

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

Construction Phase Monthly EM&A Report No.55 (For July 2020)

August 2020

Airport Authority Hong Kong

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August 2020

This Monthly EM&A Report No. 55 has been reviewed and certified by

the Environmental Team Leader (ETL) in accordance with

Condition 3.5 of Environmental Permit No. EP-489/2014.

In Kory

Certified by:

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

Date

14 August 2020



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By Email

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

Attn: Mr. Lawrence Tsui, Principal Manager

14 August 2020

Dear Sir,

Contract No. 3102 3RS Independent Environmental Checker Consultancy Services

Submission of Monthly EM&A Report No. 55 (July 2020)

Reference is made to the Environmental Team's submission of the Monthly EM&A Report No. 55 under Condition 3.5 of the Environmental Permit No. EP-489/2014 certified by the ET Leader on 14 August 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.

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Jackel Law Independent Environmental Checker

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Abbreviations

200	Three Durnupy Cyclem		
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		
ММНК	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		
50			

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 55th 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 July 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



Results of Impact Monitoring

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

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

The water quality monitoring results for all parameters, except dissolved oxygen (DO), obtained during the reporting period were within the corresponding Action and Limit Levels stipulated in the EM&A programme. Relevant investigation and follow-up actions will be conducted according to the EM&A programme if the corresponding Action and Limit Levels are triggered. For dissolved oxygen (DO), some testing results triggered the relevant Action and Limit Levels, and the corresponding investigations were conducted accordingly. Further investigations for cases recorded between 11 and 25 June 2020 were also provided in this Construction Phase Monthly EM&A Report. The investigation findings indicated that the cases recorded in June and July 2020 were not related to the Project. To conclude, the construction activities did not introduce adverse impact to all water quality sensitive receivers.

Summary of Upcoming Key Issues

Reclamation Works:

Contract 3205 DCM works

DCM works

Contract 3206 Main Reclamation Works

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

Airfield Works:

Contract 3301 North Runway Crossover Taxiway

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

Contract 3302 Eastern Vehicular Tunnel Advance Works

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

Contract 3303 Third Runway and Associated Works

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

Contract 3307 Fire Training Facility

Site establishment

Third Runway Concourse:

Contract 3403 New Integrated Airport Centres Building and Civil Works

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

Contract 3405 Third Runway Concourse Foundation and Substructure Works

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

Terminal 2 Expansion:

Contract 3503 Terminal 2 Foundation and Substructure Works

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

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

Contract 3601 New Automated People Mover System (TRC Line)

- 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

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

Contract 3722 Construction Support Facilities

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

• Site Establishment.

Airport Support Infrastructure:

Contract 3801 APM and BHS Tunnels on Existing Airport Island

- Construction of box culvert;
- Cofferdam installation for shaft;
- King Post;
- Backfilling work; and
- Site clearance.

Contract 3802 APM and BHS Tunnels and Related Works

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

Construction Support (Services / Licences):

Contract 3901A/ B Concrete Batching Facility

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

Summary Table

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

	Yes	No	Details	Analysis / Recommendation / Remedial Actions
Breach of Limit Level ^A		\checkmark	No breach of Limit Level was recorded.	Nil
Breach of Action Level^		\checkmark	No breach of Action Level was recorded.	Nil
Complaint Received	V		A complaint regarding suspected improper chemical waste disposal at the pier near Marina Garden, Tuen Mun was received on 6 Jul 2020.	ET requested the concerned Contractor for details on the complaint. Based on information provided by Contractor, no chemical waste has been generated from the Contractor. The case was considered closed.
			A complaint regarding the discharge of muddy water from the construction site which was near Aviation Fuel Supply Company (AFSC) Operation Limited premise to the surrounding surface water channel was received on 13 Jul 2020.	ET investigated the related work contracts that carried out construction activities at or near the alleged area. Based on information provided by contractors and ET's inspection findings, no malpractices were observed. The case was considered closed.
Notification of any summons and status of prosecutions		\checkmark	No notification of summons or prosecution was received.	Nil
Change that affect the EM&A		\checkmark	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 3.1¹. AECOM Asia Company Limited (AECOM) was employed by AAHK as the Independent Environmental Checker (IEC) for the Project.

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

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

The updated overall phasing programme of all construction works was presented in Appendix A of the Construction Phase Monthly EM&A Report No. 7 and the contract information was presented in Appendix A of Construction Phase Monthly EM&A Report No. 54.

1.2 Scope of this Report

This is the 55th 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 July 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

Party	Position	Name	Telephone
Contract 3205 DCM	Deputy Project Director	Min Park	9683 0765
(Package 5) (Bachy Soletanche - Sambo Joint Venture)	Environmental Officer	William Chan	5408 3045
Contract 3206 Main Reclamation Works	Project Manager	Alan Mong	3763 1352
(ZHEC-CCCC-CDC Joint Venture)	Environmental Officer	Kwai Fung Wong	3763 1452

Airfield Works:

Party	Position	Name	Telephone	
Contract 3301 North Runway Crossover Taxiway	Deputy Project Director	Kin Hang Chung	9800 0048	
(FJT-CHEC-ZHEC Joint Venture)	Environmental Officer	Joe Wong	6182 0351	
Contract 3302 Eastern Vehicular Tunnel Advance	Project Manager	Dickey Yau	5699 4503	
Works (China Road and Bridge Corporation)	Environmental Officer	Dennis Ho	5645 0563	
Contract 3303 Third Runway and Associated	Project Manager	Andrew Keung	6277 6628	
Works (SAPR Joint Venture)	Environmental Officer	Max Chin	6447 5707	
Contract 3307 Fire Training Facility	Project Manager	Steven Meredith	6109 1813	
(Paul Y. Construction Company Limited)	Environmental Officer	Albert Chan	9700 1083	

Third Runway Concourse:

Party	Position	Name	Telephone
Contract 3402 New Integrated Airport Centres	Contract Manager	Michael Kan	9206 0550
Enabling Works (Wing Hing Construction Co., Ltd.)	Environmental Officer	Lisa He	5374 3418
Contract 3403 New	Project Manager	Alice Leung	9220 3162
Integrated Airport Centres Building and Civil Works (Sun Fook Kong Construction Limited)	Environmental Officer	Alpha Chia	9626 1114
Contract 3405 Third Runway Concourse Foundation and	Project Manager	Francis Choi	9423 3469
Substructure Works (China Road and Bridge Corporation – Bachy Soletanche Group Limited – LT Sambo Co., Ltd. Joint Venture)	Environmental Officer	Cecilia Choi	9265 9352

Terminal 2 (T2) Expansion:

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

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

Party	Position	Name	Telephone
Contract 3601 New Automated People Mover System (TRC Line) (CRRC Puzhen Bombardier Transportation Systems Limited and CRRC Nanjing Puzhen Co., Ltd. Joint Venture)	Project Manager	Hongdan Wei	158 6180 9450
	Environmental Officer	KFLi	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	Project Manager	K C Ho	9272 9626
Handling System (VISH Consortium)	Environmental Officer	Eric Ha	9215 3432

Construction Support (Facilities):

Party	Position	Name	Telephone
Contract 3721 Construction Support Infrastructure Works (China State Construction Engineering (Hong Kong) Ltd.)	Site Agent	Thomas Lui	9011 5340
	Environmental Officer	Xavier Lam	9493 2944

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

Airport Support Infrastructure:

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

Construction Support (Services / Licences):

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

1.4 Summary of Construction Works

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

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

1.5 Summary of EM&A Programme Requirements

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

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

Parameters	Status
Air Quality	

Provide state	0(-1)
Parameters	Status
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.
Impact Monitoring	On-going
Environmental Auditing	
Regular site inspection	On-going
-	

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

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

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

- One skipper training session provided by ET: 8 July 2020;
- One dolphin observer training session provided by ET: 17 July 2020;
- Sixteen environmental management meetings for EM&A review with works contracts: 2, 3, 6, 10, 14, 15, 20, 22, 23, 27, 29, 30, and 31 July 2020.

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

2 Air Quality Monitoring

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

Table 2.1: Locations of Impact	Air Quality Monitoring Stations
--------------------------------	---------------------------------

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

2.1 Action and Limit Levels

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

Table 2.2:	Action and	Limit Levels	of Air C	Quality	Monitoring
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Monitoring Station	Action Level (µg/m ³)	Limit Level (µg/m³)
AR1A	306	500
AR2	298	

2.2 Monitoring Equipment

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

Table 2.3: Air Quality	Monitoring Equipment
------------------------	----------------------

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

2.3 Monitoring Methodology

2.3.1 Measuring Procedure

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

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

- c. The one hour dust measurement was started. Site conditions and dust sources at the nearby area were recorded on a record sheet.
- d. When the measurement completed, the "Count" reading per hour was recorded for result calculation.

2.3.2 Maintenance and Calibration

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

2.4 Summary of Monitoring Results

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

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

Table 2.4: Summary of Air Quality Monitoring Results

Monitoring Station	1-hr TSP Concentration Range (μg/m ³)	Action Level (μg/m ³)	Limit Level (µg/m³)
AR1A	7 - 34	306	500
AR2	3 - 16	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 I	Noise Monitoring	J Stations
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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
Noto:		

Note:

 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**.

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:

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

3.2 Monitoring Equipment

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

Table 3.3: Noise Monitoring Equipment

Equipment	Brand and Model	Last Calibration Date	Calibration Certificate Provided in
Integrated Sound Level Meter	Rion NL-52 (Serial No. 00998505)	24 Mar 2020	Monthly EM&A Report No. 52, Appendix D
	Rion NL-52 (Serial No. 01287679)	21 Jun 2020	Monthly EM&A Report No. 54, Appendix E
Acoustic Calibrator	Casella CEL-120/1 (Serial No. 2383737)	21 Sep 2019	Monthly EM&A Report No. 45, Appendix D
	Castle GA607 (Serial No. 040162)	4 Jul 2020	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}, L₁₀ and L₉₀ were recorded. In addition, site conditions and noise sources were recorded on a record sheet.
- f. Noise measurement results were corrected with reference to the baseline monitoring levels.
- g. Observations were recorded when high intrusive noise (e.g. dog barking, helicopter noise) was observed during the monitoring.

3.3.2 Maintenance and Calibration

The maintenance and calibration procedures are summarised below:

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

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

3.4 Summary of Monitoring Results

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

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

Monitoring Station	Noise Level Range, dB(A)	Limit Level, dB(A)	
	L _{eq (30mins)}	L _{eq} (30mins)	
NM1A ⁽¹⁾	67 - 73	75	
NM4 ⁽¹⁾	61 - 64	70 ⁽²⁾	
NM5 ⁽¹⁾	53 - 61	75	
NM6 ⁽¹⁾	66 - 68	75	

Table 3.4: Summary of Construction Noise Monitoring Results

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 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.

Monitoring Station	Description		Coordinates	Parameters	
		Easting	Northing		
C1	Control Station	804247	815620	General Parameters	
C2	Control Station	806945	825682	DO, pH, Temperature,	
C3 ⁽³⁾	Control Station	817803	822109	Salinity, Turbidity, SS	
IM1	Impact Station	807132	817949	DCM Parameters	
IM2	Impact Station	806166	818163	Total Alkalinity, Heavy	
IM3	Impact Station	805594	818784	Metals ⁽²⁾	
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	<u>General Parameters</u> DO, pH, Temperature, Salinity, Turbidity, SS	
SR2 ⁽³⁾	Planned marine park / hard corals at The Brothers / Tai Mo To	814166	821463	<u>General Parameters</u> DO, pH, Temperature, Salinity, Turbidity, SS	
				<u>DCM Parameters</u> Total Alkalinity, Heavy Metals ⁽²⁾⁽⁴⁾	
SR3	Sha Chau and Lung Kwu Chau Marine Park / fishing and spawning grounds in North Lantau	807571	822147	<u>General Parameters</u> DO, pH, Temperature, Salinity, Turbidity, SS	
SR4A	Sha Lo Wan	807810	817189		

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

Monitoring Station	Description	Coordinates		Parameters
		Easting	Northing	
SR5A	San Tau Beach SSSI	810696	816593	
SR6A ⁽⁵⁾	Tai Ho Bay, Near Tai Ho Stream SSSI	814739	817963	<u>General Parameters</u> DO, pH, Temperature, Salinity, Turbidity, SS
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/epsubmissions.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	

Parameter	rs	Action Level (A	L)	Limit Level (LL)				
	Limit Levels for genera SR1A & SR8)	al water quality mor	nitoring and regular	DCM monitorin	g			
General Water Quality Monitoring	Middle & Bottom)	Surface and Middle 4.5mg/l	9	Surface and Mi 4.1mg/l 5mg/l for Fish 0	ddle Culture Zone (SR7) only			
3		Bottom 3.4mg/l		Bottom 2.7mg/l				
	Suspended Solids (SS) in mg/l	23	or 120% of upstream control	37	or 130% of upstream control			
	Turbidity in NTU	22.6	station at the same tide of the	36.1	station at the same tide of the			
Regular	Total Alkalinity in ppm	95	same day,	99	same day,			
DCM Monitoring	Representative Heavy Metals for regular DCM monitoring (Chromium) in µg/I	0.2	whichever is higher	0.2	whichever is higher			
	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:								

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 (<u>http://env.threerunwaysystem.com/en/ep-submissions.html</u>)

(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

Impact Stations
IM1, IM2, IM3, IM4, IM5, IM6, IM7, IM8, SR3
IM7, IM8, IM9, IM10, IM11, IM12, SR1A, SR3, SR4A, SR5A, SR6A, SR8
SR4A, SR5A, SR6A
IM1, IM2, IM3, IM4, IM5, IM6, IM7, IM8, IM9, IM10, IM11, IM12, SR1A, SR2, SR3, SR7, SR8

Note:

 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.

Equipment	Brand and Model	Last Calibration Date	Calibration Certificate Provided in
Multifunctional Meter (measurement of DO, pH, temperature, salinity and turbidity)	YSI 6920V2 (Serial No. 0001C6A7)	20 Jul 2020	Appendix D
	YSI 6920V2 (Serial No. 00019CB2)	21 Apr 2020 ⁽¹⁾	Monthly EM&A Report No. 52, Appendix D
	YSI ProDSS (Serial No. 16H104234)	10 Jun 2020	Monthly EM&A Report No. 54, Appendix E
	YSI ProDSS (Serial No. 17E100747)	20 Jul 2020	Appendix D
Digital Titrator (measurement of total alkalinity)	Titrette Bottle-top Burette, 50ml (Serial No. 10N60623)	1 Jun 2020	Monthly EM&A Report No. 54, Appendix E

Note:

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

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

Table 4.5: Other Monitoring Equipment

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

4.3 Monitoring Methodology

4.3.1 Measuring Procedure

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

The water samples for all monitoring parameters were collected, stored, preserved and analysed according to the Standard Methods, APHA 22nd ed. and/or other methods as agreed by the EPD. In-situ measurements at monitoring locations including temperature, pH, DO, turbidity, salinity, alkalinity and water depth were collected by equipment listed in **Table 4.4** and **Table 4.5**. Water samples for heavy metals and SS analysis were stored in high density polythene bottles with no preservative added, packed in ice (cooled to 4°C 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.

	-		
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

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

4.4 Summary of Monitoring Results

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

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

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

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

IM6 IM7 IM	M8 IM9 IM10	IM11 IM12 SR2	SR3 SR4A	SR5A SR6A SR7
			D	
1 0	0 0 0	0 0 0	0 1	o 0
	1 0			

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

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

	IM1	IM2	IM3	IM4	IM5	IM6	IM7	IM8	IM9	IM10	IM11	IM12	SR2	SR3	SR4A	SR5A	SR6A	SR7
02/07/2020																		
04/07/2020																		
07/07/2020																		
09/07/2020																		
11/07/2020																		
14/07/2020																		
16/07/2020		D	D	D														
18/07/2020	D	D	D	D											D			
21/07/2020																		
23/07/2020																		
25/07/2020																		
28/07/2020																		
30/07/2020																		
No. of result triggering Action or Limit Level	1	2	2	2	0	0	0	0	0	0	0	0	0	1	1	0	0	0

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

	IM1	IM2	IM3	IM4	IM5	IM6	IM7	IM8	IM9	IM10	IM11	IM12	SR3	SR4A	SR5A	SR6A	SR7
02/07/2020																	
04/07/2020																	
07/07/2020																	
09/07/2020																	
11/07/2020																	
14/07/2020																	
16/07/2020																	
18/07/2020																	
21/07/2020					D												
23/07/2020																	
25/07/2020																	
28/07/2020																	
30/07/2020																	
No. of result																	
triggering Action or Limit Level	1	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0

	IM1	IM2	IM3	IM4	IM5	IM6	IM7	IM8	IM9	IM10	IM11	IM12	SR3	SR4A	SR5A	SR6A	SR7
02/07/2020																	
04/07/2020																	
07/07/2020																	
09/07/2020																	
11/07/2020																	
14/07/2020																	
16/07/2020																	
18/07/2020																	
21/07/2020																	
23/07/2020																	
25/07/2020																	
28/07/2020																	
30/07/2020																	
No. of result																	
triggering Action or Limit Level	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0

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

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

Monitoring results triggered the corresponding Action and Limit Levels on three monitoring days. In accordance with Event and Action Plan stipulated in the Manual, EPD, IEC and Contractor were informed when the corresponding Action and Limit Levels were triggered. Repeat measurement was conducted on 17, 19, 20 and 22 July 2020 as stipulated in the Manual. Some cases occurred at monitoring stations upstream of the Project during respective tide and would unlikely be affected by the Project.

Investigations focusing on the cases that occurred at monitoring stations located downstream of the Project were carried out. Details of the Project's marine construction activities and site observations on the concerned monitoring days were collected. Findings were summarized in **Table 4.11**.

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

Date	Marine construction works nearby	Approximate distance from marine construction works	Status of water quality measures (if applicable)	Construction vessels in the vicinity	Turbidity / Silt plume observed near the monitoring station	Action or Limit Level triggered due to Project
16/7/2020	DCM works	Around 1km	Localised and enhanced silt curtain deployed	No	No	No
18/7/2020	DCM works	Around 1km	Localised and enhanced silt curtain deployed	No	No	No

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	
21/7/2020	DCM works	Around 1km	Localised and enhanced silt curtain deployed	No	No	No	

During the reporting period, all the DO results which triggered Action or Limit Level were recorded at monitoring stations located at the western part of the 3RS marine work site. The ET checked with all contractors and confirmed that only DCM works and marine filling activities were undertaking at this area, localised and enhanced silt curtains were deployed and there was no abnormal operation. The contractors had also checked the maintenance record of all plant and equipment and confirmed that there was no spillage incident or abnormal observation.

In June, the low DO levels which triggered Action and Limit Levels occurred from 11 to 25 June 2020. Actions have been taken to repeat the monitoring in the next day. The initial findings after reviewing the results of control stations and tidal situation revealed that the cases were not much related to the construction activities. In addition, further investigation was conducted to monitor the in-situ water quality around the western part of the 3RS marine work site at locations closer to the construction activities. The monitoring results did not identify any hotspots of low DO levels. Conversely, the additional monitoring showed that the low DO levels were present over a large area, covering the western part of the 3RS marine work site. It is also noted that similar sustained low DO levels have occurred in this area in the previous wet season (i.e. June 2017 and July 2019). These findings suggest that the area of IM2 to IM4, similar to SR4A, is likely naturally susceptible to low DO levels during the wet season as a result of the combination of climatic and hydrological conditions in this area. Therefore, the cases were considered unlikely due to the Project.

In July, similar cases recorded from 16 July to 21 July 2020 with DO levels triggered Action and Limit Levels. Actions have been taken to repeat the monitoring in the next day and the results were found similar. Further investigation found that there were no abnormal activities observed, the cases were considered similar to those found in June 2020 and not due to the Project.

Detail investigation findings are presented in Appendix C.

4.5 Conclusion

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

Based on the investigation findings, all results that triggered the corresponding Action or Limit Levels in June and July 2020 were not due to the Project. Therefore, the Project did not cause adverse impact at the water quality sensitive receivers. All required actions under the Event and Action Plan were followed. These cases appeared to be due to natural fluctuation or other sources not related to the Project.

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

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

5 Waste Management

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

5.1 Action and Limit Levels

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

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		

Table 5.1: Action and Limit Levels for Construction Waste

5.2 Waste Management Status

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

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

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

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)	Reused in the Project	Reused in other	Public Fill	Chemical Waste (kg)	Chemical Waste (I)	General Refuse (tonne)
June 2020 ⁽²⁾⁽³⁾	3,903	*32,271	0	3,164	0	0	736
July 2020 ⁽²⁾⁽⁴⁾	2,895	38,584	16	3,785	60	4,200	1,035

Notes:

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

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

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

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

6 Chinese White Dolphin Monitoring

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

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

6.1 Action and Limit Levels

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

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

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

Notes: (referring to the baseline monitoring report)

 Action Level – running quarterly encounter rates STG & ANI of this month will be calculated from the reporting period and the two preceding survey months.

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

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

6.2 CWD Monitoring Transects and Stations

6.2.1 Small Vessel Line-transect Survey

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

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

			, , ,		
Waypoint	Easting	Northing	Waypoint	Easting	Northing
40	040505	NE		040500	004400
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
		NV			
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
		A۱	N		
1W	804733	818205	2W	805045	816912
1E	806708	818017	2E	805960	816633
		W	L		
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			
		SM	/L		
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	98	810542	800423
40 4N	805478	807556	9N	810542	807462
	000470	00,000	014	010072	001 102

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

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.

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

Table 6.3: Land-based Theodolite Survey Station Details

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 6, 8, 9, 10, 13, 20, 21 and 22 July 2020, covering all transects in NEL, NWL, AW, WL and SWL survey areas for twice.

A total of around 430.31 km of survey effort was collected from these surveys and around 91.8% of the survey effort was being conducted under favourable weather condition (i.e. Beaufort Sea State 3 or below with favourable visibility). Details of the survey effort are given in **Appendix C**.

Sighting Distribution

In July 2020, 28 sightings with 124 dolphins were sighted. Amongst these sightings, 27 sightings with 113 dolphins are on-effort records under favourable weather condition (i.e. Beaufort Sea State 3 or below with favourable visibility). Details of cetacean sightings are presented in **Appendix C**.

Distribution of all CWD sightings recorded in July 2020 is illustrated in **Figure 6.3**. In NWL, the only CWD sighting was recorded northeastern to Sha Chau and Lung Kwu Chau Marine Park. In WL, the majority of the CWD sightings were clustered at waters around Tai O and at the relatively offshore waters between Yi O and Fan Lau. In SWL, CWD sightings were scattered from Shui Hau to Fan Lau with the majority recorded at the offshore waters between Fan Lau and the Soko Islands. No sightings of CWD were recorded in NEL or AW survey area.

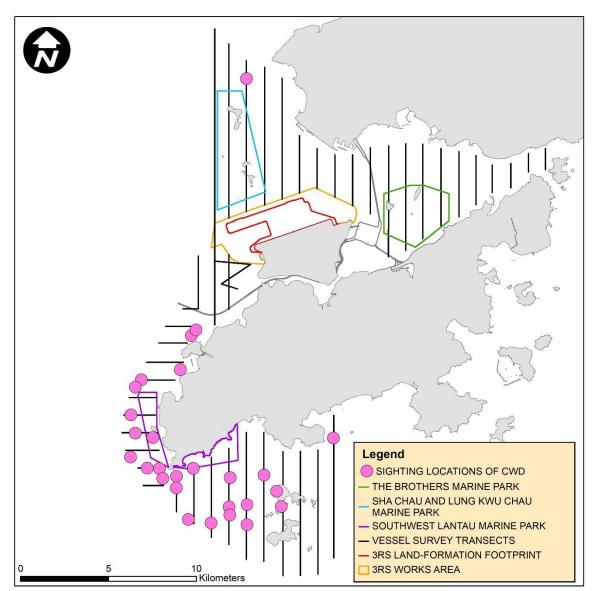


Figure 6.3: Sightings Distribution of Chinese White Dolphins

Remarks: (1) Please note that there are 28 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 July 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 July 2020, a total of around 394.79 km of survey effort were conducted under Beaufort Sea State 3 or below with favourable visibility, whilst a total number of 27 on-effort sightings with 113 dolphins were sighted under such condition. Calculation of the encounter rates in July 2020 are shown in **Appendix C**.

For the running quarter of the reporting period (i.e., from May 2020 to July 2020), a total of around 1228.86 km of survey effort were conducted under Beaufort Sea State 3 or below with favourable visibility, whilst a total number of 60 on-effort sightings and a total number of 260 dolphins from on-effort sightings were obtained under such condition. Calculation of the running quarterly encounter rates are shown in **Appendix C**.

The STG and ANI of CWD in the whole survey area (i.e. NEL, NWL, AW, WL and SWL) during the month of July 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)
July 2020	6.84	28.62
Running Quarter from May 2020 to July 2020 ⁽¹⁾	4.88	21.16
Action Level	Running quarterly ⁽¹⁾ ST	G < 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 May 2020 to July 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 July 2020, 28 groups of 124 dolphins in total were sighted, and the average group size of CWDs was 4.4 dolphins per group. Sightings with small group size (i.e. 1-2 dolphins) and medium group size (i.e. 3-9 dolphins) were similar. There were two CWD sightings with large group size (i.e. 10 or more dolphins) recorded in WL.

Activities and Association with Fishing Boats

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

Mother-calf Pair

In July 2020, eight CWD sightings were recorded with the presence of mother-and-unspotted calf and/or mother-and-unspotted juvenile pair.

6.4.2 Photo Identification

In July 2020, a total number of 57 different CWD individuals were identified for totally 75 times. A summary of photo identification works is presented in **Table 6.5**. Representative photos of these individuals are given in **Appendix C**.

Individual ID	Date of Sighting (dd-mmm-yy)	Sighting Group No.	Area	Individual ID	Date of Sighting (dd-mmm-yy)	Sighting Group No.	Area
NLMM012	13-Jul-20	4	WL	WLMM029	20-Jul-20	4	SWL
NLMM013	13-Jul-20	5	WL	WLMM030	06-Jul-20	2	WL
NLMM019	20-Jul-20	4	SWL		13-Jul-20	2	WL
NLMM020	06-Jul-20	4	WL	WLMM038	13-Jul-20	1	WL
NLMM027	20-Jul-20	3	SWL	WLMM043	13-Jul-20	5	WL
NLMM034	13-Jul-20	1	WL	WLMM047	13-Jul-20	7	WL
NLMM037	20-Jul-20	8	SWL	WLMM060	13-Jul-20	6	WL
		9	SWL	WLMM063	21-Jul-20	3	SWL
NLMM052	13-Jul-20	5	WL	WLMM071	06-Jul-20	2	WL
	21-Jul-20	5	SWL	WLMM079	13-Jul-20	7	WL
NLMM060	06-Jul-20	2	WL		20-Jul-20	5	SWL
NLMM063	22-Jul-20	1	NWL		21-Jul-20	4	SWL
SLMM003	13-Jul-20	7	WL	WLMM080	13-Jul-20	6	WL
	21-Jul-20	4	SWL	WLMM085	13-Jul-20	6	WL
SLMM007	13-Jul-20	6	WL			7	WL
		7	WL	WLMM086	13-Jul-20	2	WL
SLMM010	13-Jul-20	6	WL	WLMM089	13-Jul-20	5	WL
SLMM012	21-Jul-20	2	SWL	WLMM091	13-Jul-20	2	WL
SLMM014	06-Jul-20	3	WL			3	WL
SLMM025	13-Jul-20	7	WL	WLMM092	13-Jul-20	2	WL
	20-Jul-20	3	SWL			3	WL
SLMM027	21-Jul-20	5	SWL	WLMM098	13-Jul-20	1	WL
SLMM037	20-Jul-20	5	SWL	WLMM102	06-Jul-20	1	WL
SLMM049	13-Jul-20	7	WL	WLMM107	06-Jul-20	2	WL
	20-Jul-20	5	SWL	WLMM112	13-Jul-20	6	WL
SLMM052	13-Jul-20	7	WL	WLMM122	21-Jul-20	7	SWL
SLMM060	20-Jul-20	1	SWL	WLMM136	06-Jul-20	2	WL
	21-Jul-20	7	SWL	WLMM147	13-Jul-20	7	WL
SLMM062	20-Jul-20	3	SWL		20-Jul-20	5	SWL
	21-Jul-20	2	SWL		21-Jul-20	4	SWL
SLMM070	21-Jul-20	2	SWL	WLMM149	06-Jul-20	2	WL
WLMM001	13-Jul-20	6	WL	WLMM154	06-Jul-20	2	WL
		7	WL	WLMM155	13-Jul-20	1	WL
WLMM008	21-Jul-20	5	SWL	WLMM156	13-Jul-20	1	WL
WLMM009	13-Jul-20	6	WL	WLMM157	13-Jul-20	7	WL
	20-Jul-20	4	SWL	WLMM158	13-Jul-20	7	WL
WLMM019	22-Jul-20	1	NWL	WLMM159	13-Jul-20	7	WL
WLMM028	20-Jul-20	4	SWL				

Table 6.5: Summary of Photo Identification

6.4.3 Land-based Theodolite Tracking Survey

Survey Effort

Land-based theodolite tracking surveys were conducted at LKC on 15 July 2020 and at SC on 7 July 2020, with a total of two days of land-based theodolite tracking survey effort accomplished in this reporting period. No CWD group was tracked during the surveys. Information of survey effort and CWD groups are presented in **Table 6.6**. Details of the survey effort are presented in **Appendix C**.

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

6.5 Progress Update on Passive Acoustic Monitoring

Underwater acoustic monitoring using Passive Acoustic Monitoring (PAM) should be undertaken during land formation related construction works. In this reporting period, the Ecological Acoustic Recorder (EAR) was retrieved on 22 July 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 4 dolphin observation stations and teams of at least two dolphin observers were deployed by the contractors for continuous monitoring of the DEZ for DCM and seawall construction works in accordance with the DEZ Plan. Trainings for the proposed dolphin observers on the implementation of MMWP and DEZ monitoring were provided by the ET prior to the aforementioned works, with a cumulative total of 696 individuals being trained and the training records kept by the ET. From the contractors' MMWP observation records, no dolphin or other marine mammals were observed within or around the silt curtains. As for DEZ monitoring records, no dolphin or other marine mammals were also audited by the ET during site inspection.

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

6.7 Timing of Reporting CWD Monitoring Results

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

6.8 Summary of CWD Monitoring

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

7 Environmental Site Inspection and Audit

7.1 Environmental Site Inspection

Site inspections of the construction works were carried out on a weekly basis to monitor the implementation of proper environmental pollution control and mitigation measures for the Project. The weekly site inspection schedule of the construction works is provided in **Appendix B**. Biweekly 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.

Landscape and Visual Mitigation Measures

Implementation of applicable landscape and visual mitigation measures (reference to the environmental protection measures CM1 – CM10 in **Appendix A**) was monitored regularly in accordance with the Manual. No non-conformity was recorded during the reporting period. Based on the latest Contractors' submitted records, the updated cumulative total number of retained and transplanted trees under the Project were 165 and 8, respectively. Compare to the last reporting period, some retained trees were removed from the records because it was confirmed recently that those retained trees are not located within 3RS works area. 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.

Marine Sediment Management

Marine sediment is managed according to the EIA Report, Updated EM&A Manual and the project Waste Management Plan. Sediment sampling and treatment are in progress. Treated sediment is reused as backfilling materials.

Land Contamination Assessment

The Supplementary CAP was submitted to EPD pursuant to EP Condition 2.20. The CAR for Golf Course and T2 Emergency Power Supply System No.1 (Volumes 1 and 2) were submitted to EPD in accordance with EP Condition 1.9 and the Supplementary CAP in which no land contamination issues were identified. The land contamination assessment work of the Emergency Power Supply System No. 3 as on-going in the reporting period.

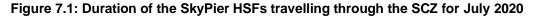
A summary of implementation status of the environmental mitigation measures for the construction phase of the Project during the reporting period is provided in **Appendix A**.

7.2 Audit of SkyPier High Speed Ferries

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

Due to the COVID-19 pandemic, all SkyPier HSF services have been suspended from 25 March 2020 until further notice. Special ferry service between Macau and Hong Kong International Airport was arranged from 17 June 2020 to 16 July 2020. Key audit findings for the SkyPier HSFs travelling to/from Macau against the requirements of the SkyPier Plan during the reporting period are summarised in **Table 7.1**. The daily movements of all SkyPier HSFs in this reporting period (i.e., 0 to 4 daily movements) were within the maximum daily cap of 125 daily movements. Status of compliance with the annual daily average of 99 movements will be further reviewed in the annual EM&A Report.

In total, 64 ferry movements between HKIA SkyPier and Macau were recorded in July 2020 and the data are presented in **Appendix G**. The time spent by the SkyPier HSFs travelling through the SCZ in July 2020 were presented in **Figure 7.1**. It will take 9.6 minutes to travel through the SCZ when the SkyPier HSFs adopt the maximum allowable speed of 15 knots within the SCZ. **Figure 7.1** shows that all of the SkyPier HSFs spent more than 9.6 minutes to travel through the SCZ.



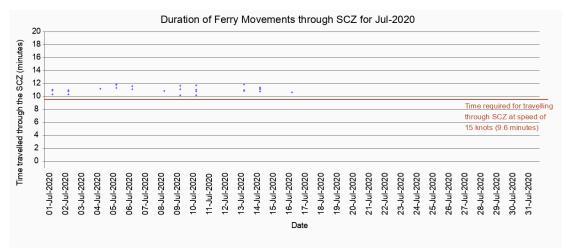


Table 7.1: Summary of Key Audit Findings against the SkyPier Plan

Requirements in the SkyPier Plan	1 to 31 July 2020
Total number of ferry movements recorded and audited	64
Use diverted route and enter / leave SCZ through Gate Access Points	0 deviation
Speed control in speed control zone	The average speeds of all HSFs travelling through the SCZ ranged from 10.6 to 13.4 knots. All HSFs had travelled through the SCZ with average speeds under 15 knots in compliance with the SkyPier Plan. The time used by HSFs to travel through SCZ is presented in Figure 7.1 .
Daily Cap (including all SkyPier HSFs)	0-4 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:

- One skipper training session was 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.
- Five 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, 13 skippers were trained by ET and 15 skippers were trained by contractors' Environmental Officers. In total, 1591 skippers were trained from August 2016 to July 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**.

EP Condition	Submission	Status
2.1	Complaint Management Plan	
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	Accepted / approved
2.11	Marine Mammal Watching Plan	by EPD
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	
2.20	Supplementary Contamination Assessment Plan	Accepted / approved
3.1	Updated EM&A Manual	by EPD
3.4	Baseline Monitoring Reports	

Table 7.2: Status of Submissions under Environmental Permit

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

A complaint was received on 6 July 2020 regarding suspected improper chemical waste disposal at the pier near Marina Garden, Tuen Mun. Investigation was conducted by the ET in accordance with the Manual and the Complaint Management Plan of the Project. According to the information provided by the Contactor, skipper of the concerned vessel had carried a rubbish bin filled with trash from the vessel for disposal at the refuse collection point at the pier near Marina Garden, Tuen Mun. Furthermore, the chemical containers located at the pier near Marina Garden, Tuen Mun did not belong to the Contractor or the owner of vessel. Moreover, there was no chemical waste generated from the Contractor. Based on the ET's regular site inspections, the Contractor was mainly conducting ground investigation works and no chemical waste had been generated from the construction site. ET had also checked the Contractor's chemical waste cabinet, which was found empty on 8 June, 3 and 6 July 2020. According to Contractor's record, no chemical waste was generated from the Contractor. The chemical waste cabinet was also observed properly locked and labelled with the display of the Chemical Waste Producer Registration on the cabinet, following the guideline Code of Practice of chemical waste handling. In view of the information provided by the Contractor and the ET's inspection findings, there were no evidences indicating improper disposal of chemical waste at the pier near Marine Garden, Tuen Mun by the Contractor. ET will continue to remind all work contracts to properly handle their chemical. Hence, the complaint case was considered closed.

A complaint was received on 13 July 2020 regarding the discharge of muddy water from a construction site near Aviation Fuel Supply Company (AFSC) Operation Limited premise and the discharge flowing to the surrounding surface water channel. Investigation was conducted by the ET in accordance with the Manual and the Complaint Management Plan of the Project. ET investigated the related work contracts of 3RS Project at or near the alleged area. Based on information provided by the Contractors, the sites were used as material stockpile and site office, and no wastewater was generated. Each contractor implemented water pollution control measures such as provision of concrete bund at the site entrance to contain surface runoff within the site, establishing an internal water reuse circuit using trenches and water tanks, and reuse of wastewater generated from the wheel washing facility. Based on the ET's weekly site inspections, no malpractices were observed on site. ET also found that surface runoff, if any, was contained within the Contractors respective site areas. In view of the above information provided from Contractors and ET inspection findings, there were no evidences that any one of the Contractors had discharged muddy water from their site areas to the surface water channel. Hence, the complaint case was considered closed. However, the ET will continue to remind all work contracts to properly handle the wastewater, especially surface runoff during the rainy season.

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:

Reclamation Works:

Contract 3205 DCM works

DCM works

Contract 3206 Main Reclamation Works

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

Airfield Works:

Contract 3301 North Runway Crossover Taxiway

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

Contract 3302 Eastern Vehicular Tunnel Advance Works

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

Contract 3303 Third Runway and Associated Works

- Footing and utilities work;
- Preparation works for box culvert construction;
- Bored pilling work; and
- Cable laying and ducting works.
- **Contract 3307 Fire Training Facility**
- Site establishment

Third Runway Concourse:

Contract 3403 New Integrated Airport Centres Building and Civil Works

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

Contract 3405 Third Runway Concourse Foundation and Substructure Works

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

Terminal 2 Expansion:

Contract 3503 Terminal 2 Foundation and Substructure Works

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

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

Contract 3601 New Automated People Mover System (TRC Line)

• 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

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

Contract 3722 Construction Support Facilities

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

Airport Support Infrastructure:

Contract 3801 APM and BHS Tunnels on Existing Airport Island

- Construction of box culvert;
- Cofferdam installation for shaft;
- King Post;
- Backfilling work; and
- Site clearance.

Contract 3802 APM and BHS Tunnels and Related Works

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

Construction Support (Services / Licenses):

Contract 3901A/ B Concrete Batching Facility

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

8.2 Key Environmental Issues for the Coming Reporting Period

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

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

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

8.3 Monitoring Schedule for the Coming Reporting Period

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

8.4 Review of the Key Assumptions Adopted in the EIA Report

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

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9 Conclusion and Recommendation

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

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

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

The water quality monitoring results for all parameters, except DO, obtained during the reporting period were within the corresponding Action and Limit Levels stipulated in the EM&A programme. Relevant investigation and follow-up actions will be conducted according to the EM&A programme if the corresponding Action and Limit Levels are triggered. For DO, some testing results triggered the relevant Action and Limit Levels, and the corresponding investigations were conducted accordingly. Further investigations for cases recorded between 11 and 25 June 2020 were also provided in this Construction Phase Monthly EM&A Report. The investigation findings indicated that the cases recorded in June and July were not related to the Project. To conclude, the construction activities 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. Special ferry service between Macau and HKIA was arranged from 17 June 2020 to 16 July 2020. The daily movements of all SkyPier HSFs in this reporting period were in the range of 0 to 4 daily movements, which are within the maximum daily cap of 125 daily movements. A total of 64 HSF movements under the SkyPier Plan were recorded in the reporting period. The average speeds of all HSFs travelling through the SCZ ranged from 10.6 to 13.4 knots. All HSFs had travelled through the SCZ with average speeds under 15 knots in compliance with the SkyPier Plan. In summary, the ET and IEC have audited the HSF movements against the SkyPier Plan and conducted follow up investigations or actions accordingly.

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

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

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

Figures

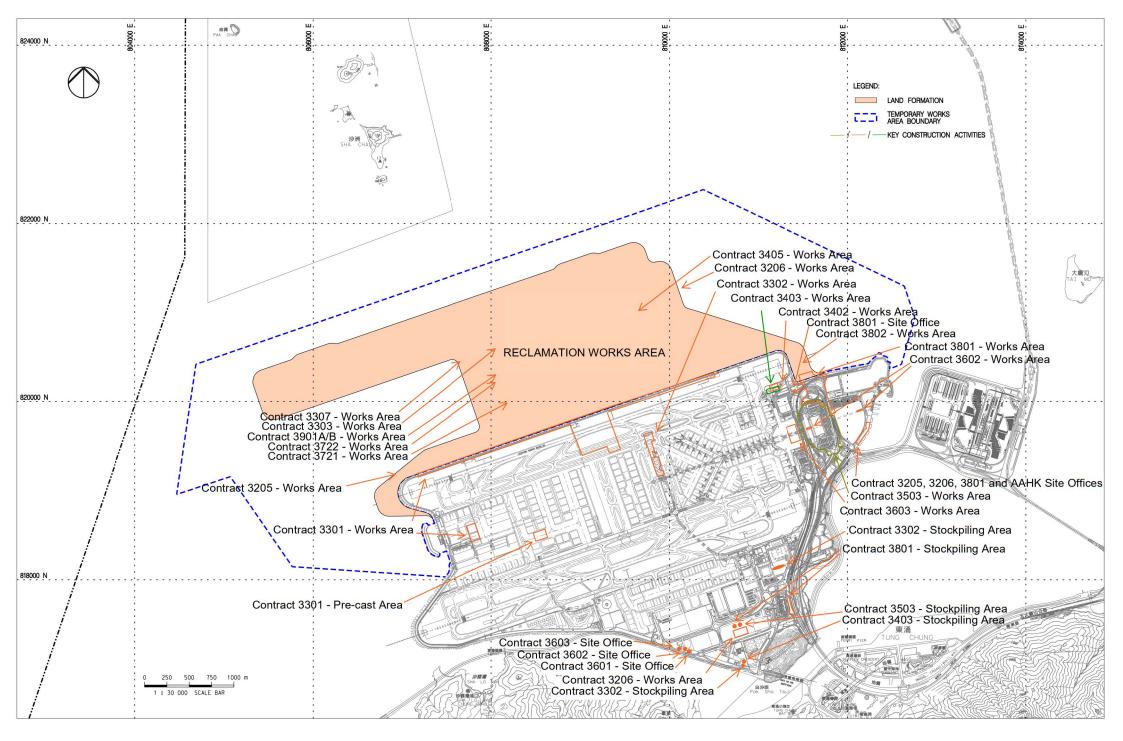
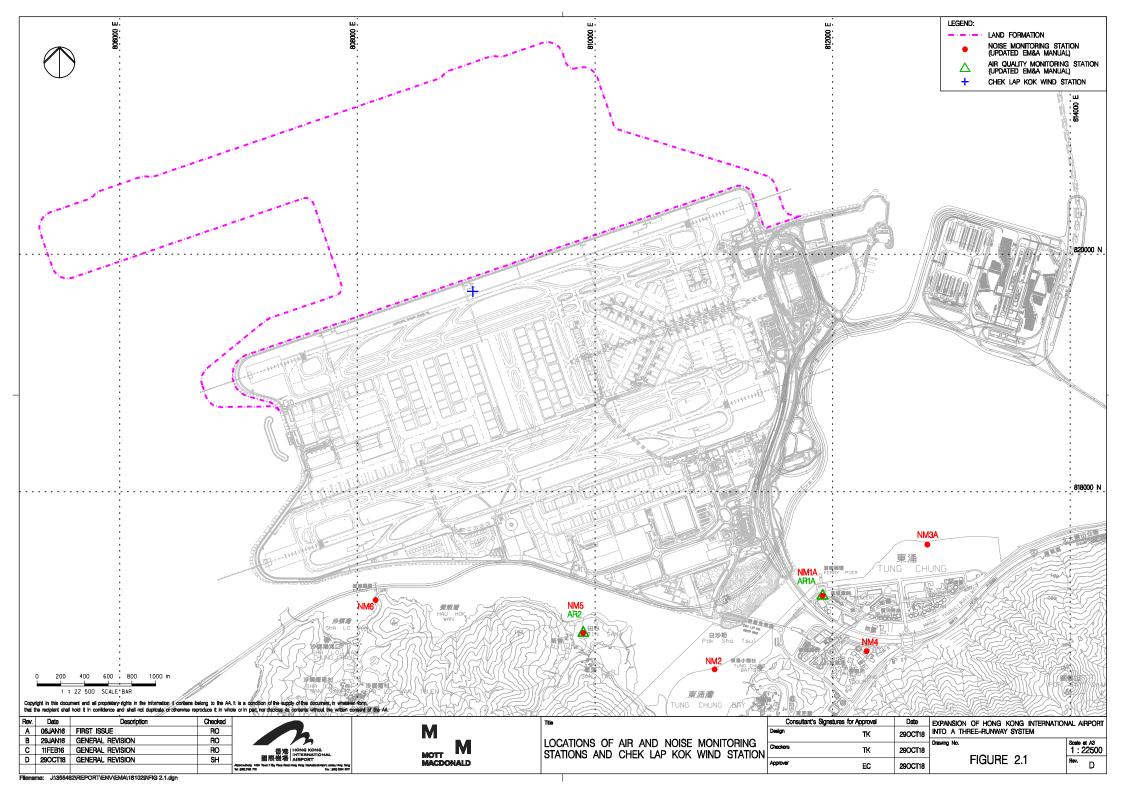
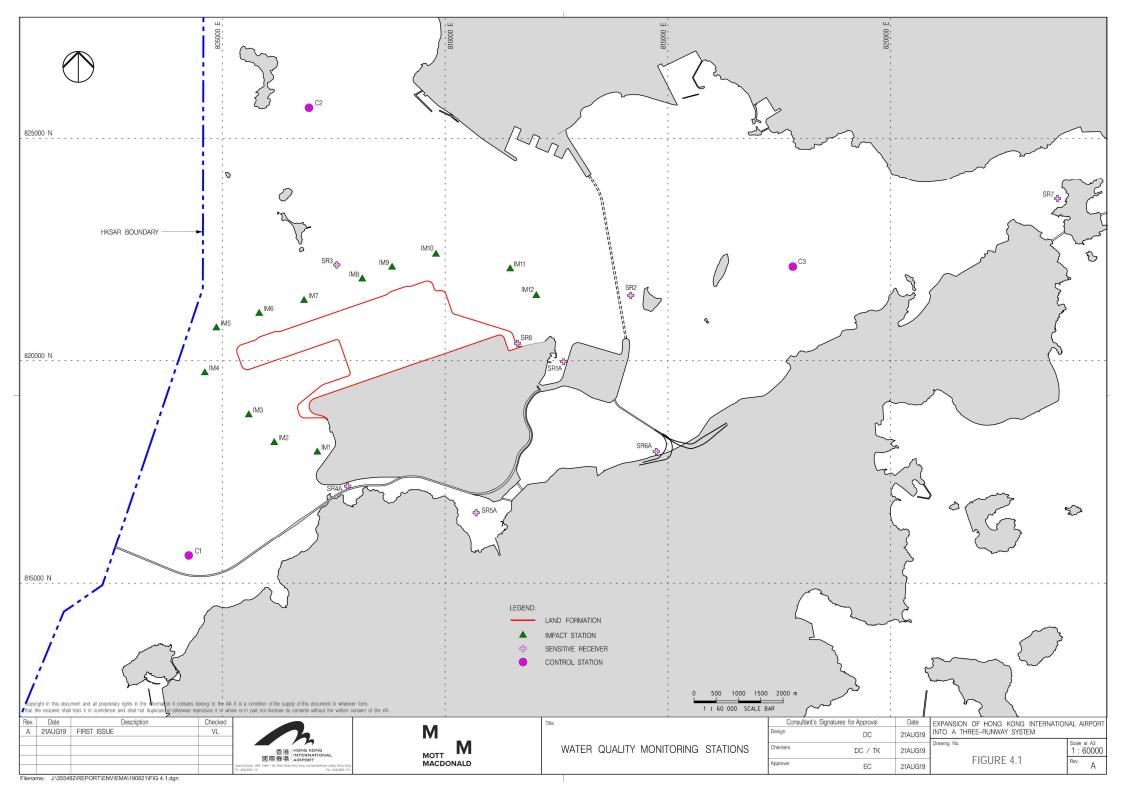
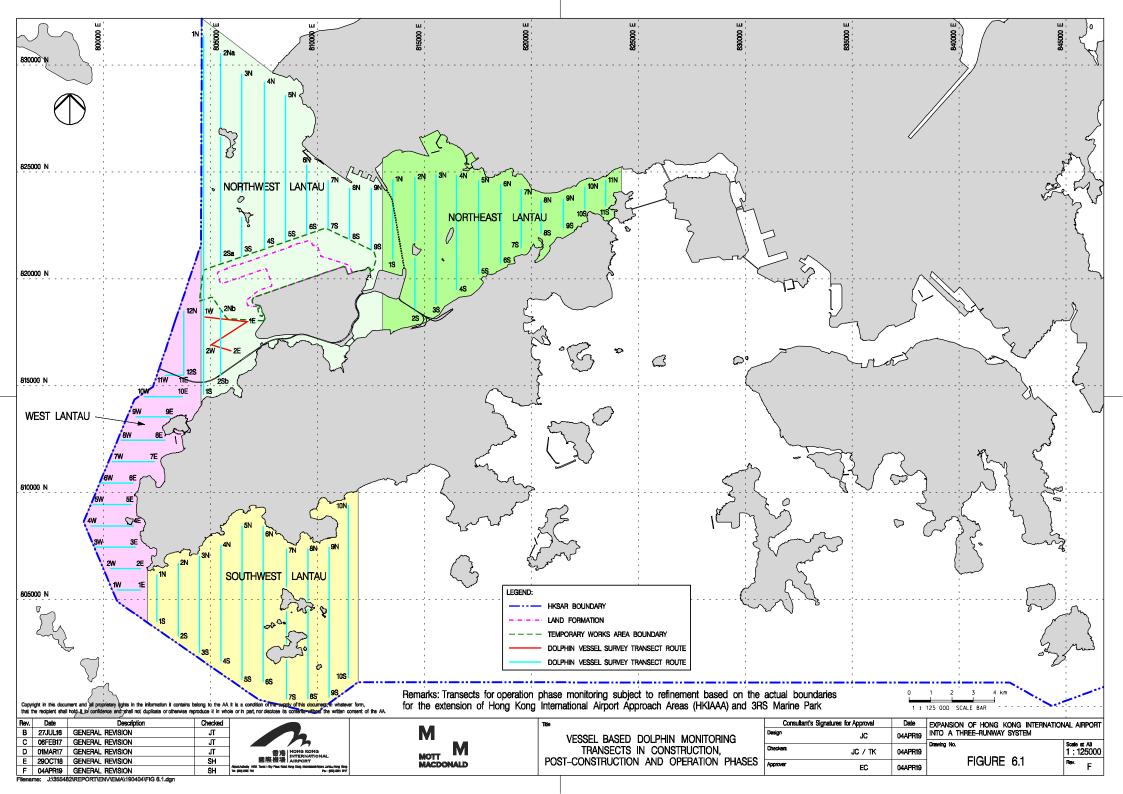
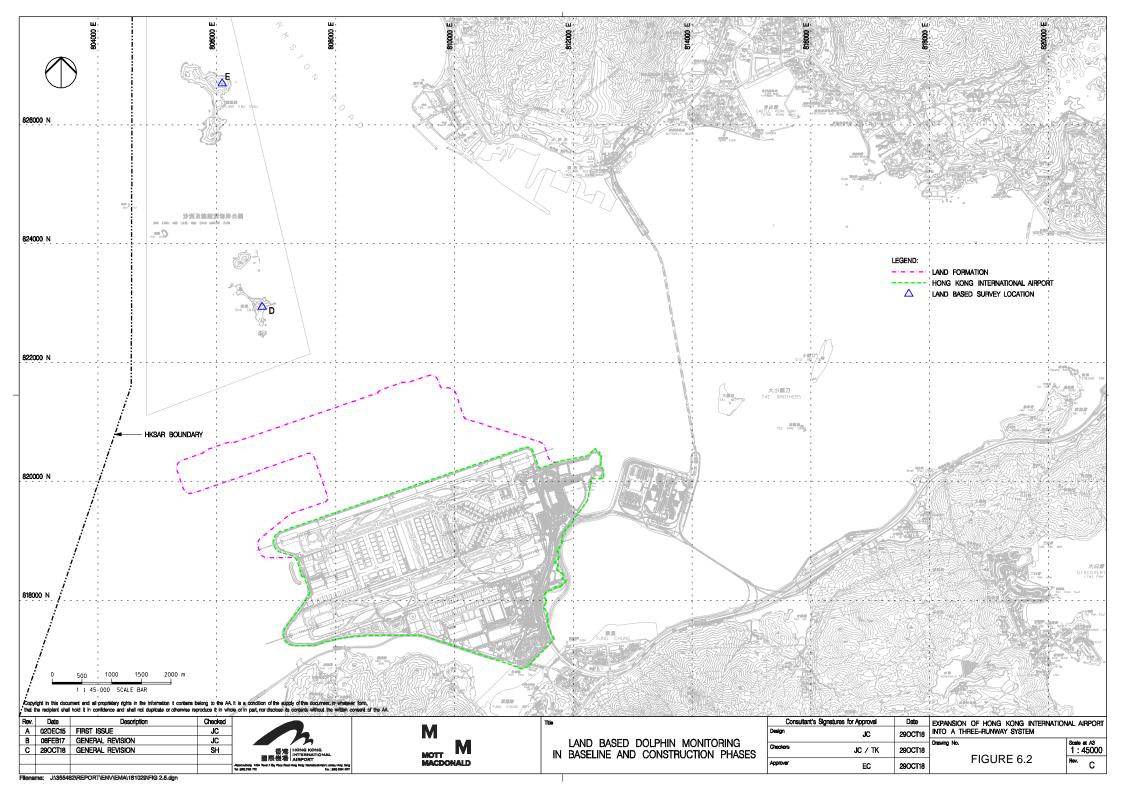


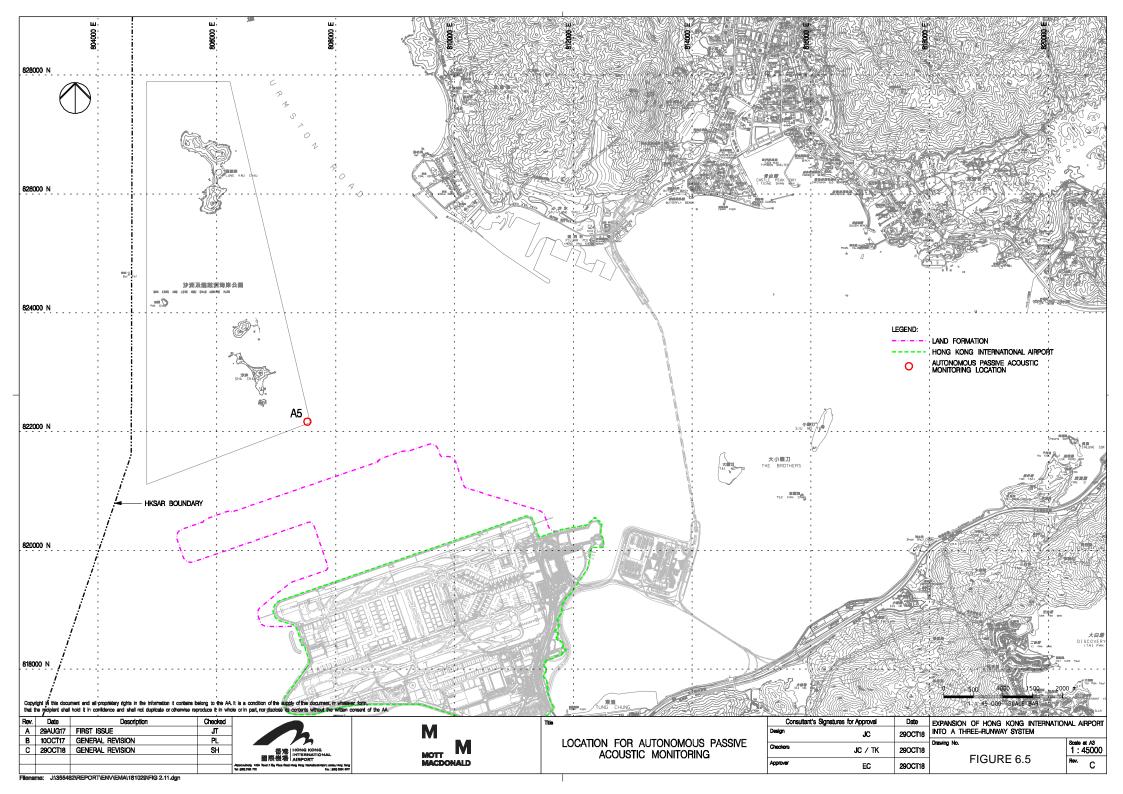
FIGURE 1.1 LOCATIONS OF KEY CONSTRUCTION ACTIVITIES











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



Environmental Mitigation Implementation Schedule (EMIS) for Construction Phase

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			Air Quality Impact – Construction Phase		
5.2.6.2	2.1	-	Dust Control MeasuresWater 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	1	
			 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	1
		 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. EM8 Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures	Mitigation Measures Implemented?
			Timing of completion of 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; 	Within construction site / Duration of the construction phase	I
			 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. 		
			Site hoarding	Within construction	I
			 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. 	site / Duration of the construction phase	
5.2.6.5	2.1	-	Best Practices for Concrete Batching Plant	Within Concrete	N/A
			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:	Batching Plant / Duration of the construction phase	



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	Within Concrete	N/A
			 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; 	Batching Plant / Duration of the construction phase	
			 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; 		



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	Within Concrete	N/A
			 Concrete truck shall be loaded in such a way as to minimise airborne dust emissions. The following control measures shall be implemented: 	Batching Plant / Duration of the construction phase	
			(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.		
			 Vehicles All practicable measures shall be taken to prevent or minimize the dust emission caused by vehicle movement; and 	Within Concrete Batching Plant / Duration of the construction phase	N/A
			All access and route roads within the premises shall be paved and adequately wetted.	Within One and 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	2.1 -	Best Practices for Asphaltic Concrete Plant	Within Concrete Batching Plant / Duration of the construction phase	N/A
			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;		



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented? ⁴	
			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	Within Concrete	N/A	
			 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; 	Batching Plant / Duration of the construction phase		
			 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. 			
			Hot feed side	Within Concrete Batching Plant / Duration of the construction phase	N/A	
			 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; 		Duration of the	
			 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; 			



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	Within Concrete	N/A
			 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; 	Batching Plant / Duration of the construction phase	
			 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. 		
			Control of emissions from bitumen decanting	Within Concrete	N/A
			 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; 	Batching Plant / Duration of the construction phase	
			 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	
			Liquid fuel		N/A
			 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. 		
			Housekeeping	Within Concrete	N/A
			 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. 	Batching Plant / Duration of the construction phase	
5.2.6.7	2.1	-	Best Practices for Rock Crushing Plants	Within Concrete	N/A
			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:	Batching Plant / Duration of the construction phase	



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	Within Concrete	N/A
			 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 	Batching Plant / Duration of the construction phase	
			 All grizzlies shall be enclosed on top and 3 sides and sufficient water sprayers shall be installed at their feeding and outlet areas. 		
			Belt conveyors	Within Concrete	N/A
			 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; 	Batching Plant / Duration of the construction phase	
			 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. 		



	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion	Mitigation Measures Implemented?^
				of measures	
			Storage piles and bins Where practicable, free falling transfer points from conveyors to stockpiles shall be fitted with flexible Where practicable, free falling transfer points from conveyors to stockpiles shall be fitted with flexible 	Within Concrete Batching Plant / Duration of the	N/A
			curtains or be enclosed with chutes designed to minimize the drop height. Water sprays shall also be used where required.	construction phase	
			 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. 		
			Rock drilling equipment	Within Concrete	N/A
			 Appropriate dust control equipment such as a dust extraction and collection system shall be used during rock drilling activities. 	Batching Plant / Duration of the construction phase	
			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	Ι
Table 6.40	3.2	-	 Location of all existing hydrant networks should be clearly identified prior to any construction works. 	Construction Site / Construction Period	Ι
			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:	Within the Project site / During construction phase / Prior to	I
			 only well-maintained plant to be operated on-site and plant should be serviced regularly during the construction works; 	commencement of operation	
			 machines and plant that may be in intermittent use to be shut down between work periods or should be throttled down to a minimum; 		



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures	Mitigation Measures
				Timing of completion of 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	Within the Project site /	
7.5.0		 QPME should be adopted as far as applicable. 	During construction phase / Prior to commencement of operation		
7.5.6	4.3	- Use of Movable Noise Barriers	Within the Project site /	1	
7.3.0	4.5		 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. 	During construction phase / Prior to commencement of operation	1
7.5.6	4.3	-	Use of Noise Enclosure/ Acoustic Shed	Within the Project site /	
			 Noise enclosure or acoustic shed should be used to cover stationary PME such as air compressor and generator. 	During construction phase / Prior to commencement of operation	
			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?^
3.8.1.2 and 3.8.1.3	5.1	2.26	Marine Construction Activities General Measures to be Applied to All Works Areas	Within construction site / Duration of the	I
			 Barges or hoppers shall not be filled to a level which will cause overflow of materials or pollution of water during loading or transportation; 	construction phase	
			 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; 	Within construction site / Duration of the construction phase	
			 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. 		
			Specific Measures to be Applied to All Works Areas		
			 The daily maximum production rates shall not exceed those assumed in the water quality assessment in the EIA report; 		I
			 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; 		
			 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; 		1
			 Closed grab dredger shall be used to excavate marine sediment; 		N/A
			 Silt curtains surrounding the closed grab dredger shall be deployed in accordance with the Silt Curtain Deployment Plan; and 		*(The arrangement silt curtain has bee modified. The deta can be referred to Curtain Deploymer Plan)
			The Silt Curtain Deployment Plan shall be implemented.		



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
			 Double layer silt curtains to be applied at the south-western opening prior to commencement of marine 		Plan) N/A
			filling activities;		*(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 		N/A
			C7a and C8 prior to commencement of marine filling activities; and		*(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. 		



