MOTT MACDONALD

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

Construction Phase Monthly EM&A Report No.51 (For March 2020)

April 2020

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This Monthly EM&A Report No. 51 has been reviewed and certified by the Environmental Team Leader (ETL) in accordance with Condition 3.5 of Environmental Permit No. EP-489/2014.

Certified by: 

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

Date 14 April 2020

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By Email

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

Attn: Mr. Lawrence Tsui, Principal Manager

14 April 2020

Dear Sir,

Contract No. 3102
3RS Independent Environmental Checker Consultancy Services

Submission of Monthly EM&A Report No. 51 (March 2020)

Reference is made to the Environmental Team's submission of the Monthly EM&A Report No. 51 under Condition 3.5 of the Environmental Permit No. EP-489/2014 certified by the ET Leader on 14 April 2020.

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

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

Yours faithfully,
AECOM Asia Co. Ltd.

Jackel Law
Independent Environmental Checker

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Abbreviations

3RS	Three-Runway System
AAHK	Airport Authority Hong Kong
AECOM	AECOM Asia Company Limited
AFCD	Agriculture, Fisheries and Conservation Department
AIS	Automatic Information System
ANI	Encounter Rate of Number of Dolphins
APM	Automated People Mover
AW	Airport West
BHS	Baggage Handling System
C&D	Construction and Demolition
CAP	Contamination Assessment Plan
CAR	Contamination Assessment Report
CNP	Construction Noise Permit
CWD	Chinese White Dolphin
DCM	Deep Cement Mixing
DEZ	Dolphin Exclusion Zone
DO	Dissolved Oxygen
EAR	Ecological Acoustic Recorder
EIA	Environmental Impact Assessment
EM&A	Environmental Monitoring & Audit
EP	Environmental Permit
EPD	Environmental Protection Department
ET	Environmental Team
FCZ	Fish Culture Zone
HDD	Horizontal Directional Drilling
HKBCF	Hong Kong-Zhuhai-Macao Bridge Hong Kong Boundary Crossing Facilities
HKIA	Hong Kong International Airport
HOKLAS	Hong Kong Laboratory Accreditation Scheme
HSF	High Speed Ferry
HVS	High Volume Sampler
IEC	Independent Environmental Checker
LKC	Lung Kwu Chau
MTCC	Marine Traffic Control Centre
MMHK	Mott MacDonald Hong Kong Limited
MMWP	Marine Mammal Watching Plan
MSS	Maritime Surveillance System
MTRMP-CAV	Marine Travel Routes and Management Plan for Construction and Associated Vessel
NEL	Northeast Lantau
NWL	Northwest Lantau
PAM	Passive Acoustic Monitoring
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 51st Construction Phase Monthly EM&A Report for the Project which summarises the monitoring results and audit findings of the EM&A programme during the reporting period from 1 to 31 March 2020.

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. Works in the reclamation areas included deep cement mixing (DCM) works, marine filling, seawall and facilities construction, together with runway and associated works. Land-side works on Existing Airport Island involved mainly airfield works, foundation and substructure work for Terminal 2 expansion, modification and tunnel work for Automated People Mover (APM) and Baggage Handling System (BHS), and preparation work for utilities, with activities include site establishment, site office construction, road and drainage works, cable ducting, demolition, piling, and excavation works.

EM&A Activities Conducted in the Reporting Period

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

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

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

Snapshots of EM&A Activities in the Reporting Period

		
Environmental Records Checking conducted by ET	Small Vessel Line-transect Survey of CWD conducted by ET	Contract-specific Environmental Management Meeting conducted by AAHK, ET and Contractor to discuss Site Environmental Issues

Results of Impact Monitoring

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

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

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

Summary of Upcoming Key Issues

Advanced Works:

Contract P560 (R) Aviation Fuel Pipeline Diversion Works

- Stockpiling of compressed materials

DCM Works:

Contract 3205 DCM works

- DCM works

Reclamation Works:

Contract 3206 Main Reclamation Works

- Land base ground improvement works;
- Seawall construction;
- Marine filling; and
- Sorting and reuse of inert waste from other 3RS contracts.

Airfield Works:

Contract 3301 North Runway Crossover Taxiway

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

Contract 3302 Eastern Vehicular Tunnel Advance Works

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

Contract 3303 Third Runway and Associated Works

- Plant and equipment mobilisation;
- Footing and utilities work;
- Preparation works for box culvert construction; and
- Site establishment.

Third Runway Concourse and Integrated Airport Centres Works:

Contract 3402 New Integrated Airport Centres Enabling Works

- Potable water and seawater works;
- Footing construction;
- Road works; and
- Sewerage and pipe works.

Contract 3403 New Integrated Airport Centres Building and Civil Works

- Site establishment; and
- Foundation works.

Contract 3405 Three Runway Concourse Foundation and Substructure Works

- Site establishment.

Terminal 2 Expansion Works:

Contract 3501 Antenna Farm and Sewage Pumping Station

- Site clearance.

Contract 3503 Terminal 2 Foundation and Substructure Works

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

Automated People Mover (APM) Works:

Contract 3601 New Automated People Mover System (TRC Line)

- Construction of site office.

Contract 3602 Existing APM System Modification Works

- Modification works at APM depot.

Airport Support Infrastructure & Logistic Works:

Contract 3721 Construction Support Infrastructure Works

- Site clearance and establishment;
- Excavation for utilities works; and
- Construction of utilities and logistic facilities.

Contract 3722 Construction Support Facilities

- Formboard erecting and concreting; and
- Establishment.

Contract 3801 APM and BHS Tunnels on Existing Airport Island

- Construction of temporary traffic steel deck;
- Cofferdam installation for box culvert;
- Rising main installation;
- Drilling and grouting works;
- Piling and foundation works; and
- Site clearance.

Contract 3901B Concrete Batching Facility

- Footing construction; and
- Erection of steelwork.

Summary Table

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

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

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

1 Introduction

1.1 Background

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

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

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

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

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

1.2 Scope of this Report

This is the 51st Construction Phase Monthly EM&A Report for the Project which summarises the key findings of the EM&A programme during the reporting period from 1 to 31 March 2020.

1.3 Project Organisation

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

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

Table 1.1: Contact Information of Key Personnel

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

Advanced Works:

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

Deep Cement Mixing (DCM) Works:

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

Reclamation Works:

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

Airfield Works:

Party	Position	Name	Telephone
Contract 3301 North Runway Crossover Taxiway (FJT-CHEC-ZHEC Joint Venture)	Deputy Project Director	Kin Hang Chung	9800 0048
	Environmental Officer	Joe Wong	6182 0351
Contract 3302 Eastern Vehicular Tunnel Advance Works (China Road and Bridge Corporation)	Project Manager	Wan Cheung Lee	6100 6075
	Environmental Officer	Dennis Ho	5645 0563
Contract 3303 Third Runway and Associated Works (SAPR Joint Venture)	Project Manager	Andrew Keung	6277 6628
	Environmental Officer	Pan Fong	9436 9435

Third Runway Concourse and Integrated Airport Centres Works:

Party	Position	Name	Telephone
Contract 3402 New Integrated Airport Centres Enabling Works (Wing Hing Construction Co., Ltd.)	Contract Manager	Michael Kan	9206 0550
	Environmental Officer	Lisa He	5374 3418
Contract 3403 New Integrated Airport Centres Building and Civil Works (Sun Fook Kong Construction Limited)	Project Manager	Alice Leung	9220 3162
	Environmental Officer	Alpha Chia	9626 1114
Contract 3405 Three Runway Concourse Foundation and Substructure Works (China Road and Bridge Corporation – Bachy Soletanche Group Limited – LT Sambo Co., Ltd. Joint Venture)	Project Manager	Francis Choi	9423 3469
	Environmental Officer	K M Lui	5113 8223

Terminal 2 (T2) Expansion Works:

Party	Position	Name	Telephone
Contract 3501 Antenna Farm and Sewage Pumping Station (Build King Construction Ltd.)	Contracts Manager	Vincent Kwan	9833 1313
	Environmental Officer	Edward Tam	9287 8270
Contract 3503 Terminal 2 Foundation and Substructure Works (Leighton – Chun Wo Joint Venture)	Project Manager	Eric Wu	3973 1718
	Environmental Officer	Malcolm Leung	3973 0850

Automated People Mover (APM) Works:

Party	Position	Name	Telephone
Contract 3601 New Automated People Mover System (TRC Line) (CRRC Puzhen Bombardier Transportation Systems Limited and CRRC Nanjing Puzhen Co., Ltd. Joint Venture)	Project Manager	HongDan Wei	158 6180 9450
	Environmental Officer	K F Li	9086 1793
Contract 3602 Existing APM System Modification Works (Niigata Transys Co., Ltd.)	Project Manager	Kunihiro Tatecho	9755 0351
	Environmental Officer	Yolanda Gao	5399 3509

Baggage Handling System (BHS) Works:

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

Airport Support Infrastructure and Logistic Works:

Party	Position	Name	Telephone
Contract 3721 Construction Support Infrastructure Works (China State Construction Engineering (Hong Kong) Ltd.)	Site Agent	Thomas Lui	9011 5340
	Environmental Officer	Xavier Lam	9493 2944
Contract 3722 Western Support Area – Construction Support Facilities (Tapbo Construction Company Limited and Konwo Modular House Limited Joint Venture)	Project Manager	Lawrence Chan	9049 3161
	Environmental Officer	Sampson Lo	9752 9118
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
Contract 3901B Concrete Batching Facility (Gammon Construction Limited)	General Manager	Herbert Zheng	9177 9596
	Environmental Officer	Rex Wong	9108 1705

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. Works in the reclamation areas included DCM works, marine filling, seawall and facilities construction, together with runway and associated works. Land-side works on Existing Airport Island involved mainly airfield works, foundation and substructure work for Terminal 2 expansion, modification and tunnel work for APM and BHS systems, and preparation work for utilities, with activities include site establishment, site office construction, road and drainage works, cable ducting, demolition of existing facilities, piling, and excavation works.

The locations of key construction activities are presented in **Figure 1.1**.

1.5 Summary of EM&A Programme Requirements

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

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

Parameters	Status
Air Quality	
Baseline Monitoring	The baseline air quality monitoring result has been reported in Baseline Monitoring Report and submitted to EPD under EP Condition 3.4.
Impact Monitoring	On-going
Noise	
Baseline Monitoring	The baseline noise monitoring result has been reported in Baseline Monitoring Report and submitted to EPD under EP Condition 3.4.
Impact Monitoring	On-going
Water Quality	
General Baseline Water Quality Monitoring for reclamation, water jetting and field joint works	The baseline water quality monitoring result has been reported in Baseline Water Quality Monitoring Report and submitted to EPD under EP Condition 3.4.
General Impact Water Quality Monitoring for reclamation, water jetting and field joint works	On-going
Initial Intensive Deep Cement Mixing (DCM) Water Quality Monitoring	The Initial Intensive DCM Monitoring Report was submitted and approved by EPD in accordance with the Detailed Plan on DCM.
Regular DCM Water Quality Monitoring	On-going
Waste Management	
Waste Monitoring	On-going
Land Contamination	
Supplementary Contamination Assessment Plan (CAP)	The Supplementary CAP was submitted to EPD pursuant to EP Condition 2.20.
Contamination Assessment Report (CAR) for Golf Course	The CAR for Golf Course was submitted to EPD.
Contamination Assessment Report (CAR) for Terminal 2 Emergency Power Supply System No.1 (Volume 1)	The CAR for Terminal 2 Emergency Power Supply System No.1 (Volume 1) was submitted to EPD.
Terrestrial Ecology	
Pre-construction Egretry Survey Plan	The Egretry Survey Plan was submitted and approved by EPD under EP Condition 2.14.
Ecological Monitoring	The terrestrial ecological monitoring at Sheung Sha Chau was completed in January 2019.
Marine Ecology	
Pre-Construction Phase Coral Dive Survey	The Coral Translocation Plan was submitted and approved by EPD under EP Condition 2.12.
Coral Translocation	The coral translocation was completed.
Post-Translocation Coral Monitoring	The post-translocation monitoring programme according to the Coral Translocation Plan was completed in April 2018.
Chinese White Dolphins (CWD)	

Parameters	Status
Vessel Survey, Land-based Theodolite Tracking and Passive Acoustic Monitoring (PAM)	
Baseline Monitoring	Baseline CWD results were reported in the CWD Baseline Monitoring Report and submitted to EPD in accordance with EP Condition 3.4.
Impact Monitoring	On-going
Landscape & Visual	
Landscape & Visual Plan	The Landscape & Visual Plan was submitted to EPD under EP Condition 2.18
Baseline Monitoring	The baseline landscape & visual monitoring result has been reported in Baseline Monitoring Report and submitted to EPD under EP Condition 3.4.
Impact Monitoring	On-going
Environmental Auditing	
Regular site inspection	On-going
Marine Mammal Watching Plan (MMWP) implementation measures	On-going
Dolphin Exclusion Zone (DEZ) Plan implementation measures	On-going
SkyPier High Speed Ferries (HSF) implementation measures	On-going
Construction and Associated Vessels Implementation measures	On-going
Complaint Hotline and Email channel	On-going
Environmental Log Book	On-going

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

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

- Two skipper training sessions provided by ET: 4 and 18 March 2020;
- Ten environmental management meetings for EM&A review with works contracts: 4, 5, 10, 11, 12, 18, 24, 26, and 27 March 2020.

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

2 Air Quality Monitoring

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

Table 2.1: Locations of Impact Air Quality Monitoring Stations

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

2.1 Action and Limit Levels

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

Table 2.2: Action and Limit Levels of Air Quality Monitoring

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

2.2 Monitoring Equipment

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

Table 2.3: Air Quality Monitoring Equipment

Equipment	Brand and Model	Last Calibration Date	Calibration Certificate Provided in
Portable direct reading dust meter (Laser dust monitor)	SIBATA LD-3B-2 (Serial No. 296098)	24 Oct 2019	Monthly EM&A Report No. 46, Appendix E

2.3 Monitoring Methodology

2.3.1 Measuring Procedure

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

a. The portable direct reading dust meter was mounted on a tripod at a height of 1.2m above the ground.
b. Prior to the measurement, the equipment was set up for 1 minute span check and 6 second background check.

c. The one hour dust measurement was started. Site conditions and dust sources at the nearby area were recorded on a record sheet.

d. When the measurement completed, the “Count” reading per hour was recorded for result calculation.

2.3.2 Maintenance and Calibration

The portable direct reading dust meter is calibrated every year against high volume sampler (HVS) to check the validity and accuracy of the results measured by direct reading method. The calibration record of the HVS provided in Appendix E of the Construction Phase Monthly EM&A Report No. 46, and the calibration certificates of portable direct reading dust meters listed in **Table 2.3** are valid in the reporting period.

2.4 Summary of Monitoring Results

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

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

Table 2.4: Summary of Air Quality Monitoring Results

Monitoring Station	1-hr TSP Concentration Range (μg/m^3)	Action Level (μg/m^3)	Limit Level (μg/m^3)
AR1A	6 - 35	306	500
AR2	8 - 126	298	

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

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

2.5 Conclusion

No dust emission source from Project and other activities was observed at the monitoring stations during impact air quality monitoring. It is considered that the monitoring work in the reporting period is effective and there was no adverse impact attributable to the Project activities.

3 Noise Monitoring

Noise monitoring in the form of 30-minute measurements of L_{eq}, L_{10}, and L_{90} levels was conducted once per week between 0700 and 1900 on normal weekdays at four representative monitoring stations in the vicinity of noise sensitive receivers in Tung Chung and villages in North Lantau in accordance with the Manual. **Table 3.1** describes the details of the monitoring stations. **Figure 2.1** shows the locations of the monitoring stations.

Table 3.1: Locations of Impact Noise Monitoring Stations

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

Note:

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

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

3.1 Action and Limit Levels

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

Table 3.2: Action and Limit Levels for Noise Monitoring

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

Note:

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

3.2 Monitoring Equipment

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

Table 3.3: Noise Monitoring Equipment

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

3.3 Monitoring Methodology

3.3.1 Monitoring Procedure

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

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

3.3.2 Maintenance and Calibration

The maintenance and calibration procedures are summarised below:

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

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

3.4 Summary of Monitoring Results

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

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

Table 3.4: Summary of Construction Noise Monitoring Results

Monitoring Station	Noise Level Range, dB(A) $L_{eq\ (30mins)}$	Limit Level, dB(A) $L_{eq\ (30mins)}$
NM1A(1)	70 - 73	75
NM4(1)	62 - 64	70(2)
NM5(1)	57 - 62	75
NM6(1)	62 - 68	75

Notes:

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

(2) Reduced to 65dB(A) during school examination periods at NM4. No school examination took place during this reporting period.

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

3.5 Conclusion

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

4 Water Quality Monitoring

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

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

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

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

Notes:

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

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

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

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

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

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

4.1 Action and Limit Levels

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

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

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

Notes:

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

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

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

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

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

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

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

Note:

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

4.2 Monitoring Equipment

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

Table 4.4: Water Quality Monitoring Equipment

Equipment	Brand and Model	Last Calibration Date	Calibration Certificate Provided in
Multifunctional Meter (measurement of DO, pH, temperature, salinity and turbidity)	YSI 6920V2 (Serial No. 0001C6A7)	20 Jan 2020	Monthly EM&A Report No. 49, Appendix E
	YSI 6920V2 (Serial No. 00019CB2)	20 Jan 2020	
	YSI ProDSS (Serial No. 17H105557)	11 Mar 2020	**Appendix E**
	YSI ProDSS (Serial No. 16H104234)	11 Mar 2020	
	YSI ProDSS (Serial No. 17E100747)	11 Mar 2020	
	YSI ProDSS (Serial No. 18A104824)	11 Mar 2020	
Digital Titrator (measurement of total alkalinity)	Titrette Digital Burette 50ml Class A (Serial No. 10N64701)	9 Dec 2019(1)	Monthly EM&A Report No. 48, Appendix D
	Titrette Bottle-top Burette, 50ml (Serial No. 10N60623)	5 Mar 2020	**Appendix E**

Note:

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

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

Table 4.5: Other Monitoring Equipment

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

4.3 Monitoring Methodology

4.3.1 Measuring Procedure

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

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

4.3.2 Maintenance and Calibration

Calibration of In-situ Instruments

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

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

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

4.3.3 Laboratory Measurement / Analysis

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

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

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

4.4 Summary of Monitoring Results

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

The water quality monitoring results for all parameters, except SS, obtained during the reporting period were within their corresponding Action and Limit Levels. The detailed monitoring results are presented in **Appendix D**.

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

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

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

	IM1	IM2	IM3	IM4	IM5	IM6	IM7	IM8	IM9	IM10	IM11	IM12	SR1A	SR3	SR4A	SR5A	SR6A	SR7	SR8
03/03/2020																			
05/03/2020																			
07/03/2020																			
10/03/2020					D														
12/03/2020									D										
14/03/2020									D										
17/03/2020																			
19/03/2020																			
21/03/2020																			
24/03/2020																			
26/03/2020																			
28/03/2020																			
31/03/2020																			
No. of result triggereing Action or Limit Level	0	1	0	0	1	0	0	0	2	0	1	0	0	0	0	0	0	0	0

Note: Detailed results are presented in **Appendix D**.

Legend:

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

Monitoring results triggered the corresponding Action or Limit Levels on three monitoring days. Some cases occurred at monitoring station upstream of the Project during respective tide and would unlikely be affected by the Project.

Investigation focusing on the cases that occurred at monitoring stations located downstream of the Project was carried out. Details of the Project's marine construction activities and site observations on the concerned monitoring days were collected. Findings were summarised in **Table 4.8**

Table 4.8: Summary of Findings from Investigation of SS Monitoring Results

Date	Marine construction works nearby	Approximate distance from marine construction works	Status of water quality measures (if applicable)	Construction vessels in the vicinity	Turbidity / Silt plume observed near the monitoring station	Action or Limit Level triggered due to Project
10/3/2020	DCM works	Around 3km	Localised and enhanced silt curtain deployed	No	No	No
12/3/2020	Marine filling	Around 1km	Relevant section of seawalls partially completed	No	No	No
14/3/2020	Marine filling	Around 1km	Relevant section of seawalls partially completed	No	No	No

The investigation confirmed that marine filling and DCM works were operating normally with localised and enhanced silt curtains deployed. The silt curtains were maintained properly and checked by ET regularly. Relevant section of seawalls was also partially completed with rock core to high tide mark and filter layer on the inner side, which could contain the SS generated from marine filling activities within the reclamation area.

SS results recorded at IM5 on 10 March 2020 during mid-flood was within its baseline range. The station was also located around 3km away from the nearest marine construction activities so it was unlikely to be affected. For cases at IM9 on 12 and 14 March 2020, both appeared to be isolated with no observable spatial trend to indicate any effect due to Project activities. IM9 was also located around 1km away from the nearest marine construction activities on both days so it was unlikely to be affected. With no observable silt plume during marine works and mitigation measures implemented properly, the cases were considered not due to the Project.

4.5 Conclusion

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

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

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

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

5 Waste Management

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

5.1 Action and Limit Levels

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

Table 5.1: Action and Limit Levels for Construction Waste

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

5.2 Waste Management Status

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

Recommendations made included provision and maintenance of proper chemical waste storage area, as well as handling, segregation, and regular disposal of general refuse. The contractors had taken actions to implement the recommended measures. Waste management audits were carried out by ET according to the requirement of the Waste Management Plan, Updated EM&A Manual and the implementation schedule of the waste management mitigation measures in **Appendix B**.

Based on updated information provided by contractors, construction waste generated in the reporting period is summarised in **Table 5.2**. The stockpile of compressed materials of Contract P560 has been reused in 3RS reclamation works since March 2020.

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

Along with the design and construction progress, further development on the treatment level/details and the re-use mode for marine sediment generated from 3RS Project has been conducted according to the EIA recommendation.

Table 5.2: Construction Waste Statistics

	C&D[(1)] Material Stockpiled for Reuse or Recycle (m^3)	C&D Material Reused in the Project (m^3)	C&D Material Reused in other Projects (m^3)	C&D Material Transferred to Public Fill (m^3)	Chemical Waste (kg)	Chemical Waste (l)	General Refuse (tonne)
February 2020[(2)(3)]	*850	41,994	0	5,074	120	6,400	1,011

	C&D[1] Material Stockpiled for Reuse or Recycle (m^3)	C&D Material Reused in the Project (m^3)	C&D Material Reused in other Projects (m^3)	C&D Material Transferred to Public Fill (m^3)	Chemical Waste (kg)	Chemical Waste (l)	General Refuse (tonne)
March 2020[2][4]	4,881	23,125	0	4,654	1,070	8,400	1,350

Notes:

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

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

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

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

6 Chinese White Dolphin Monitoring

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

The small vessel line-transect survey should be conducted at a frequency of two full surveys per month, while land-based theodolite tracking survey should be conducted at a frequency of one day per month per station at Sha Chau (SC) and Lung Kwu Chau (LKC) during the construction phase as stipulated in the Manual.

6.1 Action and Limit Levels

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

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

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

Notes: (referring to the baseline monitoring report)

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

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

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

6.2 CWD Monitoring Transects and Stations

6.2.1 Small Vessel Line-transect Survey

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

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

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

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

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

6.2.2 Land-based Theodolite Tracking Survey

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

Table 6.3: Land-based Theodolite Survey Station Details

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

6.3 CWD Monitoring Methodology

6.3.1 Small Vessel Line-transect Survey

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

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

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

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

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

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

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

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

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

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

6.3.2 Photo Identification

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

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

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

6.3.3 Land-based Theodolite Tracking Survey

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

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

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

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

6.4 Monitoring Results and Observations

6.4.1 Small Vessel Line-transect Survey

Survey Effort

Within this reporting period, two complete sets of small vessel line-transect surveys were conducted on the 2, 6, 11, 12, 17, 18, 19 and 23 March 2020, covering all transects in NEL, NWL, AW, WL and SWL survey areas for twice.

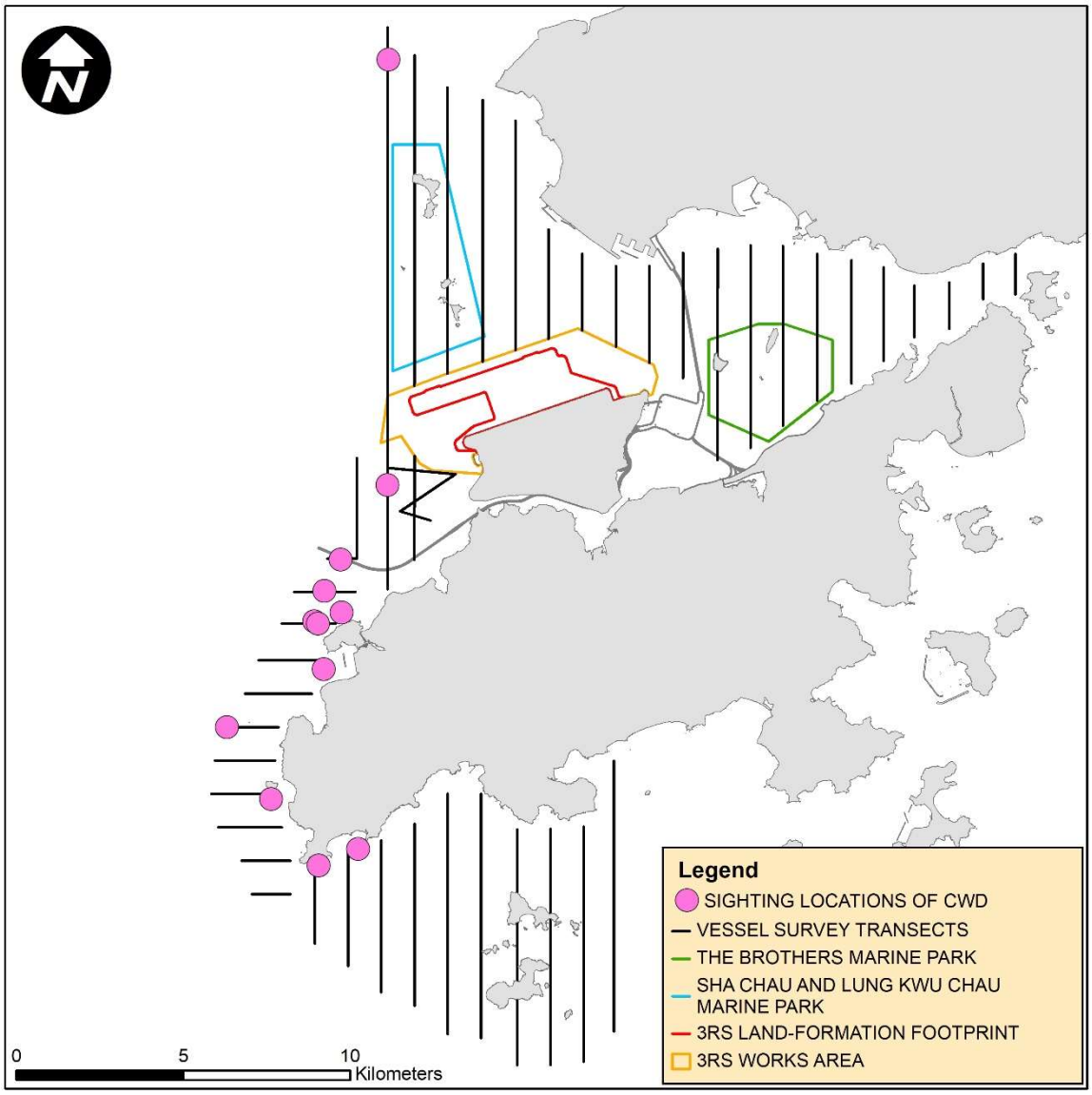
A total of around 449.59 km of survey effort was collected from these surveys and around 91.7% of the survey effort was being conducted under favourable weather condition (i.e. Beaufort Sea State 3 or below with favourable visibility). Details of the survey effort are given in **Appendix D**.

Sighting Distribution

In March 2020, 12 sightings with 37 dolphins were sighted. Amongst these sightings, 10 sightings with 32 dolphins are on-effort sightings under favourable weather condition (i.e. Beaufort Sea State 3 or below with favourable visibility). Details of cetacean sightings are presented in **Appendix D**.

Distribution of all CWD sightings recorded in March 2020 is illustrated in **Figure 6.3**. In NWL, one CWD sighting was recorded at the northwestern corner of the survey area and while another sighting was encountered at the waters off the southwestern side of 3RS works area. In WL, the majority of CWD sightings were clustered at waters around Tai O. In SWL, the two CWD sightings were located at Fan Lau and Fan Lau Tung Wan. No sightings of CWD were recorded in NEL survey area.

Figure 6.3: Sightings Distribution of Chinese White Dolphins



Remarks: Please note that there are 12 pink circles on the map indicating the sighting locations of CWDs. Some of them were very close to each other and therefore may appear overlapped on this distribution map

Encounter Rate

Two types of dolphin encounter rates were calculated based on the data from March 2020. 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 2020, a total of around 412.38 km of survey effort were conducted under Beaufort Sea State 3 or below with favourable visibility, whilst a total number of 10 on-effort sightings with 32 dolphins were sighted under such condition. Calculation of the encounter rates in March 2020 are shown in **Appendix D**.

For the running quarter of the reporting period (i.e., from January 2020 to March 2020), a total of around 1242.84 km of survey effort were conducted under Beaufort Sea State 3 or below with favourable visibility, whilst a total number of 35 on-effort sightings and a total number of 114 dolphins from on-effort sightings were obtained under such condition. Calculation of the running quarterly encounter rates are shown in **Appendix D**.

The STG and ANI of CWD in the whole survey area (i.e. NEL, NWL, AW, WL and SWL) during the month of March 2020 and during the running quarter are presented in **Table 6.4** below and compared with the Action Level. The running quarterly encounter rate STG remains above the Action Level but the running quarterly encounter rate ANI is below the Action Level. Nevertheless, the overall Action Level is not triggered.

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

	Encounter Rate (STG)	Encounter Rate (ANI)
March 2020	2.42	7.76
Running Quarter from January 2020 to March 2020(1)	2.82	9.17
Action Level	Running quarterly(1) STG < 1.86 & ANI < 9.35	

Note: (1) Running quarterly encounter rates STG & ANI were calculated from data collected in the reporting period and the two preceding survey months, i.e. the data from January 2020 to March 2020, containing six sets of transect surveys for all monitoring areas. Action Level will be triggered if both STG and ANI fall below the criteria.

Group Size

In March 2020, 12 groups with 37 dolphins were sighted, and the average group size of CWDs was 3.1 dolphins per group. Sightings with small group size (i.e. 1-2 dolphins) and medium group size (i.e. 3-9 dolphins) were identical. No CWD sighting with large group size (i.e. 10 or more dolphins) was recorded.

Activities and Association with Fishing Boats

Only one sighting of CWD was recorded engaging in feeding activities in March 2020 and this sighting was not observed in association with operating fishing boat.

Mother-calf Pair

In March 2020, no CWD sighing was recorded with the presence of mother-and-unspotted calf or mother-and-unspotted juvenile pair.

6.4.2 Photo Identification

In March 2020, a total number of 15 different CWD individuals were identified for totally 19 times. A summary of photo identification works is presented in **Table 6.5**. Representative photos of these individuals are given in **Appendix D**.

Table 6.5: Summary of Photo Identification

Individual ID	Date of Sighting (dd-mmm-yy)	Sighting Group No.	Area	Individual ID	Date of Sighting (dd-mmm-yy)	Sighting Group No.	Area
NLMM042	11-Mar-20	1	NWL	SLMM034	23-Mar-20	17	SWL
SLMM003	12-Mar-20	4	WL			18	SWL
SLMM011	23-Mar-20	17	SWL	SLMM037	12-Mar-20	4	WL
		18	SWL	SLMM044	18-Mar-20	3	WL
SLMM012	12-Mar-20	4	WL	SLMM052	12-Mar-20	4	WL
SLMM014	11-Mar-20	2	NWL	SLMM059	18-Mar-20	2	WL
	12-Mar-20	3	WL	WLMM040	18-Mar-20	3	WL
SLMM028	11-Mar-20	2	NWL	WLMM151	18-Mar-20	2	WL
SLMM031	23-Mar-20	17	SWL	WLMM152	18-Mar-20	2	WL
		18	SWL				

6.4.3 Land-based Theodolite Tracking Survey

Survey Effort

Land-based theodolite tracking surveys were conducted at LKC on 9 March 2020 and at SC on 23 March 2020, with a total of two days of land-based theodolite tracking survey effort accomplished in this reporting period. No CWD groups were tracked at LKC or SC stations during the surveys. Information of survey effort and CWD groups are presented in **Table 6.6**. Details of the survey effort and CWD groups tracked are presented in **Appendix D**.

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	1	6:00	0	0
Sha Chau	1	6:00	0	0
TOTAL	**2**	**12:00**	**0**	**0**

6.5 Progress Update on Passive Acoustic Monitoring

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

6.6 Site Audit for CWD-related Mitigation Measures

During the reporting period, silt curtains were in place by the contractor for marine filling , in which dolphin observers were deployed by contractor in accordance with the MMWP. Overall, 2 to 7 dolphin observation stations and teams of at least two dolphin observers were deployed by the contractors for continuous monitoring of the DEZ for DCM works and seawall construction in accordance with the DEZ Plan. Trainings for the proposed dolphin observers on the implementation of MMWP and DEZ monitoring were provided by the ET prior to the aforementioned works, with a cumulative total of 679 individuals being trained and the training records kept by the ET. From the contractors' MMWP observation records, no dolphin or other marine mammals were observed within or around the silt curtains. As for DEZ monitoring records, no dolphin or other marine mammals were observed within or around the DEZs in this reporting month. These contractors' records were also audited by the ET during site inspection.

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

6.7 Timing of Reporting CWD Monitoring Results

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

6.8 Summary of CWD Monitoring

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

7 Environmental Site Inspection and Audit

7.1 Environmental Site Inspection

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

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

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

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

Implementation of applicable landscape and visual mitigation measures (reference to the environmental protection measures CM1 – CM10 in **Appendix B**) was monitored regularly in accordance with the Manual. No non-conformity was recorded during the reporting period. Based on the latest Contractors' submitted records, a cumulative total of 231 and 8 trees were retained and transplanted. The Contractors' performance on existing trees maintenance and protection measures on retained and transplanted trees were regularly checked by the ET. In case of non-conformity, specific recommendations would be made, and actions will be carried out according to the Event and Action Plan.

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

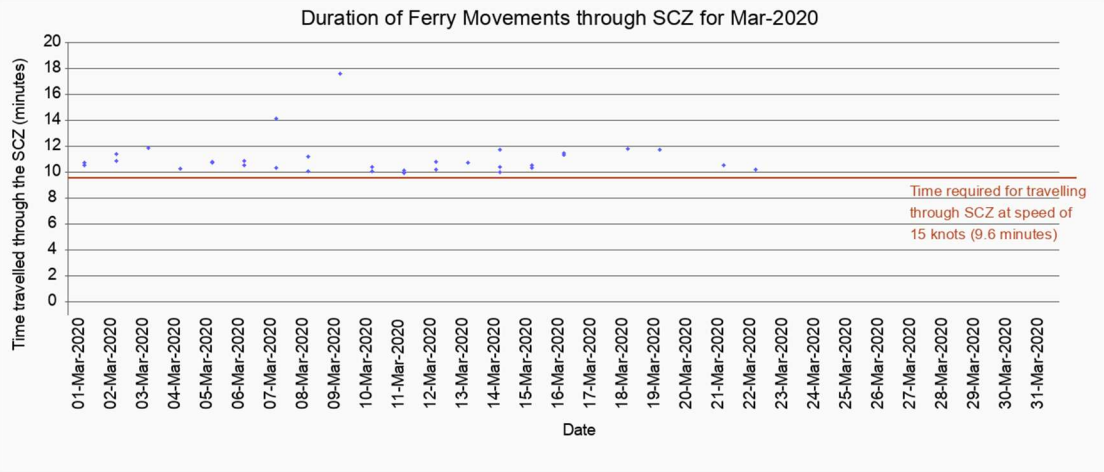
7.2 Audit of SkyPier High Speed Ferries

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

Key audit findings for the SkyPier HSFs travelling to/from Zhuhai and Macau against the requirements of the SkyPier Plan during the reporting period are summarised in **Table 7.1**. The daily movements of all SkyPier HSFs in this reporting period (i.e., 8 to 20daily 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.

Due to the Novel Coronavirus epidemic, all ferry service between HKIA SkyPier and Macau has been suspended from 4 February 2020 and all ferry services has been suspended from 25 March 2020 for 14 days. In total, 44 ferry movements between HKIA SkyPier and Zhuhai were recorded in March 2020 and the data are presented in **Appendix H**. The time spent by the SkyPier HSFs travelling through the SCZ in March 2020 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 2020



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.

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

Requirements in the SkyPier Plan	1 to 31 March 2020
Total number of ferry movements recorded and audited	44
Use diverted route and enter / leave SCZ through Gate Access Points	0 deviation
Speed control in speed control zone	The average speeds of all HSFs travelling through the SCZ ranged from 10.8 to 13.7 knots. All HSFs had travelled through the SCZ with average speeds under 15 knots in compliance with the SkyPier Plan. The time used by HSFs to travel through SCZ is presented in **Figure 7.1**.
Daily Cap (including all SkyPier HSFs)	8-20 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.
- Eleven skipper training sessions were held by contractors' Environmental Officers. Competency tests were subsequently conducted with the trained skippers by ET. The list of all trained skippers was properly recorded and maintained by ET.
- In this reporting period, 9 skippers were trained by ET and 31 skippers were trained by contractors' Environmental Officers. In total, 1358 skippers were trained from August 2016 to March 2020.
- The MSS automatically recorded deviation cases such as speeding, entering no entry zone and not travelling through the designated gate. ET conducted checking to ensure the MSS records deviation cases accurately.
- Deviations such as speeding in the works area, entered no entry zone, and entering from non-designated gates were identified. All the concerned contractors were reminded to comply with the requirements of the MTRMP-CAV during the bi-weekly MTCC audit.
- Three-month rolling programmes (one month record and three months forecast) for construction vessel activities were received from the contractors in order to help maintain the number of construction and associated vessels on site to a practicable minimal level.

7.4 Implementation of Dolphin Exclusion Zone

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

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

7.5 Status of Submissions under Environmental Permits

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

Table 7.2: Status of Submissions under Environmental Permit

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

7.6 Compliance with Other Statutory Environmental Requirements

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

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

7.7.1 Complaints

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

7.7.2 Notifications of Summons or Status of Prosecution

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

7.7.3 Cumulative Statistics

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

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

8.1 Construction Programme for the Coming Reporting Period

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

Advanced Works:

Contract P560 (R) Aviation Fuel Pipeline Diversion Works

- Stockpiling of compressed materials

DCM Works:

Contract 3205 DCM works

- DCM works

Reclamation Works:

Contract 3206 Main Reclamation Works

- Land base ground improvement works;
- Seawall construction;
- Marine filling; and
- Sorting and reuse of inert waste from other 3RS contracts.

Airfield Works:

Contract 3301 North Runway Crossover Taxiway

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

Contract 3302 Eastern Vehicular Tunnel Advance Works

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

Contract 3303 Third Runway and Associated Works

- Plant and equipment mobilisation;
- Footing and utilities work;
- Preparation works for box culvert construction; and
- Site establishment.

Third Runway Concourse and Integrated Airport Centres Works:

Contract 3402 New Integrated Airport Centres Enabling Works

- Potable water and seawater works;
- Footing construction;
- Road works; and
- Sewerage and pipe works.

Contract 3403 New Integrated Airport Centres Building and Civil Works

- Site establishment; and
- Foundation works.

Contract 3405 Three Runway Concourse Foundation and Substructure Works

- Site establishment.

Terminal 2 Expansion Works:

Contract 3501 Antenna Farm and Sewage Pumping Station

- Site clearance.

Contract 3503 Terminal 2 Foundation and Substructure Works

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

Automated People Mover (APM) Works:

Contract 3601 New Automated People Mover System (TRC Line)

- Construction of site office.

Contract 3602 Existing APM System Modification Works

- Modification works at APM depot.

Airport Support Infrastructure & Logistic Works:

Contract 3721 Construction Support Infrastructure Works

- Site clearance and establishment;
- Excavation for utilities works; and
- Construction of utilities and logistic facilities.

Contract 3722 Construction Support Facilities

- Formboard erecting and concreting; and
- Establishment.

Contract 3801 APM and BHS Tunnels on Existing Airport Island

- Construction of temporary traffic steel deck;
- Cofferdam installation for box culvert;
- Rising main installation;
- Drilling and grouting works;
- Piling and foundation works; and
- Site clearance.

Contract 3901B Concrete Batching Facility

- Footing construction; and
- Erection of steelwork.

8.2 Key Environmental Issues for the Coming Reporting Period

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

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

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

8.3 Monitoring Schedule for the Coming Reporting Period

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

8.4 Review of the Key Assumptions Adopted in the EIA Report

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

9 Conclusion and Recommendation

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

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

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

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

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

On the implementation of the SkyPier Plan, the daily movements of all SkyPier HSFs in March 2020 were in the range of 8 to 20 daily movements, which are within the maximum daily cap of 125 daily movements. A total of 44 HSF movements under the SkyPier Plan were recorded in the reporting period. The average speeds of all HSFs travelling through the SCZ ranged from 10.8 to 13.7 knots. All HSFs had travelled through the SCZ with average speeds under 15 knots in compliance with the SkyPier Plan. In summary, the ET and IEC have audited the HSF movements against the SkyPier Plan and conducted follow up investigations or actions accordingly.

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

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

Figures

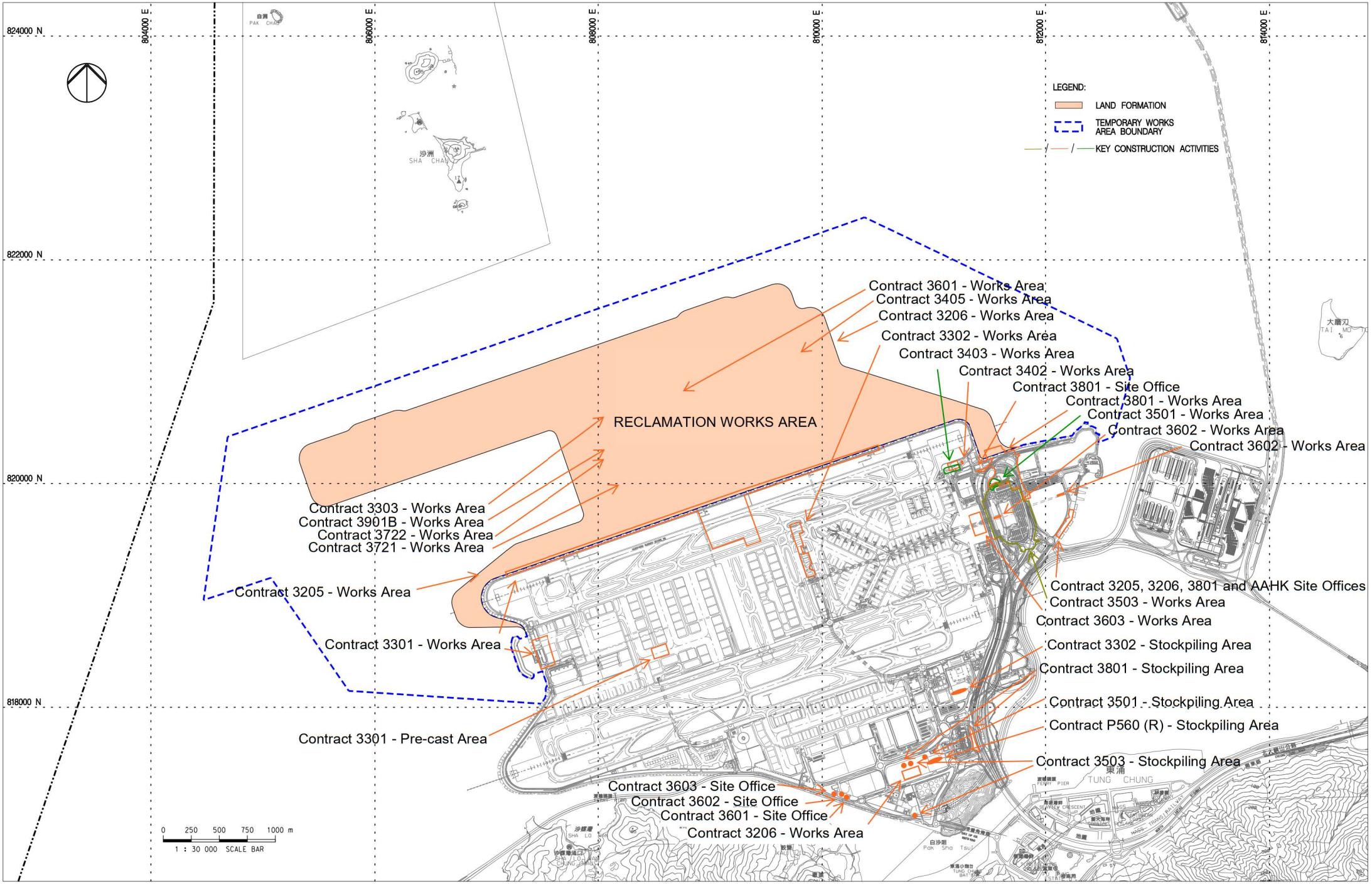
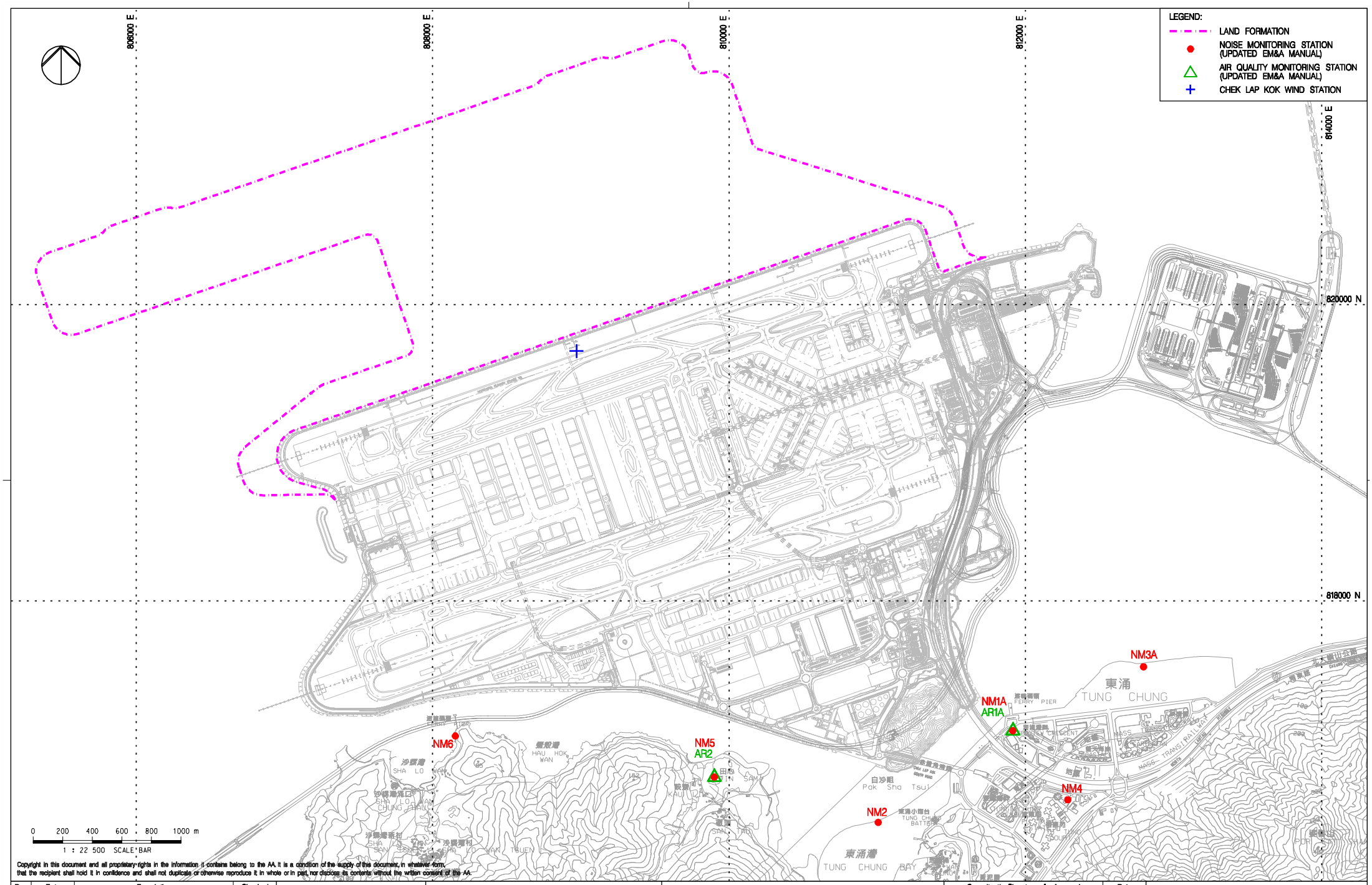


FIGURE 1.1 LOCATIONS OF KEY CONSTRUCTION ACTIVITIES

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



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C	11FEB16	GENERAL REVISION	RO
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香港國際機場 HONG KONG INTERNATIONAL AIRPORT

MOTT MACDONALD

Title

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

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

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

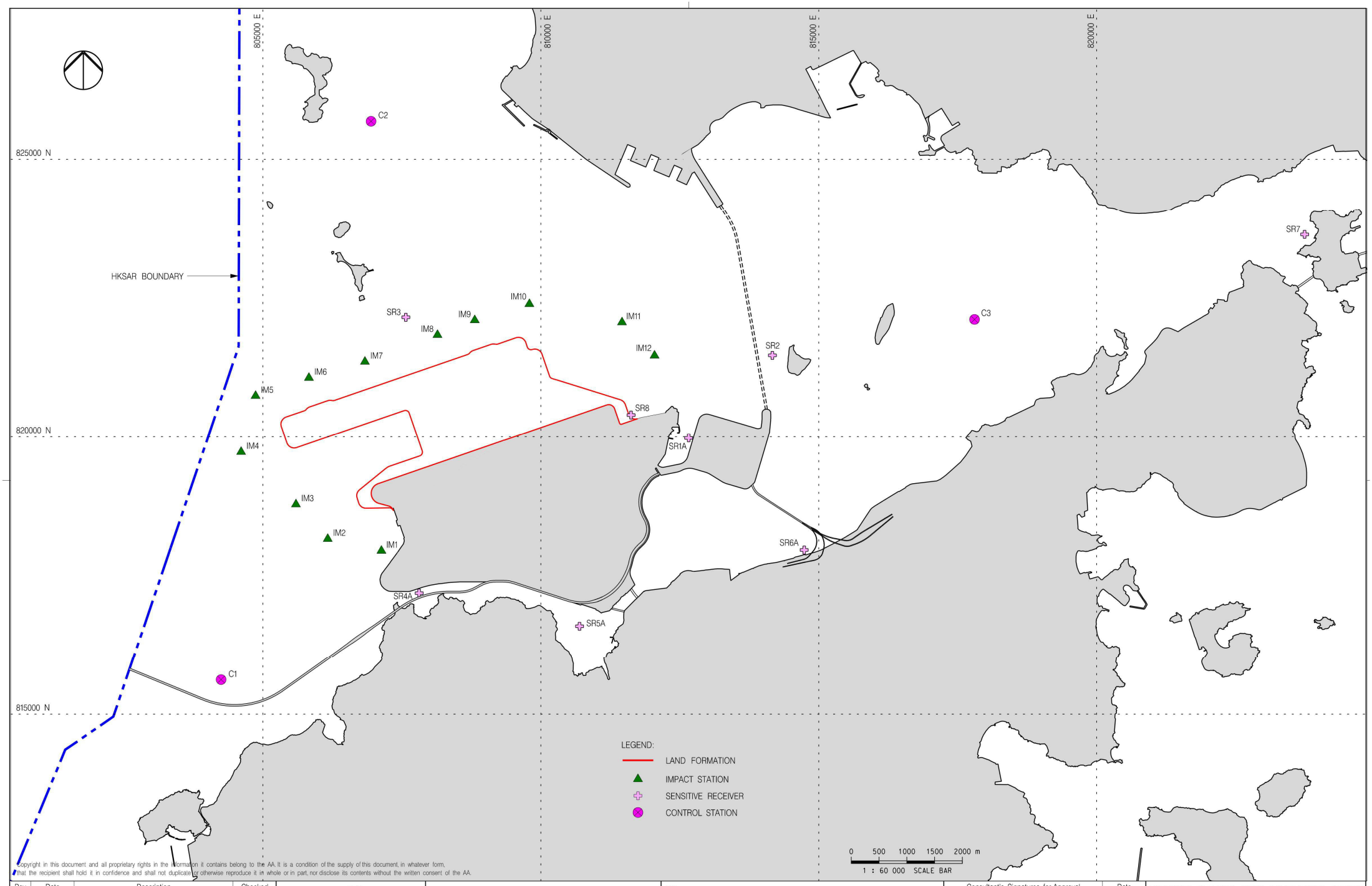
Drawing No.

FIGURE 2.1

Scale at A3 1 : 22500

Rev. D

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



Rev.	Date	Description	Checked
A	21AUG19	FIRST ISSUE	VL

香港國際機場 HONG KONG INTERNATIONAL AIRPORT

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MOTT MACDONALD

Title

WATER QUALITY MONITORING STATIONS

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

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

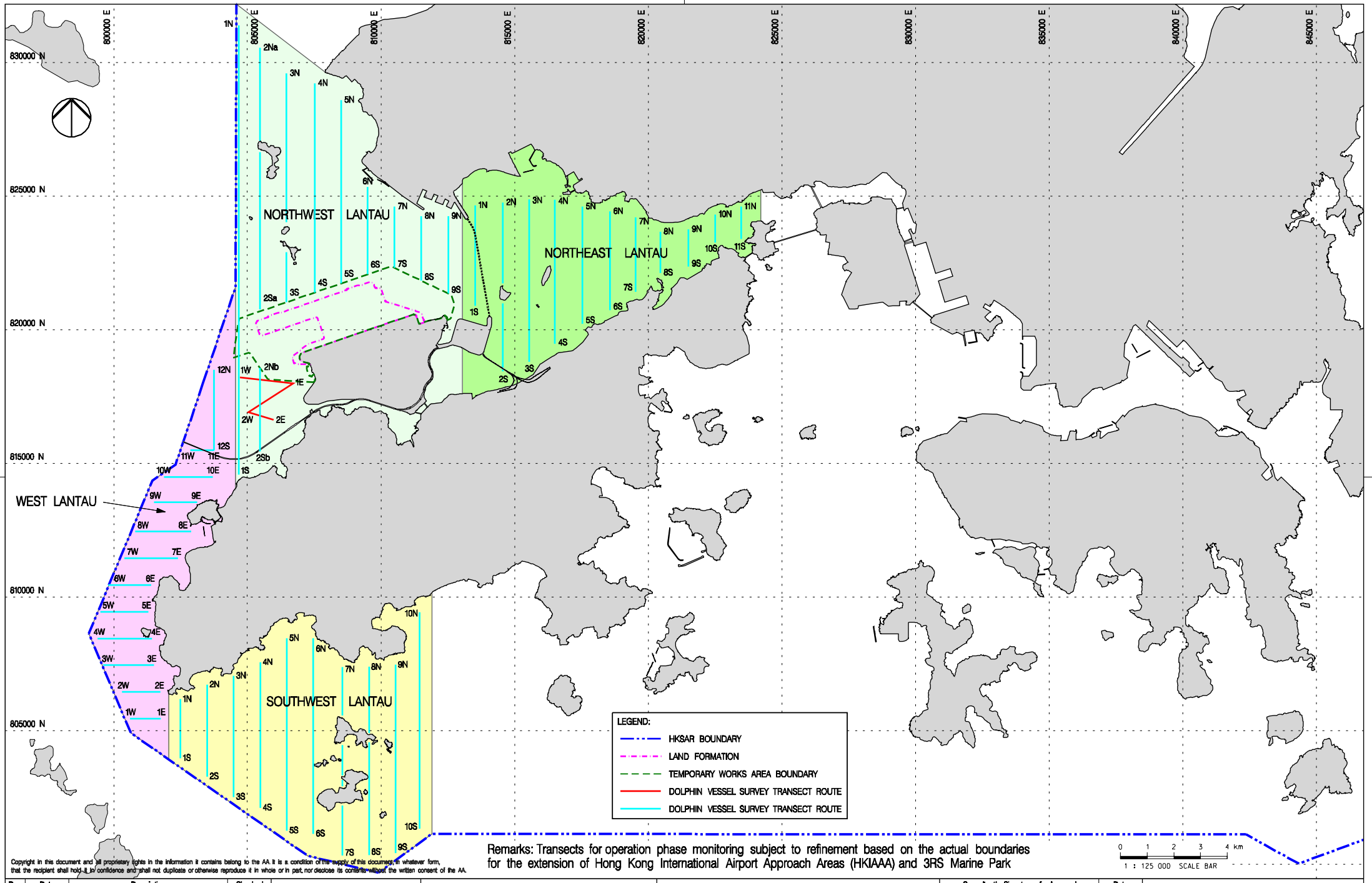
Drawing No.

FIGURE 4.1

Scale at A3 1 : 60000

Rev. A

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



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

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

香港國際機場 HONG KONG INTERNATIONAL AIRPORT

MOTT MACDONALD

Title

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

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

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

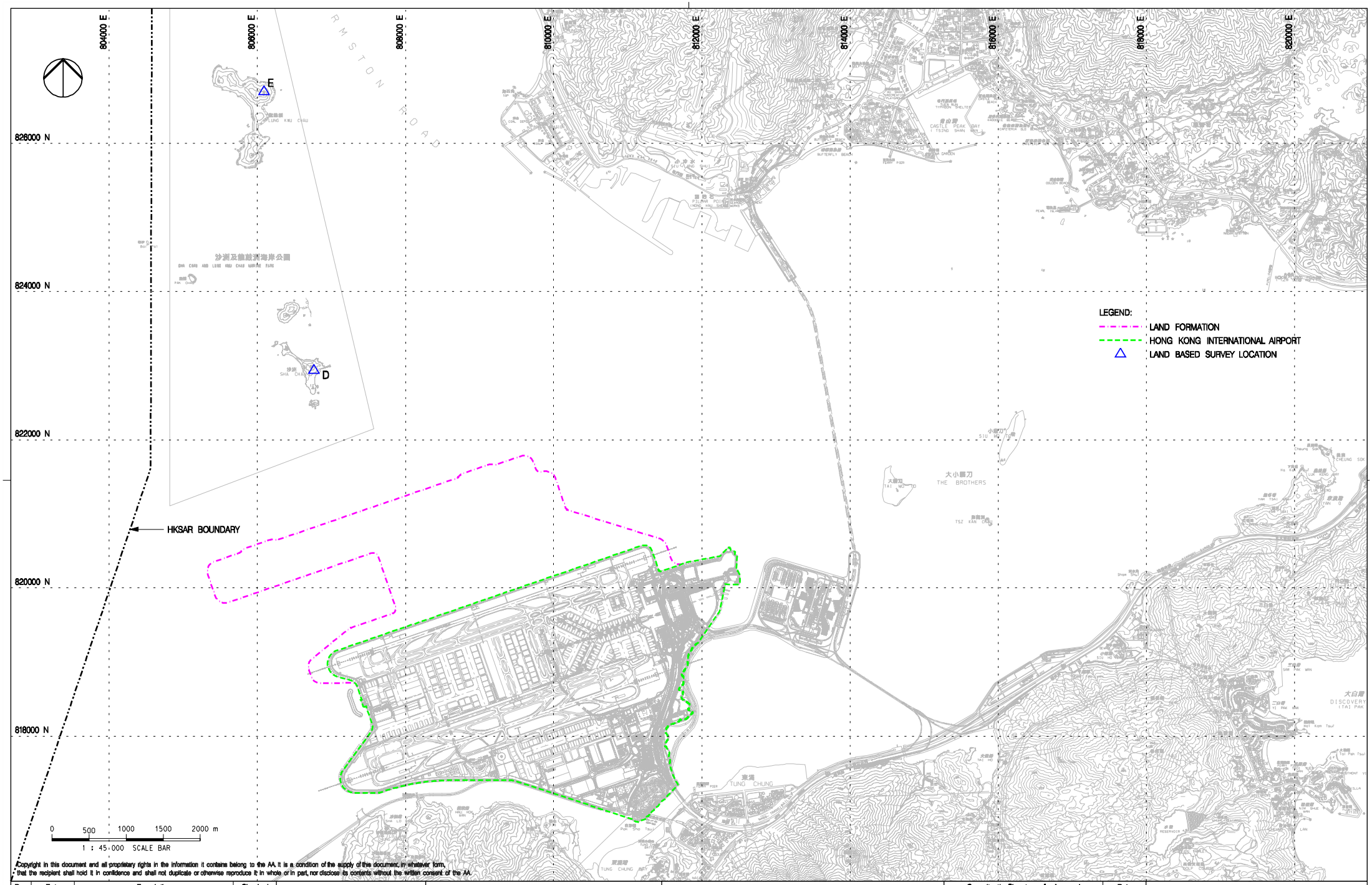
Drawing No.

FIGURE 6.1

Scale at A3 1 : 125000

Rev. F

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



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A	02DEC15	FIRST ISSUE	JC
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香港國際機場 HONG KONG INTERNATIONAL AIRPORT

MOTT MACDONALD

Title

LAND BASED DOLPHIN MONITORING IN BASELINE AND CONSTRUCTION PHASES

Consultant's Signatures for Approval		Date
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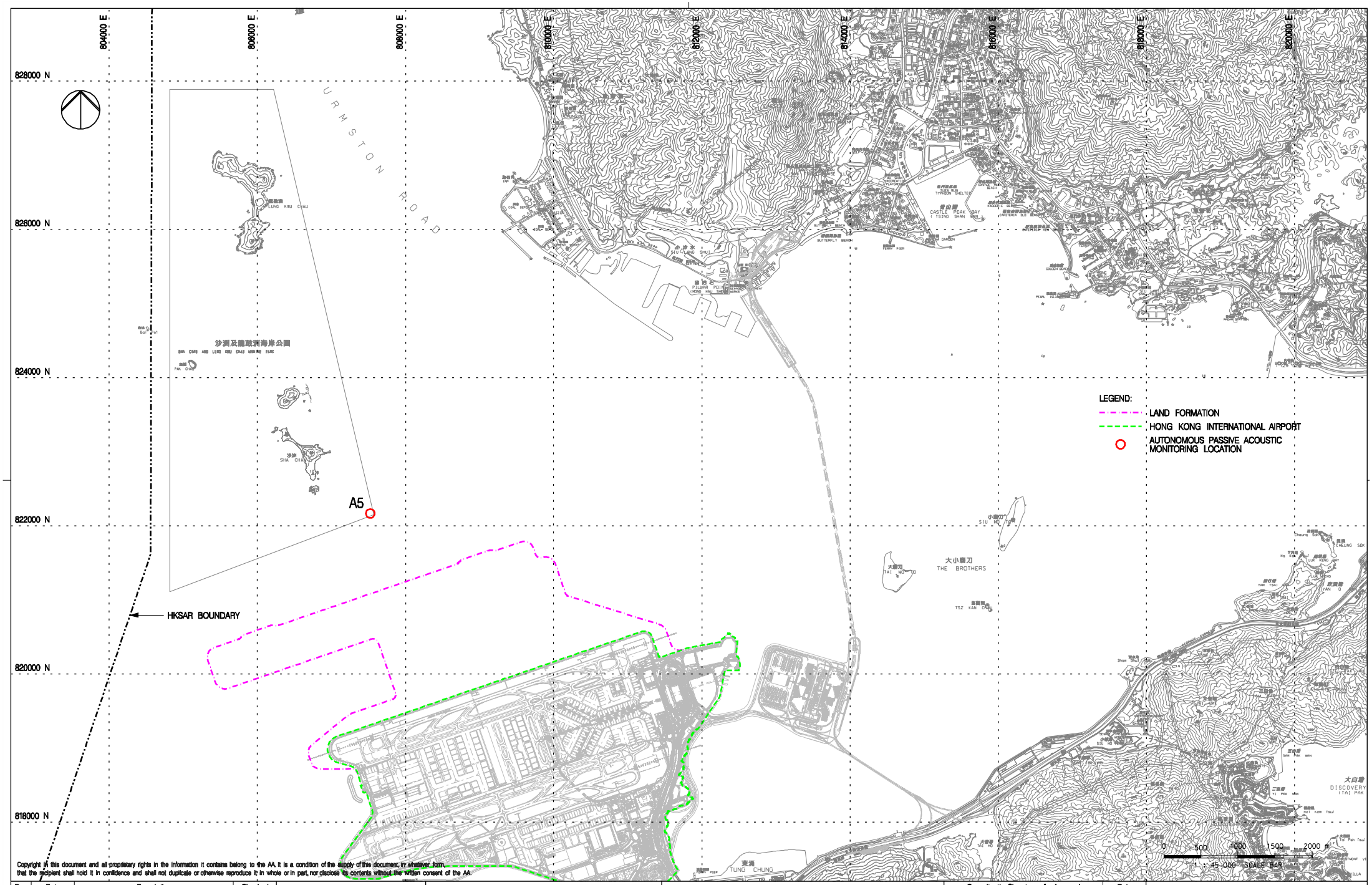
EXPANSION OF HONG KONG INTERNATIONAL AIRPORT INTO A THREE-RUNWAY SYSTEM

Drawing No. FIGURE 6.2

Scale at A3 1 : 45000

Rev. C

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



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

MOTT MACDONALD

Title

LOCATION FOR AUTONOMOUS PASSIVE ACOUSTIC MONITORING

Consultant's Signatures for Approval		Date
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EXPANSION OF HONG KONG INTERNATIONAL AIRPORT INTO A THREE-RUNWAY SYSTEM

Drawing No. FIGURE 6.5

Scale at A3 1 : 45000

Rev. C

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

Appendix A. Contract Description

Contract Description

Contract No.	Contract Title	Contractor	Key Construction Activities
P560 (R)	Aviation Fuel Pipeline Diversion Works	Langfang Huayuan Mechanical and Electrical Engineering Co., Ltd.	Diversion of the existing submarine aviation fuel pipelines will use a horizontal directional drilling (HDD) method forming two rock drill holes by drilling through bedrock from a launching site located at the west of the airport island to a daylighting point adjacent to the offshore receiving platform at Sha Chau. Two new pipelines will be installed through the drilled tunnels. The total length is approximately 5 km. Drilling works will proceed from the HDD launching site at the airport island.
3205	Deep Cement Mixing (Package 5)	Bachy Soletanche- Sambo Joint Venture	The works covered by the Contract 3205 comprise ground improvement of seabed using Deep Cement Mixing (DCM) method, the major construction activities including without limitation the following • Geophysical surveys; • Supply and placing of geotextile and sand blanket under seawalls; • Supply, maintenance, installation and removal of silt curtain systems; • Preliminary construction trails; • Supply and installation of DCM clusters within the works areas; and • Coring, sampling and testing of DCM treated soils and reporting works.
3206	Reclamation Contract	ZHEC-CCCC-CDC Joint Venture	The works covered by the Contract 3206 comprise the formation of approximately 650 hectares of land north of the existing airport island for the project, the major construction activities including without limitation the following • Site clearance and demolition; • Geotechnical and ground improvement works; • Seawall construction; • Marine and land filling works; and • Civil works.
3301	North Runway Crossover Taxiway	FJT-CHEC-ZHEC Joint Venture	The works covered by the Contract 3301 comprise the construction of a new dual taxiway across the existing north runway and utility services and cable

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

Contract No.	Contract Title	Contractor	Key Construction Activities
3403	New Integrated Airport Centres – Building and Civil Works	Sun Fook Kong Construction Limited	The works covered by the Contract 3403 comprise the construction of a new Integrated Airport Centre (IAC) and a number of ancillary facilities and Additions and Alteration (A&A) works for converting the existing IAC into a back-up IAC, including without limitation the following: • Site clearance and demolition; • Building structure and envelope; • Building Services and Airport Systems; and • Utilities division and installations.
3405	Three Runway Concourse Foundation and Substructure Works	China Road and Bridge Corporation - Bachy Soletanche Group Limited - LT Sambo Co., Ltd. Joint Venture	The works covered by the Contract 3405 comprise without limitation the following: • Piled foundation works; • Basement and tunnel structure works; • Associated internal reinforced concrete structures; • Backfilling and compaction of works area; • Handling, treatment, and re-use of marine deposit, contaminated mud and DCM treated soil generated from the excavations; and • Associated testing and temporary works.
3501	Antenna Farm and Sewage Pumping Station	Build King Construction Limited	The works covered by the Contract 3501 comprise the construction of antenna farm and sewage pumping station. The major construction activities include without limitation the following: • Civil and structural engineering works; • Building services works; • Architectural builder's works and finishes; • Trenchless excavation for sewage rising mains; and • All associated works.
3503	Terminal 2 Foundation and Substructure Works	Leighton - Chun Wo Joint Venture	The works covered by the Contract 3503 comprise the foundations for the new T2 terminal, two annex buildings and associated viaducts, construction of the new T2 basement and south annex building structures, diaphragm walls, utility services and other advance works. The major construction activities include without limitation the following: • Re-configuration and demolition of existing utilities and structures; • Pile foundations for the expanded T2 Terminal Building, South Annex Building, and North Annex Building;

Contract No.	Contract Title	Contractor	Key Construction Activities
			• Construction of new South Annex Building; • Diversion and provisions of utilities; and • All associated testing and commissioning works.
3601	New Automated People Mover System (TRC Line)	CRRC Puzhen Bombardier Transportation Systems Limited and CRRC Nanjing Puzhen Co., Ltd. Joint Venture	The works covered by the Contract 3601 comprise the initial phase of the APM system connecting the Third Runway Concourse (TRC) and the APM Interchange Station in the modified T2, and extension of the new APM system into the new APM Depot east of T2. The major construction activities include without limitation the following: • New 3-guideway APM system between TRC and T2; • Extension of the TRC Line into the new APM Depot; • APM associated sub-systems (communications, signalling, etc.) • Associated civil works; and • All associated testing, commissioning works.
3602	Existing APM System Modification Works	Niigata Transys Co., Ltd.	The works covered by the Contract 3602 comprise the detailed design, supply, manufacture, fabrication, implementation, testing and commissioning of the following modification works of the existing APM systems: • Modification of existing APM depot and APM cars; • Modification of existing T1 & T2 tunnels; and • Preparation of new APM depot.
3603	3RS Baggage Handling System	VISH Consortium	The works covered by the Contract 3603 comprise the design, supply, manufacture, delivery, installation, testing and commissioning of the high-speed baggage handling system.
3721	Construction Support Infrastructure Works	China State Construction Engineering (Hong Kong) Limited	The works covered by the Contract 3721 comprise the construction of the infrastructure works and building facilities on the reclaimed land formation. The major construction activities include without limitation the following: • Project site road; • Utilities; • Cargo loading quays; and • Security fencing and hoarding.
3722	Western Support Area – Construction	Tapbo Construction Company Limited and	The works covered by the Contract 3722 comprise the design and construction of support facilities, including site office, Canteen, Safety

Contract No.	Contract Title	Contractor	Key Construction Activities
	Support Facilities	Konwo Modular House Limited Joint Venture	Induction Centre and Medical Centre, Material Testing Laboratories and Typhoon Shelter, Vehicle Maintenance Facility and Fuel Storage Facility. The major construction activities include without limitation the following: • Construction of support facilities; • Foundation and structural works; and • Building services works.
3801	APM and BHS Tunnels on Existing Airport Island	China State Construction Engineering (Hong Kong) Limited	The works covered by the Contract 3801 comprise the construction of the APM and Baggage Handling System (BHS) tunnels on existing airport island. The major construction activities include without limitation the following: • Construction of APM and BHS tunnels; • Construction of ventilation building and associated infrastructure; and • Construction, testing and commissioning of sewerage pumping station; and • Civil and structural engineering works.
3901B	Concrete Batching Facility	Gammon Construction Limited	The works covered by the Contract 3901B comprise the establishment, operation and maintenance of a concrete batching facility at the Project Site and the supply of concrete products. The major construction activities include without limitation the following: • Supply of all equipment for the installation of the Facility to the Site; and • Supply of all raw materials required for the production of ready mixed concrete products and the continual operation of the Facility.

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

Environmental Mitigation Implementation Schedule (EMIS) for Construction Phase

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			▪ After completion of SI, the Contamination Assessment Report (CAR) will be prepared and submitted to EPD for approval prior to start of the proposed construction works at the golf course, the underground and above-ground fuel storage tank areas, emergency power generation units, airside petrol filling station and fuel tank room.		I *(CAR for golf course and Terminal 2 Emergency Power Supply System No.1)
			▪ 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	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
				HDD drilling works at HKIA	
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

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			▪ 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
			▪ 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

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
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
13.11.5.4 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**	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?^
			▪ 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.		
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

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
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 ▪ 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
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

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
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. – may be disassembled in phases	I
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;	N/A

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
				Upon handover and completion of works.	
			Cultural Heritage Impact – Construction Phase		
			Not applicable.		
			Health Impact – Aircraft Emissions		
			Not applicable.		
			Health Impact – Aircraft Noise		
			Not applicable.		

Notes:

I= implemented where applicable;

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

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

Appendix C. Monitoring Schedule

Monitoring Schedule of This Reporting Period

Mar-20

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	**2** CWD Survey (Vessel)	**3** Site Inspection WQ General & Regular DCM mid-ebb: 19:19 mid-flood: 11:30	**4**	**5** Site Inspection AR1A, AR2 NM1A, NM4, NM5, NM6 WQ General & Regular DCM mid-ebb: 21:59 mid-flood: 09:29	**6** Site Inspection CWD Survey (Vessel)	**7** WQ General & Regular DCM mid-ebb: 11:40 mid-flood: 16:47
8	**9** CWD Survey (Land-based)	**10** Site Inspection WQ General & Regular DCM mid-ebb: 13:39 mid-flood: 07:59	**11** Site Inspection CWD Survey (Vessel) AR1A, AR2 NM1A, NM4, NM5	**12** Site Inspection CWD Survey (Vessel) NM6 WQ General & Regular DCM mid-ebb: 14:57 mid-flood: 08:59	**13** Site Inspection	**14** WQ General & Regular DCM mid-ebb: 16:29 mid-flood: 10:02
15	**16**	**17** Site Inspection CWD Survey (Vessel) AR1A, AR2 NM1A, NM4, NM5, NM6 WQ General & Regular DCM mid-ebb: 19:59 mid-flood: 07:04	**18** Site Inspection CWD Survey (Vessel)	**19** Site Inspection CWD Survey (Vessel) WQ General & Regular DCM mid-ebb: 10:53 mid-flood: 15:25	**20** Site Inspection	**21** WQ General & Regular DCM mid-ebb: 12:10 mid-flood: 17:17
22	**23** CWD Survey (Vessel, Land-base) AR1A, AR2 NM1A, NM4, NM5, NM6	**24** Site Inspection WQ General & Regular DCM mid-ebb: 13:29 mid-flood: 07:41	**25**	**26** Site Inspection WQ General & Regular DCM mid-ebb: 14:19 mid-flood: 08:13	**27** Site Inspection	**28** AR1A, AR2 WQ General & Regular DCM mid-ebb: 15:17 mid-flood: 08:51
29	**30**	**31** Site Inspection WQ General & Regular DCM mid-ebb: 17:24 mid-flood: 10:01				

Notes:

CWD - Chinese White Dolphin

Air quality and Noise Monitoring Station

WQ - Water Quality

DCM - Deep Cement Mixing

NM1A/AR1A - Man Tung Road Park

NM4 - Ching Chung Hau Po Woon Primary School

NM5/AR2 - Village House, Tin Sum

NM6 - House No. 1, Sha Lo Wan

Tentative Monitoring Schedule of Next Reporting Period

Apr-20

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1	2 Site Inspection WQ General & Regular DCM mid-ebb: 19:49 mid-flood: 07:08	3 Site Inspection CWD Survey (Vessel) AR1A, AR2 NM1A, NM4, NM5, NM6	4 WQ General & Regular DCM mid-ebb: 10:38 mid-flood: 15:35
5	6 CWD Survey (Vessel)	7 Site Inspection WQ General & Regular DCM mid-ebb: 12:37 mid-flood: 18:33	8	9 Site Inspection CWD Survey (Vessel, Land-based) AR1A, AR2 NM1A, NM4, NM5, NM6 WQ General & Regular DCM mid-ebb: 13:53 mid-flood: 20:22	10	11 WQ General & Regular DCM mid-ebb: 15:20 mid-flood: 08:47
12	13	14 Site Inspection WQ General & Regular DCM mid-ebb: 17:57 mid-flood: 10:29	15 CWD Survey (Vessel) AR1A, AR2 NM1A, NM4, NM5, NM6	16 Site Inspection CWD Survey (Vessel, Land-based) WQ General & Regular DCM mid-ebb: 20:42 mid-flood: 08:01	17 Site Inspection CWD Survey (Vessel)	18 WQ General & Regular DCM mid-ebb: 11:14 mid-flood: 16:13
19	20 CWD Survey (Vessel)	21 Site Inspection CWD Survey (Vessel) AR1A, AR2 NM1A, NM4, NM5, NM6 WQ General & Regular DCM mid-ebb: 12:35 mid-flood: 18:27	22	23 Site Inspection WQ General & Regular DCM mid-ebb: 13:26 mid-flood: 19:44	24 Site Inspection	25 WQ General & Regular DCM mid-ebb: 14:22 mid-flood: 07:47
26	27 Site Inspection AR1A, AR2 NM1A, NM4, NM5, NM6	28 Site Inspection WQ General & Regular DCM mid-ebb: 16:13 mid-flood: 09:01	29 Site Inspection	30 WQ General & Regular DCM mid-ebb: 18:03 mid-flood: 05:30		
		Notes: Contract Number - Site Inspection CWD - Chinese White Dolphin Air quality and Noise Monitoring Station WQ - Water Quality DCM - Deep Cement Mixing NM1A/AR1A - Man Tung Road Park NM4 - Ching Chung Hau Po Woon Primary School NM5/AR2 - Village House, Tin Sum NM6 - House No. 1, Sha Lo Wan				

Appendix D. Monitoring Results

Air Quality Monitoring Results

1-hour TSP Results

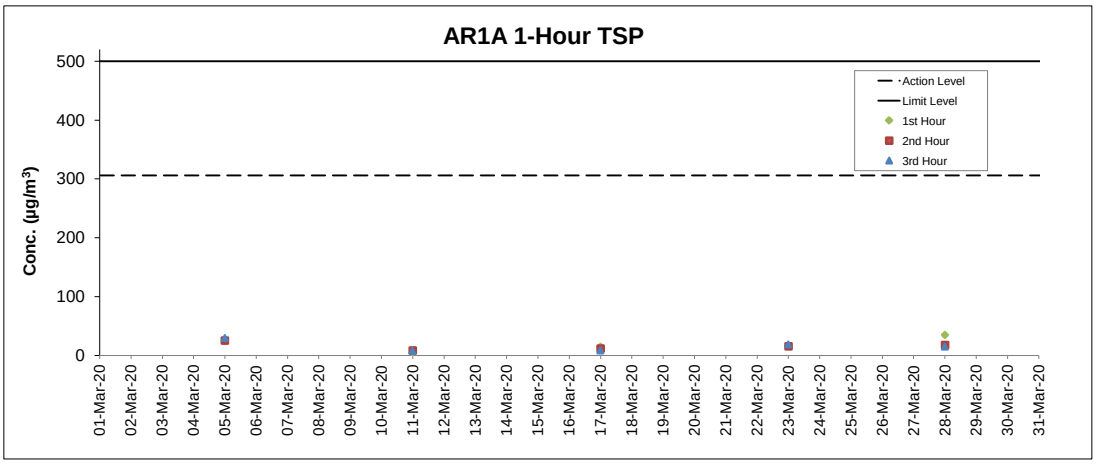
Station: AR1A- Man Tung Road Park

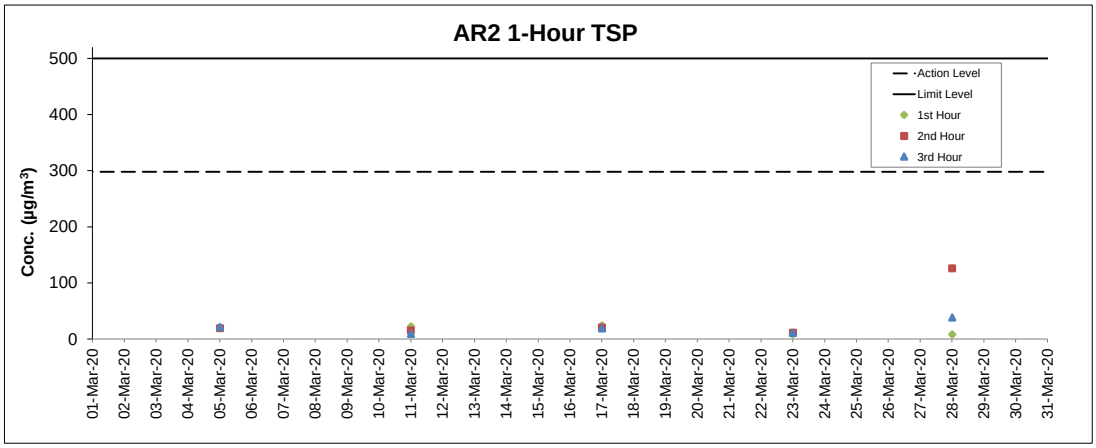
Date	Time	Weather	Wind Speed (m/s)	Wind Direction (deg)	1-hr TSP (μg/m^3)	Action Level (μg/m^3)	Limit Level (μg/m^3)
05-Mar-20	13:30	Cloudy	3.3	55	25	306	500
05-Mar-20	14:30	Cloudy	3.3	73	26	306	500
05-Mar-20	15:30	Cloudy	2.8	73	30	306	500
11-Mar-20	13:45	Cloudy	8.1	79	6	306	500
11-Mar-20	14:45	Cloudy	6.9	100	9	306	500
11-Mar-20	15:45	Cloudy	7.2	96	8	306	500
17-Mar-20	13:31	Cloudy	4.7	418	15	306	500
17-Mar-20	14:31	Cloudy	4.2	348	12	306	500
17-Mar-20	15:31	Cloudy	5.3	245	9	306	500
23-Mar-20	13:45	Sunny	6.4	243	16	306	500
23-Mar-20	14:45	Sunny	6.7	238	16	306	500
23-Mar-20	15:45	Sunny	5.3	235	19	306	500
28-Mar-20	14:10	Drizzle	2.2	254	35	306	500
28-Mar-20	15:10	Drizzle	2.8	282	18	306	500
28-Mar-20	16:10	Drizzle	3.9	277	15	306	500

1-hour TSP Results

Station: AR2- Village House, Tin Sum

Date	Time	Weather	Wind Speed (m/s)	Wind Direction (deg)	1-hr TSP (μg/m^3)	Action Level (μg/m^3)	Limit Level (μg/m^3)
05-Mar-20	9:55	Cloudy	5.8	52	20	298	500
05-Mar-20	10:55	Cloudy	4.2	59	19	298	500
05-Mar-20	11:55	Cloudy	5.0	83	21	298	500
11-Mar-20	9:35	Drizzle	5.6	77	22	298	500
11-Mar-20	10:35	Drizzle	5.0	82	15	298	500
11-Mar-20	11:35	Drizzle	6.4	87	9	298	500
17-Mar-20	9:24	Cloudy	6.4	80	24	298	500
17-Mar-20	10:24	Cloudy	8.1	92	20	298	500
17-Mar-20	11:24	Cloudy	6.1	76	19	298	500
23-Mar-20	9:24	Sunny	2.8	301	8	298	500
23-Mar-20	10:24	Sunny	2.5	255	11	298	500
23-Mar-20	11:24	Sunny	4.2	262	11	298	500
28-Mar-20	9:10	Cloudy	2.2	82	8	298	500
28-Mar-20	11:10	Rainy	3.3	296	126	298	500
28-Mar-20	12:25	Drizzle	7.2	308	38	298	500





Notes

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

Noise Monitoring Results

Noise Measurement Results

Station: NM1A- Man Tung Road Park

Date	Weather	Time	Measured L_{10} dB(A)	Measured L_{90} dB(A)	$L_{eq(30mins)}$ dB(A)
05-Mar-20	Cloudy	14:26	72.6	51.9	73
05-Mar-20	Cloudy	14:31	75.2	53.8	
05-Mar-20	Cloudy	14:36	73.6	52.1	
05-Mar-20	Cloudy	14:41	70.9	49.9	
05-Mar-20	Cloudy	14:46	71.7	50.8	
05-Mar-20	Cloudy	14:51	73.0	50.7	
11-Mar-20	Cloudy	15:26	70.4	51.8	70
11-Mar-20	Cloudy	15:31	71.3	53.0	
11-Mar-20	Cloudy	15:36	70.8	52.3	
11-Mar-20	Cloudy	15:41	72.0	52.8	
11-Mar-20	Cloudy	15:46	71.0	52.9	
11-Mar-20	Cloudy	15:51	69.3	52.0	
17-Mar-20	Cloudy	14:39	71.3	51.9	70
17-Mar-20	Cloudy	14:44	71.9	51.5	
17-Mar-20	Cloudy	14:49	71.7	50.8	
17-Mar-20	Cloudy	14:54	69.2	49.5	
17-Mar-20	Cloudy	14:59	73.0	51.0	
17-Mar-20	Cloudy	15:04	70.6	51.4	
23-Mar-20	Cloudy	14:25	70.3	49.5	70
23-Mar-20	Cloudy	14:30	70.0	49.2	
23-Mar-20	Cloudy	14:35	72.3	50.4	
23-Mar-20	Cloudy	14:40	69.8	50.0	
23-Mar-20	Cloudy	14:45	70.4	49.2	
23-Mar-20	Cloudy	14:50	69.0	53.9	

Remarks:

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

Noise Measurement Results

Station: NM4- Ching Chung Hau Po Woon Primary School

Date	Weather	Time	Measured L_{10} dB(A)	Measured L_{90} dB(A)	$L_{eq(30mins)}$ dB(A)
05-Mar-20	Drizzle	13:26	62.2	55.9	62
05-Mar-20	Drizzle	13:31	61.2	56.5	
05-Mar-20	Drizzle	13:36	60.5	54.3	
05-Mar-20	Drizzle	13:41	59.5	54.6	
05-Mar-20	Drizzle	13:46	60.1	55.2	
05-Mar-20	Drizzle	13:51	61.0	55.3	
11-Mar-20	Cloudy	13:47	61.5	56.1	63
11-Mar-20	Cloudy	13:52	61.9	56.6	
11-Mar-20	Cloudy	13:57	61.6	56.9	
11-Mar-20	Cloudy	14:02	62.2	56.8	
11-Mar-20	Cloudy	14:07	62.9	56.8	
11-Mar-20	Cloudy	14:12	60.6	56.4	
17-Mar-20	Cloudy	15:41	62.2	57.7	63
17-Mar-20	Cloudy	15:46	62.2	56.9	
17-Mar-20	Cloudy	15:51	60.3	55.0	
17-Mar-20	Cloudy	15:56	61.3	55.6	
17-Mar-20	Cloudy	16:01	60.3	55.9	
17-Mar-20	Cloudy	16:06	61.8	57.7	
23-Mar-20	Cloudy	13:35	63.4	58.3	64
23-Mar-20	Cloudy	13:40	61.8	56.8	
23-Mar-20	Cloudy	13:45	63.7	57.2	
23-Mar-20	Cloudy	13:50	62.3	57.1	
23-Mar-20	Cloudy	13:55	60.7	56.6	
23-Mar-20	Cloudy	14:00	62.5	57.5	

Remarks:

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

Noise Measurement Results

Station: NM5- Village House, Tin Sum

Date	Weather	Time	Measured L_{10} dB(A)	Measured L_{90} dB(A)	$L_{eq(30mins)}$ dB(A)
05-Mar-20	Drizzle	10:11	58.3	49.0	57
05-Mar-20	Drizzle	10:16	52.2	48.5	
05-Mar-20	Drizzle	10:21	53.7	48.6	
05-Mar-20	Drizzle	10:26	59.4	49.7	
05-Mar-20	Drizzle	10:31	57.0	48.6	
05-Mar-20	Drizzle	10:36	56.6	50.4	
11-Mar-20	Drizzle	9:52	52.7	49.4	57
11-Mar-20	Drizzle	9:57	55.1	50.3	
11-Mar-20	Drizzle	10:02	60.4	50.6	
11-Mar-20	Drizzle	10:07	53.3	50.5	
11-Mar-20	Drizzle	10:12	54.4	50.4	
11-Mar-20	Drizzle	10:17	55.5	50.0	
17-Mar-20	Cloudy	9:36	53.0	50.2	57
17-Mar-20	Cloudy	9:41	55.7	50.7	
17-Mar-20	Cloudy	9:46	54.0	50.6	
17-Mar-20	Cloudy	9:51	54.8	51.8	
17-Mar-20	Cloudy	9:56	58.6	51.3	
17-Mar-20	Cloudy	10:01	53.8	51.1	
23-Mar-20	Sunny	9:32	53.7	46.1	62
23-Mar-20	Sunny	9:37	52.3	45.2	
23-Mar-20	Sunny	9:42	56.6	44.0	
23-Mar-20	Sunny	9:47	56.6	45.2	
23-Mar-20	Sunny	9:52	58.2	45.3	
23-Mar-20	Sunny	9:57	61.3	46.0	

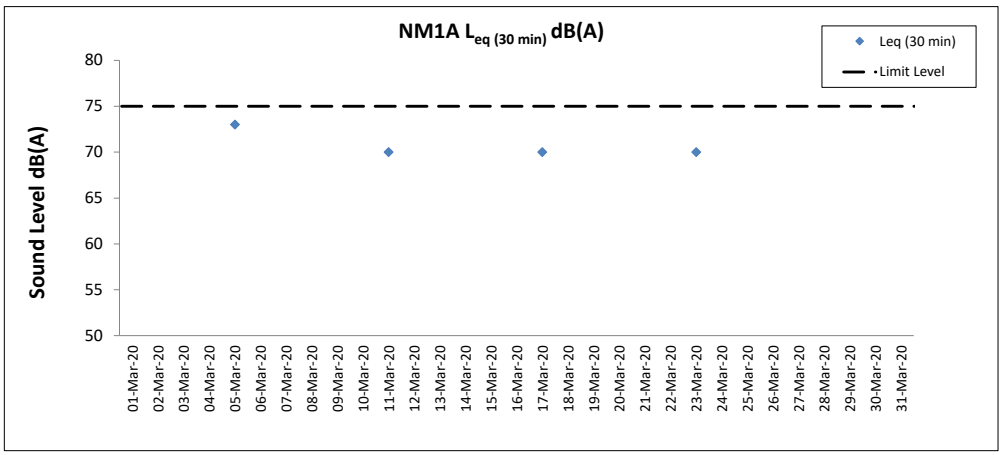
Remarks:
+3dB (A) correction was applied to free-field measurement.

