MOTT MACDONALD

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

Construction Phase Monthly EM&A Report No.53 (For May 2020)

June 2020

Airport Authority Hong Kong

3/F International Trade Tower
348 Kwun Tong Road
Kwun Tong
Kowloon
Hong Kong

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

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

Construction Phase Monthly EM&A Report No.53 (For May 2020)

June 2020

Airport Authority Hong Kong

This Monthly EM&A Report No. 53 has been reviewed and certified by the Environmental Team Leader (ETL) in accordance with Condition 3.5 of Environmental Permit No. EP-489/2014.

Certified by: 

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

Date 12 June 2020

AECOM
12/F, Grand Central Plaza, Tower 2, 138 Shatin Rural Committee Road, Shatin, Hong Kong
香港新界沙田鄉事會路 138 號新城市中央廣場第 2 座 12 樓
www.aecom.com
+852 3922 9000 tel
+852 3922 9797 fax

Our Ref : 60440482/C/JCHL200612

By Email

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

Attn: Mr. Lawrence Tsui, Principal Manager

12 June 2020

Dear Sir,

Contract No. 3102
3RS Independent Environmental Checker Consultancy Services

Submission of Monthly EM&A Report No. 53 (May 2020)

Reference is made to the Environmental Team's submission of the Monthly EM&A Report No. 53 under Condition 3.5 of the Environmental Permit No. EP-489/2014 certified by the ET Leader on 12 Jun 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

Contents

Abbreviations 1

Executive Summary 3

1 Introduction 7

1.1 Background 7
1.2 Scope of this Report 7
1.3 Project Organisation 7
1.4 Summary of Construction Works 10
1.5 Summary of EM&A Programme Requirements 10

2 Air Quality Monitoring 13

2.1 Action and Limit Levels 13
2.2 Monitoring Equipment 13
2.3 Monitoring Methodology 13
2.3.1 Measuring Procedure 13
2.3.2 Maintenance and Calibration 14
2.4 Summary of Monitoring Results 14
2.5 Conclusion 14

3 Noise Monitoring 15

3.1 Action and Limit Levels 15
3.2 Monitoring Equipment 15
3.3 Monitoring Methodology 16
3.3.1 Monitoring Procedure 16
3.3.2 Maintenance and Calibration 16
3.4 Summary of Monitoring Results 16
3.5 Conclusion 17

4 Water Quality Monitoring 18

4.1 Action and Limit Levels 19
4.2 Monitoring Equipment 21
4.3 Monitoring Methodology 21
4.3.1 Measuring Procedure 21
4.3.2 Maintenance and Calibration 21
4.3.3 Laboratory Measurement / Analysis 22
4.4 Summary of Monitoring Results 22
4.5 Conclusion 24

5 Waste Management 26
5.1 Action and Limit Levels 26
5.2 Waste Management Status 26

6 Chinese White Dolphin Monitoring 28
6.1 Action and Limit Levels 28
6.2 CWD Monitoring Transects and Stations 28
6.2.1 Small Vessel Line-transect Survey 28
6.2.2 Land-based Theodolite Tracking Survey 30
6.3 CWD Monitoring Methodology 30
6.3.1 Small Vessel Line-transect Survey 30
6.3.2 Photo Identification 31
6.3.3 Land-based Theodolite Tracking Survey 31
6.4 Monitoring Results and Observations 32
6.4.1 Small Vessel Line-transect Survey 32
6.4.2 Photo Identification 35
6.4.3 Land-based Theodolite Tracking Survey 35
6.5 Progress Update on Passive Acoustic Monitoring 36
6.6 Site Audit for CWD-related Mitigation Measures 37
6.7 Timing of Reporting CWD Monitoring Results 37
6.8 Summary of CWD Monitoring 37

7 Environmental Site Inspection and Audit 38
7.1 Environmental Site Inspection 38
7.2 Audit of SkyPier High Speed Ferries 39
7.3 Audit of Construction and Associated Vessels 39
7.4 Implementation of Dolphin Exclusion Zone 40
7.5 Status of Submissions under Environmental Permits 40
7.6 Compliance with Other Statutory Environmental Requirements 40
7.7 Analysis and Interpretation of Complaints, Notification of Summons and Status of Prosecutions 41
7.7.1 Complaints 41
7.7.2 Notifications of Summons or Status of Prosecution 41
7.7.3 Cumulative Statistics 41

8 Future Key Issues and Other EIA & EM&A Issues 42
8.1 Construction Programme for the Coming Reporting Period 42
8.2 Key Environmental Issues for the Coming Reporting Period 44
8.3 Monitoring Schedule for the Coming Reporting Period 44
8.4 Review of the Key Assumptions Adopted in the EIA Report 44

9 Conclusion and Recommendation 45

Tables

Table 1.1: Contact Information of Key Personnel 8
Table 1.2: Summary of status for all environmental aspects under the Updated EM&A Manual 11
Table 2.1: Locations of Impact Air Quality Monitoring Stations 13
Table 2.2: Action and Limit Levels of Air Quality Monitoring 13
Table 2.3: Air Quality Monitoring Equipment 13
Table 2.4: Summary of Air Quality Monitoring Results 14
Table 3.1: Locations of Impact Noise Monitoring Stations 15
Table 3.2: Action and Limit Levels for Noise Monitoring 15
Table 3.3: Noise Monitoring Equipment 16
Table 3.4: Summary of Construction Noise Monitoring Results 17
Table 4.1: Monitoring Locations and Parameters of Impact Water Quality Monitoring 18
Table 4.2: Action and Limit Levels for General Water Quality Monitoring and Regular DCM Monitoring 20
Table 4.3: The Control and Impact Stations during Flood Tide and Ebb Tide for General Water Quality Monitoring and Regular DCM Monitoring 20
Table 4.4: Water Quality Monitoring Equipment 21
Table 4.5: Other Monitoring Equipment 21
Table 4.6: Laboratory Measurement/ Analysis of SS and Heavy Metals 22
Table 4.7: Summary of DO (Surface and Middle) Compliance Status (Mid-Ebb Tide) 23
Table 4.8 : Summary of SS Compliance Status (Mid-Flood Tide) 24
Table 4.9: Summary of Findings from Investigation of SS Monitoring Results 24
Table 5.1: Action and Limit Levels for Construction Waste 26
Table 5.2: Construction Waste Statistics 27
Table 6.1: Derived Values of Action and Limit Levels for Chinese White Dolphin Monitoring 28
Table 6.2: Coordinates of Transect Lines in NEL, NWL, AW, WL and SWL Survey Areas 29
Table 6.3: Land-based Theodolite Survey Station Details 30
Table 6.4: Comparison of CWD Encounter Rates of the Whole Survey Area with Action Levels 34
Table 6.5: Summary of Photo Identification 35
Table 6.6: Summary of Survey Effort and CWD Group of Land-based Theodolite Tracking 35
Table 7.1: Summary of Key Audit Findings against the SkyPier Plan 39
Table 7.2: Status of Submissions under Environmental Permit 40

Figures

Figure 1.1	Locations of Key Construction Activities
Figure 2.1	Locations of Air and Noise Monitoring Stations and Chek Lap Kok Wind Station
Figure 4.1	Water Quality Monitoring Stations
Figure 6.1	Vessel based Dolphin Monitoring Transects in Construction, Post-construction and Operation Phases
Figure 6.2	Land based Dolphin Monitoring in Baseline and Construction Phases
Figure 6.3	Sightings Distribution of Chinese White Dolphins
Figure 6.4	Plots of First Sightings of All CWD Groups obtained from Land-based Stations
Figure 6.5	Location for Autonomous Passive Acoustic Monitoring

Appendices

Appendix A	Contract Description
Appendix B	Environmental Mitigation Implementation Schedule (EMIS) for Construction Phase
Appendix C	Monitoring Schedule
Appendix D	Monitoring Results
Appendix E	Status of Environmental Permits and Licences
Appendix F	Cumulative Statistics on Exceedances, Environmental Complaints, Notification of Summons and Status of Prosecutions

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 53rd 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 May 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	13
Vessel line-transect surveys for Chinese White Dolphin (CWD) monitoring	2
Land-based theodolite tracking survey effort for CWD monitoring	2

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

Snapshots of EM&A Activities in the Reporting Period

		
Chemical Spill Drill conducted by Contractor	Photo Shoot for Photo Identification of CWD	Impact Water Quality Monitoring 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) and suspended solids (SS), obtained during the reporting period were within the corresponding Action and Limit Levels stipulated in the EM&A programme. Relevant investigation and follow-up actions will be conducted according to the EM&A programme if the corresponding Action and Limit Levels are triggered. For DO and SS, some of the testing results triggered the relevant Action and Limit Level, and the corresponding investigations were conducted accordingly. The investigation findings concluded that the cases were not related to the Project. To conclude, the construction activities in the reporting period did not introduce adverse impact to all water quality sensitive receivers.

Summary of Upcoming Key Issues

Advanced Works:

Contract P560 (R) Aviation Fuel Pipeline Diversion Works

- Stockpiling of construction materials

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; and
- Site establishment.

Contract 3303 Third Runway and Associated Works

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

Third Runway Concourse:

Contract 3402 New Integrated Airport Centres Enabling Works

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

Contract 3403 New Integrated Airport Centres Building and Civil Works

- Site establishment; and
- Foundation works.

Contract 3405 Third Runway Concourse Foundation and Substructure Works

- Bored pilling work; and
- Site establishment.

Terminal 2 Expansion:

Contract 3501 Antenna Farm and Sewage Pumping Station

- Site clearance.

Contract 3503 Terminal 2 Foundation and Substructure Works

- T2 demolition;
- Site establishment;
- 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)

- Construction of site office.

Contract 3602 Existing APM System Modification Works

- Modification works at APM depot.

Construction Support (Facilities):

Contract 3721 Construction Support Infrastructure Works

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

Contract 3722 Construction Support Facilities

- Formboard erecting and concreting;
- Superstructure; and
- Site Establishment.

Airport Support Infrastructure:

Contract 3801 APM and BHS Tunnels on Existing Airport Island

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

Construction Support (Services / Licences):

Contract 3901A/ B Concrete Batching Facility

- Footing construction; and
- Erection of steelwork.

Summary Table

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

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

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

1 Introduction

1.1 Background

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

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

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

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

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

1.2 Scope of this Report

This is the 53rd 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 May 2020.

1.3 Project Organisation

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

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

Table 1.1: Contact Information of Key Personnel

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

Advanced Works:

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

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	Kim Chuan Lim	3763 1509
	Environmental Officer	Kwai Fung Wong	3763 1452

Airfield Works:

Party	Position	Name	Telephone
Contract 3301 North Runway Crossover Taxiway (FJT-CHEC-ZHEC Joint Venture)	Deputy Project Director	Kin Hang Chung	9800 0048
	Environmental Officer	Joe Wong	6182 0351
Contract 3302 Eastern Vehicular Tunnel Advance Works (China Road and Bridge Corporation)	Project Manager	Dickey Yau	5699 4503
	Environmental Officer	Dennis Ho	5645 0563

Party	Position	Name	Telephone
Contract 3303 Third Runway and Associated Works (SAPR Joint Venture)	Project Manager	Andrew Keung	6277 6628
	Environmental Officer	Max Chin	6447 5707

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

Automated People Mover (APM) 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
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

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
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)	
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.

Parameters	Status
Impact Monitoring	On-going
Environmental Auditing	
Regular site inspection	On-going
Marine Mammal Watching Plan (MMWP) implementation measures	On-going
Dolphin Exclusion Zone (DEZ) Plan implementation measures	On-going
SkyPier High Speed Ferries (HSF) implementation measures	On-going
Construction and Associated Vessels Implementation measures	On-going
Complaint Hotline and Email channel	On-going
Environmental Log Book	On-going

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

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

- Two skipper training sessions provided by ET: 13 and 27 May 2020;
- Two dolphin observer training sessions provided by ET: 5 and 18 May 2020;
- Thirteen environmental management meetings for EM&A review with works contracts: 4, 7, 12, 13, 20, 22, 25, 26, 27 and 29 May 2020.

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

2 Air Quality Monitoring

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

Table 2.1: Locations of Impact Air Quality Monitoring Stations

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

2.1 Action and Limit Levels

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

Table 2.2: Action and Limit Levels of Air Quality Monitoring

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

2.2 Monitoring Equipment

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

Table 2.3: Air Quality Monitoring Equipment

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

2.3 Monitoring Methodology

2.3.1 Measuring Procedure

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

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

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

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

2.3.2 Maintenance and Calibration

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

2.4 Summary of Monitoring Results

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

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

Table 2.4: Summary of Air Quality Monitoring Results

Monitoring Station	1-hr TSP Concentration Range (μg/m^3)	Action Level (μg/m^3)	Limit Level (μg/m^3)
AR1A	18 - 75	306	500
AR2	18 - 66	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
Acoustic Calibrator	Casella CEL-120/1 (Serial No. 2383737)	21 Sep 2019	Monthly EM&A Report No. 45, Appendix D
	Castle GA607 (Serial No. 040162)	14 Jul 2019	Monthly EM&A Report No. 43, Appendix D

3.3 Monitoring Methodology

3.3.1 Monitoring Procedure

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

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

3.3.2 Maintenance and Calibration

The maintenance and calibration procedures are summarised below:

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

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

3.4 Summary of Monitoring Results

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

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

Table 3.4: Summary of Construction Noise Monitoring Results

Monitoring Station	Noise Level Range, dB(A) $L_{eq\ (30mins)}$	Limit Level, dB(A) $L_{eq\ (30mins)}$
NM1A(1)	66 - 72	75
NM4(1)	59 - 66	70(2)
NM5(1)	53 - 59	75
NM6(1)	62 - 66	75

Notes:

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

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

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

3.5 Conclusion

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

4 Water Quality Monitoring

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

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

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

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

Notes:

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

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

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

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

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

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

4.1 Action and Limit Levels

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

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

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

Notes:

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

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

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

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

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

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

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

Note:

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

4.2 Monitoring Equipment

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

Table 4.4: Water Quality Monitoring Equipment

Equipment	Brand and Model	Last Calibration Date	Calibration Certificate Provided in
Multifunctional Meter (measurement of DO, pH, temperature, salinity and turbidity)	YSI 6920V2 (Serial No. 0001C6A7)	21 Apr 2020	Monthly EM&A Report No. 52, Appendix D
	YSI 6920V2 (Serial No. 00019CB2)	21 Apr 2020	
	YSI ProDSS (Serial No. 17H105557)	11 Mar 2020	Monthly EM&A Report No. 51, Appendix E
	YSI ProDSS (Serial No. 16H104234)	11 Mar 2020	
	YSI ProDSS (Serial No. 17E100747)	11 Mar 2020	
	YSI ProDSS (Serial No. 18A104824)	11 Mar 2020	
Digital Titrator (measurement of total alkalinity)	Titrette Bottle-top Burette, 50ml (Serial No. 10N60623)	5 Mar 2020	Monthly EM&A Report No. 51, 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 C**. Monitoring session during mid-flood tide on 21 May 2020 was cancelled due to red rainstorm warning signal in force.

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

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

Table 4.7 presents the summary of the DO compliance status at IM and SR stations during mid-ebb 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
02/05/2020																		
05/05/2020																		
07/05/2020																		
09/05/2020																		
12/05/2020																		
14/05/2020																		
16/05/2020																		
19/05/2020																		
21/05/2020																		
23/05/2020																		
26/05/2020																		
28/05/2020																		
30/05/2020																		D
No. of result triggereing Action or Limit Level	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1

Note: Detailed results are presented in **Appendix D**.	
Legend:	
	The monitoring results were within the corresponding Action and Limit Levels
D	Monitoring result triggered the 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 result triggered the Limit Level on one monitoring day at a SR station located downstream of the Project. However, all monitoring results recorded at the IM stations, which were located closer to active construction activities, were within the Action and Limit Levels. Therefore, the case was considered not due to the Project.

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

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

	IM1	IM2	IM3	IM4	IM5	IM6	IM7	IM8	IM9	IM10	IM11	IM12	SR2	SR3	SR4A	SR5A	SR6A	SR7
02/05/2020																		
05/05/2020																		
07/05/2020																		
09/05/2020					D													
12/05/2020																		
14/05/2020																		
16/05/2020																		
19/05/2020																		
23/05/2020																		
26/05/2020																		
28/05/2020																		
30/05/2020																		
No. of result triggereing Action or Limit Level	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0

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

Action Level was triggered on 9 May 2020. Investigation focusing on that case which occurred at monitoring station located downstream of the Project was carried out. Details of the Project's marine construction activities and site observations on the concerned monitoring day were collected. Findings were summarised in **Table 4.9**

Table 4.9: Summary of Findings from Investigation of SS Monitoring Results

Date	Marine construction works nearby	Approximate distance from marine construction works	Status of water quality measures (if applicable)	Construction vessels in the vicinity	Turbidity / Silt plume observed near the monitoring station	Action or Limit Level triggered due to Project
9/5/2020	Marine filling works	Around 1km	Relevant section of seawalls partially completed	No	No	No

The investigation confirmed that marine filling works were operating normally. Relevant section of seawalls was also partially completed with rock core to high tide mark and filter layer on the inner side, which could contain the SS generated from marine filling activities within the reclamation area.

SS result recorded at IM5 on 9 May 2020 during mid-flood was within its baseline range. The station was also located around 1km away from the nearest marine construction activities so it was unlikely to be affected. Given that mitigation measures were properly implemented and no silt plume was observed, it is considered as an isolated case due to external factors but not due to the Project.

4.5 Conclusion

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

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

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

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

5 Waste Management

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

5.1 Action and Limit Levels

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

Table 5.1: Action and Limit Levels for Construction Waste

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

5.2 Waste Management Status

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

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

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

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

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

Table 5.2: Construction Waste Statistics

	C&D[1] Material Stockpiled for Reuse or Recycle (m^3)	C&D Material Reused in the Project (m^3)	C&D Material Reused in other Projects (m^3)	C&D Material Transferred to Public Fill (m^3)	Chemical Waste (kg)	Chemical Waste (l)	General Refuse (tonne)
May 2020[2][3]	3,424	34,956	0	2,871	60	2,000	1131

Notes:

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

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

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

6 Chinese White Dolphin Monitoring

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

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

6.1 Action and Limit Levels

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

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

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

Notes: (referring to the baseline monitoring report)

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

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

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

6.2 CWD Monitoring Transects and Stations

6.2.1 Small Vessel Line-transect Survey

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

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

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

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

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

6.2.2 Land-based Theodolite Tracking Survey

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

Table 6.3: Land-based Theodolite Survey Station Details

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

6.3 CWD Monitoring Methodology

6.3.1 Small Vessel Line-transect Survey

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

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

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

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

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

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

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

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

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

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

6.3.2 Photo Identification

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

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

All photos taken were initially examined to sort out those containing potentially identifiable individuals. These sorted-out images would then be examined in detail and compared to the CWD photo-identification catalogue established for 3RS 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 4, 6, 7, 11, 12, 13, 18 and 20 May 2020, covering all transects in NEL, NWL, AW, WL and SWL survey areas for twice.

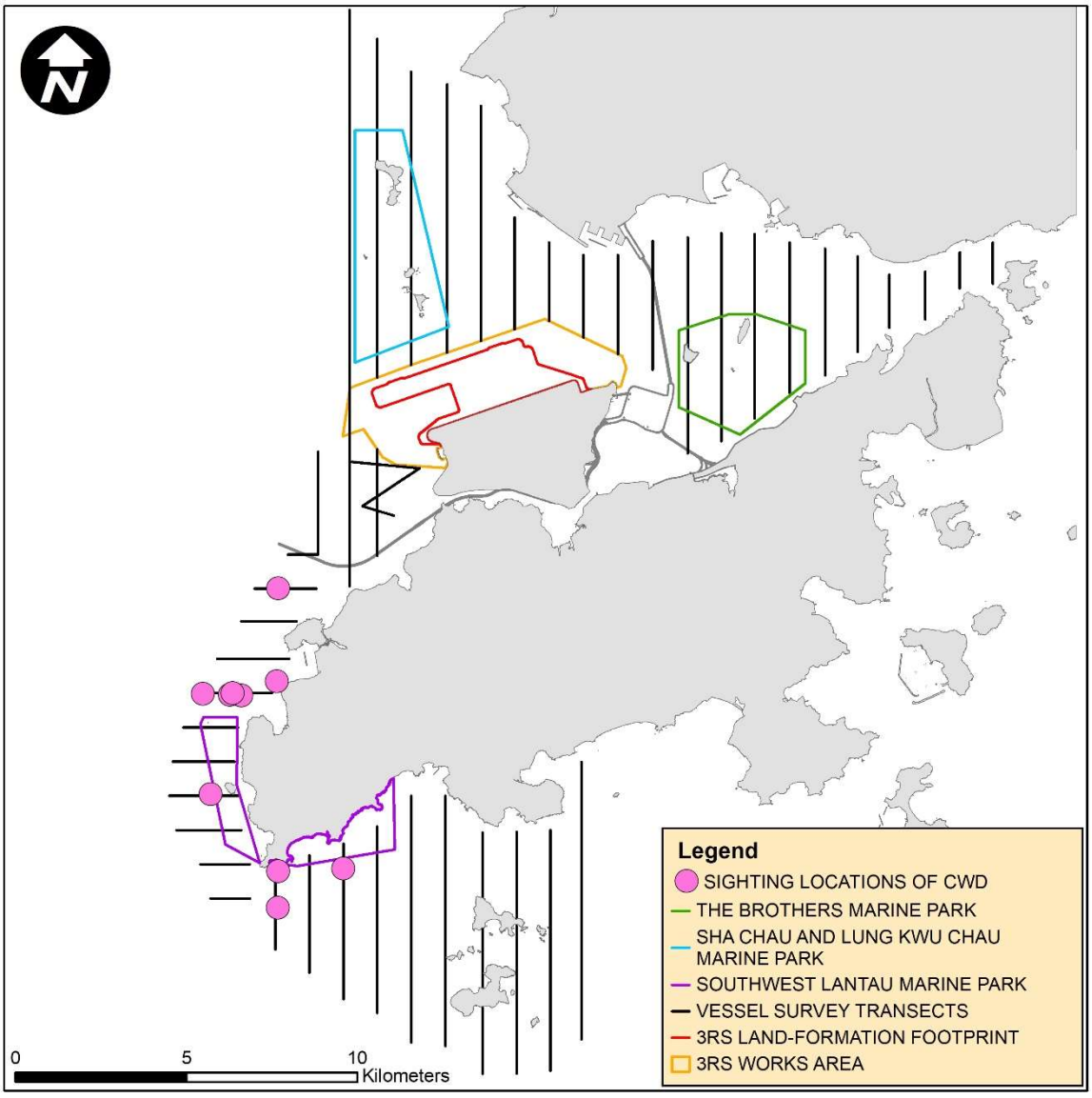
A total of around 453.68 km of survey effort was collected from these surveys and around 93.5% of the survey effort was being conducted under favourable weather condition (i.e. Beaufort Sea State 3 or below with favourable visibility). Details of the survey effort are given in **Appendix D**.

Sighting Distribution

In May 2020, ten sightings with 60 dolphins were sighted. Amongst these sightings, nine sightings with 59 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 D**.

Distribution of all CWD sightings recorded in May 2020 is illustrated in **Figure 6.3**. In WL, CWD sightings scattered from north of Tai O to Peaked Hill with majority of the sightings clustered at the waters between Tai O and Yi O. In SWL, CWD sightings were recorded at the western end of the survey area, in waters off Fan Lau and Kau Ling Chung. No sightings of CWD were recorded in NEL, NWL or AW survey area

Figure 6.3: Sightings Distribution of Chinese White Dolphins



Remarks: (1) Please note that there are 10 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 April 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 May 2020, a total of around 424.26 km of survey effort were conducted under Beaufort Sea State 3 or below with favourable visibility, whilst a total number of nine on-effort sightings with 59 dolphins were sighted under such condition. Calculation of the encounter rates in May 2020 are shown in **Appendix D**.

For the running quarter of the reporting period (i.e., from March 2020 to May 2020), a total of around 1279.92 km of survey effort were conducted under Beaufort Sea State 3 or below with favourable visibility, whilst a total number of 26 on-effort sightings and a total number of 121 dolphins from on-effort sightings were obtained under such condition. Calculation of the running quarterly encounter rates are shown in **Appendix D**.

The STG and ANI of CWD in the whole survey area (i.e. NEL, NWL, AW, WL and SWL) during the month of May 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)
May 2020	2.12	13.91
Running Quarter from March 2020 to May 2020[(1)]	2.03	9.45
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 March 2020 to May 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 May 2020, ten groups of total 60 dolphins were sighted, and the average group size of CWDs was 6.0 dolphins per group. Sightings with small group size (i.e. 1-2 dolphins) accounted for half of all sightings. The large average group size this month was mainly attributed by the three records of CWD sighting with large group size (i.e. 10 or more dolphins).

Activities and Association with Fishing Boats

Two sightings of CWDs were recorded engaging in feeding activities in May 2020 and one of them was observed in association with operating purse seiner.

Mother-calf Pair

In May 2020, two CWD sightings were recorded with the presence of mother-and-unspotted juvenile pair.

6.4.2 Photo Identification

In May 2020, a total number of 35 different CWD individuals were identified for totally 50 times. A summary of photo identification works is presented in **Table 6.5**. Representative photos of these individuals are given in **Appendix D**.

Table 6.5: Summary of Photo Identification

Individual ID	Date of Sighting (dd-mmm-yy)	Sighting Group No.	Area	Individual ID	Date of Sighting (dd-mmm-yy)	Sighting Group No.	Area
SLMM002	12-May-20	5	SWL	SLMM070	11-May-20	4	SWL
	13-May-20	1	WL	SLMM072	12-May-20	6	SWL
		3	WL		13-May-20	3	WL
SLMM003	07-May-20	3	WL	WLMM001	07-May-20	3	WL
	13-May-20	3	WL	WLMM005	07-May-20	3	WL
SLMM007	07-May-20	3	WL	WLMM006	07-May-20	3	WL
SLMM010	11-May-20	4	SWL	WLMM007	07-May-20	3	WL
SLMM012	11-May-20	4	SWL		13-May-20	3	WL
SLMM014	11-May-20	4	SWL	WLMM009	07-May-20	2	WL
SLMM023	11-May-20	4	SWL	WLMM018	13-May-20	3	WL
	13-May-20	1	WL	WLMM027	07-May-20	1	WL
		3	WL		13-May-20	3	WL
SLMM025	11-May-20	4	SWL	WLMM028	07-May-20	3	WL
SLMM030	07-May-20	3	WL	WLMM029	07-May-20	3	WL
	13-May-20	4	WL	WLMM070	11-May-20	4	SWL
SLMM031	12-May-20	5	SWL	WLMM073	11-May-20	4	SWL
SLMM034	11-May-20	4	SWL		13-May-20	3	WL
	13-May-20	1	WL	WLMM081	07-May-20	3	WL
		3	WL	WLMM082	07-May-20	3	WL
SLMM044	13-May-20	1	WL	WLMM114	11-May-20	4	SWL
SLMM049	13-May-20	3	WL		13-May-20	1	WL
SLMM052	11-May-20	4	SWL	WLMM131	13-May-20	3	WL
	13-May-20	3	WL	WLMM138	07-May-20	3	WL
SLMM059	12-May-20	5	SWL	WLMM150	07-May-20	3	WL
SLMM068	12-May-20	5	SWL		13-May-20	3	WL

6.4.3 Land-based Theodolite Tracking Survey

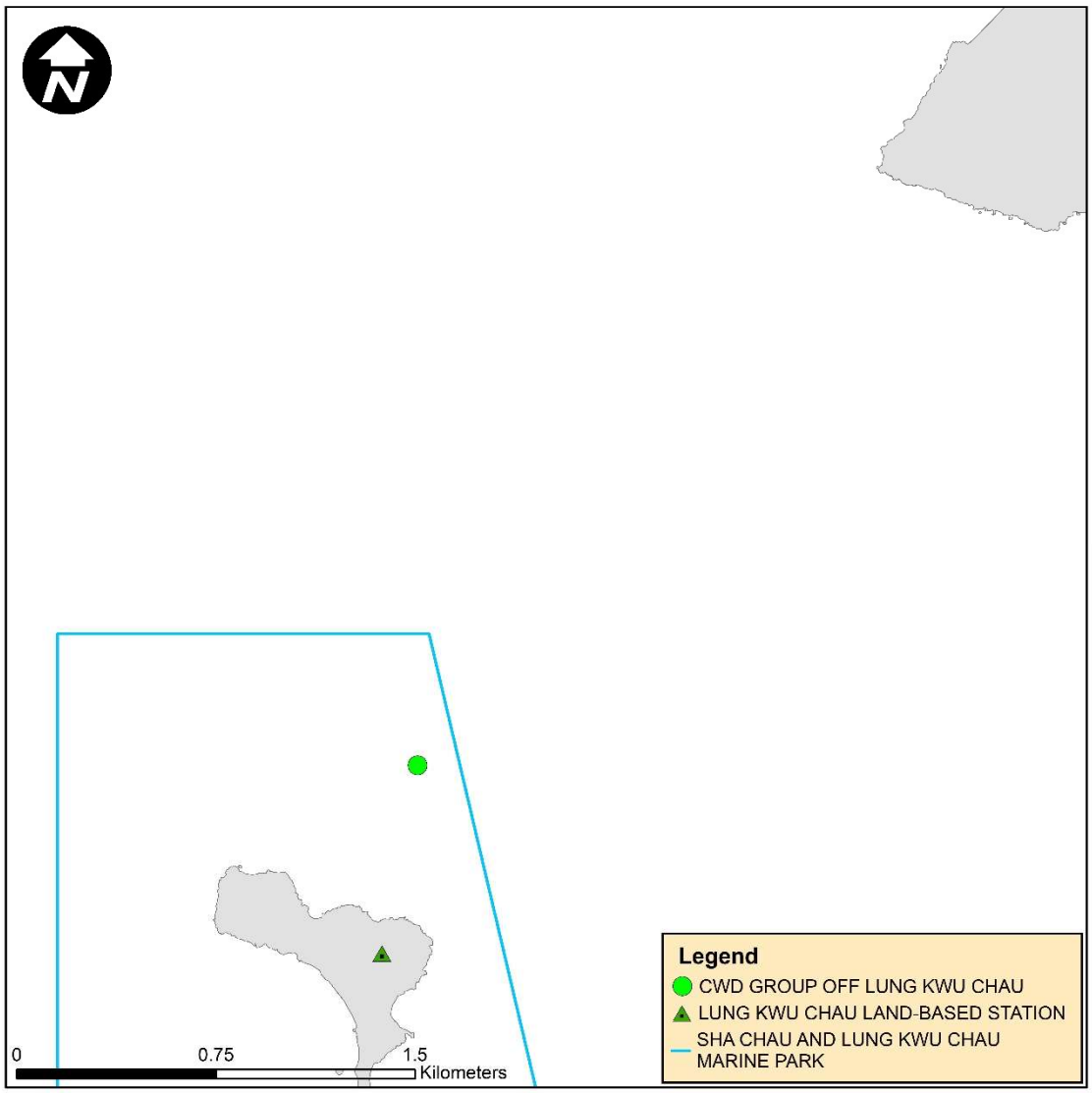
Survey Effort

Land-based theodolite tracking surveys were conducted at LKC on 27 May 2020 and at SC on 28 May 2020, with a total of two days of land-based theodolite tracking survey effort accomplished in this reporting period. Only one CWD group was tracked at LKC station during the survey. Information of survey effort and CWD groups are presented in **Table 6.6**. Details of the survey effort and CWD group tracked are presented in **Appendix D**. The first sighting locations of CWD group tracked at LKC station during land-based theodolite tracking surveys in May 2020 were depicted in **Figure 6.4**. No CWD group was sighted from SC station in this reporting month.

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

Land-based Station	No. of Survey Sessions	Survey Effort (hh:mm)	No. of CWD Groups Sighted	CWD Group Sighting per Survey Hour
Lung Kwu Chau	1	6:00	1	0.17
Sha Chau	1	6:00	0	0
TOTAL	**2**	**12:00**	**1**	**0.08**

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 retrieved on 27 May 2020 and subsequently redeployed and positioned at south of Sha Chau Island inside the SCLKCMP with 20% duty cycle (**Figure 6.5**). The EAR deployment is generally for 6 weeks prior to data retrieval for analysis. Acoustic data is reviewed to give an indication of CWDs occurrence patterns and to obtain anthropogenic noise information simultaneously. Analysis (by a specialised team of acousticians) involved manually browsing through spectrograms of every acoustic recording and logging the occurrence of dolphin signals. All potential dolphin detections will be re-played by computer as well as listened to by human ears for accurate assessment of dolphin group presence. As the period of data collection and analysis takes more than four months, PAM results could not be reported in monthly intervals but report for supplementing the annual CWD monitoring analysis.

6.6 Site Audit for CWD-related Mitigation Measures

During the reporting period, silt curtains were in place by the contractor for marine filling , in which dolphin observers were deployed by contractor in accordance with the MMWP. Overall, 2 to 6 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 694 individuals being trained and the training records kept by the ET. From the contractors' MMWP observation records, no dolphin or other marine mammals were observed within or around the silt curtains. As for DEZ monitoring records, no dolphin or other marine mammals were observed within or around the DEZs in this reporting month. These contractors' records were also audited by the ET during site inspection.

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

6.7 Timing of Reporting CWD Monitoring Results

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

6.8 Summary of CWD Monitoring

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

7 Environmental Site Inspection and Audit

7.1 Environmental Site Inspection

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

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

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

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

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

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

7.2 Audit of SkyPier High Speed Ferries

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

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 May 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**. There were no daily movements of all SkyPier HSFs in this reporting period. 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 May 2020
Total number of ferry movements recorded and audited	0
Use diverted route and enter / leave SCZ through Gate Access Points	0 deviation
Daily Cap (including all SkyPier HSFs)	0 daily movement (within the maximum daily cap - 125 daily movements).

7.3 Audit of Construction and Associated Vessels

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

ET carried out the following actions during the reporting period:

- Two skipper training sessions were held for contractors' concerned skippers of relevant construction vessels to familiarize them with the predefined routes; general education on local cetaceans; guidelines for avoiding adverse water quality impact; the required environmental practices / measures while operating construction and associated vessels under the Project; and guidelines for operating vessels safely in the presence of CWDs. The list of all trained skippers was properly recorded and maintained by ET.
- Nine 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, 12 skippers were trained by ET and 55 skippers were trained by contractors' Environmental Officers. In total, 1514 skippers were trained from August 2016 to May 2020.
- The MSS automatically recorded deviation cases such as speeding, entering no entry zone and not travelling through the designated gate. ET conducted checking to ensure the MSS records deviation cases accurately.

- Deviations such as speeding in the works area, entered no entry zone, and entering from non-designated gates were identified. All the concerned contractors were reminded to comply with the requirements of the MTRMP-CAV during the bi-weekly MTCC audit.
- Three-month rolling programmes (one month record and three months forecast) for construction vessel activities were received from the contractors in order to help maintain the number of construction and associated vessels on site to a practicable minimal level.

7.4 Implementation of Dolphin Exclusion Zone

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

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

7.5 Status of Submissions under Environmental Permits

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

Table 7.2: Status of Submissions under Environmental Permit

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

7.6 Compliance with Other Statutory Environmental Requirements

During the reporting period, environmental related licenses and permits required for the construction activities were checked. No non-compliance with environmental statutory

requirements was recorded. The environmental licenses and permits which are valid in the reporting period are presented in **Appendix E**.

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

7.7.1 Complaints

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

7.7.2 Notifications of Summons or Status of Prosecution

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

7.7.3 Cumulative Statistics

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

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

8.1 Construction Programme for the Coming Reporting Period

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

Advanced Works:

Contract P560 (R) Aviation Fuel Pipeline Diversion Works

- Stockpiling of construction materials

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; and
- Site establishment.

Contract 3303 Third Runway and Associated Works

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

Third Runway Concourse:

Contract 3402 New Integrated Airport Centres Enabling Works

- Potable water and seawater works;

- Road works; and
- Sewerage and pipe works.

Contract 3403 New Integrated Airport Centres Building and Civil Works

- Site establishment; and
- Foundation works.

Contract 3405 Third Runway Concourse Foundation and Substructure Works

- Bored pilling work; and
- Site establishment.

Terminal 2 Expansion:

Contract 3501 Antenna Farm and Sewage Pumping Station

- Site clearance.

Contract 3503 Terminal 2 Foundation and Substructure Works

- T2 demolition;
- Site establishment;
- 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)

- Construction of site office.

Contract 3602 Existing APM System Modification Works

- Modification works at APM depot.

Construction Support (Facilities):

Contract 3721 Construction Support Infrastructure Works

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

Contract 3722 Construction Support Facilities

- Formboard erecting and concreting;
- Superstructure; and
- Site Establishment.

Airport Support Infrastructure:

Contract 3801 APM and BHS Tunnels on Existing Airport Island

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

Construction Support (Services / Licenses):

Contract 3901A/ B Concrete Batching Facility

- Footing construction; and
- Erection of steelwork.

8.2 Key Environmental Issues for the Coming Reporting Period

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

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

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

8.3 Monitoring Schedule for the Coming Reporting Period

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

8.4 Review of the Key Assumptions Adopted in the EIA Report

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

9 Conclusion and Recommendation

The key activities of the Project carried out in the reporting period included reclamation works and land-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 and SS, obtained during the reporting period were within the corresponding Action and Limit Levels stipulated in the EM&A programme. Relevant investigations and follow-up actions will be conducted according to the EM&A programme if the corresponding Action and Limit Levels are triggered. For DO and SS, some of the testing results triggered the relevant Action and Limit Level, and the corresponding investigations were conducted accordingly. The investigation findings concluded that the cases were not related to the Project. To conclude, the construction 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 is within the maximum daily cap of 125 daily movements in May 2020.

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

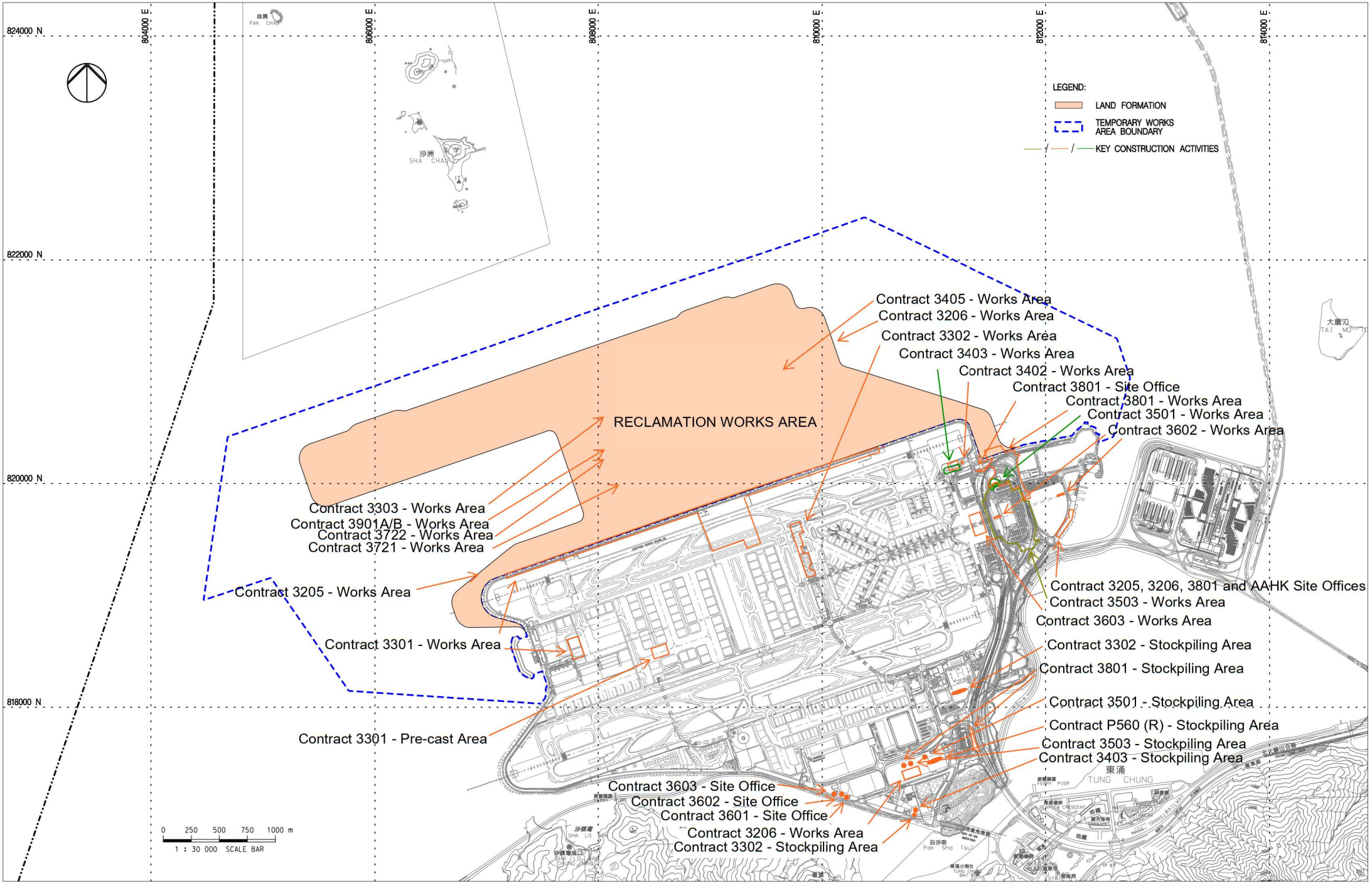
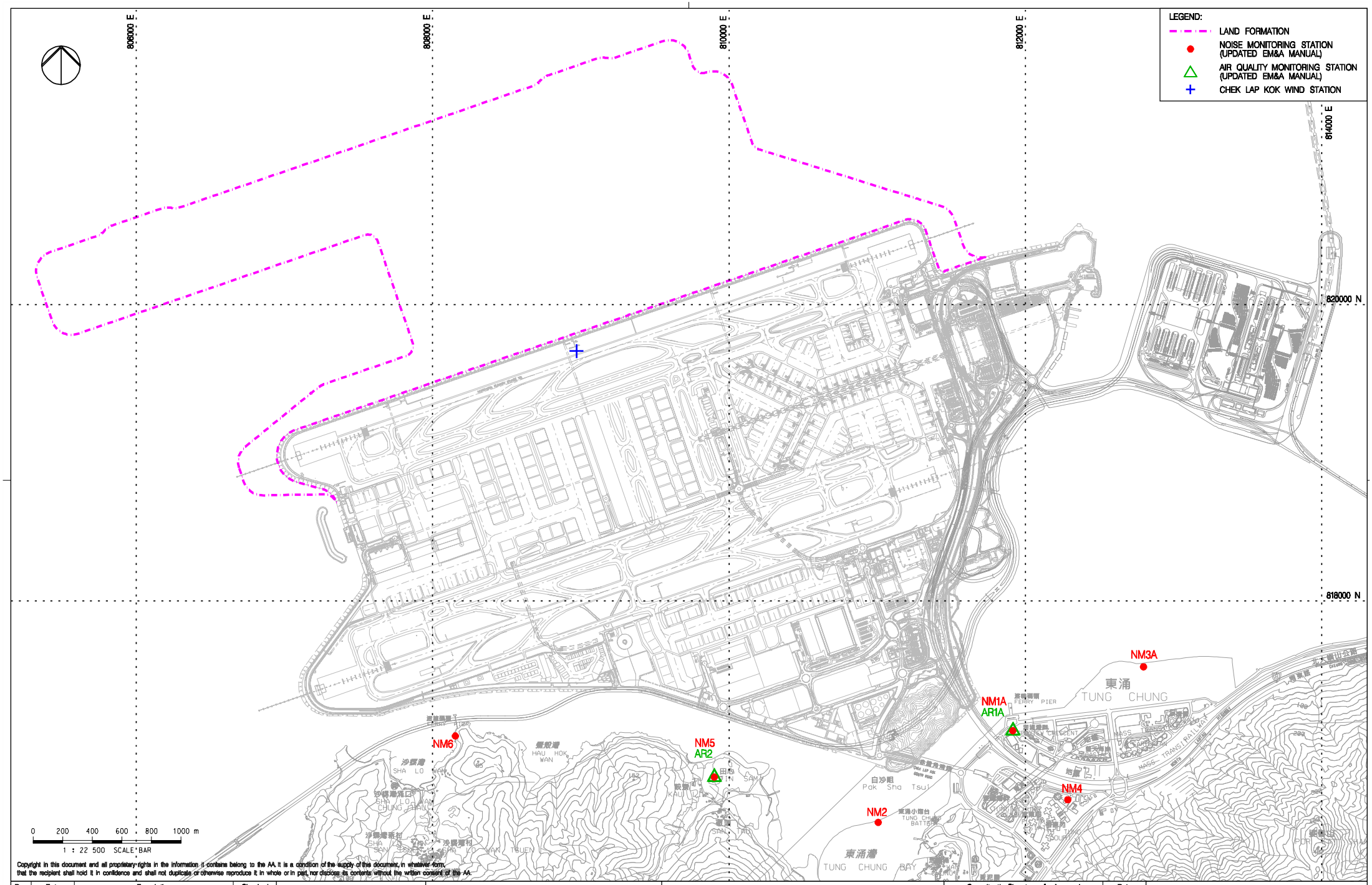


FIGURE 1.1 LOCATIONS OF KEY CONSTRUCTION ACTIVITIES

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
D	29OCT18	GENERAL REVISION	SH

香港國際機場 HONG KONG INTERNATIONAL AIRPORT

MOTT MACDONALD

Title

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

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

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

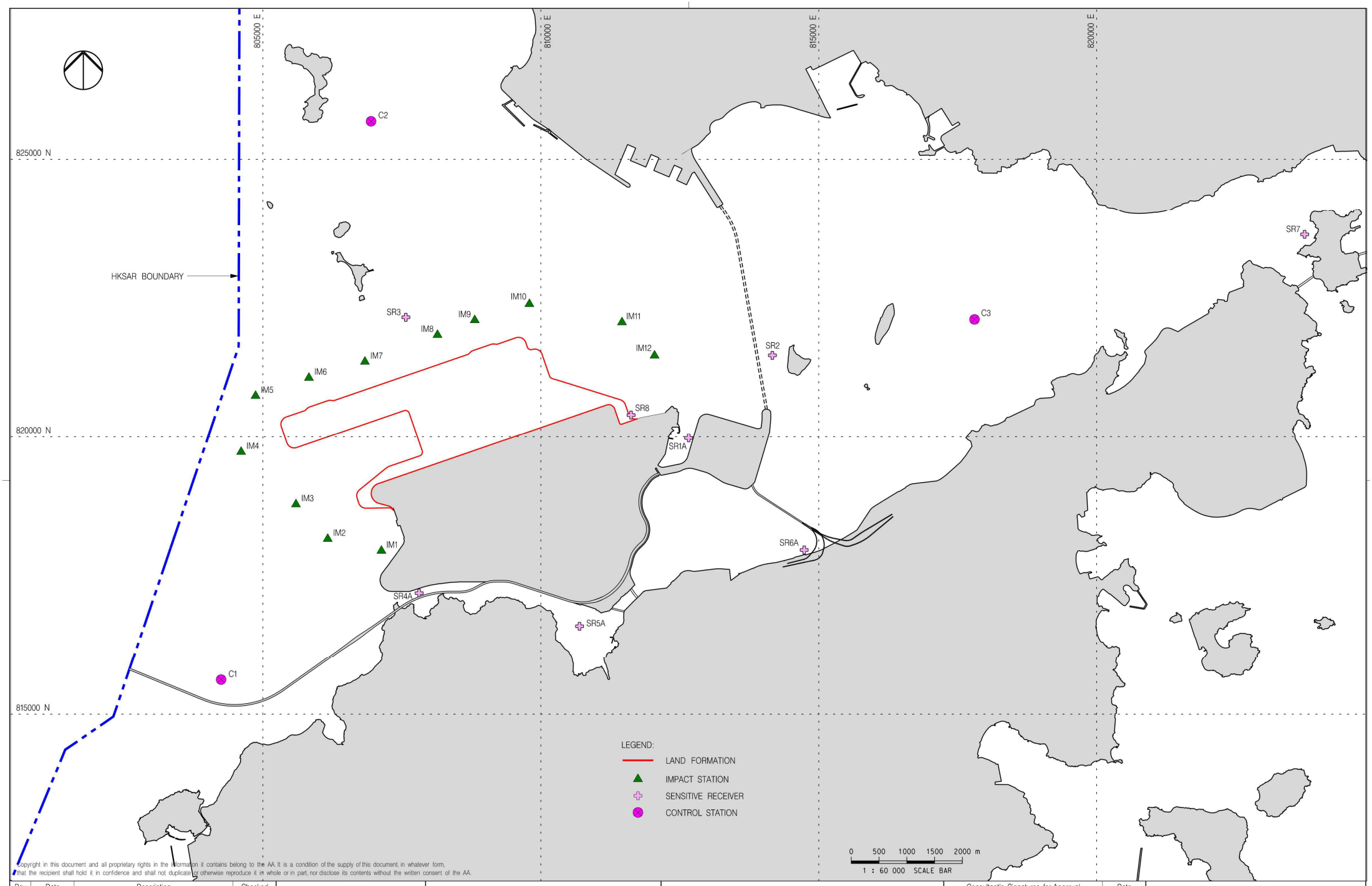
Drawing No.

FIGURE 2.1

Scale at A3 1 : 22500

Rev. D

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



Rev.	Date	Description	Checked
A	21AUG19	FIRST ISSUE	VL

香港國際機場 HONG KONG INTERNATIONAL AIRPORT

Airport Authority HKIA Tower, 1 Sky Plaza Road, Hong Kong, International Airport, Lantau, Hong Kong
Tel: (852) 2188 7111 Fax: (852) 2824 0711

MOTT MACDONALD

Title

WATER QUALITY MONITORING STATIONS

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

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

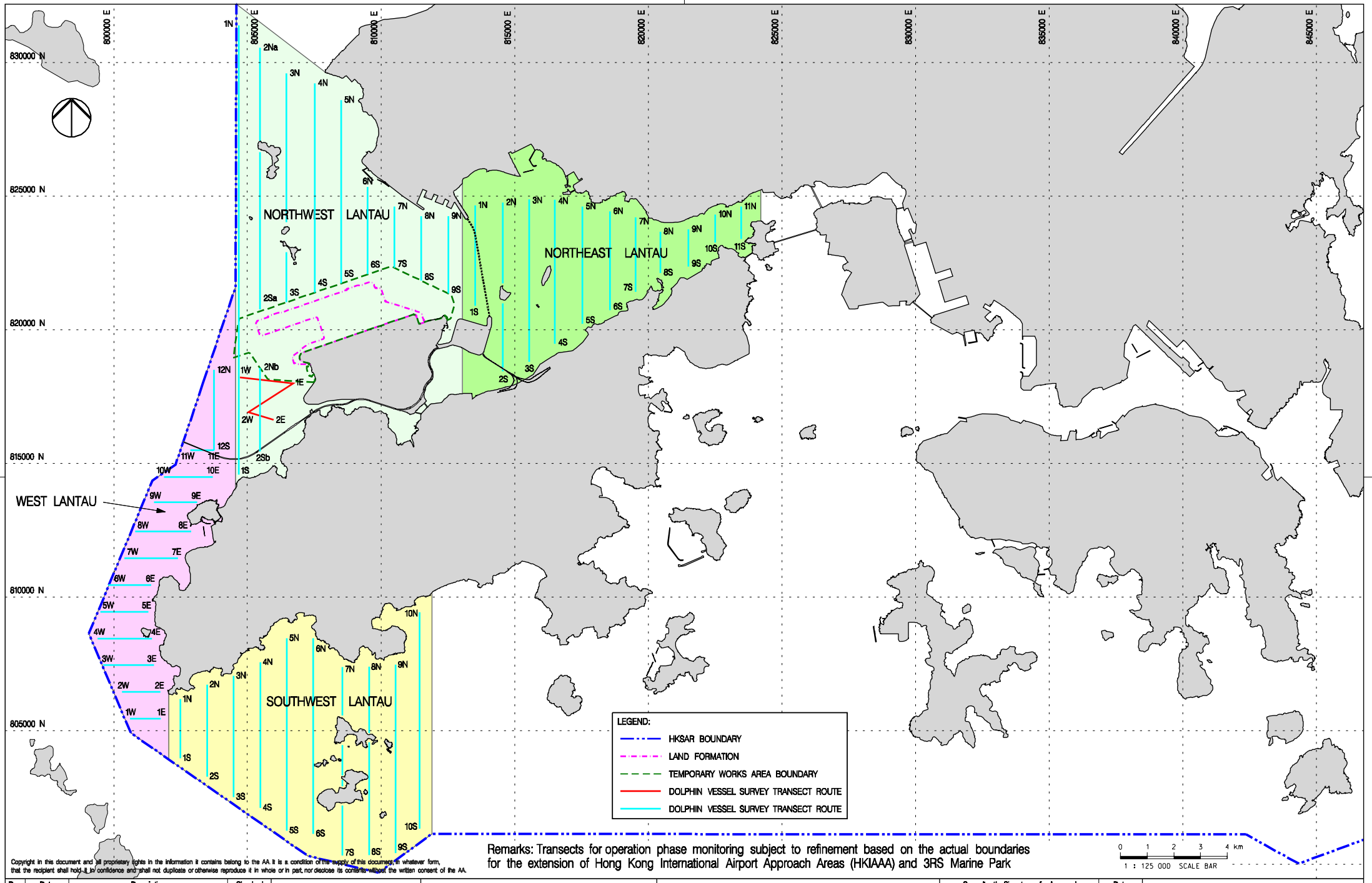
Drawing No.

FIGURE 4.1

Scale at A3 1 : 60000

Rev. A

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



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

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

香港國際機場 HONG KONG INTERNATIONAL AIRPORT

MOTT MACDONALD

Title

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

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

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

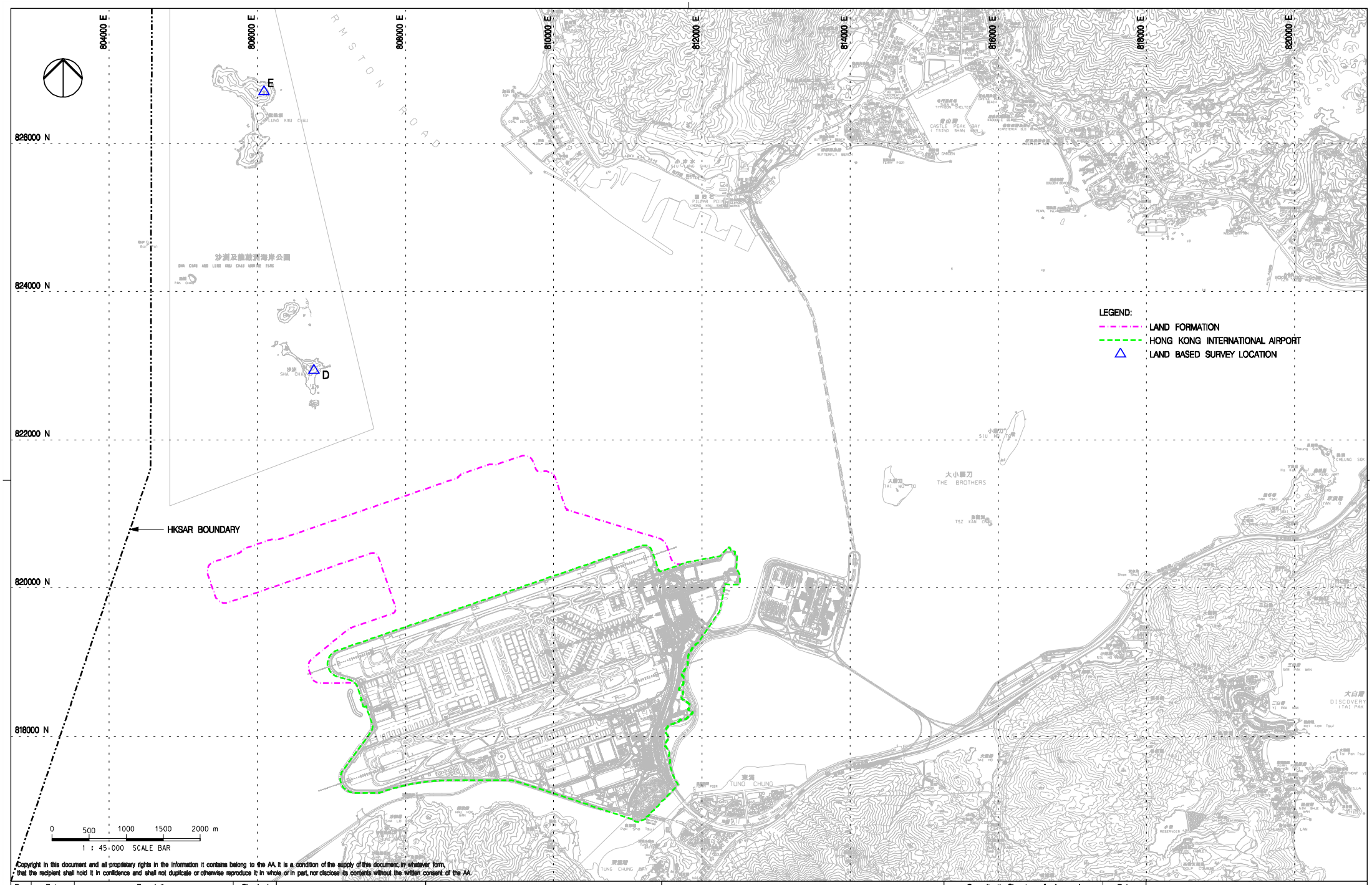
Drawing No.

FIGURE 6.1

Scale at A3 1 : 125000

Rev. F

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



Rev.	Date	Description	Checked
A	02DEC15	FIRST ISSUE	JC
B	06FEB17	GENERAL REVISION	JC
C	29OCT18	GENERAL REVISION	SH

香港國際機場 HONG KONG INTERNATIONAL AIRPORT

MOTT MACDONALD

Title

LAND BASED DOLPHIN MONITORING IN BASELINE AND CONSTRUCTION PHASES

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

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

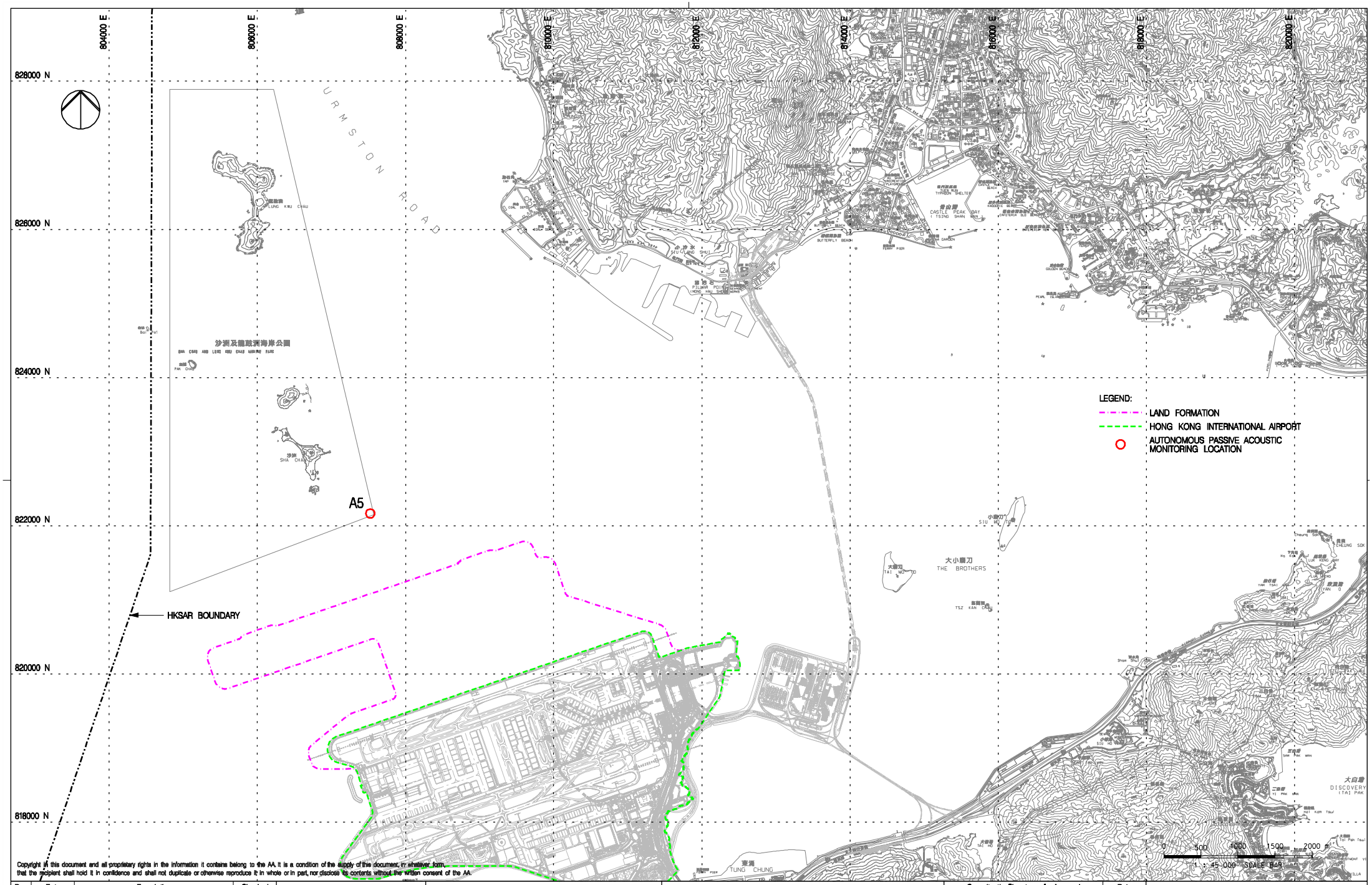
Drawing No.

FIGURE 6.2

Scale at A3 1 : 45000

Rev. C

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



Rev.	Date	Description	Checked
A	29AUG17	FIRST ISSUE	JT
B	10OCT17	GENERAL REVISION	PL
C	29OCT18	GENERAL REVISION	SH

香港國際機場 | HONG KONG INTERNATIONAL AIRPORT

MOTT MACDONALD

Title

LOCATION FOR AUTONOMOUS PASSIVE ACOUSTIC MONITORING

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

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

Drawing No.

FIGURE 6.5

Scale at A3 1 : 45000

Rev. C

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

Appendix A. Contract Description

Contract Description

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

Contract No.	Contract Title	Contractor	Key Construction Activities
			• Construction of a new dual taxiway; • Cable ducting works; • Extension of existing portable water supply system; and • All associated works.
3302	Eastern Vehicular Tunnel Advance Works	China Road and Bridge Corporation	The works covered by the Contract 3302 comprise the design and construction of the first section of the new Eastern Vehicular Tunnel and a Road Tunnel Plant Building. The major construction activities include without limitation the following: • Foundation and structural works; • Cast-in / Underground electrical & mechanical works and utility services; and • All associated testing and commissioning works.
3303	Third Runway and Associated Works	SAPR Joint Venture	The works covered by the Contract 3303 comprise all elements of permanent works and temporary works required for the completion, commissioning and operation of the new North Runway and existing South Runway following the closure of the existing North Runway. The major construction activities include without limitation the following: • New runway, taxiways, and associated works; • Infrastructure works; • Construction of ancillary buildings and facilities; • Set up of various airport systems; and • All associated testing and commissioning works.
3402	New Integrated Airport Centers Enabling Works	Wing Hing Construction Co., Ltd.	The works covered by the Contract 3402 comprise the enabling works for the new Integrated Airport Centers. The major construction activities include without limitation the following: • Site clearance and demolition; • Building services works; • Utilities diversion and installation works; • Roadworks including associated facilities; and • All associated testing and commissioning works.
3403	New Integrated Airport Centres	Sun Fook Kong Construction Limited	The works covered by the Contract 3403 comprise the construction of a new Integrated Airport Centre (IAC) and a number of ancillary facilities and

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

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

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

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

Environmental Mitigation Implementation Schedule (EMIS) for Construction Phase

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			▪ After completion of SI, the Contamination Assessment Report (CAR) will be prepared and submitted to EPD for approval prior to start of the proposed construction works at the golf course, the underground and above-ground fuel storage tank areas, emergency power generation units, airside petrol filling station and fuel tank room.		I *(CAR for golf course and Terminal 2 Emergency Power Supply System No.1)
			▪ Should remediation be required, Remediation Action Plan (RAP) and Remediation Report (RR) will be prepared for EPD's approval prior to commencement of the proposed remediation and any construction works respectively.		N/A
11.8.1.2	8.1	-	If contaminated soil is identified, the following mitigation measures are for the excavation and transportation of contaminated materials (if any): ▪ To minimize the incidents of construction workers coming in contact with any contaminated materials, bulk earth-moving excavation equipment should be employed; ▪ Contact with contaminated materials can be minimised by wearing appropriate clothing and personal protective equipment such as gloves and masks (especially when working directly with contaminated material), provision of washing facilities and prohibition of smoking and eating on site; ▪ Stockpiling of contaminated excavated materials on site should be avoided as far as possible; ▪ The use of any contaminated soil for landscaping purpose should be avoided unless pre-treatment was carried out; ▪ Vehicles containing any excavated materials should be suitably covered to reduce dust emissions and/or release of contaminated wastewater; ▪ Truck bodies and tailgates should be sealed to prevent any discharge; ▪ Only licensed waste haulers should be used to collect and transport contaminated material to treatment/disposal site and should be equipped with tracking system to avoid fly tipping; ▪ Speed control for trucks carrying contaminated materials should be exercised. 8km/h is the recommended speed limit; ▪ Strictly observe all relevant regulations in relation to waste handling, such as Waste Disposal Ordinance (Cap 354), Waste Disposal (Chemical Waste) (General) Regulation (Cap 354) and obtain all necessary permits where required; and ▪ Maintain records of waste generation and disposal quantities and disposal arrangements.	Project Site Area / Construction Phase	N/A
			Terrestrial Ecological – Construction Phase		
12.10.1.1	9.2	2.14	**Pre-construction Egretry Survey** ▪ Conduct ecological survey for Sha Chau egretry to update the latest boundary of the egretry.	Breeding season (April - July) prior to commencement of	I

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

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

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
13.11.1.3 to 13.11.1.6	-	-	**Minimisation of Land Formation Area** ▪ Minimise the overall size of the land formation needed for the additional facilities to minimise the overall loss of habitat for marine resources, especially the CWD population.	Land formation footprint / during detailed design phase to completion of construction	I
13.11.5.4 to 13.11.5.13	10.3.1	-	**SkyPier High Speed Ferries' Speed Restrictions and Route Diversions** ▪ SkyPier HSFs operating to / from Zhuhai and Macau would divert north of SCLKC Marine Park with a 15 knot speed limit to apply for the part-journeys that cross high CWD abundance grid squares as indicatively shown in **Drawing No. MCL/P132/EIA/13-023** of the EIA Report. Both the alignment of the northerly route and the portion of routings to be subject to the speed limit of 15 knots shall be finalised prior to commencement of construction based on the future review of up-to-date CWD abundance and EM&A data and taking reference to changes in total SkyPier HSF numbers; and ▪ A maximum of 10 knots will be enforced through the designated SCLKC Marine Park area at all times.	Area between the footprint and SCLKC Marine Park during construction phase	I
			Other mitigation measures ▪ The ET will audit various parameters including actual daily numbers of HSFs, compliance with the 15-knot speed limit in the speed control zone and diversion compliance for SkyPier HSFs operating to / from Zhuhai and Macau; and ▪ The effectiveness of the CWD mitigation measures after implementation of initial six month SkyPier HSF diversion and speed restriction will be reviewed.	Area between the footprint and SCLKC Marine Park during construction phase	I
13.11.5.14 to 13.11.5.18	10.3.1	2.31	**Dolphin Exclusion Zone** ▪ Establishment of a 24 hr Dolphin Exclusion Zone (DEZ) with a 250 m radius around the land formation works areas;	Marine waters around land formation works area during construction phase	I
			▪ A DEZ would also be implemented during ground improvement works (e.g. DCM), water jetting works for submarine cables diversion, open trench dredging at the field joint locations and seawall construction; and		I
			▪ A DEZ would also be implemented during bored piling work but as a precautionary measure only.		N/A
13.11.5.19	10.4	2.31	**Acoustic Decoupling of Construction Equipment** ▪ Air compressors and other noisy equipment that must be mounted on steel barges should be acoustically-decoupled to the greatest extent feasible, for instance by using rubber or air-filled tyres; and ▪ Specific acoustic decoupling measures shall be specified during the detailed design of the project for use during the land formation works.	Around coastal works area during construction phase	I
13.11.5.20	10.6.1	2.29	**Spill Response Plan**	Construction phase	I

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

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

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
Table 15.6	12.3	-	**CM5 -** Erection of decorative mesh screens or construction hoardings around works areas in visually unobtrusive colours.	All works areas for duration of works; Upon handover and completion of works. – may be disassembled in phases	I
Table 15.6	12.3	-	**CM6 -** Avoidance of excessive height and bulk of site buildings and structures.	New passenger concourse, terminal 2 expansion and other proposed airport related buildings and structures under the project; Upon handover and completion of works.	N/A
Table 15.6	12.3	-	**CM7** - Control of night-time lighting by hooding all lights and through minimisation of night working periods.	All works areas for duration of works; Upon handover and completion of works. – may be disassembled in phases	I
Table 15.6	12.3	-	**CM8 -** All existing trees shall be carefully protected during construction. Detailed Tree Protection Specification shall be provided in the Contract Specification. Under this specification, the Contractor shall be required to submit, for approval, a detailed working method statement for the protection of trees prior to undertaking any works adjacent to all retained trees, including trees in contractor's works areas.	All existing trees to be retained; Upon handover and completion of works.	I
Table 15.6	12.3	-	**CM9 -** Trees unavoidably affected by the works shall be transplanted where practical. A detailed Tree Transplanting Specification shall be provided in the Contract Specification, if applicable. Sufficient time for necessary tree root and crown preparation periods shall be allowed in the project programme.	All existing trees to be affected by the works; Upon handover and completion of works.	I
Table 15.6	12.3	-	**CM10 -** Land formation works shall be followed with advanced hydroseeding around taxiways and runways as soon as practical.	All affected existing grass areas around runways and verges/Duration of works;	N/A

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

Notes:

I= implemented where applicable;

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

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

Appendix C. Monitoring Schedule

Monitoring Schedule of This Reporting Period

May-20

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1	**2** AR1A, AR2 WQ General & Regular DCM mid-ebb: 09:16 mid-flood: 13:56
3	**4** CWD Survey (Vessel)	**5** Site Inspection WQ General & Regular DCM mid-ebb: 11:33 mid-flood: 17:33	**6** CWD Survey (Vessel)	**7** Site Inspection CWD Survey (Vessel) WQ General & Regular DCM mid-ebb: 12:53 mid-flood: 19:31	**8** Site Inspection AR1A, AR2 NM1A, NM4, NM5, NM6	**9** WQ General & Regular DCM mid-ebb: 14:19 mid-flood: 07:37
10	**11** CWD Survey (Vessel)	**12** Site Inspection CWD Survey (Vessel) WQ General & Regular DCM mid-ebb: 16:37 mid-flood: 09:23	**13** Site Inspection CWD Survey (Vessel)	**14** Site Inspection AR1A, AR2 NM1A, NM4, NM5, NM6 WQ General & Regular DCM mid-ebb: 18:31 mid-flood: 05:59	**15** Site Inspection	**16** WQ General & Regular DCM mid-ebb: 09:52 mid-flood: 14:30
17	**18** Site Inspection CWD Survey (Vessel)	**19** Site Inspection WQ General & Regular DCM mid-ebb: 11:35 mid-flood: 17:27	**20** CWD Survey (Vessel) AR1A, AR2 NM1A, NM4, NM5, NM6	**21** Site Inspection WQ General & Regular DCM[(1)] mid-ebb: 12:31 mid-flood: 05:56	**22** Site Inspection	**23** WQ General & Regular DCM mid-ebb: 13:30 mid-flood: 20:20
24	**25** Site Inspection NM4	**26** Site Inspection AR1A, AR2 NM1A, NM5 WQ General & Regular DCM mid-ebb: 15:19 mid-flood: 08:09	**27** CWD Survey (Land-based) NM6	**28** Site Inspection CWD Survey (Land-based) WQ General & Regular DCM mid-ebb: 16:53 mid-flood: 09:28	**29** Site Inspection	**30** WQ General & Regular DCM mid-ebb: 07:12 mid-flood: 11:50
31		**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 during mid flood tide on 21 May 2020 was cancelled due to to red rainstorm warning signal in force.				

Tentative Monitoring Schedule of Next Reporting Period

Jun-20

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1 Site Inspection AR1A, AR2 NM1A, NM4, NM5, NM6	**2** Site Inspection WQ General & Regular DCM mid-ebb: 10:25 mid-flood: 16:25	**3**	**4** Site Inspection CWD Survey (Land-based) WQ General & Regular DCM mid-ebb: 11:52 mid-flood: 18:38	**5** Site Inspection	**6** AR1A, AR2 WQ General & Regular DCM mid-ebb: 13:21 mid-flood: 20:31
7	**8** Site Inspection	**9** Site Inspection CWD Survey (Vessel) WQ General & Regular DCM mid-ebb: 15:33 mid-flood: 08:23	**10** CWD Survey (Land-based)	**11** Site Inspection CWD Survey (Vessel) NM4, NM6 WQ General & Regular DCM mid-ebb: 17:02 mid-flood: 09:49	**12** Site Inspection AR1A, AR2 NM1A, NM5	**13** WQ General & Regular DCM mid-ebb: 07:32 mid-flood: 12:05
14	**15** Site Inspection CWD Survey (Vessel)	**16** Site Inspection CWD Survey (Vessel) WQ General & Regular DCM mid-ebb: 10:23 mid-flood: 16:11	**17** CWD Survey (Vessel)	**18** Site Inspection CWD Survey (Vessel) AR1A, AR2 NM1A, NM4, NM5, NM6 WQ General & Regular DCM mid-ebb: 11:30 mid-flood: 17:59	**19** Site Inspection	**20** WQ General & Regular DCM mid-ebb: 12:35 mid-flood: 19:32
21	**22** Site Inspection CWD Survey (Vessel)	**23** Site Inspection NM4, NM6 WQ General & Regular DCM mid-ebb: 14:29 mid-flood: 07:18	**24** Site Inspection CWD Survey (Vessel) AR1A, AR2 NM1A, NM5	**25** WQ General & Regular DCM mid-ebb: 15:56 mid-flood: 08:45	**26** Site Inspection	**27** WQ General & Regular DCM mid-ebb: 17:35 mid-flood: 10:35
28	**29** Site Inspection	**30** Site Inspection AR1A, AR2 NM1A, NM4, NM5, NM6 WQ General & Regular DCM mid-ebb: 09:00 mid-flood: 15:05				

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

Appendix D. Monitoring Results

Air Quality Monitoring Results

1-hour TSP Results

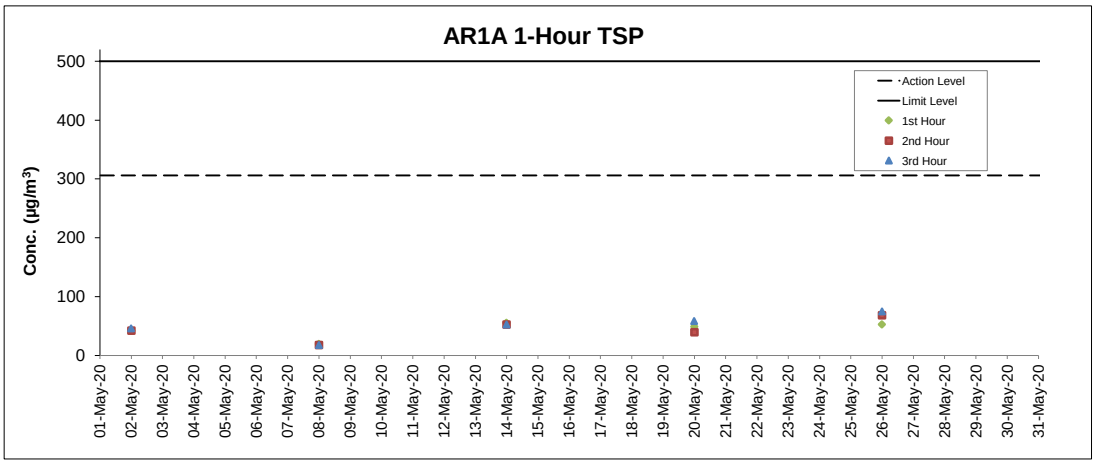
Station: AR1A- Man Tung Road Park

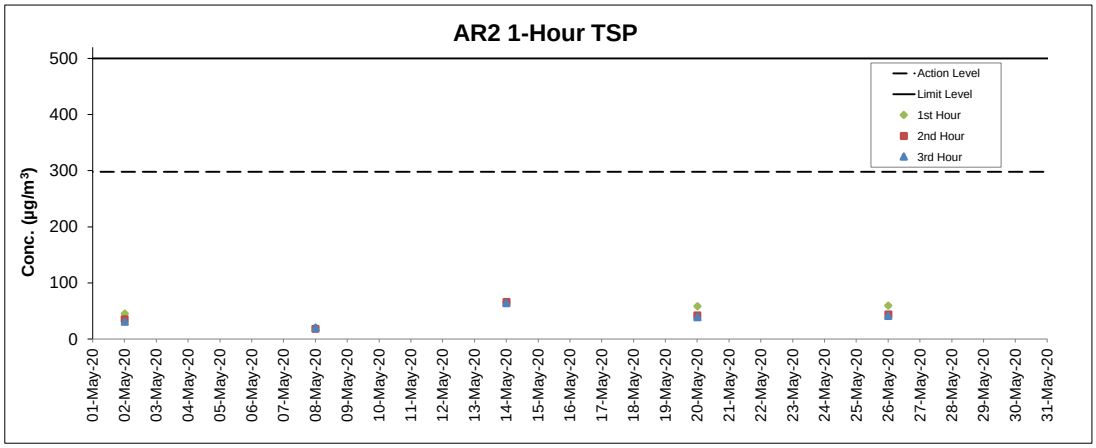
Date	Time	Weather	Wind Speed (m/s)	Wind Direction (deg)	1-hr TSP (μg/m^3)	Action Level (μg/m^3)	Limit Level (μg/m^3)
02-May-20	13:37	Sunny	4.7	245	42	306	500
02-May-20	14:37	Sunny	5.8	233	43	306	500
02-May-20	15:37	Sunny	5.0	237	46	306	500
08-May-20	13:25	Cloudy	5.8	194	20	306	500
08-May-20	14:25	Cloudy	6.9	206	18	306	500
08-May-20	15:25	Cloudy	6.4	203	18	306	500
14-May-20	13:25	Cloudy	6.4	125	56	306	500
14-May-20	14:25	Cloudy	8.1	134	53	306	500
14-May-20	15:35	Cloudy	8.3	148	53	306	500
20-May-20	13:08	Cloudy	7.8	106	49	306	500
20-May-20	14:08	Cloudy	7.5	95	40	306	500
20-May-20	15:08	Cloudy	8.3	89	59	306	500
26-May-20	13:12	Cloudy	8.3	230	53	306	500
26-May-20	14:12	Cloudy	7.2	222	69	306	500
26-May-20	15:12	Cloudy	3.9	229	75	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)
02-May-20	9:38	Sunny	2.8	33	45	298	500
02-May-20	10:38	Sunny	3.6	263	35	298	500
02-May-20	11:38	Sunny	5.0	259	31	298	500
08-May-20	9:15	Cloudy	3.3	201	20	298	500
08-May-20	10:15	Cloudy	6.1	167	18	298	500
08-May-20	11:15	Cloudy	5.0	210	20	298	500
14-May-20	9:15	Cloudy	8.3	91	65	298	500
14-May-20	10:15	Cloudy	7.5	100	66	298	500
14-May-20	11:15	Cloudy	8.3	99	64	298	500
20-May-20	9:13	Cloudy	5.3	69	58	298	500
20-May-20	10:13	Cloudy	6.1	85	42	298	500
20-May-20	11:13	Cloudy	6.4	133	39	298	500
26-May-20	9:32	Cloudy	6.1	227	59	298	500
26-May-20	10:32	Cloudy	6.1	224	44	298	500
26-May-20	11:32	Cloudy	6.7	227	41	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)
08-May-20	Cloudy	13:38	72.2	51.7	72
08-May-20	Cloudy	13:43	75.2	53.4	
08-May-20	Cloudy	13:48	72.9	57.7	
08-May-20	Cloudy	13:53	72.5	55.8	
08-May-20	Cloudy	13:58	73.6	55.1	
08-May-20	Cloudy	14:03	72.0	51.5	
14-May-20	Cloudy	16:47	59.6	51.5	66
14-May-20	Cloudy	16:52	59.4	51.8	
14-May-20	Cloudy	16:57	64.2	55.1	
14-May-20	Cloudy	17:02	65.3	55.1	
14-May-20	Cloudy	17:07	71.0	55.2	
14-May-20	Cloudy	17:12	66.1	51.6	
20-May-20	Cloudy	16:35	67.2	55.1	68
20-May-20	Cloudy	16:40	68.9	58.6	
20-May-20	Cloudy	16:45	66.0	55.7	
20-May-20	Cloudy	16:50	67.5	57.6	
20-May-20	Cloudy	16:55	68.9	60.4	
20-May-20	Cloudy	17:00	65.9	53.9	
26-May-20	Cloudy	13:02	74.4	60.7	69
26-May-20	Cloudy	13:07	67.3	56.1	
26-May-20	Cloudy	13:12	66.8	61.3	
26-May-20	Cloudy	13:17	63.3	55.8	
26-May-20	Cloudy	13:22	66.4	55.5	
26-May-20	Cloudy	13:27	66.4	56.0	

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)
08-May-20	Sunny	16:38	56.7	52.6	59
08-May-20	Sunny	16:43	57.0	52.6	
08-May-20	Sunny	16:48	57.3	52.3	
08-May-20	Sunny	16:53	57.8	52.9	
08-May-20	Sunny	16:58	57.8	52.9	
08-May-20	Sunny	17:03	57.2	52.2	
14-May-20	Cloudy	13:27	63.6	56.4	66
14-May-20	Cloudy	13:32	61.8	58.5	
14-May-20	Cloudy	13:37	62.5	59.1	
14-May-20	Cloudy	13:42	61.4	56.5	
14-May-20	Cloudy	13:47	68.3	55.3	
14-May-20	Cloudy	13:52	68.8	62.5	
20-May-20	Cloudy	13:15	66.0	60.6	66
20-May-20	Cloudy	13:20	65.1	60.7	
20-May-20	Cloudy	13:25	63.8	59.7	
20-May-20	Cloudy	13:30	64.0	60.5	
20-May-20	Cloudy	13:35	64.8	60.6	
20-May-20	Cloudy	13:40	64.1	58.7	
25-May-20	Cloudy	16:55	56.1	53.5	60
25-May-20	Cloudy	17:00	59.2	51.8	
25-May-20	Cloudy	17:05	57.4	51.9	
25-May-20	Cloudy	17:10	55.1	51.3	
25-May-20	Cloudy	17:15	58.5	52.0	
25-May-20	Cloudy	17:20	55.7	51.6	

Remarks:

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

Noise Measurement Results

Station: NM5- Village House, Tin Sum

Date	Weather	Time	Measured L_{10} dB(A)	Measured L_{90} dB(A)	$L_{eq(30mins)}$ dB(A)
08-May-20	Cloudy	10:35	53.4	48.8	59
08-May-20	Cloudy	10:40	53.7	49.0	
08-May-20	Cloudy	10:45	51.7	48.9	
08-May-20	Cloudy	10:50	60.1	47.7	
08-May-20	Cloudy	10:55	54.2	44.3	
08-May-20	Cloudy	11:00	51.2	43.7	
14-May-20	Cloudy	9:17	58.6	56.7	58
14-May-20	Cloudy	9:22	58.1	56.3	
14-May-20	Cloudy	9:27	57.2	49.9	
14-May-20	Cloudy	9:32	56.5	49.6	
14-May-20	Cloudy	9:37	56.9	49.9	
14-May-20	Cloudy	9:42	53.7	47.4	
20-May-20	Cloudy	10:30	51.7	47.0	53
20-May-20	Cloudy	10:35	57.0	45.7	
20-May-20	Cloudy	10:40	50.0	42.3	
20-May-20	Cloudy	10:45	49.4	41.9	
20-May-20	Cloudy	10:50	53.4	43.6	
20-May-20	Cloudy	10:55	52.7	43.1	
26-May-20	Cloudy	10:01	69.0	46.0	57
26-May-20	Cloudy	10:06	56.2	47.7	
26-May-20	Cloudy	10:11	51.5	47.6	
26-May-20	Cloudy	10:16	52.1	48.0	
26-May-20	Cloudy	10:21	62.2	50.2	
26-May-20	Cloudy	10:26	59.4	53.1	

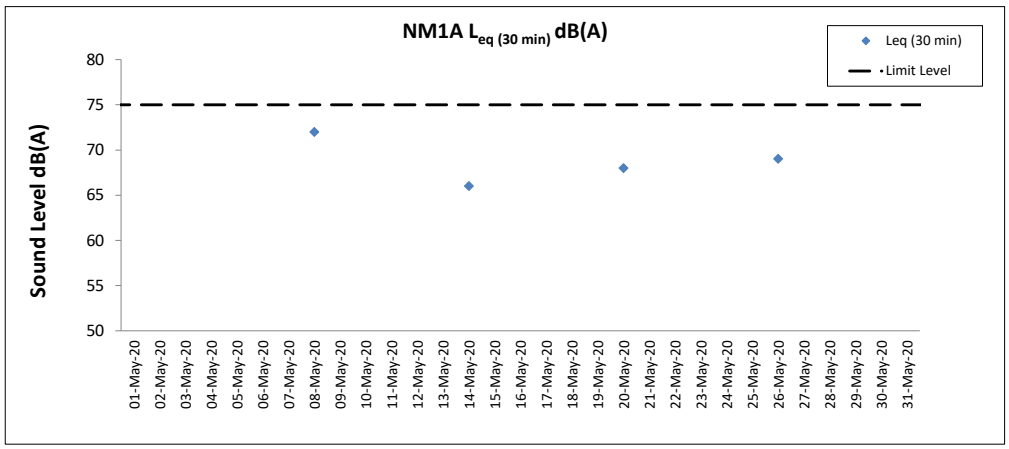
Remarks:
+3dB (A) correction was applied to free-field measurement.

