MOTT MACDONALD

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

Construction Phase Monthly EM&A Report No.56 (For August 2020)

September 2020

Airport Authority Hong Kong

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This Monthly EM&A Report No. 56 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 September 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, Environmental Compliance

14 September 2020

Dear Sir,

Contract No. 3102
3RS Independent Environmental Checker Consultancy Services

Submission of Monthly EM&A Report No. 56 (August 2020)

Reference is made to the Environmental Team's submission of the Monthly EM&A Report No. 56 under Condition 3.5 of the Environmental Permit No. EP-489/2014 certified by the ET Leader on 14 September 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 56th 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 August 2020.

Key Activities in the Reporting Period

The key activities of the Project carried out in the reporting period included reclamation works and land-based 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-based 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.

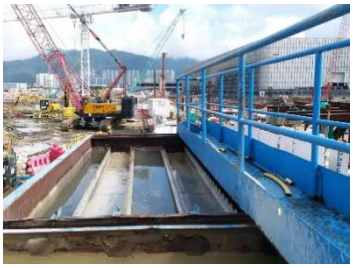
EM&A Activities Conducted in the Reporting Period

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	12
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

		
Contract-specific Environmental Management Meeting conducted by AAHK, ET and Contractor to discuss Site Environmental Issues	Checking of Wastewater Treatment Facility maintained by Contractor	On-site Checking of Construction Noise Permit conducted by ET

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 dissolved oxygen (DO), 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 or Limit Level is triggered. For dissolved oxygen (DO), some testing results triggered the relevant Action or Limit Levels, and the corresponding investigations were conducted accordingly. The investigation findings indicated 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

Reclamation Works:

Contract 3205 DCM works

- DCM works.

Contract 3206 Main Reclamation Works

- Land-based 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; and
- Subgrade compaction and paving works.

Contract 3302 Eastern Vehicular Tunnel Advance Works

- Cable laying and ducting works;

- Trench excavation works;
- Backfilling and reinstatement works;
- Piling and structure works;
- King Post Construction; and
- Site establishment.

Contract 3303 Third Runway and Associated Works

- Footing and utilities work;
- Preparation works for box culvert construction;
- Bored pilling work; and
- Cable laying and ducting works.

Contract 3307 Fire Training Facility

- Site establishment.

Third Runway Concourse:

Contract 3403 New Integrated Airport Centres Building and Civil Works

- Piling works; and
- Installation of cable and lightning pit.

Contract 3405 Third Runway Concourse Foundation and Substructure Works

- Plant mobilisation;
- Bored pilling work; and
- Laying of pipes.

Terminal 2 Expansion:

Contract 3503 Terminal 2 Foundation and Substructure Works

- T2 re-configuration;
- Excavation works;
- Utilities, drainage, and road work; and
- Piling and structure works.

Automated People Mover (APM) and Baggage Handling System (BHS):

Contract 3601 New Automated People Mover System (TRC Line)

- Hole drilling; and
- Plinth construction work.

Contract 3602 Existing APM System Modification Works

- Modification works at APM depot.

Construction Support (Facilities):

Contract 3721 Construction Support Infrastructure Works

- Excavation and backfilling; and
- Laying of drainage pipes and dusts.

Contract 3722 Construction Support Facilities

- Formboard erecting and concreting;
- Foundation works;
- Erection of superstructure; and

- Site establishment.

Airport Support Infrastructure:

Contract 3801 APM and BHS Tunnels on Existing Airport Island

- Construction of box culvert and ventilation building;
- Cofferdam and king post installation for shaft;
- Backfilling work; and
- Site clearance.

Contract 3802 APM and BHS Tunnels and Related Works

- Site establishment;
- Set up storage area and temporary haul road; and
- Ground investigation.

Construction Support (Services / Licences):

Contract 3901A/ B Concrete Batching Facility

- Erection of superstructure;
- Concreting; and
- Foundation work.

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	√		A complaint regarding dust issue at Chek Lap Kok South Road was received on 28 Aug 2020.	The complaint is under investigation. The findings of investigation for the complaint will be reported in the next Monthly EM&A Report.
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 of Construction Phase Monthly EM&A Report No. 54.

1.2 Scope of this Report

This is the 56th 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 August 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

Reclamation 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
Contract 3206 Main Reclamation Works (ZHEC-CCCC-CDC Joint Venture)	Project Manager	Alan Mong	3763 1352
	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	Dickey Yau	5699 4503
	Environmental Officer	Dennis Ho	5645 0563
Contract 3303 Third Runway and Associated Works (SAPR Joint Venture)	Project Manager	Andrew Keung	6277 6628
	Environmental Officer	Max Chin	6447 5707
Contract 3307 Fire Training Facility (Paul Y. Construction Company Limited)	Project Manager	Steven Meredith	6109 1813
	Environmental Officer	Albert Chan	9700 1083

Third Runway Concourse:

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 Third 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	Cecilia Choi	9265 9352

Terminal 2 (T2) Expansion:

Party	Position	Name	Telephone
Contract 3503 Terminal 2 Foundation and Substructure Works (Leighton – Chun Wo Joint Venture)	Project Manager	Eric Wu	3973 1718
	Environmental Officer	Malcolm Leung	3973 0850

Automated People Mover (APM) and Baggage Handling System (BHS):

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
Contract 3603 3RS Baggage Handling System (VISH Consortium)	Project Manager	K C Ho	9272 9626
	Environmental Officer	Eric Ha	9215 3432

Construction Support (Facilities):

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

Party	Position	Name	Telephone
Contract 3722 Western Support Area – Construction Support Facilities (Tapbo Construction Company Limited and Konwo Modular House Limited Joint Venture)	Deputy Project Director	Philip Kong	9049 3161
	Environmental Officer	Sampson Lo	9752 9118

Airport Support Infrastructure:

Party	Position	Name	Telephone
Contract 3801 APM and BHS Tunnels on Existing Airport Island (China State Construction Engineering (Hong Kong) Ltd.)	Project Manager	Tony Wong	9642 8672
	Environmental Officer	Federick Wong	9842 2703
Contract 3802 APM and BHS Tunnels and Related Works (Gammon Engineering & Construction Company Limited)	Project Director	John Adams	6111 6989
	Environmental Officer	Andy Leung	9489 0035

Construction Support (Services / Licences):

Party	Position	Name	Telephone
Contract 3901A Concrete Batching Facility (K. Wah Concrete Company Limited)	Project Manager	Benedict Wong	9553 2806
	Environmental Officer	C P Fung	9874 2872
Contract 3901B Concrete Batching Facility (Gammon Construction Limited)	Senior Project Manager	Gabriel Chan	2435 3260
	Environmental Officer	Rex Wong	2695 6319

1.4 Summary of Construction Works

The key activities of the Project carried out in the reporting period included reclamation works and land-based works. Works in the reclamation areas included DCM works, marine filling, seawall and facilities construction, together with runway and associated works. Land-based 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
Sewerage and Sewage Treatment	
Methodology for carrying out annual sewage flow monitoring for concerned gravity sewer	The proposed methodology of the annual sewage flow monitoring will be prepared and submitted to EPD at least one year before commencement of operation of 3RS.
Details of the routine H_2S monitoring system for the sewerage system of 3RS	The details of the routine H_2S monitoring system will be prepared and submitted to EPD at least one year before commencement of operation of 3RS.
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 (Volumes 1 and 2)	The CAR for Terminal 2 Emergency Power Supply System No.1 (Volumes 1 and 2) was submitted to EPD.
Terrestrial Ecology	
Pre-construction Egretry Survey Plan	The Egretry Survey Plan was submitted and approved by EPD under EP Condition 2.14.
Ecological Monitoring	The terrestrial ecological monitoring at Sheung Sha Chau was completed in January 2019.
Marine Ecology	
Pre-Construction Phase Coral Dive Survey	The Coral Translocation Plan was submitted and approved by EPD under EP Condition 2.12.
Coral Translocation	The coral translocation was completed.
Post-Translocation Coral Monitoring	The post-translocation monitoring programme according to the Coral Translocation Plan was completed in April 2018.
Chinese White Dolphins (CWD)	
Vessel Survey, Land-based Theodolite Tracking and Passive Acoustic Monitoring (PAM)	

Parameters	Status
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:

- Three skipper training session provided by ET: 6, 19 and 25 August 2020;
- Thirteen environmental management meetings for EM&A review with works contracts: 6, 7, 11, 19, 20, 21, 24, 26, 27 and 28 August 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 A**.

2 Air Quality Monitoring

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

Table 2.1: Locations of Impact Air Quality Monitoring Stations

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

2.1 Action and Limit Levels

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

Table 2.2: Action and Limit Levels of Air Quality Monitoring

Monitoring Station	Action Level ($\mu g/m^3$)	Limit Level ($\mu g/m^3$)
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 B**.

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

Table 2.4: Summary of Air Quality Monitoring Results

Monitoring Station	1-hr TSP Concentration Range (μg/m^3)	Action Level (μg/m^3)	Limit Level (μg/m^3)
AR1A	5 - 52	306	500
AR2	8 - 32	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 was observed at the monitoring stations during the monitoring sessions. As the sensitive receivers were far away from the construction activities, with the implementation of dust control measures, there was no adverse impact at the sensitive receivers attributable to the works of the Project.

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. 00998505)	24 Mar 2020	Monthly EM&A Report No. 52, Appendix D
	Rion NL-52 (Serial No. 01287679)	21 Jun 2020	Monthly EM&A Report No. 54, Appendix E
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)	4 Jul 2020	Monthly EM&A Report No. 55, 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 B**.

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

Table 3.4: Summary of Construction Noise Monitoring Results

Monitoring Station	Noise Level Range, dB(A) $L_{eq\ (30mins)}$	Limit Level, dB(A) $L_{eq\ (30mins)}$
NM1A(1)	71 - 72	75
NM4(1)	62 - 64	70(2)
NM5(1)	53 - 65	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 NM1A, NM5 and NM6 during this reporting period. It is considered that the monitoring work during the reporting period was effective and there was no adverse impact attributable to the Project activities.

4 Water Quality Monitoring

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

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

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

Monitoring Station	Description	Coordinates		Parameters
SR5A	San Tau Beach SSSI	810696	816593	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 Jul 2020	Monthly EM&A Report No. 55, Appendix D
	YSI ProDSS (Serial No. 16H104234)	10 Jun 2020	Monthly EM&A Report No. 54, Appendix E
	YSI ProDSS (Serial No. 17E100747)	20 Jul 2020	Monthly EM&A Report No. 55, Appendix D
Digital Titrator (measurement of total alkalinity)	Titrette Bottle-top Burette, 50ml (Serial No. 10N60623)	1 Jun 2020	Monthly EM&A Report No. 54, Appendix E

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

Table 4.5: Other Monitoring Equipment

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

4.3 Monitoring Methodology

4.3.1 Measuring Procedure

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

The water samples for all monitoring parameters were collected, stored, preserved and analysed according to the Standard Methods, APHA 22nd ed. and/or other methods as agreed by the EPD. In-situ measurements at monitoring locations including temperature, pH, DO, turbidity, salinity, alkalinity and water depth were collected by equipment listed in **Table 4.4** and **Table 4.5**. Water samples for heavy metals and SS analysis were stored in high density polythene bottles with no preservative added, packed in ice (cooled to 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 B**. Monitoring session on 1 August 2020 was cancelled due to Strong Wind Signal No.3 in force. It should be noted that Very Hot Weather Warning was issued on 14, 15 and 16 August 2020 and water quality monitoring results might be affected by this weather event.

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

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

Table 4.7 to **Table 4.9** present the summary of the DO compliance status at IM and SR stations during mid-ebb and mid-flood tide for the reporting period.

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

	IM1	IM2	IM3	IM4	IM5	IM6	IM7	IM8	IM9	IM10	IM11	IM12	SR2	SR3	SR4A	SR5A	SR6A	SR7
04/08/2020																		
06/08/2020																		
08/08/2020																		
11/08/2020																		
13/08/2020																		
15/08/2020			D															
18/08/2020																		
20/08/2020																		
22/08/2020																		
25/08/2020																		
27/08/2020																		
29/08/2020																		
No. of result triggering Action or Limit Level	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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

	IM1	IM2	IM3	IM4	IM5	IM6	IM7	IM8	IM9	IM10	IM11	IM12	SR2	SR3	SR4A	SR5A	SR6A	SR7
04/08/2020																		
06/08/2020																		
08/08/2020																		
11/08/2020																		
13/08/2020																		
15/08/2020	D	D	D	D											D			
18/08/2020																		
20/08/2020																		
22/08/2020																		
25/08/2020																		
27/08/2020																		
29/08/2020																		
No. of result triggering Action or Limit Level	1	1	1	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0

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

	IM1	IM2	IM3	IM4	IM5	IM6	IM7	IM8	IM9	IM10	IM11	IM12	SR3	SR4A	SR5A	SR6A	SR7
04/08/2020																	
06/08/2020																	
08/08/2020																	
11/08/2020																	
13/08/2020																	
15/08/2020																	
18/08/2020																	
20/08/2020																	
22/08/2020																	
25/08/2020																	
27/08/2020																	
29/08/2020																	
No. of result triggering Action or Limit Level	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1

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

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

Monitoring results triggered the corresponding Action and Limit Levels on two monitoring days. In accordance with Event and Action Plan stipulated in the Manual, EPD, IEC and Contractor were informed when the corresponding Action or Limit Levels were triggered. Repeat measurement was conducted on 16 and 17 August 2020 as stipulated in the Manual.

Monitoring result triggered the corresponding Limit Level at SR7 on 22 August 2020. The case occurred at a monitoring station upstream of the Project during flood tide and would unlikely be affected by the Project.

Investigations focusing on the cases that occurred at monitoring stations located downstream of the Project were carried out. Details of the Project's marine construction activities and site observations on the concerned monitoring day were collected. Findings were summarized in **Table 4.10**.

Table 4.10: Summary of Findings from Investigation of DO Monitoring Results

Date	Marine construction works nearby	Approximate distance from marine construction works	Status of water quality measures (if applicable)	Construction vessels in the vicinity	Turbidity / Silt plume observed near the monitoring station	Action or Limit Level triggered due to Project
15/8/2020	DCM works	Around 1km	Localised and enhanced silt curtain deployed	No	No	No

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

For DO results recorded in ebb tide at IM1, IM2, IM3, IM4 and SR4A on 15 August 2020 which triggered Action or Limit Levels, no silt plume was observed at these monitoring stations and appropriate mitigation measures were implemented properly by contractors. In accordance with the Event and Action Plan, repeat measurement was conducted on 16 and 17 August 2020 during ebb tide at IM1, IM2, IM3, IM4 and SR4A. Monitoring results showed that DO levels at these monitoring stations still triggered Action or Limit Levels, and lower DO levels were observed on 16 August 2020. However, there were no DCM works in the vicinity of these monitoring stations on 16 August 2020 which was a public holiday. It was also noted that no Action and Limit Levels were triggered on 18 August 2020. These suggested that the low DO levels were not due to one-off or localized incident. In addition, DO levels at these stations were within their baseline ranges during baseline monitoring of the Project. Therefore, the cases were considered unlikely 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 DO measurement results triggered the corresponding Action and Limit Levels, and investigations were conducted accordingly.

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

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

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

5 Waste Management

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

5.1 Action and Limit Levels

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

Table 5.1: Action and Limit Levels for Construction Waste

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

5.2 Waste Management Status

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

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

Based on updated information provided by contractors, construction waste generated in the reporting period is summarised in **Table 5.2**. Proactive measures have been undertaken during the re-configuration of T2 building. The contractor has established the recycling strategy for C&D materials with proper planning and design to maximize recycling and reuse. Dedicated recyclers were employed for different kinds of recyclable materials by the contractor, and ET and IEC have carried out site visit to recyclers' faciltities to review recycling process. Recycling materials before leaving the site are weighted by a weight bridge and monitored by CCTV system. Dedicated areas for sorting of materials are established on site. Recyclable materials such as steel, reinforcement bar, structural steel, aluminum, copper, other metals and glass are sorted on-site and transported off-site for recycling. ET and IEC has carried out site audits regularly and reviewed the trip ticket system.

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)
July 2020[2][3]	2,895	*43,002	16	3,785	60	*8,200	1,035
August 2020[2][4]	6,005	51,847	0	2,652	0	1,400	1,224

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.

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.

5.3 Marine Sediment Management

Marine sediment is managed according to the EIA Report, Updated EM&A Manual and Waste Management Plan of the Project. Sampling works for marine sediment generated from the reclaimed land area was on-going during the reporting period. The sampling process, storage conditions of the excavated marine sediment, treatment process, final backfilling location as well as associated records were inspected and checked by ET and verified by IEC to ensure they were in compliance with the requirements as stipulated in the Waste Management Plan.

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 encounter rates STG & ANI of this month will be calculated from the reporting period and the two 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 Project 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 7, 10, 11, 12, 17, 18, 24 and 26 August 2020, covering all transects in NEL, NWL, AW, WL and SWL survey areas for twice.

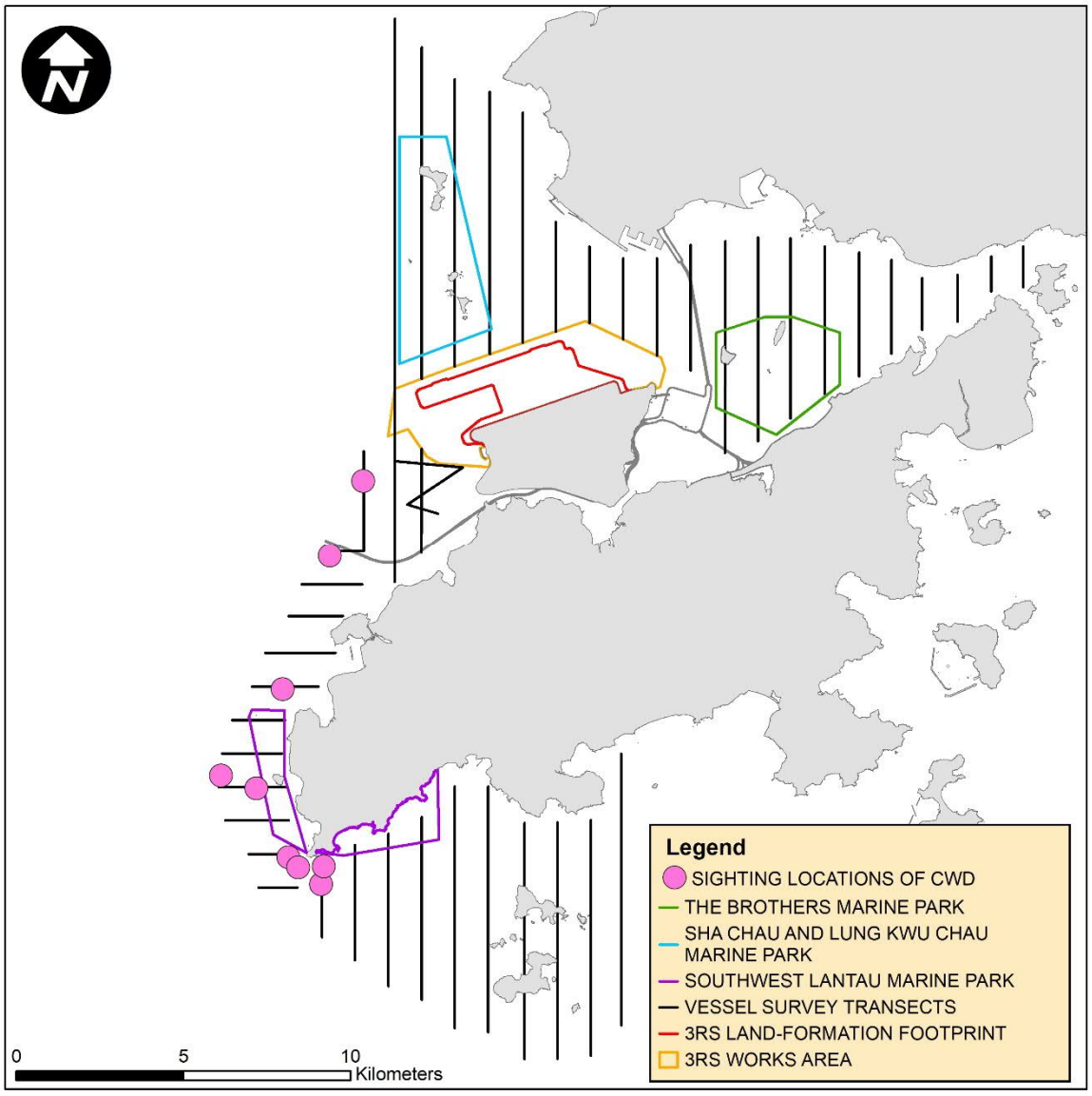
A total of around 448.54 km of survey effort was collected from these surveys and around 93.9% of the survey effort was being conducted under favourable weather condition (i.e. Beaufort Sea State 3 or below with favourable visibility). Details of the survey effort are given in **Appendix C**.

Sighting Distribution

In August 2020, 9 sightings with 33 dolphins were sighted. Amongst these sightings, 8 sightings with 32 dolphins are on-effort records under favourable weather condition (i.e. Beaufort Sea State 3 or below with favourable visibility). Details of cetacean sightings are presented in **Appendix C**.

Distribution of all CWD sightings recorded in August 2020 is illustrated in **Figure 6.3**. In WL, the CWD sightings scattered in the entire survey area with relatively more sightings recorded between Peaked Hill and Fan Lau. In SWL, CWD sightings were recorded at Fan Lau. No sightings of CWD were recorded in NEL and NWL survey areas including AW transects.

Figure 6.3: Sightings Distribution of Chinese White Dolphins



Remarks: (1) Please note that there are 9 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. (2) Marine park excludes land area and the landward boundary generally follows the high water mark along the coastline.

Encounter Rate

Two types of dolphin encounter rates were calculated based on the data from August 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 August 2020, a total of around 421.33 km of survey effort were conducted under Beaufort Sea State 3 or below with favourable visibility, whilst a total number of 8 on-effort sightings with 32 dolphins were sighted under such condition. Calculation of the encounter rates in August 2020 are shown in **Appendix C**.

For the running quarter of the reporting period (i.e., from June 2020 to August 2020), a total of around 1225.93 km of survey effort were conducted under Beaufort Sea State 3 or below with favourable visibility, whilst a total number of 59 on-effort sightings and a total number of 233 dolphins from on-effort sightings were obtained under such condition. Calculation of the running quarterly encounter rates are shown in **Appendix C**.

The STG and ANI of CWD in the whole survey area (i.e. NEL, NWL, AW, WL and SWL) during the month of August 2020 and during the running quarter are presented in **Table 6.4** below and compared with the Action Level. The running quarterly encounter rates STG and ANI remain above the Action Level, thus the 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)
August 2020	1.90	7.59
Running Quarter from June 2020 to August 2020[(1)]	4.81	19.01
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 June 2020 to August 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 August 2020, 9 groups of 33 dolphins in total were sighted, and the average group size of CWDs was 3.7 dolphins per group. Sightings with small group size (i.e. 1-2 dolphins) are dominant. There was one CWD sighting with large group size (i.e. 10 or more dolphins) recorded in WL.

Activities and Association with Fishing Boats

Three sightings of CWDs were recorded engaging in feeding activities in August 2020 and none of them was observed in association with operating fishing boats.

Mother-calf Pair

In August 2020, one CWD sighting was recorded with the presence of mother-and-unspotted juvenile pair.

6.4.2 Photo Identification

In August 2020, a total number of 19 different CWD individuals were identified for totally 21 times. A summary of photo identification works is presented in **Table 6.5**. Representative photos of these individuals are given in **Appendix C**.

Table 6.5: Summary of Photo Identification

Individual ID	Date of Sighting (dd-mmm-yy)	Sighting Group No.	Area	Individual ID	Date of Sighting (dd-mmm-yy)	Sighting Group No.	Area
NLMM039	07-Aug-20	2	WL	WLMM095	17-Aug-20	1	WL
NLMM060	17-Aug-20	1	WL	WLMM103	17-Aug-20	1	WL
SLMM010	07-Aug-20	4	WL	WLMM109	07-Aug-20	4	WL
SLMM014	07-Aug-20	4	WL	WLMM131	07-Aug-20	3	WL
SLMM049	07-Aug-20	4	WL		10-Aug-20	2	SWL
SLMM052	07-Aug-20	4	WL			3	SWL
WLMM007	07-Aug-20	4	WL	WLMM133	17-Aug-20	1	WL
WLMM008	07-Aug-20	4	WL	WLMM160	07-Aug-20	4	WL
WLMM062	17-Aug-20	1	WL	WLMM161	17-Aug-20	1	WL
WLMM068	17-Aug-20	1	WL	WLMM162	17-Aug-20	1	WL
WLMM073	07-Aug-20	4	WL				

6.4.3 Land-based Theodolite Tracking Survey

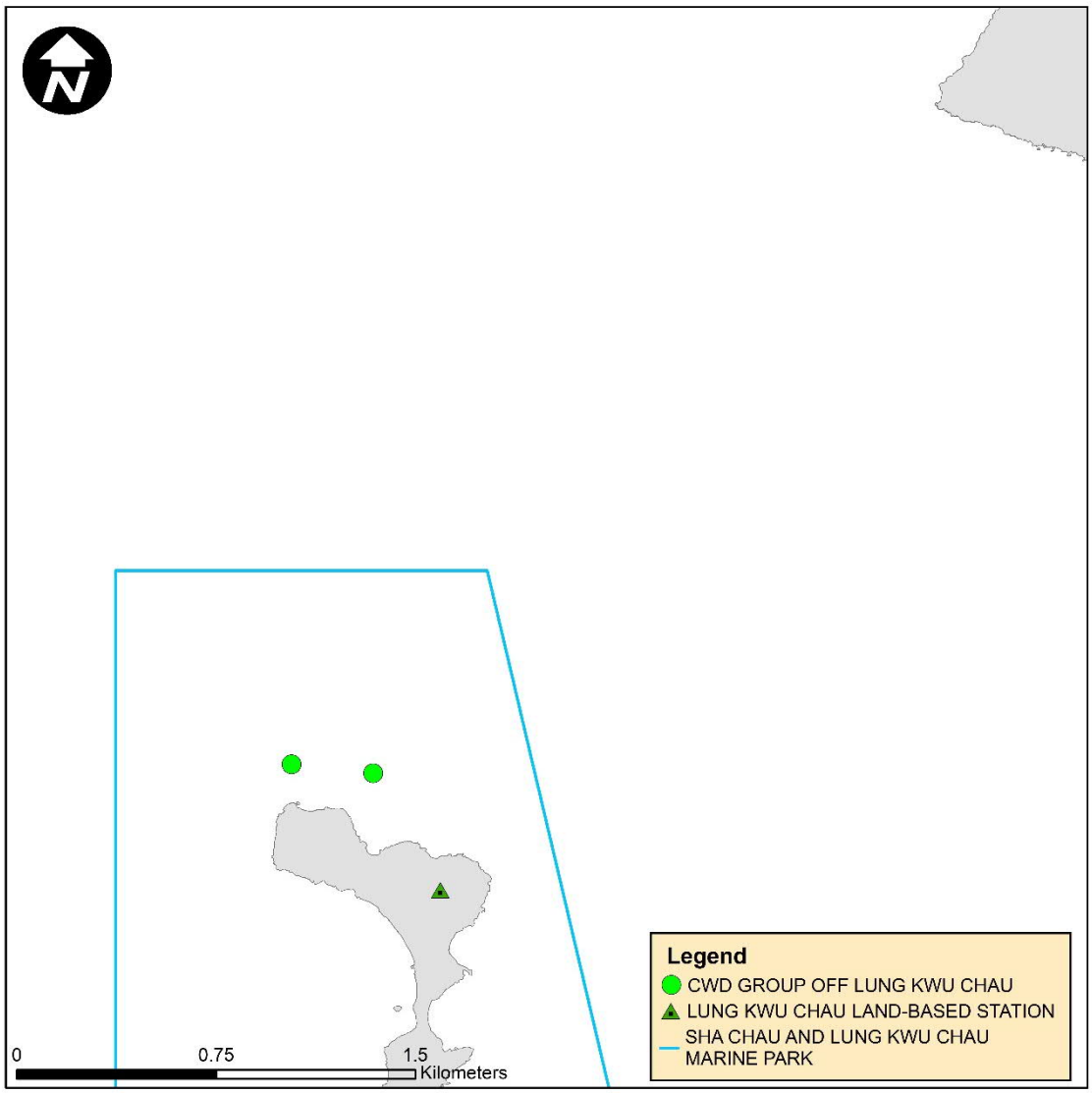
Survey Effort

Land-based theodolite tracking surveys were conducted at LKC on 17 August 2020 and at SC on 24 August 2020, with a total of two days of land-based theodolite tracking survey effort accomplished in this reporting period. Two CWD groups were tracked during the survey at LKC. Information of survey effort and CWD groups are presented in **Table 6.6**. Details of the survey effort are presented in **Appendix C**. The first sighting locations of CWD group tracked at LKC station during land-based theodolite tracking survey in August 2020 were depicted in **Figure 6.3**. No CWD group was sighted from SC station in this reporting month.

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

Land-based Station	No. of Survey Sessions	Survey Effort (hh:mm)	No. of CWD Groups Sighted	CWD Group Sighting per Survey Hour
Lung Kwu Chau	1	6:00	2	0.33
Sha Chau	1	6:00	0	0
TOTAL	**2**	**12:00**	**2**	**0.17**

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



Remark: Marine park excludes land area and the landward boundary generally follows the high water mark along the coastline.

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, 3 to 5 dolphin observation stations and teams of at least two dolphin observers were deployed by the contractors for continuous monitoring of the DEZ for DCM and seawall construction works 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 696 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 B**. 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.

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

7.2 Landscape and Visual Mitigation Measures

Implementation of applicable landscape and visual mitigation measures (reference to the environmental protection measures CM1 – CM10 in **Appendix A**) was monitored regularly in accordance with the Manual. No non-conformity was recorded during the reporting period.

During Environmental Management Meetings, all contractors confirmed that they had implemented environmental protection measures CM1 – CM7 as appropriate. For CM8, detailed Tree Protection Specification was included in the Contract Specification. The Contractors'

performance in the implementation of the trees protection measures were regularly checked by the ET. The cumulative total number of retained trees under the 3RS Project as of the reporting period was 156. Compared to the last reporting period, some retained trees were removed from the records because it was confirmed recently that those retained trees are not located within 3RS works area.

For CM9, Tree Transplanting Specifications was included in the Contract Specification. The Contractors were required to submit Method Statements for tree transplanting prior to the transplanting works. Tree inspections were conducted by ET to check the tree transplanting works implemented by the Contractors on site. The cumulative total number of transplanted trees under the Project was seven as one transplanted tree was lost due to the hit of Typhoon Higos on 18 August 2020. The Contractors' performance on the implementation of trees maintenance and protection measures for transplanted trees are regularly checked by the ET.

Land formation works are still in progress. CM10 will be implemented around taxiways and runways as soon as practicable.

7.3 Land Contamination Assessment

The Supplementary CAP was submitted to EPD pursuant to EP Condition 2.20. The CAR for Golf Course and T2 Emergency Power Supply System No.1 (Volumes 1 and 2) were submitted to EPD in accordance with EP Condition 1.9 and the Supplementary CAP in which no land contamination issues were identified. Sampling of soil/sand for the land contamination assessment work of the Emergency Power Supply System No. 3 was completed and the CAR for the said system together with the inspection findings for the Emergency Power Supply System Nos. 2 and 5 is being prepared for submission. The land contamination assessment work for the Emergency Power Supply System No. 4 was on-going in the reporting period.

7.4 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.

Due to the COVID-19 pandemic, all SkyPier HSF services have been suspended from 25 March 2020 until further notice. No ferry movements between HKIA SkyPier and Zhuhai and Macau was recorded in August 2020.

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 movement of all SkyPier HSFs in this reporting period is zero. Status of compliance with the annual daily average of 99 movements will be further reviewed in the Annual EM&A Report.

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

Requirements in the SkyPier Plan	1 to 31 August 2020
Total number of ferry movements recorded and audited	0
Use diverted route and enter / leave SCZ through Gate Access Points	0 deviation

Requirements in the SkyPier Plan	1 to 31 August 2020
Daily Cap (including all SkyPier HSFs)	0 daily movement (within the maximum daily cap - 125 daily movements)

7.5 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:

- Three 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.
- Four 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, 14 skippers were trained by ET and 5 skippers were trained by contractors' Environmental Officers. In total, 1610 skippers were trained from August 2016 to August 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.

7.6 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.

7.7 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	

7.8 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 D**.

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

7.9.1 Complaints

A complaint was received on 28 August 2020 regarding dust issue at Chek Lap Kok South Road and is being investigated by ET in accordance with the Manual and the Complaint Management Plan of the Project. The findings of investigation for the complaint will be reported in the next Monthly EM&A Report.

7.9.2 Notifications of Summons or Status of Prosecution

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

7.9.3 Cumulative Statistics

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

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:

Reclamation Works:

Contract 3205 DCM works

- DCM works.

Contract 3206 Main Reclamation Works

- Land-based 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; and
- Subgrade compaction and paving works.

Contract 3302 Eastern Vehicular Tunnel Advance Works

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

Contract 3303 Third Runway and Associated Works

- Footing and utilities work;
- Preparation works for box culvert construction;
- Bored pilling work; and
- Cable laying and ducting works.

Contract 3307 Fire Training Facility

- Site establishment.

Third Runway Concourse:

Contract 3403 New Integrated Airport Centres Building and Civil Works

- Piling works; and
- Installation of cable and lightning pit.

Contract 3405 Third Runway Concourse Foundation and Substructure Works

- Plant mobilisation;
- Bored pilling work; and
- Laying of pipes.

Terminal 2 Expansion:

Contract 3503 Terminal 2 Foundation and Substructure Works

- T2 re-configuration;
- Excavation works;
- Utilities, drainage, and road work; and
- Piling and structure works.

Automated People Mover (APM) and Baggage Handling System (BHS):

Contract 3601 New Automated People Mover System (TRC Line)

- Hole drilling; and
- Plinth construction work.

Contract 3602 Existing APM System Modification Works

- Modification works at APM depot.

Construction Support (Facilities):

Contract 3721 Construction Support Infrastructure Works

- Excavation and backfilling; and
- Laying of drainage pipes and dusts.

Contract 3722 Construction Support Facilities

- Formboard erecting and concreting;
- Foundation works;
- Erection of superstructure; and
- Site Establishment.

Airport Support Infrastructure:

Contract 3801 APM and BHS Tunnels on Existing Airport Island

- Construction of box culvert and ventilation building;
- Cofferdam and king post installation for shaft;
- Backfilling work; and
- Site clearance.

Contract 3802 APM and BHS Tunnels and Related Works

- Site establishment;
- Set up storage area and temporary haul road; and
- Ground investigation.

Construction Support (Services / Licenses):

Contract 3901A/ B Concrete Batching Facility

- Erection of superstructure;
- Concreting; and
- Foundation work.

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;
- Reuse of treated marine sediments from piling and excavation works;
- Management of chemicals and avoidance of oil spillage on-site; and
- Acoustic decoupling measures for equipment on marine vessels.

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

8.3 Monitoring Schedule for the Coming Reporting Period

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

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-based works. Works in the reclamation areas included DCM works, marine filling, seawall and facilities construction, together with runway and associated works. Land-based 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 DO, 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 or Limit Level is triggered. For DO, some testing results triggered the relevant Action or Limit Levels, and the corresponding investigations were conducted accordingly. The investigation findings indicated 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.

Due to the COVID-19 pandemic, all SkyPier HSF services have been suspended from 25 March 2020 until further notice. No HSF movements under the SkyPier Plan were recorded during the reporting period. Therefore, the daily movement of HSF was within the maximum daily cap of 125 daily movements in the reporting period.

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

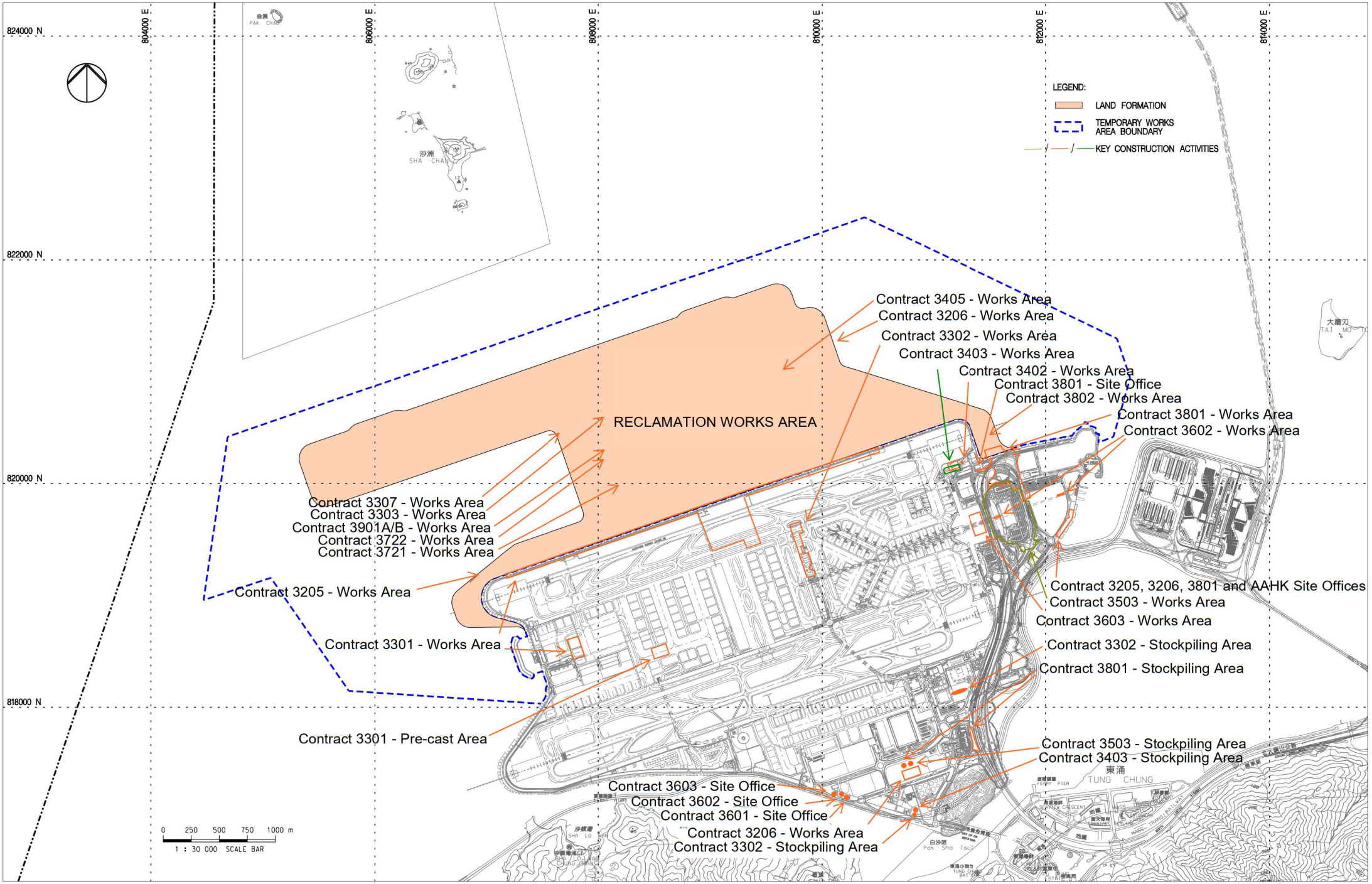
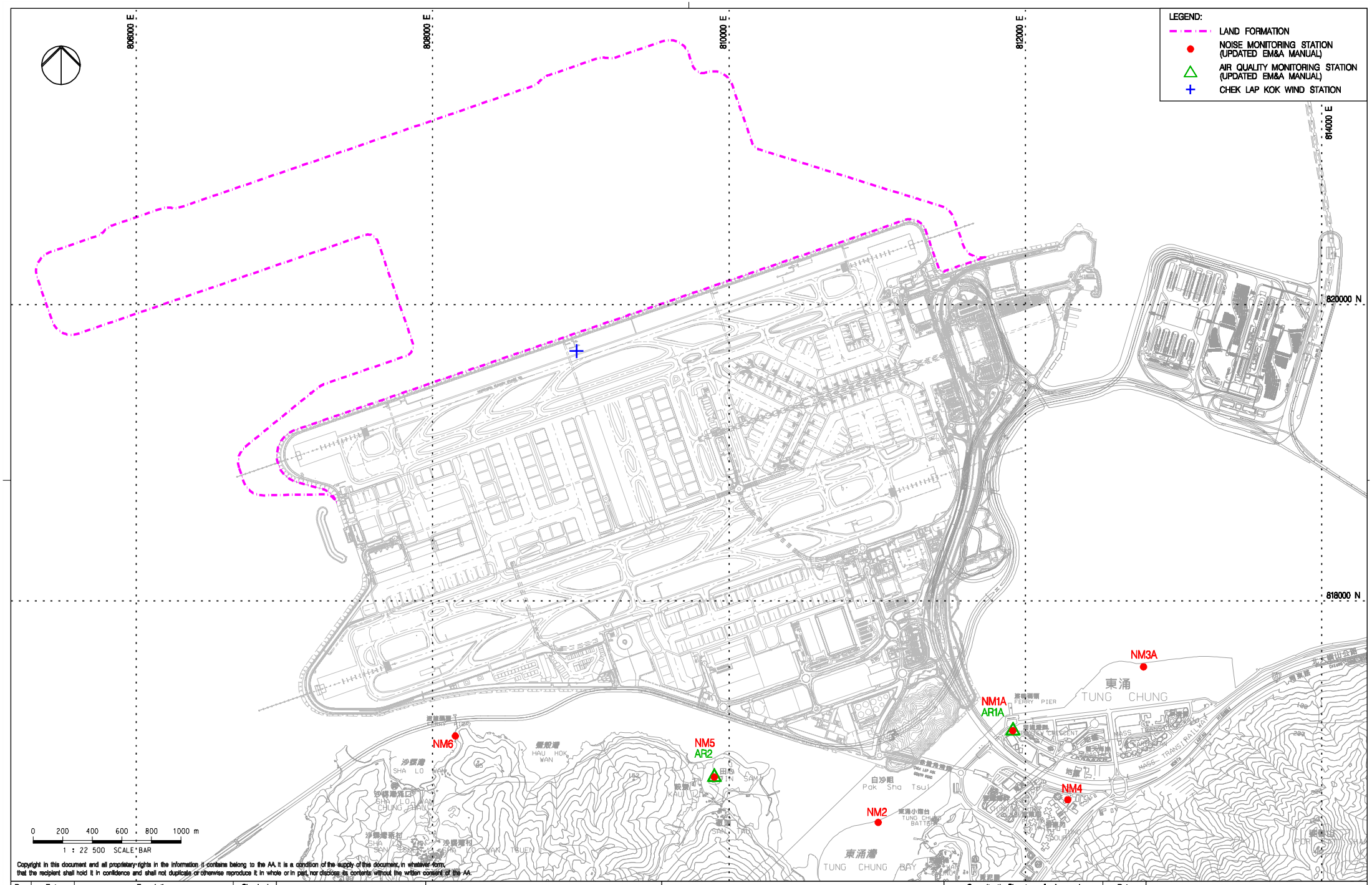


FIGURE 1.1 LOCATIONS OF KEY CONSTRUCTION ACTIVITIES

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



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

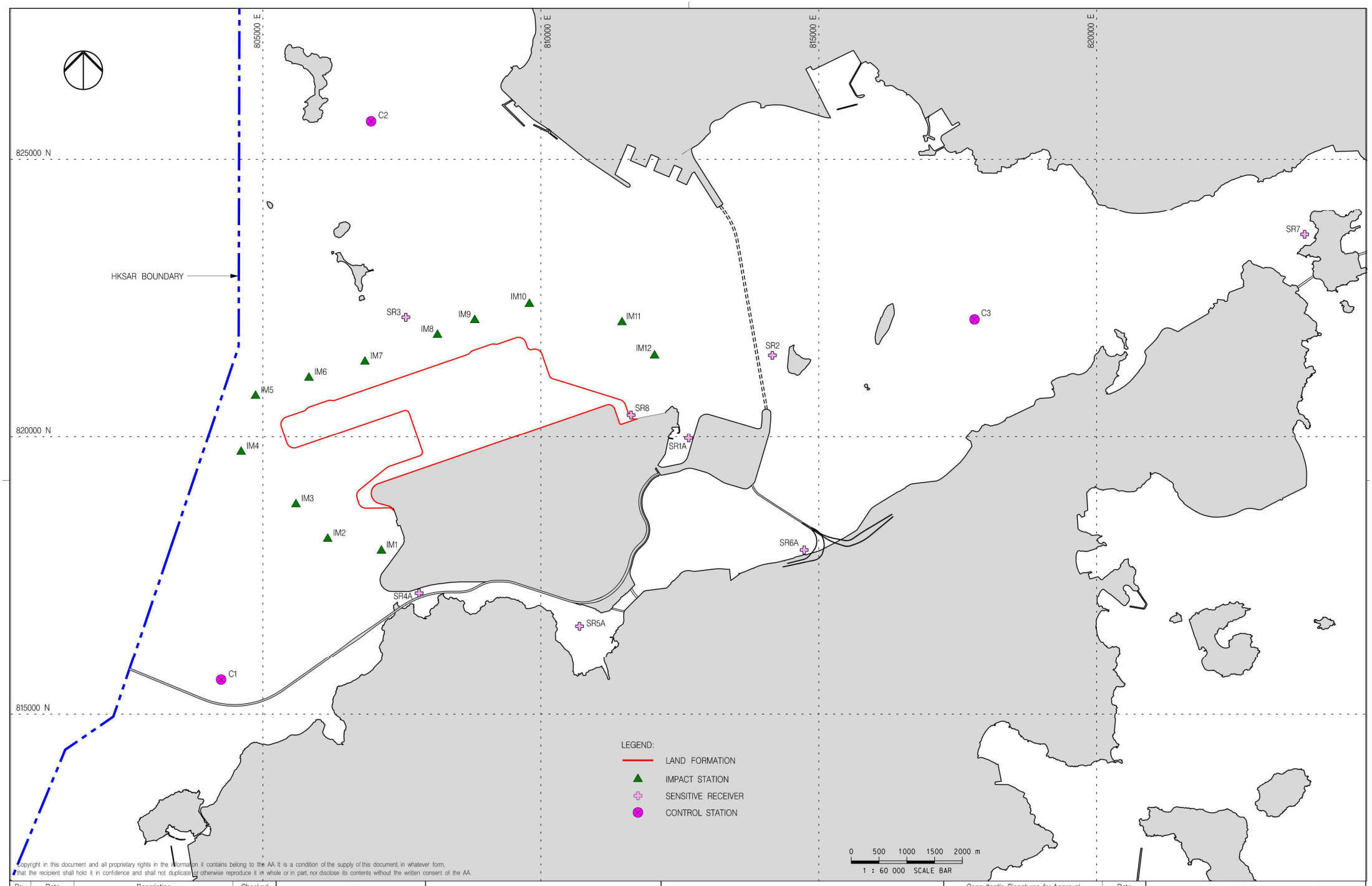
Drawing No.

FIGURE 2.1

Scale at A3 1 : 22500

Rev. D

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



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香港國際機場 HONG KONG INTERNATIONAL AIRPORT

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Title

WATER QUALITY MONITORING STATIONS

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

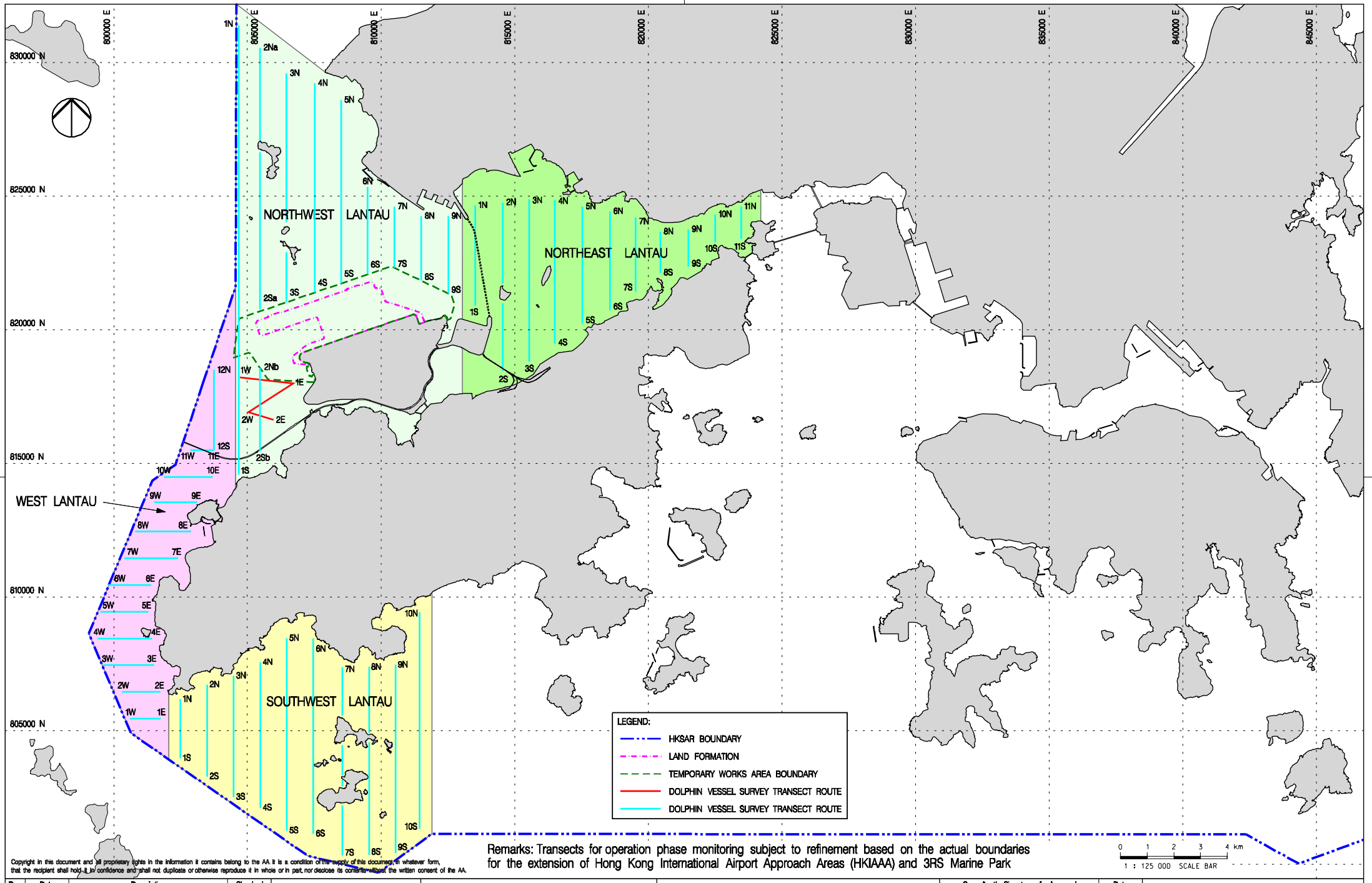
Drawing No.

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
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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
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Checkers	JC / TK	04APR19
Approver	EC	04APR19

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

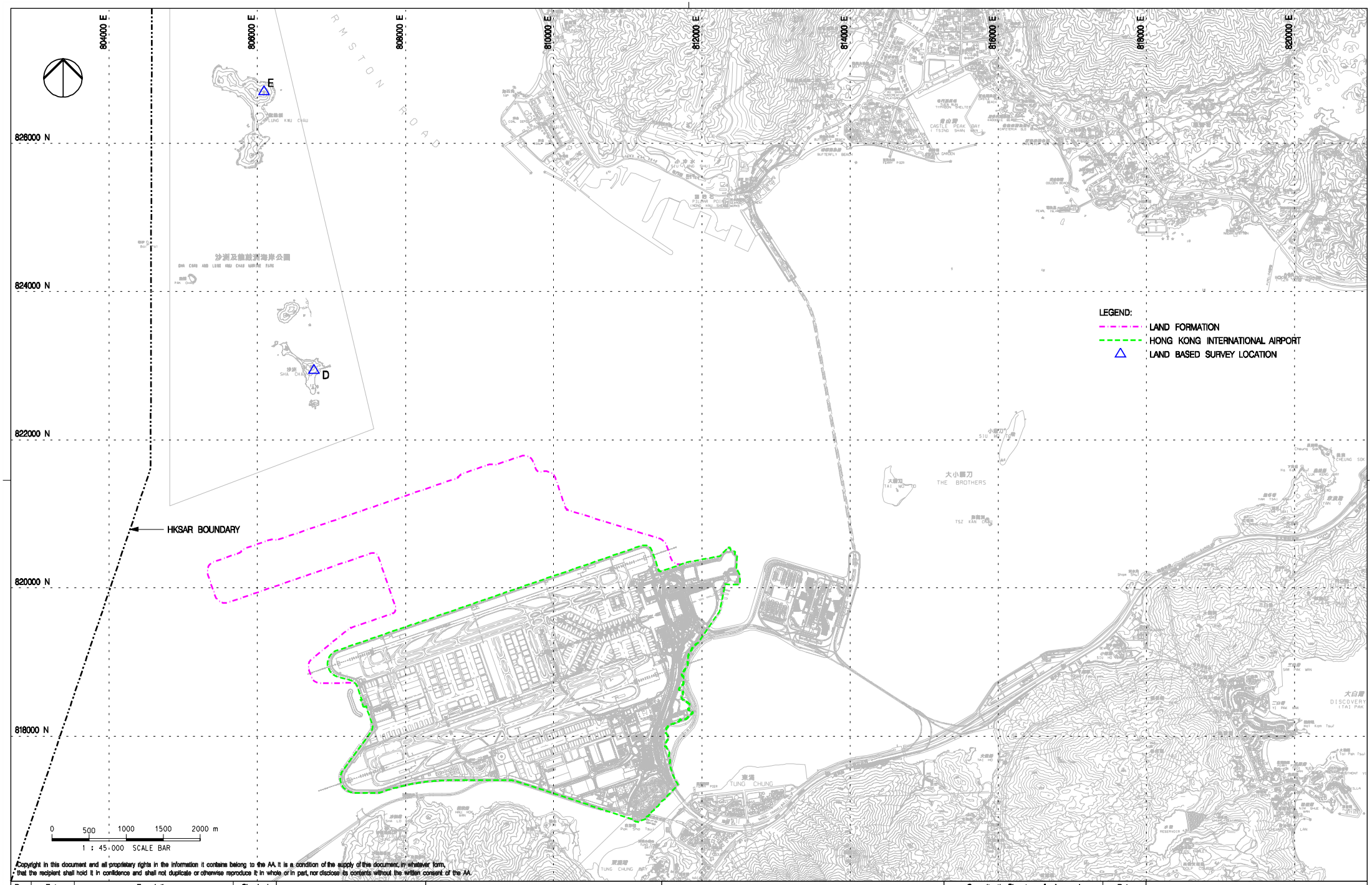
Drawing No.

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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C	29OCT18	GENERAL REVISION	SH

香港國際機場 HONG KONG INTERNATIONAL AIRPORT

MOTT MACDONALD

Title

LAND BASED DOLPHIN MONITORING IN BASELINE AND CONSTRUCTION PHASES

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

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

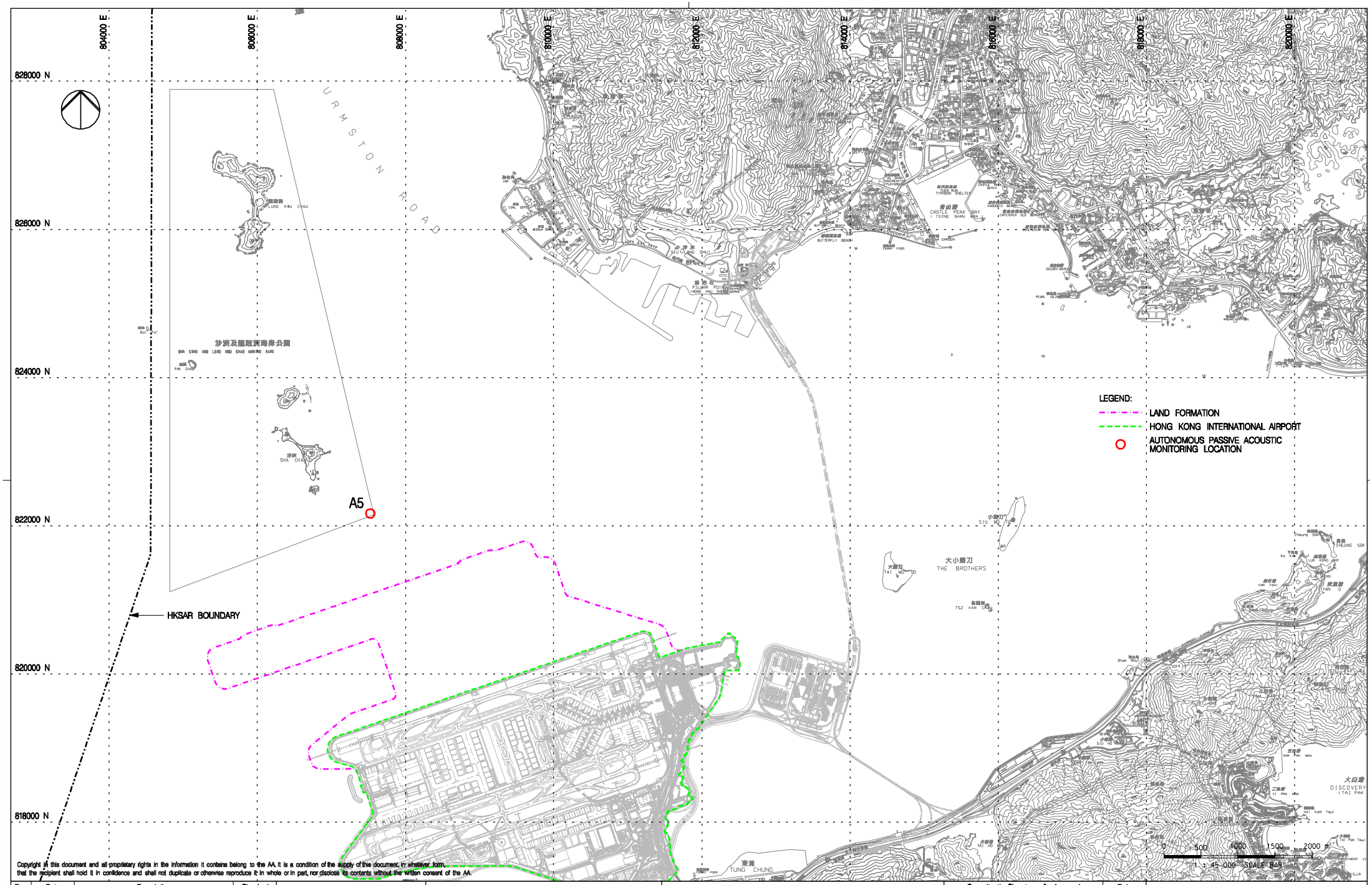
Drawing No.

FIGURE 6.2

Scale at A3 1 : 45000

Rev. C

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



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C	29OCT18	GENERAL REVISION	SH

香港國際機場 | HONG KONG INTERNATIONAL AIRPORT

MOTT MACDONALD

Title

LOCATION FOR AUTONOMOUS PASSIVE ACOUSTIC MONITORING

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Approver	EC	29OCT18

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

Drawing No.

FIGURE 6.5

Scale at A3 1 : 45000

Rev. C

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

Appendix A. 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 B. Monitoring Schedule

Monitoring Schedule of This Reporting Period

Aug-20

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1 WQ General & Regular DCM[(1)] mid-ebb: 11:26 mid-flood: 18:54
2	**3** Site Inspection NM4, NM6	**4** Site Inspection AR1A, AR2 NM1A, NM5 WQ General & Regular DCM mid-ebb: 13:36 mid-flood: 6:36	**5** Site Inspection	**6** Site Inspection WQ General & Regular DCM mid-ebb: 14:49 mid-flood: 7:59	**7** Site Inspection CWD Survey (Vessel)	**8** AR1A, AR2 WQ General & Regular DCM mid-ebb: 15:51 mid-flood: 9:20
9	**10** Site Inspection CWD Survey (Vessel)	**11** Site Inspection CWD Survey (Vessel) WQ General & Regular DCM mid-ebb: 17:37 mid-flood: 11:56	**12** Site Inspection CWD Survey (Vessel)	**13** Site Inspection WQ General & Regular DCM mid-ebb: 8:18 mid-flood: 15:26	**14** Site Inspection AR1A, AR2 NM1A, NM4, NM5, NM6	**15** WQ General & Regular DCM mid-ebb: 10:16 mid-flood: 17:46
16	**17** Site Inspection CWD Survey (Vessel, Land-based)	**18** Site Inspection CWD Survey (Vessel) WQ General & Regular DCM mid-ebb: 12:34 mid-flood: 5:29	**19** Site Inspection	**20** Site Inspection AR1A, AR2 NM1A, NM4, NM5, NM6 WQ General & Regular DCM mid-ebb: 14:00 mid-flood: 7:09	**21** Site Inspection	**22** WQ General & Regular DCM mid-ebb: 15:24 mid-flood: 8:48
23	**24** Site Inspection CWD Survey (Vessel, Land-based)	**25** Site Inspection WQ General & Regular DCM mid-ebb: 17:55 mid-flood: 12:03	**26** Site Inspection CWD Survey (Vessel) AR1A, AR2 NM1A, NM5	**27** Site Inspection NM4, NM6 WQ General & Regular DCM mid-ebb: 7:54 mid-flood: 15:44	**28** Site Inspection	**29** WQ General & Regular DCM mid-ebb: 10:22 mid-flood: 18:05
30	**31** Site Inspection	**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 [(1)] Water quality monitoring session on 1 August 2020 was cancelled due to Strong Wind Signal No.3 in force.				

Tentative Monitoring Schedule of Next Reporting Period

Sep-20

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1 Site Inspection AR1A, AR2 NM1A, NM5 WQ General & Regular DCM mid-ebb: 12:39 mid-flood: 05:50	**2** Site Inspection NM4, NM6	**3** Site Inspection CWD Survey (Land-based) WQ General & Regular DCM mid-ebb: 13:50 mid-flood: 07:12	**4** Site Inspection CWD Survey (Vessel)	**5** WQ General & Regular DCM mid-ebb: 14:47 mid-flood: 08:28
6	**7** Site Inspection CWD Survey (Vessel, Land-based) AR1A, AR2 NM1A, NM5	**8** Site Inspection CWD Survey (Vessel) NM4, NM6 WQ General & Regular DCM mid-ebb: 16:17 mid-flood: 10:35	**9** Site Inspection CWD Survey (Vessel)	**10** Site Inspection WQ General & Regular DCM mid-ebb: 05:51 mid-flood: 12:59	**11** Site Inspection	**12** AR1A, AR2 WQ General & Regular DCM mid-ebb: 08:26 mid-flood: 21:07
13	**14** Site Inspection CWD Survey (Vessel)	**15** Site Inspection CWD Survey (Vessel) WQ General & Regular DCM mid-ebb: 11:25 mid-flood: 04:28	**16** Site Inspection	**17** Site Inspection CWD Survey (Vessel) NM4, NM6 WQ General & Regular DCM mid-ebb: 12:55 mid-flood: 06:15	**18** Site Inspection AR1A, AR2 NM1A, NM5	**19** WQ General & Regular DCM mid-ebb: 14:19 mid-flood: 07:56
20	**21** Site Inspection CWD Survey (Vessel)	**22** Site Inspection WQ General & Regular DCM mid-ebb: 16:39 mid-flood: 10:54	**23** Site Inspection NM4, NM6	**24** Site Inspection AR1A, AR2 NM1A, NM5 WQ General & Regular DCM mid-ebb: 05:58 mid-flood: 18:30	**25** Site Inspection	**26** WQ General & Regular DCM mid-ebb: 08:51 mid-flood: 17:03
27	**28** Site Inspection	**29** Site Inspection NM4, NM6 WQ General & Regular DCM mid-ebb: 11:38 mid-flood: 18:38	**30** Site Inspection AR1A, AR2 NM1A, NM5			

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 C. Monitoring Results

Air Quality Monitoring Results

1-hour TSP Results

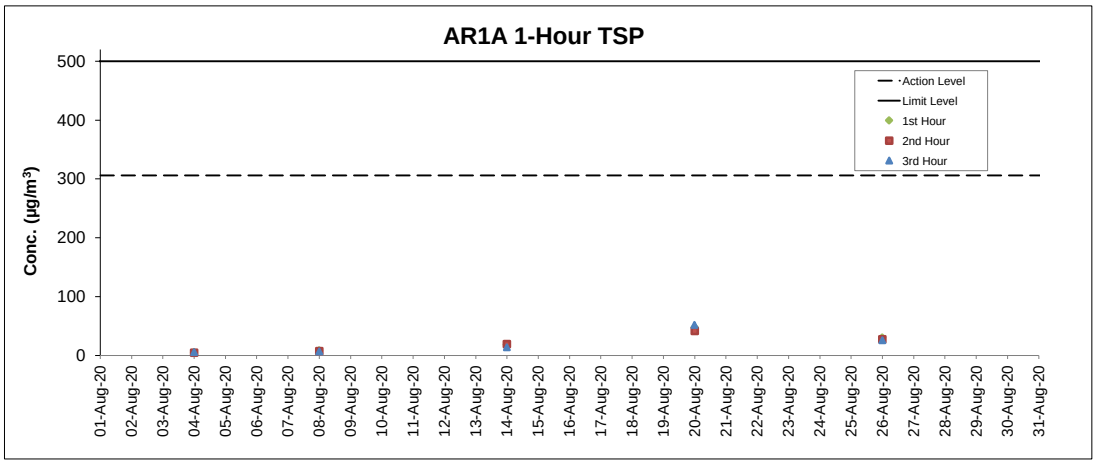
Station: AR1A- Man Tung Road Park

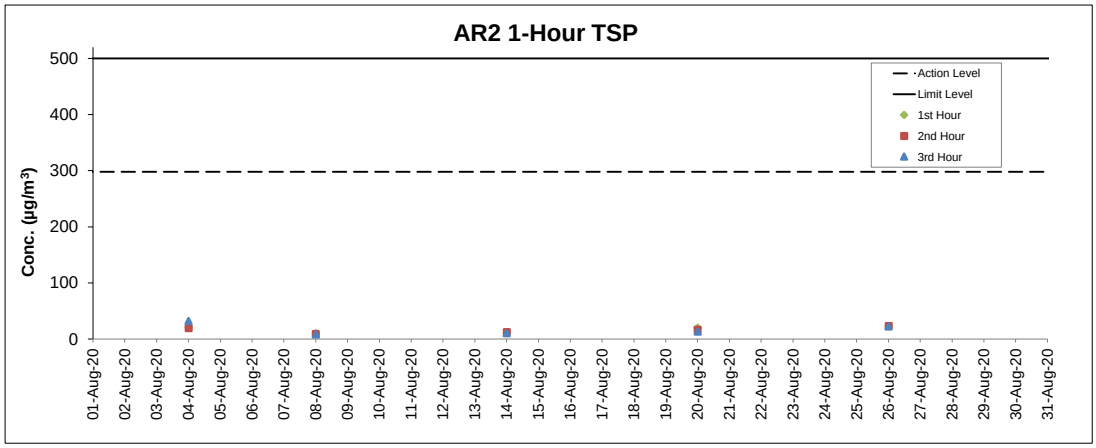
Date	Time	Weather	Wind Speed (m/s)	Wind Direction (deg)	1-hr TSP (μg/m^3)	Action Level (μg/m^3)	Limit Level (μg/m^3)
04-Aug-20	12:49	Cloudy	3.3	252	6	306	500
04-Aug-20	13:49	Cloudy	5.8	146	5	306	500
04-Aug-20	14:49	Cloudy	3.9	123	6	306	500
08-Aug-20	13:18	Sunny	3.6	259	9	306	500
08-Aug-20	14:18	Sunny	2.5	275	8	306	500
08-Aug-20	15:18	Sunny	3.1	330	7	306	500
14-Aug-20	13:25	Sunny	6.1	153	19	306	500
14-Aug-20	14:25	Sunny	4.7	145	20	306	500
14-Aug-20	15:25	Sunny	5.0	144	14	306	500
20-Aug-20	13:45	Sunny	7.2	103	48	306	500
20-Aug-20	14:45	Sunny	7.5	107	42	306	500
20-Aug-20	15:45	Sunny	6.7	105	52	306	500
26-Aug-20	13:45	Sunny	6.7	220	31	306	500
26-Aug-20	14:45	Sunny	6.9	212	28	306	500
26-Aug-20	15:45	Sunny	8.9	197	26	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)
04-Aug-20	12:57	Cloudy	2.8	256	21	298	500
04-Aug-20	13:57	Cloudy	6.1	145	19	298	500
04-Aug-20	14:57	Cloudy	4.2	128	32	298	500
08-Aug-20	9:24	Sunny	3.3	31	10	298	500
08-Aug-20	10:24	Sunny	2.8	variable	9	298	500
08-Aug-20	11:24	Sunny	3.1	286	8	298	500
14-Aug-20	9:29	Sunny	2.8	65	10	298	500
14-Aug-20	10:29	Sunny	4.4	136	12	298	500
14-Aug-20	11:29	Sunny	4.2	156	10	298	500
20-Aug-20	9:42	Sunny	5.0	65	20	298	500
20-Aug-20	10:42	Sunny	5.0	104	16	298	500
20-Aug-20	11:42	Sunny	6.1	109	13	298	500
26-Aug-20	9:38	Sunny	3.3	247	23	298	500
26-Aug-20	10:38	Sunny	4.2	242	23	298	500
26-Aug-20	11:38	Sunny	4.2	236	22	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)
04-Aug-20	Cloudy	14:03	70.3	53.0	72
04-Aug-20	Cloudy	14:08	69.6	51.7	
04-Aug-20	Cloudy	14:13	74.9	53.1	
04-Aug-20	Cloudy	14:18	71.6	51.8	
04-Aug-20	Cloudy	14:23	73.6	52.1	
04-Aug-20	Cloudy	14:28	71.1	52.1	
14-Aug-20	Sunny	14:35	73.2	53.3	72
14-Aug-20	Sunny	14:40	72.8	51.8	
14-Aug-20	Sunny	14:45	71.4	52.0	
14-Aug-20	Sunny	14:50	69.8	52.2	
14-Aug-20	Sunny	14:55	73.4	52.0	
14-Aug-20	Sunny	15:00	73.0	51.8	
20-Aug-20	Sunny	15:51	71.1	50.7	71
20-Aug-20	Sunny	15:56	71.4	50.1	
20-Aug-20	Sunny	16:01	67.5	49.7	
20-Aug-20	Sunny	16:06	71.1	50.7	
20-Aug-20	Sunny	16:11	73.8	50.9	
20-Aug-20	Sunny	16:16	70.5	51.5	
26-Aug-20	Sunny	13:57	74.0	55.7	71
26-Aug-20	Sunny	14:02	73.7	53.7	
26-Aug-20	Sunny	14:07	74.4	55.5	
26-Aug-20	Sunny	14:12	74.6	64.6	
26-Aug-20	Sunny	14:17	74.5	64.8	
26-Aug-20	Sunny	14:22	76.5	65.2	

Remarks:

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

Noise Measurement Results

Station: NM4- Ching Chung Hau Po Woon Primary School

Date	Weather	Time	Measured L_{10} dB(A)	Measured L_{90} dB(A)	$L_{eq(30mins)}$ dB(A)
03-Aug-20	Cloudy	13:02	62.9	58.8	64
03-Aug-20	Cloudy	13:07	63.9	59.0	
03-Aug-20	Cloudy	13:12	63.9	59.8	
03-Aug-20	Cloudy	13:17	62.6	58.3	
03-Aug-20	Cloudy	13:22	62.4	58.6	
03-Aug-20	Cloudy	13:27	59.9	56.5	
14-Aug-20	Sunny	14:10	62.7	59.2	64
14-Aug-20	Sunny	14:15	62.4	59.3	
14-Aug-20	Sunny	14:20	62.0	59.3	
14-Aug-20	Sunny	14:25	62.4	58.9	
14-Aug-20	Sunny	14:30	61.8	57.7	
14-Aug-20	Sunny	14:35	61.0	57.4	
20-Aug-20	Sunny	13:59	60.4	56.3	62
20-Aug-20	Sunny	14:04	59.7	55.6	
20-Aug-20	Sunny	14:09	61.4	56.5	
20-Aug-20	Sunny	14:14	59.3	55.8	
20-Aug-20	Sunny	14:19	62.2	57.0	
20-Aug-20	Sunny	14:24	61.2	56.7	
27-Aug-20	Cloudy	13:07	60.9	56.4	62
27-Aug-20	Cloudy	13:12	60.6	56.1	
27-Aug-20	Cloudy	13:17	62.0	57.0	
27-Aug-20	Cloudy	13:22	61.0	57.2	
27-Aug-20	Cloudy	13:27	61.0	56.8	
27-Aug-20	Cloudy	13:32	60.6	57.3	

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)
04-Aug-20	Cloudy	13:42	66.7	44.4	65
04-Aug-20	Cloudy	13:47	49.3	44.3	
04-Aug-20	Cloudy	13:52	51.5	45.0	
04-Aug-20	Cloudy	13:57	51.5	43.8	
04-Aug-20	Cloudy	14:02	51.5	44.5	
04-Aug-20	Cloudy	14:07	58.1	43.6	
14-Aug-20	Sunny	11:11	48.3	42.2	58
14-Aug-20	Sunny	11:16	62.0	41.8	
14-Aug-20	Sunny	11:21	49.9	42.4	
14-Aug-20	Sunny	11:26	59.8	43.0	
14-Aug-20	Sunny	11:31	52.6	43.6	
14-Aug-20	Sunny	11:36	49.9	42.3	
20-Aug-20	Sunny	9:42	51.5	48.0	54
20-Aug-20	Sunny	9:47	50.8	47.9	
20-Aug-20	Sunny	9:52	53.4	47.1	
20-Aug-20	Sunny	9:57	53.1	47.4	
20-Aug-20	Sunny	10:02	54.4	46.1	
20-Aug-20	Sunny	10:07	51.4	46.8	
26-Aug-20	Sunny	9:37	48.0	45.6	53
26-Aug-20	Sunny	9:42	55.9	46.8	
26-Aug-20	Sunny	9:47	59.4	51.6	
26-Aug-20	Sunny	9:52	52.4	47.9	
26-Aug-20	Sunny	9:57	53.4	49.4	
26-Aug-20	Sunny	10:02	54.5	45.3	

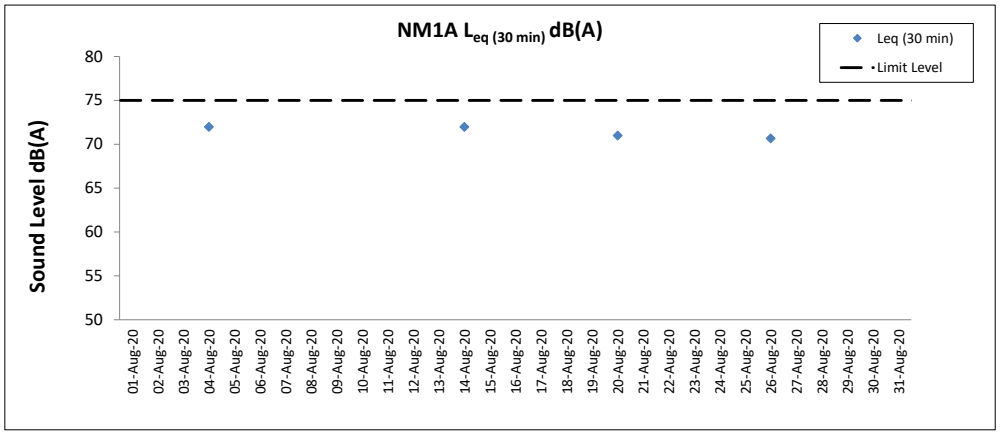
Remarks:
+3dB (A) correction was applied to free-field measurement.