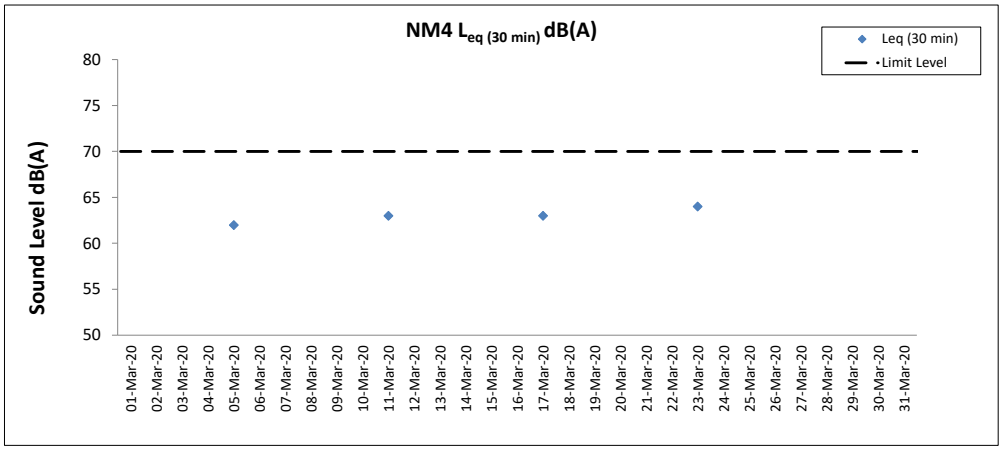
Noise Measurement Results

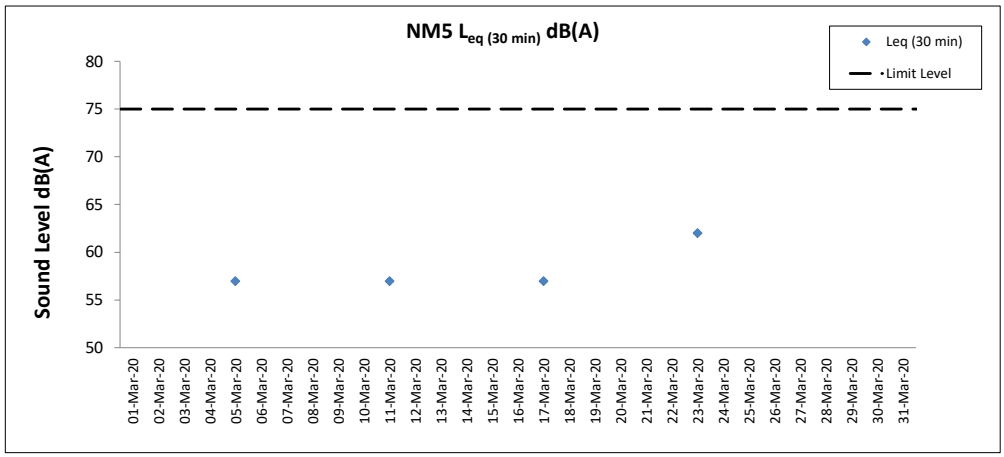
Station: NM6- House No.1 Sha Lo Wan

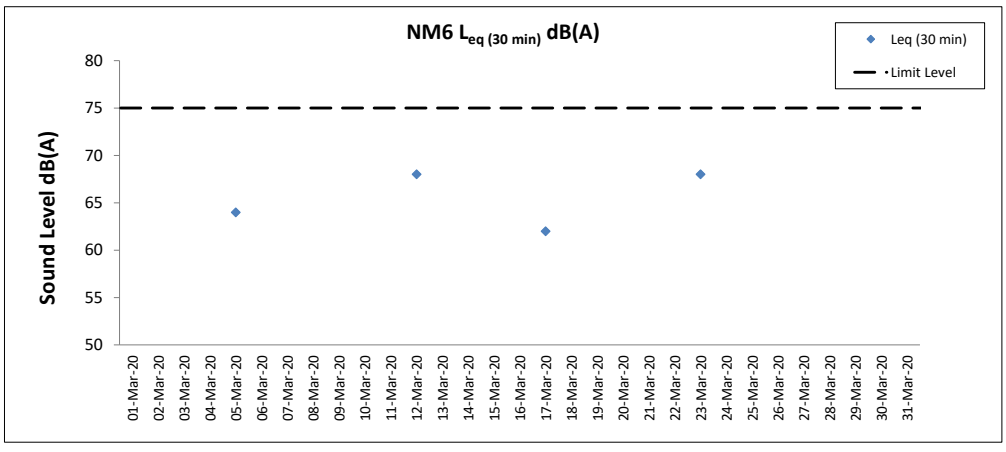
Date	Weather	Time	Measured L_{10} dB(A)	Measured L_{90} dB(A)	$L_{eq(30mins)}$ dB(A)
05-Mar-20	Cloudy	15:41	66.7	53.8	64
05-Mar-20	Cloudy	15:46	55.1	45.5	
05-Mar-20	Cloudy	15:51	67.8	48.8	
05-Mar-20	Cloudy	15:56	62.3	44.9	
05-Mar-20	Cloudy	16:01	65.6	44.2	
05-Mar-20	Cloudy	16:06	61.7	43.8	
12-Mar-20	Cloudy	15:42	68.2	46.9	68
12-Mar-20	Cloudy	15:47	65.5	45.6	
12-Mar-20	Cloudy	15:52	71.0	50.2	
12-Mar-20	Cloudy	15:57	65.6	49.4	
12-Mar-20	Cloudy	16:02	67.0	49.2	
12-Mar-20	Cloudy	16:07	68.7	48.7	
17-Mar-20	Cloudy	13:11	58.5	44.9	62
17-Mar-20	Cloudy	13:16	56.4	43.4	
17-Mar-20	Cloudy	13:21	53.9	45.5	
17-Mar-20	Cloudy	13:26	70.3	55.3	
17-Mar-20	Cloudy	13:31	76.3	53.7	
17-Mar-20	Cloudy	13:36	61.8	47.7	
23-Mar-20	Cloudy	15:41	69.8	49.9	68
23-Mar-20	Cloudy	15:46	70.1	47.7	
23-Mar-20	Cloudy	15:51	71.2	50.1	
23-Mar-20	Cloudy	15:56	71.0	50.2	
23-Mar-20	Cloudy	16:01	67.0	43.7	
23-Mar-20	Cloudy	16:06	66.4	39.2	

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









Notes

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

Water Quality Monitoring Results

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 03 March 20 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	18:45	8.1	Surface	1.0	0.2	244	19.9	19.9	8.2	8.2	32.6	32.6	105.4	105.4	7.9	7.9	1.9	2.6	4	5	83	89	815610	804231	<0.2	<0.2	0.9	0.6
						1.0	0.2	254	19.9		8.2		32.6		105.4		7.9		1.9		5		88				<0.2		0.8	
					Middle	4.1	0.1	163	19.9	19.9	8.2	8.2	32.9	32.9	104.2	104.1	7.8		1.9		5	5	89				<0.2		0.5	
						4.1	0.1	164	19.9		8.2		32.9		104.0		7.8		1.9		5		89				<0.2		0.5	
					Bottom	7.1	0.1	207	19.7	19.7	8.2	8.2	33.4	33.4	99.6	99.6	7.5	7.5	4.1		5		91				<0.2		0.4	
						7.1	0.1	223	19.7		8.2		33.4		99.6		7.5		4.1		6		91				<0.2		0.4	
C2	Cloudy	Moderate	17:35	12.4	Surface	1.0	0.1	158	20.4	20.4	7.9	7.9	29.1	29.1	94.6	94.5	7.2	7.1	1.9	4.5	3	4	86	89	825665	806948	<0.2	<0.2	0.3	0.3
						1.0	0.1	158	20.4		7.9		29.1		94.4		7.2		1.9		3		88				<0.2		0.3	
					Middle	6.2	0.2	138	20.3	20.3	7.9	7.9	29.4	29.4	92.4	92.4	7.0		2.0		4		88				<0.2		0.3	
						6.2	0.2	143	20.3		7.9		29.4		92.3		7.0		2.1		3		89				<0.2		0.3	
					Bottom	11.4	0.2	152	19.9	19.9	7.9	7.9	30.5	30.5	83.3	83.4	6.3	6.3	9.7		4		90				<0.2		0.3	
						11.4	0.2	160	19.9		7.9		30.5		83.4		6.3		9.5		3		90				<0.2		0.3	
C3	Cloudy	Moderate	19:16	12.0	Surface	1.0	0.4	55	19.9	19.9	8.0	8.0	31.2	31.2	92.8	92.8	7.0	7.0	2.5	3.2	3	4	86	89	822106	817819	<0.2	<0.2	0.3	0.3
						1.0	0.5	59	19.9		8.0		31.2		92.8		7.0		2.6		2		87				<0.2		0.3	
					Middle	6.0	0.2	75	19.9	19.9	8.0	8.0	31.6	31.6	92.8	92.8	7.0		3.3		4		92				<0.2		0.4	
						6.0	0.2	79	19.8		8.0		31.6		92.7		7.0		3.3		5		89				<0.2		0.3	
					Bottom	11.0	0.2	66	19.7	19.7	8.1	8.1	31.7	31.7	94.5	94.6	7.2	7.2	3.7		5		90				<0.2		0.3	
						11.0	0.2	69	19.7		8.1		31.7		94.7		7.2		3.7		6		92				<0.2		0.3	
IM1	Cloudy	Moderate	19:09	4.9	Surface	1.0	0.1	171	19.7	19.7	8.2	8.2	33.2	33.2	100.7	100.7	7.6	7.6	3.0	3.5	7	7	88	89	817953	807147	<0.2	<0.2	0.2	0.4
						1.0	0.1	179	19.7		8.2		33.2		100.6		7.6		3.0		6		88				<0.2		0.3	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	0.1	175	19.7	19.7	8.2	8.2	33.3	33.3	98.1	98.1	7.4	7.4	4.0		7		89				<0.2		0.5	
						3.9	0.1	175	19.7		8.2		33.3		98.1		7.4		4.0		8		89				<0.2		0.5	
IM2	Cloudy	Moderate	19:17	6.8	Surface	1.0	0.1	191	19.9	19.9	8.2	8.2	33.1	33.1	104.8	104.8	7.9	7.9	2.7	4.2	4	5	87	89	818166	806146	<0.2	<0.2	0.3	0.3
						1.0	0.1	198	19.9		8.2		33.1		104.8		7.9		2.7		5		87				<0.2		0.2	
					Middle	3.4	0.1	172	19.9	19.9	8.2	8.2	33.2	33.2	103.4	103.4	7.8		2.7		4		89				<0.2		0.2	
						3.4	0.1	189	19.9		8.2		33.2		103.3		7.8		2.7		5		89				<0.2		0.2	
					Bottom	5.8	0.1	166	19.7	19.7	8.2	8.2	33.3	33.3	99.6	99.6	7.5	7.5	7.2		5		90				<0.2		0.3	
						5.8	0.2	170	19.7		8.2		33.3		99.6		7.5		7.3		6		90				<0.2		0.3	
IM3	Cloudy	Moderate	19:25	7.0	Surface	1.0	0.2	187	20.0	20.0	8.2	8.2	33.1	33.1	106.5	106.5	8.0	8.0	1.8	2.9	3	4	87	89	818781	805607	<0.2	<0.2	0.2	0.3
						1.0	0.2	200	20.0		8.2		33.1		106.5		8.0		1.8		3		87				<0.2		0.3	
					Middle	3.5	0.2	180	20.0	20.0	8.2	8.2	33.1	33.1	105.2	105.2	7.9		2.2		4		89				<0.2		0.2	
						3.5	0.3	181	20.0		8.2		33.1		105.1		7.9		2.2		4		89				<0.2		0.3	
					Bottom	6.0	0.2	154	19.8	19.8	8.2	8.2	33.3	33.3	100.0	100.0	7.5	7.5	4.7		4		90				<0.2		0.2	
						6.0	0.3	161	19.8		8.2		33.3		100.0		7.5		4.7		4		90				<0.2		0.3	
IM4	Cloudy	Moderate	19:39	7.8	Surface	1.0	0.4	191	19.9	19.9	8.2	8.2	32.1	32.1	98.1	98.1	7.4	7.4	4.7	6.7	4	6	86	88	819714	804615	<0.2	<0.2	0.6	0.6
						1.0	0.5	208	19.9		8.2		32.1		98.1		7.4		4.7		5		86				<0.2		0.6	
					Middle	3.9	0.4	177	19.8	19.8	8.2	8.2	32.9	32.9	98.5	98.5	7.4		6.9		7		89				<0.2		0.8	
						3.9	0.4	177	19.8		8.2		32.9		98.5		7.4		6.8		6		89				<0.2		1.0	
					Bottom	6.8	0.2	156	19.8	19.8	8.2	8.2	33.2	33.2	98.4	98.4	7.4	7.4	8.5		7		90				<0.2		0.3	
						6.8	0.2	165	19.8		8.2		33.2		98.4		7.4		8.5		6		90				<0.2		0.5	
IM5	Cloudy	Moderate	19:50	7.3	Surface	1.0	0.7	228	20.2	20.2	8.1	8.1	30.8	30.8	95.4	95.4	7.2	7.3	3.5	5.1	4	4	85	87	820747	804865	<0.2	<0.2	0.7	0.6
						1.0	0.7	240	20.2		8.1		30.8		95.4		7.2		3.5		4		85				<0.2		0.6	
					Middle	3.7	0.6	211	20.1	20.1	8.1	8.1	31.2	31.2	96.4	96.5	7.3		3.7		4		88				<0.2		0.6	
						3.7	0.6	221	20.1		8.1		31.2		96.5		7.3		3.7		5		88				<0.2		0.7	
					Bottom	6.3	0.4	201	19.8	19.8	8.2	8.2	33.0	33.0	98.6	98.6	7.4	7.4	8.0		4		89				<0.2		0.6	
						6.3	0.5	208	19.8		8.2		33.0		98.6		7.4		8.0		4		89				<0.2		0.6	
IM6	Cloudy	Moderate	20:01	6.9	Surface	1.0	0.6	241	20.3	20.3	8.1	8.1	30.4	30.4	95.0	95.1	7.2	7.3	2.9	4.8	4	5	85	87	821080	805847	<0.2	<0.2	0.5	0.4
						1.0	0.6	243	20.3		8.1		30.4		95.1		7.2		2.8		4		85				<0.2		0.5	
					Middle	3.5	0.4	227	20.0	20.0	8.2	8.2	31.9	31.9	96.9	97.0	7.3		3.9		5		88				<0.2		0.5	
						3.5	0.5	236	20.0		8.2		31.9		97.0		7.3		3.9		6		88				<0.2		0.5	
					Bottom	5.9	0.3	219	19.7	19.7	8.2	8.2	33.1	33.1	97.2	97.2	7.3	7.3	7.5		5		89				<0.2		0.3	
						5.9	0.4	234	19.7		8.2		33.1		97.2		7.3		7.5		6		88				<0.2		0.2	
IM7	Cloudy	Moderate	20:11	8.0	Surface	1.0	0.4	236	20.3	20.3	8.1	8.1	30.2	30.2	96.1	96.1	7.3	7.3	2.6	4.1	5	5	86	88	821348	806849	<0.2	<0.2	0.7	0.7
						1.0	0.5	249	20.3		8.1		30.2		96.1		7.3		2.6		5		86				<0.2		0.6	
					Middle	4.0	0.2	243	20.1	20.1	8.1	8.1	31.4	31.4	96.1	96.1	7.3		4.4		5		88				<0.2		0.7	
						4.0	0.3	258	20.1		8.1		31.4		96.1		7.3		4.5		5		87				<0.2		0.7	
					Bottom	7.0	0.2	228	19.7	19.7	8.2	8.2	33.0	33.0	97.3	97.3	7.3	7.3	5.4		5		89				<0.2		0.7	
						7.0	0.2	229	19.7		8.2		33.0		97.3		7.3		5.4		5		89				<0.2		0.7	
IM8	Cloudy	Moderate	17:56	8.0	Surface	1.0	0.2	100	20.2	20.2	8.0	8.0	29.8	29.8	94.3	94.4	7.2	7.2	6.3	6.8	4	4	86	88	821830	808136	<0.2	<0.2	0.6	0.6
						1.0	0.2	107	20.2		8.0		29.8		94.5		7.2		6.5		4		86				<0.2		0.5	
					Middle	4.0	0.1	84	19.9	19.9	8.0	8.0	30.6	30.6	95.1	95.2	7.2		7.0		4		88				<0.2		0.6	
						4.0	0.2	88	19.9		8.0		30.7		95.2		7.2		6.9		4		89				<0.2		0.5	
					Bottom	7.0	0.2	49	19.7	19.7	8.0	8.0	31.6	31.6	95.3	95.4	7.2	7.2	7.1		4		90				<0.2		0.6	
						7.0	0.2	52	19.7		8.0		31.7		95.4		7.2		7.1		4		90				<0.2		0.6	

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 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	18:03	7.6	Surface	1.0	0.3	84	20.2	20.2	8.0	8.0	29.9	29.9	93.8	93.9	7.1	7.2	4.4	5.9	4	5	86	88	822116	808815	<0.2	<0.2	0.4	0.5
						1.0	0.3	89	20.1		8.0		29.9		93.9		7.1		4.5		4		86				<0.2		0.5	
					Middle	3.8	0.3	84	19.9	19.9	8.0	8.0	30.6	30.6	94.1	94.1	7.2		4.8		6		88				<0.2		0.5	
						3.8	0.3	91	19.9		8.0		30.6		94.1		7.2		4.9		5		89				<0.2		0.5	
					Bottom	6.6	0.3	79	19.8	19.8	8.0	8.0	31.2	31.2	93.9	94.0	7.1	7.1	8.3		5		90				<0.2		0.5	
						6.6	0.3	85	19.8		8.0		31.2		94.0		7.1		8.3		6		90				<0.2		0.6	
IM10	Cloudy	Moderate	18:09	7.5	Surface	1.0	0.4	62	20.1	20.1	8.0	8.0	29.8	29.8	91.8	91.8	7.0	7.1	5.1	8.6	6	6	86	88	822393	809815	<0.2	<0.2	0.5	0.5
						1.0	0.5	67	20.1		8.0		29.9		91.8		7.0		5.4		6		85				<0.2		0.7	
					Middle	3.8	0.4	66	20.0	20.0	8.0	8.0	30.4	30.4	92.7	92.8	7.1		8.9		5		88				<0.2		0.5	
						3.8	0.4	69	20.0		8.0		30.4		92.9		7.1		9.3		6		87				<0.2		0.5	
					Bottom	6.5	0.4	74	19.9	19.9	8.0	8.0	30.6	30.6	94.1	94.2	7.2	7.2	11.5		6		90				<0.2		0.5	
						6.5	0.4	76	19.9		8.0		30.6		94.2		7.2		11.5		5		92				<0.2		0.5	
IM11	Cloudy	Moderate	18:19	8.0	Surface	1.0	0.4	106	20.1	20.1	7.9	7.9	29.8	29.8	90.8	90.8	6.9	6.9	3.8	5.6	5	6	86	88	822041	811470	<0.2	<0.2	0.5	0.5
						1.0	0.4	106	20.1		7.9		29.8		90.8		6.9		4.1		5		86				<0.2		0.6	
					Middle	4.0	0.4	109	20.0	20.0	8.0	8.0	30.1	30.2	91.0	91.0	6.9		5.7		5		88				<0.2		0.5	
						4.0	0.4	118	20.0		8.0		30.2		91.0		6.9		5.9		6		88				<0.2		0.5	
					Bottom	7.0	0.3	99	20.0	20.0	8.0	8.0	30.4	30.4	91.9	92.1	7.0	7.0	7.2		6		90				<0.2		0.5	
						7.0	0.3	105	20.0		8.0		30.4		92.3		7.0		7.2		6		91				<0.2		0.5	
IM12	Cloudy	Moderate	18:26	9.1	Surface	1.0	0.4	144	20.1	20.1	8.0	8.0	29.9	29.9	90.7	90.7	6.9	6.9	5.7	6.9	6	5	87	89	821456	812052	<0.2	<0.2	0.6	0.5
						1.0	0.4	144	20.1		8.0		29.9		90.6		6.9		5.6		5		86				<0.2		0.5	
					Middle	4.6	0.4	157	20.0	20.0	8.0	8.0	30.2	30.2	90.2	90.2	6.9		7.3		5		88				<0.2		0.4	
						4.6	0.4	164	20.0		8.0		30.3		90.1		6.9		7.4		5		89				<0.2		0.5	
					Bottom	8.1	0.2	142	19.9	19.9	8.0	8.0	30.6	30.6	90.6	90.7	6.9	6.9	7.9		4		90				<0.2		0.5	
						8.1	0.2	149	19.9		8.0		30.6		90.8		6.9		7.6		4		91				<0.2		0.4	
SR1A	Cloudy	Moderate	18:44	5.1	Surface	1.0	-	-	20.1	20.1	8.0	8.0	29.9	29.9	90.3	90.4	6.9	6.9	3.1	3.4	3	3	-	-	819970	812655	-	-	-	-
						1.0	-	-	20.1		8.0		30.0		90.4		6.9		3.2		3		-				-		-	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	-	-	20.0	20.0	8.0	8.0	30.4	30.4	91.9	92.0	7.0	7.0	3.6		3		-				-		-	
						4.1	-	-	20.0		8.0		30.4		92.1		7.0		3.6		3		-				-		-	
SR2	Cloudy	Moderate	18:56	4.2	Surface	1.0	0.4	91	20.1	20.1	8.0	8.0	30.0	30.0	93.3	93.3	7.1	7.1	3.3	3.6	6	6	86	89	821453	814158	<0.2	<0.2	1.4	1.2
						1.0	0.4	92	20.1		8.0		30.0		93.2		7.1		3.3		6		88				<0.2		1.3	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.3	89	20.0	20.0	8.0	8.0	30.4	30.4	93.0	93.1	7.1	7.1	4.0		5		90				<0.2		1.0	
						3.2	0.3	96	20.0		8.0		30.4		93.1		7.1		4.0		5		92				<0.2		0.9	
SR3	Cloudy	Moderate	17:51	8.7	Surface	1.0	0.2	185	20.3	20.3	7.9	7.9	29.3	29.3	94.3	94.3	7.2	7.2	2.5	4.0	5	5	-	-	822158	807578	-	-	-	-
						1.0	0.2	191	20.3		7.9		29.3		94.3		7.2		2.5		4		-				-		-	
					Middle	4.4	0.1	173	20.2	20.2	8.0	8.0	29.5	29.5	95.1	95.2	7.2		2.7		5		-				-		-	
						4.4	0.1	187	20.2		8.0		29.5		95.2		7.2		2.8		4		-				-		-	
					Bottom	7.7	0.1	7	19.7	19.7	8.0	8.0	31.8	31.7	96.4	96.4	7.3	7.3	6.7		5		-				-		-	
						7.7	0.1	7	19.7		8.0		31.7		96.4		7.3		6.7		5		-				-		-	
SR4A	Cloudy	Calm	18:24	9.2	Surface	1.0	0.2	82	19.9	19.9	8.2	8.2	32.9	32.9	104.4	104.4	7.8	7.8	3.7	5.1	10	8	-	-	817181	807822	-	-	-	-
						1.0	0.2	84	19.9		8.2		32.9		104.3		7.8		3.7		10		-				-		-	
					Middle	4.6	0.2	61	19.8	19.8	8.2	8.2	33.0	33.0	102.1	102.1	7.7		5.3		8		-				-		-	
						4.6	0.2	65	19.8		8.2		33.0		102.0		7.7		5.3		7		-				-		-	
					Bottom	8.2	0.1	52	19.8	19.8	8.2	8.2	33.1	33.1	100.9	100.9	7.6	7.6	6.3		6		-				-		-	
						8.2	0.1	55	19.8		8.2		33.1		100.9		7.6		6.3		7		-				-		-	
SR5A	Cloudy	Calm	18:05	3.6	Surface	1.0	0.1	96	20.6	20.6	8.1	8.1	30.0	30.0	97.5	97.5	7.3	7.3	5.2	5.1	8	10	-	-	816613	810709	-	-	-	-
						1.0	0.1	101	20.6		8.1		30.0		97.5		7.3		5.2		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.6	0.0	175	20.5	20.5	8.1	8.1	30.9	30.9	98.5	98.5	7.4	7.4	5.1		11		-				-		-	
						2.6	0.0	183	20.5		8.1		30.9		98.5		7.4		5.1		10		-				-		-	
SR6A	Cloudy	Calm	17:34	4.3	Surface	1.0	0.1	73	20.9	20.9	8.1	8.1	30.0	30.0	94.5	94.5	7.1	7.1	4.9	6.0	6	7	-	-	817953	814749	-	-	-	-
						1.0	0.1	78	20.9		8.1		30.0		94.4		7.1		4.9		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.1	115	20.6	20.6	8.1	8.1	30.5	30.5	89.8	89.8	6.8	6.8	7.1		8		-				-		-	
						3.3	0.1	115	20.6		8.1		30.5		89.8		6.8		7.0		7		-				-		-	
SR7	Cloudy	Moderate	19:45	16.4	Surface	1.0	0.4	56	19.7	19.7	8.0	8.0	31.8	31.8	92.1	92.1	7.0	7.0	1.4	1.5	3	4	-	-	823630	823743	-	-	-	-
						1.0	0.4	57	19.7		8.0		31.8		92.1		7.0		1.4		4		-				-		-	
					Middle	8.2	0.3	42	19.7	19.7	8.0	8.0	31.9	31.9	91.9	91.9	7.0		1.6		4		-				-		-	
						8.2	0.3	42	19.7		8.0		31.9		91.9		7.0		1.6		4		-				-		-	
					Bottom	15.4	0.2	3	19.7	19.7	8.0	8.0	32.0	32.0	92.2	92.3	7.0	7.0	1.7		4		-				-		-	
						15.4	0.2	3	19.7		8.0		32.0		92.3		7.0		1.7		4		-				-		-	
SR8	Cloudy	Moderate	18:35	5.0	Surface	1.0	-	-	20.4	20.4	8.0	8.0	29.9	30.0	92.3	92.3	7.0	7.0	8.2	7.6	6	5	-	-	820400	811619	-	-	-	-
						1.0	-	-	20.4		8.0		30.0		92.2		7.0		7.9		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	-	-	20.2	20.2	8.0	8.0	30.1	30.1	92.5	92.7	7.0	7.1	7.1		5		-				-		-	
						4.0	-	-	20.2		8.0		30.1		92.9		7.1		7.1		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 03 March 20 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	11:52	7.7	Surface	1.0	0.3	46	19.8	19.8	8.2	8.2	33.2	33.2	101.6	101.6	7.6	7.6	2.6	3.5	4	4	87	89	815636	804236	<0.2	<0.2	0.4	0.4
						1.0	0.3	48	19.8		8.2		33.2		101.6		7.6		2.6		4		87				<0.2		0.6	
					Middle	3.9	0.2	51	19.8	19.8	8.2	8.2	33.3	33.3	100.6	100.6	7.6		3.4		4		89				<0.2		0.4	
						3.9	0.3	52	19.8		8.2		33.3		100.6		7.6		3.4		4		89				<0.2		0.4	
					Bottom	6.7	0.2	53	19.7	19.7	8.2	8.2	33.4	33.4	99.6	99.6	7.5	7.5	4.6		5		91				<0.2		0.4	
						6.7	0.2	57	19.7		8.2		33.4		99.6		7.5		4.6		5		90				<0.2		0.4	
C2	Cloudy	Moderate	12:36	12.5	Surface	1.0	0.1	351	20.5	20.5	8.0	8.0	28.0	28.1	95.0	95.0	7.3	7.2	1.8	3.5	3	3	86	88	825668	806922	<0.2	<0.2	0.8	0.8
						1.0	0.1	323	20.4		8.0		28.1		94.9		7.3		1.8		3		85				<0.2		0.7	
					Middle	6.3	0.2	303	20.2	20.2	8.0	8.0	29.2	29.2	92.5	92.3	7.1		2.0		3		88				<0.2		0.8	
						6.3	0.3	331	20.2		8.0		29.2		92.1		7.0		2.2		3		88				<0.2		0.8	
					Bottom	11.5	0.2	326	20.2	20.2	8.0	8.0	29.7	29.7	90.2	90.3	6.9	6.9	6.7		2		90				<0.2		0.8	
						11.5	0.2	338	20.2		8.0		29.7		90.3		6.9		6.6		3		91				<0.2		0.8	
C3	Cloudy	Moderate	10:49	11.6	Surface	1.0	0.4	281	20.0	20.0	8.0	8.0	30.2	30.2	93.0	92.9	7.1	7.0	1.6	3.0	3	3	86	89	822123	817803	<0.2	<0.2	0.6	0.6
						1.0	0.4	306	19.9		8.0		30.3		92.8		7.1		1.5		3		88				<0.2		0.5	
					Middle	5.8	0.4	293	19.7	19.7	8.0	8.0	31.5	31.5	89.4	89.4	6.8		1.1		4		88				<0.2		0.5	
						5.8	0.4	317	19.7		8.0		31.6		89.3		6.8		1.1		3		89				<0.2		0.5	
					Bottom	10.6	0.2	345	19.6	19.6	8.0	8.0	31.8	31.8	89.0	89.0	6.8	6.8	6.5		3		90				<0.2		0.6	
						10.6	0.2	351	19.6		8.0		31.8		89.0		6.8		6.0		4		91				<0.2		0.6	
IM1	Fine	Moderate	12:14	5.3	Surface	1.0	0.2	21	19.7	19.7	8.2	8.2	33.1	33.1	98.3	98.3	7.4	7.4	4.6	6.0	8	8	88	89	817956	807149	<0.2	<0.2	0.7	0.6
						1.0	0.2	22	19.7		8.2		33.1		98.3		7.4		4.6		8		88				<0.2		0.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	0.1	41	19.6	19.6	8.2	8.2	33.5	33.5	96.0	96.1	7.2	7.2	7.4		7		89				<0.2		0.6	
						4.3	0.1	43	19.6		8.2		33.5		96.1		7.2		7.3		8		89				<0.2		0.6	
IM2	Fine	Moderate	12:24	7.2	Surface	1.0	0.2	347	19.8	19.8	8.2	8.2	32.8	32.8	98.5	98.5	7.4	7.4	3.6	5.2	7	8	86	88	818150	806150	<0.2	<0.2	0.5	0.5
						1.0	0.2	319	19.8		8.2		32.8		98.5		7.4		3.7		6		87				<0.2		0.5	
					Middle	3.6	0.2	0	19.6	19.6	8.2	8.2	33.1	33.1	97.5	97.5	7.4		5.5		9		88				<0.2		0.5	
						3.6	0.2	0	19.6		8.2		33.1		97.5		7.4		5.5		9		88				<0.2		0.5	
					Bottom	6.2	0.2	13	19.6	19.6	8.2	8.2	33.1	33.1	97.2	97.2	7.3	7.3	6.4		9		90				<0.2		0.5	
						6.2	0.2	13	19.6		8.2		33.1		97.2		7.3		6.5		9		89				<0.2		0.6	
IM3	Fine	Moderate	12:32	7.3	Surface	1.0	0.3	315	19.8	19.8	8.2	8.2	32.8	32.8	98.5	98.5	7.4	7.4	3.8	4.7	6	6	86	88	818778	805593	<0.2	<0.2	0.8	0.7
						1.0	0.3	344	19.8		8.2		32.8		98.5		7.4		3.8		6		86				<0.2		0.8	
					Middle	3.7	0.2	346	19.7	19.7	8.2	8.2	32.9	32.9	98.1	98.1	7.4		3.9		6		88				<0.2		0.8	
						3.7	0.2	318	19.7		8.2		32.9		98.0		7.4		3.9		7		88				<0.2		0.7	
					Bottom	6.3	0.2	359	19.5	19.5	8.2	8.2	33.2	33.2	97.0	97.0	7.3	7.3	6.4		7		89				<0.2		0.6	
						6.3	0.2	330	19.5		8.2		33.2		97.0		7.3		6.4		6		89				<0.2		0.7	
IM4	Fine	Moderate	12:41	8.1	Surface	1.0	0.4	334	19.7	19.7	8.2	8.2	33.0	33.0	98.7	98.7	7.4	7.4	4.6	6.5	7	9	86	88	819714	804618	<0.2	<0.2	0.7	0.7
						1.0	0.4	350	19.7		8.2		33.0		98.7		7.4		4.5		8		86				<0.2		0.7	
					Middle	4.1	0.3	356	19.6	19.6	8.2	8.2	33.1	33.1	98.4	98.4	7.4		5.2		9		87				<0.2		0.7	
						4.1	0.3	356	19.6		8.2		33.1		98.4		7.4		5.2		8		88				<0.2		0.6	
					Bottom	7.1	0.3	0	19.6	19.6	8.2	8.2	33.3	33.3	97.9	97.9	7.4	7.4	9.8		10		89				<0.2		0.7	
						7.1	0.3	0	19.6		8.2		33.3		97.8		7.4		9.6		11		89				<0.2		0.7	
IM5	Fine	Moderate	12:53	7.6	Surface	1.0	0.4	352	19.7	19.7	8.2	8.2	33.0	33.0	97.8	97.8	7.4	7.4	4.4	5.2	7	8	86	88	820744	804857	<0.2	<0.2	0.7	0.7
						1.0	0.4	324	19.7		8.2		33.0		97.8		7.4		4.3		7		86				<0.2		0.7	
					Middle	3.8	0.4	8	19.6	19.6	8.2	8.2	33.1	33.1	97.6	97.6	7.4		5.1		8		88				<0.2		0.7	
						3.8	0.4	8	19.6		8.2		33.1		97.6		7.4		5.1		7		88				<0.2		0.7	
					Bottom	6.6	0.3	15	19.6	19.6	8.2	8.2	33.1	33.1	97.4	97.4	7.3	7.3	6.1		8		89				<0.2		0.6	
						6.6	0.3	16	19.6		8.2		33.1		97.4		7.3		6.2		8		89				<0.2		0.6	
IM6	Fine	Moderate	13:03	7.3	Surface	1.0	0.1	276	20.4	20.4	8.1	8.1	30.4	30.4	96.1	96.1	7.3	7.3	3.8	5.5	7	8	87	88	821066	805823	<0.2	<0.2	1.0	1.0
						1.0	0.1	282	20.4		8.1		30.4		96.1		7.3		3.8		7		86				<0.2		0.9	
					Middle	3.7	0.1	83	20.0	20.0	8.1	8.1	31.6	31.6	96.0	96.0	7.2		4.7		8		88				<0.2		0.9	
						3.7	0.1	85	20.0		8.2		31.7		96.0		7.2		4.7		8		88				<0.2		1.0	
					Bottom	6.3	0.2	73	19.6	19.6	8.2	8.2	32.8	32.8	95.2	95.2	7.2	7.2	8.0		9		90				<0.2		1.0	
						6.3	0.3	79	19.6		8.2		32.8		95.2		7.2		8.0		8		89				<0.2		1.1	
IM7	Fine	Moderate	13:13	8.5	Surface	1.0	0.1	263	20.4	20.4	8.1	8.1	30.1	30.1	94.8	94.8	7.2	7.2	4.7	5.5	7	9	85	87	821338	806831	<0.2	<0.2	1.2	1.1
						1.0	0.1	279	20.4		8.1		30.1		94.8		7.2		4.7		7		85				<0.2		1.1	
					Middle	4.3	0.1	102	20.2	20.2	8.1	8.1	30.6	30.6	94.3	94.3	7.1		4.2		9		87				<0.2		1.1	
						4.3	0.1	106	20.2		8.1		30.6		94.3		7.1		4.2		8		87				<0.2		1.2	
					Bottom	7.5	0.2	86	19.7	19.7	8.2	8.2	32.6	32.6	94.4	94.4	7.1	7.1	7.6		10		89				<0.2		1.1	
						7.5	0.2	87	19.7		8.2		32.6		94.4		7.1		7.6		10		89				<0.2		1.0	
IM8	Cloudy	Moderate	12:12	8.2	Surface	1.0	0.1	177	20.3	20.3	7.9	7.9	29.2	29.2	91.6	91.6	7.0	7.0	6.1	5.9	11	11	86	89	821828	808153	<0.2	<0.2	0.6	0.5
						1.0	0.1	194	20.3		7.9		29.2		91.5		7.0		6.0		12		87				<0.2		0.5	
					Middle	4.1	0.1	183	20.3	20.3	7.9	7.9	29.2	29.2	91.5	91.5	7.0		5.7		11		88				<0.2		0.6	
						4.1	0.1	200	20.3		7.9		29.2		91.5		7.0		5.7		10		89				<0.2		0.5	
					Bottom	7.2	0.1	146	20.1	20.1	8.0	8.0	29.8	29.8	91.3	91.3	7.0	7.0	5.8		11		90				<0.2		0.5	
						7.2	0.1	159	20.1		8.0		29.8		91.3		7.0		5.8		10		91				<0.2		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 03 March 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	12:05	7.6	Surface	1.0	0.2	254	20.3	20.3	8.0	8.0	29.3	29.3	91.1	91.1	6.9	6.9	7.2	7.7	12	12	85	88	822089	808813	<0.2	<0.2	0.5	0.6
						1.0	0.2	264	20.3		8.0		29.3		91.0		6.9		7.4		13		87				<0.2		0.6	
					Middle	3.8	0.2	238	20.3	20.3	8.0	8.0	29.3	29.3	91.0	91.0	6.9		7.9		12		88				<0.2		0.6	
						3.8	0.2	247	20.3		8.0		29.3		91.0		6.9		7.9		11		89				<0.2		0.6	
					Bottom	6.6	0.2	212	20.2	20.2	8.0	8.0	29.3	29.3	91.5	91.6	7.0	7.0	7.8		12		90				<0.2		0.6	
						6.6	0.2	222	20.2		8.0		29.3		91.6		7.0		7.8		11		91				<0.2		0.6	
IM10	Cloudy	Moderate	11:59	8.4	Surface	1.0	0.3	301	20.2	20.2	8.0	8.0	29.4	29.4	91.5	91.5	7.0	7.0	6.2	6.7	12	12	86	88	822379	809816	<0.2	<0.2	0.6	0.6
						1.0	0.3	323	20.2		8.0		29.4		91.5		7.0		6.2		11		86				<0.2		0.6	
					Middle	4.2	0.2	299	20.2	20.2	8.0	8.0	29.5	29.5	91.0	91.0	6.9		6.8		11		88				<0.2		0.6	
						4.2	0.3	320	20.2		8.0		29.5		91.0		6.9		6.8		12		87				<0.2		0.6	
					Bottom	7.4	0.3	300	20.2	20.2	8.0	8.0	29.5	29.5	91.3	91.4	7.0	7.0	7.1		14		90				<0.2		0.6	
						7.4	0.4	326	20.2		8.0		29.5		91.4		7.0		7.1		14		90				<0.2		0.6	
IM11	Cloudy	Moderate	11:50	7.4	Surface	1.0	0.3	333	20.1	20.1	8.0	8.0	29.6	29.6	92.9	92.9	7.1	7.1	2.6	4.4	10	11	86	88	822069	811447	<0.2	<0.2	0.6	0.7
						1.0	0.4	336	20.1		8.0		29.6		92.8		7.1		2.6		11		85				<0.2		0.6	
					Middle	3.7	0.4	329	20.1	20.1	8.0	8.0	29.7	29.7	92.2	92.2	7.0		4.2		11		87				<0.2		0.6	
						3.7	0.5	345	20.1		8.0		29.7		92.2		7.0		4.4		10		89				<0.2		0.8	
					Bottom	6.4	0.3	331	20.1	20.1	8.0	8.0	29.8	29.8	92.1	92.1	7.0	7.0	6.3		11		90				<0.2		0.7	
						6.4	0.3	338	20.1		8.0		29.8		92.1		7.0		6.4		12		91				<0.2		0.6	
IM12	Cloudy	Moderate	11:45	8.9	Surface	1.0	0.3	257	20.0	20.0	8.0	8.0	29.8	29.8	91.3	91.2	7.0	6.9	2.5	4.7	5	9	87	88	821469	812033	<0.2	<0.2	0.6	0.6
						1.0	0.3	279	20.0		8.0		29.8		91.1		7.0		2.5		6		86				<0.2		0.6	
					Middle	4.5	0.3	264	20.0	20.0	8.0	8.0	30.2	30.3	89.6	89.6	6.8		4.7		8		89				<0.2		0.7	
						4.5	0.3	284	20.0		8.0		30.3		89.5		6.8		4.9		9		88				<0.2		0.6	
					Bottom	7.9	0.3	257	19.9	20.0	8.0	8.0	30.5	30.5	89.5	89.6	6.8	6.8	6.7		12		90				<0.2		0.6	
						7.9	0.3	281	20.0		8.0		30.5		89.6		6.8		6.8		12		90				<0.2		0.6	
SR1A	Cloudy	Moderate	11:19	5.1	Surface	1.0	-	-	20.2	20.2	8.0	8.0	29.3	29.3	89.3	89.3	6.8	6.8	3.3	3.4	6	8	-	-	819978	812661	-	-	-	-
						1.0	-	-	20.2		8.0		29.3		89.3		6.8		3.3		7		-				-		-	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	-	-	20.2	20.2	8.0	8.0	29.5	29.6	89.0	89.0	6.8	6.8	3.5		9		-				-		-	
						4.1	-	-	20.2		8.0		29.6		88.9		6.8		3.6		8		-				-		-	
SR2	Cloudy	Moderate	11:08	5.1	Surface	1.0	0.1	167	20.0	20.0	8.0	8.0	30.2	30.2	91.3	91.3	7.0	7.0	2.5	2.9	4	5	86	89	821473	814143	<0.2	<0.2	0.6	0.6
						1.0	0.1	171	20.0		8.0		30.2		91.2		6.9		2.6		5		88				<0.2		0.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	0.1	181	19.9	19.9	8.0	8.0	30.7	30.7	90.2	90.3	6.9	6.9	3.3		6		90				<0.2		0.6	
						4.1	0.1	186	19.9		8.0		30.7		90.3		6.9		3.2		6		92				<0.2		0.6	
SR3	Cloudy	Moderate	12:17	8.5	Surface	1.0	0.1	272	20.3	20.3	7.9	7.9	29.2	29.2	92.7	92.7	7.1	7.1	4.3	4.1	10	10	-	-	822154	807588	-	-	-	-
						1.0	0.1	282	20.3		7.9		29.2		92.7		7.1		4.3		12		-				-		-	
					Middle	4.3	0.1	237	20.2	20.2	8.0	8.0	29.2	29.2	92.7	92.7	7.1		4.2		11		-				-		-	
						4.3	0.1	248	20.2		8.0		29.3		92.7		7.1		4.2		10		-				-		-	
					Bottom	7.5	0.0	174	20.2	20.2	8.0	8.0	29.3	29.3	93.0	93.0	7.1	7.1	3.6		8		-				-		-	
						7.5	0.0	185	20.2		8.0		29.3		93.0		7.1		3.7		9		-				-		-	
SR4A	Cloudy	Calm	11:29	9.0	Surface	1.0	0.1	99	20.3	20.3	8.1	8.1	30.4	30.4	94.9	94.9	7.2	7.2	4.9	6.0	7	8	-	-	817189	807831	-	-	-	-
						1.0	0.1	101	20.3		8.1		30.4		94.9		7.2		4.9		8		-				-		-	
					Middle	4.5	0.2	85	19.6	19.6	8.2	8.2	33.3	33.3	94.8	94.8	7.1		5.0		8		-				-		-	
						4.5	0.2	91	19.6		8.2		33.3		94.8		7.1		5.0		8		-				-		-	
					Bottom	8.0	0.2	71	19.6	19.6	8.2	8.2	33.5	33.5	94.4	94.4	7.1	7.1	8.2		10		-				-		-	
						8.0	0.2	76	19.6		8.2		33.5		94.4		7.1		8.3		9		-				-		-	
SR5A	Cloudy	Calm	11:12	3.8	Surface	1.0	0.1	311	20.4	20.4	8.1	8.1	29.9	29.9	94.1	94.1	7.1	7.1	4.3	7.0	8	8	-	-	816596	810693	-	-	-	-
						1.0	0.1	331	20.4		8.1		29.9		94.0		7.1		4.3		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	0.1	316	20.3	20.3	8.1	8.1	29.9	29.9	93.5	93.5	7.1	7.1	9.7		9		-				-		-	
						2.8	0.1	324	20.3		8.1		29.9		93.5		7.1		9.7		9		-				-		-	
SR6A	Cloudy	Calm	10:43	4.1	Surface	1.0	0.1	281	20.3	20.3	8.0	8.0	30.1	30.1	91.4	91.5	6.9	6.9	4.2	4.1	8	8	-	-	817956	814745	-	-	-	-
						1.0	0.1	285	20.3		8.0		30.1		91.5		6.9		4.2		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.0	238	20.3	20.3	8.0	8.0	30.1	30.1	92.3	92.4	7.0	7.0	3.9		7		-				-		-	
						3.1	0.0	245	20.3		8.0		30.1		92.4		7.0		3.9		7		-				-		-	
SR7	Cloudy	Moderate	10:18	16.7	Surface	1.0	0.2	31	19.6	19.6	7.9	7.9	31.9	31.9	90.2	90.2	6.9	6.9	1.6	2.0	6	5	-	-	823659	823749	-	-	-	-
						1.0	0.2	31	19.6		7.9		31.9		90.2		6.9		1.6		6		-				-		-	
					Middle	8.4	0.2	34	19.6	19.6	7.8	7.8	32.0	32.0	90.1	90.1	6.8		2.0		4		-				-		-	
						8.4	0.2	36	19.6		7.8		32.0		90.1		6.8		2.0		4		-				-		-	
					Bottom	15.7	0.3	21	19.6	19.6	7.9	7.9	32.0	32.0	90.6	90.6	6.9	6.9	2.5		4		-				-		-	
						15.7	0.4	21	19.6		7.9		32.0		90.6		6.9		2.5		4		-				-		-	
SR8	Cloudy	Moderate	11:35	5.3	Surface	1.0	-	-	20.3	20.3	8.0	8.0	29.5	29.5	91.3	91.3	6.9	6.9	6.1	6.1	6	7	-	-	820379	811615	-	-	-	-
						1.0	-	-	20.3		8.0		29.5		91.2		6.9		6.0		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	-	-	20.1	20.1	8.0	8.0	29.9	29.9	89.9	90.0	6.8	6.8	6.1		7		-				-		-	
						4.3	-	-	20.1		8.0		29.9		90.0		6.8		6.1		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 05 March 20 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	21:49	8.2	Surface	1.0	0.5	206	20.0	20.0	8.1	8.1	32.8	32.8	106.3	106.2	8.0	7.8	0.2	1.4	4	5	82	85	815642	804252	<0.2	<0.2	0.9	1.0
						1.0	0.5	222	20.0		8.1		32.8		106.1		8.0		0.2		4		83				<0.2		1.0	
					Middle	4.1	0.4	212	19.7	19.7	8.1	8.1	34.3	34.3	100.9	101.0	7.6		1.4		5		84				<0.2		0.9	
						4.1	0.4	212	19.7		8.1		34.3		101.1		7.6		1.4		4		85				<0.2		1.0	
					Bottom	7.2	0.3	215	19.7	19.7	8.2	8.2	34.3	34.3	100.9	100.8	7.5	7.5	2.5		5		87				<0.2		1.0	
						7.2	0.3	228	19.7		8.2		34.3		100.7		7.5		2.6		6		88				<0.2		0.9	
C2	Cloudy	Moderate	20:15	12.4	Surface	1.0	0.1	187	20.1	20.1	8.4	8.4	31.3	31.3	96.6	96.6	7.3	7.1	2.7	5.9	10	7	82	85	825664	806941	<0.2	<0.2	1.0	1.0
						1.0	0.2	198	20.1		8.4		31.3		96.5		7.3		2.9		9		82				<0.2		1.0	
					Middle	6.2	0.4	202	19.8	19.8	8.4	8.4	32.6	32.6	90.6	90.6	6.8		7.0		6		85				<0.2		1.0	
						6.2	0.4	216	19.8		8.4		32.7		90.6		6.8		7.1		5		85				<0.2		1.0	
					Bottom	11.4	0.3	183	19.7	19.7	8.4	8.4	32.9	32.9	90.9	91.0	6.8	6.9	7.7		5		88				<0.2		0.9	
						11.4	0.3	185	19.7		8.4		32.9		91.1		6.9		7.8		4		88				<0.2		1.0	
C3	Cloudy	Moderate	22:03	12.9	Surface	1.0	0.5	98	19.7	19.7	8.4	8.4	33.2	33.2	91.8	91.8	6.9	6.9	3.1	4.4	6	7	83	86	822110	817788	<0.2	<0.2	1.1	1.0
						1.0	0.5	101	19.7		8.4		33.2		91.8		6.9		3.1		7		83				<0.2		1.1	
					Middle	6.5	0.4	103	19.7	19.7	8.4	8.4	33.6	33.6	91.6	91.6	6.9		4.1		7		85				<0.2		1.0	
						6.5	0.4	104	19.7		8.4		33.6		91.6		6.9		4.4		8		86				<0.2		1.0	
					Bottom	11.9	0.3	120	19.6	19.6	8.3	8.3	33.8	33.8	91.9	92.0	6.9	6.9	6.0		8		88				<0.2		1.0	
						11.9	0.3	123	19.6		8.3		33.8		92.0		6.9		5.5		8		89				<0.2		1.0	
IM1	Cloudy	Moderate	21:29	5.1	Surface	1.0	0.2	201	19.9	19.9	8.2	8.2	33.5	33.5	99.0	99.0	7.4	7.4	1.9	2.6	6	7	84	86	817937	807133	<0.2	<0.2	1.0	0.9
						1.0	0.2	220	19.9		8.2		33.5		99.0		7.4		1.9		6		84				<0.2		0.9	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	0.1	189	19.7	19.7	8.2	8.2	34.0	34.0	99.6	99.6	7.5	7.5	3.3		9		87				<0.2		0.9	
						4.1	0.1	201	19.7		8.2		34.0		99.6		7.5		3.3		8		87				<0.2		0.9	
IM2	Cloudy	Moderate	21:20	7.1	Surface	1.0	0.2	185	19.8	19.8	8.2	8.2	33.1	33.1	100.1	100.2	7.5	7.6	1.2	2.0	6	7	83	86	818171	806178	<0.2	<0.2	1.1	0.9
						1.0	0.2	201	19.8		8.2		33.1		100.3		7.5		1.2		7		84				<0.2		1.1	
					Middle	3.6	0.2	156	19.8	19.8	8.2	8.2	33.9	33.9	102.2	102.3	7.6		1.5		6		86				<0.2		0.8	
						3.6	0.2	159	19.8		8.2		33.9		102.3		7.6		1.5		7		86				<0.2		0.8	
					Bottom	6.1	0.2	167	19.7	19.7	8.2	8.2	34.2	34.2	101.6	101.7	7.6	7.6	3.4		8		88				<0.2		0.9	
						6.1	0.2	173	19.7		8.2		34.2		101.7		7.6		3.4		8		88				<0.2		0.8	
IM3	Cloudy	Moderate	21:12	7.4	Surface	1.0	0.2	174	19.9	19.9	8.2	8.2	33.3	33.3	102.0	102.0	7.6	7.6	0.7	1.8	6	8	83	86	818786	805581	<0.2	<0.2	0.9	0.9
						1.0	0.2	185	19.9		8.2		33.3		102.0		7.6		0.7		6		83				<0.2		0.8	
					Middle	3.7	0.3	160	19.7	19.7	8.2	8.2	34.1	34.1	101.0	101.0	7.5		1.6		8		86				<0.2		0.9	
						3.7	0.4	172	19.7		8.2		34.1		101.0		7.6		1.6		8		86				<0.2		0.9	
					Bottom	6.4	0.3	155	19.7	19.7	8.2	8.2	34.3	34.3	100.2	100.1	7.5	7.5	3.2		8		88				<0.2		1.0	
						6.4	0.3	158	19.7		8.2		34.3		100.0		7.5		3.2		9		88				<0.2		0.8	
IM4	Cloudy	Moderate	21:02	8.3	Surface	1.0	0.4	182	19.9	19.9	8.2	8.2	33.0	33.0	100.5	100.6	7.5	7.6	1.2	1.5	7	8	83	86	819718	804594	<0.2	<0.2	0.8	0.8
						1.0	0.4	195	19.9		8.2		33.0		100.6		7.5		1.2		8		82				<0.2		0.8	
					Middle	4.2	0.3	165	19.9	19.9	8.2	8.2	33.3	33.3	102.6	102.6	7.7		1.0		8		86				<0.2		0.8	
						4.2	0.4	172	19.9		8.2		33.3		102.5		7.7		1.0		8		86				<0.2		0.8	
					Bottom	7.3	0.3	169	19.7	19.7	8.2	8.2	34.2	34.2	99.3	99.4	7.4	7.4	2.3		8		88				<0.2		0.7	
						7.3	0.3	178	19.7		8.2		34.2		99.5		7.4		2.3		9		88				<0.2		0.8	
IM5	Cloudy	Moderate	20:52	7.9	Surface	1.0	0.3	196	20.0	20.0	8.1	8.1	32.4	32.4	101.8	101.8	7.7	7.6	1.2	2.9	5	7	82	85	820741	804886	<0.2	<0.2	0.6	0.6
						1.0	0.3	210	20.0		8.1		32.4		101.8		7.7		1.2		6		83				<0.2		0.6	
					Middle	4.0	0.3	174	19.7	19.7	8.2	8.2	34.0	34.0	100.2	100.1	7.5		4.0		7		85				<0.2		0.6	
						4.0	0.3	185	19.7		8.2		34.0		100.0		7.5		4.0		6		85				<0.2		0.6	
					Bottom	6.9	0.3	171	19.7	19.7	8.2	8.2	34.2	34.2	100.5	100.6	7.5	7.5	3.6		8		87				<0.2		0.7	
						6.9	0.3	179	19.7		8.2		34.2		100.6		7.5		3.6		8		88				<0.2		0.6	
IM6	Cloudy	Moderate	20:41	7.6	Surface	1.0	0.2	221	20.1	20.1	8.1	8.1	32.0	32.0	100.9	100.9	7.6	7.5	0.9	2.3	5	6	83	85	821068	805818	<0.2	<0.2	0.7	0.7
						1.0	0.2	225	20.1		8.1		32.0		100.9		7.6		0.9		6		83				<0.2		0.7	
					Middle	3.8	0.2	173	19.8	19.8	8.1	8.1	33.9	33.9	99.5	99.5	7.4		2.4		6		85				<0.2		0.6	
						3.8	0.2	188	19.8		8.1		33.9		99.4		7.4		2.4		5		85				<0.2		0.7	
					Bottom	6.6	0.1	179	19.7	19.7	8.1	8.1	34.1	34.1	99.4	99.4	7.4	7.4	3.7		6		88				<0.2		0.6	
						6.6	0.1	180	19.7		8.1		34.1		99.4		7.4		3.6		7		87				<0.2		0.7	
IM7	Cloudy	Moderate	20:20	8.8	Surface	1.0	0.1	180	20.1	20.1	7.9	7.9	31.9	31.9	100.1	100.1	7.5	7.4	1.1	3.2	4	6	82	85	821330	806820	<0.2	<0.2	0.5	0.6
						1.0	0.1	197	20.1		7.9		31.9		100.1		7.5		1.2		5		82				<0.2		0.6	
					Middle	4.4	0.1	130	19.8	19.8	7.9	7.9	33.7	33.7	98.0	98.0	7.3		3.1		6		85				<0.2		0.6	
						4.4	0.1	140	19.8		7.9		33.7		98.0		7.3		3.1		6		85				<0.2		0.6	
					Bottom	7.8	0.1	120	19.7	19.7	7.9	7.9	34.1	34.1	96.8	96.9	7.2	7.2	5.4		7		88				<0.2		0.5	
						7.8	0.1	125	19.7		7.9		34.1		96.9		7.2		5.4		6		88				<0.2		0.6	
IM8	Cloudy	Moderate	20:38	8.3	Surface	1.0	0.2	46	20.0	20.0	8.4	8.4	31.9	31.9	99.6	99.6	7.5	7.4	2.6	4.2	5	6	81	84	821827	808160	<0.2	<0.2	1.0	0.9
						1.0	0.2	49	20.0		8.4		31.9		99.6		7.5		2.6		4		82				<0.2		0.9	
					Middle	4.2	0.3	36	20.0	20.0	8.4	8.4	32.6	32.6	97.8	97.7	7.4		3.8		6		85				<0.2		1.0	
						4.2	0.3	38	19.9		8.4		32.7		97.6		7.3		4.1		6		85				<0.2		0.9	
					Bottom	7.3	0.2	14	19.7	19.7	8.4	8.4	33.5	33.5	97.4	97.6	7.3	7.3	6.0		6		86				<0.2		0.9	
						7.3	0.2	15	19.7		8.4		33.5		97.7		7.3		5.8		7		86				<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 05 March 20 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	20:43	8.0	Surface	1.0	0.4	52	20.0	20.0	8.4	8.4	32.0	32.0	97.6	97.5	7.4	7.3	2.7	5.0	5	7	81	85	822071	808794	<0.2	<0.2	1.0	0.9
						1.0	0.4	54	20.0		8.4		32.0		97.4		7.3		2.7		6		81				<0.2		0.9	
					Middle	4.0	0.5	54	19.9	19.9	8.4	8.4	32.4	32.5	95.4	95.5	7.2		4.3		7		86				<0.2		0.9	
						4.0	0.5	58	19.8		8.4		32.5		95.6		7.2		4.7		8		86				<0.2		0.9	
					Bottom	7.0	0.4	42	19.7	19.8	8.4	8.3	33.4	33.4	97.6	97.7	7.3	7.3	7.7		8		89				<0.2		1.0	
						7.0	0.4	45	19.8		8.3		33.4		97.7		7.3		7.7		9		89				<0.2		0.9	
IM10	Cloudy	Moderate	20:52	9.2	Surface	1.0	0.5	62	19.9	19.9	8.4	8.4	32.2	32.2	96.8	96.8	7.3	7.3	4.3	8.8	6	7	81	85	822362	809781	<0.2	<0.2	0.9	0.9
						1.0	0.5	62	19.9		8.4		32.2		96.7		7.3		4.4		5		82				<0.2		0.9	
					Middle	4.6	0.5	64	19.9	19.9	8.4	8.4	32.6	32.6	96.3	96.4	7.3		7.9		6		84				<0.2		0.9	
						4.6	0.5	65	19.9		8.4		32.6		96.4		7.3		7.7		7		85				<0.2		1.0	
					Bottom	8.2	0.4	50	19.8	19.8	8.4	8.4	33.0	33.0	96.5	96.6	7.2	7.3	14.4		9		89				<0.2		1.0	
						8.2	0.4	54	19.8		8.4		33.0		96.6		7.3		14.2		8		89				<0.2		0.9	
IM11	Cloudy	Moderate	21:03	8.1	Surface	1.0	0.6	169	19.8	19.8	8.3	8.3	32.1	32.1	93.5	93.5	7.1	7.1	3.6	6.0	9	9	82	85	822054	811449	<0.2	<0.2	1.0	1.0
						1.0	0.6	172	19.8		8.3		32.1		93.5		7.1		3.6		9		82				<0.2		1.0	
					Middle	4.1	0.5	166	19.9	19.9	8.3	8.3	32.3	32.3	92.7	92.6	7.0		4.3		9		84				<0.2		0.9	
						4.1	0.6	177	19.9		8.3		32.4		92.5		7.0		4.7		8		84				<0.2		1.0	
					Bottom	7.1	0.4	152	19.8	19.8	8.3	8.3	32.8	32.8	93.7	94.0	7.1	7.1	10.0		8		89				<0.2		0.9	
						7.1	0.4	162	19.8		8.3		32.8		94.3		7.1		10.0		9		89				<0.2		0.9	
IM12	Cloudy	Moderate	21:09	10.1	Surface	1.0	0.5	144	19.8	19.8	8.3	8.3	32.3	32.3	90.3	90.4	6.8	6.8	5.1	5.8	12	9	84	87	821469	812029	<0.2	<0.2	0.9	0.9
						1.0	0.6	154	19.8		8.3		32.3		90.4		6.8		5.2		12		84				<0.2		0.9	
					Middle	5.1	0.4	143	19.7	19.7	8.3	8.3	33.1	33.1	90.9	90.9	6.8		5.7		9		87				<0.2		0.9	
						5.1	0.5	151	19.7		8.3		33.1		90.9		6.8		5.8		10		87				<0.2		0.9	
					Bottom	9.1	0.3	135	19.7	19.7	8.3	8.3	33.2	33.2	93.0	93.2	7.0	7.0	6.5		6		89				<0.2		0.9	
						9.1	0.4	144	19.7		8.3		33.2		93.4		7.0		6.6		5		90				<0.2		1.0	
SR1A	Cloudy	Calm	21:31	5.4	Surface	1.0	-	-	19.9	19.9	8.3	8.3	31.9	31.9	88.7	88.8	6.7	6.7	3.1	3.6	5	6	-	-	819974	812659	-	-	-	-
						1.0	-	-	19.9		8.3		31.9		88.8		6.7		3.1		4		-				-		-	
					Middle	2.7	-	-	-	-		-	-	-	-	-	-		-		-		-				-		-	
						2.7	-	-	-				-		-		-		-		-		-				-		-	
					Bottom	4.4	-	-	19.7	19.7	8.3	8.3	33.1	33.0	90.2	90.3	6.8	6.8	3.9		8		-				-		-	
						4.4	-	-	19.7		8.3		33.0		90.3		6.8		4.0		7		-				-		-	
SR2	Cloudy	Moderate	21:43	5.0	Surface	1.0	0.6	97	19.8	19.8	8.3	8.3	32.3	32.3	93.5	93.5	7.1	7.1	3.2	4.1	7	8	83	86	821472	814158	<0.2	<0.2	0.9	0.9
						1.0	0.6	101	19.8		8.3		32.3		93.5		7.1		3.4		7		84				<0.2		0.9	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.3	90	19.7	19.7	8.3	8.3	33.1	33.1	95.4	95.5	7.2	7.2	5.0		8		88				<0.2		1.0	
						4.0	0.4	92	19.7		8.3		33.1		95.6		7.2		5.0		8		88				<0.2		0.9	
SR3	Cloudy	Moderate	20:33	9.5	Surface	1.0	0.1	92	20.0	20.0	8.4	8.4	31.7	31.8	96.6	96.5	7.3	7.3	3.0	4.9	7	6	-	-	822147	807547	-	-	-	-
						1.0	0.1	98	20.0		8.4		31.8		96.4		7.3		3.2		7		-				-		-	
					Middle	4.8	0.1	97	19.9	19.9	8.4	8.4	32.6	32.6	95.4	95.5	7.2		5.0		5		-				-		-	
						4.8	0.2	106	19.9		8.4		32.6		95.6		7.2		5.0		6		-				-		-	
					Bottom	8.5	0.1	61	19.8	19.8	8.4	8.4	33.4	33.4	97.0	97.0	7.3	7.3	6.5		4		-				-		-	
						8.5	0.1	61	19.8		8.4		33.4		96.9		7.3		6.5		5		-				-		-	
SR4A	Cloudy	Calm	22:13	9.0	Surface	1.0	0.1	76	19.8	19.8	8.0	8.0	33.4	33.4	98.5	98.5	7.4	7.4	1.9	2.9	5	6	-	-	817165	807810	-	-	-	-
						1.0	0.1	76	19.8		8.0		33.4		98.4		7.4		1.9		6		-				-		-	
					Middle	4.5	0.1	68	19.7	19.7	8.0	8.0	34.1	34.1	99.1	99.2	7.4		3.2		6		-				-		-	
						4.5	0.1	73	19.7		8.0		34.1		99.2		7.4		3.2		5		-				-		-	
					Bottom	8.0	0.1	79	19.7	19.7	8.1	8.1	34.1	34.1	99.5	99.4	7.4	7.4	3.6		6		-				-		-	
						8.0	0.1	82	19.7		8.1		34.1		99.3		7.4		3.5		5		-				-		-	
SR5A	Cloudy	Calm	22:32	3.7	Surface	1.0	0.1	329	20.3	20.3	7.9	7.9	31.6	31.6	97.3	97.4	7.3	7.3	2.9	2.9	4	5	-	-	816572	810679	-	-	-	-
						1.0	0.1	352	20.3		8.0		31.6		97.4		7.3		2.9		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.7	0.1	332	20.0	20.0	8.0	8.0	32.5	32.5	97.1	97.2	7.3	7.3	2.9		6		-				-		-	
						2.7	0.1	339	20.0		8.0		32.5		97.3		7.3		2.9		5		-				-		-	
SR6A	Cloudy	Calm	23:00	3.9	Surface	1.0	0.1	75	20.1	20.1	7.8	7.8	31.6	31.6	90.4	90.5	6.8	6.8	3.8	3.7	8	9	-	-	817947	814760	-	-	-	-
						1.0	0.1	80	20.1		7.8		31.6		90.5		6.8		3.8		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.9	0.0	187	20.0	20.0	7.8	7.8	32.2	32.2	93.0	93.1	7.0	7.0	3.5		8		-				-		-	
						2.9	0.0	198	20.0		7.8		32.2		93.2		7.0		3.5		9		-				-		-	
SR7	Cloudy	Moderate	22:31	16.1	Surface	1.0	0.3	84	19.6	19.6	8.4	8.4	33.6	33.6	92.8	92.8	7.0	7.0	2.1	2.4	5	6	-	-	823648	823759	-	-	-	-
						1.0	0.3	84	19.6		8.4		33.6		92.8		7.0		2.2		5		-				-		-	
					Middle	8.1	0.3	65	19.6	19.6	8.4	8.4	33.6	33.6	92.7	92.7	7.0		2.3		6		-				-		-	
						8.1	0.4	71	19.6		8.4		33.6		92.7		7.0		2.3		5		-				-		-	
					Bottom	15.1	0.2	39	19.6	19.6	8.4	8.4	33.7	33.7	92.8	92.9	7.0	7.0	2.7		6		-				-		-	
						15.1	0.2	42	19.6		8.4		33.7		92.9		7.0		2.7		7		-				-		-	
SR8	Cloudy	Calm	21:22	5.3	Surface	1.0	-	-	20.0	20.0	8.3	8.3	32.1	32.2	90.1	90.2	6.8	6.8	12.6	9.8	9	10	-	-	820366	811639	-	-	-	-
						1.0	-	-	20.0		8.3		32.2		90.2		6.8		12.0		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	-	-	19.8	19.8	8.3	8.3	32.9	32.9	92.1	92.4	6.9	7.0	7.3		12		-				-		-	
						4.3	-	-	19.8		8.3		32.9		92.6		7.0		7.4		11		-				-		-	

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 05 March 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	09:22	7.8	Surface	1.0	0.1	24	19.5	19.5	7.9	7.9	31.7	31.7	99.4	99.4	7.6	7.6	2.7	3.1	8	7	83	86	815602	804259	<0.2	<0.2	0.6	0.6
						1.0	0.2	25	19.5		7.9		31.7		99.4		7.6		2.7		8		83				<0.2		0.6	
					Middle	3.9	0.2	57	19.5	19.5	7.9	7.9	31.8	31.8	99.0	99.0	7.5		2.4		8		86				<0.2		0.5	
						3.9	0.2	59	19.5		7.9		31.8		99.0		7.5		2.4		7		86				<0.2		0.6	
					Bottom	6.8	0.2	61	19.5	19.5	7.9	7.9	33.1	33.1	99.3	99.3	7.5	7.5	4.3		6		89				<0.2		0.6	
						6.8	0.2	65	19.5		7.9		33.1		99.3		7.5		4.3		6		89				<0.2		0.7	
C2	Cloudy	Moderate	10:37	11.8	Surface	1.0	0.2	216	20.0	20.0	8.3	8.3	30.6	30.6	94.0	94.0	7.1	7.1	3.0	5.0	5	4	85	87	825659	806960	<0.2	<0.2	1.0	1.1
						1.0	0.2	217	20.0		8.3		30.6		93.9		7.1		3.0		4		86				<0.2		1.0	
					Middle	5.9	0.0	238	20.0	20.0	8.3	8.3	31.8	31.9	92.9	92.9	7.0		5.0		4		85				<0.2		1.0	
						5.9	0.0	261	19.9		8.3		32.0		92.8		7.0		5.3		4		85				<0.2		1.1	
					Bottom	10.8	0.1	302	19.8	19.8	8.3	8.3	32.5	32.5	94.4	94.6	7.1	7.1	7.0		4		90				<0.2		1.1	
						10.8	0.1	302	19.8		8.3		32.4		94.8		7.1		6.8		4		90				<0.2		1.1	
C3	Rainy	Moderate	08:47	12.2	Surface	1.0	0.2	269	19.6	19.6	8.4	8.4	33.2	33.2	92.4	92.4	7.0	7.0	1.5	2.6	5	5	69	82	822114	817810	<0.2	<0.2	0.7	0.8
						1.0	0.2	275	19.6		8.4		33.2		92.3		7.0		1.5		4		70				<0.2		0.7	
					Middle	6.1	0.1	293	19.6	19.6	8.4	8.4	33.6	33.6	92.2	92.2	6.9		1.8		4		86				<0.2		0.8	
						6.1	0.1	303	19.6		8.4		33.6		92.2		6.9		1.9		5		86				<0.2		0.6	
					Bottom	11.2	0.2	329	19.6	19.6	8.3	8.3	33.7	33.7	92.8	92.9	7.0	7.0	4.4		4		89				<0.2		0.9	
						11.2	0.2	339	19.6		8.3		33.7		92.9		7.0		4.6		5		90				<0.2		0.8	
IM1	Cloudy	Moderate	09:44	4.7	Surface	1.0	0.0	118	19.7	19.7	7.9	7.9	31.3	31.3	98.0	98.0	7.5	7.5	3.1	5.3	3	4	84	86	817962	807138	<0.2	<0.2	0.9	0.8
						1.0	0.0	128	19.7		7.9		31.3		97.9		7.5		3.1		3		85				<0.2		0.9	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.0	101	19.6	19.6	7.9	7.9	31.7	31.7	96.4	96.4	7.3	7.3	7.6		5		87				<0.2		0.8	
						3.7	0.0	105	19.6		7.9		31.7		96.4		7.3		7.6		6		88				<0.2		0.7	
IM2	Cloudy	Moderate	09:54	6.8	Surface	1.0	0.1	303	19.7	19.7	8.0	8.0	31.2	31.2	99.9	99.9	7.6	7.6	3.2	5.2	5	6	84	87	818162	806152	<0.2	<0.2	1.0	0.9
						1.0	0.1	317	19.7		8.0		31.2		99.9		7.6		3.2		4		84				<0.2		0.9	
					Middle	3.4	0.1	36	19.7	19.7	8.0	8.0	31.8	31.8	98.2	98.2	7.5		4.0		6		87				<0.2		0.9	
						3.4	0.1	39	19.7		8.0		31.7		98.2		7.5		4.0		7		88				<0.2		0.9	
					Bottom	5.8	0.1	53	19.7	19.7	8.0	8.0	32.4	32.4	97.2	97.3	7.3	7.3	8.3		6		90				<0.2		1.0	
						5.8	0.2	56	19.7		8.0		32.4		97.3		7.3		8.3		7		90				<0.2		0.9	
IM3	Cloudy	Moderate	10:01	7.1	Surface	1.0	0.1	282	19.7	19.7	8.0	8.0	31.5	31.5	99.9	99.9	7.6	7.5	3.7	5.6	6	5	84	87	818773	805615	<0.2	<0.2	0.8	0.8
						1.0	0.1	286	19.7		8.0		31.5		99.9		7.6		3.6		5		84				<0.2		0.8	
					Middle	3.6	0.1	23	19.7	19.7	8.0	8.0	32.0	32.0	98.0	98.0	7.4		4.2		4		87				<0.2		0.8	
						3.6	0.1	24	19.7		8.0		32.0		98.0		7.4		4.2		5		87				<0.2		0.8	
					Bottom	6.1	0.1	39	19.7	19.7	8.0	8.0	32.5	32.5	96.8	96.8	7.3	7.3	9.0		5		89				<0.2		0.9	
						6.1	0.1	41	19.7		8.0		32.5		96.8		7.3		9.0		4		90				<0.2		0.8	
IM4	Cloudy	Moderate	10:10	7.9	Surface	1.0	0.1	331	19.8	19.8	8.0	8.0	31.7	31.7	99.8	99.8	7.6	7.5	3.2	4.1	5	5	83	87	819729	804600	<0.2	<0.2	0.7	0.7
						1.0	0.1	333	19.8		8.0		31.7		99.8		7.6		3.2		5		84				<0.2		0.8	
					Middle	4.0	0.1	8	19.7	19.7	8.0	8.0	32.2	32.2	97.9	97.9	7.4		4.1		6		87				<0.2		0.7	
						4.0	0.1	8	19.7		8.0		32.2		97.8		7.4		4.1		5		87				<0.2		0.7	
					Bottom	6.9	0.2	42	19.7	19.7	8.0	8.0	32.5	32.5	97.0	97.0	7.3	7.3	5.0		5		90				<0.2		0.7	
						6.9	0.2	42	19.7		8.0		32.5		97.0		7.3		4.9		6		90				<0.2		0.8	
IM5	Cloudy	Moderate	10:18	7.2	Surface	1.0	0.2	359	19.9	19.9	8.0	8.0	30.5	30.5	98.4	98.4	7.5	7.5	2.6	4.0	4	4	84	87	820735	804872	<0.2	<0.2	0.7	0.7
						1.0	0.2	330	19.9		8.0		30.5		98.4		7.5		2.6		5		83				<0.2		0.8	
					Middle	3.6	0.2	19	19.7	19.7	8.0	8.0	31.8	31.8	98.5	98.5	7.5		3.5		4		87				<0.2		0.7	
						3.6	0.2	20	19.7		8.0		31.8		98.5		7.5		3.4		4		87				<0.2		0.7	
					Bottom	6.2	0.1	36	19.7	19.7	8.0	8.0	32.1	32.1	97.7	97.7	7.4	7.4	5.9		3		89				<0.2		0.7	
						6.2	0.1	36	19.7		8.0		32.1		97.7		7.4		5.9		4		89				<0.2		0.7	
IM6	Cloudy	Moderate	10:28	7.0	Surface	1.0	0.0	339	20.0	20.0	8.0	8.0	29.8	29.8	97.6	97.6	7.4	7.4	2.2	4.0	3	4	84	87	821065	805822	<0.2	<0.2	0.9	0.9
						1.0	0.0	354	20.0		8.0		29.8		97.6		7.4		2.2		4		83				<0.2		1.0	
					Middle	3.5	0.2	66	19.7	19.7	8.0	8.0	31.4	31.4	97.8	97.8	7.4		3.5		4		87				<0.2		0.9	
						3.5	0.2	66	19.7		8.0		31.4		97.7		7.4		3.5		3		87				<0.2		0.9	
					Bottom	6.0	0.2	64	19.7	19.7	8.0	8.0	31.8	31.8	97.2	97.2	7.4	7.4	6.2		4		89				<0.2		0.9	
						6.0	0.2	65	19.7		8.0		31.8		97.2		7.4		6.3		3		89				<0.2		0.9	
IM7	Cloudy	Moderate	10:37	8.2	Surface	1.0	0.1	274	20.1	20.1	8.0	8.0	29.5	29.5	97.3	97.3	7.4	7.4	2.1	4.2	4	3	83	87	821330	806815	<0.2	<0.2	1.2	1.1
						1.0	0.1	293	20.1		8.0		29.5		97.3		7.4		2.1		3		83				<0.2		1.1	
					Middle	4.1	0.2	63	19.8	19.8	8.0	8.0	31.0	31.0	96.8	96.8	7.4		4.2		3		87				<0.2		1.1	
						4.1	0.2	68	19.8		8.0		31.0		96.8		7.4		4.2		3		87				<0.2		1.1	
					Bottom	7.2	0.2	58	19.7	19.7	8.0	8.0	31.6	31.6	96.5	96.5	7.3	7.3	6.4		3		90				<0.2		1.1	
						7.2	0.2	63	19.7		8.0		31.6		96.5		7.3		6.4		3		90				<0.2		1.1	
IM8	Cloudy	Moderate	10:11	7.9	Surface	1.0	0.1	132	20.1	20.1	8.3	8.3	30.5	30.5	95.2	95.3	7.2	7.3	2.9	4.5	4	4	82	84	821815	808125	<0.2	<0.2	1.1	1.1
						1.0	0.1	136	20.1		8.3		30.5		95.3		7.2		2.9		4		82				<0.2		1.1	
					Middle	4.0	0.1	179	20.0	20.1	8.3	8.3	30.7	30.7	95.7	95.8	7.3		3.1		4		83				<0.2		1.2	
						4.0	0.1	188	20.1		8.3		30.7		95.8		7.3		3.1		5		84				<0.2		1.1	
					Bottom	6.9	0.2	102	19.8	19.8	8.3	8.3	32.2	32.2	96.7	96.8	7.3	7.3	7.8		5		87				<0.2		1.1	
						6.9	0.2	109	19.8		8.3		32.2		96.8		7.3		7.5		4		88				<0.2		1.2	

