MOTT MACDONALD

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

Construction Phase Monthly EM&A Report No.27 (For March 2018)

April 2018

Airport Authority Hong Kong

20/F AIA Kowloon Tower
Landmark East
100 How Ming Street
Kwun Tong
Kowloon
Hong Kong

T +852 2828 5757
F +852 2827 1823
mottmac.hk

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

Construction Phase Monthly EM&A Report No.27 (For March 2018)

April 2018

Airport Authority Hong Kong

This Monthly EM&A Report No. 27 has been reviewed and certified by the Environmental Team Leader (ETL) in accordance with Condition 3.5 of Environmental Permit No. EP-489/2014.

Certified by: 

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

Date 13 April 2018

AECOM
8/F, Grand Central Plaza, Tower 2,
138 Shatin Rural Committee Road,
Shatin, Hong Kong
香港新界沙田鄉事會路 138 號新城
市中央廣場第 2 座 8 樓
www.aecom.com

+852 3922 9000 tel
+852 2317 7609 fax

Our Ref : 60440482/C/JCHL180413

By Email

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

Attn: Mr. Lawrence Tsui, Principal Manager

13 April 2018

Dear Sir,

Contract No. 3102
3RS Independent Environmental Checker Consultancy Services

Submission of Monthly EM&A Report No.27 (March 2018)

Reference is made to the Environmental Team's submission of the Monthly EM&A Report No.27 under Condition 3.5 of the Environmental Permit No. EP-489/2014 certified by the ET Leader on 13 April 2018.

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

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

Yours faithfully,
AECOM Asia Co. Ltd.

Jackel Law
Independent Environmental Checker

Contents

Tables

Figures

Appendices

Abbreviations

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

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

Executive Summary

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

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

This is the 27th Construction Phase Monthly EM&A Report for the Project which summarizes the monitoring results and audit findings of the EM&A programme during the reporting period from 1 to 31 March 2018.

Key Activities in the Reporting Period

The key activities of the Project carried out in the reporting period included reclamation works and land-side works. Reclamation works included deep cement mixing (DCM) works, seawall construction, laying of sand blanket, and prefabricated vertical drain (PVD) installation. Land-side works included horizontal directional drilling (HDD) works, site establishment, site office construction, road and drainage works, cable ducting, demolition and modification of existing facilities, piling, and excavation works.

EM&A Activities Conducted in the Reporting Period

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

Monitoring Activities	Number of Sessions
1-hour Total Suspended Particulates (TSP) air quality monitoring	36
Noise monitoring	20
Water quality monitoring	14
Vessel line-transect surveys for Chinese White Dolphin (CWD) monitoring	2
Land-based theodolite tracking survey effort for CWD monitoring	5
Terrestrial ecology monitoring	1

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

Snapshots of EM&A Activities in the Reporting Period

		
Environmental Management Meeting for EM&A Review with Works Contracts	Dolphin Observer Training Conducted by ET	Small Vessel Line-transect Survey of Chinese White Dolphin

Results of Impact Monitoring

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

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

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

The monthly terrestrial ecology monitoring on Sheung Sha Chau observed that HDD works were conducted at the daylighting location and there was no encroachment upon the egretry area nor any significant disturbance to the ardeids at Sheung Sha Chau by the works.

Summary of Upcoming Key Issues

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

Advanced Works:

Contract P560 (R) Aviation Fuel Pipeline Diversion Works

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

DCM Works:

Contract 3201 to 3205 DCM Works

- DCM works; and
- Seawall construction.

Reclamation Works:

Contract 3206 Main Reclamation Works

- Laying of sand blanket;

- PVD installation; and
- Seawall construction.

Airfield Works:

Contract 3301 North Runway Crossover Taxiway

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

Terminal 2 Expansion Works:

Contract 3501 Antenna Farm and Sewage Pumping Station

- Excavation works;
- Pipe installation;
- Piling works; and
- Builders works of antenna farm.

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

- Removal of existing concrete;
- Formwork erection and concreting works; and
- Steel platform erection.

Contract 3503 Terminal 2 Foundation and Substructure Works

- Site establishment;
- Electrical and mechanical (E&M), drainage, and road work; and
- Piling works

APM works:

Contract 3602 Existing APM System Modification Works

- Site office establishment; and
- Concrete plinth construction.

Baggage Handling System (BHS) works:

Contract 3603 3RS Baggage Handling System

- Site establishment.

Airport Support Infrastructure & Logistic Works:

Contract 3801 APM and BHS Tunnels on Existing Airport Island

- Erection of hoarding;
- Diversion of underground utilities;
- Piling works; and
- Demolition of footbridge.

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

Summary Table

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

	Yes	No	Details	Analysis / Recommendation / Remedial Actions
Breach of Limit Level^		√	No breach of Limit Level was recorded.	Nil
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 summon 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 related to Project works is counted as Breach of Action or Limit Level.

1 Introduction

1.1 Background

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

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

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

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

The updated overall phasing programme of all construction works was presented in Appendix A of the Construction Phase Monthly EM&A Report No. 7 and the contract information was presented in Appendix A of the Construction Phase Monthly EM&A Report No. 25.

1.2 Scope of this Report

This is the 27th Construction Phase Monthly EM&A Report for the Project which summarizes the key findings of the EM&A programme during the reporting period from 1 to 31 March 2018.

1.3 Project Organisation

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

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

Table 1.1: Contact Information of Key Personnel

Party	Position	Name	Telephone
Project Manager's Representative (Airport Authority Hong Kong)	Principal Manager, Environment	Lawrence Tsui	2183 2734
Environmental Team (ET) (Mott MacDonald Hong Kong Limited)	Environmental Team Leader	Terence Kong	2828 5919
	Deputy Environmental Team Leader	Heidi Yu	2828 5704
	Deputy Environmental Team Leader	Keith Chau	2972 1721
Independent Environmental Checker (IEC) (AECOM Asia Company Limited)	Independent Environmental Checker	Jackel Law	3922 9376
	Deputy Independent Environmental Checker	Roy Man	3922 9376

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	Alan Tam	6119 3107
Contract 3202 DCM (Package 2) (Samsung-BuildKing Joint Venture)	Project Manager	Ilkwon Nam	9643 3117
	Environmental Officer	Dickson Mak	9525 8408
Contract 3203 DCM (Package 3) (Sambo E&C Co., Ltd)	Project Manager	Eric Kan	9014 6758
	Environmental Officer	David Hung	9765 6151
Contract 3204 DCM (Package 4) (CRBC-SAMBO Joint Venture)	Project Manager	Kyung-Sik Yoo	9683 8697
	Environmental Officer	Kanny Cho	6799 8226

Deep Cement Mixing (DCM) Works:

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

Reclamation Works:

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

Airfield Works

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

Terminal 2 (T2) Expansion Works:

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

Automated People Mover (APM) Works:

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

Airport Support Infrastructure and Logistic Works:

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

1.4 Summary of Construction Works

The key activities of the Project carried out in the reporting period included reclamation works and land-side works. Reclamation works included DCM works, seawall construction, laying of sand blanket, and PVD installation. Land-side works included HDD works, site establishment, site office construction, road and drainage works, cable ducting, demolition and modification of existing facilities, piling, and excavation works.

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

1.5 Summary of EM&A Programme Requirements

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

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

Parameters	Status
Air Quality	
Baseline Monitoring	The baseline air quality monitoring result has been reported in Baseline Monitoring Report and submitted to EPD under EP Condition 3.4.
Impact Monitoring	On-going
Noise	
Baseline Monitoring	The baseline noise monitoring result has been reported in Baseline Monitoring Report and submitted to EPD under EP Condition 3.4.
Impact Monitoring	On-going
Water Quality	
General Baseline Water Quality Monitoring for reclamation, water jetting and field joint works	The baseline water quality monitoring result has been reported in Baseline Water Quality Monitoring Report and submitted to EPD under EP Condition 3.4.
General Impact Water Quality Monitoring for reclamation, water jetting and field joint works	On-going
Initial Intensive Deep Cement Mixing (DCM) Water Quality Monitoring	The Initial Intensive DCM Monitoring Report was submitted and approved by EPD in accordance with the Detailed Plan on DCM.
Regular DCM Water Quality Monitoring	On-going
Waste Management	
Waste Monitoring	On-going
Land Contamination	
Supplementary Contamination Assessment Plan (CAP)	The Supplementary CAP was submitted and approved by EPD pursuant to EP condition 2.20.
Contamination Assessment Report (CAR) for Golf Course	The CAR for Golf Course was submitted to EPD.

Parameters	Status
Terrestrial Ecology	
Pre-construction Egretry Survey Plan	The Egretry Survey Plan was submitted and approved by EPD under EP Condition 2.14.
Ecological Monitoring	On-going
Marine Ecology	
Pre-Construction Phase Coral Dive Survey	The Coral Translocation Plan was submitted and approved by EPD under EP Condition 2.12.
Coral Translocation	The coral translocation was completed.
Post-Translocation Coral Monitoring	On-going
Chinese White Dolphins (CWD)	
Vessel Survey, Land-based Theodolite Tracking and Passive Acoustic Monitoring (PAM)	
Baseline Monitoring	Baseline CWD results were reported in the CWD Baseline Monitoring Report and submitted to EPD in accordance with EP Condition 3.4.
Impact Monitoring	On-going
Landscape & Visual	
Baseline Monitoring	The baseline landscape & visual monitoring result has been reported in Baseline Monitoring Report and submitted to EPD under EP Condition 3.4.
Impact Monitoring	On-going
Environmental Auditing	
Regular site inspection	On-going
Marine Mammal Watching Plan (MMWP) implementation measures	On-going
Dolphin Exclusion Zone (DEZ) Plan implementation measures	On-going
SkyPier High Speed Ferries (HSF) implementation measures	On-going
Construction and Associated Vessels Implementation measures	On-going
Complaint Hotline and Email channel	On-going
Environmental Log Book	On-going

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

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

- One dolphin observer training provided by ET: 21 Mar 2018
- Three skipper trainings provided by ET: 7, 8 and 21 Mar 2018
- Eight environmental management meetings for EM&A review with works contracts: 13, 21, 22, 27 and 28 Mar 2018

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

2 Air Quality Monitoring

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

Table 2.1: Locations of Impact Air Quality Monitoring Stations

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

2.1 Action and Limit Levels

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

Table 2.2: Action and Limit Levels of Air Quality Monitoring

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

2.2 Monitoring Equipment

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

Table 2.3: Air Quality Monitoring Equipment

Equipment	Brand and Model	Last Calibration Date	Calibration Certificate Provided in
Portable direct reading dust meter (Laser dust monitor)	SIBATA LD-3B-001 (Serial No. 934393)	11 Oct 2017	Monthly EM&A Report No. 22, Appendix E
	SIBATA LD-3B-002 (Serial No. 974350)	11 Sep 2017	
	SIBATA LD-3B-003 (Serial No. 276018)	11 Sep 2017	

2.3 Monitoring Methodology

2.3.1 Measuring Procedure

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

a. The portable direct reading dust meter was mounted on a tripod at a height of 1.2 m above the ground.
b. Prior to the measurement, the equipment was set up for 1 minute span check and 6 second background check.
c. The one hour dust measurement was started. Site conditions and dust sources at the nearby area were recorded on a record sheet.
d. When the measurement completed, the “Count” reading per hour was recorded for result calculation.

2.3.2 Maintenance and Calibration

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

2.4 Summary of Monitoring Results

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

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

Table 2.4: Summary of Air Quality Monitoring Results

Monitoring Station	1-hr TSP Concentration Range (μg/m^3)	Action Level (μg/m^3)	Limit Level (μg/m^3)
AR1A	13 – 56	306	500
AR2	13 – 184	298	

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

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

2.5 Conclusion

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

3 Noise Monitoring

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

Table 3.1: Locations of Impact Noise Monitoring Stations

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

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

3.1 Action and Limit Levels

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

Table 3.2: Action and Limit Levels for Noise Monitoring

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

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

3.2 Monitoring Equipment

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

Table 3.3: Noise Monitoring Equipment

Equipment	Brand and Model	Last Calibration Date	Calibration Certificate Provided in
Integrated Sound Level Meter	B&K 2238 (Serial No. 2800932)	17 Jul 2017	Monthly EM&A Report No. 19, Appendix E
	B&K 2238 (Serial No. 2808432)	30 Aug 2017	Monthly EM&A Report No. 21, Appendix E
Acoustic Calibrator	B&K 4231 (Serial No. 3003246)	16 May 2017	Monthly EM&A Report No. 17, Appendix D
	B&K 4231 (Serial No. 3004068)	17 Jul 2017	Monthly EM&A Report No. 19, Appendix E

3.3 Monitoring Methodology

3.3.1 Monitoring Procedure

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

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

3.3.2 Maintenance and Calibration

The maintenance and calibration procedures are summarised below:

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

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

3.4 Summary of Monitoring Results

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

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

Table 3.4: Summary of Construction Noise Monitoring Results

Monitoring Station	Noise Level Range, dB(A) $L_{eq\ (30\ mins)}$	Limit Level, dB(A) $L_{eq\ (30\ mins)}$
NM1A(1)	71 – 73	75
NM3A	61 – 63	75
NM4(1)	60 – 66	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 took place from 15 to 21 March 2018 in this reporting period.

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

3.5 Conclusion

As the construction activities were far away from the monitoring stations, major sources of noise dominating the monitoring stations observed during the construction noise impact monitoring were road traffic noise at NM1A, and aircraft and helicopter noise at NM3A, NM4, NM5 and NM6 during this reporting period. It is considered that the monitoring work during the reporting period is effective and there was no adverse impact attributable to the Project activities.

4 Water Quality Monitoring

Water quality monitoring of DO, turbidity, total alkalinity, chromium, and nickel was conducted three days per week, at mid-ebb and mid-flood tides, at a total of 22 water quality monitoring stations, comprising 12 impact (IM) stations, 7 sensitive receiver (SR) stations and 3 control (C) stations in the vicinity of water quality sensitive receivers around the airport island in accordance with the Manual. The purpose of water quality monitoring at the IM stations is to promptly capture any potential water quality impact from the Project before it could become apparent at sensitive receivers (represented by the SR stations). **Table 4.1** describes the details of the monitoring stations. **Figure 3.1** shows the locations of the monitoring stations.

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

Monitoring Station	Description	Coordinates		Parameters
		Easting	Northing	
C1	Control Station	804247	815620	DO, pH, Temperature, Salinity, Turbidity, SS, Total Alkalinity, Heavy Metals[2]
C2	Control Station	806945	825682	
C3[3]	Control Station	817803	822109	
IM1	Impact Station	806458	818351	
IM2	Impact Station	806193	818852	
IM3	Impact Station	806019	819411	
IM4	Impact Station	805039	819570	
IM5	Impact Station	804924	820564	
IM6	Impact Station	805828	821060	
IM7	Impact Station	806835	821349	
IM8	Impact Station	807838	821695	
IM9	Impact Station	808811	822094	
IM10	Impact Station	809838	822240	
IM11	Impact Station	810545	821501	
IM12	Impact Station	811519	821162	
SR1[1]	Future Hong Kong-Zhuhai-Macao Bridge Hong Kong Boundary Crossing Facilities (HKBCF) Seawater Intake for cooling	812586	820069	DO, pH, Temperature, Salinity, Turbidity, SS
SR2[3]	Planned marine park / hard corals at The Brothers / Tai Mo To	814166	821463	DO, pH, Temperature, Salinity, Turbidity, SS, Total Alkalinity, Heavy Metals[2][4]
SR3	Sha Chau and Lung Kwu Chau Marine Park / fishing and spawning grounds in North Lantau	807571	822147	DO, pH, Temperature, Salinity, Turbidity, SS
SR4A	Sha Lo Wan	807810	817189	
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	

Monitoring	Description	Coordinates		Parameters
SR8[5]	Seawater Intake for cooling at Hong Kong International Airport (East)	811418 (from July 2017 onwards)	820246	

Notes:

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

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

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

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

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

4.1 Action and Limit Levels

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

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

Parameters	Action Level[1][2][3]		Limit Level[1][2][3]	
Action and Limit Levels for general water quality monitoring and regular DCM monitoring (excluding SR1& SR8)				
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	
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	
Total Alkalinity in ppm	95		99	
Representative Heavy Metals for regular DCM monitoring (Chromium)[4][5]	0.2		0.2	
Representative Heavy Metals for regular DCM monitoring (Nickel)[4][5]	3.2		3.6	
Action and Limit Levels SR1				
SS (mg/l)	To be determined prior to its commissioning		To be determined prior to its commissioning	
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 6920 V2 (Serial No. 00019CB2)	7 Dec 2017	Monthly EM&A Report No. 24, Appendix D
	YSI ProDSS (Serial No. 15M100005)	6 Feb 2018	**Appendix D**
	YSI ProDSS (Serial No. 16H104233)	6 Feb 2018	
	YSI ProDSS (Serial No. 16H104234)	6 Feb 2018	
	YSI ProDSS (Serial No. 17E100747)	1 Feb 2018	
	YSI ProDSS (Serial No. 17H105557)	6 Feb 2018	
	YSI 6920 V2 (Serial No. 0001C6A7)	2 Mar 2018	
	YSI 6920 (Serial No. 000109DF)	2 Mar 2018	
Digital Titrator (measurement of total alkalinity)	Titrette Digital Burette 50ml Class A (Serial No. 10N65665)	18 Dec 2017	Monthly EM&A Report No. 24, Appendix D
	Titrette Digital Burette 50ml Class A (Serial No. 10N60623)	22 Feb 2018	**Appendix D**

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

Table 4.5: Other Monitoring Equipment

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

4.3 Monitoring Methodology

4.3.1 Measuring Procedure

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

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

4.3.2 Maintenance and Calibration

Calibration of In-situ Instruments

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

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

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

4.3.3 Laboratory Measurement / Analysis

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

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

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

4.4 Summary of Monitoring Results

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

The sea conditions varied from calm to rough, and the weather conditions varied from sunny to rainy during the monitoring period.

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

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

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

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

	IM1	IM2	IM3	IM4	IM5	IM6	IM7	IM8	IM9	IM10	IM11	IM12	SR2	SR3	SR4A	SR5A	SR6	SR7	SR8
01/03/2018																			
03/03/2018																			
06/03/2018																			
08/03/2018																			
10/03/2018																			
13/03/2018																			
15/03/2018																			
17/03/2018																			
20/03/2018																			
22/03/2018																			
24/03/2018																			
27/03/2018																			
29/03/2018																			
31/03/2018																			
No. of result triggereing Action or Limit Level	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0

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

Monitoring results triggered the corresponding Action Levels on two monitoring days. However, the cases occurred at monitoring stations which were located upstream of the Project during ebb

tide, that would unlikely be affected by the Project. Therefore, the cases were possibly due to natural fluctuation in the vicinity of the monitoring stations, and considered not due to the Project.

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

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

	IM1	IM2	IM3	IM4	IM5	IM6	IM7	IM8	IM9	IM10	IM11	IM12	SR3	SR4A	SR5A	SR6	SR7	SR8
01/03/2018																		
03/03/2018					D	D	D											
06/03/2018																		
08/03/2018																		
10/03/2018																		
13/03/2018																		
15/03/2018																		
17/03/2018																		
20/03/2018					D	D	D	D	D									
22/03/2018																		
24/03/2018																		
27/03/2018																		
29/03/2018																		
31/03/2018																		
No. of result triggereing Action or Limit Level	0	0	2	1	2	2	2	1	1	0	1	0	0	0	0	0	0	0

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

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

As part of the investigation on the downstream events, details of the Project's marine construction activities on the concerned monitoring days were collected, as well as any observations during the monitoring. The findings are summarized in **Table 4.9**.

Table 4.9: Summary of Findings from Investigations of SS Monitoring Results (Mid-Flood Tide)

Date	Marine construction works nearby	Approximate distance from marine construction works*	Status of water quality measures (if applicable)	Construction vessels in the vicinity	Turbidity / Silt plume observed near the monitoring station	Action or Limit Level triggered due to Project
03/03/2018	DCM works Sand blanket laying	Around 500m	Silt curtain deployed	No	No	No
20/03/2018	DCM works Sand blanket laying	Around 500m	Silt curtain deployed	No	No	No

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

For the monitoring results at IM5, IM6, and IM7 on 3 March 2018, these stations were located downstream of the Project during flood tide, which might be affected by Project's construction activities. However, it was noticed that Action Level was also triggered at IM4, a nearby IM station located upstream of the Project. This station, while being unlikely to be affected by the Project, might affect the water quality at the downstream IM stations in the vicinity. Besides, during the monitoring session conducted on 3 March 2018, no specific observation was made regarding any water quality impact due to Project activities. As there was no evidence of SS release due to Project activities from site observations and all mitigation measures were carried out properly, the cases were considered not due to the Project.

For the monitoring result at IM5, IM6, IM7, IM8, and IM9 on 20 March 2018, these monitoring stations were located downstream of the Project during flood tide, which might be affected by Project's construction activities. However, it was noticed that the SS levels at IM5, IM6, and IM7 were within the baseline levels. Besides, during the monitoring session conducted on 20 March 2018, no specific observation was made regarding any water quality impact due to Project activities. As there was no evidence of SS release due to Project activities from site observations and all mitigation measures were carried out properly, the cases were considered not due to the Project.

Table 4.10 presents a summary of the nickel compliance status at IM and SR stations during mid-flood tide for the reporting period.

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

	IM1	IM2	IM3	IM4	IM5	IM6	IM7	IM8	IM9	IM10	IM11	IM12
01/03/2018												
03/03/2018												
06/03/2018												
08/03/2018												
10/03/2018												
13/03/2018												
15/03/2018												
17/03/2018												
20/03/2018												
22/03/2018												
24/03/2018												
27/03/2018												
29/03/2018									D			
31/03/2018												
No. of result triggereing Action or Limit Level	0	0	0	0	0	0	0	0	1	0	0	0

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

Monitoring results triggered the corresponding Limit Level on one monitoring day. As the result was collected at a station located downstream of the Project, which might be affected by Project's construction activities, investigation was carried out.

As part of the investigation on the downstream event, details of the Project's marine construction activities on the concerned monitoring day was collected, as well as any observations during the monitoring. The findings are summarized in **Table 4.11**.

Table 4.11: Summary of Findings from Investigations of Nickel Monitoring Results (Mid-Flood Tide)

Date	Marine construction works nearby	Approximate distance from marine construction works*	Status of water quality measures (if applicable)	Construction vessels in the vicinity	Turbidity / Silt plume observed near the monitoring station	Action or Limit Level triggered due to Project
29/03/2018	DCM works Sand blanket laying	Around 500m	Silt curtain deployed	No	No	No

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

The monitoring result at IM9 on 29 March 2018 appeared to be an isolated case with no observable temporal and spatial trend to indicate any effect due to Project activities. The monitoring results was also marginally above the Limit Level (3.8 µg/L compared to Limit Level of 3.6 µg/L based on the results derived from baseline monitoring data). Based on the investigation

of in-situ water quality monitoring at the nearest DCM barge, three out of four monitoring points in the immediate downstream of the DCM rigs were below the Action and Limit Levels specified in the Baseline Monitoring Report. This suggests that there was no leakage of contaminants from the contaminated mud pits due to DCM activities.

Therefore, the case was considered not due to the Project and may be due to natural fluctuation or other sources not related to the Project.

4.5 Conclusion

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

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

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

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

5 Waste Management

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

5.1 Action and Limit Levels

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

Table 5.1: Action and Limit Levels for Construction Waste

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

5.2 Waste Management Status

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

Recommendations made included provision and maintenance of proper chemical waste storage area, as well as handling, segregation, and regular disposal of general refuse and chemical waste. 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**.

The monitoring results complied with the Action or Limit Levels during the reporting period.

Table 5.2: Construction Waste Statistics

	Excavated Material (m^3)(1)	C&D(2) Material Reused in the Project (m^3)	C&D Material Reused in other Projects (m^3)	C&D Material Disposed of as Public Fill (m^3)	Chemical Waste (kg)	Chemical Waste (L)	General Refuse (tonne)
Mar 2018(3)	1,236	563	0	1,689	165	8,000	258

Notes:

(1) The excavated materials were temporarily stored at stockpiling area and will be reused in the Project.

(2) C&D refers to Construction and Demolition

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

6.1 Action and Limit Levels

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

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

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

Notes: (referring to the baseline monitoring report)

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

(2) Limit Level – two consecutive running quarters mean both the running quarterly encounter rates of the preceding month February 2018 (calculated by data from December 2017 to February 2018) and the running quarterly encounter rates of this month (calculated by data from January 2018 to March 2018).

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

6.2 CWD Monitoring Transects and Stations

6.2.1 Small Vessel Line-transect Survey

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

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

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

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

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

6.2.2 Land-based Theodolite Tracking Survey

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

Table 6.3: Land-based Theodolite Survey Station Details

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

6.3 CWD Monitoring Methodology

6.3.1 Small Vessel Line-transect Survey

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

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

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

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

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

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

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

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

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

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

6.3.2 Photo Identification

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

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

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

6.3.3 Land-based Theodolite Tracking Survey

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

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

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

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

6.4 Monitoring Results and Observations

6.4.1 Small Vessel Line-transect Survey

Survey Effort

Within this reporting period, two complete sets of small vessel line-transect surveys were conducted on the 5, 7, 8, 12, 13, 14, 21, and 22 March 2018, covering all transects in NEL, NWL, AW, WL and SWL survey areas for twice.

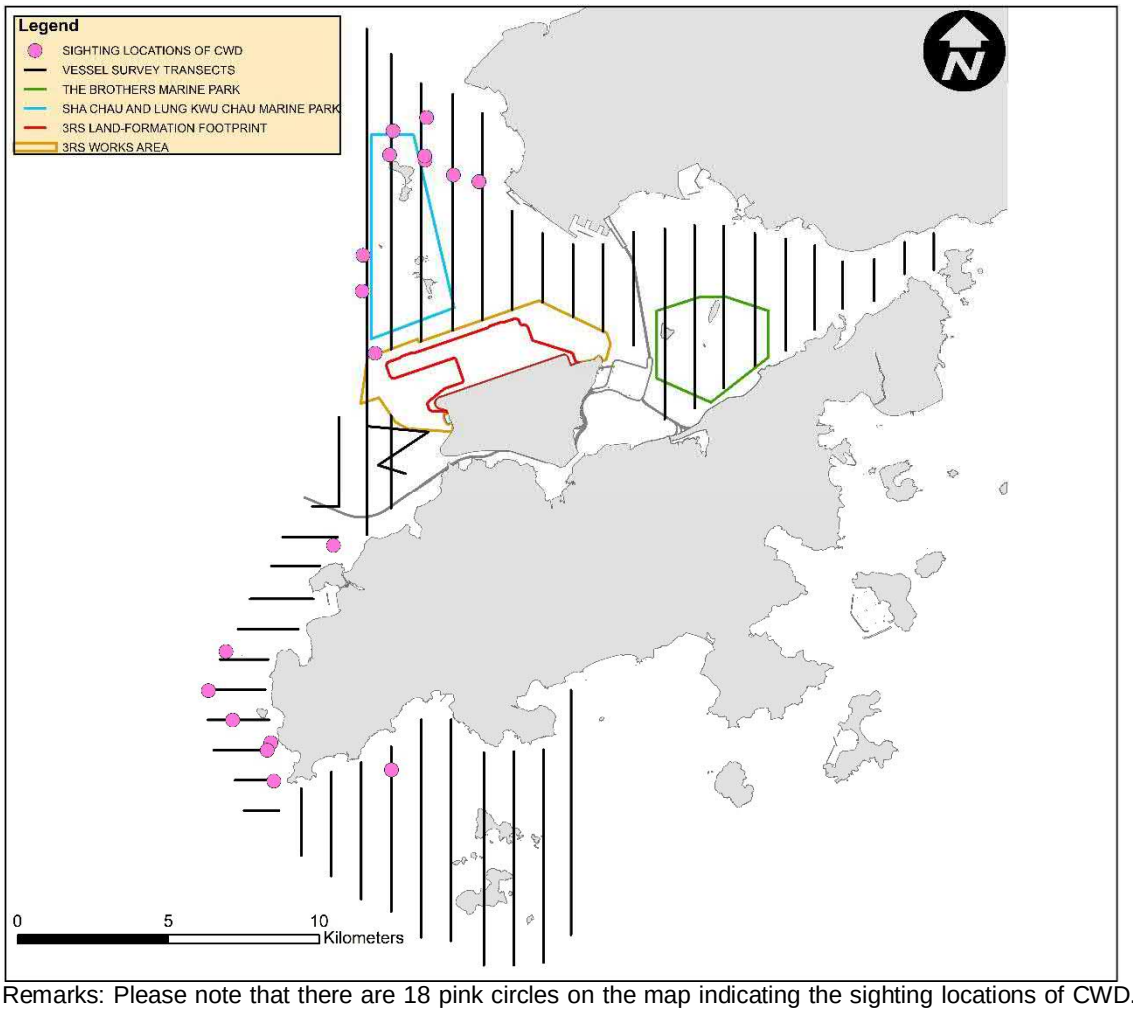
A total of around 454.57 km of survey effort was collected from these surveys, with around 91.57% of the total survey effort being conducted under favourable weather condition (i.e. Beaufort Sea State 3 or below with favourable visibility). Details of the survey effort are given in **Appendix C**.

Sighting Distribution

In March 2018, 18 sightings with 46 dolphins were sighted. Details of cetacean sightings are presented in **Appendix C**.

Distribution of all CWD sightings recorded in March 2018 is illustrated in **Figure 6.3**. In NWL, the majority of the CWD sightings were recorded within and around Sha Chau and Lung Kwu Chau Marine Park, particularly at the waters northern and northeastern off Lung Kwu Chau. Two sightings were recorded on Urmston Road between Lung Kwu Chau and Castle Peak Power Station. One off-effort sighting with two dolphins were sighted just outside the open-sea silt curtain at the northwestern tip of the 3RS works area. In WL, a few CWD sightings were recorded scattering from Tai O to Fan Lau. In SWL, only one CWD sighting was encountered at the coastal waters between Tai Long Wan and Fan Lau Tung Wan . No sightings of CWDs were recorded in NEL survey area.

Figure 6.3: Sightings Distribution of Chinese White Dolphins



Remarks: Please note that there are 18 pink circles on the map indicating the sighting locations of CWD. Some of them were very close to each other and therefore appear overlapped on this distribution map.

Encounter Rate

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

Encounter Rate by Number of Dolphin Sightings (STG)

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

Encounter Rate by Number of Dolphins (ANI)

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

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

In March 2018, a total of around 416.26 km of survey effort were conducted under Beaufort Sea State 3 or below with favourable visibility, whilst a total number of 16 on-effort sightings with 43 dolphins were sighted under such condition. Calculation of the encounter rates in March 2018 are shown in **Appendix C**.

For the running quarter of the reporting period (i.e., from January 2018 to March 2018), a total of around 1256.20 km of survey effort were conducted under Beaufort Sea State 3 or below with favourable visibility, whilst a total number of 60 on-effort sightings and a total number of 195 dolphins from on-effort sightings were obtained under such condition. Calculation of the running quarterly encounter rates are shown in **Appendix C**.

The STG and ANI of CWD in the whole survey area (i.e. NEL, NWL, AW, WL and SWL) during the month of March 2018 and during the running quarter are presented in **Table 6.4** below and compared with the Action Level. The running quarterly encounter rates STG and ANI did not trigger the Action Level (i.e., remained above the Action Level).

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

	Encounter Rate (STG)	Encounter Rate (ANI)
March 2018	3.84	10.33
Running Quarter from January 2018 to March 2018(1)	4.78	15.52
Action Level	Running quarterly(1) < 1.86	Running quarterly(1) < 9.35

Note:

(1) Running quarterly encounter rates STG & ANI were calculated from data collected in the reporting period and the two preceding survey months, i.e. the data from January to March 2018, containing six sets of transect surveys for all monitoring areas.

Group Size

In March 2018, 18 groups with 46 dolphins were sighted, and the average group size of CWDs was 2.56 dolphins per group. Sightings with small group size (i.e. 1-2 dolphins) were dominant. One sighting with large group size of 10 dolphins was recorded in WL.

Activities and Association with Fishing Boats

Seven out of 18 sightings of CWDs were recorded engaging in feeding activities in March 2018. CWDs from one out of these seven sightings were observed associating with operating purse seiner at the waters northeastern off Lung Kwu Chau.

Mother-calf Pair

In March 2018, one mother-and-spotted juvenile pair and one mother-and-unspotted juvenile pair were recorded in WL and NWL respectively.

6.4.2 Photo Identification

In March 2018, a total number of 31 different CWD individuals were identified for totally 36 times. A summary of photo identification works is presented in **Table 6.5**. Representative photos of these individuals are given in **Appendix C**.

Table 6.5: Summary of Photo Identification

Individual ID	Date of Sighting (dd/mm/yy)	Sighting Group No.	Area	Individual ID	Date of Sighting (dd/mm/yy)	Sighting Group No.	Area
NLMM002	22-Mar-18	1	NWL	WLMM001	12-Mar-18	2	WL
NLMM004	22-Mar-18	1	NWL	WLMM003	13-Mar-18	3	WL
NLMM009	22-Mar-18	1	NWL	WLMM007	12-Mar-18	1	WL
NLMM018	22-Mar-18	1	NWL	WLMM018	12-Mar-18	1	WL
NLMM043	22-Mar-18	1	NWL	WLMM026	14-Mar-18	1	NWL
NLMM063	22-Mar-18	1	NWL			3	NWL
NLMM065	14-Mar-18	4	NWL	WLMM027	14-Mar-18	1	NWL
		6	NWL			3	NWL
SLMM003	12-Mar-18	1	WL	WLMM028	13-Mar-18	3	WL
SLMM014	12-Mar-18	1	WL	WLMM029	13-Mar-18	3	WL
		3	SWL	WLMM046	14-Mar-18	4	NWL
SLMM023	13-Mar-18	3	WL	WLMM065	14-Mar-18	2	NWL
SLMM025	12-Mar-18	1	WL	WLMM066	14-Mar-18	2	NWL
SLMM027	12-Mar-18	1	WL	WLMM073	12-Mar-18	1	WL
SLMM031	13-Mar-18	5	WL	WLMM078	13-Mar-18	1	WL
SLMM034	12-Mar-18	2	WL	WLMM079	12-Mar-18	1	WL
	13-Mar-18	2	WL	WLMM080	14-Mar-18	4	NWL
SLMM049	12-Mar-18	1	WL	WLMM114	12-Mar-18	1	WL

6.4.3 Land-based Theodolite Tracking Survey

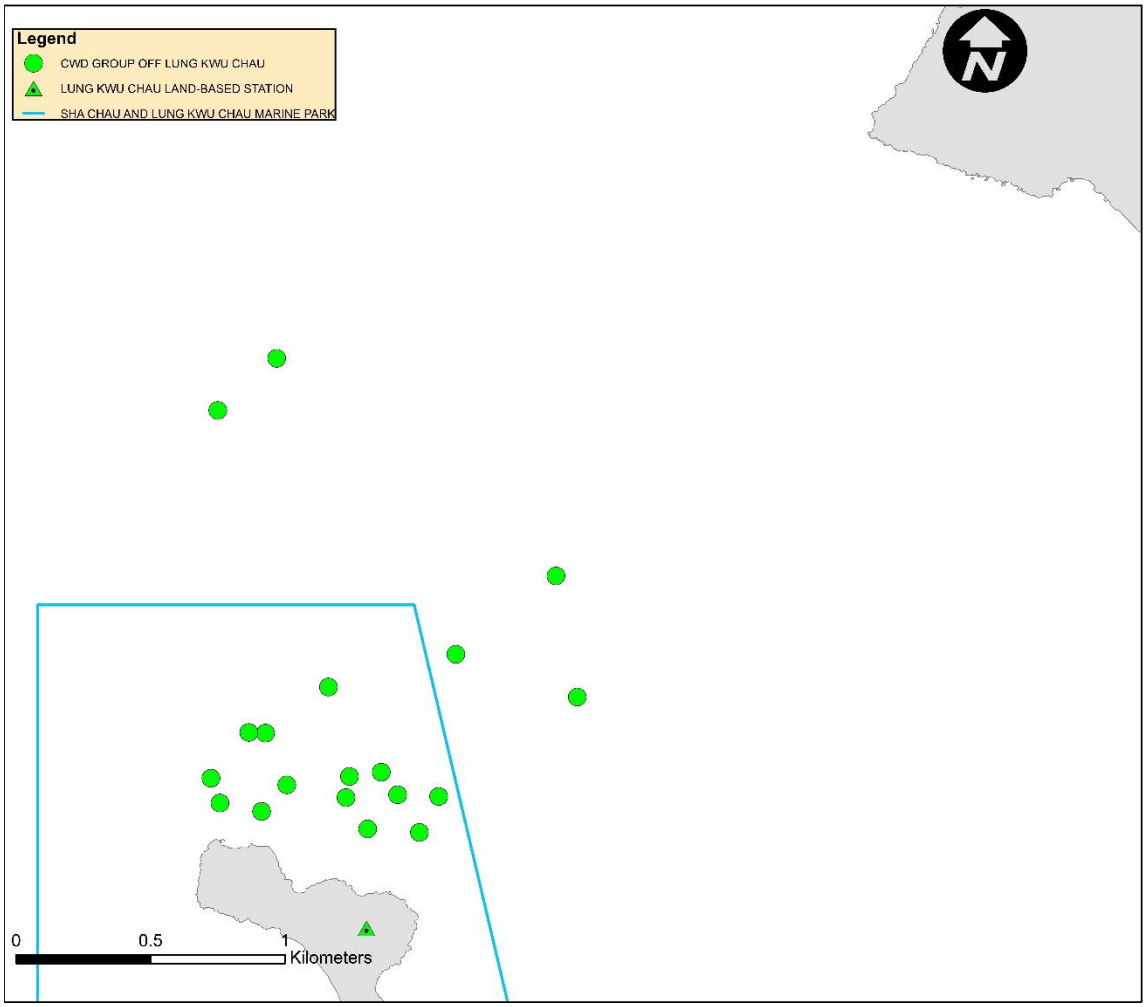
Survey Effort

Land-based theodolite tracking surveys were conducted at LKC on 12, 22 and 23 March 2018 and at SC on 26 and 27 March 2018, with a total of five days of land-based theodolite tracking survey effort accomplished in this reporting period. A total number of 19 CWD groups were tracked at LKC station during the surveys. Information of survey effort and CWD groups sighted during these land-based theodolite tracking surveys are presented in **Table 6.6**. Details of the survey effort and CWD groups tracked are presented in **Appendix C**. The first sighting locations of CWD groups tracked at LKC station during land-based theodolite tracking surveys in March 2018 were depicted in **Figure 6.4**. No CWD group was sighted from SC station in this reporting month.

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

Land-based Station	No. of Survey Sessions	Survey Effort (hh:mm)	No. of CWD Groups Sighted	CWD Group Sighting per Survey Hour
Lung Kwu Chau	3	18:00	19	1.06
Sha Chau	2	12:00	0	0
TOTAL	**5**	**30:00**	**19**	**0.63**

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



6.5 Progress Update on Passive Acoustic Monitoring

Underwater acoustic monitoring using Passive Acoustic Monitoring (PAM) should be undertaken during land formation related construction works. In this reporting period, the Ecological Acoustic Recorder (EAR) has been retrieved on 6 March 2017 and subsequently redeployed and positioned at south of Sha Chau Island inside the SCLKCMP with 20% duty cycle (**Figure 6.5**). The EAR deployment is generally for 4-6 weeks prior to data retrieval for analysis. Acoustic data is reviewed to give an indication of CWDs occurrence patterns and to obtain anthropogenic noise information simultaneously. Analysis (by a specialized team of acousticians) involved manually browsing through every acoustic recording and logging the occurrence of dolphin signals. All data will be re-played by computer as well as listened to by human ears for accurate assessment of dolphin group presence. As the period of data collection and analysis takes more than two months, PAM results could not be reported in monthly intervals.

6.6 Site Audit for CWD-related Mitigation Measures

During the reporting period, silt curtains were in place by the contractors for sand blanket laying works, in which dolphin observers were deployed by each contractor in accordance with the MMWP. Teams of at least two dolphin observers were deployed at 20 to 24 dolphin observation stations by the contractors for continuous monitoring of the DEZ by all contractors for ground

improvement works (DCM works and PVD installation) and seawall construction in accordance with the DEZ Plan. Trainings for the proposed dolphin observers on the implementation of MMWP and DEZ monitoring were provided by the ET prior to the aforementioned works, with a cumulative total of 605 individuals being trained and the training records kept by the ET. From the contractors' MMWP observation records and DEZ monitoring records, no dolphin or other marine mammals were observed within or around the silt curtains, whilst there were three records of dolphin sighting within the DEZ of DCM works in this reporting period. According to the contractor's site record, relevant DCM works were suspended in the dolphin sighting events until the DEZ was clear of dolphin for a continuous period of 30 minutes. Details for the implementation of DEZ during the incident of dolphin sighting within the DEZ of DCM works are mentioned in **Section 7.4**. These contractors' records were also audited by the ET during site inspection.

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

6.7 Timing of Reporting CWD Monitoring Results

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

6.8 Summary of CWD Monitoring

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

7 Environmental Site Inspection and Audit

7.1 Environmental Site Inspection

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

The key observations from site inspection and associated recommendations were related to display of appropriate permits and labels; provision and maintenance of drip trays, spill kits, and chemical waste storage area; proper deployment and maintenance of silt curtains; proper handling, segregation, and regular disposal of general refuse and chemical waste; proper implementation of dust suppression, acoustic decoupling measures, wastewater treatment, dark smoke prevention, tree protection, and runoff prevention measures; as well as proper implementation DEZ and marine traffic monitoring.

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

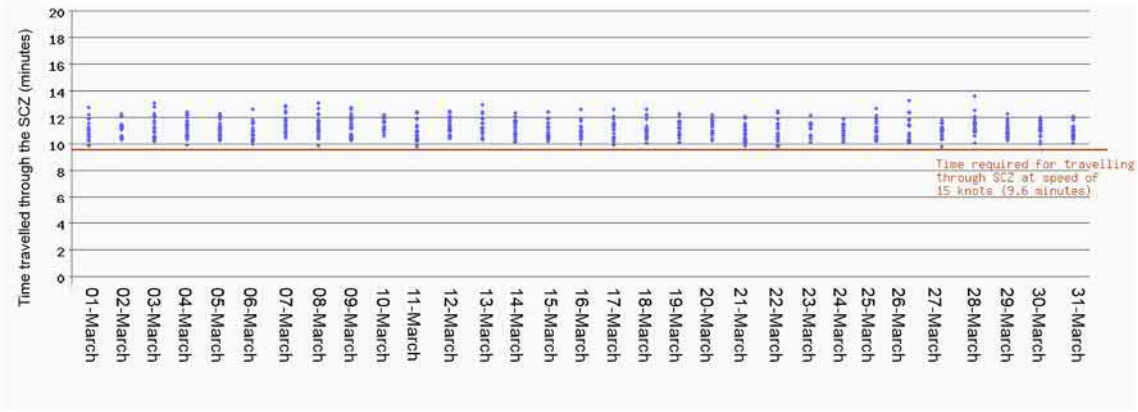
7.2 Audit of SkyPier High Speed Ferries

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

Key audit findings for the SkyPier HSFs travelling to/from Zhuhai and Macau against the requirements of the SkyPier Plan during the reporting period are summarized in **Table 7.1**. The daily movements of all SkyPier HSFs in this reporting period (i.e., 84 to 90 daily movements) were within the maximum daily cap of 125 daily movements. Status of compliance with the annual daily average of 99 movements will be further reviewed in the annual EM&A Report.

In total, 884 ferry movements between HKIA SkyPier and Zhuhai / Macau were recorded in March 2018 and the data are presented in **Appendix G**. The time spent by the SkyPier HSFs travelling through the SCZ in March 2018 were presented in **Figure 7.1**. It will take 9.6 minutes to travel through the SCZ when the SkyPier HSFs adopt the maximum allowable speed of 15 knots within the SCZ. **Figure 7.1** shows that all of the SkyPier HSFs spent more than 9.6 minutes to travel through the SCZ.

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



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

One ferry was recorded with minor deviation from the diverted route on 5 March 2018. Notices were sent to the ferry operators and the cases are under investigation by ET. The investigation result will be presented in the next monthly EM&A report.

Six ferries were recorded with minor deviation from the diverted route in February 2018. For the two cases on 5 February 2018, ET's investigation found that the vessel captains of the two cases had to give way to a large container vessel and a small fishing boat respectively to ensure safety. For the case on 17 February 2018, ET's investigation found that the vessel captain had to give way to a large container vessel to ensure safety. For the cases on 18 February 2018, 20 February 2018 and 24 February 2018, ET's investigation found that the vessel captains for all three cases had to give way to a vessel to avoid collision. After the minor deviation, all HSFs returned to the diverted route following the SkyPier Plan.

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

Requirements in the SkyPier Plan	1 March to 31 March 2018
Total number of ferry movements recorded and audited	884
Use diverted route and enter / leave SCZ through Gate Access Points	1 deviation.
Speed control in speed control zone	The average speeds taken within the SCZ by all HSFs were within 15 knots (10.0 knots to 13.9 knots), which complied with the SkyPier Plan. The time used by HSFs to travel through SCZ is presented in **Figure 7.1**.
Daily Cap (including all SkyPier HSFs)	84 to 90 daily movements (within the maximum daily cap - 125 daily movements).

7.3 Audit of Construction and Associated Vessels

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

ET carried out the following actions during the reporting period:

- Two skipper training sessions were held for contractors' concerned skippers of relevant construction vessels to familiarize them with the predefined routes; general education on local cetaceans; guidelines for avoiding adverse water quality impact; the required environmental practices / measures while operating construction and associated vessels under the Project; and guidelines for operating vessels safely in the presence of CWDs. The list of all trained skippers was properly recorded and maintained by ET.
- Eight skipper training sessions were held by contractor's Environmental Officer. Competency tests were subsequently conducted with the trained skippers by ET.
- In this reporting period, eight skippers were trained by ET and nine skippers were trained by contractor's Environmental Officer. In total, 893 skippers were trained from August 2016 to March 2018.
- The Marine Surveillance System (MSS) automatically recorded deviation cases such as speeding, entering no entry zone and not travelling through the designated gate. ET conducted checking to ensure the MSS records deviation cases accurately.
- Deviations such as speeding in the works area and entering from non-designated gates were identified. All the concerned contractors were reminded to comply with the requirements of the MTRMP-CAV during the bi-weekly MTCC audit.
- Three-month rolling programmes (one month record and three months forecast) for construction vessel activities were received from the contractors in order to help maintain the number of construction and associated vessels on site to a practicable minimal level.

7.4 Implementation of Dolphin Exclusion Zone

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

During the reporting period, ET was notified on three records of dolphin sighting within the DEZ of DCM works by the contractor. The ET checked the dolphin sighting records and the contractor's site records to audit the implementation of DEZ. Details of the sightings are summarized in **Table 7.2**. DCM installation works on DCM barges within the DEZ were ceased by the contractor, and not resumed until the DEZ was clear of dolphin for a continuous period of at least 30 minutes in accordance with the DEZ Plan.

Table 7.2: Summary of Dolphin Sightings within the DEZ

Date	Works Area(1) and Type of Works Suspended	Location of the DEZ Monitoring Station	Time of Initial Sighting of Dolphin Group	Time of Last Sighting of Dolphin Group
08 Mar 2018	DCM works at Area G4	22°18.443N, 113°53.502E	16:47	17:10
09 Mar 2018	DCM works at Area G4	22°18.428N, 113°53.504E	13:35	16:40
18 Mar 2018	DCM works at Area G4	22°18.437N, 113°53.494E	09:03	09:12

Note:

(1) Please refer to **Figure 1.2** for the location of works area.

7.5 Ecological Monitoring

In accordance with the Manual, ecological monitoring shall be undertaken monthly at the Horizontal Directional Drilling (HDD) daylighting location on Sheung Sha Chau Island during the HDD construction works period from August to March to identify and evaluate any impacts with

appropriate actions taken as required to address and minimise any adverse impact found. During the reporting period, the monthly ecological monitoring at the HDD daylighting location on Sheung Sha Chau observed that HDD works were ongoing under the Contract P560(R) at the daylighting location, and there was no encroachment of any works upon the egretry area nor any significant disturbance to the ardeids on the island by the works. Signs of early breeding activities by Black-crowned Night Heron and Little Egret were observed on trees located further east of the previously identified egretry area where it is at the southern side of Sheung Sha Chau Island. At the HDD daylighting location, neither nest nor breeding activity of ardeids were found during the monthly ecological monitoring and weekly site inspections in the reporting period. The location map and site photos regarding the monthly ecological monitoring for the HDD works and egretry area are provided in **Appendix C** for reference. All the HDD construction works on Sheung Sha Chau had been completed and retreated on 29 March 2018 No construction works will be conducted on Sheung Sha Chau Island during the ardeid's breeding season.

7.6 Status of Submissions under Environmental Permits

The current status of submissions under the EP up to the reporting period is presented in **Table 7.3**.

Table 7.3: Status of Submissions under Environmental Permit

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

7.7 Compliance with Other Statutory Environmental Requirements

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

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

7.8.1 Complaints

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

7.8.2 Notifications of Summons or Status of Prosecution

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

7.8.3 Cumulative Statistics

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

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

8.1 Construction Programme for the Coming Reporting Period

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

Advanced Works:

Contract P560 (R) Aviation Fuel Pipeline Diversion Works

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

DCM Works:

Contract 3201 to 3205 DCM Works

- DCM works; and
- Seawall construction.

Reclamation Works:

Contract 3206 Main Reclamation Works

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

Airfield Works:

Contract 3301 North Runway Crossover Taxiway

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

Terminal 2 Expansion Works:

Contract 3501 Antenna Farm and Sewage Pumping Station

- Excavation works;
- Pipe installation;
- Piling works; and
- Builders works of antenna farm.

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

- Removal of existing concrete;
- Formwork erection and concreting works; and
- Steel platform erection.

Contract 3503 Terminal 2 Foundation and Substructure Works

- Site establishment;
- Electrical and mechanical (E&M), drainage, and road work; and
- Piling works

APM works:

Contract 3602 Existing APM System Modification Works

- Site office establishment; and
- Concrete plinth construction.

Baggage Handling System (BHS) works:

Contract 3603 3RS Baggage Handling System

- Site establishment.

Airport Support Infrastructure & Logistic Works:

Contract 3801 APM and BHS Tunnels on Existing Airport Island

- Erection of hoarding;
- Diversion of underground utilities;
- Piling works; and
- Demolition of footbridge.

8.2 Key Environmental Issues for the Coming Reporting Period

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

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

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

8.3 Monitoring Schedule for the Coming Reporting Period

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

9 Conclusion and Recommendation

The key activities of the Project carried out in the reporting period included reclamation works and land-side works. Reclamation works included DCM works, seawall construction, laying of sand blanket, and PVD installation. Land-side works included HDD works, site establishment, site office construction, road and drainage works, cable ducting, demolition and modification of existing facilities, piling, and excavation works.

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

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

The water quality monitoring results for DO, turbidity, total alkalinity, and chromium obtained during the reporting period were within their corresponding Action and Limit Levels stipulated in the EM&A programme for triggering the relevant investigation and follow-up procedures under the programme if being exceeded. For SS and nickel, some of the testing results triggered the relevant Action or Limit Level, and the corresponding investigations were conducted accordingly. The investigation findings concluded that the cases were not related to the Project. To conclude, the construction operation during the reporting period did not introduce adverse impact to all water quality sensitive receivers.

The monthly terrestrial ecology monitoring on Sheung Sha Chau Island observed that HDD works were conducted at the daylighting location and there was no encroachment upon the egretry area nor any significant disturbance to the egrets at Sheung Sha Chau by the works.

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

On the implementation of MMWP, dolphin observers were deployed by the contractors for laying of open sea silt curtain and laying of silt curtains for sand blanket works in accordance with the MMWP. On the implementation of DEZ Plan, dolphin observers at 20 to 24 dolphin observation stations were deployed for continuous monitoring of the DEZ by all contractors for ground improvement works (DCM works and PVD installation) and seawall construction in accordance with the DEZ Plan. Trainings for the proposed dolphin observers were provided by the ET prior to the aforementioned works, with the training records kept by the ET. From the contractors' MMWP observation records and DEZ monitoring records, no dolphin or other marine mammals were observed within or around the silt curtains, whilst there were three records of dolphin sighting within the DEZ of DCM works in this reporting month. The concerned DCM installation works were temporarily ceased by the contractor in accordance with the DEZ Plan. The contractor's record was checked by the ET during site inspection. Audits of acoustic decoupling measures for construction vessels were also carried out by the ET, and relevant recommendations were made during regular site inspections.

On the implementation of the SkyPier Plan, the daily movements of all SkyPier high speed ferries (HSFs) in March 2018 were in the range of 84 to 90 daily movements, which are within the

maximum daily cap of 125 daily movements. A total of 884 HSF movements under the SkyPier Plan were recorded in the reporting period. All HSFs had travelled through the SCZ with average speeds under 15 knots (10.0 to 13.9 knots), which were in compliance with the SkyPier Plan. One deviation from the diverted route in March 2018 is recorded in the High Speed Ferry Monitoring System. In summary, the ET and IEC have audited the HSF movements against the SkyPier Plan and conducted follow up investigation or actions accordingly.

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

Figures

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

Contract P560 (R)-
Daylighting
Location

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

RECLAMATION WORKS AREA
(please refer to Figure 1.2)

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

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

Rev.	Date	Description	Checked
A	31AUG15	FIRST ISSUE	DC

香港國際機場 HONG KONG INTERNATIONAL AIRPORT
Airport Authority HKIA Tower, 1 Sky Plaza Road, Hong Kong International Airport, Lantau, Hong Kong
Tel : (852) 2181 1111 Fax : (852) 2824 0717

Mott MacDonald

Title
LOCATIONS OF KEY CONSTRUCTION ACTIVITIES

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

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

Drawing No.
FIGURE 1.1

Scale at A3
1 : 30000

Rev.
A

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

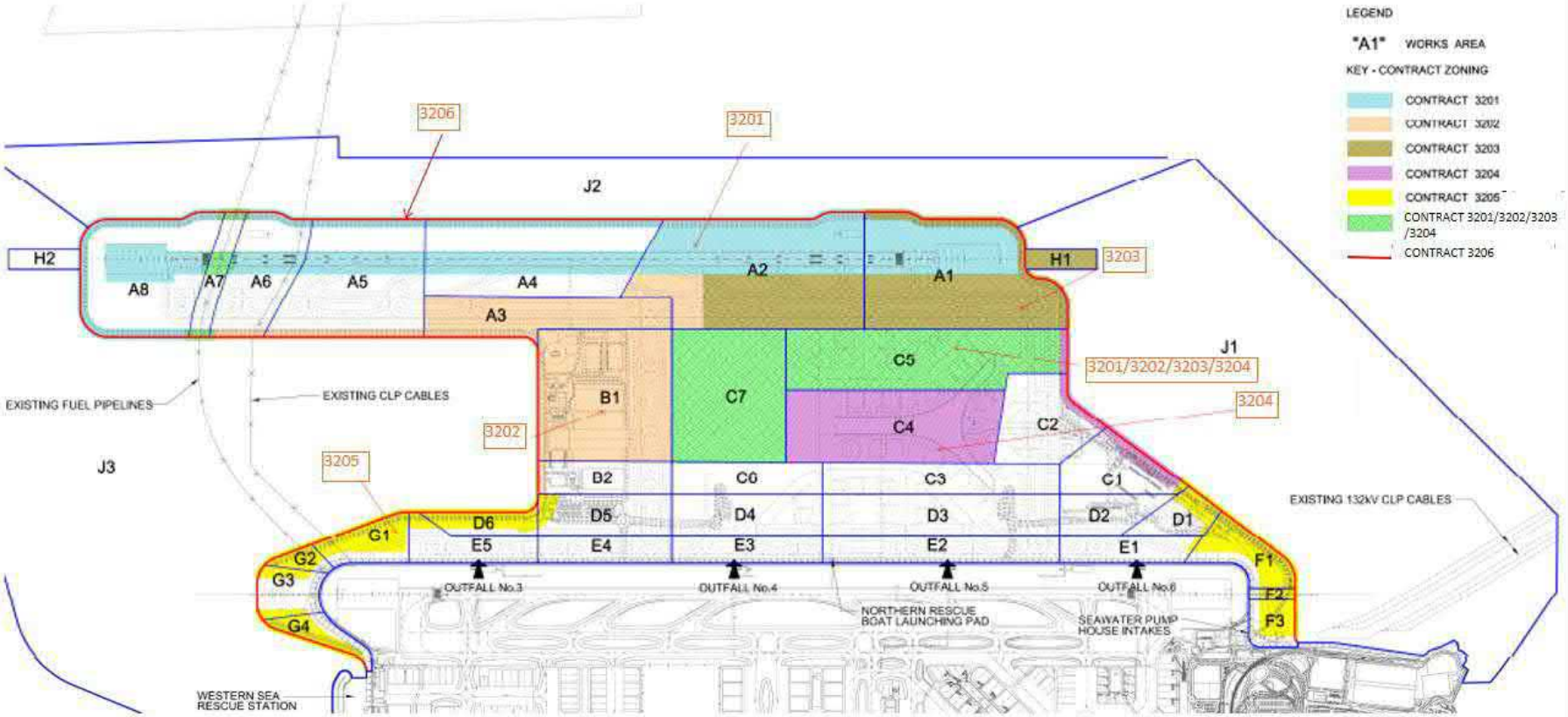


FIGURE 1.2- LOCATIONS OF RECLAMATION WORKS AREA

LEGEND:

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

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

NM1A
AR1A
NM2
NM3A
NM4
NM5
AR2
NM6

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

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

香港國際機場 HONG KONG INTERNATIONAL AIRPORT
Airport Authority HKIA Tower, 1 Sky Plaza Road, Hong Kong International Airport, Lantau, Hong Kong
Tel : (852) 2188 7111 Fax : (852) 2634 0717

Mott MacDonald

Title

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

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

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

Drawing No.

FIGURE 2.1

Scale at A3 1 : 22500

Rev. C

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

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

LEGEND:
- LAND FORMATION
- 500m ENVELOPE
- IMPACT STATION
- SENSITIVE RECEIVER
- CONTROL STATION

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

Rev.	Date	Description	Checked
A	02DEC15	FIRST ISSUE	DC
B	04MAY16	GENERAL REVISION	RO
C	06JUN16	GENERAL REVISION	LC
D	02AUG17	GENERAL REVISION	RO

香港國際機場 HONG KONG INTERNATIONAL AIRPORT
Airport Authority HKIA Tower, 1 Sky Plaza Road, Hong Kong International Airport, Lantau, Hong Kong
Tel : (852) 2188 7111 Fax : (852) 2824 0717

MOTT MACDONALD

Title

WATER QUALITY MONITORING STATIONS

Consultant's Signatures for Approval		Date
Design	DC	02AUG17
Checkers	DC / TK	02AUG17
Approver	EC	02AUG17

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

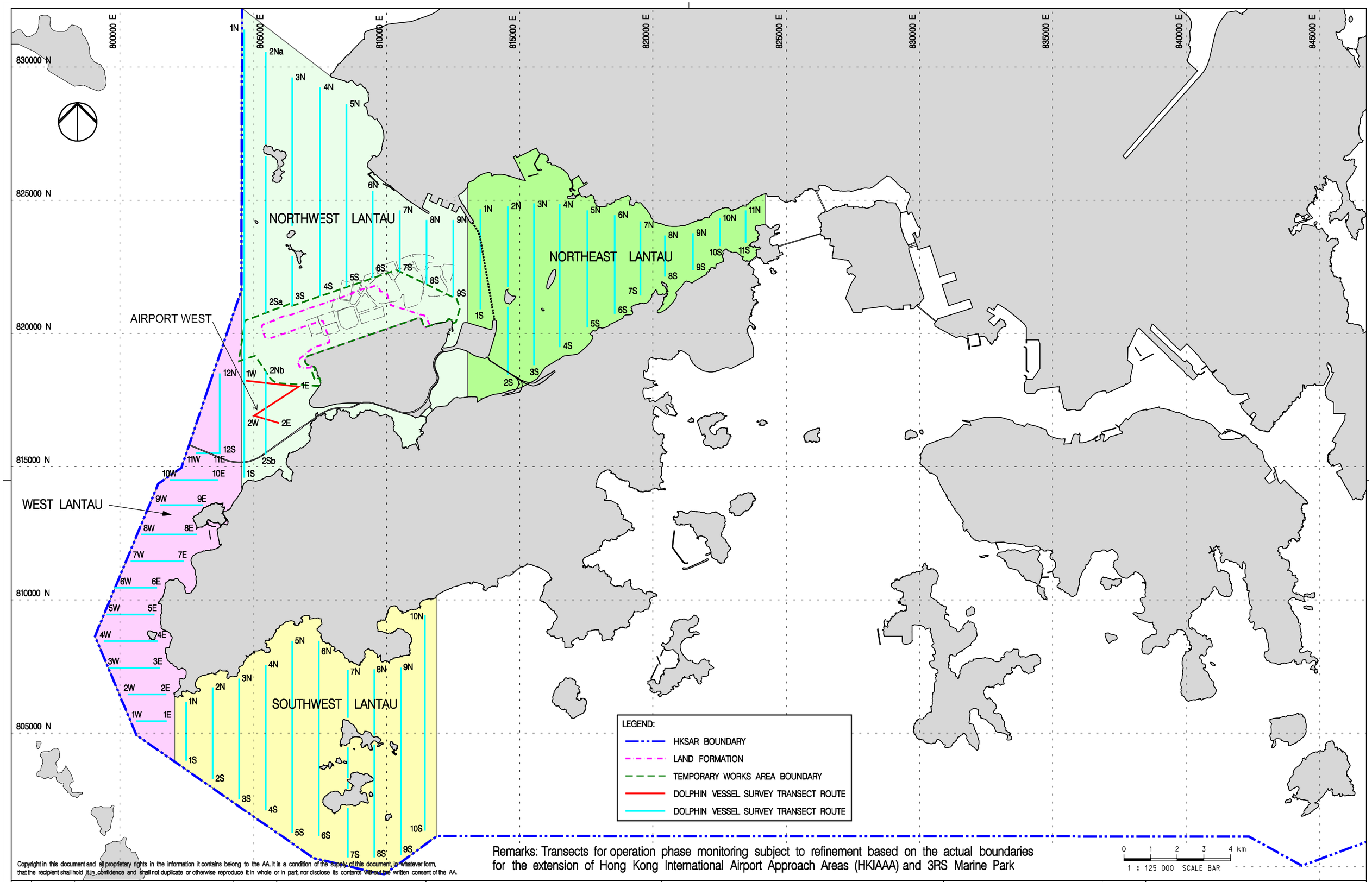
Drawing No.

FIGURE 3.1

Scale at A3 1 : 60000

Rev. D

Filename: J:\355482\REPORT\ENV\EMA\170802\FIG 3.1.dgn



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

Rev.	Date	Description	Checked
A	02DEC15	FIRST ISSUE	JC
B	27JUL16	GENERAL REVISION	JT
C	06FEB17	GENERAL REVISION	JT
D	01MAR17	GENERAL REVISION	JT

香港國際機場 HONG KONG INTERNATIONAL AIRPORT
Airport Authority HKIA Tower, 1 Sky Plaza Road, Hong Kong International Airport, Lantau, Hong Kong
Tel : (852) 2188 7111 Fax : (852) 2634 0717

MOTT MACDONALD

Title

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

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

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

Drawing No. FIGURE 6.1

Scale at A3 1 : 125000

Rev. D

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

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

E
D

HKSAR BOUNDARY

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

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

Rev.	Date	Description	Checked
A	02DEC15	FIRST ISSUE	JC
B	06FEB17	GENERAL REVISION	JC

香港國際機場 HONG KONG INTERNATIONAL AIRPORT
Airport Authority HKIA Tower, 1 Sky Plaza Road, Hong Kong International Airport, Lantau, Hong Kong
Tel : (852) 2188 7111 Fax : (852) 2634 0717

MOTT MACDONALD

Title

LAND BASED DOLPHIN MONITORING IN BASELINE AND CONSTRUCTION PHASES

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

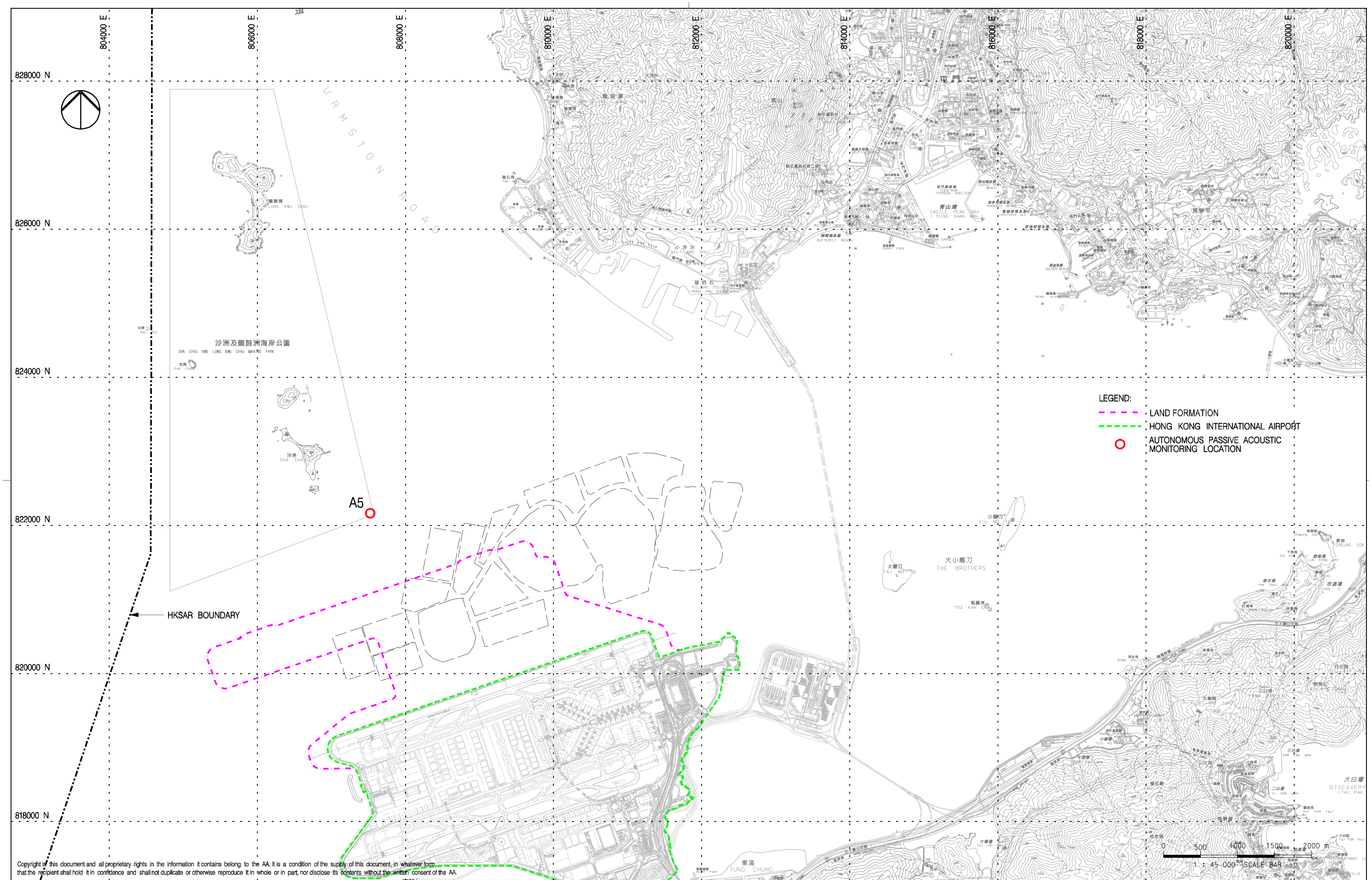
EXPANSION OF HONG KONG INTERNATIONAL AIRPORT INTO A THREE-RUNWAY SYSTEM

Drawing No.
FIGURE 6.2

Scale at A3
1 : 45000

Rev. B

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


804000 E
806000 E
808000 E
810000 E
812000 E
814000 E
816000 E
818000 E
820000 E
828000 N
826000 N
824000 N
822000 N
820000 N
818000 N
URMSTON ROAD
沙洲及龍鼓洲海岸公園
SHA CHAU AND LUNG KWU CHAU MARINE PARK
A5
HKSAR BOUNDARY
大小磨刀
THE BROTHERS
東涌
TUNG CHUNG
LEGEND:
LAND FORMATION
HONG KONG INTERNATIONAL AIRPORT
AUTONOMOUS PASSIVE ACOUSTIC MONITORING LOCATION
0 500 1000 1500 2000 m
1 : 45 000 SCALE BAR

Rev.	Date	Description	Checked
A	29AUG17	FIRST ISSUE	JT

香港國際機場 HONG KONG INTERNATIONAL AIRPORT

Airport Authority HKIA Tower, 1 Sky Plaza Road, Hong Kong International Airport, Lantau, Hong Kong Tel : (852) 2188 7111 Fax : (852) 2824 0717

MOTT MACDONALD

Title

LOCATION FOR AUTONOMOUS PASSIVE ACOUSTIC MONITORING

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

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

Drawing No. FIGURE 6.5

Scale at A3 1 : 45000

Rev. A

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Notes:

I= implemented where applicable;

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

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

Appendix B. Monitoring Schedule

Monitoring Schedule of This Reporting Period

Mar-18

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1 Site Inspection WQ General & Regular DCM mid-ebb: 12:53 mid-flood: 07:19	**2** Site Inspection	**3** WQ General & Regular DCM mid-ebb: 14:08 mid-flood: 08:26
4	**5** CWD Survey (Vessel) AR1A, AR2 NM1A, NM3A, NM4, NM5	**6** Site Inspection WQ General & Regular DCM mid-ebb: 15:52 mid-flood: 09:47	**7** Site Inspection CWD Survey (Vessel)	**8** Site Inspection CWD Survey (Vessel) WQ General & Regular DCM mid-ebb: 17:27 mid-flood: 10:44	**9** Site Inspection AR1A, AR2 NM6	**10** WQ General & Regular DCM mid-ebb: 20:01 mid-flood: 12:02
11	**12** CWD Survey (Vessel, Land-based) AR1A, AR2 NM1A, NM3A, NM4, NM5	**13** Site Inspection CWD Survey (Vessel) WQ General & Regular DCM mid-ebb: 11:19 mid-flood: 05:59	**14** Site Inspection CWD Survey (Vessel) NM6 Ecological Monitoring	**15** Site Inspection WQ General & Regular DCM mid-ebb: 12:20 mid-flood: 06:47	**16** Site Inspection AR1A, AR2	**17** WQ General & Regular DCM mid-ebb: 13:16 mid-flood: 07:31
18	**19**	**20** Site Inspection NM6 WQ General & Regular DCM mid-ebb: 14:50 mid-flood: 08:38	**21** Site Inspection CWD Survey (Vessel) NM4	**22** Site Inspection CWD Survey (Vessel, Land-based) AR1A, AR2 NM1A, NM3A, NM5 WQ General & Regular DCM mid-ebb: 16:12 mid-flood: 09:36	**23** Site Inspection CWD Survey (Land-based)	**24** WQ General & Regular DCM mid-ebb: 18:07 mid-flood: 10:52
25	**26** CWD Survey (Land-based) NM6	**27** Site Inspection CWD Survey (Land-based) WQ General & Regular DCM mid-ebb: 10:22 mid-flood: 15:23	**28** Site Inspection AR1A, AR2 NM1A, NM3A, NM4, NM5	**29** Site Inspection WQ General & Regular DCM mid-ebb: 11:58 mid-flood: 06:11	**30**	**31** WQ General & Regular DCM mid-ebb: 13:08 mid-flood: 07:13
		Notes: CWD - Chinese White Dolphin Air quality and Noise Monitoring Station WQ - Water Quality DCM - Deep Cemenet Mixing	NM1A/AR1A - Man Tung Road Park NM3A - Site Office NM4 - Ching Chung Hau Po Woon Primary School NM5/AR2 - Village House, Tin Sum NM6 - House No. 1, Sha Lo Wan			

Tentative Monitoring Schedule of Next Reporting Period

Apr-18

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	**2**	**3** Site Inspection CWD Survey (Vessel) AR1A, AR2 NM1A, NM3A, NM4, NM5 WQ General & Regular DCM mid-ebb: 14:47 mid-flood: 08:32	**4** Site Inspection CWD Survey (Vessel) NM6	**5** WQ General & Regular DCM mid-ebb: 16:02 mid-flood: 09:25	**6** Site Inspection	**7** WQ General & Regular DCM mid-ebb: 17:39 mid-flood: 10:23
8	**9** CWD Survey (Land-based) AR1A, AR2 NM1A, NM3A, NM4, NM5	**10** Site Inspection CWD Survey (Land-based) WQ General & Regular DCM mid-ebb: 10:10 mid-flood: 14:22	**11** Site Inspection CWD Survey (Vessel)	**12** Site Inspection CWD Survey (Vessel) NM6 WQ General & Regular DCM mid-ebb: 11:23 mid-flood: 16:37	**13** Site Inspection CWD Survey (Vessel) AR1A, AR2	**14** WQ General & Regular DCM mid-ebb: 12:20 mid-flood: 18:07
15	**16** CWD Survey (Vessel)	**17** Site Inspection CWD Survey (Vessel) NM6 WQ General & Regular DCM mid-ebb: 13:53 mid-flood: 07:31	**18** Site Inspection CWD Survey (Vessel)	**19** Site Inspection CWD Survey (Land-based) AR1, AR2 NM1A, NM3A, NM4, NM5 WQ General & Regular DCM mid-ebb: 15:11 mid-flood: 08:32	**20** Site Inspection CWD Survey (Land-based)	**21** WQ General & Regular DCM mid-ebb: 16:52 mid-flood: 09:45
22	**23** CWD Survey (Land-based)	**24** Site Inspection AR1A, AR2 NM1A, NM3A, NM4, NM5 WQ General & Regular DCM mid-ebb: 09:03 mid-flood: 13:54	**25** Site Inspection	**26** Site Inspection NM6 WQ General & Regular DCM mid-ebb: 10:59 mid-flood: 16:30	**27** Site Inspection	**28** WQ General & Regular DCM mid-ebb: 12:11 mid-flood: 18:18
29	**30** CWD Survey (Land-based) AR1A, AR2 NM1A, NM3A, NM4, NM5					

Notes:

CWD - Chinese White Dolphin

Air quality and Noise Monitoring Station

WQ - Water Quality
DCM - Deep Cemenet Mixing

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

Appendix C. Monitoring Results

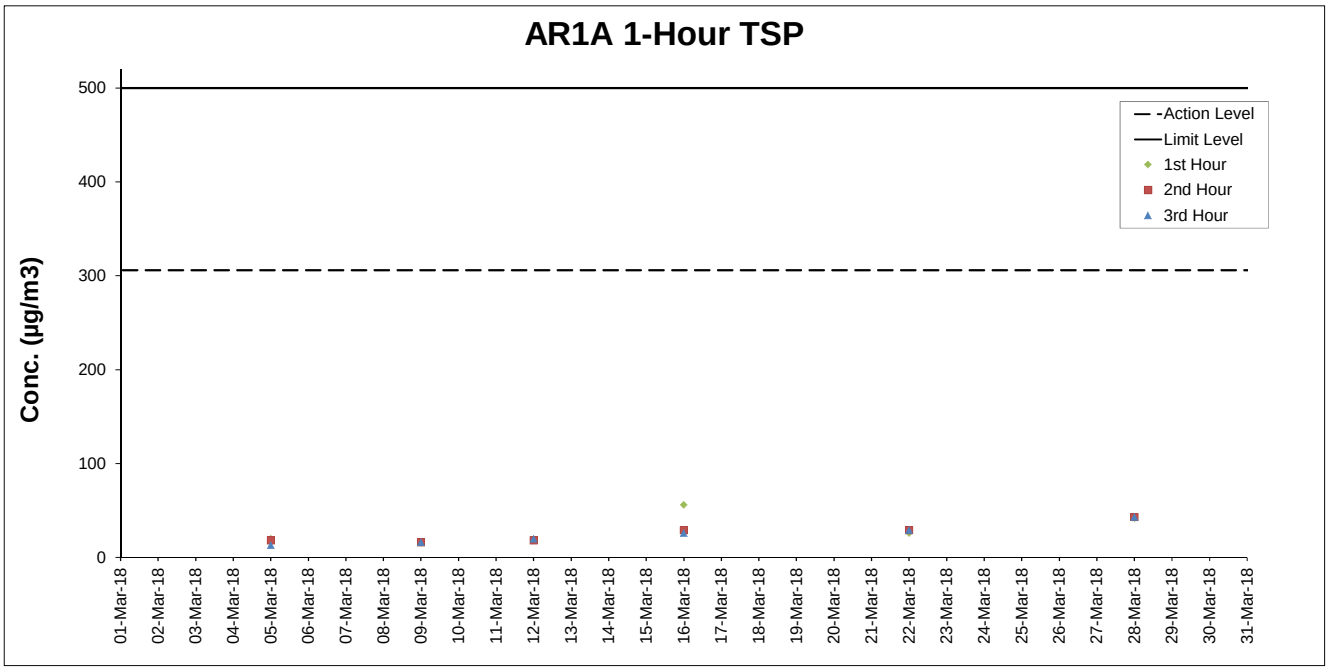
Air Quality Monitoring Results

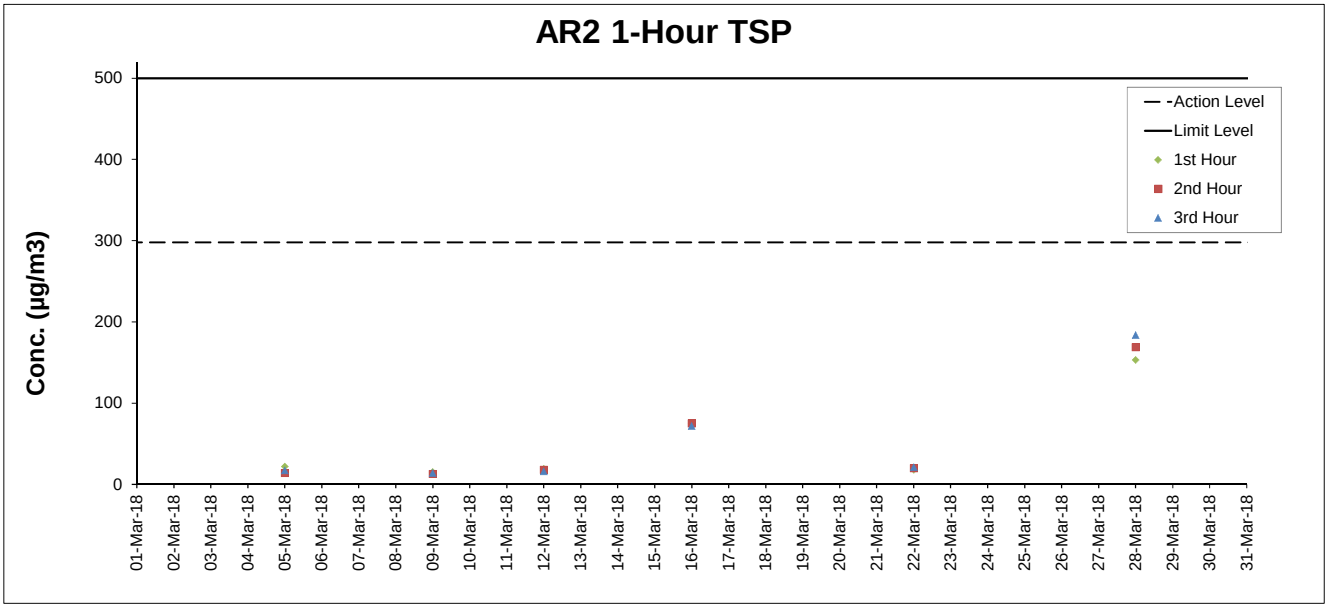
1-hour TSP Results
Station: AR1A- Man Tung Road Park

Date	Time	Weather	Wind Speed (m/s)	Wind Direction (deg)	1-hr TSP ($\mu g/m^3$)	Action Level ($\mu g/m^3$)	Limit Level ($\mu g/m^3$)
05-Mar-18	13:00	Fine	2.2	195	20	306	500
05-Mar-18	14:00	Fine	3.0	206	18	306	500
05-Mar-18	15:00	Fine	3.0	10	13	306	500
09-Mar-18	09:00	Sunny	3.6	195	16	306	500
09-Mar-18	10:00	Sunny	4.1	206	16	306	500
09-Mar-18	11:00	Sunny	4.5	25	16	306	500
12-Mar-18	13:45	Sunny	4.6	195	19	306	500
12-Mar-18	14:45	Sunny	4.5	206	18	306	500
12-Mar-18	15:45	Sunny	3.2	281	20	306	500
16-Mar-18	13:00	Sunny	4.2	195	56	306	500
16-Mar-18	14:00	Sunny	4.2	206	29	306	500
16-Mar-18	15:00	Sunny	4.7	260	26	306	500
22-Mar-18	13:00	Sunny	4.0	195	26	306	500
22-Mar-18	14:00	Sunny	4.2	206	29	306	500
22-Mar-18	15:00	Sunny	4.8	255	29	306	500
28-Mar-18	13:00	Sunny	4.3	195	42	306	500
28-Mar-18	14:00	Sunny	4.2	206	43	306	500
28-Mar-18	15:00	Sunny	4.3	57	43	306	500

1-hour TSP Results
Station: AR2- Village House, Tin Sum

Date	Time	Weather	Wind Speed (m/s)	Wind Direction (deg)	1-hr TSP ($\mu g/m^3$)	Action Level ($\mu g/m^3$)	Limit Level ($\mu g/m^3$)
05-Mar-18	09:00	Sunny	2.7	195	22	298	500
05-Mar-18	10:00	Sunny	3.2	206	14	298	500
05-Mar-18	11:00	Sunny	2.3	356	17	298	500
09-Mar-18	09:01	Sunny	3.6	195	15	298	500
09-Mar-18	10:01	Sunny	4.2	206	13	298	500
09-Mar-18	11:01	Sunny	4.2	30	14	298	500
12-Mar-18	09:00	Sunny	4.4	195	19	298	500
12-Mar-18	10:00	Sunny	3.4	206	18	298	500
12-Mar-18	11:00	Sunny	5.4	56	16	298	500
16-Mar-18	09:00	Sunny	2.0	195	75	298	500
16-Mar-18	10:00	Sunny	3.5	206	75	298	500
16-Mar-18	11:00	Sunny	2.4	287	72	298	500
22-Mar-18	08:56	Sunny	3.6	195	18	298	500
22-Mar-18	09:56	Sunny	4.4	206	20	298	500
22-Mar-18	10:56	Sunny	3.3	13	21	298	500
28-Mar-18	09:00	Sunny	4.5	195	153	298	500
28-Mar-18	10:00	Sunny	4.4	206	169	298	500
28-Mar-18	11:00	Sunny	3.9	87	184	298	500


AR1A 1-Hour TSP
Conc. (µg/m3)
500
400
300
200
100
0
-Action Level
Limit Level
1st Hour
2nd Hour
3rd Hour
01-Mar-18
02-Mar-18
03-Mar-18
04-Mar-18
05-Mar-18
06-Mar-18
07-Mar-18
08-Mar-18
09-Mar-18
10-Mar-18
11-Mar-18
12-Mar-18
13-Mar-18
14-Mar-18
15-Mar-18
16-Mar-18
17-Mar-18
18-Mar-18
19-Mar-18
20-Mar-18
21-Mar-18
22-Mar-18
23-Mar-18
24-Mar-18
25-Mar-18
26-Mar-18
27-Mar-18
28-Mar-18
29-Mar-18
30-Mar-18
31-Mar-18


AR2 1-Hour TSP
Conc. (µg/m3)
500
400
300
200
100
0
-Action Level
Limit Level
1st Hour
2nd Hour
3rd Hour
01-Mar-18
02-Mar-18
03-Mar-18
04-Mar-18
05-Mar-18
06-Mar-18
07-Mar-18
08-Mar-18
09-Mar-18
10-Mar-18
11-Mar-18
12-Mar-18
13-Mar-18
14-Mar-18
15-Mar-18
16-Mar-18
17-Mar-18
18-Mar-18
19-Mar-18
20-Mar-18
21-Mar-18
22-Mar-18
23-Mar-18
24-Mar-18
25-Mar-18
26-Mar-18
27-Mar-18
28-Mar-18
29-Mar-18
30-Mar-18
31-Mar-18

Noise Monitoring Results

Noise Measurement Results
Station: NM1A- Man Tung Road Park

Date	Weather	Time	Measured L_{10} dB(A)	Measured L_{90} dB(A)	$L_{eq(30mins)}$ dB(A)
05-Mar-18	Fine	13:12	71.0	53.5	72
05-Mar-18	Fine	13:17	73.0	54.5	
05-Mar-18	Fine	13:22	71.5	54.0	
05-Mar-18	Fine	13:27	73.5	54.5	
05-Mar-18	Fine	13:32	71.0	55.0	
05-Mar-18	Fine	13:37	72.5	55.5	
12-Mar-18	Sunny	14:05	71.0	55.0	71
12-Mar-18	Sunny	14:10	73.0	55.0	
12-Mar-18	Sunny	14:15	72.5	55.5	
12-Mar-18	Sunny	14:20	70.0	54.0	
12-Mar-18	Sunny	14:25	71.0	55.0	
12-Mar-18	Sunny	14:30	71.0	55.5	
22-Mar-18	Sunny	13:10	73.5	59.5	73
22-Mar-18	Sunny	13:15	73.5	59.0	
22-Mar-18	Sunny	13:20	71.5	57.0	
22-Mar-18	Sunny	13:25	71.5	57.0	
22-Mar-18	Sunny	13:30	75.5	59.0	
22-Mar-18	Sunny	13:35	73.0	57.0	
28-Mar-18	Sunny	13:15	73.5	55.0	72
28-Mar-18	Sunny	13:20	71.0	54.0	
28-Mar-18	Sunny	13:25	74.0	55.0	
28-Mar-18	Sunny	13:30	73.0	55.5	
28-Mar-18	Sunny	13:35	72.0	56.5	
28-Mar-18	Sunny	13:40	74.0	56.0	

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

Noise Measurement Results
Station: NM3A- Site Office

Date	Weather	Time	Measured L_{10} dB(A)	Measured L_{90} dB(A)	$L_{eq(30mins)}$ dB(A)
05-Mar-18	Sunny	09:45	62.0	60.5	61
05-Mar-18	Sunny	09:50	63.0	60.5	
05-Mar-18	Sunny	09:55	61.0	60.0	
05-Mar-18	Sunny	10:00	61.0	60.5	
05-Mar-18	Sunny	10:05	61.0	60.0	
05-Mar-18	Sunny	10:10	61.0	60.0	
12-Mar-18	Sunny	09:20	68.0	61.0	63
12-Mar-18	Sunny	09:25	69.0	60.0	
12-Mar-18	Sunny	09:30	69.0	60.0	
12-Mar-18	Sunny	09:35	71.0	60.5	
12-Mar-18	Sunny	09:40	68.5	60.5	
12-Mar-18	Sunny	09:45	70.0	60.5	
22-Mar-18	Sunny	09:30	69.5	60.0	63
22-Mar-18	Sunny	09:35	69.5	60.5	
22-Mar-18	Sunny	09:40	71.0	60.0	
22-Mar-18	Sunny	09:45	70.5	60.0	
22-Mar-18	Sunny	09:50	70.0	60.0	
22-Mar-18	Sunny	09:55	69.5	59.5	
28-Mar-18	Sunny	10:27	68.5	57.5	61
28-Mar-18	Sunny	10:32	69.0	58.0	
28-Mar-18	Sunny	10:37	66.0	57.0	
28-Mar-18	Sunny	10:42	69.0	58.0	
28-Mar-18	Sunny	10:47	69.0	57.0	
28-Mar-18	Sunny	10:52	71.5	57.0	

Noise Measurement Results
Station: NM4- Ching Chung Hau Po Woon Primary School

Date	Weather	Time	Measured L_{10} dB(A)	Measured L_{90} dB(A)	$L_{eq(30mins)}$ dB(A)
05-Mar-18	Sunny	14:39	61.5	57.5	63
05-Mar-18	Sunny	14:44	61.5	57.5	
05-Mar-18	Sunny	14:49	62.0	58.0	
05-Mar-18	Sunny	14:54	62.0	58.0	
05-Mar-18	Sunny	14:59	63.0	58.0	
05-Mar-18	Sunny	15:04	62.0	57.0	
12-Mar-18	Sunny	14:04	65.0	60.0	60
12-Mar-18	Sunny	14:09	66.5	60.5	
12-Mar-18	Sunny	14:14	67.5	62.5	
12-Mar-18	Sunny	14:19	66.5	60.5	
12-Mar-18	Sunny	14:24	64.0	60.0	
12-Mar-18	Sunny	14:29	64.0	60.0	
21-Mar-18	Sunny	09:18	64.5	59.0	65
21-Mar-18	Sunny	09:23	62.0	58.5	
21-Mar-18	Sunny	09:28	66.0	59.0	
21-Mar-18	Sunny	09:33	64.5	58.5	
21-Mar-18	Sunny	09:38	63.5	59.0	
21-Mar-18	Sunny	09:43	63.5	58.5	
28-Mar-18	Sunny	14:03	64.0	60.0	66
28-Mar-18	Sunny	14:08	65.0	60.5	
28-Mar-18	Sunny	14:13	66.0	60.5	
28-Mar-18	Sunny	14:18	64.0	59.5	
28-Mar-18	Sunny	14:23	63.5	60.0	
28-Mar-18	Sunny	14:28	65.0	60.5	

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

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

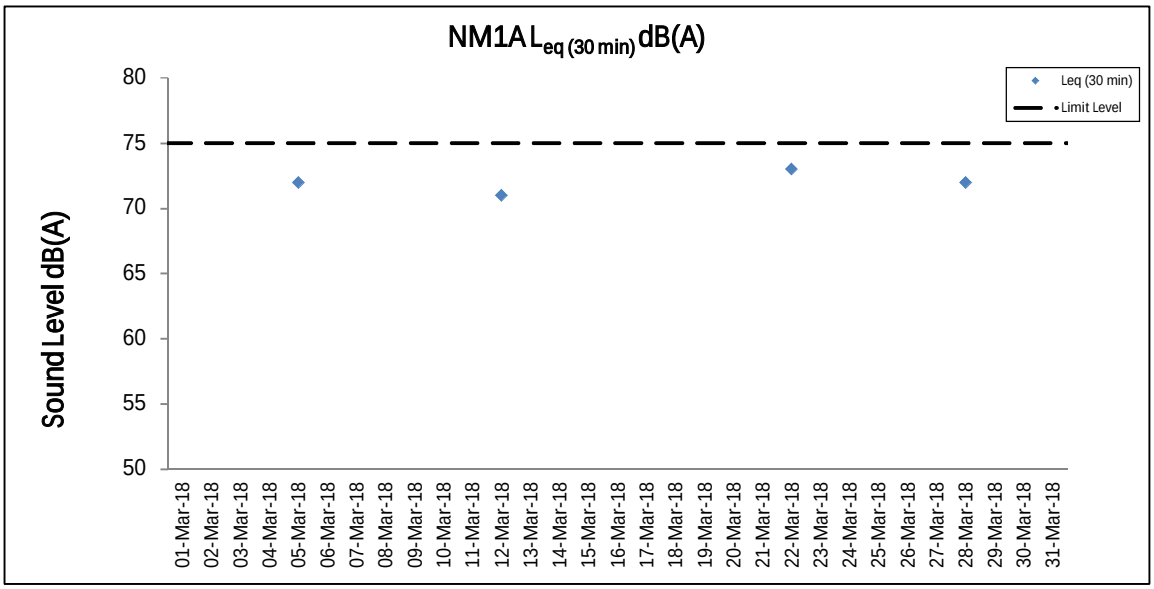
Date	Weather	Time	Measured L_{10} dB(A)	Measured L_{90} dB(A)	$L_{eq(30mins)}$ dB(A)
05-Mar-18	Sunny	09:30	53.0	46.5	57
05-Mar-18	Sunny	09:35	51.5	46.6	
05-Mar-18	Sunny	09:40	57.5	48.0	
05-Mar-18	Sunny	09:45	50.5	45.5	
05-Mar-18	Sunny	09:50	61.5	46.5	
05-Mar-18	Sunny	09:55	53.0	46.0	
12-Mar-18	Sunny	09:25	59.5	52.0	62
12-Mar-18	Sunny	09:30	66.5	53.0	
12-Mar-18	Sunny	09:35	62.5	52.5	
12-Mar-18	Sunny	09:40	61.5	51.5	
12-Mar-18	Sunny	09:45	60.0	53.0	
12-Mar-18	Sunny	09:50	63.5	53.0	
22-Mar-18	Sunny	09:06	58.5	51.0	58
22-Mar-18	Sunny	09:11	58.5	51.0	
22-Mar-18	Sunny	09:16	59.0	50.0	
22-Mar-18	Sunny	09:21	56.0	49.0	
22-Mar-18	Sunny	09:26	58.0	51.5	
22-Mar-18	Sunny	09:31	57.5	50.5	
28-Mar-18	Sunny	09:17	58.5	50.5	53
28-Mar-18	Sunny	09:22	57.5	51.0	
28-Mar-18	Sunny	09:27	60.5	50.5	
28-Mar-18	Sunny	09:32	58.5	50.0	
28-Mar-18	Sunny	09:37	55.5	50.5	
28-Mar-18	Sunny	09:42	57.0	50.0	

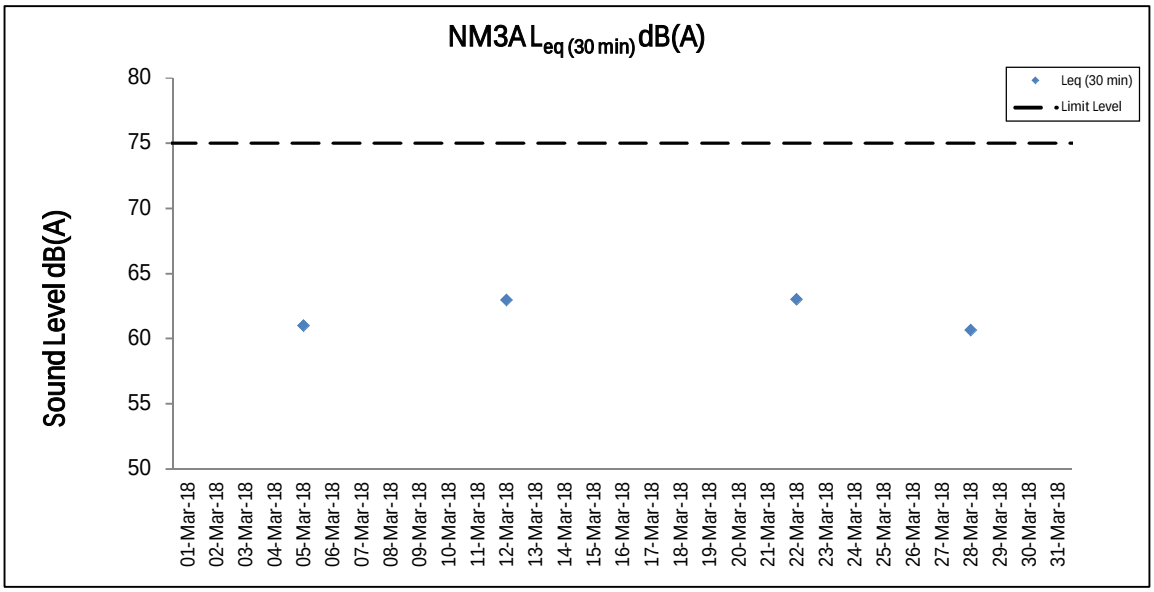
Remarks:
+3dB (A) correction was applied to free-field measurement.

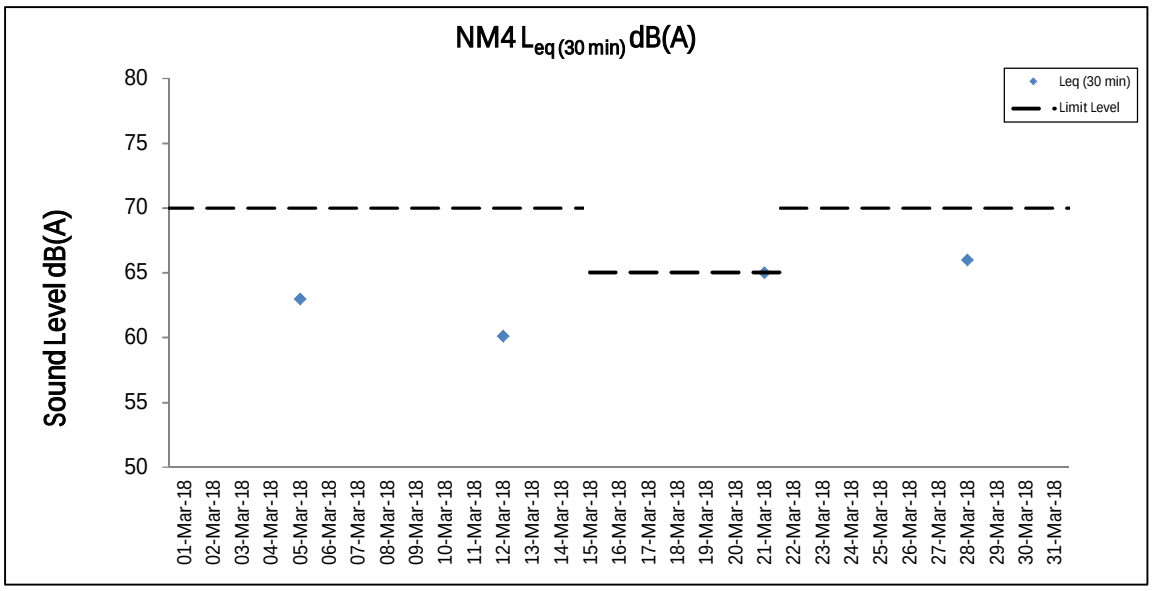
Noise Measurement Results
Station: NM6- House No.1 Sha Lo Wan

Date	Weather	Time	Measured L_{10} dB(A)	Measured L_{90} dB(A)	$L_{eq(30mins)}$ dB(A)
09-Mar-18	Sunny	10:50	70.0	63.0	71
09-Mar-18	Sunny	10:55	71.0	62.0	
09-Mar-18	Sunny	11:00	69.5	58.0	
09-Mar-18	Sunny	11:05	78.5	59.5	
09-Mar-18	Sunny	11:10	76.0	57.0	
09-Mar-18	Sunny	11:15	74.5	57.5	
14-Mar-18	Cloudy	09:42	70.0	61.0	66
14-Mar-18	Cloudy	09:47	72.0	58.5	
14-Mar-18	Cloudy	09:52	70.5	58.5	
14-Mar-18	Cloudy	09:57	67.0	54.5	
14-Mar-18	Cloudy	10:02	74.0	54.5	
14-Mar-18	Cloudy	10:07	70.0	58.0	
20-Mar-18	Cloudy	09:39	74.5	54.5	73
20-Mar-18	Cloudy	09:44	70.5	53.5	
20-Mar-18	Cloudy	09:49	75.0	54.0	
20-Mar-18	Cloudy	09:54	76.0	53.5	
20-Mar-18	Cloudy	09:59	72.0	54.0	
20-Mar-18	Cloudy	10:04	77.0	53.5	
26-Mar-18	Fine	09:39	78.0	58.5	73
26-Mar-18	Fine	09:44	73.5	64.0	
26-Mar-18	Fine	09:49	72.5	61.0	
26-Mar-18	Fine	09:54	78.0	58.5	
26-Mar-18	Fine	09:59	74.5	55.0	
26-Mar-18	Fine	10:04	71.0	56.0	

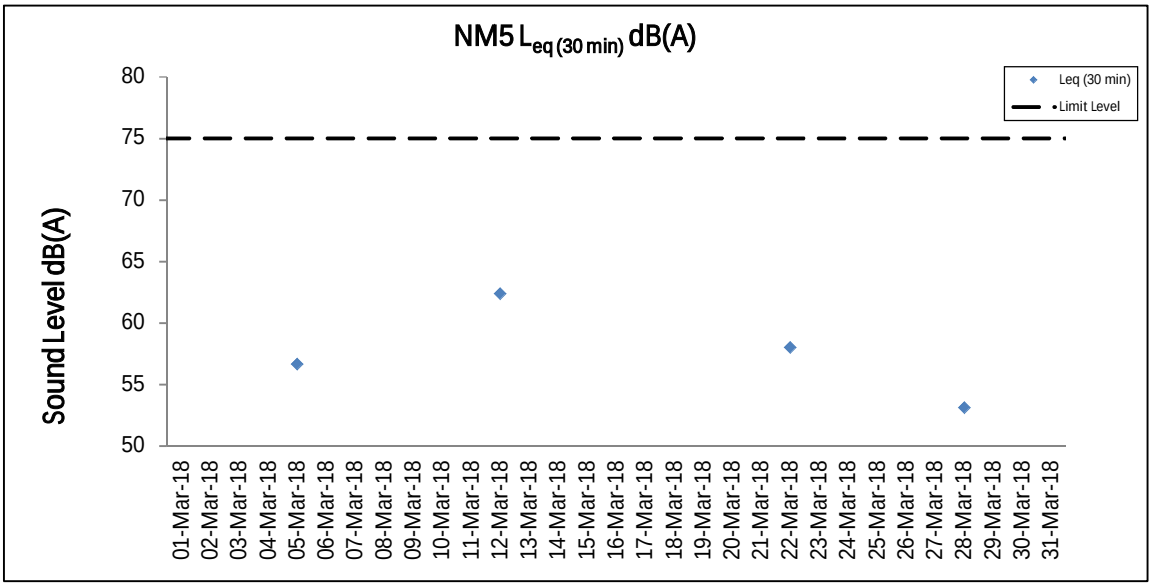
Remarks:
+3dB (A) correction was applied to free-field measurement.

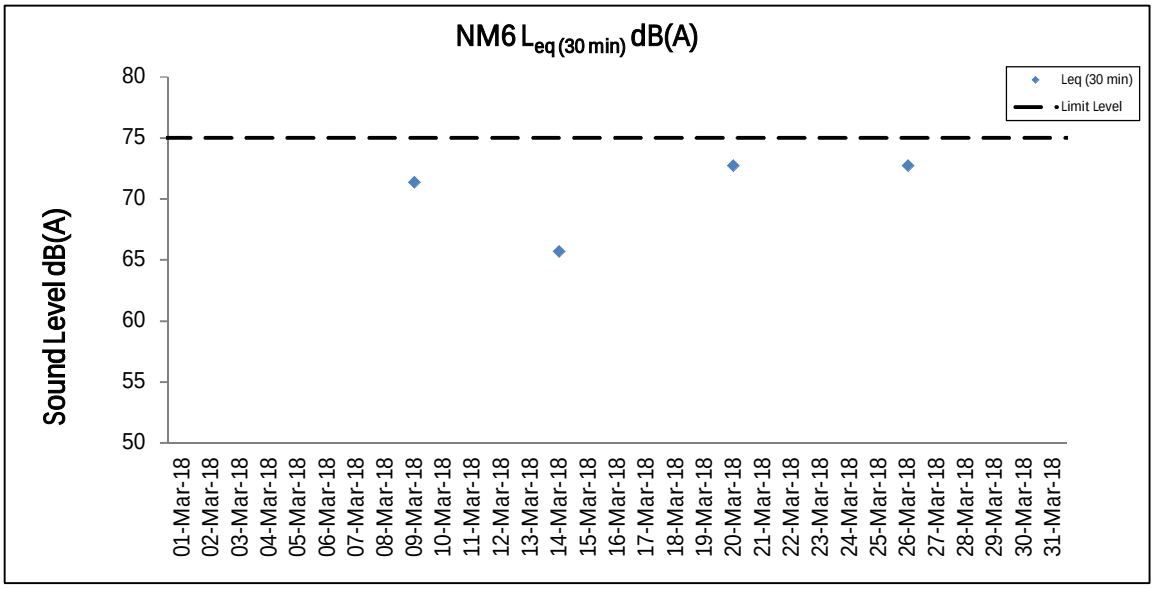






Note: Limit Level at NM4 reduced to 65 dB(A) during school examination period from 15 to 21 March 2017.