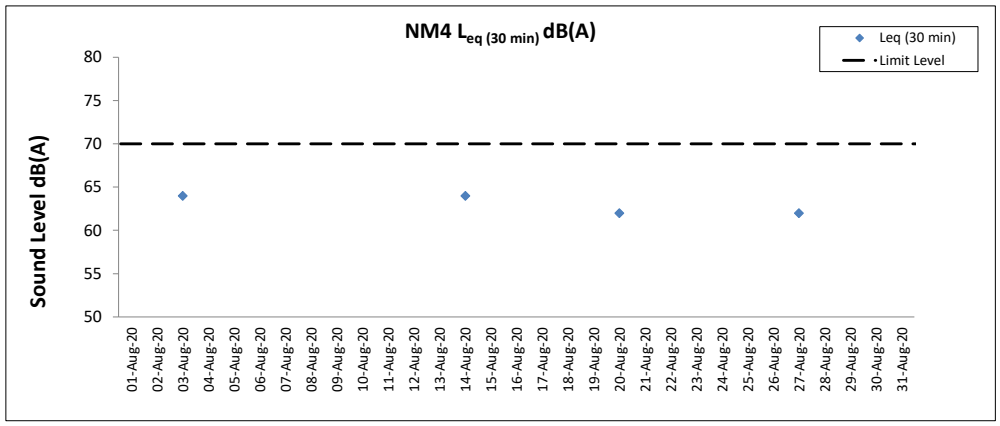
Noise Measurement Results

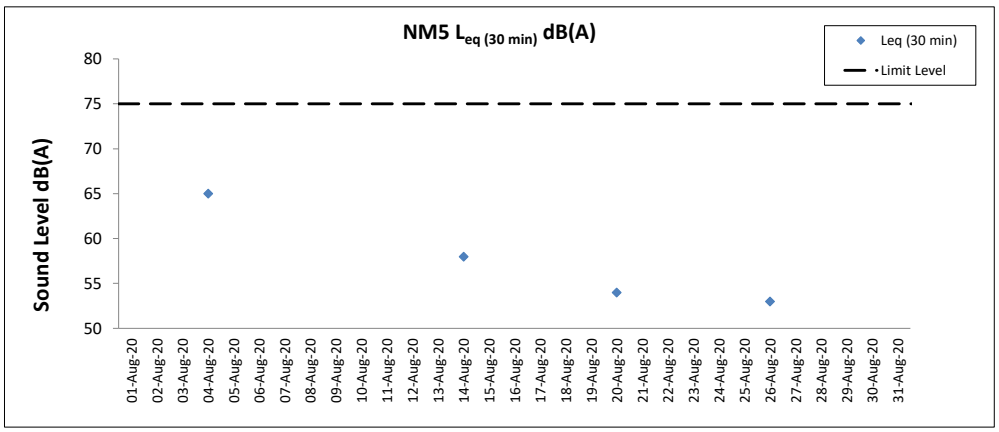
Station: NM6- House No.1 Sha Lo Wan

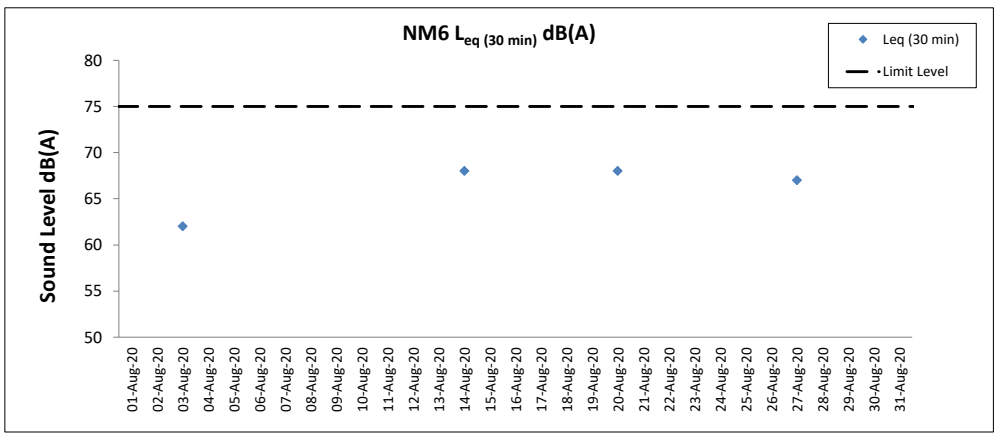
Date	Weather	Time	Measured L_{10} dB(A)	Measured L_{90} dB(A)	$L_{eq(30mins)}$ dB(A)
03-Aug-20	Cloudy	15:50	67.7	55.8	62
03-Aug-20	Cloudy	15:55	67.7	53.9	
03-Aug-20	Cloudy	16:00	63.8	54.1	
03-Aug-20	Cloudy	16:05	68.8	54.2	
03-Aug-20	Cloudy	16:10	72.2	60.1	
03-Aug-20	Cloudy	16:15	70.9	60.1	
14-Aug-20	Sunny	15:40	69.4	54.2	68
14-Aug-20	Sunny	15:45	66.2	51.7	
14-Aug-20	Sunny	15:50	68.4	50.5	
14-Aug-20	Sunny	15:55	66.1	49.5	
14-Aug-20	Sunny	16:00	68.7	54.2	
14-Aug-20	Sunny	16:05	71.6	58.5	
20-Aug-20	Sunny	15:41	67.0	50.8	68
20-Aug-20	Sunny	15:46	61.8	51.5	
20-Aug-20	Sunny	15:51	61.7	56.2	
20-Aug-20	Sunny	15:56	64.7	55.7	
20-Aug-20	Sunny	16:01	63.4	57.1	
20-Aug-20	Sunny	16:06	60.1	45.9	
27-Aug-20	Cloudy	15:48	69.1	55.3	67
27-Aug-20	Cloudy	15:53	71.8	54.5	
27-Aug-20	Cloudy	15:58	68.0	53.3	
27-Aug-20	Cloudy	16:03	65.4	49.2	
27-Aug-20	Cloudy	16:08	60.5	53.2	
27-Aug-20	Cloudy	16:13	60.6	48.4	

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 04 August 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	12:51	8.8	Surface	1.0	0.4	227	27.9	27.9	8.2	8.2	27.0	27.0	94.3	94.3	6.4	6.2	3.3	4.3	2	2	84	89	815597	804258	<0.2	<0.2	0.8	0.8
						1.0	0.5	232	27.9		8.2		27.0		94.2		6.4		3.3		2		85				<0.2		0.8	
					Middle	4.4	0.4	210	27.4	27.4	8.2	8.2	29.9	30.0	89.0	89.0	6.0		3.8		2		89				<0.2		0.8	
						4.4	0.4	214	27.4		8.2		30.0		88.9		6.0		3.7		3		90				<0.2		0.7	
					Bottom	7.8	0.4	204	27.3	27.3	8.2	8.2	30.8	30.8	83.8	84.0	5.6	5.6	6.0		3		93				<0.2		0.8	
						7.8	0.4	213	27.3		8.2		30.8		84.1		5.6		5.8		2		94				<0.2		0.7	
C2	Cloudy	Moderate	11:51	11.4	Surface	1.0	0.6	170	27.0	27.1	7.9	7.9	25.0	24.9	80.1	80.1	5.5	5.5	6.1	6.0	<2	4	86	88	825692	806951	<0.2	<0.2	1.0	1.1
						1.0	0.6	181	27.1		7.9		24.9		80.1		5.5		6.1		<2		87				<0.2		1.2	
					Middle	5.7	0.6	166	26.7	26.7	7.9	7.9	25.2	25.3	77.2	77.2	5.4		5.8		4		88				<0.2		1.1	
						5.7	0.6	180	26.7		7.9		25.3		77.1		5.4		5.7		5		88				<0.2		1.0	
					Bottom	10.4	0.4	145	26.1	26.1	7.9	7.9	26.8	26.8	73.2	73.4	5.1	5.1	6.5		4		90				<0.2		1.2	
						10.4	0.5	147	26.1		7.9		26.7		73.5		5.1		6.1		5		90				<0.2		1.1	
C3	Cloudy	Moderate	13:29	11.4	Surface	1.0	0.2	119	26.7	26.7	7.9	7.9	25.9	25.9	79.3	79.2	5.5	5.5	2.1	4.2	6	3	86	88	822093	817783	<0.2	<0.2	1.2	1.1
						1.0	0.2	120	26.7		7.9		25.9		79.0		5.5		2.1		6		86				<0.2		1.1	
					Middle	5.7	0.2	123	26.4	26.4	7.9	7.9	26.5	26.6	77.6	77.5	5.4		3.5		2		88				<0.2		1.0	
						5.7	0.2	131	26.4		7.9		26.6		77.4		5.4		3.6		2		89				<0.2		1.1	
					Bottom	10.4	0.3	77	26.1	26.2	7.9	7.9	27.5	27.4	72.9	73.1	5.1	5.1	7.3		<2		90				<0.2		1.1	
						10.4	0.4	78	26.2		7.9		27.3		73.3		5.1		6.6		<2		91				<0.2		1.0	
IM1	Sunny	Moderate	12:32	5.4	Surface	1.0	0.1	198	27.4	27.4	8.2	8.2	27.3	27.3	82.1	82.0	5.6	5.6	5.3	5.7	<2	3	87	91	817944	807129	<0.2	<0.2	0.8	0.8
						1.0	0.1	202	27.3		8.2		27.3		81.9		5.6		5.4		<2		87				<0.2		0.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	0.1	146	27.2	27.2	8.2	8.2	28.5	28.5	80.9	81.2	5.5	5.5	6.0		3		93				<0.2		0.8	
						4.4	0.1	148	27.2		8.2		28.5		81.4		5.5		6.1		3		95				<0.2		0.8	
IM2	Sunny	Moderate	12:25	7.6	Surface	1.0	0.2	180	27.3	27.3	8.2	8.2	27.0	27.0	86.3	86.4	5.9	5.8	4.7	4.7	3	2	88	93	818144	806159	<0.2	<0.2	0.7	0.8
						1.0	0.2	185	27.3		8.2		27.0		86.4		5.9		4.6		2		89				<0.2		0.7	
					Middle	3.8	0.2	157	27.3	27.3	8.2	8.2	28.8	28.9	85.2	85.1	5.7		4.0		2		93				<0.2		0.7	
						3.8	0.2	170	27.3		8.2		28.9		85.0		5.7		4.0		2		93				<0.2		0.8	
					Bottom	6.6	0.2	130	27.3	27.3	8.2	8.2	29.7	29.7	84.4	84.5	5.7	5.7	5.4		<2		96				<0.2		0.8	
						6.6	0.2	133	27.3		8.2		29.7		84.6		5.7		5.5		<2		96				<0.2		0.8	
IM3	Sunny	Moderate	12:20	7.9	Surface	1.0	0.2	141	27.6	27.6	8.2	8.2	27.4	27.4	87.1	87.1	5.9	5.8	4.3	6.2	4	3	88	92	818794	805582	<0.2	<0.2	0.8	0.8
						1.0	0.2	141	27.6		8.2		27.4		87.1		5.9		4.4		4		88				<0.2		0.8	
					Middle	4.0	0.3	147	27.3	27.3	8.2	8.2	28.3	28.3	82.2	82.3	5.6		7.1		3		91				<0.2		0.8	
						4.0	0.3	148	27.3		8.2		28.3		82.3		5.6		7.1		2		92				<0.2		0.8	
					Bottom	6.9	0.2	140	27.2	27.2	8.2	8.2	29.8	29.8	82.5	82.6	5.5	5.6	7.3		3		97				<0.2		0.8	
						6.9	0.3	150	27.2		8.2		29.8		82.6		5.6		7.4		2		96				<0.2		0.8	
IM4	Sunny	Moderate	12:12	8.7	Surface	1.0	0.7	192	27.3	27.3	8.2	8.2	27.3	27.3	83.9	83.9	5.7	5.7	5.1	6.0	3	3	87	92	819730	804587	<0.2	<0.2	0.7	0.8
						1.0	0.8	206	27.3		8.2		27.3		83.8		5.7		5.1		3		88				<0.2		0.8	
					Middle	4.4	0.5	177	27.2	27.2	8.3	8.3	29.1	29.1	82.3	82.3	5.6		6.0		3		91				<0.2		0.8	
						4.4	0.6	194	27.2		8.3		29.1		82.3		5.6		6.0		2		92				<0.2		0.9	
					Bottom	7.7	0.4	161	27.3	27.3	8.3	8.3	29.2	29.2	83.3	83.4	5.6	5.6	6.6		<2		96				<0.2		0.8	
						7.7	0.4	177	27.3		8.3		29.2		83.5		5.6		6.8		<2		96				<0.2		0.7	
IM5	Sunny	Moderate	12:05	8.3	Surface	1.0	0.6	213	27.4	27.4	8.2	8.2	26.2	26.2	88.0	88.0	6.0	5.8	4.0	5.2	2	2	89	92	820721	804849	<0.2	<0.2	0.8	0.8
						1.0	0.6	224	27.4		8.2		26.2		88.0		6.0		4.0		2		90				<0.2		0.7	
					Middle	4.2	0.5	176	27.2	27.2	8.2	8.2	28.8	28.8	82.0	82.0	5.5		5.2		2		93				<0.2		0.8	
						4.2	0.5	192	27.2		8.2		28.8		82.0		5.5		5.1		3		93				<0.2		0.9	
					Bottom	7.3	0.5	187	27.3	27.3	8.2	8.2	28.9	28.9	82.7	82.9	5.6	5.6	6.5		2		94				<0.2		0.8	
						7.3	0.5	203	27.3		8.2		28.9		83.0		5.6		6.6		2		94				<0.2		0.8	
IM6	Sunny	Moderate	11:59	8.0	Surface	1.0	0.4	252	27.3	27.3	8.2	8.2	26.2	26.2	87.1	86.9	6.0	5.8	4.3	6.4	3	3	87	91	821048	805846	<0.2	<0.2	0.8	0.8
						1.0	0.4	264	27.3		8.2		26.2		86.7		5.9		4.4		2		88				<0.2		0.7	
					Middle	4.0	0.3	197	27.2	27.2	8.3	8.3	28.0	28.0	83.8	83.9	5.7		7.0		3		91				<0.2		0.9	
						4.0	0.3	211	27.2		8.3		28.0		83.9		5.7		7.1		2		92				<0.2		0.7	
					Bottom	7.0	0.3	197	27.3	27.3	8.3	8.3	28.1	28.1	86.8	87.1	5.9	5.9	7.6		4		94				<0.2		0.7	
						7.0	0.4	201	27.3		8.3		28.1		87.3		5.9		7.8		4		94				<0.2		0.8	
IM7	Sunny	Moderate	11:51	9.4	Surface	1.0	0.1	239	27.4	27.4	8.3	8.3	25.7	25.7	88.7	88.7	6.1	5.9	3.9	5.7	2	2	86	90	821361	806824	<0.2	<0.2	1.0	0.8
						1.0	0.1	253	27.3		8.3		25.7		88.6		6.1		4.2		2		87				<0.2		0.9	
					Middle	4.7	0.1	172	27.2	27.2	8.4	8.4	27.3	27.3	83.4	83.4	5.7		6.0		2		90				<0.2		0.8	
						4.7	0.1	184	27.2		8.4		27.3		83.3		5.7		5.9		2		91				<0.2		0.7	
					Bottom	8.4	0.1	174	27.2	27.2	8.4	8.4	27.5	27.5	81.5	81.7	5.6	5.6	6.9		3		93				<0.2		0.7	
						8.4	0.1	189	27.2		8.4		27.5		81.8		5.6		6.9		3		94				<0.2		0.8	
IM8	Cloudy	Moderate	12:13	8.0	Surface	1.0	0.2	126	27.1	27.1	7.9	7.9	24.3	24.3	81.7	81.5	5.7	5.6	2.8	4.6	2	3	86	88	821839	808159	<0.2	<0.2	1.0	1.1
						1.0	0.2	136	27.0		7.9		24.4		81.3		5.7		2.9		3		87				<0.2		1.1	
					Middle	4.0	0.2	150	26.8	26.8	7.9	7.9	25.1	25.2	78.5	78.5	5.5		4.2		4		88				<0.2		1.2	
						4.0	0.2	154	26.8		7.9		25.3		78.4		5.4		4.5		3		87				<0.2		1.0	
					Bottom	7.0	0.2	90	26.8	26.8	8.0	8.0	26.3	26.3	78.6	78.6	5.4	5.4	6.6		3		90				<0.2		1.1	
						7.0	0.2	94	26.8		8.0		26.3		78.6		5.4		6.7		4		90				<0.2		1.0	

DA: Depth-Averaged

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

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

Note: The monitoring session on 1 August 2020 was cancelled due to Strong Wind Signal No. 3.

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

Water Quality Monitoring

Water Quality Monitoring Results on 04 August 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	12:19	7.6	Surface	1.0	0.3	135	27.5	27.5	7.9	7.9	23.7	23.8	87.4	87.4	6.1	5.9	1.8	4.1	3	5	87	88	822102	808790	<0.2	<0.2	1.0	1.1
						1.0	0.3	144	27.4		7.9		23.8		87.3		6.1		1.9		4		86				<0.2		1.1	
					Middle	3.8	0.4	120	26.9	26.9	8.0	8.0	24.6	24.7	80.9	80.7	5.6		2.7		4		88				<0.2		1.1	
						3.8	0.4	124	26.9		8.0		24.7		80.5		5.6		2.9		6		89				<0.2		1.1	
					Bottom	6.6	0.3	86	26.8	26.8	8.0	8.0	26.0	26.0	80.3	80.4	5.6	5.6	7.8		6		90				<0.2		1.2	
						6.6	0.3	94	26.8		8.0		26.0		80.5		5.6		7.6		5		90				<0.2		1.0	
IM10	Cloudy	Moderate	12:26	7.4	Surface	1.0	0.7	131	27.6	27.6	7.9	7.9	24.0	24.1	89.4	89.4	6.2	6.0	1.6	6.3	3	3	86	88	822388	809782	<0.2	<0.2	1.0	1.1
						1.0	0.8	133	27.6		7.9		24.1		89.4		6.2		1.7		3		86				<0.2		1.2	
					Middle	3.7	0.6	120	26.9	26.9	8.0	8.0	25.2	25.1	82.1	82.0	5.7		4.2		3		88				<0.2		1.0	
						3.7	0.6	130	26.9		8.0		25.1		81.8		5.7		3.9		4		88				<0.2		1.1	
					Bottom	6.4	0.5	123	26.4	26.4	7.9	7.9	26.2	26.2	76.3	76.6	5.3	5.3	13.2		3		90				<0.2		1.0	
						6.4	0.5	132	26.4		7.9		26.2		76.8		5.3		13.3		4		90				<0.2		1.0	
IM11	Cloudy	Moderate	12:36	8.2	Surface	1.0	0.9	94	27.5	27.5	8.0	8.0	23.9	24.0	89.6	89.6	6.2	6.0	1.8	7.6	4	3	86	88	822037	811470	<0.2	<0.2	1.1	1.1
						1.0	1.0	94	27.4		8.0		24.0		89.6		6.2		2.0		4		86				<0.2		1.0	
					Middle	4.1	0.8	91	27.0	27.0	8.0	8.0	25.2	25.2	84.2	84.2	5.8		9.1		3		88				<0.2		1.1	
						4.1	0.8	97	27.0		8.0		25.2		84.2		5.8		9.7		4		89				<0.2		1.2	
					Bottom	7.2	0.4	88	26.9	26.9	8.0	8.0	25.3	25.3	85.7	85.9	5.9	6.0	11.7		3		90				<0.2		1.0	
						7.2	0.4	93	26.9		8.0		25.3		86.0		6.0		11.3		2		90				<0.2		1.1	
IM12	Cloudy	Moderate	12:42	8.7	Surface	1.0	0.5	149	27.1	27.1	7.9	7.9	24.3	24.3	84.8	84.7	5.9	5.9	3.5	5.9	4	4	86	88	821453	812061	<0.2	<0.2	1.0	1.0
						1.0	0.5	154	27.1		7.9		24.4		84.5		5.9		3.8		4		86				<0.2		1.0	
					Middle	4.4	0.5	122	27.0	27.0	7.9	7.9	24.6	24.6	83.3	83.3	5.8		5.4		3		88				<0.2		1.0	
						4.4	0.6	123	27.0		7.9		24.7		83.2		5.8		5.8		4		89				<0.2		0.9	
					Bottom	7.7	0.3	104	26.8	26.8	7.9	7.9	25.3	25.3	78.8	78.9	5.5	5.5	8.9		3		91				<0.2		1.1	
						7.7	0.3	108	26.8		7.9		25.3		79.0		5.5		8.1		3		90				<0.2		1.1	
SR1A	Cloudy	Moderate	12:59	4.9	Surface	1.0	-	-	26.9	26.9	7.9	7.9	25.0	25.0	82.4	82.5	5.7	5.7	2.2	2.2	8	7	-	-	819977	812661	-	-	-	-
						1.0	-	-	26.9		7.9		25.1		82.6		5.7		2.2		7		-				-		-	
					Middle	2.5	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.5	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	-	-	26.8	26.8	8.0	8.0	25.3	25.3	83.5	83.8	5.8	5.8	2.2		6		-				-		-	
						3.9	-	-	26.8		8.0		25.3		84.0		5.8		2.2		5		-				-		-	
SR2	Cloudy	Moderate	13:11	4.4	Surface	1.0	0.6	108	26.8	26.8	7.9	7.9	25.1	25.2	81.6	81.6	5.7	5.7	6.6	7.9	7	5	88	89	821482	814176	<0.2	<0.2	1.0	1.1
						1.0	0.6	112	26.7		7.9		25.2		81.5		5.7		7.2		6		88				<0.2		1.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.4	102	26.7	26.7	8.0	8.0	25.4	25.4	82.5	82.6	5.7	5.8	8.9		3		90				<0.2		1.1	
						3.4	0.4	104	26.7		8.0		25.4		82.7		5.8		8.9		4		90				<0.2		1.0	
SR3	Cloudy	Moderate	12:07	8.8	Surface	1.0	0.4	185	27.1	27.1	7.9	7.9	24.3	24.3	82.9	82.9	5.8	5.6	2.6	4.8	4	3	-	-	822132	807566	-	-	-	-
						1.0	0.4	198	27.1		7.9		24.3		82.9		5.8		2.6		4		-				-		-	
					Middle	4.4	0.2	174	26.8	26.8	7.9	7.9	25.4	25.4	78.5	78.5	5.5		5.1		3		-				-		-	
						4.4	0.2	179	26.8		7.9		25.5		78.4		5.4		5.3		4		-				-		-	
					Bottom	7.8	0.0	34	26.8	26.8	7.9	7.9	25.8	25.8	79.1	79.2	5.5	5.5	6.6		2		-				-		-	
						7.8	0.0	35	26.8		7.9		25.7		79.2		5.5		6.5		2		-				-		-	
SR4A	Fine	Calm	13:13	9.3	Surface	1.0	0.0	274	27.3	27.3	8.2	8.2	28.1	28.1	82.0	81.9	5.6	5.5	5.7	6.5	4	3	-	-	817183	807809	-	-	-	-
						1.0	0.0	287	27.3		8.2		28.1		81.8		5.5		5.8		4		-				-		-	
					Middle	4.7	0.0	215	27.2	27.2	8.2	8.2	28.5	28.5	79.4	79.4	5.4		6.1		<2		-				-		-	
						4.7	0.0	230	27.2		8.2		28.5		79.3		5.4		6.4		<2		-				-		-	
					Bottom	8.3	0.1	316	27.2	27.2	8.2	8.2	28.6	28.6	79.5	79.6	5.4	5.4	7.7		<2		-				-		-	
						8.3	0.1	325	27.2		8.2		28.6		79.6		5.4		7.6		<2		-				-		-	
SR5A	Fine	Calm	13:31	4.8	Surface	1.0	0.0	54	27.4	27.4	8.2	8.2	26.4	26.4	86.0	85.9	5.9	5.9	6.3	6.9	2	2	-	-	816607	810686	-	-	-	-
						1.0	0.0	56	27.4		8.2		26.5		85.8		5.9		6.3		2		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.1	348	27.4	27.4	8.2	8.2	26.8	26.8	88.2	88.4	6.0	6.0	7.5		<2		-				-		-	
						3.8	0.1	355	27.4		8.2		26.8		88.5		6.0		7.5		<2		-				-		-	
SR6A	Fine	Calm	14:08	4.4	Surface	1.0	0.1	12	27.4	27.4	8.1	8.1	25.2	25.2	85.1	85.1	5.9	5.9	7.4	7.4	4	4	-	-	817965	814733	-	-	-	-
						1.0	0.1	12	27.4		8.1		25.2		85.0		5.9		7.3		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.0	287	27.0	27.0	8.1	8.1	26.1	26.1	80.6	80.7	5.6	5.6	7.4		4		-				-		-	
						3.4	0.0	289	27.0		8.1		26.1		80.7		5.6		7.5		4		-				-		-	
SR7	Cloudy	Moderate	13:56	16.6	Surface	1.0	0.6	50	26.9	26.9	8.0	8.0	25.7	25.7	84.9	84.9	5.9	5.7	0.9	1.5	3	3	-	-	823635	823728	-	-	-	-
						1.0	0.7	54	26.9		8.0		25.7		84.8		5.9		0.9		4		-				-		-	
					Middle	8.3	0.6	52	26.3	26.3	8.0	8.0	26.8	26.8	77.1	77.1	5.4		1.4		3		-				-		-	
						8.3	0.6	54	26.2		8.0		26.8		77.0		5.4		1.5		3		-				-		-	
					Bottom	15.6	0.4	12	26.1	26.1	8.0	8.0	27.3	27.2	77.1	77.2	5.4	5.4	2.2		2		-				-		-	
						15.6	0.4	13	26.1		8.0		27.2		77.2		5.4		2.2		3		-				-		-	
SR8	Cloudy	Moderate	12:51	4.5	Surface	1.0	-	-	27.1	27.1	7.9	7.9	24.8	24.8	82.8	82.8	5.7	5.7	2.7	2.8	3	2	-	-	820381	811615	-	-	-	-
						1.0	-	-	27.1		7.9		24.8		82.8		5.7		2.6		2		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	-	-	27.1	27.1	7.9	7.9	24.9	24.9	84.6	84.8	5.9	5.9	2.9		<2		-				-		-	
						3.5	-	-	27.1		7.9		24.9		84.9		5.9		2.9		<2		-				-		-	

DA: Depth-Averaged

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

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

Note: The monitoring session on 1 August 2020 was cancelled due to Strong Wind Signal No. 3.

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

Water Quality Monitoring

Water Quality Monitoring Results on 04 August 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	07:04	9.0	Surface	1.0	0.6	34	27.1	27.1	8.1	8.1	26.3	26.3	84.8	84.7	5.8	5.7	4.3	5.5	4	3	87	91	815608	804251	<0.2	<0.2	0.7	0.7
						1.0	0.7	35	27.1		8.1		26.3		84.5		5.8		4.3		4		88				<0.2		0.6	
					Middle	4.5	0.5	37	27.2	27.2	8.1	8.1	29.2	29.3	82.7	82.7	5.6		5.6		3		91				<0.2		0.7	
						4.5	0.5	39	27.2		8.1		29.3		82.7		5.6		5.6		4		91				<0.2		0.6	
					Bottom	8.0	0.4	31	27.1	27.1	8.1	8.0	30.1	30.1	82.8	82.9	5.6	5.6	6.6		2		94				<0.2		0.6	
						8.0	0.4	32	27.1		8.0		30.1		82.9		5.6		6.8		3		94				<0.2		0.7	
C2	Cloudy	Moderate	07:22	12.5	Surface	1.0	0.5	221	26.9	26.9	8.0	8.0	22.5	22.5	79.3	79.1	5.6	5.5	3.2	6.4	2	2	87	88	825685	806923	<0.2	<0.2	1.0	1.1
						1.0	0.5	228	26.9		8.0		22.6		78.9		5.6		3.4		3		86				<0.2		1.0	
					Middle	6.3	0.4	290	26.6	26.6	8.0	8.0	25.2	25.2	76.7	76.7	5.3		8.1		2		88				<0.2		1.1	
						6.3	0.4	293	26.6		8.0		25.2		76.7		5.3		8.4		2		89				<0.2		1.1	
					Bottom	11.5	0.3	304	26.5	26.6	8.0	8.0	25.4	25.4	78.2	78.3	5.4	5.5	8.0		2		90				<0.2		1.1	
						11.5	0.4	333	26.6		8.0		25.4		78.4		5.5		7.6		2		90				<0.2		1.1	
C3	Rainy	Moderate	05:41	11.7	Surface	1.0	0.4	285	26.5	26.5	7.9	7.9	24.5	24.5	80.3	80.3	5.6	5.4	1.3	3.8	<2	2	86	88	822089	817801	<0.2	<0.2	1.2	1.1
						1.0	0.4	291	26.5		7.9		24.5		80.3		5.6		1.3		<2		85				<0.2		1.3	
					Middle	5.9	0.4	283	26.2	26.2	7.9	7.9	26.3	26.3	74.0	73.9	5.2		1.5		2		88				<0.2		1.1	
						5.9	0.4	285	26.2		7.9		26.3		73.7		5.1		1.6		2		89				<0.2		1.1	
					Bottom	10.7	0.5	279	25.8	25.8	7.9	7.9	28.0	28.0	71.1	71.2	4.9	5.0	8.6		2		90				<0.2		1.0	
						10.7	0.5	294	25.8		7.9		28.0		71.2		5.0		8.2		2		90				<0.2		1.1	
IM1	Fine	Moderate	07:22	5.8	Surface	1.0	0.3	6	27.0	27.0	8.1	8.0	27.2	27.2	80.0	80.0	5.5	5.5	5.7	5.9	6	5	88	91	817931	807145	<0.2	<0.2	1.0	0.9
						1.0	0.3	6	27.0		8.0		27.2		79.9		5.5		5.8		5		88				<0.2		1.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.8	0.1	1	26.9	26.9	8.0	8.0	27.6	27.6	78.9	79.1	5.4	5.4	6.2		5		93				<0.2		0.8	
						4.8	0.1	1	26.9		8.0		27.6		79.2		5.4		6.1		5		94				<0.2		0.7	
IM2	Fine	Moderate	07:29	7.9	Surface	1.0	0.3	346	27.1	27.1	8.1	8.1	26.4	26.4	84.6	84.6	5.8	5.7	3.9	5.2	4	4	87	91	818139	806154	<0.2	<0.2	1.1	1.0
						1.0	0.3	346	27.1		8.1		26.4		84.5		5.8		4.0		4		87				<0.2		1.0	
					Middle	4.0	0.3	2	27.1	27.1	8.1	8.1	27.8	27.8	80.5	80.5	5.5		5.4		5		90				<0.2		0.9	
						4.0	0.3	2	27.1		8.1		27.8		80.5		5.5		5.2		4		91				<0.2		0.8	
					Bottom	6.9	0.3	5	27.1	27.1	8.0	8.0	27.9	27.9	81.1	81.2	5.5	5.5	6.5		4		95				<0.2		0.9	
						6.9	0.3	5	27.1		8.0		27.9		81.3		5.5		6.3		5		94				<0.2		1.0	
IM3	Fine	Moderate	07:35	8.2	Surface	1.0	0.5	336	27.1	27.1	8.1	8.1	26.1	26.1	86.1	86.0	5.9	5.7	4.3	5.5	3	4	85	91	818772	805591	<0.2	<0.2	0.7	0.7
						1.0	0.5	351	27.1		8.1		26.1		85.9		5.9		4.5		4		86				<0.2		0.6	
					Middle	4.1	0.4	341	27.1	27.1	8.1	8.1	27.9	27.9	79.3	79.3	5.4		5.5		5		91				<0.2		0.7	
						4.1	0.4	314	27.1		8.1		27.9		79.2		5.4		5.7		4		93				<0.2		0.7	
					Bottom	7.2	0.3	338	27.1	27.1	8.1	8.1	28.1	28.1	79.6	79.7	5.4	5.4	6.5		5		93				<0.2		0.8	
						7.2	0.3	340	27.1		8.1		28.1		79.7		5.4		6.4		4		95				<0.2		0.7	
IM4	Fine	Moderate	07:43	9.0	Surface	1.0	0.9	351	27.1	27.1	8.1	8.1	26.1	26.1	86.1	86.0	5.9	5.7	5.6	6.7	5	5	86	91	819716	804597	<0.2	<0.2	0.6	0.7
						1.0	0.9	323	27.1		8.1		26.1		85.9		5.9		5.5		5		87				<0.2		0.6	
					Middle	4.5	0.7	358	27.1	27.1	8.1	8.1	28.6	28.6	80.2	80.3	5.4		6.6		4		90				<0.2		0.7	
						4.5	0.7	359	27.1		8.1		28.6		80.3		5.4		6.7		5		91				<0.2		0.7	
					Bottom	8.0	0.6	357	27.1	27.1	8.1	8.1	28.7	28.7	81.1	81.2	5.5	5.5	7.7		4		95				<0.2		0.7	
						8.0	0.6	328	27.1		8.1		28.7		81.3		5.5		7.9		5		94				<0.2		0.7	
IM5	Fine	Moderate	07:50	8.4	Surface	1.0	1.1	9	27.1	27.1	8.1	8.1	27.3	27.3	80.5	80.5	5.5	5.5	5.7	6.5	5	4	87	91	820735	804881	<0.2	<0.2	1.1	0.8
						1.0	1.2	9	27.1		8.1		27.4		80.4		5.5		5.4		4		88				<0.2		1.1	
					Middle	4.2	0.9	15	27.1	27.1	8.1	8.1	27.7	27.7	79.9	79.9	5.5		6.3		4		91				<0.2		0.6	
						4.2	0.9	16	27.1		8.1		27.7		79.9		5.5		6.4		4		92				<0.2		0.6	
					Bottom	7.4	0.8	18	27.1	27.1	8.1	8.1	28.0	28.0	80.0	80.0	5.4	5.5	7.4		5		95				<0.2		0.5	
						7.4	0.9	18	27.1		8.1		28.0		80.0		5.5		7.5		4		95				<0.2		0.6	
IM6	Fine	Moderate	07:58	8.0	Surface	1.0	0.1	225	27.1	27.1	8.1	8.1	24.5	24.5	84.9	84.9	5.9	5.8	3.1	5.1	3	4	87	91	821049	805844	<0.2	<0.2	1.1	1.0
						1.0	0.1	234	27.1		8.1		24.6		84.7		5.9		3.2		4		88				<0.2		0.9	
					Middle	4.0	0.2	39	27.0	27.0	8.1	8.1	26.0	26.0	81.2	81.1	5.6		5.3		3		91				<0.2		1.0	
						4.0	0.2	41	27.0		8.1		26.1		80.9		5.6		5.4		3		92				<0.2		1.0	
					Bottom	7.0	0.1	48	27.0	27.0	8.0	8.0	27.0	27.0	79.0	79.1	5.4	5.4	6.9		6		92				<0.2		1.0	
						7.0	0.1	50	27.0		8.0		27.1		79.2		5.4		7.0		5		93				<0.2		1.0	
IM7	Fine	Moderate	08:06	9.6	Surface	1.0	0.1	260	27.2	27.2	8.0	8.0	23.3	23.3	87.4	87.3	6.1	5.9	2.9	4.2	4	4	85	90	821333	806857	<0.2	<0.2	1.0	1.0
						1.0	0.1	266	27.2		8.0		23.3		87.1		6.1		3.0		3		86				<0.2		1.0	
					Middle	4.8	0.2	124	27.1	27.1	8.1	8.1	25.6	25.6	83.3	83.2	5.7		4.1		4		90				<0.2		1.0	
						4.8	0.2	130	27.1		8.1		25.6		83.1		5.7		4.2		4		90				<0.2		1.1	
					Bottom	8.6	0.2	98	27.0	27.0	8.0	8.0	27.6	27.6	80.7	80.8	5.5	5.5	5.6		4		95				<0.2		0.9	
						8.6	0.2	106	27.0		8.0		27.6		80.8		5.5		5.6		3		94				<0.2		1.0	
IM8	Cloudy	Moderate	07:00	8.5	Surface	1.0	0.2	268	26.8	26.8	7.9	7.9	23.4	23.4	79.8	79.7	5.6	5.6	2.5	4.2	3	2	86	89	821819	808132	<0.2	<0.2	1.0	1.0
						1.0	0.2	291	26.8		7.9		23.4		79.6		5.6		2.7		2		87				<0.2		1.0	
					Middle	4.3	0.1	263	26.8	26.8	7.9	7.9	23.8	23.8	78.6	78.6	5.5		4.0		2		88				<0.2		0.9	
						4.3	0.1	280	26.8		7.9		23.9		78.6		5.5		4.4		2		89				<0.2		0.9	
					Bottom	7.5	0.1	258	26.7	26.7	7.9	7.9	24.2	24.2	79.2	79.3	5.5	5.6	5.7		3		90				<0.2		1.0	
						7.5	0.1	273	26.7		7.9		24.2		79.3		5.6		5.9		2		91				<0.2		1.0	

DA: Depth-Averaged

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

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

Note: The monitoring session on 1 August 2020 was cancelled due to Strong Wind Signal No. 3.

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

Water Quality Monitoring

Water Quality Monitoring Results on 04 August 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	06:55	8.0	Surface	1.0	0.5	279	26.8	26.8	7.9	7.9	23.5	23.5	78.9	78.9	5.5	5.5	4.5	7.7	2	3	86	88	822093	808815	<0.2	<0.2	1.0	1.0
						1.0	0.6	287	26.8		7.9		23.5		78.9		5.5		4.8		3		86				<0.2		1.0	
					Middle	4.0	0.5	276	26.8	26.8	7.9	7.9	23.6	23.6	78.8	78.9	5.5		8.2		4		88				<0.2		1.0	
						4.0	0.5	287	26.8		7.9		23.6		78.9		5.5		8.5		3		88				<0.2		1.0	
					Bottom	7.0	0.4	280	26.8	26.8	7.9	7.9	23.6	23.6	79.4	79.5	5.6	5.6	10.1		3		90				<0.2		1.0	
						7.0	0.4	305	26.8		7.9		23.6		79.6		5.6		10.1		4		90				<0.2		1.0	
IM10	Cloudy	Moderate	06:48	7.8	Surface	1.0	0.6	303	26.8	26.8	7.9	7.9	23.4	23.5	80.7	80.7	5.7	5.7	3.7	6.8	4	3	85	88	822379	809783	<0.2	<0.2	1.0	1.0
						1.0	0.6	306	26.8		7.9		23.5		80.6		5.7		3.9		3		86				<0.2		1.1	
					Middle	3.9	0.7	309	26.8	26.8	7.9	7.9	23.7	23.7	79.8	79.7	5.6		5.8		2		88				<0.2		1.0	
						3.9	0.7	310	26.7		7.9		23.7		79.6		5.6		6.5		3		88				<0.2		1.1	
					Bottom	6.8	0.4	301	26.6	26.6	7.9	7.9	24.7	24.7	78.7	78.8	5.5	5.5	10.9		3		90				<0.2		1.0	
						6.8	0.5	302	26.6		7.9		24.7		78.9		5.5		9.8		2		90				<0.2		1.0	
IM11	Cloudy	Moderate	06:39	8.3	Surface	1.0	0.7	322	26.7	26.7	7.9	7.9	23.9	23.9	80.3	80.2	5.6	5.6	3.5	7.1	2	3	86	88	822064	811466	<0.2	<0.2	1.0	1.0
						1.0	0.7	337	26.7		7.9		23.9		80.1		5.6		3.5		2		86				<0.2		1.0	
					Middle	4.2	0.7	316	26.6	26.6	7.9	7.9	24.8	24.8	78.2	78.1	5.5		7.6		4		88				<0.2		1.0	
						4.2	0.8	333	26.5		7.9		24.8		78.0		5.5		7.1		3		88				<0.2		1.0	
					Bottom	7.3	0.6	312	26.3	26.3	7.9	7.9	26.0	26.0	77.2	77.3	5.4	5.4	10.4		3		90				<0.2		1.0	
						7.3	0.6	325	26.3		7.9		26.0		77.4		5.4		10.4		3		90				<0.2		1.0	
IM12	Cloudy	Moderate	06:34	8.8	Surface	1.0	0.5	264	26.7	26.7	7.9	7.9	23.9	24.0	79.6	79.4	5.6	5.5	2.0	5.9	3	3	86	88	821446	812053	<0.2	<0.2	1.0	1.0
						1.0	0.5	287	26.7		7.9		24.1		79.2		5.5		2.2		2		86				<0.2		1.0	
					Middle	4.4	0.6	262	26.5	26.5	7.9	7.9	25.1	25.1	76.6	76.5	5.4		5.2		4		89				<0.2		1.0	
						4.4	0.6	271	26.5		7.9		25.2		76.3		5.3		5.6		3		88				<0.2		1.0	
					Bottom	7.8	0.6	279	26.2	26.2	7.9	7.9	26.1	26.1	76.7	76.8	5.4	5.4	10.1		3		90				<0.2		1.0	
						7.8	0.6	287	26.2		7.9		26.1		76.9		5.4		10.4		4		90				<0.2		0.9	
SR1A	Rainy	Moderate	06:13	5.0	Surface	1.0	-	-	26.8	26.8	7.9	7.9	23.5	23.6	80.5	80.6	5.7	5.7	1.7	3.2	3	4	-	-	819976	812660	-	-	-	-
						1.0	-	-	26.8		7.9		23.6		80.6		5.7		1.6		4		-				-		-	
					Middle	2.5	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.5	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	-	-	26.7	26.7	7.9	7.9	23.8	23.8	82.7	82.9	5.8	5.8	4.7		3		-				-		-	
						4.0	-	-	26.7		7.9		23.8		83.0		5.8		4.8		4		-				-		-	
SR2	Rainy	Moderate	06:01	5.1	Surface	1.0	0.1	282	26.5	26.5	7.9	7.9	25.0	25.1	76.6	76.5	5.4	5.4	3.1	3.9	3	3	88	89	821486	814182	<0.2	<0.2	1.0	1.0
						1.0	0.1	301	26.4		7.9		25.2		76.3		5.3		3.3		3		87				<0.2		1.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	0.2	316	26.3	26.3	7.9	7.9	25.9	25.9	75.5	75.6	5.3	5.3	4.7		3		90				<0.2		0.9	
						4.1	0.3	323	26.3		7.9		25.9		75.6		5.3		4.6		4		91				<0.2		1.1	
SR3	Cloudy	Moderate	07:05	9.6	Surface	1.0	0.1	261	26.8	26.8	8.0	8.0	22.6	22.6	81.0	80.9	5.7	5.6	2.2	4.1	3	3	-	-	822130	807553	-	-	-	-
						1.0	0.1	267	26.8		8.0		22.6		80.7		5.7		2.2		3		-				-		-	
					Middle	4.8	0.2	278	26.7	26.7	8.0	8.0	24.4	24.5	79.4	79.4	5.5		3.6		3		-				-		-	
						4.8	0.2	292	26.7		8.0		24.6		79.4		5.5		4.1		2		-				-		-	
					Bottom	8.6	0.2	10	26.7	26.7	8.0	8.0	25.4	25.3	80.0	80.2	5.6	5.6	6.0		3		-				-		-	
						8.6	0.2	10	26.7		8.0		25.3		80.3		5.6		6.4		4		-				-		-	
SR4A	Rainy	Calm	06:41	9.8	Surface	1.0	0.2	253	27.1	27.1	8.1	8.1	25.7	25.7	85.0	85.0	5.9	5.7	3.6	5.1	4	4	-	-	817194	807793	-	-	-	-
						1.0	0.2	261	27.1		8.1		25.7		84.9		5.8		3.6		3		-				-		-	
					Middle	4.9	0.0	218	27.1	27.1	8.1	8.1	26.6	26.6	80.3	80.2	5.5		4.8		3		-				-		-	
						4.9	0.0	223	27.1		8.1		26.7		80.1		5.5		4.9		3		-				-		-	
					Bottom	8.8	0.1	55	26.9	27.0	8.0	8.0	27.4	27.3	77.0	77.1	5.3	5.3	6.7		6		-				-		-	
						8.8	0.1	59	27.0		8.0		27.3		77.2		5.3		6.8		5		-				-		-	
SR5A	Rainy	Calm	06:25	5.3	Surface	1.0	0.1	284	27.2	27.2	8.0	8.0	25.5	25.5	87.6	87.6	6.0	6.0	8.4	9.2	4	4	-	-	816612	810690	-	-	-	-
						1.0	0.1	292	27.2		8.0		25.5		87.6		6.0		8.6		3		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	0.2	289	27.2	27.2	8.0	8.0	25.4	25.4	88.0	88.0	6.1	6.1	10.0		4		-				-		-	
						4.3	0.2	315	27.2		8.0		25.4		88.0		6.1		9.9		4		-				-		-	
SR6A	Rainy	Calm	05:57	4.3	Surface	1.0	0.1	241	27.0	27.0	8.0	7.9	25.7	25.8	81.5	81.4	5.6	5.6	6.5	7.0	2	2	-	-	817949	814760	-	-	-	-
						1.0	0.1	248	27.0		7.9		25.8		81.3		5.6		6.3		2		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.1	211	26.9	26.9	7.9	7.9	26.0	26.0	75.9	75.9	5.2	5.2	7.7		3		-				-		-	
						3.3	0.1	230	26.9		7.9		26.0		75.9		5.2		7.5		2		-				-		-	
SR7	Rainy	Moderate	05:06	16.6	Surface	1.0	0.1	223	26.2	26.2	7.9	7.9	26.1	26.1	77.4	77.4	5.4	5.2	1.1	1.3	2	2	-	-	823635	823752	-	-	-	-
						1.0	0.1	235	26.2		7.9		26.1		77.4		5.4		1.1		2		-				-		-	
					Middle	8.3	0.2	189	25.9	25.9	7.9	7.9	27.5	27.5	71.4	71.4	5.0		1.4		3		-				-		-	
						8.3	0.2	196	25.9		7.9		27.5		71.4		5.0		1.4		2		-				-		-	
					Bottom	15.6	0.2	166	25.8	25.8	7.8	7.8	28.2	28.2	70.0	70.1	4.9	4.9	1.4		2		-				-		-	
						15.6	0.2	180	25.8		7.8		28.2		70.1		4.9		1.4		2		-				-		-	
SR8	Rainy	Moderate	06:24	4.8	Surface	1.0	-	-	26.8	26.8	7.9	7.9	23.3	23.3	82.3	82.3	5.8	5.8	2.4	2.4	3	3	-	-	820412	811642	-	-	-	-
						1.0	-	-	26.8		7.9		23.4		82.3		5.8		2.5		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	-	-	26.7	26.7	7.9	7.9	24.0	24.0	84.7	84.9	5.9	6.0	2.4		<2		-				-		-	
						3.8	-	-	26.7		7.9		24.0		85.0		6.0		2.3		<2		-				-		-	

DA: Depth-Averaged

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

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

Note: The monitoring session on 1 August 2020 was cancelled due to Strong Wind Signal No. 3.

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

Water Quality Monitoring

Water Quality Monitoring Results on 06 August 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	14:09	8.9	Surface	1.0	0.6	223	28.8	28.8	8.3	8.3	24.2	24.2	98.2	98.2	6.6	6.2	5.2	7.8	4	4	87	90	815627	804258	<0.2	<0.2	1.0	1.1
						1.0	0.6	241	28.7		8.3		24.2		98.2		6.6		5.5		4		87				<0.2		1.2	
					Middle	4.5	0.5	211	27.7	27.7	8.4	8.4	27.9	27.9	86.4	86.4	5.8		6.3		4		89				<0.2		1.1	
						4.5	0.5	215	27.7		8.4		28.0		86.3		5.8		6.3		5		90				<0.2		1.1	
					Bottom	7.9	0.3	199	27.6	27.6	8.4	8.4	29.0	29.0	84.2	84.2	5.6	5.6	11.8		5		93				<0.2		1.0	
						7.9	0.4	210	27.6		8.4		29.0		84.2		5.6		11.6		4		93				<0.2		1.0	
C2	Fine	Moderate	13:07	12.6	Surface	1.0	0.6	163	28.0	28.0	7.9	7.9	22.6	22.6	89.6	89.6	6.2	5.9	2.8	7.5	4	3	86	89	825675	806951	<0.2	<0.2	1.1	1.1
						1.0	0.6	173	27.9		7.9		22.5		89.5		6.2		2.9		4		86				<0.2		1.2	
					Middle	6.3	0.4	149	27.1	27.1	7.9	7.9	25.1	25.2	79.2	79.0	5.5		8.4		4		89				<0.2		1.1	
						6.3	0.4	155	27.0		7.9		25.2		78.8		5.5		8.7		3		89				<0.2		1.1	
					Bottom	11.6	0.3	158	26.8	26.8	7.9	7.9	25.9	25.9	79.5	79.7	5.5	5.5	11.1		2		91				<0.2		1.0	
						11.6	0.3	165	26.8		7.9		25.9		79.8		5.5		11.1		3		91				<0.2		1.0	
C3	Fine	Moderate	14:48	12.4	Surface	1.0	0.6	89	27.5	27.5	7.9	7.9	24.3	24.3	85.1	85.2	5.9	5.8	2.6	3.7	7	7	88	91	822101	817817	<0.2	<0.2	1.0	1.0
						1.0	0.6	97	27.5		7.9		24.3		85.2		5.9		2.6		8		88				<0.2		1.0	
					Middle	6.2	0.3	90	27.2	27.2	7.9	7.9	25.5	25.5	81.2	80.9	5.6		2.7		6		92				<0.2		1.0	
						6.2	0.3	91	27.1		7.9		25.6		80.5		5.6		2.7		7		92				<0.2		1.0	
					Bottom	11.4	0.3	41	26.8	26.9	7.9	7.9	26.9	26.7	77.7	78.0	5.4	5.4	5.8		5		93				<0.2		0.9	
						11.4	0.3	44	26.9		7.9		26.6		78.2		5.4		5.7		6		93				<0.2		1.0	
IM1	Cloudy	Moderate	13:50	5.3	Surface	1.0	0.2	175	28.1	28.1	8.2	8.2	25.8	25.8	91.3	91.3	6.2	6.2	5.1	8.6	4	4	88	89	817932	807135	<0.2	<0.2	1.0	1.0
						1.0	0.2	184	28.0		8.2		25.8		91.2		6.2		5.2		5		88				<0.2		0.9	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	0.2	193	27.7	27.7	8.2	8.2	26.4	26.4	84.9	85.0	5.8	5.8	12.0		4		89				<0.2		1.0	
						4.3	0.2	203	27.7		8.2		26.4		85.0		5.8		12.1		4		90				<0.2		0.9	
IM2	Cloudy	Moderate	13:42	7.4	Surface	1.0	0.2	167	28.2	28.2	8.2	8.2	25.6	25.6	95.7	95.7	6.5	6.3	3.6	5.9	4	5	85	89	818175	806155	<0.2	<0.2	1.0	0.9
						1.0	0.2	170	28.1		8.2		25.7		95.6		6.5		3.6		4		85				<0.2		0.9	
					Middle	3.7	0.2	172	27.8	27.8	8.2	8.2	26.7	26.8	90.0	90.1	6.1		3.9		4		89				<0.2		1.0	
						3.7	0.2	184	27.8		8.2		26.8		90.1		6.1		4.1		4		89				<0.2		0.8	
					Bottom	6.4	0.2	139	27.7	27.7	8.2	8.2	27.8	27.8	86.0	86.1	5.8	5.8	10.4		6		91				<0.2		0.9	
						6.4	0.2	144	27.7		8.2		27.8		86.1		5.8		10.0		5		92				<0.2		1.0	
IM3	Cloudy	Moderate	13:36	7.6	Surface	1.0	0.2	114	28.2	28.2	8.2	8.2	25.4	25.4	98.4	98.4	6.7	6.3	3.3	6.9	6	5	86	89	818763	805579	<0.2	<0.2	0.9	1.0
						1.0	0.2	122	28.2		8.2		25.4		98.3		6.7		3.3		5		86				<0.2		1.0	
					Middle	3.8	0.3	133	27.8	27.8	8.2	8.2	26.5	26.5	87.5	87.4	5.9		4.6		5		89				<0.2		1.0	
						3.8	0.3	134	27.8		8.2		26.5		87.3		5.9		4.9		4		89				<0.2		1.0	
					Bottom	6.6	0.3	140	27.7	27.7	8.2	8.2	27.9	27.9	85.4	85.5	5.8	5.8	12.7		4		92				<0.2		1.1	
						6.6	0.4	140	27.7		8.2		27.9		85.5		5.8		12.8		5		92				<0.2		1.0	
IM4	Fine	Moderate	13:27	8.7	Surface	1.0	0.6	201	27.9	27.9	8.2	8.2	25.4	25.4	89.1	89.1	6.1	6.0	4.4	6.5	6	5	85	89	819732	804599	<0.2	<0.2	0.9	1.0
						1.0	0.6	206	27.9		8.2		25.4		89.0		6.1		4.4		5		85				<0.2		1.1	
					Middle	4.4	0.5	181	27.7	27.7	8.2	8.2	26.5	26.5	87.4	87.3	5.9		4.6		6		89				<0.2		1.0	
						4.4	0.5	186	27.7		8.2		26.5		87.2		5.9		4.6		5		89				<0.2		0.9	
					Bottom	7.7	0.4	154	27.7	27.7	8.2	8.2	28.1	28.1	84.8	84.9	5.7	5.7	10.6		4		92				<0.2		0.9	
						7.7	0.4	157	27.7		8.2		28.1		84.9		5.7		10.4		4		91				<0.2		0.9	
IM5	Fine	Moderate	13:19	8.2	Surface	1.0	0.4	219	27.8	27.8	8.2	8.2	26.1	26.1	89.3	89.3	6.1	5.9	4.5	7.6	6	6	85	88	820718	804848	<0.2	<0.2	1.0	1.0
						1.0	0.5	240	27.8		8.2		26.1		89.2		6.1		4.5		5		86				<0.2		1.0	
					Middle	4.1	0.4	186	27.7	27.7	8.2	8.2	27.5	27.4	84.9	84.9	5.7		7.2		6		88				<0.2		0.9	
						4.1	0.4	196	27.7		8.2		27.4		84.9		5.7		7.3		6		88				<0.2		0.9	
					Bottom	7.2	0.4	190	27.7	27.7	8.2	8.2	27.7	27.7	84.3	84.3	5.7	5.7	11.1		6		91				<0.2		1.0	
						7.2	0.4	202	27.7		8.2		27.7		84.3		5.7		11.0		7		91				<0.2		1.0	
IM6	Fine	Moderate	13:12	8.0	Surface	1.0	0.3	229	27.8	27.8	8.2	8.2	26.3	26.3	87.9	87.9	6.0	6.0	5.4	6.9	3	5	85	88	821040	805824	<0.2	<0.2	1.5	1.3
						1.0	0.3	237	27.8		8.2		26.3		87.8		6.0		5.4		3		85				<0.2		1.4	
					Middle	4.0	0.3	205	27.7	27.7	8.2	8.2	26.7	26.7	87.2	87.2	5.9		5.8		5		88				<0.2		1.3	
						4.0	0.3	205	27.7		8.2		26.7		87.2		5.9		5.8		6		89				<0.2		1.2	
					Bottom	7.0	0.2	192	27.7	27.7	8.2	8.2	27.0	27.0	86.3	86.4	5.8	5.9	9.6		5		91				<0.2		1.3	
						7.0	0.3	194	27.7		8.2		27.0		86.4		5.9		9.4		6		91				<0.2		1.2	
IM7	Fine	Moderate	13:05	9.3	Surface	1.0	0.1	151	27.9	27.9	8.6	8.6	24.4	24.4	91.5	91.5	6.3	6.2	4.0	6.1	3	5	85	88	821343	806854	<0.2	<0.2	1.4	1.4
						1.0	0.1	165	27.9		8.6		24.4		91.5		6.3		4.0		4		84				<0.2		1.3	
					Middle	4.7	0.1	143	27.8	27.8	8.6	8.6	25.7	25.7	88.3	88.2	6.0		5.9		5		88				<0.2		1.4	
						4.7	0.1	143	27.8		8.6		25.7		88.1		6.0		6.0		6		88				<0.2		1.4	
					Bottom	8.3	0.1	137	27.7	27.7	8.7	8.7	26.0	26.0	85.7	85.7	5.8	5.8	8.3		6		91				<0.2		1.4	
						8.3	0.1	142	27.7		8.7		26.0		85.7		5.8		8.1		5		91				<0.2		1.4	
IM8	Fine	Moderate	13:31	8.4	Surface	1.0	0.1	53	27.8	27.8	7.9	7.9	22.6	22.6	87.6	87.6	6.1	6.1	2.4	3.3	6	5	86	89	821813	808146	<0.2	<0.2	0.9	1.0
						1.0	0.1	57	27.8		7.9		22.6		87.6		6.1		2.4		7		87				<0.2		1.0	
					Middle	4.2	0.1	124	27.4	27.4	7.9	7.9	23.5	23.5	87.2	87.2	6.1		2.2		5		89				<0.2		1.0	
						4.2	0.1	134	27.4		7.9		23.5		87.2		6.1		2.4		4		89				<0.2		1.1	
					Bottom	7.4	0.1	67	27.4	27.4	8.0	8.0	24.3	24.3	89.5	89.9	6.2	6.2	5.0		4		91				<0.2		1.0	
						7.4	0.1	70	27.4		8.0		24.3		90.2		6.2		5.1		4		91				<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 06 August 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	13:37	7.9	Surface	1.0	0.3	123	27.7	27.7	7.9	7.9	23.0	23.0	89.4	89.4	6.2	6.1	1.9	5.5	3	4	86	89	822097	808806	<0.2	<0.2	1.0	1.0
						1.0	0.3	130	27.7		7.9		23.1		89.4		6.2		2.0		4		86				<0.2		1.0	
					Middle	4.0	0.3	148	27.5	27.5	7.9	7.9	23.9	24.0	87.6	87.5	6.1		3.8		4		89				<0.2		1.1	
						4.0	0.3	151	27.5		8.0		24.0		87.3		6.0		4.0		5		90				<0.2		1.0	
					Bottom	6.9	0.1	151	27.4	27.4	8.0	8.0	24.6	24.6	87.3	89.3	6.0	6.2	10.6		4		91				<0.2		1.0	
						6.9	0.1	162	27.4		8.0		24.6		91.2		6.3		10.5		5		91				<0.2		1.0	
IM10	Fine	Moderate	13:44	8.0	Surface	1.0	0.8	149	27.9	27.9	7.9	7.9	21.6	21.6	95.1	95.1	6.6	6.4	1.7	5.2	4	5	87	89	822368	809779	<0.2	<0.2	1.0	1.0
						1.0	0.8	153	27.9		7.9		21.6		95.0		6.6		1.9		4		87				<0.2		1.0	
					Middle	4.0	0.7	124	27.7	27.7	8.0	8.0	24.0	24.0	90.0	89.9	6.2		3.9		6		89				<0.2		1.0	
						4.0	0.8	126	27.7		8.0		24.0		89.7		6.2		3.7		5		89				<0.2		1.0	
					Bottom	7.0	0.5	120	27.4	27.5	8.0	8.0	24.6	24.6	89.0	89.2	6.1	6.2	9.9		6		90				<0.2		1.0	
						7.0	0.5	130	27.5		8.0		24.5		89.4		6.2		10.0		6		91				<0.2		1.1	
IM11	Fine	Moderate	13:54	10.0	Surface	1.0	0.7	109	28.1	28.1	7.9	7.9	23.2	23.2	92.4	92.4	6.4	6.3	1.7	7.8	3	4	88	91	822048	811446	<0.2	<0.2	1.2	1.1
						1.0	0.7	116	28.1		7.9		23.2		92.3		6.3		1.8		4		88				<0.2		1.0	
					Middle	5.0	0.7	101	27.6	27.6	8.0	8.0	24.3	24.3	89.2	89.3	6.2		8.9		4		91				<0.2		1.2	
						5.0	0.7	102	27.6		8.0		24.3		89.4		6.2		9.1		4		92				<0.2		1.0	
					Bottom	9.0	0.6	96	27.5	27.5	8.0	8.0	24.4	24.4	91.9	92.2	6.3	6.4	13.0		4		93				<0.2		1.0	
						9.0	0.6	101	27.5		8.0		24.4		92.4		6.4		12.7		3		93				<0.2		1.0	
IM12	Fine	Moderate	13:59	10.2	Surface	1.0	0.7	104	28.0	28.0	7.9	7.9	23.2	23.2	90.2	90.2	6.2	6.0	2.7	6.0	3	3	88	91	821462	812028	<0.2	<0.2	1.0	1.0
						1.0	0.7	112	28.0		7.9		23.2		90.2		6.2		2.7		2		88				<0.2		1.0	
					Middle	5.1	0.5	103	27.3	27.3	7.9	7.9	24.5	24.6	83.3	83.3	5.8		6.6		4		90				<0.2		1.0	
						5.1	0.6	106	27.3		7.9		24.7		83.2		5.8		6.3		4		91				<0.2		0.9	
					Bottom	9.2	0.4	98	27.1	27.2	7.9	7.9	25.0	24.9	83.9	84.2	5.8	5.8	8.9		3		93				<0.2		1.0	
						9.2	0.5	103	27.2		7.9		24.8		84.5		5.8		9.0		4		94				<0.2		0.8	
SR1A	Fine	Calm	14:16	5.0	Surface	1.0	-	-	27.7	27.7	7.9	7.9	23.1	23.1	89.1	89.1	6.2	6.2	2.2	2.8	3	3	-	-	819970	812658	-	-	-	-
						1.0	-	-	27.7		7.9		23.2		89.0		6.2		2.4		3		-				-		-	
					Middle	2.5	-	-	-	-		-	-	-	-	-	-		-		-		-				-		-	
						2.5	-	-	-				-		-		-		-		-		-				-		-	
					Bottom	4.0	-	-	27.1	27.1	7.9	7.9	24.6	24.6	84.3	84.6	5.8	5.9	3.4		2		-				-		-	
						4.0	-	-	27.1		7.9		24.6		84.9		5.9		3.4		3		-				-		-	
SR2	Fine	Moderate	14:27	4.9	Surface	1.0	0.5	105	27.9	27.9	7.9	7.9	23.3	23.3	94.9	94.9	6.6	6.6	2.0	7.5	<2	3	87	89	821445	814151	<0.2	<0.2	1.0	1.0
						1.0	0.5	114	27.8		7.9		23.4		94.9		6.6		2.1		<2		87				<0.2		0.9	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	0.3	106	27.3	27.3	7.9	7.9	24.3	24.3	90.9	91.5	6.3	6.4	13.0		4		90				<0.2		0.9	
						3.9	0.3	106	27.3		7.9		24.3		92.1		6.4		13.1		3		91				<0.2		1.0	
SR3	Fine	Moderate	13:26	9.8	Surface	1.0	0.2	178	27.5	27.5	7.9	7.9	23.1	23.1	86.8	86.8	6.0	5.9	2.9	4.0	3	4	-	-	822155	807561	-	-	-	-
						1.0	0.2	190	27.5		7.9		23.2		86.7		6.0		3.2		4		-				-		-	
					Middle	4.9	0.1	235	27.3	27.3	7.9	7.9	24.2	24.2	82.9	83.0	5.7		4.4		4		-				-		-	
						4.9	0.1	257	27.3		7.9		24.3		83.1		5.8		4.3		3		-				-		-	
					Bottom	8.8	0.0	28	27.5	27.5	8.0	8.0	24.8	24.8	91.2	91.5	6.3	6.3	4.6		4		-				-		-	
						8.8	0.0	30	27.5		8.0		24.8		91.7		6.3		4.7		4		-				-		-	
SR4A	Cloudy	Calm	14:33	9.8	Surface	1.0	0.2	59	28.0	28.0	8.3	8.3	25.8	25.8	90.9	90.9	6.2	6.0	4.8	6.2	3	5	-	-	817202	807815	-	-	-	-
						1.0	0.2	64	28.0		8.3		25.8		90.9		6.2		4.9		4		-				-		-	
					Middle	4.9	0.1	58	27.7	27.7	8.3	8.3	26.4	26.4	84.8	84.7	5.8		6.0		5		-				-		-	
						4.9	0.1	60	27.7		8.3		26.4		84.6		5.8		6.1		5		-				-		-	
					Bottom	8.8	0.0	7	27.7	27.7	8.3	8.3	26.8	26.8	81.9	81.9	5.6	5.6	7.9		5		-				-		-	
						8.8	0.0	7	27.7		8.3		26.8		81.9		5.6		7.9		6		-				-		-	
SR5A	Cloudy	Calm	14:51	3.8	Surface	1.0	0.0	311	28.3	28.3	8.3	8.3	24.9	24.9	91.9	91.9	6.2	6.2	5.1	5.2	6	6	-	-	816610	810718	-	-	-	-
						1.0	0.0	326	28.3		8.3		24.9		91.8		6.2		5.1		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	0.1	326	28.0	28.1	8.3	8.3	25.1	25.1	91.0	91.1	6.2	6.2	5.3		5		-				-		-	
						2.8	0.1	357	28.1		8.3		25.1		91.1		6.2		5.3		6		-				-		-	
SR6A	Cloudy	Calm	15:37	4.4	Surface	1.0	0.0	354	27.7	27.7	8.2	8.2	23.3	23.3	83.1	83.1	5.8	5.8	10.3	11.3	9	10	-	-	817984	814728	-	-	-	-
						1.0	0.0	326	27.7		8.2		23.3		83.0		5.7		10.3		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.0	178	27.5	27.5	8.2	8.2	25.1	25.1	80.9	81.0	5.6	5.6	12.4		10		-				-		-	
						3.4	0.0	186	27.5		8.2		25.1		81.0		5.6		12.2		10		-				-		-	
SR7	Fine	Moderate	15:13	15.6	Surface	1.0	0.8	59	27.8	27.8	7.9	7.9	24.4	24.4	90.5	90.5	6.2	6.0	1.1	1.3	6	5	-	-	823636	823752	-	-	-	-
						1.0	0.8	61	27.8		7.9		24.4		90.5		6.2		1.1		5		-				-		-	
					Middle	7.8	0.5	40	27.1	27.2	7.9	7.9	25.8	25.7	84.6	84.8	5.8		1.5		4		-				-		-	
						7.8	0.5	41	27.2		7.9		25.7		84.9		5.8		1.5		5		-				-		-	
					Bottom	14.6	0.4	32	27.1	27.1	8.0	8.0	26.0	26.0	87.0	87.4	6.0	6.0	1.5		4		-				-		-	
						14.6	0.5	33	27.1		8.0		26.0		87.8		6.0		1.5		5		-				-		-	
SR8	Fine	Moderate	14:08	4.8	Surface	1.0	-	-	27.8	27.9	8.0	8.0	23.6	23.6	88.7	88.8	6.1	6.1	4.5	6.0	3	3	-	-	820471	811699	-	-	-	-
						1.0	-	-	27.9		8.0		23.6		88.8		6.1		4.9		3		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	-	-	27.9	27.9	8.0	8.0	23.9	23.9	90.0	91.9	6.2	6.3	7.3		3		-				-		-	
						3.8	-	-	27.9		8.0		23.9		93.8		6.4		7.2		3		-				-		-	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 06 August 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	08:30	9.2	Surface	1.0	0.6	26	27.5	27.5	8.3	8.3	25.1	25.0	89.9	89.9	6.2	6.0	3.7	4.8	3	3	86	89	815605	804260	<0.2	<0.2	0.9	0.9
						1.0	0.6	27	27.5		8.3		25.0		89.9		6.2		3.8		4		86				<0.2		1.0	
					Middle	4.6	0.6	32	27.6	27.6	8.3	8.3	27.4	27.4	84.6	84.6	5.7		3.9		4		88				<0.2		0.8	
						4.6	0.7	34	27.6		8.3		27.4		84.6		5.7		3.9		4		88				<0.2		0.9	
					Bottom	8.2	0.6	18	27.6	27.6	8.3	8.3	28.6	28.6	83.7	83.8	5.6	5.6	6.8		2		91				<0.2		0.9	
						8.2	0.6	19	27.6		8.3		28.6		83.8		5.6		7.0		3		92				<0.2		0.9	
C2	Fine	Moderate	08:50	12.5	Surface	1.0	0.5	10	27.3	27.3	7.9	7.9	20.2	20.2	81.7	81.7	5.8	5.7	2.3	3.7	2	4	89	91	825684	806938	<0.2	<0.2	1.1	1.0
						1.0	0.5	10	27.3		7.9		20.2		81.6		5.8		2.2		3		89				<0.2		0.9	
					Middle	6.3	0.6	354	27.2	27.2	7.9	7.9	22.9	22.9	79.7	79.7	5.6		1.8		4		90				<0.2		1.1	
						6.3	0.6	326	27.2		7.9		23.0		79.7		5.6		1.8		3		90				<0.2		1.0	
					Bottom	11.5	0.3	355	27.1	27.1	7.9	7.9	23.6	23.6	81.2	81.3	5.7	5.7	7.1		6		93				<0.2		1.0	
						11.5	0.4	327	27.1		7.9		23.6		81.4		5.7		7.1		6		94				<0.2		1.1	
C3	Cloudy	Moderate	07:07	11.6	Surface	1.0	0.4	278	27.0	27.0	7.9	7.9	23.3	23.2	81.9	81.8	5.7	5.5	1.0	2.1	2	2	87	89	822104	817791	<0.2	<0.2	1.0	1.1
						1.0	0.4	299	27.0		7.9		23.2		81.7		5.7		1.0		3		87				<0.2		1.0	
					Middle	5.8	0.5	291	26.9	26.9	7.9	7.9	25.0	25.0	76.0	75.8	5.3		1.9		2		88				<0.2		1.1	
						5.8	0.5	319	26.9		7.9		25.0		75.6		5.3		2.1		2		88				<0.2		1.1	
					Bottom	10.6	0.5	286	26.6	26.6	7.9	7.9	26.9	26.9	72.7	72.7	5.0	5.0	3.4		2		92				<0.2		1.1	
						10.6	0.5	309	26.6		7.9		26.9		72.7		5.0		3.2		2		92				<0.2		1.1	
IM1	Cloudy	Moderate	08:49	5.7	Surface	1.0	0.2	14	27.6	27.6	8.3	8.3	25.2	25.3	85.6	85.6	5.9	5.9	5.9	9.1	2	3	87	89	817948	807151	<0.2	<0.2	1.0	1.0
						1.0	0.2	14	27.6		8.3		25.3		85.5		5.9		6.2		3		86				<0.2		1.1	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.7	0.1	350	27.5	27.5	8.3	8.3	25.6	25.6	83.6	83.7	5.7	5.7	12.3		2		90				<0.2		1.0	
						4.7	0.2	322	27.5		8.3		25.6		83.7		5.7		12.2		3		91				<0.2		1.0	
IM2	Cloudy	Moderate	08:56	7.7	Surface	1.0	0.4	355	27.6	27.6	8.2	8.2	25.0	25.0	89.5	89.5	6.1	5.9	4.5	9.1	3	3	85	88	818166	806156	<0.2	<0.2	1.1	1.1
						1.0	0.5	327	27.6		8.2		25.0		89.5		6.1		4.6		4		85				<0.2		1.0	
					Middle	3.9	0.3	3	27.6	27.6	8.2	8.2	26.2	26.2	83.2	83.2	5.7		9.7		3		88				<0.2		1.1	
						3.9	0.3	3	27.6		8.2		26.2		83.2		5.7		9.9		3		89				<0.2		1.1	
					Bottom	6.7	0.3	353	27.6	27.6	8.2	8.2	26.5	26.5	83.8	83.9	5.7	5.7	13.0		3		91				<0.2		1.0	
						6.7	0.4	325	27.6		8.2		26.5		83.9		5.7		12.8		3		91				<0.2		1.0	
IM3	Cloudy	Moderate	09:02	8.0	Surface	1.0	0.5	345	27.7	27.7	8.1	8.1	24.8	24.8	92.1	92.1	6.3	6.0	3.5	7.6	2	2	85	88	818788	805571	<0.2	<0.2	1.1	1.1
						1.0	0.5	317	27.7		8.1		24.8		92.0		6.3		3.7		2		85				<0.2		1.0	
					Middle	4.0	0.4	338	27.6	27.6	8.1	8.1	26.3	26.3	83.3	83.3	5.7		7.8		2		88				<0.2		1.0	
						4.0	0.4	353	27.6		8.1		26.3		83.3		5.7		8.0		2		88				<0.2		1.0	
					Bottom	7.0	0.4	337	27.6	27.6	8.1	8.1	26.4	26.4	84.3	84.4	5.7	5.7	11.2		<2		91				<0.2		1.2	
						7.0	0.4	348	27.6		8.1		26.4		84.4		5.7		11.2		<2		91				<0.2		1.0	
IM4	Cloudy	Moderate	09:10	9.1	Surface	1.0	0.6	353	27.7	27.7	8.1	8.1	24.8	24.8	91.7	91.7	6.3	6.0	3.9	8.1	3	2	84	88	819719	804594	<0.2	<0.2	1.0	1.0
						1.0	0.6	325	27.7		8.1		24.8		91.6		6.3		3.9		2		85				<0.2		1.0	
					Middle	4.6	0.6	350	27.6	27.6	8.1	8.1	26.7	26.7	84.3	84.3	5.7		7.8		2		88				<0.2		1.0	
						4.6	0.6	322	27.6		8.1		26.7		84.3		5.7		7.5		2		88				<0.2		1.0	
					Bottom	8.1	0.5	355	27.6	27.6	8.1	8.1	26.7	26.7	84.4	84.5	5.7	5.7	12.5		<2		91				<0.2		0.9	
						8.1	0.5	327	27.6		8.1		26.7		84.5		5.7		12.9		<2		91				<0.2		1.1	
IM5	Cloudy	Moderate	09:18	7.8	Surface	1.0	1.1	4	27.6	27.6	8.2	8.2	25.0	25.0	89.5	89.4	6.1	6.0	5.8	10.5	2	2	85	87	820728	804889	<0.2	<0.2	0.9	1.0
						1.0	1.2	4	27.6		8.2		25.1		89.2		6.1		6.1		2		84				<0.2		1.1	
					Middle	3.9	0.8	12	27.6	27.6	8.3	8.3	25.8	25.8	85.5	85.5	5.8		10.5		2		88				<0.2		1.1	
						3.9	0.8	12	27.6		8.3		25.8		85.4		5.8		10.2		2		87				<0.2		1.0	
					Bottom	6.8	0.7	14	27.6	27.6	8.3	8.3	25.9	25.9	85.0	85.0	5.8	5.8	15.2		2		90				<0.2		1.0	
						6.8	0.7	14	27.6		8.3		25.9		85.0		5.8		15.3		2		90				<0.2		1.1	
IM6	Cloudy	Moderate	09:26	8.2	Surface	1.0	0.1	249	27.7	27.7	8.1	8.1	22.1	22.1	90.5	90.5	6.3	6.3	3.0	5.0	2	2	85	88	821058	805825	<0.2	<0.2	1.1	1.1
						1.0	0.1	261	27.7		8.1		22.1		90.5		6.3		3.0		3		85				<0.2		1.0	
					Middle	4.1	0.3	39	27.6	27.6	8.1	8.1	23.6	23.6	89.4	89.4	6.2		3.7		3		88				<0.2		1.0	
						4.1	0.3	39	27.6		8.1		23.6		89.4		6.2		3.7		2		88				<0.2		1.0	
					Bottom	7.2	0.3	46	27.6	27.6	8.1	8.1	24.9	24.9	88.6	88.6	6.1	6.1	8.3		<2		91				<0.2		1.3	
						7.2	0.3	47	27.6		8.1		24.9		88.6		6.1		8.5		<2		90				<0.2		1.3	
IM7	Cloudy	Moderate	09:35	9.5	Surface	1.0	0.1	274	27.7	27.7	8.1	8.1	21.3	21.3	88.8	88.8	6.2	6.0	2.6	8.1	<2	2	85	88	821368	806848	<0.2	<0.2	1.4	1.5
						1.0	0.1	282	27.7		8.1		21.3		88.7		6.2		2.6		<2		85				<0.2		1.4	
					Middle	4.8	0.2	106	27.6	27.6	8.1	8.1	24.8	24.8	85.1	85.1	5.8		7.9		<2		88				<0.2		1.6	
						4.8	0.2	109	27.6		8.1		24.9		85.0		5.8		8.2		<2		88				<0.2		1.6	
					Bottom	8.5	0.2	98	27.5	27.5	8.1	8.1	25.7	25.7	84.3	84.3	5.8	5.8	13.3		2		91				<0.2		1.5	
						8.5	0.2	107	27.5		8.1		25.7		84.3		5.8		13.9		2		91				<0.2		1.6	
IM8	Fine	Moderate	08:25	8.4	Surface	1.0	0.1	137	27.3	27.3	7.9	7.9	20.8	20.8	83.9	83.9	5.9	5.8	1.3	1.8	2	4	88	91	821830	808147	<0.2	<0.2	1.0	1.0
						1.0	0.1	137	27.3		7.9		20.8		83.8		5.9		1.3		2		89				<0.2		1.0	
					Middle	4.2	0.1	264	27.2	27.2	7.9	7.9	21.8	21.8	81.5	81.5	5.7		2.2		4		90				<0.2		1.0	
						4.2	0.1	277	27.2		7.9		21.9		81.5		5.7		2.3		5		90				<0.2		1.0	
					Bottom	7.4	0.0	208	27.2	27.2	7.9	7.9	22.1	22.1	82.5	82.7	5.8	5.8	2.0		5		93				<0.2		1.1	
						7.4	0.0	221	27.2		7.9		22.1		82.8		5.8		2.0		4		93				<0.2		1.1	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 06 August 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	08:20	7.9	Surface	1.0	0.5	290	27.2	27.2	7.9	7.9	22.5	22.6	80.7	80.8	5.7	5.7	6.9	8.6	5	4	87	90	822102	808805	<0.2	<0.2	1.1	1.1
						1.0	0.5	307	27.2		7.9		22.6		80.8		5.7		7.1		4		87				<0.2		1.1	
					Middle	4.0	0.3	280	27.2	27.2	7.9	7.9	22.7	22.7	81.1	81.2	5.7		8.4		4		90				<0.2		1.1	
						4.0	0.3	290	27.2		7.9		22.7		81.3		5.7		8.3		4		90				<0.2		1.1	
					Bottom	6.9	0.2	289	27.2	27.2	7.9	7.9	22.7	22.6	82.7	83.2	5.8	5.9	10.9		4		93				<0.2		1.1	
						6.9	0.2	308	27.2		7.9		22.6		83.7		5.9		10.4		5		93				<0.2		1.1	
IM10	Fine	Moderate	08:13	9.3	Surface	1.0	0.8	286	27.2	27.2	7.9	7.9	21.0	21.0	83.8	83.8	5.9	5.7	2.7	7.2	<2	<2	85	89	822365	809813	<0.2	<0.2	1.1	1.1
						1.0	0.8	298	27.2		7.9		21.0		83.7		5.9		2.6		<2		86				<0.2		1.1	
					Middle	4.7	0.7	291	27.1	27.1	7.9	7.9	23.3	23.3	79.2	79.3	5.5		8.5		<2		89				<0.2		1.2	
						4.7	0.7	300	27.1		7.9		23.3		79.3		5.5		8.5		<2		89				<0.2		1.1	
					Bottom	8.3	0.6	284	27.1	27.1	7.9	7.9	23.9	23.9	80.1	80.3	5.6	5.6	10.7		<2		93				<0.2		1.0	
						8.3	0.6	288	27.1		7.9		23.9		80.5		5.6		10.3		<2		93				<0.2		1.0	
IM11	Cloudy	Moderate	08:03	8.2	Surface	1.0	0.7	326	27.1	27.1	7.9	7.9	21.9	21.9	79.1	79.0	5.6	5.5	4.4	6.8	2	2	86	89	822038	811480	<0.2	<0.2	0.9	1.0
						1.0	0.7	340	27.1		7.9		21.9		78.8		5.5		4.9		3		86				<0.2		1.1	
					Middle	4.1	0.7	320	27.0	27.0	7.9	7.9	24.2	24.2	78.2	78.2	5.4		7.4		<2		89				<0.2		1.0	
						4.1	0.8	351	27.0		7.9		24.3		78.2		5.4		7.2		<2		89				<0.2		1.0	
					Bottom	7.2	0.6	317	26.9	27.0	7.9	7.9	24.7	24.7	78.8	79.0	5.5	5.5	8.5		<2		92				<0.2		1.1	
						7.2	0.6	324	27.0		7.9		24.7		79.2		5.5		8.4		<2		92				<0.2		1.0	
IM12	Cloudy	Moderate	07:57	8.8	Surface	1.0	0.7	281	27.2	27.2	7.9	7.9	21.8	21.8	81.2	81.1	5.7	5.6	3.5	4.5	4	4	86	89	821474	812053	<0.2	<0.2	1.1	1.1
						1.0	0.7	297	27.2		7.9		21.8		81.0		5.7		3.5		4		86				<0.2		1.1	
					Middle	4.4	0.7	276	27.0	27.0	7.9	7.9	24.3	24.3	78.4	78.4	5.5		5.8		4		88				<0.2		1.1	
						4.4	0.7	296	27.0		7.9		24.3		78.4		5.5		5.7		4		88				<0.2		0.9	
					Bottom	7.8	0.5	272	26.9	26.9	7.9	7.9	24.4	24.4	79.8	79.9	5.6	5.6	4.3		4		92				<0.2		1.2	
						7.8	0.6	298	26.9		7.9		24.4		80.0		5.6		4.4		3		93				<0.2		1.0	
SR1A	Cloudy	Moderate	07:40	5.1	Surface	1.0	-	-	27.1	27.1	7.9	7.9	21.3	21.3	83.8	83.8	5.9	5.9	1.4	1.9	2	3	-	-	819976	812663	-	-	-	-
						1.0	-	-	27.1		7.9		21.4		83.7		5.9		1.4		3		-				-		-	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	-	-	27.1	27.1	7.9	7.9	22.0	21.9	83.8	83.9	5.9	5.9	2.4		4		-				-		-	
						4.1	-	-	27.1		7.9		21.9		83.9		5.9		2.5		3		-				-		-	
SR2	Cloudy	Moderate	07:27	5.0	Surface	1.0	0.1	11	27.0	27.0	7.9	7.9	23.7	23.8	80.3	80.3	5.6	5.6	3.4	4.1	<2	<2	87	90	821440	814185	<0.2	<0.2	1.0	1.1
						1.0	0.1	11	27.0		7.9		23.8		80.3		5.6		3.5		<2		88				<0.2		1.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.1	24	26.8	26.8	7.9	7.9	24.5	24.5	84.4	84.8	5.9	6.0	4.8		<2		92				<0.2		1.0	
						4.0	0.1	24	26.7		7.9		24.5		85.2		6.0		4.9		<2		93				<0.2		1.2	
SR3	Fine	Moderate	08:31	9.5	Surface	1.0	0.1	217	27.4	27.4	7.9	7.9	20.0	20.0	83.7	83.7	5.9	5.8	1.7	4.6	6	6	-	-	822153	807587	-	-	-	-
						1.0	0.1	232	27.4		7.9		20.0		83.7		5.9		1.7		6		-				-		-	
					Middle	4.8	0.2	268	27.2	27.2	7.9	7.9	21.9	21.9	79.7	79.7	5.6		4.3		5		-				-		-	
						4.8	0.2	280	27.2		7.9		21.9		79.7		5.6		4.3		6		-				-		-	
					Bottom	8.5	0.2	37	27.2	27.2	7.9	7.9	24.2	24.2	80.3	80.5	5.6	5.6	7.8		5		-				-		-	
						8.5	0.2	38	27.2		7.9		24.2		80.6		5.6		7.7		5		-				-		-	
SR4A	Cloudy	Calm	08:07	9.6	Surface	1.0	0.1	220	27.4	27.4	8.3	8.3	24.7	24.7	86.3	86.3	5.9	5.9	4.0	5.0	3	3	-	-	817172	807813	-	-	-	-
						1.0	0.1	231	27.4		8.3		24.7		86.3		5.9		4.1		4		-				-		-	
					Middle	4.8	0.1	243	27.4	27.4	8.3	8.3	24.9	24.9	85.3	85.3	5.9		4.7		4		-				-		-	
						4.8	0.1	265	27.4		8.3		24.9		85.3		5.9		4.7		3		-				-		-	
					Bottom	8.6	0.1	85	27.5	27.5	8.3	8.3	25.5	25.5	82.9	83.0	5.7	5.7	6.2		3		-				-		-	
						8.6	0.1	86	27.5		8.3		25.5		83.0		5.7		6.2		2		-				-		-	
SR5A	Cloudy	Calm	07:51	3.5	Surface	1.0	0.1	282	27.4	27.4	8.3	8.3	24.7	24.7	86.2	86.2	5.9	5.9	4.7	5.0	3	2	-	-	816596	810704	-	-	-	-
						1.0	0.1	294	27.4		8.3		24.7		86.2		5.9		4.7		2		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.5	0.1	282	27.4	27.4	8.1	8.1	24.7	24.7	86.1	86.1	5.9	5.9	5.4		2		-				-		-	
						2.5	0.1	284	27.4		8.1		24.7		86.1		5.9		5.3		2		-				-		-	
SR6A	Cloudy	Calm	07:25	4.3	Surface	1.0	0.1	254	27.3	27.3	8.3	8.3	23.5	23.5	86.3	86.3	6.0	6.0	3.9	6.5	<2	2	-	-	817986	814725	-	-	-	-
						1.0	0.1	259	27.3		8.3		23.5		86.3		6.0		4.1		<2		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.1	190	27.4	27.4	8.3	8.3	24.8	24.8	80.2	80.2	5.5	5.5	9.1		2		-				-		-	
						3.3	0.1	190	27.4		8.3		24.8		80.2		5.5		9.0		2		-				-		-	
SR7	Cloudy	Moderate	06:36	15.8	Surface	1.0	0.0	290	26.7	26.7	7.9	7.9	24.5	24.5	80.9	80.9	5.6	5.4	1.3	1.3	3	2	-	-	823627	823751	-	-	-	-
						1.0	0.0	317	26.7		7.9		24.5		80.8		5.6		1.3		2		-				-		-	
					Middle	7.9	0.1	181	26.7	26.7	7.9	7.9	25.8	25.8	75.5	75.4	5.2		1.2		<2		-				-		-	
						7.9	0.1	196	26.7		7.9		25.8		75.3		5.2		1.2		<2		-				-		-	
					Bottom	14.8	0.2	191	26.7	26.7	7.9	7.9	26.7	26.7	72.9	73.0	5.0	5.0	1.4		<2		-				-		-	
						14.8	0.2	209	26.7		7.9		26.7		73.0		5.0		1.4		<2		-				-		-	
SR8	Cloudy	Moderate	07:49	4.8	Surface	1.0	-	-	27.2	27.2	7.9	7.9	22.9	23.0	81.3	81.3	5.7	5.7	5.6	6.9	4	4	-	-	820382	811608	-	-	-	-
						1.0	-	-	27.2		7.9		23.0		81.3		5.7		5.4		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	-	-	27.1	27.1	7.9	7.9	23.6	23.6	81.1	81.5	5.7	5.7	8.2		4		-				-		-	
						3.8	-	-	27.0		7.9		23.6		81.8		5.7		8.4		4		-				-		-	