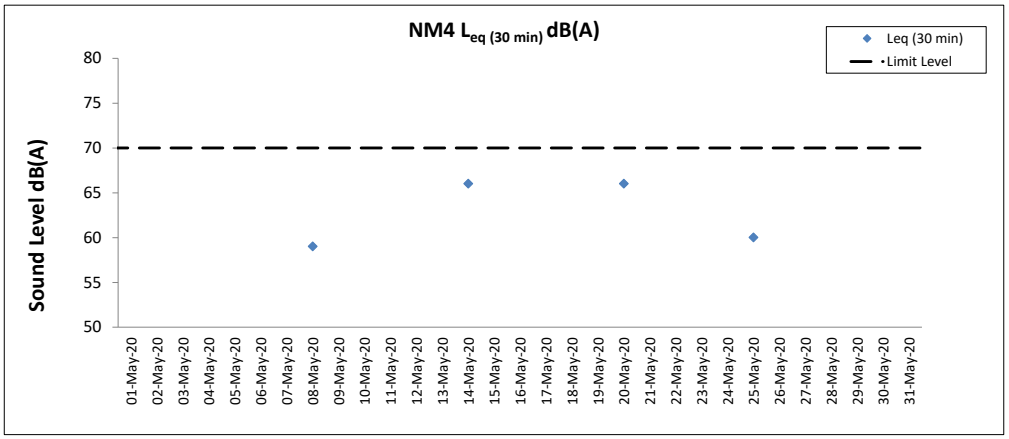
Noise Measurement Results

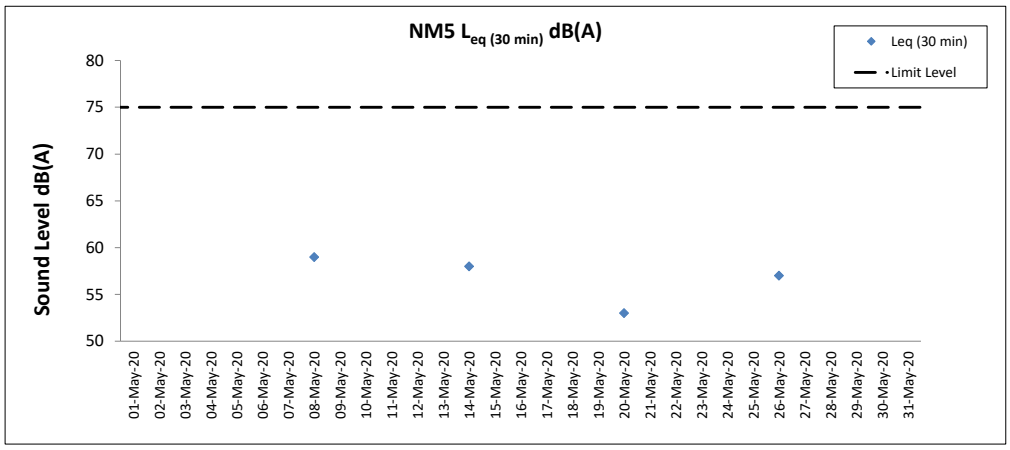
Station: NM6- House No.1 Sha Lo Wan

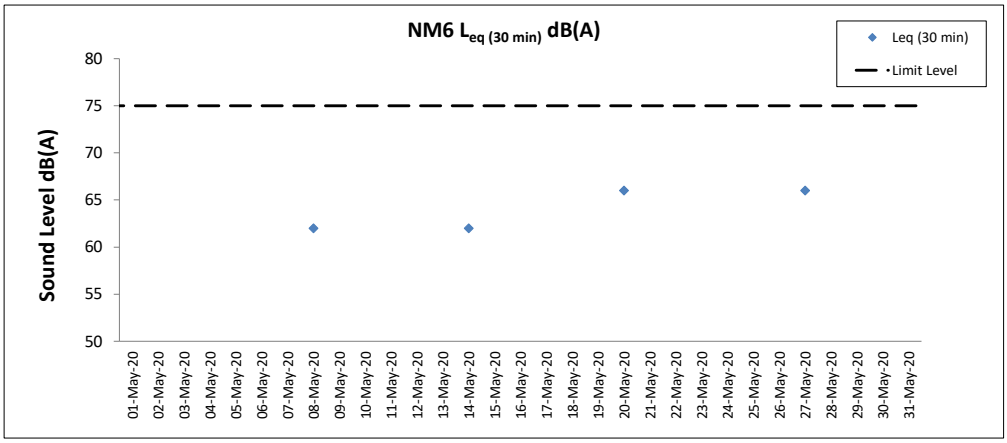
Date	Weather	Time	Measured L_{10} dB(A)	Measured L_{90} dB(A)	$L_{eq(30mins)}$ dB(A)
08-May-20	Sunny	15:36	62.7	46.9	62
08-May-20	Sunny	15:41	65.2	46.1	
08-May-20	Sunny	15:46	61.8	45.3	
08-May-20	Sunny	15:51	73.8	48.1	
08-May-20	Sunny	15:56	56.8	45.8	
08-May-20	Sunny	16:01	69.8	48.8	
14-May-20	Cloudy	15:41	55.2	47.7	62
14-May-20	Cloudy	15:46	52.5	47.4	
14-May-20	Cloudy	15:51	71.7	54.0	
14-May-20	Cloudy	15:56	72.4	64.9	
14-May-20	Cloudy	16:01	72.6	60.8	
14-May-20	Cloudy	16:06	59.4	46.3	
20-May-20	Cloudy	15:47	63.8	49.8	66
20-May-20	Cloudy	15:52	66.9	51.8	
20-May-20	Cloudy	15:57	67.4	53.1	
20-May-20	Cloudy	16:02	68.6	51.3	
20-May-20	Cloudy	16:07	67.1	48.2	
20-May-20	Cloudy	16:12	62.4	48.2	
27-May-20	Cloudy	15:48	72.6	62.0	66
27-May-20	Cloudy	15:53	69.6	61.1	
27-May-20	Cloudy	15:58	67.1	60.4	
27-May-20	Cloudy	16:03	68.7	60.5	
27-May-20	Cloudy	16:08	68.5	60.7	
27-May-20	Cloudy	16:13	67.2	60.5	

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 02 May 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	09:43	8.0	Surface	1.0	0.1	212	24.0	24.0	7.8	7.8	22.9	23.0	130.6	130.0	9.6	8.4	3.9	4.7	3	3	85	87	815607	804259	<0.2	<0.2	1.6	1.7
						1.0	0.1	213	24.0		7.8		23.0		129.4		9.6		3.9		3		84							
					Middle	4.0	0.1	136	23.2	23.2	8.0	8.0	30.5	30.6	100.3	100.2	7.2		4.9		3		87							
						4.0	0.1	147	23.2		8.0		30.6		100.1		7.2		5.0		3		86							
					Bottom	7.0	0.1	218	23.1	23.1	8.0	8.0	31.1	31.0	95.1	95.2	6.8	6.8	5.3		2		89							
						7.0	0.2	233	23.1		8.0		31.0		95.3		6.8		5.3		3		90							
C2	Sunny	Moderate	10:41	11.4	Surface	1.0	0.5	170	24.9	24.9	8.3	8.3	20.8	20.8	152.8	152.8	11.2	9.0	5.9	13.5	3	4	85	89	825669	806945	<0.2	<0.2	2.0	2.0
						1.0	0.5	179	24.9		8.3		20.8		152.8		11.2		5.9		4		85							
					Middle	5.7	0.3	174	24.1	24.1	8.2	8.2	26.9	26.9	94.6	94.5	6.8		4.9		4		90							
						5.7	0.3	186	24.1		8.2		26.9		94.4		6.8		4.9		4		89							
					Bottom	10.4	0.2	130	23.3	23.3	8.2	8.2	30.8	30.8	79.8	79.9	5.7	5.7	30.2		4		94							
						10.4	0.2	142	23.3		8.3		30.8		79.9		5.7		29.2		5		93							
C3	Sunny	Moderate	08:30	12.2	Surface	1.0	0.2	75	24.2	24.2	8.4	8.4	27.1	27.1	113.7	113.7	8.2	7.4	3.9	4.2	3	3	85	90	822089	817788	<0.2	<0.2	1.2	1.2
						1.0	0.2	76	24.2		8.4		27.1		113.7		8.2		3.9		4		86							
					Middle	6.1	0.2	281	23.6	23.6	8.3	8.3	30.9	30.9	92.5	92.5	6.6		4.0		3		90							
						6.1	0.2	298	23.6		8.3		30.9		92.5		6.6		4.0		3		90							
					Bottom	11.2	0.1	353	23.3	23.3	8.3	8.3	32.2	32.2	90.8	90.9	6.4	6.5	4.8		2		94							
						11.2	0.1	325	23.3		8.3		32.2		91.0		6.5		4.8		3		94							
IM1	Cloudy	Moderate	10:04	4.6	Surface	1.0	0.1	224	24.2	24.2	7.8	7.8	23.3	23.4	123.0	122.0	9.0	9.0	6.4	9.5	3	3	86	88	817965	807135	<0.2	<0.2	1.8	1.8
						1.0	0.1	235	24.1		7.8		23.5		120.9		8.9		7.1		4		87							
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.1	156	23.6	23.6	7.9	7.9	28.1	28.0	93.9	94.1	6.8	6.8	12.3		3		89				<0.2		1.8	
						3.6	0.1	160	23.6		7.9		28.0		94.2		6.8		12.1		3		90				<0.2		1.7	
IM2	Cloudy	Moderate	10:11	6.8	Surface	1.0	0.2	165	23.7	23.7	7.9	7.8	25.3	25.3	109.5	109.1	8.0	7.4	5.2	8.0	3	3	85	88	818180	806145	<0.2	<0.2	1.9	2.0
						1.0	0.2	181	23.7		7.8		25.3		108.6		8.0		5.4		3		86				<0.2		1.9	
					Middle	3.4	0.1	150	23.4	23.4	7.8	7.8	29.0	29.0	94.8	95.0	6.8		7.4		3		87				<0.2		1.9	
						3.4	0.1	163	23.4		7.8		29.1		95.1		6.9		7.5		3		88				<0.2		2.0	
					Bottom	5.8	0.1	62	23.4	23.4	7.9	7.9	29.6	29.6	97.5	97.8	7.0	7.0	11.5		4		89				<0.2		2.0	
						5.8	0.1	66	23.4		7.9		29.6		98.0		7.0		11.1		3		91				<0.2		2.0	
IM3	Cloudy	Moderate	10:17	7.1	Surface	1.0	0.1	152	25.5	25.5	8.2	8.2	20.5	20.6	134.3	133.4	9.8	8.2	4.3	8.7	2	3	85	87	818761	805603	<0.2	<0.2	2.1	2.1
						1.0	0.1	161	25.5		8.2		20.6		132.4		9.7		4.6		3		84				<0.2		2.0	
					Middle	3.6	0.2	138	23.4	23.4	7.9	7.9	29.2	29.2	91.0	91.1	6.6		9.2		3		87				<0.2		2.0	
						3.6	0.2	139	23.4		7.9		29.2		91.1		6.6		9.8		4		88				<0.2		2.1	
					Bottom	6.1	0.2	103	23.4	23.4	7.9	7.9	29.3	29.3	91.9	92.0	6.6	6.6	12.1		3		90				<0.2		2.1	
						6.1	0.2	111	23.4		7.9		29.3		92.0		6.6		12.3		4		89				<0.2		2.0	
IM4	Cloudy	Moderate	10:25	7.8	Surface	1.0	0.4	195	23.8	23.8	8.0	7.9	25.1	24.9	104.4	104.0	7.7	7.0	5.3	5.5	3	4	86	89	819714	804594	<0.2	<0.2	2.1	2.0
						1.0	0.4	195	23.7		7.9		24.7		103.6		7.6		5.3		4		87				<0.2		2.0	
					Middle	3.9	0.3	167	23.5	23.5	7.9	7.9	28.2	28.2	87.6	87.7	6.3		5.6		4		87				<0.2		2.1	
						3.9	0.3	178	23.5		7.9		28.2		87.7		6.3		5.6		5		88				<0.2		2.0	
					Bottom	6.8	0.1	136	23.5	23.5	8.0	8.0	28.4	28.4	89.3	89.5	6.5	6.5	5.7		4		91				<0.2		1.8	
						6.8	0.2	139	23.5		8.0		28.4		89.6		6.5		5.7		5		92				<0.2		1.8	
IM5	Cloudy	Moderate	10:33	7.3	Surface	1.0	0.4	208	24.2	24.2	8.1	8.1	24.3	24.4	112.5	112.5	8.2	7.4	4.5	5.4	4	5	86	88	820732	804878	<0.2	<0.2	2.2	2.0
						1.0	0.4	214	24.2		8.1		24.4		112.4		8.2		4.6		5		85				<0.2		2.0	
					Middle	3.7	0.3	198	23.7	23.7	8.0	8.0	27.3	27.3	91.2	91.2	6.6		5.8		6		88				<0.2		2.0	
						3.7	0.3	215	23.7		8.0		27.3		91.1		6.6		5.7		5		87				<0.2		1.9	
					Bottom	6.3	0.2	195	23.6	23.6	8.0	8.0	27.5	27.5	91.0	91.1	6.6	6.6	5.8		6		89				<0.2		2.1	
						6.3	0.2	207	23.6		8.0		27.5		91.1		6.6		5.8		6		91				<0.2		2.0	
IM6	Cloudy	Moderate	10:41	6.7	Surface	1.0	0.3	255	24.5	24.5	8.3	8.3	22.1	22.1	126.8	126.5	9.3	8.8	4.8	5.3	4	5	87	88	821073	805807	<0.2	<0.2	2.4	2.3
						1.0	0.3	259	24.5		8.3		22.1		126.2		9.3		4.8		4		86				<0.2		2.3	
					Middle	3.4	0.3	227	24.2	24.2	8.2	8.2	24.0	24.0	111.6	111.5	8.2		5.2		4		88				<0.2		2.3	
						3.4	0.3	235	24.2		8.2		24.0		111.4		8.2		5.2		5		88				<0.2		2.2	
					Bottom	5.7	0.2	203	23.9	23.9	8.2	8.2	26.3	26.3	99.8	99.9	7.2	7.3	5.9		5		91				<0.2		2.2	
						5.7	0.2	211	23.9		8.2		26.3		100.0		7.3		5.9		5		90				<0.2		2.2	
IM7	Cloudy	Moderate	10:49	8.3	Surface	1.0	0.2	264	24.3	24.3	8.2	8.2	22.4	22.4	115.9	114.2	8.5	8.0	4.4	5.5	5	5	87	88	821333	806845	<0.2	<0.2	1.8	1.9
						1.0	0.2	285	24.2		8.2		22.5		112.5		8.3		4.6		6		86				<0.2		1.8	
					Middle	4.2	0.2	235	24.1	24.1	8.2	8.2	24.4	24.4	102.9	102.8	7.5		5.3		5		88				<0.2		1.8	
						4.2	0.2	236	24.1		8.2		24.4		102.7		7.5		5.4		5		88				<0.2		2.0	
					Bottom	7.3	0.0	107	23.9	23.9	8.2	8.2	26.3	26.3	96.2	96.3	7.0	7.0	6.5		4		90				<0.2		2.1	
						7.3	0.0	107	23.9		8.2		26.3		96.4		7.0		6.8		4		91				<0.2		2.1	
IM8	Sunny	Moderate	10:12	8.4	Surface	1.0	0.1	161	24.8	24.8	8.2	8.2	22.5	22.5	125.8	125.9	9.2	8.8	5.4	6.3	4	5	86	90	821809	808156	<0.2	<0.2	1.6	1.6
						1.0	0.1	162	24.8		8.2		22.5		125.9		9.2		5.5		6		86				<0.2		1.6	
					Middle	4.2	0.1	148	24.7	24.7	8.2	8.2	23.7	23.7	116.2	116.2	8.4		5.8		4		90				<0.2		1.6	
						4.2	0.1	161	24.7		8.2		23.7		116.1		8.4		5.8		5		90				<0.2		1.5	
					Bottom	7.4	0.1	128	24.3	24.3	8.2	8.2	25.8	25.8	101.5	101.5	7.3	7.3	7.7		4		94				<0.2		1.6	
						7.4	0.1	138	24.3		8.2		25.8		101.5		7.3		7.8		5		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 02 May 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	10:04	7.7	Surface	1.0	0.3	95	24.9	24.9	8.3	8.3	21.9	21.9	129.4	129.3	9.5	9.0	5.6	13.3	5	5	86	90	822071	808818	<0.2	<0.2	1.7	1.8
						1.0	0.3	101	24.9		8.3		21.9		129.2		9.5		5.5		5		86				<0.2		1.7	
					Middle	3.9	0.3	105	24.7	24.7	8.2	8.2	23.9	23.9	115.5	115.5	8.4		7.7		5		90				<0.2		1.8	
						3.9	0.3	105	24.7		8.2		23.9		115.4		8.4		7.9		5		91				<0.2		1.7	
					Bottom	6.7	0.2	50	24.3	24.3	8.2	8.2	25.4	25.4	102.1	102.2	7.4	7.4	26.7		5		94				<0.2		1.8	
						6.7	0.2	50	24.3		8.2		25.4		102.2		7.4		26.2		5		94				<0.2		1.8	
IM10	Sunny	Moderate	09:55	8.2	Surface	1.0	0.5	131	25.4	25.4	8.4	8.4	19.5	19.5	158.5	158.4	11.7	10.1	5.5	6.9	4	4	85	90	822373	809798	<0.2	<0.2	2.0	1.9
						1.0	0.5	137	25.4		8.4		19.5		158.2		11.6		5.5		3		86				<0.2		1.9	
					Middle	4.1	0.5	132	24.8	24.8	8.3	8.3	23.3	23.3	118.5	118.4	8.6		5.3		4		91				<0.2		1.9	
						4.1	0.5	137	24.8		8.3		23.3		118.3		8.6		5.3		4		90				<0.2		1.9	
					Bottom	7.2	0.4	139	24.2	24.2	8.2	8.2	26.4	26.4	97.5	97.6	7.0	7.0	9.8		5		93				<0.2		2.0	
						7.2	0.5	150	24.2		8.2		26.4		97.6		7.0		9.8		5		94				<0.2		1.9	
IM11	Sunny	Moderate	09:42	8.3	Surface	1.0	0.7	98	25.1	25.1	8.2	8.2	21.3	21.3	126.0	126.0	9.2	8.2	6.2	7.0	4	5	85	90	822055	811481	<0.2	<0.2	1.7	1.7
						1.0	0.7	99	25.1		8.2		21.3		125.9		9.2		6.2		5		86				<0.2		1.6	
					Middle	4.2	0.4	97	24.3	24.3	8.1	8.1	25.9	25.9	98.2	98.2	7.1		6.2		5		90				<0.2		1.6	
						4.2	0.4	101	24.3		8.1		26.0		98.2		7.1		6.3		5		91				<0.2		1.6	
					Bottom	7.3	0.2	79	24.0	24.0	8.1	8.1	27.3	27.3	95.8	95.8	6.9	6.9	8.4		5		94				<0.2		1.7	
						7.3	0.2	82	24.0		8.1		27.3		95.8		6.9		8.4		6		94				<0.2		1.8	
IM12	Sunny	Moderate	09:31	8.1	Surface	1.0	0.4	117	25.1	25.1	8.3	8.3	21.4	21.4	135.9	135.9	9.9	9.0	5.7	5.8	5	5	86	91	821473	812038	<0.2	<0.2	1.5	1.6
						1.0	0.5	119	25.1		8.3		21.4		135.8		9.9		5.7		4		90				<0.2		1.5	
					Middle	4.1	0.2	105	24.6	24.6	8.2	8.2	24.4	24.4	111.0	111.0	8.0		6.0		4		90				<0.2		1.6	
						4.1	0.2	113	24.6		8.2		24.4		111.0		8.0		6.0		5		90				<0.2		1.6	
					Bottom	7.1	0.1	103	24.0	24.0	8.2	8.2	27.5	27.5	95.2	95.3	6.9	6.9	5.6		6		94				<0.2		1.6	
						7.1	0.1	110	24.0		8.2		27.5		95.3		6.9		5.6		6		94				<0.2		1.6	
SR1A	Sunny	Moderate	09:09	5.5	Surface	1.0	-	-	24.8	24.8	8.4	8.4	23.5	23.5	122.9	122.9	8.9	8.9	5.2	5.4	4	4	-	-	819970	812663	-	-	-	-
						1.0	-	-	24.8		8.4		23.5		122.8		8.9		5.0		3		-				-		-	
					Middle	2.8	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.8	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.5	-	-	24.1	24.1	8.3	8.3	26.1	26.1	99.3	99.2	7.2	7.2	5.6		5		-				-		-	
						4.5	-	-	24.1		8.3		26.1		99.1		7.2		5.6		5		-				-		-	
SR2	Sunny	Moderate	08:55	4.7	Surface	1.0	0.3	83	24.9	24.9	8.4	8.4	21.9	21.9	136.8	136.8	10.0	10.0	4.7	5.1	3	4	86	88	821444	814185	<0.2	<0.2	1.4	1.4
						1.0	0.3	85	24.9		8.4		21.9		136.8		10.0		4.7		3		85				<0.2		1.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.2	80	24.0	24.0	8.3	8.3	27.4	27.4	97.4	97.4	7.0	7.0	5.4		4		90				<0.2		1.4	
						3.7	0.2	82	24.0		8.3		27.4		97.4		7.0		5.4		4		90				<0.2		1.4	
SR3	Sunny	Moderate	10:19	8.9	Surface	1.0	0.1	197	24.8	24.8	8.2	8.2	21.8	21.8	124.0	124.0	9.1	8.1	5.7	7.6	3	4	-	-	822166	807558	-	-	-	-
						1.0	0.1	206	24.8		8.2		21.8		123.9		9.1		5.7		4		-				-		-	
					Middle	4.5	0.1	182	24.2	24.2	8.1	8.1	25.8	25.8	97.7	97.7	7.1		7.8		4		-				-		-	
						4.5	0.2	189	24.2		8.1		25.8		97.6		7.1		7.8		3		-				-		-	
					Bottom	7.9	0.1	164	24.1	24.1	8.2	8.2	27.3	27.3	96.2	96.2	6.9	6.9	9.2		4		-				-		-	
						7.9	0.1	179	24.1		8.2		27.3		96.2		6.9		9.3		3		-				-		-	
SR4A	Cloudy	Moderate	09:23	8.6	Surface	1.0	0.3	80	24.0	24.0	7.9	7.9	23.8	23.8	113.4	113.3	8.3	7.6	6.7	8.0	5	4	-	-	817172	807799	-	-	-	-
						1.0	0.3	81	23.9		7.9		23.8		113.1		8.3		6.9		4		-				-		-	
					Middle	4.3	0.3	76	23.6	23.6	7.7	7.7	27.8	27.8	93.9	93.9	6.8		8.4		4		-				-		-	
						4.3	0.3	77	23.6		7.7		27.8		93.9		6.8		8.4		4		-				-		-	
					Bottom	7.6	0.2	68	23.6	23.6	7.7	7.7	28.0	28.0	93.7	93.7	6.8	6.8	8.6		3		-				-		-	
						7.6	0.2	68	23.6		7.7		28.0		93.7		6.8		8.9		4		-				-		-	
SR5A	Cloudy	Calm	09:05	3.5	Surface	1.0	0.0	331	24.7	24.7	7.9	7.9	24.0	24.0	120.0	119.7	8.7	8.7	7.3	7.4	12	11	-	-	816605	810713	-	-	-	-
						1.0	0.0	334	24.7		7.9		24.0		119.4		8.7		7.3		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.5	0.0	213	24.6	24.6	7.9	7.9	24.5	24.5	113.0	113.0	8.2	8.2	7.5		10		-				-		-	
						2.5	0.0	226	24.6		7.9		24.5		112.9		8.2		7.5		11		-				-		-	
SR6A	Cloudy	Calm	08:37	4.6	Surface	1.0	0.0	35	24.7	24.7	8.0	8.0	24.2	24.2	125.7	125.7	9.1	9.1	5.3	6.9	3	5	-	-	817957	814735	-	-	-	-
						1.0	0.0	36	24.7		8.0		24.3		125.6		9.1		5.5		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.0	303	24.5	24.5	8.0	8.0	25.0	25.0	109.8	109.5	7.9	7.9	8.3		6		-				-		-	
						3.6	0.0	318	24.5		8.0		25.0		109.1		7.9		8.5		6		-				-		-	
SR7	Sunny	Moderate	07:56	14.8	Surface	1.0	0.1	126	23.7	23.7	8.3	8.3	29.7	29.7	101.0	101.0	7.2	6.8	3.9	4.9	3	5	-	-	823623	823745	-	-	-	-
						1.0	0.1	138	23.7		8.3		29.7		101.0		7.2		3.9		4		-				-		-	
					Middle	7.4	0.1	165	23.3	23.3	8.3	8.3	32.0	32.0	89.4	89.5	6.4		4.7		4		-				-		-	
						7.4	0.1	178	23.3		8.3		32.0		89.5		6.4		4.7		5		-				-		-	
					Bottom	13.8	0.1	102	23.1	23.1	8.3	8.3	32.8	32.8	89.4	89.4	6.3	6.3	6.1		5		-				-		-	
						13.8	0.1	108	23.1		8.3		32.8		89.4		6.3		6.2		6		-				-		-	
SR8	Sunny	Moderate	09:21	4.7	Surface	1.0	-	-	25.2	25.2	8.4	8.4	21.8	21.8	135.6	135.6	9.9	9.9	5.3	5.4	4	5	-	-	820379	811638	-	-	-	-
						1.0	-	-	25.2		8.4		21.8		135.5		9.9		5.3		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	-	-	24.8	24.8	8.3	8.3	24.0	23.9	119.6	119.6	8.7	8.7	5.4		5		-				-		-	
						3.7	-	-	24.8		8.3		23.8		119.5		8.7		5.4		5		-				-		-	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 02 May 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	13:23	8.6	Surface	1.0	0.2	67	24.7	24.7	8.2	8.2	25.1	25.2	127.4	126.7	9.2	8.0	3.5	5.7	4	4	87	88	815608	804241	<0.2	<0.2	1.6	1.6
						1.0	0.2	72	24.6		8.2		25.2		126.0		9.1		3.6		3		86				<0.2		1.7	
					Middle	4.3	0.1	3	23.2	23.2	8.1	8.1	30.8	30.8	96.3	96.2	6.9		5.8		4		87				<0.2		1.6	
						4.3	0.1	3	23.2		8.1		30.8		96.0		6.9		6.1		3		88				<0.2		1.5	
					Bottom	7.6	0.2	37	23.2	23.2	8.3	8.3	31.1	31.0	96.0	96.2	6.9	6.9	7.6		5		90				<0.2		1.4	
						7.6	0.2	37	23.2		8.3		31.0		96.4		6.9		7.7		4		91				<0.2		1.5	
C2	Sunny	Moderate	12:11	10.9	Surface	1.0	0.4	186	26.2	26.2	8.3	8.3	19.6	19.6	176.7	176.6	12.8	10.1	5.4	5.8	4	5	87	91	825666	806945	<0.2	<0.2	1.7	1.8
						1.0	0.4	204	26.2		8.3		19.6		176.5		12.8		5.4		6		88				<0.2		1.8	
					Middle	5.5	0.2	209	24.2	24.2	8.1	8.1	26.2	26.2	101.4	101.3	7.3		4.5		5		91				<0.2		1.8	
						5.5	0.2	223	24.2		8.1		26.2		101.2		7.3		4.5		5		91				<0.2		1.7	
					Bottom	9.9	0.1	148	23.4	23.4	8.1	8.1	29.7	29.7	83.6	83.7	6.0	6.0	7.4		4		95				<0.2		1.8	
						9.9	0.1	149	23.4		8.1		29.7		83.7		6.0		7.4		5		95				<0.2		1.8	
C3	Sunny	Moderate	14:11	12.2	Surface	1.0	0.3	277	25.0	25.0	8.3	8.3	24.8	24.8	155.9	155.8	11.2	9.6	4.4	4.7	4	4	87	91	822114	817795	<0.2	<0.2	1.3	1.3
						1.0	0.3	277	25.0		8.3		24.8		155.7		11.2		4.4		4		87				<0.2		1.3	
					Middle	6.1	0.3	264	24.2	24.2	8.2	8.2	27.3	27.3	110.6	110.6	7.9		4.1		4		91				<0.2		1.2	
						6.1	0.3	273	24.2		8.2		27.3		110.5		7.9		4.1		4		90				<0.2		1.3	
					Bottom	11.2	0.2	305	23.2	23.2	8.2	8.2	32.1	32.1	92.1	92.2	6.5	6.6	5.6		4		95				<0.2		1.3	
						11.2	0.2	306	23.2		8.2		32.1		92.3		6.6		5.6		5		94				<0.2		1.2	
IM1	Cloudy	Moderate	13:00	5.0	Surface	1.0	0.1	55	25.6	25.6	8.2	8.2	23.0	23.0	117.8	117.5	8.5	8.5	5.6	7.9	2	3	86	88	817966	807119	<0.2	<0.2	1.4	1.4
						1.0	0.1	56	25.5		8.2		23.1		117.1		8.4		6.0		3		87				<0.2		1.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.1	352	23.6	23.6	8.2	8.2	28.9	29.0	99.2	99.3	7.1	7.1	9.8		4		89				<0.2		1.4	
						4.0	0.1	352	23.6		8.2		29.0		99.4		7.1		10.0		3		89				<0.2		1.5	
IM2	Cloudy	Moderate	12:54	7.1	Surface	1.0	0.1	10	25.2	25.2	8.2	8.2	24.4	24.4	122.4	122.2	8.8	7.8	3.3	8.5	4	3	86	89	818179	806157	<0.2	<0.2	1.7	1.8
						1.0	0.1	10	25.2		8.2		24.5		122.0		8.7		3.4		3		87				<0.2		1.7	
					Middle	3.6	0.1	341	23.5	23.5	8.1	8.1	29.1	29.1	95.2	95.4	6.9		10.1		4		89				<0.2		1.7	
						3.6	0.1	354	23.5		8.1		29.2		95.5		6.9		10.8		3		88				<0.2		1.7	
					Bottom	6.1	0.2	341	23.5	23.5	8.1	8.1	29.4	29.4	96.5	96.6	6.9	6.9	11.8		3		91				<0.2		1.9	
						6.1	0.2	346	23.5		8.1		29.3		96.6		6.9		11.7		2		90				<0.2		1.9	
IM3	Cloudy	Moderate	12:46	7.2	Surface	1.0	0.1	0	25.4	25.4	8.1	8.1	23.5	23.5	123.6	123.4	8.9	7.7	3.3	7.4	2	3	86	88	818768	805594	<0.2	<0.2	1.6	1.6
						1.0	0.2	0	25.4		8.1		23.5		123.2		8.9		3.3		3		86				<0.2		1.6	
					Middle	3.6	0.1	41	23.5	23.5	8.1	8.1	28.1	28.1	90.5	90.5	6.5		6.0		3		88				<0.2		1.5	
						3.6	0.1	43	23.5		8.1		28.1		90.5		6.5		6.5		2		87				<0.2		1.6	
					Bottom	6.2	0.2	8	23.3	23.3	8.1	8.1	29.9	29.9	91.3	91.4	6.6	6.6	12.9		2		90				<0.2		1.7	
						6.2	0.2	8	23.3		8.1		29.9		91.5		6.6		12.8		3		91				<0.2		1.6	
IM4	Cloudy	Moderate	12:36	8.1	Surface	1.0	0.2	223	23.9	23.9	8.1	8.1	26.5	26.5	96.7	96.7	7.0	6.8	4.7	5.6	4	5	86	88	819727	804594	<0.2	<0.2	2.1	2.1
						1.0	0.2	226	23.9		8.2		26.5		96.7		7.0		4.7		5		86				<0.2		2.0	
					Middle	4.1	0.1	241	23.5	23.5	8.2	8.2	28.2	28.3	89.9	90.0	6.5		5.8		4		87				<0.2		2.0	
						4.1	0.1	256	23.4		8.2		28.3		90.0		6.5		5.8		5		88				<0.2		2.2	
					Bottom	7.1	0.1	10	23.3	23.3	8.2	8.2	29.4	29.4	86.8	87.0	6.3	6.3	6.3		5		90				<0.2		2.2	
						7.1	0.1	10	23.3		8.2		29.4		87.1		6.3		6.3		4		91				<0.2		2.1	
IM5	Cloudy	Moderate	12:30	7.4	Surface	1.0	0.1	269	25.3	25.3	8.1	8.1	20.9	20.9	137.8	137.7	10.1	9.1	3.5	4.4	4	3	87	89	820749	804874	<0.2	<0.2	2.1	2.2
						1.0	0.1	275	25.2		8.1		20.9		137.6		10.1		3.5		4		86				<0.2		2.2	
					Middle	3.7	0.1	266	24.0	24.0	7.9	7.9	24.3	24.3	112.4	111.0	8.2		4.7		3		89				<0.2		2.1	
						3.7	0.1	274	23.9		7.9		24.3		109.6		8.0		4.7		3		88				<0.2		2.1	
					Bottom	6.4	0.0	336	23.9	23.9	7.9	7.9	26.5	26.5	103.1	103.4	7.5	7.5	4.9		3		90				<0.2		2.4	
						6.4	0.0	359	23.9		7.9		26.5		103.7		7.5		4.8		3		91				<0.2		2.2	
IM6	Cloudy	Moderate	12:20	7.2	Surface	1.0	0.3	279	25.2	25.2	8.1	8.1	21.6	21.7	142.1	141.4	10.4	9.1	4.0	4.9	3	4	86	88	821042	805811	<0.2	<0.2	2.0	2.1
						1.0	0.3	296	25.2		8.1		21.7		140.7		10.3		4.1		3		86				<0.2		1.9	
					Middle	3.6	0.2	259	24.2	24.2	8.1	8.1	24.6	24.6	108.6	108.6	7.9		4.7		4		88				<0.2		2.0	
						3.6	0.2	270	24.2		8.1		24.6		108.5		7.9		4.7		4		87				<0.2		2.1	
					Bottom	6.2	0.0	121	24.0	24.0	8.1	8.1	26.1	26.1	102.0	102.1	7.4	7.4	5.9		4		91				<0.2		2.2	
						6.2	0.0	131	24.0		8.1		26.1		102.1		7.4		5.8		4		89				<0.2		2.2	
IM7	Cloudy	Moderate	12:12	8.5	Surface	1.0	0.2	274	24.4	24.4	8.0	8.0	22.6	22.7	117.6	116.8	8.6	7.9	4.2	5.7	4	4	85	89	821345	806846	<0.2	<0.2	1.9	1.9
						1.0	0.2	283	24.3		8.0		22.7		115.9		8.5		4.3		4		87				<0.2		1.8	
					Middle	4.3	0.2	267	24.0	24.0	8.0	8.0	25.5	25.6	99.2	99.1	7.2		5.7		4		89				<0.2		1.9	
						4.3	0.2	272	24.0		8.0		25.7		99.0		7.2		5.9		4		88				<0.2		2.0	
					Bottom	7.5	0.1	214	23.9	23.9	8.0	8.0	26.5	26.5	91.4	91.4	6.6	6.6	7.1		5		91				<0.2		2.0	
						7.5	0.1	220	23.9		8.0		26.5		91.4		6.6		7.1		4		91				<0.2		2.0	
IM8	Sunny	Moderate	12:40	7.7	Surface	1.0	0.2	270	25.6	25.6	8.4	8.4	19.9	20.1	155.8	155.7	11.4	9.7	5.2	6.0	3	3	88	91	821811	808131	<0.2	<0.2	1.8	1.8
						1.0	0.2	292	25.6		8.4		20.2		155.5		11.3		5.2		3		87				<0.2		1.7	
					Middle	3.9	0.2	184	24.4	24.4	8.2	8.2	24.7	24.7	111.4	111.4	8.1		6.5		3		91				<0.2		1.7	
						3.9	0.2	201	24.4		8.2		24.7		111.3		8.1		6.5		3		91				<0.2		1.8	
					Bottom	6.7	0.1	281	24.3	24.3	8.1	8.1	25.7	25.7	104.0	104.0	7.5	7.5	6.3		3		95				<0.2		1.7	
						6.7	0.1	308	24.3		8.1		25.7		104.0		7.5		6.2		4		95				<0.2		1.8	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 02 May 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	12:47	7.1	Surface	1.0	0.1	248	25.2	25.2	8.3	8.3	21.5	21.5	151.5	151.4	11.1	10.3	5.3	5.7	4	3	88	91	822112	808812	<0.2	<0.2	1.5	1.6
						1.0	0.1	260	25.2		8.3		21.5		151.3		11.0		5.3		3		87				<0.2		1.6	
					Middle	3.6	0.1	256	24.8	24.8	8.3	8.3	22.9	22.9	130.8	130.8	9.5		5.9		3		91				<0.2		1.7	
						3.6	0.1	269	24.8		8.3		22.9		130.7		9.5		5.9		4		92				<0.2		1.6	
					Bottom	6.1	0.1	230	24.3	24.3	8.2	8.2	25.3	25.3	108.2	108.2	7.8	7.8	5.9		3		95				<0.2		1.6	
						6.1	0.1	234	24.3		8.2		25.3		108.2		7.8		5.9		3		95				<0.2		1.6	
IM10	Sunny	Moderate	12:56	8.3	Surface	1.0	0.1	71	26.1	26.1	8.3	8.3	20.3	20.3	163.2	163.1	11.8	10.3	4.9	5.9	3	4	87	91	822370	809814	<0.2	<0.2	1.7	1.7
						1.0	0.1	75	26.1		8.3		20.3		163.0		11.8		4.9		4		87				<0.2		1.6	
					Middle	4.2	0.1	37	24.7	24.7	8.2	8.2	23.4	23.4	121.5	121.5	8.8		6.3		4		92				<0.2		1.7	
						4.2	0.1	39	24.7		8.2		23.4		121.5		8.9		6.2		3		91				<0.2		1.6	
					Bottom	7.3	0.2	322	23.9	23.9	8.1	8.1	27.6	27.7	84.1	84.1	6.1	6.1	6.6		4		95				<0.2		1.7	
						7.3	0.2	333	23.9		8.1		27.7		84.1		6.1		6.6		5		95				<0.2		1.6	
IM11	Sunny	Moderate	13:07	7.7	Surface	1.0	0.1	30	25.5	25.5	8.4	8.4	21.4	21.4	167.3	167.3	12.1	10.1	5.5	5.9	5	5	87	91	822059	811440	<0.2	<0.2	1.5	1.5
						1.0	0.2	30	25.5		8.4		21.4		167.2		12.1		5.5		4		87				<0.2		1.5	
					Middle	3.9	0.1	317	24.7	24.7	8.2	8.2	23.9	23.9	111.8	111.8	8.1		6.5		5		91				<0.2		1.5	
						3.9	0.1	342	24.7		8.2		23.9		111.7		8.1		6.4		4		92				<0.2		1.4	
					Bottom	6.7	0.2	236	23.8	23.8	8.2	8.2	28.2	28.2	90.5	90.6	6.5	6.5	5.7		4		95				<0.2		1.5	
						6.7	0.2	256	23.8		8.2		28.2		90.6		6.5		5.7		5		95				<0.2		1.5	
IM12	Sunny	Moderate	13:14	9.9	Surface	1.0	0.2	340	25.2	25.2	8.3	8.3	22.0	22.0	139.0	138.9	10.1	8.5	5.9	6.4	5	6	87	92	821464	812047	<0.2	<0.2	1.5	1.6
						1.0	0.2	353	25.2		8.3		22.0		138.7		10.1		5.9		5		88				<0.2		1.6	
					Middle	5.0	0.2	307	24.0	24.0	8.2	8.2	27.3	27.3	94.1	94.1	6.8		5.4		5		91				<0.2		1.6	
						5.0	0.2	309	24.0		8.2		27.3		94.1		6.8		5.4		6		92				<0.2		1.5	
					Bottom	8.9	0.2	315	23.5	23.5	8.2	8.2	30.0	30.0	85.9	85.9	6.2	6.2	7.8		6		95				<0.2		1.6	
						8.9	0.2	333	23.5		8.2		30.0		85.9		6.2		7.8		6		96				<0.2		1.5	
SR1A	Sunny	Moderate	13:36	5.4	Surface	1.0	-	-	25.6	25.6	8.4	8.4	22.1	22.1	162.8	162.7	11.7	11.7	5.5	6.1	5	5	-	-	819973	812662	-	-	-	-
						1.0	-	-	25.6		8.4		22.1		162.6		11.7		5.6		5		-				-		-	
					Middle	2.7	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.7	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	-	-	24.8	24.8	8.3	8.3	24.2	24.2	125.9	125.9	9.1	9.1	6.6		5		-				-		-	
						4.4	-	-	24.8		8.3		24.2		125.9		9.1		6.6		4		-				-		-	
SR2	Sunny	Moderate	13:49	4.8	Surface	1.0	0.1	229	25.9	25.9	8.3	8.3	21.8	21.8	168.2	168.2	12.1	12.1	5.5	6.4	3	4	88	89	821475	814163	<0.2	<0.2	1.7	1.7
						1.0	0.1	241	25.9		8.3		21.8		168.1		12.1		5.5		4		87				<0.2		1.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.3	336	24.6	24.5	8.2	8.2	25.2	25.2	113.9	113.9	8.2	8.2	7.2		3		91				<0.2		1.7	
						3.8	0.3	356	24.5		8.2		25.2		113.8		8.2		7.2		4		91				<0.2		1.6	
SR3	Sunny	Moderate	12:32	8.4	Surface	1.0	0.2	285	25.3	25.3	8.3	8.3	20.9	21.2	148.6	148.5	10.9	8.9	5.4	6.7	4	3	-	-	822159	807552	-	-	-	-
						1.0	0.2	309	25.3		8.3		21.5		148.4		10.8		5.4		3		-				-		-	
					Middle	4.2	0.0	8	24.2	24.2	8.1	8.1	26.0	26.0	97.1	97.1	7.0		6.7		3		-				-		-	
						4.2	0.0	8	24.2		8.1		26.0		97.1		7.0		6.7		2		-				-		-	
					Bottom	7.4	0.1	323	24.1	24.1	8.1	8.1	26.8	26.8	93.8	93.8	6.8	6.8	8.1		2		-				-		-	
						7.4	0.1	348	24.1		8.1		26.8		93.7		6.8		8.1		3		-				-		-	
SR4A	Cloudy	Moderate	13:43	9.2	Surface	1.0	0.2	249	25.3	25.3	8.3	8.3	22.6	22.7	138.7	138.5	10.0	8.4	5.3	7.3	4	4	-	-	817199	807824	-	-	-	-
						1.0	0.2	255	25.2		8.3		22.7		138.3		10.0		5.4		5		-				-		-	
					Middle	4.6	0.0	279	23.6	23.6	8.3	8.3	28.7	28.7	94.6	94.6	6.8		7.6		4		-				-		-	
						4.6	0.0	298	23.6		8.3		28.7		94.6		6.8		7.6		5		-				-		-	
					Bottom	8.2	0.1	110	23.6	23.6	8.2	8.2	29.1	29.1	95.5	95.5	6.9	6.9	8.9		3		-				-		-	
						8.2	0.1	115	23.6		8.2		29.1		95.5		6.9		8.9		4		-				-		-	
SR5A	Cloudy	Calm	14:00	4.1	Surface	1.0	0.1	335	25.2	25.2	8.4	8.4	23.4	23.5	139.9	139.7	10.1	10.1	5.0	6.0	4	4	-	-	816609	810698	-	-	-	-
						1.0	0.1	358	25.2		8.4		23.5		139.4		10.1		5.0		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.1	299	24.8	24.9	8.3	8.3	24.7	24.7	120.8	120.9	8.7	8.7	7.0		3		-				-		-	
						3.1	0.1	301	24.9		8.3		24.7		120.9		8.7		7.0		4		-				-		-	
SR6A	Cloudy	Calm	14:35	4.5	Surface	1.0	0.1	242	25.9	25.9	8.5	8.5	22.5	22.5	176.6	176.0	12.7	12.7	5.1	5.3	5	6	-	-	817960	814719	-	-	-	-
						1.0	0.1	264	25.9		8.5		22.5		175.3		12.6		5.1		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.0	271	25.9	25.9	8.4	8.4	22.7	22.6	164.8	164.6	11.8	11.8	5.6		6		-				-		-	
						3.5	0.0	272	25.9		8.4		22.6		164.4		11.8		5.4		6		-				-		-	
SR7	Sunny	Moderate	14:43	14.6	Surface	1.0	0.2	155	25.4	25.4	8.3	8.3	26.5	26.5	176.5	176.6	12.5	10.0	4.5	4.9	3	4	-	-	823652	823746	-	-	-	-
						1.0	0.2	158	25.4		8.3		26.5		176.6		12.5		4.5		3		-				-		-	
					Middle	7.3	0.0	62	23.8	23.8	8.2	8.2	30.4	30.4	105.2	105.2	7.5		4.2		3		-				-		-	
						7.3	0.0	66	23.8		8.2		30.4		105.1		7.5		4.2		3		-				-		-	
					Bottom	13.6	0.0	40	23.1	23.1	8.2	8.2	33.3	33.3	89.1	89.1	6.3	6.3	5.9		5		-				-		-	
						13.6	0.0	41	23.1		8.2		33.3		89.1		6.3		5.9		4		-				-		-	
SR8	Sunny	Moderate	13:26	4.1	Surface	1.0	-	-	26.4	26.4	8.4	8.4	21.1	21.1	187.2	187.2	13.4	13.4	5.9	6.7	5	5	-	-	820420	811700	-	-	-	-
						1.0	-	-	26.4		8.4		21.1		187.2		13.4		5.9		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	-	-	24.8	24.8	8.2	8.2	23.0	23.0	128.3	128.4	9.3	9.3	7.4		6		-				-		-	
						3.1	-	-	24.8		8.2		23.0		128.4		9.3		7.4		5		-				-		-	

DA: Depth-Averaged

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

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

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 05 May 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	11:19	8.0	Surface	1.0	0.4	241	25.7	25.7	8.0	8.0	23.9	24.0	91.5	91.5	6.5	6.4	6.2	7.9	7	8	85	88	815623	804251	<0.2	<0.2	1.5	1.4
						1.0	0.4	260	25.6		8.1		24.1		91.5		6.5		5.9		8		85				<0.2		1.4	
					Middle	4.0	0.4	203	24.5	24.5	8.1	8.1	27.6	27.6	87.3	87.3	6.2		4.3		8		88				<0.2		1.5	
						4.0	0.4	203	24.5		8.1		27.6		87.3		6.2		4.3		9		88				<0.2		1.5	
					Bottom	7.0	0.3	214	24.0	24.0	8.1	8.1	29.3	29.3	82.9	83.0	5.9	5.9	13.3		8		91				<0.2		1.2	
						7.0	0.3	218	24.0		8.1		29.3		83.0		5.9		13.3		9		90				<0.2		1.3	
C2	Cloudy	Moderate	12:34	11.6	Surface	1.0	0.8	153	26.7	26.7	8.1	8.1	21.3	21.4	93.5	93.5	6.7	6.6	4.5	7.6	9	8	86	88	825696	806932	<0.2	<0.2	1.2	1.2
						1.0	0.8	165	26.7		8.1		21.5		93.5		6.6		4.9		9		86				<0.2		1.2	
					Middle	5.8	0.9	150	25.4	25.4	8.2	8.2	23.4	23.4	90.4	90.4	6.5		7.2		7		88				<0.2		1.2	
						5.8	0.9	153	25.4		8.2		23.4		90.4		6.5		7.3		8		88				<0.2		1.2	
					Bottom	10.6	0.3	142	24.6	24.6	8.2	8.2	27.1	27.1	90.0	90.1	6.4	6.4	11.0		6		90				<0.2		1.2	
						10.6	0.3	153	24.6		8.2		27.1		90.2		6.4		10.8		7		90				<0.2		1.2	
C3	Cloudy	Moderate	10:25	12.4	Surface	1.0	0.6	109	25.4	25.4	8.2	8.2	25.4	25.5	95.1	95.2	6.8	6.8	2.5	3.0	4	5	86	89	822087	817792	<0.2	<0.2	1.2	1.2
						1.0	0.6	119	25.3		8.2		25.6		95.2		6.8		2.4		4		87				<0.2		1.2	
					Middle	6.2	0.3	101	24.6	24.6	8.2	8.2	27.9	28.0	94.4	94.3	6.7		2.0		5		88				<0.2		1.2	
						6.2	0.3	109	24.6		8.2		28.2		94.1		6.7		2.3		4		89				<0.2		1.2	
					Bottom	11.4	0.3	59	24.1	24.1	8.2	8.2	29.8	29.8	92.8	92.9	6.6	6.6	4.5		6		90				<0.2		1.2	
						11.4	0.4	59	24.1		8.2		29.8		92.9		6.6		4.5		5		91				<0.2		1.2	
IM1	Fine	Moderate	11:42	4.5	Surface	1.0	0.1	204	25.8	25.8	8.1	8.1	23.5	23.5	91.9	91.9	6.6	6.6	5.7	7.2	9	9	86	87	817945	807118	<0.2	<0.2	1.3	1.3
						1.0	0.2	219	25.8		8.1		23.5		91.9		6.6		5.7		8		86				<0.2		1.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.1	226	25.8	25.8	8.2	8.2	23.7	23.6	91.1	91.1	6.5	6.5	8.6		8		89				<0.2		1.4	
						3.5	0.1	242	25.8		8.2		23.6		91.1		6.5		8.8		9		88				<0.2		1.4	
IM2	Fine	Moderate	11:51	6.6	Surface	1.0	0.2	96	26.0	26.0	8.0	8.0	23.5	23.5	93.3	93.3	6.6	6.5	3.5	6.8	7	6	84	87	818147	806185	<0.2	<0.2	1.3	1.2
						1.0	0.2	98	26.0		8.0		23.5		93.3		6.6		3.5		7		85				<0.2		1.2	
					Middle	3.3	0.1	118	25.4	25.4	8.1	8.1	23.8	23.8	89.4	89.4	6.4		6.6		5		87				<0.2		1.2	
						3.3	0.1	122	25.4		8.1		23.8		89.4		6.4		6.6		5		87				<0.2		1.1	
					Bottom	5.6	0.1	157	25.0	25.0	8.1	8.1	25.2	25.2	86.2	86.3	6.2	6.2	10.3		4		90				<0.2		1.2	
						5.6	0.2	157	25.0		8.1		25.1		86.3		6.2		10.1		5		89				<0.2		1.2	
IM3	Fine	Moderate	11:59	6.9	Surface	1.0	0.3	161	25.7	25.7	8.0	8.0	23.8	23.8	89.3	89.3	6.4	6.4	10.8	12.3	12	15	84	87	818791	805587	<0.2	<0.2	1.3	1.3
						1.0	0.3	164	25.7		8.0		23.8		89.3		6.4		10.7		14		84				<0.2		1.4	
					Middle	3.5	0.3	151	25.3	25.3	8.2	8.2	24.1	24.2	88.0	88.0	6.3		12.6		15		87				<0.2		1.3	
						3.5	0.3	152	25.2		8.2		24.2		88.0		6.3		12.6		15		87				<0.2		1.2	
					Bottom	5.9	0.2	90	24.5	24.6	8.2	8.2	27.0	27.0	83.4	83.4	6.0	6.0	13.4		17		89				<0.2		1.2	
						5.9	0.2	98	24.6		8.2		27.0		83.4		6.0		13.8		16		89				<0.2		1.3	
IM4	Fine	Rough	12:11	7.8	Surface	1.0	0.8	202	25.5	25.5	8.1	8.1	23.7	23.7	88.4	88.2	6.3	6.3	7.5	12.0	10	12	84	86	819708	804588	<0.2	<0.2	2.0	1.7
						1.0	0.9	218	25.4		8.1		23.8		88.0		6.3		7.6		11		84				<0.2		2.2	
					Middle	3.9	0.8	195	25.0	25.0	8.2	8.2	24.6	24.6	85.6	85.6	6.2		12.2		11		86				<0.2		1.6	
						3.9	0.8	203	25.0		8.2		24.7		85.6		6.2		12.2		12		86				<0.2		1.6	
					Bottom	6.8	0.6	171	24.7	24.7	8.2	8.2	25.9	25.9	83.7	83.8	6.0	6.0	16.1		12		88				<0.2		1.3	
						6.8	0.6	179	24.7		8.2		25.9		83.8		6.0		16.2		13		89				<0.2		1.3	
IM5	Fine	Moderate	12:22	7.2	Surface	1.0	0.7	215	25.8	25.8	8.0	8.0	23.6	23.6	90.8	90.8	6.5	6.4	5.6	8.5	7	9	84	87	820718	804845	<0.2	<0.2	1.4	1.5
						1.0	0.7	216	25.8		8.0		23.6		90.7		6.5		5.7		8		84				<0.2		1.6	
					Middle	3.6	0.6	211	25.4	25.4	8.0	8.0	23.9	23.9	87.9	87.9	6.3		8.8		9		87				<0.2		1.6	
						3.6	0.6	228	25.4		8.1		23.9		87.9		6.3		8.9		8		87				<0.2		1.5	
					Bottom	6.2	0.6	207	25.3	25.3	8.2	8.2	24.0	24.0	87.4	87.4	6.3	6.3	10.9		10		89				<0.2		1.4	
						6.2	0.6	214	25.3		8.2		24.0		87.4		6.3		11.0		11		89				<0.2		1.2	
IM6	Fine	Moderate	12:32	6.8	Surface	1.0	0.6	235	26.0	26.0	8.1	8.1	23.5	23.5	91.8	91.9	6.5	6.4	5.4	9.4	8	9	85	87	821083	805846	<0.2	<0.2	1.3	1.4
						1.0	0.6	236	26.0		8.1		23.5		91.9		6.5		5.4		9		84				<0.2		1.4	
					Middle	3.4	0.5	234	25.5	25.5	8.1	8.1	23.9	23.9	88.5	88.5	6.3		9.7		9		87				<0.2		1.5	
						3.4	0.6	252	25.5		8.2		23.9		88.5		6.3		9.5		8		87				<0.2		1.4	
					Bottom	5.8	0.5	234	25.5	25.5	8.2	8.2	24.0	24.0	88.4	88.4	6.3	6.3	13.3		10		89				<0.2		1.3	
						5.8	0.5	238	25.5		8.2		24.0		88.4		6.3		13.2		10		89				<0.2		1.2	
IM7	Fine	Moderate	12:41	7.9	Surface	1.0	0.3	258	25.6	25.6	8.0	8.0	23.7	23.7	89.9	90.0	6.4	6.4	7.1	8.6	8	9	85	87	821358	806812	<0.2	<0.2	1.3	1.3
						1.0	0.3	266	25.6		8.1		23.7		90.0		6.4		7.2		8		85				<0.2		1.2	
					Middle	4.0	0.4	253	25.6	25.6	8.2	8.2	23.7	23.7	89.6	89.6	6.4		7.6		8		87				<0.2		1.3	
						4.0	0.4	263	25.5		8.2		23.7		89.5		6.4		7.5		9		87				<0.2		1.3	
					Bottom	6.9	0.4	243	25.3	25.3	8.2	8.2	24.3	24.3	88.1	88.1	6.3	6.3	10.9		10		89				<0.2		1.2	
						6.9	0.4	264	25.3		8.2		24.3		88.1		6.3		11.2		11		89				<0.2		1.4	
IM8	Cloudy	Moderate	12:07	7.6	Surface	1.0	0.1	280	25.7	25.7	8.2	8.2	23.6	23.6	90.2	90.2	6.4	6.4	7.3	8.0	7	8	87	88	821850	808155	<0.2	<0.2	1.0	1.1
						1.0	0.1	298	25.7		8.2		23.6		90.1		6.4		7.3		7		87				<0.2		1.0	
					Middle	3.8	0.2	194	25.5	25.5	8.2	8.2	23.6	23.6	89.2	89.2	6.4		5.9		7		88				<0.2		1.0	
						3.8	0.2	210	25.5		8.2		23.6		89.1		6.4		6.2		8		87				<0.2		1.1	
					Bottom	6.6	0.1	201	25.2	25.2	8.2	8.2	24.5	24.5	88.2	88.3	6.3	6.3	10.7		8		90				<0.2		1.1	
						6.6	0.1	220	25.2		8.2		24.5		88.3		6.3		10.6		9		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 05 May 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	12:01	7.2	Surface	1.0	0.3	90	25.7	25.7	8.2	8.2	23.3	23.3	90.5	90.5	6.5	6.5	5.2	9.5	3	5	86	88	822096	808831	<0.2	<0.2	1.2	1.2
						1.0	0.3	97	25.7		8.2		23.3		90.5		6.5		5.2		4		87				<0.2		1.1	
					Middle	3.6	0.3	101	25.4	25.4	8.2	8.2	24.0	24.0	88.8	88.7	6.4		10.1		5		88				<0.2		1.2	
						3.6	0.3	104	25.3		8.2		24.1		88.6		6.4		10.7		6		87				<0.2		1.1	
					Bottom	6.2	0.3	114	25.2	25.2	8.2	8.2	24.5	24.5	88.6	88.7	6.4	6.4	12.9		6		90				<0.2		1.3	
						6.2	0.3	118	25.2		8.2		24.5		88.8		6.4		12.8		7		92				<0.2		1.2	
IM10	Cloudy	Moderate	11:51	7.8	Surface	1.0	0.8	99	25.6	25.6	8.1	8.1	23.3	23.4	90.0	89.9	6.5	6.4	5.4	8.0	4	5	86	88	822383	809778	<0.2	<0.2	1.2	1.2
						1.0	0.8	103	25.6		8.1		23.5		89.8		6.4		5.4		5		87				<0.2		1.2	
					Middle	3.9	0.8	99	25.3	25.3	8.1	8.1	24.4	24.4	88.6	88.7	6.3		8.3		4		87				<0.2		1.2	
						3.9	0.8	104	25.3		8.1		24.4		88.7		6.4		8.4		5		88				<0.2		1.2	
					Bottom	6.8	0.5	97	25.2	25.2	8.2	8.2	24.5	24.5	89.7	89.9	6.4	6.5	10.2		4		90				<0.2		1.2	
						6.8	0.5	105	25.2		8.2		24.5		90.1		6.5		10.1		5		91				<0.2		1.2	
IM11	Cloudy	Moderate	11:38	7.6	Surface	1.0	0.7	95	25.7	25.7	8.1	8.1	23.3	23.4	91.1	91.1	6.5	6.5	6.4	8.6	4	6	87	89	822053	811481	<0.2	<0.2	1.1	1.2
						1.0	0.7	103	25.7		8.1		23.4		91.0		6.5		7.0		4		87				<0.2		1.3	
					Middle	3.8	0.7	101	25.2	25.2	8.2	8.2	24.3	24.3	90.1	90.3	6.5		9.7		6		88				<0.2		1.2	
						3.8	0.8	110	25.2		8.2		24.3		90.4		6.5		9.6		5		89				<0.2		1.1	
					Bottom	6.6	0.4	101	25.2	25.2	8.2	8.2	24.4	24.4	92.7	92.9	6.6	6.7	9.2		7		90				<0.2		1.3	
						6.6	0.5	103	25.2		8.2		24.4		93.0		6.7		10.0		7		91				<0.2		1.2	
IM12	Cloudy	Moderate	11:29	8.8	Surface	1.0	0.7	101	25.7	25.7	8.1	8.1	23.3	23.3	91.0	91.0	6.5	6.5	5.7	8.6	5	6	86	88	821459	812026	<0.2	<0.2	1.2	1.2
						1.0	0.7	108	25.7		8.1		23.3		91.0		6.5		5.7		5		87				<0.2		1.2	
					Middle	4.4	0.7	86	25.4	25.4	8.1	8.1	23.9	23.9	89.6	89.6	6.4		11.9		6		88				<0.2		1.2	
						4.4	0.7	89	25.3		8.1		23.9		89.5		6.4		11.8		5		86				<0.2		1.2	
					Bottom	7.8	0.4	91	25.2	25.2	8.1	8.1	24.3	24.3	89.4	89.5	6.4	6.4	8.5		6		90				<0.2		1.2	
						7.8	0.4	94	25.2		8.1		24.4		89.5		6.4		8.0		6		91				<0.2		1.2	
SR1A	Cloudy	Moderate	11:09	5.1	Surface	1.0	-	-	26.0	26.0	8.2	8.2	24.0	24.0	94.4	94.4	6.7	6.7	2.6	3.3	6	6	-	-	819980	812662	-	-	-	-
						1.0	-	-	26.0		8.2		24.0		94.4		6.7		2.6		6		-				-		-	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	-	-	25.6	25.6	8.2	8.2	24.6	24.6	93.7	93.8	6.7	6.7	4.0		6		-				-		-	
						4.1	-	-	25.6		8.2		24.6		93.9		6.7		4.1		4		-				-		-	
SR2	Cloudy	Moderate	10:55	4.9	Surface	1.0	0.6	83	25.6	25.6	8.2	8.2	23.1	23.1	93.8	93.9	6.7	6.7	5.1	4.5	4	4	88	89	821453	814150	<0.2	<0.2	1.2	1.3
						1.0	0.6	84	25.6		8.2		23.1		93.9		6.7		5.0		4		87				<0.2		1.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	0.3	80	25.1	25.1	8.2	8.2	25.5	25.5	94.3	94.4	6.7	6.7	3.9		4		90				<0.2		1.2	
						3.9	0.3	83	25.1		8.2		25.5		94.4		6.7		4.0		5		91				<0.2		1.4	
SR3	Cloudy	Moderate	12:12	8.5	Surface	1.0	0.2	233	25.7	25.7	8.1	8.1	23.2	23.2	90.2	90.2	6.5	6.4	5.6	9.2	8	8	-	-	822152	807581	-	-	-	-
						1.0	0.2	240	25.7		8.1		23.2		90.1		6.4		5.7		7		-				-		-	
					Middle	4.3	0.3	190	25.4	25.4	8.2	8.2	23.9	24.0	88.9	88.9	6.4		8.9		7		-				-		-	
						4.3	0.3	190	25.4		8.2		24.0		88.9		6.4		9.4		8		-				-		-	
					Bottom	7.5	0.2	200	25.3	25.4	8.2	8.2	24.6	24.5	89.0	89.1	6.4	6.4	12.9		10		-				-		-	
						7.5	0.2	212	25.4		8.2		24.5		89.1		6.4		12.9		9		-				-		-	
SR4A	Fine	Calm	10:57	8.7	Surface	1.0	0.2	57	25.6	25.6	8.1	8.1	23.4	23.4	91.3	91.3	6.5	6.5	5.7	6.4	6	7	-	-	817195	807812	-	-	-	-
						1.0	0.2	59	25.6		8.1		23.4		91.2		6.5		5.7		6		-				-		-	
					Middle	4.4	0.1	63	25.6	25.6	8.1	8.1	23.4	23.4	90.8	90.8	6.5		5.9		6		-				-		-	
						4.4	0.2	63	25.6		8.1		23.4		90.8		6.5		5.9		7		-				-		-	
					Bottom	7.7	0.1	56	25.6	25.6	8.1	8.1	23.6	23.6	89.5	89.5	6.4	6.4	7.5		8		-				-		-	
						7.7	0.2	61	25.6		8.1		23.6		89.5		6.4		7.5		8		-				-		-	
SR5A	Fine	Calm	10:38	3.3	Surface	1.0	0.1	3	26.1	26.1	8.1	8.1	23.7	23.7	92.7	92.7	6.6	6.6	6.8	7.5	8	9	-	-	816605	810709	-	-	-	-
						1.0	0.1	3	26.1		8.1		23.7		92.7		6.6		6.9		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.3	0.0	54	26.1	26.1	8.1	8.1	23.7	23.7	92.3	92.3	6.5	6.5	8.1		9		-				-		-	
						2.3	0.0	56	26.1		8.1		23.7		92.3		6.5		8.1		8		-				-		-	
SR6A	Fine	Calm	10:06	4.2	Surface	1.0	0.0	32	25.7	25.7	8.2	8.2	23.4	23.4	94.8	94.8	6.8	6.8	3.1	3.6	5	6	-	-	817949	814716	-	-	-	-
						1.0	0.0	34	25.7		8.2		23.4		94.7		6.8		3.0		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.1	50	25.7	25.7	8.2	8.2	23.6	23.6	93.6	93.6	6.7	6.7	4.1		6		-				-		-	
						3.2	0.1	54	25.7		8.2		23.6		93.6		6.7		4.2		5		-				-		-	
SR7	Cloudy	Moderate	09:48	16.8	Surface	1.0	0.5	91	24.7	24.7	8.1	8.1	28.0	28.0	93.9	93.8	6.7	6.6	2.0	2.3	3	4	-	-	823644	823762	-	-	-	-
						1.0	0.6	95	24.6		8.1		28.1		93.7		6.6		2.0		4		-				-		-	
					Middle	8.4	0.2	35	24.2	24.2	8.1	8.1	29.7	29.7	92.3	92.2	6.5		2.3		3		-				-		-	
						8.4	0.2	37	24.1		8.1		29.8		92.1		6.5		2.3		4		-				-		-	
					Bottom	15.8	0.2	359	24.0	24.0	8.1	8.1	30.5	30.5	91.7	91.8	6.5	6.5	2.7		3		-				-		-	
						15.8	0.2	330	24.0		8.1		30.5		91.8		6.5		2.7		4		-				-		-	
SR8	Cloudy	Moderate	11:22	5.4	Surface	1.0	-	-	25.6	25.6	8.2	8.2	23.9	23.9	92.2	92.2	6.6	6.6	9.0	9.8	2	3	-	-	820392	811616	-	-	-	-
						1.0	-	-	25.6		8.2		24.0		92.2		6.6		9.3		3		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	-	-	25.5	25.5	8.2	8.2	24.1	24.1	92.3	92.3	6.6	6.6	10.4		4		-				-		-	
						4.4	-	-	25.5		8.2		24.0		92.3		6.6		10.4		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**

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

Water Quality Monitoring

Water Quality Monitoring Results on 05 May 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	17:10	8.2	Surface	1.0	0.5	27	26.3	26.3	8.0	8.0	23.4	23.4	90.3	90.3	6.4	6.2	5.7	9.3	7	8	85	88	815638	804255	<0.2	<0.2	1.2	1.3
						1.0	0.5	28	26.3		8.0		23.4		90.2		6.4		5.7		7		86				<0.2		1.1	
					Middle	4.1	0.1	11	24.9	24.9	8.2	8.2	26.5	26.5	84.2	84.2	6.0		8.1		8		88				<0.2		1.2	
						4.1	0.1	11	24.8		8.2		26.6		84.2		6.0		8.1		7		88				<0.2		1.2	
					Bottom	7.2	0.2	30	24.2	24.2	8.2	8.2	28.2	28.2	80.5	80.5	5.7	5.7	14.0		9		90				<0.2		1.5	
						7.2	0.2	32	24.2		8.2		28.2		80.5		5.7		14.3		9		90				<0.2		1.4	
C2	Cloudy	Moderate	15:49	11.7	Surface	1.0	0.3	167	26.2	26.2	8.0	8.0	19.6	19.6	89.4	89.4	6.5	6.4	5.0	6.4	7	8	86	88	825665	806960	<0.2	<0.2	1.2	1.3
						1.0	0.3	178	26.2		8.0		19.6		89.3		6.5		5.2		6		86				<0.2		1.2	
					Middle	5.9	0.3	166	24.9	24.9	8.0	8.0	23.5	23.6	85.1	85.0	6.2		6.9		9		88				<0.2		1.2	
						5.9	0.4	176	24.8		8.0		23.6		84.9		6.2		7.0		8		88				<0.2		1.3	
					Bottom	10.7	0.2	296	24.7	24.7	8.0	8.0	26.2	26.1	85.2	85.4	6.1	6.1	7.3		9		90				<0.2		1.3	
						10.7	0.2	312	24.7		8.0		26.1		85.6		6.1		7.2		9		90				<0.2		1.3	
C3	Cloudy	Moderate	17:43	11.6	Surface	1.0	0.3	270	26.0	26.0	8.2	8.2	24.2	24.2	92.8	92.8	6.6	6.6	3.4	5.6	8	8	88	89	822096	817784	<0.2	<0.2	1.2	1.2
						1.0	0.3	284	26.0		8.2		24.2		92.8		6.6		3.4		8		88				<0.2		1.3	
					Middle	5.8	0.3	266	25.5	25.5	8.2	8.2	25.1	25.1	92.2	92.2	6.6		3.2		8		90				<0.2		1.3	
						5.8	0.3	272	25.5		8.2		25.1		92.2		6.6		3.2		8		89				<0.2		1.2	
					Bottom	10.6	0.2	302	24.3	24.3	8.2	8.2	29.3	29.3	89.8	89.9	6.4	6.4	10.3		7		90				<0.2		1.2	
						10.6	0.2	319	24.3		8.2		29.3		89.9		6.4		10.4		7		91				<0.2		1.2	
IM1	Fine	Rough	16:44	4.8	Surface	1.0	0.4	352	26.3	26.3	8.2	8.2	23.6	23.6	91.9	91.9	6.5	6.5	10.6	11.3	16	16	87	87	817954	807147	<0.2	<0.2	1.2	1.2
						1.0	0.4	324	26.3		8.2		23.6		91.9		6.5		10.8		17		86				<0.2		1.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.3	343	26.2	26.2	8.2	8.2	23.7	23.7	90.7	90.8	6.4	6.4	12.0		15		88				<0.2		1.3	
						3.8	0.3	316	26.2		8.2		23.7		90.8		6.4		11.9		16		88				<0.2		1.2	
IM2	Fine	Rough	16:34	6.5	Surface	1.0	0.5	356	26.2	26.2	8.0	8.0	23.9	23.9	91.5	91.5	6.5	6.5	8.5	11.3	10	10	84	87	818166	806149	<0.2	<0.2	1.2	1.3
						1.0	0.6	328	26.2		8.1		23.9		91.4		6.5		8.8		11		84				<0.2		1.3	
					Middle	3.3	0.5	348	26.2	26.2	8.1	8.1	24.0	24.0	90.8	90.8	6.4		11.1		10		87				<0.2		1.2	
						3.3	0.5	355	26.2		8.1		24.0		90.7		6.4		11.3		11		87				<0.2		1.4	
					Bottom	5.5	0.3	337	24.8	24.8	8.2	8.2	26.5	26.5	82.3	82.3	5.9	5.9	14.0		10		89				<0.2		1.2	
						5.5	0.3	358	24.7		8.2		26.5		82.3		5.9		14.1		10		89				<0.2		1.4	
IM3	Fine	Rough	16:25	6.7	Surface	1.0	0.4	340	26.1	26.1	8.1	8.1	24.1	24.1	91.2	91.2	6.5	6.4	7.1	8.2	8	9	84	87	818776	805613	<0.2	<0.2	1.5	1.6
						1.0	0.5	358	26.1		8.1		24.1		91.2		6.5		7.1		9		84				<0.2		1.4	
					Middle	3.4	0.4	354	25.2	25.2	8.2	8.2	25.2	25.3	88.2	88.2	6.3		6.6		8		87				<0.2		1.7	
						3.4	0.5	326	25.1		8.2		25.4		88.1		6.3		6.6		9		87				<0.2		1.7	
					Bottom	5.7	0.4	333	24.5	24.5	8.2	8.2	27.1	27.1	82.6	82.7	5.9	5.9	11.0		9		89				<0.2		1.6	
						5.7	0.4	359	24.5		8.2		27.1		82.8		5.9		10.7		10		90				<0.2		1.6	
IM4	Fine	Rough	16:13	7.5	Surface	1.0	0.7	328	26.2	26.2	8.0	8.0	23.8	23.8	92.9	92.9	6.6	6.6	5.1	7.5	8	8	83	87	819720	804622	<0.2	<0.2	1.6	1.7
						1.0	0.8	337	26.2		8.0		23.8		92.9		6.6		5.0		8		84				<0.2		1.6	
					Middle	3.8	0.7	319	26.2	26.2	8.1	8.1	23.8	23.8	92.5	92.5	6.5		5.0		8		87				<0.2		1.8	
						3.8	0.8	322	26.2		8.1		23.8		92.4		6.5		5.0		7		87				<0.2		1.7	
					Bottom	6.5	0.5	313	24.7	24.7	8.2	8.2	26.4	26.4	82.3	82.4	5.9	5.9	12.4		8		89				<0.2		1.7	
						6.5	0.5	318	24.7		8.2		26.4		82.4		5.9		12.3		7		89				<0.2		1.8	
IM5	Fine	Rough	16:03	6.8	Surface	1.0	0.5	295	26.6	26.6	8.0	8.0	21.9	21.9	93.2	93.1	6.6	6.5	6.1	9.1	9	9	84	86	820749	804888	<0.2	<0.2	1.6	1.7
						1.0	0.5	321	26.6		8.1		22.0		92.9		6.6		6.4		8		84				<0.2		1.7	
					Middle	3.4	0.3	292	25.9	26.0	8.2	8.2	22.9	22.9	90.2	90.3	6.4		9.7		9		86				<0.2		1.8	
						3.4	0.4	318	26.0		8.2		22.9		90.3		6.4		9.6		8		86				<0.2		1.7	
					Bottom	5.8	0.3	309	25.9	25.9	8.2	8.2	23.0	23.0	89.8	89.8	6.4	6.4	11.9		10		88				<0.2		1.6	
						5.8	0.3	315	25.9		8.2		23.0		89.8		6.4		10.9		11		89				<0.2		1.6	
IM6	Fine	Moderate	15:55	6.6	Surface	1.0	0.5	259	26.2	26.2	8.1	8.1	22.0	22.0	91.6	91.6	6.5	6.5	6.6	9.3	7	7	84	86	821079	805826	<0.2	<0.2	1.7	1.7
						1.0	0.5	280	26.2		8.1		22.0		91.5		6.5		6.9		7		84				<0.2		1.7	
					Middle	3.3	0.4	263	25.7	25.7	8.2	8.2	22.9	22.9	89.5	89.5	6.4		10.4		7		86				<0.2		1.7	
						3.3	0.4	270	25.7		8.2		22.9		89.5		6.4		10.3		6		86				<0.2		1.7	
					Bottom	5.6	0.4	266	25.7	25.7	8.2	8.2	22.9	22.9	89.4	89.4	6.4	6.4	10.8		8		89				<0.2		1.6	
						5.6	0.4	288	25.7		8.2		22.9		89.4		6.4		10.8		7		88				<0.2		1.6	
IM7	Fine	Moderate	15:49	7.7	Surface	1.0	0.5	237	26.4	26.4	8.1	8.1	21.3	21.4	93.7	93.7	6.7	6.6	5.3	8.8	6	7	85	87	821341	806821	<0.2	<0.2	1.7	1.7
						1.0	0.6	247	26.3		8.1		21.4		93.7		6.7		5.6		6		84				<0.2		1.7	
					Middle	3.9	0.5	245	25.7	25.7	8.1	8.1	22.9	22.9	89.5	89.5	6.4		8.1		7		87				<0.2		1.6	
						3.9	0.5	268	25.7		8.1		22.9		89.5		6.4		8.2		7		87				<0.2		1.7	
					Bottom	6.7	0.4	250	25.7	25.7	8.2	8.2	23.1	23.1	89.6	89.6	6.4	6.4	12.9		8		89				<0.2		1.6	
						6.7	0.4	257	25.7		8.2		23.1		89.6		6.4		12.7		8		90				<0.2		1.6	
IM8	Cloudy	Moderate	16:12	7.1	Surface	1.0	0.2	248	26.7	26.7	8.1	8.1	21.1	21.1	93.8	93.7	6.7	6.6	2.9	7.1	8	9	86	88	821806	808147	<0.2	<0.2	1.3	1.2
						1.0	0.2	258	26.7		8.1		21.2		93.6		6.7		3.1		9		87				<0.2		1.2	
					Middle	3.6	0.2	246	26.2	26.2	8.1	8.1	22.0	22.0	91.8	91.7	6.6		4.8		9		88				<0.2		1.2	
						3.6	0.2	247	26.2		8.1		22.1		91.6		6.5		4.8		8		89				<0.2		1.2	
					Bottom	6.1	0.2	283	25.7	25.7	8.1	8.1	23.0	23.0	90.2	90.2	6.5	6.5	13.3		9		90				<0.2		1.2	
						6.1	0.2	284	25.7		8.1		23.0		90.2		6.5		13.8		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 05 May 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	16:18	6.6	Surface	1.0	0.1	231	26.4	26.4	8.1	8.1	21.8	21.9	92.8	92.7	6.6	6.6	3.7	5.5	8	9	86	88	822092	808795	<0.2	<0.2	1.3	1.3
						1.0	0.1	245	26.3		8.1		21.9		92.5		6.6		4.0		8		86							
					Middle	3.3	0.1	255	25.9	25.9	8.1	8.1	22.6	22.6	91.1	91.1	6.5		5.6		9		88							
						3.3	0.1	258	25.8		8.1		22.7		91.1		6.5		5.8		9		87							
					Bottom	5.6	0.0	235	25.7	25.7	8.2	8.2	23.0	23.0	91.3	91.4	6.5	6.6	6.9		10		90							
						5.6	0.0	244	25.7		8.2		23.0		91.5		6.6		6.9		10		92							
IM10	Cloudy	Moderate	16:26	7.5	Surface	1.0	0.1	76	26.3	26.3	8.1	8.1	22.0	22.1	92.1	91.9	6.6	6.5	4.1	7.0	7	7	86	89	822380	809807	<0.2	<0.2	1.3	1.2
						1.0	0.1	83	26.3		8.1		22.2		91.7		6.5		4.4		8		87							
					Middle	3.8	0.1	42	25.7	25.7	8.1	8.1	23.3	23.3	88.8	88.8	6.4		7.7		7		88							
						3.8	0.1	43	25.7		8.1		23.3		88.8		6.4		7.8		6		89							
					Bottom	6.5	0.2	326	25.6	25.6	8.1	8.1	23.3	23.3	89.0	89.1	6.4	6.4	8.9		7		90							
						6.5	0.2	344	25.6		8.1		23.3		89.1		6.4		8.8		6		92							
IM11	Cloudy	Moderate	16:38	7.9	Surface	1.0	0.2	34	26.0	26.0	8.1	8.1	23.2	23.2	90.6	90.6	6.5	6.4	8.2	10.0	7	7	86	89	822065	811441	<0.2	<0.2	1.3	1.2
						1.0	0.2	34	26.0		8.1		23.2		90.5		6.4		8.2		6		87							
					Middle	4.0	0.1	312	25.6	25.6	8.1	8.1	23.9	24.0	89.0	89.0	6.4		9.3		8		88							
						4.0	0.1	334	25.5		8.1		24.0		88.9		6.4		9.7		7		89							
					Bottom	6.9	0.2	231	25.4	25.4	8.2	8.2	24.6	24.6	89.0	89.1	6.4	6.4	12.3		7		90							
						6.9	0.2	244	25.4		8.2		24.6		89.1		6.4		12.3		8		91							
IM12	Cloudy	Moderate	16:46	8.8	Surface	1.0	0.2	335	26.3	26.3	8.2	8.2	22.8	22.8	91.6	91.5	6.5	6.4	5.0	8.9	8	8	86	89	821445	812058	<0.2	<0.2	1.1	1.2
						1.0	0.2	308	26.2		8.2		22.8		91.3		6.5		5.3		7		87							
					Middle	4.4	0.2	302	25.7	25.7	8.1	8.1	23.9	24.0	88.5	88.4	6.3		9.0		8		88							
						4.4	0.2	321	25.6		8.1		24.0		88.2		6.3		9.3		7		89							
					Bottom	7.8	0.2	319	25.3	25.3	8.1	8.1	24.7	24.7	86.9	87.0	6.2	6.2	12.4		8		90							
						7.8	0.2	340	25.3		8.1		24.8		87.0		6.2		12.5		8		91							
SR1A	Cloudy	Moderate	17:05	5.2	Surface	1.0	-	-	26.1	26.1	8.2	8.2	24.0	24.0	92.5	92.5	6.6	6.6	5.4	5.3	8	8	-	-	819982	812658	-	-	-	-
						1.0	-	-	26.0		8.2		24.0		92.5		6.6		5.4		8		-				-		-	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	-	-	25.9	25.9	8.2	8.2	24.1	24.1	92.6	92.6	6.6	6.6	5.2		8		-				-		-	
						4.2	-	-	25.9		8.2		24.1		92.6		6.6		5.3		7		-				-		-	
SR2	Cloudy	Moderate	17:18	4.8	Surface	1.0	0.1	217	25.7	25.7	8.2	8.2	24.8	24.9	91.4	91.4	6.5	6.5	8.0	8.1	9	8	88	90	821457	814166	<0.2	<0.2	1.3	1.2
						1.0	0.1	219	25.7		8.2		24.9		91.4		6.5		8.0		8		89				<0.2		1.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.3	328	25.7	25.7	8.2	8.1	24.9	24.9	91.9	92.0	6.5	6.5	8.2		7		90				<0.2		1.2	
						3.8	0.3	331	25.7		8.1		24.9		92.0		6.5		8.3		6		91				<0.2		1.2	
SR3	Cloudy	Moderate	16:07	8.7	Surface	1.0	0.3	213	26.5	26.4	8.1	8.1	20.8	20.8	92.5	92.3	6.6	6.5	3.8	8.1	6	7	-	-	822135	807578	-	-	-	-
						1.0	0.4	230	26.3		8.1		20.8		92.1		6.6		4.0		6		-				-		-	
					Middle	4.4	0.3	229	25.5	25.5	8.1	8.1	22.9	22.9	89.7	89.7	6.5		7.8		7		-				-		-	
						4.4	0.4	246	25.5		8.1		22.9		89.6		6.4		8.6		6		-				-		-	
					Bottom	7.7	0.2	260	25.4	25.5	8.1	8.1	23.3	23.3	89.4	89.4	6.4	6.4	12.7		8		-				-		-	
						7.7	0.2	273	25.5		8.1		23.3		89.4		6.4		11.8		7		-				-		-	
SR4A	Fine	Calm	17:31	8.1	Surface	1.0	0.0	193	26.5	26.5	8.1	8.1	23.5	23.5	92.5	92.5	6.5	6.5	10.5	10.8	9	12	-	-	817182	807829	-	-	-	-
						1.0	0.0	199	26.5		8.1		23.5		92.4		6.5		10.5		10		-				-		-	
					Middle	4.1	0.0	73	26.4	26.4	8.1	8.1	23.5	23.5	91.5	91.5	6.5		10.7		12		-				-		-	
						4.1	0.0	74	26.4		8.1		23.5		91.4		6.5		10.6		12		-				-		-	
					Bottom	7.1	0.1	86	26.3	26.3	8.1	8.1	23.5	23.5	89.8	89.9	6.4	6.4	11.4		14		-				-		-	
						7.1	0.1	92	26.3		8.1		23.5		89.9		6.4		11.3		14		-				-		-	
SR5A	Fine	Calm	17:48	3.5	Surface	1.0	0.1	262	26.4	26.4	8.2	8.2	23.8	23.8	93.0	93.0	6.6	6.6	9.7	10.0	12	12	-	-	816570	810706	-	-	-	-
						1.0	0.1	263	26.4		8.2		23.8		93.0		6.6		9.7		12		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.5	0.1	267	26.4	26.4	8.1	8.1	23.8	23.8	92.9	92.9	6.5	6.5	10.2		13		-				-		-	
						2.5	0.1	291	26.4		8.1		23.8		92.9		6.5		10.2		12		-				-		-	
SR6A	Fine	Calm	18:16	4.0	Surface	1.0	0.1	217	26.3	26.3	8.0	8.0	24.3	24.3	93.0	93.0	6.6	6.6	6.4	8.0	8	9	-	-	817964	814757	-	-	-	-
						1.0	0.1	219	26.3		8.0		24.3		92.9		6.5		6.4		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	0.1	239	26.0	26.0	8.0	8.0	24.5	24.5	90.9	90.9	6.4	6.4	9.7		9		-				-		-	
						3.0	0.1	255	26.0		8.0		24.5		90.9		6.4		9.5		10		-				-		-	
SR7	Cloudy	Moderate	18:16	16.7	Surface	1.0	0.0	113	24.9	24.9	8.2	8.2	27.6	27.6	91.2	91.2	6.5	6.5	2.5	3.2	10	9	-	-	823620	823719	-	-	-	-
						1.0	0.0	114	24.8		8.2		27.7		91.2		6.5		2.5		10		-				-		-	
					Middle	8.4	0.1	124	24.2	24.2	8.2	8.2	29.6	29.7	90.2	90.2	6.4		3.3		9		-				-		-	
						8.4	0.1	132	24.2		8.2		29.7		90.2		6.4		3.3		10		-				-		-	
					Bottom	15.7	0.1	91	24.1	24.2	8.2	8.2	30.4	30.3	90.9	91.0	6.4	6.4	3.8		8		-				-		-	
						15.7	0.1	91	24.2		8.2		30.3		91.1		6.4		3.8		8		-				-		-	
SR8	Cloudy	Moderate	16:57	4.9	Surface	1.0	-	-	26.2	26.2	8.2	8.2	23.3	23.4	91.3	91.3	6.5	6.5	6.3	6.9	8	8	-	-	820413	811633	-	-	-	-
						1.0	-	-	26.1		8.2		23.5		91.2		6.5		6.5		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	-	-	26.1	26.1	8.2	8.2	23.7	23.7	91.1	91.2	6.5	6.5	7.3		7		-				-		-	
						3.9	-	-	26.1		8.2		23.7		91.2		6.5		7.6		8		-				-		-	