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


NM6 Leq (30 min) dB(A)
Sound Level dB(A)
80
75
70
65
60
55
50
Leq (30 min)
Limit Level
01-Mar-18
02-Mar-18
03-Mar-18
04-Mar-18
05-Mar-18
06-Mar-18
07-Mar-18
08-Mar-18
09-Mar-18
10-Mar-18
11-Mar-18
12-Mar-18
13-Mar-18
14-Mar-18
15-Mar-18
16-Mar-18
17-Mar-18
18-Mar-18
19-Mar-18
20-Mar-18
21-Mar-18
22-Mar-18
23-Mar-18
24-Mar-18
25-Mar-18
26-Mar-18
27-Mar-18
28-Mar-18
29-Mar-18
30-Mar-18
31-Mar-18

Water Quality Monitoring Results

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

Water Quality Monitoring

Water Quality Monitoring Results on 01 March 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Sunny	Moderate	12:18	8.3	Surface	1.0	0.3	135	19.3	19.3	8.2	8.2	30.1	30.1	127.3	127.3	9.8	9.5	7.5	7.9	5	6	72	74	815614	804247	<0.2	<0.2	1.9	1.8
						1.0	0.3	143	19.3		8.2		30.1		127.2		9.8		7.5		5		72				<0.2		1.8	
					Middle	4.2	0.3	156	17.7	17.7	8.2	8.2	30.7	30.7	116.8	116.7	9.3		7.4		7		73				<0.2		1.6	
						4.2	0.3	169	17.7		8.2		30.8		116.6		9.2		7.4		7		74				<0.2		1.8	
					Bottom	7.3	0.2	162	17.3	17.3	8.1	8.1	31.6	31.6	115.4	115.5	9.2	9.2	8.8		7		75				<0.2		1.8	
						7.3	0.2	164	17.3		8.1		31.6		115.5		9.2		8.7		7		75				<0.2		1.7	
C2	Fine	Moderate	11:14	11.8	Surface	1.0	0.1	117	18.1	18.1	8.1	8.1	29.1	29.1	100.2	100.2	8.0	7.9	12.5	12.1	10	10	73	74	825663	806935	<0.2	<0.2	1.4	1.5
						1.0	0.1	120	18.1		8.1		29.1		100.2		8.0		12.5		9		73				<0.2		1.6	
					Middle	5.9	0.1	96	18.0	18.0	8.1	8.1	29.5	29.5	98.3	98.3	7.8		12.2		10		73				<0.2		1.4	
						5.9	0.1	97	18.0		8.1		29.5		98.3		7.8		12.2		9		74				<0.2		1.6	
					Bottom	10.8	0.1	223	18.0	18.0	8.0	8.0	29.8	29.8	94.1	94.1	7.5	7.5	11.7		10		75				<0.2		1.6	
						10.8	0.1	234	18.0		8.0		29.8		94.1		7.5		11.7		10		75				<0.2		1.6	
C3	Sunny	Moderate	13:04	12.0	Surface	1.0	0.5	69	18.1	18.1	8.1	8.1	30.7	30.7	95.6	95.6	7.5	7.4	3.5	3.3	3	4	74	76	822083	817814	<0.2	<0.2	1.8	2.0
						1.0	0.5	70	18.1		8.1		30.7		95.6		7.5		3.5		4		73				<0.2		1.6	
					Middle	6.0	0.4	83	17.9	17.9	8.1	8.1	30.8	30.8	91.0	91.0	7.2		3.2		4		76				<0.2		1.5	
						6.0	0.4	88	17.9		8.1		30.8		91.0		7.2		3.2		3		75				<0.2		2.3	
					Bottom	11.0	0.3	89	17.6	17.6	8.0	8.0	31.1	31.1	83.6	83.6	6.6	6.6	3.2		3		78				<0.2		2.2	
						11.0	0.3	97	17.6		8.0		31.1		83.6		6.6		3.2		4		77				<0.2		2.3	
IM1	Sunny	Moderate	11:55	7.2	Surface	1.0	0.1	164	17.8	17.8	8.2	8.2	30.7	30.7	115.8	115.8	9.2	9.1	7.7	7.5	9	8	72	75	818356	806439	<0.2	<0.2	1.6	1.7
						1.0	0.1	177	17.8		8.3		30.7		115.7		9.2		7.8		8		72				<0.2		1.7	
					Middle	3.6	0.1	173	17.8	17.8	8.3	8.3	30.8	30.8	113.3	113.2	9.0		7.4		8		75				<0.2		1.6	
						3.6	0.1	178	17.8		8.3		30.8		113.1		8.9		7.4		7		75				<0.2		1.7	
					Bottom	6.2	0.1	166	17.8	17.8	8.3	8.3	30.8	30.8	109.2	109.1	8.6	8.6	7.4		8		77				<0.2		1.6	
						6.2	0.1	177	17.8		8.3		30.8		109.0		8.6		7.4		7		77				<0.2		1.8	
IM2	Sunny	Moderate	11:48	8.1	Surface	1.0	0.1	152	18.5	18.5	8.3	8.3	30.3	30.3	120.0	119.9	9.4	9.2	8.2	9.0	8	8	72	75	818859	806206	<0.2	<0.2	1.7	1.8
						1.0	0.1	165	18.5		8.3		30.3		119.7		9.4		8.2		7		73				<0.2		1.8	
					Middle	4.1	0.1	160	17.6	17.6	8.2	8.2	30.7	30.7	114.0	114.0	9.1		8.9		8		75				<0.2		1.7	
						4.1	0.1	163	17.6		8.2		30.7		114.0		9.0		8.9		8		75				<0.2		1.9	
					Bottom	7.1	0.1	167	17.7	17.7	8.2	8.2	30.8	30.8	110.0	110.0	8.7	8.7	10.0		8		77				<0.2		1.9	
						7.1	0.1	176	17.7		8.2		30.8		109.9		8.7		10.0		7		77				<0.2		1.7	
IM3	Sunny	Moderate	11:41	8.2	Surface	1.0	0.2	105	18.3	18.3	8.3	8.3	29.9	29.9	124.5	124.4	9.8	9.5	7.9	8.6	5	8	73	75	819427	805995	<0.2	<0.2	1.6	1.6
						1.0	0.2	106	18.3		8.3		29.9		124.3		9.8		7.9		6		73				<0.2		1.7	
					Middle	4.1	0.1	103	17.6	17.6	8.2	8.2	30.8	30.8	116.1	116.1	9.2		8.6		8		75				<0.2		1.3	
						4.1	0.1	104	17.6		8.2		30.8		116.0		9.2		8.7		8		75				<0.2		1.6	
					Bottom	7.2	0.1	110	17.6	17.6	8.2	8.2	30.8	30.8	111.6	111.5	8.9	8.9	9.3		9		77				<0.2		1.5	
						7.2	0.1	120	17.6		8.2		30.8		111.4		8.8		9.2		9		77				<0.2		1.6	
IM4	Sunny	Moderate	11:34	7.6	Surface	1.0	0.1	105	17.8	17.8	8.2	8.2	30.6	30.6	118.6	118.6	9.4	9.3	8.8	9.5	9	8	74	75	819570	805017	<0.2	<0.2	1.5	1.5
						1.0	0.1	111	17.8		8.2		30.6		118.5		9.4		8.8		8		73				<0.2		1.5	
					Middle	3.8	0.1	111	17.7	17.7	8.2	8.2	30.7	30.7	115.1	115.1	9.1		9.7		8		75				<0.2		1.6	
						3.8	0.2	119	17.7		8.2		30.7		115.0		9.1		9.6		7		75				<0.2		1.5	
					Bottom	6.6	0.1	70	17.5	17.5	8.2	8.2	31.0	31.0	109.5	109.5	8.7	8.7	10.0		7		76				<0.2		1.5	
						6.6	0.1	75	17.5		8.2		31.0		109.4		8.7		10.0		7		76				<0.2		1.6	
IM5	Sunny	Moderate	11:25	6.9	Surface	1.0	0.1	88	18.1	18.1	8.3	8.3	29.9	29.9	119.9	119.8	9.5	9.3	9.2	9.4	6	9	72	75	820562	804952	<0.2	<0.2	1.5	1.4
						1.0	0.1	96	18.1		8.3		29.9		119.7		9.5		9.2		6		73				<0.2		1.4	
					Middle	3.5	0.1	116	17.8	17.8	8.2	8.2	30.4	30.4	113.2	113.2	9.0		9.3		10		75				<0.2		1.4	
						3.5	0.1	124	17.8		8.2		30.4		113.1		9.0		9.3		10		75				<0.2		1.5	
					Bottom	5.9	0.1	212	17.8	17.8	8.2	8.2	30.6	30.6	109.2	109.2	8.7	8.7	9.8		9		77				<0.2		1.4	
						5.9	0.1	219	17.8		8.2		30.6		109.1		8.6		9.8		10		77				<0.2		1.3	
IM6	Sunny	Moderate	11:17	7.0	Surface	1.0	0.1	60	18.2	18.2	8.3	8.3	30.3	30.3	120.9	120.7	9.5	9.4	9.0	9.2	9	9	73	75	821045	805850	<0.2	<0.2	1.7	1.5
						1.0	0.1	63	18.2		8.3		30.3		120.4		9.5		9.1		8		73				<0.2		1.3	
					Middle	3.5	0.1	86	17.8	17.8	8.2	8.2	30.4	30.4	116.2	116.0	9.2		8.8		9		74				<0.2		1.7	
						3.5	0.1	94	17.8		8.2		30.4		115.8		9.2		8.9		9		75				<0.2		1.4	
					Bottom	6.0	0.1	40	17.8	17.8	8.2	8.2	30.6	30.6	110.1	110.1	8.7	8.7	9.8		9		76				<0.2		1.4	
						6.0	0.1	41	17.8		8.2		30.6		110.0		8.7		9.8		11		77				<0.2		1.4	
IM7	Sunny	Moderate	11:09	8.2	Surface	1.0	0.1	82	18.0	18.0	8.2	8.2	30.5	30.6	116.5	116.5	9.2	9.1	9.3	9.6	7	9	72	73	821364	806840	<0.2	<0.2	1.5	1.5
						1.0	0.1	84	18.0		8.2		30.6		116.5		9.2		9.3		8		72				<0.2		1.5	
					Middle	4.1	0.2	50	17.8	17.8	8.2	8.2	30.6	30.6	114.1	114.1	9.0		9.8		10		73				<0.2		1.5	
						4.1	0.2	52	17.8		8.2		30.6		114.0		9.0		9.9		8		73				<0.2		1.4	
					Bottom	7.2	0.1	65	17.8	17.8	8.2	8.2	30.6	30.6	112.3	112.1	8.9	8.9	9.6		10		75				<0.2		1.4	
						7.2	0.1	65	17.8		8.2		30.6		111.8		8.8		9.6		10		75				<0.2		1.4	
IM8	Fine	Moderate	11:40	8.3	Surface	1.0	0.3	132	18.3	18.3	8.1	8.1	29.2	29.2	110.5	110.5	8.7	8.7	8.9	12.2	8	8	73	74	821716	807839	<0.2	<0.2	1.5	1.8
						1.0	0.3	137	18.3		8.1		29.2		110.5		8.7		8.9		8		73				<0.2		2.2	
					Middle	4.2	0.2	92	18.2	18.2	8.2	8.2	29.9	29.9	109.6	109.6	8.7		9.9		8		73				<0.2		1.6	
						4.2	0.3	93	18.2		8.2		29.9		109.6		8.7		9.9		8		73				<0.2		1.7	
					Bottom	7.3	0.2	79	18.1	18.1	8.2	8.2	30.0	30.0	104.2	104.2	8.2	8.2	17.9		9		74				<0.2		1.9	
						7.3	0.2	86	18.1		8.2		30.0		104.2		8.2		17.9		9		75				<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 March 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Fine	Moderate	11:49	7.2	Surface	1.0	0.5	95	18.3	18.3	8.1	8.1	29.3	29.3	100.6	100.6	8.0	7.9	9.3	9.2	12	14	73	74	822067	808786	<0.2	<0.2	2.1	2.1
						1.0	0.5	99	18.3		8.1		29.3		100.6		8.0		9.3		13		73				<0.2		1.9	
					Middle	3.6	0.5	88	18.2	18.2	8.1	8.1	29.5	29.5	98.7	98.7	7.8		8.9		12		73				<0.2		2.0	
						3.6	0.5	91	18.2		8.1		29.5		98.7		7.8		8.9		14		74				<0.2		2.2	
					Bottom	6.2	0.4	88	18.1	18.1	8.1	8.1	29.8	29.8	86.5	86.5	6.8	6.8	9.3		15		74				<0.2		2.2	
						6.2	0.4	93	18.1		8.1		29.8		86.5		6.8		9.3		15		75				<0.2		2.4	
IM10	Sunny	Moderate	11:57	7.0	Surface	1.0	0.4	95	18.3	18.3	8.2	8.2	29.8	29.8	102.6	102.6	8.1	7.9	10.2	9.6	12	12	73	74	822220	809858	<0.2	<0.2	2.0	2.1
						1.0	0.4	102	18.3		8.2		29.8		102.6		8.1		10.2		12		73				<0.2		2.0	
					Middle	3.5	0.5	105	18.1	18.1	8.2	8.2	29.8	29.8	95.8	95.8	7.6		9.2		11		74				<0.2		2.0	
						3.5	0.5	109	18.1		8.2		29.8		95.8		7.6		9.2		13		75				<0.2		2.2	
					Bottom	6.0	0.3	114	18.1	18.1	8.1	8.1	29.9	29.9	84.7	84.7	6.7	6.7	9.3		12		73				<0.2		2.1	
						6.0	0.3	121	18.1		8.1		29.9		84.7		6.7		9.3		11		74				<0.2		2.0	
IM11	Sunny	Moderate	12:11	7.8	Surface	1.0	0.4	110	18.4	18.4	8.2	8.2	29.5	29.5	104.0	104.0	8.2	7.9	7.1	7.8	9	9	73	74	821488	810524	<0.2	<0.2	2.2	2.2
						1.0	0.4	120	18.4		8.2		29.5		104.0		8.2		7.1		7		72				<0.2		1.8	
					Middle	3.9	0.3	109	18.2	18.2	8.2	8.2	29.8	29.8	95.8	95.8	7.6		7.4		9		73				<0.2		2.1	
						3.9	0.3	119	18.2		8.2		29.8		95.8		7.6		7.4		9		74				<0.2		2.4	
					Bottom	6.8	0.3	101	18.2	18.2	8.1	8.1	30.0	30.0	83.2	83.2	6.6	6.6	8.8		9		75				<0.2		2.2	
						6.8	0.4	109	18.2		8.1		30.0		83.2		6.6		8.8		8		76				<0.2		2.5	
IM12	Sunny	Moderate	12:17	8.4	Surface	1.0	0.5	100	18.3	18.3	8.2	8.2	29.7	29.7	104.6	104.6	8.3	8.2	9.5	12.2	8	9	73	75	821158	811490	<0.2	<0.2	1.0	1.1
						1.0	0.5	109	18.3		8.2		29.7		104.6		8.3		9.5		8		73				<0.2		1.1	
					Middle	4.2	0.4	99	18.2	18.2	8.2	8.2	29.8	29.8	101.3	101.3	8.0		12.2		8		75				<0.2		0.9	
						4.2	0.4	106	18.2		8.2		29.8		101.3		8.0		12.2		8		75				<0.2		1.1	
					Bottom	7.4	0.3	92	18.2	18.2	8.2	8.2	29.9	29.9	89.6	89.6	7.1	7.1	14.9		12		76				<0.2		1.1	
						7.4	0.3	97	18.2		8.2		29.9		89.6		7.1		14.9		12		75				<0.2		1.1	
SR2	Sunny	Moderate	12:44	3.7	Surface	1.0	0.4	77	18.8	18.8	8.1	8.1	29.1	29.1	107.6	107.6	8.4	8.4	5.5	4.9	10	10	73	74	821491	814177	<0.2	<0.2	1.1	1.3
						1.0	0.4	81	18.8		8.1		29.1		107.6		8.4		5.5		9		73				<0.2		1.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.7	0.3	71	18.3	18.3	8.1	8.1	29.7	29.7	103.7	103.7	8.2	8.2	4.3		9		76				<0.2		1.7	
						2.7	0.3	77	18.3		8.1		29.7		103.7		8.2		4.3		10		75				<0.2		1.5	
SR3	Fine	Moderate	11:35	8.8	Surface	1.0	0.3	140	18.4	18.4	8.1	8.1	28.8	28.8	106.1	106.1	8.4	8.4	9.2	10.3	11	12	-	-	822160	807579	-	-	-	-
						1.0	0.3	152	18.4		8.1		28.8		106.1		8.4		9.2		12		-				-		-	
					Middle	4.4	0.2	118	18.1	18.1	8.1	8.1	29.4	29.4	105.5	105.5	8.4		10.8		13		-				-		-	
						4.4	0.2	120	18.1		8.1		29.4		105.5		8.4		10.8		12		-				-		-	
					Bottom	7.8	0.2	75	18.1	18.1	8.1	8.1	29.9	29.9	103.7	103.7	8.2	8.2	11.0		12		-				-		-	
						7.8	0.2	75	18.1		8.1		29.9		103.7		8.2		11.0		11		-				-		-	
SR4A	Sunny	Moderate	12:37	8.5	Surface	1.0	0.4	68	18.4	18.4	8.3	8.3	30.2	30.2	134.8	134.8	10.6	10.2	6.7	7.4	9	11	-	-	817162	807832	-	-	-	-
						1.0	0.4	73	18.4		8.3		30.2		134.7		10.6		6.7		10		-				-		-	
					Middle	4.3	0.4	65	18.0	18.0	8.2	8.2	30.5	30.5	122.7	122.7	9.7		7.5		12		-				-		-	
						4.3	0.4	68	18.0		8.2		30.5		122.7		9.7		7.5		11		-				-		-	
					Bottom	7.5	0.4	65	18.0	18.0	8.2	8.2	30.5	30.5	120.7	120.7	9.5	9.5	7.9		10		-				-		-	
						7.5	0.4	69	18.0		8.2		30.5		120.6		9.5		7.9		11		-				-		-	
SR5A	Sunny	Moderate	12:54	4.3	Surface	1.0	0.1	292	18.5	18.5	8.2	8.2	31.1	31.1	116.0	115.9	9.0	9.0	6.8	7.1	6	7	-	-	816621	810707	-	-	-	-
						1.0	0.1	307	18.5		8.2		31.1		115.8		9.0		6.9		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.1	301	18.5	18.5	8.2	8.2	31.1	31.1	111.9	111.7	8.7	8.7	7.3		8		-				-		-	
						3.3	0.1	304	18.5		8.2		31.1		111.5		8.7		7.2		9		-				-		-	
SR6	Sunny	Moderate	13:17	3.8	Surface	1.0	0.1	67	18.8	18.8	8.0	8.0	31.3	31.3	99.8	99.8	7.7	7.7	7.0	7.3	9	8	-	-	817923	814684	-	-	-	-
						1.0	0.1	67	18.8		8.0		31.3		99.8		7.7		7.0		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	0.1	70	18.6	18.6	8.0	8.0	31.4	31.4	99.3	99.3	7.7	7.7	7.5		8		-				-		-	
						2.8	0.1	70	18.6		8.0		31.4		99.3		7.7		7.5		8		-				-		-	
SR7	Sunny	Moderate	13:32	16.4	Surface	1.0	0.5	71	18.4	18.4	8.1	8.1	30.7	30.7	103.0	103.0	8.1	7.7	2.6	1.9	7	8	-	-	823640	823722	-	-	-	-
						1.0	0.6	74	18.4		8.1		30.7		103.0		8.1		2.6		7		-				-		-	
					Middle	8.2	0.3	41	18.0	18.0	8.0	8.0	30.8	30.8	93.1	93.1	7.3		2.4		8		-				-		-	
						8.2	0.3	42	18.0		8.0		30.8		93.1		7.3		2.4		6		-				-		-	
					Bottom	15.4	0.3	33	17.7	17.7	8.0	8.0	31.0	31.0	87.8	87.8	7.0	7.0	0.7		9		-				-		-	
						15.4	0.3	33	17.7		8.0		31.0		87.8		7.0		0.7		9		-				-		-	
SR8	Sunny	Moderate	12:26	4.3	Surface	1.0	-	-	18.5	18.5	8.1	8.1	29.8	29.8	81.0	81.0	6.4	6.4	6.8	7.1	11	12	-	-	820246	811418	-	-	-	-
						1.0	-	-	18.5		8.1		29.8		81.0		6.4		6.8		11		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	-	-	18.4	18.4	7.9	7.9	29.9	29.9	56.4	56.4	4.4	4.4	7.4		12		-				-		-	
						3.3	-	-	18.4		7.9		29.9		56.4		4.4		7.4		13		-				-		-	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 01 March 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Moderate	07:36	7.8	Surface	1.0	0.7	40	17.7	17.7	8.2	8.2	30.5	30.5	116.1	116.1	9.2	9.2	14.6	19.7	18	17	71	74	815643	804259	<0.2	<0.2	1.5	1.6
						1.0	0.8	43	17.7		8.2		30.5		116.1		9.2		15.4		17		71				<0.2		1.4	
					Middle	3.9	0.6	32	17.7	17.7	8.2	8.2	30.7	30.7	115.3	115.3	9.1		22.6		16		73				<0.2		1.6	
						3.9	0.6	34	17.7		8.2		30.7		115.3		9.1		22.3		18		74				<0.2		1.8	
					Bottom	6.8	0.5	29	17.7	17.7	8.2	8.2	30.8	30.8	114.4	114.4	9.1	9.1	20.8		16		76				<0.2		1.8	
						6.8	0.6	31	17.7		8.2		30.8		114.3		9.1		22.2		18		76				<0.2		1.6	
C2	Fine	Moderate	08:14	10.8	Surface	1.0	0.4	359	18.2	18.2	8.1	8.1	28.2	28.2	103.9	103.9	8.3	8.2	10.6	17.6	9	9	73	74	825698	806970	<0.2	<0.2	2.2	2.1
						1.0	0.5	330	18.2		8.1		28.2		103.9		8.3		10.6		8		72				<0.2		1.9	
					Middle	5.4	0.3	16	18.0	18.0	8.1	8.1	28.4	28.4	101.9	101.9	8.1		19.8		10		73				<0.2		2.2	
						5.4	0.4	16	18.0		8.1		28.4		101.9		8.1		19.8		8		74				<0.2		2.0	
					Bottom	9.8	0.3	23	17.9	17.9	8.1	8.1	28.8	28.8	100.8	100.8	8.0	8.0	22.3		10		74				<0.2		1.8	
						9.8	0.4	24	17.9		8.1		28.8		100.8		8.0		22.3		11		75				<0.2		2.7	
C3	Fine	Moderate	06:21	10.8	Surface	1.0	0.5	260	18.1	18.1	8.1	8.1	30.0	30.0	101.9	101.9	8.0	7.9	5.2	7.6	6	8	73	75	822105	817799	<0.2	<0.2	1.1	1.1
						1.0	0.5	282	18.1		8.1		30.0		101.9		8.0		5.2		7		73				<0.2		1.1	
					Middle	5.4	0.6	263	18.2	18.2	8.1	8.1	30.5	30.5	99.7	99.6	7.8		7.3		6		75				<0.2		1.3	
						5.4	0.6	273	18.2		8.1		30.5		99.5		7.8		7.5		7		75				<0.2		1.0	
					Bottom	9.8	0.5	268	18.2	18.2	8.1	8.1	30.6	30.6	93.3	93.3	7.3	7.3	10.1		11		77				<0.2		0.9	
						9.8	0.5	276	18.2		8.1		30.6		93.3		7.3		10.1		10		76				<0.2		0.9	
IM1	Fine	Moderate	07:53	7.4	Surface	1.0	0.6	5	17.8	17.8	8.2	8.2	30.4	30.4	110.6	110.6	8.8	8.8	10.7	12.3	11	13	72	73	818359	806439	<0.2	<0.2	1.9	1.9
						1.0	0.6	5	17.8		8.2		30.4		110.5		8.8		10.7		11		72				<0.2		2.1	
					Middle	3.7	0.5	0	17.8	17.8	8.2	8.2	30.6	30.6	110.2	110.1	8.7		12.3		14		73				<0.2		1.8	
						3.7	0.6	0	17.8		8.3		30.6		110.0		8.7		12.6		14		73				<0.2		1.8	
					Bottom	6.4	0.5	356	17.8	17.8	8.3	8.3	30.7	30.7	108.1	107.8	8.6	8.6	14.2		12		75				<0.2		2.0	
						6.4	0.5	328	17.8		8.3		30.7		107.4		8.5		13.5		13		75				<0.2		2.0	
IM2	Fine	Moderate	07:59	7.8	Surface	1.0	0.6	30	17.7	17.7	8.2	8.2	30.1	30.1	109.4	109.4	8.7	8.7	10.4	15.6	14	13	70	72	818848	806196	<0.2	<0.2	2.1	2.0
						1.0	0.7	32	17.7		8.2		30.1		109.4		8.7		10.4		13		70				<0.2		1.9	
					Middle	3.9	0.5	27	17.7	17.7	8.2	8.2	30.4	30.4	108.6	108.6	8.6		16.6		12		72				<0.2		2.0	
						3.9	0.5	29	17.7		8.2		30.4		108.6		8.6		17.0		13		71				<0.2		1.9	
					Bottom	6.8	0.5	29	17.8	17.8	8.2	8.2	30.4	30.4	105.9	105.8	8.4	8.4	19.8		12		73				<0.2		1.9	
						6.8	0.5	30	17.8		8.2		30.4		105.6		8.4		19.1		11		73				<0.2		2.2	
IM3	Fine	Moderate	08:06	8.0	Surface	1.0	0.6	9	17.7	17.7	8.2	8.2	30.4	30.4	108.6	108.6	8.6	8.6	13.1	15.9	14	15	70	72	819421	806017	<0.2	<0.2	1.6	1.7
						1.0	0.7	9	17.7		8.2		30.4		108.6		8.6		13.2		16		71				<0.2		1.8	
					Middle	4.0	0.6	10	17.7	17.7	8.2	8.2	30.4	30.4	107.8	107.8	8.6		15.6		14		72				<0.2		1.7	
						4.0	0.6	10	17.7		8.2		30.4		107.8		8.6		15.8		14		72				<0.2		1.7	
					Bottom	7.0	0.5	12	17.7	17.7	8.2	8.2	30.4	30.4	107.5	107.5	8.5	8.5	18.7		15		74				<0.2		1.8	
						7.0	0.5	12	17.7		8.2		30.4		107.5		8.5		18.9		14		74				<0.2		1.8	
IM4	Fine	Moderate	08:14	7.4	Surface	1.0	0.5	33	17.7	17.7	8.2	8.2	30.5	30.5	108.9	108.9	8.6	8.6	15.1	18.6	15	20	71	73	819596	805035	<0.2	<0.2	1.5	1.8
						1.0	0.5	35	17.7		8.2		30.5		108.9		8.6		15.3		16		71				<0.2		1.8	
					Middle	3.7	0.5	32	17.7	17.7	8.2	8.2	30.5	30.5	108.4	108.4	8.6		18.4		15		72				<0.2		1.7	
						3.7	0.5	32	17.7		8.2		30.5		108.4		8.6		18.6		15		73				<0.2		1.7	
					Bottom	6.4	0.4	33	17.7	17.7	8.2	8.2	30.5	30.5	108.0	108.1	8.6	8.6	21.9		29		74				<0.2		2.5	
						6.4	0.4	34	17.7		8.2		30.5		108.1		8.6		22.1		30		75				<0.2		1.8	
IM5	Fine	Moderate	08:25	6.8	Surface	1.0	0.6	28	17.7	17.7	8.2	8.2	30.4	30.4	107.4	107.4	8.5	8.5	16.8	20.4	15	16	70	72	820563	804930	<0.2	<0.2	1.5	1.5
						1.0	0.7	29	17.7		8.2		30.4		107.4		8.5		16.8		16		70				<0.2		1.6	
					Middle	3.4	0.6	25	17.7	17.7	8.2	8.2	30.4	30.4	107.2	107.2	8.5		20.2		16		71				<0.2		1.3	
						3.4	0.6	26	17.7		8.2		30.4		107.2		8.5		20.2		17		72				<0.2		1.5	
					Bottom	5.8	0.5	27	17.7	17.7	8.2	8.2	30.4	30.4	107.2	107.2	8.5	8.5	24.3		15		73				<0.2		1.7	
						5.8	0.5	28	17.7		8.2		30.4		107.2		8.5		24.3		15		74				<0.2		1.5	
IM6	Fine	Moderate	08:33	6.7	Surface	1.0	0.4	15	17.7	17.7	8.2	8.2	30.0	30.0	106.5	106.5	8.5	8.5	17.9	18.9	15	15	71	73	821042	805853	<0.2	<0.2	1.5	1.6
						1.0	0.4	15	17.7		8.2		30.0		106.5		8.5		18.0		14		71				<0.2		1.6	
					Middle	3.4	0.3	20	17.7	17.7	8.2	8.2	30.0	30.0	106.0	106.0	8.4		19.9		14		73				<0.2		1.8	
						3.4	0.4	20	17.7		8.2		30.0		106.0		8.4		19.1		16		73				<0.2		1.6	
					Bottom	5.7	0.4	23	17.7	17.7	8.2	8.2	30.1	30.1	105.7	105.7	8.4	8.4	19.2		15		74				<0.2		1.4	
						5.7	0.4	24	17.7		8.2		30.1		105.7		8.4		19.2		14		75				<0.2		1.8	
IM7	Fine	Moderate	08:41	8.3	Surface	1.0	0.4	35	17.8	17.8	8.2	8.2	30.0	30.0	107.7	107.7	8.6	8.6	13.9	14.3	14	15	72	74	821338	806828	<0.2	<0.2	1.7	1.7
						1.0	0.4	38	17.8		8.2		30.0		107.7		8.6		14.1		13		72				<0.2		1.7	
					Middle	4.2	0.4	44	17.8	17.8	8.2	8.2	30.0	30.0	107.4	107.4	8.5		14.3		15		73				<0.2		1.8	
						4.2	0.4	47	17.8		8.2		30.0		107.4		8.5		14.4		15		74				<0.2		1.7	
					Bottom	7.3	0.3	43	17.8	17.8	8.2	8.2	30.0	30.0	107.0	107.0	8.5	8.5	14.6		17		75				<0.2		1.6	
						7.3	0.4	43	17.8		8.2		30.0		107.0		8.5		14.7		17		76				<0.2		1.7	
IM8	Fine	Moderate	07:49	7.7	Surface	1.0	0.3	28	18.0	18.0	8.2	8.2	29.5	29.5	96.1	96.1	7.6	7.6	18.1	18.0	14	15	72	74	821691	807862	<0.2	<0.2	2.0	1.6
						1.0	0.4	30	18.0		8.2		29.5		96.1		7.6		18.1		13		73				<0.2		1.7	
					Middle	3.9	0.4	28	18.0	18.0	8.2	8.2	29.6	29.6	95.0	95.0	7.5		18.7		15		74				<0.2		1.7	
						3.9	0.4	28	18.0		8.2		29.6		95.0		7.5		18.7		16		75				<0.2		1.3	
					Bottom	6.7	0.4	23	18.0	18.0	8.2	8.2	29.8	29.8	86.4	86.4	6.9	6.9	17.3		15		75				<0.2		1.6	
						6.7	0.4	23	18.0		8.2		29.8		86.4		6.9		17.3		17		75				<0.2		1.4	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 01 March 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Fine	Moderate	07:41	6.7	Surface	1.0	0.2	16	18.0	18.0	8.1	8.1	28.4	28.4	96.0	96.0	7.7	7.5	13.6	13.5	10	11	73	74	822077	808784	<0.2	<0.2	1.3	1.3
						1.0	0.2	17	18.0		8.1		28.4		96.0		7.7		13.6		10		73				<0.2		1.4	
					Middle	3.4	0.1	3	18.0	18.0	8.2	8.2	28.5	28.5	89.9	89.9	7.2		13.9		12		74				<0.2		1.2	
						3.4	0.1	3	18.0		8.2		28.5		89.9		7.2		13.9		11		74				<0.2		1.4	
					Bottom	5.7	0.2	357	18.0	18.0	8.1	8.1	28.5	28.5	77.5	77.5	6.2	6.2	13.0		13		75				<0.2		1.2	
						5.7	0.2	328	18.0		8.1		28.5		77.5		6.2		13.0		12		75				<0.2		1.2	
IM10	Fine	Moderate	07:31	7.0	Surface	1.0	0.5	324	18.1	18.1	8.1	8.1	29.5	29.5	96.6	96.6	7.7	7.4	12.3	15.9	10	12	73	75	822253	809842	<0.2	<0.2	1.4	1.3
						1.0	0.6	356	18.1		8.1		29.5		96.6		7.7		12.3		12		73				<0.2		1.2	
					Middle	3.5	0.6	322	18.1	18.1	8.1	8.1	29.5	29.5	89.3	89.3	7.1		17.0		11		74				<0.2		1.2	
						3.5	0.6	336	18.1		8.1		29.5		89.3		7.1		17.0		12		76				<0.2		1.6	
					Bottom	6.0	0.5	320	18.1	18.1	8.0	8.0	29.6	29.6	72.5	72.5	5.7	5.7	18.5		12		75				<0.2		1.1	
						6.0	0.5	351	18.1		8.0		29.6		72.5		5.7		18.5		12		76				<0.2		1.1	
IM11	Fine	Moderate	07:17	7.7	Surface	1.0	0.6	302	18.1	18.1	8.1	8.1	29.6	29.6	99.7	99.7	7.9	7.8	11.8	17.2	8	9	73	75	821484	810572	<0.2	<0.2	1.9	1.5
						1.0	0.6	326	18.1		8.1		29.6		99.7		7.9		11.8		9		73				<0.2		1.7	
					Middle	3.9	0.6	300	18.2	18.2	8.1	8.1	30.1	30.1	98.1	98.1	7.7		17.9		8		74				<0.2		1.4	
						3.9	0.6	305	18.2		8.1		30.1		98.1		7.7		17.9		10		75				<0.2		1.4	
					Bottom	6.7	0.4	301	18.1	18.1	8.1	8.1	29.9	29.9	92.6	92.6	7.3	7.3	21.8		8		77				<0.2		1.4	
						6.7	0.5	321	18.1		8.1		29.9		92.6		7.3		21.8		9		76				<0.2		1.1	
IM12	Fine	Moderate	07:09	7.2	Surface	1.0	0.6	284	18.1	18.1	8.1	8.1	29.5	29.5	100.2	100.2	7.9	7.9	10.4	15.9	10	10	73	74	821153	811524	<0.2	<0.2	1.8	1.4
						1.0	0.7	302	18.1		8.1		29.5		100.2		7.9		10.4		11		73				<0.2		1.6	
					Middle	3.6	0.6	280	18.2	18.2	8.1	8.1	30.5	30.5	98.8	98.8	7.8		15.9		9		75				<0.2		1.8	
						3.6	0.6	283	18.2		8.1		30.5		98.8		7.8		15.9		9		74				<0.2		1.1	
					Bottom	6.2	0.4	275	18.2	18.2	8.1	8.1	30.5	30.5	97.5	97.5	7.7	7.7	21.4		12		76				<0.2		1.2	
						6.2	0.5	276	18.2		8.1		30.5		97.5		7.7		21.4		11		75				<0.2		1.1	
SR2	Fine	Moderate	06:42	3.9	Surface	1.0	0.1	169	18.1	18.1	8.1	8.1	30.2	30.2	89.4	89.4	7.1	7.1	8.9	10.6	6	7	74	75	821483	814154	<0.2	<0.2	1.9	2.0
						1.0	0.1	174	18.1		8.1		30.2		89.4		7.1		8.9		7		73				<0.2		1.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.9	0.1	174	18.1	18.1	8.0	8.0	30.3	30.3	75.9	75.9	6.0	6.0	12.3		8		75				<0.2		2.3	
						2.9	0.1	177	18.1		8.0		30.3		75.9		6.0		12.3		7		76				<0.2		2.1	
SR3	Fine	Moderate	07:55	8.6	Surface	1.0	0.5	29	17.9	17.9	8.1	8.1	28.7	28.7	101.8	101.8	8.1	8.1	13.3	18.7	13	12	-	-	822147	807599	-	-	-	-
						1.0	0.5	29	17.9		8.1		28.7		101.8		8.1		13.3		11		-				-		-	
					Middle	4.3	0.5	24	17.9	17.9	8.1	8.1	28.9	28.9	101.0	101.0	8.1		20.4		12		-				-		-	
						4.3	0.5	26	17.9		8.1		28.9		101.0		8.1		20.4		12		-				-		-	
					Bottom	7.6	0.5	15	18.0	18.0	8.2	8.2	29.8	29.8	98.6	98.6	7.8	7.8	22.5		12		-				-		-	
						7.6	0.5	15	18.0		8.2		29.8		98.6		7.8		22.5		14		-				-		-	
SR4A	Fine	Calm	07:12	8.7	Surface	1.0	0.0	283	18.2	18.2	8.1	8.1	31.3	31.3	102.0	101.9	8.0	8.0	6.4	6.5	9	10	-	-	817196	807794	-	-	-	-
						1.0	0.0	301	18.2		8.1		31.3		101.8		8.0		6.5		10		-				-		-	
					Middle	4.4	0.1	254	18.2	18.2	8.1	8.1	31.3	31.3	100.6	100.6	7.9		6.5		10		-				-		-	
						4.4	0.1	256	18.2		8.1		31.4		100.5		7.9		6.5		10		-				-		-	
					Bottom	7.7	0.1	236	18.2	18.2	8.1	8.1	31.4	31.4	100.2	100.2	7.8	7.8	6.6		10		-				-		-	
						7.7	0.1	237	18.2		8.1		31.4		100.2		7.8		6.7		10		-				-		-	
SR5A	Fine	Calm	06:56	3.8	Surface	1.0	0.3	278	18.1	18.1	8.1	8.1	31.4	31.4	100.5	100.5	7.9	7.9	7.0	6.9	5	7	-	-	816591	810717	-	-	-	-
						1.0	0.3	291	18.1		8.1		31.4		100.5		7.9		7.0		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	0.3	283	18.1	18.1	8.1	8.1	31.4	31.4	100.8	100.8	7.9	7.9	6.9		7		-				-		-	
						2.8	0.3	290	18.1		8.1		31.4		100.7		7.9		6.8		8		-				-		-	
SR6	Fine	Calm	06:32	3.7	Surface	1.0	0.2	247	17.9	17.9	8.1	8.1	31.0	31.0	104.7	104.7	8.3	8.3	7.1	7.0	7	8	-	-	817918	814634	-	-	-	-
						1.0	0.2	258	17.9		8.1		31.0		104.6		8.3		7.1		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.7	0.2	246	17.9	17.9	8.1	8.1	31.0	31.0	101.7	101.7	8.0	8.0	6.9		8		-				-		-	
						2.7	0.2	263	17.9		8.1		31.0		101.6		8.0		7.0		9		-				-		-	
SR7	Fine	Moderate	05:43	16.8	Surface	1.0	0.4	11	17.9	17.9	8.1	8.1	30.7	30.7	101.4	101.4	8.0	8.0	3.0	3.0	13	14	-	-	823636	823714	-	-	-	-
						1.0	0.4	11	17.9		8.1		30.7		101.4		8.0		3.0		13		-				-		-	
					Middle	8.4	0.4	17	17.9	17.9	8.1	8.1	30.7	30.7	100.3	100.3	7.9		3.1		12		-				-		-	
						8.4	0.4	17	17.9		8.1		30.7		100.3		7.9		3.1		12		-				-		-	
					Bottom	15.8	0.4	20	17.8	17.8	8.1	8.1	30.8	30.8	99.3	99.3	7.8	7.8	2.9		15		-				-		-	
						15.8	0.4	20	17.8		8.1		30.8		99.3		7.8		2.9		17		-				-		-	
SR8	Fine	Moderate	06:59	4.6	Surface	1.0	-	-	18.3	18.3	8.0	8.0	28.9	28.9	90.9	90.9	7.2	7.2	12.1	12.0	11	12	-	-	820246	811418	-	-	-	-
						1.0	-	-	18.3		8.0		28.9		90.9		7.2		12.1		11		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	-	-	18.2	18.2	8.0	8.0	28.9	28.9	81.1	81.1	6.4	6.4	11.8		11		-				-		-	
						3.6	-	-	18.2		8.0		28.9		81.1		6.4		11.8		13		-				-		-	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 03 March 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Moderate	13:26	8.3	Surface	1.0	0.4	185	18.2	18.2	8.2	8.2	30.1	30.1	119.9	119.9	9.5	9.2	7.5	7.2	10	10	73	75	815625	804263	<0.2	<0.2	0.9	0.9
						1.0	0.4	186	18.2		8.2		30.1		119.8		9.5		7.5		9		73				<0.2		1.0	
					Middle	4.2	0.3	211	17.8	17.8	8.2	8.2	30.6	30.6	111.9	111.9	8.9		6.9		9		75				<0.2		0.8	
						4.2	0.3	214	17.8		8.2		30.6		111.9		8.9		6.9		10		75				<0.2		0.8	
					Bottom	7.3	0.3	244	17.6	17.6	8.1	8.1	31.0	31.0	109.3	109.4	8.7	8.7	7.2		11		77				<0.2		0.8	
						7.3	0.3	261	17.6		8.1		31.0		109.4		8.7		7.3		12		77				<0.2		0.9	
C2	Cloudy	Moderate	12:25	11.3	Surface	1.0	0.3	226	19.3	19.3	8.2	8.2	27.8	27.8	112.6	112.6	8.8	8.7	15.6	19.6	12	20	73	74	825680	806952	<0.2	<0.2	2.1	2.1
						1.0	0.3	246	19.3		8.2		27.8		112.6		8.8		15.6		13		73				<0.2		2.1	
					Middle	5.7	0.3	203	19.1	19.1	8.2	8.2	27.9	27.9	109.2	109.2	8.6		17.3		17		74				<0.2		2.2	
						5.7	0.3	208	19.1		8.2		27.9		109.2		8.6		17.3		18		74				<0.2		2.1	
					Bottom	10.3	0.3	192	19.0	19.0	8.2	8.2	28.1	28.1	107.4	107.4	8.4	8.4	26.0		29		75				<0.2		2.0	
						10.3	0.3	202	19.0		8.2		28.1		107.4		8.4		26.0		28		75				<0.2		2.0	
C3	Cloudy	Moderate	14:19	11.5	Surface	1.0	0.5	68	19.0	19.0	8.3	8.3	29.4	29.4	116.8	116.8	9.1	8.7	5.1	5.9	5	7	74	76	822118	817781	<0.2	<0.2	1.2	1.3
						1.0	0.5	74	19.0		8.3		29.4		116.8		9.1		5.1		6		74				<0.2		1.4	
					Middle	5.8	0.3	82	18.6	18.6	8.2	8.2	29.8	29.8	106.3	106.3	8.3		5.9		8		76				<0.2		1.3	
						5.8	0.3	89	18.6		8.2		29.8		106.3		8.3		5.9		8		75				<0.2		1.2	
					Bottom	10.5	0.3	105	18.3	18.3	8.1	8.1	30.1	30.1	106.2	106.3	8.4	8.4	6.6		8		78				<0.2		1.2	
						10.5	0.4	105	18.3		8.1		30.1		106.3		8.4		6.6		8		77				<0.2		1.2	
IM1	Fine	Moderate	13:08	7.5	Surface	1.0	0.0	204	18.7	18.7	8.2	8.2	30.1	30.1	120.5	120.5	9.4	9.2	6.5	7.6	9	9	73	75	818338	806486	<0.2	<0.2	1.0	0.9
						1.0	0.0	219	18.7		8.2		30.1		120.4		9.4		6.6		7		73				<0.2		1.0	
					Middle	3.8	0.1	171	18.2	18.2	8.2	8.2	30.5	30.5	114.4	114.4	9.0		7.4		8		75				<0.2		0.9	
						3.8	0.1	179	18.2		8.2		30.5		114.4		9.0		7.5		10		75				<0.2		0.8	
					Bottom	6.5	0.2	178	17.9	17.9	8.1	8.1	30.7	30.7	111.8	111.8	8.8	8.8	8.6		10		77				<0.2		0.9	
						6.5	0.2	187	17.9		8.1		30.7		111.8		8.8		8.7		9		77				<0.2		0.8	
IM2	Fine	Moderate	13:03	8.4	Surface	1.0	0.1	135	18.1	18.1	8.2	8.2	30.5	30.5	118.8	118.8	9.4	9.3	7.7	7.9	8	10	73	75	818855	806190	<0.2	<0.2	0.8	0.8
						1.0	0.1	142	18.1		8.2		30.5		118.8		9.4		7.7		8		73				<0.2		0.8	
					Middle	4.2	0.1	233	17.9	17.9	8.2	8.2	30.6	30.6	115.8	115.8	9.2		8.1		11		75				<0.2		0.7	
						4.2	0.1	234	17.9		8.2		30.6		115.8		9.2		8.1		10		76				<0.2		0.7	
					Bottom	7.4	0.1	138	17.8	17.8	8.1	8.1	30.8	30.8	111.4	111.4	8.8	8.8	7.8		10		77				<0.2		0.8	
						7.4	0.1	149	17.8		8.1		30.8		111.4		8.8		7.8		11		77				<0.2		0.7	
IM3	Fine	Moderate	12:58	8.4	Surface	1.0	0.1	117	17.9	17.9	8.2	8.2	30.6	30.6	113.2	113.2	8.9	8.8	8.7	9.3	10	11	73	75	819395	806005	<0.2	<0.2	0.9	0.7
						1.0	0.1	127	17.9		8.2		30.6		113.1		8.9		8.7		8		73				<0.2		0.9	
					Middle	4.2	0.1	177	17.7	17.7	8.1	8.1	31.0	31.0	109.6	109.6	8.7		9.0		12		75				<0.2		0.6	
						4.2	0.1	190	17.7		8.1		31.0		109.6		8.7		9.0		12		75				<0.2		0.7	
					Bottom	7.4	0.1	188	17.7	17.7	8.1	8.1	31.1	31.1	109.1	109.1	8.6	8.6	10.3		11		77				<0.2		0.6	
						7.4	0.1	189	17.7		8.1		31.1		109.1		8.6		10.2		10		77				<0.2		0.7	
IM4	Fine	Moderate	12:50	8.1	Surface	1.0	0.1	134	18.3	18.3	8.2	8.2	30.0	30.0	114.5	114.5	9.0	8.9	9.1	10.2	12	12	73	75	819547	805036	<0.2	<0.2	1.1	0.9
						1.0	0.1	146	18.3		8.2		30.0		114.5		9.0		9.1		11		73				<0.2		1.2	
					Middle	4.1	0.1	149	17.8	17.8	8.1	8.1	30.6	30.6	110.7	110.7	8.8		10.5		12		75				<0.2		0.9	
						4.1	0.1	161	17.8		8.1		30.6		110.7		8.8		10.6		11		75				<0.2		0.8	
					Bottom	7.1	0.1	182	17.7	17.7	8.1	8.1	30.8	30.8	108.8	108.8	8.6	8.6	10.8		12		77				<0.2		0.6	
						7.1	0.1	196	17.7		8.1		30.8		108.7		8.6		10.8		12		77				<0.2		0.7	
IM5	Fine	Moderate	12:40	7.1	Surface	1.0	0.1	129	18.5	18.5	8.2	8.2	29.7	29.7	118.7	118.6	9.3	9.2	9.7	10.6	11	12	73	76	820589	804946	<0.2	<0.2	1.0	1.0
						1.0	0.2	133	18.5		8.2		29.7		118.5		9.3		9.7		9		74				<0.2		1.0	
					Middle	3.6	0.1	87	18.2	18.2	8.2	8.2	29.9	30.0	114.3	114.2	9.0		10.4		13		75				<0.2		1.0	
						3.6	0.1	90	18.2		8.2		30.0		114.0		9.0		10.7		12		76				<0.2		1.0	
					Bottom	6.1	0.0	133	17.9	17.9	8.1	8.1	30.6	30.6	110.9	110.9	8.8	8.8	11.4		14		78				<0.2		0.8	
						6.1	0.0	146	17.9		8.1		30.6		110.9		8.8		11.5		15		77				<0.2		0.9	
IM6	Fine	Moderate	12:32	7.1	Surface	1.0	0.1	159	18.7	18.7	8.2	8.2	29.8	29.8	119.6	119.6	9.3	9.2	8.3	10.0	10	13	74	75	821065	805838	<0.2	<0.2	1.1	0.9
						1.0	0.2	174	18.7		8.2		29.8		119.5		9.3		8.4		10		73				<0.2		0.9	
					Middle	3.6	0.1	158	18.3	18.3	8.2	8.2	30.0	30.0	115.5	115.5	9.1		9.7		14		75				<0.2		0.8	
						3.6	0.1	168	18.3		8.2		30.0		115.4		9.1		9.8		15		75				<0.2		1.0	
					Bottom	6.1	0.1	113	18.0	18.0	8.1	8.1	30.4	30.4	112.5	112.5	8.9	8.9	11.7		14		77				<0.2		0.8	
						6.1	0.1	115	18.0		8.1		30.4		112.5		8.9		11.8		14		78				<0.2		0.8	
IM7	Fine	Moderate	12:23	8.4	Surface	1.0	0.2	137	18.6	18.6	8.2	8.2	29.6	29.6	119.2	119.0	9.3	9.2	7.9	8.5	12	13	75	75	821355	806844	<0.2	<0.2	1.0	1.0
						1.0	0.2	139	18.6		8.2		29.6		118.8		9.3		8.1		11		73				<0.2		1.0	
					Middle	4.2	0.1	110	18.2	18.2	8.1	8.1	29.9	29.9	113.9	113.9	9.0		8.4		13		75				<0.2		1.0	
						4.2	0.1	116	18.2		8.1		29.9		113.8		9.0		8.4		11		75				<0.2		0.9	
					Bottom	7.4	0.1	44	18.2	18.2	8.1	8.1	29.9	29.9	112.2	112.2	8.9	8.9	9.1		14		77				<0.2		1.0	
						7.4	0.1	44	18.2		8.1		29.9		112.2		8.8		9.1		14		77				<0.2		1.0	
IM8	Cloudy	Moderate	12:51	8.3	Surface	1.0	0.3	118	19.2	19.2	8.3	8.3	28.7	28.7	118.7	118.7	9.3	9.2	9.3	9.5	11	10	73	75	821710	807841	<0.2	<0.2	1.7	1.3
						1.0	0.3	120	19.2		8.3		28.7		118.7		9.3		9.3		10		73				<0.2		1.6	
					Middle	4.2	0.2	90	18.8	18.8	8.3	8.3	29.7	29.7	116.9	116.9	9.1		9.3		9		75				<0.2		1.4	
						4.2	0.2	95	18.8		8.3		29.7		116.9		9.1		9.3		9		75				<0.2		1.3	
					Bottom	7.3	0.2	77	18.6	18.6	8.2	8.2	29.8	29.8	114.5	114.5	9.0	9.0	10.0		10		76				<0.2		1.0	
						7.3	0.2	78	18.6		8.2		29.8		114.5		9.0		10.0		9		75				<0.2		0.9	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 03 March 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	13:01	7.3	Surface	1.0	0.5	100	19.2	19.2	8.3	8.3	28.5	28.5	118.1	118.1	9.2	9.2	10.3	16.2	8	9	72	75	822080	808809	<0.2	<0.2	1.7	1.4
						1.0	0.5	109	19.2		8.3		28.5		118.1		9.2		10.3		8		73				<0.2		1.8	
					Middle	3.7	0.5	74	18.7	18.7	8.3	8.3	29.6	29.6	116.4	116.4	9.1		15.2		8		75				<0.2		1.5	
						3.7	0.5	76	18.7		8.3		29.6		116.4		9.1		15.2		10		75				<0.2		1.4	
					Bottom	6.3	0.4	69	18.6	18.6	8.3	8.3	29.7	29.7	115.6	115.6	9.1	9.1	23.0		10		76				<0.2		1.1	
						6.3	0.4	73	18.6		8.3		29.7		115.6		9.1		23.0		11		76				<0.2		1.1	
IM10	Cloudy	Moderate	13:10	8.2	Surface	1.0	0.4	112	19.3	19.3	8.3	8.3	28.2	28.2	121.6	121.6	9.5	9.4	8.4	13.0	9	9	73	75	822255	809826	<0.2	<0.2	1.7	1.6
						1.0	0.4	115	19.3		8.3		28.2		121.6		9.5		8.4		8		73				<0.2		1.8	
					Middle	4.1	0.5	86	19.0	19.0	8.3	8.3	29.0	29.0	118.5	118.5	9.2		13.4		9		75				<0.2		1.7	
						4.1	0.5	87	19.0		8.3		29.0		118.4		9.2		13.5		8		75				<0.2		1.7	
					Bottom	7.2	0.3	81	18.8	18.8	8.3	8.3	29.6	29.6	117.0	117.0	9.1	9.1	17.2		9		75				<0.2		1.4	
						7.2	0.4	87	18.8		8.3		29.6		117.0		9.1		17.2		9		76				<0.2		1.2	
IM11	Cloudy	Moderate	13:22	8.2	Surface	1.0	0.3	121	19.2	19.2	8.3	8.3	28.9	28.9	117.0	117.0	9.1	9.1	10.4	12.2	9	10	73	75	821518	810549	<0.2	<0.2	1.4	1.3
						1.0	0.4	125	19.2		8.3		28.9		117.0		9.1		10.4		10		74				<0.2		1.4	
					Middle	4.1	0.3	110	18.9	18.9	8.3	8.3	29.3	29.3	114.8	114.8	9.0		12.0		11		75				<0.2		1.4	
						4.1	0.3	116	18.9		8.3		29.3		114.8		9.0		12.0		10		75				<0.2		1.4	
					Bottom	7.2	0.3	94	18.9	18.9	8.3	8.3	29.4	29.4	113.9	113.9	8.9	8.9	14.3		10		77				<0.2		1.3	
						7.2	0.3	96	18.9		8.3		29.4		113.9		8.9		14.3		10		77				<0.2		1.1	
IM12	Cloudy	Moderate	13:31	9.0	Surface	1.0	0.5	110	19.4	19.4	8.3	8.3	28.6	28.6	116.2	116.2	9.0	9.0	8.9	12.8	8	10	73	75	821156	811493	<0.2	<0.2	1.6	1.4
						1.0	0.5	120	19.4		8.3		28.6		116.2		9.0		8.9		7		73				<0.2		1.5	
					Middle	4.5	0.5	104	19.0	19.0	8.3	8.3	29.0	29.0	114.7	114.7	9.0		11.1		8		75				<0.2		1.6	
						4.5	0.5	111	19.0		8.3		29.0		114.7		9.0		11.1		7		75				<0.2		1.4	
					Bottom	8.0	0.4	92	19.0	19.0	8.3	8.3	29.1	29.1	114.2	114.2	8.9	8.9	18.5		14		76				<0.2		1.0	
						8.0	0.5	92	19.0		8.3		29.1		114.2		8.9		18.5		16		78				<0.2		1.3	
SR2	Cloudy	Moderate	13:59	3.5	Surface	1.0	0.4	79	19.6	19.6	8.3	8.3	28.6	28.6	122.4	122.4	9.5	9.5	6.3	6.9	7	8	75	76	821484	814193	<0.2	<0.2	1.5	1.5
						1.0	0.4	85	19.6		8.3		28.6		122.4		9.5		6.3		7		75				<0.2		1.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.5	0.3	74	19.1	19.1	8.3	8.3	29.0	29.0	117.9	117.9	9.2	9.2	7.4		7		78				<0.2		1.5	
						2.5	0.3	79	19.1		8.3		29.0		117.9		9.2		7.4		8		76				<0.2		1.4	
SR3	Cloudy	Moderate	12:46	8.8	Surface	1.0	0.3	141	19.2	19.2	8.2	8.2	28.3	28.3	117.0	117.0	9.1	9.1	9.1	10.5	8	9	-	-	822145	807548	-	-	-	-
						1.0	0.3	143	19.2		8.2		28.3		117.0		9.1		9.1		8		-				-		-	
					Middle	4.4	0.3	95	18.9	18.9	8.3	8.3	29.3	29.3	116.2	116.2	9.1		11.3		9		-				-		-	
						4.4	0.3	95	18.9		8.3		29.3		116.2		9.1		11.3		9		-				-		-	
					Bottom	7.8	0.3	63	18.6	18.6	8.2	8.2	29.6	29.6	114.7	114.7	9.0	9.0	11.2		10		-				-		-	
						7.8	0.3	64	18.6		8.2		29.6		114.7		9.0		11.2		11		-				-		-	
SR4A	Fine	Moderate	13:51	7.7	Surface	1.0	0.3	75	18.7	18.6	8.2	8.2	30.0	30.0	118.5	118.4	9.3	9.0	6.8	7.9	6	8	-	-	817164	807795	-	-	-	-
						1.0	0.3	77	18.6		8.2		30.0		118.2		9.2		6.9		7		-				-		-	
					Middle	3.9	0.3	95	18.1	18.1	8.2	8.2	30.5	30.5	111.2	111.2	8.8		8.1		9		-				-		-	
						3.9	0.3	104	18.1		8.2		30.5		111.1		8.8		8.1		7		-				-		-	
					Bottom	6.7	0.2	66	17.8	17.8	8.1	8.1	31.0	31.0	109.9	110.0	8.7	8.7	8.8		11		-				-		-	
						6.7	0.2	72	17.8		8.1		31.0		110.0		8.7		8.8		9		-				-		-	
SR5A	Fine	Moderate	14:07	4.4	Surface	1.0	0.1	258	19.9	19.9	8.2	8.2	29.8	29.8	126.8	126.8	9.7	9.7	5.3	6.1	4	5	-	-	816590	810696	-	-	-	-
						1.0	0.1	258	19.9		8.2		29.8		126.7		9.7		5.4		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.1	165	19.2	19.2	8.2	8.2	29.8	29.8	122.0	122.0	9.4	9.4	6.7		5		-				-		-	
						3.4	0.1	177	19.3		8.2		29.8		122.0		9.4		6.8		6		-				-		-	
SR6	Fine	Moderate	14:30	4.1	Surface	1.0	0.1	58	19.8	19.8	8.2	8.2	29.8	29.8	116.9	116.9	9.0	9.0	5.8	7.1	7	7	-	-	817895	814669	-	-	-	-
						1.0	0.1	59	19.8		8.2		29.8		116.9		9.0		5.7		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.1	62	19.6	19.6	8.2	8.2	29.8	29.8	115.8	115.8	8.9	8.9	8.4		7		-				-		-	
						3.1	0.1	66	19.6		8.2		29.8		115.8		8.9		8.5		7		-				-		-	
SR7	Cloudy	Moderate	14:47	16.4	Surface	1.0	0.5	93	18.9	18.9	8.2	8.2	29.7	29.7	114.1	114.1	8.9	8.8	3.6	4.0	4	5	-	-	823625	823714	-	-	-	-
						1.0	0.6	99	18.9		8.2		29.7		114.1		8.9		3.6		3		-				-		-	
					Middle	8.2	0.3	75	18.7	18.7	8.2	8.2	29.8	29.8	111.0	111.0	8.7		3.9		4		-				-		-	
						8.2	0.4	76	18.7		8.2		29.8		111.0		8.7		3.9		5		-				-		-	
					Bottom	15.4	0.3	69	18.6	18.6	8.2	8.2	29.9	29.9	111.5	111.5	8.7	8.7	4.4		5		-				-		-	
						15.4	0.3	73	18.6		8.2		29.9		111.5		8.7		4.4		7		-				-		-	
SR8	Cloudy	Moderate	13:41	4.0	Surface	1.0	-	-	19.2	19.2	8.3	8.3	29.1	29.1	114.4	114.4	8.9	8.9	7.5	7.6	4	6	-	-	820246	811418	-	-	-	-
						1.0	-	-	19.2		8.3		29.1		114.4		8.9		7.5		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	-	-	19.0	19.0	8.3	8.3	29.2	29.2	113.4	113.4	8.8	8.8	7.7		7		-				-		-	
						3.0	-	-	19.0		8.3		29.2		113.4		8.8		7.7		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 03 March 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	08:40	8.4	Surface	1.0	0.8	38	18.4	18.4	8.2	8.2	29.3	29.3	115.5	115.5	9.1	9.0	12.8	15.3	12	11	73	75	815600	804222	<0.2	<0.2	1.3	1.3
						1.0	0.8	41	18.4		8.2		29.3		115.4		9.1		13.0		10		73				<0.2		1.3	
					Middle	4.2	0.8	37	18.2	18.2	8.1	8.1	29.9	29.9	113.4	113.4	9.0		15.3		11		75				<0.2		1.2	
						4.2	0.8	40	18.2		8.1		29.9		113.3		8.9		15.4		11		75				<0.2		1.2	
					Bottom	7.4	0.7	36	18.1	18.1	8.1	8.1	30.0	30.0	112.3	112.3	8.9	8.9	17.5		13		77				<0.2		1.4	
						7.4	0.7	39	18.1		8.1		30.0		112.3		8.9		17.6		11		77				<0.2		1.4	
C2	Cloudy	Moderate	09:30	11.8	Surface	1.0	0.7	341	19.2	19.2	8.2	8.2	27.2	27.2	113.5	113.5	8.9	8.8	11.2	18.9	8	9	73	74	825678	806974	<0.2	<0.2	2.6	2.5
						1.0	0.7	353	19.2		8.2		27.2		113.5		8.9		11.2		8		72				<0.2		2.3	
					Middle	5.9	0.5	352	19.0	19.0	8.2	8.2	27.4	27.4	108.8	108.8	8.6		16.0		8		74				<0.2		2.3	
						5.9	0.6	324	19.0		8.2		27.4		108.8		8.6		16.0		9		74				<0.2		2.4	
					Bottom	10.8	0.4	30	18.9	18.9	8.2	8.2	27.9	27.9	107.7	107.7	8.5	8.5	29.6		8		75				<0.2		2.7	
						10.8	0.4	32	18.9		8.2		27.9		107.7		8.5		29.2		10		75				<0.2		2.5	
C3	Cloudy	Moderate	07:37	11.4	Surface	1.0	0.6	255	18.8	18.8	8.2	8.2	29.1	29.1	111.0	111.0	8.7	8.7	5.6	7.0	5	5	73	75	822127	817814	<0.2	<0.2	1.3	1.3
						1.0	0.6	259	18.8		8.2		29.1		111.0		8.7		5.6		4		73				<0.2		1.4	
					Middle	5.7	0.6	258	18.7	18.7	8.3	8.3	29.4	29.4	111.1	111.1	8.7		6.1		4		75				<0.2		1.4	
						5.7	0.6	277	18.7		8.3		29.4		111.1		8.7		6.1		5		76				<0.2		1.3	
					Bottom	10.4	0.4	268	18.7	18.7	8.3	8.3	29.5	29.5	108.8	108.8	8.5	8.5	9.3		6		77				<0.2		1.3	
						10.4	0.5	280	18.7		8.3		29.5		108.8		8.5		9.3		5		77				<0.2		1.2	
IM1	Cloudy	Moderate	08:57	7.6	Surface	1.0	0.8	20	18.4	18.4	8.2	8.2	29.4	29.4	113.9	113.9	9.0	9.0	8.7	13.4	10	13	74	76	818380	806481	<0.2	<0.2	1.2	1.3
						1.0	0.8	20	18.4		8.2		29.4		113.9		9.0		8.8		8		74				<0.2		1.3	
					Middle	3.8	0.7	14	18.4	18.4	8.2	8.2	29.5	29.5	112.9	112.9	8.9		11.8		12		75				<0.2		1.4	
						3.8	0.7	14	18.4		8.2		29.5		112.9		8.9		11.9		13		76				<0.2		1.3	
					Bottom	6.6	0.5	354	18.2	18.2	8.2	8.2	30.2	30.2	111.5	111.5	8.8	8.8	19.7		17		77				<0.2		1.3	
						6.6	0.5	326	18.2		8.2		30.2		111.5		8.8		19.5		15		78				<0.2		1.3	
IM2	Cloudy	Moderate	09:02	8.2	Surface	1.0	0.8	20	18.5	18.5	8.2	8.2	29.3	29.3	113.6	113.6	8.9	8.9	10.5	16.9	10	15	73	76	818866	806179	<0.2	<0.2	1.4	1.3
						1.0	0.8	21	18.5		8.2		29.3		113.6		8.9		10.6		11		74				<0.2		1.3	
					Middle	4.1	0.7	21	18.4	18.4	8.2	8.2	29.3	29.3	112.3	112.3	8.9		17.4		13		76				<0.2		1.4	
						4.1	0.8	21	18.4		8.2		29.3		112.3		8.9		17.5		14		76				<0.2		1.2	
					Bottom	7.2	0.6	20	18.4	18.4	8.2	8.2	29.3	29.3	109.7	109.7	8.6	8.6	22.5		21		78				<0.2		1.3	
						7.2	0.7	20	18.4		8.2		29.3		109.6		8.6		22.9		22		78				<0.2		1.3	
IM3	Cloudy	Moderate	09:08	8.4	Surface	1.0	0.6	20	18.5	18.5	8.2	8.2	29.2	29.2	112.3	112.3	8.8	8.8	13.3	17.4	11	17	74	76	819406	806005	<0.2	<0.2	1.4	1.4
						1.0	0.6	21	18.5		8.2		29.2		112.3		8.8		13.4		12		74				<0.2		1.4	
					Middle	4.2	0.6	23	18.5	18.5	8.2	8.2	29.2	29.2	111.4	111.4	8.8		16.6		16		76				<0.2		1.3	
						4.2	0.6	25	18.5		8.2		29.2		111.3		8.8		16.6		15		76				<0.2		1.4	
					Bottom	7.4	0.5	19	18.5	18.5	8.2	8.2	29.2	29.2	109.7	109.7	8.6	8.6	22.1		25		78				<0.2		1.4	
						7.4	0.6	19	18.5		8.2		29.2		109.7		8.6		22.6		25		78				<0.2		1.4	
IM4	Cloudy	Moderate	09:17	7.8	Surface	1.0	0.5	11	18.4	18.4	8.2	8.2	29.3	29.3	113.1	113.1	8.9	8.9	13.6	17.7	25	26	74	76	819590	805030	<0.2	<0.2	1.3	1.3
						1.0	0.6	11	18.4		8.2		29.3		113.1		8.9		13.2		27		74				<0.2		1.3	
					Middle	3.9	0.5	7	18.4	18.4	8.2	8.2	29.3	29.3	112.5	112.5	8.9		16.7		25		76				<0.2		1.3	
						3.9	0.6	7	18.4		8.2		29.3		112.4		8.9		16.8		25		76				<0.2		1.3	
					Bottom	6.8	0.4	6	18.4	18.4	8.2	8.2	29.3	29.3	111.6	111.6	8.8	8.8	22.8		26		78				<0.2		1.3	
						6.8	0.5	6	18.4		8.2		29.3		111.6		8.8		22.9		26		78				<0.2		1.2	
IM5	Cloudy	Moderate	09:27	7.0	Surface	1.0	0.7	15	18.5	18.5	8.2	8.2	29.2	29.2	113.8	113.8	9.0	9.0	15.9	20.5	22	26	74	76	820568	804932	<0.2	<0.2	1.6	1.7
						1.0	0.7	15	18.5		8.2		29.2		113.8		9.0		15.8		22		74				<0.2		1.7	
					Middle	3.5	0.8	12	18.5	18.5	8.2	8.2	29.2	29.2	113.2	113.2	8.9		20.8		24		76				<0.2		1.7	
						3.5	0.8	13	18.5		8.2		29.2		113.2		8.9		20.6		22		75				<0.2		1.5	
					Bottom	6.0	0.7	11	18.5	18.5	8.2	8.2	29.2	29.2	112.3	112.3	8.9	8.9	25.0		33		77				<0.2		1.7	
						6.0	0.7	11	18.5		8.2		29.2		112.3		8.9		25.0		31		78				<0.2		1.8	
IM6	Cloudy	Moderate	09:35	7.1	Surface	1.0	0.2	42	18.6	18.6	8.2	8.2	28.9	28.9	113.3	113.3	8.9	8.9	16.2	18.8	22	26	74	76	821042	805807	<0.2	<0.2	1.7	1.8
						1.0	0.2	42	18.6		8.2		28.9		113.2		8.9		16.1		20		74				<0.2		1.7	
					Middle	3.6	0.3	32	18.6	18.6	8.2	8.2	28.9	28.9	112.5	112.5	8.9		17.9		24		76				<0.2		1.6	
						3.6	0.3	32	18.6		8.2		28.9		112.5		8.9		17.5		26		76				<0.2		2.0	
					Bottom	6.1	0.3	32	18.6	18.6	8.2	8.2	28.9	28.9	110.5	110.5	8.7	8.7	22.5		30		78				<0.2		2.1	
						6.1	0.3	34	18.6		8.2		28.9		110.4		8.7		22.5		31		78				<0.2		1.4	
IM7	Cloudy	Moderate	09:45	8.2	Surface	1.0	0.5	31	18.6	18.6	8.2	8.2	28.9	28.9	111.9	111.9	8.8	8.8	17.5	19.6	26	26	74	76	821343	806839	<0.2	<0.2	1.6	1.6
						1.0	0.5	32	18.6		8.2		28.9		111.9		8.8		17.7		25		74				<0.2		1.5	
					Middle	4.1	0.5	27	18.5	18.5	8.2	8.2	28.9	28.9	111.4	111.4	8.8		19.7		26		76				<0.2		1.6	
						4.1	0.5	28	18.5		8.2		28.9		111.3		8.8		19.7		24		76				<0.2		1.7	
					Bottom	7.2	0.5	28	18.5	18.5	8.2	8.2	28.9	28.9	110.3	110.1	8.7	8.7	21.1		26		78				<0.2		1.6	
						7.2	0.5	29	18.5		8.2		28.9		109.8		8.7		21.6		27		78				<0.2		1.7	
IM8	Cloudy	Moderate	09:02	8.2	Surface	1.0	0.3	12	18.8	18.8	8.3	8.3	29.2	29.2	112.0	112.0	8.8	8.8	15.4	20.6	14	15	72	74	821722	807861	<0.2	<0.2	1.5	1.8
						1.0	0.3	13	18.8		8.3		29.2		112.0		8.8		15.4		13		73				<0.2		1.6	
					Middle	4.1	0.4	14	18.8	18.8	8.3	8.3	29.2	29.2	112.0	112.0	8.8		17.8		13		75				<0.2		1.8	
						4.1	0.4	14	18.8		8.3		29.2		112.0		8.8		17.8		13		75				<0.2		1.8	
					Bottom	7.2	0.4	16	18.8	18.8	8.3	8.3	29.2	29.2	109.2	109.2	8.6	8.6	28.6		16		75				<0.2		2.3	
						7.2	0.4	16	18.8		8.3		29.2		109.2		8.6		28.6		18		75				<0.2		2.0	

DA: Depth-Averaged

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

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

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

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	08:53	7.0	Surface	1.0	0.2	327	18.9	18.9	8.2	8.2	27.9	27.9	107.9	107.9	8.5	8.5	16.6	22.1	20	19	72	74	822110	808789	<0.2	<0.2	2.1	2.0
						1.0	0.2	333	18.9		8.2		27.9		107.9		8.5		16.6		18		73				<0.2		1.9	
					Middle	3.5	0.2	333	18.9	18.9	8.2	8.2	27.9	27.9	107.7	107.7	8.5		25.6		18		73				<0.2		1.8	
						3.5	0.2	359	18.9		8.2		27.9		107.7		8.5		25.6		19		74				<0.2		2.0	
					Bottom	6.0	0.2	341	18.9	18.9	8.2	8.2	27.9	27.9	107.7	107.7	8.5	8.5	24.0		19		74				<0.2		1.9	
						6.0	0.2	341	18.9		8.2		27.9		107.7		8.5		24.0		21		75				<0.2		2.0	
IM10	Cloudy	Moderate	08:46	6.7	Surface	1.0	0.6	316	18.9	18.9	8.3	8.3	28.9	28.9	110.5	110.5	8.7	8.7	15.0	19.8	13	13	73	75	822235	809809	<0.2	<0.2	1.4	1.5
						1.0	0.7	330	18.9		8.3		28.9		110.5		8.7		15.0		14		73				<0.2		1.6	
					Middle	3.4	0.6	322	18.9	18.9	8.3	8.3	28.9	28.9	109.4	109.4	8.6		22.3		12		75				<0.2		1.6	
						3.4	0.6	323	18.9		8.3		28.9		109.4		8.6		22.3		13		75				<0.2		1.5	
					Bottom	5.7	0.5	317	18.9	18.9	8.3	8.3	28.9	28.9	109.8	109.8	8.6	8.6	22.1		14		76				<0.2		1.5	
						5.7	0.5	336	18.9		8.3		28.9		109.8		8.6		22.1		12		77				<0.2		1.5	
IM11	Cloudy	Moderate	08:31	8.0	Surface	1.0	0.6	302	19.0	19.0	8.3	8.3	29.2	29.2	108.7	108.7	8.5	8.5	17.3	18.9	15	25	74	75	821530	810572	<0.2	<0.2	1.4	1.3
						1.0	0.6	307	19.0		8.3		29.2		108.7		8.5		17.3		17		73				<0.2		1.2	
					Middle	4.0	0.6	304	18.9	18.9	8.3	8.3	29.2	29.2	107.7	107.7	8.4		16.5		16		75				<0.2		1.3	
						4.0	0.6	324	18.9		8.3		29.2		107.7		8.4		16.5		16		75				<0.2		1.4	
					Bottom	7.0	0.5	301	19.0	19.0	8.3	8.3	29.3	29.3	106.5	106.5	8.3	8.3	22.9		41		78				<0.2		1.3	
						7.0	0.5	311	19.0		8.3		29.3		106.5		8.3		22.9		44		77				<0.2		1.4	
IM12	Cloudy	Moderate	08:23	7.0	Surface	1.0	0.7	282	18.8	18.8	8.3	8.3	29.3	29.3	109.9	109.9	8.6	8.6	15.5	20.6	15	16	73	75	821144	811498	<0.2	<0.2	1.2	1.3
						1.0	0.8	309	18.8		8.3		29.3		109.9		8.6		15.5		14		73				<0.2		1.3	
					Middle	3.5	0.7	282	18.8	18.8	8.3	8.3	29.3	29.3	109.6	109.6	8.6		18.2		13		75				<0.2		1.2	
						3.5	0.7	298	18.8		8.3		29.3		109.6		8.6		18.2		14		75				<0.2		1.2	
					Bottom	6.0	0.5	284	18.8	18.8	8.3	8.3	29.3	29.3	108.0	108.0	8.5	8.5	28.2		18		76				<0.2		1.3	
						6.0	0.6	305	18.8		8.3		29.3		108.0		8.5		28.2		19		76				<0.2		1.3	
SR2	Cloudy	Moderate	07:58	3.3	Surface	1.0	0.3	107	18.8	18.8	8.3	8.3	29.1	29.1	109.6	109.6	8.6	8.6	14.4	15.6	16	18	74	76	821456	814152	<0.2	<0.2	1.4	1.4
						1.0	0.4	116	18.8		8.3		29.1		109.6		8.6		14.4		17		75				<0.2		1.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.3	0.3	101	18.8	18.8	8.3	8.3	29.2	29.2	106.7	106.7	8.4	8.4	16.7		20		76				<0.2		1.5	
						2.3	0.3	103	18.8		8.3		29.2		106.7		8.4		16.7		18		77				<0.2		1.3	
SR3	Cloudy	Moderate	09:10	9.0	Surface	1.0	0.4	18	18.9	18.9	8.2	8.2	28.1	28.1	109.5	109.5	8.6	8.6	16.6	20.8	16	16	-	-	822165	807567	-	-	-	-
						1.0	0.4	18	18.9		8.2		28.1		109.5		8.6		16.6		16		-				-		-	
					Middle	4.5	0.5	26	18.8	18.8	8.3	8.3	28.3	28.3	109.6	109.6	8.6		17.1		14		-				-		-	
						4.5	0.5	27	18.8		8.3		28.3		109.6		8.6		17.1		14		-				-		-	
					Bottom	8.0	0.6	15	18.7	18.7	8.3	8.3	29.7	29.7	109.5	109.5	8.6	8.6	28.8		17		-				-		-	
						8.0	0.6	15	18.7		8.3		29.7		109.5		8.6		28.8		19		-				-		-	
SR4A	Cloudy	Calm	08:16	9.0	Surface	1.0	0.1	221	19.1	19.1	8.1	8.1	29.9	29.9	108.9	109.0	8.4	8.5	5.1	5.7	7	7	-	-	817189	807835	-	-	-	-
						1.0	0.1	224	19.1		8.1		29.9		109.0		8.5		5.1		7		-				-		-	
					Middle	4.5	0.0	165	19.1	19.1	8.1	8.1	29.9	29.9	109.0	109.0	8.5		6.7		7		-				-		-	
						4.5	0.0	178	19.1		8.1		29.9		109.0		8.5		6.8		6		-				-		-	
					Bottom	8.0	0.0	31	19.0	19.0	8.1	8.1	29.9	29.9	108.4	108.4	8.4	8.4	5.3		9		-				-		-	
						8.0	0.0	32	19.0		8.1		29.9		108.4		8.4		5.3		7		-				-		-	
SR5A	Cloudy	Calm	07:59	4.7	Surface	1.0	0.4	309	19.1	19.1	8.1	8.1	29.8	29.8	109.0	109.0	8.5	8.5	6.3	6.1	6	9	-	-	816612	810707	-	-	-	-
						1.0	0.4	315	19.1		8.1		29.8		109.0		8.5		6.3		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.3	320	19.1	19.1	8.2	8.2	29.9	29.9	106.8	106.8	8.3	8.3	5.9		12		-				-		-	
						3.7	0.3	328	19.1		8.2		29.9		106.8		8.3		5.9		11		-				-		-	
SR6	Cloudy	Calm	07:34	3.8	Surface	1.0	0.2	245	18.6	18.6	8.1	8.1	29.2	29.2	108.5	108.5	8.5	8.5	4.7	4.7	5	6	-	-	817889	814650	-	-	-	-
						1.0	0.2	249	18.6		8.1		29.2		108.4		8.5		4.7		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	0.2	241	18.6	18.6	8.1	8.1	29.2	29.2	106.2	106.2	8.4	8.4	4.7		6		-				-		-	
						2.8	0.2	259	18.6		8.1		29.2		106.2		8.3		4.7		8		-				-		-	
SR7	Cloudy	Moderate	07:05	16.5	Surface	1.0	0.4	328	18.6	18.6	8.2	8.2	29.7	29.7	107.2	107.2	8.4	8.3	4.7	5.7	5	7	-	-	823653	823761	-	-	-	-
						1.0	0.4	328	18.6		8.2		29.7		107.2		8.4		4.7		5		-				-		-	
					Middle	8.3	0.4	313	18.4	18.4	8.2	8.2	29.9	29.9	104.5	104.5	8.2		6.1		7		-				-		-	
						8.3	0.4	336	18.4		8.2		29.9		104.5		8.2		6.1		6		-				-		-	
					Bottom	15.5	0.4	243	18.4	18.4	8.2	8.2	29.9	29.9	103.3	103.3	8.1	8.1	6.4		10		-				-		-	
						15.5	0.4	259	18.4		8.2		29.9		103.3		8.1		6.4		8		-				-		-	
SR8	Cloudy	Moderate	08:14	4.8	Surface	1.0	-	-	19.3	19.3	8.2	8.2	28.2	28.2	108.0	108.0	8.4	8.4	12.8	14.4	9	9	-	-	820246	811418	-	-	-	-
						1.0	-	-	19.3		8.2		28.2		108.0		8.4		12.8		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	-	-	19.0	19.0	8.2	8.2	28.3	28.3	106.0	106.0	8.3	8.3	15.9		9		-				-		-	
						3.8	-	-	19.0		8.2		28.3		106.0		8.3		15.9		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 06 March 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)			Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	Average	DA	Value	DA
C1	Fine	Moderate	15:28	8.8	Surface	1.0	0.4	195	18.7	18.7	8.2	8.2	30.4	30.4	110.6	110.6	8.6	8.6	7.5	6.5	9	8	73	75	815601	804240	<0.2	<0.2	<0.2	0.8	0.9
						1.0	0.4	204	18.7		8.2		30.4		110.6		8.6		7.5		8		73				<0.2			1.0	
					Middle	4.4	0.2	207	18.3	18.3	8.2	8.2	31.1	31.1	109.3	109.3	8.6		5.9		7		75				<0.2	<0.2		0.9	
						4.4	0.2	211	18.3		8.2		31.1		109.3		8.5		5.9		8		75				<0.2			0.9	
					Bottom	7.8	0.1	207	18.1	18.1	8.2	8.2	31.2	31.2	108.3	108.3	8.5	8.5	6.2		7		77				<0.2	<0.2		0.8	
						7.8	0.1	222	18.1		8.2		31.2		108.2		8.5		6.2		8		77				<0.2			0.8	
C2	Fine	Rough	14:08	12.4	Surface	1.0	0.1	221	20.2	20.2	8.2	8.2	27.3	27.3	108.5	108.5	8.4	8.4	11.9	10.9	12	12	73	74	825663	806972	<0.2	<0.2	<0.2	2.1	2.1
						1.0	0.1	225	20.2		8.2		27.3		108.5		8.4		11.9		12		73				<0.2			2.2	
					Middle	6.2	0.1	340	20.1	20.1	8.3	8.3	28.2	28.2	108.6	108.6	8.4		10.7		13		72				<0.2	<0.2		2.2	
						6.2	0.1	350	20.1		8.3		28.2		108.6		8.4		10.7		13		74				<0.2			2.1	
					Bottom	11.4	0.2	340	20.1	20.1	8.3	8.3	28.3	28.3	108.0	108.0	8.3	8.3	10.2		12		75				<0.2	<0.2		1.9	
						11.4	0.2	313	20.1		8.3		28.3		108.0		8.3		10.2		12		75				<0.2			1.9	
C3	Fine	Moderate	16:26	12.0	Surface	1.0	0.3	45	19.4	19.4	8.2	8.2	29.4	29.4	102.0	102.0	7.9	7.8	6.0	6.1	6	7	73	75	822127	817780	<0.2	<0.2	<0.2	1.3	1.2
						1.0	0.3	49	19.4		8.2		29.4		102.0		7.9		6.0		6		73				<0.2			1.2	
					Middle	6.0	0.3	84	19.1	19.1	8.2	8.2	29.8	29.8	99.2	99.2	7.7		5.6		7		74				<0.2	<0.2		1.2	
						6.0	0.3	90	19.1		8.2		29.8		99.2		7.7		5.6		6		75				<0.2			1.3	
					Bottom	11.0	0.4	115	18.9	18.9	8.1	8.1	30.0	30.0	98.8	98.8	7.7	7.7	6.6		9		77				<0.2	<0.2		1.2	
						11.0	0.4	119	18.9		8.1		30.0		98.8		7.7		6.6		8		77				<0.2			1.2	
IM1	Fine	Rough	15:09	7.8	Surface	1.0	0.4	250	19.0	19.0	8.2	8.2	30.4	30.4	108.6	108.6	8.4	8.4	10.8	10.2	12	12	73	75	818362	806467	<0.2	<0.2	<0.2	1.5	1.1
						1.0	0.4	250	19.0		8.2		30.4		108.6		8.4		10.8		12		73				<0.2			1.0	
					Middle	3.9	0.3	234	18.8	18.8	8.2	8.2	30.6	30.6	107.6	107.6	8.4		10.3		12		75				<0.2	<0.2		1.0	
						3.9	0.3	249	18.8		8.2		30.6		107.6		8.4		10.3		12		75				<0.2			0.9	
					Bottom	6.8	0.1	179	18.5	18.5	8.2	8.2	30.8	30.8	105.9	105.9	8.3	8.3	9.5		11		77				<0.2	<0.2		1.1	
						6.8	0.1	195	18.5		8.2		30.8		105.8		8.3		9.5		12		77				<0.2			0.9	
IM2	Fine	Rough	15:01	8.6	Surface	1.0	0.5	255	19.1	19.1	8.2	8.2	30.2	30.2	109.1	109.1	8.5	8.4	10.1	10.4	11	13	74	75	818860	806171	<0.2	<0.2	<0.2	1.0	1.0
						1.0	0.6	274	19.1		8.2		30.2		109.1		8.5		10.2		11		73				<0.2			1.1	
					Middle	4.3	0.2	264	19.0	19.0	8.2	8.2	30.3	30.3	107.6	107.6	8.3		10.3		12		75				<0.2	<0.2		1.1	
						4.3	0.3	268	19.0		8.2		30.3		107.5		8.3		10.3		12		75				<0.2			1.0	
					Bottom	7.6	0.1	199	18.5	18.5	8.2	8.2	30.8	30.8	104.6	104.6	8.2	8.2	10.7		15		77				<0.2	<0.2		1.0	
						7.6	0.1	217	18.5		8.2		30.8		104.5		8.2		10.7		14		77				<0.2			1.0	
IM3	Fine	Rough	14:53	8.6	Surface	1.0	0.2	236	19.0	19.0	8.2	8.2	30.4	30.4	109.3	109.3	8.5	8.5	10.3	10.4	10	12	73	75	819389	806003	<0.2	<0.2	<0.2	1.1	1.0
						1.0	0.2	238	19.0		8.2		30.4		109.3		8.5		10.2		10		73				<0.2			1.0	
					Middle	4.3	0.0	172	18.8	18.8	8.2	8.2	30.5	30.5	107.7	107.7	8.4		10.7		13		75				<0.2	<0.2		1.0	
						4.3	0.0	173	18.8		8.2		30.5		107.6		8.4		10.8		12		75				<0.2			1.1	
					Bottom	7.6	0.1	107	18.6	18.6	8.2	8.2	30.7	30.7	106.2	106.2	8.3	8.3	10.2		14		77				<0.2	<0.2		0.8	
						7.6	0.1	110	18.6		8.2		30.7		106.1		8.3		10.0		14		77				<0.2			0.9	
IM4	Fine	Rough	14:43	8.1	Surface	1.0	0.2	242	18.5	18.5	8.2	8.2	30.7	30.7	107.0	107.0	8.4	8.4	10.3	10.4	11	12	73	75	819586	805045	<0.2	<0.2	<0.2	1.0	1.0
						1.0	0.3	252	18.5		8.2		30.7		107.0		8.4		10.3		10		74				<0.2			0.9	
					Middle	4.1	0.2	229	18.5	18.5	8.2	8.2	30.7	30.7	106.2	106.2	8.3		10.1		12		75				<0.2	<0.2		1.0	
						4.1	0.2	229	18.5		8.2		30.7		106.1		8.3		10.2		12		76				<0.2			0.9	
					Bottom	7.1	0.2	265	18.5	18.5	8.2	8.2	30.7	30.7	104.5	104.5	8.2	8.2	10.8		12		77				<0.2	<0.2		1.0	
						7.1	0.3	266	18.5		8.2		30.7		104.5		8.2		10.8		13		77				<0.2			1.0	
IM5	Fine	Rough	14:32	7.4	Surface	1.0	0.1	296	18.7	18.7	8.2	8.2	30.5	30.5	107.8	107.8	8.4	8.4	9.9	10.5	11	12	73	75	820562	804909	<0.2	<0.2	<0.2	1.0	1.0
						1.0	0.1	319	18.7		8.2		30.5		107.7		8.4		10.1		12		73				<0.2			1.0	
					Middle	3.7	0.1	307	18.6	18.6	8.2	8.2	30.5	30.5	106.8	106.8	8.3		10.6		13		75				<0.2	<0.2		1.1	
						3.7	0.1	332	18.6		8.2		30.5		106.7		8.3		10.6		13		75				<0.2			1.1	
					Bottom	6.4	0.0	108	18.6	18.6	8.2	8.2	30.5	30.5	104.6	104.6	8.2	8.2	10.8		12		77				<0.2	<0.2		1.0	
						6.4	0.0	115	18.6		8.2		30.5		104.5		8.2		10.8		13		77				<0.2			0.9	
IM6	Fine	Rough	14:24	7.3	Surface	1.0	0.3	292	18.9	18.9	8.2	8.2	30.2	30.2	108.5	108.5	8.4	8.4	14.5	15.3	17	18	73	75	821033	805827	<0.2	<0.2	<0.2	1.1	1.2
						1.0	0.3	300	18.9		8.2		30.2		108.4		8.4		14.5		17		73				<0.2			1.2	
					Middle	3.7	0.2	292	18.9	18.9	8.2	8.2	30.2	30.2	107.9	107.9	8.4		15.3		17		75				<0.2	<0.2		1.1	
						3.7	0.2	306	18.9		8.2		30.2		107.9		8.4		15.4		18		75				<0.2			1.2	
					Bottom	6.3	0.1	351	18.8	18.8	8.2	8.2	30.3	30.3	106.0	106.0	8.3	8.3	15.9		19		77				<0.2	<0.2		1.2	
						6.3	0.1	323	18.8		8.2		30.3		106.0		8.2		15.9		20		77				<0.2			1.1	
IM7	Fine	Rough	14:13	8.6	Surface	1.0	0.2	275	19.1	19.1	8.2	8.2	30.2	30.2	109.2	109.2	8.5	8.5	12.2	12.5	11	16	73	75	821321	806861	<0.2	<0.2	<0.2	1.5	1.5
						1.0	0.2	277	19.1		8.2		30.2		109.2		8.5		12.1		10		73				<0.2			1.4	
					Middle	4.3	0.1	6	19.1	19.1	8.2	8.2	30.2	30.2	108.8	108.8	8.4		12.3		19		75				<0.2	<0.2		1.6	
						4.3	0.1	6	19.1		8.2		30.2		108.8		8.4		12.3		18		75				<0.2			1.6	
					Bottom	7.6	0.1	235	19.1	19.1	8.2	8.2	30.2	30.2	108.2	108.2	8.4	8.4	13.1		17		77				<0.2	<0.2		1.4	
						7.6	0.1	240	19.1		8.2		30.2		108.2		8.4		13.2		18		77				<0.2			1.2	
IM8	Fine	Rough	14:41	8.4	Surface	1.0	0.2	275	19.7	19.7	8.2	8.2	29.5	29.5	108.8	108.8	8.4	8.4	10.5	10.6	11	12	73	74	821679	807812	<0.2	<0.2	<0.2	1.6	1.3
						1.0	0.2	293	19.7		8.2		29.5		108.8		8.4		10.5		12		73				<0.2			1.4	
					Middle	4.2	0.1	297	19.5	19.5	8.2	8.2	29.8	29.8	108.1	108.1	8.3		10.6		11		75				<0.2	<0.2		1.0	
						4.2	0.1	313	19.5		8.2		29.8		108.1		8.3		10.6		13		75				<0.2			1.1	
					Bottom	7.4	0.0	94	19.5	19.5	8.2	8.2	29.8	29.8	107.9	107.9	8.3	8.3	10.6		11		74				<0.2	<0.2		1.3	
						7.4	0.0	94	19.5		8.2		29.8		107.9		8.3		10.6		12		75				<0.2			1.1	

DA: Depth-Averaged

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

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 06 March 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)			Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	Average	DA	Value	DA
IM9	Fine	Rough	14:54	7.5	Surface	1.0	0.1	249	20.0	20.0	8.3	8.3	28.9	28.9	108.3	108.3	8.3	8.3	11.3	12.1	12	13	73	74	822082	808797	<0.2	<0.2	<0.2	1.5	1.5
						1.0	0.1	272	20.0		8.3		28.9		108.3		8.3		11.3		13		73				<0.2			1.6	
					Middle	3.8	0.1	209	19.8	19.8	8.2	8.2	29.2	29.2	108.1	108.1	8.3		11.5		12		74				<0.2	<0.2		1.5	
						3.8	0.1	229	19.8		8.2		29.2		108.1		8.3		11.5		14		75				<0.2			1.5	
					Bottom	6.5	0.1	111	19.5	19.5	8.2	8.2	29.7	29.7	106.7	106.7	8.2	8.2	13.6		14		75				<0.2	<0.2		1.4	
						6.5	0.1	113	19.5		8.2		29.7		106.7		8.2		13.6		14		74				<0.2			1.6	
IM10	Fine	Rough	15:07	8.6	Surface	1.0	0.2	109	20.0	20.0	8.2	8.2	28.8	28.8	107.4	107.4	8.3	8.3	11.8	12.8	12	11	73	74	822218	809856	<0.2	<0.2	<0.2	1.6	1.6
						1.0	0.2	119	20.0		8.2		28.8		107.4		8.3		11.8		10		73				<0.2			1.8	
					Middle	4.3	0.3	111	19.9	19.9	8.2	8.2	28.8	28.8	107.0	107.0	8.2		13.4		12		74				<0.2	<0.2		1.7	
						4.3	0.3	111	19.9		8.2		28.8		107.0		8.2		13.4		11		75				<0.2			1.5	
					Bottom	7.6	0.3	106	19.8	19.8	8.2	8.2	29.0	29.0	106.1	106.1	8.2	8.2	13.1		12		75				<0.2	<0.2		1.6	
						7.6	0.3	113	19.8		8.2		29.0		106.1		8.2		13.1		11		75				<0.2			1.6	
IM11	Fine	Rough	15:22	8.2	Surface	1.0	0.0	164	19.9	19.9	8.2	8.2	28.8	28.8	107.4	107.4	8.3	8.3	8.5	8.6	10	9	73	75	821516	810522	<0.2	<0.2	<0.2	2.8	1.8
						1.0	0.0	170	19.9		8.2		28.8		107.4		8.3		8.5		9		73				<0.2			1.8	
					Middle	4.1	0.1	143	19.9	19.9	8.2	8.2	28.8	28.8	106.8	106.8	8.2		8.8		8		75				<0.2	<0.2		1.6	
						4.1	0.1	143	19.9		8.2		28.8		106.8		8.2		8.8		10		75				<0.2			1.6	
					Bottom	7.2	0.0	83	19.9	19.9	8.2	8.2	28.8	28.8	106.7	106.7	8.2	8.2	8.4		8		76				<0.2	<0.2		1.5	
						7.2	0.0	86	19.9		8.2		28.8		106.7		8.2		8.4		10		75				<0.2			1.4	
IM12	Fine	Rough	15:34	8.9	Surface	1.0	0.2	114	19.9	19.9	8.2	8.2	28.8	28.8	106.9	106.9	8.2	8.2	9.0	8.5	9	10	73	75	821173	811492	<0.2	<0.2	<0.2	1.5	1.5
						1.0	0.2	122	19.9		8.2		28.8		106.9		8.2		9.0		10		73				<0.2			1.6	
					Middle	4.5	0.2	101	19.9	19.9	8.2	8.2	28.8	28.8	105.7	105.7	8.1		8.1		9		75				<0.2	<0.2		1.5	
						4.5	0.2	102	19.9		8.2		28.8		105.7		8.1		8.1		11		75				<0.2			1.6	
					Bottom	7.9	0.2	107	19.8	19.8	8.2	8.2	28.9	28.9	105.4	105.4	8.1	8.1	8.4		9		77				<0.2	<0.2		1.5	
						7.9	0.2	110	19.8		8.2		28.9		105.4		8.1		8.4		10		78				<0.2			1.5	
SR2	Fine	Moderate	16:04	4.8	Surface	1.0	0.4	64	19.8	19.8	8.2	8.2	28.8	28.8	105.7	105.7	8.1	8.1	7.9	8.1	8	9	75	76	821445	814179	<0.2	<0.2	<0.2	1.4	1.5
						1.0	0.4	67	19.8		8.2		28.8		105.7		8.1		7.9		9		75				<0.2			1.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-	-		-	
						-	-	-	-		-		-		-		-		-		-		-				-			-	
					Bottom	3.8	0.3	74	19.8	19.8	8.2	8.2	28.9	28.9	104.7	104.7	8.1	8.1	8.2		11		77				<0.2	<0.2		1.6	
						3.8	0.3	74	19.8		8.2		28.9		104.7		8.1		8.2		9		76				<0.2			1.4	
SR3	Fine	Rough	14:33	9.6	Surface	1.0	0.1	254	19.5	19.5	8.2	8.2	29.8	29.8	108.3	108.3	8.3	8.3	11.1	11.6	11	12	-	-	822157	807582	-	-	-	-	-
						1.0	0.1	279	19.5		8.2		29.8		108.3		8.3		11.1		12		-				-			-	
					Middle	4.8	0.1	282	19.5	19.5	8.2	8.2	29.8	29.8	107.9	107.9	8.3		11.9		12		-	-			-	-		-	
						4.8	0.1	288	19.5		8.2		29.8		107.9		8.3		11.9		12		-				-			-	
					Bottom	8.6	0.0	192	19.5	19.5	8.2	8.2	29.9	29.9	107.8	107.8	8.3	8.3	11.8		12		-	-			-	-		-	
						8.6	0.0	210	19.5		8.2		29.9		107.8		8.3		11.8		12		-				-			-	
SR4A	Fine	Moderate	15:52	8.5	Surface	1.0	0.2	122	19.0	19.0	8.2	8.2	30.6	30.6	109.0	109.0	8.4	8.4	8.7	10.3	8	10	-	-	817206	807816	-	-	-	-	-
						1.0	0.2	131	19.0		8.2		30.6		109.0		8.4		8.7		7		-				-			-	
					Middle	4.3	0.2	104	18.5	18.5	8.2	8.2	30.9	30.9	106.7	106.7	8.3		10.3		11		-	-			-	-		-	
						4.3	0.2	104	18.5		8.2		30.9		106.6		8.3		10.3		10		-				-			-	
					Bottom	7.5	0.2	99	18.4	18.4	8.2	8.2	31.0	31.0	104.8	104.8	8.2	8.2	11.7		13		-	-			-	-		-	
						7.5	0.2	99	18.4		8.2		31.0		104.8		8.2		11.8		11		-				-			-	
SR5A	Fine	Moderate	16:11	4.8	Surface	1.0	0.1	313	20.2	20.2	8.2	8.2	29.6	29.6	104.6	104.6	8.0	8.0	10.1	10.2	9	9	-	-	816596	810692	-	-	-	-	-
						1.0	0.1	318	20.2		8.2		29.6		104.6		8.0		10.1		9		-				-			-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-	-		-	
						-	-	-	-		-		-		-		-		-		-		-				-			-	
					Bottom	3.8	0.1	75	20.1	20.1	8.2	8.2	29.6	29.6	103.9	103.9	7.9	7.9	10.2		9		-	-			-	-		-	
						3.8	0.1	80	20.1		8.2		29.6		103.9		7.9		10.3		9		-				-			-	
SR6	Fine	Moderate	16:36	4.1	Surface	1.0	0.0	61	19.9	19.9	8.2	8.2	29.1	29.1	105.8	105.8	8.1	8.1	11.6	11.9	12	13	-	-	817917	814646	-	-	-	-	-
						1.0	0.0	64	19.9		8.2		29.1		105.8		8.1		11.7		12		-				-			-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-	-		-	
						-	-	-	-		-		-		-		-		-		-		-				-			-	
					Bottom	3.1	0.0	66	20.1	20.1	8.2	8.2	29.1	29.1	102.4	102.4	7.8	7.8	12.0		14		-	-			-	-		-	
						3.1	0.0	66	20.1		8.2		29.1		102.4		7.8		12.1		13		-				-			-	
SR7	Fine	Moderate	16:59	16.9	Surface	1.0	0.3	74	19.1	19.1	8.2	8.2	29.8	29.8	100.6	100.6	7.8	7.8	3.6	3.3	5	5	-	-	823620	823748	-	-	-	-	-
						1.0	0.3	78	19.1		8.2		29.8		100.6		7.8		3.6		4		-				-			-	
					Middle	8.5	0.5	84	18.9	18.9	8.1	8.1	30.0	30.0	99.5	99.5	7.7		3.2		7		-	-			-	-		-	
						8.5	0.5	91	18.9		8.1		30.0		99.5		7.7		3.2		6		-				-			-	
					Bottom	15.9	0.3	66	18.9	18.9	8.1	8.1	30.0	30.0	100.0	100.0	7.8	7.8	3.0		5		-	-			-	-		-	
						15.9	0.3	67	18.9		8.1		30.0		100.0		7.8		3.0		4		-				-			-	
SR8	Fine	Rough	15:47	4.3	Surface	1.0	-	-	20.2	20.2	8.2	8.2	28.7	28.7	107.1	107.1	8.2	8.2	10.8	11.2	10	11	-	-	820246	811418	-	-	-	-	-
						1.0	-	-	20.2		8.2		28.7		107.1		8.2		10.8		11		-				-			-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-	-		-	
						-	-	-	-		-		-		-		-		-		-		-				-			-	
					Bottom	3.3	-	-	20.2	20.2	8.2	8.2	28.7	28.7	106.8	106.8	8.2	8.2	11.5		11		-	-			-	-		-	
						3.3	-	-	20.2		8.2		28.7		106.8		8.2		11.5		12		-				-			-	