DA: Depth-Averaged

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

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

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 08 August 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	Sunny	Moderate	15:10	8.7	Surface	1.0	0.4	237	29.3	29.3	8.1	8.1	22.5	22.5	102.7	102.6	6.9	6.5	2.4	6.3	<2	2	80	85	815618	804224	<0.2	<0.2	1.1	1.1
						1.0	0.4	253	29.2		8.1		22.6		102.5		6.9		2.4		<2		81				<0.2		1.1	
					Middle	4.4	0.4	214	28.1	28.1	8.1	8.1	26.8	26.8	89.0	88.9	6.0		2.7		<2		86				<0.2		1.0	
						4.4	0.4	222	28.1		8.1		26.8		88.8		6.0		2.4		<2		85				<0.2		1.0	
					Bottom	7.7	0.3	195	27.8	27.8	8.0	8.0	27.7	27.7	80.3	80.3	5.4	5.4	14.1		3		89				<0.2		1.1	
						7.7	0.3	209	27.8		8.0		27.7		80.3		5.4		14.0		2		89				<0.2		1.0	
C2	Fine	Moderate	14:07	12.6	Surface	1.0	0.2	135	28.6	28.6	8.4	8.4	23.7	23.7	91.9	91.9	6.2	6.1	4.6	5.5	2	2	85	88	825685	806966	<0.2	<0.2	1.5	1.5
						1.0	0.2	140	28.6		8.4		23.7		91.9		6.2		4.6		2		85				<0.2		1.5	
					Middle	6.3	0.5	154	28.3	28.3	8.5	8.5	24.7	24.7	86.8	86.8	5.9		5.3		<2		88				<0.2		1.5	
						6.3	0.5	166	28.3		8.5		24.7		86.7		5.9		5.2		<2		88				<0.2		1.4	
					Bottom	11.6	0.5	144	27.7	27.7	8.6	8.6	27.4	27.4	78.4	78.6	5.3	5.3	6.8		<2		91				<0.2		1.5	
						11.6	0.5	145	27.7		8.6		27.4		78.7		5.3		6.6		<2		90				<0.2		1.5	
C3	Fine	Moderate	15:51	11.6	Surface	1.0	0.4	286	28.9	28.9	8.3	8.3	25.5	25.5	105.3	105.3	7.0	6.6	2.3	3.1	3	2	86	89	822132	817805	<0.2	<0.2	1.2	1.0
						1.0	0.4	294	28.9		8.3		25.5		105.3		7.0		2.3		3		85				<0.2		1.2	
					Middle	5.8	0.2	257	28.2	28.2	8.4	8.4	26.6	26.6	91.9	91.9	6.2		2.7		<2		89				<0.2		0.9	
						5.8	0.2	259	28.2		8.4		26.6		91.8		6.2		2.7		<2		89				<0.2		1.0	
					Bottom	10.6	0.1	120	27.5	27.5	8.4	8.4	28.4	28.4	79.2	79.3	5.3	5.4	4.4		<2		91				<0.2		1.0	
						10.6	0.1	129	27.5		8.4		28.4		79.4		5.4		4.4		<2		91				<0.2		0.9	
IM1	Sunny	Moderate	14:51	5.3	Surface	1.0	0.1	222	29.6	29.6	8.1	8.1	22.9	22.9	108.4	108.3	7.3	7.3	1.1	4.7	<2	<2	82	86	817926	807137	<0.2	<0.2	0.8	0.9
						1.0	0.1	235	29.6		8.1		22.9		108.2		7.3		1.1		<2		83				<0.2		1.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	0.1	179	28.1	28.1	8.0	8.0	25.2	25.2	86.0	86.1	5.8	5.8	8.3		<2		88				<0.2		0.9	
						4.3	0.1	195	28.1		8.0		25.2		86.1		5.8		8.3		<2		89				<0.2		0.9	
IM2	Sunny	Moderate	14:43	7.3	Surface	1.0	0.2	160	28.7	28.7	8.1	8.1	23.9	23.9	103.1	103.1	7.0	6.5	1.5	6.7	2	2	81	86	818180	806160	<0.2	<0.2	0.9	0.9
						1.0	0.2	161	28.7		8.1		23.9		103.0		7.0		1.5		2		82				<0.2		0.9	
					Middle	3.7	0.1	154	28.2	28.2	8.0	8.0	25.2	25.2	89.1	89.0	6.0		5.4		<2		86				<0.2		1.0	
						3.7	0.1	161	28.2		8.0		25.2		88.9		6.0		5.3		<2		86				<0.2		0.9	
					Bottom	6.3	0.2	104	28.0	28.0	8.0	8.0	26.4	26.4	82.6	82.7	5.6	5.6	13.2		<2		89				<0.2		0.9	
						6.3	0.2	106	28.0		8.0		26.4		82.7		5.6		13.2		<2		89				<0.2		0.9	
IM3	Sunny	Moderate	14:36	7.5	Surface	1.0	0.2	120	28.6	28.6	8.1	8.1	24.3	24.3	96.8	96.8	6.6	6.3	2.3	3.6	2	2	81	85	818760	805577	<0.2	<0.2	0.9	1.0
						1.0	0.2	126	28.6		8.1		24.3		96.8		6.6		2.2		2		81				<0.2		0.9	
					Middle	3.8	0.2	135	28.2	28.2	8.0	8.0	25.3	25.3	89.0	89.1	6.0		2.6		<2		85				<0.2		1.0	
						3.8	0.2	146	28.2		8.0		25.3		89.1		6.0		2.6		<2		85				<0.2		1.0	
					Bottom	6.5	0.2	114	28.0	28.0	8.0	8.0	26.4	26.4	84.5	84.5	5.7	5.7	5.9		<2		90				<0.2		1.1	
						6.5	0.2	124	28.0		8.0		26.4		84.5		5.7		5.9		<2		89				<0.2		0.9	
IM4	Sunny	Moderate	14:27	8.4	Surface	1.0	0.5	178	28.4	28.4	8.0	8.0	24.5	24.5	89.8	89.8	6.1	5.9	2.6	5.2	2	2	80	85	819702	804605	<0.2	<0.2	1.2	1.1
						1.0	0.5	180	28.4		8.0		24.5		89.7		6.1		2.6		2		81				<0.2		1.2	
					Middle	4.2	0.4	162	28.0	28.0	8.0	8.0	26.5	26.5	82.9	83.0	5.6		5.8		<2		84				<0.2		1.2	
						4.2	0.4	174	28.0		8.0		26.5		83.1		5.6		5.5		<2		85				<0.2		1.1	
					Bottom	7.4	0.3	150	27.9	27.9	8.0	8.0	26.8	26.8	81.4	81.5	5.5	5.5	7.2		<2		89				<0.2		1.0	
						7.4	0.3	156	27.9		8.0		26.8		81.5		5.5		7.3		<2		89				<0.2		0.9	
IM5	Sunny	Moderate	14:19	7.5	Surface	1.0	0.5	239	28.7	28.7	8.0	8.0	22.9	22.9	98.2	98.1	6.7	6.4	1.6	4.1	<2	<2	82	85	820755	804875	<0.2	<0.2	1.2	1.2
						1.0	0.5	245	28.7		8.0		23.0		98.0		6.7		1.6		<2		83				<0.2		1.2	
					Middle	3.8	0.4	220	28.1	28.1	8.0	8.0	25.9	25.9	88.6	88.8	6.0		3.0		<2		86				<0.2		1.2	
						3.8	0.4	225	28.1		8.0		25.8		88.9		6.0		3.0		<2		86				<0.2		1.2	
					Bottom	6.5	0.4	189	27.9	27.9	8.0	8.0	26.7	26.7	81.1	81.2	5.5	5.5	7.5		<2		87				<0.2		1.2	
						6.5	0.4	206	27.9		8.0		26.7		81.2		5.5		7.6		<2		87				<0.2		1.0	
IM6	Sunny	Moderate	14:12	7.8	Surface	1.0	0.3	271	28.8	28.8	8.0	8.0	22.6	22.6	98.8	98.7	6.7	6.2	1.8	6.0	4	4	80	85	821062	805830	<0.2	<0.2	1.0	1.0
						1.0	0.4	285	28.8		8.0		22.7		98.5		6.7		1.8		3		81				<0.2		0.9	
					Middle	3.9	0.3	264	28.1	28.1	8.0	8.0	25.6	25.6	84.2	84.3	5.7		5.2		3		86				<0.2		1.0	
						3.9	0.4	281	28.1		8.0		25.6		84.4		5.7		5.1		4		87				<0.2		1.0	
					Bottom	6.8	0.2	237	27.9	27.9	8.0	8.0	26.1	26.1	80.3	80.3	5.4	5.4	11.0		5		88				<0.2		0.9	
						6.8	0.2	248	27.9		8.0		26.1		80.3		5.4		11.0		5		89				<0.2		1.0	
IM7	Sunny	Moderate	14:06	9.0	Surface	1.0	0.3	222	28.7	28.7	8.0	8.0	22.6	22.6	98.0	98.0	6.7	6.4	1.8	3.1	2	2	81	85	821325	806836	<0.2	<0.2	1.3	1.4
						1.0	0.3	229	28.7		8.0		22.6		97.9		6.7		1.8		<2		82				<0.2		1.5	
					Middle	4.5	0.2	187	28.3	28.3	8.0	8.0	24.6	24.6	90.0	90.0	6.1		2.9		2		85				<0.2		1.5	
						4.5	0.2	190	28.3		8.0		24.6		89.9		6.1		3.0		2		85				<0.2		1.5	
					Bottom	8.0	0.2	149	28.1	28.1	8.0	8.0	25.1	25.1	85.7	85.8	5.8	5.8	4.4		2		89				<0.2		1.4	
						8.0	0.2	159	28.1		8.0		25.1		85.8		5.8		4.4		2		89				<0.2		1.4	
IM8	Fine	Moderate	14:30	8.3	Surface	1.0	0.1	131	28.9	28.9	8.3	8.3	22.6	22.6	101.1	101.1	6.9	6.6	3.0	4.6	3	3	84	87	821826	808158	<0.2	<0.2	1.3	1.3
						1.0	0.1	134	28.9		8.3		22.6		101.0		6.9		3.1		4		84				<0.2		1.3	
					Middle	4.2	0.2	123	28.6	28.6	8.4	8.4	24.3	24.3	92.9	92.9	6.3		4.8		<2		87				<0.2		1.3	
						4.2	0.2	133	28.6		8.4		24.3		92.9		6.3		4.9		<2		87				<0.2		1.3	
					Bottom	7.3	0.1	78	28.7	28.7	8.4	8.4	25.3	25.3	93.5	93.6	6.3	6.3	5.8		<2		89				<0.2		1.3	
						7.3	0.1	81	28.7		8.4		25.3		93.6		6.3		5.8		<2		89				<0.2		1.4	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 08 August 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	14:36	7.7	Surface	1.0	0.2	99	29.3	29.3	8.3	8.3	21.6	21.6	108.2	108.2	7.3	7.0	2.9	4.5	<2	<2	83	87	822112	808823	<0.2	<0.2	1.5	1.4
						1.0	0.2	100	29.3		8.3		21.6		108.1		7.3		3.0		<2		84				<0.2		1.5	
					Middle	3.9	0.2	106	28.7	28.7	8.3	8.3	23.9	23.9	97.9	98.0	6.6		4.3		<2		87				<0.2		1.4	
						3.9	0.2	115	28.7		8.3		23.9		98.0		6.6		4.2		<2		87				<0.2		1.4	
					Bottom	6.7	0.2	71	28.7	28.7	8.4	8.4	24.9	24.8	93.6	93.6	6.3	6.3	6.2		<2		90				<0.2		1.4	
						6.7	0.2	73	28.7		8.4		24.8		93.6		6.3		6.4		<2		89				<0.2		1.4	
IM10	Fine	Moderate	14:44	7.8	Surface	1.0	0.6	122	30.0	30.0	8.2	8.2	21.5	21.4	110.7	110.7	7.4	7.2	2.7	4.5	<2	<2	84	87	822401	809775	<0.2	<0.2	1.3	1.4
						1.0	0.7	130	30.0		8.2		21.3		110.7		7.5		2.7		<2		84				<0.2		1.4	
					Middle	3.9	0.6	122	28.7	28.7	8.3	8.3	23.9	24.0	103.1	102.7	7.0		3.4		<2		87				<0.2		1.4	
						3.9	0.6	133	28.7		8.3		24.0		102.3		6.9		3.4		<2		87				<0.2		1.4	
					Bottom	6.8	0.4	101	28.4	28.4	8.3	8.3	25.1	25.1	85.4	85.4	5.8	5.8	7.4		<2		89				<0.2		1.4	
						6.8	0.4	106	28.4		8.3		25.1		85.4		5.8		7.5		<2		89				<0.2		1.3	
IM11	Fine	Moderate	14:54	8.8	Surface	1.0	0.7	119	29.3	29.3	8.3	8.3	22.4	22.4	111.4	111.4	7.5	7.1	2.6	5.2	<2	2	84	88	822055	811464	<0.2	<0.2	1.4	1.4
						1.0	0.8	130	29.3		8.3		22.4		111.3		7.5		2.6		2		85				<0.2		1.5	
					Middle	4.4	0.7	120	28.6	28.6	8.4	8.4	24.1	24.1	98.2	98.1	6.7		3.6		<2		88				<0.2		1.4	
						4.4	0.8	131	28.6		8.4		24.1		98.0		6.6		3.6		<2		88				<0.2		1.2	
					Bottom	7.8	0.4	116	28.2	28.2	8.5	8.5	25.5	25.5	89.4	89.5	6.1	6.1	9.4		<2		90				<0.2		1.3	
						7.8	0.5	118	28.2		8.5		25.5		89.6		6.1		9.6		<2		90				<0.2		1.3	
IM12	Fine	Moderate	15:00	10.1	Surface	1.0	0.5	95	29.6	29.6	8.3	8.3	21.9	21.8	110.7	110.7	7.5	6.8	2.5	5.3	3	3	85	88	821448	812045	<0.2	<0.2	1.3	1.3
						1.0	0.5	102	29.6		8.3		21.8		110.6		7.5		2.6		3		84				<0.2		1.4	
					Middle	5.1	0.4	116	28.4	28.4	8.4	8.4	24.6	24.6	89.4	89.3	6.1		4.9		3		88				<0.2		1.3	
						5.1	0.4	116	28.4		8.4		24.7		89.2		6.1		5.1		3		88				<0.2		1.4	
					Bottom	9.1	0.2	92	28.3	28.3	8.5	8.5	25.2	25.2	86.7	86.9	5.9	5.9	8.3		<2		90				<0.2		1.4	
						9.1	0.2	99	28.3		8.5		25.3		87.0		5.9		8.2		<2		90				<0.2		1.2	
SR1A	Fine	Moderate	15:19	5.2	Surface	1.0	-	-	29.0	29.1	8.3	8.3	23.4	23.4	98.7	98.7	6.7	6.7	3.2	3.5	3	3	-	-	819975	812659	-	-	-	-
						1.0	-	-	29.1		8.4		23.4		98.7		6.7		3.3		3		-				-		-	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	-	-	28.5	28.5	8.5	8.5	25.0	25.0	92.6	92.6	6.3	6.3	3.7		3		-				-		-	
						4.2	-	-	28.5		8.5		25.0		92.6		6.3		3.8		3		-				-		-	
SR2	Fine	Moderate	15:32	4.9	Surface	1.0	0.3	107	29.0	29.0	8.4	8.4	23.6	23.6	105.6	105.7	7.1	7.2	3.3	4.1	<2	3	86	87	821440	814174	<0.2	<0.2	1.2	1.2
						1.0	0.3	114	29.0		8.4		23.6		105.8		7.2		3.4		2		86				<0.2		1.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	0.2	117	28.6	28.6	8.4	8.4	24.2	24.2	96.3	96.3	6.5	6.5	4.8		3		89				<0.2		1.3	
						3.9	0.2	123	28.6		8.4		24.2		96.3		6.5		4.8		3		88				<0.2		1.2	
SR3	Fine	Moderate	14:24	9.4	Surface	1.0	0.2	198	28.8	28.9	8.4	8.4	22.6	22.6	102.1	102.2	6.9	6.6	2.6	4.1	2	3	-	-	822131	807589	-	-	-	-
						1.0	0.2	203	28.9		8.4		22.6		102.2		7.0		2.6		<2		-				-		-	
					Middle	4.7	0.2	182	28.5	28.5	8.5	8.5	24.3	24.2	90.7	90.8	6.2		4.4		3		-				-		-	
						4.7	0.2	196	28.5		8.5		24.2		90.8		6.2		4.3		3		-				-		-	
					Bottom	8.4	0.1	250	28.4	28.4	8.6	8.6	24.6	24.6	89.1	89.2	6.0	6.1	5.3		3		-				-		-	
						8.4	0.1	271	28.4		8.6		24.6		89.3		6.1		5.3		3		-				-		-	
SR4A	Sunny	Calm	15:33	9.2	Surface	1.0	0.2	52	29.0	29.0	8.1	8.1	23.8	23.8	100.8	100.8	6.8	6.4	3.1	5.5	3	3	-	-	817174	807802	-	-	-	-
						1.0	0.2	53	29.0		8.1		23.8		100.7		6.8		3.3		3		-				-		-	
					Middle	4.6	0.1	78	28.3	28.3	8.0	8.0	25.0	25.0	88.0	88.0	6.0		5.5		2		-				-		-	
						4.6	0.1	81	28.3		8.0		25.0		87.9		6.0		5.5		3		-				-		-	
					Bottom	8.2	0.1	52	28.2	28.2	8.0	8.0	25.3	25.3	79.5	79.7	5.4	5.4	7.8		3		-				-		-	
						8.2	0.1	56	28.2		8.0		25.3		79.8		5.4		7.6		4		-				-		-	
SR5A	Sunny	Calm	15:51	5.0	Surface	1.0	0.1	138	29.5	29.5	8.0	8.0	23.2	23.2	100.1	100.1	6.7	6.7	2.8	4.8	4	4	-	-	816577	810674	-	-	-	-
						1.0	0.1	138	29.5		8.0		23.2		100.0		6.7		2.8		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.0	33	28.4	28.4	8.0	8.0	23.9	23.9	87.6	87.6	6.0	6.0	6.7		4		-				-		-	
						4.0	0.0	33	28.4		8.0		23.9		87.6		6.0		6.8		4		-				-		-	
SR6A	Sunny	Calm	16:18	4.3	Surface	1.0	0.2	15	29.3	29.3	8.0	8.0	22.8	22.8	98.1	98.1	6.6	6.6	4.5	4.2	5	5	-	-	817949	814721	-	-	-	-
						1.0	0.2	15	29.3		8.0		22.8		98.0		6.6		4.3		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.0	30	28.1	28.1	8.0	8.0	24.4	24.4	85.7	85.8	5.9	5.9	4.0		5		-				-		-	
						3.3	0.0	32	28.1		8.0		24.4		85.8		5.9		3.9		5		-				-		-	
SR7	Fine	Moderate	16:20	15.6	Surface	1.0	0.6	61	28.6	28.6	8.3	8.3	25.7	25.7	112.0	112.0	7.5	7.5	2.1	2.2	<2	2	-	-	823628	823729	-	-	-	-
						1.0	0.7	61	28.6		8.3		25.7		111.9		7.5		2.1		2		-				-		-	
					Middle	7.8	0.2	14	28.5	28.5	8.3	8.3	26.1	26.0	110.0	110.0	7.4		2.3		<2		-				-		-	
						7.8	0.2	14	28.5		8.3		26.0		110.0		7.4		2.3		2		-				-		-	
					Bottom	14.6	0.2	55	28.5	28.5	8.4	8.4	26.1	26.1	108.7	108.7	7.3	7.3	2.2		2		-				-		-	
						14.6	0.2	58	28.5		8.4		26.1		108.7		7.3		2.1		2		-				-		-	
SR8	Fine	Moderate	15:10	5.1	Surface	1.0	-	-	29.1	29.1	8.4	8.4	23.4	23.4	98.3	98.3	6.6	6.6	3.2	5.7	2	2	-	-	820384	811608	-	-	-	-
						1.0	-	-	29.1		8.4		23.4		98.2		6.6		3.2		2		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	-	-	29.3	29.3	8.5	8.5	24.0	24.1	95.9	95.9	6.4	6.4	8.2		2		-				-		-	
						4.1	-	-	29.3		8.5		24.1		95.8		6.4		8.3		2		-				-		-	

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 08 August 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	09:36	9.0	Surface	1.0	0.4	20	28.3	28.3	8.0	8.0	23.5	23.5	88.8	88.8	6.1	5.8	1.7	6.1	3	2	84	88	815611	804255	<0.2	<0.2	1.1	1.0
						1.0	0.4	21	28.3		8.0		23.5		88.7		6.1		1.7		3		85				<0.2		1.0	
					Middle	4.5	0.5	14	27.9	27.9	8.0	8.0	26.6	26.5	80.5	80.5	5.5		3.2		2		88				<0.2		1.0	
						4.5	0.5	14	27.9		8.0		26.5		80.5		5.5		3.3		<2		87				<0.2		1.0	
					Bottom	8.0	0.3	21	27.7	27.7	8.0	8.0	28.1	28.1	77.6	77.7	5.2	5.2	13.6		<2		91				<0.2		1.0	
						8.0	0.4	22	27.7		8.0		28.1		77.7		5.2		13.3		<2		91				<0.2		1.1	
C2	Fine	Moderate	10:15	12.1	Surface	1.0	0.3	350	28.6	28.6	8.2	8.2	20.9	20.9	91.3	91.3	6.3	6.1	2.6	5.9	<2	<2	84	88	825678	806943	<0.2	<0.2	1.6	1.6
						1.0	0.3	322	28.6		8.2		20.9		91.2		6.3		2.6		<2		85				<0.2		1.6	
					Middle	6.1	0.4	28	28.4	28.4	8.2	8.2	24.3	24.3	85.4	85.4	5.8		6.0		<2		87				<0.2		1.6	
						6.1	0.4	29	28.4		8.2		24.3		85.4		5.8		5.2		<2		88				<0.2		1.7	
					Bottom	11.1	0.4	346	28.0	28.0	8.2	8.2	25.7	25.7	79.4	79.5	5.4	5.4	9.3		<2		90				<0.2		1.6	
						11.1	0.5	358	28.0		8.2		25.7		79.5		5.4		9.4		<2		91				<0.2		1.7	
C3	Fine	Moderate	08:28	11.9	Surface	1.0	0.3	241	28.4	28.4	8.2	8.2	24.0	24.0	89.1	89.1	6.1	5.8	2.2	3.8	<2	2	85	88	822119	817782	<0.2	<0.2	0.9	1.0
						1.0	0.3	245	28.3		8.2		24.0		89.0		6.1		2.2		<2		85				<0.2		0.9	
					Middle	6.0	0.4	252	27.8	27.8	8.2	8.2	26.5	26.5	79.8	79.8	5.4		2.4		<2		88				<0.2		0.9	
						6.0	0.4	273	27.8		8.2		26.5		79.8		5.4		2.4		<2		88				<0.2		1.0	
					Bottom	10.9	0.4	266	27.4	27.4	8.2	8.2	28.4	28.4	76.7	76.9	5.2	5.2	6.9		2		91				<0.2		1.0	
						10.9	0.4	290	27.4		8.2		28.4		77.0		5.2		6.7		<2		91				<0.2		1.2	
IM1	Fine	Moderate	09:56	5.3	Surface	1.0	0.1	322	28.7	28.7	8.0	8.0	23.6	23.6	93.2	93.1	6.3	6.3	1.5	6.0	3	3	86	89	817933	807116	<0.2	<0.2	1.0	1.0
						1.0	0.1	347	28.7		8.0		23.6		93.0		6.3		1.5		3		85				<0.2		1.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	0.2	2	28.0	28.0	8.0	8.0	25.8	25.8	79.5	79.5	5.4	5.4	10.5		2		92				<0.2		1.0	
						4.3	0.2	2	28.0		8.0		25.8		79.5		5.4		10.6		2		92				<0.2		1.1	
IM2	Fine	Moderate	10:03	7.5	Surface	1.0	0.3	349	28.4	28.5	8.0	8.0	23.2	23.2	93.4	93.3	6.4	6.2	1.4	5.3	<2	2	86	89	818181	806146	<0.2	<0.2	0.9	1.0
						1.0	0.3	321	28.5		8.0		23.2		93.2		6.4		1.4		<2		86				<0.2		1.0	
					Middle	3.8	0.3	357	28.2	28.2	8.0	8.0	23.7	23.7	87.2	87.2	6.0		1.8		<2		90				<0.2		1.0	
						3.8	0.4	328	28.2		8.0		23.7		87.2		6.0		1.7		<2		90				<0.2		1.0	
					Bottom	6.5	0.2	335	28.0	28.0	8.0	8.0	26.0	26.0	80.7	80.8	5.5	5.5	13.2		<2		91				<0.2		1.0	
						6.5	0.3	308	28.0		8.0		26.0		80.8		5.5		12.4		2		91				<0.2		1.1	
IM3	Sunny	Moderate	10:10	7.8	Surface	1.0	0.4	351	28.3	28.3	8.0	8.0	22.9	22.9	93.3	93.2	6.4	6.1	1.4	6.7	2	2	87	89	818762	805600	<0.2	<0.2	0.9	1.0
						1.0	0.4	323	28.3		8.0		22.9		93.1		6.4		1.4		<2		86				<0.2		1.0	
					Middle	3.9	0.4	358	28.2	28.2	8.0	8.0	23.9	23.9	84.9	84.8	5.8		3.0		2		89				<0.2		1.0	
						3.9	0.4	329	28.1		8.0		23.9		84.6		5.8		3.2		<2		89				<0.2		1.0	
					Bottom	6.8	0.2	340	27.9	27.9	8.0	8.0	26.3	26.3	78.8	78.9	5.3	5.3	15.2		<2		92				<0.2		1.0	
						6.8	0.3	313	27.9		8.0		26.3		78.9		5.3		16.0		<2		92				<0.2		1.0	
IM4	Sunny	Moderate	10:20	8.4	Surface	1.0	0.7	353	28.1	28.1	8.0	8.0	23.8	23.8	85.9	85.9	5.9	5.7	1.7	7.9	2	2	86	89	819726	804628	<0.2	<0.2	0.9	1.0
						1.0	0.7	325	28.1		8.0		23.8		85.9		5.9		1.6		2		86				<0.2		1.0	
					Middle	4.2	0.7	359	28.0	28.0	8.0	8.0	25.2	25.2	80.3	80.3	5.5		7.7		<2		90				<0.2		1.0	
						4.2	0.7	330	28.0		8.0		25.2		80.2		5.5		7.5		2		89				<0.2		1.0	
					Bottom	7.4	0.5	356	27.9	27.9	8.0	8.0	26.0	26.0	77.0	77.1	5.2	5.2	14.7		3		92				<0.2		1.0	
						7.4	0.5	328	27.9		8.0		26.0		77.1		5.2		14.4		3		92				<0.2		1.0	
IM5	Sunny	Moderate	10:27	8.2	Surface	1.0	1.1	3	28.2	28.2	8.0	8.0	23.4	23.4	89.1	89.0	6.1	5.8	1.4	7.4	2	2	86	90	820731	804872	<0.2	<0.2	0.9	1.0
						1.0	1.2	3	28.2		8.0		23.4		88.8		6.1		1.5		2		87				<0.2		0.9	
					Middle	4.1	1.0	5	28.0	28.0	8.0	8.0	25.0	25.0	80.9	80.9	5.5		9.0		2		91				<0.2		1.0	
						4.1	1.1	5	28.0		8.0		25.1		80.9		5.5		9.1		2		91				<0.2		1.0	
					Bottom	7.2	0.9	15	28.0	28.0	8.0	8.0	25.3	25.3	79.7	79.7	5.4	5.4	11.8		<2		92				<0.2		1.0	
						7.2	0.9	16	28.0		8.0		25.3		79.7		5.4		11.8		<2		93				<0.2		1.0	
IM6	Sunny	Moderate	10:35	8.3	Surface	1.0	0.0	115	28.4	28.5	7.9	7.9	21.3	21.2	90.3	90.3	6.2	6.1	1.2	3.1	<2	<2	86	89	821052	805842	<0.2	<0.2	1.4	1.3
						1.0	0.0	116	28.5		7.9		21.2		90.3		6.2		1.2		<2		86				<0.2		1.4	
					Middle	4.2	0.2	88	28.3	28.4	8.0	8.0	22.5	22.5	87.9	87.9	6.0		1.8		<2		90				<0.2		1.5	
						4.2	0.2	94	28.4		8.0		22.5		87.8		6.0		1.8		<2		90				<0.2		1.6	
					Bottom	7.3	0.3	61	28.1	28.1	8.0	8.0	25.0	25.0	82.7	82.8	5.6	5.6	6.4		<2		92				<0.2		1.0	
						7.3	0.3	65	28.1		8.0		25.0		82.8		5.6		6.2		<2		92				<0.2		1.0	
IM7	Fine	Moderate	10:43	9.1	Surface	1.0	0.1	282	28.7	28.7	7.9	7.9	19.5	19.5	91.6	91.6	6.4	6.2	1.1	2.7	<2	<2	86	89	821341	806844	<0.2	<0.2	1.5	1.5
						1.0	0.1	302	28.7		7.9		19.5		91.5		6.4		1.1		<2		86				<0.2		1.6	
					Middle	4.6	0.1	111	28.3	28.3	7.9	7.9	21.5	21.5	86.1	86.1	5.9		1.5		<2		90				<0.2		1.6	
						4.6	0.1	120	28.3		7.9		21.6		86.0		5.9		1.5		<2		90				<0.2		1.5	
					Bottom	8.1	0.2	91	28.0	28.0	8.0	8.0	25.1	25.1	80.3	80.3	5.5	5.5	5.4		<2		92				<0.2		1.5	
						8.1	0.3	91	28.0		8.0		25.1		80.3		5.5		5.5		<2		92				<0.2		1.5	
IM8	Fine	Moderate	09:49	8.2	Surface	1.0	0.1	148	28.9	28.9	8.1	8.1	21.5	21.4	93.8	93.8	6.4	6.4	3.0	4.4	3	2	83	86	821818	808144	<0.2	<0.2	1.5	1.5
						1.0	0.1	152	28.9		8.1		21.3		93.8		6.4		3.1		3		83				<0.2		1.5	
					Middle	4.1	0.0	164	28.7	28.7	8.1	8.1	21.9	21.9	91.9	91.9	6.3		3.7		2		86				<0.2		1.4	
						4.1	0.0	165	28.7		8.1		21.9		91.9		6.3		3.7		<2		86				<0.2		1.6	
					Bottom	7.2	0.1	218	28.7	28.7	8.1	8.1	22.0	22.0	91.3	91.3	6.3	6.3	6.5		<2		89				<0.2		1.5	
						7.2	0.1	222	28.7		8.1		22.0		91.3		6.3		6.5		<2		89				<0.2		1.5	

DA: Depth-Averaged

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

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 08 August 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	09:43	7.8	Surface	1.0	0.3	263	28.6	28.6	8.1	8.1	23.0	23.0	89.0	89.0	6.1	6.1	8.8	9.8	4	5	83	86	822117	808802	<0.2	<0.2	1.1	1.2
						1.0	0.3	283	28.6		8.1		23.0		89.0		6.1		9.0		4		83				<0.2		1.2	
					Middle	3.9	0.3	256	28.6	28.6	8.1	8.1	23.0	23.0	88.9	88.9	6.1		9.9		5		86				<0.2		1.2	
						3.9	0.3	278	28.6		8.1		23.0		88.9		6.1		9.9		5		87				<0.2		1.2	
					Bottom	6.8	0.3	258	28.6	28.6	8.1	8.1	22.9	22.9	89.1	89.2	6.1	6.1	10.6		6		90				<0.2		1.2	
						6.8	0.3	265	28.6		8.1		23.0		89.2		6.1		10.5		6		89				<0.2		1.2	
IM10	Fine	Moderate	09:36	8.1	Surface	1.0	0.7	300	28.8	28.8	8.2	8.2	21.9	21.9	94.9	94.9	6.5	6.2	2.7	6.1	3	2	84	87	822369	809792	<0.2	<0.2	1.2	1.3
						1.0	0.8	304	28.8		8.2		21.9		94.8		6.5		2.6		3		84				<0.2		1.3	
					Middle	4.1	0.5	303	28.4	28.4	8.2	8.2	24.1	24.1	84.7	84.7	5.8		6.3		<2		87				<0.2		1.3	
						4.1	0.5	325	28.4		8.2		24.1		84.7		5.8		6.1		<2		87				<0.2		1.2	
					Bottom	7.1	0.5	295	28.4	28.4	8.2	8.2	24.3	24.3	84.7	84.7	5.8	5.8	9.3		<2		90				<0.2		1.3	
						7.1	0.5	311	28.4		8.2		24.3		84.7		5.8		9.5		<2		90				<0.2		1.2	
IM11	Fine	Moderate	09:26	8.8	Surface	1.0	0.8	300	28.6	28.6	8.1	8.1	23.1	23.1	89.3	89.4	6.1	5.8	2.7	5.3	<2	<2	84	87	822037	811439	<0.2	<0.2	1.3	1.3
						1.0	0.8	310	28.6		8.1		23.1		89.4		6.1		2.7		<2		84				<0.2		1.2	
					Middle	4.4	0.7	301	28.1	28.1	8.1	8.1	25.2	25.2	81.3	81.3	5.5		5.9		<2		87				<0.2		1.2	
						4.4	0.7	307	28.1		8.1		25.2		81.3		5.5		5.9		<2		87				<0.2		1.3	
					Bottom	7.8	0.5	295	27.7	27.7	8.1	8.1	26.9	26.9	76.6	76.7	5.2	5.2	7.2		<2		90				<0.2		1.3	
						7.8	0.5	321	27.7		8.1		26.9		76.7		5.2		7.2		<2		90				<0.2		1.2	
IM12	Fine	Moderate	09:20	9.2	Surface	1.0	0.8	285	28.5	28.5	8.1	8.1	23.2	23.2	91.8	91.8	6.3	6.0	2.7	6.2	<2	<2	84	87	821438	812044	<0.2	<0.2	1.2	1.3
						1.0	0.8	300	28.4		8.1		23.2		91.8		6.3		2.9		<2		84				<0.2		1.3	
					Middle	4.6	0.6	283	28.2	28.2	8.1	8.1	25.2	25.2	84.4	84.4	5.7		6.5		<2		87				<0.2		1.3	
						4.6	0.6	288	28.2		8.1		25.2		84.3		5.7		6.6		<2		87				<0.2		1.2	
					Bottom	8.2	0.4	291	28.1	28.1	8.1	8.1	25.4	25.4	83.2	83.2	5.6	5.6	9.4		<2		90				<0.2		1.2	
						8.2	0.5	312	28.1		8.1		25.4		83.2		5.6		9.5		<2		90				<0.2		1.3	
SR1A	Fine	Moderate	09:00	5.1	Surface	1.0	-	-	28.6	28.6	8.2	8.2	22.3	22.4	92.8	92.7	6.4	6.4	2.3	2.3	<2	2	-	-	819978	812656	-	-	-	-
						1.0	-	-	28.6		8.2		22.4		92.5		6.3		2.3		<2		-				-		-	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	-	-	28.5	28.5	8.2	8.2	23.0	23.0	91.5	91.5	6.3	6.3	2.3		<2		-				-		-	
						4.1	-	-	28.5		8.2		23.0		91.5		6.3		2.3		2		-				-		-	
SR2	Fine	Moderate	08:47	4.8	Surface	1.0	0.1	45	28.3	28.3	8.2	8.2	23.6	23.5	87.5	87.5	6.0	6.0	2.9	3.9	3	3	86	87	821479	814169	<0.2	<0.2	1.3	1.3
						1.0	0.1	45	28.3		8.2		23.5		87.5		6.0		3.0		3		86				<0.2		1.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.1	145	27.6	27.6	8.2	8.2	27.1	27.1	78.0	78.1	5.3	5.3	4.8		<2		88				<0.2		1.4	
						3.8	0.1	152	27.6		8.2		27.1		78.1		5.3		4.9		<2		89				<0.2		1.4	
SR3	Fine	Moderate	09:55	9.5	Surface	1.0	0.2	286	29.0	29.0	8.1	8.1	20.1	20.1	94.8	94.8	6.5	6.3	2.4	4.1	<2	<2	-	-	822132	807560	-	-	-	-
						1.0	0.2	296	29.0		8.1		20.1		94.8		6.5		2.4		<2		-				-		-	
					Middle	4.8	0.1	303	28.7	28.7	8.1	8.1	21.9	21.9	89.6	89.6	6.1		2.7		<2		-				-		-	
						4.8	0.1	322	28.7		8.1		21.9		89.5		6.1		2.8		<2		-				-		-	
					Bottom	8.5	0.1	72	28.4	28.4	8.1	8.1	24.5	24.5	83.4	83.5	5.7	5.7	7.0		<2		-				-		-	
						8.5	0.1	72	28.4		8.1		24.5		83.5		5.7		7.1		<2		-				-		-	
SR4A	Fine	Calm	09:14	9.5	Surface	1.0	0.2	262	28.4	28.4	8.0	8.0	23.1	23.1	87.7	87.6	6.0	5.9	2.4	3.2	2	3	-	-	817168	807831	-	-	-	-
						1.0	0.2	264	28.4		8.0		23.1		87.5		6.0		2.4		2		-				-		-	
					Middle	4.8	0.2	258	28.2	28.2	8.0	8.0	23.4	23.4	83.3	83.3	5.7		2.6		3		-				-		-	
						4.8	0.2	272	28.2		8.0		23.4		83.3		5.7		2.6		3		-				-		-	
					Bottom	8.5	0.1	91	27.9	27.9	8.0	8.0	25.5	25.5	76.5	76.5	5.2	5.2	4.7		4		-				-		-	
						8.5	0.1	95	27.9		8.0		25.5		76.5		5.2		4.6		3		-				-		-	
SR5A	Fine	Calm	08:56	5.5	Surface	1.0	0.2	269	28.3	28.3	8.0	8.0	23.7	23.7	86.0	86.0	5.9	5.9	3.2	3.8	3	3	-	-	816592	810692	-	-	-	-
						1.0	0.2	294	28.3		8.0		23.7		86.0		5.9		3.2		3		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.5	0.2	280	28.3	28.3	8.0	8.0	23.7	23.7	85.7	85.7	5.9	5.9	4.3		3		-				-		-	
						4.5	0.2	307	28.3		8.0		23.7		85.7		5.9		4.4		3		-				-		-	
SR6A	Fine	Calm	08:30	4.8	Surface	1.0	0.0	232	28.0	28.0	7.9	7.9	23.4	23.4	84.7	84.7	5.8	5.8	1.6	3.1	2	2	-	-	817971	814744	-	-	-	-
						1.0	0.0	232	28.0		7.9		23.4		84.6		5.8		1.6		2		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.0	199	27.8	27.8	7.8	7.8	24.4	24.4	76.6	76.7	5.3	5.3	4.5		2		-				-		-	
						3.8	0.0	218	27.8		7.8		24.4		76.8		5.3		4.5		2		-				-		-	
SR7	Fine	Moderate	08:00	16.0	Surface	1.0	0.0	116	28.0	28.0	8.2	8.2	24.5	24.5	89.0	89.0	6.1	5.8	1.9	2.0	<2	2	-	-	823650	823760	-	-	-	-
						1.0	0.0	120	28.0		8.2		24.5		88.9		6.1		2.0		<2		-				-		-	
					Middle	8.0	0.1	184	27.6	27.6	8.2	8.2	27.6	27.6	79.5	79.4	5.4		2.0		2		-				-		-	
						8.0	0.1	193	27.6		8.2		27.6		79.3		5.4		2.0		2		-				-		-	
					Bottom	15.0	0.1	76	27.4	27.4	8.1	8.1	28.6	28.6	77.4	77.5	5.2	5.2	2.0		3		-				-		-	
						15.0	0.1	78	27.4		8.1		28.6		77.5		5.2		2.0		3		-				-		-	
SR8	Fine	Moderate	09:11	5.3	Surface	1.0	-	-	28.9	28.9	8.2	8.2	22.1	22.1	94.0	94.0	6.4	6.4	3.0	6.1	<2	2	-	-	820390	811605	-	-	-	-
						1.0	-	-	28.8		8.2		22.1		93.9		6.4		3.0		<2		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	-	-	28.3	28.3	8.2	8.2	24.5	24.5	85.1	85.1	5.8	5.8	9.2		2		-				-		-	
						4.3	-	-	28.3		8.2		24.5		85.1		5.8		9.1		2		-				-		-	

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 11 August 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	16:52	8.4	Surface	1.0	0.3	214	29.9	29.9	8.8	8.8	16.6	16.6	178.1	177.6	12.3	8.7	5.0	6.1	7	9	84	88	815627	804223	<0.2	<0.2	1.3	1.4
						1.0	0.3	223	29.9		8.8		16.6		177.0		12.3		4.9		8		84				<0.2		1.4	
					Middle	4.2	0.1	182	28.3	28.3	8.2	8.2	28.1	28.1	76.3	76.1	5.1		6.0		10		88				<0.2		1.4	
						4.2	0.1	197	28.2		8.2		28.2		75.8		5.1		6.3		9		88				<0.2		1.3	
					Bottom	7.4	0.1	228	28.0	28.0	8.2	8.2	31.0	30.9	67.5	67.7	4.5	4.5	7.1		10		91				<0.2		1.3	
						7.4	0.1	228	28.0		8.2		30.9		67.8		4.5		7.1		11		92				<0.2		1.4	
C2	Cloudy	Moderate	15:52	12.0	Surface	1.0	0.1	163	29.1	29.1	8.3	8.3	17.9	17.9	121.2	121.3	8.4	7.2	3.1	3.4	15	15	86	88	825675	806937	<0.2	<0.2	1.6	1.6
						1.0	0.1	177	29.1		8.3		17.9		121.3		8.4		3.1		14		86				<0.2		1.5	
					Middle	6.0	0.1	168	28.6	28.6	8.0	8.0	22.4	22.4	87.2	87.2	6.0		1.2		14		88				<0.2		1.4	
						6.0	0.1	177	28.6		8.0		22.4		87.2		6.0		1.3		15		88				<0.2		1.6	
					Bottom	11.0	0.2	153	27.7	27.7	7.9	7.9	26.1	26.1	70.4	70.3	4.8	4.8	5.9		16		90				<0.2		1.6	
						11.0	0.2	156	27.7		7.9		26.2		70.2		4.8		6.1		16		90				<0.2		1.6	
C3	Cloudy	Moderate	17:38	11.8	Surface	1.0	0.1	54	29.7	29.7	8.7	8.7	18.5	18.5	186.4	185.9	12.8	10.7	1.4	4.8	11	9	88	89	822088	817804	<0.2	<0.2	1.5	1.4
						1.0	0.1	55	29.6		8.7		18.5		185.4		12.8		1.4		11		86				<0.2		1.4	
					Middle	5.9	0.1	4	29.0	29.0	8.3	8.3	21.2	21.2	125.8	125.6	8.6		4.5		10		88				<0.2		1.4	
						5.9	0.1	4	29.0		8.3		21.2		125.4		8.6		5.1		9		90				<0.2		1.4	
					Bottom	10.8	0.2	42	27.5	27.6	8.0	8.0	26.6	26.6	81.0	83.0	5.5	5.7	8.0		7		90				<0.2		1.4	
						10.8	0.2	42	27.6		8.0		26.6		84.9		5.8		8.3		6		91				<0.2		1.4	
IM1	Cloudy	Moderate	16:33	5.0	Surface	1.0	0.1	197	30.1	30.1	8.8	8.8	15.9	15.9	197.6	197.4	13.7	13.7	5.6	6.6	13	12	84	86	817950	807116	<0.2	<0.2	1.3	1.4
						1.0	0.1	216	30.1		8.8		15.9		197.2		13.7		5.5		12		84				<0.2		1.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.2	169	30.0	30.0	8.8	8.8	17.2	17.2	180.1	180.0	12.4	12.4	7.6		11		87				<0.2		1.4	
						4.0	0.2	184	30.0		8.8		17.2		179.9		12.4		7.8		11		87				<0.2		1.3	
IM2	Cloudy	Moderate	16:26	7.0	Surface	1.0	0.2	225	30.0	30.0	8.8	8.8	16.2	16.2	188.4	186.1	13.0	10.4	6.6	6.5	13	13	88	93	818150	806181	<0.2	<0.2	1.3	1.5
						1.0	0.2	237	30.0		8.8		16.2		183.7		12.7		6.6		14		89				<0.2		1.4	
					Middle	3.5	0.2	179	29.2	29.2	8.4	8.4	21.9	22.0	116.4	116.4	7.9		5.6		12		91				<0.2		1.5	
						3.5	0.2	190	29.1		8.4		22.1		116.4		7.9		5.6		13		93				<0.2		1.5	
					Bottom	6.0	0.2	115	28.5	28.5	8.2	8.2	27.8	27.8	69.3	69.5	4.6	4.6	7.5		12		97				<0.2		1.5	
						6.0	0.2	121	28.5		8.2		27.7		69.6		4.6		7.2		12		98				<0.2		1.5	
IM3	Cloudy	Moderate	16:21	7.2	Surface	1.0	0.2	208	30.2	30.2	8.8	8.8	15.1	15.2	197.2	197.0	13.7	10.5	5.1	6.2	18	15	87	91	818768	805616	<0.2	<0.2	1.4	1.4
						1.0	0.3	225	30.2		8.8		15.2		196.7		13.6		5.0		16		88				<0.2		1.4	
					Middle	3.6	0.1	232	29.0	29.0	8.4	8.4	21.4	21.4	107.3	106.9	7.3		6.2		12		91				<0.2		1.4	
						3.6	0.1	237	28.9		8.4		21.4		106.5		7.3		6.3		11		92				<0.2		1.4	
					Bottom	6.2	0.2	101	28.6	28.6	8.2	8.2	27.2	27.2	75.8	76.0	5.1	5.1	7.2		15		94				<0.2		1.4	
						6.2	0.2	109	28.6		8.2		27.2		76.2		5.1		7.1		16		95				<0.2		1.4	
IM4	Cloudy	Moderate	16:13	8.1	Surface	1.0	0.4	196	30.0	30.0	8.8	8.8	16.2	16.2	184.2	184.1	12.7	10.6	6.5	6.5	14	13	84	88	819735	804597	<0.2	<0.2	1.4	1.4
						1.0	0.4	214	30.0		8.8		16.2		184.0		12.7		6.4		12		84				<0.2		1.4	
					Middle	4.1	0.2	197	29.1	29.1	8.4	8.4	21.4	21.4	123.3	123.1	8.4		5.5		13		87				<0.2		1.5	
						4.1	0.2	212	29.1		8.4		21.4		122.9		8.4		5.5		14		88				<0.2		1.5	
					Bottom	7.1	0.2	150	28.6	28.6	8.2	8.2	27.3	27.3	81.0	81.9	5.4	5.5	7.5		12		92				<0.2		1.3	
						7.1	0.2	155	28.6		8.2		27.2		82.7		5.5		7.4		11		92				<0.2		1.4	
IM5	Cloudy	Moderate	16:06	7.6	Surface	1.0	0.2	219	30.3	30.3	8.8	8.8	15.5	15.5	205.3	204.3	14.2	11.3	7.1	6.4	12	13	84	88	820740	804882	<0.2	<0.2	1.6	1.5
						1.0	0.2	225	30.3		8.8		15.5		203.2		14.1		7.1		14		83				<0.2		1.4	
					Middle	3.8	0.5	227	29.4	29.4	8.4	8.4	21.5	21.5	124.3	124.3	8.4		5.3		2		88				<0.2		1.5	
						3.8	0.5	232	29.4		8.4		21.6		124.2		8.4		5.6		14		88				<0.2		1.5	
					Bottom	6.6	0.3	199	28.8	28.8	8.3	8.3	25.7	25.7	90.3	90.4	6.1	6.1	6.5		17		92				<0.2		1.4	
						6.6	0.3	214	28.8		8.3		25.7		90.5		6.1		6.6		16		92				<0.2		1.3	
IM6	Cloudy	Moderate	15:59	7.4	Surface	1.0	0.4	242	30.0	30.0	8.9	8.9	17.2	17.2	198.1	197.6	13.6	10.7	4.1	5.0	17	16	84	88	821062	805836	<0.2	<0.2	1.6	1.4
						1.0	0.4	262	30.0		8.9		17.2		197.0		13.6		4.1		16		84				<0.2		1.4	
					Middle	3.7	0.3	247	29.4	29.4	8.3	8.3	20.5	20.4	112.5	112.5	7.7		3.9		14		88				<0.2		1.4	
						3.7	0.4	256	29.4		8.3		20.4		112.4		7.7		3.9		16		88				<0.2		1.4	
					Bottom	6.4	0.4	236	28.8	28.8	8.3	8.3	26.0	26.1	84.9	85.2	5.7	5.7	6.8		15		91				<0.2		1.3	
						6.4	0.4	251	28.8		8.3		26.1		85.5		5.7		7.0		16		92				<0.2		1.4	
IM7	Cloudy	Moderate	15:53	8.6	Surface	1.0	0.2	251	29.7	29.7	8.9	8.9	16.8	16.9	181.3	180.0	12.6	9.7	4.0	5.8	16	17	83	87	821367	806841	<0.2	<0.2	1.4	1.4
						1.0	0.2	271	29.7		8.9		17.0		178.7		12.4		3.9		17		83				<0.2		1.3	
					Middle	4.3	0.1	238	29.2	29.2	8.3	8.3	21.3	21.3	100.2	100.1	6.8		4.7		16		87				<0.2		1.4	
						4.3	0.1	247	29.2		8.3		21.3		99.9		6.8		5.2		16		87				<0.2		1.5	
					Bottom	7.6	0.1	219	28.7	28.7	8.3	8.3	26.5	26.5	81.5	81.7	5.4	5.5	8.5		18		91				<0.2		1.4	
						7.6	0.1	221	28.7		8.3		26.5		81.8		5.5		8.6		18		91				<0.2		1.4	
IM8	Cloudy	Moderate	16:19	7.5	Surface	1.0	0.2	232	29.5	29.5	8.6	8.6	16.2	16.2	174.4	174.3	12.2	9.3	3.8	3.6	13	15	86	89	821844	808120	<0.2	<0.2	1.4	1.4
						1.0	0.2	250	29.5		8.6		16.2		174.1		12.1		3.7		14		87				<0.2		1.4	
					Middle	3.8	0.1	261	29.0	29.0	8.1	8.1	20.5	20.5	94.6	94.5	6.5		1.7		16		88				<0.2		1.5	
						3.8	0.1	272	29.0		8.1		20.5		94.4		6.5		1.7		15		89				<0.2		1.4	
					Bottom	6.5	0.1	277	28.5	28.5	7.9	7.9	23.1	23.1	79.1	79.2	5.4	5.4	5.4		16		91				<0.2		1.4	
						6.5	0.1	279	28.5		7.9		23.1		79.3		5.4		5.5		16		91				<0.2		1.5	

DA: Depth-Averaged

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

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 11 August 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	16:25	7.8	Surface	1.0	0.1	72	29.3	29.3	8.6	8.6	16.2	16.2	171.2	169.1	12.0	10.0	3.1	6.2	17	18	86	89	822101	808819	<0.2	<0.2	1.3	1.4
						1.0	0.1	76	29.3		8.6		16.2		167.0		11.7		3.0		17		87				<0.2		1.4	
					Middle	3.9	0.1	116	29.0	29.0	8.1	8.1	20.2	20.1	112.9	116.5	7.8		3.6		19		88				<0.2		1.4	
						3.9	0.1	121	29.0		8.2		20.0		120.0		8.3		3.8		18		89				<0.2		1.4	
					Bottom	6.8	0.2	31	28.5	28.5	8.0	8.0	23.1	23.0	81.8	82.0	5.6	5.6	11.9		19		90				<0.2		1.4	
						6.8	0.2	32	28.5		8.0		23.0		82.2		5.6		11.8		18		91				<0.2		1.4	
IM10	Cloudy	Moderate	16:32	6.9	Surface	1.0	0.3	61	29.5	29.5	8.7	8.7	16.4	16.4	173.0	171.9	12.1	10.4	3.4	3.7	18	19	86	88	822399	809788	<0.2	<0.2	1.5	1.5
						1.0	0.3	66	29.4		8.7		16.4		170.7		11.9		3.4		19		87				<0.2		1.6	
					Middle	3.5	0.2	84	29.2	29.2	8.3	8.3	18.8	18.8	129.3	128.5	8.9		3.6		20		88				<0.2		1.5	
						3.5	0.2	91	29.2		8.3		18.8		127.6		8.8		3.6		19		87				<0.2		1.5	
					Bottom	5.9	0.3	79	28.7	28.7	8.0	8.0	21.9	21.9	86.8	86.8	6.0	6.0	3.9		19		90				<0.2		1.3	
						5.9	0.3	84	28.7		8.0		21.9		86.8		6.0		4.1		20		91				<0.2		1.4	
IM11	Cloudy	Moderate	16:42	8.0	Surface	1.0	0.3	68	29.3	29.3	8.4	8.4	17.5	17.5	148.7	148.1	10.3	9.0	3.0	2.8	16	16	86	89	822048	811472	<0.2	<0.2	1.4	1.4
						1.0	0.3	72	29.3		8.4		17.5		147.5		10.3		2.8		17		87				<0.2		1.5	
					Middle	4.0	0.2	88	28.8	28.8	8.2	8.2	21.3	21.3	110.4	110.3	7.6		1.9		16		88				<0.2		1.5	
						4.0	0.3	96	28.7		8.2		21.3		110.2		7.6		2.1		16		89				<0.2		1.4	
					Bottom	7.0	0.2	80	28.5	28.5	8.1	8.1	23.2	23.2	97.7	97.8	6.7	6.7	3.6		14		90				<0.2		1.4	
						7.0	0.2	87	28.5		8.1		23.2		97.8		6.7		3.6		15		91				<0.2		1.4	
IM12	Cloudy	Moderate	16:48	8.9	Surface	1.0	0.4	124	29.4	29.4	8.6	8.6	16.5	16.5	172.7	169.5	12.1	10.7	3.0	2.3	16	17	86	88	821452	812025	<0.2	<0.2	1.4	1.4
						1.0	0.4	135	29.4		8.6		16.5		166.3		11.6		2.9		17		87				<0.2		1.4	
					Middle	4.5	0.3	125	29.2	29.1	8.4	8.4	19.9	20.0	137.9	137.4	9.5		2.0		17		88				<0.2		1.4	
						4.5	0.3	131	29.0		8.4		20.0		136.9		9.4		2.0		16		88				<0.2		1.4	
					Bottom	7.9	0.1	125	28.0	28.0	8.0	8.0	25.1	25.1	88.7	88.9	6.0	6.1	2.0		18		90				<0.2		1.4	
						7.9	0.2	129	28.0		8.0		25.1		89.0		6.1		2.0		20		91				<0.2		1.5	
SR1A	Cloudy	Moderate	17:04	4.9	Surface	1.0	-	-	29.6	29.6	8.6	8.6	18.5	18.5	180.5	179.6	12.4	12.4	2.9	3.6	16	16	-	-	819970	812665	-	-	-	-
						1.0	-	-	29.6		8.6		18.5		178.6		12.3		3.1		16		-				-		-	
					Middle	2.5	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.5	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	-	-	29.2	29.2	8.3	8.3	21.0	21.0	129.2	126.6	8.8	8.7	4.3		14		-				-		-	
						3.9	-	-	29.2		8.3		21.0		124.0		8.5		4.2		16		-				-		-	
SR2	Cloudy	Moderate	17:16	4.9	Surface	1.0	0.2	92	29.6	29.6	8.8	8.7	16.4	16.5	190.0	185.7	13.2	12.9	4.5	5.4	12	13	88	89	821457	814159	<0.2	<0.2	1.6	1.5
						1.0	0.2	96	29.6		8.7		16.5		181.4		12.6		4.9		13		89				<0.2		1.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	0.2	86	29.5	29.5	8.5	8.5	18.4	18.3	162.7	162.6	11.2	11.2	6.2		14		90				<0.2		1.5	
						3.9	0.2	86	29.5		8.5		18.3		162.4		11.2		6.1		14		90				<0.2		1.4	
SR3	Cloudy	Moderate	16:11	8.8	Surface	1.0	0.2	168	29.6	29.6	8.7	8.7	16.2	16.2	183.8	183.6	12.8	9.6	3.4	2.9	18	16	-	-	822147	807571	-	-	-	-
						1.0	0.2	177	29.5		8.7		16.2		183.3		12.8		3.3		19		-				-		-	
					Middle	4.4	0.2	164	28.9	28.9	8.0	8.0	21.4	21.4	91.5	91.5	6.3		2.2		16		-				-		-	
						4.4	0.2	168	28.9		8.0		21.4		91.4		6.3		2.3		15		-				-		-	
					Bottom	7.8	0.2	168	28.4	28.4	8.0	8.0	23.5	23.5	84.1	84.3	5.7	5.8	3.2		14		-				-		-	
						7.8	0.2	168	28.4		8.0		23.5		84.4		5.8		3.3		14		-				-		-	
SR4A	Cloudy	Calm	17:13	9.1	Surface	1.0	0.1	352	29.8	29.8	8.8	8.8	17.0	17.0	174.2	173.2	12.0	9.6	7.3	6.5	17	19	-	-	817172	807812	-	-	-	-
						1.0	0.1	324	29.7		8.8		17.1		172.2		11.9		7.1		17		-				-		-	
					Middle	4.6	0.1	31	29.1	29.1	8.3	8.3	23.6	23.6	107.0	106.8	7.2		5.8		16		-				-		-	
						4.6	0.1	31	29.0		8.3		23.7		106.5		7.2		5.7		17		-				-		-	
					Bottom	8.1	0.1	35	28.5	28.5	8.1	8.1	27.5	27.5	69.9	69.9	4.7	4.7	6.5		24		-				-		-	
						8.1	0.2	36	28.5		8.1		27.6		69.9		4.7		6.3		23		-				-		-	
SR5A	Rainy	Calm	17:29	3.5	Surface	1.0	0.0	127	30.5	30.5	8.7	8.7	19.5	19.6	199.7	199.7	13.4	13.4	7.8	8.6	7	6	-	-	816612	810707	-	-	-	-
						1.0	0.0	137	30.5		8.7		19.7		199.6		13.4		7.9		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.5	0.0	282	30.5	30.5	8.7	8.7	20.6	20.6	197.4	198.0	13.2	13.3	9.4		6		-				-		-	
						2.5	0.0	301	30.5		8.7		20.6		198.6		13.3		9.5		5		-				-		-	
SR6A	Rainy	Calm	17:56	3.9	Surface	1.0	0.2	53	29.9	29.9	8.5	8.5	21.3	21.3	149.5	149.3	10.1	10.1	9.0	8.7	6	6	-	-	817946	814730	-	-	-	-
						1.0	0.2	54	29.9		8.5		21.3		149.1		10.0		8.9		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.9	0.0	44	29.5	29.6	8.3	8.3	22.1	22.1	123.9	124.0	8.4	8.4	8.5		5		-				-		-	
						2.9	0.0	47	29.6		8.3		22.1		124.1		8.4		8.4		5		-				-		-	
SR7	Cloudy	Moderate	18:07	16.3	Surface	1.0	0.5	63	29.6	29.6	8.7	8.7	19.4	19.4	185.7	185.4	12.7	10.8	0.9	1.4	6	5	-	-	823656	823738	-	-	-	-
						1.0	0.5	63	29.5		8.7		19.4		185.0		12.7		0.9		6		-				-		-	
					Middle	8.2	0.1	16	28.9	28.9	8.3	8.3	21.8	21.8	132.2	131.0	9.0		1.3		4		-				-		-	
						8.2	0.1	16	28.9		8.3		21.8		129.8		8.9		1.4		5		-				-		-	
					Bottom	15.3	0.1	43	26.4	26.4	8.0	8.0	29.6	29.6	71.9	72.4	4.9	5.0	1.9		4		-				-		-	
						15.3	0.1	44	26.4		8.0		29.6		72.8		5.0		1.9		4		-				-		-	
SR8	Cloudy	Moderate	16:56	4.9	Surface	1.0	-	-	29.7	29.7	8.7	8.7	17.4	17.4	188.3	188.0	13.0	13.0	4.2	4.4	8	8	-	-	820378	811603	-	-	-	-
						1.0	-	-	29.7		8.7		17.4		187.7		13.0		4.2		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	-	-	29.8	29.8	8.6	8.6	17.9	17.9	178.6	175.3	12.3	12.1	4.6		8		-				-		-	
						3.9	-	-	29.7		8.6		17.9		172.0		11.9		4.7		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 11 August 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	Moderate	11:48	8.3	Surface	1.0	0.3	52	29.7	29.7	8.6	8.6	16.3	16.3	173.1	172.5	12.0	10.3	5.5	5.5	7	7	85	89	815611	804242	<0.2	<0.2	1.4	1.4
						1.0	0.3	56	29.7		8.6		16.3		171.8		11.9				6		85				<0.2		1.3	
					Middle	4.2	0.3	37	29.1	29.1	8.5	8.5	18.7	18.3	125.1	125.2	8.7		4.8		6		89				<0.2		1.4	
						4.2	0.3	37	29.1		8.5		18.0		125.2		8.7		4.9		7		90				<0.2		1.5	
					Bottom	7.3	0.2	42	28.4	28.4	7.9	7.9	29.0	28.9	69.5	69.6	4.6	4.6	6.2		8		93				<0.2		1.4	
						7.3	0.2	42	28.4		7.9		28.9		69.7		4.6		6.2		7		94				<0.2		1.4	
C2	Cloudy	Moderate	12:58	12.3	Surface	1.0	0.4	21	29.5	29.4	8.5	8.5	15.1	15.2	152.8	152.1	10.7	8.4	3.7	4.7	9	9	86	88	825663	806961	<0.2	<0.2	1.5	1.5
						1.0	0.4	22	29.3		8.5		15.2		151.3		10.7		3.4		8		86				<0.2		1.4	
					Middle	6.2	0.3	356	28.5	28.5	8.0	8.0	23.0	23.0	87.2	87.2	6.0		1.3		9		88				<0.2		1.6	
						6.2	0.3	328	28.5		8.0		23.0		87.1		6.0		1.3		8		89				<0.2		1.4	
					Bottom	11.3	0.2	7	28.1	28.1	8.0	8.0	24.7	24.6	77.8	78.0	5.3	5.3	9.2		9		91				<0.2		1.4	
						11.3	0.2	7	28.1		8.0		24.6		78.1		5.3		9.4		9		90				<0.2		1.4	
C3	Cloudy	Moderate	11:14	11.8	Surface	1.0	0.3	259	29.4	29.4	8.5	8.5	18.2	18.2	167.7	166.8	11.6	9.1	2.4	4.2	5	5	86	88	822124	817812	<0.2	<0.2	1.5	1.4
						1.0	0.3	283	29.3		8.5		18.2		165.9		11.5		2.4		5		85				<0.2		1.4	
					Middle	5.9	0.3	269	28.3	28.3	8.0	8.0	23.8	23.8	99.3	97.5	6.8		2.6		5		88				<0.2		1.5	
						5.9	0.3	280	28.3		8.0		23.8		95.7		6.5		2.7		5		89				<0.2		1.3	
					Bottom	10.8	0.3	254	27.7	27.7	8.0	8.0	26.1	26.1	85.6	86.0	5.8	5.9	7.1		5		90				<0.2		1.3	
						10.8	0.4	254	27.7		8.0		26.1		86.4		5.9		8.1		6		90				<0.2		1.3	
IM1	Cloudy	Calm	12:06	5.0	Surface	1.0	0.2	9	30.1	30.2	8.7	8.7	15.2	15.1	192.9	192.9	13.4	13.4	6.5	7.5	8	11	89	92	817945	807153	<0.2	<0.2	1.3	1.5
						1.0	0.2	9	30.2		8.7		15.0		192.9		13.4		6.6		9		90				<0.2		1.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.1	309	30.1	30.1	8.3	8.3	16.4	16.4	190.1	189.6	13.1	13.1	8.2		12		93				<0.2		1.5	
						4.0	0.1	334	30.1		8.3		16.3		189.0		13.0		8.7		13		94				<0.2		1.6	
IM2	Cloudy	Moderate	12:13	7.1	Surface	1.0	0.2	2	29.7	29.7	8.4	8.4	15.7	15.7	177.0	176.5	12.3	11.5	6.1	6.4	10	11	82	85	818177	806148	<0.2	<0.2	1.5	1.4
						1.0	0.2	2	29.7		8.4		15.7		175.9		12.3		6.1		10		82				<0.2		1.6	
					Middle	3.6	0.3	336	29.7	29.7	7.9	7.9	17.7	17.8	155.0	154.8	10.7		5.9		12		85				<0.2		1.4	
						3.6	0.3	343	29.6		7.9		17.8		154.5		10.7		6.1		12		84				<0.2		1.4	
					Bottom	6.1	0.2	300	28.5	28.6	7.9	7.9	28.5	28.5	73.7	74.1	4.9	4.9	6.9		11		88				<0.2		1.4	
						6.1	0.2	323	28.6		7.9		28.4		74.4		4.9		7.0		11		89				<0.2		1.3	
IM3	Cloudy	Moderate	12:18	7.2	Surface	1.0	0.5	355	29.7	29.7	8.4	8.4	15.7	15.4	174.5	174.0	12.2	10.3	7.0	7.3	7	9	84	90	818773	805580	<0.2	<0.2	1.2	1.3
						1.0	0.5	356	29.6		8.4		15.2		173.5		12.1		7.0		6		84				<0.2		1.2	
					Middle	3.6	0.4	333	29.3	29.3	7.9	7.9	20.6	20.6	123.9	123.6	8.5		7.7		10		91				<0.2		1.3	
						3.6	0.4	347	29.3		7.9		20.6		123.3		8.4		7.5		10		92				<0.2		1.4	
					Bottom	6.2	0.2	297	28.6	28.6	7.9	7.9	26.8	26.8	78.9	79.0	5.3	5.3	7.4		10		94				<0.2		1.3	
						6.2	0.2	315	28.6		7.9		26.8		79.1		5.3		7.3		10		93				<0.2		1.2	
IM4	Cloudy	Moderate	12:27	8.2	Surface	1.0	0.4	15	30.3	30.3	8.3	8.3	15.7	15.7	190.2	190.0	13.1	9.6	6.4	5.8	7	7	89	92	819733	804587	<0.2	<0.2	1.2	1.2
						1.0	0.4	15	30.3		8.3		15.7		189.7		13.1		6.4		6		89				<0.2		1.2	
					Middle	4.1	0.5	317	28.9	28.9	8.4	8.4	24.4	24.4	90.0	90.1	6.1		4.2		8		93				<0.2		1.1	
						4.1	0.6	322	28.9		8.4		24.4		90.1		6.1		4.2		7		93				<0.2		1.2	
					Bottom	7.2	0.5	326	28.8	28.8	7.9	7.9	26.2	26.2	87.7	87.9	5.9	5.9	6.9		8		93				<0.2		1.2	
						7.2	0.5	355	28.8		7.9		26.2		88.1		5.9		6.8		7		95				<0.2		1.1	
IM5	Cloudy	Moderate	12:33	7.3	Surface	1.0	0.6	325	30.2	30.2	8.4	8.4	17.3	17.3	194.6	194.4	13.3	13.0	6.4	6.9	9	7	88	90	820722	804844	<0.2	<0.2	1.5	1.5
						1.0	0.6	342	30.2		8.4		17.3		194.2		13.3		6.3		5		88				<0.2		1.5	
					Middle	3.7	0.4	315	30.0	30.0	8.3	8.3	18.2	18.2	184.6	184.4	12.6		6.2		5		88				<0.2		1.4	
						3.7	0.4	342	30.0		8.3		18.2		184.1		12.6		6.3		6		89				<0.2		1.4	
					Bottom	6.3	0.4	334	28.6	28.6	8.1	8.1	26.6	26.7	81.9	82.0	5.5	5.5	8.2		8		92				<0.2		1.5	
						6.3	0.4	339	28.6		8.1		26.7		82.1		5.5		8.2		9		92				<0.2		1.5	
IM6	Cloudy	Moderate	12:40	7.4	Surface	1.0	0.2	249	30.0	30.0	8.4	8.4	17.6	17.6	195.5	195.0	13.4	10.6	5.5	7.1	6	6	87	91	821066	805827	<0.2	<0.2	1.4	1.4
						1.0	0.2	271	29.9		8.4		17.7		194.4		13.4		5.9		5		87				<0.2		1.5	
					Middle	3.7	0.1	217	29.3	29.3	8.4	8.4	23.4	23.4	116.3	116.6	7.8		7.0		6		90				<0.2		1.4	
						3.7	0.1	232	29.3		8.4		23.4		116.8		7.9		7.0		6		91				<0.2		1.4	
					Bottom	6.4	0.2	71	28.6	28.6	8.0	8.0	26.9	26.9	81.6	81.7	5.4	5.5	8.6		6		93				<0.2		1.4	
						6.4	0.2	71	28.6		8.0		26.9		81.7		5.5		8.5		7		95				<0.2		1.5	
IM7	Cloudy	Moderate	12:48	8.4	Surface	1.0	0.2	228	29.7	29.7	8.4	8.4	17.0	17.0	168.2	167.8	11.6	9.5	5.3	6.7	7	9	85	90	821364	806846	<0.2	<0.2	1.5	1.4
						1.0	0.2	235	29.7		8.4		17.0		167.4		11.6		5.2		7		87				<0.2		1.3	
					Middle	4.2	0.1	222	29.3	29.3	8.3	8.3	20.8	20.8	107.7	107.6	7.4		6.1		9		90				<0.2		1.3	
						4.2	0.1	228	29.2		8.3		20.8		107.4		7.3		6.3		9		91				<0.2		1.3	
					Bottom	7.4	0.1	47	28.9	28.9	7.9	7.9	25.0	25.0	93.3	93.4	6.3	6.3	8.7		11		94				<0.2		1.4	
						7.4	0.1	51	28.9		7.9		25.0		93.5		6.3		8.8		11		95				<0.2		1.4	
IM8	Cloudy	Moderate	12:33	7.8	Surface	1.0	0.1	300	29.5	29.5	8.6	8.6	16.0	15.9	164.7	164.9	11.5	10.2	5.5	5.8	8	8	86	88	821842	808157	<0.2	<0.2	1.3	1.3
						1.0	0.1	301	29.5		8.6		15.9		165.1		11.5		5.5		9		87				<0.2		1.2	
					Middle	3.9	0.0	281	29.3	29.3	8.3	8.3	17.7	17.6	127.6	127.6	8.9		4.3		9		89				<0.2		1.2	
						3.9	0.0	287	29.3		8.4		17.6		127.6		8.9		4.2		8		87				<0.2		1.4	
					Bottom	6.8	0.0	356	28.2	28.2	7.9	7.9	24.4	24.4	76.4	76.5	5.2	5.2	7.7		8		90				<0.2		1.2	
						6.8	0.0	328	28.2		7.9		24.5		76.5		5.2		7.9		8		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 11 August 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	12:27	7.5	Surface	1.0	0.1	271	29.4	29.4	8.6	8.6	15.9	15.9	166.6	166.5	11.7	10.9	5.4	6.3	7	9	86	88	822072	808813	<0.2	<0.2	1.3	1.3
						1.0	0.1	279	29.4		8.6		15.9		166.4		11.6		5.4		8		87				<0.2		1.3	
					Middle	3.8	0.1	276	29.4	29.4	8.4	8.4	17.9	17.9	145.5	144.6	10.1		4.4		9		88				<0.2		1.4	
						3.8	0.1	298	29.4		8.4		17.9		143.7		10.0		4.4		10		89				<0.2		1.2	
					Bottom	6.5	0.2	322	28.8	28.9	8.0	8.0	21.7	21.7	91.3	92.1	6.2	6.3	9.1		10		90				<0.2		1.3	
						6.5	0.2	338	28.9		8.0		21.7		92.9		6.4		9.3		10		90				<0.2		1.2	
IM10	Cloudy	Moderate	12:20	8.1	Surface	1.0	0.3	328	29.6	29.6	8.6	8.6	16.0	16.0	172.5	172.2	12.0	9.2	4.0	5.9	8	8	86	88	822390	809802	<0.2	<0.2	1.4	1.4
						1.0	0.3	354	29.6		8.6		16.0		171.9		12.0		4.0		7		86				<0.2		1.3	
					Middle	4.1	0.4	322	28.8	28.8	8.1	8.0	21.6	21.5	92.5	93.1	6.3		5.6		7		87				<0.2		1.4	
						4.1	0.4	338	28.8		8.0		21.4		93.6		6.4		5.6		8		88				<0.2		1.4	
					Bottom	7.1	0.2	326	28.6	28.6	8.0	8.0	22.8	22.8	85.2	85.4	5.8	5.8	8.2		7		90				<0.2		1.3	
						7.1	0.2	342	28.6		8.0		22.7		85.6		5.8		8.3		8		90				<0.2		1.4	
IM11	Cloudy	Moderate	12:08	7.3	Surface	1.0	0.2	335	29.8	29.8	8.6	8.6	16.9	16.9	180.5	180.2	12.5	10.6	2.8	3.8	8	7	86	88	822033	811467	<0.2	<0.2	1.3	1.3
						1.0	0.2	308	29.8		8.6		16.9		179.8		12.4		2.8		8		86				<0.2		1.2	
					Middle	3.7	0.2	313	29.3	29.3	8.3	8.3	18.4	18.4	127.6	127.5	8.8		2.9		6		88				<0.2		1.4	
						3.7	0.3	332	29.2		8.3		18.4		127.4		8.8		3.1		7		87				<0.2		1.3	
					Bottom	6.3	0.2	326	28.5	28.5	8.0	8.0	23.2	23.3	90.6	90.7	6.2	6.2	5.5		7		89				<0.2		1.3	
						6.3	0.3	337	28.4		8.0		23.3		90.8		6.2		5.5		7		90				<0.2		1.3	
IM12	Cloudy	Moderate	12:02	8.9	Surface	1.0	0.2	330	29.4	29.4	8.5	8.5	17.6	17.6	157.7	157.4	10.9	9.6	3.0	4.6	8	7	87	89	821473	812039	<0.2	<0.2	1.4	1.4
						1.0	0.2	347	29.4		8.5		17.6		157.0		10.9		3.2		7		88				<0.2		1.5	
					Middle	4.5	0.3	326	29.0	29.0	8.2	8.2	21.2	21.2	120.3	120.3	8.2		4.3		7		88				<0.2		1.4	
						4.5	0.3	339	29.0		8.2		21.1		120.2		8.2		4.2		8		89				<0.2		1.5	
					Bottom	7.9	0.2	347	27.7	27.7	8.0	8.0	26.1	26.1	79.6	79.9	5.4	5.5	6.6		7		90				<0.2		1.4	
						7.9	0.2	359	27.7		8.0		26.1		80.1		5.5		6.5		7		91				<0.2		1.4	
SR1A	Cloudy	Moderate	11:45	4.9	Surface	1.0	-	-	29.6	29.6	8.6	8.6	17.3	17.2	176.5	176.4	12.2	12.2	3.1	4.0	5	5	-	-	819976	812658	-	-	-	-
						1.0	-	-	29.6		8.6		17.2		176.3		12.2		3.2		5		-				-		-	
					Middle	2.5	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.5	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	-	-	29.4	29.4	8.4	8.4	19.7	19.7	144.6	144.4	9.9	9.9	4.8		5		-				-		-	
						3.9	-	-	29.4		8.4		19.7		144.1		9.9		5.0		6		-				-		-	
SR2	Cloudy	Moderate	11:34	4.8	Surface	1.0	0.2	190	29.3	29.3	8.6	8.6	16.3	16.2	168.3	167.6	11.8	11.8	4.5	5.9	5	5	88	89	821472	814144	<0.2	<0.2	1.3	1.4
						1.0	0.2	190	29.2		8.6		16.2		166.9		11.7		4.9		5		88				<0.2		1.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.1	356	28.8	28.8	8.2	8.2	21.7	21.6	113.1	113.4	7.7	7.8	7.1		6		90				<0.2		1.4	
						3.8	0.1	328	28.8		8.2		21.6		113.7		7.8		7.0		5		90				<0.2		1.3	
SR3	Cloudy	Moderate	12:39	9.2	Surface	1.0	0.2	359	29.4	29.4	8.5	8.5	16.1	16.1	147.1	146.7	10.3	9.0	5.2	3.9	9	9	-	-	822164	807579	-	-	-	-
						1.0	0.2	330	29.4		8.5		16.1		146.3		10.2		5.1		10		-				-		-	
					Middle	4.6	0.2	350	29.2	29.2	8.2	8.2	18.5	18.4	110.9	111.3	7.7		3.9		9		-				-		-	
						4.6	0.2	322	29.1		8.2		18.4		111.7		7.8		3.7		9		-				-		-	
					Bottom	8.2	0.2	10	28.5	28.5	8.0	8.0	24.1	24.1	85.4	85.8	5.8	5.9	2.7		9		-				-		-	
						8.2	0.2	10	28.5		8.0		24.0		86.2		5.9		2.7		8		-				-		-	
SR4A	Cloudy	Calm	11:27	8.9	Surface	1.0	0.1	359	30.1	30.1	8.6	8.6	18.3	18.3	179.4	179.2	12.3	10.9	6.6	7.4	6	9	-	-	817189	807827	-	-	-	-
						1.0	0.1	330	30.1		8.6		18.3		178.9		12.2		6.7		7		-				-		-	
					Middle	4.5	0.2	258	29.8	29.8	7.9	7.9	20.9	20.8	141.7	141.5	9.6		7.5		10		-				-		-	
						4.5	0.2	258	29.8		8.0		20.8		141.2		9.6		7.5		10		-				-		-	
					Bottom	7.9	0.2	258	28.6	28.6	7.9	7.9	27.8	27.8	71.8	71.9	4.8	4.8	8.1		9		-				-		-	
						7.9	0.2	283	28.6		7.9		27.8		72.0		4.8		8.3		10		-				-		-	
SR5A	Cloudy	Calm	11:11	3.3	Surface	1.0	0.1	305	30.0	30.0	8.6	8.6	21.8	21.8	170.7	170.7	11.4	11.4	6.7	7.2	7	6	-	-	816575	810676	-	-	-	-
						1.0	0.1	335	30.0		8.6		21.8		170.7		11.4		7.0		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.3	0.1	307	30.0	30.0	8.5	8.5	21.9	21.9	156.6	156.5	10.5	10.5	7.6		6		-				-		-	
						2.3	0.1	318	30.0		8.5		21.9		156.3		10.5		7.6		5		-				-		-	
SR6A	Rainy	Calm	10:35	4.0	Surface	1.0	0.0	150	29.9	29.9	8.3	8.3	20.9	20.9	166.7	166.5	11.3	11.3	5.3	5.2	12	11	-	-	817979	814759	-	-	-	-
						1.0	0.0	158	29.9		8.2		21.0		166.2		11.2		5.2		12		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	0.0	96	29.9	29.9	8.1	8.1	21.2	21.2	152.7	152.5	10.3	10.3	5.1		10		-				-		-	
						3.0	0.0	103	29.9		8.1		21.2		152.3		10.3		5.2		9		-				-		-	
SR7	Cloudy	Moderate	10:43	16.2	Surface	1.0	0.1	111	28.6	28.6	8.3	8.3	20.2	20.2	132.9	130.4	9.2	7.7	1.9	1.7	4	5	-	-	823626	823764	-	-	-	-
						1.0	0.1	113	28.5		8.3		20.3		127.9		8.9		1.7		3		-				-		-	
					Middle	8.1	0.1	180	28.2	28.2	8.0	8.0	24.4	24.4	93.7	93.5	6.4		1.9		6		-				-		-	
						8.1	0.2	185	28.2		8.0		24.4		93.2		6.4		1.9		6		-				-		-	
					Bottom	15.2	0.1	188	26.6	26.6	7.9	7.9	29.5	29.5	71.5	71.9	4.9	4.9	1.5		6		-				-		-	
						15.2	0.1	193	26.6		7.9		29.5		72.3		4.9		1.6		7		-				-		-	
SR8	Cloudy	Moderate	11:54	4.7	Surface	1.0	-	-	29.6	29.6	8.4	8.4	17.7	17.7	157.2	156.8	10.9	10.9	3.4	3.4	10	10	-	-	820407	811631	-	-	-	-
						1.0	-	-	29.5		8.4		17.8		156.4		10.8		3.4		11		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	-	-	29.4	29.4	8.4	8.4	17.9	17.9	142.0	141.9	9.8	9.8	3.5		9		-				-		-	
						3.7	-	-	29.4		8.4		17.9		141.8		9.8		3.4		8		-				-		-	