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 07 May 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	12:49	8.4	Surface	1.0	0.5	218	26.0	26.0	8.2	8.2	26.4	26.4	89.8	89.7	6.3	6.1	4.1	6.2	4	5	83	86	815638	804248	<0.2	<0.2	1.5	1.5
						1.0	0.5	221	26.0		8.2		26.5		89.6		6.3		4.1		4		83				<0.2		1.4	
					Middle	4.2	0.6	204	24.9	24.9	8.2	8.2	27.9	27.9	82.9	83.0	5.9		5.8		4		87				<0.2		1.5	
						4.2	0.6	222	24.9		8.2		27.9		83.0		5.9		5.6		5		86				<0.2		1.5	
					Bottom	7.4	0.5	205	24.9	24.9	8.2	8.2	27.9	27.9	83.4	83.5	5.9	5.9	8.9		6		89				<0.2		1.5	
						7.4	0.5	216	24.9		8.2		27.9		83.5		5.9		8.9		6		90				<0.2		1.5	
C2	Fine	Moderate	14:10	11.3	Surface	1.0	1.0	165	26.9	26.8	7.9	7.9	22.7	22.8	85.8	85.7	6.0	5.9	5.0	6.3	6	7	86	88	825684	806957	<0.2	<0.2	0.9	0.8
						1.0	1.1	171	26.8		7.9		22.8		85.6		6.0		5.5		6		87				<0.2		0.8	
					Middle	5.7	0.9	165	25.7	25.7	7.9	7.9	24.5	24.5	82.1	82.1	5.8		7.4		7		88				<0.2		0.8	
						5.7	1.0	168	25.7		7.9		24.5		82.1		5.8		8.1		7		89				<0.2		0.8	
					Bottom	10.3	0.8	159	25.7	25.7	7.9	7.9	24.8	24.8	81.7	81.8	5.8	5.8	6.0		8		90				<0.2		0.8	
						10.3	0.8	161	25.7		7.9		24.8		81.8		5.8		5.7		8		90				<0.2		0.8	
C3	Fine	Moderate	11:50	13.2	Surface	1.0	0.6	79	25.6	25.6	7.9	7.9	26.9	26.9	85.1	85.0	6.0	6.0	2.4	3.1	9	8	88	89	822110	817786	<0.2	<0.2	0.8	0.8
						1.0	0.6	80	25.6		7.9		26.9		84.9		6.0		2.2		9		88				<0.2		0.8	
					Middle	6.6	0.4	102	25.1	25.1	7.9	7.9	28.0	28.0	84.6	84.6	6.0		2.4		8		89				<0.2		0.7	
						6.6	0.4	110	25.1		7.9		28.0		84.6		6.0		2.6		7		89				<0.2		0.8	
					Bottom	12.2	0.3	104	24.7	24.7	7.9	7.9	29.5	29.5	84.4	84.4	5.9	5.9	4.6		6		90				<0.2		0.8	
						12.2	0.3	105	24.7		7.9		29.5		84.3		5.9		4.1		6		90				<0.2		0.8	
IM1	Fine	Calm	13:10	3.4	Surface	1.0	0.0	304	25.8	25.8	8.2	8.2	26.2	26.2	84.7	84.7	6.0	6.0	8.3	9.3	5	6	84	86	817926	807113	<0.2	<0.2	1.6	1.5
						1.0	0.0	322	25.8		8.2		26.2		84.7		6.0		8.5		5		84				<0.2		1.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.4	0.1	225	25.7	25.7	8.2	8.2	26.3	26.3	85.1	85.2	6.0	6.0	10.1		6		88				<0.2		1.6	
						2.4	0.1	238	25.7		8.2		26.3		85.3		6.0		10.3		6		89				<0.2		1.4	
IM2	Fine	Moderate	13:18	6.6	Surface	1.0	0.1	171	25.4	25.4	8.3	8.3	26.9	27.0	87.8	87.7	6.2	6.1	6.0	8.4	6	8	81	85	818155	806156	<0.2	<0.2	1.6	1.6
						1.0	0.1	175	25.3		8.3		27.1		87.5		6.2		6.0		7		82				<0.2		1.5	
					Middle	3.3	0.2	122	25.1	25.1	8.3	8.3	27.4	27.4	83.7	83.8	5.9		8.9		8		85				<0.2		1.6	
						3.3	0.2	133	25.1		8.3		27.4		83.8		5.9		9.0		8		86				<0.2		1.5	
					Bottom	5.6	0.1	113	25.1	25.2	8.3	8.3	27.4	27.4	84.8	84.9	6.0	6.0	10.4		10		88				<0.2		1.6	
						5.6	0.2	117	25.2		8.3		27.4		84.9		6.0		10.3		10		88				<0.2		1.5	
IM3	Fine	Moderate	13:24	6.6	Surface	1.0	0.1	154	25.4	25.4	8.3	8.3	27.1	27.1	83.7	83.7	5.9	5.9	11.9	13.6	13	12	83	86	818761	805580	<0.2	<0.2	1.6	1.6
						1.0	0.1	156	25.3		8.3		27.1		83.6		5.9		12.0		13		82				<0.2		1.6	
					Middle	3.3	0.2	152	25.2	25.2	8.3	8.3	27.2	27.2	83.2	83.3	5.9		13.5		12		86				<0.2		1.6	
						3.3	0.2	155	25.2		8.3		27.2		83.3		5.9		13.3		12		86				<0.2		1.8	
					Bottom	5.6	0.2	145	25.2	25.2	8.3	8.3	27.3	27.3	84.0	84.2	5.9	5.9	15.9		11		89				<0.2		1.6	
						5.6	0.2	148	25.2		8.3		27.3		84.3		5.9		15.1		11		89				<0.2		1.5	
IM4	Fine	Rough	13:33	7.5	Surface	1.0	1.0	198	25.7	25.7	8.3	8.3	26.4	26.4	85.4	85.4	6.0	6.0	11.4	12.2	7	6	82	85	819725	804623	<0.2	<0.2	1.6	1.5
						1.0	1.0	213	25.6		8.3		26.4		85.4		6.0		11.5		7		82				<0.2		1.5	
					Middle	3.8	1.0	196	25.5	25.5	8.3	8.3	26.7	26.7	85.1	85.1	6.0		12.2		6		85				<0.2		1.6	
						3.8	1.0	204	25.5		8.3		26.7		85.1		6.0		12.5		6		86				<0.2		1.5	
					Bottom	6.5	0.8	192	25.5	25.5	8.3	8.3	26.7	26.7	85.5	85.6	6.0	6.0	13.0		5		88				<0.2		1.6	
						6.5	0.8	202	25.5		8.3		26.7		85.6		6.0		12.7		5		88				<0.2		1.4	
IM5	Fine	Moderate	13:44	7.0	Surface	1.0	1.1	214	25.9	25.9	8.3	8.3	26.4	26.4	86.1	86.1	6.0	6.0	9.7	12.6	7	6	81	84	820752	804869	<0.2	<0.2	1.6	1.5
						1.0	1.1	220	25.9		8.3		26.5		86.1		6.0		10.1		6		81				<0.2		1.5	
					Middle	3.5	1.0	212	25.6	25.6	8.3	8.3	27.0	27.0	85.4	85.4	6.0		13.6		6		84				<0.2		1.5	
						3.5	1.0	213	25.6		8.3		27.0		85.4		6.0		13.7		6		84				<0.2		1.5	
					Bottom	6.0	0.8	204	25.6	25.6	8.3	8.3	27.1	27.1	85.5	85.6	6.0	6.0	14.2		6		87				<0.2		1.6	
						6.0	0.9	217	25.6		8.3		27.1		85.6		6.0		14.5		6		88				<0.2		1.5	
IM6	Fine	Moderate	13:54	6.8	Surface	1.0	1.0	240	26.0	26.0	8.3	8.3	25.3	25.4	84.5	84.4	6.0	5.9	6.8	8.7	6	8	82	85	821077	805839	<0.2	<0.2	1.3	1.5
						1.0	1.0	258	25.9		8.3		25.4		84.2		5.9		6.8		7		82				<0.2		1.4	
					Middle	3.4	0.8	241	25.4	25.4	8.3	8.3	26.4	26.4	82.7	82.7	5.8		9.0		8		85				<0.2		1.7	
						3.4	0.9	256	25.4		8.3		26.4		82.7		5.8		8.6		8		85				<0.2		1.7	
					Bottom	5.8	0.7	238	25.4	25.4	8.2	8.2	26.5	26.5	83.0	83.1	5.9	5.9	10.5		9		88				<0.2		1.6	
						5.8	0.8	248	25.4		8.3		26.5		83.1		5.9		10.6		10		88				<0.2		1.5	
IM7	Fine	Moderate	14:04	7.5	Surface	1.0	0.7	241	26.0	26.0	8.3	8.3	25.6	25.7	85.2	85.0	6.0	6.0	6.7	8.8	9	10	82	85	821335	806850	<0.2	<0.2	1.5	1.4
						1.0	0.8	246	25.9		8.3		25.7		84.8		6.0		6.7		9		82				<0.2		1.4	
					Middle	3.8	0.8	240	25.5	25.5	8.2	8.2	26.4	26.4	83.4	83.4	5.9		8.3		9		85				<0.2		1.4	
						3.8	0.8	251	25.5		8.2		26.4		83.3		5.9		8.0		10		85				<0.2		1.4	
					Bottom	6.5	0.6	250	25.4	25.4	8.2	8.2	26.5	26.5	83.1	83.2	5.9	5.9	11.7		10		88				<0.2		1.4	
						6.5	0.6	272	25.4		8.2		26.5		83.2		5.9		11.5		10		88				<0.2		1.5	
IM8	Fine	Moderate	13:36	8.0	Surface	1.0	0.3	181	26.3	26.2	7.9	7.9	25.2	25.2	86.1	86.1	6.0	6.0	7.5	6.5	6	7	86	88	821817	808147	<0.2	<0.2	1.5	0.9
						1.0	0.3	197	26.2		7.9		25.3		86.0		6.0		7.1		6		86				<0.2		1.5	
					Middle	4.0	0.3	174	25.7	25.7	7.9	7.9	26.3	26.3	84.8	84.9	6.0		6.4		7		88				<0.2		0.6	
						4.0	0.4	185	25.7		7.9		26.3		84.9		6.0		6.8		7		88				<0.2		0.6	
					Bottom	7.0	0.2	197	25.6	25.6	7.9	7.9	26.5	26.5	86.3	86.4	6.1	6.1	5.8		7		89				<0.2		0.7	
						7.0	0.3	216	25.6		7.9		26.5		86.5		6.1		5.4		7		90				<0.2		0.7	

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 07 May 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	13:30	7.1	Surface	1.0	0.3	149	26.4	26.4	7.9	7.9	25.0	25.0	85.9	85.8	6.0	6.0	5.4	7.3	7	7	85	88	822074	808831	<0.2	<0.2	0.7	0.7
						1.0	0.4	152	26.4		7.9		25.0		85.6		6.0		5.3		7		85				<0.2		0.6	
					Middle	3.6	0.4	143	25.6	25.6	7.9	7.9	26.4	26.4	84.6	84.6	6.0		10.8		7		88				<0.2		0.7	
						3.6	0.4	147	25.6		7.9		26.4		84.6		6.0		11.0		7		89				<0.2		0.8	
					Bottom	6.1	0.2	114	25.5	25.5	7.9	7.9	26.5	26.5	86.0	86.1	6.1	6.1	6.0		6		89				<0.2		0.6	
						6.1	0.2	115	25.5		7.9		26.5		86.2		6.1		5.6		6		90				<0.2		0.7	
IM10	Fine	Moderate	13:21	7.5	Surface	1.0	0.8	116	25.8	25.8	7.9	7.9	25.8	25.8	83.9	83.9	5.9	5.9	5.5	7.2	8	7	86	88	822393	809814	<0.2	<0.2	0.8	0.7
						1.0	0.8	118	25.8		7.9		25.8		83.9		5.9		6.0		8		86				<0.2		0.8	
					Middle	3.8	0.7	112	25.6	25.6	7.9	7.9	26.1	26.1	83.9	84.0	5.9		8.5		7		88				<0.2		0.7	
						3.8	0.7	117	25.6		7.9		26.2		84.1		5.9		8.4		7		88				<0.2		0.6	
					Bottom	6.5	0.6	102	25.6	25.6	7.9	7.9	26.3	26.3	86.3	86.4	6.1	6.1	7.2		6		89				<0.2		0.8	
						6.5	0.6	103	25.6		7.9		26.3		86.5		6.1		7.5		6		90				<0.2		0.6	
IM11	Fine	Moderate	13:08	8.6	Surface	1.0	0.9	98	26.8	26.7	7.9	7.9	24.4	24.4	87.4	87.3	6.1	6.1	7.1	7.3	7	7	86	88	822070	811479	<0.2	<0.2	0.7	0.6
						1.0	1.0	104	26.7		7.9		24.5		87.1		6.1		7.9		7		86				<0.2		0.6	
					Middle	4.3	0.9	99	25.9	25.9	7.9	7.9	25.3	25.3	85.1	85.1	6.0		8.8		7		87				<0.2		0.7	
						4.3	0.9	99	25.9		7.9		25.4		85.1		6.0		8.3		6		87				<0.2		0.6	
					Bottom	7.6	0.7	95	25.9	25.9	7.9	7.9	25.6	25.6	87.2	87.3	6.1	6.2	6.1		6		89				<0.2		0.6	
						7.6	0.7	101	25.9		7.9		25.6		87.4		6.2		5.8		6		90				<0.2		0.6	
IM12	Fine	Moderate	12:59	9.4	Surface	1.0	0.9	92	26.3	26.3	7.9	7.9	25.2	25.2	86.0	86.0	6.0	6.0	5.9	7.6	8	9	85	88	821474	812048	<0.2	<0.2	0.6	0.7
						1.0	0.9	101	26.3		7.9		25.2		85.9		6.0		6.1		8		85				<0.2		0.6	
					Middle	4.7	0.7	89	25.9	25.9	7.9	7.9	25.8	25.8	85.2	85.3	6.0		7.9		8		88				<0.2		0.6	
						4.7	0.8	93	25.9		7.9		25.9		85.3		6.0		8.7		9		89				<0.2		0.6	
					Bottom	8.4	0.6	84	25.8	25.8	7.9	7.9	25.9	25.9	86.1	86.2	6.1	6.1	8.2		9		90				<0.2		0.7	
						8.4	0.6	86	25.8		7.9		25.9		86.2		6.1		9.2		9		90				<0.2		0.8	
SR1A	Fine	Calm	12:39	4.8	Surface	1.0	-	-	26.5	26.5	7.9	7.9	25.3	25.3	85.1	85.1	5.9	5.9	2.7	3.6	6	5	-	-	819972	812658	-	-	-	-
						1.0	-	-	26.4		7.9		25.3		85.1		5.9		3.0		6		-				-		-	
					Middle	2.4	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.4	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	-	-	26.1	26.1	7.9	7.9	25.6	25.6	88.4	88.5	6.2	6.2	4.2		4		-				-		-	
						3.8	-	-	26.1		7.9		25.6		88.6		6.2		4.3		4		-				-		-	
SR2	Fine	Moderate	12:21	5.1	Surface	1.0	0.7	64	25.9	25.9	7.9	7.9	25.1	25.1	85.8	85.8	6.1	6.1	4.2	3.2	8	9	85	87	821449	814154	<0.2	<0.2	0.8	0.7
						1.0	0.7	70	25.9		7.9		25.1		85.8		6.1		4.1		8		86				<0.2		0.7	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	0.4	48	25.8	25.8	7.9	7.9	25.4	25.4	88.1	88.2	6.2	6.2	2.1		9		88				<0.2		0.6	
						4.1	0.4	50	25.8		7.9		25.4		88.2		6.2		2.3		9		88				<0.2		0.6	
SR3	Fine	Moderate	13:42	8.9	Surface	1.0	0.3	208	26.6	26.5	7.9	7.9	25.4	25.4	86.6	86.5	6.0	6.0	5.8	7.6	6	7	-	-	822165	807594	-	-	-	-
						1.0	0.4	208	26.5		7.9		25.4		86.4		6.0		6.0		7		-				-		-	
					Middle	4.5	0.5	210	25.7	25.7	7.9	7.9	26.7	26.7	85.4	85.3	6.0		9.5		8		-				-		-	
						4.5	0.5	226	25.7		7.9		26.7		85.2		6.0		9.1		8		-				-		-	
					Bottom	7.9	0.3	210	25.7	25.7	7.9	7.9	26.7	26.7	87.3	87.5	6.1	6.1	8.0		8		-				-		-	
						7.9	0.4	222	25.7		7.9		26.7		87.6		6.1		7.5		7		-				-		-	
SR4A	Fine	Moderate	12:30	8.2	Surface	1.0	0.2	75	25.6	25.6	8.2	8.2	26.4	26.4	82.5	82.4	5.8	5.8	9.1	9.9	6	8	-	-	817175	807811	-	-	-	-
						1.0	0.2	76	25.6		8.2		26.4		82.3		5.8		9.3		6		-				-		-	
					Middle	4.1	0.1	50	25.4	25.4	8.2	8.2	26.6	26.6	81.4	81.4	5.7		10.0		8		-				-		-	
						4.1	0.1	54	25.4		8.2		26.6		81.3		5.7		10.0		8		-				-		-	
					Bottom	7.2	0.1	98	25.4	25.4	8.2	8.2	26.7	26.7	81.2	81.3	5.7	5.7	10.5		10		-				-		-	
						7.2	0.1	105	25.4		8.2		26.7		81.3		5.7		10.6		9		-				-		-	
SR5A	Fine	Calm	12:11	4.5	Surface	1.0	0.1	89	25.8	25.8	8.2	8.2	26.2	26.2	83.0	82.9	5.8	5.8	12.3	13.5	13	12	-	-	816575	810687	-	-	-	-
						1.0	0.1	89	25.7		8.2		26.3		82.7		5.8		12.4		13		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.1	163	25.5	25.5	8.2	8.2	26.7	26.7	82.2	82.3	5.8	5.8	14.6		10		-				-		-	
						3.5	0.1	163	25.5		8.2		26.7		82.4		5.8		14.7		10		-				-		-	
SR6A	Fine	Calm	11:31	4.8	Surface	1.0	0.1	196	26.0	26.0	8.1	8.1	24.9	24.9	82.6	82.6	5.8	5.8	12.5	12.3	18	17	-	-	817974	814738	-	-	-	-
						1.0	0.1	212	26.0		8.1		24.9		82.6		5.8		12.5		18		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.0	241	26.0	26.0	8.1	8.1	24.9	24.9	83.1	83.3	5.9	5.9	12.1		16		-				-		-	
						3.8	0.0	263	26.0		8.1		24.9		83.4		5.9		12.1		16		-				-		-	
SR7	Fine	Moderate	11:08	16.1	Surface	1.0	0.5	68	25.1	25.1	8.0	8.0	28.8	28.8	85.0	84.9	6.0	5.9	2.1	3.2	4	6	-	-	823632	823731	-	-	-	-
						1.0	0.5	72	25.1		8.0		28.8		84.8		5.9		2.4		4		-				-		-	
					Middle	8.1	0.3	35	24.9	24.9	8.0	8.0	29.2	29.2	84.2	84.3	5.9		3.5		7		-				-		-	
						8.1	0.3	37	24.9		8.0		29.2		84.3		5.9		3.7		6		-				-		-	
					Bottom	15.1	0.3	3	24.8	24.8	8.1	8.1	29.4	29.4	83.5	83.5	5.9	5.9	3.8		8		-				-		-	
						15.1	0.3	3	24.8		8.1		29.4		83.5		5.9		3.8		8		-				-		-	
SR8	Fine	Calm	12:50	4.9	Surface	1.0	-	-	26.8	26.8	7.9	7.9	25.2	25.2	85.6	85.6	6.0	6.0	9.5	5.8	7	7	-	-	820445	811699	-	-	-	-
						1.0	-	-	26.7		7.9		25.2		85.6		6.0		8.5		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	-	-	25.9	25.9	7.9	7.9	25.5	25.5	85.4	85.5	6.0	6.0	2.5		8		-				-		-	
						3.9	-	-	25.9		7.9		25.5		85.6		6.0		2.7		8		-				-		-	

DA: Depth-Averaged

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

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

Note: 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 07 May 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	18:54	8.0	Surface	1.0	0.6	26	25.7	25.7	8.2	8.2	27.0	27.0	84.5	84.4	5.9	5.9	11.9	13.2	12	13	83	86	815623	804260	<0.2	<0.2	0.9	0.9
						1.0	0.6	26	25.7		8.2		27.0		84.3		5.9		11.9		12		83				<0.2		1.0	
					Middle	4.0	0.6	32	25.4	25.4	8.2	8.2	27.6	27.6	83.1	83.1	5.8		12.4		13		86				<0.2		1.0	
						4.0	0.6	35	25.4		8.2		27.6		83.1		5.8		12.3		12		86				<0.2		0.8	
					Bottom	7.0	0.5	33	25.3	25.3	8.2	8.2	27.7	27.7	83.3	83.4	5.9	5.9	15.3		14		89				<0.2		0.8	
						7.0	0.5	34	25.3		8.2		27.7		83.4		5.9		15.4		14		89				<0.2		0.7	
C2	Fine	Moderate	17:47	11.3	Surface	1.0	0.5	201	27.5	27.5	7.9	7.9	21.0	21.0	86.8	86.4	6.1	5.9	5.4	6.7	9	8	87	89	825670	806961	<0.2	<0.2	0.6	0.8
						1.0	0.5	209	27.5		7.9		21.0		86.0		6.0		5.1		9		87				<0.2		0.5	
					Middle	5.7	0.4	191	26.0	26.0	7.9	7.9	23.6	23.6	82.2	82.2	5.8		7.1		8		88				<0.2		0.9	
						5.7	0.5	207	26.0		7.9		23.6		82.2		5.8		7.4		8		88				<0.2		0.8	
					Bottom	10.3	0.2	224	25.7	25.7	8.0	8.0	24.7	24.7	83.3	83.3	5.9	5.9	7.4		7		90				<0.2		0.9	
						10.3	0.2	242	25.7		8.0		24.7		83.3		5.9		7.6		7		91				<0.2		0.8	
C3	Fine	Moderate	19:49	12.1	Surface	1.0	0.6	247	25.9	25.9	7.9	7.9	26.1	26.1	84.8	84.8	5.9	5.9	3.3	7.0	8	6	84	88	822122	817815	<0.2	<0.2	1.0	0.9
						1.0	0.7	253	25.9		7.9		26.1		84.7		5.9		3.3		8		85				<0.2		1.1	
					Middle	6.1	0.6	258	25.1	25.1	8.0	8.0	28.4	28.4	82.8	82.9	5.8		9.5		5		88				<0.2		1.0	
						6.1	0.6	277	25.1		8.0		28.4		82.9		5.8		9.6		5		89				<0.2		0.8	
					Bottom	11.1	0.5	253	25.1	25.1	8.0	8.0	28.4	28.4	82.5	82.5	5.8	5.8	8.2		5		90				<0.2		0.8	
						11.1	0.5	272	25.1		8.0		28.4		82.5		5.8		8.2		5		90				<0.2		0.8	
IM1	Fine	Calm	18:30	4.2	Surface	1.0	0.1	17	25.7	25.7	8.3	8.3	26.5	26.5	82.5	82.5	5.8	5.8	15.0	16.9	12	13	84	86	817950	807123	<0.2	<0.2	1.1	1.1
						1.0	0.1	17	25.7		8.3		26.5		82.4		5.8		15.3		13		84				<0.2		1.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.1	338	25.7	25.7	8.3	8.3	26.5	26.5	82.2	82.3	5.8	5.8	18.6		14		88				<0.2		1.1	
						3.2	0.1	311	25.7		8.3		26.5		82.3		5.8		18.7		14		88				<0.2		1.0	
IM2	Fine	Moderate	18:24	6.4	Surface	1.0	0.4	4	25.8	25.8	8.3	8.3	26.3	26.4	83.9	83.9	5.9	5.9	13.2	15.0	14	14	82	85	818174	806166	<0.2	<0.2	1.0	1.1
						1.0	0.4	4	25.7		8.3		26.4		83.9		5.9		13.5		14		82				<0.2		1.1	
					Middle	3.2	0.3	342	25.6	25.6	8.2	8.2	26.8	26.8	83.7	83.7	5.9		15.4		14		85				<0.2		1.1	
						3.2	0.4	348	25.6		8.2		26.8		83.7		5.9		15.8		14		85				<0.2		1.1	
					Bottom	5.4	0.4	336	25.6	25.6	8.2	8.2	27.0	27.0	83.6	83.7	5.9	5.9	16.2		14		88				<0.2		1.0	
						5.4	0.4	357	25.6		8.2		27.0		83.7		5.9		16.0		14		88				<0.2		1.1	
IM3	Fine	Moderate	18:17	6.5	Surface	1.0	0.4	335	26.1	26.1	8.3	8.3	26.2	26.2	85.7	85.6	6.0	6.0	10.6	12.8	15	13	82	86	818801	805584	<0.2	<0.2	1.1	1.1
						1.0	0.5	339	26.0		8.3		26.3		85.4		6.0		10.4		15		83				<0.2		1.3	
					Middle	3.3	0.5	313	25.8	25.8	8.3	8.3	26.7	26.7	83.9	83.9	5.9		12.4		13		86				<0.2		1.1	
						3.3	0.5	314	25.8		8.3		26.7		83.9		5.9		12.3		13		86				<0.2		1.2	
					Bottom	5.5	0.4	321	25.8	25.8	8.3	8.3	26.8	26.8	84.4	84.5	5.9	5.9	15.5		11		89				<0.2		1.0	
						5.5	0.4	343	25.8		8.3		26.8		84.6		5.9		15.4		12		89				<0.2		1.0	
IM4	Fine	Moderate	18:06	7.3	Surface	1.0	0.8	331	25.9	25.9	8.3	8.3	26.6	26.6	84.0	83.9	5.9	5.9	15.5	17.1	20	17	81	84	819709	804608	<0.2	<0.2	1.0	0.9
						1.0	0.8	354	25.8		8.3		26.7		83.8		5.9		15.9		19		81				<0.2		0.9	
					Middle	3.7	0.7	324	25.7	25.7	8.2	8.2	26.8	26.8	83.1	83.1	5.8		17.8		19		84				<0.2		0.9	
						3.7	0.7	342	25.7		8.2		26.8		83.1		5.8		17.9		19		84				<0.2		0.9	
					Bottom	6.3	0.6	326	25.6	25.6	8.3	8.3	26.9	26.9	83.0	83.0	5.8	5.8	17.8		13		87				<0.2		0.9	
						6.3	0.6	356	25.6		8.3		26.9		83.0		5.8		17.9		13		87				<0.2		1.0	
IM5	Fine	Moderate	17:58	6.5	Surface	1.0	0.4	326	26.5	26.5	8.2	8.2	23.4	23.4	87.4	87.4	6.2	6.2	12.7	14.0	12	13	83	85	820742	804861	<0.2	<0.2	1.2	1.1
						1.0	0.4	350	26.5		8.2		23.5		87.4		6.2		13.0		12		82				<0.2		1.2	
					Middle	3.3	0.5	347	26.4	26.4	8.2	8.2	25.5	25.5	87.2	87.2	6.1		14.2		12		85				<0.2		1.2	
						3.3	0.5	319	26.4		8.2		25.5		87.2		6.1		14.4		13		86				<0.2		1.2	
					Bottom	5.5	0.5	349	26.4	26.4	8.2	8.2	25.7	25.7	87.4	87.4	6.1	6.1	15.0		14		88				<0.2		1.0	
						5.5	0.6	321	26.4		8.2		25.7		87.4		6.1		15.0		14		88				<0.2		1.0	
IM6	Fine	Moderate	17:52	6.2	Surface	1.0	0.5	275	26.5	26.5	8.2	8.2	22.4	22.4	87.0	87.0	6.2	6.2	11.5	14.0	10	9	83	85	821062	805825	<0.2	<0.2	1.1	1.0
						1.0	0.5	279	26.5		8.2		22.4		86.9		6.2		11.5		10		82				<0.2		1.0	
					Middle	3.1	0.4	271	26.4	26.4	8.2	8.2	22.6	22.6	86.3	86.3	6.1		14.3		9		85				<0.2		1.1	
						3.1	0.4	286	26.4		8.2		22.6		86.3		6.1		14.2		9		85				<0.2		0.9	
					Bottom	5.2	0.3	266	26.4	26.4	8.2	8.2	22.6	22.6	86.7	86.8	6.1	6.2	16.2		8		87				<0.2		1.0	
						5.2	0.3	276	26.4		8.2		22.6		86.8		6.2		16.3		8		88				<0.2		1.0	
IM7	Fine	Moderate	17:46	7.6	Surface	1.0	0.5	242	26.5	26.5	8.2	8.2	22.4	22.4	86.4	86.3	6.1	6.1	14.0	15.1	9	8	82	85	821372	806820	<0.2	<0.2	1.0	1.0
						1.0	0.5	258	26.4		8.2		22.5		86.1		6.1		13.8		9		82				<0.2		1.0	
					Middle	3.8	0.5	246	26.4	26.4	8.2	8.2	22.6	22.6	85.8	85.8	6.1		14.9		8		85				<0.2		1.1	
						3.8	0.5	265	26.4		8.2		22.7		85.8		6.1		15.0		8		85				<0.2		1.1	
					Bottom	6.6	0.4	247	26.4	26.4	8.2	8.2	22.7	22.7	86.1	86.2	6.1	6.1	16.5		8		88				<0.2		1.0	
						6.6	0.5	265	26.4		8.2		22.7		86.2		6.1		16.2		8		88				<0.2		1.0	
IM8	Fine	Moderate	18:16	7.0	Surface	1.0	0.3	234	27.0	27.0	7.9	7.9	21.8	21.8	88.7	88.6	6.3	6.2	3.2	3.8	11	10	86	88	821815	808128	<0.2	<0.2	0.8	0.8
						1.0	0.3	257	27.0		7.9		21.8		88.5		6.3		3.5		11		87				<0.2		0.8	
					Middle	3.5	0.3	238	26.5	26.5	7.9	7.9	22.8	22.8	86.6	86.6	6.1		4.9		10		88				<0.2		0.8	
						3.5	0.3	261	26.5		7.9		22.8		86.6		6.1		4.5		10		88				<0.2		0.7	
					Bottom	6.0	0.2	213	26.3	26.3	7.9	7.9	23.1	23.1	87.8	87.8	6.2	6.2	3.1		8		90				<0.2		0.8	
						6.0	0.2	216	26.3		7.9		23.1		87.7		6.2		3.4		8		90				<0.2		0.8	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 07 May 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	18:23	6.2	Surface	1.0	0.3	260	27.0	26.9	7.9	7.9	21.9	21.9	88.3	88.3	6.2	6.2	4.1	4.5	10	9	87	88	822096	808808	<0.2	<0.2	0.7	0.7
						1.0	0.3	272	26.9		7.9		21.9		88.3		6.2		4.5		10		86				<0.2		0.8	
					Middle	3.1	0.4	263	26.7	26.7	7.9	7.9	23.0	23.0	87.2	87.2	6.2		5.9		9		87				<0.2		0.8	
						3.1	0.4	284	26.7		7.9		23.0		87.1		6.1		6.0		9		88				<0.2		0.7	
					Bottom	5.2	0.3	258	26.4	26.4	7.9	7.9	23.0	23.0	88.5	88.6	6.3	6.3	3.5		8		89				<0.2		0.7	
						5.2	0.3	258	26.4		8.0		23.0		88.6		6.3		3.1		8		89				<0.2		0.7	
IM10	Fine	Moderate	18:31	6.4	Surface	1.0	0.6	319	26.8	26.8	7.9	7.9	23.1	23.1	87.3	87.3	6.1	6.1	4.6	5.6	6	6	85	88	822397	809780	<0.2	<0.2	0.8	0.8
						1.0	0.6	322	26.8		7.9		23.1		87.3		6.1		4.9		6		86				<0.2		0.8	
					Middle	3.2	0.6	320	26.8	26.8	7.9	7.9	23.7	23.7	86.9	86.9	6.1		8.0		7		89				<0.2		0.9	
						3.2	0.6	324	26.8		7.9		23.7		86.8		6.1		9.0		7		89				<0.2		0.8	
					Bottom	5.4	0.5	313	26.8	26.8	7.9	7.9	23.7	23.7	88.2	88.2	6.2	6.2	3.5		5		90				<0.2		0.7	
						5.4	0.5	327	26.8		7.9		23.7		88.2		6.2		3.9		5		89				<0.2		0.8	
IM11	Fine	Moderate	18:43	7.5	Surface	1.0	0.8	325	26.7	26.7	7.9	7.9	23.7	23.7	86.2	86.2	6.1	6.0	8.3	7.6	7	8	85	88	822046	811461	<0.2	<0.2	0.7	0.8
						1.0	0.8	346	26.7		7.9		23.7		86.1		6.0		9.5		7		85				<0.2		0.7	
					Middle	3.8	0.7	329	26.5	26.4	7.9	7.9	24.8	24.8	85.8	86.0	6.0		9.8		8		88				<0.2		0.8	
						3.8	0.7	351	26.4		7.9		24.8		86.1		6.0		9.5		8		89				<0.2		0.7	
					Bottom	6.5	0.5	330	26.4	26.4	7.9	7.9	24.9	24.9	87.8	87.9	6.2	6.2	4.5		8		90				<0.2		0.8	
						6.5	0.5	304	26.4		8.0		24.9		87.9		6.2		4.3		9		90				<0.2		0.8	
IM12	Fine	Moderate	18:51	8.8	Surface	1.0	0.6	287	26.9	26.9	7.9	7.9	23.4	23.4	85.9	85.9	6.0	6.0	5.4	7.7	8	8	85	87	821456	812056	<0.2	<0.2	0.8	0.8
						1.0	0.7	314	26.9		7.9		23.4		85.8		6.0		5.1		8		85				<0.2		0.8	
					Middle	4.4	0.7	282	26.2	26.2	7.9	7.9	25.3	25.3	84.0	84.1	5.9		9.4		8		87				<0.2		0.8	
						4.4	0.7	288	26.2		7.9		25.3		84.1		5.9		9.5		8		88				<0.2		0.8	
					Bottom	7.8	0.6	282	26.2	26.2	7.9	7.9	25.5	25.5	84.4	84.4	5.9	5.9	8.7		7		89				<0.2		0.7	
						7.8	0.6	294	26.2		7.9		25.5		84.4		5.9		8.3		7		89				<0.2		0.8	
SR1A	Fine	Moderate	19:10	5.1	Surface	1.0	-	-	27.0	26.9	7.9	7.9	23.4	23.5	88.4	88.2	6.2	6.2	5.4	5.9	7	8	-	-	819982	812656	-	-	-	-
						1.0	-	-	26.9		8.0		23.5		88.0		6.2		5.4		7		-				-		-	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	-	-	26.6	26.6	8.0	8.0	25.6	25.5	89.4	89.6	6.2	6.2	6.5		8		-				-		-	
						4.1	-	-	26.6		8.0		25.5		89.7		6.2		6.5		8		-				-		-	
SR2	Fine	Moderate	19:23	3.8	Surface	1.0	0.1	41	26.2	26.2	8.0	8.0	25.4	25.4	85.4	85.4	6.0	6.0	8.3	7.0	7	8	84	86	821453	814156	<0.2	<0.2	0.8	0.8
						1.0	0.1	43	26.2		8.0		25.4		85.3		6.0		8.4		7		85				<0.2		0.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	0.1	321	26.2	26.2	8.0	8.0	25.4	25.4	85.6	85.6	6.0	6.0	5.6		8		87				<0.2		0.7	
						2.8	0.1	333	26.2		8.0		25.4		85.6		6.0		5.5		8		88				<0.2		0.8	
SR3	Fine	Moderate	18:08	7.9	Surface	1.0	0.3	198	27.1	27.1	7.9	7.9	21.6	21.6	87.5	87.4	6.2	6.1	4.1	6.2	10	11	-	-	822140	807547	-	-	-	-
						1.0	0.3	213	27.1		7.9		21.6		87.3		6.2		4.0		10		-				-		-	
					Middle	4.0	0.2	247	26.3	26.3	7.9	7.9	23.1	23.1	84.8	84.9	6.0		8.7		11		-				-		-	
						4.0	0.2	260	26.3		7.9		23.1		85.0		6.0		8.9		11		-				-		-	
					Bottom	6.9	0.2	261	26.2	26.2	7.8	7.8	23.3	23.3	86.0	86.0	6.1	6.1	5.9		12		-				-		-	
						6.9	0.2	280	26.2		7.8		23.3		86.0		6.1		5.6		12		-				-		-	
SR4A	Fine	Moderate	19:12	8.4	Surface	1.0	0.1	93	26.3	26.3	8.3	8.3	25.9	25.9	82.8	82.8	5.8	5.8	13.4	14.5	14	16	-	-	817193	807814	-	-	-	-
						1.0	0.1	98	26.3		8.3		25.9		82.8		5.8		13.2		15		-				-		-	
					Middle	4.2	0.1	72	26.3	26.3	8.3	8.3	25.9	25.9	82.8	82.8	5.8		13.9		17		-				-		-	
						4.2	0.1	74	26.3		8.3		25.9		82.8		5.8		14.0		17		-				-		-	
					Bottom	7.4	0.1	66	26.4	26.4	8.3	8.3	25.9	25.9	83.5	83.6	5.8	5.8	16.2		17		-				-		-	
						7.4	0.1	70	26.4		8.3		25.9		83.6		5.8		16.0		18		-				-		-	
SR5A	Fine	Calm	19:28	3.2	Surface	1.0	0.1	286	26.6	26.6	8.3	8.3	25.4	25.4	83.4	83.4	5.8	5.8	14.0	13.9	15	15	-	-	816592	810697	-	-	-	-
						1.0	0.1	308	26.6		8.3		25.4		83.4		5.8		14.1		15		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.2	0.1	284	26.6	26.6	8.3	8.3	25.4	25.4	83.8	83.9	5.8	5.9	13.8		14		-				-		-	
						2.2	0.1	289	26.6		8.3		25.4		84.0		5.9		13.8		14		-				-		-	
SR6A	Fine	Calm	19:58	4.6	Surface	1.0	0.1	263	26.2	26.2	8.2	8.2	25.4	25.4	83.7	83.7	5.9	5.9	8.9	9.8	14	16	-	-	817983	814753	-	-	-	-
						1.0	0.1	277	26.2		8.2		25.4		83.6		5.9		9.1		14		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.1	252	26.1	26.1	8.2	8.2	25.6	25.6	83.6	83.7	5.9	5.9	10.6		18		-				-		-	
						3.6	0.1	258	26.1		8.2		25.6		83.8		5.9		10.5		18		-				-		-	
SR7	Fine	Moderate	20:29	16.5	Surface	1.0	0.1	192	25.2	25.2	8.0	8.0	28.0	28.0	82.2	82.3	5.8	5.8	3.4	3.6	5	6	-	-	823613	823731	-	-	-	-
						1.0	0.1	203	25.2		8.0		28.0		82.4		5.8		3.4		5		-				-		-	
					Middle	8.3	0.0	250	24.7	24.7	8.0	8.0	29.7	29.7	82.4	82.4	5.8		3.9		6		-				-		-	
						8.3	0.0	256	24.7		8.0		29.7		82.4		5.8		4.0		6		-				-		-	
					Bottom	15.5	0.1	52	24.7	24.7	8.0	8.0	30.0	30.0	82.3	82.4	5.8	5.8	3.5		6		-				-		-	
						15.5	0.1	52	24.7		8.0		30.0		82.4		5.8		3.5		6		-				-		-	
SR8	Fine	Calm	19:01	5.0	Surface	1.0	-	-	26.7	26.7	7.9	7.9	24.3	24.3	86.9	87.0	6.1	6.1	6.7	6.2	8	7	-	-	820383	811637	-	-	-	-
						1.0	-	-	26.7		7.9		24.3		87.0		6.1		7.5		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	-	-	26.5	26.5	8.0	8.0	24.8	24.8	89.4	89.6	6.3	6.3	5.4		6		-				-		-	
						4.0	-	-	26.5		8.0		24.8		89.8		6.3		5.1		6		-				-		-	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 09 May 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	13:36	8.5	Surface	1.0	0.7	221	25.6	25.6	8.2	8.2	27.2	27.3	90.3	90.0	6.3	6.2	9.9	12.6	7	8	85	88	815631	804225	<0.2	<0.2	1.1	1.2
						1.0	0.8	240	25.5		8.2		27.4		89.6		6.3		10.4		7		86				<0.2		1.0	
					Middle	4.3	0.5	208	25.4	25.4	8.2	8.2	27.9	28.0	86.3	86.3	6.0		13.2		8		87				<0.2		1.1	
						4.3	0.6	219	25.4		8.2		28.0		86.3		6.0		13.1		9		88				<0.2		1.2	
					Bottom	7.5	0.4	214	25.4	25.4	8.1	8.1	28.2	28.2	87.2	87.3	6.1	6.1	14.3		9		90				<0.2		1.7	
						7.5	0.4	233	25.4		8.1		28.2		87.3		6.1		14.8		9		91				<0.2		1.3	
C2	Sunny	Moderate	12:34	11.5	Surface	1.0	0.3	161	26.4	26.4	8.0	8.0	25.4	25.4	85.2	85.2	6.0	5.8	7.9	8.7	12	12	85	88	825664	806941	<0.2	<0.2	1.4	1.3
						1.0	0.3	176	26.4		8.0		25.4		85.1		6.0		7.8		11		85				<0.2		1.3	
					Middle	5.8	0.4	171	25.6	25.6	8.0	8.0	27.1	27.1	80.3	80.3	5.6		7.3		12		87				<0.2		1.3	
						5.8	0.4	171	25.6		8.0		27.1		80.3		5.6		7.3		12		87				<0.2		1.3	
					Bottom	10.5	0.3	168	25.5	25.5	8.0	8.0	27.6	27.6	79.7	79.7	5.6	5.6	10.9		13		91				<0.2		1.3	
						10.5	0.3	170	25.5		8.0		27.6		79.7		5.6		11.0		12		90				<0.2		1.3	
C3	Fine	Moderate	14:13	10.8	Surface	1.0	0.5	105	26.2	26.2	8.1	8.1	26.2	26.2	88.8	88.8	6.2	6.2	9.2	8.3	14	15	84	86	822129	817824	<0.2	<0.2	1.2	1.2
						1.0	0.5	112	26.2		8.1		26.2		88.8		6.2		9.1		15		84				<0.2		1.1	
					Middle	5.4	0.4	109	26.2	26.2	8.1	8.1	26.3	26.3	88.5	88.5	6.2		7.8		14		85				<0.2		1.2	
						5.4	0.4	112	26.2		8.1		26.3		88.5		6.2		7.8		14		85				<0.2		1.1	
					Bottom	9.8	0.3	67	26.0	26.0	8.1	8.1	26.8	26.8	86.5	86.5	6.0	6.0	8.0		16		88				<0.2		1.2	
						9.8	0.3	71	26.0		8.1		26.8		86.4		6.0		8.0		15		88				<0.2		1.1	
IM1	Cloudy	Moderate	13:16	5.3	Surface	1.0	0.1	211	26.6	26.6	8.2	8.2	25.7	25.7	92.2	92.1	6.4	6.4	8.4	8.7	8	7	88	89	817954	807153	<0.2	<0.2	1.4	1.7
						1.0	0.1	231	26.5		8.2		25.8		92.0		6.4		8.6		8		87				<0.2		1.3	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	0.2	190	26.5	26.5	8.2	8.2	25.9	25.9	92.0	92.1	6.4	6.4	9.1		6		90				<0.2		2.1	
						4.3	0.2	190	26.5		8.2		25.9		92.1		6.4		8.9		7		91				<0.2		2.1	
IM2	Cloudy	Moderate	13:10	7.4	Surface	1.0	0.3	186	26.2	26.2	8.1	8.1	26.0	26.0	87.7	87.6	6.1	6.1	6.5	8.9	7	8	85	88	818140	806148	<0.2	<0.2	2.0	2.0
						1.0	0.3	188	26.1		8.1		26.0		87.4		6.1		6.4		8		87				<0.2		1.9	
					Middle	3.7	0.3	166	25.7	25.7	8.1	8.1	26.5	26.5	85.0	84.9	6.0		9.5		8		88				<0.2		2.0	
						3.7	0.3	169	25.7		8.1		26.5		84.8		6.0		9.7		7		87				<0.2		1.9	
					Bottom	6.4	0.3	150	25.6	25.6	8.1	8.1	26.8	26.8	84.3	84.4	5.9	5.9	10.5		9		90				<0.2		2.1	
						6.4	0.3	151	25.6		8.1		26.8		84.5		5.9		10.6		8		91				<0.2		2.0	
IM3	Cloudy	Moderate	13:03	7.6	Surface	1.0	0.4	145	26.1	26.1	8.1	8.1	25.9	25.9	87.5	87.5	6.1	6.1	9.1	10.2	15	13	86	88	818762	805610	<0.2	<0.2	2.2	2.1
						1.0	0.5	159	26.1		8.1		25.9		87.4		6.1		9.1		15		85				<0.2		2.2	
					Middle	3.8	0.3	140	25.8	25.8	8.2	8.2	26.4	26.4	86.3	86.2	6.1		9.6		12		87				<0.2		2.2	
						3.8	0.4	144	25.8		8.2		26.5		86.1		6.0		9.6		11		88				<0.2		2.0	
					Bottom	6.6	0.3	117	25.5	25.5	8.1	8.1	27.2	27.2	85.5	85.6	6.0	6.0	12.2		12		90				<0.2		2.1	
						6.6	0.3	119	25.5		8.1		27.2		85.7		6.0		11.8		11		91				<0.2		2.0	
IM4	Cloudy	Moderate	12:55	8.6	Surface	1.0	0.7	192	26.4	26.4	8.1	8.1	25.4	25.5	87.5	87.2	6.1	6.0	9.5	10.3	9	10	86	89	819743	804624	<0.2	<0.2	1.6	1.8
						1.0	0.7	192	26.3		8.1		25.5		86.9		6.1		9.9		10		87				<0.2		1.7	
					Middle	4.3	0.5	171	25.5	25.5	8.3	8.3	27.3	27.3	84.8	84.7	6.0		7.7		10		88				<0.2		1.6	
						4.3	0.5	181	25.5		8.3		27.3		84.6		5.9		7.6		10		89				<0.2		1.9	
					Bottom	7.6	0.3	153	25.3	25.4	8.3	8.3	27.8	27.8	84.6	84.7	5.9	5.9	13.5		10		91				<0.2		1.8	
						7.6	0.3	155	25.4		8.3		27.8		84.7		5.9		13.4		11		90				<0.2		1.9	
IM5	Cloudy	Moderate	12:47	7.1	Surface	1.0	0.5	209	26.2	26.2	8.1	8.1	25.9	25.9	88.6	88.5	6.2	6.1	7.3	7.8	10	10	85	88	820750	804889	<0.2	<0.2	2.1	2.2
						1.0	0.5	220	26.1		8.2		26.0		88.4		6.2		7.3		9		86				<0.2		2.1	
					Middle	3.6	0.4	184	25.6	25.6	8.2	8.2	27.2	27.2	85.0	84.9	6.0		7.4		10		87				<0.2		2.1	
						3.6	0.4	192	25.5		8.2		27.2		84.7		5.9		7.4		10		88				<0.2		2.1	
					Bottom	6.1	0.4	184	25.4	25.4	8.2	8.2	27.6	27.6	84.1	84.2	5.9	5.9	8.6		11		89				<0.2		2.2	
						6.1	0.4	201	25.4		8.2		27.6		84.2		5.9		8.6		10		90				<0.2		2.3	
IM6	Cloudy	Moderate	12:40	8.0	Surface	1.0	0.4	253	26.2	26.2	7.9	7.9	25.7	25.7	88.9	88.9	6.2	6.1	9.3	10.5	11	10	86	88	821056	805847	<0.2	<0.2	1.9	2.1
						1.0	0.4	274	26.1		7.9		25.8		88.9		6.2		9.4		12		86				<0.2		2.0	
					Middle	4.0	0.3	199	25.6	25.6	8.0	8.0	26.8	26.9	84.2	84.2	5.9		10.7		11		87				<0.2		1.9	
						4.0	0.3	213	25.6		8.0		26.9		84.2		5.9		10.9		10		88				<0.2		2.0	
					Bottom	7.0	0.3	199	25.6	25.6	8.0	8.0	27.0	27.0	84.2	84.2	5.9	5.9	11.2		9		90				<0.2		2.3	
						7.0	0.3	203	25.6		8.0		27.0		84.2		5.9		11.6		9		91				<0.2		2.2	
IM7	Cloudy	Moderate	12:34	8.8	Surface	1.0	0.2	235	26.5	26.5	8.1	8.1	24.9	25.0	92.6	92.7	6.5	6.3	8.2	11.6	10	9	85	88	821341	806828	<0.2	<0.2	1.8	1.8
						1.0	0.2	236	26.4		8.1		25.0		92.7		6.5		8.3		9		86				<0.2		1.8	
					Middle	4.4	0.1	222	25.9	25.9	8.1	8.1	26.1	26.2	86.0	86.0	6.0		11.6		8		87				<0.2		1.8	
						4.4	0.1	233	25.9		8.1		26.2		85.9		6.0		11.7		9		88				<0.2		1.8	
					Bottom	7.8	0.2	161	25.8	25.8	8.2	8.2	26.4	26.4	85.3	85.3	6.0	6.0	15.1		8		90				<0.2		1.8	
						7.8	0.2	176	25.8		8.2		26.5		85.3		6.0		14.7		8		91				<0.2		1.8	
IM8	Sunny	Moderate	12:58	8.0	Surface	1.0	0.1	152	26.7	26.7	8.0	8.0	24.9	24.9	87.7	87.7	6.1	6.0	6.3	12.0	8	9	82	84	821806	808157	<0.2	<0.2	1.3	1.2
						1.0	0.1	164	26.7		8.0		24.9		87.7		6.1		6.2		7		82				<0.2		1.2	
					Middle	4.0	0.1	125	26.0	26.0	8.0	8.0	26.0	26.0	84.7	84.8	5.9		15.9		9		84				<0.2		1.2	
						4.0	0.1	128	26.0		8.0		26.0		84.8		5.9		15.8		10		84				<0.2		1.2	
					Bottom	7.0	0.1	76	25.9	25.9	8.0	8.0	26.4	26.4	85.8	85.8	6.0	6.0	14.0		10		86				<0.2		1.3	
						7.0	0.1	78	25.9		8.0		26.4		85.8		6.0		14.0		9		86				<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 09 May 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	13:04	7.6	Surface	1.0	0.3	116	26.4	26.4	8.0	8.0	25.4	25.4	85.9	85.9	6.0	6.0	6.0	8.4	8	9	82	85	822073	808828	<0.2	<0.2	1.3	1.2
						1.0	0.3	125	26.4		8.0		25.4		85.9		6.0		6.0		9		83				<0.2		1.2	
					Middle	3.8	0.4	127	26.3	26.3	8.0	8.0	25.5	25.5	85.6	85.7	6.0		6.9		9		84				<0.2		1.1	
						3.8	0.4	137	26.3		8.0		25.5		85.7		6.0		6.8		9		85				<0.2		1.2	
					Bottom	6.6	0.3	113	25.9	25.9	8.0	8.0	26.4	26.4	81.4	81.5	5.7	5.7	12.3		9		87				<0.2		1.3	
						6.6	0.3	120	25.9		8.0		26.4		81.5		5.7		12.6		9		87				<0.2		1.2	
IM10	Sunny	Moderate	13:11	8.4	Surface	1.0	0.8	98	26.8	26.8	8.1	8.1	25.1	25.1	91.2	91.2	6.3	6.3	5.5	9.0	9	10	84	85	822376	809781	<0.2	<0.2	1.2	1.2
						1.0	0.8	100	26.8		8.1		25.2		91.2		6.3		5.5		8		84				<0.2		1.3	
					Middle	4.2	0.9	97	26.7	26.7	8.0	8.0	25.4	25.4	90.1	90.0	6.3		6.1		10		85				<0.2		1.2	
						4.2	0.9	100	26.6		8.0		25.4		89.8		6.3		6.4		10		85				<0.2		1.2	
					Bottom	7.4	0.6	83	25.8	25.8	8.0	8.0	26.9	26.9	83.0	83.1	5.8	5.8	15.2		10		87				<0.2		1.2	
						7.4	0.7	83	25.7		8.0		26.9		83.1		5.8		15.1		11		87				<0.2		1.2	
IM11	Sunny	Moderate	13:19	8.9	Surface	1.0	1.0	109	27.1	27.1	8.0	8.0	24.6	24.6	92.2	92.2	6.4	6.2	5.1	9.6	8	10	82	85	822054	811460	<0.2	<0.2	1.2	1.3
						1.0	1.1	113	27.1		8.0		24.6		92.2		6.4		5.0		9		83				<0.2		1.3	
					Middle	4.5	0.9	110	26.2	26.2	8.0	8.0	25.8	25.8	86.4	86.3	6.0		10.3		10		84				<0.2		1.3	
						4.5	0.9	120	26.2		8.0		25.8		86.2		6.0		10.8		9		85				<0.2		1.2	
					Bottom	7.9	0.6	102	25.9	25.9	8.0	8.0	26.5	26.5	83.5	83.5	5.8	5.8	13.2		11		87				<0.2		1.4	
						7.9	0.7	111	25.9		8.0		26.5		83.5		5.8		13.3		11		86				<0.2		1.2	
IM12	Sunny	Moderate	13:25	8.3	Surface	1.0	0.7	107	26.5	26.5	8.0	8.0	25.3	25.3	87.2	87.2	6.1	6.1	5.1	7.7	10	10	82	85	821473	812057	<0.2	<0.2	1.2	1.3
						1.0	0.8	109	26.5		8.0		25.3		87.1		6.1		5.2		10		82				<0.2		1.3	
					Middle	4.2	0.6	112	26.5	26.5	8.0	8.0	25.6	25.6	86.6	86.6	6.0		5.0		10		84				<0.2		1.3	
						4.2	0.7	114	26.5		8.0		25.6		86.5		6.0		5.0		9		85				<0.2		1.3	
					Bottom	7.3	0.5	108	25.9	25.9	8.0	8.0	26.4	26.4	82.2	82.2	5.8	5.8	12.8		10		87				<0.2		1.5	
						7.3	0.5	116	25.9		8.0		26.4		82.2		5.8		12.7		9		88				<0.2		1.2	
SR1A	Sunny	Moderate	13:44	5.6	Surface	1.0	-	-	27.1	27.1	8.0	8.0	25.5	25.5	92.1	92.1	6.4	6.4	3.5	4.4	10	9	-	-	819977	812665	-	-	-	-
						1.0	-	-	27.1		8.0		25.5		92.1		6.4		3.5		9		-				-		-	
					Middle	2.8	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.8	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.6	-	-	26.5	26.5	8.0	8.0	25.7	25.7	85.2	85.1	5.9	5.9	5.3		8		-				-		-	
						4.6	-	-	26.5		8.0		25.7		85.0		5.9		5.3		7		-				-		-	
SR2	Sunny	Moderate	13:56	4.6	Surface	1.0	0.6	61	26.9	26.9	8.1	8.1	25.0	25.0	95.1	95.1	6.6	6.6	5.3	9.3	11	12	82	83	821476	814143	<0.2	<0.2	1.2	1.2
						1.0	0.7	62	26.9		8.1		25.1		95.0		6.6		5.4		10		82				<0.2		1.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.4	60	26.5	26.5	8.1	8.1	25.6	25.6	89.7	89.7	6.3	6.3	13.2		13		83				<0.2		1.3	
						3.6	0.5	61	26.5		8.1		25.6		89.7		6.3		13.2		14		84				<0.2		1.2	
SR3	Sunny	Moderate	12:51	8.8	Surface	1.0	0.1	141	26.7	26.7	8.0	8.0	24.9	24.9	88.2	88.2	6.2	6.0	6.5	9.0	12	11	-	-	822146	807563	-	-	-	-
						1.0	0.1	150	26.7		8.0		24.9		88.2		6.1		6.6		12		-				-		-	
					Middle	4.4	0.2	193	26.0	26.0	8.0	8.0	25.8	25.8	83.1	83.0	5.8		9.8		11		-				-		-	
						4.4	0.2	210	26.0		8.0		25.9		82.9		5.8		10.1		11		-				-		-	
					Bottom	7.8	0.0	236	25.9	25.9	8.0	8.0	26.3	26.3	80.9	80.9	5.7	5.7	10.4		9		-				-		-	
						7.8	0.0	254	25.9		8.0		26.3		80.9		5.7		10.3		10		-				-		-	
SR4A	Cloudy	Moderate	13:57	8.7	Surface	1.0	0.1	355	26.5	26.5	8.2	8.2	25.6	25.6	91.7	91.8	6.4	6.3	8.5	9.5	6	7	-	-	817202	807832	-	-	-	-
						1.0	0.1	356	26.5		8.2		25.6		91.8		6.4		8.8		6		-				-		-	
					Middle	4.4	0.0	282	26.3	26.3	8.2	8.2	25.9	25.9	87.7	87.6	6.1		9.8		7		-				-		-	
						4.4	0.0	294	26.3		8.2		25.9		87.5		6.1		9.8		8		-				-		-	
					Bottom	7.7	0.0	192	26.2	26.2	8.1	8.1	26.0	26.0	87.6	87.7	6.1	6.1	9.9		7		-				-		-	
						7.7	0.0	209	26.2		8.1		26.0		87.8		6.1		10.0		8		-				-		-	
SR5A	Cloudy	Moderate	14:14	3.9	Surface	1.0	0.1	323	26.6	26.6	8.1	8.1	26.2	26.2	85.7	85.7	5.9	5.9	12.7	14.2	9	9	-	-	816582	810692	-	-	-	-
						1.0	0.1	334	26.5		8.1		26.2		85.6		5.9		13.0		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.9	0.1	358	26.4	26.4	8.0	8.0	26.2	26.2	85.5	85.6	5.9	6.0	15.5		10		-				-		-	
						2.9	0.1	329	26.4		8.0		26.2		85.7		6.0		15.4		9		-				-		-	
SR6A	Cloudy	Moderate	14:48	4.1	Surface	1.0	0.1	102	26.6	26.6	8.2	8.2	25.3	25.3	86.4	86.3	6.0	6.0	8.8	9.4	8	9	-	-	817951	814725	-	-	-	-
						1.0	0.1	110	26.6		8.2		25.3		86.2		6.0		8.9		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.0	76	26.5	26.5	8.2	8.2	25.4	25.4	84.7	84.8	5.9	5.9	10.0		10		-				-		-	
						3.1	0.0	79	26.5		8.2		25.4		84.8		5.9		9.9		10		-				-		-	
SR7	Fine	Moderate	14:38	14.6	Surface	1.0	1.0	47	26.6	26.6	8.1	8.1	25.6	25.6	92.7	92.6	6.5	6.2	3.4	4.3	7	8	-	-	823658	823740	-	-	-	-
						1.0	1.0	48	26.6		8.1		25.6		92.5		6.4		3.4		7		-				-		-	
					Middle	7.3	0.6	34	26.0	26.0	8.0	8.0	26.9	26.9	85.6	85.7	6.0		4.6		7		-				-		-	
						7.3	0.6	34	26.0		8.0		26.9		85.7		6.0		4.6		8		-				-		-	
					Bottom	13.6	0.5	12	25.9	25.9	8.1	8.1	27.1	27.1	84.7	84.7	5.9	5.9	4.9		8		-				-		-	
						13.6	0.6	12	25.9		8.1		27.1		84.7		5.9		5.0		8		-				-		-	
SR8	Sunny	Moderate	13:35	4.3	Surface	1.0	-	-	26.3	26.3	8.0	8.0	25.5	25.5	83.8	83.8	5.9	5.9	7.5	7.5	12	11	-	-	820457	811699	-	-	-	-
						1.0	-	-	26.3		8.0		25.6		83.7		5.9		7.6		12		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	-	-	26.3	26.3	8.0	8.0	25.6	25.6	83.9	84.0	5.9	5.9	7.6		10		-				-		-	
						3.3	-	-	26.3		8.0		25.6		84.0		5.9		7.5		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**

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 09 May 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	08:11	9.1	Surface	1.0	1.0	38	25.6	25.6	8.0	8.0	26.1	26.2	84.7	84.6	6.0	5.9	9.3	12.4	6	6	86	87	815614	804246	<0.2	<0.2	1.3	1.5
						1.0	1.1	38	25.6		8.0		26.3		84.4		6.0		9.5		5		85				<0.2		1.4	
					Middle	4.6	0.8	35	25.3	25.3	8.1	8.1	27.6	27.6	82.5	82.5	5.8		11.1		5		87				<0.2		1.4	
						4.6	0.8	36	25.3		8.1		27.6		82.5		5.8		12.0		6		86				<0.2		1.5	
					Bottom	8.1	0.6	37	25.3	25.3	8.1	8.1	27.9	27.9	81.9	81.9	5.8	5.8	16.1		7		90				<0.2		1.9	
						8.1	0.7	40	25.3		8.1		27.9		81.9		5.8		16.1		6		89				<0.2		1.7	
C2	Fine	Moderate	08:11	11.0	Surface	1.0	0.5	349	26.7	26.7	8.1	8.1	21.5	21.5	90.9	90.9	6.5	6.2	3.2	8.6	4	5	86	88	825674	806944	<0.2	<0.2	1.6	1.6
						1.0	0.5	321	26.7		8.1		21.5		90.9		6.5		3.2		5		86				<0.2		1.5	
					Middle	5.5	0.7	332	26.4	26.4	8.0	8.0	24.2	24.2	84.5	84.5	5.9		6.9		5		88				<0.2		1.7	
						5.5	0.7	358	26.4		8.0		24.2		84.4		5.9		7.6		4		89				<0.2		1.8	
					Bottom	10.0	0.5	340	26.3	26.3	8.0	8.0	24.6	24.6	83.5	83.5	5.9	5.9	16.2		5		91				<0.2		1.5	
						10.0	0.5	358	26.3		8.0		24.6		83.5		5.9		14.7		6		90				<0.2		1.6	
C3	Fine	Moderate	06:25	10.8	Surface	1.0	0.5	250	26.2	26.2	8.0	8.0	25.2	25.2	85.1	85.1	6.0	5.9	4.3	7.9	7	7	84	88	822105	817808	<0.2	<0.2	1.2	1.2
						1.0	0.5	271	26.2		8.0		25.2		85.1		6.0		4.3		6		84				<0.2		1.2	
					Middle	5.4	0.4	254	26.1	26.1	8.0	8.0	25.9	25.9	82.9	83.0	5.8		5.7		7		89				<0.2		1.2	
						5.4	0.4	262	26.1		8.0		25.8		83.1		5.8		5.6		7		89				<0.2		1.3	
					Bottom	9.8	0.4	248	25.6	25.6	8.0	8.0	27.4	27.4	81.3	81.3	5.7	5.7	13.1		7		89				<0.2		1.2	
						9.8	0.5	266	25.6		8.0		27.4		81.3		5.7		14.5		8		90				<0.2		1.2	
IM1	Cloudy	Moderate	08:28	5.5	Surface	1.0	0.2	19	26.1	26.1	8.1	8.1	26.0	26.0	84.6	84.7	5.9	5.9	12.5	13.6	12	13	86	88	817955	807114	<0.2	<0.2	1.7	1.7
						1.0	0.2	20	26.1		8.1		26.1		84.7		5.9		12.7		11		87				<0.2		1.7	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.5	0.2	35	26.1	26.1	8.1	8.1	26.1	26.1	84.0	84.0	5.9	5.9	14.6		14		89				<0.2		1.7	
						4.5	0.2	38	26.1		8.1		26.1		83.9		5.9		14.5		13		90				<0.2		1.8	
IM2	Cloudy	Moderate	08:36	7.8	Surface	1.0	0.4	353	26.0	26.0	8.1	8.1	26.3	26.3	84.7	84.7	5.9	5.9	13.4	14.2	17	16	85	88	818170	806152	<0.2	<0.2	1.8	1.9
						1.0	0.4	325	26.0		8.1		26.3		84.6		5.9		13.5		16		86				<0.2		2.0	
					Middle	3.9	0.4	3	26.0	26.0	8.1	8.1	26.3	26.3	83.8	83.8	5.9		12.8		17		87				<0.2		1.9	
						3.9	0.4	3	26.0		8.1		26.4		83.8		5.9		12.3		16		88				<0.2		1.9	
					Bottom	6.8	0.3	355	26.0	26.0	8.1	8.1	26.4	26.4	82.8	82.8	5.8	5.8	16.4		16		90				<0.2		2.0	
						6.8	0.3	327	26.0		8.1		26.4		82.7		5.8		16.6		16		92				<0.2		2.0	
IM3	Cloudy	Moderate	08:42	7.8	Surface	1.0	0.6	343	25.7	25.7	8.2	8.2	26.6	26.6	84.4	84.4	5.9	5.9	13.8	13.7	9	10	85	88	818780	805573	<0.2	<0.2	2.1	2.2
						1.0	0.6	316	25.7		8.2		26.7		84.3		5.9		13.1		10		87				<0.2		1.9	
					Middle	3.9	0.5	312	25.7	25.7	8.2	8.2	26.7	26.7	83.6	83.6	5.9		11.8		10		88				<0.2		2.1	
						3.9	0.5	323	25.7		8.2		26.7		83.5		5.9		11.0		10		87				<0.2		2.3	
					Bottom	6.8	0.4	324	25.7	25.7	8.1	8.1	26.8	26.8	83.2	83.2	5.8	5.8	16.1		10		90				<0.2		2.4	
						6.8	0.4	339	25.7		8.1		26.8		83.2		5.8		16.5		11		90				<0.2		2.4	
IM4	Cloudy	Moderate	08:51	8.9	Surface	1.0	1.1	356	25.8	25.8	8.3	8.3	26.4	26.4	84.8	84.7	6.0	5.9	12.4	12.4	15	14	85	88	819721	804594	<0.2	<0.2	1.4	1.4
						1.0	1.1	328	25.7		8.3		26.4		84.6		5.9		12.5		16		86				<0.2		1.3	
					Middle	4.5	1.0	343	25.6	25.6	8.3	8.3	27.0	27.0	82.7	82.7	5.8		13.0		14		87				<0.2		1.4	
						4.5	1.1	316	25.6		8.3		27.0		82.7		5.8		13.3		13		88				<0.2		1.5	
					Bottom	7.9	0.8	340	25.6	25.6	8.3	8.3	27.1	27.1	82.4	82.4	5.8	5.8	11.3		13		91				<0.2		1.5	
						7.9	0.9	340	25.6		8.3		27.1		82.4		5.8		11.9		13		90				<0.2		1.5	
IM5	Cloudy	Moderate	08:56	8.0	Surface	1.0	1.3	13	25.8	25.8	8.3	8.3	26.3	26.3	85.7	85.7	6.0	6.0	19.6	17.1	24	25	86	88	820744	804857	<0.2	<0.2	1.5	1.6
						1.0	1.3	13	25.8		8.3		26.3		85.6		6.0		19.7		24		86				<0.2		1.5	
					Middle	4.0	1.1	12	25.8	25.8	8.3	8.3	26.3	26.3	85.3	85.3	6.0		17.0		24		87				<0.2		1.6	
						4.0	1.2	13	25.8		8.3		26.3		85.3		6.0		16.9		25		88				<0.2		1.6	
					Bottom	7.0	0.9	15	25.8	25.8	8.2	8.2	26.3	26.3	84.6	84.6	5.9	5.9	14.1		25		90				<0.2		1.7	
						7.0	1.0	15	25.8		8.2		26.3		84.6		5.9		15.5		26		91				<0.2		1.6	
IM6	Cloudy	Moderate	09:03	8.0	Surface	1.0	0.0	199	26.5	26.5	8.2	8.2	23.8	23.9	88.4	88.3	6.2	6.1	8.7	12.0	3	4	85	88	821050	805832	<0.2	<0.2	1.8	1.9
						1.0	0.0	204	26.5		8.2		24.0		88.1		6.2		9.2		4		86				<0.2		2.0	
					Middle	4.0	0.4	61	26.2	26.2	8.2	8.2	25.4	25.4	85.5	85.5	6.0		13.6		4		87				<0.2		1.9	
						4.0	0.4	64	26.2		8.2		25.5		85.4		6.0		13.4		4		88				<0.2		1.9	
					Bottom	7.0	0.2	64	26.1	26.1	8.2	8.2	25.9	25.9	84.6	84.6	5.9	5.9	13.8		5		90				<0.2		1.9	
						7.0	0.2	67	26.1		8.2		25.9		84.6		5.9		13.5		5		91				<0.2		1.9	
IM7	Cloudy	Moderate	09:11	8.5	Surface	1.0	0.1	261	26.4	26.4	8.3	8.3	23.4	23.4	86.5	86.4	6.1	6.1	6.4	8.5	4	5	86	88	821351	806858	<0.2	<0.2	1.6	1.7
						1.0	0.1	267	26.4		8.3		23.4		86.3		6.1		6.5		4		86				<0.2		1.7	
					Middle	4.3	0.1	113	26.2	26.2	8.2	8.2	25.4	25.5	85.3	85.2	6.0		8.9		5		87				<0.2		1.7	
						4.3	0.1	113	26.2		8.2		25.5		85.1		6.0		9.5		4		87				<0.2		1.8	
					Bottom	7.5	0.1	61	26.1	26.1	8.2	8.2	25.8	25.8	84.7	84.7	5.9	5.9	9.7		5		90				<0.2		1.6	
						7.5	0.1	65	26.1		8.2		25.8		84.7		5.9		9.8		5		91				<0.2		1.8	
IM8	Fine	Moderate	07:45	7.8	Surface	1.0	0.1	150	26.8	26.8	8.1	8.1	22.4	22.4	91.7	91.7	6.5	6.3	3.6	7.1	5	5	84	87	821807	808148	<0.2	<0.2	1.5	1.5
						1.0	0.1	151	26.8		8.1		22.4		91.6		6.5		3.6		6		84				<0.2		1.5	
					Middle	3.9	0.2	265	26.5	26.5	8.0	8.0	24.2	24.2	86.5	86.6	6.1		8.4		5		87				<0.2		1.6	
						3.9	0.2	270	26.5		8.0		24.2		86.6		6.1		8.3		4		88				<0.2		1.6	
					Bottom	6.8	0.2	262	26.5	26.5	8.0	8.0	24.2	24.2	86.4	86.5	6.1	6.1	9.4		5		90				<0.2		1.4	
						6.8	0.2	277	26.5		8.0		24.2		86.5		6.1		9.4		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 09 May 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	07:39	7.5	Surface	1.0	0.4	258	26.4	26.4	8.0	8.0	24.4	24.4	85.7	85.7	6.0	6.0	9.9	12.3	12	14	83	86	822081	808815	<0.2	<0.2	1.3	1.3
						1.0	0.4	269	26.4		8.0		24.4		85.7		6.0		9.9		12		83				<0.2		1.2	
					Middle	3.8	0.4	261	26.4	26.4	8.0	8.0	24.4	24.4	86.0	86.0	6.0		12.5		14		86				<0.2		1.2	
						3.8	0.4	262	26.4		8.0		24.4		86.0		6.0		12.4		14		87				<0.2		1.2	
					Bottom	6.5	0.3	259	26.4	26.4	8.0	8.0	24.4	24.4	85.7	85.7	6.0	6.0	14.6		15		90				<0.2		1.3	
						6.5	0.3	280	26.4		8.0		24.4		85.7		6.0		14.8		14		89				<0.2		1.3	
IM10	Fine	Moderate	07:32	8.0	Surface	1.0	0.9	292	26.4	26.4	8.0	8.0	24.3	24.3	87.0	87.0	6.1	6.1	5.7	11.3	6	6	82	86	822391	809799	<0.2	<0.2	1.2	1.3
						1.0	0.9	299	26.4		8.0		24.3		86.9		6.1		5.8		6		81				<0.2		1.2	
					Middle	4.0	0.7	291	26.4	26.4	8.0	8.0	24.7	24.7	85.2	85.2	6.0		11.5		6		82				<0.2		1.2	
						4.0	0.8	309	26.4		8.0		24.7		85.2		6.0		11.6		6		83				<0.2		1.4	
					Bottom	7.0	0.5	288	26.4	26.4	8.0	8.0	24.8	24.8	85.0	85.1	6.0	6.0	16.8		6		93				<0.2		1.3	
						7.0	0.6	291	26.4		8.0		24.8		85.1		6.0		16.2		7		93				<0.2		1.3	
IM11	Fine	Moderate	07:23	8.8	Surface	1.0	0.8	314	26.5	26.5	8.0	8.0	24.1	24.1	87.3	87.3	6.1	6.1	3.8	8.4	5	6	82	86	822053	811464	<0.2	<0.2	1.3	1.4
						1.0	0.9	334	26.5		8.0		24.1		87.3		6.1		3.8		4		82				<0.2		1.3	
					Middle	4.4	0.8	320	26.4	26.4	8.0	8.0	24.8	24.8	85.2	85.2	6.0		7.2		7		87				<0.2		1.4	
						4.4	0.8	329	26.4		8.0		24.8		85.2		6.0		7.2		6		87				<0.2		1.4	
					Bottom	7.8	0.6	322	26.3	26.3	8.0	8.0	24.9	24.9	85.1	85.2	6.0	6.0	14.2		7		90				<0.2		1.5	
						7.8	0.7	353	26.3		8.0		24.9		85.2		6.0		14.4		6		89				<0.2		1.3	
IM12	Fine	Moderate	07:17	8.6	Surface	1.0	0.7	290	26.5	26.5	8.0	8.0	23.8	23.8	88.7	88.8	6.2	6.1	3.8	6.5	3	4	85	89	821476	812049	<0.2	<0.2	1.3	1.4
						1.0	0.7	318	26.5		8.0		23.8		88.8		6.3		3.8		4		85				<0.2		1.3	
					Middle	4.3	0.8	287	26.4	26.4	8.0	8.0	24.7	24.7	85.3	85.3	6.0		4.9		3		89				<0.2		1.4	
						4.3	0.8	294	26.4		8.0		24.7		85.3		6.0		4.9		4		90				<0.2		1.4	
					Bottom	7.6	0.6	283	26.3	26.3	8.0	8.0	25.5	25.5	83.1	83.2	5.8	5.8	10.7		4		91				<0.2		1.4	
						7.6	0.6	309	26.3		8.0		25.5		83.2		5.8		10.8		3		92				<0.2		1.4	
SR1A	Fine	Moderate	06:58	5.1	Surface	1.0	-	-	26.4	26.4	8.0	8.0	24.7	24.7	85.4	85.5	6.0	6.0	4.5	7.9	4	5	-	-	819980	812656	-	-	-	-
						1.0	-	-	26.4		8.0		24.7		85.5		6.0		4.5		5		-				-		-	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	-	-	26.3	26.3	8.0	8.0	25.6	25.6	80.4	80.5	5.6	5.6	11.2		5		-				-		-	
						4.1	-	-	26.3		8.0		25.6		80.5		5.6		11.5		6		-				-		-	
SR2	Fine	Moderate	06:46	4.6	Surface	1.0	0.2	279	26.4	26.4	8.0	8.0	24.4	24.4	86.0	86.0	6.0	6.0	4.8	8.3	6	6	85	86	821469	814175	<0.2	<0.2	1.3	1.4
						1.0	0.2	291	26.4		8.0		24.4		86.0		6.0		4.8		5		85				<0.2		1.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.3	308	26.3	26.3	8.0	8.0	25.7	25.7	82.6	82.6	5.8	5.8	11.7		6		88				<0.2		1.4	
						3.6	0.3	338	26.3		8.0		25.7		82.6		5.8		11.9		6		87				<0.2		1.3	
SR3	Fine	Moderate	07:52	9.1	Surface	1.0	0.2	269	26.7	26.7	8.1	8.1	22.0	22.0	90.0	90.0	6.4	6.3	3.5	4.7	4	5	-	-	822159	807574	-	-	-	-
						1.0	0.2	292	26.7		8.1		22.0		90.0		6.4		3.5		5		-				-		-	
					Middle	4.6	0.1	311	26.7	26.7	8.0	8.0	23.6	23.6	86.3	86.3	6.1		4.9		5		-				-		-	
						4.6	0.1	328	26.7		8.0		23.6		86.3		6.1		4.9		4		-				-		-	
					Bottom	8.1	0.1	318	26.7	26.7	8.0	8.0	23.7	23.7	86.3	86.3	6.1	6.1	5.8		6		-				-		-	
						8.1	0.1	322	26.7		8.0		23.7		86.3		6.1		5.9		5		-				-		-	
SR4A	Cloudy	Moderate	07:47	8.9	Surface	1.0	0.2	56	26.3	26.3	8.1	8.1	26.1	26.1	81.6	81.6	5.7	5.7	11.0	11.3	14	13	-	-	817168	807828	-	-	-	-
						1.0	0.2	60	26.3		8.1		26.1		81.5		5.7		11.1		13		-				-		-	
					Middle	4.5	0.1	63	26.3	26.3	8.1	8.1	26.1	26.1	81.4	81.4	5.7		11.3		13		-				-		-	
						4.5	0.1	66	26.3		8.1		26.1		81.4		5.7		11.3		12		-				-		-	
					Bottom	7.9	0.1	59	26.3	26.3	8.1	8.1	26.1	26.1	80.5	80.5	5.6	5.6	11.7		13		-				-		-	
						7.9	0.1	61	26.3		8.1		26.1		80.4		5.6		11.5		12		-				-		-	
SR5A	Cloudy	Moderate	07:30	3.4	Surface	1.0	0.2	284	26.3	26.3	7.9	7.9	26.1	26.1	82.2	82.2	5.7	5.7	12.7	14.8	12	11	-	-	816614	810712	-	-	-	-
						1.0	0.2	304	26.3		7.9		26.1		82.2		5.7		13.0		11		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.4	0.2	287	26.3	26.4	7.9	7.9	26.1	26.1	81.5	81.5	5.7	5.7	16.9		11		-				-		-	
						2.4	0.2	312	26.4		7.9		26.1		81.4		5.7		16.6		11		-				-		-	
SR6A	Cloudy	Moderate	06:53	3.4	Surface	1.0	0.1	222	26.3	26.3	7.8	7.8	25.7	25.7	81.1	81.1	5.7	5.7	8.4	7.7	5	5	-	-	817952	814740	-	-	-	-
						1.0	0.1	233	26.3		7.8		25.7		81.0		5.7		8.6		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.4	0.1	223	26.2	26.2	7.8	7.8	26.0	26.0	79.4	79.4	5.6	5.6	7.0		4		-				-		-	
						2.4	0.1	232	26.2		7.8		26.0		79.3		5.6		6.8		5		-				-		-	
SR7	Fine	Moderate	05:56	14.5	Surface	1.0	0.2	234	26.2	26.2	8.0	8.0	25.5	25.5	85.5	85.5	6.0	6.0	3.5	4.5	3	4	-	-	823650	823745	-	-	-	-
						1.0	0.2	252	26.2		8.0		25.5		85.5		6.0		3.5		3		-				-		-	
					Middle	7.3	0.2	239	26.2	26.2	8.0	8.0	25.6	25.6	84.9	84.9	5.9		3.6		4		-				-		-	
						7.3	0.2	260	26.2		8.0		25.6		84.9		5.9		3.5		4		-				-		-	
					Bottom	13.5	0.2	216	25.4	25.4	7.9	7.9	27.9	27.9	80.6	80.7	5.6	5.7	6.5		4		-				-		-	
						13.5	0.2	236	25.4		7.9		27.9		80.7		5.7		6.4		4		-				-		-	
SR8	Fine	Moderate	07:08	4.4	Surface	1.0	-	-	26.4	26.4	8.0	8.0	23.8	23.8	87.5	87.5	6.2	6.2	4.5	5.2	5	6	-	-	820401	811622	-	-	-	-
						1.0	-	-	26.4		8.0		23.9		87.4		6.2		4.7		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	-	-	26.6	26.6	8.0	8.0	24.4	24.4	86.5	86.5	6.1	6.1	5.8		7		-				-		-	
						3.4	-	-	26.6		8.0		24.4		86.5		6.1		5.8		6		-				-		-	