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 06 March 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)			Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	Average	DA	Value	DA
C1	Fine	Rough	10:04	8.5	Surface	1.0	0.3	30	18.7	18.7	8.2	8.2	30.4	30.4	110.9	110.9	8.6	8.6	11.2	13.7	15	17	75	76	815647	804221	<0.2	<0.2	<0.2	1.1	1.1
						1.0	0.3	32	18.7		8.2		30.4		110.9		8.6		11.2		14		74				<0.2			1.0	
					Middle	4.3	0.5	34	18.3	18.3	8.2	8.2	31.1	31.1	109.9	109.9	8.6		13.6		19		75				<0.2	<0.2		1.2	
						4.3	0.6	36	18.3		8.2		31.1		109.9		8.6		13.6		19		75				<0.2			1.1	
					Bottom	7.5	0.4	40	18.1	18.1	8.2	8.2	31.2	31.2	109.2	109.2	8.6	8.6	16.1		18		77				<0.2	<0.2		1.2	
						7.5	0.4	40	18.1		8.2		31.2		109.2		8.6		16.2		18		77				<0.2			1.0	
C2	Fine	Rough	10:52	12.2	Surface	1.0	0.6	330	20.1	20.1	8.1	8.1	27.0	27.0	105.9	106.0	8.2	8.2	17.3	20.1	13	16	73	74	825710	806973	<0.2	<0.2	<0.2	2.0	2.1
						1.0	0.7	342	20.1		8.1		27.0		106.0		8.2		17.3		14		72				<0.2			2.1	
					Middle	6.1	0.5	343	20.0	20.0	8.1	8.1	27.1	27.1	105.0	105.0	8.1		19.6		15		73				<0.2	<0.2		2.1	
						6.1	0.6	354	20.0		8.1		27.1		105.0		8.1		19.6		15		74				<0.2			2.3	
					Bottom	11.2	0.4	340	20.0	20.0	8.1	8.1	27.1	27.1	104.7	104.7	8.1	8.1	23.5		20		75				<0.2	<0.2		2.1	
						11.2	0.4	351	20.0		8.1		27.1		104.7		8.1		23.5		19		75				<0.2			2.2	
C3	Fine	Moderate	09:03	11.3	Surface	1.0	0.8	276	19.7	19.7	8.2	8.2	28.7	28.7	103.8	103.8	8.0	8.0	6.2	8.2	6	6	73	75	822118	817809	<0.2	<0.2	<0.2	1.6	1.5
						1.0	0.9	279	19.7		8.2		28.7		103.8		8.0		6.2		5		73				<0.2			1.6	
					Middle	5.7	0.7	270	19.4	19.4	8.2	8.2	29.3	29.3	101.7	101.7	7.9		9.0		6		75				<0.2	<0.2		1.4	
						5.7	0.7	278	19.4		8.2		29.3		101.7		7.9		9.0		5		75				<0.2			1.4	
					Bottom	10.3	0.5	271	19.3	19.3	8.1	8.1	29.4	29.4	101.7	101.7	7.9	7.9	9.3		5		77				<0.2	<0.2		1.4	
						10.3	0.5	295	19.3		8.1		29.4		101.7		7.9		9.3		6		77				<0.2			1.5	
IM1	Fine	Rough	10:27	7.6	Surface	1.0	0.6	355	19.0	19.0	8.2	8.2	30.4	30.4	109.0	109.0	8.5	8.5	11.2	15.9	18	19	74	76	818359	806433	<0.2	<0.2	<0.2	1.8	1.4
						1.0	0.6	327	19.0		8.2		30.4		109.0		8.5		11.3		16		74				<0.2			1.1	
					Middle	3.8	0.6	356	18.9	18.9	8.2	8.2	30.4	30.4	108.6	108.6	8.4		16.5		19		75				<0.2	<0.2		1.4	
						3.8	0.6	328	18.9		8.2		30.4		108.6		8.4		16.6		18		76				<0.2			1.5	
					Bottom	6.6	0.5	1	18.6	18.6	8.2	8.2	30.7	30.7	107.9	107.9	8.4	8.4	19.8		23		77				<0.2	<0.2		1.2	
						6.6	0.5	1	18.6		8.2		30.7		107.9		8.4		19.8		21		77				<0.2			1.2	
IM2	Fine	Rough	10:36	8.2	Surface	1.0	0.6	12	19.0	19.0	8.2	8.2	30.2	30.2	109.5	109.5	8.5	8.5	13.2	17.0	19	20	73	76	818825	806217	<0.2	<0.2	<0.2	1.4	1.3
						1.0	0.6	12	19.0		8.2		30.2		109.5		8.5		13.3		19		74				<0.2			1.3	
					Middle	4.1	0.4	13	18.9	18.9	8.2	8.2	30.4	30.4	108.8	108.8	8.4		17.7		18		76				<0.2	<0.2		1.2	
						4.1	0.4	13	18.9		8.2		30.4		108.8		8.4		17.7		19		76				<0.2			1.2	
					Bottom	7.2	0.5	5	18.5	18.5	8.2	8.2	30.7	30.7	107.9	107.9	8.4	8.4	20.1		24		78				<0.2	<0.2		1.2	
						7.2	0.6	5	18.5		8.2		30.7		107.9		8.4		20.2		22		78				<0.2			1.4	
IM3	Fine	Rough	10:41	8.4	Surface	1.0	0.3	2	19.0	19.0	8.2	8.2	30.4	30.4	109.7	109.7	8.5	8.5	16.5	19.2	23	25	74	76	819405	806046	<0.2	<0.2	<0.2	1.2	1.2
						1.0	0.3	2	19.0		8.2		30.4		109.7		8.5		16.6		22		74				<0.2			1.2	
					Middle	4.2	0.5	38	18.9	18.9	8.2	8.2	30.5	30.5	109.0	109.0	8.5		18.4		25		76				<0.2	<0.2		1.1	
						4.2	0.5	40	18.9		8.2		30.5		109.0		8.5		18.9		25		76				<0.2			1.3	
					Bottom	7.4	0.4	35	18.6	18.6	8.2	8.2	30.6	30.6	108.3	108.4	8.4	8.4	22.4		27		78				<0.2	<0.2		1.2	
						7.4	0.4	37	18.6		8.2		30.6		108.4		8.4		22.3		26		78				<0.2			1.2	
IM4	Fine	Rough	10:49	7.8	Surface	1.0	0.5	358	18.5	18.5	8.2	8.2	30.7	30.7	107.6	107.6	8.4	8.4	16.1	18.4	13	15	74	76	819544	805025	<0.2	<0.2	<0.2	1.4	1.3
						1.0	0.6	329	18.5		8.2		30.7		107.6		8.4		16.0		13		74				<0.2			1.2	
					Middle	3.9	0.6	4	18.5	18.5	8.2	8.2	30.7	30.7	107.2	107.2	8.4		18.7		16		76				<0.2	<0.2		1.2	
						3.9	0.6	4	18.5		8.2		30.7		107.2		8.4		18.8		15		76				<0.2			1.3	
					Bottom	6.8	0.4	6	18.5	18.5	8.2	8.2	30.7	30.7	106.9	106.9	8.4	8.4	20.3		15		77				<0.2	<0.2		1.2	
						6.8	0.4	6	18.5		8.2		30.7		106.9		8.4		20.3		16		78				<0.2			1.2	
IM5	Fine	Rough	10:59	7.0	Surface	1.0	0.4	12	18.7	18.7	8.2	8.2	30.5	30.5	108.3	108.3	8.4	8.4	17.3	19.0	17	17	74	76	820554	804908	<0.2	<0.2	<0.2	1.2	1.3
						1.0	0.4	12	18.7		8.2		30.5		108.3		8.4		17.2		15		74				<0.2			1.2	
					Middle	3.5	0.6	24	18.7	18.7	8.2	8.2	30.5	30.5	108.0	108.0	8.4		19.4		16		76				<0.2	<0.2		1.3	
						3.5	0.7	25	18.7		8.2		30.5		108.0		8.4		19.5		18		76				<0.2			1.3	
					Bottom	6.0	0.5	23	18.7	18.6	8.2	8.2	30.5	30.5	107.8	107.8	8.4	8.4	20.4		19		78				<0.2	<0.2		1.2	
						6.0	0.6	23	18.6		8.2		30.5		107.8		8.4		20.2		17		78				<0.2			1.4	
IM6	Fine	Rough	11:08	7.2	Surface	1.0	0.2	326	18.9	18.9	8.2	8.2	30.3	30.3	108.6	108.6	8.4	8.4	14.2	17.6	13	13	74	76	821035	805809	<0.2	<0.2	<0.2	1.4	1.4
						1.0	0.2	326	18.9		8.2		30.3		108.6		8.4		14.2		11		74				<0.2			1.2	
					Middle	3.6	0.3	18	18.9	18.9	8.2	8.2	30.3	30.3	108.3	108.3	8.4		15.9		12		76				<0.2	<0.2		1.5	
						3.6	0.3	19	18.9		8.2		30.3		108.3		8.4		15.9		12		76				<0.2			1.5	
					Bottom	6.2	0.2	39	18.8	18.7	8.2	8.2	30.4	30.4	107.8	107.8	8.4	8.4	22.5		16		78				<0.2	<0.2		1.3	
						6.2	0.2	41	18.7		8.2		30.4		107.8		8.4		22.6		15		78				<0.2			1.3	
IM7	Fine	Rough	11:18	8.3	Surface	1.0	0.2	348	19.1	19.1	8.2	8.2	30.2	30.2	109.3	109.4	8.5	8.5	11.5	16.2	15	16	74	76	821369	806821	<0.2	<0.2	<0.2	1.5	1.5
						1.0	0.2	320	19.1		8.2		30.2		109.4		8.5		11.5		15		74				<0.2			1.5	
					Middle	4.2	0.4	27	19.1	19.1	8.2	8.2	30.2	30.2	109.1	109.1	8.5		16.8		16		76				<0.2	<0.2		1.4	
						4.2	0.4	28	19.1		8.2		30.2		109.1		8.5		16.8		14		76				<0.2			1.3	
					Bottom	7.3	0.3	37	19.1	19.1	8.2	8.2	30.2	30.2	108.9	108.9	8.4	8.4	20.4		18		78				<0.2	<0.2		1.5	
						7.3	0.3	39	19.1		8.2		30.2		108.9		8.4		20.4		18		78				<0.2			1.5	
IM8	Fine	Moderate	10:25	8.3	Surface	1.0	0.4	333	20.0	20.0	8.3	8.3	27.8	27.8	106.1	106.1	8.2	8.2	18.2	21.0	11	13	72	74	821706	807849	<0.2	<0.2	<0.2	1.9	2.1
						1.0	0.4	335	20.0		8.3		27.8		106.1		8.2		18.2		11		73				<0.2			2.2	
					Middle	4.2	0.3	12	19.9	19.9	8.3	8.3	27.9	27.9	105.7	105.7	8.2		22.3		11		75				<0.2	<0.2		2.2	
						4.2	0.4	13	19.9		8.3		27.9		105.7		8.2		22.3		10		74				<0.2			2.0	
					Bottom	7.3	0.4	26	19.9	19.9	8.3	8.3	27.9	27.9	104.7	104.7	8.1	8.1	22.4		17		76				<0.2	<0.2		2.3	
						7.3	0.4	28	19.9		8.3		27.9		104.7		8.1		22.4		18		75				<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 06 March 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)			Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	Average	DA	Value	DA
IM9	Fine	Moderate	10:16	7.0	Surface	1.0	0.5	314	19.9	19.9	8.2	8.2	28.0	28.0	107.0	107.0	8.3	8.3	19.8	20.4	12	13	73	74	822109	808839	<0.2	<0.2	<0.2	2.0	1.9
						1.0	0.5	329	19.9		8.2		28.0		107.0		8.3		19.9		12		73				<0.2			2.0	
					Middle	3.5	0.4	324	19.9	19.9	8.2	8.2	28.0	28.0	106.9	106.9	8.3		18.8		11		74				<0.2	<0.2		2.0	
						3.5	0.4	352	19.9		8.2		28.0		106.9		8.3		18.8		11		73				<0.2			1.9	
					Bottom	6.0	0.4	337	19.9	19.9	8.2	8.2	28.0	28.0	106.0	106.0	8.2	8.2	22.5		17		76				<0.2	<0.2		1.9	
						6.0	0.4	345	19.9		8.2		28.0		106.0		8.2		22.5		17		75				<0.2			1.8	
IM10	Fine	Moderate	10:09	7.4	Surface	1.0	0.8	306	19.9	19.9	8.2	8.2	28.7	28.7	106.2	106.2	8.2	8.2	19.2	20.4	11	13	73	75	822263	809815	<0.2	<0.2	<0.2	1.6	1.6
						1.0	0.8	318	19.9		8.2		28.7		106.2		8.2		19.2		11		73				<0.2			1.6	
					Middle	3.7	0.7	309	19.9	19.9	8.2	8.2	28.7	28.7	105.7	105.7	8.1		19.7		11		75				<0.2	<0.2		1.6	
						3.7	0.7	316	19.9		8.2		28.7		105.7		8.1		19.7		10		75				<0.2			1.6	
					Bottom	6.4	0.6	312	19.9	19.9	8.2	8.2	28.7	28.7	105.0	105.0	8.1	8.1	22.3		17		76				<0.2	<0.2		1.5	
						6.4	0.7	327	19.9		8.2		28.7		105.0		8.1		22.3		18		76				<0.2			1.7	
IM11	Fine	Moderate	09:54	7.6	Surface	1.0	0.8	289	20.0	20.0	8.2	8.2	28.7	28.7	105.9	105.9	8.1	8.1	18.2	18.1	12	13	73	75	821519	810561	<0.2	<0.2	<0.2	1.6	1.7
						1.0	0.8	302	20.0		8.2		28.7		105.9		8.1		18.2		12		73				<0.2			1.7	
					Middle	3.8	0.6	290	20.0	20.0	8.2	8.2	28.7	28.7	105.3	105.3	8.1		19.0		10		75				<0.2	<0.2		1.8	
						3.8	0.6	290	20.0		8.2		28.7		105.3		8.1		19.0		11		75				<0.2			1.7	
					Bottom	6.6	0.6	298	20.0	20.0	8.2	8.2	28.7	28.7	104.6	104.6	8.0	8.0	17.1		16		77				<0.2	<0.2		1.5	
						6.6	0.6	298	20.0		8.2		28.7		104.6		8.0		17.1		17		77				<0.2			1.6	
IM12	Fine	Moderate	09:48	7.6	Surface	1.0	0.9	276	19.8	19.8	8.2	8.2	28.5	28.5	105.9	105.9	8.2	8.2	16.7	18.0	13	15	73	75	821151	811515	<0.2	<0.2	<0.2	1.6	1.7
						1.0	0.9	292	19.8		8.2		28.5		105.9		8.2		16.7		13		74				<0.2			1.5	
					Middle	3.8	0.8	281	19.8	19.8	8.2	8.2	28.7	28.7	105.3	105.3	8.1		19.3		13		75				<0.2	<0.2		1.6	
						3.8	0.8	281	19.8		8.2		28.7		105.3		8.1		19.3		12		75				<0.2			1.7	
					Bottom	6.6	0.6	284	19.8	19.8	8.2	8.2	28.7	28.7	105.0	105.0	8.1	8.1	18.1		20		77				<0.2	<0.2		1.9	
						6.6	0.6	287	19.8		8.2		28.7		105.0		8.1		18.1		21		76				<0.2			1.6	
SR2	Fine	Moderate	09:22	4.3	Surface	1.0	0.1	188	19.7	19.7	8.2	8.2	28.6	28.6	104.5	104.5	8.1	8.1	16.2	19.1	15	17	74	76	821449	814172	<0.2	<0.2	<0.2	1.7	1.7
						1.0	0.1	192	19.7		8.2		28.6		104.5		8.1		16.2		15		75				<0.2			1.7	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-	-		-	
						-	-	-	-		-		-		-		-		-		-		-				-			-	
					Bottom	3.3	0.2	136	19.7	19.7	8.2	8.2	28.7	28.7	104.0	104.0	8.0	8.0	22.0		18		77				<0.2	<0.2		1.7	
						3.3	0.2	148	19.7		8.2		28.7		104.0		8.0		22.0		18		77				<0.2			1.6	
SR3	Fine	Rough	10:32	9.1	Surface	1.0	0.5	335	20.0	20.0	8.3	8.3	27.8	27.8	106.5	106.5	8.2	8.2	17.3	19.6	11	13	-	-	822149	807566	-	-	-	-	-
						1.0	0.6	308	20.0		8.3		27.8		106.5		8.2		17.3		10		-				-			-	
					Middle	4.6	0.6	344	19.9	19.9	8.3	8.3	27.9	27.9	106.2	106.2	8.2		18.2		14		-				-	-		-	
						4.6	0.6	357	19.9		8.3		27.9		106.2		8.2		18.2		13		-				-			-	
					Bottom	8.1	0.5	357	19.9	19.9	8.3	8.3	28.0	28.0	105.7	105.7	8.2	8.2	23.2		15		-				-	-		-	
						8.1	0.5	328	19.9		8.3		28.0		105.7		8.2		23.2		14		-				-			-	
SR4A	Cloudy	Calm	09:41	9.1	Surface	1.0	0.4	229	19.1	19.1	8.2	8.2	30.5	30.5	110.2	110.2	8.5	8.5	8.2	9.4	11	12	-	-	817168	807826	-	-	-	-	-
						1.0	0.4	243	19.1		8.2		30.5		110.2		8.5		8.2		10		-				-			-	
					Middle	4.6	0.2	247	18.7	18.7	8.2	8.2	30.8	30.8	108.8	108.8	8.5		9.4		12		-				-	-		-	
						4.6	0.3	258	18.7		8.2		30.8		108.8		8.5		9.5		13		-				-			-	
					Bottom	8.1	0.2	241	18.4	18.4	8.2	8.2	31.0	31.0	107.8	107.9	8.4	8.4	10.6		12		-				-	-		-	
						8.1	0.2	260	18.4		8.2		31.0		107.9		8.4		10.6		11		-				-			-	
SR5A	Cloudy	Calm	09:26	4.5	Surface	1.0	0.4	296	20.2	20.2	8.2	8.2	29.6	29.6	104.8	104.8	8.0	8.0	10.1	10.0	13	14	-	-	816618	810714	-	-	-	-	-
						1.0	0.4	323	20.2		8.2		29.6		104.8		8.0		10.0		12		-				-			-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-	-		-	
						-	-	-	-		-		-		-		-		-		-		-				-			-	
					Bottom	3.5	0.3	302	20.1	20.1	8.2	8.2	29.6	29.6	104.5	104.5	8.0	8.0	9.9		15		-				-	-		-	
						3.5	0.4	304	20.1		8.2		29.6		104.5		8.0		9.9		15		-				-			-	
SR6	Cloudy	Calm	09:01	4.0	Surface	1.0	0.2	225	19.9	19.9	8.2	8.2	29.1	29.1	107.0	107.0	8.2	8.2	11.1	11.1	12	13	-	-	817884	814672	-	-	-	-	-
						1.0	0.2	230	19.9		8.2		29.1		107.0		8.2		11.1		12		-				-			-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-	-		-	
						-	-	-	-		-		-		-		-		-		-		-				-			-	
					Bottom	3.0	0.2	227	19.9	19.9	8.2	8.2	29.1	29.1	106.7	106.7	8.2	8.2	11.2		14		-				-	-		-	
						3.0	0.2	235	19.9		8.2		29.1		106.6		8.2		11.1		14		-				-			-	
SR7	Fine	Moderate	08:34	16.5	Surface	1.0	0.5	22	19.6	19.6	8.2	8.2	28.9	28.9	103.0	103.0	8.0	8.0	4.1	4.2	5	5	-	-	823660	823729	-	-	-	-	-
						1.0	0.5	22	19.6		8.2		28.9		103.0		8.0		4.1		5		-				-			-	
					Middle	8.3	0.5	30	19.6	19.6	8.1	8.1	28.9	28.9	102.1	102.1	7.9		4.4		5		-				-	-		-	
						8.3	0.5	31	19.6		8.1		28.9		102.1		7.9		4.4		5		-				-			-	
					Bottom	15.5	0.4	49	19.5	19.5	8.1	8.1	29.0	29.0	101.3	101.3	7.8	7.8	4.2		5		-				-	-		-	
						15.5	0.5	53	19.5		8.1		29.0		101.3		7.8		4.2		5		-				-			-	
SR8	Fine	Moderate	09:38	4.3	Surface	1.0	-	-	20.1	20.1	8.2	8.2	28.1	28.1	104.6	104.6	8.0	8.0	12.9	12.1	8	9	-	-	820246	811418	-	-	-	-	-
						1.0	-	-	20.1		8.2		28.1		104.6		8.0		12.9		9		-				-			-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-	-		-	
						-	-	-	-		-		-		-		-		-		-		-				-			-	
					Bottom	3.3	-	-	20.0	20.0	8.2	8.2	28.1	28.1	103.5	103.5	8.0	8.0	11.3		10		-				-	-		-	
						3.3	-	-	20.0		8.2		28.1		103.5		8.0		11.3		9		-				-			-	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 08 March 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Rainy	Rough	16:49	8.6	Surface	1.0	0.2	155	18.2	18.2	8.2	8.2	30.9	30.9	106.2	106.2	8.3	8.3	3.7	3.7	3	8	71	73	815604	804240	<0.2	<0.2	1.2	1.1
						1.0	0.2	166	18.2		8.2		30.9		106.2		8.3		3.7		4		72				<0.2		1.2	
					Middle	4.3	0.2	141	18.2	18.2	8.2	8.2	30.9	30.9	106.3	106.4	8.3		3.7		10		73				<0.2		1.1	
						4.3	0.2	152	18.2		8.2		30.9		106.4		8.3		3.7		11		73				<0.2		1.0	
					Bottom	7.6	0.2	163	18.2	18.2	8.3	8.3	30.9	30.9	106.6	106.6	8.4	8.4	3.8		10		75				<0.2		1.2	
						7.6	0.2	176	18.2		8.3		30.9		106.5		8.4		3.8		10		75				<0.2		1.1	
C2	Rainy	Rough	15:46	12.0	Surface	1.0	0.3	156	19.5	19.5	8.1	8.1	27.5	27.5	96.6	96.6	7.5	7.5	8.2	13.1	8	9	73	74	825688	806961	<0.2	<0.2	2.0	2.1
						1.0	0.3	162	19.5		8.1		27.5		96.6		7.5		8.2		10		73				<0.2		2.1	
					Middle	6.0	0.1	128	19.5	19.5	8.1	8.1	28.2	28.2	95.9	95.9	7.5		14.6		8		73				<0.2		2.0	
						6.0	0.1	129	19.5		8.1		28.2		95.9		7.5		14.6		9		73				<0.2		1.9	
					Bottom	11.0	0.2	302	19.1	19.1	8.1	8.1	29.6	29.6	96.4	96.4	7.5	7.5	16.4		8		74				<0.2		2.1	
						11.0	0.2	309	19.1		8.1		29.6		96.4		7.5		16.4		8		75				<0.2		2.2	
C3	Cloudy	Calm	17:46	12.1	Surface	1.0	0.3	101	18.4	18.4	8.1	8.1	30.6	30.6	95.7	95.7	7.5	7.5	1.0	1.4	4	6	73	75	822116	817775	<0.2	<0.2	1.2	0.8
						1.0	0.3	102	18.4		8.1		30.6		95.7		7.5		1.0		4		73				<0.2		0.7	
					Middle	6.1	0.3	107	18.4	18.4	8.1	8.1	30.6	30.6	95.9	95.9	7.5		1.3		7		75				<0.2		0.6	
						6.1	0.3	111	18.4		8.1		30.6		95.9		7.5		1.3		6		75				<0.2		0.7	
					Bottom	11.1	0.2	101	18.4	18.4	8.1	8.1	30.6	30.6	96.6	96.6	7.6	7.6	2.0		7		76				<0.2		0.7	
						11.1	0.3	109	18.4		8.1		30.6		96.6		7.6		2.0		6		77				<0.2		0.8	
IM1	Rainy	Rough	16:29	7.5	Surface	1.0	0.1	176	18.7	18.7	8.2	8.2	29.3	29.3	102.6	102.6	8.0	8.1	6.8	8.0	8	10	71	73	818324	806461	<0.2	<0.2	1.3	1.3
						1.0	0.1	177	18.7		8.2		29.3		102.6		8.1		6.8		6		71				<0.2		1.3	
					Middle	3.8	0.0	217	18.7	18.7	8.2	8.2	29.4	29.4	103.5	103.6	8.1		7.6		11		73				<0.2		1.5	
						3.8	0.0	221	18.7		8.2		29.4		103.6		8.1		7.7		10		73				<0.2		1.3	
					Bottom	6.5	0.1	59	18.7	18.7	8.2	8.2	30.1	30.2	105.8	106.1	8.3	8.3	9.2		13		75				<0.2		1.2	
						6.5	0.1	59	18.7		8.2		30.2		106.3		8.3		9.6		14		76				<0.2		1.2	
IM2	Rainy	Rough	16:24	8.0	Surface	1.0	0.2	106	18.7	18.7	8.2	8.2	29.5	29.5	103.4	103.5	8.1	8.2	5.8	6.0	7	8	71	73	818825	806220	<0.2	<0.2	1.2	1.2
						1.0	0.2	106	18.7		8.2		29.5		103.5		8.1		5.9		9		72				<0.2		1.1	
					Middle	4.0	0.0	186	18.7	18.7	8.2	8.2	29.5	29.5	104.2	104.4	8.2		6.0		8		73				<0.2		1.2	
						4.0	0.0	193	18.7		8.2		29.5		104.5		8.2		6.0		9		73				<0.2		1.1	
					Bottom	7.0	0.2	111	18.6	18.6	8.3	8.3	30.2	30.2	106.0	106.1	8.3	8.3	6.1		7		75				<0.2		1.3	
						7.0	0.2	111	18.6		8.3		30.2		106.1		8.3		6.1		8		76				<0.2		1.2	
IM3	Rainy	Rough	16:18	8.3	Surface	1.0	0.2	123	18.6	18.6	8.2	8.2	29.9	29.9	104.7	104.7	8.2	8.2	4.9	5.6	5	7	71	74	819394	805995	<0.2	<0.2	1.1	1.1
						1.0	0.3	123	18.6		8.2		29.9		104.7		8.2		4.9		6		72				<0.2		1.3	
					Middle	4.2	0.2	137	18.6	18.6	8.2	8.2	29.9	29.9	105.1	105.2	8.2		5.4		6		73				<0.2		1.1	
						4.2	0.2	149	18.6		8.2		29.9		105.3		8.2		5.4		7		74				<0.2		1.1	
					Bottom	7.3	0.2	96	18.6	18.6	8.2	8.2	30.2	30.2	106.6	106.7	8.3	8.3	6.6		9		75				<0.2		1.1	
						7.3	0.2	100	18.6		8.2		30.2		106.7		8.3		6.6		9		76				<0.2		1.1	
IM4	Rainy	Rough	16:11	7.5	Surface	1.0	0.2	177	18.6	18.6	8.2	8.2	29.8	29.8	104.6	104.6	8.2	8.2	5.0	6.3	9	9	72	74	819569	805044	<0.2	<0.2	1.1	1.1
						1.0	0.2	182	18.6		8.2		29.8		104.6		8.2		5.1		7		72				<0.2		1.1	
					Middle	3.8	0.2	139	18.6	18.6	8.2	8.2	29.9	29.9	104.8	104.8	8.2		6.3		8		73				<0.2		1.1	
						3.8	0.2	152	18.6		8.2		29.9		104.8		8.2		6.3		8		73				<0.2		1.2	
					Bottom	6.5	0.1	119	18.7	18.7	8.2	8.2	30.4	30.4	105.7	105.7	8.2	8.2	7.5		10		75				<0.2		1.1	
						6.5	0.1	124	18.7		8.2		30.4		105.7		8.2		7.5		9		76				<0.2		1.1	
IM5	Rainy	Rough	16:01	6.8	Surface	1.0	0.0	130	18.7	18.7	8.2	8.2	29.5	29.5	104.2	104.3	8.2	8.3	6.8	7.2	8	9	71	73	820559	804932	<0.2	<0.2	1.3	1.3
						1.0	0.0	132	18.7		8.2		29.5		104.3		8.2		6.9		7		72				<0.2		1.3	
					Middle	3.4	0.1	137	18.7	18.7	8.2	8.2	29.5	29.5	105.6	105.7	8.3		8.2		7		73				<0.2		1.3	
						3.4	0.1	141	18.7		8.2		29.5		105.7		8.3		8.2		8		73				<0.2		1.3	
					Bottom	5.8	0.0	61	18.7	18.7	8.2	8.2	29.7	29.7	107.2	107.2	8.4	8.4	6.4		13		75				<0.2		1.2	
						5.8	0.0	63	18.7		8.2		29.7		107.2		8.4		6.4		11		76				<0.2		1.6	
IM6	Rainy	Rough	15:52	6.7	Surface	1.0	0.0	165	18.8	18.8	8.2	8.2	29.4	29.4	104.0	104.0	8.1	8.2	7.0	8.9	7	8	71	73	821059	805816	<0.2	<0.2	1.2	1.3
						1.0	0.0	178	18.8		8.2		29.4		104.0		8.1		7.0		8		72				<0.2		1.2	
					Middle	3.4	0.0	273	18.8	18.8	8.2	8.2	29.5	29.5	104.6	104.6	8.2		8.4		7		73				<0.2		1.2	
						3.4	0.0	289	18.8		8.2		29.5		104.6		8.2		8.5		6		73				<0.2		1.3	
					Bottom	5.7	0.1	162	18.8	18.8	8.2	8.2	30.1	30.1	106.0	106.0	8.3	8.3	11.3		9		75				<0.2		1.4	
						5.7	0.1	176	18.8		8.2		30.1		106.0		8.3		11.2		10		75				<0.2		1.3	
IM7	Rainy	Rough	15:44	8.2	Surface	1.0	0.1	192	18.8	18.8	8.2	8.2	29.2	29.2	102.9	102.9	8.1	8.1	6.4	7.2	8	10	72	74	821368	806841	<0.2	<0.2	1.9	1.6
						1.0	0.1	196	18.8		8.2		29.2		102.9		8.1		6.5		8		72				<0.2		1.5	
					Middle	4.1	0.0	50	18.9	18.9	8.2	8.2	29.4	29.4	102.8	102.9	8.0		7.1		11		73				<0.2		1.6	
						4.1	0.0	51	18.9		8.2		29.4		102.9		8.0		7.2		9		74				<0.2		1.7	
					Bottom	7.2	0.1	8	18.9	18.9	8.2	8.2	29.6	29.6	103.4	103.4	8.1	8.1	7.8		12		75				<0.2		1.4	
						7.2	0.1	8	18.9		8.2		29.6		103.4		8.1		7.9		10		75				<0.2		1.3	
IM8	Rainy	Rough	16:13	8.1	Surface	1.0	0.3	131	19.1	19.1	8.2	8.2	28.7	28.7	100.9	100.9	7.9	7.9	10.4	7.5	8	9	73	75	821710	807851	<0.2	<0.2	1.3	1.4
						1.0	0.3	132	19.1		8.2		28.7		100.9		7.9		10.4		9		73				<0.2		1.4	
					Middle	4.1	0.4	118	19.1	19.1	8.2	8.2	28.7	28.7	101.6	101.6	7.9		6.0		8		75				<0.2		1.5	
						4.1	0.4	122	19.1		8.2		28.7		101.6		7.9		6.0		10		75				<0.2		1.3	
					Bottom	7.1	0.3	132	19.1	19.1	8.2	8.2	28.8	28.8	101.9	101.9	8.0	8.0	6.2		10		76				<0.2		1.4	
						7.1	0.3	132	19.1		8.2		28.8		101.9		8.0		6.2		10		76				<0.2		1.4	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 08 March 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Rainy	Rough	16:23	7.2	Surface	1.0	0.1	141	19.2	19.2	8.3	8.3	28.2	28.2	100.5	100.5	7.9	7.9	7.5	7.6	9	9	73	74	822120	808804	<0.2	<0.2	1.6	1.5
						1.0	0.1	148	19.2		8.3		28.2		100.5		7.9		7.5		9		73				<0.2		1.5	
					Middle	3.6	0.2	152	19.2	19.2	8.2	8.2	28.4	28.4	101.7	101.7	7.9		7.4		9		73				<0.2		1.6	
						3.6	0.2	158	19.2		8.2		28.4		101.7		7.9		7.4		8		74				<0.2		1.5	
					Bottom	6.2	0.2	126	19.2	19.2	8.2	8.2	28.5	28.5	103.9	103.9	8.1	8.1	7.9		10		74				<0.2		1.5	
						6.2	0.2	126	19.2		8.2		28.5		103.9		8.1		7.9		10		74				<0.2		1.4	
IM10	Cloudy	Rough	16:34	7.4	Surface	1.0	0.2	118	19.4	19.4	8.2	8.2	28.4	28.4	95.2	95.2	7.4	7.5	6.9	7.3	8	9	74	75	822265	809828	<0.2	<0.2	1.5	1.6
						1.0	0.3	119	19.4		8.2		28.4		95.2		7.4		6.9		8		73				<0.2		1.7	
					Middle	3.7	0.3	106	19.4	19.4	8.2	8.2	28.4	28.4	96.2	96.2	7.5		6.9		10		74				<0.2		1.6	
						3.7	0.4	106	19.4		8.2		28.4		96.2		7.5		6.9		8		75				<0.2		1.7	
					Bottom	6.4	0.2	100	19.4	19.4	8.2	8.2	28.7	28.7	99.8	99.8	7.7	7.7	8.2		9		76				<0.2		1.5	
						6.4	0.2	102	19.4		8.2		28.7		99.8		7.7		8.2		8		77				<0.2		1.6	
IM11	Cloudy	Rough	16:48	8.0	Surface	1.0	0.2	86	19.4	19.4	8.3	8.3	28.0	28.0	98.2	98.2	7.7	7.7	14.5	14.0	12	11	74	75	821486	810559	<0.2	<0.2	1.5	1.6
						1.0	0.2	87	19.4		8.3		28.0		98.2		7.7		14.5		11		73				<0.2		1.7	
					Middle	4.0	0.2	94	19.3	19.3	8.2	8.2	28.4	28.4	98.0	98.0	7.6		13.3		10		75				<0.2		1.7	
						4.0	0.2	95	19.3		8.2		28.4		98.0		7.6		13.3		11		75				<0.2		1.6	
					Bottom	7.0	0.1	88	19.3	19.3	8.2	8.2	28.5	28.5	101.2	101.2	7.9	7.9	14.1		11		77				<0.2		1.4	
						7.0	0.1	96	19.3		8.2		28.5		101.2		7.9		14.1		12		77				<0.2		1.4	
IM12	Cloudy	Rough	16:57	8.9	Surface	1.0	0.3	103	19.5	19.5	8.2	8.2	27.8	27.8	93.5	93.5	7.3	7.2	8.1	8.0	8	10	72	74	821188	811504	<0.2	<0.2	1.6	1.6
						1.0	0.4	111	19.5		8.2		27.8		93.5		7.3		8.1		9		73				<0.2		1.6	
					Middle	4.5	0.2	92	19.4	19.4	8.1	8.1	28.9	28.9	91.9	91.9	7.1		7.9		9		74				<0.2		1.8	
						4.5	0.3	94	19.4		8.1		28.9		91.9		7.1		7.9		11		75				<0.2		1.8	
					Bottom	7.9	0.2	97	19.2	19.2	8.1	8.1	29.3	29.3	93.0	93.0	7.2	7.2	8.0		10		76				<0.2		1.2	
						7.9	0.2	100	19.2		8.1		29.3		93.0		7.2		8.0		10		76				<0.2		1.4	
SR2	Cloudy	Calm	17:23	4.2	Surface	1.0	0.2	56	19.2	19.2	8.1	8.1	28.9	28.9	96.4	96.4	7.5	7.5	8.3	8.6	6	8	73	74	821478	814167	<0.2	<0.2	1.3	1.3
						1.0	0.2	58	19.2		8.1		28.9		96.4		7.5		8.3		7		73				<0.2		1.3	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.1	39	19.2	19.2	8.1	8.1	29.2	29.2	99.9	100.0	7.8	7.8	8.9		10		75				<0.2		1.3	
						3.2	0.1	41	19.2		8.1		29.2		100.0		7.8		8.9		8		75				<0.2		1.2	
SR3	Rainy	Rough	16:08	8.6	Surface	1.0	0.3	149	19.2	19.2	8.2	8.2	28.4	28.4	100.5	100.5	7.9	7.9	6.1	6.7	8	9	-	-	822146	807563	-	-	-	-
						1.0	0.3	155	19.2		8.2		28.4		100.5		7.9		6.1		8		-				-		-	
					Middle	4.3	0.2	117	19.2	19.2	8.2	8.2	28.8	28.8	100.5	100.5	7.8		6.3		10		-				-		-	
						4.3	0.2	124	19.2		8.2		28.8		100.5		7.8		6.3		8		-				-		-	
					Bottom	7.6	0.2	65	19.2	19.2	8.2	8.2	29.4	29.4	100.8	100.8	7.8	7.8	7.8		8		-				-		-	
						7.6	0.2	70	19.2		8.2		29.4		100.8		7.8		7.8		10		-				-		-	
SR4A	Rainy	Calm	17:12	8.4	Surface	1.0	0.2	69	18.7	18.7	8.3	8.3	29.3	29.3	102.5	102.5	8.0	8.1	8.5	9.7	8	8	-	-	817178	807787	-	-	-	-
						1.0	0.2	74	18.7		8.3		29.3		102.5		8.0		8.5		7		-				-		-	
					Middle	4.2	0.2	74	18.7	18.7	8.3	8.3	29.3	29.3	103.3	103.3	8.1		10.4		8		-				-		-	
						4.2	0.2	80	18.7		8.3		29.3		103.3		8.1		10.6		8		-				-		-	
					Bottom	7.4	0.1	69	18.7	18.7	8.3	8.3	29.4	29.4	106.1	106.2	8.3	8.3	10.3		8		-				-		-	
						7.4	0.1	73	18.7		8.3		29.4		106.2		8.3		10.0		8		-				-		-	
SR5A	Rainy	Calm	17:32	5.3	Surface	1.0	0.1	116	19.2	19.2	8.1	8.1	29.3	29.3	91.7	91.8	7.1	7.1	8.6	8.8	7	8	-	-	816585	810725	-	-	-	-
						1.0	0.1	117	19.2		8.1		29.3		91.8		7.1		8.7		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	0.1	119	19.2	19.2	8.1	8.1	29.3	29.3	100.5	100.6	7.8	7.8	9.0		9		-				-		-	
						4.3	0.1	126	19.2		8.1		29.3		100.7		7.8		9.0		8		-				-		-	
SR6	Rainy	Calm	17:56	4.1	Surface	1.0	0.1	42	19.0	19.0	8.2	8.2	28.2	28.2	99.9	100.0	7.8	7.8	7.9	8.0	5	7	-	-	817922	814692	-	-	-	-
						1.0	0.1	45	19.0		8.2		28.2		100.0		7.8		7.9		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.1	36	19.0	19.0	8.2	8.2	28.2	28.1	102.1	102.2	8.0	8.0	8.1		9		-				-		-	
						3.1	0.1	37	19.0		8.2		28.1		102.2		8.0		8.2		7		-				-		-	
SR7	Cloudy	Calm	18:20	16.6	Surface	1.0	0.2	89	18.4	18.4	8.1	8.1	30.6	30.6	95.6	95.6	7.5	7.5	2.5	5.3	4	3	-	-	823660	823713	-	-	-	-
						1.0	0.2	93	18.4		8.1		30.6		95.6		7.5		2.5		3		-				-		-	
					Middle	8.3	0.2	78	18.4	18.4	8.0	8.0	30.6	30.6	94.7	94.7	7.4		6.9		2		-				-		-	
						8.3	0.2	80	18.4		8.0		30.6		94.7		7.4		6.9		2		-				-		-	
					Bottom	15.6	0.1	85	18.4	18.4	7.9	7.9	30.6	30.6	94.4	94.4	7.4	7.4	6.5		4		-				-		-	
						15.6	0.1	93	18.4		7.9		30.6		94.4		7.4		6.5		5		-				-		-	
SR8	Cloudy	Calm	17:06	3.8	Surface	1.0	-	-	19.4	19.4	8.1	8.1	28.2	28.2	95.2	95.2	7.4	7.4	6.8	6.8	7	7	-	-	820246	811418	-	-	-	-
						1.0	-	-	19.4		8.1		28.2		95.2		7.4		6.8		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	-	-	19.4	19.4	8.1	8.1	28.1	28.1	102.8	102.8	8.0	8.0	6.8		7		-				-		-	
						2.8	-	-	19.4		8.1		28.1		102.8		8.0		6.8		6		-				-		-	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 08 March 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C) Value	Water Temperature (°C) Average	pH Value	pH Average	Salinity (ppt) Value	Salinity (ppt) Average	DO Saturation (%) Value	DO Saturation (%) Average	Dissolved Oxygen Value	Dissolved Oxygen DA	Turbidity(NTU) Value	Turbidity(NTU) DA	Suspended Solids (mg/L) Value	Suspended Solids (mg/L) DA	Total Alkalinity (ppm) Value	Total Alkalinity (ppm) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L) Value	Chromium (µg/L) DA	Nickel (µg/L) Value	Nickel (µg/L) DA
C1	Rainy	Rough	11:11	8.4	Surface	1.0	0.6	15	18.2	18.2	8.2	8.2	30.9	30.9	106.2	106.2	8.3	8.3	3.5	3.5	3	5	72	73	815649	804268	<0.2	<0.2	1.6	1.8
						1.0	0.6	15	18.2		8.2		30.9		106.2		8.3		3.5		5		72				<0.2		1.7	
					Middle	4.2	0.6	13	18.2	18.2	8.2	8.2	30.9	30.9	105.9	105.9	8.3		3.6		6		73				<0.2		1.9	
						4.2	0.6	14	18.2		8.2		30.9		105.9		8.3		3.6		4		73				<0.2		1.8	
					Bottom	7.4	0.6	7	18.2	18.2	8.2	8.2	31.0	31.0	105.9	105.9	8.3	8.3	3.5		5		75				<0.2		1.8	
						7.4	0.6	7	18.2		8.2		31.0		105.9		8.3		3.5		6		75				<0.2		1.8	
C2	Rainy	Rough	12:11	11.8	Surface	1.0	0.5	342	19.8	19.8	8.1	8.1	27.3	27.3	96.5	96.5	7.5	7.5	5.9	11.2	4	6	72	73	825671	806947	<0.2	<0.2	2.0	2.0
						1.0	0.5	346	19.8		8.1		27.3		96.5		7.5		5.9		5		72				<0.2		2.0	
					Middle	5.9	0.5	348	19.8	19.8	8.1	8.1	27.4	27.4	96.1	96.1	7.5		10.2		5		73				<0.2		1.9	
						5.9	0.5	349	19.8		8.1		27.5		96.1		7.5		11.6		4		73				<0.2		2.1	
					Bottom	10.8	0.3	356	19.7	19.7	8.1	8.1	28.2	28.2	96.4	96.4	7.5	7.5	16.7		8		75				<0.2		2.1	
						10.8	0.3	328	19.7		8.1		28.2		96.4		7.5		16.7		9		74				<0.2		2.0	
C3	Rainy	Moderate	10:17	11.4	Surface	1.0	0.5	262	19.0	19.0	8.1	8.1	29.7	29.7	95.3	95.3	7.4	7.4	3.4	5.0	4	4	73	75	822082	817816	<0.2	<0.2	1.2	1.1
						1.0	0.5	264	19.0		8.1		29.7		95.3		7.4		3.4		3		73				<0.2		1.2	
					Middle	5.7	0.5	268	19.0	19.0	8.1	8.1	30.0	30.0	95.2	95.2	7.4		4.8		4		75				<0.2		1.2	
						5.7	0.6	284	19.0		8.1		30.0		95.2		7.4		4.8		2		74				<0.2		1.2	
					Bottom	10.4	0.4	261	18.9	18.9	8.1	8.1	30.2	30.2	95.6	95.6	7.4	7.4	6.7		6		76				<0.2		1.0	
						10.4	0.4	282	18.9		8.1		30.2		95.6		7.4		6.7		5		76				<0.2		1.0	
IM1	Rainy	Rough	11:27	7.6	Surface	1.0	0.6	21	19.2	19.2	8.2	8.2	28.2	28.2	100.5	100.6	7.9	7.9	8.5	10.3	8	8	73	74	818368	806484	<0.2	<0.2	2.0	2.1
						1.0	0.6	21	19.2		8.2		28.2		100.6		7.9		8.8		7		72				<0.2		2.1	
					Middle	3.8	0.5	27	19.0	19.0	8.2	8.2	29.3	29.3	100.6	100.6	7.8		10.4		8		74				<0.2		2.0	
						3.8	0.6	27	19.0		8.2		29.3		100.6		7.8		10.5		7		74				<0.2		2.1	
					Bottom	6.6	0.4	14	19.0	19.0	8.2	8.2	29.6	29.6	100.4	100.4	7.8	7.8	11.7		8		75				<0.2		2.2	
						6.6	0.4	14	19.0		8.2		29.6		100.4		7.8		11.7		8		75				<0.2		2.1	
IM2	Rainy	Rough	11:32	7.9	Surface	1.0	0.5	31	19.2	19.2	8.2	8.2	28.2	28.3	100.7	100.7	7.9	7.9	8.7	9.6	7	7	72	75	818838	806211	<0.2	<0.2	2.2	2.2
						1.0	0.5	32	19.2		8.2		28.3		100.7		7.9		8.8		7		73				<0.2		2.1	
					Middle	4.0	0.4	0	19.0	19.0	8.2	8.2	29.2	29.2	100.4	100.5	7.8		9.8		6		75				<0.2		2.4	
						4.0	0.5	0	19.0		8.2		29.2		100.5		7.8		9.9		8		75				<0.2		2.2	
					Bottom	6.9	0.4	24	19.0	19.0	8.2	8.2	29.6	29.6	99.9	99.9	7.8	7.8	10.4		8		76				<0.2		2.0	
						6.9	0.4	26	19.0		8.2		29.6		99.8		7.8		9.9		6		77				<0.2		2.1	
IM3	Rainy	Rough	11:35	8.5	Surface	1.0	0.2	10	19.0	19.0	8.2	8.2	28.3	28.3	100.8	100.8	7.9	7.9	6.7	8.4	7	7	73	74	819396	806038	<0.2	<0.2	2.0	2.0
						1.0	0.2	10	19.0		8.2		28.3		100.8		7.9		6.7		6		73				<0.2		2.0	
					Middle	4.3	0.3	24	19.0	19.0	8.2	8.2	28.5	28.5	101.1	101.2	7.9		7.0		7		74				<0.2		2.1	
						4.3	0.4	24	19.0		8.2		28.5		101.3		7.9		7.0		7		74				<0.2		1.9	
					Bottom	7.5	0.3	15	19.0	19.0	8.1	8.1	29.2	29.2	102.7	102.7	8.0	8.0	11.4		8		75				<0.2		1.9	
						7.5	0.4	15	19.0		8.1		29.3		102.7		8.0		11.6		6		75				<0.2		2.1	
IM4	Rainy	Rough	11:42	7.5	Surface	1.0	0.3	356	19.2	19.2	8.2	8.2	28.1	28.0	101.3	101.3	7.9	8.0	6.2	7.2	7	6	72	75	819592	805032	<0.2	<0.2	2.0	2.0
						1.0	0.4	328	19.2		8.2		28.0		101.3		7.9		6.2		6		73				<0.2		2.1	
					Middle	3.8	0.3	27	19.2	19.2	8.2	8.2	28.1	28.1	102.5	102.6	8.0		7.1		6		75				<0.2		1.9	
						3.8	0.3	28	19.2		8.2		28.1		102.6		8.0		7.0		5		75				<0.2		2.0	
					Bottom	6.5	0.3	28	19.1	19.1	8.2	8.2	28.6	28.7	104.6	104.7	8.2	8.2	8.4		7		77				<0.2		1.9	
						6.5	0.3	28	19.1		8.2		28.7		104.7		8.2		8.4		5		76				<0.2		2.0	
IM5	Rainy	Rough	11:54	6.6	Surface	1.0	0.5	11	19.2	19.2	8.2	8.2	28.0	28.0	101.1	101.1	7.9	8.0	7.5	12.3	6	6	73	75	820549	804941	<0.2	<0.2	2.3	2.1
						1.0	0.5	12	19.2		8.2		28.0		101.1		7.9		7.6		6		73				<0.2		2.2	
					Middle	3.3	0.4	21	19.2	19.2	8.2	8.2	28.1	28.1	101.9	102.0	8.0		9.8		5		75				<0.2		2.1	
						3.3	0.4	22	19.2		8.2		28.1		102.0		8.0		9.9		5		76				<0.2		1.9	
					Bottom	5.6	0.4	4	19.0	19.0	8.2	8.2	29.6	29.6	105.7	105.7	8.2	8.2	19.8		6		76				<0.2		1.9	
						5.6	0.4	4	19.0		8.2		29.6		105.7		8.2		19.4		7		77				<0.2		2.0	
IM6	Rainy	Rough	12:02	6.8	Surface	1.0	0.3	5	19.1	19.1	8.2	8.2	28.9	28.9	101.9	102.0	8.0	8.0	10.1	13.3	8	9	73	75	821063	805809	<0.2	<0.2	2.0	2.0
						1.0	0.3	5	19.1		8.2		28.9		102.0		8.0		10.2		9		73				<0.2		2.1	
					Middle	3.4	0.2	1	19.1	19.1	8.2	8.2	28.9	28.9	102.5	102.5	8.0		13.3		10		75				<0.2		2.1	
						3.4	0.2	1	19.1		8.2		28.9		102.5		8.0		13.5		8		76				<0.2		1.8	
					Bottom	5.8	0.3	18	19.1	19.1	8.2	8.2	29.2	29.2	103.8	103.8	8.1	8.1	16.3		9		77				<0.2		2.0	
						5.8	0.3	18	19.1		8.2		29.2		103.8		8.1		16.1		11		77				<0.2		2.2	
IM7	Rainy	Rough	12:13	8.2	Surface	1.0	0.3	39	19.2	19.2	8.2	8.2	28.1	28.2	100.5	100.5	7.9	7.9	8.4	9.5	8	8	72	73	821321	806810	<0.2	<0.2	2.1	2.1
						1.0	0.3	41	19.2		8.2		28.2		100.5		7.9		8.4		7		72				<0.2		2.2	
					Middle	4.1	0.3	29	19.0	19.0	8.2	8.2	29.3	29.3	100.5	100.5	7.8		9.9		9		73				<0.2		2.1	
						4.1	0.3	30	19.0		8.2		29.3		100.5		7.8		10.0		10		73				<0.2		2.2	
					Bottom	7.2	0.2	30	19.0	19.0	8.2	8.2	29.6	29.6	100.1	100.1	7.8	7.8	10.1		8		75				<0.2		2.2	
						7.2	0.2	32	19.0		8.2		29.6		100.0		7.8		10.1		9		75				<0.2		1.9	
IM8	Cloudy	Rough	11:43	8.1	Surface	1.0	0.2	3	19.7	19.7	8.2	8.2	27.1	27.1	96.9	96.9	7.6	7.6	14.0	15.7	15	18	72	74	821678	807843	<0.2	<0.2	1.7	1.7
						1.0	0.2	3	19.7		8.2		27.1		96.9		7.6		14.0		15		73				<0.2		1.8	
					Middle	4.1	0.2	346	19.7	19.7	8.3	8.3	27.1	27.1	97.6	97.6	7.6		16.5		15		74				<0.2		1.6	
						4.1	0.2	349	19.7		8.3		27.1		97.6		7.6		16.5		16		73				<0.2		1.6	
					Bottom	7.1	0.2	338	19.7	19.7	8.3	8.3	27.1	27.1	98.4	98.4	7.7	7.7	16.7		24		75				<0.2		1.7	
						7.1	0.2	311	19.7		8.3		27.1		98.4		7.7		16.7		25		75				<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 08 March 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Rough	11:34	7.0	Surface	1.0	0.2	303	19.8	19.8	8.2	8.2	27.5	27.5	96.6	96.6	7.5	7.5	10.8	11.7	12	12	73	74	822108	808791	<0.2	<0.2	2.0	1.8
						1.0	0.2	324	19.8		8.2		27.5		96.6		7.5		10.8		12		73				<0.2		2.0	
					Middle	3.5	0.2	306	19.8	19.8	8.2	8.2	27.6	27.6	97.1	97.1	7.5		12.1		12		74				<0.2		1.7	
						3.5	0.2	314	19.8		8.2		27.6		97.1		7.5		12.1		12		74				<0.2		1.8	
					Bottom	6.0	0.2	306	19.8	19.8	8.2	8.2	27.6	27.6	98.2	98.2	7.6	7.6	12.3		13		75				<0.2		1.5	
						6.0	0.2	306	19.8		8.2		27.6		98.2		7.6		12.3		13		75				<0.2		1.6	
IM10	Cloudy	Rough	11:25	7.1	Surface	1.0	0.6	300	19.8	19.8	8.1	8.1	27.5	27.5	95.2	95.2	7.4	7.4	11.8	14.2	8	9	72	74	822213	809813	<0.2	<0.2	2.1	2.0
						1.0	0.6	305	19.8		8.1		27.5		95.2		7.4		11.8		8		73				<0.2		2.1	
					Middle	3.6	0.6	307	19.7	19.7	8.1	8.1	28.1	28.1	95.4	95.4	7.4		14.4		8		75				<0.2		1.9	
						3.6	0.6	310	19.7		8.1		28.1		95.4		7.4		14.4		8		74				<0.2		1.9	
					Bottom	6.1	0.4	316	19.7	19.7	8.1	8.1	28.6	28.6	98.4	98.4	7.6	7.6	16.5		10		75				<0.2		1.9	
						6.1	0.4	332	19.7		8.1		28.6		98.4		7.6		16.5		9		76				<0.2		1.9	
IM11	Cloudy	Rough	11:11	7.4	Surface	1.0	0.5	280	19.8	19.8	8.1	8.1	27.3	27.3	95.0	95.0	7.4	7.4	8.5	14.2	5	10	72	74	821518	810563	<0.2	<0.2	2.5	2.1
						1.0	0.5	291	19.8		8.1		27.3		95.0		7.4		8.5		7		72				<0.2		1.8	
					Middle	3.7	0.5	281	19.7	19.7	8.1	8.1	28.3	28.3	94.2	94.2	7.3		15.8		8		74				<0.2		2.0	
						3.7	0.5	290	19.7		8.1		28.3		94.2		7.3		15.8		8		73				<0.2		1.9	
					Bottom	6.4	0.4	295	19.6	19.6	8.1	8.1	28.8	28.8	95.6	95.6	7.4	7.4	18.3		16		75				<0.2		2.1	
						6.4	0.4	317	19.6		8.1		28.8		95.6		7.4		18.3		17		75				<0.2		2.0	
IM12	Cloudy	Rough	11:03	8.0	Surface	1.0	0.8	273	19.6	19.6	8.1	8.1	28.1	28.1	95.8	95.8	7.4	7.5	10.8	13.3	6	8	73	74	821154	811511	<0.2	<0.2	2.1	2.1
						1.0	0.8	299	19.6		8.1		28.1		95.8		7.4		10.8		6		72				<0.2		2.2	
					Middle	4.0	0.6	271	19.6	19.6	8.1	8.1	28.8	28.8	96.4	96.4	7.5		14.2		5		74				<0.2		2.0	
						4.0	0.6	273	19.6		8.1		28.8		96.4		7.5		14.2		6		74				<0.2		2.2	
					Bottom	7.0	0.4	278	19.6	19.6	8.1	8.1	28.9	28.9	98.9	98.9	7.6	7.6	15.0		12		75				<0.2		2.0	
						7.0	0.4	300	19.6		8.1		28.9		98.9		7.6		15.0		14		75				<0.2		2.0	
SR2	Rainy	Moderate	10:37	4.1	Surface	1.0	0.1	67	19.7	19.7	8.1	8.1	28.0	28.0	96.0	96.0	7.5	7.5	5.4	5.6	6	6	73	74	821436	814144	<0.2	<0.2	1.8	1.8
						1.0	0.1	70	19.7		8.1		28.0		96.0		7.5		5.4		5		73				<0.2		1.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.1	53	19.6	19.6	8.1	8.1	28.2	28.2	99.9	99.9	7.8	7.8	5.7		7		74				<0.2		1.8	
						3.1	0.1	56	19.6		8.1		28.2		99.9		7.8		5.7		5		74				<0.2		1.6	
SR3	Rainy	Rough	11:51	9.0	Surface	1.0	0.4	22	19.8	19.8	8.1	8.1	26.8	26.8	96.4	96.4	7.5	7.5	7.5	9.8	8	8	-	-	822132	807555	-	-	-	-
						1.0	0.4	23	19.8		8.1		26.8		96.4		7.5		7.5		7		-				-		-	
					Middle	4.5	0.3	18	19.8	19.8	8.2	8.2	26.8	26.8	96.3	96.3	7.5		10.2		8		-				-		-	
						4.5	0.4	19	19.8		8.2		26.8		96.3		7.5		10.2		8		-				-		-	
					Bottom	8.0	0.3	7	19.7	19.7	8.2	8.2	26.9	26.9	97.1	97.1	7.6	7.6	11.6		9		-				-		-	
						8.0	0.3	7	19.7		8.2		26.9		97.1		7.6		11.6		10		-				-		-	
SR4A	Rainy	Moderate	10:51	8.3	Surface	1.0	0.3	252	18.7	18.7	8.3	8.3	29.3	29.3	101.3	101.3	8.0	8.0	6.7	8.4	8	9	-	-	817189	807793	-	-	-	-
						1.0	0.3	252	18.7		8.3		29.3		101.3		8.0		6.7		7		-				-		-	
					Middle	4.2	0.2	255	18.7	18.7	8.3	8.3	29.3	29.3	101.0	101.0	7.9		9.6		7		-				-		-	
						4.2	0.2	255	18.7		8.3		29.3		101.0		7.9		9.6		8		-				-		-	
					Bottom	7.3	0.2	258	18.8	18.8	8.2	8.2	29.4	29.4	101.4	101.4	7.9	7.9	8.8		13		-				-		-	
						7.3	0.2	266	18.8		8.2		29.4		101.4		7.9		8.8		10		-				-		-	
SR5A	Rainy	Moderate	10:38	5.1	Surface	1.0	0.4	302	18.2	18.2	8.1	8.1	29.3	29.3	88.7	88.7	6.9	6.9	6.4	7.3	8	8	-	-	816584	810710	-	-	-	-
						1.0	0.4	326	18.2		8.1		29.3		88.7		6.9		6.4		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	0.4	309	18.2	18.2	8.1	8.1	29.3	29.3	89.4	89.4	6.9	6.9	8.1		9		-				-		-	
						4.1	0.4	338	18.2		8.1		29.3		89.4		6.9		8.1		9		-				-		-	
SR6	Rainy	Moderate	10:16	4.3	Surface	1.0	0.2	250	18.2	18.2	8.2	8.2	28.2	28.2	99.9	100.0	7.8	7.8	7.5	7.4	10	10	-	-	817883	814668	-	-	-	-
						1.0	0.2	270	18.2		8.2		28.2		100.0		7.8		7.5		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.2	252	18.2	18.2	8.2	8.2	28.2	28.1	102.1	102.2	8.0	8.0	7.3		10		-				-		-	
						3.3	0.2	270	18.2		8.2		28.1		102.2		8.0		7.3		9		-				-		-	
SR7	Rainy	Moderate	09:47	16.4	Surface	1.0	0.1	98	18.7	18.7	8.1	8.1	30.3	30.3	94.3	94.3	7.4	7.4	2.4	2.8	7	8	-	-	823606	823752	-	-	-	-
						1.0	0.1	107	18.7		8.1		30.3		94.3		7.4		2.4		6		-				-		-	
					Middle	8.2	0.3	30	18.7	18.7	8.1	8.1	30.4	30.4	93.8	93.8	7.3		2.6		5		-				-		-	
						8.2	0.3	32	18.7		8.1		30.4		93.8		7.3		2.6		6		-				-		-	
					Bottom	15.4	0.3	41	18.7	18.7	8.1	8.1	30.4	30.4	94.7	94.7	7.4	7.4	3.3		12		-				-		-	
						15.4	0.3	42	18.7		8.1		30.4		94.7		7.4		3.3		14		-				-		-	
SR8	Cloudy	Moderate	10:54	4.1	Surface	1.0	-	-	19.8	19.8	8.1	8.1	27.0	27.0	99.6	99.6	7.8	7.8	6.9	6.9	6	8	-	-	820246	811418	-	-	-	-
						1.0	-	-	19.8		8.1		27.0		99.6		7.8		6.9		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	-	-	19.8	19.8	8.1	8.1	26.9	26.9	101.2	101.2	7.9	7.9	6.9		9		-				-		-	
						3.1	-	-	19.8		8.1		26.9		101.2		7.9		6.9		11		-				-		-	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 10 March 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Moderate	19:19	8.8	Surface	1.0	0.3	180	17.9	17.9	8.2	8.2	31.2	31.2	107.8	107.8	8.5	8.5	2.7	3.1	4	4	73	74	815618	804273	<0.2	<0.2	0.6	0.5
						1.0	0.3	180	17.9		8.2		31.2		107.8		8.5		2.7		3		73				<0.2		0.6	
					Middle	4.4	0.3	196	17.8	17.8	8.2	8.2	31.2	31.2	106.3	106.3	8.4		3.0		3		74				<0.2		0.5	
						4.4	0.3	199	17.8		8.2		31.2		106.3		8.4		3.0		4		73				<0.2		0.4	
					Bottom	7.8	0.3	199	17.7	17.7	8.2	8.2	31.2	31.2	104.1	103.7	8.2	8.2	3.5		3		75				<0.2		0.4	
						7.8	0.3	207	17.7		8.2		31.2		103.3		8.2		3.4		4		75				<0.2		0.4	
C2	Sunny	Moderate	18:16	12.5	Surface	1.0	0.2	167	18.7	18.7	8.2	8.2	29.9	29.9	102.2	102.2	8.0	7.8	3.8	4.0	6	6	73	74	825694	806956	<0.2	<0.2	1.2	1.2
						1.0	0.2	173	18.7		8.2		29.9		102.2		8.0		3.8		6		73				<0.2		1.4	
					Middle	6.3	0.1	117	18.2	18.2	8.1	8.1	30.5	30.5	94.9	94.9	7.5		3.8		6		74				<0.2		1.2	
						6.3	0.1	127	18.2		8.1		30.5		94.9		7.5		3.9		6		74				<0.2		1.2	
					Bottom	11.5	0.2	71	18.0	18.0	8.0	8.0	30.8	30.8	96.2	96.3	7.6	7.6	4.5		5		75				<0.2		1.1	
						11.5	0.2	77	18.0		8.0		30.8		96.4		7.6		4.3		5		75				<0.2		0.9	
C3	Fine	Moderate	20:02	12.2	Surface	1.0	0.4	63	18.1	18.1	8.1	8.1	30.8	30.8	96.5	96.5	7.6	7.6	4.0	4.9	5	6	73	74	822116	817810	<0.2	<0.2	0.9	0.8
						1.0	0.4	64	18.1		8.1		30.8		96.5		7.6		4.0		4		73				<0.2		1.0	
					Middle	6.1	0.3	65	17.8	17.8	8.1	8.1	31.0	31.0	95.7	95.7	7.6		5.2		6		73				<0.2		0.7	
						6.1	0.3	69	17.8		8.1		31.0		95.7		7.6		5.2		4		74				<0.2		0.7	
					Bottom	11.2	0.2	94	17.8	17.8	8.1	8.1	31.0	31.0	95.8	95.8	7.6	7.6	5.4		9		74				<0.2		0.7	
						11.2	0.2	102	17.8		8.1		31.0		95.8		7.6		5.4		7		74				<0.2		0.7	
IM1	Fine	Moderate	19:02	7.5	Surface	1.0	0.2	207	18.2	18.2	8.2	8.2	30.9	30.9	112.5	112.5	8.8	8.8	5.3	4.3	16	16	73	74	818348	806446	<0.2	<0.2	0.6	0.7
						1.0	0.2	215	18.2		8.2		30.9		112.5		8.8		5.3		16		73				<0.2		0.6	
					Middle	3.8	0.2	191	18.1	18.1	8.2	8.2	31.0	31.0	110.9	110.9	8.7		3.1		16		74				<0.2		0.7	
						3.8	0.2	197	18.1		8.2		31.0		110.9		8.7		3.1		16		73				<0.2		0.6	
					Bottom	6.5	0.1	166	17.9	17.9	8.2	8.2	31.1	31.1	105.4	105.4	8.3	8.3	4.5		16		75				<0.2		1.0	
						6.5	0.1	172	17.9		8.2		31.1		105.4		8.3		4.5		17		75				<0.2		0.5	
IM2	Fine	Moderate	18:57	8.5	Surface	1.0	0.2	207	18.2	18.2	8.2	8.2	30.8	30.8	113.1	113.1	8.9	8.9	2.8	2.8	3	2	73	74	818827	806216	<0.2	<0.2	0.6	0.6
						1.0	0.2	214	18.2		8.2		30.8		113.1		8.9		2.8		3		73				<0.2		0.5	
					Middle	4.3	0.2	186	18.1	18.1	8.2	8.2	31.0	31.0	112.1	112.1	8.8		2.8		2		74				<0.2		0.6	
						4.3	0.2	186	18.1		8.2		31.0		112.1		8.8		2.8		2		73				<0.2		0.6	
					Bottom	7.5	0.2	200	17.9	17.9	8.2	8.2	31.0	31.0	109.6	109.6	8.6	8.6	2.8		2		75				<0.2		0.6	
						7.5	0.2	218	17.9		8.2		31.0		109.6		8.6		2.8		2		76				<0.2		0.5	
IM3	Fine	Moderate	18:51	8.6	Surface	1.0	0.2	182	18.3	18.3	8.2	8.2	30.8	30.8	114.3	114.3	9.0	8.9	3.9	3.7	4	3	73	75	819386	806005	<0.2	<0.2	0.7	0.7
						1.0	0.2	192	18.3		8.2		30.8		114.3		9.0		3.9		2		73				<0.2		0.7	
					Middle	4.3	0.2	184	18.2	18.2	8.2	8.2	30.9	30.9	112.0	112.0	8.8		3.5		3		75				<0.2		0.9	
						4.3	0.2	190	18.2		8.2		30.9		112.0		8.8		3.5		3		76				<0.2		0.8	
					Bottom	7.6	0.2	184	18.0	18.0	8.2	8.2	31.0	31.0	104.6	104.6	8.2	8.2	3.8		4		75				<0.2		0.6	
						7.6	0.2	192	18.0		8.2		31.0		104.6		8.2		3.8		2		75				<0.2		0.6	
IM4	Fine	Moderate	18:44	8.0	Surface	1.0	0.2	162	18.0	18.0	8.2	8.2	31.0	31.0	112.3	112.3	8.8	8.8	3.7	5.2	2	3	73	75	819565	805036	<0.2	<0.2	0.6	0.6
						1.0	0.2	170	18.0		8.2		31.0		112.3		8.8		3.7		2		73				<0.2		0.7	
					Middle	4.0	0.2	163	17.8	17.8	8.2	8.2	31.0	31.0	110.7	110.7	8.7		4.4		3		75				<0.2		0.5	
						4.0	0.2	170	17.8		8.2		31.0		110.7		8.7		4.4		2		75				<0.2		0.5	
					Bottom	7.0	0.1	184	17.8	17.8	8.2	8.2	31.1	31.1	107.2	107.2	8.5	8.5	7.5		4		75				<0.2		0.6	
						7.0	0.1	197	17.8		8.2		31.1		107.2		8.5		7.5		3		76				<0.2		0.6	
IM5	Fine	Moderate	18:35	7.1	Surface	1.0	0.1	168	18.1	18.1	8.2	8.2	30.9	30.9	111.6	111.6	8.8	8.7	3.8	4.0	3	4	73	74	820570	804934	<0.2	<0.2	0.6	0.6
						1.0	0.1	168	18.1		8.2		30.9		111.6		8.8		3.8		2		72				<0.2		0.6	
					Middle	3.6	0.1	182	18.1	18.1	8.2	8.2	30.9	30.9	108.8	108.8	8.5		4.2		6		73				<0.2		0.6	
						3.6	0.1	188	18.1		8.2		30.9		108.8		8.5		4.2		5		74				<0.2		0.6	
					Bottom	6.1	0.1	157	18.1	18.1	8.2	8.2	31.0	31.0	103.4	103.4	8.1	8.1	4.1		5		75				<0.2		0.6	
						6.1	0.1	160	18.1		8.2		31.0		103.4		8.1		4.1		4		75				<0.2		0.7	
IM6	Fine	Moderate	18:27	7.2	Surface	1.0	0.2	173	18.2	18.2	8.2	8.2	30.8	30.8	116.1	116.1	9.1	9.1	4.0	4.9	4	4	72	74	821089	805853	<0.2	<0.2	0.7	0.7
						1.0	0.2	177	18.2		8.2		30.8		116.1		9.1		4.0		3		72				<0.2		0.6	
					Middle	3.6	0.2	179	18.1	18.1	8.2	8.2	30.9	30.9	114.9	114.9	9.0		5.0		4		75				<0.2		0.8	
						3.6	0.2	187	18.1		8.2		30.9		114.9		9.0		5.0		3		75				<0.2		0.6	
					Bottom	6.2	0.1	171	18.1	18.1	8.2	8.2	30.8	30.8	113.4	113.4	8.9	8.9	5.7		6		76				<0.2		0.7	
						6.2	0.1	187	18.1		8.2		30.8		113.4		8.9		5.7		4		75				<0.2		0.6	
IM7	Fine	Moderate	18:17	8.8	Surface	1.0	0.2	124	18.3	18.3	8.1	8.1	30.7	30.7	113.2	113.2	8.9	8.8	3.6	4.1	5	4	72	74	821352	806863	<0.2	<0.2	0.9	0.9
						1.0	0.2	135	18.3		8.1		30.7		113.2		8.9		3.6		4		72				<0.2		0.8	
					Middle	4.4	0.2	106	18.3	18.3	8.1	8.1	30.8	30.8	111.5	111.5	8.7		4.1		4		75				<0.2		0.9	
						4.4	0.2	113	18.3		8.1		30.8		111.5		8.7		4.1		4		74				<0.2		1.1	
					Bottom	7.8	0.1	94	18.2	18.2	8.1	8.1	30.8	30.8	109.0	109.0	8.6	8.6	4.5		4		75				<0.2		0.8	
						7.8	0.1	96	18.2		8.1		30.8		109.0		8.6		4.5		4		76				<0.2		0.9	
IM8	Fine	Moderate	18:40	8.5	Surface	1.0	0.2	154	18.7	18.7	8.2	8.2	30.0	30.0	111.1	111.2	8.7	8.7	3.3	2.7	4	4	73	74	821715	807851	<0.2	<0.2	1.3	1.1
						1.0	0.2	167	18.7		8.2		30.1		111.2		8.7		3.4		3		74				<0.2		1.4	
					Middle	4.3	0.1	80	18.4	18.4	8.2	8.2	30.8	30.8	109.4	109.4	8.6		2.7		5		74				<0.2		1.0	
						4.3	0.1	82	18.4		8.2		30.8		109.4		8.6		2.7		4		74				<0.2		1.0	
					Bottom	7.5	0.1	51	18.3	18.3	8.2	8.2	30.9	30.9	104.9	104.9	8.2	8.2	2.1		4		75				<0.2		1.0	
						7.5	0.1	55	18.3		8.2		30.9		104.8		8.2		2.0		4		75				<0.2		0.9	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 10 March 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Fine	Moderate	18:48	7.2	Surface	1.0	0.2	118	18.8	18.8	8.2	8.2	30.1	30.1	111.1	111.1	8.6	8.6	3.8	5.3	4	5	73	74	822096	808787	<0.2	<0.2	1.3	1.1
						1.0	0.2	128	18.8		8.2		30.1		111.1		8.6		3.8		4		73				<0.2		1.3	
					Middle	3.6	0.3	95	18.8	18.8	8.2	8.2	30.2	30.2	110.3	110.3	8.6		5.2		5		74				<0.2		1.0	
						3.6	0.3	98	18.8		8.2		30.2		110.3		8.6		5.2		6		74				<0.2		1.1	
					Bottom	6.2	0.2	59	18.4	18.4	8.2	8.2	31.0	31.0	106.9	106.9	8.3	8.3	6.9		4		75				<0.2		0.9	
						6.2	0.2	61	18.4		8.2		31.0		106.9		8.3		6.9		6		75				<0.2		0.8	
IM10	Fine	Moderate	18:57	8.6	Surface	1.0	0.4	136	18.6	18.6	8.3	8.3	29.9	29.9	110.9	110.9	8.7	8.7	4.5	4.6	6	5	73	73	822230	809863	<0.2	<0.2	1.3	1.1
						1.0	0.4	148	18.6		8.3		29.9		110.9		8.7		4.2		5		73				<0.2		1.2	
					Middle	4.3	0.3	132	18.5	18.5	8.3	8.3	30.4	30.4	110.5	110.5	8.6		4.4		4		73				<0.2		1.2	
						4.3	0.3	132	18.5		8.3		30.4		110.5		8.6		4.4		4		73				<0.2		1.1	
					Bottom	7.6	0.2	61	18.4	18.4	8.2	8.2	30.8	30.8	109.2	109.2	8.5	8.5	5.0		6		74				<0.2		0.9	
						7.6	0.2	63	18.4		8.2		30.8		109.2		8.5		5.0		4		74				<0.2		1.1	
IM11	Fine	Moderate	19:10	6.9	Surface	1.0	0.3	91	18.4	18.4	8.3	8.3	30.4	30.4	105.6	105.6	8.3	8.3	6.2	9.5	7	8	73	74	821495	810557	<0.2	<0.2	1.2	1.0
						1.0	0.3	95	18.4		8.3		30.4		105.6		8.3		6.2		6		73				<0.2		1.0	
					Middle	3.5	0.3	97	18.4	18.4	8.3	8.3	30.5	30.5	106.4	106.4	8.3		11.2		6		73				<0.2		1.0	
						3.5	0.3	105	18.4		8.3		30.5		106.4		8.3		11.2		7		73				<0.2		1.0	
					Bottom	5.9	0.3	101	18.4	18.4	8.3	8.3	30.7	30.7	105.4	105.4	8.2	8.2	11.2		10		74				<0.2		0.9	
						5.9	0.3	103	18.4		8.3		30.7		105.4		8.2		11.2		10		75				<0.2		0.9	
IM12	Fine	Moderate	19:16	9.3	Surface	1.0	0.3	100	18.5	18.5	8.3	8.3	30.0	30.0	99.1	99.0	7.8	7.7	6.8	8.7	7	7	73	74	821132	811528	<0.2	<0.2	1.2	1.1
						1.0	0.3	108	18.5		8.3		30.0		98.9		7.8		6.7		6		73				<0.2		1.0	
					Middle	4.7	0.3	90	18.4	18.4	8.2	8.2	30.2	30.2	95.7	95.7	7.5		7.3		7		74				<0.2		1.1	
						4.7	0.3	92	18.4		8.2		30.2		95.6		7.5		7.4		6		74				<0.2		1.1	
					Bottom	8.3	0.2	95	18.3	18.3	8.1	8.1	30.4	30.4	95.6	95.6	7.5	7.5	11.9		8		75				<0.2		1.1	
						8.3	0.2	101	18.3		8.1		30.4		95.6		7.5		11.9		9		75				<0.2		1.2	
SR2	Fine	Moderate	19:41	4.2	Surface	1.0	0.4	95	18.5	18.5	8.2	8.2	30.2	30.2	96.8	96.8	7.6	7.6	6.0	6.1	6	6	73	73	821444	814192	<0.2	<0.2	1.2	1.1
						1.0	0.4	103	18.5		8.2		30.2		96.8		7.6		6.0		6		73				<0.2		1.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.3	98	18.4	18.4	8.1	8.1	30.4	30.4	96.8	96.8	7.6	7.6	6.1		5		73				<0.2		1.0	
						3.2	0.3	107	18.4		8.1		30.4		96.8		7.6		6.3		6		73				<0.2		1.0	
SR3	Fine	Moderate	18:36	9.0	Surface	1.0	0.3	160	18.6	18.6	8.2	8.2	30.0	30.0	110.5	110.5	8.6	8.6	2.3	2.7	3	4	-	-	822160	807547	-	-	-	-
						1.0	0.3	169	18.6		8.2		30.0		110.5		8.6		2.3		3		-				-		-	
					Middle	4.5	0.2	133	18.4	18.4	8.2	8.2	30.4	30.4	110.2	110.2	8.6		2.6		4		-				-		-	
						4.5	0.2	136	18.4		8.2		30.4		110.2		8.6		2.6		5		-				-		-	
					Bottom	8.0	0.2	103	18.3	18.3	8.2	8.2	30.9	30.9	108.6	108.6	8.5	8.5	3.3		5		-				-		-	
						8.0	0.2	103	18.3		8.2		30.9		108.6		8.5		3.3		4		-				-		-	
SR4A	Fine	Calm	19:40	8.7	Surface	1.0	0.2	57	18.1	18.1	8.2	8.2	30.9	30.9	112.1	112.1	8.8	8.8	3.5	3.6	3	5	-	-	817187	807823	-	-	-	-
						1.0	0.2	61	18.1		8.2		30.9		112.1		8.8		3.5		5		-				-		-	
					Middle	4.4	0.2	50	18.0	18.0	8.2	8.2	30.9	30.9	110.1	110.1	8.7		3.6		4		-				-		-	
						4.4	0.2	54	18.0		8.2		30.9		110.1		8.7		3.6		3		-				-		-	
					Bottom	7.7	0.1	64	18.0	18.0	8.2	8.2	31.1	31.1	105.5	105.5	8.3	8.3	3.7		7		-				-		-	
						7.7	0.1	66	18.0		8.2		31.1		105.5		8.3		3.7		5		-				-		-	
SR5A	Fine	Calm	19:58	5.2	Surface	1.0	0.1	74	19.2	19.2	8.1	8.1	29.5	29.5	103.2	103.2	8.0	8.0	5.1	5.1	2	3	-	-	816620	810667	-	-	-	-
						1.0	0.1	78	19.2		8.1		29.5		103.2		8.0		5.1		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.2	87	19.0	19.0	8.1	8.1	29.9	29.9	102.1	102.1	7.9	7.9	5.0		3		-				-		-	
						4.2	0.2	95	19.0		8.1		29.9		102.1		7.9		5.0		4		-				-		-	
SR6	Fine	Calm	20:20	4.0	Surface	1.0	0.1	77	19.0	19.0	8.1	8.1	29.0	29.0	88.3	88.3	6.9	6.9	7.2	10.1	6	5	-	-	817903	814637	-	-	-	-
						1.0	0.1	84	19.0		8.1		29.0		88.3		6.9		7.2		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	0.2	81	18.8	18.8	8.1	8.1	29.7	29.7	88.0	88.0	6.9	6.9	12.9		4		-				-		-	
						3.0	0.2	88	18.8		8.1		29.7		88.0		6.9		12.9		5		-				-		-	
SR7	Fine	Moderate	20:31	23.6	Surface	1.0	0.5	84	18.0	18.0	8.1	8.1	31.0	31.0	96.8	96.8	7.6	7.6	2.0	2.0	3	3	-	-	823641	823735	-	-	-	-
						1.0	0.5	90	18.0		8.1		31.0		96.8		7.6		2.0		3		-				-		-	
					Middle	11.8	0.3	89	17.8	17.8	8.1	8.1	31.1	31.1	95.5	95.5	7.5		2.0		4		-				-		-	
						11.8	0.3	94	17.8		8.1		31.1		95.5		7.5		2.0		3		-				-		-	
					Bottom	22.6	0.2	75	17.8	17.8	8.1	8.1	31.1	31.1	95.3	95.3	7.5	7.5	2.1		3		-				-		-	
						22.6	0.3	75	17.8		8.1		31.1		95.3		7.5		2.1		2		-				-		-	
SR8	Fine	Moderate	19:26	3.9	Surface	1.0	-	-	18.7	18.7	8.1	8.1	30.3	30.3	96.4	96.4	7.5	7.5	4.8	4.9	5	6	-	-	820246	811418	-	-	-	-
						1.0	-	-	18.7		8.1		30.3		96.4		7.5		4.8		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.9	-	-	18.6	18.6	8.1	8.1	30.3	30.3	96.6	96.6	7.5	7.5	5.0		6		-				-		-	
						2.9	-	-	18.6		8.1		30.3		96.6		7.5		5.0		5		-				-		-	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 10 March 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Sunny	Calm	12:03	8.6	Surface	1.0	0.3	6	17.9	17.9	8.2	8.2	31.0	31.0	106.9	106.9	8.4	8.4	3.0	3.1	2	2	73	73	815591	804245	<0.2	<0.2	0.5	0.6
						1.0	0.3	6	17.9		8.2		31.0		106.9		8.4		3.0		2		72				<0.2		0.7	
					Middle	4.3	0.2	21	17.5	17.5	8.2	8.2	31.1	31.1	104.9	104.9	8.3		3.1		2		73				<0.2		0.7	
						4.3	0.2	21	17.5		8.2		31.1		104.9		8.3		3.1		2		73				<0.2		0.7	
					Bottom	7.6	0.2	27	17.4	17.4	8.2	8.2	31.2	31.2	101.0	101.0	8.0	8.0	3.2		3		74				<0.2		0.5	
						7.6	0.2	27	17.4		8.2		31.2		101.0		8.0		3.2		2		75				<0.2		0.6	
C2	Sunny	Moderate	12:56	12.1	Surface	1.0	0.2	18	18.8	18.8	8.1	8.1	29.4	29.4	98.3	98.3	7.7	7.6	3.1	4.3	4	4	73	74	825655	806941	<0.2	<0.2	1.5	1.3
						1.0	0.2	18	18.8		8.1		29.4		98.3		7.7		3.1		3		73				<0.2		1.5	
					Middle	6.1	0.3	324	18.3	18.3	8.1	8.1	30.1	30.1	95.7	95.7	7.5		4.4		4		74				<0.2		1.2	
						6.1	0.3	345	18.3		8.1		30.1		95.7		7.5		4.4		6		74				<0.2		1.3	
					Bottom	11.1	0.2	331	18.3	18.3	8.1	8.1	30.4	30.4	95.8	95.8	7.5	7.5	5.4		5		75				<0.2		1.0	
						11.1	0.2	349	18.3		8.1		30.4		95.8		7.5		5.4		4		75				<0.2		1.5	
C3	Sunny	Moderate	11:08	12.0	Surface	1.0	0.2	249	18.2	18.2	8.1	8.1	30.6	30.6	96.4	96.4	7.6	7.6	2.0	2.1	4	3	73	74	822136	817819	<0.2	<0.2	1.1	1.0
						1.0	0.2	254	18.2		8.1		30.6		96.4		7.6		2.0		2		73				<0.2		1.1	
					Middle	6.0	0.2	249	17.8	17.8	8.1	8.1	31.0	31.0	94.5	94.5	7.5		2.8		3		74				<0.2		0.9	
						6.0	0.2	266	17.8		8.1		31.0		94.5		7.5		2.8		3		74				<0.2		0.9	
					Bottom	11.0	0.2	267	17.8	17.8	8.1	8.1	31.0	31.0	94.9	94.9	7.5	7.5	1.6		4		74				<0.2		1.0	
						11.0	0.2	279	17.8		8.1		31.0		94.9		7.5		1.6		4		75				<0.2		1.0	
IM1	Sunny	Calm	12:21	7.3	Surface	1.0	0.2	350	18.4	18.4	8.2	8.2	30.7	30.7	111.0	111.0	8.7	8.7	2.9	4.3	2	4	72	74	818325	806457	<0.2	<0.2	0.7	0.8
						1.0	0.3	359	18.4		8.2		30.7		111.0		8.7		2.9		2		73				<0.2		0.8	
					Middle	3.7	0.3	358	18.2	18.2	8.3	8.3	30.7	30.7	110.0	110.0	8.6		3.7		2		73				<0.2		0.8	
						3.7	0.3	329	18.2		8.3		30.7		110.0		8.6		3.7		3		73				<0.2		0.7	
					Bottom	6.3	0.3	5	17.9	17.9	8.2	8.2	30.9	30.9	107.9	107.9	8.5	8.5	6.2		6		75				<0.2		0.7	
						6.3	0.3	5	17.9		8.2		30.9		107.9		8.5		6.2		7		75				<0.2		0.9	
IM2	Sunny	Calm	12:26	8.4	Surface	1.0	0.2	351	18.5	18.5	8.2	8.2	30.7	30.7	109.6	109.6	8.6	8.6	2.8	3.2	4	4	73	75	818876	806212	<0.2	<0.2	0.6	0.7
						1.0	0.2	323	18.5		8.2		30.7		109.6		8.6		2.8		4		73				<0.2		0.7	
					Middle	4.2	0.3	345	18.0	18.0	8.2	8.2	30.9	30.9	108.2	108.2	8.5		3.1		3		75				<0.2		0.6	
						4.2	0.3	317	18.0		8.2		30.9		108.2		8.5		3.1		3		75				<0.2		0.6	
					Bottom	7.4	0.3	350	17.9	17.9	8.2	8.2	30.9	30.9	103.0	103.0	8.1	8.1	3.6		6		76				<0.2		0.7	
						7.4	0.3	322	17.9		8.2		30.9		103.0		8.1		3.6		5		75				<0.2		0.7	
IM3	Sunny	Moderate	12:31	8.6	Surface	1.0	0.2	16	18.6	18.6	8.3	8.3	30.4	30.4	107.9	107.9	8.4	8.4	3.8	3.6	4	4	73	74	819434	806044	<0.2	<0.2	0.8	0.8
						1.0	0.2	16	18.6		8.3		30.4		107.9		8.4		3.8		3		73				<0.2		0.8	
					Middle	4.3	0.2	29	18.1	18.1	8.2	8.2	30.8	30.8	105.8	105.8	8.3		3.4		4		74				<0.2		0.8	
						4.3	0.2	31	18.1		8.2		30.8		105.8		8.3		3.4		6		74				<0.2		0.7	
					Bottom	7.6	0.2	40	18.0	18.0	8.2	8.2	30.9	30.9	101.1	101.1	8.0	8.0	3.5		4		75				<0.2		0.7	
						7.6	0.2	41	18.0		8.2		30.9		101.1		8.0		3.5		4		75				<0.2		0.7	
IM4	Sunny	Moderate	12:38	7.9	Surface	1.0	0.2	319	18.1	18.1	8.3	8.3	30.5	30.5	110.6	110.6	8.7	8.7	3.2	3.7	4	4	73	75	819558	805060	<0.2	<0.2	0.8	0.7
						1.0	0.2	345	18.1		8.3		30.5		110.6		8.7		3.2		5		73				<0.2		0.8	
					Middle	4.0	0.3	0	17.9	17.9	8.2	8.2	30.8	30.8	109.8	109.8	8.7		3.4		5		75				<0.2		1.0	
						4.0	0.3	0	17.9		8.2		30.8		109.8		8.7		3.4		4		75				<0.2		0.7	
					Bottom	6.9	0.2	0	17.9	17.9	8.2	8.2	30.9	30.9	107.4	107.4	8.5	8.5	4.4		4		76				<0.2		0.6	
						6.9	0.2	0	17.9		8.2		30.9		107.4		8.5		4.4		4		76				<0.2		0.5	
IM5	Sunny	Moderate	12:48	7.3	Surface	1.0	0.2	12	18.4	18.4	8.3	8.3	30.3	30.3	108.1	108.1	8.5	8.5	3.6	4.2	4	4	72	75	820561	804908	<0.2	<0.2	1.0	0.9
						1.0	0.2	12	18.3		8.3		30.3		108.1		8.5		3.7		4		73				<0.2		1.0	
					Middle	3.7	0.2	346	18.3	18.3	8.3	8.3	30.4	30.4	107.4	107.4	8.4		3.8		3		75				<0.2		0.9	
						3.7	0.2	318	18.3		8.3		30.4		107.4		8.4		3.8		4		75				<0.2		0.9	
					Bottom	6.3	0.2	350	18.1	18.1	8.2	8.2	30.7	30.7	101.6	101.6	8.0	8.0	5.0		5		76				<0.2		0.9	
						6.3	0.2	322	18.1		8.2		30.7		101.6		8.0		5.0		3		76				<0.2		0.8	
IM6	Sunny	Moderate	12:56	7.0	Surface	1.0	0.2	24	18.5	18.5	8.3	8.3	30.2	30.2	107.9	107.9	8.5	8.5	3.7	3.9	4	4	73	75	821046	805839	<0.2	<0.2	0.9	1.0
						1.0	0.3	25	18.5		8.3		30.2		107.9		8.5		3.7		3		72				<0.2		1.0	
					Middle	3.5	0.2	31	18.2	18.2	8.3	8.3	30.4	30.4	106.3	106.3	8.4		3.8		2		75				<0.2		1.2	
						3.5	0.2	32	18.2		8.3		30.4		106.3		8.4		3.8		4		75				<0.2		1.0	
					Bottom	6.0	0.2	51	18.1	18.1	8.2	8.2	30.5	30.5	103.9	103.9	8.2	8.2	4.3		3		77				<0.2		1.0	
						6.0	0.2	54	18.1		8.2		30.5		103.9		8.2		4.3		5		77				<0.2		1.0	
IM7	Sunny	Moderate	13:03	8.6	Surface	1.0	0.1	20	18.8	18.8	8.3	8.3	29.7	29.7	107.9	107.9	8.4	8.4	4.0	3.8	5	5	72	74	821331	806842	<0.2	<0.2	1.4	1.2
						1.0	0.1	21	18.8		8.3		29.7		107.9		8.4		4.0		4		72				<0.2		1.1	
					Middle	4.3	0.2	14	18.3	18.3	8.3	8.3	30.2	30.2	106.0	106.0	8.3		3.6		5		75				<0.2		1.1	
						4.3	0.2	15	18.3		8.3		30.2		106.0		8.3		3.6		5		74				<0.2		1.3	
					Bottom	7.6	0.2	38	18.2	18.2	8.3	8.3	30.4	30.4	101.2	101.2	8.0	8.0	3.8		4		76				<0.2		1.1	
						7.6	0.2	38	18.2		8.3		30.4		101.2		8.0		3.8		4		77				<0.2		1.1	
IM8	Sunny	Moderate	12:30	8.5	Surface	1.0	0.1	303	18.9	18.9	8.2	8.2	29.5	29.5	105.4	105.4	8.2	8.2	3.7	3.9	4	4	74	74	821671	807832	<0.2	<0.2	1.3	1.3
						1.0	0.1	321	18.9		8.2		29.5		105.4		8.2		3.7		3		74				<0.2		1.3	
					Middle	4.3	0.1	7	18.4	18.4	8.2	8.2	29.8	29.8	104.4	104.4	8.2		3.5		4		74				<0.2		1.3	
						4.3	0.1	7	18.4		8.2		29.8		104.3		8.2		3.5		4		74				<0.2		1.1	
					Bottom	7.5	0.1	15	18.2	18.2	8.2	8.2	30.3	30.3	102.8	102.8	8.1	8.1	4.6		4		75				<0.2		1.0	
						7.5	0.1	15	18.2		8.2		30.3		102.8		8.1		4.6		5		75				<0.2		1.5	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 10 March 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C) Value	Water Temperature (°C) Average	pH Value	pH Average	Salinity (ppt) Value	Salinity (ppt) Average	DO Saturation (%) Value	DO Saturation (%) Average	Dissolved Oxygen Value	Dissolved Oxygen DA	Turbidity(NTU) Value	Turbidity(NTU) DA	Suspended Solids (mg/L) Value	Suspended Solids (mg/L) DA	Total Alkalinity (ppm) Value	Total Alkalinity (ppm) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L) Value	Chromium (µg/L) DA	Nickel (µg/L) Value	Nickel (µg/L) DA
IM9	Sunny	Moderate	12:22	7.4	Surface	1.0	0.1	295	18.9	18.9	8.2	8.2	29.6	29.6	105.1	105.1	8.2	8.2	3.0	3.5	5	5	73	74	822066	808815	<0.2	<0.2	1.2	1.3
						1.0	0.1	301	18.9		8.2		29.6		105.1		8.2		3.0		5		73				<0.2		1.6	
					Middle	3.7	0.1	312	18.4	18.4	8.3	8.3	29.7	29.7	102.6	102.6	8.1		4.0		5		74				<0.2		1.3	
						3.7	0.1	340	18.4		8.3		29.7		102.6		8.1		4.0		4		75				<0.2		1.2	
					Bottom	6.4	0.1	305	18.3	18.3	8.3	8.3	29.9	29.9	100.7	100.7	7.9	7.9	3.5		6		75				<0.2		1.2	
						6.4	0.1	326	18.3		8.3		29.9		100.7		7.9		3.5		4		75				<0.2		1.2	
IM10	Sunny	Moderate	12:16	6.9	Surface	1.0	0.2	309	18.4	18.4	8.2	8.2	29.9	29.9	99.7	99.6	7.8	7.8	3.1	3.8	3	4	73	74	822236	809836	<0.2	<0.2	1.3	1.3
						1.0	0.2	332	18.4		8.2		29.9		99.5		7.8		3.2		2		73				<0.2		1.3	
					Middle	3.5	0.2	312	18.4	18.4	8.2	8.2	29.9	29.9	98.4	98.4	7.7		3.6		4		73				<0.2		1.2	
						3.5	0.2	337	18.4		8.2		29.9		98.4		7.7		3.6		4		73				<0.2		1.2	
					Bottom	5.9	0.2	319	18.3	18.3	8.1	8.1	30.1	30.1	97.8	97.8	7.7	7.7	4.7		4		75				<0.2		1.4	
						5.9	0.2	347	18.3		8.1		30.1		97.8		7.7		4.7		4		75				<0.2		1.3	
IM11	Sunny	Moderate	12:03	7.7	Surface	1.0	0.2	270	18.5	18.5	8.2	8.2	29.9	29.9	96.5	96.5	7.6	7.5	5.8	9.6	4	6	73	74	821487	810574	<0.2	<0.2	1.5	1.4
						1.0	0.2	273	18.5		8.2		29.9		96.5		7.6		5.8		5		73				<0.2		1.6	
					Middle	3.9	0.1	275	18.3	18.3	8.1	8.1	30.0	30.0	94.4	94.4	7.4		9.0		6		74				<0.2		1.2	
						3.9	0.1	291	18.3		8.1		30.0		94.4		7.4		9.0		8		74				<0.2		1.3	
					Bottom	6.7	0.2	302	18.2	18.2	8.1	8.1	30.3	30.3	95.4	95.4	7.5	7.5	14.0		7		75				<0.2		1.4	
						6.7	0.2	330	18.2		8.1		30.3		95.4		7.5		14.0		6		75				<0.2		1.1	
IM12	Sunny	Moderate	11:55	8.1	Surface	1.0	0.2	275	18.3	18.3	8.1	8.1	30.0	30.0	94.1	94.1	7.4	7.4	3.7	4.6	2	4	73	74	821140	811528	<0.2	<0.2	1.0	1.1
						1.0	0.2	277	18.3		8.1		30.0		94.1		7.4		3.7		4		73				<0.2		1.2	
					Middle	4.1	0.2	277	18.2	18.2	8.1	8.1	30.4	30.4	93.1	93.1	7.3		4.3		5		74				<0.2		1.1	
						4.1	0.3	293	18.2		8.1		30.4		93.1		7.3		4.3		3		75				<0.2		1.2	
					Bottom	7.1	0.2	296	18.1	18.1	8.1	8.1	30.6	30.6	95.0	95.0	7.5	7.5	5.8		6		75				<0.2		1.0	
						7.1	0.2	320	18.1		8.1		30.6		95.0		7.5		5.8		4		75				<0.2		0.9	
SR2	Sunny	Moderate	11:30	5.0	Surface	1.0	0.1	312	18.4	18.4	8.1	8.1	30.1	30.1	95.5	95.5	7.5	7.5	4.3	4.3	4	5	73	73	821457	814165	<0.2	<0.2	1.2	1.3
						1.0	0.1	331	18.4		8.1		30.1		95.5		7.5		4.3		3		73				<0.2		1.3	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.1	285	18.4	18.4	8.1	8.1	30.2	30.2	95.7	95.7	7.5	7.5	4.3		7		73				<0.2		1.3	
						4.0	0.1	288	18.4		8.1		30.2		95.7		7.5		4.3		5		74				<0.2		1.3	
SR3	Sunny	Moderate	12:37	9.2	Surface	1.0	0.1	15	19.1	19.1	8.2	8.2	29.4	29.4	104.6	104.7	8.1	8.2	2.5	2.7	4	4	-	-	822165	807558	-	-	-	-
						1.0	0.1	15	19.1		8.2		29.4		104.7		8.1		2.5		3		-				-		-	
					Middle	4.6	0.2	14	18.2	18.2	8.2	8.2	29.8	29.8	103.4	103.4	8.2		2.3		4		-				-		-	
						4.6	0.2	15	18.2		8.2		29.8		103.4		8.2		2.3		3		-				-		-	
					Bottom	8.2	0.1	36	18.0	18.0	8.2	8.2	30.5	30.5	101.0	101.0	8.0	8.0	3.2		3		-				-		-	
						8.2	0.2	36	18.0		8.2		30.5		101.0		8.0		3.2		4		-				-		-	
SR4A	Sunny	Calm	11:42	9.2	Surface	1.0	0.2	272	18.3	18.3	8.2	8.2	29.9	29.9	104.2	104.2	8.2	8.2	3.4	3.6	2	3	-	-	817181	807798	-	-	-	-
						1.0	0.2	280	18.3		8.2		29.9		104.2		8.2		3.4		2		-				-		-	
					Middle	4.6	0.1	269	18.0	18.0	8.2	8.2	30.5	30.5	104.5	104.5	8.2		3.5		4		-				-		-	
						4.6	0.1	277	18.0		8.2		30.5		104.5		8.2		3.5		2		-				-		-	
					Bottom	8.2	0.1	294	17.9	17.9	8.2	8.2	30.8	30.8	102.1	102.1	8.1	8.1	3.8		3		-				-		-	
						8.2	0.1	315	17.9		8.2		30.8		102.1		8.1		3.8		3		-				-		-	
SR5A	Sunny	Calm	11:25	5.2	Surface	1.0	0.1	291	18.6	18.6	8.1	8.1	29.2	29.2	91.7	91.7	7.2	7.2	4.6	4.9	3	3	-	-	816597	810708	-	-	-	-
						1.0	0.1	318	18.6		8.1		29.2		91.7		7.2		4.6		2		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.1	285	18.6	18.6	8.1	8.1	29.4	29.4	91.7	91.7	7.2	7.2	5.2		3		-				-		-	
						4.2	0.1	290	18.6		8.1		29.4		91.7		7.2		5.2		3		-				-		-	
SR6	Sunny	Calm	11:02	4.3	Surface	1.0	0.0	218	18.6	18.6	8.1	8.1	29.1	29.1	92.1	92.1	7.2	7.2	12.4	14.1	3	4	-	-	817916	814652	-	-	-	-
						1.0	0.0	234	18.6		8.1		29.1		92.1		7.2		12.4		3		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.1	235	18.6	18.6	8.1	8.1	29.5	29.5	93.6	93.6	7.4	7.4	15.7		4		-				-		-	
						3.3	0.1	250	18.6		8.1		29.5		93.6		7.4		15.7		4		-				-		-	
SR7	Sunny	Moderate	10:34	23.7	Surface	1.0	0.0	220	17.9	17.9	8.1	8.1	30.9	30.9	95.2	95.2	7.5	7.5	2.4	2.4	4	3	-	-	823663	823764	-	-	-	-
						1.0	0.0	228	17.9		8.1		30.9		95.2		7.5		2.3		2		-				-		-	
					Middle	11.9	0.0	157	17.7	17.7	8.1	8.1	31.0	31.0	95.2	95.2	7.5		1.9		2		-				-		-	
						11.9	0.0	157	17.7		8.1		31.0		95.2		7.5		1.9		2		-				-		-	
					Bottom	22.7	0.0	130	17.6	17.6	8.1	8.1	31.1	31.1	95.8	95.8	7.6	7.6	2.8		2		-				-		-	
						22.7	0.0	139	17.6		8.1		31.1		95.8		7.6		2.8		3		-				-		-	
SR8	Sunny	Moderate	11:47	3.9	Surface	1.0	-	-	19.1	19.1	8.1	8.1	29.8	29.8	97.7	97.7	7.6	7.6	6.7	7.4	7	7	-	-	820246	811418	-	-	-	-
						1.0	-	-	19.1		8.1		29.8		97.7		7.6		6.7		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.9	-	-	18.4	18.4	8.1	8.1	30.1	30.1	96.2	96.2	7.6	7.6	8.1		7		-				-		-	
						2.9	-	-	18.4		8.1		30.1		96.2		7.6		8.1		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 13 March 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Sunny	Moderate	10:43	8.8	Surface	1.0	0.2	53	18.8	18.8	8.3	8.3	29.1	29.2	118.1	117.9	9.2	8.9	6.0	7.1	10	11	73	75	815629	804225	<0.2	<0.2	3.1	3.3
						1.0	0.2	57	18.8		8.3		29.2		117.8		9.2		6.0		10		74				<0.2		3.0	
					Middle	4.4	0.0	12	18.3	18.3	8.2	8.2	30.2	30.2	109.9	109.8	8.6		7.3		12		75				<0.2		3.4	
						4.4	0.0	12	18.3		8.2		30.2		109.8		8.6		7.4		11		75				<0.2		3.2	
					Bottom	7.8	0.0	102	18.1	18.1	8.2	8.2	30.4	30.4	107.0	107.0	8.4	8.4	8.0		10		76				<0.2		3.6	
						7.8	0.0	105	18.1		8.2		30.4		107.0		8.4		7.9		10		77				<0.2		3.6	
C2	Sunny	Moderate	09:36	12.0	Surface	1.0	0.2	72	19.5	19.5	8.1	8.1	25.4	25.4	102.6	102.5	8.1	8.0	10.4	10.6	11	11	72	73	825710	806935	<0.2	<0.2	2.6	2.0
						1.0	0.2	73	19.5		8.1		25.4		102.4		8.1		10.5		12		73				<0.2		2.5	
					Middle	6.0	0.1	350	18.9	18.9	8.1	8.1	29.1	29.1	100.0	100.0	7.8		9.9		12		73				<0.2		2.0	
						6.0	0.1	322	18.9		8.1		29.1		100.0		7.8		9.9		11		73				<0.2		1.9	
					Bottom	11.0	0.1	346	18.6	18.6	8.1	8.1	30.1	30.1	101.4	101.5	7.9	7.9	11.5		11		74				<0.2		1.4	
						11.0	0.1	318	18.6		8.1		30.1		101.5		7.9		11.5		11		74				<0.2		1.5	
C3	Sunny	Moderate	11:22	11.9	Surface	1.0	0.2	72	18.7	18.7	8.2	8.2	30.4	30.4	102.0	102.0	7.9	7.8	3.3	4.6	6	6	73	73	822100	817786	<0.2	<0.2	1.1	0.9
						1.0	0.2	72	18.7		8.2		30.4		102.0		7.9		3.3		6		73				<0.2		1.0	
					Middle	6.0	0.2	74	18.3	18.3	8.1	8.1	30.6	30.6	98.1	98.1	7.7		4.7		6		73				<0.2		0.9	
						6.0	0.2	77	18.3		8.1		30.6		98.1		7.7		4.7		6		73				<0.2		0.8	
					Bottom	10.9	0.2	102	18.3	18.3	8.1	8.1	30.7	30.7	98.8	98.8	7.7	7.7	5.8		6		74				<0.2		0.8	
						10.9	0.2	106	18.3		8.1		30.7		98.8		7.7		5.8		6		74				<0.2		0.8	
IM1	Sunny	Moderate	10:23	7.1	Surface	1.0	0.1	55	18.8	18.8	8.3	8.3	30.3	30.3	123.8	123.4	9.6	9.3	5.8	6.4	6	9	73	74	818326	806460	<0.2	<0.2	2.3	2.5
						1.0	0.1	60	18.8		8.3		30.3		123.1		9.6		5.9		6		73				<0.2		2.6	
					Middle	3.6	0.1	350	18.9	18.9	8.3	8.3	30.4	30.4	115.4	115.4	8.9		6.7		10		74				<0.2		2.3	
						3.6	0.1	322	18.9		8.3		30.4		115.4		8.9		6.8		11		74				<0.2		2.8	
					Bottom	6.1	0.1	328	18.9	18.9	8.3	8.2	30.5	30.5	111.9	111.8	8.7	8.7	6.7		9		76				<0.2		2.4	
						6.1	0.1	336	18.9		8.2		30.5		111.7		8.7		6.8		9		76				<0.2		2.6	
IM2	Sunny	Moderate	10:18	8.2	Surface	1.0	0.1	28	18.9	18.9	8.3	8.3	30.4	30.4	121.7	121.7	9.4	9.2	6.3	7.3	10	9	72	74	818865	806218	<0.2	<0.2	3.0	2.9
						1.0	0.1	29	18.9		8.3		30.4		121.8		9.4		6.4		9		72				<0.2		2.9	
					Middle	4.1	0.1	44	18.6	18.7	8.2	8.2	30.4	30.4	115.7	115.4	9.0		7.7		8		74				<0.2		2.8	
						4.1	0.1	48	18.7		8.2		30.4		115.1		9.0		7.9		9		74				<0.2		2.8	
					Bottom	7.2	0.1	16	18.7	18.7	8.2	8.2	30.4	30.4	109.9	109.8	8.6	8.6	7.8		10		76				<0.2		2.8	
						7.2	0.1	17	18.7		8.2		30.4		109.7		8.5		7.9		10		76				<0.2		3.0	
IM3	Sunny	Moderate	10:13	8.3	Surface	1.0	0.1	33	18.8	18.8	8.3	8.3	29.9	29.9	122.7	122.4	9.6	9.5	6.5	7.3	8	10	72	74	819430	806047	<0.2	<0.2	2.9	3.0
						1.0	0.1	33	18.8		8.3		30.0		122.1		9.5		6.7		8		72				<0.2		3.0	
					Middle	4.2	0.1	54	18.7	18.7	8.2	8.2	30.4	30.4	120.8	120.8	9.4		7.6		11		73				<0.2		2.9	
						4.2	0.1	54	18.7		8.2		30.4		120.8		9.4		7.6		9		73				<0.2		3.0	
					Bottom	7.3	0.1	76	18.7	18.7	8.2	8.2	30.4	30.4	122.6	122.6	9.6	9.6	7.8		13		76				<0.2		3.1	
						7.3	0.1	80	18.7		8.2		30.4		122.7		9.6		7.8		12		75				<0.2		3.0	
IM4	Sunny	Moderate	10:05	7.7	Surface	1.0	0.1	358	18.8	18.8	8.3	8.3	29.5	29.5	121.9	121.8	9.5	9.3	6.3	7.5	9	10	73	75	819554	805017	<0.2	<0.2	3.3	3.2
						1.0	0.1	329	18.8		8.3		29.6		121.7		9.5		6.3		8		73				<0.2		3.0	
					Middle	3.9	0.1	354	18.6	18.6	8.2	8.2	30.4	30.4	115.1	115.0	9.0		7.9		8		75				<0.2		3.1	
						3.9	0.1	326	18.6		8.2		30.4		115.0		9.0		7.9		8		76				<0.2		3.0	
					Bottom	6.7	0.1	329	18.6	18.6	8.2	8.2	30.4	30.4	110.8	110.7	8.6	8.6	8.5		13		76				<0.2		3.5	
						6.7	0.1	354	18.6		8.2		30.4		110.6		8.6		8.4		12		76				<0.2		3.3	
IM5	Sunny	Moderate	09:55	7.0	Surface	1.0	0.2	42	18.8	18.8	8.3	8.3	29.8	29.9	123.7	123.4	9.6	9.4	7.7	8.2	10	10	73	75	820555	804943	<0.2	<0.2	3.0	3.1
						1.0	0.2	45	18.8		8.3		29.9		123.2		9.6		7.8		9		73				<0.2		3.0	
					Middle	3.5	0.2	24	18.7	18.7	8.3	8.3	30.1	30.1	118.1	118.0	9.2		8.4		9		75				<0.2		3.1	
						3.5	0.2	25	18.7		8.3		30.1		118.0		9.2		8.5		9		75				<0.2		3.2	
					Bottom	6.0	0.1	6	18.7	18.7	8.3	8.3	30.2	30.2	112.2	112.2	8.8	8.8	8.4		10		75				<0.2		3.3	
						6.0	0.1	6	18.7		8.3		30.2		112.2		8.8		8.5		11		76				<0.2		2.9	
IM6	Sunny	Moderate	09:47	6.9	Surface	1.0	0.1	183	19.0	19.0	8.3	8.3	28.8	28.9	118.5	118.4	9.3	9.1	9.4	10.1	8	12	73	75	821048	805841	<0.2	<0.2	3.3	3.2
						1.0	0.1	184	19.0		8.3		28.9		118.4		9.3		9.4		9		73				<0.2		3.1	
					Middle	3.5	0.1	159	18.8	18.8	8.3	8.3	29.8	29.8	114.4	114.3	8.9		10.2		14		74				<0.2		3.2	
						3.5	0.1	164	18.8		8.3		29.8		114.2		8.9		10.3		14		75				<0.2		3.1	
					Bottom	5.9	0.1	198	18.7	18.7	8.2	8.2	30.1	30.1	109.9	109.8	8.6	8.6	10.7		14		76				<0.2		3.3	
						5.9	0.1	211	18.7		8.2		30.1		109.7		8.6		10.8		15		76				<0.2		2.9	
IM7	Sunny	Moderate	09:40	8.3	Surface	1.0	0.1	21	19.5	19.5	8.2	8.2	25.0	25.0	119.5	119.5	9.5	9.3	9.1	9.6	11	11	72	75	821324	806835	<0.2	<0.2	2.8	2.9
						1.0	0.1	22	19.4		8.2		25.0		119.6		9.5		9.1		11		73				<0.2		2.9	
					Middle	4.2	0.2	66	18.9	18.9	8.3	8.3	29.4	29.4	116.7	116.7	9.1		9.1		12		75				<0.2		2.9	
						4.2	0.2	70	18.9		8.3		29.4		116.7		9.1		9.1		10		75				<0.2		2.8	
					Bottom	7.3	0.1	67	18.7	18.7	8.3	8.3	30.1	30.1	112.7	112.2	8.8	8.8	10.7		11		76				<0.2		2.9	
						7.3	0.2	71	18.7		8.3		30.0		111.8		8.7		10.5		12		76				<0.2		2.8	
IM8	Sunny	Moderate	10:00	8.1	Surface	1.0	0.0	123	19.6	19.6	8.2	8.2	25.9	25.9	116.3	116.3	9.2	9.1	8.9	8.4	13	12	73	73	821699	807832	<0.2	<0.2	2.7	1.7
						1.0	0.0	128	19.6		8.2		25.9		116.3		9.2		8.9		11		73				<0.2		2.6	
					Middle	4.1	0.1	60	18.9	18.9	8.3	8.3	29.5	29.5	115.0	115.0	9.0		7.9		11		73				<0.2		1.3	
						4.1	0.2	65	18.9		8.3		29.6		115.0		9.0		8.1		13		73				<0.2		1.4	
					Bottom	7.1	0.2	59	18.8	18.8	8.3	8.3	30.2	30.2	112.9	112.9	8.8	8.8	8.4		11		74				<0.2		1.0	
						7.1	0.2	60	18.8		8.3		30.2		112.9		8.8		8.4		12		74				<0.2		1.0	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 13 March 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Sunny	Moderate	10:10	6.8	Surface	1.0	0.1	82	19.8	19.8	8.2	8.2	26.3	26.3	114.5	114.5	9.0	9.0	9.2	9.5	9	12	73	73	822068	808818	<0.2	<0.2	2.2	1.4
						1.0	0.1	85	19.8		8.2		26.3		114.5		9.0		9.2		10		73				<0.2		2.3	
					Middle	3.4	0.1	98	19.1	19.1	8.3	8.3	28.2	28.2	114.3	114.3	9.0		10.0		13		73				<0.2		1.2	
						3.4	0.1	102	19.1		8.3		28.2		114.3		9.0		10.0		13		73				<0.2		1.2	
					Bottom	5.8	0.1	103	18.9	18.9	8.3	8.3	30.0	30.0	113.6	113.6	8.8	8.8	9.3		12		74				<0.2		0.6	
						5.8	0.1	106	18.9		8.3		30.0		113.6		8.8		9.3		12		74				<0.2		0.7	
IM10	Sunny	Moderate	10:17	6.8	Surface	1.0	0.2	68	19.8	19.8	8.2	8.2	26.7	26.7	106.4	106.4	8.3	8.2	8.8	9.7	9	11	73	73	822243	809853	<0.2	<0.2	1.9	1.5
						1.0	0.2	71	19.8		8.2		26.7		106.4		8.3		8.8		10		73				<0.2		1.9	
					Middle	3.4	0.3	103	19.2	19.2	8.1	8.1	28.1	28.1	103.8	103.9	8.1		9.4		13		73				<0.2		1.2	
						3.4	0.3	109	19.2		8.1		28.1		103.9		8.1		9.4		12		73				<0.2		1.2	
					Bottom	5.8	0.2	78	19.2	19.2	8.2	8.2	28.8	28.8	104.7	104.7	8.2	8.2	10.8		12		74				<0.2		1.3	
						5.8	0.2	78	19.2		8.2		28.8		104.7		8.2		10.8		12		74				<0.2		1.4	
IM11	Sunny	Moderate	10:29	7.4	Surface	1.0	0.3	88	19.5	19.5	8.3	8.3	27.1	27.1	108.1	108.1	8.5	8.4	10.1	8.5	12	12	73	73	821474	810570	<0.2	<0.2	2.8	1.6
						1.0	0.3	93	19.5		8.3		27.1		108.1		8.5		10.1		11		73				<0.2		1.9	
					Middle	3.7	0.2	86	19.2	19.2	8.2	8.2	28.8	28.8	104.7	104.7	8.2		8.2		11		73				<0.2		1.2	
						3.7	0.2	91	19.2		8.2		28.8		104.7		8.2		8.2		12		73				<0.2		1.0	
					Bottom	6.4	0.1	99	18.9	18.9	8.2	8.2	29.6	29.6	104.4	104.4	8.1	8.1	7.2		12		74				<0.2		1.1	
						6.4	0.1	107	18.9		8.2		29.6		104.4		8.1		7.2		11		74				<0.2		1.3	
IM12	Sunny	Moderate	10:37	8.5	Surface	1.0	0.3	86	19.6	19.6	8.3	8.3	27.2	27.2	110.7	110.6	8.6	8.4	7.9	7.9	11	10	73	74	821136	811522	<0.2	<0.2	1.7	1.3
						1.0	0.3	88	19.6		8.3		27.2		110.5		8.6		8.0		11		73				<0.2		1.7	
					Middle	4.3	0.1	151	19.0	19.0	8.2	8.2	29.5	29.5	104.8	104.8	8.2		7.8		9		73				<0.2		1.2	
						4.3	0.1	163	19.0		8.2		29.5		104.8		8.2		7.8		10		74				<0.2		1.1	
					Bottom	7.5	0.0	166	18.9	18.9	8.2	8.2	29.8	29.8	103.7	103.7	8.1	8.1	7.9		10		74				<0.2		1.0	
						7.5	0.0	168	18.9		8.2		29.8		103.7		8.1		7.9		11		74				<0.2		1.0	
SR2	Sunny	Moderate	11:02	4.3	Surface	1.0	0.2	50	19.4	19.4	8.2	8.2	29.1	29.1	110.4	110.4	8.6	8.6	6.7	8.3	10	11	72	73	821472	814186	<0.2	<0.2	0.9	0.9
						1.0	0.2	50	19.4		8.2		29.1		110.4		8.6		6.7		10		72				<0.2		1.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.2	38	18.9	18.9	8.2	8.2	29.7	29.7	106.3	106.3	8.3	8.3	9.8		11		73				<0.2		0.8	
						3.3	0.2	38	18.9		8.2		29.7		106.3		8.3		9.8		12		73				<0.2		0.7	
SR3	Sunny	Moderate	09:55	8.7	Surface	1.0	0.2	124	19.6	19.6	8.2	8.2	26.3	26.3	117.1	117.1	9.2	9.1	8.6	9.5	9	10	-	-	822157	807545	-	-	-	-
						1.0	0.2	127	19.6		8.2		26.3		117.1		9.2		8.6		9		-				-		-	
					Middle	4.4	0.2	70	18.7	18.7	8.3	8.3	29.9	29.9	115.4	115.4	9.0		9.1		10		-				-		-	
						4.4	0.2	70	18.7		8.3		29.9		115.4		9.0		9.1		10		-				-		-	
					Bottom	7.7	0.1	78	18.7	18.7	8.3	8.3	30.2	30.2	114.0	114.0	8.9	8.9	10.9		12		-				-		-	
						7.7	0.1	81	18.7		8.3		30.2		114.0		8.9		10.9		12		-				-		-	
SR4A	Fine	Calm	11:03	8.3	Surface	1.0	0.2	75	19.2	19.2	8.3	8.3	30.3	30.3	125.2	125.1	9.7	9.6	6.0	6.6	6	8	-	-	817170	807829	-	-	-	-
						1.0	0.2	81	19.2		8.3		30.3		125.1		9.7		6.0		8		-				-		-	
					Middle	4.2	0.2	68	19.0	19.0	8.3	8.3	30.4	30.4	122.3	122.2	9.5		6.6		7		-				-		-	
						4.2	0.2	73	19.0		8.3		30.4		122.2		9.5		6.6		8		-				-		-	
					Bottom	7.3	0.2	69	18.9	18.9	8.3	8.3	30.4	30.4	114.6	114.5	8.9	8.9	7.3		7		-				-		-	
						7.3	0.2	69	18.9		8.3		30.4		114.4		8.9		7.3		9		-				-		-	
SR5A	Fine	Calm	11:20	5.0	Surface	1.0	0.1	69	19.4	19.4	8.1	8.1	29.8	29.9	100.9	100.9	7.8	7.8	6.7	7.5	8	8	-	-	816597	810670	-	-	-	-
						1.0	0.1	75	19.4		8.1		29.9		100.9		7.8		6.7		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.1	34	19.2	19.2	8.1	8.1	30.1	30.1	100.8	100.8	7.8	7.8	8.3		7		-				-		-	
						4.0	0.1	37	19.2		8.1		30.0		100.9		7.8		8.3		8		-				-		-	
SR6	Fine	Calm	11:43	4.3	Surface	1.0	0.1	133	19.4	19.4	8.2	8.2	29.2	29.2	105.8	105.7	8.2	8.2	7.8	7.8	8	8	-	-	817907	814684	-	-	-	-
						1.0	0.1	139	19.4		8.2		29.2		105.6		8.2		7.8		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.1	39	19.3	19.3	8.2	8.2	29.4	29.4	104.9	104.9	8.1	8.1	7.9		8		-				-		-	
						3.3	0.1	39	19.3		8.2		29.4		105.0		8.1		7.8		7		-				-		-	
SR7	Sunny	Moderate	11:52	24.0	Surface	1.0	0.3	69	18.4	18.4	8.1	8.1	30.6	30.6	98.5	98.5	7.7	7.7	4.8	4.2	5	5	-	-	823616	823761	-	-	-	-
						1.0	0.3	70	18.4		8.1		30.6		98.5		7.7		4.8		5		-				-		-	
					Middle	12.0	0.1	56	18.3	18.3	8.1	8.1	30.7	30.7	97.5	97.5	7.6		4.3		4		-				-		-	
						12.0	0.2	58	18.3		8.1		30.7		97.5		7.6		4.3		4		-				-		-	
					Bottom	23.0	0.2	37	18.3	18.3	8.1	8.1	30.7	30.7	97.7	97.7	7.7	7.7	3.5		5		-				-		-	
						23.0	0.2	38	18.3		8.1		30.7		97.7		7.7		3.5		4		-				-		-	
SR8	Sunny	Moderate	10:48	4.0	Surface	1.0	-	-	19.4	19.4	8.2	8.2	28.5	28.5	108.2	108.2	8.4	8.4	7.3	7.9	10	9	-	-	820246	811418	-	-	-	-
						1.0	-	-	19.4		8.2		28.5		108.1		8.4		7.3		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	-	-	19.1	19.1	8.2	8.2	29.4	29.4	106.2	106.2	8.3	8.3	8.4		9		-				-		-	
						3.0	-	-	19.1		8.2		29.4		106.2		8.3		8.4		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 13 March 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Moderate	06:15	8.2	Surface	1.0	0.4	56	18.7	18.7	8.3	8.3	30.1	30.1	116.5	116.5	9.1	9.0	7.0	9.1	8	8	72	74	815616	804226	<0.2	<0.2	3.2	3.2
						1.0	0.4	57	18.7		8.3		30.1		116.5		9.1		7.0		7		73				<0.2		3.3	
					Middle	4.1	0.4	36	18.6	18.6	8.2	8.2	30.4	30.4	114.4	114.3	8.9		9.0		9		74				<0.2		3.2	
						4.1	0.4	38	18.6		8.2		30.4		114.3		8.9		9.1		8		74				<0.2		3.1	
					Bottom	7.2	0.3	33	18.6	18.6	8.2	8.2	30.6	30.6	110.0	109.9	8.6	8.6	11.1		8		75				<0.2		3.2	
						7.2	0.4	35	18.6		8.2		30.6		109.8		8.6		11.3		7		75				<0.2		3.0	
C2	Fine	Moderate	06:50	11.5	Surface	1.0	0.2	351	19.4	19.4	8.1	8.1	24.6	24.6	100.5	100.5	8.0	7.8	12.1	16.1	7	11	73	74	825686	806956	<0.2	<0.2	3.4	2.1
						1.0	0.2	323	19.4		8.1		24.6		100.4		8.0		12.2		9		73				<0.2		3.5	
					Middle	5.8	0.3	27	19.0	19.0	8.1	8.1	28.1	28.1	96.9	96.9	7.6		16.3		12		73				<0.2		1.5	
						5.8	0.3	28	19.0		8.1		28.1		96.9		7.6		16.3		12		74				<0.2		1.7	
					Bottom	10.5	0.3	325	18.7	18.7	8.1	8.1	29.9	29.9	95.7	95.7	7.5	7.5	19.9		13		75				<0.2		1.2	
						10.5	0.3	336	18.7		8.1		29.9		95.7		7.5		19.9		12		75				<0.2		1.1	
C3	Fine	Moderate	05:03	11.0	Surface	1.0	0.5	262	18.7	18.7	8.2	8.2	29.9	29.9	102.1	102.1	8.0	8.0	4.0	4.4	6	7	73	73	822119	817783	<0.2	<0.2	0.7	0.6
						1.0	0.5	262	18.7		8.2		29.9		102.1		8.0		4.0		6		73				<0.2		0.8	
					Middle	5.5	0.3	256	18.4	18.4	8.1	8.1	30.5	30.5	100.8	100.8	7.9		4.5		7		73				<0.2		0.7	
						5.5	0.4	271	18.4		8.1		30.5		100.8		7.9		4.4		7		73				<0.2		0.5	
					Bottom	10.0	0.3	261	18.3	18.3	8.1	8.1	30.6	30.6	101.9	101.9	8.0	8.0	4.8		8		74				<0.2		0.5	
						10.0	0.3	273	18.3		8.1		30.6		101.9		8.0		4.8		7		74				<0.2		0.5	
IM1	Fine	Calm	06:33	7.1	Surface	1.0	0.4	351	18.8	18.8	8.3	8.3	29.9	29.9	116.1	116.0	9.0	8.9	7.2	7.6	6	8	73	74	818377	806480	<0.2	<0.2	3.0	3.0
						1.0	0.5	323	18.8		8.3		29.9		116.0		9.0		7.2		8		73				<0.2		3.0	
					Middle	3.6	0.3	357	18.7	18.7	8.3	8.3	30.5	30.5	113.6	113.5	8.8		7.7		8		74				<0.2		3.2	
						3.6	0.3	328	18.7		8.3		30.5		113.5		8.8		7.7		7		74				<0.2		3.0	
					Bottom	6.1	0.2	344	18.6	18.6	8.3	8.3	30.5	30.5	109.6	109.5	8.5	8.5	7.9		8		75				<0.2		2.9	
						6.1	0.2	351	18.6		8.3		30.5		109.4		8.5		8.0		9		75				<0.2		3.1	
IM2	Fine	Moderate	06:39	7.8	Surface	1.0	0.3	2	18.9	18.9	8.3	8.3	29.7	29.7	115.9	115.9	9.0	8.9	7.6	8.8	5	8	73	75	818848	806187	<0.2	<0.2	3.3	3.3
						1.0	0.3	2	18.8		8.3		29.7		115.9		9.0		7.6		6		73				<0.2		3.2	
					Middle	3.9	0.3	8	18.6	18.6	8.2	8.2	30.5	30.6	113.0	112.9	8.8		9.5		8		76				<0.2		3.2	
						3.9	0.3	8	18.6		8.2		30.6		112.8		8.8		9.5		9		74				<0.2		3.3	
					Bottom	6.8	0.3	13	18.6	18.6	8.2	8.2	30.6	30.6	108.7	108.6	8.5	8.5	9.5		10		76				<0.2		3.3	
						6.8	0.3	13	18.6		8.2		30.6		108.5		8.4		9.4		9		76				<0.2		3.5	
IM3	Fine	Moderate	06:44	8.0	Surface	1.0	0.3	33	19.0	18.9	8.2	8.2	29.4	29.4	115.8	115.8	9.0	8.9	8.1	10.5	6	7	73	74	819421	806036	<0.2	<0.2	3.4	3.5
						1.0	0.3	33	18.9		8.2		29.5		115.8		9.0		8.3		7		74				<0.2		3.4	
					Middle	4.0	0.3	26	18.6	18.6	8.2	8.2	30.5	30.5	112.6	112.2	8.8		11.5		7		74				<0.2		3.4	
						4.0	0.3	26	18.5		8.2		30.5		111.9		8.7		11.7		6		74				<0.2		3.3	
					Bottom	7.0	0.3	18	18.5	18.5	8.2	8.2	30.5	30.5	107.2	107.0	8.4	8.4	11.7		8		75				<0.2		3.3	
						7.0	0.3	19	18.5		8.2		30.5		106.9		8.3		11.7		8		76				<0.2		4.4	
IM4	Fine	Moderate	06:51	7.4	Surface	1.0	0.3	345	19.1	19.1	8.2	8.2	28.1	28.1	117.1	117.1	9.2	9.2	9.0	10.9	5	7	74	75	819590	805048	<0.2	<0.2	4.1	3.8
						1.0	0.3	317	19.1		8.2		28.1		117.2		9.2		9.1		6		73				<0.2		3.7	
					Middle	3.7	0.3	7	18.8	18.8	8.2	8.2	29.7	29.7	116.7	116.6	9.1		11.1		7		75				<0.2		3.7	
						3.7	0.3	7	18.8		8.2		29.7		116.6		9.1		11.2		8		76				<0.2		3.6	
					Bottom	6.4	0.3	342	18.8	18.8	8.2	8.2	30.1	30.1	112.6	112.4	8.8	8.8	12.5		10		76				<0.2		3.9	
						6.4	0.3	315	18.8		8.2		30.1		112.3		8.8		12.5		8		76				<0.2		3.7	
IM5	Fine	Moderate	07:00	6.4	Surface	1.0	0.4	359	19.0	19.0	8.2	8.2	29.3	29.3	117.0	117.0	9.1	9.1	10.2	13.6	8	8	73	75	820590	804908	<0.2	<0.2	3.7	3.7
						1.0	0.4	359	19.0		8.2		29.3		117.0		9.1		10.2		7		75				<0.2		3.8	
					Middle	3.2	0.4	350	18.9	18.9	8.2	8.2	29.5	29.5	116.8	116.7	9.1		13.2		8		76				<0.2		3.8	
						3.2	0.4	322	18.9		8.2		29.5		116.7		9.1		13.4		8		74				<0.2		3.5	
					Bottom	5.4	0.3	350	18.8	18.8	8.2	8.2	29.9	29.9	113.2	113.1	8.8	8.8	17.6		9		76				<0.2		3.9	
						5.4	0.3	322	18.8		8.2		29.9		113.0		8.8		16.9		8		76				<0.2		3.6	
IM6	Fine	Moderate	07:09	6.6	Surface	1.0	0.2	49	19.1	19.1	8.2	8.2	28.5	28.5	112.5	112.5	8.8	8.8	12.6	14.0	9	10	73	75	821030	805852	<0.2	<0.2	3.3	3.4
						1.0	0.2	51	19.1		8.2		28.5		112.6		8.8		12.9		8		73				<0.2		3.4	
					Middle	3.3	0.2	49	18.9	18.9	8.2	8.2	29.6	29.6	112.6	112.6	8.8		14.9		10		75				<0.2		3.3	
						3.3	0.2	51	18.9		8.2		29.6		112.6		8.8		15.0		9		76				<0.2		3.4	
					Bottom	5.6	0.2	17	18.8	18.8	8.2	8.2	30.1	30.1	110.7	110.6	8.6	8.6	14.4		12		76				<0.2		3.5	
						5.6	0.2	17	18.8		8.2		30.1		110.6		8.6		14.4		12		77				<0.2		3.7	
IM7	Fine	Moderate	07:16	8.0	Surface	1.0	0.1	33	19.3	19.3	8.1	8.1	26.1	26.1	110.0	110.0	8.7	8.6	10.6	11.0	8	9	72	74	821355	806851	<0.2	<0.2	3.8	3.6
						1.0	0.1	35	19.3		8.1		26.1		110.0		8.7		10.5		7		72				<0.2		3.8	
					Middle	4.0	0.2	58	19.0	19.0	8.2	8.2	28.5	28.5	108.2	108.1	8.5		11.0		10		74				<0.2		3.7	
						4.0	0.2	60	19.0		8.2		28.6		108.1		8.5		11.1		10		74				<0.2		2.8	
					Bottom	7.0	0.2	56	19.0	19.0	8.2	8.2	29.6	29.6	104.4	104.3	8.1	8.1	11.5		9		76				<0.2		3.7	
						7.0	0.2	58	19.0		8.2		29.6		104.3		8.1		11.5		10		76				<0.2		3.8	
IM8	Fine	Moderate	06:24	7.6	Surface	1.0	0.1	71	19.7	19.7	8.1	8.1	25.0	25.0	106.9	106.9	8.4	8.4	11.9	13.3	11	13	73	73	821715	807824	<0.2	<0.2	3.1	2.8
						1.0	0.1	76	19.7		8.1		25.0		106.9		8.4		11.9		10		73				<0.2		3.4	
					Middle	3.8	0.1	53	19.5	19.5	8.2	8.2	25.8	25.8	106.0	106.0	8.4		14.6		12		73				<0.2		2.6	
						3.8	0.1	55	19.5		8.2		25.8		106.0		8.4		14.6		14		73				<0.2		2.7	
					Bottom	6.6	0.2	68	19.6	19.6	8.1	8.1	26.3	26.3	106.2	106.2	8.3	8.3	13.5		15		74				<0.2		2.6	
						6.6	0.2	69	19.6		8.1		26.3		106.2		8.3		13.5		16		74				<0.2		2.5	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 13 March 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Fine	Moderate	06:16	6.8	Surface	1.0	0.1	63	19.7	19.7	8.2	8.2	24.1	24.1	107.5	107.5	8.5	8.5	8.9	11.9	7	10	73	74	822069	808788	<0.2	<0.2	3.4	3.0
						1.0	0.1	64	19.7		8.2		24.1		107.5		8.5		9.0		6		73				<0.2		3.4	
					Middle	3.4	0.1	338	19.6	19.6	8.2	8.2	25.7	25.7	106.9	106.9	8.4		11.2		10		73				<0.2		2.9	
						3.4	0.1	345	19.6		8.2		25.7		106.9		8.4		11.2		11		74				<0.2		3.1	
					Bottom	5.8	0.2	312	19.4	19.4	8.1	8.1	27.4	27.4	106.6	106.6	8.4	8.4	15.4		13		74				<0.2		2.4	
						5.8	0.2	320	19.4		8.1		27.4		106.6		8.4		15.4		14		75				<0.2		2.6	
IM10	Fine	Moderate	06:09	6.4	Surface	1.0	0.4	304	19.4	19.4	8.2	8.2	27.9	27.9	108.8	108.8	8.5	8.5	6.7	9.3	5	7	73	73	822264	809866	<0.2	<0.2	2.3	1.9
						1.0	0.4	304	19.4		8.2		27.9		108.8		8.5		6.7		4		73				<0.2		1.9	
					Middle	3.2	0.5	312	19.3	19.3	8.2	8.2	28.4	28.4	108.2	108.2	8.4		9.9		9		73				<0.2		1.8	
						3.2	0.5	321	19.3		8.2		28.4		108.2		8.4		9.9		7		73				<0.2		1.9	
					Bottom	5.4	0.4	314	19.2	19.2	8.2	8.2	28.9	28.9	106.9	106.9	8.3	8.3	11.4		9		74				<0.2		1.7	
						5.4	0.5	337	19.2		8.2		28.9		106.9		8.3		11.4		9		74				<0.2		2.0	
IM11	Fine	Moderate	05:56	7.4	Surface	1.0	0.4	294	19.4	19.4	8.2	8.2	28.1	28.1	109.5	109.5	8.5	8.5	6.2	8.5	5	9	73	73	821488	810558	<0.2	<0.2	1.5	1.2
						1.0	0.5	298	19.4		8.2		28.1		109.5		8.5		6.2		6		73				<0.2		1.5	
					Middle	3.7	0.4	297	19.1	19.1	8.2	8.2	29.3	29.3	109.2	109.2	8.5		9.0		9		73				<0.2		1.1	
						3.7	0.4	307	19.1		8.2		29.3		109.2		8.5		9.0		10		73				<0.2		1.0	
					Bottom	6.4	0.2	309	19.1	19.1	8.2	8.2	29.5	29.5	107.9	107.9	8.4	8.4	10.3		12		74				<0.2		1.2	
						6.4	0.2	321	19.1		8.2		29.5		107.9		8.4		10.3		12		74				<0.2		1.1	
IM12	Fine	Moderate	05:49	7.9	Surface	1.0	0.7	274	19.1	19.1	8.2	8.2	29.1	29.1	105.3	105.3	8.2	8.2	8.1	12.4	5	7	73	74	821156	811503	<0.2	<0.2	1.1	1.1
						1.0	0.7	286	19.1		8.2		29.1		105.3		8.2		8.1		7		73				<0.2		1.1	
					Middle	4.0	0.6	274	19.1	19.1	8.2	8.2	29.5	29.5	104.3	104.3	8.1		14.1		7		73				<0.2		1.1	
						4.0	0.6	274	19.1		8.2		29.5		104.3		8.1		14.1		6		74				<0.2		1.0	
					Bottom	6.9	0.5	276	19.1	19.1	8.1	8.1	29.7	29.7	105.0	105.0	8.2	8.2	15.1		8		74				<0.2		1.0	
						6.9	0.5	296	19.1		8.1		29.7		105.0		8.2		15.0		9		74				<0.2		1.0	
SR2	Fine	Moderate	05:24	3.9	Surface	1.0	0.1	39	18.8	18.8	8.1	8.1	29.6	29.6	105.7	105.8	8.3	8.3	5.9	5.7	7	8	72	73	821466	814191	<0.2	<0.2	1.0	1.0
						1.0	0.1	42	18.8		8.1		29.6		105.8		8.3		6.0		6		73				<0.2		1.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.9	0.2	26	18.8	18.8	8.1	8.1	29.7	29.7	106.6	106.6	8.3	8.3	5.4		10		73				<0.2		1.0	
						2.9	0.2	26	18.8		8.1		29.7		106.6		8.3		5.4		10		73				<0.2		1.0	
SR3	Fine	Moderate	06:30	8.5	Surface	1.0	0.3	10	19.7	19.7	8.1	8.1	24.7	24.7	103.6	103.6	8.2	8.2	12.9	14.5	8	10	-	-	822128	807571	-	-	-	-
						1.0	0.3	10	19.7		8.1		24.7		103.6		8.2		12.9		8		-				-		-	
					Middle	4.3	-	-	19.6	19.6	8.1	8.1	25.6	25.6	102.9	102.9	8.1		13.5		12		-				-		-	
						4.3	-	-	19.6		8.1		25.6		102.9		8.1		13.5		11		-				-		-	
					Bottom	7.5	0.1	81	19.4	19.4	8.1	8.1	27.3	27.3	102.3	102.3	8.0	8.0	17.1		12		-				-		-	
						7.5	0.1	83	19.4		8.1		27.3		102.3		8.0		17.1		11		-				-		-	
SR4A	Fine	Calm	05:53	8.3	Surface	1.0	0.2	247	19.1	19.1	8.1	8.1	30.2	30.2	103.9	103.9	8.0	8.0	6.4	6.6	5	6	-	-	817215	807798	-	-	-	-
						1.0	0.2	253	19.1		8.1		30.2		103.9		8.0		6.4		5		-				-		-	
					Middle	4.2	0.1	293	19.0	19.0	8.1	8.1	30.4	30.4	103.3	103.3	8.0		6.6		6		-				-		-	
						4.2	0.1	300	19.0		8.1		30.4		103.3		8.0		6.6		8		-				-		-	
					Bottom	7.3	0.0	300	18.9	18.9	8.1	8.1	30.4	30.4	102.4	102.3	7.9	7.9	6.7		7		-				-		-	
						7.3	0.0	305	18.9		8.1		30.4		102.3		7.9		6.7		6		-				-		-	
SR5A	Fine	Calm	05:37	4.6	Surface	1.0	0.2	292	19.1	19.1	8.1	8.1	29.9	29.9	99.1	99.1	7.7	7.7	7.7	7.7	5	6	-	-	816597	810668	-	-	-	-
						1.0	0.2	316	19.1		8.1		29.9		99.1		7.7		7.7		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.2	300	19.1	19.1	8.1	8.1	29.9	29.9	100.3	100.3	7.8	7.8	7.8		6		-				-		-	
						3.6	0.2	324	19.1		8.1		29.9		100.3		7.8		7.8		7		-				-		-	
SR6	Fine	Calm	05:15	3.7	Surface	1.0	0.2	240	19.1	19.1	8.0	8.0	29.1	29.1	101.6	101.5	7.9	7.9	7.6	8.1	6	7	-	-	817925	814633	-	-	-	-
						1.0	0.2	240	19.1		8.0		29.1		101.4		7.9		7.8		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.7	0.1	232	19.1	19.1	8.0	8.0	29.3	29.3	101.1	101.1	7.9	7.9	8.5		9		-				-		-	
						2.7	0.2	245	19.1		8.0		29.3		101.1		7.9		8.5		8		-				-		-	
SR7	Fine	Moderate	04:35	24.0	Surface	1.0	0.3	38	18.6	18.6	8.1	8.1	30.3	30.3	99.8	99.8	7.8	7.8	2.7	2.8	4	5	-	-	823618	823760	-	-	-	-
						1.0	0.3	40	18.6		8.1		30.3		99.8		7.8		2.6		4		-				-		-	
					Middle	12.0	0.3	43	18.4	18.4	8.1	8.1	30.5	30.5	97.9	97.9	7.7		2.8		4		-				-		-	
						12.0	0.3	46	18.4		8.1		30.5		97.9		7.7		2.7		6		-				-		-	
					Bottom	23.0	0.2	68	18.4	18.4	8.1	8.1	30.6	30.6	98.2	98.2	7.7	7.7	3.0		5		-				-		-	
						23.0	0.3	68	18.4		8.1		30.6		98.2		7.7		3.0		5		-				-		-	
SR8	Fine	Moderate	05:41	4.1	Surface	1.0	-	-	19.6	19.6	8.1	8.1	27.0	27.0	109.9	109.9	8.6	8.6	4.2	4.3	5	6	-	-	820246	811418	-	-	-	-
						1.0	-	-	19.6		8.1		27.0		109.9		8.6		4.2		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	-	-	19.6	19.6	8.1	8.1	27.4	27.3	109.5	109.6	8.5	8.6	4.3		7		-				-		-	
						3.1	-	-	19.6		8.1		27.3		109.6		8.6		4.3		6		-				-		-	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 15 March 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Calm	11:44	8.6	Surface	1.0	0.1	122	19.1	19.1	8.2	8.2	27.8	27.8	119.1	119.0	9.3	8.9	7.6	9.9	7	8	71	73	815630	804276	<0.2	<0.2	3.0	2.9
						1.0	0.1	124	19.1		8.2		27.8		118.9		9.3		7.7		8		72				<0.2		2.9	
					Middle	4.3	0.1	222	18.6	18.6	8.2	8.2	29.5	29.5	108.3	108.3	8.5		9.3		6		73				<0.2		2.8	
						4.3	0.1	229	18.6		8.2		29.5		108.2		8.5		9.2		8		73				<0.2		2.9	
					Bottom	7.6	0.2	227	18.6	18.6	8.2	8.2	29.8	29.8	106.5	106.5	8.4	8.4	12.8		9		75				<0.2		3.0	
						7.6	0.2	240	18.6		8.2		29.8		106.4		8.3		13.0		8		76				<0.2		3.0	
C2	Cloudy	Moderate	10:40	12.0	Surface	1.0	0.2	94	19.5	19.5	8.2	8.2	26.7	26.7	103.1	103.1	8.1	8.1	16.7	17.0	11	16	71	73	825685	806938	<0.2	<0.2	2.8	2.3
						1.0	0.3	96	19.5		8.2		26.7		103.1		8.1		16.7		11		71				<0.2		2.8	
					Middle	6.0	0.1	86	19.3	19.3	8.2	8.2	27.7	27.7	102.2	102.2	8.0		17.0		19		73				<0.2		2.4	
						6.0	0.1	91	19.3		8.2		27.7		102.2		8.0		17.0		18		73				<0.2		2.3	
					Bottom	11.0	0.1	307	19.1	19.1	8.2	8.2	29.3	29.3	101.9	101.9	7.9	7.9	17.4		18		74				<0.2		1.8	
						11.0	0.1	328	19.1		8.2		29.3		101.9		7.9		17.4		17		75				<0.2		1.8	
C3	Cloudy	Moderate	12:24	12.0	Surface	1.0	0.5	71	19.1	19.1	8.2	8.2	29.4	29.4	104.0	104.0	8.1	8.0	5.5	5.0	8	8	73	75	822086	817821	<0.2	<0.2	1.4	1.2
						1.0	0.5	72	19.1		8.2		29.4		104.0		8.1		5.5		7		73				<0.2		1.4	
					Middle	6.0	0.3	87	18.8	18.8	8.1	8.1	30.0	30.0	100.4	100.4	7.8		4.8		7		75				<0.2		1.2	
						6.0	0.3	90	18.8		8.1		30.0		100.4		7.8		4.8		9		75				<0.2		1.3	
					Bottom	11.0	0.2	90	18.6	18.6	8.1	8.1	30.3	30.3	101.1	101.1	7.9	7.9	4.7		7		76				<0.2		1.0	
						11.0	0.2	93	18.6		8.1		30.3		101.1		7.9		4.7		8		75				<0.2		0.9	
IM1	Cloudy	Calm	11:25	7.3	Surface	1.0	0.1	151	19.1	19.1	8.3	8.3	28.9	28.9	120.8	120.8	9.4	9.2	9.8	13.0	9	11	72	74	818327	806433	<0.2	<0.2	2.9	3.0
						1.0	0.1	162	19.1		8.3		28.9		120.7		9.4		9.8		9		72				<0.2		3.2	
					Middle	3.7	0.1	163	19.0	19.0	8.2	8.2	29.1	29.1	115.7	115.7	9.0		12.7		11		73				<0.2		2.8	
						3.7	0.1	175	19.0		8.2		29.1		115.6		9.0		13.0		11		73				<0.2		3.1	
					Bottom	6.3	0.1	122	19.0	19.0	8.2	8.2	29.1	29.1	113.4	113.4	8.9	8.9	16.3		12		75				<0.2		2.8	
						6.3	0.1	129	19.0		8.2		29.1		113.4		8.9		16.3		14		76				<0.2		3.0	
IM2	Cloudy	Calm	11:20	8.1	Surface	1.0	0.1	336	19.0	19.0	8.3	8.3	29.0	29.0	120.6	120.6	9.4	9.2	10.0	11.8	9	10	72	74	818876	806170	<0.2	<0.2	3.1	2.9
						1.0	0.1	309	19.0		8.3		29.0		120.5		9.4		10.0		8		73				<0.2		2.8	
					Middle	4.1	0.0	320	19.0	19.0	8.2	8.2	29.2	29.2	113.8	113.8	8.9		12.1		10		74				<0.2		3.1	
						4.1	0.0	334	19.0		8.2		29.2		113.7		8.9		12.2		10		74				<0.2		2.9	
					Bottom	7.1	0.1	121	19.0	19.0	8.2	8.2	29.2	29.2	110.5	110.4	8.6	8.6	13.1		13		75				<0.2		3.0	
						7.1	0.1	128	19.0		8.2		29.2		110.3		8.6		13.2		12		75				<0.2		2.7	
IM3	Cloudy	Calm	11:15	8.2	Surface	1.0	0.1	74	19.1	19.1	8.3	8.3	29.1	29.1	121.1	121.0	9.4	9.2	9.8	11.9	8	12	72	74	819409	806021	<0.2	<0.2	2.8	2.7
						1.0	0.1	80	19.1		8.3		29.1		120.8		9.4		9.8		10		73				<0.2		2.7	
					Middle	4.1	0.2	99	19.0	19.0	8.2	8.2	29.3	29.3	113.6	113.6	8.9		12.4		14		73				<0.2		2.6	
						4.1	0.2	102	19.0		8.2		29.3		113.5		8.9		12.5		13		74				<0.2		2.7	
					Bottom	7.2	0.2	58	19.0	19.0	8.2	8.2	29.3	29.3	111.6	111.6	8.7	8.7	13.5		12		75				<0.2		2.7	
						7.2	0.2	58	19.0		8.2		29.3		111.5		8.7		13.5		12		75				<0.2		2.8	
IM4	Cloudy	Calm	11:07	7.7	Surface	1.0	0.1	62	19.3	19.3	8.3	8.3	28.6	28.6	122.0	122.0	9.5	9.2	9.9	11.7	9	10	72	73	819573	805034	<0.2	<0.2	2.5	2.6
						1.0	0.1	64	19.3		8.3		28.6		122.0		9.5		10.0		10		72				<0.2		2.6	
					Middle	3.9	0.1	77	19.0	19.0	8.2	8.2	29.3	29.3	113.7	113.7	8.9		12.3		9		73				<0.2		2.5	
						3.9	0.1	79	19.0		8.2		29.3		113.7		8.9		12.3		10		73				<0.2		2.5	
					Bottom	6.7	0.0	70	18.9	18.9	8.2	8.2	29.3	29.3	111.5	111.5	8.7	8.7	12.8		12		75				<0.2		2.6	
						6.7	0.0	70	18.9		8.2		29.3		111.4		8.7		12.8		10		75				<0.2		2.7	
IM5	Cloudy	Calm	10:57	6.8	Surface	1.0	0.1	65	19.2	19.2	8.3	8.3	28.5	28.5	121.8	121.8	9.5	9.3	12.4	13.5	11	12	71	73	820588	804924	<0.2	<0.2	2.7	2.6
						1.0	0.1	65	19.2		8.3		28.5		121.7		9.5		12.4		10		72				<0.2		2.6	
					Middle	3.4	0.1	53	19.1	19.1	8.2	8.2	29.0	29.0	117.0	117.0	9.1		13.4		9		73				<0.2		2.7	
						3.4	0.1	58	19.1		8.2		29.0		117.0		9.1		13.5		10		73				<0.2		2.6	
					Bottom	5.8	0.1	6	19.1	19.1	8.2	8.2	29.1	29.1	114.4	114.4	8.9	8.9	14.7		14		75				<0.2		2.5	
						5.8	0.1	6	19.1		8.2		29.1		114.4		8.9		14.7		15		76				<0.2		2.6	
IM6	Cloudy	Calm	10:48	6.9	Surface	1.0	0.2	300	19.3	19.3	8.3	8.3	28.6	28.6	122.3	122.3	9.5	9.5	12.4	13.0	15	16	72	74	821072	805835	<0.2	<0.2	2.6	2.7
						1.0	0.2	306	19.3		8.3		28.6		122.3		9.5		12.6		15		72				<0.2		2.8	
					Middle	3.5	0.1	297	19.2	19.2	8.3	8.3	28.8	28.8	121.1	121.1	9.4		13.3		14		73				<0.2		2.7	
						3.5	0.1	314	19.2		8.3		28.8		121.0		9.4		13.3		14		73				<0.2		2.8	
					Bottom	5.9	0.0	31	19.3	19.3	8.3	8.3	28.6	28.6	119.9	119.9	9.3	9.3	13.2		17		75				<0.2		2.7	
						5.9	0.0	32	19.3		8.3		28.6		119.8		9.3		13.2		18		76				<0.2		2.7	
IM7	Cloudy	Calm	10:38	8.4	Surface	1.0	0.2	63	19.5	19.5	8.3	8.3	28.3	28.3	120.0	120.0	9.3	9.3	12.5	14.6	17	17	72	74	821368	806833	<0.2	<0.2	2.5	2.5
						1.0	0.2	66	19.5		8.3		28.3		119.9		9.3		12.5		17		72				<0.2		2.4	
					Middle	4.2	0.2	47	19.4	19.4	8.3	8.3	28.4	28.4	118.2	118.2	9.2		13.7		15		73				<0.2		2.5	
						4.2	0.2	50	19.4		8.3		28.4		118.2		9.2		13.8		15		74				<0.2		2.4	
					Bottom	7.4	0.2	36	19.4	19.4	8.2	8.2	28.4	28.4	114.2	114.2	8.9	8.9	17.5		17		75				<0.2		2.4	
						7.4	0.2	38	19.4		8.2		28.4		114.1		8.9		17.5		18		75				<0.2		2.5	
IM8	Cloudy	Moderate	11:03	7.3	Surface	1.0	0.3	92	19.3	19.3	8.3	8.3	28.5	28.5	117.5	117.5	9.2	9.1	11.9	12.8	15	15	72	73	821696	807842	<0.2	<0.2	1.6	1.7
						1.0	0.4	94	19.3		8.3		28.5		117.5		9.2		11.9		15		71				<0.2		1.7	
					Middle	3.7	0.3	92	19.2	19.2	8.3	8.3	28.7	28.7	115.7	115.7	9.0		12.9		16		73				<0.2		1.7	
						3.7	0.3	93	19.2		8.3		28.7		115.7		9.0		12.9		15		73				<0.2		1.7	
					Bottom	6.3	0.2	78	19.2	19.2	8.3	8.3	28.8	28.8	113.5	113.5	8.8	8.8	13.6		16		75				<0.2		1.7	
						6.3	0.2	78	19.2		8.3		28.8		113.5		8.8		13.6		15		75				<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 15 March 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	11:11	7.1	Surface	1.0	0.4	78	19.6	19.6	8.3	8.3	27.4	27.4	118.5	118.5	9.2	9.1	9.8	13.1	9	11	72	73	822094	808801	<0.2	<0.2	2.8	2.2
						1.0	0.4	84	19.6		8.3		27.4		118.5		9.2		9.8		8		72				<0.2		2.7	
					Middle	3.6	0.4	71	19.4	19.4	8.3	8.3	28.3	28.3	114.5	114.5	8.9		14.8		11		73				<0.2		2.1	
						3.6	0.4	77	19.4		8.3		28.3		114.5		8.9		14.8		12		73				<0.2		2.0	
					Bottom	6.1	0.3	70	19.2	19.2	8.3	8.3	28.7	28.7	111.9	111.9	8.7	8.7	14.7		12		74				<0.2		1.9	
						6.1	0.3	72	19.2		8.3		28.7		111.9		8.7		14.7		11		75				<0.2		1.9	
IM10	Cloudy	Moderate	11:18	8.0	Surface	1.0	0.3	103	19.5	19.5	8.3	8.3	27.6	27.6	112.0	112.0	8.7	8.7	13.8	16.3	8	13	72	73	822225	809840	<0.2	<0.2	2.3	2.0
						1.0	0.4	112	19.5		8.3		27.6		112.0		8.7		13.8		9		71				<0.2		2.3	
					Middle	4.0	0.3	102	19.3	19.3	8.4	8.4	28.5	28.5	110.5	110.5	8.6		17.2		12		73				<0.2		2.0	
						4.0	0.3	105	19.3		8.4		28.5		110.5		8.6		17.2		12		73				<0.2		2.0	
					Bottom	7.0	0.2	108	19.3	19.3	8.4	8.4	28.5	28.5	107.8	107.8	8.4	8.4	17.8		19		75				<0.2		1.8	
						7.0	0.2	117	19.3		8.4		28.5		107.7		8.4		17.9		20		75				<0.2		1.7	
IM11	Cloudy	Moderate	11:31	6.5	Surface	1.0	0.3	102	19.4	19.4	8.4	8.4	28.1	28.1	112.1	112.1	8.7	8.7	17.2	19.3	10	17	72	73	821519	810537	<0.2	<0.2	2.2	2.1
						1.0	0.3	108	19.4		8.4		28.1		112.1		8.7		17.2		10		72				<0.2		2.2	
					Middle	3.3	0.2	93	19.4	19.4	8.4	8.4	28.3	28.3	111.7	111.7	8.7		21.4		15		73				<0.2		2.1	
						3.3	0.3	101	19.4		8.4		28.3		111.7		8.7		21.4		14		73				<0.2		2.2	
					Bottom	5.5	0.2	108	19.4	19.4	8.4	8.4	28.3	28.3	111.4	111.4	8.7	8.7	19.2		25		75				<0.2		1.8	
						5.5	0.2	108	19.4		8.4		28.3		111.4		8.7		19.2		25		75				<0.2		1.8	
IM12	Cloudy	Moderate	11:39	8.0	Surface	1.0	0.4	90	19.6	19.6	8.3	8.3	27.6	27.6	110.4	110.4	8.6	8.5	10.3	9.2	11	10	72	74	821164	811505	<0.2	<0.2	2.2	2.1
						1.0	0.4	94	19.6		8.3		27.6		110.4		8.6		10.3		10		73				<0.2		2.2	
					Middle	4.0	0.3	100	19.4	19.4	8.2	8.2	28.5	28.5	106.1	106.1	8.3		8.9		10		74				<0.2		1.9	
						4.0	0.4	101	19.4		8.2		28.5		106.1		8.3		8.9		10		74				<0.2		2.0	
					Bottom	7.0	0.2	105	19.3	19.3	8.2	8.2	29.0	29.0	106.0	106.0	8.2	8.2	8.3		9		75				<0.2		2.0	
						7.0	0.2	106	19.3		8.2		29.0		106.0		8.2		8.3		10		75				<0.2		2.1	
SR2	Cloudy	Moderate	12:03	4.2	Surface	1.0	0.2	104	19.4	19.4	8.2	8.2	29.0	29.0	105.8	105.8	8.2	8.2	10.4	11.2	8	9	73	74	821492	814192	<0.2	<0.2	1.7	1.7
						1.0	0.2	111	19.4		8.2		29.0		105.8		8.2		10.4		8		73				<0.2		1.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.2	105	19.3	19.3	8.2	8.2	29.0	29.0	106.0	106.0	8.2	8.2	11.9		9		75				<0.2		1.7	
						3.2	0.2	115	19.3		8.2		29.0		106.0		8.2		11.9		9		75				<0.2		1.6	
SR3	Cloudy	Moderate	10:59	8.6	Surface	1.0	0.4	88	19.5	19.5	8.2	8.2	27.0	27.0	112.7	112.7	8.8	8.8	14.4	15.6	10	14	-	-	822134	807548	-	-	-	-
						1.0	0.4	96	19.5		8.2		27.0		112.7		8.8		14.4		10		-				-		-	
					Middle	4.3	0.4	60	19.3	19.3	8.3	8.3	28.3	28.3	112.9	112.9	8.8		15.0		16		-				-		-	
						4.3	0.4	65	19.3		8.3		28.3		112.9		8.8		15.0		15		-				-		-	
					Bottom	7.6	0.3	58	19.3	19.3	8.3	8.3	28.5	28.5	109.3	109.3	8.5	8.5	17.4		17		-				-		-	
						7.6	0.3	63	19.3		8.3		28.5		109.3		8.5		17.4		16		-				-		-	
SR4A	Cloudy	Calm	12:05	8.1	Surface	1.0	0.4	90	19.3	19.3	8.3	8.3	28.6	28.6	118.3	118.2	9.2	9.1	9.9	11.2	9	10	-	-	817192	807839	-	-	-	-
						1.0	0.4	98	19.3		8.3		28.6		118.1		9.2		10.2		10		-				-		-	
					Middle	4.1	0.3	90	19.3	19.3	8.3	8.3	28.7	28.7	115.3	115.3	9.0		11.5		12		-				-		-	
						4.1	0.3	95	19.3		8.3		28.7		115.2		9.0		11.5		11		-				-		-	
					Bottom	7.1	0.3	87	19.2	19.2	8.3	8.3	28.7	28.7	113.5	113.5	8.8	8.8	12.2		10		-				-		-	
						7.1	0.3	91	19.2		8.3		28.7		113.5		8.8		12.1		10		-				-		-	
SR5A	Cloudy	Calm	12:20	4.3	Surface	1.0	0.1	72	19.9	19.9	8.2	8.2	29.1	29.1	106.6	106.5	8.2	8.2	9.3	9.4	10	9	-	-	816571	810684	-	-	-	-
						1.0	0.1	73	19.9		8.2		29.1		106.3		8.2		9.5		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.1	88	19.9	19.9	8.2	8.2	29.1	29.1	105.3	105.1	8.1	8.1	9.4		9		-				-		-	
						3.3	0.1	93	19.9		8.2		29.1		104.9		8.1		9.5		9		-				-		-	
SR6	Cloudy	Calm	12:43	4.4	Surface	1.0	0.1	57	19.7	19.7	8.2	8.2	28.7	28.7	107.6	107.2	8.3	8.3	9.1	11.0	8	9	-	-	817913	814691	-	-	-	-
						1.0	0.1	57	19.7		8.2		28.7		106.7		8.2		9.3		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.1	67	19.7	19.7	8.1	8.1	29.1	29.1	101.6	101.6	7.8	7.8	12.8		9		-				-		-	
						3.4	0.1	71	19.7		8.1		29.1		101.6		7.8		12.8		11		-				-		-	
SR7	Cloudy	Moderate	12:52	16.6	Surface	1.0	0.4	71	18.8	18.8	8.1	8.1	30.1	30.1	99.6	99.6	7.8	7.8	4.6	4.7	6	6	-	-	823620	823712	-	-	-	-
						1.0	0.4	75	18.8		8.1		30.1		99.6		7.8		4.6		5		-				-		-	
					Middle	8.3	0.3	57	18.7	18.7	8.1	8.1	30.1	30.1	99.3	99.3	7.7		4.4		6		-				-		-	
						8.3	0.3	57	18.7		8.1		30.1		99.3		7.7		4.4		4		-				-		-	
					Bottom	15.6	0.2	42	18.7	18.7	8.1	8.1	30.2	30.2	99.0	99.0	7.7	7.7	5.0		7		-				-		-	
						15.6	0.2	43	18.7		8.1		30.2		99.0		7.7		5.0		6		-				-		-	
SR8	Cloudy	Moderate	11:48	4.0	Surface	1.0	-	-	19.6	19.6	8.2	8.2	28.3	28.3	106.5	106.5	8.3	8.3	9.6	9.6	12	11	-	-	820246	811418	-	-	-	-
						1.0	-	-	19.6		8.2		28.3		106.5		8.3		9.6		12		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	-	-	19.7	19.7	8.2	8.2	28.3	28.3	103.4	103.4	8.0	8.0	9.6		10		-				-		-	
						3.0	-	-	19.7		8.2		28.3		103.4		8.0		9.6		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 15 March 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C) Value	Water Temperature (°C) Average	pH Value	pH Average	Salinity (ppt) Value	Salinity (ppt) Average	DO Saturation (%) Value	DO Saturation (%) Average	Dissolved Oxygen Value	Dissolved Oxygen DA	Turbidity(NTU) Value	Turbidity(NTU) DA	Suspended Solids (mg/L) Value	Suspended Solids (mg/L) DA	Total Alkalinity (ppm) Value	Total Alkalinity (ppm) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L) Value	Chromium (µg/L) DA	Nickel (µg/L) Value	Nickel (µg/L) DA
C1	Cloudy	Calm	07:15	8.2	Surface	1.0	0.5	27	19.0	19.0	8.2	8.2	29.1	29.1	115.2	115.2	9.0	9.0	17.3	19.1	13	14	72	73	815642	804225	<0.2	<0.2	1.8	1.7
						1.0	0.5	29	19.0		8.2		29.1		115.2		9.0		17.2		14		72				<0.2		1.7	
					Middle	4.1	0.5	22	19.0	19.0	8.2	8.2	29.2	29.2	113.5	113.5	8.9		18.5		13		73				<0.2		1.7	
						4.1	0.5	23	19.0		8.2		29.2		113.4		8.9		18.6		14		73				<0.2		1.6	
					Bottom	7.2	0.5	20	18.9	18.9	8.2	8.2	29.4	29.4	109.9	109.9	8.6	8.6	21.7		15		74				<0.2		1.7	
						7.2	0.5	21	18.9		8.2		29.4		109.8		8.6		21.5		14		75				<0.2		1.5	
C2	Cloudy	Moderate	08:11	11.8	Surface	1.0	0.3	8	19.7	19.7	8.1	8.1	24.7	24.7	102.2	102.2	8.1	8.1	14.5	17.5	11	12	72	73	825667	806940	<0.2	<0.2	3.5	2.9
						1.0	0.3	8	19.7		8.1		24.7		102.2		8.1		14.7		12		71				<0.2		3.7	
					Middle	5.9	0.4	17	19.3	19.3	8.1	8.1	27.3	27.3	101.6	101.6	8.0		18.8		10		73				<0.2		2.8	
						5.9	0.4	18	19.3		8.1		27.3		101.6		8.0		18.8		10		73				<0.2		2.9	
					Bottom	10.8	0.3	335	19.3	19.3	8.1	8.1	28.9	28.9	100.8	100.8	7.8	7.8	19.2		14		74				<0.2		2.2	
						10.8	0.3	343	19.3		8.1		28.9		100.8		7.8		19.2		14		75				<0.2		2.1	
C3	Cloudy	Moderate	06:25	11.2	Surface	1.0	0.7	268	19.0	19.0	8.2	8.2	29.4	29.4	102.0	102.0	8.0	8.0	7.0	7.8	6	7	73	74	822080	817822	<0.2	<0.2	1.5	1.3
						1.0	0.7	274	19.0		8.2		29.4		102.0		8.0		7.0		5		73				<0.2		1.3	
					Middle	5.6	0.6	265	18.9	18.9	8.1	8.1	29.8	29.8	101.4	101.4	7.9		8.3		5		74				<0.2		1.3	
						5.6	0.6	272	18.9		8.1		29.8		101.4		7.9		8.3		7		74				<0.2		1.4	
					Bottom	10.2	0.4	263	18.9	18.9	8.1	8.1	29.8	29.8	101.8	101.9	7.9	7.9	8.2		8		76				<0.2		1.3	
						10.2	0.4	279	18.9		8.1		29.8		102.0		7.9		7.9		10		76				<0.2		1.2	
IM1	Cloudy	Calm	07:31	7.0	Surface	1.0	0.4	11	19.4	19.4	8.3	8.3	28.0	28.0	113.7	113.7	8.9	8.8	11.8	15.3	10	12	71	73	818362	806474	<0.2	<0.2	2.0	2.0
						1.0	0.4	11	19.4		8.3		28.0		113.6		8.9		12.0		11		72				<0.2		2.0	
					Middle	3.5	0.4	5	19.1	19.1	8.2	8.2	29.0	29.0	111.6	111.6	8.7		16.5		13		73				<0.2		1.9	
						3.5	0.4	5	19.1		8.2		29.0		111.5		8.7		16.8		12		73				<0.2		2.1	
					Bottom	6.0	0.3	349	19.1	19.1	8.2	8.2	29.0	29.0	108.7	108.7	8.5	8.5	17.3		13		75				<0.2		2.1	
						6.0	0.3	321	19.1		8.2		29.0		108.6		8.5		17.4		14		75				<0.2		2.0	
IM2	Cloudy	Calm	07:36	8.1	Surface	1.0	0.4	28	19.4	19.4	8.2	8.2	27.8	27.8	116.4	116.5	9.1	9.1	10.7	14.9	13	12	71	73	818874	806219	<0.2	<0.2	2.0	1.9
						1.0	0.4	29	19.4		8.2		27.8		116.5		9.1		10.8		12		71				<0.2		1.9	
					Middle	4.1	0.4	24	19.2	19.2	8.2	8.2	28.8	28.8	116.8	116.8	9.1		16.5		11		73				<0.2		1.9	
						4.1	0.5	25	19.2		8.2		28.8		116.8		9.1		16.4		12		73				<0.2		2.0	
					Bottom	7.1	0.4	26	19.2	19.2	8.2	8.2	28.8	28.8	113.1	113.1	8.8	8.8	17.7		13		75				<0.2		1.8	
						7.1	0.4	26	19.2		8.2		28.8		113.0		8.8		17.5		12		75				<0.2		2.0	
IM3	Cloudy	Calm	07:41	8.0	Surface	1.0	0.5	46	19.5	19.5	8.2	8.2	27.4	27.4	115.0	115.2	9.0	9.1	9.6	15.5	8	10	71	73	819438	806003	<0.2	<0.2	2.0	2.0
						1.0	0.5	48	19.5		8.2		27.4		115.3		9.0		9.7		7		72				<0.2		1.9	
					Middle	4.0	0.5	49	19.4	19.4	8.2	8.2	28.4	28.4	118.3	118.3	9.2		17.1		11		73				<0.2		2.0	
						4.0	0.5	51	19.4		8.2		28.4		118.3		9.2		17.1		10		73				<0.2		2.0	
					Bottom	7.0	0.4	40	19.3	19.3	8.2	8.2	28.6	28.6	113.0	113.0	8.8	8.8	19.8		12		74				<0.2		2.0	
						7.0	0.4	43	19.3		8.2		28.6		112.9		8.8		19.8		12		75				<0.2		2.0	
IM4	Cloudy	Calm	07:49	7.4	Surface	1.0	0.4	46	19.5	19.5	8.2	8.2	27.5	27.5	114.4	114.5	8.9	9.0	10.0	14.8	9	8	72	73	819554	805009	<0.2	<0.2	2.8	2.7
						1.0	0.5	46	19.5		8.2		27.5		114.6		9.0		10.0		8		72				<0.2		2.8	
					Middle	3.7	0.4	42	19.4	19.4	8.2	8.2	28.3	28.3	117.2	117.2	9.1		16.8		7		73				<0.2		2.5	
						3.7	0.5	43	19.4		8.2		28.3		117.2		9.1		16.8		8		73				<0.2		2.6	
					Bottom	6.4	0.4	37	19.4	19.4	8.2	8.2	28.3	28.3	115.7	115.7	9.0	9.0	17.6		8		75				<0.2		2.7	
						6.4	0.4	39	19.4		8.2		28.3		115.7		9.0		17.6		8		75				<0.2		2.6	
IM5	Cloudy	Calm	07:58	6.6	Surface	1.0	0.5	8	19.5	19.5	8.2	8.2	27.6	27.6	112.9	112.9	8.8	8.8	14.7	18.7	15	16	71	73	820577	804898	<0.2	<0.2	2.4	2.4
						1.0	0.5	8	19.5		8.2		27.6		112.9		8.8		14.7		15		71				<0.2		2.4	
					Middle	3.3	0.5	10	19.4	19.4	8.2	8.2	27.8	27.8	112.3	112.3	8.8		20.2		15		73				<0.2		2.4	
						3.3	0.5	10	19.4		8.2		27.8		112.3		8.8		20.2		16		74				<0.2		2.5	
					Bottom	5.6	0.4	2	19.4	19.4	8.2	8.2	27.8	27.8	110.0	110.0	8.6	8.6	21.2		16		75				<0.2		2.5	
						5.6	0.5	2	19.4		8.2		27.8		109.9		8.6		21.2		16		75				<0.2		2.3	
IM6	Cloudy	Calm	08:06	6.7	Surface	1.0	0.3	34	19.4	19.4	8.2	8.2	28.1	28.0	113.5	113.5	8.9	8.8	14.7	15.6	13	12	71	73	821058	805839	<0.2	<0.2	2.6	2.7
						1.0	0.4	34	19.4		8.2		28.0		113.5		8.8		14.8		13		72				<0.2		2.8	
					Middle	3.4	0.3	28	19.4	19.4	8.2	8.2	28.1	28.1	112.3	112.3	8.8		15.7		12		73				<0.2		2.8	
						3.4	0.3	29	19.4		8.2		28.1		112.3		8.8		15.8		13		73				<0.2		2.8	
					Bottom	5.7	0.2	33	19.4	19.4	8.2	8.2	28.2	28.2	110.2	110.2	8.6	8.6	16.4		11		75				<0.2		2.6	
						5.7	0.2	35	19.4		8.2		28.2		110.2		8.6		16.3		11		75				<0.2		2.8	
IM7	Cloudy	Calm	08:14	8.2	Surface	1.0	0.3	65	19.4	19.4	8.2	8.2	27.2	27.2	111.8	111.8	8.8	8.8	11.2	13.8	10	10	72	74	821377	806857	<0.2	<0.2	2.6	2.6
						1.0	0.3	69	19.4		8.2		27.2		111.8		8.8		11.2		9		72				<0.2		2.5	
					Middle	4.1	0.3	51	19.3	19.3	8.3	8.3	28.3	28.3	112.5	112.5	8.8		15.3		8		73				<0.2		2.7	
						4.1	0.3	54	19.3		8.3		28.3		112.4		8.8		15.2		10		73				<0.2		2.6	
					Bottom	7.2	0.3	47	19.3	19.3	8.3	8.3	28.4	28.4	111.2	111.2	8.7	8.7	15.0		10		76				<0.2		2.6	
						7.2	0.3	50	19.3		8.3		28.4		111.2		8.7		14.8		10		75				<0.2		2.6	
IM8	Cloudy	Moderate	07:46	7.9	Surface	1.0	0.1	65	19.5	19.5	8.3	8.3	25.9	25.9	108.1	108.1	8.5	8.5	15.5	18.9	7	8	71	73	821693	807810	<0.2	<0.2	3.1	2.9
						1.0	0.1	71	19.5		8.3		25.9		108.1		8.5		15.5		6		72				<0.2		3.1	
					Middle	4.0	0.1	34	19.4	19.4	8.3	8.3	27.1	27.1	108.4	108.4	8.5		18.5		9		73				<0.2		2.6	
						4.0	0.1	36	19.4		8.3		27.1		108.4		8.5		18.5		8		73				<0.2		2.7	
					Bottom	6.9	0.4	27	19.3	19.3	8.3	8.3	28.4	28.4	106.6	106.6	8.3	8.3	22.8		8		74				<0.2		2.9	
						6.9	0.4	27	19.3		8.3		28.4		106.6		8.3		22.8		9		75				<0.2		2.8	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 15 March 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	07:36	6.9	Surface	1.0	0.1	55	19.6	19.6	8.2	8.2	25.9	25.9	102.8	102.8	8.1	8.1	12.0	13.4	9	11	72	73	822084	808839	<0.2	<0.2	2.9	2.6
						1.0	0.1	55	19.6		8.2		25.9		102.8		8.1		12.0		7		73				<0.2		2.8	
					Middle	3.5	0.1	355	19.5	19.5	8.2	8.2	26.4	26.4	102.8	102.8	8.1		13.0		10		73				<0.2		2.7	
						3.5	0.1	327	19.5		8.2		26.4		102.8		8.1		13.0		8		72				<0.2		2.6	
					Bottom	5.9	0.1	321	19.5	19.5	8.2	8.2	27.0	27.0	101.8	101.8	8.0	8.0	15.2		14		75				<0.2		2.4	
						5.9	0.1	331	19.5		8.2		27.0		101.8		8.0		15.2		15		74				<0.2		2.3	
IM10	Cloudy	Moderate	07:30	7.6	Surface	1.0	0.4	321	19.5	19.5	8.2	8.2	27.6	27.6	109.6	109.6	8.6	8.6	11.2	17.3	4	10	72	73	822241	809818	<0.2	<0.2	2.1	1.9
						1.0	0.4	335	19.5		8.2		27.6		109.6		8.6		11.2		5		72				<0.2		2.0	
					Middle	3.8	0.4	331	19.4	19.4	8.3	8.3	28.4	28.4	110.1	110.1	8.6		20.6		7		73				<0.2		2.1	
						3.8	0.4	352	19.4		8.3		28.4		110.1		8.6		20.6		6		73				<0.2		2.0	
					Bottom	6.6	0.3	325	19.4	19.4	8.3	8.3	28.4	28.4	109.1	109.1	8.5	8.5	20.1		18		75				<0.2		1.6	
						6.6	0.4	336	19.4		8.3		28.4		109.1		8.5		20.1		17		75				<0.2		1.8	
IM11	Cloudy	Moderate	07:17	7.5	Surface	1.0	0.3	288	19.4	19.4	8.2	8.2	28.3	28.3	108.7	108.7	8.5	8.4	15.3	18.8	5	14	71	73	821499	810520	<0.2	<0.2	2.2	1.8
						1.0	0.4	300	19.4		8.2		28.3		108.7		8.5		15.3		5		72				<0.2		2.0	
					Middle	3.8	0.4	292	19.4	19.4	8.2	8.2	28.6	28.6	107.4	107.4	8.3		19.2		14		73				<0.2		1.8	
						3.8	0.4	294	19.4		8.2		28.6		107.4		8.3		19.2		13		74				<0.2		1.8	
					Bottom	6.5	0.3	301	19.4	19.4	8.2	8.2	28.7	28.7	104.8	104.8	8.1	8.1	21.8		25		74				<0.2		1.6	
						6.5	0.3	322	19.4		8.2		28.7		104.8		8.1		21.8		24		75				<0.2		1.6	
IM12	Cloudy	Moderate	07:10	7.4	Surface	1.0	0.5	282	19.3	19.3	8.2	8.2	28.9	28.9	109.3	109.3	8.5	8.4	14.3	15.0	11	13	73	74	821137	811515	<0.2	<0.2	1.7	1.6
						1.0	0.5	307	19.3		8.2		28.9		109.3		8.5		14.3		11		73				<0.2		1.6	
					Middle	3.7	0.4	282	19.3	19.3	8.2	8.2	28.9	28.9	107.3	107.3	8.3		15.5		12		74				<0.2		1.6	
						3.7	0.5	300	19.3		8.2		28.9		107.3		8.3		15.5		13		74				<0.2		1.6	
					Bottom	6.4	0.3	285	19.3	19.3	8.2	8.2	28.9	28.9	104.7	104.7	8.1	8.1	15.3		16		75				<0.2		1.5	
						6.4	0.3	286	19.3		8.2		28.9		104.7		8.1		15.3		15		75				<0.2		1.6	
SR2	Cloudy	Moderate	06:45	4.0	Surface	1.0	0.3	303	19.3	19.3	8.2	8.2	28.7	28.7	109.7	109.7	8.5	8.5	10.8	10.0	9	10	73	74	821451	814178	<0.2	<0.2	1.7	1.7
						1.0	0.3	327	19.3		8.2		28.7		109.7		8.5		10.8		8		73				<0.2		1.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	0.2	300	19.3	19.3	8.2	8.2	28.8	28.8	105.7	105.7	8.2	8.2	9.1		12		74				<0.2		1.7	
						3.0	0.2	317	19.3		8.2		28.8		105.7		8.2		9.1		10		74				<0.2		1.6	
SR3	Cloudy	Moderate	07:52	8.7	Surface	1.0	0.2	27	19.7	19.7	8.1	8.1	25.2	25.2	104.9	104.9	8.3	8.4	13.0	18.1	7	9	-	-	822169	807597	-	-	-	-
						1.0	0.2	28	19.7		8.1		25.2		104.9		8.3		13.0		6		-				-		-	
					Middle	4.4	0.5	18	19.5	19.5	8.2	8.2	26.9	26.9	107.6	107.6	8.4		18.8		7		-				-		-	
						4.4	0.5	18	19.5		8.2		26.9		107.6		8.4		18.8		8		-				-		-	
					Bottom	7.7	0.4	21	19.3	19.3	8.3	8.3	28.5	28.5	105.8	105.8	8.2	8.2	22.6		14		-				-		-	
						7.7	0.5	21	19.3		8.3		28.5		105.8		8.2		22.6		13		-				-		-	
SR4A	Cloudy	Calm	06:53	8.5	Surface	1.0	0.2	271	19.7	19.7	8.1	8.1	29.1	29.1	107.2	107.2	8.3	8.3	9.9	10.3	7	8	-	-	817204	807827	-	-	-	-
						1.0	0.2	272	19.7		8.1		29.1		107.2		8.3		9.9		8		-				-		-	
					Middle	4.3	0.1	307	19.7	19.7	8.1	8.1	29.1	29.1	106.4	106.4	8.2		10.5		9		-				-		-	
						4.3	0.2	318	19.7		8.1		29.1		106.4		8.2		10.6		8		-				-		-	
					Bottom	7.5	0.1	310	19.7	19.7	8.1	8.1	29.1	29.1	105.5	105.5	8.1	8.1	10.4		8		-				-		-	
						7.5	0.1	340	19.7		8.1		29.1		105.5		8.1		10.5		9		-				-		-	
SR5A	Cloudy	Calm	06:37	4.5	Surface	1.0	0.2	295	19.6	19.6	8.1	8.1	29.1	29.1	102.4	102.4	7.9	7.9	9.6	9.6	8	9	-	-	816591	810696	-	-	-	-
						1.0	0.2	315	19.6		8.1		29.1		102.4		7.9		9.6		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.1	295	19.6	19.6	8.1	8.1	29.1	29.1	101.8	101.8	7.9	7.9	9.6		10		-				-		-	
						3.5	0.2	314	19.6		8.1		29.1		101.8		7.9		9.6		8		-				-		-	
SR6	Cloudy	Calm	06:14	3.8	Surface	1.0	0.2	240	19.4	19.4	8.1	8.1	28.9	28.9	102.2	102.2	7.9	7.9	11.3	11.6	9	10	-	-	817906	814689	-	-	-	-
						1.0	0.2	263	19.4		8.1		28.9		102.1		7.9		11.3		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	0.2	234	19.4	19.4	8.1	8.1	28.9	28.9	100.6	100.6	7.8	7.8	11.9		10		-				-		-	
						2.8	0.2	256	19.4		8.1		28.9		100.5		7.8		12.0		12		-				-		-	
SR7	Cloudy	Moderate	05:55	16.5	Surface	1.0	0.1	52	19.0	19.0	8.2	8.2	29.5	29.5	101.7	101.7	7.9	7.9	6.9	11.7	5	5	-	-	823613	823731	-	-	-	-
						1.0	0.1	53	19.0		8.2		29.5		101.7		7.9		6.9		6		-				-		-	
					Middle	8.3	0.2	79	18.9	18.9	8.1	8.1	29.9	29.9	100.1	100.1	7.8		14.0		4		-				-		-	
						8.3	0.2	83	18.9		8.1		29.9		100.1		7.8		14.0		5		-				-		-	
					Bottom	15.5	0.1	64	18.8	18.8	8.1	8.1	29.9	29.9	99.6	99.6	7.8	7.8	14.1		5		-				-		-	
						15.5	0.1	65	18.8		8.1		29.9		99.6		7.8		14.1		5		-				-		-	
SR8	Cloudy	Moderate	07:00	4.0	Surface	1.0	-	-	19.5	19.5	8.2	8.2	27.6	27.6	103.7	103.7	8.1	8.1	10.3	11.1	4	7	-	-	820246	811418	-	-	-	-
						1.0	-	-	19.5		8.2		27.6		103.7		8.1		10.3		3		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	-	-	19.4	19.4	8.2	8.2	27.8	27.8	101.1	101.1	7.9	7.9	11.9		11		-				-		-	
						3.0	-	-	19.4		8.2		27.8		101.1		7.9		11.9		10		-				-		-	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 17 March 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	12:39	8.4	Surface	1.0	0.2	207	18.8	18.8	8.2	8.2	30.0	30.0	110.8	110.8	8.6	8.5	7.8	8.7	10	12	73	75	815598	804251	<0.2	<0.2	1.7	1.6
						1.0	0.3	221	18.8		8.2		30.0		110.8		8.6		7.8		9		73				<0.2		1.7	
					Middle	4.2	0.2	189	18.6	18.6	8.2	8.2	30.2	30.2	108.1	108.1	8.4		8.7		11		75				<0.2		1.7	
						4.2	0.2	207	18.6		8.2		30.2		108.0		8.4		8.7		10		75				<0.2		1.6	
					Bottom	7.4	0.1	233	18.4	18.4	8.2	8.2	30.5	30.5	105.3	105.3	8.2	8.2	9.6		14		77				<0.2		1.5	
						7.4	0.1	236	18.4		8.2		30.5		105.2		8.2		9.5		15		77				<0.2		1.6	
C2	Cloudy	Rough	11:38	11.8	Surface	1.0	0.2	290	20.0	20.0	8.1	8.1	26.4	26.4	97.5	97.5	7.6	7.7	20.4	22.7	15	18	71	73	825656	806918	<0.2	<0.2	2.2	2.3
						1.0	0.2	313	20.0		8.1		26.4		97.5		7.6		20.4		16		71				<0.2		2.3	
					Middle	5.9	0.0	99	19.9	19.9	8.1	8.1	26.5	26.5	98.9	98.9	7.7		22.8		17		73				<0.2		2.4	
						5.9	0.0	106	19.9		8.1		26.5		98.9		7.7		22.8		18		73				<0.2		2.3	
					Bottom	10.8	0.0	207	19.7	19.7	8.1	8.1	28.1	28.1	100.1	100.1	7.8	7.8	24.8		22		75				<0.2		2.3	
						10.8	0.0	227	19.7		8.1		28.1		100.1		7.8		24.8		21		75				<0.2		2.3	
C3	Cloudy	Moderate	13:55	11.5	Surface	1.0	0.4	37	19.9	19.9	8.2	8.2	28.5	28.5	101.8	101.8	7.8	7.7	8.5	14.0	12	13	73	75	822101	817797	<0.2	<0.2	1.2	1.4
						1.0	0.4	37	19.9		8.2		28.5		101.8		7.8		8.5		13		73				<0.2		1.3	
					Middle	5.8	0.3	85	19.4	19.4	8.2	8.2	29.0	29.0	97.3	97.3	7.5		12.5		14		75				<0.2		1.4	
						5.8	0.3	85	19.4		8.2		29.0		97.2		7.5		12.8		14		74				<0.2		1.4	
					Bottom	10.5	0.4	110	19.0	19.0	8.1	8.1	29.7	29.7	95.9	95.9	7.5	7.5	20.7		12		76				<0.2		1.6	
						10.5	0.4	113	19.0		8.1		29.7		95.9		7.5		20.7		12		77				<0.2		1.5	
IM1	Cloudy	Rough	12:21	7.6	Surface	1.0	0.3	263	19.4	19.4	8.2	8.2	29.2	29.2	109.6	109.6	8.5	8.5	16.0	16.4	16	18	73	75	818345	806485	<0.2	<0.2	1.7	1.7
						1.0	0.4	263	19.4		8.2		29.2		109.6		8.5		16.0		17		73				<0.2		1.8	
					Middle	3.8	0.1	269	19.1	19.1	8.2	8.2	29.6	29.6	108.5	108.5	8.4		16.5		18		75				<0.2		1.8	
						3.8	0.1	286	19.1		8.2		29.6		108.4		8.4		16.5		17		75				<0.2		1.6	
					Bottom	6.6	0.1	110	18.7	18.7	8.2	8.2	30.5	30.5	105.9	105.9	8.2	8.2	16.9		20		77				<0.2		1.8	
						6.6	0.1	119	18.7		8.2		30.5		105.8		8.2		16.7		19		77				<0.2		1.7	
IM2	Cloudy	Rough	12:15	8.5	Surface	1.0	0.4	252	19.3	19.3	8.2	8.2	29.4	29.4	109.9	109.9	8.5	8.5	15.4	17.0	17	18	74	75	818872	806173	<0.2	<0.2	1.6	1.7
						1.0	0.5	257	19.3		8.2		29.4		109.9		8.5		15.5		16		73				<0.2		1.6	
					Middle	4.3	0.2	289	19.0	19.0	8.2	8.2	29.8	29.8	108.2	108.2	8.4		16.6		18		75				<0.2		1.8	
						4.3	0.2	300	19.0		8.2		29.8		108.2		8.4		16.5		20		75				<0.2		1.8	
					Bottom	7.5	0.0	288	18.6	18.6	8.2	8.2	30.5	30.5	105.1	105.1	8.2	8.2	19.1		18		78				<0.2		1.8	
						7.5	0.0	305	18.6		8.2		30.5		105.0		8.2		18.9		19		77				<0.2		1.8	
IM3	Cloudy	Rough	12:09	8.6	Surface	1.0	0.4	282	19.4	19.4	8.2	8.2	29.1	29.1	109.9	109.9	8.5	8.5	16.0	16.0	16	16	73	75	819401	806014	<0.2	<0.2	1.7	1.7
						1.0	0.4	293	19.4		8.2		29.1		109.9		8.5		16.0		15		73				<0.2		1.7	
					Middle	4.3	0.1	281	19.2	19.2	8.2	8.2	29.4	29.4	108.8	108.8	8.4		15.8		15		75				<0.2		1.7	
						4.3	0.1	281	19.2		8.2		29.4		108.8		8.4		15.8		15		75				<0.2		1.6	
					Bottom	7.6	0.1	139	19.0	19.0	8.2	8.2	29.9	29.9	106.9	106.9	8.3	8.3	16.3		17		77				<0.2		1.6	
						7.6	0.1	149	19.0		8.2		29.9		106.9		8.3		16.1		18		77				<0.2		1.6	
IM4	Cloudy	Rough	12:00	7.9	Surface	1.0	0.2	306	18.7	18.7	8.2	8.2	30.4	30.4	110.0	110.0	8.6	8.6	11.4	12.0	10	13	73	75	819544	805027	<0.2	<0.2	1.6	1.7
						1.0	0.2	335	18.7		8.2		30.4		110.0		8.6		11.5		10		74				<0.2		1.6	
					Middle	4.0	0.2	337	18.7	18.7	8.2	8.2	30.4	30.4	109.2	109.2	8.5		11.4		15		75				<0.2		1.6	
						4.0	0.2	310	18.7		8.2		30.4		109.2		8.5		11.4		16		76				<0.2		1.7	
					Bottom	6.9	0.2	302	18.6	18.6	8.2	8.2	30.5	30.5	107.7	107.7	8.4	8.4	12.9		14		77				<0.2		1.7	
						6.9	0.2	320	18.6		8.2		30.5		107.6		8.4		13.1		14		77				<0.2		1.8	
IM5	Cloudy	Rough	11:50	7.3	Surface	1.0	0.1	168	18.9	18.9	8.2	8.2	29.7	29.7	108.4	108.4	8.4	8.4	19.0	22.0	15	15	73	75	820581	804929	<0.2	<0.2	1.8	1.7
						1.0	0.1	184	18.9		8.2		29.7		108.3		8.4		19.2		13		73				<0.2		1.8	
					Middle	3.7	0.1	182	18.9	18.9	8.2	8.2	29.8	29.8	107.5	107.5	8.4		21.9		16		75				<0.2		1.7	
						3.7	0.1	190	18.9		8.2		29.8		107.4		8.4		21.8		15		75				<0.2		1.7	
					Bottom	6.3	0.1	157	18.9	18.9	8.2	8.2	29.8	29.8	105.9	105.9	8.3	8.3	25.2		15		77				<0.2		1.6	
						6.3	0.1	168	18.9		8.2		29.8		105.9		8.2		25.1		14		77				<0.2		1.7	
IM6	Cloudy	Rough	11:42	7.1	Surface	1.0	0.2	306	19.3	19.3	8.2	8.2	28.9	28.9	109.6	109.7	8.5	8.5	18.3	21.1	22	22	73	75	821036	805854	<0.2	<0.2	1.7	1.7
						1.0	0.2	332	19.3		8.2		28.9		109.7		8.5		18.2		22		73				<0.2		1.8	
					Middle	3.6	0.2	281	19.3	19.3	8.2	8.2	29.0	29.0	108.6	108.6	8.4		21.9		23		75				<0.2		1.6	
						3.6	0.2	299	19.3		8.2		29.0		108.6		8.4		21.9		21		75				<0.2		1.7	
					Bottom	6.1	0.1	234	19.1	19.1	8.2	8.2	29.3	29.3	106.4	106.4	8.3	8.3	23.2		24		77				<0.2		1.6	
						6.1	0.1	251	19.1		8.2		29.3		106.3		8.3		23.0		22		77				<0.2		1.6	
IM7	Cloudy	Rough	11:34	8.5	Surface	1.0	0.1	300	19.6	19.6	8.2	8.2	28.6	28.6	110.0	110.0	8.5	8.5	17.6	21.0	24	25	73	75	821376	806814	<0.2	<0.2	1.7	1.7
						1.0	0.1	323	19.6		8.2		28.6		109.9		8.5		17.2		24		73				<0.2		1.6	
					Middle	4.3	0.0	108	19.5	19.5	8.2	8.2	28.7	28.7	108.7	108.7	8.4		21.1		23		75				<0.2		1.7	
						4.3	0.0	116	19.5		8.2		28.7		108.6		8.4		21.8		24		75				<0.2		1.7	
					Bottom	7.5	0.1	138	19.5	19.5	8.2	8.2	28.7	28.7	106.4	106.4	8.3	8.3	24.1		26		77				<0.2		1.8	
						7.5	0.1	144	19.5		8.2		28.7		106.3		8.2		24.3		28		77				<0.2		1.7	
IM8	Cloudy	Rough	12:14	8.3	Surface	1.0	0.1	322	19.7	19.7	8.3	8.3	28.5	28.5	109.3	109.3	8.4	8.4	16.2	17.2	17	16	72	73	821667	807856	<0.2	<0.2	1.4	1.4
						1.0	0.1	351	19.7		8.3		28.5		109.3		8.4		16.2		15		72				<0.2		1.3	
					Middle	4.2	0.1	89	19.7	19.7	8.3	8.3	28.5	28.5	108.0	108.0	8.4		17.5		16		73				<0.2		1.3	
						4.2	0.1	93	19.7		8.3		28.5		108.0		8.4		17.5		15		73				<0.2		1.3	
					Bottom	7.3	0.2	99	19.6	19.6	8.3	8.3	28.6	28.6	106.3	106.3	8.2	8.2	18.0		16		75				<0.2		1.3	
						7.3	0.2	101	19.6		8.3		28.6		106.3		8.2		18.0		15		74				<0.2		1.5	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 17 March 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C) Value	Water Temperature (°C) Average	pH Value	pH Average	Salinity (ppt) Value	Salinity (ppt) Average	DO Saturation (%) Value	DO Saturation (%) Average	Dissolved Oxygen Value	Dissolved Oxygen DA	Turbidity(NTU) Value	Turbidity(NTU) DA	Suspended Solids (mg/L) Value	Suspended Solids (mg/L) DA	Total Alkalinity (ppm) Value	Total Alkalinity (ppm) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L) Value	Chromium (µg/L) DA	Nickel (µg/L) Value	Nickel (µg/L) DA
IM9	Cloudy	Rough	12:24	7.3	Surface	1.0	0.1	253	19.9	19.9	8.2	8.2	27.5	27.5	106.8	106.8	8.3	8.4	13.3	16.1	9	10	72	73	822081	808825	<0.2	<0.2	1.7	1.8
						1.0	0.1	256	19.9		8.2		27.5		106.8		8.3		13.3		10		72				<0.2		1.7	
					Middle	3.7	0.1	92	19.9	19.9	8.3	8.3	27.7	27.7	107.9	107.9	8.4		15.3		11		73				<0.2		1.8	
						3.7	0.1	93	19.9		8.3		27.7		107.9		8.4		15.3		10		73				<0.2		1.7	
					Bottom	6.3	0.2	96	19.7	19.7	8.3	8.3	28.3	28.3	106.7	106.7	8.3	8.3	19.6		11		75				<0.2		1.8	
						6.3	0.3	102	19.7		8.3		28.3		106.7		8.3		19.6		10		75				<0.2		1.8	
IM10	Cloudy	Rough	12:37	7.6	Surface	1.0	0.3	118	20.1	20.1	8.2	8.2	27.6	27.6	104.2	104.2	8.0	8.0	11.3	12.4	10	11	72	73	822218	809855	<0.2	<0.2	1.7	1.7
						1.0	0.3	119	20.1		8.2		27.6		104.2		8.0		11.3		11		72				<0.2		1.7	
					Middle	3.8	0.3	108	20.1	20.1	8.2	8.2	27.6	27.6	103.8	103.8	8.0		11.9		11		73				<0.2		1.6	
						3.8	0.3	117	20.1		8.2		27.6		103.8		8.0		11.9		11		73				<0.2		1.6	
					Bottom	6.6	0.2	110	20.0	20.0	8.2	8.2	27.8	27.8	103.1	103.1	8.0	8.0	14.1		11		74				<0.2		1.7	
						6.6	0.2	119	20.0		8.2		27.8		103.1		8.0		14.1		10		75				<0.2		1.8	
IM11	Cloudy	Rough	12:50	7.4	Surface	1.0	0.1	79	20.3	20.3	8.2	8.2	27.7	27.7	106.8	106.8	8.2	8.2	9.1	9.4	8	9	72	73	821526	810537	<0.2	<0.2	1.7	1.7
						1.0	0.2	79	20.3		8.2		27.7		106.8		8.2		9.1		9		72				<0.2		1.6	
					Middle	3.7	0.1	116	20.2	20.2	8.2	8.2	27.8	27.8	105.7	105.7	8.1		9.5		8		73				<0.2		1.8	
						3.7	0.1	121	20.2		8.2		27.8		105.7		8.1		9.5		9		73				<0.2		1.8	
					Bottom	6.4	0.1	102	20.1	20.1	8.2	8.2	28.0	28.0	104.5	104.5	8.1	8.1	9.7		8		75				<0.2		1.7	
						6.4	0.1	110	20.1		8.2		28.0		104.5		8.1		9.7		10		75				<0.2		1.7	
IM12	Cloudy	Rough	13:06	8.0	Surface	1.0	0.3	66	20.2	20.2	8.2	8.2	27.7	27.7	104.9	104.9	8.1	8.1	11.1	11.0	10	12	73	75	821146	811495	<0.2	<0.2	1.8	1.8
						1.0	0.3	66	20.2		8.2		27.7		104.9		8.1		11.1		10		73				<0.2		1.8	
					Middle	4.0	0.3	105	20.1	20.1	8.2	8.2	27.8	27.8	104.3	104.3	8.0		11.0		14		74				<0.2		1.7	
						4.0	0.3	114	20.1		8.2		27.8		104.3		8.0		11.0		14		75				<0.2		1.8	
					Bottom	7.0	0.3	114	20.1	20.1	8.2	8.2	27.9	27.9	104.0	104.0	8.0	8.0	10.9		12		76				<0.2		1.9	
						7.0	0.3	117	20.1		8.2		27.9		104.0		8.0		10.9		13		77				<0.2		1.9	
SR2	Cloudy	Rough	13:33	4.2	Surface	1.0	0.5	92	19.9	19.9	8.2	8.2	28.3	28.3	102.4	102.4	7.9	7.9	9.3	9.0	8	9	73	74	821486	814169	<0.2	<0.2	1.6	1.6
						1.0	0.5	96	19.9		8.2		28.3		102.4		7.9		9.3		8		73				<0.2		1.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.3	92	20.1	20.1	8.2	8.2	28.1	28.1	102.7	102.7	7.9	7.9	8.7		8		75				<0.2		1.5	
						3.2	0.3	96	20.1		8.2		28.1		102.7		7.9		8.7		10		75				<0.2		1.5	
SR3	Cloudy	Rough	12:07	9.2	Surface	1.0	0.1	290	19.6	19.6	8.3	8.3	28.6	28.6	109.7	109.7	8.5	8.5	15.7	16.0	15	15	-	-	822125	807576	-	-	-	-
						1.0	0.1	300	19.6		8.3		28.6		109.7		8.5		15.7		16		-				-		-	
					Middle	4.6	0.1	13	19.6	19.6	8.3	8.3	28.6	28.6	108.3	108.3	8.4		15.7		14		-				-		-	
						4.6	0.1	14	19.6		8.3		28.6		108.3		8.4		15.7		15		-				-		-	
					Bottom	8.2	0.2	67	19.5	19.5	8.2	8.2	28.8	28.7	105.3	105.3	8.2	8.2	16.5		15		-				-		-	
						8.2	0.2	67	19.5		8.2		28.7		105.2		8.2		16.5		14		-				-		-	
SR4A	Cloudy	Calm	13:01	8.7	Surface	1.0	0.2	69	20.0	20.0	8.2	8.2	29.1	29.1	110.7	110.7	8.5	8.5	12.9	16.2	9	11	-	-	817216	807813	-	-	-	-
						1.0	0.2	75	20.0		8.2		29.1		110.7		8.5		13.0		9		-				-		-	
					Middle	4.4	0.3	71	18.9	18.9	8.2	8.2	30.2	30.2	107.7	107.7	8.4		16.4		10		-				-		-	
						4.4	0.3	73	18.9		8.2		30.2		107.7		8.4		16.5		10		-				-		-	
					Bottom	7.7	0.2	57	18.7	18.7	8.2	8.2	30.4	30.4	105.1	105.1	8.2	8.2	19.3		15		-				-		-	
						7.7	0.2	61	18.8		8.2		30.4		105.0		8.2		19.2		14		-				-		-	
SR5A	Cloudy	Calm	13:17	4.3	Surface	1.0	0.1	335	20.8	20.8	8.1	8.1	28.2	28.2	101.1	101.1	7.7	7.7	9.5	10.1	8	8	-	-	816617	810703	-	-	-	-
						1.0	0.1	341	20.8		8.1		28.2		101.1		7.7		9.6		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.1	351	20.6	20.6	8.1	8.1	28.2	28.2	100.7	100.7	7.7	7.7	10.6		8		-				-		-	
						3.3	0.1	323	20.6		8.1		28.2		100.7		7.7		10.5		7		-				-		-	
SR6	Cloudy	Calm	13:43	3.9	Surface	1.0	0.1	1	20.3	20.3	8.2	8.2	27.8	27.8	104.1	104.1	8.0	8.0	12.1	12.5	9	10	-	-	817910	814677	-	-	-	-
						1.0	0.1	1	20.3		8.2		27.8		104.1		8.0		12.2		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.9	0.1	36	20.2	20.2	8.2	8.2	27.8	27.8	102.6	102.6	7.9	7.9	12.8		10		-				-		-	
						2.9	0.1	36	20.2		8.2		27.8		102.6		7.9		12.7		11		-				-		-	
SR7	Cloudy	Moderate	14:25	16.8	Surface	1.0	0.4	104	19.2	19.2	8.1	8.1	29.5	29.5	98.3	98.3	7.6	7.6	6.1	7.5	5	5	-	-	823653	823770	-	-	-	-
						1.0	0.4	108	19.2		8.1		29.5		98.3		7.6		6.1		6		-				-		-	
					Middle	8.4	0.3	88	19.2	19.2	8.1	8.1	29.6	29.6	97.8	97.8	7.6		6.6		4		-				-		-	
						8.4	0.3	95	19.2		8.1		29.6		97.8		7.6		6.6		4		-				-		-	
					Bottom	15.8	0.1	75	19.2	19.2	8.1	8.1	29.6	29.6	98.3	98.3	7.6	7.6	9.8		5		-				-		-	
						15.8	0.1	80	19.2		8.1		29.6		98.3		7.6		9.8		7		-				-		-	
SR8	Cloudy	Rough	13:15	4.3	Surface	1.0	-	-	20.1	20.1	8.2	8.2	27.9	27.9	106.0	106.0	8.2	8.2	12.5	13.4	11	12	-	-	820246	811418	-	-	-	-
						1.0	-	-	20.1		8.2		27.9		106.0		8.2		12.5		13		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	-	-	20.2	20.2	8.2	8.2	27.8	27.8	106.7	106.7	8.2	8.2	14.2		12		-				-		-	
						3.3	-	-	20.2		8.2		27.8		106.7		8.2		14.2		10		-				-		-	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 17 March 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	07:48	8.2	Surface	1.0	0.3	56	19.2	19.2	8.2	8.2	28.9	28.9	110.1	110.1	8.6	8.6	17.3	20.1	13	15	73	75	815621	804231	<0.2	<0.2	1.2	1.3
						1.0	0.3	57	19.2		8.2		28.9		110.0		8.6		17.4		13		74				<0.2		1.4	
					Middle	4.1	0.5	41	19.2	19.2	8.2	8.2	29.0	29.0	109.3	109.3	8.5		19.0		13		75				<0.2		1.2	
						4.1	0.5	45	19.2		8.2		29.0		109.3		8.5		19.3		15		75				<0.2		1.2	
					Bottom	7.2	0.5	40	19.1	19.1	8.2	8.2	29.1	29.1	106.3	106.3	8.3	8.3	23.7		18		77				<0.2		1.2	
						7.2	0.5	41	19.1		8.2		29.1		106.3		8.3		23.8		16		77				<0.2		1.3	
C2	Cloudy	Rough	08:26	11.9	Surface	1.0	0.6	328	19.9	19.9	8.1	8.1	26.7	26.7	95.6	95.6	7.5	7.5	16.4	20.1	13	17	72	73	825667	806932	<0.2	<0.2	1.9	2.1
						1.0	0.6	348	19.9		8.1		26.7		95.6		7.5		16.4		14		71				<0.2		2.1	
					Middle	6.0	0.6	339	19.9	19.9	8.1	8.1	26.7	26.7	95.1	95.1	7.4		19.7		17		73				<0.2		2.0	
						6.0	0.6	312	19.9		8.1		26.7		95.1		7.4		19.7		15		73				<0.2		2.1	
					Bottom	10.9	0.4	343	19.9	19.9	8.0	8.0	26.7	26.7	95.6	95.6	7.4	7.4	24.3		19		75				<0.2		2.1	
						10.9	0.4	316	19.9		8.0		26.7		95.6		7.4		24.3		21		74				<0.2		2.1	
C3	Cloudy	Rough	06:42	11.3	Surface	1.0	0.8	261	19.7	19.7	8.2	8.2	28.2	28.2	102.9	102.9	8.0	7.9	5.6	9.3	7	6	73	75	822116	817794	<0.2	<0.2	2.0	1.9
						1.0	0.8	266	19.7		8.2		28.2		102.9		8.0		5.6		5		73				<0.2		2.0	
					Middle	5.7	0.5	263	19.6	19.6	8.2	8.2	28.7	28.7	100.5	100.5	7.8		9.3		6		75				<0.2		1.8	
						5.7	0.6	282	19.6		8.2		28.7		100.5		7.8		9.3		5		75				<0.2		1.8	
					Bottom	10.3	0.3	265	19.4	19.4	8.1	8.1	29.0	29.0	100.2	100.2	7.8	7.8	12.9		7		77				<0.2		1.7	
						10.3	0.3	270	19.4		8.1		29.0		100.2		7.8		12.9		6		77				<0.2		1.8	
IM1	Cloudy	Moderate	08:05	7.4	Surface	1.0	0.5	357	19.8	19.8	8.3	8.3	27.7	27.7	109.6	109.6	8.5	8.5	17.5	21.3	12	12	74	76	818335	806452	<0.2	<0.2	2.0	1.9
						1.0	0.5	328	19.8		8.3		27.7		109.6		8.5		17.6		12		74				<0.2		1.9	
					Middle	3.7	0.6	3	19.8	19.8	8.2	8.2	27.7	27.7	109.1	109.1	8.5		20.6		11		75				<0.2		2.0	
						3.7	0.6	3	19.8		8.2		27.7		109.1		8.5		20.2		11		76				<0.2		1.9	
					Bottom	6.4	0.5	2	19.6	19.6	8.2	8.2	28.4	28.4	106.5	106.5	8.3	8.3	26.0		12		77				<0.2		2.0	
						6.4	0.6	2	19.6		8.2		28.4		106.4		8.2		26.1		12		78				<0.2		1.7	
IM2	Cloudy	Moderate	08:11	8.1	Surface	1.0	0.6	9	19.8	19.8	8.2	8.2	27.6	27.6	109.0	109.0	8.5	8.5	9.8	15.9	9	9	73	76	818874	806211	<0.2	<0.2	1.9	1.8
						1.0	0.6	9	19.8		8.2		27.6		108.9		8.5		9.9		8		74				<0.2		1.7	
					Middle	4.1	0.5	9	19.8	19.8	8.2	8.2	27.6	27.6	108.6	108.6	8.4		11.3		10		76				<0.2		1.8	
						4.1	0.6	9	19.8		8.2		27.6		108.5		8.4		11.4		8		76				<0.2		1.7	
					Bottom	7.1	0.5	10	19.7	19.7	8.2	8.2	27.9	28.0	106.9	106.9	8.3	8.3	26.5		10		78				<0.2		1.7	
						7.1	0.6	10	19.7		8.2		28.0		106.8		8.3		26.7		9		78				<0.2		1.8	
IM3	Cloudy	Moderate	08:16	8.5	Surface	1.0	0.4	355	19.9	19.9	8.2	8.2	27.4	27.4	107.0	107.0	8.3	8.3	15.3	18.9	9	12	74	76	819407	806042	<0.2	<0.2	1.6	1.7
						1.0	0.4	327	19.9		8.2		27.4		107.0		8.3		15.5		10		74				<0.2		1.9	
					Middle	4.3	0.5	13	19.9	19.9	8.2	8.2	27.4	27.4	106.6	106.6	8.3		19.2		12		76				<0.2		1.9	
						4.3	0.5	13	19.9		8.2		27.4		106.6		8.3		19.1		13		76				<0.2		1.6	
					Bottom	7.5	0.4	16	19.8	19.8	8.2	8.2	27.5	27.5	105.5	105.5	8.2	8.2	22.2		15		78				<0.2		1.6	
						7.5	0.4	16	19.8		8.2		27.5		105.5		8.2		22.3		14		78				<0.2		1.7	
IM4	Cloudy	Moderate	08:24	7.7	Surface	1.0	0.6	350	19.7	19.7	8.2	8.2	27.9	27.9	109.4	109.4	8.5	8.5	14.3	18.1	12	13	74	76	819546	805048	<0.2	<0.2	1.6	1.6
						1.0	0.6	322	19.7		8.2		27.9		109.4		8.5		14.4		11		74				<0.2		1.6	
					Middle	3.9	0.6	354	19.6	19.6	8.2	8.2	27.9	27.9	108.7	108.7	8.4		17.2		12		76				<0.2		1.6	
						3.9	0.6	326	19.6		8.2		27.9		108.7		8.4		16.9		14		76				<0.2		1.7	
					Bottom	6.7	0.5	5	19.5	19.5	8.2	8.2	28.0	28.0	106.6	106.6	8.3	8.3	24.4		15		78				<0.2		1.6	
						6.7	0.5	5	19.5		8.2		28.0		106.5		8.3		21.6		14		78				<0.2		1.6	
IM5	Cloudy	Moderate	08:33	7.0	Surface	1.0	0.5	4	19.8	19.8	8.2	8.2	27.5	27.5	108.1	108.1	8.4	8.4	13.8	17.1	14	15	74	76	820593	804944	<0.2	<0.2	1.8	1.9
						1.0	0.5	4	19.8		8.2		27.5		108.1		8.4		13.6		13		74				<0.2		1.8	
					Middle	3.5	0.5	3	19.8	19.8	8.2	8.2	27.5	27.5	107.5	107.5	8.3		15.2		14		76				<0.2		1.8	
						3.5	0.5	3	19.8		8.2		27.5		107.5		8.3		15.0		15		76				<0.2		2.0	
					Bottom	6.0	0.5	6	19.8	19.8	8.2	8.2	27.5	27.5	106.1	106.1	8.2	8.2	22.4		16		78				<0.2		1.9	
						6.0	0.5	6	19.8		8.2		27.5		106.0		8.2		22.5		16		78				<0.2		2.0	
IM6	Cloudy	Moderate	08:40	6.9	Surface	1.0	0.4	13	19.9	19.9	8.2	8.2	27.4	27.4	104.9	104.9	8.1	8.1	14.8	14.8	14	15	74	76	821049	805806	<0.2	<0.2	2.0	2.1
						1.0	0.5	14	19.9		8.2		27.4		104.9		8.1		14.8		14		74				<0.2		2.0	
					Middle	3.5	0.3	7	19.9	19.9	8.2	8.2	27.5	27.5	104.9	104.9	8.1		14.8		14		76				<0.2		2.2	
						3.5	0.3	7	19.9		8.2		27.5		104.9		8.1		14.8		14		76				<0.2		2.0	
					Bottom	5.9	0.3	10	19.9	19.9	8.2	8.2	27.6	27.6	104.3	104.3	8.1	8.1	14.9		15		78				<0.2		2.0	
						5.9	0.3	10	19.9		8.2		27.6		104.3		8.1		14.9		16		78				<0.2		2.2	
IM7	Cloudy	Moderate	08:49	8.3	Surface	1.0	0.3	13	19.9	19.9	8.2	8.2	27.4	27.4	104.6	104.6	8.1	8.1	17.8	21.6	16	17	74	76	821333	806841	<0.2	<0.2	2.1	2.1
						1.0	0.3	13	19.9		8.2		27.4		104.6		8.1		17.9		16		74				<0.2		2.1	
					Middle	4.2	0.3	24	19.9	19.9	8.2	8.2	27.5	27.5	104.3	104.3	8.1		21.0		15		76				<0.2		2.0	
						4.2	0.3	25	19.9		8.2		27.5		104.3		8.1		21.0		17		76				<0.2		2.1	
					Bottom	7.3	0.2	33	19.9	19.9	8.2	8.2	27.7	27.7	103.3	103.3	8.0	8.0	25.8		19		78				<0.2		2.1	
						7.3	0.2	36	19.9		8.2		27.7		103.3		8.0		25.8		17		78				<0.2		2.2	
IM8	Cloudy	Rough	08:02	8.0	Surface	1.0	0.2	1	19.9	19.9	8.3	8.3	26.7	26.7	97.5	97.5	7.6	7.6	18.7	21.3	15	16	71	73	821691	807861	<0.2	<0.2	2.7	2.4
						1.0	0.3	1	19.9		8.3		26.7		97.5		7.6		18.7		14		71				<0.2		2.6	
					Middle	4.0	0.3	11	19.9	19.9	8.3	8.3	26.7	26.7	97.9	97.9	7.6		19.2		16		73				<0.2		2.8	
						4.0	0.3	11	19.9		8.3		26.7		97.9		7.6		19.2		15		73				<0.2		2.1	
					Bottom	7.0	0.3	22	19.9	19.9	8.4	8.4	26.8	26.8	97.9	97.9	7.6	7.6	26.0		20		74				<0.2		2.1	
						7.0	0.4	23	19.9		8.4		26.8		97.9		7.6		26.0		18		74				<0.2		2.0	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 17 March 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Rough	07:54	7.6	Surface	1.0	0.2	326	19.9	19.9	8.4	8.4	27.1	27.1	99.1	99.1	7.7	7.7	18.4	19.9	15	17	72	73	822070	808818	<0.2	<0.2	2.0	2.3
						1.0	0.3	338	19.9		8.4		27.1		99.1		7.7		18.4		13		72				<0.2		2.2	
					Middle	3.8	0.2	348	19.9	19.9	8.4	8.4	27.1	27.1	99.2	99.2	7.7		18.8		13		73				<0.2		2.0	
						3.8	0.2	356	19.9		8.4		27.1		99.2		7.7		18.8		13		73				<0.2		2.3	
					Bottom	6.6	0.2	3	19.9	19.9	8.3	8.3	27.1	27.1	99.4	99.4	7.7	7.7	22.6		25		75				<0.2		2.5	
						6.6	0.3	3	19.9		8.3		27.1		99.4		7.7		22.6		24		75				<0.2		2.5	
IM10	Cloudy	Rough	07:47	8.0	Surface	1.0	0.5	303	20.0	20.0	8.2	8.2	27.5	27.5	104.9	104.9	8.1	8.1	20.8	21.8	12	19	72	73	822239	809863	<0.2	<0.2	2.3	2.1
						1.0	0.6	321	20.0		8.2		27.5		104.9		8.1		20.8		13		72				<0.2		2.3	
					Middle	4.0	0.5	306	20.0	20.0	8.2	8.2	27.5	27.5	104.6	104.6	8.1		20.4		14		73				<0.2		2.5	
						4.0	0.5	308	20.0		8.2		27.5		104.6		8.1		20.4		13		73				<0.2		1.8	
					Bottom	7.0	0.4	310	20.0	20.0	8.2	8.2	27.5	27.5	104.0	104.0	8.1	8.1	24.1		30		75				<0.2		1.9	
						7.0	0.4	320	20.0		8.2		27.5		104.0		8.1		24.1		29		75				<0.2		2.0	
IM11	Cloudy	Rough	07:34	7.6	Surface	1.0	0.4	282	20.1	20.1	8.2	8.2	27.9	27.9	104.6	104.6	8.1	8.1	18.7	21.9	12	21	72	73	821492	810558	<0.2	<0.2	2.2	2.3
						1.0	0.5	292	20.1		8.2		27.9		104.6		8.1		18.7		13		72				<0.2		2.3	
					Middle	3.8	0.4	289	20.1	20.1	8.2	8.2	27.9	27.9	104.4	104.4	8.0		21.4		15		73				<0.2		2.3	
						3.8	0.4	304	20.1		8.2		27.9		104.4		8.0		21.4		14		73				<0.2		2.2	
					Bottom	6.6	0.4	300	20.1	20.1	8.2	8.2	28.0	28.0	104.1	104.1	8.0	8.0	25.5		36		75				<0.2		2.2	
						6.6	0.4	323	20.1		8.2		28.0		104.1		8.0		25.5		35		74				<0.2		2.4	
IM12	Cloudy	Rough	07:28	7.0	Surface	1.0	0.7	275	20.0	20.0	8.2	8.2	28.0	28.0	105.2	105.2	8.1	8.1	19.9	21.3	19	19	71	73	821163	811527	<0.2	<0.2	2.0	2.1
						1.0	0.7	287	20.0		8.2		28.0		105.2		8.1		19.9		19		72				<0.2		1.9	
					Middle	3.5	0.6	281	20.0	20.0	8.2	8.2	28.0	28.0	104.9	104.9	8.1		20.8		18		73				<0.2		2.0	
						3.5	0.6	295	20.0		8.2		28.0		104.9		8.1		20.8		19		73				<0.2		2.1	
					Bottom	6.0	0.5	280	20.0	20.0	8.2	8.2	28.0	28.0	104.2	104.2	8.0	8.0	23.2		20		74				<0.2		2.2	
						6.0	0.5	287	20.0		8.2		28.0		104.2		8.0		23.2		19		74				<0.2		2.3	
SR2	Cloudy	Rough	07:02	4.3	Surface	1.0	0.1	279	19.9	19.9	8.2	8.2	28.0	28.0	106.7	106.7	8.2	8.2	20.0	20.5	19	19	72	74	821443	814161	<0.2	<0.2	2.1	2.2
						1.0	0.1	294	19.9		8.2		28.0		106.7		8.2		20.0		19		73				<0.2		2.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.1	313	19.9	19.9	8.2	8.2	28.0	28.0	104.4	104.4	8.1	8.1	20.9		19		75				<0.2		2.1	
						3.3	0.1	329	19.9		8.2		28.0		104.4		8.1		20.9		18		76				<0.2		2.2	
SR3	Cloudy	Rough	08:08	8.7	Surface	1.0	0.4	1	19.8	19.8	8.2	8.2	26.6	26.6	97.3	97.3	7.6	7.6	17.8	20.6	17	20	-	-	822120	807544	-	-	-	-
						1.0	0.5	1	19.8		8.2		26.6		97.3		7.6		17.8		15		-				-		-	
					Middle	4.4	0.5	15	19.9	19.9	8.2	8.2	26.7	26.7	97.6	97.6	7.6		18.3		17		-				-		-	
						4.4	0.5	16	19.9		8.2		26.7		97.6		7.6		18.3		16		-				-		-	
					Bottom	7.7	0.4	14	19.9	19.9	8.2	8.2	26.8	26.8	98.3	98.3	7.7	7.7	25.6		26		-				-		-	
						7.7	0.4	14	19.9		8.2		26.8		98.3		7.7		25.6		28		-				-		-	
SR4A	Cloudy	Moderate	07:25	8.5	Surface	1.0	0.2	233	20.5	20.5	8.2	8.2	28.2	28.2	102.5	102.5	7.8	7.8	10.7	11.5	6	8	-	-	817217	807808	-	-	-	-
						1.0	0.2	245	20.5		8.2		28.2		102.5		7.8		10.8		7		-				-		-	
					Middle	4.3	0.2	224	20.5	20.5	8.2	8.2	28.2	28.2	101.9	101.9	7.8		11.5		7		-				-		-	
						4.3	0.2	238	20.5		8.2		28.2		101.9		7.8		11.6		8		-				-		-	
					Bottom	7.5	0.1	215	20.5	20.5	8.1	8.1	28.2	28.2	101.2	101.2	7.7	7.7	12.2		10		-				-		-	
						7.5	0.1	230	20.5		8.1		28.2		101.2		7.7		12.3		11		-				-		-	
SR5A	Cloudy	Calm	07:09	4.2	Surface	1.0	0.3	284	20.4	20.4	8.1	8.1	28.2	28.2	101.3	101.3	7.7	7.7	12.6	13.7	13	12	-	-	816587	810713	-	-	-	-
						1.0	0.3	289	20.4		8.1		28.2		101.3		7.7		12.5		12		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.2	287	20.4	20.4	8.1	8.1	28.3	28.3	101.1	101.1	7.7	7.7	14.7		12		-				-		-	
						3.2	0.3	315	20.4		8.1		28.3		101.1		7.7		14.8		12		-				-		-	
SR6	Cloudy	Calm	06:47	3.9	Surface	1.0	0.2	232	19.9	19.9	8.1	8.1	28.0	28.0	101.8	101.8	7.9	7.9	12.8	13.1	14	13	-	-	817926	814663	-	-	-	-
						1.0	0.2	253	19.9		8.1		28.0		101.8		7.9		12.8		13		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.9	0.2	231	19.9	19.9	8.1	8.1	28.0	28.0	100.5	100.5	7.8	7.8	13.3		13		-				-		-	
						2.9	0.2	245	19.9		8.1		28.0		100.5		7.8		13.4		13		-				-		-	
SR7	Cloudy	Rough	06:14	16.4	Surface	1.0	0.3	21	19.7	19.7	8.1	8.1	28.3	28.3	106.8	106.8	8.3	8.3	5.1	6.1	5	4	-	-	823636	823743	-	-	-	-
						1.0	0.3	22	19.7		8.1		28.3		106.8		8.3		5.1		4		-				-		-	
					Middle	8.2	0.3	44	19.7	19.7	8.1	8.1	28.4	28.4	105.8	105.8	8.2		6.2		4		-				-		-	
						8.2	0.3	46	19.7		8.1		28.4		105.8		8.2		6.2		3		-				-		-	
					Bottom	15.4	0.3	41	19.6	19.6	8.1	8.1	28.6	28.6	105.8	105.8	8.2	8.2	7.1		3		-				-		-	
						15.4	0.3	41	19.6		8.1		28.6		105.8		8.2		7.1		4		-				-		-	
SR8	Cloudy	Rough	07:19	4.2	Surface	1.0	-	-	20.1	20.1	8.1	8.1	27.2	27.2	102.7	102.7	8.0	8.0	12.0	12.9	10	12	-	-	820246	811418	-	-	-	-
						1.0	-	-	20.1		8.1		27.2		102.7		8.0		12.0		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	-	-	20.0	20.0	8.2	8.2	27.4	27.4	102.6	102.6	8.0	8.0	13.7		12		-				-		-	
						3.2	-	-	20.0		8.2		27.4		102.6		8.0		13.7		14		-				-		-	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 20 March 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	14:13	8.8	Surface	1.0	0.7	168	20.2	20.2	8.1	8.1	29.8	29.8	104.3	104.3	7.9	7.9	4.7	5.3	8	7	73	75	815615	804267	<0.2	<0.2	1.5	1.4
						1.0	0.7	183	20.2		8.1		29.8		104.3		7.9		4.6		6		73				<0.2		1.5	
					Middle	4.4	0.3	197	20.0	20.0	8.1	8.1	29.7	29.7	103.7	103.7	7.9		4.9		8		75				<0.2		1.4	
						4.4	0.3	210	20.0		8.1		29.7		103.7		7.9		4.9		6		75				<0.2		1.5	
					Bottom	7.8	0.3	178	20.0	20.0	8.1	8.1	30.0	30.0	102.5	102.3	7.8	7.8	6.4		6		76				<0.2		1.3	
						7.8	0.3	181	20.0		8.1		30.0		102.0		7.8		6.5		7		76				<0.2		1.3	
C2	Cloudy	Rough	13:05	12.1	Surface	1.0	0.3	160	20.8	20.8	8.0	8.0	27.1	27.1	92.5	92.5	7.1	7.1	10.7	14.5	15	17	73	74	825710	806942	<0.2	<0.2	2.6	2.6
						1.0	0.3	164	20.8		8.0		27.1		92.5		7.1		11.0		16		73				<0.2		2.5	
					Middle	6.1	0.1	137	20.5	20.5	8.0	8.0	28.4	28.4	92.5	92.5	7.0		13.3		16		73				<0.2		2.6	
						6.1	0.1	137	20.5		8.0		28.4		92.5		7.0		13.7		16		74				<0.2		2.6	
					Bottom	11.1	0.2	246	20.4	20.4	8.0	8.0	28.9	28.9	92.5	92.5	7.0	7.0	18.8		18		75				<0.2		2.5	
						11.1	0.2	253	20.4		8.0		28.9		92.5		7.0		19.7		18		75				<0.2		2.5	
C3	Cloudy	Moderate	14:51	12.0	Surface	1.0	0.4	77	20.2	20.2	8.0	8.0	29.4	29.5	91.0	91.0	6.9	6.9	9.4	13.4	9	10	73	74	822093	817780	<0.2	<0.2	1.6	1.6
						1.0	0.5	82	20.2		8.0		29.5		91.0		6.9		9.8		9		73				<0.2		1.6	
					Middle	6.0	0.2	75	20.0	20.0	8.0	8.0	29.7	29.7	90.8	90.8	6.9		12.9		10		74				<0.2		1.6	
						6.0	0.2	81	20.0		8.0		29.7		90.8		6.9		14.0		8		74				<0.2		1.5	
					Bottom	11.0	0.2	107	20.0	20.0	8.0	8.0	29.8	29.8	91.0	91.0	6.9	6.9	16.2		11		75				<0.2		1.5	
						11.0	0.2	111	20.0		8.0		29.8		91.0		6.9		17.9		10		75				<0.2		1.6	
IM1	Cloudy	Rough	13:56	7.4	Surface	1.0	0.3	212	20.2	20.2	8.1	8.1	29.3	29.3	100.9	101.0	7.7	7.7	6.4	10.7	10	11	72	74	818377	806481	<0.2	<0.2	1.8	1.7
						1.0	0.3	218	20.2		8.1		29.3		101.0		7.7		6.3		10		72				<0.2		1.9	
					Middle	3.7	0.2	180	20.1	20.1	8.1	8.1	29.3	29.3	101.2	101.2	7.7		11.9		12		74				<0.2		1.6	
						3.7	0.2	190	20.1		8.1		29.3		101.2		7.7		11.9		12		74				<0.2		1.7	
					Bottom	6.4	0.2	207	20.1	20.1	8.1	8.1	29.8	29.8	101.8	101.8	7.8	7.8	13.7		11		75				<0.2		1.5	
						6.4	0.2	213	20.1		8.1		29.8		101.8		7.8		13.8		11		76				<0.2		1.4	
IM2	Cloudy	Rough	13:51	8.1	Surface	1.0	0.3	163	20.3	20.3	8.1	8.1	28.9	28.9	99.7	99.7	7.6	7.6	6.1	15.1	10	10	71	73	818847	806187	<0.2	<0.2	2.6	2.0
						1.0	0.4	167	20.3		8.1		28.9		99.7		7.6		6.4		9		72				<0.2		2.5	
					Middle	4.1	0.2	141	20.3	20.3	8.1	8.1	28.9	28.9	100.2	100.3	7.6		8.1		10		73				<0.2		1.7	
						4.1	0.2	145	20.3		8.1		28.9		100.3		7.7		7.9		10		74				<0.2		1.8	
					Bottom	7.1	0.3	106	20.0	20.0	8.1	8.1	29.7	29.7	101.4	101.4	7.7	7.7	31.5		12		75				<0.2		1.7	
						7.1	0.3	107	20.0		8.1		29.7		101.4		7.7		30.6		11		75				<0.2		1.7	
IM3	Cloudy	Rough	13:45	8.2	Surface	1.0	0.3	205	20.0	20.0	8.1	8.1	29.8	29.8	102.1	102.1	7.8	7.8	9.5	16.5	9	11	73	74	819388	806032	<0.2	<0.2	1.9	1.6
						1.0	0.3	210	20.0		8.1		29.8		102.1		7.8		9.4		11		72				<0.2		2.0	
					Middle	4.1	0.2	233	20.0	20.0	8.1	8.1	29.8	29.8	102.2	102.3	7.8		16.0		10		74				<0.2		1.2	
						4.1	0.2	246	20.0		8.1		29.8		102.3		7.8		16.4		11		74				<0.2		1.2	
					Bottom	7.2	0.2	223	20.0	20.0	8.1	8.1	29.7	29.7	101.9	101.9	7.8	7.8	23.8		12		76				<0.2		1.6	
						7.2	0.2	225	20.0		8.1		29.7		101.9		7.8		24.0		10		76				<0.2		1.5	
IM4	Cloudy	Rough	13:37	7.7	Surface	1.0	0.2	189	20.0	20.0	8.1	8.1	29.8	29.8	102.0	102.0	7.8	7.8	9.6	14.8	12	14	73	74	819554	805037	<0.2	<0.2	2.7	2.0
						1.0	0.2	192	20.0		8.1		29.8		102.0		7.8		9.6		13		73				<0.2		2.3	
					Middle	3.9	0.2	250	19.9	19.9	8.1	8.1	29.8	29.8	102.1	102.0	7.8		17.9		14		73				<0.2		1.4	
						3.9	0.2	251	19.8		8.1		29.8		101.9		7.8		18.1		14		74				<0.2		1.4	
					Bottom	6.7	0.2	258	19.9	19.9	8.1	8.1	29.8	29.8	101.8	101.8	7.8	7.8	16.9		14		75				<0.2		2.0	
						6.7	0.2	269	19.9		8.1		29.8		101.8		7.8		17.0		15		76				<0.2		2.2	
IM5	Cloudy	Rough	13:26	6.7	Surface	1.0	0.2	160	20.1	20.1	8.1	8.1	29.5	29.5	102.1	102.2	7.8	7.9	7.6	11.8	13	13	72	73	820583	804917	<0.2	<0.2	1.4	1.4
						1.0	0.2	163	20.1		8.1		29.5		102.2		7.8		7.6		12		72				<0.2		1.5	
					Middle	3.4	0.2	158	19.9	19.9	8.1	8.1	29.6	29.6	103.0	103.1	7.9		15.9		13		72				<0.2		1.3	
						3.4	0.2	170	19.8		8.1		29.7		103.1		7.9		15.7		12		73				<0.2		1.3	
					Bottom	5.7	0.1	118	20.1	20.1	8.1	8.1	29.5	29.5	102.0	102.0	7.8	7.8	12.0		14		73				<0.2		1.3	
						5.7	0.2	122	20.1		8.1		29.5		102.0		7.8		12.1		13		74				<0.2		1.4	
IM6	Cloudy	Rough	13:14	6.9	Surface	1.0	0.2	163	20.2	20.2	8.1	8.1	29.4	29.4	101.6	101.6	7.8	7.8	10.2	17.7	24	27	72	74	821047	805820	<0.2	<0.2	1.4	1.5
						1.0	0.2	166	20.1		8.1		29.4		101.6		7.8		10.2		24		72				<0.2		1.4	
					Middle	3.5	0.1	140	19.9	19.9	8.1	8.1	29.6	29.6	100.7	100.7	7.7		21.0		27		74				<0.2		1.5	
						3.5	0.1	140	19.9		8.1		29.6		100.7		7.7		20.0		25		74				<0.2		1.5	
					Bottom	5.9	0.2	160	20.1	20.1	8.1	8.1	29.4	29.4	101.9	102.0	7.8	7.8	22.4		30		75				<0.2		1.5	
						5.9	0.2	169	20.1		8.1		29.4		102.0		7.8		22.3		31		75				<0.2		1.4	
IM7	Cloudy	Rough	13:05	8.5	Surface	1.0	0.4	99	20.4	20.4	8.0	8.0	29.0	29.0	100.7	100.7	7.7	7.7	10.7	12.1	18	18	72	73	821358	806853	<0.2	<0.2	1.6	1.6
						1.0	0.4	102	20.3		8.0		29.0		100.7		7.7		10.6		17		72				<0.2		1.7	
					Middle	4.3	0.4	88	20.2	20.2	8.0	8.0	29.0	29.0	100.3	100.3	7.7		13.5		16		72				<0.2		1.7	
						4.3	0.4	92	20.2		8.0		29.0		100.3		7.7		13.5		16		73				<0.2		1.6	
					Bottom	7.5	0.3	82	20.2	20.2	8.0	8.0	29.0	29.0	100.2	100.2	7.7	7.7	12.3		21		73				<0.2		1.6	
						7.5	0.4	85	20.2		8.0		29.0		100.2		7.7		12.3		20		74				<0.2		1.6	
IM8	Cloudy	Rough	13:30	8.3	Surface	1.0	0.3	141	20.8	20.8	8.0	8.0	27.4	27.4	96.1	96.2	7.3	7.4	9.1	10.6	12	12	73	74	821698	807812	<0.2	<0.2	2.2	2.2
						1.0	0.3	143	20.8		8.0		27.5		96.3		7.3		9.1		11		73				<0.2		2.3	
					Middle	4.2	0.3	105	20.6	20.6	8.0	8.0	28.5	28.5	97.2	97.2	7.4		11.0		12		74				<0.2		2.2	
						4.2	0.3	111	20.6		8.0		28.5		97.2		7.4		11.1		12		74				<0.2		2.3	
					Bottom	7.3	0.2	88	20.5	20.5	8.0	8.0	28.9	28.9	96.7	96.7	7.3	7.4	11.8		12		75				<0.2		2.1	
						7.3	0.2	91	20.5		8.0		28.9		96.7		7.4		11.5		14		75				<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 20 March 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C) Value	Water Temperature (°C) Average	pH Value	pH Average	Salinity (ppt) Value	Salinity (ppt) Average	DO Saturation (%) Value	DO Saturation (%) Average	Dissolved Oxygen Value	Dissolved Oxygen DA	Turbidity(NTU) Value	Turbidity(NTU) DA	Suspended Solids (mg/L) Value	Suspended Solids (mg/L) DA	Total Alkalinity (ppm) Value	Total Alkalinity (ppm) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L) Value	Chromium (µg/L) DA	Nickel (µg/L) Value	Nickel (µg/L) DA
IM9	Cloudy	Rough	13:38	7.3	Surface	1.0	0.5	126	20.8	20.8	8.0	8.0	27.4	27.4	94.7	94.8	7.2	7.3	7.9	13.9	10	11	73	74	822101	808813	<0.2	<0.2	2.4	2.3
						1.0	0.5	138	20.8		8.0		27.4		94.8		7.2		7.9		11		73				<0.2		2.4	
					Middle	3.7	0.5	125	20.7	20.7	8.0	8.0	27.8	27.8	95.7	95.8	7.3		11.6		11		74				<0.2		2.3	
						3.7	0.5	133	20.7		8.0		27.9		95.8		7.3		12.6		11		74				<0.2		2.4	
					Bottom	6.3	0.4	94	20.6	20.6	8.0	8.0	28.4	28.4	96.1	96.1	7.3	7.3	21.7		12		75				<0.2		2.2	
						6.3	0.4	97	20.6		8.0		28.4		96.1		7.3		21.8		11		75				<0.2		2.3	
IM10	Cloudy	Rough	13:47	7.0	Surface	1.0	0.5	109	20.8	20.8	8.0	8.0	27.6	27.6	94.9	94.9	7.2	7.2	7.8	15.0	10	11	74	74	822213	809851	<0.2	<0.2	2.4	2.4
						1.0	0.5	109	20.8		8.0		27.6		94.9		7.2		8.0		10		74				<0.2		2.2	
					Middle	3.5	0.5	100	20.7	20.7	8.0	8.0	27.9	27.9	95.1	95.1	7.2		11.7		10		74				<0.2		2.5	
						3.5	0.5	103	20.7		8.0		27.9		95.1		7.2		12.5		9		74				<0.2		2.5	
					Bottom	6.0	0.4	70	20.7	20.7	8.0	8.0	28.4	28.4	95.7	95.8	7.3	7.3	25.2		13		75				<0.2		2.3	
						6.0	0.4	75	20.6		8.0		28.4		95.8		7.3		24.8		12		75				<0.2		2.3	
IM11	Cloudy	Rough	13:59	8.3	Surface	1.0	0.4	106	20.7	20.7	8.2	8.2	28.2	28.2	95.0	95.0	7.2	7.3	9.6	18.9	13	15	73	74	821495	810560	<0.2	<0.2	2.2	2.1
						1.0	0.5	111	20.7		8.2		28.2		95.0		7.2		10.0		12		73				<0.2		2.0	
					Middle	4.2	0.3	112	20.6	20.6	8.1	8.1	28.6	28.6	95.9	96.0	7.3		17.2		14		74				<0.2		2.0	
						4.2	0.4	112	20.6		8.1		28.6		96.0		7.3		17.6		13		74				<0.2		2.1	
					Bottom	7.3	0.3	89	20.7	20.7	8.1	8.1	28.8	28.8	96.1	96.1	7.3	7.3	29.5		19		75				<0.2		2.0	
						7.3	0.4	97	20.7		8.1		28.8		96.1		7.3		29.6		18		75				<0.2		2.1	
IM12	Cloudy	Rough	14:06	8.9	Surface	1.0	0.4	110	20.8	20.8	8.1	8.1	28.0	28.0	93.9	93.8	7.1	7.1	9.1	11.4	13	15	73	74	821162	811520	<0.2	<0.2	2.0	2.0
						1.0	0.4	117	20.8		8.1		28.0		93.7		7.1		9.3		14		73				<0.2		2.0	
					Middle	4.5	0.4	97	20.6	20.6	8.1	8.1	28.4	28.4	92.3	92.3	7.0		12.3		14		73				<0.2		2.1	
						4.5	0.4	100	20.6		8.1		28.4		92.3		7.0		12.4		13		73				<0.2		2.2	
					Bottom	7.9	0.3	98	20.6	20.6	8.1	8.1	28.5	28.4	92.5	92.6	7.0	7.0	12.7		17		74				<0.2		2.0	
						7.9	0.3	99	20.6		8.1		28.4		92.7		7.0		12.7		17		75				<0.2		1.9	
SR2	Cloudy	Moderate	14:31	3.8	Surface	1.0	0.3	85	20.8	20.8	8.1	8.1	28.1	28.1	94.7	94.7	7.2	7.2	5.1	5.2	8	8	73	74	821472	814182	<0.2	<0.2	2.2	2.1
						1.0	0.3	92	20.8		8.1		28.1		94.7		7.2		5.1		9		73				<0.2		2.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	0.2	76	20.8	20.8	8.1	8.1	28.1	28.1	94.7	94.7	7.2	7.2	5.3		9		74				<0.2		2.0	
						2.8	0.2	77	20.8		8.1		28.1		94.7		7.2		5.2		7		74				<0.2		2.0	
SR3	Cloudy	Rough	13:26	9.1	Surface	1.0	0.3	144	20.8	20.8	8.0	8.0	27.4	27.4	94.7	94.8	7.2	7.3	9.8	13.6	14	15	-	-	822148	807553	-	-	-	-
						1.0	0.3	154	20.8		8.0		27.4		94.9		7.2		9.8		13		-				-		-	
					Middle	4.6	0.2	158	20.6	20.6	8.0	8.0	28.1	28.1	96.8	96.9	7.4		13.6		15		-				-		-	
						4.6	0.3	171	20.6		8.0		28.2		96.9		7.4		14.2		13		-				-		-	
					Bottom	8.1	0.3	71	20.5	20.5	8.0	8.0	28.8	28.7	95.7	95.7	7.3	7.3	17.3		17		-				-		-	
						8.1	0.3	74	20.5		8.0		28.6		95.6		7.3		16.8		15		-				-		-	
SR4A	Cloudy	Moderate	14:39	8.0	Surface	1.0	0.3	68	20.2	20.2	8.1	8.1	29.8	29.8	101.5	101.5	7.7	7.7	11.9	13.6	20	19	-	-	817191	807811	-	-	-	-
						1.0	0.3	69	20.2		8.1		29.8		101.5		7.7		11.9		18		-				-		-	
					Middle	4.0	0.3	61	20.1	20.1	8.1	8.1	29.7	29.7	101.3	101.3	7.7		16.0		18		-				-		-	
						4.0	0.3	61	20.1		8.1		29.7		101.3		7.7		16.0		19		-				-		-	
					Bottom	7.0	0.2	60	20.1	20.1	8.1	8.1	29.8	29.8	100.9	100.9	7.7	7.7	12.9		19		-				-		-	
						7.0	0.2	61	20.1		8.1		29.8		100.8		7.7		12.8		20		-				-		-	
SR5A	Cloudy	Moderate	14:55	4.7	Surface	1.0	0.2	87	20.8	20.8	8.0	8.0	29.4	29.4	96.9	96.9	7.3	7.3	9.6	9.5	12	12	-	-	816564	810698	-	-	-	-
						1.0	0.2	91	20.8		8.0		29.4		96.8		7.3		9.6		11		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.1	301	20.7	20.7	8.0	8.0	29.4	29.4	96.9	97.1	7.3	7.3	9.3		12		-				-		-	
						3.7	0.1	304	20.7		8.0		29.4		97.2		7.3		9.3		13		-				-		-	
SR6	Cloudy	Moderate	15:19	3.8	Surface	1.0	0.2	359	20.8	20.8	8.0	8.0	29.2	29.2	94.9	95.0	7.2	7.2	9.4	11.1	14	15	-	-	817901	814640	-	-	-	-
						1.0	0.2	330	20.8		8.0		29.2		95.0		7.2		9.4		15		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	0.2	0	20.8	20.8	8.0	8.0	28.9	28.9	96.5	96.7	7.3	7.3	12.8		15		-				-		-	
						2.8	0.2	0	20.8		8.0		28.9		96.9		7.3		12.9		14		-				-		-	
SR7	Cloudy	Moderate	15:20	23.4	Surface	1.0	0.6	80	20.5	20.5	8.0	8.0	29.4	29.4	94.1	94.1	7.1	7.1	2.6	2.7	6	6	-	-	823638	823758	-	-	-	-
						1.0	0.6	87	20.5		8.0		29.4		94.1		7.1		2.6		5		-				-		-	
					Middle	11.7	0.5	78	20.2	20.2	8.0	8.0	29.8	29.8	92.9	92.9	7.1		2.6		5		-				-		-	
						11.7	0.6	81	20.2		8.0		29.8		92.8		7.1		2.6		6		-				-		-	
					Bottom	22.4	0.4	76	20.2	20.3	8.0	8.0	29.8	29.8	93.2	93.4	7.1	7.1	2.7		7		-				-		-	
						22.4	0.4	80	20.3		8.0		29.8		93.5		7.1		2.8		8		-				-		-	
SR8	Cloudy	Moderate	14:15	4.1	Surface	1.0	-	-	20.9	20.9	8.0	8.0	28.2	28.2	95.0	95.1	7.2	7.2	10.6	10.9	19	20	-	-	820246	811418	-	-	-	-
						1.0	-	-	20.9		8.0		28.2		95.1		7.2		10.7		19		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	-	-	20.8	20.8	8.0	8.0	28.2	28.2	96.4	96.5	7.3	7.3	11.1		22		-				-		-	
						3.1	-	-	20.8		8.0		28.2		96.5		7.3		11.1		21		-				-		-	