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 13 August 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	07:55	8.9	Surface	1.0	0.3	215	28.9	28.9	8.6	8.5	18.0	17.9	106.1	106.1	7.4	6.4	3.6	6.8	4	3	85	87	815641	804244	<0.2	<0.2	1.2	1.1
						1.0	0.3	226	28.9		8.5		17.9		106.0		7.4		3.6		3		84				<0.2		1.1	
					Middle	4.5	0.3	206	28.6	28.6	8.3	8.3	22.1	22.2	78.4	78.2	5.4		6.2		3		87				<0.2		1.2	
						4.5	0.3	222	28.6		8.3		22.2		78.0		5.3		6.7		3		87				<0.2		1.2	
					Bottom	7.9	0.3	223	28.2	28.2	8.0	8.0	30.4	30.4	54.7	54.8	3.6	3.6	10.6		3		90				<0.2		0.9	
						7.9	0.3	235	28.2		8.0		30.4		54.9		3.6		10.1		3		91				<0.2		1.0	
C2	Cloudy	Moderate	09:10	11.7	Surface	1.0	0.7	153	28.6	28.6	8.1	8.1	17.2	17.2	91.4	91.4	6.4	6.1	3.4	3.1	4	4	88	90	825668	806967	<0.2	<0.2	1.3	1.3
						1.0	0.7	159	28.6		8.1		17.2		91.3		6.4		3.3		3		88				<0.2		1.3	
					Middle	5.9	0.5	152	28.5	28.5	8.0	8.0	20.4	20.4	82.9	82.7	5.8		2.1		4		89				<0.2		1.2	
						5.9	0.5	164	28.4		8.0		20.4		82.5		5.7		2.2		3		90				<0.2		1.2	
					Bottom	10.7	0.4	148	27.7	27.8	7.9	7.9	26.3	26.3	65.5	65.7	4.5	4.5	3.6		5		91				<0.2		1.2	
						10.7	0.4	149	27.8		7.9		26.3		65.9		4.5		3.7		4		92				<0.2		1.3	
C3	Cloudy	Moderate	07:17	11.5	Surface	1.0	0.3	70	28.4	28.4	8.3	8.3	20.4	20.4	110.3	110.2	7.7	7.2	0.5	3.4	2	2	86	89	822097	817800	<0.2	<0.2	1.3	1.3
						1.0	0.3	73	28.4		8.3		20.4		110.0		7.6		0.6		2		86				<0.2		1.3	
					Middle	5.8	0.0	262	28.0	28.0	8.1	8.1	22.9	23.0	96.7	96.6	6.7		3.3		2		89				<0.2		1.2	
						5.8	0.0	286	27.9		8.1		23.0		96.5		6.7		3.5		2		89				<0.2		1.4	
					Bottom	10.5	0.0	243	27.6	27.6	8.1	8.1	25.6	25.6	88.0	88.4	6.0	6.1	6.5		<2		91				<0.2		1.3	
						10.5	0.0	254	27.6		8.1		25.6		88.7		6.1		6.3		<2		91				<0.2		1.3	
IM1	Fine	Moderate	08:16	4.8	Surface	1.0	0.1	131	28.9	28.9	8.6	8.6	19.2	19.2	101.0	100.8	7.0	7.0	5.9	7.8	5	4	84	87	817957	807112	<0.2	<0.2	1.2	1.2
						1.0	0.1	140	28.9		8.6		19.2		100.6		7.0		6.1		4		85				<0.2		1.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.0	315	28.7	28.7	8.2	8.2	24.6	24.6	64.8	65.0	4.4	4.4	9.4		3		90				<0.2		1.3	
						3.8	0.0	318	28.7		8.2		24.6		65.1		4.4		9.6		3		90				<0.2		1.2	
IM2	Fine	Moderate	08:23	6.9	Surface	1.0	0.1	107	28.8	28.8	8.5	8.5	18.0	18.0	107.3	107.3	7.5	6.6	4.9	7.3	3	3	84	87	818175	806178	<0.2	<0.2	1.2	1.2
						1.0	0.1	117	28.8		8.5		18.0		107.2		7.5		4.9		3		85				<0.2		1.2	
					Middle	3.5	0.2	125	28.8	28.8	8.3	8.3	20.2	20.1	83.9	83.4	5.8		5.2		3		87				<0.2		1.1	
						3.5	0.2	132	28.8		8.3		20.0		82.9		5.7		5.5		3		87				<0.2		1.3	
					Bottom	5.9	0.1	94	28.3	28.3	8.1	8.1	28.8	28.8	54.8	54.9	3.6	3.7	11.7		4		90				<0.2		1.2	
						5.9	0.1	101	28.3		8.1		28.8		54.9		3.7		11.8		3		91				<0.2		1.2	
IM3	Fine	Moderate	08:30	7.1	Surface	1.0	0.1	211	28.8	28.8	8.5	8.5	17.9	17.9	105.6	105.6	7.4	6.3	4.7	7.9	3	2	85	87	818778	805596	<0.2	<0.2	1.2	1.2
						1.0	0.1	231	28.8		8.5		17.9		105.5		7.4		4.7		2		84				<0.2		1.2	
					Middle	3.6	0.2	159	28.8	28.8	8.2	8.2	21.7	21.7	74.6	74.5	5.1		6.3		3		87				<0.2		1.3	
						3.6	0.2	168	28.8		8.2		21.6		74.4		5.1		6.3		2		87				<0.2		1.1	
					Bottom	6.1	0.2	130	28.2	28.2	8.1	8.1	29.2	29.2	56.4	56.5	3.7	3.7	12.6		2		90				<0.2		1.2	
						6.1	0.2	135	28.2		8.1		29.2		56.5		3.7		12.6		2		90				<0.2		1.2	
IM4	Fine	Moderate	08:39	8.0	Surface	1.0	0.6	199	29.0	29.0	8.3	8.3	19.0	19.0	102.6	102.6	7.1	6.8	3.4	6.2	<2	2	84	87	819724	804629	<0.2	<0.2	1.2	1.2
						1.0	0.6	204	29.0		8.3		19.0		102.5		7.1		3.4		<2		84				<0.2		1.2	
					Middle	4.0	0.6	195	29.0	29.0	8.3	8.3	19.6	19.6	94.0	93.9	6.5		4.7		<2		86				<0.2		1.3	
						4.0	0.6	196	29.0		8.3		19.7		93.8		6.5		4.8		<2		87				<0.2		1.2	
					Bottom	7.0	0.3	185	28.5	28.6	8.0	8.0	27.4	27.4	58.1	58.1	3.9	3.9	10.5		2		90				<0.2		1.2	
						7.0	0.3	192	28.6		8.0		27.4		58.0		3.9		10.4		3		89				<0.2		1.3	
IM5	Fine	Moderate	08:48	7.4	Surface	1.0	0.4	206	29.0	29.0	8.4	8.4	18.1	18.1	108.3	108.3	7.5	7.1	3.5	5.9	3	2	84	87	820718	804851	<0.2	<0.2	1.4	1.3
						1.0	0.5	206	29.0		8.4		18.2		108.2		7.5		3.6		2		84				<0.2		1.3	
					Middle	3.7	0.5	218	29.0	29.0	8.3	8.3	19.7	19.7	95.4	95.3	6.6		4.6		2		87				<0.2		1.2	
						3.7	0.6	234	29.0		8.3		19.7		95.2		6.6		4.7		3		86				<0.2		1.2	
					Bottom	6.4	0.4	207	29.0	29.0	8.1	8.1	21.7	21.7	85.6	85.7	5.8	5.8	9.4		2		90				<0.2		1.4	
						6.4	0.4	217	29.0		8.1		21.7		85.7		5.8		9.4		2		89				<0.2		1.3	
IM6	Cloudy	Moderate	08:56	7.2	Surface	1.0	0.4	220	28.9	28.9	8.3	8.3	18.5	18.5	104.8	104.8	7.3	6.7	3.7	6.3	2	2	84	87	821038	805845	<0.2	<0.2	1.3	1.3
						1.0	0.4	236	28.9		8.3		18.5		104.7		7.3		3.7		2		85				<0.2		1.2	
					Middle	3.6	0.3	219	29.0	29.0	8.2	8.2	20.7	20.7	88.4	88.4	6.1		6.7		2		86				<0.2		1.3	
						3.6	0.3	222	29.0		8.2		20.7		88.3		6.1		6.6		3		87				<0.2		1.3	
					Bottom	6.2	0.4	249	28.7	28.7	8.0	8.0	23.6	23.6	75.3	75.4	5.1	5.1	8.6		2		89				<0.2		1.2	
						6.2	0.4	272	28.7		8.0		23.6		75.4		5.1		8.7		3		90				<0.2		1.2	
IM7	Cloudy	Moderate	09:05	8.3	Surface	1.0	0.2	250	29.0	29.0	8.3	8.3	18.5	18.6	105.1	105.0	7.3	6.5	3.0	4.8	3	3	84	87	821358	806842	<0.2	<0.2	1.3	1.3
						1.0	0.2	260	29.0		8.3		18.6		104.9		7.3		3.1		3		84				<0.2		1.3	
					Middle	4.2	0.1	241	28.8	28.8	8.1	8.1	22.5	22.5	83.7	83.7	5.7		4.6		3		87				<0.2		1.3	
						4.2	0.1	247	28.8		8.1		22.5		83.7		5.7		4.7		3		87				<0.2		1.2	
					Bottom	7.3	0.2	220	28.6	28.6	8.0	8.0	24.4	24.4	77.0	77.0	5.2	5.2	6.8		3		89				<0.2		1.2	
						7.3	0.2	239	28.6		8.0		24.4		77.0		5.2		6.7		3		89				<0.2		1.3	
IM8	Cloudy	Moderate	08:43	7.8	Surface	1.0	0.1	229	28.5	28.5	8.2	8.2	17.9	17.9	99.4	99.3	7.0	6.5	2.3	2.6	4	4	86	89	821812	808142	<0.2	<0.2	1.4	1.3
						1.0	0.1	247	28.5		8.2		17.9		99.2		7.0		2.3		3		86				<0.2		1.3	
					Middle	3.9	0.1	256	28.6	28.6	8.0	8.0	20.1	20.1	87.1	86.9	6.0		2.3		3		89				<0.2		1.3	
						3.9	0.1	273	28.6		8.0		20.1		86.6		6.0		2.3		4		89				<0.2		1.2	
					Bottom	6.8	0.1	174	28.4	28.4	8.0	8.0	22.6	22.6	81.9	82.1	5.6	5.6	3.1		3		91				<0.2		1.3	
						6.8	0.1	181	28.4		8.0		22.6		82.2		5.6		3.3		4		91				<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 13 August 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	08:38	7.3	Surface	1.0	0.2	133	28.5	28.5	8.3	8.3	17.8	17.8	100.6	100.6	7.1	6.8	2.2	2.9	4	3	86	89	822108	808825	<0.2	<0.2	1.2	1.3
						1.0	0.2	141	28.5		8.3		17.8		100.5		7.1		2.3		3		86				<0.2		1.3	
					Middle	3.7	0.1	89	28.6	28.6	8.1	8.1	19.0	19.0	92.3	92.3	6.4		2.3		3		90				<0.2		1.2	
						3.7	0.1	92	28.6		8.1		18.9		92.3		6.4		2.4		3		90				<0.2		1.3	
					Bottom	6.3	0.1	51	28.4	28.5	8.0	8.0	22.5	22.5	80.4	82.2	5.5	5.7	4.2		3		91				<0.2		1.2	
						6.3	0.2	56	28.5		8.0		22.5		84.0		5.8		4.2		3		91				<0.2		1.3	
IM10	Cloudy	Moderate	08:30	7.9	Surface	1.0	0.4	148	28.5	28.5	8.3	8.3	17.6	17.6	100.1	100.1	7.1	6.6	2.3	5.4	2	3	87	89	822394	809781	<0.2	<0.2	1.3	1.3
						1.0	0.5	151	28.5		8.3		17.6		100.0		7.0		2.2		3		87				<0.2		1.2	
					Middle	4.0	0.4	132	28.7	28.7	8.1	8.1	19.3	19.3	87.5	87.3	6.1		3.2		3		90				<0.2		1.3	
						4.0	0.5	143	28.6		8.1		19.3		87.1		6.1		3.6		2		90				<0.2		1.3	
					Bottom	6.9	0.3	134	28.2	28.2	7.9	7.9	23.8	23.8	73.6	73.7	5.0	5.1	10.5		3		91				<0.2		1.2	
						6.9	0.3	144	28.2		7.9		23.8		73.8		5.1		10.6		2		91				<0.2		1.3	
IM11	Cloudy	Moderate	08:17	7.3	Surface	1.0	0.3	76	28.5	28.5	8.2	8.2	17.9	17.9	98.1	98.1	6.9	6.7	2.0	2.1	3	3	85	89	822049	811460	<0.2	<0.2	1.3	1.3
						1.0	0.3	80	28.5		8.2		17.9		98.0		6.9		2.0		3		86				<0.2		1.2	
					Middle	3.7	0.3	80	28.7	28.7	8.1	8.1	19.1	19.1	92.0	91.9	6.4		2.3		3		89				<0.2		1.3	
						3.7	0.3	80	28.6		8.1		19.1		91.8		6.4		2.2		3		89				<0.2		1.2	
					Bottom	6.3	0.2	88	28.2	28.2	8.0	8.0	23.4	23.3	82.8	83.0	5.7	5.7	2.1		3		91				<0.2		1.2	
						6.3	0.2	93	28.2		8.0		23.3		83.2		5.7		2.1		3		91				<0.2		1.3	
IM12	Cloudy	Moderate	08:10	9.2	Surface	1.0	0.2	81	28.4	28.4	8.2	8.2	18.7	18.7	95.8	95.7	6.7	6.1	1.5	3.7	4	4	85	88	821480	812064	<0.2	<0.2	1.3	1.3
						1.0	0.3	87	28.4		8.2		18.7		95.5		6.7		1.5		4		85				<0.2		1.3	
					Middle	4.6	0.3	102	28.4	28.4	8.0	8.0	21.6	21.6	78.4	78.3	5.4		3.2		4		88				<0.2		1.2	
						4.6	0.3	104	28.4		8.0		21.6		78.2		5.4		3.4		3		89				<0.2		1.2	
					Bottom	8.2	0.3	114	28.2	28.2	7.9	7.9	23.5	23.5	70.5	70.6	4.8	4.9	6.4		3		89				<0.2		1.2	
						8.2	0.3	124	28.2		7.9		23.5		70.7		4.9		6.5		3		90				<0.2		1.4	
SR1A	Cloudy	Calm	07:54	5.1	Surface	1.0	-	-	28.5	28.5	8.3	8.3	19.7	19.8	103.9	103.8	7.2	7.2	1.4	1.6	<2	<2	-	-	819979	812666	-	-	-	-
						1.0	-	-	28.5		8.3		19.8		103.6		7.2		1.5		<2		-				-		-	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	-	-	28.5	28.5	8.3	8.3	20.1	20.1	103.2	103.3	7.2	7.2	1.7		<2		-				-		-	
						4.1	-	-	28.5		8.3		20.1		103.3		7.2		1.7		<2		-				-		-	
SR2	Cloudy	Moderate	07:40	4.3	Surface	1.0	0.2	204	28.4	28.4	8.3	8.3	19.6	19.6	107.4	107.2	7.5	7.5	1.0	2.3	3	2	85	87	821461	814180	<0.2	<0.2	1.3	1.3
						1.0	0.2	210	28.4		8.3		19.6		106.9		7.5		1.0		2		85				<0.2		1.3	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.3	89	28.6	28.6	8.2	8.2	20.5	20.5	96.5	96.6	6.7	6.7	3.6		<2		88				<0.2		1.2	
						3.3	0.3	89	28.6		8.2		20.5		96.6		6.7		3.8		<2		88				<0.2		1.2	
SR3	Cloudy	Moderate	08:49	9.0	Surface	1.0	0.2	205	28.6	28.6	8.2	8.2	18.1	18.1	98.6	98.3	6.9	6.4	2.5	3.9	3	4	-	-	822135	807588	-	-	-	-
						1.0	0.2	216	28.6		8.2		18.1		98.0		6.9		2.5		4		-				-		-	
					Middle	4.5	0.0	266	28.6	28.6	8.0	8.0	20.5	20.5	83.3	83.3	5.8		2.3		4		-				-		-	
						4.5	0.0	282	28.6		8.0		20.5		83.2		5.8		2.3		4		-				-		-	
					Bottom	8.0	0.1	187	28.2	28.2	7.9	7.9	24.0	24.0	72.5	72.6	5.0	5.0	7.1		5		-				-		-	
						8.0	0.1	194	28.2		7.9		24.0		72.6		5.0		7.0		4		-				-		-	
SR4A	Cloudy	Calm	07:35	9.4	Surface	1.0	0.1	244	28.9	28.9	8.5	8.5	18.7	18.7	98.5	98.4	6.8	5.7	4.9	7.3	4	4	-	-	817187	807799	-	-	-	-
						1.0	0.1	261	28.9		8.5		18.7		98.3		6.8		5.0		3		-				-		-	
					Middle	4.7	0.1	40	28.7	28.7	8.3	8.3	24.7	24.7	68.3	68.3	4.6		7.1		4		-				-		-	
						4.7	0.1	40	28.7		8.3		24.7		68.3		4.6		7.1		4		-				-		-	
					Bottom	8.4	0.2	65	28.4	28.4	8.2	8.2	27.4	27.4	58.8	58.9	3.9	3.9	9.7		3		-				-		-	
						8.4	0.2	68	28.4		8.2		27.4		58.9		3.9		9.8		3		-				-		-	
SR5A	Cloudy	Calm	07:19	3.5	Surface	1.0	0.1	320	28.8	28.8	8.5	8.5	18.1	18.1	107.5	107.5	7.5	7.5	4.7	5.7	4	5	-	-	816582	810691	-	-	-	-
						1.0	0.1	325	28.8		8.5		18.1		107.5		7.5		4.8		3		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.5	0.1	350	29.0	29.0	8.4	8.4	18.8	18.8	107.3	107.3	7.4	7.4	6.7		5		-				-		-	
						2.5	0.1	322	29.0		8.4		18.8		107.2		7.4		6.8		6		-				-		-	
SR6A	Cloudy	Calm	06:48	4.3	Surface	1.0	0.1	349	29.0	29.0	8.5	8.5	20.7	20.7	109.6	109.5	7.5	7.5	5.4	8.1	6	5	-	-	817948	814762	-	-	-	-
						1.0	0.1	321	29.0		8.5		20.8		109.4		7.5		5.7		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.0	231	29.0	29.0	8.3	8.3	21.7	21.7	97.2	97.2	6.6	6.6	10.7		5		-				-		-	
						3.3	0.0	252	29.0		8.3		21.7		97.1		6.6		10.6		4		-				-		-	
SR7	Cloudy	Moderate	06:40	15.7	Surface	1.0	0.1	190	28.0	28.0	8.1	8.1	21.9	21.8	104.3	104.3	7.2	7.0	0.6	1.0	2	2	-	-	823615	823747	-	-	-	-
						1.0	0.1	201	28.0		8.1		21.8		104.2		7.2		0.6		2		-				-		-	
					Middle	7.9	0.0	237	27.9	27.9	8.1	8.1	23.2	23.2	97.3	97.2	6.7		0.8		<2		-				-		-	
						7.9	0.0	257	27.9		8.1		23.2		97.0		6.7		0.8		<2		-				-		-	
					Bottom	14.7	0.0	243	26.1	26.1	7.8	7.8	29.2	29.1	66.5	67.1	4.6	4.7	1.8		<2		-				-		-	
						14.7	0.0	266	26.1		7.8		29.1		67.6		4.7		1.6		<2		-				-		-	
SR8	Cloudy	Calm	08:03	4.6	Surface	1.0	-	-	28.9	28.9	8.2	8.2	19.4	19.4	97.0	97.2	6.7	6.7	2.7	2.7	2	3	-	-	820402	811612	-	-	-	-
						1.0	-	-	28.9		8.2		19.4		97.3		6.7		2.7		3		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	-	-	28.5	28.5	8.2	8.2	19.4	19.4	97.9	97.9	6.8	6.8	2.7		3		-				-		-	
						3.6	-	-	28.5		8.2		19.5		97.9		6.8		2.6		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 13 August 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	14:52	8.3	Surface	1.0	0.3	58	29.0	29.0	8.7	8.7	17.1	17.1	121.8	121.8	8.5	8.0	3.9	6.0	2	2	86	89	815605	804254	<0.2	<0.2	1.3	1.2
						1.0	0.3	62	29.0		8.7		17.2		121.7		8.5		3.8		3		87				<0.2		1.2	
					Middle	4.2	0.1	84	29.1	29.1	8.6	8.6	18.3	18.3	106.9	106.9	7.4		4.6		2		89				<0.2		1.2	
						4.2	0.1	87	29.1		8.6		18.3		106.8		7.4		4.5		2		89				<0.2		1.2	
					Bottom	7.3	0.1	3	28.8	28.8	8.4	8.4	23.3	23.3	74.4	74.5	5.1	5.1	9.6		2		91				<0.2		1.2	
						7.3	0.1	3	28.8		8.4		23.3		74.6		5.1		9.8		2		92				<0.2		1.3	
C2	Rainy	Moderate	13:41	11.9	Surface	1.0	0.4	189	28.9	28.9	8.0	8.0	15.3	15.2	85.3	85.5	6.0	5.4	3.5	6.0	3	3	85	88	825695	806931	<0.2	<0.2	1.2	1.3
						1.0	0.5	207	28.9		8.0		15.2		85.7		6.1		3.6		3		86				<0.2		1.2	
					Middle	6.0	0.2	181	28.3	28.3	7.9	7.9	21.6	21.6	68.9	68.9	4.8		3.9		3		88				<0.2		1.4	
						6.0	0.2	190	28.2		7.9		21.6		68.8		4.8		3.9		3		89				<0.2		1.4	
					Bottom	10.9	0.3	5	27.7	27.7	7.9	7.9	25.8	25.8	63.5	63.7	4.3	4.4	10.5		4		90				<0.2		1.3	
						10.9	0.4	5	27.7		7.9		25.8		63.8		4.4		10.7		4		90				<0.2		1.3	
C3	Cloudy	Moderate	15:35	12.1	Surface	1.0	0.0	92	28.6	28.6	8.2	8.2	20.1	20.1	106.6	106.5	7.4	6.3	0.6	2.2	<2	<2	88	91	822094	817797	<0.2	<0.2	1.3	1.3
						1.0	0.0	93	28.6		8.2		20.1		106.3		7.4		0.6		<2		88				<0.2		1.3	
					Middle	6.1	0.0	229	27.6	27.6	8.0	8.0	25.0	25.0	75.3	75.2	5.2		2.5		<2		91				<0.2		1.3	
						6.1	0.0	241	27.5		8.0		25.0		75.0		5.2		2.3		<2		92				<0.2		1.3	
					Bottom	11.1	0.1	287	27.1	27.2	7.8	7.8	27.0	26.9	61.7	62.0	4.2	4.3	3.7		<2		92				<0.2		1.3	
						11.1	0.1	313	27.2		7.8		26.8		62.3		4.3		3.5		<2		92				<0.2		1.3	
IM1	Cloudy	Moderate	14:30	4.7	Surface	1.0	0.1	311	29.2	29.2	8.4	8.4	18.8	18.8	119.8	119.9	8.3	8.3	4.7	5.5	<2	3	87	89	817927	807135	<0.2	<0.2	1.3	1.4
						1.0	0.1	318	29.2		8.4		18.8		119.9		8.3		4.8		<2		88				<0.2		1.3	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.1	260	29.1	29.1	8.2	8.2	20.2	20.2	104.3	104.4	7.2	7.2	6.2		3		89				<0.2		1.4	
						3.7	0.1	278	29.1		8.2		20.2		104.4		7.2		6.2		4		90				<0.2		1.4	
IM2	Cloudy	Moderate	14:23	6.6	Surface	1.0	0.3	5	29.2	29.2	8.5	8.5	17.8	17.8	124.7	124.7	8.7	8.2	3.8	5.3	<2	2	86	88	818168	806151	<0.2	<0.2	1.4	1.3
						1.0	0.4	5	29.2		8.5		17.8		124.7		8.7		3.8		<2		85				<0.2		1.3	
					Middle	3.3	0.4	342	29.0	29.0	8.4	8.4	19.2	19.2	111.4	111.3	7.7		3.9		2		88				<0.2		1.3	
						3.3	0.5	315	29.0		8.4		19.2		111.2		7.7		4.0		2		89				<0.2		1.4	
					Bottom	5.6	0.4	316	28.6	28.6	8.0	8.0	26.2	26.2	58.7	58.9	3.9	4.0	8.2		2		90				<0.2		1.3	
						5.6	0.5	343	28.6		8.0		26.2		59.0		4.0		8.2		2		91				<0.2		1.3	
IM3	Cloudy	Moderate	14:15	6.8	Surface	1.0	0.5	322	29.1	29.1	8.3	8.3	19.2	19.2	116.3	116.1	8.0	7.4	4.9	6.4	2	2	87	89	818764	805604	<0.2	<0.2	1.4	1.3
						1.0	0.5	325	29.1		8.3		19.2		115.9		8.0		5.0		2		86				<0.2		1.3	
					Middle	3.4	0.5	318	29.1	29.1	8.3	8.3	20.4	20.4	99.4	99.4	6.8		6.1		2		89				<0.2		1.4	
						3.4	0.5	327	29.1		8.3		20.4		99.3		6.8		6.1		2		89				<0.2		1.2	
					Bottom	5.8	0.3	294	28.6	28.6	8.0	8.0	25.6	25.6	63.6	63.6	4.3	4.3	8.0		3		91				<0.2		1.3	
						5.8	0.3	295	28.6		8.0		25.6		63.5		4.3		8.0		3		90				<0.2		1.3	
IM4	Fine	Moderate	14:05	7.8	Surface	1.0	0.5	311	29.0	29.0	8.5	8.5	18.7	18.7	115.1	114.9	8.0	6.4	4.2	7.3	4	3	86	88	819720	804623	<0.2	<0.2	1.2	1.5
						1.0	0.5	330	29.0		8.5		18.7		114.6		8.0		4.3		5		86				<0.2		1.4	
					Middle	3.9	0.5	298	28.7	28.7	8.2	8.2	23.4	23.5	71.4	71.4	4.9		7.9		2		89				<0.2		1.5	
						3.9	0.6	321	28.7		8.2		23.5		71.3		4.8		8.0		2		88				<0.2		1.6	
					Bottom	6.8	0.2	327	28.5	28.5	8.0	8.0	27.0	27.0	54.7	54.9	3.7	3.7	9.9		2		90				<0.2		1.6	
						6.8	0.2	344	28.5		8.0		27.0		55.0		3.7		9.9		3		90				<0.2		1.6	
IM5	Cloudy	Moderate	13:56	6.6	Surface	1.0	0.2	283	29.1	29.1	8.4	8.4	18.4	18.4	117.3	117.3	8.1	7.9	3.7	4.3	3	4	86	89	820713	804851	<0.2	<0.2	1.5	1.5
						1.0	0.2	287	29.1		8.4		18.4		117.3		8.1		3.7		4		86				<0.2		1.5	
					Middle	3.3	0.3	280	29.1	29.1	8.3	8.3	18.9	18.9	111.2	111.2	7.7		3.9		4		89				<0.2		1.5	
						3.3	0.3	306	29.1		8.3		18.9		111.1		7.7		3.9		4		89				<0.2		1.5	
					Bottom	5.6	0.2	303	29.0	29.0	8.3	8.3	19.4	19.3	102.8	102.7	7.1	7.1	5.3		4		90				<0.2		1.6	
						5.6	0.2	317	29.0		8.3		19.2		102.6		7.1		5.6		4		91				<0.2		1.5	
IM6	Cloudy	Moderate	13:49	6.9	Surface	1.0	0.4	266	29.1	29.1	8.5	8.5	17.4	17.4	123.5	123.4	8.6	7.9	3.9	5.2	4	5	86	89	821064	805846	<0.2	<0.2	1.6	1.4
						1.0	0.4	267	29.1		8.5		17.4		123.3		8.6		3.9		4		87				<0.2		1.6	
					Middle	3.5	0.3	282	29.1	29.1	8.4	8.4	19.2	19.2	104.6	104.7	7.2		4.4		5		89				<0.2		1.2	
						3.5	0.3	283	29.1		8.4		19.2		104.7		7.2		4.4		4		89				<0.2		1.2	
					Bottom	5.9	0.1	291	28.7	28.7	8.1	8.1	23.1	23.1	80.5	80.5	5.5	5.5	7.2		6		91				<0.2		1.4	
						5.9	0.1	293	28.7		8.1		23.1		80.5		5.5		7.2		5		90				<0.2		1.3	
IM7	Cloudy	Moderate	13:44	8.0	Surface	1.0	0.4	252	29.1	29.1	8.5	8.5	17.0	17.0	116.9	116.9	8.2	7.8	4.0	5.9	5	5	85	87	821325	806827	<0.2	<0.2	1.4	1.3
						1.0	0.5	261	29.1		8.5		17.0		116.9		8.2		4.0		5		84				<0.2		1.3	
					Middle	4.0	0.4	268	29.1	29.1	8.5	8.5	18.8	18.8	106.9	106.8	7.4		4.8		5		87				<0.2		1.2	
						4.0	0.5	276	29.1		8.5		18.8		106.7		7.4		4.9		5		88				<0.2		1.3	
					Bottom	7.0	0.2	266	28.6	28.7	8.2	8.2	24.0	24.0	74.8	74.8	5.1	5.1	8.8		4		90				<0.2		1.3	
						7.0	0.2	276	28.7		8.2		24.0		74.8		5.1		8.8		5		89				<0.2		1.2	
IM8	Cloudy	Moderate	14:06	7.4	Surface	1.0	0.3	210	28.9	28.9	8.2	8.2	15.7	15.7	117.7	117.4	8.3	7.6	2.5	2.7	8	5	85	88	821810	808139	<0.2	<0.2	1.4	1.4
						1.0	0.3	216	28.9		8.2		15.7		117.1		8.3		2.5		5		86				<0.2		1.4	
					Middle	3.7	0.2	208	28.8	28.8	8.1	8.1	16.9	16.9	96.6	96.6	6.8		3.2		4		88				<0.2		1.4	
						3.7	0.2	210	28.8		8.1		16.8		96.6		6.8		3.3		4		88				<0.2		1.5	
					Bottom	6.4	0.2	221	28.7	28.7	8.0	8.0	17.4	17.4	91.1	91.4	6.4	6.4	2.2		4		91				<0.2		1.4	
						6.4	0.2	230	28.7		8.0		17.4		91.6		6.4		2.2		4		91				<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 13 August 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	14:12	7.1	Surface	1.0	0.2	205	29.0	29.0	8.2	8.2	15.8	15.8	117.3	117.2	8.3	7.9	2.7	3.4	4	5	85	88	822090	808818	<0.2	<0.2	1.4	1.4
						1.0	0.2	224	28.9		8.2		15.8		117.0		8.3		2.6		4		85				<0.2		1.4	
					Middle	3.6	0.1	250	28.8	28.8	8.1	8.1	16.6	16.6	105.9	105.8	7.5		2.9		5		89				<0.2		1.4	
						3.6	0.2	274	28.8		8.1		16.6		105.7		7.5		3.0		5		89				<0.2		1.3	
					Bottom	6.1	0.0	245	28.7	28.7	8.1	8.1	18.2	18.2	96.5	96.7	6.8	6.8	4.6		5		90				<0.2		1.4	
						6.1	0.0	247	28.7		8.1		18.2		96.8		6.8		4.6		4		91				<0.2		1.3	
IM10	Rainy	Moderate	14:19	7.0	Surface	1.0	0.0	264	28.9	28.9	8.3	8.3	16.1	16.1	128.1	127.8	9.0	8.0	2.2	5.1	5	4	86	88	822390	809773	<0.2	<0.2	1.3	1.4
						1.0	0.0	278	28.9		8.3		16.1		127.5		9.0		2.1		4		86				<0.2		1.3	
					Middle	3.5	0.1	330	28.7	28.7	8.1	8.1	18.1	18.1	97.9	97.9	6.9		6.1		4		88				<0.2		1.5	
						3.5	0.1	359	28.7		8.1		18.1		97.9		6.9		5.7		4		89				<0.2		1.3	
					Bottom	6.0	0.2	341	28.6	28.6	8.1	8.1	19.2	19.2	93.0	93.2	6.5	6.5	7.3		3		90				<0.2		1.5	
						6.0	0.2	353	28.6		8.1		19.2		93.4		6.5		7.5		4		91				<0.2		1.3	
IM11	Rainy	Moderate	14:33	8.2	Surface	1.0	0.1	269	28.7	28.7	8.2	8.2	17.1	17.1	110.8	110.7	7.8	7.5	1.8	3.9	3	4	88	90	822072	811441	<0.2	<0.2	1.4	1.4
						1.0	0.1	277	28.7		8.2		17.1		110.6		7.8		1.9		4		88				<0.2		1.4	
					Middle	4.1	0.1	294	28.7	28.7	8.2	8.2	17.8	17.9	102.4	102.4	7.2		2.6		4		91				<0.2		1.4	
						4.1	0.2	306	28.7		8.2		17.9		102.4		7.2		2.8		4		91				<0.2		1.4	
					Bottom	7.2	0.1	289	28.4	28.4	8.0	8.0	22.1	22.2	77.5	77.9	5.3	5.4	7.5		4		92				<0.2		1.4	
						7.2	0.2	313	28.4		8.0		22.2		78.3		5.4		6.7		4		92				<0.2		1.3	
IM12	Rainy	Moderate	14:42	8.5	Surface	1.0	0.2	252	28.7	28.7	8.3	8.3	17.8	17.8	115.2	114.8	8.1	7.3	2.2	2.6	5	4	87	90	821482	812060	<0.2	<0.2	1.3	1.3
						1.0	0.2	262	28.7		8.3		17.8		114.4		8.0		2.1		5		87				<0.2		1.3	
					Middle	4.3	0.3	268	28.6	28.6	8.1	8.1	19.2	19.2	94.3	94.2	6.6		2.8		3		90				<0.2		1.4	
						4.3	0.3	278	28.6		8.1		19.2		94.1		6.6		2.8		4		90				<0.2		1.3	
					Bottom	7.5	0.2	275	28.2	28.2	7.9	7.9	22.7	22.7	78.5	78.8	5.4	5.4	2.7		4		92				<0.2		1.3	
						7.5	0.3	276	28.2		7.9		22.7		79.1		5.4		2.7		3		93				<0.2		1.4	
SR1A	Rainy	Calm	14:59	4.6	Surface	1.0	-	-	28.7	28.7	8.3	8.3	18.8	18.8	112.3	112.2	7.8	7.8	2.2	2.5	6	5	-	-	819977	812662	-	-	-	-
						1.0	-	-	28.7		8.3		18.8		112.1		7.8		2.2		5		-				-		-	
					Middle	2.3	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.3	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	-	-	28.7	28.7	8.2	8.2	19.1	19.1	107.9	107.7	7.5	7.5	2.8		5		-				-		-	
						3.6	-	-	28.7		8.2		19.1		107.4		7.5		2.8		5		-				-		-	
SR2	Cloudy	Moderate	15:13	4.7	Surface	1.0	0.2	193	28.6	28.6	8.1	8.1	19.5	19.5	104.0	103.8	7.2	7.2	1.8	2.1	5	5	86	88	821484	814148	<0.2	<0.2	1.5	1.4
						1.0	0.2	193	28.6		8.1		19.5		103.5		7.2		1.8		5		87				<0.2		1.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.2	204	28.5	28.5	8.1	8.1	20.2	20.2	101.6	101.8	7.0	7.1	2.4		4		90				<0.2		1.4	
						3.7	0.2	206	28.5		8.1		20.2		101.9		7.1		2.3		4		90				<0.2		1.4	
SR3	Cloudy	Moderate	14:01	8.9	Surface	1.0	0.3	220	29.0	29.0	8.0	8.0	15.1	15.1	98.8	98.6	7.0	6.4	2.5	2.8	3	4	-	-	822130	807572	-	-	-	-
						1.0	0.3	227	29.0		8.0		15.2		98.4		7.0		2.4		4		-				-		-	
					Middle	4.5	0.2	236	28.7	28.7	8.0	8.0	18.3	18.3	83.3	83.0	5.8		2.2		4		-				-		-	
						4.5	0.2	237	28.7		8.0		18.4		82.7		5.8		2.3		4		-				-		-	
					Bottom	7.9	0.2	283	28.4	28.4	8.0	8.0	23.2	23.3	78.8	79.1	5.4	5.4	3.7		3		-				-		-	
						7.9	0.2	299	28.4		8.0		23.3		79.3		5.4		3.7		4		-				-		-	
SR4A	Cloudy	Calm	15:13	9.2	Surface	1.0	0.2	85	29.2	29.2	8.5	8.5	18.8	18.8	102.0	101.9	7.1	6.5	7.9	10.8	6	4	-	-	817185	807803	-	-	-	-
						1.0	0.2	89	29.2		8.5		18.8		101.7		7.0		8.1		6		-				-		-	
					Middle	4.6	0.1	99	29.0	29.0	8.5	8.5	20.6	20.7	85.4	85.2	5.9		11.0		5		-				-		-	
						4.6	0.1	99	28.9		8.5		20.7		85.0		5.8		11.1		4		-				-		-	
					Bottom	8.2	0.1	71	28.5	28.5	8.3	8.3	26.5	26.5	52.9	52.9	3.5	3.5	13.4		3		-				-		-	
						8.2	0.1	73	28.5		8.3		26.5		52.9		3.5		13.4		2		-				-		-	
SR5A	Cloudy	Calm	15:29	3.1	Surface	1.0	0.1	106	29.4	29.4	8.5	8.5	20.2	20.2	111.0	111.0	7.6	7.6	10.6	12.9	6	6	-	-	816587	810674	-	-	-	-
						1.0	0.1	111	29.4		8.5		20.2		110.9		7.6		10.7		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.1	0.1	118	29.3	29.3	8.5	8.5	20.3	20.3	107.0	107.1	7.3	7.3	15.2		5		-				-		-	
						2.1	0.1	118	29.3		8.5		20.3		107.1		7.3		15.2		6		-				-		-	
SR6A	Sunny	Calm	16:03	4.0	Surface	1.0	0.0	168	29.2	29.2	8.6	8.6	20.8	20.8	115.4	115.4	7.9	7.9	6.4	8.9	8	8	-	-	817973	814760	-	-	-	-
						1.0	0.0	168	29.2		8.6		20.8		115.4		7.9		6.6		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	0.0	2	29.1	29.1	8.4	8.4	21.2	21.2	106.1	106.1	7.2	7.2	11.2		8		-				-		-	
						3.0	0.0	2	29.1		8.4		21.2		106.1		7.2		11.3		8		-				-		-	
SR7	Cloudy	Moderate	16:08	15.9	Surface	1.0	0.0	239	28.8	28.8	8.3	8.3	20.5	20.5	108.8	108.6	7.5	6.4	0.5	1.6	<2	<2	-	-	823612	823752	-	-	-	-
						1.0	0.0	252	28.8		8.3		20.5		108.4		7.5		0.5		<2		-				-		-	
					Middle	8.0	0.1	17	27.3	27.4	8.0	8.0	25.7	25.7	77.8	77.5	5.3		1.2		<2		-				-		-	
						8.0	0.1	18	27.4		8.0		25.7		77.2		5.3		1.1		<2		-				-		-	
					Bottom	14.9	0.0	163	26.3	26.4	7.9	7.9	28.9	28.9	61.2	61.4	4.2	4.2	3.3		<2		-				-		-	
						14.9	0.0	163	26.4		7.9		28.9		61.6		4.2		3.0		<2		-				-		-	
SR8	Rainy	Calm	14:51	4.3	Surface	1.0	-	-	28.9	28.9	8.2	8.2	18.1	18.1	106.2	106.1	7.4	7.4	7.1	5.4	4	4	-	-	820401	811629	-	-	-	-
						1.0	-	-	28.9		8.2		18.2		106.0		7.4		6.4		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	-	-	28.6	28.6	8.1	8.1	18.9	18.9	101.8	101.8	7.1	7.1	3.9		4		-				-		-	
						3.3	-	-	28.6		8.1		18.9		101.7		7.1		4.0		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 15 August 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	Sunny	Moderate	10:16	8.8	Surface	1.0	0.7	181	29.3	29.3	8.5	8.5	14.5	14.5	116.7	116.0	8.3	6.6	4.7	8.6	5	5	85	88	815603	804266	<0.2	<0.2	1.5	1.6
						1.0	0.7	186	29.2		8.5		14.6		115.2		8.2		4.7		6		86				<0.2		1.5	
					Middle	4.4	0.4	226	28.8	28.8	8.2	8.2	22.4	22.5	71.4	71.2	4.9		4.6		4		87				<0.2		1.7	
						4.4	0.4	237	28.7		8.2		22.5		71.0		4.8		4.6		5		88				<0.2		1.6	
					Bottom	7.8	0.5	231	28.0	28.0	8.0	8.0	29.5	29.5	42.1	42.3	2.8	2.8	16.7		4		89				<0.2		1.6	
						7.8	0.5	233	28.0		8.0		29.5		42.5		2.8		16.1		4		90				<0.2		1.4	
C2	Fine	Moderate	11:20	10.7	Surface	1.0	0.8	159	29.2	29.2	8.1	8.1	15.1	15.1	92.0	91.9	6.5	5.6	3.1	4.1	5	4	82	86	825682	806926	<0.2	<0.2	1.7	1.7
						1.0	0.8	167	29.2		8.1		15.2		91.7		6.5		3.0		4		82				<0.2		1.5	
					Middle	5.4	0.5	150	27.7	27.7	8.0	8.0	24.1	24.1	66.5	66.5	4.6		3.3		4		87				<0.2		1.6	
						5.4	0.5	162	27.7		8.0		24.1		66.4		4.6		3.2		4		86				<0.2		1.9	
					Bottom	9.7	0.4	159	26.9	26.9	7.9	7.9	26.9	26.9	51.4	51.4	3.5	3.5	5.9		4		90				<0.2		1.6	
						9.7	0.4	160	26.9		7.9		26.9		51.4		3.5		6.1		4		90				<0.2		1.6	
C3	Rainy	Moderate	09:10	12.4	Surface	1.0	0.3	70	28.6	28.6	8.2	8.2	20.1	20.1	106.3	106.3	7.4	6.9	2.1	4.3	3	4	82	87	822122	817824	<0.2	<0.2	1.3	1.4
						1.0	0.3	75	28.6		8.2		20.1		106.2		7.4		2.1		3		83				<0.2		1.3	
					Middle	6.2	0.0	262	28.1	28.1	8.1	8.1	23.2	23.2	93.4	93.3	6.4		1.4		4		87				<0.2		1.4	
						6.2	0.0	277	28.1		8.1		23.2		93.1		6.4		1.4		3		87				<0.2		1.5	
					Bottom	11.4	0.0	243	27.0	27.0	8.0	8.0	26.2	26.2	67.5	67.7	4.7	4.7	9.4		4		91				<0.2		1.4	
						11.4	0.0	254	27.0		8.0		26.2		67.8		4.7		9.5		5		90				<0.2		1.4	
IM1	Cloudy	Moderate	10:37	4.9	Surface	1.0	0.1	10	29.7	29.7	8.4	8.4	18.9	18.7	104.7	104.2	7.2	7.2	9.4	10.2	5	5	86	88	817937	807149	<0.2	<0.2	1.5	1.5
						1.0	0.1	10	29.7		8.4		18.4		103.6		7.1		9.9		5		86				<0.2		1.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	0.1	309	28.2	28.2	8.0	8.0	27.6	27.6	49.1	49.3	3.3	3.3	10.8		5		89				<0.2		1.4	
						3.9	0.1	339	28.2		8.0		27.6		49.5		3.3		10.5		4		90				<0.2		1.6	
IM2	Cloudy	Moderate	10:45	6.8	Surface	1.0	0.1	214	29.7	29.7	8.4	8.4	17.6	17.6	116.8	114.5	8.1	5.2	5.5	9.2	6	6	85	87	818142	806177	<0.2	<0.2	1.2	1.3
						1.0	0.1	215	29.7		8.4		17.6		112.2		7.7		5.6		6		85				<0.2		1.4	
					Middle	3.4	0.1	204	28.0	28.0	8.1	8.0	29.2	29.3	36.9	36.8	2.5		6.4		6		87				<0.2		1.3	
						3.4	0.1	206	28.0		8.0		29.3		36.6		2.4		6.7		6		87				<0.2		1.2	
					Bottom	5.8	0.0	194	27.9	27.9	8.0	8.0	29.8	29.8	35.9	36.0	2.4	**2.4**	15.8		6		89				<0.2		1.2	
						5.8	0.0	209	27.9		8.0		29.8		36.0		2.4		15.4		6		90				<0.2		1.3	
IM3	Cloudy	Moderate	10:52	6.8	Surface	1.0	0.9	191	29.2	29.2	8.3	8.3	21.8	21.8	84.4	84.7	5.7	4.3	6.6	9.1	6	6	86	87	818764	805581	<0.2	<0.2	1.4	1.4
						1.0	0.9	194	29.2		8.3		21.7		84.9		5.8		6.7		5		85				<0.2		1.3	
					Middle	3.4	0.6	199	28.2	28.2	8.1	8.1	27.5	27.5	43.1	43.1	2.9		9.1		5		87				<0.2		1.4	
						3.4	0.6	200	28.2		8.1		27.5		43.0		2.9		9.4		6		87				<0.2		1.3	
					Bottom	5.8	0.1	258	27.9	27.9	8.0	8.0	30.0	30.0	34.9	35.0	2.3	**2.3**	11.3		6		90				<0.2		1.3	
						5.8	0.1	275	27.9		8.0		30.0		35.0		2.3		11.4		5		89				<0.2		1.5	
IM4	Sunny	Moderate	11:03	6.8	Surface	1.0	0.8	201	29.6	29.6	8.4	8.4	12.7	12.8	115.3	115.0	8.2	6.5	4.9	10.3	5	4	86	87	819726	804588	<0.2	<0.2	1.7	1.7
						1.0	0.8	208	29.5		8.4		12.9		114.7		8.2		4.8		4		85				<0.2		1.8	
					Middle	3.4	0.7	214	28.9	28.9	8.2	8.2	22.7	22.5	70.9	71.0	4.8		11.9		4		87				<0.2		1.7	
						3.4	0.8	214	28.9		8.2		22.2		71.0		4.9		12.1		4		86				<0.2		1.7	
					Bottom	5.8	0.4	212	28.3	28.3	8.1	8.1	27.0	27.1	44.1	44.0	3.0	3.0	14.1		3		90				<0.2		1.7	
						5.8	0.4	221	28.3		8.1		27.2		43.9		2.9		14.1		4		89				<0.2		1.6	
IM5	Sunny	Moderate	11:15	7.2	Surface	1.0	0.4	265	29.7	29.7	8.5	8.5	12.8	12.8	120.2	120.2	8.5	7.2	4.7	7.6	2	2	85	87	820755	804876	<0.2	<0.2	1.6	1.7
						1.0	0.4	276	29.7		8.5		12.8		120.1		8.5		4.7		2		85				<0.2		1.7	
					Middle	3.6	0.4	256	29.2	29.2	8.2	8.2	19.5	19.5	85.8	85.7	5.9		5.1		2		87				<0.2		1.6	
						3.6	0.4	275	29.1		8.2		19.5		85.5		5.9		5.1		2		88				<0.2		1.6	
					Bottom	6.2	0.4	225	28.6	28.6	8.1	8.1	23.5	23.4	64.7	64.8	4.4	4.4	13.7		2		89				<0.2		1.8	
						6.2	0.4	243	28.6		8.1		23.4		64.9		4.4		12.3		3		89				<0.2		1.6	
IM6	Sunny	Moderate	11:23	6.9	Surface	1.0	0.4	220	29.4	29.4	8.4	8.4	14.7	14.7	112.3	111.7	7.9	7.2	4.8	6.8	2	2	87	88	821083	805809	<0.2	<0.2	1.5	1.5
						1.0	0.4	241	29.3		8.4		14.7		111.1		7.8		4.9		2		85				<0.2		1.5	
					Middle	3.5	0.3	219	28.9	28.9	8.3	8.3	18.4	18.4	93.4	93.1	6.5		5.2		2		88				<0.2		1.5	
						3.5	0.3	223	28.9		8.3		18.4		92.8		6.5		5.2		3		89				<0.2		1.5	
					Bottom	5.9	0.4	249	28.4	28.4	8.1	8.1	24.6	24.6	65.4	65.8	4.4	4.5	10.5		2		90				<0.2		1.5	
						5.9	0.4	267	28.4		8.1		24.6		66.1		4.5		10.5		3		87				<0.2		1.5	
IM7	Sunny	Moderate	11:32	7.6	Surface	1.0	0.5	253	29.7	29.7	8.4	8.4	14.6	14.6	124.6	125.0	8.7	8.3	4.4	4.5	3	3	85	87	821359	806827	<0.2	<0.2	1.6	1.6
						1.0	0.5	268	29.7		8.4		14.6		125.3		8.8		4.4		3		86				<0.2		1.6	
					Middle	3.8	0.5	261	29.5	29.5	8.4	8.4	15.9	15.9	111.8	111.6	7.8		4.1		3		87				<0.2		1.6	
						3.8	0.5	270	29.5		8.4		16.0		111.3		7.8		4.1		2		87				<0.2		1.6	
					Bottom	6.6	0.2	210	28.3	28.3	8.1	8.1	25.3	25.3	54.9	55.2	3.7	3.8	5.0		2		89				<0.2		1.6	
						6.6	0.3	226	28.3		8.1		25.2		55.4		3.8		5.0		2		90				<0.2		1.7	
IM8	Fine	Moderate	10:47	7.8	Surface	1.0	0.3	170	29.4	29.4	8.3	8.3	12.7	12.7	117.8	117.7	8.4	7.5	2.7	4.5	2	3	83	87	821843	808162	<0.2	<0.2	1.9	1.8
						1.0	0.3	179	29.4		8.3		12.7		117.6		8.4		2.7		3		83				<0.2		1.7	
					Middle	3.9	0.2	200	29.0	29.0	8.1	8.1	17.9	17.9	95.2	95.2	6.6		2.5		4		87				<0.2		1.7	
						3.9	0.2	211	29.0		8.1		17.9		95.1		6.6		2.4		3		87				<0.2		1.9	
					Bottom	6.8	0.0	238	28.1	28.1	7.9	7.9	24.4	24.4	52.2	52.3	3.6	3.6	8.2		4		91				<0.2		1.8	
						6.8	0.0	257	28.1		7.9		24.5		52.4		3.6		8.3		3		91				<0.2		1.7	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 15 August 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	10:40	7.1	Surface	1.0	0.2	156	29.3	29.3	8.2	8.2	14.5	14.5	107.0	107.0	7.6	7.3	2.5	3.1	2	2	82	87	822112	808834	<0.2	<0.2	1.8	1.8
						1.0	0.2	161	29.3		8.2		14.5		106.9		7.6		2.5		2		83				<0.2		1.8	
					Middle	3.6	0.2	128	29.1	29.1	8.1	8.1	17.1	17.1	98.4	98.5	6.9		2.8		3		87				<0.2		1.7	
						3.6	0.2	133	29.1		8.1		17.0		98.6		6.9		2.7		2		87				<0.2		1.8	
					Bottom	6.1	0.2	100	28.5	28.5	8.0	8.0	20.8	20.5	72.4	74.2	5.0	5.2	4.2		3		91				<0.2		1.8	
						6.1	0.3	106	28.5		8.0		20.2		75.9		5.3		3.9		2		90				<0.2		1.6	
IM10	Fine	Moderate	10:30	8.3	Surface	1.0	0.6	117	29.2	29.2	8.1	8.1	15.5	15.5	103.8	103.8	7.3	7.2	2.7	4.5	<2	2	82	87	822394	809800	<0.2	<0.2	1.8	1.8
						1.0	0.6	125	29.2		8.1		15.5		103.7		7.3		2.6		<2		83				<0.2		1.8	
					Middle	4.2	0.6	102	29.1	29.1	8.1	8.1	16.8	16.9	100.5	100.5	7.0		2.6		2		88				<0.2		1.8	
						4.2	0.6	111	29.1		8.1		16.9		100.4		7.0		2.6		2		87				<0.2		1.9	
					Bottom	7.3	0.4	91	28.2	28.2	7.9	7.9	22.4	22.4	65.4	65.4	4.5	4.5	8.4		2		90				<0.2		1.8	
						7.3	0.4	96	28.2		7.9		22.4		65.3		4.5		8.4		2		91				<0.2		1.6	
IM11	Fine	Moderate	10:17	7.5	Surface	1.0	0.4	89	29.3	29.3	8.2	8.2	15.4	15.4	111.7	111.8	7.9	7.0	2.3	3.5	2	2	82	87	822079	811475	<0.2	<0.2	1.7	1.8
						1.0	0.4	92	29.3		8.2		15.4		111.9		7.9		2.3		2		83				<0.2		1.8	
					Middle	3.8	0.5	90	28.6	28.6	8.1	8.1	20.0	19.9	88.2	88.4	6.1		2.9		2		87				<0.2		1.8	
						3.8	0.5	93	28.6		8.1		19.9		88.6		6.1		2.8		2		87				<0.2		1.7	
					Bottom	6.5	0.2	76	27.5	27.5	7.9	7.9	24.8	24.7	57.3	57.5	3.9	4.0	5.6		3		91				<0.2		1.8	
						6.5	0.2	82	27.5		7.9		24.7		57.7		4.0		5.4		2		91				<0.2		1.8	
IM12	Fine	Moderate	10:08	9.6	Surface	1.0	0.5	126	29.4	29.4	8.2	8.2	15.7	15.7	111.0	110.9	7.8	6.7	2.4	5.6	3	3	82	88	821482	812055	<0.2	<0.2	1.5	1.6
						1.0	0.6	133	29.4		8.2		15.7		110.8		7.8		2.4		3		87				<0.2		1.6	
					Middle	4.8	0.5	105	28.5	28.5	8.0	8.0	20.2	20.2	79.7	79.6	5.5		2.7		3		87				<0.2		1.5	
						4.8	0.5	113	28.5		8.0		20.2		79.5		5.5		2.7		2		87				<0.2		1.7	
					Bottom	8.6	0.2	110	27.5	27.5	7.9	7.9	24.5	24.5	56.6	56.7	3.9	3.9	11.5		2		91				<0.2		1.8	
						8.6	0.2	113	27.5		7.9		24.5		56.7		3.9		11.6		2		91				<0.2		1.7	
SR1A	Fine	Moderate	09:48	5.5	Surface	1.0	-	-	29.0	29.0	8.2	8.2	17.6	17.6	105.4	105.4	7.4	7.4	2.6	2.7	3	2	-	-	819973	812664	-	-	-	-
						1.0	-	-	29.0		8.2		17.6		105.4		7.4		2.5		2		-				-		-	
					Middle	2.8	-	-	-	-	-	-	-	-	-	-	-		-		-		-	-			-		-	
						2.8	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.5	-	-	28.9	28.9	8.2	8.2	18.0	18.0	103.0	103.0	7.2	7.2	2.9		2		-				-		-	
						4.5	-	-	28.9		8.2		18.0		103.0		7.2		2.9		2		-				-		-	
SR2	Rainy	Moderate	09:35	4.8	Surface	1.0	0.3	69	29.1	29.1	8.2	8.2	17.0	17.0	107.6	107.6	7.5	7.5	2.4	3.0	3	3	83	85	821477	814183	<0.2	<0.2	1.6	1.6
						1.0	0.3	69	29.1		8.2		17.0		107.6		7.5		2.4		4		82				<0.2		1.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-	-			-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.2	49	28.9	28.9	8.2	8.2	19.2	19.2	103.2	103.2	7.2	7.2	3.6		2		87				<0.2		1.5	
						3.8	0.3	50	28.9		8.2		19.2		103.2		7.2		3.7		2		86				<0.2		1.5	
SR3	Fine	Moderate	10:53	8.4	Surface	1.0	0.4	191	29.4	29.4	8.3	8.3	13.9	13.9	116.2	116.0	8.2	7.0	3.0	2.9	4	3	-	-	822125	807554	-	-	-	-
						1.0	0.4	207	29.4		8.3		13.9		115.8		8.2		3.1		4		-				-		-	
					Middle	4.2	0.1	199	28.8	28.8	8.0	8.0	20.2	20.1	82.6	82.9	5.7		2.8		4		-	-			-		-	
						4.2	0.2	214	28.8		8.0		20.1		83.1		5.7		2.8		3		-				-		-	
					Bottom	7.4	0.1	285	27.8	27.8	7.9	7.9	24.2	24.2	59.1	59.0	4.1	4.1	2.9		2		-				-		-	
						7.4	0.1	290	27.8		7.9		24.2		58.9		4.0		2.9		3		-				-		-	
SR4A	Cloudy	Moderate	09:56	9.2	Surface	1.0	0.2	232	29.6	29.6	8.4	8.4	17.6	17.6	106.1	104.0	7.3	5.1	6.9	12.0	5	5	-	-	817165	807818	-	-	-	-
						1.0	0.2	246	29.6		8.4		17.6		101.9		7.0		7.2		4		-				-		-	
					Middle	4.6	0.0	74	28.2	28.2	8.1	8.1	27.6	27.6	45.5	45.5	3.1		12.6		4		-	-			-		-	
						4.6	0.0	78	28.2		8.1		27.6		45.5		3.1		12.8		5		-				-		-	
					Bottom	8.2	0.1	85	28.2	28.2	8.0	8.0	27.8	27.8	46.2	46.3	3.1	3.1	16.4		5		-				-		-	
						8.2	0.1	90	28.2		8.0		27.8		46.4		3.1		16.3		5		-				-		-	
SR5A	Cloudy	Moderate	09:40	3.4	Surface	1.0	0.1	320	29.8	29.8	8.3	8.3	19.1	19.1	94.8	94.9	6.5	6.5	9.1	10.3	4	4	-	-	816600	810702	-	-	-	-
						1.0	0.1	332	29.8		8.3		19.1		94.9		6.5		9.1		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-	-			-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.4	0.1	350	29.7	29.7	8.1	8.1	20.4	20.4	81.8	81.9	5.6	5.6	11.7		4		-				-		-	
						2.4	0.1	322	29.7		8.1		20.4		82.0		5.6		11.5		4		-				-		-	
SR6A	Cloudy	Moderate	08:55	4.3	Surface	1.0	0.1	350	29.1	29.1	8.6	8.6	20.4	20.3	84.7	84.9	5.8	5.8	11.8	11.5	9	9	-	-	817959	814736	-	-	-	-
						1.0	0.1	351	29.1		8.6		20.3		85.0		5.8		11.7		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-	-			-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.0	201	29.0	29.0	8.5	8.5	21.6	21.6	85.6	85.6	5.9	5.9	11.4		9		-				-		-	
						3.3	0.0	204	29.0		8.5		21.6		85.6		5.9		11.3		8		-				-		-	
SR7	Fine	Moderate	08:33	14.6	Surface	1.0	0.1	190	28.4	28.4	8.2	8.2	21.4	21.4	107.9	108.0	7.5	7.3	1.3	1.7	2	3	-	-	823654	823747	-	-	-	-
						1.0	0.1	205	28.4		8.2		21.4		108.0		7.5		1.3		3		-				-		-	
					Middle	7.3	0.0	237	28.2	28.2	8.2	8.2	22.0	22.0	101.7	101.7	7.0		1.4		3		-	-			-		-	
						7.3	0.0	244	28.2		8.2		22.0		101.6		7.0		1.4		2		-				-		-	
					Bottom	13.6	0.0	243	26.2	26.2	7.9	7.9	27.7	27.7	63.9	63.9	4.4	4.4	2.5		3		-				-		-	
						13.6	0.0	265	26.2		7.9		27.7		63.9		4.4		2.5		3		-				-		-	
SR8	Fine	Moderate	10:00	4.3	Surface	1.0	-	-	29.6	29.6	8.2	8.2	17.1	17.1	107.7	107.6	7.5	7.5	4.4	5.7	4	4	-	-	820376	811640	-	-	-	-
						1.0	-	-	29.6		8.2		17.1		107.5		7.4		4.5		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-	-			-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	-	-	28.4	28.4	8.1	8.1	21.2	21.2	84.9	85.0	5.9	5.9	6.9		4		-				-		-	
						3.3	-	-	28.4		8.1		21.2		85.0		5.9		6.9		5		-				-		-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 15 August 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	Sunny	Moderate	17:14	7.7	Surface	1.0	0.3	30	29.7	29.7	8.4	8.4	16.1	16.1	116.3	113.6	8.1	7.1	8.0	11.0	9	7	85	87	815614	804223	<0.2	<0.2	1.8	1.8
						1.0	0.3	30	29.6		8.4		16.2		110.9		7.7		8.1		9		85				<0.2		1.8	
					Middle	3.9	0.4	30	28.8	28.8	8.3	8.3	18.5	18.9	89.5	89.0	6.2		8.2		6		87				<0.2		1.8	
						3.9	0.4	30	28.7		8.3		19.2		88.5		6.2		8.5		7		88				<0.2		1.8	
					Bottom	6.7	0.2	48	28.3	28.3	8.0	8.0	26.9	26.9	53.3	53.3	3.6	3.6	16.9		6		89				<0.2		1.8	
						6.7	0.2	51	28.3		8.0		26.9		53.3		3.6		16.3		6		90				<0.2		1.9	
C2	Sunny	Moderate	16:01	10.5	Surface	1.0	0.4	189	29.1	29.1	8.0	8.0	15.3	15.3	91.7	91.8	6.5	5.3	4.1	7.2	4	4	84	88	825667	806945	<0.2	<0.2	1.8	1.9
						1.0	0.5	203	29.1		8.0		15.4		91.8		6.5		4.1		4		85				<0.2		1.8	
					Middle	5.3	0.2	181	27.8	27.8	7.8	7.8	22.6	22.6	58.8	58.8	4.1		3.6		4		88				<0.2		1.8	
						5.3	0.2	190	27.8		7.8		22.7		58.8		4.1		3.6		5		88				<0.2		1.9	
					Bottom	9.5	0.3	5	27.3	27.3	7.9	7.9	25.8	25.8	52.5	52.6	3.6	3.6	13.9		4		92				<0.2		2.0	
						9.5	0.4	5	27.3		7.9		25.8		52.6		3.6		13.7		4		92				<0.2		1.9	
C3	Sunny	Moderate	18:03	10.8	Surface	1.0	0.0	92	29.4	29.4	8.4	8.4	17.7	17.7	143.8	143.8	10.0	7.3	2.7	3.5	6	7	84	88	822122	817803	<0.2	<0.2	1.6	1.6
						1.0	0.0	95	29.4		8.4		17.7		143.7		10.0		2.7		5		84				<0.2		1.6	
					Middle	5.4	0.0	229	27.3	27.3	8.0	8.0	25.1	25.1	67.5	67.5	4.7		2.7		7		88				<0.2		1.7	
						5.4	0.0	243	27.3		8.0		25.1		67.4		4.6		2.7		7		87				<0.2		1.5	
					Bottom	9.8	0.1	287	25.3	25.3	7.8	7.8	29.9	29.9	42.4	42.5	2.9	3.0	5.1		7		92				<0.2		1.5	
						9.8	0.1	289	25.3		7.8		29.9		42.5		3.0		5.2		8		91				<0.2		1.5	
IM1	Sunny	Moderate	16:50	4.3	Surface	1.0	0.1	11	30.5	30.5	8.6	8.6	15.4	15.4	149.0	149.0	10.3	10.3	10.6	11.4	10	11	87	89	817948	807144	<0.2	<0.2	1.5	1.6
						1.0	0.1	11	30.5		8.6		15.4		148.9		10.3		10.7		10		88				<0.2		1.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.1	212	30.2	30.3	8.4	8.4	18.2	18.2	127.1	127.5	8.7	8.7	11.9		12		90				<0.2		1.6	
						3.3	0.1	217	30.3		8.4		18.2		127.9		8.7		12.3		12		89				<0.2		1.6	
IM2	Sunny	Moderate	16:42	6.5	Surface	1.0	0.6	340	29.5	29.5	8.5	8.5	17.2	17.3	115.5	114.6	8.0	7.0	7.8	9.8	6	6	86	88	818147	806147	<0.2	<0.2	1.5	1.6
						1.0	0.6	357	29.5		8.5		17.3		113.7		7.9		8.1		5		85				<0.2		1.6	
					Middle	3.3	0.7	351	29.2	29.2	8.3	8.3	21.4	21.4	88.4	88.1	6.0		9.9		6		87				<0.2		1.5	
						3.3	0.7	323	29.1		8.3		21.4		87.7		6.0		10.5		6		87				<0.2		1.6	
					Bottom	5.5	0.3	9	28.4	28.4	8.1	8.1	27.6	27.6	56.3	56.3	3.8	3.8	11.3		6		90				<0.2		1.5	
						5.5	0.4	9	28.3		8.1		27.6		56.3		3.8		11.3		7		91				<0.2		1.6	
IM3	Sunny	Moderate	16:34	6.8	Surface	1.0	0.6	318	29.8	29.8	8.5	8.5	17.5	17.5	120.7	120.0	8.3	6.9	6.5	8.0	6	6	85	88	818766	805578	<0.2	<0.2	1.5	1.5
						1.0	0.6	338	29.7		8.5		17.6		119.3		8.2		6.8		6		85				<0.2		1.5	
					Middle	3.4	0.6	323	29.1	29.2	8.3	8.3	22.8	22.7	81.0	81.4	5.5		8.6		7		87				<0.2		1.5	
						3.4	0.7	350	29.2		8.3		22.7		81.8		5.5		8.3		6		88				<0.2		1.4	
					Bottom	5.8	0.4	309	28.0	28.0	8.1	8.1	29.0	29.0	52.8	52.8	3.5	3.5	8.9		6		89				<0.2		1.5	
						5.8	0.4	337	28.0		8.1		29.0		52.8		3.5		8.8		7		91				<0.2		1.6	
IM4	Sunny	Moderate	16:22	7.5	Surface	1.0	0.4	339	30.2	30.2	8.5	8.5	16.8	16.8	133.5	133.2	9.2	8.4	5.9	11.3	7	7	86	88	819715	804589	<0.2	<0.2	1.5	1.5
						1.0	0.4	351	30.1		8.5		16.8		132.8		9.1		6.1		7		85				<0.2		1.4	
					Middle	3.8	0.5	346	30.0	30.0	8.5	8.5	18.7	18.8	111.3	110.7	7.6		6.9		7		88				<0.2		1.5	
						3.8	0.5	350	30.0		8.5		18.8		110.1		7.5		6.9		6		87				<0.2		1.5	
					Bottom	6.5	0.3	351	28.2	28.2	8.1	8.1	28.4	28.4	56.7	56.7	3.8	3.8	20.9		7		90				<0.2		1.6	
						6.5	0.3	323	28.2		8.1		28.4		56.7		3.8		21.3		6		91				<0.2		1.5	
IM5	Sunny	Moderate	16:13	6.9	Surface	1.0	0.4	263	30.5	30.5	8.6	8.6	14.2	14.1	149.7	149.7	10.4	10.1	5.8	9.0	4	5	85	88	820726	804880	<0.2	<0.2	1.8	1.8
						1.0	0.5	287	30.4		8.6		14.1		149.6		10.4		5.9		4		85				<0.2		1.9	
					Middle	3.5	0.4	256	30.4	30.4	8.6	8.6	16.7	16.4	142.0	141.7	9.8		6.1		5		88				<0.2		1.8	
						3.5	0.5	271	30.4		8.6		16.2		141.4		9.7		6.0		6		87				<0.2		1.8	
					Bottom	5.9	0.1	348	29.0	29.0	8.2	8.2	22.7	22.6	77.7	77.8	5.3	5.3	15.0		5		89				<0.2		1.8	
						5.9	0.1	320	29.0		8.2		22.6		77.9		5.3		15.1		6		91				<0.2		1.8	
IM6	Sunny	Moderate	16:06	6.4	Surface	1.0	0.4	266	30.6	30.6	8.6	8.6	11.0	11.0	139.5	139.3	9.8	8.3	5.0	10.0	4	4	85	87	821063	805818	<0.2	<0.2	2.0	2.0
						1.0	0.4	281	30.5		8.6		11.0		139.1		9.8		5.3		4		86				<0.2		2.2	
					Middle	3.2	0.3	282	29.3	29.3	8.3	8.3	16.9	16.9	96.2	96.1	6.7		11.7		4		86				<0.2		2.0	
						3.2	0.3	289	29.2		8.3		16.9		95.9		6.7		12.0		4		87				<0.2		1.9	
					Bottom	5.4	0.1	291	29.1	29.1	8.2	8.2	21.2	21.2	76.1	76.7	5.2	5.3	13.5		5		89				<0.2		1.9	
						5.4	0.1	303	29.1		8.2		21.3		77.3		5.3		12.7		4		89				<0.2		2.1	
IM7	Sunny	Moderate	16:01	7.6	Surface	1.0	0.4	260	30.6	30.6	8.7	8.7	10.7	10.7	132.3	132.4	9.3	9.5	5.0	8.1	5	5	85	88	821333	806838	<0.2	<0.2	2.0	2.0
						1.0	0.4	264	30.6		8.8		10.7		132.4		9.4		5.1		5		86				<0.2		2.0	
					Middle	3.8	0.4	256	30.5	30.5	9.0	9.0	12.3	12.3	138.9	138.5	9.7		6.0		4		87				<0.2		2.0	
						3.8	0.4	270	30.5		9.0		12.3		138.1		9.7		6.4		5		88				<0.2		2.0	
					Bottom	6.6	0.4	225	28.8	28.8	8.6	8.6	21.6	21.5	70.1	70.1	4.8	4.8	13.1		4		89				<0.2		2.1	
						6.6	0.4	226	28.8		8.6		21.5		70.0		4.8		12.9		4		90				<0.2		2.0	
IM8	Sunny	Moderate	16:29	7.9	Surface	1.0	0.0	56	30.6	30.6	8.4	8.4	9.6	9.6	134.4	134.4	9.6	9.1	3.4	6.4	4	4	85	88	821821	808127	<0.2	<0.2	2.1	2.1
						1.0	0.0	59	30.6		8.4		9.6		134.3		9.5		3.4		5		84				<0.2		2.2	
					Middle	4.0	0.2	210	30.1	30.1	8.2	8.2	11.5	11.5	121.9	121.9	8.6		3.8		4		88				<0.2		2.2	
						4.0	0.2	216	30.1		8.2		11.5		121.8		8.6		3.9		4		89				<0.2		2.1	
					Bottom	6.9	0.2	212	28.7	28.7	7.9	7.9	19.0	18.9	79.1	79.1	5.5	5.5	12.2		4		92				<0.2		2.1	
						6.9	0.2	213	28.7		7.9		18.9		79.1		5.5		11.9		5		92				<0.2		2.1	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 15 August 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	Sunny	Moderate	16:37	7.3	Surface	1.0	0.1	164	30.6	30.6	8.4	8.4	9.7	9.7	139.5	139.5	9.9	9.6	3.4	4.5	4	5	85	88	822099	808807	<0.2	<0.2	2.0	2.1
						1.0	0.1	175	30.6		8.4		9.7		139.5		9.9		3.4		4		84							
					Middle	3.7	0.0	306	30.4	30.4	8.3	8.3	10.8	10.8	130.0	130.0	9.2		3.2		5		88						2.1	
						3.7	0.0	319	30.4		8.3		10.8		129.9		9.2		3.2		4		89				<0.2		2.2	
					Bottom	6.3	0.2	273	28.6	28.6	7.9	7.9	19.9	19.9	75.5	75.5	5.2	5.2	6.9		5		92				<0.2		2.2	
						6.3	0.3	298	28.6		7.9		19.9		75.5		5.2		6.9		5		92				<0.2		2.2	
IM10	Sunny	Moderate	16:46	7.5	Surface	1.0	0.2	347	30.4	30.4	8.4	8.4	10.7	10.7	137.7	137.7	9.7	9.2	3.5	6.9	4	5	84	88	822374	809776	<0.2	<0.2	2.2	2.2
						1.0	0.2	319	30.4		8.4		10.7		137.7		9.7		3.6		5		84				<0.2		2.2	
					Middle	3.8	0.3	314	29.7	29.7	8.3	8.3	14.4	14.4	122.5	122.5	8.6		4.9		5		89				<0.2		2.1	
						3.8	0.3	338	29.7		8.3		14.4		122.4		8.6		4.9		4		88				<0.2		2.2	
					Bottom	6.5	0.3	320	28.3	28.3	7.9	7.9	21.1	21.1	67.7	67.8	4.7	4.7	12.4		5		92				<0.2		2.2	
						6.5	0.3	329	28.3		7.9		21.1		67.8		4.7		12.4		6		92				<0.2		2.2	
IM11	Sunny	Moderate	16:58	8.3	Surface	1.0	0.2	319	30.0	30.0	8.4	8.4	12.9	12.9	136.0	135.9	9.6	9.0	3.4	4.4	5	6	84	88	822034	811475	<0.2	<0.2	2.0	2.0
						1.0	0.2	325	30.0		8.4		12.9		135.8		9.6		3.4		5		84				<0.2		2.0	
					Middle	4.2	0.2	301	29.5	29.5	8.2	8.2	15.5	15.5	120.1	120.0	8.4		3.7		6		88				<0.2		2.0	
						4.2	0.2	304	29.5		8.2		15.5		119.8		8.4		3.7		5		89				<0.2		2.1	
					Bottom	7.3	0.3	261	28.1	28.1	7.9	7.9	22.3	22.3	71.7	71.8	5.0	5.0	6.1		7		92				<0.2		2.0	
						7.3	0.4	265	28.1		7.9		22.3		71.8		5.0		6.0		6		92				<0.2		2.1	
IM12	Sunny	Moderate	17:06	7.8	Surface	1.0	0.3	307	30.1	30.1	8.5	8.5	13.1	13.1	154.3	154.0	10.8	8.5	3.6	7.8	6	6	84	89	821448	812058	<0.2	<0.2	2.1	2.1
						1.0	0.4	328	30.1		8.5		13.1		153.7		10.8		3.6		6		85				<0.2		2.1	
					Middle	3.9	0.5	297	28.6	28.6	8.1	8.1	20.6	20.6	88.9	89.0	6.2		6.5		6		88				<0.2		2.2	
						3.9	0.5	309	28.6		8.1		20.6		89.0		6.2		6.5		6		89				<0.2		2.1	
					Bottom	6.8	0.1	322	26.9	26.9	7.8	7.8	26.7	26.7	52.7	52.7	3.9	4.0	13.3		6		92				<0.2		2.0	
						6.8	0.2	342	26.9		7.8		26.7		52.6		4.0		13.2		6		93				<0.2		2.0	
SR1A	Sunny	Moderate	17:26	5.6	Surface	1.0	-	-	30.0	30.0	8.4	8.4	15.8	15.8	145.6	145.5	10.1	10.1	3.9	7.9	5	6	-	-	819972	812662	-	-	-	-
						1.0	-	-	30.0		8.4		15.8		145.4		10.1		3.9		5		-				-		-	
					Middle	2.8	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.8	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.6	-	-	29.8	29.8	8.3	8.3	18.8	18.8	119.3	119.3	8.2	8.2	11.9		6		-				-		-	
						4.6	-	-	29.8		8.3		18.8		119.2		8.2		12.1		6		-				-		-	
SR2	Sunny	Moderate	17:39	5.0	Surface	1.0	0.1	11	30.0	30.0	8.4	8.4	14.7	14.7	147.8	147.8	10.3	10.3	4.3	10.2	6	7	85	86	821453	814187	<0.2	<0.2	2.0	2.1
						1.0	0.1	12	30.0		8.4		14.7		147.7		10.3		4.3		6		84				<0.2		2.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.1	218	28.3	28.3	8.0	8.0	21.6	21.6	78.1	78.3	5.4	5.4	16.2		8		88				<0.2		2.2	
						4.0	0.1	223	28.3		8.0		21.6		78.4		5.4		15.9		7		88				<0.2		2.0	
SR3	Sunny	Moderate	16:22	8.8	Surface	1.0	0.3	273	30.4	30.4	8.3	8.3	10.5	10.5	128.8	128.8	9.1	8.5	3.4	7.4	4	4	-	-	822149	807547	-	-	-	-
						1.0	0.3	276	30.4		8.3		10.5		128.7		9.1		3.4		3		-				-		-	
					Middle	4.4	0.2	274	29.8	29.8	8.1	8.1	13.6	13.5	112.0	111.9	7.9		5.0		4		-				-		-	
						4.4	0.3	293	29.8		8.1		13.5		111.7		7.9		5.2		4		-				-		-	
					Bottom	7.8	0.2	198	28.1	28.1	7.8	7.8	22.4	22.4	59.7	59.6	4.1	4.1	13.7		6		-				-		-	
						7.8	0.2	217	28.1		7.8		22.5		59.5		4.1		13.8		5		-				-		-	
SR4A	Sunny	Moderate	17:33	8.8	Surface	1.0	0.3	54	30.6	30.6	8.5	8.5	15.6	15.2	139.0	139.3	9.6	8.8	14.7	15.5	5	5	-	-	817201	807788	-	-	-	-
						1.0	0.3	57	30.6		8.6		14.9		139.6		9.7		14.9		5		-				-		-	
					Middle	4.4	0.1	233	30.6	30.6	8.4	8.4	18.4	18.4	116.7	116.6	7.9		16.8		4		-				-		-	
						4.4	0.1	253	30.5		8.4		18.4		116.4		7.9		16.6		5		-				-		-	
					Bottom	7.8	0.2	44	29.9	29.9	8.2	8.2	22.5	22.5	74.9	74.9	5.0	5.0	15.0		4		-				-		-	
						7.8	0.2	46	29.9		8.1		22.6		74.8		5.0		15.0		5		-				-		-	
SR5A	Cloudy	Moderate	17:48	3.5	Surface	1.0	0.1	20	30.4	30.4	8.3	8.3	20.1	20.1	120.6	120.6	8.1	8.1	8.6	9.9	8	8	-	-	816589	810695	-	-	-	-
						1.0	0.1	20	30.4		8.3		20.2		120.6		8.1		8.7		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.5	0.1	12	30.2	30.2	8.3	8.3	20.5	20.5	114.2	113.8	7.7	7.7	10.7		8		-				-		-	
						2.5	0.1	13	30.2		8.3		20.5		113.4		7.6		11.6		7		-				-		-	
SR6A	Cloudy	Moderate	18:16	3.6	Surface	1.0	0.1	260	30.3	30.4	8.5	8.5	15.9	15.9	165.6	165.6	11.4	11.4	7.5	8.7	7	9	-	-	817966	814722	-	-	-	-
						1.0	0.1	265	30.4		8.5		15.9		165.5		11.4		7.6		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.6	0.0	262	30.3	30.3	8.5	8.5	17.0	17.0	153.3	152.6	10.5	10.5	9.4		9		-				-		-	
						2.6	0.0	277	30.2		8.5		17.1		151.9		10.4		10.3		10		-				-		-	
SR7	Sunny	Moderate	18:39	14.4	Surface	1.0	0.0	239	28.3	28.3	8.2	8.2	22.8	22.8	110.2	110.2	7.6	6.6	2.1	2.6	6	4	-	-	823639	823722	-	-	-	-
						1.0	0.0	259	28.3		8.2		22.8		110.2		7.6		2.0		5		-				-		-	
					Middle	7.2	0.1	17	26.9	26.9	8.1	8.0	26.7	26.7	81.2	81.1	5.6		2.7		4		-				-		-	
						7.2	0.1	17	26.9		8.0		26.7		81.0		5.6		2.7		3		-				-		-	
					Bottom	13.4	0.0	163	26.2	26.2	8.0	8.0	28.1	28.1	67.0	66.9	4.6	4.6	3.1		3		-				-		-	
						13.4	0.0	177	26.2		8.0		28.1		66.7		4.6		3.1		3		-				-		-	
SR8	Sunny	Moderate	17:16	4.4	Surface	1.0	-	-	30.5	30.5	8.5	8.5	13.4	13.4	148.4	148.3	10.3	10.3	5.8	6.4	9	7	-	-	820370	811622	-	-	-	-
						1.0	-	-	30.5		8.5		13.4		148.2		10.3		5.8		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	-	-	29.9	29.9	8.3	8.3	15.4	15.4	126.4	126.3	8.8	8.8	7.2		6		-				-		-	
						3.4	-	-	29.9		8.3		15.4		126.1		8.8		7.1		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 18 August 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	11:45	8.5	Surface	1.0	0.5	238	28.7	28.7	8.3	8.3	24.7	24.7	81.4	81.4	5.5	5.2	5.6	5.8	6	6	87	89	815607	804234	<0.2	<0.2	0.8	0.8
						1.0	0.5	246	28.7		8.3		24.7		81.4		5.5		5.6		6		87				<0.2		0.8	
					Middle	4.3	0.4	210	28.4	28.4	8.3	8.3	26.8	26.9	73.2	73.5	4.9		5.6		6		89				<0.2		0.9	
						4.3	0.5	220	28.4		8.3		26.9		73.8		4.9		5.7		6		90				<0.2		0.8	
					Bottom	7.5	0.4	194	27.6	27.6	8.3	8.3	29.1	29.1	55.6	55.7	3.7	3.7	6.1		6		91				<0.2		0.8	
						7.5	0.5	200	27.6		8.3		29.1		55.7		3.7		6.0		5		91				<0.2		0.8	
C2	Cloudy	Rough	10:50	12.0	Surface	1.0	0.7	190	28.3	28.3	8.0	8.0	21.3	21.3	79.0	78.9	5.5	5.0	5.1	8.6	2	3	86	89	825681	806936	<0.2	<0.2	1.3	1.2
						1.0	0.7	193	28.3		8.0		21.3		78.7		5.5		5.1		3		88				<0.2		1.2	
					Middle	6.0	0.3	183	27.8	27.8	8.0	8.0	23.7	23.7	66.0	65.9	4.6		7.4		3		88				<0.2		1.1	
						6.0	0.3	194	27.8		8.0		23.7		65.7		4.5		7.6		4		89				<0.2		1.2	
					Bottom	11.0	0.4	164	26.3	26.3	8.0	8.0	27.5	27.5	59.3	59.6	4.1	4.1	13.5		3		90				<0.2		1.2	
						11.0	0.5	173	26.3		8.0		27.5		59.8		4.1		13.1		4		91				<0.2		1.2	
C3	Rainy	Rough	12:29	11.9	Surface	1.0	0.7	94	27.6	27.6	8.1	8.1	23.3	23.4	81.2	81.1	5.6	5.4	4.1	5.9	3	3	86	88	822121	817795	<0.2	<0.2	1.3	1.2
						1.0	0.8	98	27.6		8.1		23.4		81.0		5.6		4.1		2		86				<0.2		1.2	
					Middle	6.0	0.3	93	27.1	27.1	8.0	8.0	25.3	25.3	74.2	74.2	5.1		4.4		3		88				<0.2		1.3	
						6.0	0.3	98	27.1		8.0		25.3		74.1		5.1		4.4		3		88				<0.2		1.2	
					Bottom	10.9	0.3	51	26.3	26.3	8.0	8.0	27.3	27.3	64.6	64.7	4.5	4.5	9.1		2		90				<0.2		1.2	
						10.9	0.3	53	26.3		8.0		27.4		64.7		4.5		9.3		2		91				<0.2		1.2	
IM1	Cloudy	Calm	11:27	5.5	Surface	1.0	0.1	204	28.7	28.7	8.3	8.3	24.3	24.4	81.1	81.0	5.5	5.5	7.8	8.8	6	6	86	88	817959	807154	<0.2	<0.2	0.8	0.8
						1.0	0.1	208	28.7		8.3		24.4		80.9		5.5		7.7		7		86				<0.2		0.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.5	0.1	176	28.7	28.7	8.2	8.2	24.7	24.7	72.4	72.7	4.9	4.9	9.8		5		90				<0.2		0.8	
						4.5	0.1	185	28.7		8.2		24.7		72.9		4.9		9.8		4		90				<0.2		0.8	
IM2	Cloudy	Moderate	11:21	7.5	Surface	1.0	0.3	184	28.8	28.8	8.4	8.4	23.7	23.7	88.7	88.5	6.0	5.1	5.4	6.6	5	5	85	88	818161	806184	<0.2	<0.2	0.8	0.8
						1.0	0.3	195	28.8		8.4		23.7		88.2		6.0		5.7		5		85				<0.2		0.7	
					Middle	3.8	0.2	167	28.4	28.4	8.3	8.3	25.8	25.8	63.2	63.1	4.3		6.2		5		89				<0.2		0.8	
						3.8	0.2	170	28.4		8.3		25.8		63.0		4.2		6.3		5		89				<0.2		0.8	
					Bottom	6.5	0.1	148	28.4	28.4	8.3	8.3	26.0	26.0	63.3	63.4	4.3	4.3	8.0		6		90				<0.2		0.8	
						6.5	0.2	152	28.4		8.3		26.0		63.5		4.3		7.9		6		90				<0.2		0.8	
IM3	Cloudy	Moderate	11:15	7.8	Surface	1.0	0.2	172	28.7	28.7	8.3	8.3	24.5	24.5	74.4	74.6	5.0	4.9	6.2	6.7	6	5	85	88	818776	805573	<0.2	<0.2	0.8	0.9
						1.0	0.2	176	28.7		8.3		24.6		74.8		5.1		6.2		6		86				<0.2		0.9	
					Middle	3.9	0.2	142	28.6	28.6	8.3	8.3	24.9	24.9	70.7	70.7	4.8		6.8		5		89				<0.2		0.8	
						3.9	0.2	154	28.5		8.3		25.0		70.6		4.8		6.8		4		89				<0.2		0.9	
					Bottom	6.8	0.2	136	28.2	28.2	8.3	8.3	27.0	26.9	64.4	64.5	4.3	4.3	7.1		4		90				<0.2		0.9	
						6.8	0.2	142	28.2		8.3		26.9		64.6		4.3		7.1		5		91				<0.2		0.8	
IM4	Cloudy	Moderate	11:07	9.0	Surface	1.0	0.6	193	28.6	28.6	8.3	8.3	23.9	23.9	72.3	72.2	4.9	4.6	6.3	7.4	7	6	85	88	819712	804606	<0.2	<0.2	1.0	0.9
						1.0	0.6	201	28.5		8.3		23.9		72.1		4.9		6.2		6		85				<0.2		0.9	
					Middle	4.5	0.4	169	28.2	28.2	8.3	8.3	26.6	26.6	64.0	63.9	4.3		7.5		6		88				<0.2		1.0	
						4.5	0.5	173	28.2		8.3		26.6		63.8		4.3		7.5		6		89				<0.2		1.1	
					Bottom	8.0	0.5	140	28.0	28.1	8.3	8.3	27.5	27.5	61.3	61.6	4.1	4.2	8.4		6		89				<0.2		0.9	
						8.0	0.5	153	28.1		8.3		27.5		61.8		4.2		8.5		5		90				<0.2		0.7	
IM5	Cloudy	Moderate	11:02	8.4	Surface	1.0	0.4	224	28.7	28.7	8.3	8.3	23.2	23.2	80.4	80.4	5.5	5.1	7.1	7.8	6	5	87	90	820723	804885	<0.2	<0.2	0.9	1.0
						1.0	0.5	242	28.7		8.3		23.2		80.4		5.5		7.3		5		88				<0.2		1.0	
					Middle	4.2	0.5	199	28.4	28.4	8.3	8.3	25.9	25.9	67.9	67.9	4.6		7.4		5		91				<0.2		0.9	
						4.2	0.5	199	28.4		8.3		25.9		67.8		4.6		7.5		6		91				<0.2		1.0	
					Bottom	7.4	0.4	174	28.2	28.2	8.3	8.3	27.0	27.0	64.3	64.5	4.3	4.4	8.6		5		92				<0.2		0.9	
						7.4	0.5	175	28.2		8.3		27.0		64.7		4.4		8.8		5		92				<0.2		1.0	
IM6	Cloudy	Moderate	10:55	8.1	Surface	1.0	0.3	264	28.7	28.7	8.4	8.4	23.9	24.0	77.2	77.3	5.2	4.9	8.2	8.8	4	4	88	91	821053	805843	<0.2	<0.2	1.1	1.2
						1.0	0.3	271	28.6		8.4		24.1		77.3		5.2		8.3		3		88				<0.2		1.1	
					Middle	4.1	0.3	184	28.5	28.5	8.4	8.4	25.1	25.1	68.6	68.4	4.6		8.4		4		91				<0.2		1.2	
						4.1	0.3	186	28.5		8.4		25.1		68.2		4.6		8.5		3		91				<0.2		1.2	
					Bottom	7.1	0.3	186	28.5	28.5	8.4	8.4	25.3	25.3	67.8	67.8	4.6	4.6	9.6		5		92				<0.2		1.2	
						7.1	0.3	187	28.5		8.4		25.3		67.8		4.6		9.6		5		93				<0.2		1.1	
IM7	Cloudy	Moderate	10:49	9.3	Surface	1.0	0.2	242	28.9	28.9	8.5	8.5	22.2	22.2	85.9	86.0	5.9	5.4	7.3	8.4	3	4	88	90	821372	806839	<0.2	<0.2	1.2	1.2
						1.0	0.2	248	28.9		8.5		22.2		86.1		5.9		7.4		4		88				<0.2		1.2	
					Middle	4.7	0.2	197	28.6	28.6	8.5	8.5	24.2	24.3	72.9	72.6	4.9		8.4		4		90				<0.2		1.2	
						4.7	0.2	214	28.6		8.5		24.3		72.3		4.9		8.5		4		90				<0.2		1.1	
					Bottom	8.3	0.1	159	28.6	28.6	8.5	8.5	24.6	24.6	72.4	72.6	4.9	4.9	9.2		5		91				<0.2		1.1	
						8.3	0.1	165	28.6		8.5		24.6		72.8		4.9		9.4		5		92				<0.2		1.1	
IM8	Cloudy	Moderate	11:14	8.3	Surface	1.0	0.1	139	28.4	28.4	8.0	8.0	21.8	21.9	84.5	84.1	5.8	5.5	4.8	7.6	2	2	86	88	821852	808155	<0.2	<0.2	1.1	1.2
						1.0	0.1	142	28.4		8.0		22.0		83.7		5.8		5.1		2		86				<0.2		1.0	
					Middle	4.2	0.1	103	28.2	28.2	8.0	8.0	22.5	22.5	73.5	73.5	5.1		6.6		<2		88				<0.2		1.3	
						4.2	0.1	112	28.2		8.0		22.5		73.4		5.1		6.8		<2		87				<0.2		1.2	
					Bottom	7.3	0.2	166	28.0	28.0	8.0	8.0	23.3	23.3	68.8	68.8	4.7	4.7	11.0		<2		90				<0.2		1.3	
						7.3	0.2	167	28.0		8.0		23.3		68.8		4.7		11.4		<2		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 18 August 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	11:19	7.5	Surface	1.0	0.2	129	28.4	28.4	8.1	8.1	21.5	21.5	86.5	86.6	6.0	5.8	3.8	6.1	3	3	86	88	822077	808789	<0.2	<0.2	1.3	1.3
						1.0	0.2	139	28.4		8.1		21.5		86.6		6.0		3.8		4		86							
					Middle	3.8	0.1	99	28.1	28.1	8.0	8.0	22.5	22.5	79.5	79.4	5.5		5.4		2		88							
						3.8	0.1	102	28.1		8.0		22.6		79.3		5.5		5.8		2		89							
					Bottom	6.5	0.1	48	27.9	27.9	8.0	8.0	23.4	23.4	71.9	72.0	5.0	5.0	8.9		3		90							
						6.5	0.2	49	27.9		8.0		23.4		72.1		5.0		8.8		2		90							
IM10	Rainy	Moderate	11:27	8.8	Surface	1.0	0.6	113	28.4	28.4	8.0	8.0	22.3	22.3	81.1	81.0	5.6	5.2	4.8	7.9	3	3	86	88	822397	809780	<0.2	<0.2	1.1	1.2
						1.0	0.6	113	28.4		8.0		22.3		80.8		5.6		4.9		2		86							
					Middle	4.4	0.5	108	28.0	28.0	8.0	8.0	23.7	23.7	68.4	68.5	4.7		8.4		2		87							
						4.4	0.6	113	28.0		8.0		23.7		68.5		4.7		8.5		2		89							
					Bottom	7.8	0.5	107	27.9	28.0	8.0	8.0	23.8	23.8	73.3	73.5	5.0	5.1	10.4		3		90							
						7.8	0.5	114	28.0		8.0		23.8		73.6		5.1		10.4		3		90							
IM11	Rainy	Rough	11:37	8.5	Surface	1.0	0.7	118	28.3	28.3	8.1	8.1	21.4	21.4	85.1	85.1	5.9	5.7	2.6	6.7	3	3	87	88	822073	811477	<0.2	<0.2	1.1	1.2
						1.0	0.8	124	28.3		8.1		21.5		85.1		5.9		2.6		3		86							
					Middle	4.3	0.7	98	27.9	27.9	8.1	8.0	22.5	22.6	79.1	79.1	5.5		4.1		3		87							
						4.3	0.7	106	27.9		8.0		22.6		79.0		5.5		4.2		3		88							
					Bottom	7.5	0.4	104	27.8	27.8	8.0	8.0	23.3	23.3	74.5	74.7	5.2	5.2	13.6		3		90							
						7.5	0.4	111	27.8		8.0		23.2		74.8		5.2		13.1		3		90							
IM12	Rainy	Rough	11:42	9.0	Surface	1.0	0.7	100	28.2	28.2	8.1	8.0	22.0	22.0	83.1	82.8	5.7	5.4	5.4	9.3	3	3	86	89	821480	812061	<0.2	<0.2	1.2	1.1
						1.0	0.7	101	28.1		8.0		22.1		82.4		5.7		5.9		3		87							
					Middle	4.5	0.5	82	28.0	28.0	8.0	8.0	22.5	22.6	74.6	74.6	5.2		8.4		3		89							
						4.5	0.6	89	28.0		8.0		22.6		74.5		5.1		8.7		3		89							
					Bottom	8.0	0.3	55	27.0	27.0	8.0	8.0	25.6	25.7	66.4	66.5	4.6	4.6	13.7		3		90							
						8.0	0.3	58	27.0		8.0		25.7		66.6		4.6		14.0		3		91							
SR1A	Rainy	Moderate	11:59	5.1	Surface	1.0	-	-	27.8	27.8	8.0	8.0	23.3	23.4	77.4	77.4	5.3	5.3	6.4	6.3	2	2	-	-	819977	812655	-	-	-	-
						1.0	-	-	27.8		8.0		23.5		77.3		5.3		6.4		2		-							
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-							
						2.6	-	-	-		-		-		-		-		-		-		-							
					Bottom	4.1	-	-	27.5	27.5	8.0	8.0	24.3	24.3	77.1	77.1	5.3	5.3	6.2		2		-							
						4.1	-	-	27.5		8.0		24.4		77.1		5.3		6.2		3		-							
SR2	Rainy	Rough	12:11	4.6	Surface	1.0	0.5	76	27.8	27.8	8.0	8.0	23.2	23.2	73.8	73.8	5.1	5.1	7.3	7.8	4	4	88	89	821454	814170	<0.2	<0.2	1.2	1.2
						1.0	0.5	78	27.8		8.0		23.3		73.7		5.1		7.5		4		89							
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-							
						-	-	-	-		-		-		-		-		-		-		-							
					Bottom	3.6	0.3	66	27.7	27.7	8.0	8.0	23.5	23.5	74.6	74.7	5.2	5.2	8.3		3		90							
						3.6	0.3	66	27.7		8.0		23.5		74.8		5.2		8.2		4		90							
SR3	Cloudy	Moderate	11:08	8.4	Surface	1.0	0.2	208	28.5	28.5	8.1	8.0	21.6	21.6	80.7	80.7	5.6	5.2	4.2	7.3	3	3	-	-	822144	807577	-	-	-	-
						1.0	0.2	212	28.5		8.0		21.7		80.6		5.6		4.4		3		-							
					Middle	4.2	0.2	209	28.1	28.1	8.0	8.0	23.3	23.3	70.2	70.4	4.8		7.3		3		-							
						4.2	0.2	212	28.1		8.0		23.3		70.6		4.9		7.5		3		-							
					Bottom	7.4	0.2	213	27.8	27.8	8.0	8.0	23.9	23.9	66.8	66.9	4.6	4.6	10.2		3		-							
						7.4	0.2	219	27.8		8.0		23.9		66.9		4.6		10.2		2		-							
SR4A	Rainy	Moderate	12:10	9.5	Surface	1.0	0.1	275	28.7	28.7	8.2	8.2	24.2	24.2	80.5	80.5	5.4	5.1	5.4	6.4	5	5	-	-	817178	807813	-	-	-	-
						1.0	0.1	292	28.7		8.2		24.2		80.4		5.4		5.6		5		-							
					Middle	4.8	0.1	268	28.7	28.7	8.2	8.2	24.6	24.6	69.4	69.4	4.7		6.1		5		-							
						4.8	0.1	269	28.7		8.2		24.6		69.3		4.7		6.1		5		-							
					Bottom	8.5	0.1	259	28.6	28.6	8.1	8.1	25.2	25.2	63.7	63.9	4.3	4.3	7.6		5		-							
						8.5	0.1	270	28.6		8.1		25.2		64.0		4.3		7.8		4		-							
SR5A	Rainy	Calm	12:27	4.0	Surface	1.0	0.2	349	29.0	29.0	8.2	8.2	23.5	23.6	88.7	88.7	6.0	6.0	8.1	8.9	6	6	-	-	816590	810717	-	-	-	-
						1.0	0.2	321	28.9		8.2		23.6		88.6		6.0		8.0		7		-							
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-							
						-	-	-	-		-		-		-		-		-		-		-							
					Bottom	3.0	0.1	324	28.8	28.8	8.2	8.2	24.1	24.1	76.5	76.8	5.2	5.2	9.8		4		-							
						3.0	0.1	330	28.8		8.2		24.1		77.0		5.2		9.9		5		-							
SR6A	Cloudy	Calm	12:54	4.5	Surface	1.0	0.1	60	28.5	28.5	8.2	8.2	22.8	22.8	76.3	76.5	5.2	5.2	8.7	9.5	6	6	-	-	817984	814753	-	-	-	-
						1.0	0.1	62	28.5		8.2		22.8		76.6		5.2		8.9		4		-							
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-							
						-	-	-	-		-		-		-		-		-		-		-							
					Bottom	3.5	0.1	227	27.9	27.9	8.1	8.1	25.0	24.9	64.4	64.5	4.4	4.4	10.2		6		-							
						3.5	0.1	237	27.9		8.1		24.9		64.6		4.4		10.1		6		-							
SR7	Rainy	Rough	12:55	16.6	Surface	1.0	0.8	40	27.7	27.7	8.1	8.1	23.7	23.7	88.6	88.6	6.1	5.9	2.0	2.4	3	3	-	-	823612	823751	-	-	-	-
						1.0	0.8	43	27.7		8.1		23.7		88.5		6.1		2.0		3		-							
					Middle	8.3	0.5	25	27.4	27.4	8.1	8.1	24.6	24.6	82.5	82.5	5.7		2.5		3		-							
						8.3	0.5	27	27.3		8.1		24.6		82.5		5.7		2.5		3		-							
					Bottom	15.6	0.4	347	27.3	27.3	8.1	8.1	24.7	24.7	85.3	85.4	5.9	5.9	2.7		3		-							
						15.6	0.4	319	27.3		8.1		24.7		85.5		5.9		2.8		4		-							
SR8	Rainy	Moderate	11:51	5.0	Surface	1.0	-	-	28.4	28.4	8.1	8.1	21.8	21.8	84.7	84.7	5.8	5.8	6.5	6.3	3	3	-	-	820401	811640	-	-	-	-
						1.0	-	-	28.3		8.1		21.8		84.7		5.8		6.5		3		-							
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-							
						-	-	-	-		-		-		-		-		-		-		-							
					Bottom	4.0	-	-	28.2	28.2	8.1	8.1	22.5	22.5	83.8	85.6	5.8	5.9	6.2		2		-							
						4.0	-	-	28.2		8.1		22.5		87.3		6.0		6.2		3		-							