DA: Depth-Averaged

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

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 05 March 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	10:05	7.4	Surface	1.0	0.0	52	20.1	20.1	8.3	8.3	30.6	30.6	95.3	95.3	7.2	7.3	3.4	4.4	5	4	85	87	822076	808790	<0.2	<0.2	1.2	1.2
						1.0	0.0	52	20.1		8.3		30.6		95.3		7.2		3.4		5		85				<0.2		1.2	
					Middle	3.7	0.1	57	20.0	20.0	8.3	8.3	31.3	31.3	95.9	96.0	7.3		4.3		4		86				<0.2		1.3	
						3.7	0.1	57	20.0		8.3		31.4		96.0		7.3		4.5		4		87				<0.2		1.2	
					Bottom	6.4	0.2	45	19.9	19.9	8.3	8.3	31.8	31.8	96.5	96.7	7.3	7.3	5.3		3		90				<0.2		1.0	
						6.4	0.2	48	19.9		8.3		31.8		96.8		7.3		5.4		4		90				<0.2		1.1	
IM10	Cloudy	Moderate	09:58	8.0	Surface	1.0	0.1	18	20.1	20.1	8.3	8.3	30.9	30.9	91.5	91.5	6.9	6.9	5.8	9.3	7	6	81	85	822363	809814	<0.2	<0.2	1.0	1.0
						1.0	0.1	19	20.1		8.3		30.9		91.4		6.9		5.8		7		81				<0.2		1.0	
					Middle	4.0	0.0	280	20.0	20.0	8.3	8.3	31.1	31.1	90.7	90.6	6.9		7.7		6		85				<0.2		1.0	
						4.0	0.0	280	20.0		8.3		31.2		90.5		6.9		8.5		6		85				<0.2		1.0	
					Bottom	7.0	0.1	285	19.9	19.9	8.3	8.3	31.6	31.6	90.9	91.0	6.9	6.9	14.0		5		90				<0.2		1.0	
						7.0	0.1	310	19.9		8.3		31.6		91.1		6.9		13.9		6		90				<0.2		1.0	
IM11	Cloudy	Moderate	09:48	7.1	Surface	1.0	0.1	213	19.8	19.8	8.3	8.3	31.3	31.3	92.1	92.0	7.0	7.0	2.8	4.3	3	4	81	84	822074	811446	<0.2	<0.2	0.8	0.8
						1.0	0.1	223	19.8		8.3		31.3		91.9		7.0		2.8		4		81				<0.2		0.8	
					Middle	3.6	0.1	112	19.9	19.9	8.3	8.3	31.7	31.7	91.2	91.2	6.9		3.7		4		86				<0.2		0.9	
						3.6	0.1	113	19.9		8.3		31.7		91.2		6.9		3.8		4		86				<0.2		0.8	
					Bottom	6.1	0.0	71	19.8	19.8	8.3	8.3	32.2	32.2	91.5	91.5	6.9	6.9	6.3		6		84				<0.2		0.9	
						6.1	0.0	72	19.8		8.3		32.2		91.5		6.9		6.4		5		84				<0.2		0.8	
IM12	Cloudy	Moderate	09:41	9.6	Surface	1.0	0.1	169	19.8	19.8	8.3	8.3	32.1	32.1	90.2	90.2	6.8	6.8	3.6	4.6	7	6	81	86	821479	812056	<0.2	<0.2	0.8	0.7
						1.0	0.1	180	19.8		8.3		32.1		90.2		6.8		3.6		6		82				<0.2		0.7	
					Middle	4.8	0.1	130	19.8	19.8	8.3	8.3	32.1	32.1	90.0	90.0	6.8		3.7		6		86				<0.2		0.8	
						4.8	0.1	142	19.8		8.3		32.1		90.0		6.8		3.7		6		87				<0.2		0.7	
					Bottom	8.6	0.0	331	19.8	19.8	8.3	8.3	32.7	32.7	90.1	90.5	6.8	6.8	6.3		6		90				<0.2		0.7	
						8.6	0.0	341	19.8		8.3		32.7		90.9		6.8		6.6		6		90				<0.2		0.7	
SR1A	Cloudy	Calm	09:22	5.3	Surface	1.0	-	-	19.9	19.9	8.3	8.3	31.5	31.5	88.5	88.5	6.7	6.7	4.9	5.8	6	5	-	-	819975	812659	-	-	-	-
						1.0	-	-	19.9		8.3		31.6		88.5		6.7		5.0		5		-				-		-	
					Middle	2.7	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.7	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	-	-	19.8	19.8	8.3	8.3	32.5	32.5	89.0	89.1	6.7	6.7	6.7		4		-				-		-	
						4.3	-	-	19.8		8.3		32.5		89.1		6.7		6.6		6		-				-		-	
SR2	Cloudy	Moderate	09:09	4.9	Surface	1.0	0.2	345	19.8	19.8	8.3	8.3	31.1	31.2	91.6	91.4	7.0	7.0	3.4	6.5	2	3	64	74	821458	814183	<0.2	<0.2	0.8	0.8
						1.0	0.2	317	19.8		8.3		31.2		91.2		6.9		3.1		3		64				<0.2		0.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	0.1	353	19.8	19.8	8.3	8.3	32.7	32.6	89.9	90.1	6.8	6.8	9.9		4		83				<0.2		0.7	
						3.9	0.1	359	19.8		8.3		32.6		90.2		6.8		9.7		4		83				<0.2		0.7	
SR3	Cloudy	Moderate	10:17	8.9	Surface	1.0	0.1	220	20.2	20.2	8.3	8.3	30.5	30.6	93.6	93.7	7.1	7.2	2.6	3.9	3	3	-	-	822133	807561	-	-	-	-
						1.0	0.1	228	20.2		8.3		30.6		93.7		7.1		2.8		3		-				-		-	
					Middle	4.5	0.1	189	20.0	20.0	8.3	8.3	31.4	31.4	95.9	96.0	7.2		4.1		3		-				-		-	
						4.5	0.1	196	20.0		8.3		31.5		96.1		7.3		4.2		3		-				-		-	
					Bottom	7.9	0.2	32	19.9	20.0	8.3	8.3	31.9	31.9	97.2	97.3	7.3	7.3	4.8		3		-				-		-	
						7.9	0.2	33	20.0		8.3		31.8		97.3		7.3		4.7		4		-				-		-	
SR4A	Cloudy	Calm	09:01	8.9	Surface	1.0	0.1	67	19.7	19.7	7.9	7.9	30.8	30.8	98.0	98.0	7.5	7.5	3.4	6.5	8	7	-	-	817189	807818	-	-	-	-
						1.0	0.1	71	19.7		7.9		30.8		97.9		7.5		3.4		8		-				-		-	
					Middle	4.5	0.2	67	19.7	19.7	7.8	7.8	31.6	31.6	97.2	97.2	7.4		7.5		8		-				-		-	
						4.5	0.2	67	19.7		7.8		31.6		97.2		7.4		7.5		7		-				-		-	
					Bottom	7.9	0.2	59	19.7	19.7	7.8	7.8	31.7	31.7	97.2	97.3	7.4	7.4	8.6		5		-				-		-	
						7.9	0.2	60	19.7		7.8		31.7		97.3		7.4		8.5		5		-				-		-	
SR5A	Cloudy	Calm	08:42	3.5	Surface	1.0	0.0	316	19.8	19.8	7.8	7.8	30.0	30.0	90.8	90.8	6.9	6.9	5.9	6.5	8	10	-	-	816573	810677	-	-	-	-
						1.0	0.0	332	19.8		7.8		30.0		90.8		6.9		6.0		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.5	0.1	310	19.9	19.9	7.7	7.7	30.2	30.2	91.3	91.3	7.0	7.0	7.0		12		-				-		-	
						2.5	0.1	318	19.9		7.7		30.3		91.3		7.0		7.0		12		-				-		-	
SR6A	Cloudy	Calm	08:13	4.0	Surface	1.0	0.1	209	19.9	19.9	7.7	7.7	29.5	29.5	89.7	89.7	6.9	6.9	6.5	6.8	11	11	-	-	817974	814758	-	-	-	-
						1.0	0.1	224	19.9		7.7		29.5		89.7		6.9		6.5		11		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	0.1	216	19.9	19.9	7.7	7.7	29.5	29.5	90.2	90.3	6.9	6.9	7.2		10		-				-		-	
						3.0	0.1	226	19.9		7.7		29.5		90.3		6.9		7.1		10		-				-		-	
SR7	Rainy	Moderate	08:19	15.2	Surface	1.0	0.1	170	19.5	19.5	8.3	8.3	33.5	33.5	91.1	91.2	6.9	6.9	1.6	2.1	3	3	-	-	823616	823721	-	-	-	-
						1.0	0.1	178	19.5		8.3		33.6		91.2		6.9		1.6		2		-				-		-	
					Middle	7.6	0.1	139	19.6	19.6	8.3	8.3	33.7	33.7	92.2	92.3	6.9		2.3		3		-				-		-	
						7.6	0.1	152	19.6		8.3		33.7		92.3		6.9		2.3		3		-				-		-	
					Bottom	14.2	0.1	206	19.5	19.5	8.3	8.3	33.8	33.8	92.2	92.2	6.9	6.9	2.4		4		-				-		-	
						14.2	0.1	212	19.5		8.3		33.8		92.2		6.9		2.5		4		-				-		-	
SR8	Cloudy	Calm	09:32	5.1	Surface	1.0	-	-	20.1	20.1	8.3	8.3	30.6	30.6	92.3	92.2	7.0	7.0	5.2	5.0	12	11	-	-	820367	811605	-	-	-	-
						1.0	-	-	20.1		8.3		30.6		92.1		7.0		5.2		12		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	-	-	19.9	19.9	8.3	8.3	32.0	32.0	90.4	90.5	6.8	6.8	4.9		9		-				-		-	
						4.1	-	-	19.9		8.3		32.0		90.5		6.8		4.9		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 07 March 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	11:39	7.9	Surface	1.0	0.1	127	19.9	19.9	8.1	8.1	32.5	32.5	102.4	102.4	7.7	7.6	1.6	3.6	5	4	82	85	815600	804237	<0.2	<0.2	0.7	0.7
						1.0	0.1	129	19.9		8.1		32.5		102.3		7.7		1.7		4		82				<0.2		0.7	
					Middle	4.0	0.1	174	19.6	19.6	8.1	8.1	33.3	33.3	100.3	100.3	7.6		2.8		5		85				<0.2		0.6	
						4.0	0.1	190	19.6		8.1		33.3		100.2		7.5		2.8		4		85				<0.2		0.7	
					Bottom	6.9	0.2	210	19.5	19.5	8.1	8.1	34.0	34.0	98.7	98.8	7.4	7.4	6.3		3		89				<0.2		0.8	
						6.9	0.2	223	19.5		8.1		34.0		98.9		7.4		6.3		4		89				<0.2		0.7	
C2	Cloudy	Moderate	12:26	11.8	Surface	1.0	0.4	187	20.7	20.7	8.3	8.3	29.2	29.2	95.0	95.0	7.2	7.0	4.3	7.1	5	6	85	88	825664	806925	<0.2	<0.2	0.3	0.4
						1.0	0.4	201	20.6		8.3		29.2		95.0		7.2		4.3		6		85				<0.2		0.4	
					Middle	5.9	0.2	160	19.8	19.8	8.3	8.3	32.6	32.6	90.5	90.5	6.8		7.4		6		89				<0.2		0.4	
						5.9	0.3	169	19.8		8.3		32.6		90.5		6.8		7.6		5		89				<0.2		0.4	
					Bottom	10.8	0.1	172	19.8	19.8	8.3	8.3	32.6	32.6	91.2	91.3	6.9	6.9	9.5		5		91				<0.2		0.4	
						10.8	0.1	185	19.8		8.3		32.6		91.3		6.9		9.5		6		91				<0.2		0.4	
C3	Cloudy	Moderate	10:34	12.4	Surface	1.0	0.1	58	19.6	19.6	8.3	8.3	33.5	33.5	91.8	91.8	6.9	6.9	1.9	2.9	2	4	80	85	822085	817820	<0.2	<0.2	1.2	1.2
						1.0	0.1	58	19.6		8.3		33.5		91.7		6.9		1.9		3		81				<0.2		1.0	
					Middle	6.2	0.0	43	19.6	19.6	8.3	8.3	33.6	33.6	90.7	90.7	6.8		3.3		4		85				<0.2		1.3	
						6.2	0.0	43	19.6		8.3		33.6		90.7		6.8		3.4		5		85				<0.2		1.2	
					Bottom	11.4	0.1	81	19.6	19.6	8.3	8.3	33.6	33.6	91.1	91.2	6.9	6.9	3.6		5		89				<0.2		1.3	
						11.4	0.1	85	19.6		8.3		33.6		91.2		6.9		3.4		5		90				<0.2		1.3	
IM1	Cloudy	Moderate	12:01	4.7	Surface	1.0	0.1	192	20.0	20.0	8.1	8.1	33.4	33.4	102.4	102.4	7.7	7.7	2.7	2.9	5	6	84	86	817951	807119	<0.2	<0.2	0.6	0.6
						1.0	0.1	205	20.0		8.1		33.5		102.4		7.7		2.7		6		84				<0.2		0.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.1	190	19.7	19.7	8.1	8.1	33.6	33.6	98.9	99.0	7.4	7.4	3.1		6		87				<0.2		0.5	
						3.7	0.1	196	19.7		8.1		33.6		99.0		7.4		3.1		5		88				<0.2		0.6	
IM2	Cloudy	Moderate	12:11	6.8	Surface	1.0	0.1	170	20.1	20.1	8.2	8.2	33.4	33.4	104.4	104.4	7.8	7.7	2.8	3.7	7	6	83	86	818168	806179	<0.2	<0.2	0.5	0.5
						1.0	0.1	171	20.1		8.2		33.4		104.3		7.8		2.8		6		83				<0.2		0.5	
					Middle	3.4	0.2	143	20.0	20.0	8.2	8.2	33.4	33.4	101.7	101.7	7.6		3.3		6		86				<0.2		0.4	
						3.4	0.2	150	20.0		8.2		33.5		101.7		7.6		3.3		5		86				<0.2		0.4	
					Bottom	5.8	0.2	168	19.7	19.7	8.2	8.2	34.0	33.9	100.5	100.5	7.5	7.5	4.9		5		89				<0.2		0.5	
						5.8	0.2	182	19.7		8.2		33.9		100.5		7.5		4.9		6		90				<0.2		0.5	
IM3	Cloudy	Moderate	12:19	6.9	Surface	1.0	0.1	175	20.1	20.1	8.2	8.2	33.5	33.5	104.6	104.6	7.8	7.8	2.8	3.3	5	5	82	86	818771	805600	<0.2	<0.2	0.4	0.4
						1.0	0.1	189	20.1		8.2		33.5		104.6		7.8		2.8		6		83				<0.2		0.4	
					Middle	3.5	0.1	151	19.9	19.9	8.2	8.2	33.6	33.6	103.1	103.0	7.7		2.7		5		85				<0.2		0.4	
						3.5	0.1	163	19.9		8.2		33.6		102.8		7.7		2.8		5		86				<0.2		0.4	
					Bottom	5.9	0.1	141	19.6	19.6	8.2	8.2	33.9	33.9	101.0	101.0	7.6	7.6	4.3		5		90				<0.2		0.5	
						5.9	0.1	149	19.6		8.2		33.9		101.0		7.6		4.4		4		90				<0.2		0.5	
IM4	Cloudy	Moderate	12:31	7.6	Surface	1.0	0.2	185	20.0	20.0	8.3	8.3	32.6	32.6	101.7	101.7	7.6	7.6	3.1	3.1	5	5	83	86	819740	804585	<0.2	<0.2	0.9	0.9
						1.0	0.2	198	20.0		8.3		32.6		101.7		7.6		3.0		5		83				<0.2		0.9	
					Middle	3.8	0.2	172	19.9	19.9	8.3	8.3	33.6	33.6	102.0	102.0	7.6		2.9		4		85				<0.2		0.8	
						3.8	0.2	186	19.9		8.3		33.6		102.0		7.6		2.9		5		86				<0.2		1.0	
					Bottom	6.6	0.1	170	19.8	19.8	8.3	8.3	33.8	33.8	99.6	99.6	7.5	7.5	3.4		4		90				<0.2		0.9	
						6.6	0.1	180	19.8		8.3		33.8		99.6		7.5		3.4		5		90				<0.2		1.0	
IM5	Cloudy	Moderate	12:44	7.1	Surface	1.0	0.3	188	20.2	20.2	8.2	8.2	31.6	31.6	101.0	101.0	7.6	7.6	3.1	4.6	6	5	82	86	820718	804875	<0.2	<0.2	0.9	0.9
						1.0	0.3	189	20.2		8.2		31.6		101.0		7.6		3.1		5		82				<0.2		0.8	
					Middle	3.6	0.3	173	19.7	19.7	8.2	8.2	33.7	33.7	100.7	100.7	7.5		4.9		4		85				<0.2		0.9	
						3.6	0.3	173	19.7		8.2		33.7		100.6		7.5		4.9		5		85				<0.2		0.8	
					Bottom	6.1	0.2	176	19.7	19.7	8.3	8.3	33.7	33.7	99.6	99.7	7.5	7.5	5.7		4		90				<0.2		0.9	
						6.1	0.2	185	19.7		8.3		33.7		99.7		7.5		5.6		5		90				<0.2		0.8	
IM6	Cloudy	Moderate	12:54	6.9	Surface	1.0	0.2	210	20.1	20.1	8.2	8.2	31.5	31.5	99.8	99.9	7.5	7.5	3.1	4.2	5	5	83	86	821061	805810	<0.2	<0.2	0.9	0.9
						1.0	0.2	216	20.1		8.2		31.5		99.9		7.5		3.1		5		83				<0.2		0.8	
					Middle	3.5	0.1	183	19.7	19.7	8.2	8.2	33.5	33.5	99.4	99.4	7.5		4.9		4		85				<0.2		0.8	
						3.5	0.2	198	19.7		8.2		33.5		99.3		7.4		4.9		5		86				<0.2		1.0	
					Bottom	5.9	0.1	173	19.7	19.7	8.2	8.2	33.5	33.5	98.9	98.9	7.4	7.4	4.6		5		90				<0.2		0.9	
						5.9	0.1	177	19.7		8.2		33.5		98.9		7.4		4.6		4		90				<0.2		0.9	
IM7	Cloudy	Moderate	13:05	8.2	Surface	1.0	0.1	201	20.3	20.3	8.2	8.2	31.1	31.1	97.1	97.1	7.3	7.3	3.0	4.3	6	6	83	86	821336	806812	<0.2	<0.2	0.9	0.9
						1.0	0.1	210	20.3		8.2		31.1		97.1		7.3		3.0		5		83				<0.2		0.9	
					Middle	4.1	0.1	162	20.0	20.0	8.2	8.2	32.7	32.7	97.2	97.2	7.3		4.5		6		86				<0.2		1.0	
						4.1	0.1	172	20.0		8.2		32.7		97.2		7.3		4.6		5		86				<0.2		0.8	
					Bottom	7.2	0.1	104	19.8	19.8	8.2	8.2	33.2	33.2	96.6	96.7	7.3	7.3	5.3		6		89				<0.2		0.9	
						7.2	0.1	110	19.8		8.2		33.2		96.7		7.3		5.4		5		90				<0.2		0.9	
IM8	Cloudy	Moderate	12:00	7.7	Surface	1.0	0.2	121	20.2	20.2	8.3	8.3	29.5	29.5	95.4	95.4	7.3	7.3	5.3	7.6	5	6	84	87	821850	808159	<0.2	<0.2	1.0	1.1
						1.0	0.2	127	20.1		8.3		29.6		95.4		7.3		5.6		6		85				<0.2		1.0	
					Middle	3.9	0.2	108	19.8	19.8	8.3	8.3	32.2	32.2	95.3	95.3	7.2		8.0		6		87				<0.2		1.1	
						3.9	0.2	116	19.8		8.3		32.3		95.3		7.2		8.2		6		86				<0.2		1.2	
					Bottom	6.7	0.2	70	19.8	19.8	8.3	8.3	32.8	32.8	95.2	95.2	7.2	7.2	9.2		6		90				<0.2		1.2	
						6.7	0.2	72	19.8		8.3		32.8		95.2		7.2		9.3		6		90				<0.2		1.2	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 07 March 20 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	11:53	7.4	Surface	1.0	0.3	94	20.4	20.4	8.3	8.3	29.2	29.2	95.8	95.9	7.3	7.3	4.6	8.4	8	7	84	86	822114	808821	<0.2	<0.2	0.7	0.9
						1.0	0.3	98	20.4		8.3		29.3		95.9		7.3		4.8		9		85				<0.2		0.7	
					Middle	3.7	0.4	97	19.8	19.8	8.3	8.3	32.6	32.6	95.3	95.3	7.2		9.0		7		85				<0.2		0.7	
						3.7	0.4	98	19.8		8.3		32.6		95.3		7.2		9.2		7		86				<0.2		0.7	
					Bottom	6.4	0.3	76	19.8	19.8	8.3	8.3	32.6	32.6	94.7	94.7	7.1	7.1	11.4		7		89				<0.2		1.2	
						6.4	0.3	80	19.8		8.3		32.6		94.7		7.1		11.5		6		89				<0.2		1.2	
IM10	Cloudy	Moderate	11:46	7.7	Surface	1.0	0.4	112	20.5	20.5	8.3	8.3	29.4	29.4	95.4	95.5	7.2	7.2	4.1	7.3	4	5	84	86	822393	809817	<0.2	<0.2	1.2	1.2
						1.0	0.5	117	20.5		8.3		29.4		95.5		7.2		4.1		4		84				<0.2		1.2	
					Middle	3.9	0.4	109	19.8	19.8	8.3	8.3	32.3	32.3	94.9	94.9	7.2		7.8		5		86				<0.2		1.3	
						3.9	0.4	116	19.8		8.3		32.4		94.8		7.2		7.9		4		86				<0.2		1.2	
					Bottom	6.7	0.4	109	19.8	19.9	8.3	8.3	32.5	32.4	93.8	93.8	7.1	7.1	10.0		5		89				<0.2		1.0	
						6.7	0.4	115	19.9		8.3		32.4		93.7		7.1		10.0		5		89				<0.2		1.1	
IM11	Cloudy	Moderate	11:34	7.4	Surface	1.0	0.5	112	20.2	20.2	8.3	8.3	30.8	30.9	93.9	93.9	7.1	7.1	6.2	6.8	5	6	82	85	822050	811463	<0.2	<0.2	1.1	1.0
						1.0	0.5	119	20.1		8.3		31.0		93.8		7.1		6.3		6		82				<0.2		1.0	
					Middle	3.7	0.4	114	19.9	19.9	8.3	8.3	32.1	32.1	93.3	93.3	7.0		6.6		7		85				<0.2		1.0	
						3.7	0.4	120	19.9		8.3		32.1		93.2		7.0		6.5		6		85				<0.2		1.0	
					Bottom	6.4	0.2	125	19.9	20.0	8.3	8.3	32.4	32.3	92.9	93.1	7.0	7.0	7.5		6		89				<0.2		1.1	
						6.4	0.3	127	20.0		8.3		32.3		93.2		7.0		7.6		8		89				<0.2		1.0	
IM12	Cloudy	Moderate	11:28	8.4	Surface	1.0	0.3	122	20.2	20.2	8.3	8.3	31.3	31.4	94.1	94.0	7.1	7.1	4.7	6.1	5	6	81	86	821458	812050	<0.2	<0.2	0.6	0.7
						1.0	0.4	128	20.1		8.3		31.5		93.8		7.1		4.8		5		82				<0.2		0.7	
					Middle	4.2	0.3	117	19.9	19.9	8.3	8.3	32.5	32.5	92.4	92.4	7.0		5.6		6		85				<0.2		0.6	
						4.2	0.3	125	19.9		8.3		32.5		92.3		7.0		5.8		7		85				<0.2		0.7	
					Bottom	7.4	0.2	101	19.8	19.8	8.3	8.3	32.7	32.7	92.0	92.1	6.9	6.9	7.8		8		90				<0.2		0.7	
						7.4	0.2	106	19.8		8.3		32.7		92.1		6.9		7.8		7		90				<0.2		0.6	
SR1A	Cloudy	Calm	11:08	5.3	Surface	1.0	-	-	19.8	19.8	8.3	8.3	32.4	32.4	91.9	92.0	6.9	6.9	4.2	4.7	6	6	-	-	819980	812663	-	-	-	-
						1.0	-	-	19.8		8.3		32.4		92.0		6.9		4.3		6		-				-		-	
					Middle	2.7	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.7	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	-	-	19.8	19.8	8.3	8.3	32.5	32.5	92.2	92.2	7.0	7.0	5.2		7		-				-		-	
						4.3	-	-	19.8		8.3		32.5		92.2		7.0		5.2		6		-				-		-	
SR2	Cloudy	Moderate	10:56	5.6	Surface	1.0	0.1	79	19.8	19.8	8.3	8.3	32.8	32.8	91.8	91.8	6.9	6.9	4.6	5.1	5	5	84	86	821477	814155	<0.2	<0.2	0.5	0.5
						1.0	0.1	80	19.8		8.3		32.8		91.7		6.9		4.7		6		84				<0.2		0.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.6	0.1	62	19.7	19.7	8.3	8.3	32.8	32.8	91.6	91.6	6.9	6.9	5.6		5		88				<0.2		0.5	
						4.6	0.1	62	19.7		8.3		32.8		91.6		6.9		5.4		5		88				<0.2		0.5	
SR3	Cloudy	Moderate	12:05	9.4	Surface	1.0	0.2	234	20.4	20.4	8.3	8.3	29.3	29.3	94.4	94.3	7.2	7.2	4.4	7.2	4	5	-	-	822145	807573	-	-	-	-
						1.0	0.2	245	20.3		8.3		29.4		94.2		7.2		4.5		5		-				-		-	
					Middle	4.7	0.2	202	19.9	19.9	8.3	8.3	32.1	32.1	94.0	94.1	7.1		6.0		5		-				-		-	
						4.7	0.2	208	19.9		8.3		32.2		94.2		7.1		6.5		6		-				-		-	
					Bottom	8.4	0.0	206	19.8	19.8	8.3	8.3	32.7	32.7	94.2	94.1	7.1	7.1	10.8		5		-				-		-	
						8.4	0.0	206	19.8		8.3		32.6		94.0		7.1		10.8		6		-				-		-	
SR4A	Cloudy	Calm	11:16	8.6	Surface	1.0	0.2	68	19.9	19.9	8.1	8.1	33.6	33.6	100.6	100.7	7.5	7.5	3.1	3.6	7	6	-	-	817169	807802	-	-	-	-
						1.0	0.3	72	19.9		8.1		33.6		100.7		7.5		3.2		6		-				-		-	
					Middle	4.3	0.2	60	19.7	19.7	8.1	8.1	33.7	33.7	99.5	99.4	7.5		3.5		7		-				-		-	
						4.3	0.3	63	19.7		8.1		33.7		99.3		7.4		3.5		6		-				-		-	
					Bottom	7.6	0.2	83	19.7	19.7	8.0	8.0	33.7	33.7	98.7	98.7	7.4	7.4	4.0		6		-				-		-	
						7.6	0.2	90	19.7		8.0		33.7		98.6		7.4		4.0		6		-				-		-	
SR5A	Cloudy	Calm	10:57	3.7	Surface	1.0	0.1	330	20.0	20.0	8.0	8.0	32.9	32.9	96.1	96.1	7.2	7.2	4.4	4.9	7	7	-	-	816606	810719	-	-	-	-
						1.0	0.1	330	20.0		8.0		32.9		96.1		7.2		4.5		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.7	0.0	140	19.9	19.9	8.0	8.0	33.0	33.0	95.7	95.8	7.2	7.2	5.5		8		-				-		-	
						2.7	0.0	145	19.9		8.0		33.0		95.8		7.2		5.3		8		-				-		-	
SR6A	Cloudy	Calm	10:27	4.1	Surface	1.0	0.0	110	19.8	19.8	7.9	7.9	33.0	33.0	91.6	91.7	6.9	6.9	3.8	4.5	7	7	-	-	817975	814755	-	-	-	-
						1.0	0.0	120	19.8		7.9		33.0		91.7		6.9		3.8		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.0	106	19.7	19.7	7.8	7.8	33.1	33.1	91.5	91.5	6.9	6.9	5.2		6		-				-		-	
						3.1	0.0	111	19.7		7.8		33.1		91.4		6.9		5.3		7		-				-		-	
SR7	Cloudy	Moderate	10:03	15.9	Surface	1.0	0.0	285	19.6	19.6	8.3	8.3	33.6	33.6	90.3	90.4	6.8	6.8	2.6	3.5	3	3	-	-	823615	823757	-	-	-	-
						1.0	0.0	293	19.6		8.3		33.6		90.4		6.8		2.6		2		-				-		-	
					Middle	8.0	0.0	127	19.5	19.5	8.3	8.3	33.7	33.7	90.7	90.7	6.8		3.9		3		-				-		-	
						8.0	0.0	133	19.5		8.3		33.7		90.7		6.8		3.9		4		-				-		-	
					Bottom	14.9	0.1	111	19.5	19.5	8.3	8.3	33.7	33.7	91.2	91.2	6.9	6.9	4.0		3		-				-		-	
						14.9	0.1	120	19.5		8.3		33.7		91.2		6.9		4.0		4		-				-		-	
SR8	Cloudy	Calm	11:20	4.8	Surface	1.0	-	-	20.2	20.2	8.3	8.3	32.4	32.4	94.8	94.8	7.1	7.1	6.1	6.1	6	7	-	-	820394	811628	-	-	-	-
						1.0	-	-	20.2		8.3		32.5		94.7		7.1		6.1		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	-	-	19.8	19.8	8.3	8.3	32.6	32.6	93.1	93.1	7.0	7.0	6.1		7		-				-		-	
						3.8	-	-	19.8		8.3		32.6		93.1		7.0		6.1		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 07 March 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Moderate	16:21	8.2	Surface	1.0	0.3	47	20.7	20.7	8.4	8.4	32.8	32.8	110.6	110.5	8.2	8.0	1.0	2.1	2	4	83	86	815626	804235	<0.2	<0.2	0.6	0.6
						1.0	0.3	48	20.7		8.4		32.8		110.4		8.2		1.0		3		83				<0.2		0.5	
					Middle	4.1	0.3	47	19.8	19.8	8.3	8.3	33.5	33.5	104.1	104.1	7.8		1.5		3		85				<0.2		0.6	
						4.1	0.3	51	19.8		8.3		33.5		104.0		7.8		1.5		4		85				<0.2		0.5	
					Bottom	7.2	0.3	35	19.7	19.7	8.4	8.4	33.8	33.8	101.4	101.4	7.6	7.6	3.8		5		89				<0.2		0.5	
						7.2	0.3	36	19.7		8.4		33.8		101.3		7.6		3.8		5		89				<0.2		0.7	
C2	Fine	Moderate	15:13	11.7	Surface	1.0	0.3	190	21.2	21.2	8.3	8.3	28.9	28.9	98.0	97.9	7.4	7.3	3.9	5.9	4	5	85	88	825682	806928	<0.2	<0.2	1.4	1.4
						1.0	0.3	204	21.1		8.3		28.9		97.7		7.3		4.0		5		86				<0.2		1.4	
					Middle	5.9	0.1	190	20.1	20.1	8.3	8.3	31.2	31.3	94.8	94.8	7.2		6.4		4		89				<0.2		1.5	
						5.9	0.1	195	20.1		8.3		31.3		94.8		7.2		6.5		5		90				<0.2		1.5	
					Bottom	10.7	0.2	9	20.0	20.0	8.3	8.3	32.1	32.1	94.0	94.0	7.1	7.1	7.4		6		90				<0.2		1.4	
						10.7	0.2	9	20.0		8.3		32.2		94.0		7.1		7.3		6		90				<0.2		1.4	
C3	Cloudy	Moderate	17:13	13.0	Surface	1.0	0.3	272	19.7	19.7	8.3	8.3	33.4	33.4	91.4	91.4	6.9	6.9	2.4	4.5	4	3	85	88	822103	817813	<0.2	<0.2	0.6	0.6
						1.0	0.3	293	19.7		8.3		33.4		91.3		6.9		2.6		4		86				<0.2		0.6	
					Middle	6.5	0.4	267	19.6	19.6	8.3	8.3	33.5	33.5	90.8	90.8	6.8		4.4		3		89				<0.2		0.5	
						6.5	0.4	279	19.6		8.3		33.5		90.8		6.8		4.8		3		89				<0.2		0.5	
					Bottom	12.0	0.3	270	19.6	19.6	8.3	8.3	33.5	33.5	91.1	91.2	6.9	6.9	6.5		3		90				<0.2		0.6	
						12.0	0.3	272	19.6		8.3		33.5		91.2		6.9		6.6		3		90				<0.2		0.5	
IM1	Fine	Moderate	15:58	4.8	Surface	1.0	0.1	30	20.7	20.7	8.4	8.4	33.2	33.2	111.8	111.7	8.3	8.3	1.4	1.6	4	6	85	87	817946	807123	<0.2	<0.2	0.7	0.7
						1.0	0.1	32	20.7		8.4		33.2		111.6		8.2		1.4		5		85				<0.2		0.7	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-	<0.2	-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.1	355	20.4	20.4	8.4	8.4	33.4	33.4	104.9	104.9	7.8	7.8	1.8		7		88				<0.2		0.6	
						3.8	0.1	327	20.4		8.4		33.4		104.9		7.8		1.8		8		88				<0.2		0.7	
IM2	Fine	Moderate	15:49	6.9	Surface	1.0	0.1	12	20.7	20.7	8.4	8.4	33.0	33.0	111.6	111.6	8.3	8.0	1.7	3.1	7	6	83	87	818141	806185	<0.2	<0.2	0.6	0.6
						1.0	0.2	12	20.7		8.4		33.0		111.5		8.2		1.8		6		84				<0.2		0.6	
					Middle	3.5	0.1	325	19.8	19.8	8.3	8.3	33.6	33.6	102.7	102.7	7.7		2.1		4		86				<0.2		0.6	
						3.5	0.1	334	19.8		8.3		33.6		102.6		7.7		2.1		6		86				<0.2		0.6	
					Bottom	5.9	0.1	349	19.7	19.7	8.3	8.3	33.9	33.9	99.8	99.8	7.5	7.5	5.6		5		90				<0.2		0.6	
						5.9	0.1	321	19.7		8.3		33.9		99.8		7.5		5.4		5		90				<0.2		0.6	
IM3	Fine	Moderate	15:41	7.0	Surface	1.0	0.1	333	20.7	20.7	8.3	8.3	33.4	33.4	106.3	106.2	7.8	7.7	1.7	4.2	5	5	84	87	818789	805584	<0.2	<0.2	0.8	0.6
						1.0	0.1	341	20.7		8.3		33.4		106.1		7.8		1.7		5		85				<0.2		0.6	
					Middle	3.5	0.1	0	19.8	19.8	8.3	8.3	33.6	33.6	101.1	101.1	7.6		2.7		5		86				<0.2		0.6	
						3.5	0.1	0	19.8		8.3		33.6		101.1		7.6		2.7		5		86				<0.2		0.5	
					Bottom	6.0	0.1	3	19.6	19.6	8.3	8.3	33.9	33.9	99.0	99.0	7.4	7.4	8.1		5		90				<0.2		0.5	
						6.0	0.1	3	19.6		8.3		33.9		99.0		7.4		8.0		5		91				<0.2		0.6	
IM4	Fine	Moderate	15:30	7.8	Surface	1.0	0.1	264	20.1	20.1	8.3	8.3	32.9	33.0	101.0	101.0	7.6	7.5	2.9	3.1	3	5	84	87	819710	804607	<0.2	<0.2	1.0	1.0
						1.0	0.1	275	20.1		8.3		33.0		100.9		7.5		2.9		4		84				<0.2		1.0	
					Middle	3.9	0.0	307	19.9	19.9	8.3	8.3	33.5	33.5	99.8	99.9	7.5		3.3		5		86				<0.2		0.9	
						3.9	0.0	319	19.9		8.3		33.5		99.9		7.5		3.4		6		86				<0.2		0.9	
					Bottom	6.8	0.1	32	19.8	19.8	8.3	8.3	33.7	33.7	99.2	99.2	7.4	7.4	3.0		6		90				<0.2		1.0	
						6.8	0.1	32	19.8		8.3		33.7		99.2		7.4		3.1		5		90				<0.2		1.0	
IM5	Fine	Moderate	15:20	7.1	Surface	1.0	0.1	261	20.5	20.5	8.2	8.2	31.9	31.9	100.5	100.5	7.5	7.5	2.5	4.1	7	5	83	86	820721	804847	<0.2	<0.2	1.2	1.1
						1.0	0.1	282	20.5		8.2		31.9		100.5		7.5		2.5		6		84				<0.2		1.0	
					Middle	3.6	0.1	4	20.0	20.0	8.3	8.3	33.3	33.3	99.7	99.7	7.5		4.5		6		86				<0.2		1.1	
						3.6	0.1	4	20.0		8.3		33.3		99.7		7.5		4.6		5		86				<0.2		1.1	
					Bottom	6.1	0.1	342	19.9	19.9	8.3	8.3	33.5	33.5	98.4	98.4	7.4	7.4	5.1		4		89				<0.2		1.1	
						6.1	0.1	356	19.9		8.3		33.5		98.4		7.4		5.2		4		90				<0.2		1.1	
IM6	Fine	Moderate	15:12	6.7	Surface	1.0	0.1	295	20.9	20.9	8.2	8.2	30.6	30.6	98.5	98.5	7.4	7.4	1.9	3.2	4	4	84	87	821075	805842	<0.2	<0.2	1.2	1.2
						1.0	0.1	310	20.9		8.2		30.6		98.5		7.4		1.9		5		85				<0.2		1.2	
					Middle	3.4	0.1	287	20.1	20.1	8.3	8.3	32.6	32.6	98.6	98.6	7.4		3.4		5		85				<0.2		1.2	
						3.4	0.1	299	20.1		8.3		32.6		98.5		7.4		3.5		4		86				<0.2		1.1	
					Bottom	5.7	0.0	316	19.9	19.9	8.3	8.3	33.4	33.4	97.5	97.6	7.3	7.3	4.1		3		90				<0.2		1.2	
						5.7	0.0	322	19.9		8.3		33.4		97.7		7.3		4.1		4		90				<0.2		1.2	
IM7	Fine	Moderate	15:03	8.6	Surface	1.0	0.2	267	20.9	20.9	8.0	8.0	30.2	30.2	97.6	97.6	7.3	7.3	2.1	3.9	3	5	83	87	821363	806822	<0.2	<0.2	1.2	1.2
						1.0	0.2	291	20.9		8.0		30.2		97.5		7.3		2.2		3		84				<0.2		1.2	
					Middle	4.3	0.1	243	20.0	20.0	8.1	8.1	32.6	32.6	96.3	96.4	7.2		3.6		4		86				<0.2		1.2	
						4.3	0.1	246	20.0		8.1		32.6		96.4		7.2		3.6		5		86				<0.2		1.2	
					Bottom	7.6	0.0	95	19.8	19.8	8.1	8.1	33.3	33.3	95.8	95.8	7.2	7.2	5.9		6		90				<0.2		1.1	
						7.6	0.0	98	19.8		8.1		33.3		95.7		7.2		6.0		6		90				<0.2		1.2	
IM8	Fine	Moderate	15:39	7.6	Surface	1.0	0.3	238	20.7	20.7	8.3	8.3	30.4	30.4	99.7	99.7	7.5	7.4	4.1	5.3	5	6	85	88	821815	808116	<0.2	<0.2	1.6	1.4
						1.0	0.3	245	20.7		8.3		30.4		99.6		7.5		4.1		6		85				<0.2		1.4	
					Middle	3.8	0.3	229	20.4	20.4	8.3	8.3	30.9	31.0	97.8	97.6	7.4		5.3		6		89				<0.2		1.4	
						3.8	0.3	239	20.3		8.3		31.1		97.4		7.3		5.5		5		90				<0.2		1.3	
					Bottom	6.6	0.3	222	20.0	20.0	8.3	8.3	31.9	31.8	96.0	96.1	7.2	7.3	6.4		6		90				<0.2		1.4	
						6.6	0.4	230	20.0		8.3		31.8		96.1		7.3		6.5		6		90				<0.2		1.3	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 07 March 20 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	15:47	7.4	Surface	1.0	0.2	257	20.4	20.4	8.3	8.3	30.6	30.6	96.6	96.5	7.3	7.3	3.5	4.8	4	5	83	86	822087	808787	<0.2	<0.2	1.2	1.2
						1.0	0.2	276	20.3		8.3		30.7		96.3		7.3		3.5		4		82				<0.2		1.2	
					Middle	3.7	0.2	275	20.0	20.0	8.3	8.3	31.4	31.4	95.1	95.1	7.2		4.6		5		86				<0.2		1.2	
						3.7	0.2	292	20.0		8.3		31.5		95.1		7.2		4.8		6		85				<0.2		1.1	
					Bottom	6.4	0.3	257	20.0	20.0	8.3	8.3	31.7	31.7	95.7	95.7	7.2	7.2	6.2		6		89				<0.2		1.2	
						6.4	0.3	261	20.0		8.3		31.6		95.7		7.2		6.3		5		89				<0.2		1.2	
IM10	Fine	Moderate	15:55	8.1	Surface	1.0	0.3	293	20.3	20.3	8.3	8.3	30.8	30.8	96.1	95.9	7.2	7.2	3.8	4.4	6	6	84	88	822368	809802	<0.2	<0.2	1.2	1.2
						1.0	0.4	317	20.3		8.3		30.9		95.7		7.2		3.7		6		85				<0.2		1.2	
					Middle	4.1	0.3	297	20.0	20.0	8.3	8.3	31.4	31.4	94.9	95.0	7.2		4.3		6		88				<0.2		1.3	
						4.1	0.3	303	20.0		8.3		31.5		95.0		7.2		4.3		5		88				<0.2		1.2	
					Bottom	7.1	0.3	293	20.0	20.0	8.3	8.3	31.8	31.7	95.3	95.4	7.2	7.2	5.1		5		90				<0.2		1.3	
						7.1	0.3	298	20.0		8.3		31.7		95.4		7.2		5.1		6		90				<0.2		1.2	
IM11	Fine	Moderate	16:08	9.1	Surface	1.0	0.3	302	20.9	20.9	8.3	8.3	30.6	30.6	99.9	99.9	7.5	7.3	3.2	5.1	5	5	84	87	822065	811464	<0.2	<0.2	1.6	1.5
						1.0	0.4	319	20.9		8.3		30.6		99.9		7.5		3.2		4		84				<0.2		1.7	
					Middle	4.6	0.3	296	20.0	20.0	8.3	8.3	31.9	31.9	94.3	94.3	7.1		4.8		4		88				<0.2		1.6	
						4.6	0.4	314	20.0		8.3		31.9		94.3		7.1		4.9		5		88				<0.2		1.6	
					Bottom	8.1	0.3	297	19.9	19.9	8.3	8.3	32.3	32.2	94.9	95.0	7.2	7.2	7.4		6		90				<0.2		1.2	
						8.1	0.3	320	19.9		8.3		32.2		95.1		7.2		7.1		5		90				<0.2		1.1	
IM12	Fine	Moderate	16:15	8.5	Surface	1.0	0.4	292	20.5	20.5	8.3	8.3	31.1	31.2	99.2	99.2	7.4	7.3	4.0	5.8	4	5	85	88	821463	812041	<0.2	<0.2	1.1	1.1
						1.0	0.4	316	20.4		8.3		31.2		99.1		7.5		4.2		6		85				<0.2		1.1	
					Middle	4.3	0.3	297	19.9	19.9	8.3	8.3	31.8	31.8	94.4	94.4	7.1		5.1		5		88				<0.2		1.2	
						4.3	0.4	320	19.9		8.3		31.8		94.3		7.1		5.2		6		88				<0.2		1.1	
					Bottom	7.5	0.4	289	19.8	19.8	8.3	8.3	32.5	32.5	94.4	94.5	7.1	7.1	8.2		5		90				<0.2		1.1	
						7.5	0.4	299	19.8		8.3		32.5		94.5		7.1		8.3		6		90				<0.2		1.0	
SR1A	Cloudy	Calm	16:36	5.0	Surface	1.0	-	-	20.6	20.6	8.3	8.3	31.2	31.2	97.8	97.7	7.3	7.3	4.5	4.4	7	7	-	-	819973	812663	-	-	-	-
						1.0	-	-	20.5		8.3		31.3		97.6		7.3		4.5		7		-				-		-	
					Middle	2.5	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.5	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	-	-	20.2	20.2	8.3	8.3	31.8	31.8	96.3	96.4	7.2	7.2	4.3		8		-				-		-	
						4.0	-	-	20.2		8.3		31.8		96.4		7.2		4.3		7		-				-		-	
SR2	Cloudy	Moderate	16:49	4.9	Surface	1.0	0.1	24	20.0	20.0	8.3	8.3	32.3	32.3	93.8	93.8	7.1	7.1	4.3	4.8	5	4	84	87	821482	814147	<0.2	<0.2	0.9	0.9
						1.0	0.1	24	20.0		8.3		32.3		93.7		7.0		4.4		4		84				<0.2		0.9	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	0.1	1	19.9	19.9	8.3	8.3	32.6	32.6	93.5	93.6	7.0	7.0	5.3		4		89				<0.2		0.9	
						3.9	0.1	1	19.9		8.3		32.6		93.7		7.0		5.3		4		89				<0.2		1.0	
SR3	Fine	Moderate	15:33	9.0	Surface	1.0	0.3	227	20.5	20.5	8.3	8.3	30.3	30.3	98.8	98.8	7.5	7.4	3.7	5.2	3	4	-	-	822170	807583	-	-	-	-
						1.0	0.3	228	20.4		8.3		30.4		98.7		7.4		3.8		4		-				-		-	
					Middle	4.5	0.2	238	20.0	20.0	8.3	8.3	31.9	32.0	96.4	96.4	7.3		5.2		4		-				-		-	
						4.5	0.2	258	19.9		8.3		32.1		96.3		7.3		5.6		5		-				-		-	
					Bottom	8.0	0.2	293	20.0	20.0	8.3	8.3	32.3	32.2	96.3	96.4	7.2	7.2	6.4		5		-				-		-	
						8.0	0.2	299	20.0		8.3		32.2		96.4		7.2		6.3		4		-				-		-	
SR4A	Fine	Calm	16:43	9.3	Surface	1.0	0.1	220	20.7	20.7	8.3	8.3	33.4	33.4	104.7	104.7	7.7	7.7	2.2	2.3	4	5	-	-	817174	807829	-	-	-	-
						1.0	0.1	228	20.7		8.3		33.4		104.7		7.7		2.2		5		-				-		-	
					Middle	4.7	0.0	231	20.3	20.3	8.3	8.3	33.6	33.6	102.4	102.4	7.6		2.0		5		-				-		-	
						4.7	0.0	251	20.3		8.3		33.6		102.4		7.6		2.0		6		-				-		-	
					Bottom	8.3	0.1	271	19.8	19.8	8.3	8.3	33.8	33.8	99.2	99.3	7.4	7.4	2.6		6		-				-		-	
						8.3	0.1	289	19.8		8.3		33.8		99.3		7.4		2.6		6		-				-		-	
SR5A	Fine	Calm	17:02	3.8	Surface	1.0	0.1	270	20.4	20.4	8.2	8.2	33.1	33.1	102.2	102.2	7.6	7.6	2.3	2.1	5	6	-	-	816605	810717	-	-	-	-
						1.0	0.1	295	20.4		8.2		33.1		102.2		7.6		2.3		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	0.1	292	20.5	20.5	8.2	8.2	33.2	33.2	103.3	103.3	7.7	7.7	1.9		6		-				-		-	
						2.8	0.1	294	20.5		8.2		33.2		103.3		7.7		1.9		6		-				-		-	
SR6A	Fine	Calm	17:43	4.3	Surface	1.0	0.1	221	20.2	20.2	8.1	8.1	32.9	32.9	94.5	94.5	7.1	7.1	2.7	2.8	6	7	-	-	817970	814749	-	-	-	-
						1.0	0.1	242	20.2		8.1		32.9		94.5		7.1		2.7		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.1	221	20.1	20.1	8.1	8.1	32.9	32.9	94.1	94.1	7.0	7.0	2.8		8		-				-		-	
						3.3	0.1	226	20.1		8.1		32.9		94.0		7.0		2.9		8		-				-		-	
SR7	Cloudy	Moderate	17:49	15.6	Surface	1.0	0.1	299	19.9	19.9	8.3	8.3	33.4	33.4	91.8	91.8	6.9	6.9	2.1	2.6	3	3	-	-	823629	823762	-	-	-	-
						1.0	0.1	322	19.9		8.3		33.4		91.8		6.9		2.1		2		-				-		-	
					Middle	7.8	0.1	10	19.7	19.7	8.3	8.3	33.6	33.6	91.1	91.1	6.8		2.8		3		-				-		-	
						7.8	0.1	10	19.7		8.3		33.6		91.1		6.8		2.8		3		-				-		-	
					Bottom	14.6	0.1	24	19.7	19.7	8.3	8.3	33.6	33.6	91.8	91.8	6.9	6.9	2.9		3		-				-		-	
						14.6	0.1	25	19.7		8.3		33.6		91.8		6.9		2.9		2		-				-		-	
SR8	Cloudy	Calm	16:27	4.9	Surface	1.0	-	-	20.7	20.7	8.3	8.3	30.9	30.9	98.5	98.5	7.4	7.4	4.8	5.7	5	6	-	-	820381	811611	-	-	-	-
						1.0	-	-	20.7		8.3		30.9		98.4		7.4		4.8		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	-	-	20.2	20.3	8.3	8.3	31.7	31.7	96.2	96.3	7.2	7.2	6.4		6		-				-		-	
						3.9	-	-	20.3		8.3		31.7		96.4		7.2		6.7		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 10 March 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Rough	13:09	8.0	Surface	1.0	0.4	185	20.9	20.9	8.3	8.3	29.9	29.9	105.1	105.1	7.9	7.7	4.8	6.5	12	11	86	88	815633	804257	<0.2	<0.2	1.7	1.8
						1.0	0.4	187	20.9		8.3		29.9		105.1		7.9		4.8		12		85				<0.2		1.6	
					Middle	4.0	0.4	197	20.5	20.5	8.3	8.3	30.6	30.6	99.5	99.5	7.5		7.0		10		88				<0.2		1.7	
						4.0	0.4	203	20.5		8.3		30.6		99.5		7.5		7.0		12		87				<0.2		1.8	
					Bottom	7.0	0.3	231	20.1	20.1	8.3	8.3	32.5	32.5	98.7	98.7	7.4	7.4	7.7		10		90				<0.2		1.9	
						7.0	0.3	247	20.1		8.3		32.5		98.7		7.4		7.7		10		89				<0.2		1.9	
C2	Fine	Moderate	11:54	12.2	Surface	1.0	0.2	96	20.9	20.9	8.3	8.3	28.7	28.8	93.9	94.0	7.1	7.1	13.0	14.7	20	23	87	90	825705	806933	<0.2	<0.2	0.9	0.9
						1.0	0.2	99	20.9		8.3		28.8		94.0		7.1		13.5		20		86				<0.2		0.9	
					Middle	6.1	0.3	87	20.8	20.8	8.3	8.3	29.3	29.3	94.4	94.5	7.1		14.2		24		91				<0.2		0.9	
						6.1	0.3	91	20.8		8.3		29.3		94.5		7.1		14.9		25		91				<0.2		0.9	
					Bottom	11.2	0.3	47	20.8	20.8	8.3	8.3	30.1	30.1	95.5	95.5	7.2	7.2	16.1		25		92				<0.2		0.9	
						11.2	0.3	49	20.8		8.3		30.1		95.5		7.2		16.3		25		93				<0.2		0.9	
C3	Fine	Moderate	13:27	12.0	Surface	1.0	0.6	78	20.9	20.9	8.3	8.3	31.1	31.1	95.3	95.3	7.1	7.0	4.4	5.6	6	8	85	88	822119	817807	<0.2	<0.2	1.3	1.2
						1.0	0.7	79	20.9		8.3		31.1		95.3		7.1		4.4		7		85				<0.2		1.2	
					Middle	6.0	0.6	78	20.5	20.5	8.3	8.3	31.8	31.8	91.9	92.0	6.9		6.4		8		88				<0.2		1.2	
						6.0	0.6	78	20.5		8.3		31.8		92.0		6.9		6.6		7		88				<0.2		1.2	
					Bottom	11.0	0.5	84	20.5	20.5	8.3	8.3	31.9	31.9	93.5	93.6	7.0	7.0	5.8		8		91				<0.2		1.2	
						11.0	0.5	89	20.5		8.3		31.9		93.7		7.0		5.9		9		91				<0.2		1.2	
IM1	Cloudy	Rough	12:46	4.5	Surface	1.0	0.2	193	21.2	21.2	8.3	8.3	30.3	30.3	107.0	107.0	8.0	8.0	6.1	6.6	12	12	85	88	817966	807133	<0.2	<0.2	1.1	1.1
						1.0	0.2	204	21.2		8.3		30.3		107.0		8.0		6.1		11		87				<0.2		1.1	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.2	232	21.1	21.1	8.3	8.3	30.5	30.5	103.8	103.8	7.7	7.7	7.0		12		90				<0.2		1.1	
						3.5	0.2	233	21.1		8.3		30.5		103.8		7.7		7.0		12		89				<0.2		1.0	
IM2	Cloudy	Rough	12:39	6.6	Surface	1.0	0.2	142	21.0	21.0	8.2	8.2	30.0	30.0	101.6	101.6	7.6	7.6	7.0	8.6	12	11	86	88	818151	806164	<0.2	<0.2	1.0	1.1
						1.0	0.2	149	21.0		8.2		30.0		101.6		7.6		7.0		11		85				<0.2		1.1	
					Middle	3.3	0.1	181	20.9	20.9	8.2	8.2	30.2	30.2	99.9	99.9	7.5		8.3		11		88				<0.2		1.1	
						3.3	0.1	197	20.9		8.2		30.2		99.9		7.5		8.3		11		87				<0.2		1.2	
					Bottom	5.6	0.1	207	20.7	20.7	8.2	8.2	31.3	31.3	98.7	98.7	7.4	7.4	10.5		10		89				<0.2		1.1	
						5.6	0.2	211	20.7		8.2		31.3		98.7		7.4		10.5		10		90				<0.2		1.0	
IM3	Cloudy	Rough	12:30	7.0	Surface	1.0	0.1	109	21.0	21.0	8.2	8.2	30.1	30.1	100.8	100.8	7.5	7.5	7.5	8.6	12	14	86	88	818784	805598	<0.2	<0.2	1.2	1.3
						1.0	0.1	109	21.0		8.2		30.1		100.8		7.5		7.5		12		86				<0.2		1.2	
					Middle	3.5	0.0	239	20.8	20.8	8.2	8.2	30.4	30.4	98.7	98.7	7.4		8.8		14		87				<0.2		1.4	
						3.5	0.0	254	20.8		8.2		30.4		98.7		7.4		8.8		14		88				<0.2		1.2	
					Bottom	6.0	0.2	206	20.7	20.7	8.2	8.2	31.4	31.4	98.2	98.2	7.3	7.3	9.5		15		89				<0.2		1.3	
						6.0	0.2	218	20.7		8.2		31.4		98.2		7.3		9.5		15		89				<0.2		1.2	
IM4	Cloudy	Rough	12:21	7.6	Surface	1.0	0.4	147	20.9	20.9	8.2	8.2	30.3	30.3	98.8	98.8	7.4	7.4	10.5	12.0	11	14	86	88	819747	804613	<0.2	<0.2	1.2	1.3
						1.0	0.4	148	20.9		8.2		30.3		98.8		7.4		10.5		11		86				<0.2		1.3	
					Middle	3.8	0.2	151	20.8	20.8	8.2	8.2	30.5	30.5	97.7	97.7	7.3		12.6		14		88				<0.2		1.4	
						3.8	0.2	159	20.8		8.2		30.5		97.7		7.3		12.6		14		87				<0.2		1.2	
					Bottom	6.6	0.2	190	20.8	20.8	8.2	8.2	30.7	30.7	98.1	98.1	7.3	7.3	13.0		18		90				<0.2		1.4	
						6.6	0.2	205	20.8		8.2		30.7		98.1		7.3		13.0		18		91				<0.2		1.3	
IM5	Cloudy	Rough	12:13	7.8	Surface	1.0	0.2	180	21.2	21.2	8.2	8.2	28.7	28.7	100.0	100.0	7.5	7.6	5.4	7.6	9	10	86	88	820754	804889	<0.2	<0.2	1.4	1.4
						1.0	0.2	196	21.2		8.2		28.7		100.0		7.5		5.4		9		85				<0.2		1.5	
					Middle	3.9	0.2	187	21.0	21.0	8.2	8.2	29.7	29.7	100.8	100.8	7.6		8.0		10		87				<0.2		1.4	
						3.9	0.2	202	21.0		8.2		29.7		100.8		7.6		8.0		10		88				<0.2		1.4	
					Bottom	6.8	0.1	165	20.9	20.9	8.2	8.2	30.5	30.5	99.8	99.8	7.5	7.5	9.4		11		89				<0.2		1.4	
						6.8	0.1	174	20.9		8.2		30.5		99.8		7.5		9.4		11		91				<0.2		1.4	
IM6	Cloudy	Rough	12:04	7.0	Surface	1.0	0.2	227	20.9	20.9	8.1	8.1	28.9	28.9	96.6	96.6	7.3	7.3	5.9	7.7	11	11	86	88	821056	805825	<0.2	<0.2	1.4	1.4
						1.0	0.2	244	20.9		8.1		28.9		96.6		7.3		5.9		11		85				<0.2		1.3	
					Middle	3.5	0.1	250	20.8	20.8	8.1	8.1	29.8	29.8	96.9	96.9	7.3		7.7		11		87				<0.2		1.4	
						3.5	0.1	251	20.8		8.1		29.8		96.9		7.3		7.7		11		88				<0.2		1.3	
					Bottom	6.0	0.2	237	20.8	20.8	8.1	8.1	30.9	30.9	96.7	96.7	7.2	7.2	9.4		12		89				<0.2		1.4	
						6.0	0.2	249	20.8		8.1		30.9		96.7		7.2		9.4		12		90				<0.2		1.3	
IM7	Cloudy	Rough	11:54	7.7	Surface	1.0	0.1	233	21.0	21.0	8.0	8.0	28.4	28.4	97.1	97.1	7.3	7.3	6.4	7.6	12	12	86	88	821359	806812	<0.2	<0.2	1.4	1.3
						1.0	0.1	242	21.0		8.0		28.4		97.1		7.3		6.4		12		85				<0.2		1.3	
					Middle	3.9	0.1	211	20.8	20.8	8.0	8.0	29.7	29.7	96.7	96.7	7.3		6.8		11		87				<0.2		1.4	
						3.9	0.1	213	20.8		8.0		29.7		96.7		7.3		6.8		12		88				<0.2		1.2	
					Bottom	6.7	0.1	249	20.7	20.7	7.9	7.9	30.8	30.8	96.6	96.6	7.2	7.2	9.7		12		89				<0.2		1.3	
						6.7	0.1	269	20.7		7.9		30.8		96.6		7.2		9.7		12		90				<0.2		1.3	
IM8	Fine	Rough	12:16	8.0	Surface	1.0	0.4	128	21.1	21.1	8.3	8.3	27.8	27.8	94.0	94.2	7.1	7.2	6.6	8.8	10	9	86	90	821825	808141	<0.2	<0.2	1.4	1.4
						1.0	0.4	130	21.1		8.3		27.8		94.3		7.1		6.6		10		87				<0.2		1.4	
					Middle	4.0	0.4	113	20.8	20.8	8.3	8.3	30.2	30.3	95.5	95.5	7.2		9.5		9		90				<0.2		1.4	
						4.0	0.4	119	20.8		8.3		30.3		95.5		7.2		9.0		9		91				<0.2		1.4	
					Bottom	7.0	0.3	84	20.7	20.7	8.3	8.3	30.5	30.5	95.7	95.8	7.2	7.2	10.5		7		92				<0.2		1.4	
						7.0	0.3	89	20.7		8.3		30.5		95.8		7.2		10.3		8		93				<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 10 March 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Fine	Rough	12:21	7.6	Surface	1.0	0.6	109	21.1	21.1	8.3	8.3	28.2	28.2	94.2	94.3	7.1	7.2	8.9	11.9	13	12	86	90	822085	808831	<0.2	<0.2	1.3	1.3
						1.0	0.7	115	21.0		8.3		28.3		94.3		7.1		9.2		12		87				<0.2		1.3	
					Middle	3.8	0.7	93	20.9	20.9	8.3	8.3	29.3	29.3	95.0	95.1	7.2		12.5		12		90				<0.2		1.4	
						3.8	0.7	96	20.9		8.3		29.3		95.2		7.2		12.6		12		90				<0.2		1.3	
					Bottom	6.6	0.6	84	20.7	20.7	8.3	8.3	30.4	30.4	95.9	96.0	7.2	7.2	14.3		10		92				<0.2		1.3	
						6.6	0.6	86	20.7		8.3		30.4		96.0		7.2		14.1		10		92				<0.2		1.2	
IM10	Fine	Rough	12:27	7.2	Surface	1.0	0.7	118	21.1	21.1	8.3	8.3	27.8	27.8	94.8	94.9	7.2	7.2	7.6	9.3	9	11	87	90	822402	809815	<0.2	<0.2	1.3	1.3
						1.0	0.8	125	21.1		8.3		27.8		94.9		7.2		7.6		9		86				<0.2		1.3	
					Middle	3.6	0.7	104	20.8	20.8	8.3	8.3	30.1	30.1	94.7	94.8	7.1		8.9		11		90				<0.2		1.4	
						3.6	0.7	106	20.8		8.3		30.1		94.8		7.1		8.5		10		90				<0.2		1.3	
					Bottom	6.2	0.7	115	20.8	20.8	8.3	8.3	30.2	30.2	95.2	95.3	7.2	7.2	11.6		12		92				<0.2		1.3	
						6.2	0.7	115	20.8		8.3		30.2		95.4		7.2		11.8		13		93				<0.2		1.3	
IM11	Fine	Rough	12:35	7.9	Surface	1.0	0.7	112	21.2	21.2	8.3	8.3	29.1	29.1	94.8	94.8	7.1	7.1	7.7	8.2	12	12	86	90	822064	811474	<0.2	<0.2	1.2	1.2
						1.0	0.7	113	21.1		8.3		29.1		94.8		7.1		7.7		12		87				<0.2		1.2	
					Middle	4.0	0.6	114	21.0	21.0	8.3	8.3	29.5	29.5	94.8	94.9	7.1		8.1		12		91				<0.2		1.1	
						4.0	0.7	120	21.0		8.3		29.6		94.9		7.1		8.0		11		89				<0.2		1.1	
					Bottom	6.9	0.6	114	20.9	20.9	8.3	8.3	30.5	30.5	95.6	95.8	7.2	7.2	8.8		11		92				<0.2		1.2	
						6.9	0.7	123	20.9		8.3		30.5		96.0		7.2		8.8		11		93				<0.2		1.2	
IM12	Fine	Rough	12:41	9.8	Surface	1.0	0.6	104	21.2	21.2	8.3	8.3	29.3	29.4	95.9	95.9	7.2	7.2	7.7	8.0	12	13	86	90	821460	812063	<0.2	<0.2	1.2	1.1
						1.0	0.6	113	21.1		8.3		29.5		95.9		7.2		7.6		12		87				<0.2		1.1	
					Middle	4.9	0.4	95	20.9	20.9	8.3	8.3	30.6	30.6	94.6	94.6	7.1		7.2		12		92				<0.2		1.0	
						4.9	0.4	101	20.9		8.3		30.6		94.5		7.1		7.4		12		91				<0.2		1.1	
					Bottom	8.8	0.2	93	20.8	20.8	8.3	8.3	30.8	30.8	93.5	93.6	7.0	7.0	9.1		13		93				<0.2		1.2	
						8.8	0.2	96	20.8		8.3		30.8		93.6		7.0		9.1		14		93				<0.2		1.2	
SR1A	Fine	Moderate	12:57	3.8	Surface	1.0	-	-	21.1	21.1	8.3	8.3	30.5	30.5	96.9	96.9	7.2	7.2	8.2	8.3	12	13	-	-	819976	812660	-	-	-	-
						1.0	-	-	21.1		8.3		30.5		96.9		7.2		8.2		12		-				-		-	
					Middle	1.9	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						1.9	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	-	-	21.1	21.1	8.3	8.3	30.5	30.5	97.8	98.0	7.3	7.3	8.4		13		-				-		-	
						2.8	-	-	21.1		8.3		30.5		98.2		7.3		8.5		13		-				-		-	
SR2	Fine	Moderate	13:09	3.6	Surface	1.0	0.5	112	21.1	21.1	8.3	8.3	29.9	29.9	97.4	97.4	7.3	7.3	6.2	6.9	9	10	87	90	821463	814148	<0.2	<0.2	1.1	1.1
						1.0	0.5	116	21.1		8.3		30.0		97.3		7.3		6.2		9		87				<0.2		1.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.6	0.3	123	20.9	20.9	8.3	8.3	30.7	30.7	97.3	97.4	7.3	7.3	7.5		11		92				<0.2		1.1	
						2.6	0.3	130	20.9		8.3		30.7		97.5		7.3		7.6		10		93				<0.2		1.0	
SR3	Fine	Rough	12:11	8.9	Surface	1.0	0.4	153	20.9	20.9	8.3	8.3	28.0	28.1	92.6	92.7	7.0	7.1	8.1	12.7	12	11	-	-	822151	807593	-	-	-	-
						1.0	0.4	153	20.9		8.3		28.2		92.8		7.0		9.0		12		-				-		-	
					Middle	4.5	0.3	148	20.8	20.8	8.3	8.3	29.3	29.3	94.2	94.4	7.1		13.9		11		-				-		-	
						4.5	0.3	161	20.8		8.3		29.3		94.6		7.1		14.0		11		-				-		-	
					Bottom	7.9	0.3	101	20.9	20.9	8.3	8.3	30.4	30.3	95.5	95.5	7.1	7.1	15.9		10		-				-		-	
						7.9	0.3	102	20.9		8.3		30.3		95.4		7.1		15.5		10		-				-		-	
SR4A	Cloudy	Moderate	13:34	8.8	Surface	1.0	0.1	41	21.2	21.2	8.3	8.3	30.2	30.2	103.6	103.6	7.7	7.6	7.0	8.3	10	12	-	-	817187	807793	-	-	-	-
						1.0	0.1	43	21.2		8.3		30.2		103.6		7.7		7.0		10		-				-		-	
					Middle	4.4	0.1	83	21.0	21.0	8.3	8.3	30.4	30.4	100.6	100.6	7.5		8.7		10		-				-		-	
						4.4	0.1	84	21.0		8.3		30.4		100.6		7.5		8.7		11		-				-		-	
					Bottom	7.8	0.1	115	20.9	20.9	8.2	8.2	30.6	30.6	100.0	100.0	7.5	7.5	9.2		14		-				-		-	
						7.8	0.1	125	20.9		8.2		30.6		100.0		7.5		9.2		14		-				-		-	
SR5A	Cloudy	Moderate	13:53	3.5	Surface	1.0	0.0	99	21.3	21.3	8.3	8.3	31.0	31.0	101.7	101.5	7.5	7.5	9.4	8.3	15	14	-	-	816611	810698	-	-	-	-
						1.0	0.0	106	21.3		8.3		31.0		101.3		7.5		9.4		15		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.5	0.0	4	21.5	21.5	8.3	8.3	31.3	31.3	100.4	100.4	7.4	7.4	7.2		12		-				-		-	
						2.5	0.0	4	21.5		8.3		31.3		100.4		7.4		7.2		12		-				-		-	
SR6A	Cloudy	Moderate	14:29	3.6	Surface	1.0	0.1	129	21.5	21.5	8.3	8.3	30.9	30.9	103.0	103.0	7.6	7.6	5.1	5.5	9	10	-	-	817950	814745	-	-	-	-
						1.0	0.1	137	21.5		8.3		30.9		103.0		7.6		5.1		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.6	0.1	113	21.6	21.6	8.2	8.2	31.2	31.2	101.3	101.3	7.4	7.4	5.9		11		-				-		-	
						2.6	0.1	121	21.6		8.2		31.2		101.3		7.4		5.9		11		-				-		-	
SR7	Fine	Moderate	13:53	16.2	Surface	1.0	0.5	66	20.4	20.4	8.3	8.3	32.0	32.0	91.0	91.0	6.8	6.8	3.8	4.2	5	6	-	-	823621	823760	-	-	-	-
						1.0	0.5	69	20.4		8.3		32.0		91.0		6.8		3.9		5		-				-		-	
					Middle	8.1	0.4	52	20.4	20.4	8.3	8.3	32.0	32.0	91.2	91.2	6.8		4.1		5		-				-		-	
						8.1	0.4	55	20.4		8.3		32.0		91.2		6.8		4.2		6		-				-		-	
					Bottom	15.2	0.3	36	20.4	20.4	8.3	8.3	32.1	32.1	92.4	92.6	6.9	6.9	4.8		6		-				-		-	
						15.2	0.3	38	20.4		8.3		32.1		92.7		6.9		4.7		7		-				-		-	
SR8	Fine	Moderate	12:49	5.0	Surface	1.0	-	-	21.1	21.1	8.3	8.3	30.1	30.2	96.7	96.6	7.2	7.2	10.0	12.8	18	19	-	-	820403	811613	-	-	-	-
						1.0	-	-	21.1		8.3		30.2		96.5		7.2		10.1		18		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	-	-	20.9	20.9	8.3	8.3	30.3	30.3	96.8	97.0	7.2	7.3	15.4		19		-				-		-	
						4.0	-	-	20.9		8.3		30.4		97.2		7.3		15.9		19		-				-		-	

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 10 March 20 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	Rough	08:21	8.0	Surface	1.0	0.5	46	20.8	20.8	8.1	8.1	30.0	30.0	98.2	98.2	7.4	7.4	21.2	26.0	25	25	85	87	815599	804229	<0.2	<0.2	1.1	1.1
						1.0	0.6	50	20.8		8.1		30.0		98.2		7.4		21.2		24		86				<0.2		1.1	
					Middle	4.0	0.5	41	20.8	20.8	8.2	8.2	30.1	30.1	98.6	98.6	7.4		21.8		25		87				<0.2		1.1	
						4.0	0.5	45	20.8		8.2		30.1		98.6		7.4		21.8		25		87				<0.2		1.2	
					Bottom	7.0	0.5	22	20.8	20.8	8.2	8.2	30.5	30.5	98.2	98.2	7.4	7.4	35.0		26		90				<0.2		1.1	
						7.0	0.5	22	20.8		8.2		30.5		98.2		7.4		35.0		26		89				<0.2		1.1	
C2	Fine	Rough	08:31	11.7	Surface	1.0	0.5	347	21.0	21.0	8.2	8.2	26.9	26.9	89.3	89.3	6.8	6.8	9.2	11.5	11	11	83	88	825676	806939	<0.2	<0.2	1.0	1.0
						1.0	0.6	319	21.0		8.2		26.9		89.2		6.8		9.2		12		84				<0.2		0.9	
					Middle	5.9	0.5	356	21.0	21.0	8.2	8.2	27.1	27.1	88.4	88.4	6.7		11.3		11		87				<0.2		1.0	
						5.9	0.5	328	20.9		8.2		27.1		88.4		6.7		11.1		11		88				<0.2		1.0	
					Bottom	10.7	0.4	343	20.9	20.9	8.2	8.2	27.8	27.8	89.1	89.2	6.8	6.8	14.0		11		91				<0.2		1.0	
						10.7	0.4	346	20.9		8.2		27.8		89.2		6.8		14.1		11		92				<0.2		1.0	
C3	Fine	Moderate	06:44	11.5	Surface	1.0	0.2	265	20.9	20.9	8.3	8.3	30.1	30.2	95.3	95.3	7.1	7.1	6.6	8.6	9	9	82	88	822112	817800	<0.2	<0.2	1.7	1.7
						1.0	0.2	287	20.8		8.3		30.2		95.3		7.1		7.0		9		84				<0.2		1.7	
					Middle	5.8	0.1	299	20.7	20.7	8.3	8.3	31.0	31.0	94.8	94.8	7.1		8.9		9		89				<0.2		1.6	
						5.8	0.1	304	20.7		8.3		31.0		94.8		7.1		8.7		9		90				<0.2		1.7	
					Bottom	10.5	0.2	321	20.7	20.7	8.3	8.3	31.0	31.0	96.6	96.9	7.2	7.3	10.5		8		91				<0.2		1.6	
						10.5	0.2	335	20.7		8.3		31.0		97.2		7.3		10.0		9		92				<0.2		1.6	
IM1	Cloudy	Rough	08:42	4.4	Surface	1.0	0.2	352	20.6	20.6	8.2	8.2	31.9	31.9	98.3	98.3	7.3	7.3	14.4	12.9	24	26	86	88	817928	807125	<0.2	<0.2	1.2	1.2
						1.0	0.2	324	20.6		8.2		31.9		98.3		7.3		14.4		24		86				<0.2		1.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.2	8	20.5	20.5	8.2	8.2	32.0	32.0	97.4	97.4	7.3	7.3	11.4		27		89				<0.2		1.1	
						3.4	0.2	8	20.5		8.2		32.0		97.4		7.3		11.4		27		90				<0.2		1.3	
IM2	Cloudy	Rough	08:53	6.8	Surface	1.0	0.4	17	20.8	20.8	8.2	8.2	30.4	30.4	97.2	97.2	7.3	7.3	18.5	22.3	37	31	85	88	818173	806183	<0.2	<0.2	1.3	1.2
						1.0	0.5	17	20.8		8.2		30.4		97.2		7.3		18.5		36		85				<0.2		1.2	
					Middle	3.4	0.3	1	20.7	20.7	8.2	8.2	30.9	30.9	97.7	97.7	7.3		23.9		29		87				<0.2		1.3	
						3.4	0.4	1	20.7		8.2		30.9		97.7		7.3		23.9		29		88				<0.2		1.2	
					Bottom	5.8	0.2	340	20.7	20.7	8.2	8.2	31.1	31.1	97.0	97.0	7.2	7.2	24.5		28		90				<0.2		1.2	
						5.8	0.2	357	20.7		8.2		31.1		97.0		7.2		24.5		27		91				<0.2		1.1	
IM3	Cloudy	Rough	09:02	6.8	Surface	1.0	0.5	4	20.8	20.8	8.2	8.2	30.2	30.2	97.3	97.3	7.3	7.3	15.6	17.2	28	27	86	88	818787	805588	<0.2	<0.2	1.0	1.2
						1.0	0.5	4	20.8		8.2		30.2		97.3		7.3		15.6		28		85				<0.2		1.0	
					Middle	3.4	0.4	348	20.8	20.8	8.2	8.2	30.6	30.6	96.8	96.8	7.2		17.6		27		87				<0.2		1.2	
						3.4	0.5	358	20.8		8.2		30.6		96.8		7.2		17.6		27		88				<0.2		1.4	
					Bottom	5.8	0.3	331	20.8	20.8	8.2	8.2	30.9	30.9	97.4	97.4	7.3	7.3	18.3		26		90				<0.2		1.2	
						5.8	0.4	332	20.8		8.2		30.9		97.4		7.3		18.3		26		89				<0.2		1.3	
IM4	Cloudy	Rough	09:15	7.4	Surface	1.0	0.7	351	20.8	20.8	8.2	8.2	30.2	30.2	96.2	96.2	7.2	7.2	20.1	21.1	26	25	85	87	819739	804619	<0.2	<0.2	1.1	1.1
						1.0	0.8	323	20.8		8.2		30.2		96.2		7.2		20.1		27		86				<0.2		1.2	
					Middle	3.7	0.7	347	20.8	20.8	8.2	8.2	30.2	30.2	96.0	96.0	7.2		19.6		25		87				<0.2		1.1	
						3.7	0.7	319	20.8		8.2		30.2		96.0		7.2		19.6		24		87				<0.2		1.1	
					Bottom	6.4	0.5	348	20.8	20.8	8.2	8.2	30.2	30.2	95.9	95.9	7.2	7.2	23.7		23		90				<0.2		1.1	
						6.4	0.5	320	20.8		8.2		30.2		95.9		7.2		23.7		22		89				<0.2		1.1	
IM5	Cloudy	Rough	09:22	7.7	Surface	1.0	0.7	15	20.8	20.8	8.2	8.2	30.3	30.3	96.6	96.6	7.2	7.2	22.2	20.5	42	**40**	85	87	820751	804843	<0.2	<0.2	1.0	1.1
						1.0	0.7	16	20.8		8.2		30.3		96.6		7.2		22.2		44		85				<0.2		1.0	
					Middle	3.9	0.9	16	20.8	20.8	8.2	8.2	30.8	30.8	96.1	96.1	7.2		18.5		41		87				<0.2		1.1	
						3.9	1.0	17	20.8		8.2		30.8		96.1		7.2		18.5		39		86				<0.2		1.1	
					Bottom	6.7	0.4	31	20.8	20.8	8.2	8.2	30.8	30.8	96.0	96.0	7.2	7.2	20.8		37		89				<0.2		1.0	
						6.7	0.4	31	20.8		8.2		30.8		96.0		7.2		20.8		38		90				<0.2		1.1	
IM6	Cloudy	Rough	09:30	7.0	Surface	1.0	0.2	334	20.9	20.9	8.1	8.1	27.9	27.9	94.4	94.4	7.2	7.2	7.6	9.8	18	20	85	87	821059	805826	<0.2	<0.2	1.2	1.3
						1.0	0.2	340	20.9		8.1		27.9		94.4		7.2		7.6		19		86				<0.2		1.0	
					Middle	3.5	0.3	41	20.8	20.8	8.2	8.2	30.0	30.0	95.8	95.8	7.2		9.8		19		87				<0.2		1.3	
						3.5	0.3	44	20.8		8.2		29.9		95.8		7.2		9.8		20		86				<0.2		1.4	
					Bottom	6.0	0.3	57	20.7	20.7	8.2	8.2	30.4	30.4	96.9	96.9	7.3	7.3	12.1		21		90				<0.2		1.5	
						6.0	0.3	62	20.7		8.2		30.4		96.9		7.3		12.1		22		90				<0.2		1.4	
IM7	Cloudy	Rough	09:43	7.8	Surface	1.0	0.0	199	20.9	20.9	8.1	8.1	27.2	27.2	94.7	94.7	7.2	7.3	8.7	11.2	12	13	85	87	821349	806816	<0.2	<0.2	2.9	2.7
						1.0	0.0	212	20.9		8.1		27.2		94.7		7.2		8.7		12		85				<0.2		3.0	
					Middle	3.9	0.2	95	20.7	20.7	8.2	8.2	29.9	29.9	96.9	96.9	7.3		11.8		13		87				<0.2		2.0	
						3.9	0.3	98	20.7		8.2		29.9		96.9		7.3		11.8		12		88				<0.2		2.0	
					Bottom	6.8	0.0	175	20.7	20.7	8.2	8.2	31.4	31.4	96.8	96.8	7.2	7.2	13.1		14		89				<0.2		3.1	
						6.8	0.0	182	20.7		8.2		31.4		96.8		7.2		13.1		15		90				<0.2		2.9	
IM8	Fine	Rough	08:02	7.3	Surface	1.0	0.1	89	20.9	20.9	8.2	8.2	26.9	26.9	89.9	90.0	6.9	6.9	9.4	13.1	13	14	84	88	821844	808141	<0.2	<0.2	1.5	1.6
						1.0	0.1	96	20.9		8.2		26.9		90.0		6.9		9.5		13		84				<0.2		1.6	
					Middle	3.7	0.1	39	20.9	20.9	8.2	8.2	27.2	27.3	90.2	90.2	6.9		14.3		14		88				<0.2		1.6	
						3.7	0.1	40	20.9		8.2		27.3		90.2		6.9		14.4		14		88				<0.2		1.5	
					Bottom	6.3	0.1	43	20.9	20.9	8.2	8.2	27.3	27.3	90.8	90.9	6.9	6.9	15.4		15		92				<0.2		1.7	
						6.3	0.2	45	20.9		8.2		27.3		90.9		6.9		15.6		16		91				<0.2		1.6	

DA: Depth-Averaged

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

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 10 March 20 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	Rough	07:56	7.2	Surface	1.0	0.4	272	20.9	20.9	8.3	8.3	28.4	28.4	91.8	91.8	7.0	7.0	8.5	10.5	14	13	84	88	822101	808802	<0.2	<0.2	1.5	1.6
						1.0	0.4	293	20.9		8.3		28.4		91.8		7.0		8.3		14		85				<0.2		1.6	
					Middle	3.6	0.3	273	20.9	20.9	8.3	8.3	28.4	28.4	92.2	92.3	7.0		10.8		14		88				<0.2		1.5	
						3.6	0.3	284	20.9		8.3		28.4		92.3		7.0		10.1		13		89				<0.2		1.6	
					Bottom	6.2	0.1	295	20.9	20.9	8.3	8.3	28.4	28.4	94.1	94.4	7.1	7.2	12.7		11		92				<0.2		1.5	
						6.2	0.1	314	20.9		8.3		28.4		94.6		7.2		12.7		11		92				<0.2		1.6	
IM10	Fine	Rough	07:48	8.4	Surface	1.0	0.1	22	20.9	20.9	8.3	8.3	29.2	29.2	93.2	93.2	7.0	7.0	9.7	11.8	14	13	84	88	822403	809786	<0.2	<0.2	1.5	1.5
						1.0	0.1	22	20.9		8.3		29.2		93.2		7.0		9.5		14		84				<0.2		1.5	
					Middle	4.2	0.0	282	20.9	20.9	8.3	8.3	29.3	29.3	93.4	93.5	7.0		11.7		13		87				<0.2		1.5	
						4.2	0.0	289	20.9		8.3		29.3		93.5		7.0		12.1		13		88				<0.2		1.5	
					Bottom	7.4	0.1	286	20.9	20.9	8.3	8.3	29.3	29.3	94.1	94.3	7.1	7.1	14.0		13		91				<0.2		1.6	
						7.4	0.1	300	20.9		8.3		29.3		94.4		7.1		13.7		13		91				<0.2		1.5	
IM11	Fine	Rough	07:39	7.6	Surface	1.0	0.1	214	20.9	20.9	8.3	8.3	29.3	29.4	94.4	94.5	7.1	7.1	8.3	10.0	12	14	83	87	822053	811470	<0.2	<0.2	1.3	1.2
						1.0	0.1	233	20.9		8.3		29.4		94.6		7.1		8.5		12		83				<0.2		1.2	
					Middle	3.8	0.1	111	20.9	20.9	8.3	8.3	30.1	30.1	95.1	95.2	7.1		10.0		15		87				<0.2		1.2	
						3.8	0.1	121	20.9		8.3		30.1		95.2		7.1		9.8		15		87				<0.2		1.2	
					Bottom	6.6	0.0	76	20.9	20.9	8.3	8.3	30.4	30.4	95.6	95.7	7.1	7.2	11.9		16		92				<0.2		1.3	
						6.6	0.0	81	20.9		8.3		30.4		95.7		7.2		11.4		16		92				<0.2		1.2	
IM12	Fine	Moderate	07:32	8.5	Surface	1.0	0.1	161	20.9	20.9	8.3	8.3	29.8	29.9	95.2	95.3	7.1	7.1	8.1	10.1	11	12	85	88	821436	812043	<0.2	<0.2	1.3	1.3
						1.0	0.1	161	20.9		8.3		30.0		95.3		7.1		8.3		11		86				<0.2		1.3	
					Middle	4.3	0.1	237	20.9	20.9	8.3	8.3	30.7	30.7	95.6	95.6	7.1		9.1		12		88				<0.2		1.2	
						4.3	0.1	239	20.9		8.3		30.7		95.6		7.1		9.1		12		89				<0.2		1.3	
					Bottom	7.5	0.0	328	20.9	20.9	8.3	8.3	30.8	30.8	96.1	96.2	7.2	7.2	12.9		13		89				<0.2		1.2	
						7.5	0.0	344	20.9		8.3		30.8		96.3		7.2		12.9		14		90				<0.2		1.2	
SR1A	Fine	Calm	07:13	5.1	Surface	1.0	-	-	20.9	20.9	8.3	8.3	29.5	29.7	94.4	94.7	7.1	7.1	8.0	6.7	11	13	-	-	819983	812663	-	-	-	-
						1.0	-	-	20.9		8.3		30.0		94.9		7.1		7.2		12		-				-		-	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	-	-	20.9	20.9	8.3	8.3	30.8	30.8	96.7	96.8	7.2	7.2	5.9		14		-				-		-	
						4.1	-	-	20.9		8.3		30.8		96.9		7.2		5.7		13		-				-		-	
SR2	Fine	Calm	07:02	4.8	Surface	1.0	0.2	340	20.9	20.9	8.3	8.3	30.2	30.2	95.4	95.4	7.1	7.1	11.7	11.9	17	17	85	88	821450	814176	<0.2	<0.2	1.0	1.0
						1.0	0.2	350	20.9		8.3		30.2		95.4		7.1		11.7		16		85				<0.2		1.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.1	348	20.9	20.9	8.3	8.3	30.3	30.3	95.9	96.0	7.2	7.2	12.3		18		91				<0.2		1.0	
						3.8	0.1	320	20.9		8.3		30.3		96.0		7.2		11.9		18		91				<0.2		1.0	
SR3	Fine	Rough	08:10	8.5	Surface	1.0	0.1	167	20.9	20.9	8.2	8.2	26.8	26.8	89.4	89.4	6.8	6.9	12.7	14.2	17	15	-	-	822150	807588	-	-	-	-
						1.0	0.1	170	20.9		8.2		26.8		89.4		6.8		12.9		17		-				-		-	
					Middle	4.3	0.1	109	20.9	20.9	8.2	8.2	26.8	26.8	89.9	90.0	6.9		13.1		15		-				-		-	
						4.3	0.1	112	20.9		8.2		26.8		90.0		6.9		13.2		15		-				-		-	
					Bottom	7.5	0.2	48	20.9	20.9	8.2	8.2	27.5	27.5	91.9	92.1	7.0	7.0	16.7		14		-				-		-	
						7.5	0.2	49	20.9		8.2		27.5		92.3		7.0		16.6		14		-				-		-	
SR4A	Cloudy	Rough	07:55	8.7	Surface	1.0	0.2	74	21.0	21.0	7.9	7.9	31.6	31.6	94.7	94.7	7.0	7.1	9.7	10.3	14	12	-	-	817208	807830	-	-	-	-
						1.0	0.2	75	21.0		7.9		31.6		94.7		7.0		9.7		13		-				-		-	
					Middle	4.4	0.2	74	21.0	21.0	7.9	7.9	31.6	31.6	95.2	95.2	7.1		10.4		12		-				-		-	
						4.4	0.2	80	21.0		7.9		31.6		95.2		7.1		10.4		12		-				-		-	
					Bottom	7.7	0.2	73	21.0	21.0	7.9	7.9	31.6	31.6	95.2	95.2	7.1	7.1	10.7		12		-				-		-	
						7.7	0.2	73	21.0		7.9		31.6		95.2		7.1		10.7		11		-				-		-	
SR5A	Cloudy	Moderate	07:35	3.3	Surface	1.0	0.1	263	21.0	21.0	7.9	7.9	31.5	31.5	96.3	96.3	7.1	7.1	7.6	8.8	14	13	-	-	816572	810701	-	-	-	-
						1.0	0.1	281	21.0		7.9		31.5		96.3		7.1		7.6		13		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.3	0.1	268	21.0	21.0	7.8	7.8	31.5	31.5	97.6	97.6	7.2	7.2	9.9		13		-				-		-	
						2.3	0.1	272	21.0		7.8		31.5		97.6		7.2		9.9		13		-				-		-	
SR6A	Cloudy	Moderate	07:07	3.6	Surface	1.0	0.1	225	20.8	20.8	7.9	7.9	31.4	31.4	93.0	93.0	6.9	6.9	7.1	7.4	8	10	-	-	817943	814718	-	-	-	-
						1.0	0.1	236	20.8		7.9		31.4		93.0		6.9		7.1		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.6	0.0	243	20.8	20.8	7.8	7.8	31.5	31.5	93.1	93.1	6.9	6.9	7.7		11		-				-		-	
						2.6	0.0	264	20.8		7.8		31.5		93.1		6.9		7.7		11		-				-		-	
SR7	Fine	Calm	06:18	16.0	Surface	1.0	0.1	175	20.8	20.8	8.2	8.2	30.6	30.6	94.8	94.8	7.1	7.1	5.8	6.7	8	9	-	-	823631	823753	-	-	-	-
						1.0	0.1	188	20.8		8.2		30.6		94.8		7.1		5.7		7		-				-		-	
					Middle	8.0	0.1	131	20.7	20.7	8.1	8.1	30.7	30.7	94.4	94.4	7.1		6.1		9		-				-		-	
						8.0	0.1	137	20.7		8.1		30.7		94.4		7.1		6.1		8		-				-		-	
					Bottom	15.0	0.1	200	20.5	20.5	8.1	8.1	31.5	31.5	91.8	91.8	6.9	6.9	8.3		9		-				-		-	
						15.0	0.1	204	20.5		8.1		31.5		91.8		6.9		8.1		10		-				-		-	
SR8	Fine	Calm	07:24	5.1	Surface	1.0	-	-	20.9	21.0	8.3	8.3	28.5	28.5	91.5	91.6	6.9	6.9	12.1	13.4	19	19	-	-	820375	811599	-	-	-	-
						1.0	-	-	21.0		8.3		28.6		91.6		6.9		12.2		20		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	-	-	21.3	21.3	8.4	8.4	29.7	29.6	94.3	94.6	7.0	7.1	14.5		19		-				-		-	
						4.1	-	-	21.2		8.4		29.6		94.9		7.1		14.9		19		-				-		-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 12 March 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Rough	14:29	8.6	Surface	1.0	0.6	235	20.7	20.7	8.3	8.3	32.7	32.7	107.7	107.7	8.0	8.0	4.0	5.5	8	9	85	87	815608	804227	<0.2	<0.2	0.8	0.8
						1.0	0.6	236	20.7		8.3		32.7		107.7		8.0		4.0		8		85				<0.2		0.7	
					Middle	4.3	0.5	220	20.4	20.4	8.3	8.3	33.3	33.3	106.5	106.5	7.9		4.8		8		88				<0.2		0.7	
						4.3	0.5	233	20.4		8.3		33.3		106.4		7.9		4.8		9		88				<0.2		0.7	
					Bottom	7.6	0.4	215	19.8	19.8	8.3	8.3	33.8	33.8	100.0	100.0	7.5	7.5	7.8		9		89				<0.2		0.8	
						7.6	0.5	233	19.8		8.3		33.8		100.0		7.5		7.8		9		89				<0.2		0.8	
C2	Cloudy	Moderate	13:14	11.7	Surface	1.0	0.3	219	20.6	20.6	8.2	8.2	29.8	29.8	97.2	97.2	7.3	7.2	9.8	14.3	13	14	84	87	825658	806962	<0.2	<0.2	1.3	1.3
						1.0	0.3	226	20.6		8.2		29.8		97.2		7.3		9.9		14		85				<0.2		1.3	
					Middle	5.9	0.3	168	20.4	20.4	8.3	8.3	30.4	30.4	94.5	94.5	7.1		14.8		15		86				<0.2		1.2	
						5.9	0.3	171	20.4		8.3		30.4		94.5		7.1		14.4		14		87				<0.2		1.3	
					Bottom	10.7	0.3	125	20.3	20.3	8.3	8.3	30.7	30.7	96.7	96.7	7.3	7.3	18.6		14		90				<0.2		1.2	
						10.7	0.4	136	20.3		8.3		30.7		96.6		7.3		18.1		15		90				<0.2		1.3	
C3	Cloudy	Moderate	15:10	13.0	Surface	1.0	0.5	16	20.3	20.3	8.4	8.4	31.1	31.1	93.9	93.9	7.1	7.0	8.9	11.7	11	13	87	89	822105	817818	<0.2	<0.2	1.1	1.1
						1.0	0.5	16	20.3		8.4		31.1		93.8		7.1		9.2		11		87				<0.2		1.1	
					Middle	6.5	0.5	48	20.3	20.3	8.4	8.4	31.6	31.6	92.0	92.1	6.9		12.3		13		89				<0.2		1.1	
						6.5	0.5	50	20.3		8.4		31.6		92.1		6.9		12.3		13		89				<0.2		1.1	
					Bottom	12.0	0.5	52	20.2	20.2	8.4	8.4	31.9	31.9	92.7	92.8	7.0	7.0	13.8		15		90				<0.2		1.1	
						12.0	0.5	54	20.2		8.4		31.9		92.8		7.0		13.8		14		90				<0.2		1.1	
IM1	Cloudy	Rough	14:11	5.2	Surface	1.0	0.3	198	20.6	20.6	8.3	8.3	32.0	32.0	104.6	104.6	7.8	7.8	4.8	5.7	10	10	86	87	817948	807131	<0.2	<0.2	0.7	0.7
						1.0	0.3	217	20.6		8.3		32.0		104.5		7.8		4.7		10		85				<0.2		0.7	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.2	183	19.9	19.9	8.3	8.3	33.0	33.0	99.6	99.7	7.5	7.5	6.7		11		88				<0.2		0.7	
						4.2	0.2	197	19.9		8.3		33.0		99.7		7.5		6.7		10		88				<0.2		0.6	
IM2	Cloudy	Rough	14:02	7.1	Surface	1.0	0.4	191	20.3	20.3	8.3	8.3	32.4	32.4	102.9	102.8	7.7	7.7	5.7	6.3	12	12	85	88	818162	806148	<0.2	<0.2	0.7	0.6
						1.0	0.4	197	20.3		8.3		32.4		102.6		7.7		5.7		11		84				<0.2		0.6	
					Middle	3.6	0.3	174	20.3	20.3	8.3	8.3	32.5	32.5	102.7	102.7	7.7		6.1		12		89				<0.2		0.6	
						3.6	0.3	188	20.3		8.3		32.5		102.6		7.7		6.1		11		88				<0.2		0.7	
					Bottom	6.1	0.2	153	20.2	20.2	8.3	8.3	33.1	33.1	102.2	102.3	7.6	7.6	7.0		13		89				<0.2		0.6	
						6.1	0.2	160	20.2		8.3		33.1		102.3		7.6		7.0		12		90				<0.2		0.6	
IM3	Cloudy	Rough	13:55	7.4	Surface	1.0	0.1	149	20.6	20.6	8.3	8.3	32.4	32.4	107.9	107.9	8.0	8.0	3.9	3.9	11	10	85	87	818794	805611	<0.2	<0.2	0.8	0.7
						1.0	0.1	160	20.6		8.3		32.4		107.9		8.0		3.9		10		84				<0.2		0.7	
					Middle	3.7	0.2	126	20.6	20.6	8.3	8.3	32.4	32.4	107.0	107.1	8.0		3.9		10		88				<0.2		0.6	
						3.7	0.2	130	20.6		8.3		32.4		107.2		8.0		3.9		10		88				<0.2		0.8	
					Bottom	6.4	0.2	117	20.2	20.2	8.3	8.3	32.7	32.7	103.1	103.1	7.7	7.7	3.9		9		90				<0.2		0.6	
						6.4	0.2	125	20.2		8.3		32.7		103.1		7.7		3.8		10		89				<0.2		0.6	
IM4	Cloudy	Rough	13:44	8.3	Surface	1.0	0.4	183	20.3	20.3	8.3	8.3	31.7	31.7	103.8	103.7	7.8	7.7	5.1	7.2	9	10	85	88	819725	804599	<0.2	<0.2	0.8	0.8
						1.0	0.5	192	20.3		8.3		31.7		103.5		7.8		5.1		9		85				<0.2		0.8	
					Middle	4.2	0.3	172	19.9	19.9	8.3	8.3	32.5	32.5	101.2	101.2	7.6		6.0		10		89				<0.2		0.9	
						4.2	0.3	187	19.9		8.3		32.5		101.1		7.6		6.1		11		88				<0.2		0.9	
					Bottom	7.3	0.3	184	20.0	20.0	8.3	8.3	33.2	33.2	100.7	100.7	7.5	7.5	10.4		11		89				<0.2		0.8	
						7.3	0.3	202	20.0		8.3		33.2		100.7		7.5		10.4		12		90				<0.2		0.8	
IM5	Cloudy	Rough	13:35	7.7	Surface	1.0	0.2	243	20.5	20.5	8.2	8.2	30.7	30.7	101.3	101.4	7.6	7.7	5.0	5.9	10	12	85	88	820748	804851	<0.2	<0.2	1.0	1.0
						1.0	0.2	259	20.5		8.2		30.7		101.4		7.6		5.0		11		85				<0.2		1.0	
					Middle	3.9	0.1	168	20.3	20.3	8.3	8.3	32.0	32.0	102.9	103.0	7.7		6.0		12		89				<0.2		1.0	
						3.9	0.1	182	20.3		8.3		32.0		103.0		7.7		6.0		12		88				<0.2		0.9	
					Bottom	6.7	0.1	121	20.1	20.1	8.3	8.3	32.6	32.6	101.6	101.6	7.6	7.6	6.7		13		90				<0.2		0.9	
						6.7	0.1	125	20.1		8.3		32.6		101.6		7.6		6.6		13		90				<0.2		0.9	
IM6	Cloudy	Rough	13:26	7.5	Surface	1.0	0.2	241	20.4	20.4	8.2	8.2	30.4	30.4	98.0	98.0	7.4	7.4	5.9	8.2	11	12	85	88	821068	805805	<0.2	<0.2	1.0	1.0
						1.0	0.2	261	20.4		8.2		30.4		98.0		7.4		6.0		12		85				<0.2		1.0	
					Middle	3.8	0.1	244	20.3	20.3	8.2	8.2	31.1	31.1	98.5	98.5	7.4		8.6		11		89				<0.2		1.0	
						3.8	0.1	266	20.3		8.2		31.1		98.4		7.4		8.6		12		88				<0.2		1.0	
					Bottom	6.5	0.1	103	20.1	20.1	8.3	8.3	32.5	32.5	98.9	98.9	7.4	7.4	10.1		11		90				<0.2		1.0	
						6.5	0.1	107	20.1		8.3		32.5		98.8		7.4		9.9		12		90				<0.2		1.1	
IM7	Cloudy	Rough	13:14	8.8	Surface	1.0	0.3	264	20.4	20.4	8.1	8.1	30.4	30.4	97.9	97.9	7.4	7.4	6.3	8.0	12	13	86	88	821342	806831	<0.2	<0.2	1.1	1.0
						1.0	0.3	281	20.4		8.1		30.4		97.9		7.4		6.3		12		85				<0.2		1.0	
					Middle	4.4	0.1	174	20.2	20.2	8.1	8.1	31.4	31.4	96.8	96.9	7.3		8.8		13		89				<0.2		1.0	
						4.4	0.1	189	20.2		8.1		31.4		96.9		7.3		8.9		12		90				<0.2		1.0	
					Bottom	7.8	0.1	164	20.0	20.0	8.1	8.1	31.9	31.9	96.8	96.9	7.3	7.3	8.7		14		90				<0.2		1.0	
						7.8	0.1	176	20.0		8.1		31.9		96.9		7.3		8.7		13		90				<0.2		1.1	
IM8	Cloudy	Moderate	13:47	8.3	Surface	1.0	0.5	23	20.6	20.6	8.3	8.3	29.5	29.5	97.7	97.7	7.4	7.4	6.5	11.4	11	10	85	88	821845	808146	<0.2	<0.2	1.2	1.2
						1.0	0.5	25	20.6		8.3		29.5		97.7		7.4		6.8		10		85				<0.2		1.2	
					Middle	4.2	0.4	15	20.3	20.3	8.3	8.3	30.5	30.5	96.0	96.0	7.3		13.2		9		88				<0.2		1.2	
						4.2	0.4	15	20.3		8.3		30.5		96.0		7.3		13.5		10		88				<0.2		1.2	
					Bottom	7.3	0.3	49	20.2	20.2	8.2	8.2	31.3	31.2	97.7	97.8	7.4	7.4	14.2		9		89				<0.2		1.2	
						7.3	0.3	50	20.2		8.2		31.2		97.8		7.4		14.0		10		90				<0.2		1.2	