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 March 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Rainy	Rough	08:57	7.0	Surface	1.0	0.5	37	19.7	19.7	8.1	8.1	29.3	29.3	100.0	100.0	7.7	7.7	5.6	10.7	10	17	75	76	815609	804264	<0.2	<0.2	1.8	1.5
						1.0	0.5	39	19.7		8.1		29.3		100.0		7.7		5.5		10		74				<0.2		1.6	
					Middle	3.5	0.5	33	19.8	19.8	8.1	8.1	29.3	29.3	100.5	100.6	7.7		5.1		10		76				<0.2		1.5	
						3.5	0.6	33	19.8		8.1		29.3		100.6		7.7		5.1		8		76				<0.2		1.5	
					Bottom	6.0	0.5	44	19.8	19.8	8.1	8.1	29.6	29.6	101.2	101.3	7.8	7.8	21.5		32		77				<0.2		1.4	
						6.0	0.5	44	19.8		8.1		29.6		101.3		7.8		21.3		34		77				<0.2		1.4	
C2	Cloudy	Rough	09:40	11.6	Surface	1.0	0.4	11	20.8	20.8	7.9	7.9	26.2	26.2	89.1	89.1	6.8	6.8	7.4	17.5	10	11	73	74	825678	806973	<0.2	<0.2	2.8	2.7
						1.0	0.4	11	20.8		7.9		26.2		89.1		6.8		8.2		10		73				<0.2		2.5	
					Middle	5.8	0.5	4	20.8	20.8	7.9	7.9	26.4	26.4	88.8	88.8	6.8		16.3		10		74				<0.2		2.8	
						5.8	0.5	4	20.8		7.9		26.4		88.8		6.8		17.1		10		74				<0.2		2.6	
					Bottom	10.6	0.4	340	20.7	20.7	7.9	7.9	27.3	27.2	88.7	88.8	6.8	6.8	28.0		13		75				<0.2		2.6	
						10.6	0.4	341	20.7		7.9		27.2		88.8		6.8		27.9		12		75				<0.2		2.6	
C3	Cloudy	Moderate	07:38	11.2	Surface	1.0	0.5	252	20.6	20.6	8.0	8.0	28.5	28.5	93.8	93.8	7.1	7.1	4.4	9.2	6	12	73	74	822115	817793	<0.2	<0.2	2.0	1.9
						1.0	0.5	276	20.6		8.0		28.5		93.7		7.1		4.4		5		73				<0.2		1.9	
					Middle	5.6	0.5	259	20.6	20.6	8.0	8.0	28.6	28.6	93.7	93.7	7.1		5.0		9		74				<0.2		1.8	
						5.6	0.6	264	20.6		8.0		28.6		93.7		7.1		5.1		9		74				<0.2		1.9	
					Bottom	10.2	0.4	274	20.5	20.5	8.1	8.1	28.9	28.9	92.9	92.9	7.1	7.1	18.2		21		75				<0.2		1.8	
						10.2	0.4	295	20.5		8.1		28.9		92.9		7.1		18.1		19		75				<0.2		1.8	
IM1	Rainy	Rough	09:19	7.6	Surface	1.0	0.5	10	20.0	20.1	8.1	8.1	28.1	28.1	96.9	97.0	7.5	7.6	7.4	9.7	11	11	74	76	818365	806457	<0.2	<0.2	1.9	1.9
						1.0	0.6	10	20.1		8.1		28.1		97.0		7.5		7.5		11		74				<0.2		2.0	
					Middle	3.8	0.5	359	20.2	20.2	8.1	8.1	28.0	28.0	98.5	98.6	7.6		8.9		10		77				<0.2		1.9	
						3.8	0.5	330	20.2		8.1		28.0		98.7		7.6		9.0		10		76				<0.2		1.9	
					Bottom	6.6	0.4	352	20.1	20.1	8.1	8.1	28.1	28.1	97.0	97.1	7.5	7.5	12.6		11		76				<0.2		2.0	
						6.6	0.5	324	20.1		8.1		28.1		97.1		7.5		12.7		11		77				<0.2		1.8	
IM2	Rainy	Rough	09:27	7.9	Surface	1.0	0.6	40	20.0	20.0	8.1	8.1	28.2	28.2	97.1	97.2	7.5	7.6	11.0	15.9	17	22	74	76	818846	806219	<0.2	<0.2	1.9	1.9
						1.0	0.6	42	20.0		8.1		28.2		97.2		7.5		11.3		18		74				<0.2		1.8	
					Middle	4.0	0.6	44	20.1	20.1	8.1	8.1	28.1	28.1	98.5	98.6	7.6		13.8		20		76				<0.2		1.9	
						4.0	0.6	45	20.1		8.1		28.1		98.6		7.6		14.0		19		77				<0.2		1.9	
					Bottom	6.9	0.4	30	20.1	20.1	8.1	8.1	28.2	28.2	97.6	97.7	7.5	7.5	22.8		28		77				<0.2		2.0	
						6.9	0.4	32	20.1		8.1		28.2		97.8		7.5		22.5		30		77				<0.2		1.8	
IM3	Rainy	Rough	09:34	8.3	Surface	1.0	0.5	12	20.0	20.0	8.1	8.1	28.0	28.0	96.0	96.1	7.4	7.5	14.5	14.0	26	27	74	76	819437	806021	<0.2	<0.2	1.8	1.9
						1.0	0.6	12	20.0		8.1		28.0		96.1		7.4		14.6		28		74				<0.2		1.9	
					Middle	4.2	0.5	5	20.1	20.1	8.1	8.1	28.0	28.0	97.0	97.1	7.5		13.9		26		77				<0.2		1.9	
						4.2	0.5	5	20.1		8.1		28.0		97.2		7.5		13.9		27		76				<0.2		1.9	
					Bottom	7.3	0.5	356	20.1	20.1	8.1	8.1	28.0	28.0	99.0	99.1	7.6	7.6	13.6		26		77				<0.2		2.0	
						7.3	0.6	328	20.1		8.1		28.0		99.2		7.6		13.7		26		77				<0.2		2.0	
IM4	Rainy	Rough	09:44	7.7	Surface	1.0	0.5	33	19.8	19.8	8.1	8.1	28.4	28.4	98.5	98.4	7.6	7.6	7.2	8.5	8	10	74	76	819583	805063	<0.2	<0.2	1.7	1.7
						1.0	0.5	34	19.8		8.1		28.4		98.3		7.6		7.4		8		75				<0.2		1.7	
					Middle	3.9	0.6	44	19.9	19.9	8.1	8.1	28.3	28.3	98.3	98.3	7.6		7.9		9		75				<0.2		1.6	
						3.9	0.6	47	19.9		8.1		28.3		98.3		7.6		8.1		9		76				<0.2		1.8	
					Bottom	6.7	0.3	47	20.0	20.0	8.1	8.1	28.3	28.3	99.8	99.9	7.7	7.7	10.2		13		77				<0.2		1.8	
						6.7	0.3	48	20.0		8.1		28.3		99.9		7.7		10.2		11		77				<0.2		1.8	
IM5	Rainy	Rough	09:56	7.0	Surface	1.0	0.4	23	19.9	19.9	8.1	8.1	28.5	28.5	97.7	97.7	7.5	7.5	11.3	13.9	23	25	74	76	820552	804895	<0.2	<0.2	1.6	1.7
						1.0	0.4	23	19.9		8.1		28.5		97.7		7.5		11.3		22		74				<0.2		1.8	
					Middle	3.5	0.4	17	19.9	19.9	8.1	8.1	28.5	28.5	97.7	97.7	7.5		12.5		25		75				<0.2		1.7	
						3.5	0.4	18	19.9		8.1		28.5		97.7		7.5		12.4		25		76				<0.2		1.7	
					Bottom	6.0	0.5	30	20.0	20.0	8.1	8.1	28.4	28.4	97.6	97.6	7.5	7.5	18.0		27		77				<0.2		1.6	
						6.0	0.5	30	20.0		8.1		28.4		97.6		7.5		17.8		25		77				<0.2		1.7	
IM6	Rainy	Rough	10:04	6.9	Surface	1.0	0.3	24	20.0	20.0	8.1	8.1	28.0	28.0	96.1	96.1	7.4	7.4	18.7	18.2	27	29	73	75	821071	805836	<0.2	<0.2	2.0	2.0
						1.0	0.3	25	20.0		8.1		28.0		96.1		7.4		18.7		26		74				<0.2		2.3	
					Middle	3.5	0.3	42	20.1	20.1	8.1	8.1	28.0	28.0	96.7	96.8	7.4		15.3		26		75				<0.2		1.9	
						3.5	0.3	42	20.1		8.1		28.0		96.8		7.5		15.3		26		74				<0.2		1.9	
					Bottom	5.9	0.1	20	20.1	20.1	8.1	8.1	27.9	27.9	98.1	98.2	7.6	7.6	20.8		33		76				<0.2		2.0	
						5.9	0.1	20	20.1		8.1		27.9		98.3		7.6		20.8		35		77				<0.2		1.9	
IM7	Rainy	Rough	10:13	8.5	Surface	1.0	0.3	43	20.1	20.1	8.1	8.1	28.2	28.2	96.9	96.9	7.5	7.5	12.1	16.9	23	30	74	75	821319	806815	<0.2	<0.2	1.8	1.8
						1.0	0.3	44	20.1		8.1		28.2		96.9		7.5		12.1		25		73				<0.2		1.9	
					Middle	4.3	0.3	38	20.0	20.0	8.1	8.1	28.2	28.2	97.2	97.2	7.5		14.2		23		75				<0.2		1.8	
						4.3	0.4	38	20.0		8.1		28.2		97.2		7.5		14.3		25		75				<0.2		1.7	
					Bottom	7.5	0.2	66	20.1	20.1	8.1	8.1	28.5	28.5	97.6	97.7	7.5	7.5	24.3		40		76				<0.2		1.8	
						7.5	0.2	68	20.1		8.1		28.5		97.8		7.5		24.4		42		77				<0.2		1.6	
IM8	Cloudy	Rough	09:11	8.0	Surface	1.0	0.3	54	20.7	20.7	8.1	8.1	26.6	26.6	90.2	90.2	6.9	6.9	16.5	21.6	26	26	73	74	821722	807845	<0.2	<0.2	2.4	2.5
						1.0	0.3	56	20.7		8.1		26.6		90.2		6.9		16.8		26		73				<0.2		2.6	
					Middle	4.0	0.3	49	20.7	20.7	8.1	8.1	26.7	26.7	90.3	90.3	6.9		20.6		26		74				<0.2		2.4	
						4.0	0.3	52	20.7		8.1		26.7		90.3		6.9		20.6		26		74				<0.2		2.6	
					Bottom	7.0	0.3	55	20.7	20.7	8.1	8.1	26.7	26.7	90.7	90.7	7.0	7.0	27.6		27		75				<0.2		2.5	
						7.0	0.3	55	20.7		8.1		26.7		90.7		7.0		27.5		27		75				<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 20 March 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C) Value	Water Temperature (°C) Average	pH Value	pH Average	Salinity (ppt) Value	Salinity (ppt) Average	DO Saturation (%) Value	DO Saturation (%) Average	Dissolved Oxygen Value	Dissolved Oxygen DA	Turbidity(NTU) Value	Turbidity(NTU) DA	Suspended Solids (mg/L) Value	Suspended Solids (mg/L) DA	Total Alkalinity (ppm) Value	Total Alkalinity (ppm) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L) Value	Chromium (µg/L) DA	Nickel (µg/L) Value	Nickel (µg/L) DA
IM9	Cloudy	Rough	09:00	7.1	Surface	1.0	0.2	12	20.8	20.8	8.0	8.0	26.6	26.6	90.0	90.0	6.9	6.9	20.7	21.5	33	33	73	74	822084	808812	<0.2	<0.2	2.4	2.4
						1.0	0.2	12	20.8		8.0		26.6		90.0		6.9		20.6		33		74				<0.2		2.4	
					Middle	3.6	0.2	6	20.7	20.7	8.0	8.0	26.6	26.6	90.1	90.1	6.9		21.6		31		74				<0.2		2.4	
						3.6	0.2	6	20.7		8.0		26.6		90.1		6.9		21.7		32		74				<0.2		2.2	
					Bottom	6.1	0.2	332	20.7	20.7	8.0	8.0	26.6	26.6	90.5	90.5	6.9	6.9	22.2		33		75				<0.2		2.4	
						6.1	0.2	352	20.7		8.0		26.6		90.5		6.9		22.4		34		75				<0.2		2.4	
IM10	Cloudy	Rough	08:51	6.8	Surface	1.0	0.4	322	20.7	20.7	8.0	8.0	27.8	27.8	91.8	91.8	7.0	7.0	13.9	17.4	13	20	74	74	822237	809826	<0.2	<0.2	2.0	2.1
						1.0	0.5	345	20.7		8.0		27.8		91.8		7.0		14.3		15		74				<0.2		2.1	
					Middle	3.4	0.4	316	20.7	20.7	8.0	8.0	27.8	27.8	91.6	91.6	7.0		16.1		17		74				<0.2		2.1	
						3.4	0.5	332	20.7		8.0		27.8		91.5		7.0		15.8		16		74				<0.2		2.0	
					Bottom	5.8	0.4	319	20.7	20.7	7.9	7.9	27.8	27.8	91.0	91.0	6.9	6.9	23.2		29		75				<0.2		2.1	
						5.8	0.4	334	20.7		7.9		27.8		91.0		6.9		21.2		28		75				<0.2		2.0	
IM11	Cloudy	Rough	08:36	7.9	Surface	1.0	0.7	293	20.7	20.7	8.0	8.0	28.0	28.0	92.0	92.0	7.0	7.0	9.1	13.8	9	11	73	75	821487	810537	<0.2	<0.2	1.8	2.0
						1.0	0.7	313	20.7		8.0		28.0		92.0		7.0		9.7		8		74				<0.2		2.0	
					Middle	4.0	0.6	291	20.7	20.7	8.0	8.0	28.1	28.1	91.8	91.8	7.0		12.8		7		74				<0.2		2.0	
						4.0	0.6	307	20.7		8.0		28.1		91.8		7.0		12.8		7		74				<0.2		2.1	
					Bottom	6.9	0.4	289	20.7	20.7	8.0	8.0	28.1	28.1	90.7	90.6	6.9	6.9	19.8		17		76				<0.2		2.0	
						6.9	0.5	313	20.7		8.0		28.1		90.5		6.9		18.6		15		76				<0.2		1.9	
IM12	Cloudy	Rough	08:28	6.9	Surface	1.0	0.5	285	20.7	20.7	8.0	8.0	28.1	28.2	91.5	91.5	7.0	7.0	9.9	19.7	12	12	73	74	821191	811548	<0.2	<0.2	2.0	2.1
						1.0	0.6	290	20.7		8.0		28.2		91.4		7.0		10.5		12		73				<0.2		2.0	
					Middle	3.5	0.6	281	20.7	20.7	8.0	8.0	28.4	28.4	90.8	90.8	6.9		17.0		12		73				<0.2		2.0	
						3.5	0.6	301	20.7		8.0		28.4		90.7		6.9		17.2		12		74				<0.2		2.0	
					Bottom	5.9	0.6	286	20.6	20.6	8.0	8.0	28.6	28.6	90.7	90.8	6.9	6.9	32.8		12		75				<0.2		1.8	
						5.9	0.6	301	20.6		8.0		28.6		90.8		6.9		30.6		13		75				<0.2		2.5	
SR2	Cloudy	Rough	08:01	4.3	Surface	1.0	0.2	349	20.5	20.5	8.0	8.0	28.6	28.6	92.7	92.7	7.1	7.1	10.8	11.4	15	17	73	74	821474	814158	<0.2	<0.2	1.4	1.4
						1.0	0.2	321	20.5		8.0		28.6		92.6		7.1		11.0		15		73				<0.2		1.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.1	20	20.5	20.5	8.0	8.0	28.6	28.6	92.4	92.4	7.0	7.0	12.0		19		74				<0.2		1.4	
						3.3	0.1	20	20.5		8.0		28.6		92.4		7.0		11.7		17		74				<0.2		1.5	
SR3	Cloudy	Rough	09:18	8.9	Surface	1.0	0.3	34	20.8	20.8	7.9	7.9	26.2	26.2	89.0	89.0	6.8	6.9	16.7	21.5	17	20	-	-	822145	807571	-	-	-	-
						1.0	0.3	34	20.8		7.9		26.2		89.0		6.8		16.8		17		-				-		-	
					Middle	4.5	0.4	11	20.8	20.8	7.9	7.9	26.3	26.3	89.4	89.5	6.9		22.4		21		-				-		-	
						4.5	0.4	11	20.8		7.9		26.3		89.5		6.9		22.5		21		-				-		-	
					Bottom	7.9	0.4	12	20.8	20.8	7.9	7.9	26.4	26.4	90.0	90.1	6.9	6.9	25.4		21		-				-		-	
						7.9	0.4	12	20.8		7.9		26.4		90.1		6.9		25.4		20		-				-		-	
SR4A	Cloudy	Moderate	08:32	9.1	Surface	1.0	0.3	270	20.3	20.3	8.1	8.1	29.4	29.4	93.7	93.8	7.1	7.2	9.7	13.1	15	16	-	-	817188	807821	-	-	-	-
						1.0	0.3	286	20.3		8.1		29.4		93.9		7.1		9.6		14		-				-		-	
					Middle	4.6	0.3	268	20.4	20.4	8.1	8.1	29.4	29.4	96.4	96.5	7.3		12.6		16		-				-		-	
						4.6	0.3	282	20.4		8.1		29.4		96.5		7.3		12.4		16		-				-		-	
					Bottom	8.1	0.2	279	20.3	20.3	8.1	8.1	29.4	29.4	94.2	94.3	7.2	7.2	17.3		17		-				-		-	
						8.1	0.2	289	20.3		8.1		29.4		94.3		7.2		17.3		18		-				-		-	
SR5A	Cloudy	Moderate	08:16	4.6	Surface	1.0	0.3	292	20.4	20.4	8.0	8.0	29.2	29.2	91.7	91.8	7.0	7.0	9.9	11.2	16	15	-	-	816579	810671	-	-	-	-
						1.0	0.4	306	20.4		8.0		29.2		91.8		7.0		9.8		15		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.3	288	20.4	20.4	8.0	8.0	29.2	29.2	95.0	95.2	7.2	7.2	12.8		15		-				-		-	
						3.6	0.4	300	20.4		8.0		29.2		95.3		7.2		12.3		15		-				-		-	
SR6	Cloudy	Moderate	07:50	3.6	Surface	1.0	0.2	267	20.1	20.1	8.0	8.0	28.8	28.8	92.4	92.4	7.1	7.1	7.4	7.4	11	10	-	-	817883	814680	-	-	-	-
						1.0	0.2	291	20.1		8.0		28.8		92.4		7.1		7.4		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.6	0.2	268	20.1	20.1	8.0	8.0	28.8	28.8	92.3	92.4	7.1	7.1	7.4		10		-				-		-	
						2.6	0.2	281	20.1		8.0		28.8		92.4		7.1		7.5		10		-				-		-	
SR7	Cloudy	Moderate	07:03	23.4	Surface	1.0	0.2	175	20.5	20.5	8.0	8.0	28.9	28.9	93.5	93.5	7.1	7.1	3.2	3.2	6	6	-	-	823663	823719	-	-	-	-
						1.0	0.2	189	20.5		8.0		28.9		93.5		7.1		3.2		5		-				-		-	
					Middle	11.7	0.2	183	20.4	20.4	8.0	8.0	29.0	29.0	93.0	93.0	7.1		3.4		6		-				-		-	
						11.7	0.2	186	20.4		8.0		29.0		93.0		7.1		3.4		6		-				-		-	
					Bottom	22.4	0.1	175	20.4	20.4	8.0	8.0	29.0	29.0	92.9	92.9	7.1	7.1	3.1		6		-				-		-	
						22.4	0.1	182	20.4		8.0		29.0		92.9		7.1		3.1		5		-				-		-	
SR8	Cloudy	Rough	08:18	4.0	Surface	1.0	-	-	20.8	20.8	8.0	8.0	27.8	27.8	91.3	91.3	6.9	6.9	7.1	7.5	11	10	-	-	820246	811418	-	-	-	-
						1.0	-	-	20.8		8.0		27.8		91.3		6.9		7.3		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	-	-	20.8	20.8	8.0	8.0	27.8	27.8	91.1	91.1	6.9	6.9	7.7		10		-				-		-	
						3.0	-	-	20.8		8.0		27.8		91.1		6.9		7.8		10		-				-		-	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 22 March 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Sunny	Moderate	15:29	8.8	Surface	1.0	0.4	185	19.7	19.7	8.2	8.2	31.3	31.3	103.9	103.9	7.9	7.8	10.1	10.9	5	6	72	74	815592	804222	<0.2	<0.2	0.6	0.6
						1.0	0.4	190	19.7		8.2		31.3		103.9		7.9		10.1		5		72				<0.2		0.6	
					Middle	4.4	0.3	194	19.4	19.4	8.2	8.2	31.4	31.4	101.0	101.0	7.7		11.1		6		74				<0.2		0.5	
						4.4	0.3	210	19.4		8.2		31.4		100.9		7.7		10.9		6		74				<0.2		0.5	
					Bottom	7.8	0.2	184	19.4	19.4	8.2	8.2	31.4	31.4	100.0	100.0	7.6	7.6	11.5		6		77				<0.2		0.6	
						7.8	0.2	194	19.4		8.2		31.4		100.0		7.6		11.5		6		76				<0.2		0.6	
C2	Fine	Moderate	14:29	12.2	Surface	1.0	0.2	159	20.2	20.2	8.0	8.0	29.9	29.9	95.1	95.1	7.2	7.3	13.3	17.5	13	14	73	75	825661	806927	<0.2	<0.2	1.5	1.7
						1.0	0.2	163	20.2		8.0		29.9		95.1		7.2		13.4		13		73				<0.2		1.7	
					Middle	6.1	0.2	165	19.7	19.7	8.0	8.0	30.4	30.4	95.5	95.5	7.3		18.4		14		75				<0.2		1.8	
						6.1	0.2	176	19.7		8.0		30.4		95.5		7.3		18.4		15		75				<0.2		1.8	
					Bottom	11.2	0.1	112	19.7	19.7	8.0	8.0	30.8	30.8	96.5	96.5	7.4	7.4	20.6		16		77				<0.2		1.7	
						11.2	0.1	112	19.7		8.0		30.8		96.5		7.4		20.6		14		77				<0.2		1.7	
C3	Fine	Moderate	16:12	12.3	Surface	1.0	0.5	70	19.9	19.9	8.0	8.0	31.1	31.1	90.7	90.7	6.9	6.9	5.3	4.7	7	6	73	75	822096	817822	<0.2	<0.2	1.4	1.4
						1.0	0.5	75	19.9		8.0		31.2		90.6		6.9		5.4		6		73				<0.2		1.6	
					Middle	6.2	0.3	84	19.5	19.5	8.0	8.0	31.7	31.7	90.3	90.3	6.9		4.4		6		75				<0.2		1.4	
						6.2	0.4	85	19.5		8.0		31.7		90.3		6.9		4.3		6		75				<0.2		1.4	
					Bottom	11.3	0.3	87	19.5	19.5	8.0	8.0	31.9	31.9	90.6	90.7	6.9	6.9	4.4		6		76				<0.2		1.4	
						11.3	0.3	89	19.5		8.0		31.9		90.7		6.9		4.4		7		77				<0.2		1.4	
IM1	Sunny	Moderate	15:11	7.7	Surface	1.0	0.2	207	19.9	19.9	8.2	8.2	30.3	30.3	102.1	102.1	7.8	7.8	12.9	12.9	6	8	72	74	818340	806453	<0.2	<0.2	1.0	0.9
						1.0	0.2	217	19.9		8.2		30.3		102.1		7.8		13.0		7		72				<0.2		0.9	
					Middle	3.9	0.1	211	19.5	19.5	8.2	8.2	30.9	30.9	101.2	101.2	7.7		12.5		8		74				<0.2		0.9	
						3.9	0.1	212	19.5		8.2		30.9		101.1		7.7		12.6		7		74				<0.2		1.0	
					Bottom	6.7	0.2	168	19.6	19.6	8.2	8.2	31.3	31.3	100.2	100.2	7.6	7.6	13.1		9		76				<0.2		1.0	
						6.7	0.2	180	19.6		8.2		31.3		100.2		7.6		13.2		8		76				<0.2		0.8	
IM2	Sunny	Moderate	15:06	8.7	Surface	1.0	0.1	244	20.0	20.0	8.2	8.2	30.2	30.2	102.3	102.3	7.8	7.8	11.4	12.4	7	8	72	74	818844	806196	<0.2	<0.2	0.9	0.8
						1.0	0.1	249	20.0		8.2		30.2		102.3		7.8		11.3		7		73				<0.2		0.9	
					Middle	4.4	0.2	194	19.8	19.8	8.2	8.2	30.9	30.9	102.3	102.3	7.8		12.4		8		74				<0.2		0.9	
						4.4	0.2	205	19.8		8.2		30.9		102.3		7.8		12.4		9		75				<0.2		0.8	
					Bottom	7.7	0.2	182	19.6	19.6	8.2	8.2	31.3	31.3	101.0	101.1	7.7	7.7	13.3		8		76				<0.2		0.7	
						7.7	0.2	195	19.6		8.2		31.3		101.1		7.7		13.5		7		76				<0.2		0.7	
IM3	Sunny	Moderate	15:01	8.8	Surface	1.0	0.2	193	19.9	19.9	8.2	8.2	31.1	31.1	103.4	103.4	7.8	7.8	11.1	12.9	6	9	73	75	819426	806035	<0.2	<0.2	0.7	0.6
						1.0	0.2	209	19.9		8.2		31.1		103.4		7.8		11.2		7		73				<0.2		0.7	
					Middle	4.4	0.1	150	19.4	19.4	8.2	8.2	31.3	31.3	100.8	100.8	7.7		13.2		8		75				<0.2		0.7	
						4.4	0.1	157	19.4		8.2		31.3		100.8		7.7		13.3		8		75				<0.2		0.6	
					Bottom	7.8	0.1	182	19.4	19.4	8.2	8.2	31.3	31.3	100.2	100.3	7.7	7.7	14.3		12		77				<0.2		0.6	
						7.8	0.1	190	19.4		8.2		31.3		100.3		7.7		14.4		12		77				<0.2		0.5	
IM4	Sunny	Moderate	14:54	8.0	Surface	1.0	0.2	111	19.7	19.7	8.2	8.2	30.8	30.8	102.4	102.4	7.8	7.8	13.3	15.3	5	7	74	75	819577	805050	<0.2	<0.2	0.8	0.7
						1.0	0.2	117	19.7		8.2		30.8		102.4		7.8		13.5		7		73				<0.2		0.8	
					Middle	4.0	0.1	81	19.4	19.4	8.2	8.2	31.2	31.2	100.7	100.7	7.7		14.6		6		75				<0.2		0.7	
						4.0	0.1	83	19.4		8.2		31.2		100.6		7.7		14.7		5		76				<0.2		0.7	
					Bottom	7.0	0.1	70	19.4	19.4	8.2	8.2	31.2	31.2	99.8	99.8	7.6	7.6	18.0		8		77				<0.2		0.7	
						7.0	0.1	73	19.4		8.2		31.2		99.8		7.6		17.8		8		77				<0.2		0.7	
IM5	Sunny	Moderate	14:45	7.4	Surface	1.0	0.0	267	19.7	19.7	8.2	8.2	30.9	30.9	102.4	102.3	7.8	7.8	13.0	14.1	8	8	73	75	820562	804912	<0.2	<0.2	0.8	0.7
						1.0	0.0	278	19.7		8.2		30.9		102.2		7.8		13.4		7		73				<0.2		0.8	
					Middle	3.7	0.1	85	19.7	19.7	8.2	8.2	30.9	30.9	101.6	101.6	7.7		14.3		8		75				<0.2		0.7	
						3.7	0.1	92	19.7		8.2		30.9		101.5		7.7		14.2		9		76				<0.2		0.7	
					Bottom	6.4	0.1	61	19.4	19.4	8.2	8.2	31.0	31.0	100.1	100.1	7.7	7.7	14.8		9		77				<0.2		0.7	
						6.4	0.1	63	19.4		8.2		31.0		100.1		7.7		14.9		8		76				<0.2		0.7	
IM6	Sunny	Moderate	14:37	7.3	Surface	1.0	0.2	121	19.5	19.5	8.2	8.2	31.0	31.0	101.3	101.3	7.7	7.7	14.2	15.5	10	13	73	75	821030	805828	<0.2	<0.2	0.8	0.8
						1.0	0.2	122	19.5		8.2		31.0		101.3		7.7		14.4		10		73				<0.2		0.7	
					Middle	3.7	0.1	116	19.4	19.4	8.2	8.2	31.0	31.0	100.0	100.0	7.7		15.8		13		75				<0.2		0.9	
						3.7	0.1	125	19.4		8.2		31.0		99.9		7.7		16.6		12		76				<0.2		1.0	
					Bottom	6.3	0.1	117	19.3	19.3	8.2	8.2	31.0	31.0	99.1	99.1	7.6	7.6	16.0		15		77				<0.2		0.6	
						6.3	0.1	128	19.3		8.2		31.0		99.1		7.6		16.2		16		78				<0.2		0.8	
IM7	Sunny	Moderate	14:28	8.9	Surface	1.0	0.2	124	19.7	19.7	8.2	8.2	30.4	30.5	99.5	99.5	7.6	7.6	16.7	16.5	10	13	73	75	821323	806838	<0.2	<0.2	1.0	1.1
						1.0	0.2	132	19.6		8.2		30.5		99.5		7.6		16.6		11		72				<0.2		1.0	
					Middle	4.5	0.1	124	19.4	19.4	8.2	8.2	30.7	30.7	98.8	98.8	7.6		16.2		14		75				<0.2		1.2	
						4.5	0.1	134	19.4		8.2		30.7		98.8		7.6		16.4		15		75				<0.2		1.4	
					Bottom	7.9	0.1	108	19.4	19.4	8.2	8.2	30.8	30.8	98.7	98.7	7.6	7.6	16.6		15		77				<0.2		0.9	
						7.9	0.1	116	19.4		8.2		30.8		98.7		7.6		16.4		14		78				<0.2		1.0	
IM8	Fine	Moderate	14:54	8.5	Surface	1.0	0.3	118	20.2	20.2	8.0	8.0	30.6	30.6	100.0	100.1	7.6	7.6	9.4	10.2	11	10	73	75	821694	807853	<0.2	<0.2	1.5	1.4
						1.0	0.3	121	20.2		8.0		30.6		100.1		7.6		9.2		10		73				<0.2		1.6	
					Middle	4.3	0.3	66	19.5	19.5	8.1	8.1	32.2	32.2	99.4	99.4	7.5		10.1		10		75				<0.2		1.5	
						4.3	0.3	70	19.5		8.1		32.2		99.4		7.5		10.1		10		75				<0.2		1.6	
					Bottom	7.5	0.2	55	19.5	19.5	8.1	8.1	32.5	32.5	98.9	98.9	7.5	7.5	11.2		10		76				<0.2		1.1	
						7.5	0.2	58	19.5		8.1		32.5		98.9		7.5		11.2		10		77				<0.2		1.0	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 22 March 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Fine	Moderate	15:01	7.6	Surface	1.0	0.4	109	20.4	20.4	8.0	8.0	30.2	30.2	99.5	99.5	7.5	7.6	8.1	16.0	8	9	73	75	822074	808824	<0.2	<0.2	1.5	1.3
						1.0	0.4	109	20.4		8.0		30.2		99.5		7.5		8.2		8		73				<0.2		1.4	
					Middle	3.8	0.4	71	19.6	19.6	8.1	8.1	32.1	32.1	99.6	99.6	7.6		15.9		9		75				<0.2		1.4	
						3.8	0.4	77	19.6		8.1		32.1		99.6		7.6		16.1		8		75				<0.2		1.6	
					Bottom	6.6	0.3	60	19.6	19.6	8.1	8.1	32.3	32.3	99.1	99.1	7.5	7.5	23.8		9		76				<0.2		1.0	
						6.6	0.4	65	19.6		8.1		32.3		99.1		7.5		23.9		10		77				<0.2		1.1	
IM10	Fine	Moderate	15:09	7.7	Surface	1.0	0.5	103	20.0	20.0	8.1	8.1	31.0	31.0	99.0	99.0	7.5	7.5	8.4	10.0	9	9	73	75	822216	809808	<0.2	<0.2	1.3	1.3
						1.0	0.5	111	20.0		8.1		31.0		99.0		7.5		8.4		8		73				<0.2		1.2	
					Middle	3.9	0.5	94	19.8	19.8	8.1	8.1	31.5	31.5	98.8	98.8	7.5		9.6		8		75				<0.2		1.3	
						3.9	0.5	99	19.8		8.1		31.5		98.8		7.5		9.4		8		75				<0.2		1.3	
					Bottom	6.7	0.3	86	19.7	19.7	8.1	8.1	31.8	31.8	98.5	98.5	7.5	7.5	12.1		10		76				<0.2		1.3	
						6.7	0.4	91	19.7		8.1		31.8		98.4		7.5		12.2		10		77				<0.2		1.2	
IM11	Fine	Moderate	15:20	7.3	Surface	1.0	0.4	110	20.0	20.0	8.1	8.1	30.6	30.6	98.7	98.7	7.5	7.5	8.5	15.7	8	9	73	75	821505	810562	<0.2	<0.2	1.5	1.5
						1.0	0.4	115	20.0		8.1		30.7		98.7		7.5		8.6		8		73				<0.2		1.4	
					Middle	3.7	0.3	90	19.8	19.8	8.1	8.1	31.5	31.5	98.3	98.4	7.5		14.8		9		76				<0.2		1.6	
						3.7	0.3	93	19.8		8.1		31.5		98.4		7.5		14.8		9		76				<0.2		1.5	
					Bottom	6.3	0.3	70	19.8	19.8	8.1	8.1	31.9	31.9	98.1	98.1	7.4	7.4	23.6		10		76				<0.2		1.4	
						6.3	0.4	74	19.8		8.1		31.9		98.1		7.4		23.8		9		77				<0.2		1.4	
IM12	Fine	Moderate	15:27	9.0	Surface	1.0	0.5	112	20.0	20.0	8.1	8.1	30.5	30.5	96.3	96.3	7.3	7.3	10.4	15.1	8	9	73	75	821191	811490	<0.2	<0.2	1.5	1.5
						1.0	0.6	121	20.0		8.1		30.5		96.2		7.3		10.4		9		73				<0.2		1.5	
					Middle	4.5	0.5	104	19.8	19.8	8.1	8.1	31.0	31.0	96.1	96.1	7.3		13.8		9		75				<0.2		1.6	
						4.5	0.5	104	19.8		8.1		31.0		96.1		7.3		13.8		10		75				<0.2		1.5	
					Bottom	8.0	0.4	87	19.7	19.7	8.1	8.1	31.5	31.5	96.5	96.5	7.3	7.3	21.1		9		76				<0.2		1.5	
						8.0	0.4	91	19.7		8.1		31.5		96.5		7.3		21.1		9		76				<0.2		1.6	
SR2	Fine	Moderate	15:53	4.7	Surface	1.0	0.5	83	20.0	20.0	8.0	8.0	30.4	30.4	92.6	92.7	7.0	7.0	8.4	8.7	8	8	73	74	821476	814150	<0.2	<0.2	1.6	1.5
						1.0	0.5	83	20.0		8.0		30.4		92.7		7.0		8.5		8		73				<0.2		1.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.5	89	20.0	20.0	8.0	8.0	30.5	30.5	93.2	93.4	7.1	7.1	9.0		9		75				<0.2		1.7	
						3.7	0.5	92	20.0		8.0		30.5		93.6		7.1		9.0		8		75				<0.2		1.4	
SR3	Fine	Moderate	14:49	9.1	Surface	1.0	0.2	164	20.3	20.3	8.0	8.0	30.3	30.3	98.4	98.5	7.5	7.5	9.6	13.6	8	9	-	-	822136	807582	-	-	-	-
						1.0	0.2	167	20.3		8.0		30.3		98.5		7.5		9.7		7		-				-		-	
					Middle	4.6	0.3	82	19.5	19.5	8.1	8.1	32.3	32.3	98.9	98.9	7.5		13.4		9		-				-		-	
						4.6	0.3	87	19.5		8.1		32.3		98.9		7.5		13.4		8		-				-		-	
					Bottom	8.1	0.3	67	19.4	19.4	8.1	8.1	32.4	32.4	98.6	98.6	7.5	7.5	17.9		10		-				-		-	
						8.1	0.3	68	19.4		8.1		32.4		98.6		7.5		17.6		11		-				-		-	
SR4A	Sunny	Calm	15:50	9.0	Surface	1.0	0.4	70	19.6	19.6	8.2	8.2	30.8	30.8	100.6	100.6	7.7	7.7	15.0	17.3	9	9	-	-	817202	807782	-	-	-	-
						1.0	0.4	72	19.6		8.2		30.8		100.6		7.7		15.0		8		-				-		-	
					Middle	4.5	0.4	69	19.4	19.4	8.2	8.2	31.2	31.2	98.8	98.8	7.6		19.0		9		-				-		-	
						4.5	0.4	74	19.4		8.2		31.2		98.8		7.6		18.7		8		-				-		-	
					Bottom	8.0	0.4	72	19.3	19.3	8.2	8.2	31.2	31.2	98.5	98.5	7.5	7.5	18.2		12		-				-		-	
						8.0	0.4	77	19.3		8.2		31.2		98.5		7.5		18.0		10		-				-		-	
SR5A	Sunny	Calm	16:06	5.5	Surface	1.0	0.0	108	20.0	20.0	8.1	8.1	29.2	29.2	94.5	94.6	7.2	7.2	13.8	13.6	8	9	-	-	816571	810724	-	-	-	-
						1.0	0.0	111	20.0		8.1		29.2		94.6		7.2		13.7		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.5	0.1	114	20.0	20.0	8.1	8.1	29.5	29.5	95.8	95.9	7.3	7.3	13.5		10		-				-		-	
						4.5	0.1	114	20.0		8.1		29.5		95.9		7.3		13.3		10		-				-		-	
SR6	Sunny	Calm	16:28	4.1	Surface	1.0	0.0	19	21.2	21.2	8.0	8.0	28.2	28.2	94.5	94.5	7.1	7.1	17.7	17.6	10	10	-	-	817879	814669	-	-	-	-
						1.0	0.0	19	21.2		8.0		28.2		94.5		7.1		17.6		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.1	326	21.2	21.2	8.0	8.0	28.3	28.3	96.3	96.4	7.3	7.3	17.5		9		-				-		-	
						3.1	0.2	335	21.2		8.0		28.3		96.4		7.3		17.5		9		-				-		-	
SR7	Fine	Moderate	16:41	18.3	Surface	1.0	0.6	84	20.0	20.0	8.0	8.0	31.5	31.5	93.7	93.6	7.1	7.1	3.4	4.8	4	5	-	-	823659	823754	-	-	-	-
						1.0	0.7	88	20.0		8.0		31.5		93.5		7.1		3.6		3		-				-		-	
					Middle	9.2	0.3	84	19.8	19.8	8.0	8.0	31.8	31.8	92.5	92.5	7.0		4.9		4		-				-		-	
						9.2	0.3	89	19.8		8.0		31.8		92.5		7.0		5.0		5		-				-		-	
					Bottom	17.3	0.2	69	19.7	19.7	8.0	8.0	31.9	31.9	92.2	92.2	7.0	7.0	5.8		7		-				-		-	
						17.3	0.2	71	19.7		8.0		31.9		92.2		7.0		5.9		7		-				-		-	
SR8	Fine	Calm	15:41	3.4	Surface	1.0	-	-	20.2	20.2	8.1	8.1	30.4	30.4	98.4	98.4	7.5	7.5	10.1	10.5	12	11	-	-	820246	811418	-	-	-	-
						1.0	-	-	20.2		8.1		30.4		98.4		7.5		10.1		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.4	-	-	20.1	20.1	8.1	8.1	30.7	30.7	98.2	98.2	7.4	7.4	10.9		11		-				-		-	
						2.4	-	-	20.1		8.1		30.7		98.2		7.4		10.9		12		-				-		-	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 22 March 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Sunny	Moderate	09:54	8.3	Surface	1.0	0.4	43	19.2	19.2	8.2	8.2	30.8	30.8	98.4	98.4	7.6	7.6	18.1	20.7	16	16	71	74	815610	804220	<0.2	<0.2	0.9	0.8
						1.0	0.4	46	19.2		8.2		30.8		98.4		7.6		17.8		16		71				<0.2		0.8	
					Middle	4.2	0.5	32	19.2	19.2	8.2	8.2	30.9	30.9	98.1	98.1	7.6		20.7		15		74				<0.2		0.7	
						4.2	0.5	32	19.2		8.2		30.9		98.1		7.6		20.7		15		73				<0.2		0.7	
					Bottom	7.3	0.5	28	19.2	19.2	8.2	8.2	30.9	30.9	97.9	97.9	7.5	7.5	23.2		15		76				<0.2		0.8	
						7.3	0.5	28	19.2		8.2		30.9		97.9		7.5		23.5		16		76				<0.2		0.8	
C2	Fine	Moderate	10:37	12.3	Surface	1.0	0.5	353	20.0	20.0	7.9	7.9	29.3	29.3	91.4	91.4	7.0	7.0	6.4	12.7	9	10	72	74	825704	806954	<0.2	<0.2	1.8	1.8
						1.0	0.5	325	20.0		7.9		29.3		91.4		7.0		6.7		11		72				<0.2		1.7	
					Middle	6.2	0.5	341	19.9	19.9	8.0	8.0	30.0	30.0	90.6	90.6	6.9		13.2		11		73				<0.2		1.8	
						6.2	0.5	354	19.9		8.0		30.0		90.6		6.9		13.3		10		73				<0.2		1.8	
					Bottom	11.3	0.4	348	19.9	19.9	8.0	8.0	30.1	30.1	89.9	89.9	6.9	6.9	18.3		10		76				<0.2		1.8	
						11.3	0.5	320	19.9		8.0		30.1		89.9		6.9		18.3		10		77				<0.2		1.7	
C3	Fine	Moderate	08:51	11.5	Surface	1.0	0.5	255	19.6	19.6	8.0	8.0	30.5	30.5	90.6	90.7	6.9	6.9	4.6	7.3	6	7	71	73	822123	817815	<0.2	<0.2	1.3	1.3
						1.0	0.5	273	19.6		8.0		30.5		90.7		6.9		4.7		7		71				<0.2		1.4	
					Middle	5.8	0.6	261	19.6	19.5	8.0	8.0	31.4	31.4	90.0	90.1	6.9		6.9		7		73				<0.2		1.4	
						5.8	0.6	268	19.5		8.0		31.5		90.1		6.9		6.7		7		73				<0.2		1.3	
					Bottom	10.5	0.4	268	19.5	19.5	8.0	8.0	31.8	31.8	90.5	90.6	6.9	6.9	10.3		7		75				<0.2		1.3	
						10.5	0.5	283	19.5		8.0		31.8		90.6		6.9		10.3		6		75				<0.2		1.3	
IM1	Sunny	Moderate	10:11	7.5	Surface	1.0	0.5	10	19.5	19.5	8.2	8.2	29.7	29.7	97.7	97.7	7.5	7.5	12.8	18.5	8	7	72	74	818353	806448	<0.2	<0.2	1.0	1.1
						1.0	0.6	10	19.5		8.2		29.7		97.7		7.5		13.0		8		73				<0.2		0.9	
					Middle	3.8	0.6	12	19.5	19.5	8.2	8.2	29.7	29.7	97.1	97.1	7.5		17.2		6		74				<0.2		1.3	
						3.8	0.6	12	19.5		8.2		29.8		97.1		7.5		17.3		6		74				<0.2		1.3	
					Bottom	6.5	0.5	4	19.4	19.4	8.2	8.2	30.4	30.4	96.2	96.2	7.4	7.4	25.4		7		76				<0.2		1.0	
						6.5	0.5	4	19.4		8.2		30.4		96.2		7.4		25.1		6		76				<0.2		1.0	
IM2	Sunny	Moderate	10:16	8.3	Surface	1.0	0.5	349	19.5	19.5	8.2	8.2	29.5	29.5	97.5	97.5	7.5	7.5	12.3	16.2	6	7	71	73	818878	806184	<0.2	<0.2	1.0	1.0
						1.0	0.5	321	19.5		8.2		29.5		97.4		7.5		12.6		7		72				<0.2		1.0	
					Middle	4.2	0.6	1	19.4	19.4	8.2	8.2	29.6	29.6	96.9	96.9	7.5		15.3		8		73				<0.2		1.0	
						4.2	0.7	1	19.4		8.2		29.6		96.9		7.5		15.6		7		73				<0.2		1.0	
					Bottom	7.3	0.5	357	19.4	19.4	8.2	8.2	30.5	30.5	95.2	95.2	7.3	7.3	20.8		8		74				<0.2		0.9	
						7.3	0.5	328	19.4		8.2		30.4		95.2		7.3		20.5		8		75				<0.2		1.1	
IM3	Sunny	Moderate	10:21	8.4	Surface	1.0	0.5	21	19.6	19.6	8.2	8.2	29.2	29.2	97.3	97.3	7.5	7.5	11.5	18.3	7	8	72	74	819383	806004	<0.2	<0.2	1.1	1.1
						1.0	0.5	22	19.6		8.2		29.2		97.3		7.5		11.7		8		72				<0.2		1.1	
					Middle	4.2	0.5	27	19.5	19.5	8.2	8.2	29.3	29.3	97.0	97.0	7.5		13.3		8		73				<0.2		1.2	
						4.2	0.6	29	19.5		8.2		29.3		97.0		7.5		13.9		7		73				<0.2		1.1	
					Bottom	7.4	0.5	27	19.4	19.4	8.2	8.2	30.2	30.2	96.7	96.7	7.5	7.5	29.6		8		75				<0.2		1.1	
						7.4	0.5	28	19.4		8.2		30.2		96.7		7.4		29.5		7		76				<0.2		1.0	
IM4	Sunny	Moderate	10:29	7.9	Surface	1.0	0.5	16	19.7	19.7	8.2	8.2	28.9	28.9	97.5	97.5	7.5	7.6	11.6	15.0	6	7	73	75	819558	805048	<0.2	<0.2	1.2	1.2
						1.0	0.5	17	19.7		8.2		28.9		97.5		7.5		11.6		6		74				<0.2		1.3	
					Middle	4.0	0.6	27	19.4	19.4	8.2	8.2	29.4	29.4	97.8	97.8	7.6		12.6		7		75				<0.2		1.2	
						4.0	0.6	27	19.4		8.2		29.4		97.8		7.6		12.7		7		75				<0.2		1.2	
					Bottom	6.9	0.6	23	19.4	19.4	8.2	8.2	30.3	30.3	97.4	97.4	7.5	7.5	20.9		7		76				<0.2		1.2	
						6.9	0.6	23	19.4		8.2		30.3		97.4		7.5		20.5		8		76				<0.2		1.0	
IM5	Sunny	Moderate	10:38	7.2	Surface	1.0	0.6	18	19.6	19.6	8.1	8.1	28.8	28.8	97.0	97.0	7.5	7.5	10.9	15.6	7	8	74	75	820577	804896	<0.2	<0.2	1.3	1.2
						1.0	0.7	19	19.6		8.1		28.8		97.0		7.5		10.9		7		74				<0.2		1.2	
					Middle	3.6	0.7	21	19.6	19.6	8.1	8.1	28.9	28.9	96.8	96.8	7.5		12.9		9		75				<0.2		1.1	
						3.6	0.7	21	19.6		8.1		28.9		96.8		7.5		13.0		8		75				<0.2		1.2	
					Bottom	6.2	0.6	15	19.4	19.4	8.1	8.1	29.6	29.6	95.8	95.8	7.4	7.4	23.2		7		76				<0.2		1.3	
						6.2	0.6	15	19.4		8.1		29.6		95.7		7.4		22.7		7		76				<0.2		1.2	
IM6	Sunny	Moderate	10:47	7.2	Surface	1.0	0.3	30	19.6	19.6	8.2	8.2	29.2	29.2	95.9	95.9	7.4	7.4	22.6	22.5	13	16	72	75	821050	805811	<0.2	<0.2	1.0	1.0
						1.0	0.3	32	19.6		8.2		29.2		95.8		7.4		22.7		14		72				<0.2		1.0	
					Middle	3.6	0.2	18	19.6	19.6	8.2	8.2	29.2	29.2	95.8	95.9	7.4		22.7		15		75				<0.2		1.0	
						3.6	0.2	19	19.6		8.2		29.2		95.9		7.4		22.7		15		75				<0.2		1.0	
					Bottom	6.2	0.3	24	19.6	19.6	8.2	8.2	29.2	29.2	95.9	95.9	7.4	7.4	22.2		18		77				<0.2		1.1	
						6.2	0.3	25	19.6		8.2		29.2		95.9		7.4		22.3		20		76				<0.2		1.0	
IM7	Sunny	Moderate	10:54	8.5	Surface	1.0	0.3	33	19.6	19.6	8.2	8.2	29.6	29.6	96.3	96.3	7.4	7.4	20.5	21.0	14	14	72	74	821335	806857	<0.2	<0.2	1.2	1.1
						1.0	0.4	35	19.6		8.2		29.6		96.3		7.4		20.6		12		72				<0.2		1.1	
					Middle	4.3	0.3	20	19.6	19.6	8.2	8.2	29.6	29.6	96.2	96.2	7.4		21.5		14		73				<0.2		1.0	
						4.3	0.3	21	19.6		8.2		29.6		96.2		7.4		21.2		13		72				<0.2		1.2	
					Bottom	7.5	0.3	17	19.6	19.6	8.2	8.2	29.6	29.6	96.1	96.1	7.4	7.4	21.2		14		76				<0.2		0.9	
						7.5	0.3	18	19.6		8.2		29.6		96.1		7.4		20.8		16		76				<0.2		0.9	
IM8	Fine	Moderate	10:12	8.4	Surface	1.0	0.2	15	19.6	19.6	8.1	8.1	30.0	30.0	93.5	93.5	7.2	7.2	18.7	20.3	18	18	72	74	821699	807855	<0.2	<0.2	1.5	1.5
						1.0	0.2	15	19.6		8.1		30.0		93.5		7.2		18.7		16		72				<0.2		1.5	
					Middle	4.2	0.3	19	19.6	19.6	8.1	8.1	30.1	30.1	93.4	93.5	7.2		20.3		16		73				<0.2		1.6	
						4.2	0.3	20	19.6		8.1		30.1		93.5		7.2		20.3		18		73				<0.2		1.4	
					Bottom	7.4	0.3	26	19.6	19.6	8.2	8.2	30.2	30.2	94.4	94.5	7.2	7.3	21.8		18		77				<0.2		1.6	
						7.4	0.3	28	19.6		8.2		30.2		94.6		7.3		21.8		19		77				<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 March 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C) Value	Water Temperature (°C) Average	pH Value	pH Average	Salinity (ppt) Value	Salinity (ppt) Average	DO Saturation (%) Value	DO Saturation (%) Average	Dissolved Oxygen Value	Dissolved Oxygen DA	Turbidity(NTU) Value	Turbidity(NTU) DA	Suspended Solids (mg/L) Value	Suspended Solids (mg/L) DA	Total Alkalinity (ppm) Value	Total Alkalinity (ppm) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L) Value	Chromium (µg/L) DA	Nickel (µg/L) Value	Nickel (µg/L) DA
IM9	Fine	Moderate	10:04	7.4	Surface	1.0	0.2	338	19.7	19.7	8.1	8.1	30.1	30.1	94.1	94.1	7.2	7.2	12.3	16.1	13	14	71	74	822117	808782	<0.2	<0.2	1.4	1.5
						1.0	0.2	340	19.7		8.1		30.1		94.1		7.2		12.3		14		72				<0.2		1.5	
					Middle	3.7	0.2	348	19.7	19.7	8.1	8.1	30.1	30.1	94.3	94.4	7.2		16.2		15		73				<0.2		1.5	
						3.7	0.2	320	19.7		8.1		30.1		94.4		7.2		16.5		15		73				<0.2		1.5	
					Bottom	6.4	0.2	349	19.7	19.7	8.1	8.1	30.1	30.1	95.1	95.2	7.3	7.3	19.5		14		77				<0.2		1.5	
						6.4	0.2	351	19.7		8.1		30.1		95.2		7.3		19.5		14		77				<0.2		1.5	
IM10	Fine	Moderate	09:56	7.8	Surface	1.0	0.6	309	19.7	19.7	8.0	8.0	30.3	30.3	93.0	93.1	7.1	7.1	13.1	14.9	12	13	71	74	822269	809865	<0.2	<0.2	1.4	1.4
						1.0	0.6	326	19.7		8.0		30.3		93.1		7.1		13.1		13		72				<0.2		1.3	
					Middle	3.9	0.5	313	19.7	19.7	8.0	8.0	30.3	30.3	92.9	93.0	7.1		15.2		14		73				<0.2		1.4	
						3.9	0.6	320	19.7		8.0		30.3		93.0		7.1		15.2		13		73				<0.2		1.4	
					Bottom	6.8	0.4	313	19.7	19.7	8.0	8.0	30.3	30.3	93.2	93.3	7.1	7.1	16.4		14		76				<0.2		1.2	
						6.8	0.4	339	19.7		8.0		30.3		93.3		7.1		16.4		14		76				<0.2		1.4	
IM11	Fine	Moderate	09:43	7.9	Surface	1.0	0.6	294	19.7	19.7	8.0	8.0	30.3	30.3	92.2	92.2	7.1	7.1	14.1	17.2	12	13	71	73	821527	810551	<0.2	<0.2	1.4	1.4
						1.0	0.6	298	19.7		8.0		30.3		92.2		7.1		14.1		13		71				<0.2		1.3	
					Middle	4.0	0.6	299	19.6	19.6	8.0	8.0	30.3	30.3	92.2	92.2	7.1		17.3		13		73				<0.2		1.4	
						4.0	0.6	304	19.6		8.0		30.3		92.2		7.1		17.3		13		73				<0.2		1.5	
					Bottom	6.9	0.5	296	19.6	19.6	8.0	8.0	30.3	30.3	92.5	92.8	7.1	7.1	20.3		13		75				<0.2		1.4	
						6.9	0.5	317	19.6		8.0		30.3		93.1		7.1		20.3		14		76				<0.2		1.4	
IM12	Fine	Moderate	09:36	8.0	Surface	1.0	0.7	282	19.7	19.7	8.0	8.0	30.3	30.3	91.3	91.3	7.0	7.0	17.4	18.8	12	15	71	73	821164	811502	<0.2	<0.2	1.4	1.4
						1.0	0.7	308	19.7		8.0		30.3		91.3		7.0		17.5		14		72				<0.2		1.4	
					Middle	4.0	0.6	278	19.7	19.7	8.0	8.0	30.3	30.3	91.2	91.3	7.0		18.6		16		73				<0.2		1.4	
						4.0	0.6	295	19.7		8.0		30.3		91.3		7.0		18.6		16		73				<0.2		1.4	
					Bottom	7.0	0.5	282	19.6	19.6	8.0	8.0	30.3	30.3	92.1	92.2	7.1	7.1	20.4		15		75				<0.2		1.4	
						7.0	0.5	305	19.6		8.0		30.3		92.2		7.1		20.4		17		76				<0.2		1.4	
SR2	Fine	Moderate	09:11	4.6	Surface	1.0	0.1	128	19.7	19.7	8.0	8.0	30.5	30.5	90.5	90.5	6.9	6.9	15.1	15.9	10	11	71	72	821479	814139	<0.2	<0.2	1.2	1.4
						1.0	0.2	128	19.7		8.0		30.5		90.4		6.9		15.1		10		72				<0.2		1.3	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.1	113	19.7	19.7	8.0	8.0	30.5	30.5	91.1	91.1	7.0	7.0	16.8		10		73				<0.2		1.4	
						3.6	0.1	114	19.7		8.0		30.5		91.1		7.0		16.5		12		73				<0.2		1.5	
SR3	Fine	Moderate	10:18	9.1	Surface	1.0	0.4	19	19.8	19.8	8.0	8.0	29.8	29.8	92.6	92.6	7.1	7.1	13.2	16.3	13	14	-	-	822117	807564	-	-	-	-
						1.0	0.4	19	19.8		8.0		29.8		92.5		7.1		13.2		14		-				-		-	
					Middle	4.6	0.5	21	19.7	19.7	8.1	8.1	29.9	29.9	92.5	92.5	7.1		16.4		16		-				-		-	
						4.6	0.5	22	19.7		8.1		29.9		92.5		7.1		16.4		16		-				-		-	
					Bottom	8.1	0.5	13	19.6	19.6	8.1	8.1	30.0	30.0	92.9	92.9	7.1	7.1	19.2		12		-				-		-	
						8.1	0.5	13	19.6		8.1		30.0		92.8		7.1		19.2		11		-				-		-	
SR4A	Fine	Calm	09:31	9.0	Surface	1.0	0.4	248	19.6	19.6	8.1	8.1	29.3	29.3	89.0	89.0	6.9	6.9	19.4	20.3	12	15	-	-	817177	807787	-	-	-	-
						1.0	0.4	249	19.6		8.1		29.3		89.0		6.9		19.4		11		-				-		-	
					Middle	4.5	0.3	255	19.4	19.4	8.1	8.1	29.5	29.5	89.0	89.0	6.9		21.5		16		-				-		-	
						4.5	0.3	262	19.4		8.1		29.5		89.0		6.9		21.0		16		-				-		-	
					Bottom	8.0	0.2	265	19.4	19.4	8.1	8.1	29.6	29.6	88.9	89.0	6.9	6.9	20.3		17		-				-		-	
						8.0	0.3	271	19.4		8.1		29.6		89.0		6.9		20.4		18		-				-		-	
SR5A	Fine	Calm	09:15	4.6	Surface	1.0	0.3	292	19.8	19.8	8.0	8.0	28.6	28.6	86.6	86.6	6.7	6.7	19.4	19.3	17	16	-	-	816609	810666	-	-	-	-
						1.0	0.4	305	19.8		8.0		28.6		86.6		6.7		19.2		16		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.3	297	19.8	19.8	8.0	8.0	28.6	28.6	88.8	88.9	6.9	6.9	19.4		15		-				-		-	
						3.6	0.3	306	19.8		8.0		28.6		88.9		6.9		19.3		16		-				-		-	
SR6	Fine	Calm	08:53	4.0	Surface	1.0	0.2	273	19.8	19.8	8.0	8.0	28.4	28.4	92.7	92.8	7.2	7.2	19.6	19.3	14	14	-	-	817881	814674	-	-	-	-
						1.0	0.2	274	19.8		8.0		28.4		92.8		7.2		19.7		15		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	0.2	272	19.8	19.8	8.0	8.0	28.4	28.4	94.4	95.0	7.3	7.4	18.8		14		-				-		-	
						3.0	0.2	272	19.8		8.0		28.4		95.5		7.4		19.2		13		-				-		-	
SR7	Fine	Calm	08:21	16.5	Surface	1.0	0.1	23	19.5	19.5	8.0	8.0	30.8	30.8	90.1	90.1	6.9	6.9	4.6	4.2	5	5	-	-	823622	823751	-	-	-	-
						1.0	0.1	24	19.5		8.0		30.8		90.1		6.9		4.6		5		-				-		-	
					Middle	8.3	0.1	9	19.5	19.5	8.0	8.0	31.1	31.1	89.4	89.4	6.8		4.7		6		-				-		-	
						8.3	0.1	9	19.5		8.0		31.1		89.4		6.8		4.6		4		-				-		-	
					Bottom	15.5	0.2	47	19.5	19.5	8.0	8.0	31.3	31.3	89.2	89.2	6.8	6.8	3.4		5		-				-		-	
						15.5	0.2	47	19.5		8.0		31.3		89.1		6.8		3.4		4		-				-		-	
SR8	Fine	Calm	09:26	3.8	Surface	1.0	-	-	19.9	19.9	8.0	8.0	29.9	29.9	94.1	94.1	7.2	7.2	8.9	9.3	8	8	-	-	820246	811418	-	-	-	-
						1.0	-	-	19.9		8.0		29.9		94.1		7.2		9.0		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	-	-	19.8	19.8	8.0	8.0	29.9	29.9	94.6	94.6	7.2	7.2	9.6		8		-				-		-	
						2.8	-	-	19.8		8.0		29.9		94.6		7.2		9.6		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**