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 18 August 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	05:41	9.2	Surface	1.0	0.5	40	28.7	28.7	8.2	8.2	23.1	23.1	77.8	77.6	5.3	4.9	6.1	7.3	2	4	85	88	815625	804264	<0.2	<0.2	0.8	0.8
						1.0	0.6	42	28.6		8.2		23.1		77.3		5.3		6.1		2		85				<0.2		0.8	
					Middle	4.6	0.4	28	28.6	28.6	8.2	8.2	24.9	24.9	66.5	66.4	4.5		7.5		3		88				<0.2		0.8	
						4.6	0.4	28	28.5		8.2		24.9		66.3		4.5		7.7		4		87				<0.2		0.8	
					Bottom	8.2	0.3	19	27.8	27.8	8.0	8.0	28.2	28.2	51.0	51.1	3.4	3.4	8.4		5		93				<0.2		0.8	
						8.2	0.4	20	27.8		8.0		28.2		51.1		3.4		8.3		5		92				<0.2		0.7	
C2	Cloudy	Moderate	06:11	12.4	Surface	1.0	0.4	333	28.5	28.5	8.0	8.0	20.3	20.3	80.5	80.3	5.6	5.1	3.8	9.8	3	3	87	89	825698	806942	<0.2	<0.2	1.3	1.3
						1.0	0.5	306	28.5		8.0		20.3		80.1		5.6		3.8		3		88				<0.2		1.2	
					Middle	6.2	0.6	341	28.3	28.3	8.0	8.0	23.0	23.0	66.2	66.1	4.5		7.8		3		89				<0.2		1.3	
						6.2	0.7	356	28.3		8.0		23.0		65.9		4.5		8.3		3		90				<0.2		1.2	
					Bottom	11.4	0.5	344	26.6	26.6	7.9	7.9	26.7	26.7	53.4	53.6	3.7	3.7	17.1		2		91				<0.2		1.3	
						11.4	0.5	316	26.6		7.9		26.7		53.7		3.7		17.9		3		90				<0.2		1.4	
C3	Cloudy	Moderate	04:22	12.4	Surface	1.0	0.4	270	28.0	28.0	8.1	8.1	22.2	22.2	85.6	85.6	5.9	5.6	2.8	2.6	3	3	86	88	822095	817813	<0.2	<0.2	1.3	1.3
						1.0	0.4	275	28.0		8.1		22.2		85.5		5.9		2.7		4		87				<0.2		1.4	
					Middle	6.2	0.4	253	27.7	27.7	8.0	8.0	23.5	23.5	76.7	76.6	5.3		2.5		3		88				<0.2		1.2	
						6.2	0.4	276	27.7		8.0		23.5		76.5		5.3		2.5		3		87				<0.2		1.2	
					Bottom	11.4	0.3	259	26.1	26.1	8.0	8.0	28.1	28.1	66.2	66.2	4.6	4.6	2.5		3		90				<0.2		1.3	
						11.4	0.3	280	26.1		8.0		28.2		66.2		4.6		2.6		3		90				<0.2		1.3	
IM1	Fine	Calm	06:00	5.6	Surface	1.0	0.2	27	28.6	28.6	8.1	8.0	25.4	25.5	68.8	68.8	4.6	4.6	6.7	7.3	5	6	89	90	817926	807130	<0.2	<0.2	0.8	0.9
						1.0	0.2	28	28.6		8.0		25.6		68.8		4.6		6.9		6		88				<0.2		0.9	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.6	0.1	357	28.5	28.5	8.0	8.0	26.2	26.2	59.3	59.4	4.0	4.0	7.8		6		91				<0.2		0.8	
						4.6	0.1	328	28.5		8.0		26.2		59.5		4.0		7.9		6		90				<0.2		0.9	
IM2	Fine	Moderate	06:07	7.6	Surface	1.0	0.3	355	28.8	28.8	8.2	8.2	23.4	23.4	80.1	79.9	5.4	5.1	5.9	6.8	7	7	87	92	818184	806159	<0.2	<0.2	0.8	0.8
						1.0	0.3	359	28.8		8.2		23.4		79.7		5.4		5.9		6		88				<0.2		0.7	
					Middle	3.8	0.4	358	28.7	28.7	8.1	8.1	24.3	24.3	70.2	70.1	4.8		6.6		7		93				<0.2		0.8	
						3.8	0.4	329	28.6		8.1		24.3		69.9		4.7		6.5		6		93				<0.2		0.8	
					Bottom	6.6	0.2	1	28.2	28.2	8.1	8.1	26.7	26.6	58.7	58.8	4.0	4.0	8.2		7		95				<0.2		0.8	
						6.6	0.2	1	28.2		8.1		26.6		58.9		4.0		8.0		6		96				<0.2		0.8	
IM3	Fine	Moderate	06:13	8.0	Surface	1.0	0.5	351	28.7	28.7	8.2	8.2	23.1	23.1	83.3	83.2	5.7	5.3	6.1	6.7	6	7	87	90	818781	805602	<0.2	<0.2	0.9	0.9
						1.0	0.5	323	28.7		8.2		23.1		83.0		5.6		6.1		7		88				<0.2		0.9	
					Middle	4.0	0.3	353	28.8	28.8	8.2	8.2	23.8	23.9	72.9	72.8	4.9		6.4		7		90				<0.2		0.9	
						4.0	0.4	325	28.7		8.2		23.9		72.7		4.9		6.5		6		90				<0.2		0.8	
					Bottom	7.0	0.4	332	28.2	28.2	8.0	8.0	26.8	26.8	56.7	56.9	3.8	3.8	7.6		6		92				<0.2		0.8	
						7.0	0.4	344	28.2		8.0		26.8		57.0		3.8		7.4		7		92				<0.2		0.8	
IM4	Fine	Moderate	06:21	9.0	Surface	1.0	0.7	4	28.6	28.6	8.2	8.2	22.2	22.2	79.9	79.8	5.5	4.9	5.4	6.4	9	8	87	90	819723	804604	<0.2	<0.2	0.7	0.8
						1.0	0.7	4	28.6		8.2		22.2		79.6		5.5		5.7		8		87				<0.2		0.7	
					Middle	4.5	0.7	356	28.4	28.4	8.1	8.1	25.4	25.5	63.6	63.6	4.3		6.5		8		90				<0.2		0.9	
						4.5	0.7	357	28.3		8.1		25.6		63.5		4.3		6.6		7		91				<0.2		0.9	
					Bottom	8.0	0.4	347	28.2	28.2	8.1	8.1	26.4	26.4	59.1	59.5	4.0	4.0	7.2		7		92				<0.2		0.9	
						8.0	0.4	356	28.2		8.1		26.4		59.8		4.0		7.2		7		92				<0.2		0.8	
IM5	Fine	Moderate	06:28	8.2	Surface	1.0	1.2	12	28.6	28.6	8.2	8.2	22.5	22.5	80.1	80.0	5.5	5.1	5.8	7.4	6	6	86	89	820746	804858	<0.2	<0.2	0.9	0.8
						1.0	1.2	12	28.6		8.2		22.5		79.8		5.5		6.0		6		87				<0.2		0.8	
					Middle	4.1	1.0	7	28.5	28.5	8.2	8.2	24.5	24.5	69.4	69.3	4.7		7.8		6		90				<0.2		0.8	
						4.1	1.1	7	28.5		8.2		24.5		69.2		4.7		7.7		6		90				<0.2		0.9	
					Bottom	7.2	0.7	12	28.4	28.4	8.1	8.1	25.0	25.0	66.3	66.4	4.5	4.5	8.3		4		91				<0.2		0.8	
						7.2	0.8	12	28.4		8.1		25.0		66.4		4.5		8.6		5		91				<0.2		0.8	
IM6	Fine	Moderate	06:34	8.1	Surface	1.0	0.0	247	28.7	28.7	8.2	8.2	21.0	21.0	83.7	83.7	5.8	5.6	5.3	6.3	4	5	87	90	821067	805806	<0.2	<0.2	1.1	1.0
						1.0	0.0	264	28.6		8.2		21.0		83.6		5.8		5.5		4		87				<0.2		1.2	
					Middle	4.1	0.3	62	28.6	28.6	8.2	8.2	22.2	22.2	77.8	77.5	5.3		6.1		5		90				<0.2		1.1	
						4.1	0.4	66	28.5		8.2		22.2		77.1		5.3		6.2		5		91				<0.2		0.8	
					Bottom	7.1	0.3	52	28.4	28.4	8.1	8.1	25.7	25.7	60.2	60.3	4.1	4.1	7.5		6		92				<0.2		0.8	
						7.1	0.3	56	28.4		8.1		25.7		60.3		4.1		7.4		6		92				<0.2		0.8	
IM7	Fine	Moderate	06:42	9.2	Surface	1.0	0.1	243	28.7	28.7	8.2	8.2	20.4	20.5	84.0	83.8	5.8	5.3	5.5	7.5	4	4	86	89	821363	806842	<0.2	<0.2	1.3	1.0
						1.0	0.1	247	28.7		8.2		20.5		83.5		5.8		5.6		5		86				<0.2		1.2	
					Middle	4.6	0.1	177	28.5	28.5	8.1	8.1	24.0	24.1	72.3	70.5	4.9		7.5		4		90				<0.2		1.0	
						4.6	0.1	178	28.5		8.1		24.2		68.6		4.7		7.5		4		90				<0.2		0.8	
					Bottom	8.2	0.2	89	28.5	28.5	8.1	8.1	25.2	25.1	65.9	66.2	4.5	4.5	9.5		3		91				<0.2		0.8	
						8.2	0.2	89	28.5		8.1		25.1		66.4		4.5		9.7		2		91				<0.2		0.8	
IM8	Cloudy	Moderate	05:46	8.0	Surface	1.0	0.1	232	28.5	28.5	8.1	8.1	20.0	20.0	80.6	80.6	5.6	5.5	5.1	8.1	3	4	86	88	821848	808152	<0.2	<0.2	1.3	1.3
						1.0	0.1	249	28.5		8.1		20.0		80.5		5.6		5.1		4		86				<0.2		1.2	
					Middle	4.0	0.1	251	28.4	28.4	8.0	8.0	21.1	21.1	76.1	76.1	5.3		8.6		4		88				<0.2		1.3	
						4.0	0.1	271	28.4		8.0		21.1		76.0		5.3		8.5		5		89				<0.2		1.2	
					Bottom	7.0	0.1	89	28.4	28.4	8.0	8.0	22.9	22.9	70.9	71.0	4.9	4.9	10.4		5		90				<0.2		1.3	
						7.0	0.1	94	28.4		8.0		22.9		71.0		4.9		11.1		4		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 18 August 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	05:41	7.4	Surface	1.0	0.2	296	28.3	28.3	8.0	8.0	20.0	20.0	79.8	79.8	5.6	5.4	6.2	10.1	3	4	86	88	822071	808825	<0.2	<0.2	1.2	1.3
						1.0	0.2	315	28.3		8.0		20.0		79.7		5.6		6.4		3		86				<0.2		1.2	
					Middle	3.7	0.4	250	28.4	28.4	8.0	8.0	21.7	21.7	73.7	73.7	5.1		11.3		3		88				<0.2		1.2	
						3.7	0.4	250	28.4		8.0		21.7		73.7		5.1		11.4		4		87				<0.2		1.3	
					Bottom	6.4	0.3	251	28.4	28.4	8.0	8.0	22.1	22.1	74.2	74.3	5.1	5.1	12.8		5		90				<0.2		1.3	
						6.4	0.3	268	28.4		8.0		22.1		74.4		5.1		12.8		5		90				<0.2		1.3	
IM10	Cloudy	Moderate	05:33	8.6	Surface	1.0	0.7	307	28.4	28.4	8.1	8.0	20.9	20.9	80.1	80.1	5.5	5.3	4.7	6.2	5	4	86	89	822390	809778	<0.2	<0.2	1.4	1.3
						1.0	0.7	321	28.4		8.0		20.9		80.1		5.5		4.7		4		88				<0.2		1.3	
					Middle	4.3	0.7	294	28.0	28.0	8.0	8.0	22.0	22.0	74.0	73.9	5.1		6.1		4		89				<0.2		1.3	
						4.3	0.8	300	28.0		8.0		22.0		73.8		5.1		6.0		4		88				<0.2		1.3	
					Bottom	7.6	0.4	271	27.6	27.6	8.0	8.0	24.0	24.0	67.6	67.8	4.7	4.7	8.0		4		90				<0.2		1.2	
						7.6	0.4	274	27.6		8.0		24.1		67.9		4.7		8.0		3		90				<0.2		1.2	
IM11	Cloudy	Moderate	05:23	8.7	Surface	1.0	0.5	296	28.2	28.2	8.0	8.0	21.8	21.8	77.9	77.9	5.4	5.2	4.0	8.0	3	4	87	88	822072	811452	<0.2	<0.2	1.3	1.3
						1.0	0.5	321	28.2		8.0		21.9		77.8		5.4		4.0		4		86				<0.2		1.3	
					Middle	4.4	0.6	287	28.0	28.0	8.0	8.0	22.9	22.9	71.4	71.3	4.9		6.0		4		88				<0.2		1.2	
						4.4	0.6	313	28.0		8.0		22.9		71.2		4.9		6.7		4		87				<0.2		1.3	
					Bottom	7.7	0.3	280	26.5	26.5	7.9	7.9	26.8	26.8	60.5	60.6	4.2	4.2	13.7		4		90				<0.2		1.3	
						7.7	0.3	299	26.5		7.9		26.8		60.7		4.2		13.7		4		91				<0.2		1.3	
IM12	Cloudy	Moderate	05:16	9.0	Surface	1.0	0.5	275	28.4	28.4	8.1	8.1	20.9	20.9	80.7	80.7	5.6	5.2	3.6	6.2	3	4	87	88	821469	812023	<0.2	<0.2	1.3	1.3
						1.0	0.6	289	28.4		8.1		20.9		80.6		5.6		3.7		3		86				<0.2		1.3	
					Middle	4.5	0.6	265	27.9	27.9	8.0	8.0	23.2	23.2	70.5	70.4	4.9		5.2		4		88				<0.2		1.3	
						4.5	0.6	278	27.9		8.0		23.2		70.3		4.8		5.2		4		89				<0.2		1.3	
					Bottom	8.0	0.3	269	26.6	26.6	8.0	8.0	26.6	26.6	59.3	59.4	4.1	4.1	9.8		4		90				<0.2		1.3	
						8.0	0.4	288	26.6		8.0		26.6		59.4		4.1		9.6		4		89				<0.2		1.4	
SR1A	Cloudy	Moderate	04:56	4.8	Surface	1.0	-	-	28.4	28.4	8.1	8.1	20.8	20.8	82.5	82.5	5.7	5.7	4.2	4.3	4	4	-	-	819981	812666	-	-	-	-
						1.0	-	-	28.4		8.1		20.8		82.5		5.7		4.2		3		-				-		-	
					Middle	2.4	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.4	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	-	-	28.3	28.3	8.0	8.0	21.3	21.3	82.7	82.8	5.7	5.7	4.5		5		-				-		-	
						3.8	-	-	28.3		8.0		21.3		82.8		5.7		4.5		4		-				-		-	
SR2	Cloudy	Moderate	04:45	5.2	Surface	1.0	0.2	190	28.3	28.3	8.1	8.1	21.1	21.1	86.4	86.3	6.0	6.0	4.0	5.1	3	3	88	90	821482	814144	<0.2	<0.2	1.3	1.3
						1.0	0.2	195	28.2		8.1		21.1		86.2		6.0		4.1		3		89				<0.2		1.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.2	209	27.9	27.9	8.0	8.0	23.1	23.1	78.9	79.0	5.4	5.5	6.2		3		90				<0.2		1.2	
						4.2	0.2	211	27.9		8.0		23.1		79.1		5.5		6.1		3		91				<0.2		1.3	
SR3	Cloudy	Moderate	05:52	9.2	Surface	1.0	0.1	275	28.4	28.4	8.0	8.0	19.9	19.9	83.1	83.0	5.8	5.5	3.5	6.9	3	4	-	-	822167	807577	-	-	-	-
						1.0	0.1	299	28.4		8.0		19.9		82.9		5.8		3.5		4		-				-		-	
					Middle	4.6	0.2	269	28.4	28.4	8.0	8.0	21.5	21.5	74.5	74.5	5.1		5.5		3		-				-		-	
						4.6	0.2	293	28.4		8.0		21.5		74.4		5.1		6.0		4		-				-		-	
					Bottom	8.2	0.1	40	28.3	28.3	8.0	8.0	23.2	23.2	70.1	70.2	4.8	4.8	11.4		4		-				-		-	
						8.2	0.1	43	28.3		8.0		23.2		70.2		4.8		11.8		5		-				-		-	
SR4A	Fine	Calm	05:19	9.5	Surface	1.0	0.3	236	28.9	28.9	8.2	8.2	22.9	22.9	80.5	80.4	5.5	5.0	7.9	8.6	5	6	-	-	817170	807817	-	-	-	-
						1.0	0.3	247	28.8		8.2		22.9		80.2		5.5		8.0		6		-				-		-	
					Middle	4.8	0.1	138	28.6	28.7	8.1	8.1	25.4	25.4	65.6	65.7	4.4		8.7		6		-				-		-	
						4.8	0.1	150	28.7		8.1		25.3		65.8		4.4		8.7		7		-				-		-	
					Bottom	8.5	0.1	77	28.5	28.5	8.0	8.0	26.4	26.4	56.8	56.8	3.8	3.8	9.1		7		-				-		-	
						8.5	0.1	82	28.5		8.0		26.4		56.7		3.8		9.1		6		-				-		-	
SR5A	Fine	Calm	05:03	4.0	Surface	1.0	0.1	235	28.9	28.9	8.2	8.2	22.6	22.7	88.5	88.5	6.0	6.0	8.6	9.0	6	7	-	-	816592	810688	-	-	-	-
						1.0	0.1	254	28.9		8.2		22.7		88.4		6.0		8.8		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	0.0	357	29.0	29.0	8.1	8.1	22.8	22.8	88.7	88.8	6.0	6.0	9.2		7		-				-		-	
						3.0	0.0	328	29.0		8.1		22.8		88.8		6.0		9.3		7		-				-		-	
SR6A	Fine	Calm	04:36	4.3	Surface	1.0	0.1	217	28.6	28.6	8.3	8.3	21.9	21.9	87.7	87.4	6.0	6.0	5.8	6.6	3	3	-	-	817941	814745	-	-	-	-
						1.0	0.1	231	28.6		8.3		22.0		87.1		6.0		5.8		2		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.0	256	28.3	28.3	8.0	8.0	24.2	24.3	65.3	65.7	4.5	4.5	7.2		3		-				-		-	
						3.3	0.0	264	28.3		8.0		24.3		66.0		4.5		7.4		4		-				-		-	
SR7	Cloudy	Moderate	03:48	16.6	Surface	1.0	0.1	101	27.8	27.8	8.0	8.0	23.1	23.1	85.5	85.5	5.9	5.2	2.3	2.4	5	5	-	-	823650	823726	-	-	-	-
						1.0	0.1	101	27.8		8.0		23.1		85.5		5.9		2.3		6		-				-		-	
					Middle	8.3	0.1	224	26.5	26.5	7.9	7.9	27.0	26.9	65.4	65.4	4.5		2.0		4		-				-		-	
						8.3	0.1	244	26.5		7.9		26.9		65.4		4.5		2.0		5		-				-		-	
					Bottom	15.6	0.0	215	25.7	25.7	7.8	7.8	28.8	28.8	57.4	57.5	4.0	4.0	3.0		4		-				-		-	
						15.6	0.0	219	25.7		7.8		28.8		57.5		4.0		3.0		4		-				-		-	
SR8	Cloudy	Moderate	05:06	4.9	Surface	1.0	-	-	28.6	28.6	8.1	8.1	20.3	20.3	84.6	84.6	5.9	5.9	4.4	4.8	4	4	-	-	820377	811609	-	-	-	-
						1.0	-	-	28.6		8.1		20.3		84.5		5.9		4.4		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	-	-	28.5	28.5	8.1	8.1	20.6	20.7	83.1	83.1	5.8	5.8	5.0		3		-				-		-	
						3.9	-	-	28.5		8.1		20.7		83.1		5.8		5.3		4		-				-		-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 20 August 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	13:19	9.2	Surface	1.0	0.7	224	27.9	27.9	8.0	8.0	26.4	26.4	83.7	83.7	5.7	5.6	8.0	10.0	8	8	87	90	815601	804232	<0.2	<0.2	1.0	1.1
						1.0	0.7	225	27.9		8.1		26.4		83.7		5.7		8.4		7		87				<0.2		1.0	
					Middle	4.6	0.6	210	27.8	27.8	8.1	8.1	27.9	27.9	82.3	82.3	5.5		9.1		8		89				<0.2		1.1	
						4.6	0.6	216	27.8		8.1		27.9		82.2		5.5		9.0		8		90				<0.2		1.1	
					Bottom	8.2	0.5	211	27.5	27.5	8.1	8.1	28.7	28.7	76.8	76.9	5.2	5.2	12.9		9		92				<0.2		1.1	
						8.2	0.5	217	27.5		8.1		28.7		77.0		5.2		12.6		10		93				<0.2		1.2	
C2	Fine	Moderate	12:16	11.3	Surface	1.0	0.2	176	27.8	27.9	8.0	8.0	23.6	23.6	74.9	74.9	5.2	5.0	7.5	9.9	8	9	82	86	825667	806945	<0.2	<0.2	1.4	1.4
						1.0	0.2	193	27.9		8.0		23.6		74.9		5.2		7.5		9		82				<0.2		1.4	
					Middle	5.7	0.2	156	26.6	26.6	8.0	8.0	25.7	25.7	68.1	68.1	4.7		7.6		8		85				<0.2		1.4	
						5.7	0.2	169	26.6		8.0		25.7		68.1		4.7		7.7		9		86				<0.2		1.2	
					Bottom	10.3	0.2	136	26.4	26.4	8.0	8.0	26.3	26.3	68.7	68.8	4.8	4.8	14.6		9		89				<0.2		1.4	
						10.3	0.3	138	26.4		8.0		26.3		68.9		4.8		14.6		10		90				<0.2		1.5	
C3	Fine	Moderate	13:56	11.8	Surface	1.0	0.4	110	27.2	27.2	7.9	7.9	25.1	25.1	72.1	72.1	5.0	5.0	6.8	7.5	10	10	81	85	822119	817820	<0.2	<0.2	1.3	1.4
						1.0	0.5	113	27.2		7.9		25.2		72.0		5.0		6.9		9		80				<0.2		1.3	
					Middle	5.9	0.2	94	26.8	26.8	8.0	8.0	25.9	25.9	70.0	70.0	4.9		7.4		11		85				<0.2		1.4	
						5.9	0.2	100	26.7		8.0		26.0		70.0		4.9		7.6		10		84				<0.2		1.4	
					Bottom	10.8	0.3	43	26.7	26.8	8.0	8.0	26.2	26.1	70.9	71.1	4.9	4.9	8.1		11		88				<0.2		1.5	
						10.8	0.3	44	26.8		8.0		26.1		71.3		4.9		8.2		10		89				<0.2		1.4	
IM1	Fine	Moderate	13:00	5.7	Surface	1.0	0.1	213	27.9	27.9	8.0	8.0	26.2	26.2	80.5	80.5	5.5	5.5	10.1	11.4	10	10	87	89	817961	807119	<0.2	<0.2	1.0	1.0
						1.0	0.1	228	27.9		8.0		26.2		80.5		5.5		10.1		10		87				<0.2		1.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.7	0.2	153	27.5	27.5	8.1	8.1	27.6	27.6	77.8	77.9	5.3	5.3	12.9		10		90				<0.2		1.0	
						4.7	0.2	162	27.5		8.1		27.6		77.9		5.3		12.6		11		90				<0.2		1.0	
IM2	Fine	Moderate	12:53	7.6	Surface	1.0	0.2	184	27.8	27.8	8.0	8.0	26.5	26.5	80.8	80.8	5.5	5.5	9.4	10.9	13	12	85	88	818147	806146	<0.2	<0.2	1.1	1.2
						1.0	0.2	192	27.8		8.0		26.5		80.8		5.5		9.4		14		85				<0.2		1.1	
					Middle	3.8	0.2	162	27.6	27.6	8.1	8.1	26.8	26.8	79.3	79.2	5.4		9.6		13		89				<0.2		1.1	
						3.8	0.2	173	27.6		8.1		26.9		79.1		5.4		9.9		12		88				<0.2		1.1	
					Bottom	6.6	0.2	132	27.5	27.5	8.1	8.1	28.0	28.0	77.9	78.0	5.3	5.3	13.6		10		91				<0.2		1.3	
						6.6	0.2	134	27.5		8.1		28.0		78.0		5.3		13.5		9		92				<0.2		1.2	
IM3	Fine	Moderate	12:47	8.0	Surface	1.0	0.5	151	27.6	27.6	8.1	8.1	26.9	26.9	78.3	78.3	5.3	5.3	13.0	13.9	12	10	86	88	818768	805604	<0.2	<0.2	1.2	1.2
						1.0	0.5	161	27.6		8.1		26.9		78.3		5.3		13.0		10		85				<0.2		1.1	
					Middle	4.0	0.3	131	27.5	27.5	8.1	8.1	27.6	27.6	78.0	78.0	5.3		12.4		10		88				<0.2		1.1	
						4.0	0.4	143	27.5		8.1		27.6		78.0		5.3		12.5		11		89				<0.2		1.2	
					Bottom	7.0	0.2	119	27.5	27.5	8.1	8.1	27.9	27.9	78.3	78.4	5.3	5.3	16.3		10		91				<0.2		1.2	
						7.0	0.2	128	27.5		8.1		27.9		78.4		5.3		16.0		9		90				<0.2		1.2	
IM4	Fine	Moderate	12:39	8.9	Surface	1.0	0.7	189	27.6	27.6	8.0	8.0	26.2	26.2	79.8	79.8	5.4	5.4	10.0	12.9	9	10	85	88	819722	804612	<0.2	<0.2	1.2	1.2
						1.0	0.7	189	27.6		8.0		26.2		79.8		5.4		10.0		8		86				<0.2		1.0	
					Middle	4.5	0.6	170	27.6	27.6	8.1	8.1	27.1	27.1	78.7	78.7	5.3		13.5		10		88				<0.2		1.2	
						4.5	0.7	180	27.6		8.1		27.1		78.6		5.3		13.5		9		88				<0.2		1.3	
					Bottom	7.9	0.4	149	27.6	27.6	8.2	8.2	27.5	27.5	78.3	78.4	5.3	5.3	15.1		11		91				<0.2		1.2	
						7.9	0.5	152	27.6		8.2		27.5		78.4		5.3		15.1		10		91				<0.2		1.1	
IM5	Fine	Moderate	12:32	8.2	Surface	1.0	0.6	206	27.8	27.8	8.1	8.1	26.3	26.2	82.0	82.0	5.6	5.5	8.2	10.2	6	8	85	88	820740	804869	<0.2	<0.2	1.2	1.3
						1.0	0.6	207	27.8		8.1		26.2		81.9		5.6		8.2		7		86				<0.2		1.3	
					Middle	4.1	0.5	188	27.6	27.6	8.2	8.2	27.5	27.5	78.7	78.7	5.3		9.5		8		88				<0.2		1.3	
						4.1	0.6	202	27.6		8.2		27.5		78.7		5.3		9.5		8		88				<0.2		1.4	
					Bottom	7.2	0.4	187	27.6	27.6	8.2	8.2	27.5	27.5	79.7	79.8	5.4	5.4	13.0		9		91				<0.2		1.3	
						7.2	0.5	193	27.6		8.2		27.5		79.9		5.4		13.0		10		91				<0.2		1.4	
IM6	Fine	Moderate	12:25	8.4	Surface	1.0	0.3	248	27.8	27.8	8.1	8.1	25.5	25.5	82.1	82.1	5.6	5.6	9.1	10.0	8	9	85	89	821045	805851	<0.2	<0.2	1.2	1.3
						1.0	0.4	257	27.8		8.1		25.5		82.0		5.6		9.1		8		86				<0.2		1.2	
					Middle	4.2	0.3	218	27.7	27.7	8.1	8.1	26.9	26.9	80.6	80.6	5.5		8.8		9		89				<0.2		1.5	
						4.2	0.3	222	27.7		8.1		26.9		80.6		5.5		8.8		10		88				<0.2		1.3	
					Bottom	7.4	0.3	191	27.6	27.6	8.2	8.2	27.4	27.4	79.6	79.7	5.4	5.4	12.1		10		92				<0.2		1.2	
						7.4	0.4	203	27.6		8.2		27.4		79.7		5.4		12.1		9		91				<0.2		1.2	
IM7	Fine	Moderate	12:16	9.3	Surface	1.0	0.1	277	27.8	27.8	8.0	8.0	24.7	24.7	80.6	80.6	5.5	5.5	8.1	10.5	9	9	85	88	821368	806853	<0.2	<0.2	1.3	1.3
						1.0	0.1	284	27.8		8.0		24.7		80.6		5.5		8.1		8		85				<0.2		1.2	
					Middle	4.7	0.1	200	27.7	27.7	8.0	8.0	25.9	25.9	80.5	80.5	5.5		9.9		8		88				<0.2		1.2	
						4.7	0.1	210	27.7		8.0		25.9		80.5		5.5		10.0		9		88				<0.2		1.2	
					Bottom	8.3	0.2	147	27.6	27.6	8.1	8.1	27.1	27.1	79.8	79.8	5.4	5.4	13.4		10		91				<0.2		1.4	
						8.3	0.2	160	27.6		8.1		27.1		79.8		5.4		13.5		9		90				<0.2		1.2	
IM8	Fine	Moderate	12:38	8.1	Surface	1.0	0.1	155	27.5	27.6	7.9	7.9	23.8	23.7	74.1	74.1	5.1	5.1	5.8	9.2	8	9	81	86	821809	808139	<0.2	<0.2	1.5	1.3
						1.0	0.1	167	27.6		7.9		23.7		74.1		5.1		5.7		7		82				<0.2		1.3	
					Middle	4.1	0.1	165	27.1	27.1	8.0	8.0	24.9	24.9	72.8	73.0	5.0		8.8		8		85				<0.2		1.3	
						4.1	0.1	174	27.1		8.0		25.0		73.1		5.1		9.3		9		86				<0.2		1.2	
					Bottom	7.1	0.2	42	27.2	27.2	8.0	8.0	25.9	25.9	75.5	75.6	5.2	5.2	12.9		11		89				<0.2		1.4	
						7.1	0.2	46	27.2		8.0		25.9		75.7		5.2		12.8		10		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 20 August 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	12:44	7.6	Surface	1.0	0.3	117	27.5	27.5	7.9	7.9	24.1	24.1	73.6	73.6	5.1	5.0	5.8	12.2	8	9	83	86	822088	808788	<0.2	<0.2	1.4	1.4
						1.0	0.3	125	27.5		7.9		24.1		73.5		5.1		5.8		8		82						1.5	
					Middle	3.8	0.3	113	27.0	27.0	8.0	8.0	25.2	25.2	69.5	69.6	4.8		13.7		8		85						1.4	
						3.8	0.3	123	27.0		8.0		25.2		69.6		4.8		13.6		9		86						1.4	
					Bottom	6.6	0.3	120	27.1	27.1	8.0	8.0	25.4	25.4	73.2	73.2	5.1	5.1	17.3		9		89						1.4	
						6.6	0.3	126	27.1		8.0		25.4		73.2		5.1		17.1		9		90						1.4	
IM10	Fine	Moderate	12:52	8.0	Surface	1.0	0.7	130	27.6	27.6	8.0	8.0	24.5	24.5	76.3	76.3	5.3	5.3	13.6	14.8	8	9	82	86	822405	809775	<0.2	<0.2	1.5	1.4
						1.0	0.8	134	27.6		8.0		24.5		76.2		5.3		13.7		9		81						1.4	
					Middle	4.0	0.8	129	27.3	27.3	8.0	8.0	25.1	25.1	75.6	75.7	5.2		14.4		9		86						1.3	
						4.0	0.8	133	27.3		8.0		25.1		75.7		5.2		14.3		8		85						1.4	
					Bottom	7.0	0.5	124	27.3	27.3	8.0	8.0	25.3	25.3	78.1	78.4	5.4	5.4	16.5		9		90						1.5	
						7.0	0.6	133	27.3		8.0		25.2		78.6		5.4		16.7		9		89						1.3	
IM11	Fine	Moderate	13:01	8.5	Surface	1.0	0.9	106	27.7	27.7	8.0	8.0	24.1	24.1	76.1	76.1	5.2	5.2	6.4	8.5	8	8	82	86	822059	811472	<0.2	<0.2	1.6	1.4
						1.0	1.0	111	27.7		8.0		24.1		76.0		5.2		6.5		7		82						1.5	
					Middle	4.3	0.9	101	27.6	27.6	8.0	8.0	24.3	24.3	76.0	76.0	5.2		8.7		8		86						1.5	
						4.3	0.9	110	27.6		8.0		24.4		76.0		5.2		8.8		7		85						1.6	
					Bottom	7.5	0.6	92	27.4	27.4	8.0	8.0	25.0	25.0	78.4	78.6	5.4	5.4	10.4		8		89						1.3	
						7.5	0.6	93	27.4		8.0		25.0		78.7		5.4		10.5		8		90						1.1	
IM12	Fine	Moderate	13:07	9.4	Surface	1.0	0.8	131	28.0	28.0	8.0	8.0	24.1	24.1	78.4	78.4	5.4	5.3	6.1	11.9	6	7	82	86	821453	812068	<0.2	<0.2	1.2	1.3
						1.0	0.8	135	28.0		8.0		24.2		78.4		5.4		6.9		7		82						1.2	
					Middle	4.7	0.6	132	27.4	27.4	8.0	8.0	24.8	24.8	73.9	73.8	5.1		14.2		7		86						1.3	
						4.7	0.7	132	27.4		8.0		24.8		73.7		5.1		14.3		7		86						1.2	
					Bottom	8.4	0.4	122	26.9	27.0	8.0	8.0	25.5	25.5	71.8	71.9	5.0	5.0	15.0		6		89						1.3	
						8.4	0.4	131	27.0		8.0		25.5		71.9		5.0		15.0		7		89						1.4	
SR1A	Fine	Moderate	13:23	5.2	Surface	1.0	-	-	27.5	27.5	8.0	8.0	24.1	24.1	74.8	74.9	5.2	5.2	5.6	8.8	7	8	-	-	819977	812655	-	-	-	-
						1.0	-	-	27.5		8.0		24.1		74.9		5.2		5.6		8		-				-		-	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	-	-	27.5	27.5	8.0	8.0	24.3	24.3	77.4	77.6	5.3	5.4	12.2		7		-				-		-	
						4.2	-	-	27.5		8.0		24.3		77.7		5.4		11.9		8		-				-		-	
SR2	Fine	Moderate	13:36	4.9	Surface	1.0	0.6	91	27.9	27.9	8.0	8.0	24.4	24.5	79.9	79.8	5.5	5.5	6.4	7.4	9	8	81	84	821451	814178	<0.2	<0.2	1.4	1.4
						1.0	0.6	91	27.9		8.0		24.5		79.7		5.5		6.8		8		82						1.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	0.4	76	27.5	27.5	8.0	8.0	25.0	25.0	80.7	80.9	5.5	5.6	8.1		7		86				<0.2		1.4	
						3.9	0.4	81	27.5		8.0		25.0		81.1		5.6		8.3		7		86				<0.2		1.4	
SR3	Fine	Moderate	12:32	9.7	Surface	1.0	0.2	219	27.9	27.9	8.0	8.0	23.7	23.8	75.4	75.4	5.2	5.0	5.7	9.4	10	9	-	-	822136	807554	-	-	-	-
						1.0	0.2	238	27.8		8.0		23.8		75.4		5.2		6.1		8		-				-		-	
					Middle	4.9	0.1	268	27.0	27.0	8.0	8.0	25.3	25.3	68.3	68.4	4.7		9.8		8		-				-		-	
						4.9	0.1	290	27.0		8.0		25.3		68.5		4.7		10.0		9		-				-		-	
					Bottom	8.7	0.0	355	27.3	27.3	8.0	8.0	25.9	25.9	74.4	74.4	5.1	5.1	12.1		9		-				-		-	
						8.7	0.0	358	27.3		8.0		25.9		74.4		5.1		12.5		9		-				-		-	
SR4A	Fine	Calm	13:43	9.1	Surface	1.0	0.2	246	28.2	28.2	8.0	8.0	26.4	26.4	80.5	80.4	5.4	5.4	8.4	10.3	8	11	-	-	817212	807792	-	-	-	-
						1.0	0.2	267	28.1		8.0		26.5		80.3		5.4		8.8		9		-				-		-	
					Middle	4.6	0.1	271	27.6	27.6	8.1	8.1	27.3	27.3	77.7	77.7	5.3		10.5		12		-				-		-	
						4.6	0.1	286	27.6		8.1		27.3		77.6		5.3		10.5		11		-				-		-	
					Bottom	8.1	0.1	245	27.5	27.5	8.2	8.2	27.6	27.6	76.9	77.0	5.2	5.2	11.6		12		-				-		-	
						8.1	0.1	259	27.5		8.2		27.6		77.0		5.2		11.8		13		-				-		-	
SR5A	Fine	Calm	14:02	3.5	Surface	1.0	0.1	338	28.2	28.2	8.0	8.0	25.3	25.3	81.9	81.9	5.6	5.6	8.1	9.9	8	10	-	-	816602	810709	-	-	-	-
						1.0	0.1	311	28.1		8.0		25.4		81.9		5.6		8.2		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.5	0.1	351	27.8	27.8	8.2	8.2	26.0	26.0	81.5	81.6	5.5	5.5	11.5		11		-				-		-	
						2.5	0.1	323	27.8		8.2		26.0		81.6		5.5		11.7		11		-				-		-	
SR6A	Fine	Calm	14:44	4.4	Surface	1.0	0.1	311	27.6	27.6	8.0	8.0	24.0	24.0	73.5	73.5	5.1	5.1	16.3	17.9	10	11	-	-	817961	814746	-	-	-	-
						1.0	0.1	337	27.6		8.0		24.0		73.5		5.1		16.3		11		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.1	200	27.4	27.4	8.1	8.1	25.0	25.0	71.6	71.6	4.9	4.9	19.4		11		-				-		-	
						3.4	0.1	218	27.4		8.1		25.0		71.6		4.9		19.3		11		-				-		-	
SR7	Fine	Moderate	14:21	15.8	Surface	1.0	1.0	56	27.2	27.2	8.0	8.0	24.9	25.0	72.6	72.6	5.1	5.0	3.9	5.0	11	10	-	-	823641	823737	-	-	-	-
						1.0	1.1	61	27.2		8.0		25.0		72.6		5.1		4.0		10		-				-		-	
					Middle	7.9	0.5	24	26.5	26.5	8.0	8.0	26.5	26.5	68.7	68.9	4.8		5.2		10		-				-		-	
						7.9	0.5	24	26.5		8.0		26.5		69.0		4.8		5.3		11		-				-		-	
					Bottom	14.8	0.3	7	26.5	26.5	8.0	8.0	26.5	26.5	71.3	71.5	4.9	5.0	5.7		9		-				-		-	
						14.8	0.3	7	26.5		8.0		26.5		71.6		5.0		5.7		10		-				-		-	
SR8	Fine	Moderate	13:15	5.8	Surface	1.0	-	-	28.4	28.4	7.9	7.9	23.9	23.9	79.5	79.5	5.4	5.4	11.5	14.8	8	9	-	-	820372	811614	-	-	-	-
						1.0	-	-	28.4		7.9		23.9		79.5		5.4		11.5		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.8	-	-	27.7	27.7	8.0	8.0	24.3	24.3	79.4	79.7	5.5	5.5	18.0		9		-				-		-	
						4.8	-	-	27.7		8.0		24.3		80.0		5.5		18.2		10		-				-		-	