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures	Mitigation Measures
				Timing of completion of measures	Implemented?^
			Specific Measures to be Applied to the Field Joint Excavation Works for the Submarine Cable Diversion	Within construction	N/A
			 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 	site / Duration of the construction phase	
			Silt curtains surrounding the closed grab dredger to be deployed as a precautionary measure.		
8.8.1.4	5.1	-	Modification of the Existing Seawall	At the existing	N/A
			 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. 	northern seawall / Duration of the construction phase	
8.8.1.5	5.1	-	Construction of New Stormwater Outfalls and Modifications to Existing Outfalls	Within construction	N/A
			 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. 	site / Duration of the construction phase	
8.8.1.6	5.1	2.27	Piling Activities for Construction of New Runway Approach Lights and HKIAAA Marker Beacons	Within construction	N/A
8.8.1.7			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.	site / Duration of the construction phase	
			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. 		
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:	Within construction site / Duration of the construction phase	
			 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 	-	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; 	_	1
			 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; 		1
			 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. 		1
8.8.1.9	5.1	-	Sewage Effluent from Construction Workforce	Within construction	1
			 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. 	site / During construction phase	
8.8.1.10	5.1		General Construction Activities	Within construction	
8.8.1.11			 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 	site / During construction phase	



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	5.1	2.28	Drilling Activities for the Submarine Aviation Fuel Pipelines	Within construction	I
8.8.1.13			To prevent potential water quality impacts at Sha Chau, the following measures shall be applied:	site / During	
			A 'zero-discharge' policy shall be applied for all activities to be conducted at Sha Chau;	construction phase	
			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. 		
			At the airport island side of the drilling works, the following measures shall be applied for treatment of wastewater:	Within construction site / During	
			 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 	construction phase	
			 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. 		
			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; 		1
			 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:	Project Site Area /	I
			 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; 	Construction Phase	
			 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. 		
10.5.1.3	7.1	-	The following practices should be performed to achieve waste reduction include:	Project Site Area /	T
			 Use of steel or aluminium formworks and falseworks for temporary works as far as practicable; 	Construction Phase	
			 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; 		



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	1
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	Ι
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; 	-	1
			 Good housekeeping should be maintained at all times at the sediment treatment facility and storage area; 	-	1
			 Treated and untreated sediment should be clearly separated and stored separately; and 	_	1
			 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. 	-	1
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	Mitigation Measures Implemented?^
				Timing of completion of measures	
			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:	Project Site Area / Construction Phase	1
			 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. 		
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	8.1	2.32	For areas inaccessible during site reconnaissance survey	Project Site Area	
to 11.10.1.3			 Further site reconnaissance would be conducted once the areas are accessible in order to identify any land contamination concern for the areas. 	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. 	or measures	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):	Project Site Area / Construction Phase	N/A
			 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. 		
			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	Mitigation Measures Implemented?^
				Timing of completion of measures	
				HDD drilling works at HKIA	
12.7.2.3	9.1	2.30	Avoidance and Minimisation of Direct Impact to Egretry	During construction	1
and 12.7.2.6			 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; 	phase at Sheung Sha Chau Island	
			 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.		
12.7.2.5	9.1	2.30	Preservation of Nesting Vegetation	During construction	I
			 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. 	phase at Sheung Sha Chau Island	
12.7.2.4	9.1	2.30	Timing the Pipe Connection Works outside Ardeid's Breeding Season	During construction	1
and 12.7.2.6			 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. 	phase at Sheung Sha Chau Island	
12.10.1.1	9.3	-	Ecological Monitoring	at Sheung Sha Chau	I
			 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. 	Island	
			Marine Ecological Impact – Pre-construction Phase		
13.11.4.1	10.2.2	-	 Pre-construction phase Coral Dive Survey. 	HKIAAA artificial seawall	Ι
			Marine Ecological Impact – Construction Phase		
13.11.1.3	-	-	Minimisation of Land Formation Area	Land formation	I
to 13.11.1.6			 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. 	footprint / during detailed design phase to completion of construction	
13.11.1.7	-	2.31	Use of Construction Methods with Minimal Risk/Disturbance	During construction	
to 13.11.1.10			 Use of non-dredge method for the main land formation and ancillary works including the diversion of the aviation fuel pipeline to the AFRF; 	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; 		Ι
			 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); 	-	1
			 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. 		Ι
13.11.2.1	-	-	Mitigation for Indirect Disturbance due to Deterioration of Water Quality	All works area during	
to 13.11.2.7			 Water quality mitigation measures during construction phases include consideration of alternative construction methods, deployment of silt curtain and good site practices; 	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); 		Ι
			 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	All works area during	I
			 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; 	the construction phase	
			 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. 		
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	Mitigation Measures
				Timing of completion of 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
13.11.5.13 knot speed limit to apply for the part-journeys that cross high CWD abunda indicatively shown in Drawing No. MCL/P132/EIA/13-023 of the EIA Report northerly route and the portion of routings to be subject to the speed limit of prior to commencement of construction based on the future review of up-to EM&A data and taking reference to changes in total SkyPier HSF numbers		 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 	Around coastal works area during construction phase	I
			use during the land formation works.		



EIA Ref. EM&A EP Ref. 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	10.6.1	-	Construction Vessel Speed Limits and Skipper Training	All areas north and	I	
to 13.11.5.23			 A speed limit of 10 knots should be strictly observed for construction vessels at areas with the highest CWD densities; and 	west of Lantau Island during construction		
		 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. 	phase			
			Fisheries Impact – Construction Phase			
14.9.1.2 to	-		Minimisation of Land Formation Area	Land formation	I	
14.9.1.5		 Minimise the overall size of the land formation needed for the additional facilities to minimise the overall loss of habitat for fisheries resources. 	footprint / during detailed design phase to completion of construction			
14.9.1.6	-	-	Use of Construction Methods with Minimal Risk/Disturbance	During construction		
			 Use of non-dredge method for the main land formation and ancillary works including the diversion of the aviation fuel pipeline to the AFRF; 	phase at marine works area	1	
			 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; 		1	
			 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	All works area during	I	
			 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; 	the construction phase		
			 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.			



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion	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. 	of measures 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); 	_		
		 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	I
Table 15.6	12.3	-	CM2 - Reduction of construction period to practical minimum.	Completion of works. 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	Mitigation Measures
		Timing of completion of 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;	I
				Upon handover and completion of works. – may be disassembled in phases	
Table 15.6	12.3	-	CM6 - Avoidance of excessive height and bulk of site buildings and structures.	New passenger concourse, terminal 2 expansion and other proposed airport related buildings and structures under the project;	N/A
				Upon handover and completion of works.	
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;	I
				Upon handover and completion of works. – may be disassembled in phases	
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	All existing trees to be retained;	I
			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.	Upon handover and completion of works.	
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	All existing trees to be affected by the works;	Ι
			necessary tree root and crown preparation periods shall be allowed in the project programme.	Upon handover and completion of works.	
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



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

Notes:

I= implemented where applicable;

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

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

Appendix B. Monitoring Schedule

Monitoring Schedule of This Reporting Period

Jul-20

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1	2 Site Inspection	3 Site Inspection	4
				WQ General & Regular DCM mid-ebb: 10:50 mid-flood: 17:47	,	WQ General & Regular DCM mid-ebb: 12:23 mid-flood: 19:41
5	6 Site Inspection	7 Site Inspection	8 Site Inspection	9 Site Inspection	10 Site Inspection	11
	CWD Survey (Vessel) AR1A, AR2 NM1A, NM4, NM5, NM6	CWD Survey (Land-based)	CWD Survey (Vessel)	CWD Survey (Vessel)	CWD Survey (Vessel)	AR1A, AR2
		WQ General & Regular DCM mid-ebb: 14:33 mid-flood: 07:27		WQ General & Regular DCM mid-ebb: 15:52 mid-flood: 08:51		WQ General & Regular DCM mid-ebb: 17:06 mid-flood: 10:24
12	13 Site Inspection	14 Site Inspection	15 Site Inspection	16 Site Inspection	17 Site Inspection	18
	CWD Survey (Vessel) NM4, NM6		CWD Survey (Land-based)		AR1A, AR2 NM1A, NM5	
		WQ General & Regular DCM mid-ebb: 08:36 mid-flood: 14:02		WQ General & Regular DCM mid-ebb: 10:15 mid-flood: 16:55		WQ General & Regular DCM mid-ebb: 11:33 mid-flood: 18:40
19	20 Site Inspection	21 Site Inspection	22 Site Inspection	23 Site Inspection	24 Site Inspection	25
	CWD Survey (Vessel)	CWD Survey (Vessel)	CWD Survey (Vessel)	AR1A, AR2 NM1A, NM4, NM5, NM6		
		WQ General & Regular DCM mid-ebb: 13:35		WQ General & Regular DCM mid-ebb: 14:59		WQ General & Regular DCM mid-ebb: 16:27
26	27	mid-flood: 06:25	29	mid-flood: 07:59 30	31	mid-flood: 09:39
	Site Inspection	Site Inspection	Site Inspection AR1A, AR2 NM1A, NM4, NM5, NM6	Site Inspection	Site Inspection	
		WQ General & Regular DCM mid-ebb: 07:18 mid-flood: 13:31		WQ General & Regular DCM mid-ebb: 09:37 mid-flood: 16:54		
		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 Prima NM5/AR2 - Village House, Tin Sum NM6 - House No. 1, Sha Lo Wan	iry School		

Tentative Monitoring Schedule of Next Reporting Period

Aug-20

Sunday Monday Tuesday Wednesday Thursday Friday	
	Saturday
	1
	WQ General & Regular DCM
	mid-ebb: 11:26
	mid-flood: 18:54
2 3 4 5 6 7	8
Site Inspection Site Inspection Site Inspection Site Inspection	
CWD Survey (Vessel)	
AR1A, AR2	AR1A, AR2
NM4, NM6 NM1A, NM5	74(17),74(2
WQ General & Regular DCM WQ General & Regular DCM	WQ General & Regular DCM
mid-ebb: 13:36 mid-ebb: 14:49	mid-ebb: 15:51
mid-flood: 06:36 mid-flood: 07:59	mid-flood: 09:20
9 10 11 12 13 14	15
Site Inspection Site Inspection Site Inspection Site Inspection	
CWD Survey (Vessel) CWD Survey (Vessel)	
ARIA AR2	
NM1A, NM4, NM5, NM6	
WQ General & Regular DCM WQ General & Regular DCM	WQ General & Regular DCM
mid-ebi: 17:37 mid-ebi: 16:40 mid-ebi: 16:40 mid-ebi: 17:37	mid-ebb: 10:16
mid-flood: 11:56 mid-flood: 15:26	mid-flood: 17:46
16 17 18 19 20 21	22
Site Inspection Site Inspection Site Inspection Site Inspection Site Inspection	
CWD Survey (Vessel, Land-based) CWD Survey (Vessel) CWD Survey (Land-based)	
NM4, NM6 AR1A, AR2	
NM1A, NM5	
WQ General & Regular DCM WQ General & Regular DCM	WQ General & Regular DCM
	mid-ebb: 15:24
	mid-ebb: 15:24 mid-flood: 08:48
mid-ebb: 12:34 mid-ebb: 14:00	mid-flood: 08:48
mid-ebb: 12:34 mid-ebb: 14:00 mid-flood: 05:29 mid-flood: 07:09	
mid-ebb: 12:34 mid-flood: mid-ebb: 14:00 mid-flood: 14:00 07:09 23 24 25 26 27 28	29
Mid-ebb: 12:34 mid-flood: mid-ebb: 14:00 mid-flood: 23 24 25 26 27 28 Site Inspection Site Inspection Site Inspection Site Inspection Site Inspection	
23 24 25 26 27 28 Site Inspection CWD Survey (Vessel) Site Inspection Site Inspection Site Inspection Site Inspection	
mid-ebb: 12:34 mid-flood: mid-ebb: 14:00 mid-flood: 23 24 25 26 27 28 Site Inspection Site Inspection Site Inspection Site Inspection Site Inspection	
23 24 Site Inspection CWD Survey (Vessel) 25 Site Inspection CWD Survey (Vessel) 26 Site Inspection Site Inspection 27 Site Inspection Site Inspection 28 Site Inspection	29
23 24 Site Inspection CWD Survey (Vessel) 25 Site Inspection WQ General & Regular DCM 26 Site Inspection Site Inspection 27 Site Inspection Site Inspection 28 Site Inspection WQ General & Regular DCM WQ General & Regular DCM WQ General & Regular DCM	29 WQ General & Regular DCM
23 24 Site Inspection CWD Survey (Vessel) 25 Site Inspection CWD Survey (Vessel) 26 Site Inspection AR1A, AR2 NM1A, NM4, NM5, NM6 27 Site Inspection Site Inspection 28 Site Inspection WQ General & Regular DCM mid-ebb: MQ General &	29 WQ General & Regular DCM mid-ebb: 10:22
23 24 Site Inspection CWD Survey (Vessel) 25 Site Inspection CWD Survey (Vessel) 26 Site Inspection Site Inspection 27 Site Inspection 28 Site Inspection WQ General & Regular DCM mid-flood: Mid-flood: 15:44	29 WQ General & Regular DCM
Z3 Z4 Site Inspection CWD Survey (Vessel) Z5 Site Inspection CWD Survey (Vessel) Z6 Site Inspection CWD Survey (Vessel) Z6 Site Inspection AR1A, AR2 NM1A, NM4, NM5, NM6 Z7 Site Inspection Site Inspection Z8 Site Inspection WQ General & Regular DCM mid-ebb: MQ Gener	29 WQ General & Regular DCM mid-ebb: 10:22
23 24 Site Inspection CWD Survey (Vessel) 25 Site Inspection CWD Survey (Vessel) 26 Site Inspection AR1A, AR2 NM1A, NM4, NM5, NM6 27 Site Inspection WQ General & Regular DCM mid-ebb: 17:55 mid-flood: 28 Site Inspection 30 31 Notes:	29 WQ General & Regular DCM mid-ebb: 10:22
23 24 Site Inspection CWD Survey (Vessel) 25 Site Inspection CWD Survey (Vessel) 26 Site Inspection AR1A, AR2 NM1A, NM4, NM5, NM6 27 Site Inspection Site Inspection 28 Site Inspection 30 31 Notes: CWD - Chinese White Dolphin	29 WQ General & Regular DCM mid-ebb: 10:22
23 24 Site Inspection CWD Survey (Vessel) 25 Site Inspection CWD Survey (Vessel) 26 Site Inspection AR1A, AR2 NM1A, NM4, NM5, NM6 27 Site Inspection WQ General & Regular DCM mid-ebb: mid-flood: 28 Site Inspection 30 31 Notes: CWD - Chinese White Dolphin 000000000000000000000000000000000000	29 WQ General & Regular DCM mid-ebb: 10:22
23 24 Site Inspection CWD Survey (Vessel) 25 Site Inspection CWD Survey (Vessel) 26 Site Inspection CWD Survey (Vessel) 26 Site Inspection AR1A, AR2 NM1A, NM4, NM5, NM6 27 Site Inspection WQ General & Regular DCM mid-ebb: 07:54 mid-flood: 28 Site Inspection CWD Survey (Vessel) 30 31 Notes: CWD - Chinese White Dolphin Array Station MIA/AR1A - Man Tung Road Park NM4 - Ching Chung Hau Po Woon Primary School	29 WQ General & Regular DCM mid-ebb: 10:22
23 24 Net-fload: 25 Site Inspection CWD Survey (Vessel) 25 Site Inspection CWD Survey (Vessel) 26 Site Inspection AR1A, AR2 NM1A, NM4, NM5, NM6 27 Site Inspection 28 Site Inspection 30 31 Notes: CWD - Chinese White Dolphin Air quality and Noise Monitoring Station NM1A/AR1A - Man Tung Road Park NM1-Ching Chung Hau Po Woon Primary School NM4-Ching Chung Hau Po Woon Primary School VM1A/AR1A - Valiage House, Tin Sum	29 WQ General & Regular DCM mid-ebb: 10:22
23 24 Site Inspection CWD Survey (Vessel) 25 Site Inspection CWD Survey (Vessel) 26 Site Inspection CWD Survey (Vessel) 26 Site Inspection Mid-ebb: Site Inspection 27 Site Inspection 28 Site Inspection 30 31 Notes: CWD - Chinese White Dolphin Air quality and Noise Monitoring Station NM1A, NM4, NM5, NM6 WQ General & Regular DCM mid-ebb: 12:03 WU General & Regular DCM mid-ebb: 15:44	29 WQ General & Regular DCM mid-ebb: 10:22
23 24 Net-fload: 25 Site Inspection CWD Survey (Vessel) 25 Site Inspection CWD Survey (Vessel) 26 Site Inspection AR1A, AR2 NM1A, NM4, NM5, NM6 27 Site Inspection 28 Site Inspection 30 31 Notes: CWD - Chinese White Dolphin Air quality and Noise Monitoring Station NM1A/AR1A - Man Tung Road Park NM1-Ching Chung Hau Po Woon Primary School NM4-Ching Chung Hau Po Woon Primary School VM1A/AR1A - Valiage House, Tin Sum	29 WQ General & Regular DCM mid-ebb: 10:22
23 24 Site Inspection CWD Survey (Vessel) 25 Site Inspection CWD Survey (Vessel) 25 Site Inspection WQ General & Regular DCM mid-ebb: 17:55 mid-flood: 26 Site Inspection AR1A, AR2 NM1A, NM4, NM5, NM6 27 Site Inspection WQ General & Regular DCM mid-ebb: 07:54 mid-flood: 28 Site Inspection 30 31 Notes: CWD - Chinese White Dolphin Air quality and Noise Monitoring Station WQ - Water Quality NM1A/AR1A - Man Tung Road Park NM4 - Ching Chung Hau Po Woon Primary School NM5/AR2 - Vilage House, Tin Sum NM6 - House No. 1, Sha Lo Wan	29 WQ General & Regular DCM mid-ebb: 10:22
23 24 Site Inspection CWD Survey (Vessel) 25 Site Inspection WQ General & Regular DCM mid-flood: 26 Site Inspection AR1A, AR2 NM1A, NM4, NM5, NM6 27 Site Inspection WQ General & Regular DCM mid-flood: 28 Site Inspection Site Inspection 30 31 Notes: CWD - Chinese White Dolphin Air quality and Noise Monitoring Station NM6-House No. 1, Sha Lo Wan WQ - Water Quality 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	29 WQ General & Regular DCM mid-ebb: 10:22

Appendix C. Monitoring Results

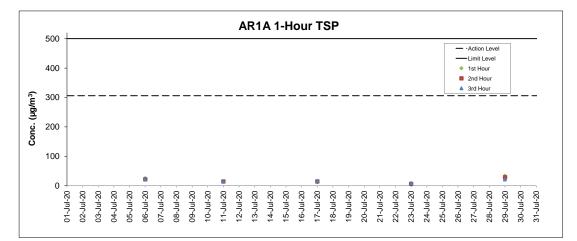
Air Quality Monitoring Results

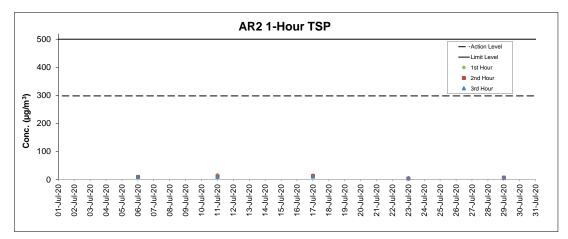
1-hour TSP Results Station: AR1A- Man Tung Road Park

Date	Time	Weather	Wind Speed (m/s)	Wind Direction (deg)	1-hr TSP (μg/m ³)	Action Level (μg/m ³)	Limit Level (µg/m ³)
06-Jul-20	13:20	Sunny	7.5	233	26	306	500
06-Jul-20	14:20	Sunny	7.8	227	22	306	500
06-Jul-20	15:20	Sunny	7.2	223	22	306	500
11-Jul-20	13:35	Sunny	6.1	200	14	306	500
11-Jul-20	14:35	Sunny	6.1	190	15	306	500
11-Jul-20	15:35	Sunny	6.7	198	14	306	500
17-Jul-20	14:09	Sunny	8.6	227	13	306	500
17-Jul-20	15:09	Sunny	6.4	205	15	306	500
17-Jul-20	16:09	Sunny	8.1	222	17	306	500
23-Jul-20	08:40	Sunny	1.7	27	8	306	500
23-Jul-20	09:40	Sunny	2.5	258	7	306	500
23-Jul-20	10:40	Sunny	1.7	280	9	306	500
29-Jul-20	13:03	Cloudy	2.2	255	34	306	500
29-Jul-20	14:03	Cloudy	2.2	variale	29	306	500
29-Jul-20	15:03	Cloudy	5.3	63	22	306	500

1-hour TSP Results

Station: AR2- Villa		um					
Date	Time	Weather	Wind Speed (m/s)	Wind Direction (deg)	1-hr TSP (μg/m³)	Action Level (μg/m ³)	Limit Level (µg/m³)
06-Jul-20	09:46	Sunny	5.0	228	10	298	500
06-Jul-20	10:46	Sunny	6.7	226	9	298	500
06-Jul-20	11:46	Sunny	6.4	223	9	298	500
11-Jul-20	09:49	Sunny	6.7	183	16	298	500
11-Jul-20	10:49	Sunny	6.7	201	11	298	500
11-Jul-20	11:49	Sunny	6.1	221	9	298	500
17-Jul-20	09:35	Sunny	5.8	202	15	298	500
17-Jul-20	10:35	Sunny	5.8	205	12	298	500
17-Jul-20	11:35	Sunny	5.0	225	10	298	500
23-Jul-20	13:15	Sunny	6.1	255	5	298	500
23-Jul-20	14:15	Sunny	6.1	247	3	298	500
23-Jul-20	15:17	Sunny	4.4	262	5	298	500
29-Jul-20	09:19	Sunny	2.2	281	6	298	500
29-Jul-20	10:19	Sunny	3.3	305	6	298	500
29-Jul-20	11:19	Sunny	2.8	291	6	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	Measured	15/4)
Date	weather	Time	L ₁₀ dB(A)	L ₉₀ dB(A)	L _{eq(30mins)} dB(A)
06-Jul-20	Sunny	15:25	69.5	51.0	
06-Jul-20	Sunny	15:30	70.3	52.8	
06-Jul-20	Sunny	15:35	71.2	54.9	71
06-Jul-20	Sunny	15:40	71.9	52.2	/1
06-Jul-20	Sunny	15:45	72.1	53.5	
06-Jul-20	Sunny	15:50	68.5	53.8	
17-Jul-20	Sunny	15:12	74.1	51.2	
17-Jul-20	Sunny	15:17	71.7	50.9	
17-Jul-20	Sunny	15:22	70.5	52.2	73
17-Jul-20	Sunny	15:27	73.8	65.7	/3
17-Jul-20	Sunny	15:32	73.7	61.9	
17-Jul-20	Sunny	15:37	71.7	54.9	
23-Jul-20	Sunny	14:18	68.4	61.4	
23-Jul-20	Sunny	14:23	62.9	55.3	
23-Jul-20	Sunny	14:28	62.1	57.3	67
23-Jul-20	Sunny	14:33	61.8	56.6	07
23-Jul-20	Sunny	14:38	68.4	60.6	
23-Jul-20	Sunny	14:43	68.3	62.2	
29-Jul-20	Cloudy	13:31	69.4	50.9	
29-Jul-20	Cloudy	13:36	69.9	51.9]
29-Jul-20	Cloudy	13:41	70.3	51.4	70
29-Jul-20	Cloudy	13:46	72.0	54.1	
29-Jul-20	Cloudy	13:51	68.3	57.0]
29-Jul-20	Cloudy	13:56	70.5	64.7	

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	Measured	1 10(4)
Date			L ₁₀ dB(A)	L ₉₀ dB(A)	L _{eq(30mins)} dB(A)
06-Jul-20	Sunny	13:41	63.9	57.9	
06-Jul-20	Sunny	13:46	60.6	55.6	
06-Jul-20	Sunny	13:51	59.0	54.9	63
06-Jul-20	Sunny	13:56	64.3	56.4	05
06-Jul-20	Sunny	14:01	62.4	56.6	
06-Jul-20	Sunny	14:06	61.4	57.3	
13-Jul-20	Sunny	10:57	61.9	55.2	
13-Jul-20	Sunny	11:02	59.8	55.7	
13-Jul-20	Sunny	11:07	62.7	55.4	61
13-Jul-20	Sunny	11:12	59.2	55.3	10
13-Jul-20	Sunny	11:17	59.9	55.9	
13-Jul-20	Sunny	11:22	60.5	55.7	
23-Jul-20	Sunny	13:01	61.1	56.9	
23-Jul-20	Sunny	13:06	62.0	57.3	
23-Jul-20	Sunny	13:11	61.9	57.4	64
23-Jul-20	Sunny	13:16	63.6	59.1	04
23-Jul-20	Sunny	13:21	63.6	58.0	
23-Jul-20	Sunny	13:26	60.9	57.6	
29-Jul-20	Cloudy	14:20	62.5	56.3	
29-Jul-20	Cloudy	14:25	63.1	56.7	
29-Jul-20	Cloudy	14:30	61.3	57.0	64
29-Jul-20	Cloudy	14:35	66.9	57.5	04
29-Jul-20	Cloudy	14:40	73.8	57.2]
29-Jul-20	Cloudy	14:45	70.2	58.6	

Remarks:

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

Noise Measurement Results

Station: NM5- Village House, Tin Sum

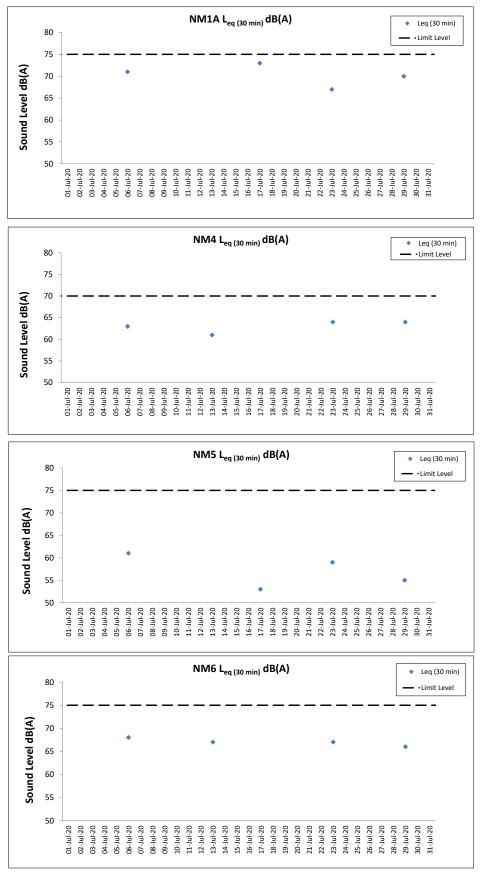
Date	Weather	Time	Measured	Measured	1 19(4)
Date	weather	Time	L ₁₀ dB(A)	L ₉₀ dB(A)	L _{eq(30mins)} dB(A)
06-Jul-20	Sunny	10:34	58.9	54.7	
06-Jul-20	Sunny	10:39	56.5	54.1	
06-Jul-20	Sunny	10:44	59.6	54.7	61
06-Jul-20	Sunny	10:49	67.0	55.4	10
06-Jul-20	Sunny	10:54	55.8	53.1	
06-Jul-20	Sunny	10:59	64.6	53.5	
17-Jul-20	Sunny	9:38	49.3	43.1	
17-Jul-20	Sunny	9:43	59.1	41.1	
17-Jul-20	Sunny	9:48	50.3	41.5	53
17-Jul-20	Sunny	9:53	55.9	41.2	55
17-Jul-20	Sunny	9:58	46.6	41.5	
17-Jul-20	Sunny	10:03	44.9	41.2	
23-Jul-20	Sunny	13:19	54.9	51.3	
23-Jul-20	Sunny	13:24	54.2	51.5	
23-Jul-20	Sunny	13:29	62.1	52.3	59
23-Jul-20	Sunny	13:34	62.9	51.6	59
23-Jul-20	Sunny	13:39	61.4	51.9	
23-Jul-20	Sunny	13:44	55.3	51.4	
29-Jul-20	Cloudy	9:19	51.8	45.0	
29-Jul-20	Cloudy	9:24	49.9	46.1]
29-Jul-20	Cloudy	9:29	51.2	46.0	55
29-Jul-20	Cloudy	9:34	53.7	45.8	35
29-Jul-20	Cloudy	9:39	60.7	45.2]
29-Jul-20	Cloudy	9:44	49.3	45.9	

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	Measured	1 mm
Date	weather	Time	L ₁₀ dB(A)	L ₉₀ dB(A)	L _{eq(30mins)} dB(A)
06-Jul-20	Sunny	15:46	71.3	55.2	
06-Jul-20	Sunny	15:51	73.6	53.0	
06-Jul-20	Sunny	15:56	67.2	54.3	68
06-Jul-20	Sunny	16:01	69.3	54.5	00
06-Jul-20	Sunny	16:06	72.7	54.7	
06-Jul-20	Sunny	16:11	67.2	52.7	
13-Jul-20	Sunny	9:38	64.5	47.6	
13-Jul-20	Sunny	9:43	70.6	48.7	
13-Jul-20	Sunny	9:48	53.9	44.1	67
13-Jul-20	Sunny	9:53	60.2	45.1	07
13-Jul-20	Sunny	9:58	63.1	45.3	
13-Jul-20	Sunny	10:03	55.9	47.0	
23-Jul-20	Sunny	15:47	71.3	57.4	
23-Jul-20	Sunny	15:52	62.8	54.9	
23-Jul-20	Sunny	15:57	67.1	54.8	67
23-Jul-20	Sunny	16:02	70.1	54.4	07
23-Jul-20	Sunny	16:07	66.9	55.8	
23-Jul-20	Sunny	16:12	65.3	55.6	
29-Jul-20	Cloudy	15:45	66.7	55.9	
29-Jul-20	Cloudy	15:50	67.7	57.5	
29-Jul-20	Cloudy	15:55	65.2	56.0	
29-Jul-20	Cloudy	16:00	67.0	52.8	66
29-Jul-20	Cloudy	16:05	65.8	53.8]
29-Jul-20	Cloudy	16:10	67.3	51.3	

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 July 20 during Mid-Ebb Tide

Water Qual	ity Monit	oring Resu	its on		02 July 20 du	uring Mid-E)																	
Monitoring	Weather	Sea	Sampling	Water	Sampling Depth (n	n)	Current Speed	Current	Water Temper	erature (°C)	I	эΗ	Salin	ity (ppt)	DO Sat (%		Dissolved Oxygen	Turbidity(led Solids g/L)	Total Alkalinity (ppm)	Coordinate HK Grid	Coordinate HK Grid	Chromiu (µg/L)	
Station	Condition	Condition	Time	Depth (m)		·/	(m/s)	Direction	Value A	Average	Value	Average	Value	Average	Value	Average	Value DA	Value	DA Value	DA	Value DA	(Northing)	(Easting)	Value	DA Value DA
					Surface	1.0	0.5	212 227	28.2 28.2	28.2	8.1 8.1	8.1	17.0	17.0	98.9 98.9	98.9	7.0	3.0 3.0	3	-	87 87			<0.2	0.9
C1	Cloudy	Moderate	10:36	8.2	Middle	4.1	0.6	179	27.6	27.6	8.1	8.1	18.9	18.9	93.4	93.2	6.6 6.8	3.7	36 5	4	90 00	815618	804265	<0.2	0.2 0.9 1.0
					Bottom	4.1 7.2	0.6	192 209	27.6 25.8	25.8	8.1 8.0	8.0	18.9 27.4	27.4	93.0 66.3	66.3	6.6 4.6 4.6	3.7 3.9	4 5		91 92			<0.2 <0.2	1.0
						7.2	0.7	211 168	25.8		8.0 7.9		27.4 13.3		66.3 85.6		4.6 4.0 6.1	4.1 2.7	4		92 88			<0.2	1.1 0.9
					Surface	1.0 5.7	1.0	181 161	28.8	28.8	7.9 7.9	7.9	13.3 21.9	13.3	85.3 69.2	85.5	6.1 4.9 5.5	2.7 3.2	5	7	89			<0.2	1.0
C2	Cloudy	Moderate	11:58	11.4	Middle	5.7	0.8	176	27.1	27.1	7.9	7.9	21.8	21.8	68.9	69.1	4.9	3.2	3.4 5	5	92	825702	806923	<0.2	1.0
					Bottom	10.4	0.3	141 148	26.5 26.5	26.5	7.9 7.9	7.9	25.0 24.9	25.0	65.2 65.5	65.4	4.6 4.6 4.6	4.6 4.3	4		93 94			<0.2 <0.2	1.0
					Surface	1.0	0.7	101 109	27.6 27.6	27.6	8.1 8.1	8.1	21.1 21.0	21.1	99.4 99.6	99.5	7.0	2.0 1.9	6	-	88 89			<0.2	0.6
СЗ	Cloudy	Moderate	09:43	12.3	Middle	6.2	0.3	100	26.5	26.5	8.0	8.0	25.3		81.4	81.2	5.7 5.7 6.4	2.2	3.8 6	6	90 90	822112	817789	<0.2	<0.2 0.8 0.7
					Bottom	6.2 11.3	0.3	109 47	26.5 25.0	25.0	8.0 7.9	7.9	25.3 30.1	20.1	81.0 66.8	67.0	4.7 4.7	2.1 7.0	5		90 92			<0.2 <0.2	0.8
						11.3 1.0	0.2	50 54	25.0	28.4	7.9 8.2		30.2 16.1		67.2 102.3		4.7 4.7 7.3	7.6 3.6	5		93 89			<0.2 <0.2	0.7
					Surface	1.0	0.1	57	28.4	20.4	8.2	8.2	16.1	16.1	102.3	102.3	7.3 7.3	3.6	4	7	89			<0.2	0.9
IM1	Cloudy	Moderate	10:56	5.1	Middle	-	-	-	-	-	-	-	-		-	-	-	- 4.7	4.1 -	4	90	817972	807113	- <	<0.2 - 0.8
					Bottom	4.1 4.1	0.2	13 13	26.4	26.4	8.0 8.0	8.0	25.1 25.2	25.1	66.3 66.3	66.3	4.6 4.6 4.6	4.7	4		91 90			<0.2 <0.2	0.8
					Surface	1.0	0.4	239 257	27.1 27.1	27.1	8.0 8.0	8.0	21.5 21.5	21.5	74.5 74.4	74.5	5.3	3.8 3.9	5	-	86 86			<0.2	0.9
IM2	Rainy	Moderate	11:04	7.0	Middle	3.5 3.5	0.1	222 227	25.7 25.7	25.7	8.0 8.0	8.0	27.5 27.5	27.5	59.8 59.8	59.8	4.2 4.2	5.5 5.5	5.4 4	4	89 90 89	818151	806174	<0.2 <0.2	<0.2 0.8 0.9
					Bottom	6.0	0.1	305	25.6	25.6	8.0	8.0	28.1	28.1	60.7	60.8	4.2 4.2	7.0	4	1	90			<0.2	0.9
					Surface	6.0 1.0	0.1	329 279	25.6	28.2	8.0 8.1	8.1	28.1 17.3	17.2	60.8 94.4	94.3	4.Z 6.7	6.9 3.3	4		91 86			<0.2 <0.2	0.9
						1.0 3.6	0.2	302 280	28.2		8.1 7.9		17.3 26.6		94.2 58.6		6.7 4.1 5.4	3.4 4.9	4 5	+ _	86 90			<0.2	0.9
IM3	Rainy	Moderate	11:11	7.2	Middle	3.6 6.2	0.2	283 278	25.9	26.0	7.9 7.9	7.9	26.6 27.6		58.4 55.8	58.5	4.1 3.9 2.0	5.1 7.1	5.1 6	5	90 89 90 91	818799	805592	<0.2	<0.2 0.9 0.9
					Bottom	6.2	0.1	285	25.7	25.7	7.9	7.9	27.6		55.9	55.9	3.9 3.9	6.9	6		91			<0.2	0.9
					Surface	1.0	0.9	169 180	28.6	28.6	8.2 8.2	8.2	13.9 13.9		101.0 101.0	101.0	7.2	3.5 3.5	2	1	85 86			<0.2 <0.2	0.9
IM4	Cloudy	Moderate	11:20	8.3	Middle	4.2	0.9	176 184	27.9 27.9	27.9	8.1 8.1	8.1	18.1 18.1	18.1	94.6 94.6	94.6	6.7 6.7	3.7 3.7	4.0 3	3	89 90 89	819741	804610	<0.2 <	<0.2 0.9 0.9
					Bottom	7.3 7.3	0.9	192 204	26.0	26.8	8.0 8.0	8.0	23.2	23.2	75.0 75.1	75.1	5.3 5.3 5.3	4.6	3	1	91 91			<0.2	0.9
					Surface	1.0	0.8	188	28.5	28.5	8.1	8.1	14.4		93.8	93.7	6.7	3.3	3		85			<0.2	0.9
IM5	Cloudy	Moderate	11:31	7.5	Middle	1.0 3.8	0.9	198 210	28.5	27.5	8.1 8.0	8.0	14.0 19.7	19.6	93.6 81.5	81.5	6.7 5.8 6.3	3.3 5.5	5.3 3	3	85 89 88	820720	804863	<0.2 <0.2	<0.2 0.9 0.9
IWIS	Cloudy	woderate	11.51	7.5		3.8 6.5	0.8	211 220	27.4		8.0 8.0		19.6 23.9		81.4 69.1		5.8 4.9	5.6 7.0	3.3 <u>4</u> 4		89 90	820720	004003	<0.2	0.9 0.9
					Bottom	6.5 1.0	0.5	230	26.6	26.6	8.0	8.0	23.9	23.9	69.2	69.2	4.9 4.9	7.3	3		90			<0.2	0.9
					Surface	1.0	0.5	224 231	28.6	28.6	8.1 8.1	8.1	14.6 14.5	14.6	99.9 99.8	99.9	7.2 7.1 6.7	3.4	4	1	86 86			<0.2	0.8
IM6	Rainy	Moderate	11:40	7.2	Middle	3.6 3.6	0.5	259 269	27.7 27.7	27.7	8.1 8.1	8.1	19.3 18.8	19.0	89.6 89.4	89.5	6.3 6.3	3.6 3.6	4.1 4	4	89 90 89	821047	805849	<0.2 <	<0.2 1.0 0.9
					Bottom	6.2 6.2	0.6	268 276	26.4 26.4	26.4	8.0 8.0	8.0	24.8 24.8	24.8	63.1 63.2	63.2	4.4 4.4	5.3 5.4	4	1	90 91			<0.2	0.9
					Surface	1.0	0.3	282	28.5	28.5	8.1	8.1	14.9	14.9	99.5	99.5	7.1	3.1	4		86			<0.2	0.9
IM7	Rainy	Moderate	11:49	8.1	Middle	1.0 4.1	0.3	283 259	28.5 27.1	27.1	8.1 8.0	8.0	14.9 21.8		99.5 72.1	72.1	7.1 5.1 6.1	3.1 4.8	4.9 4	4	86 90 89	821349	806812	<0.2 <0.2	<0.2 0.9 0.9
1117	rally	wouchate	11.43	0.1		4.1 7.1	0.4	266 259	27.1		8.0 8.0		21.8 25.9		72.0 59.8		5.1 4.2	4.9 6.6	4.9 4	+ "	90 91	021343	000012	<0.2 <	0.9 0.9
					Bottom	7.1	0.3	275	26.2	26.2	8.0	8.0	25.9	25.9	59.9	59.9	4.2 4.2	6.6	4	1	91			<0.2	0.9
					Surface	1.0	0.2	161 169	28.4	28.4	8.0 8.0	8.0	16.6 16.6		97.4 97.1	97.3	6.9 6.9 6.0	1.8 1.8	5	1	89 89			<0.2 <0.2	0.8
IM8	Rainy	Moderate	11:29	7.3	Middle	3.7 3.7	0.3	182 185	27.2 27.2	27.2	7.8 7.8	7.8	21.4 21.5	21.4	71.2 70.8	71.0	5.0 5.0	3.2 3.3	3.8 4 5	5	91 92 92	821830	808128	<0.2 <	<0.2 0.9 0.9
					Bottom	6.3 6.3	0.2	237 254	27.0	27.0	7.8 7.8	7.8	22.4	22.4	68.0 68.2	68.1	4.8 4.8 4.8	6.4 6.3	4	7	94 94			<0.2	0.9
DA: Depth-Aver	anad				I	0.0	V.2	207	27.0		1.0		44.4	t	50.2			0.0	1 *	<u> </u>	1 27 1		1	50.2	0.0

DA: Depth-Averaged

Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher Value exceeding Action Level is underlined; <u>Value exceeding Limit Level is bolded and underlined</u>

Expansion of Hong Kong International Airport into a Three-Runway System Water Quality Monitoring Water Quality Monitoring Results on 02 July 20 during Mid-Ebb Tide

Water Qua	ity Monito	oring Resu	lts on		02 July 20	during Mid-	Ebb Tide	•																			
Monitoring	Weather	Sea	Sampling	Water	Sampling Dep	h (m)	Current Speed	Current	Water Te	emperature (°C)		pН	Sal	nity (ppt)	DO Satura (%)	ition	Dissolved Oxygen	Turbidity	(NTU)	Suspende (mg			Alkalinity pm)	Coordinate HK Grid	Coordinate HK Grid	Chromium (µg/L)	Nickel (µg/L)
Station	Condition	Condition	Time	Depth (m)			(m/s)	Direction	Value	Average	Value	Average		Average			Value DA	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)	Value DA	
					Surface	1.0	0.4	139 146	28.0 28.0	28.0	7.9 7.9	7.9	17.9 17.9	17.9	86.5 86.5		6.1 6.1 5.9	2.5 2.6		6 4		87 87				<0.2	0.8
IM9	Rainy	Moderate	11:22	7.0	Middle	3.5 3.5	0.4	132 142	27.7 27.7	27.7	7.9 7.9	7.9	19.1 19.0		79.5 79.5		5.6	3.0 3.0	3.2	6 5	5	91 91	90	822083	808787	<0.2 <0.2	0.9 0.9
					Bottom	6.0 6.0	0.2	92 94	27.0 26.9	27.0	7.8 7.8	7.8	22.4 22.6		71.9 72.1		5.1 5.1 5.1	4.1 4.1		4	ŀ	93 93	-			<0.2 <0.2	0.9
					Surface	1.0 1.0	0.8	116 117	28.4 28.4	28.4	8.0 8.0	8.0	16.0 16.0	16.0	91.0	0.8	6.5	2.2 2.2		6 5		88 88				<0.2 <0.2	0.8
IM10	Cloudy	Moderate	11:09	7.2	Middle	3.6	0.8	118 119	27.3	27.3	7.9	7.9	21.5	21.5	71 7	10	5.0 5.0	4.4	4.7	4	4	90 91	90	822408	809794	<0.2 <0.2 <0.2	0.0
					Bottom	6.2 6.2	0.5	97	27.0	27.0	7.9	7.9	22.5	22.5	60.9	0.0	4.9 4.9 4.9	7.4		3		91 92				<0.2	0.9
					Surface	1.0	0.9	113	28.1	28.1	7.9	7.9	17.8	17.8	86.7 8	64	6.1	2.3		4		87				<0.2	0.8
IM11	Cloudy	Moderate	10:55	8.2	Middle	1.0 4.1	0.9	120 112	28.1 27.5	27.5	7.9 7.9	7.9	17.8 20.6	20.6	74.8 7	10	6.1 5.3 5.7	2.3 3.1	4.7	3 5	5	87 90	90	822078	811439	<0.2 <0.2 <0.2	0.8
					Bottom	4.1 7.2	0.8	122 103	27.4 26.7	26.7	7.9 7.8	7.8	20.5 23.7	22.7	75.0 66.8	7.4	5.3 4.7 4.7	2.9 8.8		4		91 92				<0.2	0.8
					Surface	7.2	0.5	113 105	26.7 28.1	28.1	7.8 8.0	8.0	23.7		67.3		4.7 ^{4.7} 6.5	8.8 2.1		5		91 88				<0.2 <0.2	0.8
IM12	Olivertu		10.15			1.0 4.8	0.6	112 97	28.1 27.0		8.0 7.8		17.7 22.3		91.8		6.5 4.8 5.7	2.2 7.6	5.9	5 6	_	89 89		821478	812069	<0.2 <0.2 <0.2	0.8
IM12	Cloudy	Moderate	10:45	9.6	Middle	4.8 8.6	0.4	104 100	27.0 26.9	27.0	7.8 7.8	7.8	22.4 23.0	22.4	67.7	/.0	4.8	7.6 8.1	5.9	5 5	5	90 92	90	821478	812069	<0.2 <0.2	0.8
					Bottom	8.6 1.0	0.2	106	26.9 28.2	26.9	7.8 8.1	7.8	22.9 19.8	22.9	68.3 ⁶	8.2	4.8 4.8 7.2	8.0 2.5		5		92				<0.2	0.8
					Surface	1.0		-	28.2	28.2	8.1	8.1	19.8		102.6		7.2 7.2	2.5		5	-	-	1			-	-
SR1A	Cloudy	Calm	10:24	4.8	Middle	2.4	-		-	-	-	-	-	-	-	-	-	-	2.5	-	5	-		819977	812661	· ·	-
					Bottom	3.8 3.8	-	-	28.2 28.4	28.3	8.0 8.0	8.0	20.4 20.4	20.4	88.2	0.0	6.2 6.1 6.2	2.5 2.5		5 4		-				-	-
					Surface	1.0 1.0	0.3	83 89	27.7 27.7	27.7	8.0 8.0	8.0	20.2 20.4		91.3 9 91.1 9	1.2	6.4 6.4 6.4	3.0 3.1		4		90 91				<0.2 <0.2	0.8
SR2	Cloudy	Moderate	10:09	4.7	Middle	-	-	-	-	-	-	-	-	-	-			-	3.3	-	4	-	92	821460	814179	- <0.2	- 0.8
					Bottom	3.7 3.7	0.1	57 59	27.5 27.5	27.5	8.0 8.0	8.0	21.2 21.2		83.9 83.8	3.9	5.9 5.9	3.5 3.6		5 4		92 93	-			<0.2 <0.2	0.8
					Surface	1.0 1.0	0.2	185 199	28.2 28.2	28.2	8.0 8.0	8.0	16.9 16.9		94.2 9 93.9		6.7 6.7	2.1 2.2		3		-	-			-	-
SR3	Rainy	Moderate	11:36	8.5	Middle	4.3 4.3	0.2	177	27.2 27.2	27.2	7.9 7.8	7.8	21.7	21.7	71.3	14	5.0 5.0	3.2 3.1	4.2	3 4	4	-	-	822164	807574		
					Bottom	7.5	0.0	181 186	26.5 26.5	26.5	7.8	7.8	24.8	24.8	62.0	10	4.5 4.5 4.5	7.4		4	ļ	-	1				-
					Surface	1.0	0.1	227 245	28.1 28.1	28.1	8.1 8.1	8.1	18.0	19.0	00.0	0.2	6.4	3.6 3.6		5		-					-
SR4A	Cloudy	Calm	10:15	8.6	Middle	4.3	0.1	76	26.0	26.0	7.9	7.9	26.5	26.5	50 F		4.2 4.2 4.2	4.8	5.2	6 5	5	-	1.	817196	807788	-	-
					Bottom	7.6	0.1	66	25.8	25.8	7.9	7.9	27.3		58.8 5		4.1 4.1	7.3		5		-	1			-	-
					Surface	7.6	0.1	71 82	25.8 28.7	28.7	7.9 8.2	8.2	27.3		58.9 110.0 10	0.0	4.1 7.7	7.1 5.2		6		-	-				-
SR5A	Rainy	Calm	09:59	3.7	Middle	1.0	0.1	90	28.7	-	8.2		17.5		109.8		7.7 7.7	5.2 -	5.4	6	7	-		816612	810717	-	· ·
					Bottom	- 2.7	- 0.0	- 317	- 28.3	28.3	- 8.2	8.2	- 18.3		- 95.5 g		- 6.7 6.7	- 5.5		- 7		-				-	
					Surface	2.7 1.0	0.0	345 310	28.3 27.8	27.9	8.2 8.0	8.0	18.3 20.1		95.6	20	6.7 5.8	5.6 5.2		6		-					
SR6A	Claudu	Calm	00:17	4.0		1.0	0.0	310	27.9	-	8.0	0.0	20.1	20.1	82.9	3.0	5.8 5.8	5.1 -	5.7	8	7	-		817946	814733	-	-
SROA	Cloudy	Caim	09:17	4.0	Middle	- 3.0	- 0.1	- 175	- 27.0		- 8.0		- 23.4	-	- 73.0 _	-	5.1	- 6.2	5.7	-	· '	-		817946	814733	-	-
					Bottom	3.0 1.0	0.1	190 81	27.0 27.3	27.0	8.0 8.0	8.0	23.4 21.9	23.4	73.2	3.1	5.1 5.1 6.8	6.4 1.7		6		-					
					Surface	1.0 8.0	0.5	86	27.3	27.3	8.0 8.0	8.0	21.9	21.9	96.8 9		6.8 5.8 6.3	1.7		6	ţ	-	1				
SR7	Cloudy	Moderate	09:08	15.9	Middle	8.0 8.0 14.9	0.5	58 58 57	26.5	26.5	8.0	8.0	25.3	25.3	83.1 8	3.4 -	5.8	1.8	2.0	5 6 4	5	-	1 ·	823632	823734	-	
					Bottom	14.9	0.3 0.3	57 59	24.6 24.6	24.6	7.8	7.8	31.0 30.9	31.0	61.1	0.0	4.2 4.3 4.3	2.5 2.5		5	<u> </u>	-					-
					Surface	1.0 1.0	-	-	28.0 28.0	28.0	8.0 8.0	8.0	19.1 19.2		92.6 92.4 9		6.5 6.5 6.5	2.9 3.1		6 5	ţ	•					-
SR8	Rainy	Calm	10:37	5.1	Middle	-	-	-	-	-	-		-	-	-	-	-	-	3.2	-	5	-	•	820400	811636		
					Bottom	4.1 4.1	-	-	27.8 27.8	27.8	8.0 8.0	8.0	19.8 19.8		85.2 85.0		6.0 6.0	3.5 3.5		5 5		-				-	-
DA: Depth-Aver	- ded		·		•	•	• •																	•	•	· · · ·	

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 July 20 during during Mid-Flood Tide

Water Qua	lity Monito	oring Resu	lts on		02 July 20 dur	ring Mid-F	lood Ti	de																			
Monitoring Station	Weather	Sea	Sampling	Water	Sampling Depth (m)		Current Speed	Current Direction	Water Ter	mperature (°C)		pН	Salir	ity (ppt)		aturation (%)	Dissolve Oxygen	¹ Tu	bidity(N1		nded Solids mg/L)		Alkalinity pm)	Coordinate HK Grid	Coordinate HK Grid	Chron (µg/	
Station	Condition	Condition	Time	Depth (m)	,		(m/s)	Direction	Value	Average	Value	Average	e Value	Average	Value	Average	Value D			DA Valu	DA DA	Value	DA	(Northing)	(Easting)		
					Surface	1.0	0.6	47 48	29.3 29.3	29.3	8.2 8.2	8.2	10.1 10.2	10.2	104.0 103.9	104.0	7.5 7.5	. 4	6 6	6		87 88				<0.2 <0.2	0.9
C1	Fine	Moderate	17:18	7.9	Middle	4.0 4.0	0.4	35 36	27.8 27.8	27.8	8.1 8.1	8.1	19.2 19.2	19.2	88.3 88.2	88.3	6.2 6.2	4	7	5.4 4	5	90 90	90	815611	804268	<0.2 <0.2	<0.2 0.8 0.9
					Bottom	6.9 6.9	0.4	40 40	27.1	27.1	8.0 8.0	8.0	21.5 21.5	21.5	75.5 75.3	75.4	5.3 5.3 5		8	5	7	92 93	-			<0.2 <0.2	0.9
					Surface	1.0	0.5	188 192	29.5 29.5	29.5	8.1 8.1	8.1	10.8 10.8	10.8	99.9 99.6	99.8	7.2 7.2		5 4	4		86 87				<0.2 <0.2	1.1
C2	Cloudy	Moderate	16:03	11.1	Middle	5.6	0.1	134 139	27.4 27.3	27.4	7.8	7.8	19.7	19.7	68.3 68.2	68.3	4.8 4.9 6	6	1 0	7.6 6	6	89 90	89	825692	806939	<0.2	<0.2 1.0 1.0
					Bottom	10.1	0.3	350 322	26.5 26.6	26.6	7.8	7.8	24.5 24.6	24.6	60.3 60.2	60.3	4.2 4 4.2 4	2 1	.1	6	4	91 92				<0.2	1.0
					Surface	1.0	0.3	238	27.7	27.7	8.0 8.0	8.0	20.9	21.0	95.6 95.1	95.4	6.7	1	6 5	4	4	85 86	1			<0.2	0.6
C3	Cloudy	Moderate	18:01	11.5	Middle	5.8	0.6	256	26.0	26.0	7.8	7.8	26.5	26.6	66.5 66.3	66.4	4.7 5 4.6	/ 2	2	l.1 4	4	87 87	88	822109	817810	<0.2 <0.2 <0.2	<0.2 0.6 0.6
					Bottom	10.5 10.5	0.3	285	25.4	25.4	7.8	7.8	28.7	28.7	63.9 64.1	64.0	4.5 4.5 4.5	5 8	7 7	4	4	91 91				<0.2	0.7
					Surface	1.0	0.1	54 55	28.6	28.6	8.2	8.2	16.6	16.6	110.4 110.4	110.4	7.8	5	4	7	4	87				<0.2	0.6
IM1	Cloudy	Moderate	16:54	4.5	Middle	-	-	-	-	-	-		-		-	-	- 7	8		5.1 -	7	-	89	817955	807151		<0.2 - 0.7
					Bottom	3.5 3.5	0.0	95 101	28.2 28.2	28.2	8.2 8.2	8.2	18.0 18.1	18.0	108.7 108.6	108.7	7.7 7.7	7 6	6 9	8	4	90 90	1			<0.2 <0.2	0.6
					Surface	1.0	0.7	338 339	28.5	28.5	8.2 8.2	8.2	16.4	16.4	105.3 104.9	105.1	7.5	3	3 4	2	-	86 85				<0.2	0.7
IM2	Cloudy	Moderate	16:46	6.6	Middle	3.3	0.5	346 318	27.2	27.2	8.1 8.1	8.1	21.7	21.7	83.9 83.8	83.9	5.9 5.9	1 5	0	5.7 3	3	89 89	89	818155	806168	<0.2	<0.2 0.7 0.7
					Bottom	5.6	0.5	342 345	26.3	26.3	8.0 8.0	8.0	23.9	24.0	69.7 68.8	69.3	4.9 4.9 4.9	s ا	7	3	4	91 92				<0.2	0.6
					Surface	1.0	0.7	357 328	28.1 28.1	28.1	8.2 8.2	8.2	18.3	18.3	106.5 106.5	106.5	7.5	3	4 4	3		85 85				<0.2	0.8
IM3	Cloudy	Moderate	16:38	6.8	Middle	3.4	0.6	344 316	27.1 27.1	27.1	8.0 8.0	8.0	22.8	22.8	78.1 78.0	78.1	5.5 5.5	5 8	1	7.6 3	3	89 89	89	818802	805604	<0.2 <0.2	<0.2 0.6 0.7
					Bottom	5.8 5.8	0.5	328 337	25.8 25.8	25.8	8.0 8.0	8.0	27.5	27.5	59.5 59.7	59.6	4.2 4.2 4.2	2 1	.3	3	4	91 92				<0.2	0.7
					Surface	1.0	0.7	339 345	28.3 28.3	28.3	8.2	8.2	17.8	17.8	111.7	111.6	7.9	3	9	4	-	85 86				<0.2 <0.2	0.7
IM4	Cloudy	Moderate	16:27	7.6	Middle	3.8	0.7	332 348	27.5	27.5	8.1 8.1	8.1	21.4 21.3	21.3	87.9 87.7	87.8	6.2 7	1 5	2	5.4 <u>3</u>	3	89 89	89	819712	804610	<0.2	<0.2 0.7 0.7
					Bottom	6.6 6.6	0.6	338 341	26.3 26.3	26.3	8.0 8.0	8.0	25.5 25.5	25.5	67.0 67.1	67.1	4.7 4.7 4.7	7 7	3 2	3	4	91 92	-			<0.2	0.7
					Surface	1.0	0.4	339 343	29.0 29.0	29.0	8.2 8.2	8.2	14.1 14.2	14.1	109.4 109.4	109.4	7.8	3	9 0	3	_	85 85				<0.2 <0.2	0.9
IM5	Cloudy	Moderate	16:17	7.1	Middle	3.6 3.6	0.5	330 333	28.5 28.5	28.5	8.3 8.3	8.3	17.1	17.0	118.9 118.7	118.8	8.4 8.4 8.4	3	1	5.0 4	3	89 89	89	820718	804876	<0.2 <0.2	<0.2 0.9 0.9
					Bottom	6.1 6.1	0.6	339 344	26.5 26.5	26.5	8.0 8.0	8.0	24.9 24.9	24.9	70.8 71.0	70.9	5.0 5.0	0 7	8	3	7	92 92	-			<0.2 <0.2	0.9
					Surface	1.0 1.0	0.6	274 285	29.2 29.2	29.2	8.2 8.2	8.2	11.2 11.3	11.2	103.8 104.0	103.9	7.5		7 7	4	-	85 86	-			<0.2 <0.2	1.0
IM6	Rainy	Moderate	16:07	6.7	Middle	3.4 3.4	0.3	277 291	28.7 28.7	28.7	8.2 8.2	8.2	14.8 14.8	14.8	103.8 103.9	103.9	7.4	5 4	8	5.3 4		89 89	89	821073	805845	<0.2 <0.2	<0.2 0.9 0.9
					Bottom	5.7 5.7	0.2	269 284	28.5 28.5	28.5	8.2 8.2	8.2	16.0 16.0	16.0	102.8 102.8	102.8	7.3 7.3		2	4	7	91 92	-			<0.2 <0.2	0.9
					Surface	1.0	0.5	238 239	29.2 29.2	29.2	8.2 8.2	8.2	12.4	12.4	110.8 110.6	110.7	7.9	4	2	4	-	85 86				<0.2 <0.2	1.0
IM7	Cloudy	Moderate	16:03	8.0	Middle	4.0	0.5	237 242	28.9 29.0	29.0	8.2 8.2	8.2	13.8 13.8	13.8	110.3 110.3	110.3	7.9 7.9 7.9	9 3	0	6.0 4	4	89 89	89	821334	806824	<0.2	<0.2 1.0 1.1
					Bottom	7.0 7.0	0.3	238 257	28.1 28.1	28.1	8.1 8.1	8.1	17.5 17.5	17.5	93.8 93.9	93.9	6.7 6.7	- 9	9 9	5	7	91 91	-			<0.2 <0.2	1.2
					Surface	1.0	0.1	261 279	29.6 29.6	29.6	8.1 8.1	8.1	9.7	9.7	103.6 103.6	103.6	7.5	4	6 5	5	-	85 86				<0.2 <0.2	1.1
IM8	Cloudy	Moderate	16:27	7.1	Middle	3.6	0.1	262 282	29.3 29.3	29.3	8.0 8.0	8.0	11.3 11.3	11.3	101.9 101.7	101.8	7.3 7.3 7.3	4 3	5	5.0 5	5	89 89	89	821824	808131	<0.2 <0.2	<0.2 1.1 1.1
					Bottom	6.1 6.1	0.2	255 274	28.7	28.7	8.0 8.0	8.0	15.7	16.3	91.6 92.1	91.9	6.5 6.5	e 6	9	5	7	92 92	1			<0.2	1.0
DA: Dopth Ave	· · · ·				• •							*															

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 July 20 during during Mid-Flood Tide