DA: Depth-Averaged

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

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 12 May 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	16:02	8.9	Surface	1.0	0.5	224	25.6	25.6	8.1	8.1	29.1	29.1	95.3	95.3	6.6	6.6	3.6	7.6	9	8	84	88	815642	804237	<0.2	<0.2	1.4	1.3
						1.0	0.5	230	25.5		8.1		29.1		95.3		6.6		3.6		9		84				<0.2		1.3	
					Middle	4.5	0.5	224	25.6	25.6	8.1	8.1	29.1	29.1	95.5	95.4	6.6		3.7		8		89				<0.2		1.3	
						4.5	0.5	236	25.6		8.1		29.1		95.2		6.6		3.7		9		89				<0.2		1.2	
					Bottom	7.9	0.3	197	24.9	24.9	8.1	8.1	30.7	30.7	83.9	84.0	5.8	5.9	15.8		7		90				<0.2		1.3	
						7.9	0.3	206	24.9		8.1		30.7		84.1		5.9		15.3		7		90				<0.2		1.4	
C2	Cloudy	Moderate	14:53	12.2	Surface	1.0	0.5	212	27.2	27.2	8.0	8.0	23.6	23.6	98.1	98.1	6.8	6.4	3.8	10.1	5	6	82	85	825668	806935	<0.2	<0.2	1.6	1.6
						1.0	0.5	221	27.2		8.0		23.6		98.0		6.8		3.9		4		82				<0.2		1.5	
					Middle	6.1	0.4	210	26.2	26.2	8.1	8.1	25.7	25.7	84.3	84.3	5.9		9.4		6		85				<0.2		1.7	
						6.1	0.4	229	26.1		8.1		25.7		84.3		5.9		9.9		6		86				<0.2		1.5	
					Bottom	11.2	0.5	180	25.5	25.5	8.1	8.1	28.3	28.3	77.8	77.9	5.4	5.4	16.7		7		88				<0.2		1.6	
						11.2	0.5	188	25.5		8.1		28.3		77.9		5.4		16.7		6		88				<0.2		1.5	
C3	Cloudy	Moderate	16:36	12.5	Surface	1.0	0.6	109	26.4	26.4	8.0	8.0	26.5	26.5	91.6	91.6	6.4	6.3	4.7	6.8	6	7	83	86	822099	817808	<0.2	<0.2	1.6	1.6
						1.0	0.6	111	26.4		8.0		26.5		91.6		6.4		4.7		6		84				<0.2		1.5	
					Middle	6.3	0.4	101	26.1	26.1	8.1	8.1	27.3	27.3	88.0	88.0	6.1		5.0		7		86				<0.2		1.6	
						6.3	0.4	107	26.1		8.1		27.3		88.0		6.1		5.0		7		87				<0.2		1.5	
					Bottom	11.5	0.3	53	24.9	24.9	8.2	8.2	30.1	30.1	79.5	79.6	5.6	5.6	10.8		7		89				<0.2		1.6	
						11.5	0.3	54	24.9		8.2		30.1		79.6		5.6		10.8		7		89				<0.2		1.5	
IM1	Cloudy	Calm	15:42	4.9	Surface	1.0	0.1	246	26.5	26.5	8.1	8.1	27.5	27.5	89.5	89.4	6.2	6.2	6.3	8.1	10	11	84	86	817959	807133	<0.2	<0.2	1.2	1.2
						1.0	0.1	269	26.5		8.1		27.5		89.3		6.2		6.4		10		84				<0.2		1.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	0.1	164	25.5	25.5	8.1	8.1	29.3	29.3	84.3	84.3	5.9	5.9	9.9		12		88				<0.2		1.2	
						3.9	0.1	167	25.5		8.1		29.3		84.3		5.9		9.9		12		89				<0.2		1.3	
IM2	Cloudy	Calm	15:35	7.2	Surface	1.0	0.2	177	25.9	25.9	8.1	8.1	28.3	28.4	98.1	98.1	6.8	6.6	4.1	5.9	9	9	85	88	818151	806160	<0.2	<0.2	1.0	1.1
						1.0	0.2	181	25.8		8.1		28.5		98.1		6.8		4.1		9		85				<0.2		1.0	
					Middle	3.6	0.2	137	25.4	25.4	8.1	8.1	29.6	29.7	94.5	92.4	6.6		4.7		8		89				<0.2		1.2	
						3.6	0.3	144	25.3		8.1		29.8		90.2		6.3		5.3		10		89				<0.2		1.0	
					Bottom	6.2	0.1	143	25.1	25.1	8.1	8.1	30.1	30.1	83.9	84.0	5.8	5.8	8.6		10		90				<0.2		1.1	
						6.2	0.1	157	25.1		8.1		30.1		84.1		5.8		8.5		9		90				<0.2		1.1	
IM3	Cloudy	Calm	15:28	7.4	Surface	1.0	0.2	160	26.8	26.8	8.1	8.1	26.9	26.9	98.0	98.0	6.7	6.6	4.9	7.0	8	9	85	88	818767	805586	<0.2	<0.2	1.2	1.2
						1.0	0.2	168	26.8		8.1		26.9		97.9		6.7		4.9		8		85				<0.2		1.2	
					Middle	3.7	0.3	147	25.8	25.8	8.1	8.1	28.5	28.7	93.4	93.1	6.5		6.1		9		88				<0.2		1.3	
						3.7	0.3	149	25.7		8.1		28.8		92.7		6.4		6.9		8		88				<0.2		1.3	
					Bottom	6.4	0.2	132	25.2	25.3	8.1	8.1	30.0	29.9	85.8	85.9	6.0	6.0	9.8		10		89				<0.2		1.2	
						6.4	0.2	142	25.3		8.1		29.9		86.0		6.0		9.8		9		90				<0.2		1.1	
IM4	Cloudy	Calm	15:20	8.6	Surface	1.0	0.6	184	25.8	25.8	8.1	8.1	28.0	28.1	88.5	88.3	6.2	6.1	6.7	10.0	8	10	84	87	819745	804594	<0.2	<0.2	1.2	1.1
						1.0	0.7	199	25.8		8.1		28.2		88.1		6.1		7.1		7		84				<0.2		1.1	
					Middle	4.3	0.5	168	25.4	25.4	8.1	8.1	29.3	29.3	85.8	85.8	6.0		10.1		11		87				<0.2		1.1	
						4.3	0.5	174	25.4		8.1		29.3		85.7		6.0		10.5		11		87				<0.2		1.1	
					Bottom	7.6	0.3	159	25.3	25.3	8.1	8.1	29.7	29.6	84.9	85.0	5.9	5.9	12.9		12		89				<0.2		1.1	
						7.6	0.3	169	25.3		8.1		29.6		85.0		5.9		12.9		12		89				<0.2		1.1	
IM5	Cloudy	Calm	15:13	8.0	Surface	1.0	0.6	210	25.9	25.9	8.1	8.1	27.9	27.9	91.2	91.2	6.3	6.2	5.8	9.6	5	7	84	87	820737	804885	<0.2	<0.2	1.1	1.2
						1.0	0.6	218	25.9		8.1		27.9		91.1		6.3		6.1		4		84				<0.2		1.1	
					Middle	4.0	0.5	182	25.5	25.5	8.1	8.1	29.2	29.2	86.2	86.2	6.0		9.8		8		88				<0.2		1.2	
						4.0	0.5	184	25.4		8.1		29.2		86.1		6.0		10.1		8		88				<0.2		1.2	
					Bottom	7.0	0.4	182	25.4	25.4	8.1	8.1	29.3	29.3	86.0	86.1	6.0	6.0	12.9		9		89				<0.2		1.2	
						7.0	0.4	192	25.4		8.1		29.3		86.1		6.0		12.8		9		90				<0.2		1.2	
IM6	Cloudy	Calm	15:05	7.7	Surface	1.0	0.4	240	26.5	26.4	8.1	8.1	25.2	25.3	93.7	93.7	6.5	6.3	5.5	7.4	6	6	85	87	821052	805808	<0.2	<0.2	1.7	1.6
						1.0	0.5	253	26.3		8.1		25.3		93.6		6.6		5.7		6		85				<0.2		1.6	
					Middle	3.9	0.4	220	25.8	25.8	8.1	8.1	28.2	28.3	88.1	87.8	6.1		6.9		6		87				<0.2		1.6	
						3.9	0.4	228	25.8		8.1		28.3		87.5		6.1		7.3		6		88				<0.2		1.6	
					Bottom	6.7	0.3	204	25.7	25.7	8.1	8.1	28.8	28.7	85.9	86.0	6.0	6.0	9.5		7		89				<0.2		1.7	
						6.7	0.3	220	25.7		8.1		28.7		86.0		6.0		9.6		7		90				<0.2		1.6	
IM7	Cloudy	Moderate	14:53	8.8	Surface	1.0	0.2	233	27.9	27.9	8.0	8.0	22.9	22.9	97.5	97.2	6.7	6.4	3.9	8.4	4	5	84	87	821344	806842	<0.2	<0.2	1.6	1.6
						1.0	0.2	249	27.9		8.0		22.9		96.8		6.7		4.3		5		84				<0.2		1.6	
					Middle	4.4	0.1	213	26.0	26.0	8.0	8.0	27.4	27.5	85.6	85.6	6.0		5.8		4		88				<0.2		1.6	
						4.4	0.1	218	26.0		8.0		27.5		85.6		6.0		5.9		5		89				<0.2		1.6	
					Bottom	7.8	0.2	168	25.7	25.7	8.1	8.1	28.5	28.5	84.5	84.5	5.9	5.9	15.1		6		89				<0.2		1.5	
						7.8	0.2	178	25.7		8.1		28.5		84.5		5.9		15.2		6		90				<0.2		1.5	
IM8	Cloudy	Moderate	15:16	8.3	Surface	1.0	0.2	174	27.6	27.6	8.0	8.0	22.7	22.7	103.9	103.9	7.2	6.7	3.9	7.5	6	6	82	85	821829	808161	<0.2	<0.2	1.5	1.5
						1.0	0.2	190	27.6		8.0		22.7		103.8		7.2		3.9		6		82				<0.2		1.4	
					Middle	4.2	0.1	156	26.6	26.7	8.0	8.0	24.9	24.9	88.6	88.7	6.2		5.0		7		85				<0.2		1.5	
						4.2	0.1	168	26.7		8.0		24.9		88.7		6.2		5.0		6		85				<0.2		1.4	
					Bottom	7.3	0.2	62	25.9	25.9	8.0	8.0	27.6	27.6	85.2	85.3	5.9	5.9	13.6		6		88				<0.2		1.5	
						7.3	0.2	67	25.9		8.0		27.6		85.3		5.9		13.5		7		87				<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 12 May 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	15:22	7.8	Surface	1.0	0.4	123	27.7	27.7	8.1	8.1	22.7	22.7	110.3	110.3	7.7	7.5	3.9	4.9	6	7	82	84	822076	808806	<0.2	<0.2	1.6	1.5
						1.0	0.4	128	27.7		8.1		22.8		110.3		7.7		4.0		6		82				<0.2		1.5	
					Middle	3.9	0.3	109	27.3	27.3	8.1	8.1	23.8	23.8	103.3	103.2	7.2		4.4		6		84				<0.2		1.5	
						3.9	0.3	117	27.3		8.1		23.8		103.1		7.2		4.4		7		84				<0.2		1.6	
					Bottom	6.8	0.2	89	26.4	26.4	8.1	8.1	25.9	25.9	88.2	88.3	6.1	6.2	6.4		7		87				<0.2		1.5	
						6.8	0.2	94	26.4		8.1		25.9		88.4		6.2		6.5		8		87				<0.2		1.5	
IM10	Cloudy	Moderate	15:29	8.0	Surface	1.0	0.7	106	27.1	27.1	8.1	8.1	23.6	23.6	102.2	102.2	7.1	6.8	4.2	7.1	4	4	83	85	822396	809788	<0.2	<0.2	1.4	1.4
						1.0	0.8	106	27.1		8.1		23.6		102.2		7.1		4.2		4		83				<0.2		1.4	
					Middle	4.0	0.6	100	26.6	26.6	8.1	8.1	25.8	25.8	92.3	92.2	6.4		7.1		4		84				<0.2		1.4	
						4.0	0.6	106	26.6		8.1		25.8		92.0		6.4		7.5		5		85				<0.2		1.4	
					Bottom	7.0	0.5	98	26.4	26.4	8.1	8.1	26.0	26.0	90.3	90.3	6.3	6.3	9.8		5		88				<0.2		1.4	
						7.0	0.5	102	26.4		8.1		26.0		90.3		6.3		9.7		4		88				<0.2		1.4	
IM11	Cloudy	Moderate	15:38	9.1	Surface	1.0	0.5	103	27.4	27.4	8.1	8.1	23.8	23.8	98.6	98.6	6.8	6.5	3.6	9.3	6	5	83	85	822056	811454	<0.2	<0.2	1.5	1.6
						1.0	0.6	110	27.4		8.1		23.8		98.6		6.8		3.6		5		83				<0.2		1.5	
					Middle	4.6	0.7	101	26.4	26.4	8.1	8.1	25.8	25.8	87.2	87.2	6.1		10.8		5		85				<0.2		1.6	
						4.6	0.7	108	26.4		8.1		25.8		87.2		6.1		10.9		4		85				<0.2		1.6	
					Bottom	8.1	0.5	99	26.3	26.3	8.1	8.1	26.0	26.0	87.6	87.7	6.1	6.1	13.5		5		87				<0.2		1.5	
						8.1	0.5	104	26.3		8.1		26.0		87.8		6.1		13.1		5		88				<0.2		1.6	
IM12	Cloudy	Moderate	15:45	10.2	Surface	1.0	0.8	105	27.5	27.5	8.1	8.1	23.5	23.5	100.9	100.9	7.0	6.7	3.9	7.7	5	5	82	85	821453	812061	<0.2	<0.2	1.4	1.5
						1.0	0.8	109	27.5		8.1		23.5		100.8		7.0		3.9		5		82				<0.2		1.5	
					Middle	5.1	0.5	91	26.8	26.8	8.1	8.1	24.8	24.8	91.1	91.1	6.3		8.2		5		84				<0.2		1.5	
						5.1	0.5	92	26.8		8.1		24.8		91.1		6.3		8.1		6		85				<0.2		1.5	
					Bottom	9.2	0.3	77	26.1	26.1	8.1	8.1	26.7	26.7	83.2	83.4	5.8	5.8	11.1		5		87				<0.2		1.5	
						9.2	0.4	78	26.1		8.1		26.7		83.5		5.8		11.2		6		87				<0.2		1.6	
SR1A	Cloudy	Moderate	16:02	5.4	Surface	1.0	-	-	28.0	28.0	8.1	8.1	23.6	23.6	100.1	100.1	6.9	6.9	3.4	5.6	5	6	-	-	819975	812663	-	-	-	-
						1.0	-	-	28.0		8.1		23.6		100.0		6.9		3.3		4		-				-		-	
					Middle	2.7	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.7	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	-	-	26.7	26.7	8.1	8.1	25.6	25.6	89.9	89.9	6.2	6.2	7.7		8		-				-		-	
						4.4	-	-	26.7		8.1		25.7		89.8		6.2		7.9		7		-				-		-	
SR2	Cloudy	Moderate	16:15	4.7	Surface	1.0	0.5	74	27.1	27.1	8.1	8.1	24.2	24.2	96.9	96.9	6.7	6.7	4.4	7.1	5	6	83	84	821464	814154	<0.2	<0.2	1.5	1.5
						1.0	0.6	75	27.1		8.1		24.2		96.8		6.7		4.4		4		83				<0.2		1.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.4	58	26.7	26.7	8.1	8.1	25.1	25.1	90.6	90.6	6.3	6.3	9.7		7		85				<0.2		1.5	
						3.7	0.4	60	26.7		8.1		25.1		90.6		6.3		9.7		6		86				<0.2		1.5	
SR3	Cloudy	Moderate	15:11	9.5	Surface	1.0	0.2	231	27.2	27.2	7.9	7.9	23.3	23.3	98.4	98.3	6.9	6.4	3.9	7.0	6	7	-	-	822162	807592	-	-	-	-
						1.0	0.2	242	27.2		7.9		23.3		98.2		6.8		4.0		7		-				-		-	
					Middle	4.8	0.1	291	26.4	26.4	7.9	7.9	25.8	25.8	86.2	86.3	6.0		6.3		6		-				-		-	
						4.8	0.1	310	26.4		7.9		25.8		86.3		6.0		6.4		7		-				-		-	
					Bottom	8.5	0.2	88	25.8	25.8	8.0	8.0	28.1	28.1	86.6	86.7	6.0	6.0	10.6		7		-				-		-	
						8.5	0.2	90	25.8		8.0		28.1		86.7		6.0		10.6		7		-				-		-	
SR4A	Cloudy	Calm	16:26	8.5	Surface	1.0	0.2	239	26.5	26.5	8.1	8.1	27.5	27.6	97.1	96.9	6.7	6.2	5.5	7.7	8	9	-	-	817175	807798	-	-	-	-
						1.0	0.3	242	26.4		8.1		27.6		96.7		6.7		5.7		8		-				-		-	
					Middle	4.3	0.1	243	25.5	25.5	8.1	8.1	29.1	29.2	83.1	82.9	5.8		7.5		8		-				-		-	
						4.3	0.1	266	25.5		8.1		29.2		82.7		5.7		7.9		9		-				-		-	
					Bottom	7.5	0.1	234	25.4	25.4	8.1	8.1	29.4	29.4	82.3	82.6	5.7	5.7	10.1		9		-				-		-	
						7.5	0.1	234	25.4		8.1		29.4		82.8		5.7		9.6		9		-				-		-	
SR5A	Cloudy	Calm	16:44	3.3	Surface	1.0	0.1	295	27.8	27.8	8.1	8.1	25.0	25.0	100.3	100.3	6.9	6.9	5.4	5.7	11	11	-	-	816601	810699	-	-	-	-
						1.0	0.1	309	27.8		8.1		25.0		100.2		6.9		5.6		11		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.3	0.1	293	27.5	27.5	8.1	8.1	25.2	25.2	98.8	97.0	6.8	6.7	5.6		11		-				-		-	
						2.3	0.1	320	27.5		8.1		25.3		95.1		6.5		6.3		12		-				-		-	
SR6A	Cloudy	Calm	17:21	3.6	Surface	1.0	0.0	149	27.4	27.4	8.0	8.0	24.7	24.7	87.6	87.4	6.0	6.0	9.2	14.7	10	11	-	-	817944	814741	-	-	-	-
						1.0	0.0	163	27.3		8.0		24.7		87.2		6.0		9.0		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.6	0.0	226	27.2	27.2	8.0	8.0	24.9	24.9	86.4	86.4	6.0	6.0	20.3		12		-				-		-	
						2.6	0.0	230	27.2		8.0		24.9		86.4		6.0		20.3		13		-				-		-	
SR7	Cloudy	Moderate	17:02	15.6	Surface	1.0	0.9	45	27.3	27.3	8.0	8.0	24.9	24.9	98.1	98.1	6.8	6.7	2.9	3.3	5	5	-	-	823653	823723	-	-	-	-
						1.0	0.9	47	27.3		8.0		24.9		98.1		6.8		2.9		6		-				-		-	
					Middle	7.8	0.5	30	26.6	26.6	8.0	8.0	26.1	26.1	93.5	93.5	6.5		3.1		4		-				-		-	
						7.8	0.5	31	26.6		8.0		26.1		93.5		6.5		3.1		5		-				-		-	
					Bottom	14.6	0.4	12	26.0	26.0	8.0	8.0	27.6	27.6	89.7	89.8	6.2	6.2	3.8		5		-				-		-	
						14.6	0.4	12	26.0		8.0		27.6		89.8		6.2		3.8		4		-				-		-	
SR8	Cloudy	Moderate	15:55	5.1	Surface	1.0	-	-	27.7	27.7	8.1	8.1	24.1	24.1	96.9	96.9	6.7	6.7	4.8	5.5	6	6	-	-	820374	811623	-	-	-	-
						1.0	-	-	27.7		8.1		24.1		96.9		6.7		4.8		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	-	-	27.1	27.1	8.1	8.1	24.8	24.8	92.0	92.0	6.4	6.4	6.3		5		-				-		-	
						4.1	-	-	27.1		8.1		24.8		92.0		6.4		6.3		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 12 May 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	09:49	9.1	Surface	1.0	0.4	35	26.0	26.0	8.1	8.1	27.6	27.5	88.8	88.8	6.2	5.9	4.6	8.5	6	7	81	84	815612	804252	<0.2	<0.2	0.9	0.9
						1.0	0.5	35	26.0		8.1		27.5		88.8		6.2		4.6		6		81				<0.2		0.9	
					Middle	4.6	0.6	40	25.2	25.2	8.1	8.1	29.8	29.9	81.6	81.4	5.7		4.4		7		84				<0.2		0.9	
						4.6	0.6	40	25.1		8.1		29.9		81.1		5.6		4.5		7		84				<0.2		0.9	
					Bottom	8.1	0.4	32	24.9	25.0	8.1	8.1	30.6	30.5	77.7	77.7	5.4	5.4	16.7		8		86				<0.2		0.9	
						8.1	0.5	33	25.0		8.1		30.4		77.7		5.4		16.5		8		86				<0.2		0.9	
C2	Cloudy	Moderate	10:09	12.9	Surface	1.0	0.4	351	27.5	27.5	8.1	8.1	21.8	21.8	98.3	98.3	6.9	6.5	3.9	7.5	8	7	82	86	825683	806922	<0.2	<0.2	1.5	1.5
						1.0	0.4	323	27.5		8.1		21.8		98.2		6.9		3.9		9		83				<0.2		1.4	
					Middle	6.5	0.4	1	26.6	26.6	8.0	8.0	24.9	25.0	86.2	86.2	6.0		6.2		6		86				<0.2		1.5	
						6.5	0.5	1	26.6		8.0		25.0		86.1		6.0		6.4		6		86				<0.2		1.4	
					Bottom	11.9	0.5	4	25.9	26.0	8.0	8.0	27.1	27.0	79.5	79.5	5.5	5.5	12.4		6		89				<0.2		1.5	
						11.9	0.5	4	26.0		8.0		27.0		79.5		5.5		12.2		6		89				<0.2		1.4	
C3	Cloudy	Moderate	08:20	12.2	Surface	1.0	0.3	283	26.7	26.7	7.9	7.9	24.5	24.5	90.8	90.7	6.3	6.2	3.3	4.1	4	3	83	86	822107	817790	<0.2	<0.2	1.5	1.5
						1.0	0.3	294	26.6		7.9		24.6		90.6		6.3		3.3		4		83				<0.2		1.4	
					Middle	6.1	0.3	296	26.0	26.0	7.9	7.9	26.7	26.7	87.4	87.4	6.1		3.1		2		85				<0.2		1.5	
						6.1	0.3	306	26.0		7.9		26.7		87.4		6.1		3.1		4		86				<0.2		1.5	
					Bottom	11.2	0.4	295	25.0	25.0	7.9	7.9	29.9	29.9	80.6	80.6	5.6	5.6	5.8		3		89				<0.2		1.4	
						11.2	0.4	315	25.0		7.9		29.9		80.6		5.6		5.9		3		89				<0.2		1.4	
IM1	Cloudy	Moderate	10:09	5.8	Surface	1.0	0.2	4	26.4	26.4	8.1	8.1	26.3	26.4	86.3	86.2	6.0	6.0	7.7	10.4	5	6	80	83	817944	807136	<0.2	<0.2	0.8	0.8
						1.0	0.2	4	26.3		8.1		26.5		86.1		6.0		8.5		5		81				<0.2		0.9	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.8	0.1	19	26.0	26.0	8.1	8.1	27.2	27.2	79.8	79.7	5.6	5.6	12.7		8		85				<0.2		0.8	
						4.8	0.1	20	26.0		8.1		27.2		79.6		5.5		12.5		7		85				<0.2		0.8	
IM2	Cloudy	Moderate	10:16	7.5	Surface	1.0	0.3	308	27.1	27.1	8.1	8.1	24.6	24.6	93.6	93.6	6.5	6.2	3.8	8.0	6	6	81	85	818174	806155	<0.2	<0.2	0.9	1.0
						1.0	0.3	334	27.0		8.1		24.7		93.5		6.5		3.9		7		81				<0.2		1.0	
					Middle	3.8	0.3	350	25.9	25.9	8.1	8.1	27.4	27.5	85.4	85.3	5.9		6.7		5		85				<0.2		0.9	
						3.8	0.3	322	25.9		8.1		27.6		85.2		5.9		7.6		6		85				<0.2		0.9	
					Bottom	6.5	0.3	357	26.0	26.1	8.1	8.1	28.0	27.9	81.2	81.1	5.6	5.6	13.0		6		88				<0.2		1.0	
						6.5	0.3	328	26.1		8.1		27.9		81.0		5.6		13.0		5		89				<0.2		1.0	
IM3	Cloudy	Moderate	10:23	7.8	Surface	1.0	0.3	322	26.8	26.8	8.1	8.1	25.2	25.2	93.2	93.2	6.5	6.3	3.9	7.9	6	7	80	84	818761	805590	<0.2	<0.2	1.1	1.0
						1.0	0.3	350	26.8		8.1		25.2		93.1		6.5		3.9		7		81				<0.2		0.9	
					Middle	3.9	0.4	355	26.0	26.0	8.1	8.1	27.1	27.2	86.8	86.8	6.0		5.7		6		84				<0.2		1.0	
						3.9	0.4	327	26.0		8.1		27.3		86.7		6.0		6.0		7		85				<0.2		1.0	
					Bottom	6.8	0.3	353	25.6	25.6	8.1	8.1	28.5	28.5	80.8	80.6	5.6	5.6	13.7		7		88				<0.2		1.0	
						6.8	0.3	325	25.6		8.1		28.5		80.4		5.6		14.0		6		88				<0.2		1.0	
IM4	Cloudy	Moderate	10:32	8.5	Surface	1.0	0.6	345	26.5	26.5	8.1	8.1	25.6	25.6	92.4	92.4	6.4	6.0	3.7	8.8	6	7	81	85	819743	804620	<0.2	<0.2	1.0	1.0
						1.0	0.6	317	26.5		8.1		25.6		92.3		6.4		3.7		7		82				<0.2		1.0	
					Middle	4.3	0.6	356	25.5	25.5	8.1	8.1	28.9	28.9	81.2	81.2	5.7		8.3		7		85				<0.2		1.0	
						4.3	0.6	358	25.5		8.1		28.9		81.1		5.6		8.2		6		86				<0.2		0.9	
					Bottom	7.5	0.4	2	25.5	25.5	8.1	8.1	29.0	29.0	80.5	80.5	5.6	5.6	14.1		8		89				<0.2		0.9	
						7.5	0.5	2	25.5		8.1		29.0		80.4		5.6		14.7		8		89				<0.2		0.9	
IM5	Cloudy	Moderate	10:39	8.1	Surface	1.0	1.0	3	26.5	26.5	8.1	8.1	26.0	26.0	89.4	89.4	6.2	6.1	4.8	8.6	6	7	83	86	820735	804877	<0.2	<0.2	1.4	1.4
						1.0	1.0	3	26.5		8.1		26.0		89.4		6.2		4.9		7		84				<0.2		1.3	
					Middle	4.1	0.8	19	26.0	26.0	8.1	8.1	27.3	27.3	84.7	84.6	5.9		8.8		8		85				<0.2		1.3	
						4.1	0.9	19	26.0		8.1		27.3		84.4		5.9		9.2		7		85				<0.2		1.3	
					Bottom	7.1	0.6	18	25.8	25.8	8.1	8.1	27.8	27.8	81.9	81.7	5.7	5.7	12.2		8		88				<0.2		1.4	
						7.1	0.6	18	25.8		8.1		27.8		81.5		5.7		12.0		8		88				<0.2		1.4	
IM6	Cloudy	Moderate	10:46	7.8	Surface	1.0	0.2	57	26.7	26.7	8.1	8.1	24.3	24.3	90.4	90.3	6.3	6.1	5.5	9.1	5	6	80	85	821074	805840	<0.2	<0.2	1.3	1.3
						1.0	0.2	62	26.7		8.1		24.3		90.2		6.3		6.1		5		81				<0.2		1.3	
					Middle	3.9	0.3	61	26.1	26.1	8.1	8.1	26.8	26.8	83.2	83.0	5.8		10.1		5		85				<0.2		1.4	
						3.9	0.3	66	26.1		8.1		26.9		82.7		5.8		10.0		6		86				<0.2		1.3	
					Bottom	6.8	0.3	84	26.0	26.1	8.1	8.1	27.2	27.1	80.9	80.9	5.6	5.6	11.7		6		88				<0.2		1.3	
						6.8	0.3	92	26.1		8.1		27.0		80.8		5.6		11.3		7		88				<0.2		1.4	
IM7	Cloudy	Moderate	10:55	8.9	Surface	1.0	0.0	299	27.1	27.1	8.1	8.1	22.6	22.6	92.1	92.1	6.5	6.3	3.4	8.8	4	5	81	85	821369	806850	<0.2	<0.2	1.4	1.4
						1.0	0.0	305	27.0		8.1		22.7		92.1		6.5		3.7		4		81				<0.2		1.3	
					Middle	4.5	0.3	94	26.4	26.4	8.1	8.1	25.6	25.6	86.2	86.2	6.0		6.7		4		85				<0.2		1.4	
						4.5	0.3	94	26.4		8.1		25.7		86.2		6.0		7.0		5		85				<0.2		1.3	
					Bottom	7.9	0.3	75	25.9	25.9	8.1	8.1	27.5	27.5	81.6	81.6	5.7	5.7	15.8		6		89				<0.2		1.4	
						7.9	0.3	78	25.9		8.1		27.5		81.6		5.7		15.9		5		89				<0.2		1.4	
IM8	Cloudy	Moderate	09:44	8.2	Surface	1.0	0.1	266	27.2	27.2	8.1	8.1	21.7	21.7	95.3	95.3	6.7	6.5	4.3	5.3	6	7	82	85	821817	808117	<0.2	<0.2	1.5	1.5
						1.0	0.1	287	27.2		8.1		21.7		95.2		6.7		4.4		6		82				<0.2		1.4	
					Middle	4.1	0.1	270	26.9	26.9	8.1	8.1	22.6	22.6	90.4	90.3	6.4		6.0		7		85				<0.2		1.4	
						4.1	0.1	280	26.9		8.1		22.7		90.1		6.3		6.0		6		85				<0.2		1.5	
					Bottom	7.2	0.0	95	26.7	26.7	8.1	8.1	24.5	24.5	89.6	89.7	6.3	6.3	5.7		7		88				<0.2		1.5	
						7.2	0.0	101	26.7		8.1		24.5		89.7		6.3		5.6		8		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 12 May 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	09:37	7.5	Surface	1.0	0.5	265	27.1	27.1	8.1	8.1	22.9	22.9	90.6	90.6	6.3	6.3	6.8	7.6	9	10	83	85	822095	808794	<0.2	<0.2	1.5	1.5
						1.0	0.6	277	27.1		8.1		22.9		90.5		6.3		6.8		9		83				<0.2		1.5	
					Middle	3.8	0.5	266	27.1	27.1	8.1	8.1	23.0	23.0	90.0	90.0	6.3		7.3		10		85				<0.2		1.4	
						3.8	0.5	287	27.1		8.1		23.0		90.0		6.3		7.4		10		85				<0.2		1.6	
					Bottom	6.5	0.4	261	26.9	26.9	8.1	8.1	23.5	23.5	89.2	89.2	6.2	6.2	8.4		10		88				<0.2		1.4	
						6.5	0.4	280	26.9		8.1		23.5		89.2		6.2		8.8		10		88				<0.2		1.5	
IM10	Cloudy	Moderate	09:30	8.0	Surface	1.0	0.7	299	27.1	27.1	8.1	8.1	22.9	22.9	91.0	91.0	6.4	6.2	5.0	6.9	7	6	83	86	822396	809797	<0.2	<0.2	1.5	1.5
						1.0	0.7	322	27.1		8.1		22.9		91.0		6.4		5.0		7		83				<0.2		1.5	
					Middle	4.0	0.6	289	26.8	26.8	8.1	8.1	24.0	24.0	85.5	85.5	6.0		8.1		6		86				<0.2		1.5	
						4.0	0.6	310	26.8		8.1		24.0		85.4		6.0		8.1		7		86				<0.2		1.5	
					Bottom	7.0	0.5	278	26.6	26.6	8.1	8.1	24.9	24.9	83.6	83.6	5.8	5.8	7.7		6		89				<0.2		1.5	
						7.0	0.5	303	26.6		8.1		24.9		83.6		5.8		7.8		5		89				<0.2		1.4	
IM11	Cloudy	Moderate	09:19	8.3	Surface	1.0	0.5	321	27.1	27.1	8.1	8.1	22.9	22.9	91.3	91.3	6.4	6.2	4.0	5.7	5	6	83	86	822033	811464	<0.2	<0.2	1.5	1.4
						1.0	0.6	323	27.1		8.1		22.9		91.2		6.4		4.0		6		83				<0.2		1.5	
					Middle	4.2	0.5	313	26.5	26.5	8.1	8.1	25.5	25.5	85.6	85.6	6.0		5.3		6		85				<0.2		1.5	
						4.2	0.5	319	26.5		8.1		25.5		85.6		6.0		5.2		5		86				<0.2		1.5	
					Bottom	7.3	0.4	307	26.4	26.4	8.1	8.1	25.9	25.9	85.2	85.3	5.9	5.9	7.8		8		88				<0.2		1.4	
						7.3	0.4	328	26.4		8.1		25.9		85.3		5.9		7.8		7		88				<0.2		1.2	
IM12	Cloudy	Moderate	09:12	8.6	Surface	1.0	0.5	309	27.2	27.2	8.0	8.0	22.4	22.4	92.4	92.4	6.5	6.3	4.4	6.5	5	6	82	85	821441	812044	<0.2	<0.2	1.3	1.4
						1.0	0.5	314	27.2		8.0		22.4		92.4		6.5		4.4		4		82				<0.2		1.3	
					Middle	4.3	0.5	300	26.6	26.6	8.0	8.0	25.0	25.0	87.8	87.8	6.1		4.8		7		85				<0.2		1.4	
						4.3	0.5	315	26.6		8.0		25.0		87.7		6.1		4.8		6		86				<0.2		1.2	
					Bottom	7.6	0.5	307	25.8	25.8	8.0	8.0	27.6	27.6	82.4	82.7	5.7	5.8	10.3		6		88				<0.2		1.5	
						7.6	0.6	337	25.8		8.0		27.6		82.9		5.8		10.1		7		88				<0.2		1.4	
SR1A	Cloudy	Moderate	08:53	5.3	Surface	1.0	-	-	27.2	27.2	8.0	8.0	22.4	22.4	93.4	93.4	6.5	6.5	4.1	4.1	4	6	-	-	819981	812654	-	-	-	-
						1.0	-	-	27.2		8.0		22.4		93.4		6.5		4.1		5		-				-		-	
					Middle	2.7	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.7	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	-	-	27.2	27.2	8.0	8.0	23.4	23.4	92.0	92.1	6.4	6.4	4.1		7		-				-		-	
						4.3	-	-	27.2		8.0		23.4		92.1		6.4		4.1		7		-				-		-	
SR2	Cloudy	Moderate	08:41	5.1	Surface	1.0	0.1	238	27.2	27.2	7.9	7.9	22.2	22.2	94.5	94.5	6.6	6.6	4.2	5.7	7	7	85	86	821462	814189	<0.2	<0.2	1.6	1.5
						1.0	0.1	249	27.2		7.9		22.2		94.5		6.6		4.4		6		84				<0.2		1.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	0.1	284	26.8	26.9	7.9	7.9	24.4	24.4	88.8	88.8	6.2	6.2	7.1		7		86				<0.2		1.5	
						4.1	0.1	295	26.9		7.9		24.4		88.8		6.2		7.1		7		87				<0.2		1.5	
SR3	Cloudy	Moderate	09:50	9.4	Surface	1.0	0.2	294	27.2	27.2	8.2	8.2	21.7	21.7	95.1	95.1	6.7	6.6	4.5	5.4	7	6	-	-	822134	807553	-	-	-	-
						1.0	0.2	302	27.2		8.2		21.7		95.0		6.7		4.6		6		-				-		-	
					Middle	4.7	0.2	297	27.0	27.0	8.2	8.2	22.7	22.7	91.4	91.3	6.4		4.8		5		-				-		-	
						4.7	0.2	316	26.9		8.2		22.7		91.1		6.4		4.9		6		-				-		-	
					Bottom	8.4	0.2	35	26.5	26.6	8.2	8.2	25.5	25.5	88.5	88.6	6.2	6.2	6.8		6		-				-		-	
						8.4	0.2	37	26.6		8.2		25.5		88.6		6.2		6.7		4		-				-		-	
SR4A	Cloudy	Calm	09:26	9.6	Surface	1.0	0.0	223	26.7	26.7	8.1	8.1	24.8	24.8	89.1	89.2	6.2	6.0	7.8	7.3	6	7	-	-	817212	807825	-	-	-	-
						1.0	0.0	232	26.6		8.1		24.8		89.2		6.2		7.8		5		-				-		-	
					Middle	4.8	0.1	80	26.4	26.4	8.1	8.1	26.1	26.2	83.2	82.9	5.8		6.0		6		-				-		-	
						4.8	0.2	85	26.4		8.1		26.3		82.6		5.7		6.5		7		-				-		-	
					Bottom	8.6	0.1	53	26.2	26.2	8.1	8.1	26.9	26.8	80.6	80.6	5.6	5.6	8.1		8		-				-		-	
						8.6	0.1	58	26.2		8.1		26.8		80.5		5.6		7.8		8		-				-		-	
SR5A	Cloudy	Calm	09:09	3.4	Surface	1.0	0.0	305	26.8	26.8	8.1	8.1	24.5	24.5	85.3	85.2	5.9	5.9	6.3	8.3	5	6	-	-	816609	810672	-	-	-	-
						1.0	0.0	334	26.8		8.1		24.5		85.0		5.9		6.4		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.4	0.2	280	26.8	26.8	8.0	8.0	24.6	24.6	81.6	79.3	5.7	5.6	10.3		6		-				-		-	
						2.4	0.2	300	26.8		8.0		24.6		77.0		5.4		10.1		7		-				-		-	
SR6A	Cloudy	Calm	08:38	4.9	Surface	1.0	0.1	263	27.2	27.2	8.0	8.0	24.1	24.1	90.1	90.2	6.3	6.3	3.5	6.1	5	5	-	-	817944	814727	-	-	-	-
						1.0	0.1	281	27.2		8.0		24.1		90.3		6.3		3.5		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	0.0	252	27.1	27.1	8.0	8.0	24.7	24.7	84.4	84.5	5.9	5.9	8.3		6		-				-		-	
						3.9	0.0	266	27.1		8.0		24.7		84.5		5.9		8.9		5		-				-		-	
SR7	Rainy	Moderate	07:47	15.8	Surface	1.0	0.1	151	26.4	26.4	8.0	8.0	25.1	25.1	90.9	90.9	6.4	6.2	3.2	5.4	4	5	-	-	823658	823725	-	-	-	-
						1.0	0.1	160	26.4		8.0		25.1		90.9		6.4		3.2		4		-				-		-	
					Middle	7.9	0.1	228	25.8	25.8	8.0	8.0	27.4	27.4	85.3	85.3	6.0		3.1		5		-				-		-	
						7.9	0.1	244	25.8		8.0		27.5		85.3		6.0		3.1		6		-				-		-	
					Bottom	14.8	0.1	200	24.5	24.5	8.0	8.0	31.0	31.0	78.6	78.7	5.5	5.5	10.0		6		-				-		-	
						14.8	0.1	214	24.5		8.0		31.0		78.8		5.5		10.0		6		-				-		-	
SR8	Cloudy	Moderate	09:05	4.9	Surface	1.0	-	-	27.3	27.3	8.1	8.1	21.7	21.7	96.2	96.2	6.8	6.8	4.4	4.5	5	5	-	-	820398	811644	-	-	-	-
						1.0	-	-	27.3		8.1		21.7		96.2		6.8		4.4		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	-	-	27.2	27.2	8.1	8.1	22.1	22.1	94.9	95.0	6.7	6.7	4.5		4		-				-		-	
						3.9	-	-	27.2		8.1		22.1		95.0		6.7		4.5		5		-				-		-	

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 14 May 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	17:50	8.3	Surface	1.0	0.4	213	26.3	26.3	8.2	8.2	28.4	28.4	127.6	127.6	8.8	8.6	2.5	5.8	7	8	84	87	815638	804244	<0.2	<0.2	1.1	1.1
						1.0	0.4	233	26.3		8.2		28.4		127.5		8.8		2.5		7		84				<0.2		1.1	
					Middle	4.2	0.4	204	26.1	26.1	8.2	8.2	28.6	28.7	122.3	122.0	8.4		4.0		9		86				<0.2		1.2	
						4.2	0.4	215	26.1		8.2		28.7		121.7		8.4		4.6		8		87				<0.2		1.1	
					Bottom	7.3	0.3	221	25.4	25.4	8.1	8.1	29.6	29.6	90.6	90.8	6.3	6.3	10.7		8		90				<0.2		1.2	
						7.3	0.4	230	25.4		8.1		29.6		91.0		6.3		10.7		9		90				<0.2		1.0	
C2	Cloudy	Moderate	16:47	12.1	Surface	1.0	0.1	158	27.0	27.0	7.9	7.9	25.5	25.5	100.2	100.1	6.9	6.4	3.0	5.6	6	6	87	88	825699	806936	<0.2	<0.2	1.4	1.4
						1.0	0.1	172	26.9		7.9		25.5		100.0		6.9		3.1		5		88				<0.2		1.4	
					Middle	6.1	0.3	160	26.2	26.2	7.9	7.9	26.6	26.6	83.3	83.1	5.8		5.7		6		86				<0.2		1.4	
						6.1	0.3	165	26.2		7.9		26.6		82.8		5.8		6.1		5		85				<0.2		1.4	
					Bottom	11.1	0.3	140	25.0	25.0	7.9	7.9	30.2	30.1	69.4	69.6	4.8	4.9	7.8		7		91				<0.2		1.4	
						11.1	0.3	150	25.0		7.9		30.1		69.7		4.9		7.8		6		90				<0.2		1.4	
C3	Cloudy	Moderate	18:28	12.3	Surface	1.0	0.4	81	26.2	26.2	8.2	8.2	27.5	27.5	93.0	92.9	6.4	6.0	3.5	4.3	6	7	84	87	822116	817785	<0.2	<0.2	1.3	1.4
						1.0	0.4	81	26.1		8.2		27.6		92.7		6.4		3.6		6		85				<0.2		1.4	
					Middle	6.2	0.3	97	25.2	25.2	8.2	8.2	29.5	29.6	81.1	81.1	5.7		4.5		6		87				<0.2		1.4	
						6.2	0.3	103	25.1		8.2		29.7		81.0		5.6		4.4		7		88				<0.2		1.3	
					Bottom	11.3	0.2	119	24.7	24.8	8.2	8.2	30.8	30.7	77.0	77.3	5.4	5.4	5.0		7		89				<0.2		1.4	
						11.3	0.2	119	24.8		8.2		30.7		77.5		5.4		5.0		8		89				<0.2		1.4	
IM1	Cloudy	Moderate	17:30	5.2	Surface	1.0	0.1	193	26.5	26.5	8.2	8.2	28.5	28.5	121.3	121.1	8.3	8.3	2.9	3.2	8	8	85	86	817956	807120	<0.2	<0.2	0.9	0.9
						1.0	0.1	208	26.5		8.2		28.5		120.8		8.3		2.9		8		85				<0.2		0.9	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.1	174	26.0	26.0	8.2	8.2	29.1	29.1	104.8	104.9	7.2	7.2	3.6		8		87				<0.2		0.9	
						4.2	0.1	185	26.0		8.2		29.1		104.9		7.2		3.6		6		88				<0.2		0.9	
IM2	Cloudy	Moderate	17:24	7.2	Surface	1.0	0.3	141	26.8	26.8	8.2	8.2	26.3	26.3	122.1	122.0	8.4	7.8	2.6	4.2	6	7	82	86	818146	806148	<0.2	<0.2	1.1	1.4
						1.0	0.3	153	26.8		8.2		26.3		121.9		8.4		2.5		6		83				<0.2		1.2	
					Middle	3.6	0.2	168	26.1	26.1	8.1	8.1	28.7	28.7	103.3	103.2	7.1		2.8		7		85				<0.2		1.3	
						3.6	0.2	172	26.1		8.1		28.7		103.1		7.1		2.8		6		85				<0.2		1.4	
					Bottom	6.2	0.2	205	25.3	25.3	8.1	8.1	29.7	29.7	83.8	83.9	5.8	5.8	7.2		8		90				<0.2		1.5	
						6.2	0.2	215	25.3		8.1		29.7		83.9		5.8		7.2		8		89				<0.2		1.6	
IM3	Cloudy	Moderate	17:17	7.5	Surface	1.0	0.4	151	26.9	26.9	8.2	8.2	25.8	25.9	119.3	119.2	8.3	7.6	2.6	4.9	9	8	82	86	818795	805593	<0.2	<0.2	1.3	1.2
						1.0	0.5	163	26.8		8.2		25.9		119.0		8.2		2.7		8		82				<0.2		1.2	
					Middle	3.8	0.4	152	26.4	26.4	8.1	8.1	27.6	27.6	101.9	102.0	7.0		3.7		7		86				<0.2		1.2	
						3.8	0.4	166	26.4		8.1		27.6		102.1		7.0		3.7		8		85				<0.2		1.1	
					Bottom	6.5	0.2	140	25.4	25.4	8.0	8.0	29.6	29.6	86.8	86.8	6.0	6.0	8.5		8		90				<0.2		1.2	
						6.5	0.2	151	25.4		8.0		29.6		86.8		6.0		8.4		7		89				<0.2		1.2	
IM4	Cloudy	Moderate	17:08	8.4	Surface	1.0	0.4	167	26.4	26.4	8.2	8.2	26.8	26.8	118.5	118.5	8.2	8.1	3.0	3.8	6	8	82	86	819741	804607	<0.2	<0.2	1.1	1.2
						1.0	0.4	174	26.4		8.2		26.8		118.5		8.2		3.1		7		82				<0.2		1.1	
					Middle	4.2	0.4	165	26.1	26.1	8.1	8.1	27.9	28.0	114.2	113.9	7.9		3.4		8		85				<0.2		1.2	
						4.2	0.4	166	26.1		8.1		28.0		113.6		7.9		3.6		7		85				<0.2		1.2	
					Bottom	7.4	0.3	176	25.9	25.9	8.1	8.1	28.8	28.8	100.9	101.0	7.0	7.0	4.9		9		89				<0.2		1.1	
						7.4	0.4	186	25.9		8.1		28.8		101.0		7.0		4.7		10		90				<0.2		1.3	
IM5	Cloudy	Moderate	17:01	7.9	Surface	1.0	0.3	182	27.2	27.2	8.2	8.2	24.4	24.4	116.8	116.9	8.1	8.1	2.5	4.0	7	8	81	85	820745	804869	<0.2	<0.2	1.4	1.5
						1.0	0.3	199	27.2		8.2		24.4		116.9		8.1		2.5		7		82				<0.2		1.6	
					Middle	4.0	0.3	177	26.2	26.2	8.1	8.1	27.1	27.1	115.0	115.0	8.0		4.0		6		85				<0.2		1.5	
						4.0	0.3	179	26.2		8.1		27.1		114.9		8.0		4.0		8		85				<0.2		1.4	
					Bottom	6.9	0.2	177	25.7	25.7	8.1	8.1	29.0	28.9	94.2	94.3	6.5	6.5	5.5		9		89				<0.2		1.6	
						6.9	0.2	187	25.7		8.1		28.9		94.4		6.5		5.5		9		89				<0.2		1.6	
IM6	Cloudy	Moderate	16:53	7.7	Surface	1.0	0.1	207	26.7	26.7	8.1	8.1	27.0	27.0	107.5	107.5	7.4	7.3	3.0	4.3	7	8	82	85	821080	805811	<0.2	<0.2	1.2	1.3
						1.0	0.1	219	26.7		8.1		27.1		107.5		7.4		3.1		8		82				<0.2		1.2	
					Middle	3.9	0.1	208	26.3	26.3	8.1	8.1	27.8	27.7	105.0	105.1	7.2		4.2		7		85				<0.2		1.5	
						3.9	0.1	228	26.3		8.1		27.7		105.1		7.3		4.2		8		85				<0.2		1.2	
					Bottom	6.7	0.1	203	25.8	25.8	8.1	8.1	28.8	28.8	98.7	98.8	6.8	6.8	5.7		9		88				<0.2		1.2	
						6.7	0.1	221	25.8		8.1		28.8		98.8		6.8		5.7		10		88				<0.2		1.2	
IM7	Cloudy	Moderate	16:47	8.8	Surface	1.0	0.1	252	27.0	27.0	8.1	8.1	26.4	26.4	109.5	109.5	7.5	7.3	2.3	3.9	8	9	82	86	821333	806823	<0.2	<0.2	1.2	1.2
						1.0	0.1	262	27.0		8.1		26.4		109.4		7.5		2.3		8		83				<0.2		1.2	
					Middle	4.4	0.1	143	26.1	26.1	8.1	8.1	28.2	28.2	102.2	102.1	7.1		3.8		8		85				<0.2		1.2	
						4.4	0.2	153	26.1		8.1		28.2		101.9		7.0		3.8		9		85				<0.2		1.3	
					Bottom	7.8	0.1	127	25.5	25.5	8.0	8.0	29.3	29.3	89.7	89.8	6.2	6.2	5.6		10		89				<0.2		1.2	
						7.8	0.1	130	25.5		8.0		29.3		89.8		6.2		5.7		11		89				<0.2		1.2	
IM8	Cloudy	Moderate	17:10	8.1	Surface	1.0	0.2	108	26.8	26.8	8.1	8.1	26.3	26.3	101.9	101.9	7.0	7.0	3.8	5.4	7	6	83	85	821813	808131	<0.2	<0.2	1.3	1.3
						1.0	0.2	113	26.8		8.1		26.3		101.8		7.0		3.8		7		84				<0.2		1.3	
					Middle	4.1	0.2	59	26.6	26.6	8.2	8.2	26.6	26.7	101.4	101.5	7.0		4.2		6		85				<0.2		1.3	
						4.1	0.2	64	26.5		8.2		26.8		101.5		7.0		4.3		5		84				<0.2		1.3	
					Bottom	7.1	0.2	30	26.0	26.0	8.2	8.2	28.3	28.2	98.5	98.8	6.8	6.9	7.7		4		87				<0.2		1.3	
						7.1	0.2	30	26.0		8.2		28.1		99.0		6.9		8.4		4		88				<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 14 May 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	17:16	7.7	Surface	1.0	0.4	147	26.7	26.7	8.1	8.1	26.1	26.2	100.4	100.4	7.0	6.9	3.7	4.5	6	6	84	88	822100	808822	<0.2	<0.2	1.3	1.3
						1.0	0.4	159	26.6		8.1		26.2		100.4		7.0		3.8		6		85				<0.2		1.3	
					Middle	3.9	0.3	124	26.6	26.6	8.2	8.2	26.4	26.3	97.3	97.5	6.7		4.0		7		88				<0.2		1.4	
						3.9	0.4	129	26.6		8.2		26.3		97.7		6.8		4.1		6		88				<0.2		1.3	
					Bottom	6.7	0.4	84	25.8	25.9	8.2	8.2	28.6	28.6	95.8	95.8	6.6	6.6	5.8		7		90				<0.2		1.3	
						6.7	0.4	86	25.9		8.2		28.6		95.8		6.6		5.9		6		91				<0.2		1.3	
IM10	Cloudy	Moderate	17:22	7.8	Surface	1.0	0.4	120	26.9	26.9	8.2	8.2	26.0	26.0	103.2	103.2	7.1	6.8	3.2	5.6	7	7	84	88	822407	809780	<0.2	<0.2	1.3	1.3
						1.0	0.5	123	26.9		8.2		26.0		103.1		7.1		3.2		6		85				<0.2		1.3	
					Middle	3.9	0.5	125	26.6	26.6	8.2	8.2	26.6	26.6	94.0	94.5	6.5		3.7		6		89				<0.2		1.3	
						3.9	0.5	128	26.5		8.2		26.5		94.9		6.6		4.0		7		89				<0.2		1.3	
					Bottom	6.8	0.3	115	25.9	25.9	8.2	8.2	28.3	28.2	91.8	91.9	6.4	6.4	10.0		7		89				<0.2		1.4	
						6.8	0.3	116	25.9		8.2		28.1		92.0		6.4		9.7		8		90				<0.2		1.3	
IM11	Cloudy	Moderate	17:32	8.6	Surface	1.0	0.6	134	26.6	26.6	8.2	8.2	26.5	26.5	98.4	98.4	6.8	6.4	4.1	7.5	9	8	84	88	822043	811453	<0.2	<0.2	1.3	1.3
						1.0	0.6	140	26.6		8.2		26.6		98.3		6.8		4.3		8		85				<0.2		1.3	
					Middle	4.3	0.5	121	25.9	25.9	8.2	8.2	27.8	27.8	86.8	86.7	6.0		7.9		7		89				<0.2		1.4	
						4.3	0.5	131	25.9		8.2		27.9		86.6		6.0		8.5		8		90				<0.2		1.3	
					Bottom	7.6	0.4	116	25.9	25.9	8.1	8.1	27.9	27.9	86.7	86.8	6.0	6.0	10.3		7		89				<0.2		1.3	
						7.6	0.4	125	25.9		8.1		27.9		86.8		6.0		10.2		6		90				<0.2		1.3	
IM12	Cloudy	Moderate	17:38	10.0	Surface	1.0	0.4	102	26.5	26.5	8.2	8.2	26.8	26.9	95.6	95.6	6.6	6.4	4.4	7.1	6	7	85	87	821460	812038	<0.2	<0.2	1.3	1.3
						1.0	0.4	103	26.5		8.2		26.9		95.5		6.6		4.6		6		84				<0.2		1.3	
					Middle	5.0	0.4	98	26.0	26.0	8.2	8.2	27.7	27.8	89.9	89.7	6.2		8.1		6		87				<0.2		1.5	
						5.0	0.5	104	25.9		8.2		27.9		89.4		6.2		8.5		6		88				<0.2		1.3	
					Bottom	9.0	0.3	84	25.8	25.9	8.2	8.2	28.2	28.1	81.3	81.5	5.6	5.7	8.7		8		89				<0.2		1.3	
						9.0	0.3	89	25.9		8.2		28.0		81.6		5.7		8.4		8		90				<0.2		1.3	
SR1A	Cloudy	Calm	17:56	5.0	Surface	1.0	-	-	26.3	26.3	8.1	8.1	27.0	27.1	94.2	94.0	6.5	6.5	4.0	4.8	8	7	-	-	819970	812657	-	-	-	-
						1.0	-	-	26.2		8.1		27.2		93.7		6.5		4.3		7		-				-		-	
					Middle	2.5	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.5	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	-	-	25.8	25.8	8.1	8.1	28.2	28.2	82.0	82.3	5.7	5.7	5.5		7		-				-		-	
						4.0	-	-	25.8		8.1		28.2		82.5		5.7		5.5		6		-				-		-	
SR2	Cloudy	Moderate	18:08	4.7	Surface	1.0	0.4	71	26.3	26.3	8.2	8.2	27.2	27.3	92.8	92.7	6.4	6.4	4.1	4.5	9	10	85	87	821442	814146	<0.2	<0.2	1.3	1.3
						1.0	0.4	76	26.2		8.2		27.4		92.5		6.4		4.1		8		85				<0.2		1.3	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.3	73	26.1	26.2	8.2	8.1	27.9	27.9	84.5	84.6	5.8	5.8	5.0		10		88				<0.2		1.3	
						3.7	0.3	73	26.3		8.1		27.8		84.7		5.8		4.9		11		88				<0.2		1.3	
SR3	Cloudy	Moderate	17:04	9.9	Surface	1.0	0.2	197	26.7	26.7	8.2	8.2	25.9	26.0	102.9	102.8	7.1	6.9	3.6	6.0	9	8	-	-	822164	807559	-	-	-	-
						1.0	0.2	197	26.6		8.2		26.1		102.7		7.1		3.7		10		-				-		-	
					Middle	5.0	0.2	190	26.1	26.1	8.2	8.2	26.8	26.9	95.1	95.5	6.6		5.4		9		-				-		-	
						5.0	0.2	207	26.0		8.2		26.9		95.8		6.7		6.1		8		-				-		-	
					Bottom	8.9	0.1	38	25.7	25.8	8.2	8.2	28.9	28.9	94.4	94.2	6.5	6.5	8.6		6		-				-		-	
						8.9	0.1	38	25.8		8.2		28.9		94.0		6.5		8.9		6		-				-		-	
SR4A	Cloudy	Calm	18:12	9.1	Surface	1.0	0.1	56	26.7	26.7	8.2	8.2	28.4	28.5	121.9	121.8	8.3	7.9	2.8	5.2	8	9	-	-	817199	807814	-	-	-	-
						1.0	0.1	56	26.7		8.2		28.5		121.7		8.3		2.9		7		-				-		-	
					Middle	4.6	0.0	30	26.2	26.2	8.1	8.1	28.8	28.8	107.2	107.2	7.4		4.3		8		-				-		-	
						4.6	0.0	31	26.2		8.1		28.8		107.2		7.4		4.2		8		-				-		-	
					Bottom	8.1	0.1	122	25.4	25.4	8.1	8.1	29.5	29.5	85.8	85.9	6.0	6.0	8.4		10		-				-		-	
						8.1	0.1	126	25.4		8.1		29.5		85.9		6.0		8.4		10		-				-		-	
SR5A	Cloudy	Calm	18:30	3.4	Surface	1.0	0.1	118	27.0	27.0	8.1	8.1	27.3	27.3	109.6	109.6	7.5	7.5	3.0	4.3	7	8	-	-	816616	810696	-	-	-	-
						1.0	0.1	122	27.0		8.1		27.3		109.6		7.5		3.1		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.4	0.0	82	26.6	26.7	8.1	8.1	27.9	27.9	104.9	105.0	7.2	7.2	5.6		8		-				-		-	
						2.4	0.0	84	26.7		8.1		27.9		105.1		7.2		5.6		10		-				-		-	
SR6A	Cloudy	Calm	18:59	4.0	Surface	1.0	0.1	78	26.3	26.3	7.9	7.9	27.2	27.2	86.1	86.0	6.0	6.0	8.4	9.1	11	11	-	-	817940	814721	-	-	-	-
						1.0	0.1	80	26.2		7.9		27.3		85.9		6.0		8.5		11		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	0.1	213	25.9	25.9	8.0	8.0	27.8	27.8	81.7	81.8	5.7	5.7	9.7		11		-				-		-	
						3.0	0.1	215	25.9		8.0		27.8		81.9		5.7		9.6		12		-				-		-	
SR7	Cloudy	Moderate	18:55	16.0	Surface	1.0	0.6	67	26.4	26.4	8.3	8.3	27.5	27.5	99.9	99.9	6.9	6.6	2.6	3.0	11	10	-	-	823645	823728	-	-	-	-
						1.0	0.7	67	26.4		8.3		27.5		99.8		6.9		2.6		10		-				-		-	
					Middle	8.0	0.3	52	25.9	25.9	8.3	8.3	28.5	28.5	91.1	91.0	6.3		3.0		10		-				-		-	
						8.0	0.4	53	25.8		8.3		28.5		90.8		6.3		3.0		10		-				-		-	
					Bottom	15.0	0.2	353	25.6	25.6	8.3	8.3	29.0	29.0	88.6	88.6	6.1	6.1	3.4		8		-				-		-	
						15.0	0.2	325	25.6		8.3		29.0		88.6		6.1		3.5		8		-				-		-	
SR8	Cloudy	Moderate	17:48	5.1	Surface	1.0	-	-	26.8	26.8	8.2	8.2	26.7	26.8	88.3	88.3	6.1	6.1	5.3	6.6	5	6	-	-	820375	811629	-	-	-	-
						1.0	-	-	26.7		8.2		26.8		88.2		6.1		5.6		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	-	-	25.8	25.8	8.2	8.2	28.0	28.0	77.4	77.6	5.4	5.4	7.7		6		-				-		-	
						4.1	-	-	25.8		8.2		28.0		77.7		5.4		7.8		7		-				-		-	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 14 May 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	06:37	8.4	Surface	1.0	0.1	21	25.9	25.9	8.1	8.1	27.1	27.1	94.6	94.7	6.6	6.6	2.4	4.4	6	6	83	86	815626	804242	<0.2	<0.2	1.6	1.4
						1.0	0.1	22	25.8		8.1		27.1		94.7		6.6		2.5		5		83				<0.2		1.6	
					Middle	4.2	0.1	85	25.5	25.5	8.1	8.1	29.6	29.6	93.8	93.7	6.5		3.6		7		85				<0.2		1.6	
						4.2	0.1	91	25.5		8.1		29.6		93.5		6.5		3.6		6		85				<0.2		1.5	
					Bottom	7.4	0.1	178	25.3	25.3	8.1	8.1	29.8	29.8	89.8	89.9	6.2	6.2	7.2		7		89				<0.2		1.1	
						7.4	0.1	178	25.3		8.1		29.8		89.9		6.2		7.1		6		88				<0.2		1.0	
C2	Cloudy	Moderate	06:47	12.1	Surface	1.0	0.1	308	26.5	26.5	8.3	8.3	23.3	23.3	89.8	89.8	6.3	6.1	3.5	5.3	6	7	86	88	825704	806964	<0.2	<0.2	1.3	1.3
						1.0	0.1	317	26.5		8.3		23.4		89.8		6.3		3.5		6		86				<0.2		1.3	
					Middle	6.1	0.1	330	26.1	26.1	8.3	8.3	26.7	26.8	84.0	84.0	5.9		3.8		7		88				<0.2		1.3	
						6.1	0.2	351	26.1		8.3		26.8		83.9		5.9		3.8		6		89				<0.2		1.4	
					Bottom	11.1	0.2	258	25.6	25.6	8.3	8.3	28.3	28.3	76.7	76.9	5.3	5.4	8.8		8		89				<0.2		1.4	
						11.1	0.2	267	25.6		8.3		28.3		77.0		5.4		8.7		7		90				<0.2		1.3	
C3	Cloudy	Moderate	04:56	11.9	Surface	1.0	0.5	284	25.2	25.2	8.0	8.0	29.1	29.1	84.5	84.5	5.9	5.7	2.5	3.3	7	9	81	85	822091	817826	<0.2	<0.2	1.4	1.4
						1.0	0.5	291	25.2		8.0		29.1		84.4		5.9		2.6		7		82				<0.2		1.4	
					Middle	6.0	0.4	277	24.6	24.6	8.0	8.0	31.0	31.0	77.7	77.8	5.4		3.3		10		84				<0.2		1.4	
						6.0	0.4	277	24.6		8.0		31.0		77.8		5.4		3.3		9		85				<0.2		1.4	
					Bottom	10.9	0.2	290	24.6	24.7	8.0	8.0	31.0	31.0	80.8	80.9	5.6	5.7	4.0		11		88				<0.2		1.5	
						10.9	0.2	315	24.7		8.0		31.0		81.0		5.7		3.9		12		89				<0.2		1.4	
IM1	Cloudy	Moderate	06:58	5.0	Surface	1.0	0.1	83	25.7	25.7	8.1	8.1	27.5	27.5	88.3	88.3	6.2	6.2	2.8	3.0	5	5	84	86	817962	807137	<0.2	<0.2	1.0	1.0
						1.0	0.1	88	25.7		8.1		27.5		88.2		6.2		2.8		5		85				<0.2		1.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.1	229	25.5	25.5	8.1	8.1	28.9	28.9	84.4	84.4	5.9	5.9	3.3		4		87				<0.2		1.0	
						4.0	0.1	230	25.5		8.1		28.8		84.3		5.9		3.3		6		86				<0.2		1.0	
IM2	Cloudy	Moderate	07:05	7.1	Surface	1.0	0.1	22	25.7	25.7	8.1	8.1	27.6	27.6	89.3	89.3	6.2	6.1	2.9	3.8	5	5	83	85	818153	806183	<0.2	<0.2	1.2	1.1
						1.0	0.1	22	25.7		8.1		27.6		89.2		6.2		2.9		4		82				<0.2		1.3	
					Middle	3.6	0.1	101	25.4	25.4	8.1	8.1	29.4	29.4	84.7	84.7	5.9		3.6		5		84				<0.2		1.1	
						3.6	0.1	101	25.4		8.1		29.4		84.6		5.9		3.5		5		84				<0.2		1.0	
					Bottom	6.1	0.0	143	25.1	25.1	8.1	8.1	29.9	29.9	82.1	82.2	5.7	5.7	5.0		5		87				<0.2		1.1	
						6.1	0.0	146	25.1		8.1		29.9		82.2		5.7		5.0		5		88				<0.2		1.1	
IM3	Cloudy	Moderate	07:11	7.3	Surface	1.0	0.0	18	25.7	25.7	8.1	8.1	27.4	27.4	90.2	90.2	6.3	6.2	2.8	3.3	5	6	83	85	818774	805592	<0.2	<0.2	1.1	1.2
						1.0	0.0	19	25.7		8.1		27.4		90.1		6.3		2.8		6		82				<0.2		1.1	
					Middle	3.7	0.2	86	25.4	25.4	8.1	8.1	29.2	29.2	87.2	87.2	6.1		3.3		6		84				<0.2		1.1	
						3.7	0.2	93	25.4		8.1		29.2		87.2		6.1		3.4		6		85				<0.2		1.2	
					Bottom	6.3	0.1	258	25.3	25.3	8.1	8.1	29.7	29.7	84.1	84.2	5.8	5.9	3.6		6		87				<0.2		1.2	
						6.3	0.1	283	25.3		8.1		29.7		84.2		5.9		3.6		7		87				<0.2		1.3	
IM4	Cloudy	Moderate	07:21	8.2	Surface	1.0	0.1	288	25.7	25.7	8.1	8.1	27.6	27.6	90.9	90.9	6.3	6.1	2.8	3.9	6	6	82	84	819713	804621	<0.2	<0.2	1.1	1.3
						1.0	0.1	296	25.7		8.1		27.6		90.8		6.3		2.8		5		82				<0.2		1.1	
					Middle	4.1	0.1	350	25.4	25.4	8.1	8.1	29.2	29.2	85.6	85.6	6.0		3.3		6		84				<0.2		1.2	
						4.1	0.1	322	25.4		8.1		29.2		85.5		5.9		3.3		6		84				<0.2		1.2	
					Bottom	7.2	0.0	47	25.3	25.3	8.1	8.1	29.7	29.7	80.9	81.0	5.6	5.6	5.6		7		87				<0.2		1.7	
						7.2	0.0	47	25.3		8.1		29.7		81.0		5.6		5.5		7		87				<0.2		1.6	
IM5	Cloudy	Moderate	07:28	7.6	Surface	1.0	0.1	312	26.2	26.2	8.1	8.1	25.4	25.5	89.9	89.9	6.3	6.1	2.6	4.3	6	5	82	85	820731	804857	<0.2	<0.2	1.3	1.3
						1.0	0.1	342	26.2		8.1		25.5		89.9		6.3		2.6		5		83				<0.2		1.2	
					Middle	3.8	0.2	67	25.4	25.4	8.1	8.1	29.3	29.3	83.4	83.4	5.8		3.9		5		84				<0.2		1.2	
						3.8	0.2	73	25.4		8.1		29.3		83.3		5.8		3.9		6		85				<0.2		1.3	
					Bottom	6.6	0.1	61	25.3	25.3	8.1	8.1	29.6	29.6	81.4	81.5	5.7	5.7	6.4		4		87				<0.2		1.3	
						6.6	0.1	62	25.3		8.1		29.6		81.5		5.7		6.3		4		88				<0.2		1.2	
IM6	Cloudy	Moderate	07:37	7.2	Surface	1.0	0.1	270	26.5	26.5	8.1	8.1	24.4	24.4	90.6	90.6	6.4	6.1	2.5	3.6	5	5	82	84	821082	805814	<0.2	<0.2	1.4	1.5
						1.0	0.1	277	26.5		8.1		24.4		90.5		6.3		2.5		4		81				<0.2		1.4	
					Middle	3.6	0.1	51	25.6	25.6	8.1	8.1	28.3	28.3	84.9	84.9	5.9		3.6		4		84				<0.2		1.4	
						3.6	0.1	53	25.6		8.1		28.3		84.8		5.9		3.6		5		84				<0.2		1.4	
					Bottom	6.2	0.3	76	25.4	25.4	8.1	8.1	29.4	29.4	82.8	82.8	5.8	5.8	4.7		7		87				<0.2		1.6	
						6.2	0.3	80	25.4		8.1		29.4		82.8		5.8		4.7		6		88				<0.2		1.6	
IM7	Cloudy	Moderate	07:43	8.6	Surface	1.0	0.1	224	26.6	26.6	8.1	8.1	24.4	24.4	88.1	88.1	6.2	6.0	2.8	4.0	10	8	82	85	821362	806822	<0.2	<0.2	1.6	1.6
						1.0	0.1	242	26.6		8.1		24.4		88.0		6.2		2.8		10		82				<0.2		1.7	
					Middle	4.3	0.2	80	25.7	25.7	8.1	8.1	28.0	28.1	84.1	84.0	5.9		4.1		8		85				<0.2		1.6	
						4.3	0.2	82	25.6		8.1		28.2		83.9		5.8		4.2		6		85				<0.2		1.6	
					Bottom	7.6	0.1	87	25.5	25.6	8.0	8.0	29.1	29.1	83.5	83.6	5.8	5.8	5.0		5		88				<0.2		1.5	
						7.6	0.2	93	25.6		8.0		29.1		83.7		5.8		4.9		6		88				<0.2		1.5	
IM8	Cloudy	Moderate	06:21	8.1	Surface	1.0	0.1	87	26.6	26.6	8.2	8.2	24.0	24.0	90.0	90.0	6.3	6.3	4.5	5.5	7	6	86	87	821823	808155	<0.2	<0.2	1.3	1.4
						1.0	0.1	91	26.6		8.2		24.0		90.0		6.3		4.4		6		83				<0.2		1.4	
					Middle	4.1	0.3	65	26.1	26.1	8.3	8.3	25.5	25.5	88.1	88.0	6.2		5.0		6		88				<0.2		1.5	
						4.1	0.3	68	26.0		8.3		25.5		87.9		6.2		5.4		7		88				<0.2		1.4	
					Bottom	7.1	0.4	51	25.6	25.6	8.3	8.3	28.5	28.5	87.2	87.3	6.1	6.1	6.9		5		89				<0.2		1.4	
						7.1	0.4	53	25.6		8.3		28.5		87.4		6.1		6.8		6		90				<0.2		1.4	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 14 May 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	06:15	7.5	Surface	1.0	0.1	183	26.6	26.6	8.2	8.2	24.2	24.2	90.2	90.2	6.3	6.3	4.8	5.9	4	5	81	85	822083	808811	<0.2	<0.2	1.3	1.4
						1.0	0.2	194	26.6		8.2		24.2		90.2		6.3		4.8		5		82				<0.2		1.4	
					Middle	3.8	0.1	126	26.5	26.5	8.2	8.2	24.7	24.8	90.0	89.9	6.3		5.0		6		84				<0.2		1.4	
						3.8	0.1	133	26.4		8.3		24.8		89.7		6.3		5.3		5		84				<0.2		1.3	
					Bottom	6.5	0.3	74	25.9	26.0	8.3	8.3	27.8	27.8	88.6	88.8	6.2	6.2	7.9		6		89				<0.2		1.4	
						6.5	0.3	77	26.0		8.3		27.8		89.0		6.2		7.9		6		89				<0.2		1.4	
IM10	Cloudy	Moderate	06:07	8.0	Surface	1.0	0.3	109	26.6	26.6	8.2	8.2	24.7	24.8	88.3	88.0	6.2	6.0	5.3	5.5	8	6	86	88	822364	809783	<0.2	<0.2	1.3	1.3
						1.0	0.3	115	26.5		8.2		25.0		87.7		6.1		5.2		8		86				<0.2		1.3	
					Middle	4.0	0.2	113	26.2	26.2	8.2	8.2	26.4	26.4	85.1	85.1	5.9		5.4		6		89				<0.2		1.4	
						4.0	0.2	116	26.2		8.2		26.4		85.0		5.9		5.6		5		90				<0.2		1.3	
					Bottom	7.0	0.2	148	26.1	26.1	8.1	8.1	26.6	26.6	84.3	84.5	5.9	5.9	5.8		6		90				<0.2		1.3	
						7.0	0.2	160	26.1		8.1		26.6		84.6		5.9		5.8		5		89				<0.2		1.3	
IM11	Cloudy	Moderate	05:56	8.3	Surface	1.0	0.1	289	26.1	26.1	8.3	8.3	26.3	26.3	89.2	89.2	6.2	6.2	3.1	3.7	5	5	85	86	822040	811469	<0.2	<0.2	1.4	1.4
						1.0	0.1	299	26.1		8.3		26.3		89.1		6.2		3.1		4		86				<0.2		1.3	
					Middle	4.2	0.1	224	26.0	26.0	8.3	8.3	26.9	26.9	86.9	86.9	6.1		3.2		4		85				<0.2		1.4	
						4.2	0.1	244	26.0		8.3		26.9		86.9		6.1		3.2		5		85				<0.2		1.3	
					Bottom	7.3	0.2	173	25.8	25.8	8.3	8.3	27.6	27.5	85.0	85.5	5.9	6.0	4.7		6		88				<0.2		1.4	
						7.3	0.2	188	25.8		8.3		27.5		85.9		6.0		4.7		5		89				<0.2		1.3	
IM12	Cloudy	Moderate	05:49	9.2	Surface	1.0	0.2	103	26.1	26.1	8.2	8.2	26.4	26.4	86.4	86.2	6.0	5.9	4.5	4.4	7	5	82	86	821448	812041	<0.2	<0.2	1.3	1.4
						1.0	0.3	104	26.1		8.2		26.5		85.9		6.0		4.5		8		82				<0.2		1.4	
					Middle	4.6	0.1	140	25.9	25.9	8.2	8.2	27.3	27.3	83.3	83.3	5.8		3.8		5		85				<0.2		1.3	
						4.6	0.1	141	25.9		8.2		27.3		83.2		5.8		3.7		4		86				<0.2		1.3	
					Bottom	8.2	0.1	188	25.7	25.7	8.2	8.2	28.0	28.0	80.8	81.0	5.6	5.7	4.9		4		89				<0.2		1.5	
						8.2	0.1	192	25.7		8.2		28.0		81.1		5.7		5.0		4		89				<0.2		1.4	
SR1A	Cloudy	Calm	05:30	5.2	Surface	1.0	-	-	26.4	26.4	8.2	8.2	25.6	25.7	86.3	86.2	6.0	6.0	3.1	3.6	6	6	-	-	819982	812661	-	-	-	-
						1.0	-	-	26.4		8.2		25.7		86.0		6.0		3.1		6		-				-		-	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	-	-	26.3	26.3	8.2	8.2	26.3	26.3	86.7	86.9	6.0	6.1	4.1		6		-				-		-	
						4.2	-	-	26.2		8.2		26.3		87.0		6.1		4.2		6		-				-		-	
SR2	Cloudy	Moderate	05:17	5.0	Surface	1.0	0.3	357	26.0	26.0	8.1	8.1	26.9	27.0	88.2	88.2	6.2	6.2	3.1	3.6	4	5	81	85	821460	814145	<0.2	<0.2	1.3	1.4
						1.0	0.3	328	25.9		8.1		27.1		88.1		6.1		3.2		4		82				<0.2		1.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.3	354	25.6	25.6	8.1	8.1	28.2	28.2	83.9	84.1	5.9	5.9	4.1		5		88				<0.2		1.3	
						4.0	0.3	326	25.6		8.1		28.2		84.3		5.9		4.2		5		89				<0.2		1.4	
SR3	Cloudy	Moderate	06:27	9.3	Surface	1.0	0.1	155	26.7	26.7	8.2	8.2	23.7	23.8	89.4	89.4	6.3	6.1	3.8	5.9	6	5	-	-	822126	807552	-	-	-	-
						1.0	0.1	161	26.7		8.2		23.9		89.3		6.3		3.9		5		-				-		-	
					Middle	4.7	0.1	157	26.4	26.4	8.2	8.2	25.3	25.3	84.8	84.9	5.9		5.3		5		-				-		-	
						4.7	0.1	169	26.4		8.2		25.3		84.9		5.9		5.6		5		-				-		-	
					Bottom	8.3	0.3	31	25.6	25.6	8.2	8.2	28.6	28.6	86.1	86.2	6.0	6.0	8.4		5		-				-		-	
						8.3	0.3	33	25.6		8.2		28.6		86.3		6.0		8.4		4		-				-		-	
SR4A	Cloudy	Calm	06:15	9.2	Surface	1.0	0.4	75	25.6	25.6	8.1	8.1	28.0	28.0	87.5	87.5	6.1	6.0	3.0	4.3	4	4	-	-	817168	807793	-	-	-	-
						1.0	0.4	75	25.6		8.1		28.0		87.4		6.1		3.0		3		-				-		-	
					Middle	4.6	0.3	78	25.4	25.4	8.1	8.1	29.4	29.3	83.6	83.6	5.8		4.3		4		-				-		-	
						4.6	0.3	78	25.4		8.1		29.3		83.6		5.8		4.3		3		-				-		-	
					Bottom	8.2	0.2	69	25.3	25.3	8.1	8.1	29.6	29.6	83.0	83.0	5.8	5.8	5.5		5		-				-		-	
						8.2	0.3	75	25.3		8.1		29.6		83.0		5.8		5.5		5		-				-		-	
SR5A	Cloudy	Calm	05:57	3.5	Surface	1.0	0.1	97	26.4	26.4	8.0	8.0	26.1	26.1	86.8	86.8	6.0	6.0	3.5	3.6	5	5	-	-	816576	810674	-	-	-	-
						1.0	0.1	98	26.4		8.0		26.1		86.7		6.0		3.6		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.5	0.1	159	26.3	26.3	8.1	8.1	26.3	26.4	85.9	85.9	6.0	6.0	3.7		5		-				-		-	
						2.5	0.1	165	26.3		8.1		26.4		85.8		6.0		3.7		5		-				-		-	
SR6A	Cloudy	Calm	05:28	4.1	Surface	1.0	0.0	256	26.1	26.1	8.0	8.0	26.4	26.4	85.2	85.0	6.0	6.0	2.5	3.0	6	5	-	-	817964	814732	-	-	-	-
						1.0	0.0	262	26.1		8.0		26.5		84.7		5.9		2.7		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.0	295	26.1	26.1	8.0	8.0	26.6	26.6	84.3	84.4	5.9	5.9	3.4		4		-				-		-	
						3.1	0.0	310	26.1		8.0		26.6		84.4		5.9		3.4		4		-				-		-	
SR7	Cloudy	Moderate	04:28	15.8	Surface	1.0	0.1	32	25.1	25.1	7.9	7.9	29.6	29.6	79.5	79.5	5.5	5.4	2.9	3.3	4	5	-	-	823643	823759	-	-	-	-
						1.0	0.1	32	25.1		7.9		29.6		79.4		5.5		2.9		4		-				-		-	
					Middle	7.9	0.1	21	24.5	24.5	8.0	8.0	31.1	31.1	76.1	76.1	5.3		3.3		4		-				-		-	
						7.9	0.1	21	24.5		8.0		31.1		76.1		5.3		3.4		5		-				-		-	
					Bottom	14.8	0.1	71	24.3	24.3	8.0	8.0	31.6	31.6	75.4	75.5	5.3	5.3	3.7		5		-				-		-	
						14.8	0.1	77	24.3		8.0		31.6		75.5		5.3		3.6		5		-				-		-	
SR8	Cloudy	Moderate	05:40	5.1	Surface	1.0	-	-	26.3	26.3	8.2	8.2	26.2	26.2	88.1	87.8	6.1	6.1	4.8	4.7	4	5	-	-	820433	811652	-	-	-	-
						1.0	-	-	26.3		8.2		26.2		87.5		6.1		4.8		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	-	-	26.2	26.2	8.2	8.2	26.7	26.7	86.4	86.6	6.0	6.0	4.6		4		-				-		-	
						4.1	-	-	26.2		8.2		26.7		86.8		6.0		4.6		5		-				-		-	

DA: Depth-Averaged

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

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 16 May 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	09:41	8.3	Surface	1.0	0.0	286	26.6	26.6	8.0	8.0	24.6	24.6	107.1	107.0	7.5	7.2	3.4	5.4	2	4	85	87	815638	804242	<0.2	<0.2	2.1	2.0
						1.0	0.0	286	26.5		8.0		24.6		106.9		7.5		3.4		3		85				<0.2		2.2	
					Middle	4.2	0.1	178	25.9	25.9	8.0	8.0	29.4	29.4	99.0	98.7	6.8		4.7		3		88				<0.2		1.9	
						4.2	0.1	184	25.8		8.0		29.4		98.3		6.8		4.8		4		88				<0.2		2.0	
					Bottom	7.3	0.1	209	25.8	25.8	8.0	8.0	29.6	29.6	93.7	93.8	6.5	6.5	8.0		5		89				<0.2		2.0	
						7.3	0.1	220	25.8		8.0		29.6		93.9		6.5		8.1		4		89				<0.2		1.9	
C2	Sunny	Moderate	10:41	12.1	Surface	1.0	0.4	194	27.5	27.5	8.2	8.2	18.8	18.7	109.3	109.0	7.8	7.1	4.8	6.3	4	5	86	89	825702	806924	<0.2	<0.2	2.2	2.2
						1.0	0.4	204	27.4		8.2		18.7		108.7		7.8		4.9		5		88				<0.2		2.2	
					Middle	6.1	0.3	188	26.8	26.8	8.3	8.3	25.5	25.4	90.3	90.3	6.3		5.2		5		89				<0.2		2.1	
						6.1	0.4	196	26.8		8.3		25.4		90.3		6.3		5.4		4		88				<0.2		2.2	
					Bottom	11.1	0.3	175	25.4	25.5	8.1	8.1	29.6	29.6	71.6	71.8	5.0	5.0	8.7		6		91				<0.2		2.1	
						11.1	0.3	186	25.5		8.1		29.6		71.9		5.0		8.7		5		92				<0.2		2.1	
C3	Sunny	Moderate	08:41	12.3	Surface	1.0	0.2	281	25.8	25.8	8.0	8.0	28.8	28.8	91.4	91.4	6.3	6.1	3.5	4.3	5	6	86	89	822100	817801	<0.2	<0.2	1.0	1.0
						1.0	0.2	283	25.8		8.0		28.8		91.4		6.3		3.5		6		87				<0.2		1.0	
					Middle	6.2	0.2	263	25.6	25.6	8.0	8.0	29.5	29.5	85.3	85.3	5.9		3.9		7		88				<0.2		0.9	
						6.2	0.2	268	25.6		8.0		29.5		85.2		5.9		4.0		6		89				<0.2		1.0	
					Bottom	11.3	0.1	274	25.1	25.1	8.0	8.0	30.6	30.6	79.7	79.8	5.5	5.5	5.3		6		90				<0.2		1.1	
						11.3	0.2	281	25.1		8.0		30.6		79.8		5.5		5.4		6		91				<0.2		1.0	
IM1	Fine	Moderate	10:03	4.9	Surface	1.0	0.1	221	27.0	27.0	8.0	8.0	25.0	25.1	104.6	104.5	7.3	7.3	5.6	7.1	2	3	84	86	817963	807145	<0.2	<0.2	1.9	1.9
						1.0	0.1	236	26.9		8.0		25.2		104.3		7.2		6.1		2		84				<0.2		1.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	0.1	163	26.7	26.7	8.0	8.0	25.9	25.9	97.5	97.6	6.8	6.8	8.4		3		88				<0.2		1.8	
						3.9	0.1	177	26.7		8.0		25.9		97.6		6.8		8.3		3		88				<0.2		1.9	
IM2	Fine	Moderate	10:11	7.0	Surface	1.0	0.2	176	26.8	26.8	8.0	8.0	24.7	24.8	101.1	101.0	7.0	6.8	5.2	9.6	3	3	84	88	818180	806184	<0.2	<0.2	2.0	2.0
						1.0	0.2	181	26.7		8.0		24.8		100.9		7.0		5.7		4		84				<0.2		1.9	
					Middle	3.5	0.2	128	26.2	26.2	8.0	8.0	27.4	27.4	93.6	93.6	6.5		10.5		4		88				<0.2		1.9	
						3.5	0.2	129	26.2		8.0		27.4		93.6		6.5		10.6		3		89				<0.2		2.1	
					Bottom	6.0	0.1	94	26.2	26.2	8.0	8.0	27.5	27.5	94.6	94.8	6.6	6.6	12.8		3		90				<0.2		2.0	
						6.0	0.1	99	26.2		8.0		27.5		94.9		6.6		12.9		3		90				<0.2		2.0	
IM3	Fine	Moderate	10:18	7.1	Surface	1.0	0.2	183	27.4	27.4	8.0	8.0	23.2	23.2	106.7	106.7	7.4	7.0	3.5	7.2	5	5	85	88	818760	805577	<0.2	<0.2	2.1	2.2
						1.0	0.2	193	27.3		8.0		23.2		106.6		7.4		3.7		4		85				<0.2		2.2	
					Middle	3.6	0.2	143	26.4	26.4	7.9	7.9	26.7	26.7	97.3	95.7	6.8		6.9		5		88				<0.2		2.2	
						3.6	0.2	145	26.3		7.9		26.8		94.1		6.5		7.3		6		89				<0.2		2.2	
					Bottom	6.1	0.2	107	26.2	26.2	8.0	8.0	27.2	27.2	93.7	93.8	6.5	6.5	10.8		6		89				<0.2		2.2	
						6.1	0.2	110	26.2		8.0		27.2		93.8		6.5		10.9		5		90				<0.2		2.3	
IM4	Fine	Moderate	10:27	8.0	Surface	1.0	0.3	195	26.7	26.7	7.9	7.9	25.6	25.7	99.5	99.3	6.9	6.6	6.1	7.8	6	6	85	88	819735	804613	<0.2	<0.2	1.9	1.9
						1.0	0.3	208	26.7		7.9		25.8		99.1		6.9		6.2		7		85				<0.2		1.8	
					Middle	4.0	0.2	173	26.2	26.2	7.9	7.9	27.1	27.1	90.9	90.9	6.3		8.0		6		88				<0.2		1.8	
						4.0	0.2	186	26.2		7.9		27.1		90.8		6.3		8.2		5		89				<0.2		1.9	
					Bottom	7.0	0.1	107	26.2	26.2	7.9	7.9	27.4	27.4	91.4	91.5	6.3	6.4	9.3		5		90				<0.2		1.9	
						7.0	0.1	113	26.2		7.9		27.4		91.5		6.4		9.3		4		90				<0.2		1.8	
IM5	Fine	Moderate	10:36	7.3	Surface	1.0	0.3	228	26.9	26.9	7.9	7.9	24.7	24.7	98.7	98.7	6.9	6.8	6.3	7.3	4	5	84	88	820721	804880	<0.2	<0.2	2.1	2.0
						1.0	0.3	238	26.9		7.9		24.7		98.7		6.9		6.4		5		85				<0.2		2.0	
					Middle	3.7	0.2	193	26.6	26.6	7.9	7.9	25.9	25.9	94.5	94.5	6.6		7.4		6		89				<0.2		2.0	
						3.7	0.2	202	26.6		7.9		25.9		94.5		6.6		7.4		5		89				<0.2		2.1	
					Bottom	6.3	0.2	174	26.6	26.6	7.9	7.9	26.0	26.0	95.3	95.5	6.6	6.6	8.2		6		90				<0.2		2.0	
						6.3	0.2	183	26.6		7.9		26.0		95.6		6.6		8.2		6		90				<0.2		2.0	
IM6	Fine	Moderate	10:44	7.2	Surface	1.0	0.2	255	27.4	27.4	7.9	7.9	22.8	22.8	103.8	103.8	7.2	6.9	5.2	7.2	6	7	85	88	821063	805827	<0.2	<0.2	1.8	1.8
						1.0	0.2	271	27.4		7.9		22.8		103.7		7.2		5.3		6		86				<0.2		1.7	
					Middle	3.6	0.1	208	27.0	27.0	7.9	7.9	24.7	24.7	95.4	95.2	6.6		7.6		7		89				<0.2		1.7	
						3.6	0.2	220	27.0		7.9		24.8		94.9		6.6		7.9		8		89				<0.2		1.7	
					Bottom	6.2	0.2	249	27.0	27.0	7.9	7.9	25.1	25.0	91.7	91.9	6.4	6.4	8.6		7		90				<0.2		1.8	
						6.2	0.2	252	27.0		7.9		25.0		92.0		6.4		8.6		8		90				<0.2		1.8	
IM7	Fine	Moderate	10:53	7.6	Surface	1.0	0.1	273	27.5	27.5	7.9	7.9	22.6	22.6	104.5	104.5	7.3	7.1	3.9	4.4	5	6	86	88	821346	806840	<0.2	<0.2	1.8	1.9
						1.0	0.1	281	27.5		7.9		22.7		104.4		7.3		3.9		5		86				<0.2		1.8	
					Middle	3.8	0.2	235	27.3	27.3	7.9	7.9	24.1	24.1	98.1	98.1	6.8		4.1		5		88				<0.2		1.9	
						3.8	0.2	241	27.3		7.9		24.1		98.1		6.8		4.2		6		88				<0.2		1.9	
					Bottom	6.6	0.1	234	27.1	27.1	7.9	7.9	24.9	24.9	93.6	93.8	6.5	6.5	5.1		6		89				<0.2		1.8	
						6.6	0.1	251	27.1		7.9		24.9		93.9		6.5		5.1		7		90				<0.2		1.9	
IM8	Sunny	Moderate	10:16	7.6	Surface	1.0	0.0	160	27.7	27.7	8.2	8.2	22.5	22.4	102.9	103.0	7.2	7.0	4.9	6.1	5	5	86	88	821824	808155	<0.2	<0.2	2.0	2.0
						1.0	0.0	171	27.6		8.2		22.4		103.0		7.2		4.9		4		87				<0.2		2.0	
					Middle	3.8	0.1	167	27.1	27.1	8.2	8.2	24.5	24.6	96.8	96.8	6.7		6.2		4		88				<0.2		2.1	
						3.8	0.1	175	27.1		8.2		24.6		96.7		6.7		6.5		5		89				<0.2		2.0	
					Bottom	6.6	0.1	168	27.0	27.0	8.2	8.2	24.9	24.9	91.8	92.0	6.4	6.4	7.2		4		90				<0.2		2.0	
						6.6	0.1	184	27.0		8.2		24.9		92.2		6.4		6.9		5		90				<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 16 May 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	10:10	7.6	Surface	1.0	0.1	22	27.7	27.7	8.1	8.1	20.6	20.6	105.4	105.4	7.4	7.2	5.1	7.5	4	5	87	88	822073	808804	<0.2	<0.2	2.2	2.1
						1.0	0.1	23	27.7		8.1		20.6		105.3		7.4		5.0		6		87				<0.2		2.0	
					Middle	3.8	0.1	78	27.4	27.4	8.1	8.1	22.8	22.9	100.1	100.0	7.0		5.0		5		88				<0.2		2.0	
						3.8	0.1	80	27.3		8.1		22.9		99.9		7.0		5.0		6		89				<0.2		2.0	
					Bottom	6.6	0.1	65	27.1	27.1	8.1	8.1	24.8	24.7	91.8	92.0	6.4	6.4	12.9		6		91				<0.2		2.2	
						6.6	0.1	66	27.1		8.1		24.6		92.2		6.4		11.9		5		88				<0.2		2.0	
IM10	Sunny	Moderate	10:02	7.1	Surface	1.0	0.4	99	28.1	28.1	8.1	8.1	19.9	19.9	113.2	113.2	7.9	7.5	4.6	7.2	8	7	86	89	822374	809773	<0.2	<0.2	1.9	2.0
						1.0	0.4	107	28.1		8.1		19.9		113.1		7.9		4.6		7		87				<0.2		2.0	
					Middle	3.6	0.3	105	27.3	27.3	8.0	8.0	21.6	21.6	102.0	101.7	7.2		7.1		6		89				<0.2		2.0	
						3.6	0.4	115	27.2		8.0		21.6		101.4		7.1		7.6		7		88				<0.2		2.0	
					Bottom	6.1	0.3	92	27.0	27.0	8.0	8.0	25.1	25.1	92.1	92.2	6.4	6.4	9.6		6		90				<0.2		1.9	
						6.1	0.3	96	27.0		8.0		25.1		92.3		6.4		9.5		6		91				<0.2		1.9	
IM11	Sunny	Moderate	09:49	7.5	Surface	1.0	0.6	120	27.9	27.9	8.1	8.1	21.1	21.1	115.3	115.0	8.1	7.3	5.1	5.5	7	6	87	88	822056	811474	<0.2	<0.2	1.6	1.6
						1.0	0.7	121	27.8		8.1		21.1		114.7		8.0		5.3		6		86				<0.2		1.6	
					Middle	3.8	0.5	104	27.0	27.0	8.0	8.0	25.0	25.1	95.0	94.8	6.6		5.8		6		88				<0.2		1.6	
						3.8	0.5	107	26.9		8.0		25.2		94.6		6.6		5.7		5		88				<0.2		1.6	
					Bottom	6.5	0.2	81	26.7	26.7	8.0	8.0	26.2	26.2	93.8	94.0	6.5	6.5	5.5		5		90				<0.2		1.6	
						6.5	0.2	81	26.7		8.0		26.2		94.2		6.5		5.5		4		91				<0.2		1.6	
IM12	Sunny	Moderate	09:40	8.8	Surface	1.0	0.5	108	27.7	27.7	7.9	7.9	22.1	22.1	100.6	100.5	7.0	6.6	6.4	7.4	6	6	87	89	821456	812029	<0.2	<0.2	1.6	1.6
						1.0	0.5	112	27.7		7.9		22.1		100.3		7.0		6.8		6		88				<0.2		1.7	
					Middle	4.4	0.2	61	26.6	26.6	8.0	8.0	26.1	26.1	89.4	89.3	6.2		8.9		5		88				<0.2		1.6	
						4.4	0.2	63	26.6		8.0		26.2		89.1		6.2		9.0		6		89				<0.2		1.6	
					Bottom	7.8	0.1	345	25.8	25.8	8.0	8.0	28.6	28.6	78.1	78.2	5.4	5.4	6.6		6		90				<0.2		1.6	
						7.8	0.1	353	25.8		8.0		28.6		78.2		5.4		6.6		4		91				<0.2		1.7	
SR1A	Sunny	Moderate	09:19	5.3	Surface	1.0	-	-	27.3	27.4	8.0	8.0	24.6	24.6	103.9	103.4	7.2	7.2	5.2	6.8	6	6	-	-	819981	812664	-	-	-	-
						1.0	-	-	27.4		8.0		24.5		102.9		7.1		5.8		5		-				-		-	
					Middle	2.7	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.7	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	-	-	26.2	26.2	8.0	8.0	27.8	27.8	82.5	82.7	5.7	5.7	8.0		6		-				-		-	
						4.3	-	-	26.2		8.0		27.8		82.8		5.7		8.0		6		-				-		-	
SR2	Sunny	Moderate	09:06	4.3	Surface	1.0	0.3	81	26.8	26.8	8.2	8.2	25.2	25.3	104.0	103.8	7.2	7.2	4.0	4.6	4	5	85	89	821440	814153	<0.2	<0.2	1.8	1.7
						1.0	0.3	85	26.7		8.2		25.3		103.5		7.2		4.2		4		88				<0.2		1.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.1	41	26.4	26.4	8.1	8.1	27.4	27.4	91.5	91.6	6.3	6.3	5.0		6		90				<0.2		1.7	
						3.3	0.1	42	26.4		8.1		27.4		91.7		6.3		5.0		5		92				<0.2		1.7	
SR3	Sunny	Moderate	10:22	9.1	Surface	1.0	0.0	60	27.3	27.3	8.3	8.2	22.2	22.1	103.0	103.1	7.2	6.9	5.3	6.5	6	6	-	-	822142	807591	-	-	-	-
						1.0	0.0	62	27.3		8.2		22.1		103.2		7.2		5.4		7		-				-		-	
					Middle	4.6	0.1	208	26.9	26.9	8.2	8.2	24.9	25.0	94.2	94.1	6.5		6.8		5		-				-		-	
						4.6	0.1	217	26.9		8.2		25.1		94.0		6.5		6.9		6		-				-		-	
					Bottom	8.1	0.2	211	26.9	26.9	8.2	8.2	25.4	25.3	86.2	86.5	6.0	6.0	7.5		5		-				-		-	
						8.1	0.2	218	26.9		8.2		25.2		86.7		6.0		7.3		5		-				-		-	
SR4A	Fine	Calm	09:20	9.5	Surface	1.0	0.2	65	27.3	27.3	7.9	7.9	21.6	21.6	104.1	104.0	7.3	6.9	5.2	8.8	7	6	-	-	817185	807792	-	-	-	-
						1.0	0.2	69	27.3		7.9		21.6		103.8		7.3		5.7		6		-				-		-	
					Middle	4.8	0.3	63	26.8	26.8	7.9	7.9	25.4	25.5	93.6	93.6	6.5		10.3		6		-				-		-	
						4.8	0.3	63	26.8		7.9		25.5		93.5		6.5		10.2		6		-				-		-	
					Bottom	8.5	0.2	81	26.8	26.8	7.9	7.9	25.9	25.9	94.9	95.0	6.6	6.6	10.6		6		-				-		-	
						8.5	0.2	81	26.8		7.9		25.8		95.1		6.6		10.6		6		-				-		-	
SR5A	Fine	Calm	09:01	3.9	Surface	1.0	0.1	94	27.3	27.3	7.9	7.9	24.0	24.0	108.1	108.1	7.5	7.5	4.3	5.3	7	8	-	-	816616	810701	-	-	-	-
						1.0	0.1	100	27.3		7.9		24.0		108.1		7.5		4.2		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.9	0.0	43	27.2	27.2	7.9	7.9	24.7	24.8	106.4	106.2	7.4	7.4	6.3		9		-				-		-	
						2.9	0.0	46	27.2		7.9		24.8		106.0		7.3		6.5		9		-				-		-	
SR6A	Fine	Calm	08:29	4.8	Surface	1.0	0.1	133	26.9	26.9	7.9	7.9	25.8	25.9	100.0	99.9	6.9	6.9	3.9	4.6	6	5	-	-	817959	814731	-	-	-	-
						1.0	0.1	138	26.9		7.9		25.9		99.8		6.9		4.1		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.0	211	26.7	26.8	7.9	7.9	26.5	26.5	93.5	93.5	6.5	6.5	5.1		4		-				-		-	
						3.8	0.0	217	26.8		7.9		26.5		93.5		6.5		5.3		5		-				-		-	
SR7	Sunny	Moderate	08:09	16.6	Surface	1.0	0.1	190	25.5	25.5	8.0	8.0	29.7	29.7	82.9	82.9	5.7	5.5	3.1	5.2	4	5	-	-	823657	823745	-	-	-	-
						1.0	0.1	197	25.5		8.0		29.7		82.9		5.7		3.1		5		-				-		-	
					Middle	8.3	0.0	229	24.9	24.9	8.1	8.1	31.1	31.1	76.1	76.1	5.3		5.2		5		-				-		-	
						8.3	0.0	248	24.9		8.1		31.1		76.1		5.3		5.7		4		-				-		-	
					Bottom	15.6	0.1	0	24.8	24.8	8.1	8.1	31.2	31.2	77.5	77.7	5.4	5.4	7.2		5		-				-		-	
						15.6	0.1	0	24.8		8.1		31.2		77.9		5.4		6.9		5		-				-		-	
SR8	Sunny	Moderate	09:30	5.2	Surface	1.0	-	-	27.1	27.1	8.1	8.1	23.7	23.8	103.8	103.7	7.2	7.2	5.3	5.6	6	7	-	-	820374	811599	-	-	-	-
						1.0	-	-	27.1		8.1		23.8		103.6		7.2		5.5		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	-	-	27.1	27.2	8.1	8.1	25.6	25.5	97.9	98.3	6.7	6.8	5.9		7		-				-		-	
						4.2	-	-	27.2		8.1		25.4		98.6		6.8		5.8		7		-				-		-	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 16 May 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	13:55	8.8	Surface	1.0	0.1	63	27.4	27.4	8.0	8.0	24.2	24.2	121.1	121.0	8.4	7.6	3.8	6.1	4	5	84	87	815625	804233	<0.2	<0.2	1.5	1.5
						1.0	0.1	65	27.4		8.0		24.1		120.9		8.4		3.9		5		84				<0.2		1.4	
					Middle	4.4	0.0	6	26.1	26.2	7.9	7.9	28.2	28.1	96.4	96.8	6.7		4.8		5		88				<0.2		1.4	
						4.4	0.0	6	26.2		7.9		28.1		97.1		6.7		4.7		6		88				<0.2		1.5	
					Bottom	7.8	0.2	31	25.9	25.9	8.0	8.0	29.6	29.6	91.4	91.7	6.3	6.3	9.7		6		90				<0.2		1.5	
						7.8	0.2	34	25.9		8.0		29.5		92.0		6.3		9.5		5		89				<0.2		1.4	
C2	Sunny	Moderate	12:48	12.1	Surface	1.0	0.2	185	28.7	28.7	8.0	8.1	20.7	20.7	118.8	117.9	8.2	7.1	4.7	6.1	7	8	87	88	825671	806926	<0.2	<0.2	1.5	1.6
						1.0	0.2	200	28.7		8.1		20.7		117.0		8.1		4.7		8		86				<0.2		1.5	
					Middle	6.1	0.2	210	26.2	26.1	8.1	8.1	26.5	26.6	87.0	86.4	6.1		5.6		8		88				<0.2		1.6	
						6.1	0.2	227	26.0		8.2		26.6		85.7		6.0		6.3		7		87				<0.2		1.5	
					Bottom	11.1	0.1	208	25.6	25.7	8.2	8.2	29.1	29.0	74.2	74.3	5.1	5.2	7.9		7		90				<0.2		1.6	
						11.1	0.1	214	25.7		8.2		28.9		74.4		5.2		7.6		8		90				<0.2		1.6	
C3	Sunny	Moderate	14:28	12.6	Surface	1.0	0.2	270	28.0	28.0	8.1	8.1	24.0	23.9	131.7	131.5	9.0	7.8	4.1	4.0	6	6	86	88	822104	817779	<0.2	<0.2	1.9	1.9
						1.0	0.2	294	28.0		8.1		23.9		131.2		9.0		3.9		7		86				<0.2		1.8	
					Middle	6.3	0.3	242	25.8	25.8	8.2	8.2	28.9	29.1	96.7	96.4	6.7		3.8		5		88				<0.2		1.9	
						6.3	0.3	265	25.7		8.2		29.2		96.0		6.6		3.9		6		87				<0.2		1.8	
					Bottom	11.6	0.4	274	25.2	25.3	8.2	8.2	30.5	30.3	81.6	81.8	5.7	5.7	4.3		7		90				<0.2		1.9	
						11.6	0.4	292	25.4		8.2		30.2		81.9		5.7		4.3		6		91				<0.2		1.9	
IM1	Fine	Moderate	13:34	5.0	Surface	1.0	0.1	355	26.9	26.9	7.9	7.9	26.2	26.3	106.1	105.9	7.3	7.3	8.9	10.9	4	4	84	86	817944	807115	<0.2	<0.2	1.9	2.0
						1.0	0.1	327	26.8		7.9		26.4		105.7		7.3		9.4		5		85				<0.2		2.1	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.1	7	26.3	26.3	8.0	8.0	27.3	27.3	94.4	94.6	6.5	6.6	12.8		3		88				<0.2		2.0	
						4.0	0.1	7	26.3		8.0		27.3		94.8		6.6		12.7		2		88				<0.2		2.0	
IM2	Fine	Moderate	13:27	6.9	Surface	1.0	0.1	298	26.9	26.9	7.9	7.9	25.6	25.7	112.1	111.8	7.8	7.2	5.0	9.4	3	4	85	88	818148	806188	<0.2	<0.2	1.8	1.9
						1.0	0.1	312	26.8		7.9		25.8		111.5		7.7		5.2		3		85				<0.2		1.8	
					Middle	3.5	0.1	89	26.3	26.3	7.9	7.9	27.4	27.5	95.8	95.9	6.6		9.4		4		88				<0.2		1.8	
						3.5	0.1	97	26.2		7.9		27.6		95.9		6.6		9.9		3		88				<0.2		1.9	
					Bottom	5.9	0.1	13	26.2	26.2	8.0	8.0	28.2	28.2	97.3	97.4	6.7	6.7	13.5		4		89				<0.2		2.0	
						5.9	0.1	13	26.2		8.0		28.2		97.4		6.7		13.4		4		90				<0.2		2.0	
IM3	Fine	Moderate	13:20	7.0	Surface	1.0	0.1	269	26.9	26.9	8.0	8.0	23.7	23.7	113.4	112.6	7.9	7.1	6.0	7.8	3	3	86	89	818780	805602	<0.2	<0.2	2.0	2.0
						1.0	0.1	282	26.9		8.0		23.8		111.8		7.8		6.2		3		87				<0.2		1.9	
					Middle	3.5	0.1	174	26.4	26.4	7.9	7.9	26.4	26.5	91.5	91.3	6.4		7.9		3		89				<0.2		2.0	
						3.5	0.1	189	26.3		7.9		26.5		91.1		6.3		8.0		4		89				<0.2		2.0	
					Bottom	6.0	0.2	30	26.0	26.0	7.9	7.9	28.5	28.5	90.9	91.2	6.3	6.3	9.6		3		90				<0.2		1.9	
						6.0	0.2	31	26.0		7.9		28.5		91.4		6.3		8.9		4		90				<0.2		1.9	
IM4	Fine	Moderate	13:11	8.2	Surface	1.0	0.1	306	27.9	27.9	8.0	8.0	22.8	22.8	115.6	112.9	8.0	7.1	5.8	7.4	5	4	85	88	819703	804592	<0.2	<0.2	1.8	1.8
						1.0	0.1	308	27.8		8.0		22.8		110.2		7.6		6.2		4		85				<0.2		1.8	
					Middle	4.1	0.1	210	26.5	26.5	7.9	7.9	26.3	26.3	92.8	92.7	6.4		8.2		5		88				<0.2		1.8	
						4.1	0.1	217	26.5		7.9		26.4		92.6		6.4		8.3		4		89				<0.2		1.8	
					Bottom	7.2	0.2	53	26.3	26.3	7.9	7.9	27.0	27.0	93.1	93.2	6.5	6.5	8.0		4		90				<0.2		1.9	
						7.2	0.2	53	26.3		7.9		27.0		93.3		6.5		7.6		4		89				<0.2		1.8	
IM5	Fine	Moderate	13:01	7.3	Surface	1.0	0.1	288	27.7	27.7	7.9	7.9	23.7	23.6	105.9	105.9	7.3	7.1	6.0	6.2	4	4	85	87	820737	804873	<0.2	<0.2	2.2	2.2
						1.0	0.1	289	27.7		7.9		23.6		105.8		7.3		6.0		4		84				<0.2		2.2	
					Middle	3.7	0.2	241	26.8	26.8	7.9	7.9	25.7	25.7	99.1	99.2	6.9		6.2		4		87				<0.2		2.2	
						3.7	0.2	258	26.8		7.9		25.8		99.3		6.9		6.3		4		87				<0.2		2.1	
					Bottom	6.3	0.1	180	26.8	26.8	8.0	8.0	25.6	25.6	101.1	101.3	7.0	7.0	6.5		4		89				<0.2		2.1	
						6.3	0.1	183	26.8		8.0		25.6		101.4		7.0		6.5		4		89				<0.2		2.1	
IM6	Fine	Moderate	12:53	7.2	Surface	1.0	0.2	235	27.8	27.8	7.9	7.9	23.4	23.3	105.9	105.9	7.3	7.1	6.6	6.0	5	4	85	88	821039	805843	<0.2	<0.2	2.0	2.0
						1.0	0.2	236	27.8		7.9		23.3		105.9		7.3		6.3		4		85				<0.2		2.0	
					Middle	3.6	0.2	234	27.2	27.2	7.9	7.9	24.6	24.6	100.1	100.0	6.9		5.4		4		89				<0.2		2.0	
						3.6	0.2	248	27.1		7.9		24.6		99.8		6.9		5.4		4		89				<0.2		2.1	
					Bottom	6.2	0.1	256	27.0	27.1	7.8	7.8	25.2	25.1	93.9	94.1	6.5	6.5	6.3		4		90				<0.2		2.0	
						6.2	0.1	256	27.1		7.8		25.1		94.2		6.5		6.3		4		90				<0.2		1.8	
IM7	Fine	Moderate	12:46	8.5	Surface	1.0	0.2	262	27.8	27.8	7.9	7.9	23.0	23.0	108.5	108.4	7.5	7.0	4.0	5.3	5	6	85	88	821338	806853	<0.2	<0.2	2.3	2.2
						1.0	0.2	263	27.7		7.9		23.0		108.3		7.5		4.1		5		86				<0.2		2.2	
					Middle	4.3	0.1	235	27.0	27.0	7.8	7.8	25.1	25.1	92.8	92.8	6.4		5.0		5		88				<0.2		2.1	
						4.3	0.1	249	26.9		7.8		25.2		92.7		6.4		5.2		6		89				<0.2		2.1	
					Bottom	7.5	0.1	248	26.8	26.8	7.8	7.8	25.6	25.6	87.6	87.7	6.1	6.1	6.8		6		90				<0.2		2.1	
						7.5	0.1	270	26.8		7.8		25.6		87.8		6.1		6.8		6		90				<0.2		2.1	
IM8	Sunny	Moderate	13:10	7.8	Surface	1.0	0.2	275	27.5	27.5	8.1	8.1	23.8	23.7	109.9	109.9	7.6	7.2	5.5	6.2	4	4	86	90	821829	808149	<0.2	<0.2	2.5	2.4
						1.0	0.2	286	27.5		8.1		23.7		109.8		7.6		5.6		4		88				<0.2		2.4	
					Middle	3.9	0.2	278	27.0	27.0	8.0	8.0	24.8	24.8	96.3	96.5	6.7		6.5		4		89				<0.2		2.5	
						3.9	0.2	301	27.0		8.0		24.9		96.6		6.7		6.5		4		90				<0.2		2.4	
					Bottom	6.8	0.1	242	27.0	27.0	8.0	8.0	24.9	24.9	97.8	98.0	6.8	6.8	6.5		4		91				<0.2		2.4	
						6.8	0.1	257	27.0		8.0		24.9		98.1		6.8		6.5		4		93				<0.2		2.4	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 16 May 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	13:16	7.3	Surface	1.0	0.3	341	27.7	27.7	8.1	8.1	22.5	22.5	110.9	110.9	7.7	7.4	8.1	7.1	5	4	86	87	822107	808828	<0.2	<0.2	2.3	2.3
						1.0	0.3	314	27.6		8.1		22.5		110.9		7.7		8.2		4		87				<0.2		2.3	
					Middle	3.7	0.0	342	27.2	27.2	8.1	8.1	24.1	24.2	102.4	102.4	7.1		7.3		4		87	88			<0.2		2.4	
						3.7	0.0	347	27.2		8.1		24.2		102.4		7.1		7.1		3		88				<0.2		2.3	
					Bottom	6.3	0.1	179	27.1	27.1	8.1	8.1	24.7	24.7	98.7	99.0	6.8	6.9	5.8		3		90				<0.2		2.4	
						6.3	0.1	191	27.1		8.1		24.7		99.2		6.9		5.9		3		91				<0.2		2.2	
IM10	Sunny	Moderate	13:23	7.0	Surface	1.0	0.1	8	28.1	28.1	8.0	8.0	22.2	22.2	117.2	117.3	8.1	7.7	5.9	5.5	3	3	87	88	822383	809812	<0.2	<0.2	2.3	2.3
						1.0	0.1	8	28.1		8.0		22.2		117.4		8.1		5.7		3		87				<0.2		2.4	
					Middle	3.5	0.1	54	27.1	27.1	8.0	8.0	24.6	24.6	105.6	105.1	7.3		5.2		3		88				<0.2		2.3	
						3.5	0.1	56	27.1		8.0		24.7		104.6		7.3		5.2		3		88				<0.2		2.3	
					Bottom	6.0	0.0	54	27.0	27.0	8.0	8.0	25.1	25.1	96.2	96.2	6.7	6.7	5.3		4		90				<0.2		2.3	
						6.0	0.0	57	27.0		8.0		25.1		96.1		6.7		5.4		4		90				<0.2		2.2	
IM11	Sunny	Moderate	13:32	8.3	Surface	1.0	0.2	66	27.7	27.7	8.1	8.1	22.8	22.9	116.6	116.5	8.1	7.6	5.5	7.6	7	6	87	89	822063	811438	<0.2	<0.2	2.2	2.2
						1.0	0.2	71	27.6		8.1		23.0		116.3		8.1		5.5		6		86				<0.2		2.2	
					Middle	4.2	0.1	41	27.2	27.2	8.0	8.0	24.2	24.2	102.0	101.7	7.1		7.7		6		88				<0.2		2.2	
						4.2	0.1	44	27.2		8.0		24.2		101.3		7.0		8.1		5		89				<0.2		2.2	
					Bottom	7.3	0.0	311	26.3	26.3	8.1	8.1	27.8	27.7	82.7	84.3	5.7	5.8	9.3		5		90				<0.2		2.3	
						7.3	0.0	325	26.3		8.1		27.7		85.9		5.9		9.2		6		91				<0.2		2.2	
IM12	Sunny	Moderate	13:38	8.6	Surface	1.0	0.0	349	28.0	28.0	8.1	8.1	21.9	21.8	120.7	120.4	8.4	7.3	6.1	5.9	5	5	87	89	821465	812061	<0.2	<0.2	2.0	2.0
						1.0	0.0	321	28.0		8.1		21.8		120.0		8.3		6.1		5		88				<0.2		2.0	
					Middle	4.3	0.1	304	26.6	26.6	8.1	8.1	26.5	26.6	90.9	90.8	6.3		5.8		4		89				<0.2		2.1	
						4.3	0.1	325	26.5		8.1		26.7		90.7		6.3		5.9		5		88				<0.2		2.0	
					Bottom	7.6	0.2	279	26.4	26.4	8.1	8.1	27.1	27.1	90.0	89.9	6.2	6.2	5.9		5		91				<0.2		2.0	
						7.6	0.2	296	26.4		8.1		27.0		89.8		6.2		5.9		5		90				<0.2		1.9	
SR1A	Sunny	Moderate	13:54	5.2	Surface	1.0	-	-	28.3	28.3	8.1	8.1	22.4	22.5	132.3	132.3	9.1	9.1	5.0	5.0	6	6	-	-	819976	812663	-	-	-	-
						1.0	-	-	28.3		8.1		22.6		132.3		9.1		5.0		6		-				-		-	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-	-			-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	-	-	27.9	27.9	8.0	8.0	23.4	23.4	121.7	121.4	8.4	8.4	4.9		6		-				-		-	
						4.2	-	-	27.9		8.0		23.4		121.0		8.3		5.0		6		-				-		-	
SR2	Sunny	Moderate	14:06	4.7	Surface	1.0	0.0	122	28.7	28.8	8.2	8.2	21.5	21.5	126.8	125.7	8.7	8.6	6.0	6.4	3	3	88	89	821486	814153	<0.2	<0.2	1.8	1.8
						1.0	0.0	131	28.8		8.2		21.5		124.5		8.5		6.2		2		87				<0.2		1.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-	-			-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.1	345	26.8	26.8	8.1	8.1	26.3	26.3	97.4	97.4	6.7	6.7	6.7		3		90				<0.2		1.8	
						3.7	0.1	317	26.8		8.1		26.3		97.4		6.7		6.7		3		91				<0.2		1.8	
SR3	Sunny	Moderate	13:05	9.4	Surface	1.0	0.1	265	27.4	27.4	8.0	8.0	22.5	22.5	113.8	113.4	7.9	7.3	5.4	6.5	4	4	-	-	822143	807563	-	-	-	-
						1.0	0.1	266	27.3		8.0		22.5		112.9		7.9		5.6		4		-				-		-	
					Middle	4.7	0.1	217	26.9	26.9	8.0	8.0	25.2	25.1	94.8	95.1	6.6		6.2		4		-	-			-		-	
						4.7	0.1	225	26.9		8.0		25.1		95.4		6.6		6.3		4		-				-		-	
					Bottom	8.4	0.1	253	26.6	26.6	8.0	8.0	26.5	26.5	87.9	88.1	6.1	6.1	7.9		4		-				-		-	
						8.4	0.1	277	26.6		8.0		26.5		88.2		6.1		7.6		4		-				-		-	
SR4A	Fine	Moderate	14:17	9.1	Surface	1.0	0.1	252	27.6	27.6	7.9	7.9	23.5	23.5	111.9	111.5	7.7	7.2	5.7	7.6	4	5	-	-	817201	807791	-	-	-	-
						1.0	0.1	276	27.6		7.9		23.5		111.0		7.7		6.0		5		-				-		-	
					Middle	4.6	0.1	90	26.3	26.3	7.9	7.9	27.6	27.6	95.8	95.9	6.6		8.5		4		-	-			-		-	
						4.6	0.1	95	26.3		7.9		27.6		95.9		6.6		8.6		6		-				-		-	
					Bottom	8.1	0.1	66	26.3	26.4	8.0	8.0	27.5	27.5	96.5	96.6	6.7	6.7	8.6		7		-				-		-	
						8.1	0.1	66	26.4		8.0		27.4		96.7		6.7		8.3		6		-				-		-	
SR5A	Fine	Calm	14:35	4.3	Surface	1.0	0.1	174	27.6	27.6	8.1	8.1	23.7	23.7	128.8	127.8	8.9	8.9	4.7	5.1	6	6	-	-	816587	810674	-	-	-	-
						1.0	0.1	174	27.5		8.1		23.7		126.8		8.8		5.0		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-	-			-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.1	268	27.1	27.1	8.0	8.0	26.0	26.0	106.7	106.8	7.3	7.4	5.4		5		-				-		-	
						3.3	0.1	290	27.1		8.0		25.9		106.9		7.4		5.5		5		-				-		-	
SR6A	Fine	Calm	15:04	5.1	Surface	1.0	0.0	173	28.0	28.0	8.0	8.0	24.2	24.3	131.8	129.8	9.0	8.9	5.4	6.6	8	8	-	-	817949	814733	-	-	-	-
						1.0	0.0	188	28.0		8.0		24.4		127.7		8.7		5.7		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-	-			-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	0.1	37	27.9	27.9	8.0	8.0	25.1	25.0	120.3	120.6	8.2	8.2	7.7		8		-				-		-	
						4.1	0.1	40	27.9		8.0		25.0		120.8		8.2		7.7		7		-				-		-	
SR7	Sunny	Moderate	14:58	16.7	Surface	1.0	0.1	167	27.2	27.2	8.0	8.0	26.7	26.7	132.3	131.5	9.1	7.4	3.4	4.0	3	4	-	-	823658	823723	-	-	-	-
						1.0	0.1	182	27.2		8.0		26.7		130.7		8.9		3.4		4		-				-		-	
					Middle	8.4	0.1	35	25.3	25.3	8.0	8.0	30.3	30.3	83.5	83.5	5.8		3.8		3		-	-			-		-	
						8.4	0.1	38	25.2		8.0		30.4		83.4		5.8		4.0		4		-				-		-	
					Bottom	15.7	0.1	35	25.0	25.0	8.1	8.1	30.9	30.9	78.9	79.0	5.5	5.5	4.6		4		-				-		-	
						15.7	0.1	38	25.0		8.1		30.9		79.1		5.5		4.7		4		-				-		-	
SR8	Sunny	Moderate	13:46	5.1	Surface	1.0	-	-	27.9	27.9	8.1	8.0	23.1	23.1	115.3	115.0	8.0	8.0	6.2	6.1	6	6	-	-	820447	811695	-	-	-	-
						1.0	-	-	27.8		8.0		23.2		114.6		7.9		6.2		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-	-			-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	-	-	27.6	27.6	8.0	8.0	23.5	23.5	106.6	107.0	7.4	7.4	6.0		6		-				-		-	
						4.1	-	-	27.6		8.0		23.5		107.3		7.4		6.0		6		-				-		-	