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

Water Quality Monitoring

Water Quality Monitoring Results on 24 March 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	17:52	9.1	Surface	1.0	0.1	107	20.4	20.4	8.1	8.1	30.2	30.2	114.8	114.8	8.7	8.5	1.8	5.9	3	5	73	74	815625	804236	<0.2	<0.2	1.3	1.2
						1.0	0.1	107	20.4		8.1		30.2		114.8		8.7		1.8		5		73				<0.2		1.4	
					Middle	4.6	0.1	81	19.7	19.7	8.1	8.1	31.7	31.7	107.9	107.9	8.2		7.0		4		73				<0.2		1.2	
						4.6	0.1	82	19.7		8.1		31.7		107.8		8.2		7.1		5		74				<0.2		1.1	
					Bottom	8.1	0.0	226	19.7	19.7	8.1	8.1	31.7	31.7	106.2	106.1	8.1	8.1	9.0		6		75				<0.2		1.1	
						8.1	0.0	246	19.7		8.1		31.7		105.9		8.0		8.9		5		76				<0.2		1.1	
C2	Cloudy	Moderate	16:22	12.7	Surface	1.0	0.3	329	20.9	20.9	8.0	8.0	27.4	27.4	101.4	101.3	7.7	7.7	3.0	9.1	5	5	72	74	825652	806970	<0.2	<0.2	2.4	2.5
						1.0	0.4	303	20.9		8.0		27.5		101.2		7.7		3.1		5		73				<0.2		2.4	
					Middle	6.4	0.3	354	20.2	20.2	8.0	8.0	28.5	28.6	99.1	99.1	7.6		9.7		4		74				<0.2		2.6	
						6.4	0.3	326	20.2		8.0		28.6		99.0		7.6		9.6		4		74				<0.2		2.6	
					Bottom	11.7	0.2	31	20.1	20.1	8.0	8.0	28.8	28.8	98.0	98.0	7.5	7.5	14.8		7		76				<0.2		2.5	
						11.7	0.2	33	20.1		8.0		28.8		97.9		7.5		14.7		6		76				<0.2		2.6	
C3	Cloudy	Moderate	18:09	12.0	Surface	1.0	0.2	66	20.3	20.3	8.1	8.1	30.5	30.5	93.2	93.2	7.0	7.0	1.5	1.6	4	7	73	75	822102	817779	<0.2	<0.2	1.4	1.2
						1.0	0.2	69	20.3		8.1		30.5		93.2		7.0		1.5		4		73				<0.2		1.2	
					Middle	6.0	0.2	86	19.8	19.8	8.1	8.1	30.8	30.8	90.8	90.9	6.9		1.5		8		74				<0.2		1.2	
						6.0	0.3	89	19.8		8.1		30.8		91.0		6.9		1.4		7		75				<0.2		1.1	
					Bottom	11.0	0.2	90	19.6	19.6	8.1	8.1	31.2	31.2	87.7	87.8	6.7	6.7	2.0		8		76				<0.2		1.1	
						11.0	0.3	90	19.6		8.1		31.2		87.8		6.7		2.0		9		77				<0.2		1.0	
IM1	Cloudy	Moderate	17:32	8.0	Surface	1.0	0.3	33	20.2	20.2	8.1	8.1	30.6	30.6	113.3	113.3	8.6	8.5	2.6	4.1	7	6	72	73	818321	806441	<0.2	<0.2	1.0	1.0
						1.0	0.3	33	20.2		8.1		30.6		113.2		8.6		2.8		7		72				<0.2		1.0	
					Middle	4.0	0.2	23	20.2	20.2	8.1	8.1	30.7	30.7	111.4	111.4	8.4		3.4		6		73				<0.2		1.0	
						4.0	0.3	23	20.2		8.1		30.7		111.3		8.4		3.5		7		73				<0.2		1.0	
					Bottom	7.0	0.2	12	20.1	20.1	8.1	8.1	30.7	30.7	106.7	106.6	8.1	8.1	6.1		5		75				<0.2		1.0	
						7.0	0.2	12	20.1		8.1		30.7		106.4		8.1		6.1		6		73				<0.2		0.9	
IM2	Cloudy	Moderate	17:26	8.8	Surface	1.0	0.3	36	20.1	20.1	8.1	8.1	30.7	30.8	113.2	113.1	8.6	8.5	2.6	3.8	4	6	71	73	818865	806197	<0.2	<0.2	1.0	1.0
						1.0	0.3	38	20.1		8.1		30.8		113.0		8.6		2.7		5		71				<0.2		1.0	
					Middle	4.4	0.2	39	20.0	20.0	8.1	8.1	30.9	30.9	111.6	111.6	8.5		3.8		8		73				<0.2		1.0	
						4.4	0.2	41	20.0		8.1		30.9		111.5		8.4		3.8		7		74				<0.2		1.0	
					Bottom	7.8	0.2	47	20.0	20.0	8.1	8.1	31.0	31.0	108.6	108.4	8.2	8.2	4.9		6		75				<0.2		0.9	
						7.8	0.2	48	20.0		8.1		31.0		108.2		8.2		5.0		8		75				<0.2		1.0	
IM3	Cloudy	Moderate	17:21	9.1	Surface	1.0	0.4	66	20.5	20.5	8.1	8.1	30.3	30.4	114.5	114.4	8.6	8.5	1.4	6.3	7	7	71	73	819436	806006	<0.2	<0.2	1.2	1.2
						1.0	0.4	70	20.4		8.1		30.4		114.2		8.6		1.5		6		72				<0.2		1.3	
					Middle	4.6	0.3	48	19.9	19.9	8.1	8.1	31.1	31.1	109.8	109.8	8.3		9.1		6		73				<0.2		1.3	
						4.6	0.3	48	19.9		8.1		31.1		109.8		8.3		9.4		8		73				<0.2		1.4	
					Bottom	8.1	0.3	27	19.9	19.9	8.1	8.1	31.1	31.1	109.6	109.6	8.3	8.3	8.7		6		75				<0.2		1.0	
						8.1	0.3	28	19.9		8.1		31.1		109.6		8.3		7.8		7		75				<0.2		1.0	
IM4	Cloudy	Moderate	17:13	8.3	Surface	1.0	0.3	49	20.3	20.3	8.1	8.1	30.3	30.3	113.6	113.6	8.6	8.5	2.2	6.1	4	7	73	75	819589	805033	<0.2	<0.2	1.5	1.3
						1.0	0.3	51	20.3		8.1		30.3		113.6		8.6		2.2		4		74				<0.2		1.5	
					Middle	4.2	0.2	21	20.0	20.0	8.1	8.1	30.9	30.9	110.4	110.4	8.4		5.0		5		75				<0.2		1.6	
						4.2	0.2	21	20.0		8.1		30.9		110.3		8.4		5.1		6		75				<0.2		1.4	
					Bottom	7.3	0.2	14	19.9	19.9	8.1	8.1	31.1	31.1	107.0	107.0	8.1	8.1	10.8		12		77				<0.2		0.8	
						7.3	0.2	14	19.9		8.1		31.1		106.9		8.1		11.0		13		77				<0.2		0.9	
IM5	Cloudy	Moderate	17:03	7.5	Surface	1.0	0.2	21	20.3	20.3	8.1	8.1	30.1	30.1	111.3	111.3	8.4	8.3	3.6	7.5	6	9	73	75	820537	804945	<0.2	<0.2	1.3	1.2
						1.0	0.2	22	20.3		8.1		30.1		111.3		8.4		3.6		5		73				<0.2		1.2	
					Middle	3.8	0.3	359	20.0	20.0	8.1	8.1	30.9	30.9	106.9	106.8	8.1		8.3		4		75				<0.2		1.3	
						3.8	0.3	330	20.0		8.1		30.9		106.7		8.1		8.2		6		75				<0.2		1.2	
					Bottom	6.5	0.2	5	20.0	20.0	8.1	8.1	30.9	30.9	104.4	104.3	7.9	7.9	10.5		14		77				<0.2		1.0	
						6.5	0.2	5	20.0		8.1		30.9		104.2		7.9		10.6		16		77				<0.2		1.0	
IM6	Cloudy	Moderate	16:55	7.6	Surface	1.0	0.1	26	20.2	20.2	8.1	8.1	30.3	30.3	107.9	107.8	8.2	8.2	8.1	9.2	11	12	73	74	821043	805810	<0.2	<0.2	1.2	1.2
						1.0	0.1	26	20.2		8.1		30.3		107.7		8.2		8.2		11		73				<0.2		1.2	
					Middle	3.8	0.2	15	20.1	20.1	8.1	8.1	30.4	30.4	106.4	106.3	8.1		9.2		10		74				<0.2		1.1	
						3.8	0.2	16	20.1		8.1		30.4		106.2		8.1		9.2		12		74				<0.2		1.3	
					Bottom	6.6	0.1	31	20.1	20.1	8.1	8.1	30.5	30.5	104.2	104.2	7.9	7.9	10.2		15		76				<0.2		1.1	
						6.6	0.1	34	20.1		8.1		30.5		104.1		7.9		10.4		13		76				<0.2		1.2	
IM7	Cloudy	Moderate	16:46	8.9	Surface	1.0	0.1	32	20.2	20.2	8.1	8.1	30.3	30.3	107.6	107.6	8.2	8.2	9.3	9.7	9	12	72	74	821373	806841	<0.2	<0.2	1.4	1.4
						1.0	0.1	34	20.2		8.1		30.3		107.6		8.2		9.5		10		72				<0.2		1.4	
					Middle	4.5	0.2	71	20.2	20.2	8.1	8.1	30.3	30.3	107.4	107.4	8.1		9.9		8		73				<0.2		1.6	
						4.5	0.2	72	20.2		8.1		30.3		107.4		8.1		9.9		8		73				<0.2		1.5	
					Bottom	7.9	0.2	36	20.2	20.2	8.1	8.1	30.3	30.3	104.8	104.8	7.9	7.9	9.9		18		77				<0.2		1.2	
						7.9	0.2	37	20.2		8.1		30.3		104.7		7.9		9.7		17		77				<0.2		1.2	
IM8	Cloudy	Moderate	16:36	8.9	Surface	1.0	0.3	32	20.1	20.1	8.2	8.2	30.6	30.6	103.1	103.1	7.8	7.8	4.6	6.5	8	13	73	75	821681	807837	<0.2	<0.2	1.4	1.6
						1.0	0.3	34	20.1		8.2		30.6		103.1		7.8		4.5		9		73				<0.2		1.5	
					Middle	4.5	0.3	42	20.1	20.1	8.2	8.2	30.6	30.6	102.7	102.7	7.8		5.3		11		75				<0.2		1.2	
						4.5	0.3	42	20.1		8.2		30.6		102.6		7.8		5.3		11		75				<0.2		1.4	
					Bottom	7.9	0.3	44	20.1	20.1	8.2	8.2	30.6	30.6	102.3	102.3	7.8	7.8	9.3		17		76				<0.2		2.1	
						7.9	0.3	48	20.1		8.2		30.6		102.3		7.8		10.0		19		77				<0.2		2.1	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 24 March 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	16:44	7.8	Surface	1.0	0.1	53	20.5	20.5	8.2	8.2	28.7	28.7	96.9	97.0	7.4	7.5	6.1	8.0	9	10	73	75	822110	808818	<0.2	<0.2	2.0	2.1
						1.0	0.2	56	20.5		8.2		28.7		97.0		7.4		6.1		8		73				<0.2		2.0	
					Middle	3.9	0.3	52	20.2	20.2	8.3	8.3	30.0	30.0	98.1	98.2	7.5		5.8		10		75				<0.2		2.2	
						3.9	0.3	55	20.2		8.3		30.0		98.2		7.5		5.9		10		75				<0.2		2.0	
					Bottom	6.8	0.3	72	20.0	20.0	8.2	8.2	30.6	30.6	97.7	97.7	7.4	7.4	12.0		10		76				<0.2		2.1	
						6.8	0.3	74	20.0		8.2		30.6		97.6		7.4		12.0		11		77				<0.2		2.0	
IM10	Cloudy	Moderate	16:54	7.8	Surface	1.0	0.2	88	20.7	20.7	8.1	8.1	28.6	28.6	96.5	96.5	7.3	7.3	3.9	4.2	7	8	73	75	822266	809854	<0.2	<0.2	2.0	2.2
						1.0	0.2	95	20.7		8.1		28.6		96.4		7.3		3.9		7		73				<0.2		2.1	
					Middle	3.9	0.2	90	20.5	20.5	8.1	8.1	29.0	28.9	94.8	94.8	7.2		4.6		8		75				<0.2		2.2	
						3.9	0.2	97	20.5		8.1		28.9		94.7		7.2		4.6		8		74				<0.2		2.3	
					Bottom	6.8	0.1	96	20.5	20.5	8.1	8.1	29.3	29.3	94.4	94.4	7.2	7.2	4.0		8		77				<0.2		2.2	
						6.8	0.1	104	20.5		8.1		29.3		94.4		7.2		4.1		8		76				<0.2		2.2	
IM11	Cloudy	Moderate	17:06	8.6	Surface	1.0	0.2	87	20.7	20.7	8.1	8.1	28.3	28.3	96.2	96.2	7.3	7.2	5.3	5.3	9	9	73	74	821490	810541	<0.2	<0.2	2.4	2.2
						1.0	0.3	87	20.7		8.1		28.3		96.2		7.3		5.4		9		72				<0.2		2.2	
					Middle	4.3	0.1	109	20.3	20.3	8.1	8.1	29.1	29.1	93.0	92.9	7.1		4.4		9		75				<0.2		2.2	
						4.3	0.1	114	20.3		8.1		29.1		92.8		7.1		4.5		8		74				<0.2		2.2	
					Bottom	7.6	0.1	100	20.1	20.1	8.1	8.1	29.7	29.7	91.0	91.1	6.9	6.9	5.9		9		76				<0.2		2.0	
						7.6	0.1	103	20.1		8.1		29.7		91.1		6.9		6.0		9		76				<0.2		2.2	
IM12	Cloudy	Moderate	17:15	8.4	Surface	1.0	0.2	93	20.5	20.5	8.1	8.1	28.7	28.7	94.9	94.8	7.2	7.1	3.9	3.9	8	9	72	75	821134	811525	<0.2	<0.2	1.8	2.1
						1.0	0.3	94	20.5		8.1		28.7		94.7		7.2		3.9		8		73				<0.2		1.6	
					Middle	4.2	0.1	124	20.3	20.3	8.1	8.1	29.5	29.5	92.6	92.6	7.0		3.7		7		75				<0.2		1.8	
						4.2	0.1	124	20.3		8.1		29.5		92.5		7.0		3.6		7		74				<0.2		2.5	
					Bottom	7.4	0.2	85	20.1	20.1	8.1	8.1	29.8	29.8	91.7	91.8	7.0	7.0	4.1		11		77				<0.2		2.5	
						7.4	0.2	92	20.1		8.1		29.8		91.8		7.0		4.2		10		76				<0.2		2.6	
SR2	Cloudy	Moderate	17:47	4.5	Surface	1.0	0.1	68	20.2	20.2	8.1	8.1	29.7	29.7	91.5	91.5	7.0	7.0	4.6	4.6	9	10	73	74	821479	814173	<0.2	<0.2	1.9	1.9
						1.0	0.1	72	20.2		8.1		29.7		91.5		7.0		4.5		10		73				<0.2		1.7	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.1	58	20.1	20.1	8.1	8.1	29.8	29.8	91.2	91.2	6.9	6.9	4.7		10		75				<0.2		2.0	
						3.5	0.1	60	20.1		8.1		29.8		91.2		6.9		4.7		10		75				<0.2		2.0	
SR3	Cloudy	Moderate	16:29	9.3	Surface	1.0	0.3	42	20.2	20.2	8.1	8.1	30.4	30.4	101.2	101.2	7.7	7.7	4.4	5.1	8	9	-	-	822153	807589	-	-	-	-
						1.0	0.3	44	20.2		8.1		30.4		101.2		7.7		4.4		9		-				-		-	
					Middle	4.7	0.3	36	20.2	20.2	8.1	8.1	30.5	30.5	101.1	101.1	7.7		4.3		10		-				-		-	
						4.7	0.3	37	20.2		8.1		30.5		101.1		7.7		4.4		9		-				-		-	
					Bottom	8.3	0.2	39	20.2	20.2	8.1	8.1	30.6	30.6	100.5	100.5	7.6	7.6	6.6		9		-				-		-	
						8.3	0.2	39	20.2		8.1		30.6		100.5		7.6		6.3		10		-				-		-	
SR4A	Cloudy	Moderate	18:11	8.7	Surface	1.0	0.3	75	20.3	20.3	8.1	8.1	30.4	30.4	110.6	110.6	8.4	8.4	3.5	6.6	6	9	-	-	817184	807806	-	-	-	-
						1.0	0.3	76	20.3		8.1		30.4		110.5		8.4		3.8		7		-				-		-	
					Middle	4.4	0.3	80	20.3	20.3	8.1	8.1	30.4	30.4	109.6	109.6	8.3		9.4		7		-				-		-	
						4.4	0.3	83	20.3		8.1		30.4		109.5		8.3		9.1		6		-				-		-	
					Bottom	7.7	0.2	75	20.3	20.3	8.1	8.1	30.4	30.4	108.8	108.8	8.2	8.2	7.0		14		-				-		-	
						7.7	0.2	81	20.3		8.1		30.4		108.7		8.2		6.9		13		-				-		-	
SR5A	Cloudy	Moderate	18:27	5.2	Surface	1.0	0.0	115	20.4	20.4	8.0	8.0	30.1	30.1	97.0	97.0	7.3	7.3	6.1	6.2	6	6	-	-	816575	810720	-	-	-	-
						1.0	0.0	122	20.4		8.0		30.2		96.9		7.3		6.1		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.0	8	20.4	20.4	8.0	8.0	30.2	30.2	96.8	96.9	7.3	7.3	6.3		7		-				-		-	
						4.2	0.0	8	20.4		8.0		30.2		96.9		7.3		6.3		7		-				-		-	
SR6	Cloudy	Moderate	18:49	4.6	Surface	1.0	0.1	77	20.8	20.8	8.0	8.0	29.4	29.4	102.1	102.0	7.7	7.7	3.4	5.2	5	5	-	-	817923	814675	-	-	-	-
						1.0	0.1	80	20.8		8.0		29.4		101.9		7.7		3.4		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.1	69	20.4	20.4	7.9	7.9	29.6	29.6	95.6	95.7	7.3	7.3	7.1		5		-				-		-	
						3.6	0.1	69	20.4		7.9		29.6		95.8		7.3		7.0		4		-				-		-	
SR7	Cloudy	Moderate	18:41	20.5	Surface	1.0	0.4	56	19.9	19.9	8.1	8.1	31.0	31.0	90.2	90.2	6.9	6.8	1.2	1.5	3	3	-	-	823662	823737	-	-	-	-
						1.0	0.4	58	19.9		8.1		31.0		90.2		6.8		1.2		3		-				-		-	
					Middle	10.3	0.3	49	19.7	19.7	8.1	8.1	31.3	31.3	88.8	88.8	6.8		1.5		3		-				-		-	
						10.3	0.3	50	19.7		8.1		31.3		88.8		6.8		1.5		3		-				-		-	
					Bottom	19.5	0.2	42	19.7	19.7	8.1	8.1	31.3	31.3	88.9	88.9	6.8	6.8	1.6		3		-				-		-	
						19.5	0.2	42	19.7		8.1		31.3		88.9		6.8		1.7		3		-				-		-	
SR8	Cloudy	Moderate	17:30	3.7	Surface	1.0	-	-	20.2	20.2	8.1	8.1	29.0	29.0	93.2	93.2	7.1	7.1	4.6	4.8	9	10	-	-	820246	811418	-	-	-	-
						1.0	-	-	20.2		8.1		29.0		93.1		7.1		4.6		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.7	-	-	20.2	20.2	8.1	8.1	29.2	29.2	92.9	93.0	7.1	7.1	5.0		10		-				-		-	
						2.7	-	-	20.2		8.1		29.2		93.0		7.1		5.0		11		-				-		-	

DA: Depth-Averaged

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

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

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

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Sunny	Moderate	10:42	8.8	Surface	1.0	0.3	40	19.9	19.9	8.1	8.1	30.5	30.6	107.3	107.2	8.2	8.1	4.1	8.3	5	6	71	73	815620	804266	<0.2	<0.2	1.0	1.1
						1.0	0.3	43	19.9		8.1		30.6		107.1		8.1		4.6		5		72				<0.2		1.0	
					Middle	4.4	0.3	44	19.9	19.9	8.1	8.1	31.1	31.1	105.9	105.8	8.0		8.5		6		73				<0.2		1.2	
						4.4	0.3	47	19.9		8.1		31.1		105.7		8.0		9.2		4		73				<0.2		1.1	
					Bottom	7.8	0.3	51	19.9	19.9	8.1	8.1	31.2	31.2	104.5	104.4	7.9	7.9	11.5		8		75				<0.2		1.2	
						7.8	0.3	51	19.9		8.1		31.2		104.2		7.9		11.6		8		76				<0.2		1.1	
C2	Cloudy	Moderate	12:02	12.8	Surface	1.0	0.5	349	20.9	20.9	7.9	7.9	27.0	27.0	100.7	100.7	7.7	7.6	3.4	7.3	6	8	73	75	825678	806957	<0.2	<0.2	2.4	2.5
						1.0	0.5	359	20.9		7.9		27.0		100.6		7.7		3.4		5		73				<0.2		2.5	
					Middle	6.4	0.5	348	20.2	20.2	8.0	8.0	28.3	28.3	97.6	97.7	7.5		4.0		10		75				<0.2		2.5	
						6.4	0.5	320	20.2		8.0		28.4		97.7		7.5		4.6		8		75				<0.2		2.6	
					Bottom	11.8	0.5	345	20.1	20.1	8.0	8.0	29.4	29.4	98.1	98.1	7.5	7.5	13.2		9		77				<0.2		2.4	
						11.8	0.5	350	20.1		8.0		29.4		98.1		7.5		15.1		8		77				<0.2		2.3	
C3	Cloudy	Moderate	09:46	11.7	Surface	1.0	0.3	243	20.1	20.1	8.1	8.1	29.4	29.4	93.7	93.7	7.2	7.0	1.8	2.2	5	5	73	75	822115	817796	<0.2	<0.2	1.8	1.9
						1.0	0.3	261	20.1		8.1		29.4		93.7		7.1		1.8		5		73				<0.2		1.8	
					Middle	5.9	0.2	265	19.8	19.8	8.1	8.1	30.1	30.1	90.5	90.4	6.9		1.8		4		75				<0.2		2.3	
						5.9	0.3	267	19.8		8.1		30.1		90.2		6.9		1.8		4		75				<0.2		2.7	
					Bottom	10.7	0.4	275	19.7	19.7	8.1	8.1	30.6	30.6	89.1	89.2	6.8	6.8	3.0		5		77				<0.2		1.4	
						10.7	0.4	297	19.7		8.1		30.6		89.2		6.8		3.2		5		76				<0.2		1.4	
IM1	Cloudy	Moderate	10:59	7.5	Surface	1.0	0.4	358	20.1	20.1	8.1	8.1	30.7	30.7	107.7	107.7	8.2	8.1	2.0	4.4	5	5	71	73	818348	806456	<0.2	<0.2	1.1	1.2
						1.0	0.5	329	20.1		8.1		30.7		107.6		8.2		2.0		4		71				<0.2		1.2	
					Middle	3.8	0.4	1	20.0	20.0	8.1	8.1	30.8	30.8	105.5	105.4	8.0		3.8		4		73				<0.2		1.2	
						3.8	0.4	1	20.0		8.1		30.8		105.3		8.0		4.0		4		73				<0.2		1.3	
					Bottom	6.5	0.4	9	20.0	20.0	8.1	8.1	31.0	31.0	102.3	102.2	7.8	7.8	7.4		5		74				<0.2		1.1	
						6.5	0.4	9	20.0		8.1		31.0		102.1		7.7		7.4		6		75				<0.2		1.1	
IM2	Cloudy	Moderate	11:04	8.7	Surface	1.0	0.3	11	20.1	20.1	8.1	8.1	30.1	30.1	106.5	106.5	8.1	8.1	2.0	3.4	4	4	71	73	818846	806220	<0.2	<0.2	1.2	1.3
						1.0	0.3	11	20.1		8.1		30.1		106.4		8.1		2.0		5		72				<0.2		1.2	
					Middle	4.4	0.4	29	20.0	20.0	8.1	8.1	30.3	30.3	105.8	105.8	8.0		3.0		4		73				<0.2		1.4	
						4.4	0.4	31	20.0		8.1		30.4		105.8		8.0		3.1		4		74				<0.2		1.4	
					Bottom	7.7	0.3	12	20.0	20.0	8.1	8.1	30.8	30.7	102.5	102.4	7.8	7.8	5.2		4		75				<0.2		1.4	
						7.7	0.3	12	20.0		8.1		30.7		102.2		7.8		5.2		4		75				<0.2		1.3	
IM3	Cloudy	Moderate	11:08	8.4	Surface	1.0	0.2	333	20.3	20.3	8.1	8.1	29.1	29.1	105.2	105.3	8.0	8.0	2.3	5.7	4	5	71	73	819427	806038	<0.2	<0.2	1.6	1.6
						1.0	0.2	351	20.3		8.1		29.2		105.3		8.0		2.4		6		71				<0.2		1.5	
					Middle	4.2	0.3	24	20.0	20.0	8.1	8.1	30.3	30.3	105.5	105.5	8.0		4.6		5		73				<0.2		1.7	
						4.2	0.3	26	20.0		8.1		30.4		105.5		8.0		4.9		6		73				<0.2		1.6	
					Bottom	7.4	0.3	9	20.0	20.0	8.1	8.1	31.0	31.0	104.7	104.6	7.9	7.9	10.1		5		75				<0.2		1.6	
						7.4	0.3	9	20.0		8.1		31.0		104.5		7.9		10.1		4		75				<0.2		1.4	
IM4	Cloudy	Moderate	11:15	8.0	Surface	1.0	0.3	343	20.4	20.4	8.0	8.0	28.7	28.7	105.5	105.6	8.0	8.0	2.8	8.1	4	4	71	73	819578	805048	<0.2	<0.2	1.8	1.7
						1.0	0.3	316	20.3		8.0		28.7		105.6		8.1		2.8		3		71				<0.2		1.8	
					Middle	4.0	0.4	18	20.0	20.0	8.1	8.1	29.7	29.8	105.0	105.0	8.0		3.1		4		73				<0.2		1.7	
						4.0	0.4	18	20.0		8.1		29.8		104.9		8.0		3.1		5		74				<0.2		1.7	
					Bottom	7.0	0.4	25	20.0	20.0	8.1	8.1	31.0	31.0	103.2	103.0	7.8	7.8	18.5		4		75				<0.2		1.6	
						7.0	0.4	26	20.0		8.1		31.0		102.8		7.8		18.5		5		75				<0.2		1.6	
IM5	Cloudy	Moderate	11:25	7.3	Surface	1.0	0.5	356	20.2	20.2	8.0	8.0	29.1	29.1	105.8	105.8	8.1	8.1	3.7	7.4	5	6	71	73	820565	804829	<0.2	<0.2	1.8	1.8
						1.0	0.5	328	20.2		8.0		29.2		105.7		8.1		3.9		5		71				<0.2		1.7	
					Middle	3.7	0.5	5	20.1	20.1	8.1	8.1	30.1	30.1	104.6	104.6	8.0		6.8		5		73				<0.2		2.0	
						3.7	0.5	5	20.1		8.1		30.1		104.5		8.0		7.1		5		73				<0.2		1.7	
					Bottom	6.3	0.3	1	20.0	20.0	8.1	8.1	30.5	30.5	101.9	101.9	7.7	7.7	11.4		8		75				<0.2		1.7	
						6.3	0.3	1	20.0		8.1		30.5		101.8		7.7		11.4		6		75				<0.2		1.6	
IM6	Cloudy	Moderate	11:33	7.1	Surface	1.0	0.2	1	20.3	20.3	8.1	8.1	28.9	28.9	103.8	103.8	7.9	7.9	4.4	7.5	6	7	72	74	821071	805850	<0.2	<0.2	1.7	1.8
						1.0	0.2	1	20.3		8.1		28.9		103.8		7.9		4.4		7		73				<0.2		1.7	
					Middle	3.6	0.3	18	20.1	20.1	8.1	8.1	29.9	30.0	102.0	101.9	7.8		8.5		6		74				<0.2		1.7	
						3.6	0.3	19	20.1		8.1		30.0		101.8		7.8		8.7		7		74				<0.2		1.8	
					Bottom	6.1	0.2	29	20.0	20.0	8.1	8.1	30.1	30.1	100.3	100.3	7.6	7.6	9.4		8		75				<0.2		1.8	
						6.1	0.2	29	20.0		8.1		30.1		100.2		7.6		9.5		6		75				<0.2		1.8	
IM7	Cloudy	Moderate	11:40	8.5	Surface	1.0	0.2	320	20.6	20.6	8.1	8.1	28.1	28.0	102.4	102.5	7.8	7.8	3.5	6.9	6	7	71	74	821331	806825	<0.2	<0.2	2.3	2.2
						1.0	0.2	341	20.6		8.1		28.0		102.5		7.8		3.5		5		72				<0.2		2.3	
					Middle	4.3	0.3	-	20.1	20.1	8.1	8.1	29.6	29.6	102.6	102.6	7.8		6.5		8		73				<0.2		2.2	
						4.3	0.3	-	20.1		8.1		29.6		102.6		7.8		6.6		7		74				<0.2		2.3	
					Bottom	7.5	0.2	26	20.1	20.1	8.1	8.1	29.6	29.6	101.7	101.7	7.8	7.8	10.5		8		75				<0.2		2.1	
						7.5	0.2	26	20.1		8.1		29.6		101.6		7.7		10.7		9		76				<0.2		2.2	
IM8	Cloudy	Moderate	11:13	8.3	Surface	1.0	0.2	301	20.5	20.5	8.1	8.1	27.4	27.4	92.9	92.9	7.1	7.1	7.1	8.3	9	9	73	75	821714	807836	<0.2	<0.2	2.7	2.9
						1.0	0.3	319	20.5		8.1		27.4		92.9		7.1		7.1		9		73				<0.2		2.6	
					Middle	4.2	0.2	309	20.2	20.2	8.1	8.1	28.0	28.0	92.0	92.1	7.1		5.8		9		75				<0.2		2.5	
						4.2	0.2	333	20.2		8.1		28.0		92.1		7.1		5.8		9		75				<0.2		3.3	
					Bottom	7.3	0.1	12	20.1	20.1	8.3	8.3	29.3	29.3	93.7	93.7	7.2	7.2	12.3		9		77				<0.2		3.2	
						7.3	0.2	12	20.1		8.3		29.3		93.7		7.2		12.0		10		77				<0.2		3.2	

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**
Note: Access to IM5 was blocked by silt curtain. The monitoring at IM5 was slightly shifted to the closest safe and accessible location temporarily.