Water Qual	ity Monit	oring Resu	lts on		02 July 20	during Mid-		de																			
Monitoring	Weather	Sea	Sampling	Water	Sampling Dept	h (m)	Current Speed	Current	Water Te	mperature (°C)		pН	Salin	ity (ppt)		aturation (%)	Dissolved Oxygen	Turbidity	NTU)	Suspende (mg/	d Solids L)	Total Alkali (ppm)	Coord HK 0		Coordinate HK Grid	Chromium (µg/L)	ⁿ Nickel (µg/L)
Station	Condition	Condition	Time	Depth (m)			(m/s)	Direction	Value	Average	Value	Average		Average	Value	Average	Value DA	Value	DA	Value	DA	Value D	A (Norti	ning)	(Easting)	Value DA	
					Surface	1.0 1.0	0.1	230 242	29.5 29.5	29.5	8.1 8.1	8.1	10.5 10.5	10.5	104.6 104.5	104.6	7.5 7.5 7.3	3.8 3.8		4 5		85 86			-	<0.2 <0.2	1.0
IM9	Cloudy	Moderate	16:34	6.4	Middle	3.2 3.2	0.1	262 268	29.0 28.9	29.0	8.0 8.0	8.0	13.6 13.6	13.6	98.5 98.5	98.5	7.0 7.1	3.9 4.1	4.2	5 5	5	88 89 8	9 822	92	808824	<0.2 <0.2	1.0
					Bottom	5.4 5.4	0.3	275 285	28.3 28.5	28.4	7.9	7.9	18.3 18.1	18.2	87.2 87.8	87.5	6.1 6.2 6.2	5.0 4.9		5 5		93 94				<0.2 <0.2	1.0
					Surface	1.0 1.0	0.1	326 333	29.6 29.6	29.6	8.1 8.1	8.1	10.7	10.7	108.1 107.7	107.9	7.8	3.8 3.8		4		86 87				<0.2 <0.2	1.0
IM10	Cloudy	Moderate	16:45	6.5	Middle	3.3 3.3	0.5	310 314	28.1 28.1	28.1	7.9 7.9	7.9	17.1	17.1	87.4 87.3	87.4	6.2 6.2 7.0	12.6 12.7	9.2	4	4	88 89	0 822	391	809776	<0.2 <0.2	11
					Bottom	5.5	0.4	293 295	27.8	27.8	7.9	7.9	19.4 19.4	19.4	80.7 80.6	80.7	5.7 5.7 5.7	11.0 11.2		4 5		94 94			-	<0.2	1.0
					Surface	1.0	0.4	318 337	29.0 29.0	29.0	8.1 8.1	8.1	14.1	14.1	105.9 105.7	105.8	7.5	2.5		4 4		86 86				<0.2 <0.2 <0.2	1.0
IM11	Cloudy	Moderate	16:57	8.2	Middle	4.1	0.5	300	27.8	27.8	7.9	7.9	20.0	20.0	85.4	85.3	6.0 6.0	3.1	5.9	4 4 4	4	87 8	9 822	043	811467	<0.2	2 1.0 1.0
					Bottom	7.2	0.6	306 307	27.8 26.7	26.7	7.9 7.8	7.8	20.0 23.9	23.9	85.1 68.0	68.2	4.8 4.9	3.3 12.3		4		87 92			-	<0.2	1.0
					Surface	7.2	0.2	316 298	26.7 28.8	28.8	7.8 8.1	8.1	23.9 16.3	16.3	68.4 112.9	112.9	4.8 8.0	11.9 2.0		5 3		93 85				<0.2 <0.2	1.0
IM12	Cloudy	Moderate	17:04	8.6	Middle	1.0 4.3	0.4 0.5	313 280	28.8 27.5	27.5	8.1 8.0	8.0	16.3 21.9	21.9	112.8 85.1	84.9	8.0 6.0 7.0	2.0 6.0	6.5	3 4	4	85 86 8	7 821	177	812058	<0.2	0.8 2 0.9 0.9
	cloudy	modorato		0.0	Bottom	4.3 7.6	0.6	307 290	27.4 26.5	26.5	8.0 7.8	7.8	21.9 24.8	24.7	84.7 69.5	69.7	5.9 4.9 4.9	6.5 11.6	0.0	4 5		87 90			012000	<0.2	0.9
						7.6	0.4	292	26.5 28.7		7.8 8.1		24.6 17.3		69.8 118.9		4.9 8.4	11.2 2.2		4		91	_			<0.2	-
					Surface	1.0 2.4	-	-	28.7	28.7	8.1	8.1	17.3	17.3	118.5	118.7	8.3 8.4	2.5		4		-				-	-
SR1A	Cloudy	Calm	17:24	4.8	Middle	2.4 3.8	-	-	- 28.7	-	- 8.1	-	- 19.1	-	- 104.9	-	- 7.3 7.2	- 4.2	3.2	- 4	4	-	819	978	812654		· ·
					Bottom	3.8	- 0.2	- 284	28.8	28.8	8.1 8.1	8.1	19.0 17.7	19.0	104.3	Ì	7.3 7.3 7.9	3.9		4 3		- 84	_			<0.2	- 0.8
					Surface	1.0	0.2	288	28.6	28.6	8.1	8.1	17.6	17.6	112.7	112.6	7.9 7.9	2.9		3		85				<0.2	0.8
SR2	Cloudy	Moderate	17:37	4.4	Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	4.6	-	5	- 8	6 821	148	814156	- <0.1	.2 - 0.8
					Bottom	3.4 3.4	0.4	298 325	27.9 27.9	27.9	8.0 8.0	8.0	19.9 19.8	19.9	99.2 99.1	99.2	7.0 7.0 7.0	6.2 6.2		6		86 87				<0.2 <0.2	0.9 0.8
					Surface	1.0 1.0	0.3	200 216	29.6 29.6	29.6	8.1 8.1	8.1	10.1 10.0	10.0	106.9 106.9	106.9	7.7 7.7 7.9	4.7 4.7		6 5		-			-	-	-
SR3	Rainy	Moderate	16:22	8.1	Middle	4.1 4.1	0.2	226 230	29.1 29.1	29.1	8.2 8.2	8.2	14.1 14.1	14.1	112.4 112.1	112.3	8.0 8.0	2.6 2.7	4.4	4 5	5	-	822	57	807565		
					Bottom	7.1 7.1	0.3	222 238	28.1 28.2	28.2	7.9 7.9	7.9	19.4 19.4	19.4	81.4 81.9	81.7	5.7 5.7 5.7	6.0 5.7		4 5		-				-	-
					Surface	1.0 1.0	0.4	42 44	28.6 28.6	28.6	8.1 8.1	8.1	17.2 17.2	17.2	110.3 110.2	110.3	7.8 7.8 7.6	7.1 7.2		8		-			-	-	-
SR4A	Fine	Calm	17:38	9.4	Middle	4.7	0.1	38 41	28.4 28.4	28.4	8.1 8.1	8.1	19.6 19.6	19.6	105.3 105.2	105.3	7.4 7.3	8.9 8.9	8.5	5	6	-	817	206	807787		
					Bottom	8.4 8.4	0.2	28 29	27.4 27.4	27.4	8.0 8.0	8.0	21.8 21.8	21.8	75.0 75.3	75.2	5.3 5.3 5.3	9.6 9.5		5 4		-			-	-	-
					Surface	1.0 1.0	0.1	88 90	28.5 28.5	28.5	8.1 8.1	8.1	19.8 19.8	19.8	119.9 120.0	120.0	8.3 8.3	7.8 7.8		8		-			-	-	-
SR5A	Fine	Calm	17:54	3.2	Middle	-	-	-	-	-	-	-	-		-		8.3 -	-	8.7	-	8	-	816	585	810716	· ·	
					Bottom	2.2 2.2	0.0	22 22	28.4 28.4	28.4	8.1 8.1	8.1	20.1	20.1	111.2 111.3	111.3	7.7 7.7	9.6 9.6		8		-			-	-	-
					Surface	1.0	0.1	304 311	28.7 28.7	28.7	8.2	8.2	19.3 19.4	19.3	134.6 134.3	134.5	9.4	5.1 5.9		7 7		-			-	-	-
SR6A	Fine	Calm	18:22	3.9	Middle	-	-	-	-	-	-	-	-	-	-		9.3 9.4	-	6.6	-	7	-	817	978	814751		
					Bottom	2.9	0.1	320 350	28.7 28.7	28.7	8.2 8.2	8.2	19.8 19.8	19.8	132.7 132.9	132.8	9.2 9.2 9.2	7.6		6		-			-	-	-
					Surface	1.0	0.1	54	26.7	26.7	8.0	8.0	25.7	25.7	97.4	97.3	6.8	2.4		3		-				-	-
SR7	Cloudy	Moderate	18:34	16.2	Middle	1.0 8.1	0.1	56 171	26.7 26.2	26.2	8.0 8.0	8.0	25.7 26.9	26.9	97.2 82.1	82.0	6.7 5.7 6.2	2.3 3.3	3.2	4 3	3	-	823	519	823720		
					Bottom	8.1 15.2	0.0	182 87	26.2 25.4	25.5	8.0 7.9	7.9	26.9 29.8	29.8	81.9 65.4	65.9	5.7 4.5 4.6	3.3 3.9		3		-				-	-
					Surface	15.2 1.0	0.1	-	25.5 28.8	28.8	7.9 8.2	8.2	29.7 15.8	15.8	66.3 117.3	116.9	4.6 8.3	4.0 2.0		3		-				-	
SR8	Cloudy	Moderate	17:15	4.7	Middle	1.0	-	-	28.8	20.0	8.2	0.2	15.8	.5.0	116.5 -		8.2 8.3	2.0	2.6	2	2	-	820	73	811622	-	-
510	Cibuuy	wouerate	17.15	4.7		- 3.7	-	-	- 28.1	- 28.1	- 8.0	-	- 19.2	-	- 96.4	06.4	- 6.8 6.9	- 3.2	2.0	- 3	2	-	620	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	011022	-	-
					Bottom	3.7	-	-	28.1	28.1	8.0	8.0	19.3	19.2	96.3	96.4	6.8 6.8	3.3		2		-				-	-

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

Expansion of Hong Kong International Airport into a Three-Runway System Water Quality Monitoring Water Quality Monitoring Results on 04 July 20 during Mid-Ebb Tide

Water Qual	ity wonite	oring Resu	its on		04 July 20 du	ring Mid-E																			
Monitoring	Weather	Sea	Sampling	Water	Sampling Depth (m)	Current Speed	Current	Water Tempe	erature (°C)	pН	Sa	linity (ppt)		aturation (%)	Dissolved Oxygen	Turbidity(NTU) S	uspende (mg/		Total Alkalinity (ppm)	Coordinate HK Grid	Coordinate HK Grid	Chromit (µg/L)	
Station	Condition	Condition	Time	Depth (m)		,	(m/s)	Direction	Value	Average	Value Av	erage Valu	e Average	Value	Average	Value DA	Value	DA	Value	DA	Value DA	(Northing)	(Easting)	Value	DA Value DA
					Surface	1.0	0.3	225 235	28.3 28.3	28.3	8.1	8.1		93.7 93.5	93.6	6.6	3.5 3.5	-	5 5		85 86			<0.2	0.8
C1	Sunny	Moderate	12:07	8.4	Middle	4.2	0.7	201	27.8	27.8	8.0	e 0 19.0	10.6	83.5	83.5	5.9 6.3	4.2	5.8	6	6	87 97	815634	804261	<0.2	0.2 0.7 0.0
						4.2 7.4	0.7	202	27.8 25.5		8.0	19.0		83.4 61.0		5.9 4.3	4.2 9.8	-	6 8		88 89			<0.2	0.2 0.7 0.8
					Bottom	7.4	0.5	253	25.5	25.5	8.0	8.0 28.2	28.1	61.9	61.5	4.3 4.3	9.3		8	•	89			<0.2	0.8
					Surface	1.0 1.0	0.2	135 145	29.5 29.5	29.5	7.9	7.9 13.	13.2	81.2 81.2	81.2	5.8 5.8 5.5	3.8 3.8	E	4 3		84 84			<0.2 <0.2	1.0
C2	Cloudy	Moderate	13:42	11.1	Middle	5.6 5.6	0.5	154 166	27.7 27.6	27.7	8.0 8.0	8.0 19.	19.1	73.6 73.6	73.6	5.2 5.2	7.5 7.5	7.7	4 5	4	86 87 86	825680	806944	<0.2 <	0.2 1.0 1.0
					Bottom	10.1	0.5	144	26.6	26.6	8.0	8.0 24.4	24.4	64.2	64.3	4.5 4.5	11.9		5		88			<0.2	1.0
					Surface	10.1	0.5	149 277	26.6 27.2	27.2	8.0	24.	22.5	64.4 83.6	83.6	4.5 4.5 5.9	12.0 2.8		4		88 86			<0.2	1.1
						1.0 6.0	0.4	285 252	27.2 26.5		8.0	22.		83.5 77.2		5.9 5.4 5.7	2.8 4.5	F	2 3		86 88 80			<0.2 <0.2	0.6
C3	Cloudy	Moderate	11:28	12.0	Middle	6.0	0.2	276	26.3	26.4	8.0	8.0 24.5	24.4	77.1	77.2	5.4	4.6	4.9	4	4	88 00	822097	817784	<0.2	0.2 0.6 0.7
					Bottom	11.0 11.0	0.1	113	25.4 25.4	25.4	8.0	8.0 28.		67.7 67.8	67.8	4.7 4.7	7.4	-	5 5		90 90			<0.2	0.7
					Surface	1.0 1.0	0.1	1	28.4 28.4	28.4	8.1 8.1	8.1 18.		95.5 95.3	95.4	6.7 6.7	3.5 3.5	_	3 4		86 85			<0.2	0.6
IM1	Sunny	Moderate	12:28	4.9	Middle	-	-	-			-	-		- 95.3		6.7	- 3.5	7.6	-	5	- 87	817959	807112		<0.2 - 0.7
	Guility	Moderate	12.20	4.5		- 3.9	- 0.1	- 1	- 26.2		- 8.0	25.		- 62.6		- 4.4	- 11.6	/.u	- 6		- 07	017333	007112	<0.2	0.7
					Bottom	3.9	0.1	1	26.2	26.2	8.0	8.0 25.	25.5	62.5	62.6	4.4 4.4	11.8		5		89			<0.2	0.6
					Surface	1.0 1.0	0.1 0.1	204 205	28.6 28.6	28.6	8.1 8.1	8.1 17.4		91.4 90.4	90.9	6.4 6.4 5.4	7.3 7.9		3		84 85			<0.2 <0.2	0.7
IM2	Sunny	Moderate	12:34	6.7	Middle	3.4 3.4	0.2	169 172	26.1 26.1	26.1	8.0	8.0 25.9		61.9 62.0	62.0	4.3 5.4	12.2 11.8	12.6	3 4	3	88 87 87	818154	806143	<0.2 <	<0.2 0.7 0.6
					Bottom	5.7	0.0	293	25.7	25.7	8.0	27.0	27.6	60.7	60.9	4.2	18.3		3		89			<0.2	0.6
					Surface	5.7 1.0	0.0	298 269	25.7 28.5	28.5	8.0	8.1 18.0 8.1		61.0 87.2	86.5	4.3 4.3 6.1	18.1 7.4		4		90 87			<0.2 <0.2	0.6
						1.0 3.4	0.2	287 214	28.5 26.5		8.1	18.		85.8 65.5		6.0 4.6 5.3	7.8 10.6	F	3 3		86 88 80			<0.2	0.6
IM3	Sunny	Moderate	12:40	6.7	Middle	3.4	0.2	223	26.4	26.5	8.0	8.0 24.5	24.5	65.3	65.4	4.6	10.9	10.1	4	4	87 00	818771	805586	<0.2	0.2 0.7
					Bottom	5.7 5.7	0.1	187 199	26.4 26.4	26.4	8.0 8.0	8.0 24.9		66.8 67.0	66.9	4.7 4.7	11.5 12.2	-	4 5		89 89			<0.2	0.6
					Surface	1.0 1.0	1.2 1.4	181 186	28.9 28.9	28.9	8.1 8.1	8.1 16.		98.6 98.5	98.6	6.9 6.9	3.5 3.7	-	2		85 85			<0.2	0.7
IM4	Sunnv	Moderate	12:49	8.0	Middle	4.0	1.1	188	27.7	27.7	8.0	8.0 20.3	20.3	82.5	82.2	5.8 6.4	9.5	9.7	2	2	87 97	819705	804599	<0.2	0.2 0.8 0.7
						4.0 7.0	1.1	194 192	27.7 27.6		8.0	20.4		81.8 81.5		5.8	9.7 16.1	-	2		86 89			<0.2	0.7
					Bottom	7.0 1.0	0.8	196 191	27.6 28.8	27.6	8.1	8.1 20.4		81.7 103.0	81.6	5.7 5.7 7.3	15.3 3.8		2		89 86			<0.2	0.7
					Surface	1.0	1.1	207	28.7	28.8	8.1	0.1	10.4	102.9	103.0	7.3 6.9	3.8		4		85			<0.2	0.7
IM5	Sunny	Moderate	13:01	6.9	Middle	3.5 3.5	1.0	198 201	28.2 28.2	28.2	8.1 8.1	8.1 18.		92.6 92.3	92.5	6.5 6.5	4.7	6.0	3	3	87 87 87	820755	804871	<0.2 <	<0.2 0.7 0.7
					Bottom	5.9	0.6	207	27.9	27.9	8.1	8.1 19.	10.0	84.7 84.8	84.8	6.0 6.0	9.6 9.7	F	2		89			<0.2 <0.2	0.7
					Surface	5.9 1.0	0.6	226 214	27.9 29.0	29.0	8.1 8.1	8.1 16.2	16.2	98.4	98.4	6.0 6.9	3.5		2		90 85			<0.2	0.6
						1.0 3.5	0.6	234 224	29.0 28.4		8.1	16.		98.3 95.2		6.9 6.7 6.8	3.5 3.6	F	3 4		85 87 o7			<0.2	0.6
IM6	Sunny	Moderate	13:10	7.0	Middle	3.5	0.7	242	28.3	28.4	8.1	8.1	17.4	95.4	95.3	6.8	3.6	6.2	3	3	88 87	821066	805822	<0.2	0.2 0.7
					Bottom	6.0 6.0	0.7	233 254	27.6 27.6	27.6	8.0 8.0	8.0 20.0		83.2 83.3	83.3	5.9 5.9	11.4 11.5	-	3 4		89 89			<0.2 <0.2	0.6
					Surface	1.0 1.0	0.6	226 236	28.1 28.0	28.1	8.0 8.0	8.0 17.		91.5 90.9	91.2	6.5 6.5	6.3 6.6	F	3		86 85			<0.2	0.7
IM7	Sunny	Moderate	13:18	8.0	Middle	4.0	0.6	223	27.6	27.6	8.0	8.0 19.8	10.8	79.1	79.1	5.6 6.1	9.0	9.2	3	3	87 97	821370	806848	<0.2	0.2 0.8 0.7
						4.0 7.0	0.6	225 225	27.5 26.8		8.0	19.8		79.0 72.3		5.6 5.1 5.1	9.6 12.0		4 4		88 89			<0.2	0.8
					Bottom	7.0	0.6	233	26.8	26.8	8.0	22.5	22.3	72.3	72.3	5.1 5.1	11.8		3		89			<0.2	0.7
					Surface	1.0 1.0	0.3	202 210	28.2 28.1	28.2	8.0	8.0 18.	18.2	83.4 83.3	83.4	5.9 5.9 5.6	4.0	E	4		85 85			<0.2 <0.2	0.8
IM8	Cloudy	Moderate	13:11	7.5	Middle	3.8 3.8	0.2	210 220	27.6 27.6	27.6	8.0 8.0	8.0 20.0		74.9 74.9	74.9	5.3 5.3	6.6 6.5	6.2	4 5	5	87 87 87	821841	808158	<0.2 <	0.2 0.7 0.7
					Bottom	6.5	0.3	222	27.5	27.5	8.0	8.0 20.3	20.3	74.4	74.5	5.3 5.3	7.8	F	6		89			<0.2	0.6
DA: Depth-Aver						6.5	0.3	243	27.5		8.0	20.3		74.6	-	5.3	7.8		5		89	1		<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; <u>Value exceeding Limit Level is bolded and underlined</u>

Expansion of Hong Kong International Airport into a Three-Runway System Water Quality Monitoring Water Quality Monitoring Results on 04 July 20 during Mid-Ebb Tide

Water Qual	ity Monit	oring Resu	Its on		04 July 20	during Mid-	Ebblide)																			
Monitoring	Weather	Sea	Sampling	Water	Sampling Dep	h (m)	Current Speed	Current	Water T	emperature (°C)		pН	Salinity (pp)	DO Saturation (%)	Dissol Oxyg		Turbidity(NTU)	Suspende (mg			(kalinity pm)	Coordinate HK Grid	Coordinate HK Grid	Chromium (µg/L)	Nickel (µg/L)
Station	Condition	Condition	Time	Depth (m)			(m/s)	Direction	Value	Average	Value	Average		-	alue Average		DA	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)	Value DA	
					Surface	1.0	0.3	149 153	28.4 28.4	28.4	8.0 8.0	8.0	18.0 18.0		85.1 85.1 85.1	6.0 6.0	5.8	5.2 5.2		4 3	ł	85 84				<0.2	0.7
IM9	Cloudy	Moderate	13:04	6.8	Middle	3.4 3.4	0.2	133 145	27.8 27.8	27.8	8.0 8.0	8.0	19.3 19.3		78.3 78.3	5.5 5.5	5.0	8.7 9.0	8.4	4	4	86 87	87	822077	808832	<0.2 <0.2	0.8 0.8
					Bottom	5.8 5.8	0.1	116 122	27.8 27.8	27.8	8.0 8.0	8.0	19.5 19.5		78.2 78.2	5.5 5.5	5.5	11.2 11.2		5 4	ł	89 88				<0.2 <0.2	0.7
					Surface	1.0	0.8	127	28.6 28.6	28.6	8.0 8.0	8.0	17.2 17.2 17.2	, 1	37.3 87.2 87.3	6.2 6.1	-	2.7 2.8		3		85 89				<0.2	0.7
IM10	Cloudy	Moderate	12:55	7.2	Middle	3.6	0.7	113	27.7	27.7	8.0 8.0	8.0	19.7 19.7 19.7	, .	75.8 75.7	5.4	5.8	6.8 7.0	6.7	4 4	4	87 88	88	822366	809794	<0.2 <0.2 <0.2	0.8
					Bottom	6.2 6.2	0.6	111 118	27.5	27.5	8.0 8.0	8.0	20.3 20.3	, .	74.4 74.5	5.2	5.3	10.5		4 5		89 89				<0.2	0.7
					Surface	1.0	0.8	113	28.4	28.4	8.0	8.0	17.2 17	,	8.5 88.7	6.3		4.4		4		85				<0.2	0.8
IM11	Cloudy	Moderate	12:39	8.5	Middle	1.0 4.3	0.9	118 111	28.4 27.8	27.8	8.0 8.0	8.0	17.2		9.2 79.3	6.3 5.6	6.0	4.5 6.4	6.9	5 4	4	85 87	87	822033	811444	<0.2 <0.2 <0.2	0.8 0.8
					Bottom	4.3 7.5	0.7 0.6	116 101	27.8 27.6	27.6	8.0 8.0		19.0		79.4 74.5 74.5	5.6 5.3	5.3	6.4 10.0		3 4		87 88				<0.2	0.8
					Surface	7.5	0.6	102 109	27.6 28.4	28.4	8.0 8.0		19.9 17.5 17.5 17.5	-	74.5 74.5 87.3 87.2	5.3 6.2	5.5	9.9 3.7		4		89 85				<0.2	0.8
IM12	Olivert -		10.00			1.0 4.6	0.7	115 108	28.4 27.9		8.0 8.0		17.5		37.0	6.1 5.7	5.9	3.8 5.0	9.6	4	4	85 87	87	001455	812038	<0.2	0.7
IM12	Cloudy	Moderate	12:28	9.1	Middle	4.6 8.1	0.4	117 89	27.9 27.7	27.9	8.0 8.0	8.0	19.1		80.8	5.7		4.8 20.2	9.6	3	4	88 89	87	821455	812038	<0.2 <0.2 <0.2 <0.2 <0.2 <0.2 <0.2 <0.2	0.6 0.7
					Bottom	8.1 1.0	0.5	90	27.7 28.4	27.7	8.0 8.0	1	19.7 19.	<u> </u>	78.3	5.5 6.4	5.5	20.3 2.9		3		89				<0.2	0.8
					Surface	1.0	-	-	28.4	28.4	8.0	8.0	18.1 18.1		90.9	6.4	6.4	2.8		3	+	-				-	-
SR1A	Cloudy	Moderate	12:08	4.9	Middle	2.5	-	-	-	-	-	-						-	2.9	-	3	-		819975	812655	-	
					Bottom	3.9 3.9	-		28.2 28.2	28.2	8.1 8.1	8.1	19.3 19.4 19.4	* !	90.3 90.2	6.3 6.3	6.3	2.8 2.9		2		-				-	-
					Surface	1.0	0.5 0.5	79 84	27.9 27.9	27.9	8.0 8.0		19.2 19.2		34.7 34.7 84.7	6.0 6.0	6.0	2.7 2.7		2		87 88				<0.2 <0.2	0.8
SR2	Cloudy	Moderate	11:54	4.7	Middle	-	-	-	-	-	-	-		-		-	0.0	-	3.8	-	2	-	88	821471	814169	- <0.2	- 0.8
					Bottom	3.7 3.7	0.3	63 68	27.6 27.6	27.6	8.0 8.0	8.0	20.5 20.5		80.1 80.2	5.6 5.6	5.6	5.0 5.0		3		89 88				<0.2 <0.2	0.8
					Surface	1.0	0.6	192 204	28.5 28.5	28.5	8.0 8.0	8.0	17.5 17.5		87.3 87.1 87.2	6.2 6.1		2.9 2.9		2		-	-			-	-
SR3	Cloudy	Moderate	13:17	8.8	Middle	4.4	0.4	187 187	27.4 27.3	27.4	8.0 8.0	8.0	21.2 21.2		70.7 70.6	5.0 5.0	5.6	5.4 5.6	5.7	3	3	-		822124	807580		
					Bottom	7.8	0.3	221 223	27.1 27.1	27.1	8.0 8.0	8.0	22.0 22.0		67.7 67.8	4.8	4.8	8.7 8.7		3		•				-	-
					Surface	1.0	0.3	286	27.7	27.7	8.0 8.0	8.0	20.0 20.0	n 🗆	79.9 79.8 79.9	5.6		5.2 5.2		2 4		-					-
SR4A	Sunny	Moderate	11:47	9.1	Middle	4.6	0.0	293	25.9	25.9	7.9	7.0	26.5 26.5 26.5	. (61.5 61.4 61.5	4.3	5.0	11.8 11.8	11.8	4 3	4	-		817194	807826	-	-
					Bottom	8.1	0.1	88	25.8	25.8	8.0		27.1 27		61.1	4.3	4.3	18.3		6						-	-
					Surface	8.1	0.1	88 48	25.8 28.4	28.4	8.0 8.1	8.1	27.1	5	51.1 95.0 94.9	4.3 6.7		18.2 5.4		6		-					
SR5A	Sunny	Moderate	11:30	4.4	Middle	1.0	0.0	- 52	28.3	-	8.1			-		6.7	6.7	-	11.1	5	5			816586	810717	-	
					Bottom	- 3.4	- 0.0	- 114	- 28.0	28.0	- 8.0	8.0	- 19.1 19.		- 84.5	- 6.0	6.0	- 16.0		- 5	-	-				-	
					Surface	3.4 1.0	0.0	118 21	27.9 27.7	27.7	8.0 7.9	7.9	19.1	-	78.7 78.7 78.5	6.0 5.6	0.0	17.4 8.4		4 3		-					-
SR6A	Sugger	Moderate	11:02	4.7	Middle	1.0	0.2	21	27.6	-	7.9	1.5	19.9	, i	- 10.0	5.5	5.6	8.5	9.0	2	3	-	-	817950	814716	-	-
SKOA	Sunny	woderate	11.02	4.7		- 3.7	- 0.1	- 190	- 27.3		- 7.9		22.0 22.0	-		- 5.4		- 9.6	9.0	- 4	3	-	-	817950	014/10	-	-
					Bottom	3.7 1.0	0.1	191 57	27.2 27.5	27.3	7.9 8.1	7.9	22.0	, i	76.4	5.4 6.4	5.4	9.6 1.4		3		-					-
					Surface	1.0	0.6	61 17	27.4 26.8	27.5	8.1 8.1	8.1	21.7 21.		91.8	6.4 6.0	6.2	1.4		3 4	1	-				-	
SR7	Cloudy	Moderate	10:46	15.6	Middle	7.8	0.3	18	26.8 25.9	26.8	8.1	8.1	23.8 23.0 23.0 23.0 23.0 23.0 23.0 23.0 23.0	°	85.3 85.2 72.3	6.0	 	1.8	1.9	4 4 5	4	-	1 '	823650	823747	-	-
					Bottom	14.6	0.2	64	26.0	26.0	8.1 8.1	8.1	27.9 27.9		2.5 72.4	5.0	5.0	2.5		4		-					-
					Surface	1.0 1.0	-	-	28.5 28.5	28.5	8.0 8.0	8.0	18.2 18.2		88.7 88.7 88.7	6.2 6.2	6.2	3.3 3.3		3 4	ļ	-				-	-
SR8	Cloudy	Moderate	12:20	4.6	Middle	-	-	-	-	-	-					-		-	3.8	-	4	•	-	820378	811611	· ·	
					Bottom	3.6 3.6	-	-	28.3 28.3	28.3	8.0 8.0	8.0	18.6 18.6		35.5 35.6 85.6	6.0 6.0	6.0	4.3 4.4		4		•				-	-
DA: Depth-Aver	aned				-																						

Expansion of Hong Kong International Airport into a Three-Runway System Water Quality Monitoring Water Quality Monitoring Results on 04 July 20 during during Mid-Flood Tide

Water Qua	ity Monito	oring Resu	Its on		04 July 20 d	luring Mid-l	Flood Tie	de																				
Monitoring Station	Weather	Sea	Sampling	Water	Sampling Depth	(m)	Current Speed	Current Direction	Water Te	mperature (°C)		pН	Salir	ity (ppt)		aturation (%)	Dissolve Oxyger		irbidity(N	TU) Su	spendeo (mg/l		Total Alk (ppm		Coordinate HK Grid	Coordinate HK Grid	Chrom (µg/	
Station	Condition	Condition	Time	Depth (m)			(m/s)	Direction	Value	Average	Value	Average	e Value	Average	Value	Average			alue	DA \	alue	DA	Value	DA	(Northing)	(Easting)		DA Value DA
					Surface	1.0 1.0 3.9	0.4 0.4 0.5	36 36 26	28.2 28.1 27.9	28.2	8.1 8.1 8.1	8.1	18.5 18.6 18.9	18.6	85.1 85.0 84.6	85.1	6.0 6.0 6.0		5.8 5.9 8.0		18 18 17		85 84 87				<0.2 <0.2 <0.2	0.8 0.8 0.7 0.7
C1	Cloudy	Moderate	18:56	7.8	Middle	3.9 6.8	0.5	28	27.8	27.9	8.1 8.1	8.1	18.9	18.9	84.7 80.4	84.7	6.0	_	7.4 9.0	17.4	16 17	17	86 89	87	815611	804243	<0.2	<0.2 0.7 0.7 0.7 0.6
					Bottom	6.8 1.0	0.3	27 192	27.9 29.0	27.9	8.1 7.9	8.1	20.4	20.5	80.6 77.8	80.5	5.6 5.6		8.5 6.9		16 8		89 84				<0.2 <0.2	0.7
C2	Cloudy	Moderate	17:57	10.0	Surface	1.0	0.7	199	29.0 27.9	29.0	7.9	7.9	11.0	11.0 15.9	77.9	77.9 68.1	5.6	3	6.9 8.4	9.5	8	_	84 87	87	825693	806928	<0.2	<0.2 1.3 1.2
02	Cloudy	woderate	17.57	10.0	Bottom	5.0 9.0	0.3 0.1	192 358	27.9 27.3	27.9	7.9 7.9	7.9	15.9 20.5	20.5	68.0 64.6	64.7	4.9 4.6	6	8.5 3.3	9.5	6 6	ŕ	87 89	01	020093	000920	<0.2 <0.2	1.2
					Surface	9.0	0.1	329 235	27.3 28.1	28.1	7.9 8.1 8.1	8.1	20.5 19.0 19.0	19.0	64.7 85.6 85.3	85.5	4.6 6.0 6.0	-	3.0 2.1 2.1		6 5 4		88 87 87				<0.2 <0.2 <0.2	1.3 1.0 1.0
C3	Cloudy	Moderate	19:52	9.9	Middle	1.0 5.0 5.0	0.5 0.5 0.6	239 254 263	28.1 26.8 26.8	26.8	8.1 8.0 8.0	8.0	23.8	23.8	85.3 72.6 72.4	72.5	5.1 5.1	.6	3.2 3.3	4.0	4 3 4	4	87 88 88	89	822122	817817	<0.2 <0.2 <0.2	<0.2 1.0 1.0
					Bottom	8.9 8.9	0.3	267 280	26.0 26.0	26.0	8.0 8.0	8.0	26.8 26.8	26.8	64.2 64.4	64.3	4.5 4.5	.5	6.7 6.6		4 3	-	90 91				<0.2 <0.2	1.0 0.9
					Surface	1.0 1.0	0.5	327 335	28.4 28.4	28.4	8.1 8.1	8.1	19.7 19.7	19.7	96.7 96.4	96.6	6.7 6.7		4.0 5.5		16 15		88 86				<0.2 <0.2	0.9
IM1	Cloudy	Moderate	18:34	3.8	Middle	- 2.8	- 0.3	326	- 28.3	-	- - 8.2		- - 19.8	-	- - 95.3	-	-		- 5.6	15.4	- - 18	17	- - 89	88	817930	807142		<0.2 - 0.9
					Bottom	2.8	0.3	350	28.4	28.4	8.2	8.2	19.7	19.7	95.4 88.6	95.4	6.7 e	./ .	6.7 0.2		17 9		89 84				<0.2	0.9
IM2	Cloudy	Moderate	18:30	6.4	Surface	1.0 3.2	0.4 0.3	3 13	27.8 27.7	27.8	8.1 8.1	8.1 8.1	21.0 21.0	21.0	88.4 88.4	88.5 89.0	6.2 6.2	.2	0.4	10.2	8 6	7	85 87	87	818161	806184	<0.2 <0.2	1.2
					Bottom	3.2 5.4 5.4	0.4 0.3 0.3	13 4 4	27.7 27.5 27.5	27.5	8.1 8.0 8.0	8.0	21.1 21.9 21.8	21.9	89.5 83.9 84.0	84.0	6.3 5.9 5.9	° .	9.8 0.1 0.8		6 7 6	ŀ	88 89 89				<0.2 <0.2 <0.2	<0.2 <u>1.2</u> 1.1 1.2
					Surface	1.0 1.0	0.6 0.6	316 319	28.1 28.0	28.1	8.1 8.1	8.1	20.0 20.0	20.0	100.9 100.0	100.5	7.1	-	6.0 6.4		4	-	85 86				<0.2 <0.2	1.2
IM3	Cloudy	Moderate	18:25	6.6	Middle	3.3 3.3	0.6	319 341	27.7	27.7	8.1 8.1	8.1	21.4 21.4	21.4	83.9 83.4	83.7	5.9 5.8		7.7	1.4	4 3	4	88 87	88	818799	805605	<0.2	<0.2 1.2 1.2
					Bottom	5.6 5.6 1.0	0.4 0.4 0.8	303 310 351	26.2 26.2 28.1	26.2	8.0 8.0 8.1	8.0	25.6 25.7 19.3	25.7	66.0 65.4 91.8	65.7	4.6 4.6 6.5	.6	7.8 8.4 8.0		4 4 6		90 89 84				<0.2 <0.2 <0.2	1.2 1.1 1.2
IM4	Claudu	Madazata	18:18	6.6	Surface	1.0 3.3	0.8	352 346	28.0	28.1	8.1 8.0	8.1 8.0	19.4	19.4 21.2	91.6 86.0	91.7 86.0	6.4	<u>,</u>	8.4 9.4	9.4	6 6	6	86 88	87	819714	804614	<0.2 <0.2	1.2
11/14	Cloudy	Moderate	10.10	0.0	Bottom	3.3 5.6	0.6	356 335	27.2 26.7	26.7	8.0 8.0	8.0	21.2 23.3	23.8	85.9 71.0	71.1	6.1 5.0	0	9.3 0.7	9.4	6 6	° -	87 89	01	019714	604614	<0.2 <0.2	1.2
					Surface	5.6 1.0 1.0	0.4 0.3 0.4	354 301 314	26.7 28.9 28.9	28.9	8.0 8.1 8.1	8.1	24.3 15.1 15.1	15.1	71.1 92.0 92.1	92.1	5.0 6.5		0.5 7.6 7.8		6 7 8		89 84 85				<0.2 <0.2 <0.2	1.2 1.2 1.2
IM5	Cloudy	Moderate	18:10	6.5	Middle	3.3	0.4	329 345	28.5	28.5	8.1 8.1	8.1	17.1	17.1	91.0 90.8	90.9	6.4 6.4	.5	0.4	11.6	7 8	8	86 87	87	820716	804846	<0.2	<0.2 1.2 1.2
					Bottom	5.5 5.5	0.4 0.4	358 329	26.9 27.0	27.0	8.1 8.1	8.1	23.6 23.5	23.5	72.9 73.0	73.0	5.1 5.1	.1	6.6 6.8		9 8		89 89				<0.2 <0.2	1.2 1.2
					Surface	1.0 1.0 3.3	0.6 0.7 0.6	290 303 292	29.0 29.0 29.0	29.0	8.0 8.0 8.0	8.0	13.8 13.8 14.1	13.8	88.8 88.8 88.1	88.8	6.3 6.3 6.3	- L	7.7 7.7 9.6	E	8 8 8	ŀ	85 85 87				<0.2 <0.2 <0.2	1.5 1.5 1.4
IM6	Cloudy	Moderate	18:05	6.6	Middle	3.3 5.6	0.6	292 297	29.0 28.9	29.0	8.0 8.0	8.0	14.1	14.1	88.1 88.4	88.1	6.3		9.7 0.0	9.1	8	8	87 89	87	821077	805825	<0.2	<0.2 1.4 1.4
					Bottom	5.6 1.0	0.4	322 230	28.9 28.8	28.9	8.0 8.0	8.0 8.0	14.0 11.4	14.0	88.4 86.4	88.4 86.3	6.3 6.3	.3	0.0 8.5		8 6		89 85	_			<0.2 <0.2	1.4
IM7	Cloudy	Moderate	17:57	7.2	Middle	1.0 3.6	0.6	233 236	28.8 28.5	28.5	8.0 8.0	8.0	11.4	14.9	86.2 79.7	79.8	5.7	.0	8.8 0.2	10.4	7 6	6	84 87	87	821343	806851	<0.2 <0.2	<0.2 1.5
					Bottom	3.6 6.2 6.2	0.6 0.5 0.6	250 240 259	28.5 28.5 28.5	28.5	8.0 8.0 8.0	8.0	14.9 15.1 15.1	15.1	79.8 81.5 81.7	81.6	5.7 5.8 5.8	•	0.2 2.4 2.2		6 6 6	ŀ	88 89 89				<0.2 <0.2 <0.2	1.5 1.5 1.4
					Surface	1.0	0.2	227 228	29.4 29.4	29.4	8.0 8.0	8.0	12.0	12.1	90.0 89.9	90.0	6.4		5.4 5.4		6 7	ŀ	86 85				<0.2 <0.2 <0.2	1.4
IM8	Cloudy	Moderate	18:19	6.7	Middle	3.4 3.4	0.1	248 252	29.2 29.2	29.2	8.0 8.0	8.0	13.0 13.0	13.0	86.6 86.5	86.6	6.2 6.2		7.4	8.2	6 5	6	88 87	88	821840	808119	<0.2 <0.2	<0.2 1.2 1.3
DA: Dooth Ave					Bottom	5.7 5.7	0.1	282 299	28.9 28.9	28.9	8.0 8.0	8.0	14.4 14.4	14.4	82.4 82.5	82.5	5.9 5.9		1.9 2.1		5 6		89 90				<0.2 <0.2	1.3 1.3

Expansion of Hong Kong International Airport into a Three-Runway System Water Quality Monitoring Water Quality Monitoring Results on 04 July 20 during during Mid-Flood Tide

Water Qual	ity Monit	oring Resu	lts on		04 July 20	during Mid-		de																		
Monitoring	Weather	Sea	Sampling	Water	Sampling Dep	th (m)	Current Speed	Current Direction	Water Te	mperature (°C)		pН	Salin	iity (ppt)		aturation (%)	Dissolved Oxygen	Turbidity	NTU)	Suspende (mg/	d Solids _)	Total Alkalini (ppm)	V Coordinate	Coordinate	e Chromiun (μg/L)	m Nickel (µg/L)
Station	Condition	Condition	Time	Depth (m)			(m/s)		Value	Average	Value	Average		Average	Value	Average	Value DA	Value	DA	Value	DA	Value DA	(Northing)	(Easting)		
					Surface	1.0 1.0	0.2	246 250	29.4 29.4	29.4	8.0 8.0	8.0	11.7 11.8	11.7	90.4 90.3	90.4	6.5 6.5 6.5	5.6 5.6		6 6		86 85			<0.2 <0.2	1.3
IM9	Cloudy	Moderate	18:26	6.1	Middle	3.1 3.1	0.1	283 288	29.3 29.3	29.3	8.0 8.0	8.0	12.4 12.4	12.4	89.5 89.5	89.5	6.4 6.4	5.6 5.5	5.6	5 6	6	87 88 87	822110	808802	<0.2 <0.2	1.3
					Bottom	5.1 5.1	0.1	310 326	29.3 29.3	29.3	8.0 8.0	8.0	13.1 13.1	13.1	89.3 89.3	89.3	6.4 6.4 6.4	5.6 5.7		5 5	-	89 89			<0.2 <0.2	1.2
					Surface	1.0 1.0	0.2	329 342	29.4 29.4	29.4	8.0 8.0	8.0	11.9 11.9	11.9	90.4 90.5	90.5	6.5 6.5	5.4 5.4		5 5	ŀ	85 85			<0.2	1.3
IM10	Cloudy	Moderate	18:35	6.0	Middle	3.0 3.0	0.3	330 336	29.3 29.3	29.3	8.0 8.0	8.0	12.6 12.6	12.6	89.5 89.5	89.5	6.5 6.4 6.4	4.7 4.7	4.8	5 4	5	87 88 87	822403	809809	<0.2 <0	12
					Bottom	5.0	0.3	310 327	29.2 29.2	29.2	8.0 8.0	8.0	13.3 13.3	13.3	88.4 88.4	88.4	6.3 6.3 6.3	4.4		4 5		89 89			<0.2	1.2
					Surface	1.0 1.0	0.5	307 307	29.1 29.1	29.1	8.0 8.0	8.0	14.4	14.4	90.0 90.0	90.0	6.4	3.9 4.0		5		85 85			<0.2	1.2
IM11	Cloudy	Moderate	18:47	6.3	Middle	3.2	0.5	311	28.6	28.6	8.0	8.0	17.1	17.1	85.8	85.8	6.1 6.1	6.2	6.1	4	5	88 97	822060	811455	<0.2	1.1 11
	-				Bottom	3.2 5.3	0.5	325 301	28.6 28.1	28.1	8.0 8.0	8.0	19.0	19.0	85.8 80.2	80.3	5.6 5.7	6.4 8.1		5		88 89			<0.2	1.1
					Surface	5.3 1.0	0.5	327 289	28.1 28.9	28.9	8.0 8.1	8.1	19.0 15.5	15.5	80.3 90.4	90.5	5.7 6.4	8.0 3.0		6 4		89 86			<0.2 <0.2	1.1
IM12	Cloudy	Moderate	18:55	8.4	Middle	1.0 4.2	0.5	301 278	28.9 28.2	28.2	8.1 8.1	8.1	15.5 19.6	19.6	90.5 91.0	91.0	6.4 6.4	2.9 6.7	6.7	4 5	5	86 88 88	821446	812065	<0.2	1.2 0.2 1.1 1.1
IIVITZ	Cibudy	woderate	18.55	0.4	Bottom	4.2 7.4	0.6	282 279	28.2 27.6		8.1 8.1	8.1	19.6 21.6		90.9 81.4		6.4 5.7 5.7	6.9 10.2	0.7	6 6	5	89 89	021440	012005	<0.2	1.1
						7.4	0.5	292	27.6 29.1	27.6	8.1 8.1		21.6 14.8	21.6	81.5 93.3	81.5	5.7 ^{5.7} 6.6	10.3 2.8		5 5		90			<0.2	1.1
					Surface	1.0	-	-	29.1	29.1	8.1	8.1	14.7	14.7	93.4	93.4	6.6 6.6	2.9		5		-			-	-
SR1A	Cloudy	Moderate	19:15	4.5	Middle	2.3	-	-	-	-	-	-	-	-	-	-	-	-	3.3	- 4	5	-	819972	812656	-	
					Bottom	3.5 3.5	- 0.1	-	28.9 28.8	28.9	8.2 8.2	8.2	17.9 17.9	17.9	98.8 98.8	98.8	6.9 6.9	3.8 3.8		4		-			-	-
					Surface	1.0 1.0	0.2	257 257	28.9 28.9	28.9	8.1 8.1	8.1	15.9 16.0	16.0	92.0 91.9	92.0	6.5 6.5 6.5	3.5 3.6		4 4		86 86			<0.2 <0.2	1.2
SR2	Cloudy	Moderate	19:28	3.9	Middle	-	-	-	-	-	-	-	-	-	-		-	-	4.6	-	4	- 87	821483	814174	- <0	-
					Bottom	2.9 2.9	0.3	300 318	28.6 28.6	28.6	8.1 8.1	8.1	17.2 17.1	17.1	90.2 90.2	90.2	6.4 6.4 6.4	5.7 5.7		4 4	ŀ	88 89			<0.2 <0.2	1.1
					Surface	1.0	0.5	195 202	29.3 29.3	29.3	7.9 7.9	7.9	11.1	11.1	84.1 84.0	84.1	6.1 6.1	6.6 6.5		6 7	-	-			-	-
SR3	Cloudy	Moderate	18:13	7.9	Middle	4.0 4.0	0.4	205 213	28.4 28.5	28.5	7.9 7.9	7.9	15.1 15.0	15.1	75.0 75.1	75.1	5.4 5.4 5.4	8.8 8.8	9.0	6 7	6		822153	807561		
					Bottom	6.9 6.9	0.3	242 255	28.4 28.4	28.4	7.9 7.9	7.9	15.5 15.5	15.5	75.0 75.0	75.0	5.4 5.4 5.4	11.6 11.6		6	-	-			-	<u>·</u>
					Surface	1.0	0.3	56 60	28.6	28.6	8.2 8.2	8.2	19.5 19.5	19.5	99.1 99.2	99.2	6.9	12.4 12.6		17 16		-			H	
SR4A	Cloudy	Moderate	19:15	8.6	Middle	4.3	0.2	57 57	28.6 28.6	28.6	8.2 8.2	8.2	19.5 19.5	19.5	99.1 99.0	99.1	6.9 6.9	13.0 12.9	14.1	15 14	15		817209	807826		
					Bottom	7.6	0.2	52 56	28.6	28.6	8.2	8.2	19.5	19.5	99.1 99.1	99.1	6.9 6.9 6.9	16.8 16.9		12	-	-			-	-
					Surface	1.0	0.1	354	28.6 28.6	28.6	8.2 8.2	8.2	19.6	19.6	103.4	103.4	7.2	9.2		10		-			-	
SR5A	Cloudy	Moderate	19:30	3.7	Middle	1.0	0.1	326	28.6	-	8.2		19.6		- 103.4	-	7.2 7.2	9.3	9.8	10 -	10		816602	810696	-	
	,				Bottom	- 2.7	- 0.0	- 337	- 28.6	28.6	- 8.2	8.2	- 19.7	19.7	- 103.6	103.6	- 7.2 7.2	- 10.5		- 10		-			-	
					Surface	2.7	0.0	339 227	28.6 28.5	28.5	8.2 8.2	8.2	19.7 18.5	18.6	103.6 104.0	104.5	7.2	10.5 5.4		11 5		-			-	-
0004	0 mil		00.17	4.0		1.0	0.1	234	28.5	20.5	8.2	0.2	18.7	10.0	105.0	104.5	7.4 7.4	5.6		5	_	-	017071	04.4745	-	-
SR6A	Cloudy	Moderate	20:17	4.2	Middle	- 3.2	- 0.0	- 290	- 27.9	-	- 8.3	-	- 19.4	-	- 107.3		7.6 7.0	- 5.9	5.6	- 5	5	-	817974	814745	-	
					Bottom	3.2	0.0	310	27.8	27.9	8.3 8.1	8.3	19.4	19.4	106.4 76.7	106.9	7.5 7.6	5.7		5		-			-	
					Surface	1.0 1.0 7.4	0.0	118	26.8	26.8	8.1	8.1	24.2	24.2	76.7	76.7	5.4 5.0	3.3 3.4 5.0		3 4 4		-			-	-
SR7	Cloudy	Moderate	20:27	14.8	Middle	7.4	0.1	184 198	26.3 26.3	26.3	8.1 8.1	8.1	25.9 25.9	25.9	72.1	72.4	5.0 5.2 5.1	5.0	5.0	3	3	· ·	823655	823758		
					Bottom	13.8 13.8	0.1 0.1	76 77	25.5 25.5	25.5	8.1 8.1	8.1	28.5 28.5	28.5	66.2 66.3	66.3	4.6 4.6 4.6	6.7 6.7		3		-				-
]		Surface	1.0 1.0	-	-	29.2 29.2	29.2	8.1 8.1	8.1	14.0 14.1	14.0	92.0 92.0	92.0	6.5 6.5 6.5	4.7 4.6		5 4	Ī	-			-	-
SR8	Cloudy	Moderate	19:06	4.1	Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	4.9	-	4		820392	811639		
					Bottom	3.1 3.1	-	-	28.8 28.9	28.9	8.1 8.1	8.1	17.8 17.7	17.8	92.5 92.5	92.5	6.5 6.5 6.5	5.4 5.1		4	ŀ	-			-	-
u																							-			

Expansion of Hong Kong International Airport into a Three-Runway System Water Quality Monitoring Water Quality Monitoring Results on 07 July 20 during Mid-Ebb Tide

Water Qual	ity wonite	oring Resu	its on		07 July 20 d	uring Mid-E		•																	
Monitoring	Weather	Sea	Sampling	Water	Sampling Depth (m)	Current Speed	Current	Water Tempe	erature (°C)	pН	Sal	inity (ppt)		aturation %)	Dissolved Oxygen	Turbidity(NTU) S	uspende (mg/		Total Alkalinit (ppm)	Coordinate HK Grid	Coordinate HK Grid	Chromi (µg/L	
Station	Condition	Condition	Time	Depth (m)		,	(m/s)	Direction	Value /	Average	Value Avera	age Value	Average	Value	Average	Value DA	Value	DA	Value	DA	Value DA	(Northing)	(Easting)	Value	DA Value DA
					Surface	1.0	0.4	212 229	28.9	28.9	8.1 8.1	17.4		103.5	103.4	7.3	4.1	-	4		87 87			<0.2	0.7
C1	Cloudy	Moderate	13:54	8.2	Middle	4.1	0.8	189	28.0	28.0	8.0	19.5	10.6	86.7	86.5	6.1 6.7	5.7	6.1	4	4	89 80	815642	804234	<0.2	0.2 0.7 0.8
	,					4.1 7.2	0.8	192 211	28.0 25.2		8.0	19.6		86.2 53.1		6.1 3.7 o.7	5.7 8.3	-	4 4		89 92			<0.2	0.7 0.8
					Bottom	7.2	0.7	217	25.2	25.2	7.9	29.4	29.4	53.2	53.2	3.7	8.5		4		91			<0.2	1.0
					Surface	1.0	0.4	165 166	29.4 29.4	29.4	8.0 8.0	15.4		91.6 91.5	91.6	6.4 6.4 5.9	4.2 4.2	E	3		86 86			<0.2 <0.2	1.0
C2	Sunny	Moderate	12:49	12.0	Middle	6.0 6.0	0.3	175	28.3 28.3	28.3	7.9 7.9	18.0		77.6	77.4	5.5 5.4	7.4 7.4	7.5	4 3	4	87 88 88	825663	806967	<0.2	<0.2 0.9 0.9
					Bottom	11.0	0.4	156	26.3	26.3	7.9 7.9	26.0	26.0	63.3	63.4	4.4 4.4	10.6		4		90			<0.2	1.0
					Surface	11.0 1.0	0.5	170 79	26.2 27.7	27.7	7.9 7 8.0 8.0	26.1		63.4 86.1	86.1	4.4 4.4 6.0	11.1 4.9		4 5		90 87	1		<0.2 <0.2	0.9
						1.0	0.1	84 47	27.7 27.7		8.0	21.4		86.0 85.0		6.0 5.9 6.0	4.9 4.6		5 4		86 88 80			<0.2 <0.2	0.9
C3	Sunny	Moderate	14:23	12.0	Middle	6.0	0.1	51	27.7	27.7	8.0 8.0	21.5	21.5	84.8	84.9	5.9	5.0	5.6	5	5	89 00	822113	817814	<0.2	<0.2 0.9 0.9
					Bottom	11.0 11.0	0.2	74	26.1 26.2	26.2	8.0 8.0	27.7		73.9 74.6	74.3	5.1 5.2 5.2	7.0 7.0	-	4 4		90 90			<0.2	0.9
					Surface	1.0 1.0	0.1	225 227	28.0 28.0	28.0	8.0 8.0	20.0		87.7 86.0	86.9	6.1 6.0	8.2 8.3	-	4		88 88	1		<0.2	0.8
IM1	Cloudy	Moderate	13:34	5.1	Middle	-	-	-	-			-		-		- 6.1	-	9.5	-	5	- 80	817949	807108	· .	<0.2 - 0.8
	cloudy	modorato	10.01	0.1		- 4.1	- 0.0	- 219	- 26.2		- 8.0	26.4		- 63.1		- 4.4	- 10.8	-	- 6	0	- 03	0.1010	007100	<0.2	0.8
					Bottom	4.1 1.0	0.0	233 199	26.2 28.8	26.2	8.0 8.0 8.1	26.3	26.4	63.3 100.4	63.2	4.4 4.4 7.0	10.8 4.6		6 4		89 87			<0.2	0.8
					Surface	1.0	0.2	199	28.8	28.8	8.1 8.1 8.1	17.7		100.2	100.3	7.0 5.6	4.6	E	3		86			<0.2	0.7
IM2	Cloudy	Moderate	13:26	7.3	Middle	3.7 3.7	0.4	148	26.3 26.3	26.3	7.9 7.9	25.8		59.5 59.7	59.6	4.2 0.0	7.2 6.8	7.0	4	4	89 89 89	818143	806151	<0.2	<0.2 0.7 0.7
					Bottom	6.3	0.2	97	25.7	25.7	7.9 7.9	28.2	20.2	59.1 59.2	59.2	4.1 4.1	9.5 9.4		5		91 91			<0.2	0.8
					Surface	6.3 1.0	0.2	103 248	25.7 28.7	28.7	7.9 7 8.1 8. ⁷	17.6	17.6	97.6	97.6	4.1 ^{4.1} 6.8	4.9		5 8		87	1		<0.2 <0.2	0.7
						1.0 3.8	0.2	272 155	28.7 27.2		8.1	17.6		97.5 68.9		6.8 4.8 5.8	4.9 6.2	F	8		87 89			<0.2	0.6
IM3	Cloudy	Moderate	13:19	7.5	Middle	3.8	0.3	156	27.2	27.2	8.0 8.0	22.9	22.8	68.6	68.8	4.8	6.1	7.1	7	7	88 89	818807	805588	<0.2	<0.2 0.7 0.7
					Bottom	6.5 6.5	0.4	124 129	26.2 26.2	26.2	8.0 8.0	26.3		62.6 62.8	62.7	4.4 4.4	10.4 10.4		5 5		91 91			<0.2	0.8
					Surface	1.0	0.7	202 207	27.9 27.9	27.9	8.0 8.0	20.2		79.2 79.0	79.1	5.6	8.0 8.0	-	8 8		86 86			<0.2	0.8
IM4	Rainy	Rough	13:09	8.6	Middle	4.3	0.8	190	26.7	26.7	7.9 7.9	24.2	24.2	66.6	66.7	4.7 5.1	10.9	11.4	8	7	89	819711	804606	<0.2	0.2 0.8 0.8
	ŕ	, in the second s			Dattam	4.3 7.6	0.8	202 159	26.7 26.1		7.9	24.3		66.8 62.9	63.0	4.7 4.4 4.4	11.1 15.5	F	8		89 90			<0.2	0.8 0.8
					Bottom	7.6	0.4	164 219	26.1 28.1	26.1	8.0 8.0 8.0	26.3	1	63.0 86.6		4.4 4.4 6.1	15.2 6.6		6 4		90 86			<0.2	0.8
					Surface	1.0	0.7	238	28.1	28.1	8.0 8.0	19.2	19.1	86.6	86.6	6.1 5.9	6.7		4		86			<0.2	0.9
IM5	Cloudy	Rough	13:02	8.1	Middle	4.1 4.1	0.6	191 208	27.8 27.8	27.8	8.0 8.0	20.4		80.0 80.0	80.0	5.6 5.6	7.6 7.6	7.9	4 4	4	89 89	820721	804862	<0.2	<0.2 0.8 0.9
					Bottom	7.1 7.1	0.4	177 189	26.5 26.5	26.5	8.0 8.0	24.8		65.0 65.1	65.1	4.5 4.6 4.6	9.1 9.4	F	5 5		91 90			<0.2 <0.2	0.9
					Surface	1.0	0.5	239	28.5	28.5	8.0 8.0	17.7	17.7	91.0	91.0	6.4	6.3		4		86			<0.2	0.8
	<u>.</u>					1.0	0.5	253 215	28.5 27.6		8.0	17.7		91.0 77.0		6.4 5.4 5.9	6.3 7.0		4		86 89			<0.2	0.7
IM6	Cloudy	Moderate	12:54	7.7	Middle	3.9	0.6	235	27.6	27.6	8.0 0.0	20.5	20.4	76.9	77.0	5.4	7.0	8.7	4 5	4	89 89 90	821076	805823	<0.2	0.7
					Bottom	6.7 6.7	0.4	198 215	26.8 26.8	26.8	7.9 7.9 7.9	23.8	23.8	65.1 65.2	65.2	4.6 4.6	12.8 12.9		5		90			<0.2 <0.2	0.8
					Surface	1.0	0.3	270 295	28.7 28.7	28.7	8.0 8.0	17.1		92.2 91.8	92.0	6.5 6.5	5.3 5.3		4		86 86			<0.2	0.9
IM7	Fine	Moderate	12:49	9.0	Middle	4.5	0.2	219	27.8	27.8	8.0 8.0	19.8	10.8	77.0	77.0	5.4 0.0	10.8	9.4	4	4	88	821359	806857	<0.2	.0.2 0.7 0.8
					Bottom	4.5 8.0	0.2	229 159	27.8 27.4	27.4	8.0 8.0 8.0	19.8	21.7	77.0 72.1	72.2	5.4 5.1 5.1	10.8 12.3	-	4		88 90			<0.2	0.8
						8.0 1.0	0.2	160 50	27.4 28.8		8.0	21.7	21.7	72.2 88.5		5.1 5.1 6.2	12.2 4.1		3 3		90 86	-		<0.2 <0.2	0.7
					Surface	1.0	0.1	51	28.8	28.8	8.0 0.0	17.0	17.0	88.5	88.5	6.2 6.0	4.1	E	3		87			<0.2	1.1
IM8	Rainy	Moderate	13:10	8.4	Middle	4.2	0.2	155 156	28.2	28.2	7.9 7.9	18.9		81.0 81.2	81.1	5.7 5.7	5.6 5.4	5.8	3 4	4	88 89 88	821847	808117	<0.2 <	<0.2 0.8 0.9
					Bottom	7.4	0.1	149	28.0	28.0	7.9 7.9	10.4	10.4	78.0	78.1	5.5 5.5 5.5	7.8	F	4 4		90 90			<0.2	0.8
DA: Depth-Aver						1.4	0.1	162	28.0		7.9	19.4	1	/8.1		5.5	1.8		4		90	1	1	<0.2	0.8

DA: Depth-Averaged

Expansion of Hong Kong International Airport into a Three-Runway System Water Quality Monitoring Water Quality Monitoring Results on 07 July 20 during Mid-Ebb Tide

Water Qual	ity Monite	oring Resu	lts on		07 July 20	during Mid-	Ebb lide	•																			
Monitoring	Weather	Sea	Sampling	Water	Sampling Dep	h (m)	Current Speed	Current	Water Te	emperature (°C)		pН	Salinity (p	opt)		turation %)	Dissolve Oxygen		bidity(NT		nded So (mg/L)		Alkalinit ppm)	Coordinate HK Grid	Coordinate HK Grid	Chromium (µg/L)	Nickel (µg/L)
Station	Condition	Condition	Time	Depth (m)			(m/s)	Direction	Value	Average	Value	Average		erage		Average			lue D	A Valu	e D	A Valu		(Northing)	(Easting)	Value DA	Value DA
					Surface	1.0	0.6	72 74	28.7 28.6	28.7	8.0 7.9	7.9	17.2 1	7.2	89.2 89.0	89.1	6.3 6.3		.4	5	_	86 86				<0.2	0.8
IM9	Rainy	Moderate	13:16	8.1	Middle	4.1	0.4	108 108	28.2	28.2	7.9	7.9	18.4 1		81.6 81.3	81.5	5.7 5.7	5	.6 .7 5	4 4		1 89 88		822113	808813	<0.2 <0.2	0.8 0.9
					Bottom	7.1	0.3	99	27.8	27.8	7.9	7.9	20.4	0.4	75.3	75.5	5.3	3 5	.8	4		90				<0.2	0.9
					Surface	7.1	0.4	106 100	27.8 29.1	29.1	7.9 8.0	8.0	20.4	6.5	75.6 95.5	95.5	5.3 6.7		.0	4		90 86				<0.2 <0.2	1.0 0.8
						1.0 3.8	0.8	103 111	29.1 28.5		8.0 7.9		16.9		95.5 89.4		6.7 6.3	.5 3	.1	5		86				<0.2	0.9
IM10	Rainy	Moderate	13:22	7.6	Middle	3.8	0.9	117	28.4	28.5	7.9	7.9	16.8	6.8	89.1	89.3	6.3	4	.1 5	⁶ 4	·	87	88	822387	809809	<0.2	0.8
					Bottom	6.6 6.6	0.6	107 109	28.0 28.0	28.0	7.9 7.9	7.9	19.5	9.5	79.6 79.8	79.7	5.6	.0 g	.5 .8	3		90 90				<0.2 <0.2	0.8
					Surface	1.0	0.9	103 105	28.7 28.6	28.7	8.0 8.0	8.0	16.9 17.0		92.0 91.6	91.8	6.5 6.5	6	.7	5		85 87				<0.2 <0.2	0.8
IM11	Rainy	Moderate	13:30	8.4	Middle	4.2 4.2	0.7	114 116	28.0 28.0	28.0	7.9 7.9	7.9	19.5 19.5	9.5	80.3 80.3	80.3	5.6 5.6	.1 10	0.6 9	4		88		822064	811480	<0.2 <0.2	0.9 0.9
					Bottom	7.4	0.5	112	28.0	28.1	7.9	7.9	19.6		80.8	80.9	5.7	7 1	.7	4		90				<0.2	0.9
					Surface	7.4	0.5	118 94	28.1 28.9	28.9	7.9 8.0	8.0	19.5		80.9 91.8	91.7	5.7 ⁵ 6.4	11	.7	4		90 86				<0.2	0.9
						1.0 4.5	0.4	101 91	28.9 28.2		8.0 7.9		17.1		91.5 80.6		6.4 5.7 6		.6	3		86				<0.2	0.8
IM12	Rainy	Moderate	13:35	9.0	Middle	4.5	0.4	98	28.2	28.2	7.9	7.9	19.0		80.3	80.5	5.6	10	9.5	6 4		* 87	~ ~~	821450	812034	<0.2	1.0
					Bottom	8.0 8.0	0.3	76 78	27.9 28.0	28.0	7.9 7.9	7.9	19.7 1: 19.7 1:		79.3 79.3	79.3	5.6 5.6 5		.6	4		90 90				<0.2 <0.2	0.9
					Surface	1.0	-	-	29.1 29.0	29.1	8.0 8.0	8.0	17.7 1	7.7	94.3 94.0	94.2	6.6 6.6		.0	4		-	_			-	-
SR1A	Sunny	Moderate	13:51	5.0	Middle	2.5	-	-	-		-	-	-		-	-	- 6	.6	. 4	3 -	_			819978	812661	· .	
					Bottom	2.5 4.0	-		29.0	29.0	- 8.0	8.0	17.8 1		93.2	93.2	6.5 6	5 4	.5	- 4		-				-	-
						4.0	- 0.6	- 89	29.0 28.9		8.0 8.0		17.8		93.2 95.3		6.5 6.7	4	.5	4		- 88		1		<0.2	- 0.9
					Surface	1.0	0.6	94	28.9	28.9	8.0	8.0	17.2		95.3	95.3	67	7 3	2	3		87				<0.2	0.8
SR2	Sunny	Moderate	14:02	4.4	Middle	-	-	-	-	-	-	-	-	-	-	-			3				89	821477	814167	- <0.2	- 0.9
					Bottom	3.4 3.4	0.3	91 98	28.4 28.4	28.4	8.0 8.0	8.0	18.6 1 18.6 1		89.7 90.0	89.9	6.3 6 6.3		.5	4		90 90				<0.2 <0.2	0.9
					Surface	1.0 1.0	0.1	189 206	28.5 28.4	28.5	7.9 7.9	7.9	17.3 17.3		86.8 86.6	86.7	6.1 6.1	5	.5	4	_	-	_			-	-
SR3	Rainy	Moderate	13:04	9.0	Middle	4.5	0.2	196	28.1	28.1	7.9	7.9	18.9	• •	79.9	79.9	5.6 5	.9 7	.6 7	4		1		822165	807594		
					Bottom	4.5 8.0	0.3	200 229	28.1 27.9	27.9	7.9 7.9	7.9	20.2	0.2	79.9 76.0	76.1	5.6 5.3	2 9	.8 /	3		-				-	-
						8.0	0.1	236 254	27.9 28.7		7.9 8.1	1	20.2		76.1 96.6		5.3 6.8	9	.3	4						-	-
					Surface	1.0 4.0	0.5	276 247	28.7 26.6	28.7	8.1 7.9	8.1	24.3		96.7 62.1	96.7	6.8 4.3 5		.5	4		-	_				-
SR4A	Cloudy	Calm	14:17	8.0	Middle	4.0	0.3	249	26.6	26.6	7.9	7.9	24.3		62.1	62.1	4.4	9	.2 8	6 3		1 -		817177	807820	-	-
					Bottom	7.0 7.0	0.0	256 260	26.1 26.1	26.1	8.0 8.0	8.0	26.9 2 26.9 2	6.9	57.0 57.0	57.0	4.0 4		.1 .2	3		-				-	-
					Surface	1.0	0.1	289 292	29.4 29.4	29.4	8.2 8.2	8.2	18.2 18.2	8.2	116.4 116.1	116.3	8.0	6	.0	5		-				-	-
SR5A	Cloudy	Calm	14:35	3.3	Middle	-	-	-	-	-	-	-		-	-		- 8	.0 0		6 -		; -		816600	810674	<u> </u>	
					Bottom	2.3	0.1	292	28.9	28.9	8.2	8.2	18.5	8.5	105.6	105.6	7.3 7		.1	4		-				-	-
					Surface	2.3	0.1	310 88	28.9 28.8		8.2 8.1		18.5		105.5 95.3		7.3 ⁷	9	.2	4		-				-	-
						1.0	0.0	95	28.7	28.8	8.1	8.1	18.8	8.7	95.1	95.2	6.6 6		.9	7		-				-	-
SR6A	Fine	Calm	15:16	3.8	Middle	-	-	-	-	-	-	-	-	-	-	-	-		. 10	-		· -		817979	814749	-	-
					Bottom	2.8 2.8	0.0	236 244	27.8 27.8	27.8	8.1 8.1	8.1	21.2		78.7 78.8	78.8	5.5	.5 10	.2	11 10		-				-	-
					Surface	1.0	0.8	60 60	29.1 29.0	29.1	8.0 8.0	8.0	17.0 1	71	103.2	103.1	7.2	2	.6	7		-	_			-	-
SR7	Sunny	Moderate	14:50	16.4	Middle	8.2	0.5	34	28.4	28.4	8.0	8.0	19.4	9.5	95.0	94.8	6.6	.9 3	.1 3	0 5		5 -	-	823643	823744		· .
					Bottom	8.2 15.4	0.5	34 21	28.4 28.2	28.3	8.0 8.0	8.0	20.2	0.1	94.6 93.3	93.4	6.6 6.5	₆ 3	.2 3	5 4		-					-
						15.4 1.0	0.4	21	28.3 29.1		8.0 8.0		20.1		93.4 88.8		6.5 ⁰ 6.2	3	.4	4		-	_				-
					Surface	1.0		-	29.1	29.1	8.0	8.0	17.9		88.7	88.8	6.2	2 7	.2	3		-	1			-	-
SR8	Sunny	Moderate	13:43	5.4	Middle	-	-	-		-		-	-	-	-	-	-		. 6	· .		3 -		820369	811608	-	-
					Bottom	4.4	-	-	28.7 28.8	28.8	8.0 8.0	8.0	18.8 18.8		87.7 87.9	87.8	6.1 6 6.1 6		.2	3		-	-				-
DA: Depth-Aver	agod		• •		•	•				•															•		·