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Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
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Water Quality Monitoring
Water Quality Monitoring Results on 12 March 20 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	13:56	7.8	Surface	1.0	0.4	60	20.4	20.4	8.4	8.4	30.1	30.1	96.1	96.1	7.3	7.2	6.8	10.7	8	10	86	88	822104	808789	<0.2	<0.2	1.3	1.2
						1.0	0.5	60	20.4		8.4		30.1		96.1		7.3		6.9		8		86				<0.2		1.2	
					Middle	3.9	0.4	51	20.3	20.3	8.4	8.4	30.5	30.5	94.4	94.4	7.1		11.2		11		89				<0.2		1.2	
						3.9	0.5	51	20.3		8.4		30.5		94.3		7.1		11.6		11		89				<0.2		1.2	
					Bottom	6.8	0.4	17	20.2	20.2	8.3	8.3	31.1	31.1	97.7	97.7	7.4	7.4	13.6		11		90				<0.2		1.2	
						6.8	0.4	18	20.2		8.3		31.1		97.7		7.4		13.8		11		90				<0.2		1.2	
IM10	Cloudy	Moderate	14:04	7.5	Surface	1.0	0.7	153	20.5	20.5	8.4	8.4	29.7	29.7	97.0	97.0	7.3	7.3	6.6	11.2	11	9	87	89	822366	809788	<0.2	<0.2	1.2	1.2
						1.0	0.7	155	20.6		8.4		29.7		96.9		7.3		7.0		11		87				<0.2		1.2	
					Middle	3.8	0.7	146	20.3	20.3	8.4	8.4	30.6	30.6	95.1	95.1	7.2		12.5		9		89				<0.2		1.2	
						3.8	0.7	147	20.3		8.4		30.6		95.1		7.2		12.3		8		89				<0.2		1.2	
					Bottom	6.5	0.6	143	20.3	20.3	8.4	8.4	30.8	30.8	95.4	95.4	7.2	7.2	14.6		8		90				<0.2		1.2	
						6.5	0.6	151	20.3		8.4		30.8		95.4		7.2		14.4		8		90				<0.2		1.3	
IM11	Cloudy	Moderate	14:15	8.6	Surface	1.0	0.7	154	20.4	20.4	8.4	8.4	30.1	30.1	97.1	97.0	7.3	7.3	11.7	14.0	15	14	87	89	822073	811438	<0.2	<0.2	1.3	1.4
						1.0	0.7	155	20.4		8.4		30.1		96.9		7.3		11.8		14		87				<0.2		1.3	
					Middle	4.3	0.6	145	20.3	20.3	8.4	8.4	30.4	30.4	96.3	96.4	7.3		14.5		12		88				<0.2		1.5	
						4.3	0.7	151	20.3		8.4		30.4		96.4		7.3		14.4		14		89				<0.2		1.4	
					Bottom	7.6	0.5	160	20.3	20.3	8.4	8.4	30.6	30.6	96.8	96.9	7.3	7.3	15.9		12		90				<0.2		1.3	
						7.6	0.5	166	20.3		8.4		30.6		96.9		7.3		15.8		14		90				<0.2		1.3	
IM12	Cloudy	Moderate	14:21	9.9	Surface	1.0	0.7	148	20.4	20.4	8.4	8.4	30.1	30.1	96.2	96.2	7.3	7.2	8.4	11.1	13	14	87	89	821466	812047	<0.2	<0.2	1.3	1.3
						1.0	0.7	148	20.4		8.4		30.1		96.1		7.3		8.6		13		88				<0.2		1.3	
					Middle	5.0	0.6	143	20.3	20.3	8.4	8.4	30.5	30.5	94.4	94.7	7.1		11.4		14		89				<0.2		1.3	
						5.0	0.6	143	20.3		8.4		30.5		94.9		7.2		12.0		14		89				<0.2		1.3	
					Bottom	8.9	0.3	137	20.3	20.3	8.4	8.4	30.6	30.6	96.5	96.5	7.3	7.3	13.2		14		90				<0.2		1.3	
						8.9	0.3	149	20.3		8.4		30.6		96.5		7.3		13.1		14		90				<0.2		1.3	
SR1A	Cloudy	Calm	14:36	4.9	Surface	1.0	-	-	20.5	20.5	8.4	8.4	30.7	30.7	95.9	95.8	7.2	7.2	5.8	6.1	10	9	-	-	819974	812666	-	-	-	-
						1.0	-	-	20.5		8.4		30.7		95.7		7.2		5.8		9		-				-		-	
					Middle	2.5	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.5	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	-	-	20.4	20.4	8.4	8.4	30.7	30.7	95.4	95.5	7.2	7.2	6.3		9		-				-		-	
						3.9	-	-	20.4		8.4		30.7		95.5		7.2		6.3		9		-				-		-	
SR2	Cloudy	Moderate	14:49	5.1	Surface	1.0	0.5	33	20.5	20.5	8.4	8.4	30.5	30.4	95.2	95.2	7.2	7.2	7.3	8.4	12	10	86	88	821443	814145	<0.2	<0.2	1.3	1.3
						1.0	0.5	34	20.5		8.4		30.4		95.2		7.2		7.4		11		86				<0.2		1.3	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	0.4	29	20.4	20.4	8.3	8.3	30.8	30.8	97.3	97.7	7.3	7.4	9.4		8		89				<0.2		1.2	
						4.1	0.4	31	20.4		8.3		30.8		98.0		7.4		9.5		10		89				<0.2		1.3	
SR3	Cloudy	Moderate	13:36	9.8	Surface	1.0	0.2	131	20.7	20.6	8.3	8.3	29.4	29.4	96.4	96.4	7.3	7.2	6.2	9.4	10	11	-	-	822158	807572	-	-	-	-
						1.0	0.2	140	20.6		8.3		29.4		96.3		7.3		6.5		9		-				-		-	
					Middle	4.9	0.1	102	20.3	20.3	8.3	8.3	30.3	30.3	94.0	94.0	7.1		10.4		11		-				-		-	
						4.9	0.1	103	20.3		8.3		30.3		94.0		7.1		10.5		12		-				-		-	
					Bottom	8.8	0.2	36	20.2	20.2	8.3	8.3	31.2	31.2	96.2	96.2	7.2	7.3	11.1		13		-				-		-	
						8.8	0.2	37	20.2		8.3		31.2		96.2		7.3		11.5		12		-				-		-	
SR4A	Cloudy	Calm	14:54	9.0	Surface	1.0	0.1	101	20.5	20.5	8.3	8.3	32.3	32.3	103.4	103.3	7.7	7.6	5.5	8.0	9	10	-	-	817169	807791	-	-	-	-
						1.0	0.1	109	20.5		8.3		32.3		103.2		7.7		5.5		9		-				-		-	
					Middle	4.5	0.1	72	20.1	20.0	8.3	8.3	33.1	33.1	100.3	100.4	7.5		8.8		10		-				-		-	
						4.5	0.1	72	20.0		8.3		33.1		100.5		7.5		8.8		10		-				-		-	
					Bottom	8.0	0.2	74	19.9	19.9	8.3	8.3	33.4	33.4	99.5	99.6	7.4	7.4	9.5		12		-				-		-	
						8.0	0.2	77	19.9		8.3		33.4		99.6		7.4		9.7		11		-				-		-	
SR5A	Rainy	Calm	15:12	3.5	Surface	1.0	0.1	334	20.9	20.9	8.3	8.3	31.5	31.5	103.0	103.2	7.7	7.7	5.9	6.6	9	11	-	-	816602	810684	-	-	-	-
						1.0	0.1	359	20.9		8.3		31.5		103.3		7.7		5.8		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.5	0.1	317	20.8	20.8	8.3	8.3	31.5	31.5	100.6	100.6	7.5	7.5	7.4		11		-				-		-	
						2.5	0.1	336	20.8		8.3		31.5		100.6		7.5		7.4		12		-				-		-	
SR6A	Rainy	Calm	15:51	3.8	Surface	1.0	0.0	65	20.8	20.8	8.2	8.2	31.1	31.1	100.9	100.9	7.5	7.5	3.0	2.7	9	10	-	-	817983	814729	-	-	-	-
						1.0	0.0	67	20.8		8.2		31.1		100.9		7.5		2.9		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	0.0	330	20.8	20.8	8.2	8.2	31.2	31.2	100.1	100.1	7.5	7.5	2.5		9		-				-		-	
						2.8	0.0	339	20.8		8.2		31.2		100.1		7.5		2.5		10		-				-		-	
SR7	Cloudy	Moderate	15:37	15.9	Surface	1.0	0.8	47	20.5	20.5	8.4	8.4	31.3	31.3	95.7	95.6	7.2	7.1	3.1	3.8	6	7	-	-	823653	823725	-	-	-	-
						1.0	0.8	51	20.5		8.4		31.3		95.5		7.2		3.2		5		-				-		-	
					Middle	8.0	0.5	20	20.3	20.3	8.4	8.4	31.8	31.8	93.7	93.7	7.0		4.2		7		-				-		-	
						8.0	0.5	20	20.3		8.4		31.8		93.6		7.0		4.2		7		-				-		-	
					Bottom	14.9	0.4	0	20.3	20.3	8.4	8.4	31.9	31.9	92.8	92.9	7.0	7.0	4.1		8		-				-		-	
						14.9	0.4	0	20.3		8.4		31.9		93.0		7.0		4.1		8		-				-		-	
SR8	Cloudy	Moderate	14:26	4.6	Surface	1.0	-	-	20.4	20.4	8.4	8.4	30.7	30.7	96.7	96.7	7.3	7.3	7.8	8.3	10	10	-	-	820383	811642	-	-	-	-
						1.0	-	-	20.4		8.4		30.7		96.7		7.3		7.9		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	-	-	20.4	20.4	8.4	8.4	30.8	30.8	98.3	98.4	7.4	7.4	8.9		10		-				-		-	
						3.6	-	-	20.4		8.4		30.8		98.4		7.4		8.7		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 12 March 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Rough	09:26	7.7	Surface	1.0	0.7	21	19.9	19.9	8.1	8.1	33.1	33.1	100.2	100.2	7.5	7.5	9.6	11.4	16	17	85	87	815643	804241	<0.2	<0.2	0.9	0.8
						1.0	0.8	22	19.9		8.1		33.1		100.2		7.5		9.8		17		84				<0.2		0.8	
					Middle	3.9	0.8	30	19.8	19.8	8.1	8.1	33.2	33.2	100.5	100.5	7.5		11.2		17		87				<0.2		0.7	
						3.9	0.8	30	19.8		8.1		33.2		100.4		7.5		11.0		18		86				<0.2		0.8	
					Bottom	6.7	0.6	36	19.8	19.8	8.1	8.1	33.2	33.2	99.8	99.8	7.5	7.5	13.6		17		89				<0.2		0.8	
						6.7	0.7	38	19.8		8.1		33.2		99.8		7.5		13.4		18		90				<0.2		1.0	
C2	Cloudy	Moderate	09:47	12.3	Surface	1.0	0.7	0	20.7	20.7	8.4	8.4	28.4	28.4	92.1	92.1	7.0	7.0	9.8	13.3	17	16	86	88	825670	806948	<0.2	<0.2	1.1	1.2
						1.0	0.7	0	20.7		8.4		28.4		92.0		7.0		9.8		16		86				<0.2		1.1	
					Middle	6.2	0.5	13	20.7	20.7	8.4	8.4	28.5	28.5	91.6	91.7	7.0		10.8		16		89				<0.2		1.2	
						6.2	0.5	13	20.7		8.4		28.5		91.7		7.0		10.6		16		89				<0.2		1.3	
					Bottom	11.3	0.4	11	20.7	20.7	8.3	8.3	28.6	28.6	92.2	92.2	7.0	7.0	19.7		15		90				<0.2		1.3	
						11.3	0.5	11	20.7		8.3		28.6		92.2		7.0		19.3		16		90				<0.2		1.3	
C3	Cloudy	Moderate	07:57	11.3	Surface	1.0	0.8	280	20.4	20.4	8.2	8.2	30.6	30.6	94.5	94.5	7.1	7.0	6.9	9.0	10	11	84	86	822132	817816	<0.2	<0.2	1.0	1.0
						1.0	0.8	295	20.4		8.2		30.6		94.4		7.1		6.7		9		84				<0.2		0.9	
					Middle	5.7	0.6	294	20.4	20.4	8.2	8.2	30.9	30.9	91.7	91.7	6.9		8.5		10		85				<0.2		1.0	
						5.7	0.6	306	20.4		8.2		30.9		91.7		6.9		8.7		11		85				<0.2		1.0	
					Bottom	10.3	0.5	296	20.3	20.3	8.1	8.1	31.0	31.0	94.3	94.3	7.1	7.1	11.5		11		90				<0.2		0.9	
						10.3	0.5	310	20.3		8.1		31.0		94.3		7.1		11.4		12		90				<0.2		0.9	
IM1	Cloudy	Moderate	09:45	5.1	Surface	1.0	0.2	20	20.2	20.2	8.1	8.1	31.9	31.9	98.9	98.9	7.4	7.4	10.9	11.5	16	18	86	87	817972	807121	<0.2	<0.2	1.1	1.0
						1.0	0.2	20	20.2		8.1		31.9		98.9		7.4		11.0		17		87				<0.2		1.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	0.1	323	20.0	20.0	8.1	8.1	32.5	32.5	98.1	98.1	7.4	7.4	12.1		20		88				<0.2		0.9	
						4.1	0.1	337	20.0		8.1		32.5		98.1		7.4		12.1		19		88				<0.2		0.9	
IM2	Cloudy	Rough	09:56	7.4	Surface	1.0	0.3	8	20.1	20.1	8.2	8.2	31.5	31.5	97.3	97.4	7.3	7.3	11.8	14.6	17	16	86	88	818170	806171	<0.2	<0.2	1.2	1.2
						1.0	0.3	8	20.1		8.2		31.5		97.5		7.4		11.8		16		86				<0.2		1.1	
					Middle	3.7	0.3	11	20.1	20.1	8.2	8.2	31.5	31.5	97.4	97.3	7.3		14.6		17		89				<0.2		1.3	
						3.7	0.3	11	20.1		8.2		31.5		97.2		7.3		14.8		17		89				<0.2		1.2	
					Bottom	6.4	0.3	8	20.1	20.1	8.2	8.2	31.5	31.5	97.4	97.4	7.3	7.3	17.4		15		90				<0.2		1.2	
						6.4	0.3	8	20.1		8.2		31.5		97.4		7.3		16.9		16		90				<0.2		1.3	
IM3	Cloudy	Rough	10:04	7.3	Surface	1.0	0.4	340	20.1	20.1	8.2	8.2	31.6	31.6	98.7	98.8	7.4	7.4	11.4	13.6	16	16	86	88	818787	805602	<0.2	<0.2	1.4	1.5
						1.0	0.4	313	20.1		8.2		31.6		98.8		7.4		11.6		16		85				<0.2		1.4	
					Middle	3.7	0.4	346	20.0	20.0	8.2	8.2	31.7	31.7	98.6	98.6	7.4		13.4		16		89				<0.2		1.3	
						3.7	0.5	318	20.0		8.2		31.7		98.6		7.4		13.8		15		89				<0.2		1.3	
					Bottom	6.3	0.3	351	20.0	20.0	8.2	8.2	31.7	31.7	97.9	97.8	7.4	7.4	15.5		15		90				<0.2		1.8	
						6.3	0.3	356	20.0		8.2		31.7		97.7		7.4		15.8		15		90				<0.2		1.9	
IM4	Cloudy	Rough	10:13	8.2	Surface	1.0	0.8	351	20.0	20.0	8.2	8.2	32.2	32.2	99.3	99.4	7.5	7.5	10.2	13.3	16	16	86	88	819704	804604	<0.2	<0.2	1.3	1.3
						1.0	0.8	323	20.0		8.2		32.2		99.5		7.5		10.2		16		85				<0.2		1.4	
					Middle	4.1	0.7	355	20.0	20.0	8.2	8.2	32.2	32.2	99.5	99.5	7.5		13.3		17		89				<0.2		1.3	
						4.1	0.7	327	20.0		8.2		32.2		99.5		7.5		13.1		16		89				<0.2		1.2	
					Bottom	7.2	0.7	356	20.0	20.0	8.2	8.2	32.2	32.2	98.6	98.6	7.4	7.4	16.6		17		90				<0.2		1.4	
						7.2	0.7	328	20.0		8.2		32.2		98.5		7.4		16.6		16		90				<0.2		1.2	
IM5	Cloudy	Rough	10:20	7.6	Surface	1.0	0.9	11	20.0	20.0	8.2	8.2	31.6	31.6	98.0	98.0	7.4	7.4	9.7	12.7	14	14	86	89	820723	804884	<0.2	<0.2	1.3	1.4
						1.0	0.9	11	20.0		8.2		31.6		97.9		7.4		9.8		13		86				<0.2		1.5	
					Middle	3.8	0.8	13	20.0	20.0	8.2	8.2	31.6	31.6	97.7	97.7	7.4		12.8		15		89				<0.2		1.5	
						3.8	0.9	13	20.0		8.2		31.6		97.7		7.4		12.8		14		89				<0.2		1.4	
					Bottom	6.6	0.8	15	20.0	20.0	8.2	8.2	31.6	31.6	97.0	97.0	7.3	7.3	15.7		14		91				<0.2		1.4	
						6.6	0.8	15	20.0		8.2		31.6		97.0		7.3		15.4		15		90				<0.2		1.4	
IM6	Cloudy	Rough	10:30	7.4	Surface	1.0	0.0	305	20.4	20.4	8.2	8.2	30.3	30.3	96.0	96.0	7.3	7.3	6.5	10.0	10	12	86	89	821052	805822	<0.2	<0.2	1.8	1.5
						1.0	0.0	327	20.4		8.2		30.3		95.9		7.2		6.6		10		87				<0.2		2.0	
					Middle	3.7	0.0	82	20.3	20.3	8.2	8.2	30.6	30.6	96.7	96.7	7.3		10.8		10		89				<0.2		1.4	
						3.7	0.0	85	20.3		8.2		30.6		96.6		7.3		10.9		11		90				<0.2		1.4	
					Bottom	6.4	0.3	58	20.2	20.2	8.2	8.2	31.4	31.4	96.6	96.6	7.3	7.3	12.7		14		90				<0.2		1.3	
						6.4	0.3	60	20.2		8.2		31.4		96.6		7.3		12.6		14		91				<0.2		1.3	
IM7	Cloudy	Rough	10:41	8.5	Surface	1.0	0.2	242	20.6	20.6	8.1	8.1	29.2	29.2	94.6	94.7	7.2	7.2	5.9	9.9	12	12	86	89	821349	806830	<0.2	<0.2	1.3	1.3
						1.0	0.2	246	20.6		8.1		29.2		94.7		7.2		6.0		11		86				<0.2		1.3	
					Middle	4.3	0.2	123	20.4	20.4	8.2	8.2	30.2	30.2	95.1	95.1	7.2		9.2		11		89				<0.2		1.3	
						4.3	0.2	134	20.4		8.2		30.2		95.1		7.2		9.1		12		90				<0.2		1.3	
					Bottom	7.5	0.1	78	19.9	19.9	8.3	8.3	32.5	32.4	96.1	96.1	7.2	7.2	14.5		14		91				<0.2		1.4	
						7.5	0.1	85	19.9		8.3		32.4		96.0		7.2		14.6		14		91				<0.2		1.4	
IM8	Cloudy	Moderate	09:20	7.9	Surface	1.0	0.2	96	20.6	20.6	8.4	8.4	28.8	28.8	93.6	93.6	7.1	7.2	9.0	13.3	15	16	87	89	821825	808121	<0.2	<0.2	1.2	1.1
						1.0	0.2	98	20.6		8.4		28.8		93.6		7.1		9.0		16		86				<0.2		1.1	
					Middle	4.0	0.2	84	20.4	20.4	8.4	8.4	29.3	29.3	94.7	94.9	7.2		15.2		16		89				<0.2		1.2	
						4.0	0.2	86	20.4		8.4		29.4		95.1		7.2		15.5		15		89				<0.2		1.1	
					Bottom	6.9	0.1	296	20.3	20.3	8.3	8.3	30.1	30.1	95.6	95.6	7.2	7.2	15.6		17		90				<0.2		1.1	
						6.9	0.1	319	20.3		8.3		30.1		95.5		7.2		15.7		16		90				<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 12 March 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	09:14	7.4	Surface	1.0	0.2	273	20.3	20.3	8.4	8.4	30.0	30.0	95.9	96.0	7.3	7.2	15.0	15.7	34	31	87	89	822092	808790	<0.2	<0.2	1.2	1.2
						1.0	0.2	287	20.3		8.4		30.0		96.1		7.3		15.3		34		87				<0.2		1.1	
					Middle	3.7	0.2	289	20.2	20.2	8.4	8.4	30.2	30.2	93.6	93.7	7.1		15.2		30		89				<0.2		1.1	
						3.7	0.2	303	20.2		8.4		30.2		93.8		7.1		15.4		30		89				<0.2		1.2	
					Bottom	6.4	0.2	271	20.2	20.2	8.4	8.4	30.3	30.3	96.2	96.3	7.3	7.3	16.8		29		90				<0.2		1.3	
						6.4	0.2	286	20.2		8.4		30.3		96.4		7.3		16.5		29		90				<0.2		1.1	
IM10	Cloudy	Rough	09:06	7.9	Surface	1.0	0.6	337	20.3	20.3	8.4	8.4	30.3	30.3	95.8	95.8	7.3	7.2	16.7	18.8	23	22	85	88	822397	809774	<0.2	<0.2	1.1	1.1
						1.0	0.7	351	20.3		8.4		30.3		95.8		7.3		16.7		24		85				<0.2		1.1	
					Middle	4.0	0.6	340	20.3	20.3	8.4	8.4	30.3	30.3	93.7	93.7	7.1		19.0		21		89				<0.2		1.1	
						4.0	0.7	313	20.3		8.4		30.3		93.7		7.1		19.2		22		89				<0.2		1.1	
					Bottom	6.9	0.5	344	20.3	20.3	8.4	8.4	30.3	30.3	96.2	96.3	7.3	7.3	20.6		22		90				<0.2		1.1	
						6.9	0.6	316	20.3		8.4		30.3		96.3		7.3		20.6		21		90				<0.2		1.2	
IM11	Cloudy	Rough	08:56	7.5	Surface	1.0	0.7	317	20.2	20.2	8.4	8.4	30.6	30.6	96.1	96.1	7.3	7.3	15.3	16.9	25	24	85	88	822066	811478	<0.2	<0.2	1.0	1.1
						1.0	0.7	335	20.2		8.4		30.6		96.1		7.3		15.4		26		86				<0.2		1.1	
					Middle	3.8	0.5	327	20.2	20.2	8.4	8.4	30.6	30.6	95.2	95.5	7.2		16.8		24		89				<0.2		1.1	
						3.8	0.6	337	20.2		8.4		30.6		95.7		7.2		16.6		24		89				<0.2		1.0	
					Bottom	6.5	0.6	327	20.2	20.2	8.4	8.4	30.6	30.6	98.0	98.1	7.4	7.4	18.4		24		90				<0.2		1.0	
						6.5	0.6	347	20.2		8.4		30.6		98.1		7.4		18.6		23		90				<0.2		1.2	
IM12	Cloudy	Rough	08:49	9.3	Surface	1.0	0.7	315	20.3	20.3	8.3	8.3	30.8	30.8	95.5	95.5	7.2	7.2	17.1	18.0	24	25	85	88	821446	812028	<0.2	<0.2	1.1	1.1
						1.0	0.7	326	20.3		8.3		30.8		95.5		7.2		17.0		24		86				<0.2		1.1	
					Middle	4.7	0.7	312	20.3	20.3	8.3	8.3	30.7	30.7	95.3	95.3	7.2		17.3		24		89				<0.2		1.1	
						4.7	0.8	333	20.3		8.3		30.7		95.2		7.2		17.6		26		90				<0.2		1.1	
					Bottom	8.3	0.6	309	20.3	20.3	8.3	8.3	30.7	30.7	95.5	95.5	7.2	7.2	19.5		27		90				<0.2		1.0	
						8.3	0.7	339	20.3		8.3		30.7		95.5		7.2		19.4		27		90				<0.2		1.0	
SR1A	Cloudy	Calm	08:28	4.9	Surface	1.0	-	-	20.3	20.3	8.3	8.3	30.5	30.5	94.1	94.2	7.1	7.1	5.9	6.2	9	10	-	-	819978	812662	-	-	-	-
						1.0	-	-	20.3		8.3		30.5		94.2		7.1		6.1		10		-				-		-	
					Middle	2.5	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.5	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	-	-	20.3	20.3	8.2	8.2	30.5	30.5	95.9	96.2	7.2	7.3	6.5		10		-				-		-	
						3.9	-	-	20.3		8.2		30.5		96.5		7.3		6.4		9		-				-		-	
SR2	Cloudy	Moderate	08:17	4.4	Surface	1.0	0.2	193	20.3	20.3	8.2	8.2	30.7	30.7	96.3	96.5	7.3	7.3	20.6	20.3	21	23	88	89	821458	814180	<0.2	<0.2	1.0	1.0
						1.0	0.2	201	20.3		8.2		30.7		96.6		7.3		20.2		22		88				<0.2		1.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.2	166	20.3	20.3	8.2	8.2	30.8	30.8	98.5	98.7	7.4	7.5	20.1		24		89				<0.2		0.9	
						3.4	0.2	179	20.3		8.2		30.8		98.9		7.5		20.1		24		89				<0.2		0.9	
SR3	Cloudy	Moderate	09:27	9.3	Surface	1.0	0.1	232	20.6	20.6	8.4	8.4	28.8	28.8	93.4	93.5	7.1	7.1	9.3	9.4	13	13	-	-	822128	807559	-	-	-	-
						1.0	0.1	232	20.6		8.4		28.8		93.5		7.1		9.4		13		-				-		-	
					Middle	4.7	0.1	77	20.6	20.6	8.4	8.4	28.8	28.8	93.2	93.3	7.1		9.6		12		-				-		-	
						4.7	0.1	81	20.6		8.4		28.8		93.3		7.1		9.7		14		-				-		-	
					Bottom	8.3	0.1	73	20.6	20.6	8.4	8.4	28.8	28.8	95.8	95.9	7.3	7.3	9.2		14		-				-		-	
						8.3	0.1	74	20.6		8.4		28.8		95.9		7.3		9.2		14		-				-		-	
SR4A	Cloudy	Calm	09:01	9.0	Surface	1.0	0.3	85	20.2	20.2	8.0	8.0	31.4	31.4	96.9	96.9	7.3	7.3	8.8	11.9	12	13	-	-	817206	807796	-	-	-	-
						1.0	0.3	91	20.2		8.0		31.4		96.9		7.3		8.9		13		-				-		-	
					Middle	4.5	0.3	82	20.1	20.1	8.0	8.0	31.8	31.8	97.5	97.5	7.3		11.9		13		-				-		-	
						4.5	0.3	83	20.1		8.0		31.8		97.4		7.3		11.9		14		-				-		-	
					Bottom	8.0	0.3	80	20.1	20.1	8.0	8.0	31.9	31.9	97.1	97.1	7.3	7.3	14.9		13		-				-		-	
						8.0	0.3	84	20.1		8.0		31.9		97.1		7.3		14.9		14		-				-		-	
SR5A	Cloudy	Calm	08:42	3.6	Surface	1.0	0.1	285	20.2	20.2	8.0	8.0	31.2	31.2	95.4	95.4	7.2	7.2	10.4	11.8	8	10	-	-	816604	810710	-	-	-	-
						1.0	0.1	293	20.2		8.0		31.2		95.3		7.2		10.3		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.6	0.1	285	20.2	20.2	7.9	7.9	31.2	31.2	95.4	95.4	7.2	7.2	13.2		12		-				-		-	
						2.6	0.1	290	20.2		7.9		31.2		95.3		7.2		13.2		12		-				-		-	
SR6A	Cloudy	Calm	08:04	3.9	Surface	1.0	0.1	208	20.3	20.3	7.9	7.9	30.9	30.9	93.9	93.9	7.1	7.1	3.8	4.0	7	8	-	-	817973	814747	-	-	-	-
						1.0	0.1	217	20.3		7.9		30.9		93.9		7.1		3.8		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.9	0.1	203	20.3	20.3	7.8	7.8	30.9	30.9	93.2	93.3	7.0	7.0	4.1		8		-				-		-	
						2.9	0.1	221	20.3		7.8		30.9		93.3		7.0		4.1		8		-				-		-	
SR7	Rainy	Moderate	07:29	15.4	Surface	1.0	0.3	69	20.3	20.3	8.2	8.2	31.2	31.2	92.8	92.8	7.0	7.0	5.1	6.0	5	6	-	-	823647	823721	-	-	-	-
						1.0	0.3	69	20.3		8.2		31.2		92.8		7.0		4.9		6		-				-		-	
					Middle	7.7	0.3	123	20.3	20.3	8.1	8.1	31.4	31.4	91.2	91.3	6.9		5.8		6		-				-		-	
						7.7	0.3	124	20.3		8.1		31.4		91.4		6.9		5.9		7		-				-		-	
					Bottom	14.4	0.3	115	20.3	20.3	8.1	8.1	31.5	31.5	92.4	92.5	6.9	7.0	7.3		7		-				-		-	
						14.4	0.3	120	20.3		8.1		31.5		92.5		7.0		7.1		6		-				-		-	
SR8	Cloudy	Calm	08:39	5.1	Surface	1.0	-	-	20.3	20.3	8.3	8.3	30.4	30.4	95.2	95.3	7.2	7.2	10.1	12.3	10	9	-	-	820370	811615	-	-	-	-
						1.0	-	-	20.3		8.3		30.4		95.3		7.2		10.5		11		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	-	-	20.3	20.3	8.3	8.3	30.4	30.4	95.9	96.0	7.3	7.3	14.1		8		-				-		-	
						4.1	-	-	20.3		8.3		30.4		96.0		7.3		14.3		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 14 March 20 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	Rough	15:53	8.5	Surface	1.0	0.3	252	21.2	21.2	8.2	8.2	31.3	31.3	117.6	117.3	8.7	8.4	3.0	3.6	5	5	83	87	815617	804250	<0.2	<0.2	1.4	1.2
						1.0	0.3	259	21.2		8.2		31.3		117.0		8.7		3.0		4		84				<0.2		1.3	
					Middle	4.3	0.3	230	20.7	20.7	8.2	8.2	32.1	32.1	108.6	108.6	8.1		4.2		5		87				<0.2		1.5	
						4.3	0.3	246	20.7		8.2		32.1		108.6		8.1		4.2		4		88				<0.2		1.4	
					Bottom	7.5	0.3	225	20.4	20.4	8.1	8.1	32.7	32.7	109.6	109.6	8.2	8.2	3.5		6		91				<0.2		0.8	
						7.5	0.3	241	20.4		8.1		32.7		109.5		8.2		3.5		5		91				<0.2		0.8	
C2	Cloudy	Moderate	14:45	12.3	Surface	1.0	0.3	162	21.2	21.2	8.0	8.0	29.7	29.7	100.8	100.8	7.5	7.5	9.2	13.3	14	14	86	88	825672	806925	<0.2	<0.2	1.9	1.9
						1.0	0.3	171	21.2		8.0		29.7		100.8		7.5		9.2		14		86				<0.2		1.9	
					Middle	6.2	0.3	171	21.0	21.0	8.0	8.0	30.1	30.1	99.8	99.8	7.5		15.9		14		88				<0.2		2.1	
						6.2	0.3	172	21.0		8.0		30.1		99.8		7.5		15.9		14		87				<0.2		1.9	
					Bottom	11.3	0.2	194	20.9	20.9	8.0	8.0	30.8	30.8	99.5	99.5	7.4	7.4	14.9		12		90				<0.2		1.8	
						11.3	0.2	196	20.9		8.0		30.8		99.5		7.4		14.9		13		90				<0.2		1.8	
C3	Cloudy	Moderate	16:30	12.0	Surface	1.0	0.6	71	20.8	20.8	8.2	8.2	31.3	31.3	95.8	95.8	7.1	7.1	5.9	6.2	4	4	86	89	822102	817824	<0.2	<0.2	1.3	1.4
						1.0	0.6	75	20.8		8.2		31.3		95.8		7.1		5.9		3		86				<0.2		1.4	
					Middle	6.0	0.3	82	20.5	20.5	8.2	8.2	31.9	31.9	94.7	94.7	7.1		6.3		4		89				<0.2		1.8	
						6.0	0.4	84	20.5		8.2		31.9		94.7		7.1		6.3		3		88				<0.2		1.8	
					Bottom	11.0	0.3	86	20.5	20.5	8.2	8.2	32.2	32.2	95.8	95.8	7.1	7.1	6.5		5		90				<0.2		1.1	
						11.0	0.3	86	20.5		8.2		32.2		95.8		7.1		6.5		4		92				<0.2		1.1	
IM1	Fine	Rough	15:32	5.0	Surface	1.0	0.2	202	21.2	21.2	8.1	8.1	30.5	30.5	117.0	117.0	8.7	8.7	4.1	6.3	7	6	83	88	817970	807140	<0.2	<0.2	1.3	1.1
						1.0	0.2	210	21.2		8.1		30.5		116.9		8.7		4.1		6		84				<0.2		1.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.2	223	21.2	21.2	8.1	8.1	30.6	30.6	115.5	115.5	8.6	8.6	8.4		6		91				<0.2		1.0	
						4.0	0.2	244	21.2		8.1		30.6		115.5		8.6		8.5		6		92				<0.2		1.0	
IM2	Fine	Rough	15:24	7.4	Surface	1.0	0.4	190	21.1	21.1	8.1	8.1	30.7	30.7	110.7	110.7	8.2	8.1	4.6	8.5	7	7	85	88	818185	806158	<0.2	<0.2	1.5	1.3
						1.0	0.4	203	21.1		8.1		30.7		110.6		8.2		4.6		6		86				<0.2		1.5	
					Middle	3.7	0.3	176	21.0	21.0	8.1	8.1	31.0	31.0	107.8	107.8	8.0		5.6		6		88				<0.2		1.4	
						3.7	0.3	185	21.0		8.1		31.0		107.8		8.0		5.6		7		88				<0.2		1.5	
					Bottom	6.4	0.2	151	20.4	20.4	8.1	8.1	31.8	31.8	102.6	102.7	7.7	7.7	15.1		7		89				<0.2		0.8	
						6.4	0.2	153	20.4		8.1		31.8		102.7		7.7		15.3		6		90				<0.2		0.9	
IM3	Fine	Rough	15:18	7.2	Surface	1.0	0.2	200	21.1	21.1	8.1	8.1	30.6	30.6	112.0	112.0	8.3	8.1	4.3	6.1	8	6	84	88	818786	805583	<0.2	<0.2	1.4	1.3
						1.0	0.2	213	21.1		8.1		30.6		111.9		8.3		4.3		8		85				<0.2		1.5	
					Middle	3.6	0.2	206	21.0	21.0	8.1	8.1	30.7	30.7	105.4	105.4	7.9		5.1		6		89				<0.2		1.5	
						3.6	0.2	207	21.0		8.1		30.7		105.4		7.9		5.2		7		89				<0.2		1.4	
					Bottom	6.2	0.1	136	20.3	20.3	8.1	8.1	31.9	31.9	102.5	102.5	7.7	7.7	8.5		4		89				<0.2		0.9	
						6.2	0.1	138	20.3		8.1		31.9		102.5		7.7		9.0		5		90				<0.2		0.8	
IM4	Fine	Rough	15:10	8.6	Surface	1.0	0.4	184	21.1	21.1	8.1	8.1	29.2	29.1	106.6	106.6	8.0	7.9	5.3	7.7	4	7	85	88	819734	804586	<0.2	<0.2	1.4	1.2
						1.0	0.4	201	21.0		8.1		28.9		106.6		8.0		5.4		6		85				<0.2		1.3	
					Middle	4.3	0.3	179	20.5	20.5	8.1	8.1	31.6	31.6	103.3	103.3	7.7		8.3		6		88				<0.2		1.3	
						4.3	0.3	186	20.5		8.1		31.7		103.3		7.7		8.4		7		89				<0.2		1.4	
					Bottom	7.6	0.3	188	20.3	20.3	8.1	8.1	31.9	31.9	103.3	103.4	7.7	7.7	9.3		10		90				<0.2		0.8	
						7.6	0.3	201	20.3		8.1		31.9		103.4		7.7		9.3		10		90				<0.2		0.8	
IM5	Fine	Rough	15:02	7.8	Surface	1.0	0.2	241	21.5	21.5	8.1	8.1	28.4	28.4	111.3	111.3	8.3	8.1	3.3	6.0	4	5	85	88	820750	804886	<0.2	<0.2	1.3	1.2
						1.0	0.2	244	21.5		8.1		28.4		111.2		8.3		3.4		4		86				<0.2		1.3	
					Middle	3.9	0.1	162	20.8	20.8	8.1	8.1	31.0	30.9	104.7	104.7	7.8		6.2		4		89				<0.2		1.3	
						3.9	0.1	164	20.8		8.1		30.9		104.7		7.8		6.2		4		89				<0.2		1.4	
					Bottom	6.8	0.1	124	20.5	20.5	8.1	8.1	31.3	31.3	104.1	104.0	7.8	7.8	8.3		6		90				<0.2		1.0	
						6.8	0.1	125	20.5		8.1		31.3		103.9		7.8		8.3		7		90				<0.2		1.0	
IM6	Fine	Rough	14:55	7.5	Surface	1.0	0.2	161	21.5	21.5	8.1	8.1	28.6	28.6	109.4	109.4	8.2	8.0	3.6	5.1	4	6	85	88	821068	805827	<0.2	<0.2	1.3	1.3
						1.0	0.2	170	21.5		8.1		28.6		109.3		8.2		3.6		5		86				<0.2		1.5	
					Middle	3.8	0.3	125	21.0	21.0	8.1	8.1	29.7	29.7	104.4	104.5	7.8		5.2		5		88				<0.2		1.5	
						3.8	0.3	134	21.0		8.1		29.7		104.5		7.8		5.2		6		88				<0.2		1.4	
					Bottom	6.5	0.2	98	20.8	20.8	8.1	8.1	30.7	30.7	104.2	104.2	7.8	7.8	6.6		7		89				<0.2		1.1	
						6.5	0.2	107	20.8		8.1		30.7		104.2		7.8		6.5		8		90				<0.2		1.1	
IM7	Fine	Rough	14:44	8.4	Surface	1.0	0.1	255	21.6	21.6	8.1	8.1	28.7	28.7	111.1	111.1	8.3	8.0	4.4	7.9	5	7	89	90	821329	806817	<0.2	<0.2	1.0	1.1
						1.0	0.1	278	21.6		8.1		28.7		111.1		8.3		4.4		5		89				<0.2		1.0	
					Middle	4.2	0.1	189	20.9	20.9	8.1	8.1	30.3	30.3	103.1	103.2	7.7		8.0		7		90				<0.2		1.2	
						4.2	0.1	199	20.9		8.1		30.3		103.2		7.7		8.1		6		90				<0.2		1.2	
					Bottom	7.4	0.2	181	20.8	20.8	8.1	8.1	30.6	30.6	104.3	104.3	7.8	7.8	11.4		8		90				<0.2		1.1	
						7.4	0.2	181	20.8		8.1		30.6		104.2		7.8		11.3		9		91				<0.2		1.2	
IM8	Cloudy	Moderate	15:10	7.7	Surface	1.0	0.2	109	21.2	21.2	8.2	8.2	29.4	29.4	102.4	102.4	7.7	7.7	6.2	6.1	6	6	85	88	821818	808125	<0.2	<0.2	1.5	1.6
						1.0	0.2	114	21.2		8.2		29.4		102.4		7.7		6.2		6		86				<0.2		1.6	
					Middle	3.9	0.2	91	21.1	21.1	8.2	8.2	29.9	29.9	102.3	102.3	7.7		6.9		6		89				<0.2		1.6	
						3.9	0.3	93	21.1		8.2		29.9		102.3		7.7		6.9		6		89				<0.2		1.6	
					Bottom	6.7	0.2	59	21.1	21.1	8.2	8.2	30.2	30.2	100.0	100.0	7.5	7.5	5.2		7		91				<0.2		1.7	
						6.7	0.3	64	21.1		8.2		30.2		100.0		7.5		5.2		7		90				<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 14 March 20 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	15:16	7.5	Surface	1.0	0.5	100	21.2	21.2	8.1	8.1	29.3	29.3	101.0	101.0	7.6	7.6	6.5	7.1	4	5	86	88	822097	808790	<0.2	<0.2	1.5	1.7
						1.0	0.5	100	21.2		8.1		29.3		101.0		7.6		6.5		4		86				<0.2		1.6	
					Middle	3.8	0.5	89	21.0	21.0	8.2	8.2	29.8	29.8	101.8	101.8	7.6		7.7		5		88				<0.2		1.7	
						3.8	0.5	91	21.0		8.2		29.8		101.8		7.6		7.7		6		87				<0.2		1.8	
					Bottom	6.5	0.4	72	21.0	21.0	8.2	8.2	29.9	29.9	100.4	100.4	7.5	7.5	7.1		6		90				<0.2		1.8	
						6.5	0.4	72	21.0		8.2		29.9		100.4		7.5		7.1		5		90				<0.2		1.7	
IM10	Cloudy	Moderate	15:23	7.8	Surface	1.0	0.8	114	21.4	21.4	8.2	8.2	29.4	29.4	101.6	101.6	7.6	7.6	12.1	15.0	6	6	86	88	822369	809794	<0.2	<0.2	1.7	1.7
						1.0	0.8	123	21.4		8.2		29.4		101.6		7.6		12.1		7		86				<0.2		1.6	
					Middle	3.9	0.7	110	21.1	21.1	8.2	8.2	29.8	29.8	100.3	100.3	7.5		13.4		7		88				<0.2		1.6	
						3.9	0.8	118	21.1		8.2		29.8		100.3		7.5		13.4		6		87				<0.2		1.6	
					Bottom	6.8	0.5	98	21.0	21.0	8.2	8.2	30.0	30.0	100.4	100.4	7.5	7.5	19.5		6		90				<0.2		1.8	
						6.8	0.5	107	21.0		8.2		30.0		100.4		7.5		19.5		6		90				<0.2		1.7	
IM11	Cloudy	Moderate	15:34	8.2	Surface	1.0	0.8	107	21.2	21.2	8.2	8.2	29.4	29.4	99.4	99.4	7.4	7.4	10.7	11.9	8	8	86	88	822044	811437	<0.2	<0.2	1.6	1.7
						1.0	0.8	110	21.2		8.2		29.4		99.4		7.4		10.7		7		86				<0.2		1.8	
					Middle	4.1	0.7	106	21.0	21.0	8.2	8.2	30.1	30.1	98.4	98.4	7.4		12.8		8		89				<0.2		1.6	
						4.1	0.8	112	21.0		8.2		30.1		98.4		7.4		12.8		7		88				<0.2		1.7	
					Bottom	7.2	0.4	108	20.9	20.9	8.2	8.2	30.6	30.6	98.7	98.7	7.4	7.4	12.1		8		90				<0.2		1.7	
						7.2	0.4	115	20.9		8.2		30.6		98.7		7.4		12.1		9		90				<0.2		1.7	
IM12	Cloudy	Moderate	15:40	8.9	Surface	1.0	0.7	107	21.4	21.4	8.2	8.2	29.2	29.2	100.6	100.6	7.5	7.4	10.1	10.0	8	9	86	88	821440	812060	<0.2	<0.2	1.5	1.4
						1.0	0.8	107	21.4		8.2		29.2		100.6		7.5		10.1		9		86				<0.2		1.4	
					Middle	4.5	0.6	105	21.0	21.0	8.2	8.2	30.0	30.0	97.5	97.5	7.3		11.0		9		88				<0.2		1.5	
						4.5	0.6	111	21.0		8.2		30.0		97.5		7.3		11.0		9		87				<0.2		1.5	
					Bottom	7.9	0.3	90	20.8	20.8	8.2	8.2	30.8	30.8	97.1	97.1	7.3	7.3	9.0		9		90				<0.2		1.2	
						7.9	0.3	97	20.8		8.2		30.8		97.1		7.3		9.0		10		91				<0.2		1.3	
SR1A	Cloudy	Moderate	16:00	4.7	Surface	1.0	-	-	21.3	21.3	8.2	8.2	30.5	30.5	100.5	100.5	7.5	7.5	3.5	4.2	5	6	-	-	819980	812660	-	-	-	-
						1.0	-	-	21.3		8.2		30.5		100.5		7.5		3.5		6		-				-		-	
					Middle	2.4	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.4	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	-	-	21.0	21.0	8.3	8.3	30.9	30.9	101.4	101.4	7.6	7.6	4.9		6		-				-		-	
						3.7	-	-	21.0		8.3		30.9		101.4		7.6		4.9		5		-				-		-	
SR2	Cloudy	Moderate	16:12	4.3	Surface	1.0	0.3	67	21.4	21.4	8.2	8.2	29.2	29.2	105.3	105.3	7.9	7.9	4.5	5.4	4	5	87	89	821470	814154	<0.2	<0.2	1.4	1.3
						1.0	0.3	69	21.4		8.2		29.2		105.3		7.9		4.5		5		88				<0.2		1.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.1	27	21.3	21.3	8.2	8.2	29.8	29.8	103.0	103.0	7.7	7.7	6.3		6		90				<0.2		1.3	
						3.3	0.1	27	21.3		8.2		29.8		103.0		7.7		6.3		6		91				<0.2		1.3	
SR3	Cloudy	Moderate	15:04	8.9	Surface	1.0	0.2	142	21.3	21.3	8.2	8.2	29.2	29.2	100.6	100.6	7.5	7.6	6.4	8.9	8	9	-	-	822142	807582	-	-	-	-
						1.0	0.2	152	21.3		8.2		29.2		100.6		7.5		6.4		9		-				-		-	
					Middle	4.5	0.2	118	21.0	21.0	8.3	8.3	29.8	29.8	101.2	101.2	7.6		9.7		9		-				-		-	
						4.5	0.2	121	21.0		8.3		29.8		101.2		7.6		9.7		8		-				-		-	
					Bottom	7.9	0.2	80	21.0	21.0	8.3	8.3	30.4	30.4	100.3	100.3	7.5	7.5	10.7		9		-				-		-	
						7.9	0.2	85	21.0		8.3		30.4		100.3		7.5		10.7		9		-				-		-	
SR4A	Fine	Rough	16:15	9.6	Surface	1.0	0.2	76	21.4	21.4	8.2	8.2	30.6	30.6	116.4	116.4	8.6	8.3	4.9	6.2	5	6	-	-	817181	807809	-	-	-	-
						1.0	0.2	81	21.4		8.2		30.6		116.3		8.6		4.9		6		-				-		-	
					Middle	4.8	0.1	79	21.1	21.1	8.1	8.1	30.7	30.7	107.8	107.8	8.0		6.4		5		-				-		-	
						4.8	0.1	83	21.1		8.1		30.7		107.7		8.0		6.4		6		-				-		-	
					Bottom	8.6	0.2	37	20.8	20.8	8.1	8.1	30.9	30.9	108.4	108.5	8.1	8.1	7.2		8		-				-		-	
						8.6	0.2	38	20.8		8.1		30.9		108.6		8.1		7.2		7		-				-		-	
SR5A	Fine	Rough	16:31	5.0	Surface	1.0	0.0	47	22.1	22.1	8.1	8.1	30.7	30.7	116.9	116.8	8.5	8.5	5.6	6.9	8	9	-	-	816578	810717	-	-	-	-
						1.0	0.0	47	22.1		8.1		30.7		116.7		8.5		5.7		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.1	343	21.5	21.5	8.1	8.1	30.6	30.6	110.9	111.0	8.2	8.2	8.2		10		-				-		-	
						4.0	0.1	353	21.5		8.1		30.6		111.0		8.2		8.2		9		-				-		-	
SR6A	Fine	Rough	16:57	5.5	Surface	1.0	0.1	344	21.6	21.6	8.0	8.0	29.7	29.7	112.9	112.8	8.4	8.4	4.1	4.2	5	6	-	-	817971	814735	-	-	-	-
						1.0	0.1	316	21.6		8.0		29.7		112.7		8.4		4.1		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.5	0.1	15	21.8	21.8	8.0	8.0	30.1	30.1	108.7	108.7	8.0	8.0	4.1		7		-				-		-	
						4.5	0.1	15	21.8		8.0		30.1		108.7		8.0		4.3		6		-				-		-	
SR7	Cloudy	Moderate	16:57	16.4	Surface	1.0	1.1	68	21.2	21.2	8.2	8.2	31.1	31.1	105.5	105.5	7.8	7.7	0.8	0.8	6	5	-	-	823654	823719	-	-	-	-
						1.0	1.1	74	21.2		8.2		31.1		105.5		7.8		0.8		5		-				-		-	
					Middle	8.2	0.6	73	20.9	20.9	8.2	8.2	31.7	31.7	101.2	101.2	7.5		0.7		5		-				-		-	
						8.2	0.7	78	20.9		8.2		31.7		101.2		7.5		0.7		4		-				-		-	
					Bottom	15.4	0.4	16	20.8	20.8	8.2	8.2	31.9	31.9	101.5	101.5	7.5	7.5	0.9		4		-				-		-	
						15.4	0.5	16	20.8		8.2		31.9		101.5		7.5		0.9		4		-				-		-	
SR8	Cloudy	Moderate	15:52	4.8	Surface	1.0	-	-	21.4	21.4	8.2	8.2	30.1	30.1	101.9	101.9	7.6	7.6	8.5	8.8	8	11	-	-	820384	811607	-	-	-	-
						1.0	-	-	21.4		8.2		30.1		101.9		7.6		8.5		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	-	-	21.3	21.3	8.3	8.3	30.1	30.1	101.4	101.4	7.5	7.5	9.1		14		-				-		-	
						3.8	-	-	21.3		8.3		30.1		101.4		7.5		9.1		14		-				-		-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 14 March 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	10:27	7.2	Surface	1.0	0.7	42	20.6	20.6	8.1	8.1	31.1	31.1	103.5	103.4	7.7	7.7	11.8	18.7	7	8	83	87	815617	804229	<0.2	<0.2	0.7	0.6
						1.0	0.7	43	20.6		8.1		31.1		103.3		7.7		12.1		8		83				<0.2		0.7	
					Middle	3.6	0.6	34	20.5	20.5	8.1	8.1	31.3	31.3	102.1	102.1	7.7		22.7		8		87				<0.2		0.6	
						3.6	0.7	35	20.5		8.1		31.3		102.0		7.6		22.8		8		88				<0.2		0.6	
					Bottom	6.2	0.6	40	20.5	20.5	8.1	8.1	31.5	31.4	102.5	102.5	7.7	7.7	21.7		10		91				<0.2		0.4	
						6.2	0.7	40	20.5		8.1		31.4		102.4		7.7		21.2		9		92				<0.2		0.4	
C2	Cloudy	Moderate	11:09	12.5	Surface	1.0	0.6	11	21.2	21.2	8.1	8.1	27.6	27.6	94.4	94.4	7.1	7.1	11.1	12.2	4	4	86	88	825695	806936	<0.2	<0.2	1.3	1.7
						1.0	0.6	11	21.2		8.1		27.6		94.4		7.1		11.1		4		86				<0.2		1.4	
					Middle	6.3	0.5	8	21.0	21.0	8.1	8.1	28.4	28.4	94.0	94.1	7.1		11.8		5		89				<0.2		1.9	
						6.3	0.6	8	21.0		8.1		28.4		94.1		7.1		11.8		4		88				<0.2		1.9	
					Bottom	11.5	0.3	351	20.9	20.9	8.2	8.2	29.7	29.7	93.3	93.3	7.0	7.0	13.8		5		90				<0.2		1.9	
						11.5	0.4	323	20.9		8.2		29.7		93.3		7.0		13.8		4		90				<0.2		2.0	
C3	Cloudy	Moderate	09:18	11.4	Surface	1.0	0.7	264	20.8	20.8	8.0	8.0	30.5	30.5	95.2	95.2	7.1	7.1	3.3	6.4	6	6	86	89	822099	817791	<0.2	<0.2	1.4	1.3
						1.0	0.7	265	20.8		8.0		30.5		95.2		7.1		3.3		6		87				<0.2		1.4	
					Middle	5.7	0.8	265	20.5	20.5	7.9	7.9	31.6	31.6	93.9	93.9	7.0		6.6		5		88				<0.2		1.1	
						5.7	0.9	281	20.5		7.9		31.6		93.9		7.0		6.6		6		89				<0.2		1.2	
					Bottom	10.4	0.5	269	20.5	20.5	7.9	7.9	31.7	31.7	95.7	95.7	7.2	7.2	9.2		4		90				<0.2		1.3	
						10.4	0.6	293	20.5		7.9		31.7		95.7		7.2		9.2		6		91				<0.2		1.4	
IM1	Cloudy	Moderate	10:45	4.3	Surface	1.0	0.3	10	20.9	20.9	8.2	8.2	30.6	30.6	104.0	104.0	7.8	7.8	7.8	8.7	10	13	83	86	817927	807150	<0.2	<0.2	0.9	0.9
						1.0	0.3	10	20.9		8.2		30.6		103.9		7.8		7.8		11		84				<0.2		1.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.2	5	20.8	20.8	8.2	8.2	30.6	30.6	103.0	103.0	7.7	7.7	9.6		14		89				<0.2		0.9	
						3.3	0.2	5	20.8		8.2		30.6		103.0		7.7		9.7		15		89				<0.2		0.9	
IM2	Cloudy	Moderate	10:52	8.1	Surface	1.0	0.4	0	20.9	20.9	8.1	8.1	30.2	30.2	102.4	102.4	7.7	7.7	9.4	16.0	8	12	86	88	818186	806184	<0.2	<0.2	1.0	1.0
						1.0	0.4	0	20.9		8.1		30.2		102.4		7.7		9.6		7		87				<0.2		1.0	
					Middle	4.1	0.4	8	20.7	20.7	8.1	8.1	30.3	30.3	100.9	100.9	7.6		14.3		10		88				<0.2		1.0	
						4.1	0.4	8	20.7		8.1		30.3		100.9		7.6		14.4		10		89				<0.2		1.0	
					Bottom	7.1	0.3	358	20.7	20.7	8.1	8.1	30.3	30.3	100.7	100.7	7.6	7.6	24.2		18		90				<0.2		0.9	
						7.1	0.3	329	20.7		8.1		30.3		100.6		7.6		24.2		16		90				<0.2		1.0	
IM3	Cloudy	Moderate	10:58	8.4	Surface	1.0	0.4	340	20.8	20.8	8.0	8.0	30.1	30.1	103.3	103.3	7.7	7.7	9.7	9.2	11	14	85	88	818798	805615	<0.2	<0.2	1.0	1.0
						1.0	0.4	340	20.8		8.0		30.1		103.2		7.7		9.8		12		86				<0.2		1.0	
					Middle	4.2	0.4	335	20.8	20.8	8.0	8.0	30.1	30.1	102.0	102.0	7.7		9.5		14		88				<0.2		1.0	
						4.2	0.4	344	20.8		8.0		30.1		101.9		7.7		9.7		14		88				<0.2		1.0	
					Bottom	7.4	0.4	339	20.8	20.8	8.0	8.0	30.1	30.1	101.5	101.5	7.6	7.6	8.1		16		90				<0.2		1.0	
						7.4	0.4	312	20.8		8.0		30.1		101.5		7.6		8.4		17		90				<0.2		1.0	
IM4	Cloudy	Moderate	11:08	8.0	Surface	1.0	0.9	344	20.8	20.8	8.1	8.1	30.3	30.3	101.8	101.8	7.6	7.5	5.0	6.0	12	14	86	88	819729	804625	<0.2	<0.2	1.1	1.0
						1.0	1.0	359	20.8		8.1		30.3		101.8		7.6		5.2		11		86				<0.2		1.0	
					Middle	4.0	0.7	342	20.7	20.7	8.1	8.1	30.3	30.3	98.6	98.6	7.4		5.3		12		88				<0.2		1.0	
						4.0	0.8	315	20.7		8.1		30.3		98.6		7.4		5.4		13		89				<0.2		1.2	
					Bottom	7.0	0.6	335	20.7	20.7	8.1	8.1	30.4	30.4	100.0	100.1	7.5	7.5	7.6		17		90				<0.2		0.9	
						7.0	0.6	343	20.7		8.1		30.4		100.1		7.5		7.5		17		90				<0.2		1.0	
IM5	Cloudy	Moderate	11:13	7.3	Surface	1.0	0.9	10	20.9	20.9	8.0	8.0	30.0	30.0	103.0	103.0	7.7	7.7	13.2	14.9	12	14	85	88	820758	804868	<0.2	<0.2	1.0	1.0
						1.0	1.0	10	20.9		8.0		30.0		103.0		7.7		13.1		13		85				<0.2		1.0	
					Middle	3.7	0.9	9	20.9	20.9	8.0	8.0	30.0	30.0	102.3	102.3	7.7		14.1		14		88				<0.2		1.1	
						3.7	0.9	9	20.9		8.0		30.0		102.2		7.7		14.2		13		89				<0.2		1.0	
					Bottom	6.3	0.8	9	20.8	20.8	8.0	8.0	30.1	30.1	101.4	101.4	7.6	7.6	17.4		15		90				<0.2		1.0	
						6.3	0.8	9	20.8		8.0		30.1		101.4		7.6		17.4		15		90				<0.2		1.0	
IM6	Cloudy	Moderate	11:21	7.6	Surface	1.0	0.1	50	21.2	21.2	8.0	8.0	28.3	28.3	101.6	101.6	7.7	7.7	5.4	8.1	8	9	86	88	821059	805844	<0.2	<0.2	1.2	1.1
						1.0	0.1	51	21.2		8.0		28.3		101.6		7.7		5.4		7		86				<0.2		1.0	
					Middle	3.8	0.3	37	21.0	21.0	8.0	8.0	29.1	29.1	101.5	101.5	7.6		7.9		8		88				<0.2		1.0	
						3.8	0.4	40	21.0		8.0		29.1		101.4		7.6		8.0		8		88				<0.2		1.1	
					Bottom	6.6	0.4	44	20.9	20.9	8.0	8.0	30.0	30.0	100.6	100.6	7.5	7.5	10.9		11		89				<0.2		1.2	
						6.6	0.4	44	20.9		8.0		30.0		100.6		7.5		10.9		12		90				<0.2		1.2	
IM7	Cloudy	Moderate	11:30	8.3	Surface	1.0	0.1	223	21.2	21.2	8.0	8.0	27.2	27.2	98.4	98.5	7.5	7.6	4.1	11.3	4	6	86	88	821360	806856	<0.2	<0.2	1.2	1.2
						1.0	0.1	244	21.2		8.0		27.2		98.5		7.5		4.1		4		86				<0.2		1.1	
					Middle	4.2	0.2	115	21.1	21.1	8.1	8.1	28.3	28.3	101.2	101.2	7.6		11.8		5		88				<0.2		1.0	
						4.2	0.2	126	21.1		8.1		28.3		101.1		7.6		12.1		5		89				<0.2		1.1	
					Bottom	7.3	0.2	92	20.9	20.9	8.1	8.1	30.0	30.0	101.1	101.2	7.6	7.6	17.8		8		89				<0.2		1.5	
						7.3	0.2	95	20.9		8.1		30.0		101.2		7.6		17.9		8		90				<0.2		1.5	
IM8	Cloudy	Moderate	10:41	7.6	Surface	1.0	0.2	73	21.1	21.1	8.1	8.1	28.4	28.4	97.3	97.3	7.3	7.3	6.0	8.2	10	10	86	88	821807	808154	<0.2	<0.2	1.5	1.5
						1.0	0.2	77	21.1		8.1		28.4		97.3		7.3		6.0		10		86				<0.2		1.5	
					Middle	3.8	0.2	74	21.1	21.1	8.1	8.1	28.6	28.6	97.2	97.2	7.3		9.1		10		87				<0.2		1.5	
						3.8	0.2	77	21.1		8.1		28.6		97.2		7.3		9.1		10		88				<0.2		1.4	
					Bottom	6.6	0.1	76	21.1	21.1	8.1	8.1	28.8	28.8	98.5	98.5	7.4	7.4	9.5		9		90				<0.2		1.4	
						6.6	0.1	76	21.1		8.1		28.8		98.5		7.4		9.5		8		90				<0.2		1.4	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 14 March 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	10:34	7.1	Surface	1.0	0.3	81	21.1	21.1	8.1	8.1	29.2	29.2	96.9	96.9	7.3	7.3	13.6	16.5	24	24	86	88	822105	808826	<0.2	<0.2	1.4	1.4
						1.0	0.3	84	21.1		8.1		29.2		96.9		7.3		13.6		24		87				<0.2		1.4	
					Middle	3.6	0.3	79	21.1	21.1	8.1	8.1	29.1	29.1	96.8	96.8	7.3		16.6		25		87				<0.2		1.4	
						3.6	0.3	81	21.1		8.1		29.1		96.8		7.3		16.6		24		88				<0.2		1.4	
					Bottom	6.1	0.2	71	21.0	21.0	8.1	8.1	29.1	29.1	97.8	97.8	7.4	7.4	19.4		25		90				<0.2		1.4	
						6.1	0.2	75	21.0		8.1		29.1		97.8		7.4		19.4		24		91				<0.2		1.4	
IM10	Cloudy	Moderate	10:26	8.7	Surface	1.0	0.7	304	21.0	21.0	8.1	8.1	30.0	30.0	96.1	96.1	7.2	7.2	21.0	19.1	22	21	86	88	822407	809802	<0.2	<0.2	1.3	1.3
						1.0	0.7	306	21.0		8.1		30.0		96.1		7.2		21.0		22		87				<0.2		1.4	
					Middle	4.4	0.6	301	21.0	21.0	8.1	8.1	30.0	30.0	96.2	96.2	7.2		18.8		22		89				<0.2		1.3	
						4.4	0.6	301	21.0		8.1		30.0		96.2		7.2		18.8		22		87				<0.2		1.3	
					Bottom	7.7	0.5	302	21.0	21.0	8.1	8.1	30.0	30.0	96.2	96.2	7.2	7.2	17.6		18		90				<0.2		1.4	
						7.7	0.5	310	21.0		8.1		30.0		96.2		7.2		17.6		20		91				<0.2		1.3	
IM11	Cloudy	Moderate	10:16	8.3	Surface	1.0	0.7	300	21.0	21.0	8.1	8.1	29.7	29.7	95.7	95.7	7.2	7.2	17.3	18.7	29	28	86	88	822050	811454	<0.2	<0.2	1.5	1.5
						1.0	0.7	328	21.0		8.1		29.7		95.7		7.2		17.3		29		86				<0.2		1.6	
					Middle	4.2	0.6	302	20.9	20.9	8.1	8.1	29.7	29.7	95.7	95.7	7.2		20.0		28		88				<0.2		1.6	
						4.2	0.6	305	20.9		8.1		29.7		95.7		7.2		20.0		28		87				<0.2		1.5	
					Bottom	7.3	0.4	310	20.9	20.9	8.1	8.1	29.8	29.8	95.8	95.8	7.2	7.2	18.7		28		90				<0.2		1.4	
						7.3	0.4	340	20.9		8.1		29.8		95.8		7.2		18.7		27		90				<0.2		1.5	
IM12	Cloudy	Moderate	10:09	8.4	Surface	1.0	0.8	281	20.9	20.9	8.1	8.1	30.3	30.3	96.1	96.1	7.2	7.2	12.6	13.5	19	18	86	88	821464	812039	<0.2	<0.2	1.5	1.5
						1.0	0.8	293	20.9		8.1		30.3		96.1		7.2		12.6		18		87				<0.2		1.6	
					Middle	4.2	0.7	279	20.9	20.9	8.1	8.1	30.3	30.3	96.0	96.0	7.2		13.8		19		88				<0.2		1.4	
						4.2	0.7	279	20.9		8.1		30.3		96.0		7.2		13.8		18		87				<0.2		1.4	
					Bottom	7.4	0.6	277	20.9	20.9	8.1	8.1	30.3	30.3	96.1	96.1	7.2	7.2	14.2		17		90				<0.2		1.4	
						7.4	0.7	297	20.9		8.1		30.3		96.1		7.2		14.2		17		91				<0.2		1.5	
SR1A	Cloudy	Moderate	09:49	4.5	Surface	1.0	-	-	21.0	21.0	8.1	8.1	29.9	29.9	99.1	99.1	7.4	7.4	2.4	2.5	9	7	-	-	819974	812658	-	-	-	-
						1.0	-	-	21.0		8.1		29.9		99.1		7.4		2.4		8		-				-		-	
					Middle	2.3	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.3	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	-	-	21.0	21.0	8.1	8.1	29.9	29.9	100.2	100.2	7.5	7.5	2.5		6		-				-		-	
						3.5	-	-	21.0		8.1		29.9		100.2		7.5		2.5		6		-				-		-	
SR2	Cloudy	Moderate	09:38	4.7	Surface	1.0	0.2	341	20.9	20.9	8.0	8.0	30.1	30.1	95.8	95.8	7.2	7.2	13.8	15.1	15	16	86	89	821483	814174	<0.2	<0.2	1.4	1.4
						1.0	0.2	347	20.9		8.0		30.1		95.8		7.2		13.8		15		88				<0.2		1.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.2	351	20.9	20.9	7.9	7.9	30.2	30.2	97.7	97.7	7.3	7.3	16.3		17		90				<0.2		1.4	
						3.7	0.2	323	20.9		7.9		30.2		97.7		7.3		16.3		16		91				<0.2		1.3	
SR3	Cloudy	Moderate	10:48	8.8	Surface	1.0	0.3	72	21.2	21.2	8.1	8.1	27.7	27.7	95.6	95.6	7.2	7.2	2.5	3.0	3	4	-	-	822169	807590	-	-	-	-
						1.0	0.3	74	21.2		8.1		27.7		95.6		7.2		2.5		4		-				-		-	
					Middle	4.4	0.2	73	21.1	21.1	8.1	8.1	28.1	28.1	95.5	95.5	7.2		3.2		4		-				-		-	
						4.4	0.2	75	21.1		8.1		28.1		95.5		7.2		3.2		4		-				-		-	
					Bottom	7.8	0.2	55	21.1	21.1	8.1	8.1	28.1	28.1	96.1	96.1	7.3	7.3	3.3		4		-				-		-	
						7.8	0.2	58	21.1		8.1		28.1		96.1		7.3		3.3		5		-				-		-	
SR4A	Cloudy	Moderate	10:04	9.9	Surface	1.0	0.1	142	21.1	21.1	8.0	8.0	30.9	30.9	99.8	99.9	7.4	7.4	6.8	7.5	9	10	-	-	817173	807818	-	-	-	-
						1.0	0.1	149	21.1		8.0		30.9		99.9		7.4		6.9		9		-				-		-	
					Middle	5.0	0.1	83	21.1	21.1	8.0	8.0	30.9	30.9	98.8	98.8	7.3		7.8		11		-				-		-	
						5.0	0.1	86	21.1		8.0		30.9		98.8		7.3		7.8		11		-				-		-	
					Bottom	8.9	0.1	109	21.1	21.1	8.0	8.0	30.9	30.9	99.0	99.1	7.4	7.4	7.8		11		-				-		-	
						8.9	0.1	118	21.1		8.0		30.9		99.1		7.4		7.8		11		-				-		-	
SR5A	Cloudy	Moderate	09:47	4.0	Surface	1.0	0.1	255	21.0	21.0	8.1	8.1	30.6	30.6	98.2	98.3	7.3	7.3	8.7	8.6	12	13	-	-	816613	810706	-	-	-	-
						1.0	0.1	278	21.0		8.1		30.6		98.3		7.3		8.7		13		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	0.1	296	21.0	21.0	8.1	8.1	30.6	30.6	98.0	98.1	7.3	7.3	8.4		12		-				-		-	
						3.0	0.1	299	21.0		8.1		30.6		98.1		7.3		8.4		13		-				-		-	
SR6A	Cloudy	Moderate	09:09	4.6	Surface	1.0	0.1	227	20.8	20.8	8.2	8.2	30.0	30.0	96.8	96.8	7.3	7.3	6.5	6.2	10	10	-	-	817959	814739	-	-	-	-
						1.0	0.1	247	20.8		8.2		30.0		96.7		7.3		6.6		11		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.0	233	20.9	20.9	8.2	8.2	30.2	30.2	96.7	96.7	7.2	7.2	5.9		8		-				-		-	
						3.6	0.0	244	20.9		8.2		30.2		96.6		7.2		5.9		9		-				-		-	
SR7	Cloudy	Moderate	08:50	16.9	Surface	1.0	0.2	108	20.6	20.6	8.0	8.0	30.9	30.9	94.1	94.1	7.1	7.1	1.8	2.0	4	5	-	-	823627	823755	-	-	-	-
						1.0	0.2	118	20.6		8.0		30.9		94.1		7.1		1.8		5		-				-		-	
					Middle	8.5	0.2	67	20.6	20.6	7.9	7.9	31.3	31.3	93.2	93.2	7.0		2.0		5		-				-		-	
						8.5	0.2	71	20.6		7.9		31.3		93.2		7.0		2.0		5		-				-		-	
					Bottom	15.9	0.3	33	20.5	20.5	7.9	7.9	31.7	31.7	92.5	92.5	6.9	6.9	2.2		5		-				-		-	
						15.9	0.4	33	20.5		7.9		31.7		92.5		6.9		2.2		6		-				-		-	
SR8	Cloudy	Moderate	10:00	4.8	Surface	1.0	-	-	21.0	21.0	8.1	8.1	29.6	29.6	99.7	99.7	7.5	7.5	10.2	9.9	11	10	-	-	820366	811629	-	-	-	-
						1.0	-	-	21.0		8.1		29.6		99.7		7.5		10.2		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	-	-	21.0	21.0	8.2	8.2	29.6	29.6	102.5	102.5	7.7	7.7	9.5		10		-				-		-	
						3.8	-	-	21.0		8.2		29.6		102.5		7.7		9.5		9		-				-		-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 17 March 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C) Value	Water Temperature (°C) Average	pH Value	pH Average	Salinity (ppt) Value	Salinity (ppt) Average	DO Saturation (%) Value	DO Saturation (%) Average	Dissolved Oxygen Value	Dissolved Oxygen DA	Turbidity(NTU) Value	Turbidity(NTU) DA	Suspended Solids (mg/L) Value	Suspended Solids (mg/L) DA	Total Alkalinity (ppm) Value	Total Alkalinity (ppm) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L) Value	Chromium (µg/L) DA	Nickel (µg/L) Value	Nickel (µg/L) DA
C1	Cloudy	Moderate	19:25	7.9	Surface	1.0	0.4	211	20.5	20.5	8.3	8.3	32.7	32.7	116.6	116.5	8.7	8.6	1.3	1.7	3	3	85	88	815610	804246	<0.2	<0.2	0.8	0.8
						1.0	0.4	216	20.5		8.3		32.7		116.4		8.7		1.3		3		86				<0.2		0.8	
					Middle	4.0	0.3	207	20.5	20.5	8.3	8.3	32.8	32.8	113.3	113.3	8.4		1.5		3		88				<0.2		0.6	
						4.0	0.3	218	20.5		8.3		32.8		113.3		8.4		1.5		3		89				<0.2		0.8	
					Bottom	6.9	0.2	204	20.2	20.2	8.2	8.2	33.3	33.3	107.9	108.0	8.0	8.0	2.2		3		91				<0.2		0.7	
						6.9	0.2	205	20.2		8.2		33.3		108.0		8.0		2.3		3		91				<0.2		0.8	
C2	Cloudy	Rough	18:16	7.7	Surface	1.0	0.3	219	21.2	21.2	8.1	8.1	28.3	28.3	118.4	118.4	8.9	8.5	1.5	2.3	3	4	84	88	825687	806942	<0.2	<0.2	1.8	1.5
						1.0	0.3	237	21.2		8.1		28.3		118.3		8.9		1.5		3		84				<0.2		1.8	
					Middle	3.9	0.3	191	21.1	21.1	8.1	8.1	29.2	29.2	108.0	108.1	8.1		2.3		3		88				<0.2		1.0	
						3.9	0.3	204	21.1		8.1		29.2		108.1		8.1		2.3		4		88				<0.2		1.0	
					Bottom	6.7	0.2	192	20.7	20.7	8.0	8.0	31.1	31.0	105.3	105.4	7.9	7.9	3.0		4		91				<0.2		1.7	
						6.7	0.2	206	20.7		8.0		31.0		105.4		7.9		3.0		4		91				<0.2		1.5	
C3	Cloudy	Rough	20:16	9.7	Surface	1.0	0.4	64	20.6	20.6	8.1	8.1	31.3	31.3	108.8	108.8	8.1	7.8	1.0	1.3	3	3	83	88	822127	817787	<0.2	<0.2	1.0	1.1
						1.0	0.4	67	20.6		8.1		31.3		108.8		8.1		1.0		3		84				<0.2		1.0	
					Middle	4.9	0.4	79	20.4	20.4	8.1	8.1	32.0	32.0	99.5	99.6	7.4		1.4		3		87				<0.2		1.0	
						4.9	0.4	84	20.4		8.1		32.0		99.6		7.4		1.4		3		88				<0.2		1.1	
					Bottom	8.7	0.3	72	20.4	20.4	8.1	8.1	32.1	32.1	101.6	101.6	7.6	7.6	1.5		4		91				<0.2		1.3	
						8.7	0.3	76	20.4		8.1		32.1		101.6		7.6		1.5		4		92				<0.2		1.1	
IM1	Cloudy	Moderate	19:05	5.0	Surface	1.0	0.1	181	20.5	20.5	8.2	8.2	32.6	32.6	110.1	110.2	8.2	8.2	3.5	4.9	5	5	87	88	817963	807138	<0.2	<0.2	0.8	0.8
						1.0	0.1	189	20.5		8.2		32.6		110.3		8.2		3.5		6		87				<0.2		0.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.1	174	20.4	20.4	8.2	8.2	32.8	32.8	105.6	105.6	7.9	7.9	6.2		4		88				<0.2		0.8	
						4.0	0.1	175	20.4		8.2		32.8		105.6		7.9		6.3		4		89				<0.2		0.8	
IM2	Cloudy	Moderate	18:57	6.9	Surface	1.0	0.1	180	20.4	20.4	8.2	8.2	32.5	32.5	110.4	110.4	8.2	8.1	3.6	4.8	6	6	85	88	818149	806152	<0.2	<0.2	0.7	0.8
						1.0	0.1	187	20.4		8.2		32.5		110.4		8.2		3.6		6		85				<0.2		0.8	
					Middle	3.5	0.2	152	20.3	20.3	8.2	8.2	32.9	32.9	107.6	107.5	8.0		4.6		6		88				<0.2		0.8	
						3.5	0.2	166	20.3		8.2		32.9		107.4		8.0		4.6		6		88				<0.2		0.8	
					Bottom	5.9	0.1	146	20.2	20.2	8.2	8.2	33.2	33.2	106.1	106.1	7.9	7.9	6.1		7		89				<0.2		0.8	
						5.9	0.1	152	20.2		8.2		33.2		106.0		7.9		6.2		7		90				<0.2		0.8	
IM3	Cloudy	Moderate	18:51	7.0	Surface	1.0	0.2	184	20.5	20.5	8.2	8.2	32.5	32.5	114.1	114.3	8.5	8.4	2.4	2.8	4	4	86	88	818773	805599	<0.2	<0.2	0.9	0.9
						1.0	0.2	186	20.5		8.2		32.5		114.4		8.5		2.4		4		85				<0.2		0.8	
					Middle	3.5	0.1	175	20.5	20.5	8.2	8.2	32.5	32.5	110.9	110.9	8.3		2.7		4		88				<0.2		0.8	
						3.5	0.1	190	20.5		8.2		32.5		110.9		8.3		2.7		4		88				<0.2		0.8	
					Bottom	6.0	0.2	176	20.3	20.3	8.2	8.2	33.0	33.0	107.6	107.6	8.0	8.0	3.4		5		90				<0.2		0.9	
						6.0	0.2	180	20.3		8.2		33.0		107.6		8.0		3.4		5		89				<0.2		0.9	
IM4	Cloudy	Moderate	18:40	7.7	Surface	1.0	0.2	180	20.6	20.6	8.2	8.2	31.9	31.9	113.8	113.9	8.5	8.5	2.6	3.5	5	4	85	88	819709	804596	<0.2	<0.2	1.0	1.0
						1.0	0.2	196	20.6		8.2		31.9		113.9		8.5		2.6		5		85				<0.2		1.0	
					Middle	3.9	0.2	155	20.5	20.5	8.2	8.2	32.2	32.2	112.6	112.6	8.4		3.0		4		88				<0.2		0.9	
						3.9	0.2	162	20.5		8.2		32.2		112.6		8.4		3.0		4		88				<0.2		1.0	
					Bottom	6.7	0.2	115	20.3	20.3	8.2	8.2	32.9	32.9	106.0	105.9	7.9	7.9	4.9		3		90				<0.2		1.0	
						6.7	0.2	117	20.3		8.2		32.9		105.8		7.9		4.9		3		90				<0.2		1.0	
IM5	Cloudy	Moderate	18:32	7.4	Surface	1.0	0.2	225	20.7	20.7	8.2	8.2	31.5	31.5	115.6	115.6	8.6	8.5	2.8	3.2	4	4	85	88	820713	804886	<0.2	<0.2	1.2	1.1
						1.0	0.3	237	20.7		8.2		31.5		115.5		8.6		2.8		4		85				<0.2		1.1	
					Middle	3.7	0.2	200	20.5	20.5	8.2	8.2	32.2	32.1	112.8	112.8	8.4		2.9		4		88				<0.2		1.1	
						3.7	0.2	200	20.5		8.2		32.1		112.7		8.4		2.9		4		88				<0.2		1.0	
					Bottom	6.4	0.2	157	20.4	20.4	8.2	8.2	32.8	32.8	108.6	108.7	8.1	8.1	4.0		4		90				<0.2		1.1	
						6.4	0.2	168	20.4		8.2		32.8		108.7		8.1		4.0		5		90				<0.2		1.1	
IM6	Cloudy	Moderate	18:24	7.3	Surface	1.0	0.1	235	20.8	20.8	8.2	8.2	31.2	31.2	115.5	115.5	8.6	8.6	3.2	3.9	4	4	85	88	821066	805816	<0.2	<0.2	1.1	1.1
						1.0	0.1	256	20.8		8.2		31.2		115.4		8.6		3.2		4		86				<0.2		1.2	
					Middle	3.7	0.1	194	20.6	20.6	8.2	8.2	32.0	32.0	113.8	113.8	8.5		4.0		4		88				<0.2		1.2	
						3.7	0.2	194	20.6		8.2		32.0		113.8		8.5		4.1		4		88				<0.2		1.0	
					Bottom	6.3	0.1	157	20.4	20.4	8.2	8.2	32.5	32.5	110.1	109.9	8.2	8.2	4.5		4		90				<0.2		1.1	
						6.3	0.1	164	20.4		8.2		32.5		109.7		8.2		4.5		4		90				<0.2		1.1	
IM7	Cloudy	Moderate	18:15	8.6	Surface	1.0	0.1	276	21.0	21.0	8.1	8.1	30.6	30.6	113.9	113.9	8.5	8.4	3.0	4.4	6	5	84	86	821352	806813	<0.2	<0.2	1.2	1.1
						1.0	0.1	299	21.0		8.1		30.6		113.9		8.5		3.0		5		83				<0.2		1.1	
					Middle	4.3	0.1	121	20.9	20.9	8.1	8.1	31.0	31.0	110.0	110.0	8.2		4.5		5		86				<0.2		1.1	
						4.3	0.1	130	20.9		8.1		31.0		110.0		8.2		4.4		5		87				<0.2		1.1	
					Bottom	7.6	0.0	142	20.5	20.5	8.1	8.1	32.2	32.2	105.6	105.6	7.9	7.9	5.7		4		89				<0.2		1.1	
						7.6	0.0	146	20.5		8.1		32.2		105.6		7.9		5.8		4		89				<0.2		1.0	
IM8	Cloudy	Rough	18:44	7.6	Surface	1.0	0.1	106	20.8	20.8	8.1	8.1	30.8	30.8	113.4	113.4	8.5	8.4	3.1	3.8	5	4	83	88	821849	808123	<0.2	<0.2	1.3	1.2
						1.0	0.1	116	20.8		8.1		30.8		113.3		8.5		3.1		5		84				<0.2		1.3	
					Middle	3.8	0.1	59	20.7	20.7	8.1	8.1	31.1	31.1	109.2	109.2	8.2		4.0		4		88				<0.2		1.2	
						3.8	0.1	63	20.7		8.1		31.1		109.2		8.2		4.0		4		88				<0.2		1.1	
					Bottom	6.6	0.0	334	20.5	20.5	8.1	8.1	31.8	31.8	108.7	108.8	8.1	8.1	4.4		4		92				<0.2		1.3	
						6.6	0.0	357	20.6		8.1		31.8		108.8		8.1		4.4		4		92				<0.2		1.2	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 17 March 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Rough	18:52	7.3	Surface	1.0	0.2	143	21.0	21.0	8.1	8.1	30.2	30.2	113.9	113.9	8.5	8.4	2.6	4.0	5	4	84	88	822089	808787	<0.2	<0.2	1.0	1.1
						1.0	0.3	144	21.0		8.1		30.2		113.9		8.5		2.6		5		84				<0.2		1.1	
					Middle	3.7	0.3	95	20.8	20.8	8.1	8.1	30.8	30.8	109.1	109.2	8.2		4.7		4		88				<0.2		1.0	
						3.7	0.3	100	20.8		8.1		30.9		109.2		8.2		4.7		4		88				<0.2		1.0	
					Bottom	6.3	0.2	90	20.6	20.6	8.1	8.1	31.7	31.7	108.2	108.2	8.1	8.1	4.8		4		91				<0.2		1.2	
						6.3	0.2	97	20.6		8.1		31.7		108.1		8.1		4.8		4		91				<0.2		1.2	
IM10	Cloudy	Rough	19:01	7.1	Surface	1.0	0.4	101	20.8	20.8	8.1	8.1	30.4	30.4	108.1	108.1	8.1	8.0	2.2	2.8	6	5	83	88	822394	809794	<0.2	<0.2	1.4	1.3
						1.0	0.5	107	20.8		8.1		30.4		108.0		8.1		2.2		6		84				<0.2		1.2	
					Middle	3.6	0.4	107	20.8	20.8	8.1	8.1	30.5	30.5	104.5	104.5	7.8		2.9		5		87				<0.2		1.2	
						3.6	0.4	110	20.8		8.1		30.5		104.5		7.8		2.9		5		87				<0.2		1.3	
					Bottom	6.1	0.3	88	20.7	20.7	8.1	8.1	31.2	31.2	104.8	104.8	7.8	7.8	3.5		4		92				<0.2		1.2	
						6.1	0.3	92	20.7		8.1		31.1		104.8		7.8		3.3		4		92				<0.2		1.2	
IM11	Cloudy	Rough	19:13	8.8	Surface	1.0	0.5	109	20.8	20.8	8.1	8.1	30.7	30.7	108.4	108.4	8.1	7.9	3.9	6.3	13	12	83	87	822053	811476	<0.2	<0.2	1.0	1.0
						1.0	0.6	113	20.8		8.1		30.7		108.4		8.1		4.0		13		83				<0.2		1.1	
					Middle	4.4	0.4	117	20.7	20.7	8.1	8.1	31.1	31.1	102.3	102.3	7.7		7.1		12		88				<0.2		1.0	
						4.4	0.4	119	20.7		8.1		31.1		102.3		7.7		7.2		12		88				<0.2		1.0	
					Bottom	7.8	0.3	100	20.6	20.6	8.1	8.1	31.2	31.2	102.5	102.5	7.7	7.7	7.6		11		91				<0.2		1.0	
						7.8	0.3	101	20.6		8.1		31.2		102.5		7.7		7.7		11		91				<0.2		1.0	
IM12	Cloudy	Rough	19:21	8.4	Surface	1.0	0.4	96	20.7	20.7	8.1	8.1	30.8	30.8	103.0	103.0	7.7	7.7	3.3	4.2	10	7	83	88	821442	812033	<0.2	<0.2	1.1	1.0
						1.0	0.4	104	20.7		8.1		30.8		102.9		7.7		3.3		9		84				<0.2		1.0	
					Middle	4.2	0.3	89	20.7	20.7	8.1	8.1	30.9	30.9	101.5	101.5	7.6		4.0		7		87				<0.2		1.0	
						4.2	0.3	92	20.7		8.1		30.9		101.4		7.6		4.1		7		87				<0.2		1.0	
					Bottom	7.4	0.2	85	20.7	20.7	8.1	8.1	31.1	31.1	100.8	100.9	7.5	7.5	5.2		5		92				<0.2		1.0	
						7.4	0.2	85	20.7		8.1		31.1		100.9		7.5		5.2		5		92				<0.2		1.0	
SR1A	Cloudy	Rough	19:44	3.8	Surface	1.0	-	-	20.8	20.8	8.1	8.1	30.8	30.8	103.1	103.2	7.7	7.7	1.6	1.9	5	6	-	-	819976	812659	-	-	-	-
						1.0	-	-	20.8		8.1		30.8		103.3		7.7		1.7		5		-				-		-	
					Middle	1.9	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						1.9	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	-	-	20.8	20.8	8.1	8.1	30.9	30.9	103.2	103.2	7.7	7.7	2.1		6		-				-		-	
						2.8	-	-	20.8		8.1		30.9		103.2		7.7		2.0		6		-				-		-	
SR2	Cloudy	Rough	19:57	5.0	Surface	1.0	0.4	92	20.7	20.7	8.1	8.1	31.0	31.0	104.1	104.2	7.8	7.8	2.7	3.3	5	5	83	86	821447	814157	<0.2	<0.2	1.1	1.1
						1.0	0.4	98	20.7		8.1		31.0		104.2		7.8		2.6		5		84				<0.2		1.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.3	94	20.7	20.7	8.0	8.0	31.2	31.2	102.3	102.3	7.7	7.7	3.8		5		89				<0.2		1.1	
						4.0	0.3	94	20.7		8.0		31.2		102.2		7.6		3.9		5		89				<0.2		1.2	
SR3	Cloudy	Rough	18:38	8.0	Surface	1.0	0.2	247	21.0	21.0	8.1	8.1	29.9	29.9	112.7	112.7	8.4	8.2	2.2	3.0	4	3	-	-	822133	807573	-	-	-	-
						1.0	0.2	257	21.0		8.1		29.9		112.6		8.4		2.2		4		-				-		-	
					Middle	4.0	0.1	211	20.8	20.8	8.1	8.1	30.9	30.9	106.4	106.5	8.0		3.1		3		-				-		-	
						4.0	0.1	228	20.8		8.1		30.9		106.6		8.0		3.1		3		-				-		-	
					Bottom	7.0	0.1	83	20.6	20.6	8.1	8.1	31.5	31.5	106.9	106.8	8.0	8.0	3.7		2		-				-		-	
						7.0	0.1	88	20.6		8.1		31.5		106.7		8.0		3.8		3		-				-		-	
SR4A	Cloudy	Calm	19:47	8.2	Surface	1.0	0.2	85	20.5	20.5	8.2	8.2	32.6	32.6	108.9	108.9	8.1	8.1	4.0	4.5	8	7	-	-	817203	807792	-	-	-	-
						1.0	0.3	87	20.5		8.2		32.6		108.8		8.1		4.0		7		-				-		-	
					Middle	4.1	0.2	88	20.4	20.4	8.2	8.2	32.7	32.7	107.4	107.4	8.0		4.5		7		-				-		-	
						4.1	0.2	89	20.4		8.2		32.7		107.3		8.0		4.5		7		-				-		-	
					Bottom	7.2	0.1	87	20.4	20.4	8.2	8.2	32.9	32.9	105.2	105.2	7.8	7.8	5.0		7		-				-		-	
						7.2	0.1	91	20.4		8.2		32.9		105.1		7.8		5.1		7		-				-		-	
SR5A	Cloudy	Calm	20:07	3.7	Surface	1.0	0.1	283	20.9	20.9	8.2	8.2	31.6	31.6	108.3	108.1	8.0	8.0	3.7	3.8	7	7	-	-	816572	810677	-	-	-	-
						1.0	0.1	310	20.9		8.2		31.6		107.9		8.0		3.7		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.7	0.0	269	20.7	20.7	8.2	8.2	32.0	32.0	104.2	104.1	7.8	7.8	3.9		8		-				-		-	
						2.7	0.0	295	20.7		8.2		32.0		104.0		7.7		3.9		8		-				-		-	
SR6A	Cloudy	Calm	20:47	4.0	Surface	1.0	0.1	45	20.9	20.9	8.1	8.1	31.0	31.0	103.3	103.2	7.7	7.7	6.2	7.3	8	9	-	-	817949	814724	-	-	-	-
						1.0	0.1	47	20.9		8.1		31.0		103.1		7.7		6.1		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	0.0	339	20.8	20.8	8.1	8.1	31.2	31.2	100.6	100.6	7.5	7.5	8.0		9		-				-		-	
						3.0	0.0	312	20.8		8.1		31.2		100.5		7.5		8.7		9		-				-		-	
SR7	Cloudy	Rough	20:44	15.8	Surface	1.0	0.6	91	20.4	20.4	8.1	8.1	32.1	32.1	99.3	99.4	7.4	7.3	0.8	1.2	4	4	-	-	823632	823725	-	-	-	-
						1.0	0.6	93	20.4		8.1		32.1		99.5		7.4		0.9		4		-				-		-	
					Middle	7.9	0.4	65	20.3	20.3	8.1	8.1	32.5	32.5	96.6	96.6	7.2		1.3		4		-				-		-	
						7.9	0.4	70	20.3		8.1		32.5		96.6		7.2		1.3		4		-				-		-	
					Bottom	14.8	0.3	44	20.3	20.3	8.1	8.1	32.5	32.5	98.6	98.6	7.4	7.4	1.4		3		-				-		-	
						14.8	0.4	47	20.3		8.1		32.5		98.5		7.4		1.4		3		-				-		-	
SR8	Cloudy	Rough	19:33	4.7	Surface	1.0	-	-	21.4	21.4	8.1	8.1	30.8	30.8	104.6	104.6	7.7	7.7	5.4	5.5	7	8	-	-	820379	811640	-	-	-	-
						1.0	-	-	21.4		8.1		30.8		104.5		7.7		5.4		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	-	-	20.7	20.7	8.1	8.1	31.0	31.0	102.7	102.7	7.7	7.7	5.5		8		-				-		-	
						3.7	-	-	20.8		8.1		31.0		102.7		7.7		5.5		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 17 March 20 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	07:30	8.1	Surface	1.0	0.2	13	20.3	20.3	8.1	8.1	32.2	32.2	108.5	108.6	8.1	8.1	2.1	2.5	6	5	84	87	815627	804266	<0.2	<0.2	0.8	0.8
						1.0	0.3	14	20.3		8.1		32.2		108.6		8.1		2.1		6		83				<0.2		0.7	
					Middle	4.1	0.1	37	20.3	20.3	8.1	8.1	32.3	32.3	108.8	108.8	8.1		2.3		4		88				<0.2		0.8	
						4.1	0.1	37	20.3		8.1		32.3		108.8		8.1		2.3		4		88				<0.2		0.6	
					Bottom	7.1	0.0	38	20.3	20.3	8.1	8.1	33.0	33.0	107.3	107.3	8.0	8.0	3.0		4		90				<0.2		0.8	
						7.1	0.0	41	20.3		8.1		33.0		107.3		8.0		2.9		4		91				<0.2		0.9	
C2	Fine	Rough	08:06	7.9	Surface	1.0	0.1	196	21.2	21.2	7.9	7.9	27.7	27.7	101.9	102.0	7.7	7.7	2.3	2.0	4	4	83	88	825693	806958	<0.2	<0.2	1.5	1.3
						1.0	0.1	200	21.2		7.9		27.7		102.0		7.7		2.3		5		84				<0.2		1.4	
					Middle	4.0	0.1	169	21.2	21.2	7.9	7.9	27.8	27.8	102.2	102.3	7.7		2.1		4		90				<0.2		1.3	
						4.0	0.2	173	21.2		7.9		27.8		102.3		7.7		2.1		4		90				<0.2		1.2	
					Bottom	6.9	0.1	130	21.0	21.0	7.9	7.9	29.9	29.9	103.0	103.1	7.7	7.7	1.7		3		91				<0.2		1.3	
						6.9	0.1	139	21.1		7.9		29.9		103.1		7.7		1.7		3		92				<0.2		1.3	
C3	Fine	Rough	06:04	10.2	Surface	1.0	0.1	200	20.5	20.5	7.8	7.8	31.5	31.5	100.5	100.5	7.5	7.4	1.1	1.2	3	2	84	87	822112	817789	<0.2	<0.2	0.8	0.8
						1.0	0.1	209	20.5		7.8		31.5		100.4		7.5		1.0		3		84				<0.2		0.8	
					Middle	5.1	0.1	246	20.4	20.4	7.8	7.8	32.0	32.0	96.9	96.9	7.2		1.2		2		87				<0.2		0.8	
						5.1	0.1	254	20.4		7.8		32.0		96.9		7.2		1.1		2		87				<0.2		0.8	
					Bottom	9.2	0.1	270	20.4	20.4	7.8	7.8	32.3	32.3	99.5	99.6	7.4	7.4	1.4		<2		91				<0.2		0.7	
						9.2	0.1	293	20.4		7.8		32.3		99.7		7.4		1.4		<2		91				<0.2		0.7	
IM1	Cloudy	Moderate	07:53	4.9	Surface	1.0	0.0	282	20.4	20.4	8.1	8.1	32.4	32.4	109.7	109.7	8.2	8.2	3.4	3.6	4	6	86	87	817926	807117	<0.2	<0.2	0.8	0.7
						1.0	0.0	299	20.4		8.1		32.4		109.6		8.2		3.4		5		86				<0.2		0.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	0.0	106	20.4	20.4	8.1	8.1	32.5	32.5	109.0	108.9	8.1	8.1	3.7		7		89				<0.2		0.7	
						3.9	0.0	109	20.4		8.1		32.5		108.8		8.1		3.7		7		88				<0.2		0.6	
IM2	Cloudy	Moderate	08:01	6.6	Surface	1.0	0.1	282	20.4	20.4	8.2	8.2	32.4	32.4	109.5	109.4	8.2	8.2	4.1	5.1	6	6	84	87	818180	806186	<0.2	<0.2	0.7	0.7
						1.0	0.1	300	20.4		8.2		32.4		109.3		8.2		4.1		6		84				<0.2		0.7	
					Middle	3.3	0.1	51	20.4	20.4	8.2	8.2	32.4	32.4	109.2	109.3	8.1		5.0		6		88				<0.2		0.7	
						3.3	0.1	55	20.4		8.2		32.4		109.3		8.2		5.0		6		87				<0.2		0.7	
					Bottom	5.6	0.1	73	20.4	20.4	8.2	8.2	32.8	32.8	108.4	108.4	8.1	8.1	6.2		7		89				<0.2		0.6	
						5.6	0.1	73	20.4		8.2		32.8		108.3		8.1		6.2		7		90				<0.2		0.7	
IM3	Cloudy	Moderate	08:13	6.7	Surface	1.0	0.1	329	20.4	20.4	8.3	8.3	32.3	32.3	109.3	109.4	8.2	8.2	3.6	5.1	5	5	84	86	818785	805590	<0.2	<0.2	0.7	0.7
						1.0	0.1	336	20.4		8.3		32.3		109.5		8.2		3.6		5		83				<0.2		0.7	
					Middle	3.4	0.0	5	20.4	20.4	8.2	8.2	32.3	32.3	109.4	109.5	8.2		4.8		5		87				<0.2		0.7	
						3.4	0.0	5	20.4		8.2		32.3		109.5		8.2		4.8		5		86				<0.2		0.7	
					Bottom	5.7	0.1	70	20.4	20.4	8.2	8.2	32.8	32.8	108.3	108.3	8.1	8.1	6.8		5		89				<0.2		0.7	
						5.7	0.1	73	20.4		8.2		32.8		108.2		8.1		6.8		5		89				<0.2		0.8	
IM4	Cloudy	Moderate	08:24	7.4	Surface	1.0	0.2	283	20.4	20.4	8.3	8.3	31.8	31.8	109.0	109.1	8.2	8.2	3.0	3.6	5	4	83	86	819708	804585	<0.2	<0.2	0.7	0.8
						1.0	0.2	310	20.4		8.3		31.8		109.1		8.2		3.0		5		83				<0.2		0.8	
					Middle	3.7	0.1	318	20.4	20.4	8.3	8.3	32.3	32.3	109.0	109.1	8.1		3.7		4		86				<0.2		1.0	
						3.7	0.1	321	20.4		8.3		32.3		109.1		8.1		3.7		4		87				<0.2		0.8	
					Bottom	6.4	0.1	13	20.4	20.4	8.3	8.3	32.5	32.5	106.5	106.5	7.9	7.9	3.9		4		89				<0.2		0.8	
						6.4	0.1	13	20.4		8.3		32.5		106.4		7.9		4.0		4		88				<0.2		0.7	
IM5	Cloudy	Moderate	08:32	7.0	Surface	1.0	0.1	287	20.8	20.8	8.2	8.2	30.3	30.3	109.2	109.2	8.2	8.2	3.0	3.6	5	4	83	86	820720	804867	<0.2	<0.2	1.1	1.1
						1.0	0.2	306	20.8		8.2		30.3		109.2		8.2		3.0		5		83				<0.2		1.1	
					Middle	3.5	0.1	3	20.4	20.4	8.3	8.3	32.3	32.3	109.8	109.8	8.2		3.5		4		87				<0.2		1.1	
						3.5	0.1	3	20.4		8.3		32.3		109.7		8.2		3.6		4		86				<0.2		1.1	
					Bottom	6.0	0.1	61	20.4	20.4	8.3	8.3	32.6	32.6	108.3	108.3	8.1	8.1	4.2		4		89				<0.2		1.1	
						6.0	0.1	61	20.4		8.3		32.6		108.3		8.1		4.1		4		88				<0.2		1.0	
IM6	Cloudy	Moderate	08:40	6.9	Surface	1.0	0.1	235	20.9	20.9	8.2	8.2	29.8	29.8	108.7	108.8	8.2	8.2	3.3	4.1	4	4	82	86	821069	805810	<0.2	<0.2	1.4	1.3
						1.0	0.1	241	20.9		8.2		29.8		108.8		8.2		3.3		4		83				<0.2		1.3	
					Middle	3.5	0.1	115	20.6	20.6	8.3	8.3	31.8	31.8	109.3	109.4	8.2		4.3		4		86				<0.2		1.2	
						3.5	0.1	124	20.6		8.3		31.8		109.4		8.2		4.4		3		87				<0.2		1.2	
					Bottom	5.9	0.1	95	20.5	20.5	8.3	8.3	32.4	32.4	107.4	107.3	8.0	8.0	4.6		3		88				<0.2		1.3	
						5.9	0.1	96	20.5		8.3		32.4		107.2		8.0		4.6		3		89				<0.2		1.2	
IM7	Cloudy	Moderate	08:48	8.3	Surface	1.0	0.2	249	21.0	21.0	8.2	8.2	29.6	29.6	108.9	108.9	8.2	8.2	3.1	3.8	4	6	83	86	821336	806819	<0.2	<0.2	1.3	1.3
						1.0	0.2	273	21.0		8.2		29.6		108.9		8.2		3.1		4		83				<0.2		1.3	
					Middle	4.2	0.1	128	20.8	20.8	8.3	8.3	30.8	30.8	108.4	108.4	8.1		3.5		5		86				<0.2		1.2	
						4.2	0.1	137	20.8		8.3		30.8		108.4		8.1		3.5		5		86				<0.2		1.4	
					Bottom	7.3	0.2	68	20.5	20.5	8.3	8.3	32.3	32.3	107.4	107.4	8.0	8.0	4.9		8		88				<0.2		1.3	
						7.3	0.2	74	20.5		8.3		32.3		107.4		8.0		4.9		8		88				<0.2		1.3	
IM8	Fine	Rough	07:39	7.4	Surface	1.0	0.2	241	21.0	21.0	7.9	7.9	29.1	29.1	107.5	107.5	8.1	8.0	4.3	4.8	7	6	85	89	821845	808142	<0.2	<0.2	1.4	1.3
						1.0	0.2	253	21.0		7.9		29.1		107.5		8.1		4.3		7		86				<0.2		1.5	
					Middle	3.7	0.1	263	21.0	21.0	7.9	7.9	29.3	29.3	105.2	105.3	7.9		4.7		6		90				<0.2		1.2	
						3.7	0.2	277	21.0		7.9		29.3		105.3		7.9		4.7		6		90				<0.2		1.5	
					Bottom	6.4	0.0	94	20.8	20.8	7.9	7.9	31.1	31.1	105.2	105.2	7.9	7.9	5.3		6		91				<0.2		1.2	
						6.4	0.0	101	20.8		7.9		31.1		105.1		7.8		5.3		6		91				<0.2		1.2	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 17 March 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Fine	Rough	07:31	7.0	Surface	1.0	0.1	81	21.1	21.1	7.9	7.9	28.9	28.9	106.9	107.0	8.0	8.0	2.9	3.3	5	4	84	88	822079	808825	<0.2	<0.2	1.3	1.2
						1.0	0.1	85	21.1		7.9		28.9		107.0		8.0		2.9		5		84				<0.2		1.3	
					Middle	3.5	0.1	69	21.1	21.1	7.9	7.9	28.9	28.9	105.4	105.4	7.9		3.2		4		90				<0.2		1.3	
						3.5	0.1	73	21.1		7.9		28.9		105.4		7.9		3.2		4		89				<0.2		1.1	
					Bottom	6.0	0.1	315	20.9	20.9	7.9	7.9	30.0	30.1	105.2	105.3	7.9	7.9	3.7		4		91				<0.2		1.0	
						6.0	0.1	344	20.9		7.9		30.1		105.3		7.9		3.8		4		91				<0.2		1.0	
IM10	Fine	Rough	07:21	7.4	Surface	1.0	0.2	78	21.0	21.0	7.9	7.9	29.1	29.1	106.6	106.6	8.0	7.9	5.2	4.4	8	6	84	88	822378	809784	<0.2	<0.2	1.1	1.4
						1.0	0.2	78	21.0		7.9		29.1		106.6		8.0		5.2		8		84				<0.2		1.1	
					Middle	3.7	0.1	113	20.8	20.8	7.9	7.9	30.0	30.0	103.3	103.4	7.8		3.9		6		90				<0.2		1.0	
						3.7	0.1	114	20.8		7.9		30.0		103.4		7.8		3.9		6		89				<0.2		1.7	
					Bottom	6.4	0.1	245	20.7	20.7	7.9	7.9	30.7	30.7	104.6	104.6	7.8	7.8	4.1		5		91				<0.2		1.6	
						6.4	0.1	256	20.7		7.9		30.7		104.6		7.8		4.1		5		92				<0.2		1.6	
IM11	Fine	Rough	07:10	8.3	Surface	1.0	0.1	244	20.6	20.6	7.9	7.9	30.9	30.9	102.0	102.0	7.6	7.5	2.9	3.3	6	5	85	88	822038	811448	<0.2	<0.2	1.1	1.1
						1.0	0.1	256	20.6		7.9		30.9		101.9		7.6		2.9		6		86				<0.2		1.2	
					Middle	4.2	0.1	284	20.6	20.6	7.9	7.9	30.9	30.9	98.9	98.9	7.4		3.0		5		87				<0.2		1.2	
						4.2	0.1	288	20.6		7.9		30.9		98.8		7.4		3.0		5		88				<0.2		1.1	
					Bottom	7.3	0.1	272	20.6	20.6	7.9	7.9	31.4	31.4	101.0	101.1	7.6	7.6	3.9		5		91				<0.2		1.2	
						7.3	0.1	289	20.6		7.9		31.4		101.2		7.6		3.8		5		91				<0.2		1.0	
IM12	Fine	Rough	07:02	7.8	Surface	1.0	0.1	312	20.7	20.7	7.9	7.9	30.8	30.8	103.2	103.2	7.7	7.6	2.3	2.9	2	4	83	88	821456	812057	<0.2	<0.2	1.0	1.1
						1.0	0.1	331	20.7		7.9		30.8		103.2		7.7		2.3		3		84				<0.2		1.0	
					Middle	3.9	0.1	300	20.7	20.7	7.9	7.9	30.9	30.9	100.1	100.2	7.5		2.6		4		90				<0.2		1.2	
						3.9	0.1	329	20.7		7.9		30.9		100.2		7.5		2.7		4		90				<0.2		1.1	
					Bottom	6.8	0.1	148	20.6	20.6	7.9	7.9	31.3	31.3	103.1	103.1	7.7	7.7	3.6		5		91				<0.2		1.2	
						6.8	0.1	158	20.6		7.9		31.3		103.1		7.7		3.6		5		91				<0.2		1.0	
SR1A	Fine	Rough	06:39	3.5	Surface	1.0	-	-	20.8	20.8	7.9	7.9	30.6	30.6	102.0	102.1	7.6	7.6	2.5	3.6	4	4	-	-	819980	812659	-	-	-	-
						1.0	-	-	20.8		7.9		30.6		102.1		7.6		2.5		4		-				-		-	
					Middle	1.8	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						1.8	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.5	-	-	20.9	20.8	7.9	7.9	30.6	30.6	104.2	104.2	7.8	7.8	4.6		3		-				-		-	
						2.5	-	-	20.8		7.9		30.6		104.2		7.8		4.6		3		-				-		-	
SR2	Fine	Rough	06:25	3.9	Surface	1.0	0.2	311	20.6	20.6	7.9	7.9	30.8	30.8	102.9	102.9	7.7	7.7	1.9	2.1	3	4	84	87	821467	814167	<0.2	<0.2	1.1	1.1
						1.0	0.2	332	20.6		7.9		30.8		102.9		7.7		1.9		3		84				<0.2		1.1	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.9	0.1	307	20.6	20.6	7.9	7.9	30.9	30.9	101.6	101.8	7.6	7.6	2.3		4		90				<0.2		1.1	
						2.9	0.1	317	20.6		7.9		30.9		101.9		7.6		2.3		4		91				<0.2		1.0	
SR3	Fine	Rough	07:45	7.8	Surface	1.0	0.1	247	21.1	21.1	7.8	7.8	28.7	28.7	105.1	105.1	7.9	8.0	2.3	3.6	5	4	-	-	822126	807572	-	-	-	-
						1.0	0.1	249	21.1		7.8		28.7		105.1		7.9		2.4		5		-				-		-	
					Middle	3.9	0.1	215	21.1	21.1	7.9	7.9	29.4	29.4	106.2	106.3	8.0		3.5		4		-				-		-	
						3.9	0.1	230	21.1		7.9		29.4		106.3		8.0		3.5		4		-				-		-	
					Bottom	6.8	0.2	5	20.7	20.7	7.9	7.9	31.0	31.0	106.4	106.3	8.0	8.0	5.1		4		-				-		-	
						6.8	0.2	5	20.7		7.9		31.0		106.2		7.9		5.0		4		-				-		-	
SR4A	Cloudy	Calm	07:08	9.2	Surface	1.0	0.2	79	20.4	20.4	8.2	8.2	32.2	32.2	110.4	110.4	8.2	8.2	3.3	4.0	4	5	-	-	817190	807796	-	-	-	-
						1.0	0.2	82	20.4		8.2		32.2		110.4		8.2		3.2		4		-				-		-	
					Middle	4.6	0.2	73	20.4	20.4	8.2	8.2	32.2	32.2	109.6	109.7	8.2		3.7		4		-				-		-	
						4.6	0.2	75	20.4		8.2		32.2		109.7		8.2		3.7		4		-				-		-	
					Bottom	8.2	0.2	55	20.4	20.4	8.2	8.2	32.5	32.5	108.4	108.5	8.1	8.1	4.8		6		-				-		-	
						8.2	0.2	58	20.4		8.2		32.5		108.6		8.1		5.0		6		-				-		-	
SR5A	Cloudy	Calm	06:48	3.8	Surface	1.0	0.1	259	20.9	20.9	8.1	8.1	31.4	31.4	109.7	109.7	8.2	8.2	3.9	4.1	5	5	-	-	816584	810689	-	-	-	-
						1.0	0.1	260	20.9		8.1		31.4		109.7		8.2		4.0		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	0.1	249	20.9	20.9	8.1	8.1	31.4	31.4	108.8	108.9	8.1	8.1	4.2		5		-				-		-	
						2.8	0.1	259	20.9		8.1		31.4		108.9		8.1		4.2		5		-				-		-	
SR6A	Cloudy	Calm	06:18	3.9	Surface	1.0	0.0	216	20.7	20.7	8.0	8.0	31.2	31.2	103.5	103.6	7.7	7.7	2.9	3.5	4	5	-	-	817970	814760	-	-	-	-
						1.0	0.0	219	20.7		8.0		31.2		103.7		7.7		2.9		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.9	0.0	257	20.8	20.8	8.0	8.0	31.3	31.3	103.2	103.2	7.7	7.7	4.0		5		-				-		-	
						2.9	0.0	266	20.8		8.0		31.3		103.1		7.7		4.0		5		-				-		-	
SR7	Fine	Moderate	05:25	17.3	Surface	1.0	0.1	288	20.3	20.3	7.9	7.9	32.3	32.3	97.5	97.5	7.3	7.3	1.3	1.5	4	3	-	-	823622	823727	-	-	-	-
						1.0	0.1	307	20.3		7.9		32.3		97.5		7.3		1.3		4		-				-		-	
					Middle	8.7	0.1	70	20.3	20.3	7.9	7.9	32.4	32.4	96.6	96.6	7.2		1.5		3		-				-		-	
						8.7	0.2	72	20.3		7.9		32.4		96.5		7.2		1.5		3		-				-		-	
					Bottom	16.3	0.1	63	20.2	20.2	7.9	7.9	32.6	32.6	95.6	95.7	7.2	7.2	1.6		2		-				-		-	
						16.3	0.1	67	20.2		7.9		32.6		95.8		7.2		1.8		2		-				-		-	
SR8	Fine	Rough	06:51	4.0	Surface	1.0	-	-	21.1	21.1	7.9	7.9	30.7	30.7	104.8	104.8	7.8	7.8	2.3	2.6	4	5	-	-	820373	811635	-	-	-	-
						1.0	-	-	21.1		7.9		30.7		104.8		7.8		2.3		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	-	-	21.0	21.0	7.9	7.9	30.7	30.7	104.5	104.6	7.8	7.8	2.8		5		-				-		-	
						3.0	-	-	21.0		7.9		30.7		104.6		7.8		2.8		5		-				-		-	