DA: Depth-Averaged

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

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 19 May 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	11:36	8.2	Surface	1.0	0.4	218	27.0	27.0	8.0	8.0	23.6	23.6	82.1	81.8	5.7	5.2	4.4	6.0	10	7	84	89	815633	804264	<0.2	<0.2	1.6	1.6
						1.0	0.4	227	27.0		8.0		23.6		81.4		5.7		4.7		8		85				<0.2		1.6	
					Middle	4.1	0.5	189	25.6	25.6	7.9	7.9	29.9	29.9	68.4	68.5	4.7		6.1		8		90				<0.2		1.6	
						4.1	0.5	192	25.6		7.9		29.9		68.5		4.7		6.6		7		89				<0.2		1.6	
					Bottom	7.2	0.4	202	25.4	25.5	7.9	7.9	30.9	30.9	70.7	71.0	4.9	4.9	6.9		5		93				<0.2		1.5	
						7.2	0.4	207	25.5		7.9		30.9		71.2		4.9		6.9		6		93				<0.2		1.4	
C2	Cloudy	Moderate	12:49	11.5	Surface	1.0	0.8	182	27.7	27.7	8.1	8.1	19.7	19.7	90.7	90.7	6.4	6.1	6.6	5.9	5	7	86	88	825654	806941	<0.2	<0.2	1.6	1.5
						1.0	0.8	187	27.6		8.1		19.7		90.6		6.4		6.4		6		87				<0.2		1.6	
					Middle	5.8	0.5	190	26.8	26.8	8.1	8.1	25.2	25.2	81.9	81.8	5.7		4.6		7		88				<0.2		1.4	
						5.8	0.5	206	26.8		8.1		25.2		81.7		5.7		4.6		7		87				<0.2		1.4	
					Bottom	10.5	0.3	172	26.5	26.5	8.1	8.0	26.8	26.8	81.0	81.1	5.6	5.6	6.5		10		90				<0.2		1.6	
						10.5	0.4	182	26.5		8.0		26.8		81.2		5.6		6.4		9		90				<0.2		1.6	
C3	Cloudy	Moderate	10:34	12.3	Surface	1.0	0.4	66	27.6	27.6	8.2	8.2	22.7	22.7	97.6	97.6	6.8	6.4	2.4	3.3	4	4	86	88	822117	817819	<0.2	<0.2	1.3	1.1
						1.0	0.4	68	27.6		8.2		22.7		97.5		6.8		2.4		3		86				<0.2		1.3	
					Middle	6.2	0.1	145	26.1	26.1	8.1	8.1	27.7	27.7	85.3	85.3	5.9		2.5		4		88				<0.2		1.1	
						6.2	0.1	155	26.1		8.1		27.7		85.3		5.9		2.5		5		89				<0.2		1.0	
					Bottom	11.3	0.2	21	25.5	25.5	8.1	8.1	29.8	29.8	79.2	79.3	5.5	5.5	5.0		5		91				<0.2		1.0	
						11.3	0.2	22	25.5		8.1		29.8		79.4		5.5		5.0		5		90				<0.2		1.0	
IM1	Fine	Moderate	11:59	4.5	Surface	1.0	0.1	230	26.3	26.2	7.9	7.9	25.8	25.9	76.1	75.8	5.3	5.3	8.0	8.6	6	7	86	90	817933	807120	<0.2	<0.2	1.2	1.2
						1.0	0.1	248	26.1		7.9		26.0		75.4		5.3		8.2		7		87				<0.2		1.1	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.0	113	25.9	25.9	7.9	7.9	29.2	29.2	71.2	71.4	4.9	4.9	9.1		6		92				<0.2		1.2	
						3.5	0.0	122	25.8		7.9		29.3		71.5		4.9		9.1		7		93				<0.2		1.2	
IM2	Fine	Moderate	12:07	6.7	Surface	1.0	0.1	152	27.5	27.5	8.0	8.0	22.5	22.1	86.6	85.9	6.1	5.4	4.7	7.3	9	7	85	90	818175	806145	<0.2	<0.2	1.3	1.3
						1.0	0.1	164	27.4		8.0		21.8		85.1		6.0		5.3		8		86				<0.2		1.2	
					Middle	3.4	0.3	126	26.0	26.0	7.9	7.9	28.7	28.8	69.6	69.6	4.8		7.2		6		89				<0.2		1.3	
						3.4	0.3	128	25.9		7.9		28.8		69.5		4.8		7.7		6		90				<0.2		1.3	
					Bottom	5.7	0.1	46	25.7	25.8	7.9	7.9	29.8	29.7	69.3	69.4	4.8	4.8	9.7		5		94				<0.2		1.3	
						5.7	0.1	47	25.8		7.9		29.6		69.5		4.8		9.2		6		93				<0.2		1.1	
IM3	Fine	Moderate	12:14	6.8	Surface	1.0	0.2	186	27.2	27.2	7.9	7.9	23.1	23.2	88.0	87.8	6.1	5.5	7.4	10.1	6	8	84	89	818801	805615	<0.2	<0.2	1.1	1.2
						1.0	0.2	199	27.1		7.9		23.4		87.5		6.1		7.0		6		85				<0.2		1.2	
					Middle	3.4	0.3	157	26.1	26.1	7.9	7.9	27.5	27.5	69.2	69.0	4.8		11.0		7		90				<0.2		1.2	
						3.4	0.3	161	26.0		7.9		27.5		68.8		4.8		11.4		8		92				<0.2		1.2	
					Bottom	5.8	0.1	116	25.8	25.8	7.9	7.9	29.3	29.3	68.7	68.9	4.7	4.8	12.1		9		92				<0.2		1.3	
						5.8	0.2	119	25.8		7.9		29.3		69.1		4.8		12.0		9		93				<0.2		1.2	
IM4	Fine	Moderate	12:23	7.5	Surface	1.0	0.9	205	27.3	27.3	7.9	7.9	23.2	23.3	84.0	84.0	5.9	5.7	6.6	7.9	9	9	86	89	819736	804625	<0.2	<0.2	1.6	1.4
						1.0	0.9	213	27.2		7.9		23.3		83.9		5.8		6.8		9		87				<0.2		1.4	
					Middle	3.8	0.8	199	27.0	27.0	7.9	7.9	24.4	24.5	78.6	78.4	5.5		8.1		9		90				<0.2		1.4	
						3.8	0.8	211	26.9		7.9		24.6		78.1		5.4		8.5		9		90				<0.2		1.4	
					Bottom	6.5	0.5	179	26.7	26.7	7.9	7.9	25.8	25.8	77.5	77.6	5.4	5.4	8.7		10		91				<0.2		1.3	
						6.5	0.5	185	26.7		7.9		25.8		77.6		5.4		9.0		10		91				<0.2		1.2	
IM5	Fine	Moderate	12:33	7.2	Surface	1.0	0.7	229	27.7	27.7	7.9	7.9	21.6	21.7	89.6	89.4	6.3	6.2	4.6	7.1	7	8	85	89	820746	804858	<0.2	<0.2	1.5	1.4
						1.0	0.7	250	27.6		7.9		21.7		89.1		6.2		4.6		7		86				<0.2		1.4	
					Middle	3.6	0.7	220	27.2	27.2	7.9	7.9	22.2	22.2	86.6	86.2	6.1		6.9		7		89				<0.2		1.4	
						3.6	0.8	239	27.1		7.9		22.2		85.7		6.0		7.6		8		89				<0.2		1.4	
					Bottom	6.2	0.6	203	26.9	26.9	7.9	7.9	25.1	25.1	79.5	79.8	5.5	5.6	9.5		8		94				<0.2		1.3	
						6.2	0.6	222	26.9		7.9		25.1		80.1		5.6		9.4		9		93				<0.2		1.4	
IM6	Fine	Moderate	12:42	6.8	Surface	1.0	0.5	243	27.5	27.5	7.9	7.9	22.2	22.2	86.2	86.0	6.0	5.9	5.3	6.6	8	9	85	90	821047	805826	<0.2	<0.2	1.5	1.5
						1.0	0.5	244	27.5		7.9		22.2		85.8		6.0		5.5		8		87				<0.2		1.6	
					Middle	3.4	0.6	243	27.1	27.1	7.9	7.9	23.4	23.4	82.6	82.7	5.8		6.9		10		90				<0.2		1.5	
						3.4	0.6	259	27.1		7.9		23.4		82.7		5.8		6.9		9		90				<0.2		1.6	
					Bottom	5.8	0.5	239	27.0	27.0	7.9	7.9	24.1	24.1	82.8	83.1	5.8	5.8	7.4		8		93				<0.2		1.5	
						5.8	0.5	240	27.0		7.9		24.1		83.4		5.8		7.5		10		94				<0.2		1.4	
IM7	Fine	Moderate	12:51	8.0	Surface	1.0	0.5	253	27.3	27.3	7.9	7.9	22.7	22.7	84.5	84.4	5.9	5.9	5.6	6.4	8	8	84	89	821355	806840	<0.2	<0.2	1.6	1.6
						1.0	0.5	262	27.3		7.9		22.7		84.3		5.9		5.7		7		85				<0.2		1.5	
					Middle	4.0	0.5	246	27.2	27.2	7.9	7.9	23.0	23.0	82.9	82.8	5.8		5.9		9		89				<0.2		1.6	
						4.0	0.5	261	27.2		7.9		23.1		82.6		5.8		6.1		8		89				<0.2		1.6	
					Bottom	7.0	0.3	253	27.1	27.1	7.9	7.9	23.9	23.8	82.6	82.7	5.8	5.8	7.8		9		94				<0.2		1.7	
						7.0	0.4	267	27.1		7.9		23.7		82.8		5.8		7.6		9		93				<0.2		1.6	
IM8	Cloudy	Moderate	12:19	7.5	Surface	1.0	0.2	210	27.6	27.6	8.2	8.1	21.3	21.3	89.3	89.2	6.3	6.2	5.4	7.0	7	7	86	88	821822	808140	<0.2	<0.2	1.5	1.4
						1.0	0.2	215	27.6		8.1		21.3		89.0		6.2		5.4		6		87				<0.2		1.5	
					Middle	3.8	0.2	187	27.4	27.4	8.1	8.1	22.1	22.1	86.5	86.5	6.1		5.9		6		88				<0.2		1.4	
						3.8	0.2	203	27.4		8.1		22.1		86.5		6.1		5.9		7		87				<0.2		1.3	
					Bottom	6.5	0.2	190	27.0	27.0	8.1	8.1	24.0	24.0	80.2	80.3	5.6	5.6	9.7		6		91				<0.2		1.4	
						6.5	0.2	195	27.0		8.1		24.0		80.3		5.6		9.6		7		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 19 May 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	12:12	7.2	Surface	1.0	0.3	104	27.5	27.5	8.1	8.1	21.1	21.1	91.4	91.5	6.4	6.3	5.5	7.6	6	7	87	88	822064	808818	<0.2	<0.2	1.6	1.5
						1.0	0.3	104	27.5		8.1		21.1		91.5		6.4		5.5		5		86				<0.2		1.5	
					Middle	3.6	0.3	120	27.4	27.3	8.1	8.1	21.9	22.0	86.5	86.4	6.1		7.2		8		87				<0.2		1.5	
						3.6	0.3	125	27.2		8.1		22.1		86.3		6.1		7.5		7		88				<0.2		1.4	
					Bottom	6.2	0.3	111	27.0	27.0	8.1	8.1	23.9	23.9	80.6	80.6	5.6	5.6	9.9		8		90				<0.2		1.4	
						6.2	0.3	111	27.0		8.1		23.9		80.6		5.6		9.9		9		90				<0.2		1.4	
IM10	Cloudy	Moderate	12:02	6.6	Surface	1.0	0.2	112	27.3	27.3	8.1	8.1	21.8	21.8	90.2	88.6	6.3	6.1	5.5	8.4	7	8	86	88	822390	809812	<0.2	<0.2	1.5	1.4
						1.0	0.2	117	27.3		8.1		21.9		87.0		6.1		5.6		7		85				<0.2		1.5	
					Middle	3.3	0.3	124	27.1	27.1	8.1	8.1	22.8	22.8	85.6	85.6	6.0		7.6		8		88				<0.2		1.4	
						3.3	0.3	134	27.1		8.1		22.8		85.6		6.0		8.0		7		87				<0.2		1.4	
					Bottom	5.6	0.3	108	27.0	27.0	8.1	8.1	23.7	23.7	81.4	81.5	5.7	5.7	11.7		9		90				<0.2		1.4	
						5.6	0.3	111	27.0		8.1		23.7		81.5		5.7		11.7		9		90				<0.2		1.4	
IM11	Cloudy	Moderate	11:48	7.2	Surface	1.0	0.6	110	27.9	27.9	8.2	8.2	19.8	19.8	97.1	97.1	6.8	6.5	3.6	8.2	6	7	87	89	822037	811467	<0.2	<0.2	1.6	1.5
						1.0	0.6	119	27.9		8.2		19.8		97.1		6.8		3.6		5		86				<0.2		1.7	
					Middle	3.6	0.5	102	27.3	27.3	8.1	8.1	22.1	22.2	88.2	88.2	6.2		7.7		7		89				<0.2		1.6	
						3.6	0.5	108	27.3		8.1		22.2		88.2		6.2		8.2		7		88				<0.2		1.4	
					Bottom	6.2	0.2	112	27.1	27.1	8.1	8.1	23.3	23.3	83.6	83.7	5.8	5.8	13.2		8		91				<0.2		1.4	
						6.2	0.3	114	27.1		8.1		23.3		83.7		5.8		13.1		9		90				<0.2		1.4	
IM12	Cloudy	Moderate	11:39	9.5	Surface	1.0	0.6	140	27.8	27.8	8.1	8.1	19.8	19.8	95.4	95.4	6.7	6.4	6.7	9.1	5	7	86	89	821433	812051	<0.2	<0.2	1.6	1.5
						1.0	0.6	147	27.8		8.1		19.8		95.4		6.7		6.8		6		87				<0.2		1.5	
					Middle	4.8	0.4	126	27.2	27.2	8.1	8.1	22.4	22.4	86.0	86.0	6.0		9.4		7		88				<0.2		1.5	
						4.8	0.4	131	27.2		8.1		22.4		86.0		6.0		9.4		7		89				<0.2		1.6	
					Bottom	8.5	0.1	97	26.9	26.9	8.1	8.1	24.9	24.9	80.7	80.8	5.6	5.6	11.1		9		90				<0.2		1.4	
						8.5	0.2	105	26.9		8.1		24.9		80.8		5.6		11.3		10		91				<0.2		1.4	
SR1A	Cloudy	Moderate	11:18	5.2	Surface	1.0	-	-	27.5	27.5	8.1	8.1	21.6	21.6	92.0	92.0	6.4	6.4	4.4	4.8	7	8	-	-	819979	812660	-	-	-	-
						1.0	-	-	27.5		8.1		21.6		92.0		6.4		4.4		6		-				-		-	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	-	-	27.0	27.0	8.1	8.1	24.6	24.6	87.0	86.9	6.0	6.0	5.1		9		-				-		-	
						4.2	-	-	27.0		8.1		24.7		86.8		6.0		5.2		9		-				-		-	
SR2	Cloudy	Moderate	11:04	4.8	Surface	1.0	0.6	87	27.6	27.6	8.1	8.1	19.6	19.6	91.9	91.8	6.5	6.5	4.1	4.0	5	6	88	89	821438	814183	<0.2	<0.2	1.7	1.6
						1.0	0.6	89	27.5		8.1		19.6		91.7		6.5		4.1		5		87				<0.2		1.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.3	78	27.3	27.3	8.1	8.1	22.6	22.6	90.6	90.6	6.3	6.3	3.9		6		90				<0.2		1.5	
						3.8	0.3	80	27.3		8.1		22.6		90.5		6.3		3.9		6		91				<0.2		1.4	
SR3	Cloudy	Moderate	12:26	9.0	Surface	1.0	0.3	191	27.6	27.6	8.1	8.1	20.6	20.6	91.4	91.4	6.4	6.1	5.5	8.0	6	7	-	-	822117	807567	-	-	-	-
						1.0	0.3	209	27.5		8.1		20.6		91.4		6.4		5.5		6		-				-		-	
					Middle	4.5	0.4	179	27.2	27.2	8.1	8.1	23.0	23.1	82.0	81.9	5.7		7.4		7		-				-		-	
						4.5	0.4	190	27.2		8.1		23.1		81.7		5.7		7.6		8		-				-		-	
					Bottom	8.0	0.2	189	27.0	27.0	8.1	8.1	24.1	24.1	79.9	79.9	5.6	5.6	10.8		7		-				-		-	
						8.0	0.2	190	27.0		8.1		24.1		79.9		5.6		11.3		8		-				-		-	
SR4A	Fine	Calm	11:13	9.0	Surface	1.0	0.1	2	27.6	27.6	8.0	8.0	20.7	20.7	85.7	85.3	6.0	5.4	5.7	7.4	5	6	-	-	817199	807830	-	-	-	-
						1.0	0.1	2	27.6		8.0		20.7		84.8		6.0		6.5		6		-				-		-	
					Middle	4.5	0.2	66	25.9	25.9	7.9	7.9	28.8	28.8	70.1	70.1	4.8		7.3		6		-				-		-	
						4.5	0.3	68	25.9		7.9		28.8		70.1		4.8		7.5		6		-				-		-	
					Bottom	8.0	0.2	41	25.9	25.9	7.9	7.9	29.1	29.1	71.7	72.1	5.0	5.0	8.6		6		-				-		-	
						8.0	0.2	44	25.9		7.9		29.1		72.4		5.0		8.8		7		-				-		-	
SR5A	Fine	Calm	10:57	3.9	Surface	1.0	0.1	5	27.7	27.7	8.0	8.0	21.4	21.5	94.1	94.0	6.6	6.6	5.9	7.2	6	7	-	-	816581	810705	-	-	-	-
						1.0	0.1	5	27.6		8.0		21.6		93.9		6.6		6.3		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.9	0.0	115	27.6	27.6	8.0	8.0	21.9	21.8	87.6	88.3	6.1	6.2	8.3		7		-				-		-	
						2.9	0.0	119	27.6		8.0		21.8		88.9		6.2		8.4		6		-				-		-	
SR6A	Fine	Calm	10:17	4.9	Surface	1.0	0.1	31	27.4	27.4	7.9	7.9	22.4	22.5	91.7	91.6	6.4	6.4	4.8	5.9	9	9	-	-	817969	814747	-	-	-	-
						1.0	0.1	33	27.4		7.9		22.6		91.5		6.4		5.1		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	0.0	250	27.3	27.4	7.9	7.9	23.2	23.2	86.7	86.9	6.0	6.1	6.8		9		-				-		-	
						3.9	0.0	258	27.4		7.9		23.2		87.0		6.1		6.8		10		-				-		-	
SR7	Cloudy	Moderate	09:51	16.2	Surface	1.0	0.1	56	26.3	26.3	8.1	8.1	27.1	27.1	86.5	86.5	6.0	5.6	2.6	3.8	7	8	-	-	823643	823740	-	-	-	-
						1.0	0.1	59	26.3		8.1		27.1		86.4		6.0		2.6		6		-				-		-	
					Middle	8.1	0.1	11	25.2	25.2	8.0	8.0	30.6	30.7	73.7	73.7	5.1		4.2		8		-				-		-	
						8.1	0.1	11	25.2		8.0		30.7		73.7		5.1		4.3		7		-				-		-	
					Bottom	15.2	0.2	55	25.1	25.1	8.0	8.0	31.0	31.0	73.3	73.4	5.1	5.1	4.6		9		-				-		-	
						15.2	0.2	60	25.1		8.0		31.0		73.4		5.1		4.7		9		-				-		-	
SR8	Cloudy	Moderate	11:28	5.2	Surface	1.0	-	-	27.6	27.6	8.1	8.1	20.5	20.4	93.4	93.3	6.6	6.6	6.0	10.2	6	7	-	-	820461	811798	-	-	-	-
						1.0	-	-	27.6		8.1		20.3		93.2		6.6		6.1		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	-	-	27.6	27.6	8.1	8.1	22.3	22.3	91.8	91.8	6.4	6.4	14.5		8		-				-		-	
						4.2	-	-	27.6		8.1		22.3		91.8		6.4		14.3		9		-				-		-	

DA: Depth-Averaged

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

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

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

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

Water Quality Monitoring

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

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Moderate	16:50	8.0	Surface	1.0	0.2	44	28.1	28.2	7.9	7.9	22.2	22.1	88.1	87.8	6.1	5.6	5.9	7.3	6	7	86	90	815604	804268	<0.2	<0.2	1.4	1.3
						1.0	0.2	45	28.2		7.9		22.0		87.5		6.0		5.9		7		87				<0.2		1.3	
					Middle	4.0	0.3	58	26.2	26.2	7.9	7.9	26.7	26.7	75.3	75.0	5.2		7.6		7		90				<0.2		1.3	
						4.0	0.3	61	26.2		7.9		26.7		74.7		5.2		8.0		6		90				<0.2		1.4	
					Bottom	7.0	0.4	37	25.9	26.0	7.9	7.9	29.3	29.3	73.2	73.5	5.0	5.1	8.2		8		93				<0.2		1.3	
						7.0	0.4	37	26.0		7.9		29.3		73.8		5.1		8.0		7		93				<0.2		1.3	
C2	Cloudy	Moderate	15:43	11.5	Surface	1.0	0.5	167	28.4	28.4	8.1	8.1	16.9	17.0	96.6	96.5	6.8	6.1	6.8	8.2	6	7	86	89	825697	806957	<0.2	<0.2	2.0	2.1
						1.0	0.5	174	28.4		8.1		17.1		96.4		6.8		6.8		7		87				<0.2		2.0	
					Middle	5.8	0.2	198	26.6	26.6	8.1	8.1	25.8	25.7	76.7	76.7	5.3		7.7		6		88				<0.2		2.1	
						5.8	0.2	204	26.6		8.1		25.7		76.6		5.3		7.8		7		89				<0.2		2.1	
					Bottom	10.5	0.2	307	26.4	26.4	8.1	8.1	27.2	27.2	75.4	75.5	5.2	5.2	10.2		8		90				<0.2		2.1	
						10.5	0.2	328	26.4		8.1		27.2		75.5		5.2		10.2		8		91				<0.2		2.1	
C3	Cloudy	Moderate	17:28	12.2	Surface	1.0	0.5	267	27.9	27.9	8.1	8.1	22.7	22.7	95.3	95.2	6.6	6.1	3.4	5.4	6	6	86	89	822117	817811	<0.2	<0.2	1.6	1.7
						1.0	0.5	282	27.9		8.1		22.7		95.0		6.6		3.4		5		87				<0.2		1.7	
					Middle	6.1	0.5	290	25.9	25.9	8.1	8.1	28.4	28.4	80.6	80.7	5.6		3.2		6		88				<0.2		1.7	
						6.1	0.6	300	25.8		8.1		28.4		80.7		5.6		3.2		6		89				<0.2		1.7	
					Bottom	11.2	0.4	316	25.4	25.4	8.1	8.1	30.1	30.1	76.0	76.1	5.3	5.3	9.7		7		92				<0.2		1.7	
						11.2	0.4	318	25.4		8.1		30.1		76.1		5.3		9.5		7		91				<0.2		1.7	
IM1	Fine	Moderate	16:29	4.5	Surface	1.0	0.1	47	26.8	26.7	7.9	7.9	25.7	25.8	84.5	84.1	5.9	5.9	6.0	6.9	5	5	88	91	817950	807109	<0.2	<0.2	1.2	1.2
						1.0	0.1	49	26.6		7.9		25.8		83.7		5.8		6.4		4		87				<0.2		1.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.2	6	26.2	26.2	7.9	7.9	28.6	28.6	76.5	76.8	5.3	5.3	7.5		5		94				<0.2		1.1	
						3.5	0.2	6	26.1		7.9		28.6		77.1		5.3		7.7		4		94				<0.2		1.2	
IM2	Fine	Moderate	16:22	6.6	Surface	1.0	0.4	335	28.0	28.0	7.9	7.9	23.9	24.0	92.9	92.5	6.4	6.0	4.9	6.2	6	6	88	92	818161	806156	<0.2	<0.2	1.3	1.3
						1.0	0.4	308	27.9		7.9		24.1		92.0		6.3		5.5		6		88				<0.2		1.3	
					Middle	3.3	0.3	346	27.3	27.3	7.9	7.9	24.8	24.8	81.0	80.4	5.6		6.3		6		92				<0.2		1.4	
						3.3	0.3	318	27.3		7.9		24.8		79.8		5.5		6.1		6		93				<0.2		1.3	
					Bottom	5.6	0.2	332	25.9	25.9	7.9	7.9	29.4	29.4	70.4	70.6	4.8	4.9	7.1		5		94				<0.2		1.4	
						5.6	0.3	350	25.9		7.9		29.4		70.7		4.9		7.3		6		95				<0.2		1.3	
IM3	Fine	Moderate	16:15	6.6	Surface	1.0	0.5	324	27.9	27.9	7.9	7.9	23.6	23.7	86.4	85.8	5.9	5.6	5.6	6.5	4	6	89	92	818796	805591	<0.2	<0.2	1.4	1.4
						1.0	0.5	326	27.8		7.9		23.7		85.2		5.9		5.7		6		88				<0.2		1.4	
					Middle	3.3	0.3	300	26.5	26.5	7.9	7.9	27.0	26.9	76.1	76.2	5.3		6.8		6		92				<0.2		1.4	
						3.3	0.4	300	26.5		7.9		26.9		76.3		5.3		6.6		5		93				<0.2		1.4	
					Bottom	5.6	0.2	325	25.9	25.9	7.9	7.9	29.8	29.8	69.5	69.9	4.8	4.8	7.2		6		94				<0.2		1.4	
						5.6	0.2	351	25.9		7.9		29.8		70.2		4.8		7.4		6		94				<0.2		1.3	
IM4	Fine	Moderate	16:05	7.6	Surface	1.0	0.3	315	27.9	27.9	7.9	7.9	22.6	22.6	87.3	87.2	6.0	5.6	6.2	7.2	5	5	89	92	819737	804629	<0.2	<0.2	1.7	1.6
						1.0	0.3	318	27.9		7.9		22.5		87.1		6.0		6.2		5		88				<0.2		1.6	
					Middle	3.8	0.4	314	26.1	26.1	7.9	7.8	26.7	26.7	76.3	75.1	5.3		7.4		4		91				<0.2		1.7	
						3.8	0.4	315	26.0		7.8		26.8		73.9		5.2		7.1		5		92				<0.2		1.6	
					Bottom	6.6	0.3	335	25.9	26.0	7.8	7.8	29.3	29.3	69.6	69.8	4.8	4.8	8.4		5		94				<0.2		1.4	
						6.6	0.3	308	26.1		7.8		29.2		69.9		4.8		8.2		5		95				<0.2		1.4	
IM5	Fine	Moderate	15:56	7.0	Surface	1.0	0.4	266	27.6	27.6	7.9	7.9	21.7	21.8	90.4	89.3	6.3	6.1	9.1	10.1	5	5	88	91	820738	804880	<0.2	<0.2	1.8	1.8
						1.0	0.4	281	27.5		7.9		21.9		88.2		6.2		9.7		5		88				<0.2		1.8	
					Middle	3.5	0.2	261	27.2	27.2	7.8	7.8	22.2	22.2	84.0	83.9	5.9		10.5		6		92				<0.2		1.7	
						3.5	0.3	286	27.1		7.8		22.2		83.7		5.9		10.3		5		92				<0.2		1.7	
					Bottom	6.0	0.2	325	26.5	26.6	7.8	7.8	26.6	26.6	74.2	74.4	5.1	5.2	10.7		5		94				<0.2		1.8	
						6.0	0.2	352	26.6		7.8		26.5		74.5		5.2		10.4		6		93				<0.2		1.7	
IM6	Fine	Moderate	15:49	6.7	Surface	1.0	0.4	255	27.8	27.8	7.9	7.9	20.1	20.3	93.0	92.6	6.5	6.4	7.7	9.5	6	6	88	92	821045	805843	<0.2	<0.2	1.7	1.8
						1.0	0.4	276	27.7		7.9		20.4		92.1		6.5		8.1		5		89				<0.2		1.7	
					Middle	3.4	0.3	254	27.5	27.5	7.9	7.9	21.7	21.7	88.4	88.5	6.2		9.0		6		94				<0.2		1.8	
						3.4	0.3	263	27.5		7.9		21.7		88.5		6.2		9.1		6		93				<0.2		1.7	
					Bottom	5.7	0.3	264	27.5	27.5	7.9	7.9	21.7	21.7	89.1	89.2	6.2	6.2	11.4		6		95				<0.2		1.8	
						5.7	0.3	276	27.5		7.9		21.7		89.2		6.2		11.5		6		95				<0.2		1.8	
IM7	Fine	Moderate	15:43	7.6	Surface	1.0	0.6	233	28.8	28.7	7.9	7.9	19.4	19.5	102.3	102.1	7.1	6.7	5.1	6.0	5	5	88	91	821340	806820	<0.2	<0.2	1.7	1.7
						1.0	0.6	246	28.6		7.9		19.5		101.9		7.1		5.1		5		88				<0.2		1.8	
					Middle	3.8	0.5	244	27.5	27.5	7.9	7.9	21.8	21.9	88.4	88.3	6.2		5.6		5		92				<0.2		1.7	
						3.8	0.5	261	27.5		7.9		21.9		88.2		6.2		5.9		5		91				<0.2		1.7	
					Bottom	6.6	0.3	255	27.5	27.5	7.9	7.9	22.3	22.3	88.4	88.6	6.2	6.2	7.2		5		94				<0.2		1.7	
						6.6	0.4	271	27.5		7.9		22.3		88.8		6.2		7.3		6		95				<0.2		1.7	
IM8	Cloudy	Moderate	16:04	7.2	Surface	1.0	0.3	207	28.1	28.1	8.1	8.1	20.4	20.4	102.8	102.8	7.2	6.8	5.3	7.7	5	5	86	89	821833	808135	<0.2	<0.2	2.0	2.1
						1.0	0.3	223	28.0		8.1		20.5		102.7		7.2		5.4		5		87				<0.2		2.1	
					Middle	3.6	0.3	235	27.7	27.7	8.1	8.1	21.2	21.2	91.4	91.4	6.4		5.5		6		88				<0.2		2.1	
						3.6	0.3	247	27.7		8.1		21.2		91.4		6.4		5.6		4		89				<0.2		2.1	
					Bottom	6.2	0.2	225	27.3	27.3	8.1	8.1	22.7	22.7	85.6	85.7	6.0	6.0	12.3		5		90				<0.2		2.1	
						6.2	0.2	236	27.3		8.1		22.7		85.7		6.0		12.3		6		91				<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 19 May 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C) Value	Water Temperature (°C) Average	pH Value	pH Average	Salinity (ppt) Value	Salinity (ppt) Average	DO Saturation (%) Value	DO Saturation (%) Average	Dissolved Oxygen Value	Dissolved Oxygen DA	Turbidity(NTU) Value	Turbidity(NTU) DA	Suspended Solids (mg/L) Value	Suspended Solids (mg/L) DA	Total Alkalinity (ppm) Value	Total Alkalinity (ppm) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L) Value	Chromium (µg/L) DA	Nickel (µg/L) Value	Nickel (µg/L) DA
IM9	Cloudy	Moderate	16:10	6.8	Surface	1.0	0.3	272	28.0	28.0	8.1	8.1	21.1	21.2	98.7	98.6	6.9	6.7	5.7	7.5	4	4	86	88	822095	808793	<0.2	<0.2	2.1	1.9
						1.0	0.3	285	28.0		8.1		21.2		98.4		6.9		5.7		4		87				<0.2		2.1	
					Middle	3.4	0.3	293	27.7	27.6	8.1	8.1	21.9	22.1	93.0	92.8	6.5		7.4		4		88				<0.2		1.9	
						3.4	0.3	301	27.5		8.1		22.2		92.5		6.5		7.8		4		89				<0.2		1.7	
					Bottom	5.8	0.2	263	27.3	27.3	8.1	8.1	23.1	23.1	84.3	84.4	5.9	5.9	9.3		5		91				<0.2		1.8	
						5.8	0.2	280	27.3		8.1		23.1		84.4		5.9		9.1		5		88				<0.2		1.7	
IM10	Cloudy	Moderate	16:17	7.1	Surface	1.0	0.2	295	28.1	28.1	8.1	8.1	21.1	21.1	103.7	103.4	7.2	6.9	4.9	6.3	3	4	88	89	822404	809810	<0.2	<0.2	1.7	1.8
						1.0	0.2	313	28.1		8.1		21.1		103.0		7.2		5.1		4		86				<0.2		1.7	
					Middle	3.6	0.2	297	27.6	27.6	8.1	8.1	22.2	22.3	94.0	93.9	6.6		6.4		4		88				<0.2		1.8	
						3.6	0.2	309	27.6		8.1		22.3		93.8		6.5		6.5		4		89				<0.2		1.8	
					Bottom	6.1	0.3	296	27.3	27.3	8.1	8.1	23.0	23.0	86.2	86.4	6.0	6.0	7.5		4		91				<0.2		1.7	
						6.1	0.4	312	27.3		8.1		23.0		86.5		6.0		7.6		5		90				<0.2		1.8	
IM11	Cloudy	Moderate	16:27	7.0	Surface	1.0	0.4	314	27.5	27.5	8.1	8.1	22.2	22.2	92.1	91.9	6.4	6.0	6.7	9.1	4	4	86	88	822063	811442	<0.2	<0.2	1.8	1.8
						1.0	0.4	315	27.4		8.1		22.3		91.7		6.4		6.8		4		85				<0.2		1.8	
					Middle	3.5	0.4	310	27.1	27.1	8.1	8.1	23.1	23.2	80.4	80.3	5.6		8.3		4		89				<0.2		1.8	
						3.5	0.4	324	27.1		8.1		23.2		80.1		5.6		8.6		4		88				<0.2		1.8	
					Bottom	6.0	0.4	304	26.9	26.9	8.1	8.1	24.4	24.4	79.2	79.3	5.5	5.5	12.0		4		90				<0.2		1.7	
						6.0	0.4	326	26.9		8.1		24.4		79.3		5.5		12.1		5		90				<0.2		1.8	
IM12	Cloudy	Moderate	16:35	9.0	Surface	1.0	0.4	286	27.8	27.8	8.1	8.1	21.7	21.7	95.3	95.3	6.6	6.2	6.4	7.5	3	4	86	89	821477	812065	<0.2	<0.2	1.7	1.8
						1.0	0.4	310	27.7		8.1		21.8		95.2		6.6		6.5		4		87				<0.2		1.7	
					Middle	4.5	0.4	281	26.6	26.5	8.1	8.1	23.5	23.6	82.0	82.0	5.8		7.0		4		88				<0.2		1.8	
						4.5	0.5	294	26.4		8.1		23.6		82.0		5.8		6.9		3		89				<0.2		1.8	
					Bottom	8.0	0.3	309	26.1	26.1	8.1	8.1	28.1	28.1	76.6	77.2	5.3	5.4	9.0		4		90				<0.2		1.8	
						8.0	0.3	309	26.1		8.1		28.1		77.8		5.4		9.1		4		91				<0.2		1.8	
SR1A	Cloudy	Moderate	16:53	5.0	Surface	1.0	-	-	28.0	28.0	8.2	8.2	21.9	21.9	99.2	99.1	6.9	6.9	4.6	4.6	9	8	-	-	819983	812661	-	-	-	-
						1.0	-	-	27.9		8.2		21.9		99.0		6.9		4.6		9		-				-		-	
					Middle	2.5	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.5	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	-	-	27.7	27.7	8.2	8.2	22.1	22.1	98.0	98.1	6.8	6.8	4.7		8		-				-		-	
						4.0	-	-	27.7		8.2		22.1		98.1		6.8		4.7		7		-				-		-	
SR2	Cloudy	Moderate	17:05	4.6	Surface	1.0	0.2	246	27.4	27.4	8.1	8.1	23.8	23.8	92.5	92.5	6.4	6.4	8.3	9.1	8	8	87	89	821456	814149	<0.2	<0.2	1.8	1.8
						1.0	0.2	267	27.4		8.1		23.9		92.5		6.4		8.4		6		88				<0.2		1.7	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.2	215	26.8	26.8	8.1	8.1	25.4	25.4	86.3	86.3	6.0	6.0	9.9		9		90				<0.2		1.8	
						3.6	0.2	231	26.8		8.1		25.4		86.3		6.0		9.8		8		90				<0.2		1.8	
SR3	Cloudy	Moderate	15:57	8.8	Surface	1.0	0.4	222	29.2	29.2	8.1	8.1	19.2	19.2	105.0	105.0	7.2	6.7	5.4	8.6	5	6	-	-	822148	807581	-	-	-	-
						1.0	0.4	237	29.2		8.1		19.2		104.9		7.2		5.4		6		-				-		-	
					Middle	4.4	0.3	213	27.4	27.4	8.1	8.1	22.2	22.2	88.4	88.5	6.2		8.8		6		-				-		-	
						4.4	0.3	230	27.3		8.1		22.2		88.6		6.2		9.2		5		-				-		-	
					Bottom	7.8	0.3	254	27.2	27.2	8.1	8.1	23.4	23.4	87.3	87.5	6.1	6.1	11.4		5		-				-		-	
						7.8	0.3	254	27.2		8.1		23.4		87.6		6.1		11.2		6		-				-		-	
SR4A	Fine	Calm	17:08	8.4	Surface	1.0	0.3	251	27.8	27.7	7.9	7.9	23.1	23.3	90.8	90.3	6.3	5.9	6.1	6.9	6	7	-	-	817165	807818	-	-	-	-
						1.0	0.3	270	27.6		7.9		23.4		89.8		6.2		6.3		6		-				-		-	
					Middle	4.2	0.2	240	27.3	27.3	7.9	7.9	24.1	24.1	80.5	80.6	5.6		7.0		7		-				-		-	
						4.2	0.2	240	27.3		7.9		24.1		80.6		5.6		7.0		7		-				-		-	
					Bottom	7.4	0.0	124	26.1	26.2	7.9	7.9	28.3	28.3	72.9	73.2	5.0	5.1	7.8		7		-				-		-	
						7.4	0.0	130	26.2		7.9		28.4		73.4		5.1		7.5		7		-				-		-	
SR5A	Fine	Calm	17:26	3.2	Surface	1.0	0.1	294	28.3	28.3	8.0	8.0	22.6	22.6	102.7	102.6	7.1	7.1	4.5	5.8	5	7	-	-	816615	810691	-	-	-	-
						1.0	0.1	323	28.3		8.0		22.6		102.5		7.0		4.4		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.2	0.1	300	28.2	28.2	8.0	8.0	22.7	22.7	102.0	102.0	7.0	7.0	7.1		8		-				-		-	
						2.2	0.1	301	28.2		8.0		22.7		101.9		7.0		7.2		8		-				-		-	
SR6A	Fine	Calm	17:54	4.6	Surface	1.0	0.0	226	28.2	28.2	8.0	8.0	22.8	22.8	103.4	103.2	7.1	7.1	3.6	4.5	6	6	-	-	817978	814762	-	-	-	-
						1.0	0.0	246	28.2		8.0		22.9		103.0		7.1		3.7		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.0	232	28.0	28.0	8.0	8.0	23.3	23.3	99.6	99.6	6.9	6.9	5.2		6		-				-		-	
						3.6	0.0	249	28.0		8.0		23.3		99.5		6.8		5.3		6		-				-		-	
SR7	Cloudy	Moderate	18:02	16.0	Surface	1.0	0.1	19	26.5	26.5	8.1	8.1	27.0	27.0	87.1	87.1	6.0	5.9	3.4	4.0	2	3	-	-	823652	823756	-	-	-	-
						1.0	0.1	19	26.4		8.1		27.0		87.0		6.0		3.4		2		-				-		-	
					Middle	8.0	0.1	103	26.1	26.1	8.1	8.1	28.3	28.3	82.9	83.0	5.7		3.7		2		-				-		-	
						8.0	0.1	110	26.1		8.1		28.3		83.0		5.7		3.7		3		-				-		-	
					Bottom	15.0	0.1	68	25.1	25.1	8.1	8.1	31.0	31.0	73.0	73.1	5.1	5.1	5.0		3		-				-		-	
						15.0	0.1	73	25.1		8.1		31.0		73.2		5.1		5.0		3		-				-		-	
SR8	Cloudy	Moderate	16:44	4.5	Surface	1.0	-	-	27.9	27.9	8.1	8.1	21.6	21.6	95.0	95.0	6.6	6.6	5.6	6.9	5	6	-	-	820382	811604	-	-	-	-
						1.0	-	-	27.9		8.1		21.6		94.9		6.6		5.7		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	-	-	27.8	27.8	8.1	8.1	21.7	21.7	93.8	93.8	6.5	6.5	7.8		6		-				-		-	
						3.5	-	-	27.8		8.1		21.7		93.8		6.5		8.5		6		-				-		-	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 21 May 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	11:55	8.3	Surface	1.0	0.4	232	27.2	27.2	8.0	7.9	22.3	22.3	90.4	90.2	6.3	5.9	5.4	7.4	7	7	85	88	815622	804269	<0.2	<0.2	1.4	1.4
						1.0	0.4	250	27.2		7.9		22.3		90.0		6.3		5.4		6		86						1.5	
					Middle	4.2	0.5	199	26.8	26.8	7.9	7.9	24.4	24.4	76.9	76.9	5.4		5.8		7		88						1.4	
						4.2	0.6	213	26.8		7.9		24.4		76.8		5.4		5.7		7		88						1.4	
					Bottom	7.3	0.3	193	26.4	26.4	7.9	7.9	27.0	27.0	72.9	73.0	5.0	5.1	11.1		8		89						1.4	
						7.3	0.3	203	26.4		7.9		27.0		73.0		5.1		10.9		7		89						1.3	
C2	Rainy	Moderate	10:48	11.6	Surface	1.0	0.1	203	27.4	27.4	8.0	8.0	21.1	21.1	88.4	88.4	6.2	5.8	6.1	7.2	7	8	85	88	825659	806941	<0.2	<0.2	1.6	1.5
						1.0	0.1	211	27.4		8.0		21.1		88.3		6.2		6.2		7		86						1.5	
					Middle	5.8	0.4	175	26.9	26.9	8.0	8.0	25.0	25.1	77.7	77.7	5.4		7.0		8		88						1.6	
						5.8	0.4	177	26.8		8.0		25.2		77.6		5.4		7.1		8		88						1.5	
					Bottom	10.6	0.3	167	26.6	26.6	7.9	7.9	26.1	26.1	73.4	73.5	5.1	5.1	8.4		8		90						1.5	
						10.6	0.3	171	26.6		7.9		26.1		73.5		5.1		8.3		8		90						1.5	
C3	Cloudy	Moderate	12:31	11.9	Surface	1.0	0.4	92	26.7	26.7	8.1	8.1	25.4	25.4	82.7	82.6	5.7	5.7	5.0	6.2	5	6	85	88	822127	817786	<0.2	<0.2	1.6	1.6
						1.0	0.5	92	26.7		8.1		25.5		82.4		5.7		5.0		6		86						1.5	
					Middle	6.0	0.3	85	26.6	26.6	8.1	8.1	26.1	26.2	81.3	81.3	5.6		6.0		6		88						1.7	
						6.0	0.3	87	26.5		8.1		26.3		81.2		5.6		6.2		6		89						1.5	
					Bottom	10.9	0.4	31	26.4	26.4	8.1	8.1	27.1	27.1	76.4	76.6	5.3	5.3	7.5		6		90						1.6	
						10.9	0.4	33	26.4		8.1		27.1		76.7		5.3		7.6		6		90						1.6	
IM1	Cloudy	Moderate	11:35	5.2	Surface	1.0	0.1	201	27.4	27.4	8.0	8.0	20.3	20.3	100.7	100.7	7.1	7.1	4.5	5.0	6	6	86	87	817948	807139	<0.2	<0.2	1.5	1.5
						1.0	0.1	210	27.4		8.0		20.3		100.6		7.1		4.5		5		85						1.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.1	158	27.2	27.2	8.0	8.0	21.8	21.8	90.9	91.0	6.4	6.4	5.5		7		88				<0.2		1.5	
						4.2	0.1	170	27.2		8.0		21.7		91.1		6.4		5.4		6		87				<0.2		1.4	
IM2	Cloudy	Moderate	11:27	7.1	Surface	1.0	0.2	175	27.4	27.4	8.0	8.0	20.5	20.5	96.4	96.4	6.8	6.4	4.4	5.1	6	6	84	86	818151	806187	<0.2	<0.2	1.6	1.5
						1.0	0.3	185	27.4		8.0		20.6		96.3		6.8		4.4		6		84				<0.2		1.5	
					Middle	3.6	0.2	147	27.2	27.2	7.9	7.9	22.4	22.4	86.0	85.8	6.0		4.5		6		86				<0.2		1.5	
						3.6	0.2	156	27.2		7.9		22.4		85.6		6.0		4.5		5		86				<0.2		1.5	
					Bottom	6.1	0.2	158	27.0	27.0	7.9	7.9	24.0	24.0	82.1	82.1	5.7	5.7	6.4		6		88				<0.2		1.5	
						6.1	0.2	168	27.0		7.9		24.0		82.0		5.7		6.2		5		88				<0.2		1.4	
IM3	Cloudy	Moderate	11:20	7.4	Surface	1.0	0.3	135	27.4	27.4	7.9	7.9	22.4	22.4	86.5	86.5	6.0	5.8	4.6	7.9	8	7	84	87	818807	805611	<0.2	<0.2	1.4	1.4
						1.0	0.3	144	27.4		7.9		22.4		86.4		6.0		4.7		7		85				<0.2		1.4	
					Middle	3.7	0.3	132	27.0	27.0	7.9	7.9	23.9	23.9	78.6	78.6	5.5		8.1		8		86				<0.2		1.4	
						3.7	0.3	135	27.0		7.9		23.9		78.6		5.5		8.1		6		87				<0.2		1.4	
					Bottom	6.4	0.2	123	26.9	26.9	7.9	7.9	24.1	24.1	79.1	79.2	5.5	5.5	11.0		7		88				<0.2		1.4	
						6.4	0.2	125	26.9		7.9		24.1		79.3		5.5		10.8		6		89				<0.2		1.4	
IM4	Cloudy	Moderate	11:11	8.4	Surface	1.0	0.6	191	27.2	27.2	7.9	7.9	23.2	23.2	83.4	83.4	5.8	5.7	6.7	8.6	9	9	84	86	819722	804598	<0.2	<0.2	1.6	1.5
						1.0	0.6	204	27.2		7.9		23.2		83.4		5.8		6.7		10		85				<0.2		1.6	
					Middle	4.2	0.5	178	27.0	27.0	7.9	7.9	24.0	24.0	78.3	78.3	5.5		6.3		10		86				<0.2		1.6	
						4.2	0.5	187	27.0		7.9		23.9		78.3		5.5		6.4		9		86				<0.2		1.4	
					Bottom	7.4	0.4	166	26.7	26.7	7.9	7.9	25.7	25.7	72.0	72.3	5.0	5.0	12.7		9		88				<0.2		1.5	
						7.4	0.4	167	26.7		7.9		25.7		72.6		5.0		12.6		9		88				<0.2		1.5	
IM5	Cloudy	Moderate	11:03	7.9	Surface	1.0	0.4	222	27.2	27.2	7.9	7.9	23.0	23.0	84.0	84.0	5.9	5.6	5.0	6.7	8	7	84	86	820724	804888	<0.2	<0.2	1.5	1.4
						1.0	0.4	226	27.2		7.9		23.0		83.9		5.9		5.0		7		85				<0.2		1.4	
					Middle	4.0	0.4	192	26.8	26.8	7.9	7.9	24.5	24.5	75.4	75.4	5.3		5.3		7		86				<0.2		1.4	
						4.0	0.5	209	26.8		7.9		24.6		75.4		5.3		5.2		6		87				<0.2		1.3	
					Bottom	6.9	0.3	183	26.7	26.7	7.9	7.9	25.7	25.7	71.7	72.0	5.0	5.0	10.0		7		88				<0.2		1.4	
						6.9	0.4	195	26.7		7.9		25.7		72.2		5.0		9.7		6		88				<0.2		1.3	
IM6	Cloudy	Moderate	10:55	7.7	Surface	1.0	0.3	246	27.2	27.2	7.9	7.9	22.7	22.7	85.7	85.7	6.0	5.8	5.8	7.4	5	6	85	87	821037	805815	<0.2	<0.2	1.5	1.5
						1.0	0.4	251	27.2		7.9		22.7		85.6		6.0		5.8		6		85				<0.2		1.4	
					Middle	3.9	0.4	232	27.1	27.1	7.9	7.9	23.5	23.5	80.8	80.8	5.6		6.0		6		86				<0.2		1.5	
						3.9	0.4	241	27.1		7.9		23.5		80.7		5.6		6.0		6		87				<0.2		1.4	
					Bottom	6.7	0.3	210	26.8	26.8	7.9	7.9	25.1	25.1	76.5	76.6	5.3	5.3	10.6		7		88				<0.2		1.4	
						6.7	0.4	226	26.8		7.9		25.1		76.7		5.3		10.3		8		88				<0.2		1.5	
IM7	Cloudy	Moderate	10:47	9.0	Surface	1.0	0.2	176	27.3	27.3	7.9	7.9	21.8	21.8	90.5	90.5	6.4	6.1	5.1	5.7	8	9	85	87	821367	806821	<0.2	<0.2	1.5	1.4
						1.0	0.2	187	27.3		7.9		21.8		90.4		6.4		5.1		8		85				<0.2		1.4	
					Middle	4.5	0.1	224	27.2	27.2	7.8	7.8	22.7	22.7	81.9	81.8	5.7		5.6		8		87				<0.2		1.3	
						4.5	0.2	244	27.2		7.8		22.7		81.6		5.7		5.5		9		87				<0.2		1.4	
					Bottom	8.0	0.0	278	27.1	27.1	7.8	7.8	23.7	23.7	80.4	80.4	5.6	5.6	6.4		9		88				<0.2		1.5	
						8.0	0.0	303	27.1		7.8		23.7		80.3		5.6		6.4		9		88				<0.2		1.4	
IM8	Rainy	Moderate	11:15	8.1	Surface	1.0	0.1	122	27.5	27.5	8.0	8.0	21.7	21.7	87.9	88.0	6.2	6.0	5.2	7.0	6	6	85	87	821818	808150	<0.2	<0.2	1.6	1.6
						1.0	0.1	126	27.4		8.0		21.7		88.1		6.2		5.5		7		85				<0.2		1.6	
					Middle	4.1	0.1	127	27.1	27.1	8.0	8.0	23.4	23.4	83.4	83.5	5.8		7.4		7		87				<0.2		1.6	
						4.1	0.1	138	27.1		8.0		23.4		83.6		5.8		7.5		6		87				<0.2		1.5	
					Bottom	7.1	0.1	181	27.1	27.1	8.0	8.0	23.4	23.4	85.9	86.1	6.0	6.0	8.1		6		89				<0.2		1.6	
						7.1	0.1	187	27.1		8.0		23.4		86.3		6.0		8.1		6		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**

Note: The flood tide monitoring session on 21 May 2020 was cancelled due to adverse weather.

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

Water Quality Monitoring

Water Quality Monitoring Results on 21 May 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	11:21	7.9	Surface	1.0	0.3	62	27.3	27.3	8.0	8.0	22.8	22.8	84.7	84.7	5.9	5.7	6.2	8.6	5	5	85	88	822104	808790	<0.2	<0.2	1.6	1.6
						1.0	0.3	63	27.3		8.0		22.9		84.6		5.9		6.4		6		86				<0.2		1.6	
					Middle	4.0	0.3	90	27.1	27.1	8.0	8.0	23.9	24.0	79.4	79.3	5.5		8.9		5		89				<0.2		1.6	
						4.0	0.3	91	27.1		8.0		24.0		79.2		5.5		9.2		5		89				<0.2		1.5	
					Bottom	6.9	0.3	108	27.1	27.1	8.0	8.0	24.2	24.2	79.4	79.6	5.5	5.5	10.4		5		89				<0.2		1.6	
						6.9	0.3	118	27.1		8.0		24.2		79.8		5.5		10.5		5		90				<0.2		1.6	
IM10	Cloudy	Moderate	11:27	7.8	Surface	1.0	0.5	99	27.4	27.4	8.0	8.0	21.9	22.0	88.1	88.0	6.2	5.9	5.4	9.1	5	5	85	88	822392	809798	<0.2	<0.2	1.6	1.6
						1.0	0.6	104	27.4		8.0		22.0		87.8		6.2		5.7		5		86				<0.2		1.6	
					Middle	3.9	0.5	120	26.9	26.9	8.0	8.0	24.5	24.5	79.1	79.2	5.5		10.1		4		88				<0.2		1.6	
						3.9	0.6	126	26.9		8.0		24.6		79.2		5.5		10.4		4		89				<0.2		1.6	
					Bottom	6.8	0.4	116	27.0	27.0	8.0	8.0	24.6	24.6	81.6	81.8	5.7	5.7	11.6		4		90				<0.2		1.6	
						6.8	0.4	126	27.0		8.0		24.6		81.9		5.7		11.3		5		90				<0.2		1.6	
IM11	Cloudy	Moderate	11:36	8.7	Surface	1.0	0.8	114	27.2	27.2	8.1	8.1	22.8	22.8	88.1	88.1	6.2	5.9	7.2	11.9	4	4	85	88	822059	811468	<0.2	<0.2	1.6	1.6
						1.0	0.9	117	27.2		8.1		22.9		88.0		6.2		7.5		4		85				<0.2		1.6	
					Middle	4.4	0.7	121	27.1	27.1	8.1	8.1	23.8	23.8	80.9	80.9	5.6		12.4		4		89				<0.2		1.6	
						4.4	0.8	132	27.1		8.1		23.8		80.9		5.6		12.8		5		89				<0.2		1.5	
					Bottom	7.7	0.5	115	27.0	27.0	8.0	8.0	23.8	23.8	81.7	81.8	5.7	5.7	15.8		5		89				<0.2		1.6	
						7.7	0.6	123	27.0		8.0		23.8		81.9		5.7		15.7		4		90				<0.2		1.5	
IM12	Cloudy	Moderate	11:42	10.4	Surface	1.0	0.6	106	27.3	27.3	8.0	8.0	22.2	22.2	86.5	86.5	6.1	5.8	9.2	13.3	6	6	85	87	821473	812031	<0.2	<0.2	1.6	1.5
						1.0	0.7	111	27.3		8.0		22.2		86.4		6.1		9.9		7		85				<0.2		1.5	
					Middle	5.2	0.4	83	27.1	27.1	8.0	8.0	23.8	23.8	78.3	78.3	5.5		14.6		5		88				<0.2		1.6	
						5.2	0.4	85	27.1		8.0		23.8		78.2		5.4		14.8		6		88				<0.2		1.5	
					Bottom	9.4	0.1	84	26.9	26.9	8.0	8.0	24.8	24.8	78.8	78.9	5.5	5.5	15.6		5		89				<0.2		1.5	
						9.4	0.1	86	26.9		8.0		24.8		79.0		5.5		15.7		6		89				<0.2		1.5	
SR1A	Cloudy	Moderate	12:00	5.0	Surface	1.0	-	-	27.1	27.1	8.1	8.1	23.8	23.9	82.5	82.4	5.7	5.7	6.6	6.5	5	5	-	-	819974	812664	-	-	-	-
						1.0	-	-	27.1		8.1		24.0		82.2		5.7		6.6		6		-				-		-	
					Middle	2.5	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.5	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	-	-	27.0	27.1	8.1	8.1	25.3	25.2	82.2	82.4	5.7	5.7	6.5		5		-				-		-	
						4.0	-	-	27.1		8.1		25.2		82.5		5.7		6.5		5		-				-		-	
SR2	Cloudy	Moderate	12:13	4.6	Surface	1.0	0.4	100	27.1	27.1	8.1	8.1	23.9	23.9	83.8	84.0	5.8	5.9	7.0	7.1	6	6	85	87	821460	814142	<0.2	<0.2	1.6	1.5
						1.0	0.4	103	27.1		8.1		23.9		84.1		5.9		7.0		6		85				<0.2		1.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.2	104	27.1	27.2	8.1	8.1	23.9	23.9	85.9	86.1	6.0	6.0	7.2		6		88				<0.2		1.5	
						3.6	0.2	109	27.2		8.1		23.9		86.3		6.0		7.0		5		89				<0.2		1.4	
SR3	Rainy	Moderate	11:05	9.6	Surface	1.0	0.1	183	27.5	27.5	8.0	8.0	21.1	21.1	90.8	90.8	6.4	6.0	5.4	6.9	6	7	-	-	822141	807568	-	-	-	-
						1.0	0.1	183	27.5		8.0		21.1		90.7		6.4		5.4		6		-				-		-	
					Middle	4.8	0.1	185	27.2	27.2	7.9	7.9	23.5	23.5	80.6	80.5	5.6		6.8		7		-				-		-	
						4.8	0.2	198	27.2		7.9		23.6		80.3		5.6		6.9		6		-				-		-	
					Bottom	8.6	0.1	237	27.1	27.2	7.9	7.9	24.2	24.2	78.9	78.9	5.5	5.5	8.4		7		-				-		-	
						8.6	0.1	256	27.2		7.9		24.2		78.9		5.5		8.4		8		-				-		-	
SR4A	Cloudy	Calm	12:18	8.2	Surface	1.0	0.1	210	27.3	27.3	7.9	7.9	21.0	21.0	94.5	94.3	6.7	6.2	5.0	8.2	6	7	-	-	817166	807793	-	-	-	-
						1.0	0.1	230	27.3		7.9		21.1		94.1		6.6		5.3		7		-				-		-	
					Middle	4.1	0.0	263	27.1	27.1	7.9	7.9	22.2	22.2	83.1	83.1	5.8		7.2		6		-				-		-	
						4.1	0.0	283	27.1		7.9		22.2		83.0		5.8		7.4		6		-				-		-	
					Bottom	7.2	0.1	111	27.0	27.0	7.9	7.9	23.4	23.4	79.8	79.8	5.6	5.6	12.3		7		-				-		-	
						7.2	0.1	118	27.0		7.9		23.4		79.7		5.6		12.2		7		-				-		-	
SR5A	Cloudy	Calm	12:36	3.5	Surface	1.0	0.1	329	27.4	27.4	7.9	7.9	22.0	22.0	90.1	89.9	6.3	6.3	5.4	7.1	5	6	-	-	816598	810701	-	-	-	-
						1.0	0.1	330	27.4		7.9		22.0		89.7		6.3		5.6		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.5	0.1	356	27.4	27.4	8.0	8.0	22.3	22.3	88.3	88.3	6.2	6.2	8.7		7		-				-		-	
						2.5	0.1	359	27.4		8.0		22.3		88.3		6.2		8.7		6		-				-		-	
SR6A	Cloudy	Calm	13:13	4.1	Surface	1.0	0.1	282	27.0	27.0	7.9	7.9	24.1	24.1	78.2	78.2	5.4	5.4	10.0	9.5	11	11	-	-	817985	814722	-	-	-	-
						1.0	0.1	285	27.0		7.9		24.1		78.1		5.4		10.2		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.0	207	27.0	27.0	7.9	7.9	24.8	24.8	76.9	77.0	5.3	5.3	8.8		12		-				-		-	
						3.1	0.0	219	27.0		7.9		24.9		77.0		5.3		8.9		11		-				-		-	
SR7	Cloudy	Moderate	12:58	16.2	Surface	1.0	0.6	41	26.7	26.7	8.1	8.1	25.6	25.6	83.4	83.4	5.8	5.7	4.1	4.4	5	6	-	-	823628	823763	-	-	-	-
						1.0	0.6	43	26.7		8.1		25.6		83.3		5.8		4.1		6		-				-		-	
					Middle	8.1	0.4	19	26.4	26.4	8.1	8.1	26.7	26.7	80.5	80.6	5.6		4.6		6		-				-		-	
						8.1	0.4	19	26.4		8.1		26.7		80.6		5.6		4.6		6		-				-		-	
					Bottom	15.2	0.3	0	26.4	26.4	8.1	8.1	26.7	26.7	81.2	81.3	5.6	5.6	4.6		6		-				-		-	
						15.2	0.3	0	26.4		8.1		26.7		81.3		5.6		4.5		6		-				-		-	
SR8	Cloudy	Moderate	11:52	5.1	Surface	1.0	-	-	27.3	27.3	8.1	8.1	23.7	23.7	84.0	84.1	5.8	5.8	7.7	8.0	6	6	-	-	820375	811601	-	-	-	-
						1.0	-	-	27.3		8.1		23.8		84.1		5.8		7.8		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	-	-	27.3	27.3	8.1	8.1	24.0	24.0	85.4	85.6	5.9	5.9	8.3		6		-				-		-	
						4.1	-	-	27.3		8.1		24.0		85.7		5.9		8.2		5		-				-		-	

DA: Depth-Averaged

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

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

Note: The flood tide monitoring session on 21 May 2020 was cancelled due to adverse weather.