Expansion of Hong Kong International Airport into a Three-Runway System Water Quality Monitoring Water Quality Monitoring Results on 07 July 20 during during Mid-Flood Tide

Water Qua	lity Monito	oring Resu	lits on		07 July 20	during Mid-	Flood II	de																				
Monitoring Station	Weather	Sea	Sampling	Water	Sampling Dep	oth (m)	Current Speed	Current Direction	Water Te	emperature (°C)		pН	Sali	nity (ppt)	DOS	aturation (%)	Dissol Oxyg		Turbidity(NTU)	Suspende (mg	ed Solids /L)	Total Al (pp		Coordinate HK Grid	Coordinate HK Grid	Chrom (µg/l	
Station	Condition	Condition	Time	Depth (m)			(m/s)		Value	Average	Value	Averag		Average		Average		DA	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)		DA Value DA
					Surface	1.0	0.7	33 33	28.2 28.2	28.2	8.0 8.0	8.0	16.6 16.6	16.6	88.9 88.9	88.9	6.3 6.3	6.0	7.7 7.7		3 4		86 87				<0.2 <0.2	0.7
C1	Fine	Moderate	07:51	8.4	Middle	4.2	0.6	30 30	27.8 27.8	27.8	8.0 8.0	8.0	19.7 19.7	19.7	80.0 80.0	80.0	5.6		9.5 9.4	9.7	5 4	4	89 89	89	815608	804247	<0.2	<0.2 0.7 0.7
					Bottom	7.4	0.5	12 12	27.3 27.3	27.3	8.0 8.0	8.0	22.3 22.3	22.3	72.6 72.7	72.7	5.1 5.1	5.1	11.9 12.0	-	5 5		91 91				<0.2 <0.2	0.7
					Surface	1.0	0.5	347 319	28.8 28.8	28.8	8.0 8.0	8.0	14.4	14.4	83.0 82.9	83.0	5.9 5.9		4.9 4.9	-	3	-	85 86	-			<0.2 <0.2	0.9
C2	Cloudy	Moderate	08:02	12.0	Middle	6.0 6.0	0.5	355 327	28.5 28.5	28.5	8.0 8.0	8.0	18.1 18.1	18.1	76.7 76.3	76.5	5.4 5.4	5.7	4.7 4.7	6.6	3 3	3	88 87	88	825670	806937	<0.2 <0.2	<0.2 0.9 0.9
					Bottom	11.0 11.0	0.6	352 324	27.8 27.8	27.8	8.0 8.0	8.0	20.8 20.8	20.8	72.7 72.6	72.7	5.1 5.1	5.1	10.2 10.1	F	4	í [90 90				<0.2 <0.2	1.0
					Surface	1.0	0.4	286 295	28.5 28.4	28.5	8.1 8.1	8.1	16.9 16.9	16.9	85.2 84.9	85.1	6.0		5.2 5.8	-	4 5	İ	86 87				<0.2 <0.2	0.9
СЗ	Cloudy	Moderate	06:22	12.0	Middle	6.0 6.0	0.4	278 288	27.8 27.7	27.8	8.1 8.1	8.1	20.8 20.8	20.8	81.2 81.2	81.2	5.7 5.7	5.9	9.6 9.7	7.3	4	4	88 89	88	822116	817794	-0.2	<0.2 1.0 1.0
					Bottom	11.0 11.0	0.3	275	26.6 26.6	26.6	8.1 8.1	8.1	25.1 25.1	25.1	76.1 76.2	76.2	5.2	5.3	6.6 7.0	F	4		90 90				<0.2	1.0
					Surface	1.0	0.1	156	28.1	28.1	8.0 8.0	8.0	19.3	19.4	83.7 83.8	83.8	5.9	ŀ	6.5	-	3 4	(T	87 87				<0.2	0.8
IM1	Fine	Moderate	08:09	5.2	Middle	-	-	-	-	-	-	-	-	-	-		-	5.9	-	6.8	-	5	-	88	817936	807141		<0.2 - 0.8
					Bottom	4.2	0.1	177 193	27.8	27.8	8.0 8.0	8.0	20.6 20.6	20.6	77.2	77.2	5.4 5.4	5.4	7.2	F	5		90 89				<0.2 <0.2	0.8
					Surface	1.0	0.4	11	28.4	28.4	8.0 8.0	8.0	10.0	16.9	91.9 91.8	91.9	6.5		6.1 6.1	-	6 5		85 86				<0.2	0.9
IM2	Fine	Moderate	08:18	7.5	Middle	3.8	0.3	359 330	28.3	28.3	8.0 8.0	8.0	10.0	18.0	84.1 83.3	83.7	5.9 5.9	6.2	6.3 6.4	7.5	5	5	90 89	89	818143	806176	.0.2	<0.2 0.8 0.8
					Bottom	6.5	0.3	317 342	26.9	26.9	8.0 8.0	8.0	23.9	23.9	65.4 65.5	65.5	4.6	4.6	10.1	F	4 4	ļ	91 90				<0.2	0.8
					Surface	1.0	0.5	7	28.3	28.3	8.0 8.0	8.0	16.8 16.8	16.8	89.4 89.3	89.4	6.3		6.1 6.1	-	4 4		85 86				<0.2	0.8
IM3	Fine	Moderate	08:25	7.8	Middle	3.9	0.4	317 328	28.2	28.2	8.0 8.0	8.0	18.9	19.0	80.1 80.0	80.1	5.6 5.6	6.0	6.9 6.9	7.6	5	5	89 89	88	818776	805596	<0.2	<0.2 0.8 0.8
					Bottom	6.8 6.8	0.4	283 308	26.6	26.6	7.9	7.9	24.7	24.7	63.5 63.6	63.6	4.4	4.4	9.7 9.8	F	6	[]	90 90				<0.2	0.6
					Surface	1.0 1.0	0.9	9	28.4	28.4	8.0 8.0	8.0	17.0	16.9	88.5 88.4	88.5	6.3	ŀ	5.9 5.9	-	4 4	(T	85 85				<0.2 <0.2	0.8
IM4	Fine	Moderate	08:35	8.9	Middle	4.5	0.8	341 346	27.8	27.8	8.0 8.0	8.0	19.9	19.9	75.5	75.5	5.3 5.3	5.8	7.7	8.9	5	5	88 89	88	819733	804599	<0.2	<0.2 0.8 0.8
					Bottom	7.9	0.5	343 316	26.8	26.8	7.9	7.9	23.9	23.9	64.2 64.2	64.2	4.5	4.5	12.7	F	6	[]	90 90				<0.2	0.7
					Surface	1.0	1.1	10	28.4	28.4	8.0 8.0	8.0	17.7	17.7	84.7 84.6	84.7	6.0	-	6.2	-	5		85 85				<0.2 <0.2	0.8
IM5	Fine	Moderate	08:41	7.0	Middle	3.5	1.1	4 4	28.2	28.2	8.0 8.0	8.0	18.5	18.5	82.0 82.0	82.0	5.8	5.9	6.8 6.8	7.8	5	5	89 89	88	820756	804864	<0.2	<0.2 0.9 0.9
					Bottom	6.0 6.0	0.7	13 13	27.5	27.5	8.0 8.0	8.0	24.4	21.2	73.8	73.8	5.0	5.2	10.2		6	[]	90 90				<0.2	0.9
					Surface	1.0	0.1	215 216	28.8	28.8	8.0 8.0	8.0	45.0	15.6	87.8 87.9	87.9	6.2 6.2		5.4	-	6	f i	86 85				<0.2 <0.2	0.8
IM6	Fine	Moderate	08:49	8.1	Middle	4.1	0.1	120	28.5	28.5	8.0 8.0	8.0	16.9 16.9	16.9	87.4 87.3	87.4	6.2	6.2	8.3 8.4	8.6	6	6	89 90	89	821053	805820	<0.2	<0.2 0.9 0.9
					Bottom	7.1	0.2	73	27.2	27.2	8.0 8.0	8.0	22.3	22.3	71.6	71.7	5.0	5.0	11.9 12.3		6	[]	91 90				<0.2 <0.2	0.9
					Surface	1.0	0.1	196 204	28.5	28.5	8.0 8.0	8.0	16.4	16.4	85.8 85.7	85.8	6.1		6.7 7.0	-	6	F †	86 85				<0.2 <0.2 <0.2	1.0
IM7	Fine	Moderate	08:57	9.3	Middle	4.7	0.2	135 145	28.2	28.2	8.0 8.0	8.0	18.8	18.8	83.1 83.0	83.1	5.8 5.8	6.0	10.0	10.6	4	5	89 88	88	821329	806851	<0.2	<0.2 0.9 1.0
					Bottom	8.3 8.3	0.2	107	27.0	27.0	8.0 8.0	8.0	23.4	23.4	70.1	70.2	4.9	4.9	14.9	F	4	ļļ	90 90				<0.2	0.9
					Surface	1.0	0.3	266	28.8	28.8	8.0 8.0	8.0	15.1	15.1	85.7 85.6	85.7	6.1 6.1		4.5	-	6	F	87 86				<0.2	0.8
IM8	Cloudy	Moderate	07:40	7.9	Middle	4.0	0.3	285	28.7	28.7	8.0 8.0	8.0	16.1	16.1	83.9 83.7	83.8	5.9	6.0	5.6	6.1	4 4	5	88 87	88	821826	808118	<0.2	<0.2 0.9 0.9
					Bottom	6.9 6.9	0.1	254 278	28.6	28.6	8.0 8.0	8.0	16.6	16.6	84.2 84.4	84.3	5.9 6.0	6.0	8.0 7.9	F	4 3	ļ ļ	90 90				<0.2	0.9
DA: Dopth Aug	I				1	0.9	U.1	210	20.0		0.0	1	1 10.0	I	04.4	1	0.0		1.3		J		30	1		l	, \U.2	0.9

Expansion of Hong Kong International Airport into a Three-Runway System Water Quality Monitoring Water Quality Monitoring Results on 07 July 20 during during Mid-Flood Tide

Water Qual	lity Monit	oring Resu	lts on		07 July 20	during Mid-	Flood Tie	de																			
Monitoring	Weather	Sea	Sampling	Water	Sampling D	epth (m)	Current Speed	Current	Water Te	emperature (°C)		pН	Salinity (pp	t)		ituration %)	Dissolved Oxygen	Turbidity	NTU) Su	spende (mg/	d Solids L)	Total Al (ppi		Coordinate HK Grid	Coordinate HK Grid	Chron (µg/	
Station	Condition	Condition	Time	Depth (m)			(m/s)	Direction	Value	Average	Value	Averag	e Value Aver	age \	Value	Average	Value DA	Value	DA	alue	DA	Value	DA	(Northing)	(Easting)	Value	DA Value DA
					Surface	1.0	0.6	247 269	28.7 28.7	28.7	8.0 8.0	8.0	16.5 16.5		83.3 83.2	83.3	5.9 5.9	7.8 7.8	_	6 7		86 87				<0.2 <0.2	0.9
IM9	Cloudy	Moderate	07:35	7.2	Middle	3.6	0.5	246	28.7	28.7	8.0	8.0	16.6 16	6	82.6	82.6	5.8 5.9	8.9	8.6	6	6	88	88	822117	808814	<0.2	-0.2 0.9 1.0
						3.6 6.2	0.5	267 240	28.7 28.7		8.0 8.0		16.7		82.6 83.0		5.8 5.9 5.0	8.9 9.3	_	6 6	-	89 90				<0.2 <0.2	1.1
					Bottom	6.2	0.6	249	28.7	28.7	8.0	8.0	16.8	8	83.2	83.1	5.9 5.9	9.2		6		90				<0.2	1.0
					Surface	1.0	0.5	311 340	28.7 28.7	28.7	8.0 8.0	8.0	16.3 16.4 16		83.1 82.9	83.0	5.9 5.9 5.9	5.6 5.6	_	6 5		86 87				<0.2 <0.2	1.0
IM10	Cloudy	Moderate	07:29	7.9	Middle	4.0	0.6	296 301	28.6 28.6	28.6	8.0 8.0	8.0	16.9 16.9 16		81.6 81.5	81.6	5.8 5.8	5.5 5.5	9.1	5 5	5	89 90	89	822378	809806	<0.2 <0.2	<0.2 0.9 0.9
					Bottom	6.9	0.4	285	28.5	28.5	8.0	8.0	17.6 17	6	82.1	82.3	5.8 5.8	16.1		3		90				<0.2	1.0
						6.9	0.4	294 305	28.5 28.7		8.0 8.0		17.6		82.4 84.3		5.8 5.0 6.0	16.4 4.6		3		91 86				<0.2	0.8
					Surface	1.0	0.6	325	28.7	28.7	8.0	8.0	15.0 15	.0	84.2	84.3	6.0	4.6		6		86				<0.2	1.0
IM11	Cloudy	Moderate	07:19	8.2	Middle	4.1	0.6	294 304	28.3 28.4	28.4	8.0 8.0	8.0	18.5 18.4		78.8 78.8	78.8	5.5 5.5	6.8 6.8	7.2	5 5	5	89 89	89	822073	811454	<0.2 <0.2	<0.2 1.0 1.0
					Bottom	7.2	0.5	309 333	27.3 27.3	27.3	8.0 8.0	8.0	22.6 22	6	70.0 70.1	70.1	4.9 4.9	10.1 10.3		5 5		91 91				<0.2 <0.2	1.0
					Surface	1.0	0.5	309	28.8	28.8	8.0	8.0	15.8 15		84.0	84.1	6.0	4.8		4		85				<0.2	0.9
						1.0	0.5	334 311	28.8 28.5		8.0 8.0		15.7		84.1 82.6		6.0 5.8 5.9	4.9 5.6		4 4		86 88				<0.2 <0.2	0.9
IM12	Cloudy	Moderate	07:11	8.5	Middle	4.3	0.7	325	28.5	28.5	8.0	8.0	17.9	.9	82.3	82.5	5.8	5.5	6.7	5	5	87	88	821474	812065	<0.2	<0.2 1.1 0.9
					Bottom	7.5	0.5	315 324	26.9 26.9	26.9	8.0 8.0	8.0	24.1 24		68.8 68.9	68.9	4.8 4.8	9.9 9.8		5 5		90 90				<0.2 <0.2	0.9
					Surface	1.0	-	-	28.8 28.8	28.8	8.0 8.0	8.0	15.7 15.7 15		85.7 85.6	85.7	6.1 6.1	4.1 4.1		6 6		-				-	-
SR1A	Cloudy	Moderate	06:53	5.5	Middle	2.8	-	-	-	-	-				-		- 6.1	-	4.7	-	5	-	_	819980	812664	-	
o	cloudy	modorato	00.00	0.0		2.8	-	· ·	- 28.8		- 8.0		- 16.2 40		- 86.6		6.1 0.1	- 5.3		- 4	Ũ	-		010000	012001	-	-
					Bottom	4.5	-	-	28.8	28.8	8.0	8.0	16.2 16	-2	86.7	86.7	6.1 6.1	5.4		5		-				-	-
					Surface	1.0	0.2	263 266	28.7 28.7	28.7	8.0 8.0	8.0	16.6 16.6	.6	82.6 82.6	82.6	5.8 5.8 5.8	5.6 5.6	-	3 4		88 87				<0.2 <0.2	1.2
SR2	Cloudy	Moderate	06:42	4.6	Middle	-	-	-	-	-	-		· .	_	-	-	- 5.0	-	6.4	-	4	-	89	821451	814163	· ·	<0.2 - 1.0
					Bottom	3.6	0.3	320	28.1	28.1	8.0	8.0	19.9 19		78.7	78.9	5.5 5.5	7.3		4		90				<0.2	0.9
						3.6	0.3	325 201	28.1 28.7		8.0 8.0		19.8	-	79.0 84.5	84.4	5.5 5.5 6.0	7.2 4.9		5 3		90				<0.2	0.9
					Surface	1.0	0.3	219 222	28.7 28.6	28.7	8.0 8.0	8.0	14.7 14 14.8 16.9 10	1	84.3 82.8		6.0 5.8 5.9	5.0 6.2		3 3		-				-	-
SR3	Cloudy	Moderate	07:45	8.8	Middle	4.4	0.2	234	28.6	28.6	8.0	8.0	16.9	.9	82.6	82.7	5.8	6.6	9.1	3	3	-	-	822141	807589	-	
					Bottom	7.8	0.3	217 222	28.5 28.5	28.5	8.0 8.0	8.0	18.0 18.0	.0	84.2 84.4	84.3	5.9 5.9	15.9 16.1	-	4		-				-	-
					Surface	1.0	0.2	268	28.4	28.4	8.0 8.0	8.0	17.6 17.6 17		82.5 82.4	82.5	5.8 5.8	7.0 6.9		4		-				-	-
SR4A	Cloudy	Calm	07:28	8.9	Middle	1.0	0.2	286 240	28.4 27.4	27.4	7.9	7.9	22.2 22	2	66.5	66.5	4.7 5.3	9.8	9.0	4 5	5	-		817170	807793	-	-
UNIX	Cloudy	Gain	07.20	0.5		4.5	0.0	244 73	27.4 26.7		7.9 8.0		22.3		66.5 64.6		4.7	9.8 10.3	5.0	5 6	5	-		017170	007733	-	-
					Bottom	7.9	0.1	76	26.7	26.7	8.0	8.0	24.6	.0	64.7	64.7	4.5 4.5	10.4		6		-				-	-
					Surface	1.0	0.2	275 285	28.6 28.6	28.6	8.1 8.1	8.1	17.9 17.9		91.3 91.4	91.4	6.4 6.4 6.4	6.6 6.6		7 6		-				-	-
SR5A	Cloudy	Calm	07:11	3.6	Middle	-	-	-	-	-	-	-		_	-	-	- 0.4	-	7.1	-	6	-	-	816601	810691	-	
					Bottom	2.6	0.2	288	28.7	28.7	8.1	8.1	18.7 18		93.6	93.6	6.5 6.5	7.6		4		-				-	-
					1	2.6	0.2	302 231	28.7 28.6		8.1 8.0		18.7		93.6 90.8		6.5 0.5 6.4	7.6 5.2		5		-				-	
					Surface	1.0	0.1	249	28.6	28.6	8.0	8.0	16.9		90.7	90.8	6.4 6.4	5.3		6		-				-	-
SR6A	Cloudy	Calm	06:39	4.1	Middle	-	-	-	-	-	-	-			•		-	-	6.7	-	5	-	-	817945	814731	-	
					Bottom	3.1 3.1	0.1	232 252	28.7 28.7	28.7	7.9 7.9	7.9	17.6 17		89.7 89.6	89.7	6.3 6.3	8.0 8.1		4		-				-	-
					Surface	1.0	0.2	126	28.6	28.6	8.0	8.0	16.7 16	7	86.4	86.4	6.1	3.0		3		-				-	-
						1.0 8.3	0.2	129 210	28.6 27.3		8.0 8.0		16.7	-	86.3 74.7		6.1 5.2 5.7	2.9 2.7		4 4		-				-	-
SR7	Cloudy	Moderate	05:51	16.6	Middle	8.3	0.1	217	27.3	27.3	8.0	8.0	22.4 22	4	74.3	74.5	5.2	2.8	2.9	4	4	-	-	823626	823762	-	
					Bottom	15.6 15.6	0.2	228 235	25.5 25.5	25.5	8.0 8.0	8.0	28.8 28.8 28		65.9 66.1	66.0	4.6 4.6	2.9 2.9		5 5		-				-	-
					Surface	1.0 1.0	-	-	28.9 28.9	28.9	8.0 8.0	8.0	15.6 15.7 15		84.7 84.5	84.6	6.0 6.0	5.8 5.6		5 5		-				· ·	
SR8	Cloudy	Moderate	07:02	5.0	Middle	-	-	-	-	-	-	<u> </u>			-	-	- 6.0	-	8.5	-	5	-	_	820373	811628	-	
						- 4.0	-	-	- 28.5		- 8.0		17.8		- 84.2		5.9	- 11.6		- 5	-	-				-	-
					Bottom	4.0	-	-	28.5	28.5	8.0	8.0	17.5 17		84.6	84.4	6.0 6.0	11.0		5		-				-	-

Expansion of Hong Kong International Airport into a Three-Runway System Water Quality Monitoring Water Quality Monitoring Results on 09 July 20 during Mid-Ebb Tide

Water Qual	ity wonite	oring Resu	its on		09 July 20	during Mid-																			
Monitoring Station	Weather	Sea	Sampling	Water	Sampling Dep	h (m)	Current Speed	Current Direction	Water Te	mperature (°C)		рH	Salinity (ppt)	DC	O Saturation (%)	Dissolved Oxygen	Turbidity	(NTU)	Suspende (mg	ed Solids /L)	Total Alka (ppm		oordinate HK Grid	Coordinate HK Grid	Chromium (µg/L) Nickel (µg/L)
Otation	Condition	Condition	Time	Depth (m)			(m/s)		Value	Average	Value	Average				Value DA	Value	DA	Value	DA		DA (N	lorthing)	(Easting)	Value DA Value DA
					Surface	1.0	0.4	209	28.8 28.8	28.8	8.1 8.1	8.1	17.2 17.2	104		7.4	4.0		5		88 87				<0.2 0.9 <0.2 0.9
C1	Cloudy	Rough	15:23	8.8	Middle	4.4	0.5	198	28.6	28.6	8.1	8.1	17.5 17.5	98.	.1 09.1	6.9 7.2	4.2	8.4	4	4	91	91 8	315604	804261	<0.2 .0.2 0.8 0.8
		, in the second s			Darman	4.4 7.8	0.5	207	28.6 25.7	05.7	8.1 8.0		25.1 26.7	98. 63.	1	6.9 4.5	4.2	+ +	5		91 93				<0.2 0.7 0.8 <0.2 0.7
					Bottom	7.8 1.0	0.5	234 136	25.6 28.8	25.7	8.0 7.9	8.0	28.2 26.7	62. 88.	.8 63.0	4.5 4.4 6.2	18.3 3.2		4 5		94 84				<0.2 0.7 <0.2 0.8
					Surface	1.0	0.3	138	28.8	28.8	7.9	7.9	17.1	87.		6.2 5.7	3.2		5		83				<0.2 0.8
C2	Cloudy	Rough	14:09	12.4	Middle	6.2	0.3	159 166	27.7 27.7	27.7	7.9 7.9	7.9	20.7 20.8	72.	.5 72.3	5.1 5.7	4.3	4.2	4	5	88 88	87 8	325703	806965	<0.2 <0.2 0.8 0.8 <0.2 <0.2 0.7 0.8
					Bottom	11.4	0.5	152	25.9	25.9	7.9	7.9	27.1 27.1	62.	.4 62.5	4.4	5.1	1	4		90				<0.2 0.7
					Surface	11.4	0.5	153 293	25.9 28.0		7.9 8.0		27.1 20.2	62. 90.	4	4.4 6.3	4.8 2.6		4		90 84				<0.2 0.7 <0.2 0.7
					Surface	1.0 6.2	0.2	319 263	28.0 27.0	28.0	7.9 7.9	7.9	20.2	90. 77.	.2 90.3	6.3 5.4 5.9	2.7 3.9	1	4 5	ļ	85 89				<0.2 0.8
C3	Cloudy	Moderate	15:59	12.3	Middle	6.2	0.2	281	27.1	27.1	7.9	7.9	23.6 23.4 23.5	77.	.9 //./	5.4	4.1	4.2	6	6	88	88 8	322112	817817	<0.2 0.7 0.7
					Bottom	11.3 11.3	0.2	158 173	25.5 25.5	25.5	7.9	7.9	28.2 28.2	64. 64.		4.5 4.5	5.9 6.1		7		92 91				<0.2 0.8 <0.2 0.7
					Surface	1.0	0.1	71	28.9	28.9	8.2	8.2	17.4	111	.5 111.2	7.8	4.5		6		86				<0.2 0.6
IM1	Cloudy	Daugh	15:02	4.8	Middle	1.0	0.1	72	28.9		8.2		17.4	111	.1	7.8 7.8	4.9	8.4	5	5	85	88 8	317962	807147	<0.2 0.7 - <0.2 0.7
IIVI I	Cloudy	Rough	15.02	4.0		- 3.8	- 0.0	- 120	- 28.0		- 8.1	-	20.5	- 84.	-	- 5.9	- 12.0	0.4	- 6	5	- 91	00 0	517962	607147	- <0.2 - 0.7 <0.2 0.8
					Bottom	3.8	0.0	127	27.2	27.6	8.1	8.1	18.4 19.4	82.	.8 83.9	5.9 5.9	12.2		4		91				<0.2 0.6
					Surface	1.0	0.0	172 178	28.8 28.8	28.8	8.1 8.1	8.1	17.6 17.6	105		7.4	4.5 4.8	┥┝	7 6		86 86				<0.2 0.7 <0.2 0.7
IM2	Cloudy	Rough	14:55	6.9	Middle	3.5 3.5	0.2	139 148	27.9 27.9	27.9	8.0 8.0	8.0	20.1 20.1	81. 81.		5.7 6.5 5.7	7.3 7.3	6.9	6 6	6	90	90 8	318183	806179	<0.2 <0.2 0.6 0.7 <0.2 <0.2 0.6 0.7
					Bottom	5.9	0.1	46	25.8	25.9	7.9	7.9	27.7	62.	.7 62.0	4.4	8.7		5		93				<0.2 0.7
						5.9 1.0	0.1	47 332	25.9 28.8		8.0 8.1		27.7	63. 102	.0	4.4 4.4 7.2	8.8		4 6		94 82				<0.2 0.6 <0.2 0.7
					Surface	1.0	0.2	354	28.8	28.8	8.1	8.1	17.3 17.2	102	102.2	7.2 6.0	4.0	1	6		83				<0.2 0.6
IM3	Cloudy	Rough	14:47	7.3	Middle	3.7 3.7	0.1	37 38	27.0 27.0	27.0	7.9 7.9	7.9	23.8 23.7	69. 69.		4.8 4.9	10.7 10.7	9.8	7 6	7	86 87	87 8	318795	805608	<0.2 <0.2 0.7 0.7 <0.2 <0.2 0.6 0.7
					Bottom	6.3 6.3	0.3	124 126	26.2 26.2	26.2	7.9 7.9	7.9	26.0 26.0	58. 58.		4.1 4.1	14.8 14.8		7		90 91				<0.2 0.7 <0.2 0.7
					Surface	1.0	0.9	202	28.6	28.6	8.0	8.0	17.8 17.8	99.	.2 00.1	7.0	5.8		6		83				<0.2 0.6
	0 million	Dennet	11.00			1.0	0.9	207	28.6 28.1		8.0 8.0		17.8	99. 88.	.0	7.0 6.2 6.6	5.9 9.1	10.5	5	_	83 87		10700	004000	<0.2 0.6 <0.2 0.6 0.7
IM4	Cloudy	Rough	14:36	8.4	Middle	4.2 7.4	0.9	211 170	28.1 27.0	28.1	8.0 8.0	8.0	18.0 18.7 23.1 23.1	87.	.9 00.0	6.2	9.1 16.6	10.5	6 6	ь	87 91	87 8	319736	804623	<0.2 0.8 0.7 <0.2
					Bottom	7.4	0.5	186	27.1	27.1	8.0	8.0	23.2	75. 75.	.7	5.3 5.3	16.7		7		91				<0.2 0.7
					Surface	1.0	0.5	207	28.8 28.8	28.8	8.1 8.1	8.1	17.2 17.2	102		7.2 7.0	4.4	-	5 5		83 82				<0.2 0.8 <0.2 0.7
IM5	Cloudy	Rough	14:29	7.4	Middle	3.7	0.4	203	28.5	28.5	8.1	8.1	17.7 17.7	96.	.6 06.1	6.8 7.0	4.5	7.2	5	6	87	87 8	320757	804875	<0.2 0.0 0.6 0.7
		-			Bottom	3.7 6.4	0.4	218 209	28.5 27.2	27.2	8.1 8.0	8.0	17.7 17.7 22.7 22.7	95. 74.		6.7 5.2 5.2	4.5 13.0	1	5		87 91				<0.2 <0.2 0.8 0.7 <0.2 <0.7 <0.7 <0.7 <0.7 <0.7 <0.7 <0.7 <0.7
						6.4	0.3	210	27.2 28.7		8.0 8.1		22.6	74.	.6	5.2 7.2	12.2		7		91 83				<0.2 0.8
					Surface	1.0	0.3	248	28.7	28.7	8.1	8.1	17.3	102	102.5	7.2 7.1	4.8	1 1	5		83				<0.2 0.6
IM6	Cloudy	Rough	14:20	7.5	Middle	3.8 3.8	0.3	232 246	28.6 28.6	28.6	8.1 8.1	8.1	17.8 17.8	99. 99.		7.0	5.8 5.8	7.2	5 6	5	87 88	88 8	321051	805829	<0.2 <0.2 0.6 0.6 <0.2
					Bottom	6.5 6.5	0.2	245 255	28.0 28.1	28.1	8.0 8.0	8.0	19.9 19.9	85.	.0 85.5	6.0 6.0 6.0	10.9 10.9	1	5	Ì	92 92				<0.2 0.7 <0.2 0.7
					Surface	1.0	0.3	179	28.7	28.7	8.1	8.1	17.2 17.2	101	.6 101.6	7.1	4.5		5		85				<0.2 0.6
						1.0 4.5	0.1 0.2	181 217	28.7 28.4		8.1 8.0		17.2	101 91.	.5	7.1 6.4 6.8	4.5 5.1	╡	4 5	ł	84				<0.2 0.7 <0.2 0.7 0.7
IM7	Cloudy	Rough	14:08	8.9	Middle	4.5	0.2	229	28.4	28.4	8.0	8.0	17.9	91.	.2 91.2	6.4	5.1	5.4	4	5	88	87 8	321351	806858	<0.2 0.7 0.7
					Bottom	7.9	0.2	229 243	28.1 28.2	28.2	8.0 8.1	8.0	18.9 18.9	84. 85.		6.0 6.0	6.7 6.7	┥┝	6	ł	89 89				<0.2 0.6 <0.2 0.6
					Surface	1.0 1.0	0.2	42 44	28.8 28.8	28.8	8.0 8.0	8.0	17.6 17.6 17.6	95. 94.		6.7 6.7	3.0 3.0	ļļ	5 4		85 84		ĺ		<0.2 0.6 <0.2 0.7
IM8	Cloudy	Rough	14:34	8.5	Middle	4.3	0.1	88	28.4	28.4	7.9	7.9	18.1 18.1	87.	.6 87.6	6.2 6.5	3.8	4.5	5	5	89	88 8	321825	808143	<0.2 <0.2 0.6 0.7
INIO	Sloudy	Rough	14.04	0.0		4.3 7.5	0.1	90 143	28.4 28.1		7.9 7.9		18.1	87.	.5	6.2 5.5	3.8 6.8		4	J	89 90	~~ ⁰	- 1020	300143	<0.2 0.7 0.7 <0.2 0.6
					Bottom	7.5	0.2	150	28.1	28.1	7.9	7.9	19.3 19.3	77.		5.5 5.5	6.7		4		91				<0.2 0.7
DA: Depth-Aver																									

DA: Depth-Averaged

Expansion of Hong Kong International Airport into a Three-Runway System Water Quality Monitoring Water Quality Monitoring Results on 09 July 20 during during Mid-Ebb Tide

Water Qual	ity Monit	oring Resu	Its on		09 July 20	during Mid-		<u> </u>																	
Monitoring	Weather	Sea	Sampling	Water	Sampling Dept	h (m)	Current Speed	Current	Water Te	mperature (°C)		pН	Salinity (ppt)	DO S	Saturation (%)	Dissolve Oxyger	d Turb	idity(NTU)	Suspend (mg	led Solids g/L)	Total Alkalinit (ppm)	Coordinate HK Grid	Coordinate HK Grid	Chron (µg/	
Station	Condition	Condition	Time	Depth (m)	Cumping Dept		(m/s)	Direction	Value	Average	Value	Average	Value Average		Average		A Valu			DA	Value DA	(Northing)	(Easting)		DA Value DA
					Surface	1.0	0.4	62 65	28.8 28.8	28.8	8.0 8.0	8.0	17.6 17.6	94.1 94.0	94.1	6.6 6.6	3.0		5	1	84 84			<0.2 <0.2	0.6
IM9	Cloudy	Rough	14:42	7.8	Middle	3.9 3.9	0.4	101	28.5 28.5	28.5	7.9 7.9	7.9	17.8 17.9 17.9	89.0 88.7	000	6.3 6.2	4 3.5	12	5	5	88 89 88	822107	808826	<0.2 <0.2	<0.2 0.6 0.6
					Bottom	6.8	0.5	87 89	28.0 28.0	28.0	7.9	7.9	19.2 19.3 19.2	80.5 80.6	80.6	5.7 5.7 5		1	5	1	90 91			<0.2	0.6
					Surface	1.0	0.7	88	28.8	28.8	8.0	8.0	17.4 17.4	95.9	95.9	6.7	3.0		6	_	84			<0.2	0.6
IM10	Cloudy	Rough	14:49	8.0	Middle	1.0 4.0	0.8 0.6	95 99	28.8 28.6	28.6	8.0 7.9	7.9	17.4 17.5 17.5 17.5	95.8 90.3	90.3	6.7 6.4	3.1	42	6 6	6	83 89 88	822401	809793	<0.2 <0.2	<0.2 0.7 0.7
	,				Bottom	4.0 7.0	0.7	102 102	28.6 27.9	27.9	7.9 7.9	7.9	20.0 20.0	90.2 78.3	78.4	6.3 5.5 5	4.1 5 6.0	1	6		91			<0.2 <0.2	0.6
						7.0	0.5	105 84	27.9 28.8		7.9 8.0	1	20.0	78.4 94.9		5.5 6.7	6.0		6		90 84			<0.2	0.7
	a i 1				Surface	1.0 4.6	0.9 0.7	89 91	28.8 28.1	28.8	8.0 7.9	8.0	17.6 17.6 18.9 18.0	94.6 83.3		6.6 5.9 6	3 2.6		6 6	1.	84 89 00			<0.2 <0.2	0.6
IM11	Cloudy	Moderate	14:59	9.1	Middle	4.6	0.7	97 90	28.1 27.1	28.1	7.9 7.9	7.9	18.9	83.4 70.6	03.4	5.9	4.2	4.2	5	6	89 89 91	822070	811473	<0.2	<0.2 0.7 0.7 0.7 0.7
					Bottom	8.1	0.6	92	27.1	27.1	7.9	7.9	22.9 22.9	70.6	70.6	4.9 4	.9 5.5		6		91			<0.2	0.8
					Surface	1.0	0.6 0.6	100 105	28.7 28.7	28.7	8.0 8.0	8.0	17.6 17.6 17.6	93.4 93.1	93.3	6.5 6.5	1 2.6	i	7	1	83 84			<0.2 <0.2	0.6
IM12	Cloudy	Moderate	15:06	9.6	Middle	4.8 4.8	0.5 0.5	101 107	28.2 28.2	28.2	7.9 7.9	7.9	19.1 19.1	80.8 80.6	80.7	5.7 5.7	4.1	4.0	6 7	6	88 88 87	821448	812055	<0.2 <0.2	<0.2 0.6 0.6
					Bottom	8.6 8.6	0.3	86 92	27.4 27.4	27.4	7.9 7.9	7.9	22.1 22.1 22.1	70.5 70.5	70.5	4.9 4.9	5.6		5 5		90 91			<0.2 <0.2	0.6
					Surface	1.0	-	-	28.9 28.9	28.9	8.0 8.0	8.0	18.5 18.6 18.5	100.2 99.6		7.0 6.9	3.1		6 5	-	-			-	-
SR1A	Cloudy	Moderate	15:29	5.5	Middle	2.8 2.8	-	-	-	-	-		<u> </u>			- '	.0 -	3.7	-	5	· ·	819973	812662	-	
					Bottom	4.5	-	-	28.1 28.1	28.1	7.9 7.9	7.9	20.4 20.4 20.4	84.1 84.0		5.9 5.9 5	9 4.4		5 5	1	-			-	-
					Surface	1.0	0.5	80	28.8	28.8	8.0	8.0	17.5 17.5	96.6	06.6	6.8	2.2		5	1	87			<0.2	0.6
SR2	Cloudy	Moderate	15:41	5.2	Middle	- 1.0	- 0.5	- 83	- 28.8	-	8.0		17.5	96.5		<u>6.8</u> - 6	8 2.3		-	6	- 88	821466	814154	<0.2	<0.2 - 0.7
	,				Bottom	- 4.2	- 0.2	- 60	- 28.1	28.1	- 7.9	7.9	- 19.4 19.4	- 83.6		- 5.9 5	- 9 4.6		- 6		88			<0.2	0.6
					Surface	4.2	0.2	63 47	28.1 28.7	28.7	7.9 8.0	8.0	17.3 47.2	83.5 95.8	05.9	5.9 6.7	4.5	1	7		- 89			<0.2	-
	a t 1					1.0 4.5	0.2	48 157	28.7 28.4		8.0 7.9		17.3	95.7 86.7		6.7 6.1 6	4 3.1		6 8	-	-			-	-
SR3	Cloudy	Rough	14:27	8.9	Middle	4.5 7.9	0.1	168 173	28.4 27.9	28.4	7.9 7.9	7.9	17.9 17.9 20.2 20.2	86.2 74.4		6.1	3.9		7	- '	-	822125	807590	-	
					Bottom	7.9	0.1	189 246	27.9	27.9	7.9	7.9	20.2	74.2	74.3	5.2 5 5.2 5	2 9.6		8	-				-	
					Surface	1.0	0.5	266 142	29.1 26.5	29.1	8.1 7.9	8.1	17.6 17.6 25.4 05.4	108.4	100.0	7.6 4.1 5	5.2		6	1	-			-	-
SR4A	Cloudy	Moderate	15:45	7.7	Middle	3.9	0.0	153	26.4	26.5	7.9	7.9	25.4 25.4	59.4 59.4	59.4	4.2	10.	4 10.5	8	7	-	817199	807829	-	
					Bottom	6.7 6.7	0.0	58 61	26.0 26.0	26.0	7.9 7.9	7.9	27.5 27.5 27.5	60.9 61.2	61.1	4.3	3 15.	2	8		-			-	-
					Surface	1.0	0.2	312 317	28.9 28.9	28.9	8.2 8.2	8.2	18.1 18.1	113.4 113.2		7.9 7.9	6.9 7.8		10 10	-	-			-	-
SR5A	Cloudy	Moderate	16:04	3.4	Middle	-	-	-	-	-	-			-			.9 -	9.5	-	10		816588	810682	-	
					Bottom	2.4 2.4	0.1	305 335	28.9 28.9	28.9	8.2 8.2	8.2	18.2 18.2 18.2	114.4 114.7		8.0 8.0	.0 11.		9 10	7	-			-	-
					Surface	1.0	0.1	26 26	29.2	29.2	8.2 8.2	8.2	18.6 18.6 18.6	111.4	1116	7.7	8.7		12	ł	L÷.		İ		-
SR6A	Cloudy	Moderate	16:33	4.6	Middle	-	-	-	-	-	-			-		- 7	.7 -	9.1	-	10		817946	814729	-	
					Bottom	3.6	0.0	231	27.8	27.8	8.0	8.0	20.9 20.9	86.7		6.1 6	1 9.5		- 9	4	-			-	-
					Surface	3.6	0.0	248 110	27.8 28.7	28.7	8.0 8.0	8.0	20.9 18.0 18.0	87.3 101.3	3 101 3	6.1 7.1	9.6		8	1				-	
SR7	Cloudy	Moderate	16:28	16.0	Middle	1.0 8.0	0.7	115 70	28.7 28.3	28.3	8.0 8.0	8.0	18.1	101.2 95.7	95.7	7.1 6.7 6	2.0	21	7 6	6	· .	823626	823737	-	
GR/	Cibudy	wouerate	10.20	10.0		8.0 15.0	0.3	76 58	28.3 28.1		8.0 8.0		19.3	95.6 93.4	-	6.7 6.5	2.0	<u> </u>	6 4		-	023020	023131	-	
					Bottom	15.0 1.0	0.2	62	28.1 28.9	28.1	8.0 7.9	8.0	20.0 20.0	93.4 89.8	93.4	6.5 ⁶ 6.2	5 2.2		4	1	-			-	-
					Surface	1.0	-	-	28.8	28.9	7.9	7.9	19.0 19.0	89.7		6.2	2 5.8	1	5	1					-
SR8	Cloudy	Moderate	15:17	4.9	Middle	-	-	-	-	-	-	-	-	-	-	-	-	10.5	-	5		820390	811601	-	· · ·
					Bottom	3.9 3.9	-	-	28.2 28.2	28.2	7.9 7.9	7.9	19.6 19.6	82.2 82.1		5.8 5.7 5	8 14.		5 5	<u> </u>	-			-	-
DA: Depth-Aver	aged																								

Expansion of Hong Kong International Airport into a Three-Runway System Water Quality Monitoring Water Quality Monitoring Results on 09 July 20 during during Mid-Flood Tide

Water Qua	ity Monito	oring Resu	Its on		09 July 20 during	Mid-Flood	Tide																	
Monitoring Station	Weather	Sea	Sampling	Water	Sampling Depth (m)	Currer Speed		Water Te	mperature (°C)		рH	alinity (ppt)	DC	Saturation (%)	Dissolved Oxygen	Turbidity	(NTU) Sus	ended Sol (mg/L)	ds Tot	al Alkalinity (ppm)	Coordinate HK Grid	Coordinate HK Grid	Chrom	
Station	Condition	Condition	Time	Depth (m)		(m/s)	Direction	Value	Average	Value	Average Va	ue Averag	je Valu	le Average	Value DA	Value	DA V	ue D/		lue DA	(Northing)	(Easting)		DA Value DA
					Surface 1.	0.7	40 43 23	28.4 28.3 28.1	28.4	8.0 8.0 8.0	0.0 10	.5 .5 .5	91.	9 92.0	6.5 6.5 5.9 6.2	6.7 6.7 6.8		i 	8	3			<0.2 <0.2 <0.2	1.0 0.9 0.9
C1	Cloudy	Rough	08:59	8.8	Middle 4. Bottom 7.	0.3	24 8 8	28.1 26.8 26.8	28.1	8.0 7.9 7.9	7.0 24	.4 .4 .3 .2 24.3	63	2 64.9	5.8 4.4 4.6 4.5	6.8 18.4 18.2		7	9) 9) 9)	0	815637	804241	<0.2 <0.2 <0.2	<0.2 0.9 0.9 0.9 0.9 0.7
					Surface 1.	0.7	19 19	28.8 28.8	28.8	7.9 7.9	7.9 1	.2 .2 12.2	94. 93.	0 9 94.0	6.8 6.8	4.6 4.6			8	4			<0.2 <0.2	0.8
C2	Cloudy	Rough	09:27	12.5	Middle 6.	0.7	354 326 342	28.5 28.5 26.8	28.5	7.9 7.9 7.8	7.9 1	.6 .0 17.3	84.	0 84.0	5.9	4.6 4.6 5.9	5.1	6		7 7 0	825672	806924	<0.2 <0.2 <0.2	<0.2 0.9 0.9 1.0 0.9
					Bottom 11 Surface 1.	5 0.4 0.3	347 263	26.8 28.5	26.8	7.8 7.9	7.8 24	.2 24.2	61. 86.	5 01.4 8 06.0	4.3 6.1	6.0 3.1		1	9	0 4			<0.2 <0.2	1.0
C3	Cloudy	Moderate	07:37	12.4	Middle 6. 6. 6.	0.4	263 247 268	28.4 27.9 27.9	27.9	7.9 7.9 7.9	7.0 2	.0 16.9 .6 20.6	86.	8 5 80.4	6.1 5.6 5.6	3.2 3.3 3.3	3.6	7	8	8 88	822096	817789	<0.2 <0.2 <0.2	<0.2 1.0 1.0
					Bottom 11 11	4 0.3 4 0.3	250 251	26.4 26.4	26.4	7.9 7.9	7.9 2	.7 .7 25.7	70.	8 70.9	4.9 5.0	4.5 4.5		i •	9	1			<0.2 <0.2	1.0 1.0
IM1	0 hurt	Bruch	00.40	5.0	Surface 1.		85 90 -	28.4	28.4	8.0 8.0	8.0 1	.2 .2 17.2	96. 96.		6.8 6.8 - 6.8	6.6 6.6		8	8	5 5 - 87	047045	807136	<0.2 <0.2	<pre>1.0 0.9 <0.2 - 1.0</pre>
INT	Cloudy	Rough	09:18	5.0	Middle 4. Bottom 4.		- 130 137	- 28.4 28.4	28.4	- 8.0 8.0		.3 .3 17.3	- 94. 94.		- 6.7 6.7 6.7	- 9.2 9.3	_		-	0	817945	807136	- <0.2 <0.2	<0.2 - 1.0
					Surface 1.	0.4	21 21	28.4 28.4	28.4	8.0 8.0	8.0 1	.4 17.4	94. 94.	6 94.5	6.7 6.7	6.3 6.4		i •	8: 8:	2			<0.2 <0.2	0.9
IM2	Cloudy	Rough	09:27	6.9	Middle 3. 3.	0.4	18 19 353	28.4 28.4 28.2	28.4	8.0 8.0 8.0	0.0 1	.5 .6 .9	93.	1 93.1	6.6	7.8 8.1 7.1	7.1	7	8	6 86 5 0	818162	806151	<0.2 <0.2 <0.2	<0.2 0.9 1.0
					Surface 1.	0.2	325 1	28.2 28.3	28.2	8.0 8.0	8.0 1 ⁻	.9 17.9 .8 16.0	86. 92.	0 86.2	6.1 6.1 6.6	7.0 6.3		i	9	0 4			<0.2 <0.2	1.0
IM3	Cloudy	Rough	09:34	7.7	Middle 3. 3. 3.	0.3	1 345 353	28.3 28.2 28.1	28.2	8.0 8.0 8.0	e 0 1	.9 .3 .3 .3	92.	3 90.2	6.5 6.3 6.3	6.3 6.8 7.3	7.8	6	8	3 6 7 87	818795	805610	<0.2 <0.2 <0.2	<0.2 1.0 1.0
					Bottom 6. 6.	0.3	279 289 4	27.4 27.3 28.4	27.4	8.0 8.0 8.0	8.0 1	.3 .4 18.9	80. 74. 94.	7 //.6	5.7 5.3 6.7	9.9 10.0 5.5			9				<0.2 <0.2 <0.2	1.0 1.0 0.9
IM4	Cloudy	Rough	09:42	8.5	Middlo 4.	0.9	4 348	28.4 28.1	28.4	8.0 8.0	8.0 1	.5 17.5	94. 89.	4 94.4 3 90.2	6.7 6.3 6.5	5.6 6.7			8	2 8 00	819709	804615	<0.2 <0.2	0.9
	oloudy	nough	00.12	0.0	Minute 4. Bottom 7. 7. 7.	0.5	350 330 351	28.0 27.4 27.3	27.4	8.0 8.0 8.0	1	.5 17.5 .8 20.8	70	3 1 70.4	6.3 5.6 5.5 5.6	6.7 15.5 15.3			9	8 00 2 2	010100		<0.2 <0.2 <0.2	<0.2 0.9 0.9 0.9 0.9 0.9
					Surface 1.	1.0	7 7 1	28.2 28.2	28.2	8.0 8.0	8.0 1	.2 .2 16.2	91. 91.	7 91.6	6.5 6.5	6.4 6.6		i	8	7			<0.2 <0.2	0.9
IM5	Cloudy	Moderate	09:48	8.0	Middle 4.	1.0 0.5	1 1 15	28.2 28.2 27.7	28.2	8.0 8.0 8.0	8.0 1	.2 .2 .3 .20.2	89.	9 89.9 8 83.0	6.4 6.4 5.8 5.8 5.8	7.5 7.4 10.7	8.2	6	9	1 90 2	820727	804876	<0.2 <0.2 <0.2	<0.2 0.9 0.9 0.9 0.9
					Surface 1. 1. 1.	0.2	16 273 295	27.7 28.5 28.5	28.5	8.0 8.0 8.0	80 1	.2 20.2 .8 17.8	83.	1 6 94.6	5.8 6.7	10.7 6.6 6.9			9:				<0.2 <0.2 <0.2	1.0 1.0 0.9
IM6	Cloudy	Moderate	09:55	7.8	Middle 3.	0.1	242 245	27.9 27.8	27.9	8.0 8.0	8.0 1	.8 .8 18.8	85. 85.	5 4 85.5	6.0 6.0	11.1 11.0	10.4	8	9	1 1 90	821045	805839	<0.2 <0.2	<0.2 1.0 1.0
					Bottom 6.	0.1	72 75 9	27.2 27.2 28.6	27.2	8.0 8.0 8.0	1	.0 21.9	75.	2 75.4	5.3 5.3 6.7	13.3 13.3 5.6			9	2	<u> </u>	<u> </u>	<0.2 <0.2 <0.2	1.0 0.9 0.9
IM7	Cloudy	Moderate	10:04	8.8	Surface 1.	0.1	9 292	28.6 28.5	28.6	8.0 8.0	8.0 1	.2 17.2	95. 89.	7 ^{95.0} 8 90.0	6.7 6.3 6.5	5.7 6.0	7.1		8	7 8 00	821367	806842	<0.2 <0.2	0.9
	-				Middle 4. Bottom 7. 7. 7.	0.1	309 74 74	28.5 28.5 28.6	28.6	8.0 8.0 8.0	0 1i	.4 .6 .5 18.5	90.	0 5 86 7	6.3 6.1 6.1	6.3 9.5 9.5			9	8 0 0			<0.2 <0.2 <0.2	0.2 0.9 1.0 0.9
					Surface 1.	0.1	7 7	28.6 28.6	28.6	7.9 7.9	7.9 1	.9 .9 15.9	88. 88.	3 88.2	6.3 6.2 6.1	4.1 4.1 4.2		j 	8	3 4			<0.2 <0.2	1.0
IM8	Cloudy	Moderate	09:00	8.3	Middle 4. Bottom 7.	0.2	251 272 265	28.5 28.5 28.4	28.5	7.9 7.9 7.9	7.9 10	.7 .7 .9 .17.9	83.	4 83.5 1 81.2	5.9 5.9 5.7 5.7	4.3 7.9	5.4	6	8	7 ⁸⁷ 0	821850	808126	<0.2	<0.2 1.0 1.0 0.9
DA: Denth-Ave					Bottom 7.	0.2	268	28.4	20.4	7.9	1.5 1	.9	81.	2 01.2	5.7 5.7	7.8		;	9	0			<0.2	0.9

Expansion of Hong Kong International Airport into a Three-Runway System Water Quality Monitoring Water Quality Monitoring Results on 09 July 20 during during Mid-Flood Tide

Water Qual	ity Monit	oring Resu	lts on		09 July 20	during Mid-		de																			
Monitoring	Weather	Sea	Sampling	Water	Sampling Dept	h (m)	Current Speed	Current Direction	Water Te	mperature (°C)		рН	Salin	ity (ppt)		aturation (%)	Dissolved Oxygen	Turbidity	NTU)	Suspende (mg/	d Solids L)	Total Alkalinit (ppm)		Coordinate HK Grid	Coordinate HK Grid	Chromium (µg/L)	n Nickel (µg/L)
Station	Condition	Condition	Time	Depth (m)			(m/s)		Value	Average	Value	Average		Average	Value	Average	Value DA	Value	DA	Value	DA	Value DA	DA	(Northing)	(Easting)	Value DA	
					Surface	1.0 1.0	0.2	269 277	28.6 28.6	28.6	7.9 7.9	7.9	15.7 15.7	15.7	89.6 89.6	89.6	6.4 6.4 6.3	4.4 4.3		5 6		84 83				<0.2 <0.2	1.0
IM9	Cloudy	Moderate	08:53	8.4	Middle	4.2	0.3	254 272	28.6 28.6	28.6	7.9 7.9	7.9	17.0 17.0	17.0	88.2 88.1	88.2	6.2 6.2	4.3 4.4	4.9	6 5	5	87 86 87	87	822100	808822	<0.2 <0.2 <0.	0.9
					Bottom	7.4	0.4	270 283	28.5 28.5	28.5	7.9 7.9	7.9	17.6 17.6	17.6	83.8 83.9	83.9	5.9 5.9	5.9 6.0		5 5	-	90 90				<0.2 <0.2	1.0 0.9
					Surface	1.0	0.3	322 351	28.6 28.6	28.6	7.9 7.9	7.9	16.4 16.4	16.4	88.7 88.7	88.7	6.3 6.3 6.1	4.7 4.8		7 7	-	84 84				<0.2	1.0
IM10	Cloudy	Moderate	08:46	8.2	Middle	4.1 4.1	0.5	306 325	28.5 28.5	28.5	7.9 7.9	7.9	17.1 17.1	17.1	84.1 84.1	84.1	5.9 5.9	5.0 5.0	5.0	6 7	6	87 86 87	87	822394	809776	<0.2 <0.	0.2 0.9 1.0
					Bottom	7.2 7.2	0.4	302 328	28.2 28.2	28.2	7.9 7.9	7.9	18.7 18.6	18.7	78.2 78.4	78.3	5.5 5.5 5.5	5.3 5.1		5 6		89 90				<0.2 <0.2	1.0 1.0
					Surface	1.0	0.3	319 319	28.6 28.6	28.6	7.9	7.9	16.2 16.2	16.2	87.0 86.5	86.8	6.2	4.3		6		83 84				<0.2 <0.2	1.0
IM11	Cloudy	Moderate	08:35	8.3	Middle	4.2	0.4	303 303	28.5 28.5	28.5	7.9	7.9	17.2	17.2	82.6 82.6	82.6	5.8 5.8 5.8	4.7	4.9	6	6	86 87 86	86	822048	811456	<0.2 <0.2 <0.	0.0
					Bottom	7.3	0.4 0.3 0.3	291 292	27.6	27.6	7.9	7.9	21.6	21.6	72.6	72.7	5.1 5.1 5.1	5.5 5.5		5		89 89				<0.2	0.9
					Surface	1.0 1.0	0.4	301 329	28.7 28.7	28.7	7.9	7.9	15.8 15.8	15.8	85.8 85.7	85.8	6.1 6.1	3.8 3.9		6		84 83				<0.2	0.9
IM12	Cloudy	Moderate	08:29	9.0	Middle	4.5	0.4	303	28.2	28.2	7.9	7.9	18.8	18.8	76.3	76.1	5.4 5.7	4.5	4.7	6	6	87 87 87	87	821446	812032	<0.2	10
					Bottom	4.5 8.0 8.0	0.5 0.4 0.4	309 300 311	28.2 26.6 26.6	26.6	7.9 7.9 7.9	7.9	25.0	25.0	75.9 65.0 64.9	65.0	5.3 4.5 4.5 4.5	4.5 5.8 6.1		6 6 5		90 90				<0.2 0.2 <0.2	0.9
					Surface	1.0 1.0		-	28.6 28.6	28.6	7.9	7.9	16.4 16.4	16.4	88.2 88.1	88.2	6.2 6.2	3.4 3.5		5 7 7		-				-	-
SR1A	Cloudy	Moderate	08:11	5.1	Middle	2.6		-			-		-		-		6.2 -	-	4.3	-	6	÷.	-	819978	812664	<u> </u>	
	-				Bottom	2.6 4.1	•	-	28.6	28.6	7.9	7.9	- 16.8 16.8	16.8	- 86.1 86.0	86.1	- 6.1 6.1	5.2		6		-				-	-
					Surface	4.1	- 0.1	246	28.6 28.7	28.7	7.9 7.9	7.9	15.5	15.5	87.9	87.9	6.2	5.2 3.5		5		86				- <0.2	- 1.0
SR2	Cloudy	Moderate	07:58	4.5	Middle	1.0 -	0.1	- 262	28.7	-	7.9		15.5		87.8		6.2 - 6.2	3.7	6.4	-	7	86 - 87	87	821480	814144	- <0.2	1.0
					Bottom	3.5	0.1	280	28.5	28.5	7.9	7.9	17.5	17.6	83.0	83.1	- 5.9 5.9	- 9.2		- 6		- 88				<0.2	0.9
					Surface	3.5 1.0	0.1	288 4	28.4 28.6	28.6	7.9	7.9	17.6 16.4	16.4	83.1 87.6	87.6	5.9 5.3 6.2	9.1 4.0		6		-				<0.2	-
SR3	Cloudy	Moderate	09:08	9.7	Middle	1.0 4.9	0.2	4 326	28.6 28.5	28.5	7.9 7.9	7.9	16.4 17.2	17.2	87.5 84.2	84.3	6.2 5.9 6.1	4.0	4.2	7	6		-	822139	807552	· .	
					Bottom	4.9 8.7	0.1	346 331	28.5 27.8	27.8	7.9 7.9	7.9	17.2 20.7	20.7	84.3 73.0	73.1	5.9 5.1 5.1	3.7 5.0		6 5		-				-	
					Surface	8.7	0.1	336 255	27.8 28.4	28.4	7.9 8.0	8.0	20.7	17.2	73.2 89.9	89.8	5.1 ^{3.1} 6.4	4.7 6.4		5		-					
SR4A	Cloudy	Moderate	08:35	9.1	Middle	1.0 4.6	0.3	272 255	28.4 27.6	27.6	8.0 7.9	7.9	17.2 21.4	21.4	89.7 71.8	71.9	6.3 5.0 5.7	6.7 11.6	10.3	6	7		-	817202	807803	<u> </u>	
					Bottom	4.6 8.1	0.1	272 34	27.6 26.7	26.7	7.9 7.9	7.9	21.3 25.1	25.0	71.9 64.3	64.5	5.0 4.5 4.5	11.9 12.8		8	-	-				-	-
					Surface	8.1 1.0	0.1	36 274	26.7 28.4	28.4	7.9 8.0	8.0	25.0 18.1	18.1	64.7 91.5	91.5	4.5 6.4	12.7 7.4		8		-				-	-
SR5A	Cloudy	Moderate	08:19	3.2	Middle	1.0	- 0.2	- 282	28.4	-	8.0		18.1	-	91.4 -		6.4 6.4	7.7	9.2	-	8		-	816582	810692	<u> </u>	
-	,				Bottom	- 2.2	- 0.2	- 276	- 28.5	28.5	- 8.0	8.0	- 18.7	18.7	- 89.9	89.9	- 6.3 6.3	- 10.8		- 7	-	-				-	
					Surface	2.2	0.2	297 251	28.5 28.5	28.5	8.0 7.9	7.9	18.7 17.3	17.3	89.9 91.3	91.3	6.3 6.4	11.0 5.2		8 5		-				-	-
SR6A	Cloudy	Moderate	07:53	3.9	Middle	1.0 -	0.1	- 268	28.5		7.9		17.3		91.3 -		6.4 6.4	5.2	7.5	5	5	· .	-	817942	814730	<u> </u>	
	,				Bottom	- 2.9	- 0.0	- 339	- 28.5	28.5	- 7.8	7.8	- 18.5	18.5	- 89.3	89.5	- 6.3 6.3	- 9.9		- 4	-	-				-	-
					Surface	2.9	0.0	358 48	28.5 28.4	28.4	7.8 7.9	7.9	18.5 17.7	17.7	89.7 88.1	88.1	6.2	9.8 2.4		4 7		-				-	
SR7	Cloudy	Moderate	07:07	15.6	Middle	1.0 7.8	0.3 0.1	52 75	28.4 28.1	28.1	7.9 7.9	7.9	17.7 18.8	18.8	88.1 84.2	84.2	6.2 5.9 6.1	2.4 2.5	2.7	7 7	7	· .		823619	823749	<u>·</u> .	
0.0	Cioudy	modorate		10.0	Bottom	7.8 14.6	0.1 0.2	80 192	28.0 25.2	25.2	7.9 7.8	7.8	18.8 29.5	29.5	84.1 65.5	65.6	5.9 4.6 4.6	2.4 3.2		8	·	· ·		220010	5201.10		
					Surface	14.6 1.0	0.2	- 202	25.2 29.1	29.1	7.8 7.9	7.8	29.5 17.2	29.5	65.6 86.3	86.3	4.6 6.0	3.2 4.1		8	[-				-	-
SR8	Cloudy	Moderate	08:21	4.7	Middle	1.0	-	-	29.1	23.1	7.9	1.9	17.2	11.2	86.3	00.3	6.0 - 6.0	4.1	5.2	7	8	-		820403	811612	-	-
550	Cloudy	woderate	00.21	4.7		- 3.7	-	-	- 29.0	-	- 7.9	-	- 17.2	-	- 85.8	-	- 6.0	- 6.2	5.2	- 9	°	· ·	-	020403	011012	-	
					Bottom	3.7	-		29.0	29.0	7.9	7.9	17.2	17.2	85.7	85.8	6.0 6.0	6.4		9						-	-