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 20 August 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	07:46	9.2	Surface	1.0	0.8	45	27.4	27.4	8.1	8.1	27.4	27.4	79.9	80.0	5.4	5.4	15.7	17.7	14	13	87	90	815639	804231	<0.2	<0.2	1.3	1.4
						1.0	0.8	47	27.4		8.1		27.4		80.0		5.4		15.9		14		86				<0.2		1.5	
					Middle	4.6	0.7	40	27.4	27.4	8.1	8.1	27.6	27.6	78.8	78.8	5.3		17.2		13		90				<0.2		1.6	
						4.6	0.7	43	27.4		8.1		27.6		78.8		5.3		17.3		14		90				<0.2		1.4	
					Bottom	8.2	0.6	39	27.4	27.4	8.0	8.0	27.6	27.6	79.7	79.8	5.4	5.4	20.0		10		93				<0.2		1.4	
						8.2	0.6	41	27.4		8.0		27.6		79.8		5.4		19.9		11		93				<0.2		1.3	
C2	Cloudy	Moderate	08:06	12.3	Surface	1.0	0.6	359	27.4	27.4	7.9	7.9	22.3	22.3	74.0	74.0	5.2	5.2	4.4	10.7	4	4	86	90	825672	806962	<0.2	<0.2	1.3	1.4
						1.0	0.6	330	27.4		7.9		22.3		74.0		5.2		4.7		5		86				<0.2		1.4	
					Middle	6.2	0.5	6	27.3	27.3	7.9	7.9	23.8	23.8	72.9	73.0	5.1		12.2		4		90				<0.2		1.4	
						6.2	0.5	6	27.3		7.9		23.8		73.0		5.1		12.7		4		90				<0.2		1.4	
					Bottom	11.3	0.4	16	27.3	27.3	8.0	8.0	24.0	24.0	74.6	74.7	5.2	5.2	15.1		3		93				<0.2		1.4	
						11.3	0.4	16	27.3		8.0		24.0		74.7		5.2		15.1		3		94				<0.2		1.3	
C3	Cloudy	Moderate	06:23	12.2	Surface	1.0	0.5	271	26.9	26.9	8.0	8.0	24.7	24.7	72.2	72.2	5.0	4.9	4.8	7.2	9	7	87	91	822097	817784	<0.2	<0.2	1.4	1.4
						1.0	0.5	275	26.9		8.0		24.7		72.2		5.0		4.8		8		87				<0.2		1.4	
					Middle	6.1	0.7	281	26.6	26.6	8.0	8.0	25.6	25.6	69.5	69.5	4.8		6.2		7		91				<0.2		1.4	
						6.1	0.8	307	26.6		8.0		25.6		69.5		4.8		6.2		6		91				<0.2		1.5	
					Bottom	11.2	0.5	285	26.2	26.2	8.0	8.0	26.8	26.8	67.4	67.5	4.7	4.7	10.4		5		94				<0.2		1.5	
						11.2	0.5	296	26.2		8.0		26.8		67.6		4.7		10.5		5		94				<0.2		1.4	
IM1	Fine	Moderate	08:03	5.9	Surface	1.0	0.3	15	27.4	27.4	8.1	8.1	26.0	26.0	78.6	78.6	5.4	5.4	11.9	13.5	13	14	88	89	817925	807149	<0.2	<0.2	1.1	1.1
						1.0	0.3	15	27.4		8.1		26.0		78.5		5.4		12.0		14		88				<0.2		1.1	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.9	0.2	31	27.4	27.4	8.1	8.1	26.2	26.2	77.3	77.4	5.3	5.3	15.1		14		90				<0.2		1.2	
						4.9	0.2	32	27.4		8.1		26.2		77.4		5.3		15.0		13		90				<0.2		1.1	
IM2	Fine	Moderate	08:11	8.1	Surface	1.0	0.5	1	27.4	27.4	8.0	8.0	25.9	25.9	83.6	83.6	5.7	5.5	7.3	10.4	14	10	85	88	818153	806189	<0.2	<0.2	1.1	1.2
						1.0	0.6	1	27.4		8.0		26.0		83.5		5.7		7.4		14		85				<0.2		0.9	
					Middle	4.1	0.5	351	27.4	27.4	8.0	8.0	26.5	26.5	78.4	78.4	5.3		10.6		10		89				<0.2		1.3	
						4.1	0.5	323	27.4		8.0		26.5		78.3		5.3		10.6		9		88				<0.2		1.2	
					Bottom	7.1	0.4	349	27.4	27.4	8.0	8.0	26.6	26.6	78.4	78.5	5.3	5.4	13.2		7		90				<0.2		1.3	
						7.1	0.4	321	27.4		8.0		26.6		78.5		5.4		13.3		8		91				<0.2		1.1	
IM3	Cloudy	Moderate	08:17	8.3	Surface	1.0	0.5	350	27.4	27.4	8.0	8.0	26.5	26.5	79.2	79.2	5.4	5.4	13.9	16.2	7	8	85	88	818776	805615	<0.2	<0.2	0.9	1.0
						1.0	0.5	357	27.4		8.0		26.5		79.1		5.4		13.9		6		84				<0.2		1.0	
					Middle	4.2	0.5	344	27.4	27.4	8.0	8.0	26.6	26.6	78.0	78.0	5.3		15.9		7		88				<0.2		1.2	
						4.2	0.5	316	27.4		8.0		26.6		78.0		5.3		15.8		8		88				<0.2		1.0	
					Bottom	7.3	0.5	337	27.4	27.4	7.9	7.9	26.6	26.6	78.1	78.2	5.3	5.3	19.0		10		90				<0.2		1.0	
						7.3	0.5	351	27.4		7.9		26.6		78.2		5.3		18.7		9		90				<0.2		1.0	
IM4	Fine	Moderate	08:26	9.3	Surface	1.0	0.9	349	27.5	27.5	8.0	8.0	26.4	26.4	81.0	81.0	5.5	5.5	14.3	17.1	15	19	85	88	819744	804612	<0.2	<0.2	0.9	1.0
						1.0	0.9	321	27.5		8.0		26.4		81.0		5.5		14.2		15		85				<0.2		1.0	
					Middle	4.7	0.8	350	27.5	27.5	8.0	8.0	26.6	26.6	78.8	78.8	5.4		17.0		19		88				<0.2		1.0	
						4.7	0.9	322	27.5		8.0		26.6		78.8		5.4		17.2		20		88				<0.2		1.1	
					Bottom	8.3	0.8	349	27.5	27.5	7.9	7.9	26.6	26.6	78.7	78.8	5.4	5.4	19.9		22		90				<0.2		1.1	
						8.3	0.8	321	27.5		7.9		26.6		78.8		5.4		20.1		22		90				<0.2		1.0	
IM5	Fine	Moderate	08:33	7.6	Surface	1.0	1.1	10	27.5	27.5	7.9	7.9	26.3	26.3	79.4	79.4	5.4	5.4	7.3	10.0	5	7	85	88	820743	804845	<0.2	<0.2	1.0	1.2
						1.0	1.2	10	27.5		7.9		26.3		79.4		5.4		7.5		6		85				<0.2		1.1	
					Middle	3.8	0.9	8	27.5	27.5	7.9	7.9	26.3	26.3	79.0	79.0	5.4		10.4		7		88				<0.2		1.3	
						3.8	1.0	8	27.5		7.9		26.3		79.0		5.4		10.5		6		88				<0.2		1.2	
					Bottom	6.6	0.7	12	27.5	27.5	7.9	7.9	26.4	26.4	78.9	79.0	5.4	5.4	12.2		8		90				<0.2		1.4	
						6.6	0.8	12	27.5		7.9		26.4		79.0		5.4		12.1		9		91				<0.2		1.2	
IM6	Cloudy	Moderate	08:41	8.2	Surface	1.0	0.1	211	27.8	27.8	7.9	7.9	22.9	22.9	81.6	81.6	5.6	5.6	6.3	8.5	6	6	85	88	821064	805832	<0.2	<0.2	1.0	1.2
						1.0	0.1	219	27.8		7.9		23.0		81.5		5.6		6.5		5		85				<0.2		1.2	
					Middle	4.1	0.1	69	27.6	27.6	7.9	7.9	24.2	24.2	80.4	80.4	5.5		8.6		6		88				<0.2		1.3	
						4.1	0.1	71	27.6		7.9		24.2		80.4		5.5		8.6		5		88				<0.2		1.4	
					Bottom	7.2	0.2	67	27.5	27.5	7.9	7.9	25.5	25.5	79.9	80.0	5.5	5.5	10.7		6		90				<0.2		1.3	
						7.2	0.2	68	27.5		7.9		25.5		80.0		5.5		10.5		6		90				<0.2		1.2	
IM7	Cloudy	Moderate	08:49	9.6	Surface	1.0	0.1	242	27.9	27.9	7.9	7.9	22.5	22.5	80.9	80.9	5.6	5.6	5.9	8.8	6	5	85	88	821370	806856	<0.2	<0.2	1.0	1.2
						1.0	0.1	258	27.9		7.9		22.5		80.9		5.6		6.0		7		85				<0.2		1.2	
					Middle	4.8	0.1	158	27.6	27.6	7.9	7.9	24.2	24.2	80.5	80.6	5.6		9.0		5		87				<0.2		1.3	
						4.8	0.1	173	27.6		7.9		24.2		80.6		5.6		9.0		5		88				<0.2		1.2	
					Bottom	8.6	0.1	100	27.4	27.4	7.9	7.9	25.6	25.6	80.4	80.5	5.5	5.5	11.6		5		90				<0.2		1.3	
						8.6	0.1	107	27.4		7.9		25.6		80.5		5.5		11.3		4		90				<0.2		1.3	
IM8	Cloudy	Moderate	07:42	8.3	Surface	1.0	0.1	97	27.3	27.3	7.9	7.9	22.5	22.5	76.2	76.2	5.3	5.3	6.8	9.1	6	6	87	90	821819	808134	<0.2	<0.2	1.4	1.4
						1.0	0.1	101	27.3		7.9		22.5		76.2		5.3		6.7		6		86				<0.2		1.5	
					Middle	4.2	0.1	143	27.3	27.3	7.9	7.9	22.7	22.7	76.2	76.3	5.3		7.1		6		91				<0.2		1.2	
						4.2	0.1	144	27.3		7.9		22.7		76.3		5.3		7.2		5		90				<0.2		1.4	
					Bottom	7.3	0.0	201	27.2	27.2	8.0	8.0	22.8	22.8	80.1	80.3	5.6	5.6	13.0		5		94				<0.2		1.5	
						7.3	0.0	204	27.2		8.0		22.8		80.5		5.6		13.5		5		94				<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 20 August 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	07:36	8.0	Surface	1.0	0.3	233	27.2	27.2	7.9	7.9	22.8	22.8	74.6	74.7	5.2	5.2	8.5	11.1	6	6	86	90	822090	808833	<0.2	<0.2	1.6	1.5
						1.0	0.3	242	27.2		7.9		22.8		74.7		5.2		8.7		5		87				<0.2		1.4	
					Middle	4.0	0.3	239	27.2	27.2	7.9	7.9	22.8	22.8	75.1	75.1	5.2		10.2		6		91				<0.2		1.5	
						4.0	0.3	252	27.2		7.9		22.8		75.1		5.3		10.0		4		91				<0.2		1.5	
					Bottom	7.0	0.3	246	27.2	27.2	8.0	8.0	23.1	23.1	79.1	79.3	5.5	5.6	14.6		6		93				<0.2		1.4	
						7.0	0.3	252	27.2		8.0		23.1		79.5		5.6		14.8		6		93				<0.2		1.4	
IM10	Cloudy	Moderate	07:30	9.1	Surface	1.0	0.9	311	27.2	27.2	7.9	7.9	23.1	23.1	74.4	74.4	5.2	5.1	8.1	12.8	5	5	87	89	822366	809775	<0.2	<0.2	1.5	1.4
						1.0	0.9	321	27.2		7.9		23.1		74.4		5.2		8.1		6		86				<0.2		1.5	
					Middle	4.6	0.7	309	27.1	27.1	8.0	8.0	23.8	23.9	71.9	71.9	5.0		12.9		5		88				<0.2		1.3	
						4.6	0.7	314	27.1		8.0		23.9		71.9		5.0		13.2		5		88				<0.2		1.3	
					Bottom	8.1	0.6	301	27.1	27.1	8.0	8.0	24.1	24.1	72.8	72.9	5.1	5.1	17.4		5		94				<0.2		1.3	
						8.1	0.6	311	27.1		8.0		24.1		72.9		5.1		17.4		5		93				<0.2		1.3	
IM11	Cloudy	Moderate	07:20	8.5	Surface	1.0	1.0	304	27.1	27.1	7.9	7.9	24.2	24.2	71.3	71.3	5.0	5.0	6.7	11.2	7	6	86	90	822049	811483	<0.2	<0.2	1.3	1.3
						1.0	1.0	305	27.1		7.9		24.2		71.2		5.0		6.7		6		87				<0.2		1.4	
					Middle	4.3	0.8	305	26.9	26.9	7.9	7.9	24.7	24.7	70.3	70.4	4.9		11.8		6		91				<0.2		1.3	
						4.3	0.8	317	26.9		7.9		24.7		70.5		4.9		11.9		5		91				<0.2		1.3	
					Bottom	7.5	0.6	315	26.9	26.9	8.0	8.0	25.0	25.0	71.8	72.0	5.0	5.0	15.2		5		93				<0.2		1.3	
						7.5	0.6	328	26.9		8.0		25.0		72.1		5.0		14.9		5		93				<0.2		1.3	
IM12	Cloudy	Moderate	07:15	9.6	Surface	1.0	0.9	286	27.0	27.0	7.9	7.9	24.3	24.3	72.5	72.5	5.0	5.0	8.6	12.2	7	6	87	91	821479	812049	<0.2	<0.2	1.4	1.4
						1.0	0.9	296	27.0		7.9		24.3		72.4		5.0		8.7		8		87				<0.2		1.4	
					Middle	4.8	0.8	282	27.0	27.0	7.9	7.9	24.4	24.4	72.2	72.2	5.0		11.9		5		91				<0.2		1.4	
						4.8	0.8	301	27.0		7.9		24.4		72.2		5.0		12.2		6		91				<0.2		1.3	
					Bottom	8.6	0.6	290	27.0	27.0	8.0	8.0	24.5	24.5	73.6	73.7	5.1	5.1	15.9		6		93				<0.2		1.3	
						8.6	0.7	316	27.0		8.0		24.5		73.7		5.1		15.7		4		94				<0.2		1.3	
SR1A	Cloudy	Moderate	06:57	4.6	Surface	1.0	-	-	27.1	27.1	7.9	7.9	23.0	23.1	75.0	74.9	5.2	5.2	4.7	4.9	4	5	-	-	819976	812654	-	-	-	-
						1.0	-	-	27.1		7.9		23.1		74.8		5.2		4.7		5		-				-		-	
					Middle	2.3	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.3	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	-	-	27.0	27.0	8.0	8.0	23.5	23.5	74.9	75.1	5.2	5.3	5.1		4		-				-		-	
						3.6	-	-	27.0		8.0		23.5		75.2		5.3		5.0		5		-				-		-	
SR2	Cloudy	Moderate	06:45	4.8	Surface	1.0	0.3	86	26.9	26.9	7.9	7.9	24.6	24.6	70.6	70.6	4.9	4.9	5.8	7.0	3	4	87	89	821481	814156	<0.2	<0.2	1.4	1.5
						1.0	0.3	88	26.9		7.9		24.6		70.6		4.9		5.7		4		87				<0.2		1.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.2	79	26.8	26.8	7.9	7.9	24.8	24.8	71.3	71.4	5.0	5.0	8.3		4		90				<0.2		1.5	
						3.8	0.2	79	26.8		7.9		24.8		71.4		5.0		8.2		5		90				<0.2		1.4	
SR3	Cloudy	Moderate	07:48	9.4	Surface	1.0	0.1	343	27.4	27.4	7.9	7.9	21.9	21.9	76.0	76.0	5.3	5.3	4.5	6.6	4	5	-	-	822167	807549	-	-	-	-
						1.0	0.1	316	27.4		7.9		22.0		75.9		5.3		4.8		5		-				-		-	
					Middle	4.7	0.1	25	27.4	27.4	7.9	7.9	22.4	22.4	76.1	76.1	5.3		7.4		4		-				-		-	
						4.7	0.1	26	27.4		7.9		22.5		76.1		5.3		7.5		5		-				-		-	
					Bottom	8.4	0.2	49	27.4	27.4	8.0	8.0	22.5	22.5	80.2	80.4	5.6	5.6	7.8		5		-				-		-	
						8.4	0.2	49	27.4		8.0		22.5		80.6		5.6		7.8		5		-				-		-	
SR4A	Fine	Calm	07:22	9.8	Surface	1.0	0.1	105	27.4	27.4	8.1	8.1	25.0	25.0	77.5	77.5	5.3	5.3	10.3	12.2	8	7	-	-	817183	807805	-	-	-	-
						1.0	0.1	113	27.4		8.1		25.0		77.5		5.3		10.3		8		-				-		-	
					Middle	4.9	0.1	59	27.4	27.4	8.1	8.1	25.5	25.5	77.9	77.9	5.3		11.3		6		-				-		-	
						4.9	0.2	64	27.4		8.1		25.5		77.9		5.3		11.2		6		-				-		-	
					Bottom	8.8	0.2	75	27.4	27.4	8.0	8.0	25.7	25.7	77.7	77.8	5.3	5.3	15.2		7		-				-		-	
						8.8	0.2	75	27.4		8.0		25.7		77.8		5.3		15.0		6		-				-		-	
SR5A	Fine	Calm	07:06	3.6	Surface	1.0	0.2	295	27.2	27.2	8.0	8.0	24.6	24.6	77.0	77.1	5.3	5.3	8.9	10.5	5	6	-	-	816610	810706	-	-	-	-
						1.0	0.3	312	27.2		8.0		24.6		77.1		5.3		9.1		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.6	0.2	302	27.2	27.2	8.0	8.0	24.6	24.6	78.1	78.2	5.4	5.4	12.0		6		-				-		-	
						2.6	0.3	303	27.2		8.0		24.6		78.2		5.4		12.0		6		-				-		-	
SR6A	Cloudy	Calm	06:38	4.3	Surface	1.0	0.1	239	27.2	27.2	8.1	8.1	24.8	24.8	76.6	76.6	5.3	5.3	6.2	7.9	<2	3	-	-	817962	814717	-	-	-	-
						1.0	0.1	248	27.2		8.1		24.8		76.5		5.3		6.2		<2		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.1	233	27.3	27.3	8.0	8.0	25.4	25.4	74.8	74.9	5.1	5.2	9.7		4		-				-		-	
						3.3	0.1	249	27.3		8.0		25.4		74.9		5.2		9.6		4		-				-		-	
SR7	Cloudy	Calm	05:51	15.6	Surface	1.0	0.3	220	26.8	26.8	7.9	7.9	24.9	24.9	73.8	73.8	5.1	5.0	4.5	4.3	5	5	-	-	823620	823758	-	-	-	-
						1.0	0.3	229	26.8		7.9		24.9		73.8		5.1		4.4		4		-				-		-	
					Middle	7.8	0.2	206	26.7	26.7	7.8	7.8	25.4	25.4	71.0	71.0	4.9		4.0		4		-				-		-	
						7.8	0.2	212	26.7		7.8		25.4		70.9		4.9		4.0		6		-				-		-	
					Bottom	14.6	0.0	94	26.3	26.3	7.7	7.7	26.6	26.6	68.6	68.8	4.8	4.8	4.4		6		-				-		-	
						14.6	0.0	96	26.3		7.7		26.5		68.9		4.8		4.4		5		-				-		-	
SR8	Cloudy	Moderate	07:07	5.0	Surface	1.0	-	-	27.1	27.1	7.9	7.9	23.2	23.2	73.5	73.5	5.1	5.1	8.0	10.9	6	7	-	-	820379	811606	-	-	-	-
						1.0	-	-	27.1		7.9		23.3		73.4		5.1		7.9		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	-	-	27.0	27.0	7.9	7.9	23.7	23.7	73.7	73.8	5.1	5.2	13.8		8		-				-		-	
						4.0	-	-	27.0		7.9		23.7		73.8		5.2		13.8		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 22 August 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	14:47	8.0	Surface	1.0	0.6	230	28.8	28.8	8.0	8.0	24.7	24.7	83.3	83.2	5.6	5.5	6.2	10.1	3	4	85	87	815632	804226	<0.2	<0.2	1.2	1.2
						1.0	0.6	238	28.7		8.0		24.8		83.0		5.6		6.2		4		86				<0.2		1.2	
					Middle	4.0	0.5	195	27.8	27.8	8.1	8.1	28.4	28.5	78.5	78.4	5.3		9.9		4		87				<0.2		1.2	
						4.0	0.6	213	27.7		8.1		28.6		78.2		5.3		10.8		3		88				<0.2		1.3	
					Bottom	7.0	0.3	223	27.7	27.7	8.0	8.0	29.0	28.9	78.3	78.4	5.3	5.3	13.8		5		89				<0.2		1.2	
						7.0	0.3	227	27.7		8.0		28.9		78.5		5.3		13.7		4		89				<0.2		1.3	
C2	Foggy	Moderate	13:40	11.4	Surface	1.0	0.2	135	28.7	28.7	7.9	7.9	22.2	22.2	72.5	72.5	5.0	4.8	6.3	7.9	9	9	83	86	825673	806921	<0.2	<0.2	1.5	1.6
						1.0	0.2	146	28.7		7.9		22.2		72.5		5.0		6.3		8		82				<0.2		1.4	
					Middle	5.7	0.5	154	27.7	27.7	7.9	7.9	24.1	24.0	67.0	67.1	4.6		9.2		9		86				<0.2		1.5	
						5.7	0.5	164	27.7		7.9		24.0		67.1		4.6		9.3		9		86				<0.2		1.6	
					Bottom	10.4	0.5	144	27.2	27.2	7.9	7.9	25.7	25.7	65.0	65.0	4.5	4.5	8.2		11		90				<0.2		1.8	
						10.4	0.5	153	27.2		7.9		25.7		65.0		4.5		8.3		10		90				<0.2		1.8	
C3	Foggy	Moderate	15:21	12.6	Surface	1.0	0.4	286	28.2	28.2	7.9	7.9	23.9	23.9	73.6	73.6	5.0	5.0	4.9	5.9	6	6	83	87	822113	817821	<0.2	<0.2	1.3	1.2
						1.0	0.4	303	28.2		7.9		24.0		73.6		5.0		4.9		5		83				<0.2		1.2	
					Middle	6.3	0.2	257	28.0	28.0	7.9	7.9	24.6	24.6	71.8	71.8	4.9		4.8		6		87				<0.2		1.1	
						6.3	0.2	271	28.0		7.9		24.6		71.8		4.9		4.9		7		87				<0.2		1.2	
					Bottom	11.6	0.1	120	27.1	27.1	7.9	7.9	26.1	26.1	64.8	64.8	4.5	4.5	7.9		7		90				<0.2		1.2	
						11.6	0.1	127	27.1		7.9		26.1		64.8		4.5		7.9		6		91				<0.2		1.4	
IM1	Cloudy	Moderate	14:27	5.6	Surface	1.0	0.2	193	29.6	29.6	8.0	8.0	23.7	23.7	86.7	86.4	5.8	5.8	5.2	8.2	3	4	87	88	817967	807118	<0.2	<0.2	1.2	1.2
						1.0	0.2	197	29.6		8.0		23.7		86.1		5.8		5.3		4		86				<0.2		1.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.6	0.2	157	28.2	28.2	8.0	8.0	26.1	26.1	76.0	76.1	5.1	5.1	11.1		4		89				<0.2		1.1	
						4.6	0.2	157	28.2		8.0		26.1		76.2		5.1		11.3		3		89				<0.2		1.1	
IM2	Cloudy	Moderate	14:19	7.7	Surface	1.0	0.2	191	28.3	28.3	8.1	8.1	24.8	24.9	78.2	78.0	5.3	5.3	7.9	10.3	4	5	85	87	818166	806183	<0.2	<0.2	1.2	1.2
						1.0	0.2	192	28.2		8.1		24.9		77.8		5.3		8.1		4		86				<0.2		1.2	
					Middle	3.9	0.2	171	28.0	28.0	8.1	8.1	26.9	27.0	77.2	77.3	5.2		8.2		5		87				<0.2		1.2	
						3.9	0.2	180	28.0		8.1		27.0		77.3		5.2		8.2		4		87				<0.2		1.2	
					Bottom	6.7	0.2	135	28.0	28.0	8.1	8.1	27.5	27.5	79.4	79.5	5.3	5.3	14.6		6		89				<0.2		1.2	
						6.7	0.2	138	28.0		8.1		27.5		79.6		5.3		14.5		5		89				<0.2		1.3	
IM3	Cloudy	Moderate	14:13	7.9	Surface	1.0	0.2	138	29.4	29.4	8.1	8.1	23.7	23.8	84.9	84.7	5.7	5.5	5.5	8.3	4	5	85	87	818788	805583	<0.2	<0.2	1.2	1.1
						1.0	0.3	140	29.3		8.1		23.8		84.4		5.7		5.6		5		86				<0.2		1.2	
					Middle	4.0	0.2	135	28.0	28.0	8.1	8.1	27.0	27.1	78.3	78.1	5.3		5.8		4		87				<0.2		1.1	
						4.0	0.2	142	28.0		8.1		27.1		77.9		5.2		5.8		6		88				<0.2		1.1	
					Bottom	6.9	0.3	129	27.9	27.9	8.1	8.1	27.7	27.7	76.9	77.0	5.2	5.2	13.3		5		89				<0.2		1.1	
						6.9	0.3	140	27.9		8.1		27.7		77.0		5.2		13.5		6		89				<0.2		1.0	
IM4	Cloudy	Moderate	14:03	8.6	Surface	1.0	0.5	203	28.3	28.3	7.9	7.9	25.3	25.2	78.4	78.4	5.3	5.3	10.4	14.1	6	7	85	87	819722	804599	<0.2	<0.2	1.1	1.2
						1.0	0.5	205	28.2		7.9		25.2		78.4		5.3		11.1		6		85				<0.2		1.2	
					Middle	4.3	0.3	155	28.1	28.1	7.9	7.9	27.6	27.7	78.1	78.1	5.2		13.6		6		87				<0.2		1.1	
						4.3	0.3	163	28.1		7.9		27.8		78.0		5.2		14.6		7		87				<0.2		1.1	
					Bottom	7.6	0.2	154	27.9	27.9	7.9	7.9	28.3	28.3	78.1	78.2	5.2	5.2	17.8		7		89				<0.2		1.2	
						7.6	0.2	166	27.9		7.9		28.3		78.3		5.2		17.1		8		89				<0.2		1.2	
IM5	Cloudy	Moderate	13:56	8.4	Surface	1.0	0.4	222	28.4	28.4	7.9	7.9	24.6	24.6	78.5	78.6	5.3	5.3	8.3	10.8	8	7	86	88	820714	804884	<0.2	<0.2	1.2	1.2
						1.0	0.4	223	28.4		7.9		24.6		78.6		5.3		8.3		7		85				<0.2		1.2	
					Middle	4.2	0.3	194	28.3	28.3	8.0	8.0	26.5	26.5	78.9	78.9	5.3		8.0		6		87				<0.2		1.2	
						4.2	0.4	210	28.3		8.0		26.5		78.8		5.3		8.1		6		88				<0.2		1.3	
					Bottom	7.4	0.2	171	28.0	28.0	8.0	8.0	27.9	27.9	77.7	77.8	5.2	5.2	16.5		6		89				<0.2		1.2	
						7.4	0.2	177	28.0		8.0		27.9		77.8		5.2		15.7		6		91				<0.2		1.2	
IM6	Cloudy	Moderate	13:49	8.1	Surface	1.0	0.3	267	28.5	28.5	7.9	7.9	24.0	24.1	78.2	78.0	5.3	5.2	8.6	12.2	8	7	85	88	821073	805821	<0.2	<0.2	1.1	1.2
						1.0	0.4	284	28.5		7.9		24.1		77.7		5.3		8.7		8		85				<0.2		1.2	
					Middle	4.1	0.1	186	28.2	28.2	8.0	8.0	26.2	26.3	76.1	76.1	5.1		10.1		7		88				<0.2		1.3	
						4.1	0.2	197	28.1		8.0		26.3		76.1		5.1		10.3		7		87				<0.2		1.3	
					Bottom	7.1	0.2	168	28.1	28.1	8.0	8.0	26.8	26.8	76.4	76.5	5.2	5.2	17.9		6		89				<0.2		1.2	
						7.1	0.2	178	28.1		8.0		26.8		76.6		5.2		17.6		6		91				<0.2		1.3	
IM7	Cloudy	Moderate	13:40	8.3	Surface	1.0	0.1	266	28.6	28.6	8.1	8.1	23.6	23.6	78.3	78.2	5.3	5.2	7.5	12.5	5	6	85	87	821333	806856	<0.2	<0.2	1.3	1.2
						1.0	0.1	275	28.6		8.1		23.6		78.1		5.3		7.7		5		85				<0.2		1.3	
					Middle	4.2	0.1	192	28.3	28.3	8.2	8.3	25.1	25.3	76.3	76.2	5.2		11.0		5		87				<0.2		1.2	
						4.2	0.1	199	28.3		8.3		25.5		76.0		5.1		12.0		6		87				<0.2		1.1	
					Bottom	7.3	0.1	163	28.3	28.3	8.3	8.3	25.8	25.8	75.9	76.0	5.1	5.1	18.1		8		90				<0.2		1.1	
						7.3	0.2	163	28.3		8.3		25.8		76.0		5.1		18.8		9		90				<0.2		1.2	
IM8	Foggy	Moderate	14:02	7.7	Surface	1.0	0.2	92	28.6	28.6	7.9	7.9	22.3	22.3	74.8	74.8	5.1	5.0	6.0	10.2	7	8	84	87	821811	808130	<0.2	<0.2	1.4	1.5
						1.0	0.2	93	28.6		7.9		22.3		74.8		5.1		5.9		7		83				<0.2		1.6	
					Middle	3.9	0.1	108	28.1	28.1	7.9	7.9	24.1	24.1	71.3	71.3	4.9		11.2		7		87				<0.2		1.5	
						3.9	0.1	115	28.1		7.9		24.1		71.3		4.9		11.2		8		87				<0.2		1.4	
					Bottom	6.7	0.1	102	27.8	27.8	7.9	7.9	24.2	24.2	68.9	69.0	4.7	4.7	13.4		8		90				<0.2		1.5	
						6.7	0.1	105	27.8		7.9		24.2		69.0		4.7		13.3		8		91				<0.2		1.5	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 22 August 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	14:08	7.8	Surface	1.0	0.2	68	28.3	28.3	7.9	7.9	22.4	22.4	71.9	71.9	5.0	4.9	5.8	8.5	6	7	83	87	822082	808809	<0.2	<0.2	1.3	1.5
						1.0	0.2	68	28.3		7.9		22.4		71.9		4.9		5.8		6		83				<0.2		1.4	
					Middle	3.9	0.3	102	27.8	27.8	7.9	7.9	24.1	24.1	69.2	69.2	4.8		7.5		8		86				<0.2		1.5	
						3.9	0.3	109	27.8		7.9		24.1		69.2		4.8		7.5		7		87				<0.2		1.6	
					Bottom	6.8	0.2	95	27.5	27.5	7.9	7.9	24.6	24.6	66.7	66.7	4.6	4.6	12.3		7		90				<0.2		1.6	
						6.8	0.2	95	27.5		7.9		24.6		66.7		4.6		12.0		8		91				<0.2		1.6	
IM10	Foggy	Moderate	14:15	7.5	Surface	1.0	0.6	98	28.5	28.5	7.9	7.9	22.8	22.8	74.2	74.2	5.1	5.1	5.7	8.7	9	8	83	87	822374	809786	<0.2	<0.2	1.5	1.5
						1.0	0.6	102	28.5		7.9		22.8		74.2		5.1		5.7		8		82				<0.2		1.5	
					Middle	3.8	0.6	97	28.4	28.4	7.9	7.9	23.0	23.0	73.4	73.4	5.0		6.2		8		87				<0.2		1.4	
						3.8	0.6	102	28.4		7.9		23.0		73.4		5.0		6.2		8		87				<0.2		1.5	
					Bottom	6.5	0.5	110	27.6	27.6	7.9	7.9	24.7	24.7	67.5	67.6	4.6	4.6	14.6		7		91				<0.2		1.4	
						6.5	0.5	115	27.6		7.9		24.7		67.6		4.6		13.9		7		90				<0.2		1.4	
IM11	Foggy	Moderate	14:25	7.8	Surface	1.0	0.8	105	28.9	28.9	7.9	7.9	22.5	22.5	77.1	77.1	5.2	5.0	4.0	10.8	5	5	83	87	822067	811476	<0.2	<0.2	1.3	1.4
						1.0	0.9	106	28.9		7.9		22.5		77.0		5.2		4.0		6		83				<0.2		1.3	
					Middle	3.9	0.7	109	28.0	28.0	7.9	7.9	23.9	23.9	70.3	70.3	4.8		12.9		5		87				<0.2		1.4	
						3.9	0.8	116	28.0		7.9		23.9		70.2		4.8		13.2		6		87				<0.2		1.5	
					Bottom	6.8	0.5	99	27.6	27.6	7.9	7.9	24.6	24.6	68.3	68.4	4.7	4.7	15.3		4		91				<0.2		1.5	
						6.8	0.5	101	27.6		7.9		24.6		68.4		4.7		15.3		5		91				<0.2		1.5	
IM12	Foggy	Moderate	14:31	9.0	Surface	1.0	0.5	95	29.0	29.0	7.9	7.9	22.1	22.1	77.4	77.4	5.3	5.1	4.0	9.5	5	5	82	86	821454	812047	<0.2	<0.2	1.2	1.2
						1.0	0.5	101	29.0		7.9		22.1		77.3		5.3		4.0		6		83				<0.2		1.2	
					Middle	4.5	0.4	116	27.9	27.9	7.9	7.9	23.9	23.9	69.1	69.1	4.8		10.2		6		86				<0.2		1.2	
						4.5	0.4	120	27.9		7.9		23.9		69.1		4.8		10.0		4		86				<0.2		1.2	
					Bottom	8.0	0.2	92	27.5	27.5	7.9	7.9	24.8	24.8	66.1	66.1	4.5	4.6	14.3		4		90				<0.2		1.3	
						8.0	0.2	97	27.5		7.9		24.8		66.1		4.6		14.8		3		90				<0.2		1.2	
SR1A	Foggy	Moderate	14:50	5.4	Surface	1.0	-	-	28.3	28.4	7.9	7.9	23.1	23.1	71.6	71.6	4.9	4.9	8.6	7.9	11	12	-	-	819974	812655	-	-	-	-
						1.0	-	-	28.4		7.9		23.1		71.5		4.9		8.7		11		-				-		-	
					Middle	2.7	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.7	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	-	-	27.7	27.7	7.9	7.9	24.2	24.2	67.1	67.2	4.6	4.6	7.1		14		-				-		-	
						4.4	-	-	27.7		7.9		24.2		67.3		4.6		7.0		13		-				-		-	
SR2	Foggy	Moderate	15:03	5.2	Surface	1.0	0.5	86	28.8	28.8	7.9	7.9	22.6	22.6	76.5	76.5	5.2	5.2	3.7	8.2	7	7	83	85	821479	814179	<0.2	<0.2	1.1	1.2
						1.0	0.5	91	28.8		7.9		22.6		76.4		5.2		3.8		7		83				<0.2		1.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.3	78	27.8	27.8	7.9	7.9	24.1	24.1	69.0	69.0	4.7	4.7	12.6		6		86				<0.2		1.2	
						4.2	0.3	81	27.8		7.9		24.1		69.0		4.7		12.6		6		86				<0.2		1.2	
SR3	Foggy	Moderate	13:56	8.8	Surface	1.0	0.1	170	28.2	28.2	7.9	7.9	22.9	22.9	71.7	71.7	4.9	4.9	6.8	8.6	5	6	-	-	822152	807569	-	-	-	-
						1.0	0.1	170	28.2		7.9		22.9		71.7		4.9		6.8		6		-				-		-	
					Middle	4.4	0.2	195	27.9	27.9	7.9	7.9	24.2	24.2	70.2	70.2	4.8		8.6		6		-				-		-	
						4.4	0.2	204	27.9		7.9		24.2		70.1		4.8		8.6		7		-				-		-	
					Bottom	7.8	0.2	232	27.6	27.6	7.9	7.9	24.5	24.5	67.3	67.3	4.6	4.6	10.2		6		-				-		-	
						7.8	0.2	236	27.5		7.9		24.5		67.3		4.6		10.4		7		-				-		-	
SR4A	Cloudy	Moderate	15:10	8.4	Surface	1.0	0.1	58	29.2	29.2	8.1	8.1	24.5	24.5	82.2	82.1	5.5	5.3	8.8	12.6	4	5	-	-	817181	807802	-	-	-	-
						1.0	0.1	62	29.2		8.1		24.5		81.9		5.5		8.6		5		-				-		-	
					Middle	4.2	0.2	53	28.2	28.2	8.1	8.1	26.1	26.1	75.0	75.1	5.1		13.4		5		-				-		-	
						4.2	0.2	57	28.2		8.1		26.1		75.2		5.1		13.3		4		-				-		-	
					Bottom	7.4	0.2	50	28.1	28.1	8.1	8.1	26.4	26.3	76.8	76.9	5.2	5.2	16.0		4		-				-		-	
						7.4	0.2	50	28.1		8.1		26.3		77.0		5.2		15.5		5		-				-		-	
SR5A	Cloudy	Moderate	15:27	3.7	Surface	1.0	0.0	119	28.8	28.8	8.0	8.0	24.4	24.4	78.9	79.0	5.3	5.3	14.8	16.0	7	7	-	-	816594	810693	-	-	-	-
						1.0	0.0	127	28.8		8.0		24.5		79.1		5.3		15.0		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.7	0.0	171	28.7	28.7	8.0	8.0	24.6	24.6	78.0	78.1	5.3	5.3	16.6		8		-				-		-	
						2.7	0.0	184	28.7		8.0		24.6		78.1		5.3		17.4		8		-				-		-	
SR6A	Cloudy	Moderate	15:54	4.5	Surface	1.0	0.1	82	28.5	28.5	8.0	8.0	23.9	23.9	80.4	80.3	5.5	5.5	11.4	15.5	6	7	-	-	817980	814727	-	-	-	-
						1.0	0.1	87	28.5		8.0		23.9		80.2		5.5		11.9		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.0	281	28.5	28.5	8.0	8.0	24.0	23.9	73.1	73.3	5.0	5.0	19.5		6		-				-		-	
						3.5	0.0	290	28.5		8.0		23.9		73.5		5.0		19.2		7		-				-		-	
SR7	Foggy	Moderate	15:48	14.7	Surface	1.0	0.6	61	28.6	28.6	7.9	7.9	23.4	23.4	77.5	77.5	5.3	5.1	2.7	3.9	3	4	-	-	823658	823727	-	-	-	-
						1.0	0.7	62	28.6		7.9		23.5		77.4		5.3		2.7		2		-				-		-	
					Middle	7.4	0.2	14	27.8	27.8	7.9	7.9	25.1	25.1	70.6	70.6	4.8		4.6		3		-				-		-	
						7.4	0.2	14	27.8		7.9		25.1		70.6		4.8		4.7		4		-				-		-	
					Bottom	13.7	0.2	55	27.0	27.0	8.0	8.0	27.3	27.3	67.6	67.7	4.6	4.6	4.4		5		-				-		-	
						13.7	0.2	57	27.0		8.0		27.2		67.7		4.6		4.4		4		-				-		-	
SR8	Foggy	Moderate	14:41	4.8	Surface	1.0	-	-	28.5	28.5	7.9	7.9	23.1	23.1	72.6	72.6	5.0	5.0	13.3	14.2	17	17	-	-	820371	811622	-	-	-	-
						1.0	-	-	28.5		7.9		23.1		72.6		5.0		13.2		16		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	-	-	28.5	28.5	7.9	7.9	23.2	23.2	73.1	73.1	5.0	5.0	15.1		16		-				-		-	
						3.8	-	-	28.5		7.9		23.2		73.1		5.0		15.1		17		-				-		-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 22 August 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	09:25	8.4	Surface	1.0	0.6	43	28.1	28.1	8.2	8.2	25.6	25.5	76.6	76.6	5.2	5.1	15.7	13.6	8	7	85	87	815617	804256	<0.2	<0.2	1.2	1.3
						1.0	0.6	46	28.1		8.2		25.5		76.6		5.2		15.7		9		84				<0.2		1.3	
					Middle	4.2	0.5	34	27.8	27.8	8.2	8.2	28.1	28.1	74.4	74.4	5.0		14.2		7		87				<0.2		1.3	
						4.2	0.6	34	27.8		8.2		28.1		74.4		5.0		14.3		6		88				<0.2		1.2	
					Bottom	7.4	0.5	31	27.7	27.7	8.2	8.2	28.4	28.3	74.6	74.6	5.0	5.0	10.7		6		89				<0.2		1.3	
						7.4	0.5	31	27.7		8.2		28.3		74.6		5.0		10.7		7		90				<0.2		1.2	
C2	Foggy	Moderate	10:21	11.2	Surface	1.0	0.3	350	28.1	28.1	7.9	7.9	21.2	21.2	71.3	71.3	5.0	4.9	3.9	9.1	4	6	86	90	825692	806955	<0.2	<0.2	1.8	1.8
						1.0	0.3	350	28.1		7.9		21.2		71.3		5.0		3.9		6		85				<0.2		1.6	
					Middle	5.6	0.4	28	28.0	28.0	7.9	7.9	21.8	21.8	69.9	69.9	4.8		6.2		5		90				<0.2		2.0	
						5.6	0.4	28	28.0		7.9		21.8		69.9		4.8		6.2		6		90				<0.2		1.8	
					Bottom	10.2	0.4	346	27.9	27.9	7.9	7.9	22.6	22.6	67.5	67.6	4.7	4.7	17.3		6		94				<0.2		1.8	
						10.2	0.5	318	27.9		7.9		22.6		67.6		4.7		17.3		7		93				<0.2		1.8	
C3	Foggy	Moderate	07:58	12.1	Surface	1.0	0.3	241	27.9	27.9	7.9	7.9	23.1	23.1	71.8	71.8	5.0	4.8	3.8	7.2	4	5	84	88	822095	817804	<0.2	<0.2	1.2	1.3
						1.0	0.3	241	27.9		7.9		23.1		71.8		5.0		3.8		5		84				<0.2		1.2	
					Middle	6.1	0.4	252	27.0	27.0	7.9	7.9	26.1	26.1	65.4	65.4	4.5		6.9		4		89				<0.2		1.3	
						6.1	0.4	263	27.0		7.9		26.1		65.4		4.5		6.7		5		88				<0.2		1.3	
					Bottom	11.1	0.4	266	26.9	26.9	7.9	7.9	26.5	26.5	64.6	64.6	4.4	4.5	10.8		5		92				<0.2		1.3	
						11.1	0.4	279	26.9		7.9		26.5		64.6		4.5		10.9		5		92				<0.2		1.4	
IM1	Cloudy	Moderate	09:44	5.4	Surface	1.0	0.2	12	28.4	28.4	8.2	8.2	24.8	24.8	73.8	73.8	5.0	5.0	18.2	17.0	7	8	87	88	817972	807131	<0.2	<0.2	1.2	1.2
						1.0	0.2	13	28.4		8.2		24.8		73.8		5.0		18.3		7		87				<0.2		1.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	0.1	15	28.4	28.4	8.2	8.2	24.8	24.8	73.9	74.0	5.0	5.0	15.8		9		90				<0.2		1.2	
						4.4	0.1	16	28.4		8.2		24.8		74.0		5.0		15.6		10		89				<0.2		1.2	
IM2	Cloudy	Moderate	09:51	7.9	Surface	1.0	0.3	5	28.3	28.3	8.2	8.2	25.3	25.3	75.8	75.7	5.1	5.1	10.1	13.2	4	6	85	88	818145	806183	<0.2	<0.2	1.2	1.2
						1.0	0.4	5	28.3		8.2		25.3		75.6		5.1		10.5		4		86				<0.2		1.2	
					Middle	4.0	0.3	356	28.2	28.2	8.2	8.2	25.7	25.7	74.6	74.6	5.1		14.7		5		87				<0.2		1.3	
						4.0	0.3	358	28.2		8.2		25.7		74.5		5.0		14.9		6		88				<0.2		1.1	
					Bottom	6.9	0.2	15	28.2	28.2	8.2	8.2	25.9	25.9	73.7	73.7	5.0	5.0	14.9		8		89				<0.2		1.3	
						6.9	0.3	15	28.2		8.2		25.9		73.6		5.0		14.3		7		90				<0.2		1.2	
IM3	Cloudy	Moderate	09:58	7.3	Surface	1.0	0.5	345	28.2	28.2	8.2	8.2	25.5	25.6	75.4	75.3	5.1	5.1	10.1	11.9	8	6	86	88	818771	805587	<0.2	<0.2	1.3	1.2
						1.0	0.5	346	28.2		8.2		25.6		75.2		5.1		10.2		7		86				<0.2		1.2	
					Middle	3.7	0.4	337	28.1	28.1	8.2	8.2	25.8	25.8	74.2	74.2	5.0		12.9		6		87				<0.2		1.2	
						3.7	0.5	310	28.1		8.2		25.8		74.2		5.0		13.3		5		88				<0.2		1.3	
					Bottom	6.3	0.3	333	28.1	28.1	8.2	8.2	25.9	25.9	74.2	74.2	5.0	5.0	12.3		4		89				<0.2		1.2	
						6.3	0.3	346	28.1		8.2		25.9		74.2		5.0		12.3		4		89				<0.2		1.2	
IM4	Cloudy	Moderate	10:06	8.2	Surface	1.0	0.7	353	28.1	28.1	8.2	8.2	26.2	26.2	74.6	74.6	5.0	5.0	10.5	11.7	4	4	85	87	819709	804608	<0.2	<0.2	1.2	1.3
						1.0	0.8	325	28.1		8.2		26.2		74.5		5.0		10.1		4		85				<0.2		1.3	
					Middle	4.1	0.6	353	28.0	28.0	8.2	8.2	26.4	26.4	74.4	74.4	5.0		11.0		4		87				<0.2		1.2	
						4.1	0.7	325	28.0		8.2		26.4		74.4		5.0		10.5		4		87				<0.2		1.2	
					Bottom	7.2	0.5	352	28.0	28.0	8.2	8.2	26.4	26.4	74.9	75.0	5.1	5.1	13.9		4		89				<0.2		1.3	
						7.2	0.6	324	28.0		8.2		26.4		75.0		5.1		14.0		3		89				<0.2		1.3	
IM5	Cloudy	Moderate	10:12	7.7	Surface	1.0	1.0	12	28.3	28.3	8.2	8.2	25.1	25.1	76.3	76.2	5.2	5.2	11.5	13.8	5	5	85	88	820746	804871	<0.2	<0.2	1.1	1.2
						1.0	1.0	12	28.2		8.2		25.2		76.1		5.2		12.0		5		86				<0.2		1.2	
					Middle	3.9	0.9	12	28.2	28.2	8.2	8.2	25.7	25.7	75.6	75.7	5.1		13.4		5		88				<0.2		1.2	
						3.9	0.9	12	28.1		8.2		25.7		75.7		5.1		13.6		6		87				<0.2		1.3	
					Bottom	6.7	0.7	19	28.1	28.1	8.2	8.2	25.7	25.7	76.6	76.7	5.2	5.2	15.9		5		89				<0.2		1.2	
						6.7	0.8	19	28.1		8.2		25.7		76.8		5.2		16.7		6		90				<0.2		1.3	
IM6	Cloudy	Moderate	10:21	7.9	Surface	1.0	0.1	234	28.7	28.7	8.2	8.2	21.1	21.1	79.6	79.6	5.5	5.4	5.4	8.5	4	4	86	87	821081	805840	<0.2	<0.2	1.4	1.4
						1.0	0.1	243	28.7		8.2		21.0		79.5		5.5		5.5		3		85				<0.2		1.4	
					Middle	4.0	0.1	59	28.5	28.5	8.2	8.2	22.3	22.3	77.6	77.6	5.3		8.5		4		86				<0.2		1.4	
						4.0	0.2	63	28.5		8.2		22.3		77.5		5.3		9.0		5		87				<0.2		1.3	
					Bottom	6.9	0.1	69	28.5	28.5	8.2	8.2	24.1	24.1	77.3	77.3	5.3	5.3	11.4		5		89				<0.2		1.4	
						6.9	0.1	75	28.5		8.2		24.1		77.3		5.3		11.2		4		90				<0.2		1.4	
IM7	Cloudy	Moderate	10:29	7.6	Surface	1.0	0.1	238	28.6	28.6	8.2	8.2	20.9	20.9	78.9	78.9	5.4	5.4	5.8	9.5	<2	3	85	87	821371	806852	<0.2	<0.2	1.8	1.8
						1.0	0.1	245	28.6		8.2		20.9		78.9		5.4		6.2		<2		86				<0.2		1.9	
					Middle	3.8	0.2	79	28.5	28.5	8.2	8.2	22.8	22.8	78.6	78.6	5.4		9.8		3		87				<0.2		1.7	
						3.8	0.2	80	28.5		8.2		22.8		78.5		5.4		10.3		3		87				<0.2		1.7	
					Bottom	6.6	0.1	68	28.5	28.5	8.1	8.1	24.0	24.0	78.4	78.5	5.3	5.3	13.0		3		89				<0.2		1.8	
						6.6	0.1	70	28.5		8.1		24.0		78.5		5.3		12.1		3		89				<0.2		1.7	
IM8	Foggy	Moderate	09:54	7.9	Surface	1.0	0.2	55	28.4	28.4	7.9	7.9	19.2	19.2	75.3	75.3	5.3	5.2	3.7	6.0	2	3	85	89	821828	808154	<0.2	<0.2	1.7	1.7
						1.0	0.2	59	28.4		7.9		19.2		75.2		5.3		3.6		2		85				<0.2		1.8	
					Middle	4.0	0.2	76	28.2	28.2	7.9	7.9	21.6	21.6	72.5	72.6	5.0		5.6		2		90				<0.2		1.7	
						4.0	0.2	79	28.2		7.9		21.6		72.6		5.0		5.6		3		89				<0.2		1.8	
					Bottom	6.9	0.1	64	28.1	28.1	7.9	7.9	21.9	21.9	72.2	72.3	5.0	5.0	8.9		4		93				<0.2		1.7	
						6.9	0.1	64	28.1		7.9		21.9		72.3		5.0		8.9		3		94				<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 22 August 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	09:47	7.6	Surface	1.0	0.5	73	28.4	28.4	7.9	7.9	19.5	19.6	76.9	76.9	5.4	5.3	3.5	8.5	4	4	86	90	822083	808798	<0.2	<0.2	1.6	1.7
						1.0	0.5	77	28.4		7.9		19.6		76.9		5.4		3.5		3		85				<0.2		1.7	
					Middle	3.8	0.4	100	28.2	28.2	7.9	7.9	21.6	21.6	73.2	73.2	5.1		6.7		3		90				<0.2		1.6	
						3.8	0.5	109	28.2		7.9		21.6		73.2		5.1		6.7		4		89				<0.2		1.7	
					Bottom	6.6	0.4	97	28.0	28.0	7.9	7.9	22.4	22.4	71.2	71.3	4.9	4.9	15.4		5		93				<0.2		1.6	
						6.6	0.4	101	28.0		7.9		22.4		71.3		4.9		15.1		4		94				<0.2		1.8	
IM10	Foggy	Moderate	09:39	8.2	Surface	1.0	0.6	313	28.1	28.1	7.9	7.9	23.0	23.0	72.0	72.0	5.0	4.9	7.4	12.9	8	8	85	89	822381	809784	<0.2	<0.2	1.5	1.5
						1.0	0.6	334	28.1		7.9		23.0		71.9		5.0		7.7		8		86				<0.2		1.4	
					Middle	4.1	0.5	303	27.8	27.8	7.9	7.9	23.7	23.7	69.1	69.2	4.8		13.4		8		89				<0.2		1.4	
						4.1	0.5	332	27.8		7.9		23.7		69.2		4.8		13.4		8		89				<0.2		1.5	
					Bottom	7.2	0.4	300	27.8	27.8	7.9	7.9	23.7	23.7	68.9	69.0	4.8	4.8	17.8		10		93				<0.2		1.5	
						7.2	0.5	326	27.8		7.9		23.7		69.0		4.8		17.7		8		93				<0.2		1.6	
IM11	Foggy	Moderate	08:56	7.8	Surface	1.0	0.8	307	27.9	27.9	7.9	7.9	23.2	23.2	71.1	71.1	4.9	4.9	4.9	9.5	7	7	85	89	822033	811473	<0.2	<0.2	1.4	1.5
						1.0	0.8	320	27.9		7.9		23.2		71.1		4.9		4.9		7		86				<0.2		1.4	
					Middle	3.9	0.8	309	27.7	27.7	7.9	7.9	23.7	23.6	69.0	69.0	4.8		9.1		6		89				<0.2		1.4	
						3.9	0.8	333	27.7		7.9		23.6		69.0		4.8		8.9		7		90				<0.2		1.5	
					Bottom	6.8	0.6	301	27.4	27.4	7.9	7.9	24.5	24.5	67.2	67.2	4.6	4.6	14.9		8		93				<0.2		1.5	
						6.8	0.6	323	27.4		7.9		24.5		67.2		4.6		14.5		8		93				<0.2		1.5	
IM12	Foggy	Moderate	08:50	8.9	Surface	1.0	0.9	279	27.8	27.8	7.9	7.9	23.6	23.6	69.5	69.5	4.8	4.8	12.4	13.9	4	5	85	89	821442	812033	<0.2	<0.2	1.3	1.4
						1.0	1.0	296	27.8		7.9		23.6		69.5		4.8		12.5		4		85				<0.2		1.4	
					Middle	4.5	0.7	273	27.7	27.7	7.9	7.9	23.9	23.9	68.4	68.4	4.7		14.1		6		90				<0.2		1.3	
						4.5	0.8	280	27.7		7.9		23.9		68.4		4.7		13.5		5		89				<0.2		1.4	
					Bottom	7.9	0.6	267	27.6	27.6	7.9	7.9	24.0	24.0	67.8	67.9	4.7	4.7	15.6		6		94				<0.2		1.5	
						7.9	0.6	291	27.6		7.9		24.0		67.9		4.7		15.5		5		93				<0.2		1.6	
SR1A	Foggy	Moderate	08:31	5.5	Surface	1.0	-	-	28.0	28.0	7.9	7.9	22.4	22.4	73.0	73.0	5.0	5.0	4.2	5.3	6	7	-	-	819982	812664	-	-	-	-
						1.0	-	-	28.0		7.9		22.4		73.0		5.0		4.2		6		-				-		-	
					Middle	2.8	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.8	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.5	-	-	27.9	27.9	7.9	7.9	23.2	23.2	69.3	69.4	4.8	4.8	6.6		7		-				-		-	
						4.5	-	-	27.9		7.9		23.2		69.5		4.8		6.2		7		-				-		-	
SR2	Foggy	Moderate	08:19	5.0	Surface	1.0	0.2	13	27.7	27.7	7.9	7.9	23.7	23.7	68.9	68.9	4.8	4.8	10.6	11.6	13	13	85	88	821485	814183	<0.2	<0.2	1.4	1.4
						1.0	0.2	13	27.7		7.9		23.7		68.9		4.8		10.9		12		85				<0.2		1.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.2	48	27.6	27.6	7.9	7.9	24.1	24.1	68.0	68.1	4.7	4.7	12.5		14		90				<0.2		1.4	
						4.0	0.2	52	27.6		7.9		24.1		68.1		4.7		12.3		14		90				<0.2		1.4	
SR3	Foggy	Moderate	10:01	8.2	Surface	1.0	0.3	270	28.4	28.4	7.8	7.8	19.1	19.1	75.4	75.4	5.3	5.2	3.2	4.5	4	4	-	-	822163	807560	-	-	-	-
						1.0	0.3	294	28.4		7.8		19.1		75.4		5.3		3.2		3		-				-		-	
					Middle	4.1	0.1	300	28.2	28.2	7.9	7.9	21.0	21.0	71.7	71.7	5.0		5.0		3		-				-		-	
						4.1	0.1	304	28.2		7.9		21.0		71.7		5.0		4.9		4		-				-		-	
					Bottom	7.2	0.3	59	28.1	28.1	7.9	7.9	21.2	21.2	71.1	71.1	4.9	4.9	5.5		5		-				-		-	
						7.2	0.3	64	28.1		7.9		21.2		71.1		4.9		5.5		4		-				-		-	
SR4A	Cloudy	Moderate	09:00	8.7	Surface	1.0	0.1	221	28.4	28.4	8.1	8.1	24.1	24.1	75.4	75.4	5.1	5.1	9.9	11.3	8	9	-	-	817204	807831	-	-	-	-
						1.0	0.1	241	28.4		8.1		24.1		75.4		5.1		10.1		8		-				-		-	
					Middle	4.4	0.2	63	28.4	28.4	8.1	8.1	24.2	24.2	75.1	75.2	5.1		11.6		10		-				-		-	
						4.4	0.2	67	28.4		8.1		24.2		75.2		5.1		11.7		9		-				-		-	
					Bottom	7.7	0.1	69	28.4	28.4	8.1	8.1	24.2	24.2	75.6	75.7	5.1	5.2	12.1		10		-				-		-	
						7.7	0.1	75	28.4		8.1		24.2		75.8		5.2		12.2		10		-				-		-	
SR5A	Sunny	Moderate	08:42	3.5	Surface	1.0	0.2	303	28.3	28.3	8.1	8.1	24.3	24.3	75.6	75.7	5.2	5.2	12.4	12.8	8	9	-	-	816600	810685	-	-	-	-
						1.0	0.2	322	28.3		8.1		24.4		75.8		5.2		12.5		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.5	0.2	305	28.3	28.3	8.1	8.1	24.3	24.3	78.0	78.1	5.3	5.3	13.3		10		-				-		-	
						2.5	0.2	308	28.3		8.1		24.3		78.2		5.3		13.2		10		-				-		-	
SR6A	Sunny	Moderate	08:10	4.8	Surface	1.0	0.0	182	28.1	28.1	8.5	8.5	24.2	24.2	74.3	74.3	5.1	5.1	9.1	10.2	8	9	-	-	817956	814753	-	-	-	-
						1.0	0.0	195	28.1		8.5		24.3		74.3		5.1		9.4		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.0	140	28.1	28.1	8.5	8.5	24.4	24.4	74.5	74.7	5.1	5.1	11.1		9		-				-		-	
						3.8	0.0	146	28.1		8.5		24.4		74.8		5.1		11.2		10		-				-		-	
SR7	Foggy	Moderate	07:30	14.9	Surface	1.0	0.0	116	27.4	27.4	7.9	7.9	24.5	24.5	70.3	70.3	4.9	4.9	3.8	5.3	5	6	-	-	823621	823752	-	-	-	-
						1.0	0.0	122	27.4		7.9		24.5		70.3		4.9		3.7		6		-				-		-	
					Middle	7.5	0.1	184	26.9	26.9	7.9	7.9	26.4	26.4	65.1	65.1	4.5	**4.7**	6.2		6		-				-		-	
						7.5	0.1	185	26.9		7.9		26.4		65.1		4.5		6.2		5		-				-		-	
					Bottom	13.9	0.1	76	26.9	26.9	7.9	7.9	26.5	26.4	65.6	65.6	4.5	4.5	6.0		5		-				-		-	
						13.9	0.1	80	26.9		7.9		26.4		65.6		4.5		5.9		6		-				-		-	
SR8	Foggy	Moderate	08:41	5.2	Surface	1.0	-	-	28.3	28.3	7.9	7.9	22.1	22.1	74.0	74.0	5.1	5.1	9.0	10.5	9	11	-	-	820391	811638	-	-	-	-
						1.0	-	-	28.2		7.9		22.1		74.0		5.1		8.9		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	-	-	28.0	28.0	7.9	7.9	22.8	22.8	70.8	70.8	4.9	4.9	12.1		14		-				-		-	
						4.2	-	-	27.9		7.9		22.8		70.8		4.9		12.0		12		-				-		-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 25 August 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	17:27	8.2	Surface	1.0	0.6	230	30.1	30.1	8.4	8.4	18.4	18.4	103.4	103.2	7.1	6.4	7.3	7.8	8	7	88	90	815633	804249	<0.2	<0.2	1.6	1.6
						1.0	0.6	245	30.0		8.4		18.4		102.9		7.0		7.3		7		88							
					Middle	4.1	0.5	195	29.1	29.1	8.4	8.4	21.7	21.7	83.1	83.1	5.7		7.7		6		90							
						4.1	0.6	206	29.1		8.4		21.7		83.0		5.7		8.0		6		90							
					Bottom	7.2	0.3	223	28.9	28.9	8.4	8.4	24.3	24.3	79.1	79.2	5.3	5.3	8.2		6		92							
						7.2	0.3	240	28.9		8.4		24.3		79.2		5.3		8.3		6		92							
C2	Cloudy	Rough	16:11	11.6	Surface	1.0	0.2	135	29.8	29.8	8.1	8.1	18.4	18.4	97.9	97.9	6.7	6.1	4.0	6.6	6	6	86	88	825673	806928	<0.2	<0.2	1.4	1.4
						1.0	0.2	141	29.8		8.1		18.4		97.8		6.7		4.0		5		87							
					Middle	5.8	0.5	154	28.7	28.7	8.0	8.0	21.7	21.7	78.8	78.7	5.4		7.2		5		88							
						5.8	0.5	157	28.7		8.0		21.8		78.5		5.4		7.2		6		87							
					Bottom	10.6	0.5	144	28.5	28.5	8.0	8.0	23.0	23.0	75.4	75.5	5.2	5.2	8.5		6		89							
						10.6	0.5	153	28.5		8.0		23.0		75.6		5.2		8.5		5		91							
C3	Cloudy	Moderate	17:49	12.0	Surface	1.0	0.4	286	29.2	29.2	8.0	8.0	20.8	20.8	89.6	89.6	6.1	5.9	2.4	5.4	4	5	87	89	822112	817823	<0.2	<0.2	1.3	1.3
						1.0	0.4	313	29.2		8.0		20.8		89.5		6.1		2.4		5		88							
					Middle	6.0	0.2	257	28.7	28.7	8.0	8.0	23.2	23.2	81.9	81.9	5.6		3.6		5		89							
						6.0	0.2	263	28.6		8.0		23.2		81.8		5.6		3.7		6		88							
					Bottom	11.0	0.1	120	27.9	27.9	8.0	8.0	26.9	26.9	75.2	75.3	5.1	5.1	10.4		6		90							
						11.0	0.1	125	27.9		8.0		26.9		75.3		5.1		10.1		6		91							
IM1	Fine	Rough	17:10	5.0	Surface	1.0	0.1	231	30.2	30.2	8.4	8.4	18.4	18.4	104.7	104.6	7.1	7.1	8.0	9.4	7	8	88	90	817960	807155	<0.2	<0.2	1.4	1.5
						1.0	0.1	240	30.1		8.4		18.4		104.4		7.1		9.0		7		89							
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-							
					Bottom	4.0	0.1	311	29.4	29.4	8.3	8.3	21.5	21.5	86.2	86.6	5.9	5.9	10.3		10		91				<0.2		1.5	
						4.0	0.1	325	29.4		8.3		21.5		87.0		5.9		10.2		9		91				<0.2		1.5	
IM2	Fine	Rough	16:50	7.0	Surface	1.0	0.2	191	29.9	29.9	8.4	8.4	18.5	18.5	103.0	102.6	7.1	6.4	8.0	8.5	10	10	88	91	818173	806169	<0.2	<0.2	1.5	1.5
						1.0	0.3	207	29.8		8.4		18.6		102.2		7.0		7.9		11		88				<0.2		1.5	
					Middle	3.5	0.2	171	29.3	29.3	8.4	8.4	21.1	21.1	84.7	84.7	5.8		8.1		11		91				<0.2		1.5	
						3.5	0.2	171	29.2		8.4		21.1		84.6		5.8		8.1		10		91				<0.2		1.4	
					Bottom	6.0	0.2	135	28.8	28.8	8.4	8.4	24.5	24.5	79.7	79.8	5.4	5.4	9.5		9		93				<0.2		1.4	
						6.0	0.2	145	28.8		8.4		24.5		79.8		5.4		9.5		9		94				<0.2		1.5	
IM3	Fine	Rough	16:41	7.2	Surface	1.0	0.2	138	30.0	30.0	8.4	8.4	18.5	18.6	103.3	103.0	7.1	6.4	7.9	8.7	9	9	88	91	818805	805598	<0.2	<0.2	1.4	1.4
						1.0	0.3	145	29.9		8.4		18.6		102.6		7.0		7.6		9		89				<0.2		1.4	
					Middle	3.6	0.2	135	29.1	29.1	8.4	8.4	21.2	21.2	84.9	84.9	5.8		8.9		9		91				<0.2		1.3	
						3.6	0.2	146	29.0		8.4		21.2		84.8		5.8		8.9		8		92				<0.2		1.4	
					Bottom	6.2	0.3	129	28.8	28.8	8.4	8.4	24.6	24.6	80.2	80.4	5.4	5.4	9.7		9		93				<0.2		1.5	
						6.2	0.3	140	28.8		8.4		24.6		80.6		5.4		9.5		8		93				<0.2		1.4	
IM4	Fine	Rough	16:33	8.3	Surface	1.0	0.5	203	30.1	30.1	8.4	8.4	18.3	18.3	104.5	104.3	7.1	6.4	8.4	9.3	10	10	87	90	819743	804594	<0.2	<0.2	1.5	1.5
						1.0	0.6	207	30.0		8.4		18.4		104.0		7.1		8.4		10		87				<0.2		1.5	
					Middle	4.2	0.3	155	29.1	29.1	8.4	8.4	22.1	22.1	81.8	81.7	5.6		9.1		9		90				<0.2		1.5	
						4.2	0.4	162	29.0		8.4		22.1		81.6		5.6		9.2		10		91				<0.2		1.4	
					Bottom	7.3	0.2	154	28.8	28.8	8.4	8.4	24.5	24.5	82.6	82.8	5.6	5.6	10.3		9		91				<0.2		1.4	
						7.3	0.2	167	28.8		8.4		24.5		83.0		5.6		10.4		9		92				<0.2		1.5	
IM5	Fine	Rough	16:25	7.6	Surface	1.0	0.4	222	30.0	30.0	8.4	8.4	18.5	18.5	104.3	104.1	7.1	6.6	8.0	8.5	11	9	87	90	820755	804886	<0.2	<0.2	1.7	1.7
						1.0	0.4	238	29.9		8.4		18.5		103.8		7.1		7.8		10		88				<0.2		1.8	
					Middle	3.8	0.3	194	29.4	29.4	8.4	8.4	21.0	21.0	87.7	87.7	6.0		8.0		8		91				<0.2		1.8	
						3.8	0.3	206	29.3		8.4		21.0		87.7		6.0		8.2		8		91				<0.2		1.6	
					Bottom	6.6	0.2	171	28.8	28.8	8.4	8.4	24.5	24.5	81.5	81.9	5.5	5.5	9.5		8		92				<0.2		1.5	
						6.6	0.2	183	28.8		8.4		24.5		82.2		5.5		9.6		8		92				<0.2		1.5	
IM6	Fine	Rough	16:18	7.5	Surface	1.0	0.3	267	30.3	30.3	8.4	8.4	18.3	18.3	107.4	107.2	7.3	6.7	8.2	9.0	9	7	87	89	821039	805846	<0.2	<0.2	1.6	1.6
						1.0	0.4	276	30.3		8.4		18.4		107.0		7.3		8.4		8		87				<0.2		1.6	
					Middle	3.8	0.1	186	29.2	29.2	8.3	8.3	21.0	21.1	87.8	87.7	6.0		8.9		6		89				<0.2		1.7	
						3.8	0.1	192	29.1		8.3		21.1		87.6		6.0		8.9		5		90				<0.2		1.6	
					Bottom	6.5	0.2	168	28.8	28.8	8.3	8.3	24.7	24.7	81.6	81.7	5.5	5.5	9.8		5		91				<0.2		1.6	
						6.5	0.2	175	28.8		8.3		24.7		81.7		5.5		9.5		6		92				<0.2		1.6	
IM7	Fine	Rough	16:10	8.8	Surface	1.0	0.1	218	29.8	29.8	8.6	8.6	18.5	18.5	94.0	93.9	6.5	6.0	5.1	8.9	6	5	86	89	821352	806844	<0.2	<0.2	1.6	1.6
						1.0	0.1	218	29.7		8.6		18.5		93.7		6.4		5.2		5		86				<0.2		1.5	
					Middle	4.4	0.2	212	29.3	29.3	8.6	8.6	20.8	20.8	80.4	80.3	5.5		8.9		5		89				<0.2		1.6	
						4.4	0.2	221	29.3		8.6		20.8		80.1		5.5		9.7		4		90				<0.2		1.6	
					Bottom	7.8	0.2	220	29.2	29.2	8.6	8.6	21.7	21.7	79.2	79.3	5.4	5.4	12.6		4		91				<0.2		1.7	
						7.8	0.2	227	29.2		8.6		21.7		79.4		5.4		12.1		4		91				<0.2		1.7	
IM8	Cloudy	Rough	16:35	8.0	Surface	1.0	0.1	73	29.1	29.1	7.9	7.9	19.2	19.2	83.0	83.0	5.7	5.7	4.5	7.9	5	6	86	89	821828	808143	<0.2	<0.2	1.3	1.4
						1.0	0.1	76	29.1		7.9		19.2		83.0		5.7		4.4		5		86				<0.2		1.4	
					Middle	4.0	0.1	17	29.0	29.0	7.9	7.9	20.0	20.0	81.4	81.3	5.6		4.8		6		88				<0.2		1.3	
						4.0	0.1	17	29.0		7.9		20.1		81.1		5.6		4.8		6		89				<0.2		1.5	
					Bottom	7.0	0.1	165	28.9	28.9	7.9	7.9	20.7	20.7	77.8	78.0	5.4	5.4	14.3		7		91				<0.2		1.5	
						7.0	0.1	167	28.9		7.9		20.7		78.1		5.4		14.7		6		91				<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 25 August 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	16:40	7.2	Surface	1.0	0.2	40	29.2	29.2	7.9	7.9	18.9	18.9	84.0	84.0	5.8	5.8	3.8	4.9	7	6	86	88	822074	808830	<0.2	<0.2	1.5	1.4
						1.0	0.2	40	29.2		7.9		18.9		83.9		5.8		3.8		6		86				<0.2		1.3	
					Middle	3.6	0.2	44	29.0	29.0	7.9	7.9	19.3	19.3	82.1	82.1	5.7		4.7		6		88				<0.2		1.2	
						3.6	0.3	45	29.0		7.9		19.3		82.0		5.7		4.9		6		89				<0.2		1.3	
					Bottom	6.2	0.1	57	28.9	28.9	8.0	8.0	20.6	20.6	81.1	81.5	5.6	5.6	5.9		5		90				<0.2		1.4	
						6.2	0.2	62	28.9		8.0		20.6		81.8		5.6		5.9		5		90				<0.2		1.4	
IM10	Cloudy	Rough	16:48	7.6	Surface	1.0	0.6	69	29.4	29.4	8.0	8.0	18.4	18.4	89.0	89.0	6.2	6.1	3.1	4.1	7	5	86	88	822367	809773	<0.2	<0.2	1.4	1.4
						1.0	0.6	72	29.4		8.0		18.4		89.0		6.2		3.1		6		86				<0.2		1.4	
					Middle	3.8	0.4	77	29.1	29.1	7.9	7.9	18.8	18.8	85.3	85.2	5.9		4.2		6		88				<0.2		1.4	
						3.8	0.4	79	29.1		7.9		18.8		85.1		5.9		4.2		5		88				<0.2		1.4	
					Bottom	6.6	0.5	115	29.0	29.0	7.9	7.9	21.3	21.4	83.9	83.9	5.7	5.7	5.0		4		90				<0.2		1.4	
						6.6	0.5	116	29.0		7.9		21.5		83.8		5.7		5.2		4		90				<0.2		1.4	
IM11	Cloudy	Rough	16:57	8.1	Surface	1.0	0.5	94	29.4	29.4	8.0	8.0	17.8	17.8	91.4	91.4	6.3	6.0	3.3	4.9	5	5	86	89	822064	811442	<0.2	<0.2	1.4	1.4
						1.0	0.5	94	29.4		8.0		17.8		91.3		6.3		3.4		6		87				<0.2		1.3	
					Middle	4.1	0.5	119	29.1	28.9	7.9	7.9	20.0	20.1	85.0	82.8	5.8		3.8		5		89				<0.2		1.3	
						4.1	0.5	119	28.7		7.9		20.2		80.5		5.6		3.9		4		89				<0.2		1.4	
					Bottom	7.1	0.3	105	28.7	28.7	7.9	7.9	22.3	22.3	77.5	77.5	5.3	5.3	7.4		4		90				<0.2		1.5	
						7.1	0.3	111	28.7		7.9		22.3		77.4		5.3		7.4		3		90				<0.2		1.3	
IM12	Cloudy	Rough	17:03	9.0	Surface	1.0	0.7	106	29.2	29.2	7.9	7.9	17.9	17.9	87.5	87.4	6.1	5.7	4.1	4.6	3	4	87	88	821460	812024	<0.2	<0.2	1.4	1.4
						1.0	0.7	109	29.2		7.9		18.0		87.2		6.1		4.2		4		86				<0.2		1.4	
					Middle	4.5	0.4	88	28.8	28.8	7.9	7.9	21.3	21.3	76.4	76.5	5.3		5.1		4		88				<0.2		1.3	
						4.5	0.4	89	28.8		7.9		21.2		76.5		5.3		5.0		3		89				<0.2		1.4	
					Bottom	8.0	0.1	76	28.7	28.7	7.9	7.9	22.7	22.7	77.8	77.9	5.3	5.3	4.6		4		90				<0.2		1.3	
						8.0	0.1	79	28.7		7.9		22.7		78.0		5.3		4.6		4		90				<0.2		1.4	
SR1A	Cloudy	Moderate	17:18	5.1	Surface	1.0	-	-	29.5	29.5	8.0	8.0	20.1	20.1	95.0	95.0	6.5	6.5	3.8	4.7	6	7	-	-	819976	812657	-	-	-	-
						1.0	-	-	29.4		8.0		20.1		94.9		6.5		4.0		6		-				-		-	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	-	-	28.9	28.9	8.0	8.0	22.5	22.6	83.3	83.2	5.7	5.7	5.4		8		-				-		-	
						4.1	-	-	28.9		8.0		22.6		83.1		5.7		5.6		7		-				-		-	
SR2	Cloudy	Moderate	17:30	4.6	Surface	1.0	0.4	78	29.5	29.5	8.0	8.0	17.7	17.7	94.0	93.9	6.5	6.5	2.7	3.2	5	4	88	89	821439	814175	<0.2	<0.2	1.3	1.3
						1.0	0.4	81	29.5		8.0		17.7		93.7		6.5		2.7		4		89				<0.2		1.3	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.2	67	29.1	29.1	8.0	8.0	19.8	19.8	92.1	92.2	6.3	6.4	3.6		3		90				<0.2		1.2	
						3.6	0.2	68	29.1		8.0		19.8		92.3		6.4		3.7		4		90				<0.2		1.2	
SR3	Cloudy	Rough	16:29	8.9	Surface	1.0	0.2	67	29.4	29.4	8.0	8.0	18.2	18.2	89.3	89.2	6.2	6.1	3.8	5.9	5	5	-	-	822167	807565	-	-	-	-
						1.0	0.2	73	29.4		8.0		18.2		89.1		6.2		4.0		5		-				-		-	
					Middle	4.5	0.2	173	29.2	29.2	8.0	8.0	20.5	20.6	86.7	86.7	5.9		5.8		5		-				-		-	
						4.5	0.2	187	29.2		8.0		20.6		86.6		5.9		5.8		6		-				-		-	
					Bottom	7.9	0.2	278	28.9	28.9	8.0	8.0	21.3	21.4	82.0	82.2	5.6	5.6	7.9		5		-				-		-	
						7.9	0.3	296	28.8		8.0		21.4		82.3		5.6		8.3		6		-				-		-	
SR4A	Fine	Moderate	17:45	8.5	Surface	1.0	0.1	229	30.0	29.9	8.4	8.4	18.6	18.6	102.6	102.3	7.0	6.4	7.2	8.4	5	6	-	-	817209	807792	-	-	-	-
						1.0	0.1	234	29.8		8.4		18.6		102.0		7.0		7.1		6		-				-		-	
					Middle	4.3	-	23	29.2	29.2	8.3	8.3	22.1	22.0	83.4	83.4	5.7		8.3		5		-				-		-	
						4.3	-	23	29.2		8.4		21.9		83.3		5.7		8.3		6		-				-		-	
					Bottom	7.5	0.3	74	28.6	28.6	8.4	8.4	25.7	25.6	78.7	78.8	5.3	5.3	9.7		6		-				-		-	
						7.5	0.3	74	28.6		8.4		25.6		78.9		5.3		9.7		6		-				-		-	
SR5A	Fine	Moderate	18:00	4.2	Surface	1.0	0.2	307	30.3	30.3	8.3	8.3	21.0	21.0	100.0	100.0	6.7	6.7	9.2	9.8	8	9	-	-	816586	810699	-	-	-	-
						1.0	0.2	336	30.3		8.3		21.0		99.9		6.7		9.1		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.1	308	30.3	30.3	8.3	8.3	21.1	21.1	100.1	100.3	6.7	6.7	10.4		8		-				-		-	
						3.2	0.1	326	30.3		8.3		21.1		100.5		6.7		10.5		10		-				-		-	
SR6A	Fine	Calm	18:20	5.0	Surface	1.0	0.1	62	30.0	30.0	8.3	8.3	22.3	22.3	98.3	98.4	6.6	6.6	9.4	9.8	13	11	-	-	817957	814728	-	-	-	-
						1.0	0.1	63	30.0		8.3		22.4		98.4		6.6		9.3		12		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.0	188	29.7	29.7	8.3	8.3	22.5	22.5	87.4	87.7	5.9	5.9	10.2		9		-				-		-	
						4.0	0.0	200	29.7		8.3		22.5		87.9		5.9		10.1		10		-				-		-	
SR7	Cloudy	Moderate	18:20	16.4	Surface	1.0	0.6	61	29.3	29.3	8.0	8.0	22.7	22.7	90.7	90.6	6.1	6.1	1.4	1.6	3	4	-	-	823659	823726	-	-	-	-
						1.0	0.7	66	29.3		8.0		22.8		90.5		6.1		1.4		3		-				-		-	
					Middle	8.2	0.2	14	29.0	29.0	8.0	8.0	23.7	23.8	89.6	89.5	6.0		1.6		3		-				-		-	
						8.2	0.2	15	29.0		8.0		23.8		89.4		6.0		1.6		3		-				-		-	
					Bottom	15.4	0.2	55	28.8	28.9	8.0	8.0	24.3	24.2	83.4	83.5	5.6	5.6	1.7		5		-				-		-	
						15.4	0.2	55	28.9		8.0		24.2		83.5		5.6		1.7		5		-				-		-	
SR8	Cloudy	Moderate	17:10	4.7	Surface	1.0	-	-	29.7	29.7	8.0	8.0	19.8	19.8	92.5	92.5	6.3	6.3	4.6	5.2	7	5	-	-	820396	811645	-	-	-	-
						1.0	-	-	29.7		8.0		19.8		92.4		6.3		4.5		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	-	-	29.9	29.9	8.0	8.0	20.4	20.4	92.8	92.9	6.3	6.3	5.7		4		-				-		-	
						3.7	-	-	29.9		8.0		20.4		93.0		6.3		5.9		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 25 August 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	Sunny	Moderate	12:22	8.4	Surface	1.0	0.5	28	29.4	29.4	8.5	8.5	19.4	19.4	94.2	94.2	6.5	6.0	8.3	9.1	5	4	86	90	815634	804238	<0.2	<0.2	1.3	1.4
						1.0	0.5	30	29.3		8.5		19.5		94.1		6.5		8.3		5		87				<0.2		1.3	
					Middle	4.2	0.7	44	28.0	28.0	8.5	8.5	28.1	28.0	80.4	80.3	5.4		9.3		4		90				<0.2		1.3	
						4.2	0.7	45	28.0		8.5		27.9		80.2		5.4		9.0		4		91				<0.2		1.3	
					Bottom	7.4	0.4	37	27.9	27.9	8.5	8.5	29.0	29.0	79.0	79.2	5.3	5.3	9.9		4		92				<0.2		1.5	
						7.4	0.4	38	27.9		8.5		29.1		79.3		5.3		9.8		3		92				<0.2		1.4	
C2	Sunny	Moderate	12:51	12.0	Surface	1.0	0.3	350	29.1	29.1	7.9	7.9	18.7	18.7	78.4	78.4	5.4	5.3	6.3	7.7	3	4	86	88	825659	806956	<0.2	<0.2	1.7	1.5
						1.0	0.3	322	29.1		7.9		18.7		78.4		5.4		6.3		2		86				<0.2		1.5	
					Middle	6.0	0.4	28	28.6	28.6	7.9	7.9	21.4	21.4	73.8	73.8	5.1		7.1		4		89				<0.2		1.6	
						6.0	0.4	28	28.6		7.9		21.4		73.7		5.1		7.5		3		88				<0.2		1.6	
					Bottom	11.0	0.4	346	28.4	28.4	7.9	7.9	23.6	23.6	73.7	73.8	5.0	5.0	9.6		5		90				<0.2		1.4	
						11.0	0.4	318	28.4		7.9		23.6		73.9		5.0		9.6		4		90				<0.2		1.3	
C3	Sunny	Moderate	11:05	11.8	Surface	1.0	0.3	241	29.0	29.0	7.9	7.9	21.5	21.5	82.3	82.2	5.6	5.3	2.1	4.8	2	2	86	88	822093	817808	<0.2	<0.2	1.2	1.2
						1.0	0.3	251	29.0		7.9		21.6		82.1		5.6		2.2		2		86				<0.2		1.2	
					Middle	5.9	0.4	252	28.5	28.5	7.9	7.9	23.1	23.1	73.7	73.6	5.0		2.1		2		88				<0.2		1.2	
						5.9	0.4	268	28.5		7.9		23.1		73.5		5.0		2.2		2		89				<0.2		1.3	
					Bottom	10.8	0.4	266	28.1	28.1	7.9	7.9	24.9	24.9	71.8	71.9	4.9	4.9	10.0		3		90				<0.2		1.2	
						10.8	0.4	274	28.1		7.9		24.9		71.9		4.9		10.2		3		90				<0.2		1.3	
IM1	Sunny	Calm	12:40	5.1	Surface	1.0	0.1	204	30.1	30.1	8.5	8.5	18.9	18.9	106.9	106.7	7.3	7.3	5.2	6.0	7	6	88	90	817925	807118	<0.2	<0.2	1.4	1.4
						1.0	0.1	217	30.0		8.5		18.9		106.5		7.3		5.3		7		88				<0.2		1.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	0.1	223	29.4	29.5	8.5	8.5	22.3	22.3	91.9	92.1	6.2	6.2	6.8		5		91				<0.2		1.4	
						4.1	0.1	232	29.5		8.5		22.3		92.3		6.2		6.7		6		92				<0.2		1.4	
IM2	Sunny	Moderate	12:48	7.1	Surface	1.0	0.3	12	30.0	30.0	8.4	8.4	18.7	18.7	98.3	98.3	6.7	6.5	5.0	7.7	4	5	86	89	818179	806189	<0.2	<0.2	1.4	1.4
						1.0	0.3	12	30.0		8.4		18.7		98.2		6.7		5.1		5		87				<0.2		1.5	
					Middle	3.6	0.3	331	29.3	29.3	8.5	8.5	20.5	20.5	91.4	91.3	6.2		8.4		5		90				<0.2		1.4	
						3.6	0.3	352	29.3		8.5		20.5		91.1		6.2		8.4		4		90				<0.2		1.4	
					Bottom	6.1	0.2	306	29.0	29.0	8.5	8.5	24.2	24.2	79.6	79.8	5.4	5.4	9.8		5		91				<0.2		1.4	
						6.1	0.2	306	28.9		8.5		24.2		79.9		5.4		9.8		4		91				<0.2		1.4	
IM3	Sunny	Moderate	12:54	7.3	Surface	1.0	0.4	6	30.1	30.1	8.4	8.4	18.4	18.4	98.6	98.5	6.7	6.5	5.0	6.3	5	5	87	90	818807	805578	<0.2	<0.2	1.4	1.5
						1.0	0.4	6	30.0		8.4		18.4		98.4		6.7		5.0		4		87				<0.2		1.5	
					Middle	3.7	0.3	321	29.4	29.4	8.5	8.5	20.8	20.8	91.6	91.5	6.2		6.7		4		90				<0.2		1.4	
						3.7	0.3	347	29.4		8.5		20.8		91.4		6.2		6.6		5		91				<0.2		1.5	
					Bottom	6.3	0.3	298	29.1	29.1	8.5	8.5	23.8	23.9	82.1	82.1	5.5	5.5	7.5		4		92				<0.2		1.4	
						6.3	0.3	308	29.1		8.5		23.9		82.0		5.5		7.2		5		92				<0.2		1.5	
IM4	Sunny	Moderate	13:03	8.4	Surface	1.0	0.7	2	29.5	29.5	8.4	8.4	20.0	20.0	92.2	92.3	6.3	6.2	6.3	8.2	4	5	88	91	819726	804584	<0.2	<0.2	1.3	1.4
						1.0	0.7	2	29.5		8.4		20.0		92.3		6.3		6.3		4		88				<0.2		1.3	
					Middle	4.2	0.6	336	29.2	29.2	8.5	8.5	21.5	21.5	88.8	88.6	6.0		8.8		4		91				<0.2		1.5	
						4.2	0.6	344	29.2		8.5		21.5		88.4		6.0		8.9		5		91				<0.2		1.4	
					Bottom	7.4	0.4	331	29.2	29.2	8.5	8.5	22.8	22.8	87.5	87.7	5.9	5.9	9.3		4		92				<0.2		1.4	
						7.4	0.4	331	29.2		8.5		22.8		87.8		5.9		9.5		6		93				<0.2		1.4	
IM5	Sunny	Moderate	13:10	7.5	Surface	1.0	0.8	5	29.8	29.8	8.4	8.4	19.5	19.5	96.2	96.3	6.6	6.5	6.0	7.9	4	4	87	90	820741	804859	<0.2	<0.2	1.5	1.5
						1.0	0.8	5	29.8		8.4		19.5		96.3		6.6		6.2		4		87				<0.2		1.4	
					Middle	3.8	0.6	3	29.5	29.5	8.4	8.4	20.5	20.5	94.2	94.2	6.4		7.5		4		90				<0.2		1.5	
						3.8	0.7	3	29.5		8.4		20.5		94.1		6.4		7.6		5		90				<0.2		1.5	
					Bottom	6.5	0.5	15	29.4	29.5	8.5	8.5	21.0	21.0	92.7	92.8	6.3	6.3	9.9		5		93				<0.2		1.4	
						6.5	0.5	15	29.5		8.5		21.0		92.8		6.3		10.0		4		93				<0.2		1.4	
IM6	Sunny	Moderate	13:16	7.4	Surface	1.0	0.1	197	30.2	30.2	8.5	8.5	16.8	16.8	100.3	100.4	6.9	6.9	5.6	7.2	5	5	87	89	821077	805838	<0.2	<0.2	1.5	1.6
						1.0	0.1	213	30.1		8.5		16.8		100.5		6.9		5.8		4		86				<0.2		1.6	
					Middle	3.7	0.1	90	30.0	30.0	8.5	8.5	18.6	18.6	100.7	100.7	6.9		7.7		6		89				<0.2		1.6	
						3.7	0.1	91	30.0		8.5		18.7		100.6		6.9		7.7		5		90				<0.2		1.6	
					Bottom	6.4	0.1	39	29.9	29.9	8.5	8.5	20.0	20.0	101.0	101.3	6.9	6.9	8.1		6		91				<0.2		1.8	
						6.4	0.1	39	29.9		8.5		20.0		101.6		6.9		8.1		6		91				<0.2		1.7	
IM7	Sunny	Moderate	13:24	8.8	Surface	1.0	0.1	127	29.8	29.8	8.4	8.4	17.4	17.4	92.1	92.3	6.4	6.4	6.5	7.6	4	5	88	90	821326	806825	<0.2	<0.2	1.6	1.6
						1.0	0.1	127	29.8		8.4		17.3		92.5		6.4		6.9		5		88				<0.2		1.6	
					Middle	4.4	0.2	122	29.6	29.6	8.5	8.5	19.9	19.8	93.1	93.1	6.4		7.4		5		90				<0.2		1.7	
						4.4	0.2	130	29.6		8.5		19.8		93.0		6.4		7.2		4		90				<0.2		1.5	
					Bottom	7.8	0.2	112	29.5	29.5	8.5	8.5	20.9	20.9	91.8	91.9	6.2	6.3	8.6		5		92				<0.2		1.6	
						7.8	0.2	122	29.5		8.5		20.9		92.0		6.3		8.8		5		92				<0.2		1.6	
IM8	Sunny	Moderate	12:27	7.8	Surface	1.0	0.1	53	29.4	29.4	7.9	7.9	15.0	15.0	86.7	86.7	6.1	5.8	4.1	9.1	4	4	86	88	821824	808133	<0.2	<0.2	1.6	1.5
						1.0	0.2	55	29.4		7.9		15.0		86.6		6.1		4.2		4		86				<0.2		1.6	
					Middle	3.9	0.1	111	29.1	29.1	7.9	7.9	18.0	18.0	79.7	79.6	5.5		10.8		3		88				<0.2		1.6	
						3.9	0.1	115	29.1		7.9		18.0		79.5		5.5		10.8		4		88				<0.2		1.6	
					Bottom	6.8	0.2	118	29.0	29.0	7.9	7.9	19.4	19.4	79.2	79.3	5.5	5.5	12.7		3		90				<0.2		1.4	
						6.8	0.2	124	29.0		7.9		19.4		79.4		5.5		12.0		3		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 25 August 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	Sunny	Moderate	12:20	7.4	Surface	1.0	0.2	69	30.1	30.1	8.0	8.0	14.2	14.2	90.4	90.3	6.3	6.2	5.1	8.7	4	5	87	88	822086	808817	<0.2	<0.2	1.4	1.4
						1.0	0.3	69	30.0		8.0		14.2		90.1		6.3		5.1		4		86				<0.2		1.5	
					Middle	3.7	0.1	89	29.2	29.2	8.0	8.0	16.9	16.9	86.2	86.2	6.0		4.7		5		88				<0.2		1.3	
						3.7	0.1	89	29.2		8.0		16.9		86.1		6.0		4.9		5		87				<0.2		1.4	
					Bottom	6.4	0.2	279	28.9	28.9	7.9	7.9	20.4	20.4	81.2	81.3	5.6	5.6	16.6		5		90				<0.2		1.3	
						6.4	0.2	285	28.9		7.9		20.4		81.4		5.6		16.1		6		90				<0.2		1.4	
IM10	Sunny	Moderate	12:12	7.1	Surface	1.0	0.4	330	29.2	29.2	7.9	7.9	19.0	19.0	86.5	86.5	6.0	5.7	3.8	9.1	5	5	86	88	822393	809807	<0.2	<0.2	1.3	1.4
						1.0	0.5	353	29.1		7.9		19.0		86.4		6.0		3.8		4		86				<0.2		1.4	
					Middle	3.6	0.4	326	28.8	28.8	7.9	7.9	21.3	21.3	76.6	76.6	5.3		12.6		5		88				<0.2		1.3	
						3.6	0.4	344	28.8		7.9		21.4		76.5		5.3		12.5		4		89				<0.2		1.5	
					Bottom	6.1	0.4	321	28.8	28.8	7.9	7.9	21.5	21.5	77.8	77.9	5.3	5.3	10.8		6		90				<0.2		1.4	
						6.1	0.4	346	28.8		7.9		21.5		77.9		5.3		10.9		6		90				<0.2		1.5	
IM11	Sunny	Moderate	12:01	7.5	Surface	1.0	0.6	296	29.1	29.1	7.9	7.9	20.2	20.2	84.4	84.4	5.8	5.5	3.5	7.2	3	4	87	88	822074	811454	<0.2	<0.2	1.3	1.4
						1.0	0.6	311	29.1		7.9		20.2		84.3		5.8		3.7		3		86				<0.2		1.5	
					Middle	3.8	0.6	296	28.8	28.8	7.9	7.9	22.1	22.1	75.1	75.0	5.1		6.0		4		88				<0.2		1.2	
						3.8	0.6	306	28.7		7.9		22.2		74.9		5.1		6.2		4		87				<0.2		1.3	
					Bottom	6.5	0.4	294	28.3	28.3	7.9	7.9	23.6	23.6	72.6	72.7	5.0	5.0	12.0		4		89				<0.2		1.4	
						6.5	0.4	309	28.3		7.9		23.7		72.8		5.0		12.1		4		90				<0.2		1.4	
IM12	Sunny	Moderate	11:56	8.8	Surface	1.0	0.5	270	29.2	29.2	8.0	8.0	19.9	19.9	86.3	86.3	5.9	5.6	5.2	10.8	4	5	86	88	821445	812035	<0.2	<0.2	1.2	1.4
						1.0	0.5	288	29.2		8.0		19.9		86.2		5.9		5.6		4		86				<0.2		1.4	
					Middle	4.4	0.4	270	28.7	28.7	7.9	7.9	22.3	22.4	78.0	78.0	5.3		11.5		5		89				<0.2		1.5	
						4.4	0.5	291	28.7		7.9		22.5		77.9		5.3		11.8		6		88				<0.2		1.4	
					Bottom	7.8	0.3	265	28.4	28.4	7.9	7.9	23.5	23.5	74.2	74.3	5.1	5.1	15.2		7		90				<0.2		1.5	
						7.8	0.3	291	28.4		8.0		23.5		74.3		5.1		15.7		6		91				<0.2		1.4	
SR1A	Sunny	Moderate	11:38	5.2	Surface	1.0	-	-	29.3	29.3	8.0	8.0	19.1	19.1	90.4	90.1	6.2	6.2	6.0	8.7	5	4	-	-	819978	812658	-	-	-	-
						1.0	-	-	29.2		8.0		19.1		89.8		6.2		6.9		4		-				-		-	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	-	-	29.1	29.1	8.0	8.0	21.4	21.4	85.2	85.3	5.8	5.8	10.7		4		-				-		-	
						4.2	-	-	29.1		8.0		21.4		85.4		5.8		11.0		4		-				-		-	
SR2	Sunny	Moderate	11:25	4.1	Surface	1.0	0.1	31	29.4	29.4	8.0	8.0	19.8	19.8	87.0	87.0	6.0	6.0	4.1	4.6	4	4	89	89	821468	814173	<0.2	<0.2	1.4	1.4
						1.0	0.1	32	29.4		8.0		19.8		87.0		6.0		4.0		4		88				<0.2		1.3	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.2	356	29.3	29.3	8.0	8.0	19.9	19.9	88.0	88.0	6.0	6.0	5.1		5		89				<0.2		1.3	
						3.1	0.2	328	29.3		8.0		19.9		88.0		6.0		5.1		4		90				<0.2		1.4	
SR3	Sunny	Moderate	12:32	8.8	Surface	1.0	0.3	21	30.1	30.1	7.9	7.9	13.0	13.0	90.5	90.5	6.4	6.0	4.1	4.1	3	4	-	-	822164	807578	-	-	-	-
						1.0	0.3	21	30.0		7.9		13.1		90.4		6.4		4.1		4		-				-		-	
					Middle	4.4	0.2	29	29.1	29.1	7.9	7.9	17.0	17.0	79.9	79.8	5.6		4.7		4		-				-		-	
						4.4	0.2	29	29.1		7.9		17.0		79.6		5.6		4.7		4		-				-		-	
					Bottom	7.8	0.0	109	28.9	28.9	7.9	7.9	19.6	19.6	80.0	80.1	5.5	5.5	3.3		4		-				-		-	
						7.8	0.0	109	28.9		7.9		19.6		80.1		5.5		3.4		5		-				-		-	
SR4A	Sunny	Calm	11:59	8.6	Surface	1.0	0.3	59	29.8	29.8	8.4	8.4	19.2	19.2	94.7	94.7	6.5	6.3	8.8	9.8	3	6	-	-	817182	807810	-	-	-	-
						1.0	0.3	62	29.8		8.4		19.2		94.6		6.5		8.9		4		-				-		-	
					Middle	4.3	0.1	64	29.8	29.8	8.4	8.4	21.0	21.0	88.6	88.6	6.0		9.5		6		-				-		-	
						4.3	0.1	64	29.7		8.4		21.0		88.6		6.0		9.9		7		-				-		-	
					Bottom	7.6	0.2	105	29.7	29.7	8.3	8.3	22.0	22.0	84.6	84.9	5.7	5.7	10.8		7		-				-		-	
						7.6	0.2	106	29.7		8.3		22.0		85.1		5.7		10.8		8		-				-		-	
SR5A	Sunny	Calm	11:40	3.3	Surface	1.0	0.2	307	29.8	29.8	8.4	8.4	22.2	22.3	89.2	88.9	6.0	6.0	7.9	8.0	7	6	-	-	816600	810672	-	-	-	-
						1.0	0.2	323	29.8		8.4		22.3		88.6		6.0		8.0		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.3	0.2	293	29.7	29.7	8.3	8.3	22.4	22.4	87.8	87.9	5.9	5.9	8.2		5		-				-		-	
						2.3	0.2	298	29.7		8.3		22.4		88.0		5.9		8.1		4		-				-		-	
SR6A	Sunny	Calm	11:03	4.4	Surface	1.0	0.0	13	29.8	29.8	8.5	8.5	22.5	22.5	93.8	93.7	6.3	6.3	5.3	6.5	5	6	-	-	817950	814741	-	-	-	-
						1.0	0.0	13	29.8		8.5		22.5		93.5		6.3		5.5		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.0	302	29.4	29.4	8.5	8.5	23.0	23.0	82.1	82.2	5.5	5.5	7.7		6		-				-		-	
						3.4	0.0	326	29.4		8.5		23.0		82.2		5.5		7.5		6		-				-		-	
SR7	Sunny	Moderate	10:36	16.2	Surface	1.0	0.0	116	28.9	28.9	7.9	7.9	21.3	21.3	82.1	82.1	5.3	5.0	2.2	6.8	3	3	-	-	823641	823723	-	-	-	-
						1.0	0.0	119	28.9		7.9		21.3		82.0		5.3		2.2		3		-				-		-	
					Middle	8.1	0.1	184	28.2	28.2	7.9	7.9	23.6	23.6	72.6	72.6	4.6		3.5		3		-				-		-	
						8.1	0.1	197	28.2		7.9		23.6		72.6		4.6		3.6		4		-				-		-	
					Bottom	15.2	0.1	76	27.7	27.7	7.9	7.9	27.2	27.2	68.0	68.1	4.3	4.3	14.7		4		-				-		-	
						15.2	0.1	81	27.7		7.9		27.2		68.1		4.4		14.4		3		-				-		-	
SR8	Sunny	Moderate	11:48	4.9	Surface	1.0	-	-	29.3	29.3	8.0	8.0	19.4	19.4	88.7	88.7	6.1	6.1	6.3	6.7	5	4	-	-	820397	811623	-	-	-	-
						1.0	-	-	29.2		8.0		19.4		88.6		6.1		6.3		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	-	-	29.2	29.3	8.0	8.0	21.1	21.1	81.7	81.8	5.6	5.6	7.1		3		-				-		-	
						3.9	-	-	29.3		8.0		21.0		81.9		5.6		7.0		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 27 August 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	07:24	8.0	Surface	1.0	0.3	202	29.0	29.0	8.1	8.1	18.8	18.8	91.9	91.9	6.4	6.1	2.0	6.6	3	3	85	88	815642	804252	<0.2	<0.2	1.3	1.3
						1.0	0.3	202	29.0		8.1		18.8		91.8		6.4		2.1		4		86				<0.2		1.3	
					Middle	4.0	0.3	194	28.5	28.5	8.1	8.1	23.4	23.4	84.1	84.1	5.7		3.4		4		89				<0.2		1.4	
						4.0	0.3	196	28.5		8.1		23.4		84.0		5.7		3.4		3		89				<0.2		1.2	
					Bottom	7.0	0.4	220	26.9	26.9	8.1	8.1	30.9	30.9	69.0	69.1	4.6	4.6	14.5		2		89				<0.2		1.2	
						7.0	0.4	240	26.9		8.1		30.9		69.1		4.6		14.6		2		89				<0.2		1.3	
C2	Cloudy	Moderate	08:56	11.2	Surface	1.0	1.0	162	29.7	29.7	8.2	8.2	16.0	16.0	88.0	87.9	6.1	5.8	5.8	6.1	3	4	86	89	825700	806941	<0.2	<0.2	2.0	2.1
						1.0	1.1	169	29.7		8.2		16.0		87.8		6.1		5.9		3		86				<0.2		2.0	
					Middle	5.6	0.6	173	29.4	29.4	8.1	8.1	21.7	21.8	80.8	80.7	5.5		4.4		3		88				<0.2		2.3	
						5.6	0.6	181	29.4		8.1		21.8		80.6		5.5		4.4		4		89				<0.2		2.1	
					Bottom	10.2	0.4	166	28.7	28.7	8.0	8.0	25.4	25.4	70.9	71.0	4.8	4.8	8.1		5		91				<0.2		2.1	
						10.2	0.5	174	28.7		8.0		25.5		71.0		4.8		8.2		4		91				<0.2		2.1	
C3	Cloudy	Moderate	06:46	12.3	Surface	1.0	0.3	69	29.2	29.2	8.2	8.2	21.8	21.8	86.9	86.9	5.9	5.9	3.9	4.1	3	2	85	87	822127	817823	<0.2	<0.2	1.6	1.4
						1.0	0.3	72	29.2		8.2		21.8		86.8		5.9		3.9		2		84				<0.2		1.5	
					Middle	6.2	0.3	69	29.0	29.0	8.2	8.2	23.5	23.4	85.2	85.2	5.8		3.1		2		87				<0.2		1.3	
						6.2	0.3	70	29.0		8.2		23.4		85.2		5.8		3.1		3		87				<0.2		1.3	
					Bottom	11.3	0.1	339	27.8	27.8	8.2	8.1	29.4	29.4	75.2	75.4	5.0	5.0	5.5		2		90				<0.2		1.5	
						11.3	0.1	344	27.8		8.1		29.3		75.6		5.0		5.4		2		89				<0.2		1.3	
IM1	Cloudy	Moderate	07:46	5.0	Surface	1.0	0.0	139	29.1	29.1	8.1	8.1	19.1	19.1	86.1	86.0	5.9	5.9	6.2	8.2	3	3	84	87	817938	807109	<0.2	<0.2	1.3	1.2
						1.0	0.0	151	29.1		8.1		19.1		85.9		5.9		6.5		4		85				<0.2		1.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.1	272	28.2	28.2	8.0	8.0	26.7	26.7	72.4	72.5	4.9	4.9	10.1		3		89				<0.2		1.2	
						4.0	0.1	289	28.2		8.0		26.6		72.6		4.9		9.9		3		89				<0.2		1.2	
IM2	Cloudy	Moderate	07:54	6.9	Surface	1.0	0.1	193	29.2	29.2	8.1	8.1	19.0	19.0	87.3	87.2	6.0	5.4	3.0	9.4	4	4	85	88	818141	806185	<0.2	<0.2	1.3	1.3
						1.0	0.1	199	29.2		8.1		19.0		87.0		6.0		3.0		2		85				<0.2		1.3	
					Middle	3.5	0.2	159	27.5	27.5	8.0	8.0	27.4	27.4	70.1	70.2	4.8		11.5		3		89				<0.2		1.3	
						3.5	0.2	171	27.5		8.0		27.4		70.2		4.8		11.4		4		89				<0.2		1.3	
					Bottom	5.9	0.0	38	27.4	27.4	8.0	8.0	28.8	28.8	72.5	72.7	4.9	4.9	13.7		4		90				<0.2		1.3	
						5.9	0.0	39	27.4		8.0		28.8		72.8		4.9		13.8		4		90				<0.2		1.2	
IM3	Cloudy	Moderate	08:01	7.1	Surface	1.0	0.1	218	29.2	29.2	8.1	8.1	19.3	19.3	89.2	89.1	6.2	5.8	3.8	7.4	6	5	86	89	818785	805617	<0.2	<0.2	1.3	1.3
						1.0	0.1	238	29.1		8.1		19.3		89.0		6.1		3.8		6		86				<0.2		1.1	
					Middle	3.6	0.1	188	28.8	28.8	8.0	8.0	21.3	21.3	80.4	80.3	5.5		5.7		4		89				<0.2		1.3	
						3.6	0.1	204	28.8		8.0		21.3		80.1		5.5		5.8		5		89				<0.2		1.2	
					Bottom	6.1	0.2	145	27.2	27.2	8.0	8.0	29.5	29.5	74.4	74.9	5.0	5.1	12.9		5		90				<0.2		1.3	
						6.1	0.2	147	27.2		8.0		29.5		75.3		5.1		12.7		4		91				<0.2		1.3	
IM4	Cloudy	Moderate	08:10	8.2	Surface	1.0	0.9	189	29.2	29.2	8.0	8.0	18.0	18.0	84.9	84.9	5.9	5.7	4.7	11.0	4	4	86	89	819701	804624	<0.2	<0.2	1.3	1.4
						1.0	1.0	196	29.2		8.0		18.0		84.9		5.9		4.7		4		87				<0.2		1.3	
					Middle	4.1	0.7	170	28.9	28.9	8.0	8.0	20.9	20.9	78.8	78.8	5.4		13.2		4		89				<0.2		1.3	
						4.1	0.8	173	28.8		8.0		20.9		78.8		5.4		13.3		4		90				<0.2		1.3	
					Bottom	7.2	0.4	127	27.7	27.7	8.0	8.0	27.0	27.0	71.1	71.3	4.8	4.8	15.2		3		90				<0.2		1.4	
						7.2	0.4	128	27.7		8.0		27.0		71.5		4.8		15.2		3		91				<0.2		1.5	
IM5	Cloudy	Moderate	08:21	7.5	Surface	1.0	0.7	200	29.3	29.3	8.0	8.0	17.1	17.2	87.1	87.1	6.1	6.0	4.6	6.0	5	4	85	88	820741	804886	<0.2	<0.2	1.5	1.5
						1.0	0.8	208	29.2		8.0		17.2		87.0		6.1		4.6		4		85				<0.2		1.5	
					Middle	3.8	0.6	203	29.2	29.2	8.0	8.0	19.2	19.2	85.9	85.9	5.9		5.2		4		89				<0.2		1.4	
						3.8	0.6	219	29.2		8.0		19.2		85.9		5.9		5.2		5		89				<0.2		1.6	
					Bottom	6.5	0.5	195	29.1	29.1	8.0	8.0	19.4	19.4	88.6	88.8	6.1	6.1	8.2		4		90				<0.2		1.6	
						6.5	0.5	210	29.1		8.0		19.4		88.9		6.1		8.4		4		90				<0.2		1.6	
IM6	Cloudy	Moderate	08:31	7.2	Surface	1.0	0.5	205	29.2	29.2	8.0	8.0	17.3	17.3	88.8	88.7	6.2	6.0	3.6	6.7	4	4	85	88	821079	805843	<0.2	<0.2	1.4	1.5
						1.0	0.5	220	29.2		8.0		17.3		88.6		6.2		3.6		4		85				<0.2		1.5	
					Middle	3.6	0.5	205	29.3	29.3	8.0	8.0	18.7	18.7	84.5	84.5	5.8		2.9		4		88				<0.2		1.4	
						3.6	0.5	221	29.3		8.0		18.7		84.5		5.8		2.9		5		89				<0.2		1.5	
					Bottom	6.2	0.5	207	29.0	29.0	7.9	7.9	20.9	20.9	77.1	77.3	5.3	5.3	13.6		4		90				<0.2		1.5	
						6.2	0.5	210	29.0		7.9		20.9		77.4		5.3		13.4		5		90				<0.2		1.6	
IM7	Cloudy	Moderate	08:39	8.1	Surface	1.0	0.4	268	29.2	29.2	8.0	8.0	17.0	17.0	87.0	87.0	6.1	5.9	2.9	5.8	4	4	87	89	821366	806843	<0.2	<0.2	1.4	1.5
						1.0	0.4	277	29.2		8.0		17.0		87.0		6.1		2.9		4		87				<0.2		1.4	
					Middle	4.1	0.4	258	29.1	29.1	7.9	7.9	19.9	19.9	81.5	81.5	5.6		4.8		4		88				<0.2		1.4	
						4.1	0.4	267	29.0		7.9		19.9		81.5		5.6		5.2		3		89				<0.2		1.5	
					Bottom	7.1	0.3	271	28.9	28.9	7.9	7.9	21.3	21.3	75.6	75.7	5.2	5.2	9.3		3		91				<0.2		1.4	
						7.1	0.3	282	28.9		7.9		21.3		75.7		5.2		9.5		4		91				<0.2		1.6	
IM8	Cloudy	Moderate	08:23	7.8	Surface	1.0	0.1	214	29.6	29.6	8.1	8.1	17.8	17.8	91.2	91.2	6.3	6.2	5.0	7.0	3	3	85	88	821830	808137	<0.2	<0.2	2.0	2.0
						1.0	0.1	218	29.6		8.1		17.8		91.1		6.3		5.0		2		85				<0.2		1.8	
					Middle	3.9	0.1	178	29.6	29.6	8.2	8.2	19.7	19.7	88.3	88.3	6.0		5.5		3		87				<0.2		1.9	
						3.9	0.1	185	29.6		8.2		19.7		88.3		6.0		5.5		4		88				<0.2		2.1	
					Bottom	6.8	0.1	123	29.4	29.4	8.2	8.2	21.3	21.3	82.3	82.3	5.6	5.6	10.5		4		90				<0.2		2.0	
						6.8	0.1	124	29.4		8.2		21.3		82.3		5.6		10.4		3		90				<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 27 August 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	08:16	7.3	Surface	1.0	0.2	117	29.6	29.6	8.0	8.0	17.6	17.6	92.2	92.2	6.4	6.2	5.2	7.4	3	3	85	88	822113	808789	<0.2	<0.2	1.5	1.8
						1.0	0.2	122	29.6		8.0		17.6		92.1		6.4		5.2		2		85				<0.2		1.6	
					Middle	3.7	0.3	103	29.6	29.6	8.0	8.0	19.8	19.8	88.3	88.2	6.0		5.4		3		88				<0.2		1.9	
						3.7	0.3	104	29.6		8.0		19.8		88.0		6.0		5.7		3		87				<0.2		1.9	
					Bottom	6.3	0.3	94	29.4	29.4	7.9	7.9	21.1	21.1	85.0	85.1	5.8	5.8	11.3		2		90				<0.2		1.9	
						6.3	0.3	100	29.4		7.9		21.1		85.2		5.8		11.4		3		90				<0.2		2.1	
IM10	Cloudy	Moderate	08:07	7.5	Surface	1.0	0.6	105	29.6	29.6	8.1	8.1	17.1	17.1	92.0	91.9	6.4	6.2	5.4	7.6	3	4	85	88	822395	809809	<0.2	<0.2	1.7	1.6
						1.0	0.7	107	29.6		8.1		17.1		91.8		6.4		5.4		3		86				<0.2		1.6	
					Middle	3.8	0.5	101	29.5	29.5	8.1	8.1	20.1	20.1	87.0	86.9	5.9		6.1		4		88				<0.2		1.6	
						3.8	0.6	109	29.5		8.1		20.2		86.7		5.9		6.3		5		88				<0.2		1.6	
					Bottom	6.5	0.4	98	29.3	29.3	7.9	7.9	22.0	21.9	78.8	78.9	5.3	5.4	11.1		4		90				<0.2		1.6	
						6.5	0.4	106	29.3		7.9		21.9		78.9		5.4		11.2		5		91				<0.2		1.6	
IM11	Cloudy	Moderate	07:54	8.1	Surface	1.0	0.6	106	29.4	29.4	8.0	8.0	17.1	17.1	92.2	92.1	6.4	6.2	5.1	6.0	4	4	85	88	822061	811442	<0.2	<0.2	1.6	1.5
						1.0	0.6	109	29.4		8.0		17.1		92.0		6.4		5.1		5		85				<0.2		1.4	
					Middle	4.1	0.5	105	29.5	29.5	8.0	7.9	20.5	20.4	87.2	87.2	5.9		5.3		5		88				<0.2		1.5	
						4.1	0.5	109	29.5		7.9		20.4		87.2		5.9		5.3		4		88				<0.2		1.6	
					Bottom	7.1	0.3	110	29.4	29.4	7.9	7.9	21.6	21.6	84.0	84.1	5.7	5.7	7.6		3		90				<0.2		1.4	
						7.1	0.3	110	29.4		7.9		21.6		84.1		5.7		7.4		3		90				<0.2		1.5	
IM12	Cloudy	Moderate	07:45	9.8	Surface	1.0	0.5	117	29.5	29.5	8.1	8.1	18.0	18.0	90.5	90.5	6.2	6.0	4.8	7.3	3	3	85	87	821477	812050	<0.2	<0.2	1.4	1.5
						1.0	0.6	121	29.5		8.1		18.0		90.4		6.2		4.9		3		85				<0.2		1.6	
					Middle	4.9	0.4	115	29.4	29.4	8.1	8.1	21.0	21.0	85.0	85.0	5.8		6.9		3		87				<0.2		1.6	
						4.9	0.5	119	29.4		8.1		21.0		84.9		5.8		6.9		3		87				<0.2		1.5	
					Bottom	8.8	0.2	82	28.9	28.9	8.0	8.0	24.3	24.3	74.9	75.0	5.1	5.1	10.0		4		90				<0.2		1.4	
						8.8	0.2	87	28.9		8.0		24.3		75.1		5.1		10.1		3		90				<0.2		1.5	
SR1A	Cloudy	Moderate	07:25	4.9	Surface	1.0	-	-	29.4	29.4	8.1	8.1	19.8	19.8	85.9	85.8	5.9	5.9	6.1	5.8	5	5	-	-	819976	812654	-	-	-	-
						1.0	-	-	29.4		8.1		19.8		85.6		5.9		6.0		4		-				-		-	
					Middle	2.5	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.5	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	-	-	29.3	29.3	8.1	8.1	22.0	22.0	81.9	81.8	5.6	5.6	5.5		6		-				-		-	
						3.9	-	-	29.3		8.1		22.1		81.7		5.5		5.5		6		-				-		-	
SR2	Cloudy	Moderate	07:11	4.6	Surface	1.0	0.5	61	29.5	29.5	8.1	8.1	20.0	20.0	87.9	87.8	6.0	6.0	4.4	5.0	2	3	86	87	821480	814181	<0.2	<0.2	1.4	1.4
						1.0	0.5	61	29.5		8.1		20.1		87.6		6.0		4.5		3		86				<0.2		1.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.3	43	29.4	29.4	7.9	7.9	21.3	21.3	86.0	86.0	5.8	5.8	5.6		4		89				<0.2		1.4	
						3.6	0.3	46	29.4		7.9		21.3		86.0		5.8		5.6		4		88				<0.2		1.3	
SR3	Cloudy	Moderate	08:30	8.9	Surface	1.0	0.4	178	29.7	29.7	8.1	8.1	17.4	17.4	92.8	92.8	6.4	6.3	5.1	5.5	3	3	-	-	822167	807593	-	-	-	-
						1.0	0.4	186	29.7		8.1		17.4		92.8		6.4		5.1		4		-				-		-	
					Middle	4.5	0.4	177	29.6	29.7	8.1	8.1	20.2	20.1	88.9	89.1	6.1		5.0		2		-				-		-	
						4.5	0.4	182	29.7		8.1		20.0		89.2		6.1		5.0		3		-				-		-	
					Bottom	7.9	0.2	179	29.4	29.4	8.0	8.0	20.6	20.6	84.5	84.5	5.8	5.8	6.4		3		-				-		-	
						7.9	0.2	196	29.4		8.0		20.6		84.4		5.8		6.7		2		-				-		-	
SR4A	Cloudy	Moderate	07:03	8.8	Surface	1.0	0.0	211	29.2	29.2	8.1	8.1	18.7	18.6	88.9	88.9	6.2	5.6	3.7	7.2	3	4	-	-	817197	807826	-	-	-	-
						1.0	0.0	231	29.2		8.1		18.6		88.8		6.1		3.6		4		-				-		-	
					Middle	4.4	0.2	47	28.2	28.2	8.0	8.0	25.0	25.0	72.9	72.9	5.0		6.2		4		-				-		-	
						4.4	0.3	49	28.2		8.0		25.0		72.9		5.0		6.3		4		-				-		-	
					Bottom	7.8	0.3	46	27.7	27.7	8.0	8.0	27.4	27.4	70.3	70.4	4.7	4.8	11.7		6		-				-		-	
						7.8	0.3	48	27.7		8.0		27.4		70.5		4.8		11.8		5		-				-		-	
SR5A	Cloudy	Calm	06:44	5.5	Surface	1.0	0.1	59	29.2	29.2	8.0	8.0	18.9	19.0	88.6	88.6	6.1	6.1	3.3	3.5	5	5	-	-	816613	810708	-	-	-	-
						1.0	0.2	61	29.2		8.0		19.0		88.5		6.1		3.3		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.5	0.1	39	29.3	29.3	8.0	8.0	19.4	19.4	89.5	89.6	6.2	6.2	3.7		5		-				-		-	
						4.5	0.1	41	29.3		8.0		19.4		89.6		6.2		3.7		5		-				-		-	
SR6A	Cloudy	Calm	06:15	4.8	Surface	1.0	0.1	43	29.2	29.2	7.9	7.9	20.3	20.3	79.1	79.1	5.4	5.4	5.3	5.3	7	7	-	-	817941	814723	-	-	-	-
						1.0	0.1	43	29.2		7.9		20.3		79.1		5.4		5.4		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.0	271	29.2	29.2	7.8	7.8	20.6	20.6	78.7	78.7	5.4	5.4	5.3		6		-				-		-	
						3.8	0.0	292	29.2		7.8		20.6		78.6		5.4		5.3		6		-				-		-	
SR7	Cloudy	Moderate	06:10	15.2	Surface	1.0	0.7	53	28.7	28.7	8.2	8.2	24.8	24.8	83.9	83.9	5.7	5.3	2.9	3.7	5	4	-	-	823631	823736	-	-	-	-
						1.0	0.7	54	28.7		8.2		24.8		83.8		5.6		2.9		6		-				-		-	
					Middle	7.6	0.5	72	28.0	28.0	8.2	8.2	28.6	28.6	75.1	75.1	5.0		3.0		3		-				-		-	
						7.6	0.5	76	28.0		8.2		28.6		75.1		5.0		3.0		4		-				-		-	
					Bottom	14.2	0.6	72	27.2	27.2	8.1	8.1	31.4	31.4	72.1	72.2	4.8	4.8	5.2		3		-				-		-	
						14.2	0.6	78	27.2		8.1		31.4		72.3		4.8		5.2		3		-				-		-	
SR8	Cloudy	Moderate	07:36	4.7	Surface	1.0	-	-	29.6	29.6	8.1	8.1	18.8	18.8	89.8	89.8	6.2	6.2	5.5	5.8	3	4	-	-	820373	811604	-	-	-	-
						1.0	-	-	29.6		8.1		18.8		89.8		6.2		5.5		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	-	-	29.6	29.6	8.1	8.1	19.0	19.0	89.8	89.9	6.2	6.2	6.2		4		-				-		-	
						3.7	-	-	29.6		8.1		19.0		89.9		6.2		6.0		4		-				-		-	