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 19 March 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	10:45	8.1	Surface	1.0	0.1	74	20.5	20.5	8.1	8.1	30.0	30.0	106.2	106.3	8.0	7.9	1.8	2.6	2	4	86	88	815614	804251	<0.2	<0.2	1.3	1.3
						1.0	0.1	75	20.5		8.1		30.0		106.3		8.0		1.8		4		86				<0.2		1.3	
					Middle	4.1	0.1	105	20.2	20.2	8.1	8.1	32.2	32.2	104.2	104.2	7.8		2.2		3	4	89				<0.2		1.2	
						4.1	0.1	109	20.2		8.1		32.2		104.2		7.8		2.1		4		89				<0.2		1.3	
					Bottom	7.1	0.0	85	20.1	20.1	8.1	8.1	33.1	33.1	101.3	101.4	7.6	7.6	3.9		5		90				<0.2		1.4	
						7.1	0.0	86	20.1		8.1		33.1		101.4		7.6		3.9		4		90				<0.2		1.3	
C2	Cloudy	Moderate	12:18	12.1	Surface	1.0	0.1	183	21.0	21.0	7.9	7.9	26.4	26.5	100.1	99.8	7.6	7.5	2.6	3.5	4	4	85	88	825665	806939	<0.2	<0.2	1.0	1.0
						1.0	0.1	191	21.0		7.9		26.5		99.5		7.6		2.7		4		86				<0.2		0.9	
					Middle	6.1	0.1	170	20.7	20.7	7.9	7.9	29.4	29.4	96.5	96.4	7.3		3.6		4		89				<0.2		1.0	
						6.1	0.1	176	20.7		7.9		29.4		96.3		7.3		3.8		4		89				<0.2		1.0	
					Bottom	11.1	0.1	307	20.6	20.6	7.9	7.9	31.1	31.1	97.9	98.2	7.3	7.4	4.1		4		89				<0.2		1.0	
						11.1	0.1	334	20.6		7.9		31.1		98.4		7.4		3.9		4		90				<0.2		1.0	
C3	Cloudy	Moderate	09:58	12.2	Surface	1.0	0.2	38	20.4	20.4	7.9	7.9	31.7	31.7	95.7	95.7	7.2	7.1	1.9	2.8	4	5	85	87	822099	817805	<0.2	<0.2	0.9	0.9
						1.0	0.2	40	20.4		7.9		31.7		95.6		7.2		2.0		4		85				<0.2		0.9	
					Middle	6.1	0.0	330	20.1	20.1	7.9	7.9	32.7	32.7	93.7	93.8	7.0		2.6		5		86				<0.2		0.9	
						6.1	0.0	340	20.1		7.9		32.7		93.8		7.0		2.6		4		87				<0.2		0.8	
					Bottom	11.2	0.1	223	20.1	20.1	7.9	7.9	32.8	32.8	93.9	93.9	7.0	7.0	3.8		4		89				<0.2		0.9	
						11.2	0.1	233	20.1		7.9		32.8		93.8		7.0		3.8		6		89				<0.2		0.9	
IM1	Cloudy	Moderate	11:05	4.6	Surface	1.0	0.1	182	20.5	20.5	8.1	8.1	31.0	31.0	101.8	101.8	7.6	7.6	2.6	2.8	4	3	87	88	817935	807114	<0.2	<0.2	1.2	1.2
						1.0	0.1	185	20.5		8.1		31.0		101.8		7.6		2.6		3		86				<0.2		1.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.1	188	20.5	20.5	8.1	8.1	31.3	31.3	98.6	98.6	7.4	7.4	2.9		3		88				<0.2		1.2	
						3.6	0.1	203	20.5		8.1		31.3		98.5		7.4		2.9		3		89				<0.2		1.1	
IM2	Cloudy	Moderate	11:13	6.6	Surface	1.0	0.1	81	20.7	20.7	8.2	8.2	29.8	29.8	106.2	106.2	8.0	7.9	1.9	3.0	4	3	85	88	818156	806146	<0.2	<0.2	1.2	1.2
						1.0	0.1	81	20.7		8.2		29.8		106.2		8.0		2.0		3		85				<0.2		1.2	
					Middle	3.3	0.1	166	20.4	20.4	8.2	8.2	31.3	31.3	102.8	102.8	7.7		3.1		3		88				<0.2		1.2	
						3.3	0.1	180	20.4		8.2		31.3		102.7		7.7		3.1		3		88				<0.2		1.2	
					Bottom	5.6	0.1	172	20.4	20.4	8.2	8.2	32.1	32.1	98.5	98.5	7.4	7.4	3.9		3		89				<0.2		1.2	
						5.6	0.1	182	20.4		8.2		32.1		98.4		7.4		3.9		3		90				<0.2		1.2	
IM3	Cloudy	Moderate	11:20	6.8	Surface	1.0	0.1	106	20.7	20.7	8.2	8.2	29.9	29.9	105.5	105.4	7.9	7.8	2.3	2.9	4	4	85	87	818782	805571	<0.2	<0.2	1.2	1.2
						1.0	0.1	114	20.7		8.2		29.9		105.3		7.9		2.3		4		85				<0.2		1.1	
					Middle	3.4	0.0	34	20.4	20.4	8.2	8.2	31.5	31.5	102.5	102.5	7.7		3.0		4		88				<0.2		1.2	
						3.4	0.0	36	20.4		8.2		31.5		102.4		7.7		3.0		3		87				<0.2		1.2	
					Bottom	5.8	0.1	186	20.4	20.4	8.2	8.2	32.0	32.0	98.1	98.1	7.3	7.3	3.4		3		89				<0.2		1.2	
						5.8	0.1	198	20.4		8.2		32.0		98.0		7.3		3.4		3		89				<0.2		1.1	
IM4	Cloudy	Moderate	11:30	7.9	Surface	1.0	0.1	167	20.7	20.7	8.2	8.2	29.8	29.8	104.8	104.8	7.9	7.8	2.3	3.3	3	3	85	87	819702	804585	<0.2	<0.2	1.3	1.3
						1.0	0.1	167	20.7		8.2		29.8		104.8		7.9		2.3		4		85				<0.2		1.2	
					Middle	4.0	0.1	152	20.4	20.4	8.2	8.2	31.7	31.7	102.9	102.9	7.7		3.4		3		88				<0.2		1.2	
						4.0	0.1	163	20.4		8.2		31.7		102.9		7.7		3.4		3		88				<0.2		1.3	
					Bottom	6.9	0.1	136	20.4	20.4	8.2	8.2	32.0	32.0	101.3	101.1	7.6	7.6	4.2		3		89				<0.2		1.3	
						6.9	0.1	136	20.4		8.2		32.0		100.9		7.5		4.2		3		89				<0.2		1.2	
IM5	Cloudy	Moderate	11:43	7.1	Surface	1.0	0.2	215	20.6	20.6	8.2	8.2	30.0	30.1	101.0	101.2	7.6	7.6	5.4	8.9	4	4	84	87	820719	804852	<0.2	<0.2	1.3	1.4
						1.0	0.2	235	20.6		8.2		30.1		101.3		7.6		5.5		4		85				<0.2		1.4	
					Middle	3.6	0.3	200	20.5	20.5	8.2	8.2	31.4	31.4	100.3	100.3	7.5		10.9		4		88				<0.2		1.3	
						3.6	0.3	215	20.5		8.2		31.4		100.2		7.5		11.0		4		88				<0.2		1.5	
					Bottom	6.1	0.2	204	20.4	20.4	8.2	8.2	31.8	31.8	97.9	97.9	7.3	7.3	10.4		4		89				<0.2		1.3	
						6.1	0.2	215	20.4		8.2		31.8		97.8		7.3		10.4		4		89				<0.2		1.4	
IM6	Cloudy	Moderate	11:52	8.1	Surface	1.0	0.1	206	20.8	20.8	8.2	8.2	29.0	29.0	100.5	100.5	7.6	7.6	3.2	4.4	4	3	85	87	821075	805839	<0.2	<0.2	1.2	1.2
						1.0	0.1	217	20.8		8.2		29.0		100.5		7.6		3.2		4		85				<0.2		1.2	
					Middle	4.1	0.1	185	20.5	20.5	8.2	8.2	31.4	31.4	100.0	99.9	7.5		4.9		3		88				<0.2		1.2	
						4.1	0.1	191	20.5		8.2		31.4		99.8		7.5		4.9		3		88				<0.2		1.3	
					Bottom	7.1	0.1	176	20.5	20.5	8.2	8.2	31.8	31.7	94.8	94.8	7.1	7.1	5.1		3		89				<0.2		1.3	
						7.1	0.1	176	20.5		8.2		31.7		94.7		7.1		5.0		3		89				<0.2		1.2	
IM7	Cloudy	Moderate	12:04	8.0	Surface	1.0	0.0	312	20.6	20.6	8.2	8.2	29.6	29.6	102.7	102.7	7.8	7.7	3.3	4.5	4	4	84	87	821362	806828	<0.2	<0.2	2.4	2.4
						1.0	0.0	321	20.6		8.2		29.6		102.6		7.7		3.4		4		84				<0.2		2.4	
					Middle	4.0	0.1	91	20.4	20.4	8.2	8.2	31.8	31.8	101.6	101.7	7.6		4.5		4		88				<0.2		2.3	
						4.0	0.1	93	20.4		8.2		31.8		101.7		7.6		4.6		4		87				<0.2		2.1	
					Bottom	7.0	0.1	152	20.4	20.4	8.2	8.2	32.0	32.0	100.1	100.1	7.5	7.5	5.6		4		88				<0.2		2.4	
						7.0	0.1	157	20.4		8.2		32.0		100.0		7.5		5.5		4		88				<0.2		2.5	
IM8	Cloudy	Moderate	11:39	7.8	Surface	1.0	0.1	199	21.0	21.0	7.9	7.9	26.5	26.5	100.4	100.4	7.7	7.6	3.8	6.7	4	3	85	88	821816	808153	<0.2	<0.2	0.9	0.9
						1.0	0.1	204	21.0		7.9		26.5		100.3		7.7		4.1		4		86				<0.2		0.9	
					Middle	3.9	0.0	302	20.7	20.7	7.9	7.9	30.0	30.0	99.6	99.6	7.5		6.5		4		88				<0.2		0.8	
						3.9	0.0	305	20.7		7.9		30.0		99.6		7.5		7.0		3		89				<0.2		0.9	
					Bottom	6.8	0.1	43	20.6	20.6	7.9	7.9	30.7	30.7	99.4	99.4	7.5	7.5	9.4		2		90				<0.2		0.8	
						6.8	0.2	43	20.6		7.9		30.7		99.4		7.5		9.1		2		90				<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 19 March 20 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	11:36	7.5	Surface	1.0	0.1	98	21.0	21.0	7.9	7.9	27.8	27.4	100.1	100.1	7.6	7.6	4.2	6.7	3	4	86	88	822113	808833	<0.2	<0.2	0.8	0.9
						1.0	0.1	105	21.0		7.9		27.1		100.0		7.6		4.5		4		85				<0.2		0.9	
					Middle	3.8	0.2	62	20.7	20.7	7.9	7.9	30.0	30.0	99.4	99.5	7.5		7.1		3		89				<0.2		0.9	
						3.8	0.2	62	20.7		7.9		30.0		99.5		7.5		7.2		4		89				<0.2		1.1	
					Bottom	6.5	0.1	75	20.6	20.6	7.9	7.9	30.7	30.7	99.0	99.1	7.4	7.4	8.6		3		90				<0.2		0.9	
						6.5	0.1	81	20.6		7.9		30.7		99.1		7.4		8.4		4		90				<0.2		1.0	
IM10	Cloudy	Moderate	11:29	8.9	Surface	1.0	0.4	105	21.1	21.1	7.9	7.9	26.9	26.9	100.9	100.9	7.7	7.6	4.4	7.0	4	4	85	88	822400	809774	<0.2	<0.2	1.6	1.6
						1.0	0.4	109	21.1		7.9		26.9		100.9		7.7		4.5		4		85				<0.2		1.7	
					Middle	4.5	0.4	98	20.7	20.7	7.9	7.9	29.9	29.9	99.7	99.8	7.5		8.7		4		88				<0.2		1.6	
						4.5	0.4	99	20.7		7.9		29.9		99.8		7.5		8.9		4		89				<0.2		1.6	
					Bottom	7.9	0.3	66	20.6	20.6	7.9	7.9	30.7	30.7	98.8	98.8	7.4	7.4	7.4		3		90				<0.2		1.6	
						7.9	0.3	72	20.6		7.9		30.7		98.8		7.4		7.9		3		90				<0.2		1.6	
IM11	Cloudy	Moderate	11:09	7.4	Surface	1.0	0.1	84	20.9	20.8	7.9	7.9	27.5	27.6	97.5	97.4	7.4	7.3	3.0	3.2	4	4	84	87	822073	811463	<0.2	<0.2	1.6	1.5
						1.0	0.1	89	20.7		7.9		27.8		97.2		7.4		3.1		4		85				<0.2		1.5	
					Middle	3.7	0.2	92	20.6	20.6	7.9	7.9	30.8	30.8	96.4	96.4	7.2		3.3		4		86				<0.2		1.6	
						3.7	0.2	101	20.6		7.9		30.8		96.4		7.2		3.3		4		86				<0.2		1.5	
					Bottom	6.4	0.1	109	20.5	20.5	7.9	7.9	31.2	31.2	96.1	96.2	7.2	7.2	3.2		4		90				<0.2		1.5	
						6.4	0.1	112	20.5		7.9		31.2		96.2		7.2		3.2		4		90				<0.2		1.5	
IM12	Cloudy	Moderate	10:59	9.7	Surface	1.0	0.3	107	20.9	20.9	7.9	7.9	28.5	28.5	100.3	100.3	7.6	7.5	2.8	2.4	4	5	86	88	821443	812037	<0.2	<0.2	0.9	1.0
						1.0	0.3	108	20.9		7.9		28.5		100.3		7.6		2.8		4		86				<0.2		1.0	
					Middle	4.9	0.2	88	20.7	20.7	7.9	7.9	30.3	30.3	98.5	98.5	7.4		2.3		5		88				<0.2		0.9	
						4.9	0.2	92	20.7		7.9		30.3		98.4		7.4		2.3		6		88				<0.2		0.9	
					Bottom	8.7	0.2	124	20.6	20.6	7.9	7.9	30.8	30.8	98.6	98.7	7.4	7.4	2.2		5		90				<0.2		1.0	
						8.7	0.2	129	20.6		7.9		30.8		98.7		7.4		2.2		6		90				<0.2		1.0	
SR1A	Cloudy	Calm	10:34	5.1	Surface	1.0	-	-	20.6	20.6	7.9	7.9	30.7	30.7	94.5	94.5	7.1	7.1	2.9	3.1	4	4	-	-	819972	812654	-	-	-	-
						1.0	-	-	20.6		7.9		30.7		94.4		7.1		3.0		4		-				-		-	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	-	-	20.6	20.6	7.9	7.9	30.7	30.7	94.9	94.9	7.1	7.1	3.3		4		-				-		-	
						4.1	-	-	20.6		7.9		30.7		94.9		7.1		3.3		4		-				-		-	
SR2	Cloudy	Moderate	10:21	4.8	Surface	1.0	0.2	12	20.6	20.6	7.9	7.9	30.8	30.8	98.9	98.9	7.4	7.4	2.3	2.2	4	5	85	86	821449	814144	<0.2	<0.2	0.8	0.9
						1.0	0.2	13	20.6		7.9		30.8		98.8		7.4		2.2		4		85				<0.2		0.9	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.2	14	20.6	20.6	7.9	7.9	30.8	30.8	98.4	98.4	7.4	7.4	2.1		5		87				<0.2		0.9	
						3.8	0.2	14	20.7		7.9		30.8		98.4		7.4		2.1		5		88				<0.2		0.8	
SR3	Cloudy	Moderate	11:44	9.2	Surface	1.0	0.1	155	21.0	21.0	7.9	7.9	26.4	26.4	98.8	98.7	7.6	7.4	3.1	5.5	4	4	-	-	822158	807592	-	-	-	-
						1.0	0.1	168	21.0		7.9		26.5		98.5		7.5		3.2		4		-				-		-	
					Middle	4.6	0.1	168	20.6	20.6	7.9	7.9	31.1	31.1	95.5	95.7	7.2		4.9		3		-				-		-	
						4.6	0.1	175	20.6		7.9		31.1		95.9		7.2		4.9		4		-				-		-	
					Bottom	8.2	0.1	300	20.6	20.6	7.8	7.8	31.1	31.1	93.2	93.3	7.0	7.0	8.2		3		-				-		-	
						8.2	0.1	325	20.6		7.8		31.1		93.3		7.0		8.5		4		-				-		-	
SR4A	Cloudy	Calm	10:24	8.8	Surface	1.0	0.2	79	20.6	20.6	8.1	8.1	30.3	30.3	103.9	103.9	7.8	7.7	2.8	4.3	5	5	-	-	817207	807801	-	-	-	-
						1.0	0.2	84	20.6		8.1		30.3		103.8		7.8		2.9		4		-				-		-	
					Middle	4.4	0.1	42	20.5	20.5	8.0	8.0	30.9	30.9	101.6	101.5	7.6		3.9		4		-				-		-	
						4.4	0.1	43	20.5		8.0		30.9		101.4		7.6		4.0		5		-				-		-	
					Bottom	7.8	0.1	63	20.5	20.5	8.0	8.0	31.5	31.5	99.8	99.9	7.5	7.5	6.0		5		-				-		-	
						7.8	0.1	66	20.5		8.0		31.5		99.9		7.5		6.0		4		-				-		-	
SR5A	Cloudy	Calm	10:05	3.5	Surface	1.0	0.1	355	20.7	20.7	8.0	8.0	31.5	31.5	96.5	96.5	7.2	7.2	4.4	5.5	5	5	-	-	816594	810708	-	-	-	-
						1.0	0.1	327	20.7		8.0		31.5		96.5		7.2		4.4		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.5	0.1	8	20.6	20.6	8.0	8.0	31.6	31.6	94.5	94.4	7.1	7.1	6.6		4		-				-		-	
						2.5	0.1	8	20.6		8.0		31.6		94.3		7.0		6.6		5		-				-		-	
SR6A	Cloudy	Calm	09:32	4.0	Surface	1.0	0.1	182	20.6	20.6	8.0	8.0	31.0	31.0	98.0	98.0	7.3	7.3	5.6	6.7	4	4	-	-	817961	814742	-	-	-	-
						1.0	0.1	189	20.6		8.0		31.0		98.0		7.3		5.2		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	0.0	202	20.6	20.6	8.0	8.0	31.1	31.1	96.2	96.2	7.2	7.2	8.0		5		-				-		-	
						3.0	0.0	207	20.6		8.0		31.1		96.2		7.2		8.0		4		-				-		-	
SR7	Cloudy	Moderate	09:26	15.2	Surface	1.0	0.1	350	20.2	20.2	7.9	7.9	32.7	32.7	94.3	94.2	7.1	7.0	1.5	1.7	4	4	-	-	823634	823723	-	-	-	-
						1.0	0.1	322	20.2		7.9		32.7		94.1		7.0		1.5		4		-				-		-	
					Middle	7.6	0.1	85	20.1	20.1	7.9	7.9	32.8	32.8	92.7	92.7	6.9		1.7		3		-				-		-	
						7.6	0.1	87	20.1		7.9		32.9		92.7		6.9		1.7		4		-				-		-	
					Bottom	14.2	0.1	209	20.0	20.0	7.9	7.9	32.9	32.9	92.8	92.8	7.0	7.0	1.8		3		-				-		-	
						14.2	0.1	226	20.0		7.9		32.9		92.8		6.9		1.8		4		-				-		-	
SR8	Cloudy	Moderate	10:48	5.0	Surface	1.0	-	-	20.9	20.9	7.9	7.9	30.6	30.6	96.4	96.5	7.2	7.2	3.8	3.7	7	6	-	-	820480	811749	-	-	-	-
						1.0	-	-	20.9		7.9		30.6		96.5		7.2		3.8		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	-	-	20.6	20.6	7.9	7.9	30.8	30.8	97.4	97.5	7.3	7.3	3.7		6		-				-		-	
						4.0	-	-	20.7		7.9		30.8		97.5		7.3		3.6		5		-				-		-	

DA: Depth-Averaged

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

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

Note: Due to safety concern, the monitoring at SR8 was shifted to the closest safe and accessible location as a precautionary measure.

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

Water Quality Monitoring

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

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Rainy	Moderate	14:54	7.8	Surface	1.0	0.1	146	20.6	20.6	8.1	8.1	31.5	31.5	94.6	94.6	7.1	7.1	2.3	3.0	2	3	86	88	815600	804267	<0.2	<0.2	1.9	1.8
						1.0	0.1	158	20.6		8.1		31.5		94.6		7.1		2.4		4		86				<0.2		1.9	
					Middle	3.9	0.1	188	20.5	20.5	8.1	8.1	32.0	32.0	93.4	93.4	7.0		2.9		3		88				<0.2		1.6	
						3.9	0.1	193	20.5		8.1		32.0		93.3		7.0		2.9		3		89				<0.2		1.6	
					Bottom	6.8	0.1	190	20.3	20.3	8.1	8.1	32.6	32.6	92.3	92.4	6.9	6.9	3.7		3		90				<0.2		1.9	
						6.8	0.1	202	20.3		8.1		32.6		92.5		6.9		3.7		3		90				<0.2		1.8	
C2	Rainy	Moderate	13:43	11.5	Surface	1.0	0.1	164	21.0	21.0	7.9	7.9	26.4	26.4	99.5	99.2	7.6	7.5	2.9	4.6	3	3	85	88	825675	806938	<0.2	<0.2	0.9	1.2
						1.0	0.1	172	21.0		7.9		26.5		98.9		7.6		3.2		3		85				<0.2		0.9	
					Middle	5.8	0.2	151	20.7	20.7	7.9	7.9	30.6	30.6	97.3	97.5	7.3		4.3		3		88				<0.2		1.1	
						5.8	0.2	153	20.7		7.9		30.6		97.7		7.3		4.3		3		88				<0.2		1.3	
					Bottom	10.5	0.4	177	20.6	20.6	7.9	7.9	31.1	31.1	98.4	98.4	7.4	7.4	6.4		3		90				<0.2		1.4	
						10.5	0.4	177	20.6		7.9		31.0		98.4		7.4		6.6		3		90				<0.2		1.6	
C3	Rainy	Moderate	15:38	12.7	Surface	1.0	0.1	222	21.0	21.0	7.8	7.8	26.5	26.5	100.3	100.1	7.7	7.5	2.8	4.7	4	4	84	88	822110	817791	<0.2	<0.2	1.4	1.4
						1.0	0.1	223	21.0		7.8		26.5		99.8		7.6		3.0		3		84				<0.2		1.5	
					Middle	6.4	0.1	234	20.7	20.7	7.8	7.8	29.7	29.7	96.7	96.9	7.3		4.3		3		89				<0.2		1.4	
						6.4	0.1	239	20.7		7.8		29.7		97.0		7.3		4.4		4		89				<0.2		1.4	
					Bottom	11.7	0.2	254	20.5	20.5	7.8	7.8	31.1	31.1	97.9	98.2	7.3	7.4	7.0		4		90				<0.2		1.3	
						11.7	0.2	266	20.5		7.8		31.1		98.4		7.4		6.7		4		90				<0.2		1.3	
IM1	Rainy	Moderate	14:34	4.8	Surface	1.0	0.1	175	20.6	20.6	8.1	8.1	30.9	30.8	97.3	97.4	7.3	7.3	1.8	1.8	4	5	86	87	817963	807144	<0.2	<0.2	2.2	2.2
						1.0	0.1	184	20.6		8.1		30.8		97.4		7.3		1.8		5		86				<0.2		2.3	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.1	170	20.6	20.6	8.1	8.1	31.4	31.4	97.2	97.2	7.3	7.3	1.8		5		88				<0.2		2.2	
						3.8	0.1	172	20.6		8.1		31.4		97.2		7.3		1.8		6		88				<0.2		2.0	
IM2	Rainy	Moderate	14:26	6.8	Surface	1.0	0.2	342	20.6	20.6	8.1	8.1	31.1	31.1	96.7	96.8	7.2	7.2	1.9	1.8	6	5	85	87	818167	806163	<0.2	<0.2	2.0	2.1
						1.0	0.2	355	20.6		8.1		31.1		96.8		7.2		1.9		5		85				<0.2		2.0	
					Middle	3.4	0.1	325	20.6	20.6	8.1	8.1	31.4	31.4	96.8	96.9	7.2		1.8		5		87				<0.2		2.1	
						3.4	0.1	350	20.6		8.1		31.4		96.9		7.2		1.8		4		88				<0.2		2.0	
					Bottom	5.8	0.1	288	20.6	20.6	8.1	8.1	31.7	31.7	96.5	96.5	7.2	7.2	1.8		4		89				<0.2		2.1	
						5.8	0.1	305	20.6		8.1		31.7		96.5		7.2		1.8		4		90				<0.2		2.2	
IM3	Rainy	Moderate	14:19	7.0	Surface	1.0	0.2	331	20.6	20.6	8.1	8.1	31.3	31.3	96.7	96.6	7.2	7.2	1.7	1.7	5	5	85	87	818772	805577	<0.2	<0.2	2.0	2.1
						1.0	0.2	343	20.6		8.1		31.3		96.5		7.2		1.7		4		85				<0.2		2.2	
					Middle	3.5	0.1	310	20.6	20.6	8.1	8.1	31.5	31.5	95.9	95.9	7.2		1.7		4		88				<0.2		2.1	
						3.5	0.1	316	20.6		8.1		31.5		95.8		7.2		1.7		5		88				<0.2		2.2	
					Bottom	6.0	0.0	243	20.5	20.5	8.1	8.1	31.9	31.9	93.9	94.0	7.0	7.0	1.8		5		89				<0.2		2.1	
						6.0	0.0	253	20.5		8.1		31.9		94.0		7.0		1.8		6		89				<0.2		2.1	
IM4	Rainy	Moderate	14:11	8.2	Surface	1.0	0.0	33	20.6	20.6	8.1	8.1	31.3	31.3	94.6	94.6	7.1	7.1	1.9	2.1	5	5	85	87	819710	804605	<0.2	<0.2	2.0	2.0
						1.0	0.0	35	20.6		8.1		31.3		94.5		7.1		1.9		4		85				<0.2		2.1	
					Middle	4.1	0.1	25	20.5	20.5	8.1	8.1	31.9	31.9	94.3	94.3	7.0		1.9		4		88				<0.2		2.0	
						4.1	0.1	25	20.5		8.1		31.9		94.3		7.0		2.0		5		88				<0.2		1.9	
					Bottom	7.2	0.1	321	20.4	20.4	8.1	8.1	32.1	32.1	93.9	94.0	7.0	7.0	2.4		4		89				<0.2		2.0	
						7.2	0.1	335	20.4		8.1		32.1		94.0		7.0		2.5		5		89				<0.2		2.2	
IM5	Rainy	Moderate	14:03	7.3	Surface	1.0	0.2	262	20.6	20.6	8.1	8.1	31.4	31.4	94.8	94.8	7.1	7.1	2.0	1.9	7	6	84	87	820727	804854	<0.2	<0.2	1.9	2.0
						1.0	0.2	281	20.6		8.1		31.4		94.8		7.1		2.0		6		85				<0.2		2.0	
					Middle	3.7	0.2	284	20.5	20.5	8.1	8.1	31.8	31.8	94.4	94.4	7.1		1.8		6		88				<0.2		1.9	
						3.7	0.2	305	20.5		8.1		31.8		94.4		7.1		1.8		5		88				<0.2		1.9	
					Bottom	6.3	0.1	39	20.5	20.5	8.1	8.1	31.9	31.9	94.8	94.8	7.1	7.1	1.8		4		90				<0.2		2.0	
						6.3	0.1	40	20.5		8.1		31.9		94.8		7.1		1.8		6		89				<0.2		2.2	
IM6	Rainy	Moderate	13:53	7.1	Surface	1.0	0.2	236	20.6	20.6	8.1	8.1	31.4	31.4	95.0	95.0	7.1	7.1	2.0	2.0	6	6	85	88	821049	805825	<0.2	<0.2	2.1	2.0
						1.0	0.2	244	20.6		8.1		31.4		95.0		7.1		2.0		5		85				<0.2		1.9	
					Middle	3.6	0.1	211	20.5	20.5	8.1	8.1	31.8	31.8	94.1	94.1	7.0		2.1		6		88				<0.2		2.1	
						3.6	0.1	211	20.5		8.1		31.8		94.0		7.0		2.1		6		88				<0.2		2.1	
					Bottom	6.1	0.1	108	20.4	20.4	8.1	8.1	32.1	32.1	93.4	93.4	7.0	7.0	2.0		6		90				<0.2		1.9	
						6.1	0.1	111	20.4		8.1		32.1		93.4		7.0		2.0		7		89				<0.2		2.0	
IM7	Rainy	Moderate	13:43	8.0	Surface	1.0	0.1	275	21.1	21.1	8.1	8.1	26.6	26.6	100.8	100.8	7.7	7.6	2.8	4.1	4	5	84	87	821372	806837	<0.2	<0.2	2.0	2.0
						1.0	0.1	276	21.1		8.1		26.6		100.7		7.7		2.9		5		85				<0.2		2.0	
					Middle	4.0	0.1	146	20.8	20.8	8.1	8.1	28.9	28.9	98.8	98.8	7.5		4.7		4		87				<0.2		2.0	
						4.0	0.1	154	20.8		8.1		28.9		98.8		7.5		4.8		5		88				<0.2		2.0	
					Bottom	7.0	0.2	158	20.6	20.6	8.2	8.2	30.9	30.9	97.2	97.2	7.3	7.3	4.6		6		89				<0.2		2.0	
						7.0	0.2	170	20.6		8.2		30.9		97.2		7.3		4.6		6		89				<0.2		2.0	
IM8	Rainy	Moderate	14:15	8.2	Surface	1.0	0.4	98	21.1	21.1	7.9	7.9	26.1	26.1	101.5	101.3	7.8	7.5	2.7	3.5	6	6	85	88	821835	808139	<0.2	<0.2	1.1	1.1
						1.0	0.4	107	21.1		7.9		26.1		101.0		7.7		2.6		5		85				<0.2		1.1	
					Middle	4.1	0.4	82	20.8	20.8	7.9	7.9	29.0	29.0	96.2	96.1	7.3		3.4		6		88				<0.2		1.2	
						4.1	0.4	83	20.7		7.9		29.0		96.0		7.3		3.7		6		89				<0.2		1.2	
					Bottom	7.2	0.1	63	20.6	20.6	7.9	7.9	30.6	30.6	97.9	98.3	7.3	7.4	4.4		6		90				<0.2		1.1	
						7.2	0.1	68	20.7		7.9		30.6		98.7		7.4		4.1		6		90				<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 19 March 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Rainy	Moderate	14:24	7.6	Surface	1.0	0.3	84	21.1	21.1	7.9	7.9	26.1	26.1	102.7	102.6	7.8	7.6	2.4	3.8	6	5	85	88	822079	808802	<0.2	<0.2	1.2	1.1
						1.0	0.3	91	21.1		7.9		26.1		102.5		7.8		2.4		5		86				<0.2		1.1	
					Middle	3.8	0.4	72	20.8	20.7	7.9	7.9	29.7	29.6	96.3	96.4	7.3		3.6		4		89				<0.2		1.1	
						3.8	0.4	78	20.7		7.9		29.5		96.5		7.3		3.9		5		89				<0.2		1.1	
					Bottom	6.6	0.2	91	20.6	20.6	7.9	7.9	31.1	31.0	97.2	97.5	7.3	7.3	5.4		4		90				<0.2		1.1	
						6.6	0.2	96	20.6		7.9		31.0		97.8		7.3		5.3		4		90				<0.2		1.1	
IM10	Rainy	Moderate	14:32	7.3	Surface	1.0	0.5	72	21.1	21.1	7.9	7.9	26.0	26.0	101.9	101.7	7.8	7.6	2.8	4.6	4	4	85	88	822407	809781	<0.2	<0.2	1.1	1.1
						1.0	0.5	73	21.1		7.9		26.0		101.5		7.8		2.8		5		85				<0.2		1.1	
					Middle	3.7	0.3	94	20.8	20.8	7.9	7.9	29.3	29.3	97.3	97.4	7.3		4.3		4		89				<0.2		1.1	
						3.7	0.3	94	20.8		7.9		29.2		97.4		7.4		4.6		4		89				<0.2		1.1	
					Bottom	6.3	0.5	76	20.6	20.6	7.9	7.9	30.9	30.9	98.6	98.9	7.4	7.4	7.0		4		90				<0.2		1.1	
						6.3	0.6	79	20.6		7.9		30.9		99.2		7.4		6.3		3		90				<0.2		1.1	
IM11	Rainy	Moderate	14:43	8.4	Surface	1.0	0.1	100	21.1	21.1	7.9	7.9	26.2	26.2	102.2	102.1	7.8	7.6	3.1	5.6	4	6	85	88	822063	811473	<0.2	<0.2	1.1	1.1
						1.0	0.1	102	21.1		7.9		26.2		102.0		7.8		3.3		5		85				<0.2		1.1	
					Middle	4.2	0.1	132	20.7	20.7	7.9	7.9	29.6	29.6	97.6	97.7	7.4		7.2		6		88				<0.2		1.1	
						4.2	0.2	144	20.7		7.9		29.6		97.7		7.4		7.1		5		89				<0.2		1.2	
					Bottom	7.4	0.2	165	20.6	20.6	7.9	7.9	30.9	30.9	98.2	98.4	7.4	7.4	6.5		7		90				<0.2		1.1	
						7.4	0.2	170	20.6		7.9		30.9		98.6		7.4		6.3		6		90				<0.2		1.1	
IM12	Rainy	Moderate	14:49	9.7	Surface	1.0	0.1	238	21.1	21.1	7.9	7.9	25.9	25.9	103.0	102.8	7.9	7.6	3.3	5.8	5	6	86	88	821471	812060	<0.2	<0.2	1.1	1.1
						1.0	0.1	246	21.1		7.9		25.9		102.6		7.9		3.6		6		86				<0.2		1.1	
					Middle	4.9	0.1	251	20.7	20.7	7.9	7.9	29.8	29.8	97.3	97.4	7.3		7.6		5		88				<0.2		1.1	
						4.9	0.1	273	20.7		7.9		29.8		97.4		7.3		7.5		6		88				<0.2		1.0	
					Bottom	8.7	0.2	166	20.6	20.6	7.9	7.9	30.7	30.7	99.7	99.8	7.5	7.5	6.6		6		90				<0.2		1.1	
						8.7	0.2	167	20.6		7.9		30.7		99.9		7.5		6.3		6		90				<0.2		1.1	
SR1A	Rainy	Calm	15:04	5.2	Surface	1.0	-	-	21.0	21.0	7.9	7.9	27.3	27.2	102.8	103.0	7.8	7.8	3.1	3.9	6	8	-	-	819979	812665	-	-	-	-
						1.0	-	-	21.0		7.9		27.1		103.1		7.8		3.2		7		-				-		-	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	-	-	20.8	20.8	7.9	7.9	29.3	29.3	102.0	102.2	7.7	7.7	5.0		9		-				-		-	
						4.2	-	-	20.8		7.9		29.2		102.4		7.7		4.1		10		-				-		-	
SR2	Rainy	Moderate	15:17	4.7	Surface	1.0	0.2	321	21.1	21.1	7.8	7.8	26.6	26.6	100.3	100.3	7.7	7.7	1.8	2.4	4	4	84	86	821447	814176	<0.2	<0.2	1.0	1.1
						1.0	0.2	326	21.1		7.8		26.6		100.2		7.6		1.9		4		84				<0.2		1.1	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.1	22	20.8	20.8	7.8	7.8	29.1	29.1	95.2	95.3	7.2	7.2	2.9		3		88				<0.2		1.1	
						3.7	0.1	23	20.8		7.8		29.1		95.3		7.2		2.9		4		89				<0.2		1.0	
SR3	Rainy	Moderate	14:04	9.6	Surface	1.0	0.4	120	21.1	21.0	7.9	7.9	26.4	26.4	100.0	99.2	7.6	7.5	2.8	4.0	3	5	-	-	822155	807567	-	-	-	-
						1.0	0.4	125	21.0		7.9		26.4		98.3		7.5		2.9		4		-				-		-	
					Middle	4.8	0.3	112	20.7	20.7	7.9	7.9	29.2	29.2	97.1	97.3	7.3		4.1		5		-				-		-	
						4.8	0.4	114	20.7		7.9		29.2		97.5		7.4		4.5		4		-				-		-	
					Bottom	8.6	0.3	109	20.6	20.6	7.9	7.9	31.1	31.1	98.8	98.9	7.4	7.4	4.9		6		-				-		-	
						8.6	0.3	118	20.6		7.9		31.0		99.0		7.4		4.7		5		-				-		-	
SR4A	Rainy	Calm	15:16	9.1	Surface	1.0	0.1	35	20.6	20.6	8.1	8.1	31.6	31.6	95.5	95.5	7.1	7.1	3.0	3.2	6	7	-	-	817197	807815	-	-	-	-
						1.0	0.1	37	20.6		8.1		31.6		95.4		7.1		3.0		5		-				-		-	
					Middle	4.6	0.3	92	20.5	20.5	8.1	8.1	32.0	32.0	93.5	93.5	7.0		2.7		8		-				-		-	
						4.6	0.3	92	20.5		8.1		32.1		93.4		7.0		2.7		7		-				-		-	
					Bottom	8.1	0.3	70	20.3	20.3	8.1	8.1	32.6	32.6	92.5	92.5	6.9	6.9	4.0		8		-				-		-	
						8.1	0.3	74	20.3		8.1		32.6		92.4		6.9		4.0		8		-				-		-	
SR5A	Rainy	Calm	15:41	3.7	Surface	1.0	0.2	87	20.6	20.6	8.1	8.1	31.8	31.8	94.1	94.1	7.0	7.0	3.0	3.0	5	6	-	-	816604	810684	-	-	-	-
						1.0	0.2	93	20.6		8.1		31.8		94.1		7.0		3.0		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.7	0.1	99	20.5	20.5	8.1	8.1	31.9	31.9	93.1	93.1	7.0	7.0	3.0		7		-				-		-	
						2.7	0.1	102	20.5		8.1		31.9		93.0		6.9		3.0		7		-				-		-	
SR6A	Rainy	Calm	16:12	4.2	Surface	1.0	0.1	146	20.6	20.6	8.1	8.1	31.7	31.7	93.5	93.5	7.0	7.0	3.0	3.1	10	8	-	-	817969	814752	-	-	-	-
						1.0	0.1	157	20.6		8.1		31.7		93.5		7.0		3.0		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.1	85	20.5	20.5	8.1	8.1	32.0	32.0	93.4	93.4	7.0	7.0	3.2		7		-				-		-	
						3.2	0.1	87	20.5		8.1		32.0		93.4		7.0		3.1		6		-				-		-	
SR7	Rainy	Moderate	16:05	15.9	Surface	1.0	0.1	274	20.8	20.8	7.8	7.8	29.6	29.6	96.4	96.2	7.3	7.1	2.6	3.5	6	7	-	-	823634	823736	-	-	-	-
						1.0	0.1	292	20.8		7.8		29.6		95.9		7.2		2.9		7		-				-		-	
					Middle	8.0	0.1	48	20.6	20.6	7.8	7.8	31.2	31.2	91.6	91.8	6.9		5.0		7		-				-		-	
						8.0	0.1	48	20.6		7.8		31.2		91.9		6.9		4.9		6		-				-		-	
					Bottom	14.9	0.1	89	20.4	20.4	7.8	7.8	31.8	31.8	91.9	91.9	6.9	6.9	2.9		7		-				-		-	
						14.9	0.1	89	20.4		7.8		31.8		91.8		6.9		2.9		8		-				-		-	
SR8	Rainy	Calm	14:54	5.1	Surface	1.0	-	-	21.1	21.1	7.9	7.9	25.8	25.8	102.4	101.5	7.8	7.8	2.7	3.3	5	5	-	-	820473	811744	-	-	-	-
						1.0	-	-	21.1		7.9		25.9		100.5		7.7		2.8		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	-	-	20.8	20.8	7.9	7.9	28.9	28.9	99.2	99.5	7.5	7.5	3.7		4		-				-		-	
						4.1	-	-	20.8		7.9		28.9		99.7		7.5		4.0		4		-				-		-	

DA: Depth-Averaged

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

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

Note: Due to safety concern, the monitoring at SR8 was shifted to the closest safe and accessible location as a precautionary measure.