Expansion of Hong Kong International Airport into a Three-Runway System Water Quality Monitoring Water Quality Monitoring Results on 11 July 20 during Mid-Ebb Tide

Water Qual	ity Monite	oring Resu	its on		11 July 20	during Mid-		•																
Monitoring	Weather	Sea	Sampling	Water	Sampling Dep	th (m)	Current Speed	Current	Water Ten	nperature (°C)	pН	Sal	inity (ppt)	DO Satura (%)		Dissolved Oxygen	Turbidity(NTU) Susp	nded Solid mg/L)	s Total Alkalinit (ppm)	Coordinate	Coordinate HK Grid	e Chromiu (µg/L)	
Station	Condition	Condition	Time	Depth (m)			(m/s)	Direction	Value	Average	Value Avera	ge Value	Average	Value Ave	rage Va	alue DA	Value	DA Val	e DA	Value DA	(Northing)	(Easting)	Value	DA Value DA
					Surface	1.0	0.4	226 247	29.0 29.0	29.0	8.2 8.2	18.7		132.9 132.6		.2	4.0 4.0	4	_	87 86			<0.2	0.9
C1	Fine	Moderate	16:30	8.1	Middle	4.1	0.5	209	28.3	28.3	8.1 8.1	19.7	10.7	102.4 10	25 7	.2 8.2	4.4	60 5	5	89 80	815596	804230	<0.2	-0.2 1.0 1.0
0.		modorato	10.00	0.1		4.1	0.5	213 220	28.3 24.8		8.1	19.7		102.6	7	.0 1.0	4.4 9.6	6	-	89 91	010000	00.200	<0.2	0.9 1.0
					Bottom	7.1	0.4	228	24.8	24.8	8.0 8.0	30.8	30.8	57.5	7.5 4	.0 4.0	9.6	5		91			<0.2	1.0
					Surface	1.0	0.2	135 147	29.7 29.7	29.7	8.1 8.1 8.1	15.7		108.5 106.6		.6	2.7 2.7	5		86 86			<0.2	0.9
C2	Cloudy	Moderate	15:24	11.5	Middle	5.8	0.5	154	27.4	27.4	7.8 7.8	21.8	21.8	77.0 76	s.o. 5	.4	2.5	53 4		88	825663	806929	<0.2	-0.2 1.0 1.0
					Bottom	5.8 10.5	0.5	167 144	27.4 25.2	25.2	7.8	21.8		76.7	5	.4 .2 4.2	2.6 11.0	4		87 90			<0.2	1.0
						10.5	0.5	158 286	25.2 29.1		7.8 7.8	29.2		60.6	4	.2 4.2	10.1 2.5	3		90 86			<0.2 <0.2	1.0
					Surface	1.0	0.4	294	28.9	29.0	8.2 8.3 8.2	20.7		137.4	9.7	.4 8.1	2.6	5		88			<0.2	0.9
C3	Cloudy	Moderate	17:08	11.2	Middle	5.6	0.2	257 257	27.9 27.9	27.9	8.0 8.0	24.2		99.4 99 99.2 99		.8	3.0 3.0	3.2 4		88 89	822130	817813	<0.2 <	<0.2 0.9 0.9
					Bottom	10.2	0.1	120	26.0	26.0	7.9 7.9	28.8	28.8	78.5 79	. 5	.4 5.4	4.0	6		90			<0.2	0.9
						10.2	0.1	131 169	26.0 29.3		7.9	28.8		79.1	5	.4	4.1 4.2	5		90 87			<0.2	0.9
					Surface	1.0	0.2	169	29.3	29.3	8.1 8.1	18.3		138.3 13		.6 9.6	4.2	5		88			<0.2	0.9
IM1	Fine	Moderate	16:09	4.9	Middle	-	-	-	-	-	-	-	-	-	-	-	-	6.5 -	4	- 88	817946	807140	-	<0.2 - 0.9
					Bottom	3.9 3.9	0.1	197 205	26.0 26.0	26.0	8.0 8.0	27.0		64.7 64.9 64		.5 4.5	8.9 8.8	4		89 89			<0.2	0.9
					Surface	1.0	0.2	190	29.2	29.2	8.1 0.1	18.4	40.4	138.4	9.4 9	.6	3.9	5		85			<0.2	0.9
						1.0	0.2	194 152	29.2 26.9		8.1	18.4		73.5	9	.6 7.4	4.0 5.9	5		86 88			<0.2 <0.2	0.9
IM2	Fine	Moderate	16:01	7.0	Middle	3.5	0.3	166	26.9	26.9	8.0 8.0	23.9	23.9	73.5	3.5 5	.1	5.9	6.4 6	5	89 88	818154	806171	<0.2	<0.2 0.9 0.9
					Bottom	6.0 6.0	0.2	116 127	25.5 25.5	25.5	8.0 8.0 8.0	28.8		63.8 64.2 64		.4 4.5	9.4 9.5	6		90 90			<0.2 <0.2	0.9
					Surface	1.0	0.1	72 77	29.1 29.1	29.1	8.1 8.1 8.1	18.5 18.5		132.0 131.6 13		.2	4.1 4.2	5		86 86		1	<0.2	0.9
IM3	Fine	Moderate	15:54	7.3	Middle	3.7	0.2	119	27.4	27.4	8.0 8.0	22.5	22.5	85.9 86	s 1 6	.0 7.6	5.8	62 6	6	88 88	818782	805571	<0.2	0.2 0.9 0.9
	1 110	modorato	10.01	1.0		3.7 6.3	0.2	127 130	27.4 25.6		8.0	22.5		86.2	6	.0	5.8 8.8	6		88 89	010702	000071	<0.2	0.9 0.9
					Bottom	6.3	0.4	134	25.6	25.6	8.0	28.5	20.5	64.7	+.0 4	.5 4.5	8.6	7		90			<0.2	0.9
					Surface	1.0	0.7	200	28.8 28.8	28.8	8.2 8.2 8.2	18.5		110.3 110.6		.7	4.7	5		85 85			<0.2	0.9
IM4	Fine	Moderate	15:44	8.2	Middle	4.1	0.6	175 186	26.8	26.8	8.0 8.0	24.2	24.2	76.0 76	6.0 5	.3 6.5 .3	6.2 6.3	7.9 5	5	88	819717	804587	<0.2	-0.2 1.0 0.0
					Bottom	7.2	0.6	186	26.8 25.5	25.5	8.0 8.0 8.0	20 F		76.0 62.2 62	2 4	.3 4.2	12.8	7.5 5 4		89 90			<0.2	0.9 0.9
						7.2	0.3	173 214	25.5 29.5		8.0	28.5		62.4	4	.3 4.3	12.9 3.9	5		90 85			<0.2	0.9
					Surface	1.0	0.7	218	29.5	29.5	8.1 8.1	17.9	17.9	131.8	2.0 9	.1 74	3.9	4		86			<0.2	1.0
IM5	Fine	Moderate	15:37	7.8	Middle	3.9	0.5	214 229	27.1 27.1	27.1	8.0 8.0	23.0		82.2 82.0		.8 7.4	6.1 6.3	6.7 6		88 87 88	820733	804856	<0.2 <	<0.2 1.0 1.0
					Bottom	6.8	0.4	195	26.2	26.2	8.0 8.0	26.4	26.4	65.7 64	5.8 4	.6 4.6	10.1	6		90			<0.2	1.0
					Surface	6.8	0.4	198 216	26.2 29.5	29.5	8.0 8.2 8.2	26.4		65.9 0. 133.6 12		.6 4.0	10.1 3.9	5		90 86			<0.2	1.0
					Sunace	1.0	0.4	224 235	29.5 28.9	29.5	8.2 0.2 8.1 0.4	17.7		133.5 118.6	9	.2 8.7	4.0 5.4	6		86 88 99			<0.2 <0.2	0.9
IM6	Fine	Moderate	15:29	7.3	Middle	3.7	0.3	240	28.9	28.9	8.1 8.1	18.8	10.0	118.9	o.o 8	.3	5.4	0.2 6	°	88 00	821052	805828	<0.2	<0.2 1.0
					Bottom	6.3	0.3	209 219	26.7 26.7	26.7	8.0 8.0	24.7		73.7 73		5.1	9.3 9.4	6		90 90			<0.2	0.9
					Surface	1.0	0.2	223	28.7	28.7	8.2 0.2	17.5	17.5	112.2 11	20 7	.9	4.0	5		86		1	<0.2	1.0
						1.0	0.2	236 240	28.7 28.3		8.2	17.5		111.7	7	.8 7.1	4.0 4.4	6		86 88 99			<0.2 <0.2	1.0
IM7	Fine	Moderate	15:22	8.7	Middle	4.4	0.2	251	28.3	28.3	8.0	19.2	19.2	89.0	9.1 6	.2	4.7	5.2 5	5	88 00	821352	806846	<0.2	<0.2 1.0
					Bottom	7.7	0.2	246 249	26.4 26.4	26.4	8.0 8.0	26.1 26.1		69.4 69.5		.8 4.8	7.0 7.2	4		90 90			<0.2	1.0
					Surface	1.0	0.2	55 57	29.0 28.9	29.0	8.1 8.1 8.1	18.2		4475	69 8	.1	2.7 2.7	3		86 86			<0.2 <0.2	0.9
IM8	Cloudy	Moderate	15:52	7.6	Middle	3.8	0.2	136	27.8	27.8	8.1 7.9 7.0	18.2	18.7	88.7 88	8.2 6	.3 7.2	4.6	46 3		88	821833	808122	<0.2	-0.2 0.9 1.0
IIVIO	Cloudy	MOUCIALE	10.02	7.0		3.8 6.6	0.2	147 126	27.7 27.5		7.9	18.7		87.7	6	.2	5.1 6.1	4.0 4		87 90	021033	000122	<0.2	<0.2 1.0 1.0
					Bottom	6.6	0.1	126	27.5	27.5	7.9 7.9	19.9		77.9 77		5.5	6.3	4		90			<0.2	0.9
DA: Depth-Aver	and																							

DA: Depth-Averaged

Expansion of Hong Kong International Airport into a Three-Runway System Water Quality Monitoring Water Quality Monitoring Results on during Mid-Ebb Tide 11 July 20

Water Qua	lity Monit	oring Resu	lts on		11 July 20	during Mid-		е																	
Monitoring Station	Weather	Sea	Sampling	Water	Sampling Dep	th (m)	Current Speed	Current Direction	Water T	emperature (°C)		pН	Salin	nity (ppt)	DO Saturat (%)	ion	Dissolved Oxygen	Turbidity(NTU		ded Solids g/L)		Alkalinity pm)	Coordinate HK Grid	Coordinate HK Grid	Chromium (µg/L)
Station	Condition	Condition	Time	Depth (m)		1 10	(m/s)		Value	Average	Value	Average		Average		•	alue DA	Value D/		DA	Value	DA	(Northing)	(Easting)	
					Surface	1.0 1.0	0.2	75 77	29.1 29.1	29.1	8.1 8.1	8.1	18.2 18.2	18.2	117.1 116.7 116		8.1 8.1 7.3	2.6	5	1	86 86	1			<0.2
IM9	Cloudy	Moderate	15:57	7.2	Middle	3.6 3.6	0.2	105 111	28.1 28.0	28.1	7.9 7.9	7.9	18.4 18.4	18.4	92.3 92 92.3		6.5 6.5	4.6 4.1	4 5	5	88 87	88	822080	808817	<0.2 <0.2
					Bottom	6.2 6.2	0.2	91 92	27.5 27.5	27.5	7.8 7.9	7.8	19.8 19.8	19.8	77.2 77.6 77		5.4 5.5	6.7 6.8	5	1	90 90	1			<0.2 <0.2
					Surface	1.0	0.5	79	29.0	29.0	8.1	8.0	17.9	17.9	116.6		8.1	2.4	4	<u> </u>	86	<u> </u>			<0.2
						1.0	0.5	85 87	28.9		8.0 8.0		17.9 18.0		115.7		8.0 7.1 7.6	2.4 4.2	2	4	87 88	1			<0.2 <0.2 <0.2
IM10	Cloudy	Moderate	16:04	6.8	Middle	3.4 5.8	0.4	88 107	28.6 27.1	28.6	8.0 7.8	8.0	18.1 20.5	18.1	101.6 101.1 70.0 70.0	_	7.1 4.9 5.0	4.2 4.1 12.0 6.2	4	4	89 91	89	822407	809784	<0.2 <0.2
					Bottom	5.8	0.3	112	27.1	27.1	7.8	7.8	20.5	20.5	70.3	.2	5.0	12.1	5	1	91				<0.2
					Surface	1.0	0.6	91 92	28.5 28.3	28.4	8.1 8.1	8.1	18.1 18.1	18.1	106.5 103.6 105	».' Г	7.4	4.0 4.3	4	4	87 86	-			<0.2 <0.2
IM11	Cloudy	Moderate	16:14	8.0	Middle	4.0	0.4	83 83	27.9 28.0	28.0	7.8 7.8	7.8	19.5 19.4	19.5	81.2 81.9 81	.6	5.7 5.7 5.7	6.1 6.3 6.0	4	4	89 89	89	822064	811463	<0.2 <0.2
					Bottom	7.0	0.2	124	26.8	26.8	7.8	7.8	23.5	23.5	71.0 74	2	5.0 5.0	7.5	4	1	91	1			<0.2
					Surface	7.0	0.2	130 118	26.8 28.6	28.6	7.8 8.1	8.1	23.5 18.2	18.2	71.4 71 111.4 110	_	5.0 7.8	7.5 4.0	5	+	90 86	<u> </u>			<0.2 <0.2
						1.0 4.6	0.6	129 109	28.5 27.8		8.1 7.9		18.2 19.7		110.3	-	7.7 5.5 6.6	4.4 6.1	5	-	87 89	-			<0.2 <0.2 <0.2
IM12	Cloudy	Moderate	16:19	9.2	Middle	4.6	0.5	111	27.8	27.8	7.9	7.9	19.7	19.7	77.9 78		5.5	6.1	5	5	90	89	821439	812054	<0.2
					Bottom	8.2 8.2	0.2	113 123	26.4 26.5	26.5	7.9 7.9	7.9	22.7 22.7	22.7	70.9 71.7 71	.3	5.0 5.1 5.1	6.4 6.4	5 5	-	90 91				<0.2 <0.2
					Surface	1.0	-	-	29.0 28.9	29.0	8.2 8.2	8.2	19.1 19.1	19.1	121.1 120.5 120		8.3 8.3	3.3 3.4	7	-	-	-			-
SR1A	Cloudy	Moderate	16:36	5.0	Middle	2.5 2.5	•	-	-		-		-				<u>-</u> 8.3	- 3.		7	-	1.	819972	812661	
					Bottom	4.0	-	-	28.5	28.5	8.1	8.0	20.9	20.9	108.4 106		7.5 7.4	3.8	8	1	-				-
					1	4.0	- 0.3	- 77	28.5 28.8		8.0 8.1	-	20.9		104.1	_	7.2 8.1	3.9 3.4	7	+	- 88	<u> </u>			- <0.2
					Surface	1.0	0.3	79	28.7	28.8	8.1	8.1	18.1	18.1	116.0 116		8.1 8.1	3.6	5	1	89	1			<0.2
SR2	Cloudy	Moderate	16:47	4.0	Middle	-	-	-	-	-	-	•	-	-			-	- 3.0	-	5		90	821460	814179	- <0.2
					Bottom	3.0 3.0	0.1	67 72	28.5 28.5	28.5	8.0 8.0	8.0	20.0	20.0	97.7 97.9		6.8 6.8	4.1	5	4	90 91	-			<0.2
					Surface	1.0 1.0	0.1	198 209	28.9 28.8	28.9	8.1 8.1	8.1	17.8 17.9	17.9	112.4 111.7 112	2.1	7.8	2.7	4	-	-	1			-
SR3	Cloudy	Moderate	15:44	8.4	Middle	4.2	0.4	175	28.1	28.1	7.9	7.9	18.5	18.5	90.8 00		6.4	4.6	5	4	-	1.	822133	807574	· .
					Bottom	4.2 7.4	0.4	175 196	28.0 27.6	27.6	7.9 7.8	7.8	18.5 20.8	20.8	80.2	7	6.4 5.6 5.7	5.1 8.4	4	-	-	1			
						7.4	0.1	198 255	27.6 29.3		7.8 8.1		20.8 18.7		81.2		5.7 8.8	8.4 7.3	4	—	-	1			
					Surface	1.0	0.3	263	29.3	29.3	8.1	8.1	18.7	18.7	128.3	5.1	8.9	7.9	7	1	-	1			-
SR4A	Fine	Calm	16:52	8.6	Middle	4.3 4.3	0.1	45 45	26.5 26.5	26.5	8.0 8.0	8.0	25.4 25.5	25.5	68.2 68.3 68		4.8 4.8	11.0 11.2 11.2	6	7	-	-	817188	807791	
					Bottom	7.6	0.2	70	26.2 26.2	26.2	8.0 8.0	8.0	26.6 26.6	26.6	59.4 59 59.6		4.1 4.2	14.9 15.0	7	4	-	-			-
					Surface	1.0	0.1	295 316	29.4 29.3	29.4	8.2 8.2	8.2	19.1 19.1	19.1	134.8 134.5 134	17	9.3	6.8 6.9	6	1	-	1			-
SR5A	Fine	Calm	17:10	3.3	Middle	-	-	-	- 29.5		-		-	-			9.3 - 9.3	- 8		6		1.	816577	810673	· .
					Bottom	- 2.3	- 0.1	- 265	- 28.9	28.9	- 8.1	8.1	- 19.3	19.3	- 115.1 115		- 8.0 8.0	9.0	- 7	-	-	-			-
						2.3	0.1	266 210	28.9 28.3		8.1 8.1	-	19.3 20.0		115.4		8.0 6.8	9.1 9.0	6 12	_					
					Surface	1.0	0.0	230	28.3	28.3	8.1	8.1	20.0	20.0	97.9 97		6.8 6.8	9.0	11	1	-	1			
SR6A	Fine	Calm	17:44	3.8	Middle	-	-	-	-		-		-			-	- 0.0	- 9.3	-	10	-		817981	814741	
					Bottom	2.8	0.1	245 261	27.9 27.9	27.9	8.1 8.1	8.1	20.6 20.6	20.6	88.1 87.8 88	.0	6.2 6.1 6.2	9.6 9.7	9 9	7	· ·	-			
				1	Surface	1.0	0.6	61	29.2	29.2	8.2	8.2	18.6	18.6	135.8	57	9.4	1.9	4	1	-	1			
SR7	Cloudy	Moderate	17:36	16.5	Middle	1.0 8.3	0.7	66 14	29.1 28.8	28.8	8.2 8.1	8.1	18.6 19.9	19.9	135.5 121.3 121.3	11	9.4 8.4 8.9	2.0 2.0 2.0	4	5	-	1.	823632	823758	
SIX7	Cioudy	woodlate	11.30	10.0		8.3 15.5	0.2	14 55	28.8 25.4		8.1 7.9	-	19.9 20.6		78.9	_	8.3 5.7 5.0	2.0 2.3 2.	4		-	+ -	023032	023130	
			<u> </u>		Bottom	15.5	0.2	55	25.4	25.4	7.9	7.9	20.6	20.6	79.4	.2	5.8 5.8	2.3	5	1	-	1			-
					Surface	1.0 1.0	-		29.7 29.7	29.7	8.0 8.0	8.0	19.5 19.6	19.6	109.1 108.9		7.4 7.4 7.4	5.7 5.8	8	1	-	1			-
600	Claudu	Madarata	10.00	4.0	Minhallo	-	-	-	-		-		-		-		- 1 '.4			7	-	1	020440	011000	I - I [

8.0 8.0

-

8.0

-

29.7

29.7

29.7

20.1 20.1

107.9 107.8

-

107.9

-

20.1

7.3 7.3

7.3

5.6

5.8

5.7

-

6

6

7

Nickel (µg/L)

1.0 1.0 0.9 1.0 1.0 1.0 1.0 1.0 <0.2

 $<0.2 \begin{array}{c} 1.0 \\ 0.9 \\ 1.0 \\ 1.0 \\ 1.0 \\ 1.0 \\ 1.0 \\ 1.0 \\ 1.0 \\ 0.9 \\ 1.0 \\ 0.9 \\ 1.0 \\ 0.9 \\ 1.0 \\ 0.9 \\ 1.0 \\ 0.9 \\ 1.0 \\ 0.9 \\ 1.0 \\ 0.9 \\ 1.0 \\ 0.9 \\ 1.0 \\ 0.9 \\ 1.0 \\ 0.9 \\ 1.0 \\ 0.9 \\$

1.0 1.0 -<0.2

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811602

820410

1.0

1.0

1.0

1.0

1.0 1.0 0.9 • ---

DA Value DA 1.0 1.0 1.0 1.0 1.0 1.0 <0.2

SR8

Cloudy

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

Moderate

16:28

4.9

3.9

3.9

Middle

Bottom

Expansion of Hong Kong International Airport into a Three-Runway System Water Quality Monitoring Water Quality Monitoring Results on 11 July 20 during during Mid-Flood Tide

Water Qua	ity Monite	oring Resu	Its on		11 July 20 d	luring Mid-I	Flood Ti	de																				
Monitoring Station	Weather	Sea	Sampling	Water	Sampling Depth	(m)	Current Speed	Current Direction	Water Te	emperature (°C)		рН	Sali	nity (ppt)	DO Satura (%)	ation	Dissolv Oxyge		Turbidity(NTU)	Suspende (mg			Alkalinity pm)	Coordinate HK Grid	Coordinate HK Grid	Chromium (µg/L)	Nickel (µg/
Station	Condition	Condition	Time	Depth (m)			(m/s)		Value	Average	Value	Averag		Average		-		DA	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)	Value DA	
	a				Surface	1.0 1.0 4.2	0.3 0.3 0.3	61 63 17	28.1 28.0 27.3	28.1	8.1 8.1 8.0	8.1	18.5 18.6 22.2	18.5	95.8	5.9	6.8 6.8 5.3	6.0	4.9 5.0 5.6	_	5 6 6		86 87 89				<0.2 <0.2 <0.2	0.9 0.9 0.9
C1	Cloudy	Moderate	10:27	8.3	Bottom	4.2 7.3	0.3 0.2	18 32	27.3 25.6	27.3	8.0 8.0	• •	22.2 28.1		74.9 63.2	5.0	5.2 4.4	4.4	5.5 7.2	5.9	7 7	6	88 91	89	815640	804265	<0.2 <0.2	2 0.8 0.9
					Surface	7.3	0.2	34 350	25.6 28.9	28.9	8.0 8.0	8.0	28.1	14.9	96.1 or	60	4.4 6.8		7.3 2.9		6 3		91 86				<0.2 <0.2	0.9
C2	Cloudy	Moderate	10:58	12.3	Middle	1.0 6.2 6.2	0.3 0.4 0.4	322 28 29	28.9 27.0 27.1	27.1	8.0 7.9 7.9	7.0	14.9	22.2	95.9	24	6.8 5.1 5.1	6.0	2.9 3.0 3.0	6.8	4 2 4	4	85 88 88	88	825666	806930	<0.2 <0.2 <0.2 <0.2	2 1.0 2 1.0 1.0
					Bottom -	11.3 11.3	0.4	346 351	26.3 26.2	26.3	7.8 7.8	7.8	24.1 24.2	24.1	67.6 68.3	8.0	4.8 4.8	4.8	14.3 14.7		5 4		90 90				<0.2 <0.2	1.0 1.0
					Surface	1.0 1.0 6.1	0.3 0.3 0.4	241 249 252	28.6 28.5 27.9	28.6	8.0 8.0 7.9	8.0	16.7	16.7	95.6	5.7	6.8 6.8 6.2	6.5	2.5 2.5 2.2	F	5 4 4		86 85 88	4			<0.2 <0.2 <0.2	1.0 1.0 1.0
C3	Cloudy	Moderate	09:13	12.1	Bottom	6.1 11.1	0.4 0.4	257 266	27.9 25.4	27.9	7.9 7.9	7.9	19.7 28.0	19.7 27.0	87.7 ⁸ 66.6 6	 	6.2 4.7	4.7	2.2 10.1	5.0	3 3	4	87 90	88	822132	817818	<0.2 <0.2	2 1.0 1.1
					Surface	11.1 1.0 1.0	0.4 0.4 0.4	290 7 7	25.4 28.7 28.7	28.7	7.9 8.2 8.2		27.9	17.0	67.0	20.4	4.7	-	10.7 4.5 4.5		4 6 6		90 88 87	-			<0.2 <0.2 <0.2	1.0 0.9 0.9
IM1	Fine	Moderate	10:46	5.2	Middle	-	-	-	-	-	-	-	-	-	-		-	7.7	-	6.3	-	5		89	817952	807150	- <0.2	2 - 0.9
					Bottom	4.2 4.2 1.0	0.4 0.4 0.2	342 351 16	26.9 26.9 28.5	26.9	8.0 8.0 8.1	8.0	24.0	24.0	75.2	5.1	5.2 5.2 7.1	5.2	8.0 8.0 4.8		4 5 5		90 90 86				<0.2 <0.2 <0.2	1.0 0.9 0.8
IM2	Fine	Moderate	10:54	7.1	Surface	1.0 3.6 3.6	0.2	17 341 314	28.4 27.8	28.5	8.1 8.1 8.1	8.1	18.9		101.6 10 86.0 8	50	7.1 6.0	6.6	4.9 5.2	5.4	5 6	6	86 88	88	818154	806167	<0.2	0.9
					Bottom	3.6 6.1 6.1	0.3 0.3 0.4	314 335 337	27.8 25.7 25.7	25.7	8.1 8.0 8.0		20.4	28.0	85.7 65.0 65.1	E 1	6.0 4.5 4.5	4.5	5.2 6.1 6.5	þ	6 6 6		88 90 91				<0.2 <0.2 <0.2	0.9 0.8 0.9
					Surface	1.0 1.0 3.7	0.2 0.3 0.4	335 353 330	28.6 28.6 27.2	28.6	8.1 8.1	8.1	18.5	18.5	101.6	J1.7	7.1	6.2	5.1 5.2 5.6		5 5 5		85 86 87	-			<0.2 <0.2 <0.2	0.9 0.8 0.9 0.9
IM3	Fine	Moderate	11:01	7.4	Bottom	3.7 3.7 6.4	0.4 0.4 0.3	304 333	27.2 27.2 25.5	27.2	8.0 8.0 8.0	0.0	22.8 28.6	22.7	74.3	4.3	5.2 5.2 4.3	4.3	5.6 10.9	7.2	5 5 4	5	87 90	88	818781	805610	<0.2 <0.2	2 0.9 0.9 1.0
					Surface	6.4 1.0 1.0	0.3 0.4 0.5	357 359 330	25.5 29.0 29.0	29.0	8.0 8.1 8.1	81	28.5	173	61.7	13.8	4.3 7.3 7.3	4.3	10.7 4.5 4.4	[4 4 4		90 85 86				<0.2 <0.2 <0.2	1.0 0.9 0.9
IM4	Fine	Moderate	11:11	8.3	Middle	4.2 4.2	0.6	326 352	27.0 27.0	27.0	8.0 8.0		23.5		73.5	3.5	5.1 5.1	6.2	6.4 6.5	8.1	4 5	4	87 87	88	819741	804626	<0.2 <0.2 <0.2	2 0.9 0.9
					Bottom	7.3 7.3 1.0	0.6 0.6 0.9	332 352 350	25.6 25.6 28.5	25.6	8.0 8.0 8.1	8.0	28.3	28.2	63.7	3.6	4.4 4.4 7.4	4.4	13.5 13.1 4.7		4 5 4		90 90 86				<0.2 <0.2 <0.2	0.9 1.0 1.1
IM5	Fine	Moderate	11:18	7.1	Surface	1.0 3.6	1.0 0.8	322 355	28.5 26.9	28.5	8.1 8.0		18.8 23.4	10.0	105.2 10 83.1 or	22	7.4 5.8	6.6	4.7 7.6	84	4	5	85 87	87	820739	804850	<0.2	0.9
IWIO	T IIIC	Moderate	11.10	7.1	Bottom	3.6 6.1 6.1	0.8 0.5 0.5	327 12 12	26.9 25.7 25.7	25.7	8.0 8.0 8.0		23.0	27.0	83.5		5.9 4.3 4.3	4.3	7.7 12.8 12.8	0.4	6 6		87 89 90		020733	004030	<0.2 <0.2 <0.2	2 <u>1.0</u> 1.0 1.0
					Surface	1.0 1.0	0.1 0.1	252 265	28.7 28.7	28.7	8.1 8.1	8.1	17.2 17.3	17.2	98.7 98.6	8.7	6.9 6.9	6.6	4.6 4.7		5 4		86 85				<0.2 <0.2	0.9
IM6	Fine	Moderate	11:26	7.5	Middle	3.8 3.8 6.5	0.0 0.0 0.3	127 132 79	28.2 28.3 25.7	28.3	8.0 8.0 8.0	8.0	18.7	18.8	88.2	8.2	6.2	-	5.6 5.6 8.2	6.1	5 4 4	5	88 88 90	88	821065	805849	<0.2 <0.2 <0.2	2 0.9 0.9 0.9 0.9
					Bottom	6.5 1.0	0.3	79 236	25.7	25.7	8.0	0.0	28.1	20.1	63.4	3.4	4.4	4.4	8.2		5		89 86				<0.2	0.9
IM7	Fine	Moderate	11:34	8.6	Surface	1.0 4.3	0.1	249 59	28.7 28.0	28.7	8.1 8.0	8.1	17.4 20.1	17.4	97.8 9 82.1 e	7.9	6.9 5.8	6.4	4.2 4.8	6.3	6 4	5	86 88	88	821357	806825	<0.2	0.9
				0.0	Bottom	4.3 7.6 7.6	0.1 0.3 0.3	59 47 48	28.0 27.5 27.5	27.5	8.0 8.0 8.0	8.0	20.1	22.2	82.1	5.2	5.8 5.2 5.3	5.3	4.8 9.8 9.7	5.0	5 4 3	,	88 90 90		521007	500020	<0.2 <0.2 <0.2	1.0 1.0 0.9
					Surface	1.0 1.0	0.3 0.3	309 327	28.8 28.8	28.8	8.0 8.0	8.0	16.3 16.4	16.4	95.0 94.8 9	4.9	6.7 6.7	6.5	3.0 3.1	ŀ	4		86 85				<0.2 <0.2	1.0
IM8	Cloudy	Moderate	10:33	7.0	Middle	3.5 3.5 6.0	0.3 0.3 0.2	306 324 306	28.5 28.5 28.2	28.5	7.9 7.9 7.9	7.9	17.3	17.3	89.7	9.8	6.3 6.3		3.7 4.1 7.7	4.9	4 5 4	4	89 88 90	88	821821	808148	<0.2 <0.2 <0.2	2 <u>1.0</u> <u>1.0</u> 1.0
					Bottom	6.0	0.2	320	28.2	28.2	7.9		19.1	19.1	83.6		5.9	5.9	7.6	F	5		90	1			<0.2	1.0

Expansion of Hong Kong International Airport into a Three-Runway System Water Quality Monitoring Water Quality Monitoring Results on 11 July 20 during Mid-Flood Tide

Water Qual	ity Monito	bring Resu	its on		11 July 20	during Mid-		de			-							-			-		-		
Monitoring Station	Weather	Sea	Sampling	Water	Sampling Dep	th (m)	Current Speed	Current		emperature (°C)		pН		nity (ppt)		aturation (%)	Dissolved Oxygen	Turbidity	NTU)	nded Solid mg/L)	(ppm)	HK Grid	HK Grid	Chromium (µg/L)	Nickel (µg/L)
Claion	Condition	Condition	Time	Depth (m)		10	(m/s)		Value	Average	Value	Average		Average		Average	Value DA	Value	DA Valu	e DA		A (Northing)	(Easting)	Value DA	
					Surface	1.0	0.3	277 289	28.7 28.7	28.7	7.9	7.9	16.6 16.6	16.6	92.3 92.0	92.2	6.5 6.5 6.5	3.0 2.9	5	_	86 87			<0.2	1.0
IM9	Cloudy	Moderate	10:28	7.3	Middle	3.7 3.7	0.3	293 320	28.5 28.5	28.5	7.9 7.9	7.9	16.8 16.8		90.6 90.4	90.5	6.4 6.4	4.1 4.5	4.6 4	5	89	89 822100	808803	<0.2 <0.2 <0.2	1.0
					Bottom	6.3 6.3	0.4	305 316	28.3	28.3	7.9 7.9	7.9	18.8 18.7	18.7	81.1 81.6	81.4	5.7 5.7	6.6 6.6	5		90 90			<0.2	1.0
					Surface	1.0	0.3	291	28.7	28.7	7.9	7.9	16.5	16.5	92.5	92.4	6.5	3.4	5		87			<0.2	1.0
IM10	Cloudy	Moderate	10:21	7.2	Middle	1.0 3.6	0.3	311 300	28.7 28.4	28.4	7.9 7.9	7.9	16.6 16.7		92.2 90.9	90.8	6.5 6.5	3.6 4.1	5.0 6	4	86 88	8 822403	809775	<0.2 <0.2 <0.2	1.0 2 1.0 1.0
INTO	Cloudy	woderate	10.21	1.2	Wilddle	3.6 6.2	0.4 0.3	313 313	28.3 27.7		7.9 7.9		16.7 19.0		90.7 79.0		6.4 5.6 5.6	4.2 7.3	5.0 4		87 90	622403	009775	<0.2 <0.2	1.0
					Bottom	6.2	0.3	330	27.7	27.7	7.9	7.9	19.0	19.0	78.7	78.9	5.6	7.5	3		91			<0.2	0.9
					Surface	1.0	0.3	298 298	28.6 28.5	28.6	7.9 7.9	7.9	16.5 16.5	16.5	94.0 93.6	93.8	6.7 6.6 6.3	3.7 3.9	5		86 86			<0.2	1.0 1.0
IM11	Cloudy	Moderate	10:11	7.4	Middle	3.7 3.7	0.4	304 331	28.3 28.3	28.3	7.9 7.9	7.9	18.6 18.6	18.6	85.0 84.7	84.9	6.0 6.0	4.5 4.5	4.1 5		88 87	8 822072	811456	<0.2 <0.2	2 1.0 1.0
					Bottom	6.4	0.4	302	27.9	27.9	7.9	7.9	20.3	20.2	80.3 83.9	82.1	5.6 5.9 5.8	4.2	5		90			<0.2	1.0
					Surface	6.4 1.0	0.4	309 307	28.8	28.8	8.0	7.9	16.2	46.0	94.4	94.3	6.7	2.8	6		87			<0.2	1.0
IM12	Olivita		10.05	8.8		1.0 4.4	0.2	312 311	28.7 27.9		7.9 7.9	7.9	16.3 19.8		94.2 79.6		6.7 5.6 6.2	2.8 6.2	4		86 88	8 821437	040004	<0.2	1.1
IM12	Cloudy	Moderate	10:05	8.8	Middle	4.4 7.8	0.3	336 312	27.9 25.8	27.9	7.9 7.9		19.8 27.0	19.8	79.2 69.1	79.4	5.6	6.6 7.7	5.6 5	5	89 90	8 821437	812034	<0.2 <0.2 <0.2 <0.2 <0.2 <0.2 <0.2 <0.2	2 <u>1.0</u> 1.1 <u>1.1</u>
					Bottom	7.8	0.3	331	25.8	25.8	7.9	7.9	27.0	27.0	69.4	69.3	4.9 4.9	7.3	4		90			<0.2	1.1
					Surface	1.0	-	-	28.8 28.7	28.8	8.0 8.0	8.0	16.8 16.9	16.9	95.6 95.5	95.6	6.7 6.7 6.7	6.2 6.1	3		-			-	-
SR1A	Cloudy	Moderate	09:48	5.1	Middle	2.6 2.6	-	-	•	-	•	-	-	-	-	-	- 0.7	-	4.7 -		-	- 819975	812660		
					Bottom	4.1	-	-	28.4 28.4	28.4	7.9 7.9	7.9	18.0	18.1	88.7 88.5	88.6	6.2 6.2 6.2	3.3 3.0	3		-			-	-
					Surface	1.0	0.0	331	28.8	28.8	8.0	8.0	15.7	15.6	95.3	95.3	6.8	3.2	5		88			<0.2	1.1
SR2	Olivita			5.0		1.0	0.0	349	28.7	-	8.0		15.6		95.3		6.8 6.8	3.4	3.8 -		87	821461	814172	<0.2	2 - 1.1
582	Cloudy	Moderate	09:34	5.0	Middle	- 4.0	- 0.0	- 220	- 28.5		- 8.0	-	- 17.7	-	- 89.7	-	- 6.3 c.2	- 4.2	3.8 -		- 90	821461	814172	<0.2	2 - 1.1
					Bottom	4.0	0.0	237	28.6	28.6	8.0	8.0	17.7	17.7	89.9	89.8	6.3 0.3	4.2	4		90			<0.2	1.1
					Surface	1.0 1.0	0.2	294 298	28.8 28.7	28.8	7.9 7.9	7.9	15.8 15.8	15.8	94.3 94.1	94.2	6.7 6.7 6.3	2.8 2.8	4		-			-	-
SR3	Cloudy	Moderate	10:39	8.9	Middle	4.5 4.5	0.3	283 285	28.4 28.4	28.4	7.9 7.9	7.9	18.3 18.2	18.2	84.2 84.0	84.1	5.9 5.9	3.0 3.0	5.1 4		-	- 822130	807590		
					Bottom	7.9 7.9	0.1	155 168	27.1 27.1	27.1	7.9 7.9	7.9	23.2 23.2	23.2	74.6 75.1	74.9	5.2 5.2	9.5 9.7	3					-	
					Surface	1.0	0.5	247	28.6	28.6	8.1	8.1	18.2	18.2	93.3	93.2	6.5	7.0	5		-				-
SR4A	Cloudy	Calm	10:05	9.4	Middle	1.0 4.7	0.6	251 253	28.6 26.4	26.4	8.1 8.0	8.0	18.2 25.5	25.5	93.0 65.3	65.3	6.5 4.6 5.6	7.2 9.1	9.8 7	7	-	- 817166	807814	-	· .
UNIT	Cloudy	Can	10.05	5.4		4.7 8.4	0.1	269 313	26.4 25.6		8.0 8.0		25.5 28.4		65.2 59.9		4.6	9.1 13.1	5.0 8		-	017100	00/014	-	
					Bottom	8.4 1.0	0.0	321 277	25.6 28.5	25.6	8.0 8.1	8.0	28.4 18.8		60.1 96.0	60.0	4.2 4.2 4.2 6.7	13.1 7.2	7				-	-	-
					Surface	1.0	0.3	292	28.5	28.5	8.1	8.1	18.9		96.0	96.0	6.7 6.7	7.3	5		-			-	-
SR5A	Cloudy	Calm	09:48	3.5	Middle	-	-	-	-	-	-		-		-			-	8.5 -	5	-	- 816598	810705		
					Bottom	2.5 2.5	0.2	307 325	28.3 28.3	28.3	8.1 8.1	8.1	19.7 19.7	19.7	91.1 91.2	91.2	6.4 6.4	9.7 9.8	4		-			-	-
					Surface	1.0	0.0	209	28.5	28.5	8.0	8.0	18.7	18.8	101.7	101.7	7.1	4.4	4		<u> </u>			-	
SR6A	Cloudy	Calm	09:22	3.9	Middle	1.0	0.0	227	28.5	-	8.0 -		18.8	-	101.6 -		7.1 7.1	4.5	6.9 -	4		- 817952	814761		-
	,					- 2.9	- 0.0	- 114	- 28.1		- 7.9	7.0	- 20.1	20.4	- 88.8	00.0	- 6.2 c.2	- 9.4	0.9 <u>-</u> 3		-			-	-
L					Bottom	2.9 1.0	0.0	114 116	28.1 28.5	28.1	7.9 7.9	7.9	20.1	20.1	89.2 92.6	89.0	6.2 6.5	9.4	3		-				
					Surface	1.0	0.0	117	28.5	28.5	7.9	7.9	17.3	17.3	92.1	92.4	6.5 6.0	2.0	4		-			-	
SR7	Cloudy	Moderate	08:40	16.2	Middle	8.1 8.1	0.1	184 185	26.8 26.8	26.8	7.9 7.9	7.9	23.9 23.9	23.9	77.1 76.8	77.0	5.4 5.4	2.2 2.3	2.4 5	5	-	- 823621	823724		-
					Bottom	15.2 15.2	0.1	76 78	24.5 24.5	24.5	7.8	7.8	31.3 31.3	31.3	66.8 67.3	67.1	4.7 4.7	2.8 2.8	5		-			-	-
					Surface	1.0	-	-	28.5 28.5	28.5	7.9	7.9	17.1	17.1	90.0 89.8	89.9	6.4	4.8 5.1	5		<u> </u>				
SR8	Cloudy	Moderate	09:57	4.8	Middle	-	-	-	-		-		-	- 1	-		- 6.4	-	6.5 -		·	- 820397	811635		
					Bottom	- 3.8	-	-	- 28.2	28.2	- 7.9	7.9	- 18.9		- 82.8	82.8	- 5.8 5.8	- 8.1	- 7		-			-	-
DA: Dopth Aver					Bottom	3.8	-	-	28.2	20.2	7.9	1.5	18.8	10.0	82.8	02.0	5.8 5.0	8.1	8		-			· ·	-

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

Water Qual	ity Monite	oring Resu	its on		14 July 20 0	during Mid-		•																
Monitoring	Weather	Sea	Sampling	Water	Sampling Depth	(m)	Current Speed	Current	Water Ter	mperature (°C)	pН	Sal	inity (ppt)	DO Satur (%)		Dissolved Oxygen	Turbidity(NTU) Sus	ended Solid (mg/L)	ls Total Alkalin (ppm)	ty Coordinate HK Grid	Coordinate HK Grid	e Chromiu (µg/L)	
Station	Condition	Condition	Time	Depth (m)		()	(m/s)	Direction	Value	Average	Value Aver	age Value	Average	Value Av	verage	Value DA	Value	DA Va	Je DA	Value DA		(Easting)	Value	DA Value DA
					Surface	1.0	0.2	178 188	29.8 29.7	29.8	8.2 8.2	10.0		105.7 105.4	105.6	7.6	5.0 5.0			84 84			<0.2	1.1
C1	Fine	Moderate	08:05	8.4	Middle	4.2	0.3	235	27.5	27.5	8.1 8	21.1	21.2	84.1	83.9	5.9 6.8	5.6	62	5	87	815637	804238	<0.2	-0.2 1.1 1.1
					Bottom	4.2	0.4	238 234	27.5 24.2	24.2	8.1 7.9 7.	21.2		83.7 62.5	62.9	5.9 4.4 4.4	5.5 8.1		- Ĩ	88 91			<0.2	1.0
						7.4	0.4	249 154	24.2 29.5		7.9	32.2		63.2		4.4 6.4	8.2 4.0			92 86			<0.2	1.0
					Surface	1.0	0.6	168	29.5	29.5	8.0 ^{o.}	9.8	9.0	88.7	88.7	6.4 5.6	4.0			88			<0.2	1.0
C2	Cloudy	Moderate	09:28	11.0	Middle	5.5 5.5	0.3	163 172	26.7 26.7	26.7	8.1 8. 8.1	25.0 25.0		67.2 67.2	67.2	4.7	4.2		5	88 89	825686	806960	<0.2 <	<0.2 1.0 1.0
					Bottom	10.0 10.0	0.3	149 159	25.3 25.3	25.3	8.1 8.1 8.	29.2		62.7 62.7	62.7	4.4 4.4	8.8 8.8			90 91			<0.2	1.0
					Surface	1.0	0.0	244	29.5	29.5	8.1 8	14.8	14.9	127.7	127.7	9.0	2.2	-		86		-	<0.2	1.1
	<u>.</u>					1.0 6.1	0.0	255 341	29.5 27.8		8.1	14.8		127.7		9.0 7.3 8.2	2.2			87 88			<0.2 <0.2	1.1
C3	Cloudy	Moderate	07:28	12.2	Middle	6.1 11.2	0.0	344 308	27.8 24.1	27.8	8.1 ^{o.}	22.3 31.9	22.3	104.5	104.5	7.3	1.1 1.7		⁵	87 00	822110	817800	<0.2	<0.2 1.0 1.1
					Bottom	11.2	0.2	311	24.1	24.1	8.1 8. 8.1	31.9	31.9	77.1	77.1	5.4 5.4 5.4	1.7			90 90			<0.2	1.1
					Surface	1.0	0.1	39 40	29.7 29.7	29.7	8.3 8.3	9.7		109.1 108.6	108.9	7.9	6.1 6.3			84 84			<0.2	1.0
IM1	Fine	Calm	08:25	4.6	Middle	-	-	-	-	-	· .	-			-	- 7.9	•	70	5	- 86	817943	807127		<0.2 - 1.1
					Bottom	3.6	0.0	81	27.2	27.2	8.0 8.	22.3		80.7	80.8	5.7 5.7	8.3			87			<0.2	1.2
						3.6	0.0	81 166	27.1 29.2		8.0	23.9		80.8		5.6 5.7 7.3	8.3 5.6			87 83			<0.2	1.2
					Surface	1.0	0.2	169 294	29.2	29.2	8.2 8.	10.2	10.1	99.8 1	100.2	7.2 6.1	5.7 7.8			83 87			<0.2	1.0
IM2	Fine	Moderate	08:33	6.6	Middle	3.3 3.3	0.1	322	26.5 26.4	26.5	8.0 8.0	24.8		71.6 70.8	71.2	5.0 5.0	7.8		5	87 87	818148	806184	<0.2	<0.2 1.1 1.1
					Bottom	5.6 5.6	0.1	284 293	24.7 24.8	24.8	7.9 7.	30.8		60.4 60.6	60.5	4.2 4.2	9.6 9.2			91 91			<0.2 <0.2	1.1
					Surface	1.0	0.2	144	28.6	28.6	8.1	14.7	14.7	91.1	90.9	6.5	6.7	4		85			<0.2	1.2
IM3	Fine	Moderate	08:40	6.8	Middle	1.0 3.4	0.2	153 247	28.6 25.6	25.6	8.1 0. 8.0 7.	14.6 28.1		90.7 62.0	62.1	6.5 4.3 5.4	6.8 7.6	74		84 88 88	818807	805596	<0.2 <0.2	<0.2 1.3
IIVIJ	Fille	wouerate	08.40	0.0		3.4 5.8	0.1	249 290	25.6 24.6		7.9	28.1		62.2		4.3 3.9 2.0	7.7 7.6		- *	88 91	818807	805550	<0.2	1.3
					Bottom	5.8	0.1	302	24.6	24.6	7.9	30.9	30.9	56.4	56.3	3.9	7.8			92			<0.2	1.3
					Surface	1.0	0.7	188 193	29.5 29.5	29.5	8.2 8. 8.2	10.0		102.5 102.0	102.3	7.4 5.9	5.6 5.9		_	84 84			<0.2	1.3
IM4	Fine	Moderate	08:52	7.8	Middle	3.9 3.9	0.4	194 210	25.9 25.8	25.9	7.9 7.	27.4		62.3 61.5	61.9	4.3 4.3	8.7 8.8		5	87 88	819736	804627	<0.2 <	<0.2 1.3 1.3
					Bottom	6.8	0.1	160	24.5	24.5	7.9 7	31.3	31.3	57.7	57.8	4.0 4.0	9.6			91			<0.2	1.3
					Surface	6.8	0.1	170 224	24.5 29.6	29.6	7.9 ⁷ . 8.2 8.	31.3		57.9	106.2	4.0 7.6	9.4 5.2		_	92 83			<0.2	1.2
						1.0 3.6	0.6	245 225	29.6 28.0		8.2	10.9		106.0		7.6 6.1 6.9	5.2 7.2		— _	84			<0.2 <0.2	1.2
IM5	Fine	Moderate	09:02	7.2	Middle	3.6	0.5	226	28.0	28.0	8.1 ^{o.}	20.7	19.0	87.6	87.7	6.1	7.9	··· 0	5	87 07	820750	804847	<0.2	1.3
					Bottom	6.2	0.2	219 224	25.9 25.9	25.9	7.9 7.	27.3		63.8 64.0	63.9	4.5 4.5	8.6 8.6			91 91			<0.2	1.3
					Surface	1.0 1.0	0.3	229 245	29.5 29.5	29.5	8.2 8.2	10.0		106.5 1 106.3	106.4	7.7	5.5 5.5		_	84 83		1	<0.2 <0.2	1.3
IM6	Fine	Moderate	09:10	7.0	Middle	3.5	0.2	234	29.4	29.4	8.2 8	11.7	11.8	103.7 1	103.4	7.4	8.1	• • •		88	821083	805825	<0.2	.0.0 1.2 1.0
	1 110	modorato	00.10	1.0		3.5 6.0	0.2	241 241	29.4 26.1		8.2	11.8		103.0		7.4 4.3	8.1 10.1			88 92	021000	000020	<0.2	<0.2 1.2 1.2
					Bottom	6.0	0.2	249	26.1	26.1	7.9	26.8	26.8	61.4	61.2	4.3	10.4			91			<0.2	1.2
					Surface	1.0	0.3	243 266	29.5 29.4	29.5	8.2 8. 8.2	9.7		106.3 105.9	106.1	7.7	5.3 5.3			84 84			<0.2 <0.2	1.3 1.3
IM7	Fine	Moderate	09:18	8.0	Middle	4.0 4.0	0.2	283 305	29.1 29.1	29.1	8.1 8.1 8.	14.4		94.0 89.6	91.8	6.7 6.4	5.1 5.1		5	87 88	821368	806855	<0.2 <	<0.2 1.3 1.3
					Bottom	7.0	0.1	217	26.0	26.0	7.9 7	27.1	27.1	64.5	64.7	4.5 4.5	7.3			92			<0.2	1.2
<u> </u>					Surface	7.0	0.2	219 195	26.0 29.6	29.6	7.9	27.1		64.9 99.8	99.8	4.5 7.2	7.5 4.7			92 86		+	<0.2 <0.2	1.2
						1.0 4.0	0.2	197 227	29.6 29.4		8.0 0.	9.2	9.2	99.8		7.2 6.6 6.9	4.7 5.5			86			<0.2	0.9
IM8	Cloudy	Moderate	08:59	7.9	Middle	4.0	0.0	234	29.4	29.4	8.1 8.	14.5	14.5	94.1	94.1	6.6	5.5	1.2	6	89 88	821816	808136	<0.2	<0.2 1.0 1.0
					Bottom	6.9 6.9	0.1	359 330	26.2 26.2	26.2	8.0 8.0	26.5		66.5 66.5	66.5	4.6 4.6	11.4 11.4			90 90			<0.2	0.9
DA: Depth-Aver	anad				·							1 = 0.0												

DA: Depth-Averaged

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

Water Qual	ity Monite	oring Resu	lts on		14 July 20	during Mid-	Ebb Tid	e																					
Monitoring	Weather	Sea	Sampling	Water	Sampling Dep	th (m)	Current Speed	Current	Water Te	emperature (°C)		pН	Salir	nity (ppt)	DO	Saturation (%)	Dissolve Oxygen	Tur	bidity(N	TU) Sus	pended (mg/L	Solids .)	Total Al (pp		Coordinate HK Grid	Coordinate HK Grid	Chromium (µg/L)	Nickel (µg/L)
Station	Condition	Condition	Time	Depth (m)			(m/s)	Direction	Value	Average	Value	Average		Average	Value	-	Value D				lue	DA	Value	DA	(Northing)	(Easting)	Value DA		DA
					Surface	1.0	0.2	155 159	29.5 29.5	29.5	8.1 8.1	8.1	9.7 9.7	9.7	101.6		7.4	4			4		86 86				<0.2	1.0	
IM9	Cloudy	Moderate	08:53	7.0	Middle	3.5 3.5	0.1	51 52	29.4 29.4	29.4	8.1 8.1	8.1	12.5 12.5	12.5	92.5 92.5	02.5	6.6 6.6	4	9		6 5	5	88 89	88	822071	808818	<0.2 <0.2	0.0	1.0
					Bottom	6.0	0.3	65	26.7	26.7	8.0	8.0	25.0	25.0	66.9		4.7 4 4.7 4		8		ô		90				<0.2	0.9	
					Surface	6.0 1.0	0.3	67 115	26.7 29.6	29.6	8.0 8.0	8.0	25.0 10.0	10.0	66.9 102.8		4./ 7.4	8			6 4		90 86				<0.2	1.0	
					Sunace	1.0	0.4	122 88	29.6 29.4	29.0	8.0 8.1	0.0	10.0 12.4	10.0	102.8 84.9	5	7.4 6.1 6		5 4		4 5		86				<0.2	1.0	
IM10	Cloudy	Moderate	08:45	7.2	Middle	3.6	0.4	93	29.4	29.4	8.1	8.1	12.4	12.4	84.9	84.9	6.1	7	4	/.2	4	4	89 87	88	822408	809789	<0.2 <0.2 <0.2	0.9	1.0
					Bottom	6.2 6.2	0.2	109 116	26.6 26.6	26.6	8.1 8.1	8.1	25.3 25.3	25.3	76.0 76.0		5.3 5 5.3 5	3 9			4 3		90 90				<0.2	1.1 0.9	
					Surface	1.0	0.5	117	29.4	29.4	8.0	8.0	11.5	11.5	102.4	1 102.4	7.3	3	9		ô		86				<0.2	1.2	
	Olau da	Madaaata	00.01	7.5		1.0	0.5	126 105	29.4 29.0		8.0 8.1		11.5 16.0		102.4 90.4	+	7.3 6.4 6	3 4			5	_	87 88		000000	044475	<0.2	1.0	10
IM11	Cloudy	Moderate	08:31	7.5	Middle	3.8 6.5	0.5	113 117	29.0	29.0	8.1 8.1	8.1	16.0	16.0	90.4 71.7		6.4	4	3		5	5	87 90	88	822033	811475	<0.2 <0.2 <0.2 <0.2 <0.2	1.0	1.0
					Bottom	6.5	0.3	117	26.2 26.2	26.2	8.1	8.1	26.4 26.4	26.4	71.7		5.0 5.0 5	5			4 5		90				<0.2	1.0	
					Surface	1.0	0.3	79 86	29.6 29.6	29.6	8.1 8.1	8.1	12.5	12.5	106.9		7.6	5			5		86 86				<0.2	1.0	
IM12	Cloudy	Moderate	08:23	8.5	Middle	4.3	0.2	79	27.8	27.8	8.0	8.0	20.8	20.8	79.6	79.6	5.6	5 5	8	78	5	5	88	88	821480	812054	<0.2	1.0	1.0
	,					4.3 7.5	0.2	84 65	27.8 25.4		8.0 8.0		20.8 30.3		79.6 64.9		5.6 4.5	11	8		4 6	-	89 90				<0.2	1.0	
					Bottom	7.5	0.1	71	25.4	25.4	8.0	8.0	30.3	30.3	64.9	64.9	4.5 4	° 11	.7		5		90				<0.2	1.0	
					Surface	1.0	-	-	29.8 29.8	29.8	8.0 8.0	8.0	12.4 12.4	12.4	126.1 126.1		8.9 8.9 8	3			5		-				-	-	
SR1A	Cloudy	Moderate	08:06	5.3	Middle	2.7	-	-	-	-	-	-	-	-	-		- °				-	6	-	-	819977	812662		-	-
					Bottom	4.3	-	-	29.3	29.3	8.2	8.2	16.8	16.8	124.6	3 124.6	8.7 8	, 2	8		- 6						-	-	
						4.3	- 0.3	- 76	29.3 29.7		8.2 8.1		16.8		124.6	5	8.7	2			6 4		- 88				- <0.2	- 1.0	
					Surface	1.0	0.3	77	29.7	29.7	8.1	8.1	11.3	11.3	119.3		8.5 8	2	4		4		89				<0.2	1.0	
SR2	Cloudy	Moderate	07:52	4.8	Middle		-	-	-	-	-	-	-	-	-			-		35	-	4	-	89	821462	814189	- <0.2	2 -	1.0
					Bottom	3.8 3.8	0.2	57 61	29.5 29.5	29.5	8.1 8.1	8.1	16.5 16.5	16.5	129.1		9.0 9		5 5		4 5		90 90				<0.2	0.9	
					Surface	1.0	0.2	156	29.5	29.6	8.1	8.1	8.8	8.8	95.9	95.9	7.0	4	5		5		-				-	-	_
						1.0	0.3	159 171	29.6 27.6		8.1 8.1		8.8 22.6		95.9 86.3		7.0 6.0 6	5 4			6 4		•				-	-	
SR3	Cloudy	Moderate	09:05	8.8	Middle	4.4	0.1	181	27.6	27.6	8.1	8.1	22.6	22.6	86.3	86.3	6.0	5	7	6.0	5	5	-	-	822137	807563	-	-	-
					Bottom	7.8	0.1	98 101	25.8 25.8	25.8	8.1 8.1	8.1	28.0 28.0	28.0	66.9 66.9		4.7 4	7			3 4		-				-	-	
					Surface	1.0	0.2	259 261	29.5 29.5	29.5	8.3 8.3	8.3	11.6 11.6	11.6	105.2		7.5 7.5	6			3 4		-					-	
SR4A	Fine	Calm	07:45	9.0	Middle	4.5	0.2	261	29.5	24.9	7.9	7.9	30.1	30.1	60.5		4.2 5	9			4		-		817198	807819	-	-	
3N4A	Fille	Caim	07.45	5.0		4.5 8.0	0.1	54 67	24.9 24.8		7.9 7.9		30.1 30.7		60.6 63.1		4.2 4.4	10	8		5	*	-		017190	807819		-	
					Bottom	8.0	0.1	70	24.8	24.8	7.9	7.9	30.6	30.7	63.4	03.3	4.4 4	10	.2		4		-				-	-	
					Surface	1.0	0.0	193 199	29.8 29.7	29.8	8.4 8.4	8.4	15.4 15.3	15.4	141.5		9.9	0	2		4 5		-				-	-	
SR5A	Fine	Calm	07:28	3.4	Middle	-	-	-	-	-	-	-	-		-		- 9	, <u> </u>		11.0	-	5	-		816584	810716	· .	-	-
					Bottom	2.4	0.0	168	29.7	29.7	8.4	8.4	17.4	17.4	140.7		9.7 9	, 13			5		-				-	-	
						2.4	0.0	170 295	29.7 29.6		8.4 8.3		17.4		140.3	7	9.7 9.0	13			6 3		-				-	-	
					Surface	1.0	0.0	296	29.6	29.6	8.3	8.3	17.8	17.8	130.6		9.0 9	0			2		-				-	-	
SR6A	Fine	Calm	06:52	4.7	Middle	-	-	-		-	-	-	-		-		-	-			-	4	-	-	817968	814752		-	-
					Bottom	3.7	0.1	213 213	28.8 28.8	28.8	8.1 8.1	8.1	19.2 19.2	19.2	120.3 119.8		8.4 8.3		.5 .6		5		-				-	-	
					Surface	1.0	0.4	67	29.1	29.1	8.1	8.1	16.6	16.6	130.3	3 120.2	9.1	1	1		3		-				-	-	_
						1.0	0.5	68 4	29.1 26.2		8.1 8.0		16.6 25.8		130.3	3	9.1 8		1		4		-				-	-	
SR7	Cloudy	Moderate	06:51	16.0	Middle	8.0	0.0	4	26.2	26.2	8.0	8.0	25.9	25.8	101.9	101.9	7.1	0	8	1.1	5	4	-	-	823634	823729		-	-
					Bottom	15.0 15.0	0.2	60 63	23.2 23.2	23.2	7.9 7.9	7.9	33.7 33.7	33.7	69.7 69.7		4.9 4.9 4	1	5 5		4 5		-				-	-	
					Surface	1.0	-	-	30.5 30.5	30.5	8.1 8.1	8.1	14.2	14.2	112.2	112.2	7.8	8	4		3		-					-	
SR8	Cloudy	Moderate	08:16	5.1	Middle	-	-	-	- 30.5		0.1		- 14.2	<u> </u>	-	- -	- 7.8	3	+	11 /	-	5	-		820398	811642	· .	-	.
0.10	cicacy	modorato	00.10	0		- 4.1	-	-	- 28.6		- 8.0		- 19.2		- 106.3	3	- 7.4 -	. 14	.4		- 6	Ĭ	-		020000	0.1012	-	-	
					Bottom	4.1	-	-	28.6	28.6	8.0	8.0	19.2	19.2	106.3		7.4 7	1 14			5		-					<u> </u>	
DA: Depth-Aver	agod																												