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 27 August 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	15:13	7.8	Surface	1.0	0.4	43	29.4	29.4	8.0	8.0	19.0	18.9	91.6	91.6	6.3	5.6	4.2	12.5	6	5	86	89	815629	804260	<0.2	<0.2	1.5	1.4
						1.0	0.4	45	29.4		8.0		18.9		91.6		6.3		4.2		4		87				<0.2		1.4	
					Middle	3.9	0.4	48	27.8	27.8	8.0	8.0	26.2	26.2	72.9	72.9	5.0		8.8		6		90				<0.2		1.3	
						3.9	0.5	51	27.8		8.0		26.2		72.8		4.9		8.7		5		90				<0.2		1.4	
					Bottom	6.8	0.3	40	27.5	27.6	8.0	8.0	28.0	28.0	71.6	71.7	4.8	4.8	24.4		5		91				<0.2		1.3	
						6.8	0.3	43	27.6		8.0		28.0		71.8		4.8		24.7		5		91				<0.2		1.4	
C2	Cloudy	Moderate	14:00	11.2	Surface	1.0	0.2	199	30.4	30.4	8.1	8.1	14.6	14.5	101.7	101.7	7.1	6.1	6.4	7.3	5	6	85	88	825664	806932	<0.2	<0.2	1.5	1.6
						1.0	0.2	202	30.4		8.1		14.5		101.7		7.0		6.4		5		86				<0.2		1.6	
					Middle	5.6	0.2	310	29.2	29.2	8.1	8.1	22.6	22.6	76.7	76.7	5.2		5.4		5		88				<0.2		1.6	
						5.6	0.2	323	29.2		8.1		22.6		76.7		5.2		5.4		6		88				<0.2		1.6	
					Bottom	10.2	0.4	345	28.9	28.9	8.2	8.2	24.3	24.3	72.7	72.8	4.9	4.9	10.2		6		91				<0.2		1.6	
						10.2	0.4	348	28.9		8.2		24.3		72.8		4.9		10.3		6		91				<0.2		1.7	
C3	Cloudy	Moderate	15:49	11.0	Surface	1.0	0.2	238	29.6	29.6	8.0	8.0	21.2	21.2	93.2	93.2	6.3	5.8	3.4	4.4	2	2	85	87	822098	817813	<0.2	<0.2	1.6	1.4
						1.0	0.2	247	29.6		8.0		21.2		93.2		6.3		3.4		2		84				<0.2		1.5	
					Middle	5.5	0.3	235	28.3	28.3	8.1	8.1	27.3	27.3	77.0	77.0	5.2		3.5		2		87				<0.2		1.4	
						5.5	0.3	243	28.3		8.1		27.3		77.0		5.2		3.6		3		87				<0.2		1.5	
					Bottom	10.0	0.3	249	27.7	27.7	8.1	8.1	29.6	29.6	73.3	73.4	4.9	4.9	6.2		2		89				<0.2		1.4	
						10.0	0.3	269	27.7		8.1		29.6		73.5		4.9		6.3		3		90				<0.2		1.2	
IM1	Cloudy	Moderate	14:51	4.6	Surface	1.0	0.1	24	29.7	29.7	8.1	8.1	19.1	19.1	111.4	111.3	7.6	7.6	2.7	6.7	2	3	85	87	817967	807138	<0.2	<0.2	1.3	1.3
						1.0	0.1	24	29.7		8.1		19.1		111.2		7.6		2.8		3		85				<0.2		1.3	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.0	244	29.2	29.2	8.1	8.1	20.9	20.9	96.6	96.6	6.6	6.6	10.7		3		88				<0.2		1.2	
						3.6	0.0	260	29.2		8.1		20.9		96.6		6.6		10.4		4		89				<0.2		1.3	
IM2	Cloudy	Moderate	14:44	6.4	Surface	1.0	0.4	359	29.9	29.9	8.1	8.0	19.9	19.9	98.7	98.6	6.7	6.1	2.2	14.6	5	5	89	89	818166	806160	<0.2	<0.2	1.4	1.3
						1.0	0.4	330	29.9		8.0		19.9		98.5		6.7		2.3		6		89				<0.2		1.2	
					Middle	3.2	0.3	354	28.8	28.8	8.0	8.0	21.7	21.7	80.7	80.6	5.5		13.3		4		89				<0.2		1.2	
						3.2	0.3	326	28.7		8.0		21.8		80.5		5.5		13.4		5		89				<0.2		1.3	
					Bottom	5.4	0.3	3	27.8	27.8	8.0	8.0	27.2	27.2	71.2	71.4	4.8	4.8	28.5		4		90				<0.2		1.3	
						5.4	0.3	3	27.8		8.0		27.3		71.5		4.8		28.0		5		90				<0.2		1.4	
IM3	Cloudy	Moderate	14:37	6.5	Surface	1.0	0.4	11	29.6	29.7	8.1	8.1	19.8	19.8	99.2	99.2	6.8	6.1	2.5	13.6	5	4	87	89	818791	805588	<0.2	<0.2	1.4	1.4
						1.0	0.5	11	29.7		8.1		19.8		99.1		6.8		2.6		4		87				<0.2		1.3	
					Middle	3.3	0.4	13	28.6	28.6	8.0	8.0	22.9	22.9	79.2	79.1	5.4		12.3		4		90				<0.2		1.4	
						3.3	0.4	13	28.5		8.0		23.0		79.0		5.4		12.3		3		90				<0.2		1.3	
					Bottom	5.5	0.3	299	27.6	27.6	8.0	8.0	28.0	28.0	67.6	67.7	4.6	4.6	25.7		2		90				<0.2		1.4	
						5.5	0.3	311	27.6		8.0		28.0		67.8		4.6		26.2		3		91				<0.2		1.4	
IM4	Cloudy	Moderate	14:25	7.6	Surface	1.0	0.6	350	29.3	29.3	8.1	8.1	19.9	19.9	107.2	107.0	7.3	6.3	3.0	9.9	6	5	86	89	819707	804626	<0.2	<0.2	1.2	1.3
						1.0	0.6	322	29.3		8.1		19.9		106.7		7.3		3.0		6		87				<0.2		1.2	
					Middle	3.8	0.7	347	28.3	28.3	8.0	8.0	24.1	24.0	77.8	77.7	5.3		8.5		4		89				<0.2		1.3	
						3.8	0.7	319	28.3		8.0		24.0		77.5		5.3		8.6		6		89				<0.2		1.3	
					Bottom	6.6	0.4	353	28.0	28.0	8.0	8.0	26.0	26.0	77.5	77.8	5.3	5.3	18.1		5		90				<0.2		1.2	
						6.6	0.4	325	28.0		8.0		26.0		78.0		5.3		18.4		5		90				<0.2		1.4	
IM5	Cloudy	Moderate	14:17	6.5	Surface	1.0	0.6	329	29.7	29.7	8.1	8.1	19.6	19.6	103.3	103.1	7.0	6.5	3.9	8.9	3	5	86	89	820747	804877	<0.2	<0.2	1.5	1.3
						1.0	0.7	355	29.7		8.1		19.6		102.8		7.0		4.2		4		86				<0.2		1.4	
					Middle	3.3	0.6	326	28.7	28.7	8.0	8.0	22.5	22.5	87.7	87.7	6.0		7.0		6		89				<0.2		1.2	
						3.3	0.6	339	28.7		8.0		22.5		87.6		6.0		6.9		5		89				<0.2		1.3	
					Bottom	5.5	0.5	335	28.4	28.5	8.0	8.0	24.5	24.5	81.7	81.8	5.5	5.6	15.7		6		90				<0.2		1.2	
						5.5	0.5	335	28.5		8.0		24.4		81.9		5.6		15.6		5		91				<0.2		1.3	
IM6	Cloudy	Moderate	14:08	6.6	Surface	1.0	0.3	305	30.0	30.0	8.0	8.0	14.4	14.4	91.2	91.2	6.4	6.4	4.3	10.1	4	4	85	88	821039	805826	<0.2	<0.2	1.7	1.8
						1.0	0.3	330	29.9		8.0		14.4		91.1		6.4		4.4		3		86				<0.2		1.8	
					Middle	3.3	0.1	278	29.6	29.6	8.0	8.0	16.0	16.0	89.8	89.8	6.3		5.7		3		89				<0.2		1.7	
						3.3	0.1	287	29.6		8.0		16.0		89.8		6.3		5.6		4		89				<0.2		1.7	
					Bottom	5.6	0.2	96	28.8	28.8	8.0	8.0	23.2	23.2	87.5	87.6	5.9	6.0	20.4		4		89				<0.2		1.9	
						5.6	0.2	100	28.8		8.0		23.1		87.6		6.0		20.2		4		90				<0.2		1.9	
IM7	Cloudy	Moderate	14:00	8.0	Surface	1.0	0.2	303	30.0	30.0	8.0	8.0	14.8	14.8	91.3	91.2	6.4	6.4	3.3	5.1	4	4	85	88	821350	806811	<0.2	<0.2	1.8	1.9
						1.0	0.2	327	30.0		8.0		14.8		91.1		6.4		3.3		3		86				<0.2		2.0	
					Middle	4.0	0.2	311	29.8	29.8	8.0	8.0	15.0	15.0	89.4	89.4	6.3		4.8		5		88				<0.2		1.8	
						4.0	0.2	326	29.8		8.0		15.0		89.4		6.3		5.1		4		89				<0.2		1.8	
					Bottom	7.0	0.1	215	29.5	29.5	8.0	8.0	18.8	18.8	83.5	83.7	5.7	5.8	7.3		5		90				<0.2		1.8	
						7.0	0.1	222	29.5		8.0		18.8		83.8		5.8		7.2		5		90				<0.2		1.9	
IM8	Cloudy	Moderate	14:22	7.1	Surface	1.0	0.1	169	30.6	30.6	8.0	8.0	14.9	14.9	103.5	103.5	7.1	6.9	5.2	6.6	5	5	85	87	821833	808139	<0.2	<0.2	1.6	1.6
						1.0	0.1	179	30.6		8.0		14.9		103.4		7.1		5.2		4		85				<0.2		1.5	
					Middle	3.6	0.1	278	30.3	30.3	8.0	8.0	15.8	15.8	97.0	96.9	6.7		5.7		6		87				<0.2		1.5	
						3.6	0.1	304	30.3		8.0		15.8		96.7		6.7		6.0		5		88				<0.2		1.6	
					Bottom	6.1	0.1	311	30.2	30.2	8.0	8.0	16.2	16.2	95.4	95.5	6.6	6.6	8.8		5		89				<0.2		1.6	
						6.1	0.1	333	30.2		8.0		16.2		95.6		6.6		8.8		6		89				<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 27 August 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	14:29	6.8	Surface	1.0	0.0	86	30.5	30.5	8.1	8.1	16.2	16.2	100.6	100.6	6.9	6.8	4.6	6.9	5	4	86	88	822098	808824	<0.2	<0.2	1.6	1.6
						1.0	0.0	90	30.5		8.1		16.2		100.5		6.9		4.6		5		85				<0.2		1.6	
					Middle	3.4	0.1	276	30.2	30.2	8.2	8.2	16.8	16.8	97.0	96.7	6.7		5.8		5		88				<0.2		1.6	
						3.4	0.1	290	30.2		8.2		16.8		96.4		6.6		6.3		4		88				<0.2		1.6	
					Bottom	5.8	0.2	275	29.9	29.9	8.1	8.1	17.7	17.7	94.3	94.4	6.5	6.5	9.9		3		90				<0.2		1.6	
						5.8	0.2	291	29.9		8.1		17.8		94.5		6.5		9.9		4		90				<0.2		1.6	
IM10	Cloudy	Moderate	14:37	7.4	Surface	1.0	0.4	324	30.0	30.0	8.1	8.1	17.8	17.7	96.9	96.9	6.7	6.4	4.7	7.3	3	3	85	88	822373	809779	<0.2	<0.2	1.7	1.7
						1.0	0.4	348	30.0		8.1		17.7		96.9		6.7		4.7		3		86				<0.2		1.7	
					Middle	3.7	0.4	307	29.6	29.6	8.1	8.1	19.6	19.6	88.8	88.7	6.1		6.2		3		87				<0.2		1.7	
						3.7	0.4	310	29.6		8.1		19.6		88.6		6.1		6.2		3		87				<0.2		1.7	
					Bottom	6.4	0.3	280	29.4	29.4	8.1	8.1	20.7	20.7	84.2	84.3	5.7	5.8	10.9		4		90				<0.2		1.7	
						6.4	0.3	285	29.4		8.1		20.7		84.4		5.8		10.9		3		90				<0.2		1.7	
IM11	Cloudy	Moderate	14:49	7.0	Surface	1.0	0.2	322	30.1	30.1	7.9	7.9	17.9	17.9	99.1	99.0	6.8	6.7	4.2	7.5	6	4	86	88	822040	811442	<0.2	<0.2	1.6	1.6
						1.0	0.2	332	30.1		7.9		17.9		98.9		6.8		4.2		5		85				<0.2		1.7	
					Middle	3.5	0.3	302	29.9	29.9	8.0	8.0	18.8	18.9	96.5	96.5	6.6		5.9		3		87				<0.2		1.6	
						3.5	0.3	328	29.8		8.0		18.9		96.5		6.6		6.7		4		87				<0.2		1.5	
					Bottom	6.0	0.4	299	29.2	29.3	8.1	8.1	23.0	23.0	84.3	84.4	5.7	5.7	12.1		3		90				<0.2		1.6	
						6.0	0.4	321	29.3		8.1		22.9		84.4		5.7		12.0		2		90				<0.2		1.5	
IM12	Cloudy	Moderate	14:57	8.9	Surface	1.0	0.4	260	30.2	30.2	8.1	8.1	18.1	18.1	100.6	100.5	6.9	6.4	3.9	6.9	2	2	85	88	821457	812057	<0.2	<0.2	1.4	1.4
						1.0	0.4	265	30.2		8.1		18.1		100.3		6.8		4.0		3		85				<0.2		1.4	
					Middle	4.5	0.6	276	29.4	29.4	8.1	8.1	22.0	22.0	88.1	88.1	6.0		5.8		2		87				<0.2		1.4	
						4.5	0.7	281	29.4		8.1		22.0		88.1		6.0		5.8		2		88				<0.2		1.4	
					Bottom	7.9	0.2	300	28.6	28.6	8.1	8.1	26.2	26.2	73.0	73.2	4.9	4.9	11.0		2		90				<0.2		1.5	
						7.9	0.2	313	28.6		8.1		26.1		73.3		4.9		10.9		2		90				<0.2		1.4	
SR1A	Cloudy	Moderate	15:16	5.1	Surface	1.0	-	-	30.0	30.0	8.1	8.1	19.8	19.8	100.6	100.6	6.8	6.8	5.6	6.5	2	3	-	-	819975	812655	-	-	-	-
						1.0	-	-	30.0		8.1		19.8		100.6		6.8		5.5		3		-				-		-	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	-	-	30.0	30.0	8.1	8.1	21.0	21.0	94.9	94.9	6.4	6.4	7.5		3		-				-		-	
						4.1	-	-	30.0		8.1		21.0		94.9		6.4		7.5		3		-				-		-	
SR2	Cloudy	Moderate	15:28	4.5	Surface	1.0	0.3	352	29.7	29.7	8.0	8.0	21.1	21.1	96.7	96.7	6.6	6.6	4.5	5.8	3	4	86	88	821449	814148	<0.2	<0.2	1.4	1.4
						1.0	0.3	324	29.6		8.0		21.1		96.6		6.5		4.7		4		87				<0.2		1.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.2	19	29.4	29.4	8.1	8.1	22.3	22.3	89.0	89.0	6.0	6.0	7.0		5		89				<0.2		1.3	
						3.5	0.2	19	29.4		8.1		22.3		89.0		6.0		7.0		4		89				<0.2		1.3	
SR3	Cloudy	Moderate	14:16	8.8	Surface	1.0	0.1	228	30.6	30.6	7.9	7.9	14.9	14.9	102.8	102.7	7.1	6.8	5.4	7.3	5	4	-	-	822134	807549	-	-	-	-
						1.0	0.1	235	30.6		7.9		14.9		102.6		7.1		5.3		4		-				-		-	
					Middle	4.4	0.1	296	30.1	30.1	8.0	8.0	16.7	16.7	92.9	93.0	6.4		5.5		4		-				-		-	
						4.4	0.1	311	30.1		8.0		16.7		93.0		6.4		5.3		4		-				-		-	
					Bottom	7.8	0.1	154	29.5	29.5	8.1	8.1	21.4	21.4	82.0	82.2	5.6	5.6	11.1		4		-				-		-	
						7.8	0.1	158	29.5		8.1		21.4		82.3		5.6		11.1		5		-				-		-	
SR4A	Cloudy	Moderate	15:33	8.9	Surface	1.0	0.5	64	29.7	29.7	8.0	8.0	19.5	19.5	94.8	94.7	6.5	6.4	8.9	10.7	7	12	-	-	817203	807810	-	-	-	-
						1.0	0.5	65	29.7		8.0		19.5		94.5		6.5		8.8		8		-				-		-	
					Middle	4.5	0.4	59	29.6	29.6	8.0	8.0	19.9	20.0	91.2	91.3	6.2		9.9		13		-				-		-	
						4.5	0.4	62	29.6		8.0		20.0		91.4		6.2		10.3		12		-				-		-	
					Bottom	7.9	0.4	59	29.4	29.4	8.0	8.0	20.9	20.9	86.1	86.1	5.9	5.9	13.2		14		-				-		-	
						7.9	0.4	62	29.3		8.0		21.0		86.1		5.9		13.3		15		-				-		-	
SR5A	Cloudy	Calm	15:49	4.5	Surface	1.0	0.1	126	29.9	29.9	8.0	8.0	20.1	20.1	95.0	95.0	6.4	6.4	8.5	10.2	11	11	-	-	816580	810687	-	-	-	-
						1.0	0.1	133	29.9		8.0		20.1		95.0		6.4		8.5		11		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.0	140	29.6	29.6	8.0	8.0	20.2	20.2	90.6	90.7	6.2	6.2	12.1		10		-				-		-	
						3.5	0.0	153	29.6		8.0		20.2		90.7		6.2		11.9		11		-				-		-	
SR6A	Cloudy	Calm	16:32	4.4	Surface	1.0	0.1	291	29.8	29.8	8.0	8.0	19.3	19.3	100.2	100.2	6.8	6.8	5.2	8.1	6	8	-	-	817958	814716	-	-	-	-
						1.0	0.1	317	29.8		8.0		19.4		100.1		6.8		5.5		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.0	51	29.5	29.5	8.0	8.0	20.4	20.4	88.9	88.5	6.1	6.1	10.7		8		-				-		-	
						3.4	0.0	54	29.5		8.0		20.5		88.1		6.0		11.1		10		-				-		-	
SR7	Cloudy	Moderate	16:21	15.1	Surface	1.0	0.0	252	28.8	28.8	8.0	8.0	25.3	25.3	83.9	83.9	5.6	5.5	3.6	4.4	<2	<2	-	-	823643	823747	-	-	-	-
						1.0	0.0	256	28.8		8.0		25.3		83.9		5.6		3.7		<2		-				-		-	
					Middle	7.6	0.1	319	28.3	28.3	8.0	8.0	27.6	27.6	79.4	79.5	5.3		4.4		<2		-				-		-	
						7.6	0.1	320	28.2		8.1		27.6		79.5		5.3		4.4		<2		-				-		-	
					Bottom	14.1	0.2	276	27.5	27.5	8.1	8.1	30.4	30.4	73.3	73.4	4.9	4.9	5.1		<2		-				-		-	
						14.1	0.2	281	27.5		8.1		30.4		73.4		4.9		5.1		<2		-				-		-	
SR8	Cloudy	Moderate	15:08	4.6	Surface	1.0	-	-	30.1	30.1	8.0	8.0	17.9	17.9	101.7	101.7	7.0	7.0	4.1	4.9	2	2	-	-	820381	811613	-	-	-	-
						1.0	-	-	30.1		8.0		18.0		101.6		7.0		4.1		3		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	-	-	29.6	29.7	8.1	8.1	20.5	20.5	91.9	91.7	6.2	6.2	5.6		2		-				-		-	
						3.6	-	-	29.7		8.1		20.6		91.5		6.2		5.6		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 29 August 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	10:01	8.4	Surface	1.0	0.7	180	29.3	29.3	8.0	8.0	19.0	19.0	93.7	93.6	6.5	6.1	4.3	6.3	4	3	85	88	815634	804240	<0.2	<0.2	1.5	1.5
						1.0	0.7	197	29.3		8.0		19.0		93.5		6.5		4.3		3		86				<0.2		1.5	
					Middle	4.2	0.4	214	28.9	28.9	8.0	8.0	24.4	24.4	82.6	82.7	5.6		4.7		4		87				<0.2		1.5	
						4.2	0.4	234	28.9		8.0		24.4		82.8		5.6		4.7		3		88				<0.2		1.5	
					Bottom	7.4	0.3	227	27.5	27.5	8.0	8.0	30.6	30.6	65.1	65.3	4.3	4.4	9.9		2		90				<0.2		1.4	
						7.4	0.4	231	27.5		8.0		30.6		65.4		4.4		9.9		2		89				<0.2		1.5	
C2	Sunny	Moderate	11:25	11.3	Surface	1.0	1.0	159	29.7	29.7	8.0	8.0	15.6	15.6	94.1	94.1	6.6	5.6	2.9	4.6	<2	2	84	87	825683	806955	<0.2	<0.2	1.8	1.7
						1.0	1.1	159	29.7		8.0		15.6		94.0		6.6		2.9		<2		85				<0.2		1.6	
					Middle	5.7	0.8	161	28.2	28.2	7.9	7.9	25.9	25.9	66.7	66.7	4.5		2.7		2		87				<0.2		1.5	
						5.7	0.8	173	28.2		7.9		25.9		66.7		4.5		2.7		2		87				<0.2		1.6	
					Bottom	10.3	0.5	152	27.6	27.6	7.9	7.9	27.7	27.7	62.6	62.7	4.2	4.2	8.2		3		88				<0.2		1.9	
						10.3	0.5	162	27.6		8.0		27.7		62.7		4.2		8.3		3		89				<0.2		1.8	
C3	Sunny	Moderate	09:14	12.9	Surface	1.0	0.3	86	29.1	29.1	8.0	8.0	20.6	20.7	89.3	89.2	6.1	5.8	1.2	3.1	<2	<2	85	87	822087	817808	<0.2	<0.2	1.4	1.4
						1.0	0.3	89	29.0		8.0		20.7		89.1		6.1		1.2		<2		85				<0.2		1.4	
					Middle	6.5	0.2	107	28.2	28.2	8.0	8.0	24.9	24.9	79.3	79.3	5.4		1.6		<2		88				<0.2		1.5	
						6.5	0.2	117	28.1		8.0		24.9		79.2		5.4		1.7		<2		87				<0.2		1.3	
					Bottom	11.9	0.3	71	27.1	27.1	8.0	8.0	29.5	29.4	69.6	69.7	4.7	4.7	6.7		<2		89				<0.2		1.3	
						11.9	0.3	75	27.1		8.0		29.4		69.7		4.7		6.4		<2		90				<0.2		1.3	
IM1	Cloudy	Moderate	10:25	4.4	Surface	1.0	0.1	186	28.3	28.3	8.0	8.0	24.5	24.6	78.6	78.3	5.3	5.3	5.7	6.5	2	3	87	88	817959	807109	<0.2	<0.2	1.4	1.5
						1.0	0.1	200	28.2		8.0		24.6		78.0		5.3		5.9		3		86				<0.2		1.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.1	148	27.9	27.9	8.0	8.0	29.1	29.1	64.1	64.2	4.3	4.3	7.5		3		88				<0.2		1.6	
						3.4	0.1	154	27.9		8.0		29.1		64.3		4.3		7.1		3		90				<0.2		1.6	
IM2	Cloudy	Moderate	10:32	6.8	Surface	1.0	0.1	247	28.2	28.2	8.1	8.1	24.0	24.0	78.7	78.3	5.4	4.8	7.2	8.6	<2	2	86	87	818161	806188	<0.2	<0.2	1.4	1.5
						1.0	0.1	260	28.1		8.1		24.1		77.8		5.3		7.4		<2		85				<0.2		1.4	
					Middle	3.4	0.2	153	27.8	27.8	8.1	8.1	29.4	29.4	65.0	64.9	4.3		8.3		3		87				<0.2		1.5	
						3.4	0.2	164	27.8		8.1		29.4		64.8		4.3		8.2		2		88				<0.2		1.5	
					Bottom	5.8	0.1	95	27.6	27.6	8.1	8.1	30.2	30.2	64.9	65.1	4.3	4.3	10.5		2		89				<0.2		1.4	
						5.8	0.1	96	27.6		8.1		30.2		65.2		4.3		10.1		2		89				<0.2		1.5	
IM3	Cloudy	Moderate	10:39	7.0	Surface	1.0	0.1	259	28.5	28.5	8.1	8.1	25.2	25.2	76.3	76.2	5.2	4.8	6.2	8.5	2	3	85	87	818764	805593	<0.2	<0.2	1.2	1.2
						1.0	0.1	276	28.4		8.1		25.3		76.0		5.1		6.4		2		85				<0.2		1.2	
					Middle	3.5	0.1	214	27.9	27.9	8.1	8.1	28.2	28.2	66.7	66.6	4.5		9.7		4		87				<0.2		1.3	
						3.5	0.1	231	27.9		8.1		28.2		66.4		4.5		9.4		3		87				<0.2		1.2	
					Bottom	6.0	0.1	112	27.6	27.6	8.0	8.0	30.6	30.6	66.3	66.5	4.4	4.4	9.6		3		89				<0.2		1.2	
						6.0	0.1	116	27.6		8.0		30.6		66.6		4.4		9.6		4		89				<0.2		1.2	
IM4	Cloudy	Moderate	10:49	7.6	Surface	1.0	1.0	204	29.7	29.7	8.1	8.1	18.1	18.1	94.4	94.3	6.5	5.8	4.5	10.7	<2	2	85	87	819740	804601	<0.2	<0.2	1.6	1.6
						1.0	1.0	205	29.7		8.1		18.1		94.1		6.5		4.5		<2		85				<0.2		1.5	
					Middle	3.8	0.8	201	28.4	28.4	8.1	8.1	24.8	24.8	75.3	75.3	5.1		12.1		2		87				<0.2		1.6	
						3.8	0.8	210	28.3		8.1		24.8		75.3		5.1		12.5		3		87				<0.2		1.6	
					Bottom	6.6	0.4	173	28.0	28.0	8.1	8.1	28.2	28.2	68.7	68.9	4.6	4.6	15.4		3		90				<0.2		1.6	
						6.6	0.4	185	28.0		8.1		28.2		69.1		4.6		15.2		2		89				<0.2		1.5	
IM5	Cloudy	Moderate	11:00	7.2	Surface	1.0	0.9	208	29.5	29.5	8.1	8.1	18.5	18.5	93.5	93.4	6.4	6.0	4.5	5.3	<2	<2	85	87	820751	804864	<0.2	<0.2	1.6	1.6
						1.0	0.9	218	29.5		8.1		18.4		93.2		6.4		4.5		<2		86				<0.2		1.6	
					Middle	3.6	0.8	220	28.8	28.8	8.1	8.1	22.4	22.5	80.1	80.0	5.5		4.5		<2		88				<0.2		1.5	
						3.6	0.8	232	28.7		8.1		22.5		79.8		5.5		4.5		<2		87				<0.2		1.6	
					Bottom	6.2	0.4	209	28.3	28.3	8.1	8.1	27.2	27.2	71.2	71.4	4.8	4.8	7.0		<2		89				<0.2		1.6	
						6.2	0.4	226	28.3		8.1		27.2		71.5		4.8		7.0		<2		89				<0.2		1.6	
IM6	Cloudy	Moderate	11:10	6.8	Surface	1.0	0.5	249	29.8	29.8	8.1	8.1	18.8	18.8	94.9	92.8	6.5	5.5	8.0	8.1	3	3	86	87	821054	805845	<0.2	<0.2	1.4	1.4
						1.0	0.5	266	29.8		8.1		18.9		90.7		6.2		8.8		4		85				<0.2		1.4	
					Middle	3.4	0.6	245	28.3	28.3	8.1	8.1	27.0	27.1	67.7	67.9	4.5		8.2		3		87				<0.2		1.4	
						3.4	0.7	249	28.3		8.1		27.1		68.0		4.6		8.6		4		86				<0.2		1.4	
					Bottom	5.8	0.3	248	28.2	28.2	8.0	8.0	27.7	27.7	70.1	70.3	4.7	4.7	7.4		2		89				<0.2		1.3	
						5.8	0.3	264	28.2		8.0		27.7		70.5		4.7		7.6		3		89				<0.2		1.4	
IM7	Cloudy	Moderate	11:18	8.0	Surface	1.0	0.5	248	29.5	29.5	8.2	8.2	18.9	18.9	95.0	94.9	6.5	6.1	4.3	6.1	<2	<2	85	87	821354	806839	<0.2	<0.2	1.5	1.5
						1.0	0.5	264	29.4		8.2		18.9		94.7		6.5		4.4		<2		85				<0.2		1.5	
					Middle	4.0	0.5	255	28.5	28.5	8.2	8.2	23.0	23.0	81.6	81.5	5.6		5.4		<2		87				<0.2		1.4	
						4.0	0.5	256	28.4		8.2		23.0		81.4		5.6		5.6		<2		86				<0.2		1.5	
					Bottom	7.0	0.4	257	28.0	28.0	8.2	8.2	29.2	29.2	65.2	65.3	4.3	4.4	8.8		<2		90				<0.2		1.5	
						7.0	0.4	266	28.0		8.2		29.2		65.4		4.4		7.9		<2		89				<0.2		1.5	
IM8	Sunny	Moderate	10:51	7.6	Surface	1.0	0.3	167	29.4	29.4	8.0	8.0	17.6	17.6	90.8	90.8	6.3	6.1	2.3	4.3	2	3	85	86	821817	808156	<0.2	<0.2	1.4	1.5
						1.0	0.3	170	29.4		8.0		17.6		90.7		6.3		2.4		2		84				<0.2		1.4	
					Middle	3.8	0.1	148	29.1	29.1	8.0	8.0	19.6	19.6	84.9	84.8	5.9		3.3		2		87				<0.2		1.5	
						3.8	0.1	154	29.1		8.0		19.6		84.7		5.8		3.4		2		86				<0.2		1.6	
					Bottom	6.6	0.1	307	28.0	28.0	7.9	7.9	26.1	26.0	63.5	63.6	4.3	4.3	7.3		3		88				<0.2		1.6	
						6.6	0.1	336	28.0		7.9		26.0		63.6		4.3		7.0		4		88				<0.2		1.5	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 29 August 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	Sunny	Moderate	10:45	7.0	Surface	1.0	0.4	165	29.4	29.4	8.0	8.0	17.3	17.3	91.5	91.5	6.4	6.1	4.3	5.7	2	2	85	86	822115	808818	<0.2	<0.2	1.6	1.5
						1.0	0.4	169	29.4		8.0		17.3		91.5		6.4		4.3		2		84				<0.2		1.4	
					Middle	3.5	0.3	152	29.2	29.2	8.0	8.0	19.2	19.2	85.1	85.0	5.9		2.3		<2		86				<0.2		1.4	
						3.5	0.3	154	29.2		8.0		19.2		84.8		5.8		2.3		<2		87				<0.2		1.5	
					Bottom	6.0	0.2	105	28.3	28.3	8.0	8.0	25.0	25.0	66.9	67.0	4.5	4.5	10.9		<2		88				<0.2		1.5	
						6.0	0.2	114	28.3		8.0		25.0		67.0		4.5		10.3		<2		88				<0.2		1.5	
IM10	Sunny	Moderate	10:36	7.3	Surface	1.0	0.6	101	29.3	29.3	8.0	8.0	18.7	18.7	87.3	87.3	6.0	5.8	2.2	5.2	<2	2	84	86	822365	809778	<0.2	<0.2	1.3	1.5
						1.0	0.6	110	29.3		8.0		18.7		87.3		6.0		2.2		<2		85				<0.2		1.4	
					Middle	3.7	0.5	101	29.1	29.1	8.0	8.0	20.0	20.0	80.6	80.6	5.5		2.6		2		86				<0.2		1.6	
						3.7	0.5	107	29.1		8.0		20.0		80.6		5.5		2.6		2		86				<0.2		1.5	
					Bottom	6.3	0.5	78	28.1	28.1	8.0	8.0	25.6	25.6	65.8	65.9	4.5	4.5	10.9		2		88				<0.2		1.5	
						6.3	0.6	85	28.1		8.0		25.6		65.9		4.5		10.8		2		89				<0.2		1.4	
IM11	Sunny	Moderate	10:21	8.1	Surface	1.0	0.6	131	29.2	29.2	8.0	8.0	20.0	20.0	83.3	83.3	5.7	5.3	2.5	5.9	<2	2	84	87	822073	811454	<0.2	<0.2	1.4	1.4
						1.0	0.6	135	29.2		8.0		20.0		83.2		5.7		2.5		<2		85				<0.2		1.4	
					Middle	4.1	0.6	124	28.6	28.6	8.0	8.0	23.8	23.7	71.3	71.4	4.8		4.1		<2		86				<0.2		1.4	
						4.1	0.6	133	28.6		8.0		23.7		71.5		4.9		4.1		<2		87				<0.2		1.4	
					Bottom	7.1	0.3	148	27.7	27.7	7.9	7.9	27.2	27.2	61.2	61.2	4.1	4.1	11.0		3		88				<0.2		1.4	
						7.1	0.3	152	27.7		7.9		27.2		61.2		4.1		11.0		2		89				<0.2		1.5	
IM12	Sunny	Moderate	10:13	9.4	Surface	1.0	0.5	83	29.4	29.4	8.0	8.0	19.3	19.3	88.5	88.5	6.1	5.4	2.0	4.8	4	3	85	87	821459	812062	<0.2	<0.2	1.4	1.4
						1.0	0.6	90	29.4		8.0		19.3		88.5		6.1		2.0		3		84				<0.2		1.3	
					Middle	4.7	0.5	69	28.5	28.5	7.9	7.9	23.5	23.5	67.9	67.9	4.6		5.1		3		87				<0.2		1.4	
						4.7	0.6	69	28.5		7.9		23.5		67.9		4.6		5.1		3		87				<0.2		1.4	
					Bottom	8.4	0.3	94	28.0	28.0	8.0	8.0	25.9	25.9	67.0	67.1	4.5	4.6	7.4		2		89				<0.2		1.4	
						8.4	0.3	98	28.0		8.0		25.9		67.2		4.6		7.3		2		88				<0.2		1.4	
SR1A	Sunny	Moderate	09:54	5.0	Surface	1.0	-	-	29.3	29.3	8.0	8.0	20.2	20.2	84.7	84.7	5.8	5.8	2.7	2.9	2	3	-	-	819981	812660	-	-	-	-
						1.0	-	-	29.2		8.0		20.2		84.6		5.8		2.8		3		-				-		-	
					Middle	2.5	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.5	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	-	-	29.2	29.2	8.0	8.0	20.5	20.5	82.5	82.5	5.7	5.7	3.1		3		-				-		-	
						4.0	-	-	29.2		8.0		20.5		82.4		5.6		3.1		2		-				-		-	
SR2	Sunny	Moderate	09:41	4.6	Surface	1.0	0.3	113	29.0	29.0	8.0	8.0	20.5	20.5	81.3	81.3	5.6	5.6	2.3	3.0	2	3	87	88	821449	814149	<0.2	<0.2	1.5	1.5
						1.0	0.3	117	29.0		8.0		20.5		81.3		5.6		2.4		3		87				<0.2		1.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.2	90	28.7	28.7	8.0	8.0	22.7	22.8	75.0	75.1	5.1	5.1	3.7		3		88				<0.2		1.4	
						3.6	0.2	93	28.7		8.0		22.8		75.1		5.1		3.7		4		88				<0.2		1.6	
SR3	Sunny	Moderate	10:59	8.9	Surface	1.0	0.4	179	30.1	30.1	8.0	8.0	15.3	15.4	92.2	92.1	6.4	5.8	2.7	4.1	2	2	-	-	822170	807589	-	-	-	-
						1.0	0.4	196	30.1		8.0		15.4		91.9		6.4		2.7		3		-				-		-	
					Middle	4.5	0.3	198	28.9	28.9	8.0	8.0	21.1	21.1	75.9	75.7	5.2		2.5		3		-				-		-	
						4.5	0.3	216	28.9		8.0		21.1		75.5		5.2		2.5		2		-				-		-	
					Bottom	7.9	0.2	228	27.5	27.6	8.0	8.0	27.9	27.9	60.3	60.4	4.1	4.1	7.2		2		-				-		-	
						7.9	0.2	237	27.6		8.0		27.9		60.4		4.1		7.0		2		-				-		-	
SR4A	Cloudy	Moderate	09:40	9.0	Surface	1.0	0.0	257	29.1	29.1	8.0	8.0	21.8	21.9	87.9	87.8	6.0	5.1	5.0	9.0	4	3	-	-	817194	807831	-	-	-	-
						1.0	0.0	275	29.1		8.0		21.9		87.6		6.0		5.0		3		-				-		-	
					Middle	4.5	0.1	82	27.9	27.9	8.0	8.0	28.9	29.0	61.6	61.5	4.1		9.8		4		-				-		-	
						4.5	0.2	85	27.8		8.0		29.0		61.4		4.1		10.1		3		-				-		-	
					Bottom	8.0	0.1	199	27.7	27.7	7.9	7.9	29.8	29.8	61.1	61.2	4.1	4.1	12.2		2		-				-		-	
						8.0	0.1	202	27.7		7.9		29.7		61.3		4.1		12.1		2		-				-		-	
SR5A	Cloudy	Moderate	09:23	3.3	Surface	1.0	0.1	7	29.7	29.7	8.0	8.0	21.9	21.9	96.2	96.4	6.5	6.5	7.6	9.1	6	5	-	-	816588	810717	-	-	-	-
						1.0	0.1	7	29.7		8.0		21.9		96.5		6.5		7.8		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.3	0.0	42	29.7	29.7	7.8	7.8	22.2	22.2	91.4	91.4	6.2	6.2	10.4		5		-				-		-	
						2.3	0.0	44	29.7		7.8		22.2		91.4		6.2		10.6		4		-				-		-	
SR6A	Cloudy	Moderate	08:48	4.2	Surface	1.0	0.1	40	29.3	29.3	8.0	8.0	22.2	22.2	79.8	79.9	5.4	5.4	7.9	10.9	7	7	-	-	817981	814723	-	-	-	-
						1.0	0.1	40	29.3		8.0		22.2		79.9		5.4		7.8		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.1	180	28.9	28.9	8.0	8.0	24.7	24.7	73.0	73.1	4.9	4.9	13.8		5		-				-		-	
						3.2	0.1	187	28.9		8.0		24.7		73.1		4.9		13.9		6		-				-		-	
SR7	Sunny	Moderate	08:38	15.6	Surface	1.0	0.5	43	28.5	28.5	8.0	8.0	23.0	23.0	88.4	88.4	6.0	5.8	1.0	1.8	<2	3	-	-	823621	823742	-	-	-	-
						1.0	0.6	46	28.5		8.0		23.0		88.4		6.0		1.0		<2		-				-		-	
					Middle	7.8	0.2	24	28.2	28.2	7.9	7.9	24.7	24.7	80.5	80.4	5.5		1.0		2		-				-		-	
						7.8	0.2	25	28.2		7.9		24.7		80.3		5.5		1.1		2		-				-		-	
					Bottom	14.6	0.3	41	26.4	26.4	7.9	7.9	31.3	31.3	64.0	64.1	4.3	4.3	3.2		3		-				-		-	
						14.6	0.4	44	26.4		7.9		31.3		64.1		4.3		3.2		4		-				-		-	
SR8	Sunny	Moderate	10:05	4.9	Surface	1.0	-	-	29.4	29.4	8.0	8.0	19.4	19.4	88.6	88.6	6.1	6.1	2.6	2.9	3	4	-	-	820366	811610	-	-	-	-
						1.0	-	-	29.4		8.0		19.4		88.6		6.1		2.6		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	-	-	29.5	29.5	8.0	8.0	19.7	19.7	87.5	87.5	6.0	6.0	3.1		3		-				-		-	
						3.9	-	-	29.5		8.0		19.7		87.5		6.0		3.2		4		-				-		-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 29 August 20 during Mid-Flood Tide

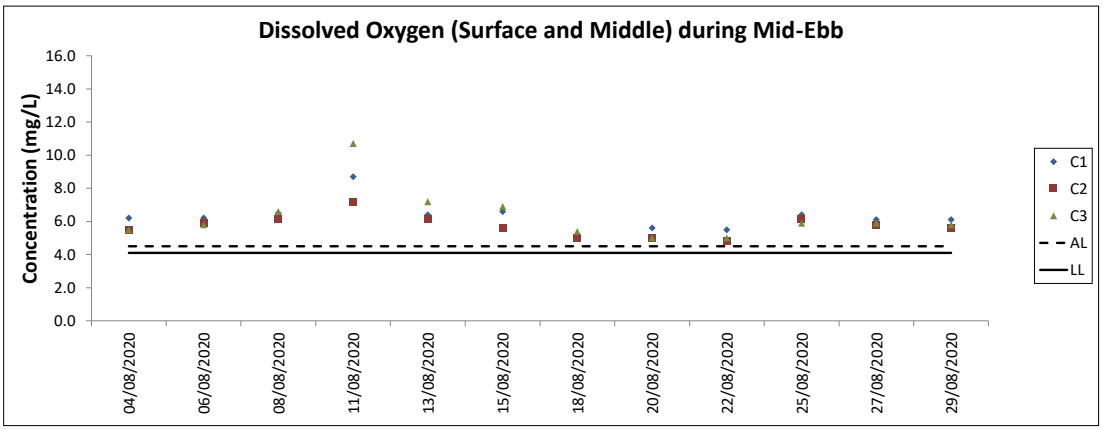
Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (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	17:31	7.7	Surface	1.0	0.7	33	30.2	30.3	8.1	8.1	20.0	19.7	103.0	103.0	7.0	5.9	7.8	8.1	3	4	87	88	815626	804269	<0.2	<0.2	1.5	1.5
						1.0	0.7	33	30.3		8.1		19.4		103.0		7.0		7.8		2		86				<0.2		1.4	
					Middle	3.9	0.5	18	28.1	28.1	8.1	8.1	27.7	27.7	71.3	71.3	4.8		7.2		5		88				<0.2		1.6	
						3.9	0.5	18	28.1		8.1		27.7		71.3		4.8		7.4		4		87				<0.2		1.5	
					Bottom	6.7	0.3	16	27.8	27.8	8.1	8.1	29.4	29.4	67.3	67.5	4.5	4.5	9.0		4		90				<0.2		1.5	
						6.7	0.3	16	27.8		8.1		29.4		67.6		4.5		9.3		5		90				<0.2		1.6	
C2	Sunny	Rough	16:23	11.4	Surface	1.0	0.3	152	30.1	30.1	8.0	8.0	15.6	15.6	90.2	90.1	6.2	5.4	4.6	7.2	5	4	85	87	825689	806953	<0.2	<0.2	2.4	2.4
						1.0	0.3	163	30.1		8.0		15.6		90.0		6.2		4.7		4		84				<0.2		2.3	
					Middle	5.7	0.2	24	28.2	28.2	8.0	8.0	24.3	24.2	66.5	66.5	4.5		5.6		4		87				<0.2		2.2	
						5.7	0.2	24	28.2		8.0		24.2		66.5		4.5		5.6		4		86				<0.2		2.3	
					Bottom	10.4	0.3	322	27.7	27.7	8.0	8.0	27.1	27.1	65.2	65.3	4.4	4.4	11.4		4		88				<0.2		2.5	
						10.4	0.3	352	27.7		8.0		27.1		65.3		4.4		11.4		4		89				<0.2		2.4	
C3	Cloudy	Moderate	18:16	11.8	Surface	1.0	0.4	219	28.9	28.9	8.0	8.0	23.0	23.0	86.7	86.7	5.9	5.5	1.4	3.7	2	2	85	88	822127	817808	<0.2	<0.2	1.4	1.4
						1.0	0.4	237	28.8		8.0		23.0		86.7		5.9		1.4		2		85				<0.2		1.4	
					Middle	5.9	0.6	238	27.6	27.6	8.0	8.0	28.0	28.0	75.7	75.7	5.1		2.6		2		88				<0.2		1.4	
						5.9	0.6	250	27.6		8.0		28.0		75.7		5.1		2.6		3		88				<0.2		1.3	
					Bottom	10.8	0.4	243	26.9	26.9	8.0	8.0	29.8	29.8	66.9	67.0	4.5	4.5	7.2		3		90				<0.2		1.3	
						10.8	0.5	266	26.9		8.0		29.8		67.0		4.5		7.3		2		89				<0.2		1.3	
IM1	Cloudy	Moderate	17:09	4.1	Surface	1.0	0.1	233	31.1	31.1	8.2	8.2	20.6	20.6	124.3	124.2	8.3	8.3	6.7	7.3	2	2	87	88	817964	807142	<0.2	<0.2	1.3	1.4
						1.0	0.1	250	31.0		8.2		20.6		124.0		8.2		6.8		2		87				<0.2		1.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.1	252	30.5	30.5	8.2	8.2	21.5	21.4	107.9	108.6	7.2	7.3	8.0		2		89				<0.2		1.3	
						3.1	0.1	273	30.5		8.2		21.2		109.3		7.3		7.6		3		89				<0.2		1.4	
IM2	Cloudy	Moderate	17:01	6.4	Surface	1.0	0.4	336	29.3	29.3	8.2	8.2	22.3	22.3	99.4	98.7	6.7	5.9	8.0	12.3	4	4	85	87	818160	806181	<0.2	<0.2	1.3	1.3
						1.0	0.5	351	29.2		8.2		22.4		97.9		6.6		8.6		4		85				<0.2		1.3	
					Middle	3.2	0.4	7	28.2	28.2	8.1	8.1	26.0	26.0	75.2	75.0	5.1		11.7		4		88				<0.2		1.2	
						3.2	0.5	7	28.1		8.1		26.0		74.7		5.1		12.2		5		87				<0.2		1.3	
					Bottom	5.4	0.3	352	27.9	28.0	8.1	8.1	29.2	29.1	62.6	62.6	4.2	4.2	16.5		5		89				<0.2		1.3	
						5.4	0.3	354	28.0		8.1		29.1		62.6		4.2		16.8		4		90				<0.2		1.2	
IM3	Cloudy	Moderate	16:53	6.5	Surface	1.0	0.5	331	29.2	29.2	8.2	8.2	24.7	24.2	92.9	93.3	6.3	5.6	8.4	8.8	3	3	85	87	818795	805604	<0.2	<0.2	1.4	1.3
						1.0	0.5	348	29.1		8.2		23.6		93.7		6.3		8.5		2		85				<0.2		1.3	
					Middle	3.3	0.4	337	28.2	28.2	8.2	8.2	27.1	27.1	72.4	72.5	4.9		8.3		3		87				<0.2		1.2	
						3.3	0.4	351	28.1		8.2		27.1		72.6		4.9		8.3		3		88				<0.2		1.2	
					Bottom	5.5	0.3	314	27.9	27.9	8.2	8.2	29.4	29.4	63.2	63.2	4.2	4.2	9.5		3		89				<0.2		1.2	
						5.5	0.3	314	27.9		8.2		29.4		63.1		4.2		9.9		3		90				<0.2		1.2	
IM4	Cloudy	Moderate	16:42	7.4	Surface	1.0	0.7	333	28.5	28.5	8.3	8.3	26.9	26.9	79.1	79.2	5.3	5.1	7.0	8.6	3	3	85	87	819714	804590	<0.2	<0.2	1.3	1.3
						1.0	0.8	340	28.5		8.3		27.0		79.2		5.3		7.2		3		86				<0.2		1.4	
					Middle	3.7	0.6	331	28.2	28.2	8.3	8.3	28.0	28.0	72.4	72.5	4.8		8.6		3		87				<0.2		1.3	
						3.7	0.7	351	28.1		8.3		27.9		72.5		4.9		8.7		3		87				<0.2		1.2	
					Bottom	6.4	0.4	333	27.9	28.0	8.3	8.3	29.3	29.3	67.4	67.5	4.5	4.5	10.3		3		90				<0.2		1.3	
						6.4	0.4	354	28.0		8.3		29.3		67.6		4.5		10.1		4		89				<0.2		1.3	
IM5	Cloudy	Moderate	16:33	6.8	Surface	1.0	0.7	342	30.8	30.8	8.3	8.3	16.0	16.0	112.7	112.6	7.7	6.9	6.4	11.7	5	5	85	87	820735	804850	<0.2	<0.2	1.9	1.8
						1.0	0.7	353	30.8		8.3		16.0		112.4		7.7		6.9		5		86				<0.2		1.8	
					Middle	3.4	0.6	346	29.1	29.1	8.3	8.3	25.2	25.2	89.5	89.5	6.0		12.8		4		87				<0.2		1.8	
						3.4	0.7	358	29.1		8.3		25.2		89.4		6.0		13.0		5		86				<0.2		1.8	
					Bottom	5.8	0.5	359	28.3	28.3	8.2	8.2	28.0	28.0	73.9	74.0	4.9	4.9	15.4		5		88				<0.2		1.7	
						5.8	0.5	330	28.3		8.2		28.0		74.1		4.9		15.5		4		87				<0.2		1.6	
IM6	Cloudy	Moderate	16:26	6.5	Surface	1.0	0.2	269	30.5	30.4	8.3	8.3	13.1	13.1	115.4	115.1	8.1	7.4	7.4	10.0	4	4	85	87	821069	805820	<0.2	<0.2	2.1	2.1
						1.0	0.3	285	30.3		8.3		13.1		114.8		8.0		7.4		3		85				<0.2		2.1	
					Middle	3.3	0.1	65	29.6	29.6	8.3	8.3	19.4	19.4	97.3	97.3	6.7		9.4		3		86				<0.2		2.1	
						3.3	0.1	65	29.5		8.3		19.5		97.3		6.7		10.0		4		87				<0.2		2.0	
					Bottom	5.5	0.3	60	29.2	29.2	8.2	8.2	25.5	25.5	88.0	88.4	5.9	5.9	13.0		4		89				<0.2		2.0	
						5.5	0.3	60	29.2		8.2		25.5		88.7		5.9		13.0		4		89				<0.2		2.0	
IM7	Cloudy	Moderate	16:21	7.6	Surface	1.0	0.4	258	31.1	31.1	8.3	8.3	13.0	13.0	114.5	114.4	7.9	7.7	6.6	8.3	3	4	85	87	821338	806841	<0.2	<0.2	2.0	2.2
						1.0	0.4	276	31.1		8.3		13.1		114.3		7.9		6.6		4		84				<0.2		2.2	
					Middle	3.8	0.4	255	30.7	30.7	8.3	8.3	14.8	14.8	108.1	108.1	7.4		8.1		5		87				<0.2		2.1	
						3.8	0.4	257	30.7		8.3		14.9		108.0		7.4		8.3		4		87				<0.2		2.2	
					Bottom	6.6	0.2	173	29.2	29.2	8.2	8.2	21.8	21.8	82.3	82.3	5.6	5.6	10.1		5		89				<0.2		2.3	
						6.6	0.2	187	29.2		8.2		21.8		82.3		5.6		10.2		4		89				<0.2		2.2	
IM8	Sunny	Moderate	16:46	7.3	Surface	1.0	0.0	183	30.5	30.5	8.1	8.1	13.9	13.9	104.5	104.4	7.3	6.9	5.9	8.5	5	5	85	86	821849	808151	<0.2	<0.2	2.0	2.1
						1.0	0.0	191	30.4		8.1		13.9		104.3		7.3		6.0		4		84				<0.2		2.2	
					Middle	3.7	0.1	283	30.1	30.1	8.0	8.0	15.7	15.7	93.2	93.2	6.5		6.9		4		86				<0.2		2.0	
						3.7	0.1	289	30.1		8.0		15.7		93.1		6.5		7.0		6		86				<0.2		2.1	
					Bottom	6.3	0.3	271	28.9	28.9	8.0	8.0	21.5	21.5	77.0	77.1	5.3	5.3	12.6		7		88				<0.2		2.0	
						6.3	0.3	287	28.9		8.0		21.5		77.2		5.3		12.5		6		88				<0.2		2.0	

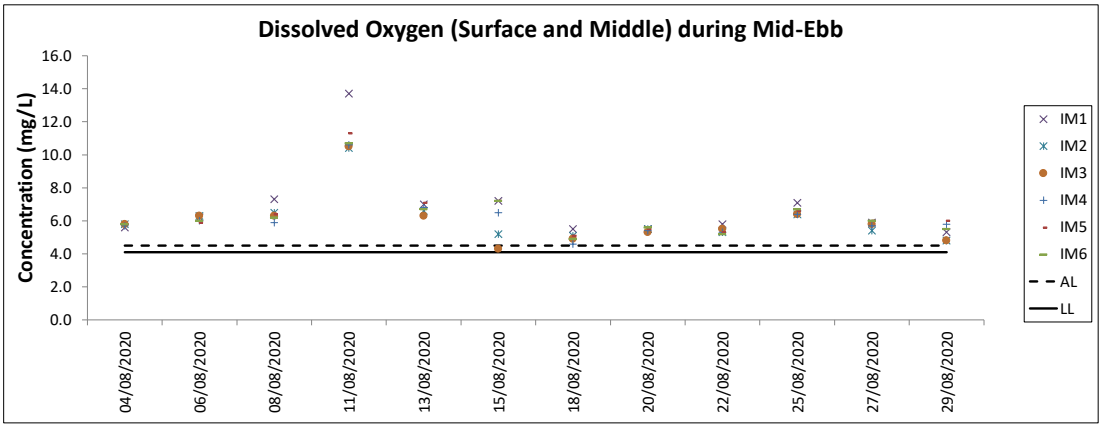
DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

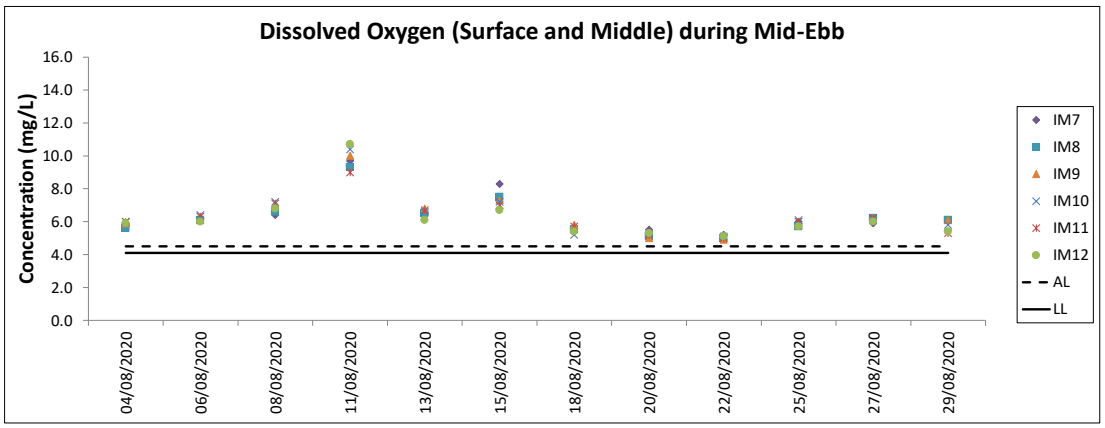
Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 29 August 20 during Mid-Flood Tide

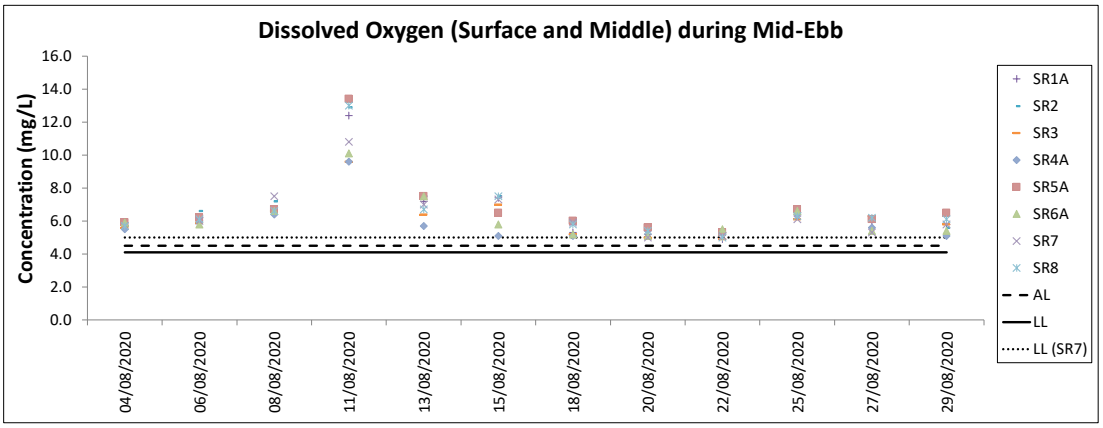
Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (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	Sunny	Moderate	16:52	6.8	Surface	1.0	0.1	357	30.7	30.7	8.1	8.1	14.2	14.2	107.6	107.6	7.4	7.1	3.6	7.1	3	3	84	86	822111	808820	<0.2	<0.2	2.2	2.0
						1.0	0.1	328	30.7		8.1		14.2		107.6		7.4		3.6		3		84				<0.2		2.0	
					Middle	3.4	0.1	325	30.3	30.3	8.0	8.0	16.5	16.5	97.7	97.7	6.7		5.7		4		86				<0.2		2.0	
						3.4	0.1	337	30.3		8.0		16.5		97.7		6.7		5.7		3		87				<0.2		1.9	
					Bottom	5.8	0.4	280	28.8	28.8	7.9	7.9	22.3	22.3	74.0	74.1	5.1	5.1	11.9		3		88				<0.2		2.0	
						5.8	0.4	281	28.8		7.9		22.3		74.1		5.1		12.0		4		89				<0.2		1.8	
IM10	Sunny	Moderate	17:00	6.9	Surface	1.0	0.2	324	30.7	30.7	8.1	8.1	14.5	14.5	109.1	109.0	7.5	7.0	3.5	5.2	2	3	84	87	822365	809797	<0.2	<0.2	2.0	2.0
						1.0	0.2	327	30.6		8.1		14.5		108.9		7.5		3.5		2		85				<0.2		2.0	
					Middle	3.5	0.3	308	29.9	29.9	8.0	8.0	17.8	17.8	95.0	95.0	6.5		3.8		2		87				<0.2		1.9	
						3.5	0.3	337	29.9		8.0		17.8		95.0		6.5		3.9		2		87				<0.2		1.9	
					Bottom	5.9	0.5	291	28.5	28.5	7.9	7.9	23.7	23.6	73.1	73.2	5.0	5.0	8.1		4		89				<0.2		1.9	
						5.9	0.5	313	28.5		7.9		23.6		73.3		5.0		8.1		4		89				<0.2		2.0	
IM11	Sunny	Moderate	17:13	7.0	Surface	1.0	0.6	301	30.0	30.0	8.1	8.1	18.4	18.4	104.3	104.2	7.1	6.4	2.6	6.5	3	3	84	87	822041	811470	<0.2	<0.2	2.2	2.0
						1.0	0.6	324	30.0		8.1		18.4		104.1		7.1		2.6		2		85				<0.2		2.0	
					Middle	3.5	0.7	297	29.0	29.0	8.0	8.0	23.0	23.0	82.9	82.9	5.6		6.0		2		87				<0.2		2.0	
						3.5	0.8	304	29.0		8.0		23.0		82.9		5.6		6.1		3		87				<0.2		2.0	
					Bottom	6.0	0.4	301	28.2	28.2	8.0	8.0	25.3	25.3	71.8	71.9	4.9	4.9	10.9		2		89				<0.2		1.8	
						6.0	0.5	325	28.2		8.0		25.3		72.0		4.9		10.8		3		89				<0.2		1.9	
IM12	Sunny	Moderate	17:21	8.2	Surface	1.0	0.5	304	29.9	29.9	8.1	8.1	19.1	19.1	105.1	105.1	7.2	6.4	2.8	7.6	3	2	85	87	821465	812048	<0.2	<0.2	1.7	1.8
						1.0	0.5	318	29.8		8.1		19.1		105.0		7.2		3.0		3		85				<0.2		1.6	
					Middle	4.1	0.6	298	28.6	28.6	8.0	8.0	23.5	23.5	81.0	80.9	5.5		7.3		2		86				<0.2		1.8	
						4.1	0.6	315	28.5		8.0		23.5		80.8		5.5		7.5		2		87				<0.2		1.8	
					Bottom	7.2	0.4	306	27.8	27.8	7.9	7.9	26.9	26.9	66.1	66.2	4.5	4.5	12.2		<2		89				<0.2		1.8	
						7.2	0.4	308	27.8		7.9		26.9		66.2		4.5		12.4		<2		89				<0.2		1.8	
SR1A	Sunny	Moderate	17:38	4.9	Surface	1.0	-	-	30.1	30.1	8.1	8.1	19.8	19.8	109.6	109.6	7.4	7.4	2.9	5.9	2	3	-	-	819974	812661	-	-	-	-
						1.0	-	-	30.1		8.1		19.8		109.6		7.4		2.9		3		-				-		-	
					Middle	2.5	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.5	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	-	-	29.9	29.9	8.1	8.1	21.6	21.6	100.8	100.8	6.8	6.8	9.0		3		-				-		-	
						3.9	-	-	29.9		8.1		21.7		100.8		6.8		8.9		3		-				-		-	
SR2	Sunny	Moderate	17:51	4.5	Surface	1.0	0.4	344	29.4	29.4	8.1	8.1	21.5	21.5	101.0	101.0	6.9	6.9	3.0	4.8	3	3	86	87	821462	814171	<0.2	<0.2	1.4	1.4
						1.0	0.4	316	29.4		8.1		21.5		100.9		6.8		3.1		3		87				<0.2		1.3	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.2	25	28.5	28.5	8.0	8.0	24.6	24.6	80.2	80.3	5.4	5.4	6.5		4		88				<0.2		1.4	
						3.5	0.2	26	28.5		8.0		24.6		80.3		5.4		6.5		3		88				<0.2		1.3	
SR3	Sunny	Moderate	16:39	8.0	Surface	1.0	0.2	214	30.8	30.8	8.1	8.1	13.4	13.4	102.9	102.8	7.1	6.5	4.0	6.0	4	4	-	-	822164	807594	-	-	-	-
						1.0	0.2	234	30.8		8.1		13.4		102.7		7.1		4.0		4		-				-		-	
					Middle	4.0	0.2	176	29.3	29.3	7.9	7.9	18.1	18.1	83.9	83.8	5.8		4.9		4		-				-		-	
						4.0	0.2	177	29.2		7.9		18.1		83.6		5.8		5.0		4		-				-		-	
					Bottom	7.0	0.2	183	28.6	28.6	7.9	7.9	22.7	22.7	69.7	69.7	4.8	4.8	9.0		5		-				-		-	
						7.0	0.2	194	28.6		7.9		22.7		69.7		4.8		9.2		4		-				-		-	
SR4A	Cloudy	Moderate	17:50	8.8	Surface	1.0	0.2	47	30.4	30.4	8.1	8.1	22.4	22.4	114.5	114.5	7.6	7.4	10.8	9.4	7	9	-	-	817196	807791	-	-	-	-
						1.0	0.2	48	30.4		8.1		22.5		114.4		7.6		10.8		6		-				-		-	
					Middle	4.4	0.3	43	30.3	30.3	8.1	8.1	23.3	23.3	109.0	108.8	7.2		9.6		9		-				-		-	
						4.4	0.4	45	30.2		8.1		23.3		108.5		7.2		9.9		10		-				-		-	
					Bottom	7.8	0.3	41	29.7	29.7	8.0	8.0	24.1	24.1	98.2	98.3	6.5	6.6	7.9		12		-				-		-	
						7.8	0.3	41	29.7		8.0		24.1		98.4		6.6		7.7		12		-				-		-	
SR5A	Cloudy	Moderate	18:06	3.3	Surface	1.0	0.0	144	30.6	30.6	8.1	8.1	22.5	22.5	124.2	124.2	8.2	8.2	8.6	9.4	10	10	-	-	816591	810710	-	-	-	-
						1.0	0.0	151	30.6		8.1		22.5		124.2		8.2		8.7		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.3	0.0	8	30.5	30.5	8.1	8.1	22.6	22.6	116.8	116.8	7.7	7.7	9.8		10		-				-		-	
						2.3	0.0	8	30.5		8.1		22.6		116.7		7.7		10.4		11		-				-		-	
SR6A	Cloudy	Moderate	18:34	4.2	Surface	1.0	0.1	197	30.6	30.6	8.0	8.0	21.1	21.2	124.5	124.5	8.3	8.3	7.4	10.6	8	8	-	-	817949	814728	-	-	-	-
						1.0	0.1	214	30.6		8.0		21.2		124.4		8.3		7.9		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.1	207	30.6	30.6	8.0	8.0	21.2	21.2	123.6	123.6	8.2	8.2	13.6		8		-				-		-	
						3.2	0.1	208	30.6		8.0		21.2		123.5		8.2		13.6		7		-				-		-	
SR7	Cloudy	Moderate	18:52	15.4	Surface	1.0	0.1	349	27.9	27.9	8.0	8.0	27.1	27.1	78.6	78.6	5.3	5.2	2.1	3.3	3	3	-	-	823653	823761	-	-	-	-
						1.0	0.1	321	27.9		8.0		27.1		78.6		5.3		2.1		3		-				-		-	
					Middle	7.7	0.1	29	27.4	27.4	8.0	8.0	28.3	28.4	73.5	73.5	5.0		3.4		3		-				-		-	
						7.7	0.1	30	27.4		8.0		28.5		73.4		5.0		3.4		2		-				-		-	
					Bottom	14.4	0.1	74	26.5	26.5	8.0	8.0	30.7	30.7	65.8	66.0	4.5	4.5	4.3		2		-				-		-	
						14.4	0.1	76	26.5		8.0		30.7		66.1		4.5		4.4		2		-				-		-	
SR8	Sunny	Moderate	17:29	4.7	Surface	1.0	-	-	29.9	29.9	8.0	8.0	19.5	19.5	98.0	97.8	6.7	6.7	5.1	7.6	8	9	-	-	820407	811609	-	-	-	-
						1.0	-	-	29.8		8.0		19.5		97.6		6.7		5.2		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	-	-	29.0	29.0	8.0	8.0	22.8	22.8	79.8	79.7	5.4	5.4	10.1		10		-				-		-	
						3.7	-	-	29.0		8.0		22.8		79.5		5.4		10.2		10		-				-		-	

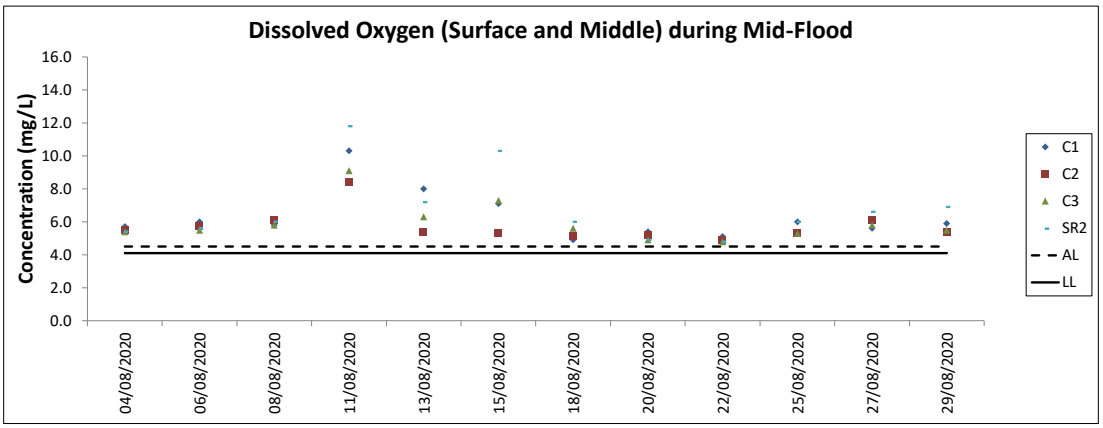
DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**


Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
04/08/2020
06/08/2020
08/08/2020
11/08/2020
13/08/2020
15/08/2020
18/08/2020
20/08/2020
22/08/2020
25/08/2020
27/08/2020
29/08/2020
C1
C2
C3
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
04/08/2020
06/08/2020
08/08/2020
11/08/2020
13/08/2020
15/08/2020
18/08/2020
20/08/2020
22/08/2020
25/08/2020
27/08/2020
29/08/2020
IM1
IM2
IM3
IM4
IM5
IM6
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
04/08/2020
06/08/2020
08/08/2020
11/08/2020
13/08/2020
15/08/2020
18/08/2020
20/08/2020
22/08/2020
25/08/2020
27/08/2020
29/08/2020
IM7
IM8
IM9
IM10
IM11
IM12
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
04/08/2020
06/08/2020
08/08/2020
11/08/2020
13/08/2020
15/08/2020
18/08/2020
20/08/2020
22/08/2020
25/08/2020
27/08/2020
29/08/2020
SR1A
SR2
SR3
SR4A
SR5A
SR6A
SR7
SR8
AL
LL
LL (SR7)


Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
04/08/2020
06/08/2020
08/08/2020
11/08/2020
13/08/2020
15/08/2020
18/08/2020
20/08/2020
22/08/2020
25/08/2020
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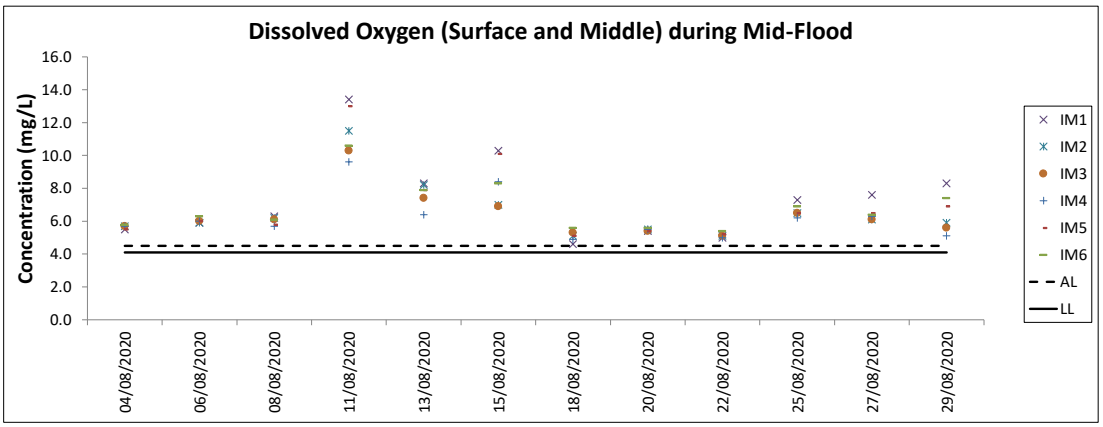
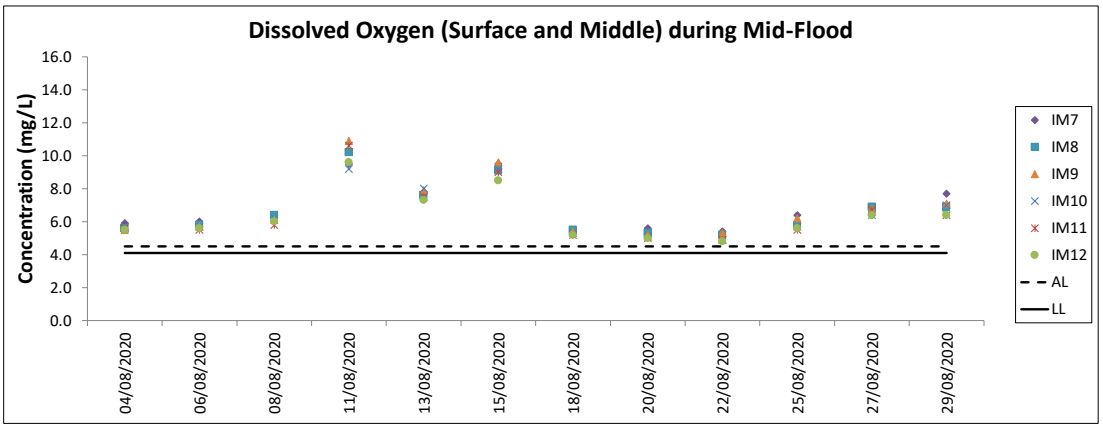
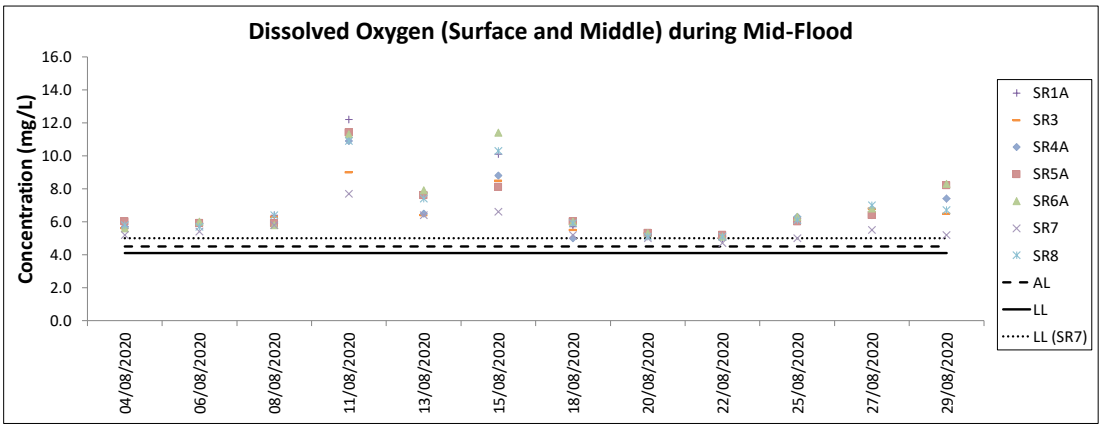
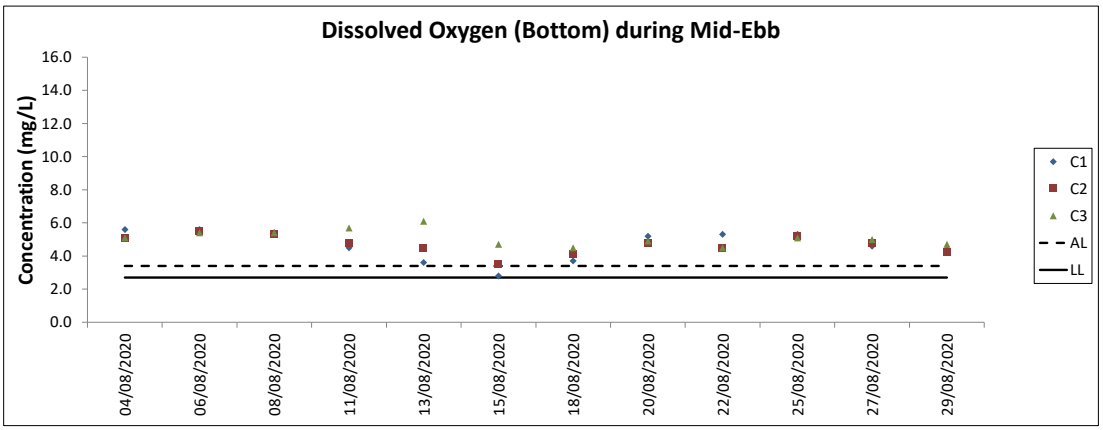
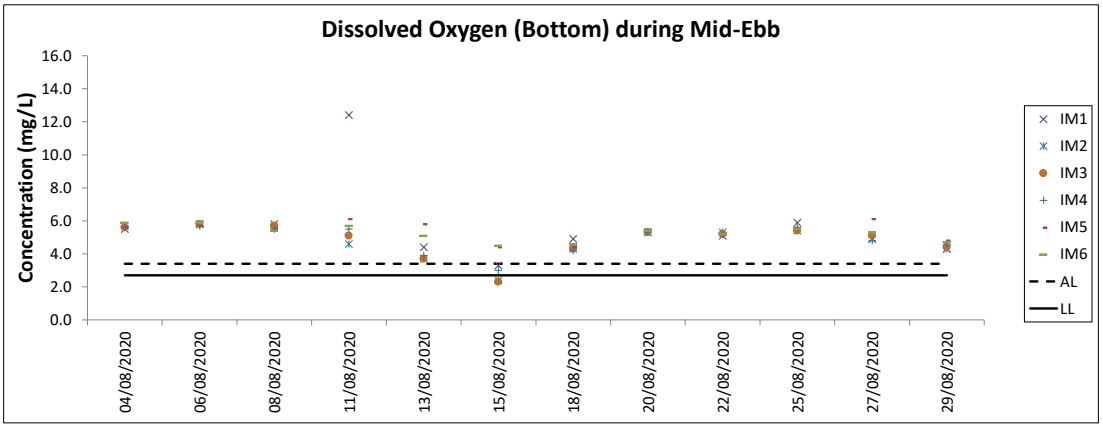
29/08/2020
C1
C2
C3
SR2
AL
LL

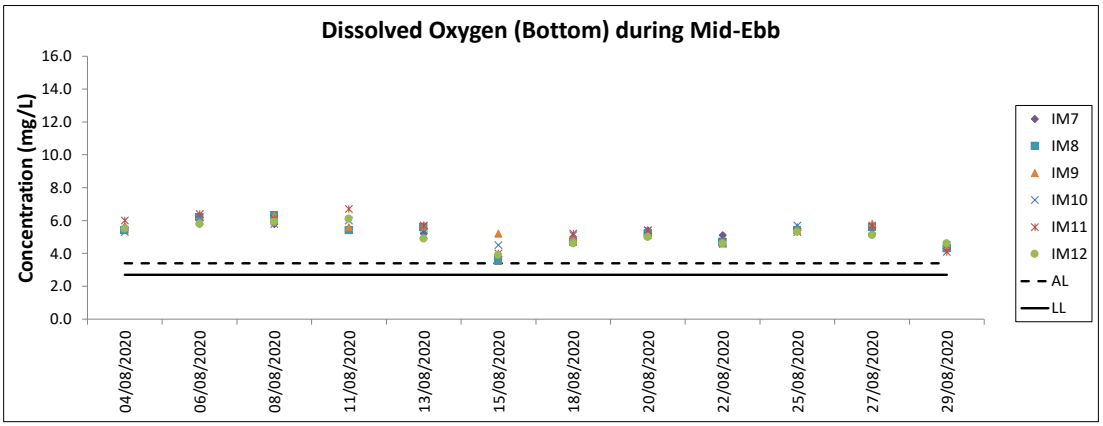

Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
04/08/2020
06/08/2020
08/08/2020
11/08/2020
13/08/2020
15/08/2020
18/08/2020
20/08/2020
22/08/2020
25/08/2020
27/08/2020
29/08/2020
IM1
IM2
IM3
IM4
IM5
IM6
AL
LL

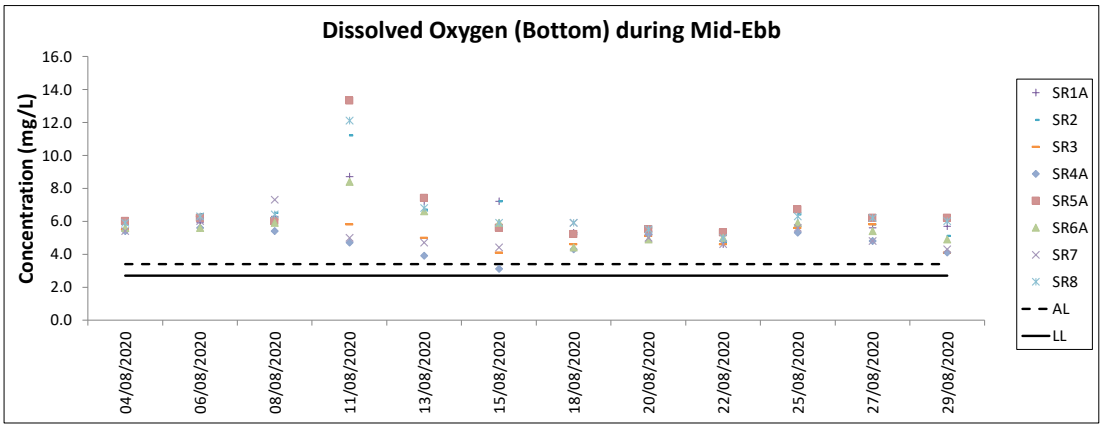

Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
04/08/2020
06/08/2020
08/08/2020
11/08/2020
13/08/2020
15/08/2020
18/08/2020
20/08/2020
22/08/2020
25/08/2020
27/08/2020
29/08/2020
IM7
IM8
IM9
IM10
IM11
IM12
AL
LL

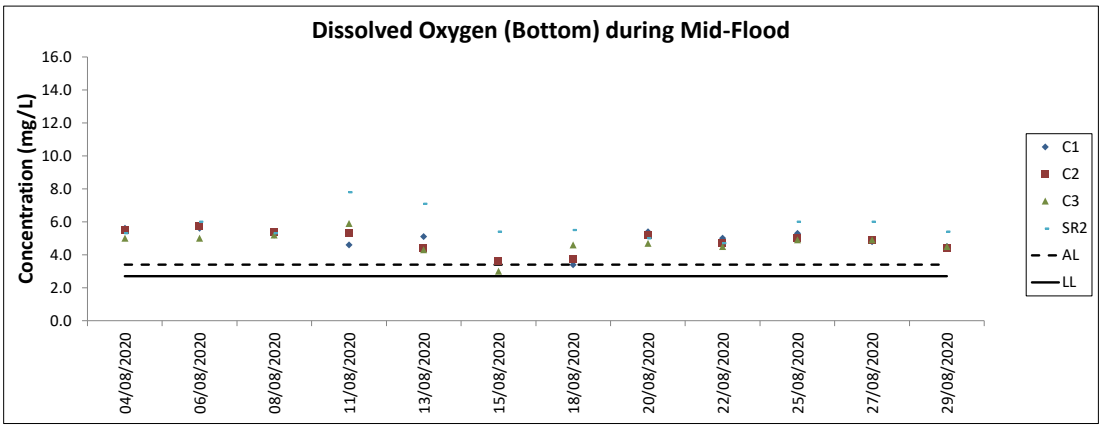

Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
04/08/2020
06/08/2020
08/08/2020
11/08/2020
13/08/2020
15/08/2020
18/08/2020
20/08/2020
22/08/2020
25/08/2020
27/08/2020
29/08/2020
SR1A
SR3
SR4A
SR5A
SR6A
SR7
SR8
AL
LL
LL (SR7)

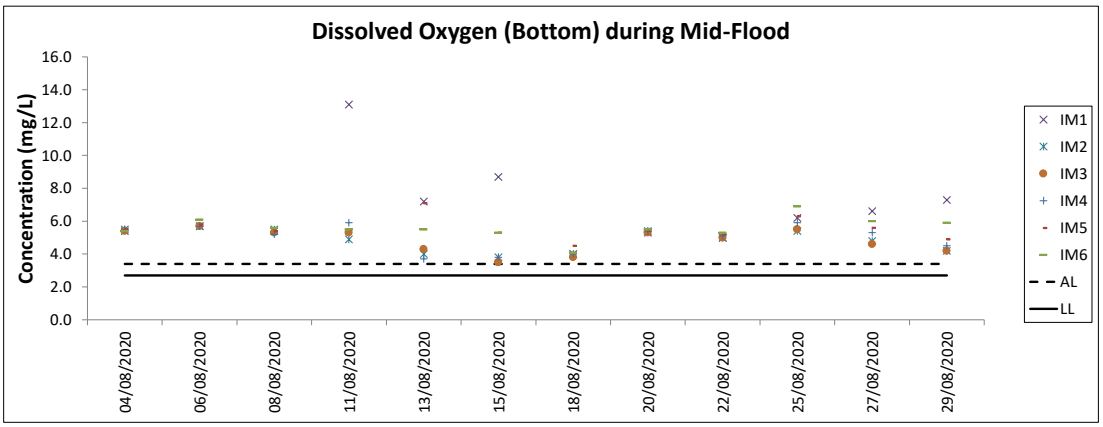

Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
04/08/2020
06/08/2020
08/08/2020
11/08/2020
13/08/2020
15/08/2020
18/08/2020
20/08/2020
22/08/2020
25/08/2020
27/08/2020
29/08/2020
C1
C2
C3
AL
LL