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 21 March 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Moderate	12:12	8.9	Surface	1.0	0.1	236	20.8	20.8	8.0	8.0	30.8	30.8	100.3	100.3	7.5	7.4	2.6	4.4	3	3	84	87	815632	804270	<0.2	<0.2	0.9	1.0
						1.0	0.1	243	20.8		8.0		30.9		100.2		7.5		2.7		3		84				<0.2		1.1	
					Middle	4.5	0.2	232	20.2	20.2	8.0	8.0	31.9	31.9	95.3	95.4	7.2		4.3		3		87				<0.2		0.9	
						4.5	0.2	243	20.2		8.0		32.0		95.4		7.2		4.4		3		87				<0.2		0.9	
					Bottom	7.9	0.2	248	20.1	20.1	8.0	8.0	32.3	32.3	96.8	96.8	7.3	7.3	6.2		4		91				<0.2		1.0	
						7.9	0.2	269	20.1		8.0		32.3		96.8		7.3		6.1		4		91				<0.2		0.9	
C2	Foggy	Moderate	13:19	10.7	Surface	1.0	0.6	170	21.2	21.2	8.2	8.2	28.9	28.9	96.3	96.4	7.2	7.0	4.8	6.2	8	7	85	88	825669	806953	<0.2	<0.2	1.4	1.4
						1.0	0.7	174	21.2		8.2		28.9		96.5		7.2		4.9		8		85				<0.2		1.3	
					Middle	5.4	0.4	157	20.5	20.5	8.2	8.2	31.4	31.4	89.3	89.3	6.7		6.3		7		89				<0.2		1.4	
						5.4	0.4	170	20.5		8.2		31.4		89.3		6.7		6.3		7		89				<0.2		1.4	
					Bottom	9.7	0.2	138	20.5	20.5	8.2	8.2	31.6	31.6	89.4	89.5	6.7	6.7	7.4		6		89				<0.2		1.4	
						9.7	0.2	150	20.5		8.2		31.6		89.6		6.7		7.4		5		90				<0.2		1.5	
C3	Foggy	Moderate	11:03	12.4	Surface	1.0	0.2	77	20.6	20.6	8.0	8.0	31.7	31.7	91.5	91.4	6.8	6.8	2.9	3.6	4	4	85	87	822126	817822	<0.2	<0.2	1.1	1.1
						1.0	0.2	78	20.6		8.0		31.7		91.3		6.8		2.9		5		85				<0.2		1.2	
					Middle	6.2	0.2	89	20.2	20.2	8.0	8.0	32.9	32.9	89.6	89.7	6.7		3.3		4		86				<0.2		1.1	
						6.2	0.2	93	20.2		8.0		32.9		89.7		6.7		3.3		4		86				<0.2		0.9	
					Bottom	11.4	0.1	103	20.2	20.2	8.0	8.0	33.0	32.9	90.3	90.3	6.7	6.7	4.5		3		89				<0.2		1.0	
						11.4	0.1	108	20.2		8.0		32.9		90.2		6.7		4.5		3		89				<0.2		1.0	
IM1	Fine	Moderate	12:33	5.1	Surface	1.0	0.2	195	20.8	20.8	8.0	8.0	31.0	31.0	96.6	96.6	7.2	7.2	4.4	5.3	5	5	83	86	817943	807135	<0.2	<0.2	1.0	0.9
						1.0	0.3	205	20.8		8.0		31.0		96.6		7.2		4.4		6		84				<0.2		0.9	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	0.2	192	20.5	20.5	8.0	8.0	31.4	31.4	95.5	95.6	7.2	7.2	6.1		4		89				<0.2		0.9	
						4.1	0.2	194	20.5		8.0		31.4		95.6		7.2		6.2		4		89				<0.2		0.9	
IM2	Fine	Moderate	12:41	7.5	Surface	1.0	0.1	148	20.9	20.9	8.0	8.0	30.8	30.8	99.6	99.5	7.4	7.4	10.5	7.3	4	4	83	88	818163	806177	<0.2	<0.2	0.9	1.0
						1.0	0.1	158	20.9		8.0		30.8		99.4		7.4		10.8		3		83				<0.2		1.0	
					Middle	3.8	0.1	154	20.5	20.5	8.0	8.0	31.2	31.2	96.8	96.8	7.3		4.6		4		88				<0.2		1.0	
						3.8	0.1	167	20.5		8.0		31.3		96.8		7.3		4.5		4		88				<0.2		1.0	
					Bottom	6.5	0.1	179	20.4	20.4	8.0	8.0	31.7	31.7	96.1	96.2	7.2	7.2	6.7		4		92				<0.2		1.0	
						6.5	0.1	179	20.4		8.0		31.7		96.2		7.2		6.8		4		93				<0.2		0.8	
IM3	Fine	Moderate	12:49	7.9	Surface	1.0	0.3	128	21.0	21.0	8.0	8.0	29.7	29.7	101.8	101.8	7.6	7.5	2.3	3.8	5	4	83	88	818792	805600	<0.2	<0.2	1.0	1.0
						1.0	0.3	136	21.0		8.0		29.7		101.8		7.6		2.3		5		84				<0.2		1.1	
					Middle	4.0	0.2	137	20.6	20.6	8.0	8.0	31.1	31.1	97.6	97.6	7.3		3.1		5		88				<0.2		0.9	
						4.0	0.2	141	20.7		8.0		31.1		97.6		7.3		3.1		4		88				<0.2		1.0	
					Bottom	6.9	0.1	132	20.5	20.5	8.0	8.0	31.4	31.4	96.9	96.9	7.3	7.3	5.8		3		91				<0.2		1.0	
						6.9	0.1	135	20.5		8.0		31.4		96.9		7.3		5.9		3		91				<0.2		1.1	
IM4	Fine	Moderate	12:59	8.0	Surface	1.0	0.4	197	20.9	20.9	8.0	8.0	29.5	29.5	96.1	96.2	7.2	7.3	3.6	5.3	4	5	86	89	819701	804621	<0.2	<0.2	1.2	1.2
						1.0	0.4	201	20.9		8.0		29.5		96.2		7.2		3.7		4		86				<0.2		1.2	
					Middle	4.0	0.3	196	20.7	20.7	8.0	8.0	30.1	30.1	96.9	97.0	7.3		5.1		5		89				<0.2		1.2	
						4.0	0.4	213	20.7		8.0		30.1		97.0		7.3		5.1		5		90				<0.2		1.1	
					Bottom	7.0	0.4	188	20.4	20.4	8.0	8.0	31.4	31.4	96.2	96.2	7.2	7.2	7.1		5		91				<0.2		1.1	
						7.0	0.4	202	20.4		8.0		31.4		96.1		7.2		7.1		5		91				<0.2		1.1	
IM5	Fine	Moderate	13:08	7.2	Surface	1.0	0.5	215	21.0	21.0	8.0	8.0	29.0	29.0	98.5	98.6	7.4	7.3	2.6	7.0	5	4	85	89	820714	804881	<0.2	<0.2	1.2	1.2
						1.0	0.5	232	21.0		8.0		29.0		98.6		7.4		2.6		5		86				<0.2		1.2	
					Middle	3.6	0.5	204	20.6	20.6	8.0	8.0	31.1	31.1	95.5	95.5	7.2		7.2		4		89				<0.2		1.3	
						3.6	0.5	209	20.6		8.0		31.1		95.5		7.2		7.2		4		89				<0.2		1.2	
					Bottom	6.2	0.3	193	20.5	20.5	8.0	8.0	31.3	31.3	96.2	96.3	7.2	7.2	10.9		4		91				<0.2		1.2	
						6.2	0.4	205	20.5		8.0		31.3		96.3		7.2		11.2		4		92				<0.2		1.2	
IM6	Fine	Moderate	13:16	7.7	Surface	1.0	0.3	233	20.2	20.2	8.1	8.1	31.2	31.2	90.2	90.2	6.8	6.8	6.7	8.2	4	4	86	89	821075	805818	<0.2	<0.2	1.2	1.3
						1.0	0.3	244	20.2		8.1		31.2		90.2		6.8		6.7		4		85				<0.2		1.3	
					Middle	3.9	0.3	208	20.2	20.2	8.1	8.1	31.2	31.2	89.5	89.5	6.7		8.1		4		87				<0.2		1.3	
						3.9	0.3	225	20.2		8.1		31.2		89.5		6.7		8.1		4		89				<0.2		1.4	
					Bottom	6.7	0.2	204	20.2	20.2	8.1	8.1	31.2	31.2	89.7	89.7	6.8	6.8	9.8		4		91				<0.2		1.3	
						6.7	0.2	218	20.2		8.1		31.2		89.7		6.8		9.9		4		93				<0.2		1.2	
IM7	Fine	Moderate	13:29	8.1	Surface	1.0	0.2	235	20.2	20.2	8.1	8.1	29.2	29.2	97.2	97.2	7.4	7.4	3.9	4.1	5	5	83	88	821355	806842	<0.2	<0.2	1.3	1.3
						1.0	0.2	245	20.2		8.1		29.2		97.2		7.4		4.0		5		84				<0.2		1.4	
					Middle	4.1	0.1	202	20.0	20.0	8.1	8.1	29.2	29.2	96.8	96.8	7.4		3.7		4		88				<0.2		1.3	
						4.1	0.1	221	20.0		8.1		29.2		96.8		7.4		3.6		5		89				<0.2		1.3	
					Bottom	7.1	0.1	169	20.2	20.2	8.1	8.1	29.2	29.2	96.9	96.9	7.4	7.4	4.8		5		92				<0.2		1.4	
						7.1	0.1	180	20.2		8.1		29.2		96.9		7.4		4.8		5		93				<0.2		1.3	
IM8	Foggy	Moderate	12:49	7.8	Surface	1.0	0.2	171	21.1	21.1	8.1	8.1	28.6	28.6	93.2	93.2	7.0	7.0	4.9	7.3	4	4	85	88	821824	808120	<0.2	<0.2	1.5	1.5
						1.0	0.2	180	21.1		8.1		28.6		93.1		7.0		4.9		4		85				<0.2		1.5	
					Middle	3.9	0.2	176	20.8	20.8	8.2	8.2	30.0	30.0	93.6	93.6	7.0		7.0		4		88				<0.2		1.5	
						3.9	0.2	180	20.8		8.2		30.0		93.6		7.0		7.0		4		89				<0.2		1.4	
					Bottom	6.8	0.1	44	20.5	20.5	8.2	8.2	31.3	31.3	94.8	94.8	7.1	7.1	9.9		4		89				<0.2		1.5	
						6.8	0.1	44	20.5		8.2		31.3		94.7		7.1		10.0		4		90				<0.2		1.4	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 21 March 20 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	Foggy	Moderate	12:39	7.1	Surface	1.0	0.2	127	21.2	21.2	8.1	8.1	28.3	28.3	94.2	94.3	7.1	7.1	4.5	7.3	5	5	85	88	822093	808791	<0.2	<0.2	1.6	1.5
						1.0	0.2	138	21.2		8.1		28.3		94.3		7.1		4.5		5		85				<0.2		1.6	
					Middle	3.6	0.3	113	20.7	20.7	8.2	8.2	30.1	30.1	93.5	93.6	7.0		5.9		5		89				<0.2		1.5	
						3.6	0.3	118	20.7		8.2		30.1		93.6		7.0		5.9		5		88				<0.2		1.5	
					Bottom	6.1	0.2	83	20.5	20.5	8.2	8.2	31.1	31.1	94.1	94.1	7.1	7.1	11.4		4		90				<0.2		1.4	
						6.1	0.2	84	20.5		8.2		31.1		94.1		7.1		11.5		4		90				<0.2		1.4	
IM10	Foggy	Moderate	12:29	8.3	Surface	1.0	0.5	124	21.0	21.0	8.1	8.1	28.7	28.7	92.7	92.7	7.0	6.9	4.3	6.5	3	3	85	88	822398	809802	<0.2	<0.2	1.4	1.5
						1.0	0.5	124	21.0		8.1		28.7		92.7		7.0		4.3		3		85				<0.2		1.6	
					Middle	4.2	0.5	122	20.7	20.7	8.1	8.1	30.7	30.7	91.3	91.3	6.8		5.9		3		88				<0.2		1.5	
						4.2	0.6	123	20.7		8.1		30.7		91.3		6.9		5.9		3		89				<0.2		1.5	
					Bottom	7.3	0.5	113	20.6	20.6	8.1	8.1	31.3	31.3	90.5	90.5	6.8	6.8	9.4		3		90				<0.2		1.6	
						7.3	0.5	121	20.6		8.1		31.3		90.5		6.8		9.4		3		90				<0.2		1.4	
IM11	Foggy	Moderate	12:13	7.5	Surface	1.0	0.6	116	21.1	21.1	8.1	8.1	28.1	28.1	92.3	92.3	7.0	6.9	4.4	5.8	4	3	84	87	822078	811460	<0.2	<0.2	1.4	1.4
						1.0	0.6	123	21.1		8.1		28.1		92.2		7.0		4.4		3		85				<0.2		1.5	
					Middle	3.8	0.5	120	20.7	20.7	8.1	8.1	30.7	30.7	91.1	91.2	6.8		5.4		3		86				<0.2		1.5	
						3.8	0.5	121	20.7		8.1		30.7		91.2		6.8		5.4		3		86				<0.2		1.4	
					Bottom	6.5	0.3	130	20.6	20.6	8.1	8.1	31.2	31.2	90.3	90.3	6.8	6.8	7.5		3		89				<0.2		1.4	
						6.5	0.3	132	20.6		8.1		31.2		90.3		6.8		7.6		2		90				<0.2		1.4	
IM12	Foggy	Moderate	12:04	9.6	Surface	1.0	0.5	107	20.9	20.9	8.1	8.1	28.6	28.6	92.1	92.1	7.0	6.9	5.0	5.7	4	4	85	88	821471	812026	<0.2	<0.2	1.4	1.3
						1.0	0.6	115	20.9		8.1		28.6		92.1		7.0		4.9		4		86				<0.2		1.4	
					Middle	4.8	0.4	111	20.7	20.7	8.1	8.1	30.1	30.1	90.9	90.9	6.8		5.5		4		88				<0.2		1.3	
						4.8	0.4	112	20.7		8.1		30.1		90.8		6.8		5.5		4		88				<0.2		1.2	
					Bottom	8.6	0.2	109	20.6	20.6	8.1	8.1	31.2	31.2	89.7	89.7	6.7	6.7	6.5		4		90				<0.2		1.2	
						8.6	0.2	112	20.6		8.1		31.2		89.7		6.7		6.6		4		90				<0.2		1.2	
SR1A	Foggy	Moderate	11:42	5.5	Surface	1.0	-	-	20.9	20.9	8.1	8.1	30.7	30.7	90.8	90.9	6.8	6.8	4.6	6.4	5	4	-	-	819982	812663	-	-	-	-
						1.0	-	-	20.9		8.1		30.7		91.0		6.8		4.6		4		-				-		-	
					Middle	2.8	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.8	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.5	-	-	20.7	20.7	8.1	8.1	31.0	31.0	92.6	92.7	6.9	6.9	8.1		4		-				-		-	
						4.5	-	-	20.7		8.1		31.0		92.7		6.9		8.2		4		-				-		-	
SR2	Foggy	Moderate	11:29	4.8	Surface	1.0	0.2	80	20.9	20.9	8.1	8.1	30.8	30.8	92.5	92.7	6.9	6.9	4.7	8.1	6	5	85	86	821477	814142	<0.2	<0.2	1.0	1.2
						1.0	0.2	87	20.9		8.1		30.8		92.8		6.9		4.8		6		85				<0.2		1.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.1	59	20.6	20.6	8.1	8.1	31.3	31.3	91.5	91.5	6.8	6.9	11.5		3		87				<0.2		1.1	
						3.8	0.1	61	20.6		8.1		31.3		91.5		6.9		11.5		4		87				<0.2		1.1	
SR3	Foggy	Moderate	12:55	8.4	Surface	1.0	0.2	166	21.1	21.1	8.1	8.1	28.3	28.3	94.2	94.2	7.1	7.1	4.0	6.4	4	3	-	-	822136	807552	-	-	-	-
						1.0	0.2	171	21.1		8.1		28.3		94.1		7.1		4.0		4		-				-		-	
					Middle	4.2	0.1	217	20.9	20.9	8.2	8.2	29.1	29.1	92.2	92.3	7.0		5.4		3		-				-		-	
						4.2	0.1	234	20.9		8.2		29.1		92.3		7.0		5.5		3		-				-		-	
					Bottom	7.4	0.1	282	20.6	20.6	8.2	8.2	31.2	31.2	90.1	90.2	6.8	6.8	9.6		3		-				-		-	
						7.4	0.1	282	20.6		8.2		31.2		90.2		6.8		9.6		3		-				-		-	
SR4A	Fine	Moderate	11:51	10.1	Surface	1.0	0.2	94	20.6	20.6	8.0	8.0	31.4	31.4	96.6	96.6	7.2	7.1	5.0	5.5	8	7	-	-	817176	807799	-	-	-	-
						1.0	0.2	96	20.6		8.0		31.4		96.6		7.2		5.0		7		-				-		-	
					Middle	5.1	0.2	71	20.4	20.4	8.0	8.0	31.5	31.5	93.8	93.8	7.0		3.4		7		-				-		-	
						5.1	0.3	75	20.4		8.0		31.5		93.8		7.0		3.2		7		-				-		-	
					Bottom	9.1	0.2	61	20.4	20.4	8.0	8.0	31.6	31.6	95.0	95.0	7.1	7.1	8.1		7		-				-		-	
						9.1	0.2	64	20.4		8.0		31.6		95.0		7.1		8.2		6		-				-		-	
SR5A	Fine	Moderate	11:33	3.8	Surface	1.0	0.0	84	21.0	21.0	8.0	8.0	30.3	30.3	93.0	93.1	7.0	7.0	5.0	7.3	9	7	-	-	816587	810715	-	-	-	-
						1.0	0.0	87	21.0		8.0		30.4		93.1		7.0		5.0		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	0.1	125	20.7	20.7	8.0	8.0	30.7	30.7	92.1	92.2	6.9	6.9	9.6		5		-				-		-	
						2.8	0.1	132	20.7		8.0		30.7		92.2		6.9		9.7		5		-				-		-	
SR6A	Fine	Moderate	10:57	4.9	Surface	1.0	0.1	315	20.7	20.7	8.0	8.0	30.4	30.4	90.7	90.8	6.8	6.8	5.5	5.4	23	22	-	-	817951	814726	-	-	-	-
						1.0	0.2	336	20.7		8.0		30.4		90.8		6.8		5.7		22		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	0.1	326	20.7	20.7	7.9	7.9	30.4	30.4	90.6	90.6	6.8	6.8	5.2		21		-				-		-	
						3.9	0.1	356	20.7		7.9		30.4		90.6		6.8		5.2		21		-				-		-	
SR7	Foggy	Moderate	10:28	14.6	Surface	1.0	0.0	191	20.2	20.2	7.9	7.9	33.1	33.1	87.5	87.5	6.5	6.6	3.6	4.0	3	4	-	-	823640	823726	-	-	-	-
						1.0	0.0	205	20.2		7.9		33.1		87.4		6.5		3.6		3		-				-		-	
					Middle	7.3	0.0	340	20.1	20.1	7.9	7.9	33.3	33.3	88.1	88.1	6.6		4.0		4		-				-		-	
						7.3	0.0	354	20.1		7.9		33.3		88.1		6.6		4.0		4		-				-		-	
					Bottom	13.6	0.1	104	20.0	20.0	7.9	7.9	33.5	33.5	87.8	87.9	6.6	6.6	4.4		4		-				-		-	
						13.6	0.1	113	20.0		7.9		33.5		87.9		6.6		4.5		4		-				-		-	
SR8	Foggy	Moderate	11:54	5.3	Surface	1.0	-	-	21.1	21.1	8.1	8.1	30.9	30.9	91.6	91.6	6.8	6.8	6.2	9.9	5	5	-	-	820391	811643	-	-	-	-
						1.0	-	-	21.1		8.1		30.9		91.6		6.8		6.2		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	-	-	20.6	20.6	8.1	8.1	31.3	31.3	91.0	91.0	6.8	6.8	13.6		5		-				-		-	
						4.3	-	-	20.6		8.1		31.3		91.0		6.8		13.6		5		-				-		-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 21 March 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Rough	16:45	7.9	Surface	1.0	0.3	32	20.7	20.7	8.2	8.2	31.0	31.0	104.8	104.9	7.8	7.8	2.9	3.8	4	4	83	87	815602	804266	<0.2	<0.2	0.8	0.9
						1.0	0.3	32	20.7		8.2		31.0		104.9		7.8		2.9		3		84				<0.2		0.9	
					Middle	4.0	0.3	30	20.1	20.1	8.2	8.2	31.4	31.4	103.8	103.8	7.8		4.5		4		87				<0.2		0.8	
						4.0	0.3	30	20.1		8.2		31.4		103.8		7.8		4.6		4		87				<0.2		0.9	
					Bottom	6.9	0.3	35	20.7	20.7	8.2	8.2	31.0	31.0	104.3	104.3	7.8	7.8	4.1		5		91				<0.2		0.8	
						6.9	0.3	35	20.7		8.2		31.0		104.2		7.8		3.9		5		92				<0.2		1.0	
C2	Foggy	Moderate	15:46	8.5	Surface	1.0	0.4	179	21.6	21.6	8.0	8.0	27.1	27.1	93.4	93.4	7.0	6.9	3.5	4.6	3	3	85	88	825673	806951	<0.2	<0.2	1.6	1.6
						1.0	0.4	183	21.6		8.0		27.1		93.4		7.0		3.6		3		85				<0.2		1.5	
					Middle	4.3	0.3	195	20.8	20.8	8.0	8.0	29.6	29.6	90.6	90.7	6.8		5.3		3		88				<0.2		1.2	
						4.3	0.3	210	20.8		8.0		29.6		90.7		6.8		5.2		3		88				<0.2		1.6	
					Bottom	7.5	0.1	339	20.7	20.7	8.0	8.0	30.6	30.6	90.3	90.4	6.8	6.8	5.0		2		90				<0.2		1.8	
						7.5	0.1	359	20.7		8.0		30.6		90.4		6.8		5.1		2		90				<0.2		1.7	
C3	Foggy	Moderate	17:48	10.8	Surface	1.0	0.5	270	20.7	20.7	8.1	8.1	31.4	31.4	90.9	90.9	6.8	6.7	5.0	6.8	3	2	84	88	822101	817815	<0.2	<0.2	1.1	1.2
						1.0	0.5	290	20.7		8.1		31.4		90.9		6.8		5.1		3		84				<0.2		1.1	
					Middle	5.4	0.6	264	20.3	20.3	8.1	8.1	32.7	32.7	88.3	88.4	6.6		5.2		2		89				<0.2		1.2	
						5.4	0.7	277	20.3		8.1		32.7		88.4		6.6		5.2		2		89				<0.2		1.2	
					Bottom	9.8	0.4	268	20.2	20.2	8.1	8.1	32.9	32.9	87.9	87.9	6.6	6.6	10.2		<2		90				<0.2		1.1	
						9.8	0.4	285	20.2		8.1		32.9		87.8		6.6		10.3		<2		90				<0.2		1.2	
IM1	Fine	Rough	16:24	5.1	Surface	1.0	0.1	350	20.3	20.3	8.2	8.2	30.9	30.9	104.5	104.5	7.9	7.9	3.1	3.3	4	4	84	86	817970	807111	<0.2	<0.2	0.9	0.9
						1.0	0.1	322	20.3		8.2		30.9		104.5		7.9		3.1		4		84				<0.2		1.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	0.1	346	20.3	20.3	8.2	8.2	30.9	30.9	105.7	105.7	8.0	8.0	3.5		5		88				<0.2		0.9	
						4.1	0.1	318	20.3		8.2		30.9		105.7		8.0		3.6		4		88				<0.2		0.9	
IM2	Fine	Rough	16:16	7.9	Surface	1.0	0.2	2	19.9	19.9	8.2	8.2	31.1	31.1	100.0	100.0	7.6	7.6	8.1	5.6	6	5	84	89	818182	806159	<0.2	<0.2	1.0	1.0
						1.0	0.2	2	19.9		8.2		31.1		99.9		7.6		8.1		6		86				<0.2		1.0	
					Middle	4.0	0.2	358	20.1	20.1	8.2	8.2	30.8	30.8	100.2	100.2	7.6		4.8		6		88				<0.2		0.9	
						4.0	0.2	329	20.1		8.2		30.8		100.1		7.6		4.8		5		90				<0.2		0.9	
					Bottom	6.9	0.2	352	20.3	20.3	8.2	8.2	30.8	30.8	99.7	99.7	7.5	7.5	3.9		4		92				<0.2		0.9	
						6.9	0.2	324	20.3		8.2		30.8		99.6		7.5		3.9		4		93				<0.2		1.0	
IM3	Fine	Rough	16:09	8.1	Surface	1.0	0.2	351	20.2	20.2	8.1	8.1	30.5	30.5	99.1	99.2	7.5	7.5	3.6	4.7	4	5	85	89	818766	805571	<0.2	<0.2	1.0	0.9
						1.0	0.2	323	20.2		8.1		30.5		99.2		7.5		3.7		4		86				<0.2		0.9	
					Middle	4.1	0.2	332	19.9	19.9	8.2	8.2	31.4	31.4	99.2	99.2	7.5		5.7		5		88				<0.2		0.9	
						4.1	0.2	333	19.9		8.2		31.4		99.2		7.5		5.6		4		90				<0.2		0.9	
					Bottom	7.1	0.2	348	19.9	19.9	8.2	8.2	31.4	31.4	99.1	99.1	7.5	7.5	4.9		5		91				<0.2		0.8	
						7.1	0.3	320	19.9		8.2		31.4		99.1		7.5		4.8		5		93				<0.2		0.9	
IM4	Fine	Rough	15:58	7.2	Surface	1.0	0.2	293	19.7	19.7	8.1	8.1	31.3	31.3	97.6	97.6	7.4	7.5	6.1	5.2	6	5	84	89	819717	804602	<0.2	<0.2	1.0	0.9
						1.0	0.3	299	19.7		8.1		31.3		97.6		7.4		5.9		6		86				<0.2		0.8	
					Middle	3.6	0.2	292	20.1	20.1	8.1	8.1	30.0	30.0	98.0	98.1	7.5		4.2		5		88				<0.2		0.9	
						3.6	0.3	317	20.1		8.1		30.0		98.1		7.5		4.2		5		90				<0.2		0.8	
					Bottom	6.2	0.3	297	19.7	19.7	8.2	8.2	31.2	31.2	97.4	97.4	7.4	7.4	5.3		4		92				<0.2		0.9	
						6.2	0.3	324	19.7		8.2		31.2		97.4		7.4		5.3		4		93				<0.2		1.0	
IM5	Fine	Rough	15:50	8.1	Surface	1.0	0.3	249	20.4	20.4	8.1	8.1	28.3	28.3	98.1	98.1	7.5	7.5	3.4	3.2	6	4	84	89	820744	804876	<0.2	<0.2	1.6	1.5
						1.0	0.3	255	20.4		8.1		28.3		98.1		7.5		3.6		5		86				<0.2		1.5	
					Middle	4.1	0.2	249	20.4	20.4	8.1	8.1	28.3	28.3	98.0	98.0	7.5		3.8		4		88				<0.2		1.5	
						4.1	0.2	264	20.4		8.1		28.3		98.0		7.5		3.8		4		90				<0.2		1.5	
					Bottom	7.1	0.2	247	20.4	20.4	8.1	8.1	28.4	28.4	98.2	98.2	7.5	7.5	2.3		3		91				<0.2		1.5	
						7.1	0.2	266	20.4		8.1		28.4		98.2		7.5		2.5		3		92				<0.2		1.5	
IM6	Fine	Rough	15:40	8.0	Surface	1.0	0.4	247	20.2	20.2	8.1	8.1	28.5	28.5	97.4	97.4	7.5	7.5	5.9	3.9	4	4	84	89	821045	805847	<0.2	<0.2	1.4	1.5
						1.0	0.4	256	20.2		8.1		28.5		97.4		7.5		5.8		4		85				<0.2		1.4	
					Middle	4.0	0.4	258	20.1	20.1	8.1	8.1	28.7	28.7	97.2	97.2	7.5		2.6		4		87				<0.2		1.4	
						4.0	0.4	268	20.1		8.1		28.7		97.2		7.5		2.7		4		89				<0.2		1.5	
					Bottom	7.0	0.3	262	20.3	20.3	8.1	8.1	28.4	28.4	97.8	97.8	7.5	7.5	3.1		3		93				<0.2		1.5	
						7.0	0.3	281	20.3		8.1		28.4		97.8		7.5		3.1		3		94				<0.2		1.5	
IM7	Fine	Rough	15:34	8.3	Surface	1.0	0.4	234	20.3	20.3	8.1	8.1	28.6	28.6	98.9	98.9	7.6	7.6	3.6	3.5	5	6	83	88	821349	806832	<0.2	<0.2	1.5	1.5
						1.0	0.4	245	20.3		8.1		28.6		98.9		7.6		3.6		5		84				<0.2		1.5	
					Middle	4.2	0.4	260	20.3	20.3	8.1	8.1	28.6	28.6	98.8	98.8	7.5		2.4		5		87				<0.2		1.4	
						4.2	0.4	282	20.3		8.1		28.6		98.7		7.5		2.6		5		88				<0.2		1.5	
					Bottom	7.3	0.3	258	21.8	21.8	8.1	8.1	28.8	28.8	100.1	100.1	7.4	7.4	4.3		7		92				<0.2		1.4	
						7.3	0.3	266	21.8		8.1		28.8		100.1		7.4		4.2		7		93				<0.2		1.4	
IM8	Foggy	Moderate	16:11	7.9	Surface	1.0	0.3	239	21.3	21.3	8.1	8.1	28.8	28.8	96.1	96.2	7.2	7.2	4.1	6.6	4	5	85	88	821847	808153	<0.2	<0.2	1.6	1.6
						1.0	0.3	248	21.3		8.1		28.8		96.3		7.2		4.1		4		85				<0.2		1.6	
					Middle	4.0	0.2	251	21.1	21.1	8.1	8.1	29.3	29.3	94.6	94.5	7.1		6.5		4		88				<0.2		1.6	
						4.0	0.2	263	21.1		8.1		29.3		94.4		7.1		6.6		5		88				<0.2		1.6	
					Bottom	6.9	0.1	222	20.9	20.9	8.1	8.1	29.9	29.9	93.3	93.4	7.0	7.0	9.2		6		90				<0.2		1.6	
						6.9	0.1	232	20.9		8.1		29.9		93.4		7.0		9.3		6		90				<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 21 March 20 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	Foggy	Moderate	16:17	7.3	Surface	1.0	0.3	250	21.3	21.3	8.1	8.1	28.6	28.6	95.1	95.0	7.1	7.1	3.3	4.4	3	3	85	88	822102	808791	<0.2	<0.2	1.7	1.7
						1.0	0.3	251	21.3		8.1		28.6		94.9		7.1		3.3		3		86				<0.2		1.9	
					Middle	3.7	0.3	241	21.0	21.0	8.1	8.1	29.4	29.4	93.6	93.7	7.0		4.5		3		89				<0.2		1.6	
						3.7	0.3	248	21.0		8.1		29.4		93.7		7.0		4.5		3		89				<0.2		1.8	
					Bottom	6.3	0.2	252	20.8	20.8	8.1	8.1	30.3	30.3	92.8	92.8	7.0	7.0	5.3		3		90				<0.2		1.6	
						6.3	0.2	255	20.8		8.1		30.3		92.7		7.0		5.3		2		90				<0.2		1.7	
IM10	Foggy	Moderate	16:26	7.5	Surface	1.0	0.3	279	21.3	21.3	8.1	8.1	28.7	28.7	95.3	95.3	7.1	7.0	3.4	5.2	3	4	85	88	822388	809791	<0.2	<0.2	1.7	1.7
						1.0	0.3	294	21.3		8.1		28.7		95.2		7.1		3.4		3		85				<0.2		1.7	
					Middle	3.8	0.3	282	20.9	20.9	8.1	8.1	29.9	29.9	92.2	92.2	6.9		4.8		4		88				<0.2		1.7	
						3.8	0.4	309	20.9		8.1		29.9		92.2		6.9		4.9		4		89				<0.2		1.6	
					Bottom	6.5	0.3	292	20.7	20.7	8.1	8.1	30.5	30.5	90.8	90.8	6.8	6.8	7.2		5		90				<0.2		1.7	
						6.5	0.3	314	20.7		8.1		30.5		90.7		6.8		7.2		5		90				<0.2		1.7	
IM11	Foggy	Moderate	16:38	8.3	Surface	1.0	0.4	287	20.9	20.9	8.1	8.1	29.8	29.8	92.5	92.5	6.9	6.9	4.8	8.4	4	5	85	88	822065	811454	<0.2	<0.2	1.6	1.7
						1.0	0.4	301	20.9		8.1		29.8		92.5		6.9		4.8		4		85				<0.2		1.6	
					Middle	4.2	0.4	286	20.8	20.8	8.1	8.1	30.2	30.2	90.9	90.8	6.8		7.2		4		88				<0.2		1.7	
						4.2	0.5	311	20.8		8.1		30.2		90.6		6.8		7.3		5		89				<0.2		1.6	
					Bottom	7.3	0.4	303	20.7	20.7	8.1	8.1	30.7	30.7	88.9	88.9	6.7	6.7	13.0		6		90				<0.2		1.7	
						7.3	0.5	333	20.7		8.1		30.7		88.9		6.7		13.1		6		90				<0.2		1.7	
IM12	Foggy	Moderate	16:48	7.8	Surface	1.0	0.3	293	21.2	21.2	8.1	8.1	29.1	29.1	95.3	95.4	7.1	7.0	4.1	5.3	4	4	85	88	821480	812031	<0.2	<0.2	1.7	1.7
						1.0	0.3	302	21.2		8.1		29.1		95.4		7.1		4.1		3		86				<0.2		1.7	
					Middle	3.9	0.4	294	20.8	20.8	8.1	8.1	30.3	30.3	91.7	91.7	6.9		5.5		4		88				<0.2		1.8	
						3.9	0.4	304	20.8		8.1		30.3		91.7		6.9		5.4		4		88				<0.2		1.5	
					Bottom	6.8	0.4	284	20.7	20.7	8.2	8.2	30.3	30.3	90.5	90.6	6.8	6.8	6.4		5		89				<0.2		1.6	
						6.8	0.4	308	20.7		8.2		30.3		90.6		6.8		6.5		5		90				<0.2		1.7	
SR1A	Foggy	Moderate	17:09	5.6	Surface	1.0	-	-	21.2	21.2	8.1	8.1	29.6	29.6	92.8	92.8	6.9	6.9	4.5	4.8	5	6	-	-	819976	812661	-	-	-	-
						1.0	-	-	21.2		8.1		29.6		92.8		6.9		4.5		4		-				-		-	
					Middle	2.8	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.8	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.6	-	-	21.1	21.1	8.2	8.2	30.0	30.0	91.6	91.6	6.8	6.8	5.0		7		-				-		-	
						4.6	-	-	21.1		8.2		30.0		91.6		6.8		5.1		7		-				-		-	
SR2	Foggy	Moderate	17:23	5.0	Surface	1.0	0.2	86	20.9	20.9	8.1	8.1	30.6	30.6	90.5	90.6	6.8	6.8	5.4	7.0	6	5	84	86	821459	814159	<0.2	<0.2	1.7	1.7
						1.0	0.3	87	20.9		8.1		30.6		90.6		6.8		5.4		6		84				<0.2		1.7	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.2	88	20.7	20.7	8.2	8.2	31.0	31.0	89.4	89.5	6.7	6.7	8.5		5		88				<0.2		1.7	
						4.0	0.2	88	20.7		8.2		31.0		89.5		6.7		8.5		4		89				<0.2		1.7	
SR3	Foggy	Moderate	16:05	8.8	Surface	1.0	0.3	215	21.4	21.4	8.1	8.1	28.4	28.4	96.5	96.5	7.2	7.2	3.6	4.6	6	5	-	-	822169	807590	-	-	-	-
						1.0	0.3	232	21.4		8.1		28.4		96.4		7.2		3.6		6		-				-		-	
					Middle	4.4	0.2	225	21.1	21.1	8.1	8.1	29.4	29.4	96.7	96.7	7.3		4.6		5		-				-		-	
						4.4	0.2	246	21.1		8.1		29.4		96.7		7.2		4.6		5		-				-		-	
					Bottom	7.8	0.2	281	20.9	20.9	8.1	8.1	30.0	30.0	95.3	95.3	7.1	7.1	5.5		4		-				-		-	
						7.8	0.2	292	20.9		8.1		30.0		95.2		7.1		5.5		4		-				-		-	
SR4A	Fine	Moderate	17:05	10.4	Surface	1.0	0.1	334	20.2	20.2	8.2	8.2	31.6	31.6	99.6	99.6	7.5	7.6	6.1	6.6	9	8	-	-	817180	807833	-	-	-	-
						1.0	0.1	341	20.2		8.2		31.6		99.6		7.5		6.1		9		-				-		-	
					Middle	5.2	0.0	278	20.4	20.4	8.2	8.2	31.6	31.6	100.8	100.8	7.6		5.3		8		-				-		-	
						5.2	0.0	278	20.4		8.2		31.6		100.8		7.6		5.2		8		-				-		-	
					Bottom	9.4	0.0	39	20.3	20.3	8.2	8.2	31.7	31.7	99.2	99.2	7.4	7.4	8.3		6		-				-		-	
						9.4	0.0	40	20.3		8.2		31.7		99.2		7.4		8.3		7		-				-		-	
SR5A	Fine	Moderate	17:26	4.2	Surface	1.0	0.2	282	20.3	20.3	8.1	8.1	31.0	31.0	96.6	96.6	7.3	7.3	5.3	5.5	6	7	-	-	816586	810701	-	-	-	-
						1.0	0.2	289	20.3		8.1		31.0		96.6		7.3		5.3		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.2	292	20.3	20.3	8.1	8.1	31.0	31.0	96.5	96.5	7.3	7.3	5.6		9		-				-		-	
						3.2	0.2	311	20.3		8.1		31.0		96.5		7.3		5.6		8		-				-		-	
SR6A	Fine	Moderate	17:58	5.0	Surface	1.0	0.1	193	19.8	19.8	8.1	8.1	30.7	30.7	94.2	94.2	7.2	7.2	6.5	5.6	6	7	-	-	817956	814716	-	-	-	-
						1.0	0.1	204	19.8		8.1		30.7		94.2		7.2		6.5		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.2	257	20.3	20.3	8.1	8.1	30.8	30.8	95.9	95.9	7.2	7.2	4.6		7		-				-		-	
						4.0	0.2	264	20.3		8.1		30.8		95.9		7.2		4.6		7		-				-		-	
SR7	Foggy	Moderate	18:33	14.4	Surface	1.0	0.2	342	20.3	20.3	8.1	8.1	32.8	32.8	88.5	88.5	6.6	6.6	3.3	4.4	2	3	-	-	823642	823730	-	-	-	-
						1.0	0.2	352	20.3		8.1		32.8		88.5		6.6		3.4		2		-				-		-	
					Middle	7.2	0.2	27	20.2	20.2	8.1	8.1	33.1	33.1	87.9	87.9	6.6		4.4		3		-				-		-	
						7.2	0.2	27	20.2		8.1		33.1		87.8		6.5		4.4		4		-				-		-	
					Bottom	13.4	0.2	50	20.2	20.2	8.1	8.1	33.2	33.2	88.1	88.1	6.6	6.6	5.5		5		-				-		-	
						13.4	0.2	52	20.2		8.1		33.2		88.0		6.6		5.5		4		-				-		-	
SR8	Foggy	Moderate	16:59	5.4	Surface	1.0	-	-	21.1	21.1	8.1	8.1	29.3	29.3	93.9	93.9	7.0	7.0	4.8	5.7	4	4	-	-	820379	811607	-	-	-	-
						1.0	-	-	21.1		8.1		29.3		93.9		7.0		4.8		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	-	-	21.2	21.2	8.2	8.2	29.6	29.6	93.3	93.3	7.0	7.0	6.6		4		-				-		-	
						4.4	-	-	21.2		8.2		29.6		93.2		7.0		6.6		4		-				-		-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 24 March 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Moderate	12:43	8.2	Surface	1.0	0.4	210	22.0	22.0	8.3	8.3	28.4	28.4	98.2	98.1	7.3	7.2	3.6	4.3	6	7	84	89	815631	804260	<0.2	<0.2	1.3	1.3
						1.0	0.4	228	22.0		8.3		28.4		98.0		7.3		3.6		5		85				<0.2		1.3	
					Middle	4.1	0.2	186	21.1	21.1	8.2	8.2	30.0	30.1	95.1	95.3	7.1		4.4		7		89				<0.2		1.3	
						4.1	0.2	186	21.0		8.2		30.1		95.4		7.1		4.6		6		90				<0.2		1.2	
					Bottom	7.2	0.3	181	20.9	20.9	8.2	8.2	31.4	31.3	95.7	95.8	7.1	7.1	4.8		8		93				<0.2		1.3	
						7.2	0.3	186	20.9		8.2		31.3		95.8		7.1		4.6		8		94				<0.2		1.3	
C2	Fine	Moderate	11:44	11.3	Surface	1.0	0.3	101	22.4	22.4	8.1	8.1	25.7	25.7	92.8	92.8	6.9	6.7	2.7	6.6	6	6	85	88	825687	806935	<0.2	<0.2	1.8	1.9
						1.0	0.3	101	22.4		8.1		25.7		92.7		6.9		2.7		7		85				<0.2		1.8	
					Middle	5.7	0.3	125	21.8	21.8	8.1	8.1	27.9	27.9	87.6	87.6	6.5		7.4		6		88				<0.2		1.8	
						5.7	0.3	126	21.8		8.1		27.9		87.5		6.5		7.6		6		89				<0.2		2.0	
					Bottom	10.3	0.3	173	21.4	21.4	8.1	8.1	29.6	29.6	87.1	87.1	6.5	6.5	9.4		7		90				<0.2		1.9	
						10.3	0.3	176	21.4		8.1		29.6		87.1		6.5		9.9		6		90				<0.2		1.9	
C3	Fine	Moderate	13:44	11.7	Surface	1.0	0.4	82	21.7	21.7	8.2	8.2	30.0	30.0	89.3	89.3	6.6	6.6	1.2	3.0	5	6	84	87	822111	817809	<0.2	<0.2	1.4	1.5
						1.0	0.4	82	21.7		8.2		30.0		89.3		6.6		1.3		5		84				<0.2		1.5	
					Middle	5.9	0.3	99	21.6	21.6	8.2	8.2	30.4	30.4	88.2	88.2	6.5		1.9		6		89				<0.2		1.5	
						5.9	0.3	101	21.6		8.2		30.4		88.2		6.5		2.0		6		85				<0.2		1.5	
					Bottom	10.7	0.2	65	21.0	21.0	8.2	8.2	31.6	31.6	86.8	86.8	6.4	6.4	5.6		6		90				<0.2		1.5	
						10.7	0.3	66	21.0		8.2		31.6		86.8		6.4		5.9		6		90				<0.2		1.4	
IM1	Fine	Calm	12:25	5.2	Surface	1.0	0.2	225	22.1	22.1	8.2	8.2	28.3	28.3	94.9	94.2	7.0	7.0	7.8	10.1	8	8	90	92	817951	807126	<0.2	<0.2	1.4	1.3
						1.0	0.2	235	22.1		8.2		28.4		93.5		6.9		8.6		8		90				<0.2		1.3	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.1	186	21.5	21.5	8.2	8.2	29.3	29.3	96.8	96.9	7.2	7.2	12.2		8		93				<0.2		1.3	
						4.2	0.1	192	21.5		8.2		29.3		96.9		7.2		11.9		8		93				<0.2		1.3	
IM2	Fine	Moderate	12:19	7.2	Surface	1.0	0.2	199	22.0	22.0	8.3	8.3	28.6	28.6	94.5	94.6	7.0	7.0	7.3	9.3	8	9	89	92	818154	806154	<0.2	<0.2	1.3	1.3
						1.0	0.2	212	22.0		8.3		28.6		94.6		7.0		7.4		8		89				<0.2		1.3	
					Middle	3.6	0.2	184	21.2	21.2	8.3	8.3	30.2	30.2	93.5	93.6	7.0		8.9		9		93				<0.2		1.2	
						3.6	0.2	195	21.2		8.3		30.2		93.6		7.0		9.0		10		93				<0.2		1.3	
					Bottom	6.2	0.2	157	21.1	21.1	8.3	8.3	30.3	30.3	95.3	95.4	7.1	7.1	11.6		10		94				<0.2		1.3	
						6.2	0.2	158	21.1		8.3		30.3		95.5		7.1		11.7		9		95				<0.2		1.2	
IM3	Fine	Moderate	12:13	7.4	Surface	1.0	0.1	217	22.0	22.0	8.3	8.3	28.7	28.7	94.7	94.7	7.0	7.1	6.7	8.0	10	11	87	91	818764	805597	<0.2	<0.2	1.5	1.4
						1.0	0.1	234	22.0		8.3		28.7		94.7		7.0		6.8		10		88				<0.2		1.4	
					Middle	3.7	0.1	130	21.5	21.4	8.2	8.2	29.6	29.7	95.5	95.4	7.1		8.1		10		91				<0.2		1.3	
						3.7	0.1	138	21.4		8.2		29.7		95.3		7.1		8.5		11		92				<0.2		1.4	
					Bottom	6.4	0.2	124	21.3	21.3	8.2	8.2	30.3	30.3	95.8	95.8	7.1	7.1	8.9		12		94				<0.2		1.5	
						6.4	0.2	132	21.3		8.2		30.3		95.8		7.1		8.8		12		94				<0.2		1.3	
IM4	Sunny	Moderate	12:03	8.2	Surface	1.0	0.2	252	22.0	21.9	8.3	8.3	28.6	28.6	96.2	95.8	7.1	7.1	7.6	10.3	9	9	86	90	819711	804614	<0.2	<0.2	1.3	1.3
						1.0	0.2	267	21.8		8.3		28.7		95.3		7.1		7.9		8		87				<0.2		1.3	
					Middle	4.1	0.1	124	21.1	21.1	8.2	8.2	30.4	30.4	93.3	93.3	7.0		10.1		9		90				<0.2		1.3	
						4.1	0.1	134	21.1		8.2		30.4		93.3		7.0		10.2		8		91				<0.2		1.2	
					Bottom	7.2	0.1	100	21.0	21.0	8.2	8.2	30.5	30.5	93.3	93.7	7.0	7.0	13.0		11		93				<0.2		1.2	
						7.2	0.1	100	21.1		8.2		30.5		94.1		7.0		12.9		10		94				<0.2		1.4	
IM5	Sunny	Moderate	11:56	7.5	Surface	1.0	0.3	241	22.3	22.3	8.2	8.2	26.0	26.0	94.7	94.5	7.1	7.0	4.7	8.2	6	6	85	90	820744	804887	<0.2	<0.2	1.4	1.4
						1.0	0.3	247	22.3		8.2		26.0		94.3		7.1		4.8		5		87				<0.2		1.4	
					Middle	3.8	0.1	24	21.4	21.4	8.2	8.2	29.7	29.7	92.0	92.1	6.9		9.0		6		90				<0.2		1.3	
						3.8	0.1	26	21.4		8.2		29.7		92.2		6.9		9.2		5		91				<0.2		1.4	
					Bottom	6.5	0.1	90	21.2	21.2	8.2	8.2	29.9	29.9	93.3	93.4	7.0	7.0	10.6		6		94				<0.2		1.4	
						6.5	0.1	93	21.2		8.2		29.9		93.5		7.0		10.6		7		95				<0.2		1.4	
IM6	Sunny	Moderate	11:50	7.6	Surface	1.0	0.1	213	22.2	22.2	8.2	8.2	25.6	25.6	93.8	93.8	7.0	6.9	5.5	8.2	6	6	87	91	821073	805811	<0.2	<0.2	1.6	1.6
						1.0	0.2	217	22.2		8.2		25.6		93.8		7.0		5.6		6		87				<0.2		1.7	
					Middle	3.8	0.0	20	21.5	21.5	8.2	8.2	29.1	29.1	90.8	90.8	6.8		8.8		6		90				<0.2		1.6	
						3.8	0.0	21	21.5		8.2		29.1		90.8		6.8		8.9		5		91				<0.2		1.7	
					Bottom	6.6	0.2	90	21.5	21.5	8.2	8.2	29.2	29.2	91.8	91.9	6.8	6.8	10.1		6		93				<0.2		1.5	
						6.6	0.2	90	21.5		8.2		29.2		91.9		6.8		10.1		5		95				<0.2		1.6	
IM7	Sunny	Moderate	11:44	8.8	Surface	1.0	0.2	215	22.3	22.3	8.2	8.2	25.6	25.6	91.8	91.8	6.9	6.8	6.0	9.7	6	6	88	90	821365	806838	<0.2	<0.2	1.7	1.8
						1.0	0.2	215	22.3		8.2		25.7		91.7		6.9		6.1		6		88				<0.2		1.8	
					Middle	4.4	0.1	129	21.5	21.5	8.2	8.2	29.0	29.0	90.1	90.1	6.7		10.5		6		89				<0.2		1.8	
						4.4	0.1	131	21.5		8.2		29.0		90.1		6.7		10.5		6		89				<0.2		2.0	
					Bottom	7.8	0.0	139	21.5	21.5	8.2	8.2	29.0	29.0	90.1	90.2	6.7	6.7	12.8		6		92				<0.2		1.8	
						7.8	0.0	141	21.5		8.2		29.1		90.3		6.7		12.5		7		92				<0.2		1.7	
IM8	Fine	Moderate	12:12	7.6	Surface	1.0	0.2	100	22.5	22.5	8.2	8.2	25.5	25.5	92.3	92.2	6.9	6.9	2.4	4.1	6	5	86	88	821811	808144	<0.2	<0.2	1.7	1.7
						1.0	0.2	106	22.5		8.2		25.5		92.1		6.9		2.5		5		86				<0.2		1.7	
					Middle	3.8	0.3	101	21.8	21.8	8.2	8.2	26.7	26.7	90.2	90.4	6.8		4.5		5		86				<0.2		1.7	
						3.8	0.3	102	21.8		8.2		26.7		90.5		6.8		4.5		6		87				<0.2		1.7	
					Bottom	6.6	0.2	63	21.6	21.6	8.3	8.3	29.0	29.0	91.5	91.5	6.8	6.8	5.5		5		90				<0.2		1.7	
						6.6	0.3	63	21.6		8.3		29.0		91.5		6.8		5.3		5		90				<0.2		1.8	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 24 March 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Fine	Moderate	12:19	7.3	Surface	1.0	0.3	100	22.6	22.5	8.2	8.2	25.4	25.4	93.3	93.3	7.0	7.0	2.6	6.7	6	6	86	88	822087	808823	<0.2	<0.2	1.8	1.7
						1.0	0.3	108	22.5		8.2		25.4		93.3		7.0		2.9		6		86				<0.2		1.7	
					Middle	3.7	0.4	80	21.7	21.7	8.2	8.2	27.9	27.9	91.7	91.7	6.9		7.3		6		88				<0.2		1.7	
						3.7	0.4	87	21.7		8.2		28.0		91.7		6.9		7.6		6		89				<0.2		1.6	
					Bottom	6.3	0.3	71	21.7	21.7	8.3	8.3	28.7	28.7	91.9	92.0	6.8	6.8	9.9		7		90				<0.2		1.7	
						6.3	0.3	77	21.7		8.3		28.7		92.0		6.8		10.0		6		90				<0.2		1.7	
IM10	Fine	Moderate	12:30	7.9	Surface	1.0	0.6	117	22.3	22.3	8.2	8.2	25.8	25.8	91.5	91.5	6.9	6.8	4.5	8.8	4	6	86	89	822386	809775	<0.2	<0.2	1.8	1.8
						1.0	0.6	128	22.2		8.2		25.9		91.5		6.9		5.1		6		86				<0.2		1.7	
					Middle	4.0	0.5	103	21.8	21.8	8.3	8.3	28.3	28.2	89.2	89.2	6.6		9.6		7		90				<0.2		1.8	
						4.0	0.5	106	21.8		8.3		28.2		89.1		6.6		9.7		6		90				<0.2		1.7	
					Bottom	6.9	0.3	117	21.6	21.6	8.2	8.2	29.0	29.0	90.0	90.1	6.7	6.7	12.1		6		90				<0.2		1.7	
						6.9	0.3	122	21.6		8.2		29.0		90.1		6.7		11.8		7		90				<0.2		1.8	
IM11	Fine	Moderate	12:41	7.5	Surface	1.0	0.6	109	22.4	22.4	8.2	8.2	25.9	25.9	91.7	91.7	6.8	6.8	1.6	3.1	5	6	85	88	822036	811456	<0.2	<0.2	1.8	1.7
						1.0	0.7	116	22.4		8.2		25.9		91.6		6.8		1.6		6		86				<0.2		1.6	
					Middle	3.8	0.5	115	22.0	22.0	8.2	8.2	27.9	27.9	90.3	90.2	6.7		2.9		6		88				<0.2		1.7	
						3.8	0.5	121	22.0		8.2		27.9		90.1		6.7		3.1		5		88				<0.2		1.7	
					Bottom	6.5	0.2	126	21.8	21.8	8.2	8.2	28.6	28.6	90.3	90.4	6.7	6.7	4.7		6		90				<0.2		1.6	
						6.5	0.2	129	21.8		8.2		28.6		90.4		6.7		4.7		6		90				<0.2		1.6	
IM12	Fine	Moderate	12:48	9.9	Surface	1.0	0.6	114	22.2	22.2	8.2	8.2	26.3	26.3	89.8	89.8	6.7	6.7	3.8	4.4	10	8	85	88	821474	812065	<0.2	<0.2	1.6	1.7
						1.0	0.6	115	22.2		8.2		26.3		89.8		6.7		3.8		9		85				<0.2		1.7	
					Middle	5.0	0.4	105	21.8	21.8	8.2	8.2	28.7	28.7	88.9	88.9	6.6		4.1		7		89				<0.2		1.6	
						5.0	0.4	110	21.8		8.2		28.7		88.9		6.6		4.3		8		90				<0.2		1.7	
					Bottom	8.9	0.2	93	21.7	21.7	8.2	8.2	29.0	29.0	89.1	89.2	6.6	6.6	5.2		8		90				<0.2		1.7	
						8.9	0.2	93	21.7		8.2		29.0		89.2		6.6		5.1		7		90				<0.2		1.7	
SR1A	Fine	Calm	13:10	4.9	Surface	1.0	-	-	22.7	22.7	8.2	8.2	28.0	28.0	91.9	91.8	6.8	6.8	1.1	1.4	8	7	-	-	819974	812664	-	-	-	-
						1.0	-	-	22.6		8.2		28.0		91.7		6.7		1.2		7		-				-		-	
					Middle	2.5	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.5	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	-	-	22.1	22.2	8.2	8.2	28.5	28.5	90.3	90.5	6.7	6.7	1.7		7		-				-		-	
						3.9	-	-	22.2		8.2		28.4		90.7		6.7		1.5		6		-				-		-	
SR2	Fine	Moderate	13:24	4.4	Surface	1.0	0.5	87	22.4	22.3	8.2	8.2	26.6	26.6	92.0	91.7	6.9	6.9	3.5	4.6	5	5	85	87	821471	814143	<0.2	<0.2	1.2	1.1
						1.0	0.5	90	22.2		8.2		26.7		91.3		6.8		4.0		5		85				<0.2		1.1	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.3	85	22.0	22.0	8.2	8.2	28.8	28.8	91.3	91.3	6.8	6.8	5.5		4		89				<0.2		1.1	
						3.4	0.4	92	22.0		8.2		28.8		91.2		6.8		5.5		5		89				<0.2		1.1	
SR3	Fine	Moderate	12:04	9.2	Surface	1.0	0.2	157	22.3	22.3	8.1	8.1	25.3	25.3	90.5	90.5	6.8	6.8	2.4	8.6	5	5	-	-	822128	807549	-	-	-	-
						1.0	0.2	163	22.3		8.1		25.3		90.4		6.8		2.5		5		-				-		-	
					Middle	4.6	0.2	162	21.8	21.8	8.2	8.2	27.5	27.4	90.6	90.7	6.8		10.6		5		-				-		-	
						4.6	0.2	165	21.8		8.2		27.3		90.7		6.8		10.6		5		-				-		-	
					Bottom	8.2	0.2	59	21.7	21.7	8.2	8.2	29.1	29.1	90.2	90.2	6.7	6.7	12.7		6		-				-		-	
						8.2	0.2	64	21.7		8.2		29.1		90.1		6.7		12.6		5		-				-		-	
SR4A	Fine	Moderate	13:05	8.3	Surface	1.0	0.2	54	21.8	21.8	8.2	8.2	28.9	29.0	94.9	94.8	7.0	7.0	8.5	9.8	10	9	-	-	817200	807825	-	-	-	-
						1.0	0.3	54	21.8		8.2		29.0		94.7		7.0		8.6		10		-				-		-	
					Middle	4.2	0.3	60	21.2	21.2	8.2	8.2	30.0	30.0	93.2	93.3	6.9		10.8		9		-				-		-	
						4.2	0.3	62	21.2		8.2		30.0		93.3		7.0		10.9		10		-				-		-	
					Bottom	7.3	0.3	47	21.2	21.2	8.2	8.2	30.1	30.1	95.1	95.2	7.1	7.1	10.1		9		-				-		-	
						7.3	0.3	51	21.2		8.2		30.1		95.2		7.1		10.0		8		-				-		-	
SR5A	Fine	Calm	13:21	3.7	Surface	1.0	0.1	359	22.8	22.8	8.2	8.2	27.8	27.9	95.5	95.6	7.0	7.0	8.2	8.4	9	9	-	-	816580	810676	-	-	-	-
						1.0	0.1	330	22.7		8.2		27.9		95.6		7.0		8.2		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.7	0.1	102	22.4	22.6	8.2	8.2	27.9	27.8	96.7	97.0	7.1	7.1	9.0		9		-				-		-	
						2.7	0.1	108	22.8		8.2		27.7		97.2		7.1		8.2		8		-				-		-	
SR6A	Fine	Calm	13:54	4.2	Surface	1.0	0.1	4	22.6	22.5	8.1	8.1	27.7	27.7	95.9	95.9	7.1	7.1	10.4	11.7	8	9	-	-	817960	814753	-	-	-	-
						1.0	0.1	4	22.5		8.1		27.8		95.8		7.1		11.0		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.0	340	22.4	22.4	8.0	8.0	27.6	27.6	96.9	96.9	7.2	7.2	12.6		9		-				-		-	
						3.2	0.0	313	22.5		8.0		27.6		96.9		7.2		12.7		9		-				-		-	
SR7	Fine	Moderate	14:13	15.9	Surface	1.0	0.7	59	22.5	22.5	8.2	8.2	29.2	29.2	91.1	91.1	6.7	6.6	2.0	2.1	5	4	-	-	823637	823754	-	-	-	-
						1.0	0.8	62	22.5		8.2		29.2		91.1		6.7		2.0		4		-				-		-	
					Middle	8.0	0.4	25	21.3	21.3	8.2	8.2	31.2	31.2	87.7	87.7	6.5		2.1		4		-				-		-	
						8.0	0.4	26	21.3		8.2		31.2		87.7		6.5		2.1		4		-				-		-	
					Bottom	14.9	0.4	357	21.1	21.1	8.2	8.2	31.5	31.5	87.8	87.8	6.5	6.5	2.3		4		-				-		-	
						14.9	0.4	357	21.1		8.2		31.5		87.8		6.5		2.3		4		-				-		-	
SR8	Fine	Moderate	13:00	5.0	Surface	1.0	-	-	22.5	22.5	8.2	8.2	27.5	27.5	92.1	92.1	6.8	6.8	4.0	4.1	7	6	-	-	820386	811614	-	-	-	-
						1.0	-	-	22.5		8.2		27.5		92.1		6.8		4.0		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	-	-	22.1	22.1	8.2	8.2	28.5	28.5	91.7	91.8	6.8	6.8	4.1		6		-				-		-	
						4.0	-	-	22.1		8.2		28.5		91.8		6.8		4.1		5		-				-		-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 24 March 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Moderate	08:02	8.2	Surface	1.0	0.4	25	21.6	21.6	8.3	8.3	28.4	28.4	95.0	95.1	7.1	7.1	9.0	10.8	12	10	87	92	815597	804263	<0.2	<0.2	1.1	1.2
						1.0	0.4	27	21.6		8.3		28.4		95.1		7.1		9.2		10		88				<0.2		1.2	
					Middle	4.1	0.4	28	21.3	21.2	8.2	8.2	29.8	29.8	94.7	94.7	7.1		10.1		10		93				<0.2		1.2	
						4.1	0.4	29	21.2		8.2		29.8		94.7		7.1		10.3		10		94				<0.2		1.1	
					Bottom	7.2	0.4	27	21.0	21.0	8.2	8.2	30.9	30.9	95.1	95.2	7.1	7.1	12.9		10		96				<0.2		1.2	
						7.2	0.4	28	21.0		8.2		30.9		95.2		7.1		13.2		9		96				<0.2		1.2	
C2	Cloudy	Moderate	08:47	11.8	Surface	1.0	0.4	26	22.1	22.1	8.0	8.0	24.4	24.4	88.3	88.2	6.7	6.6	3.1	7.6	6	6	85	88	825658	806959	<0.2	<0.2	2.0	1.9
						1.0	0.4	26	22.1		8.0		24.4		88.0		6.7		3.3		5		85				<0.2		1.8	
					Middle	5.9	0.2	20	21.8	21.8	8.0	8.0	25.4	25.4	86.3	86.3	6.5		5.5		5		89				<0.2		1.8	
						5.9	0.2	20	21.8		8.0		25.4		86.3		6.5		6.3		6		89				<0.2		2.0	
					Bottom	10.8	0.2	323	21.5	21.5	8.1	8.1	29.0	29.0	87.0	87.1	6.5	6.5	13.8		5		90				<0.2		2.0	
						10.8	0.3	336	21.5		8.1		29.0		87.1		6.5		13.5		6		91				<0.2		2.0	
C3	Cloudy	Moderate	06:49	10.9	Surface	1.0	0.6	258	21.6	21.6	8.1	8.1	28.7	28.7	89.5	89.5	6.7	6.6	1.6	2.0	4	4	84	87	822118	817826	<0.2	<0.2	1.5	1.6
						1.0	0.7	279	21.6		8.1		28.7		89.4		6.7		1.6		4		84				<0.2		1.6	
					Middle	5.5	0.5	262	21.4	21.4	8.1	8.1	29.9	29.9	86.9	86.8	6.5		1.7		4		86				<0.2		1.4	
						5.5	0.5	265	21.4		8.1		29.9		86.7		6.4		1.7		5		86				<0.2		1.6	
					Bottom	9.9	0.3	254	21.2	21.2	8.1	8.1	30.6	30.6	86.0	86.0	6.4	6.4	2.7		4		90				<0.2		1.6	
						9.9	0.3	263	21.2		8.1		30.6		86.0		6.4		2.7		4		89				<0.2		1.6	
IM1	Fine	Calm	08:20	5.0	Surface	1.0	0.2	18	21.9	21.9	8.2	8.2	27.8	27.8	93.2	93.3	7.0	7.0	7.6	7.3	10	11	89	91	817937	807127	<0.2	<0.2	1.3	1.2
						1.0	0.2	19	21.9		8.2		27.8		93.3		7.0		7.6		10		90				<0.2		1.3	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.1	327	21.6	21.6	8.2	8.2	29.0	29.0	95.8	96.2	7.1	7.2	7.0		11		91				<0.2		1.1	
						4.0	0.1	343	21.6		8.2		28.9		96.5		7.2		7.1		12		92				<0.2		1.2	
IM2	Fine	Moderate	08:27	7.1	Surface	1.0	0.2	341	21.9	21.9	8.3	8.3	27.6	27.6	92.6	92.5	6.9	6.9	8.4	8.8	11	11	88	92	818157	806165	<0.2	<0.2	1.2	1.2
						1.0	0.3	353	21.9		8.3		27.6		92.3		6.9		8.3		11		89				<0.2		1.1	
					Middle	3.6	0.3	8	21.5	21.5	8.3	8.3	29.0	29.0	90.8	90.8	6.8		8.1		11		91				<0.2		1.2	
						3.6	0.3	8	21.5		8.3		29.0		90.8		6.8		8.1		12		91				<0.2		1.2	
					Bottom	6.1	0.2	358	21.5	21.5	8.2	8.2	29.3	29.3	91.2	91.3	6.8	6.8	10.0		11		95				<0.2		1.2	
						6.1	0.3	329	21.5		8.2		29.3		91.3		6.8		9.9		12		95				<0.2		1.2	
IM3	Fine	Moderate	08:33	7.3	Surface	1.0	0.3	349	21.9	21.9	8.3	8.3	27.0	27.0	93.8	93.8	7.0	6.9	10.6	12.5	14	14	87	92	818766	805604	<0.2	<0.2	1.3	1.2
						1.0	0.3	321	21.9		8.3		27.0		93.8		7.0		10.7		13		88				<0.2		1.2	
					Middle	3.7	0.3	19	21.4	21.4	8.3	8.3	29.2	29.2	91.6	91.7	6.8		12.5		14		93				<0.2		1.2	
						3.7	0.3	20	21.4		8.3		29.2		91.7		6.8		12.5		13		94				<0.2		1.2	
					Bottom	6.3	0.2	5	21.3	21.3	8.2	8.2	29.8	29.8	94.4	94.4	7.0	7.0	14.6		15		95				<0.2		1.2	
						6.3	0.2	5	21.3		8.2		29.8		94.4		7.0		14.3		14		96				<0.2		1.2	
IM4	Fine	Moderate	08:41	8.0	Surface	1.0	0.6	342	21.8	21.8	8.2	8.2	27.6	27.6	94.4	94.4	7.1	7.0	11.3	13.5	13	13	88	92	819715	804621	<0.2	<0.2	1.2	1.3
						1.0	0.7	315	21.8		8.2		27.6		94.4		7.1		11.5		12		88				<0.2		1.3	
					Middle	4.0	0.5	342	21.3	21.3	8.2	8.2	29.8	29.8	91.7	91.7	6.8		13.6		13		91				<0.2		1.3	
						4.0	0.6	345	21.3		8.2		29.8		91.7		6.8		13.8		12		92				<0.2		1.2	
					Bottom	7.0	0.5	345	21.3	21.3	8.2	8.2	29.8	29.8	92.9	93.2	6.9	7.0	15.3		13		97				<0.2		1.2	
						7.0	0.5	317	21.3		8.2		29.8		93.4		7.0		15.7		14		96				<0.2		1.3	
IM5	Fine	Moderate	08:48	7.4	Surface	1.0	0.7	356	21.8	21.8	8.2	8.2	27.6	27.6	93.8	93.8	7.0	6.9	11.5	13.2	15	13	88	93	820734	804869	<0.2	<0.2	1.8	1.8
						1.0	0.8	328	21.8		8.2		27.5		93.8		7.0		11.7		14		89				<0.2		1.8	
					Middle	3.7	0.7	1	21.4	21.4	8.2	8.2	29.2	29.2	91.6	91.6	6.8		12.3		14		93				<0.2		1.7	
						3.7	0.7	1	21.4		8.2		29.2		91.6		6.8		12.5		13		93				<0.2		1.8	
					Bottom	6.4	0.5	2	21.4	21.4	8.3	8.3	29.3	29.3	93.4	94.0	7.0	7.1	15.4		12		96				<0.2		1.7	
						6.4	0.5	2	21.4		8.3		29.3		94.5		7.1		15.9		12		96				<0.2		1.8	
IM6	Fine	Moderate	08:55	7.3	Surface	1.0	0.1	89	22.0	22.0	8.2	8.2	25.1	25.1	93.2	93.2	7.0	7.0	4.6	6.1	7	8	89	92	821038	805847	<0.2	<0.2	1.7	1.7
						1.0	0.1	94	22.0		8.2		25.1		93.1		7.0		4.5		7		90				<0.2		1.8	
					Middle	3.7	0.2	54	21.8	21.8	8.2	8.2	27.0	27.0	91.4	91.4	6.9		5.2		8		93				<0.2		1.8	
						3.7	0.2	58	21.8		8.2		27.0		91.4		6.9		5.3		8		93				<0.2		1.6	
					Bottom	6.3	0.3	46	21.6	21.6	8.2	8.2	28.7	28.7	92.5	92.9	6.9	7.0	8.6		9		94				<0.2		1.8	
						6.3	0.3	46	21.6		8.2		28.7		93.2		7.0		8.5		8		94				<0.2		1.7	
IM7	Fine	Moderate	09:03	8.3	Surface	1.0	0.1	186	22.1	22.1	8.2	8.2	24.5	24.5	91.7	91.5	6.9	7.0	4.4	5.7	6	6	87	92	821353	806830	<0.2	<0.2	1.7	1.7
						1.0	0.1	201	22.1		8.2		24.5		91.2		6.9		4.5		6		88				<0.2		1.6	
					Middle	4.2	0.1	103	22.0	22.0	8.2	8.2	25.0	25.0	92.0	92.3	7.0		5.8		6		91				<0.2		1.7	
						4.2	0.1	108	22.0		8.2		25.0		92.5		7.0		6.0		6		92				<0.2		1.7	
					Bottom	7.3	0.3	78	21.9	21.9	8.2	8.2	28.0	28.0	95.4	95.5	7.1	7.1	6.7		6		96				<0.2		1.7	
						7.3	0.3	79	21.9		8.2		28.0		95.5		7.1		6.5		6		96				<0.2		1.7	
IM8	Cloudy	Moderate	08:19	7.4	Surface	1.0	0.2	88	21.9	21.9	8.1	8.1	25.4	25.4	90.2	90.2	6.8	6.8	2.7	4.2	7	7	84	88	821831	808142	<0.2	<0.2	1.7	1.8
						1.0	0.2	93	21.9		8.1		25.4		90.2		6.8		2.7		7		85				<0.2		1.8	
					Middle	3.7	0.1	87	21.9	21.9	8.1	8.1	25.7	25.7	89.5	89.5	6.8		3.9		6		89				<0.2		1.7	
						3.7	0.1	94	21.9		8.1		25.7		89.4		6.8		4.3		7		89				<0.2		1.8	
					Bottom	6.4	0.2	90	21.8	21.8	8.1	8.1	26.2	26.2	89.8	90.2	6.8	6.8	5.6		6		90				<0.2		1.8	
						6.4	0.2	94	21.8		8.1		26.2		90.5		6.8		5.7		7		90				<0.2		1.8	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 24 March 20 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	08:13	7.0	Surface	1.0	0.2	82	22.0	22.0	8.1	8.1	25.5	25.5	91.6	91.7	6.9	6.9	3.5	4.7	8	7	85	88	822074	808797	<0.2	<0.2	1.6	1.6
						1.0	0.2	89	22.0		8.1		25.5		91.7		6.9		3.5		7		85				<0.2		1.7	
					Middle	3.5	0.1	115	22.1	22.1	8.1	8.1	25.8	25.8	91.9	91.8	6.9		4.3		8		88				<0.2		1.6	
						3.5	0.1	120	22.1		8.1		25.8		91.6		6.9		4.3		6		88				<0.2		1.5	
					Bottom	6.0	0.1	146	22.1	22.1	8.1	8.1	26.1	26.1	91.8	91.9	6.9	6.9	6.2		6		90				<0.2		1.6	
						6.0	0.1	159	22.1		8.1		26.1		91.9		6.9		6.3		7		90				<0.2		1.6	
IM10	Cloudy	Moderate	08:04	7.5	Surface	1.0	0.6	309	22.0	22.0	8.1	8.1	27.1	27.1	90.9	90.9	6.8	6.8	8.3	12.0	7	7	84	87	822398	809795	<0.2	<0.2	1.5	1.7
						1.0	0.6	337	22.0		8.1		27.1		90.8		6.8		8.4		7		84				<0.2		1.8	
					Middle	3.8	0.4	309	22.1	22.1	8.1	8.1	27.3	27.3	90.7	90.7	6.8		13.2		7		89				<0.2		1.7	
						3.8	0.5	339	22.1		8.1		27.3		90.7		6.8		13.4		8		88				<0.2		1.6	
					Bottom	6.5	0.4	301	22.1	22.1	8.1	8.1	27.4	27.4	90.9	91.0	6.8	6.8	14.5		7		89				<0.2		1.9	
						6.5	0.4	319	22.1		8.1		27.4		91.0		6.8		14.3		8		88				<0.2		1.6	
IM11	Cloudy	Moderate	07:54	7.6	Surface	1.0	0.7	308	21.8	21.8	8.1	8.1	27.7	27.7	89.6	89.6	6.7	6.7	3.8	6.1	8	8	84	86	822046	811465	<0.2	<0.2	1.6	1.5
						1.0	0.7	312	21.8		8.1		27.7		89.5		6.7		3.8		7		84				<0.2		1.4	
					Middle	3.8	0.4	302	21.6	21.6	8.1	8.1	28.6	28.6	88.5	88.6	6.6		6.2		7		85				<0.2		1.5	
						3.8	0.4	306	21.6		8.1		28.6		88.6		6.6		6.2		8		86				<0.2		1.4	
					Bottom	6.6	0.1	43	21.5	21.5	8.1	8.1	29.3	29.3	89.1	89.2	6.6	6.7	8.3		7		89				<0.2		1.4	
						6.6	0.1	47	21.5		8.1		29.3		89.3		6.7		8.3		8		89				<0.2		1.4	
IM12	Cloudy	Moderate	07:45	8.0	Surface	1.0	0.7	282	21.9	21.9	8.1	8.1	27.9	27.9	90.3	90.4	6.7	6.7	7.3	14.4	8	8	85	87	821440	812047	<0.2	<0.2	1.4	1.4
						1.0	0.7	307	21.9		8.1		27.9		90.5		6.7		7.6		8		84				<0.2		1.4	
					Middle	4.0	0.6	280	21.8	21.8	8.1	8.1	28.0	28.0	90.4	90.4	6.7		12.9		9		88				<0.2		1.4	
						4.0	0.6	292	21.8		8.1		28.0		90.4		6.7		13.1		8		88				<0.2		1.4	
					Bottom	7.0	0.4	279	21.7	21.7	8.1	8.1	28.2	28.2	90.7	90.7	6.8	6.8	22.6		8		89				<0.2		1.4	
						7.0	0.4	283	21.7		8.1		28.2		90.6		6.8		22.6		9		89				<0.2		1.5	
SR1A	Cloudy	Calm	07:24	5.1	Surface	1.0	-	-	22.1	22.1	8.1	8.1	26.7	26.8	90.5	90.5	6.8	6.8	1.1	1.2	5	6	-	-	819977	812663	-	-	-	-
						1.0	-	-	22.1		8.1		26.8		90.5		6.8		1.2		6		-				-		-	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	-	-	22.1	22.1	8.1	8.1	27.5	27.5	91.2	91.3	6.8	6.8	1.2		8		-				-		-	
						4.1	-	-	22.1		8.1		27.5		91.4		6.8		1.2		6		-				-		-	
SR2	Cloudy	Moderate	07:09	3.6	Surface	1.0	0.4	33	21.8	21.8	8.1	8.1	27.7	27.7	89.7	89.7	6.7	6.7	7.2	10.8	9	9	84	86	821472	814144	<0.2	<0.2	1.4	1.4
						1.0	0.4	34	21.8		8.1		27.7		89.7		6.7		7.4		9		84				<0.2		1.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.6	0.4	31	21.7	21.7	8.1	8.1	28.2	28.2	90.1	90.1	6.7	6.7	14.1		8		88				<0.2		1.4	
						2.6	0.4	32	21.7		8.1		28.2		90.1		6.7		14.3		10		88				<0.2		1.3	
SR3	Cloudy	Moderate	08:26	9.1	Surface	1.0	0.1	64	22.0	22.0	8.1	8.1	25.1	25.1	89.1	89.1	6.7	6.7	2.6	3.9	6	6	-	-	822135	807583	-	-	-	-
						1.0	0.1	66	22.0		8.1		25.1		89.0		6.7		2.7		5		-				-		-	
					Middle	4.6	0.0	127	21.8	21.8	8.1	8.1	25.9	25.9	88.7	88.8	6.7		3.9		5		-				-		-	
						4.6	0.0	131	21.8		8.1		25.9		88.8		6.7		3.9		6		-				-		-	
					Bottom	8.1	0.1	96	21.8	21.8	8.1	8.1	26.1	26.1	89.2	89.2	6.7	6.7	5.1		5		-				-		-	
						8.1	0.2	102	21.8		8.1		26.1		89.2		6.7		5.1		6		-				-		-	
SR4A	Fine	Moderate	07:39	9.0	Surface	1.0	0.1	60	22.6	22.6	8.2	8.2	27.6	27.6	91.8	91.5	6.8	6.7	6.7	7.9	10	9	-	-	817207	807817	-	-	-	-
						1.0	0.1	60	22.6		8.2		27.6		91.1		6.7		6.8		9		-				-		-	
					Middle	4.5	0.1	65	22.5	22.5	8.2	8.2	27.7	27.7	90.3	90.4	6.7		8.1		9		-				-		-	
						4.5	0.1	70	22.5		8.2		27.8		90.4		6.7		8.1		9		-				-		-	
					Bottom	8.0	0.2	66	21.7	21.7	8.2	8.2	28.8	28.7	92.5	92.6	6.9	6.9	9.0		10		-				-		-	
						8.0	0.2	66	21.8		8.2		28.7		92.6		6.9		8.6		9		-				-		-	
SR5A	Fine	Calm	07:24	4.5	Surface	1.0	0.2	275	22.4	22.4	8.2	8.2	27.7	27.7	91.3	91.5	6.8	6.8	4.5	4.7	6	6	-	-	816582	810691	-	-	-	-
						1.0	0.2	301	22.4		8.2		27.7		91.7		6.8		4.6		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.1	276	22.4	22.4	8.2	8.2	27.7	27.7	95.4	95.7	7.1	7.1	4.8		7		-				-		-	
						3.5	0.1	279	22.4		8.2		27.7		95.9		7.1		4.9		6		-				-		-	
SR6A	Fine	Calm	06:57	4.0	Surface	1.0	0.1	187	22.3	22.3	8.0	8.0	27.7	27.7	89.9	89.9	6.7	6.7	2.4	3.2	8	7	-	-	817976	814731	-	-	-	-
						1.0	0.1	192	22.3		8.0		27.7		89.8		6.7		2.4		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	0.1	205	22.3	22.3	8.0	8.0	28.5	28.4	88.9	89.3	6.6	6.6	4.3		7		-				-		-	
						3.0	0.1	222	22.3		8.0		28.4		89.6		6.6		3.8		7		-				-		-	
SR7	Cloudy	Moderate	06:22	15.8	Surface	1.0	0.4	316	21.7	21.7	8.1	8.1	28.7	28.7	90.4	90.5	6.7	6.6	1.3	1.5	5	4	-	-	823632	823725	-	-	-	-
						1.0	0.4	341	21.7		8.1		28.7		90.5		6.7		1.3		4		-				-		-	
					Middle	7.9	0.4	31	21.3	21.3	8.1	8.1	30.2	30.2	86.7	86.7	6.4		1.7		4		-				-		-	
						7.9	0.4	32	21.3		8.1		30.2		86.6		6.4		1.7		4		-				-		-	
					Bottom	14.8	0.3	50	21.0	21.0	8.1	8.1	31.6	31.6	86.3	86.3	6.4	6.4	1.4		4		-				-		-	
						14.8	0.3	53	21.0		8.1		31.6		86.3		6.4		1.5		4		-				-		-	
SR8	Cloudy	Calm	07:36	5.3	Surface	1.0	-	-	22.3	22.3	8.1	8.1	26.8	26.8	91.3	91.3	6.8	6.8	7.1	9.9	8	7	-	-	820378	811645	-	-	-	-
						1.0	-	-	22.3		8.1		26.8		91.3		6.8		7.3		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	-	-	22.1	22.1	8.1	8.1	28.0	28.0	91.6	91.6	6.8	6.8	12.6		6		-				-		-	
						4.3	-	-	22.1		8.1		28.0		91.6		6.8		12.4		6		-				-		-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 26 March 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C) Value	Water Temperature (°C) Average	pH Value	pH Average	Salinity (ppt) Value	Salinity (ppt) Average	DO Saturation (%) Value	DO Saturation (%) Average	Dissolved Oxygen Value	Dissolved Oxygen DA	Turbidity(NTU) Value	Turbidity(NTU) DA	Suspended Solids (mg/L) Value	Suspended Solids (mg/L) DA	Total Alkalinity (ppm) Value	Total Alkalinity (ppm) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L) Value	Chromium (µg/L) DA	Nickel (µg/L) Value	Nickel (µg/L) DA
C1	Cloudy	Moderate	13:34	8.5	Surface	1.0	0.3	244	21.7	21.7	8.4	8.4	29.3	29.3	95.6	95.7	7.1	7.1	3.0	4.4	4	3	83	88	815617	804243	<0.2	<0.2	1.8	1.8
						1.0	0.4	247	21.7		8.4		29.3		95.7		7.1		3.1		3		84				<0.2		1.7	
					Middle	4.3	0.3	228	21.5	21.5	8.4	8.4	30.3	30.2	95.1	95.0	7.0		3.7		4		88				<0.2		1.8	
						4.3	0.3	246	21.5		8.4		30.1		94.9		7.0		4.1		3		89				<0.2		1.8	
					Bottom	7.5	0.4	221	21.4	21.4	8.4	8.4	31.3	31.3	95.4	95.5	7.0	7.0	6.2		2		91				<0.2		1.7	
						7.5	0.4	230	21.4		8.4		31.3		95.5		7.0		6.1		3		92				<0.2		1.7	
C2	Cloudy	Moderate	12:36	11.6	Surface	1.0	0.3	149	22.6	22.6	7.9	7.9	24.9	24.9	90.8	90.8	6.8	6.6	4.9	8.8	4	5	82	85	825675	806935	<0.2	<0.2	1.4	1.6
						1.0	0.4	150	22.6		8.0		24.9		90.7		6.8		5.0		5		83				<0.2		1.6	
					Middle	5.8	0.4	159	21.7	21.7	8.1	8.1	29.1	29.1	86.4	86.4	6.4		7.8		5		85				<0.2		1.6	
						5.8	0.4	162	21.7		8.1		29.1		86.3		6.4		7.9		6		85				<0.2		1.6	
					Bottom	10.6	0.4	155	21.6	21.6	8.2	8.2	29.5	29.5	86.6	86.6	6.4	6.4	13.5		6		88				<0.2		1.5	
						10.6	0.4	162	21.6		8.2		29.5		86.5		6.4		13.5		6		88				<0.2		1.6	
C3	Fine	Moderate	14:33	11.4	Surface	1.0	0.4	66	22.2	22.2	8.2	8.2	28.1	28.1	89.2	89.2	6.6	6.5	4.5	5.4	5	6	84	87	822116	817816	<0.2	<0.2	1.2	1.1
						1.0	0.5	71	22.2		8.2		28.1		89.1		6.6		4.5		6		84				<0.2		1.2	
					Middle	5.7	0.2	87	21.5	21.5	8.2	8.2	30.3	30.3	85.2	85.2	6.3		6.0		6		87				<0.2		1.1	
						5.7	0.2	91	21.5		8.2		30.3		85.1		6.3		6.0		6		87				<0.2		1.1	
					Bottom	10.4	0.1	74	21.5	21.5	8.2	8.2	30.3	30.3	86.3	86.4	6.4	6.4	5.6		6		89				<0.2		1.0	
						10.4	0.1	76	21.5		8.2		30.3		86.4		6.4		5.7		5		89				<0.2		1.1	
IM1	Cloudy	Calm	13:16	5.2	Surface	1.0	0.2	222	22.1	22.1	8.3	8.3	29.0	29.0	93.3	93.6	6.9	6.9	4.5	5.3	7	6	85	86	817928	807144	<0.2	<0.2	1.1	1.1
						1.0	0.2	228	22.1		8.3		29.0		93.9		6.9		4.7		6		86				<0.2		1.1	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.1	223	22.0	22.0	8.3	8.3	29.3	29.3	94.2	94.4	7.0	7.0	6.0		5		87				<0.2		1.1	
						4.2	0.1	227	22.0		8.3		29.3		94.5		7.0		6.1		7		87				<0.2		1.1	
IM2	Cloudy	Calm	13:09	7.2	Surface	1.0	0.1	189	22.4	22.4	8.2	8.2	28.4	28.5	96.1	95.7	7.1	7.0	5.1	8.1	6	6	85	90	818150	806168	<0.2	<0.2	1.1	1.1
						1.0	0.1	195	22.4		8.2		28.5		95.3		7.0		5.5		6		87				<0.2		1.1	
					Middle	3.6	0.2	194	21.9	21.9	8.2	8.2	29.6	29.6	93.7	93.7	6.9		9.3		5		90				<0.2		1.1	
						3.6	0.2	198	21.9		8.2		29.6		93.7		6.9		9.4		7		91				<0.2		1.0	
					Bottom	6.2	0.2	202	21.8	21.8	8.2	8.2	29.9	29.9	94.9	95.0	7.0	7.0	9.6		5		94				<0.2		1.1	
						6.2	0.2	204	21.8		8.2		29.9		95.1		7.0		9.5		6		95				<0.2		1.1	
IM3	Cloudy	Moderate	13:02	7.6	Surface	1.0	0.2	149	22.0	22.0	8.3	8.3	28.8	28.9	94.5	94.5	7.0	7.0	3.5	5.1	4	4	88	91	818799	805577	<0.2	<0.2	1.1	1.1
						1.0	0.2	155	22.0		8.3		28.9		94.4		7.0		3.6		4		87				<0.2		1.0	
					Middle	3.8	0.2	179	21.8	21.8	8.3	8.3	29.6	29.6	94.3	94.4	7.0		5.7		4		90				<0.2		1.3	
						3.8	0.2	195	21.8		8.3		29.6		94.5		7.0		5.4		5		91				<0.2		1.0	
					Bottom	6.6	0.2	194	21.7	21.7	8.3	8.2	30.1	30.1	94.3	94.5	7.0	7.0	5.9		3		93				<0.2		1.3	
						6.6	0.2	197	21.7		8.2		30.1		94.7		7.0		6.7		4		95				<0.2		1.1	
IM4	Cloudy	Calm	12:54	8.4	Surface	1.0	0.3	206	22.2	22.2	8.2	8.2	27.8	27.8	93.3	93.5	6.9	7.0	2.8	4.4	4	4	88	90	819725	804606	<0.2	<0.2	1.1	1.1
						1.0	0.3	223	22.2		8.2		27.8		93.7		7.0		2.9		5		88				<0.2		1.1	
					Middle	4.2	0.1	194	21.8	21.8	8.2	8.2	29.5	29.5	94.7	94.7	7.0		4.2		4		89				<0.2		1.1	
						4.2	0.1	210	21.8		8.2		29.6		94.7		7.0		4.3		5		89				<0.2		1.2	
					Bottom	7.4	0.2	173	21.5	21.5	8.2	8.2	30.6	30.6	93.7	93.8	6.9	6.9	6.1		4		92				<0.2		1.1	
						7.4	0.2	176	21.5		8.2		30.6		93.9		6.9		5.9		4		92				<0.2		1.1	
IM5	Cloudy	Moderate	12:47	8.4	Surface	1.0	0.3	248	22.0	22.0	8.2	8.2	28.7	28.7	94.2	94.3	7.0	7.0	5.6	7.3	6	7	85	90	820752	804852	<0.2	<0.2	1.0	1.1
						1.0	0.3	262	22.0		8.2		28.8		94.4		7.0		5.7		7		85				<0.2		1.1	
					Middle	4.2	0.3	240	21.6	21.6	8.2	8.2	30.0	30.0	94.1	94.1	7.0		7.4		8		89				<0.2		1.0	
						4.2	0.3	259	21.6		8.2		30.0		94.0		7.0		7.6		6		89				<0.2		1.0	
					Bottom	7.4	0.2	231	21.6	21.6	8.2	8.2	30.3	30.2	94.3	94.4	7.0	7.0	8.8		8		94				<0.2		1.1	
						7.4	0.3	232	21.6		8.2		30.2		94.5		7.0		8.7		9		95				<0.2		1.1	
IM6	Cloudy	Moderate	12:41	7.6	Surface	1.0	0.2	252	22.4	22.4	8.1	8.1	26.4	26.4	93.5	93.5	7.0	7.0	4.9	7.6	6	6	87	92	821052	805832	<0.2	<0.2	1.0	1.2
						1.0	0.2	274	22.4		8.1		26.4		93.5		7.0		4.9		6		88				<0.2		1.0	
					Middle	3.8	0.1	206	22.0	22.0	8.2	8.2	28.8	28.8	93.7	93.7	6.9		8.4		6		91				<0.2		1.1	
						3.8	0.1	212	22.0		8.2		28.8		93.6		6.9		8.9		7		92				<0.2		1.0	
					Bottom	6.6	0.2	142	21.9	21.9	8.2	8.2	29.3	29.3	94.2	94.5	7.0	7.0	9.3		7		96				<0.2		1.6	
						6.6	0.2	148	21.9		8.2		29.3		94.7		7.0		9.4		6		97				<0.2		1.6	
IM7	Cloudy	Moderate	12:34	8.8	Surface	1.0	0.1	134	22.3	22.3	8.2	8.2	26.1	26.1	92.9	93.0	6.9	6.9	4.5	7.6	5	5	86	90	821328	806855	<0.2	<0.2	1.7	1.5
						1.0	0.1	147	22.3		8.2		26.2		93.0		7.0		4.6		5		87				<0.2		1.5	
					Middle	4.4	0.2	127	21.9	21.9	8.3	8.3	29.0	29.0	93.0	93.0	6.9		8.3		5		90				<0.2		1.7	
						4.4	0.2	139	21.9		8.3		29.0		92.9		6.9		8.4		5		91				<0.2		1.6	
					Bottom	7.8	0.1	103	21.9	21.9	8.3	8.3	29.2	29.2	93.5	93.5	6.9	6.9	9.8		4		93				<0.2		1.1	
						7.8	0.1	112	21.9		8.3		29.2		93.4		6.9		9.7		5		94				<0.2		1.2	
IM8	Cloudy	Moderate	13:03	7.6	Surface	1.0	0.2	125	22.4	22.4	7.9	7.9	25.7	25.7	91.7	91.7	6.9	6.9	4.7	8.2	5	5	82	86	821853	808132	<0.2	<0.2	1.5	1.5
						1.0	0.2	125	22.4		7.9		25.7		91.6		6.9		4.7		6		83				<0.2		1.4	
					Middle	3.8	0.2	113	22.0	22.0	8.1	8.1	27.8	27.8	91.5	91.6	6.8		7.1		6		86				<0.2		1.5	
						3.8	0.2	117	22.0		8.1		27.8		91.6		6.8		7.3		4		86				<0.2		1.6	
					Bottom	6.6	0.3	64	21.9	21.9	8.2	8.2	28.6	28.6	91.8	91.8	6.8	6.8	12.6		4		88				<0.2		1.4	
						6.6	0.3	67	21.9		8.2		28.6		91.8		6.8		12.6		4		88				<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 26 March 20 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	13:10	7.3	Surface	1.0	0.3	108	22.6	22.5	8.0	8.0	25.4	25.4	93.4	93.4	7.0	6.9	5.4	9.9	4	5	82	85	822109	808797	<0.2	<0.2	1.6	1.5
						1.0	0.3	114	22.5		8.0		25.4		93.3		7.0		5.5		4		82				<0.2		1.6	
					Middle	3.7	0.3	99	22.0	22.0	8.1	8.1	28.2	28.2	91.8	91.8	6.8		10.3		5		86				<0.2		1.5	
						3.7	0.3	105	22.0		8.1		28.2		91.8		6.8		10.4		5		85				<0.2		1.5	
					Bottom	6.3	0.3	78	21.9	21.9	8.1	8.1	28.7	28.7	92.0	92.0	6.8	6.8	13.8		5		88				<0.2		1.5	
						6.3	0.3	85	21.9		8.1		28.7		91.9		6.8		14.0		6		88				<0.2		1.4	
IM10	Fine	Moderate	13:19	7.9	Surface	1.0	0.5	119	22.6	22.6	8.0	8.0	25.6	25.6	91.9	91.9	6.9	6.8	4.5	9.3	5	5	83	85	822394	809784	<0.2	<0.2	1.4	1.5
						1.0	0.5	119	22.6		8.0		25.6		91.8		6.9		4.6		6		82				<0.2		1.4	
					Middle	4.0	0.5	117	21.9	21.9	8.1	8.1	28.3	28.3	88.4	88.4	6.6		8.5		6		86				<0.2		1.4	
						4.0	0.5	121	22.0		8.1		28.3		88.4		6.6		8.6		5		85				<0.2		1.5	
					Bottom	6.9	0.4	107	21.9	21.9	8.1	8.1	28.5	28.5	88.1	88.2	6.5	6.5	14.7		4		88				<0.2		1.5	
						6.9	0.5	113	21.9		8.1		28.5		88.2		6.5		14.8		5		88				<0.2		1.5	
IM11	Cloudy	Moderate	13:31	9.1	Surface	1.0	0.6	117	22.5	22.5	7.9	7.9	26.4	26.4	90.1	90.1	6.7	6.6	4.9	10.8	5	7	83	86	822064	811437	<0.2	<0.2	1.3	1.4
						1.0	0.6	126	22.5		7.9		26.4		90.0		6.7		4.9		7		83				<0.2		1.4	
					Middle	4.6	0.6	116	22.0	22.0	8.1	8.1	27.9	27.9	87.0	87.0	6.5		10.8		8		86				<0.2		1.5	
						4.6	0.7	120	22.0		8.1		27.9		87.0		6.5		10.9		6		87				<0.2		1.4	
					Bottom	8.1	0.5	114	21.8	21.8	8.1	8.1	28.8	28.8	87.4	87.4	6.5	6.5	16.6		8		88				<0.2		1.4	
						8.1	0.5	124	21.8		8.1		28.8		87.4		6.5		16.5		7		89				<0.2		1.4	
IM12	Fine	Moderate	13:37	8.6	Surface	1.0	0.6	106	22.6	22.6	8.0	8.0	25.8	25.8	92.3	92.3	6.9	6.8	5.5	9.4	5	6	83	86	821437	812036	<0.2	<0.2	1.6	1.5
						1.0	0.6	108	22.6		8.0		25.8		92.2		6.9		5.6		7		83				<0.2		1.4	
					Middle	4.3	0.5	104	22.0	22.0	8.1	8.1	27.9	27.9	88.4	88.4	6.6		8.9		7		87				<0.2		1.5	
						4.3	0.5	107	22.0		8.1		27.9		88.3		6.6		9.0		7		87				<0.2		1.4	
					Bottom	7.6	0.4	104	21.9	21.9	8.1	8.1	28.4	28.4	88.6	88.6	6.6	6.6	13.7		5		88				<0.2		1.5	
						7.6	0.5	111	21.9		8.1		28.4		88.5		6.6		13.9		5		89				<0.2		1.4	
SR1A	Fine	Moderate	13:59	5.1	Surface	1.0	-	-	22.5	22.5	8.2	8.2	26.9	26.9	92.3	92.3	6.8	6.8	5.2	4.8	7	7	-	-	819975	812657	-	-	-	-
						1.0	-	-	22.5		8.2		26.9		92.3		6.8		5.2		6		-				-		-	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	-	-	22.5	22.5	8.1	8.1	27.7	27.7	91.8	91.8	6.8	6.8	4.3		8		-				-		-	
						4.1	-	-	22.5		8.1		27.7		91.8		6.8		4.4		8		-				-		-	
SR2	Fine	Moderate	14:12	3.5	Surface	1.0	0.4	96	22.6	22.6	8.2	8.2	26.4	26.4	91.8	91.8	6.8	6.8	5.2	6.2	6	6	85	86	821444	814159	<0.2	<0.2	1.4	1.4
						1.0	0.4	103	22.6		8.2		26.4		91.8		6.8		5.3		6		85				<0.2		1.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.5	0.2	92	22.2	22.2	8.1	8.1	27.7	27.7	90.9	91.0	6.8	6.8	7.2		6		87				<0.2		1.3	
						2.5	0.2	94	22.2		8.1		27.7		91.0		6.8		7.2		6		87				<0.2		1.4	
SR3	Cloudy	Moderate	12:56	8.8	Surface	1.0	0.2	179	22.3	22.3	8.0	8.0	26.5	26.5	90.8	90.8	6.8	6.8	7.5	10.6	4	5	-	-	822130	807564	-	-	-	-
						1.0	0.2	184	22.3		8.0		26.5		90.8		6.8		7.4		4		-				-		-	
					Middle	4.4	0.1	135	22.0	22.0	8.1	8.1	27.8	27.8	90.3	90.4	6.7		10.8		4		-				-		-	
						4.4	0.1	144	22.0		8.1		27.8		90.4		6.7		10.8		5		-				-		-	
					Bottom	7.8	0.2	89	22.0	22.0	8.1	8.1	28.6	28.6	90.6	90.5	6.7	6.7	13.5		5		-				-		-	
						7.8	0.2	97	22.0		8.1		28.6		90.4		6.7		13.5		5		-				-		-	
SR4A	Cloudy	Calm	13:56	8.0	Surface	1.0	0.2	80	22.2	22.2	8.3	8.3	29.0	29.0	95.4	95.3	7.0	7.0	4.9	5.7	6	6	-	-	817203	807819	-	-	-	-
						1.0	0.2	86	22.2		8.3		29.0		95.2		7.0		5.0		6		-				-		-	
					Middle	4.0	0.2	90	22.0	22.0	8.3	8.3	29.2	29.2	94.0	94.0	6.9		6.4		6		-				-		-	
						4.0	0.2	95	22.0		8.3		29.2		94.0		6.9		6.4		6		-				-		-	
					Bottom	7.0	0.1	118	22.0	22.0	8.4	8.4	29.4	29.4	94.6	94.9	7.0	7.0	6.1		6		-				-		-	
						7.0	0.1	129	22.0		8.4		29.3		95.1		7.0		5.5		6		-				-		-	
SR5A	Cloudy	Calm	14:14	4.8	Surface	1.0	0.1	34	22.6	22.6	8.3	8.3	28.9	28.9	92.5	92.6	6.8	6.8	7.4	8.5	6	6	-	-	816605	810716	-	-	-	-
						1.0	0.1	36	22.6		8.3		28.9		92.6		6.8		7.3		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.1	102	22.3	22.4	8.3	8.3	29.0	29.0	94.7	95.1	7.0	7.0	9.6		5		-				-		-	
						3.8	0.1	109	22.4		8.3		29.0		95.4		7.0		9.7		6		-				-		-	
SR6A	Cloudy	Calm	14:40	4.5	Surface	1.0	0.0	29	22.6	22.6	8.3	8.3	28.0	28.0	93.9	94.1	6.9	6.9	7.0	6.7	9	10	-	-	817975	814741	-	-	-	-
						1.0	0.0	29	22.6		8.3		28.0		94.2		6.9		6.7		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.1	13	22.7	22.7	8.3	8.3	28.1	28.1	95.5	96.1	7.0	7.1	6.5		10		-				-		-	
						3.5	0.1	14	22.8		8.4		28.1		96.6		7.1		6.6		10		-				-		-	
SR7	Fine	Moderate	15:03	16.0	Surface	1.0	0.7	60	22.1	22.1	8.1	8.1	28.9	28.9	91.4	91.4	6.7	6.7	2.5	2.7	4	5	-	-	823614	823722	-	-	-	-
						1.0	0.8	64	22.1		8.1		28.9		91.4		6.7		2.5		6		-				-		-	
					Middle	8.0	0.3	29	21.8	21.8	8.2	8.2	29.7	29.7	88.8	88.8	6.6		2.5		6		-				-		-	
						8.0	0.3	31	21.8		8.2		29.7		88.8		6.6		2.5		4		-				-		-	
					Bottom	15.0	0.3	25	21.6	21.6	8.3	8.3	30.3	30.3	86.3	86.3	6.4	6.4	3.1		5		-				-		-	
						15.0	0.3	27	21.6		8.3		30.3		86.3		6.4		3.1		4		-				-		-	
SR8	Fine	Moderate	13:49	4.9	Surface	1.0	-	-	22.8	22.8	8.1	8.1	26.8	26.8	94.2	94.3	7.0	7.0	4.7	5.1	6	6	-	-	820388	811644	-	-	-	-
						1.0	-	-	22.8		8.1		26.8		94.3		7.0		4.7		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	-	-	22.6	22.6	8.2	8.2	26.9	26.9	91.9	91.9	6.8	6.8	5.5		6		-				-		-	
						3.9	-	-	22.6		8.2		26.9		91.8		6.8		5.5		4		-				-		-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 26 March 20 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	Calm	08:32	8.4	Surface	1.0	0.5	57	21.8	21.8	8.1	8.1	28.6	28.6	94.2	94.3	7.0	7.0	7.9	11.3	6	6	83	87	815633	804265	<0.2	<0.2	1.6	1.6
						1.0	0.5	57	21.8		8.1		28.6		94.3		7.0		8.0		7		83				<0.2		1.6	
					Middle	4.2	0.4	49	21.5	21.5	8.2	8.2	30.4	30.4	94.3	94.2	7.0		10.9		6		87				<0.2		1.7	
						4.2	0.5	49	21.5		8.2		30.5		94.0		7.0		11.0		5		87				<0.2		1.6	
					Bottom	7.4	0.5	45	21.4	21.4	8.2	8.2	31.1	31.1	95.3	95.3	7.0	7.0	14.9		5		90				<0.2		1.7	
						7.4	0.5	47	21.4		8.2		31.1		95.3		7.0		15.3		5		91				<0.2		1.4	
C2	Cloudy	Moderate	09:29	12.4	Surface	1.0	0.4	22	22.5	22.5	8.1	8.1	23.9	23.9	90.4	90.4	6.8	6.7	3.6	6.6	3	4	82	85	825664	806967	<0.2	<0.2	1.8	1.8
						1.0	0.4	24	22.5		8.1		23.9		90.3		6.8		3.6		3		82				<0.2		1.7	
					Middle	6.2	0.5	31	22.2	22.2	8.2	8.2	25.8	25.8	86.9	86.8	6.5		6.4		3		85				<0.2		1.9	
						6.2	0.5	33	22.2		8.2		25.8		86.7		6.5		6.7		4		85				<0.2		1.9	
					Bottom	11.4	0.4	357	21.8	21.8	8.3	8.3	28.4	28.3	84.8	84.8	6.3	6.3	9.7		4		88				<0.2		1.9	
						11.4	0.4	328	21.8		8.3		28.3		84.8		6.3		9.4		4		88				<0.2		1.8	
C3	Rainy	Moderate	07:25	11.6	Surface	1.0	0.6	269	22.0	22.0	8.1	8.1	28.0	28.0	89.2	89.2	6.6	6.6	4.4	8.6	4	4	83	86	822110	817789	<0.2	<0.2	1.7	1.7
						1.0	0.6	276	22.0		8.1		28.0		89.2		6.6		4.5		5		83				<0.2		1.7	
					Middle	5.8	0.6	266	21.6	21.6	8.2	8.2	29.6	29.6	87.1	87.1	6.5		7.0		4		86				<0.2		1.8	
						5.8	0.7	272	21.6		8.2		29.6		87.0		6.5		7.1		4		86				<0.2		1.8	
					Bottom	10.6	0.5	260	21.5	21.5	8.2	8.2	30.3	30.3	86.5	86.5	6.4	6.4	14.1		4		89				<0.2		1.6	
						10.6	0.5	282	21.5		8.2		30.3		86.5		6.4		14.2		5		90				<0.2		1.7	
IM1	Cloudy	Calm	08:50	5.1	Surface	1.0	0.2	31	22.0	22.0	8.2	8.2	28.9	29.0	92.9	93.1	6.9	6.9	6.7	7.1	7	7	83	85	817950	807126	<0.2	<0.2	1.3	1.3
						1.0	0.2	33	22.0		8.2		29.1		93.2		6.9		7.0		6		83				<0.2		1.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	0.1	326	21.9	22.0	8.2	8.2	29.7	29.6	93.8	94.0	6.9	6.9	7.3		7		86				<0.2		1.2	
						4.1	0.1	342	22.0		8.2		29.6		94.2		6.9		7.2		6		86				<0.2		1.3	
IM2	Cloudy	Calm	08:57	7.2	Surface	1.0	0.4	0	22.1	22.1	8.1	8.1	27.9	27.9	93.3	93.4	6.9	6.9	8.8	12.4	7	8	83	86	818167	806171	<0.2	<0.2	1.2	1.7
						1.0	0.4	0	22.0		8.1		27.9		93.5		7.0		9.6		8		82				<0.2		1.2	
					Middle	3.6	0.4	350	21.9	21.9	8.1	8.1	29.3	29.3	93.3	93.4	6.9		13.9		8		86				<0.2		1.2	
						3.6	0.4	322	21.9		8.1		29.3		93.5		6.9		14.1		8		86				<0.2		1.5	
					Bottom	6.2	0.2	337	21.8	21.8	8.2	8.2	29.6	29.6	94.1	94.4	7.0	7.0	14.1		8		90				<0.2		2.5	
						6.2	0.2	351	21.8		8.2		29.6		94.7		7.0		14.0		7		90				<0.2		2.6	
IM3	Cloudy	Calm	09:03	7.4	Surface	1.0	0.3	359	21.8	21.8	8.2	8.2	29.3	29.4	93.3	93.3	6.9	7.0	9.7	11.9	9	9	84	87	818807	805577	<0.2	<0.2	2.4	1.8
						1.0	0.4	330	21.8		8.2		29.4		93.3		6.9		10.0		11		83				<0.2		2.6	
					Middle	3.7	0.4	348	21.8	21.8	8.2	8.2	29.5	29.5	94.3	94.6	7.0		12.1		9		87				<0.2		1.3	
						3.7	0.4	320	21.8		8.2		29.5		94.9		7.0		12.3		10		87				<0.2		1.5	
					Bottom	6.4	0.3	328	21.7	21.7	8.2	8.2	29.7	29.6	93.7	93.7	6.9	6.9	13.5		8		90				<0.2		1.3	
						6.4	0.3	302	21.7		8.2		29.6		93.7		6.9		13.8		9		91				<0.2		1.6	
IM4	Cloudy	Calm	09:13	8.4	Surface	1.0	0.7	343	22.0	22.0	8.2	8.2	28.0	28.1	93.3	93.3	6.9	6.9	10.8	12.9	7	8	83	87	819730	804627	<0.2	<0.2	1.3	2.1
						1.0	0.7	316	22.0		8.2		28.1		93.3		6.9		11.8		8		83				<0.2		1.4	
					Middle	4.2	0.6	341	21.7	21.7	8.2	8.2	29.8	29.8	93.2	93.3	6.9		11.9		8		86				<0.2		2.3	
						4.2	0.7	345	21.7		8.2		29.8		93.3		6.9		12.1		7		87				<0.2		2.4	
					Bottom	7.4	0.6	338	21.7	21.7	8.2	8.2	29.8	29.8	93.6	93.7	6.9	6.9	15.2		8		90				<0.2		2.6	
						7.4	0.6	311	21.7		8.2		29.8		93.7		6.9		15.5		9		91				<0.2		2.7	
IM5	Cloudy	Calm	09:19	7.5	Surface	1.0	0.9	1	21.9	21.9	8.2	8.2	28.5	28.5	92.9	92.8	6.9	6.9	4.3	6.1	3	5	83	87	820714	804869	<0.2	<0.2	1.4	1.5
						1.0	0.9	1	21.9		8.2		28.5		92.7		6.9		4.6		5		82				<0.2		1.2	
					Middle	3.8	0.9	3	21.8	21.8	8.2	8.2	29.5	29.5	92.5	92.5	6.9		5.5		5		87				<0.2		1.6	
						3.8	0.9	3	21.8		8.2		29.5		92.4		6.8		5.8		4		87				<0.2		1.7	
					Bottom	6.5	0.8	5	21.7	21.7	8.2	8.2	29.6	29.6	92.9	93.0	6.9	6.9	8.2		5		91				<0.2		1.5	
						6.5	0.8	5	21.7		8.2		29.6		93.0		6.9		8.1		5		90				<0.2		1.5	
IM6	Cloudy	Calm	09:27	7.4	Surface	1.0	0.0	58	22.4	22.4	8.1	8.1	24.8	24.7	93.0	93.0	7.0	7.0	2.8	6.1	5	6	83	87	821042	805833	<0.2	<0.2	1.3	1.7
						1.0	0.0	60	22.4		8.1		24.7		92.9		7.0		3.0		4		83				<0.2		1.4	
					Middle	3.7	0.2	70	22.2	22.2	8.2	8.2	26.9	27.0	93.0	93.0	6.9		6.2		6		87				<0.2		1.9	
						3.7	0.3	73	22.2		8.2		27.0		93.0		6.9		6.3		6		87				<0.2		1.6	
					Bottom	6.4	0.4	76	22.0	22.0	8.2	8.2	28.7	28.7	93.0	93.1	6.9	6.9	9.3		7		91				<0.2		2.2	
						6.4	0.4	82	22.0		8.2		28.7		93.1		6.9		9.2		5		91				<0.2		2.0	
IM7	Cloudy	Calm	09:35	8.7	Surface	1.0	0.0	324	22.4	22.4	8.1	8.1	24.5	24.4	91.9	91.9	6.9	6.9	3.3	5.3	4	4	82	87	821348	806820	<0.2	<0.2	1.7	1.6
						1.0	0.0	342	22.4		8.1		24.4		91.9		6.9		3.6		3		83				<0.2		1.6	
					Middle	4.4	0.2	100	22.3	22.3	8.1	8.1	25.9	25.9	92.4	92.5	6.9		5.3		3		86				<0.2		1.6	
						4.4	0.2	108	22.3		8.1		26.0		92.5		6.9		5.5		5		87				<0.2		1.7	
					Bottom	7.7	0.2	73	22.0	22.0	8.2	8.2	28.6	28.6	93.7	93.9	6.9	7.0	6.9		4		90				<0.2		1.6	
						7.7	0.2	76	22.0		8.2		28.6		94.1		7.0		7.0		4		91				<0.2		1.6	
IM8	Cloudy	Moderate	09:00	7.7	Surface	1.0	0.3	66	22.5	22.5	8.2	8.2	24.8	24.8	91.2	91.2	6.8	6.8	4.3	8.0	5	5	81	85	821825	808140	<0.2	<0.2	1.6	1.7
						1.0	0.3	69	22.5		8.2		24.8		91.1		6.8		4.3		6		82				<0.2		1.7	
					Middle	3.9	0.2	76	22.4	22.4	8.2	8.2	25.4	25.4	90.3	90.3	6.8		8.2		6		85				<0.2		1.7	
						3.9	0.2	79	22.4		8.2		25.4		90.3		6.8		8.2		6		84				<0.2		1.7	
					Bottom	6.7	0.2	112	22.4	22.4	8.3	8.3	26.0	26.0	91.3	91.3	6.8	6.8	11.6		5		87				<0.2		1.7	
						6.7	0.2	119	22.4		8.3		26.0		91.3		6.8		11.5		4		88				<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 26 March 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Rainy	Moderate	08:52	7.3	Surface	1.0	0.1	101	22.4	22.4	8.2	8.2	25.3	25.3	92.1	92.1	6.9	6.9	6.5	10.3	5	8	82	85	822111	808834	<0.2	<0.2	1.5	1.6
						1.0	0.1	103	22.4		8.2		25.3		92.0		6.9		6.6		5		81				<0.2		1.6	
					Middle	3.7	0.0	263	22.4	22.4	8.2	8.2	26.0	26.0	91.6	91.6	6.8		11.0		7		85				<0.2		1.5	
						3.7	0.0	268	22.4		8.2		26.0		91.6		6.8		11.1		8		85				<0.2		1.6	
					Bottom	6.3	0.1	207	22.4	22.4	8.2	8.2	26.2	26.2	91.2	91.3	6.8	6.8	13.4		10		88				<0.2		1.5	
						6.3	0.1	220	22.4		8.2		26.2		91.3		6.8		13.4		11		88				<0.2		1.8	
IM10	Cloudy	Moderate	08:42	7.9	Surface	1.0	0.6	307	22.3	22.3	8.2	8.2	26.8	26.8	91.7	91.7	6.8	6.8	9.4	12.4	8	8	82	85	822376	809801	<0.2	<0.2	1.3	1.4
						1.0	0.7	320	22.3		8.2		26.8		91.7		6.8		9.5		7		82				<0.2		1.4	
					Middle	4.0	0.6	305	22.3	22.3	8.2	8.2	27.1	27.1	90.0	89.9	6.7		12.3		8		85				<0.2		1.3	
						4.0	0.7	312	22.3		8.2		27.1		89.8		6.7		12.2		8		85				<0.2		1.4	
					Bottom	6.9	0.6	308	22.3	22.3	8.2	8.2	27.2	27.2	91.0	91.0	6.8	6.8	15.6		7		88				<0.2		1.4	
						6.9	0.6	314	22.3		8.2		27.2		91.0		6.8		15.5		7		88				<0.2		1.3	
IM11	Cloudy	Moderate	08:30	7.4	Surface	1.0	0.6	289	22.1	22.1	8.2	8.2	27.5	27.5	90.1	90.1	6.7	6.6	13.4	15.8	10	15	82	85	822063	811451	<0.2	<0.2	1.3	1.3
						1.0	0.6	310	22.1		8.2		27.5		90.1		6.7		13.7		15		82				<0.2		1.2	
					Middle	3.7	0.5	296	22.1	22.1	8.3	8.3	27.9	27.9	87.4	87.5	6.5		15.3		18		86				<0.2		1.2	
						3.7	0.5	318	22.1		8.3		27.9		87.5		6.5		15.3		25		85				<0.2		1.3	
					Bottom	6.4	0.4	301	22.1	22.1	8.3	8.3	27.9	27.9	87.6	87.6	6.5	6.5	18.4		10		88				<0.2		1.2	
						6.4	0.4	315	22.1		8.3		27.9		87.6		6.5		18.6		9		89				<0.2		1.3	
IM12	Rainy	Moderate	08:22	8.5	Surface	1.0	0.7	286	22.1	22.1	8.2	8.2	27.7	27.7	90.7	90.7	6.7	6.7	11.1	15.4	10	10	83	86	821464	812038	<0.2	<0.2	1.3	1.4
						1.0	0.7	286	22.1		8.2		27.7		90.7		6.7		11.3		9		82				<0.2		1.6	
					Middle	4.3	0.6	287	22.1	22.1	8.3	8.3	27.8	27.8	90.0	90.0	6.7		14.9		10		86				<0.2		1.4	
						4.3	0.6	287	22.1		8.3		27.8		90.0		6.7		14.9		10		86				<0.2		1.3	
					Bottom	7.5	0.5	290	22.0	22.0	8.3	8.3	27.9	27.9	89.7	89.7	6.7	6.7	20.0		9		89				<0.2		1.5	
						7.5	0.6	290	22.0		8.3		27.9		89.7		6.7		19.9		10		89				<0.2		1.2	
SR1A	Rainy	Moderate	08:00	4.7	Surface	1.0	-	-	22.3	22.3	8.1	8.1	27.0	27.0	90.5	90.5	6.7	6.7	4.2	5.1	8	9	-	-	819974	812654	-	-	-	-
						1.0	-	-	22.3		8.1		27.0		90.4		6.7		4.2		8		-				-		-	
					Middle	2.4	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.4	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	-	-	22.3	22.3	8.0	8.0	27.6	27.6	87.7	87.7	6.5	6.5	6.0		8		-				-		-	
						3.7	-	-	22.3		8.0		27.6		87.7		6.5		6.0		8		-				-		-	
SR2	Rainy	Moderate	07:47	4.1	Surface	1.0	0.3	39	22.1	22.1	8.1	8.1	27.6	27.6	89.6	89.6	6.7	6.7	9.1	12.0	10	9	84	86	821458	814147	<0.2	<0.2	1.4	1.4
						1.0	0.4	41	22.1		8.1		27.6		89.5		6.7		9.3		9		85				<0.2		1.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.3	36	22.0	22.0	8.1	8.1	28.1	28.1	87.2	87.2	6.5	6.5	14.6		8		87				<0.2		1.5	
						3.1	0.4	38	22.0		8.1		28.1		87.2		6.5		14.8		10		87				<0.2		1.4	
SR3	Cloudy	Moderate	09:08	9.2	Surface	1.0	0.1	66	22.3	22.3	8.1	8.1	24.7	24.7	88.9	88.9	6.7	6.6	2.9	3.9	4	6	-	-	822135	807547	-	-	-	-
						1.0	0.1	68	22.3		8.1		24.7		88.8		6.7		2.9		5		-				-		-	
					Middle	4.6	0.1	63	22.2	22.2	8.2	8.2	25.4	25.4	86.3	86.3	6.5		3.4		6		-				-		-	
						4.6	0.1	66	22.2		8.2		25.4		86.3		6.5		3.5		6		-				-		-	
					Bottom	8.2	0.2	66	22.3	22.3	8.2	8.2	25.6	25.6	88.5	88.5	6.6	6.6	5.3		8		-				-		-	
						8.2	0.2	69	22.3		8.2		25.6		88.5		6.6		5.3		6		-				-		-	
SR4A	Rainy	Calm	08:11	9.0	Surface	1.0	0.0	136	22.5	22.5	8.1	8.1	28.9	28.9	91.2	91.2	6.7	6.7	7.5	8.4	12	12	-	-	817184	807812	-	-	-	-
						1.0	0.0	139	22.5		8.1		28.9		91.2		6.7		7.6		12		-				-		-	
					Middle	4.5	0.1	100	22.4	22.4	8.1	8.1	29.0	29.0	91.4	91.4	6.7		7.8		12		-				-		-	
						4.5	0.1	106	22.4		8.1		29.0		91.4		6.7		8.0		11		-				-		-	
					Bottom	8.0	0.1	83	22.4	22.4	8.2	8.2	29.0	29.0	93.8	94.2	6.9	6.9	9.6		11		-				-		-	
						8.0	0.1	84	22.4		8.2		29.0		94.5		6.9		9.7		11		-				-		-	
SR5A	Rainy	Calm	07:55	4.3	Surface	1.0	0.2	286	22.4	22.4	8.1	8.1	28.6	28.6	90.4	90.4	6.7	6.7	7.0	7.1	12	13	-	-	816615	810695	-	-	-	-
						1.0	0.2	306	22.4		8.1		28.6		90.4		6.7		7.1		13		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.2	297	22.4	22.4	8.1	8.1	28.6	28.6	91.1	91.2	6.7	6.7	7.0		13		-				-		-	
						3.3	0.2	302	22.4		8.1		28.6		91.2		6.7		7.3		13		-				-		-	
SR6A	Rainy	Calm	07:22	4.4	Surface	1.0	0.1	213	22.4	22.3	8.0	8.0	28.5	28.5	88.1	88.0	6.5	6.5	5.2	6.7	6	6	-	-	817950	814759	-	-	-	-
						1.0	0.1	223	22.3		8.0		28.5		87.8		6.5		5.8		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.1	234	22.1	22.1	8.0	8.0	28.9	28.9	87.7	88.0	6.5	6.5	7.9		6		-				-		-	
						3.4	0.1	244	22.1		8.0		28.9		88.2		6.5		7.8		5		-				-		-	
SR7	Rainy	Moderate	06:55	15.8	Surface	1.0	0.2	62	21.9	21.9	8.2	8.2	28.9	28.9	89.2	89.2	6.6	6.6	2.9	3.3	7	6	-	-	823647	823719	-	-	-	-
						1.0	0.2	68	21.9		8.2		28.9		89.2		6.6		3.0		6		-				-		-	
					Middle	7.9	0.2	84	21.8	21.8	8.2	8.2	29.0	29.0	88.5	88.5	6.6		3.2		6		-				-		-	
						7.9	0.2	85	21.8		8.2		29.0		88.5		6.6		3.3		7		-				-		-	
					Bottom	14.8	0.2	82	21.8	21.8	8.1	8.1	29.2	29.1	88.8	88.8	6.6	6.6	3.6		6		-				-		-	
						14.8	0.3	89	21.8		8.1		29.1		88.8		6.6		3.5		6		-				-		-	
SR8	Cloudy	Moderate	08:12	4.6	Surface	1.0	-	-	22.6	22.5	8.1	8.1	26.7	26.7	91.5	91.5	6.8	6.8	8.2	9.1	9	10	-	-	820386	811619	-	-	-	-
						1.0	-	-	22.5		8.1		26.7		91.4		6.8		8.2		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	-	-	22.3	22.3	8.1	8.1	27.2	27.2	89.1	89.1	6.6	6.6	10.1		10		-				-		-	
						3.6	-	-	22.3		8.1		27.2		89.1		6.6		10.0		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 28 March 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Rough	14:40	9.1	Surface	1.0	0.4	227	22.4	22.4	8.2	8.2	26.5	26.5	95.9	95.9	7.1	7.0	5.1	8.9	5	4	82	87	815623	804236	<0.2	<0.2	1.2	1.2
						1.0	0.4	231	22.4		8.2		26.6		95.8		7.1		5.3		5		83				<0.2		1.2	
					Middle	4.6	0.5	231	22.0	22.0	8.2	8.2	29.6	29.7	94.2	94.1	6.9		8.4		4		88				<0.2		1.2	
						4.6	0.5	246	22.0		8.2		29.7		94.0		6.9		8.6		4		87				<0.2		1.2	
					Bottom	8.1	0.4	212	21.6	21.6	8.3	8.3	31.8	31.8	93.8	93.8	6.9	6.9	13.0		4		91				<0.2		1.1	
						8.1	0.4	224	21.6		8.3		31.8		93.8		6.9		12.9		4		91				<0.2		1.2	
C2	Rainy	Rough	13:32	12.8	Surface	1.0	0.5	151	22.6	22.6	8.2	8.2	24.7	24.7	89.4	89.4	6.7	6.6	5.0	8.2	7	6	85	87	825696	806932	<0.2	<0.2	2.3	2.1
						1.0	0.5	158	22.6		8.2		24.7		89.4		6.7		5.1		6		84				<0.2		2.1	
					Middle	6.4	0.4	161	22.4	22.4	8.3	8.3	26.4	26.4	85.8	85.8	6.4		8.3		6		87				<0.2		2.2	
						6.4	0.5	169	22.4		8.3		26.4		85.8		6.4		8.3		5		86				<0.2		2.1	
					Bottom	11.8	0.3	109	22.0	22.0	8.2	8.2	28.9	28.9	87.5	87.6	6.5	6.5	11.2		5		88				<0.2		2.0	
						11.8	0.3	109	22.0		8.2		28.9		87.6		6.5		11.0		5		89				<0.2		2.1	
C3	Cloudy	Moderate	15:37	11.0	Surface	1.0	0.5	82	22.3	22.3	8.3	8.3	27.4	27.4	89.4	89.4	6.6	6.5	4.8	5.2	5	6	85	87	822090	817786	<0.2	<0.2	1.3	1.4
						1.0	0.5	85	22.3		8.3		27.4		89.4		6.6		4.8		5		85				<0.2		1.4	
					Middle	5.5	0.4	91	22.2	22.2	8.3	8.3	27.9	27.9	86.9	86.9	6.4		5.0		5		87				<0.2		1.4	
						5.5	0.4	92	22.2		8.3		27.9		86.9		6.4		5.0		6		88				<0.2		1.4	
					Bottom	10.0	0.4	67	22.0	22.0	8.3	8.3	29.4	29.5	86.2	86.2	6.4	6.4	5.7		6		90				<0.2		1.4	
						10.0	0.4	70	22.0		8.3		29.5		86.2		6.4		5.7		6		89				<0.2		1.4	
IM1	Cloudy	Moderate	14:21	5.4	Surface	1.0	0.2	186	22.6	22.6	8.2	8.2	26.2	26.2	96.5	96.5	7.2	7.2	4.9	6.7	4	5	85	88	817955	807117	<0.2	<0.2	1.2	1.2
						1.0	0.3	196	22.6		8.2		26.2		96.4		7.2		4.9		4		85				<0.2		1.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	0.2	168	22.7	22.7	8.2	8.2	26.4	26.4	94.3	94.3	7.0	7.0	8.0		5		90				<0.2		1.2	
						4.4	0.3	175	22.7		8.2		26.5		94.3		7.0		8.8		5		91				<0.2		1.3	
IM2	Cloudy	Moderate	14:13	7.8	Surface	1.0	0.2	157	22.5	22.5	8.2	8.2	26.4	26.4	95.5	95.5	7.1	7.1	1.3	2.5	4	3	84	88	818156	806184	<0.2	<0.2	1.4	1.4
						1.0	0.2	158	22.5		8.2		26.4		95.5		7.1		1.3		4		85				<0.2		1.5	
					Middle	3.9	0.2	170	22.5	22.5	8.2	8.2	27.0	27.0	94.0	94.1	7.0		2.4		3		88				<0.2		1.5	
						3.9	0.2	176	22.5		8.2		27.0		94.2		7.0		2.4		3		89				<0.2		1.4	
					Bottom	6.8	0.2	110	22.3	22.3	8.2	8.2	28.7	28.7	93.1	93.2	6.9	6.9	3.9		3		92				<0.2		1.4	
						6.8	0.2	114	22.3		8.2		28.7		93.2		6.9		3.9		3		92				<0.2		1.4	
IM3	Cloudy	Moderate	14:07	8.1	Surface	1.0	0.3	130	22.6	22.6	8.2	8.2	26.7	26.7	94.4	94.4	7.0	7.0	2.0	5.8	4	4	83	88	818776	805593	<0.2	<0.2	1.6	1.6
						1.0	0.3	137	22.6		8.2		26.6		94.4		7.0		2.0		4		84				<0.2		1.7	
					Middle	4.1	0.1	169	22.4	22.4	8.2	8.2	27.9	27.9	93.0	93.0	6.9		4.1		4		87				<0.2		1.6	
						4.1	0.1	185	22.4		8.2		27.9		93.0		6.9		4.2		4		88				<0.2		1.7	
					Bottom	7.1	0.2	132	22.1	22.1	8.2	8.2	29.5	29.5	92.5	92.5	6.8	6.8	11.2		4		92				<0.2		1.7	
						7.1	0.2	138	22.1		8.2		29.5		92.5		6.8		11.3		4		91				<0.2		1.5	
IM4	Cloudy	Moderate	13:57	8.4	Surface	1.0	0.5	158	22.8	22.8	8.2	8.2	23.4	23.4	93.4	93.4	7.0	7.0	2.0	3.5	4	4	83	87	819711	804611	<0.2	<0.2	1.9	1.9
						1.0	0.5	173	22.8		8.2		23.4		93.3		7.0		2.0		4		83				<0.2		1.8	
					Middle	4.2	0.4	159	22.5	22.5	8.2	8.2	27.3	27.3	93.9	93.9	6.9		2.7		4		87				<0.2		1.9	
						4.2	0.5	159	22.5		8.2		27.3		93.9		6.9		2.6		3		87				<0.2		1.9	
					Bottom	7.4	0.7	159	22.0	22.0	8.2	8.2	29.8	29.8	93.4	93.5	6.9	6.9	5.9		3		92				<0.2		1.8	
						7.4	0.7	163	22.0		8.2		29.8		93.5		6.9		5.9		3		91				<0.2		1.8	
IM5	Cloudy	Rough	13:50	7.6	Surface	1.0	0.4	219	22.8	22.8	8.1	8.1	23.0	23.0	93.2	93.3	7.0	6.9	1.7	4.8	3	3	84	88	820743	804865	<0.2	<0.2	2.0	2.1
						1.0	0.4	230	22.8		8.1		23.0		93.3		7.0		1.7		3		85				<0.2		2.1	
					Middle	3.8	0.3	203	22.4	22.4	8.2	8.2	28.1	28.1	92.4	92.4	6.8		4.8		3		88				<0.2		2.1	
						3.8	0.3	212	22.4		8.2		28.1		92.4		6.8		4.7		3		89				<0.2		2.2	
					Bottom	6.6	0.2	207	22.2	22.2	8.2	8.2	28.9	28.9	93.0	93.0	6.9	6.9	8.0		4		89				<0.2		1.9	
						6.6	0.2	213	22.2		8.2		28.9		93.0		6.9		8.0		4		90				<0.2		2.0	
IM6	Rainy	Rough	13:42	8.0	Surface	1.0	0.3	245	22.8	22.8	8.1	8.1	23.4	23.4	92.8	92.7	7.0	6.9	1.9	6.4	4	5	82	88	821040	805831	<0.2	<0.2	1.8	1.8
						1.0	0.3	257	22.8		8.1		23.4		92.6		7.0		2.0		4		83				<0.2		1.7	
					Middle	4.0	0.3	235	22.6	22.6	8.1	8.1	27.2	27.2	91.8	91.9	6.8		5.7		4		88				<0.2		1.8	
						4.0	0.3	248	22.6		8.1		27.2		91.9		6.8		5.7		5		90				<0.2		1.7	
					Bottom	7.0	0.2	234	22.6	22.6	8.2	8.2	27.5	27.5	91.0	91.1	6.7	6.7	11.4		5		90				<0.2		1.8	
						7.0	0.2	256	22.6		8.2		27.5		91.2		6.7		11.4		5		92				<0.2		1.8	
IM7	Rainy	Rough	13:33	9.2	Surface	1.0	0.2	145	22.8	22.8	8.1	8.1	25.0	25.0	93.8	93.8	7.0	7.0	3.1	7.1	5	5	84	88	821325	806849	<0.2	<0.2	1.6	1.6
						1.0	0.2	157	22.8		8.1		25.0		93.8		7.0		3.2		5		84				<0.2		1.6	
					Middle	4.6	0.2	133	22.5	22.5	8.1	8.1	27.4	27.4	92.9	93.0	6.9		9.2		5		87				<0.2		1.6	
						4.6	0.2	135	22.5		8.1		27.4		93.0		6.9		9.1		5		88				<0.2		1.6	
					Bottom	8.2	0.3	131	22.5	22.5	8.1	8.1	27.4	27.4	92.6	92.6	6.8	6.8	9.0		4		92				<0.2		1.5	
						8.2	0.3	140	22.5		8.1		27.4		92.6		6.8		9.1		4		91				<0.2		1.6	
IM8	Rainy	Rough	14:05	7.7	Surface	1.0	0.2	109	22.8	22.8	8.2	8.2	23.7	23.7	91.0	91.0	6.8	6.7	4.1	6.0	5	5	85	87	821852	808151	<0.2	<0.2	1.7	1.8
						1.0	0.2	117	22.8		8.2		23.7		90.9		6.8		4.1		5		84				<0.2		1.8	
					Middle	3.9	0.1	93	22.7	22.7	8.2	8.2	24.8	24.9	88.9	88.9	6.7		6.0		5		87				<0.2		1.8	
						3.9	0.1	97	22.7		8.2		25.0		88.9		6.6		6.0		5		87				<0.2		1.8	
					Bottom	6.7	0.2	84	22.6	22.6	8.2	8.2	26.8	26.8	91.5	91.6	6.8	6.8	7.8		5		88				<0.2		1.8	
						6.7	0.2	91	22.6		8.2		26.8		91.6		6.8		7.8		5		88				<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 28 March 20 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	Rainy	Rough	14:12	7.0	Surface	1.0	0.3	106	22.8	22.8	8.2	8.2	23.9	23.9	91.3	91.3	6.9	6.8	3.9	5.6	5	5	84	86	822095	808787	<0.2	<0.2	1.8	1.7
						1.0	0.3	113	22.8		8.2		23.9		91.3		6.9		3.9		5		84				<0.2		1.7	
					Middle	3.5	0.3	91	22.8	22.8	8.2	8.2	24.1	24.1	89.9	89.9	6.7		5.5		5		86				<0.2		1.8	
						3.5	0.3	93	22.8		8.2		24.1		89.9		6.7		5.6		4		87				<0.2		1.7	
					Bottom	6.0	0.3	81	22.6	22.6	8.1	8.1	26.6	26.6	90.6	90.7	6.7	6.7	7.3		4		88				<0.2		1.7	
						6.0	0.3	81	22.6		8.1		26.6		90.7		6.7		7.3		4		89				<0.2		1.6	
IM10	Rainy	Rough	14:20	7.4	Surface	1.0	0.7	115	22.8	22.8	8.2	8.2	25.0	25.0	93.0	93.0	6.9	6.8	10.5	12.2	5	5	84	87	822379	809780	<0.2	<0.2	1.7	1.7
						1.0	0.7	116	22.8		8.2		25.0		93.0		6.9		10.7		4		85				<0.2		1.7	
					Middle	3.7	0.7	110	22.6	22.6	8.2	8.2	26.3	26.3	88.8	88.8	6.6		8.9		5		87				<0.2		1.9	
						3.7	0.7	116	22.6		8.2		26.3		88.8		6.6		9.0		5		87				<0.2		1.7	
					Bottom	6.4	0.6	106	22.5	22.5	8.2	8.2	26.9	26.9	88.5	88.6	6.6	6.6	17.1		4		89				<0.2		1.7	
						6.4	0.6	112	22.5		8.2		26.9		88.6		6.6		17.0		4		89				<0.2		1.7	
IM11	Rainy	Rough	14:35	9.1	Surface	1.0	0.8	114	22.8	22.8	8.2	8.2	24.3	24.3	92.6	92.7	6.9	6.9	7.1	12.2	5	5	84	87	822062	811447	<0.2	<0.2	1.6	1.6
						1.0	0.8	121	22.8		8.2		24.3		92.7		6.9		7.3		5		85				<0.2		1.7	
					Middle	4.6	0.6	111	22.7	22.7	8.2	8.2	25.1	25.1	91.3	91.3	6.8		12.2		5		86				<0.2		1.5	
						4.6	0.6	117	22.7		8.2		25.1		91.3		6.8		12.2		5		87				<0.2		1.5	
					Bottom	8.1	0.4	117	22.5	22.5	8.2	8.2	26.6	26.6	88.5	88.6	6.6	6.6	17.2		4		89				<0.2		1.6	
						8.1	0.4	126	22.5		8.2		26.6		88.6		6.6		17.0		4		89				<0.2		1.7	
IM12	Rainy	Rough	14:41	8.8	Surface	1.0	0.8	118	22.8	22.8	8.2	8.2	24.1	24.1	92.0	92.1	6.9	6.8	3.9	6.6	5	5	84	87	821465	812062	<0.2	<0.2	1.7	1.6
						1.0	0.8	128	22.8		8.2		24.1		92.1		6.9		3.9		4		85				<0.2		1.5	
					Middle	4.4	0.5	107	22.7	22.7	8.2	8.2	25.3	25.3	88.7	88.7	6.6		7.5		5		86				<0.2		1.5	
						4.4	0.5	110	22.7		8.2		25.3		88.7		6.6		7.5		5		86				<0.2		1.7	
					Bottom	7.8	0.3	75	22.5	22.5	8.2	8.2	26.9	26.9	87.8	87.8	6.5	6.5	8.5		4		89				<0.2		1.6	
						7.8	0.3	75	22.5		8.2		26.9		87.8		6.5		8.5		4		89				<0.2		1.6	
SR1A	Cloudy	Moderate	15:01	4.7	Surface	1.0	-	-	22.7	22.7	8.2	8.2	25.0	25.0	90.2	90.2	6.7	6.7	4.7	4.5	9	8	-	-	819976	812655	-	-	-	-
						1.0	-	-	22.7		8.2		25.0		90.1		6.7		4.7		9		-				-		-	
					Middle	2.4	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.4	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	-	-	22.7	22.7	8.1	8.1	27.1	27.1	87.5	87.5	6.5	6.5	4.3		7		-				-		-	
						3.7	-	-	22.7		8.1		27.1		87.5		6.5		4.3		7		-				-		-	
SR2	Cloudy	Moderate	15:17	4.6	Surface	1.0	0.2	96	22.7	22.7	8.1	8.1	25.2	25.2	91.4	91.5	6.8	6.8	4.4	4.8	4	5	85	86	821442	814185	<0.2	<0.2	1.6	1.7
						1.0	0.2	98	22.7		8.1		25.2		91.5		6.8		4.4		4		85				<0.2		1.7	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.1	64	22.7	22.7	8.1	8.1	25.5	25.5	90.9	90.9	6.8	6.8	5.1		5		87				<0.2		1.6	
						3.6	0.1	67	22.7		8.1		25.5		90.9		6.8		5.1		5		87				<0.2		1.7	
SR3	Rainy	Rough	13:57	8.6	Surface	1.0	0.0	105	22.8	22.8	8.2	8.2	23.5	23.5	90.7	90.8	6.8	6.7	3.7	5.6	6	5	-	-	822169	807561	-	-	-	-
						1.0	0.0	110	22.8		8.2		23.5		90.8		6.8		3.7		6		-				-		-	
					Middle	4.3	0.0	309	22.6	22.6	8.2	8.2	26.2	26.2	87.8	87.8	6.5		6.2		5		-				-		-	
						4.3	0.0	337	22.6		8.2		26.2		87.8		6.5		6.3		5		-				-		-	
					Bottom	7.6	0.0	191	22.5	22.5	8.1	8.1	26.6	26.6	90.3	90.3	6.7	6.7	6.9		5		-				-		-	
						7.6	0.0	203	22.5		8.1		26.6		90.3		6.7		6.9		5		-				-		-	
SR4A	Cloudy	Calm	15:05	8.6	Surface	1.0	0.2	109	22.7	22.7	8.2	8.2	26.1	26.1	95.0	95.0	7.1	7.0	3.6	6.0	6	6	-	-	817205	807813	-	-	-	-
						1.0	0.3	110	22.7		8.2		26.1		94.9		7.1		3.6		5		-				-		-	
					Middle	4.3	0.1	69	22.7	22.7	8.2	8.2	26.6	26.6	93.5	93.4	6.9		4.9		6		-				-		-	
						4.3	0.1	75	22.7		8.2		26.6		93.3		6.9		5.0		6		-				-		-	
					Bottom	7.6	0.1	94	22.6	22.6	8.2	8.2	27.6	27.6	92.5	92.6	6.8	6.8	9.5		6		-				-		-	
						7.6	0.1	103	22.6		8.2		27.6		92.6		6.8		9.5		6		-				-		-	
SR5A	Cloudy	Calm	15:21	5.0	Surface	1.0	0.1	85	22.7	22.7	8.2	8.2	26.9	26.9	94.1	94.2	7.0	7.0	2.5	4.7	4	4	-	-	816616	810715	-	-	-	-
						1.0	0.1	93	22.7		8.2		26.9		94.2		7.0		2.6		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.2	27	22.8	22.8	8.2	8.2	27.4	27.4	93.4	93.5	6.9	6.9	6.7		4		-				-		-	
						4.0	0.2	27	22.8		8.2		27.4		93.5		6.9		6.9		4		-				-		-	
SR6A	Cloudy	Calm	15:51	4.3	Surface	1.0	0.1	0	22.8	22.8	8.2	8.2	27.0	27.0	90.3	90.3	6.7	6.7	6.3	7.0	6	6	-	-	818004	814743	-	-	-	-
						1.0	0.1	0	22.8		8.2		27.0		90.2		6.7		6.3		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.1	22	22.9	22.9	8.2	8.2	27.3	27.3	91.0	91.2	6.7	6.7	7.9		5		-				-		-	
						3.3	0.1	22	22.9		8.2		27.3		91.3		6.7		7.5		5		-				-		-	
SR7	Cloudy	Moderate	16:06	16.2	Surface	1.0	0.7	65	22.5	22.5	8.2	8.2	27.2	27.2	92.1	92.2	6.8	6.7	2.5	2.8	4	3	-	-	823621	823763	-	-	-	-
						1.0	0.8	66	22.5		8.2		27.2		92.2		6.8		2.5		4		-				-		-	
					Middle	8.1	0.4	35	22.3	22.3	8.3	8.3	28.4	28.4	88.7	88.7	6.5		3.2		3		-				-		-	
						8.1	0.4	37	22.3		8.3		28.4		88.7		6.5		3.1		3		-				-		-	
					Bottom	15.2	0.3	22	22.0	22.0	8.3	8.3	29.5	29.5	87.2	87.3	6.4	6.4	2.8		3		-				-		-	
						15.2	0.3	23	22.0		8.3		29.5		87.3		6.4		2.8		3		-				-		-	
SR8	Cloudy	Moderate	14:52	4.5	Surface	1.0	-	-	22.8	22.8	8.1	8.1	24.5	24.5	90.9	91.0	6.8	6.8	8.6	9.0	12	10	-	-	820395	811621	-	-	-	-
						1.0	-	-	22.8		8.1		24.5		91.0		6.8		8.7		11		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	-	-	22.8	22.8	8.1	8.1	24.7	24.7	90.8	90.9	6.8	6.8	9.3		8		-				-		-	
						3.5	-	-	22.8		8.1		24.7		90.9		6.8		9.3		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 28 March 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	09:16	7.5	Surface	1.0	0.4	32	22.4	22.4	8.1	8.1	26.0	26.0	92.5	92.6	6.9	6.8	3.3	7.6	5	6	84	88	815626	804225	<0.2	<0.2	1.4	1.3
						1.0	0.5	34	22.4		8.1		26.0		92.7		6.9		3.4		5		85				<0.2		1.3	
					Middle	3.8	0.4	47	22.1	22.1	8.1	8.1	29.3	29.3	91.4	91.4	6.7		8.9		5		88				<0.2		1.3	
						3.8	0.5	47	22.1		8.1		29.3		91.4		6.7		9.1		6		88				<0.2		1.2	
					Bottom	6.5	0.4	37	21.8	21.8	8.1	8.1	31.0	31.0	85.7	85.0	6.3	6.3	10.2		6		91				<0.2		1.3	
						6.5	0.4	37	21.8		8.1		31.0		84.3		6.2		10.6		6		91				<0.2		1.3	
C2	Cloudy	Moderate	10:13	12.5	Surface	1.0	0.4	15	22.8	22.8	8.1	8.1	22.8	22.8	88.7	88.7	6.7	6.7	2.6	6.4	<2	2	84	86	825686	806957	<0.2	<0.2	2.2	2.3
						1.0	0.4	16	22.8		8.1		22.8		88.7		6.7		2.7		<2		84				<0.2		2.2	
					Middle	6.3	0.4	7	22.7	22.7	8.2	8.2	24.5	24.5	87.8	87.9	6.6		5.6		2		86				<0.2		2.3	
						6.3	0.4	7	22.7		8.2		24.5		87.9		6.6		5.7		2		86				<0.2		2.3	
					Bottom	11.5	0.2	12	22.1	22.1	8.2	8.2	28.4	28.4	86.3	86.3	6.4	6.4	10.7		2		88				<0.2		2.3	
						11.5	0.3	12	22.1		8.2		28.4		86.3		6.4		10.8		3		87				<0.2		2.3	
C3	Cloudy	Moderate	08:00	10.7	Surface	1.0	0.6	267	22.5	22.5	8.1	8.1	26.9	26.9	89.4	89.4	6.6	6.5	3.9	6.1	3	3	85	86	822108	817788	<0.2	<0.2	1.6	1.6
						1.0	0.7	268	22.5		8.1		26.9		89.4		6.6		3.9		3		84				<0.2		1.6	
					Middle	5.4	0.6	260	22.2	22.2	8.1	8.1	28.5	28.5	86.4	86.4	6.4		5.5		3		87				<0.2		1.6	
						5.4	0.7	285	22.2		8.1		28.5		86.4		6.4		5.6		3		86				<0.2		1.6	
					Bottom	9.7	0.4	267	21.9	21.9	8.1	8.1	29.5	29.5	87.9	87.9	6.5	6.5	8.8		3		88				<0.2		1.8	
						9.7	0.4	282	21.9		8.1		29.5		87.9		6.5		8.8		3		88				<0.2		1.6	
IM1	Cloudy	Moderate	09:33	5.3	Surface	1.0	0.2	331	22.6	22.6	8.1	8.1	27.7	27.7	91.3	91.4	6.7	6.7	6.6	9.1	7	8	86	89	817942	807154	<0.2	<0.2	1.4	1.4
						1.0	0.2	305	22.6		8.1		27.7		91.5		6.7		6.7		7		85				<0.2		1.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	0.2	339	22.5	22.5	8.1	8.1	28.1	28.1	91.7	91.8	6.8	6.8	11.5		9		92				<0.2		1.4	
						4.3	0.2	356	22.5		8.1		28.1		91.8		6.8		11.6		9		92				<0.2		1.4	
IM2	Cloudy	Moderate	09:41	7.6	Surface	1.0	0.3	352	22.5	22.5	8.1	8.1	27.4	27.4	92.4	92.4	6.8	6.8	5.0	8.7	5	4	86	89	818159	806156	<0.2	<0.2	1.4	1.4
						1.0	0.3	324	22.5		8.1		27.4		92.4		6.8		5.1		4		87				<0.2		1.4	
					Middle	3.8	0.3	347	22.4	22.4	8.1	8.1	28.2	28.2	91.3	91.4	6.7		8.6		5		90				<0.2		1.5	
						3.8	0.3	319	22.4		8.1		28.2		91.4		6.7		8.4		3		90				<0.2		1.4	
					Bottom	6.6	0.2	334	22.4	22.4	8.1	8.1	28.2	28.2	91.9	91.9	6.8	6.8	12.6		3		92				<0.2		1.4	
						6.6	0.2	339	22.4		8.1		28.2		91.9		6.8		12.5		3		91				<0.2		1.4	
IM3	Cloudy	Moderate	09:47	7.8	Surface	1.0	0.3	327	22.6	22.6	8.1	8.1	26.8	26.8	92.9	92.9	6.9	6.9	4.2	8.1	5	5	87	90	818796	805575	<0.2	<0.2	1.4	1.4
						1.0	0.4	348	22.6		8.1		26.8		92.9		6.9		4.2		5		86				<0.2		1.4	
					Middle	3.9	0.3	317	22.4	22.4	8.2	8.2	28.2	28.2	91.9	92.0	6.8		7.8		5		89				<0.2		1.4	
						3.9	0.3	319	22.4		8.2		28.2		92.1		6.8		7.8		5		90				<0.2		1.4	
					Bottom	6.8	0.3	317	22.4	22.4	8.2	8.2	28.3	28.3	92.3	92.4	6.8	6.8	12.3		5		92				<0.2		1.4	
						6.8	0.3	334	22.4		8.2		28.3		92.4		6.8		12.3		5		93				<0.2		1.4	
IM4	Cloudy	Moderate	09:56	8.2	Surface	1.0	0.8	21	22.7	22.7	8.2	8.2	26.4	26.4	93.7	93.7	6.9	6.9	2.5	5.8	6	5	86	89	819738	804585	<0.2	<0.2	1.4	1.4
						1.0	0.9	21	22.7		8.2		26.4		93.7		6.9		2.5		6		86				<0.2		1.4	
					Middle	4.1	0.7	19	22.6	22.6	8.2	8.2	26.5	26.5	93.2	93.2	6.9		3.9		5		90				<0.2		1.4	
						4.1	0.7	20	22.6		8.2		26.5		93.2		6.9		3.7		5		89				<0.2		1.4	
					Bottom	7.2	0.5	13	22.3	22.3	8.2	8.2	28.5	28.5	92.9	92.9	6.9	6.9	11.2		5		92				<0.2		1.4	
						7.2	0.5	13	22.3		8.2		28.5		92.9		6.9		11.2		5		93				<0.2		1.4	
IM5	Cloudy	Moderate	10:04	7.7	Surface	1.0	0.8	8	22.5	22.5	8.2	8.2	27.6	27.6	92.5	92.5	6.8	6.8	8.4	10.5	21	21	86	90	820740	804860	<0.2	<0.2	1.2	1.2
						1.0	0.9	8	22.5		8.2		27.6		92.5		6.8		8.5		21		87				<0.2		1.2	
					Middle	3.9	0.7	14	22.4	22.4	8.2	8.2	27.9	27.9	92.9	92.8	6.9		10.2		21		91				<0.2		1.2	
						3.9	0.8	14	22.4		8.2		27.9		92.7		6.8		10.2		21		91				<0.2		1.3	
					Bottom	6.7	0.5	26	22.4	22.4	8.2	8.2	28.0	28.0	91.9	92.0	6.8	6.8	12.7		22		93				<0.2		1.2	
						6.7	0.5	26	22.4		8.2		28.0		92.0		6.8		12.8		22		93				<0.2		1.2	
IM6	Cloudy	Moderate	10:12	6.9	Surface	1.0	0.1	113	22.8	22.8	8.1	8.1	22.6	22.6	91.7	91.8	6.9	6.9	2.5	4.5	4	6	87	90	821072	805821	<0.2	<0.2	1.8	1.9
						1.0	0.1	121	22.8		8.1		22.6		91.8		6.9		2.5		4		86				<0.2		1.9	
					Middle	3.5	0.2	61	22.7	22.7	8.2	8.2	24.9	24.9	92.4	92.5	6.9		3.3		6		90				<0.2		2.0	
						3.5	0.2	63	22.7		8.2		24.9		92.5		6.9		3.3		6		91				<0.2		1.9	
					Bottom	5.9	0.4	57	22.6	22.6	8.2	8.2	27.2	27.2	92.5	92.5	6.8	6.8	7.6		7		92				<0.2		1.9	
						5.9	0.4	61	22.6		8.2		27.2		92.5		6.8		7.6		7		92				<0.2		1.9	
IM7	Cloudy	Moderate	10:21	8.2	Surface	1.0	0.0	71	22.9	22.9	8.1	8.1	21.0	21.0	90.0	90.0	6.9	6.9	1.5	4.6	3	3	86	90	821332	806826	<0.2	<0.2	2.0	2.2
						1.0	0.0	76	22.9		8.1		21.0		90.0		6.9		1.6		3		86				<0.2		2.2	
					Middle	4.1	0.3	76	22.8	22.8	8.1	8.1	23.3	23.3	90.4	90.4	6.8		2.6		3		90				<0.2		2.2	
						4.1	0.3	83	22.8		8.1		23.3		90.3		6.8		2.5		3		91				<0.2		2.2	
					Bottom	7.2	0.3	73	22.6	22.6	8.2	8.2	27.1	27.1	91.9	91.9	6.8	6.8	9.7		3		92				<0.2		2.3	
						7.2	0.3	77	22.6		8.2		27.1		91.9		6.8		9.8		3		93				<0.2		2.3	
IM8	Cloudy	Moderate	09:32	7.6	Surface	1.0	0.3	49	22.9	22.9	8.1	8.1	19.4	19.4	90.2	90.3	6.9	6.9	3.0	5.0	4	3	83	84	821849	808124	<0.2	<0.2	2.2	2.2
						1.0	0.3	53	22.9		8.1		19.4		90.3		6.9		3.0		3		83				<0.2		2.3	
					Middle	3.8	0.2	56	22.9	22.9	8.1	8.1	21.5	21.5	90.0	90.0	6.8		4.9		3		84				<0.2		2.3	
						3.8	0.2	59	22.9		8.1		21.5		90.0		6.8		4.9		3		84				<0.2		2.1	
					Bottom	6.6	0.0	61	22.8	22.8	8.1	8.1	23.5	23.5	90.6	90.6	6.8	6.8	7.2		3		86				<0.2		2.1	
						6.6	0.0	67	22.8		8.1		23.5		90.6		6.8		7.2		3		85				<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 28 March 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	09:23	7.2	Surface	1.0	0.1	17	22.9	22.9	8.1	8.1	21.9	21.9	91.5	91.5	6.9	6.9	6.6	9.9	4	3	84	85	822108	808822	<0.2	<0.2	2.2	2.3
						1.0	0.1	18	22.9		8.1		21.9		91.4		6.9		6.5		4		83				<0.2		2.3	
					Middle	3.6	0.1	285	22.9	22.9	8.1	8.1	23.5	23.5	90.2	90.3	6.8		8.3		3		85				<0.2		2.2	
						3.6	0.1	292	22.9		8.1		23.5		90.3		6.8		8.4		<0.2		84				<0.2		2.2	
					Bottom	6.2	0.3	280	22.8	22.8	8.2	8.2	24.7	24.7	89.0	89.1	6.7	6.7	14.7		2		86				<0.2		2.7	
						6.2	0.3	287	22.8		8.2		24.7		89.2		6.7		14.7		2		86				<0.2		2.4	
IM10	Cloudy	Moderate	09:15	8.1	Surface	1.0	0.8	302	22.9	22.9	8.2	8.2	24.7	24.7	91.5	91.5	6.8	6.8	3.7	9.6	5	4	83	85	822401	809815	<0.2	<0.2	1.8	1.8
						1.0	0.8	308	22.9		8.2		24.7		91.5		6.8		3.8		4		84				<0.2		1.7	
					Middle	4.1	0.7	307	22.7	22.7	8.2	8.2	26.0	26.0	90.2	90.2	6.7		10.1		4		85				<0.2		1.8	
						4.1	0.7	309	22.7		8.2		26.0		90.1		6.7		10.2		4		84				<0.2		1.7	
					Bottom	7.1	0.6	303	22.7	22.7	8.2	8.2	26.1	26.1	90.0	90.1	6.7	6.7	14.8		4		85				<0.2		1.8	
						7.1	0.6	313	22.7		8.2		26.1		90.1		6.7		15.0		4		86				<0.2		1.8	
IM11	Cloudy	Moderate	09:04	8.0	Surface	1.0	0.8	297	22.8	22.8	8.2	8.2	25.8	25.8	89.8	89.8	6.7	6.5	8.0	13.3	4	4	83	85	822052	811473	<0.2	<0.2	1.7	1.9
						1.0	0.9	300	22.8		8.2		25.8		89.7		6.7		8.2		4		84				<0.2		1.7	
					Middle	4.0	0.6	300	22.4	22.4	8.2	8.2	27.6	27.6	85.7	85.7	6.3		13.3		4		84				<0.2		1.7	
						4.0	0.6	305	22.4		8.2		27.6		85.7		6.3		13.6		4		85				<0.2		1.7	
					Bottom	7.0	0.4	309	22.2	22.2	8.2	8.2	28.1	28.1	86.9	86.9	6.4	6.4	18.2		3		86				<0.2		2.1	
						7.0	0.5	324	22.2		8.2		28.1		86.9		6.4		18.3		3		85				<0.2		2.5	
IM12	Cloudy	Moderate	08:56	8.6	Surface	1.0	0.7	292	22.8	22.8	8.2	8.2	25.2	25.2	91.4	91.4	6.8	6.8	3.3	9.5	4	5	84	85	821456	812065	<0.2	<0.2	1.7	1.9
						1.0	0.8	303	22.8		8.2		25.2		91.4		6.8		3.4		4		83				<0.2		1.7	
					Middle	4.3	0.7	285	22.5	22.5	8.2	8.2	27.0	27.0	89.8	89.8	6.7		8.6		4		85				<0.2		1.8	
						4.3	0.7	290	22.5		8.2		27.0		89.8		6.7		8.6		5		85				<0.2		1.8	
					Bottom	7.6	0.5	287	22.4	22.4	8.2	8.2	27.4	27.4	89.8	89.9	6.6	6.7	16.4		6		87				<0.2		2.0	
						7.6	0.6	311	22.4		8.2		27.4		89.9		6.7		16.5		5		86				<0.2		2.2	
SR1A	Cloudy	Moderate	08:35	4.9	Surface	1.0	-	-	22.7	22.7	8.1	8.1	25.4	25.4	90.1	90.0	6.7	6.7	3.5	3.7	4	4	-	-	819971	812664	-	-	-	-
						1.0	-	-	22.7		8.1		25.4		89.9		6.7		3.5		4		-				-		-	
					Middle	2.5	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.5	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	-	-	22.7	22.7	8.1	8.1	26.5	26.5	87.9	87.9	6.5	6.5	3.9		4		-				-		-	
						3.9	-	-	22.7		8.1		26.5		87.9		6.5		3.9		4		-				-		-	
SR2	Cloudy	Moderate	08:21	4.1	Surface	1.0	0.2	46	22.6	22.6	8.1	8.1	26.3	26.3	90.0	90.0	6.7	6.7	5.6	7.1	4	4	85	86	821460	814157	<0.2	<0.2	1.6	1.7
						1.0	0.2	46	22.6		8.1		26.3		90.0		6.7		5.5		3		86				<0.2		1.7	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.2	50	22.4	22.4	8.1	8.1	27.3	27.3	89.4	89.5	6.6	6.6	8.7		4		87				<0.2		1.6	
						3.1	0.2	50	22.4		8.1		27.3		89.5		6.6		8.7		4		87				<0.2		1.7	
SR3	Cloudy	Moderate	09:40	9.1	Surface	1.0	0.2	32	22.9	22.9	8.1	8.1	19.2	19.2	89.5	89.5	6.9	6.8	2.6	4.5	3	2	-	-	822123	807585	-	-	-	-
						1.0	0.2	32	22.9		8.1		19.2		89.5		6.9		2.6		3		-				-		-	
					Middle	4.6	0.0	158	22.9	22.9	8.2	8.2	21.9	21.9	88.8	88.8	6.7		3.5		2		-				-		-	
						4.6	0.0	164	22.9		8.2		21.9		88.8		6.7		3.5		2		-				-		-	
					Bottom	8.1	0.2	122	22.6	22.6	8.2	8.2	24.9	24.9	87.9	87.9	6.6	6.6	7.5		2		-				-		-	
						8.1	0.2	125	22.6		8.2		24.9		87.9		6.6		7.5		2		-				-		-	
SR4A	Cloudy	Calm	08:50	9.5	Surface	1.0	0.1	200	22.8	22.8	8.1	8.1	27.4	27.4	90.2	90.3	6.6	6.6	4.2	4.5	6	6	-	-	817182	807799	-	-	-	-
						1.0	0.1	213	22.8		8.1		27.4		90.3		6.6		4.2		6		-				-		-	
					Middle	4.8	0.1	214	22.7	22.7	8.1	8.1	27.7	27.7	89.2	89.3	6.6		5.4		6		-				-		-	
						4.8	0.1	234	22.7		8.1		27.7		89.3		6.6		5.4		6		-				-		-	
					Bottom	8.5	0.1	229	22.7	22.7	8.1	8.1	27.8	27.8	88.6	88.7	6.5	6.5	4.0		7		-				-		-	
						8.5	0.1	247	22.7		8.1		27.8		88.7		6.5		4.0		7		-				-		-	
SR5A	Cloudy	Calm	08:34	5.5	Surface	1.0	0.3	279	22.8	22.8	8.1	8.1	27.9	27.9	88.6	88.6	6.5	6.5	5.7	6.6	10	9	-	-	816569	810679	-	-	-	-
						1.0	0.3	301	22.8		8.1		27.9		88.6		6.5		5.8		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.5	0.2	285	22.7	22.7	8.1	8.1	27.9	27.9	89.4	89.4	6.6	6.6	7.3		8		-				-		-	
						4.5	0.3	300	22.7		8.1		27.9		89.4		6.6		7.4		8		-				-		-	
SR6A	Cloudy	Calm	08:08	4.8	Surface	1.0	0.0	186	22.6	22.6	8.1	8.1	27.7	27.7	86.7	86.7	6.4	6.4	4.4	4.8	5	6	-	-	817971	814755	-	-	-	-
						1.0	0.0	198	22.6		8.1		27.7		86.7		6.4		4.4		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.0	204	22.6	22.6	8.1	8.1	28.0	28.0	85.6	85.6	6.3	6.3	5.1		6		-				-		-	
						3.8	0.0	216	22.6		8.1		28.0		85.6		6.3		5.1		6		-				-		-	
SR7	Cloudy	Moderate	07:32	15.8	Surface	1.0	0.3	224	22.5	22.5	7.7	7.7	27.0	27.0	90.2	90.2	6.7	6.6	2.5	3.1	5	4	-	-	823637	823752	-	-	-	-
						1.0	0.3	225	22.5		7.7		27.0		90.2		6.7		2.5		5		-				-		-	
					Middle	7.9	0.3	194	22.1	22.1	7.7	7.7	29.0	29.0	88.2	88.2	6.5		2.9		4		-				-		-	
						7.9	0.3	205	22.1		7.7		29.0		88.1		6.5		2.9		4		-				-		-	
					Bottom	14.8	0.6	316	21.9	21.9	7.7	7.7	29.8	29.8	87.4	87.4	6.4	6.4	3.8		3		-				-		-	
						14.8	0.6	328	21.9		7.7		29.8		87.3		6.4		3.9		3		-				-		-	
SR8	Cloudy	Moderate	08:47	4.6	Surface	1.0	-	-	22.8	22.8	8.2	8.2	24.9	24.9	91.2	91.2	6.8	6.8	4.9	7.3	6	5	-	-	820391	811642	-	-	-	-
						1.0	-	-	22.8		8.2		24.9		91.1		6.8		5.0		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	-	-	22.6	22.6	8.2	8.2	26.3	26.3	88.2	88.2	6.5	6.5	9.6		4		-				-		-	
						3.6	-	-	22.6		8.2		26.4		88.2		6.5		9.7		4		-				-		-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 31 March 20 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	16:39	8.8	Surface	1.0	0.3	205	21.6	21.6	7.9	7.9	25.7	25.7	93.6	93.6	7.1	7.0	1.8	4.1	4	3	84	88	815618	804247	<0.2	<0.2	1.2	1.3
						1.0	0.3	224	21.6		7.9		25.7		93.5		7.1		1.9		3		85				<0.2		1.3	
					Middle	4.4	0.3	186	21.7	21.7	7.9	7.9	32.9	32.8	93.6	93.4	6.8		2.8		3		88				<0.2		1.2	
						4.4	0.3	199	21.7		7.9		32.8		93.2		6.8		3.0		3		88				<0.2		1.4	
					Bottom	7.8	0.3	220	21.6	21.6	7.9	7.9	33.9	33.8	92.9	92.9	6.7	6.7	7.8		3		91				<0.2		1.4	
						7.8	0.3	241	21.6		7.9		33.8		92.8		6.7		7.4		3		91				<0.2		1.2	
C2	Rainy	Moderate	15:43	12.3	Surface	1.0	0.3	162	21.9	21.9	8.0	8.0	21.2	21.2	91.1	91.1	7.1	6.9	2.5	5.1	3	3	85	87	825697	806961	<0.2	<0.2	1.7	1.8
						1.0	0.3	168	21.9		8.0		21.2		91.0		7.1		2.5		3		84				<0.2		1.7	
					Middle	6.2	0.1	137	21.9	21.9	8.0	8.0	27.7	27.6	89.0	89.0	6.6		5.5		4		87				<0.2		1.8	
						6.2	0.1	150	21.9		8.0		27.6		89.0		6.6		5.4		3		87				<0.2		1.7	
					Bottom	11.3	0.3	131	21.6	21.6	8.0	8.0	30.9	30.9	89.4	89.5	6.6	6.6	7.4		4		89				<0.2		1.9	
						11.3	0.3	136	21.6		8.0		30.9		89.5		6.6		7.4		3		89				<0.2		1.8	
C3	Rainy	Moderate	17:48	11.2	Surface	1.0	0.1	145	21.7	21.7	8.0	8.0	27.3	27.3	89.7	89.7	6.7	6.7	2.1	4.6	3	4	86	88	822107	817779	<0.2	<0.2	1.1	1.1
						1.0	0.1	149	21.7		8.0		27.3		89.8		6.7		2.1		2		85				<0.2		1.1	
					Middle	5.6	0.1	113	21.7	21.7	8.0	8.0	28.2	28.2	89.4	89.4	6.7		4.0		4		87				<0.2		1.1	
						5.6	0.1	121	21.7		8.0		28.2		89.3		6.7		4.0		4		87				<0.2		1.1	
					Bottom	10.2	0.2	42	21.5	21.5	8.1	8.1	31.1	31.1	88.1	88.2	6.5	6.5	7.8		4		90				<0.2		1.1	
						10.2	0.2	43	21.5		8.1		31.2		88.2		6.5		7.7		4		90				<0.2		1.1	
IM1	Rainy	Rough	16:20	5.1	Surface	1.0	0.1	198	21.7	21.7	7.9	7.9	27.6	27.2	89.5	89.4	6.7	6.7	3.5	4.2	4	4	87	90	817943	807136	<0.2	<0.2	1.1	1.1
						1.0	0.1	206	21.7		7.9		26.8		89.3		6.7		3.8		3		86				<0.2		1.1	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	0.1	197	21.7	21.7	7.9	7.9	31.8	31.8	89.1	88.8	6.5	6.5	5.1		4		92				<0.2		1.2	
						4.1	0.1	211	21.7		7.9		31.8		88.5		6.5		4.5		4		93				<0.2		1.1	
IM2	Rainy	Rough	16:13	7.4	Surface	1.0	0.3	153	21.7	21.7	7.9	7.9	28.3	28.3	93.9	93.9	7.0	6.8	4.7	6.1	3	3	86	90	818144	806188	<0.2	<0.2	1.1	1.1
						1.0	0.4	167	21.7		7.9		28.4		93.8		7.0		5.1		3		87				<0.2		1.1	
					Middle	3.7	0.3	153	21.7	21.7	7.9	7.9	32.2	32.2	90.7	90.6	6.6		5.6		3		90				<0.2		1.1	
						3.7	0.3	153	21.7		7.9		32.3		90.4		6.6		6.2		3		91				<0.2		1.1	
					Bottom	6.4	0.2	158	21.7	21.7	7.9	7.9	32.6	32.6	89.8	89.8	6.5	6.5	6.9		4		92				<0.2		1.1	
						6.4	0.3	164	21.7		7.9		32.6		89.7		6.5		7.9		3		93				<0.2		1.2	
IM3	Rainy	Rough	16:07	7.6	Surface	1.0	0.1	175	21.8	21.7	8.0	8.0	28.9	29.0	93.4	92.9	6.9	6.8	3.6	6.4	3	4	87	90	818762	805575	<0.2	<0.2	1.0	1.1
						1.0	0.2	175	21.7		8.0		29.0		92.4		6.9		4.0		4		86				<0.2		1.3	
					Middle	3.8	0.2	143	21.7	21.7	8.0	8.0	32.2	32.2	91.2	91.3	6.7		6.8		4		90				<0.2		1.1	
						3.8	0.2	153	21.7		8.0		32.2		91.3		6.7		7.0		4		90				<0.2		1.1	
					Bottom	6.6	0.1	131	21.7	21.7	8.0	8.0	32.3	32.3	92.8	93.1	6.8	6.8	8.9		4		92				<0.2		1.1	
						6.6	0.1	136	21.7		8.0		32.3		93.3		6.8		8.2		4		93				<0.2		1.2	
IM4	Rainy	Rough	16:00	8.2	Surface	1.0	0.4	191	21.8	21.8	8.0	8.0	26.1	26.4	93.6	93.5	7.1	6.9	2.6	4.0	3	3	86	90	819715	804608	<0.2	<0.2	1.7	1.8
						1.0	0.4	201	21.8		8.0		26.6		93.4		7.0		2.7		2		87				<0.2		1.8	
					Middle	4.1	0.2	152	21.7	21.7	8.0	8.0	32.3	32.3	91.6	91.6	6.7		4.0		2		90				<0.2		1.6	
						4.1	0.2	158	21.7		8.0		32.3		91.5		6.7		4.1		3		90				<0.2		1.7	
					Bottom	7.2	0.2	156	21.7	21.7	8.0	8.0	32.5	32.5	92.0	92.1	6.7	6.7	5.2		3		92				<0.2		1.7	
						7.2	0.3	170	21.7		8.0		32.5		92.2		6.7		5.1		3		92				<0.2		2.0	
IM5	Rainy	Rough	15:53	7.8	Surface	1.0	0.5	215	21.7	21.7	8.0	8.0	23.0	23.1	92.8	92.8	7.1	7.0	1.8	3.5	2	3	87	90	820757	804887	<0.2	<0.2	1.9	1.9
						1.0	0.5	225	21.7		8.0		23.1		92.8		7.1		1.8		3		86				<0.2		2.1	
					Middle	3.9	0.3	224	21.7	21.7	8.0	8.0	27.7	27.8	91.3	91.3	6.8		3.5		3		91				<0.2		2.0	
						3.9	0.4	244	21.7		8.0		28.0		91.2		6.8		3.5		4		91				<0.2		1.9	
					Bottom	6.8	0.1	194	21.7	21.7	7.9	7.9	32.3	32.3	90.5	90.6	6.6	6.6	5.3		4		92				<0.2		1.6	
						6.8	0.1	198	21.7		7.9		32.3		90.7		6.6		5.1		4		93				<0.2		1.7	
IM6	Rainy	Rough	15:46	7.8	Surface	1.0	0.3	220	21.8	21.8	7.9	7.9	22.1	22.1	92.8	92.9	7.2	7.1	2.4	4.0	3	3	86	90	821057	805833	<0.2	<0.2	1.8	1.8
						1.0	0.3	235	21.8		7.9		22.1		92.9		7.2		2.5		3		87				<0.2		1.8	
					Middle	3.9	0.3	237	21.8	21.8	7.9	7.9	27.1	26.9	92.3	92.1	6.9		3.7		3		92				<0.2		1.8	
						3.9	0.3	251	21.8		7.9		26.7		91.9		6.9		3.9		4		91				<0.2		1.9	
					Bottom	6.8	0.1	177	21.7	21.7	7.9	7.9	32.0	32.0	90.8	91.0	6.6	6.7	5.7		3		93				<0.2		1.7	
						6.8	0.1	181	21.7		7.9		32.0		91.2		6.7		5.7		4		93				<0.2		1.9	
IM7	Rainy	Rough	15:39	8.6	Surface	1.0	0.2	232	21.8	21.8	7.9	7.9	21.8	21.8	92.0	91.7	7.1	7.0	2.2	3.4	2	2	86	90	821341	806821	<0.2	<0.2	2.0	2.0
						1.0	0.2	250	21.8		7.9		21.8		91.3		7.1		2.3		2		87				<0.2		2.0	
					Middle	4.3	0.1	15	21.8	21.8	7.9	7.9	27.7	28.6	92.3	92.3	6.9		3.1		2		91				<0.2		2.1	
						4.3	0.1	15	21.8		7.9		29.4		92.3		6.8		3.3		2		90				<0.2		2.0	
					Bottom	7.6	0.1	92	21.7	21.7	7.9	7.9	31.7	31.7	90.7	90.7	6.6	6.6	4.8		2		92				<0.2		2.1	
						7.6	0.1	94	21.7		7.9		31.7		90.6		6.6		4.6		2		93				<0.2		2.0	
IM8	Rainy	Moderate	16:10	8.2	Surface	1.0	0.2	130	21.9	21.9	8.0	8.0	21.8	21.8	93.1	93.1	7.2	7.2	2.2	4.3	4	4	86	88	821816	808156	<0.2	<0.2	2.0	2.0
						1.0	0.2	136	21.9		8.0		21.8		93.0		7.2		2.2		4		85				<0.2		2.0	
					Middle	4.1	0.1	102	21.9	21.9	8.1	8.1	23.1	23.3	92.9	92.9	7.1		3.9		4		88				<0.2		2.1	
						4.1	0.1	107	21.9		8.1		23.6		92.9		7.1		4.0		3		88				<0.2		1.9	
					Bottom	7.2	0.2	87	21.7	21.7	8.1	8.1	30.9	30.9	93.6	93.6	6.9	6.9	6.8		3		89				<0.2		2.1	
						7.2	0.2	91	21.7		8.1		30.9		93.6		6.9		6.5		3		89				<0.2		1.9	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 31 March 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Rainy	Moderate	16:17	7.8	Surface	1.0	0.4	102	21.8	21.8	8.1	8.1	21.9	21.9	92.6	92.6	7.2	7.2	1.5	2.3	3	3	85	87	822096	808816	<0.2	<0.2	1.7	1.8
						1.0	0.4	105	21.8		8.1		21.9		92.6		7.2		1.5		2		85				<0.2		1.8	
					Middle	3.9	0.3	89	21.9	21.9	8.1	8.1	22.2	22.2	92.7	92.7	7.2		1.9		3		87				<0.2		1.8	
						3.9	0.3	95	21.9		8.1		22.2		92.6		7.1		1.9		3		88				<0.2		1.8	
					Bottom	6.8	0.2	86	21.8	21.8	8.1	8.1	27.6	27.4	92.1	92.2	6.9	6.9	3.4		3		89				<0.2		1.8	
						6.8	0.2	86	21.8		8.1		27.1		92.2		6.9		3.4		4		89				<0.2		1.8	
IM10	Rainy	Moderate	16:29	8.5	Surface	1.0	0.6	95	21.9	21.9	8.1	8.1	23.0	23.0	91.2	91.2	7.0	6.9	2.9	5.6	4	4	85	87	822378	809801	<0.2	<0.2	1.7	1.7
						1.0	0.6	96	21.9		8.1		23.0		91.2		7.0		2.9		3		84				<0.2		1.6	
					Middle	4.3	0.5	85	21.9	21.9	8.1	8.1	26.9	26.9	91.0	91.1	6.8		5.6		3		88				<0.2		1.8	
						4.3	0.6	89	21.9		8.1		26.9		91.1		6.8		5.6		4		88				<0.2		1.7	
					Bottom	7.5	0.5	100	21.8	21.8	8.2	8.2	28.8	28.8	92.9	92.9	6.9	6.9	8.2		5		89				<0.2		1.7	
						7.5	0.5	103	21.8		8.2		28.8		92.9		6.9		8.3		4		89				<0.2		1.6	
IM11	Rainy	Moderate	16:40	9.3	Surface	1.0	0.6	127	21.9	21.9	8.0	8.0	23.1	23.1	89.5	89.4	6.9	6.7	3.4	5.7	3	3	86	88	822054	811439	<0.2	<0.2	1.7	1.7
						1.0	0.6	133	21.9		8.0		23.1		89.3		6.8		3.5		3		85				<0.2		1.8	
					Middle	4.7	0.3	126	21.8	21.8	8.1	8.1	27.5	27.5	87.2	87.2	6.5		6.2		4		88				<0.2		1.7	
						4.7	0.4	126	21.8		8.1		27.5		87.1		6.5		6.3		3		88				<0.2		1.7	
					Bottom	8.3	0.2	123	21.8	21.8	8.0	8.0	28.7	28.6	86.2	86.2	6.4	6.4	7.4		2		89				<0.2		1.6	
						8.3	0.2	131	21.8		8.0		28.6		86.1		6.4		7.3		4		90				<0.2		1.7	
IM12	Rainy	Moderate	16:48	8.6	Surface	1.0	0.6	126	21.9	21.9	8.1	8.1	22.8	22.8	91.3	91.3	7.0	6.9	2.3	3.3	2	3	85	87	821460	812024	<0.2	<0.2	1.8	1.8
						1.0	0.6	128	21.9		8.1		22.8		91.2		7.0		2.3		4		85				<0.2		1.8	
					Middle	4.3	0.3	111	21.9	21.9	8.1	8.1	25.1	25.1	89.8	89.8	6.8		3.3		4		87				<0.2		1.7	
						4.3	0.4	118	21.9		8.1		25.1		89.8		6.8		3.3		3		88				<0.2		1.8	
					Bottom	7.6	0.2	114	21.8	21.8	8.1	8.1	27.8	27.8	87.8	87.9	6.6	6.6	4.3		3		89				<0.2		1.8	
						7.6	0.2	122	21.8		8.1		27.8		88.0		6.6		4.3		3		89				<0.2		1.7	
SR1A	Rainy	Moderate	17:06	5.1	Surface	1.0	-	-	21.8	21.8	8.0	8.0	23.4	23.4	90.4	90.4	6.9	6.9	2.1	2.8	3	3	-	-	819974	812662	-	-	-	-
						1.0	-	-	21.8		8.0		23.4		90.4		6.9		2.1		3		-				-		-	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	-	-	21.8	21.8	8.1	8.1	25.9	25.9	91.4	91.5	6.9	6.9	3.4		2		-				-		-	
						4.1	-	-	21.8		8.1		25.9		91.5		6.9		3.4		3		-				-		-	
SR2	Rainy	Moderate	17:22	4.8	Surface	1.0	0.5	125	21.8	21.8	8.0	8.0	23.9	23.9	92.0	92.0	7.0	7.0	1.8	2.0	3	4	86	87	821455	814163	<0.2	<0.2	1.8	1.8
						1.0	0.5	130	21.8		8.0		23.9		91.9		7.0		1.8		4		86				<0.2		1.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.3	140	21.9	21.9	8.1	8.1	24.5	24.5	92.1	92.1	7.0	7.0	2.2		3		88				<0.2		1.7	
						3.8	0.3	148	21.9		8.1		24.5		92.1		7.0		2.2		4		88				<0.2		1.7	
SR3	Rainy	Moderate	16:02	9.4	Surface	1.0	0.2	216	21.9	21.9	8.0	8.0	21.3	21.3	92.4	92.5	7.2	7.1	2.0	3.4	2	2	-	-	822152	807590	-	-	-	-
						1.0	0.2	227	21.9		8.0		21.3		92.5		7.2		2.0		2		-				-		-	
					Middle	4.7	0.0	76	21.9	21.9	8.0	8.0	25.0	25.0	91.4	91.5	6.9		2.8		2		-				-		-	
						4.7	0.0	82	21.9		8.0		25.0		91.5		6.9		2.7		2		-				-		-	
					Bottom	8.4	0.3	62	21.7	21.7	8.1	8.1	31.0	31.0	93.2	93.3	6.8	6.8	5.4		2		-				-		-	
						8.4	0.3	67	21.7		8.1		31.0		93.3		6.8		5.3		3		-				-		-	
SR4A	Rainy	Calm	17:01	8.2	Surface	1.0	0.1	61	21.7	21.7	7.9	7.9	27.7	27.7	92.3	92.3	6.9	6.8	5.4	7.1	4	4	-	-	817170	807810	-	-	-	-
						1.0	0.1	62	21.7		7.9		27.7		92.3		6.9		5.5		4		-				-		-	
					Middle	4.1	0.2	50	21.7	21.7	7.9	7.9	31.9	31.9	91.8	91.7	6.7		7.3		4		-				-		-	
						4.1	0.2	51	21.7		7.9		31.9		91.6		6.7		7.5		4		-				-		-	
					Bottom	7.2	0.1	72	21.7	21.7	7.8	7.8	32.1	32.1	91.3	91.3	6.7	6.7	8.3		4		-				-		-	
						7.2	0.1	76	21.7		7.8		32.1		91.3		6.7		8.5		4		-				-		-	
SR5A	Rainy	Calm	17:18	4.9	Surface	1.0	0.1	11	21.7	21.7	7.9	7.9	25.0	25.0	88.2	88.1	6.7	6.7	3.6	4.5	4	4	-	-	816600	810718	-	-	-	-
						1.0	0.1	11	21.7		7.9		25.0		88.0		6.7		3.8		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	0.1	179	21.8	21.8	7.8	7.8	28.5	28.4	88.3	88.6	6.6	6.6	5.2		3		-				-		-	
						3.9	0.1	190	21.8		7.8		28.4		88.8		6.6		5.2		4		-				-		-	
SR6A	Rainy	Calm	17:44	4.0	Surface	1.0	0.1	253	21.9	21.9	7.9	7.9	26.7	26.7	83.6	83.7	6.3	6.3	6.5	6.7	8	7	-	-	817968	814731	-	-	-	-
						1.0	0.1	260	21.9		7.9		26.7		83.7		6.3		6.4		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	0.1	258	21.8	21.8	7.8	7.7	28.2	28.2	86.0	86.1	6.4	6.4	7.0		7		-				-		-	
						3.0	0.1	264	21.8		7.7		28.2		86.1		6.4		6.9		7		-				-		-	
SR7	Rainy	Moderate	18:20	15.7	Surface	1.0	0.5	70	21.8	21.8	8.0	8.0	25.6	25.6	91.0	91.0	6.9	6.9	1.5	1.4	4	4	-	-	823621	823720	-	-	-	-
						1.0	0.5	72	21.8		8.0		25.6		91.0		6.9		1.6		4		-				-		-	
					Middle	7.9	0.3	58	21.8	21.8	8.0	8.0	26.1	26.1	91.0	91.0	6.9		1.4		4		-				-		-	
						7.9	0.3	59	21.8		8.0		26.1		90.9		6.9		1.5		5		-				-		-	
					Bottom	14.7	0.2	90	21.7	21.7	8.0	8.0	29.6	29.7	89.7	89.7	6.6	6.6	1.2		5		-				-		-	
						14.7	0.2	97	21.7		8.0		29.7		89.6		6.6		1.2		4		-				-		-	
SR8	Rainy	Moderate	16:58	4.9	Surface	1.0	-	-	21.9	21.9	8.1	8.1	24.2	24.2	91.6	91.6	7.0	7.0	4.3	4.5	6	6	-	-	820398	811643	-	-	-	-
						1.0	-	-	21.9		8.1		24.2		91.6		7.0		4.3		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	-	-	22.0	22.0	8.1	8.1	25.1	25.0	92.1	92.2	7.0	7.0	4.7		7		-				-		-	
						3.9	-	-	22.0		8.1		25.0		92.2		7.0		4.7		6		-				-		-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 31 March 20 during Mid-Flood Tide