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

Water Qua	lity Monito	oring Resu	ilts on		14 July 20	during Mid-	Flood Ti	de																				
Monitoring	Weather	Sea	Sampling	Water	Sampling Dep	th (m)	Current Speed	Current	Water Te	emperature (°C)		pН	Sali	ity (ppt)		turation %)	Dissolv Oxyge		Turbidity(I	NTU) S	uspende (mg/	d Solids /L)	Total A (pp	lkalinity om)	Coordinate HK Grid	Coordinate HK Grid	Chrom (µg/l	
Station	Condition	Condition	Time	Depth (m)			(m/s)	Direction	Value	Average	Value	Averag	e Value	Average		Average		DA	Value	DA	√alue	DA	Value	DA	(Northing)	(Easting)		DA Value D
					Surface	1.0	0.3	69 72	29.9 29.9	29.9	8.3 8.3	8.3	8.5 8.5	8.5	111.5	111.3	8.1 8.0	6.6	9.4 9.6		3		86 88				<0.2	1.2
C1	Sunny	Moderate	13:20	7.9	Middle	4.0	0.2	51 55	26.4 26.4	26.4	7.9 7.9	7.9	26.0 25.8	25.9	74.1 75.1	74.6	5.2 5.2		8.1 8.1	8.8	3	3	91 92	91	815614	804230	<0.2	<0.2 1.1 1
					Bottom	6.9 6.9	0.2	33 35	24.3 24.3	24.3	7.9 7.9	7.9	32.2 32.2	32.2	58.9 59.2	59.1	4.1	4.1	9.0 8.8		4 3		95 96				<0.2 <0.2	1.2
					Surface	1.0	0.4	182 198	30.0 30.0	30.0	8.1 8.1	8.1	8.4 8.4	8.4	93.9 93.9	93.9	6.8 6.8	5.6	4.8 4.8		4		86 86				<0.2 <0.2	0.9
C2	Cloudy	Moderate	12:18	11.0	Middle	5.5 5.5	0.1	187 204	26.4 26.4	26.4	7.9	7.9	26.8 26.8	26.8	63.8 63.8	63.8	4.4		5.7 5.7	6.2	5 5	5	88 87	88	825697	806945	<0.2	<0.2 1.0 1
					Bottom	10.0 10.0	0.1	358 329	24.9 24.9	24.9	7.9	7.9	30.4	30.4	55.7 55.7	55.7	3.9	3.9	8.1 8.1		4		90 89				<0.2	1.0
					Surface	1.0 1.0 5.9	0.3 0.3 0.4	265 271 244	30.7 30.7 25.8	30.7	8.2 8.2	8.2	13.5 13.5 28.2	13.5	159.3 159.3 81.2	159.3	11.1	B.4	3.1 3.1 2.5		5		87 87				<0.2	1.1
C3	Cloudy	Moderate	14:10	11.8	Middle	5.9 5.9 10.8	0.4 0.3	244 244 251	25.8 25.8 23.5	25.8	8.1 8.1 8.0	8.1	28.2 28.2 33.2	28.2	81.2 81.2 78.7	81.2	5.6 5.6 5.5		2.5 2.5 4.6	3.4	5 4 5	5	88 89 90	89	822093	817804	<0.2 <0.2 <0.2	<0.2 1.1 1
					Bottom	10.8	0.3	273	23.5 23.5 30.4	23.5	8.0 8.4	8.0	33.2 8.7	33.2	78.7	78.7	5.5 5.5 9.7	5.5	4.6		5 4 3		90 90 86				<0.2 <0.2 <0.2	1.0
					Surface	1.0	0.2	313	30.4	30.4	8.4	8.4	8.7	8.7	135.0	135.3	0.7	9.7	6.0		3		86				<0.2	1.1
IM1	Sunny	Calm	12:59	4.6	Middle	- 3.6	- 0.2	- 326	- 29.8	-	- 8.3	-	- 11.6	-	- 112.1	-	- 8.0		- 7.4	6.6	- 3	3	- 88	87	817952	807127	- <0.2	<0.2 - 1
					Bottom	3.6	0.2	349 356	29.8	29.8	8.3 8.3	8.3	11.6 9.0	11.6	111.8	112.0	8.0 9.2	B.O	7.4		4 3		88 89				<0.2	1.2
IM2					Surface	1.0	0.5	328 353	30.1 29.7	30.1	8.3 8.3	8.3	9.0 10.8	9.0	128.3 114.6	128.0	0.2	B.7	5.3	. F	3	3	89 90	91			<0.2	1.1
IVIZ	Sunny	Moderate	12:52	6.6	Bottom	3.3 5.6	0.5	325 331	29.7 25.1	29.7	8.3 8.0	8.3 8.0	10.8 30.0	10.8 29.9	114.0 57.9	114.3	8.2	4.2	6.7 8.7	6.8	4 4	3	90 93	91	818154	806180	<0.2 <0.2	<0.2 1.2 1
					Surface	5.6 1.0	0.4	346 322	25.2 29.7	25.2	8.0 8.3	8.0	29.9 10.2	10.2	61.3 122.7	59.6 122.8	4.3 8.8	4.2	8.7 5.4		3 4		93 86				<0.2 <0.2	1.3
IM3	Sunny	Moderate	12:45	6.7	Middle	1.0 3.4	0.6	331 299	29.7 29.2	29.2	8.3 8.2	8.2	10.2 12.2	12.2	122.8 110.9	110.3	8.0	B.4	5.4 5.8	5.9	4		86 90	91	818801	805589	<0.2 <0.2	<0.2 1.1 1
	ounny	modorato	12.10	0.1	Bottom	3.4 5.7	0.5 0.3	310 259	29.1 24.8	24.8	8.2 8.0	8.0	12.2 30.9	30.9	109.7 60.1	60.3	7.9 4.2	4.2	6.0 6.4		4		90 95		010001	000000	<0.2	1.1
					Surface	5.7	0.3	273 286	24.8 30.9	30.9	8.0 8.4	8.4	30.9 10.0	10.0	60.5 139.9	139.5	4.2 9.9		6.1 5.0		3 4		96 84				<0.2 <0.2	1.2
IM4	Sunny	Moderate	12:36	7.2	Middle	1.0	0.5	300 285	30.9 28.9	28.9	8.4 8.2	8.2	10.0 14.6 14.7	14.6	139.0 104.1	104.0	7.4	B.6	5.2 6.5	6.7	4	4	84 88	88	819739	804607	<0.2	<0.2 1.2 1
					Bottom	3.6 6.2 6.2	0.5 0.2 0.2	300 318 324	28.9 24.7 24.7	24.7	8.2 8.0 8.0	8.0	14.7 31.1 31.1	31.1	103.8 62.0 62.8	62.4	7.4 4.3 4.4	4.4	6.6 8.6 8.6		4 4 4		88 93 93				<0.2 <0.2 <0.2	1.2 1.1 1.2
					Surface	1.0 1.0	0.2	262 269	30.7 30.7	30.7	8.2 8.2	8.2	8.9	8.9	112.7 108.1	110.4	8.0 7.7		5.5 5.5	_	4 4		93 86 87				<0.2 <0.2 <0.2	1.2
IM5	Sunny	Moderate	12:29	7.1	Middle	3.6	0.4	283	28.2	28.2	8.1	8.1	18.2	18.2	90.6 90.2	90.4	6.4 6.4	7.1	6.6 6.7	7.2	4 4	4	89 90	89	820743	804884	<0.2	<0.2 1.1 1
					Bottom	6.1 6.1	0.3	321 324	25.3	25.3	7.9	7.9	30.0	30.0	58.4 58.6	58.5	4.1	4.1	9.5 9.3		4		90 91				<0.2	1.2
					Surface	1.0	0.4	229 232	29.5 29.3	29.4	8.2	8.2	10.0	10.0	109.8 109.6	109.7	7.9		5.5 5.5	_	5 4		88 89				<0.2 <0.2	1.1
IM6	Sunny	Moderate	12:22	6.9	Middle	3.5 3.5	0.3	241 243	28.4 28.4	28.4	8.1 8.1	8.1	17.7	17.7	94.1 93.4	93.8	6.6 6.6	7.3	6.3 6.5	6.5	4	4	92 93	93	821040	805822	<0.2 <0.2	<0.2 1.2 1
					Bottom	5.9 5.9	0.2	280 307	26.4 26.4	26.4	8.0 8.0	8.0	26.1 26.0	26.1	69.4 70.2	69.8	4.8 4.9	4.9	7.6 7.4		4 3		97 98				<0.2 <0.2	1.1
					Surface	1.0 1.0	0.4 0.4	253 274	29.9 29.9	29.9	8.2 8.2	8.2	9.0 9.0	9.0	108.5 108.1	108.3	7.8 7.8	6.7	5.5 5.5		4 3		87 88				<0.2 <0.2	1.1
IM7	Sunny	Moderate	12:18	7.8	Middle	3.9 3.9	0.3 0.3	259 260	27.2 27.2	27.2	8.0 8.0	8.0	23.0 23.0	23.0	81.0 80.8	80.9	5.7 5.6		4.5 4.5	6.1	3 4	4	91 92	91	821329	806835	<0.2	<0.2 1.3 1
					Bottom	6.8 6.8	0.1	225 239	25.9 25.9	25.9	8.0 8.0	8.0	27.5 27.5	27.5	58.5 58.6	58.6	4.1	4.1	8.5 8.5		3 4		94 95				<0.2 <0.2	1.1
					Surface	1.0	0.4	262 287	30.4 30.4	30.4	8.0 8.0	8.0	7.8	7.8	104.9 104.7	104.8	7.6	6.8	4.6 4.6		4 5		87 86	$\begin{bmatrix} 1 \end{bmatrix}$			<0.2 <0.2	1.2
IM8	Cloudy	Moderate	12:41	7.3	Middle	3.7	0.3	268 269	29.6 29.6	29.6	8.0 8.0	8.0	9.4 9.4	9.4	84.4 84.4	84.4	6.1 6.1		7.3	7.7	5	5	88 89	88	821852	808148	<0.2	<0.2 1.0 1
DA: Dopth Avo					Bottom	6.3 6.3	0.2	281 303	26.9 26.9	26.9	8.0 8.0	8.0	25.3 25.3	25.3	71.2 71.2	71.2	4.9 4.9	4.9	11.3 11.3		5 4		90 90				<0.2 <0.2	1.0

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

Water Qual	ity Monit	oring Resu	lts on		14 July 20	during Mid-		de																	
Monitoring Station	Weather	Sea	Sampling	Water	Sampling E	Depth (m)	Current Speed	Current	Water Ter	mperature (°C)	pł	H S	alinity (ppt)	DO	Saturation (%)	Dissolved Oxygen	Turbidity	NTU)	Suspende (mg/		Total Alkalinity (ppm)	Coordinate HK Grid	Coordinate HK Grid	Chromi (µg/L	
Station	Condition	Condition	Time	Depth (m)			(m/s)	Direction	Value	Average	Value A	Average Val	ie Averaç	ge Value	Average	Value DA	Value	DA	Value	DA	Value DA	(Northing)	(Easting)	Value	DA Value DA
					Surface	1.0	0.2	206 207	30.6 30.6	30.6	8.1	8.1 8.		101.5	101.5	7.3	4.4		4 5		86 87			<0.2	1.0
IM9	Cloudy	Moderate	12:48	6.7	Middle	3.4	0.2	240	29.9	29.9	8.1	9.1	0.5	85.0	95.0	6.1 0.7	5.1	5.5	4	5	89 00	822097	808805	<0.2	.0.0 1.1 1.1
					Bottom	3.4 5.7	0.2	255 258	29.9 27.4	27.4	8.1 8.0	8.0 24)	85.0		6.1 5.1 5.1	5.1 7.0	-	5 4		87 90			<0.2	1.1
					Bollom	5.7 1.0	0.3	280 336	27.4 30.0	27.4	8.0 8.1	8.0 24	3	73.3	13.3	5.1 5.1	7.0 4.0		5 3		90 86			<0.2	1.0
					Surface	1.0	0.1	344	30.0	30.0	8.1	8.1 8.0) 8.0	104.9	104.9	7.6 7.2	4.0		4		85			<0.2	1.1
IM10	Cloudy	Moderate	12:58	6.7	Middle	3.4	0.2	311 316	29.9 29.9	29.9	8.0 8.0	8.0 10		95.0 95.0		6.8	5.2 5.2	5.5	4 5	4	88 87 88	822375	809788	<0.2	<0.2 1.0 1.1
					Bottom	5.7	0.4	305 307	27.0	27.0	8.0 8.0	8.0 22	8 22.8	88.6	88.6	6.2 6.2 6.2	7.2 7.2		5		90			<0.2 <0.2	1.0 1.1
					Surface	1.0	0.3	312	27.0 29.9	29.9	8.1	e 1 10	5 10.5	88.6	105.5	7.6	4.4		5		90 86			<0.2	1.1
						1.0	0.4	315 300	29.9 29.3		8.1 8.1	10	5	105.2		7.5 6.3 6.9	4.4	-	4 5	_	87 88 00			<0.2	1.0
IM11	Cloudy	Moderate	13:08	7.0	Middle	3.5	0.4	326	29.3	29.3	8.1	8.1	0 13.0	88.9		6.3	4.4	4.4	4	5	87 88	822074	811482	<0.2	1.0
					Bottom	6.0 6.0	0.3	295 304	27.3 27.3	27.3	8.0 8.0	8.0 25		84.9 84.9		5.8 5.8 5.8	4.4		5 5		90 90			<0.2 <0.2	1.1
					Surface	1.0	0.2	266 270	29.9 29.9	29.9	8.1 8.1	8.1 11		105.1		7.5	4.3 4.3		3 4		86 86			<0.2	1.1
IM12	Cloudy	Moderate	13:14	8.9	Middle	4.5	0.3	274	28.3	28.3	8.0	8.0 20	4 20.4	87.1	86.8	6.1 6.8	4.6	5.6	4	4	88	821453	812066	<0.2	.0.2 1.1 1.1
	-				Bottom	4.5	0.3	286 289	28.3 24.5	24.5	8.0 8.0	8.0 20	3 21 2	86.4 65.6		6.0 4.6 4.6	4.7 7.7		4 5		89 90			<0.2	1.1
						7.9	0.2	312	24.5 30.3		8.0 8.0	31	3	65.6		4.6 4.0	7.7		5 5		90	1		<0.2	1.1
					Surface	1.0	-	-	30.3	30.3	8.0	8.0 12		160.4		11.3 11.3	4.1		4		-			-	-
SR1A	Cloudy	Moderate	13:35	5.2	Middle	2.6	-	-	-	-	-			-	+ -	-	•	4.3	-	5		819979	812657	-	
					Bottom	4.2	-	-	30.1 30.1	30.1	8.1	8.1 16		138.4		9.6 9.6 9.6	4.5 4.5	-	5 5		-			-	-
					Surface	1.0	0.1	335	30.5	30.5	8.1	8.1 10	9 10.9	145.5	145.5	10.3	5.8		4		88			<0.2	1.1
SR2	01	Ma. 4	10.10	4.0		1.0	0.1	358	30.5		8.1	10	9	145.5		10.3 10.3	5.8	6.9	5		- 89	821460	814169	<0.2	<0.2 - 1.1
582	Cloudy	Moderate	13:48	4.6	Middle	- 3.6	- 0.2	- 329	- 29.3		- 8.0		-	- 139.8	-	9.7 0.7	- 8.0	6.9	- 3	4	- 89	821460	814169	- <0.2	- 1.1
					Bottom	3.6	0.2	354	29.3	29.3	8.0	0.0 17	0 17.0	139.8		9.7 9.7	8.0		4		90			<0.2	1.1
					Surface	1.0	0.3	240 250	30.4 30.4	30.4	8.0 8.0	8.0 10		104.7	104.7	7.4 6.4	3.1 3.1	-	4 5		-			-	-
SR3	Cloudy	Moderate	12:35	8.7	Middle	4.4	0.2	245 249	27.3 27.3	27.3	8.0 8.0	8.0 21		75.8 75.8	75.8	5.3 5.3	5.7 5.7	6.3	5 4	5	· .	822136	807576	-	
					Bottom	7.7	0.0	109	25.8	25.8	8.0	8.0 28	0 28.0	71.6		5.0 5.0	10.1		4		-			-	
					Surface	7.7	0.0	118 80	25.8 30.7		8.0 8.5	28	5	157.6		5.0 5.0	10.1 6.0		5 6		-			-	
						1.0	0.0	86 252	30.7 29.8	30.7	8.5 8.4	8.5 10	2	157.4		11.1 9.9 10.5	6.0 7.0	-	6 6		-			-	-
SR4A	Sunny	Calm	13:39	8.4	Middle	4.2	0.4	274	29.8	29.8	8.4	8.4 17	3 17.3	142.8	143.1	9.8	7.5	8.8	6	6	-	817207	807806	-	
					Bottom	7.4	0.3	243 243	25.8 25.9	25.9	8.0 8.0	8.0 28		63.6 63.8		4.4 4.4	13.2 13.2	-	5 4		-			-	-
					Surface	1.0	0.2	277 292	30.8 30.7	30.8	8.6 8.6	8.6 15	2 15.2	191.5		13.1 13.2 13.2	6.0 6.3		5 5		-	1		-	-
SR5A	Sunnv	Calm	13:54	3.6	Middle	-	-	-	-		-			-		- 13.2	-	6.8	-	7	-	816610	810681	-	
					Bottom	- 2.6	- 0.2	- 306	- 30.1	30.1	- 8.6	8.6 17		- 178.0	177.9	- 12.2 12.2	- 7.5	-	- 9		-			-	-
					Bollom	2.6	0.2	329 137	30.1 31.0		8.6 8.7	17	3	204 5		12.2	7.4 7.4		8		-			-	
					Surface	1.0	0.0	141	30.9	31.0	8.7	8.7 13		204.2		14.1 14.1	7.7		5		-			-	
SR6A	Sunny	Calm	14:21	4.0	Middle	-	-	-	-	-	-			-		-	-	8.5	-	5		817973	814756	-	· · ·
					Bottom	3.0	0.1	180 191	30.8 30.8	30.8	8.7 8.7	8.7 14		186.1		12.8 12.7 12.8	9.4 9.3		5 5		-			-	-
					Surface	1.0	0.0	198	30.3	30.3	8.2	e 2 14	6 146	174.8	174.9	12.1	3.0	.	4		-			-	-
	01			46-		1.0 8.3	0.0	205 226	30.3 25.7		8.2 8.1	14	4	74.6	1	12.1 5.2 8.7	3.0 3.4		4 5	_				-	-
SR7	Cloudy	Moderate	14:42	16.5	Middle	8.3	0.0	229	25.7	25.7	8.1	0.1 28	4 20.4	74.5	74.5	5.2	3.4	4.3	4	5		823655	823735	-	
					Bottom	15.5 15.5	0.0	96 103	23.1 23.1	23.1	8.0 8.0	8.0 33	8 33.8	62.5	62.5	4.4 4.4	6.4 6.4		6 5		-			-	
					Surface	1.0	-	-	30.6 30.6	30.6	8.0 8.0	8.0 10		110.0		7.8	10.6 10.6		6 5		<u> </u>			-	-
SR8	Cloudy	Moderate	13:23	4.8	Middle	-	-	-	-	-	-			-		- 7.8	-	8.9	-	6	· .	820381	811646	-	
	-				Bottom	- 3.8	-	-	- 27.9	27.9	- 8.0	8.0 19		92.1		- 6.5 6.5	- 7.2		- 6		-			-	· · ·
DA: Dopth Aver					Dottom	3.8	-	-	27.9	21.3	8.0	8.0 19	8 13.0	92.1	32.1	6.5 6.5	7.2		6		-]				

Expansion of Hong Kong International Airport into a Three-Runway System Water Quality Monitoring Water Quality Monitoring Results on 16 July 20 during Mid-Ebb Tide

Water Qual	ity wonite	oring Resu	its on		16 July 20	during Mid-		•																		
Monitoring	Weather	Sea	Sampling	Water	Sampling Dep	th (m)	Current Speed	Current	Water Temp	perature (°C)	p	н	Salin	nity (ppt)		aturation (%)	Dissolved Oxygen	Turbidity(NTU)	Suspende (mg/		Total Alkalinit (ppm)	Coordinate	Coordinate HK Grid	Chromi (µg/L	
Station	Condition	Condition	Time	Depth (m)		. ,	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value DA	Value	DA	Value	DA	Value DA	(Northing)	(Easting)	Value	DA Value DA
					Surface	1.0	0.4	177 194	30.0 30.0	30.0	8.6 8.6	8.6	9.6 9.6	9.6	130.1 129.9	130.0	9.3	5.1 5.1	-	5		87 87			<0.2	1.2
C1	Fine	Moderate	10:28	7.9	Middle	4.0	0.2	231	29.7	29.7	8.5	8.5	10.0	10.0	118.5	118.4	8.5 8.9	5.2	5.6	6	6	90 00	815643	804230	<0.2	-0.2 1.0 1.1
-					Daman	4.0 6.9	0.3	231 214	29.7 24.1		8.5 7.9		10.0 31.9		118.2 47.9	40.0	8.5 3.4 2.4	5.2 6.6	-	6 7		89 92			<0.2	0.9
					Bottom	6.9 1.0	0.5	223 133	24.1 29.1	24.1	7.9	7.9	31.9 9.8	31.9	48.1 99.3	48.0	3.4 3.4	6.5 4.5		7		92 88			<0.2	1.2
					Surface	1.0	0.4	145	29.1	29.1	8.2 8.2	8.2	9.8	9.8	99.2	99.3	7.2 7.2 5.8	4.6	Ŀ	6		88			<0.2	1.0
C2	Fine	Moderate	11:05	11.9	Middle	6.0 6.0	0.6	152 154	25.0 25.0	25.0	7.8	7.8	27.6 27.6	27.6	60.5 60.4	60.5	4.3	3.6 3.8	5.3	6	6	90 90 90	825687	806925	<0.2	<0.2 1.0 1.0
					Bottom	10.9	0.2	155	24.5	24.5	7.8	7.8	29.2		55.8	55.9	3.9 4.0	7.7	F	6		92			<0.2	1.0
					Surface	10.9 1.0	0.2	161 192	24.5 29.0	29.0	8.3	8.3	29.2 13.1		55.9 122.4	122.4	4.0 4.0 8.8	3.4		6		87			<0.2	1.0
						1.0 6.4	0.2	194 237	29.0		8.3 8.2		13.1 20.1		122.3 101.5		8.8 7.2 8.0	3.4 2.5	-	6		88 91 00			<0.2	1.0
C3	Cloudy	Moderate	09:06	12.7	Middle	6.4	0.2	254	27.2	27.2	8.2	8.2	20.2	20.2	101.0	101.3	7.2	2.6	5.0	6	6	91 90	822103	817815	<0.2	<0.2 0.9 1.0
					Bottom	11.7 11.7	0.1	30 31	23.6 23.6	23.6	7.9 7.9	7.9	30.7 30.8	30.8	68.9 69.6	69.3	4.9 4.9	8.8 9.4	ŀ	8		92 93			<0.2	1.0
					Surface	1.0 1.0	0.1	321 335	30.2 30.2	30.2	8.7 8.7	8.7	9.4 9.4	9.4	130.8 130.7	130.8	9.4 9.3	5.7 5.7	ļ	7 7		87 88			<0.2	0.8
IM1	Fine	Moderate	10:47	4.5	Middle	-	-	-	-	-	-		-		-		- 9.4	-	7.5	-	7	- 80	817964	807146	<u> </u>	<0.2 - 0.8
	1	modorato	10.17			- 3.5	- 0.1	- 14	- 28.3		- 8.3		- 17.2		- 89.0		6.3	- 9.3		- 6	·	90	0.1.001	007110	<0.2	0.8
					Bottom	3.5 1.0	0.1	14 238	28.3 28.9	28.3	8.3 8.4	8.3	18.5 14.1	17.8	80.9 115.0	85.0	5.6 6.0 8.2	9.4 6.6		6		91 86			<0.2	0.9
					Surface	1.0	0.0	254	28.9	28.9	8.4	8.4	14.0		115.0	115.0	8.2 6.0	6.5	E	0 7		86			<0.2	0.8
IM2	Fine	Moderate	10:55	6.2	Middle	3.1 3.1	0.1	200	25.5 25.5	25.5	7.9 7.9	7.9	28.4 28.3	28.4	53.2 53.3	53.3	3.7 0.0	7.5 7.5	7.5	7 6	7	89 88 88	818178	806166	<0.2	<0.2 1.0 0.9
					Bottom	5.2	0.0	347	23.9	23.9	7.9	7.9	32.3	32.3	43.4	43.4	3.0 2.0	8.4	þ	7		91			<0.2	0.9
					Surface	5.2 1.0	0.0	319 227	23.9 29.6	29.6	7.9 8.4	8.4	32.3 12.7	12.7	43.4 120.7	120.7	3.0 <u>5.0</u> 8.6	8.4 5.8		6 6		90 86			<0.2 <0.2	0.9
						1.0 3.2	0.2	239 231	29.6 25.0		8.4 7.9		12.7 29.4		120.6 47.5		8.6 3.3 6.0	5.8 8.7	F	6 6		86 88 00			<0.2	0.9
IM3	Fine	Moderate	11:02	6.4	Middle	3.2	0.2	233	25.0	25.0	7.9	7.9	29.4	29.4	47.7	47.6	3.3	8.7	8.1	7	7	88 00	818800	805591	<0.2	<0.2 0.9 1.0
					Bottom	5.4 5.4	0.2	214 226	23.9 23.9	23.9	7.9 7.9	7.9	32.4 32.4		42.4 42.4	42.4	3.0 3.0 <u>3.0</u>	9.7 9.8	-	8		90 90			<0.2 <0.2	0.9
					Surface	1.0	0.8	180 184	29.8 29.8	29.8	8.3 8.3	8.3	9.4 9.4	9.4	110.1 109.8	110.0	7.9 7.9	5.1 5.1	-	6 6		86 85			<0.2	1.0
IM4	Fine	Rough	11:12	7.4	Middle	3.7	0.7	194	28.5	28.5	8.4	8.4	11.1	11.2	96.4	92.8	7.0	6.7	7.5	6	6	88	819702	804603	<0.2	-0.2 1.0 1.0
		ě			Bottom	3.7 6.4	0.8	209 209	28.4 24.2	24.2	8.4 7.9	7.9	11.3 31.6	21.6	89.2 43.7	43.7	6.5 3.1 2.1	7.0 10.4	ŀ	6 7		88 90			<0.2	1.0
						6.4 1.0	0.1	228 195	24.2 30.0		7.9 8.4		31.6 8.2		43.7 117.6		3.1 <u>3.1</u> 8.5	10.5 5.5		6		90 86			<0.2	1.0
					Surface	1.0	0.6	205	30.0	30.0	8.4	8.4	8.5	8.3	117.6	117.6	8.5 8.1	5.5	E	5		85			<0.2	1.0
IM5	Fine	Rough	11:22	6.6	Middle	3.3 3.3	0.7	204 220	29.4 29.4	29.4	8.3 8.3	8.3	10.6 10.6		107.0 106.8	106.9	7.7	5.4 5.4	6.6	5	4	88 88	820746	804876	<0.2	<0.2 1.1 1.0
					Bottom	5.6 5.6	0.5 0.5	221 222	26.4 26.4	26.4	8.1 8.1	8.1	20.7 20.7	20.7	68.6 68.6	68.6	4.9 4.9	8.7 9.0	F	4		91 91			<0.2	1.0
					Surface	1.0	0.4	215	29.8	29.8	8.4	8.4	9.9	9.9	118.2	118.2	8.5	5.2		4		86			<0.2	1.1
						1.0 3.4	0.4	233 238	29.8 29.6		8.4 8.4		9.9 11.0		118.1 114.9		8.5 8.2 8.4	5.2 5.5		4 5		86 89			<0.2 <0.2	1.0
IM6	Fine	Rough	11:32	6.7	Middle	3.4 5.7	0.4	239	29.6	29.6	8.4	8.4	11.0	11.0	114.7	114.8	8.2	5.5	6.4	4	4	89 89 90	821052	805833	<0.2	<0.2 1.2 1.1
					Bottom	5.7	0.3	256 257	26.6 26.5	26.6	8.0 8.0	8.0	21.7 22.0	21.8	75.7 74.9	75.3	5.4 5.3 5.4	8.6 8.8	-	4 5		91			<0.2 <0.2	1.0
					Surface	1.0	0.4	227 240	29.7 29.7	29.7	8.4 8.4	8.4	10.5 10.5	10.5	120.1 120.0	120.1	8.6 8.6	5.3 5.4		5 4		85 84			<0.2	1.1
IM7	Fine	Rough	11:39	7.8	Middle	3.9	0.4	231	29.3	29.3	8.3	8.3	12.3	12.3	105.0	104.9	7.5 0.1	5.4	7.0	4	5	87 97	821368	806814	<0.2	-0.2 1.0 1.0
		•			Bottom	3.9 6.8	0.4	241 279	29.3 25.8	25.8	8.3 7.9		12.3 26.8		104.8 57.4	57.2	7.5 4.0 4.0	5.4 10.0	ŀ	5 6		88 90			<0.2	1.0
						6.8 1.0	0.2	280 181	25.7 29.3		7.9 8.2	7.9	26.9 9.9	26.9	56.9 109.1		4.0 7.9	10.4 4.2	[6 5		90 87			<0.2 <0.2	1.1
					Surface	1.0	0.1	186	29.3	29.3	8.2	8.2	9.9	9.9	109.0	109.1	7.9 7.7	4.2	E	5		86			<0.2	1.0
IM8	Fine	Moderate	10:37	7.9	Middle	4.0	0.1	154 158	28.9 28.9	28.9	8.2 8.2	8.2	11.3 11.3	11.3	103.3 103.1	103.2	7.5	4.1 4.2	4.4	5 5	5	89 90 89	821847	808131	<0.2	<0.2 1.0 1.0
					Bottom	6.9	0.1	173	28.6	28.6	8.1	8.1	13.2	13.2	99.1	99.1	7.1 7.1	5.0	þ	6		91			<0.2	1.1
DA: Depth-Aver						6.9	0.1	173	28.6		8.1		13.1	1	99.0		7.1	4.9		5		91	1	I	<0.2	1.1

DA: Depth-Averaged

Expansion of Hong Kong International Airport into a Three-Runway System Water Quality Monitoring Water Quality Monitoring Results on 16 July 20 during Mid-Ebb Tide

mater qual		oring Resu	113 011		16 July 20	during Mid-		-																			
Monitoring	Weather	Sea	Sampling	Water	0	Death (a)	Current Speed	Current	Water Te	emperature (°C)		pН	Salinity (ppt)	DO	Saturation (%)	Dissol Oxyg		Turbidity(NTU)	Suspende (mg		Total Al (pp		Coordinate HK Grid	Coordinate	Chromi (µg/L	
Station	Condition	Condition	Time	Depth (m)	Sampling	Depth (m)	(m/s)	Direction	Value	Average	Value	Average	Value Average	Valu	e Average	Value	DA	Value	DA	Value	DA	Value	DA	(Northing)	HK Grid (Easting)	Value	DA Value DA
					Surface	1.0	0.2	90	29.4	29.4	8.2	8.2	9.8 9.8	108.		7.9		4.1		6		86				<0.2	1.0
IM9	Fine	Moderate	10:31	7.5	Middle	1.0	0.3	90 107	29.4 29.3	29.3	8.2 8.2	8.2	9.8 5.0 10.1 10.1	108. 104.	-	7.9 7.6	7.7	4.1 4.2	5.8	5	6	86 90	89	822080	808809	<0.2 <0.2	<0.2 1.0 1.1
11113	Fine	wouerate	10.51	7.5		3.8	0.3	115 85	29.3 27.1		8.2 7.9		10.1	104.	2	7.5 5.6	[4.2 9.0	5.0	5 6	0	90 91	05	822080	808809	<0.2	0.2 0.9
					Bottom	6.5	0.2	85	27.0	27.1	7.9	7.9	17.5	77.0	11.2	5.5	5.6	8.9		6		91				<0.2	1.1
					Surface	1.0	0.6	100 105	29.3 29.3	29.3	8.2 8.2	8.2	9.6 9.6	106. 106.		7.7	7.6	4.1 4.1		6	ł	87 88				<0.2	1.0
IM10	Fine	Moderate	10:22	7.6	Middle	3.8 3.8	0.6	108 109	28.9 28.9	28.9	8.2 8.2	8.2	11.8 11.9 11.8	102.		7.4 7.4	1.0	4.0 4.1	5.4	4	6	90 91	90	822384	809811	<0.2	<0.2 1.1 1.0
					Bottom	6.6	0.5	87	28.3	28.3	8.1	8.1	15.8 15.4	93.8	0/ 2	6.7	6.8	8.1		5	ţ	91				<0.2	0.9
					1	6.6	0.6	88 84	28.3 29.2		8.1 8.3		15.0	94.6	i	6.8 7.9		8.2 3.9		6		92 87				<0.2	0.9
					Surface	1.0	0.6 0.5	90 93	29.2 28.6	29.2	8.3 8.2	8.3	10.6 10.6 13.9 10.0	109. 99.9		7.9 7.2	7.6	3.9 3.6		6 5	1	87 90				<0.2 <0.2	1.0
IM11	Fine	Moderate	10:08	8.0	Middle	4.0	0.6	100	28.6	28.6	8.2	8.2	13.8	99.7	99.8	7.2	-	3.7	4.7	6	6	91	90	822074	811481	<0.2	1.0
					Bottom	7.0	0.2	101	25.0 25.0	25.0	7.9	7.9	27.2 27.2	70.6		5.0 5.1	5.1	6.3 6.5		6 5	ł	92 92				<0.2 <0.2	1.0
					Surface	1.0	0.4	85 90	29.0 29.0	29.0	8.2 8.2	8.2	11.9 11.9 11.9	110.		8.0 8.0	-	4.0 3.9		6		86 87				<0.2 <0.2	1.2
IM12	Fine	Moderate	10:01	9.7	Middle	4.9	0.2	84	28.6	28.6	8.2	8.2	14.2 14.2	100.	5 100.2	7.2	7.6	3.6	4.6	6	6	90	89	821450	812035	<0.2	-0.2 1.0 1.1
	1 110	modorato	10.01	0.1		4.9	0.2	87 51	28.6 24.1		8.2 7.8		14.2	99.9 60.9		7.2		3.7 6.1		7	- Ŭ	90 91		021100	012000	<0.2	1.0
					Bottom	8.7	0.1	53	24.1	24.1	7.8	7.8	29.8	62.0	61.5	4.4	4.4	6.1 3.1		7	İ	91				<0.2	0.9
					Surface	1.0	-		29.2 29.2	29.2	8.4 8.4	8.4	12.6 12.6	131. 131.		9.4 9.4	9.4	3.1		5 6	ł	-				-	-
SR1A	Fine	Moderate	09:43	4.9	Middle	2.5	-	-	•	-	•	-		-		•	3.4	-	3.2	-	6	-	-	819982	812662	-	
					Bottom	3.9	-	-	29.1	29.1	8.3	8.3	13.7 13.7	119.		8.5	8.5	3.4		6	ļ	-				-	-
					Surface	3.9	- 0.3	- 101	29.1 29.3	20.2	8.3 8.3	8.3	13.8 11.2 11.2	118.		8.4 8.5		3.3 3.6		6		- 87				- <0.2	- 1.1
					Surface	1.0	0.3	101	29.2	29.3	8.3	0.3	11.3	117.	4 117.5	8.5	8.5	3.5		6	ļ	87				<0.2	1.0
SR2	Cloudy	Moderate	09:30	5.0	Middle	-	-	-	-	-	-	-	-	-		-		-	3.5	-	6	-	89	821485	814155	- 1	<0.2 - 1.0
					Bottom	4.0	0.2	92 93	28.9 28.9	28.9	8.3 8.3	8.3	13.2 13.2 13.2	111.		8.0 8.0	8.0	3.6 3.4		5 6		90 90				<0.2 <0.2	1.0
					Surface	1.0	0.1	173 173	29.3 29.3	29.3	8.2 8.2	8.2	9.9 9.9	108.		7.8 7.8	-	4.1 4.2		6 5	ł	-				-	-
SR3	Fine	Moderate	10:43	8.8	Middle	4.4	0.1	219	28.7	28.7	8.1	8.1	13.2 13.2	97.6	97.4	7.0	7.4	3.6	5.4	5	6	-	_	822165	807590	-	
					Bottom	4.4 7.8	0.2	225 186	28.7 25.5	25.5	8.1 7.8	7.8	13.2 26.5 26.5 26.5	97.1 55.9		7.0 3.9	4.0	3.5 8.5		6	+	-				-	
						7.8	0.1	196 274	25.5 30.2		7.8 8.6		20.5	56.3		4.0 8.9	4.0	8.5 6.3		6 6	[· ·				-	-
					Surface	1.0	0.0	274	30.2	30.2	8.6	8.6	10.7	125.	125.2	8.9	6.3	6.3		7	ļ	•				-	-
SR4A	Fine	Calm	10:06	8.8	Middle	4.4	0.2	66 68	26.1 26.1	26.1	7.9 8.0	7.9	28.0 28.0 28.0	53.8 54.2		3.7 3.7	ŀ	10.1 10.2	9.9	8	7	-	-	817178	807796	-	
					Bottom	7.8	0.2	70 70	23.9 23.9	23.9	7.9	7.9	32.6 32.6 32.6	48.8		3.4 3.4	3.4	13.3 13.3		7	Į	-				•	-
					Surface	1.0	0.0	117	30.4	30.4	8.6	8.6	12.5 12.5	132.	4 122.4	9.3		5.3		7		·				-	<u> </u>
SR5A	Fine	Calm	09:48	3.7	Middle	1.0	0.0	122	30.4		8.6		12.5	132.	4	9.3	9.3	5.5	6.6	-	7	-		816615	810685	-	-
SKJA	Fille	Califi	05.40	3.7		- 2.7	- 0.1	- 52	- 30.0	-	- 8.5	-	16.3 16.2	- 127.	-	- 8.8	[- 7.8	0.0	- 7	['	-		810015	810085	-	· 🕂 ·
					Bottom	2.7	0.1	54 289	30.0	30.0	8.5 8.3	8.5	16.3	127.	2 127.4	8.8	8.8	7.8		7		-				-	
					Surface	1.0	0.1	289 301	29.3 29.3	29.3	8.3	8.3	15.3 15.3 15.3	118.		8.3 8.3	8.3	10.7		8	ł	-				-	-
SR6A	Fine	Calm	09:19	4.1	Middle	-	-	-	-	-	-	-		-		-	0.5	-	12.0	-	8	-	-	817948	814728	-	
					Bottom	3.1	0.1	172	29.0	29.0	8.1	8.1	17.2 17.3	102.		7.2	7.2	13.4		8	1	•				-	-
					Surface	3.1	0.1	175 67	29.0 28.9	28.9	8.1 8.5	8.5	17.3 17.3 13.4 13.4	102.	122.7	7.2 9.5		13.4 3.1		7 6		-				-	
						1.0 7.8	0.4	71 284	28.9 27.4		8.5 8.2		13.4	132. 100.	5 7	9.5 7.2	8.4	3.1 3.7		7 7	Į	-				-	-
SR7	Cloudy	Moderate	08:32	15.5	Middle	7.8	0.1	300	27.4	27.4	8.2	8.2	18.2	100.	100.6	7.2		3.7	3.4	8	7	-	-	823652	823726	-	· · ·
					Bottom	14.5 14.5	0.3	62 67	23.0 23.0	23.0	7.8 7.8	7.8	32.1 32.1 32.1	69.3 70.4		4.9 5.0	5.0	3.3 3.3		8	<u> </u>	-				-	-
					Surface	1.0	-	-	29.2 29.2	29.2	8.3 8.3	8.3	11.9 12.0 12.0	116. 115.	2 116.1	8.3 8.3		4.6 5.0		6 6		H-				-	-
SR8	Fine	Moderate	09:54	5.1	Middle	-	-	-	-	-	-			-	1.1	-	8.3	-	5.9	-	6	-	-	820412	811638	-	
	-			-		4.1	-	-	- 29.0	20.4	- 8.3	0.2	- 12.5	- 113.	5 112.0	- 8.1		- 6.8		- 6	+	-				-	-
DA: Depth-Avera					Bottom	4.1	-	-	29.1	29.1	8.3	8.3	12.5 12.5	113.	113.3	8.1	8.1	7.1		5	1	-				-	

Expansion of Hong Kong International Airport into a Three-Runway System Water Quality Monitoring Water Quality Monitoring Results on 16 July 20 during during Mid-Flood Tide

Water Qua	lity Monito	oring Resu	ilts on		16 July 20	during Mid-	Flood Ti	de																					
Monitoring Station	Weather	Sea	Sampling	Water	Sampling Dep	th (m)	Current Speed	Current Direction	Water Te	emperature (°C)		pН	Sali	ity (ppt)		aturation (%)	Dissolve Oxyge		Turbidity(I	NTU) S	uspende (mg/	d Solids 'L)	Total A (pp	lkalinity om)	Coordinate HK Grid	Coordinate HK Grid	Chrom (µg/l		g/L)
Station	Condition	Condition	Time	Depth (m)			(m/s)		Value	Average	Value	Averag		Average		Average		DA	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)			DA
					Surface	1.0 1.0 4.0	0.4 0.4 0.1	20 20 12	30.5 30.5 24.4	30.5	8.6 8.6 7.9	8.6	9.1 9.1 30.8	9.1	136.9 136.7 48.8	136.8	9.8 9.8 3.4	6.6	5.6 5.7 8.6		7 8 8		86 87 90	-			<0.2 <0.2 <0.2	0.9 0.8 0.8	
C1	Fine	Moderate	16:59	7.9	Middle	4.0	0.1	12	24.4	24.4	7.9	7.9	30.6	30.7	49.4	49.1	3.5		8.5 11.7	8.7	7	7	89	89	815642	804229	<0.2	<0.2 0.8	0.9
					Bottom	6.9 6.9	0.3	37 38	23.8 23.8	23.8	7.9 7.9	7.9	32.3 32.3	32.3	43.4 43.5	43.5	3.1	3.1	11.9		6		92 91				<0.2 <0.2	0.9	
					Surface	1.0	0.4	149 154	29.7 29.6	29.7	8.2 8.2	8.2	9.5 9.5	9.5	107.6 107.2	107.4	7.8	5.0	5.2 5.2		6 5		87 87				<0.2 <0.2	1.0	
C2	Fine	Rough	15:14	10.5	Middle	5.3 5.3	0.2	67 73	25.6 25.5	25.6	7.8	7.8	24.8 24.8	24.8	60.2 60.3	60.3	4.3		5.4 5.8	6.5	6	6	90 90	90	825667	806922	<0.2	1.0	1.0
					Bottom	9.5 9.5	0.1	87 92	25.2 25.2	25.2	7.8	7.8	26.4 26.4	26.4	61.1 61.5	61.3	4.4	1.4	8.8 8.5		6		92 92				<0.2 <0.2	1.0 1.1	
					Surface	1.0 1.0 6.3	0.1	292 300 242	29.9 29.9 25.4	29.9	8.6 8.6 7.9	8.6	11.6	11.6	158.6 157.8 66.4	158.2	11.3 11.2 4.7	3.0	3.1 3.1 2.4	F	6 6 7		87 88				<0.2	0.9	
C3	Fine	Moderate	17:09	12.5	Middle	6.3 11.5	0.1	242 244 299	25.4 25.4 23.4	25.4	7.9 7.8	7.9	25.8 25.8 31.2	25.8	66.2 59.2	66.3	4.7	_	2.4 2.6 11.2	5.6	7 6 6	6	91 91 92	90	822087	817795	<0.2 <0.2 <0.2	<0.2 1.1	1.1
					Bottom	11.5	0.3 0.3 0.1	307 337	23.4 23.4 30.5	23.4	7.0	7.8	31.2 31.2 9.6	31.2	59.2 59.5 145.7	59.4	4.2 4.2	1.2	11.2 11.0 9.4		6 7 7		92 92 89				<0.2 <0.2 <0.2	1.2	
					Surface	1.0	0.1	310	30.5	30.5	8.7	8.7	9.6	9.6	145.7	145.7	10.4	0.4	9.4		7		89				<0.2	1.3	
IM1	Fine	Rough	16:34	4.6	Middle	- 3.6	- 0.1	- 264	30.6	-	- 8.7	-	- 9.9	-	- 145.4		- 10.3		- 10.6	10.0	- 7	7	- - 90	90	817951	807126	- <0.2	<0.2	1.2
					Bottom	3.6	0.1	267	30.6	30.6	8.7 8.6	8.7	9.9	9.9	145.2	145.3	10.3 1 10.3 1	0.3	10.7		6		90 87				<0.2	1.2	
					Surface	1.0	0.6	10 352	30.4 30.2	30.4	8.6 8.5	8.6	9.4	9.4	142.4	142.5	10.2	9.7	5.8 7.2		6		87 90				<0.2	1.0	
IM2	Fine	Rough	16:26	6.5	Middle	3.3	0.4	324 339	30.2 25.4	30.2	8.5 7.9	8.5	9.7 25.7	9.7	129.2 64.3	129.3	9.2		7.3	7.5	7 6	6	90 92	90	818177	806147	<0.2	<0.2 1.2 1.0 1.0	1.0
					Bottom	5.5	0.5	340 328	25.3 30.3	25.4	7.9 8.6	7.9	29.3 10.0	27.5	62.3 143.7	63.3	4.3 10.2	1.4	9.3 6.2		6 7		92 87				<0.2 <0.2	1.0	
IM3	Fine	Daugh	16:17	6.7	Surface Middle	1.0 3.4	0.6 0.6	337 324	30.3 30.1	30.3	8.6 8.5	8.6 8.5	10.0 10.1	10.0	143.8 133.9	143.8 133.6	10.2	9.9	6.3 7.2	7.9	8 7	-	87 90	90	818789	805607	<0.2	1.0	1.0
IIVIS	rine	Rough	10.17	0.7	Bottom	3.4 5.7	0.6 0.5	352 294	30.1 24.4	24.4	8.5 7.9		10.1 31.4	31.4	133.3 46.9	47.0	9.5 3.3	3.3	7.3 10.3	7.5	6 6	ŕ	90 92	50	010709	803007	<0.2	1.0	1.0
					Surface	5.7 1.0	0.6	315 280	24.4 30.3	30.3	7.9 8.6	8.6	31.4 10.6	10.6	47.1 145.3	145.3	10.3	<u></u>	10.0 6.5		7 8	[92 86				<0.2 <0.2	0.9	
IM4	Fine	Rough	16:03	7.1	Middle	1.0 3.6	0.8	289 299	30.3 30.2	30.2	8.6 8.6	8.5	10.6 10.6	10.6	145.2 136.0	135.9	9.7	0.0	6.5 6.5	7.6	8 8	8	86 90	89	819722	804587	<0.2 <0.2	<0.2 1.0	1.1
					Bottom	3.6 6.1	0.7	328 324	30.2 24.1	24.1	8.5 7.9	7.9	10.6 31.9	31.9	135.7 41.8	41.8	9.6 2.9	2.9	6.5 9.8	E	8	-	90 92				<0.2 <0.2	1.2	
					Surface	6.1 1.0	0.4	327 278	24.1 30.2	30.2	7.9	8.6	31.9 11.0	11.0	41.8 148.5	148.5	10.5	_	9.7 6.2		9 7		92 86				<0.2	1.0	—
IM5	Fine	Rough	15:49	6.0	Middle	1.0 3.0 3.0	0.3 0.3 0.3	286 280 300	30.2 29.9 29.9	29.9	8.6 8.5 8.5	8.5	11.0 11.5 11.5	11.5	148.5 137.3 137.4	137.4	10.5 9.8 9.8	0.2	6.1 6.0 6.0	6.0	8 6 7	7	87 89 89	89	820728	804863	<0.2 <0.2 <0.2	<0.2 1.0	1.1
					Bottom	5.0	0.3	322 334	29.9	28.7	8.2 8.2	8.2	45.4	15.0	93.3 97.0	95.2	6.6	6.8	6.0 6.1		7 6		91 91				<0.2 <0.2 <0.2	1.2	
					Surface	1.0	0.4	232 240	30.0 30.0	30.0	8.5 8.5	8.5	10.0	10.9	134.7 134.5	134.6	9.6	-	5.5 5.5	-	6		86 87				<0.2 <0.2 <0.2	1.0	
IM6	Fine	Rough	15:40	6.1	Middle	3.1	0.5	254 257	29.0	29.0	8.2 8.2	8.2	13.7	13.8	101.5	101.7	7.2	3.4	6.5 6.5	6.2	7 6	6	89 89	89	821059	805850	<0.2	1.0	1.0
					Bottom	5.1	0.1	239 242	27.4 27.5	27.5	8.1 8.1	8.1	21.1	21.1	75.6 76.4	76.0	5.2	5.4	6.6 6.4		6 7		91 91				<0.2 <0.2	1.0	
					Surface	1.0	0.4	241 247	29.7	29.7	8.3 8.3	8.3	10.5	10.5	110.5 110.3	110.4	7.9		6.0 6.0	ŀ	5 6		86 86			ĺ	<0.2 <0.2	1.0	
IM7	Fine	Rough	15:19	7.3	Middle	3.7 3.7	0.4	268 289	28.0 28.0	28.0	8.1 8.1	8.1	17.3 17.2	17.2	83.7 83.8	83.8	6.0 6.0	7.0	6.8 6.8	7.2	5 6	6	89 88	89	821331	806842	<0.2 <0.2	<0.2 1.0	1.1
					Bottom	6.3 6.3	0.2	280 282	26.5 26.5	26.5	8.0 8.0	8.0	24.5 24.5	24.5	63.3 63.3	63.3	4.4	1.4	8.7 8.6	_	7 8		91 91				<0.2 <0.2	1.1 1.2	
					Surface	1.0	0.2	246 268	29.9 29.8	29.9	8.3 8.3	8.3	9.1 9.1	9.1	115.2 114.9	115.1	8.3 8.3	7.8	4.8 4.8		6 5		87 88				<0.2 <0.2	1.2 1.2	
IM8	Fine	Rough	15:44	7.0	Middle	3.5 3.5	0.2	228 243	28.9 28.8	28.9	8.1 8.1	8.1	11.3 11.3	11.3	98.6 98.6	98.6	7.2		4.9 4.9	7.8	6 6	6	90 90	90	821816	808124	<0.2	<0.2 1.1	1.1
					Bottom	6.0 6.0	0.3	288 311	28.1 28.1	28.1	8.0 8.0	8.0	15.5 15.5	15.5	86.3 86.6	86.5	6.2 6.2	6.2	13.5 13.6		7 6		92 92				<0.2 <0.2	1.0 1.0	

Expansion of Hong Kong International Airport into a Three-Runway System Water Quality Monitoring Water Quality Monitoring Results on 16 July 20 during during Mid-Flood Tide

M mod M mod M mod M mod <th< th=""><th>Water Qual</th><th>ity Monite</th><th>oring Resu</th><th>ts on</th><th></th><th>16 July 20</th><th>during Mid-</th><th></th><th>de</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></th<>	Water Qual	ity Monite	oring Resu	ts on		16 July 20	during Mid-		de																		
		Weather	Sea	Sampling	Water	Sampling [Depth (m)	Current Speed		Water Te	mperature (°C)	P	ын	Salinit	ty (ppt)			Dissolved Oxygen	Turbidity	NTU)							
</td <td>Station</td> <td>Condition</td> <td>Condition</td> <td>Time</td> <td>Depth (m)</td> <td></td> <td>1.()</td> <td>(m/s)</td> <td>Direction</td> <td>Value</td> <td>Average</td> <td>Value</td> <td>Average V</td> <td>alue</td> <td>Average</td> <td>Value</td> <td>Average</td> <td>Value DA</td> <td>Value</td> <td>DA</td> <td>Value</td> <td>DA</td> <td>Value DA</td> <td></td> <td></td> <td>Value</td> <td>DA Value DA</td>	Station	Condition	Condition	Time	Depth (m)		1.()	(m/s)	Direction	Value	Average	Value	Average V	alue	Average	Value	Average	Value DA	Value	DA	Value	DA	Value DA			Value	DA Value DA
						Surface					29.8				9.2		114.6	82			6						
<td>IM9</td> <td>Fine</td> <td>Rough</td> <td>15:51</td> <td>7.1</td> <td>Middle</td> <td>3.6</td> <td>0.1</td> <td>241</td> <td>28.8</td> <td>28.8</td> <td>8.1</td> <td>0.1</td> <td>2.4</td> <td>12.4</td> <td>97.3</td> <td>97.5</td> <td>7.0</td> <td>5.3</td> <td>5.5</td> <td>7</td> <td>7</td> <td>90 00</td> <td>822074</td> <td>808789</td> <td><0.2</td> <td>.0.2 1.0 1.1</td>	IM9	Fine	Rough	15:51	7.1	Middle	3.6	0.1	241	28.8	28.8	8.1	0.1	2.4	12.4	97.3	97.5	7.0	5.3	5.5	7	7	90 00	822074	808789	<0.2	.0.2 1.0 1.1
Implicit Implici			, in the second s			Dattam							1				04.4	6.4									
<td></td> <td></td> <td></td> <td></td> <td></td> <td>Bollom</td> <td></td> <td>0.2</td> <td></td> <td>28.0</td> <td>28.0</td> <td></td> <td>1</td> <td></td> <td>14.7</td> <td>84.0</td> <td></td> <td>6.1</td> <td></td> <td></td> <td></td> <td></td> <td>92</td> <td></td> <td></td> <td><0.2</td> <td></td>						Bollom		0.2		28.0	28.0		1		14.7	84.0		6.1					92			<0.2	
						Surface	1.0	0.1	269	29.6	29.7	8.3	8.3	9.3	9.3	118.6	118.7	8.6 8.3	4.9		7		88			<0.2	1.0
<td>IM10</td> <td>Fine</td> <td>Moderate</td> <td>15:59</td> <td>7.2</td> <td>Middle</td> <td></td> <td></td> <td></td> <td></td> <td>29.2</td> <td></td> <td></td> <td></td> <td>11.5</td> <td></td> <td>110.1</td> <td>7.9</td> <td></td> <td>6.9</td> <td></td> <td>6</td> <td></td> <td>822363</td> <td>809807</td> <td></td> <td></td>	IM10	Fine	Moderate	15:59	7.2	Middle					29.2				11.5		110.1	7.9		6.9		6		822363	809807		
</td <td></td> <td></td> <td></td> <td></td> <td></td> <td>Bottom</td> <td>6.2</td> <td>0.3</td> <td>356</td> <td>27.7</td> <td>27.7</td> <td>8.0</td> <td>8.0 1</td> <td>7.4</td> <td>17.4</td> <td>87.3</td> <td>87.6</td> <td>6.2 6.3</td> <td>10.9</td> <td></td> <td>6</td> <td></td> <td>91</td> <td></td> <td></td> <td><0.2</td> <td>1.0</td>						Bottom	6.2	0.3	356	27.7	27.7	8.0	8.0 1	7.4	17.4	87.3	87.6	6.2 6.3	10.9		6		91			<0.2	1.0
Image: here in the state in						Surface	1.0	0.1	300	29.7	29.7	8.4	o 4 1	0.7	10.7	134.1	13/11	9.6	4.2		6		88			<0.2	1.0
100 100 </td <td></td> <td>_</td> <td></td> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>01</td> <td></td> <td></td> <td><0.2</td> <td>12</td>		_											1										01			<0.2	12
<th< td=""><td>IM11</td><td>Fine</td><td>Moderate</td><td>16:10</td><td>6.6</td><td>Middle</td><td>3.3</td><td>0.3</td><td>306</td><td>29.2</td><td>29.2</td><td>8.3</td><td>8.3</td><td>2.1</td><td>12.1</td><td>121.3</td><td>121.3</td><td>8.7</td><td>4.2</td><td>4.2</td><td>7</td><td>7</td><td>91 91</td><td>822076</td><td>811443</td><td><0.2</td><td>1.0</td></th<>	IM11	Fine	Moderate	16:10	6.6	Middle	3.3	0.3	306	29.2	29.2	8.3	8.3	2.1	12.1	121.3	121.3	8.7	4.2	4.2	7	7	91 91	822076	811443	<0.2	1.0
						Bottom					29.0				13.0		120.2										
Image: bold i						Surface					29.8				10.7		139.0									<0.2	1.0
	IM12	Fine	Moderate	16:17	8.8	Middle	4.4	0.4	298	29.1	29.1	8.4	8.4	4.0	14.0	125.9	124.8	9.0 9.4	3.6	4.0	6	6	90 00	821452	812041	<0.2	-0.2 1.1 1.0
B B						Derrore					04.0				07.0		04.5	43									
						Bottom		0.4	323		24.9		2					4.4								<0.2	1.1
No No No No No No No No No No No No No No						Surface	1.0	-	-	29.9	29.9	8.6			12.7		165.6	11.7 11.7	3.8		6		-			-	
<td>SR1A</td> <td>Fine</td> <td>Moderate</td> <td>16:34</td> <td>4.9</td> <td>Middle</td> <td></td> <td></td> <td>-</td> <td></td> <td>-</td> <td>-</td> <td></td> <td>-</td> <td></td> <td>-</td> <td>-</td> <td></td> <td></td> <td>5.1</td> <td></td> <td>6</td> <td></td> <td>819976</td> <td>812654</td> <td>-</td> <td></td>	SR1A	Fine	Moderate	16:34	4.9	Middle			-		-	-		-		-	-			5.1		6		819976	812654	-	
Fine Andere Fine Andere Fine Andere Fine Andere Fine Andere Fine Andere Fine Andere Fine Andere Fine Andere Fine Andere Fine Andere Fine Andere Fine Andere Fine Andere Fine Andere Fine Andere Fine						Bottom			-		29.8				14.2		134.8						-			-	-
Photom Photom						Surface	1.0	0.1		29.8	29.8	8.5	8.5	0.0	10.0	134.4	134.2	9.6	4.6		6						
Note: Priore Mode: Note:		_							138			8.5	1	- 0.0	10.0	133.9	101.2		5.1								
i i	SR2	Fine	Moderate	16:47	4.8	Middle					-	-		-	-	-	-	-	-	6.2		6		821481	814178	-	<0.2 - 1.0
See by the sector se						Bottom	3.8		26		28.9				15.7		111.5		7.4								
B3 Pictor ictor						Surface					29.8				8.7		111.4						-			-	
Image: bolic	SR3	Fine	Rough	15:38	8.3	Middle	4.2	0.3	212	28.8	28.8	8.1	8.1	1.1	11.1	94.3	94.2	6.8 7.4	4.7	5.5	6	6	· .	822149	807583	-	
Normal Area Normal Area			, in the second s				7.3					7.8	70	24.0		67.9	69.0	4.8 4.9	6.8		6		-			-	
SRA Fine Calm Fine Calm Fine Suffice													4					4.8					-				
SRAA Fne Cam 17.19 9.1 Model 4.6 0.1 327 30.4 30.4 6.5 8.5 163						Surface	1.0	0.1	47	30.6	30.6	8.6	8.6	0.5	10.5	144.0	144.0	10.2 0.7	11.7		9		-			-	
Image: bold biase in the section of the sec	SR4A	Fine	Calm	17:19	9.1	Middle					30.4				16.3		133.0			11.5		8		817202	807826	-	
SR5A Fne Calm 17.36 Same 10 0.2 247 30.7 8.6 15.5 146.5 16.5 17.8 18.8 <						Bottom					25.9				26.6		50.9						-			-	-
SR5A Fine Calm 17.36 3.8 10.0 0						Surface	1.0	0.2	247	30.7	30.7	8.6	0.0	5.5	15.5	146.6	146.6	10.1	8.5		8		-			-	
Image: brance Image: brance	0054	Fine	Calm	47.00	2.5							8.6	1			146.5				0.2			-	046644	840702	-	
Image: bolic	SKOA	Fine	Caim	17.30	3.5		- 25		- 288			- 86		-	-	-	-	- 9.5		9.2			· ·	010014	810702	-	
SR6A Fine Calm 18:10 A.0 Calm 1.0 0.0 288 30.5 30.0 1.2 <th1.2< th=""> 1.2 1.2 <th1< td=""><td></td><td></td><td></td><td></td><td></td><td>Bottom</td><td>2.5</td><td>0.1</td><td>290</td><td>30.5</td><td>30.5</td><td>8.6</td><td>8.6</td><td>5.9</td><td>15.9</td><td>137.7</td><td>137.8</td><td>9.5</td><td>9.9</td><td></td><td>9</td><td></td><td>-</td><td></td><td></td><td>-</td><td>-</td></th1<></th1.2<>						Bottom	2.5	0.1	290	30.5	30.5	8.6	8.6	5.9	15.9	137.7	137.8	9.5	9.9		9		-			-	-
SR6A Fine Calm 18:10 4.0 Middle						Surface					30.5				13.2		179.8	12.5					-			-	-
Image: bolic	SR6A	Fine	Calm	18:10	4.0	Middle		-	-	-	-	-	-	-		-		- 12.5	-	10.7	-	9		817944	814734	-	
SR7 Fine Moderate 17.41 16.26 5.2 <						Bottom		0.0		30.7	30.7				13.0		170.3	11.8 11.9	12.7		9					-	
SR7 Fine Moderate 17.4 17.4 10 0.1 169 24.9 24.9 7.9 7.9 7.9 2.4 7.9 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>11.8</td><td></td><td></td><td></td><td></td><td>-</td><td> </td><td></td><td><u></u></td><td></td></t<>																		11.8					-			<u></u>	
SR7 Fine Moderate 17.4 15.7 Midele 7.9 0.2 17.2 24.9 7.9 7.9 27.3 7.6 <td></td> <td></td> <td></td> <td></td> <td></td> <td>Surface</td> <td>1.0</td> <td>0.1</td> <td>169</td> <td>29.2</td> <td>29.3</td> <td>8.6</td> <td>8.6</td> <td>3.2</td> <td>13.2</td> <td>158.1</td> <td>158.9</td> <td>11.3</td> <td>3.0</td> <td></td> <td>6</td> <td></td> <td>-</td> <td> </td> <td></td> <td><u> </u></td> <td>-</td>						Surface	1.0	0.1	169	29.2	29.3	8.6	8.6	3.2	13.2	158.1	158.9	11.3	3.0		6		-			<u> </u>	-
Image: Normal base in the i	SR7	Fine	Moderate	17:41	15.7	Middle	7.9				24.9	7.9			27.3		76.7		3.3	3.6	5	6		823655	823763	· ·	
SR8 Fine Moderate 16.26 5.2 1.0 1.0 1.0 29.8 29.8 8.5 11.9 11.9 15.0 15.1 16.26 6 -						Bottom					23.3				31.6	65.2 66.6	65.9	4.6 4.7					-			<u>·</u>	-
SR8 Fine Moderate 16.26 5.2 Middle 10 - - 29.8 8.5 11.9 151.7 10.8 4.3 6 - - - - - - - - - - - 10.8 - <td></td> <td></td> <td></td> <td></td> <td></td> <td>Surface</td> <td>1.0</td> <td>-</td> <td>-</td> <td>29.8</td> <td>29.8</td> <td>8.5</td> <td>9.6</td> <td>1.9</td> <td>11.9</td> <td>152.0</td> <td>151.9</td> <td>10.8</td> <td>4.3</td> <td></td> <td>6</td> <td></td> <td>-</td> <td>1</td> <td>1</td> <td></td> <td><u> </u></td>						Surface	1.0	-	-	29.8	29.8	8.5	9.6	1.9	11.9	152.0	151.9	10.8	4.3		6		-	1	1		<u> </u>
Dottom 4.2 - 29.4 8.4 0.4 12.8 13.0 9.5 12.8 7 - </td <td>600</td> <td>Fino</td> <td>Modorato</td> <td>16:26</td> <td>5.2</td> <td></td> <td></td> <td></td> <td>-</td> <td></td> <td></td> <td>8.5</td> <td>1</td> <td>-</td> <td>-</td> <td>151.7</td> <td></td> <td>10.8</td> <td></td> <td></td> <td></td> <td>6</td> <td>-</td> <td>920279</td> <td>011622</td> <td>-</td> <td>-</td>	600	Fino	Modorato	16:26	5.2				-			8.5	1	-	-	151.7		10.8				6	-	920279	011622	-	-
Dottom 4.2 - 29.4 8.4 0.4 12.8 13.0 9.5 12.8 7 - </td <td>540</td> <td>Fille</td> <td>woderate</td> <td>10.20</td> <td>5.2</td> <td></td> <td>- 42</td> <td></td> <td>-</td> <td>- 29.4</td> <td></td> <td>- 84</td> <td></td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>- 95</td> <td>- 12.7</td> <td>0.0</td> <td>-</td> <td>0</td> <td></td> <td>020378</td> <td>011033</td> <td>÷</td> <td></td>	540	Fille	woderate	10.20	5.2		- 42		-	- 29.4		- 84		-	-	-	-	- 95	- 12.7	0.0	-	0		020378	011033	÷	
	DA: Dopth Avor					Bottom		-	-		29.4				12.8		133.0						-			<u> </u>	