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 23 May 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	Moderate	13:00	8.4	Surface	1.0	0.5	222	26.8	26.8	7.9	7.9	24.2	24.2	74.0	74.0	5.2	4.9	4.1	7.5	6	5	86	88	815614	804260	<0.2	<0.2	1.4	1.3
						1.0	0.5	237	26.8		7.9		24.2		73.9		5.2		3.9		5		87							
					Middle	4.2	0.6	195	26.0	26.0	7.9	7.9	27.6	27.6	66.4	66.5	4.6		4.4		5		88						1.3	
						4.2	0.7	210	26.0		7.9		27.6		66.5		4.6		4.3		6		88						1.3	
					Bottom	7.4	0.5	209	25.9	26.0	7.8	7.8	29.5	29.5	63.7	64.0	4.4	4.4	14.4		4		89						1.3	
						7.4	0.5	212	26.0		7.8		29.5		64.3		4.4		14.1		5		90						1.3	
C2	Rainy	Moderate	11:45	11.6	Surface	1.0	0.4	186	27.1	27.1	8.0	8.0	21.7	21.7	74.9	74.8	5.3	5.2	7.2	8.4	5	7	86	88	825699	806966	<0.2	<0.2	1.9	1.8
						1.0	0.4	190	27.0		8.0		21.7		74.6		5.3		7.3		6		86						1.9	
					Middle	5.8	0.3	182	26.9	26.9	8.0	8.0	23.1	23.1	72.9	72.9	5.1		8.4		6		87						1.9	
						5.8	0.3	194	26.9		8.0		23.1		72.9		5.1		8.4		5		88						1.9	
					Bottom	10.6	0.3	177	26.4	26.4	8.0	8.0	26.1	26.1	66.4	66.4	4.6	4.6	9.6		9		90						1.6	
						10.6	0.3	181	26.4		8.0		26.1		66.4		4.6		9.6		8		91						1.6	
C3	Rainy	Moderate	13:29	12.0	Surface	1.0	0.6	88	26.5	26.5	8.0	8.0	24.6	24.6	73.9	73.8	5.2	5.1	5.8	8.9	6	7	86	88	822102	817801	<0.2	<0.2	1.5	1.5
						1.0	0.6	95	26.4		8.0		24.7		73.6		5.2		5.7		7		85						1.6	
					Middle	6.0	0.3	49	26.0	26.0	8.0	8.0	26.3	26.3	70.1	70.0	4.9		8.0		7		89						1.5	
						6.0	0.3	52	26.0		8.0		26.3		69.8		4.9		8.5		7		88						1.5	
					Bottom	11.0	0.3	26	25.7	25.7	8.0	8.0	28.6	28.6	69.2	69.4	4.8	4.8	12.7		8		91						1.5	
						11.0	0.3	26	25.7		8.0		28.6		69.5		4.8		12.7		7		91						1.4	
IM1	Rainy	Moderate	12:39	5.2	Surface	1.0	0.2	180	26.5	26.5	7.9	7.9	25.7	25.6	66.3	66.3	4.6	4.6	8.2	11.3	8	9	85	87	817945	807135	<0.2	<0.2	1.6	1.6
						1.0	0.2	192	26.5		7.9		25.6		66.2		4.6		8.0		8		85						1.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.1	165	26.1	26.1	7.8	7.8	27.8	27.8	65.1	65.2	4.5	4.5	14.8		10		88				<0.2		1.6	
						4.2	0.1	177	26.1		7.8		27.8		65.3		4.5		14.4		9		88				<0.2		1.6	
IM2	Rainy	Moderate	12:31	7.3	Surface	1.0	0.2	173	26.5	26.5	7.9	7.9	25.6	25.6	70.3	70.4	4.9	4.7	4.8	8.3	5	5	84	86	818161	806170	<0.2	<0.2	1.6	1.6
						1.0	0.2	176	26.5		7.9		25.6		70.4		4.9		4.8		4		84				<0.2		1.6	
					Middle	3.7	0.4	146	26.3	26.4	7.9	7.9	27.4	27.3	65.3	65.7	4.5		7.4		5		85				<0.2		1.6	
						3.7	0.4	147	26.4		7.9		27.2		66.0		4.6		6.9		6		86				<0.2		1.6	
					Bottom	6.3	0.2	137	25.9	25.9	7.8	7.8	28.5	28.5	63.1	63.3	4.4	4.4	13.2		6		88				<0.2		1.6	
						6.3	0.2	145	25.9		7.8		28.5		63.5		4.4		12.9		5		89				<0.2		1.6	
IM3	Rainy	Moderate	12:23	7.6	Surface	1.0	0.3	169	26.9	26.9	7.9	7.9	23.0	23.0	81.0	80.8	5.7	5.0	4.9	9.8	5	6	84	87	818772	805600	<0.2	<0.2	1.5	1.5
						1.0	0.3	177	26.8		7.9		23.1		80.5		5.7		5.1		6		85				<0.2		1.5	
					Middle	3.8	0.5	148	25.9	25.9	7.8	7.8	28.6	28.7	61.8	61.9	4.3		12.3		6		86				<0.2		1.5	
						3.8	0.5	152	25.9		7.8		28.8		62.0		4.3		13.0		5		86				<0.2		1.4	
					Bottom	6.6	0.4	129	25.8	25.9	7.8	7.8	28.9	28.8	64.2	64.5	4.4	4.5	11.9		6		89				<0.2		1.7	
						6.6	0.4	136	25.9		7.8		28.8		64.7		4.5		11.6		7		89				<0.2		1.5	
IM4	Rainy	Moderate	12:14	8.5	Surface	1.0	0.5	184	26.3	26.3	7.9	7.9	26.6	26.6	65.4	65.4	4.5	4.5	6.5	8.7	7	8	85	87	819701	804593	<0.2	<0.2	1.9	1.9
						1.0	0.5	197	26.2		7.9		26.6		65.4		4.6		6.6		7		85				<0.2		1.9	
					Middle	4.3	0.5	169	26.2	26.2	7.9	7.9	27.1	27.0	64.6	64.8	4.5		6.9		8		88				<0.2		2.0	
						4.3	0.6	170	26.2		7.9		26.9		65.0		4.5		6.8		7		88				<0.2		1.8	
					Bottom	7.5	0.4	162	25.7	25.8	7.8	7.8	29.5	29.5	60.7	60.9	4.2	4.2	12.6		9		88				<0.2		1.8	
						7.5	0.4	169	25.8		7.8		29.5		61.0		4.2		13.0		8		89				<0.2		1.8	
IM5	Rainy	Calm	12:05	7.8	Surface	1.0	0.4	214	26.7	26.7	7.9	7.9	24.7	24.8	72.8	73.0	5.1	4.6	6.0	9.1	6	6	86	88	820716	804863	<0.2	<0.2	2.0	2.0
						1.0	0.4	214	26.7		7.9		25.0		73.2		5.1		6.0		7		86				<0.2		2.0	
					Middle	3.9	0.4	182	25.8	25.8	7.8	7.8	29.2	29.2	57.7	57.8	4.0		6.2		6		88				<0.2		2.1	
						3.9	0.4	192	25.8		7.8		29.2		57.8		4.0		6.9		6		88				<0.2		2.0	
					Bottom	6.8	0.4	169	25.7	25.7	7.8	7.8	29.3	29.3	58.3	58.5	4.0	4.1	15.0		5		90				<0.2		2.0	
						6.8	0.4	183	25.7		7.8		29.3		58.6		4.1		14.8		6		89				<0.2		1.9	
IM6	Rainy	Calm	11:55	7.9	Surface	1.0	0.2	254	26.8	26.8	7.8	7.8	24.0	24.1	72.5	72.5	5.1	4.8	6.8	8.8	6	5	85	88	821059	805846	<0.2	<0.2	1.9	2.0
						1.0	0.2	259	26.7		7.8		24.1		72.5		5.1		6.9		5		85				<0.2		2.0	
					Middle	4.0	0.3	192	26.2	26.2	7.8	7.8	27.2	27.2	65.4	65.5	4.5		8.7		6		88				<0.2		1.9	
						4.0	0.3	201	26.2		7.8		27.3		65.6		4.6		9.1		5		89				<0.2		2.0	
					Bottom	6.9	0.2	191	26.1	26.1	7.8	7.8	27.5	27.5	67.2	67.4	4.7	4.7	10.8		5		89				<0.2		2.0	
						6.9	0.2	201	26.1		7.8		27.5		67.6		4.7		10.6		5		90				<0.2		2.0	
IM7	Rainy	Moderate	11:46	8.9	Surface	1.0	0.1	263	27.1	27.1	7.8	7.8	21.9	21.9	75.4	75.4	5.3	5.0	6.6	9.8	8	8	81	85	821354	806857	<0.2	<0.2	1.9	2.0
						1.0	0.1	271	27.1		7.8		21.9		75.3		5.3		6.6		8		82				<0.2		2.0	
					Middle	4.5	0.1	123	26.3	26.3	7.8	7.8	26.3	26.4	66.0	66.0	4.6		10.6		8		84				<0.2		2.0	
						4.5	0.1	131	26.3		7.8		26.4		66.0		4.6		11.1		8		84				<0.2		2.1	
					Bottom	7.9	0.2	111	26.3	26.4	7.8	7.8	26.5	26.4	66.5	66.6	4.6	4.6	12.4		8		89				<0.2		2.0	
						7.9	0.2	111	26.4		7.8		26.3		66.7		4.6		11.7		8		90				<0.2		1.9	
IM8	Rainy	Moderate	12:07	8.8	Surface	1.0	0.1	94	27.1	27.1	8.0	8.0	20.8	20.8	80.6	80.6	5.7	5.5	6.8	8.2	6	7	87	89	821824	808159	<0.2	<0.2	1.9	1.8
						1.0	0.1	101	27.1		8.0		20.8		80.5		5.7		7.0		7		87				<0.2		1.8	
					Middle	4.4	0.1	99	26.9	26.9	8.0	8.0	23.1	23.1	74.7	74.7	5.2		8.4		7		88				<0.2		1.9	
						4.4	0.1	105	26.9		8.0		23.1		74.6		5.2		8.3		7		89				<0.2		1.9	
					Bottom	7.8	0.2	35	26.4	26.4	8.0	8.0	25.6	25.6	72.8	73.0	5.1	5.1	8.9		8		88				<0.2		1.6	
						7.8	0.2	36	26.4		8.0		25.6		73.1		5.1		9.7		9		92				<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 23 May 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Rainy	Moderate	12:13	7.6	Surface	1.0	0.3	128	27.2	27.2	8.0	8.0	20.9	20.9	82.3	82.3	5.8	5.6	6.4	9.7	6	7	87	89	822074	808827	<0.2	<0.2	1.9	1.7
						1.0	0.4	130	27.1		8.0		20.9		82.2		5.8		6.7		7		87				<0.2		1.8	
					Middle	3.8	0.4	127	26.7	26.7	8.0	8.0	21.9	22.0	77.3	76.5	5.5		13.1		7		88				<0.2		1.8	
						3.8	0.4	139	26.6		8.0		22.2		75.7		5.4		13.5		6		89				<0.2		1.8	
					Bottom	6.6	0.3	95	26.6	26.6	8.0	8.0	24.9	24.9	72.6	72.7	5.1	5.1	9.2		8		90				<0.2		1.5	
						6.6	0.3	100	26.6		8.0		24.9		72.8		5.1		9.5		9		91				<0.2		1.5	
IM10	Rainy	Moderate	12:20	8.0	Surface	1.0	0.7	143	27.0	27.0	8.0	8.0	21.9	21.9	82.8	82.8	5.8	5.6	6.4	8.4	7	9	87	89	822398	809771	<0.2	<0.2	1.8	1.7
						1.0	0.8	156	27.0		8.0		22.0		82.7		5.8		6.4		7		88				<0.2		1.9	
					Middle	4.0	0.6	129	26.8	26.8	8.0	8.0	22.4	22.4	76.1	75.8	5.4		6.9		6		89				<0.2		1.8	
						4.0	0.7	140	26.8		8.0		22.4		75.5		5.3		6.9		8		90				<0.2		1.9	
					Bottom	7.0	0.5	115	26.7	26.7	8.0	8.0	24.3	24.3	75.0	75.3	5.3	5.3	11.7		13		91				<0.2		1.4	
						7.0	0.5	116	26.7		8.0		24.3		75.5		5.3		11.8		13		90				<0.2		1.4	
IM11	Rainy	Moderate	12:30	8.5	Surface	1.0	0.8	96	27.0	27.0	8.0	8.0	22.4	22.4	81.1	81.1	5.7	5.5	5.0	8.7	5	5	87	89	822076	811479	<0.2	<0.2	1.9	1.7
						1.0	0.8	97	27.0		8.0		22.4		81.0		5.7		5.1		5		88				<0.2		1.8	
					Middle	4.3	0.8	97	26.8	26.8	8.0	8.0	23.6	23.7	74.6	74.6	5.2		6.0		5		89				<0.2		1.9	
						4.3	0.9	99	26.8		8.0		23.7		74.5		5.2		6.1		4		89				<0.2		1.8	
					Bottom	7.5	0.6	102	26.6	26.6	8.0	8.0	24.7	24.7	74.9	75.0	5.2	5.3	14.9		6		90				<0.2		1.4	
						7.5	0.7	102	26.6		8.0		24.7		75.1		5.3		15.1		6		91				<0.2		1.5	
IM12	Rainy	Moderate	12:37	9.0	Surface	1.0	0.7	133	26.9	26.9	8.0	8.0	21.4	21.4	81.7	81.5	5.8	5.4	7.4	12.9	8	10	86	89	821471	812067	<0.2	<0.2	1.8	1.7
						1.0	0.7	143	26.8		8.0		21.5		81.3		5.8		7.6		8		87				<0.2		1.8	
					Middle	4.5	0.5	123	26.6	26.6	8.0	8.0	24.7	24.7	71.8	71.8	5.0		15.7		9		88				<0.2		1.8	
						4.5	0.5	127	26.6		8.0		24.8		71.8		5.0		15.1		10		89				<0.2		1.8	
					Bottom	8.0	0.3	119	26.5	26.5	8.0	8.0	25.1	25.1	72.3	72.4	5.1	5.1	15.6		11		90				<0.2		1.4	
						8.0	0.3	130	26.5		8.0		25.1		72.5		5.1		15.9		11		92				<0.2		1.4	
SR1A	Rainy	Moderate	12:57	4.8	Surface	1.0	-	-	26.9	26.9	8.0	8.0	22.4	22.4	76.5	76.5	5.4	5.4	6.7	7.0	10	10	-	-	819975	812653	-	-	-	-
						1.0	-	-	26.9		8.0		22.5		76.5		5.4		6.8		9		-				-		-	
					Middle	2.4	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.4	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	-	-	26.7	26.7	8.0	8.0	24.2	24.3	76.3	76.4	5.3	5.3	7.2		10		-				-		-	
						3.8	-	-	26.7		8.0		24.3		76.4		5.3		7.3		10		-				-		-	
SR2	Rainy	Moderate	13:09	4.7	Surface	1.0	0.7	101	27.1	27.1	8.0	8.0	21.2	21.2	83.7	83.8	5.9	5.9	5.8	8.8	8	9	88	89	821480	814187	<0.2	<0.2	1.5	1.6
						1.0	0.7	110	27.1		8.0		21.2		83.8		5.9		6.3		8		87				<0.2		1.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.4	87	26.8	26.8	8.0	8.0	23.4	23.4	76.8	77.2	5.4	5.4	11.8		11		90				<0.2		1.6	
						3.7	0.4	95	26.8		8.0		23.4		77.5		5.4		11.3		10		92				<0.2		1.5	
SR3	Rainy	Moderate	12:01	9.0	Surface	1.0	0.2	216	27.0	27.0	8.1	8.1	20.9	20.9	80.9	80.8	5.7	5.4	8.6	10.2	6	7	-	-	822159	807556	-	-	-	-
						1.0	0.2	227	26.9		8.1		20.9		80.7		5.7		9.2		6		-				-		-	
					Middle	4.5	0.1	253	26.4	26.4	8.0	8.0	24.0	24.0	71.1	71.1	5.0		12.2		7		-				-		-	
						4.5	0.1	278	26.4		8.0		24.0		71.1		5.0		12.4		6		-				-		-	
					Bottom	8.0	0.1	48	26.3	26.3	8.0	8.0	26.3	26.3	71.4	71.6	5.0	5.0	9.1		8		-				-		-	
						8.0	0.1	50	26.3		8.0		26.3		71.7		5.0		9.6		9		-				-		-	
SR4A	Rainy	Calm	13:25	9.0	Surface	1.0	0.1	87	26.4	26.4	7.8	7.8	26.3	26.3	71.4	71.8	5.0	4.7	8.5	11.2	5	5	-	-	817201	807814	-	-	-	-
						1.0	0.1	88	26.4		7.8		26.3		72.1		5.0		8.2		4		-				-		-	
					Middle	4.5	0.1	67	26.1	26.1	7.8	7.8	27.7	27.7	62.2	62.3	4.3		11.8		5		-				-		-	
						4.5	0.1	73	26.1		7.8		27.7		62.3		4.3		11.9		5		-				-		-	
					Bottom	8.0	0.1	85	26.1	26.1	7.8	7.8	27.8	27.8	63.3	63.4	4.4	4.4	13.4		5		-				-		-	
						8.0	0.1	87	26.1		7.8		27.8		63.4		4.4		13.3		6		-				-		-	
SR5A	Rainy	Calm	13:42	4.1	Surface	1.0	0.1	290	27.1	27.1	7.9	7.9	22.9	22.9	76.0	76.0	5.3	5.3	7.5	9.8	6	7	-	-	816616	810712	-	-	-	-
						1.0	0.1	297	27.1		7.9		22.9		75.9		5.3		7.6		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.1	288	26.8	26.8	7.8	7.8	23.9	24.0	73.5	73.7	5.1	5.2	11.9		8		-				-		-	
						3.1	0.1	303	26.7		7.8		24.0		73.8		5.2		12.0		7		-				-		-	
SR6A	Rainy	Calm	14:17	4.5	Surface	1.0	0.1	8	26.9	26.9	7.8	7.8	22.7	22.7	74.1	73.9	5.2	5.2	8.2	9.2	11	12	-	-	817982	814749	-	-	-	-
						1.0	0.1	8	26.9		7.8		22.7		73.7		5.2		8.3		11		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.0	173	26.6	26.6	7.8	7.8	24.9	24.9	71.0	71.2	5.0	5.0	10.1		12		-				-		-	
						3.5	0.0	181	26.6		7.8		24.9		71.3		5.0		10.1		12		-				-		-	
SR7	Rainy	Moderate	13:55	16.6	Surface	1.0	1.0	54	26.6	26.6	8.0	8.0	24.1	24.1	77.6	77.6	5.4	5.1	4.0	4.2	4	6	-	-	823657	823735	-	-	-	-
						1.0	1.0	55	26.6		8.0		24.1		77.5		5.4		4.1		5		-				-		-	
					Middle	8.3	0.4	41	25.7	25.7	8.0	8.0	28.0	28.0	68.2	68.2	4.8		4.3		6		-				-		-	
						8.3	0.4	44	25.7		8.0		28.1		68.2		4.8		4.2		6		-				-		-	
					Bottom	15.6	0.5	34	25.6	25.6	8.0	8.0	28.7	28.6	70.9	71.0	4.9	4.9	4.2		6		-				-		-	
						15.6	0.5	34	25.6		8.0		28.6		71.1		4.9		4.2		7		-				-		-	
SR8	Rainy	Moderate	12:49	4.9	Surface	1.0	-	-	27.0	27.0	8.0	8.0	22.6	22.6	78.0	78.1	5.5	5.5	12.1	12.3	8	10	-	-	820401	811619	-	-	-	-
						1.0	-	-	27.0		8.0		22.6		78.1		5.5		12.4		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	-	-	27.0	27.0	8.0	8.0	22.7	22.7	81.2	81.5	5.7	5.7	12.1		12		-				-		-	
						3.9	-	-	27.0		8.0		22.7		81.7		5.7		12.5		11		-				-		-	

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 23 May 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	Calm	20:31	8.8	Surface	1.0	0.7	36	26.9	27.0	7.9	7.9	22.8	22.8	77.9	77.9	5.5	5.0	5.0	10.6	5	6	85	88	815640	804230	<0.2	<0.2	1.4	1.5
						1.0	0.7	36	27.0		7.9		22.8		77.9		5.5		4.9		5		85				<0.2		1.5	
					Middle	4.4	0.4	46	26.1	26.1	7.9	7.9	27.6	27.5	63.8	63.9	4.4		10.6		6		88				<0.2		1.4	
						4.4	0.4	49	26.1		7.9		27.5		63.9		4.4		10.5		5		88				<0.2		1.5	
					Bottom	7.8	0.4	46	25.8	25.8	7.9	7.9	29.3	29.2	63.3	63.5	4.4	4.4	16.4		6		90				<0.2		1.5	
						7.8	0.5	48	25.8		7.9		29.2		63.6		4.4		16.3		6		90				<0.2		1.6	
C2	Cloudy	Moderate	20:53	12.6	Surface	1.0	0.4	12	27.3	27.3	8.0	8.0	19.3	19.3	82.1	82.0	5.8	5.6	6.0	7.2	6	6	86	88	825665	806956	<0.2	<0.2	2.1	2.0
						1.0	0.4	12	27.3		8.0		19.3		81.9		5.8		6.2		7		87				<0.2		2.0	
					Middle	6.3	0.4	23	27.2	27.2	8.0	8.0	22.1	22.1	76.5	76.5	5.4		7.3		6		88				<0.2		2.0	
						6.3	0.4	24	27.2		8.0		22.2		76.4		5.4		7.3		6		88				<0.2		2.0	
					Bottom	11.6	0.5	359	27.0	27.0	8.0	8.0	23.0	23.1	75.9	76.0	5.3	5.3	7.9		5		90				<0.2		1.9	
						11.6	0.6	330	27.0		8.0		23.1		76.0		5.3		8.2		6		91				<0.2		1.9	
C3	Cloudy	Moderate	19:02	12.0	Surface	1.0	0.6	273	27.0	27.0	8.0	8.0	22.1	22.1	78.9	78.9	5.6	5.6	5.0	4.6	5	5	86	88	822115	817826	<0.2	<0.2	1.9	1.8
						1.0	0.6	297	27.0		8.0		22.1		78.8		5.6		5.0		5		87				<0.2		1.8	
					Middle	6.0	0.6	283	26.6	26.6	8.0	8.0	23.1	23.1	77.5	77.5	5.5		5.2		5		88				<0.2		1.8	
						6.0	0.6	294	26.6		8.0		23.2		77.4		5.5		5.2		6		89				<0.2		2.0	
					Bottom	11.0	0.7	301	25.8	25.8	8.0	8.0	28.8	28.8	67.6	67.7	4.7	4.7	3.5		6		90				<0.2		1.8	
						11.0	0.8	307	25.8		8.0		28.8		67.7		4.7		3.8		5		90				<0.2		1.7	
IM1	Cloudy	Calm	20:30	5.6	Surface	1.0	0.1	356	26.9	26.9	7.9	7.9	23.2	23.2	76.0	76.0	5.3	5.3	5.6	8.4	6	8	81	83	817956	807127	<0.2	<0.2	1.6	1.6
						1.0	0.1	358	26.9		7.9		23.2		76.0		5.3		5.6		7		82				<0.2		1.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.6	0.1	273	26.7	26.7	7.8	7.8	24.8	24.8	72.9	73.1	5.1	5.1	11.5		9		84				<0.2		1.6	
						4.6	0.1	293	26.7		7.8		24.8		73.3		5.1		11.2		8		85				<0.2		1.6	
IM2	Cloudy	Moderate	20:21	7.7	Surface	1.0	0.5	12	27.1	27.1	7.9	7.9	21.7	21.7	80.8	80.8	5.7	5.2	5.1	8.5	5	6	82	85	818156	806183	<0.2	<0.2	1.7	1.7
						1.0	0.5	12	27.1		7.9		21.7		80.8		5.7		5.1		6		83				<0.2		1.7	
					Middle	3.9	0.3	12	26.5	26.5	7.9	7.9	25.8	25.8	67.8	67.9	4.7		8.2		5		84				<0.2		1.7	
						3.9	0.3	12	26.5		7.9		25.8		67.9		4.7		8.0		6		85				<0.2		1.6	
					Bottom	6.7	0.2	12	26.4	26.5	7.8	7.8	26.1	26.1	69.9	70.1	4.9	4.9	12.7		5		88				<0.2		1.6	
						6.7	0.2	12	26.5		7.8		26.0		70.3		4.9		12.1		6		88				<0.2		1.6	
IM3	Cloudy	Moderate	20:15	8.0	Surface	1.0	0.4	325	27.0	27.0	7.9	7.9	21.9	21.9	81.9	81.9	5.8	5.3	5.0	9.3	6	6	83	86	818807	805579	<0.2	<0.2	1.9	1.9
						1.0	0.4	337	27.0		7.9		21.9		81.8		5.8		5.0		5		83				<0.2		1.8	
					Middle	4.0	0.5	2	26.4	26.4	7.9	7.8	26.0	26.0	68.2	68.3	4.7		10.1		5		85				<0.2		1.8	
						4.0	0.5	2	26.4		7.8		26.0		68.3		4.8		10.2		6		85				<0.2		1.9	
					Bottom	7.0	0.3	340	26.3	26.3	7.8	7.8	26.7	26.7	67.4	67.6	4.7	4.7	12.7		6		88				<0.2		2.0	
						7.0	0.3	313	26.3		7.8		26.7		67.7		4.7		12.9		5		89				<0.2		2.0	
IM4	Cloudy	Moderate	19:49	8.8	Surface	1.0	0.7	342	26.9	26.9	7.9	7.9	22.5	22.6	78.6	78.6	5.5	5.3	5.3	7.5	6	5	85	88	819733	804610	<0.2	<0.2	1.6	1.6
						1.0	0.7	315	26.9		7.9		22.6		78.5		5.5		5.4		5		85				<0.2		1.6	
					Middle	4.4	0.7	0	26.5	26.6	7.9	7.9	24.9	24.8	71.5	71.5	5.0		6.2		6		89				<0.2		1.6	
						4.4	0.7	0	26.6		7.9		24.8		71.5		5.0		6.2		5		89				<0.2		1.7	
					Bottom	7.8	0.6	0	26.4	26.4	7.8	7.8	26.8	26.8	69.9	70.2	4.8	4.9	10.7		5		90				<0.2		1.7	
						7.8	0.6	0	26.3		7.8		26.8		70.5		4.9		11.0		5		90				<0.2		1.6	
IM5	Cloudy	Moderate	19:26	7.8	Surface	1.0	1.0	6	26.9	26.9	7.9	7.9	22.8	22.7	78.3	78.3	5.5	5.1	5.9	11.6	6	6	83	86	820758	804872	<0.2	<0.2	1.8	1.9
						1.0	1.0	6	26.9		7.9		22.7		78.3		5.5		5.8		6		83				<0.2		1.8	
					Middle	3.9	0.8	15	26.4	26.4	7.9	7.9	26.0	26.1	67.8	67.9	4.7		14.4		6		85				<0.2		1.8	
						3.9	0.8	15	26.4		7.9		26.1		67.9		4.7		13.5		6		86				<0.2		1.8	
					Bottom	6.8	0.6	18	26.3	26.4	7.8	7.8	26.4	26.4	69.7	69.9	4.9	4.9	15.0		6		88				<0.2		1.9	
						6.8	0.6	19	26.4		7.8		26.4		70.0		4.9		15.3		5		89				<0.2		2.0	
IM6	Cloudy	Moderate	19:07	7.9	Surface	1.0	0.1	214	27.3	27.3	7.8	7.8	19.6	19.6	81.1	81.1	5.8	5.6	5.3	9.3	5	5	84	88	821044	805806	<0.2	<0.2	1.9	2.0
						1.0	0.1	227	27.3		7.8		19.6		81.0		5.8		5.5		4		84				<0.2		2.0	
					Middle	4.0	0.3	74	26.9	26.9	7.9	7.9	22.2	22.2	75.4	75.4	5.3		8.8		5		88				<0.2		2.0	
						4.0	0.3	76	26.8		7.9		22.2		75.4		5.3		9.4		6		88				<0.2		2.0	
					Bottom	6.9	0.3	75	26.5	26.5	7.9	7.9	25.5	25.5	69.0	69.2	4.8	4.8	13.3		5		90				<0.2		2.0	
						6.9	0.3	78	26.5		7.9		25.5		69.3		4.8		13.3		6		91				<0.2		2.0	
IM7	Cloudy	Moderate	18:36	9.3	Surface	1.0	0.1	245	27.4	27.4	7.8	7.8	19.3	19.4	80.5	80.4	5.7	5.7	4.9	6.4	6	6	85	88	821357	806843	<0.2	<0.2	2.4	2.3
						1.0	0.1	246	27.3		7.8		19.5		80.2		5.7		5.1		7		85				<0.2		2.2	
					Middle	4.7	0.2	119	27.1	27.1	7.8	7.8	20.4	20.4	78.4	78.4	5.6		6.1		6		89				<0.2		2.4	
						4.7	0.2	124	27.0		7.8		20.4		78.3		5.6		6.1		7		90				<0.2		2.2	
					Bottom	8.3	0.3	85	26.6	26.7	7.8	7.8	24.9	24.9	72.3	72.5	5.0	5.1	8.2		5		90				<0.2		2.2	
						8.3	0.3	93	26.7		7.8		24.9		72.6		5.1		8.0		6		91				<0.2		2.2	
IM8	Cloudy	Moderate	20:25	8.4	Surface	1.0	0.1	13	27.3	27.3	8.0	8.0	19.8	19.8	81.0	80.9	5.8	5.7	7.3	9.1	7	7	87	88	821812	808155	<0.2	<0.2	2.2	2.2
						1.0	0.1	13	27.3		8.0		19.9		80.8		5.7		7.7		7		86				<0.2		2.2	
					Middle	4.2	0.1	76	27.3	27.3	8.0	8.0	20.0	20.0	80.8	80.9	5.7		8.6		6		88				<0.2		2.2	
						4.2	0.1	82	27.3		8.0		20.0		80.9		5.7		8.7		8		87				<0.2		2.2	
					Bottom	7.4	0.2	98	27.4	27.4	8.0	8.0	20.6	20.6	84.0	84.2	5.9	6.0	11.2		8		90				<0.2		2.1	
						7.4	0.2	102	27.4		8.0		20.6		84.3		6.0		11.2		7		90				<0.2		2.0	

DA: Depth-Averaged

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

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 23 May 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	20:18	7.6	Surface	1.0	0.1	26	27.2	27.2	8.0	8.0	20.3	20.3	82.0	82.1	5.8	5.8	9.6	9.0	11	12	87	88	822092	808804	<0.2	<0.2	2.1	2.1
						1.0	0.1	28	27.2		8.0		20.3		82.1		5.8		9.6		12		87				<0.2		2.2	
					Middle	3.8	0.1	239	27.2	27.2	8.0	8.0	20.3	20.3	82.0	82.0	5.8		9.5		12		87				<0.2		2.2	
						3.8	0.1	240	27.2		8.0		20.3		82.0		5.8		9.6		12		88				<0.2		2.3	
					Bottom	6.6	0.1	216	27.1	27.1	8.0	8.0	21.9	21.9	80.7	80.7	5.7	5.7	8.0		13		90				<0.2		1.9	
						6.6	0.1	231	27.1		8.0		21.9		80.7		5.7		7.7		12		91				<0.2		1.9	
IM10	Cloudy	Moderate	20:10	7.6	Surface	1.0	0.8	311	27.1	27.1	8.0	8.0	20.8	20.8	81.2	81.2	5.8	5.6	9.1	9.6	5	7	87	89	822396	809790	<0.2	<0.2	2.2	2.0
						1.0	0.9	322	27.1		8.0		20.8		81.1		5.8		9.5		6		87				<0.2		2.2	
					Middle	3.8	0.6	320	26.9	26.9	8.0	8.0	23.1	23.1	76.3	76.3	5.4		11.8		7		88				<0.2		2.0	
						3.8	0.6	340	26.9		8.0		23.1		76.3		5.4		11.7		6		89				<0.2		2.2	
					Bottom	6.6	0.5	312	26.9	26.9	8.0	8.0	23.4	23.4	76.3	76.4	5.3	5.4	7.7		9		90				<0.2		1.7	
						6.6	0.5	313	26.9		8.0		23.4		76.4		5.4		7.9		10		92				<0.2		1.6	
IM11	Cloudy	Moderate	19:59	8.8	Surface	1.0	0.6	278	27.1	27.1	8.0	8.0	21.7	21.7	78.9	78.9	5.6	5.5	5.8	8.4	4	8	86	89	822061	811441	<0.2	<0.2	2.0	1.9
						1.0	0.7	298	27.1		8.0		21.8		78.8		5.6		5.8		5		88				<0.2		2.0	
					Middle	4.4	0.5	289	26.7	26.7	8.0	8.0	24.2	24.3	75.9	75.9	5.3		7.8		9		89				<0.2		2.0	
						4.4	0.5	297	26.7		8.0		24.3		75.8		5.3		8.5		8		88				<0.2		2.1	
					Bottom	7.8	0.3	286	26.6	26.6	8.0	8.0	24.6	24.6	75.9	75.9	5.3	5.3	11.3		10		90				<0.2		1.6	
						7.8	0.3	304	26.6		8.0		24.6		75.9		5.3		11.3		10		91				<0.2		1.6	
IM12	Cloudy	Moderate	19:51	8.6	Surface	1.0	0.8	294	27.0	27.0	8.0	8.0	21.4	21.4	79.7	79.6	5.6	5.5	6.7	6.8	5	6	86	88	821475	812029	<0.2	<0.2	2.0	1.9
						1.0	0.9	297	27.0		8.0		21.4		79.5		5.6		7.2		5		85				<0.2		2.0	
					Middle	4.3	0.6	294	26.8	26.8	8.0	8.0	23.7	23.7	76.8	76.8	5.4		4.0		6		88				<0.2		2.0	
						4.3	0.7	307	26.8		8.0		23.8		76.7		5.4		4.2		6		89				<0.2		2.0	
					Bottom	7.6	0.4	319	26.7	26.7	8.0	8.0	24.1	24.1	76.8	76.9	5.4	5.4	9.4		7		91				<0.2		1.7	
						7.6	0.5	320	26.7		8.0		24.1		77.0		5.4		9.5		8		91				<0.2		1.7	
SR1A	Cloudy	Moderate	19:33	5.4	Surface	1.0	-	-	27.2	27.2	8.0	8.0	19.7	19.7	82.9	83.0	5.9	5.9	5.3	5.3	4	5	-	-	819977	812662	-	-	-	-
						1.0	-	-	27.2		8.0		19.7		83.1		5.9		5.4		4		-				-		-	
					Middle	2.7	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.7	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	-	-	27.2	27.2	8.0	8.0	21.0	21.1	84.5	84.6	6.0	6.0	5.3		6		-				-		-	
						4.4	-	-	27.2		8.0		21.1		84.7		6.0		5.3		7		-				-		-	
SR2	Cloudy	Moderate	19:21	5.2	Surface	1.0	0.3	44	26.7	26.7	8.0	8.0	22.8	22.8	75.0	74.9	5.3	5.3	7.0	7.2	6	8	88	89	821449	814189	<0.2	<0.2	2.0	1.8
						1.0	0.3	47	26.7		8.0		22.9		74.8		5.3		7.1		5		89				<0.2		2.1	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.1	34	26.4	26.4	8.0	8.0	25.8	25.7	70.3	70.4	4.9	4.9	7.4		10		90				<0.2		1.5	
						4.2	0.1	37	26.4		8.0		25.7		70.5		4.9		7.3		10		90				<0.2		1.5	
SR3	Cloudy	Moderate	20:31	9.6	Surface	1.0	0.2	351	27.3	27.3	8.0	8.0	20.0	20.0	80.8	80.8	5.7	5.7	8.1	7.9	8	8	-	-	822155	807590	-	-	-	-
						1.0	0.2	323	27.3		8.0		20.0		80.8		5.7		8.2		8		-				-		-	
					Middle	4.8	0.1	73	27.3	27.3	8.0	8.0	20.1	20.1	80.5	80.5	5.7		8.0		8		-				-		-	
						4.8	0.1	75	27.3		8.0		20.2		80.5		5.7		7.9		8		-				-		-	
					Bottom	8.6	0.1	121	27.2	27.2	8.0	8.0	21.3	21.3	78.8	78.8	5.6	5.6	7.7		9		-				-		-	
						8.6	0.1	121	27.2		8.0		21.3		78.7		5.5		7.8		9		-				-		-	
SR4A	Cloudy	Calm	20:37	9.4	Surface	1.0	0.1	99	27.2	27.2	7.9	7.9	21.7	21.7	79.7	79.7	5.6	5.5	5.3	8.8	6	6	-	-	817169	807819	-	-	-	-
						1.0	0.1	101	27.2		7.9		21.7		79.6		5.6		5.3		6		-				-		-	
					Middle	4.7	0.2	79	27.1	27.1	7.9	7.9	22.5	22.5	75.8	75.8	5.3		6.9		7		-				-		-	
						4.7	0.3	79	27.1		7.9		22.5		75.7		5.3		6.8		6		-				-		-	
					Bottom	8.4	0.3	77	26.8	26.8	7.9	7.9	24.4	24.4	72.1	72.2	5.0	5.0	14.3		7		-				-		-	
						8.4	0.3	77	26.8		7.9		24.4		72.3		5.0		14.5		6		-				-		-	
SR5A	Cloudy	Calm	20:45	4.3	Surface	1.0	0.1	285	27.1	27.1	7.8	7.8	22.6	22.6	79.3	79.3	5.6	5.6	5.0	5.4	7	6	-	-	816583	810674	-	-	-	-
						1.0	0.1	291	27.1		7.8		22.6		79.3		5.6		5.1		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.1	292	27.1	27.1	7.8	7.8	22.6	22.6	79.4	79.5	5.6	5.6	5.7		5		-				-		-	
						3.3	0.1	297	27.1		7.8		22.6		79.5		5.6		5.7		5		-				-		-	
SR6A	Cloudy	Calm	20:53	4.8	Surface	1.0	0.1	203	27.1	27.1	7.8	7.8	21.0	21.0	80.3	80.3	5.7	5.7	4.8	6.1	5	5	-	-	817967	814737	-	-	-	-
						1.0	0.1	221	27.1		7.8		21.0		80.3		5.7		4.9		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.0	260	27.1	27.1	7.8	7.8	21.9	21.9	79.1	79.2	5.6	5.6	7.0		6		-				-		-	
						3.8	0.0	260	27.1		7.8		21.9		79.2		5.6		7.6		6		-				-		-	
SR7	Cloudy	Moderate	18:35	16.6	Surface	1.0	0.1	180	27.0	27.0	8.0	8.0	22.4	22.4	79.3	79.3	5.6	5.4	4.3	4.2	4	4	-	-	823637	823765	-	-	-	-
						1.0	0.1	192	27.0		8.0		22.5		79.3		5.6		4.3		3		-				-		-	
					Middle	8.3	0.1	231	26.1	26.1	7.9	7.9	25.6	25.6	72.5	72.5	5.1		4.0		4		-				-		-	
						8.3	0.1	249	26.0		7.9		25.6		72.4		5.1		4.1		3		-				-		-	
					Bottom	15.6	0.1	64	25.4	25.4	7.9	7.9	29.7	29.7	66.2	66.3	4.6	4.6	4.2		5		-				-		-	
						15.6	0.1	70	25.4		7.9		29.7		66.3		4.6		4.2		6		-				-		-	
SR8	Cloudy	Moderate	19:43	5.0	Surface	1.0	-	-	27.1	27.1	8.0	8.0	19.4	19.4	79.5	79.4	5.7	5.7	7.1	7.2	5	5	-	-	820381	811644	-	-	-	-
						1.0	-	-	27.1		8.0		19.4		79.2		5.7		7.1		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	-	-	27.0	27.0	8.0	8.0	22.4	22.4	78.9	79.0	5.5	5.6	7.4		5		-				-		-	
						4.0	-	-	27.0		8.0		22.4		79.0		5.6		7.4		6		-				-		-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 26 May 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	14:45	8.6	Surface	1.0	0.4	236	27.0	27.0	8.0	8.0	24.6	24.6	86.8	86.7	6.0	5.8	4.5	6.4	5	6	86	89	815605	804227	<0.2	<0.2	1.2	1.2
						1.0	0.4	239	27.0		8.0		24.6		86.6		6.0		4.5		6		88				<0.2		1.2	
					Middle	4.3	0.5	216	26.5	26.5	8.0	8.0	25.0	25.0	79.8	79.9	5.6		4.7		5		89				<0.2		1.2	
						4.3	0.5	229	26.4		8.0		25.0		79.9		5.6		4.7		6		89				<0.2		1.2	
					Bottom	7.6	0.4	193	26.0	26.0	7.9	7.9	27.7	27.6	68.2	68.3	4.7	4.7	9.9		8		91				<0.2		1.3	
						7.6	0.4	198	26.0		7.9		27.6		68.3		4.7		9.9		7		91				<0.2		1.2	
C2	Rainy	Moderate	13:35	12.4	Surface	1.0	0.4	174	27.4	27.4	7.7	7.7	21.0	21.0	78.8	78.8	5.6	5.3	5.8	6.9	6	7	88	91	825666	806930	<0.2	<0.2	2.0	2.0
						1.0	0.5	184	27.3		7.7		21.1		78.8		5.6		5.9		6		89				<0.2		1.9	
					Middle	6.2	0.5	175	26.7	26.7	7.7	7.7	22.2	22.2	70.1	70.1	5.0		7.1		7		92				<0.2		2.0	
						6.2	0.5	182	26.6		7.7		22.2		70.0		5.0		7.0		8		92				<0.2		2.1	
					Bottom	11.4	0.3	154	26.0	26.1	7.7	7.7	27.6	27.6	65.3	65.5	4.5	4.6	7.5		8		93				<0.2		2.1	
						11.4	0.3	162	26.1		7.7		27.6		65.7		4.6		8.0		8		94				<0.2		1.9	
C3	Cloudy	Moderate	15:05	12.2	Surface	1.0	0.5	97	26.7	26.7	7.8	7.8	23.8	23.8	75.1	75.1	5.3	5.1	5.3	6.3	6	7	88	92	822090	817780	<0.2	<0.2	1.9	1.9
						1.0	0.5	99	26.7		7.8		23.9		75.0		5.3		5.3		7		89				<0.2		1.9	
					Middle	6.1	0.2	75	26.4	26.4	7.8	7.8	25.2	25.2	69.4	69.4	4.9		6.0		7		92				<0.2		2.0	
						6.1	0.2	77	26.4		7.8		25.2		69.4		4.9		6.2		7		92				<0.2		1.8	
					Bottom	11.2	0.4	53	25.8	25.8	7.8	7.8	27.8	27.8	63.7	63.8	4.4	4.5	7.5		8		94				<0.2		1.8	
						11.2	0.4	54	25.8		7.8		27.8		63.9		4.5		7.5		9		94				<0.2		1.8	
IM1	Cloudy	Moderate	14:23	5.2	Surface	1.0	0.2	169	26.9	26.9	8.0	8.0	22.9	23.0	83.4	83.3	5.9	5.9	7.8	9.0	7	8	86	89	817936	807115	<0.2	<0.2	1.2	1.2
						1.0	0.2	177	26.9		8.0		23.1		83.2		5.8		8.2		7		88				<0.2		1.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.0	9	26.6	26.7	7.9	7.9	23.6	23.5	72.0	72.5	5.1	5.1	10.2		9		90				<0.2		1.2	
						4.2	0.0	9	26.7		7.9		23.5		72.9		5.1		9.8		9		90				<0.2		1.2	
IM2	Cloudy	Moderate	14:16	7.4	Surface	1.0	0.3	163	26.6	26.6	8.0	8.0	23.7	23.7	80.4	80.0	5.7	5.4	4.9	8.4	6	7	86	88	818151	806144	<0.2	<0.2	1.2	1.2
						1.0	0.3	167	26.6		8.0		23.8		79.6		5.6		4.8		7		87				<0.2		1.3	
					Middle	3.7	0.3	149	26.6	26.6	7.9	7.9	24.1	24.1	71.2	71.6	5.0		4.8		7		88				<0.2		1.2	
						3.7	0.3	151	26.5		7.9		24.0		71.9		5.1		4.7		8		87				<0.2		1.2	
					Bottom	6.4	0.1	111	26.2	26.2	7.9	7.9	26.3	26.3	68.7	69.0	4.8	4.8	15.7		7		90				<0.2		1.3	
						6.4	0.2	113	26.2		7.9		26.3		69.2		4.8		15.6		8		90				<0.2		1.2	
IM3	Cloudy	Moderate	14:10	7.7	Surface	1.0	0.2	73	27.1	27.1	8.0	8.0	23.5	23.6	83.8	83.7	5.9	5.3	4.4	10.5	7	7	86	88	818806	805610	<0.2	<0.2	1.1	1.1
						1.0	0.2	78	27.0		8.0		23.6		83.6		5.8		4.9		7		87				<0.2		1.1	
					Middle	3.9	0.1	100	26.2	26.2	7.9	7.9	25.6	25.7	66.9	66.8	4.7		9.9		6		88				<0.2		1.1	
						3.9	0.1	106	26.2		7.9		25.8		66.7		4.7		9.9		7		87				<0.2		1.1	
					Bottom	6.7	0.3	126	26.1	26.1	7.9	7.9	26.4	26.4	67.7	68.0	4.7	4.8	16.9		7		90				<0.2		1.2	
						6.7	0.3	137	26.1		7.9		26.4		68.3		4.8		16.8		6		90				<0.2		1.1	
IM4	Cloudy	Moderate	13:59	8.6	Surface	1.0	0.6	203	26.3	26.3	8.0	8.0	24.6	24.7	68.3	68.1	4.8	4.7	7.7	10.6	11	10	87	89	819719	804586	<0.2	<0.2	1.3	1.2
						1.0	0.7	222	26.3		8.0		24.8		67.8		4.8		7.7		12		87				<0.2		1.3	
					Middle	4.3	0.5	181	26.1	26.1	8.0	7.9	25.6	25.6	65.9	65.8	4.6		7.6		10		89				<0.2		1.3	
						4.3	0.5	196	26.1		7.9		25.6		65.7		4.6		7.2		10		88				<0.2		1.2	
					Bottom	7.6	0.4	157	26.0	26.0	7.9	7.9	27.0	27.0	65.6	65.7	4.6	4.6	16.6		9		90				<0.2		1.2	
						7.6	0.4	158	26.0		7.9		27.0		65.7		4.6		16.6		9		91				<0.2		1.1	
IM5	Cloudy	Moderate	13:50	8.1	Surface	1.0	0.4	233	26.7	26.7	8.0	8.0	23.2	23.3	75.2	75.2	5.3	5.1	6.3	9.1	7	8	86	89	820719	804877	<0.2	<0.2	1.3	1.3
						1.0	0.5	242	26.7		8.0		23.3		75.1		5.3		6.3		8		88				<0.2		1.2	
					Middle	4.1	0.5	202	26.3	26.3	7.9	7.9	24.5	24.5	69.0	68.9	4.9		8.9		7		89				<0.2		1.3	
						4.1	0.5	210	26.2		7.9		24.5		68.7		4.8		9.6		8		88				<0.2		1.3	
					Bottom	7.1	0.3	176	26.1	26.1	7.9	7.9	26.6	26.6	68.5	68.6	4.8	4.8	11.9		8		90				<0.2		1.3	
						7.1	0.3	185	26.1		7.9		26.6		68.7		4.8		11.9		7		91				<0.2		1.4	
IM6	Cloudy	Moderate	13:43	8.0	Surface	1.0	0.3	232	26.8	26.8	8.0	8.0	22.5	22.5	76.1	76.3	5.4	5.2	6.8	7.6	6	6	86	89	821056	805821	<0.2	<0.2	1.4	1.4
						1.0	0.3	234	26.7		8.0		22.5		76.4		5.4		7.0		6		87				<0.2		1.4	
					Middle	4.0	0.3	198	26.4	26.4	8.0	8.0	24.5	24.5	70.6	70.5	5.0		8.1		7		88				<0.2		1.5	
						4.0	0.3	213	26.4		8.0		24.4		70.4		5.0		8.1		6		89				<0.2		1.4	
					Bottom	7.0	0.2	181	26.2	26.2	7.9	7.9	25.6	25.6	69.6	69.7	4.9	4.9	7.8		7		90				<0.2		1.4	
						7.0	0.2	182	26.2		7.9		25.6		69.7		4.9		8.1		6		91				<0.2		1.5	
IM7	Cloudy	Moderate	13:35	8.4	Surface	1.0	0.2	228	27.0	27.0	8.0	8.0	21.6	21.6	79.9	79.9	5.6	5.5	6.8	8.1	8	7	86	88	821333	806837	<0.2	<0.2	1.5	1.5
						1.0	0.2	239	26.9		8.0		21.6		79.8		5.6		6.9		8		87				<0.2		1.4	
					Middle	4.2	0.1	148	26.7	26.7	8.0	8.0	23.3	23.2	74.8	74.8	5.3		7.7		7		88				<0.2		1.5	
						4.2	0.1	161	26.7		8.0		23.2		74.8		5.3		7.7		6		88				<0.2		1.5	
					Bottom	7.4	0.1	35	26.5	26.6	7.9	7.9	23.9	23.8	75.0	75.4	5.3	5.3	9.7		6		89				<0.2		1.6	
						7.4	0.1	36	26.6		7.9		23.8		75.8		5.3		9.6		7		90				<0.2		1.6	
IM8	Rainy	Moderate	13:54	8.4	Surface	1.0	0.2	42	27.1	27.1	7.7	7.7	21.6	21.7	77.5	77.5	5.5	5.3	5.5	7.7	7	7	88	92	821822	808152	<0.2	<0.2	2.0	2.0
						1.0	0.2	43	27.0		7.7		21.8		77.4		5.5		5.7		6		89				<0.2		2.0	
					Middle	4.2	0.2	52	26.7	26.7	7.8	7.8	22.9	22.9	72.9	73.0	5.1		8.0		6		92				<0.2		2.0	
						4.2	0.2	54	26.7		7.8		22.9		73.1		5.2		8.1		7		92				<0.2		2.0	
					Bottom	7.4	0.2	59	26.6	26.6	7.8	7.8	23.3	23.3	74.7	74.8	5.3	5.3	9.6		8		95				<0.2		2.0	
						7.4	0.2	59	26.6		7.8		23.3		74.8		5.3		9.7		7		95				<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 26 May 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C) Value	Water Temperature (°C) Average	pH Value	pH Average	Salinity (ppt) Value	Salinity (ppt) Average	DO Saturation (%) Value	DO Saturation (%) Average	Dissolved Oxygen Value	Dissolved Oxygen DA	Turbidity(NTU) Value	Turbidity(NTU) DA	Suspended Solids (mg/L) Value	Suspended Solids (mg/L) DA	Total Alkalinity (ppm) Value	Total Alkalinity (ppm) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L) Value	Chromium (µg/L) DA	Nickel (µg/L) Value	Nickel (µg/L) DA
IM9	Rainy	Moderate	13:59	8.0	Surface	1.0	0.3	80	27.0	27.0	7.7	7.7	21.9	21.9	75.4	75.5	5.3	5.2	5.6	7.4	7	7	89	92	822076	808820	<0.2	<0.2	2.0	2.0
						1.0	0.3	84	26.9		7.7		21.9		75.6		5.3		6.0		8		89				<0.2		1.9	
					Middle	4.0	0.3	82	26.6	26.6	7.7	7.7	23.6	23.6	71.1	71.2	5.0		6.6		7		92				<0.2		2.0	
						4.0	0.3	88	26.6		7.7		23.6		71.2		5.0		6.8		6		93				<0.2		1.9	
					Bottom	7.0	0.2	96	26.5	26.5	7.7	7.7	23.7	23.7	73.0	73.1	5.1	5.2	9.8		6		94				<0.2		1.9	
						7.0	0.2	104	26.5		7.7		23.7		73.2		5.2		9.8		6		94				<0.2		2.0	
IM10	Rainy	Moderate	14:05	7.5	Surface	1.0	0.7	101	26.8	26.8	7.8	7.8	22.5	22.6	74.7	74.5	5.3	5.1	7.0	8.3	7	7	88	92	822394	809778	<0.2	<0.2	2.0	2.0
						1.0	0.7	101	26.8		7.8		22.7		74.2		5.2		7.4		6		89				<0.2		2.0	
					Middle	3.8	0.6	101	26.6	26.6	7.8	7.8	23.4	23.5	71.7	71.6	5.0		8.4		7		92				<0.2		2.0	
						3.8	0.7	102	26.6		7.8		23.5		71.4		5.0		8.6		7		93				<0.2		2.0	
					Bottom	6.5	0.6	106	26.5	26.5	7.7	7.7	23.9	23.9	71.8	71.9	5.1	5.1	9.2		8		94				<0.2		1.9	
						6.5	0.6	112	26.5		7.7		23.9		72.0		5.1		9.5		7		94				<0.2		1.9	
IM11	Rainy	Moderate	14:13	8.6	Surface	1.0	0.8	97	27.0	27.0	7.8	7.8	22.3	22.3	77.3	77.1	5.4	5.4	6.2	6.7	7	8	89	93	822051	811472	<0.2	<0.2	1.9	2.0
						1.0	0.9	100	26.9		7.8		22.4		76.8		5.4		6.1		7		90				<0.2		1.9	
					Middle	4.3	0.7	98	26.8	26.8	7.8	7.8	22.8	22.8	75.3	75.3	5.3		6.6		8		93				<0.2		2.0	
						4.3	0.7	101	26.8		7.8		22.8		75.3		5.3		6.8		9		93				<0.2		2.0	
					Bottom	7.6	0.5	100	26.7	26.7	7.8	7.8	23.1	23.1	75.0	75.1	5.3	5.3	7.3		9		95				<0.2		2.0	
						7.6	0.6	105	26.7		7.8		23.1		75.1		5.3		7.6		10		95				<0.2		1.9	
IM12	Rainy	Moderate	14:18	10.4	Surface	1.0	0.7	100	27.0	27.0	7.8	7.8	22.0	22.1	75.6	75.4	5.3	5.2	5.8	7.0	9	9	89	92	821464	812030	<0.2	<0.2	1.9	2.0
						1.0	0.7	101	27.0		7.8		22.1		75.1		5.3		6.0		10		89				<0.2		2.0	
					Middle	5.2	0.6	96	26.7	26.7	7.7	7.7	22.9	22.9	72.2	72.3	5.1		7.1		8		92				<0.2		1.9	
						5.2	0.6	97	26.7		7.7		22.9		72.3		5.1		7.4		8		93				<0.2		2.0	
					Bottom	9.4	0.3	81	26.3	26.3	7.7	7.7	25.2	25.2	67.2	67.4	4.7	4.7	7.8		9		95				<0.2		1.9	
						9.4	0.3	86	26.3		7.7		25.2		67.5		4.7		8.0		8		96				<0.2		2.0	
SR1A	Cloudy	Calm	14:35	5.4	Surface	1.0	-	-	27.0	27.0	7.8	7.8	22.3	22.3	74.7	74.5	5.3	5.3	6.4	6.2	11	11	-	-	819974	812657	-	-	-	-
						1.0	-	-	27.0		7.8		22.4		74.3		5.2		6.3		11		-				-		-	
					Middle	2.7	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.7	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	-	-	26.7	26.7	7.7	7.7	23.9	23.9	72.6	72.8	5.1	5.1	6.2		11		-				-		-	
						4.4	-	-	26.7		7.7		23.9		73.0		5.1		6.1		12		-				-		-	
SR2	Cloudy	Calm	14:46	5.5	Surface	1.0	0.6	87	27.4	27.4	7.8	7.8	20.9	20.9	85.4	85.4	6.0	6.0	5.1	6.4	8	8	88	91	821439	814148	<0.2	<0.2	2.0	1.9
						1.0	0.7	87	27.3		7.8		20.9		85.4		6.0		5.2		9		89				<0.2		1.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.5	0.3	84	27.0	27.1	7.8	7.8	23.1	23.1	78.3	78.6	5.5	5.5	7.6		8		92				<0.2		1.9	
						4.5	0.3	89	27.1		7.8		23.1		78.8		5.5		7.7		7		93				<0.2		1.8	
SR3	Rainy	Moderate	13:50	9.4	Surface	1.0	0.0	78	26.9	26.9	7.7	7.7	22.3	22.4	73.7	73.4	5.2	5.2	6.6	7.1	7	8	-	-	822136	807560	-	-	-	-
						1.0	0.0	78	26.8		7.7		22.5		73.1		5.2		7.0		6		-				-		-	
					Middle	4.7	0.1	202	26.7	26.7	7.7	7.7	23.0	23.0	71.9	71.9	5.1		7.1		8		-				-		-	
						4.7	0.1	206	26.7		7.7		22.9		71.8		5.1		7.2		8		-				-		-	
					Bottom	8.4	0.1	204	26.6	26.6	7.7	7.7	23.6	23.6	72.2	72.4	5.1	5.1	7.3		8		-				-		-	
						8.4	0.1	217	26.6		7.7		23.6		72.5		5.1		7.5		10		-				-		-	
SR4A	Cloudy	Moderate	15:06	9.2	Surface	1.0	0.1	292	26.6	26.6	8.0	7.9	24.1	24.2	72.6	72.4	5.1	5.0	7.5	8.2	6	7	-	-	817210	807806	-	-	-	-
						1.0	0.1	311	26.6		7.9		24.2		72.2		5.1		7.7		5		-				-		-	
					Middle	4.6	0.1	236	26.5	26.5	7.9	7.9	24.6	24.7	70.5	70.3	4.9		8.1		6		-				-		-	
						4.6	0.2	237	26.5		7.9		24.8		70.0		4.9		8.3		7		-				-		-	
					Bottom	8.2	0.1	244	26.3	26.4	7.9	7.9	25.3	25.3	68.8	68.9	4.8	4.8	8.9		7		-				-		-	
						8.2	0.1	260	26.4		7.9		25.3		68.9		4.8		8.8		8		-				-		-	
SR5A	Cloudy	Moderate	15:23	3.5	Surface	1.0	0.0	308	27.1	27.1	7.9	7.9	22.6	22.7	81.6	81.4	5.7	5.7	6.6	7.5	8	8	-	-	816600	810717	-	-	-	-
						1.0	0.0	322	27.0		7.9		22.8		81.2		5.7		6.6		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.5	0.0	338	26.8	26.8	7.9	7.9	23.1	23.1	73.7	74.0	5.2	5.2	8.3		9		-				-		-	
						2.5	0.0	311	26.8		7.9		23.1		74.2		5.2		8.5		8		-				-		-	
SR6A	Rainy	Moderate	15:59	4.2	Surface	1.0	0.1	328	26.7	26.7	7.9	7.9	23.5	23.6	73.0	72.8	5.1	5.1	8.2	9.1	8	9	-	-	817967	814744	-	-	-	-
						1.0	0.1	337	26.7		7.9		23.7		72.6		5.1		8.4		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.1	268	26.4	26.5	7.8	7.8	24.3	24.3	69.2	69.4	4.9	4.9	9.8		10		-				-		-	
						3.2	0.1	278	26.5		7.8		24.3		69.6		4.9		9.9		10		-				-		-	
SR7	Cloudy	Moderate	15:30	17.0	Surface	1.0	1.0	36	27.3	27.3	7.8	7.8	22.5	22.6	84.4	84.2	5.9	5.6	3.1	3.5	6	6	-	-	823616	823759	-	-	-	-
						1.0	1.0	36	27.2		7.8		22.7		84.0		5.9		3.1		5		-				-		-	
					Middle	8.5	0.7	30	26.7	26.7	7.8	7.8	24.4	24.4	74.3	74.2	5.2		3.6		6		-				-		-	
						8.5	0.7	30	26.7		7.8		24.4		74.1		5.2		3.6		6		-				-		-	
					Bottom	16.0	0.5	3	26.5	26.5	7.8	7.8	25.2	25.1	74.5	74.6	5.2	5.2	3.8		6		-				-		-	
						16.0	0.6	3	26.5		7.8		25.0		74.7		5.2		3.7		7		-				-		-	
SR8	Cloudy	Calm	14:28	5.0	Surface	1.0	-	-	27.1	27.1	7.7	7.7	22.9	22.9	75.5	75.6	5.3	5.3	6.6	7.2	9	9	-	-	820374	811643	-	-	-	-
						1.0	-	-	27.1		7.7		22.9		75.7		5.3		6.8		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	-	-	27.1	27.1	7.7	7.7	23.0	23.0	77.3	77.5	5.4	5.4	7.8		8		-				-		-	
						4.0	-	-	27.1		7.7		23.0		77.6		5.4		7.5		8		-				-		-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 26 May 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	08:15	8.1	Surface	1.0	0.4	37	26.2	26.2	8.0	8.0	23.6	23.7	73.4	73.2	5.2	4.9	5.8	8.6	6	7	87	89	815596	804256	<0.2	<0.2	1.1	1.1
						1.0	0.4	39	26.2		8.0		23.7		73.0		5.2		5.9		5		86				<0.2		1.1	
					Middle	4.1	0.5	26	25.9	25.9	7.9	7.9	27.9	28.0	65.2	65.2	4.5		8.3		6		88				<0.2		1.1	
						4.1	0.5	26	25.8		7.9		28.1		65.2		4.5		8.7		6		89				<0.2		1.0	
					Bottom	7.1	0.3	33	25.7	25.7	7.9	7.9	29.1	29.1	67.1	67.3	4.6	4.7	11.5		8		90				<0.2		1.1	
						7.1	0.3	33	25.7		7.9		29.1		67.4		4.7		11.4		8		91				<0.2		1.1	
C2	Fine	Moderate	08:43	12.8	Surface	1.0	0.5	8	27.2	27.2	7.7	7.7	17.2	17.3	80.2	80.1	5.8	5.4	4.5	5.6	5	6	89	93	825689	806935	<0.2	<0.2	2.0	2.1
						1.0	0.6	8	27.2		7.7		17.3		80.0		5.8		4.5		6		90				<0.2		2.0	
					Middle	6.4	0.5	346	26.7	26.7	7.7	7.7	22.1	22.1	69.8	69.8	4.9		5.6		6		93				<0.2		2.2	
						6.4	0.5	353	26.7		7.7		22.1		69.7		4.9		6.0		5		93				<0.2		2.2	
					Bottom	11.8	0.6	343	26.2	26.2	7.7	7.7	25.9	25.9	64.2	64.4	4.5	4.5	6.6		7		95				<0.2		2.2	
						11.8	0.6	356	26.2		7.7		25.9		64.6		4.5		6.5		6		96				<0.2		2.2	
C3	Fine	Moderate	07:03	12.2	Surface	1.0	0.5	294	26.7	26.7	7.8	7.8	22.0	22.0	74.6	74.5	5.3	5.1	3.5	4.1	5	7	90	93	822128	817791	<0.2	<0.2	2.2	2.3
						1.0	0.5	313	26.7		7.8		22.0		74.4		5.3		3.5		6		90				<0.2		2.2	
					Middle	6.1	0.5	273	26.4	26.4	7.8	7.8	23.7	23.8	69.9	69.9	4.9		3.8		6		93				<0.2		2.3	
						6.1	0.5	287	26.4		7.8		23.8		69.9		4.9		3.8		6		93				<0.2		2.5	
					Bottom	11.2	0.3	274	25.6	25.6	7.8	7.8	28.7	28.7	63.6	63.8	4.4	4.4	4.9		8		95				<0.2		2.2	
						11.2	0.3	281	25.6		7.8		28.7		63.9		4.4		4.9		8		96				<0.2		2.1	
IM1	Cloudy	Moderate	08:34	5.6	Surface	1.0	0.1	16	26.7	26.7	7.9	7.9	23.1	23.1	73.8	73.7	5.2	5.2	6.7	8.3	7	7	88	89	817958	807109	<0.2	<0.2	1.4	1.3
						1.0	0.2	17	26.6		7.9		23.2		73.6		5.2		6.9		8		87				<0.2		1.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.6	0.1	2	26.4	26.4	7.9	7.9	24.1	24.1	70.8	71.0	5.0	5.0	9.8		7		90				<0.2		1.3	
						4.6	0.1	2	26.4		7.9		24.1		71.1		5.0		9.8		6		91				<0.2		1.4	
IM2	Cloudy	Moderate	08:42	7.7	Surface	1.0	0.3	357	26.6	26.6	8.0	8.0	22.5	22.6	77.9	77.8	5.5	5.2	5.4	6.5	5	6	87	89	818149	806171	<0.2	<0.2	1.4	1.4
						1.0	0.3	328	26.6		8.0		22.6		77.6		5.5		5.5		6		87				<0.2		1.4	
					Middle	3.9	0.3	329	26.5	26.5	7.9	7.9	22.9	22.9	69.4	69.2	4.9		5.7		5		88				<0.2		1.3	
						3.9	0.3	358	26.4		7.9		22.9		68.9		4.9		5.6		6		89				<0.2		1.3	
					Bottom	6.7	0.2	352	26.2	26.2	7.9	7.9	25.6	25.6	67.1	67.2	4.7	4.7	8.5		8		90				<0.2		1.4	
						6.7	0.2	324	26.2		7.9		25.6		67.2		4.7		8.4		7		91				<0.2		1.3	
IM3	Cloudy	Moderate	08:48	8.0	Surface	1.0	0.4	347	26.6	26.6	8.0	8.0	22.5	22.5	73.8	73.7	5.2	5.0	5.7	8.4	4	6	86	89	818770	805595	<0.2	<0.2	1.4	1.4
						1.0	0.4	319	26.6		8.0		22.6		73.6		5.2		5.8		5		88				<0.2		1.4	
					Middle	4.0	0.3	333	26.3	26.3	7.9	7.9	23.4	23.4	66.9	66.9	4.7		7.5		6		89				<0.2		1.3	
						4.0	0.3	306	26.3		7.9		23.4		66.8		4.7		7.8		6		88				<0.2		1.4	
					Bottom	7.0	0.3	330	26.2	26.2	7.9	7.9	26.0	26.0	66.6	66.7	4.7	4.7	11.9		7		90				<0.2		1.4	
						7.0	0.3	343	26.2		7.9		26.0		66.7		4.7		11.8		6		90				<0.2		1.3	
IM4	Cloudy	Moderate	08:59	8.2	Surface	1.0	0.9	354	26.6	26.6	8.0	8.0	22.6	22.7	79.9	79.8	5.6	5.4	5.0	6.3	4	6	86	89	819703	804607	<0.2	<0.2	1.5	1.6
						1.0	0.9	326	26.6		8.0		22.7		79.7		5.6		5.0		5		87				<0.2		1.4	
					Middle	4.1	0.7	357	26.3	26.3	7.9	7.9	23.3	23.3	72.1	72.1	5.1		5.5		6		88				<0.2		1.6	
						4.1	0.7	328	26.2		7.9		23.2		72.1		5.1		5.4		6		89				<0.2		1.7	
					Bottom	7.2	0.4	352	26.1	26.1	7.9	7.9	26.2	26.2	65.3	65.4	4.6	4.6	8.3		8		90				<0.2		1.6	
						7.2	0.4	324	26.1		7.9		26.2		65.5		4.6		8.5		8		91				<0.2		1.6	
IM5	Cloudy	Moderate	09:06	8.3	Surface	1.0	1.0	8	26.6	26.6	8.0	8.0	22.7	22.7	75.5	75.5	5.3	5.1	5.3	9.9	7	7	86	89	820717	804868	<0.2	<0.2	1.3	1.3
						1.0	1.0	8	26.6		8.0		22.7		75.4		5.3		5.4		7		87				<0.2		1.4	
					Middle	4.2	0.9	9	26.4	26.4	7.9	7.9	24.1	24.1	69.8	69.9	4.9		12.0		7		88				<0.2		1.4	
						4.2	0.9	9	26.4		7.9		24.1		69.9		4.9		11.2		6		89				<0.2		1.3	
					Bottom	7.3	0.5	21	26.4	26.4	7.9	7.9	24.3	24.3	71.6	71.8	5.0	5.1	12.5		7		91				<0.2		1.2	
						7.3	0.6	22	26.4		7.9		24.3		71.9		5.1		13.0		8		92				<0.2		1.3	
IM6	Cloudy	Moderate	09:13	8.0	Surface	1.0	0.1	237	26.8	26.8	7.9	7.9	21.5	21.6	75.7	75.6	5.4	5.3	7.8	11.0	7	8	86	88	821044	805847	<0.2	<0.2	1.6	1.7
						1.0	0.1	241	26.8		7.9		21.6		75.5		5.4		8.8		8		87				<0.2		1.8	
					Middle	4.0	0.3	53	26.5	26.5	7.9	7.9	22.4	22.4	74.1	73.9	5.3		12.0		7		88				<0.2		1.8	
						4.0	0.3	55	26.5		7.9		22.4		73.7		5.2		12.5		8		87				<0.2		1.7	
					Bottom	7.0	0.2	47	26.4	26.4	7.9	7.9	24.2	24.2	69.9	70.0	4.9	4.9	12.7		8		90				<0.2		1.6	
						7.0	0.2	49	26.4		7.9		24.2		70.1		4.9		12.5		8		90				<0.2		1.6	
IM7	Cloudy	Moderate	09:22	8.5	Surface	1.0	0.1	242	27.0	27.0	7.9	7.9	20.2	20.2	76.0	76.1	5.4	5.3	5.9	10.1	7	7	86	88	821353	806814	<0.2	<0.2	1.8	1.8
						1.0	0.2	247	26.9		7.9		20.2		76.2		5.4		6.0		8		87				<0.2		1.8	
					Middle	4.3	0.1	141	26.6	26.6	7.9	7.9	21.9	21.9	72.2	72.2	5.1		8.1		7		88				<0.2		1.8	
						4.3	0.1	148	26.6		7.9		21.9		72.2		5.1		8.2		6		87				<0.2		1.8	
					Bottom	7.5	0.2	76	26.5	26.5	7.9	7.9	23.7	23.7	73.4	73.6	5.2	5.2	16.5		6		90				<0.2		1.8	
						7.5	0.2	77	26.5		7.9		23.7		73.7		5.2		16.0		5		91				<0.2		1.8	
IM8	Fine	Moderate	08:19	8.4	Surface	1.0	0.1	220	27.0	27.0	7.7	7.7	20.1	20.2	74.8	74.6	5.3	5.3	4.8	6.6	6	6	88	92	821847	808140	<0.2	<0.2	1.6	1.7
						1.0	0.1	237	27.0		7.7		20.2		74.4		5.3		4.9		5		89				<0.2		1.7	
					Middle	4.2	0.2	291	26.9	26.9	7.7	7.7	20.9	20.9	72.7	72.7	5.2		6.3		5		93				<0.2		1.7	
						4.2	0.2	306	26.9		7.7		20.9		72.6		5.2		6.5		6		94				<0.2		1.6	
					Bottom	7.4	0.2	270	26.9	26.9	7.7	7.7	21.2	21.2	73.4	73.6	5.2	5.2	8.3		6		94				<0.2		1.6	
						7.4	0.3	273	26.9		7.7		21.2		73.8		5.2		8.6		6		95				<0.2		1.7	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 26 May 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	08:14	7.9	Surface	1.0	0.4	269	27.0	27.0	7.7	7.7	20.5	20.5	75.6	75.6	5.4	5.3	5.2	6.1	7	7	89	92	822117	808811	<0.2	<0.2	2.2	2.2
						1.0	0.4	294	27.0		7.7		20.5		75.5		5.4		5.2		8		89				<0.2		2.2	
					Middle	4.0	0.4	276	26.9	26.9	7.7	7.7	20.7	20.7	73.5	73.4	5.2		6.3		7		92				<0.2		2.2	
						4.0	0.4	289	26.9		7.7		20.8		73.2		5.2		6.2		6		93				<0.2		2.1	
					Bottom	6.9	0.4	268	26.8	26.8	7.7	7.7	21.5	21.5	72.4	72.5	5.1	5.1	6.6		6		94				<0.2		2.3	
						6.9	0.4	277	26.8		7.8		21.5		72.5		5.1		7.0		7		94				<0.2		2.3	
IM10	Fine	Moderate	08:07	9.4	Surface	1.0	0.5	323	26.9	26.9	7.7	7.7	21.2	21.3	71.0	70.8	5.0	4.9	6.7	7.5	7	8	88	92	822377	809787	<0.2	<0.2	2.0	2.1
						1.0	0.5	354	26.8		7.7		21.3		70.6		5.0		6.5		8		88				<0.2		2.2	
					Middle	4.7	0.5	309	26.7	26.7	7.7	7.7	22.5	22.6	68.2	68.1	4.8		7.1		8		93				<0.2		2.2	
						4.7	0.5	334	26.7		7.7		22.7		67.9		4.8		7.3		8		93				<0.2		2.1	
					Bottom	8.4	0.3	313	26.6	26.6	7.8	7.8	23.9	23.9	68.1	68.3	4.8	4.8	8.6		10		95				<0.2		2.1	
						8.4	0.3	323	26.6		7.8		23.9		68.4		4.8		8.9		9		95				<0.2		2.2	
IM11	Fine	Moderate	07:56	9.0	Surface	1.0	0.5	332	26.9	26.9	7.7	7.7	20.9	20.9	72.3	72.1	5.1	5.0	5.6	7.8	7	7	89	93	822079	811480	<0.2	<0.2	2.2	2.2
						1.0	0.6	359	26.9		7.7		20.9		71.8		5.1		5.7		6		90				<0.2		2.2	
					Middle	4.5	0.4	320	26.6	26.6	7.8	7.8	22.3	22.3	69.2	69.2	4.9		7.9		7		93				<0.2		2.3	
						4.5	0.4	327	26.5		7.8		22.2		69.1		4.9		8.7		6		93				<0.2		2.2	
					Bottom	8.0	0.4	318	26.2	26.2	7.8	7.8	25.7	25.7	66.1	66.2	4.6	4.6	9.5		8		95				<0.2		2.1	
						8.0	0.4	337	26.2		7.8		25.7		66.3		4.6		9.6		9		96				<0.2		2.2	
IM12	Fine	Moderate	07:51	8.4	Surface	1.0	0.5	285	26.9	26.9	7.7	7.7	20.5	20.5	73.1	73.0	5.2	5.1	5.4	6.1	6	7	89	92	821451	812039	<0.2	<0.2	2.2	2.2
						1.0	0.5	302	26.9		7.7		20.5		72.9		5.2		5.4		6		89				<0.2		2.2	
					Middle	4.2	0.6	261	26.6	26.6	7.8	7.8	22.9	22.9	70.2	70.2	5.0		6.1		7		93				<0.2		2.2	
						4.2	0.7	273	26.6		7.8		22.9		70.1		5.0		6.1		8		93				<0.2		2.2	
					Bottom	7.4	0.7	261	26.2	26.3	7.8	7.8	26.2	26.2	65.5	65.7	4.6	4.6	6.9		7		95				<0.2		2.3	
						7.4	0.7	267	26.3		7.8		26.2		65.9		4.6		6.9		8		95				<0.2		2.2	
SR1A	Fine	Calm	07:33	5.2	Surface	1.0	-	-	26.9	26.9	7.7	7.7	20.9	21.0	75.7	75.7	5.4	5.4	4.7	4.9	5	6	-	-	819971	812663	-	-	-	-
						1.0	-	-	26.9		7.8		21.1		75.7		5.4		4.7		6		-				-		-	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	-	-	26.8	26.8	7.8	7.8	21.5	21.5	76.3	76.5	5.4	5.4	5.0		6		-				-		-	
						4.2	-	-	26.8		7.8		21.5		76.6		5.4		5.1		6		-				-		-	
SR2	Fine	Moderate	07:21	5.0	Surface	1.0	0.1	274	26.8	26.8	7.7	7.7	21.2	21.3	73.8	73.8	5.2	5.2	6.0	6.4	6	6	89	91	821451	814172	<0.2	<0.2	2.2	2.2
						1.0	0.1	287	26.8		7.7		21.3		73.8		5.2		6.0		5		90				<0.2		2.1	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.0	335	26.8	26.8	7.8	7.8	21.9	21.9	75.1	75.2	5.3	5.3	6.9		5		93				<0.2		2.2	
						4.0	0.0	339	26.8		7.8		21.9		75.3		5.3		6.7		6		92				<0.2		2.2	
SR3	Fine	Moderate	08:25	10.0	Surface	1.0	0.1	289	27.0	27.0	7.7	7.7	19.7	19.7	77.8	77.7	5.6	5.3	5.2	6.8	6	7	-	-	822134	807581	-	-	-	-
						1.0	0.2	307	27.0		7.7		19.7		77.5		5.5		5.4		5		-				-		-	
					Middle	5.0	0.2	282	26.8	26.8	7.8	7.8	21.6	21.6	71.0	70.9	5.0		6.9		6		-				-		-	
						5.0	0.2	304	26.8		7.8		21.6		70.8		5.0		7.1		7		-				-		-	
					Bottom	9.0	0.2	36	26.7	26.7	7.8	7.8	22.8	22.8	69.9	70.0	4.9	4.9	8.2		7		-				-		-	
						9.0	0.2	39	26.7		7.8		22.8		70.1		4.9		8.2		8		-				-		-	
SR4A	Cloudy	Moderate	07:53	8.3	Surface	1.0	0.3	257	26.7	26.7	8.0	8.0	22.1	22.1	73.3	73.2	5.2	5.1	6.3	6.8	7	7	-	-	817184	807824	-	-	-	-
						1.0	0.3	259	26.7		8.0		22.1		73.0		5.2		6.3		6		-				-		-	
					Middle	4.2	0.2	258	26.7	26.7	7.9	7.9	22.4	22.4	71.0	70.8	5.0		6.7		7		-				-		-	
						4.2	0.2	275	26.7		7.9		22.5		70.6		5.0		6.8		8		-				-		-	
					Bottom	7.3	0.1	334	26.6	26.6	7.9	7.9	23.5	23.5	68.9	69.0	4.9	4.9	7.3		7		-				-		-	
						7.3	0.1	307	26.6		7.9		23.5		69.1		4.9		7.3		8		-				-		-	
SR5A	Cloudy	Moderate	07:36	3.3	Surface	1.0	0.1	283	26.8	26.8	7.9	7.9	21.9	21.9	77.9	77.9	5.5	5.5	5.7	6.3	7	8	-	-	816590	810686	-	-	-	-
						1.0	0.1	310	26.8		7.9		21.9		77.9		5.5		5.7		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.3	0.1	290	26.8	26.9	7.8	7.8	22.0	22.0	77.6	77.7	5.5	5.5	6.8		8		-				-		-	
						2.3	0.1	297	26.9		7.8		22.0		77.7		5.5		7.0		8		-				-		-	
SR6A	Cloudy	Moderate	07:09	4.0	Surface	1.0	0.1	219	26.7	26.7	7.9	7.9	22.0	21.9	75.8	75.8	5.4	5.4	4.7	5.9	7	6	-	-	817951	814718	-	-	-	-
						1.0	0.1	220	26.7		7.9		21.9		75.8		5.4		4.7		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	0.0	280	26.7	26.7	7.8	7.8	22.9	23.0	73.4	73.4	5.2	5.2	7.0		6		-				-		-	
						3.0	0.0	287	26.7		7.8		23.0		73.4		5.2		7.2		5		-				-		-	
SR7	Fine	Calm	06:31	15.4	Surface	1.0	0.0	141	26.6	26.6	7.7	7.7	22.9	23.0	75.9	75.8	5.4	5.0	3.1	4.0	5	5	-	-	823629	823749	-	-	-	-
						1.0	0.0	142	26.6		7.7		23.0		75.7		5.3		3.1		4		-				-		-	
					Middle	7.7	0.1	269	25.9	26.0	7.7	7.7	27.0	27.0	65.1	65.2	4.5		3.2		4		-				-		-	
						7.7	0.1	278	26.0		7.7		27.0		65.2		4.6		3.4		5		-				-		-	
					Bottom	14.4	0.1	209	25.5	25.5	7.6	7.6	29.2	29.2	63.7	64.0	4.4	4.5	5.5		5		-				-		-	
						14.4	0.1	226	25.5		7.6		29.2		64.2		4.5		5.7		5		-				-		-	
SR8	Fine	Calm	07:43	4.7	Surface	1.0	-	-	27.0	27.0	7.7	7.7	19.9	19.9	76.7	76.8	5.5	5.5	4.8	6.0	4	5	-	-	820379	811636	-	-	-	-
						1.0	-	-	27.0		7.7		19.9		76.9		5.5		5.2		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	-	-	27.2	27.2	7.7	7.7	20.6	20.6	80.7	80.8	5.7	5.7	7.0		6		-				-		-	
						3.7	-	-	27.2		7.7		20.6		80.9		5.7		6.8		7		-				-		-	

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 28 May 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	16:16	8.5	Surface	1.0	0.4	224	27.2	27.2	8.1	8.1	25.3	25.3	88.2	88.1	6.1	5.6	3.9	5.2	3	4	82	87	815610	804261	<0.2	<0.2	1.1	1.0
						1.0	0.4	232	27.1		8.1		25.3		88.0		6.1		4.0		4		83				<0.2		1.0	
					Middle	4.3	0.4	206	26.2	26.2	8.0	8.0	28.8	28.8	72.3	72.3	5.0		3.7		4		86				<0.2		1.0	
						4.3	0.4	218	26.2		8.0		28.8		72.3		5.0		3.7		4		90				<0.2		0.9	
					Bottom	7.5	0.3	210	26.0	26.0	8.0	8.0	29.6	29.6	67.2	67.3	4.6	4.6	7.9		4		90				<0.2		1.0	
						7.5	0.3	218	26.0		8.0		29.6		67.3		4.6		7.8		4		91				<0.2		1.0	
C2	Cloudy	Moderate	15:08	12.5	Surface	1.0	0.3	163	27.8	27.8	1.3	1.3	21.1	21.1	77.8	77.8	5.4	5.1	2.6	4.5	4	4	82	86	825677	806926	<0.2	<0.2	1.4	1.4
						1.0	0.3	168	27.8		1.3		21.1		77.7		5.4		2.7		4		82				<0.2		1.3	
					Middle	6.3	0.5	165	26.7	26.7	5.5	5.4	25.1	25.1	67.2	67.2	4.7		5.6		4		86				<0.2		1.3	
						6.3	0.5	172	26.7		5.4		25.1		67.2		4.7		5.6		4		87				<0.2		1.4	
					Bottom	11.5	0.3	137	26.2	26.2	11.4	11.3	29.8	29.7	74.0	74.2	5.1	5.1	5.4		4		89				<0.2		1.3	
						11.5	0.4	147	26.3		11.2		29.7		74.4		5.1		5.1		4		89				<0.2		1.4	
C3	Cloudy	Moderate	16:48	12.4	Surface	1.0	0.2	46	27.2	27.2	1.2	1.2	25.2	25.2	77.3	77.3	5.3	5.0	1.8	3.2	5	5	81	86	822104	817804	<0.2	<0.2	1.5	1.5
						1.0	0.2	47	27.2		1.2		25.2		77.2		5.3		1.8		5		82				<0.2		1.5	
					Middle	6.2	0.2	72	26.4	26.4	6.5	6.5	27.6	27.6	68.5	68.6	4.7		3.5		5		87				<0.2		1.5	
						6.2	0.2	74	26.4		6.5		27.6		68.6		4.7		3.6		5		88				<0.2		1.5	
					Bottom	11.4	0.2	39	26.1	26.1	11.3	11.3	29.6	29.6	72.2	72.3	5.0	5.0	4.2		6		89				<0.2		1.4	
						11.4	0.2	41	26.1		11.3		29.6		72.4		5.0		4.1		5		89				<0.2		1.3	
IM1	Cloudy	Moderate	15:55	5.3	Surface	1.0	0.1	167	26.4	26.4	8.0	8.0	27.0	27.0	68.0	68.1	4.7	4.7	5.8	7.4	3	4	83	86	817958	807148	<0.2	<0.2	0.9	0.9
						1.0	0.1	176	26.4		8.0		27.0		68.1		4.7		5.7		4		83				<0.2		0.9	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	0.1	178	26.2	26.2	8.0	8.0	28.0	28.0	65.6	65.7	4.5	4.5	8.9		4		88				<0.2		0.9	
						4.3	0.1	188	26.2		8.0		28.0		65.8		4.5		9.1		5		88				<0.2		0.9	
IM2	Cloudy	Moderate	15:48	7.4	Surface	1.0	0.2	190	27.7	27.7	8.0	8.0	24.2	24.2	85.8	85.7	5.9	5.4	5.2	6.3	5	5	80	85	818148	806154	<0.2	<0.2	1.0	0.9
						1.0	0.2	206	27.7		8.0		24.2		85.5		5.9		5.1		4		81				<0.2		1.0	
					Middle	3.7	0.2	139	26.3	26.3	8.0	8.0	28.5	28.5	71.7	71.6	4.9		4.8		5		84				<0.2		1.0	
						3.7	0.2	147	26.2		8.0		28.5		71.4		4.9		5.2		5		84				<0.2		0.9	
					Bottom	6.4	0.1	130	26.1	26.1	8.0	8.0	28.8	28.8	67.4	67.5	4.6	4.7	9.0		4		89				<0.2		0.8	
						6.4	0.2	135	26.1		8.0		28.8		67.6		4.7		8.8		4		90				<0.2		0.9	
IM3	Cloudy	Moderate	15:40	7.6	Surface	1.0	0.3	144	26.7	26.7	8.0	8.0	26.7	26.7	71.5	71.5	4.9	4.9	6.6	7.6	5	5	80	85	818807	805611	<0.2	<0.2	0.9	0.9
						1.0	0.3	150	26.7		8.0		26.7		71.4		4.9		6.6		4		80				<0.2		0.8	
					Middle	3.8	0.3	142	26.3	26.3	8.0	8.0	28.2	28.1	68.9	68.9	4.8		6.4		5		85				<0.2		0.8	
						3.8	0.3	156	26.3		8.0		28.1		68.9		4.8		6.5		6		85				<0.2		0.8	
					Bottom	6.6	0.3	124	26.1	26.1	8.0	8.0	28.8	28.8	68.1	68.2	4.7	4.7	9.7		6		89				<0.2		1.0	
						6.6	0.3	129	26.1		8.0		28.8		68.2		4.7		9.6		6		89				<0.2		1.1	
IM4	Cloudy	Moderate	15:31	8.7	Surface	1.0	0.4	199	26.7	26.7	8.0	8.0	25.7	25.7	69.7	69.7	4.8	4.8	6.6	7.1	9	8	81	84	819743	804606	<0.2	<0.2	1.0	1.1
						1.0	0.4	218	26.7		8.0		25.7		69.6		4.8		6.6		8		81				<0.2		1.1	
					Middle	4.4	0.4	170	26.2	26.2	8.0	8.0	28.5	28.5	68.0	68.0	4.7		6.6		8		83				<0.2		1.0	
						4.4	0.4	181	26.2		8.0		28.5		68.0		4.7		6.6		9		84				<0.2		1.0	
					Bottom	7.7	0.3	157	26.1	26.1	8.0	8.0	29.1	29.1	66.2	66.3	4.6	4.6	8.1		8		88				<0.2		1.2	
						7.7	0.3	167	26.1		8.0		29.1		66.3		4.6		8.1		7		89				<0.2		1.1	
IM5	Cloudy	Moderate	15:23	7.2	Surface	1.0	0.4	218	27.3	27.3	8.0	8.0	23.5	23.5	77.6	77.5	5.4	5.0	5.3	6.7	6	5	81	85	820724	804875	<0.2	<0.2	1.3	1.4
						1.0	0.4	227	27.3		8.0		23.5		77.3		5.4		5.3		5		82				<0.2		1.4	
					Middle	3.6	0.4	173	26.1	26.1	8.0	8.0	28.5	28.5	67.2	67.2	4.6		6.4		4		84				<0.2		1.3	
						3.6	0.4	182	26.1		8.0		28.5		67.1		4.6		6.5		5		85				<0.2		1.4	
					Bottom	6.2	0.3	169	26.1	26.1	8.0	8.0	28.7	28.7	66.6	66.7	4.6	4.6	8.2		5		89				<0.2		1.4	
						6.2	0.3	171	26.1		8.0		28.7		66.7		4.6		8.3		5		89				<0.2		1.5	
IM6	Cloudy	Moderate	15:15	7.7	Surface	1.0	0.3	252	27.1	27.1	8.0	8.0	23.2	23.2	73.6	73.6	5.1	4.9	6.0	6.8	6	6	80	84	821070	805816	<0.2	<0.2	1.4	1.4
						1.0	0.3	264	27.1		8.0		23.2		73.6		5.1		6.0		5		81				<0.2		1.5	
					Middle	3.9	0.2	189	26.3	26.3	8.0	8.0	27.5	27.6	68.2	68.2	4.7		6.0		6		84				<0.2		1.5	
						3.9	0.2	204	26.3		8.0		27.6		68.2		4.7		6.0		5		84				<0.2		1.3	
					Bottom	6.7	0.2	179	26.2	26.2	8.0	8.0	28.1	28.1	68.5	68.6	4.7	4.7	8.4		7		88				<0.2		1.4	
						6.7	0.2	192	26.2		8.0		28.1		68.6		4.7		8.4		6		89				<0.2		1.5	
IM7	Cloudy	Moderate	15:09	9.0	Surface	1.0	0.2	233	26.9	26.9	8.0	8.0	23.3	23.3	68.0	68.0	4.8	4.8	6.2	8.2	6	6	81	85	821331	806851	<0.2	<0.2	1.5	1.6
						1.0	0.2	241	26.9		8.0		23.3		67.9		4.8		6.3		6		82				<0.2		1.6	
					Middle	4.5	0.1	173	26.5	26.5	8.0	8.0	26.0	26.0	67.5	67.5	4.7		7.4		6		85				<0.2		1.5	
						4.5	0.1	178	26.5		8.0		26.0		67.5		4.7		7.4		6		85				<0.2		1.6	
					Bottom	8.0	0.1	82	26.3	26.3	8.0	8.0	27.6	27.6	66.4	66.5	4.6	4.6	11.0		6		89				<0.2		1.5	
						8.0	0.1	87	26.3		8.0		27.6		66.6		4.6		10.7		5		89				<0.2		1.6	
IM8	Cloudy	Moderate	15:31	8.3	Surface	1.0	0.2	137	27.6	27.6	1.0	1.0	21.5	21.5	76.1	75.8	5.3	5.2	2.5	3.4	4	5	82	86	821808	808152	<0.2	<0.2	1.4	1.5
						1.0	0.2	142	27.6		1.0		21.5		75.5		5.3		2.6		4		83				<0.2		1.5	
					Middle	4.2	0.1	122	27.0	26.9	4.2	4.2	23.7	23.7	71.6	71.9	5.0		3.6		5		85				<0.2		1.5	
						4.2	0.1	125	26.9		4.1		23.7		72.2		5.1		3.8		5		86				<0.2		1.5	
					Bottom	7.3	0.1	29	26.7	26.7	7.5	7.5	27.9	27.9	77.1	77.3	5.3	5.3	4.0		5		89				<0.2		1.5	
						7.3	0.1	29	26.7		7.5		27.9		77.5		5.3		3.9		6		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 28 May 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	15:36	7.8	Surface	1.0	0.3	145	27.8	27.8	1.0	1.0	20.9	20.9	80.2	80.1	5.6	5.4	2.1	2.7	4	5	83	86	822099	808802	<0.2	<0.2	1.5	1.5
						1.0	0.3	158	27.8		1.0		20.9		80.0		5.6		2.2		5		83				<0.2		1.4	
					Middle	3.9	0.2	106	27.3	27.2	3.9	3.9	22.3	22.3	74.9	75.0	5.2		2.8		5		86				<0.2		1.6	
						3.9	0.2	110	27.2		3.9		22.3		75.0		5.3		2.8		4		87				<0.2		1.5	
					Bottom	6.8	0.2	76	27.0	27.0	6.8	6.8	25.5	25.5	81.0	81.3	5.6	5.6	3.1		4		89				<0.2		1.5	
						6.8	0.2	83	27.1		6.8		25.5		81.6		5.6		3.1		5		90				<0.2		1.4	
IM10	Cloudy	Moderate	15:42	7.7	Surface	1.0	0.5	135	27.6	27.6	1.1	1.1	22.1	22.1	78.5	78.4	5.5	5.4	2.3	3.2	5	5	84	87	822371	809787	<0.2	<0.2	1.6	1.5
						1.0	0.6	140	27.6		1.1		22.1		78.3		5.5		2.3		5		84				<0.2		1.5	
					Middle	3.9	0.5	128	27.0	27.0	4.5	4.5	23.8	23.8	74.5	74.5	5.2		3.4		6		86				<0.2		1.5	
						3.9	0.5	128	27.0		4.5		23.8		74.4		5.2		3.5		5		87				<0.2		1.4	
					Bottom	6.7	0.4	123	26.8	26.8	6.7	6.7	26.2	26.2	80.3	80.6	5.5	5.6	3.8		5		89				<0.2		1.6	
						6.7	0.4	124	26.9		6.7		26.2		80.8		5.6		3.7		4		90				<0.2		1.5	
IM11	Cloudy	Moderate	15:52	7.8	Surface	1.0	0.6	86	27.2	27.2	1.2	1.2	23.1	23.1	72.1	72.1	5.0	4.9	2.9	5.8	4	4	81	86	822042	811436	<0.2	<0.2	1.4	1.5
						1.0	0.6	93	27.2		1.2		23.1		72.0		5.0		2.9		4		81				<0.2		1.5	
					Middle	3.9	0.5	100	26.7	26.7	3.9	3.9	25.6	25.6	68.0	68.0	4.7		6.5		4		87				<0.2		1.5	
						3.9	0.5	102	26.7		3.9		25.6		68.0		4.7		6.6		4		87				<0.2		1.5	
					Bottom	6.8	0.4	107	26.6	26.6	7.0	7.0	26.3	26.3	70.4	70.5	4.9	4.9	7.8		4		90				<0.2		1.5	
						6.8	0.4	110	26.6		7.0		26.3		70.6		4.9		7.8		4		90				<0.2		1.6	
IM12	Cloudy	Moderate	15:58	10.1	Surface	1.0	0.6	108	27.5	27.5	0.9	0.9	22.3	22.3	76.4	76.4	5.3	5.1	2.2	5.1	6	5	83	86	821459	812034	<0.2	<0.2	1.4	1.5
						1.0	0.6	115	27.5		0.9		22.3		76.3		5.3		2.2		5		84				<0.2		1.5	
					Middle	5.1	0.4	95	26.9	26.9	5.3	5.3	24.9	24.9	69.6	69.7	4.8		6.5		6		86				<0.2		1.5	
						5.1	0.4	95	26.9		5.3		24.9		69.7		4.8		6.5		5		87				<0.2		1.5	
					Bottom	9.1	0.3	96	26.8	26.8	9.1	9.1	26.4	26.4	74.1	74.3	5.1	5.1	6.5		3		89				<0.2		1.4	
						9.1	0.3	101	26.8		9.1		26.4		74.5		5.1		6.4		4		89				<0.2		1.6	
SR1A	Cloudy	Calm	16:16	5.1	Surface	1.0	-	-	27.7	27.7	1.0	1.0	21.5	21.5	82.9	82.9	5.8	5.8	1.9	2.2	6	6	-	-	819981	812659	-	-	-	-
						1.0	-	-	27.7		1.0		21.5		82.9		5.8		1.9		7		-				-		-	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	-	-	27.4	27.4	4.2	4.2	24.4	24.3	87.5	87.8	6.1	6.1	2.4		6		-				-		-	
						4.1	-	-	27.4		4.2		24.3		88.0		6.1		2.4		6		-				-		-	
SR2	Cloudy	Moderate	16:28	3.9	Surface	1.0	0.5	77	27.3	27.2	0.9	0.9	23.1	23.1	75.4	75.5	5.3	5.3	2.7	2.7	3	4	83	85	821478	814158	<0.2	<0.2	1.5	1.5
						1.0	0.5	77	27.2		0.9		23.1		75.5		5.3		2.7		4		84				<0.2		1.3	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.9	0.3	75	27.2	27.2	3.2	3.2	24.2	23.8	79.3	79.5	5.5	5.6	2.7		5		85				<0.2		1.6	
						2.9	0.3	77	27.2		3.2		23.5		79.7		5.6		2.7		4		86				<0.2		1.4	
SR3	Cloudy	Moderate	15:25	9.6	Surface	1.0	0.3	212	28.1	28.1	0.9	0.9	20.3	20.3	82.3	82.2	5.7	5.4	2.3	3.7	4	4	-	-	822146	807563	-	-	-	-
						1.0	0.3	232	28.1		0.9		20.3		82.1		5.7		2.3		4		-				-		-	
					Middle	4.8	0.1	229	26.8	26.7	5.1	5.1	25.2	25.2	72.1	72.3	5.0		4.3		4		-				-		-	
						4.8	0.1	233	26.7		5.0		25.2		72.4		5.0		4.3		4		-				-		-	
					Bottom	8.6	0.2	56	26.6	26.7	7.7	7.7	28.2	28.2	79.7	79.9	5.5	5.5	4.5		4		-				-		-	
						8.6	0.2	60	26.7		7.7		28.2		80.1		5.5		4.4		3		-				-		-	
SR4A	Cloudy	Calm	16:39	9.6	Surface	1.0	0.1	331	27.2	27.2	8.0	8.0	25.1	25.1	83.4	83.3	5.8	5.1	5.5	7.9	5	5	-	-	817173	807800	-	-	-	-
						1.0	0.1	348	27.2		8.0		25.2		83.1		5.7		5.5		4		-				-		-	
					Middle	4.8	0.0	5	26.2	26.2	8.0	8.0	28.2	28.2	64.1	64.1	4.4		8.2		5		-				-		-	
						4.8	0.0	5	26.2		8.0		28.2		64.1		4.4		8.2		6		-				-		-	
					Bottom	8.6	0.0	211	26.2	26.2	8.0	8.0	28.6	28.6	64.6	64.7	4.5	4.5	10.1		5		-				-		-	
						8.6	0.0	212	26.2		8.0		28.6		64.7		4.5		10.1		6		-				-		-	
SR5A	Cloudy	Calm	17:00	3.6	Surface	1.0	0.0	175	27.3	27.3	8.0	8.0	22.8	22.8	76.4	76.3	5.3	5.3	7.8	8.4	5	5	-	-	816598	810715	-	-	-	-
						1.0	0.0	183	27.3		8.0		22.8		76.1		5.3		7.9		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.6	0.0	262	27.1	27.1	8.0	8.0	23.6	23.6	71.4	71.3	5.0	5.0	8.9		5		-				-		-	
						2.6	0.0	282	27.1		8.0		23.7		71.2		5.0		8.9		4		-				-		-	
SR6A	Cloudy	Calm	17:35	4.1	Surface	1.0	0.1	46	27.3	27.3	7.9	7.9	21.8	21.8	72.5	72.5	5.1	5.1	7.1	7.5	10	9	-	-	817967	814725	-	-	-	-
						1.0	0.1	47	27.3		7.9		21.8		72.4		5.1		7.2		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.1	267	26.6	26.6	7.9	7.9	24.6	24.6	64.2	64.3	4.5	4.5	7.9		9		-				-		-	
						3.1	0.1	293	26.6		7.9		24.6		64.3		4.5		7.9		9		-				-		-	
SR7	Cloudy	Moderate	17:15	15.9	Surface	1.0	0.5	30	27.6	27.6	1.1	1.1	22.9	22.9	86.8	86.8	6.0	5.6	1.1	1.1	5	4	-	-	823613	823739	-	-	-	-
						1.0	0.5	31	27.6		1.1		22.9		86.7		6.0		1.1		4		-				-		-	
					Middle	8.0	0.4	359	26.8	26.8	6.7	6.7	25.2	25.2	75.6	75.6	5.2		1.1		4		-				-		-	
						8.0	0.4	330	26.8		6.7		25.3		75.6		5.3		1.0		5		-				-		-	
					Bottom	14.9	0.5	19	26.8	26.8	12.2	12.2	25.7	25.7	78.9	79.0	5.5	5.5	1.1		3		-				-		-	
						14.9	0.5	20	26.8		12.2		25.7		79.0		5.5		1.1		3		-				-		-	
SR8	Cloudy	Calm	16:08	5.2	Surface	1.0	-	-	28.0	28.0	1.1	1.1	21.9	21.9	85.8	85.8	6.0	6.0	4.0	4.1	7	7	-	-	820400	811606	-	-	-	-
						1.0	-	-	28.0		1.1		21.9		85.8		6.0		4.0		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	-	-	27.9	27.9	4.2	4.2	22.2	22.2	88.4	88.5	6.1	6.1	4.1		7		-				-		-	
						4.2	-	-	27.9		4.1		22.2		88.6		6.1		4.1		6		-				-		-	