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

Water Quality Monitoring

Water Quality Monitoring Results on 24 March 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	11:06	7.3	Surface	1.0	0.4	296	20.5	20.5	8.1	8.1	28.0	28.0	93.2	93.2	7.1	7.1	4.1	6.6	3	5	73	75	822081	808783	<0.2	<0.2	2.7	2.5
						1.0	0.4	314	20.5		8.1		28.0		93.1		7.1		4.1		4		73				<0.2		2.6	
					Middle	3.7	0.3	285	20.3	20.3	8.1	8.1	28.2	28.2	92.3	92.3	7.1		4.7		5		75				<0.2		2.4	
						3.7	0.3	311	20.3		8.1		28.2		92.3		7.1		4.7		4		75				<0.2		2.4	
					Bottom	6.3	0.2	300	20.2	20.2	8.2	8.2	28.5	28.5	92.0	92.1	7.1	7.1	10.9		6		77				<0.2		2.4	
						6.3	0.2	327	20.2		8.2		28.5		92.1		7.1		10.9		6		77				<0.2		2.4	
IM10	Cloudy	Moderate	10:58	7.2	Surface	1.0	0.6	287	20.5	20.5	8.1	8.1	28.1	28.0	93.1	93.2	7.1	7.1	3.2	6.2	4	4	73	75	822232	809843	<0.2	<0.2	2.8	2.5
						1.0	0.6	287	20.5		8.1		28.0		93.2		7.1		3.2		3		73				<0.2		2.8	
					Middle	3.6	0.5	295	20.1	20.1	8.2	8.2	28.9	28.9	91.6	91.6	7.0		6.3		4		75				<0.2		2.8	
						3.6	0.5	315	20.1		8.2		28.9		91.6		7.0		6.3		4		75				<0.2		2.1	
					Bottom	6.2	0.3	291	20.1	20.1	8.2	8.2	29.0	29.0	91.5	91.6	7.0	7.0	9.0		4		77				<0.2		2.3	
						6.2	0.3	292	20.1		8.2		29.0		91.6		7.0		9.3		5		77				<0.2		2.2	
IM11	Cloudy	Moderate	10:44	7.8	Surface	1.0	0.5	286	20.6	20.6	8.1	8.1	27.8	27.8	94.1	94.1	7.2	7.2	2.8	6.2	4	4	73	75	821506	810554	<0.2	<0.2	2.5	2.1
						1.0	0.5	297	20.5		8.1		27.8		94.1		7.2		3.0		4		73				<0.2		2.2	
					Middle	3.9	0.3	286	20.1	20.1	8.1	8.1	28.6	28.6	92.8	92.8	7.1		5.5		5		75				<0.2		2.1	
						3.9	0.3	307	20.1		8.1		28.6		92.8		7.1		5.5		4		75				<0.2		2.1	
					Bottom	6.8	0.2	289	20.0	20.0	8.1	8.1	29.0	29.0	92.2	92.3	7.1	7.1	10.4		5		77				<0.2		1.8	
						6.8	0.2	299	20.0		8.1		29.0		92.4		7.1		10.3		4		77				<0.2		2.1	
IM12	Cloudy	Moderate	10:37	8.2	Surface	1.0	0.5	284	20.5	20.5	8.1	8.1	28.0	28.0	94.3	94.3	7.2	7.1	2.6	6.3	4	4	73	75	821163	811496	<0.2	<0.2	3.1	3.2
						1.0	0.6	310	20.5		8.1		28.0		94.3		7.2		2.6		4		73				<0.2		3.8	
					Middle	4.1	0.6	279	20.0	20.0	8.1	8.1	29.3	29.3	91.9	91.9	7.0		5.4		4		75				<0.2		3.5	
						4.1	0.7	281	20.0		8.1		29.3		91.8		7.0		5.4		5		75				<0.2		2.9	
					Bottom	7.2	0.4	279	20.0	20.0	8.1	8.1	29.7	29.7	91.8	91.9	7.0	7.0	10.9		4		77				<0.2		2.8	
						7.2	0.4	300	20.0		8.1		29.7		92.0		7.0		10.8		5		77				<0.2		3.1	
SR2	Cloudy	Moderate	10:10	4.5	Surface	1.0	0.2	299	20.1	20.1	8.1	8.1	29.1	29.1	91.6	91.6	7.0	7.0	3.1	3.5	4	5	73	74	821452	814185	<0.2	<0.2	3.4	2.5
						1.0	0.2	319	20.1		8.1		29.1		91.5		7.0		3.1		4		73				<0.2		2.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.2	311	20.0	20.0	8.1	8.1	29.8	29.8	90.2	90.3	6.9	6.9	3.8		6		75				<0.2		1.9	
						3.5	0.2	317	20.0		8.1		29.8		90.4		6.9		3.8		4		75				<0.2		2.1	
SR3	Cloudy	Moderate	11:19	9.2	Surface	1.0	0.4	304	20.6	20.6	8.0	8.0	27.1	27.1	93.9	93.9	7.2	7.2	2.9	4.5	4	5	-	-	822160	807541	-	-	-	-
						1.0	0.4	305	20.6		8.0		27.1		93.9		7.2		2.9		4		-				-		-	
					Middle	4.6	0.2	332	20.2	20.2	8.1	8.1	28.0	28.1	92.1	92.1	7.1		3.5		4		-				-		-	
						4.6	0.2	338	20.2		8.1		28.1		92.1		7.1		3.5		5		-				-		-	
					Bottom	8.2	0.2	20	20.0	20.0	8.1	8.1	29.5	29.5	93.9	94.0	7.2	7.2	7.1		7		-				-		-	
						8.2	0.3	20	20.0		8.1		29.5		94.0		7.2		7.2		6		-				-		-	
SR4A	Sunny	Calm	10:21	9.2	Surface	1.0	0.4	240	19.9	19.9	8.1	8.1	30.7	30.7	102.8	102.8	7.8	7.8	3.5	6.4	5	5	-	-	817205	807790	-	-	-	-
						1.0	0.4	258	19.9		8.1		30.7		102.7		7.8		3.6		6		-				-		-	
					Middle	4.6	0.4	252	19.8	19.8	8.1	8.1	30.8	30.8	101.5	101.5	7.7		4.7		5		-				-		-	
						4.6	0.4	254	19.8		8.1		30.8		101.5		7.7		5.0		5		-				-		-	
					Bottom	8.2	0.3	251	19.8	19.8	8.1	8.1	30.8	30.8	101.2	101.2	7.7	7.7	10.8		6		-				-		-	
						8.2	0.4	274	19.8		8.1		30.8		101.2		7.7		11.0		5		-				-		-	
SR5A	Sunny	Calm	10:05	4.1	Surface	1.0	0.2	304	20.1	20.1	8.0	8.0	30.2	30.2	96.5	96.5	7.3	7.3	3.8	3.9	5	6	-	-	816616	810672	-	-	-	-
						1.0	0.2	332	20.1		8.0		30.2		96.4		7.3		3.8		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.2	305	20.1	20.1	8.0	8.0	30.2	30.2	96.1	96.1	7.3	7.3	4.0		5		-				-		-	
						3.1	0.2	305	20.1		8.0		30.2		96.1		7.3		4.1		6		-				-		-	
SR6	Sunny	Calm	09:40	4.2	Surface	1.0	0.1	259	19.9	19.9	8.0	8.0	29.6	29.6	94.2	94.2	7.2	7.2	8.4	10.1	16	18	-	-	817891	814676	-	-	-	-
						1.0	0.1	267	19.9		8.0		29.6		94.2		7.2		8.7		15		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.1	254	19.9	19.9	8.0	8.0	29.6	29.6	94.7	94.8	7.3	7.3	11.7		21		-				-		-	
						3.2	0.1	270	19.9		8.0		29.6		94.8		7.3		11.8		21		-				-		-	
SR7	Cloudy	Moderate	09:15	19.0	Surface	1.0	0.1	210	19.7	19.7	8.1	8.1	30.4	30.4	90.5	90.5	6.9	6.8	1.4	1.5	4	3	-	-	823639	823748	-	-	-	-
						1.0	0.1	218	19.7		8.1		30.4		90.4		6.9		1.4		3		-				-		-	
					Middle	9.5	0.2	221	19.6	19.6	8.1	8.1	30.9	30.9	88.2	88.2	6.7		1.5		3		-				-		-	
						9.5	0.2	236	19.6		8.1		30.9		88.2		6.7		1.5		3		-				-		-	
					Bottom	18.0	0.2	194	19.6	19.6	8.0	8.0	31.0	31.0	88.6	88.7	6.8	6.8	1.8		3		-				-		-	
						18.0	0.2	208	19.6		8.0		31.0		88.7		6.8		1.7		3		-				-		-	
SR8	Cloudy	Moderate	10:31	3.6	Surface	1.0	-	-	20.4	20.4	8.1	8.1	28.0	28.0	94.9	94.9	7.3	7.3	2.9	2.7	3	4	-	-	820246	811418	-	-	-	-
						1.0	-	-	20.4		8.1		28.0		94.9		7.3		2.9		2		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.6	-	-	20.4	20.4	8.1	8.1	27.9	27.9	95.4	95.4	7.3	7.3	2.5		5		-				-		-	
						2.6	-	-	20.4		8.1		27.9		95.4		7.3		2.5		5		-				-		-	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 27 March 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Calm	10:32	8.5	Surface	1.0	0.2	259	21.3	21.3	8.0	8.0	27.3	27.3	106.6	106.6	8.1	8.0	1.6	1.8	4	4	72	73	815646	804227	<0.2	<0.2	1.8	1.5
						1.0	0.2	267	21.3		8.0		27.3		106.6		8.1		1.6		3		72				<0.2		2.0	
					Middle	4.3	0.1	270	20.8	20.8	8.0	8.0	29.4	29.4	103.9	103.9	7.8		1.0		4		73				<0.2		2.0	
						4.3	0.1	273	20.8		8.0		29.4		103.8		7.8		1.0		3		73				<0.2		1.6	
					Bottom	7.5	0.1	277	20.5	20.5	8.0	8.0	30.9	30.9	100.1	99.9	7.5	7.5	2.8		6		75				<0.2		0.8	
						7.5	0.1	289	20.5		8.0		30.9		99.7		7.5		3.0		4		75				<0.2		0.9	
C2	Fine	Moderate	11:46	10.9	Surface	1.0	0.3	174	21.8	21.8	8.1	8.1	24.4	24.4	102.0	101.8	7.8	7.3	3.3	4.8	4	4	73	75	825690	806949	<0.2	<0.2	3.5	3.3
						1.0	0.3	175	21.8		8.1		24.4		101.5		7.7		3.2		3		73				<0.2		3.6	
					Middle	5.5	0.2	159	20.9	20.9	8.1	8.1	28.0	28.0	91.0	91.0	6.9		2.8		3		75				<0.2		3.4	
						5.5	0.2	171	20.9		8.1		28.0		90.9		6.9		2.8		4		75				<0.2		2.9	
					Bottom	9.9	0.2	159	20.4	20.4	8.0	8.0	29.5	29.5	85.7	85.8	6.5	6.5	8.6		6		77				<0.2		3.1	
						9.9	0.2	171	20.4		8.0		29.5		85.8		6.5		8.4		6		77				<0.2		3.2	
C3	Fine	Moderate	09:18	11.9	Surface	1.0	0.3	74	20.5	20.6	8.1	8.1	29.5	29.5	91.7	91.6	6.9	6.8	0.8	1.5	2	3	73	75	822109	817798	<0.2	<0.2	1.5	1.5
						1.0	0.3	75	20.6		8.1		29.5		91.5		6.9		0.8		3		73				<0.2		1.5	
					Middle	6.0	0.2	89	20.2	20.2	8.1	8.1	30.6	30.6	86.9	87.0	6.6		1.3		3		75				<0.2		1.8	
						6.0	0.2	94	20.2		8.1		30.6		87.0		6.6		1.3		2		74				<0.2		1.6	
					Bottom	10.9	0.2	69	20.2	20.2	8.1	8.1	30.7	30.7	87.2	87.3	6.6	6.6	2.4		2		76				<0.2		1.2	
						10.9	0.2	75	20.2		8.1		30.7		87.3		6.6		2.4		3		76				<0.2		1.2	
IM1	Cloudy	Moderate	10:52	7.1	Surface	1.0	0.0	329	21.4	21.4	8.0	8.0	27.5	27.5	105.5	105.4	7.9	7.8	1.7	3.9	5	4	72	73	818370	806432	<0.2	<0.2	2.2	1.8
						1.0	0.0	352	21.4		8.0		27.5		105.3		7.9		1.7		3		72				<0.2		2.2	
					Middle	3.6	0.0	21	21.1	21.1	8.0	8.0	28.8	28.8	102.2	102.2	7.7		2.9		3		73				<0.2		1.7	
						3.6	0.0	22	21.1		8.0		28.8		102.2		7.7		3.0		3		73				<0.2		1.6	
					Bottom	6.1	0.1	69	20.9	20.9	8.1	8.1	29.6	29.6	101.3	101.3	7.6	7.6	6.8		5		75				<0.2		1.5	
						6.1	0.1	75	20.9		8.1		29.6		101.3		7.6		7.1		4		75				<0.2		1.5	
IM2	Cloudy	Moderate	10:58	8.1	Surface	1.0	0.1	331	21.5	21.5	8.1	8.1	27.4	27.4	106.4	106.4	8.0	7.9	1.6	3.3	6	5	72	74	818839	806207	<0.2	<0.2	1.8	1.5
						1.0	0.1	305	21.5		8.1		27.5		106.3		8.0		1.5		5		72				<0.2		1.8	
					Middle	4.1	0.0	333	20.9	20.9	8.1	8.1	29.5	29.5	103.0	103.0	7.8		2.3		5		73				<0.2		1.7	
						4.1	0.0	337	20.9		8.1		29.5		102.9		7.7		2.3		3		73				<0.2		1.7	
					Bottom	7.1	0.1	97	20.8	20.8	8.0	8.0	29.6	29.6	101.3	101.3	7.6	7.6	6.2		7		75				<0.2		1.0	
						7.1	0.1	97	20.8		8.0		29.6		101.2		7.6		6.0		6		76				<0.2		1.0	
IM3	Cloudy	Moderate	11:03	8.2	Surface	1.0	0.0	12	21.4	21.4	8.0	8.0	27.5	27.5	105.8	105.6	8.0	7.8	5.5	9.6	4	5	71	74	819382	805989	<0.2	<0.2	2.3	1.7
						1.0	0.0	12	21.4		8.0		27.6		105.3		7.9		5.8		5		72				<0.2		2.2	
					Middle	4.1	0.0	352	21.2	21.2	8.0	8.0	28.8	28.8	102.6	102.6	7.7		6.1		5		73				<0.2		1.6	
						4.1	0.0	355	21.2		8.0		28.8		102.6		7.7		6.6		4		74				<0.2		1.6	
					Bottom	7.2	0.1	13	20.9	20.9	8.0	8.0	29.5	29.5	101.1	101.1	7.6	7.6	16.0		4		75				<0.2		1.2	
						7.2	0.1	13	20.9		8.0		29.5		101.0		7.6		17.9		6		76				<0.2		1.1	
IM4	Cloudy	Moderate	11:11	7.6	Surface	1.0	0.2	204	21.2	21.2	8.0	8.0	28.8	28.8	104.6	104.5	7.9	7.8	1.9	4.3	3	5	72	74	819541	805028	<0.2	<0.2	2.2	1.6
						1.0	0.2	218	21.2		8.0		28.8		104.4		7.8		1.9		5		72				<0.2		2.3	
					Middle	3.8	0.1	208	21.1	21.1	8.0	8.0	29.3	29.3	102.0	102.0	7.7		4.9		5		73				<0.2		1.4	
						3.8	0.1	217	21.1		8.0		29.3		101.9		7.6		4.9		4		74				<0.2		1.3	
					Bottom	6.6	0.2	158	21.0	21.0	8.0	8.0	29.7	29.7	101.2	101.2	7.6	7.6	6.0		6		76				<0.2		1.1	
						6.6	0.2	161	21.0		8.0		29.7		101.1		7.6		6.2		7		76				<0.2		1.1	
IM5	Cloudy	Moderate	11:21	6.8	Surface	1.0	0.1	201	21.6	21.6	8.1	8.1	27.3	27.4	110.4	110.2	8.3	8.2	2.2	4.6	5	5	72	74	820583	804918	<0.2	<0.2	2.2	1.9
						1.0	0.1	213	21.5		8.1		27.4		109.9		8.3		2.2		6		73				<0.2		2.3	
					Middle	3.4	0.1	192	21.4	21.4	8.0	8.0	28.1	28.1	106.7	106.7	8.0		3.2		6		74				<0.2		1.8	
						3.4	0.1	204	21.4		8.0		28.0		106.7		8.0		3.3		5		73				<0.2		1.8	
					Bottom	5.8	0.1	176	21.1	21.1	8.0	8.0	28.9	28.9	99.3	99.4	7.5	7.5	8.2		4		75				<0.2		1.6	
						5.8	0.1	176	21.1		8.0		28.9		99.4		7.5		8.4		5		75				<0.2		1.6	
IM6	Cloudy	Moderate	11:28	6.5	Surface	1.0	0.2	135	21.5	21.5	8.1	8.1	27.4	27.3	110.8	110.6	8.3	8.0	1.9	4.4	4	5	72	74	821078	805822	<0.2	<0.2	2.1	1.8
						1.0	0.2	139	21.5		8.1		27.3		110.4		8.3		1.9		4		72				<0.2		2.3	
					Middle	3.3	0.1	134	21.1	21.1	8.0	8.0	28.7	28.7	100.7	100.6	7.6		4.6		4		73				<0.2		1.7	
						3.3	0.1	136	21.1		8.0		28.7		100.5		7.6		5.0		5		74				<0.2		1.6	
					Bottom	5.5	0.1	143	21.1	21.1	8.0	8.0	28.8	28.8	100.1	100.1	7.5	7.5	6.5		6		75				<0.2		1.4	
						5.5	0.1	156	21.1		8.0		28.8		100.1		7.5		6.4		5		75				<0.2		1.4	
IM7	Cloudy	Moderate	11:36	8.3	Surface	1.0	0.1	105	22.5	22.5	8.0	8.0	25.3	25.2	111.3	111.4	8.3	8.2	2.2	2.8	4	5	72	75	821367	806857	<0.2	<0.2	3.3	2.4
						1.0	0.1	113	22.5		8.0		25.2		111.4		8.3		2.2		3		73				<0.2		3.3	
					Middle	4.2	0.2	132	21.7	21.7	8.0	8.0	27.2	27.2	108.6	108.5	8.2		2.0		5		75				<0.2		2.4	
						4.2	0.2	142	21.7		8.0		27.2		108.4		8.1		1.9		4		75				<0.2		2.4	
					Bottom	7.3	0.1	120	21.1	21.1	8.0	8.0	28.8	28.8	98.4	98.6	7.4	7.4	4.4		8		76				<0.2		1.5	
						7.3	0.2	120	21.1		8.0		28.8		98.7		7.4		4.3		7		77				<0.2		1.4	
IM8	Fine	Moderate	11:16	8.0	Surface	1.0	0.2	91	21.8	21.8	8.1	8.1	24.9	24.9	107.8	107.9	8.2	8.0	2.8	3.6	5	5	73	75	821696	807832	<0.2	<0.2	3.4	3.3
						1.0	0.2	91	21.8		8.1		24.8		107.9		8.2		2.9		5		73				<0.2		3.3	
					Middle	4.0	0.2	96	21.0	21.0	8.1	8.1	27.8	27.7	102.2	102.1	7.8		3.4		4		75				<0.2		3.2	
						4.0	0.2	103	21.0		8.1		27.7		101.9		7.7		3.4		4		75				<0.2		3.2	
					Bottom	7.0	0.2	56	20.8	20.8	8.1	8.1	28.8	28.8	98.6	98.6	7.5	7.5	4.7		4		77				<0.2		3.4	
						7.0	0.2	58	20.8		8.1		28.8		98.6		7.5		4.7		6		77				<0.2		3.5	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 27 March 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Fine	Moderate	11:07	6.8	Surface	1.0	0.3	110	21.3	21.3	8.1	8.1	25.5	25.5	101.7	102.0	7.8	7.8	2.9	3.8	5	6	73	75	822071	808800	<0.2	<0.2	3.5	3.1
						1.0	0.4	117	21.3		8.1		25.5		102.3		7.8		2.9		4		73				<0.2		3.2	
					Middle	3.4	0.3	106	21.0	21.0	8.2	8.2	26.8	26.8	102.6	102.5	7.8		2.8		5		75				<0.2		3.1	
						3.4	0.3	111	21.0		8.2		26.8		102.4		7.8		2.9		5		75				<0.2		2.9	
					Bottom	5.8	0.3	80	20.9	20.9	8.1	8.1	28.6	28.6	100.5	100.5	7.6	7.6	5.6		7		76				<0.2		3.0	
						5.8	0.3	80	20.9		8.1		28.6		100.4		7.6		5.6		7		77				<0.2		3.0	
IM10	Fine	Moderate	10:58	7.2	Surface	1.0	0.4	96	21.3	21.3	8.1	8.1	25.6	25.7	103.2	103.1	7.9	7.7	2.6	4.6	6	5	73	75	822231	809812	<0.2	<0.2	3.9	3.8
						1.0	0.5	104	21.3		8.1		25.7		103.0		7.9		2.6		6		73				<0.2		3.6	
					Middle	3.6	0.5	85	20.9	20.9	8.2	8.2	27.9	27.9	99.3	99.2	7.5		3.3		4		75				<0.2		3.9	
						3.6	0.5	87	20.9		8.2		27.9		99.1		7.5		3.2		4		75				<0.2		3.6	
					Bottom	6.2	0.2	88	20.9	20.9	8.2	8.2	28.4	28.4	96.1	96.1	7.3	7.3	7.8		4		77				<0.2		3.8	
						6.2	0.2	88	20.9		8.2		28.4		96.1		7.3		8.1		6		77				<0.2		3.8	
IM11	Fine	Moderate	10:43	8.8	Surface	1.0	0.4	101	21.6	21.6	8.2	8.1	25.9	25.9	97.9	97.8	7.4	7.3	4.4	4.4	5	6	73	75	821500	810536	<0.2	<0.2	3.1	3.0
						1.0	0.4	102	21.6		8.1		25.9		97.6		7.4		4.4		6		73				<0.2		2.7	
					Middle	4.4	0.3	92	21.1	21.1	8.1	8.1	27.8	27.8	94.1	94.1	7.1		4.2		7		75				<0.2		3.0	
						4.4	0.3	97	21.1		8.1		27.8		94.1		7.1		4.3		7		75				<0.2		2.9	
					Bottom	7.8	0.1	75	20.9	20.9	8.1	8.1	28.8	28.8	90.6	90.7	6.8	6.8	4.7		6		77				<0.2		3.1	
						7.8	0.1	81	20.9		8.1		28.8		90.7		6.8		4.6		7		77				<0.2		3.0	
IM12	Fine	Moderate	10:32	8.8	Surface	1.0	0.4	82	21.3	21.3	8.2	8.2	26.3	26.3	97.6	97.5	7.4	7.2	6.3	4.8	5	6	73	75	821136	811493	<0.2	<0.2	2.4	2.5
						1.0	0.5	87	21.3		8.2		26.4		97.4		7.4		6.3		5		73				<0.2		2.4	
					Middle	4.4	0.2	95	21.1	21.1	8.1	8.1	28.0	28.0	93.0	92.9	7.0		4.1		4		75				<0.2		2.3	
						4.4	0.2	96	21.1		8.1		28.0		92.8		7.0		4.0		3		75				<0.2		2.7	
					Bottom	7.8	0.1	134	20.8	20.8	8.1	8.1	29.1	29.1	86.9	87.1	6.6	6.6	4.0		8		77				<0.2		2.7	
						7.8	0.1	137	20.8		8.1		29.1		87.3		6.6		4.0		9		77				<0.2		2.6	
SR2	Fine	Moderate	09:46	4.7	Surface	1.0	0.2	46	21.3	21.3	8.1	8.1	26.4	26.4	97.0	96.9	7.4	7.4	2.4	2.8	4	4	73	74	821480	814151	<0.2	<0.2	2.7	2.7
						1.0	0.2	48	21.3		8.1		26.4		96.8		7.4		2.5		4		73				<0.2		2.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.2	38	20.9	20.9	8.1	8.1	28.9	28.9	91.7	91.9	6.9	6.9	3.1		4		75				<0.2		2.7	
						3.7	0.2	38	20.9		8.1		28.9		92.0		6.9		3.1		4		75				<0.2		2.7	
SR3	Fine	Moderate	11:23	8.7	Surface	1.0	0.1	163	21.5	21.5	8.1	8.1	25.1	25.1	98.3	98.2	7.5	7.4	3.3	4.6	4	5	-	-	822144	807564	-	-	-	-
						1.0	0.1	177	21.5		8.1		25.1		98.1		7.5		3.3		5		-				-		-	
					Middle	4.4	0.1	107	20.9	20.9	8.1	8.1	27.5	27.5	95.9	96.2	7.3		4.6		5		-				-		-	
						4.4	0.1	117	20.9		8.1		27.5		96.4		7.3		4.6		5		-				-		-	
					Bottom	7.7	0.2	68	20.8	20.8	8.1	8.1	28.5	28.5	98.5	98.5	7.5	7.5	5.8		6		-				-		-	
						7.7	0.2	72	20.8		8.1		28.5		98.4		7.5		5.9		7		-				-		-	
SR4A	Fine	Calm	10:11	8.2	Surface	1.0	0.3	74	21.4	21.4	8.0	8.0	27.3	27.3	101.2	101.2	7.6	7.4	2.1	3.7	4	6	-	-	817187	807781	-	-	-	-
						1.0	0.3	76	21.4		8.0		27.3		101.1		7.6		2.1		5		-				-		-	
					Middle	4.1	0.2	65	21.3	21.3	8.0	8.0	28.4	28.4	95.8	95.7	7.2		4.1		6		-				-		-	
						4.1	0.2	69	21.3		8.0		28.4		95.6		7.2		4.1		7		-				-		-	
					Bottom	7.2	0.2	83	21.2	21.2	7.9	7.9	29.3	29.3	90.4	90.5	6.8	6.8	5.1		7		-				-		-	
						7.2	0.2	84	21.2		7.9		29.3		90.6		6.8		5.0		8		-				-		-	
SR5A	Fine	Calm	09:54	4.4	Surface	1.0	0.0	1	21.3	21.3	7.9	7.9	29.3	29.3	87.3	87.2	6.5	6.5	3.1	4.7	5	6	-	-	816605	810709	-	-	-	-
						1.0	0.0	1	21.3		7.9		29.3		87.1		6.5		3.5		3		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.0	34	21.3	21.3	7.9	7.9	29.4	29.4	87.0	87.2	6.5	6.5	6.2		8		-				-		-	
						3.4	0.0	34	21.3		7.9		29.4		87.3		6.5		6.1		6		-				-		-	
SR6	Fine	Calm	09:30	4.1	Surface	1.0	0.1	100	21.5	21.5	7.9	7.9	28.2	28.2	91.1	91.1	6.8	6.8	2.5	7.0	4	5	-	-	817878	814670	-	-	-	-
						1.0	0.1	103	21.5		7.9		28.2		91.0		6.8		2.4		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.1	101	21.4	21.4	7.9	7.9	29.4	29.4	86.8	87.0	6.5	6.5	11.4		4		-				-		-	
						3.1	0.1	107	21.4		7.9		29.4		87.1		6.5		11.7		5		-				-		-	
SR7	Fine	Moderate	08:41	18.1	Surface	1.0	0.1	35	20.2	20.2	8.0	8.0	30.6	30.6	87.9	87.9	6.6	6.6	1.0	1.3	3	5	-	-	823656	823726	-	-	-	-
						1.0	0.1	38	20.2		8.0		30.6		87.8		6.6		1.1		4		-				-		-	
					Middle	9.1	0.1	315	20.1	20.1	8.0	8.0	30.9	30.9	86.8	86.9	6.6		1.4		6		-				-		-	
						9.1	0.1	325	20.1		8.0		30.9		86.9		6.6		1.5		5		-				-		-	
					Bottom	17.1	0.1	91	20.0	20.0	8.0	8.0	31.4	31.4	87.1	87.1	6.6	6.6	1.5		5		-				-		-	
						17.1	0.1	93	20.0		8.0		31.4		87.1		6.6		1.5		4		-				-		-	
SR8	Fine	Moderate	10:25	4.2	Surface	1.0	-	-	21.3	21.3	8.1	8.1	26.8	26.7	96.7	96.7	7.3	7.3	4.9	4.8	5	5	-	-	820493	811652	-	-	-	-
						1.0	-	-	21.3		8.1		26.7		96.6		7.3		4.7		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	-	-	21.0	21.0	8.1	8.1	28.8	28.7	92.5	92.6	7.0	7.0	4.7		5		-				-		-	
						3.2	-	-	21.0		8.1		28.7		92.7		7.0		4.8		4		-				-		-	

DA: Depth-Averaged

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

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

Note: Access to SR8 was blocked by floating object. The monitoring at SR8 was slightly shifted to the closest safe and accessible location temporarily.

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

Water Quality Monitoring

Water Quality Monitoring Results on 27 March 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	14:41	8.3	Surface	1.0	0.3	49	22.3	22.3	8.1	8.1	27.3	27.3	110.5	110.4	8.2	8.1	1.3	2.2	5	5	73	75	815636	804244	<0.2	<0.2	1.6	1.3
						1.0	0.3	51	22.3		8.1		27.3		110.3		8.2		1.3		4		73				<0.2		1.7	
					Middle	4.2	0.2	32	20.7	20.7	8.1	8.1	30.2	30.2	105.2	105.2	7.9		1.2		5		75				<0.2		1.5	
						4.2	0.2	32	20.7		8.1		30.2		105.1		7.9		1.4		4		76				<0.2		1.5	
					Bottom	7.3	0.2	48	20.4	20.4	8.1	8.1	31.0	31.0	99.7	99.8	7.5	7.5	4.0		5		77				<0.2		0.6	
						7.3	0.2	48	20.4		8.1		31.0		99.9		7.5		3.9		4		77				<0.2		0.6	
C2	Fine	Moderate	13:38	11.6	Surface	1.0	0.3	187	22.6	22.6	8.0	8.0	25.0	25.0	101.4	101.3	7.6	7.3	2.7	3.7	6	6	73	75	825664	806937	<0.2	<0.2	3.8	3.8
						1.0	0.3	195	22.6		8.0		25.0		101.2		7.6		2.8		4		73				<0.2		4.2	
					Middle	5.8	0.1	272	20.8	20.8	8.0	8.0	27.9	27.9	90.7	90.6	6.9		3.3		6		75				<0.2		3.8	
						5.8	0.1	286	20.8		8.0		27.9		90.5		6.9		3.3		6		75				<0.2		3.7	
					Bottom	10.6	0.0	20	20.4	20.4	8.0	8.0	29.8	29.8	86.8	87.0	6.6	6.6	5.1		6		77				<0.2		3.7	
						10.6	0.0	20	20.4		8.0		29.8		87.2		6.6		5.0		5		77				<0.2		3.8	
C3	Fine	Moderate	15:43	12.2	Surface	1.0	0.1	289	21.4	21.4	8.1	8.1	28.1	28.1	100.7	100.7	7.6	7.1	1.3	1.7	9	8	73	75	822131	817785	<0.2	<0.2	2.1	2.3
						1.0	0.1	296	21.4		8.1		28.1		100.6		7.6		1.3		7		73				<0.2		2.1	
					Middle	6.1	0.4	269	20.2	20.2	8.0	8.0	30.6	30.6	86.3	86.3	6.5		1.2		7		75				<0.2		2.0	
						6.1	0.4	283	20.2		8.0		30.6		86.2		6.5		1.3		7		75				<0.2		2.6	
					Bottom	11.2	0.3	276	20.1	20.1	8.0	8.0	31.0	31.0	85.7	85.8	6.5	6.5	2.7		7		77				<0.2		2.4	
						11.2	0.4	296	20.1		8.1		31.0		85.8		6.5		2.7		8		77				<0.2		2.6	
IM1	Cloudy	Moderate	14:21	7.2	Surface	1.0	0.2	75	22.7	22.7	8.1	8.1	27.1	27.1	112.6	112.6	8.3	8.3	1.2	2.0	4	4	72	74	818359	806475	<0.2	<0.2	2.1	1.9
						1.0	0.3	79	22.7		8.1		27.1		112.6		8.3		1.2		4		72				<0.2		1.9	
					Middle	3.6	0.2	91	21.6	21.6	8.1	8.1	27.8	27.8	110.1	110.1	8.3		1.1		4		73				<0.2		2.0	
						3.6	0.2	99	21.6		8.1		27.8		110.0		8.2		1.1		5		73				<0.2		2.1	
					Bottom	6.2	0.2	76	20.6	20.6	8.1	8.1	30.2	30.2	102.7	102.8	7.7	7.7	3.8		4		75				<0.2		1.5	
						6.2	0.2	83	20.6		8.1		30.2		102.8		7.7		3.7		5		76				<0.2		1.5	
IM2	Cloudy	Moderate	14:16	8.5	Surface	1.0	0.0	10	22.5	22.5	8.1	8.1	26.9	26.9	121.4	121.2	9.0	8.6	1.9	4.3	4	4	73	75	818879	806165	<0.2	<0.2	2.1	1.8
						1.0	0.0	10	22.5		8.1		26.9		121.0		9.0		1.9		5		73				<0.2		2.0	
					Middle	4.3	0.1	11	21.5	21.5	8.1	8.1	28.2	28.2	108.0	108.0	8.1		1.1		3		75				<0.2		1.7	
						4.3	0.1	11	21.5		8.1		28.2		107.9		8.1		1.1		3		75				<0.2		1.7	
					Bottom	7.5	0.1	16	20.6	20.6	8.1	8.1	30.3	30.3	101.0	101.1	7.6	7.6	9.9		4		76				<0.2		1.5	
						7.5	0.1	16	20.6		8.1		30.3		101.1		7.6		9.9		3		77				<0.2		1.7	
IM3	Cloudy	Moderate	14:10	8.3	Surface	1.0	0.0	330	22.3	22.3	8.1	8.1	27.0	27.0	124.0	123.9	9.2	8.6	2.1	1.8	4	5	73	74	819383	806015	<0.2	<0.2	2.1	1.8
						1.0	0.0	352	22.3		8.1		27.0		123.8		9.2		2.0		5		73				<0.2		2.1	
					Middle	4.2	0.1	348	21.2	21.2	8.1	8.1	28.7	28.7	104.8	104.8	7.9		1.5		5		74				<0.2		1.7	
						4.2	0.1	320	21.2		8.1		28.7		104.8		7.9		1.5		4		74				<0.2		1.7	
					Bottom	7.3	0.1	344	21.2	21.2	8.1	8.1	28.8	28.8	103.0	103.1	7.7	7.7	1.9		5		75				<0.2		1.7	
						7.3	0.1	316	21.2		8.1		28.8		103.1		7.7		1.8		4		75				<0.2		1.6	
IM4	Cloudy	Moderate	14:02	7.5	Surface	1.0	0.1	354	22.8	22.8	8.1	8.1	26.5	26.5	116.9	116.6	8.6	8.2	2.4	4.5	5	6	73	75	819568	805039	<0.2	<0.2	2.2	1.9
						1.0	0.1	326	22.8		8.1		26.5		116.3		8.6		2.3		5		74				<0.2		2.4	
					Middle	3.8	0.0	351	21.1	21.1	8.1	8.1	28.8	28.8	102.2	102.2	7.7		4.3		6		75				<0.2		1.9	
						3.8	0.0	323	21.1		8.1		28.8		102.1		7.7		4.3		7		76				<0.2		1.9	
					Bottom	6.5	0.1	47	20.6	20.6	8.1	8.0	30.2	30.2	100.0	100.1	7.5	7.5	6.8		6		76				<0.2		1.4	
						6.5	0.1	48	20.6		8.0		30.2		100.1		7.5		6.7		8		77				<0.2		1.4	
IM5	Cloudy	Moderate	13:53	6.5	Surface	1.0	0.1	260	22.8	22.9	8.1	8.1	26.1	26.1	117.7	117.5	8.7	8.3	2.7	4.3	4	6	73	75	820572	804946	<0.2	<0.2	2.3	2.1
						1.0	0.1	273	22.9		8.1		26.1		117.3		8.7		2.8		5		73				<0.2		2.4	
					Middle	3.3	0.1	269	21.5	21.5	8.0	8.0	28.0	28.0	105.2	105.1	7.9		5.0		4		75				<0.2		2.3	
						3.3	0.1	284	21.5		8.0		28.0		104.9		7.9		4.6		6		75				<0.2		2.2	
					Bottom	5.5	0.1	274	21.1	21.1	8.0	8.0	28.9	28.9	101.6	101.8	7.6	7.7	5.4		8		76				<0.2		1.8	
						5.5	0.1	300	21.1		8.0		28.9		102.0		7.7		5.3		8		77				<0.2		1.8	
IM6	Cloudy	Moderate	13:46	6.7	Surface	1.0	0.1	231	22.0	22.0	8.1	8.1	26.7	26.7	118.7	118.6	8.9	8.5	2.6	2.5	6	8	71	73	821079	805829	<0.2	<0.2	3.2	2.3
						1.0	0.1	249	22.0		8.1		26.7		118.4		8.9		2.5		5		72				<0.2		3.1	
					Middle	3.4	0.0	193	21.2	21.2	8.0	8.0	28.0	28.0	107.0	106.9	8.1		2.5		9		73				<0.2		2.0	
						3.4	0.0	207	21.2		8.0		28.0		106.8		8.1		2.4		7		73				<0.2		2.0	
					Bottom	5.7	0.0	174	21.1	21.1	8.0	8.0	28.6	28.6	104.1	104.1	7.8	7.8	2.6		10		75				<0.2		1.9	
						5.7	0.0	174	21.1		8.0		28.6		104.1		7.8		2.7		11		75				<0.2		1.8	
IM7	Cloudy	Moderate	13:39	8.6	Surface	1.0	0.2	260	22.8	22.8	8.0	8.0	24.8	24.8	110.2	110.1	8.2	7.9	2.1	4.1	5	6	71	73	821323	806838	<0.2	<0.2	3.6	2.8
						1.0	0.2	285	22.8		8.0		24.8		110.0		8.2		2.2		6		72				<0.2		3.3	
					Middle	4.3	0.0	74	21.1	21.1	8.0	8.0	28.3	28.3	100.6	100.6	7.6		4.8		6		73				<0.2		3.0	
						4.3	0.0	79	21.1		8.0		28.3		100.5		7.6		4.8		6		74				<0.2		3.2	
					Bottom	7.6	0.1	30	21.1	21.1	8.0	8.0	28.7	28.7	99.6	99.7	7.5	7.5	5.2		6		75				<0.2		1.8	
						7.6	0.1	32	21.1		8.0		28.7		99.8		7.5		5.4		6		75				<0.2		1.7	
IM8	Fine	Moderate	14:03	8.2	Surface	1.0	0.1	290	21.8	21.8	8.2	8.2	25.4	25.4	122.7	122.3	9.3	8.6	2.6	3.0	5	5	73	75	821708	807860	<0.2	<0.2	3.7	3.5
						1.0	0.1	308	21.8		8.2		25.4		121.9		9.2		2.7		4		74				<0.2		3.8	
					Middle	4.1	0.1	357	21.1	21.1	8.1	8.1	27.4	27.3	105.5	105.4	8.0		2.4		4		76				<0.2		3.5	
						4.1	0.1	328	21.1		8.1		27.3		105.2		8.0		2.4		5		75				<0.2		3.3	
					Bottom	7.2	0.1	41	20.8	20.8	8.1	8.1	28.6	28.6	100.8	100.8	7.6	7.6	3.9		5		77				<0.2		3.3	
						7.2	0.1	44	20.8		8.1		28.6		100.8		7.6		3.9		6		77				<0.2		3.3	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 27 March 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Fine	Moderate	14:11	6.8	Surface	1.0	0.1	249	22.4	22.4	8.2	8.2	24.9	24.9	120.7	120.7	9.1	8.9	3.1	3.0	6	6	74	76	822103	808822	<0.2	<0.2	3.1	3.2
						1.0	0.2	273	22.4		8.2		24.9		120.6		9.1		3.1		6		73				<0.2		3.4	
					Middle	3.4	0.1	267	21.5	21.5	8.1	8.1	25.9	25.9	113.4	113.4	8.6		2.4		6		75				<0.2		3.2	
						3.4	0.1	288	21.5		8.1		25.9		113.3		8.6		2.4		7		76				<0.2		3.3	
					Bottom	5.8	0.1	296	21.0	21.0	8.1	8.1	27.7	27.7	102.1	102.2	7.7	7.8	3.3		6		77				<0.2		3.2	
						5.8	0.1	300	21.0		8.1		27.7		102.2		7.8		3.4		6		78				<0.2		3.2	
IM10	Fine	Moderate	14:19	7.1	Surface	1.0	0.2	316	22.2	22.2	8.1	8.1	25.3	25.4	112.7	112.8	8.5	8.4	2.4	2.7	7	9	73	75	822223	809820	<0.2	<0.2	3.2	3.3
						1.0	0.2	345	22.1		8.1		25.4		112.9		8.5		2.4		9		73				<0.2		3.2	
					Middle	3.6	0.2	312	21.2	21.2	8.1	8.1	26.5	26.5	108.8	108.8	8.3		2.3		8		75				<0.2		3.1	
						3.6	0.2	312	21.2		8.1		26.5		108.7		8.3		2.4		8		76				<0.2		3.4	
					Bottom	6.1	0.3	308	20.9	21.0	8.1	8.1	27.9	27.9	96.5	96.6	7.3	7.3	3.3		11		77				<0.2		3.5	
						6.1	0.3	337	21.0		8.1		27.9		96.7		7.3		3.3		9		77				<0.2		3.6	
IM11	Fine	Moderate	14:32	8.0	Surface	1.0	0.3	280	21.4	21.4	8.2	8.2	26.8	26.8	104.4	104.3	7.9	7.6	4.3	6.1	6	7	73	75	821528	810519	<0.2	<0.2	3.1	2.7
						1.0	0.3	291	21.4		8.2		26.8		104.1		7.9		4.4		8		74				<0.2		3.0	
					Middle	4.0	0.2	292	21.1	21.1	8.2	8.2	27.9	27.9	94.8	94.8	7.2		6.3		8		75				<0.2		2.9	
						4.0	0.2	297	21.1		8.2		27.9		94.8		7.2		6.3		6		76				<0.2		2.3	
					Bottom	7.0	0.1	267	21.1	21.1	8.2	8.2	28.1	28.1	93.7	93.7	7.1	7.1	7.9		8		77				<0.2		2.4	
						7.0	0.1	292	21.1		8.2		28.1		93.7		7.1		7.7		7		77				<0.2		2.4	
IM12	Fine	Moderate	14:40	8.8	Surface	1.0	0.2	287	21.9	21.9	8.1	8.1	26.0	26.0	106.4	106.4	8.0	7.6	2.6	4.3	4	5	73	75	821137	811508	<0.2	<0.2	2.9	2.8
						1.0	0.2	297	21.9		8.1		26.0		106.4		8.0		2.6		5		74				<0.2		2.8	
					Middle	4.4	0.3	286	21.1	21.1	8.1	8.1	27.9	27.9	94.7	94.6	7.2		5.4		5		76				<0.2		2.6	
						4.4	0.3	293	21.1		8.1		27.9		94.4		7.1		5.4		5		75				<0.2		2.7	
					Bottom	7.8	0.2	260	20.4	20.4	8.0	8.0	29.8	29.8	86.7	86.9	6.6	6.6	4.8		6		77				<0.2		2.9	
						7.8	0.2	264	20.4		8.1		29.8		87.0		6.6		4.9		6		77				<0.2		2.7	
SR2	Fine	Moderate	15:20	3.9	Surface	1.0	0.2	332	21.5	21.5	8.1	8.1	27.3	27.3	99.6	99.4	7.5	7.5	2.0	2.9	3	5	73	75	821438	814139	<0.2	<0.2	3.0	3.0
						1.0	0.2	359	21.5		8.1		27.3		99.2		7.5		2.1		4		74				<0.2		2.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.9	0.2	331	20.7	20.7	8.0	8.0	29.3	29.3	89.3	89.5	6.8	6.8	3.8		5		75				<0.2		3.2	
						2.9	0.2	354	20.7		8.0		29.3		89.7		6.8		3.9		6		76				<0.2		3.1	
SR3	Fine	Moderate	13:57	8.7	Surface	1.0	0.1	224	21.5	21.5	8.2	8.2	25.8	25.8	121.8	121.6	9.3	8.7	2.5	3.0	5	6	-	-	822142	807588	-	-	-	-
						1.0	0.1	240	21.5		8.2		25.8		121.4		9.2		2.5		5		-				-		-	
					Middle	4.4	0.0	25	21.1	21.1	8.1	8.1	27.5	27.5	107.0	107.0	8.1		2.3		6		-				-		-	
						4.4	0.0	26	21.1		8.1		27.5		107.0		8.1		2.2		5		-				-		-	
					Bottom	7.7	0.1	346	20.8	20.8	8.1	8.1	28.7	28.7	100.0	100.1	7.6	7.6	4.2		6		-				-		-	
						7.7	0.1	318	20.8		8.1		28.7		100.1		7.6		4.4		7		-				-		-	
SR4A	Cloudy	Calm	15:00	8.9	Surface	1.0	0.0	102	21.9	21.9	8.1	8.1	27.7	27.7	103.8	103.8	7.7	7.5	3.9	4.8	8	8	-	-	817206	807799	-	-	-	-
						1.0	0.0	103	21.9		8.1		27.7		103.7		7.7		3.9		7		-				-		-	
					Middle	4.5	0.1	91	21.2	21.2	8.0	8.0	28.8	28.8	95.5	95.8	7.2		4.3		7		-				-		-	
						4.5	0.1	97	21.2		8.0		28.8		96.1		7.2		4.4		7		-				-		-	
					Bottom	7.9	0.1	90	20.9	20.9	8.1	8.0	29.5	29.5	99.0	98.9	7.4	7.4	6.1		8		-				-		-	
						7.9	0.1	90	20.9		8.0		29.5		98.8		7.4		6.2		9		-				-		-	
SR5A	Cloudy	Calm	15:17	4.7	Surface	1.0	0.1	1	22.2	22.2	8.0	8.0	28.6	28.6	99.9	99.9	7.4	7.4	3.3	4.7	5	5	-	-	816573	810683	-	-	-	-
						1.0	0.1	1	22.2		8.0		28.6		99.8		7.4		3.2		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.1	300	21.4	21.4	8.0	8.0	29.1	29.1	93.4	93.8	7.0	7.0	6.1		6		-				-		-	
						3.7	0.2	314	21.4		8.0		29.1		94.2		7.0		6.1		6		-				-		-	
SR6	Cloudy	Calm	15:40	4.4	Surface	1.0	0.2	255	22.1	22.1	8.1	8.1	27.1	27.1	98.1	98.0	7.3	7.3	4.8	6.0	6	7	-	-	817889	814668	-	-	-	-
						1.0	0.2	272	22.1		8.1		27.1		97.9		7.3		4.7		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.1	248	21.7	21.7	8.0	8.0	28.5	28.5	88.8	88.9	6.6	6.6	7.3		7		-				-		-	
						3.4	0.1	260	21.7		8.0		28.5		89.0		6.6		7.3		8		-				-		-	
SR7	Fine	Moderate	16:18	18.6	Surface	1.0	0.1	10	20.5	20.5	8.1	8.1	30.6	30.6	89.8	89.7	6.8	6.7	0.9	1.6	4	3	-	-	823665	823716	-	-	-	-
						1.0	0.1	10	20.5		8.1		30.6		89.6		6.7		0.9		3		-				-		-	
					Middle	9.3	0.1	71	20.2	20.2	8.1	8.1	31.2	31.2	87.1	87.1	6.6		1.5		3		-				-		-	
						9.3	0.1	73	20.2		8.1		31.2		87.0		6.6		1.6		3		-				-		-	
					Bottom	17.6	0.1	180	20.1	20.1	8.1	8.1	31.3	31.3	86.9	87.1	6.6	6.6	2.3		3		-				-		-	
						17.6	0.1	196	20.1		8.1		31.3		87.2		6.6		2.2		3		-				-		-	
SR8	Fine	Moderate	15:09	4.0	Surface	1.0	-	-	22.3	22.3	8.2	8.2	25.7	25.7	114.2	114.2	8.6	8.6	2.5	2.5	7	7	-	-	820246	811418	-	-	-	-
						1.0	-	-	22.3		8.2		25.7		114.1		8.6		2.5		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	-	-	21.9	22.0	8.2	8.2	26.0	25.9	111.1	111.0	8.4	8.4	2.6		6		-				-		-	
						3.0	-	-	22.0		8.2		25.9		110.8		8.3		2.6		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 March 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Moderate	11:18	8.2	Surface	1.0	0.1	199	21.8	21.8	8.2	8.2	26.5	26.5	113.6	113.6	8.6	8.2	8.6	7.9	9	11	73	75	815592	804254	<0.2	<0.2	2.1	2.1
						1.0	0.1	211	21.8		8.2		26.5		113.5		8.6		8.6		8		73				<0.2		2.1	
					Middle	4.1	0.1	141	20.9	21.0	8.1	8.1	29.1	29.1	102.1	102.2	7.7		7.7		12		75				<0.2		1.8	
						4.1	0.1	141	21.0		8.1		29.1		102.2		7.7		7.7		13		75				<0.2		2.3	
					Bottom	7.2	0.2	198	20.9	20.9	8.1	8.1	29.6	29.6	101.2	101.3	7.6	7.6	7.6		11		76				<0.2		2.0	
						7.2	0.2	206	20.9		8.1		29.6		101.3		7.6		7.6		13		76				<0.2		2.0	
C2	Cloudy	Moderate	10:17	12.2	Surface	1.0	0.3	93	21.5	21.5	7.8	7.8	25.2	25.2	103.2	103.1	7.9	7.7	7.9	7.5	8	7	72	73	825700	806916	<0.2	<0.2	3.7	3.7
						1.0	0.3	93	21.4		7.8		25.2		103.0		7.9		7.9		7		72				<0.2		3.5	
					Middle	6.1	0.1	186	21.1	21.1	7.9	7.9	28.4	28.4	97.7	97.7	7.4		7.4		6		73				<0.2		3.8	
						6.1	0.1	190	21.1		7.9		28.4		97.7		7.4		7.4		7		73				<0.2		3.7	
					Bottom	11.2	0.2	168	21.1	21.1	7.9	7.9	28.5	28.5	98.2	98.3	7.4	7.4	7.4		7		75				<0.2		3.6	
						11.2	0.2	172	21.1		7.9		28.5		98.3		7.4		7.4		8		75				<0.2		3.7	
C3	Cloudy	Moderate	12:04	12.1	Surface	1.0	0.3	83	21.1	21.1	7.8	7.8	28.9	28.9	99.1	99.1	7.4	7.4	7.4	7.4	6	8	73	75	822111	817791	<0.2	<0.2	1.4	1.5
						1.0	0.3	90	21.1		7.8		28.9		99.0		7.4		7.4		7		73				<0.2		1.4	
					Middle	6.1	0.2	79	21.0	21.0	7.8	7.8	29.2	29.3	97.8	97.8	7.4		7.4		5		75				<0.2		1.5	
						6.1	0.2	83	21.0		7.8		29.3		97.7		7.3		7.3		7		75				<0.2		1.4	
					Bottom	11.1	0.2	88	21.0	21.0	7.8	7.8	29.4	29.4	98.6	98.8	7.4	7.4	7.4		10		77				<0.2		1.7	
						11.1	0.2	93	21.0		7.8		29.4		99.0		7.4		7.4		10		77				<0.2		1.4	
IM1	Fine	Moderate	11:00	7.4	Surface	1.0	0.1	186	21.3	21.3	8.2	8.2	27.8	27.8	104.3	104.3	7.9	7.9	7.9	7.8	11	12	72	73	818365	806479	<0.2	<0.2	1.9	1.9
						1.0	0.1	195	21.3		8.2		27.8		104.3		7.9		7.9		11		72				<0.2		2.0	
					Middle	3.7	0.1	160	21.1	21.2	8.2	8.2	28.3	28.3	103.1	103.1	7.8		7.8		12		73				<0.2		1.9	
						3.7	0.1	172	21.2		8.2		28.3		103.1		7.8		7.8		11		73				<0.2		1.9	
					Bottom	6.4	0.1	120	21.1	21.1	8.1	8.1	28.7	28.7	102.3	102.3	7.7	7.7	7.7		12		75				<0.2		2.0	
						6.4	0.1	125	21.1		8.1		28.7		102.3		7.7		7.7		12		75				<0.2		1.9	
IM2	Fine	Moderate	10:55	8.3	Surface	1.0	0.1	99	21.5	21.5	8.2	8.2	26.7	26.7	113.9	113.9	8.6	8.2	8.6	8.1	11	12	73	75	818832	806164	<0.2	<0.2	1.9	1.8
						1.0	0.1	107	21.5		8.2		26.7		113.8		8.6		8.6		12		73				<0.2		1.9	
					Middle	4.2	0.0	137	21.1	21.1	8.1	8.1	28.3	28.3	103.7	103.7	7.8		7.8		11		75				<0.2		1.8	
						4.2	0.0	141	21.1		8.1		28.3		103.6		7.8		7.8		12		75				<0.2		1.8	
					Bottom	7.3	0.1	113	21.1	21.1	8.1	8.1	28.6	28.6	103.1	103.1	7.8	7.8	7.8		11		77				<0.2		1.7	
						7.3	0.1	121	21.1		8.1		28.6		103.1		7.8		7.8		13		76				<0.2		1.7	
IM3	Fine	Moderate	10:50	8.3	Surface	1.0	0.1	101	21.7	21.7	8.2	8.2	27.1	27.1	112.2	112.2	8.4	8.2	8.4	8.0	11	10	71	74	819397	805998	<0.2	<0.2	2.1	2.0
						1.0	0.1	107	21.6		8.2		27.1		112.1		8.4		8.4		10		72				<0.2		2.0	
					Middle	4.2	0.1	76	21.2	21.2	8.1	8.1	28.2	28.2	105.5	105.5	7.9		7.9		11		73				<0.2		2.0	
						4.2	0.1	77	21.2		8.1		28.2		105.4		7.9		7.9		9		74				<0.2		2.0	
					Bottom	7.3	0.1	90	21.1	21.1	8.1	8.1	28.8	28.8	103.1	103.1	7.8	7.8	7.8		10		75				<0.2		2.0	
						7.3	0.1	98	21.1		8.1		28.8		103.1		7.8		7.8		9		76				<0.2		1.9	
IM4	Fine	Moderate	10:42	7.8	Surface	1.0	0.0	164	21.5	21.5	8.2	8.2	27.8	27.8	107.7	107.7	8.1	8.0	8.1	7.9	12	12	71	74	819553	805053	<0.2	<0.2	2.2	2.1
						1.0	0.0	164	21.5		8.2		27.8		107.6		8.1		8.1		12		72				<0.2		2.0	
					Middle	3.9	0.0	148	21.1	21.1	8.2	8.2	28.6	28.6	103.7	103.7	7.8		7.8		11		73				<0.2		2.0	
						3.9	0.0	151	21.1		8.2		28.6		103.7		7.8		7.8		12		74				<0.2		2.2	
					Bottom	6.8	0.1	215	21.0	21.0	8.2	8.2	28.9	28.9	102.7	102.7	7.7	7.7	7.7		13		75				<0.2		2.0	
						6.8	0.1	225	21.0		8.2		28.9		102.7		7.7		7.7		12		76				<0.2		2.0	
IM5	Fine	Moderate	10:32	7.1	Surface	1.0	0.2	118	21.7	21.7	8.2	8.2	27.5	27.5	110.3	110.3	8.3	8.1	8.3	7.9	16	18	72	74	820557	804905	<0.2	<0.2	2.0	2.0
						1.0	0.2	126	21.7		8.2		27.5		110.3		8.3		8.3		17		72				<0.2		1.9	
					Middle	3.6	0.1	116	21.2	21.2	8.1	8.1	28.4	28.4	103.6	103.6	7.8		7.8		18		73				<0.2		1.9	
						3.6	0.1	118	21.2		8.1		28.4		103.5		7.8		7.8		19		74				<0.2		2.0	
					Bottom	6.1	0.0	241	21.1	21.1	8.1	8.1	28.6	28.6	102.9	102.9	7.7	7.7	7.7		17		75				<0.2		2.0	
						6.1	0.0	241	21.1		8.1		28.6		102.9		7.7		7.7		18		76				<0.2		2.1	
IM6	Fine	Moderate	10:25	7.0	Surface	1.0	0.2	126	21.5	21.5	8.2	8.2	27.7	27.7	111.0	110.9	8.3	8.2	8.3	8.1	17	18	72	74	821041	805804	<0.2	<0.2	2.0	2.0
						1.0	0.2	130	21.5		8.2		27.7		110.8		8.3		8.3		18		72				<0.2		2.0	
					Middle	3.5	0.1	133	21.4	21.4	8.1	8.1	28.0	28.0	107.4	107.3	8.1		8.1		18		73				<0.2		2.0	
						3.5	0.1	133	21.4		8.1		28.0		107.1		8.1		8.1		19		74				<0.2		2.0	
					Bottom	6.0	0.1	96	21.3	21.3	8.1	8.1	28.3	28.3	105.0	105.0	7.9	7.9	7.9		18		75				<0.2		2.0	
						6.0	0.1	103	21.3		8.1		28.3		105.0		7.9		7.9		17		75				<0.2		2.0	
IM7	Fine	Moderate	10:16	7.2	Surface	1.0	0.2	80	21.4	21.4	8.2	8.2	27.5	27.5	105.8	105.9	8.0	8.0	8.0	8.0	15	16	72	74	821331	806812	<0.2	<0.2	2.1	2.0
						1.0	0.2	83	21.4		8.2		27.6		106.0		8.0		8.0		16		72				<0.2		2.0	
					Middle	3.6	0.1	49	21.4	21.4	8.2	8.2	27.8	27.8	106.9	106.9	8.0		8.0		15		73				<0.2		2.0	
						3.6	0.1	51	21.4		8.2		27.8		106.8		8.0		8.0		16		74				<0.2		2.1	
					Bottom	6.2	0.1	58	21.3	21.3	8.2	8.2	28.0	28.0	105.5	105.6	7.9	8.0	7.9		17		76				<0.2		2.0	
						6.2	0.1	63	21.3		8.2		28.0		105.6		8.0		8.0		15		76				<0.2		2.0	
IM8	Cloudy	Moderate	10:42	8.4	Surface	1.0	0.4	92	21.6	21.6	7.9	7.9	25.5	25.5	109.6	109.7	8.3	8.4	8.3	8.4	7	8	72	74	821665	807833	<0.2	<0.2	2.4	2.4
						1.0	0.4	96	21.6		7.9		25.6		109.7		8.3		8.3		7		73				<0.2		2.3	
					Middle	4.2	0.2	136	21.4	21.4	7.9	7.9	27.3	27.3	112.5	112.6	8.5		8.5		9		73				<0.2		2.3	
						4.2	0.2	148	21.4		7.9		27.3		112.7		8.5		8.5		9		73				<0.2		2.3	
					Bottom	7.4	0.2	48	21.4	21.4	7.9	7.9	27.6	27.6	112.1	111.9	8.4	8.4	8.4		8		75				<0.2		2.6	
						7.4	0.3	51	21.4		7.9		27.6		111.6		8.4		8.4		9		76				<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 29 March 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	10:50	7.2	Surface	1.0	0.5	90	21.5	21.5	7.9	7.9	26.7	26.7	111.0	111.1	8.4	8.4	8.4	8.4	8	8	73	74	822106	808796	<0.2	<0.2	2.5	2.5
						1.0	0.5	92	21.5		7.9		26.7		111.1		8.4		8.4		7		73				<0.2		2.5	
					Middle	3.6	0.3	70	21.5	21.5	7.9	7.9	27.1	27.2	111.9	112.0	8.4		8.4		8		73				<0.2		2.4	
						3.6	0.3	71	21.5		7.9		27.2		112.0		8.5		8.5		8		74				<0.2		2.4	
					Bottom	6.2	0.3	71	21.5	21.5	7.9	7.9	27.4	27.3	111.1	111.0	8.4		8.4		9		75				<0.2		2.5	
						6.2	0.3	71	21.5		7.9		27.3		110.9		8.4		8.4		8		76				<0.2		2.5	
IM10	Cloudy	Moderate	10:59	8.2	Surface	1.0	0.3	112	21.7	21.7	7.9	7.9	26.1	26.2	110.9	110.7	8.4	8.3	8.4	8.2	5	5	73	74	822229	809860	<0.2	<0.2	2.0	2.0
						1.0	0.4	118	21.7		7.9		26.2		110.5		8.4		8.4		5		73				<0.2		2.0	
					Middle	4.1	0.3	87	21.5	21.5	7.9	7.9	26.8	26.9	108.8	108.8	8.2		8.2		5		73				<0.2		2.0	
						4.1	0.3	92	21.5		7.9		26.9		108.8		8.2		8.2		5		74				<0.2		2.0	
					Bottom	7.2	0.2	99	21.4	21.4	7.9	7.9	27.4	27.4	108.0	108.0	8.1	8.1	8.1		5		75				<0.2		1.9	
						7.2	0.3	100	21.4		7.9		27.4		108.0		8.1		8.1		4		75				<0.2		2.0	
IM11	Cloudy	Moderate	11:11	7.2	Surface	1.0	0.4	113	21.5	21.5	8.0	8.0	27.1	27.1	105.0	104.9	7.9	7.9	7.9	7.9	7	10	73	74	821472	810561	<0.2	<0.2	1.8	1.8
						1.0	0.4	124	21.5		8.0		27.1		104.8		7.9		7.9		7		73				<0.2		1.8	
					Middle	3.6	0.3	110	21.4	21.4	8.0	8.0	27.2	27.2	104.1	104.1	7.9		7.9		12		73				<0.2		1.8	
						3.6	0.3	115	21.4		8.0		27.2		104.1		7.9		7.9		10		74				<0.2		1.7	
					Bottom	6.2	0.3	100	21.4	21.4	8.0	8.0	27.4	27.4	104.0	104.0	7.8	7.8	7.8		11		75				<0.2		1.7	
						6.2	0.3	100	21.4		8.0		27.4		103.9		7.8		7.8		10		74				<0.2		1.8	
IM12	Cloudy	Moderate	11:18	8.3	Surface	1.0	0.4	105	21.6	21.6	8.0	8.0	26.9	26.9	107.6	107.6	8.1	8.1	8.1	8.0	8	9	73	74	821156	811511	<0.2	<0.2	1.7	1.8
						1.0	0.5	110	21.5		8.0		26.9		107.5		8.1		8.1		9		73				<0.2		1.8	
					Middle	4.2	0.4	95	21.5	21.5	8.0	8.0	27.0	27.0	106.9	106.8	8.1		8.1		10		73				<0.2		1.9	
						4.2	0.5	97	21.5		8.0		27.0		106.7		8.1		8.1		8		74				<0.2		1.8	
					Bottom	7.3	0.3	104	21.4	21.4	8.0	8.0	27.3	27.3	105.3	105.5	7.9	8.0	7.9		9		75				<0.2		1.8	
						7.3	0.3	109	21.4		8.0		27.3		105.6		8.0		8.0		9		76				<0.2		1.9	
SR2	Cloudy	Moderate	11:44	4.2	Surface	1.0	0.4	94	21.5	21.5	7.9	7.9	27.6	27.7	108.0	108.1	8.1	8.1	8.1	8.1	7	7	72	73	821489	814175	<0.2	<0.2	1.9	1.9
						1.0	0.5	98	21.5		7.9		27.7		108.1		8.1		8.1		6		73				<0.2		1.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.4	96	21.5	21.5	7.9	7.9	27.6	27.6	108.2	108.3	8.1	8.1	8.1		8		74				<0.2		1.9	
						3.2	0.4	103	21.5		7.9		27.6		108.3		8.1		8.1		6		74				<0.2		1.9	
SR3	Cloudy	Moderate	10:38	9.2	Surface	1.0	0.3	146	21.5	21.5	7.9	7.9	25.8	25.8	105.2	105.3	8.0	8.1	8.0	8.2	10	10	-	-	822167	807585	-	-	-	-
						1.0	0.3	149	21.5		7.9		25.8		105.4		8.0		8.0		10		-				-		-	
					Middle	4.6	0.3	84	21.4	21.4	7.9	7.9	27.3	27.3	108.9	109.0	8.2		8.2		10		-				-		-	
						4.6	0.3	92	21.4		7.9		27.3		109.0		8.2		8.2		10		-				-		-	
					Bottom	8.2	0.2	39	21.3	21.3	7.9	7.9	27.7	27.7	109.4	109.4	8.2	8.2	8.2		11		-				-		-	
						8.2	0.2	39	21.3		7.9		27.7		109.4		8.2		8.2		10		-				-		-	
SR4A	Fine	Calm	11:39	9.1	Surface	1.0	0.3	89	21.5	21.5	8.2	8.2	27.0	27.0	109.8	109.6	8.3	8.3	8.3	8.1	8	9	-	-	817218	807787	-	-	-	-
						1.0	0.4	95	21.5		8.2		27.0		109.4		8.3		8.3		8		-				-		-	
					Middle	4.6	0.4	82	21.5	21.5	8.2	8.2	27.1	27.1	108.6	108.7	8.2		8.2		8		-				-		-	
						4.6	0.4	89	21.5		8.2		27.1		108.8		8.2		8.2		10		-				-		-	
					Bottom	8.1	0.4	79	21.3	21.3	8.1	8.1	27.5	27.4	103.0	103.1	7.8	7.8	7.8		9		-				-		-	
						8.1	0.4	80	21.3		8.1		27.4		103.1		7.8		7.8		8		-				-		-	
SR5A	Fine	Calm	11:54	4.6	Surface	1.0	0.2	133	21.6	21.6	8.2	8.2	27.8	27.8	102.5	102.5	7.7	7.7	7.7	7.6	8	8	-	-	816581	810690	-	-	-	-
						1.0	0.2	136	21.6		8.2		27.8		102.5		7.7		7.7		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.0	89	21.7	21.7	8.1	8.1	28.0	28.0	102.0	102.0	7.6	7.6	7.6		8		-				-		-	
						3.6	0.0	94	21.7		8.1		28.0		102.0		7.6		7.6		8		-				-		-	
SR6	Fine	Calm	12:16	3.8	Surface	1.0	0.0	14	21.8	21.8	8.1	8.1	27.8	27.8	101.3	101.2	7.6	7.6	7.6	7.2	7	8	-	-	817912	814685	-	-	-	-
						1.0	0.0	14	21.8		8.1		27.9		101.1		7.6		7.6		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	0.1	48	21.7	21.7	8.0	8.0	28.3	28.3	92.4	92.5	6.9	6.9	6.9		7		-				-		-	
						2.8	0.1	48	21.7		8.0		28.3		92.6		6.9		6.9		9		-				-		-	
SR7	Cloudy	Moderate	12:35	16.8	Surface	1.0	0.6	84	21.4	21.4	7.9	7.9	29.0	29.0	109.0	108.6	8.2	7.8	8.2	7.6	2	2	-	-	823607	823757	-	-	-	-
						1.0	0.6	85	21.3		7.9		29.1		108.2		8.1		8.1		2		-				-		-	
					Middle	8.4	0.3	84	20.9	20.9	7.8	7.8	29.5	29.5	98.3	98.3	7.4		7.4		2		-				-		-	
						8.4	0.4	88	20.9		7.8		29.6		98.2		7.4		7.4		2		-				-		-	
					Bottom	15.8	0.2	69	20.9	20.9	7.8	7.8	29.7	29.7	98.4	98.5	7.4	7.4	7.4		3		-				-		-	
						15.8	0.2	75	20.9		7.8		29.7		98.6		7.4		7.4		3		-				-		-	
SR8	Cloudy	Moderate	11:28	3.8	Surface	1.0	-	-	21.8	21.8	7.9	7.9	27.2	27.2	105.8	105.8	7.9	7.9	7.9	7.9	7	8	-	-	820246	811418	-	-	-	-
						1.0	-	-	21.8		7.9		27.2		105.7		7.9		7.9		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	-	-	21.7	21.7	7.9	7.9	27.2	27.2	105.2	105.2	7.9	7.9	7.9		9		-				-		-	
						2.8	-	-	21.7		7.9		27.2		105.2		7.9		7.9		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 29 March 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Calm	06:49	8.1	Surface	1.0	0.7	30	21.2	21.2	8.1	8.1	26.2	26.2	102.2	102.4	7.8	7.9	7.8	7.8	5	6	71	74	815631	804227	<0.2	<0.2	3.6	3.5
						1.0	0.7	30	21.2		8.1		26.2		102.5		7.8				5		71				<0.2		3.4	
					Middle	4.1	0.5	16	21.2	21.2	8.1	8.1	28.2	28.2	105.0	105.0	7.9				6		73				<0.2		3.4	
						4.1	0.6	16	21.2		8.1		28.2		105.0		7.9				6		74				<0.2		3.5	
					Bottom	7.1	0.4	11	21.0	21.0	8.1	8.1	28.7	28.7	103.4	103.4	7.8	7.8			6		77				<0.2		3.5	
						7.1	0.5	11	21.0		8.1		28.7		103.4		7.8				7		76				<0.2		3.4	
C2	Cloudy	Moderate	07:49	12.1	Surface	1.0	0.4	21	21.7	21.7	7.8	7.8	22.6	22.6	104.9	104.9	8.1	7.9	7.6	7.6	5	5	73	74	825660	806964	<0.2	<0.2	3.8	3.8
						1.0	0.4	21	21.7		7.8		22.6		104.8		8.1				6		73				<0.2		3.8	
					Middle	6.1	0.4	14	21.4	21.4	7.8	7.8	25.1	25.1	99.0	98.9	7.6				4		74				<0.2		3.7	
						6.1	0.4	15	21.3		7.8		25.1		98.8		7.6				6		74				<0.2		3.8	
					Bottom	11.1	0.4	319	21.0	21.0	7.8	7.8	28.4	28.4	93.0	93.0	7.0	7.0			4		75				<0.2		3.7	
						11.1	0.4	329	21.0		7.8		28.4		93.0		7.0				5		75				<0.2		3.8	
C3	Cloudy	Moderate	06:00	11.2	Surface	1.0	0.6	263	21.1	21.1	7.9	7.9	28.5	28.5	99.7	99.5	7.5	7.4	7.3	7.3	3	3	73	75	822097	817777	<0.2	<0.2	2.0	2.0
						1.0	0.6	282	21.1		7.9		28.5		99.3		7.5				2		73				<0.2		2.2	
					Middle	5.6	0.6	265	20.9	20.9	7.9	7.9	29.3	29.3	96.0	96.0	7.2				3		75				<0.2		1.8	
						5.6	0.7	273	20.9		7.9		29.3		95.9		7.2				3		75				<0.2		1.8	
					Bottom	10.2	0.3	264	20.8	20.8	7.9	7.9	29.5	29.4	96.7	97.1	7.3	7.3			4		77				<0.2		2.0	
						10.2	0.3	284	20.8		7.9		29.4		97.5		7.3				3		76				<0.2		2.0	
IM1	Fine	Calm	07:05	7.4	Surface	1.0	0.5	23	21.3	21.3	8.1	8.1	27.1	27.1	98.6	98.6	7.5	7.6	7.5	7.5	5	6	71	73	818325	806433	<0.2	<0.2	3.6	3.5
						1.0	0.5	23	21.3		8.1		27.1		98.6		7.5				5		72				<0.2		2.5	
					Middle	3.7	0.4	11	21.2	21.2	8.2	8.2	28.0	28.0	100.9	100.9	7.6				6		73				<0.2		3.6	
						3.7	0.4	11	21.2		8.2		28.0		100.9		7.6				8		73				<0.2		3.7	
					Bottom	6.4	0.4	353	21.1	21.1	8.1	8.1	28.2	28.2	99.0	99.0	7.5	7.5			7		75				<0.2		3.9	
						6.4	0.4	325	21.1		8.1		28.2		98.9		7.5				7		76				<0.2		3.7	
IM2	Fine	Moderate	07:10	8.2	Surface	1.0	0.5	21	21.3	21.3	8.1	8.1	27.0	27.0	99.9	100.0	7.6	7.7	7.7	7.7	5	5	72	74	818829	806203	<0.2	<0.2	3.7	3.6
						1.0	0.6	22	21.3		8.1		27.0		100.1		7.6				3		72				<0.2		3.6	
					Middle	4.1	0.6	23	21.2	21.2	8.2	8.2	28.2	28.2	102.7	102.7	7.7				6		73				<0.2		3.7	
						4.1	0.6	23	21.2		8.2		28.2		102.7		7.7				5		74				<0.2		3.6	
					Bottom	7.2	0.5	22	21.2	21.2	8.1	8.1	28.2	28.2	101.6	101.6	7.7	7.7			4		75				<0.2		3.6	
						7.2	0.5	23	21.2		8.1		28.2		101.6		7.7				5		75				<0.2		3.4	
IM3	Fine	Moderate	07:15	8.4	Surface	1.0	0.5	48	21.4	21.4	8.1	8.1	27.4	27.4	101.5	101.5	7.7	7.7	7.6	7.6	5	6	72	74	819383	806012	<0.2	<0.2	3.4	3.5
						1.0	0.5	49	21.4		8.1		27.4		101.5		7.7				5		72				<0.2		3.5	
					Middle	4.2	0.4	54	21.3	21.3	8.2	8.2	27.7	27.7	101.2	101.2	7.6				5		73				<0.2		3.5	
						4.2	0.5	55	21.3		8.2		27.7		101.2		7.6				4		73				<0.2		3.5	
					Bottom	7.4	0.4	47	21.3	21.3	8.2	8.2	27.8	27.8	100.1	100.0	7.5	7.5			9		75				<0.2		3.5	
						7.4	0.4	49	21.3		8.2		27.8		99.9		7.5				8		76				<0.2		3.4	
IM4	Fine	Moderate	07:23	7.7	Surface	1.0	0.5	26	21.3	21.3	8.1	8.1	27.3	27.3	101.2	101.4	7.7	7.8	7.8	7.8	6	6	72	74	819548	805058	<0.2	<0.2	4.0	3.8
						1.0	0.5	26	21.3		8.1		27.3		101.5		7.7				6		72				<0.2		3.7	
					Middle	3.9	0.5	33	21.4	21.4	8.1	8.1	28.0	28.0	104.9	104.9	7.9				6		73				<0.2		3.9	
						3.9	0.5	36	21.4		8.1		28.0		104.9		7.9				5		74				<0.2		3.6	
					Bottom	6.7	0.5	38	21.4	21.4	8.1	8.1	28.0	28.0	104.4	104.4	7.9	7.9			7		75				<0.2		3.6	
						6.7	0.5	40	21.4		8.1		28.0		104.4		7.8				8		75				<0.2		3.7	
IM5	Fine	Moderate	07:32	6.9	Surface	1.0	0.5	12	21.3	21.3	8.1	8.1	27.0	27.0	95.9	95.9	7.3	7.3	7.2	7.2	5	6	72	74	820539	804897	<0.2	<0.2	3.7	3.7
						1.0	0.5	12	21.3		8.1		27.0		95.9		7.3				5		73				<0.2		3.8	
					Middle	3.5	0.5	7	21.3	21.3	8.0	8.0	27.0	27.0	95.4	95.4	7.2				5		74				<0.2		3.7	
						3.5	0.5	7	21.3		8.0		27.0		95.3		7.2				6		74				<0.2		3.6	
					Bottom	5.9	0.4	5	21.3	21.3	7.9	7.9	27.0	27.0	93.9	93.9	7.1	7.1			8		75				<0.2		3.8	
						5.9	0.5	5	21.3		7.9		27.0		93.8		7.1				7		75				<0.2		3.7	
IM6	Fine	Moderate	07:39	7.0	Surface	1.0	0.2	66	21.4	21.4	8.1	8.1	26.7	26.7	96.4	96.4	7.3	7.3	7.3	7.3	6	8	72	74	821048	805854	<0.2	<0.2	3.7	3.7
						1.0	0.2	68	21.4		8.1		26.7		96.4		7.3				7		73				<0.2		3.6	
					Middle	3.5	0.3	63	21.4	21.4	8.1	8.1	26.8	26.8	96.5	96.5	7.3				6		74				<0.2		3.7	
						3.5	0.3	68	21.4		8.1		26.8		96.5		7.3				8		74				<0.2		3.7	
					Bottom	6.0	0.3	65	21.4	21.4	8.1	8.1	26.9	26.9	96.5	96.5	7.3	7.3			9		75				<0.2		3.7	
						6.0	0.3	69	21.4		8.1		26.9		96.5		7.3				11		75				<0.2		3.6	
IM7	Fine	Moderate	07:48	8.4	Surface	1.0	0.3	19	21.3	21.3	8.2	8.2	27.0	27.0	97.3	97.3	7.4	7.4	7.4	7.4	9	9	72	74	821329	806816	<0.2	<0.2	3.6	3.8
						1.0	0.4	19	21.3		8.2		27.0		97.3		7.4				9		72				<0.2		4.0	
					Middle	4.2	0.3	11	21.3	21.3	8.2	8.2	27.0	27.0	97.2	97.2	7.4				9		73				<0.2		3.8	
						4.2	0.3	11	21.3		8.2		27.0		97.2		7.4				9		74				<0.2		3.9	
					Bottom	7.4	0.2	15	21.3	21.3	8.2	8.2	27.1	27.1	97.1	97.1	7.4	7.4			10		75				<0.2		3.7	
						7.4	0.2	15	21.3		8.2		27.1		97.1		7.4				10		75				<0.2		3.8	
IM8	Cloudy	Moderate	07:23	8.1	Surface	1.0	0.2	15	21.5	21.5	7.8	7.8	23.1	23.1	102.1	102.0	7.9	7.8	7.7	7.7	6	7	72	74	821712	807856	<0.2	<0.2	3.8	3.8
						1.0	0.2	15	21.5		7.8		23.1		101.9		7.9				6		72				<0.2		3.7	
					Middle	4.1	0.3	19	21.5	21.5	7.8	7.8	24.9	24.9	100.7	100.6	7.7				5		74				<0.2		3.8	
						4.1	0.3	19	21.4		7.8		24.9		100.5		7.7				6		75				<0.2		3.8	
					Bottom	7.1	0.3	26	21.4	21.4	7.8	7.8	25.3	25.2	100.0	100.1	7.6	7.6			7		75				<0.2		3.9	
						7.1	0.3	27	21.4		7.8		25.2		100.1		7.6				9		76				<0.2		3.8	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 29 March 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	07:18	7.6	Surface	1.0	0.2	338	21.5	21.5	7.8	7.8	23.3	23.3	102.0	101.9	7.9	7.8	7.9	7.8	7	8	73	74	822093	808835	<0.2	<0.2	3.6	**3.8**
						1.0	0.2	342	21.5		7.8		23.2		101.7		7.9		7.9		7		73				<0.2		3.8	
					Middle	3.8	0.2	348	21.5	21.5	7.8	7.8	25.0	25.0	101.3	101.3	7.7		7.7		8		74				<0.2		3.8	
						3.8	0.2	320	21.5		7.8		25.0		101.2		7.7		7.7		6		74				<0.2		3.9	
					Bottom	6.6	0.2	349	21.4	21.4	7.8	7.8	25.1	25.2	101.4	101.5	7.7	7.8	7.7		8		75				<0.2		4.0	
						6.6	0.2	321	21.4		7.8		25.2		101.6		7.8		7.8		10		76				<0.2		3.7	
IM10	Cloudy	Moderate	07:12	8.2	Surface	1.0	0.3	327	21.5	21.5	7.9	7.9	26.9	26.9	104.5	104.5	7.9	7.9	7.9	7.9	12	12	73	74	822230	809846	<0.2	<0.2	2.0	2.0
						1.0	0.3	357	21.5		7.9		26.9		104.5		7.9		7.9		13		73				<0.2		2.0	
					Middle	4.1	0.3	325	21.5	21.5	7.9	7.9	27.0	27.0	104.3	104.3	7.9		7.9		13		74				<0.2		2.1	
						4.1	0.3	351	21.5		7.9		27.1		104.3		7.9		7.9		12		74				<0.2		2.1	
					Bottom	7.2	0.3	319	21.5	21.5	7.9	7.9	27.1	27.1	104.3	104.6	7.9	7.9	7.9		11		76				<0.2		2.0	
						7.2	0.3	347	21.5		7.9		27.1		104.8		7.9		7.9		12		76				<0.2		2.0	
IM11	Cloudy	Moderate	06:57	8.0	Surface	1.0	0.3	282	21.4	21.4	7.9	7.9	27.6	27.6	104.1	104.1	7.8	7.8	7.8	7.8	7	8	73	75	821504	810552	<0.2	<0.2	2.2	2.2
						1.0	0.4	302	21.4		7.9		27.6		104.0		7.8		7.8		8		73				<0.2		2.4	
					Middle	4.0	0.3	291	21.4	21.4	7.9	7.9	27.8	27.8	103.3	103.3	7.8		7.8		7		75				<0.2		2.1	
						4.0	0.4	295	21.4		7.9		27.8		103.3		7.8		7.8		8		74				<0.2		2.0	
					Bottom	7.0	0.3	302	21.4	21.4	7.9	7.9	27.8	27.8	103.2	103.2	7.8	7.8	7.8		7		76				<0.2		2.1	
						7.0	0.3	316	21.4		7.9		27.8		103.2		7.8		7.8		8		76				<0.2		2.4	
IM12	Cloudy	Moderate	06:50	7.8	Surface	1.0	0.6	277	21.4	21.4	7.9	7.9	27.7	27.7	107.1	107.1	8.1	8.1	8.1	8.0	7	8	73	75	821191	811547	<0.2	<0.2	1.8	2.4
						1.0	0.7	295	21.4		7.9		27.7		107.0		8.1		8.1		7		73				<0.2		2.2	
					Middle	3.9	0.5	279	21.4	21.4	7.9	7.9	27.7	27.7	106.7	106.7	8.0		8.0		9		75				<0.2		2.1	
						3.9	0.5	302	21.4		7.9		27.7		106.7		8.0		8.0		7		75				<0.2		2.6	
					Bottom	6.8	0.4	286	21.4	21.4	7.9	7.9	27.8	27.8	105.8	105.8	8.0	8.0	8.0		10		76				<0.2		3.2	
						6.8	0.4	304	21.4		7.9		27.8		105.7		8.0		8.0		10		75				<0.2		2.7	
SR2	Cloudy	Moderate	06:24	3.8	Surface	1.0	0.2	281	21.4	21.4	7.9	7.9	27.7	27.7	104.0	104.0	7.8	7.8	7.8	7.9	8	8	73	74	821436	814191	<0.2	<0.2	2.0	2.5
						1.0	0.2	283	21.4		7.9		27.7		104.0		7.8		7.8		8		74				<0.2		3.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	0.2	290	21.4	21.4	7.9	7.9	27.7	27.7	104.6	104.7	7.9	7.9	7.9		6		75				<0.2		2.6	
						2.8	0.2	293	21.4		7.9		27.7		104.8		7.9		7.9		8		75				<0.2		2.4	
SR3	Cloudy	Moderate	07:28	8.9	Surface	1.0	0.4	19	21.5	21.5	7.8	7.8	23.0	23.0	101.8	101.7	7.9	7.8	7.9	7.7	8	8	-	-	822167	807558	-	-	-	-
						1.0	0.4	20	21.5		7.8		23.0		101.5		7.8		7.8		9		-				-		-	
					Middle	4.5	0.5	21	21.4	21.4	7.8	7.8	24.9	24.9	100.3	100.2	7.7		7.7		7		-				-		-	
						4.5	0.5	23	21.4		7.8		25.0		100.1		7.7		7.7		8		-				-		-	
					Bottom	7.9	0.5	13	21.4	21.4	7.8	7.8	25.3	25.3	99.5	99.5	7.6	7.6	7.6		7		-				-		-	
						7.9	0.5	13	21.4		7.8		25.3		99.5		7.6		7.6		7		-				-		-	
SR4A	Fine	Calm	06:23	8.3	Surface	1.0	0.4	248	21.3	21.3	8.1	8.1	26.9	26.9	102.8	102.8	7.8	7.9	7.8	7.8	8	10	-	-	817179	807803	-	-	-	-
						1.0	0.4	272	21.3		8.1		26.9		102.8		7.8		7.8		8		-				-		-	
					Middle	4.2	0.3	255	21.3	21.3	8.1	8.1	27.8	27.7	104.8	104.8	7.9		7.9		13		-				-		-	
						4.2	0.3	270	21.3		8.1		27.7		104.8		7.9		7.9		11		-				-		-	
					Bottom	7.3	0.2	265	21.1	21.1	8.1	8.1	28.8	28.8	103.5	103.5	7.8	7.8	7.8		10		-				-		-	
						7.3	0.3	278	21.1		8.1		28.8		103.5		7.8		7.8		10		-				-		-	
SR5A	Fine	Calm	06:10	4.5	Surface	1.0	0.3	292	21.3	21.3	8.1	8.1	26.6	26.6	102.0	102.1	7.7	7.8	7.7	7.8	10	9	-	-	816619	810712	-	-	-	-
						1.0	0.3	315	21.3		8.1		26.6		102.1		7.8		7.8		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.3	297	21.3	21.3	8.1	8.1	27.7	27.7	103.5	103.5	7.8	7.8	7.8		8		-				-		-	
						3.5	0.3	316	21.3		8.1		27.7		103.5		7.8		7.8		7		-				-		-	
SR6	Fine	Calm	05:47	4.0	Surface	1.0	0.2	273	21.3	21.3	8.0	8.0	26.8	26.8	101.4	101.4	7.7	7.7	7.7	7.7	7	8	-	-	817884	814679	-	-	-	-
						1.0	0.2	292	21.3		8.0		26.8		101.4		7.7		7.7		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	0.2	272	21.3	21.3	7.9	7.9	27.7	27.7	102.1	102.0	7.7	7.7	7.7		8		-				-		-	
						3.0	0.2	272	21.3		7.9		27.7		101.9		7.7		7.7		8		-				-		-	
SR7	Cloudy	Moderate	05:27	16.8	Surface	1.0	0.1	297	21.2	21.2	7.8	7.8	28.3	28.3	101.8	101.8	7.7	7.6	7.7	7.5	6	6	-	-	823629	823712	-	-	-	-
						1.0	0.2	297	21.2		7.8		28.3		101.7		7.7		7.7		7		-				-		-	
					Middle	8.4	0.3	73	21.1	21.1	7.8	7.8	28.8	28.8	99.7	99.7	7.5		7.5		5		-				-		-	
						8.4	0.3	73	21.1		7.8		28.8		99.7		7.5		7.5		5		-				-		-	
					Bottom	15.8	0.4	57	20.9	20.9	7.8	7.8	29.4	29.4	98.5	98.6	7.4	7.4	7.4		7		-				-		-	
						15.8	0.4	59	20.9		7.8		29.4		98.6		7.4		7.4		6		-				-		-	
SR8	Cloudy	Moderate	06:40	4.0	Surface	1.0	-	-	21.4	21.4	7.9	7.9	27.6	27.6	107.6	107.6	8.1	8.1	8.1	8.1	9	10	-	-	820246	811418	-	-	-	-
						1.0	-	-	21.4		7.9		27.6		107.6		8.1		8.1		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	-	-	21.4	21.4	7.9	7.9	27.7	27.7	107.6	107.7	8.1	8.1	8.1		11		-				-		-	
						3.0	-	-	21.4		7.9		27.7		107.7		8.1		8.1		9		-				-		-	

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 31 March 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	12:29	8.5	Surface	1.0	0.1	206	21.9	21.9	8.1	8.1	29.0	29.0	99.9	99.7	7.4	7.3	12.6	16.5	7	9	72	74	815592	804227	<0.2	<0.2	2.2	1.9
						1.0	0.1	214	21.9		8.1		29.0		99.5		7.4		13.5		6		73				<0.2		2.2	
					Middle	4.3	0.1	204	21.2	21.2	8.1	8.1	29.7	29.7	96.5	96.5	7.2		17.3		10		75				<0.2		2.6	
						4.3	0.1	205	21.2		8.1		29.7		96.5		7.2		17.3		10		75				<0.2		2.1	
					Bottom	7.5	0.2	224	21.1	21.1	8.1	8.1	30.2	30.2	96.0	96.0	7.2	7.2	19.0		12		75				<0.2		1.2	
						7.5	0.3	239	21.1		8.1		30.2		96.0		7.2		19.0		11		76				<0.2		1.0	
C2	Sunny	Moderate	11:24	12.2	Surface	1.0	0.1	4	22.2	22.2	7.8	7.8	26.5	26.5	89.5	89.5	6.7	6.7	14.0	18.8	14	14	73	75	825699	806937	<0.2	<0.2	2.5	2.6
						1.0	0.1	4	22.2		7.8		26.5		89.4		6.7		14.0		14		73				<0.2		2.7	
					Middle	6.1	0.1	155	21.9	21.9	7.9	7.9	27.1	27.1	88.4	88.4	6.6		16.5		14		75				<0.2		2.6	
						6.1	0.1	168	21.9		7.9		27.1		88.4		6.6		16.8		13		75				<0.2		2.4	
					Bottom	11.2	0.2	158	21.8	21.8	7.9	7.9	28.5	28.5	89.4	89.4	6.7	6.7	25.7		14		77				<0.2		2.6	
						11.2	0.2	158	21.8		7.9		28.5		89.3		6.7		25.7		14		77				<0.2		2.6	
C3	Sunny	Moderate	13:14	12.5	Surface	1.0	0.5	48	22.2	22.2	8.0	8.0	28.8	28.8	89.8	89.8	6.6	6.6	6.7	9.4	4	6	73	75	822127	817819	<0.2	<0.2	2.0	2.1
						1.0	0.6	50	22.2		8.0		28.8		89.8		6.6		6.7		5		73				<0.2		2.2	
					Middle	6.3	0.4	76	21.6	21.6	8.0	8.0	29.8	29.8	87.1	87.1	6.5		9.6		6		75				<0.2		2.1	
						6.3	0.4	83	21.6		8.0		29.8		87.1		6.5		9.5		6		75				<0.2		2.0	
					Bottom	11.5	0.3	99	21.3	21.3	8.0	8.0	30.9	30.9	86.7	86.8	6.4	6.4	12.0		6		77				<0.2		2.0	
						11.5	0.3	99	21.3		8.0		30.9		86.8		6.4		12.1		7		76				<0.2		2.2	
IM1	Cloudy	Moderate	12:13	7.5	Surface	1.0	0.1	241	21.9	21.9	8.1	8.1	27.9	27.9	96.5	96.5	7.2	7.2	17.5	19.8	7	8	72	74	818364	806443	<0.2	<0.2	1.4	1.5
						1.0	0.1	245	21.9		8.1		27.9		96.5		7.2		17.5		6		73				<0.2		1.4	
					Middle	3.8	0.1	162	21.6	21.6	8.1	8.1	28.5	28.5	96.1	96.1	7.2		18.7		9		74				<0.2		1.6	
						3.8	0.1	167	21.6		8.1		28.5		96.1		7.2		19.0		10		74				<0.2		1.5	
					Bottom	6.5	0.1	200	21.2	21.2	8.1	8.1	30.0	30.0	95.2	95.2	7.1	7.1	23.0		9		75				<0.2		1.7	
						6.5	0.1	201	21.2		8.1		30.0		95.2		7.1		23.0		8		76				<0.2		1.5	
IM2	Cloudy	Moderate	12:08	8.4	Surface	1.0	0.1	206	21.7	21.7	8.1	8.1	28.4	28.4	97.2	97.2	7.3	7.3	16.0	17.3	10	9	73	75	818870	806191	<0.2	<0.2	1.3	1.4
						1.0	0.1	216	21.7		8.1		28.4		97.2		7.3		16.0		10		73				<0.2		1.4	
					Middle	4.2	0.1	138	21.5	21.5	8.1	8.1	28.7	28.7	96.5	96.5	7.2		17.1		9		74				<0.2		1.4	
						4.2	0.1	142	21.5		8.1		28.7		96.5		7.2		17.1		10		75				<0.2		1.4	
					Bottom	7.4	0.2	142	21.3	21.3	8.1	8.1	29.9	29.9	95.1	95.1	7.1	7.1	18.9		9		76				<0.2		1.4	
						7.4	0.2	142	21.3		8.1		29.9		95.1		7.1		18.9		8		76				<0.2		1.4	
IM3	Cloudy	Moderate	11:59	8.4	Surface	1.0	0.1	272	21.8	21.8	8.1	8.1	28.2	28.2	97.5	97.6	7.3	7.3	15.6	17.9	8	9	73	74	819435	805993	<0.2	<0.2	1.4	1.4
						1.0	0.1	281	21.8		8.1		28.2		97.6		7.3		15.7		9		73				<0.2		1.6	
					Middle	4.2	0.1	105	21.5	21.5	8.1	8.1	29.0	29.0	96.9	96.9	7.2		16.9		9		74				<0.2		1.5	
						4.2	0.1	111	21.5		8.1		29.0		96.9		7.2		16.9		9		74				<0.2		1.3	
					Bottom	7.4	0.2	118	21.2	21.2	8.1	8.1	29.9	29.9	95.4	95.4	7.1	7.1	21.2		8		75				<0.2		1.2	
						7.4	0.2	120	21.2		8.1		29.9		95.4		7.1		21.2		8		75				<0.2		1.4	
IM4	Cloudy	Moderate	11:49	8.0	Surface	1.0	0.2	189	21.8	21.8	8.1	8.1	28.5	28.5	97.5	97.5	7.3	7.2	16.4	18.7	9	8	73	75	819585	805050	<0.2	<0.2	1.3	1.2
						1.0	0.2	197	21.8		8.1		28.5		97.5		7.3		16.4		7		74				<0.2		1.2	
					Middle	4.0	0.1	46	21.3	21.3	8.1	8.1	29.5	29.5	95.7	95.7	7.1		18.9		7		75				<0.2		1.3	
						4.0	0.1	49	21.3		8.1		29.5		95.7		7.1		18.9		8		75				<0.2		1.1	
					Bottom	7.0	0.1	241	21.2	21.2	8.1	8.1	30.0	30.0	94.8	94.8	7.1	7.1	20.9		7		75				<0.2		1.3	
						7.0	0.1	261	21.2		8.1		30.0		94.8		7.1		20.9		7		76				<0.2		1.2	
IM5	Cloudy	Moderate	11:40	7.4	Surface	1.0	0.2	166	21.8	21.8	8.1	8.1	28.4	28.4	97.2	97.2	7.2	7.2	16.6	17.1	6	8	73	74	820550	804937	<0.2	<0.2	1.8	1.5
						1.0	0.2	180	21.8		8.1		28.4		97.2		7.2		16.6		6		73				<0.2		1.7	
					Middle	3.7	0.1	194	21.5	21.5	8.1	8.1	28.8	28.8	96.0	96.0	7.2		17.1		7		74				<0.2		1.9	
						3.7	0.1	198	21.5		8.1		28.8		96.0		7.2		17.1		8		74				<0.2		1.1	
					Bottom	6.4	0.0	264	21.3	21.3	8.1	8.1	29.3	29.3	95.8	95.8	7.2	7.2	17.6		10		74				<0.2		1.2	
						6.4	0.0	269	21.3		8.1		29.3		95.8		7.2		17.6		11		75				<0.2		1.3	
IM6	Cloudy	Moderate	11:33	7.2	Surface	1.0	0.2	231	21.7	21.7	8.1	8.1	28.7	28.7	96.2	96.2	7.2	7.2	17.0	18.1	14	16	72	73	821086	805835	<0.2	<0.2	1.2	1.4
						1.0	0.2	237	21.7		8.1		28.7		96.2		7.2		17.0		15		72				<0.2		1.3	
					Middle	3.6	0.1	229	21.5	21.5	8.1	8.1	28.9	28.9	95.1	95.1	7.1		18.6		16		73				<0.2		1.2	
						3.6	0.1	232	21.5		8.1		28.9		95.1		7.1		18.6		17		73				<0.2		1.4	
					Bottom	6.2	0.1	195	21.5	21.5	8.1	8.1	28.9	28.9	94.6	94.6	7.1	7.1	18.7		16		75				<0.2		1.5	
						6.2	0.1	205	21.5		8.1		28.9		94.6		7.1		18.7		16		75				<0.2		1.5	
IM7	Cloudy	Moderate	11:25	8.8	Surface	1.0	0.0	19	21.8	21.8	8.1	8.1	28.3	28.3	96.9	96.9	7.2	7.2	20.0	22.4	13	14	72	73	821325	806850	<0.2	<0.2	1.3	1.3
						1.0	0.0	20	21.8		8.1		28.3		96.9		7.2		20.0		13		72				<0.2		1.3	
					Middle	4.4	0.2	61	21.7	21.7	8.1	8.1	28.4	28.4	96.1	96.1	7.2		21.5		14		73				<0.2		1.4	
						4.4	0.2	61	21.7		8.1		28.4		96.1		7.2		21.5		13		73				<0.2		1.1	
					Bottom	7.8	0.2	79	21.6	21.6	8.1	8.1	28.6	28.6	95.2	95.2	7.1	7.1	25.8		16		75				<0.2		1.2	
						7.8	0.2	83	21.6		8.1		28.6		95.2		7.1		25.8		15		75				<0.2		1.4	
IM8	Sunny	Moderate	11:49	8.4	Surface	1.0	0.2	62	21.9	21.9	8.0	8.0	29.8	29.8	97.0	97.0	7.2	7.2	14.4	18.8	12	13	73	75	821679	807809	<0.2	<0.2	2.4	2.4
						1.0	0.2	67	21.9		8.0		29.8		97.0		7.2		14.3		11		73				<0.2		2.4	
					Middle	4.2	0.2	89	21.6	21.6	8.0	8.0	30.1	30.1	96.1	96.1	7.1		19.4		13		75				<0.2		2.4	
						4.2	0.2	91	21.6		8.0		30.1		96.1		7.1		19.5		11		75				<0.2		2.2	
					Bottom	7.4	0.3	97	21.5	21.5	8.0	8.0	30.3	30.3	95.1	95.1	7.0	7.0	22.4		17		76				<0.2		2.3	
						7.4	0.3	103	21.5		8.0		30.3		95.1		7.0		22.6		16		76				<0.2		2.5	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 31 March 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Sunny	Moderate	11:57	7.4	Surface	1.0	0.2	90	22.3	22.3	7.9	7.9	27.1	27.1	93.1	93.1	6.9	6.9	13.3	19.0	9	10	73	75	822107	808814	<0.2	<0.2	2.2	2.3
						1.0	0.2	94	22.3		7.9		27.1		93.1		6.9		13.3		10		73				<0.2		2.3	
					Middle	3.7	0.3	98	22.1	22.1	8.1	8.0	28.5	28.4	93.6	93.7	6.9		18.4		10		75				<0.2		2.3	
						3.7	0.3	100	22.1		8.0		28.4		93.7		6.9		18.6		10		75				<0.2		2.3	
					Bottom	6.4	0.4	72	21.6	21.6	8.0	8.0	30.0	30.0	94.6	94.6	7.0	7.0	25.4		12		76				<0.2		2.2	
						6.4	0.4	78	21.6		8.0		30.0		94.5		7.0		25.2		10		77				<0.2		2.3	
IM10	Sunny	Moderate	12:06	7.8	Surface	1.0	0.5	95	22.1	22.1	8.0	8.0	28.2	28.2	94.9	94.9	7.0	7.0	10.4	15.3	10	11	73	75	822226	809865	<0.2	<0.2	1.8	1.8
						1.0	0.5	101	22.1		8.0		28.2		94.9		7.0		10.4		10		73				<0.2		1.8	
					Middle	3.9	0.6	88	21.8	21.8	8.0	8.0	29.0	29.0	94.2	94.3	7.0		14.9		10		75				<0.2		1.8	
						3.9	0.6	96	21.8		8.0		29.0		94.3		7.0		15.1		10		75				<0.2		1.8	
					Bottom	6.8	0.5	92	21.7	21.7	8.0	8.0	29.5	29.5	93.8	93.8	7.0	7.0	20.5		12		76				<0.2		1.8	
						6.8	0.5	98	21.7		8.0		29.5		93.7		6.9		20.3		12		77				<0.2		1.8	
IM11	Sunny	Moderate	12:18	7.5	Surface	1.0	0.3	105	22.2	22.2	8.1	8.1	28.0	28.0	92.8	92.8	6.9	6.9	16.2	18.2	16	18	73	75	821489	810516	<0.2	<0.2	1.8	1.8
						1.0	0.3	106	22.2		8.1		28.0		92.7		6.9		16.0		18		73				<0.2		1.8	
					Middle	3.8	0.4	105	21.9	21.9	8.1	8.1	28.6	28.6	92.9	93.0	6.9		18.4		17		75				<0.2		1.8	
						3.8	0.4	109	21.9		8.1		28.6		93.0		6.9		18.5		17		74				<0.2		1.7	
					Bottom	6.5	0.4	83	21.8	21.8	8.1	8.1	29.2	29.2	93.0	93.0	6.9	6.9	20.0		19		76				<0.2		1.7	
						6.5	0.4	87	21.8		8.1		29.2		93.0		6.9		20.0		18		77				<0.2		1.8	
IM12	Sunny	Moderate	12:27	7.9	Surface	1.0	0.4	97	22.3	22.3	8.0	8.0	27.8	27.8	92.6	92.6	6.9	6.9	15.4	17.3	12	14	73	75	821160	811543	<0.2	<0.2	1.6	1.8
						1.0	0.5	98	22.3		8.0		27.8		92.6		6.9		15.5		12		73				<0.2		1.7	
					Middle	4.0	0.5	106	21.9	21.9	8.1	8.1	28.1	28.1	91.6	91.6	6.8		17.2		15		75				<0.2		1.8	
						4.0	0.5	114	21.9		8.1		28.1		91.6		6.8		17.4		14		75				<0.2		1.7	
					Bottom	6.9	0.4	98	21.9	21.9	8.1	8.1	28.4	28.4	92.2	92.3	6.9	6.9	19.2		16		77				<0.2		1.8	
						6.9	0.4	102	21.9		8.1		28.4		92.3		6.9		19.2		16		76				<0.2		1.9	
SR2	Sunny	Moderate	12:54	3.6	Surface	1.0	0.5	73	22.4	22.4	8.0	8.0	28.1	28.1	92.8	92.8	6.9	6.9	9.9	13.1	8	7	73	74	821435	814146	<0.2	<0.2	1.8	1.8
						1.0	0.5	75	22.4		8.0		28.1		92.8		6.9		9.9		6		73				<0.2		1.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.6	0.4	73	22.1	22.1	8.0	8.0	28.6	28.6	92.0	92.0	6.8	6.8	16.1		7		75				<0.2		1.8	
						2.6	0.4	78	22.1		8.0		28.6		92.0		6.8		16.4		7		74				<0.2		1.8	
SR3	Sunny	Moderate	11:44	9.0	Surface	1.0	0.3	132	22.2	22.2	7.9	7.9	26.8	26.8	92.8	92.9	6.9	7.0	14.7	17.2	13	13	-	-	822136	807581	-	-	-	-
						1.0	0.3	141	22.2		7.9		26.8		92.9		6.9		14.8		12		-				-		-	
					Middle	4.5	0.3	63	21.8	21.8	8.0	8.0	29.8	29.8	96.3	96.3	7.1		16.3		14		-				-		-	
						4.5	0.3	65	21.8		8.0		29.8		96.3		7.1		16.3		14		-				-		-	
					Bottom	8.0	0.3	61	21.7	21.7	8.0	8.0	30.2	30.2	96.0	96.0	7.1	7.1	20.4		13		-				-		-	
						8.0	0.3	64	21.7		8.0		30.2		96.0		7.1		20.4		13		-				-		-	
SR4A	Cloudy	Calm	12:49	8.4	Surface	1.0	0.3	84	21.7	21.7	8.1	8.1	28.4	28.4	95.2	95.2	7.1	7.1	16.6	19.6	12	13	-	-	817164	807797	-	-	-	-
						1.0	0.3	92	21.7		8.1		28.4		95.2		7.1		16.6		12		-				-		-	
					Middle	4.2	0.2	78	21.4	21.4	8.1	8.1	28.9	28.9	94.4	94.4	7.1		19.4		12		-				-		-	
						4.2	0.2	84	21.4		8.1		28.9		94.4		7.1		19.4		14		-				-		-	
					Bottom	7.4	0.2	67	21.4	21.4	8.1	8.1	29.1	29.1	94.1	94.1	7.0	7.0	22.9		13		-				-		-	
						7.4	0.2	72	21.4		8.1		29.1		94.1		7.0		22.9		12		-				-		-	
SR5A	Cloudy	Calm	13:04	4.4	Surface	1.0	0.0	46	22.6	22.6	8.1	8.1	27.0	27.0	92.2	92.2	6.8	6.8	19.2	19.2	9	9	-	-	816610	810699	-	-	-	-
						1.0	0.0	48	22.6		8.1		27.0		92.2		6.8		19.2		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.1	98	22.4	22.4	8.1	8.1	27.0	27.0	91.5	91.5	6.8	6.8	19.2		8		-				-		-	
						3.4	0.1	102	22.4		8.1		27.0		91.5		6.8		19.2		9		-				-		-	
SR6	Cloudy	Calm	13:27	4.1	Surface	1.0	0.2	49	22.5	22.5	8.0	8.0	26.9	26.9	90.3	90.3	6.7	6.7	14.3	14.2	9	10	-	-	817893	814651	-	-	-	-
						1.0	0.2	52	22.5		8.0		26.9		90.3		6.7		14.3		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.2	58	22.4	22.4	8.0	8.0	26.9	26.9	91.0	91.0	6.8	6.8	14.0		10		-				-		-	
						3.1	0.2	59	22.4		8.0		26.9		91.0		6.8		14.0		10		-				-		-	
SR7	Sunny	Moderate	13:44	18.4	Surface	1.0	0.4	97	22.0	22.0	8.0	8.0	29.8	29.8	90.5	90.5	6.7	6.7	4.5	6.2	6	6	-	-	823662	823760	-	-	-	-
						1.0	0.5	98	22.0		8.0		29.8		90.5		6.7		4.5		6		-				-		-	
					Middle	9.2	0.4	100	21.8	21.8	8.0	8.0	30.1	30.1	89.3	89.3	6.6		5.2		5		-				-		-	
						9.2	0.5	102	21.8		8.0		30.1		89.3		6.6		5.2		6		-				-		-	
					Bottom	17.4	0.2	68	21.7	21.7	8.0	8.0	30.2	30.2	88.8	88.8	6.6	6.6	8.9		5		-				-		-	
						17.4	0.2	72	21.7		8.0		30.2		88.8		6.6		9.1		6		-				-		-	
SR8	Sunny	Moderate	12:42	4.2	Surface	1.0	-	-	22.2	22.2	8.0	8.0	28.0	28.0	93.0	93.0	6.9	6.9	15.6	18.9	14	14	-	-	820246	811418	-	-	-	-
						1.0	-	-	22.2		8.0		28.0		93.0		6.9		15.6		14		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	-	-	22.0	22.0	8.0	8.0	28.3	28.3	93.1	93.2	6.9	6.9	22.1		14		-				-		-	
						3.2	-	-	22.0		8.0		28.3		93.2		6.9		22.4		14		-				-		-	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 31 March 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	07:21	8.3	Surface	1.0	0.5	43	21.5	21.5	8.1	8.1	28.2	28.2	94.9	94.9	7.1	7.1	19.7	20.4	14	16	72	74	815636	804270	<0.2	<0.2	1.2	1.4
						1.0	0.6	45	21.5		8.1		28.2		94.9		7.1		19.7		14		73				<0.2		1.2	
					Middle	4.2	0.6	36	21.4	21.4	8.1	8.1	28.7	28.7	94.2	94.2	7.1		20.3		16		74				<0.2		1.1	
						4.2	0.7	39	21.4		8.1		28.7		94.2		7.1		20.3		17		74				<0.2		1.5	
					Bottom	7.3	0.7	28	21.4	21.4	8.1	8.1	28.8	28.8	93.9	93.9	7.0	7.0	21.2		18		76				<0.2		1.6	
						7.3	0.7	28	21.4		8.1		28.8		93.9		7.0		21.2		19		75				<0.2		1.7	
C2	Fine	Moderate	08:17	12.3	Surface	1.0	0.6	359	22.0	22.0	7.8	7.8	26.0	26.0	86.7	86.7	6.5	6.5	14.3	18.2	11	12	73	75	825693	806940	<0.2	<0.2	2.9	2.9
						1.0	0.7	330	22.0		7.8		26.0		86.7		6.5		14.5		11		73				<0.2		3.0	
					Middle	6.2	0.5	353	21.9	21.9	7.8	7.8	26.2	26.2	85.4	85.4	6.4		16.5		12		75				<0.2		2.8	
						6.2	0.5	325	21.9		7.8		26.2		85.4		6.4		16.6		13		75				<0.2		2.8	
					Bottom	11.3	0.4	342	21.9	21.9	7.8	7.8	26.4	26.4	85.7	85.7	6.4	6.4	23.8		11		77				<0.2		2.8	
						11.3	0.5	351	21.9		7.8		26.4		85.7		6.4		23.6		12		77				<0.2		3.0	
C3	Fine	Moderate	06:19	11.3	Surface	1.0	0.7	263	21.9	21.9	7.9	7.9	28.2	28.2	91.2	91.3	6.8	6.7	7.4	12.9	5	14	73	75	822089	817799	<0.2	<0.2	2.5	2.4
						1.0	0.8	270	21.9		7.9		28.2		91.3		6.8		7.4		6		73				<0.2		2.4	
					Middle	5.7	0.7	265	21.8	21.8	7.9	7.9	29.0	29.0	89.0	89.0	6.6		10.0		14		75				<0.2		2.3	
						5.7	0.8	265	21.8		7.9		29.0		89.0		6.6		10.0		15		75				<0.2		2.4	
					Bottom	10.3	0.5	271	21.7	21.7	7.9	7.9	29.4	29.4	89.2	89.2	6.6	6.6	21.4		20		77				<0.2		2.4	
						10.3	0.5	274	21.7		7.9		29.4		89.2		6.6		21.0		24		77				<0.2		2.4	
IM1	Cloudy	Moderate	07:38	8.2	Surface	1.0	0.6	23	21.8	21.8	8.2	8.2	26.3	26.3	93.1	93.1	7.0	7.0	20.2	19.4	11	11	73	74	818350	806484	<0.2	<0.2	2.1	2.1
						1.0	0.6	24	21.8		8.2		26.3		93.1		7.0		20.2		11		72				<0.2		2.1	
					Middle	4.1	0.6	13	21.7	21.7	8.2	8.2	27.3	27.3	93.2	93.2	7.0		18.8		11		74				<0.2		2.3	
						4.1	0.6	14	21.7		8.2		27.3		93.2		7.0		18.8		11		74				<0.2		2.1	
					Bottom	7.2	0.5	351	21.5	21.5	8.1	8.1	28.2	28.2	92.7	92.7	7.0	7.0	19.2		10		75				<0.2		2.0	
						7.2	0.5	323	21.5		8.1		28.2		92.7		7.0		19.2		12		75				<0.2		2.0	
IM2	Cloudy	Moderate	07:43	8.2	Surface	1.0	0.6	13	21.8	21.8	8.1	8.1	26.4	26.4	92.8	92.8	7.0	7.0	18.3	18.5	9	9	74	74	818864	806221	<0.2	<0.2	2.2	2.2
						1.0	0.7	14	21.8		8.1		26.4		92.8		7.0		18.3		9		73				<0.2		2.2	
					Middle	4.1	0.7	23	21.8	21.8	8.1	8.1	26.4	26.4	92.6	92.6	7.0		18.9		8		73				<0.2		2.0	
						4.1	0.7	23	21.8		8.1		26.4		92.6		7.0		18.9		10		74				<0.2		2.2	
					Bottom	7.2	0.5	23	21.7	21.7	8.1	8.1	27.4	27.4	92.3	92.3	6.9	6.9	18.2		9		74				<0.2		2.2	
						7.2	0.6	23	21.7		8.1		27.4		92.3		6.9		18.2		10		75				<0.2		2.1	
IM3	Cloudy	Moderate	07:49	8.4	Surface	1.0	0.1	358	21.8	21.8	8.1	8.1	26.4	26.4	92.8	92.8	7.0	7.0	18.7	19.9	11	11	74	74	819422	806011	<0.2	<0.2	2.0	2.2
						1.0	0.1	329	21.8		8.1		26.4		92.8		7.0		18.7		10		73				<0.2		2.2	
					Middle	4.2	0.2	6	21.8	21.8	8.1	8.1	26.6	26.6	92.6	92.6	7.0		19.1		9		74				<0.2		2.1	
						4.2	0.2	6	21.8		8.1		26.6		92.6		7.0		19.1		12		74				<0.2		2.5	
					Bottom	7.4	0.0	184	21.8	21.8	8.1	8.1	26.7	26.7	92.4	92.4	6.9	6.9	22.0		12		75				<0.2		2.3	
						7.4	0.0	185	21.8		8.1		26.7		92.4		6.9		22.0		13		76				<0.2		2.3	
IM4	Cloudy	Moderate	08:00	7.3	Surface	1.0	0.7	4	21.8	21.8	8.1	8.1	26.9	26.9	93.6	93.6	7.0	7.0	17.4	17.2	8	10	73	74	819579	805037	<0.2	<0.2	2.1	2.1
						1.0	0.7	4	21.8		8.1		26.9		93.6		7.0		17.4		8		73				<0.2		2.2	
					Middle	3.7	0.6	16	21.8	21.8	8.1	8.1	27.2	27.2	93.2	93.2	7.0		17.3		8		74				<0.2		2.2	
						3.7	0.7	17	21.8		8.1		27.2		93.2		7.0		17.3		9		74				<0.2		2.1	
					Bottom	6.3	0.5	13	21.8	21.8	8.1	8.1	27.2	27.2	93.0	93.0	7.0	7.0	17.0		12		75				<0.2		2.0	
						6.3	0.5	13	21.8		8.1		27.2		93.0		7.0		17.0		12		75				<0.2		2.2	
IM5	Cloudy	Moderate	08:11	7.0	Surface	1.0	0.6	28	21.8	21.8	8.1	8.1	26.4	26.4	92.9	92.9	7.0	7.0	17.0	17.9	13	14	73	74	820567	804948	<0.2	<0.2	2.9	3.2
						1.0	0.6	28	21.8		8.1		26.4		92.9		7.0		17.0		12		73				<0.2		3.1	
					Middle	3.5	0.5	21	21.8	21.8	8.1	8.1	26.4	26.4	92.4	92.4	7.0		17.3		14		74				<0.2		3.6	
						3.5	0.6	21	21.8		8.1		26.4		92.3		6.9		17.3		13		75				<0.2		3.3	
					Bottom	6.0	0.4	13	21.9	21.9	8.1	8.1	26.4	26.4	92.3	92.3	6.9	6.9	19.5		15		75				<0.2		3.3	
						6.0	0.4	13	21.9		8.1		26.4		92.3		6.9		19.5		16		76				<0.2		3.0	
IM6	Cloudy	Moderate	08:17	7.3	Surface	1.0	0.3	45	21.9	21.9	8.0	8.0	25.8	25.8	90.0	90.0	6.8	6.8	17.5	17.7	13	14	73	74	821031	805802	<0.2	<0.2	3.0	3.2
						1.0	0.4	49	21.9		8.0		25.8		90.0		6.8		17.5		13		72				<0.2		3.1	
					Middle	3.7	0.3	30	21.9	21.9	8.0	8.0	25.8	25.8	90.4	90.4	6.8		18.3		13		74				<0.2		3.1	
						3.7	0.4	30	21.9		8.0		25.8		90.4		6.8		18.3		13		73				<0.2		3.2	
					Bottom	6.3	0.3	25	21.9	21.9	8.0	8.0	25.9	25.9	90.9	90.9	6.9	6.9	17.3		14		75				<0.2		3.1	
						6.3	0.4	25	21.9		8.0		25.9		90.9		6.9		17.3		16		74				<0.2		3.4	
IM7	Cloudy	Moderate	08:24	8.4	Surface	1.0	0.4	44	21.8	21.8	8.1	8.1	26.3	26.3	90.6	90.6	6.8	6.8	20.6	21.0	11	13	71	73	821353	806851	<0.2	<0.2	2.8	3.1
						1.0	0.4	46	21.8		8.1		26.3		90.6		6.8		20.6		12		72				<0.2		2.8	
					Middle	4.2	0.3	46	21.8	21.8	8.1	8.1	26.6	26.6	90.5	90.5	6.8		20.2		14		72				<0.2		2.9	
						4.2	0.3	47	21.8		8.1		26.6		90.5		6.8		20.2		14		73				<0.2		3.5	
					Bottom	7.4	0.2	61	21.7	21.7	8.1	8.1	26.8	26.8	90.5	90.5	6.8	6.8	22.3		14		75				<0.2		3.2	
						7.4	0.3	62	21.7		8.1		26.8		90.5		6.8		22.3		15		75				<0.2		3.2	
IM8	Fine	Moderate	07:53	8.2	Surface	1.0	0.2	3	21.8	21.8	8.0	8.0	26.6	26.6	88.5	88.5	6.7	6.7	17.5	20.2	13	13	73	75	821718	807813	<0.2	<0.2	2.6	2.7
						1.0	0.2	3	21.8		8.0		26.6		88.5		6.7		17.7		14		73				<0.2		2.7	
					Middle	4.1	0.4	30	21.8	21.8	8.0	8.0	27.7	27.7	90.1	90.2	6.7		18.8		14		76				<0.2		2.7	
						4.1	0.5	30	21.8		8.0		27.7		90.2		6.7		18.9		12		75				<0.2		2.7	
					Bottom	7.2	0.5	38	21.7	21.7	8.0	8.0	28.9	28.9	90.4	90.5	6.7	6.7	24.2		13		77				<0.2		2.7	
						7.2	0.5	41	21.7		8.0		28.9		90.5		6.7		24.0		13		77				<0.2		2.7	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