Expansion of Hong Kong International Airport into a Three-Runway System Water Quality Monitoring Water Quality Monitoring Results on 18 July 20 during Mid-Ebb Tide

Water Qual	ity Monit	oring Resu	its on		18 July 20	during Mid-		9																		
Monitoring	Weather	Sea	Sampling	Water	Sampling D	epth (m)	Current Speed	Current	Water Temp	perature (°C)	1	эΗ	Salin	nity (ppt)		aturation (%)	Dissolved Oxygen	Turbidity	NTU) Su	spended (mg/L		Total Alkalinity (ppm)	Coordinate HK Grid	Coordinate HK Grid	Chromium (µg/L)	Nickel (µg/L)
Station	Condition	Condition	Time	Depth (m)		-1 · /	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value DA	Value	DA \	alue	DA	Value DA	(Northing)	(Easting)	Value DA	Value DA
					Surface	1.0	0.4	184 193	30.0 30.0	30.0	8.4 8.4	8.4	11.4 11.4	11.4	134.9 134.8	134.9	9.6 9.6	5.7 5.8	_	9		87 86			<0.2	1.0
C1	Sunny	Moderate	12:07	8.7	Middle	4.4	0.5	188	29.8	29.8	8.3	8.3	11.5	11.5	124.8	124.8	8.9 9.3	5.9	7.1	8	8	87 88	815597	804239	<0.2	0.9
						4.4	0.5	206 214	29.7 25.2		8.3 7.9		11.5 27.3		124.7 57.9		8.9 4.1	5.9 9.7	_	8	-	88 89			<0.2	0.9
					Bottom	7.7	0.8	218	25.1	25.2	7.9	7.9	27.5	27.4	58.0	58.0	4.1 4.1	9.5		8		89			<0.2	0.9
					Surface	1.0	0.2	136 138	29.6 29.6	29.6	8.2 8.2	8.2	10.0 10.0	10.0	103.5 103.2	103.4	7.5 7.4 5.9	5.0 5.1	-	6 5		81 81			<0.2 <0.2	1.1
C2	Sunny	Moderate	13:07	10.7	Middle	5.4 5.4	0.5	143 147	25.7 25.8	25.8	7.9 7.9	7.9	24.3 24.2	24.2	61.2 61.2	61.2	4.4 5.9 4.4	2.5 2.5	4.3	6 6	6	86 86 86	825680	806951	<0.2 <0.2	2 1.0 1.0
					Bottom	9.7	0.5	140	24.4	24.4	7.8	7.8	28.6	28.7	48.4	48.3	3.4 3.4	5.4		6		90			<0.2	1.0
						9.7	0.5	146 285	24.3 28.9		7.8 8.4		28.8 14.9		48.2 136.3		3.4 ^{3.4} 9.7	5.5 2.0		6 5		89 82			<0.2 <0.2	1.0 0.9
					Surface	1.0	0.4	298	28.9	28.9	8.4	8.4	14.9	14.9	136.2	136.3	9.7 8.7	2.1		5		82			<0.2	0.9
C3	Sunny	Moderate	10:49	12.4	Middle	6.2 6.2	0.2	256 264	27.5 27.5	27.5	8.2 8.2	8.2	19.4 19.4	19.4	109.4 109.2	109.3	7.8	2.0	2.8	5 6	5	86 86 86	822129	817809	<0.2 <0.2	2 0.9 1.0
					Bottom	11.4 11.4	0.1	123 134	24.6 24.6	24.6	7.9	7.9	27.5	27.6	62.2 61.8	62.0	4.4 4.4	4.3		5		90 90			<0.2	1.3
					Surface	1.0	0.1	134	29.6	29.6	8.5	8.5	12.6		134.8	134.8	9.6	7.5		9		85			<0.2	0.9
						1.0	0.1	135	29.6		8.5		12.6	-	134.7		9.6 9.6	7.5		9		86			<0.2	0.9
IM1	Sunny	Moderate	12:26	4.5	Middle	- 3.5	- 0.1	- 311	- 24.5	-	- 7.8		- 29.9		- 42.8	-	- 3.0	- 13.8	10.7	- 8	9	- 87	817925	807123	- <0.2	2 - 0.9
					Bottom	3.5	0.1	315	24.6	24.6	7.8	7.8	29.8	29.8	42.8	42.8	3.0 <u>3.0</u>	13.8		9		89			<0.2	1.0
					Surface	1.0	0.3	354 326	29.4 29.4	29.4	8.4 8.4	8.4	14.9 14.8	14.8	125.1 124.9	125.0	8.8	6.8 6.8	_	8		86 85			<0.2	0.9
IM2	Sunny	Moderate	12:33	6.3	Middle	3.2	0.1	348	27.4	27.4	8.1	8.1	20.5	20.5	80.7	78.4	5.7 7.2	10.1	10.6	8	8	87 97	818182	806183	<0.2	0.9
					Bottom	3.2 5.3	0.1	351 176	27.4 24.0	24.0	8.1 7.8	7.8	20.6 30.8	30.9	76.1 41.5	41.8	5.4 2.9 3.0	10.6 14.7		8		87 87 89			<0.2 <0.2	1.0 0.9
						5.3	0.0	188 224	24.0 29.9		7.8 8.6		30.9 12.7		42.1 151.9		3.0 <u>3.0</u> 10.7	14.4 6.7		8 8		89 86			<0.2 <0.2	0.9
					Surface	1.0	0.2	238	29.9	29.9	8.6	8.6	12.7		151.5	151.7	10.7 7.3	6.8		7		85			<0.2	1.0
IM3	Sunny	Moderate	12:39	6.4	Middle	3.2	0.2	214 231	26.0 26.0	26.0	7.9	7.9	27.1	27.1	55.0 56.2	55.6	3.8	9.0	8.7	9	8	87 88 87	818793	805584	<0.2 <0.2 <0.2	2 1.0 1.0
					Bottom	5.4	0.1	222	23.9 23.9	23.9	7.9 7.9	7.9	31.4 31.4	31.4	41.1 41.3	41.2	2.9 2.9 <u>2.9</u>	10.3 10.2		8 9		89 89			<0.2 <0.2	1.0
					Surface	1.0	1.0	233 194	29.9	29.9	8.3	8.3	9.5		118.2	118.1	8.5	6.1		6		86			<0.2	1.0
						1.0	1.0	202 199	29.9 26.8		8.3 8.0		9.7 22.2		117.9 67.5		8.5 4.8 6.6	6.1 13.9	-	6 8		86 88			<0.2	1.0
IM4	Sunny	Moderate	12:49	7.1	Middle	3.6	0.7	205	26.8	26.8	8.0	8.0	22.2	22.2	67.1	67.3	4.7	14.0	11.9	7	8	87 87	819735	804603	<0.2	0.9
					Bottom	6.1 6.1	0.3	191 195	25.2 25.2	25.2	7.9 7.9	7.9	27.6 27.5	27.5	44.9 44.8	44.9	3.2 <u>3.2</u> 3.2	15.7 15.7		9 9		89 90			<0.2	1.0
					Surface	1.0	0.9	210 214	29.8 29.7	29.8	8.3 8.3	8.3	10.8 10.8	10.8	124.9 124.9	124.9	8.9 8.9	6.3 6.2	-	6 6		86 86		1	<0.2 <0.2	1.0 0.9
IM5	Sunnv	Moderate	12:58	7.0	Middle	3.5	0.9	225	29.4	29.4	8.3	8.3	12.3	12.3	118.4	118.2	8.5 8.7	6.8	9.3	6	7	87 97	820742	804857	<0.2	1.0
1015	Gunny	Moderate	12.00	7.0		3.5	0.9	236 211	29.4 27.4		8.3 8.1		12.3 20.3		117.9 82.4		8.4 5.8	7.0	3.5	7	,	87 89	020742	004037	<0.2	0.9
					Bottom	6.0	0.5	213	27.4	27.4	8.1	8.1	20.3	20.3	82.5	82.5	5.8 5.0	15.0		7		89			<0.2	1.0
					Surface	1.0	0.7	257 272	30.0 29.9	30.0	8.4 8.4	8.4	11.4 11.4	11.4	130.9 130.8	130.9	9.3 9.3 8.3	6.1 6.1		8		86 86			<0.2 <0.2	1.0
IM6	Sunny	Moderate	13:06	6.6	Middle	3.3 3.3	0.7	249 270	28.6 28.6	28.6	8.2 8.2	8.2	14.8 14.9	14.9	101.5 101.3	101.4	7.2 7.2 7.2	4.9 4.8	7.5	7 8	8	87 88 88	821051	805847	<0.2 <0.2 <0.2	0.0
					Bottom	5.6	0.3	243	26.2	26.2	8.0	8.0	25.1		66.8	66.9	4.7	11.4		9		90			<0.2	1.0
						5.6	0.3	248 250	26.2 29.8		8.0 8.4		25.1 12.1		67.0 136.5		4.7 ^{4.7} 9.7	11.4 6.2		8		89 84		1	<0.2 <0.2	0.9
					Surface	1.0	0.7	271	29.8	29.8	8.4	8.4	12.1	12.1	132.1	134.3	9.4 8.4	6.3		8		86			<0.2	1.0
IM7	Sunny	Moderate	13:15	7.6	Middle	3.8 3.8	0.7	249 271	28.6 28.6	28.6	8.2 8.2	8.2	15.6 15.5		101.3 101.7	101.5	7.2	6.3 6.7	8.6	8	8	87 88 87	821367	806833	<0.2 <0.2	2 1.0 1.5
					Bottom	6.6	0.2	225 232	25.5 25.5	25.5	7.9 7.9	7.9	27.0 27.0	27.0	58.8 59.5	59.2	4.1 4.2 4.2	13.2 13.1		8		89 89			<0.2	4.0
					Surface	1.0	0.2	255	29.6	29.6	8.3	8.3	10.9	10.9	121.8	121.8	8.7	4.2		6		82	1		<0.2	1.2
						1.0	0.2	279 188	29.6 28.6		8.3 8.2		10.9 13.9		121.7 104.4		8.7 7.5 8.1	4.2		7 6		82 87 00			<0.2	1.2
IM8	Sunny	Moderate	12:36	7.8	Middle	3.9	0.4	203	28.6	28.6	8.2	8.2	13.9	13.9	104.1	104.3	7.5	4.2	3.9	5	6	86 86	821823	808122	<0.2	1.2
					Bottom	6.8 6.8	0.2	233 246	28.2 28.2	28.2	8.1 8.1	8.1	15.6 15.5	15.5	95.4 95.3	95.4	6.8 6.8	3.5 3.4		5		90 90			<0.2	1.2
DA: Depth-Aver	a a a d				•	• • •								• •				•					•	•		

DA: Depth-Averaged

Expansion of Hong Kong International Airport into a Three-Runway System Water Quality Monitoring Water Quality Monitoring Results on 18 July 20 during Mid-Ebb Tide

Water Qua	ity Monito	oring Resu	Its on		18 July 20	during Mid-	Ebb Tide)																			
Monitoring	Weather	Sea	Sampling	Water	Sampling Dep	h (m)	Current Speed	Current	Water Te	emperature (°C)		pН	Sali	nity (ppt)	DO S	aturation (%)	Dissolved Oxygen	Turbidity	(NTU) Suspe	nded Solids mg/L)		Alkalinity pm)	Coordinate HK Grid	Coordinate HK Grid	Chromium (µg/L)	Nickel (µ	µg/L)
Station	Condition	Condition	Time	Depth (m)			(m/s)	Direction	Value	Average	Value	Averag	je Value	Average	Value	Average	Value DA	Value	DA Valu	e DA	Value	DA	(Northing)	(Easting)	Value DA		DA
					Surface	1.0	0.2	134 142	29.6 29.6	29.6	8.3 8.3	8.3	10.5	10.6	122.6 122.6	122.6	8.8	4.6 4.6	6	_	82 82	-			<0.2	1.3	
IM9	Sunny	Moderate	12:28	7.1	Middle	3.6	0.5	149	28.9	28.9	8.2	8.2	12.6	12.6	109.3	109.2	7.9 8.4	4.2	41 7	6	86	86	822110	808808	<0.2	1.2	1.3
					Bottom	3.6 6.1	0.5	159 122	28.9 28.3	28.3	8.2 8.1	8.1	12.7		109.1 97.4	97.2	7.9 7.0 7.0	4.2 3.6	6		87 90	-			<0.2	1.2	
						6.1 1.0	0.2	128 121	28.3		8.1 8.3		14.8		96.9 118.8		7.0 7.0	3.8	7	_	90 82				<0.2	1.4	
					Surface	1.0	0.9	122	29.7	29.7	8.3	8.3	10.3	10.3	118.7	118.8	8.5 8.2	4.4	6		82				<0.2	1.1	
IM10	Sunny	Moderate	12:18	8.3	Middle	4.2	0.8	119 123	29.0 29.1	29.1	8.2 8.2	8.2	12.6	12.8	108.8 108.9	108.9	7.8	4.6 4.6	4.8 5	6	87 86	86	822388	809810	<0.2 <0.2	2 1.4	1.2
					Bottom	7.3	0.5	97	27.6	27.6	8.0	8.0	17.8	17.8	85.7	85.8	6.1 6.1	5.4	5		90				<0.2	1.2	
					Surface	7.3	0.5	98 90	27.6 29.3	29.3	8.0 8.3	8.3	17.8		85.8 116.6	116.6	6.1 0.1 8.4	5.5 4.2	6		90 82				<0.2	1.1	
						1.0 3.8	1.0 0.7	92 91	29.3 27.4		8.3 8.0		11.7		116.5 86.4		8.4 6.2 7.3	4.2	6	7	82 86				<0.2	1.2	
IM11	Sunny	Moderate	11:59	7.5	Middle	3.8	0.7	97	27.5	27.5	8.0	8.0	18.7	18.8	86.8	86.6	6.2	4.4	5.6 5	6	87	86	822056	811442	<0.2	1.3	1.3
					Bottom	6.5 6.5	0.3	75 76	25.4 25.3	25.4	7.8 7.8	7.8	25.2 25.3	25.3	56.9 56.8	56.9	4.1 4.1	8.2 8.4	5	_	90 91	-			<0.2	1.3 1.3	
					Surface	1.0 1.0	0.5	97 103	29.4 29.4	29.4	8.4	8.4	12.4	12.4	126.2 125.9	126.1	9.0	4.1 4.2	6	_	82 86				<0.2	1.1	
IM12	Sunny	Moderate	11:50	9.6	Middle	4.8	0.4	119	28.1	28.1	8.1	8.1	16.1	16.1	97.9	97.8	7.0 8.0	5.4	56 6	6	86		821451	812034	<0.2	, 1.1	11
						4.8 8.6	0.4	123 94	28.1 25.1		8.1 7.8		16.1 26.0		97.7 56.0		7.0 4.0	5.4 7.2	6 6	-	86 90	-			<0.2	1.1	
					Bottom	8.6	0.2	99	25.2	25.2	7.8	7.8	25.9	26.0	56.4	56.2	4.0 4.0	7.2	7	_	90				<0.2	1.2	
					Surface	1.0	-		29.5 29.4	29.5	8.5 8.5	8.5	13.5 13.6	13.5	139.8 139.6	139.7	9.9 9.9 9.9	2.8 2.8	6		-				-	-	
SR1A	Sunny	Moderate	11:29	5.5	Middle	2.8 2.8	-	-	-	-	-	-	-		-	-	- 5.5	•	3.4 -	6	-		819977	812654		-	
					Bottom	4.5	-	-	27.9	27.9	8.2	8.2	17.8	17.8	96.5	96.4	6.9 6.9	4.1	6		-	1				-	
						4.5	- 0.4	- 101	27.9 29.0		8.2 8.4		17.8		96.3 125.4		6.8 0.3 9.0	3.9 4.2	5		- 82				- <0.2	- 1.1	
					Surface	1.0	0.4	109	29.0	29.0	8.4	8.4	12.9	12.9	125.0	125.2	9.0 9.0	4.2	6]	82	1			<0.2	1.0	
SR2	Sunny	Moderate	11:14	4.8	Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	4.2 -	7	-	84	821452	814158	- <0.2	-	1.1
					Bottom	3.8 3.8	0.2	88 90	28.2 28.2	28.2	8.2 8.2	8.2	15.8 15.6	15.7	101.5	101.6	7.3 7.3	4.2 4.3	7	-	87 86				<0.2	1.1	
					Surface	1.0	0.2	239	29.6	29.6	8.3	8.3	10.8	10.8	121.5	121.5	8.7	4.5	7						-	-	ļ
SR3	Current	Moderate	12:43	8.4	Middle	1.0 4.2	0.2 0.4	241 184	29.6 28.0	28.0	8.3 8.1	8.1	10.8 15.8	15.8	121.5 91.5	91.4	8.7 6.6 7.6	4.4 3.7	5.5 6	6	-		822150	807587	-	-	
31.3	Sunny	wouerate	12.43	0.4		4.2	0.5	196 194	28.0 25.0		8.1 7.8		15.9 26.5		91.3 46.3		6.5 3.3	3.7 8.0	5.5 7	- 0	-	-	022150	807387		-	-
					Bottom	7.4	0.2	194	25.0	25.0	7.8	7.8	26.6	26.5	46.2	46.3	3.3 3.3	8.3	6		-				-	-	
					Surface	1.0	0.1 0.1	241 247	30.1 30.1	30.1	8.6 8.5	8.5	12.2 12.2	12.2	142.2 141.8	142.0	10.0	7.2	10		-	-			-	-	
SR4A	Sunny	Moderate	11:44	8.6	Middle	4.3 4.3	0.2	233 233	26.9 26.9	26.9	8.0 8.0	8.0	22.7 22.4		59.4 59.3	59.4	4.2 4.2 7.1	10.2 10.4	10.0 10		-		817174	807830	<u> </u>	-	
					Bottom	7.6	0.2	240	24.1	24.1	7.8	7.8	30.8	30.8	38.0	38.0	2.7 2.7	12.5	7						-	-	
						7.6	0.1	243 243	24.1 29.9		7.8 8.5		30.8 14.8	1	38.0 126.7		2.7 <u>2.7</u> 8.9	12.6 7.1	7		-					-	
					Surface	1.0	0.1	264	29.8	29.9	8.5	8.5	14.9	14.8	126.2	126.5	8.8 8.9	7.1	8		-	1			-	-	
SR5A	Sunny	Moderate	11:28	3.5	Middle	-	-		-	-	-	-	-	-	-	-	-	-	11.7 -	9	-		816573	810713		-	•
					Bottom	2.5	0.0	274 275	29.5 29.5	29.5	8.3 8.3	8.3	17.2	17.2	102.1	102.1	7.1 7.1	16.3 16.3	8		-				-	-	
					Surface	1.0	0.1	31	28.5 28.5	28.5	8.3	8.3	16.7 16.7	16.7	98.8 98.4	98.6	7.0	16.3	14		-	_				-	
SR6A	Sunny	Moderate	10:59	4.0	Middle	1.0	0.1	33	- 28.5		8.3		16.7		98.4		7.0 7.0	16.2	13	13	-		817984	814736	-	-	
SKOA	Sunny	wouerate	10.55	4.0		- 3.0	- 0.0	- 14	- 28.2	-	- 8.1	-	- 18.9	-	- 84.1	-	5.9 5.0	- 15.9	10.1 -		•		017904	014730	F. I	-	
					Bottom	3.0	0.0	14	28.2	28.2	8.1	8.1	18.9		84.1	84.1	5.9 5.9	15.9	12		-					-	
					Surface	1.0	0.6	61 66	29.3 29.3	29.3	8.5 8.5	8.5	12.7	12.7	143.3 143.2	143.3	10.2	3.0 3.2	6	-	-	1			-	-	
SR7	Sunny	Moderate	10:10	14.6	Middle	7.3 7.3	0.2	14 14	28.6 28.6	28.6	8.4 8.4	8.4	14.8 14.8	14.8	132.0 131.9	132.0	9.4 9.4 9.4	2.7 2.7	2.7 6		-		823631	823733	<u> </u>	-	
					Bottom	13.6	0.2	55	24.7	24.8	7.9	7.9	27.2	27.2	72.0	72.2	5.1 5.1	2.5	5		-	1				-	
						13.6	0.2	57	24.8 29.2		7.9 8.4		27.1		72.3 133.6		5.1 ^{3.1} 9.5	2.5 4.0	6	_	-	-			-	-	_
					Surface	1.0	-	-	29.2	29.2	8.4	8.4	13.5	13.5	133.2	133.4	9.5 9.5	4.0	8		-	1			-	-	
SR8	Sunny	Moderate	11:39	5.3	Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	7.3 -	9	-		820384	811619		-	-
					Bottom	4.3 4.3	-	-	27.4 27.4	27.4	8.1 8.1	8.1	19.4 19.4	19.4	86.5 86.6	86.6	6.1 6.2 6.2	10.7	8	-	-	4			<u> </u>	-	
DA: Depth-Ave	agod					T.0		-	L 21.4	1	0.1		15.4		1 00.0		U.4	10.0		1			1				

Expansion of Hong Kong International Airport into a Three-Runway System Water Quality Monitoring Water Quality Monitoring Results on 18 July 20 during during Mid-Flood Tide

Water Qua	lity Monito	oring Resu	Its on		18 July 20	during Mid-	-Flood Ti	de																			
Monitoring Station	Weather	Sea	Sampling	Water	Sampling Dep	oth (m)	Current Speed	Current Direction	Water Te	emperature (°C)		pН	Sali	nity (ppt)		ituration %)	Dissolve Oxyger		rbidity(N		nded Solid mg/L)		Alkalinity pm)	Coordinate HK Grid	Coordinate HK Grid	Chrom (µg/	
Station	Condition	Condition	Time	Depth (m)			(m/s)		Value	Average	Value	Averaç	-	Average		Average				DA Val		Value	e DA	(Northing)	(Easting)		DA Value D/
					Surface	1.0 1.0 3.9	0.4 0.5 0.2	15 16 12	29.7 29.7 27.9	29.7	8.3 8.3 8.1	8.3	13.0	13.0	113.2 110.7 76.3	112.0	8.0 7.8 5.4		.5	12	4	86 86 87	-			<0.2 <0.2 <0.2	1.1 1.2 1.2
C1	Sunny	Moderate	18:05	7.7	Bottom	3.9 6.7	0.2 0.4	12 44	27.9 24.7	27.9	8.1 7.8	8.1 7.8	18.3 28.9	18.3 28.9	73.7 42.5	75.0 42.6	5.2 3.0		.9	8.0 <u>16</u> 18	16	87 89		815607	804247	<0.2 <0.2	<0.2 <u>1.1</u> 1.
					Surface	6.7	0.4	48 350	24.7 29.0	29.0	7.8 8.0	8.0	28.8	10.4	42.6 89.6	89.7	3.0 6.5		.8	17		89 83				<0.2 <0.2	1.1
C2	Sunny	Moderate	16:56	10.5	Middle	1.0 5.3 5.3	0.3 0.4 0.4	322 28 30	29.0 27.6 27.6	29.0	8.0 8.0 8.0	8.0	10.4	16.6	89.7 79.5 79.4	79.5	6.5 5.7 5.7	.1	.7 .1 .1	7.8 8		84 87 87	87	825693	806930	<0.2 <0.2 <0.2	<0.2 1.1 1.1
					Bottom	9.5	0.4	346 318	25.3 25.3	25.3	7.8	7.8	25.4	25.4	54.1 54.3	54.2	2.0	.9 1).2).7	8		91 92				<0.2 <0.2 <0.2	1.1
					Surface	1.0 1.0 5.9	0.3 0.3 0.4	241 250 252	29.5 29.5 25.5	29.5	8.6 8.6 8.0	8.6	12.7	12.7	150.0 149.7 69.7	149.9	10.7 10.6 5.0 7		.2	7 6 5		83 84 87				<0.2 <0.2 <0.2	1.7 1.6 1.6
C3	Fine	Moderate	18:55	11.8	Bottom	5.9 10.8	0.4	252 266	25.5 23.8	25.5 23.8	8.0 7.8	8.0 7.8	24.9 29.7	24.9 29.7	69.7 53.4	69.7 53.4	5.0 3.8		5 1	4.3 6 6		87 91		822105	817803	<0.2 <0.2	<0.2 1.4 1.5
					Surface	10.8 1.0 1.0	0.4	270 196 209	23.8 30.3 30.3	30.3	7.8 8.6 8.6	8.6	29.7	12.6	53.4 161.6 161.7	161.7	3.8 11.3		.1	4 9 8		90 87 87				<0.2 <0.2 <0.2	1.4 1.0 1.0
IM1	Sunny	Moderate	17:42	4.0	Middle	-	-	-	-	-	-	-	-	-	-		- 1'	.3	-	9.4 -	11	-	88	817934	807139	-	<0.2 - 1.0
					Bottom	3.0 3.0 1.0	0.1 0.1 0.6	215 229 340	30.3 30.3 28.8	30.3	8.6 8.6 8.4	8.6	12.7	12.7	164.1 162.6 125.3	163.4	11.5 11.4 8.9	.5	.5 .3).3	14		89 89 86				<0.2 <0.2 <0.2	0.9 1.0 0.9
IM2	Sunny	Moderate	17:35	6.2	Surface	1.0 3.1	0.6 0.5	358 331	28.8 28.5	28.8 28.5	8.4 8.3	8.4	14.4 16.2	14.4 16.2	123.8 109.9	124.6 109.7	8.8 7.8	.3 1	1.3 4.5	23 18	17	85 87	88	818157	806183	<0.2 <0.2	1.0
					Bottom	3.1 5.2 5.2	0.6 0.4 0.5	342 337 310	28.5 27.6 27.6	27.6	8.3 8.1 8.1	8.1	16.2	21.7	109.5 76.6 75.4	76.0	7.8 5.4 5.3	4 1	4.6 1.7 1.4	17		88 90 89				<0.2 <0.2 <0.2	0.9 0.9 0.9
					Surface	1.0	0.8	323 345	28.9 28.8	28.9	8.4 8.4	8.4	15.0	14.9	128.7 127.4	128.1	9.1 9.1	2	.3	8		86 86				<0.2 <0.2	1.0
IM3	Sunny	Moderate	17:26	6.5	Middle	3.3 3.3 5.5	0.7 0.8 0.5	326 336 318	28.5 28.5 24.6	28.5	8.3 8.3 7.9	8.3	20.7	17.8	103.4 102.5 45.2	103.0	7.3 7.2 3.2	1	0.8 0.8 2.4	0.9 9		87 88 90	~~~	818767	805596	<0.2 <0.2 <0.2	<0.2 0.9 1.0
					Bottom Surface	5.5	0.5	324 326	24.6 30.0	24.6 30.0	7.9 8.5 8.5	7.9 8.5	29.7	29.7 13.1	45.7 146.3 146.0	45.5 146.2	3.2 3.2 10.3 10.3		2.6 .9 .0	9		90 85 86				<0.2	1.1 1.0 0.9
IM4	Sunny	Moderate	17:14	7.0	Middle	1.0 3.5 3.5	0.7 0.6 0.6	349 311 322	29.9 29.9 29.9	29.9	8.5 8.5 8.5	8.5	13.4	13.4	146.0 141.0 135.8	138.4	9.9 9.6	.0	.0 .3 .3	7.3 9 7.3 8	8	86 87 87	87	819741	804614	<0.2 <0.2 <0.2	<0.2 1.0 1.0
					Bottom	6.0 6.0 1.0	0.2 0.2 0.4	344 316 291	24.9 24.9 30.2	24.9	7.9 7.9	7.9	28.6	28.6	54.2 54.6	54.4	3.8	.8	.7 .8 .8	876		89 89 85				<0.2 <0.2 <0.2	0.9 1.0 1.3
IM5	Support	Moderate	17:06	6.8	Surface	1.0	0.4 0.4 0.3	316 337	30.2 30.2 30.0	30.2	8.4 8.4 8.4	8.4	10.0	9.9 12.2	128.3 128.2 126.3	128.3 125.6	9.2 9.1 8.9		.9	0.6		86 87		820740	804887	<0.2 <0.2 <0.2	<0.2 1.2 1.2
1015	Sunny	woderate	17.00	0.8	Bottom	3.4 5.8 5.8	0.3 0.3 0.3	338 342 342	30.0 28.0 28.0	28.0	8.4 8.1 8.1	81	12.2	17.8	124.9 89.3 89.3	89.3	8.8 6.3 6.3	2 1	0.5 1.8 1.2	6 8 7		86 89 89		820740	004007	<0.2 <0.2 <0.2	1.2 1.3
					Surface	1.0 1.0	0.6	267 276	30.2 30.2	30.2	8.3 8.3	8.3	0.0	9.6	122.2 122.1	122.2	8.7		0.0	7		86 86				<0.2 <0.2 <0.2	1.3 1.2
IM6	Sunny	Moderate	16:59	6.2	Middle	3.1 3.1 5.2	0.5 0.5 0.3	265 275 260	29.3 29.2 28.8	29.3	8.3 8.3 8.1	8.3	10.9	10.9	115.6 115.3	115.5	8.3	1	.9 0.0	9.1 6	6	88 88 89		821077	805825	<0.2 <0.2 <0.2	<0.2 1.3 1.3 1.3 1.3
					Bottom	5.2 5.2 1.0	0.3	260 267 255	28.8 29.9	28.8	8.1 8.2	8.1	14.2	14.2	98.8 99.0 112.7	98.9	7.1 7 7.1 7 8.1	.1	.7	5		90 85	1			<0.2 <0.2 <0.2	1.0
IM7	Sunny	Moderate	16:57	8.2	Surface Middle	1.0 4.1	0.6	272 258	30.0 29.7	30.0 29.7	8.2 8.2	8.2	9.9 11.0	10.0 11.0	112.7 109.1	112.7 109.1	8.1 7.8	.0	.5	4		87 87		821336	806839	<0.2 <0.2	1.2
					Bottom	4.1 7.2 7.2	0.7 0.3 0.3	264 239 244	29.7 27.9 27.8	27.9	8.2 8.1 8.1	8.1	11.0	14.5	109.0 91.1 90.3	90.7	7.8 6.6 6.5	₆ 1	4.2 4.4	5.2 5 5 6		88 90 89	-			<0.2 <0.2 <0.2	<0.2 <u>1.2</u> 1. <u>1.2</u> 1.2
					Surface	1.0 1.0	0.3 0.3	197 207	30.6 30.6	30.6	8.4 8.4	8.4	6.8 6.8	6.8	129.1 129.1	129.1	9.3 9.3	1	.3	5		84 84				<0.2 <0.2	1.3 1.3
IM8	Sunny	Moderate	17:23	7.9	Middle	4.0 4.0 6.9	0.2 0.2 0.1	243 250 245	30.0 30.0 28.4	30.0	8.3 8.3 8.0	8.3	9.1	9.1	123.2 123.1 90.7	123.2	8.9 8.9		.1 .0 .4	6.6 5 5	5	87 88 91	88	821851	808149	<0.2 <0.2 <0.2	<0.2 1.2 1.4
DA: Dopth Ava					Bottom	6.9	0.2	263	28.4	28.4	8.0	8.0	13.8	13.8	90.8	90.8	6.5 6		.4	5		91				<0.2	1.4

Expansion of Hong Kong International Airport into a Three-Runway System Water Quality Monitoring Water Quality Monitoring Results on 18 July 20 during

Water Qual Water Qual		•	lts on		18 July 20 d	during Mid-l		le																			
Monitoring	Weather	Sea	Sampling	Water	Querra la Decetta	()	Current Speed	Current	Water Te	emperature (°C)		pН	Salinity	(ppt)		aturation (%)	Dissolved Oxygen	Turbidi	ty(NTU)	Suspende (mg		Total Alk (ppm		Coordinate	Coordinate	Chrom (µg/l	
Station	Condition	Condition	Time	Depth (m)	Sampling Depth	(m)	(m/s)	Direction	Value	Average	Value	Average	Value A	Verage	Value	Average	Value D.	Value	DA	Value	DA	Value	DA	HK Grid (Northing)	HK Grid (Easting)		DA Value DA
					Surface	1.0 1.0	0.2	229 231	30.4 30.4	30.4	8.4 8.4	8.4	7.6	7.6	130.2 130.2	130.2	9.4 9.4	4.7	_	7	ł	84 84				<0.2	1.5 1.5
IM9	Sunny	Moderate	17:31	7.3	Middle	3.7 3.7	0.2	278 281	30.2 30.2	30.2	8.4 8.4	8.4	8.4 8.3	8.3	126.0	126.0	9.1 9.1 9.1	3 <u>5.0</u> 4.9	6.0	5	6	87 88	88	822098	808802	<0.2 <0.2	<0.2 1.6 1.5
					Bottom	6.3 6.3	0.2	249 251	28.9 28.9	28.9	8.1 8.1	8.1	12.8	12.7	103.1 103.1	103.1	7.4 7.	0.4		6	1	91 91				<0.2	1.4
					Surface	1.0	0.1	334 307	30.3 30.3	30.3	8.4 8.4	8.4	8.2	8.2	132.1 132.1	132.1	9.5	4.4	_	5	ł	83 84				<0.2	1.4
IM10	Sunny	Moderate	17:39	7.5	Middle	3.8	0.2	305 330	29.9 29.9	29.9	8.3 8.3	8.3	9.7	9.7	123.6 123.4	123.5	9.5 8.9 8.9	4.9	7.4	5	5	88 87	87	822393	809795	.0.2	<0.2 1.4 1.4
					Bottom	6.5 6.5	0.5	299 312	28.4 28.4	28.4	8.1 8.1	8.1	15.0 15.0	15.0	96.5 96.8	96.7	6.9 6.9 6.	12.0		4	+	91 91				<0.2	1.4
					Surface	1.0 1.0	0.4	312 312 313	30.1 30.1	30.1	8.4 8.4	8.4	9.8	9.8	133.5 133.4	133.5	9.6 9.6	4.2	_	6 5	-	83 84				<0.2	1.4
IM11	Sunny	Moderate	17:52	8.3	Middle	4.2	0.5	274	28.7	28.8	8.2	8.2	14.6	14.6	107.4	107.4	7.7 8.	7.0	7.5	6	6	88	88	822039	811454	<0.2	1.4 1.4
					Bottom	4.2	0.6	275 274	28.8 26.6	26.6	8.2 7.9	7.9	14.6 21.2	21.2	107.4	71.4	7.7 5.1 5.	6.9	_	5	+	88 91				<0.2	1.4
					Surface	7.3	0.4	274 289	26.6 29.8	29.8	7.9 8.4	8.4	11.0	11.0	71.4 136.9	136.9	5.1 9.8	5.0		6	1	92 83				<0.2 <0.2	1.4
IM12	Sunny	Moderate	18:01	7.8	Middle	1.0 3.9	0.3 0.8	289 276	29.8 29.4	29.4	8.4 8.4	8.4	11.0 13.8	13.8	136.9 133.5	133.5	9.8 9.5 9.	4.1	5.5	7	7	84 88	88	821448	812050	<0.2 <0.2	<0.2 1.3 1.4
					Bottom	3.9 6.8	0.8	297 315	29.3 25.8	25.8	8.4 7.9	7.9	13.8 23.9	22.0	133.4 69.9	70.2	9.5 5.0 5.	4.1		6 7	ł	88 91				<0.2 <0.2	1.4
					Surface	6.8 1.0	0.1	326	25.8 29.7	29.7	7.9 8.5	8.5	12.5		70.4 145.5		10.3	4.4		6 7		92				<0.2	- 1.4
SR1A	Sunny	Moderate	18:20	5.2	Middle	1.0 2.6	-	-	29.7		8.5 -		12.5		145.4 -		10.3 10	-	5.3	7	7	-		819975	812655	-	
					Bottom	2.6	-	-	- 29.8	29.8	- 8.4	8.4	- 14.2	14.2	- 136.4	136.5	- 9.6 9.	- 6.4	_	- 7		-				-	-
					Surface	4.2	- 0.3	- 351	29.8 29.5	29.5	8.4 8.4	8.4	14.2 12.6	12.6	136.6 143.6	143.6	9.6 ^{3.} 10.2	6.2 4.1		6		- 84	_			- <0.2	- 1.4
SR2	Sunny	Moderate	18:33	4.8	Middle	1.0	0.3	323	29.5	-	8.4	0.4	12.6	12.0	143.6	143.0	10.2 10	2 4.1	5.8	7	6	83	85	821444	814173	<0.2	<0.2 - 1.4
JNZ	Sunny	woderate	10.55	4.0	Bottom	- 3.8	- 0.2	- 357	- 28.9	28.9	- 8.3	8.3	- 15.1	15.1	- 130.4	130.5	- 9.3 9.	- 7.7	5.8	- 4	Ů	- 87	05	021444	014173	- <0.2	1.4
					Surface	3.8 1.0	0.2	328 185	28.9 30.4	30.4	8.3 8.4	8.4	15.0 7.0	7.0	130.6 124.9	124.9	9.3 9.0	7.4		5 6		87				<0.2	- 1.4
SR3	0	Moderate	17:17	8.8	Middle	1.0 4.4	0.4	185 183	30.4 29.4		8.4 8.2	8.2	7.0		124.8 107.1	107.0	9.0 7.7 8.	5.2	6.4	6 6	6	-		822145	807566	-	-
383	Sunny	Moderate	17.17	0.0	Bottom	4.4 7.8	0.4	198 217	29.4 28.3	29.4	8.2 7.9	7.9	10.6 13.9	10.5	106.9 87.0	87.0	7.7 6.3 6.	5.2	0.4	5 6	0	-	-	022145	007500	-	
						7.8	0.3	232 181	28.3 30.1		7.9 8.5		12.8 14.1		87.0 131.0		6.3 ^{0.} 9.2	9.0		5 17	I	-				-	
					Surface	1.0 4.0	0.1	198 259	30.1 30.0	30.1	8.5 8.4	8.5	14.1 17.1	14.1	130.8 124.7	130.9	9.1 8. 8.6	12.6	7	16 15	I	-				-	-
SR4A	Sunny	Moderate	18:23	8.0	Middle	4.0	0.1	263 262	30.0 28.2	30.0	8.4 8.2	8.4	17.0 21.1	17.0	124.4 93.6	124.6	8.6	12.0	13.9	16 12	15	-		817168	807812	-	
					Bottom	7.0	0.0	272 319	28.1 30.1	28.2	8.2 8.5	8.2	21.2 16.1	21.2	93.4 136.2	93.5	6.5 6. 9.4	17.3	_	12 9	1	-				-	
					Surface	1.0	0.1	323	30.1	30.1	8.5	8.5	16.1	16.1	136.3	136.3	9.4 9.	10.2	-	8	1	-				-	-
SR5A	Sunny	Moderate	18:39	3.7	Middle	- 2.7	- 0.1	- 329	- 29.9	•	- 8.4	-	- 16.7		- 126.7		- 8.8 0	-	12.5	- 11	10	-	-	816616	810714	-	· · ·
					Bottom	2.7	0.1	357	29.9 30.1	29.9	8.4 8.5	8.4	16.7	16.7	126.6 150.5	126.7	8.8 8. 8.10.5	3 14.1 6.6		12	†	· ·				•	
					Surface	1.0	0.0	219	30.1	30.1	8.5	8.5	13.5		150.3	150.4	10.5 10	67	1	8	1	$\left \right $				-	-
SR6A	Sunny	Moderate	19:12	3.7	Middle	- 2.7	- 0.0	- 47	- 30.3	-	- 8.5	-	- 14.8		- 143.2		9.9	- 7.7	7.2	- 8	8	-	-	817967	814759	-	· ·
					Bottom	2.7	0.0	49 117	30.3	30.3	8.5	8.5	14.8	14.8	142.8	143.0	9.9 9.	7.7		9	<u> </u>					-	
					Surface	1.0	0.0	121	27.6 27.6 26.6	27.6	8.3 8.3	8.3	19.6 19.6	19.6	113.3	113.3	8.0 8.0 7.0 7.0	2.5 2.5 2.9	-	5	1	-				-	-
SR7	Fine	Moderate	19:30	14.4	Middle	7.2	0.1	185 198	26.6	26.6	8.2 8.2	8.2	22.9	22.9	99.3 99.0	99.2	7.0	3.0	4.2	4	4	-	-	823656	823762	-	
					Bottom	13.4 13.4	0.1 0.1	79 86	23.3 23.3	23.3	7.9 7.9	7.9	30.8 30.7	30.8	53.3 53.4	53.4	3.8 3.8 3.8	7.1	_	3	<u> </u>	-				-	
					Surface	1.0 1.0	-	-	29.8 29.8	29.8	8.4 8.4	8.4	11.8 11.8	11.8	133.7 133.8	133.8	9.5 9.5 9.	7.3		9	ţ	-				-	-
SR8	Sunny	Moderate	18:11	4.4	Middle	-	-	-	•	-	-	-	-	-	•	-	-	-	7.3	-	11	<u> </u>	-	820406	811642	-	
					Bottom	3.4 3.4	-	-	29.4 29.4	29.4	8.3 8.3	8.3	12.7 12.7	12.7	127.2 127.2	127.2	9.1 9.1 9.	7.4		12 13	ł	-				-	-

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

Water Qua	lity Monite	oring Resu	lts on		21 July 20	during Mid-	Ebb Tide	e																					
Monitoring	Weather	Sea	Sampling	Water	Sampling Dep	oth (m)	Current Speed	Current	Water Ter	mperature (°C)		pН	Sali	nity (ppt)		aturation (%)	Disso Oxyo		Turbidity(NTU)	Suspende (mg/		Total A (pp		Coordinate HK Grid	Coordinate HK Grid	Chron (µg/		l (µg/L)
Station	Condition	Condition	Time	Depth (m)		-	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)	Value		DA
					Surface	1.0	0.5	219 232	27.9 28.0	28.0	8.0 8.0	8.0	22.3	22.3	82.3 82.4	82.4	5.7 5.7		4.6 4.6		3 4		82 83				<0.2	0.8	ł
C1	Sunny	Moderate	12:59	8.4	Middle	4.2	0.5	210 210	25.7 25.7	25.7	8.0 8.0	8.0	26.3 26.4	26.4	62.2 62.0	62.1	4.4	5.1	5.8 5.8	6.3	6 5	5	88 89	87	815616	804243	<0.2 <0.2	<0.2 0.9	0.8
					Bottom	7.4	0.5	220	24.2	24.3	7.9	7.9	30.4		48.4	48.6	3.4	3.4	8.6		6		91				<0.2	0.8	1
						7.4	0.5	241 205	24.3 28.3		7.9 8.0		30.3 18.0		48.7 82.1		3.4 5.8	0.1	8.5 3.0		5 4		91 86				<0.2	0.9	
					Surface	1.0	0.3	208	28.3	28.3	8.0	8.0	18.0	18.0	81.8	82.0	5.8	4.8	3.1		3		87				<0.2	1.0	į
C2	Sunny	Moderate	11:50	11.6	Middle	5.8 5.8	0.5	196 207	26.1 26.0	26.1	7.9 7.9	7.9	22.5 22.5	22.5	53.7 53.3	53.5	3.8 3.8		8.9 8.3	7.6	4	4	88 89	88	825695	806957	<0.2	<0.2 1.0	1.0
					Bottom	10.6 10.6	0.4	154 168	24.2 24.2	24.2	7.9 7.9	7.9	28.7 28.7	28.7	53.6 53.8	53.7	3.8 3.8	3.8	11.0 11.3		4		90 90				<0.2 <0.2	0.9	ł
					Surface	1.0	0.3	83	25.9	25.9	7.9	7.9	24.9	24.9	66.8	66.7	4.7		5.7		10		87				<0.2	1.0	(
00	0	M - 1 1 -	40.00			1.0	0.3	85 42	25.8 24.8		7.9 7.9		25.0 26.2		66.6 62.9		4.7 4.5	4.6	5.7 6.9	0.7	10 9		88 89		000007	047040	<0.2 <0.2	1.0	1
C3	Sunny	Moderate	13:33	11.1	Middle	5.6 10.1	0.1	45 83	24.6 24.5	24.7	7.9	7.9	26.2	26.2	59.5	61.2	4.3		7.1	6.7	9	9	89 90	89	822087	817813	< 0.2	<0.2 1.2 1.3	1.2
					Bottom	10.1	0.2	89	24.5	24.5	7.9 7.9	7.9	28.7 28.7	28.7	59.8 60.4	60.1	4.2	4.3	7.4 7.3		9		90				<0.2 <0.2	1.2	[
					Surface	1.0	0.1	237 246	27.3 27.3	27.3	8.0 8.0	8.0	23.2 23.2	23.2	71.9	72.0	5.0 5.0		5.3 5.3		4		84 85				<0.2	0.9	ł
IM1	Sunny	Moderate	12:49	5.4	Middle	-	-	-	-		-		-		-	-	-	5.0	-	6.5	-	5	-	86	817972	807139	-	<0.2	0.7
	, i				Bottom	- 4.4	- 0.2	- 161	- 25.6	25.7	- 8.0	8.0	27.1	27.1	- 53.7	53.9	3.8	3.8	7.6		- 5		86				- <0.2	0.6	1
						4.4	0.2	165 183	25.7 26.5		8.0 7.9		27.1 23.7		54.0 68.3		3.8 4.8	3.0	7.8 5.2		4		87 88				<0.2	0.7	<u> </u>
					Surface	1.0	0.2	188	26.4	26.5	7.9	7.9	23.8	23.7	67.9	68.1	4.8	4.3	5.3		4		87				<0.2	0.8	i
IM2	Sunny	Moderate	12:29	7.5	Middle	3.8 3.8	0.2	167 175	25.3 25.2	25.3	7.9 7.9	7.9	27.0 27.1	27.0	52.5 52.1	52.3	3.7 3.7		9.5 9.7	8.2	5 4	4	88 89	89	818145	806185	<0.2	<0.2 0.7	0.7
					Bottom	6.5 6.5	0.1	117 119	24.8 24.9	24.9	7.9 7.9	7.9	28.8 28.8	28.8	52.4 52.8	52.6	3.7 3.7	3.7	9.8 9.9		4		92 92				<0.2 <0.2	0.7	ł
					Surface	1.0	0.1	165	25.8	25.8	7.9	7.9	26.2	26.3	58.6	58.5	4.1		8.0		4		84				<0.2	0.7	
						1.0 4.0	0.1	167 150	25.7 25.1		7.9 7.9		26.4 28.0		58.4 50.9		4.1 3.6	<u>3.9</u>	8.0 8.5		4		85 88				<0.2 <0.2	0.7	1
IM3	Sunny	Moderate	12:22	7.9	Middle	4.0	0.3	150	25.1	25.1	7.9	7.9	28.0	28.0	51.0	51.0	3.6		8.7	8.7	5	5	88	89	818806	805575	<0.2	<0.2 0.8	0.7
					Bottom	6.9 6.9	0.4	125 127	24.9 25.0	25.0	7.9 7.9	7.9	28.6 28.5	28.6	53.3 53.5	53.4	3.8 3.8	3.8	9.5 9.5		6 6		93 94				<0.2 <0.2	0.7	[
					Surface	1.0	0.6	194 209	25.8 25.8	25.8	7.9 7.9	7.9	25.8 25.9	25.9	55.3 55.3	55.3	3.9 3.9		9.1 8.9		4		84 86				<0.2	0.7	ł
IM4	Sunny	Moderate	12:15	8.8	Middle	4.4	0.6	176	25.5	25.5	7.9	7.9	26.6	26.6	55.3	55.3	3.9	<u>3.9</u>	8.3	9.1	4	5	89	90	819704	804608	<0.2	.0.2 0.7	0.7
					Bottom	4.4 7.8	0.6	187 159	25.4 24.6	24.6	7.9 7.9	7.9	26.6 29.4	29.4	55.2 48.5	48.6	3.9 3.4	3.4	8.4 9.9		5 5		90 94				<0.2 <0.2	0.7	1
						7.8	0.5	173 218	24.6 26.2		7.9 7.9		29.4 24.8		48.7 60.4		3.4 4.3	3.4	9.9 7.9		6 4		94 87				<0.2	0.7	<u> </u>
					Surface	1.0	0.6	228	26.1	26.2	7.9	7.9	25.0	24.9	60.4	60.4	4.3	4.2	7.8		4		87				<0.2	0.8	i
IM5	Sunny	Moderate	12:09	8.2	Middle	4.1	0.5	191 204	25.4 25.3	25.4	7.9 7.9	7.9	26.7 26.7	26.7	56.2 56.2	56.2	4.0 4.0		8.5 8.7	8.6	4	4	90 91	90	820736	804859	<0.2 <0.2	<0.2 0.8	0.8
					Bottom	7.2	0.4	174 185	24.9 25.0	25.0	7.9 7.9	7.9	29.1 29.0	29.1	50.3 50.5	50.4	3.5 3.5	3.5	9.3 9.2		5 5		93 94				<0.2 <0.2	0.8	ł
					Surface	1.0	0.4	256	27.2	27.2	8.0	8.0	21.8		66.6	66.6	4.7		6.9		3		86				<0.2	0.8	ļ —
IM6	0	M - 1	44.50			1.0	0.4	276 188	27.2 25.3		8.0 7.9		21.8 27.2		66.5 52.5		4.7 3.7	<u>4.2</u>	7.0	8.0	4	4	87 90		004075	005000	<0.2	<0.2 0.9	
IMP	Sunny	Moderate	11:59	8.1	Middle	4.1	0.3	188 182	25.3 25.3	25.3	7.9 7.9	7.9	27.3 27.6	27.2	52.5 56.0	52.5	3.7		8.2 9.0	8.0	4	4	91 96	91	821075	805832	<0.2 <0.2	<0.2 0.8 0.9	0.8
					Bottom	7.1	0.3	192	25.3	25.3	7.9	7.9	27.6	27.6	56.3	56.2	3.9 4.0	4.0	8.9		5		96				<0.2	0.8	Ĺ
					Surface	1.0	0.2	246 249	27.2 27.2	27.2	8.0 8.0	8.0	21.6 21.7	21.6	69.5 69.4	69.5	4.9 4.9		7.3 7.5		3		86 86				<0.2	0.9	ł
IM7	Sunny	Moderate	11:50	8.9	Middle	4.5	0.1	264	26.2	26.2	8.0	8.0	24.5	24.5	58.8	58.8	4.1	4.5	8.7	8.6	4	4	89	90	821335	806827	<0.2	<0.2 0.9	0.9
					Bottom	4.5	0.1	280 157	26.2 25.5	25.5	8.0 8.0	8.0	24.5 26.9		58.8 53.3	53.5	4.1 3.8	3.8	8.8 9.7		4 5		90 93				<0.2 <0.2	0.8	1
<u> </u>						7.9	0.1	163 178	25.5 28.3		8.0 8.0		26.9 18.3	20.9	53.6 83.5		3.8 5.9	3.0	9.6 3.9		4 5		94 86				<0.2 <0.2	0.9	<u> </u>
					Surface	1.0	0.1	182	28.3	28.3	8.0	8.0	18.3	18.3	82.6	83.1	5.8	5.4	4.0		4		86				<0.2	0.9	i
IM8	Sunny	Moderate	12:12	8.0	Middle	4.0	0.1	165 170	26.9 26.8	26.9	7.9 7.9	7.9	21.2	21.2	69.8 69.7	69.8	5.0 5.0		5.0 5.4	6.8	6 5	5	88 89	88	821834	808134	<0.2 <0.2	<0.2 0.9	0.9
					Bottom	7.0	0.1	52	25.9	25.9	7.8	7.8	23.7	23.7	62.7	63.0	4.5	4.5	10.7		6		90				<0.2	0.8	ł
DA: Depth-Ave	<u> </u>					7.0	0.1	55	25.9		7.8		23.7	I	63.2	I	4.5		11.8		6		90				<0.2	0.9	<u> </u>

DA: Depth-Averaged

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

Monitoring Station Condition Corr IM9 Sunny Moc IM10 Sunny Moc IM11 Sunny Moc	Sea Sea Sondition Solution	Sampling Time 12:19 12:25 12:34	Water Depth (m) 7.5 8.0 8.3	Sampling Depi Surface Middle Bottom Surface Middle Bottom Surface Middle Bottom	th (m) 1.0 1.0 3.8 6.5 6.5 1.0 4.0 7.0 7.0 1.0 1.0 4.2 7.3	Current Speed (m/s) 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.9 1.0 0.8 0.8 0.5 0.5 0.5 0.7	Current Direction 113 114 106 113 94 98 118 124 107 110 103 106 122 128	Water Te Value 27.7 27.6 26.6 26.5 26.2 28.1 28.1 26.3 26.2 26.2 26.1 26.1 26.1 27.9	Average 27.7 26.6 26.2 28.1 26.3 26.1	Value 8.0 7.9	Average 8.0 7.9 7.9 7.9 7.9		ty (ppt) Average 19.2 22.1 23.0 19.3	DO Satura (%) Value Ave 84.1 84 83.8 64 71.1 70.0 70 61.7 66 61.8 67 75.3 75 74.7 75	age V .0 1 .6 1 .8 1	Dissolved Oxygen Yalue DA 6.0 5.9 5.1 5.0 4.4 4.4 5.3 5.2 4.0	Turbidity Value 2.7 2.8 6.5 7.0 9.3 9.3 9.3 4.2 4.5	(NTU) DA 6.3	Suspended (mg/l Value 5 6 6 5 6 7 6 5 5	L) DA 6	(ppm Value 86 87 89 90 91 86 86 86 86		Coordinate HK Grid (Northing) 822098	Coordinate HK Grid (Easting) 808822	Chromium (µg/L) Value DA <0.2 <0.2 <0.2 <0.2 <0.2 <0.2 <0.2 <0.2	0.9 0.9 0.9 0.9 0.9
IM9 Sunny Moc IM10 Sunny Moc IM11 Sunny Moc	oderate oderate	12:19	8.0	Surface Middle Bottom Surface Middle Bottom Surface Middle	$\begin{array}{c} 1.0\\ 1.0\\ 3.8\\ 6.5\\ 6.5\\ 1.0\\ 1.0\\ 4.0\\ 7.0\\ 7.0\\ 7.0\\ 1.0\\ 1.0\\ 4.2\\ 4.2 \end{array}$	0.2 0.2 0.3 0.3 0.2 0.2 0.9 1.0 0.8 0.8 0.5 0.5 0.5 0.9	113 114 106 113 94 98 118 124 107 110 103 106 122	27.7 27.6 26.6 26.5 26.2 26.2 28.1 28.1 26.3 26.2 26.1 26.1	27.7 26.6 26.2 28.1 26.3	8.0 8.0 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9	8.0 7.9 7.9 7.9	19.1 19.2 22.0 22.3 23.0 23.0 19.3 19.3	19.2 22.1 23.0	84.1 83.8 71.1 70.0 61.7 61.8 75.3 76	.6	6.0 5.9 5.1 5.0 4.4 4.4 5.3 5.2	2.7 2.8 6.5 7.0 9.3 9.3 4.2	-	5 6 5 6 7 6 5 5	6	86 87 89 90 91 86 86 86		(Northing)	(Easting)	<0.2 <0.2 <0.2 <0.2 <0.2 <0.2 <0.2 <0.2 <0.2 <0.2 <0.2 <0.2	0.9 1.0 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0
IM10 Sunny Moc IM11 Sunny Moc	oderate oderate	12:25	8.0	Middle Bottom Surface Middle Bottom Surface Middle	1.0 3.8 3.8 6.5 6.5 1.0 1.0 4.0 7.0 7.0 7.0 1.0 1.0 4.2 4.2	0.2 0.3 0.3 0.2 0.2 0.9 1.0 0.8 0.8 0.5 0.5 0.5 0.9	114 106 113 94 98 118 124 107 110 103 106 122	27.6 26.6 26.5 26.2 26.2 28.1 28.1 26.3 26.2 26.1 26.1	26.6 26.2 28.1 26.3	8.0 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9	7.9 7.9 7.9	19.2 22.0 22.3 23.0 23.0 19.3 19.3	22.1 23.0	83.8 71.1 70.0 61.7 61.8 75.3 76	.6	5.9 5.1 5.0 4.4 4.4 5.3 5.2	2.8 6.5 7.0 9.3 9.3 4.2	6.3	6 6 5 6 7 6 5	-	87 89 90 91 86 86 86	89	822098	808822	 <0.2 <0.2 <0.2 <0.2 <0.2 <0.2 <0.2 <0.2 <0.2 <0.2 <0.2 <0.2 <0.2 <0.2 	1.0 1.0 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9
IM10 Sunny Moc IM11 Sunny Moc	oderate oderate	12:25	8.0	Bottom Surface Middle Bottom Surface Middle	3.8 6.5 1.0 4.0 7.0 1.0 4.2	0.3 0.2 0.9 1.0 0.8 0.8 0.5 0.5 0.5 0.8 0.9	113 94 98 118 124 107 110 103 106 122	26.5 26.2 26.2 28.1 28.1 26.3 26.2 26.1 26.1	26.2 28.1 26.3	7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9	7.9 7.9	22.3 23.0 23.0 19.3 19.3	23.0	70.0 61.7 61.8 75.3	.8 .	5.1 5.0 4.4 4.4 5.3 5.2	7.0 9.3 9.3 4.2	6.3	5 6 7 6 5	-	89 90 91 86 86	89	822098	808822	<0.2 <0.2 <0.2 <0.2 <0.2 <0.2 <0.2 <0.2	0.9 0.9 0.9 0.9 0.9 0.9
IM11 Sunny Moc	oderate			Surface Middle Bottom Surface Middle	6.5 1.0 4.0 7.0 7.0 1.0 4.2 4.2	0.2 0.9 1.0 0.8 0.8 0.5 0.5 0.5 0.5 0.8 0.9	98 118 124 107 110 103 106 122	26.2 28.1 26.3 26.2 26.1 26.1	28.1 26.3	7.9 7.9 7.9 7.9 7.9 7.9	7.9	23.0 19.3 19.3	23.0	61.8 0 75.3 7	·° ·	4.4 5.3	9.3 4.2	-	7 6 5	-	91 86 86				<0.2 <0.2 <0.2	0.9 0.9 0.9
IM11 Sunny Moc	oderate			Middle Bottom Surface Middle	1.0 1.0 4.0 7.0 7.0 1.0 4.2 4.2	0.9 1.0 0.8 0.5 0.5 0.5 0.8 0.9	118 124 107 110 103 106 122	28.1 28.1 26.3 26.2 26.1 26.1	26.3	7.9 7.9 7.9 7.9 7.9		19.3 19.3	19.3	75.3		5.3	4.2	-	6 5	_	86 86				<0.2 <0.2	0.9
IM11 Sunny Moc	oderate			Middle Bottom Surface Middle	4.0 4.0 7.0 7.0 1.0 4.2 4.2	0.8 0.8 0.5 0.5 0.8 0.8 0.9	107 110 103 106 122	26.3 26.2 26.1 26.1	26.3	7.9 7.9			19.5	74.7	.0	5.2	4.5			_ F	00		l l		-0.2	0.0
IM11 Sunny Moc	oderate			Bottom Surface Middle	4.0 7.0 7.0 1.0 4.2 4.2	0.8 0.5 0.5 0.8 0.9	110 103 106 122	26.2 26.1 26.1		7.9	7.9			60.4		4.3 4.8	8.8	1	5							
		12:34	8.3	Surface Middle	7.0 1.0 1.0 4.2 4.2	0.5 0.8 0.9	106 122	26.1	26.1			23.0	22.9	60.1	.3 .	4.3	9.6	8.6	6	5	88	88	822387	809779	<0.2	0.8 0.9
		12:34	8.3	Middle	1.0 4.2 4.2	0.9		27.9		7.9	7.9	23.4 23.4	23.4	60.3 60.4 60	.4	4.3 4.3	12.1 12.1	-	5 4	-	90 90		ļ		<0.2 <0.2	0.8
		12:34	8.3		4.2 4.2			27.9	27.9	8.0 8.0	8.0	19.3 19.3		81.7 81.7 8'		5.8 5.8	2.7		5 5	-	86 87				<0.2 <0.2	0.8
IM12 Sunny Moc	oderate			Bottom			119	27.3	27.3	7.9	7.9	20.1	20.1	74.7	5	5.3 5.6	4.2	6.8	6	6	88	88	822062	811446	<0.2	0.9
IM12 Sunny Moo	oderate			Bottom	1.3	0.7	122 124	27.2 26.1		7.9 7.9		20.2 23.2		74.3	-	5.3 4.5	4.5 13.0		5		88 90				<0.2	0.8
IM12 Sunny Moo	oderate				7.3	0.4	127 101	26.1 27.8	26.1	7.9	7.9	23.2 19.4	23.2	63.4 63 82.6 or	.4	4.5 4.5 5.8	13.7 3.3		7		91 86				<0.2 <0.2	0.9
IM12 Sunny Mod	oderate			Surface	1.0	0.7	103	27.8	27.8	7.9	7.9	19.4	19.4	82.5	.6	5.8 5.4	3.7	1	5	Ŀ	86		ļ		<0.2	0.8
		12:42	8.2	Middle	4.1	0.4	80 82	26.8 26.8	26.8	7.9	7.9	21.7 21.7	21.7	70.2 70		5.0 5.0	9.3 9.2	8.6	5	5	87 88	88	821435	812056	<0.2 <0.2	1.0 0.8
				Bottom	7.2	0.3	93 99	26.2	26.2	7.9 7.9	7.9	23.1 23.1	23.1	63.0 63.2 63		4.5 4.5	13.1 13.2	1	5	Ē	90 91		ļ		<0.2 <0.2	0.8
				Surface	1.0	- 0.4		26.2 27.8	27.8	8.0	8.0	23.1	20.5	82.7 8	6	5.8	4.2		5		-				-	-
					1.0	-	-	27.7	21.0	8.0	0.0	20.6	20.5	82.5		5.8 5.8	4.2	-	4	-	-		ļ		-	-
SR1A Sunny Moo	oderate	13:01	5.3	Middle	2.7	-	-	-	-	-	-	-	-	-		-	-	4.3	-	4	-	-	819974	812665	-	-
				Bottom	4.3 4.3	-	-	27.4 27.5	27.5	8.0 8.0	8.0	21.3 21.3	21.3	76.5 76 76.5		5.4 5.4 5.4	4.5 4.5	ł	4 4	-	-		ļ		-	-
				Surface	1.0	0.7	74 75	27.4 27.7	27.6	8.0 8.0	8.0	20.6 20.5	20.5	77.2 7		5.4 5.5	5.8 6.1	-	4	-	88 89				<0.2 <0.2	1.0
SR2 Sunny Moo	oderate	13:13	4.4	Middle	-	-	-	-		-		-		-		- 5.5	-	64	-	4	-	89	821484	814184	- <0.2	- 11
one outry mod	ouorato	10.10			- 3.4	- 0.3	- 57	- 26.5		- 8.0		- 22.7		- 71.9 -,		5.1 5.1	- 6.8	0.1	- 4	·	- 90		021101	011101	<0.2	1.0
				Bottom	3.4	0.3	59 211	26.5	26.5	8.0	8.0	22.6	22.6	72.2	.'	5.1 5.1	6.8	1	4		90				<0.2	1.2
				Surface	1.0	0.2	227	27.9 28.0	28.0	8.0 8.0	8.0	18.9 18.8	18.8	77.2 76.1 76	.'	5.5 5.4 4.9	5.5 5.8		3 4	E	-		ļ		-	-
SR3 Sunny Mod	oderate	12:07	8.4	Middle	4.2	0.2	173 177	26.1 26.1	26.1	7.9 7.9	7.9	22.8 22.8	22.8	61.1 6 ⁻		4.4	8.7 8.9	8.5	4	4	-	-	822132	807591		
				Bottom	7.4	0.1	58	25.7	25.7	7.8	7.8	24.4	24.4	62.7 6	2	4.5	11.0	1	4	þ	-		ļ		-	-
				Surface	7.4	0.1	60 246	25.7 26.9	26.9	7.8 7.9	7.9	24.4 23.7	23.7	63.9 70.1 70		4.5 4.9	11.3 7.5		5 3		-				-	-
					1.0 4.8	0.2	266 231	26.8 25.6		7.9 7.9		23.7 26.5		70.2	-	4.9 3.6 <u>4.3</u>	7.6 8.4		4	F	-		ļ		-	-
SR4A Sunny C	Calm	13:16	9.6	Middle	4.8	0.1	240	25.6	25.6	7.9	7.9	26.6	26.6	51.3 5	.4	3.6	8.5	9.0	5	5	-	•	817192	807812	-	· ·
				Bottom	8.6 8.6	0.0	296 311	25.5 25.5	25.5	7.9	7.9	26.9 26.9	26.9	51.6 5' 51.7 5'		3.6 3.6 3.6	11.0 10.9	-	6	-	-				-	-
				Surface	1.0	0.1	323 347	28.0 27.9	28.0	8.1 8.1	8.1	21.3 21.4	21.4	85.7 85.9		6.0 6.0	8.6 8.5		5 5	-	-		1		-	-
SR5A Sunny C	Calm	13:35	4.3	Middle	-	-	-	-		-	-	-	-	-	Ľ	- 6.0	-	9.3	-	6	-		816577	810715	· .	<u> </u>
					- 3.3	- 0.1	- 286	- 27.5	07.5	- 8.0	8.0	- 22.3	22.3	73.9 74		5.2 5.2	- 10.1	-	- 6		-				-	
				Bottom	3.3 1.0	0.2	303 31	27.5 28.3	27.5	8.0 8.1	8.0	22.2 21.0		74.4	.2	5.2 5.2 6.0	10.0 11.8	İ	6		-	_			-	-
				Surface	1.0	0.2	32	28.3	28.3	8.1	8.1	21.0	21.0	86.0 86		6.0 6.0	11.8	ł	7	E	-				-	-
SR6A Sunny C	Calm	14:15	4.1	Middle	-	-	-	-	-	-	-	-	-	-			-	12.5	-	8	-	-	817947	814724		
				Bottom	3.1 3.1	0.1	241 261	26.2 26.2	26.2	8.0 8.0	8.0	25.9 25.9	25.9	64.0 64.3 64		4.5 4.5	13.2 13.2	1	9 10	F	-		ļ		-	-
				Surface	1.0	0.6	52	27.9	27.9	8.0	8.0	20.9	20.9	87.8	6	6.1	3.1		7		-				-	<u> </u>
					1.0	0.6	56 70	27.9 26.3		8.0 8.0		20.8 23.3		87.4		6.1 5.3 5.7	3.1 2.8		7	F	-				-	-
SR7 Sunny Moo	oderate	14:01	16.7	Middle	8.4	0.5	75	26.3	26.3	8.0	8.0	23.4	23.4	75.3	.3	5.3	2.9	2.9	7	6	-	-	823649	823729		· ·
				Bottom	15.7 15.7	0.4	33 33	26.2 26.2	26.2	8.0 8.0	8.0	23.7 23.8	23.7	75.7 76.1 75	.9	5.4 5.4 5.4	2.9 2.8	1	5 5		-				-	-
				Surface	1.0	-	-	28.2 28.2	28.2	8.0 8.0	8.0	19.9 19.9	19.9	81.7 8 ⁻ 81.9		5.7	15.0 15.0	-	7 8		-				-	-
SR8 Sunny Moo	oderate	12:52	4.8	Middle	-	-	-		-	-	-	-	-	-	Ľ	- 5.7	-	12.7	-	6	-		820410	811636	· .	-
				Bottom	- 3.8	-	-	- 28.3	28.3	- 8.0	8.0	- 20.0	20.1	82.6 82		- 5.8 5.8	- 10.5	ł	- 5	ŀ	-		ļ		-	-
DA: Depth-Averaged				DOLLOIN	3.8	-	-	28.3	20.3	8.0	0.0	20.1	20.1	83.0	.0	5.8 5.8	10.4		5		-				-	