DA: Depth-Averaged

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

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 28 May 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	09:50	8.6	Surface	1.0	0.4	45	26.7	26.7	8.0	8.0	25.0	24.9	73.1	73.1	5.1	4.9	4.4	5.9	5	5	83	87	815606	804242	<0.2	<0.2	1.5	1.4
						1.0	0.4	48	26.7		8.0		24.9		73.1		5.1		4.4		4		84				<0.2		1.7	
					Middle	4.3	0.3	41	26.1	26.1	8.0	8.0	28.5	28.5	67.1	67.1	4.6		4.7		4		86				<0.2		1.4	
						4.3	0.4	44	26.1		8.0		28.5		67.1		4.6		4.7		5		87				<0.2		1.3	
					Bottom	7.6	0.2	27	25.9	25.9	8.0	8.0	30.0	30.0	66.1	66.2	4.5	4.5	8.5		4		90				<0.2		1.3	
						7.6	0.2	28	25.9		8.0		30.0		66.2		4.5		8.5		5		90				<0.2		1.3	
C2	Cloudy	Moderate	10:30	12.6	Surface	1.0	0.3	353	27.9	27.9	1.1	1.1	18.8	18.7	83.3	83.3	5.9	5.3	2.4	4.8	4	4	82	85	825690	806933	<0.2	<0.2	1.3	1.7
						1.0	0.3	358	27.9		1.1		18.7		83.2		5.9		2.4		5		83				<0.2		1.4	
					Middle	6.3	0.4	21	26.8	26.8	6.3	6.3	24.5	24.5	67.4	67.5	4.7		5.5		5		84				<0.2		1.9	
						6.3	0.4	21	26.8		6.3		24.5		67.5		4.7		5.5		4		84				<0.2		1.8	
					Bottom	11.6	0.4	354	26.5	26.5	12.6	12.4	27.7	27.6	73.7	73.9	5.1	5.1	6.6		4		89				<0.2		1.9	
						11.6	0.5	326	26.6		12.3		27.6		74.1		5.1		6.2		3		88				<0.2		1.8	
C3	Cloudy	Moderate	08:47	12.2	Surface	1.0	0.3	259	27.3	27.3	0.8	0.7	21.5	21.5	79.5	79.5	5.6	5.1	1.5	1.8	3	3	83	87	822110	817795	<0.2	<0.2	1.8	1.8
						1.0	0.3	274	27.3		0.7		21.5		79.4		5.6		1.5		3		84				<0.2		1.8	
					Middle	6.1	0.4	253	26.0	26.0	7.2	7.2	29.2	29.2	65.1	65.1	4.5		1.2		4		86				<0.2		1.8	
						6.1	0.4	268	26.0		7.2		29.2		65.1		4.5		1.2		3		87				<0.2		1.8	
					Bottom	11.2	0.4	267	25.9	25.9	11.1	11.1	30.2	30.2	69.6	69.8	4.8	4.8	2.8		4		90				<0.2		1.8	
						11.2	0.4	278	25.9		11.1		30.2		69.9		4.8		2.8		3		91				<0.2		1.9	
IM1	Rainy	Moderate	10:10	5.4	Surface	1.0	0.1	10	26.5	26.5	8.0	8.0	25.9	25.9	68.7	68.8	4.8	4.8	5.6	6.8	5	5	85	87	817936	807151	<0.2	<0.2	1.6	1.6
						1.0	0.1	10	26.5		8.0		25.9		68.8		4.8		5.6		4		85				<0.2		1.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	0.1	29	26.3	26.3	8.0	8.0	27.4	27.4	66.3	66.3	4.6	4.6	8.2		5		88				<0.2		1.6	
						4.4	0.1	30	26.3		8.0		27.4		66.3		4.6		8.0		5		88				<0.2		1.6	
IM2	Cloudy	Moderate	10:17	7.6	Surface	1.0	0.2	342	26.7	26.7	8.0	8.0	25.2	25.1	71.0	71.0	4.9	4.8	4.4	6.5	4	4	82	86	818171	806162	<0.2	<0.2	2.0	1.5
						1.0	0.2	353	26.7		8.0		25.1		71.0		4.9		4.4		4		82				<0.2		2.0	
					Middle	3.8	0.2	12	26.3	26.3	8.0	8.0	27.0	27.0	67.9	67.9	4.7		5.8		4		85				<0.2		1.3	
						3.8	0.2	12	26.3		8.0		27.0		67.9		4.7		5.8		4		86				<0.2		1.1	
					Bottom	6.6	0.2	1	26.1	26.1	8.0	8.0	28.3	28.3	65.4	65.5	4.5	4.5	9.1		4		89				<0.2		1.1	
						6.6	0.2	1	26.1		8.0		28.3		65.6		4.5		9.2		4		90				<0.2		1.2	
IM3	Cloudy	Moderate	10:25	7.9	Surface	1.0	0.2	330	26.6	26.6	8.0	8.0	25.3	25.3	69.4	69.4	4.8	4.8	4.7	5.9	4	3	82	86	818770	805591	<0.2	<0.2	1.4	1.4
						1.0	0.3	338	26.6		8.0		25.3		69.4		4.8		4.7		3		83				<0.2		1.5	
					Middle	4.0	0.3	332	26.5	26.5	8.0	8.0	25.7	25.7	68.9	68.9	4.8		5.0		3		85				<0.2		1.4	
						4.0	0.3	337	26.5		8.0		25.7		68.9		4.8		5.0		3		86				<0.2		1.4	
					Bottom	6.9	0.2	355	26.1	26.1	8.0	8.0	28.5	28.5	64.0	64.1	4.4	4.4	8.0		4		89				<0.2		1.3	
						6.9	0.3	327	26.1		8.0		28.5		64.1		4.4		8.0		3		89				<0.2		1.2	
IM4	Cloudy	Moderate	10:34	8.8	Surface	1.0	0.6	340	26.7	26.7	8.0	8.0	24.4	24.4	71.3	71.2	5.0	4.9	4.4	5.7	5	4	82	86	819708	804603	<0.2	<0.2	1.4	1.5
						1.0	0.6	313	26.7		8.0		24.4		71.1		5.0		4.4		4		82				<0.2		1.5	
					Middle	4.4	0.5	354	26.5	26.5	8.0	8.0	25.8	25.7	69.0	68.9	4.8		4.6		4		86				<0.2		1.6	
						4.4	0.6	326	26.5		8.0		25.7		68.8		4.8		4.6		4		87				<0.2		1.5	
					Bottom	7.8	0.4	4	26.0	26.0	8.0	8.0	28.6	28.6	65.5	65.6	4.5	4.5	8.1		4		90				<0.2		1.6	
						7.8	0.5	4	26.0		8.0		28.6		65.6		4.5		8.0		4		90				<0.2		1.5	
IM5	Cloudy	Moderate	10:43	7.9	Surface	1.0	0.8	3	26.7	26.8	8.0	8.0	24.8	24.8	72.2	72.3	5.0	4.8	5.5	8.1	3	4	82	85	820742	804863	<0.2	<0.2	1.5	1.5
						1.0	0.8	3	26.8		8.0		24.8		72.3		5.0		5.4		2		82				<0.2		1.6	
					Middle	4.0	0.7	19	26.2	26.2	8.0	8.0	27.8	27.8	66.3	66.3	4.6		7.1		4		85				<0.2		1.5	
						4.0	0.7	19	26.2		8.0		27.8		66.3		4.6		7.0		4		85				<0.2		1.6	
					Bottom	6.9	0.5	28	26.1	26.1	8.0	8.0	28.1	28.1	66.3	66.3	4.6	4.6	11.6		4		89				<0.2		1.5	
						6.9	0.5	30	26.1		8.0		28.1		66.3		4.6		11.7		4		89				<0.2		1.5	
IM6	Cloudy	Moderate	10:51	7.8	Surface	1.0	0.1	137	27.3	27.3	8.0	8.0	20.6	20.6	75.9	75.9	5.4	5.1	5.4	8.9	4	4	81	86	821079	805811	<0.2	<0.2	2.0	1.8
						1.0	0.1	144	27.3		8.0		20.7		75.8		5.4		5.4		4		82				<0.2		1.8	
					Middle	3.9	0.4	63	26.5	26.5	8.0	8.0	25.8	25.8	67.1	67.1	4.7		8.9		4		86				<0.2		1.8	
						3.9	0.5	65	26.5		8.0		25.8		67.0		4.7		8.9		4		86				<0.2		2.0	
					Bottom	6.8	0.3	59	26.2	26.2	8.0	8.0	27.9	27.9	64.7	64.8	4.5	4.5	12.4		4		89				<0.2		1.6	
						6.8	0.3	62	26.2		8.0		27.9		64.8		4.5		12.3		4		89				<0.2		1.6	
IM7	Cloudy	Moderate	11:00	9.2	Surface	1.0	0.1	230	27.2	27.2	8.0	8.0	21.1	21.1	72.6	72.7	5.1	5.0	5.6	7.0	3	3	81	85	821350	806833	<0.2	<0.2	1.9	2.1
						1.0	0.1	238	27.2		8.0		21.1		72.7		5.1		5.6		3		81				<0.2		1.9	
					Middle	4.6	0.2	93	26.7	26.7	8.0	8.0	24.1	24.1	69.9	69.9	4.9		6.6		3		85				<0.2		2.2	
						4.6	0.2	93	26.7		8.0		24.1		69.9		4.9		6.5		3		85				<0.2		2.2	
					Bottom	8.2	0.3	82	26.1	26.1	8.0	8.0	28.1	28.1	65.4	65.5	4.5	4.5	8.8		3		88				<0.2		2.1	
						8.2	0.3	88	26.1		8.0		28.1		65.5		4.5		9.1		2		89				<0.2		2.1	
IM8	Cloudy	Moderate	10:06	8.4	Surface	1.0	0.2	247	27.2	27.2	1.1	1.1	22.7	22.7	70.1	70.1	4.9	4.9	4.1	5.8	6	7	83	87	821810	808141	<0.2	<0.2	2.2	2.2
						1.0	0.2	266	27.2		1.1		22.7		70.1		4.9		4.1		7		83				<0.2		2.3	
					Middle	4.2	0.1	40	27.0	27.0	4.5	4.5	23.5	23.5	69.1	69.1	4.8		5.7		6		87				<0.2		2.2	
						4.2	0.1	43	27.0		4.5		23.5		69.1		4.8		5.7		7		88				<0.2		2.1	
					Bottom	7.4	0.3	71	26.9	26.9	7.0	7.0	25.0	25.0	71.2	71.3	4.9	5.0	7.5		7		90				<0.2		2.2	
						7.4	0.3	76	26.9		7.0		25.0		71.4		5.0		7.5		7		91				<0.2		2.2	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 28 May 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	10:01	7.9	Surface	1.0	0.1	277	27.2	27.2	1.0	1.0	22.9	22.9	68.9	69.0	4.8	4.8	6.0	7.8	6	6	84	87	822073	808830	<0.2	<0.2	2.0	2.1
						1.0	0.2	300	27.2		1.0		22.9		69.0		4.8		6.0		5		84				<0.2		2.1	
					Middle	4.0	0.2	260	27.0	27.0	4.3	4.4	23.6	23.6	69.3	69.4	4.8		8.1		5		87				<0.2		2.0	
						4.0	0.2	282	27.0		4.4		23.6		69.5		4.9		8.0		6		88				<0.2		2.1	
					Bottom	6.9	0.2	250	26.9	26.9	7.0	7.0	24.3	24.3	72.5	72.7	5.1	5.1	9.3		6		90				<0.2		2.2	
						6.9	0.2	251	26.9		7.0		24.3		72.8		5.1		9.4		6		91				<0.2		2.2	
IM10	Cloudy	Moderate	09:54	8.8	Surface	1.0	0.4	298	27.7	27.7	1.2	1.2	19.9	19.9	76.7	76.7	5.4	5.2	4.4	9.1	4	4	84	87	822405	809809	<0.2	<0.2	1.8	1.8
						1.0	0.4	304	27.7		1.2		19.9		76.6		5.4		4.4		4		85				<0.2		1.8	
					Middle	4.4	0.4	286	27.0	27.0	4.5	4.5	23.6	23.6	71.9	72.0	5.0		9.7		4		87				<0.2		1.8	
						4.4	0.4	293	26.9		4.5		23.6		72.1		5.0		9.7		4		88				<0.2		1.7	
					Bottom	7.8	0.3	280	26.9	26.9	7.3	7.3	24.9	24.9	77.2	77.4	5.4	5.4	13.0		4		89				<0.2		1.9	
						7.8	0.3	282	26.9		7.3		24.9		77.6		5.4		13.1		4		89				<0.2		1.8	
IM11	Cloudy	Moderate	09:45	9.0	Surface	1.0	0.3	304	27.6	27.6	1.8	1.7	21.6	21.3	82.2	82.2	5.7	5.2	2.8	7.2	5	5	84	87	822070	811459	<0.2	<0.2	2.3	2.1
						1.0	0.3	322	27.6		1.7		20.9		82.1		5.8		2.9		4		85				<0.2		2.2	
					Middle	4.5	0.4	288	26.4	26.4	4.5	4.5	24.8	25.0	67.3	67.4	4.7		7.5		6		87				<0.2		2.1	
						4.5	0.4	291	26.4		4.5		25.2		67.5		4.7		7.2		5		88				<0.2		2.1	
					Bottom	8.0	0.3	284	26.3	26.3	8.4	8.5	27.5	27.5	70.9	71.2	4.9	4.9	11.3		6		89				<0.2		2.1	
						8.0	0.3	311	26.4		8.5		27.5		71.4		4.9		11.7		4		90				<0.2		2.0	
IM12	Cloudy	Moderate	09:39	8.5	Surface	1.0	0.5	280	27.6	27.6	0.9	0.9	20.4	20.4	74.0	74.0	5.2	5.0	3.2	4.3	5	4	84	87	821458	812059	<0.2	<0.2	1.8	1.8
						1.0	0.5	289	27.6		0.9		20.4		74.0		5.2		3.2		4		84				<0.2		1.7	
					Middle	4.3	0.6	266	26.9	26.9	3.5	3.5	23.1	23.1	69.0	69.0	4.8		3.9		4		88				<0.2		1.8	
						4.3	0.6	267	26.9		3.6		23.1		69.0		4.8		4.0		4		88				<0.2		1.8	
					Bottom	7.5	0.7	254	26.3	26.3	7.2	7.2	27.8	27.8	71.2	71.4	4.9	4.9	5.7		4		90				<0.2		1.9	
						7.5	0.7	268	26.3		7.2		27.8		71.5		4.9		5.7		5		90				<0.2		1.9	
SR1A	Cloudy	Calm	09:19	4.6	Surface	1.0	-	-	27.6	27.6	0.7	0.8	19.6	19.6	82.2	82.2	5.8	5.8	2.6	2.5	4	4	-	-	819971	812658	-	-	-	-
						1.0	-	-	27.6		0.8		19.6		82.2		5.8		2.6		4		-				-		-	
					Middle	2.3	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.3	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	-	-	27.5	27.5	3.6	3.6	20.7	20.7	87.5	87.7	6.2	6.2	2.4		4		-				-		-	
						3.6	-	-	27.5		3.6		20.7		87.9		6.2		2.4		4		-				-		-	
SR2	Cloudy	Moderate	09:07	5.0	Surface	1.0	0.1	355	27.4	27.4	0.9	1.0	21.3	21.3	75.0	75.0	5.3	5.3	3.2	3.1	3	4	83	86	821475	814173	<0.2	<0.2	1.8	1.9
						1.0	0.1	327	27.4		1.0		21.3		74.9		5.3		3.2		4		84				<0.2		1.9	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.2	348	26.9	26.9	4.1	4.1	24.7	24.7	78.5	78.7	5.5	5.5	3.0		4		87				<0.2		1.8	
						4.0	0.2	320	27.0		4.1		24.7		78.9		5.5		3.1		4		88				<0.2		1.9	
SR3	Cloudy	Moderate	10:11	9.6	Surface	1.0	0.3	276	27.5	27.5	0.9	0.9	20.6	20.6	83.4	83.5	5.9	5.4	3.4	6.8	4	5	-	-	822132	807581	-	-	-	-
						1.0	0.3	289	27.5		0.9		20.6		83.6		5.9		3.4		4		-				-		-	
					Middle	4.8	0.1	305	27.1	27.1	4.8	4.8	23.2	23.2	69.2	69.2	4.8		6.4		6		-				-		-	
						4.8	0.1	327	27.1		4.8		23.2		69.2		4.8		6.5		5		-				-		-	
					Bottom	8.6	0.3	55	26.6	26.6	8.6	8.6	26.5	26.5	71.2	71.4	4.9	5.0	10.3		6		-				-		-	
						8.6	0.3	60	26.6		8.6		26.5		71.6		5.0		10.7		6		-				-		-	
SR4A	Cloudy	Calm	09:28	9.4	Surface	1.0	0.1	244	26.9	26.9	8.0	8.0	23.3	23.3	70.2	70.3	4.9	4.8	5.6	8.5	4	4	-	-	817197	807804	-	-	-	-
						1.0	0.1	263	26.9		8.0		23.3		70.3		4.9		5.6		4		-				-		-	
					Middle	4.7	0.1	67	26.4	26.4	8.0	8.0	26.5	26.5	66.6	66.6	4.6		8.3		4		-				-		-	
						4.7	0.2	67	26.4		8.0		26.5		66.6		4.6		8.3		4		-				-		-	
					Bottom	8.4	0.1	80	26.4	26.4	8.0	8.0	26.7	26.7	66.5	66.5	4.6	4.6	11.7		3		-				-		-	
						8.4	0.1	86	26.4		8.0		26.7		66.5		4.6		11.6		4		-				-		-	
SR5A	Cloudy	Calm	09:10	3.5	Surface	1.0	0.1	297	27.3	27.3	7.9	7.9	21.1	21.1	76.5	76.4	5.4	5.4	5.4	5.8	3	3	-	-	816607	810680	-	-	-	-
						1.0	0.1	321	27.3		7.9		21.1		76.2		5.4		5.6		3		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.5	0.1	307	27.2	27.2	7.9	7.9	21.3	21.3	76.3	76.4	5.4	5.4	6.2		3		-				-		-	
						2.5	0.1	324	27.2		7.9		21.3		76.5		5.4		6.1		4		-				-		-	
SR6A	Cloudy	Calm	08:42	4.3	Surface	1.0	0.1	194	27.3	27.3	7.9	7.9	20.5	20.5	77.2	77.1	5.5	5.5	11.6	14.2	5	5	-	-	817967	814756	-	-	-	-
						1.0	0.1	209	27.3		7.9		20.5		77.0		5.4		11.6		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.0	245	27.1	27.1	7.9	7.9	21.9	21.9	73.6	73.7	5.2	5.2	16.8		5		-				-		-	
						3.3	0.0	252	27.1		7.9		21.9		73.7		5.2		16.8		4		-				-		-	
SR7	Cloudy	Moderate	08:16	15.8	Surface	1.0	0.0	112	27.0	27.0	1.1	1.1	23.3	23.3	76.7	76.7	5.4	5.4	0.8	0.9	2	3	-	-	823620	823742	-	-	-	-
						1.0	0.0	112	27.0		1.1		23.3		76.6		5.4		0.8		3		-				-		-	
					Middle	7.9	0.1	177	26.6	26.6	7.5	7.5	27.2	27.2	78.0	78.2	5.4		0.9		<2		-				-		-	
						7.9	0.1	190	26.6		7.5		27.2		78.4		5.4		0.9		3		-				-		-	
					Bottom	14.8	0.1	72	25.8	25.8	14.3	14.3	30.4	30.4	64.1	64.2	4.4	4.4	0.9		3		-				-		-	
						14.8	0.1	75	25.8		14.3		30.4		64.2		4.4		0.9		2		-				-		-	
SR8	Cloudy	Calm	09:30	5.1	Surface	1.0	-	-	27.8	27.8	1.1	1.1	19.4	19.4	79.1	79.1	5.6	5.6	3.7	3.7	4	5	-	-	820392	811612	-	-	-	-
						1.0	-	-	27.8		1.1		19.4		79.1		5.6		3.7		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	-	-	27.3	27.3	4.3	4.2	22.6	22.6	84.2	84.5	5.9	5.9	3.6		5		-				-		-	
						4.1	-	-	27.3		4.2		22.6		84.8		5.9		3.6		5		-				-		-	

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 30 May 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	06:52	8.4	Surface	1.0	0.3	247	27.2	27.2	7.8	7.8	22.2	22.2	83.0	82.9	5.8	5.3	3.8	5.6	4	4	87	89	815597	804248	<0.2	<0.2	1.4	1.5
						1.0	0.3	250	27.2		7.8		22.2		82.7		5.8		3.9		4		86				<0.2		1.4	
					Middle	4.2	0.2	214	26.5	26.5	7.8	7.8	28.0	28.0	68.4	68.4	4.7		5.1		5		89				<0.2		1.4	
						4.2	0.2	233	26.5		7.8		28.0		68.4		4.7		5.1		4		88				<0.2		1.4	
					Bottom	7.4	0.2	202	26.3	26.3	7.8	7.8	28.7	28.7	65.7	65.7	4.5	4.5	7.7		4		90				<0.2		1.5	
						7.4	0.2	220	26.3		7.8		28.7		65.7		4.5		7.8		4		91				<0.2		1.6	
C2	Rainy	Moderate	08:33	11.9	Surface	1.0	0.1	185	27.1	27.1	8.1	8.1	20.8	20.8	84.6	84.6	6.0	5.5	5.8	6.8	6	6	86	88	825668	806949	<0.2	<0.2	1.8	1.8
						1.0	0.1	192	27.1		8.1		20.8		84.6		6.0		5.8		6		85				<0.2		1.8	
					Middle	6.0	0.1	214	27.3	27.3	8.0	8.0	22.7	22.7	72.4	72.4	5.1		4.9		5		88				<0.2		1.8	
						6.0	0.2	223	27.3		8.0		22.7		72.3		5.0		4.9		6		89				<0.2		2.0	
					Bottom	10.9	0.2	179	26.1	26.2	8.0	8.0	28.1	28.0	57.9	58.0	4.0	4.0	10.1		6		90				<0.2		1.8	
						10.9	0.2	179	26.2		8.0		28.0		58.1		4.0		9.5		5		90				<0.2		1.8	
C3	Rainy	Moderate	06:17	12.0	Surface	1.0	0.3	72	26.6	26.6	8.0	8.0	25.7	25.7	77.9	77.9	5.4	5.1	3.0	3.5	2	2	87	88	822127	817786	<0.2	<0.2	1.8	1.8
						1.0	0.3	74	26.6		8.0		25.7		77.8		5.4		3.0		2		86				<0.2		1.9	
					Middle	6.0	0.1	308	26.2	26.2	8.0	8.0	28.4	28.4	69.4	69.6	4.8		3.1		2		88				<0.2		1.9	
						6.0	0.1	328	26.2		8.0		28.5		69.7		4.8		3.2		2		88				<0.2		1.8	
					Bottom	11.0	0.2	332	25.9	25.9	7.9	7.9	29.7	29.7	64.4	64.5	4.4	4.4	4.5		<2		90				<0.2		1.8	
						11.0	0.2	350	25.9		7.9		29.6		64.5		4.4		4.4		<2		90				<0.2		1.8	
IM1	Rainy	Moderate	07:16	5.2	Surface	1.0	0.1	195	27.4	27.4	7.9	7.9	21.7	21.7	88.7	88.7	6.2	6.2	3.5	3.7	4	3	87	88	817925	807116	<0.2	<0.2	1.6	1.6
						1.0	0.1	204	27.4		7.9		21.7		88.7		6.2		3.5		3		88				<0.2		1.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.1	208	27.5	27.5	7.9	7.9	22.0	22.0	87.0	87.1	6.1	6.1	3.9		3		89				<0.2		1.6	
						4.2	0.1	228	27.5		7.9		22.0		87.1		6.1		3.9		3		89				<0.2		1.6	
IM2	Rainy	Moderate	07:25	7.1	Surface	1.0	0.2	187	27.4	27.4	7.9	7.9	21.8	21.8	85.8	85.7	6.0	5.9	3.6	6.1	3	3	85	88	818185	806167	<0.2	<0.2	1.8	1.7
						1.0	0.2	201	27.4		7.9		21.8		85.6		6.0		3.6		3		86				<0.2		1.7	
					Middle	3.6	0.1	224	27.6	27.6	7.9	7.9	22.5	22.5	83.2	83.1	5.8		4.0		3		88				<0.2		1.7	
						3.6	0.1	238	27.6		7.9		22.5		82.9		5.8		4.0		3		88				<0.2		1.6	
					Bottom	6.1	0.1	138	26.9	26.9	7.8	7.8	26.1	26.0	73.4	73.6	5.1	5.1	10.9		4		90				<0.2		1.7	
						6.1	0.1	139	26.9		7.8		26.0		73.7		5.1		10.8		4		90				<0.2		1.8	
IM3	Rainy	Moderate	07:36	7.3	Surface	1.0	0.1	174	27.5	27.5	7.9	7.9	21.7	21.7	83.6	83.6	5.9	5.6	3.9	6.5	4	4	86	88	818778	805579	<0.2	<0.2	1.8	1.8
						1.0	0.1	183	27.5		7.9		21.7		83.5		5.9		3.9		4		85				<0.2		1.8	
					Middle	3.7	0.1	87	27.3	27.3	7.8	7.8	24.7	24.7	76.6	76.7	5.3		4.8		5		87				<0.2		1.7	
						3.7	0.1	95	27.3		7.8		24.7		76.8		5.3		4.8		4		88				<0.2		1.6	
					Bottom	6.3	0.2	96	26.9	26.9	7.8	7.8	26.1	26.1	72.7	72.8	5.0	5.0	10.9		4		90				<0.2		1.8	
						6.3	0.2	101	26.9		7.8		26.1		72.8		5.0		10.9		4		89				<0.2		1.8	
IM4	Rainy	Moderate	07:48	8.2	Surface	1.0	0.5	199	27.5	27.5	7.8	7.8	19.9	19.9	85.9	85.9	6.1	5.8	4.8	6.6	6	5	85	87	819724	804584	<0.2	<0.2	2.0	1.9
						1.0	0.5	218	27.5		7.8		19.9		85.9		6.1		4.8		4		85				<0.2		1.9	
					Middle	4.1	0.2	156	27.4	27.4	7.8	7.8	23.5	23.5	77.7	77.7	5.4		5.4		5		87				<0.2		1.9	
						4.1	0.3	156	27.4		7.8		23.6		77.6		5.4		5.4		5		88				<0.2		1.9	
					Bottom	7.2	0.2	114	26.7	26.7	7.8	7.8	26.5	26.5	69.1	69.2	4.8	4.8	9.8		4		90				<0.2		2.0	
						7.2	0.2	123	26.7		7.8		26.5		69.2		4.8		9.8		3		89				<0.2		1.9	
IM5	Rainy	Moderate	07:59	7.7	Surface	1.0	0.3	172	27.5	27.5	7.9	7.9	20.3	20.3	86.1	86.1	6.1	5.9	4.8	5.9	5	5	85	87	820713	804880	<0.2	<0.2	1.9	1.8
						1.0	0.3	178	27.5		7.9		20.3		86.0		6.1		4.8		5		85				<0.2		1.8	
					Middle	3.9	0.4	154	27.5	27.5	7.8	7.8	22.4	22.4	80.6	80.7	5.6		5.7		5		87				<0.2		1.8	
						3.9	0.4	154	27.5		7.8		22.3		80.7		5.6		5.7		4		88				<0.2		1.8	
					Bottom	6.7	0.4	171	27.3	27.3	7.8	7.8	24.2	24.2	75.9	76.0	5.3	5.3	7.3		5		89				<0.2		1.8	
						6.7	0.4	184	27.3		7.8		24.2		76.0		5.3		7.0		5		89				<0.2		1.6	
IM6	Rainy	Moderate	08:25	7.4	Surface	1.0	0.1	196	27.5	27.5	7.8	7.8	19.9	19.9	81.3	81.2	5.8	5.6	5.0	5.6	5	4	85	87	821057	805822	<0.2	<0.2	2.0	1.9
						1.0	0.1	211	27.5		7.8		19.9		81.0		5.7		5.0		5		85				<0.2		1.9	
					Middle	3.7	0.2	244	27.4	27.4	7.8	7.8	20.4	20.4	77.6	77.4	5.5		5.4		5		87				<0.2		2.0	
						3.7	0.2	265	27.4		7.8		20.4		77.2		5.5		5.5		4		87				<0.2		1.8	
					Bottom	6.4	0.2	215	27.3	27.3	7.8	7.8	23.6	23.6	70.7	70.7	4.9	4.9	6.4		4		89				<0.2		2.0	
						6.4	0.2	220	27.3		7.8		23.6		70.7		4.9		6.3		3		89				<0.2		1.9	
IM7	Rainy	Moderate	08:26	8.4	Surface	1.0	0.1	126	27.5	27.5	7.8	7.8	19.7	19.7	84.4	84.4	6.0	5.8	5.0	5.7	4	4	85	87	821361	806827	<0.2	<0.2	2.0	2.0
						1.0	0.1	137	27.5		7.8		19.7		84.4		6.0		5.0		4		84				<0.2		2.0	
					Middle	4.2	0.1	291	27.5	27.5	7.8	7.8	20.7	20.6	79.9	80.0	5.6		5.1		4		87				<0.2		2.0	
						4.2	0.1	294	27.5		7.8		20.6		80.0		5.6		5.1		4		87				<0.2		2.0	
					Bottom	7.4	0.2	218	27.3	27.3	7.8	7.8	23.9	23.9	71.8	71.8	5.0	5.0	7.2		4		89				<0.2		1.9	
						7.4	0.2	230	27.3		7.8		23.9		71.8		5.0		7.2		5		89				<0.2		1.9	
IM8	Rainy	Moderate	08:02	8.1	Surface	1.0	0.3	78	27.4	27.5	8.0	8.0	19.3	19.3	80.9	80.8	5.7	5.5	5.8	6.6	5	5	87	89	821844	808151	<0.2	<0.2	1.8	1.9
						1.0	0.3	85	27.5		8.0		19.3		80.7		5.7		5.8		6		86				<0.2		1.8	
					Middle	4.1	0.1	44	27.4	27.4	8.0	8.0	22.7	22.7	76.0	76.1	5.3		6.4		5		89				<0.2		1.9	
						4.1	0.1	45	27.4		8.0		22.7		76.2		5.3		6.6		5		88				<0.2		2.1	
					Bottom	7.1	0.1	187	27.3	27.3	8.0	8.0	23.6	23.6	77.2	77.3	5.4	5.4	7.4		5		91				<0.2		2.0	
						7.1	0.1	198	27.3		8.0		23.6		77.4		5.4		7.3		4		91				<0.2		1.9	

DA: Depth-Averaged

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

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 30 May 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Rainy	Moderate	07:55	7.0	Surface	1.0	0.3	72	27.5	27.5	8.0	8.0	20.0	20.0	77.1	77.1	5.5	5.5	6.0	6.7	4	5	86	88	822079	808787	<0.2	<0.2	2.0	2.1
						1.0	0.3	76	27.5		8.0		20.0		77.1		5.5		6.0		5		87				<0.2		1.9	
					Middle	3.5	0.3	98	27.4	27.4	8.0	8.0	23.1	23.2	77.5	77.5	5.4		6.3		5		88				<0.2		1.9	
						3.5	0.3	104	27.3		8.0		23.2		77.4		5.4		6.4		4		87				<0.2		2.0	
					Bottom	6.0	0.2	95	27.3	27.3	8.0	8.0	23.5	23.5	77.0	77.0	5.4	5.4	7.8		4		90				<0.2		2.3	
						6.0	0.2	102	27.3		8.0		23.5		76.9		5.4		7.9		5		90				<0.2		2.2	
IM10	Rainy	Moderate	07:45	8.8	Surface	1.0	0.5	121	27.5	27.5	8.0	8.0	18.6	18.6	79.9	79.8	5.7	5.6	6.2	7.1	4	5	87	89	822370	809791	<0.2	<0.2	2.3	2.3
						1.0	0.5	122	27.5		8.0		18.5		79.6		5.7		6.2		5		86				<0.2		2.3	
					Middle	4.4	0.5	121	27.4	27.4	8.0	8.0	23.0	23.0	78.3	78.3	5.5		6.8		4		88				<0.2		2.3	
						4.4	0.5	127	27.4		8.0		23.0		78.3		5.5		6.9		5		89				<0.2		2.2	
					Bottom	7.8	0.3	113	27.4	27.4	8.0	8.0	23.0	23.0	78.6	78.7	5.5	5.5	8.2		5		91				<0.2		2.5	
						7.8	0.4	118	27.4		8.0		23.0		78.7		5.5		8.3		6		90				<0.2		2.3	
IM11	Rainy	Moderate	07:32	9.2	Surface	1.0	0.7	116	27.5	27.5	8.0	8.0	16.2	16.2	84.0	83.9	6.1	5.6	6.3	6.5	4	5	87	89	822069	811477	<0.2	<0.2	2.2	2.3
						1.0	0.7	125	27.5		8.0		16.2		83.8		6.0		6.1		4		87				<0.2		2.2	
					Middle	4.6	0.5	99	27.5	27.5	8.0	8.0	21.9	21.9	74.8	74.9	5.2		5.9		5		88				<0.2		2.0	
						4.6	0.6	101	27.5		8.0		21.9		74.9		5.2		6.0		6		89				<0.2		2.0	
					Bottom	8.2	0.2	75	26.9	26.9	8.0	8.0	25.2	25.2	68.1	68.3	4.7	4.7	7.4		5		91				<0.2		2.5	
						8.2	0.2	77	26.9		8.0		25.3		68.4		4.7		7.4		6		90				<0.2		2.6	
IM12	Rainy	Moderate	07:21	9.4	Surface	1.0	0.6	132	27.7	27.7	8.0	8.0	18.1	18.1	82.4	82.3	5.9	5.5	6.8	6.4	5	4	86	88	821464	812052	<0.2	<0.2	2.2	2.2
						1.0	0.6	144	27.6		8.0		18.1		82.2		5.9		6.9		4		87				<0.2		2.2	
					Middle	4.7	0.3	109	27.1	27.1	8.0	8.0	22.7	22.8	72.8	72.8	5.1		6.6		4		88				<0.2		2.2	
						4.7	0.3	114	27.0		8.0		22.8		72.7		5.1		6.5		4		88				<0.2		2.3	
					Bottom	8.4	0.1	49	26.7	26.7	7.9	7.9	24.4	24.5	67.2	67.1	4.7	4.7	5.9		4		90				<0.2		2.2	
						8.4	0.1	49	26.6		7.9		24.6		66.9		4.7		5.8		5		91				<0.2		2.0	
SR1A	Rainy	Moderate	07:00	5.4	Surface	1.0	-	-	27.4	27.4	8.0	7.9	21.5	21.5	81.4	81.3	5.7	5.7	6.5	6.6	<2	2	-	-	819973	812661	-	-	-	-
						1.0	-	-	27.4		7.9		21.5		81.2		5.7		6.5		<2		-				-		-	
					Middle	2.7	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.7	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	-	-	27.2	27.2	7.9	7.9	23.2	23.1	80.2	80.7	5.6	5.7	6.7		2		-				-		-	
						4.4	-	-	27.2		7.9		23.1		81.1		5.7		6.6		2		-				-		-	
SR2	Rainy	Moderate	06:46	4.3	Surface	1.0	0.5	84	27.5	27.5	8.0	8.0	18.1	18.1	86.5	86.4	6.2	6.2	5.3	5.1	4	4	88	89	821444	814189	<0.2	<0.2	2.0	2.0
						1.0	0.5	86	27.4		8.0		18.1		86.3		6.2		5.3		4		87				<0.2		1.9	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.1	355	27.2	27.3	8.0	8.0	22.7	22.6	81.2	81.6	5.7	5.7	4.9		4		90				<0.2		2.0	
						3.3	0.1	327	27.3		8.0		22.5		81.9		5.7		5.0		3		90				<0.2		2.0	
SR3	Rainy	Moderate	08:10	9.1	Surface	1.0	0.2	97	27.4	27.4	8.0	8.0	18.7	18.7	84.0	84.0	6.0	5.6	5.8	6.8	6	5	-	-	822168	807574	-	-	-	-
						1.0	0.2	106	27.4		8.0		18.7		83.9		6.0		5.8		5		-				-		-	
					Middle	4.6	0.0	330	27.4	27.4	8.0	8.0	23.6	23.6	74.3	74.3	5.2		6.1		4		-				-		-	
						4.6	0.0	349	27.4		8.0		23.6		74.2		5.2		6.1		5		-				-		-	
					Bottom	8.1	0.1	177	27.2	27.2	8.0	8.0	24.2	24.2	74.1	74.4	5.1	5.2	8.6		3		-				-		-	
						8.1	0.1	193	27.2		8.0		24.2		74.6		5.2		8.5		5		-				-		-	
SR4A	Rainy	Calm	06:27	9.3	Surface	1.0	0.2	56	27.5	27.5	7.8	7.8	22.2	22.2	84.3	84.3	5.9	5.8	4.8	7.2	4	4	-	-	817205	807825	-	-	-	-
						1.0	0.2	61	27.5		7.8		22.2		84.2		5.9		4.8		5		-				-		-	
					Middle	4.7	0.1	84	27.5	27.5	7.8	7.8	23.3	23.3	80.9	80.9	5.6		7.1		4		-				-		-	
						4.7	0.1	85	27.5		7.8		23.3		80.8		5.6		7.2		4		-				-		-	
					Bottom	8.3	0.0	304	27.5	27.5	7.8	7.8	23.9	23.8	78.7	78.8	5.4	5.4	9.7		4		-				-		-	
						8.3	0.0	313	27.5		7.8		23.8		78.8		5.4		9.6		4		-				-		-	
SR5A	Rainy	Calm	06:07	3.7	Surface	1.0	0.1	143	27.4	27.4	7.8	7.8	23.0	23.0	82.5	82.5	5.7	5.7	4.2		4		-				-		-	
						1.0	0.1	145	27.4		7.8		23.0		82.5		5.7		4.1		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-	4	-	-	816602	810674	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.7	0.1	109	27.3	27.3	7.8	7.8	23.2	23.2	81.6	81.7	5.7	5.7	4.2		4		-				-		-	
						2.7	0.1	114	27.3		7.8		23.2		81.7		5.7		4.3		3		-				-		-	
SR6A	Rainy	Calm	05:38	4.3	Surface	1.0	0.0	211	27.3	27.3	7.6	7.6	23.9	23.9	73.9	73.9	5.1	5.1	3.5	4.1	3	3	-	-	817985	814721	-	-	-	-
						1.0	0.0	227	27.3		7.6		23.9		73.8		5.1		3.5		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.1	218	27.1	27.1	7.6	7.6	24.3	24.3	72.9	73.1	5.1	5.1	4.9		3		-				-		-	
						3.3	0.1	222	27.1		7.6		24.3		73.2		5.1		4.8		3		-				-		-	
SR7	Rainy	Moderate	05:40	16.4	Surface	1.0	0.2	79	26.5	26.5	8.0	8.0	26.9	27.0	71.9	71.8	5.0	**4.7**	3.1	4.0	<2	2	-	-	823614	823755	-	-	-	-
						1.0	0.2	82	26.5		8.0		27.0		71.7		5.0		3.1		<2		-				-		-	
					Middle	8.2	0.1	264	25.7	25.7	7.9	7.9	30.5	30.5	63.2	63.2	4.3		4.1		<2		-				-		-	
						8.2	0.1	274	25.7		7.9		30.6		63.2		4.3		4.1		<2		-				-		-	
					Bottom	15.4	0.1	68	25.6	25.6	7.9	7.8	30.8	30.8	64.9	65.0	4.5	4.5	4.8		3		-				-		-	
						15.4	0.1	74	25.6		7.8		30.8		65.0		4.5		4.7		2		-				-		-	
SR8	Rainy	Moderate	07:13	5.4	Surface	1.0	-	-	27.3	27.3	8.0	8.0	20.5	20.5	83.1	82.9	5.9	5.9	6.9	6.8	2	3	-	-	820399	811606	-	-	-	-
						1.0	-	-	27.3		8.0		20.5		82.7		5.9		6.8		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	-	-	27.3	27.3	8.0	8.0	23.5	23.4	76.0	76.2	5.3	5.3	6.7		3		-				-		-	
						4.4	-	-	27.3		8.0		23.4		76.3		5.3		6.7		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 30 May 20 during Mid-Flood Tide

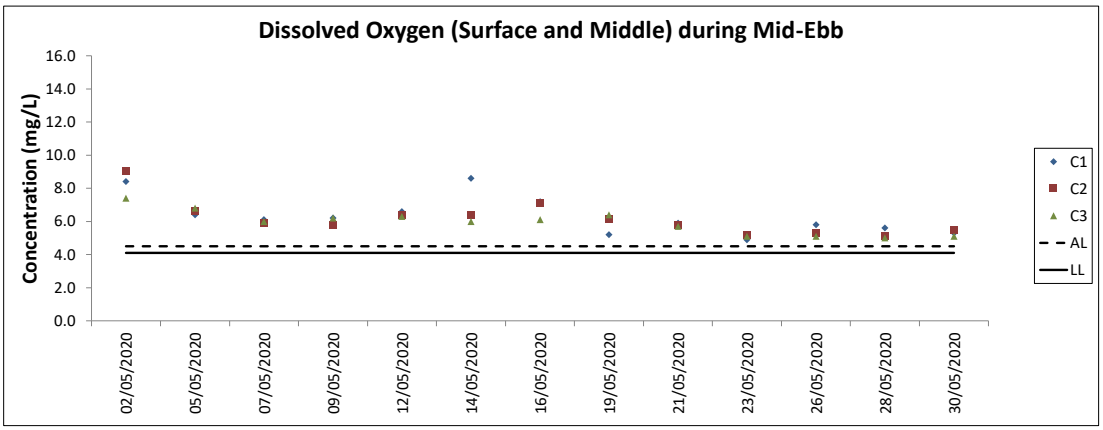
Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (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	11:27	8.3	Surface	1.0	0.1	31	27.3	27.3	7.9	7.9	21.6	21.6	84.0	83.9	5.9	5.8	3.9	6.0	3	4	87	89	815620	804239	<0.2	<0.2	1.4	1.4
						1.0	0.1	32	27.3		7.9		21.6		83.8		5.9		3.9		4		87						1.3	
					Middle	4.2	0.2	45	27.0	27.0	7.9	7.9	23.4	23.4	80.0	79.9	5.6		3.9		4		89						1.4	
						4.2	0.2	45	27.0		7.9		23.4		79.8		5.6		3.9		4		89						1.4	
					Bottom	7.3	0.2	36	26.6	26.6	7.8	7.8	27.5	27.5	68.5	68.6	4.7	4.7	10.1		3		91						1.5	
						7.3	0.2	37	26.6		7.8		27.5		68.7		4.7		9.9		3		91						1.4	
C2	Rainy	Moderate	10:05	11.5	Surface	1.0	0.1	207	27.2	27.2	8.1	8.1	21.2	21.2	81.0	81.0	5.7	5.4	5.4	6.0	4	5	86	89	825670	806960	<0.2	<0.2	1.6	1.6
						1.0	0.1	215	27.2		8.1		21.2		80.9		5.7		5.4		5		87						1.6	
					Middle	5.8	0.2	179	27.2	27.2	8.0	8.0	23.5	23.5	72.5	72.5	5.1		4.3		5		89						1.6	
						5.8	0.2	192	27.1		8.0		23.5		72.4		5.1		4.5		6		88						1.6	
					Bottom	10.5	0.2	130	26.6	26.6	8.0	8.0	26.2	26.2	64.7	64.8	4.5	4.5	8.1		6		90						1.5	
						10.5	0.2	140	26.6		8.0		26.2		64.9		4.5		8.4		6		91						1.5	
C3	Rainy	Moderate	11:49	12.3	Surface	1.0	0.4	296	27.1	27.1	8.0	8.0	21.8	21.7	79.5	79.5	5.6	5.4	4.3	4.9	5	5	86	89	822129	817782	<0.2	<0.2	1.6	1.6
						1.0	0.4	323	27.1		8.0		21.7		79.5		5.6		4.2		4		87						1.5	
					Middle	6.2	0.5	271	26.6	26.6	8.0	8.0	25.7	25.7	73.7	73.7	5.1		3.5		4		88						1.6	
						6.2	0.5	284	26.5		8.0		25.7		73.7		5.1		3.8		5		89						1.6	
					Bottom	11.3	0.4	306	26.0	26.0	8.0	8.0	29.5	29.5	71.1	71.4	4.9	4.9	6.8		5		91						1.6	
						11.3	0.4	331	26.0		8.0		29.5		71.6		4.9		6.9		4		90						1.6	
IM1	Rainy	Moderate	11:05	4.9	Surface	1.0	0.1	6	27.3	27.3	7.9	7.9	21.3	21.3	85.5	85.5	6.0	6.0	3.8	6.0	4	5	88	89	817971	807152	<0.2	<0.2	1.2	1.3
						1.0	0.2	6	27.3		7.9		21.3		85.4		6.0		3.8		5		87						1.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	0.1	12	27.1	27.1	7.8	7.8	25.3	25.3	74.9	75.0	5.2	5.2	8.2		5		89				<0.2		1.3	
						3.9	0.2	12	27.1		7.8		25.3		75.0		5.2		8.2		4		90				<0.2		1.4	
IM2	Rainy	Moderate	10:56	7.0	Surface	1.0	0.1	351	27.5	27.5	7.9	7.9	22.0	22.0	83.4	83.4	5.8	5.6	4.2	5.8	4	4	86	88	818186	806171	<0.2	<0.2	1.3	1.3
						1.0	0.1	355	27.5		7.9		22.0		83.4		5.8		4.2		3		87				<0.2		1.3	
					Middle	3.5	0.1	27	27.4	27.4	7.8	7.8	23.8	23.8	76.1	76.0	5.3		4.7		4		89				<0.2		1.3	
						3.5	0.1	27	27.4		7.8		23.8		75.9		5.3		4.7		5		88				<0.2		1.3	
					Bottom	6.0	0.2	28	26.7	26.7	7.8	7.8	26.7	26.7	69.2	69.2	4.8	4.8	8.8		4		90				<0.2		1.3	
						6.0	0.2	28	26.7		7.8		26.7		69.2		4.8		8.5		5		90				<0.2		1.3	
IM3	Rainy	Moderate	10:47	7.2	Surface	1.0	0.1	287	27.3	27.3	7.9	7.9	22.6	22.6	79.7	79.6	5.6	5.3	5.9	7.1	4	4	86	88	818766	805608	<0.2	<0.2	1.4	1.3
						1.0	0.1	307	27.3		7.9		22.7		79.4		5.5		6.0		3		87				<0.2		1.3	
					Middle	3.6	0.1	245	27.2	27.2	7.8	7.8	24.2	24.2	74.1	74.1	5.1		9.0		4		88				<0.2		1.4	
						3.6	0.1	267	27.2		7.8		24.2		74.1		5.1		9.0		5		88				<0.2		1.2	
					Bottom	6.2	0.1	15	26.9	26.9	7.8	7.8	25.6	25.6	71.3	71.3	4.9	4.9	6.4		5		90				<0.2		1.4	
						6.2	0.1	16	26.9		7.8		25.6		71.3		4.9		6.6		5		89				<0.2		1.2	
IM4	Rainy	Moderate	10:38	8.1	Surface	1.0	0.3	187	27.0	27.0	7.9	7.9	19.7	19.7	87.1	87.1	6.2	6.1	5.7	6.2	6	7	86	88	819713	804587	<0.2	<0.2	1.6	1.6
						1.0	0.3	196	27.0		7.9		19.7		87.1		6.2		5.7		7		87				<0.2		1.7	
					Middle	4.1	0.3	220	27.1	27.1	7.9	7.9	21.6	21.6	84.6	84.6	6.0		4.0		7		88				<0.2		1.6	
						4.1	0.3	225	27.1		7.9		21.6		84.5		6.0		4.0		7		88				<0.2		1.6	
					Bottom	7.1	0.1	274	26.8	26.8	7.8	7.8	26.2	26.3	67.9	67.9	4.7	4.7	9.0		8		90				<0.2		1.6	
						7.1	0.1	281	26.8		7.8		26.3		67.9		4.7		9.0		7		90				<0.2		1.6	
IM5	Rainy	Moderate	10:29	7.1	Surface	1.0	0.1	181	27.1	27.1	7.8	7.8	19.9	19.9	86.4	86.4	6.1	6.1	6.4	6.0	8	9	86	87	820714	804861	<0.2	<0.2	1.6	1.5
						1.0	0.2	191	27.1		7.8		19.9		86.3		6.1		6.4		7		85				<0.2		1.6	
					Middle	3.6	0.1	249	27.1	27.1	7.9	7.9	21.3	21.3	85.1	85.1	6.0		4.9		9		88				<0.2		1.3	
						3.6	0.1	259	27.1		7.9		21.3		85.0		6.0		4.9		8		87				<0.2		1.4	
					Bottom	6.1	0.2	302	27.4	27.4	7.8	7.8	23.1	23.1	77.8	77.9	5.4	5.4	6.6		10		89				<0.2		1.5	
						6.1	0.2	323	27.3		7.8		23.1		77.9		5.4		6.6		9		89				<0.2		1.6	
IM6	Rainy	Moderate	10:17	7.3	Surface	1.0	0.1	169	27.1	27.1	7.9	7.9	20.8	20.8	87.7	87.7	6.2	6.1	4.2	5.7	4	5	86	88	821059	805839	<0.2	<0.2	1.6	1.6
						1.0	0.1	177	27.1		7.9		20.8		87.6		6.2		4.2		5		85				<0.2		1.6	
					Middle	3.7	0.1	129	27.2	27.2	7.9	7.8	21.4	21.4	85.1	85.0	6.0		4.3		5		87				<0.2		1.6	
						3.7	0.1	140	27.2		7.8		21.4		84.9		6.0		4.3		6		88				<0.2		1.8	
					Bottom	6.3	0.0	280	27.4	27.4	7.8	7.8	23.5	23.5	74.2	74.4	5.2	5.2	8.5		6		89				<0.2		1.6	
						6.3	0.0	287	27.4		7.8		23.5		74.5		5.2		8.5		6		90				<0.2		1.6	
IM7	Rainy	Moderate	10:07	8.5	Surface	1.0	0.1	122	27.3	27.3	7.9	7.9	20.1	20.1	86.8	86.8	6.2	5.8	3.9	5.4	3	3	86	88	821341	806844	<0.2	<0.2	0.6	1.0
						1.0	0.1	128	27.3		7.9		20.1		86.7		6.2		3.9		4		85				<0.2		0.7	
					Middle	4.3	0.0	255	27.4	27.4	7.8	7.8	22.2	22.1	77.5	77.6	5.4		5.0		2		88				<0.2		1.3	
						4.3	0.0	277	27.4		7.8		22.1		77.6		5.4		5.0		3		88				<0.2		1.3	
					Bottom	7.5	0.2	257	27.3	27.3	7.8	7.8	24.1	24.1	72.9	73.0	5.1	5.1	7.3		3		90				<0.2		1.2	
						7.5	0.2	280	27.3		7.8		24.1		73.0		5.1		7.3		4		89				<0.2		1.1	
IM8	Rainy	Moderate	10:29	7.6	Surface	1.0	0.1	82	27.4	27.4	8.0	8.0	20.0	20.0	83.6	83.5	5.9	5.7	5.8	6.3	6	7	86	88	821826	808154	<0.2	<0.2	1.5	1.6
						1.0	0.1	86	27.4		8.0		20.0		83.4		5.9		5.8		7		86				<0.2		1.5	
					Middle	3.8	0.1	233	27.3	27.3	8.0	8.0	22.2	22.2	77.8	77.8	5.4		6.3		6		88				<0.2		1.6	
						3.8	0.1	248	27.3		8.0		22.2		77.8		5.5		6.3		7		88				<0.2		1.7	
					Bottom	6.6	0.1	210	27.3	27.3	7.9	7.9	23.4	23.4	77.9	78.0	5.4	5.4	6.9		7		90				<0.2		1.8	
						6.6	0.1	222	27.3		7.9		23.4		78.0		5.4		6.9		7		90				<0.2		1.6	

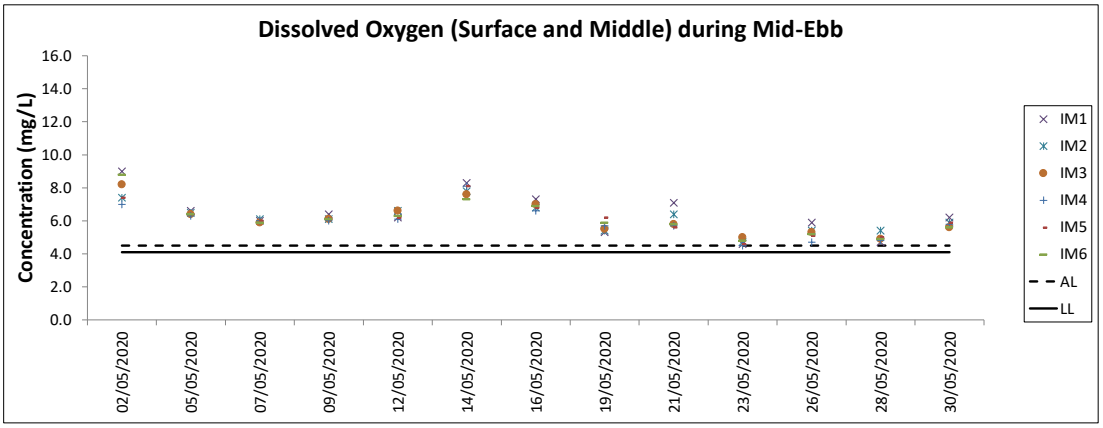
DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

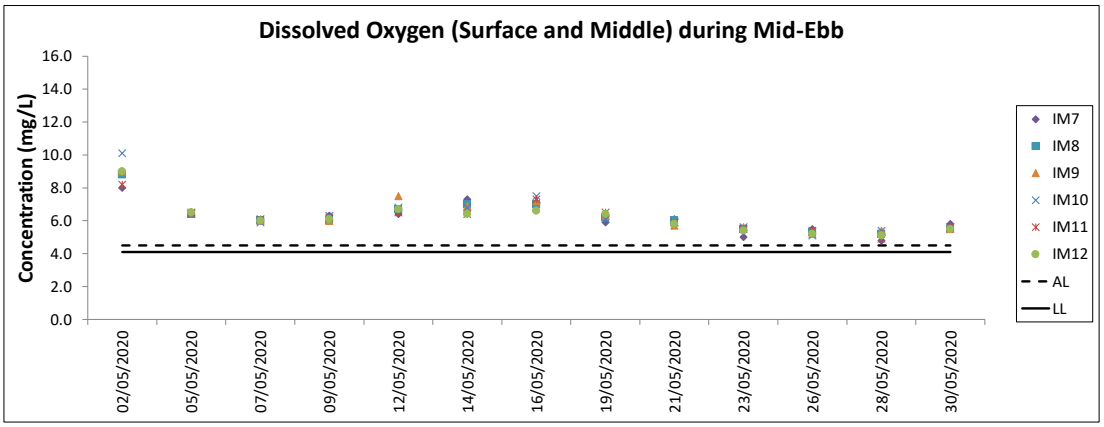
Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 30 May 20 during Mid-Flood Tide

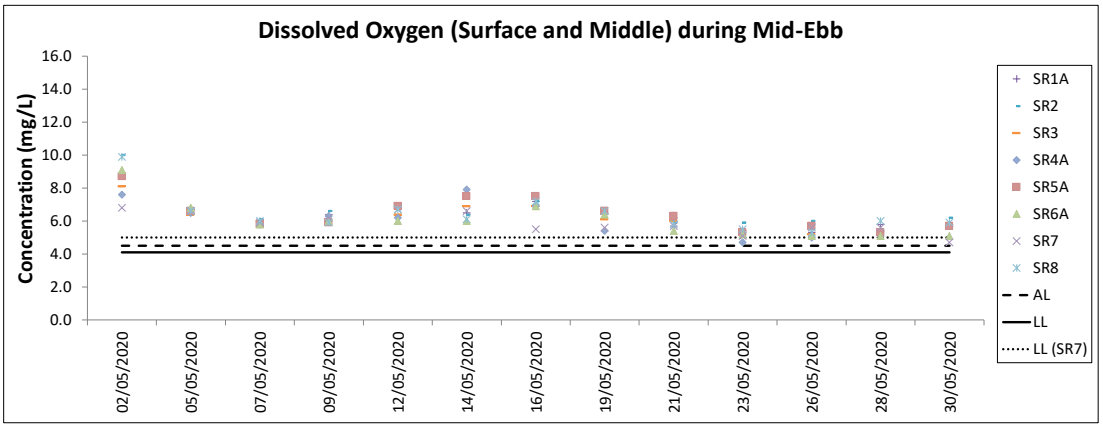
Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Rainy	Moderate	10:33	7.0	Surface	1.0	0.2	247	27.3	27.3	8.0	8.0	19.4	19.4	83.6	83.6	5.9	5.9	5.3	5.8	6	6	86	88	822090	808801	<0.2	<0.2	1.6	1.6
						1.0	0.2	251	27.3		8.0		19.4		83.5		5.9		5.2		6		87				<0.2		1.6	
					Middle	3.5	0.1	268	27.3	27.3	8.0	8.0	19.8	19.8	81.9	82.0	5.8		5.6		6		88				<0.2		1.6	
						3.5	0.1	281	27.3		8.0		19.8		82.1		5.8		5.9		6		87				<0.2		1.6	
					Bottom	6.0	0.1	221	27.3	27.3	8.0	8.0	22.1	22.1	82.9	83.1	5.8	5.8	6.2		6		90				<0.2		1.6	
						6.0	0.1	233	27.3		8.0		22.2		83.2		5.8		6.3		5		90				<0.2		1.7	
IM10	Rainy	Moderate	10:40	6.5	Surface	1.0	0.1	100	27.2	27.2	8.0	8.0	18.2	18.2	84.9	84.8	6.1	6.0	5.6	6.2	5	6	86	88	822398	809790	<0.2	<0.2	1.5	1.5
						1.0	0.1	104	27.2		8.0		18.2		84.6		6.1		5.6		6		86				<0.2		1.5	
					Middle	3.3	0.0	101	27.2	27.2	8.0	8.0	21.6	21.6	84.0	84.0	5.9		5.9		6		88				<0.2		1.5	
						3.3	0.0	109	27.2		8.0		21.6		84.0		5.9		6.0		5		89				<0.2		1.5	
					Bottom	5.5	0.1	313	27.3	27.3	8.0	8.0	22.8	22.9	80.2	80.4	5.6	5.6	7.1		5		90				<0.2		1.6	
						5.5	0.1	339	27.3		8.0		22.9		80.5		5.6		7.1		6		91				<0.2		1.5	
IM11	Rainy	Moderate	10:50	7.8	Surface	1.0	0.1	112	27.2	27.2	8.0	8.0	20.1	20.1	84.9	84.9	6.0	5.8	5.3	6.8	4	6	87	89	822050	811445	<0.2	<0.2	1.4	1.6
						1.0	0.1	118	27.2		8.0		20.1		84.9		6.0		5.3		5		86				<0.2		1.6	
					Middle	3.9	0.1	353	27.2	27.2	8.0	8.0	22.3	22.3	77.8	77.8	5.5		7.3		6		87				<0.2		1.6	
						3.9	0.1	325	27.1		8.0		22.3		77.7		5.5		7.4		5		89				<0.2		1.5	
					Bottom	6.8	0.2	301	27.0	27.0	8.0	8.0	24.5	24.5	72.8	73.0	5.1	5.1	7.6		7		91				<0.2		1.7	
						6.8	0.2	328	27.0		8.0		24.5		73.2		5.1		7.7		7		91				<0.2		1.5	
IM12	Rainy	Moderate	10:57	9.1	Surface	1.0	0.2	333	27.4	27.4	8.0	8.0	19.4	19.4	78.5	78.5	5.6	5.4	7.1	8.5	6	5	86	89	821455	812034	<0.2	<0.2	1.7	1.7
						1.0	0.2	349	27.4		8.0		19.4		78.5		5.6		7.1		5		87				<0.2		1.6	
					Middle	4.6	0.2	299	27.4	27.4	8.0	8.0	22.3	22.3	74.7	74.8	5.2		7.3		5		89				<0.2		1.8	
						4.6	0.2	308	27.4		8.0		22.3		74.8		5.2		7.4		6		88				<0.2		1.6	
					Bottom	8.1	0.2	263	27.0	27.0	8.0	8.0	24.5	24.5	70.9	71.1	4.9	5.0	11.3		4		90				<0.2		1.7	
						8.1	0.2	283	27.0		8.0		24.5		71.3		5.0		11.2		5		91				<0.2		1.6	
SR1A	Rainy	Moderate	11:14	5.2	Surface	1.0	-	-	27.3	27.3	8.0	8.0	18.8	18.9	81.6	81.5	5.8	5.8	6.0	6.5	6	6	-	-	819983	812663	-	-	-	-
						1.0	-	-	27.3		8.0		18.9		81.3		5.8		6.2		5		-				-		-	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	-	-	27.2	27.2	8.0	8.0	21.1	21.1	80.9	81.1	5.7	5.7	6.9		6		-				-		-	
						4.2	-	-	27.2		8.0		21.1		81.2		5.7		6.9		7		-				-		-	
SR2	Rainy	Moderate	11:26	5.1	Surface	1.0	0.1	299	27.2	27.2	8.0	8.0	20.9	20.9	82.8	82.9	5.9	5.9	5.6	7.9	6	6	87	89	821481	814154	<0.2	<0.2	1.6	1.8
						1.0	0.1	327	27.2		8.0		20.9		83.0		5.9		5.7		5		88				<0.2		1.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	0.2	305	26.8	26.8	8.0	8.0	24.5	24.5	73.8	73.9	5.2	5.2	10.2		5		90				<0.2		1.9	
						4.1	0.2	317	26.8		8.0		24.5		74.0		5.2		10.2		6		90				<0.2		1.9	
SR3	Rainy	Moderate	10:23	8.4	Surface	1.0	0.2	10	27.2	27.2	8.0	8.0	20.2	20.2	85.4	85.0	6.1	5.7	5.4	6.4	6	7	-	-	822165	807574	-	-	-	-
						1.0	0.2	10	27.2		8.0		20.2		84.6		6.0		5.7		7		-				-		-	
					Middle	4.2	0.1	277	27.2	27.2	8.0	8.0	22.0	22.0	76.5	76.4	5.4		6.1		6		-				-		-	
						4.2	0.1	300	27.2		8.0		22.0		76.2		5.4		6.3		7		-				-		-	
					Bottom	7.4	0.0	217	27.1	27.1	8.0	8.0	24.3	24.3	71.1	71.2	4.9	5.0	7.9		6		-				-		-	
						7.4	0.0	220	27.1		8.0		24.3		71.2		5.0		7.3		7		-				-		-	
SR4A	Rainy	Calm	11:49	9.2	Surface	1.0	0.1	244	27.3	27.3	7.9	7.9	22.1	22.1	81.0	81.0	5.7	5.5	5.4	7.1	9	9	-	-	817182	807830	-	-	-	-
						1.0	0.1	256	27.3		7.9		22.1		80.9		5.7		5.4		10		-				-		-	
					Middle	4.6	0.1	220	27.5	27.5	7.8	7.8	23.4	23.4	76.3	76.2	5.3		6.0		9		-				-		-	
						4.6	0.1	232	27.5		7.8		23.5		76.1		5.3		6.0		8		-				-		-	
					Bottom	8.2	0.1	79	27.2	27.2	7.8	7.8	25.2	25.2	73.0	73.1	5.0	5.1	9.8		8		-				-		-	
						8.2	0.1	80	27.2		7.8		25.2		73.1		5.1		9.9		8		-				-		-	
SR5A	Rainy	Calm	12:10	3.5	Surface	1.0	0.1	250	27.2	27.2	7.8	7.8	22.2	22.2	80.3	80.2	5.6	5.6	6.0	7.3	10	11	-	-	816598	810718	-	-	-	-
						1.0	0.1	250	27.2		7.8		22.2		80.1		5.6		6.1		11		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.5	0.1	268	27.3	27.3	7.8	7.8	23.5	23.5	78.8	78.9	5.5	5.5	8.8		11		-				-		-	
						2.5	0.1	270	27.3		7.8		23.4		79.0		5.5		8.4		10		-				-		-	
SR6A	Rainy	Calm	12:48	4.4	Surface	1.0	0.0	207	27.1	27.1	7.8	7.8	20.3	20.3	81.9	81.9	5.8	5.8	5.6	7.1	10	9	-	-	817972	814722	-	-	-	-
						1.0	0.0	213	27.1		7.8		20.3		81.8		5.8		5.8		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.0	65	27.1	27.1	7.8	7.8	20.9	20.9	81.7	81.8	5.8	5.8	8.5		8		-				-		-	
						3.4	0.0	70	27.1		7.8		20.9		81.8		5.8		8.5		9		-				-		-	
SR7	Rainy	Moderate	12:22	16.0	Surface	1.0	0.0	30	26.8	26.8	8.0	8.0	23.6	23.6	79.1	79.0	5.5	5.1	3.1	3.9	4	5	-	-	823625	823743	-	-	-	-
						1.0	0.0	32	26.7		8.0		23.6		78.8		5.5		3.0		5		-				-		-	
					Middle	8.0	0.2	96	26.0	26.0	8.0	8.0	28.6	28.6	66.6	66.6	4.6		3.9		5		-				-		-	
						8.0	0.2	102	26.0		8.0		28.6		66.6		4.6		4.0		5		-				-		-	
					Bottom	15.0	0.1	35	25.6	25.7	8.0	7.9	30.9	30.8	63.9	64.5	4.4	4.5	4.7		5		-				-		-	
						15.0	0.1	38	25.7		7.9		30.7		65.0		4.5		5.0		6		-				-		-	
SR8	Rainy	Moderate	11:06	5.0	Surface	1.0	-	-	27.4	27.4	8.0	8.0	19.4	19.4	81.6	81.4	5.8	5.8	7.6	9.9	6	7	-	-	820373	811628	-	-	-	-
						1.0	-	-	27.4		8.0		19.4		81.2		5.8		7.7		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	-	-	27.4	27.4	8.0	8.0	21.3	21.3	81.4	81.7	5.7	5.8	11.6		7		-				-		-	
						4.0	-	-	27.4		8.0		21.3		81.9		5.8		12.6		7		-				-		-	

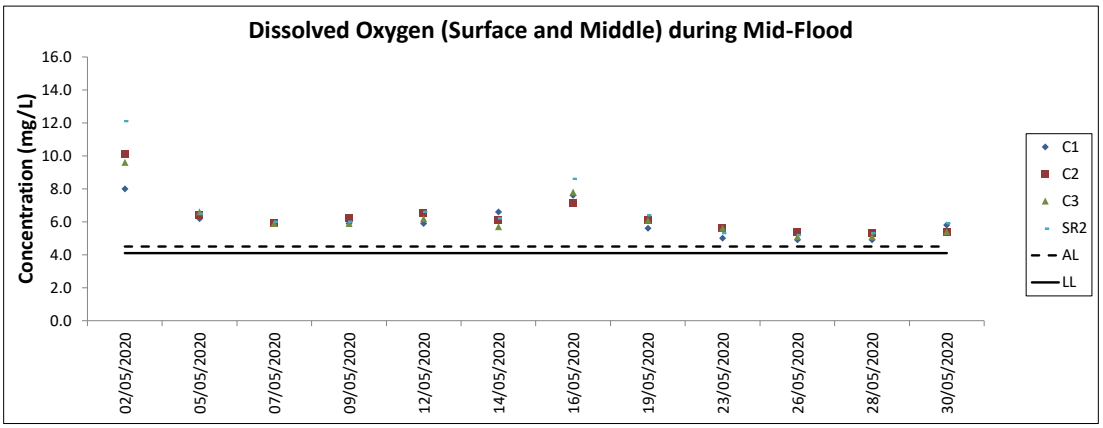
DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

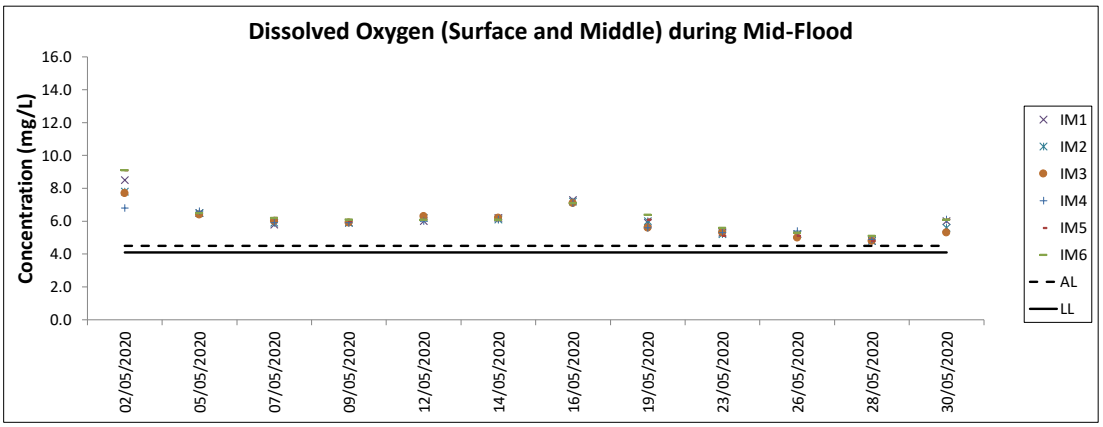

Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
02/05/2020
05/05/2020
07/05/2020
09/05/2020
12/05/2020
14/05/2020
16/05/2020
19/05/2020
21/05/2020
23/05/2020
26/05/2020
28/05/2020
30/05/2020
C1
C2
C3
AL
LL

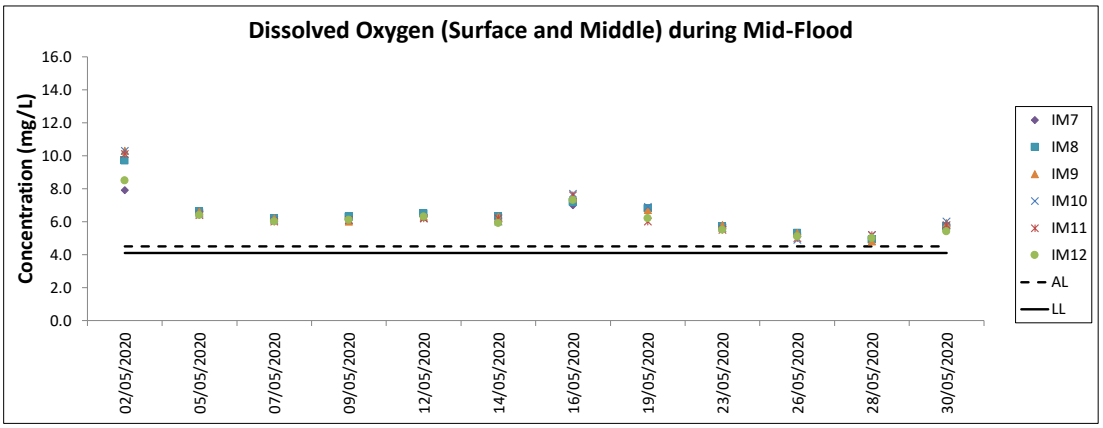

Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
02/05/2020
05/05/2020
07/05/2020
09/05/2020
12/05/2020
14/05/2020
16/05/2020
19/05/2020
21/05/2020
23/05/2020
26/05/2020
28/05/2020
30/05/2020
IM1
IM2
IM3
IM4
IM5
IM6
AL
LL

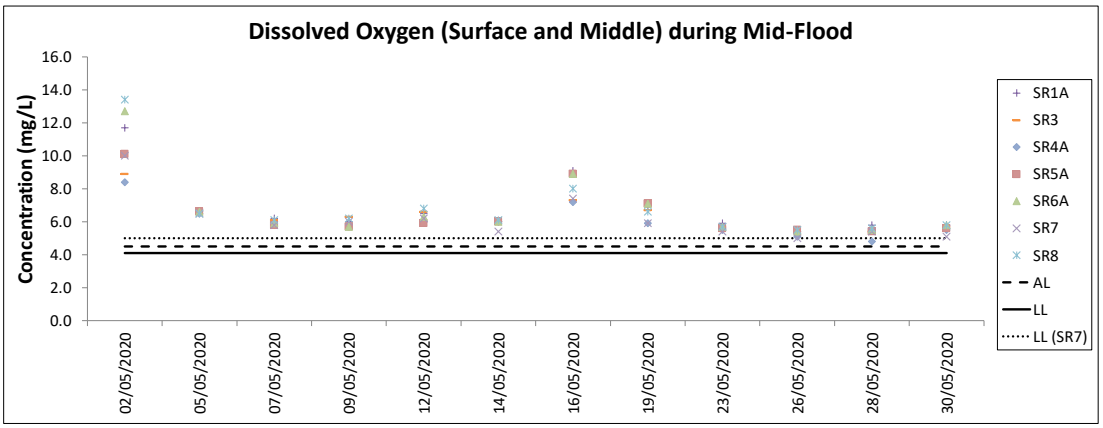

Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
02/05/2020
05/05/2020
07/05/2020
09/05/2020
12/05/2020
14/05/2020
16/05/2020
19/05/2020
21/05/2020
23/05/2020
26/05/2020
28/05/2020
30/05/2020
IM7
IM8
IM9
IM10
IM11
IM12
AL
LL

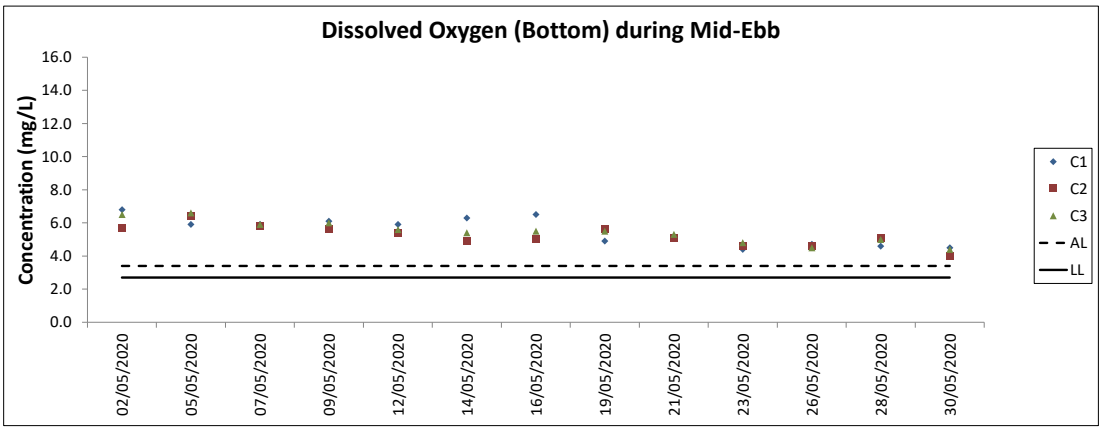

Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
02/05/2020
05/05/2020
07/05/2020
09/05/2020
12/05/2020
14/05/2020
16/05/2020
19/05/2020
21/05/2020
23/05/2020
26/05/2020
28/05/2020
30/05/2020
SR1A
SR2
SR3
SR4A
SR5A
SR6A
SR7
SR8
AL
LL
LL (SR7)

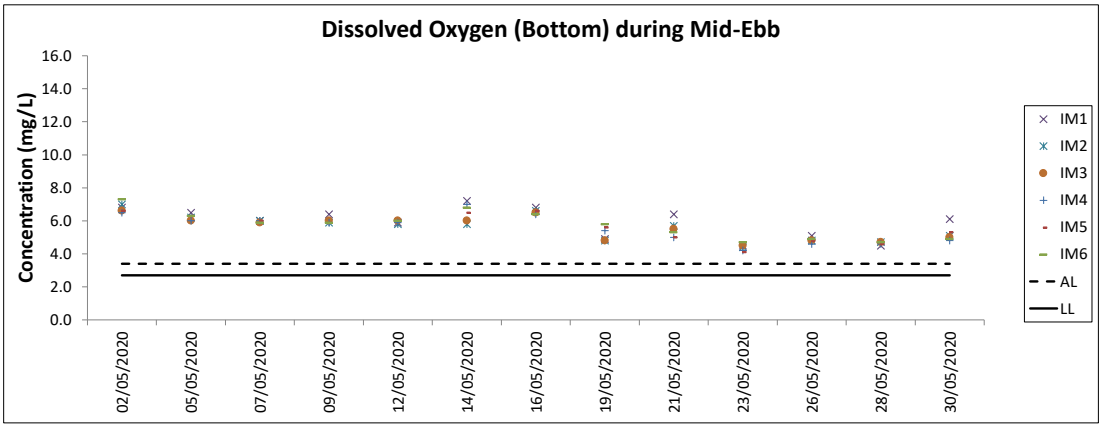

Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
02/05/2020
05/05/2020
07/05/2020
09/05/2020
12/05/2020
14/05/2020
16/05/2020
19/05/2020
23/05/2020
26/05/2020
28/05/2020
30/05/2020
C1
C2
C3
SR2
AL
LL

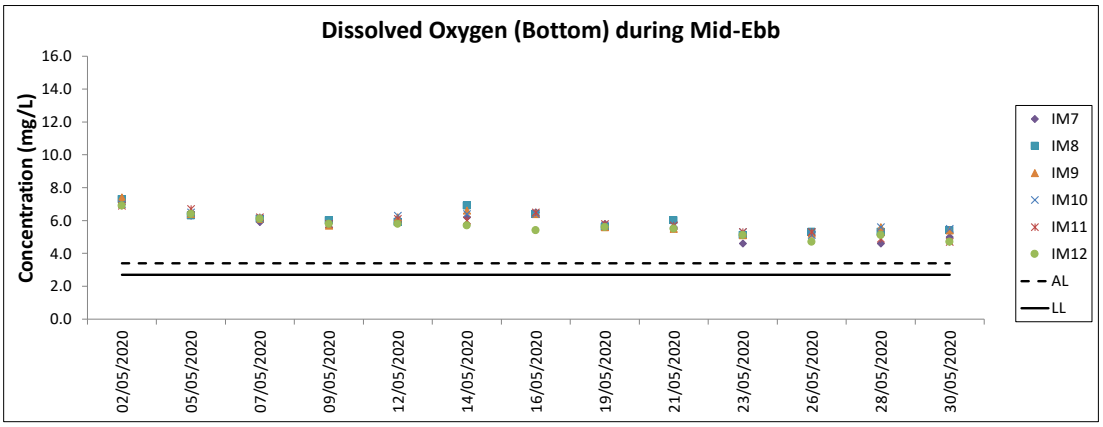

Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
02/05/2020
05/05/2020
07/05/2020
09/05/2020
12/05/2020
14/05/2020
16/05/2020
19/05/2020
23/05/2020
26/05/2020
28/05/2020
30/05/2020
IM1
IM2
IM3
IM4
IM5
IM6
AL
LL

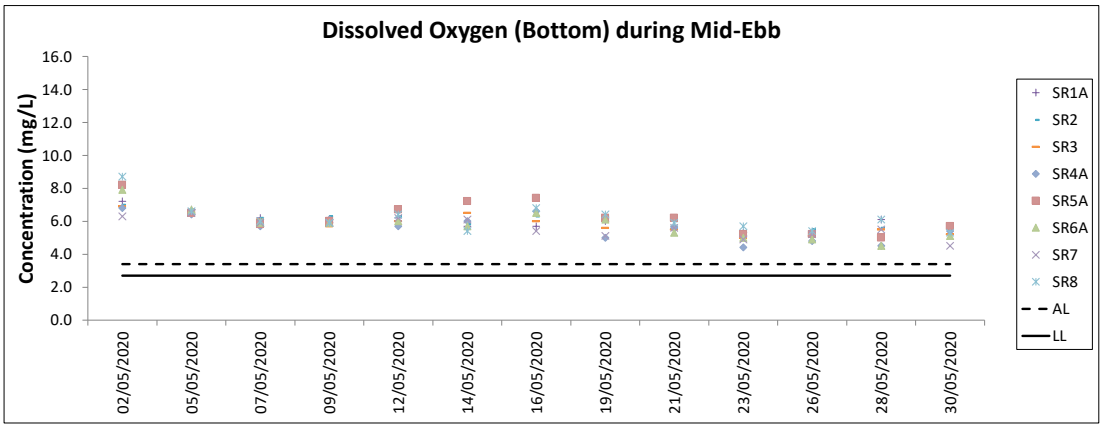

Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
02/05/2020
05/05/2020
07/05/2020
09/05/2020
12/05/2020
14/05/2020
16/05/2020
19/05/2020
23/05/2020
26/05/2020
28/05/2020
30/05/2020
IM7
IM8
IM9
IM10
IM11
IM12
AL
LL

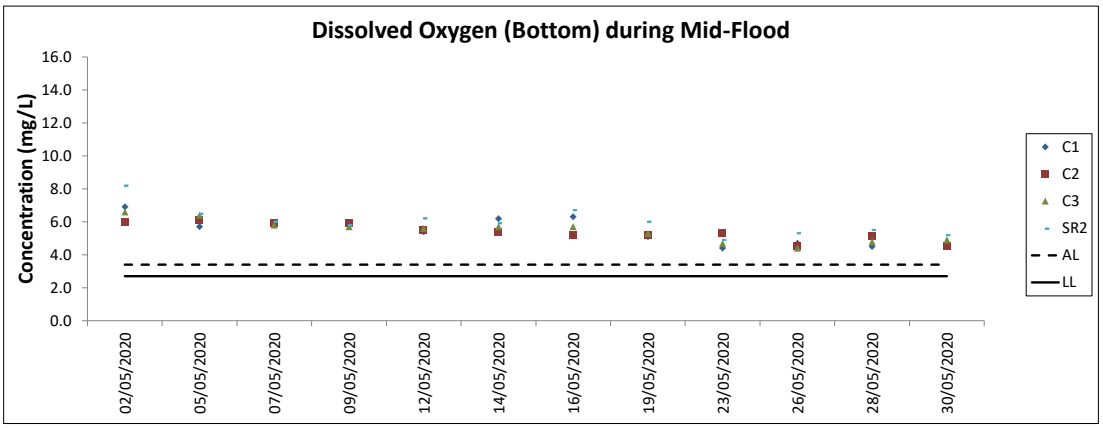

Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
02/05/2020
05/05/2020
07/05/2020
09/05/2020
12/05/2020
14/05/2020
16/05/2020
19/05/2020
23/05/2020
26/05/2020
28/05/2020
30/05/2020
SR1A
SR3
SR4A
SR5A
SR6A
SR7
SR8
AL
LL
LL (SR7)