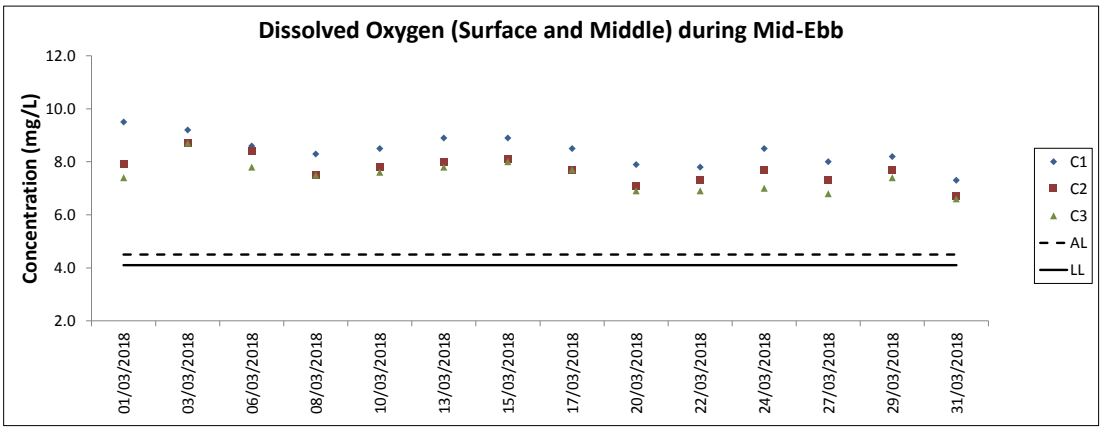
Water Quality Monitoring Results on 31 March 18 during Mid-Flood Tide

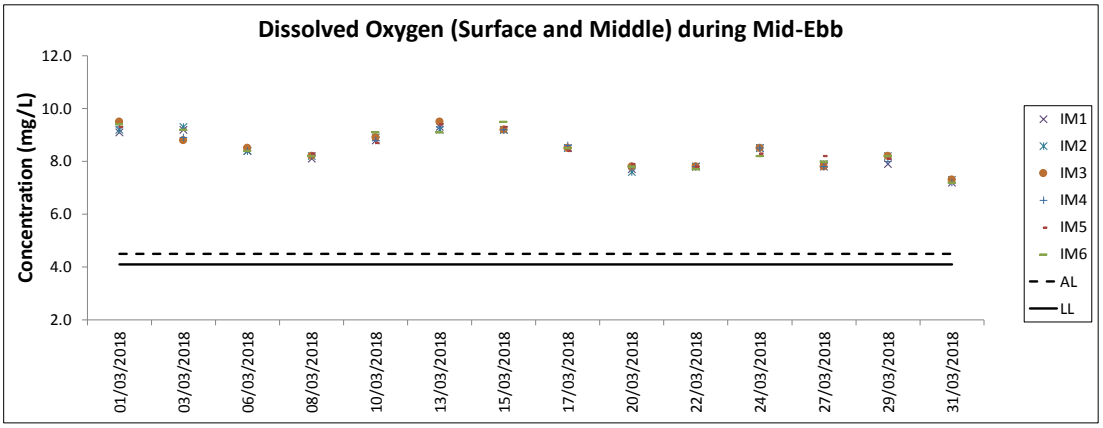
Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Fine	Moderate	07:44	7.6	Surface	1.0	0.3	347	21.9	21.9	8.0	8.0	27.2	27.2	88.7	88.7	6.6	6.6	17.3	19.8	14	13	73	75	822101	808804	<0.2	<0.2	2.1	2.1
						1.0	0.3	319	21.9		8.0		27.2		88.7		6.6		17.5		12		73				<0.2		1.9	
					Middle	3.8	0.3	334	21.9	21.9	8.0	8.0	27.2	27.2	88.7	88.7	6.6		19.5		13		75				<0.2		2.1	
						3.8	0.3	335	21.9		8.0		27.2		88.7		6.6		19.6		13		75				<0.2		2.0	
					Bottom	6.6	0.3	332	21.9	21.9	8.0	8.0	27.2	27.2	88.5	88.5	6.6	6.6	22.8		13		77				<0.2		2.2	
						6.6	0.3	347	21.9		8.0		27.2		88.5		6.6		22.3		13		77				<0.2		2.2	
IM10	Fine	Moderate	07:35	7.9	Surface	1.0	0.5	312	21.9	21.9	8.0	8.0	28.1	28.1	91.3	91.3	6.8	6.8	14.6	18.2	13	13	74	75	822249	809856	<0.2	<0.2	2.0	2.1
						1.0	0.5	335	21.9		8.0		28.1		91.3		6.8		14.6		12		73				<0.2		2.2	
					Middle	4.0	0.5	317	21.9	21.9	8.0	8.0	28.2	28.2	90.8	90.8	6.8		16.8		12		75				<0.2		2.0	
						4.0	0.5	338	21.9		8.0		28.2		90.8		6.8		16.8		14		75				<0.2		2.1	
					Bottom	6.9	0.4	317	21.9	21.9	8.0	8.0	28.1	28.1	90.7	90.7	6.7	6.7	23.3		14		77				<0.2		2.1	
						6.9	0.4	318	21.9		8.0		28.2		90.7		6.7		23.2		14		77				<0.2		2.1	
IM11	Fine	Moderate	07:20	7.7	Surface	1.0	0.6	301	22.0	22.0	8.0	8.0	28.3	28.3	91.0	91.0	6.8	6.8	16.7	21.0	22	21	73	75	821482	810543	<0.2	<0.2	2.1	2.1
						1.0	0.6	301	22.0		8.0		28.3		91.0		6.8		16.8		22		73				<0.2		2.1	
					Middle	3.9	0.5	300	22.0	22.0	8.0	8.0	28.3	28.3	90.9	91.0	6.8		20.6		22		75				<0.2		2.1	
						3.9	0.5	313	22.0		8.0		28.3		91.0		6.8		20.8		20		75				<0.2		2.0	
					Bottom	6.7	0.5	297	22.0	22.0	8.0	8.0	28.3	28.3	91.3	91.4	6.8	6.8	25.4		20		77				<0.2		2.0	
						6.7	0.5	298	22.0		8.0		28.3		91.4		6.8		25.5		21		77				<0.2		2.0	
IM12	Fine	Moderate	07:11	7.8	Surface	1.0	0.7	279	21.8	21.8	8.0	8.0	28.3	28.3	91.2	91.2	6.8	6.8	12.5	18.4	21	21	74	75	821160	811512	<0.2	<0.2	2.0	2.0
						1.0	0.7	284	21.8		8.0		28.3		91.2		6.8		12.3		22		73				<0.2		1.9	
					Middle	3.9	0.6	280	21.8	21.8	8.0	8.0	28.5	28.5	90.4	90.4	6.7		18.6		22		75				<0.2		1.9	
						3.9	0.7	289	21.8		8.0		28.5		90.4		6.7		18.7		20		75				<0.2		2.0	
					Bottom	6.8	0.5	285	21.8	21.8	8.0	8.0	28.5	28.5	91.1	91.2	6.8	6.8	24.5		21		77				<0.2		2.1	
						6.8	0.6	287	21.8		8.0		28.5		91.2		6.8		24.0		21		77				<0.2		1.9	
SR2	Fine	Moderate	06:41	3.6	Surface	1.0	0.4	51	21.9	21.9	7.9	7.9	28.1	28.1	90.6	90.6	6.7	6.7	14.2	16.5	12	12	73	75	821471	814179	<0.2	<0.2	2.2	2.3
						1.0	0.4	54	21.9		7.9		28.1		90.5		6.7		14.5		11		74				<0.2		2.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.6	0.4	50	21.9	21.9	7.9	7.9	28.1	28.1	90.6	90.6	6.8	6.8	18.7		13		75				<0.2		2.3	
						2.6	0.4	51	21.9		7.9		28.1		90.6		6.8		18.7		12		76				<0.2		2.3	
SR3	Fine	Moderate	08:00	9.0	Surface	1.0	0.5	39	21.9	21.9	7.9	7.9	26.2	26.2	88.6	88.7	6.7	6.7	18.4	21.4	12	11	-	-	822163	807541	-	-	-	-
						1.0	0.5	41	21.9		7.9		26.2		88.7		6.7		18.6		11		-				-		-	
					Middle	4.5	0.6	17	21.8	21.8	8.0	8.0	27.9	27.9	90.2	90.2	6.7		20.4		11		-				-		-	
						4.5	0.6	18	21.8		8.0		27.9		90.2		6.7		20.6		11		-				-		-	
					Bottom	8.0	0.5	16	21.7	21.7	8.0	8.0	28.7	28.7	90.7	90.7	6.8	6.8	25.1		11		-				-		-	
						8.0	0.5	16	21.7		8.0		28.7		90.7		6.8		25.1		12		-				-		-	
SR4A	Cloudy	Calm	07:00	8.3	Surface	1.0	0.2	240	22.3	22.3	8.1	8.1	27.0	27.0	88.5	88.5	6.6	6.6	16.5	18.2	12	13	-	-	817202	807822	-	-	-	-
						1.0	0.2	248	22.3		8.1		27.0		88.5		6.6		16.5		12		-				-		-	
					Middle	4.2	0.1	244	22.2	22.2	8.1	8.1	27.1	27.1	88.2	88.2	6.6		19.0		13		-				-		-	
						4.2	0.1	254	22.2		8.1		27.1		88.2		6.6		19.0		13		-				-		-	
					Bottom	7.3	0.1	302	22.1	22.1	8.1	8.1	27.1	27.1	88.6	88.6	6.6	6.6	19.2		12		-				-		-	
						7.3	0.1	302	22.1		8.1		27.1		88.6		6.6		19.2		13		-				-		-	
SR5A	Cloudy	Calm	06:45	4.7	Surface	1.0	0.4	285	22.2	22.2	8.1	8.1	26.8	26.8	89.8	89.8	6.7	6.7	18.8	18.1	10	10	-	-	816614	810706	-	-	-	-
						1.0	0.4	293	22.2		8.1		26.8		89.8		6.7		18.8		11		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.3	292	22.3	22.3	8.1	8.1	26.8	26.8	90.1	90.1	6.7	6.7	17.4		10		-				-		-	
						3.7	0.4	299	22.3		8.1		26.8		90.1		6.7		17.4		10		-				-		-	
SR6	Cloudy	Calm	06:17	3.6	Surface	1.0	0.2	243	21.8	21.8	8.0	8.0	26.8	26.8	90.9	90.9	6.8	6.8	15.9	15.4	9	10	-	-	817901	814646	-	-	-	-
						1.0	0.2	259	21.8		8.0		26.8		90.9		6.8		15.9		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.6	0.2	250	21.9	21.9	8.0	8.0	26.8	26.8	92.2	92.2	6.9	6.9	14.8		10		-				-		-	
						2.6	0.2	262	21.9		8.0		26.8		92.2		6.9		14.8		10		-				-		-	
SR7	Fine	Moderate	05:51	18.8	Surface	1.0	0.4	318	21.8	21.8	7.9	7.9	28.7	28.7	90.8	90.8	6.8	6.7	6.6	10.1	5	5	-	-	823619	823739	-	-	-	-
						1.0	0.4	331	21.8		7.9		28.7		90.8		6.8		6.7		4		-				-		-	
					Middle	9.4	0.4	-	21.7	21.7	7.9	7.9	29.3	29.3	89.5	89.5	6.6		11.2		5		-				-		-	
						9.4	0.4	-	21.7		7.9		29.3		89.5		6.6		11.4		6		-				-		-	
					Bottom	17.8	0.4	10	21.7	21.7	7.9	7.9	29.4	29.4	90.3	90.4	6.7	6.7	12.2		5		-				-		-	
						17.8	0.5	10	21.7		7.9		29.4		90.4		6.7		12.2		6		-				-		-	
SR8	Fine	Moderate	07:03	3.9	Surface	1.0	-	-	22.0	22.0	8.0	8.0	28.1	28.1	91.5	91.5	6.8	6.8	15.9	20.1	10	11	-	-	820246	811418	-	-	-	-
						1.0	-	-	22.0		8.0		28.1		91.5		6.8		16.0		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.9	-	-	22.0	22.0	8.0	8.0	28.2	28.2	91.8	91.8	6.8	6.8	24.0		12		-				-		-	
						2.9	-	-	22.0		8.0		28.2		91.8		6.8		24.4		10		-				-		-	

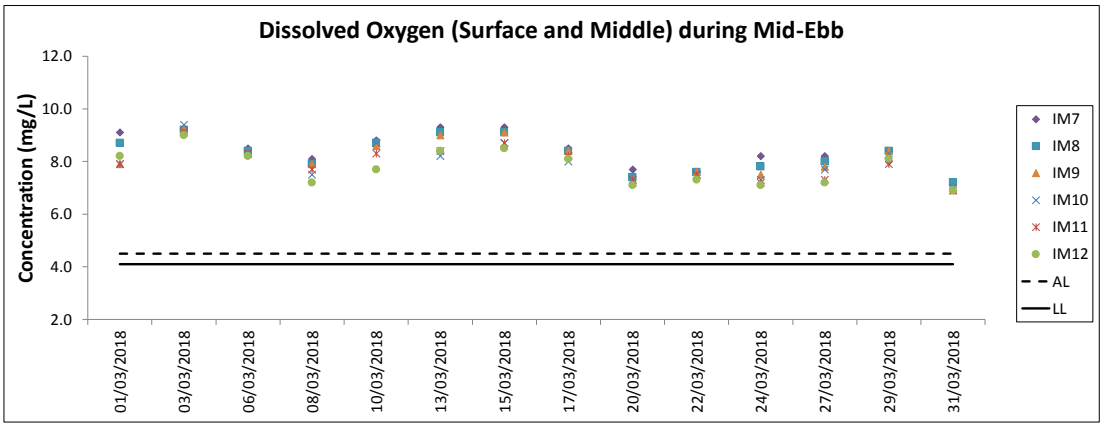
DA: Depth-Averaged

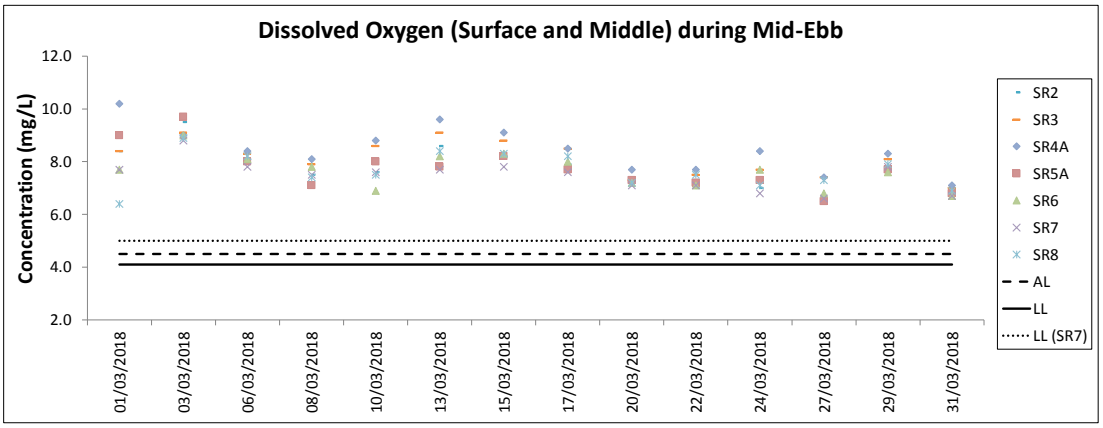
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher

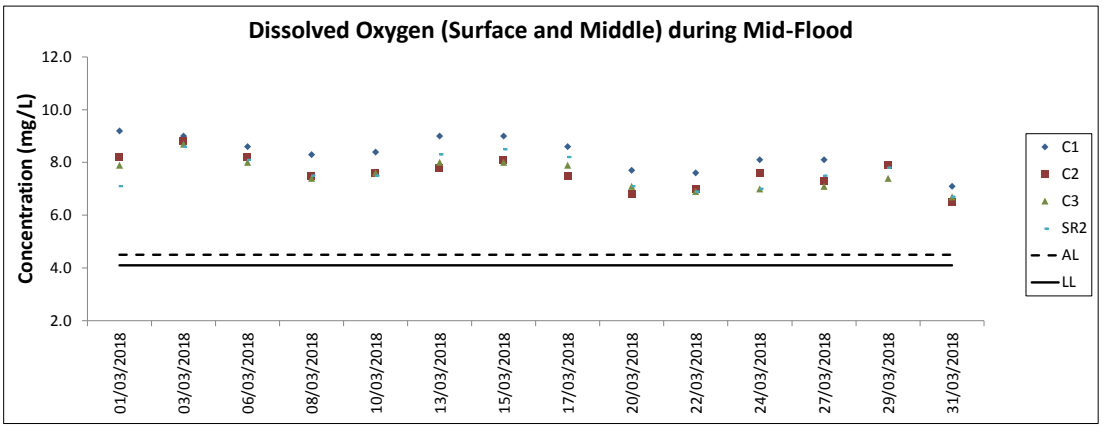
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

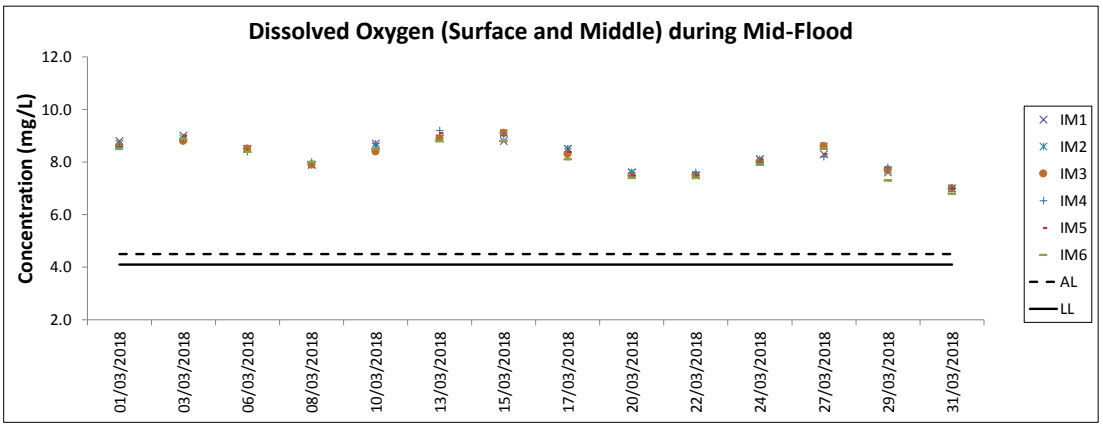

Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
12.0
10.0
8.0
6.0
4.0
2.0
01/03/2018
03/03/2018
06/03/2018
08/03/2018
10/03/2018
13/03/2018
15/03/2018
17/03/2018
20/03/2018
22/03/2018
24/03/2018
27/03/2018
29/03/2018
31/03/2018
C1
C2
C3
AL
LL

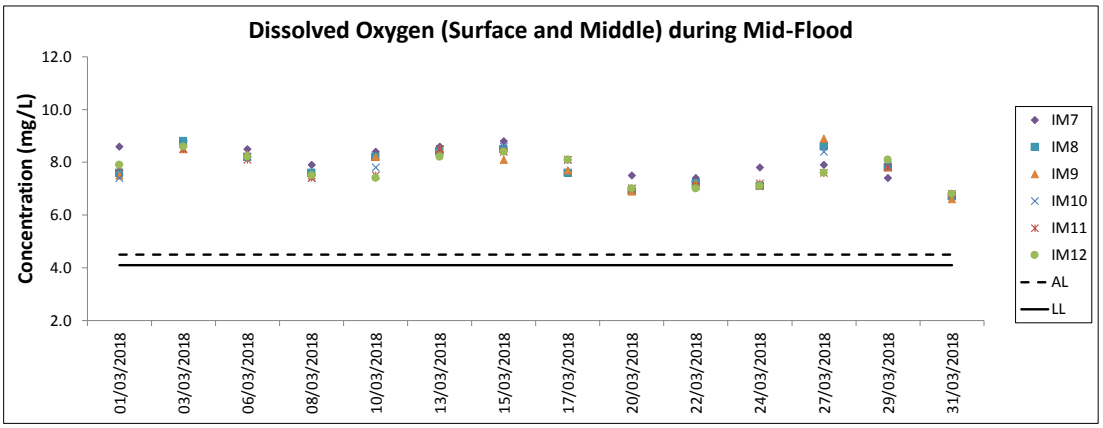

Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
12.0
10.0
8.0
6.0
4.0
2.0
01/03/2018
03/03/2018
06/03/2018
08/03/2018
10/03/2018
13/03/2018
15/03/2018
17/03/2018
20/03/2018
22/03/2018
24/03/2018
27/03/2018
29/03/2018
31/03/2018
IM1
IM2
IM3
IM4
IM5
IM6
AL
LL

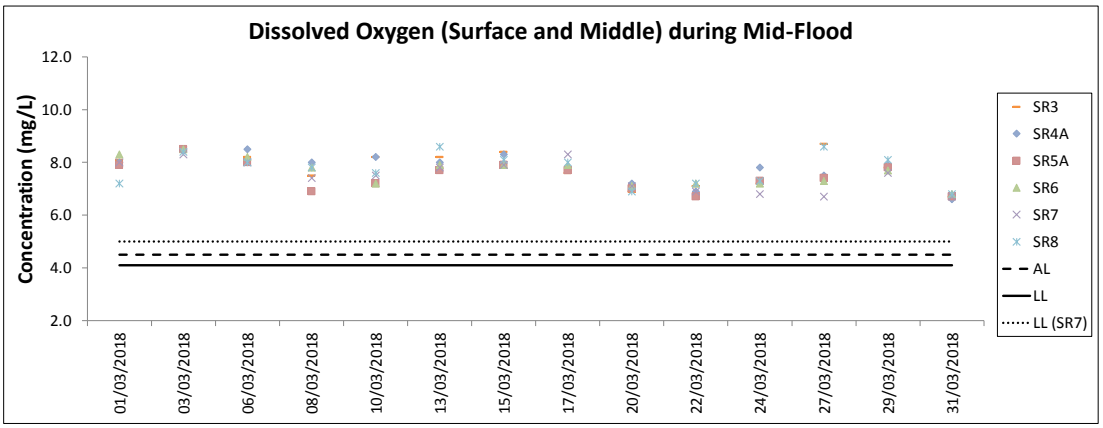

Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
12.0
10.0
8.0
6.0
4.0
2.0
01/03/2018
03/03/2018
06/03/2018
08/03/2018
10/03/2018
13/03/2018
15/03/2018
17/03/2018
20/03/2018
22/03/2018
24/03/2018
27/03/2018
29/03/2018
31/03/2018
IM7
IM8
IM9
IM10
IM11
IM12
AL
LL

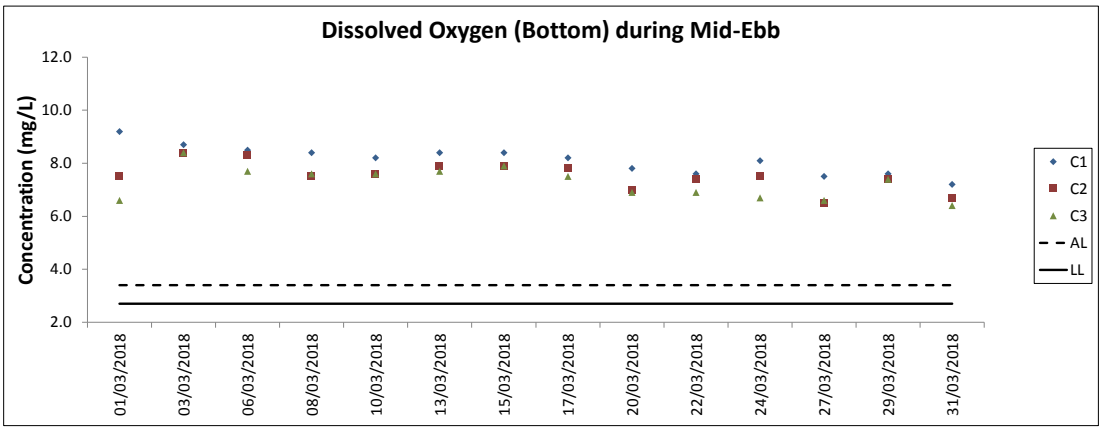

Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
12.0
10.0
8.0
6.0
4.0
2.0
01/03/2018
03/03/2018
06/03/2018
08/03/2018
10/03/2018
13/03/2018
15/03/2018
17/03/2018
20/03/2018
22/03/2018
24/03/2018
27/03/2018
29/03/2018
31/03/2018
SR2
SR3
SR4A
SR5A
SR6
SR7
SR8
AL
LL
LL (SR7)

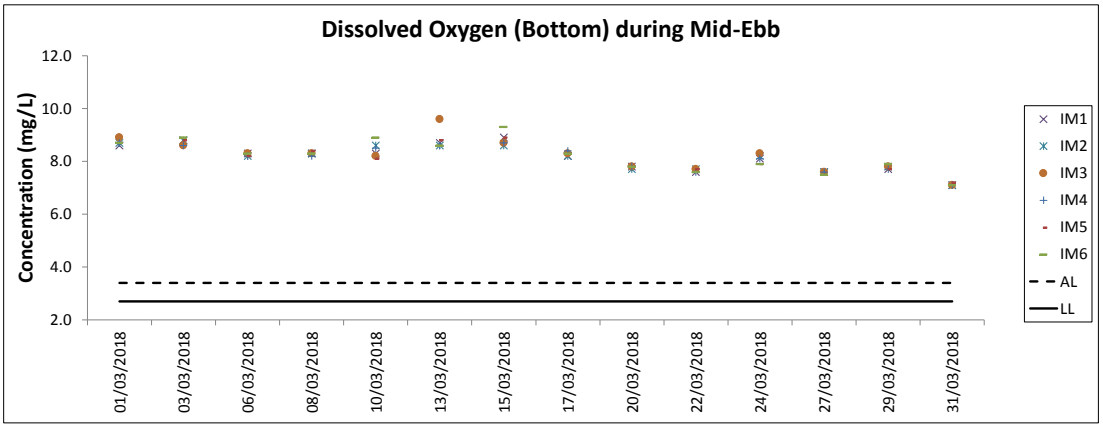

Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
12.0
10.0
8.0
6.0
4.0
2.0
01/03/2018
03/03/2018
06/03/2018
08/03/2018
10/03/2018
13/03/2018
15/03/2018
17/03/2018
20/03/2018
22/03/2018
24/03/2018
27/03/2018
29/03/2018
31/03/2018
C1
C2
C3
SR2
AL
LL

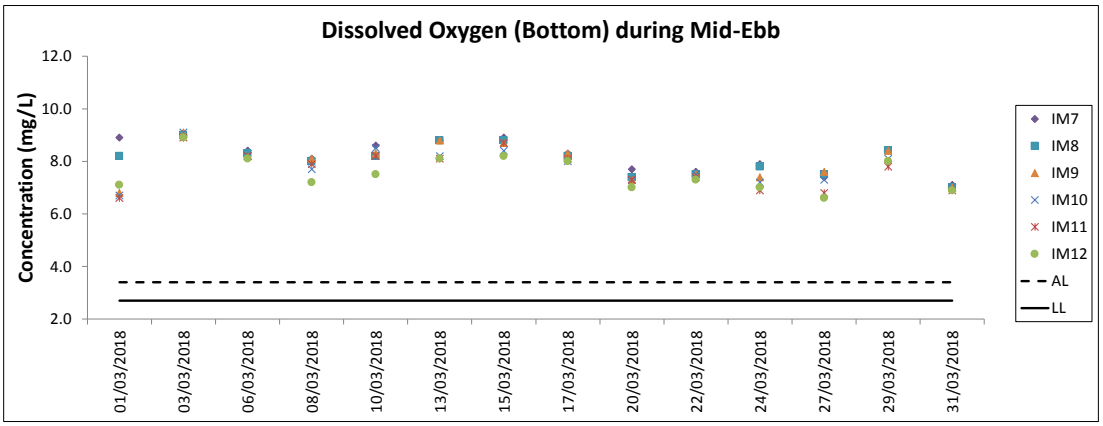

Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
12.0
10.0
8.0
6.0
4.0
2.0
01/03/2018
03/03/2018
06/03/2018
08/03/2018
10/03/2018
13/03/2018
15/03/2018
17/03/2018
20/03/2018
22/03/2018
24/03/2018
27/03/2018
29/03/2018
31/03/2018
IM1
IM2
IM3
IM4
IM5
IM6
AL
LL

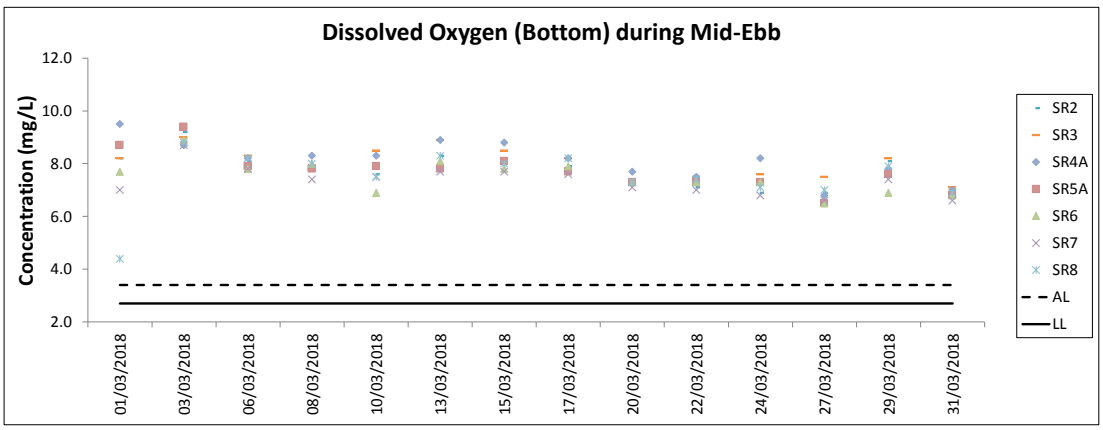

Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
12.0
10.0
8.0
6.0
4.0
2.0
01/03/2018
03/03/2018
06/03/2018
08/03/2018
10/03/2018
13/03/2018
15/03/2018
17/03/2018
20/03/2018
22/03/2018
24/03/2018
27/03/2018
29/03/2018
31/03/2018
IM7
IM8
IM9
IM10
IM11
IM12
AL
LL

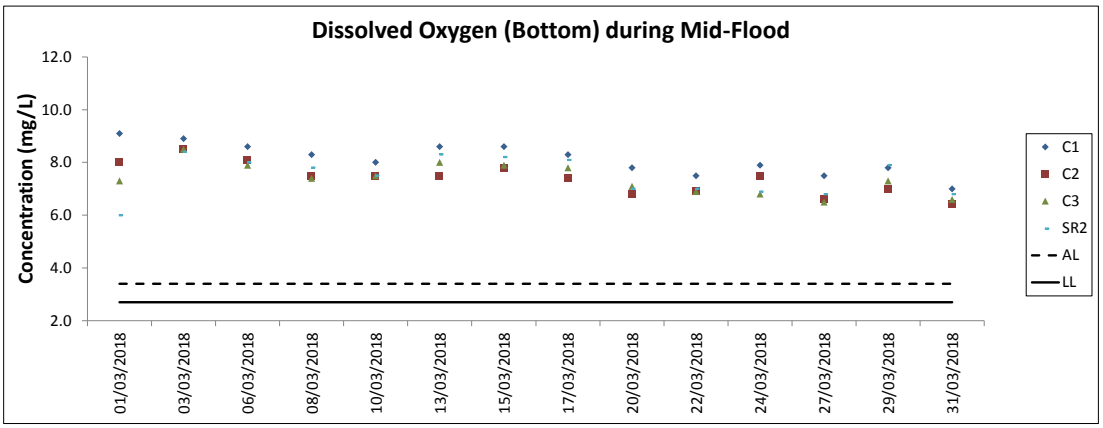

Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
12.0
10.0
8.0
6.0
4.0
2.0
01/03/2018
03/03/2018
06/03/2018
08/03/2018
10/03/2018
13/03/2018
15/03/2018
17/03/2018
20/03/2018
22/03/2018
24/03/2018
27/03/2018
29/03/2018
31/03/2018
SR3
SR4A
SR5A
SR6
SR7
SR8
AL
LL
LL (SR7)

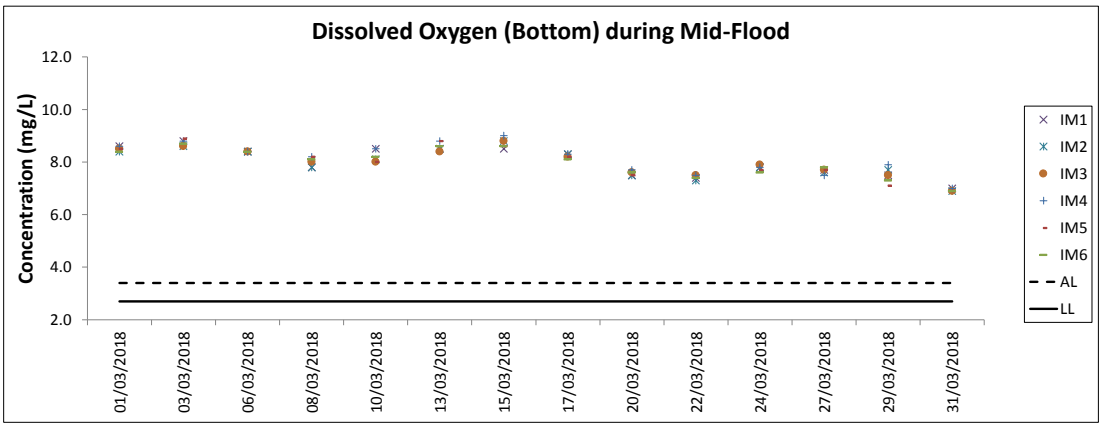

Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
12.0
10.0
8.0
6.0
4.0
2.0
01/03/2018
03/03/2018
06/03/2018
08/03/2018
10/03/2018
13/03/2018
15/03/2018
17/03/2018
20/03/2018
22/03/2018
24/03/2018
27/03/2018
29/03/2018
31/03/2018
C1
C2
C3
AL
LL

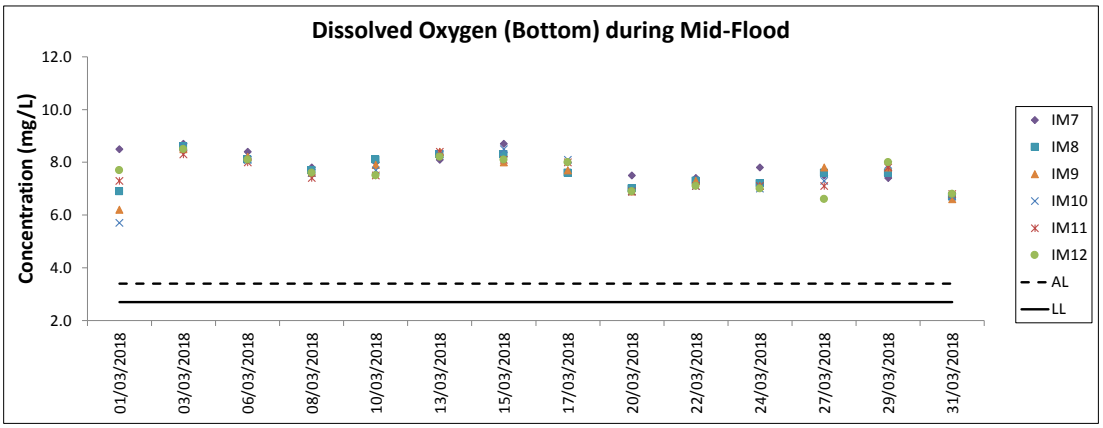

Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
12.0
10.0
8.0
6.0
4.0
2.0
01/03/2018
03/03/2018
06/03/2018
08/03/2018
10/03/2018
13/03/2018
15/03/2018
17/03/2018
20/03/2018
22/03/2018
24/03/2018
27/03/2018
29/03/2018
31/03/2018
IM1
IM2
IM3
IM4
IM5
IM6
AL
LL

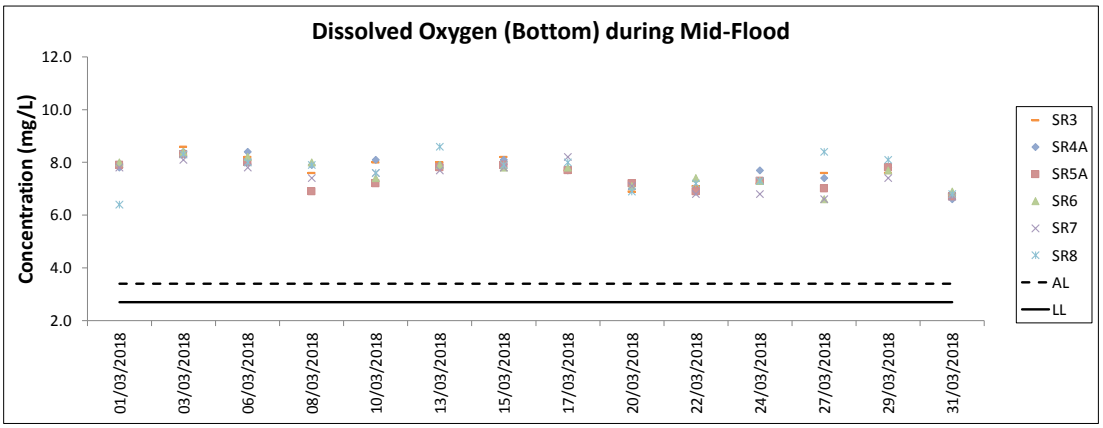

Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
12.0
10.0
8.0
6.0
4.0
2.0
01/03/2018
03/03/2018
06/03/2018
08/03/2018
10/03/2018
13/03/2018
15/03/2018
17/03/2018
20/03/2018
22/03/2018
24/03/2018
27/03/2018
29/03/2018
31/03/2018
IM7
IM8
IM9
IM10
IM11
IM12
AL
LL

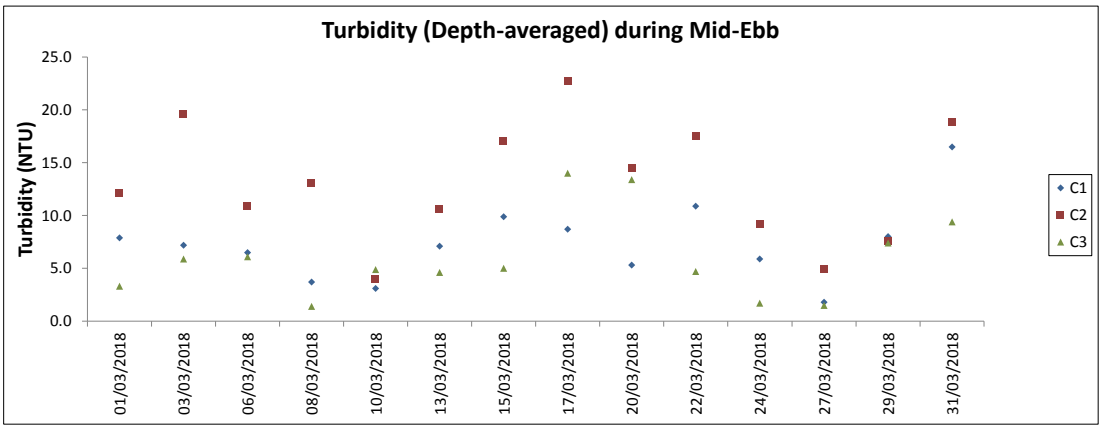

Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
12.0
10.0
8.0
6.0
4.0
2.0
01/03/2018
03/03/2018
06/03/2018
08/03/2018
10/03/2018
13/03/2018
15/03/2018
17/03/2018
20/03/2018
22/03/2018
24/03/2018
27/03/2018
29/03/2018
31/03/2018
SR2
SR3
SR4A
SR5A
SR6
SR7
SR8
AL
LL

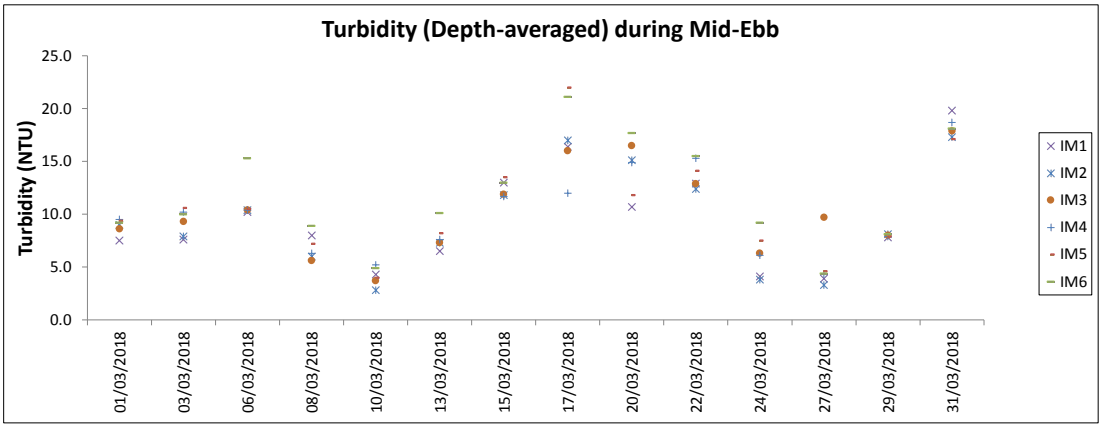

Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
12.0
10.0
8.0
6.0
4.0
2.0
01/03/2018
03/03/2018
06/03/2018
08/03/2018
10/03/2018
13/03/2018
15/03/2018
17/03/2018
20/03/2018
22/03/2018
24/03/2018
27/03/2018
29/03/2018
31/03/2018
C1
C2
C3
SR2
AL
LL

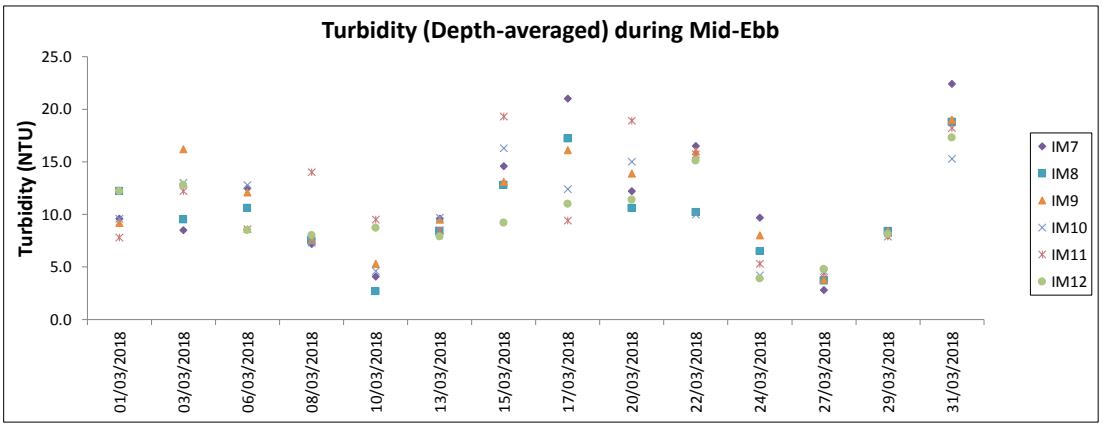

Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
12.0
10.0
8.0
6.0
4.0
2.0
01/03/2018
03/03/2018
06/03/2018
08/03/2018
10/03/2018
13/03/2018
15/03/2018
17/03/2018
20/03/2018
22/03/2018
24/03/2018
27/03/2018
29/03/2018
31/03/2018
IM1
IM2
IM3
IM4
IM5
IM6
AL
LL

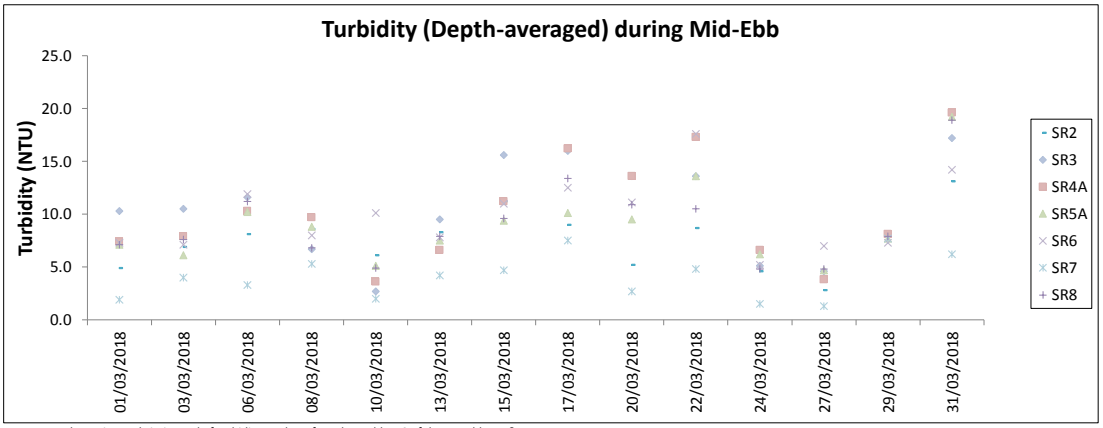

Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
12.0
10.0
8.0
6.0
4.0
2.0
01/03/2018
03/03/2018
06/03/2018
08/03/2018
10/03/2018
13/03/2018
15/03/2018
17/03/2018
20/03/2018
22/03/2018
24/03/2018
27/03/2018
29/03/2018
31/03/2018
IM7
IM8
IM9
IM10
IM11
IM12
AL
LL


Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
12.0
10.0
8.0
6.0
4.0
2.0
01/03/2018
03/03/2018
06/03/2018
08/03/2018
10/03/2018
13/03/2018
15/03/2018
17/03/2018
20/03/2018
22/03/2018
24/03/2018
27/03/2018
29/03/2018
31/03/2018
SR3
SR4A
SR5A
SR6
SR7
SR8
AL
LL

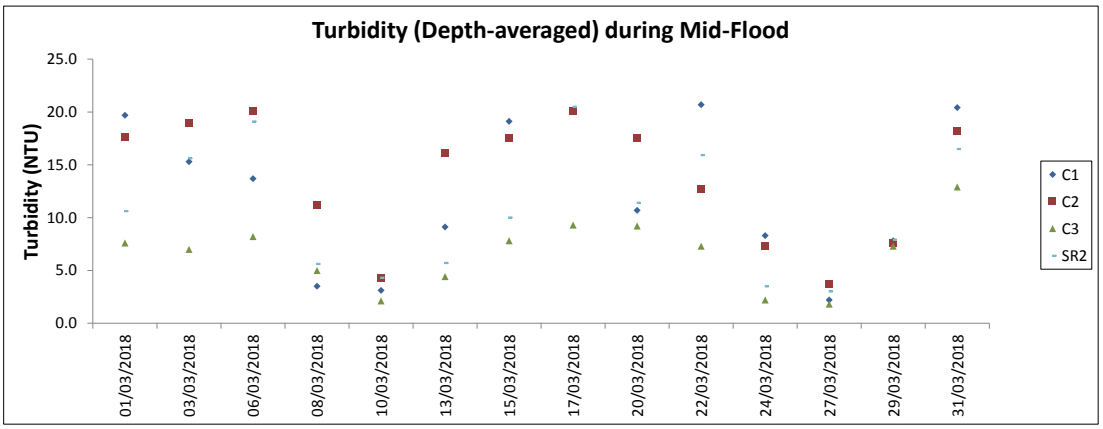


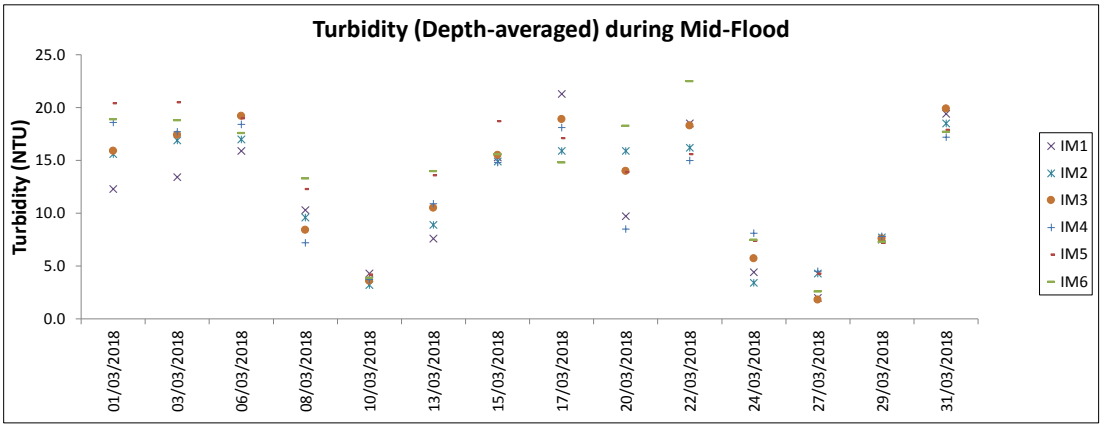


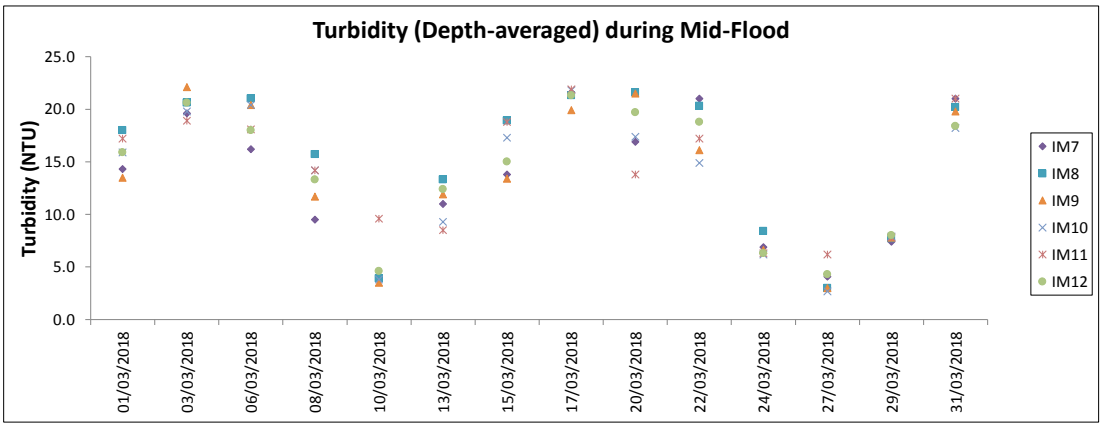


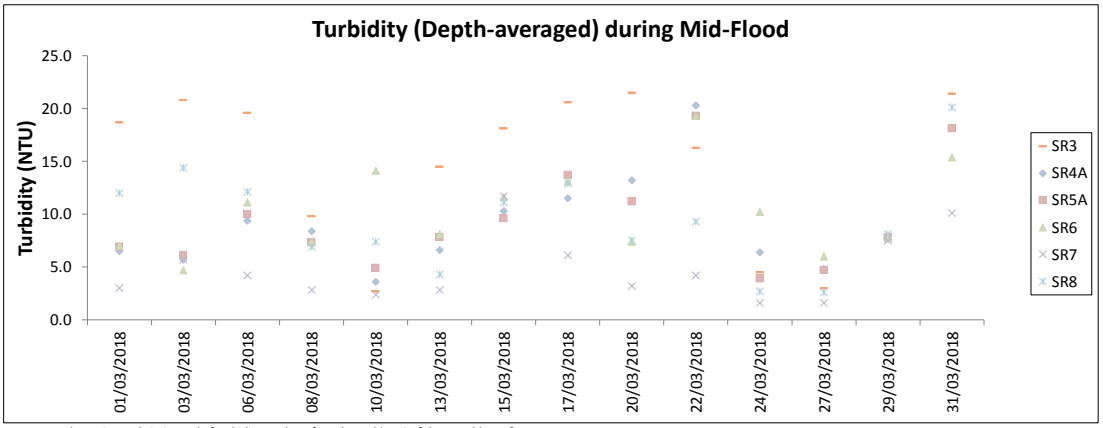


Note: The Action and Limit Level of turbidity can be referred to Table 4.2 of the monthly EM&A report.

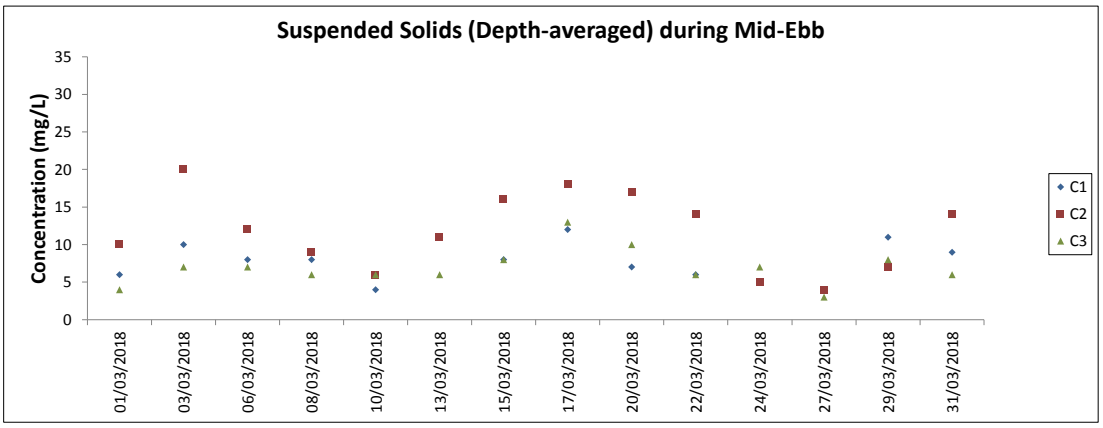


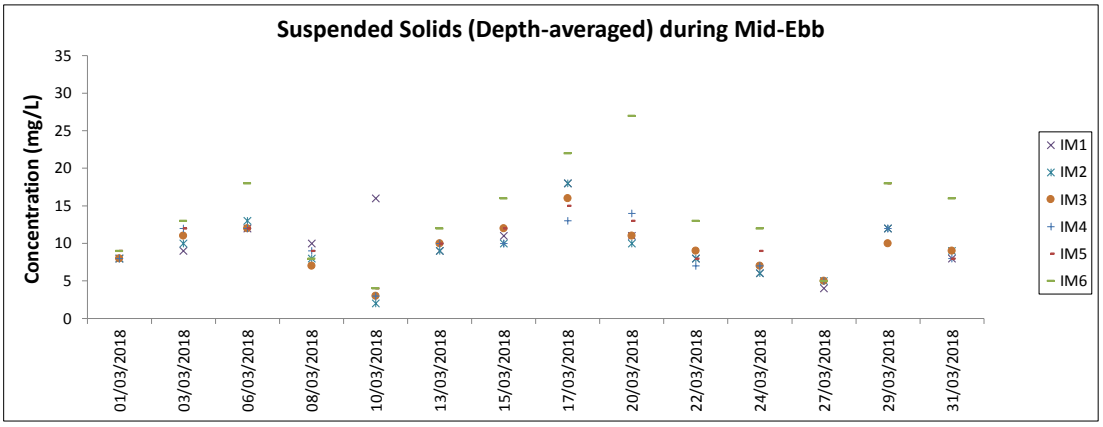


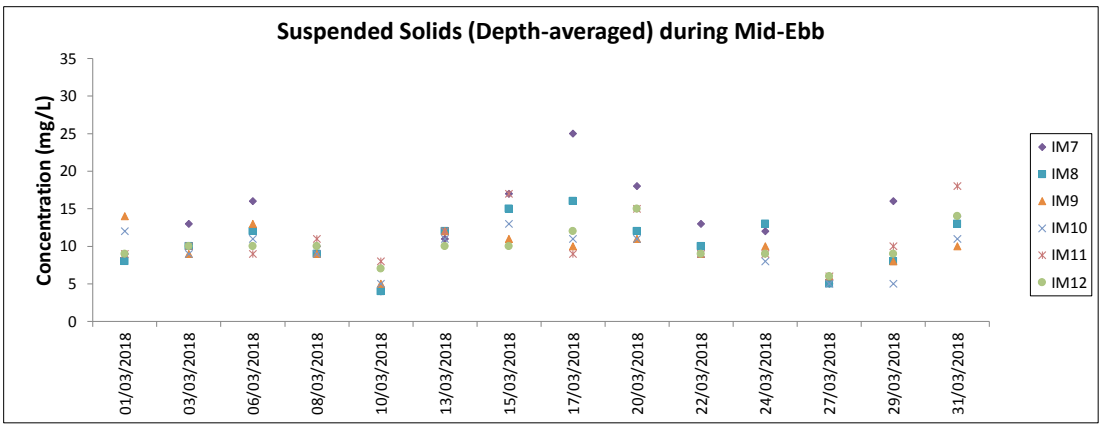


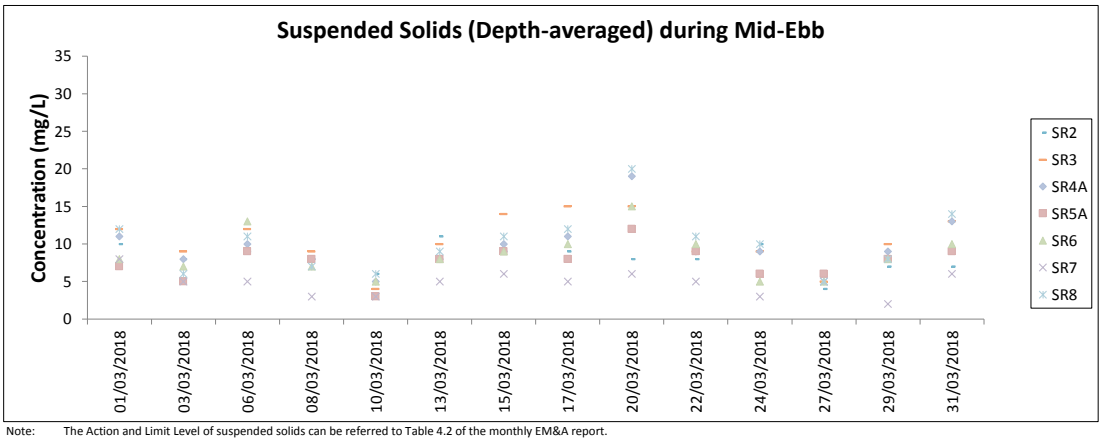


Note: The Action and Limit Level of turbidity can be referred to Table 4.2 of the monthly EM&A report.

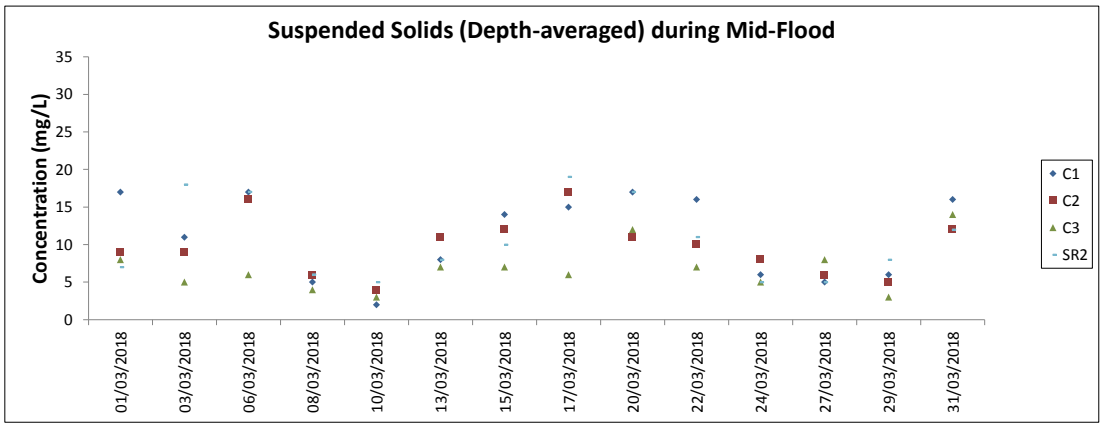


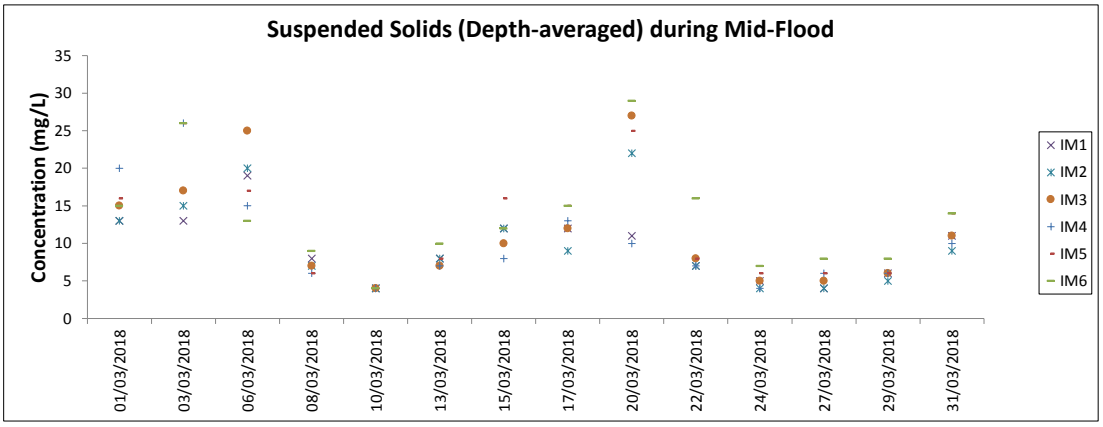


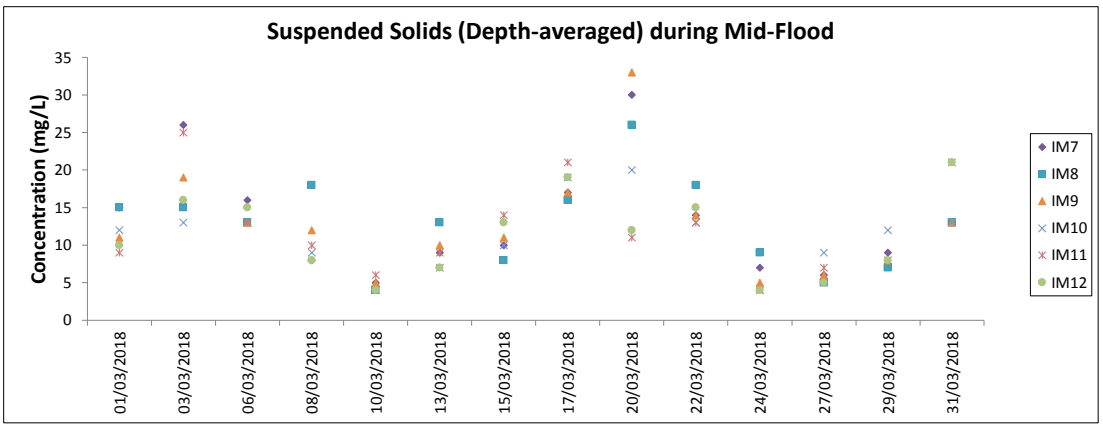


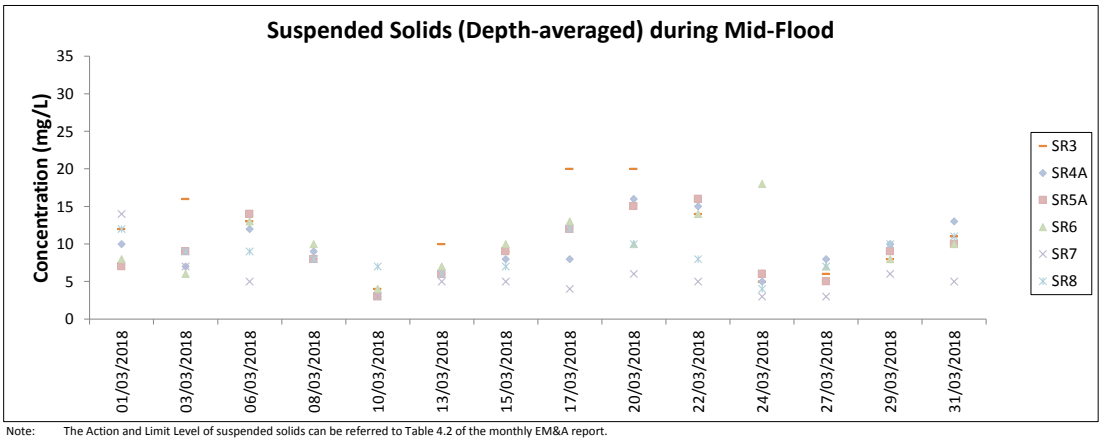


Note: The Action and Limit Level of suspended solids can be referred to Table 4.2 of the monthly EM&A report.

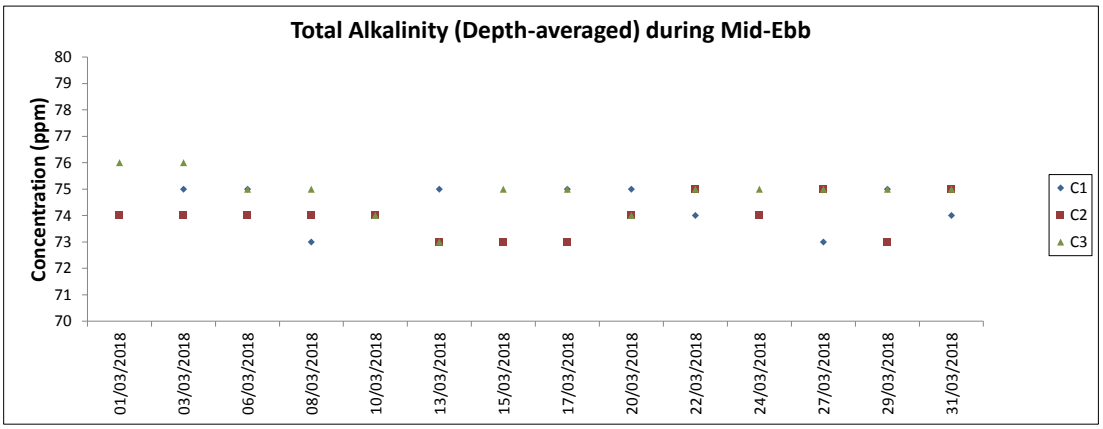


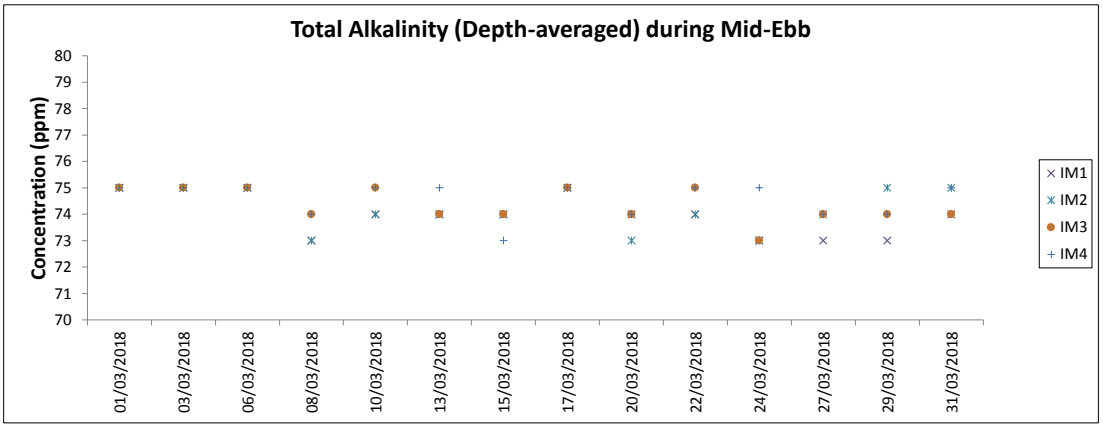


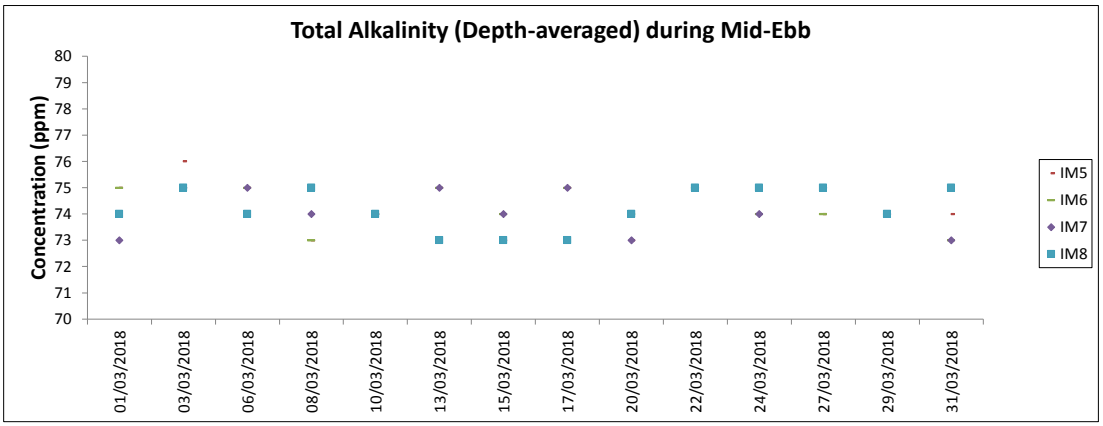


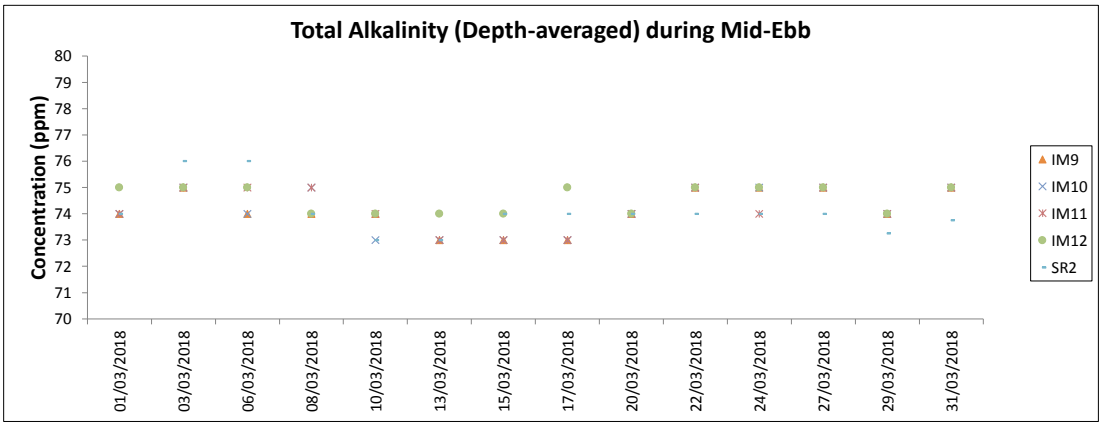


Note: The Action and Limit Level of suspended solids can be referred to Table 4.2 of the monthly EM&A report.

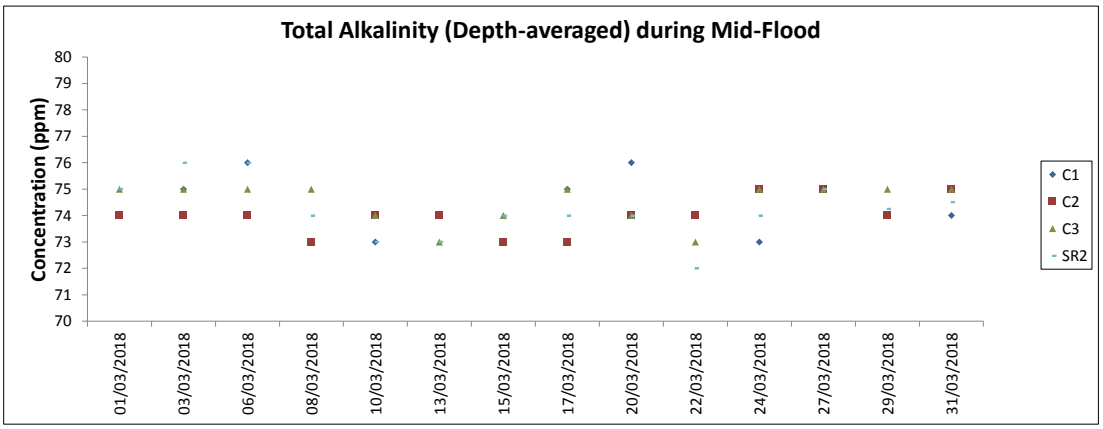


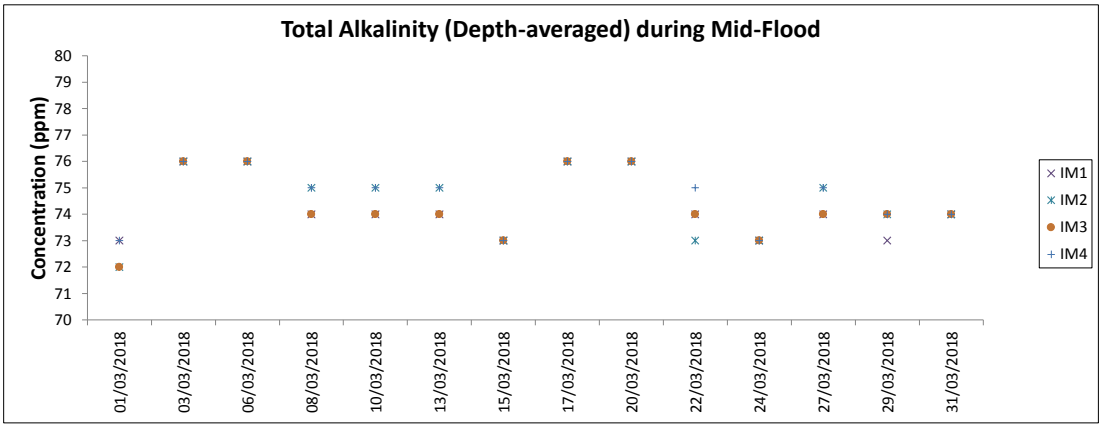


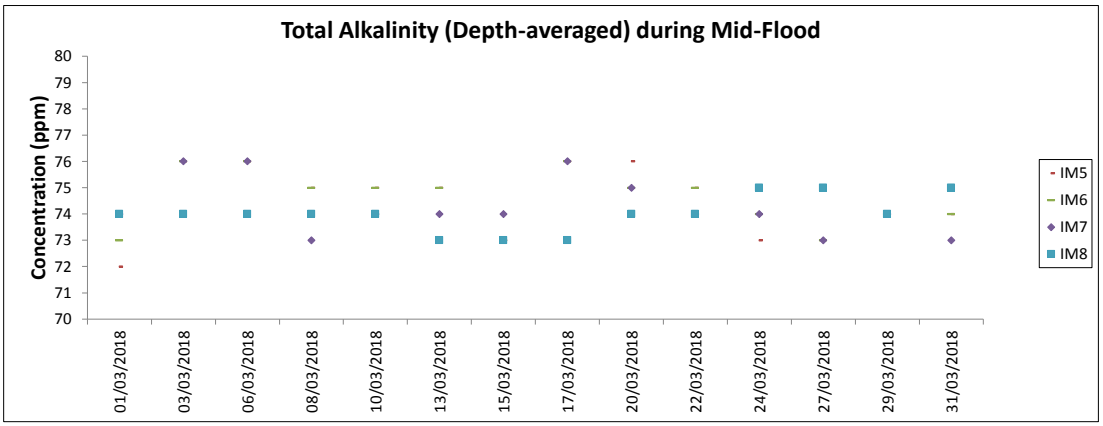


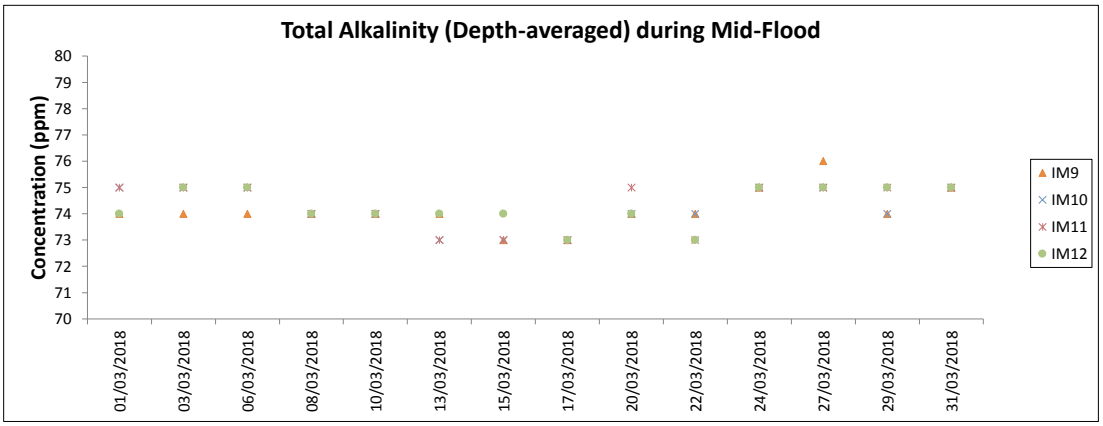


Note: The Action and Limit Level of total alkalinity can be referred to Table 4.2 of the monthly EM&A report.

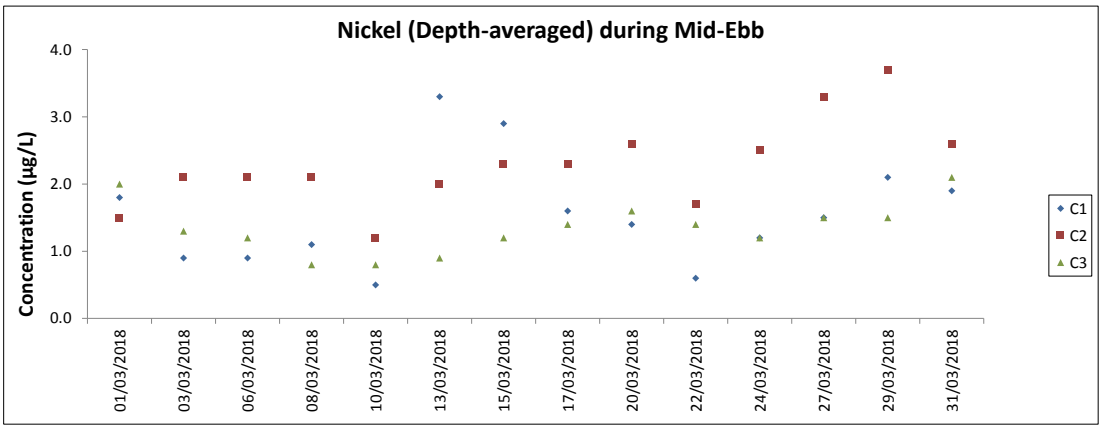


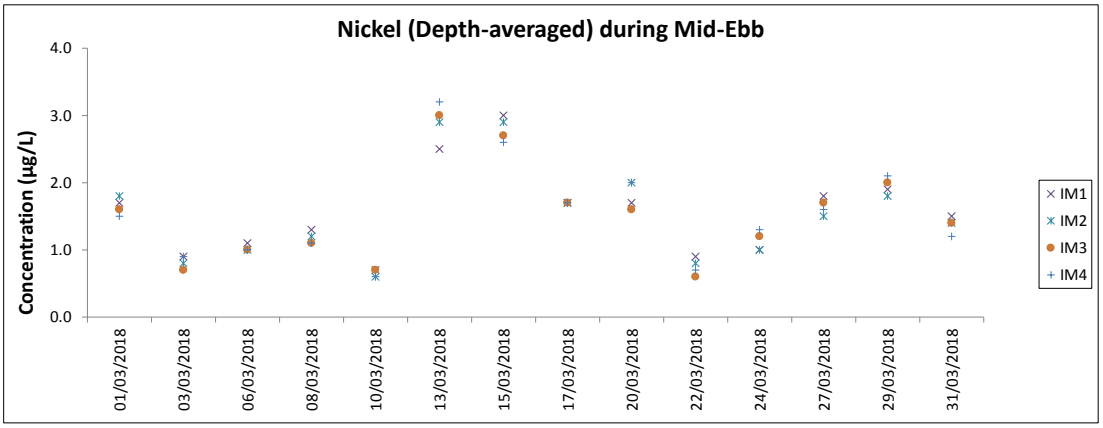


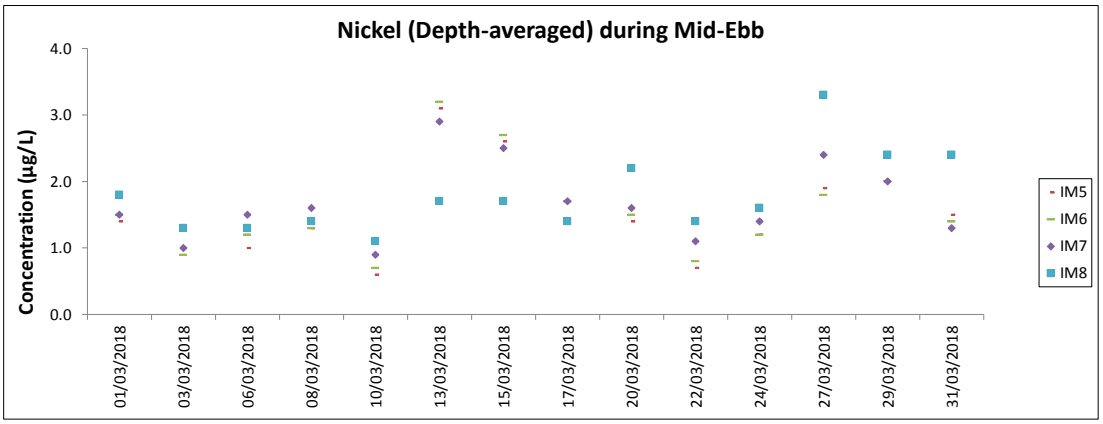


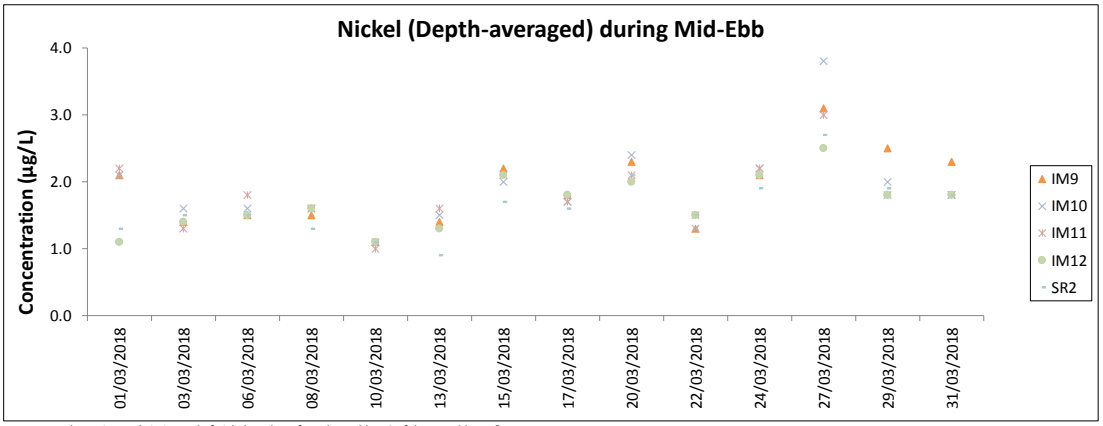


Note: The Action and Limit Level of total alkalinity can be referred to Table 4.2 of the monthly EM&A report.

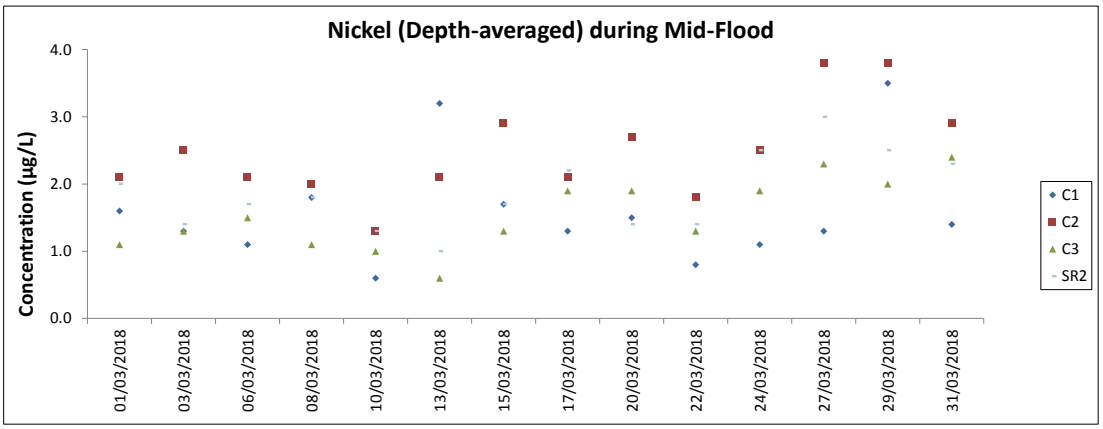


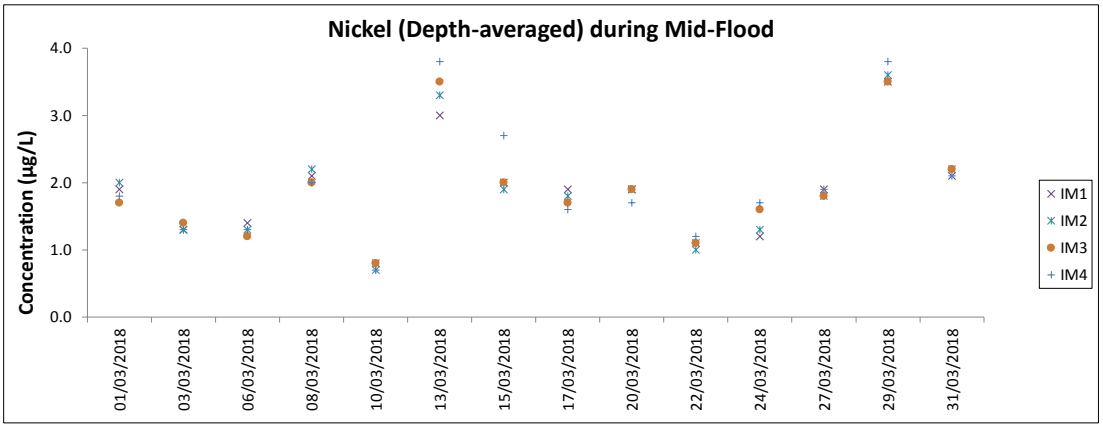


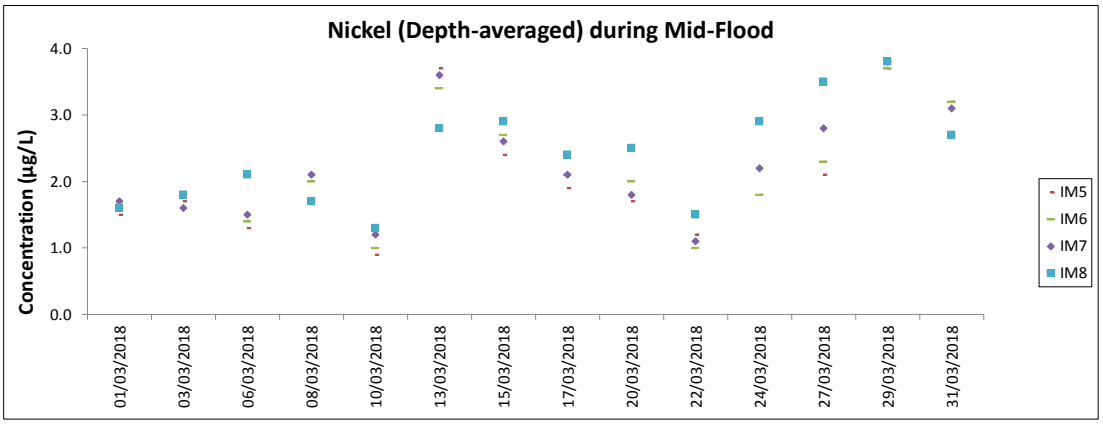


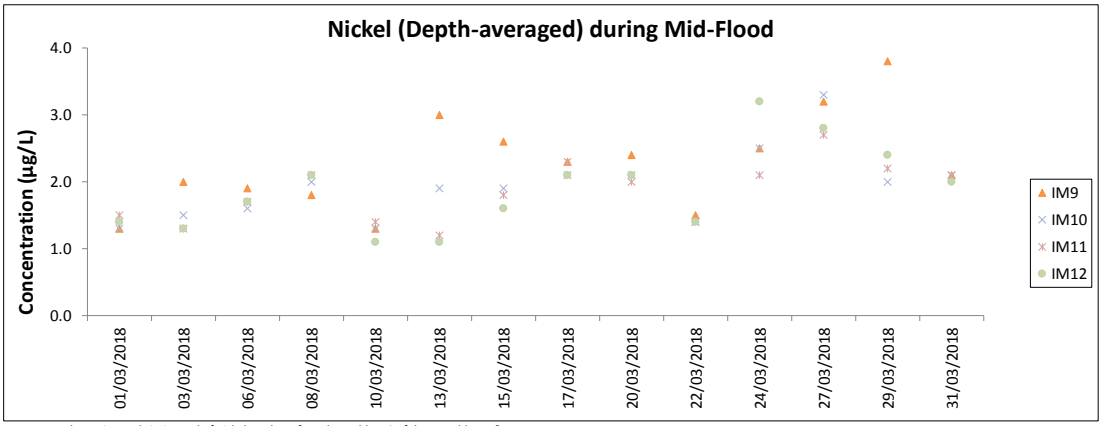


Note: The Action and Limit Level of nickel can be referred to Table 4.2 of the monthly EM&A report.
All chromium results in the reporting period were below the reporting limit 0.2 µg/L..









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

Chinese White Dolphin Monitoring Results

CWD Small Vessel Line-transect Survey — Survey Effort Data

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE
08-Jan-18	SWL	2	1.780	WINTER	32166	3RS ET
08-Jan-18	SWL	3	15.124	WINTER	32166	3RS ET
08-Jan-18	SWL	4	17.100	WINTER	32166	3RS ET
10-Jan-18	NEL	2	7.314	WINTER	32166	3RS ET
10-Jan-18	NEL	3	36.486	WINTER	32166	3RS ET
10-Jan-18	NEL	4	2.800	WINTER	32166	3RS ET
11-Jan-18	NEL	2	21.000	WINTER	32166	3RS ET
11-Jan-18	NEL	3	24.500	WINTER	32166	3RS ET
11-Jan-18	NEL	4	1.900	WINTER	32166	3RS ET
15-Jan-18	AW	2	4.691	WINTER	32166	3RS ET
15-Jan-18	WL	2	32.670	WINTER	32166	3RS ET
15-Jan-18	SWL	2	1.020	WINTER	32166	3RS ET
15-Jan-18	SWL	3	9.910	WINTER	32166	3RS ET
15-Jan-18	SWL	4	1.590	WINTER	32166	3RS ET
16-Jan-18	AW	2	4.820	WINTER	32166	3RS ET
16-Jan-18	WL	2	3.719	WINTER	32166	3RS ET
16-Jan-18	WL	3	29.681	WINTER	32166	3RS ET
16-Jan-18	SWL	2	14.580	WINTER	32166	3RS ET
16-Jan-18	SWL	3	14.510	WINTER	32166	3RS ET
17-Jan-18	SWL	1	12.768	WINTER	32166	3RS ET
17-Jan-18	SWL	2	38.865	WINTER	32166	3RS ET
17-Jan-18	SWL	3	9.180	WINTER	32166	3RS ET
17-Jan-18	SWL	4	1.600	WINTER	32166	3RS ET
18-Jan-18	NWL	1	6.510	WINTER	32166	3RS ET
18-Jan-18	NWL	2	66.180	WINTER	32166	3RS ET
18-Jan-18	NWL	3	1.200	WINTER	32166	3RS ET
19-Jan-18	NWL	1	2.700	WINTER	32166	3RS ET
19-Jan-18	NWL	2	68.300	WINTER	32166	3RS ET
19-Jan-18	NWL	3	3.700	WINTER	32166	3RS ET
06-Feb-18	NWL	2	10.500	WINTER	32166	3RS ET
06-Feb-18	NWL	3	51.794	WINTER	32166	3RS ET
06-Feb-18	NWL	4	13.389	WINTER	32166	3RS ET
07-Feb-18	NEL	1	9.800	WINTER	32166	3RS ET
07-Feb-18	NEL	2	37.100	WINTER	32166	3RS ET
12-Feb-18	NWL	2	7.850	WINTER	32166	3RS ET
12-Feb-18	NWL	3	62.380	WINTER	32166	3RS ET
12-Feb-18	NWL	4	4.890	WINTER	32166	3RS ET
13-Feb-18	AW	2	4.800	WINTER	32166	3RS ET
13-Feb-18	WL	2	17.744	WINTER	32166	3RS ET
13-Feb-18	WL	3	9.140	WINTER	32166	3RS ET
13-Feb-18	WL	4	5.970	WINTER	32166	3RS ET
13-Feb-18	SWL	5	6.830	WINTER	32166	3RS ET
14-Feb-18	AW	2	4.620	WINTER	32166	3RS ET
14-Feb-18	WL	2	27.499	WINTER	32166	3RS ET
14-Feb-18	WL	3	2.810	WINTER	32166	3RS ET
14-Feb-18	WL	4	1.420	WINTER	32166	3RS ET
14-Feb-18	SWL	4	6.860	WINTER	32166	3RS ET

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE
21-Feb-18	SWL	2	28.770	WINTER	32166	3RS ET
21-Feb-18	SWL	3	25.830	WINTER	32166	3RS ET
21-Feb-18	SWL	4	7.600	WINTER	32166	3RS ET
22-Feb-18	NEL	2	8.700	WINTER	32166	3RS ET
22-Feb-18	NEL	3	36.900	WINTER	32166	3RS ET
22-Feb-18	NEL	4	1.300	WINTER	32166	3RS ET
23-Feb-18	SWL	2	1.640	WINTER	32166	3RS ET
23-Feb-18	SWL	3	60.860	WINTER	32166	3RS ET
05-Mar-18	SWL	1	40.540	SPRING	32166	3RS ET
05-Mar-18	SWL	2	21.840	SPRING	32166	3RS ET
07-Mar-18	NEL	2	6.660	SPRING	32166	3RS ET
07-Mar-18	NEL	3	29.130	SPRING	32166	3RS ET
07-Mar-18	NEL	4	11.510	SPRING	32166	3RS ET
08-Mar-18	NEL	2	25.549	SPRING	32166	3RS ET
08-Mar-18	NEL	3	21.251	SPRING	32166	3RS ET
12-Mar-18	AW	2	1.070	SPRING	32166	3RS ET
12-Mar-18	AW	3	3.660	SPRING	32166	3RS ET
12-Mar-18	WL	2	32.876	SPRING	32166	3RS ET
12-Mar-18	WL	3	0.550	SPRING	32166	3RS ET
12-Mar-18	SWL	2	1.970	SPRING	32166	3RS ET
12-Mar-18	SWL	3	14.329	SPRING	32166	3RS ET
12-Mar-18	SWL	4	2.130	SPRING	32166	3RS ET
13-Mar-18	AW	1	4.700	SPRING	32166	3RS ET
13-Mar-18	WL	2	22.370	SPRING	32166	3RS ET
13-Mar-18	WL	3	9.417	SPRING	32166	3RS ET
13-Mar-18	WL	4	1.643	SPRING	32166	3RS ET
13-Mar-18	SWL	3	6.820	SPRING	32166	3RS ET
14-Mar-18	NWL	2	59.690	SPRING	32166	3RS ET
14-Mar-18	NWL	3	14.666	SPRING	32166	3RS ET
21-Mar-18	SWL	2	16.139	SPRING	32166	3RS ET
21-Mar-18	SWL	3	10.311	SPRING	32166	3RS ET
21-Mar-18	SWL	4	23.030	SPRING	32166	3RS ET
22-Mar-18	NWL	2	34.844	SPRING	32166	3RS ET
22-Mar-18	NWL	3	37.876	SPRING	32166	3RS ET

Notes:

CWD monitoring survey data of the two preceding survey months (i.e. January and February 2018) are presented for reference only.