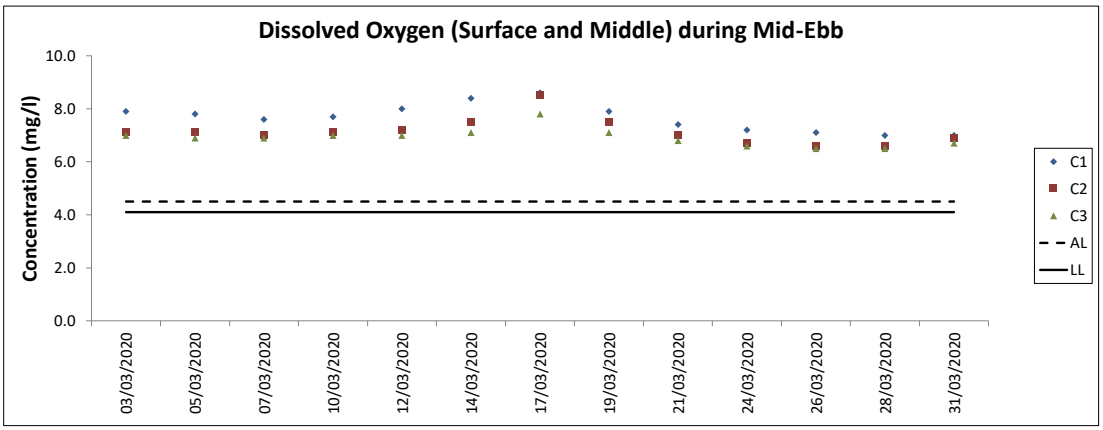
Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Rainy	Moderate	10:22	8.2	Surface	1.0	0.4	34	21.7	21.7	7.9	7.9	26.4	26.3	93.6	93.6	7.1	6.9	3.5	5.7	3	3	83	88	815599	804236	<0.2	<0.2	1.7	1.8
						1.0	0.4	36	21.7		7.9		26.2		93.5		7.1		3.9		4		84				<0.2		1.7	
					Middle	4.1	0.3	38	21.7	21.7	7.9	7.9	32.6	32.6	92.5	92.3	6.7		6.6		3		88				<0.2		1.9	
						4.1	0.4	39	21.7		7.9		32.6		92.1		6.7		7.0		3		88				<0.2		1.8	
					Bottom	7.2	0.4	31	21.7	21.7	7.8	7.8	33.1	33.1	90.7	90.7	6.6	6.6	6.5		3		91				<0.2		1.7	
						7.2	0.4	33	21.7		7.8		33.1		90.6		6.6		6.4		3		92				<0.2		1.8	
C2	Rainy	Moderate	11:23	12.8	Surface	1.0	0.4	354	22.1	22.1	8.0	8.0	21.4	21.4	90.1	90.1	7.0	6.8	2.4	4.8	4	4	85	87	825701	806936	<0.2	<0.2	2.0	2.0
						1.0	0.4	326	22.1		8.0		21.4		90.1		7.0		2.4		4		84				<0.2		1.9	
					Middle	6.4	0.4	8	21.9	21.9	8.1	8.1	26.9	26.9	88.4	88.4	6.6		4.6		3		87				<0.2		1.9	
						6.4	0.4	8	21.9		8.1		26.9		88.3		6.6		4.6		4		86				<0.2		2.0	
					Bottom	11.8	0.4	348	21.8	21.8	8.1	8.1	29.1	29.1	87.4	87.5	6.5	6.5	7.5		3		89				<0.2		2.0	
						11.8	0.4	320	21.8		8.1		29.1		87.5		6.5		7.4		3		89				<0.2		1.9	
C3	Rainy	Moderate	09:13	12.3	Surface	1.0	0.3	259	21.9	21.9	8.0	8.0	24.4	24.4	91.1	91.2	6.9	6.8	1.6	2.3	5	4	84	87	822105	817787	<0.2	<0.2	1.7	1.7
						1.0	0.3	268	21.9		8.0		24.4		91.2		6.9		1.6		4		85				<0.2		1.7	
					Middle	6.2	0.3	254	21.8	21.8	8.0	8.0	28.3	28.3	89.4	89.4	6.7		1.8		4		87				<0.2		1.6	
						6.2	0.4	261	21.8		8.0		28.3		89.4		6.7		1.8		4		87				<0.2		1.8	
					Bottom	11.3	0.4	279	21.5	21.5	8.0	8.0	31.3	31.3	89.0	89.0	6.5	6.5	3.5		3		90				<0.2		1.6	
						11.3	0.4	285	21.5		8.0		31.3		88.9		6.5		3.5		3		89				<0.2		1.7	
IM1	Rainy	Moderate	10:41	5.2	Surface	1.0	0.3	2	21.7	21.7	7.9	7.9	26.6	26.6	90.3	90.3	6.8	6.8	5.5	6.3	2	3	85	88	817940	807152	<0.2	<0.2	1.5	1.6
						1.0	0.3	2	21.7		7.9		26.6		90.2		6.8		5.6		3		85				<0.2		1.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.2	0	21.7	21.7	7.9	7.9	32.1	32.1	88.6	88.3	6.5	6.5	7.2		2		91				<0.2		1.5	
						4.2	0.2	0	21.7		7.9		32.1		87.9		6.4		6.7		3		91				<0.2		1.6	
IM2	Rainy	Moderate	10:48	7.0	Surface	1.0	0.2	3	21.7	21.7	7.9	7.9	27.2	27.2	93.5	93.5	7.0	6.9	2.5	4.6	3	4	83	87	818153	806182	<0.2	<0.2	1.4	1.4
						1.0	0.2	3	21.7		7.9		27.2		93.5		7.0		2.5		3		83				<0.2		1.4	
					Middle	3.5	0.3	18	21.8	21.8	7.9	7.9	30.6	30.5	92.8	92.8	6.8		3.4		3		87				<0.2		1.3	
						3.5	0.3	19	21.8		7.9		30.5		92.8		6.8		3.7		4		87				<0.2		1.5	
					Bottom	6.0	0.2	344	21.7	21.7	7.9	7.9	32.1	32.1	90.4	90.2	6.6	6.6	8.0		4		92				<0.2		1.5	
						6.0	0.2	316	21.7		7.9		32.1		89.9		6.6		7.4		5		92				<0.2		1.4	
IM3	Rainy	Moderate	10:54	7.6	Surface	1.0	0.2	349	21.7	21.7	7.9	7.9	27.3	27.3	93.8	93.8	7.0	6.9	7.0	8.2	4	5	84	88	818804	805573	<0.2	<0.2	1.2	1.2
						1.0	0.3	321	21.7		7.9		27.3		93.8		7.0		7.2		5		84				<0.2		1.0	
					Middle	3.8	0.3	351	21.7	21.7	7.9	7.9	31.9	32.0	92.5	92.4	6.8		8.3		5		87				<0.2		1.3	
						3.8	0.3	323	21.7		7.9		32.0		92.3		6.7		8.1		5		88				<0.2		1.3	
					Bottom	6.6	0.2	323	21.7	21.7	7.9	7.9	32.2	32.2	91.2	91.2	6.7	6.7	9.6		5		92				<0.2		1.3	
						6.6	0.2	344	21.7		7.9		32.2		91.1		6.6		9.0		5		91				<0.2		1.3	
IM4	Rainy	Moderate	11:02	8.2	Surface	1.0	0.5	348	21.8	21.8	7.9	7.9	27.2	27.2	93.2	93.2	7.0	6.9	3.5	5.7	6	5	84	88	819705	804626	<0.2	<0.2	1.2	1.2
						1.0	0.5	320	21.8		7.9		27.2		93.2		7.0		3.9		4		85				<0.2		1.2	
					Middle	4.1	0.5	0	21.7	21.7	7.9	7.9	32.1	32.1	92.8	92.8	6.8		5.9		5		88				<0.2		1.2	
						4.1	0.5	0	21.7		7.9		32.1		92.8		6.8		5.9		5		89				<0.2		1.2	
					Bottom	7.2	0.4	354	21.7	21.7	7.9	7.9	32.2	32.2	90.2	90.0	6.6	6.6	7.5		5		92				<0.2		1.2	
						7.2	0.4	326	21.7		7.9		32.2		89.8		6.5		7.3		5		92				<0.2		1.2	
IM5	Rainy	Moderate	11:09	7.9	Surface	1.0	0.6	8	21.7	21.7	7.9	7.9	27.3	27.3	92.9	92.8	7.0	6.9	4.4	6.7	3	4	84	88	820746	804888	<0.2	<0.2	1.0	1.1
						1.0	0.7	8	21.7		7.9		27.3		92.7		7.0		4.7		3		84				<0.2		1.1	
					Middle	4.0	0.6	13	21.8	21.8	7.9	7.9	31.5	31.5	92.0	92.0	6.7		7.4		4		87				<0.2		1.0	
						4.0	0.7	13	21.8		7.9		31.5		91.9		6.7		7.3		3		88				<0.2		1.0	
					Bottom	6.9	0.4	19	21.8	21.8	7.9	7.9	31.7	31.7	90.2	90.2	6.6	6.6	8.2		5		92				<0.2		1.1	
						6.9	0.4	19	21.8		7.9		31.7		90.2		6.6		8.1		4		91				<0.2		1.2	
IM6	Rainy	Moderate	11:15	7.1	Surface	1.0	0.1	79	21.8	21.8	7.9	7.9	20.9	20.9	92.6	92.6	7.2	7.1	3.2	5.4	3	3	82	88	821046	805850	<0.2	<0.2	1.9	1.9
						1.0	0.1	80	21.8		7.9		20.9		92.5		7.2		3.4		4		84				<0.2		2.0	
					Middle	3.6	0.4	68	21.7	21.7	7.9	7.9	25.4	25.4	91.9	91.9	7.0		5.4		4		89				<0.2		1.9	
						3.6	0.4	73	21.7		7.9		25.4		91.9		7.0		5.5		3		90				<0.2		1.9	
					Bottom	6.1	0.4	62	21.8	21.8	7.9	7.9	30.9	30.9	90.1	90.2	6.6	6.6	7.6		3		91				<0.2		1.9	
						6.1	0.4	65	21.8		7.9		30.9		90.2		6.6		7.5		3		92				<0.2		2.0	
IM7	Rainy	Moderate	11:23	8.8	Surface	1.0	0.1	290	21.9	21.9	7.9	7.9	21.2	21.2	91.4	91.5	7.1	7.1	2.9	5.7	4	4	85	88	821367	806855	<0.2	<0.2	1.8	1.9
						1.0	0.1	293	21.9		7.9		21.2		91.5		7.1		3.0		5		86				<0.2		1.7	
					Middle	4.4	0.2	55	21.9	21.9	7.9	7.9	23.4	23.1	91.2	91.2	7.0		6.5		4		88				<0.2		1.9	
						4.4	0.2	57	21.9		7.9		22.8		91.1		7.0		6.7		4		89				<0.2		1.9	
					Bottom	7.8	0.4	69	21.8	21.8	7.9	7.9	31.2	31.2	90.3	90.0	6.6	6.6	7.7		3		89				<0.2		2.0	
						7.8	0.5	71	21.8		7.9		31.2		89.6		6.6		7.4		2		90				<0.2		2.0	
IM8	Rainy	Moderate	10:53	8.2	Surface	1.0	0.1	286	22.0	22.0	8.1	8.1	21.5	21.5	90.1	90.2	7.0	6.9	2.8	3.9	4	4	83	86	821828	808163	<0.2	<0.2	2.0	2.0
						1.0	0.1	312	22.0		8.1		21.5		90.2		7.0		2.8		4		84				<0.2		2.1	
					Middle	4.1	0.0	276	22.0	22.0	8.1	8.1	23.6	23.6	88.8	88.8	6.8		4.2		4		87				<0.2		2.0	
						4.1	0.0	296	22.0		8.1		23.6		88.7		6.8		4.2		4		86				<0.2		2.0	
					Bottom	7.2	0.0	96	21.9	21.9	8.1	8.1	26.9	26.9	91.3	91.3	6.8	6.8	4.8		4		88				<0.2		1.9	
						7.2	0.0	96	21.9		8.1		26.9		91.3		6.8		4.8		3		88				<0.2		2.0	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 31 March 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Rainy	Moderate	10:45	7.8	Surface	1.0	0.3	206	21.9	21.9	8.1	8.1	21.6	21.6	89.5	89.6	6.9	6.8	3.7	6.4	5	5	84	86	822094	808795	<0.2	<0.2	2.0	1.9
						1.0	0.3	210	21.9		8.1		21.6		89.7		6.9		3.8		4		84							
					Middle	3.9	0.1	259	21.9	21.9	8.1	8.1	25.1	25.1	87.1	87.1	6.6		6.5		4		86						1.9	
						3.9	0.1	275	21.9		8.1		25.1		87.0		6.6		6.5		5		85						1.9	
					Bottom	6.8	0.2	280	21.9	21.9	8.1	8.1	26.9	26.9	87.6	87.7	6.6	6.6	8.9		4		88						1.9	
						6.8	0.2	289	21.9		8.1		26.9		87.8		6.6		8.9		5		88						1.8	
IM10	Rainy	Moderate	10:35	9.1	Surface	1.0	0.5	300	22.0	22.0	8.1	8.1	23.4	23.4	88.5	88.6	6.8	6.7	4.9	7.2	4	5	84	86	822380	809792	<0.2	<0.2	1.8	2.0
						1.0	0.5	324	22.0		8.1		23.4		88.7		6.8		4.9		5		85				<0.2		2.0	
					Middle	4.6	0.6	292	21.9	21.9	8.1	8.1	26.7	26.7	87.5	87.5	6.6		7.0		5		86				<0.2		2.0	
						4.6	0.6	293	21.9		8.1		26.7		87.4		6.6		7.0		6		86				<0.2		2.1	
					Bottom	8.1	0.5	281	21.8	21.8	8.1	8.1	28.2	28.2	88.8	88.9	6.6	6.6	9.8		5		88				<0.2		2.1	
						8.1	0.5	296	21.8		8.1		28.2		88.9		6.6		9.7		6		88				<0.2		2.0	
IM11	Rainy	Moderate	10:23	9.4	Surface	1.0	0.7	290	22.0	22.0	8.0	8.0	22.4	22.5	88.4	88.4	6.8	6.7	3.6	6.0	3	4	84	86	822060	811451	<0.2	<0.2	2.0	2.1
						1.0	0.7	311	22.0		8.0		22.6		88.4		6.8		3.6		4		84				<0.2		2.2	
					Middle	4.7	0.5	276	21.8	21.8	8.1	8.1	27.8	27.8	87.8	87.8	6.6		6.4		4		85				<0.2		2.2	
						4.7	0.5	298	21.8		8.1		27.8		87.8		6.6		6.5		3		86				<0.2		2.0	
					Bottom	8.4	0.4	271	21.7	21.7	8.1	8.1	29.9	29.9	88.2	88.2	6.5	6.5	8.0		4		88				<0.2		2.2	
						8.4	0.4	293	21.7		8.1		29.9		88.2		6.5		8.0		4		87				<0.2		2.0	
IM12	Rainy	Moderate	10:14	8.4	Surface	1.0	0.6	310	22.0	22.0	8.0	8.0	23.6	23.6	88.9	88.9	6.8	6.7	3.2	4.2	4	4	84	86	821469	812040	<0.2	<0.2	2.0	2.0
						1.0	0.6	331	22.0		8.0		23.6		88.9		6.8		3.2		3		83				<0.2		2.0	
					Middle	4.2	0.5	302	21.9	21.9	8.0	8.0	27.2	27.2	87.2	87.3	6.5		4.1		4		86				<0.2		2.0	
						4.2	0.5	323	21.9		8.0		27.2		87.3		6.5		4.1		5		86				<0.2		2.1	
					Bottom	7.4	0.3	299	21.7	21.7	8.0	8.0	29.2	29.2	86.6	86.7	6.4	6.4	5.2		4		89				<0.2		2.0	
						7.4	0.3	322	21.7		8.0		29.3		86.7		6.4		5.2		4		88				<0.2		2.0	
SR1A	Rainy	Moderate	09:50	5.5	Surface	1.0	-	-	22.0	22.0	8.0	8.0	21.2	21.2	88.6	88.6	6.9	6.9	3.0	3.8	3	4	-	-	819973	812658	-	-	-	-
						1.0	-	-	22.0		8.0		21.2		88.5		6.9		3.0		4		-				-		-	
					Middle	2.8	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.8	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.5	-	-	21.9	21.9	8.0	8.0	25.4	25.4	87.1	87.2	6.6	6.6	4.6		3		-				-		-	
						4.5	-	-	21.9		8.0		25.4		87.2		6.6		4.6		4		-				-		-	
SR2	Rainy	Moderate	09:36	5.1	Surface	1.0	0.1	15	21.9	21.9	8.0	8.0	25.1	25.1	88.6	88.6	6.7	6.7	3.5	4.6	3	3	85	86	821465	814146	<0.2	<0.2	2.0	2.0
						1.0	0.1	16	21.9		8.0		25.1		88.6		6.7		3.5		3		85				<0.2		2.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	0.1	136	21.7	21.7	8.0	8.0	29.4	29.4	89.3	89.4	6.6	6.6	5.7		3		87				<0.2		2.1	
						4.1	0.1	144	21.7		8.0		29.4		89.4		6.6		5.6		4		88				<0.2		2.0	
SR3	Rainy	Moderate	11:01	9.7	Surface	1.0	0.1	237	21.9	21.9	8.1	8.1	19.7	19.7	91.5	91.6	7.2	7.0	2.5	5.4	4	3	-	-	822149	807558	-	-	-	-
						1.0	0.1	244	21.9		8.1		19.7		91.7		7.2		2.5		3		-				-		-	
					Middle	4.9	0.2	335	21.9	21.9	8.1	8.1	26.0	26.0	90.6	90.6	6.8		5.1		3		-				-		-	
						4.9	0.2	357	21.9		8.1		26.0		90.5		6.8		5.2		4		-				-		-	
					Bottom	8.7	0.1	26	21.9	21.9	8.1	8.1	27.8	27.8	89.6	89.6	6.7	6.7	8.6		3		-				-		-	
						8.7	0.1	27	21.9		8.1		27.8		89.6		6.7		8.7		3		-				-		-	
SR4A	Rainy	Calm	10:01	9.2	Surface	1.0	0.1	272	21.8	21.8	7.8	7.8	26.0	25.9	90.9	91.0	6.9	6.8	4.1	4.7	4	5	-	-	817187	807818	-	-	-	-
						1.0	0.1	292	21.8		7.8		25.7		91.0		6.9		4.1		5		-				-		-	
					Middle	4.6	0.1	56	21.8	21.8	7.8	7.8	30.7	30.7	91.1	91.1	6.7		4.5		4		-				-		-	
						4.6	0.1	57	21.8		7.8		30.7		91.0		6.7		4.5		4		-				-		-	
					Bottom	8.2	0.2	70	21.7	21.7	7.8	7.8	31.9	31.9	88.7	88.5	6.5	6.5	5.6		5		-				-		-	
						8.2	0.2	75	21.7		7.8		31.9		88.2		6.4		5.2		6		-				-		-	
SR5A	Rainy	Calm	09:44	4.6	Surface	1.0	0.1	316	21.8	21.8	7.8	7.8	25.3	25.2	88.1	88.1	6.7	6.7	3.5	4.2	4	5	-	-	816592	810679	-	-	-	-
						1.0	0.2	334	21.8		7.8		25.1		88.0		6.7		3.7		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.1	306	21.8	21.8	7.7	7.7	26.7	26.7	86.0	85.8	6.5	6.5	4.8		5		-				-		-	
						3.6	0.1	310	21.8		7.7		26.7		85.5		6.4		4.6		5		-				-		-	
SR6A	Rainy	Calm	09:19	3.8	Surface	1.0	0.1	204	21.9	21.9	7.7	7.7	23.5	23.5	91.3	91.4	7.0	7.0	2.3	2.4	4	5	-	-	817946	814752	-	-	-	-
						1.0	0.1	204	21.9		7.7		23.5		91.4		7.0		2.3		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	0.0	258	21.9	21.9	7.7	7.7	23.6	23.6	93.3	93.5	7.1	7.2	2.5		4		-				-		-	
						2.8	0.0	283	21.9		7.7		23.7		93.7		7.2		2.5		5		-				-		-	
SR7	Rainy	Moderate	08:40	16.2	Surface	1.0	0.0	253	21.8	21.8	7.9	7.9	25.2	25.2	91.0	91.0	6.9	6.8	1.4	1.4	3	3	-	-	823622	823755	-	-	-	-
						1.0	0.0	271	21.8		7.9		25.2		91.0		6.9		1.4		3		-				-		-	
					Middle	8.1	0.2	184	21.6	21.6	8.0	8.0	30.5	30.5	88.9	89.0	6.6		1.4		3		-				-		-	
						8.1	0.2	195	21.6		8.0		30.5		89.0		6.6		1.5		3		-				-		-	
					Bottom	15.2	0.1	184	21.5	21.5	8.0	8.0	31.6	31.6	89.1	89.1	6.5	6.5	1.4		4		-				-		-	
						15.2	0.1	184	21.5		8.0		31.6		89.1		6.5		1.4		3		-				-		-	
SR8	Rainy	Moderate	10:05	5.2	Surface	1.0	-	-	22.0	22.0	8.0	8.0	23.5	23.5	80.4	80.4	6.1	6.1	7.0	7.8	5	5	-	-	820374	811603	-	-	-	-
						1.0	-	-	22.0		8.0		23.5		80.3		6.1		7.2		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	-	-	22.0	22.0	8.0	8.0	25.3	25.3	58.2	57.7	4.4	4.4	8.3		4		-				-		-	
						4.2	-	-	22.0		8.0		25.3		57.1		4.3		8.5		4		-				-		-	

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


Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/l)
10.0
8.0
6.0
4.0
2.0
0.0
03/03/2020
05/03/2020
07/03/2020
10/03/2020
12/03/2020
14/03/2020
17/03/2020
19/03/2020
21/03/2020
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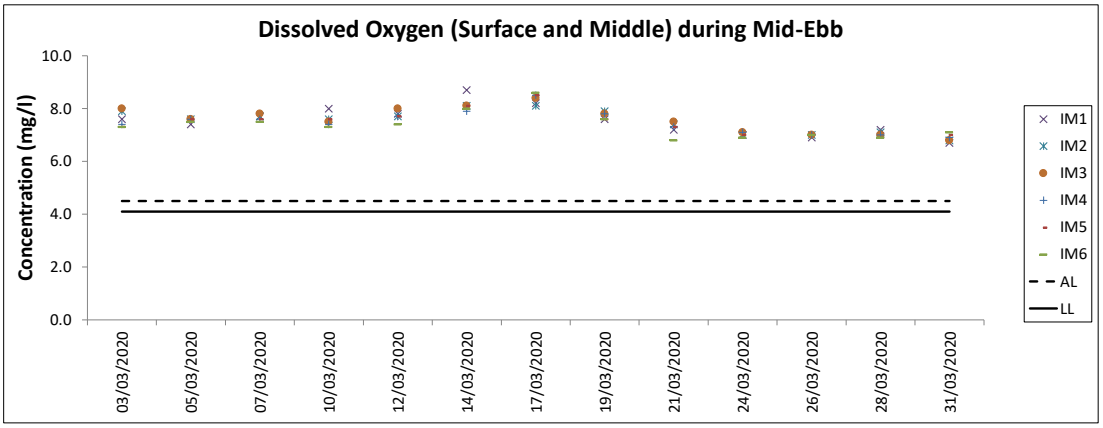
26/03/2020
28/03/2020
31/03/2020
C1
C2
C3
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/l)
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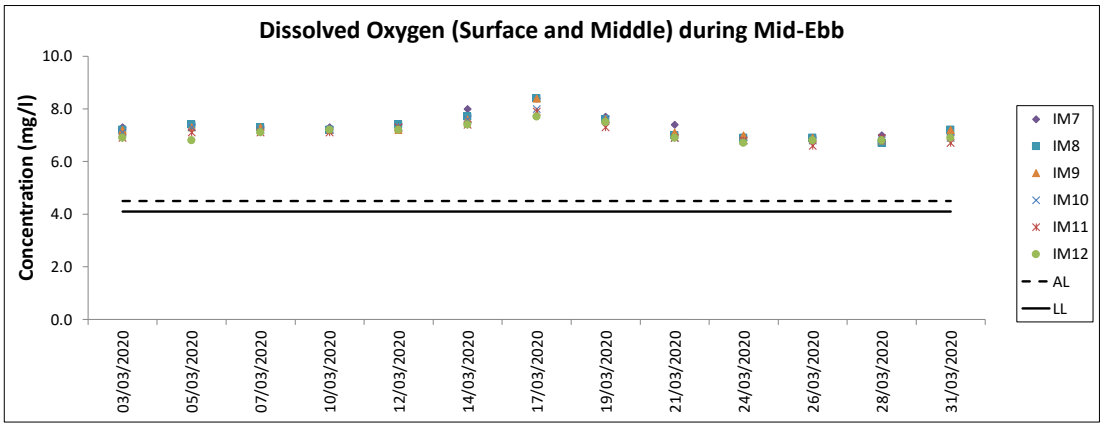
6.0
4.0
2.0
0.0
03/03/2020
05/03/2020
07/03/2020
10/03/2020
12/03/2020
14/03/2020
17/03/2020
19/03/2020
21/03/2020
24/03/2020
26/03/2020
28/03/2020
31/03/2020
IM1
IM2
IM3
IM4
IM5
IM6
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/l)
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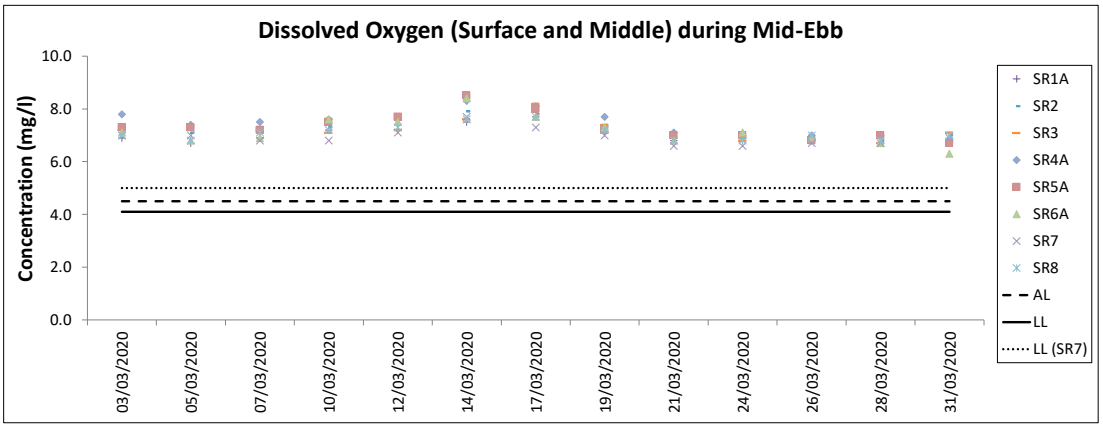
8.0
6.0
4.0
2.0
0.0
03/03/2020
05/03/2020
07/03/2020
10/03/2020
12/03/2020
14/03/2020
17/03/2020
19/03/2020
21/03/2020
24/03/2020
26/03/2020
28/03/2020
31/03/2020
IM7
IM8
IM9
IM10
IM11
IM12
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/l)
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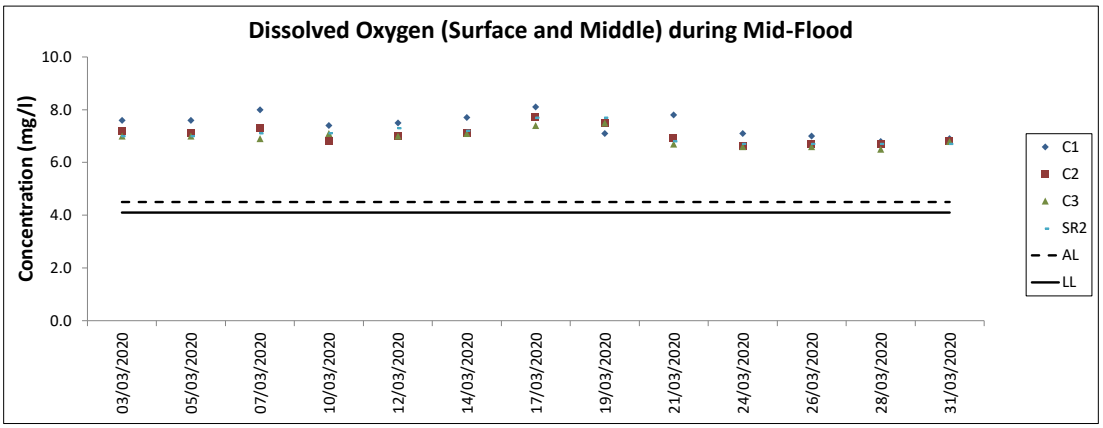
8.0
6.0
4.0
2.0
0.0
03/03/2020
05/03/2020
07/03/2020
10/03/2020
12/03/2020
14/03/2020
17/03/2020
19/03/2020
21/03/2020
24/03/2020
26/03/2020
28/03/2020
31/03/2020
SR1A
SR2
SR3
SR4A
SR5A
SR6A
SR7
SR8
AL
LL
LL (SR7)


Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/l)
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8.0
6.0
4.0
2.0
0.0
03/03/2020
05/03/2020
07/03/2020
10/03/2020
12/03/2020
14/03/2020
17/03/2020
19/03/2020
21/03/2020
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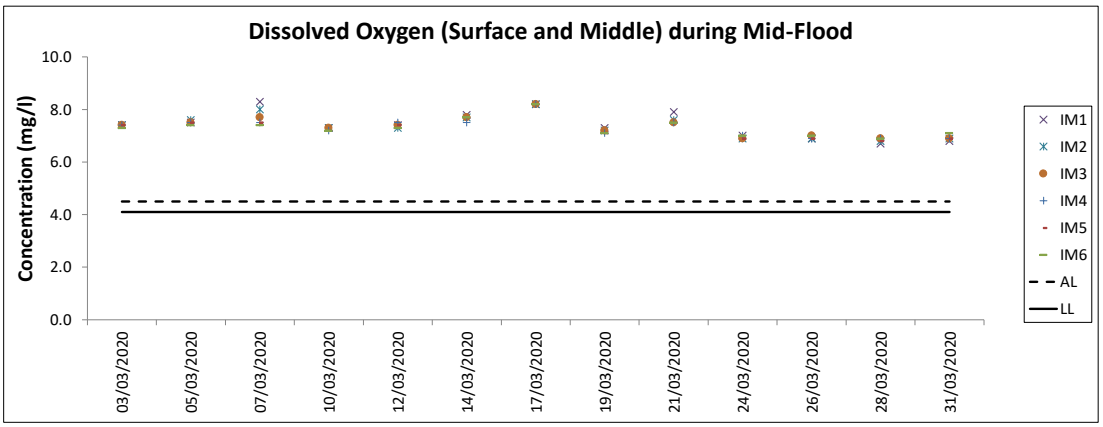
28/03/2020
31/03/2020
C1
C2
C3
SR2
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/l)
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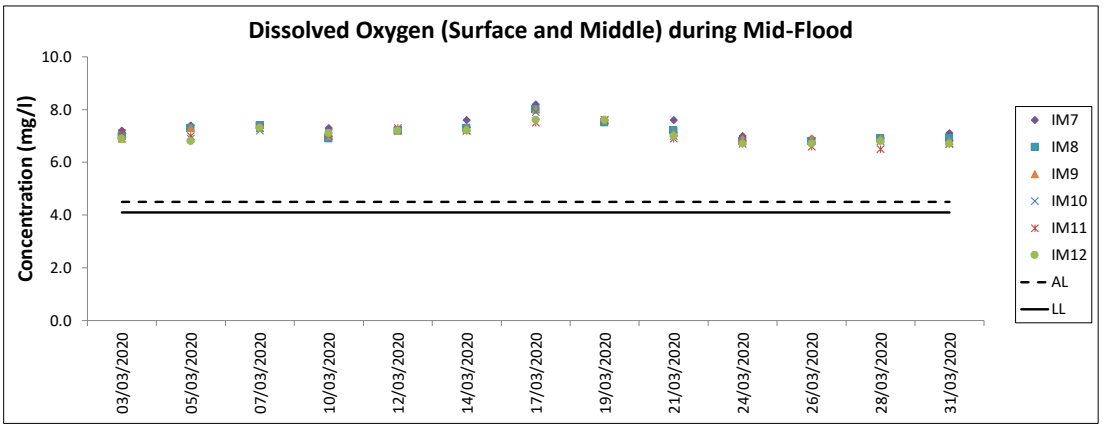
8.0
6.0
4.0
2.0
0.0
03/03/2020
05/03/2020
07/03/2020
10/03/2020
12/03/2020
14/03/2020
17/03/2020
19/03/2020
21/03/2020
24/03/2020
26/03/2020
28/03/2020
31/03/2020
IM1
IM2
IM3
IM4
IM5
IM6
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/l)
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8.0
6.0
4.0
2.0
0.0
03/03/2020
05/03/2020
07/03/2020
10/03/2020
12/03/2020
14/03/2020
17/03/2020
19/03/2020
21/03/2020
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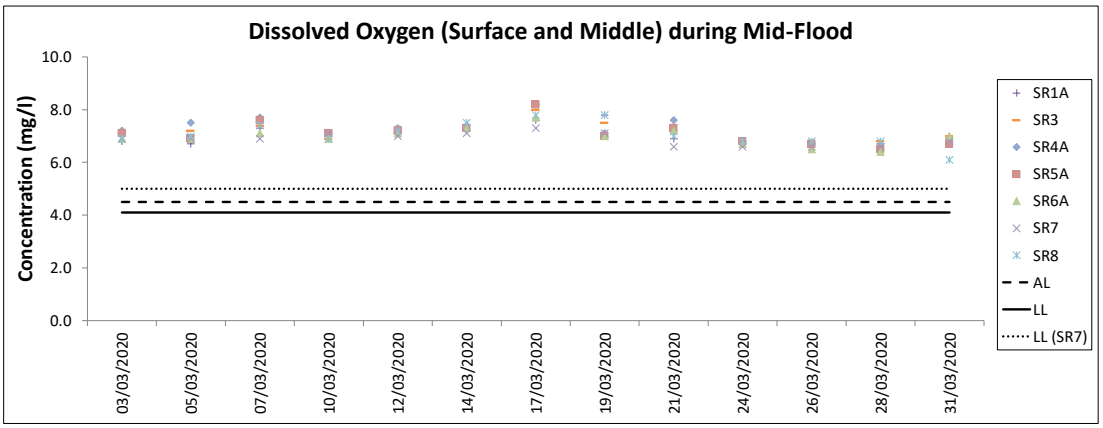
IM7
IM8
IM9
IM10
IM11
IM12
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/l)
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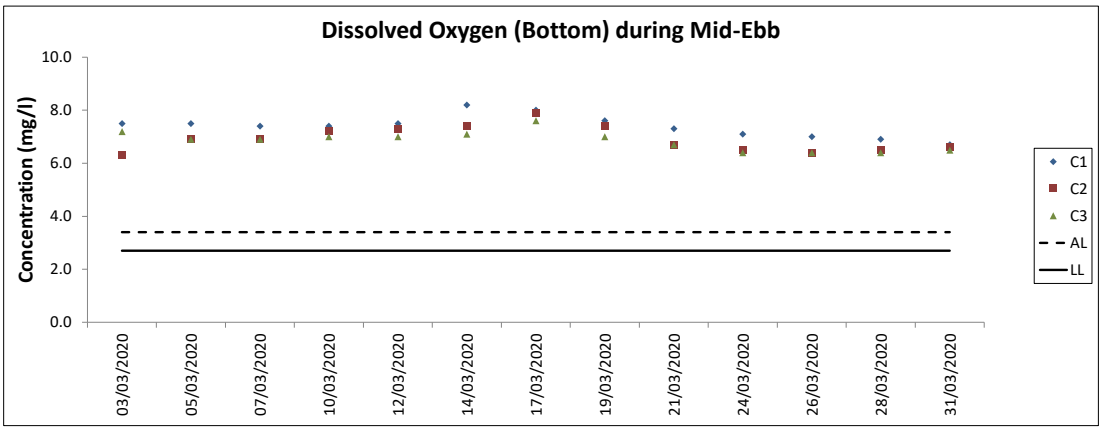
8.0
6.0
4.0
2.0
0.0
03/03/2020
05/03/2020
07/03/2020
10/03/2020
12/03/2020
14/03/2020
17/03/2020
19/03/2020
21/03/2020
24/03/2020
26/03/2020
28/03/2020
31/03/2020
SR1A
SR3
SR4A
SR5A
SR6A
SR7
SR8
AL
LL
LL (SR7)


Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/l)
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6.0
4.0
2.0
0.0
03/03/2020
05/03/2020
07/03/2020
10/03/2020
12/03/2020
14/03/2020
17/03/2020
19/03/2020
21/03/2020
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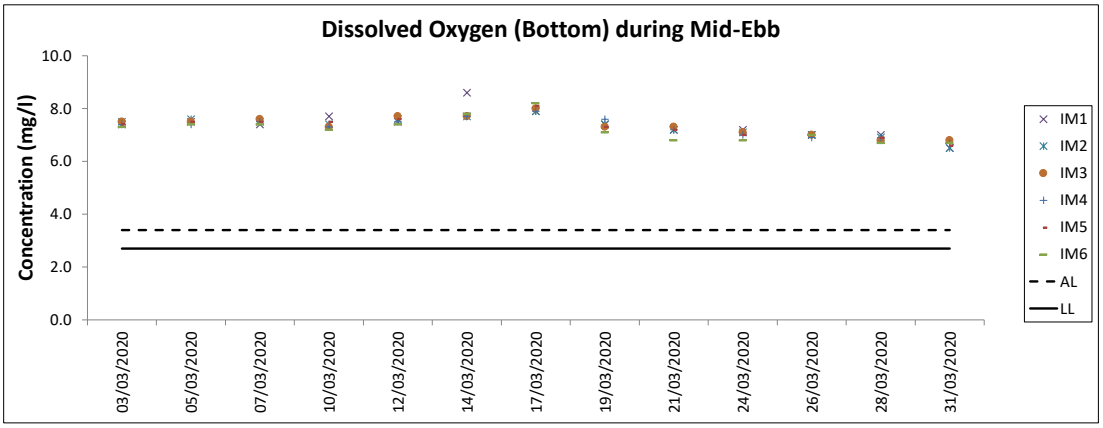
28/03/2020
31/03/2020
C1
C2
C3
AL
LL


Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/l)
10.0
8.0
6.0
4.0
2.0
0.0
03/03/2020
05/03/2020
07/03/2020
10/03/2020
12/03/2020
14/03/2020
17/03/2020
19/03/2020
21/03/2020
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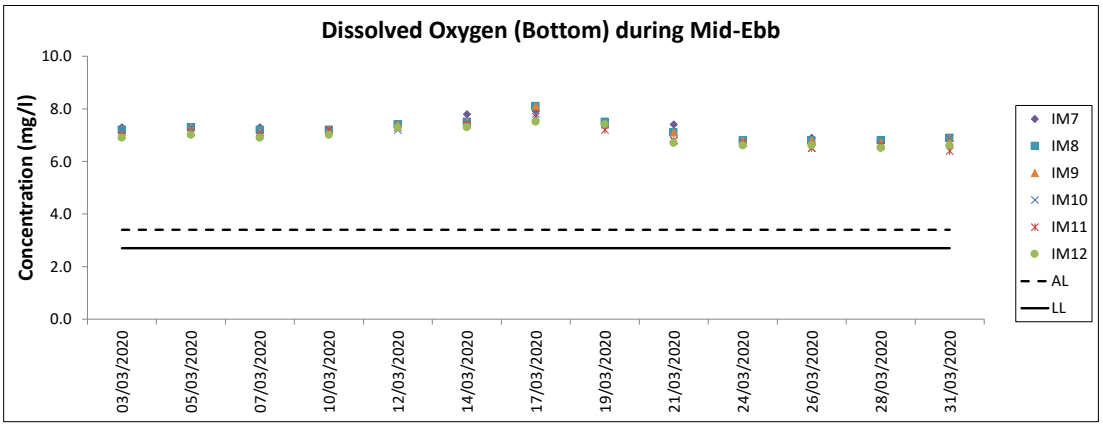
IM1
IM2
IM3
IM4
IM5
IM6
AL
LL


Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/l)
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8.0
6.0
4.0
2.0
0.0
03/03/2020
05/03/2020
07/03/2020
10/03/2020
12/03/2020
14/03/2020
17/03/2020
19/03/2020
21/03/2020
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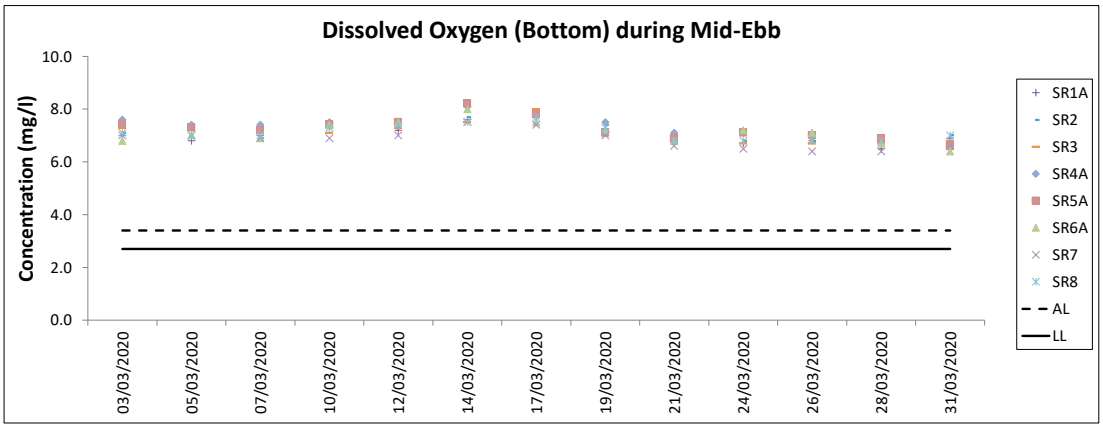
IM7
IM8
IM9
IM10
IM11
IM12
AL
LL


Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/l)
10.0
8.0
6.0
4.0
2.0
0.0
03/03/2020
05/03/2020
07/03/2020
10/03/2020
12/03/2020
14/03/2020
17/03/2020
19/03/2020
21/03/2020
24/03/2020
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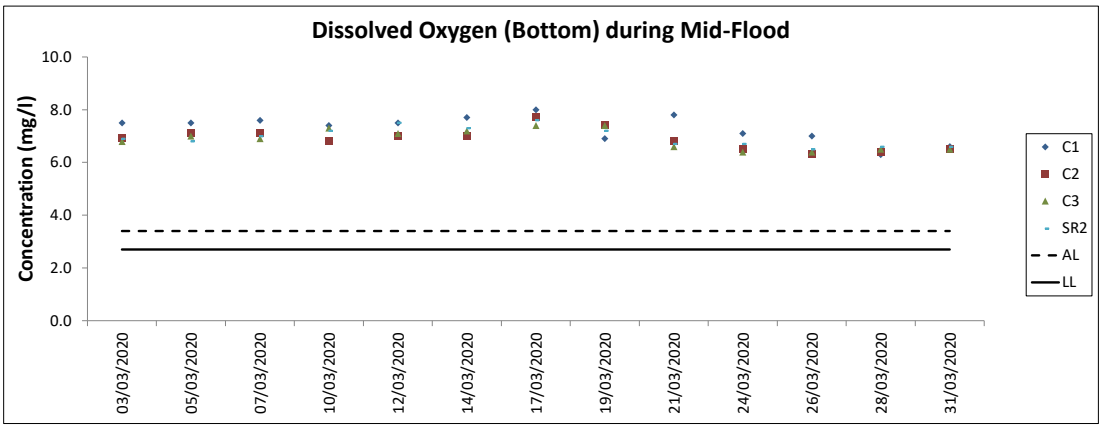
SR1A
SR2
SR3
SR4A
SR5A
SR6A
SR7
SR8
AL
LL


Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/l)
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6.0
4.0
2.0
0.0
03/03/2020
05/03/2020
07/03/2020
10/03/2020
12/03/2020
14/03/2020
17/03/2020
19/03/2020
21/03/2020
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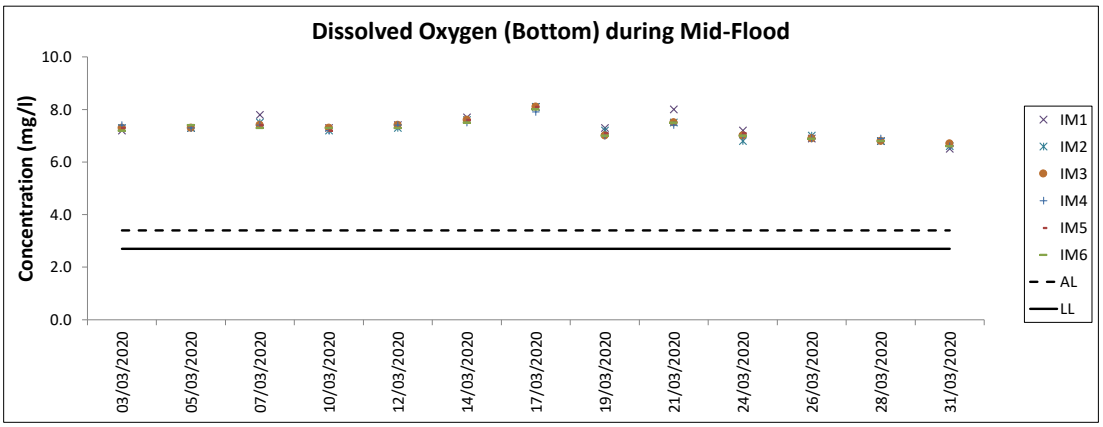
31/03/2020
C1
C2
C3
SR2
AL
LL


Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/l)
10.0
8.0
6.0
4.0
2.0
0.0
03/03/2020
05/03/2020
07/03/2020
10/03/2020
12/03/2020
14/03/2020
17/03/2020
19/03/2020
21/03/2020
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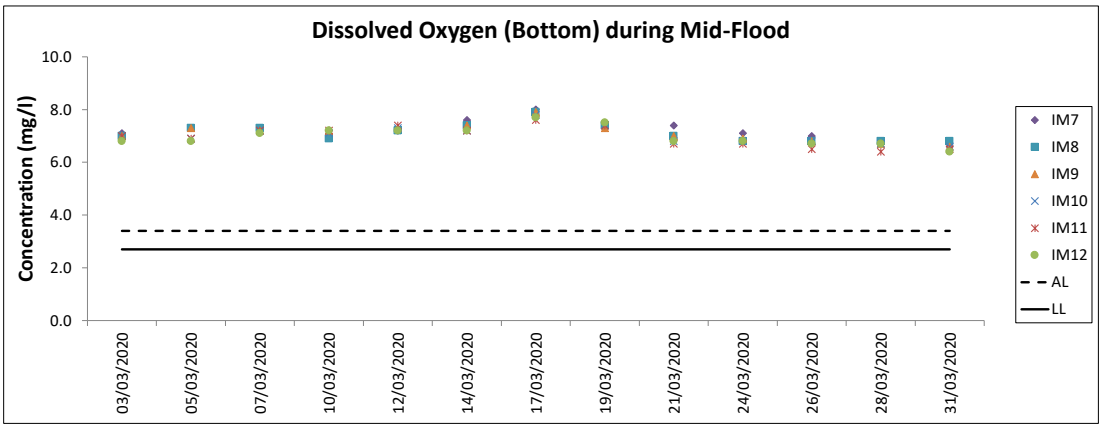
IM1
IM2
IM3
IM4
IM5
IM6
AL
LL


Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/l)
10.0
8.0
6.0
4.0
2.0
0.0
03/03/2020
05/03/2020
07/03/2020
10/03/2020
12/03/2020
14/03/2020
17/03/2020
19/03/2020
21/03/2020
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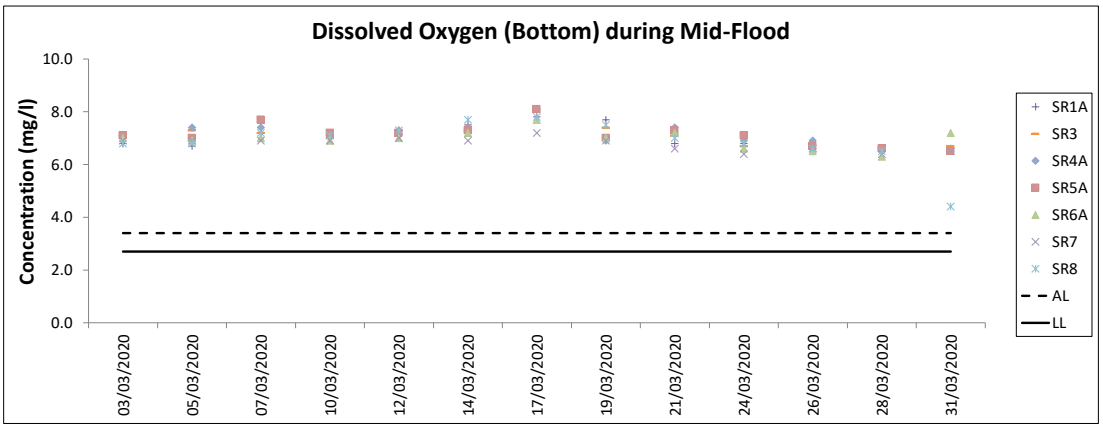
28/03/2020
31/03/2020
IM7
IM8
IM9
IM10
IM11
IM12
AL
LL


Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/l)
10.0
8.0
6.0
4.0
2.0
0.0
03/03/2020
05/03/2020
07/03/2020
10/03/2020
12/03/2020
14/03/2020
17/03/2020
19/03/2020
21/03/2020
24/03/2020
26/03/2020
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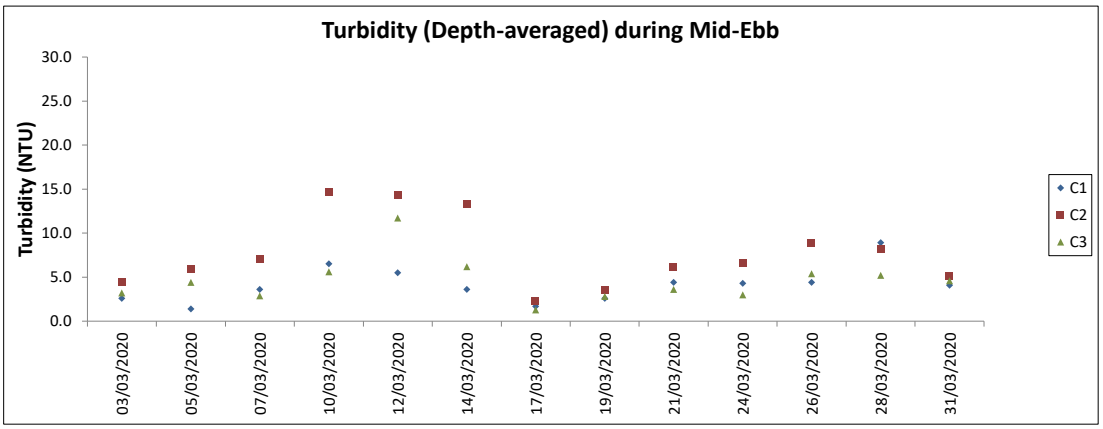
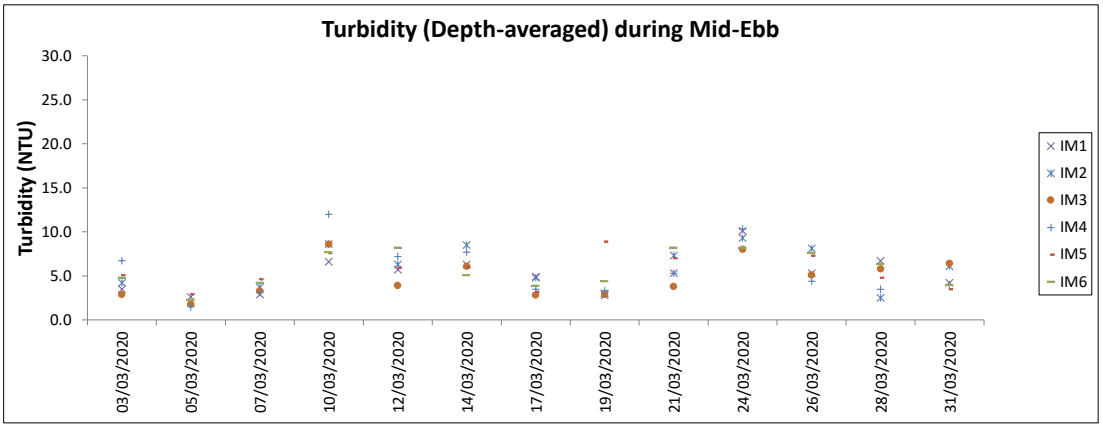
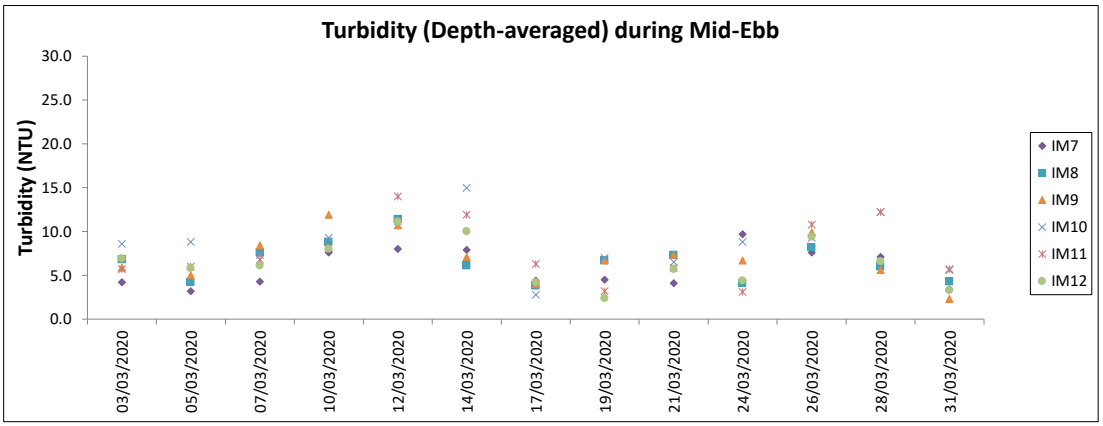
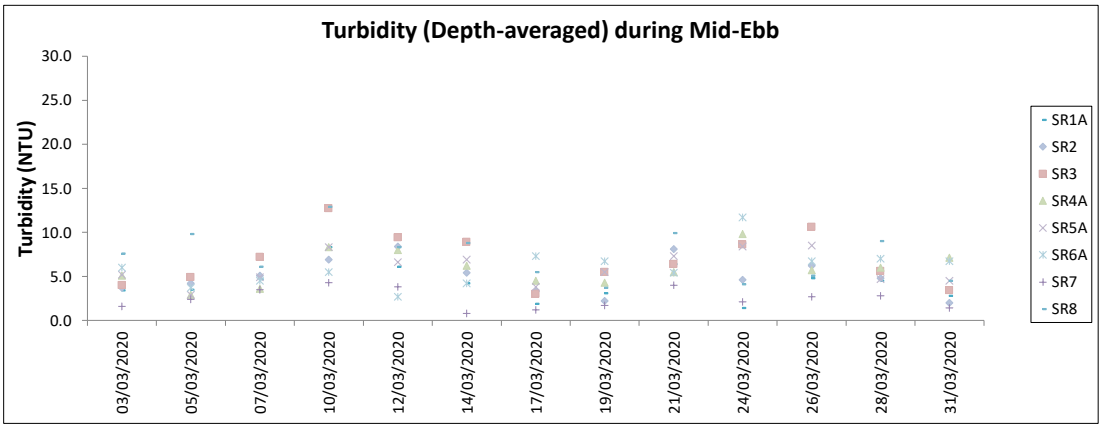
31/03/2020
SR1A
SR3
SR4A
SR5A
SR6A
SR7
SR8
AL
LL

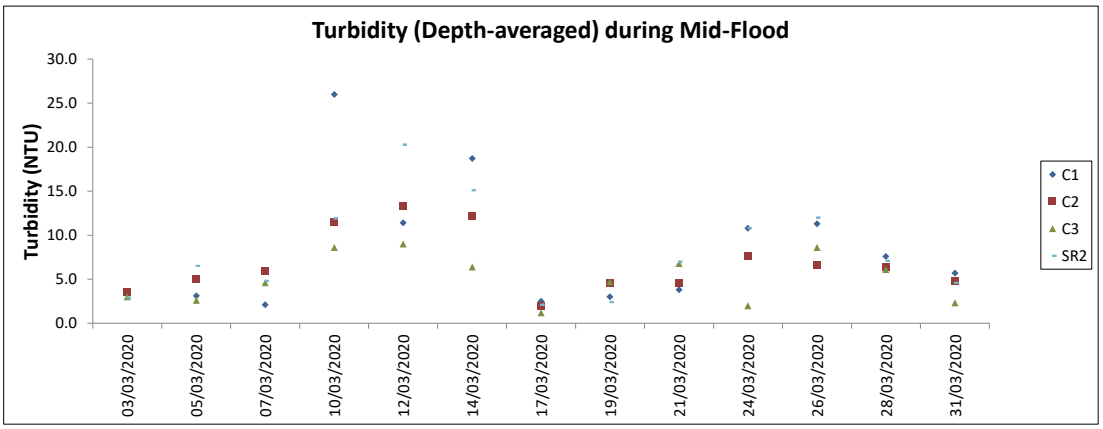


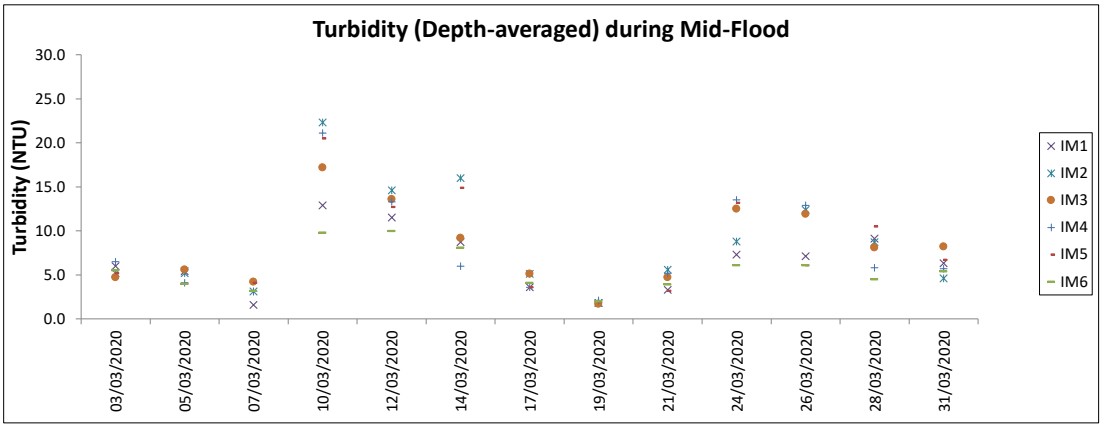


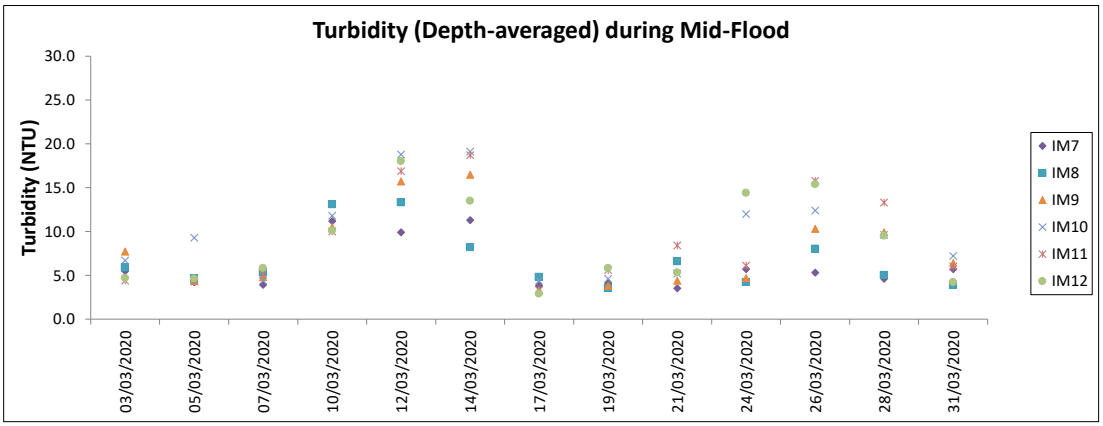


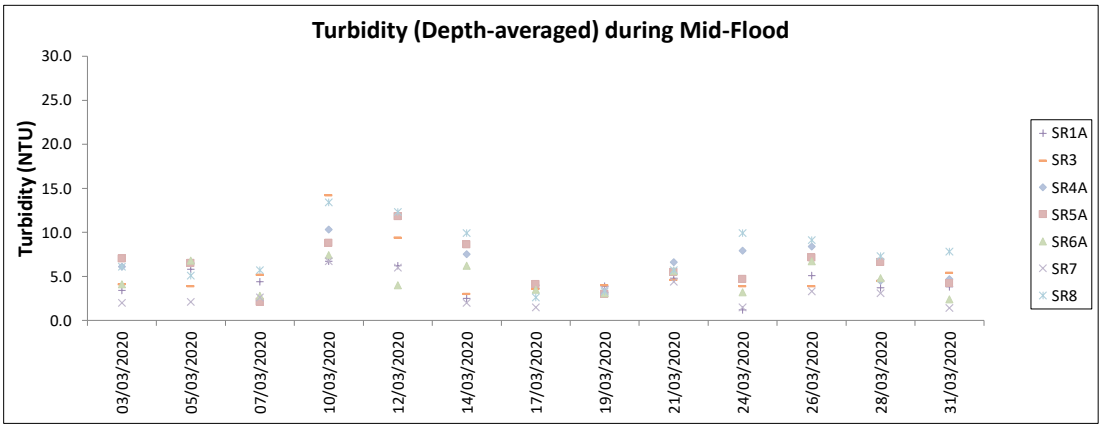


Note: The Action and Limit Level of turbidity can be referred to Table 4.2 of the monthly EM&A report.