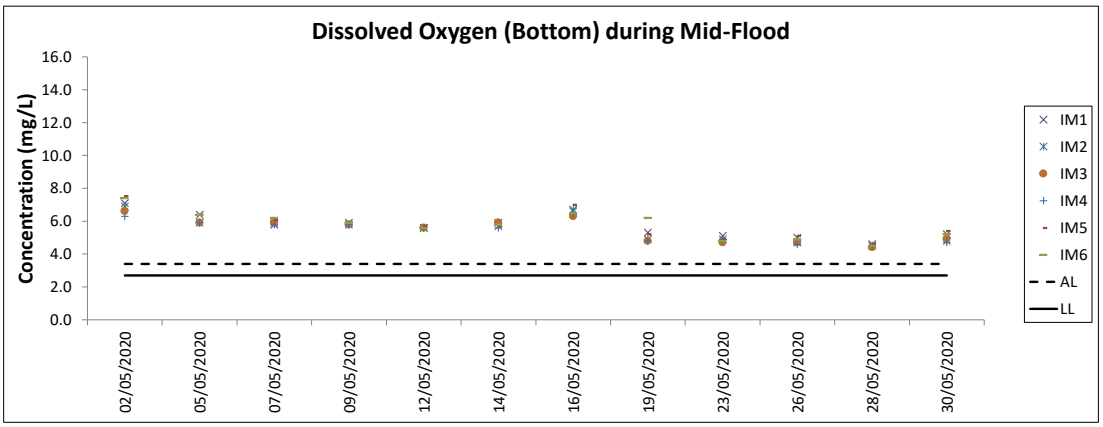

Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
02/05/2020
05/05/2020
07/05/2020
09/05/2020
12/05/2020
14/05/2020
16/05/2020
19/05/2020
21/05/2020
23/05/2020
26/05/2020
28/05/2020
30/05/2020
C1
C2
C3
AL
LL

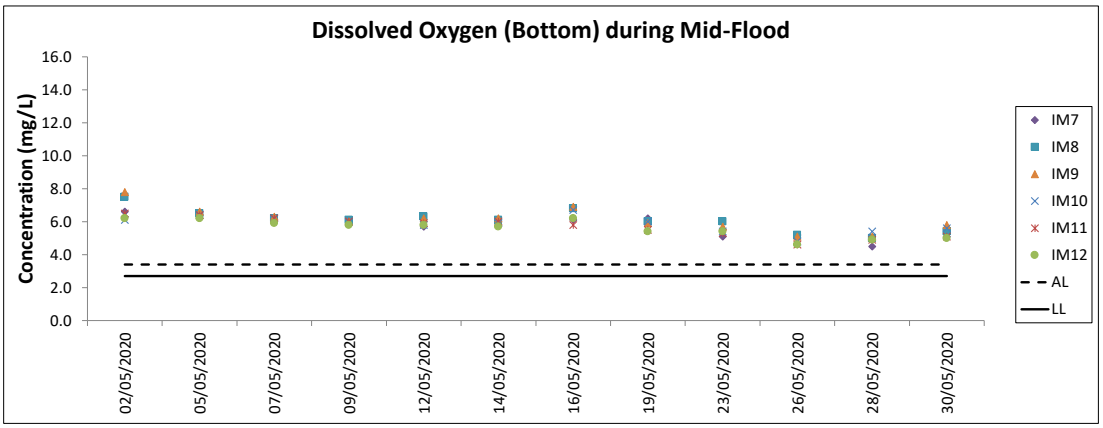

Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
02/05/2020
05/05/2020
07/05/2020
09/05/2020
12/05/2020
14/05/2020
16/05/2020
19/05/2020
21/05/2020
23/05/2020
26/05/2020
28/05/2020
30/05/2020
IM1
IM2
IM3
IM4
IM5
IM6
AL
LL

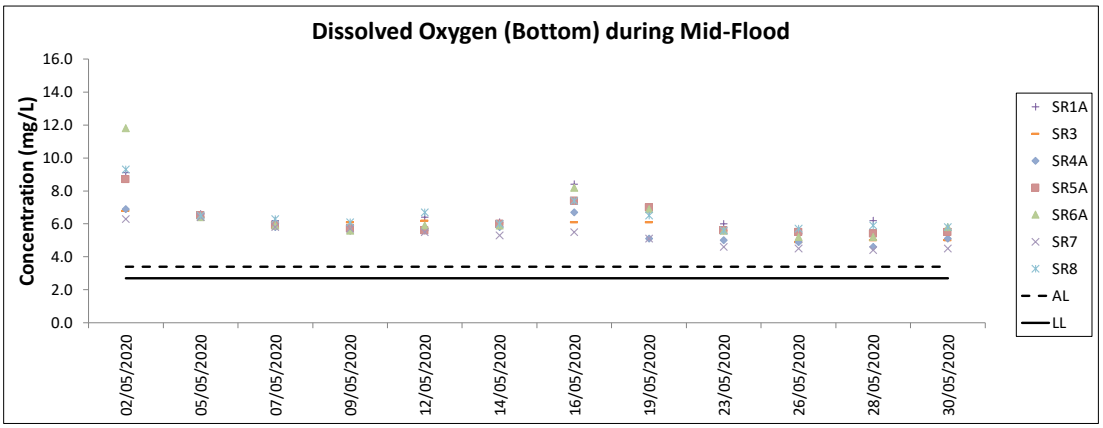

Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
02/05/2020
05/05/2020
07/05/2020
09/05/2020
12/05/2020
14/05/2020
16/05/2020
19/05/2020
21/05/2020
23/05/2020
26/05/2020
28/05/2020
30/05/2020
IM7
IM8
IM9
IM10
IM11
IM12
AL
LL

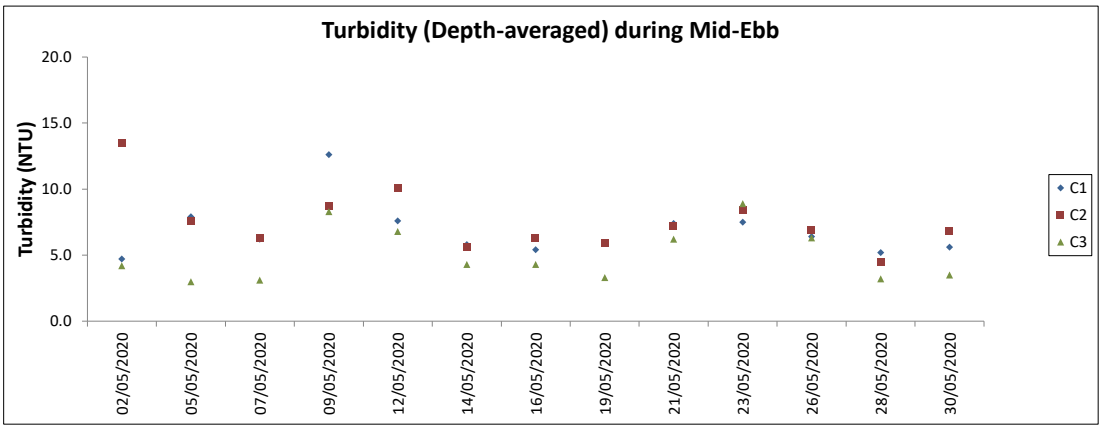

Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
02/05/2020
05/05/2020
07/05/2020
09/05/2020
12/05/2020
14/05/2020
16/05/2020
19/05/2020
21/05/2020
23/05/2020
26/05/2020
28/05/2020
30/05/2020
SR1A
SR2
SR3
SR4A
SR5A
SR6A
SR7
SR8
AL
LL

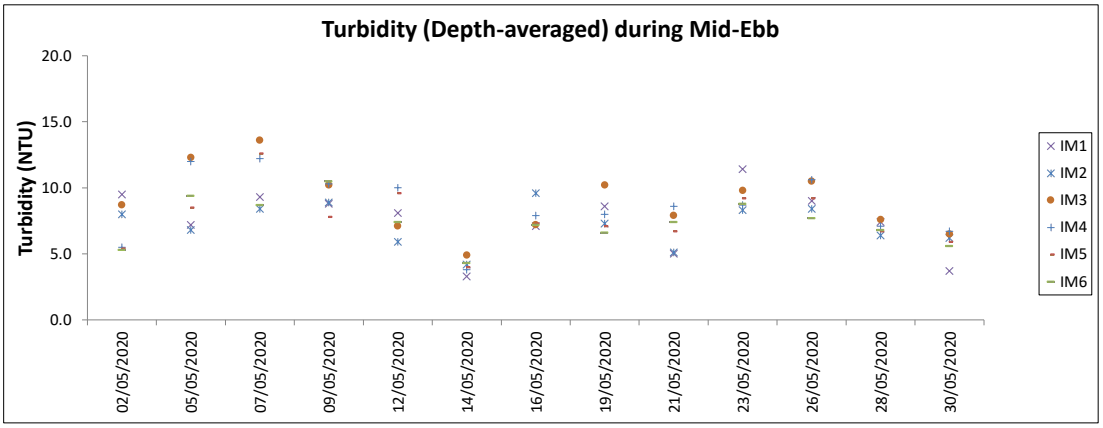

Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
02/05/2020
05/05/2020
07/05/2020
09/05/2020
12/05/2020
14/05/2020
16/05/2020
19/05/2020
23/05/2020
26/05/2020
28/05/2020
30/05/2020
C1
C2
C3
SR2
AL
LL

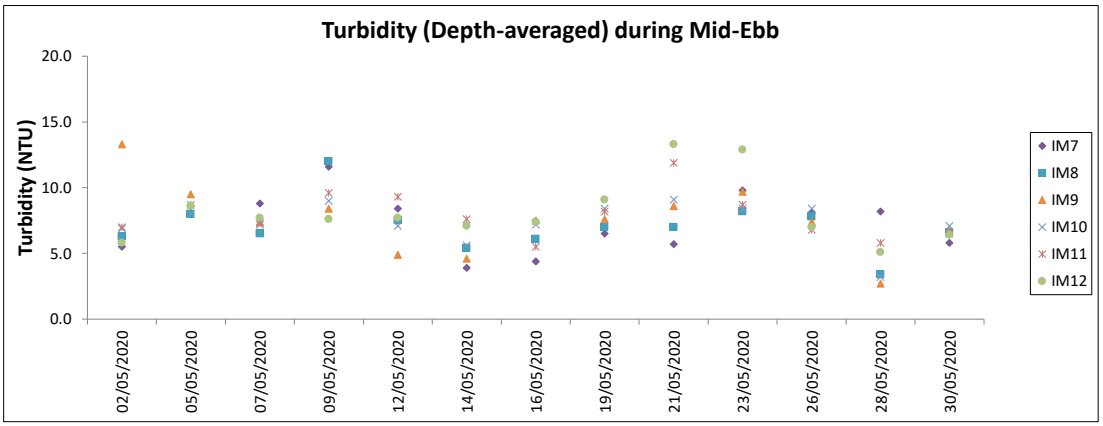

Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
02/05/2020
05/05/2020
07/05/2020
09/05/2020
12/05/2020
14/05/2020
16/05/2020
19/05/2020
23/05/2020
26/05/2020
28/05/2020
30/05/2020
IM1
IM2
IM3
IM4
IM5
IM6
AL
LL

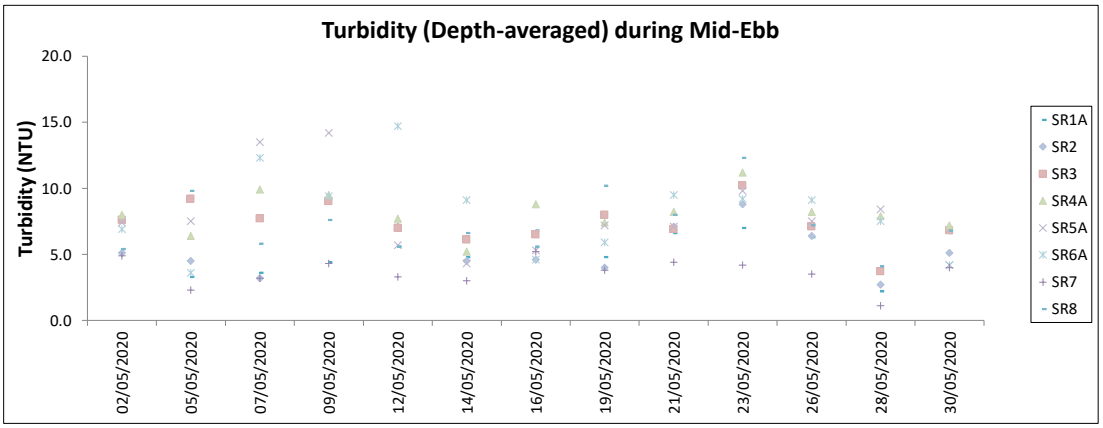

Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
02/05/2020
05/05/2020
07/05/2020
09/05/2020
12/05/2020
14/05/2020
16/05/2020
19/05/2020
23/05/2020
26/05/2020
28/05/2020
30/05/2020
IM7
IM8
IM9
IM10
IM11
IM12
AL
LL


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
02/05/2020
05/05/2020
07/05/2020
09/05/2020
12/05/2020
14/05/2020
16/05/2020
19/05/2020
23/05/2020
26/05/2020
28/05/2020
30/05/2020
SR1A
SR3
SR4A
SR5A
SR6A
SR7
SR8
AL
LL

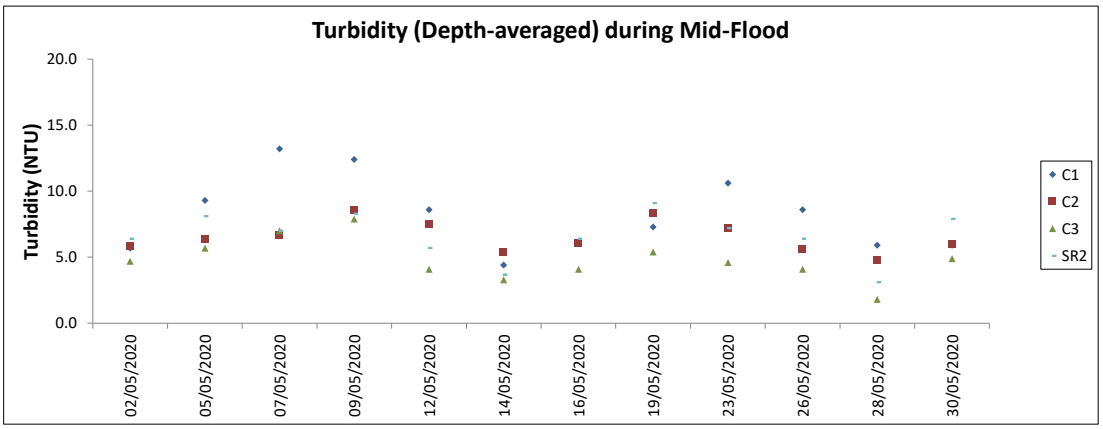


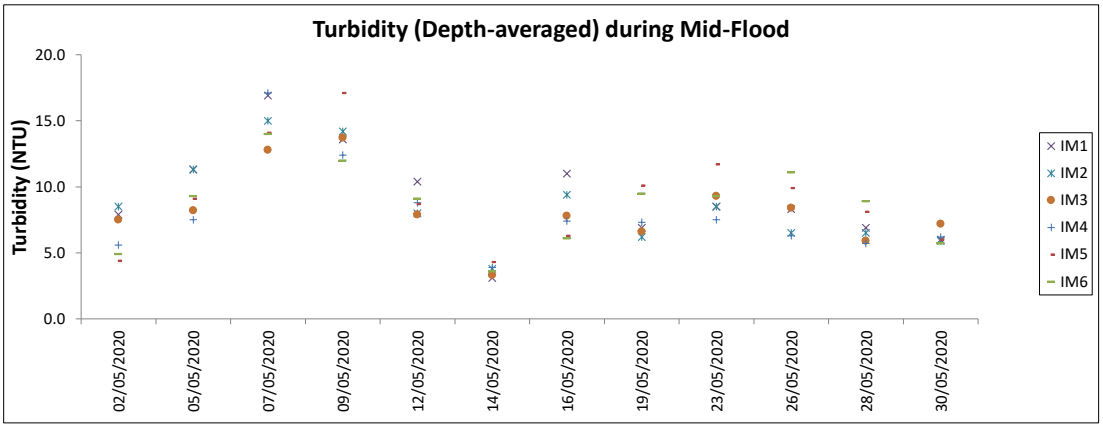


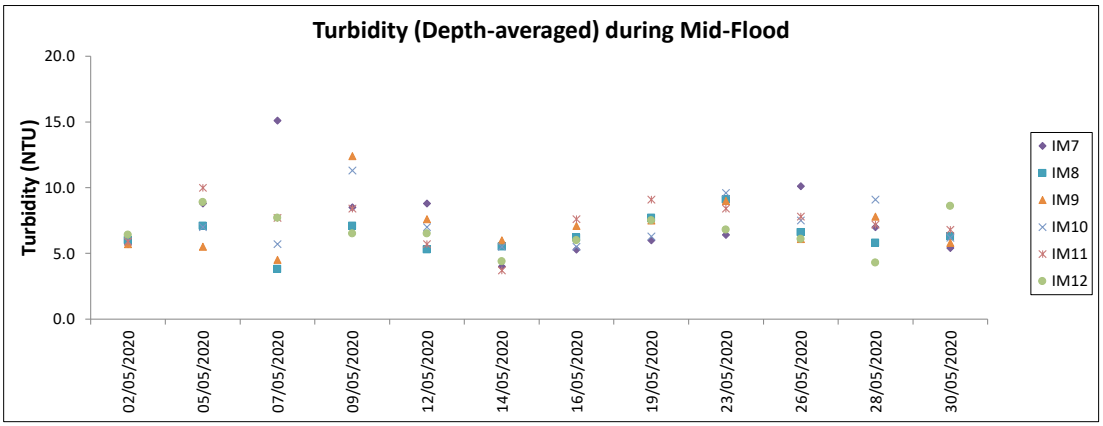


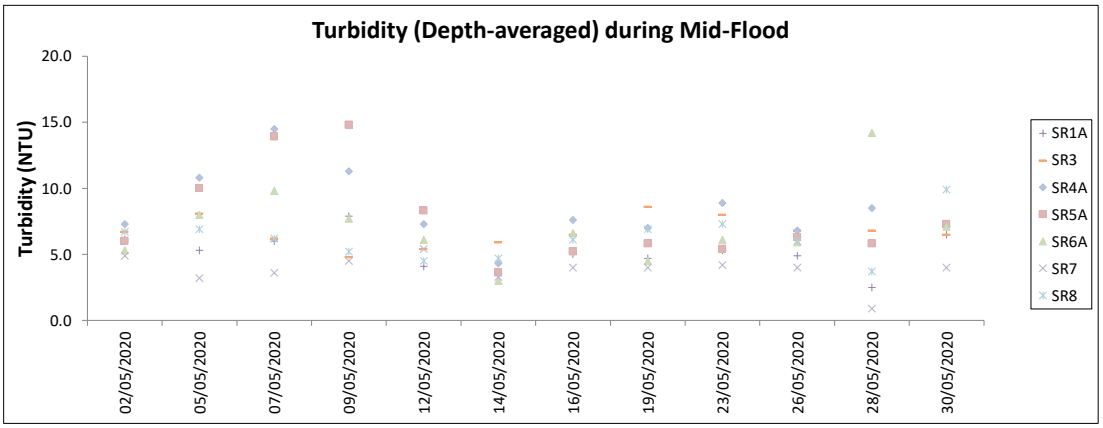


Note: The Action and Limit Level of turbidity can be referred to Table 4.2 of the monthly EM&A report.

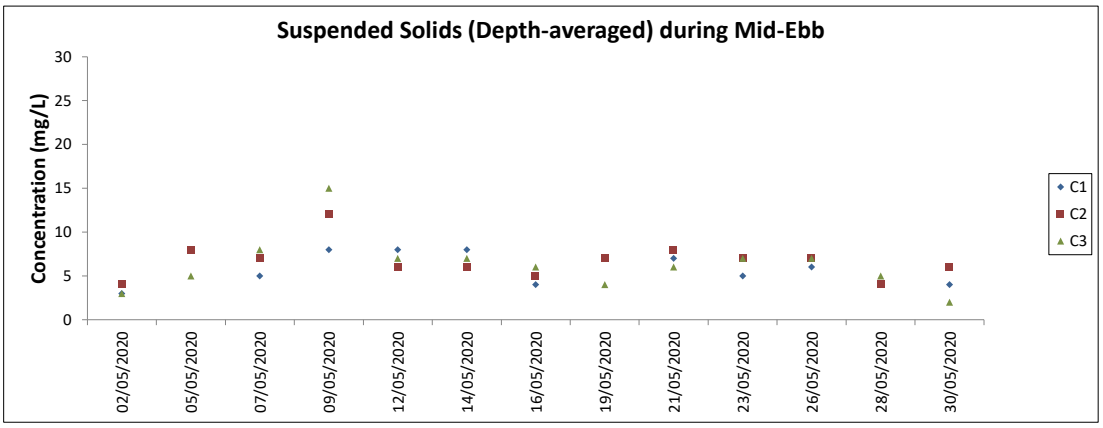


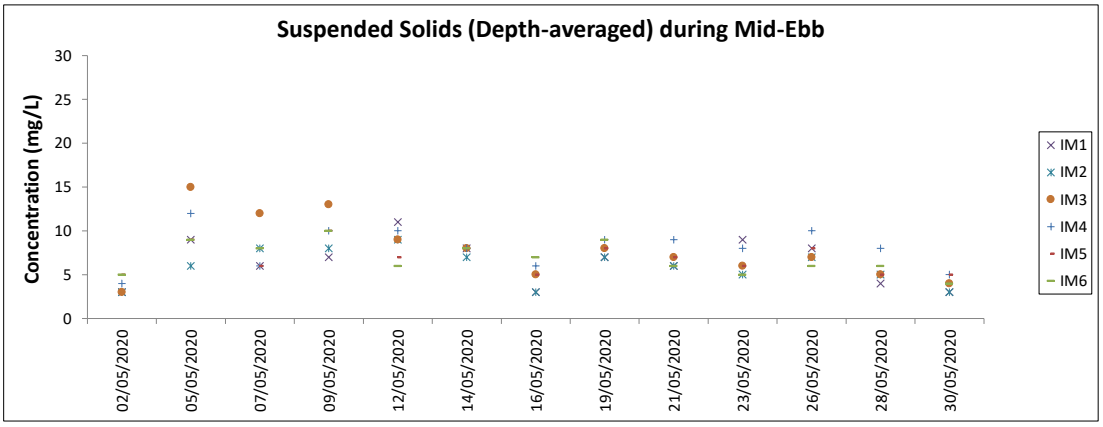


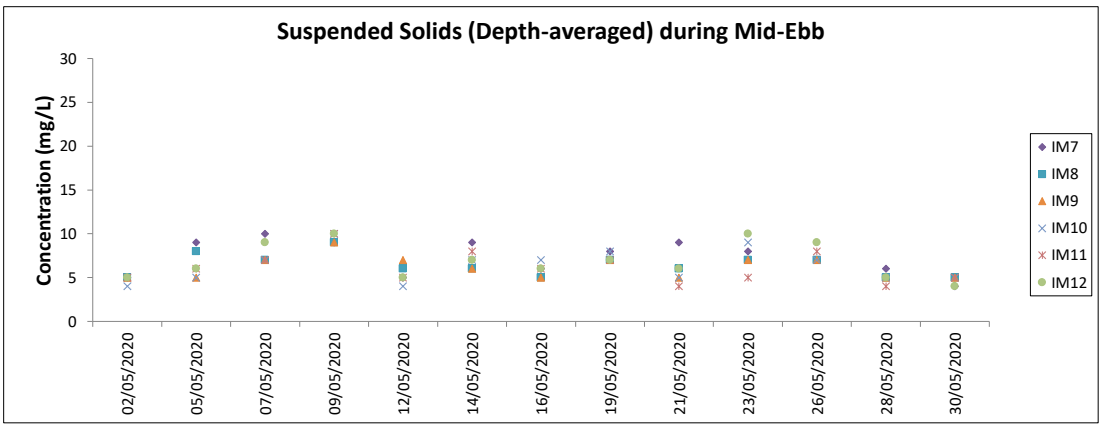


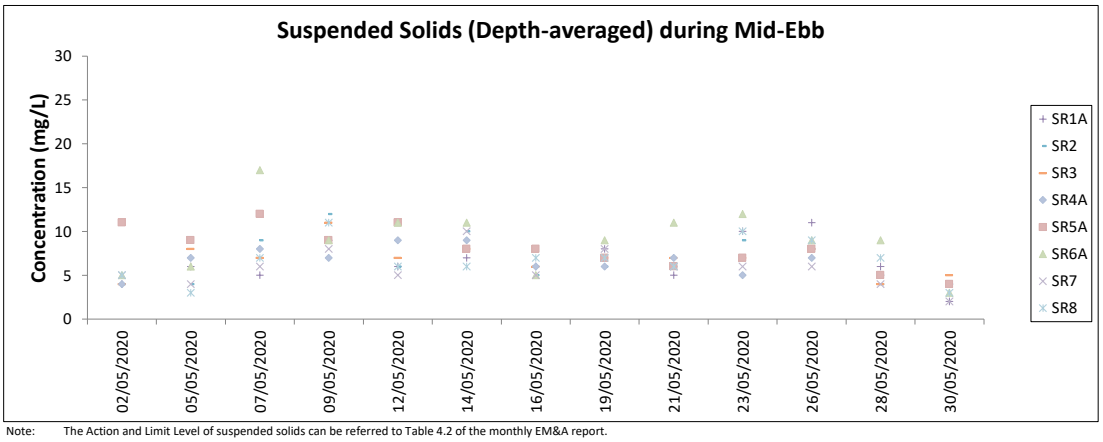


Note: The Action and Limit Level of turbidity can be referred to Table 4.2 of the monthly EM&A report.

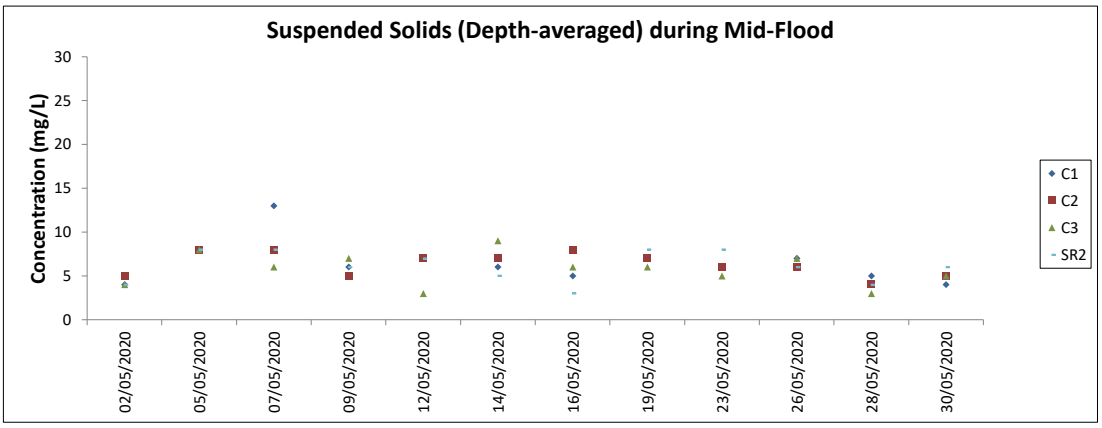


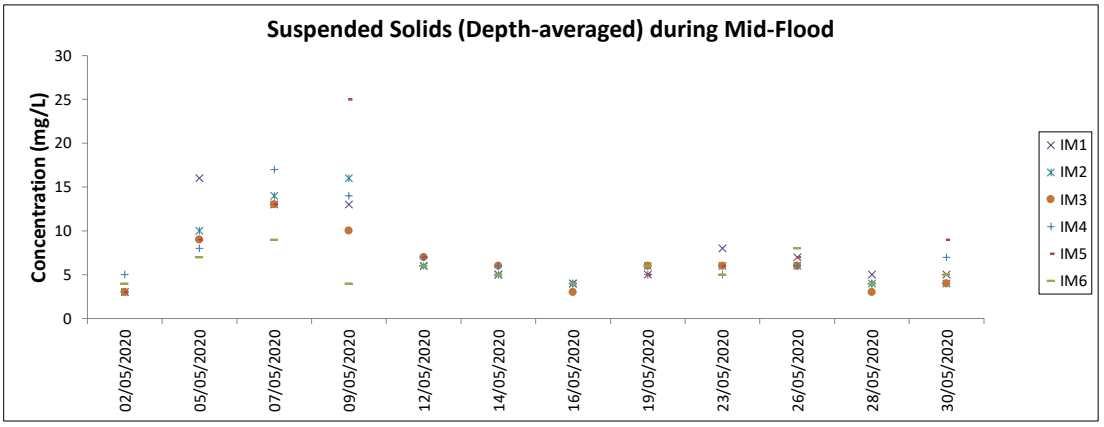


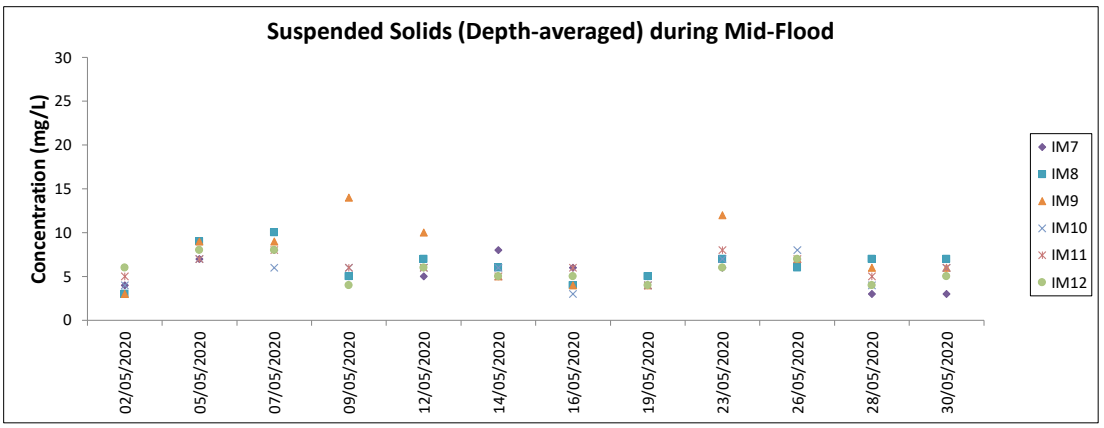


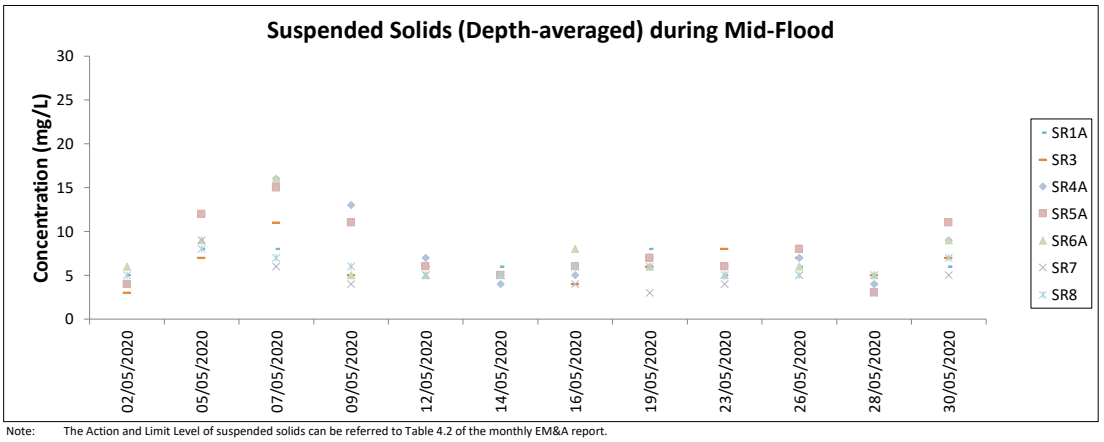


Note: The Action and Limit Level of suspended solids can be referred to Table 4.2 of the monthly EM&A report.

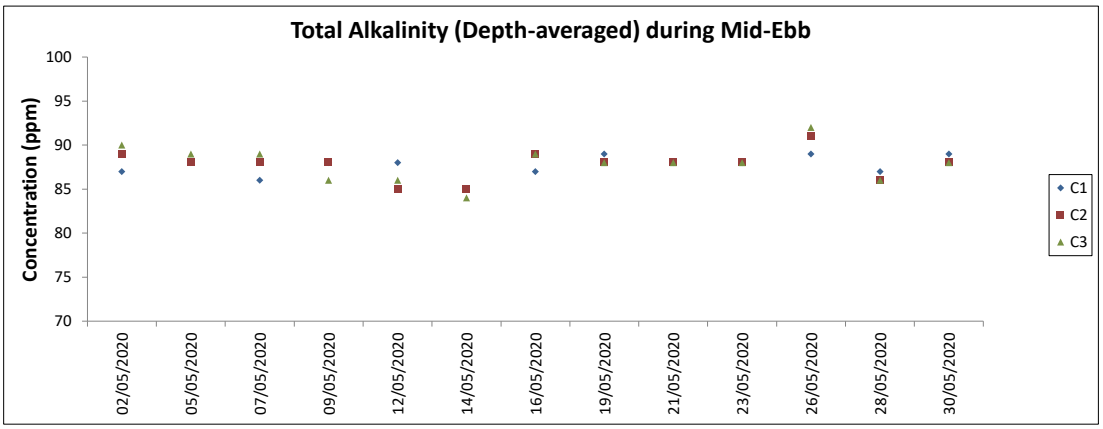


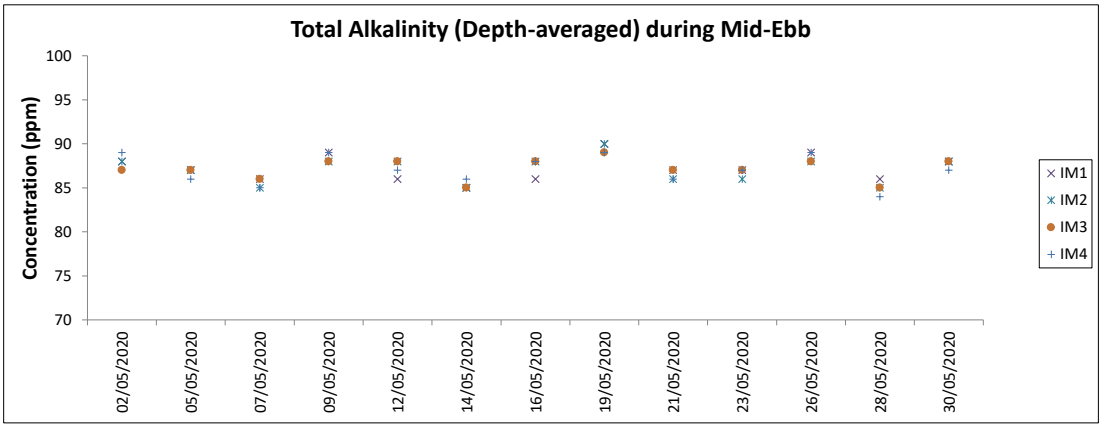


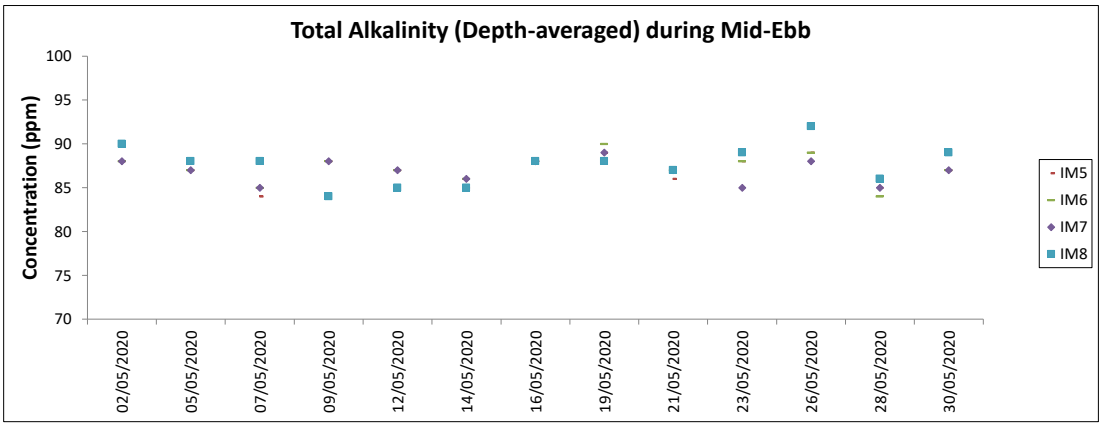


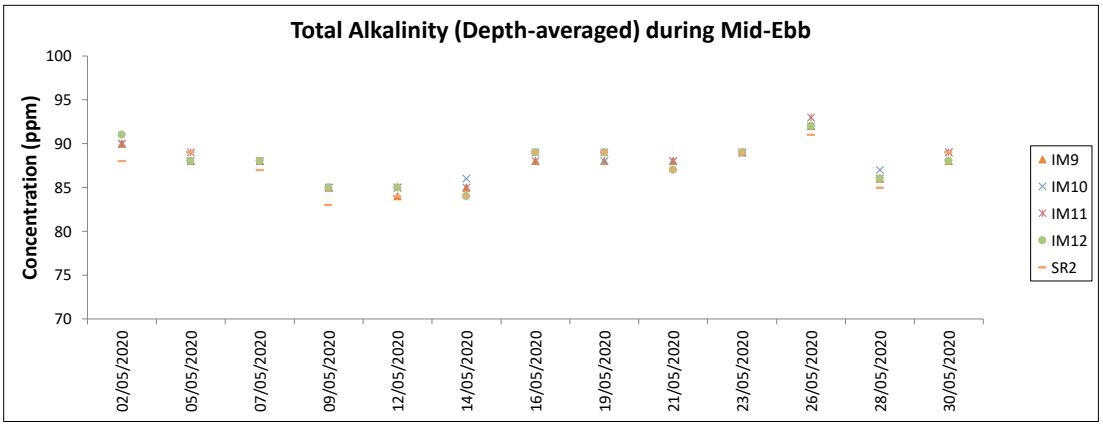


Note: The Action and Limit Level of suspended solids can be referred to Table 4.2 of the monthly EM&A report.

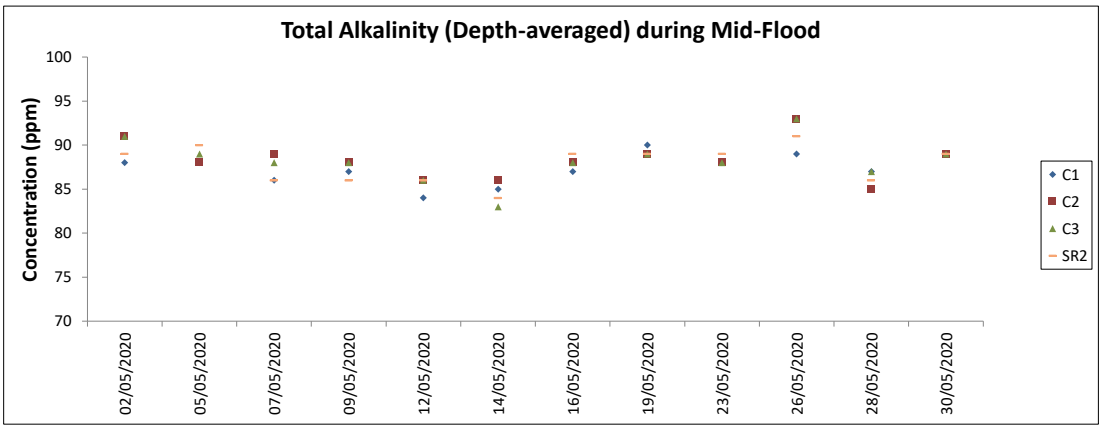


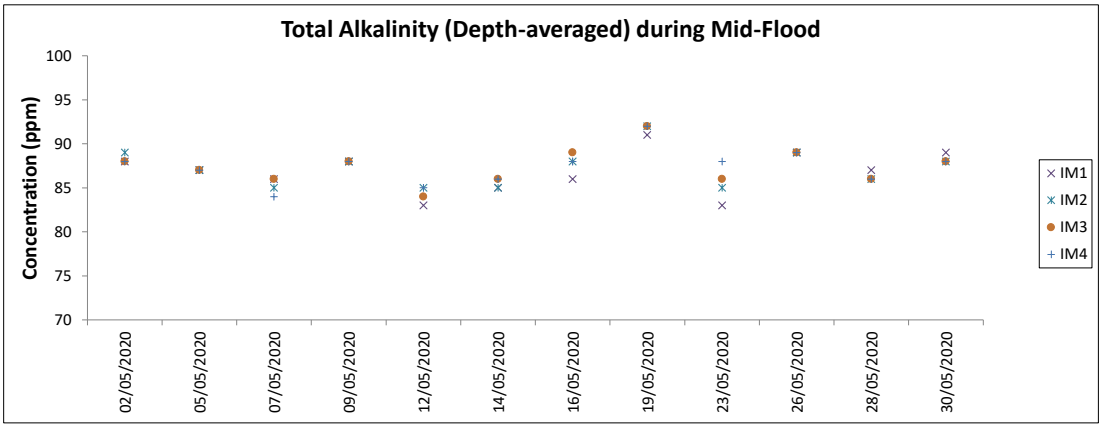


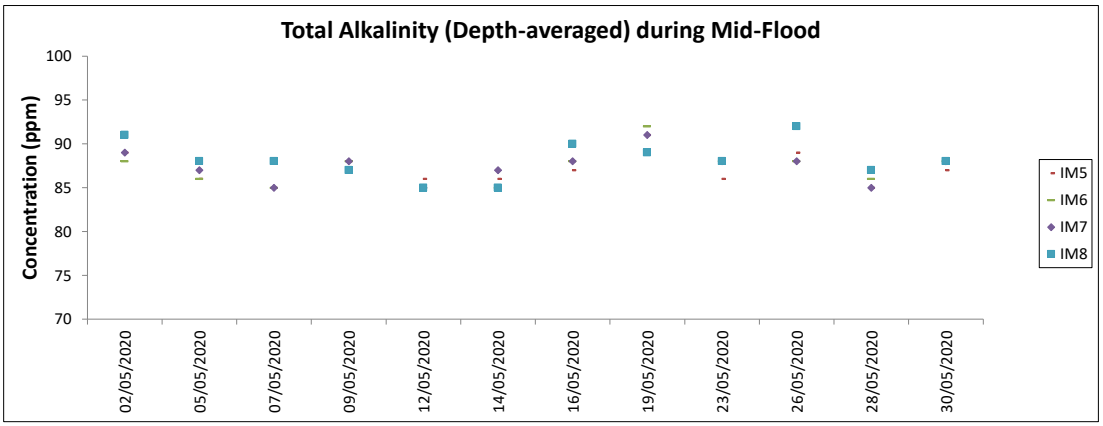


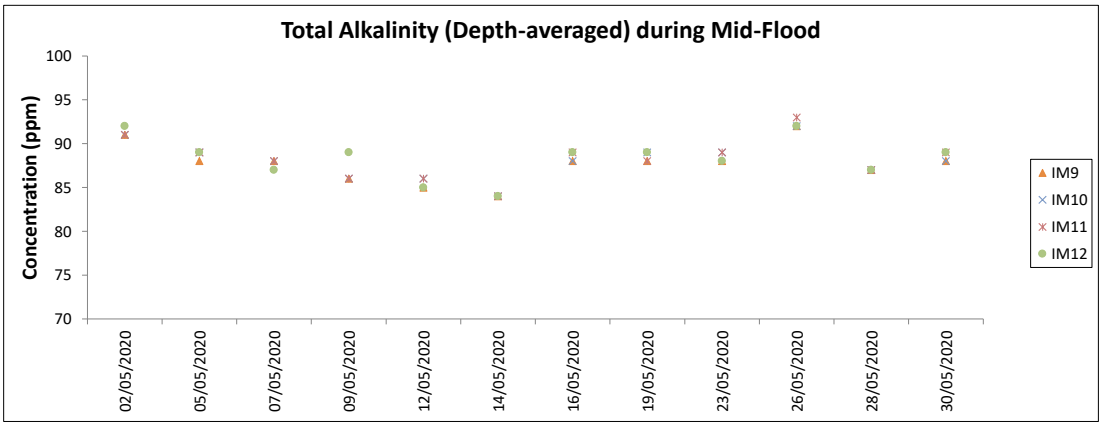


Note: The Action and Limit Level of total alkalinity can be referred to Table 4.2 of the monthly EM&A report.

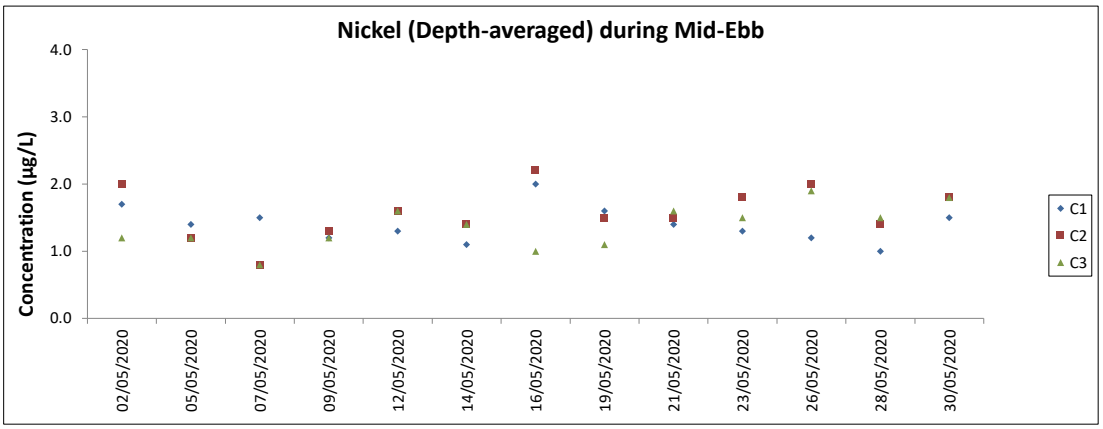


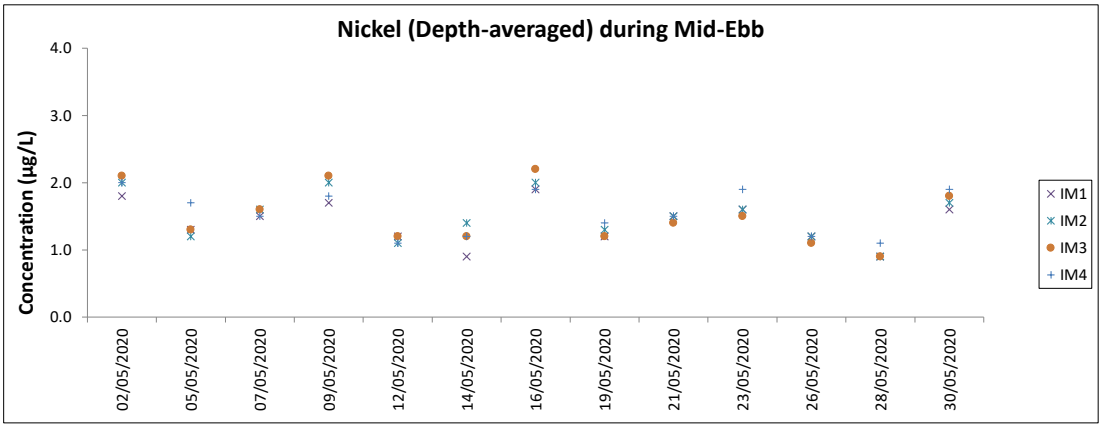


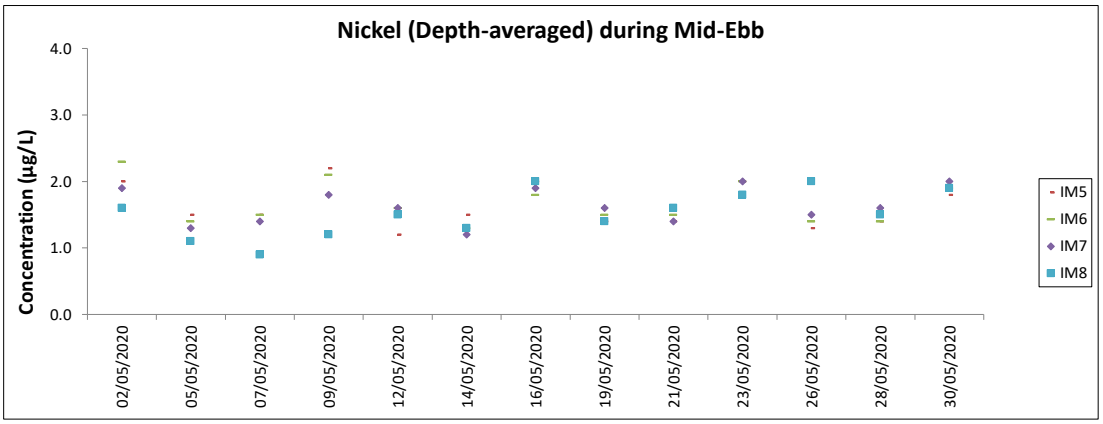


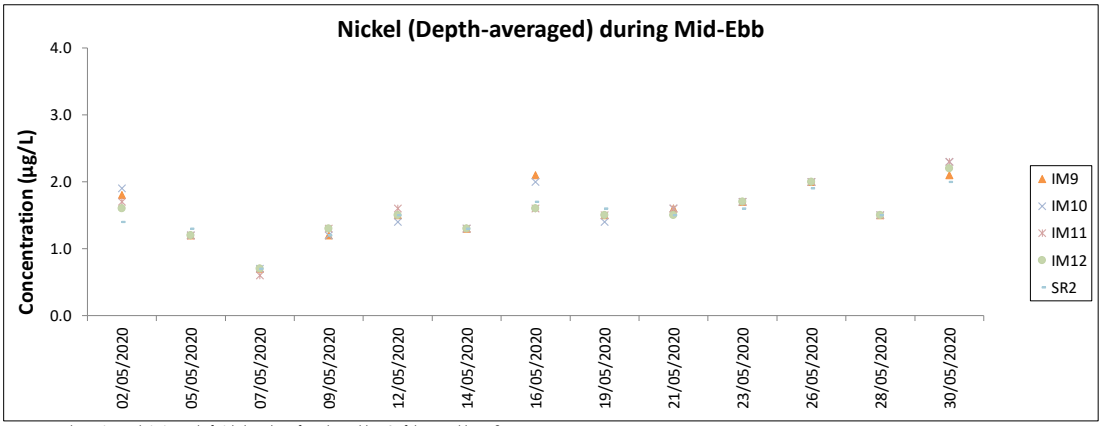


Note: The Action and Limit Level of total alkalinity can be referred to Table 4.2 of the monthly EM&A report.

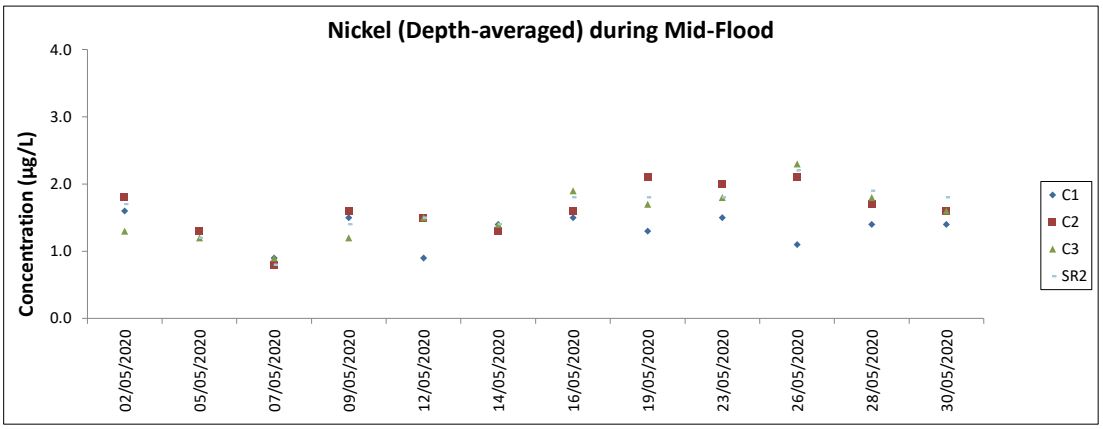


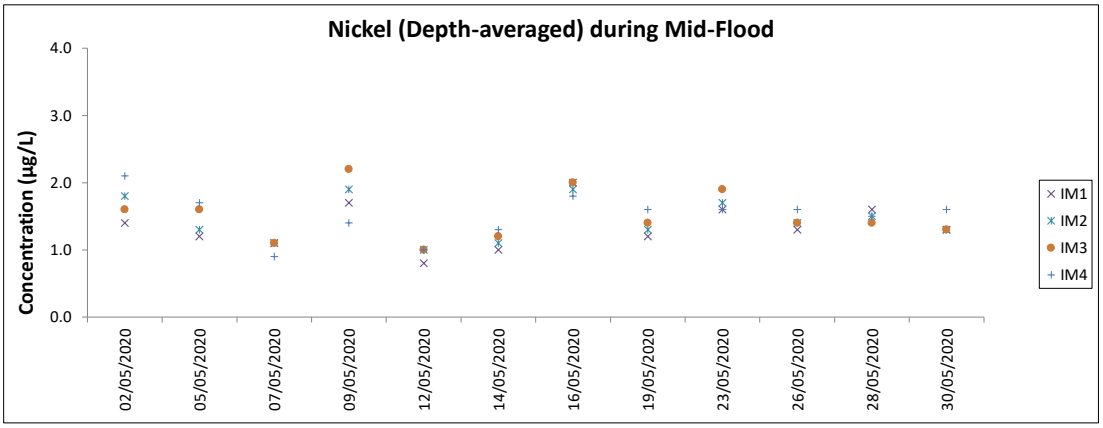


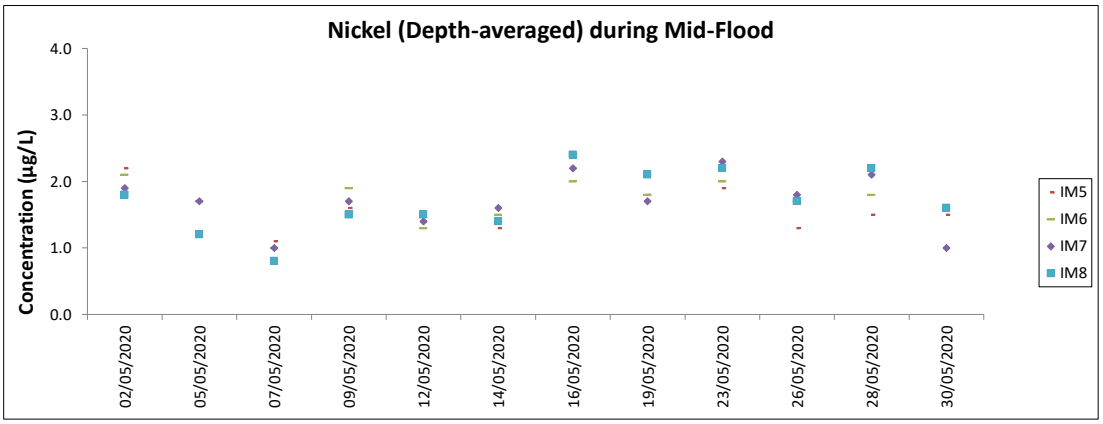


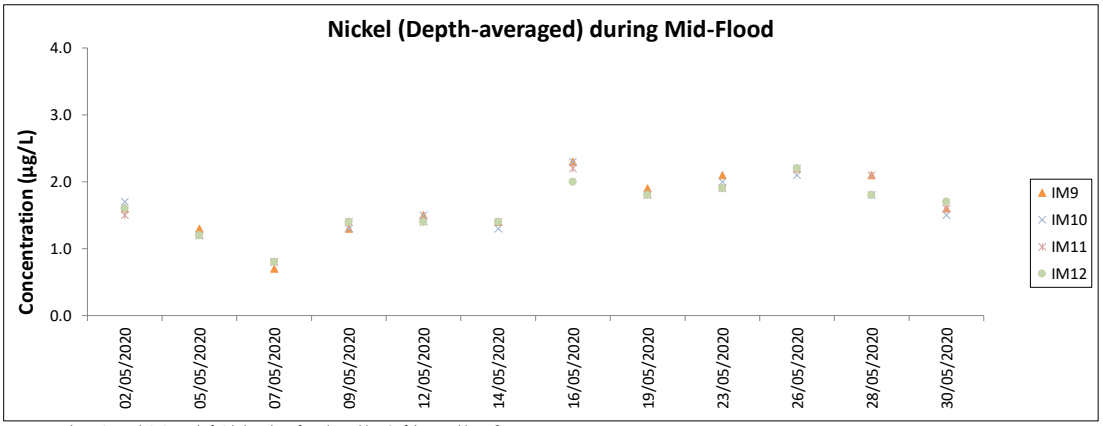


Note: The Action and Limit Level of nickel can be referred to Table 4.2 of the monthly EM&A report.
All chromium results in the reporting period was below the reporting limit 0.2 µg/L.









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
2-Mar-20	NEL	2	2.500	SPRING	32166	3RS ET	P
2-Mar-20	NEL	3	32.140	SPRING	32166	3RS ET	P
2-Mar-20	NEL	4	2.600	SPRING	32166	3RS ET	P
2-Mar-20	NEL	2	1.200	SPRING	32166	3RS ET	S
2-Mar-20	NEL	3	8.160	SPRING	32166	3RS ET	S
2-Mar-20	NEL	4	1.000	SPRING	32166	3RS ET	S
6-Mar-20	NEL	2	3.460	SPRING	32166	3RS ET	P
6-Mar-20	NEL	3	33.340	SPRING	32166	3RS ET	P
6-Mar-20	NEL	2	1.200	SPRING	32166	3RS ET	S
6-Mar-20	NEL	3	9.900	SPRING	32166	3RS ET	S
11-Mar-20	NWL	2	4.786	SPRING	32166	3RS ET	P
11-Mar-20	NWL	3	53.890	SPRING	32166	3RS ET	P
11-Mar-20	NWL	4	1.400	SPRING	32166	3RS ET	P
11-Mar-20	NWL	3	12.430	SPRING	32166	3RS ET	S
12-Mar-20	AW	4	4.920	SPRING	32166	3RS ET	P
12-Mar-20	WL	3	1.675	SPRING	32166	3RS ET	P
12-Mar-20	WL	4	15.140	SPRING	32166	3RS ET	P
12-Mar-20	WL	5	2.008	SPRING	32166	3RS ET	P
12-Mar-20	WL	3	0.480	SPRING	32166	3RS ET	S
12-Mar-20	WL	4	7.380	SPRING	32166	3RS ET	S
12-Mar-20	WL	5	1.762	SPRING	32166	3RS ET	S
17-Mar-20	NWL	2	39.340	SPRING	32166	3RS ET	P
17-Mar-20	NWL	3	23.260	SPRING	32166	3RS ET	P
17-Mar-20	NWL	4	1.000	SPRING	32166	3RS ET	P
17-Mar-20	NWL	2	6.700	SPRING	32166	3RS ET	S
17-Mar-20	NWL	3	4.900	SPRING	32166	3RS ET	S
18-Mar-20	AW	2	5.000	SPRING	32166	3RS ET	P
18-Mar-20	WL	2	9.543	SPRING	32166	3RS ET	P
18-Mar-20	WL	3	9.425	SPRING	32166	3RS ET	P
18-Mar-20	WL	2	7.497	SPRING	32166	3RS ET	S
18-Mar-20	WL	3	2.691	SPRING	32166	3RS ET	S
19-Mar-20	SWL	1	6.940	SPRING	32166	3RS ET	P
19-Mar-20	SWL	2	38.570	SPRING	32166	3RS ET	P
19-Mar-20	SWL	3	8.050	SPRING	32166	3RS ET	P
19-Mar-20	SWL	2	14.355	SPRING	32166	3RS ET	S
19-Mar-20	SWL	3	2.200	SPRING	32166	3RS ET	S
23-Mar-20	SWL	1	6.890	SPRING	32166	3RS ET	P
23-Mar-20	SWL	2	45.972	SPRING	32166	3RS ET	P
23-Mar-20	SWL	1	1.350	SPRING	32166	3RS ET	S
23-Mar-20	SWL	2	14.535	SPRING	32166	3RS ET	S
3-Apr-20	NEL	2	1.270	SPRING	32166	3RS ET	P
3-Apr-20	NEL	3	26.900	SPRING	32166	3RS ET	P
3-Apr-20	NEL	4	8.700	SPRING	32166	3RS ET	P
3-Apr-20	NEL	3	9.830	SPRING	32166	3RS ET	S
3-Apr-20	NEL	4	1.000	SPRING	32166	3RS ET	S
7-Apr-20	NEL	1	10.100	SPRING	32166	3RS ET	P
7-Apr-20	NEL	2	27.170	SPRING	32166	3RS ET	P

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
7-Apr-20	NEL	1	1.000	SPRING	32166	3RS ET	S
7-Apr-20	NEL	2	9.330	SPRING	32166	3RS ET	S
9-Apr-20	AW	2	5.030	SPRING	32166	3RS ET	P
9-Apr-20	WL	2	10.238	SPRING	32166	3RS ET	P
9-Apr-20	WL	3	6.538	SPRING	32166	3RS ET	P
9-Apr-20	WL	4	1.390	SPRING	32166	3RS ET	P
9-Apr-20	WL	2	6.432	SPRING	32166	3RS ET	S
9-Apr-20	WL	3	2.932	SPRING	32166	3RS ET	S
9-Apr-20	WL	4	0.910	SPRING	32166	3RS ET	S
15-Apr-20	AW	2	5.040	SPRING	32166	3RS ET	P
15-Apr-20	WL	2	20.680	SPRING	32166	3RS ET	P
15-Apr-20	WL	2	10.420	SPRING	32166	3RS ET	S
16-Apr-20	SWL	2	52.486	SPRING	32166	3RS ET	P
16-Apr-20	SWL	2	15.854	SPRING	32166	3RS ET	S
17-Apr-20	SWL	2	26.394	SPRING	32166	3RS ET	P
17-Apr-20	SWL	3	27.056	SPRING	32166	3RS ET	P
17-Apr-20	SWL	2	9.230	SPRING	32166	3RS ET	S
17-Apr-20	SWL	3	8.050	SPRING	32166	3RS ET	S
20-Apr-20	NWL	2	41.800	SPRING	32166	3RS ET	P
20-Apr-20	NWL	3	22.200	SPRING	32166	3RS ET	P
20-Apr-20	NWL	2	7.600	SPRING	32166	3RS ET	S
20-Apr-20	NWL	3	4.200	SPRING	32166	3RS ET	S
21-Apr-20	NWL	2	26.840	SPRING	32166	3RS ET	P
21-Apr-20	NWL	3	36.760	SPRING	32166	3RS ET	P
21-Apr-20	NWL	2	4.300	SPRING	32166	3RS ET	S
21-Apr-20	NWL	3	7.600	SPRING	32166	3RS ET	S
4-May-20	NEL	2	32.350	SPRING	32166	3RS ET	P
4-May-20	NEL	3	4.500	SPRING	32166	3RS ET	P
4-May-20	NEL	2	8.050	SPRING	32166	3RS ET	S
4-May-20	NEL	3	1.800	SPRING	32166	3RS ET	S
6-May-20	NWL	2	17.400	SPRING	32166	3RS ET	P
6-May-20	NWL	3	45.000	SPRING	32166	3RS ET	P
6-May-20	NWL	3	13.400	SPRING	32166	3RS ET	S
7-May-20	AW	3	4.890	SPRING	32166	3RS ET	P
7-May-20	WL	3	19.292	SPRING	32166	3RS ET	P
7-May-20	WL	3	11.318	SPRING	32166	3RS ET	S
11-May-20	SWL	1	2.700	SPRING	32166	3RS ET	P
11-May-20	SWL	2	51.714	SPRING	32166	3RS ET	P
11-May-20	SWL	1	1.300	SPRING	32166	3RS ET	S
11-May-20	SWL	2	14.740	SPRING	32166	3RS ET	S
12-May-20	SWL	2	42.776	SPRING	32166	3RS ET	P
12-May-20	SWL	3	11.880	SPRING	32166	3RS ET	P
12-May-20	SWL	2	13.052	SPRING	32166	3RS ET	S
12-May-20	SWL	3	2.150	SPRING	32166	3RS ET	S
13-May-20	AW	1	5.060	SPRING	32166	3RS ET	P
13-May-20	WL	1	1.220	SPRING	32166	3RS ET	P
13-May-20	WL	2	9.124	SPRING	32166	3RS ET	P
13-May-20	WL	3	2.062	SPRING	32166	3RS ET	P
13-May-20	WL	4	6.239	SPRING	32166	3RS ET	P

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
13-May-20	WL	2	4.441	SPRING	32166	3RS ET	S
13-May-20	WL	3	1.748	SPRING	32166	3RS ET	S
13-May-20	WL	4	3.271	SPRING	32166	3RS ET	S
18-May-20	NEL	2	24.600	SPRING	32166	3RS ET	P
18-May-20	NEL	3	12.500	SPRING	32166	3RS ET	P
18-May-20	NEL	2	6.200	SPRING	32166	3RS ET	S
18-May-20	NEL	3	3.900	SPRING	32166	3RS ET	S
20-May-20	NWL	2	2.300	SPRING	32166	3RS ET	P
20-May-20	NWL	3	43.690	SPRING	32166	3RS ET	P
20-May-20	NWL	4	17.310	SPRING	32166	3RS ET	P
20-May-20	NWL	3	9.100	SPRING	32166	3RS ET	S
20-May-20	NWL	4	2.600	SPRING	32166	3RS ET	S

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

CWD Small Vessel Line-transect Survey — Sighting Data

DATE	STG #	TIME	CWD/FP	GP SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.	P/S
11-Mar-20	1	0938	CWD	8	NWL	2	712	ON	3RS ET	22.4130	113.8701	SPRING	NONE	P
11-Mar-20	2	1055	CWD	2	NWL	3	118	ON	3RS ET	22.2980	113.8701	SPRING	NONE	P
12-Mar-20	1	1030	CWD	4	WL	4	N/A	OFF	3RS ET	22.2778	113.8565	SPRING	NONE	P
12-Mar-20	2	1046	CWD	1	WL	5	36	ON	3RS ET	22.2693	113.8518	SPRING	NONE	P
12-Mar-20	3	1056	CWD	1	WL	3	192	ON	3RS ET	22.2635	113.8568	SPRING	NONE	S
12-Mar-20	4	1108	CWD	4	WL	3	440	ON	3RS ET	22.2611	113.8489	SPRING	NONE	P
12-Mar-20	5	1136	CWD	2	WL	3	751	ON	3RS ET	22.2482	113.8517	SPRING	NONE	S
18-Mar-20	1	1052	CWD	1	WL	3	102	ON	3RS ET	22.2605	113.8500	SPRING	NONE	P
18-Mar-20	2	1201	CWD	5	WL	2	147	ON	3RS ET	22.2324	113.8236	SPRING	NONE	S
18-Mar-20	3	1246	CWD	2	WL	3	29	ON	3RS ET	22.2130	113.8365	SPRING	NONE	S
19-Mar-20	1	1035	FP	3	SWL	1	38	ON	3RS ET	22.2111	113.9360	SPRING	NONE	P
19-Mar-20	2	1042	FP	1	SWL	2	79	ON	3RS ET	22.1984	113.9363	SPRING	NONE	P
19-Mar-20	3	1046	FP	2	SWL	2	230	ON	3RS ET	22.1951	113.9362	SPRING	NONE	P
19-Mar-20	4	1050	FP	11	SWL	2	162	ON	3RS ET	22.1909	113.9357	SPRING	NONE	P
19-Mar-20	5	1106	FP	2	SWL	2	8	ON	3RS ET	22.1708	113.9359	SPRING	NONE	P
19-Mar-20	6	1216	FP	2	SWL	2	352	ON	3RS ET	22.1552	113.9177	SPRING	NONE	P
19-Mar-20	7	1221	FP	1	SWL	2	62	ON	3RS ET	22.1487	113.9176	SPRING	NONE	P
19-Mar-20	8	1259	FP	3	SWL	2	452	ON	3RS ET	22.1924	113.9078	SPRING	NONE	P
19-Mar-20	9	1408	FP	2	SWL	2	146	ON	3RS ET	22.1909	113.8878	SPRING	NONE	P
23-Mar-20	1	1047	FP	3	SWL	2	128	ON	3RS ET	22.1813	113.9359	SPRING	NONE	P
23-Mar-20	2	1050	FP	6	SWL	2	37	ON	3RS ET	22.1788	113.9358	SPRING	NONE	P
23-Mar-20	3	1056	FP	1	SWL	2	179	ON	3RS ET	22.1704	113.9365	SPRING	NONE	P
23-Mar-20	4	1101	FP	1	SWL	2	228	ON	3RS ET	22.1633	113.9357	SPRING	NONE	P
23-Mar-20	5	1118	FP	2	SWL	2	36	ON	3RS ET	22.1532	113.9275	SPRING	NONE	P
23-Mar-20	6	1127	FP	1	SWL	2	267	ON	3RS ET	22.1710	113.9278	SPRING	NONE	P
23-Mar-20	7	1207	FP	4	SWL	2	139	ON	3RS ET	22.1632	113.9183	SPRING	NONE	P
23-Mar-20	8	1224	FP	4	SWL	2	245	ON	3RS ET	22.1449	113.9080	SPRING	NONE	P
23-Mar-20	9	1231	FP	2	SWL	2	165	ON	3RS ET	22.1549	113.9047	SPRING	NONE	S
23-Mar-20	10	1332	FP	5	SWL	2	424	ON	3RS ET	22.1535	113.8977	SPRING	NONE	P
23-Mar-20	11	1338	FP	1	SWL	2	237	ON	3RS ET	22.1488	113.8931	SPRING	NONE	S
23-Mar-20	12	1346	FP	1	SWL	2	3	ON	3RS ET	22.1578	113.8879	SPRING	NONE	P
23-Mar-20	13	1355	FP	2	SWL	2	431	ON	3RS ET	22.1743	113.8880	SPRING	NONE	P

DATE	STG #	TIME	CWD/FP	GP SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.	P/S
23-Mar-20	14	1359	FP	1	SWL	2	274	ON	3RS ET	22.1816	113.8878	SPRING	NONE	P
23-Mar-20	15	1426	FP	1	SWL	2	572	ON	3RS ET	22.1932	113.8780	SPRING	NONE	P
23-Mar-20	16	1455	FP	4	SWL	2	351	ON	3RS ET	22.1597	113.8721	SPRING	NONE	S
23-Mar-20	17	1519	CWD	4	SWL	2	535	ON	3RS ET	22.1996	113.8618	SPRING	NONE	P
23-Mar-20	18	1607	CWD	3	SWL	2	299	ON	3RS ET	22.1951	113.8503	SPRING	NONE	P
9-Apr-20	1	1031	CWD	7	WL	2	264	ON	3RS ET	22.2687	113.8500	SPRING	PURSE SEINER	P
9-Apr-20	2	1053	CWD	2	WL	2	73	ON	3RS ET	22.2636	113.8569	SPRING	NONE	S
9-Apr-20	3	1124	CWD	4	WL	2	58	ON	3RS ET	22.2501	113.8420	SPRING	NONE	P
9-Apr-20	4	1156	CWD	1	WL	3	7	ON	3RS ET	22.2325	113.8378	SPRING	NONE	P
9-Apr-20	5	1226	CWD	1	WL	3	129	ON	3RS ET	22.2146	113.8305	SPRING	NONE	P
9-Apr-20	6	1246	CWD	14	WL	3	148	ON	3RS ET	22.2056	113.8254	SPRING	PAIR TRAWLER	P
15-Apr-20	1	1047	CWD	1	WL	2	240	ON	3RS ET	22.2505	113.8392	SPRING	NONE	P
16-Apr-20	1	1023	FP	1	SWL	2	43	ON	3RS ET	22.2087	113.9356	SPRING	NONE	P
16-Apr-20	2	1032	FP	2	SWL	2	187	ON	3RS ET	22.1955	113.9360	SPRING	NONE	P
16-Apr-20	3	1036	FP	1	SWL	2	341	ON	3RS ET	22.1888	113.9363	SPRING	NONE	P
16-Apr-20	4	1038	FP	2	SWL	2	22	ON	3RS ET	22.1864	113.9363	SPRING	NONE	P
16-Apr-20	5	1042	FP	2	SWL	2	199	ON	3RS ET	22.1832	113.9363	SPRING	NONE	P
16-Apr-20	6	1054	FP	3	SWL	2	257	ON	3RS ET	22.1604	113.9361	SPRING	NONE	P
16-Apr-20	7	1112	FP	3	SWL	2	4	ON	3RS ET	22.1582	113.9274	SPRING	NONE	P
16-Apr-20	8	1116	FP	5	SWL	2	1108	ON	3RS ET	22.1626	113.9276	SPRING	NONE	P
16-Apr-20	9	1121	FP	2	SWL	2	46	ON	3RS ET	22.1687	113.9278	SPRING	NONE	P
16-Apr-20	10	1131	FP	2	SWL	2	444	ON	3RS ET	22.1871	113.9276	SPRING	NONE	P
16-Apr-20	11	1135	FP	1	SWL	2	6	ON	3RS ET	22.1909	113.9275	SPRING	NONE	P
16-Apr-20	12	1209	FP	4	SWL	2	99	ON	3RS ET	22.1597	113.9176	SPRING	NONE	P
16-Apr-20	13	1215	FP	1	SWL	2	46	ON	3RS ET	22.1494	113.9177	SPRING	NONE	P
16-Apr-20	14	1228	FP	2	SWL	2	146	ON	3RS ET	22.1460	113.9083	SPRING	NONE	P
16-Apr-20	15	1233	FP	1	SWL	2	70	ON	3RS ET	22.1511	113.9083	SPRING	NONE	P
16-Apr-20	16	1335	FP	3	SWL	2	18	ON	3RS ET	22.1562	113.8980	SPRING	NONE	P
16-Apr-20	17	1338	FP	4	SWL	2	251	ON	3RS ET	22.1523	113.8974	SPRING	NONE	P
17-Apr-20	1	1304	FP	3	SWL	2	70	ON	3RS ET	22.1701	113.8964	SPRING	NONE	P
17-Apr-20	2	1311	FP	1	SWL	2	747	ON	3RS ET	22.1594	113.8973	SPRING	NONE	P
17-Apr-20	3	1327	FP	1	SWL	3	68	ON	3RS ET	22.1608	113.8872	SPRING	NONE	P
7-May-20	1	1032	CWD	1	WL	3	177	ON	3RS ET	22.2692	113.8499	SPRING	NONE	P

DATE	STG #	TIME	CWD/FP	GP SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.	P/S
7-May-20	2	1115	CWD	1	WL	3	19	ON	3RS ET	22.2409	113.8395	SPRING	NONE	P
7-May-20	3	1121	CWD	15	WL	3	257	ON	3RS ET	22.2411	113.8362	SPRING	NONE	P
11-May-20	1	1052	FP	1	SWL	2	421	ON	3RS ET	22.1620	113.9362	SPRING	NONE	P
11-May-20	2	1055	FP	4	SWL	2	22	ON	3RS ET	22.1606	113.9360	SPRING	NONE	P
11-May-20	3	1058	FP	2	SWL	2	181	ON	3RS ET	22.1554	113.9361	SPRING	NONE	P
11-May-20	4	1513	CWD	13	SWL	2	191	ON	3RS ET	22.1850	113.8500	SPRING	NONE	P
12-May-20	1	1051	FP	4	SWL	2	14	ON	3RS ET	22.1543	113.9363	SPRING	NONE	P
12-May-20	2	1057	FP	3	SWL	2	120	ON	3RS ET	22.1474	113.9330	SPRING	NONE	S
12-May-20	3	1101	FP	2	SWL	2	188	ON	3RS ET	22.1451	113.9301	SPRING	NONE	S
12-May-20	4	1215	FP	2	SWL	2	17	ON	3RS ET	22.1550	113.9057	SPRING	NONE	S
12-May-20	5	1441	CWD	5	SWL	2	170	ON	3RS ET	22.1954	113.8685	SPRING	NONE	P
12-May-20	6	1546	CWD	1	SWL	3	279	ON	3RS ET	22.1946	113.8500	SPRING	NONE	P
13-May-20	1	1056	CWD	6	WL	2	331	ON	3RS ET	22.2447	113.8495	SPRING	NONE	S
13-May-20	2	1127	CWD	1	WL	2	179	ON	3RS ET	22.2416	113.8370	SPRING	NONE	P
13-May-20	3	1140	CWD	16	WL	3	78	ON	3RS ET	22.2414	113.8286	SPRING	PURSE SEINER	P
13-May-20	4	1231	CWD	1	WL	4	60	ON	3RS ET	22.2149	113.8309	SPRING	NONE	P

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

Notes:

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

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

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

A total of 424.257 km of survey effort was collected under Beaufort Sea State 3 or below with favourable visibility; total no. of 9 on-effort sightings and total number of 59 dolphins from on-effort sightings were collected under such condition. Calculation of the encounter rates in May 2020 are shown as below:

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

$$STG = \frac{9}{424.257}\ x\ 100 = 2.12$$

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

$$ANI = \frac{59}{424.257}\ x\ 100 = 13.91$$

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

A total of 1279.916 km of survey effort was collected under Beaufort Sea State 3 or below with favourable visibility; total no. of 26 on-effort sightings and total number of 121 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)

$$STG = \frac{26}{1279.916}\ x\ 100 = 2.03$$

Running Quarterly Encounter Rate by Number of Dolphins (ANI)

$$ANI = \frac{121}{1279.916}\ x\ 100 = 9.45$$

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

	
WLMM027_20200507_1_5	WLMM009_20200507_2_3
	
SLMM003_20200507_3_2	SLMM007_20200507_3_1
	
SLMM030_20200507_3_3	WLMM001_20200507_3_2
	
WLMM005_20200507_3_7	WLMM006_20200507_3_1

	
WLMM007_20200507_3_5	WLMM028_20200507_3_4
	
WLMM029_20200507_3_6	WLMM081_20200507_3_8
	
WLMM082_20200507_3_3	WLMM138_20200507_3_2
	
WLMM150_20200507_3_15	SLMM010_20200511_4_1

	
SLMM012_20200511_4_2	SLMM014_20200511_4_3
	
SLMM023_20200511_4_4	SLMM025_20200511_4_3
	
SLMM034_20200511_4_6	SLMM052_20200511_4_6
	
SLMM070_20200511_4_1	WLMM070_20200511_4_6

	
WLMM073_20200511_4_2	WLMM114_20200511_4_8
	
SLMM002_20200512_5_2	SLMM031_20200512_5_11
	
SLMM059_20200512_5_2	SLMM068_20200512_5_6
	
SLMM072_20200512_6_7	SLMM002_20200513_1_7

	
SLMM023_20200513_1_3	SLMM034_20200513_1_2
	
SLMM044_20200513_1_5	WLMM114_20200513_1_7
	
SLMM002_20200513_3_5	SLMM003_20200513_3_11
	
SLMM023_20200513_3_1	SLMM034_20200513_3_1

	
SLMM049_20200513_3_3	SLMM052_20200513_3_7
	
SLMM072_20200513_3_5	WLMM007_20200513_3_6
	
WLMM018_20200513_3_1	WLMM027_20200513_3_2
	
WLMM073_20200513_3_1	WLMM131_20200513_3_2

	
WLMM150_20200513_3_1	SLMM030_20200513_4_1

CWD Land-based Theodolite Tracking Survey

CWD Groups by Survey Date

Date	Station	Start Time	End Time	Duration	Beaufort Range	Visibility	No. of Focal Follow Dolphin Groups Tracked	Dolphin Group Size Range
27/May/20	Lung Kwu Chau	8:56	14:56	6:00	2	3	1	1
28/May/20	Sha Chau	10:45	16:45	6:00	2	3	0	0

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

Appendix E. Status of Environmental Permits and Licences

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

Contract No.	Description	Location	Permit/ Reference No.	Status
P560 (R)	Notification of Construction Work under APCO	Stockpiling Area	398015	Receipt acknowledged by EPD on 18 Jan 2016
	Discharge License under WPCO	Stockpiling Area	WT00024250-2016	Valid from 25 Apr 2016 to 30 Apr 2021
	Registration as Chemical Waste Producer	Stockpiling Area	WPN 5213-951-L2902-02	Registration was updated on 3 Oct 2016
	Bill Account for disposal		A/C 7023982	Approval granted from EPD on 14 Dec 2015
3205	Notification of Construction Work under APCO	Works area of 3205	409041	Receipt acknowledged by EPD on 19 Oct 2016
	Registration as Chemical Waste Producer	Works Area of 3205	WPN 5213-951-B2502-01	Registration was updated on 25 Sep 2017
		Works Area of 3205	WPN 5111-421-B2509-01	Registration was updated on 25 Sep 2017
	Construction Noise Permit (General Works)	Works Area of 3205	GW-RS0143-20	Valid from 19 Mar 2020 to 17 Sep 2020
	Discharge License under WPCO	Works area of 3205	WT00028370-2017	Valid from 21 Jun 2017 to 30 Jun 2022
	Bill Account for disposal	Works area of 3205	A/C 7026295	Approval granted from EPD on 9 Nov 2016
3206	Notification of Construction Work under APCO	Works area of 3206	409237	Receipt acknowledged by EPD on 25 Oct 2016
		Works area of 3206 (Area 11)	447899	Receipt acknowledged by EPD on 8 Aug 2019
	Registration as Chemical Waste Producer	Site office of 3206	WPN 5213-951-Z4035-01	Completion of Registration on 18 Nov 2016
		Works area of 3206	WPN 5213-951-Z4035-02	Completion of Registration on 18 Nov 2016
		Works Area of 3206 (Area 11)	WPN 5213-951-Z4035-04	Completion of Registration on 4 Sep 2019
	Construction Noise Permit (General Works)	Works Area of 3206	GW-RS0267-20	Superseded by GW-RS0331-20
			GW-RS0331-20	Valid from 25 May 2020 to 15 Nov 2020
		Works Area of 3206 (Area 11)	GW-RS1170-19	Valid from 2 Jan 2020 to 24 Jun 2020

Contract No.	Description	Location	Permit/ Reference No.	Status
		Works Area of 3206	GW-RS0156-20	Valid from 24 Mar 2020 to 19 Jul 2020
	Bill Account for disposal	Works area of 3206	A/C 7026398	Approval granted from EPD on 16 Nov 2016
3301	Notification of Construction Work under APCO	Works area of 3301	415821	Receipt acknowledged by EPD on 19 Apr 2017
	Registration as Chemical Waste Producer	Works area of 3301	WPN 5213-951-F2718-02	Completion of Registration on 9 Jun 2017
	Discharge License under WPCO	Works area of 3301	WT00029286-2017	Valid from 20 Sep 2017 to 30 Sep 2022
	Bill Account for disposal	Works area of 3301	A/C 7027728	Approval granted from EPD on 8 May 2017
	Construction Noise Permit (General Works)	Works area of 3301 (Cable ducting works)	GW-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
		Staging area of 3302	WT00034541-2019	Valid from 14 Oct 2019 to 31 Oct 2024
	Bill Account for disposal	Works area of 3302	A/C 7032881	Approval granted from EPD on 8 Jan 2019
	Construction Noise Permit (General Works)	Works area of 3302	GW-RS1162-19	Valid from 7 Jan 2020 to 6 Jul 2020
3303	Notification of Construction Work under APCO	Works area of 3303	445611	Receipt acknowledged by EPD on 27 May 2019
	Registration as Chemical Waste Producer	Works area of 3303	5213-951-S4174-01	Completion of Registration on 17 Jun 2019
	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-RS0222-20	Superseded by GW-RS0335-20
			GW-RS0335-20	Valid from 27 May 2020 to 15 Nov 2020
		Works area of 3303 (Reclamation area)	GW-RS0154-20	Valid from 19 Mar 2020 to 17 Sep 2020
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
	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-RS0225-20	Superseded by GW-RS0334-20
			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-RS0275-20	Valid from 24 Apr 2020 to 21 Oct 2020
3501	Notification of Construction Work under APCO	Works area of 3501	434640	Receipt acknowledged by EPD on 13 Jun 2018
	Registration as Chemical Waste Producer	Works area of 3501	WPN 5213-951-B2520-02	Completion of Registration on 25 Jul 2017
	Discharge License under WPCO	Works area of 3501	WT00031400-2018	Valid from 30 Aug 2018 to 31 Aug 2023
	Bill Account for disposal	Works area of 3501	A/C 7028144	Approval granted from EPD on 23 Jun 2017
3503	Notification of Construction Work under APCO	Works area of 3503	435180	Receipt acknowledged by EPD on 29 Jun 2018
		Stockpiling area of 3503	439777	Receipt acknowledged by EPD on 26 Nov 2018
	Registration as Chemical Waste Producer	Works area of 3503	WPN 5113-951-L2845-02	Completion of Registration on 8 Jan 2018
	Discharge License under WPCO	Works area of 3503	WT00031258-2018	Valid from 7 Jun 2018 to 30 Jun 2023
	Bill Account for disposal	Works area of 3503	A/C 7029665	Approval granted from EPD on 27 Dec 2017
		Works area of 3503	GW-RS0221-20	Superseded by GW-RS0351-20
			GW-RS0351-20	Valid from 24 May 2020 to 31 Oct 2020

Contract No.	Description	Location	Permit/ Reference No.	Status
	Construction Noise Permit (General Works)	Works area of 3503 (Special Case)	GW-RS0261-20	Valid from 26 Apr 2020 to 1 Jul 2020
			GW-RS0139-20	Valid from 9 Mar 2020 to 31 May 2020
		Stockpiling area of 3503	GW-RS1180-19	Valid from 4 Jan 2020 to 30 Jun 2020
3601	Notification of Construction Work under APCO	Works area of 3601	451765	Receipt acknowledged by EPD on 10 Dec 2019
	Registration as Chemical Waste Producer	Works area of 3601	WPN 7119-951-C4421-01	Completion of Registration on 9 Jan 2020
	Bill Account for disposal	Works area of 3601	A/C 702991	Approval granted from EPD on 1 Feb 2018
3602	Notification of Construction Work under APCO	Works area of 3602	421278	Receipt acknowledged by EPD on 18 Sep 2017
	Registration as Chemical Waste Producer	Works area of 3602	WPN 5296-951-N2673-01	Completion of Registration on 9 Oct 2017
		Site office of 3602	WPN 5296-951-N2673-02	Completion of Registration on 11 Dec 2017
	Bill Account for disposal	Works area of 3602	A/C 7028942	Approval granted from EPD on 6 Oct 2017
	Construction Noise Permit (General Works)	Works area of 3602	GW-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-RS0172-20	Valid from 19 Mar 2020 to 25 May 2020
			GW-RS0327-20	Valid from 25 May 2020 to 24 Nov 2020
3722	Notification of Construction Work under APCO	Works area of 3722A	453195	Receipt acknowledged by EPD on 11 Feb 2020
		Works area of 3722B	453671	Receipt acknowledged by EPD on 25 Feb 2020
		Works area of 3722C	453673	Receipt acknowledged by EPD on 25 Feb 2020
		Works area of 3722D	453675	Receipt acknowledged by EPD on 25 Feb 2020

Contract No.	Description	Location	Permit/ Reference No.	Status
	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
		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-RS0155-20	Superseded by GW-RS0304-20
			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
			450940	Receipt acknowledged by EPD on 13 Nov 2019
	Registration as Chemical Waste Producer	Works area of 3801	WPN 5296-951-C1169-53	Completion of Registration on 14 Aug 2018
	Discharge License under WPCO	Works and stockpiling area of 3801	WT00029535-2017	Valid from 24 Nov 2017 to 30 Nov 2022
	Bill Account for disposal	Works area of 3801	A/C 7028254	Approval granted from EPD on 3 Jul 2017
	Construction Noise Permit (General Works)	Works and stockpiling area of 3801	GW-RS1212-19	Valid from 9 Jan 2020 to 8 Jul 2020
		Works area of 3801	GW-RS0152-20	Valid from 27 Mar 2020 to 26 Jun 2020
			GW-RS0113-20	Valid from 7 Mar 2020 to 2 Jun 2020
3901A	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

Contract No.	Description	Location	Permit/ Reference No.	Status
	Construction Noise Permit (General Works)	Works area of 3901B	GW-RS0106-20	Valid from 2 Mar 2020 to 19 Aug 2020

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

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

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

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

Statistics for Complaints, Notifications of Summons and Prosecutions

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