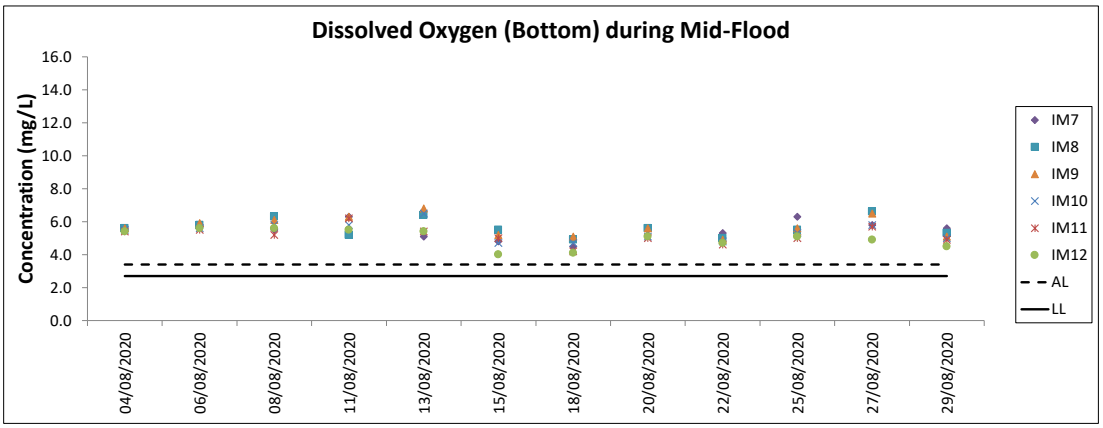

Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
04/08/2020
06/08/2020
08/08/2020
11/08/2020
13/08/2020
15/08/2020
18/08/2020
20/08/2020
22/08/2020
25/08/2020
27/08/2020
29/08/2020
IM1
IM2
IM3
IM4
IM5
IM6
AL
LL

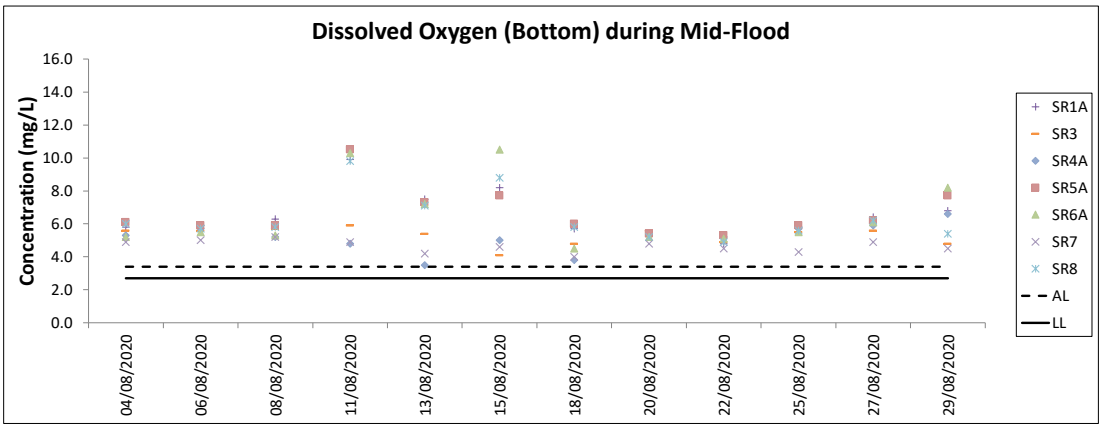

Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
04/08/2020
06/08/2020
08/08/2020
11/08/2020
13/08/2020
15/08/2020
18/08/2020
20/08/2020
22/08/2020
25/08/2020
27/08/2020
29/08/2020
IM7
IM8
IM9
IM10
IM11
IM12
AL
LL

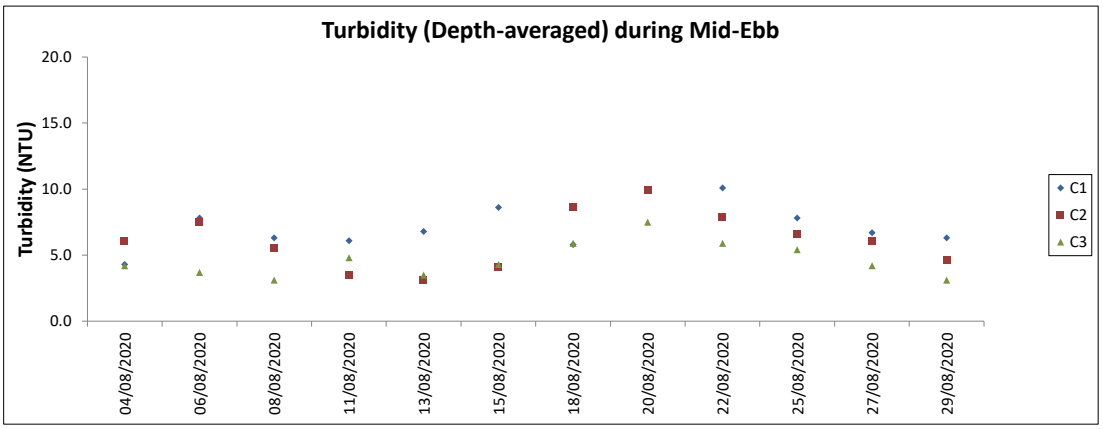

Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
04/08/2020
06/08/2020
08/08/2020
11/08/2020
13/08/2020
15/08/2020
18/08/2020
20/08/2020
22/08/2020
25/08/2020
27/08/2020
29/08/2020
SR1A
SR2
SR3
SR4A
SR5A
SR6A
SR7
SR8
AL
LL

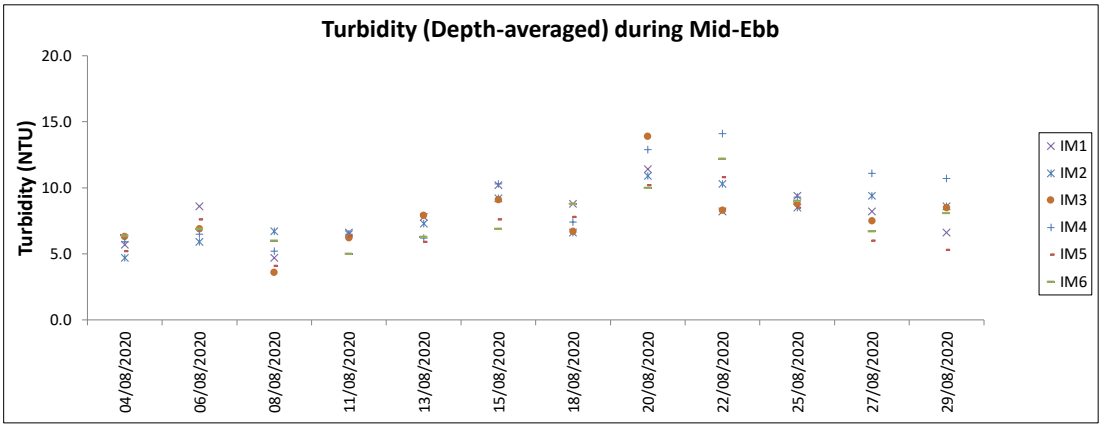

Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
04/08/2020
06/08/2020
08/08/2020
11/08/2020
13/08/2020
15/08/2020
18/08/2020
20/08/2020
22/08/2020
25/08/2020
27/08/2020
29/08/2020
C1
C2
C3
SR2
AL
LL

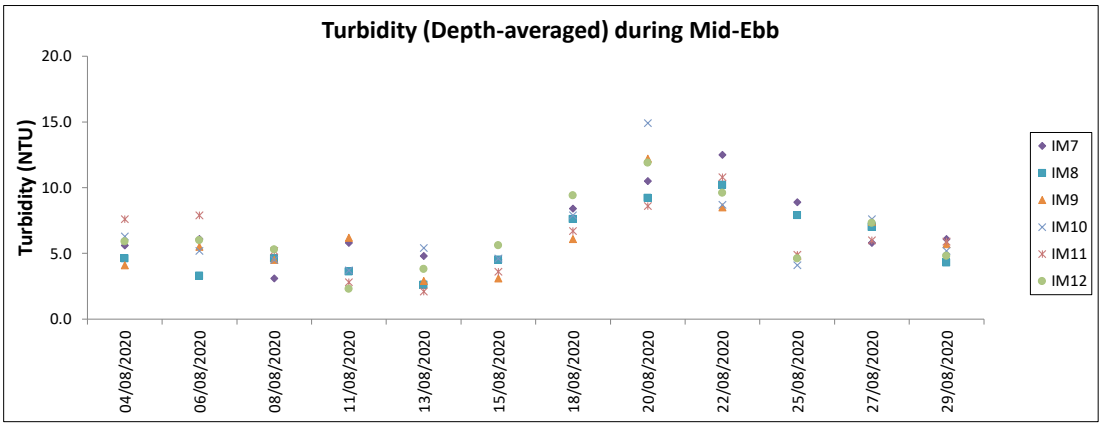

Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
04/08/2020
06/08/2020
08/08/2020
11/08/2020
13/08/2020
15/08/2020
18/08/2020
20/08/2020
22/08/2020
25/08/2020
27/08/2020
29/08/2020
IM1
IM2
IM3
IM4
IM5
IM6
AL
LL

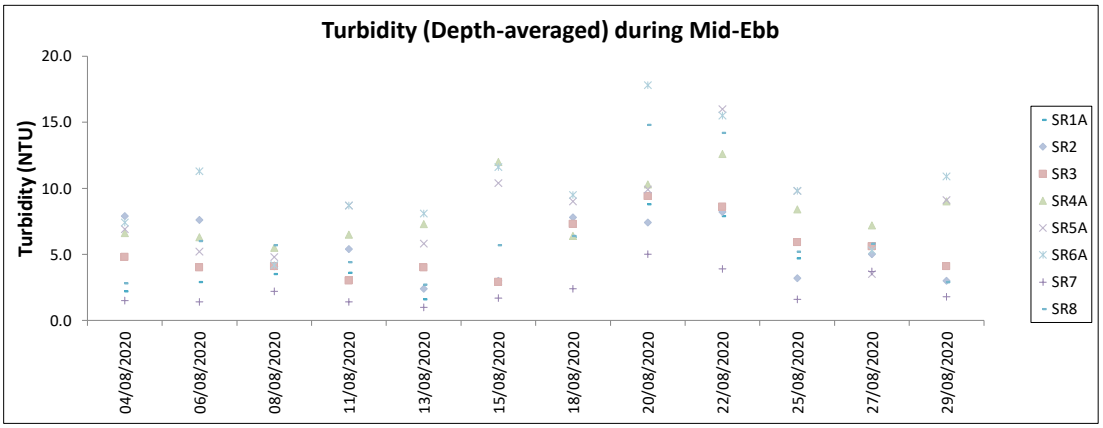

Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
04/08/2020
06/08/2020
08/08/2020
11/08/2020
13/08/2020
15/08/2020
18/08/2020
20/08/2020
22/08/2020
25/08/2020
27/08/2020
29/08/2020
IM7
IM8
IM9
IM10
IM11
IM12
AL
LL


Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
04/08/2020
06/08/2020
08/08/2020
11/08/2020
13/08/2020
15/08/2020
18/08/2020
20/08/2020
22/08/2020
25/08/2020
27/08/2020
29/08/2020
SR1A
SR3
SR4A
SR5A
SR6A
SR7
SR8
AL
LL

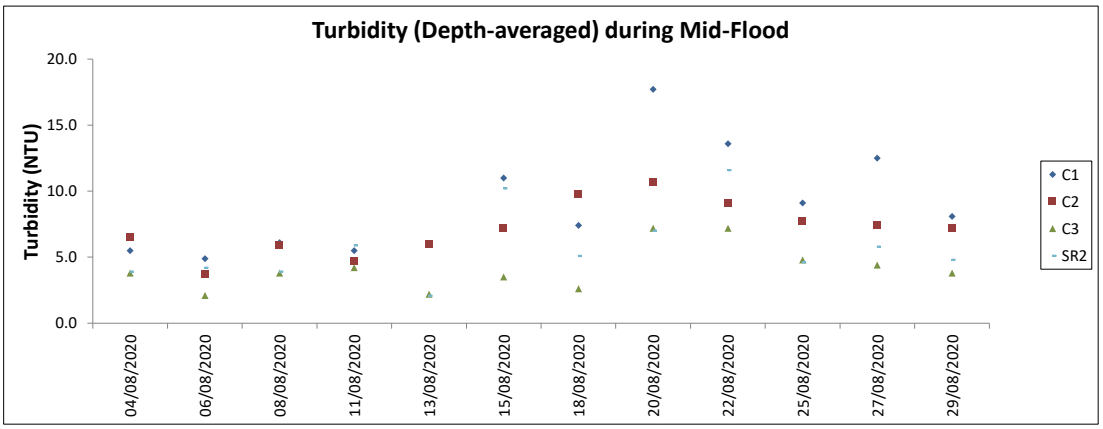


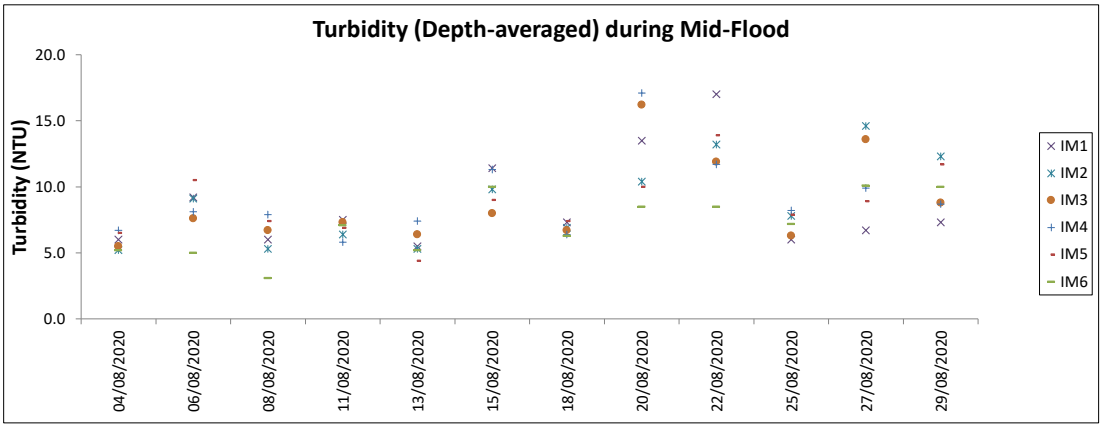


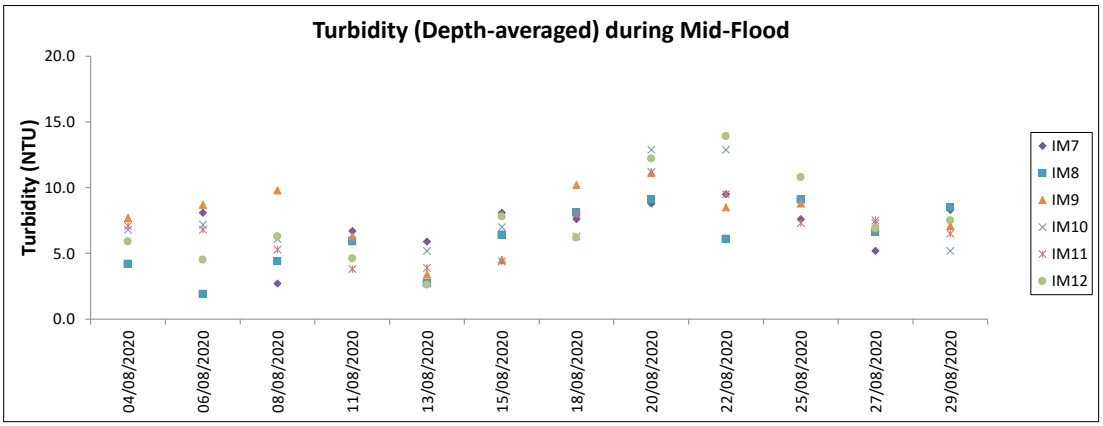


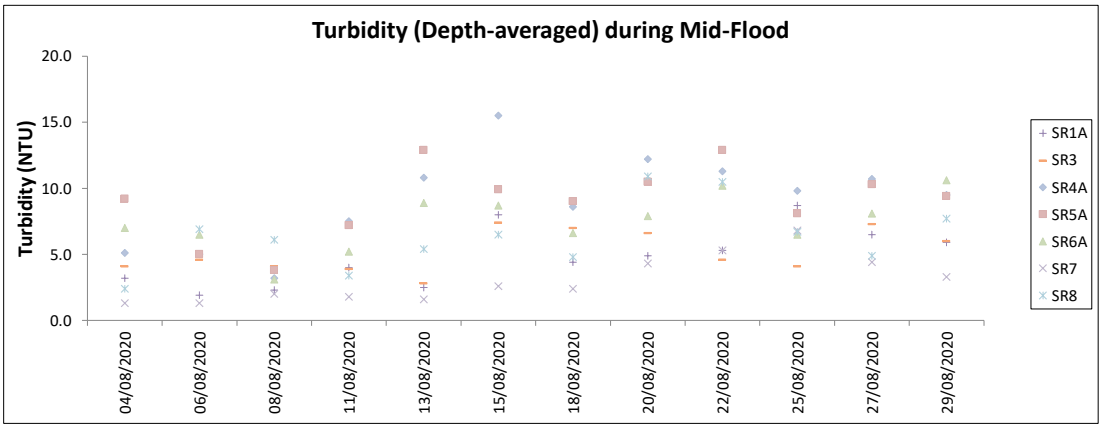


Note: The Action and Limit Level of turbidity can be referred to Table 4.2 of the monthly EM&A report.

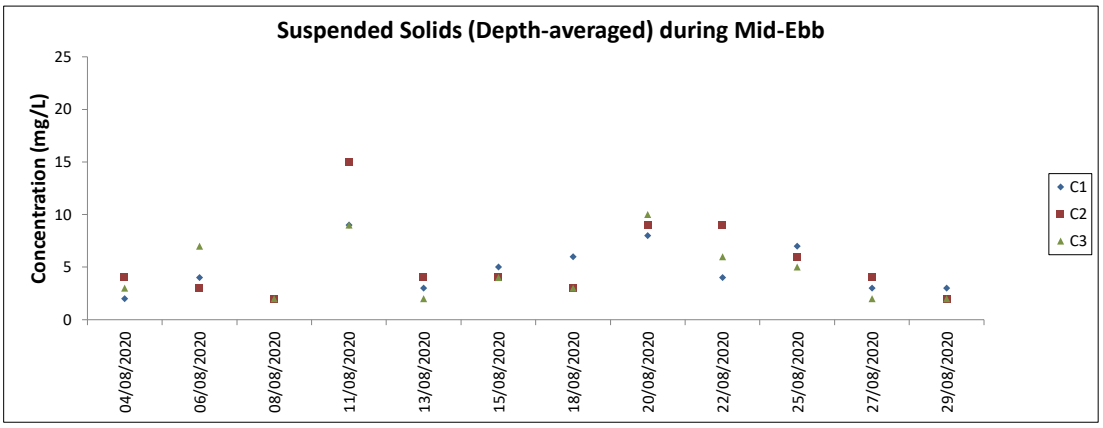


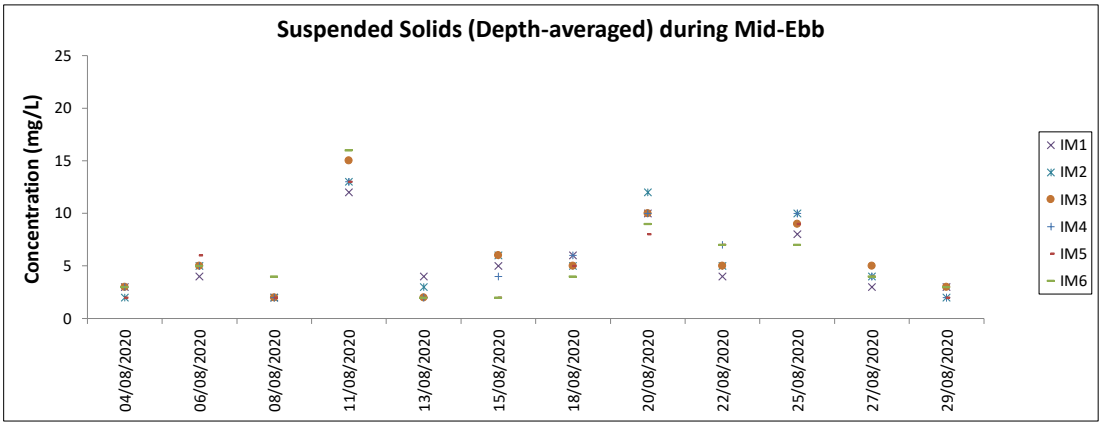


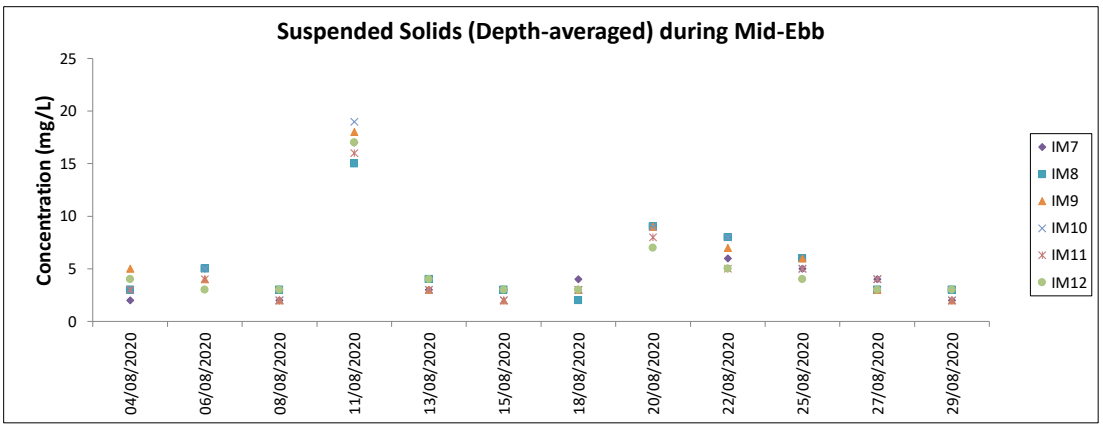


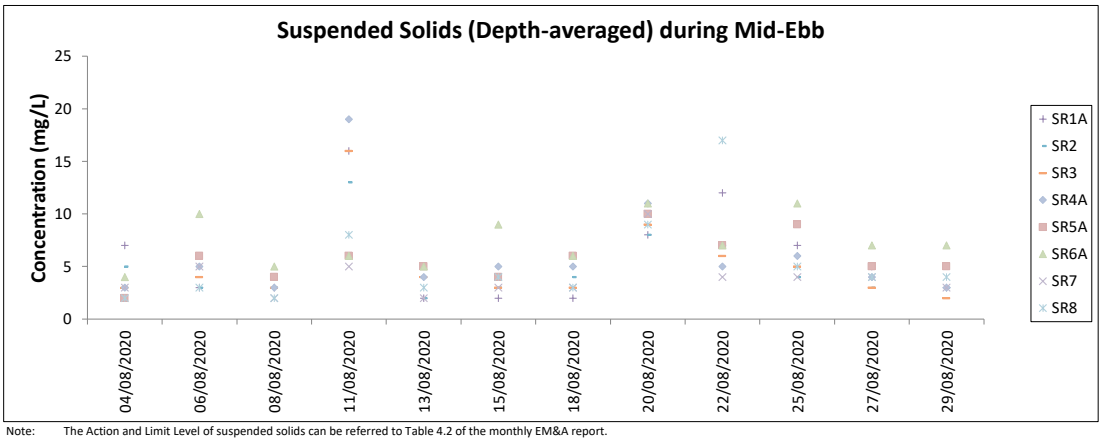


Note: The Action and Limit Level of turbidity can be referred to Table 4.2 of the monthly EM&A report.

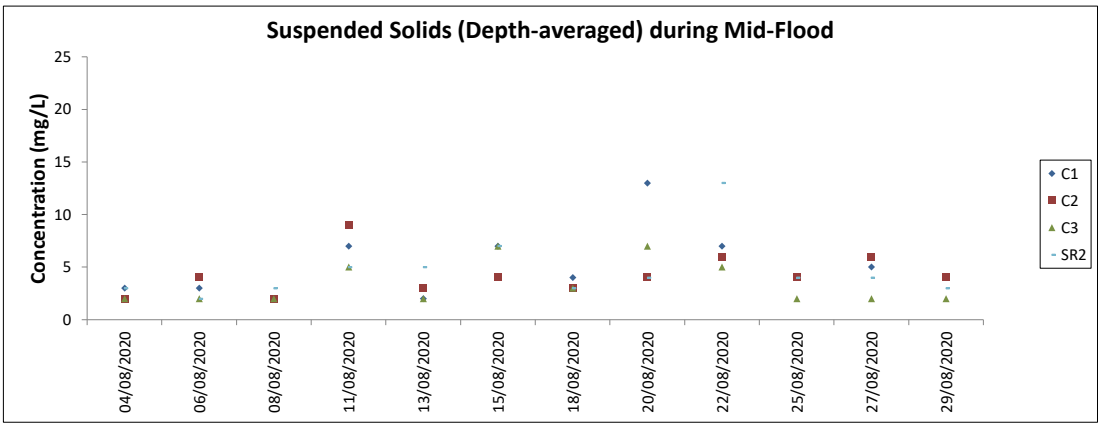


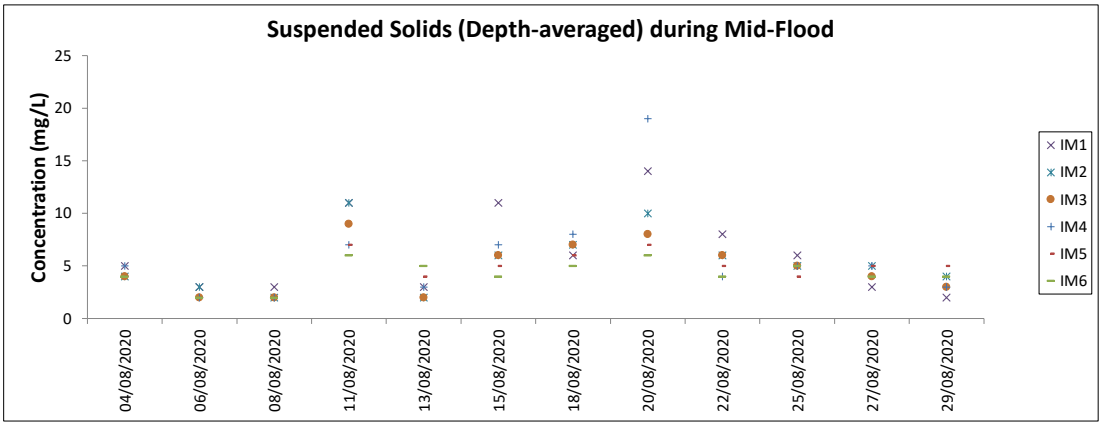


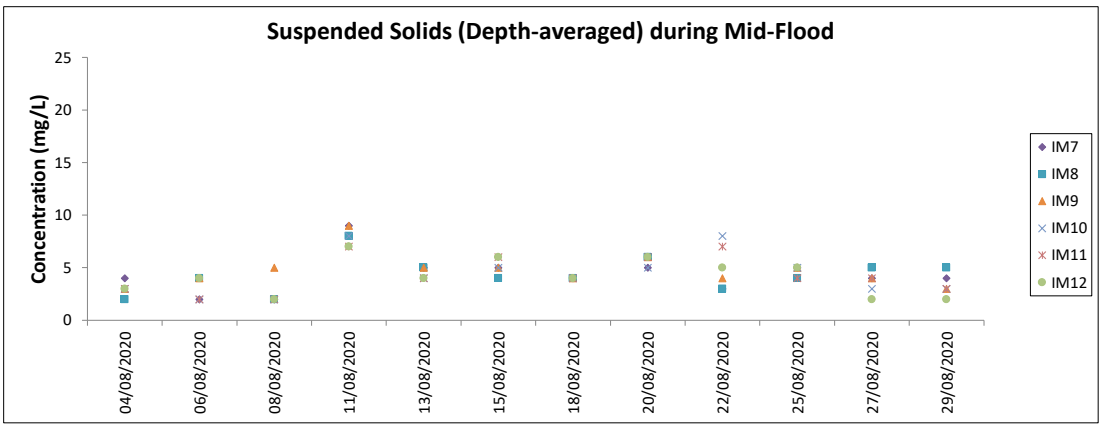


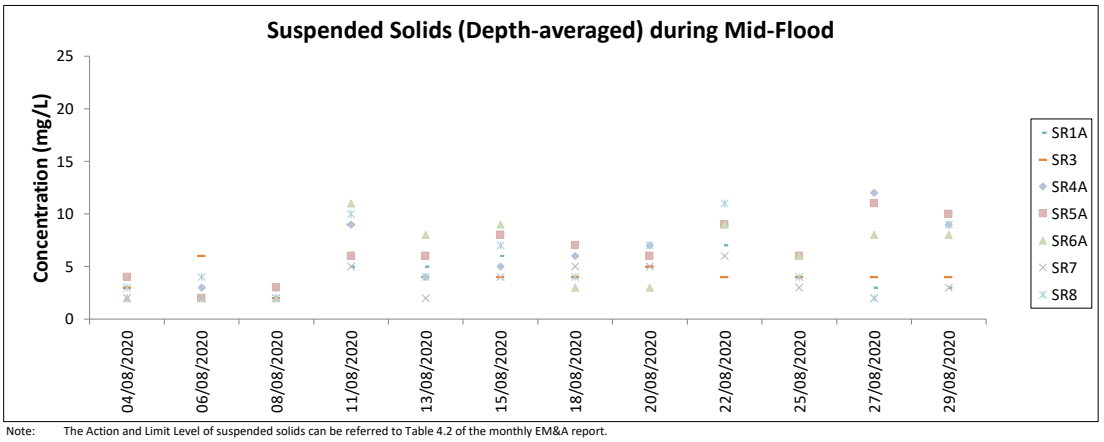


Note: The Action and Limit Level of suspended solids can be referred to Table 4.2 of the monthly EM&A report.

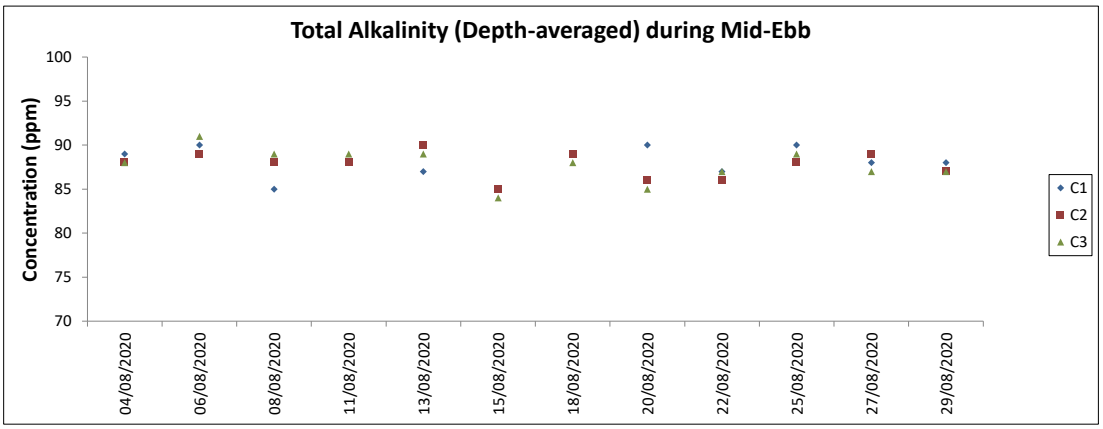


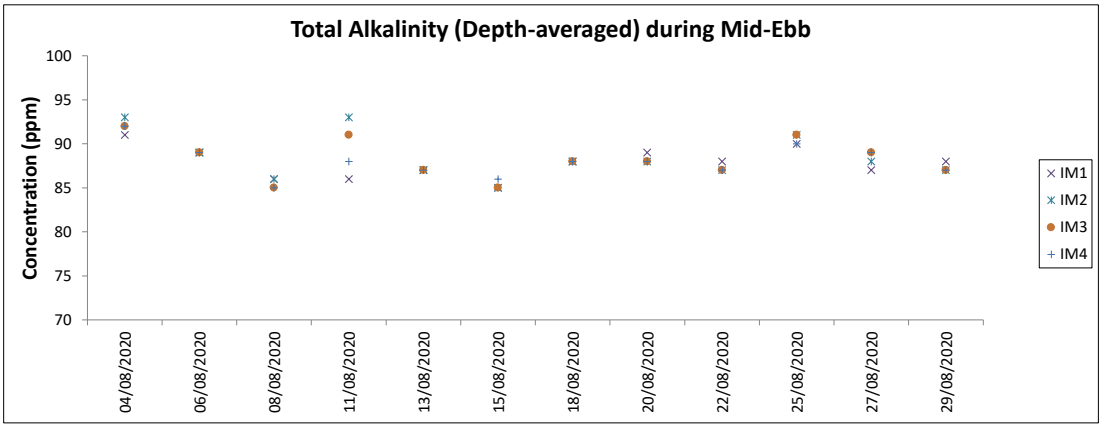


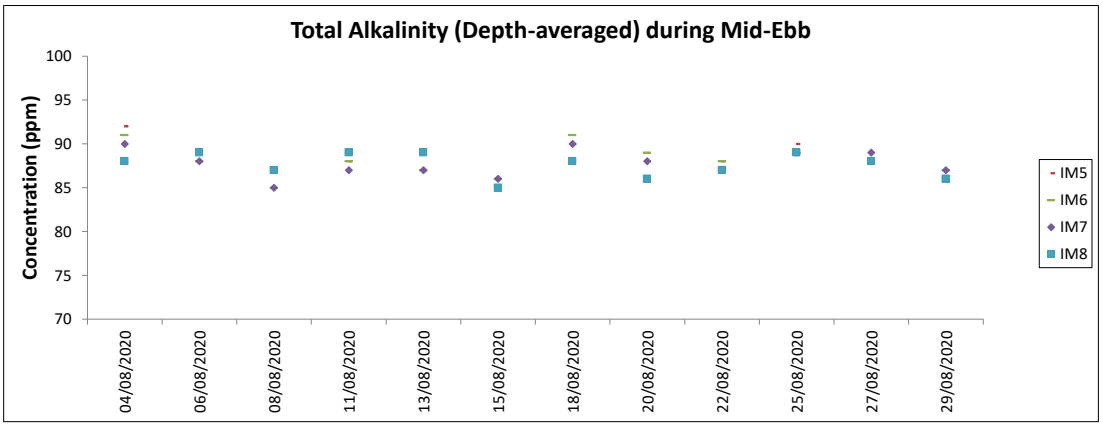


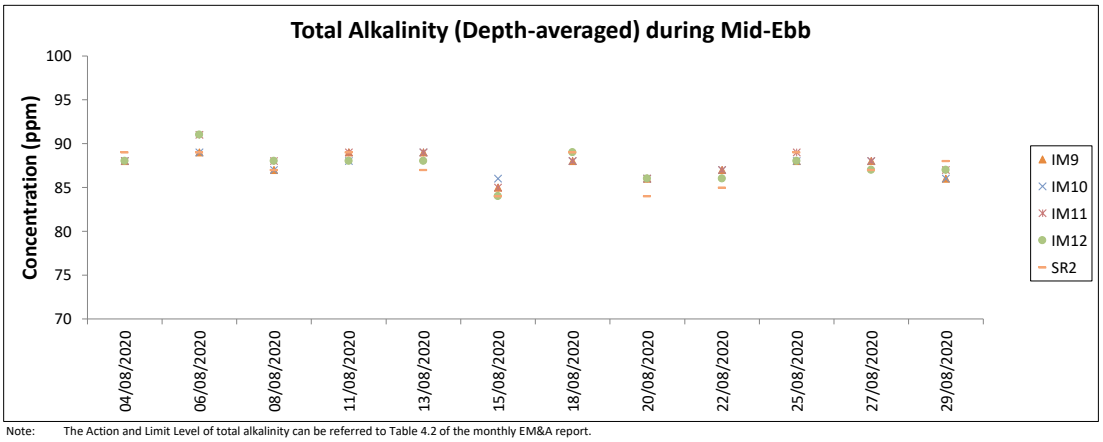


Note: The Action and Limit Level of suspended solids can be referred to Table 4.2 of the monthly EM&A report.

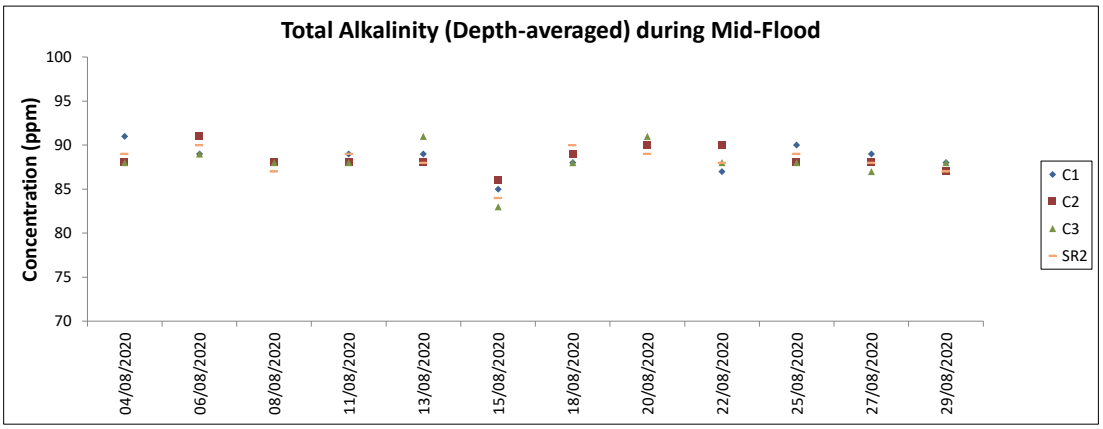


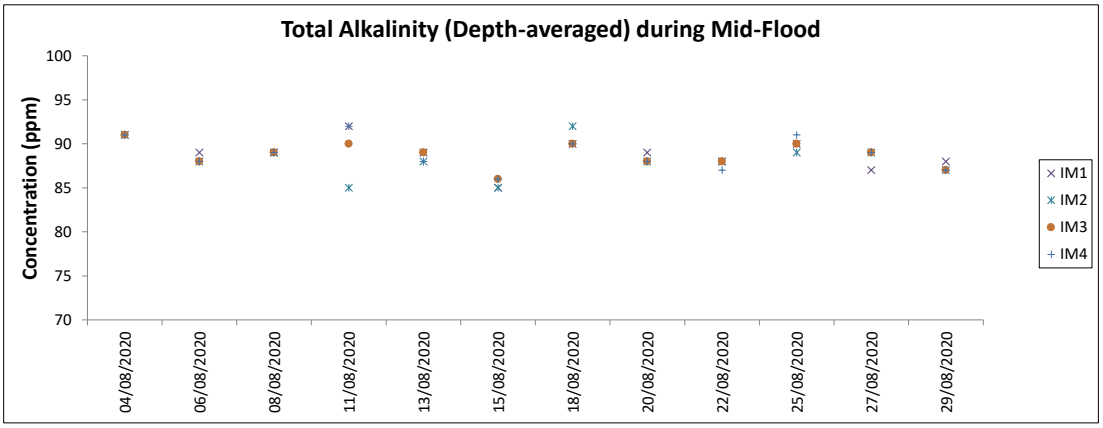


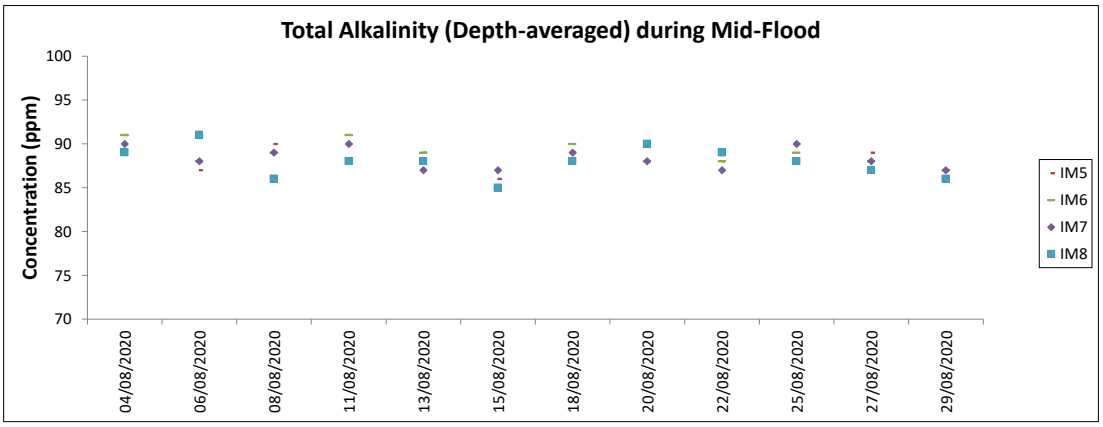


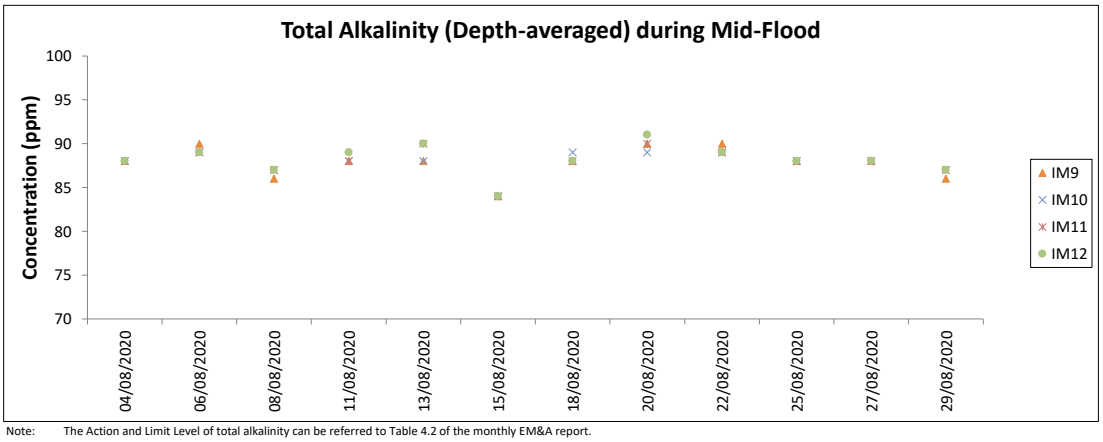


Note: The Action and Limit Level of total alkalinity can be referred to Table 4.2 of the monthly EM&A report.

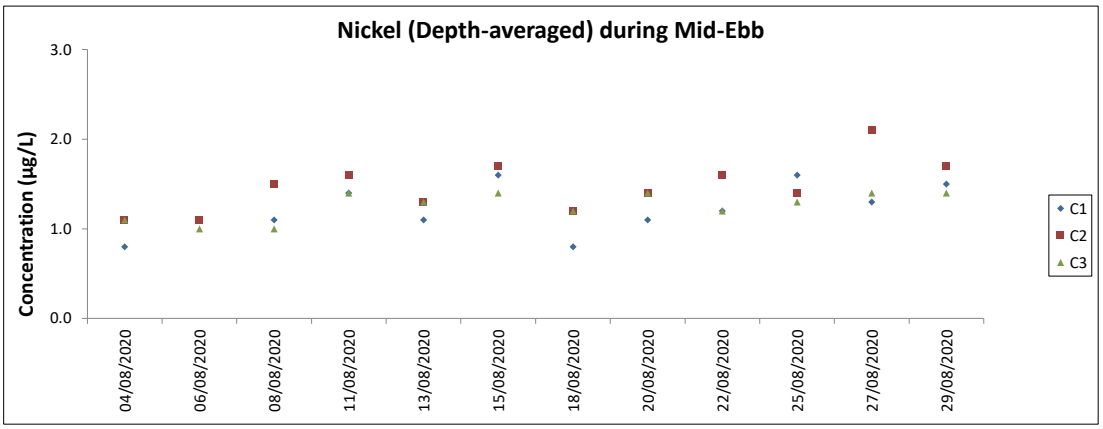


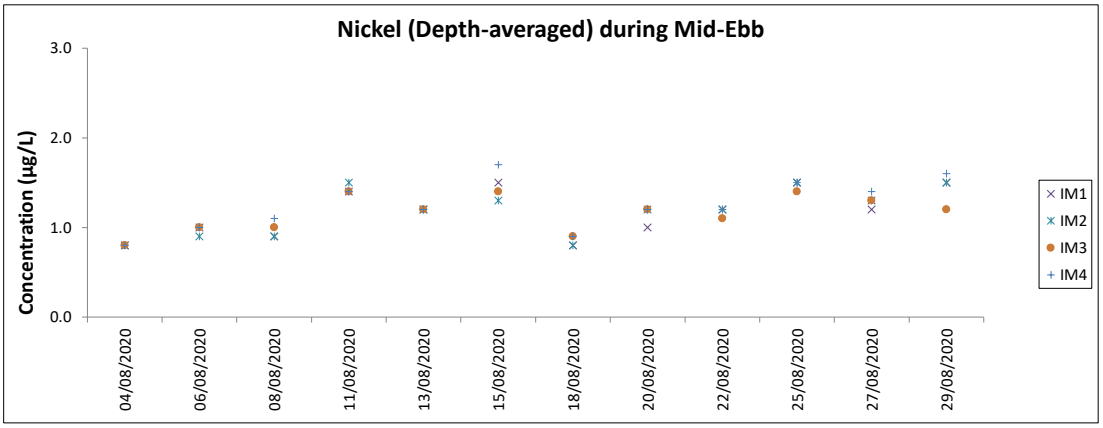


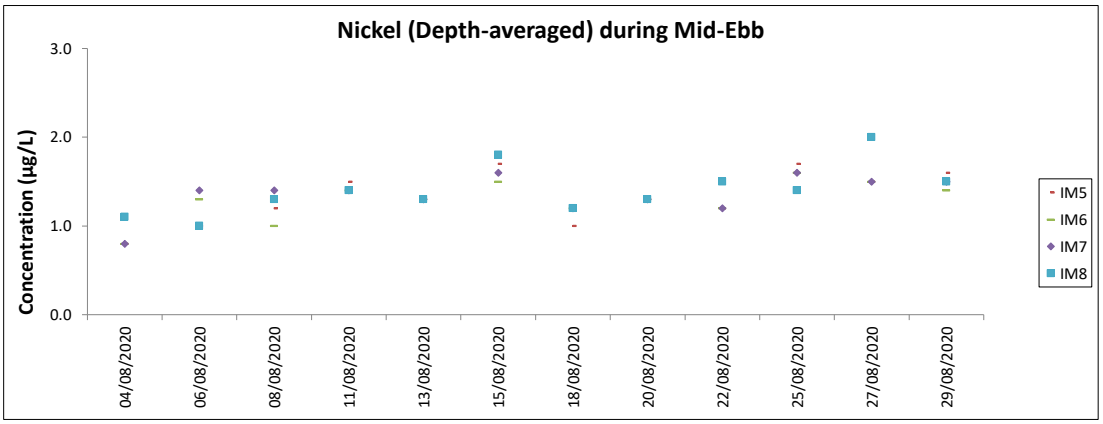


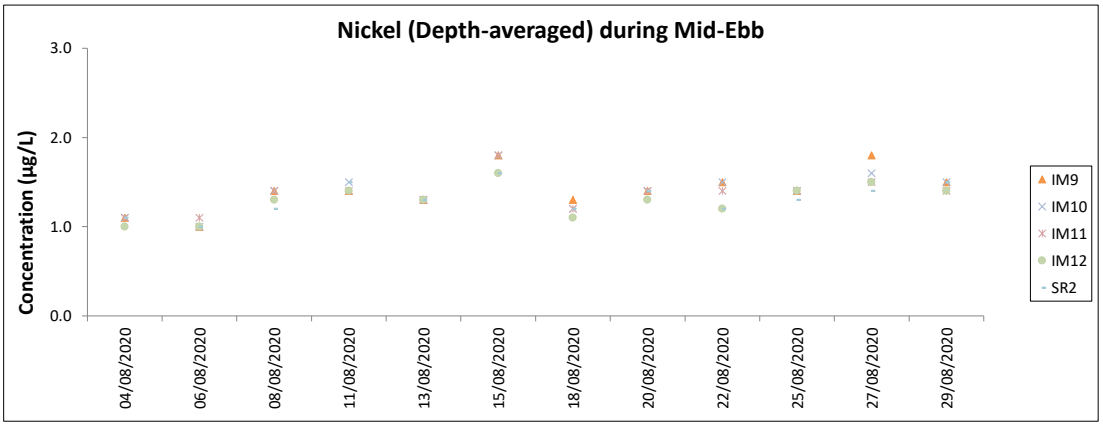


Note: The Action and Limit Level of total alkalinity can be referred to Table 4.2 of the monthly EM&A report.

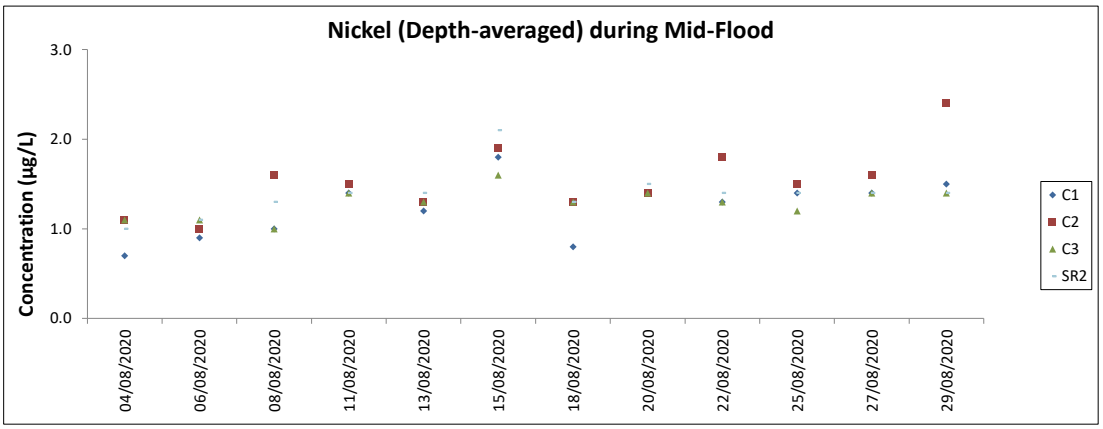


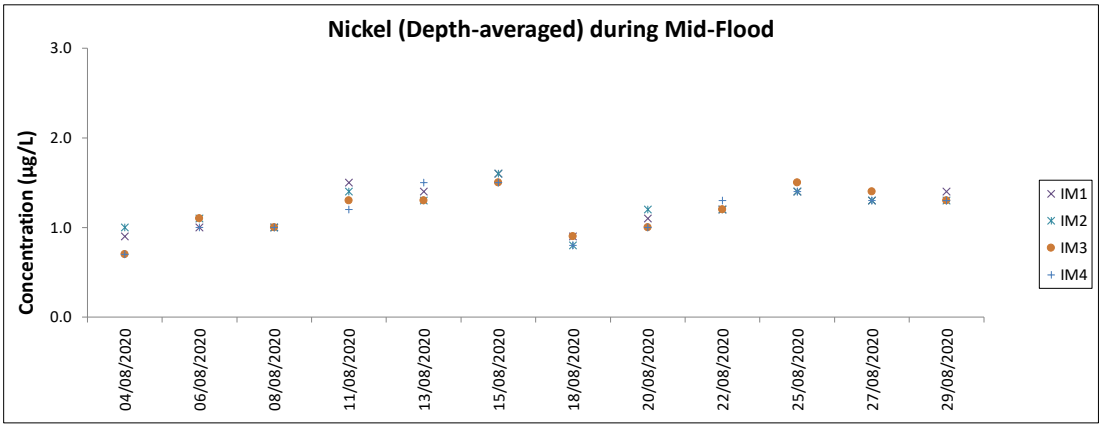


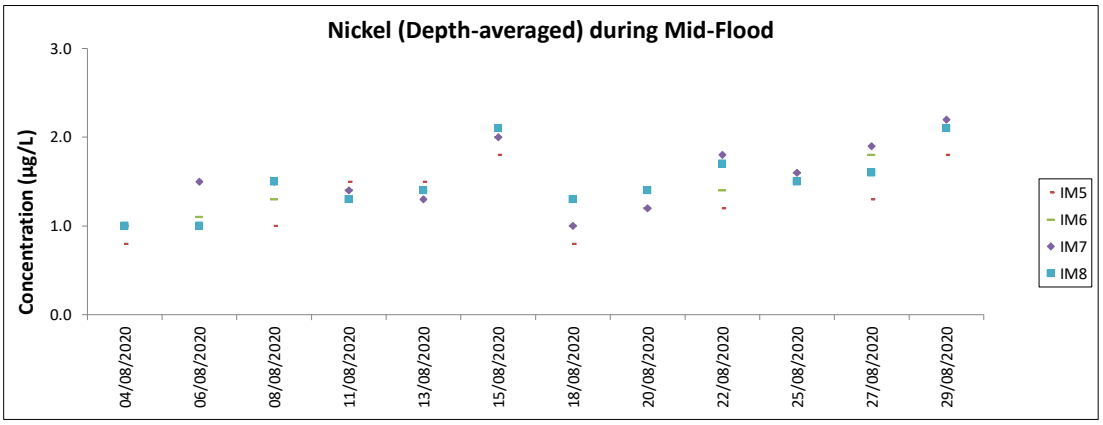


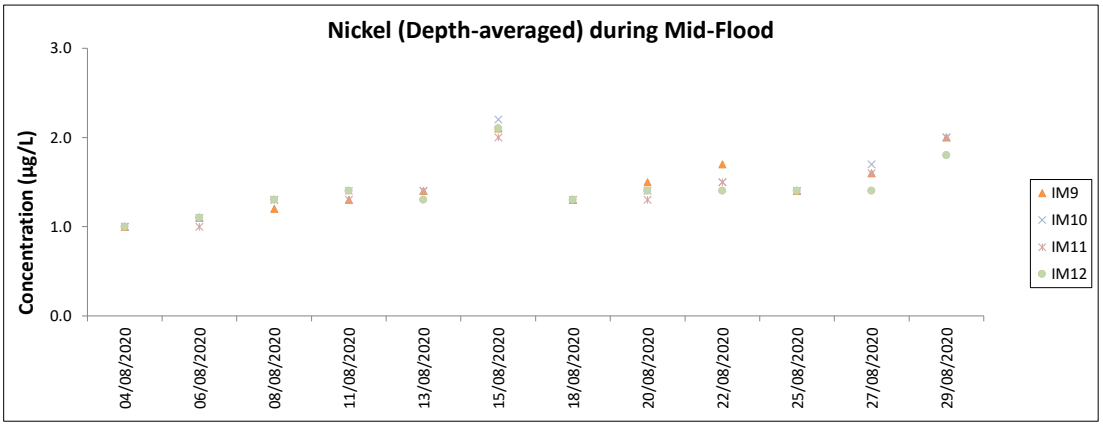


Note: The Action and Limit Level of nickel can be referred to Table 4.2 of the monthly EM&A report.
All chromium results in the reporting period was below the reporting limit 0.2 µg/L.









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
9-Jun-20	NWL	2	2.300	SUMMER	32166	3RS ET	P
9-Jun-20	NWL	3	61.400	SUMMER	32166	3RS ET	P
9-Jun-20	NWL	2	1.500	SUMMER	32166	3RS ET	S
9-Jun-20	NWL	3	10.200	SUMMER	32166	3RS ET	S
11-Jun-20	AW	2	4.760	SUMMER	32166	3RS ET	P
11-Jun-20	WL	2	1.520	SUMMER	32166	3RS ET	P
11-Jun-20	WL	3	16.937	SUMMER	32166	3RS ET	P
11-Jun-20	WL	2	1.060	SUMMER	32166	3RS ET	S
11-Jun-20	WL	3	7.545	SUMMER	32166	3RS ET	S
16-Jun-20	AW	3	4.970	SUMMER	32166	3RS ET	P
16-Jun-20	WL	2	3.459	SUMMER	32166	3RS ET	P
16-Jun-20	WL	3	15.008	SUMMER	32166	3RS ET	P
16-Jun-20	WL	4	1.050	SUMMER	32166	3RS ET	P
16-Jun-20	WL	2	1.080	SUMMER	32166	3RS ET	S
16-Jun-20	WL	3	8.877	SUMMER	32166	3RS ET	S
17-Jun-20	NWL	2	3.700	SUMMER	32166	3RS ET	P
17-Jun-20	NWL	3	52.050	SUMMER	32166	3RS ET	P
17-Jun-20	NWL	4	7.600	SUMMER	32166	3RS ET	P
17-Jun-20	NWL	2	1.200	SUMMER	32166	3RS ET	S
17-Jun-20	NWL	3	8.000	SUMMER	32166	3RS ET	S
17-Jun-20	NWL	4	3.200	SUMMER	32166	3RS ET	S
18-Jun-20	SWL	2	5.388	SUMMER	32166	3RS ET	P
18-Jun-20	SWL	3	34.630	SUMMER	32166	3RS ET	P
18-Jun-20	SWL	4	12.720	SUMMER	32166	3RS ET	P
18-Jun-20	SWL	2	3.312	SUMMER	32166	3RS ET	S
18-Jun-20	SWL	3	11.120	SUMMER	32166	3RS ET	S
18-Jun-20	SWL	4	1.870	SUMMER	32166	3RS ET	S
22-Jun-20	SWL	2	9.376	SUMMER	32166	3RS ET	P
22-Jun-20	SWL	3	31.756	SUMMER	32166	3RS ET	P
22-Jun-20	SWL	4	3.650	SUMMER	32166	3RS ET	P
22-Jun-20	SWL	2	3.471	SUMMER	32166	3RS ET	S
22-Jun-20	SWL	3	10.290	SUMMER	32166	3RS ET	S
23-Jun-20	NEL	2	21.700	SUMMER	32166	3RS ET	P
23-Jun-20	NEL	3	15.280	SUMMER	32166	3RS ET	P
23-Jun-20	NEL	2	6.500	SUMMER	32166	3RS ET	S
23-Jun-20	NEL	3	3.820	SUMMER	32166	3RS ET	S
24-Jun-20	NEL	2	31.670	SUMMER	32166	3RS ET	P
24-Jun-20	NEL	3	5.950	SUMMER	32166	3RS ET	P
24-Jun-20	NEL	2	6.880	SUMMER	32166	3RS ET	S
24-Jun-20	NEL	3	3.100	SUMMER	32166	3RS ET	S
6-Jul-20	AW	3	4.900	SUMMER	32166	3RS ET	P
6-Jul-20	WL	3	14.052	SUMMER	32166	3RS ET	P
6-Jul-20	WL	4	4.029	SUMMER	32166	3RS ET	P
6-Jul-20	WL	3	5.088	SUMMER	32166	3RS ET	S
6-Jul-20	WL	4	3.731	SUMMER	32166	3RS ET	S
8-Jul-20	NEL	2	0.500	SUMMER	32166	3RS ET	P
8-Jul-20	NEL	3	33.650	SUMMER	32166	3RS ET	P

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
8-Jul-20	NEL	4	3.230	SUMMER	32166	3RS ET	P
8-Jul-20	NEL	2	2.000	SUMMER	32166	3RS ET	S
8-Jul-20	NEL	3	7.720	SUMMER	32166	3RS ET	S
9-Jul-20	NEL	2	1.300	SUMMER	32166	3RS ET	P
9-Jul-20	NEL	3	25.670	SUMMER	32166	3RS ET	P
9-Jul-20	NEL	4	9.820	SUMMER	32166	3RS ET	P
9-Jul-20	NEL	2	1.000	SUMMER	32166	3RS ET	S
9-Jul-20	NEL	3	9.910	SUMMER	32166	3RS ET	S
10-Jul-20	NWL	3	49.090	SUMMER	32166	3RS ET	P
10-Jul-20	NWL	4	14.710	SUMMER	32166	3RS ET	P
10-Jul-20	NWL	2	2.100	SUMMER	32166	3RS ET	S
10-Jul-20	NWL	3	10.000	SUMMER	32166	3RS ET	S
13-Jul-20	AW	2	0.980	SUMMER	32166	3RS ET	P
13-Jul-20	AW	3	3.950	SUMMER	32166	3RS ET	S
13-Jul-20	WL	2	7.997	SUMMER	32166	3RS ET	P
13-Jul-20	WL	3	6.388	SUMMER	32166	3RS ET	P
13-Jul-20	WL	2	2.175	SUMMER	32166	3RS ET	S
13-Jul-20	WL	3	5.392	SUMMER	32166	3RS ET	S
20-Jul-20	SWL	2	44.018	SUMMER	32166	3RS ET	P
20-Jul-20	SWL	3	3.890	SUMMER	32166	3RS ET	P
20-Jul-20	SWL	2	12.803	SUMMER	32166	3RS ET	S
20-Jul-20	SWL	3	1.000	SUMMER	32166	3RS ET	S
21-Jul-20	SWL	1	8.130	SUMMER	32166	3RS ET	P
21-Jul-20	SWL	2	26.735	SUMMER	32166	3RS ET	P
21-Jul-20	SWL	3	15.310	SUMMER	32166	3RS ET	P
21-Jul-20	SWL	1	1.034	SUMMER	32166	3RS ET	S
21-Jul-20	SWL	2	12.790	SUMMER	32166	3RS ET	S
21-Jul-20	SWL	3	0.920	SUMMER	32166	3RS ET	S
22-Jul-20	NWL	1	14.280	SUMMER	32166	3RS ET	P
22-Jul-20	NWL	2	35.930	SUMMER	32166	3RS ET	P
22-Jul-20	NWL	3	12.500	SUMMER	32166	3RS ET	P
22-Jul-20	NWL	1	1.300	SUMMER	32166	3RS ET	S
22-Jul-20	NWL	2	9.190	SUMMER	32166	3RS ET	S
22-Jul-20	NWL	3	1.100	SUMMER	32166	3RS ET	S
7-Aug-20	AW	2	4.830	SUMMER	32166	3RS ET	P
7-Aug-20	WL	2	11.333	SUMMER	32166	3RS ET	P
7-Aug-20	WL	3	8.330	SUMMER	32166	3RS ET	P
7-Aug-20	WL	2	2.260	SUMMER	32166	3RS ET	S
7-Aug-20	WL	3	4.810	SUMMER	32166	3RS ET	S
10-Aug-20	SWL	2	36.803	SUMMER	32166	3RS ET	P
10-Aug-20	SWL	3	14.500	SUMMER	32166	3RS ET	P
10-Aug-20	SWL	2	13.697	SUMMER	32166	3RS ET	S
10-Aug-20	SWL	3	3.100	SUMMER	32166	3RS ET	S
11-Aug-20	NWL	2	18.930	SUMMER	32166	3RS ET	P
11-Aug-20	NWL	3	41.090	SUMMER	32166	3RS ET	P
11-Aug-20	NWL	4	3.780	SUMMER	32166	3RS ET	P
11-Aug-20	NWL	2	5.600	SUMMER	32166	3RS ET	S
11-Aug-20	NWL	3	6.200	SUMMER	32166	3RS ET	S
12-Aug-20	NEL	2	16.500	SUMMER	32166	3RS ET	P

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
12-Aug-20	NEL	3	19.360	SUMMER	32166	3RS ET	P
12-Aug-20	NEL	4	1.500	SUMMER	32166	3RS ET	P
12-Aug-20	NEL	2	5.270	SUMMER	32166	3RS ET	S
12-Aug-20	NEL	3	4.770	SUMMER	32166	3RS ET	S
17-Aug-20	AW	2	1.860	SUMMER	32166	3RS ET	P
17-Aug-20	AW	3	3.020	SUMMER	32166	3RS ET	P
17-Aug-20	WL	2	0.520	SUMMER	32166	3RS ET	P
17-Aug-20	WL	3	17.310	SUMMER	32166	3RS ET	P
17-Aug-20	WL	4	1.510	SUMMER	32166	3RS ET	P
17-Aug-20	WL	2	4.080	SUMMER	32166	3RS ET	S
17-Aug-20	WL	3	4.590	SUMMER	32166	3RS ET	S
17-Aug-20	WL	4	0.717	SUMMER	32166	3RS ET	S
18-Aug-20	NEL	2	29.590	SUMMER	32166	3RS ET	P
18-Aug-20	NEL	3	7.650	SUMMER	32166	3RS ET	P
18-Aug-20	NEL	2	9.100	SUMMER	32166	3RS ET	S
18-Aug-20	NEL	3	0.860	SUMMER	32166	3RS ET	S
24-Aug-20	SWL	2	35.344	SUMMER	32166	3RS ET	P
24-Aug-20	SWL	3	19.010	SUMMER	32166	3RS ET	P
24-Aug-20	SWL	2	11.416	SUMMER	32166	3RS ET	S
24-Aug-20	SWL	3	4.500	SUMMER	32166	3RS ET	S
26-Aug-20	NWL	2	13.100	SUMMER	32166	3RS ET	P
26-Aug-20	NWL	3	31.500	SUMMER	32166	3RS ET	P
26-Aug-20	NWL	4	16.400	SUMMER	32166	3RS ET	P
26-Aug-20	NWL	5	2.300	SUMMER	32166	3RS ET	P
26-Aug-20	NWL	2	4.200	SUMMER	32166	3RS ET	S
26-Aug-20	NWL	3	6.300	SUMMER	32166	3RS ET	S
26-Aug-20	NWL	4	1.000	SUMMER	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
11-Jun-20	1	1028	CWD	2	WL	3	396	ON	3RS ET	22.2636	113.8574	SUMMER	NONE	S
11-Jun-20	2	1050	CWD	3	WL	3	6	ON	3RS ET	22.2552	113.8359	SUMMER	NONE	S
11-Jun-20	3	1121	CWD	5	WL	3	323	ON	3RS ET	22.2408	113.8315	SUMMER	NONE	P
11-Jun-20	4	1213	CWD	5	WL	3	689	ON	3RS ET	22.2140	113.8257	SUMMER	NONE	P
11-Jun-20	5	1243	CWD	7	WL	3	1028	ON	3RS ET	22.2055	113.8330	SUMMER	NONE	P
11-Jun-20	6	1311	CWD	3	WL	3	86	ON	3RS ET	22.1958	113.8329	SUMMER	NONE	P
11-Jun-20	7	1325	CWD	6	WL	3	70	ON	3RS ET	22.1958	113.8408	SUMMER	NONE	P
16-Jun-20	1	1041	CWD	1	WL	2	75	ON	3RS ET	22.2609	113.8522	SUMMER	NONE	P
16-Jun-20	2	1055	CWD	6	WL	3	124	ON	3RS ET	22.2607	113.8495	SUMMER	NONE	P
16-Jun-20	3	1244	CWD	1	WL	3	112	ON	3RS ET	22.2049	113.8345	SUMMER	NONE	P
16-Jun-20	4	1310	CWD	3	WL	2	65	ON	3RS ET	22.2532	113.8336	SUMMER	NONE	P
16-Jun-20	5	1345	CWD	8	WL	2	203	ON	3RS ET	22.1945	113.8423	SUMMER	NONE	S
18-Jun-20	1	1248	CWD	5	SWL	2	118	ON	3RS ET	22.1970	113.9082	SUMMER	NONE	P
18-Jun-20	2	1321	CWD	6	SWL	3	85	ON	3RS ET	22.1937	113.8972	SUMMER	GILLNETTER	P
18-Jun-20	3	1550	CWD	2	SWL	3	46	ON	3RS ET	22.1852	113.8492	SUMMER	NONE	P
22-Jun-20	1	1144	CWD	4	SWL	2	807	ON	3RS ET	22.1939	113.9179	SUMMER	NONE	P
22-Jun-20	2	1256	CWD	4	SWL	3	178	ON	3RS ET	22.1881	113.9054	SUMMER	NONE	S
22-Jun-20	3	1321	CWD	3	SWL	2	898	ON	3RS ET	22.2123	113.8979	SUMMER	NONE	P
22-Jun-20	4	1344	CWD	4	SWL	2	386	ON	3RS ET	22.1934	113.8979	SUMMER	NONE	P
22-Jun-20	5	1432	CWD	1	SWL	3	520	ON	3RS ET	22.1688	113.8879	SUMMER	NONE	P
22-Jun-20	6	1453	CWD	5	SWL	3	305	ON	3RS ET	22.1898	113.8883	SUMMER	NONE	P
22-Jun-20	7	1548	CWD	1	SWL	3	225	ON	3RS ET	22.1795	113.8686	SUMMER	NONE	P
22-Jun-20	8	1607	CWD	1	SWL	2	67	ON	3RS ET	22.1904	113.8593	SUMMER	NONE	P
22-Jun-20	9	1614	CWD	2	SWL	2	36	ON	3RS ET	22.1824	113.8596	SUMMER	NONE	P
6-Jul-20	1	1037	CWD	1	WL	3	326	ON	3RS ET	22.2643	113.8574	SUMMER	NONE	S
6-Jul-20	2	1111	CWD	11	WL	4	634	ON	3RS ET	22.2468	113.8514	SUMMER	NONE	S
6-Jul-20	3	1216	CWD	1	WL	3	284	ON	3RS ET	22.2120	113.8363	SUMMER	NONE	P
6-Jul-20	4	1245	CWD	2	WL	3	329	ON	3RS ET	22.1961	113.8400	SUMMER	NONE	P
13-Jul-20	1	1033	CWD	5	WL	2	1238	ON	3RS ET	22.2672	113.8600	SUMMER	NONE	S
13-Jul-20	2	1126	CWD	4	WL	3	601	ON	3RS ET	22.2416	113.8299	SUMMER	NONE	P
13-Jul-20	3	1144	CWD	5	WL	3	1020	ON	3RS ET	22.2377	113.8266	SUMMER	NONE	S
13-Jul-20	4	1203	CWD	1	WL	3	13	ON	3RS ET	22.2235	113.8242	SUMMER	NONE	P

DATE	STG #	TIME	CWD/FP	GP SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.	P/S
13-Jul-20	5	1223	CWD	4	WL	3	322	ON	3RS ET	22.2142	113.8266	SUMMER	NONE	P
13-Jul-20	6	1304	CWD	18	WL	3	211	ON	3RS ET	22.2020	113.8240	SUMMER	NONE	S
13-Jul-20	7	1338	CWD	19	WL	3	221	ON	3RS ET	22.1962	113.8332	SUMMER	NONE	P
13-Jul-20	8	1410	CWD	4	WL	3	129	ON	3RS ET	22.1910	113.8419	SUMMER	NONE	S
20-Jul-20	1	1028	CWD	1	SWL	2	171	ON	3RS ET	22.2119	113.9359	SUMMER	NONE	P
20-Jul-20	2	1237	CWD	1	SWL	2	268	ON	3RS ET	22.1767	113.9072	SUMMER	NONE	S
20-Jul-20	3	1249	CWD	4	SWL	2	362	ON	3RS ET	22.1845	113.9046	SUMMER	NONE	S
20-Jul-20	4	1407	CWD	9	SWL	3	255	ON	3RS ET	22.1673	113.8883	SUMMER	NONE	P
20-Jul-20	5	1424	CWD	5	SWL	2	243	ON	3RS ET	22.1776	113.8883	SUMMER	NONE	P
20-Jul-20	6	1510	CWD	1	SWL	2	130	ON	3RS ET	22.1765	113.8784	SUMMER	NONE	P
20-Jul-20	7	1532	CWD	5	SWL	3	247	ON	3RS ET	22.1682	113.8685	SUMMER	NONE	P
20-Jul-20	8	1604	CWD	3	SWL	2	51	ON	3RS ET	22.1962	113.8586	SUMMER	NONE	P
20-Jul-20	9	1640	CWD	2	SWL	2	42	ON	3RS ET	22.1921	113.8494	SUMMER	NONE	P
21-Jul-20	1	1054	FP	7	SWL	1	146	ON	3RS ET	22.1486	113.9340	SUMMER	NONE	S
21-Jul-20	2	1255	CWD	3	SWL	3	46	ON	3RS ET	22.1928	113.8977	SUMMER	NONE	P
21-Jul-20	3	1410	CWD	2	SWL	2	161	ON	3RS ET	22.1915	113.8790	SUMMER	NONE	P
21-Jul-20	4	1426	CWD	3	SWL	2	241	ON	3RS ET	22.1723	113.8788	SUMMER	NONE	P
21-Jul-20	5	1511	CWD	4	SWL	2	21	ON	3RS ET	22.1962	113.8587	SUMMER	NONE	P
21-Jul-20	6	1537	CWD	1	SWL	2	524	ON	3RS ET	22.1700	113.8560	SUMMER	NONE	S
21-Jul-20	7	1551	CWD	3	SWL	3	188	ON	3RS ET	22.1862	113.8493	SUMMER	PURSE SEINER	P
22-Jul-20	1	1202	CWD	2	NWL	2	308	ON	3RS ET	22.3963	113.8876	SUMMER	NONE	P
7-Aug-20	1	1006	CWD	1	WL	2	57	ON	3RS ET	22.2972	113.8611	SUMMER	NONE	P
7-Aug-20	2	1033	CWD	2	WL	2	96	ON	3RS ET	22.2768	113.8514	SUMMER	NONE	S
7-Aug-20	3	1158	CWD	3	WL	3	8	ON	3RS ET	22.2174	113.8200	SUMMER	NONE	S
7-Aug-20	4	1228	CWD	13	WL	3	111	ON	3RS ET	22.2140	113.8303	SUMMER	NONE	P
7-Aug-20	5	1337	CWD	1	WL	3	235	ON	3RS ET	22.1955	113.8396	SUMMER	NONE	P
10-Aug-20	1	1122	FP	4	SWL	2	59	ON	3RS ET	22.1802	113.9280	SUMMER	NONE	P
10-Aug-20	2	1515	CWD	2	SWL	3	3	ON	3RS ET	22.1883	113.8491	SUMMER	NONE	P
10-Aug-20	3	1528	CWD	1	SWL	3	37	ON	3RS ET	22.1931	113.8499	SUMMER	NONE	P
17-Aug-20	1	1102	CWD	9	WL	3	229	ON	3RS ET	22.2408	113.8378	SUMMER	NONE	P
17-Aug-20	2	1222	CWD	1	WL	4	304	ON	3RS ET	22.1928	113.8424	SUMMER	NONE	S
24-Aug-20	1	1054	FP	2	SWL	2	61	ON	3RS ET	22.1462	113.9319	SUMMER	NONE	S
24-Aug-20	2	1318	FP	8	SWL	2	63	ON	3RS ET	22.1565	113.8876	SUMMER	NONE	P

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

Notes:

CWD monitoring survey data of the two preceding survey months 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 421.333 km of survey effort was collected under Beaufort Sea State 3 or below with favourable visibility; total no. of 8 on-effort sightings and total number of 32 dolphins from on-effort sightings were collected under such condition. Calculation of the encounter rates in August 2020 are shown as below:

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

$$STG = \frac{8}{421.333}\ x\ 100 = 1.90$$

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

$$ANI = \frac{32}{421.333}\ x\ 100 = 7.59$$

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

A total of 1225.934 km of survey effort was collected under Beaufort Sea State 3 or below with favourable visibility; total no. of 59 on-effort sightings and total number of 233 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)

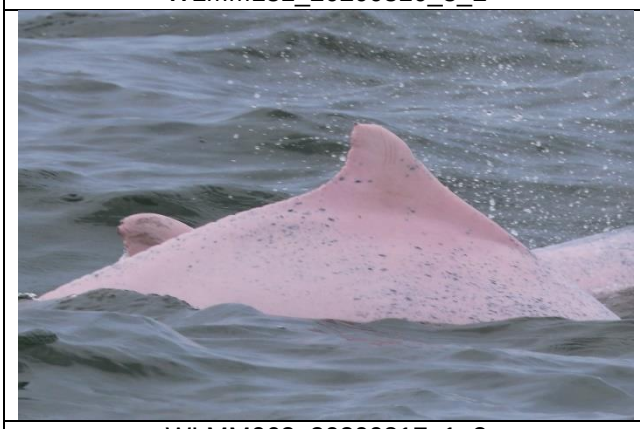
$$STG = \frac{59}{1225.934}\ x\ 100 = 4.81$$

Running Quarterly Encounter Rate by Number of Dolphins (ANI)

$$ANI = \frac{233}{1225.934}\ x\ 100 = 19.01$$

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

	
NLMM039_20200807_2_2	WLMM131_20200807_3_1
	
SLMM010_20200807_4_3	SLMM014_20200807_4_2
	
SLMM049_20200807_4_2	SLMM052_20200807_4_6
	
WLMM007_20200807_4_3	WLMM008_20200807_4_4

	
WLMM073_20200807_4_1	WLMM109_20200807_4_1
	
WLMM160_20200807_4_5	WLMM131_20200810_2_1
	
WLMM131_20200810_3_2	NLMM060_20200817_1_3
	
WLMM062_20200817_1_2	WLMM068_20200817_1_3

	
WLMM095_20200817_1_9	WLMM103_20200817_1_10
	
WLMM133_20200817_1_7	WLMM161_20200817_1_1
	
WLMM162_20200817_1_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
17/Aug/20	Lung Kwu Chau	8:55	14:55	6:00	2-3	1-2	2	1-2
24/Aug/20	Sha Chau	10:56	16:56	6:00	2	2	0	-

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

Appendix D. 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
3205	Notification of Construction Work under APCO	Works area of 3205	453653	Receipt acknowledged by EPD on 25 Feb 2020
	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-RS0436-20	Valid from 30 Jun 2020 to 29 Dec 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-RS0423-20	Valid from 30 Jun 2020 to 15 Dec 2020
		Works Area of 3206 (Area 11)	GW-RS0414-20	Valid from 25 Jun 2020 to 24 Dec 2020
		Works Area of 3206	GW-RS0501-20	Valid from 20 Jul 2020 to 20 Dec 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

Contract No.	Description	Location	Permit/ Reference No.	Status
	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-RS0129-20	Valid from 4 Mar 2020 to 13 Sep 2020
		Works area of 3301	GW-RS0212-20	Valid until from 12 Apr 2020 to 11 Oct 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
			454882	Receipt acknowledged by EPD on 2 Apr 2020
	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
		Works 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-RS0438-20	Valid from 7 Jul 2020 to 6 Jan 2021
			GW-RS0447-20	Valid from 7 Jul 2020 to 6 Jan 2021
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
	Discharge License under WPCO	Works area of 3303	WT00035689-2020	Valid from 11 May 2020 to 31 May 2025
	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-RS0335-20	Valid from 27 May 2020 to 15 Nov 2020
		Works area of 3303 (Reclamation area)	GW-RS0476-20	Superseded by GW-RS0563-20
			GW-RS0563-20	Valid from 26 Aug 2020 to 9 Feb 2021
3307	Notification of Construction Work under APCO	Works area of 3307	454964	Receipt acknowledged by EPD on 6 Apr 2020
	Registration as Chemical Waste Producer	Works area of 3307	5211-951-P3379-01	Completion of Registration on 8 Jun 2020
	Bill Account for disposal	Works area of 3307	A/C 7037129	Approval granted from EPD on 5 May 2020
	Construction Noise Permit (General Works)	Works area of 3307	GW-RS0495-20	Superseded by GW-RS0532-20
			GW-RS0532-20	Valid from 9 Aug 2020 to 6 Feb 2021
3402		Works area of 3402	440808	Receipt acknowledged by EPD on 31 Dec 2018

Contract No.	Description	Location	Permit/ Reference No.	Status
	Notification of Construction Work under APCO	Stockpiling area of 3402	441960	Receipt acknowledged by EPD on 8 Feb 2019
	Registration as Chemical Waste Producer	Works area of 3402	WPN 5213-951-W1172-05	Registration was updated on 25 Feb 2019
	Discharge License under WPCO	Works area of 3402	WT00033685-2019	Valid from 20 Jun 2019 to 30 Jun 2024
	Bill Account for disposal	Works area of 3402	A/C 7032577	Approval granted from EPD on 27 Nov 2018
	Construction Noise Permit (General Works)	Works area of 3402	GW-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
	Discharge License under WPCO	Works area of 3403	WT00035841-2020	Valid from 5 Jun 2020 to 30 Jun 2025
	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-RS0334-20	Valid from 29 May 2020 to 28 Nov 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
	Construction Noise Permit (General Works)	Works area of 3405	GW-RS0429-20	Valid from 30 Jun 2020 to 29 Dec 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	454450	Receipt acknowledged by EPD on 17 Mar 2020
		Stockpiling area of 3503	449570	Receipt acknowledged by EPD on 30 Sep 2019
	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-RS0351-20	Valid from 24 May 2020 to 31 Oct 2020
		Stockpiling area of 3503	GW-RS0385-20	Valid from 11 Jul 2020 to 31 Dec 2020
		Works area of 3503 (Special Case)	GW-RS0442-20	Valid from 2 Jul 2020 to 31 Dec 2020

Contract No.	Description	Location	Permit/ Reference No.	Status
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 7029991	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-RS0133-20	Valid from 1 Apr 2020 to 30 Sep 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-RS0165-20	Valid from 8 Apr 2020 to 7 Oct 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-RS0419-20	Valid from 30 Jun 2020 to 29 Dec 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
	Registration as Chemical Waste Producer	Works area of 3722A	WPN 5218-951-T3863-01	Completion of Registration on 18 Mar 2020
		Works area of 3722B	WPN 5218-951-T3864-01	Completion of Registration on 18 Mar 2020

Contract No.	Description	Location	Permit/ Reference No.	Status
		Works area of 3722C	WPN 5218-951-T3862-01	Completion of Registration on 18 Mar 2020
		Works area of 3722D	WPN 5218-951-T3865-01	Completion of Registration on 18 Mar 2020
	Bill Account for disposal	Works area of 3722A	A/C 7036752	Approval granted from EPD on 11 Mar 2020
		Works area of 3722B	A/C 7036966	Approval granted from EPD on 6 Apr 2020
		Works area of 3722C	A/C 7036967	Approval granted from EPD on 6 Apr 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-RS0304-20	Valid from 9 May 2020 to 7 Nov 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
			451991	Receipt acknowledged by EPD on 18 Dec 2019
		Stockpiling area of 3801	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-RS0475-20	Valid from 12 Jul 2020 to 8 Jan 2021
3802	Notification of Construction Work under APCO	Works area of 3802	458122	Receipt acknowledged by EPD on 14 Jul 2020
	Registration as Chemical Waste Producer	Works area of 3802	WPN 5218-951-G2895-01	Completion of Registration on 28 Aug 2020
	Bill Account for disposal	Works area of 3802	A/C 7037575	Approval granted from EPD on 15 Jun 2020
3901A	Notification of Construction Work under APCO	Works area of 3901A	456240	Receipt acknowledged by EPD on 18 May 2020
	Specified Process license under APCO	Works area of 3901A	443180	Receipt acknowledged by EPD on 15 Mar 2019
	Registration as Chemical Waste Producer	Works area of 3901A	WPN 5218-951-K3400-01	Completion of Registration on 17 Jul 2020
	Bill Account for disposal	Works area of 3901A	7037889	Approval granted from EPD on 20 Jul 2020

Contract No.	Description	Location	Permit/ Reference No.	Status
	Construction Noise Permit (General Works)	Works area of 3901A	GW-RS0298-20	Valid from 25 May 2020 to 24 Nov 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
			GW-RS0567-20	Valid from 26 Aug 2020 to 19 Feb 2021

Appendix E. 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	1	0	0
From 28 December 2015 to end of the reporting period	20	1	1