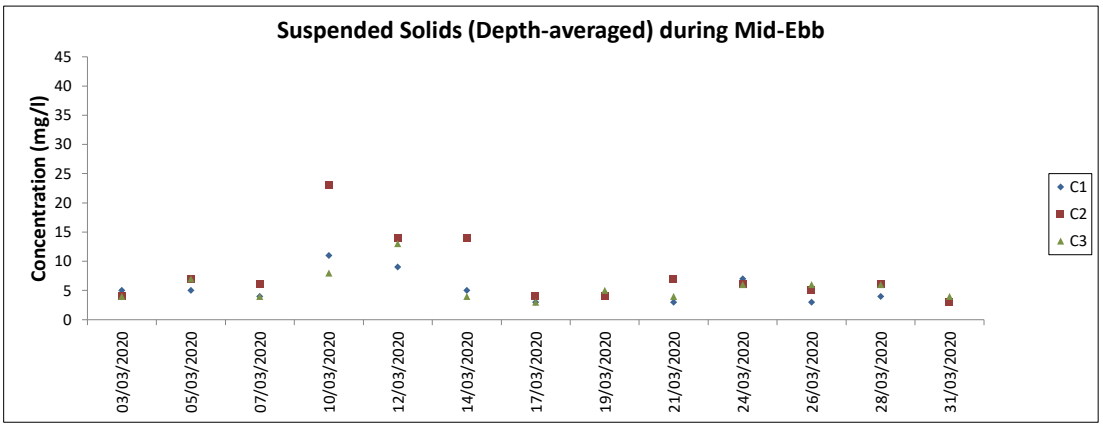


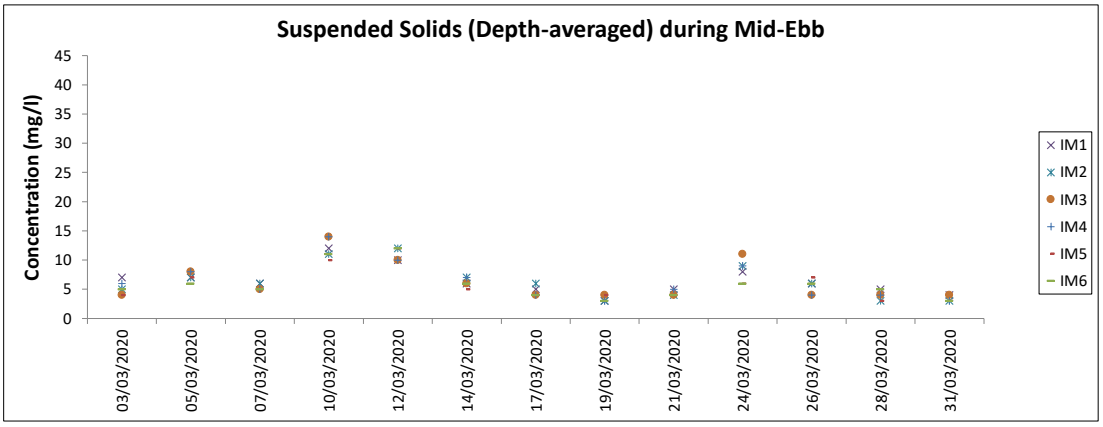


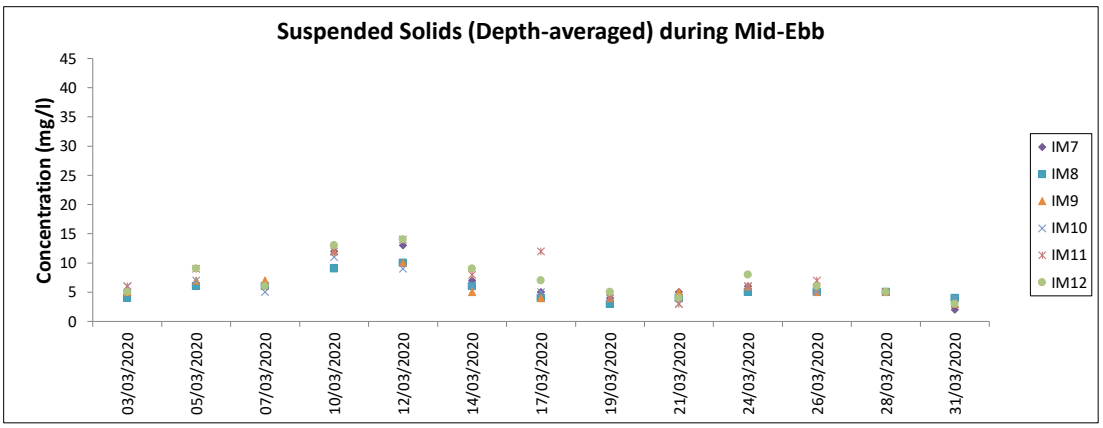


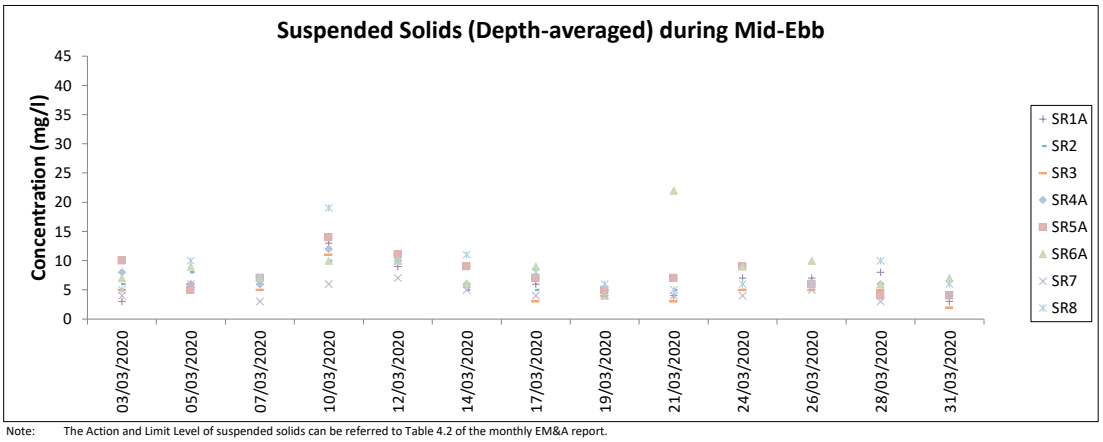


Note: The Action and Limit Level of turbidity can be referred to Table 4.2 of the monthly EM&A report.

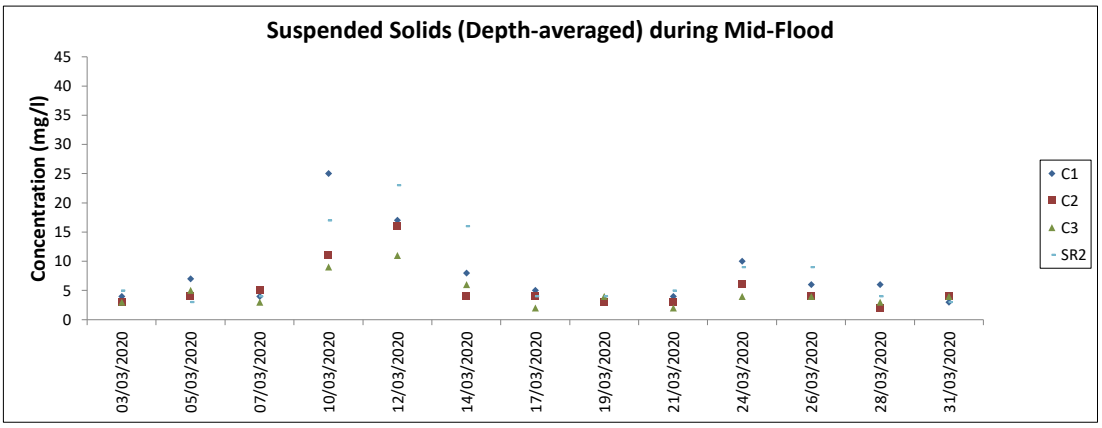


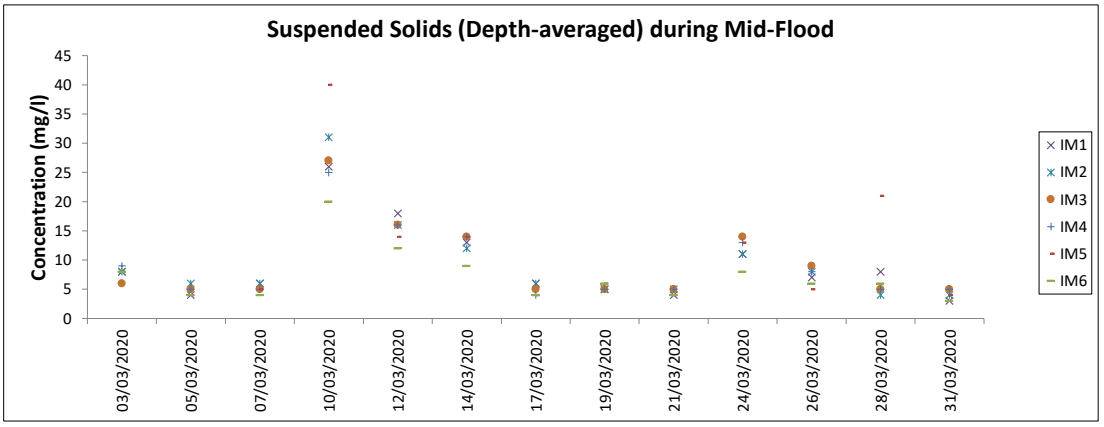


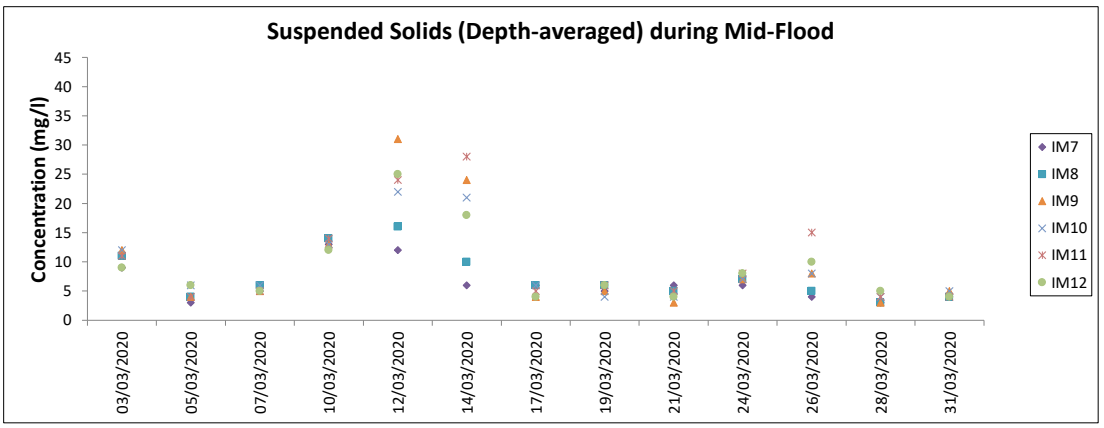


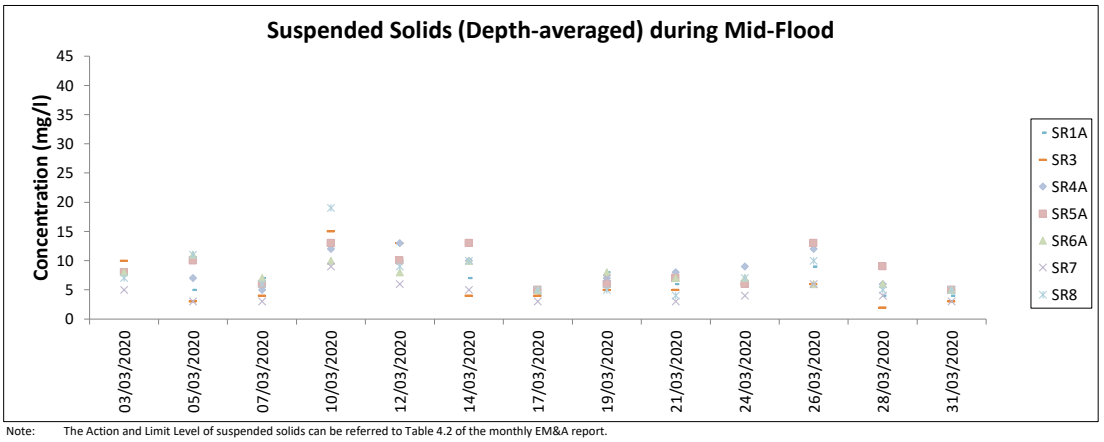


Note: The Action and Limit Level of suspended solids can be referred to Table 4.2 of the monthly EM&A report.

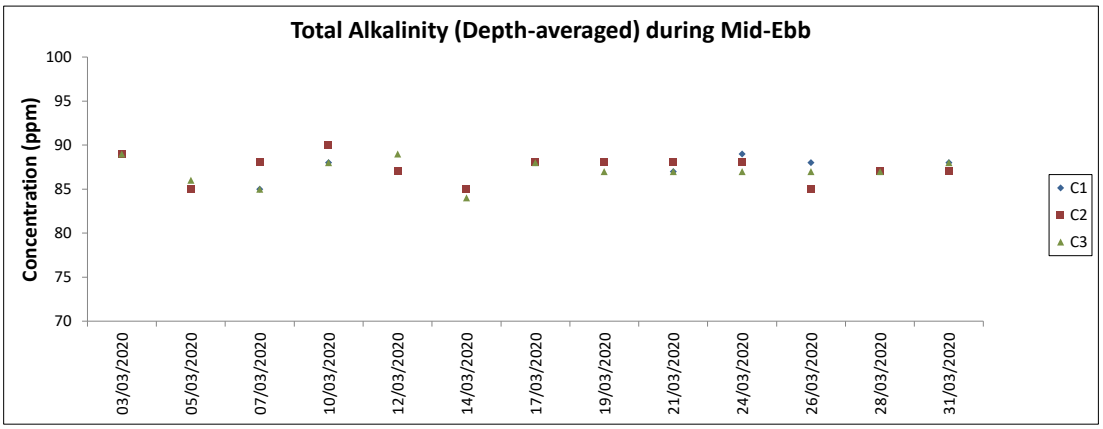


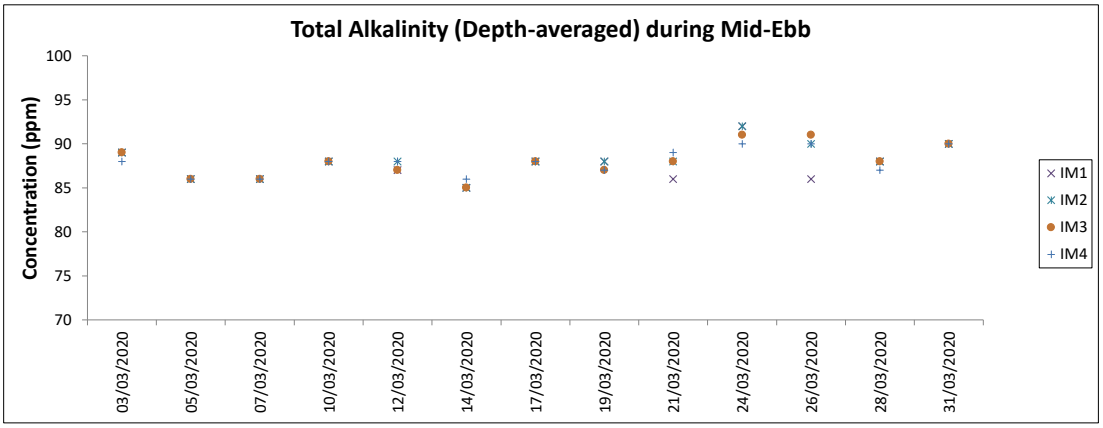


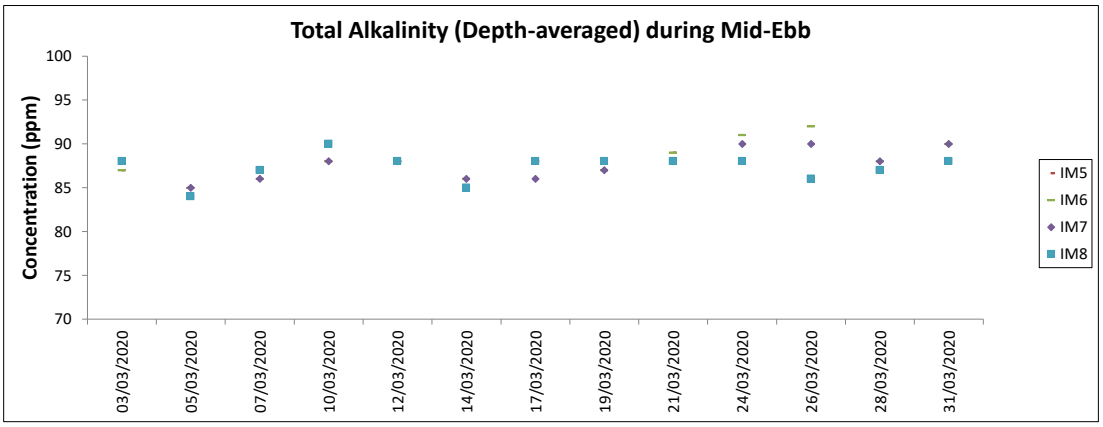


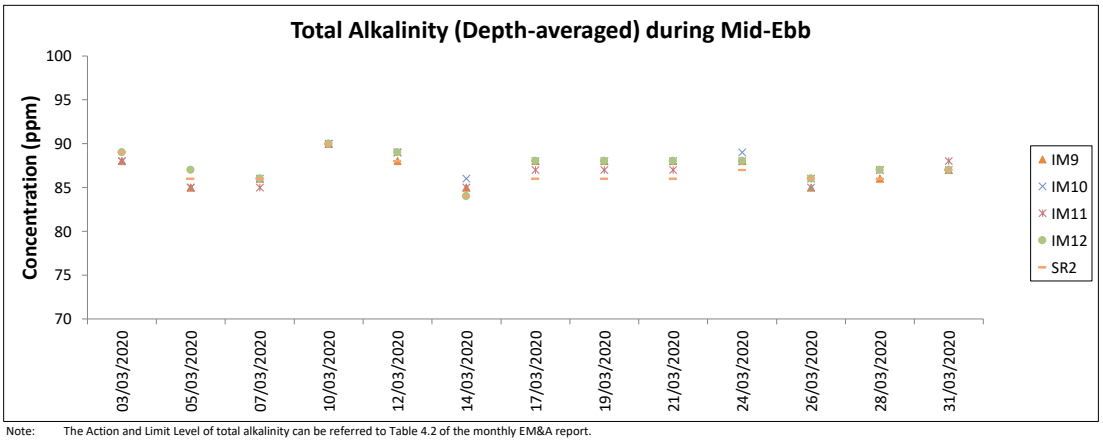


Note: The Action and Limit Level of suspended solids can be referred to Table 4.2 of the monthly EM&A report.

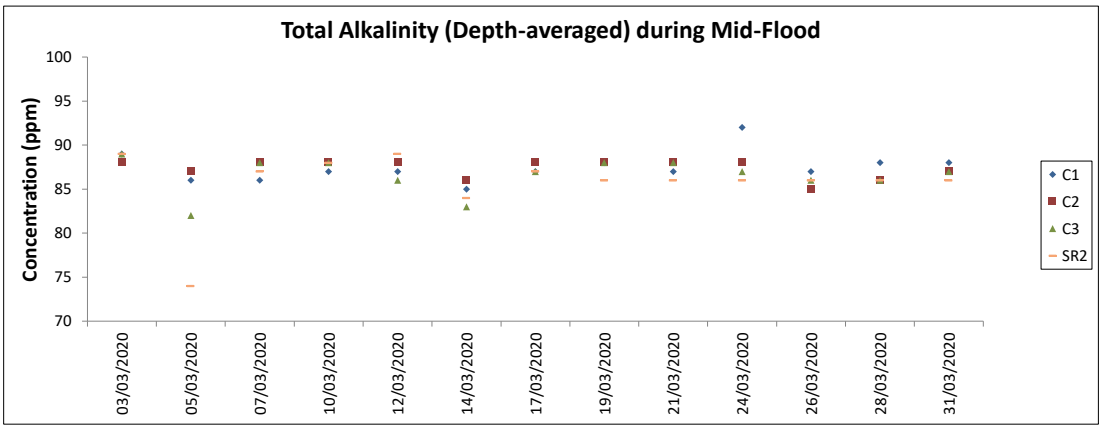


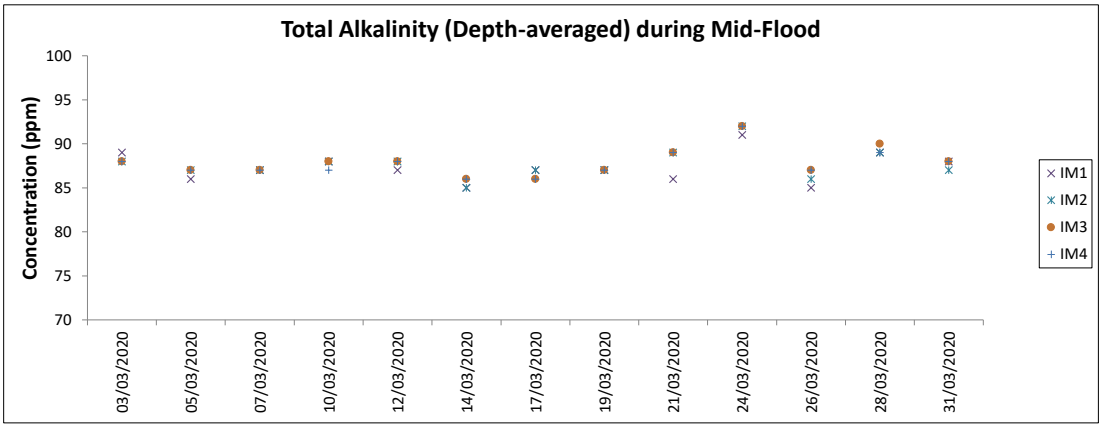


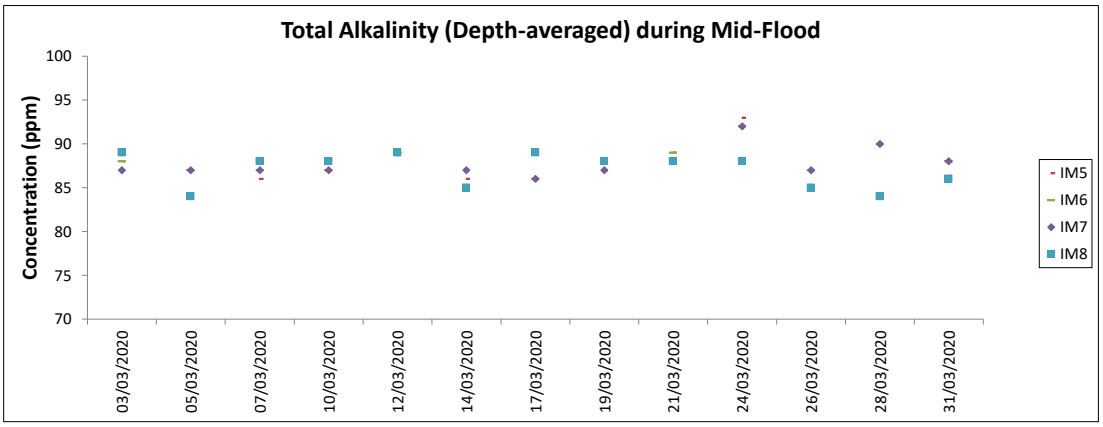


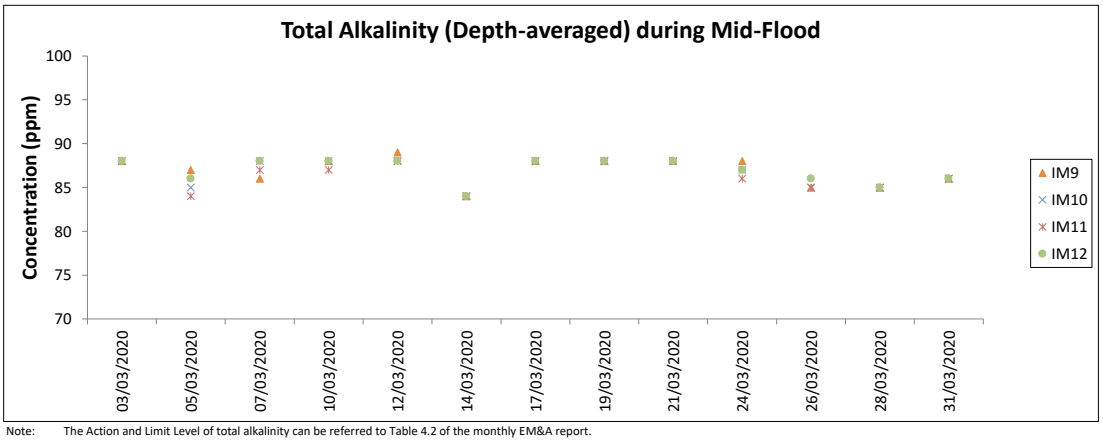


Note: The Action and Limit Level of total alkalinity can be referred to Table 4.2 of the monthly EM&A report.

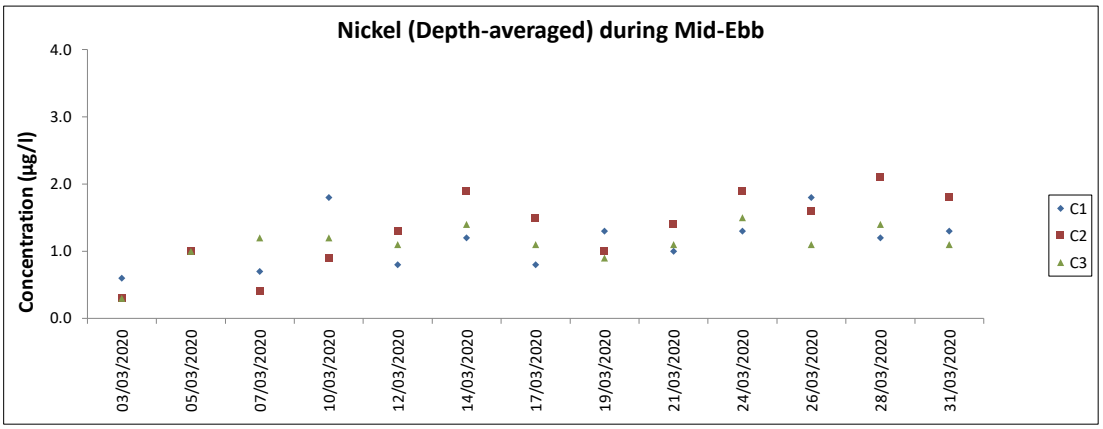


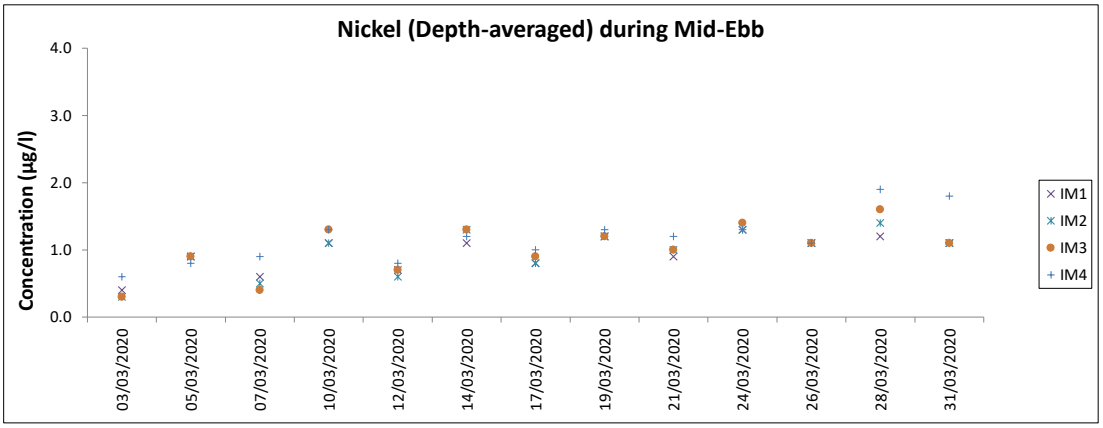


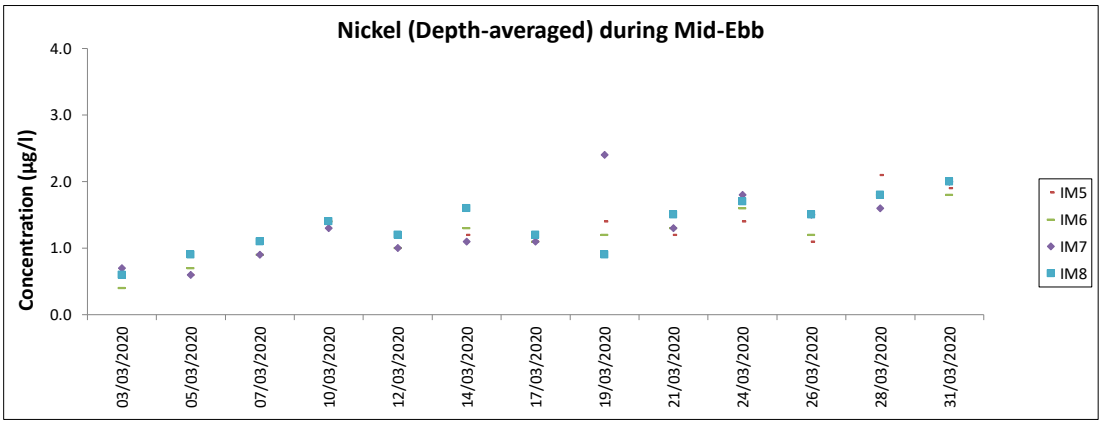


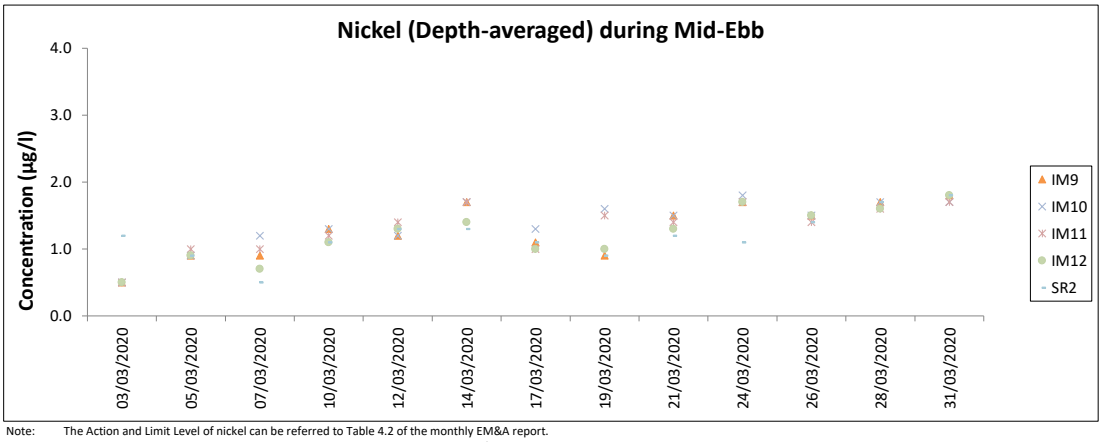


Note: The Action and Limit Level of total alkalinity can be referred to Table 4.2 of the monthly EM&A report.

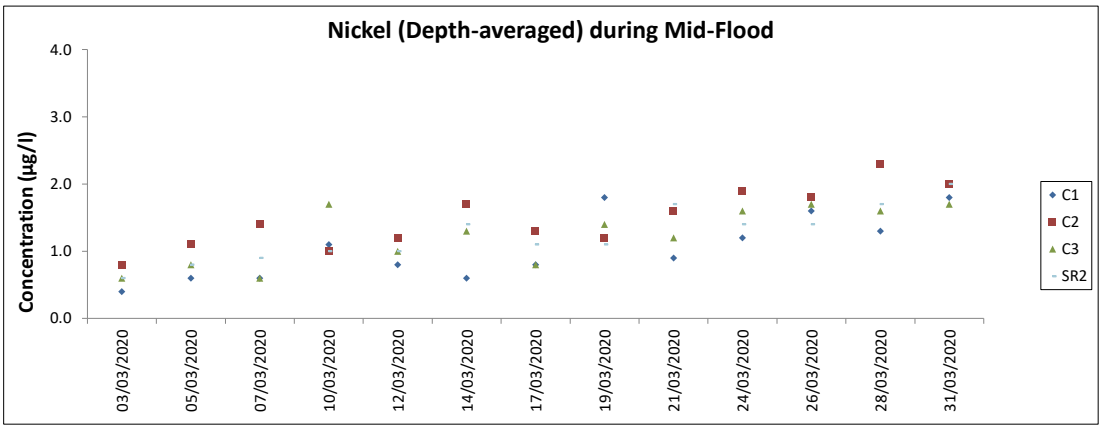


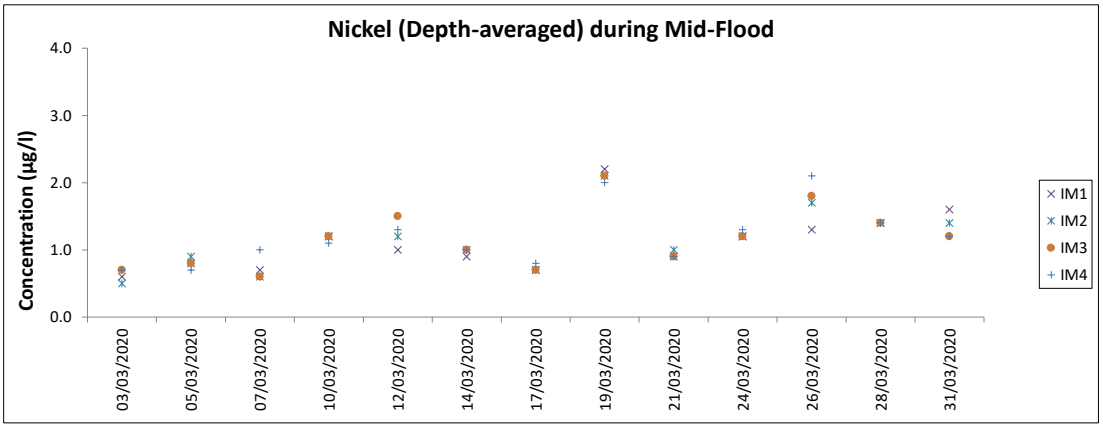


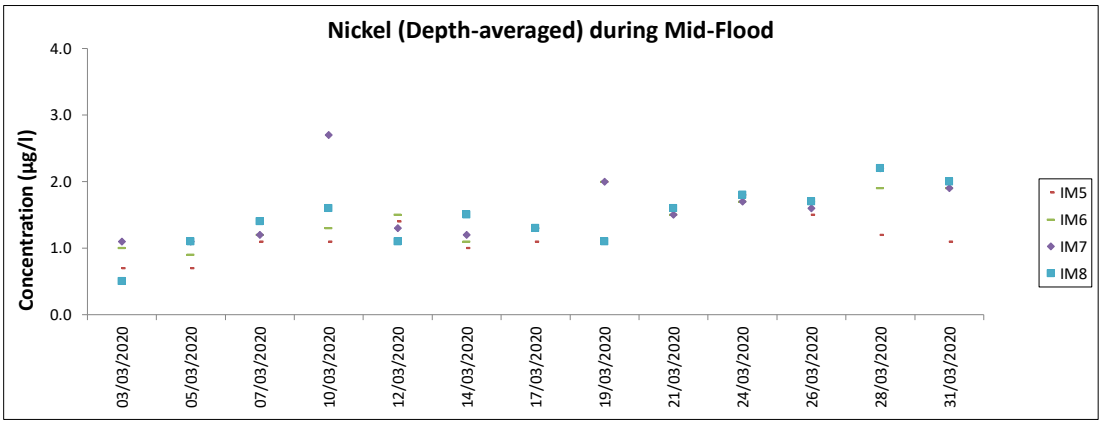


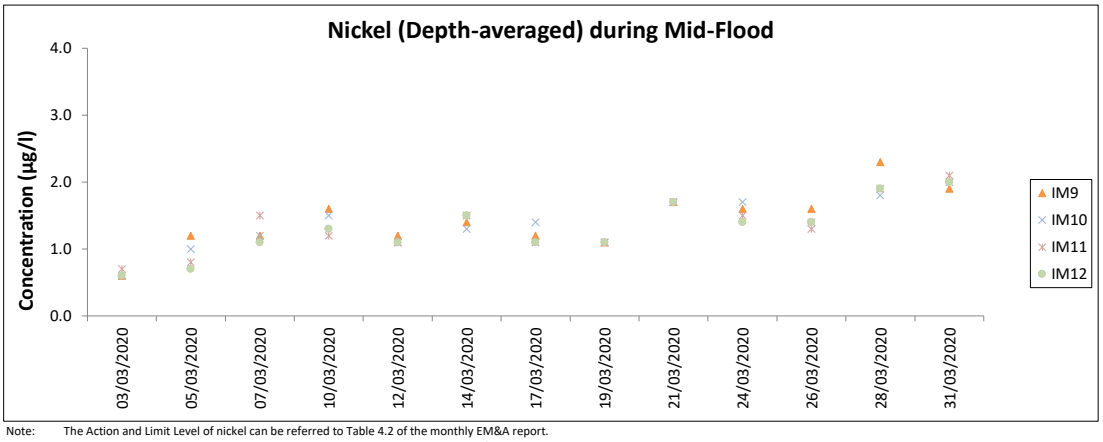


Note: The Action and Limit Level of nickel can be referred to Table 4.2 of the monthly EM&A report.
All chromium results in the reporting period was below the reporting limit 0.2 µg/l.









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

Chinese White Dolphin Monitoring Results

CWD Small Vessel Line-transect Survey — Survey Effort Data

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
6-Jan-20	NEL	2	17.100	WINTER	32166	3RS ET	P
6-Jan-20	NEL	3	20.610	WINTER	32166	3RS ET	P
6-Jan-20	NEL	2	6.200	WINTER	32166	3RS ET	S
6-Jan-20	NEL	3	3.790	WINTER	32166	3RS ET	S
7-Jan-20	SWL	1	3.200	WINTER	32166	3RS ET	P
7-Jan-20	SWL	2	49.770	WINTER	32166	3RS ET	P
7-Jan-20	SWL	2	15.800	WINTER	32166	3RS ET	S
10-Jan-20	AW	3	4.860	WINTER	32166	3RS ET	P
10-Jan-20	WL	2	10.760	WINTER	32166	3RS ET	P
10-Jan-20	WL	3	5.190	WINTER	32166	3RS ET	P
10-Jan-20	WL	4	5.890	WINTER	32166	3RS ET	P
10-Jan-20	WL	2	4.910	WINTER	32166	3RS ET	S
10-Jan-20	WL	3	0.860	WINTER	32166	3RS ET	S
10-Jan-20	WL	4	2.340	WINTER	32166	3RS ET	S
13-Jan-20	NEL	2	15.540	WINTER	32166	3RS ET	P
13-Jan-20	NEL	3	21.900	WINTER	32166	3RS ET	P
13-Jan-20	NEL	2	4.160	WINTER	32166	3RS ET	S
13-Jan-20	NEL	3	6.200	WINTER	32166	3RS ET	S
15-Jan-20	AW	3	1.170	WINTER	32166	3RS ET	P
15-Jan-20	AW	4	4.000	WINTER	32166	3RS ET	P
15-Jan-20	WL	3	7.366	WINTER	32166	3RS ET	P
15-Jan-20	WL	4	8.390	WINTER	32166	3RS ET	P
15-Jan-20	WL	5	1.550	WINTER	32166	3RS ET	P
15-Jan-20	WL	3	8.514	WINTER	32166	3RS ET	S
15-Jan-20	WL	4	2.110	WINTER	32166	3RS ET	S
16-Jan-20	NWL	2	25.710	WINTER	32166	3RS ET	P
16-Jan-20	NWL	3	36.900	WINTER	32166	3RS ET	P
16-Jan-20	NWL	4	0.300	WINTER	32166	3RS ET	P
16-Jan-20	NWL	2	5.570	WINTER	32166	3RS ET	S
16-Jan-20	NWL	3	5.220	WINTER	32166	3RS ET	S
16-Jan-20	NWL	4	0.200	WINTER	32166	3RS ET	S
17-Jan-20	NWL	2	4.600	WINTER	32166	3RS ET	P
17-Jan-20	NWL	3	49.000	WINTER	32166	3RS ET	P
17-Jan-20	NWL	4	9.300	WINTER	32166	3RS ET	P
17-Jan-20	NWL	2	1.000	WINTER	32166	3RS ET	S
17-Jan-20	NWL	3	9.500	WINTER	32166	3RS ET	S
17-Jan-20	NWL	4	2.100	WINTER	32166	3RS ET	S
22-Jan-20	SWL	1	2.200	WINTER	32166	3RS ET	P
22-Jan-20	SWL	2	47.923	WINTER	32166	3RS ET	P
22-Jan-20	SWL	3	4.200	WINTER	32166	3RS ET	P
22-Jan-20	SWL	2	14.227	WINTER	32166	3RS ET	S
22-Jan-20	SWL	3	1.200	WINTER	32166	3RS ET	S
10-Feb-20	NWL	2	58.000	WINTER	32166	3RS ET	P
10-Feb-20	NWL	3	5.360	WINTER	32166	3RS ET	P
10-Feb-20	NWL	2	11.700	WINTER	32166	3RS ET	S
11-Feb-20	NWL	2	30.200	WINTER	32166	3RS ET	P
11-Feb-20	NWL	3	33.800	WINTER	32166	3RS ET	P

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
11-Feb-20	NWL	2	4.600	WINTER	32166	3RS ET	S
11-Feb-20	NWL	3	6.900	WINTER	32166	3RS ET	S
12-Feb-20	AW	2	4.552	WINTER	32166	3RS ET	P
12-Feb-20	WL	2	18.710	WINTER	32166	3RS ET	P
12-Feb-20	WL	3	0.959	WINTER	32166	3RS ET	P
12-Feb-20	WL	2	8.676	WINTER	32166	3RS ET	S
12-Feb-20	WL	3	1.631	WINTER	32166	3RS ET	S
17-Feb-20	NEL	2	7.100	WINTER	32166	3RS ET	P
17-Feb-20	NEL	3	29.780	WINTER	32166	3RS ET	P
17-Feb-20	NEL	2	3.900	WINTER	32166	3RS ET	S
17-Feb-20	NEL	3	6.420	WINTER	32166	3RS ET	S
18-Feb-20	NEL	2	15.530	WINTER	32166	3RS ET	P
18-Feb-20	NEL	3	21.650	WINTER	32166	3RS ET	P
18-Feb-20	NEL	2	5.120	WINTER	32166	3RS ET	S
18-Feb-20	NEL	3	5.000	WINTER	32166	3RS ET	S
20-Feb-20	AW	3	4.920	WINTER	32166	3RS ET	P
20-Feb-20	WL	2	13.391	WINTER	32166	3RS ET	P
20-Feb-20	WL	3	5.057	WINTER	32166	3RS ET	P
20-Feb-20	WL	2	9.593	WINTER	32166	3RS ET	S
20-Feb-20	WL	4	1.013	WINTER	32166	3RS ET	S
21-Feb-20	SWL	3	26.930	WINTER	32166	3RS ET	P
21-Feb-20	SWL	4	18.000	WINTER	32166	3RS ET	P
21-Feb-20	SWL	5	9.200	WINTER	32166	3RS ET	P
21-Feb-20	SWL	3	7.600	WINTER	32166	3RS ET	S
21-Feb-20	SWL	4	7.700	WINTER	32166	3RS ET	S
21-Feb-20	SWL	5	1.270	WINTER	32166	3RS ET	S
26-Feb-20	SWL	1	1.800	WINTER	32166	3RS ET	P
26-Feb-20	SWL	2	49.708	WINTER	32166	3RS ET	P
26-Feb-20	SWL	3	0.840	WINTER	32166	3RS ET	P
26-Feb-20	SWL	2	13.918	WINTER	32166	3RS ET	S
26-Feb-20	SWL	3	1.970	WINTER	32166	3RS ET	S
2-Mar-20	NEL	2	2.500	SPRING	32166	3RS ET	P
2-Mar-20	NEL	3	32.140	SPRING	32166	3RS ET	P
2-Mar-20	NEL	4	2.600	SPRING	32166	3RS ET	P
2-Mar-20	NEL	2	1.200	SPRING	32166	3RS ET	S
2-Mar-20	NEL	3	8.160	SPRING	32166	3RS ET	S
2-Mar-20	NEL	4	1.000	SPRING	32166	3RS ET	S
6-Mar-20	NEL	2	3.460	SPRING	32166	3RS ET	P
6-Mar-20	NEL	3	33.340	SPRING	32166	3RS ET	P
6-Mar-20	NEL	2	1.200	SPRING	32166	3RS ET	S
6-Mar-20	NEL	3	9.900	SPRING	32166	3RS ET	S
11-Mar-20	NWL	2	4.786	SPRING	32166	3RS ET	P
11-Mar-20	NWL	3	53.890	SPRING	32166	3RS ET	P
11-Mar-20	NWL	4	1.400	SPRING	32166	3RS ET	P
11-Mar-20	NWL	3	12.430	SPRING	32166	3RS ET	S
12-Mar-20	AW	4	4.920	SPRING	32166	3RS ET	P
12-Mar-20	WL	3	1.675	SPRING	32166	3RS ET	P
12-Mar-20	WL	4	15.140	SPRING	32166	3RS ET	P
12-Mar-20	WL	5	2.008	SPRING	32166	3RS ET	P

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
12-Mar-20	WL	3	0.480	SPRING	32166	3RS ET	S
12-Mar-20	WL	4	7.380	SPRING	32166	3RS ET	S
12-Mar-20	WL	5	1.762	SPRING	32166	3RS ET	S
17-Mar-20	NWL	2	39.340	SPRING	32166	3RS ET	P
17-Mar-20	NWL	3	23.260	SPRING	32166	3RS ET	P
17-Mar-20	NWL	4	1.000	SPRING	32166	3RS ET	P
17-Mar-20	NWL	2	6.700	SPRING	32166	3RS ET	S
17-Mar-20	NWL	3	4.900	SPRING	32166	3RS ET	S
18-Mar-20	AW	2	5.000	SPRING	32166	3RS ET	P
18-Mar-20	WL	2	9.543	SPRING	32166	3RS ET	P
18-Mar-20	WL	3	9.425	SPRING	32166	3RS ET	P
18-Mar-20	WL	2	7.497	SPRING	32166	3RS ET	S
18-Mar-20	WL	3	2.691	SPRING	32166	3RS ET	S
19-Mar-20	SWL	1	6.940	SPRING	32166	3RS ET	P
19-Mar-20	SWL	2	38.570	SPRING	32166	3RS ET	P
19-Mar-20	SWL	3	8.050	SPRING	32166	3RS ET	P
19-Mar-20	SWL	2	14.355	SPRING	32166	3RS ET	S
19-Mar-20	SWL	3	2.200	SPRING	32166	3RS ET	S
23-Mar-20	SWL	1	6.890	SPRING	32166	3RS ET	P
23-Mar-20	SWL	2	45.972	SPRING	32166	3RS ET	P
23-Mar-20	SWL	1	1.350	SPRING	32166	3RS ET	S
23-Mar-20	SWL	2	14.535	SPRING	32166	3RS ET	S

Notes: CWD monitoring survey data of the two preceding survey months are presented for reference only.

CWD Small Vessel Line-transect Survey

Sighting Data

DATE	STG #	TIME	CWD/FP	GP SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.	P/S
7-Jan-20	1	1033	FP	1	SWL	2	N/A	OFF	3RS ET	22.2218	113.9359	WINTER	NONE	P
7-Jan-20	2	1123	CWD	2	SWL	2	849	ON	3RS ET	22.1646	113.9274	WINTER	NONE	P
7-Jan-20	3	1501	CWD	7	SWL	2	715	ON	3RS ET	22.1943	113.8589	WINTER	NONE	P
7-Jan-20	4	1543	CWD	2	SWL	2	26	ON	3RS ET	22.1879	113.8490	WINTER	NONE	P
10-Jan-20	1	1023	CWD	5	WL	2	16	ON	3RS ET	22.2756	113.8503	WINTER	NONE	S
10-Jan-20	2	1052	CWD	3	WL	2	140	ON	3RS ET	22.2643	113.8572	WINTER	NONE	S
10-Jan-20	3	1153	CWD	8	WL	2	579	ON	3RS ET	22.2347	113.8242	WINTER	NONE	S
15-Jan-20	1	1041	CWD	7	WL	3	304	ON	3RS ET	22.2688	113.8490	WINTER	NONE	P
15-Jan-20	2	1109	CWD	5	WL	3	456	ON	3RS ET	22.2607	113.8495	WINTER	NONE	P
15-Jan-20	3	1132	CWD	6	WL	4	12	ON	3RS ET	22.2503	113.8441	WINTER	NONE	P
15-Jan-20	4	1209	CWD	3	WL	3	1864	ON	3RS ET	22.2257	113.8374	WINTER	NONE	S
16-Jan-20	1	1339	CWD	1	NWL	2	861	ON	3RS ET	22.3359	113.9111	WINTER	NONE	S
22-Jan-20	1	1101	FP	1	SWL	2	69	ON	3RS ET	22.1433	113.9273	WINTER	NONE	S
22-Jan-20	2	1115	FP	2	SWL	2	149	ON	3RS ET	22.1671	113.9278	WINTER	NONE	P
22-Jan-20	3	1159	FP	6	SWL	2	39	ON	3RS ET	22.1591	113.9176	WINTER	NONE	P
22-Jan-20	4	1319	FP	1	SWL	2	35	ON	3RS ET	22.1582	113.8978	WINTER	NONE	P
22-Jan-20	5	1517	CWD	2	SWL	2	362	ON	3RS ET	22.1881	113.8492	WINTER	NONE	P
22-Jan-20	6	1531	CWD	2	SWL	2	82	ON	3RS ET	22.1898	113.8490	WINTER	NONE	P
10-Feb-20	1	0953	CWD	5	NWL	2	31	ON	3RS ET	22.3704	113.8700	WINTER	NONE	P
12-Feb-20	1	0936	CWD	6	AW	2	11	ON	3RS ET	22.3032	113.8723	WINTER	NONE	P
12-Feb-20	2	1103	CWD	2	WL	2	22	ON	3RS ET	22.2688	113.8576	WINTER	NONE	P
12-Feb-20	3	1129	CWD	1	WL	2	365	ON	3RS ET	22.2554	113.8358	WINTER	NONE	S
12-Feb-20	4	1143	CWD	1	WL	2	80	ON	3RS ET	22.2502	113.8347	WINTER	NONE	P
12-Feb-20	5	1231	CWD	1	WL	2	317	ON	3RS ET	22.2232	113.8359	WINTER	NONE	P
12-Feb-20	6	1249	CWD	1	WL	2	38	ON	3RS ET	22.2229	113.8313	WINTER	NONE	P
12-Feb-20	7	1304	CWD	3	WL	2	43	ON	3RS ET	22.2145	113.8270	WINTER	NONE	P
20-Feb-20	1	1048	CWD	2	WL	2	45	ON	3RS ET	22.2599	113.8494	WINTER	NONE	P
20-Feb-20	2	1054	CWD	2	WL	2	175	ON	3RS ET	22.2611	113.8428	WINTER	NONE	P
20-Feb-20	3	1148	CWD	6	WL	2	305	ON	3RS ET	22.2235	113.8328	WINTER	NONE	P
20-Feb-20	4	1238	CWD	3	WL	2	282	ON	3RS ET	22.2005	113.8254	WINTER	NONE	S
26-Feb-20	1	1049	FP	2	SWL	2	294	ON	3RS ET	22.1800	113.9361	WINTER	NONE	P
26-Feb-20	2	1058	FP	1	SWL	2	69	ON	3RS ET	22.1669	113.9362	WINTER	NONE	P

DATE	STG #	TIME	CWD/FP	GP SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.	P/S
26-Feb-20	3	1102	FP	2	SWL	2	604	ON	3RS ET	22.1632	113.9361	WINTER	NONE	P
26-Feb-20	4	1110	FP	2	SWL	2	1	ON	3RS ET	22.1489	113.9347	WINTER	NONE	S
26-Feb-20	5	1113	FP	2	SWL	2	11	ON	3RS ET	22.1473	113.9332	WINTER	NONE	S
26-Feb-20	6	1118	FP	1	SWL	2	246	ON	3RS ET	22.1437	113.9283	WINTER	NONE	S
26-Feb-20	7	1122	FP	3	SWL	2	89	ON	3RS ET	22.1484	113.9275	WINTER	NONE	S
26-Feb-20	8	1149	FP	2	SWL	2	179	ON	3RS ET	22.2012	113.9271	WINTER	NONE	P
26-Feb-20	9	1222	FP	1	SWL	2	137	ON	3RS ET	22.1533	113.9178	WINTER	NONE	P
26-Feb-20	10	1226	FP	1	SWL	2	124	ON	3RS ET	22.1489	113.9177	WINTER	NONE	P
26-Feb-20	11	1229	FP	1	SWL	2	32	ON	3RS ET	22.1468	113.9181	WINTER	NONE	P
26-Feb-20	12	1242	FP	1	SWL	3	293	ON	3RS ET	22.1493	113.9085	WINTER	NONE	P
26-Feb-20	13	1249	FP	1	SWL	2	3	ON	3RS ET	22.1549	113.9062	WINTER	NONE	S
26-Feb-20	14	1352	FP	1	SWL	2	171	ON	3RS ET	22.1555	113.8976	WINTER	NONE	P
26-Feb-20	15	1544	CWD	2	SWL	2	745	ON	3RS ET	22.1784	113.8498	WINTER	NONE	P
11-Mar-20	1	0938	CWD	8	NWL	2	712	ON	3RS ET	22.4130	113.8701	SPRING	NONE	P
11-Mar-20	2	1055	CWD	2	NWL	3	118	ON	3RS ET	22.2980	113.8701	SPRING	NONE	P
12-Mar-20	1	1030	CWD	4	WL	4	N/A	OFF	3RS ET	22.2778	113.8565	SPRING	NONE	P
12-Mar-20	2	1046	CWD	1	WL	5	36	ON	3RS ET	22.2693	113.8518	SPRING	NONE	P
12-Mar-20	3	1056	CWD	1	WL	3	192	ON	3RS ET	22.2635	113.8568	SPRING	NONE	S
12-Mar-20	4	1108	CWD	4	WL	3	440	ON	3RS ET	22.2611	113.8489	SPRING	NONE	P
12-Mar-20	5	1136	CWD	2	WL	3	751	ON	3RS ET	22.2482	113.8517	SPRING	NONE	S
18-Mar-20	1	1052	CWD	1	WL	3	102	ON	3RS ET	22.2605	113.8500	SPRING	NONE	P
18-Mar-20	2	1201	CWD	5	WL	2	147	ON	3RS ET	22.2324	113.8236	SPRING	NONE	S
18-Mar-20	3	1246	CWD	2	WL	3	29	ON	3RS ET	22.2130	113.8365	SPRING	NONE	S
19-Mar-20	1	1035	FP	3	SWL	1	38	ON	3RS ET	22.2111	113.9360	SPRING	NONE	P
19-Mar-20	2	1042	FP	1	SWL	2	79	ON	3RS ET	22.1984	113.9363	SPRING	NONE	P
19-Mar-20	3	1046	FP	2	SWL	2	230	ON	3RS ET	22.1951	113.9362	SPRING	NONE	P
19-Mar-20	4	1050	FP	11	SWL	2	162	ON	3RS ET	22.1909	113.9357	SPRING	NONE	P
19-Mar-20	5	1106	FP	2	SWL	2	8	ON	3RS ET	22.1708	113.9359	SPRING	NONE	P
19-Mar-20	6	1216	FP	2	SWL	2	352	ON	3RS ET	22.1552	113.9177	SPRING	NONE	P
19-Mar-20	7	1221	FP	1	SWL	2	62	ON	3RS ET	22.1487	113.9176	SPRING	NONE	P
19-Mar-20	8	1259	FP	3	SWL	2	452	ON	3RS ET	22.1924	113.9078	SPRING	NONE	P
19-Mar-20	9	1408	FP	2	SWL	2	146	ON	3RS ET	22.1909	113.8878	SPRING	NONE	P
23-Mar-20	1	1047	FP	3	SWL	2	128	ON	3RS ET	22.1813	113.9359	SPRING	NONE	P

DATE	STG #	TIME	CWD/FP	GP SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.	P/S
23-Mar-20	2	1050	FP	6	SWL	2	37	ON	3RS ET	22.1788	113.9358	SPRING	NONE	P
23-Mar-20	3	1056	FP	1	SWL	2	179	ON	3RS ET	22.1704	113.9365	SPRING	NONE	P
23-Mar-20	4	1101	FP	1	SWL	2	228	ON	3RS ET	22.1633	113.9357	SPRING	NONE	P
23-Mar-20	5	1118	FP	2	SWL	2	36	ON	3RS ET	22.1532	113.9275	SPRING	NONE	P
23-Mar-20	6	1127	FP	1	SWL	2	267	ON	3RS ET	22.1710	113.9278	SPRING	NONE	P
23-Mar-20	7	1207	FP	4	SWL	2	139	ON	3RS ET	22.1632	113.9183	SPRING	NONE	P
23-Mar-20	8	1224	FP	4	SWL	2	245	ON	3RS ET	22.1449	113.9080	SPRING	NONE	P
23-Mar-20	9	1231	FP	2	SWL	2	165	ON	3RS ET	22.1549	113.9047	SPRING	NONE	S
23-Mar-20	10	1332	FP	5	SWL	2	424	ON	3RS ET	22.1535	113.8977	SPRING	NONE	P
23-Mar-20	11	1338	FP	1	SWL	2	237	ON	3RS ET	22.1488	113.8931	SPRING	NONE	S
23-Mar-20	12	1346	FP	1	SWL	2	3	ON	3RS ET	22.1578	113.8879	SPRING	NONE	P
23-Mar-20	13	1355	FP	2	SWL	2	431	ON	3RS ET	22.1743	113.8880	SPRING	NONE	P
23-Mar-20	14	1359	FP	1	SWL	2	274	ON	3RS ET	22.1816	113.8878	SPRING	NONE	P
23-Mar-20	15	1426	FP	1	SWL	2	572	ON	3RS ET	22.1932	113.8780	SPRING	NONE	P
23-Mar-20	16	1455	FP	4	SWL	2	351	ON	3RS ET	22.1597	113.8721	SPRING	NONE	S
23-Mar-20	17	1519	CWD	4	SWL	2	535	ON	3RS ET	22.1996	113.8618	SPRING	NONE	P
23-Mar-20	18	1607	CWD	3	SWL	2	299	ON	3RS ET	22.1951	113.8503	SPRING	NONE	P

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

Notes:

CWD monitoring survey data of the two preceding survey months are presented for reference only. No relevant figure or text will be mentioned in this monthly EM&A report.

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

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

A total of 412.379 km of survey effort was collected under Beaufort Sea State 3 or below with favourable visibility; total no. of 10 on-effort sightings and total number of 32 dolphins from on-effort sightings were collected under such condition. Calculation of the encounter rates in March 2020 are shown as below:

Encounter Rate by Number of Dolphin Sightings (STG) in March 2020

$$STG = \frac{10}{412.379}\ x\ 100 = 2.42$$

Encounter Rate by Number of Dolphins (ANI) in March 2020

$$ANI = \frac{32}{412.379}\ x\ 100 = 7.76$$

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

A total of 1242.844 km of survey effort was collected under Beaufort Sea State 3 or below with favourable visibility; total no. of 35 on-effort sightings and total number of 114 dolphins from on-effort sightings were collected under such condition. Calculation of the running quarterly encounter rates are shown as below:

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

$$STG = \frac{35}{1242.844}\ x\ 100 = 2.82$$

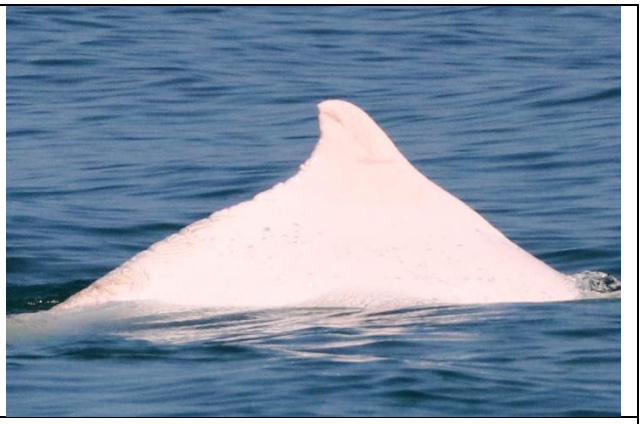
Running Quarterly Encounter Rate by Number of Dolphins (ANI)

$$ANI = \frac{114}{1242.844}\ x\ 100 = 9.17$$

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

	
NLMM042_20200311_1_1	SLMM014_20200311_2_2
	
SLMM028_20200311_2_6	SLMM014_20200312_3_2
	
SLMM003_20200312_4_5	SLMM012_20200312_4_2
	
SLMM037_20200312_4_2	SLMM052_20200312_4_1_Right

	
SLMM059_20200318_2_6	WLMM151_20200318_2_8
	
WLMM152_20200318_2_1	SLMM044_20200318_3_4
	
WLMM040_20200318_3_8	SLMM011_20200323_17_5
	
SLMM031_20200323_17_21	SLMM034_20200323_17_9

	
SLMM011_20200323_18_5	SLMM031_20200323_18_4
	
SLMM034_20200323_18_4	

CWD Land-based Theodolite Tracking Survey

CWD Groups by Survey Date

Date	Station	Start Time	End Time	Duration	Beaufort Range	Visibility	No. of Focal Follow Dolphin Groups Tracked	Dolphin Group Size Range
9/Mar/20	Lung Kwu Chau	8:50	14:50	6:00	2-3	2-3	0	-
23/Mar/20	Sha Chau	10:52	16:52	6:00	2-3	2	0	-

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

Appendix E. Calibration Certificates

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

REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AJ030054
Date of Issue : 12 March 2020

PART A – CUSTOMER INFORMATION

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

PART B – DESCRIPTION

Name of Equipment	:	YSI ProDSS (Multi-Parameters)
Manufacturer	:	YSI (a xylem brand)
Serial Number	:	17E100747
Date of Received	:	Mar 11, 2020
Date of Calibration	:	Mar 11, 2020
Date of Next Calibration[a]	:	Jun 10, 2020

PART C – REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

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

PART D – CALIBRATION RESULTS[b,c]

(1) pH at 25°C

Target (pH unit)	Displayed Reading[d] (pH Unit)	Tolerance[e](pH Unit)	Results
4.00	4.04	0.04	Satisfactory
7.42	7.38	-0.04	Satisfactory
10.01	10.04	0.03	Satisfactory

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

(2) Temperature

Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)	Results
10.0	10.2	0.2	Satisfactory
26.0	26.6	0.6	Satisfactory
47.0	47.4	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 referenced to YSI product specifications.*

LEE Chun-ning, Desmond
Senior Chemist

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
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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AJ030054
Date of Issue : 12 March 2020

PART D – CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
0.38	0.48	0.10	Satisfactory
4.44	4.50	0.06	Satisfactory
6.78	6.68	-0.10	Satisfactory
8.54	8.62	0.08	Satisfactory

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

(4) Conductivity at 25°C

Conc. of KCl (M)	Expected Reading (µS/cm)	Displayed Reading (µS/cm)	Tolerance (%)	Results
0.001	146.9	148.2	0.88	Satisfactory
0.01	1412	1386	-1.84	Satisfactory
0.1	12890	12436	-3.52	Satisfactory
0.5	58670	57314	-2.31	Satisfactory
1.0	111900	111048	-0.76	Satisfactory

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

(5) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	9.99	-0.10	Satisfactory
20	20.16	0.80	Satisfactory
30	30.28	0.93	Satisfactory

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

(6) Turbidity

Expected Reading (NTU)	Displayed Reading[f] (NTU)	Tolerance[g] (%)	Results
0	0.06	--	Satisfactory
10	10.34	3.4	Satisfactory
20	20.32	1.6	Satisfactory
100	92.4	-7.6	Satisfactory
800	801.6	0.2	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
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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AJ030056
Date of Issue : 12 March 2020

PART A – CUSTOMER INFORMATION

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

PART B – DESCRIPTION

Name of Equipment	:	YSI ProDSS (Multi-Parameters)
Manufacturer	:	YSI (a xylem brand)
Serial Number	:	18A104824
Date of Received	:	Mar 11, 2020
Date of Calibration	:	Mar 11, 2020
Date of Next Calibration[a]	:	Jun 10, 2020

PART C – REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

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

PART D – CALIBRATION RESULTS[b,c]

(1) pH at 25°C

Target (pH unit)	Displayed Reading[d] (pH Unit)	Tolerance[e](pH Unit)	Results
4.00	4.06	0.06	Satisfactory
7.42	7.40	-0.02	Satisfactory
10.01	10.10	0.09	Satisfactory

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

(2) Temperature

Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)	Results
10.0	10.5	0.5	Satisfactory
26.0	26.1	0.1	Satisfactory
47.0	46.2	-0.8	Satisfactory

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

~ CONTINUED ON NEXT PAGE ~

Remark(s): -

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

LEE Chun-ning, Desmond
Senior Chemist

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

Report No. : AJ030056
Date of Issue : 12 March 2020

PART D – CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
0.38	0.42	0.04	Satisfactory
4.44	4.51	0.07	Satisfactory
6.78	6.78	0.00	Satisfactory
8.54	8.72	0.18	Satisfactory

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

(4) Conductivity at 25°C

Conc. of KCl (M)	Expected Reading (µS/cm)	Displayed Reading (µS/cm)	Tolerance (%)	Results
0.001	146.9	145.8	-0.75	Satisfactory
0.01	1412	1356	-3.97	Satisfactory
0.1	12890	12176	-5.54	Satisfactory
0.5	58670	56438	-3.80	Satisfactory
1.0	111900	110819	-0.97	Satisfactory

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

(5) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	10.00	0.00	Satisfactory
20	20.54	2.70	Satisfactory
30	30.72	2.40	Satisfactory

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

(6) Turbidity

Expected Reading (NTU)	Displayed Reading[f] (NTU)	Tolerance[g] (%)	Results
0	0.02	--	Satisfactory
10	10.36	3.6	Satisfactory
20	20.82	4.1	Satisfactory
100	106.4	6.4	Satisfactory
800	812.4	1.6	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
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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AJ030055
Date of Issue : 12 March 2020

PART A – CUSTOMER INFORMATION

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

PART B – DESCRIPTION

Name of Equipment	:	YSI ProDSS (Multi-Parameters)
Manufacturer	:	YSI (a xylem brand)
Serial Number	:	16H104234
Date of Received	:	Mar 11, 2020
Date of Calibration	:	Mar 11, 2020
Date of Next Calibration[a]	:	Jun 10, 2020

PART C – REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

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

PART D – CALIBRATION RESULTS[b,c]

(1) pH at 25°C

Target (pH unit)	Displayed Reading[d] (pH Unit)	Tolerance[e](pH Unit)	Results
4.00	4.02	0.02	Satisfactory
7.42	7.44	0.02	Satisfactory
10.01	10.02	0.01	Satisfactory

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

(2) Temperature

Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)	Results
10.0	10.4	0.4	Satisfactory
26.0	26.0	0.0	Satisfactory
47.0	47.4	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 referenced to YSI product specifications.*

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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AJ030055
Date of Issue : 12 March 2020

PART D – CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
0.38	0.39	0.01	Satisfactory
4.44	4.53	0.09	Satisfactory
6.78	6.70	-0.08	Satisfactory
8.54	8.74	0.20	Satisfactory

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

(4) Conductivity at 25°C

Conc. of KCl (M)	Expected Reading (µS/cm)	Displayed Reading (µS/cm)	Tolerance (%)	Results
0.001	146.9	151.0	2.79	Satisfactory
0.01	1412	1357	-3.90	Satisfactory
0.1	12890	11982	-7.04	Satisfactory
0.5	58670	56432	-3.81	Satisfactory
1.0	111900	110782	-1.00	Satisfactory

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

(5) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	10.00	0.00	Satisfactory
20	20.36	1.80	Satisfactory
30	30.56	1.87	Satisfactory

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

(6) Turbidity

Expected Reading (NTU)	Displayed Reading[f] (NTU)	Tolerance[g] (%)	Results
0	0.00	--	Satisfactory
10	10.24	2.4	Satisfactory
20	21.20	6.0	Satisfactory
100	94.6	-5.4	Satisfactory
800	792.4	-1.0	Satisfactory

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

~ END OF REPORT ~

Remark(s): -

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

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

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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AJ030057
Date of Issue : 12 March 2020

PART A – CUSTOMER INFORMATION

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

PART B – DESCRIPTION

Name of Equipment	:	YSI ProDSS (Multi-Parameters)
Manufacturer	:	YSI (a xylem brand)
Serial Number	:	17H105557
Date of Received	:	Mar 11, 2020
Date of Calibration	:	Mar 11, 2020
Date of Next Calibration[a]	:	Jun 10, 2020

PART C – REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

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

PART D – CALIBRATION RESULTS[b,c]

(1) pH at 25°C

Target (pH unit)	Displayed Reading[d] (pH Unit)	Tolerance[e](pH Unit)	Results
4.00	4.00	0.00	Satisfactory
7.42	7.38	-0.04	Satisfactory
10.01	10.09	0.08	Satisfactory

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

(2) Temperature

Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)	Results
10.0	10.2	0.2	Satisfactory
26.0	26.6	0.6	Satisfactory
47.0	47.6	0.6	Satisfactory

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

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Remark(s): -

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(c) The performance of the equipment stated in this report is checked with independent reference material and results compared against a calibrated secondary source.
(d) "Displayed Reading" denotes the figure shown on item under calibration/ checking regardless of equipment precision or significant figures.
(e) The "Tolerance Limit" mentioned is referenced to YSI product specifications.

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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AJ030057
Date of Issue : 12 March 2020

PART D – CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
0.38	0.41	0.03	Satisfactory
4.44	4.50	0.06	Satisfactory
6.78	6.75	-0.03	Satisfactory
8.54	8.69	0.15	Satisfactory

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

(4) Conductivity at 25°C

Conc. of KCl (M)	Expected Reading (µS/cm)	Displayed Reading (µS/cm)	Tolerance (%)	Results
0.001	146.9	147.7	0.54	Satisfactory
0.01	1412	1467	3.90	Satisfactory
0.1	12890	12767	-0.95	Satisfactory
0.5	58670	59526	1.46	Satisfactory
1.0	111900	110742	-1.03	Satisfactory

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

(5) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	9.98	-0.20	Satisfactory
20	20.48	2.40	Satisfactory
30	30.84	2.80	Satisfactory

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

(6) Turbidity

Expected Reading (NTU)	Displayed Reading[f] (NTU)	Tolerance[g] (%)	Results
0	0.18	--	Satisfactory
10	10.14	1.4	Satisfactory
20	19.66	-1.7	Satisfactory
100	105.4	5.4	Satisfactory
800	792.6	-0.9	Satisfactory

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

~ END OF REPORT ~

Remark(s): -

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

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

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CALIBRATION REPORT

Test Report No. : AJ030007
Date of Issue : 05 March 2020

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	:	1224B90
Serial Number	:	10N60623
Date of Received	:	Mar 02, 2020
Date of Calibration	:	Mar 05, 2020
Date of Next Calibration[(a)]	:	Jun 05, 2020

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 from relevant international standards.

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CALIBRATION REPORT

Test Report No. : AJ030007
Date of Issue : 05 March 2020

PART D – RESULT[b],[c]

Water temperature: 23.0°C
Environmental conditions of the calibration:
Relative humidity: 62%
Z-Factor: 1.0023
Nominal volume: 3.0ml

Trial	Range: (1-4)	Range: (16-19)	Range: (23-26)	Range: (34-37)	Range: (42-45)
1	2.9659	2.9869	2.9688	2.9698	2.9715
2	2.9667	2.9715	2.9725	2.9652	2.9797
3	2.9742	2.9643	2.9697	2.9997	2.9622
4	2.9746	2.9817	2.9716	2.9677	2.9675
5	2.9788	2.9812	2.9800	2.9791	2.9751
6	2.9852	2.9554	2.9912	2.9612	2.9811
7	2.9743	2.9820	2.9877	2.9815	2.9670
8	2.9681	2.9655	2.9796	2.9716	2.9746
9	2.9715	2.9999	2.9812	2.9871	2.9699
10	2.9679	2.9762	2.9618	2.9755	2.9712
Average (g)	2.9727	2.9765	2.9764	2.9758	2.9720
Standard deviation	0.0061	0.0128	0.0091	0.0115	0.0058
Converted volume (mL)	2.9836	2.9874	2.9873	2.9868	2.9829
Error (%)	-0.5457	-0.4207	-0.4222	-0.4413	-0.5704
RSD (%)	0.2029	0.4286	0.3050	0.3845	0.1952

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 from relevant international standards.*

Appendix F. Status of Environmental Permits and Licences

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

Contract No.	Description	Location	Permit/ Reference No.	Status
P560 (R)	Notification of Construction Work under APCO	Stockpiling Area	398015	Receipt acknowledged by EPD on 18 Jan 2016
	Discharge License under WPCO	Stockpiling Area	WT00024250-2016	Valid from 25 Apr 2016 to 30 Apr 2021
	Registration as Chemical Waste Producer	Stockpiling Area	WPN 5213-951-L2902-02	Registration was updated on 3 Oct 2016
	Bill Account for disposal		A/C 7023982	Approval granted from EPD on 14 Dec 2015
3205	Notification of Construction Work under APCO	Works area of 3205	409041	Receipt acknowledged by EPD on 19 Oct 2016
	Registration as Chemical Waste Producer	Works Area of 3205	WPN 5213-951-B2502-01	Registration was updated on 25 Sep 2017
		Works Area of 3205	WPN 5111-421-B2509-01	Registration was updated on 25 Sep 2017
	Construction Noise Permit (General Works)	Works Area of 3205	GW-RS1094-19	Superseded by GW-RS0143-20
			GW-RS0143-20	Valid from 19 Mar 2020 to 17 Sep 2020
	Discharge License under WPCO	Works area of 3205	WT00028370-2017	Valid from 21 Jun 2017 to 30 Jun 2022
	Bill Account for disposal	Works area of 3205	A/C 7026295	Approval granted from EPD on 9 Nov 2016
3206	Notification of Construction Work under APCO	Works area of 3206	409237	Receipt acknowledged by EPD on 25 Oct 2016
		Works area of 3206 (Area 11)	447899	Receipt acknowledged by EPD on 8 Aug 2019
	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
		Works Area of 3206 (Area 11)	WPN 5213-951-Z4035-04	Completion of Registration on 4 Sep 2019
	Construction Noise Permit (General Works)	Works Area of 3206	GW-RS1194-19	Superseded by GW-RS0161-20
			GW-RS0161-20	Valid from 24 Mar 2020 to 15 Sep 2020

Contract No.	Description	Location	Permit/ Reference No.	Status
		Works Area of 3206 (Area 11)	GW-RS1170-19	Valid from 2 Jan 2020 to 24 Jun 2020
		Works Area of 3206	GW-RS0156-20	Valid from 24 Mar 2020 to 19 Jul 2020
	Bill Account for disposal	Works area of 3206	A/C 7026398	Approval granted from EPD on 16 Nov 2016
3301	Notification of Construction Work under APCO	Works area of 3301	415821	Receipt acknowledged by EPD on 19 Apr 2017
	Registration as Chemical Waste Producer	Works area of 3301	WPN 5213-951-F2718-02	Completion of Registration on 9 Jun 2017
	Discharge License under WPCO	Works area of 3301	WT00029286-2017	Valid from 20 Sep 2017 to 30 Sep 2022
	Bill Account for disposal	Works area of 3301	A/C 7027728	Approval granted from EPD on 8 May 2017
	Construction Noise Permit (General Works)	Works area of 3301 (Cable ducting works)	GW-RS0858-19	Superseded by GW-RS0129-20
			GW-RS0129-20	Valid from 4 Mar 2020 to 13 Sep 2020
		Works area of 3301	GW-RS0865-19	Valid until from 12 Oct 2019 to 11 Apr 2020
3302	Notification of Construction Work under APCO	Works area of 3302	440222	Receipt acknowledged by EPD on 10 Dec 2018
		Staging area of 3302	2018CES1	Receipt acknowledged by EPD on 21 Dec 2018
	Registration as Chemical Waste Producer	Works area of 3302	5296-951-C4331-01	Completion of Registration on 4 Jan 2019
	Discharge License under WPCO	Works area of 3302	WT00034539-2019	Valid from 11 Mar 2020 to 31 Mar 2025
		Staging area of 3302	WT00034541-2019	Valid from 14 Oct 2019 to 31 Oct 2024
	Bill Account for disposal	Works area of 3302	A/C 7032881	Approval granted from EPD on 8 Jan 2019
	Construction Noise Permit (General Works)	Works area of 3302	GW-RS1162-19	Valid from 7 Jan 2020 to 6 Jul 2020
3303	Notification of Construction Work under APCO	Works area of 3303	445611	Receipt acknowledged by EPD on 27 May 2019
	Registration as Chemical Waste Producer	Works area of 3303	5213-951-S4174-01	Completion of Registration on 17 Jun 2019
	Bill Account for disposal	Works area of 3303	A/C 7034272	Approval granted from EPD on 10 Jun 2019
	Construction Noise Permit (General Works)	Works area of 3303 (Existing airport)	GW-RS0101-20	Superseded by GW-RS0134-20
			GW-RS0134-20	Valid from 18 Mar 2020 to 16 Sep 2020
		Works area of 3303 (Reclamation area)	GW-RS0061-20	Superseded by GW-RS0154-20
			GW-RS0154-20	Valid from 19 Mar 2020 to 17 Sep 2020
3402	Notification of Construction Work under APCO	Works area of 3402	440808	Receipt acknowledged by EPD on 31 Dec 2018
		Stockpiling area of 3402	441960	Receipt acknowledged by EPD on 8 Feb 2019

Contract No.	Description	Location	Permit/ Reference No.	Status
	Registration as Chemical Waste Producer	Works area of 3402	WPN 5213-951-W1172-05	Registration was updated on 25 Feb 2019
	Discharge License under WPCO	Works area of 3402	WT00033685-2019	Valid from 20 Jun 2019 to 30 Jun 2024
	Bill Account for disposal	Works area of 3402	A/C 7032577	Approval granted from EPD on 27 Nov 2018
	Construction Noise Permit (General Works)	Works area of 3402	GW-RS0070-20	Valid from 3 Feb 2020 to 1 Aug 2020
3403	Notification of Construction Work under APCO	Works area of 3403	450860	Receipt acknowledged by EPD on 11 Nov 2019
	Registration as Chemical Waste Producer	Works area of 3403	WPN 5213-951-S4218-01	Completion of Registration on 9 Jan 2020
	Bill Account for disposal	Works area of 3403	A/C 7035267	Approval granted from EPD on 30 Sep 2019
	Construction Noise Permit (General Works)	Works area of 3403	GW-RS0078-20	Valid from 20 Feb 2020 to 19 Aug 2020
3405	Notification of Construction Work under APCO	Works area of 3405	453447	Receipt acknowledged by EPD on 18 Feb 2020
	Registration as Chemical Waste Producer	Works area of 3405	WPN 5218-951-C4431-01	Completion of Registration on 12 Mar 2020
	Bill Account for disposal	Works area of 3405	A/C 7036796	Approval granted from EPD on 20 Mar 2020
3501	Notification of Construction Work under APCO	Works area of 3501	434640	Receipt acknowledged by EPD on 13 Jun 2018
	Registration as Chemical Waste Producer	Works area of 3501	WPN 5213-951-B2520-02	Completion of Registration on 25 Jul 2017
	Discharge License under WPCO	Works area of 3501	WT00031400-2018	Valid from 30 Aug 2018 to 31 Aug 2023
	Bill Account for disposal	Works area of 3501	A/C 7028144	Approval granted from EPD on 23 Jun 2017
	Construction Noise Permit (General Works)	Works area of 3501	GW-RS0796-19	Valid from 5 Sep 2019 to 2 Mar 2020
3503	Notification of Construction Work under APCO	Works area of 3503	435180	Receipt acknowledged by EPD on 29 Jun 2018
		Stockpiling area of 3503	439777	Receipt acknowledged by EPD on 26 Nov 2018
	Registration as Chemical Waste Producer	Works area of 3503	WPN 5113-951-L2845-02	Completion of Registration on 8 Jan 2018
	Discharge License under WPCO	Works area of 3503	WT00031258-2018	Valid from 7 Jun 2018 to 30 Jun 2023
	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-RS1191-19	Superseded by GW-RS0124-20
			GW-RS0124-20	Valid from 13 Mar 2020 to 31 Aug 2020
		Works area of 3503	GW-RS0139-20	Valid from 9 Mar 2020 to 31 May 2020

Contract No.	Description	Location	Permit/ Reference No.	Status
		Stockpiling area of 3503	GW-RS1012-19	Valid from 14 Nov 2019 to 13 May 2020
		Stockpiling area of 3503	GW-RS1180-19	Valid from 4 Jan 2020 to 30 Jun 2020
3601	Notification of Construction Work under APCO	Works area of 3601	451765	Receipt acknowledged by EPD on 10 Dec 2019
	Registration as Chemical Waste Producer	Works area of 3601	WPN 7119-951-C4421-01	Completion of Registration on 9 Jan 2020
	Bill Account for disposal	Works area of 3601	A/C 702991	Approval granted from EPD on 1 Feb 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
	Construction Noise Permit (General Works)	Works area of 3602	GW-RS0888-19	Valid from 8 Oct 2019 to 31 Mar 2020
3603	Notification of Construction Work under APCO	Site office of 3603	433604	Receipt acknowledged by EPD on 16 May 2018
	Registration as Chemical Waste Producer	Works area of 3603	WPN 5296-951-S4069-01	Completion of Registration on 22 Jan 2018
	Bill Account for disposal	Works area of 3603	A/C 7030002	Approval granted from EPD on 1 Feb 2018
	Construction Noise Permit (General Works)	Works area of 3603	GW-RS0909-19	Valid from 25 Oct 2019 to 23 Apr 2020
3721	Notification of Construction Work under APCO	Works area of 3721	448657	Receipt acknowledged by EPD on 02 Sep 2019
	Registration as Chemical Waste Producer	Works area of 3721	WPN 5218-951-C4412-01	Completion of Registration on 9 Dec 2019
	Bill Account for disposal	Works area of 3721	A/C 705234	Approval granted from EPD on 25 Sep 2019
	Construction Noise Permit (General Works)	Works area of 3721	GW-RS0172-20	Valid from 19 Mar 2020 to 17 Sep 2020
3722	Notification of Construction Work under APCO	Works area of 3722A	453195	Receipt acknowledged by EPD on 11 Feb 2020
		Works area of 3722B	453671	Receipt acknowledged by EPD on 25 Feb 2020
		Works area of 3722C	453673	Receipt acknowledged by EPD on 25 Feb 2020
		Works area of 3722D	453675	Receipt acknowledged by EPD on 25 Feb 2020

Contract No.	Description	Location	Permit/ Reference No.	Status
	Bill Account for disposal	Works area of 3722A	A/C 7036752	Approval granted from EPD on 11 Mar 2020
		Works area of 3722D	A/C 7036795	Approval granted from EPD on 20 Mar 2020
	Construction Noise Permit (General Works)	Works area of 3722A, 3722B, 3722C and 3722D	GW-RS0155-20	Valid from 19 Mar 2020 to 17 Sep 2020
3801	Notification of Construction Work under APCO	Works area of 3801	418345	Receipt acknowledged by EPD on 26 Jun 2017
			430372	Receipt acknowledged by EPD on 2 Feb 2018
			435652	Receipt acknowledged by EPD on 16 Jul 2018
			450940	Receipt acknowledged by EPD on 13 Nov 2019
	Registration as Chemical Waste Producer	Works area of 3801	WPN 5296-951-C1169-53	Completion of Registration on 14 Aug 2018
	Discharge License under WPCO	Works and stockpiling area of 3801	WT00029535-2017	Valid from 24 Nov 2017 to 30 Nov 2022
	Bill Account for disposal	Works area of 3801	A/C 7028254	Approval granted from EPD on 3 Jul 2017
	Construction Noise Permit (General Works)	Works and stockpiling area of 3801	GW-RS1212-19	Valid from 9 Jan 2020 to 8 Jul 2020
		Works area of 3801	GW-RS1126-19	Valid from 27 Dec 2019 to 26 Mar 2020
			GW-RS0152-20	Valid from 27 Mar 2020 to 26 Jun 2020
			GW-RS0065-20	Valid from 6 Feb 2020 to 2 Mar 2020
			GW-RS0113-20	Valid from 7 Mar 2020 to 2 Jun 2020
3901B	Notification of Construction Work under APCO	Works area of 3901B	452168	Receipt acknowledged by EPD on 23 Dec 2019
	Specified Process license under APCO	Works area of 3901B	443181	Receipt acknowledged by EPD on 15 Mar 2019
	Registration as Chemical Waste Producer	Works area of 3901B	WPN 5218-951-G2880-01	Completion of Registration on 17 Jan 2020
	Bill Account for disposal	Works area of 3901B	A/C 7032417	Approval granted from EPD on 13 Nov 2018
	Construction Noise Permit (General Works)	Works area of 3901B	GW-RS0106-20	Valid from 2 Mar 2020 to 19 Aug 2020

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

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 Prosecutions

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

Appendix H. Data of SkyPier HSF Movements to/from Zhuhai and Macau (between 1 and 31 March 2020)

Data of SkyPier HSF Movements to/from Zhuhai and Macau (between 1 and 31 March 2020)

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
1-Mar	14:00	3A082	ZUI	Arrival	12.7	-	-
1-Mar	17:01	3A083	ZUI	Arrival	12.9	-	-
2-Mar	13:59	3A082	ZUI	Arrival	11.9	-	-
2-Mar	17:22	3A083	ZUI	Arrival	12.5	-	-
3-Mar	14:17	3A082	ZUI	Arrival	12.6	-	-
3-Mar	17:14	3A083	ZUI	Arrival	12.5	-	-
4-Mar	14:02	3A082	ZUI	Arrival	13.3	-	-
4-Mar	17:00	3A083	ZUI	Arrival	13.3	-	-
5-Mar	13:56	3A082	ZUI	Arrival	12.6	-	-
5-Mar	16:55	3A083	ZUI	Arrival	12.6	-	-
6-Mar	14:00	3A082	ZUI	Arrival	12.9	-	-
6-Mar	16:52	3A083	ZUI	Arrival	12.5	-	-
6-Mar	17:28	3A183	ZUI	Departure	13.2	-	-
7-Mar	13:55	3A082	ZUI	Arrival	13.2	-	-
7-Mar	17:02	3A083	ZUI	Arrival	11.8	-	-
8-Mar	14:04	3A082	ZUI	Arrival	13.5	-	-
8-Mar	16:57	3A083	ZUI	Arrival	12.1	-	-
9-Mar	13:54	3A082	ZUI	Arrival	13.1	-	-
9-Mar	17:03	3A083	ZUI	Arrival	10.8	-	-
10-Mar	13:58	3A082	ZUI	Arrival	13.5	-	-
10-Mar	16:57	3A083	ZUI	Arrival	13.1	-	-
11-Mar	14:14	3A082	ZUI	Arrival	13.7	-	-
11-Mar	17:07	3A083	ZUI	Arrival	13.4	-	-
12-Mar	13:59	3A082	ZUI	Arrival	12.9	-	-
12-Mar	17:12	3A083	ZUI	Arrival	13.3	-	-
13-Mar	13:52	3A082	ZUI	Arrival	12.8	-	-
13-Mar	17:00	3A083	ZUI	Arrival	12.7	-	-
14-Mar	13:59	3A082	ZUI	Arrival	13.1	-	-
14-Mar	16:56	3A083	ZUI	Arrival	13.6	-	-
14-Mar	17:22	3A183	ZUI	Departure	11.6	-	-
15-Mar	14:07	3A082	ZUI	Arrival	12.9	-	-
15-Mar	17:12	3A083	ZUI	Arrival	13.2	-	-
16-Mar	13:59	3A082	ZUI	Arrival	11.8	-	-
16-Mar	17:01	3A083	ZUI	Arrival	12.9	-	-
16-Mar	17:41	3A183	ZUI	Departure	12	-	-
17-Mar	13:52	3A082	ZUI	Arrival	12.6	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
17-Mar	16:51	3A083	ZUI	Arrival	12.1	-	-
18-Mar	14:22	3A082	ZUI	Arrival	11.6	-	-
19-Mar	14:14	3A082	ZUI	Arrival	11.8	-	-
20-Mar	13:58	3A082	ZUI	Arrival	13.4	-	-
20-Mar	14:10	3A182	ZUI	Departure	12.7	-	-
21-Mar	13:57	3A082	ZUI	Arrival	12.9	-	-
22-Mar	13:53	3A082	ZUI	Arrival	13.4	-	-
24-Mar	13:56	3A082	ZUI	Arrival	12.3	-	-

Follow-up on instantaneous speeding

Referring to the data of SkyPier HSF movements in March 2020, no instantaneous speeding (i.e. a sudden change in speed at over 15 knots for a short period of time) within the SCZ was recorded.