CWD Small Vessel Line-transect Survey — Sighting Data

DATE	STG #	TIME	CWD/FP	GP SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.
08-Jan-18	1	1019	CWD	5	SWL	2	30	ON	3RS ET	22.2153	113.9359	WINTER	PURSE SEINE
15-Jan-18	1	0949	CWD	11	AW	2	72	ON	3RS ET	22.2896	113.8777	WINTER	NONE
15-Jan-18	2	1048	CWD	2	WL	2	147	ON	3RS ET	22.2938	113.8616	WINTER	NONE
15-Jan-18	3	1128	CWD	13	WL	2	817	ON	3RS ET	22.2602	113.8400	WINTER	GILLNET
15-Jan-18	4	1217	CWD	2	WL	2	206	ON	3RS ET	22.2418	113.8359	WINTER	GILLNET
15-Jan-18	5	1242	CWD	3	WL	2	309	ON	3RS ET	22.2281	113.8377	WINTER	NONE
15-Jan-18	6	1316	CWD	2	WL	2	65	ON	3RS ET	22.2145	113.8313	WINTER	NONE
15-Jan-18	7	1335	CWD	6	WL	2	281	ON	3RS ET	22.2053	113.8346	WINTER	NONE
15-Jan-18	8	1405	CWD	9	WL	2	179	ON	3RS ET	22.1958	113.8350	WINTER	NONE
15-Jan-18	9	1432	CWD	3	WL	2	5	ON	3RS ET	22.1873	113.8318	WINTER	NONE
15-Jan-18	10	1453	CWD	2	SWL	2	248	ON	3RS ET	22.1841	113.8501	WINTER	NONE
16-Jan-18	1	0944	CWD	1	AW	2	79	ON	3RS ET	22.2880	113.8842	WINTER	NONE
16-Jan-18	2	1032	CWD	2	WL	3	74	ON	3RS ET	22.2687	113.8541	WINTER	NONE
16-Jan-18	3	1448	CWD	1	SWL	2	191	ON	3RS ET	22.1746	113.8975	WINTER	NONE
17-Jan-18	1	1045	FP	2	SWL	2	813	ON	3RS ET	22.1681	113.9359	WINTER	NONE
17-Jan-18	2	1057	FP	1	SWL	2	N/A	OFF	3RS ET	22.1529	113.9358	WINTER	NONE
17-Jan-18	3	1106	FP	1	SWL	1	372	ON	3RS ET	22.1437	113.9272	WINTER	NONE
17-Jan-18	4	1152	FP	1	SWL	2	140	ON	3RS ET	22.1835	113.9203	WINTER	NONE
17-Jan-18	5	1244	CWD	2	SWL	2	43	ON	3RS ET	22.1907	113.9078	WINTER	NONE
17-Jan-18	6	1457	CWD	1	SWL	2	149	ON	3RS ET	22.1874	113.8683	WINTER	NONE
17-Jan-18	7	1512	CWD	6	SWL	2	533	ON	3RS ET	22.1937	113.8687	WINTER	NONE
18-Jan-18	1	0933	CWD	4	NWL	2	451	ON	3RS ET	22.4000	113.8681	WINTER	NONE
18-Jan-18	2	1017	CWD	4	NWL	1	362	ON	3RS ET	22.3321	113.8689	WINTER	NONE
18-Jan-18	3	1044	CWD	4	NWL	2	221	ON	3RS ET	22.3129	113.8680	WINTER	NONE
18-Jan-18	4	1121	CWD	1	NWL	2	120	ON	3RS ET	22.2809	113.8782	WINTER	NONE
18-Jan-18	5	1135	CWD	2	NWL	2	56	ON	3RS ET	22.2934	113.8780	WINTER	NONE
06-Feb-18	1	1043	CWD	2	NWL	3	N/A	OFF	3RS ET	22.2784	113.8777	WINTER	GILLNET
06-Feb-18	2	1058	CWD	1	NWL	3	80	ON	3RS ET	22.2829	113.8785	WINTER	NONE
06-Feb-18	3	1153	CWD	5	NWL	3	75	ON	3RS ET	22.3720	113.8771	WINTER	NONE
06-Feb-18	4	1523	CWD	2	NWL	2	N/A	OFF	3RS ET	22.3304	113.9495	WINTER	NONE
12-Feb-18	1	1121	CWD	2	NWL	3	76	ON	3RS ET	22.3384	113.8781	WINTER	NONE

DATE	STG #	TIME	CWD/FP	GP SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.
12-Feb-18	2	1153	CWD	7	NWL	2	80	ON	3RS ET	22.3709	113.8768	WINTER	NONE
12-Feb-18	3	1240	CWD	3	NWL	3	345	ON	3RS ET	22.4121	113.8780	WINTER	NONE
12-Feb-18	4	1348	CWD	3	NWL	3	114	ON	3RS ET	22.3460	113.8981	WINTER	NONE
13-Feb-18	1	0943	CWD	3	AW	2	548	ON	3RS ET	22.2917	113.8745	WINTER	NONE
13-Feb-18	2	1011	CWD	1	AW	2	N/A	OFF	3RS ET	22.2879	113.8838	WINTER	NONE
13-Feb-18	3	1052	CWD	1	WL	2	366	ON	3RS ET	22.2686	113.8559	WINTER	NONE
13-Feb-18	4	1115	CWD	3	WL	2	475	ON	3RS ET	22.2604	113.8491	WINTER	NONE
13-Feb-18	5	1141	CWD	4	WL	2	392	ON	3RS ET	22.2604	113.8445	WINTER	NONE
13-Feb-18	6	1158	CWD	1	WL	2	47	ON	3RS ET	22.2605	113.8419	WINTER	NONE
13-Feb-18	7	1212	CWD	4	WL	2	200	ON	3RS ET	22.2504	113.8388	WINTER	NONE
13-Feb-18	8	1248	CWD	2	WL	2	456	ON	3RS ET	22.2375	113.8262	WINTER	NONE
14-Feb-18	1	0931	CWD	1	AW	2	11	ON	3RS ET	22.3019	113.8813	WINTER	NONE
14-Feb-18	2	0944	CWD	5	AW	2	638	ON	3RS ET	22.2951	113.8805	WINTER	NONE
14-Feb-18	3	1020	CWD	5	WL	2	269	ON	3RS ET	22.3031	113.8611	WINTER	NONE
14-Feb-18	4	1035	CWD	4	WL	2	231	ON	3RS ET	22.2937	113.8616	WINTER	GILLNET
14-Feb-18	5	1058	CWD	1	WL	3	761	ON	3RS ET	22.2751	113.8494	WINTER	NONE
14-Feb-18	6	1156	CWD	1	WL	2	71	ON	3RS ET	22.2415	113.8386	WINTER	NONE
14-Feb-18	7	1211	CWD	4	WL	2	6	ON	3RS ET	22.2416	113.8352	WINTER	NONE
14-Feb-18	8	1256	CWD	5	WL	2	110	ON	3RS ET	22.2140	113.8237	WINTER	NONE
23-Feb-18	1	1222	CWD	1	SWL	3	8	ON	3RS ET	22.1759	113.9072	WINTER	NONE
05-Mar-18	1	1328	FP	2	SWL	2	58	ON	3RS ET	22.1574	113.8973	SPRING	NONE
05-Mar-18	2	1338	FP	2	SWL	2	145	ON	3RS ET	22.1484	113.8941	SPRING	NONE
05-Mar-18	3	1454	FP	3	SWL	2	103	ON	3RS ET	22.1824	113.8685	SPRING	NONE
12-Mar-18	1	1146	CWD	10	WL	2	122	ON	3RS ET	22.2076	113.8396	SPRING	NONE
12-Mar-18	2	1208	CWD	2	WL	2	17	ON	3RS ET	22.2053	113.8384	SPRING	NONE
12-Mar-18	3	1412	CWD	1	SWL	3	164	ON	3RS ET	22.1995	113.8784	SPRING	NONE
13-Mar-18	1	1037	CWD	2	WL	2	56	ON	3RS ET	22.2666	113.8596	SPRING	NONE
13-Mar-18	2	1128	CWD	1	WL	2	140	ON	3RS ET	22.2348	113.8251	SPRING	NONE
13-Mar-18	3	1205	CWD	5	WL	2	384	ON	3RS ET	22.2231	113.8195	SPRING	NONE
13-Mar-18	4	1244	CWD	1	WL	4	12	ON	3RS ET	22.2143	113.8273	SPRING	NONE
13-Mar-18	5	1324	CWD	1	WL	2	36	ON	3RS ET	22.1961	113.8406	SPRING	NONE
14-Mar-18	1	1000	CWD	2	NWL	2	65	ON	3RS ET	22.3539	113.8689	SPRING	NONE
14-Mar-18	2	1013	CWD	2	NWL	2	335	ON	3RS ET	22.3431	113.8687	SPRING	NONE

DATE	STG #	TIME	CWD/FP	GP SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.
14-Mar-18	3	1126	CWD	2	NWL	2	N/A	OFF	3RS ET	22.3245	113.8729	SPRING	NONE
14-Mar-18	4	1208	CWD	4	NWL	2	57	ON	3RS ET	22.3912	113.8785	SPRING	NONE
14-Mar-18	5	1253	CWD	1	NWL	3	587	ON	3RS ET	22.3824	113.8888	SPRING	NONE
14-Mar-18	6	1310	CWD	2	NWL	3	13	ON	3RS ET	22.3837	113.8887	SPRING	NONE
21-Mar-18	1	1050	FP	4	SWL	2	59	ON	3RS ET	22.1486	113.9340	SPRING	NONE
21-Mar-18	2	1106	FP	1	SWL	2	201	ON	3RS ET	22.1599	113.9272	SPRING	NONE
21-Mar-18	3	1111	FP	2	SWL	2	262	ON	3RS ET	22.1658	113.9272	SPRING	NONE
21-Mar-18	4	1202	FP	1	SWL	2	30	ON	3RS ET	22.1453	113.9176	SPRING	NONE
21-Mar-18	5	1311	FP	1	SWL	4	225	ON	3RS ET	22.1641	113.8975	SPRING	NONE
22-Mar-18	1	1219	CWD	6	NWL	3	981	ON	3RS ET	22.3840	113.8774	SPRING	PURSE SEINE
22-Mar-18	2	1305	CWD	2	NWL	3	579	ON	3RS ET	22.3952	113.8893	SPRING	NONE
22-Mar-18	3	1418	CWD	1	NWL	2	50	ON	3RS ET	22.3780	113.8980	SPRING	NONE
22-Mar-18	4	1454	CWD	1	NWL	2	51	ON	3RS ET	22.3760	113.9062	SPRING	NONE

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

Notes:

CWD monitoring survey data of the two preceding survey months (i.e. January and February 2018) are presented for reference only. No relevant figure or text will be mentioned in the monthly EM&A report.

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

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

A total of 416.258 km of survey effort was collected under Beaufort Sea State 3 or below with favourable visibility; total no. of 16 on-effort sightings and total number of 43 dolphins from on-effort sightings were collected under such condition. Calculation of the encounter rates in March 2018 are shown as below:

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

$$STG = \frac{16}{416.258}\ x\ 100 = 3.84$$

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

$$ANI = \frac{43}{416.258}\ x\ 100 = 10.33$$

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

A total of 1256.203 km of survey effort was collected under Beaufort Sea State 3 or below with favourable visibility; total no. of 60 on-effort sightings and total number of 195 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)

$$STG = \frac{60}{1256.203}\ x\ 100 = 4.78$$

Running Quarterly Encounter Rate by Number of Dolphins (ANI)

$$ANI = \frac{195}{1256.203}\ x\ 100 = 15.52$$

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

SLMM003_20180312_1_16

SLMM014_20180312_1_7

SLMM025_20180312_1_11

SLMM027_20180312_1_18

SLMM049_20180312_1_9

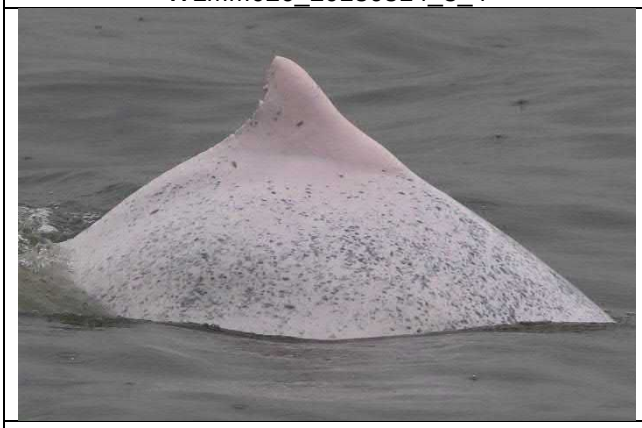
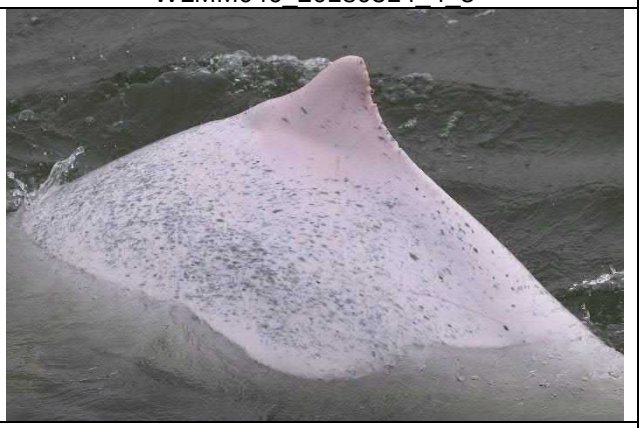
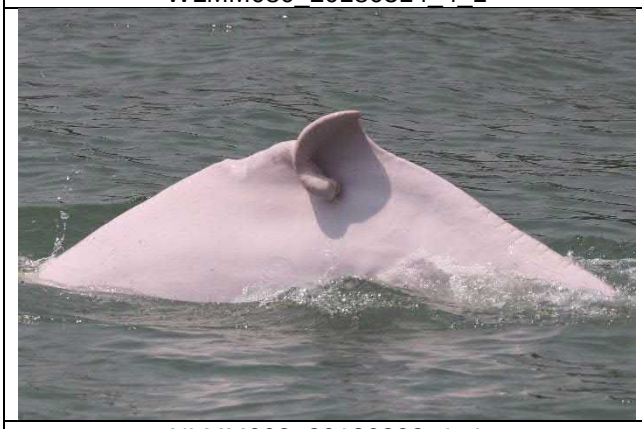
WLMM007_20180312_1_11

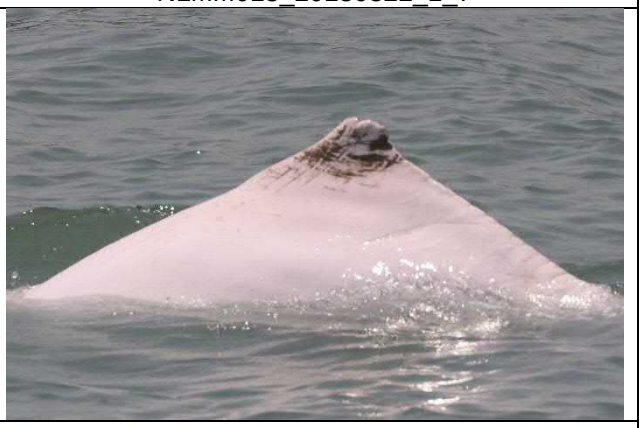
WLMM018_20180312_1_9

WLMM073_20180312_1_21

	
WLMM079_20180312_1_13	WLMM114_20180312_1_18
	
SLMM034_20180312_2_8	WLMM001_20180312_2_8
	
SLMM014_20180312_3_3	WLMM078_20180313_1_1
	
SLMM034_20180313_2_2	SLMM023_20180313_3_2

	
WLMM003_20180313_3_7	WLMM028_20180313_3_3
	
WLMM029_20180313_3_2_Upper	SLMM031_20180313_5_11
	
WLMM026_20180314_1_1_Left	WLMM027_20180314_1_1_Right
	
WLMM065_20180314_2_8	WLMM066_20180314_2_3

	
WLMM026_20180314_3_4	WLMM027_20180314_3_3
	
NLMM065_20180314_4_3	WLMM046_20180314_4_5
	
WLMM080_20180314_4_1	NLMM065_20180314_6_6
	
NLMM002_20180322_1_1	NLMM004_20180322_1_14

	
NLMM009_20180322_1_1	NLMM018_20180322_1_7
	
NLMM043_20180322_1_10	NLMM063_20180322_1_2

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
12/Mar/18	Lung Kwu Chau	8:45	14:45	6:00	2	3	3	2-6
22/Mar/18	Lung Kwu Chau	8:48	14:48	6:00	3-4	2	6	2-7
23/Mar/18	Lung Kwu Chau	8:40	14:40	6:00	2	2	10	1-6
26/Mar/18	Sha Chau	8:37	14:37	6:00	2	3	0	N/A
27/Mar/18	Sha Chau	8:42	14:42	6:00	2	3	0	N/A

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

Ecological Monitoring

Ecological Monitoring – location map and site photos regarding the monthly ecological monitoring for the egretry area on Sheung Sha Chau and the HDD works

Photo record of View 1

Photo record of View 2

Appendix D. 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. : AH020038
Date of Issue : 07 February 2018

PART A – CUSTOMER INFORMATION

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

PART B – DESCRIPTION

Name of Equipment	:	YSI ProDSS (Multi-Parameters)
Manufacturer	:	YSI (a xylem brand)
Serial Number	:	15M100005
Date of Received	:	Feb 06, 2018
Date of Calibration	:	Feb 06, 2018 to Feb 06, 2018
Date of Next Calibration[a]	:	May 06, 2018

PART C – REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

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

PART D – CALIBRATION RESULTS[b,c]

(1) pH at 25°C

Target (pH unit)	Displayed Reading[d] (pH Unit)	Tolerance[e](pH Unit)	Results
4.00	3.97	-0.03	Satisfactory
7.42	7.35	-0.07	Satisfactory
10.01	10.03	+0.02	Satisfactory

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

(2) Temperature

Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)	Results
14.0	13.9	-0.1	Satisfactory
26.0	25.7	-0.3	Satisfactory
33.0	32.7	-0.3	Satisfactory

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

~ CONTINUED ON NEXT PAGE ~

Remark(s): -

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

APPROVED SIGNATORY : _____
FUNG Yuen-ching Aries
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
Tel: (852) 3956 8717; Fax: (852) 3956 3928

REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AH020038
Date of Issue : 07 February 2018

PART D – CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
0.00	0.02	+0.02	Satisfactory
1.95	1.99	+0.04	Satisfactory
3.68	3.72	+0.04	Satisfactory
6.26	6.19	-0.07	Satisfactory

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

(4) Conductivity at 25°C

Conc. of KCl (M)	Expected Reading (µS/cm)	Displayed Reading (µS/cm)	Tolerance (%)	Results
0.001	146.9	143.1	-2.0	Satisfactory
0.01	1412	1401	-0.8	Satisfactory
0.1	12890	12762	-1.0	Satisfactory
0.5	58670	57936	-1.3	Satisfactory
1.0	111900	109009	-2.6	Satisfactory

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

(5) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	10.02	+0.2	Satisfactory
20	19.88	-0.6	Satisfactory
30	29.65	-1.2	Satisfactory

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

(6) Turbidity

Expected Reading (NTU)	Displayed Reading[f] (NTU)	Tolerance[g] (%)	Results
0	0.1	--	--
10	10.3	+3.0	Satisfactory
20	20.4	+2.0	Satisfactory
100	104.2	+4.2	Satisfactory
800	789.7	-1.3	Satisfactory

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

~ END OF REPORT ~

Remark(s): -

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

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

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

REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AH020039
Date of Issue : 07 February 2018

PART A – CUSTOMER INFORMATION

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

PART B – DESCRIPTION

Name of Equipment	:	YSI ProDSS (Multi-Parameters)
Manufacturer	:	YSI (a xylem brand)
Serial Number	:	16H104233
Date of Received	:	Feb 06, 2018
Date of Calibration	:	Feb 06, 2018 to Feb 06, 2018
Date of Next Calibration[a]	:	May 06, 2018

PART C – REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

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

PART D – CALIBRATION RESULTS[b,c]

(1) pH at 25°C

Target (pH unit)	Displayed Reading[d] (pH Unit)	Tolerance[e](pH Unit)	Results
4.00	4.04	+0.04	Satisfactory
7.42	7.39	-0.03	Satisfactory
10.01	10.08	+0.07	Satisfactory

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

(2) Temperature

Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)	Results
14.0	13.6	-0.4	Satisfactory
26.0	25.8	-0.2	Satisfactory
33.0	32.5	-0.5	Satisfactory

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

~ CONTINUED ON NEXT PAGE ~

Remark(s): -

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

APPROVED SIGNATORY :

FUNG Yuen-ching Aries
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
Tel: (852) 3956 8717; Fax: (852) 3956 3928

REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AH020039
Date of Issue : 07 February 2018

PART D – CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
0.00	0.05	+0.05	Satisfactory
1.95	1.99	+0.04	Satisfactory
3.68	3.73	+0.05	Satisfactory
6.26	6.21	-0.05	Satisfactory

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

(4) Conductivity at 25°C

Conc. of KCl (M)	Expected Reading (µS/cm)	Displayed Reading (µS/cm)	Tolerance (%)	Results
0.001	146.9	150.6	+2.5	Satisfactory
0.01	1412	1377	-2.5	Satisfactory
0.1	12890	12598	-2.3	Satisfactory
0.5	58670	57622	-1.8	Satisfactory
1.0	111900	107426	-4.0	Satisfactory

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

(5) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	9.92	-0.8	Satisfactory
20	19.79	-1.1	Satisfactory
30	29.80	-0.7	Satisfactory

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

(6) Turbidity

Expected Reading (NTU)	Displayed Reading[f] (NTU)	Tolerance[g] (%)	Results
0	0.1	--	--
10	10.6	+6.0	Satisfactory
20	19.4	-3.0	Satisfactory
100	95.9	-4.1	Satisfactory
800	790.1	-1.2	Satisfactory

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

~ END OF REPORT ~

Remark(s): -

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

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

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

REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AH020040
Date of Issue : 07 February 2018

PART A – CUSTOMER INFORMATION

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

PART B – DESCRIPTION

Name of Equipment	:	YSI ProDSS (Multi-Parameters)
Manufacturer	:	YSI (a xylem brand)
Serial Number	:	16H104234
Date of Received	:	Feb 06, 2018
Date of Calibration	:	Feb 06, 2018 to Feb 06, 2018
Date of Next Calibration[a]	:	May 06, 2018

PART C – REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

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

PART D – CALIBRATION RESULTS[b,c]

(1) pH at 25°C

Target (pH unit)	Displayed Reading[d] (pH Unit)	Tolerance[e](pH Unit)	Results
4.00	4.03	+0.03	Satisfactory
7.42	7.40	-0.02	Satisfactory
10.01	10.05	+0.04	Satisfactory

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

(2) Temperature

Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)	Results
14.0	13.9	-0.1	Satisfactory
26.0	26.1	+0.1	Satisfactory
33.0	32.8	-0.2	Satisfactory

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

~ CONTINUED ON NEXT PAGE ~

Remark(s): -

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

APPROVED SIGNATORY :

FUNG Yuen-ching Aries
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
Tel: (852) 3956 8717; Fax: (852) 3956 3928

REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AH020040
Date of Issue : 07 February 2018

PART D – CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
0.00	0.07	+0.07	Satisfactory
1.95	1.90	-0.05	Satisfactory
3.68	3.66	-0.02	Satisfactory
6.26	6.22	-0.04	Satisfactory

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

(4) Conductivity at 25°C

Conc. of KCl (M)	Expected Reading (µS/cm)	Displayed Reading (µS/cm)	Tolerance (%)	Results
0.001	146.9	149.9	+2.0	Satisfactory
0.01	1412	1362	-3.5	Satisfactory
0.1	12890	12536	-2.7	Satisfactory
0.5	58670	58006	-1.1	Satisfactory
1.0	111900	107622	-3.8	Satisfactory

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

(5) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	9.95	-0.5	Satisfactory
20	19.86	-0.7	Satisfactory
30	29.88	-0.4	Satisfactory

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

(6) Turbidity

Expected Reading (NTU)	Displayed Reading[f] (NTU)	Tolerance[g] (%)	Results
0	0.1	--	--
10	9.8	-2.0	Satisfactory
20	19.8	-1.0	Satisfactory
100	96.1	-3.9	Satisfactory
800	785.4	-1.8	Satisfactory

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

~ END OF REPORT ~

Remark(s): -

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

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

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

REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AH020037
Date of Issue : 07 February 2018

PART A – CUSTOMER INFORMATION

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

PART B – DESCRIPTION

Name of Equipment	:	YSI ProDSS (Multi-Parameters)
Manufacturer	:	YSI (a xylem brand)
Serial Number	:	17E100747
Date of Received	:	Feb 01, 2018
Date of Calibration	:	Feb 01, 2018 to Feb 01, 2018
Date of Next Calibration[a]	:	May 01, 2018

PART C – REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

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

PART D – CALIBRATION RESULTS[b,c]

(1) pH at 25°C

Target (pH unit)	Displayed Reading[d] (pH Unit)	Tolerance[e](pH Unit)	Results
4.00	4.08	+0.08	Satisfactory
7.42	7.48	+0.06	Satisfactory
10.01	10.03	+0.02	Satisfactory

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

(2) Temperature

Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)	Results
14.0	13.8	-0.2	Satisfactory
26.0	25.8	-0.2	Satisfactory
33.0	33.1	+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 the acceptance criteria applicable for similar equipment used by QPT or quoted form relevant international standards.*

APPROVED SIGNATORY : _____
FUNG Yuen-ching Aries
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
Tel: (852) 3956 8717; Fax: (852) 3956 3928

REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AH020037
Date of Issue : 07 February 2018

PART D – CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
0.00	0.03	0.03	Satisfactory
1.95	1.88	-0.07	Satisfactory
3.68	3.61	-0.07	Satisfactory
6.26	6.20	-0.06	Satisfactory

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

(4) Conductivity at 25°C

Conc. of KCl (M)	Expected Reading (µS/cm)	Displayed Reading (µS/cm)	Tolerance (%)	Results
0.001	146.9	144.2	-1.8	Satisfactory
0.01	1412	1383	-2.1	Satisfactory
0.1	12890	12603	-2.2	Satisfactory
0.5	58670	57995	-1.2	Satisfactory
1.0	111900	109400	-2.2	Satisfactory

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

(5) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	9.82	-1.8	Satisfactory
20	19.81	-1.0	Satisfactory
30	29.74	-0.9	Satisfactory

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

(6) Turbidity

Expected Reading (NTU)	Displayed Reading[f] (NTU)	Tolerance[g] (%)	Results
0	0.1	--	--
10	10.1	1.0	Satisfactory
20	20.4	2.0	Satisfactory
100	103.2	3.2	Satisfactory
800	781.2	-2.3	Satisfactory

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

~ END OF REPORT ~

Remark(s): -

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

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

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

REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AH020041
Date of Issue : 07 February 2018

PART A – CUSTOMER INFORMATION

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

PART B – DESCRIPTION

Name of Equipment	:	YSI ProDSS (Multi-Parameters)
Manufacturer	:	YSI (a xylem brand)
Serial Number	:	17H105557
Date of Received	:	Feb 06, 2018
Date of Calibration	:	Feb 06, 2018 to Feb 06, 2018
Date of Next Calibration[(a)]	:	May 06, 2018

PART C – REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

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

PART D – CALIBRATION RESULTS[(b,c)]

(1) pH at 25°C

Target (pH unit)	Displayed Reading[(d)] (pH Unit)	Tolerance[(e)](pH Unit)	Results
4.00	4.08	+0.08	Satisfactory
7.42	7.47	+0.05	Satisfactory
10.01	10.07	+0.06	Satisfactory

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

(2) Temperature

Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)	Results
14.0	13.8	-0.2	Satisfactory
26.0	25.7	-0.3	Satisfactory
33.0	32.6	-0.4	Satisfactory

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

~ CONTINUED ON NEXT PAGE ~

Remark(s): -

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

APPROVED SIGNATORY : _____
FUNG Yuen-ching Aries
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
Tel: (852) 3956 8717; Fax: (852) 3956 3928

REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AH020041
Date of Issue : 07 February 2018

PART D – CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
0.00	0.02	+0.02	Satisfactory
1.95	1.93	-0.02	Satisfactory
3.68	3.59	-0.09	Satisfactory
6.26	6.24	-0.02	Satisfactory

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

(4) Conductivity at 25°C

Conc. of KCl (M)	Expected Reading (µS/cm)	Displayed Reading (µS/cm)	Tolerance (%)	Results
0.001	146.9	143.6	-2.2	Satisfactory
0.01	1412	1394	-1.3	Satisfactory
0.1	12890	12770	-0.9	Satisfactory
0.5	58670	57972	-1.2	Satisfactory
1.0	111900	109332	-2.3	Satisfactory

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

(5) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	9.89	-1.1	Satisfactory
20	19.76	-1.2	Satisfactory
30	29.70	-1.0	Satisfactory

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

(6) Turbidity

Expected Reading (NTU)	Displayed Reading[f] (NTU)	Tolerance[g] (%)	Results
0	0.1	--	--
10	9.6	-4.0	Satisfactory
20	19.6	-2.0	Satisfactory
100	96.5	-3.5	Satisfactory
800	779.6	-2.6	Satisfactory

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

~ END OF REPORT ~

Remark(s): -

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

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

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

CALIBRATION REPORT

Test Report No. : AH020097-R
Date of Issue : 04 April 2018

PART A – CUSTOMER INFORMATION

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

PART B – SAMPLE INFORMATION

Description of Samples	:	Titrette® bottle-top burette, 50mL
Brand Name	:	BRAND
Model Number	:	6761161
Serial Number	:	10N60623
Date of Received	:	Feb 15, 2018
Date of Calibration	:	Feb 22, 2018
Date of Next Calibration[a]	:	May 22, 2018

PART C – CALIBRATION REQUESTED

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

~ Continued On Next Page ~

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

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

This report supersedes the previous report AH020097 dated 22 February 2018.

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

CALIBRATION REPORT

PART D – RESULT[(b),(c)]

Water temperature: 20.4 °C
Relative humidity: 58%
z-Factor: 1.0030

Trial	Nominal volume (mL) at interval				
	3	3	3	3	3
	Range: (1-4)	Range: (16-19)	Range: (23-26)	Range: (34-37)	Range: (42-45)
1	2.9889	2.9855	2.9859	2.9900	2.9797
2	2.9874	2.9838	2.9834	2.9795	2.9865
3	2.9861	2.9812	2.9845	2.9826	2.9830
4	2.9925	2.9842	2.9831	2.9845	2.9824
5	2.9869	2.9832	2.9767	2.9816	2.9830
6	2.9912	2.9831	2.9761	2.9798	2.9831
7	2.9810	2.9859	2.9854	2.9887	2.9858
8	2.9863	2.9902	2.9929	2.9781	2.9825
9	2.9889	2.9822	2.9846	2.9775	2.9892
10	2.9862	2.9816	2.9841	2.9790	2.9861
Average	2.9875	2.9841	2.9837	2.9821	2.9841
Standard deviation	0.0032	0.0026	0.0047	0.0044	0.0027
Calculated volume (mL)	2.9965	2.9930	2.9926	2.9911	2.9931
Error (%)	-0.1166	-0.2319	-0.2460	-0.2975	-0.2306
RSD (%)	0.1057	0.0881	0.1580	0.1457	0.0911

Acceptance Criteria [(d)]

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

~ END OF REPORT ~

Remark(s): -

(b) The results relate only to the tested sample as received

(c) The performance of the equipment stated in this report is checked with independent reference material and results compared against a calibrated secondary source.

(d) The "acceptance criteria" is applicable for similar equipment used by QPT or quoted form relevant international standards.

This report supersedes the previous report AH020097 dated 22 February 2018.

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. : AH030026
Date of Issue : 09 March 2018

PART A – CUSTOMER INFORMATION

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

PART B – DESCRIPTION

Name of Equipment	:	YSI 6920 v2 (Multi-Parameters)
Manufacturer	:	YSI (a xylem brand)
Serial Number	:	0001C6A7
Date of Received	:	Mar 02, 2018
Date of Calibration	:	Mar 02, 2018 to Mar 02, 2018
Date of Next Calibration[a]	:	Jun 02, 2018

PART C – REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

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

PART D – CALIBRATION RESULTS[b,c]

(1) pH at 25°C

Target (pH unit)	Displayed Reading[d] (pH Unit)	Tolerance[e](pH Unit)	Results
4.00	3.95	-0.05	Satisfactory
7.42	7.39	-0.03	Satisfactory
10.01	10.06	+0.05	Satisfactory

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

(2) Temperature

Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)	Results
18.0	17.9	-0.1	Satisfactory
22.0	21.9	-0.1	Satisfactory
36.0	35.9	-0.1	Satisfactory

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

~ CONTINUED ON NEXT PAGE ~

Remark(s): -

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

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

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. : AH030026
Date of Issue : 09 March 2018

PART D – CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
0.00	0.13	+0.13	Satisfactory
2.44	2.40	-0.04	Satisfactory
5.84	5.77	-0.07	Satisfactory
7.06	6.99	-0.07	Satisfactory
8.53	8.50	-0.03	Satisfactory

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

(4) Conductivity at 25°C

Conc. of KCl (M)	Expected Reading (µS/cm)	Displayed Reading (µS/cm)	Tolerance (%)	Results
0.001	146.9	143.2	-2.5	Satisfactory
0.01	1412	1429	+1.2	Satisfactory
0.1	12890	12730	-1.2	Satisfactory
0.5	58670	58276	-0.7	Satisfactory
1.0	111900	109414	-2.2	Satisfactory

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

(5) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	9.97	-0.3	Satisfactory
20	19.89	-0.5	Satisfactory
30	29.84	-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	0.1	--	--
10	9.5	-0.5	Satisfactory
20	19.4	-3.0	Satisfactory
100	94.7	-5.3	Satisfactory
800	779	-2.6	Satisfactory

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

~ END OF REPORT ~

Remark(s): -

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

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

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

REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AH030025
Date of Issue : 09 March 2018

PART A – CUSTOMER INFORMATION

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

PART B – DESCRIPTION

Name of Equipment	:	YSI 6920 (Multi-Parameters)
Manufacturer	:	YSI (a xylem brand)
Serial Number	:	000109DF
Date of Received	:	Mar 02, 2018
Date of Calibration	:	Mar 02, 2018 to Mar 02, 2018
Date of Next Calibration[(a)]	:	Jun 02, 2018

PART C – REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

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

PART D – CALIBRATION RESULTS[(b,c)]

(1) pH at 25°C

Target (pH unit)	Displayed Reading[(d)] (pH Unit)	Tolerance[(e)](pH Unit)	Results
4.00	3.97	-0.03	Satisfactory
7.42	7.46	+0.04	Satisfactory
10.01	10.08	+0.07	Satisfactory

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

(2) Temperature

Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)	Results
18.0	17.9	-0.1	Satisfactory
22.0	21.9	-0.1	Satisfactory
36.0	35.9	-0.1	Satisfactory

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

~ CONTINUED ON NEXT PAGE ~

Remark(s): -

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

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

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. : AH030025
Date of Issue : 09 March 2018

PART D – CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
0.00	0.16	+0.16	Satisfactory
2.44	2.38	-0.06	Satisfactory
5.84	5.77	-0.07	Satisfactory
7.06	6.98	-0.08	Satisfactory
8.53	8.48	-0.05	Satisfactory

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

(4) Conductivity at 25°C

Conc. of KCl (M)	Expected Reading (µS/cm)	Displayed Reading (µS/cm)	Tolerance (%)	Results
0.001	146.9	144	-2.0	Satisfactory
0.01	1412	1422	+0.7	Satisfactory
0.1	12890	12716	-1.3	Satisfactory
0.5	58670	57921	-1.3	Satisfactory
1.0	111900	109891	-1.8	Satisfactory

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

(5) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	9.92	-0.8	Satisfactory
20	19.90	-0.5	Satisfactory
30	29.78	-0.7	Satisfactory

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

(6) Turbidity

Expected Reading (NTU)	Displayed Reading[f] (NTU)	Tolerance[g] (%)	Results
0	0.1	--	--
10	9.7	-3.0	Satisfactory
20	19.6	-2.0	Satisfactory
100	96.4	-3.6	Satisfactory
800	782	-2.2	Satisfactory

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

~ END OF REPORT ~

Remark(s): -

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

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

Appendix E. Status of Environmental Permits and Licences

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

Contract No.	Description	Location	Permit/ Reference No.	Status
P560 (R)	Notification of Construction Work under APCO	Launching Site	423880	Receipt acknowledged by EPD on 1 Dec 2017
		Site Office	397151	Receipt acknowledged by EPD on 15 Jan 2016
		Stockpiling Area	398015	Receipt acknowledged by EPD on 18 Jan 2016
		Sheung Sha Chau	405860	Receipt acknowledged by EPD on 5 Aug 2016
	Construction Noise Permit (General Works)	Launching Site	GW-RS0096-18	Valid until 6 Aug 2018
		Sheung Sha Chau	GW-RW0533-17	Valid until 8 Apr 2018
		Stockpiling Area	GW-RS0043-18	Valid until 13 Aug 2018
	Discharge License under WPCO	Launching Site	WT00024249-2016	Approved on 25 Apr 2016
		Stockpiling Area	WT00024250-2016	Approved on 25 Apr 2016
	Registration as Chemical Waste Producer	Launching Site	WPN 5213-951-L2902-01	Registration was updated on 29 Sep 2017
		Sheung Sha Chau	WPN 5111-434-L2902-03	Registration was updated on 6 Oct 2017
		Stockpiling Area	WPN 5213-951-L2902-02	Registration was updated on 3 Oct 2016
	Bill Account for disposal		A/C 7023982	Approval granted from EPD on 14 Dec 2015
3201	Notification of Construction Work under APCO	Works area of 3201	406004	Receipt acknowledged by EPD on 10 Aug 2016
	Construction Noise Permit (General Works)	Works area of 3201	GW-RS0131-18	Superseded by GW-RS0187-18 on 13 Mar 2018
		Works area of 3201	GW-RS0187-18	Valid until 6 Sep 2018
	Registration as Chemical Waste Producer	Works area of 3201	WPN 5213-951-P3231-01	Completion of Registration on 9 Sep 2016
	Bill Account for disposal		A/C 7025760	Approval granted from EPD on 31 Aug 2016

Contract No.	Description	Location	Permit/ Reference No.	Status
3202	Notification of Construction Work under APCO	Works area of 3202	407624	Receipt acknowledged by EPD on 15 Sep 2016
	Construction Noise Permit (General Works)	Works area of 3202	GW-RS0083-18	Valid until 31 Jul 2018
	Registration as Chemical Waste Producer	Works area of 3202	WPN 5213-951-S3967-01	Registration was updated on 23 May 2017
	Discharge License	Works area of 3202	WT00028293-2017	Valid from 12 Jun 2017 to 30 Jun 2022
	Bill Account for disposal		A/C 7025739	Approval granted from EPD on 31 August 2016
3203	Notification of Construction Work under APCO	Works area of 3203	407053	Receipt acknowledged by EPD on 2 Sep 2016
	Construction Noise Permit (General Works)	Works area of 3203	GW-RS1172-17	Valid until 28 Jun 2018
	Registration as Chemical Waste Producer	Works area of 3203	WPN 5213-951-S3954-01	Registration was updated on 12 Dec 2016
	Discharge License	Works area of 3203	WT00028251-2017	Valid from 9 Jun 2017 to 30 Jun 2022
	Bill Account for disposal		A/C 7025846	Approval granted from EPD on 9 Sep 2016
3204	Notification of Construction Work under APCO	Works area of 3204	406446	Receipt acknowledged by EPD on 19 Aug 2016
	Construction Noise Permit (General Works)	Works Area of 3204	GW-RS0132-18	Superseded by GW-RS0188-18 on 13 Mar 2018
		Works Area of 3204	GW-RS0188-18	Valid until 6 Sep 2018
	Registration as Chemical Waste Producer	Works Area of 3204	WPN 5213-951-C4102-01	Completion of Registration on 15 Sep 2016
		Site Office of 3204	WPN 5213-951-C4102-02	Completion of Registration on 17 Mar 2017
	Discharge License	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-RS0189-18	Valid until 6 Sep 2018
		Works Area of 3205	GW-RS0085-18	Superseded by GW-RS0133-18 on 27 Feb 2018

Contract No.	Description	Location	Permit/ Reference No.	Status
		Works Area of 3205	GW-RS0133-18	Valid until 16 Aug 2018
	Discharge License	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-RS0134-18	Superseded by GW-RS0190-18 on 13 Mar 2018
		Works Area of 3206	GW-RS0190-18	Valid until 6 Sep 2018
	Bill Account for disposal	Works area of 3206	A/C 7026398	Approval granted from EPD on 16 Nov 2016
3301	Notification of Construction Work under APCO	Works area of 3301	415821	Receipt acknowledged by EPD on 19 Apr 2017
	Registration as Chemical Waste Producer	Works area of 3301	WPN 5213-951-F2718-02	Completion of Registration on 9 Jun 2017
	Bill Account for disposal	Works area of 3301	A/C 7027728	Approval granted from EPD on 8 May 2017
	Construction Noise Permit (General Works)	Works area of 3301 (Cable ducting works)	GW-RS0991-17	Valid until 14 May 2018
		Works area of 3301	GW-RS1184-17	Valid until 7 July 2018
3501	Notification of Construction Work under APCO	Works area of 3501	417903	Receipt acknowledged by EPD on 13 Jun 2017
	Registration as Chemical Waste Producer	Works area of 3501	WPN 5213-951-B2520-02	Completion of Registration on 25 Jul 2017
	Bill Account for disposal	Works area of 3501	A/C 7028144	Approval granted from EPD on 23 Jun 2017
	Construction Noise Permit (General Works)	Works area of 3501	GW-RS1187-17	Valid until 1 July 2018
3502	Notification of Construction Work under APCO	Works area of 3502	417511	Receipt acknowledged by EPD on 2 Jun 2017
	Registration as Chemical Waste Producer	Works area of 3502	WPN 5213-951-B2520-01	Completion of Registration on 3 Jul 2017
	Bill Account for disposal	Works area of 3502	A/C 7028050	Approval granted from EPD on 21 Jun 2017

Contract No.	Description	Location	Permit/ Reference No.	Status
	Construction Noise Permit (General Works)	Works area of 3502	GW-RS0784-17	Valid until 10 Mar 2018
			GW-RS0193-18	Valid until 10 Sep 2018
3503	Notification of Construction Work under APCO	Works area of 3503	424591	Receipt acknowledged by EPD on 8 Dec 2017
	Registration as Chemical Waste Producer	Works area of 3503	WPN 5113-951-L2845-02	Completion of Registration on 8 Jan 2018
	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-RS0128-18	Superseded by GW-RS0213-18 on 16 Mar 2018
			GW-RS0213-18	Valid until 13 Sep 2018
3602	Notification of Construction Work under APCO	Works area of 3602	421278	Receipt acknowledged by EPD on 18 Sep 2017
	Registration as Chemical Waste Producer	Works area of 3602	WPN 5296-951-N2673-01	Completion of Registration on 9 Oct 2017
		Site office of 3602	WPN 5296-951-N2673-02	Completion of Registration on 11 Dec 2017
	Bill Account for disposal	Works area of 3602	A/C 7028942	Approval granted from EPD on 6 Oct 2017
3801	Notification of Construction Work under APCO	Works area of 3801	418345	Receipt acknowledged by EPD on 26 Jun 2017
		Works area of 3801	430372	Receipt acknowledged by EPD on 2 Feb 2018
	Registration as Chemical Waste Producer	Works area of 3801	WPN 5296-951-C1169-51	Completion of Registration on 4 Aug 2017
	Discharge License	Works and stockpiling area of 3801	WT00029535-2017	Valid from 24 Nov 2017 to 30 Nov 2022
	Bill Account for disposal	Works area of 3801	A/C 7028254	Approval granted from EPD on 3 Jul 2017
	Construction Noise Permit (General Works)	Works and stockpiling area of 3801	GW-RS1133-17	Superseded by GW-RS0217-18 on 19 Mar 2018
		Works and stockpiling area of 3801	GW-RS0217-18	Valid until 13 Sep 2018
		Works area of 3801	GW-RS0036-18	Superseded by GW-RS0229-18 on 27 Mar 2018
		Works area of 3801	GW-RS0229-18	Valid until 22 May 2018

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

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

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

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

Statistics for Complaints, Notifications of Summons and Prosecution

Reporting Period	Cumulative Statistics		
	Complaints	Notifications of Summons	Prosecutions
This reporting period	0	0	0
From 28 December 2015 to end of the reporting period	10	1	0

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

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

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
01-Mar	08:20	3A061	YFT	Arrival	11.5	-	-
01-Mar	08:56	8S210	XZM	Arrival	11.4	-	-
01-Mar	10:12	3A062	YFT	Arrival	12.4	-	-
01-Mar	10:33	3A163	YFT	Departure	11.8	-	-
01-Mar	10:50	8S212	XZM	Arrival	12.7	-	-
01-Mar	11:08	8S121	XZM	Departure	12.1	-	-
01-Mar	11:17	3A063	YFT	Arrival	13.4	-	-
01-Mar	12:19	3A168	YFT	Departure	13.7	-	-
01-Mar	12:48	8S215	XZM	Arrival	12.2	-	-
01-Mar	12:59	3A064	YFT	Arrival	12	-	-
01-Mar	13:13	8S123	XZM	Departure	11.8	-	-
01-Mar	13:50	3A082	ZUI	Arrival	11.2	-	-
01-Mar	14:22	3A164	YFT	Departure	12	-	-
01-Mar	14:34	3A182	ZUI	Departure	12.1	-	-
01-Mar	14:56	3A065	YFT	Arrival	12.9	-	-
01-Mar	16:23	3A167	YFT	Departure	13.8	-	-
01-Mar	16:51	3A083	ZUI	Arrival	13.2	-	-
01-Mar	16:52	8S218	XZM	Arrival	10.7	-	-
01-Mar	16:53	3A067	YFT	Arrival	11.8	-	-
01-Mar	17:25	3A183	ZUI	Departure	13.2	-	-
01-Mar	17:31	8S126	XZM	Departure	12.8	-	-
01-Mar	19:04	3A166	YFT	Departure	13.4	-	-
01-Mar	19:57	3A084	ZUI	Arrival	12.7	-	-
01-Mar	20:30	3A185	ZUI	Departure	11.4	-	-
01-Mar	20:48	8S2113	XZM	Arrival	12.6	-	-
01-Mar	21:01	3A169	YFT	Departure	12.6	-	-
01-Mar	22:01	8S522	XZM	Departure	13.2	-	-
02-Mar	08:16	3A061	YFT	Arrival	11.2	-	-
02-Mar	08:19	8S210	XZM	Arrival	11.1	-	-
02-Mar	09:51	3A062	YFT	Arrival	11.8	-	-
02-Mar	10:22	3A163	YFT	Departure	12	-	-
02-Mar	10:31	8S212	XZM	Arrival	12.9	-	-
02-Mar	10:50	3A081	ZUI	Arrival	13.1	-	-
02-Mar	11:16	8S121	XZM	Departure	11.9	-	-
02-Mar	11:21	3A063	YFT	Arrival	12.2	-	-
02-Mar	12:21	3A181	ZUI	Departure	13.2	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
02-Mar	12:23	3A168	YFT	Departure	12.3	-	-
02-Mar	12:37	8S215	XZM	Arrival	12.9	-	-
02-Mar	12:53	3A064	YFT	Arrival	12.1	-	-
02-Mar	13:22	8S123	XZM	Departure	13	-	-
02-Mar	13:49	3A082	ZUI	Arrival	13.2	-	-
02-Mar	14:14	3A164	YFT	Departure	12.1	-	-
02-Mar	14:19	3A182	ZUI	Departure	12.8	-	-
02-Mar	14:53	3A065	YFT	Arrival	12.3	-	-
02-Mar	16:12	3A167	YFT	Departure	12.2	-	-
02-Mar	16:49	8S218	XZM	Arrival	10.7	-	-
02-Mar	16:50	3A083	ZUI	Arrival	12.8	-	-
02-Mar	16:55	3A067	YFT	Arrival	11.8	-	-
02-Mar	17:09	3A183	ZUI	Departure	13	-	-
02-Mar	17:18	8S126	XZM	Departure	13	-	-
02-Mar	19:06	3A166	YFT	Departure	13	<= 5	< 1min
02-Mar	19:48	3A084	ZUI	Arrival	12.3	-	-
02-Mar	20:08	3A185	ZUI	Departure	13.4	-	-
02-Mar	20:58	8S2113	XZM	Arrival	10.4	-	-
02-Mar	21:00	3A169	YFT	Departure	11.9	-	-
02-Mar	22:04	8S522	XZM	Departure	11.3	-	-
03-Mar	08:18	3A061	YFT	Arrival	11.6	-	-
03-Mar	08:26	8S210	XZM	Arrival	10.4	-	-
03-Mar	10:03	3A062	YFT	Arrival	11.3	-	-
03-Mar	10:18	3A163	YFT	Departure	12.3	-	-
03-Mar	10:41	3A081	ZUI	Arrival	13.1	-	-
03-Mar	10:44	8S212	XZM	Arrival	11.1	-	-
03-Mar	11:14	8S121	XZM	Departure	10.6	-	-
03-Mar	11:19	3A063	YFT	Arrival	11.3	-	-
03-Mar	12:20	3A168	YFT	Departure	11.8	-	-
03-Mar	12:23	3A181	ZUI	Departure	13.3	-	-
03-Mar	12:45	8S215	XZM	Arrival	13.2	-	-
03-Mar	12:55	3A064	YFT	Arrival	12.5	-	-
03-Mar	13:23	8S123	XZM	Departure	12.5	-	-
03-Mar	13:59	3A082	ZUI	Arrival	12.2	-	-
03-Mar	14:17	3A164	YFT	Departure	12.4	-	-
03-Mar	14:28	3A182	ZUI	Departure	12.3	-	-
03-Mar	14:54	3A065	YFT	Arrival	11.8	-	-
03-Mar	16:19	3A167	YFT	Departure	11.2	-	-
03-Mar	16:45	8S218	XZM	Arrival	13	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
03-Mar	16:48	3A083	ZUI	Arrival	13	-	-
03-Mar	17:02	3A067	YFT	Arrival	12.1	-	-
03-Mar	17:13	3A183	ZUI	Departure	12.9	-	-
03-Mar	17:17	8S126	XZM	Departure	13.3	-	-
03-Mar	19:10	3A166	YFT	Departure	12.8	-	-
03-Mar	19:51	3A084	ZUI	Arrival	11.6	-	-
03-Mar	20:12	3A185	ZUI	Departure	13	-	-
03-Mar	20:45	8S2113	XZM	Arrival	12.1	-	-
03-Mar	20:58	3A169	YFT	Departure	12.4	-	-
03-Mar	21:59	8S522	XZM	Departure	13	-	-
04-Mar	08:16	3A061	YFT	Arrival	10.9	-	-
04-Mar	08:42	8S210	XZM	Arrival	11.1	-	-
04-Mar	10:10	3A062	YFT	Arrival	12.1	-	-
04-Mar	10:23	3A163	YFT	Departure	11.8	-	-
04-Mar	10:34	8S212	XZM	Arrival	11.1	-	-
04-Mar	10:42	3A081	ZUI	Arrival	12.6	-	-
04-Mar	11:00	8S121	XZM	Departure	11.2	-	-
04-Mar	11:20	3A063	YFT	Arrival	11.6	-	-
04-Mar	12:21	3A168	YFT	Departure	11.2	-	-
04-Mar	12:26	3A181	ZUI	Departure	12.9	-	-
04-Mar	12:55	3A064	YFT	Arrival	12.3	-	-
04-Mar	13:17	8S215	XZM	Arrival	12.8	-	-
04-Mar	13:51	8S123	XZM	Departure	11.9	-	-
04-Mar	13:52	3A082	ZUI	Arrival	13.7	-	-
04-Mar	14:25	3A164	YFT	Departure	12.3	-	-
04-Mar	14:28	3A182	ZUI	Departure	12.8	-	-
04-Mar	14:56	3A065	YFT	Arrival	11.3	-	-
04-Mar	16:28	3A167	YFT	Departure	11.9	-	-
04-Mar	16:53	8S218	XZM	Arrival	12.5	-	-
04-Mar	16:54	3A083	ZUI	Arrival	13	-	-
04-Mar	16:57	3A067	YFT	Arrival	11.1	-	-
04-Mar	17:15	3A183	ZUI	Departure	12.9	-	-
04-Mar	17:36	8S126	XZM	Departure	12.4	-	-
04-Mar	19:15	3A166	YFT	Departure	11.6	<= 5	< 1min
04-Mar	19:52	3A084	ZUI	Arrival	12.7	-	-
04-Mar	20:12	3A185	ZUI	Departure	13.1	-	-
04-Mar	20:58	8S2113	XZM	Arrival	11.9	-	-
04-Mar	21:02	3A169	YFT	Departure	12.8	-	-
04-Mar	22:08	8S522	XZM	Departure	12.2	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
05-Mar	08:16	3A061	YFT	Arrival	11.2	-	-
05-Mar	09:11	8S210	XZM	Arrival	11.1	-	-
05-Mar	10:08	3A062	YFT	Arrival	11.3	-	-
05-Mar	10:24	3A163	YFT	Departure	12.3	-	-
05-Mar	10:50	3A081	ZUI	Arrival	12.8	-	-
05-Mar	11:20	3A063	YFT	Arrival	12.1	-	-
05-Mar	11:22	8S212	XZM	Arrival	12.1	-	-
05-Mar	11:50	8S121	XZM	Departure	11.4	-	-
05-Mar	12:19	3A168	YFT	Departure	12.1	-	-
05-Mar	12:22	3A181	ZUI	Departure	12.8	-	-
05-Mar	12:56	3A064	YFT	Arrival	12	-	-
05-Mar	13:34	3A082	ZUI	Arrival	12.9	-	-
05-Mar	13:36	8S215	XZM	Arrival	12.7	-	-
05-Mar	14:18	8S123	XZM	Departure	13.3	-	-
05-Mar	14:19	3A164	YFT	Departure	12.6	-	-
05-Mar	14:22	3A182	ZUI	Departure	13.1	-	-
05-Mar	14:57	3A065	YFT	Arrival	12.2	-	-
05-Mar	16:28	3A167	YFT	Departure	11.8	-	-
05-Mar	16:41	8S218	XZM	Arrival	12.5	-	-
05-Mar	16:45	3A083	ZUI	Arrival	13	-	-
05-Mar	17:17	3A183	ZUI	Departure	12.5	-	-
05-Mar	17:24	3A067	YFT	Arrival	12.2	-	-
05-Mar	17:34	8S126	XZM	Departure	12.2	-	-
05-Mar	19:13	3A166	YFT	Departure	12.4	-	-
05-Mar	20:06	3A084	ZUI	Arrival	12.9	<= 5	< 2mins
05-Mar	20:22	3A185	ZUI	Departure	13.2	-	-
05-Mar	21:11	3A169	YFT	Departure	12.3	-	-
05-Mar	21:40	8S2113	XZM	Arrival	12.5	-	-
05-Mar	22:15	8S522	XZM	Departure	13.2	-	-
06-Mar	08:13	3A061	YFT	Arrival	11.8	<= 5	< 1min
06-Mar	08:26	8S210	XZM	Arrival	11.8	-	-
06-Mar	09:50	3A062	YFT	Arrival	12.8	-	-
06-Mar	10:14	3A163	YFT	Departure	12.9	-	-
06-Mar	10:40	8S212	XZM	Arrival	10.8	-	-
06-Mar	10:49	3A081	ZUI	Arrival	11.6	-	-
06-Mar	10:50	8S121	XZM	Departure	11.7	-	-
06-Mar	11:26	3A063	YFT	Arrival	11.8	-	-
06-Mar	12:18	3A168	YFT	Departure	12.2	-	-
06-Mar	12:21	3A181	ZUI	Departure	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)
06-Mar	12:38	8S215	XZM	Arrival	12.8	-	-
06-Mar	12:53	3A064	YFT	Arrival	13.1	-	-
06-Mar	13:29	8S123	XZM	Departure	13.2	-	-
06-Mar	13:59	3A082	ZUI	Arrival	11.5	-	-
06-Mar	14:20	3A164	YFT	Departure	12.9	-	-
06-Mar	14:29	3A182	ZUI	Departure	13.6	-	-
06-Mar	15:03	3A065	YFT	Arrival	11.7	-	-
06-Mar	16:24	3A167	YFT	Departure	12.3	-	-
06-Mar	16:47	8S218	XZM	Arrival	13.1	-	-
06-Mar	16:50	3A083	ZUI	Arrival	13.2	-	-
06-Mar	16:53	3A067	YFT	Arrival	13.1	-	-
06-Mar	17:08	3A183	ZUI	Departure	12.1	-	-
06-Mar	17:18	8S126	XZM	Departure	12.8	-	-
06-Mar	19:04	3A166	YFT	Departure	12.4	-	-
06-Mar	19:51	3A084	ZUI	Arrival	12.7	-	-
06-Mar	20:06	3A185	ZUI	Departure	13.2	-	-
06-Mar	20:57	8S2113	XZM	Arrival	11.7	-	-
06-Mar	20:58	3A169	YFT	Departure	13.3	-	-
06-Mar	21:57	8S522	XZM	Departure	11.7	-	-
07-Mar	08:11	3A061	YFT	Arrival	11.8	-	-
07-Mar	08:18	8S210	XZM	Arrival	12	-	-
07-Mar	09:54	3A062	YFT	Arrival	10.9	-	-
07-Mar	10:11	3A163	YFT	Departure	11.8	-	-
07-Mar	10:48	3A081	ZUI	Arrival	13	-	-
07-Mar	10:55	8S212	XZM	Arrival	11	-	-
07-Mar	11:19	8S121	XZM	Departure	12	-	-
07-Mar	11:23	3A063	YFT	Arrival	0.0 **	-	-
07-Mar	12:16	3A168	YFT	Departure	0.0 **	-	-
07-Mar	12:17	3A181	ZUI	Departure	12.6	-	-
07-Mar	12:41	8S215	XZM	Arrival	10.6	-	-
07-Mar	12:57	3A064	YFT	Arrival	11.5	-	-
07-Mar	13:19	8S123	XZM	Departure	11.4	-	-
07-Mar	13:46	3A082	ZUI	Arrival	12.4	-	-
07-Mar	14:13	3A182	ZUI	Departure	12.4	-	-
07-Mar	14:18	3A164	YFT	Departure	12.6	-	-
07-Mar	14:59	3A065	YFT	Arrival	11.6	-	-
07-Mar	16:23	3A167	YFT	Departure	12.2	-	-
07-Mar	16:50	3A083	ZUI	Arrival	12.8	-	-
07-Mar	16:52	8S218	XZM	Arrival	11.5	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
07-Mar	16:52	3A067	YFT	Arrival	12.3	-	-
07-Mar	17:06	3A183	ZUI	Departure	12.3	-	-
07-Mar	17:21	8S126	XZM	Departure	11.9	-	-
07-Mar	19:05	3A166	YFT	Departure	10.6	-	-
07-Mar	19:55	3A084	ZUI	Arrival	12.5	-	-
07-Mar	20:10	3A185	ZUI	Departure	12	-	-
07-Mar	20:52	8S2113	XZM	Arrival	11.9	-	-
07-Mar	21:00	3A169	YFT	Departure	12.5	-	-
07-Mar	22:07	8S522	XZM	Departure	12.5	-	-
08-Mar	08:18	3A061	YFT	Arrival	12.8	-	-
08-Mar	08:20	8S210	XZM	Arrival	11.1	-	-
08-Mar	10:02	3A062	YFT	Arrival	11.2	-	-
08-Mar	10:18	3A163	YFT	Departure	12.4	-	-
08-Mar	10:37	8S212	XZM	Arrival	11.6	-	-
08-Mar	10:45	3A081	ZUI	Arrival	11.3	-	-
08-Mar	11:02	8S121	XZM	Departure	12	-	-
08-Mar	11:17	3A063	YFT	Arrival	11.7	-	-
08-Mar	12:18	3A168	YFT	Departure	11.9	-	-
08-Mar	12:19	3A181	ZUI	Departure	13	-	-
08-Mar	12:36	8S215	XZM	Arrival	12.5	-	-
08-Mar	13:07	3A064	YFT	Arrival	12.1	-	-
08-Mar	13:22	8S123	XZM	Departure	12.1	-	-
08-Mar	13:40	3A082	ZUI	Arrival	13.5	-	-
08-Mar	14:17	3A182	ZUI	Departure	12.3	-	-
08-Mar	14:18	3A164	YFT	Departure	12.1	-	-
08-Mar	15:00	3A065	YFT	Arrival	11.7	-	-
08-Mar	16:15	3A167	YFT	Departure	12.3	-	-
08-Mar	16:41	8S218	XZM	Arrival	10.7	-	-
08-Mar	16:44	3A083	ZUI	Arrival	12	-	-
08-Mar	17:02	3A067	YFT	Arrival	12.1	-	-
08-Mar	17:05	3A183	ZUI	Departure	11.9	-	-
08-Mar	17:10	8S126	XZM	Departure	13.8	-	-
08-Mar	19:08	3A166	YFT	Departure	12.3	-	-
08-Mar	19:53	3A084	ZUI	Arrival	12.2	-	-
08-Mar	20:12	3A185	ZUI	Departure	13.1	-	-
08-Mar	21:00	3A169	YFT	Departure	12.8	-	-
08-Mar	21:06	8S2113	XZM	Arrival	11.5	-	-
08-Mar	22:00	8S522	XZM	Departure	10.4	-	-
09-Mar	08:14	3A061	YFT	Arrival	11.1	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
09-Mar	08:21	8S210	XZM	Arrival	12.8	-	-
09-Mar	09:51	3A062	YFT	Arrival	12.2	-	-
09-Mar	10:09	3A163	YFT	Departure	12.8	-	-
09-Mar	10:43	3A081	ZUI	Arrival	11.8	-	-
09-Mar	10:45	8S212	XZM	Arrival	13.3	-	-
09-Mar	11:11	8S121	XZM	Departure	12.9	-	-
09-Mar	11:20	3A063	YFT	Arrival	11.6	-	-
09-Mar	12:15	3A168	YFT	Departure	12	-	-
09-Mar	12:18	3A181	ZUI	Departure	12.2	-	-
09-Mar	12:36	8S215	XZM	Arrival	12.9	-	-
09-Mar	12:59	3A064	YFT	Arrival	12	-	-
09-Mar	13:13	8S123	XZM	Departure	13	-	-
09-Mar	13:44	3A082	ZUI	Arrival	12.2	-	-
09-Mar	14:14	3A164	YFT	Departure	11.8	-	-
09-Mar	14:18	3A182	ZUI	Departure	13.1	-	-
09-Mar	15:05	3A065	YFT	Arrival	11.8	-	-
09-Mar	16:11	3A167	YFT	Departure	12.2	-	-
09-Mar	16:41	3A083	ZUI	Arrival	11.4	-	-
09-Mar	16:43	8S218	XZM	Arrival	13.2	-	-
09-Mar	16:58	3A067	YFT	Arrival	11.9	-	-
09-Mar	17:14	3A183	ZUI	Departure	10.7	-	-
09-Mar	17:23	8S126	XZM	Departure	12.7	-	-
09-Mar	19:05	3A166	YFT	Departure	12.1	-	-
09-Mar	19:54	3A084	ZUI	Arrival	10.8	-	-
09-Mar	20:11	3A185	ZUI	Departure	12.9	-	-
09-Mar	20:53	3A169	YFT	Departure	11.2	-	-
09-Mar	21:05	8S2113	XZM	Arrival	12.2	-	-
09-Mar	21:56	8S522	XZM	Departure	11.4	-	-
10-Mar	08:13	3A061	YFT	Arrival	12.3	-	-
10-Mar	08:20	8S210	XZM	Arrival	11.6	-	-
10-Mar	09:49	3A062	YFT	Arrival	11.7	-	-
10-Mar	10:18	3A163	YFT	Departure	12.1	-	-
10-Mar	10:42	8S212	XZM	Arrival	11.4	-	-
10-Mar	10:51	3A081	ZUI	Arrival	11.3	-	-
10-Mar	11:15	8S121	XZM	Departure	11.7	-	-
10-Mar	11:20	3A063	YFT	Arrival	11.8	-	-
10-Mar	12:17	3A168	YFT	Departure	12.3	-	-
10-Mar	12:19	3A181	ZUI	Departure	12.6	-	-
10-Mar	12:43	8S215	XZM	Arrival	12.1	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
10-Mar	12:55	3A064	YFT	Arrival	11.6	-	-
10-Mar	13:15	8S123	XZM	Departure	12	-	-
10-Mar	13:45	3A082	ZUI	Arrival	12.4	-	-
10-Mar	14:12	3A182	ZUI	Departure	11.2	-	-
10-Mar	14:13	3A164	YFT	Departure	11.6	-	-
10-Mar	14:54	3A065	YFT	Arrival	12	-	-
10-Mar	16:18	3A167	YFT	Departure	12.4	-	-
10-Mar	16:37	8S218	XZM	Arrival	12.1	-	-
10-Mar	16:46	3A083	ZUI	Arrival	12.7	-	-
10-Mar	16:55	3A067	YFT	Arrival	12.2	-	-
10-Mar	17:01	3A183	ZUI	Departure	11.6	-	-
10-Mar	17:06	8S126	XZM	Departure	12.8	-	-
10-Mar	18:54	3A166	YFT	Departure	12	-	-
10-Mar	19:48	3A084	ZUI	Arrival	12.1	-	-
10-Mar	20:06	3A185	ZUI	Departure	12.5	-	-
10-Mar	20:56	8S2113	XZM	Arrival	12.6	-	-
10-Mar	21:09	3A169	YFT	Departure	12	-	-
10-Mar	22:05	8S522	XZM	Departure	12	-	-
11-Mar	08:14	8S210	XZM	Arrival	12.8	-	-
11-Mar	08:20	3A061	YFT	Arrival	11.4	-	-
11-Mar	09:43	3A062	YFT	Arrival	12.4	-	-
11-Mar	10:18	3A163	YFT	Departure	13.2	-	-
11-Mar	10:36	8S212	XZM	Arrival	12.4	<= 5	< 1min
11-Mar	10:44	3A081	ZUI	Arrival	11.1	-	-
11-Mar	11:05	8S121	XZM	Departure	11.4	-	-
11-Mar	11:13	3A063	YFT	Arrival	13.2	-	-
11-Mar	12:22	3A168	YFT	Departure	13	-	-
11-Mar	12:29	3A181	ZUI	Departure	12.4	-	-
11-Mar	12:43	8S215	XZM	Arrival	11.9	-	-
11-Mar	12:54	3A064	YFT	Arrival	12.5	-	-
11-Mar	13:17	8S123	XZM	Departure	12.7	-	-
11-Mar	13:45	3A082	ZUI	Arrival	12.2	-	-
11-Mar	14:24	3A182	ZUI	Departure	12.8	<= 5	< 1min
11-Mar	14:25	3A164	YFT	Departure	13.1	-	-
11-Mar	14:53	3A065	YFT	Arrival	13.4	-	-
11-Mar	16:37	3A167	YFT	Departure	13.7	-	-
11-Mar	16:51	8S218	XZM	Arrival	10.9	-	-
11-Mar	16:57	3A067	YFT	Arrival	13.1	-	-
11-Mar	17:00	3A083	ZUI	Arrival	12.4	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
11-Mar	17:20	3A183	ZUI	Departure	12.9	-	-
11-Mar	17:21	8S126	XZM	Departure	12.5	-	-
11-Mar	19:27	3A166	YFT	Departure	13.9	-	-
11-Mar	19:57	3A084	ZUI	Arrival	12.1	-	-
11-Mar	20:15	3A185	ZUI	Departure	12.5	-	-
11-Mar	20:57	8S2113	XZM	Arrival	13.1	-	-
11-Mar	21:01	3A169	YFT	Departure	13.2	-	-
12-Mar	08:13	3A061	YFT	Arrival	11.9	-	-
12-Mar	08:28	8S210	XZM	Arrival	11.8	-	-
12-Mar	10:04	3A062	YFT	Arrival	12.3	-	-
12-Mar	10:17	3A163	YFT	Departure	12.2	-	-
12-Mar	10:32	8S212	XZM	Arrival	12.4	-	-
12-Mar	10:35	3A081	ZUI	Arrival	12.6	-	-
12-Mar	11:06	8S121	XZM	Departure	11.4	-	-
12-Mar	11:16	3A063	YFT	Arrival	10.9	-	-
12-Mar	12:14	3A181	ZUI	Departure	12.8	-	-
12-Mar	12:18	3A168	YFT	Departure	11	-	-
12-Mar	12:53	3A064	YFT	Arrival	12	-	-
12-Mar	12:58	8S215	XZM	Arrival	11.3	-	-
12-Mar	13:29	8S123	XZM	Departure	13.1	-	-
12-Mar	13:49	3A082	ZUI	Arrival	12.4	-	-
12-Mar	14:12	3A182	ZUI	Departure	11.6	-	-
12-Mar	14:16	3A164	YFT	Departure	12.3	-	-
12-Mar	14:55	3A065	YFT	Arrival	11.8	-	-
12-Mar	16:22	3A167	YFT	Departure	12.4	-	-
12-Mar	16:47	8S218	XZM	Arrival	11.6	-	-
12-Mar	16:54	3A083	ZUI	Arrival	12.8	-	-
12-Mar	16:55	3A067	YFT	Arrival	12.1	-	-
12-Mar	17:11	3A183	ZUI	Departure	12.9	-	-
12-Mar	17:16	8S126	XZM	Departure	13.1	-	-
12-Mar	19:01	3A166	YFT	Departure	12.8	-	-
12-Mar	19:47	3A084	ZUI	Arrival	11.5	-	-
12-Mar	20:06	3A185	ZUI	Departure	12.7	-	-
12-Mar	20:50	8S2113	XZM	Arrival	11.8	-	-
12-Mar	21:04	3A169	YFT	Departure	12.1	-	-
13-Mar	08:20	3A061	YFT	Arrival	12.2	-	-
13-Mar	08:23	8S210	XZM	Arrival	12.4	-	-
13-Mar	10:00	3A062	YFT	Arrival	11.4	-	-
13-Mar	10:14	3A163	YFT	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)
13-Mar	10:29	8S212	XZM	Arrival	13	-	-
13-Mar	10:50	3A081	ZUI	Arrival	12.1	-	-
13-Mar	11:01	8S121	XZM	Departure	12.7	-	-
13-Mar	11:16	3A063	YFT	Arrival	11.7	-	-
13-Mar	12:11	3A168	YFT	Departure	12.7	-	-
13-Mar	12:12	3A181	ZUI	Departure	13	-	-
13-Mar	12:51	8S215	XZM	Arrival	11.8	-	-
13-Mar	13:01	3A064	YFT	Arrival	11.8	-	-
13-Mar	13:28	8S123	XZM	Departure	12.5	-	-
13-Mar	13:42	3A082	ZUI	Arrival	12.5	-	-
13-Mar	14:13	3A182	ZUI	Departure	13.1	-	-
13-Mar	14:17	3A164	YFT	Departure	11	-	-
13-Mar	14:54	3A065	YFT	Arrival	12.4	-	-
13-Mar	16:16	3A167	YFT	Departure	12.2	-	-
13-Mar	16:37	3A083	ZUI	Arrival	11.8	-	-
13-Mar	16:39	8S218	XZM	Arrival	10.9	-	-
13-Mar	16:55	3A067	YFT	Arrival	11.1	-	-
13-Mar	17:00	3A183	ZUI	Departure	13	-	-
13-Mar	17:13	8S126	XZM	Departure	13.1	-	-
13-Mar	19:00	3A166	YFT	Departure	13	-	-
13-Mar	19:50	3A084	ZUI	Arrival	10.5	-	-
13-Mar	20:08	3A185	ZUI	Departure	13.1	-	-
13-Mar	20:52	8S2113	XZM	Arrival	13	-	-
13-Mar	21:05	3A169	YFT	Departure	12.2	-	-
14-Mar	08:12	8S210	XZM	Arrival	12.8	-	-
14-Mar	08:18	3A061	YFT	Arrival	11.7	-	-
14-Mar	10:14	3A062	YFT	Arrival	11.5	-	-
14-Mar	10:26	3A163	YFT	Departure	11.7	-	-
14-Mar	10:44	8S212	XZM	Arrival	12	-	-
14-Mar	10:45	3A081	ZUI	Arrival	11.6	-	-
14-Mar	11:19	8S121	XZM	Departure	12.1	-	-
14-Mar	11:26	3A063	YFT	Arrival	12.4	-	-
14-Mar	12:15	3A168	YFT	Departure	12.7	-	-
14-Mar	12:21	3A181	ZUI	Departure	12.8	-	-
14-Mar	12:46	8S215	XZM	Arrival	12.7	-	-
14-Mar	13:00	3A064	YFT	Arrival	11.9	-	-
14-Mar	13:25	8S123	XZM	Departure	13.5	-	-
14-Mar	13:58	3A082	ZUI	Arrival	13	<= 5	< 1min
14-Mar	14:13	3A164	YFT	Departure	11.7	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
14-Mar	14:42	3A182	ZUI	Departure	11.5	-	-
14-Mar	14:56	3A065	YFT	Arrival	12.6	-	-
14-Mar	16:14	3A167	YFT	Departure	13.3	-	-
14-Mar	16:37	3A083	ZUI	Arrival	12.3	-	-
14-Mar	16:39	8S218	XZM	Arrival	11	-	-
14-Mar	16:59	3A067	YFT	Arrival	11.3	-	-
14-Mar	17:02	3A183	ZUI	Departure	12.7	-	-
14-Mar	17:13	8S126	XZM	Departure	12.9	-	-
14-Mar	19:03	3A166	YFT	Departure	11.9	-	-
14-Mar	19:50	3A084	ZUI	Arrival	11.7	-	-
14-Mar	20:08	3A185	ZUI	Departure	13.1	-	-
14-Mar	21:00	8S2113	XZM	Arrival	11.5	-	-
14-Mar	21:01	3A169	YFT	Departure	12	-	-
15-Mar	08:17	3A061	YFT	Arrival	12	-	-
15-Mar	08:21	8S210	XZM	Arrival	13.3	-	-
15-Mar	09:55	3A062	YFT	Arrival	11.5	-	-
15-Mar	10:10	3A163	YFT	Departure	12	-	-
15-Mar	10:35	8S212	XZM	Arrival	13.2	-	-
15-Mar	10:47	3A081	ZUI	Arrival	13.1	-	-
15-Mar	11:06	8S121	XZM	Departure	13	-	-
15-Mar	11:17	3A063	YFT	Arrival	12.3	-	-
15-Mar	12:12	3A168	YFT	Departure	12.2	-	-
15-Mar	12:21	3A181	ZUI	Departure	12.8	-	-
15-Mar	12:51	8S215	XZM	Arrival	12	-	-
15-Mar	12:57	3A064	YFT	Arrival	12.1	-	-
15-Mar	13:42	8S123	XZM	Departure	12.5	-	-
15-Mar	13:58	3A082	ZUI	Arrival	12	-	-
15-Mar	14:14	3A164	YFT	Departure	12	-	-
15-Mar	14:18	3A182	ZUI	Departure	11.7	-	-
15-Mar	14:54	3A065	YFT	Arrival	12	-	-
15-Mar	16:24	3A167	YFT	Departure	12.8	-	-
15-Mar	16:39	8S218	XZM	Arrival	11	-	-
15-Mar	16:46	3A083	ZUI	Arrival	12.8	-	-
15-Mar	17:03	3A067	YFT	Arrival	11.4	-	-
15-Mar	17:04	3A183	ZUI	Departure	12.9	-	-
15-Mar	17:20	8S126	XZM	Departure	13	-	-
15-Mar	19:06	3A166	YFT	Departure	12.8	-	-
15-Mar	19:57	3A084	ZUI	Arrival	12.6	-	-
15-Mar	20:16	3A185	ZUI	Departure	13.1	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
15-Mar	20:53	8S2113	XZM	Arrival	12.8	-	-
15-Mar	20:58	3A169	YFT	Departure	11.8	-	-
15-Mar	21:59	8S522	XZM	Departure	13	-	-
16-Mar	08:19	3A061	YFT	Arrival	11.4	-	-
16-Mar	08:34	8S210	XZM	Arrival	12.5	-	-
16-Mar	09:51	3A062	YFT	Arrival	12.3	-	-
16-Mar	10:12	3A163	YFT	Departure	12.1	-	-
16-Mar	10:32	8S212	XZM	Arrival	11.6	-	-
16-Mar	10:41	3A081	ZUI	Arrival	13.1	-	-
16-Mar	11:04	8S121	XZM	Departure	10.8	-	-
16-Mar	11:16	3A063	YFT	Arrival	12.5	-	-
16-Mar	12:14	3A168	YFT	Departure	13.6	-	-
16-Mar	12:14	3A181	ZUI	Departure	13	-	-
16-Mar	12:57	8S215	XZM	Arrival	13.1	-	-
16-Mar	12:59	3A064	YFT	Arrival	12.5	-	-
16-Mar	13:26	8S123	XZM	Departure	12.9	-	-
16-Mar	13:50	3A082	ZUI	Arrival	12.3	-	-
16-Mar	14:21	3A182	ZUI	Departure	13.6	-	-
16-Mar	14:22	3A164	YFT	Departure	12.1	-	-
16-Mar	14:56	3A065	YFT	Arrival	13.1	-	-
16-Mar	16:17	3A167	YFT	Departure	13.1	-	-
16-Mar	16:46	8S218	XZM	Arrival	12	-	-
16-Mar	17:00	3A083	ZUI	Arrival	12.4	-	-
16-Mar	17:04	3A067	YFT	Arrival	12.6	-	-
16-Mar	17:15	8S126	XZM	Departure	13.1	-	-
16-Mar	17:19	3A183	ZUI	Departure	12.6	-	-
16-Mar	19:11	3A166	YFT	Departure	11.4	-	-
16-Mar	19:31	3A084	ZUI	Arrival	13.1	-	-
16-Mar	20:10	3A185	ZUI	Departure	12.9	-	-
16-Mar	21:01	8S2113	XZM	Arrival	12.3	-	-
16-Mar	21:07	3A169	YFT	Departure	12.5	-	-
16-Mar	22:21	8S522	XZM	Departure	12.8	-	-
17-Mar	08:19	3A061	YFT	Arrival	11.5	-	-
17-Mar	08:30	8S210	XZM	Arrival	12.6	-	-
17-Mar	09:57	3A062	YFT	Arrival	11.3	-	-
17-Mar	10:15	3A163	YFT	Departure	11.3	<= 5	< 1min
17-Mar	10:35	8S212	XZM	Arrival	10.9	-	-
17-Mar	10:48	3A081	ZUI	Arrival	11.4	-	-
17-Mar	11:04	8S121	XZM	Departure	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)
17-Mar	11:15	3A063	YFT	Arrival	12.2	-	-
17-Mar	12:17	3A168	YFT	Departure	12.2	-	-
17-Mar	12:22	3A181	ZUI	Departure	12.9	-	-
17-Mar	12:53	3A064	YFT	Arrival	12.6	-	-
17-Mar	12:56	8S215	XZM	Arrival	11.9	-	-
17-Mar	13:26	8S123	XZM	Departure	12.9	-	-
17-Mar	13:46	3A082	ZUI	Arrival	13.5	<= 5	< 2min
17-Mar	14:18	3A164	YFT	Departure	11.7	-	-
17-Mar	14:21	3A182	ZUI	Departure	13.2	-	-
17-Mar	14:54	3A065	YFT	Arrival	12.3	-	-
17-Mar	16:20	3A167	YFT	Departure	12.2	-	-
17-Mar	16:38	8S218	XZM	Arrival	10.8	-	-
17-Mar	16:47	3A083	ZUI	Arrival	12.9	-	-
17-Mar	16:56	3A067	YFT	Arrival	12.3	-	-
17-Mar	17:05	3A183	ZUI	Departure	13.4	-	-
17-Mar	17:09	8S126	XZM	Departure	13.3	-	-
17-Mar	19:03	3A166	YFT	Departure	13	-	-
17-Mar	19:52	3A084	ZUI	Arrival	12	-	-
17-Mar	20:07	3A185	ZUI	Departure	13.5	-	-
17-Mar	20:54	8S2113	XZM	Arrival	11.6	-	-
17-Mar	21:11	3A169	YFT	Departure	13.7	-	-
18-Mar	08:13	3A061	YFT	Arrival	12.9	-	-
18-Mar	08:30	8S210	XZM	Arrival	11.2	-	-
18-Mar	10:14	3A062	YFT	Arrival	12.3	-	-
18-Mar	10:35	3A163	YFT	Departure	11.5	-	-
18-Mar	10:42	8S212	XZM	Arrival	12.1	-	-
18-Mar	10:48	3A081	ZUI	Arrival	12.4	-	-
18-Mar	11:19	8S121	XZM	Departure	13.5	-	-
18-Mar	11:25	3A063	YFT	Arrival	12.1	-	-
18-Mar	12:17	3A168	YFT	Departure	12.3	-	-
18-Mar	12:23	3A181	ZUI	Departure	13.2	-	-
18-Mar	12:39	8S215	XZM	Arrival	12.6	-	-
18-Mar	13:02	3A064	YFT	Arrival	12	-	-
18-Mar	13:17	8S123	XZM	Departure	13	-	-
18-Mar	13:38	3A082	ZUI	Arrival	13.3	-	-
18-Mar	14:21	3A164	YFT	Departure	12.3	-	-
18-Mar	14:22	3A182	ZUI	Departure	12.3	-	-
18-Mar	14:54	3A065	YFT	Arrival	12.3	-	-
18-Mar	16:28	3A167	YFT	Departure	12.8	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
18-Mar	16:46	8S218	XZM	Arrival	12.6	-	-
18-Mar	16:56	3A083	ZUI	Arrival	12.9	-	-
18-Mar	16:59	3A067	YFT	Arrival	12	-	-
18-Mar	17:12	3A183	ZUI	Departure	12.3	-	-
18-Mar	17:24	8S126	XZM	Departure	13	-	-
18-Mar	19:06	3A166	YFT	Departure	12.5	-	-
18-Mar	19:51	3A084	ZUI	Arrival	12.2	-	-
18-Mar	20:08	3A185	ZUI	Departure	12.8	-	-
18-Mar	20:49	8S2113	XZM	Arrival	10.8	-	-
18-Mar	20:55	3A169	YFT	Departure	13	-	-
18-Mar	22:08	8S522	XZM	Departure	11.1	-	-
19-Mar	08:16	3A061	YFT	Arrival	11.1	-	-
19-Mar	08:21	8S210	XZM	Arrival	11.7	-	-
19-Mar	09:57	3A062	YFT	Arrival	11.6	-	-
19-Mar	10:18	3A163	YFT	Departure	12.2	-	-
19-Mar	10:38	8S212	XZM	Arrival	11.7	-	-
19-Mar	10:44	3A081	ZUI	Arrival	11.9	-	-
19-Mar	11:06	8S121	XZM	Departure	13.5	-	-
19-Mar	11:20	3A063	YFT	Arrival	12.9	-	-
19-Mar	12:17	3A168	YFT	Departure	11.2	-	-
19-Mar	12:25	3A181	ZUI	Departure	12.8	-	-
19-Mar	12:50	8S215	XZM	Arrival	13.1	-	-
19-Mar	13:10	3A064	YFT	Arrival	12.1	-	-
19-Mar	13:24	8S123	XZM	Departure	13.1	-	-
19-Mar	13:53	3A082	ZUI	Arrival	12.6	-	-
19-Mar	14:19	3A182	ZUI	Departure	12.4	-	-
19-Mar	14:21	3A164	YFT	Departure	12.6	-	-
19-Mar	14:59	3A065	YFT	Arrival	12.6	-	-
19-Mar	16:15	3A167	YFT	Departure	11.9	-	-
19-Mar	16:46	8S218	XZM	Arrival	13.4	-	-
19-Mar	16:47	3A083	ZUI	Arrival	12.7	-	-
19-Mar	17:05	3A067	YFT	Arrival	12.1	-	-
19-Mar	17:11	3A183	ZUI	Departure	12.2	-	-
19-Mar	17:14	8S126	XZM	Departure	13.1	-	-
19-Mar	19:09	3A166	YFT	Departure	12.4	-	-
19-Mar	19:51	3A084	ZUI	Arrival	12.2	-	-
19-Mar	20:14	3A185	ZUI	Departure	12.7	-	-
19-Mar	20:59	8S2113	XZM	Arrival	11.9	-	-
19-Mar	21:02	3A169	YFT	Departure	11.6	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
20-Mar	08:14	3A061	YFT	Arrival	11.9	-	-
20-Mar	08:41	8S210	XZM	Arrival	12.7	-	-
20-Mar	09:59	3A062	YFT	Arrival	11.6	-	-
20-Mar	10:23	3A163	YFT	Departure	12.5	-	-
20-Mar	10:42	8S212	XZM	Arrival	11.8	-	-
20-Mar	10:49	3A081	ZUI	Arrival	11.5	-	-
20-Mar	11:10	8S121	XZM	Departure	11.8	-	-
20-Mar	11:25	3A063	YFT	Arrival	11.4	-	-
20-Mar	12:19	3A168	YFT	Departure	11.3	-	-
20-Mar	12:24	3A181	ZUI	Departure	13.1	-	-
20-Mar	12:56	8S215	XZM	Arrival	12.6	-	-
20-Mar	12:58	3A064	YFT	Arrival	12.1	-	-
20-Mar	13:34	8S123	XZM	Departure	13.1	-	-
20-Mar	13:43	3A082	ZUI	Arrival	12.1	-	-
20-Mar	14:21	3A164	YFT	Departure	12.5	-	-
20-Mar	14:22	3A182	ZUI	Departure	12.3	-	-
20-Mar	15:01	3A065	YFT	Arrival	11.8	-	-
20-Mar	16:17	3A167	YFT	Departure	11.8	-	-
20-Mar	16:44	8S218	XZM	Arrival	11.6	-	-
20-Mar	16:46	3A083	ZUI	Arrival	11.7	-	-
20-Mar	16:58	3A067	YFT	Arrival	12.1	-	-
20-Mar	17:06	3A183	ZUI	Departure	12.4	-	-
20-Mar	17:20	8S126	XZM	Departure	12.5	-	-
20-Mar	19:06	3A166	YFT	Departure	13.2	-	-
20-Mar	19:59	3A084	ZUI	Arrival	12.2	-	-
20-Mar	20:14	3A185	ZUI	Departure	13.1	-	-
20-Mar	20:55	8S2113	XZM	Arrival	11.1	-	-
20-Mar	21:08	3A169	YFT	Departure	12.6	-	-
21-Mar	08:17	3A061	YFT	Arrival	12.4	-	-
21-Mar	08:31	8S210	XZM	Arrival	13.2	-	-
21-Mar	10:08	3A062	YFT	Arrival	13.5	-	-
21-Mar	10:21	3A163	YFT	Departure	13.5	-	-
21-Mar	10:42	8S212	XZM	Arrival	11.8	-	-
21-Mar	10:49	3A081	ZUI	Arrival	12.7	-	-
21-Mar	10:52	8S121	XZM	Departure	13.1	-	-
21-Mar	11:21	3A063	YFT	Arrival	12.3	-	-
21-Mar	12:14	3A181	ZUI	Departure	12.5	-	-
21-Mar	12:14	3A168	YFT	Departure	12	-	-
21-Mar	12:49	8S215	XZM	Arrival	12.4	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
21-Mar	12:53	3A064	YFT	Arrival	13.4	-	-
21-Mar	13:28	8S123	XZM	Departure	13.6	-	-
21-Mar	13:50	3A082	ZUI	Arrival	12.7	-	-
21-Mar	14:14	3A164	YFT	Departure	13.8	-	-
21-Mar	14:16	3A182	ZUI	Departure	13.2	-	-
21-Mar	15:03	3A065	YFT	Arrival	12	-	-
21-Mar	16:15	3A167	YFT	Departure	11.4	-	-
21-Mar	16:41	8S218	XZM	Arrival	12	-	-
21-Mar	16:42	3A083	ZUI	Arrival	13.2	-	-
21-Mar	16:56	3A067	YFT	Arrival	13.3	-	-
21-Mar	17:03	3A183	ZUI	Departure	12.4	-	-
21-Mar	17:13	8S126	XZM	Departure	12.7	-	-
21-Mar	19:01	3A166	YFT	Departure	12.5	-	-
21-Mar	19:52	3A084	ZUI	Arrival	11.3	-	-
21-Mar	20:11	3A185	ZUI	Departure	12.9	-	-
21-Mar	20:58	8S2113	XZM	Arrival	12.2	-	-
21-Mar	21:03	3A169	YFT	Departure	12.4	<= 5	< 1min
21-Mar	21:57	8S522	XZM	Departure	13	-	-
22-Mar	08:15	3A061	YFT	Arrival	10.9	-	-
22-Mar	08:23	8S210	XZM	Arrival	11	-	-
22-Mar	09:59	3A062	YFT	Arrival	10.8	-	-
22-Mar	10:20	3A163	YFT	Departure	12	-	-
22-Mar	10:40	8S212	XZM	Arrival	11.1	-	-
22-Mar	10:45	3A081	ZUI	Arrival	13	-	-
22-Mar	11:01	8S121	XZM	Departure	11.8	-	-
22-Mar	11:15	3A063	YFT	Arrival	13.3	<= 5	< 1min
22-Mar	12:15	3A168	YFT	Departure	13.9	-	-
22-Mar	12:18	3A181	ZUI	Departure	11.7	-	-
22-Mar	12:48	8S215	XZM	Arrival	13.2	-	-
22-Mar	12:53	3A064	YFT	Arrival	11.4	-	-
22-Mar	13:19	8S123	XZM	Departure	13	-	-
22-Mar	13:47	3A082	ZUI	Arrival	12.9	-	-
22-Mar	14:14	3A164	YFT	Departure	12.2	-	-
22-Mar	14:15	3A182	ZUI	Departure	11.9	-	-
22-Mar	14:58	3A065	YFT	Arrival	13.8	<= 5	< 1min
22-Mar	16:12	3A167	YFT	Departure	13.7	-	-
22-Mar	16:42	8S218	XZM	Arrival	13	-	-
22-Mar	16:47	3A083	ZUI	Arrival	13.2	-	-
22-Mar	16:51	3A067	YFT	Arrival	11.9	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
22-Mar	17:07	3A183	ZUI	Departure	12.9	-	-
22-Mar	17:08	8S126	XZM	Departure	12.9	-	-
22-Mar	18:58	3A166	YFT	Departure	12.6	-	-
22-Mar	19:52	3A084	ZUI	Arrival	13	-	-
22-Mar	20:11	3A185	ZUI	Departure	12.7	-	-
22-Mar	20:59	3A169	YFT	Departure	12.7	-	-
22-Mar	21:05	8S2113	XZM	Arrival	11.6	-	-
23-Mar	08:17	3A061	YFT	Arrival	12.7	-	-
23-Mar	08:19	8S210	XZM	Arrival	12.8	-	-
23-Mar	09:58	3A062	YFT	Arrival	11.9	-	-
23-Mar	10:14	3A163	YFT	Departure	12.9	-	-
23-Mar	10:37	8S212	XZM	Arrival	11.2	-	-
23-Mar	10:50	3A081	ZUI	Arrival	12.8	-	-
23-Mar	11:03	8S121	XZM	Departure	11.7	-	-
23-Mar	11:22	3A063	YFT	Arrival	11.8	-	-
23-Mar	12:12	3A168	YFT	Departure	12.1	-	-
23-Mar	12:19	3A181	ZUI	Departure	12.6	-	-
23-Mar	12:45	8S215	XZM	Arrival	12.6	-	-
23-Mar	12:54	3A064	YFT	Arrival	12.2	-	-
23-Mar	13:19	8S123	XZM	Departure	13.1	-	-
23-Mar	14:02	3A082	ZUI	Arrival	12.6	-	-
23-Mar	14:14	3A164	YFT	Departure	13.4	-	-
23-Mar	14:43	3A182	ZUI	Departure	12.2	-	-
23-Mar	14:56	3A065	YFT	Arrival	12.2	-	-
23-Mar	16:12	3A167	YFT	Departure	11.8	-	-
23-Mar	16:36	8S218	XZM	Arrival	12.2	-	-
23-Mar	16:42	3A083	ZUI	Arrival	11.8	-	-
23-Mar	16:54	3A067	YFT	Arrival	12.1	-	-
23-Mar	17:05	3A183	ZUI	Departure	13	-	-
23-Mar	17:22	8S126	XZM	Departure	13.4	-	-
23-Mar	19:13	3A166	YFT	Departure	11.1	-	-
23-Mar	19:50	3A084	ZUI	Arrival	11.9	-	-
23-Mar	20:10	3A185	ZUI	Departure	12.8	-	-
23-Mar	20:50	8S2113	XZM	Arrival	12.8	-	-
23-Mar	20:57	3A169	YFT	Departure	12.8	-	-
24-Mar	08:13	3A061	YFT	Arrival	12.4	-	-
24-Mar	08:22	8S210	XZM	Arrival	12.8	-	-
24-Mar	10:03	3A062	YFT	Arrival	12.6	-	-
24-Mar	10:19	3A163	YFT	Departure	12.6	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
24-Mar	10:35	8S212	XZM	Arrival	11.9	-	-
24-Mar	10:47	3A081	ZUI	Arrival	10.7	-	-
24-Mar	10:59	8S121	XZM	Departure	11.8	-	-
24-Mar	11:15	3A063	YFT	Arrival	12	-	-
24-Mar	12:17	3A168	YFT	Departure	12.2	-	-
24-Mar	12:21	3A181	ZUI	Departure	12.4	-	-
24-Mar	12:48	8S215	XZM	Arrival	11.8	-	-
24-Mar	12:57	3A064	YFT	Arrival	13.3	-	-
24-Mar	13:22	8S123	XZM	Departure	13.1	-	-
24-Mar	13:40	3A082	ZUI	Arrival	12.8	-	-
24-Mar	14:14	3A182	ZUI	Departure	12.6	-	-
24-Mar	14:15	3A164	YFT	Departure	13.4	-	-
24-Mar	14:55	3A065	YFT	Arrival	12.3	-	-
24-Mar	16:14	3A167	YFT	Departure	12.4	-	-
24-Mar	16:36	8S218	XZM	Arrival	12.4	-	-
24-Mar	16:44	3A083	ZUI	Arrival	11.2	-	-
24-Mar	16:59	3A067	YFT	Arrival	12.8	-	-
24-Mar	17:03	3A183	ZUI	Departure	12.5	-	-
24-Mar	17:04	8S126	XZM	Departure	12.9	-	-
24-Mar	19:02	3A166	YFT	Departure	12.1	-	-
24-Mar	19:51	3A084	ZUI	Arrival	12	-	-
24-Mar	20:06	3A185	ZUI	Departure	13	-	-
24-Mar	20:58	8S2113	XZM	Arrival	11.4	-	-
24-Mar	21:02	3A169	YFT	Departure	12.3	-	-
24-Mar	21:55	8S522	XZM	Departure	12	-	-
25-Mar	08:13	3A061	YFT	Arrival	11.4	-	-
25-Mar	08:24	8S210	XZM	Arrival	11.6	-	-
25-Mar	08:52	8S192	YFT	Departure	12.6	-	-
25-Mar	09:56	3A062	YFT	Arrival	12.1	-	-
25-Mar	10:14	3A163	YFT	Departure	12.3	-	-
25-Mar	10:36	8S212	XZM	Arrival	11.4	-	-
25-Mar	10:45	3A081	ZUI	Arrival	10.8	-	-
25-Mar	11:12	8S121	XZM	Departure	11.2	-	-
25-Mar	11:16	3A063	YFT	Arrival	12.5	-	-
25-Mar	12:14	3A168	YFT	Departure	13.1	-	-
25-Mar	12:14	3A181	ZUI	Departure	13	-	-
25-Mar	12:44	8S215	XZM	Arrival	13.1	-	-
25-Mar	12:57	3A064	YFT	Arrival	11.8	-	-
25-Mar	13:18	8S123	XZM	Departure	13.3	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
25-Mar	13:49	3A082	ZUI	Arrival	13	-	-
25-Mar	14:12	3A164	YFT	Departure	12.8	-	-
25-Mar	14:13	3A182	ZUI	Departure	12.8	-	-
25-Mar	14:56	3A065	YFT	Arrival	12.1	-	-
25-Mar	16:22	3A167	YFT	Departure	13	-	-
25-Mar	16:34	3A083	ZUI	Arrival	12.5	-	-
25-Mar	16:55	8S218	XZM	Arrival	13	-	-
25-Mar	17:04	3A067	YFT	Arrival	12.4	-	-
25-Mar	17:25	3A183	ZUI	Departure	12.4	-	-
25-Mar	17:30	8S126	XZM	Departure	13.2	-	-
25-Mar	19:03	3A166	YFT	Departure	13.2	-	-
25-Mar	20:00	3A084	ZUI	Arrival	12.3	-	-
25-Mar	20:18	3A185	ZUI	Departure	13.3	-	-
25-Mar	21:00	8S2113	XZM	Arrival	12.9	-	-
25-Mar	21:07	3A169	YFT	Departure	13.1	-	-
26-Mar	08:16	3A061	YFT	Arrival	11.5	-	-
26-Mar	08:24	8S210	XZM	Arrival	10.9	-	-
26-Mar	09:52	3A062	YFT	Arrival	13.2	-	-
26-Mar	10:22	3A163	YFT	Departure	13.6	-	-
26-Mar	10:44	3A081	ZUI	Arrival	12.6	-	-
26-Mar	10:53	8S212	XZM	Arrival	11.5	-	-
26-Mar	11:19	8S121	XZM	Departure	11.8	-	-
26-Mar	11:26	3A063	YFT	Arrival	12.9	-	-
26-Mar	12:17	3A168	YFT	Departure	12.7	-	-
26-Mar	12:18	3A181	ZUI	Departure	12.8	-	-
26-Mar	12:48	8S215	XZM	Arrival	12.6	-	-
26-Mar	12:53	3A064	YFT	Arrival	13.1	-	-
26-Mar	13:23	8S123	XZM	Departure	12.9	-	-
26-Mar	13:47	3A082	ZUI	Arrival	12.3	-	-
26-Mar	14:15	3A164	YFT	Departure	13.3	-	-
26-Mar	14:28	3A182	ZUI	Departure	11.9	-	-
26-Mar	14:52	3A065	YFT	Arrival	13.3	-	-
26-Mar	16:22	3A167	YFT	Departure	13.4	-	-
26-Mar	16:41	8S218	XZM	Arrival	12	-	-
26-Mar	16:50	3A083	ZUI	Arrival	12.1	-	-
26-Mar	16:54	3A067	YFT	Arrival	13.4	-	-
26-Mar	17:07	3A183	ZUI	Departure	10.8	-	-
26-Mar	17:15	8S126	XZM	Departure	13.3	-	-
26-Mar	19:19	3A166	YFT	Departure	10.2	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
26-Mar	19:45	3A084	ZUI	Arrival	13	-	-
26-Mar	20:10	3A185	ZUI	Departure	12.7	-	-
26-Mar	21:04	8S2113	XZM	Arrival	11	-	-
26-Mar	21:11	3A169	YFT	Departure	11.9	-	-
27-Mar	08:16	3A061	YFT	Arrival	12.1	-	-
27-Mar	08:18	8S210	XZM	Arrival	12.2	-	-
27-Mar	10:02	3A062	YFT	Arrival	12.3	-	-
27-Mar	10:24	3A163	YFT	Departure	12.6	-	-
27-Mar	10:31	8S212	XZM	Arrival	13.1	-	-
27-Mar	10:47	3A081	ZUI	Arrival	12.2	-	-
27-Mar	11:15	8S121	XZM	Departure	11.8	-	-
27-Mar	11:20	3A063	YFT	Arrival	11.7	-	-
27-Mar	12:18	3A168	YFT	Departure	11.5	-	-
27-Mar	12:26	3A181	ZUI	Departure	13.3	-	-
27-Mar	12:44	8S215	XZM	Arrival	13.1	-	-
27-Mar	12:53	3A064	YFT	Arrival	12.1	-	-
27-Mar	13:15	8S123	XZM	Departure	12.1	-	-
27-Mar	13:59	3A082	ZUI	Arrival	10.9	-	-
27-Mar	14:15	3A164	YFT	Departure	12.4	-	-
27-Mar	14:17	3A182	ZUI	Departure	12.8	-	-
27-Mar	14:55	3A065	YFT	Arrival	11.7	-	-
27-Mar	16:17	3A167	YFT	Departure	12.2	-	-
27-Mar	16:46	8S218	XZM	Arrival	12.5	-	-
27-Mar	16:48	3A083	ZUI	Arrival	13.1	-	-
27-Mar	16:55	3A067	YFT	Arrival	12.3	-	-
27-Mar	17:11	3A183	ZUI	Departure	12.3	-	-
27-Mar	17:29	8S126	XZM	Departure	12.8	-	-
27-Mar	19:01	3A166	YFT	Departure	13.2	-	-
27-Mar	19:47	3A084	ZUI	Arrival	12.1	-	-
27-Mar	20:11	3A185	ZUI	Departure	12.8	-	-
27-Mar	20:53	8S2113	XZM	Arrival	13.1	-	-
27-Mar	21:03	3A169	YFT	Departure	13.9	-	-
27-Mar	22:05	8S522	XZM	Departure	13.1	-	-
28-Mar	08:18	3A061	YFT	Arrival	12.3	<= 5	< 1min
28-Mar	08:21	8S210	XZM	Arrival	10	-	-
28-Mar	10:15	3A062	YFT	Arrival	11.8	-	-
28-Mar	10:29	3A163	YFT	Departure	11.3	-	-
28-Mar	10:40	8S212	XZM	Arrival	11.6	-	-
28-Mar	10:41	3A081	ZUI	Arrival	12.5	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
28-Mar	11:07	8S121	XZM	Departure	11.7	-	-
28-Mar	11:13	3A063	YFT	Arrival	12.4	-	-
28-Mar	12:13	3A168	YFT	Departure	12.4	-	-
28-Mar	12:14	3A181	ZUI	Departure	12.7	-	-
28-Mar	12:49	8S215	XZM	Arrival	12.3	-	-
28-Mar	12:59	3A064	YFT	Arrival	11.9	-	-
28-Mar	13:29	8S123	XZM	Departure	12.4	-	-
28-Mar	13:40	3A082	ZUI	Arrival	12.2	-	-
28-Mar	14:22	3A164	YFT	Departure	11.5	-	-
28-Mar	14:33	3A182	ZUI	Departure	12.8	-	-
28-Mar	14:56	3A065	YFT	Arrival	12.5	-	-
28-Mar	16:24	3A167	YFT	Departure	13.5	-	-
28-Mar	16:43	8S218	XZM	Arrival	12.1	-	-
28-Mar	16:45	3A083	ZUI	Arrival	12.9	-	-
28-Mar	16:56	3A067	YFT	Arrival	11.9	-	-
28-Mar	17:12	3A183	ZUI	Departure	13.3	-	-
28-Mar	17:30	8S126	XZM	Departure	12.8	-	-
28-Mar	19:01	3A166	YFT	Departure	12.2	-	-
28-Mar	19:49	3A084	ZUI	Arrival	10.8	-	-
28-Mar	20:10	3A185	ZUI	Departure	13.4	-	-
28-Mar	20:52	8S2113	XZM	Arrival	12.5	-	-
28-Mar	21:10	3A169	YFT	Departure	11.7	-	-
29-Mar	08:10	8S210	XZM	Arrival	13.2	-	-
29-Mar	08:16	3A061	YFT	Arrival	12.6	-	-
29-Mar	09:59	3A062	YFT	Arrival	11.8	-	-
29-Mar	10:15	3A163	YFT	Departure	11.5	-	-
29-Mar	10:41	3A081	ZUI	Arrival	12.7	-	-
29-Mar	10:42	8S212	XZM	Arrival	12.4	-	-
29-Mar	11:04	8S121	XZM	Departure	13	-	-
29-Mar	11:19	3A063	YFT	Arrival	12.4	-	-
29-Mar	12:09	3A181	ZUI	Departure	12.9	-	-
29-Mar	12:22	3A168	YFT	Departure	0.0 **	-	-
29-Mar	12:44	8S215	XZM	Arrival	12.3	-	-
29-Mar	12:58	3A064	YFT	Arrival	11.6	-	-
29-Mar	13:17	8S123	XZM	Departure	13	-	-
29-Mar	13:46	3A082	ZUI	Arrival	12.2	-	-
29-Mar	14:12	3A182	ZUI	Departure	12	-	-
29-Mar	14:16	3A164	YFT	Departure	12.6	-	-
29-Mar	15:10	3A065	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)
29-Mar	16:22	3A167	YFT	Departure	13	-	-
29-Mar	16:47	8S218	XZM	Arrival	11.5	-	-
29-Mar	16:51	3A083	ZUI	Arrival	11.4	-	-
29-Mar	17:04	3A067	YFT	Arrival	11.4	-	-
29-Mar	17:05	3A183	ZUI	Departure	12.9	-	-
29-Mar	17:15	8S126	XZM	Departure	12.7	-	-
29-Mar	18:55	3A166	YFT	Departure	12.1	-	-
29-Mar	19:49	3A084	ZUI	Arrival	11.1	-	-
29-Mar	20:12	3A185	ZUI	Departure	12.9	-	-
29-Mar	20:54	8S2113	XZM	Arrival	11.6	-	-
29-Mar	21:17	3A169	YFT	Departure	13.1	-	-
30-Mar	08:14	3A061	YFT	Arrival	11.7	-	-
30-Mar	08:27	8S210	XZM	Arrival	13.1	-	-
30-Mar	10:12	3A062	YFT	Arrival	11.7	-	-
30-Mar	10:29	3A163	YFT	Departure	11.5	-	-
30-Mar	10:39	8S212	XZM	Arrival	12.7	-	-
30-Mar	10:41	3A081	ZUI	Arrival	11.6	-	-
30-Mar	11:05	8S121	XZM	Departure	13.3	-	-
30-Mar	11:12	3A063	YFT	Arrival	12.3	-	-
30-Mar	12:17	3A168	YFT	Departure	12	-	-
30-Mar	12:20	3A181	ZUI	Departure	12.3	-	-
30-Mar	12:42	8S215	XZM	Arrival	12.2	-	-
30-Mar	12:58	3A064	YFT	Arrival	12.2	-	-
30-Mar	13:18	8S123	XZM	Departure	12.9	-	-
30-Mar	13:52	3A082	ZUI	Arrival	12.3	<= 5	< 2min
30-Mar	14:10	3A182	ZUI	Departure	12.6	-	-
30-Mar	14:18	3A164	YFT	Departure	11.9	-	-
30-Mar	14:56	3A065	YFT	Arrival	12	-	-
30-Mar	16:22	3A167	YFT	Departure	12.4	-	-
30-Mar	16:37	8S218	XZM	Arrival	11.8	-	-
30-Mar	16:49	3A083	ZUI	Arrival	11.6	-	-
30-Mar	16:58	3A067	YFT	Arrival	11.5	-	-
30-Mar	17:09	3A183	ZUI	Departure	12.9	-	-
30-Mar	17:24	8S126	XZM	Departure	13.4	-	-
30-Mar	18:59	3A166	YFT	Departure	13.6	-	-
30-Mar	19:57	3A084	ZUI	Arrival	11.4	-	-
30-Mar	20:10	3A185	ZUI	Departure	12.9	-	-
30-Mar	20:53	8S2113	XZM	Arrival	12.5	-	-
30-Mar	21:05	3A169	YFT	Departure	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)
31-Mar	08:14	3A061	YFT	Arrival	12.2	-	-
31-Mar	08:24	8S210	XZM	Arrival	12.8	-	-
31-Mar	09:55	3A062	YFT	Arrival	12	-	-
31-Mar	10:19	3A163	YFT	Departure	12.8	-	-
31-Mar	10:35	8S212	XZM	Arrival	11.3	-	-
31-Mar	10:41	3A081	ZUI	Arrival	12.4	-	-
31-Mar	11:00	8S121	XZM	Departure	11.4	-	-
31-Mar	11:19	3A063	YFT	Arrival	13	-	-
31-Mar	12:20	3A181	ZUI	Departure	12.4	-	-
31-Mar	12:24	3A168	YFT	Departure	13.1	-	-
31-Mar	12:43	8S215	XZM	Arrival	13.1	-	-
31-Mar	13:00	3A064	YFT	Arrival	12.8	-	-
31-Mar	13:21	8S123	XZM	Departure	12.9	-	-
31-Mar	13:40	3A082	ZUI	Arrival	13.3	-	-
31-Mar	14:21	3A164	YFT	Departure	12.7	-	-
31-Mar	14:27	3A182	ZUI	Departure	13.5	-	-
31-Mar	14:54	3A065	YFT	Arrival	13	-	-
31-Mar	16:21	3A167	YFT	Departure	13.2	-	-
31-Mar	16:43	3A083	ZUI	Arrival	12.6	-	-
31-Mar	16:54	8S218	XZM	Arrival	12.9	-	-
31-Mar	17:06	3A183	ZUI	Departure	12.9	-	-
31-Mar	17:12	3A067	YFT	Arrival	12.2	-	-
31-Mar	19:02	8S126	XZM	Departure	12.9	-	-
31-Mar	19:16	3A166	YFT	Departure	12.3	-	-
31-Mar	19:47	3A084	ZUI	Arrival	12	-	-
31-Mar	20:09	3A185	ZUI	Departure	12.8	-	-
31-Mar	20:53	8S2113	XZM	Arrival	11.5	-	-
31-Mar	20:54	3A169	YFT	Departure	12.3	-	-
31-Mar	22:02	8S522	XZM	Departure	12.8	-	-

Follow-up on instantaneous speeding

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

Two HSFs with no transmission of AIS data and one HSFs with insufficient transmission of AIS data were received in March 2018. Vessel captains were requested to provide the AIS plots to indicate the vessel entered the SCZ though the gate access points with no speeding in the SCZ.