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

Water Qua	lity Monito	oring Resu	its on		21 July 20 du	uring Mid-F	-lood II	de																			
Monitoring Station	Weather	Sea	Sampling	Water	Sampling Depth (m	n)	Current Speed	Current Direction	Water Te	mperature (°C)		pН	Salin	ity (ppt)		aturation (%)	Dissolve Oxygen	^d Tur	oidity(N1		ded Solids 1g/L)		lkalinity om)	Coordinate HK Grid	Coordinate HK Grid	Chrom (µg/L	
Station	Condition	Condition	Time	Depth (m)		·	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value D			DA Value	DA	Value	DA	(Northing)	(Easting)		DA Value DA
					Surface	1.0 1.0 4.0	0.7 0.7 0.6	33 33 21	26.9 26.8 25.6	26.9	7.9 7.9 7.9	7.9	22.4 22.5 26.3	22.5	69.4 69.2 56.1	69.3	4.9 4.9 4.0		5 6	9 8 7	-	87 88 93				<0.2 <0.2 <0.2	0.9 0.9 1.0 1.0
C1	Fine	Moderate	06:49	8.0	Middle	4.0 4.0 7.0	0.6	22	25.5 24.7	25.6	7.9	7.9	26.5 28.9	26.4	55.8 46.9	56.0	3.9	8	5 8	7.9 7 8 7	8	93 94 96	92	815602	804252	<0.2 <0.2 <0.2	<0.2 1.0 1.0
					Bottom	7.0	0.3	16 349	24.6	24.7	7.9	7.9	29.0 15.3	28.9	46.9	46.9	3.3 3 6.0	.3 8		8	1	96 86				<0.2	1.0
					Surface	1.0	0.5	349 357 2	28.3 28.8	28.3	8.0 8.0 7.9	8.0	15.2	15.2	83.4 83.3 63.3	83.4	60	3 3	6	6 6 6	4	86 88				<0.2 <0.2 <0.2	0.8
C2	Sunny	Moderate	07:30	12.2	Bottom	6.1 11.2	0.6	2 358	26.7 25.7	26.8	7.9 7.9	7.9 7.9	21.0 24.6	20.9	63.1 57.2	63.2 57.2	4.5 4.1	6 1 9	0	5	6	89 90	88	825701	806926	<0.2 <0.2	<0.2 0.8 0.8 0.8
					Surface	11.2 1.0	0.6	329 281	25.7 27.3	27.2	7.9 8.0	8.0	24.6 18.0	18.1	57.2 79.6	79.4	4.1 5.7	9	2	5	_	91 86				<0.2 <0.2	0.8
C3	Cloudy	Moderate	05:44	11.8	Middle	1.0 5.9 5.9	0.6 0.5 0.5	304 280 290	27.1 26.2 26.2	26.2	8.0 7.9 7.9	7.9	18.1 23.5 23.6	23.5	79.2 65.6 64.8	65.2	5.7 4.7 4.6	2 3	0 5 6	8.7 5	5	88 89 89	89	822126	817811	<0.2 <0.2 <0.2	<0.2 1.0 1.0
					Bottom	10.8 10.8	0.3	290 293 322	20.2 24.2 24.2	24.2	7.9	7.9	23.6 28.6 28.6	28.6	58.6 59.2	58.9	4.2		6	4	4	90 90				<0.2 <0.2 <0.2	1.0
					Surface	1.0	0.3	357 328	26.4 26.4	26.4	7.9 7.9	7.9	24.2 24.2	24.2	59.2 58.9	59.1	4.2	7	6	3	-	89 90				<0.2 <0.2	0.9
IM1	Fine	Moderate	07:06	5.2	Middle	-	-	-	•	-	-		-	-	-	-	- <u>4.1</u> - <u>4</u>			.5 -	4	-	91	817966	807113	-	<0.2 - 1.0
					Bottom	4.2	0.2	294 304	25.2 25.2	25.2	7.9	7.9	27.9 27.9	27.9	51.9 52.2	52.1	3.7 3.7 3	/ 9	4	5	1	91 92				<0.2 <0.2	0.9
	-				Surface	1.0 1.0 3.9	0.5 0.5 0.4	27 27 22	27.3 27.2 26.3	27.3	8.0 8.0 7.9	8.0	20.9 20.9 23.8	20.9	74.3 74.1 56.2	74.2	5.2 5.2 4.0	e 5	4 5 6 .	4 4	4	88 89 91				<0.2 <0.2 <0.2	1.0 0.9 0.9
IM2	Fine	Moderate	07:14	7.8	Bottom	3.9 6.8	0.5 0.2	24 321	26.3 25.0	26.3	7.9 7.9	7.9	23.8 28.3	23.8	56.1 48.9	56.2 49.2	4.0 3.4	7 5 8	6 2	.1 5 4	5	91 95	92	818169	806177	<0.2 <0.2	<0.2 0.9 1.0 1.0
					Surface	6.8 1.0	0.2	346	25.0 26.7	26.7	7.9 7.9 7.9	7.9	28.3 21.6 21.7	21.6	49.5 66.4	66.2	3.5 4.7	6	2	5		95 87				<0.2	1.0
IM3	Fine	Moderate	07:20	8.0	Middle	1.0 4.0 4.0	0.4 0.4 0.5	1 335 346	26.6 25.8 25.7	25.8	7.9 7.9 7.9	7.9	21.7 25.1 25.2	25.1	65.9 54.7 54.7	54.7	4.7 3.9 3.9	3 7	5 1 1	.4 3 4	4	88 93 94	92	818785	805602	<0.2 <0.2 <0.2	<0.2 1.0 1.0
					Bottom	7.0	0.4	308 336	24.9 24.9	24.9	7.9	7.9	28.3 28.3	28.3	51.0 51.3	51.2	26		8	5	7	95 96				<0.2	1.0
					Surface	1.0 1.0	0.9	10 10	27.2 27.1	27.2	7.9 7.9	7.9	21.3 21.4	21.4	66.9 66.7	66.8	4.7 4.7	2 6	9 0	3		88 88				<0.2 <0.2	1.0
IM4	Fine	Moderate	07:29	8.8	Middle	4.4 4.4 7.8	0.8 0.8 0.6	343 344 329	26.2 26.2 24.7	26.2	7.9 7.9 7.9	7.9	24.1 24.1 28.7	24.1	54.6 54.5 46.6	54.6	3.9 4 3.9 3.3	7	2 2 0	1.0 5 6	5	91 92 97	92	819729	804583	<0.2 <0.2 <0.2	<0.2 1.0 1.0
					Bottom	7.8 7.8 1.0	0.6	329 345 2	24.7 24.7 26.7	24.7	7.9 7.9 7.9	7.9	28.7 28.7 22.8	28.7	46.6 46.7 61.4	46.7	3.3 <u>3</u> 3.3 4.3	<u>.3</u> 8	0	5	-	97 96 88				<0.2 <0.2 <0.2	1.0
IM5	Fine	Madazata	07:26	7.4	Surface	1.0 3.7	1.2	2	26.7 26.6	26.7	7.9 7.9	7.9	22.8 23.0	22.8	61.2 59.3	61.3 59.3	4.3 4.2 4	6	6	3	3	89 93	0.2	820743	804857	<0.2	1.0
CIVIL	Fine	Moderate	07:36	7.4	Bottom	3.7 6.4	1.2 0.8	3 14	26.6 25.3	26.6 25.3	7.9 7.9	7.9 7.9	23.0 27.1	23.0	59.2 49.6	49.7	4.2 3.5 3	_E 7	6 0	i.8 0 4		93 96	93	620743	604657	<0.2 <0.2	0.9
					Surface	6.4	0.8	14 212	25.3 27.8 27.8	27.8	7.9 8.0 8.0	8.0	27.1 18.4 18.4	18.4	49.7 79.7 79.7	79.7	3.5 3 5.7 5.7	6	1 8 0	3	-	96 89 90				<0.2 <0.2 <0.2	1.0 1.0 1.0
IM6	Fine	Moderate	07:43	8.0	Middle	1.0 4.0 4.0	0.1 0.4 0.4	214 49 52	27.8	27.4	8.0 8.0 7.9	7.9	20.5 20.5	20.5	79.7 71.8 71.6	71.7	5.7 5.1 5.1	4 7	0	.5 4 3	4	90 93 93	92	821053	805851	<0.2 <0.2 <0.2	<0.2 1.0 1.0
					Bottom	7.0 7.0	0.3	72 78	26.0 26.0	26.0	7.9 7.9	7.9	25.2 25.2	25.2	59.6 59.8	59.7	4.2 4 4.2 4	2 8	4 6	4	1	94 94				<0.2	1.0
					Surface	1.0 1.0	0.1 0.1	224 233	28.1 28.0	28.1	8.0 8.0	8.0	18.4 18.4	18.4	78.7 78.6	78.7	5.6 5.6 5	3 5	5	4	1	87 88				<0.2 <0.2	1.0 1.0
IM7	Fine	Moderate	07:51	9.0	Middle	4.5 4.5 8.0	0.1 0.1 0.5	134 138 75	27.6 27.6 25.6	27.6	8.0 8.0 7.9	8.0	19.9 19.9 26.2	19.9	70.4 70.2 54.1	70.3	5.0	6	2 2 7	6.2 4 5 6	5	91 92 96	92	821355	806811	<0.2 <0.2 <0.2	<0.2 1.0 1.0 1.0
L					Bottom	8.0 1.0	0.5	75	25.6 27.4	25.6	7.9	7.9	26.2 26.2 19.2	26.2	54.1 54.3 68.9	54.2	3.8 3 4.9	8 6		7	1	96 96 87				<0.2 <0.2 <0.2	0.9
IM8	Sunny	Moderate	07:04	8.3	Middle	1.0 4.2	0.2	187 209	27.4 27.3	27.4	7.9 7.9	7.9 7.9	19.3 19.5	19.2	68.7 68.3	68.8 68.3	4.9 4.9	9 9	6 .8 1	7	8	86 88	89	821807	808140	<0.2 <0.2	0.9
IVIO	Suilly	wouerate	07.04	0.0	Bottom	4.2 7.3	0.1	210 89	27.3 26.8	27.3	7.9 7.9	7.9	19.5 21.2	21.2	68.3 64.4	64.7	4.9 4.6 4	e 15	.8 .9	6		89 91	09	021007	000140	<0.2	0.9
						7.3	0.2	92	26.9		7.9	1	21.1		64.9	-	4.6	15	.6	9	1	90				<0.2	0.9

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

Water Qual	ity Monite	oring Resu	its on		21 July 20	during Mid-		de																		
Monitoring Station	Weather	Sea	Sampling	Water	Sampling D	epth (m)	Current Speed	Current	Water Ter	mperature (°C)	F	эΗ	Salini	ity (ppt)		aturation (%)	Dissolved Oxygen	Turbidity	NTU)	Suspende (mg/		Total Alkalinity (ppm)	Coordinate HK Grid	Coordinate HK Grid	Chromiu (µg/L)	
Station	Condition	Condition	Time	Depth (m)			(m/s)	Direction	Value	Average	Value	Average	/alue	Average	Value	Average	Value DA	Value	DA	Value	DA	Value DA	(Northing)	(Easting)	Value [DA Value DA
					Surface	1.0	0.1	313 340	27.7 27.6	27.7	8.0		17.0 17.1	17.0	75.3 74.9	75.1	5.4	5.1 5.2		6		86 87			<0.2	0.9
IM9	Sunny	Moderate	06:58	7.5	Middle	3.8	0.4	289	26.6	26.6	7.9	7.0	21.9	21.9	63.5	63.5	4.5 5.0	7.7	8.5	5	6	89 00	822115	808820	<0.2	0.9 0.9
					Bottom	3.8 6.5	0.4	299 283	26.6 26.6	26.6	7.9 7.9		21.9 22.0	22.0	63.5 64.7	64.8	4.5 4.6 4.6	7.8 12.8		6 6		88 90			<0.2	0.2 0.9 0.9
					Bollom	6.5 1.0	0.3	300 298	26.6 27.4	20.0	7.9 8.0		22.0 17.5		64.8 76.5	04.0	4.6 5.5	12.1 5.0		6 6		90 86			<0.2 <0.2	0.9
					Surface	1.0	0.9	313	27.4	27.4	8.0	8.0	17.5	17.5	76.2	76.4	5.5 5.2	5.2		7		86			<0.2	0.9
IM10	Sunny	Moderate	06:52	8.2	Middle	4.1	0.7	300 312	26.8 26.9	26.9	7.9 7.9		20.7 20.4	20.5	68.8 69.1	69.0	4.9 0.2	6.7 6.4	6.4	6	6	88 89 88	822361	809810	<0.2 <	0.2 0.9 0.9
					Bottom	7.2	0.5	306	26.3	26.4	7.9 7.9	79	23.1	23.0	65.1	65.3	4.6 4.6	7.8		6		90			<0.2	0.9
					Surface	1.0	0.5	327 294	26.4 27.7	27.7	8.0	0	18.2	18.2	65.4 75.7	75.6	4.6 4.0 5.4	7.3 4.1		5		90 86			<0.2	0.9
						1.0	0.9	294 289	27.7 25.5		8.0 7.9		18.2 24.9		75.4 60.0		5.4 4.3 4.9	4.6 10.9		6 5		87 87 00			<0.2	0.8
IM11	Sunny	Moderate	06:42	8.5	Middle	4.3	0.6	307	25.5	25.5	7.9	7.9	25.0	25.0	60.2	60.1	4.3	11.1	9.3	4	5	87 88	822036	811475	<0.2	0.2 0.8
					Bottom	7.5	0.2	288 293	25.4 25.4	25.4	7.9 7.9		25.4 25.4	25.4	61.8 62.3	62.1	4.4 4.4	12.6 12.7		5 4		90 90			<0.2	0.9
					Surface	1.0	0.8	304 318	27.3 27.2	27.3	8.0 8.0		19.5 19.5	19.5	78.2 78.0	78.1	5.6 5.6	4.6 4.8		5 5		86 86			<0.2 <0.2	0.9
IM12	Sunny	Moderate	06:36	8.8	Middle	4.4	0.7	305	26.4	26.4	7.9	70	22.3	22.4	70.0	70.1	5.0 5.3	7.4	7.7	6	6	88	821467	812055	<0.2	0.2 0.9 0.0
						4.4	0.8	311 315	26.4 24.9		7.9 7.9		22.4 26.9		70.1 58.7		5.0 4.2	7.5 10.9		7 8		89 90			<0.2	0.8
					Bottom	7.8	0.3	334	24.9 28.0	24.9	7.9		26.9 17.1	26.9	59.3	59.0	4.2 4.2	11.0 3.8		7 4		90			<0.2	0.8
					Surface	1.0	-		28.0	28.0	8.0 8.0		17.1	17.2	78.8 78.5	78.7	5.6 5.6 5.6	3.8		4		-			-	-
SR1A	Sunny	Moderate	06:17	5.1	Middle	2.6	-	-	-	-	-	-	-	-	-	-	- 0.0	-	4.1	-	4	· ·	819981	812655	-	
					Bottom	4.1	-	-	27.6 27.6	27.6	8.0 8.0		19.1 19.1	19.1	76.0 76.1	76.1	5.4 5.4 5.4	4.5 4.5		3		-			-	-
					Surface	1.0	0.1	169	27.3	27.3	8.0	8.0	19.3	19.3	76.3	76.1	5.4	4.8		4		87			<0.2	0.9
						1.0	0.2	184	27.3		8.0	0.0	19.4	10.0	75.9	70.1	5.4 5.4	4.9		4					<0.2	0.8
SR2	Cloudy	Moderate	06:04	4.4	Middle	-	-	-	-	-	-	-	-	-	-		-	-	4.9	-	4	- 89	821475	814172	-	- 0.9
					Bottom	3.4	0.2	197 205	26.7 26.7	26.7	8.0 8.0		21.6 21.6	21.6	75.4 75.8	75.6	5.4 5.4 5.4	4.9 4.9		4		90 90			<0.2 <0.2	0.8
					Surface	1.0	0.2	246 256	27.7	27.7	7.9		16.6 16.6	16.6	78.5 78.2	78.4	5.6	5.9 6.4		6 6		-			-	-
SR3	Sunny	Moderate	07:11	9.1	Middle	4.6	0.2	281	27.0	27.0	7.9	70	19.4	19.4	69.3	69.3	5.0 5.3	10.5	10.1	4	5	· .	822169	807582	-	. 🗖 .
					Bottom	4.6	0.2	299 59	27.0 26.7	26.8	7.9 7.9	7.0	19.4 21.8	21.7	69.2 64.8	65.0	5.0 4.6 4.6	10.9 13.5		5 5		-			-	-
						8.1	0.2	62 230	26.8 28.0		7.9 8.0		21.7 19.8		65.2 76.3		4.6 4.0 5.4	13.4 7.2		4 11		-			-	
					Surface	1.0	0.1	236	28.0	28.0	8.0	8.0	19.8	19.8	75.9	76.1	5.3 4.6	7.2		11		-			-	-
SR4A	Fine	Calm	06:27	9.6	Middle	4.8	0.0	84 88	26.0 26.0	26.0	7.9 7.9		25.5 25.6	25.6	54.7 54.7	54.7	3.8 3.8	9.1 9.2	9.3	10 10	10		817198	807811	-	
					Bottom	8.6	0.2	74 80	25.1 25.1	25.1	7.8		28.0 28.0	28.0	50.2 50.6	50.4	3.5 3.6 3.6	11.5 11.6		8		-			-	-
					Surface	1.0	0.2	310	28.4	28.4	8.0		19.4	19.4	85.2	85.2	6.0	10.3		5		-			-	
SR5A	Fine	Calm	00:11	3.6	Middle	1.0	0.2	318	28.4	-	8.0		19.4	-	85.2		6.0 - 6.0	10.2	10.4	6	6	-	816581	810705	-	-
SKSA	Fille	Calm	06:11	3.0		- 2.6	- 0.3	- 311	- 28.4		- 8.0	-	- 19.4	-	- 85.9		- 6.0 0.0	- 10.4	10.4	- 7	0	· ·	010001	810705	-	
					Bottom	2.6	0.3	322	28.4	28.4	8.0	8.0	19.4	19.4	86.0	86.0	6.0	10.5		7		-			-	-
					Surface	1.0	0.1	220	28.1 28.1	28.1	7.8 7.8		18.6 18.7	18.7	84.6 84.6	84.6	6.0 6.0	6.1 6.2		3 4		-			-	-
SR6A	Fine	Calm	05:44	4.3	Middle	-	-	-	•	-	-	-	-		-		- 6.0	-	6.2	-	4		817970	814753	-	· · ·
					Bottom	3.3	0.1	237	28.1	28.1	7.8		- 19.0	19.0	- 84.9	85.1	6.0 6.0	6.3		5		-			-	-
						3.3	0.1	243	28.1		7.8 8.0		19.0 19.1		85.2 82.1		6.0 0.0 5.8	6.2 2.2		4		-				-
					Surface	1.0	0.0	232	27.5	27.5	8.0	8.0	19.1	19.1	81.9	82.0	5.8 5.4	2.2		6		-			-	-
SR7	Cloudy	Moderate	05:11	16.3	Middle	8.2 8.2	0.2	335 356	25.8 25.8	25.8	7.8		24.2 24.3	24.3	69.1 68.6	68.9	4.9 4.9	2.6 2.6	2.7	5 4	5		823626	823740	-	
					Bottom	15.3 15.3	0.1	253 256	23.7 23.7	23.7	7.7		29.9 29.8	29.8	51.3 51.6	51.5	3.7 3.7 3.7	3.4 3.4	.	5 4		-			⊢ .	-
					Surface	1.0	-	-	27.3	27.3	8.0	0	19.5	19.5	74.0	74.1	5.3	4.6		6		-	Ī		-	
SR8	Sunny	Moderate	06:28	4.8	Middle	1.0	-		27.3	-	8.0	_	19.4 -		74.1		5.3 5.3	4.6	5.1	7	7	-	820406	811629	-	
510	Sunny	wouerate	00.20	4.0		- 3.8	-	-	- 26.9		- 8.0		- 20.9	-	- 75.9	-	5.4	- 5.6	5.1	- 7	'		020400	011029	-	
DA: Dopth Avor					Bottom	3.8	-	-	26.9	26.9	8.0		20.9	20.9	76.3	76.1	5.4 5.4	5.6		6		-				

Expansion of Hong Kong International Airport into a Three-Runway System Water Quality Monitoring Water Quality Monitoring Results on 23 July 20 during Mid-Ebb Tide

Water Qual	ity Monit	oring Resu	its on		23 July 20	during Mid-		3																		
Monitoring	Weather	Sea	Sampling	Water	Sampling Dep	h (m)	Current Speed	Current	Water Tempe	erature (°C)	1	pН	Salin	iity (ppt)		aturation %)	Dissolved Oxygen	Turbidity(NTU) Susp	nded Solio (mg/L)	s Total Alk (ppn		Coordinate HK Grid	Coordinate HK Grid	Chromiu (µg/L)	
Station	Condition	Condition	Time	Depth (m)			(m/s)	Direction	Value /	Average	Value	Average	Value	Average	Value	Average	Value DA	Value	DA Val	e DA	Value	DA	(Northing)	(Easting)	Value I	DA Value DA
					Surface	1.0	0.4	204 215	27.8	27.8	8.0 8.0	8.0	23.3 23.3	23.3	88.7 88.7	88.7	6.1 6.1	2.9 2.9	5	_	86 85				<0.2	0.7
C1	Fine	Moderate	14:22	8.6	Middle	4.3	0.4	215	27.1	27.1	8.0	8.0	23.8	23.8	84.7	84.7	5.9 6.0	3.3	10 7	6	88	89	815618	804263	<0.2	-0.2 1.0 0.8
					Bottom	4.3 7.6	0.5	215 217	27.1 24.9	24.9	8.0 7.9	7.9	23.8 27.9		84.7 63.2	63.3	5.9 4.5 4.5	3.2 8.7			89 92				<0.2	0.7
					1	7.6	0.6	218 188	24.9 27.1		7.9 8.0		27.9 23.3	27.9	63.4 70.1		4.5 4.9	8.6 9.0	7		91 85				<0.2	0.7
					Surface	1.0	0.5	200	27.1	27.1	8.0	8.0	23.3	23.3	70.1	70.1	4.9 4.7	9.1	8		85				<0.2	0.9
C2	Sunny	Moderate	13:15	11.6	Middle	5.8 5.8	0.5	159 164	26.6 26.6	26.6	8.0 8.0	8.0	24.6 24.6	24.6	64.1 64.0	64.1	4.5 4.5	12.9 12.9	11.8 7		88 88	88	825662	806959	<0.2 <	<0.2 0.9 0.9
					Bottom	10.6 10.6	0.4	139 139	25.3 25.3	25.3	8.1 8.1	8.1	28.4 28.5	28.4	58.5 58.6	58.6	4.1 4.1	13.6 13.6	7		90 90				<0.2 <0.2	0.9
					Surface	1.0	0.4	98	26.7	26.7	7.9	7.9	25.7	25.7	72.7	72.7	5.0	6.3	8		87				<0.2	0.7
C3	Sunny	Moderate	15:02	12.3	Middle	1.0 6.2	0.5	100 72	26.7 25.9	25.8	7.9 7.9	7.9	25.7 27.2	27.3	72.7 65.2	65.2	5.0 4.5	6.2 7.9	7.6 7		87 90	90	822120	817783	<0.2 <0.2	<0.2 0.7 0.7
03	Sunny	woderate	13.02	12.3		6.2 11.3	0.3	78 67	25.8 24.7		7.9 8.0		27.5 29.9		65.2 60.3		4.6	8.3 8.6	7.0 8		91 91	90	022120	617765	<0.2	<0.2 0.7 0.7 0.7
					Bottom	11.3	0.2	69	24.7	24.7	8.0	8.0	29.9	29.9	60.6	60.5	4.3 4.3	8.3	6		92				<0.2	0.7
					Surface	1.0 1.0	0.1	239 250	28.7 28.7	28.7	8.0 7.9	7.9	22.0 22.0	22.0	86.7 86.4	86.6	5.9 5.9 5.9	2.8 2.9	4		86 86				<0.2 <0.2	0.7
IM1	Fine	Moderate	14:02	5.4	Middle	-		-	-	-	-	-	-	-		-	- 3.9	-	4.6		-	88	817943	807153	- <	<0.2 - 0.8
					Bottom	4.4	0.2	190 192	25.9 25.9	25.9	7.9 7.9	7.9	25.2 25.2	25.2	64.5 65.0	64.8	4.5 4.6 4.6	6.4 6.3	4		90 89				<0.2 <0.2	0.9
					Surface	1.0	0.2	143	27.9	27.9	7.9	7.9	23.0	23.0	81.8	81.7	5.6	2.9	6		84				<0.2	0.6
	F = 1		10.55	7.0		1.0 3.8	0.2	144 148	27.9 26.1		7.9 7.9		23.1 25.0		81.6 69.4		5.6 4.9 5.3	2.9 4.6	7		84 87	07	010170	000474	<0.2 <0.2	0.7
IM2	Fine	Moderate	13:55	7.6	Middle	3.8 6.6	0.2	161 142	26.0 25.4	26.1	7.9 7.9	7.9	25.0 26.6	25.0	69.4 63.9	69.4	4.9	4.6 9.3	5.6 7		88 90	87	818176	806171	<0.2 <	<0.2 0.6 0.7
					Bottom	6.6	0.3	150	25.4	25.4	7.9	7.9	26.6	26.6	64.0	64.0	4.5 4.5	9.3	7		90				<0.2	0.7
					Surface	1.0	0.2	176 189	26.9 26.9	26.9	7.9 7.9	7.9	24.3 24.3	24.3	67.1 67.1	67.1	4.7 4.7 4.6	5.8 5.8	10		84 85				<0.2	0.8
IM3	Fine	Moderate	13:47	7.9	Middle	4.0	0.3	156 169	25.7 25.6	25.7	7.9 7.9	7.9	25.8 25.8	25.8	63.4 63.3	63.4	4.5 4.5	8.1 8.2	8.3 1		86 87	87	818803	805605	<0.2 <	<0.2 0.7 0.7
					Bottom	6.9	0.3	127	25.3	25.3	7.9	7.9	26.8	26.8	62.9	63.0	4.4 4.5	11.1	9		90				<0.2	0.7
					Surface	6.9 1.0	0.3	134 196	25.3 26.3	26.3	7.9 7.9	7.9	26.8 24.4	24.3	63.0 64.7	64.8	4.5 4.3 4.6	10.9 8.0	8		90 84				<0.2 <0.2	0.7
	_					1.0	0.7	213 170	26.3 25.2		7.9 7.9		24.3 26.8		64.8 60.2		4.6 4.3 4.5	8.1 13.4		_	85 86				<0.2	0.6
IM4	Fine	Moderate	13:37	9.1	Middle	4.6	0.6	184	25.2	25.2	7.9	7.9	26.8	26.8	60.3	60.3	4.3	13.3	13.3 8	9	86	87	819728	804596	<0.2	0.7
					Bottom	8.1 8.1	0.4	160 165	25.1 25.1	25.1	7.9 7.9	7.9	27.1 27.1	27.1	60.5 60.6	60.6	4.3 4.3	18.6 18.6	10		89 89				<0.2 <0.2	0.6
					Surface	1.0	0.4	229 245	26.8 26.8	26.8	7.9 7.9	7.9	23.7 23.7	23.7	71.4	71.4	5.0	5.5 5.5	8		84 84				<0.2	0.6
IM5	Fine	Moderate	13:30	8.4	Middle	4.2	0.4	202	25.6	25.6	7.9	7.9	26.0 26.0	26.0	62.0 61.9	62.0	4.4 4.4	9.2	0.5 10		87	87	820743	804869	<0.2	<0.2 0.6 0.6
					Bottom	4.2 7.4	0.5	214 190	25.6 25.3	25.3	7.9	7.9	26.6	26.6	61.8	61.9	4.4 4.4	9.1 13.8	9.5 9 10		87 89				<0.2 <0.2	0.6
						7.4	0.4	207	25.3 26.8		7.9 7.9		26.6 23.2		61.9 70.4		4.4 4.9	13.8 5.7	9		90 84				<0.2	0.6
					Surface	1.0	0.5	297	26.9 25.7	26.9	7.9	7.9	23.2	23.2	70.2	70.3	4.9 4.4 4.7	6.0 9.9	9		84				<0.2	0.8
IM6	Fine	Moderate	13:22	8.1	Middle	4.1	0.3	237 244	25.7	25.7	7.9 7.9	7.9	25.5 25.6	25.5	62.5 62.6	62.6	4.4	9.9	10.2 8	9	86 87	87	821080	805832	<0.2	<0.2 0.8 0.8
					Bottom	7.1	0.3	230 248	25.6 25.6	25.6	7.9 7.9	7.9	25.8 25.8	25.8	62.2 62.3	62.3	4.4 4.4	14.8 14.5	10		89 89				<0.2	0.7
					Surface	1.0	0.1	291	27.2	27.2	7.9	7.9	22.0	22.0	71.9	72.0	5.0	5.2	6		84				<0.2	0.8
IM7	Fine	Moderate	13:15	9.5	Middle	1.0 4.8	0.1	314 185	27.2 26.5	26.5	7.9 7.9	7.9	22.0 24.0	24.0	72.0 70.9	70.9	5.1 5.0	5.3 5.4	7.0 6	7	85 87	87	821339	806832	<0.2 <0.2	<0.2 0.8 0.8
		moderate	10.10	0.0		4.8 8.5	0.2	196 167	26.5 26.0		7.9 7.9		24.0 24.9		70.9 68.6		5.0 4.8	5.4 10.3	7.0 7		87 89		02.000	00002	<0.2	0.8 0.8
					Bottom	8.5	0.2	175	26.0	26.0	7.9	7.9	24.9	24.9	68.9	68.8	4.9 4.9	10.3	8		90				<0.2	0.8
					Surface	1.0 1.0	0.2	32 32	27.2 27.2	27.2	7.9 7.9	7.9	23.5 23.5	23.5	70.6 70.7	70.7	4.9 4.9 4.8	7.4 7.4	1:		85 86				<0.2 <0.2	0.9
IM8	Sunny	Moderate	13:39	8.5	Middle	4.3 4.3	0.1	162 171	26.7 26.7	26.7	7.9 7.9	7.9	24.7 24.6	24.6	67.4 67.5	67.5	4.7 4.0	8.2 8.3	8.5 8		88 88	88	821836	808130	<0.2 <	<0.2 0.8 0.8
					Bottom	7.5	0.1	142	26.7	26.7	8.0 8.0	8.0	24.9	24.8	67.6	67.8	4.7 4.7 4.7	9.9	8		90 91				<0.2	0.8
DA: Depth-Aver					I	7.5	0.1	147	26.7		8.0		24.8		68.0		4./	9.8	8		91				<0.2	0.8

DA: Depth-Averaged

Expansion of Hong Kong International Airport into a Three-Runway System Water Quality Monitoring Water Quality Monitoring Results on 23 July 20 during Mid-Ebb Tide

Water Qua	ity Monite	oring Resu	its on		23 July 20	during Mid-		e																				
Monitoring Station	Weather	Sea	Sampling	Water	Sampling Dep	th (m)	Current Speed	Current Direction	Water Te	emperature (°C)		рН	Sali	nity (ppt)		aturation (%)	Disso Oxyg	gen	Turbidity		Suspende (mg		(pp	lkalinity om)	Coordinate HK Grid	Coordinate HK Grid	Chrom (µg/L	L) NICKEI (µg/L)
Gladion	Condition	Condition	Time	Depth (m)			(m/s)		Value	Average	Value	e Averag		Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)		DA Value DA
					Surface	1.0	0.2	79 84	28.0 28.0	28.0	7.9	7.9	22.3 22.3	22.3	79.7 79.6	79.7	5.5 5.5		5.1 5.1		5	+	85 85	-			<0.2	0.8
IM9	Sunny	Moderate	13:46	7.7	Middle	3.9	0.2	112	26.4	26.4	7.9		25.2	25.2	66.7	66.7	4.7	5.1	8.1	7.4	7	6	89	88	822093	808824	<0.2	.0.2 0.8 0.8
	, i				Dettern	3.9 6.7	0.2	119 121	26.4 26.3	26.3	7.9 8.0		25.3 25.6		66.6 68.5	68.7	4.7 4.8	4.8	8.3 9.1		6 7	+	89 90				<0.2	0.8 0.8
					Bottom	6.7 1.0	0.2	123 109	26.3 28.3	20.3	8.0		25.6		68.8 84.9	00.7	4.8	4.0	8.8 4.6		7 10	1	90 86				<0.2 <0.2	0.8
					Surface	1.0	0.8	109	28.3	28.3	8.0 8.0		22.3 22.3	22.3	84.8	84.9	5.8 5.8	5.3	4.6		9	ł	86				<0.2	0.8
IM10	Sunny	Moderate	13:54	8.4	Middle	4.2	0.8	109	26.8 26.8	26.8	8.0 8.0		24.7 24.5	24.6	68.7 68.9	68.8	4.8 4.8	5.5	5.7 5.6	6.9	8	8	88 88	88	822371	809816	<0.2	<0.2 0.8 0.9
					Bottom	7.4	0.5	99	26.2	26.2	8.0	8.0	25.9	25.9	69.0	69.1	4.8	4.8	10.3		7	1	90	1			<0.2	0.9
						7.4	0.6	107 113	26.2 28.3		8.0 8.0		25.9 22.0		69.2 88.4		4.8 6.1		10.5 4.4		8		90 87				<0.2	1.1 0.8
					Surface	1.0	0.9	114	28.3	28.3	8.0	8.0	22.0		88.3	88.4	6.1	5.6	4.4		7	1	87	1			<0.2	0.8
IM11	Sunny	Moderate	14:04	8.2	Middle	4.1	0.8	114 125	26.8 26.8	26.8	8.0 8.0		24.7 24.7	24.7	72.0 72.0	72.0	5.0 5.0		11.4 11.7	10.2	6	6	90 90	89	822075	811460	<0.2	<0.2 0.8 0.8
					Bottom	7.2	0.5	110	26.7	26.7	8.0	• •	24.8		72.5	72.6	5.1	5.1	14.6		4	1	91	1			<0.2	0.8
					Surface	7.2	0.5	117 112	26.7 27.6	27.6	8.0 7.9		24.8 22.9	1	72.6 80.0	80.1	5.1 5.6		14.6 5.1		5		91 86				<0.2	0.8
					Surface	1.0 5.3	0.8	117 103	27.6 26.8	27.6	7.9 7.9		22.9	22.9	80.1 68.6		5.6	5.2	5.2		4 5	1	86	1			<0.2	0.9
IM12	Sunny	Moderate	14:11	10.6	Middle	5.3	0.6	112	26.8	26.8	7.9	7.9	24.5 24.5	24.5	68.7	68.7	4.8 4.8		13.5 13.7	11.4	6	5	89 89	89	821472	812051	<0.2	<0.2 0.8 0.8
					Bottom	9.6 9.6	0.4	89 92	26.3 26.3	26.3	7.9		25.8 25.8	25.8	63.5 63.7	63.6	4.4	4.5	15.3 15.4		6 5	-	92 92				<0.2	0.8
					Surface	1.0	-	-	28.0	28.0	8.0	8.0	22.6	22.7	81.8	81.8	5.7		5.9		8		-				-	-
						1.0 2.6	-	-	27.9		8.0		22.7		81.8		5.7	5.7	6.0		8		-				-	-
SR1A	Sunny	Calm	14:30	5.2	Middle	2.6	-	-	-	-	-		-	-	-	-	-		-	7.1	-	8	-	•	819977	812666	-	
					Bottom	4.2	-	-	27.2	27.2	8.0 8.0		24.1	24.1	75.5 75.6	75.6	5.2 5.3	5.3	8.2 8.4		8	+	-	-			-	-
			1		Surface	1.0	0.3	85	27.3	27.3	8.0	8.0	23.6	23.6	78.9	79.0	5.5		6.6		7		85				<0.2	0.8
SR2	0	Madanata	14:43	4.7	Middle	1.0	0.3	92	27.3		8.0		23.6		79.0		5.5	5.5	6.8	8.8	7	8	86	87	001400		<0.2	0.8
SR2	Sunny	Moderate	14:43	4.7	Middle	-	-	-	-	-	-		-	-	-	-	-		-	8.8	-	8	-	87	821483	814145	-	<0.2 - 0.8
					Bottom	3.7 3.7	0.1	71 72	26.8 26.8	26.8	8.0 8.0		24.6 24.6		75.9 76.3	76.1	5.3 5.3	5.3	10.9 11.0		8		89 89				<0.2 <0.2	0.8
					Surface	1.0	0.1	324 326	26.7 26.7	26.7	7.9 7.9		24.5 24.5	24.5	67.6 67.6	67.6	4.7		6.4 6.7		7 8	-	-				-	-
SR3	Sunny	Moderate	13:32	9.9	Middle	5.0	0.2	225	26.3	26.3	7.9	7.0	25.4	25.4	63.3	63.3	4.4	4.6	9.1	10.9	8	7	-	1.	822136	807586	-	
Cito	Cunny	modorato	10.02	0.0		5.0 8.9	0.2	228 227	26.3 26.3		7.9 7.9	-	25.4 25.5		63.3 61.5		4.4 4.3		9.1 17.1	10.0	7		-		022100	001000	-	
					Bottom	8.9	0.1	249	26.3	26.3	7.9	7.9	25.5	25.5	61.7	61.6	4.3	4.3	16.9		6	•	-					-
					Surface	1.0	0.1	267 291	27.4 27.4	27.4	8.0 8.0		23.3 23.3	23.3	81.6 81.1	81.4	5.7 5.6	5.0	3.9 3.9		7 6	ł	-				-	-
SR4A	Fine	Calm	14:46	9.3	Middle	4.7	0.1	38 40	26.2 26.2	26.2	7.9 7.9	7.0	24.8 24.8	24.0	61.7 61.7	61.7	4.3 4.3	5.0	8.9 8.9	8.3	7	7	-	1.	817200	807818	<u> </u>	
					Bottom	4.7	0.1	30	26.2	26.2	7.9		24.8		61.7	61.9	4.3	4.4	8.9		7	1	-				-	-
					Bollom	8.3 1.0	0.0	32 356	26.2 28.0	20.2	7.9 7.9		24.9 22.7	24.9	62.1 82.8	01.9	4.4 5.7	4.4	12.1 5.4		8		-				\square	
					Surface	1.0	0.0	328	27.8	27.9	7.9		22.8	22.8	82.3	82.6	5.7	5.7	5.6		8	t	-				-	-
SR5A	Fine	Calm	15:05	3.9	Middle	-	-	-	•	-	-	- ·	-		-		-		-	6.8	-	8	-		816571	810713	-	
					Bottom	2.9	0.1	14	26.9	26.9	7.9		23.5	23.5	69.6	69.4	4.9	4.9	8.0		8	1	-	1			•	-
					0	2.9	0.1	14 71	26.9 27.4	07.5	7.9 7.9		23.5 23.0	00.0	69.2 69.0	00.0	4.9 4.8		8.1 9.3		8		-				<u><u></u> </u>	
					Surface	1.0	0.1	72	27.5	27.5	7.9		23.0	23.0	69.4	69.2	4.8	4.8	9.7		10	1	-	1			-	-
SR6A	Fine	Calm	15:38	4.4	Middle	-	-	-	-	-	•		-		-	-	-		-	12.6	-	11	-		817945	814734	-	
					Bottom	3.4	0.1	279 281	25.9 25.9	25.9	7.9 7.9		25.4 25.4	25.4	55.0 55.3	55.2	3.9 3.9	3.9	15.7 15.5		12 12	Į	-				<u> </u>	-
					Surface	1.0	0.8	62	27.6	27.6	8.0	8.0	24.1	24.1	81.5	81.5	5.6		4.1		11		-				-	
						1.0 8.0	0.9	63 43	27.6 26.9		8.0 8.0		24.1 25.2		81.5 75.9		5.6 5.3	5.5	4.1 3.9		10 9	+	-	-			· ·	-
SR7	Sunny	Moderate	15:29	15.9	Middle	8.0	0.5	44	26.9	26.9	8.0	8.0	25.1	25.1	75.9	75.9	5.3		3.9	3.9	10	10	-	1 -	823643	823729	<u> </u>	
					Bottom	14.9 14.9	0.5	28 29	26.5 26.5	26.5	8.0 8.0		25.9 25.9	25.9	73.9 74.0	74.0	5.1 5.2	5.2	3.8 3.7		8	+	-					-
					Surface	1.0	-	-	27.7	27.7	8.0	8.0	23.3	23.3	75.4	75.4	5.2		7.5		7		-				Ē	-
SR8	Sunnv	Moderate	14:22	5.3	Middle	1.0	-	-	27.7		8.0	-	23.4		75.4 -		5.2 -	5.2	7.5	9.3	7	6	-		820382	811624		
370	Suriny	woderate	14.22	0.0	widdle	- 4.3	-	-	- 27.7	-	- 8.0	1 -	- 23.7	-	- 77.2	-	- 5.3		- 11.0	5.3	- 5	°	-		020302	011024	-	
					Bottom	4.3	-	-	27.7	27.7	8.0		23.7	23.7	77.6	77.4	5.3	5.4	11.0		6		-				<u> </u>	
DA: Depth-Aver	aned			-			-	-	-	-		-	-	-	-	-	-				-	-				-	-	

Expansion of Hong Kong International Airport into a Three-Runway System Water Quality Monitoring Water Quality Monitoring Results on 23 July 20 during during Mid-Flood Tide

Water Qua	ity Monito	oring Resu	its on		23 July 20 dur	ring Mid-F	lood lic	be																			
Monitoring Station	Weather	Sea	Sampling	Water	Sampling Depth (m)		Current Speed	Current Direction	Water Ter	mperature (°C)		рН	Salin	ity (ppt)		turation %)	Dissolved Oxygen	Turbid	y(NTU)	Suspende (mg/		Total All (ppr		Coordinate HK Grid	Coordinate HK Grid	Chrom (µg/L	
Station	Condition	Condition	Time	Depth (m)	,		(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value D/		DA	Value	DA	Value	DA	(Northing)	(Easting)		DA Value DA
C1	Olauda	Moderate	08:13	0.5	Surface	1.0 1.0 4.3	0.5 0.5 0.6	35 37 29	26.1 26.1 25.2	26.1	7.9 7.9 7.9	7.9	24.4 24.4 27.0	24.4 27.0	67.3 67.3 61.9	67.3	4.8 4.8 4.4	4.6 4.6 9.3	8.4	8 7 7	8	86 87 89	89	815607	804228	<0.2 <0.2 <0.2	<pre>0.7 0.6 <</pre>
Ci	Cloudy	Moderate	06.13	8.5	Bottom	4.3 7.5 7.5	0.6 0.4 0.4	31 30 32	25.1 24.6 24.6	25.2 24.6	7.9 7.9 7.9		27.1 28.5 28.5	28.5	61.6 61.4 61.8	61.6	4.4 4.4 4.4	9.4 11.1 11.4	0.4	8 8 9	0	89 91 92	09	815607	004220	<0.2 <0.2 <0.2	<0.2 0.7 0.7 0.6 0.6
					Surface	1.0 1.0 6.3	0.5 0.5 0.5	0 0 343	27.7 27.7 26.9	27.7	7.9 7.9 7.9	7.9	21.0 21.0 23.5	21.0	74.6 74.5 64.5	74.6	5.2 5.2 4.5	5.5 5.6 9.9		7 8 7		87 87 89				<0.2 <0.2 <0.2	0.7
C2	Cloudy	Moderate	08:52	12.6	Bottom	6.3 11.6 11.6	0.5 0.5 0.6	316 337 356	26.9 25.9 25.9	26.9 25.9	7.9 7.9 7.9	7.9 7.9	23.5 27.0 27.0	23.5 27.0	64.5 59.9 60.3	64.5 60.1	4.5 4.2 4.2	9.9	11.1	6 6 6	7	90 91 91	89	825698	806968	<0.2 <0.2 <0.2 <0.2	<0.2 1.2 1.0
					Surface	1.0 1.0	0.5 0.6	267 285	27.2 27.2	27.2	7.9 7.9	7.9	22.3 22.3	22.3	71.4 71.4	71.4	5.0 5.0	5.0		5 5		86 86				<0.2 <0.2	0.9
C3	Cloudy	Moderate	07:01	12.9	Middle	6.5 6.5 11.9	0.5 0.6 0.5	258 269 290	25.8 25.7 25.1	25.8 25.1	7.9 7.9 7.9	7.9	26.4 26.5 28.9	26.4 28.9	64.2 64.2 61.1	64.2 61.2	4.5 4.5 4.3	5.0 5.0 13.3	7.8	4 5 4	5	89 90 91	89	822096	817812	<0.2	<0.2 0.9 0.9 0.9 0.9
					Surface	11.9 1.0 1.0	0.5 0.2 0.2	307 351 323	25.1 26.1 26.1	26.1	7.9 7.9 7.9	7.0	28.9 24.7 24.7	24.7	61.3 70.6 70.6	70.6	4.3 4 5.0 5.0 5.0	13.5 8.1		5 8 8		91 87 88				<0.2 <0.2 <0.2	0.9 0.6 0.6
IM1	Cloudy	Moderate	08:33	5.8	Middle	- 4.8	- 0.1	- - 356	- - 25.8	-	- - 7.9		- - 25.5	-	- - 62.0		-	-	9.6	- - 10	9	- - 90	89	817960	807120		<0.2 - 0.6
					Bottom Surface	4.8 1.0 1.0	0.1 0.4 0.4	328 20 21	25.8 26.5 26.5	25.8 26.5	7.9 7.9 7.9	7.9	25.5 23.4 23.4	25.5 23.4	62.2 66.6 66.5	62.1 66.6	4.4 4.4 4.7	11.2 5.4		8 10 10		90 85 84				<0.2 <0.2 <0.2	0.6 0.7 0.7
IM2	Cloudy	Moderate	08:41	7.9	Middle	4.0 4.0 6.9	0.4 0.4 0.3	17 18 13	25.8 25.8 25.6	25.8	7.9 7.9 7.9	7.9	25.0 25.0 25.9	25.0	59.7 59.8 63.6	59.8	4.2 4.2 4.5	6.9 6.8	7.4	8 8 7	8	87 88 90	87	818163	806147	<0.2	<0.2 0.7 0.7 0.7 0.8
					Bottom Surface	6.9 1.0 1.0	0.3 0.5 0.5	13 350 322	25.6 27.0 27.0	25.6	7.9 7.9 7.9	7.9	25.9 22.4 22.4	25.9 22.4	63.8 71.9 71.4	63.7 71.7	4.5 4.5 5.1 5.0	10.0 10.0 4.5 4.5		6 9 9		90 84 83				<0.2 <0.2 <0.2 <0.2	0.7
IM3	Cloudy	Moderate	08:49	8.2	Middle	4.1 4.1 7.2	0.4 0.4 0.4	338 311 334	25.5 25.5 25.5	25.5	7.9 7.9 7.9	7.9	26.2 26.2 26.3	26.2	61.1 61.2 62.4	61.2	4.3 4.3 4.4	8.4 8.2 12.7	8.5	8 8 10	9	88 88 91	87	818787	805595	<0.2	<0.2 0.8 0.8 0.8
					Bottom	7.2 1.0	0.4 0.8	358 349	25.5 26.8	25.5	7.9 7.9	7.9	26.3 21.6	26.3	62.5 70.6	62.5 70.6	4.4 4.4 5.0	12.9 4.5		10 4		90 84				<0.2 <0.2	0.7
IM4	Cloudy	Moderate	08:58	9.0	Middle	1.0 4.5 4.5	0.8 0.8 0.9	356 341 314	26.8 25.3 25.3	25.3	7.9 7.9 7.9	7.9	21.7 26.2 26.2	26.2	70.5 57.6 57.6	57.6	5.0 4.1 4.1	9.8 9.9	9.5	4 6 5	5	84 88 87	87	819729	804597	< 0.2	<0.2 0.8 0.8 0.8 0.8
					Bottom	8.0 8.0 1.0	0.5 0.5 1.1	334 338 354	25.3 25.3 26.5	25.3 26.5	7.9 7.9 7.9	7.9 7.9	26.3 26.3 22.8	26.3 22.8	59.0 59.1 66.7	59.1 66.7	4.2 4.2 4.7	14.1 6.5		6 7 2		90 90 84				<0.2 <0.2 <0.2	0.8 0.8 0.8
IM5	Rainy	Moderate	09:05	7.5	Middle	1.0 3.8 3.8	1.2 0.9 1.0	326 357 328	26.5 25.8 25.8	25.8	7.9 7.9 7.9	7.9	22.8 24.9 24.9	24.9	66.7 59.6 59.6	59.6	4.7 4.2 4.2	11.0	11.6	3 3 3	3	84 89 90	88	820729	804883	<0.2 <0.2 <0.2	<0.2 0.9 0.9
					Bottom	6.5 6.5 1.0	0.8 0.8 0.1	2 2 187	25.7 25.7 27.4	25.7	7.9 7.9 7.9	7.9	25.4 25.4 20.2	25.4	58.5 58.5 74.0	58.5 74.0	4.1 4. 4.1 5.2	4.3		3 4 6		90 90 84				<0.2 <0.2 <0.2	0.9 0.8 1.0
IM6	Cloudy	Moderate	09:14	8.3	Middle	1.0 4.2 4.2	0.1 0.2 0.2	188 79 84	27.4 27.1 27.1	27.1	7.9 7.9 7.9	7.9	20.2 21.6 21.6	21.6	74.0 71.9 71.8	71.9	5.2 5.1 5.1	6.2	7.3	6 5 5	5	84 88 88	87	821039	805837	<0.2 <0.2 <0.2	<0.2 0.9 0.9 0.9 0.9
					Bottom	7.3 7.3 1.0	0.2 0.3 0.0	60 60 145	26.5 26.5 27.7	26.5	7.9 7.9 7.9	7.9	23.4 23.4 19.5	23.4	69.2 69.5 73.1	69.4	4.9 4.9 5.2	11.7 11.4 3.9		5 5 4		90 90 84				<0.2 <0.2 <0.2	1.0 0.8 1.0
IM7	Cloudy	Moderate	09:23	9.4	Surface Middle	1.0 4.7 4.7	0.0 0.1 0.2	151 99 101	27.7 26.9 26.9	27.7 26.9	7.9 7.9 7.9	7.9	19.5 21.4 21.4	19.5 21.4	73.1 66.9 66.8	73.1 66.9	5.2 4.7 4.7	3.9 4.7 4.6	5.8	4 4 4	4	83 88 88	87	821328	806848	<0.2 <0.2 <0.2	<0.2 1.0 0.9 0.9
					Bottom	8.4 8.4 1.0	0.3 0.3 0.1	98 104 219	25.7 25.7 27.5	25.7	7.9 7.9 7.9	7.9	25.2 25.2 21.6	25.2 21.6	59.1 59.4 71.1	59.3 71.1	4.2 4.2 5.0	9.2		5 5 10		90 90 86				<0.2 <0.2 <0.2	0.9 0.7 0.9
IM8	Cloudy	Moderate	08:25	8.4	Middle	1.0 4.2 4.2	0.1 0.1 0.1	231 206 209	27.6 27.4 27.4	27.5	7.9 7.9 7.9	7.9	21.5 21.6 21.6	21.6	71.1 70.5 70.6	70.6	5.0 4.9 4.9	7.8	8.8	10 8 9	9	86 89 89	88	821843	808127	<0.2	<0.2 0.8 0.9 0.9
DA: Dopth Avo					Bottom	7.4 7.4	0.1 0.1	200 213	27.4 27.4	27.4	7.9 7.9	7.9	21.6 21.6	21.6	72.9 73.1	73.0	5.1 5.1	11.2 11.4		8 9		90 90				<0.2 <0.2	0.9

Expansion of Hong Kong International Airport into a Three-Runway System Water Quality Monitoring Water Quality Monitoring Results on 23 July 20 during during Mid-Flood Tide

Water Qual	ity Monit	oring Resu	its on		23 July 20	during Mid-		e																			
Monitoring Station	Weather	Sea	Sampling	Water	Sampling Dep	th (m)	Current Speed	Current		emperature (°C)		pН	Salinity (ppt		OO Saturatior (%)	Ox	ř	Turbidity(,	(mg		(ppr	m) ́	Coordinate HK Grid	Coordinate HK Grid	Chromium (µg/L)	Nickel (µg/L)
Otation	Condition	Condition	Time	Depth (m)			(m/s)		Value	Average	Value	Avera	-	-	alue Averaç		DA	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)	Value DA	Value DA
					Surface	1.0	0.3	270 290	27.1 27.1	27.1	7.9 7.9	7.9	22.9 22.9		6.8 6.8 66.8	4.7	- I	6.8 6.7	ŀ	9 10		85 86				<0.2	0.9
IM9	Cloudy	Moderate	08:19	7.8	Middle	3.9 3.9	0.4	268 274	27.1 27.1	27.1	7.9 7.9	7.9	22.0	6	7.5 67.5	47	4.7	11.8 11.8	11.4	9 10	9	89 90	89	822108	808812	<0.2 <0.2 <0.2	0.8 0.9
					Bottom	6.8	0.4	260	27.1	27.1	7.9	7.0	23.0 23.0	6	9.2 69.3	4.8	4.8	15.5	E	9		90				<0.2	1.0
						6.8	0.4	271 304	27.1 27.4		7.9	<u> </u>	23.0	6	9.3	4.8		15.6 9.1		9		91 86				<0.2	0.9
					Surface	1.0	0.9	315	27.4	27.4	7.9	7.9	21.6	7	2.6 72.6	5.1	4.9	9.1	E	9	1	87				<0.2	0.9
IM10	Cloudy	Moderate	08:11	8.2	Middle	4.1 4.1	0.7	298 325	26.9 26.8	26.9	7.9 7.9	7.9	22.6 22.7		7.5 7.1 67.3	4.7		11.8 11.8	11.6	10 9	10	90 90	89	822362	809808	<0.2 <0.2 <0.2	0.9 0.9
					Bottom	7.2	0.5	297 311	26.5 26.5	26.5	7.9 7.9	7.9	24.9 24.9		3.1 3.2 63.2	4.4	4.4	14.1 14.0	F	10 10		90 91				<0.2	0.9
					Surface	1.0	0.8	300	27.4	27.4	7.9	7.9	21.8 21.9	7	2.6 72.6	5.1		5.2		4		85				<0.2	0.8
IM11	Claudu	Madazata	09:01	8.7	Middle	1.0 4.4	0.9	301 295	27.4 26.2	26.2	7.9 7.9	7.9	21.8	6	2.5 12.0	5.1	4.7	5.3 11.0	10.6	4 4	5	86 89	88	822072	811477	<0.2 <0.2 <0.2	0.9 0.9
INTT	Cloudy	Moderate	08:01	0.7	Middle	4.4 7.7	0.8	314 287	26.2 25.5	26.2	7.9 7.9		25.2	6	1.7	4.3		10.8 15.5	10.0	5 6	5	89 90	00	622072	0114/7	<0.2	0.9
					Bottom	7.7	0.5	294	25.5	25.5	7.9	7.9	27.5 27.5	5	8.9 58.8	4.1	4.1	15.6		5		91				<0.2	1.0
					Surface	1.0	0.8	294 312	27.8 27.8	27.8	8.0 8.0	8.0	20.3 20.3	7	8.0 78.0	5.5 5.5	-	4.5 4.5	┝	6 5		85 85				<0.2	1.0 1.0
IM12	Cloudy	Moderate	07:55	8.9	Middle	4.5 4.5	0.8	287 307	26.6 26.7	26.6	7.9 7.9	7.9	24.5 24.4		4.5 64.6	4.6		11.5 11.4	10.1	5 6	6	88 89	88	821450	812052	<0.2 <0.2 <0.2	1.0 1.0
					Bottom	7.9	0.4	266	25.7	25.7	7.9	7.9	27.1 27.1	5	3.6 52.7	3.8	3.8	14.3	E	6		89				<0.2	1.0
						7.9	0.4	275	25.7 27.8		7.9 7.9		27.1	5	3.8	3.8 5.6	5.0	14.2 4.6		5 5		90				<0.2	1.0
					Surface	1.0	•	-	27.8	27.8	7.9	7.9	19.9		9.3 79.3	5.6	5.6	4.7	Ę	5	ļ	•					<u> </u>
SR1A	Cloudy	Calm	07:34	5.2	Middle	2.6 2.6	-		-	-	-	-			-	-		-	4.8	-	5	-	-	819973	812665		
					Bottom	4.2	-	-	27.6 27.6	27.6	7.9 7.9	7.9	21.4 21.4	7	6.1 76.2	5.3 5.3	5.3	5.1 5.0	ŀ	4		-				-	-
					Surface	1.0	0.1	165	27.3	27.2	7.9	7.9	21.2 21.3	7	4.8 74.8	5.3		5.5		3		85				<0.2	1.1
SR2	Cloudy	Calm	07:21	4.4	Middle	1.0	0.1	179	27.2	-	7.9 -		21.3	Ľ	4.7	5.3	5.3	5.9 -	7.3	4	4	86	87	821450	814175	- <0.2	<u>1.0</u> - 1.0
0112	Cloudy	Caim	07.21	4.4		- 3.4	- 0.2	- 129	- 26.8		- 7.9		24.7 24.7	e	8.3 69 5	- 4.8		- 8.9	/.5	- 5	-	- 88		021400	014175	<0.2	- 1.0
					Bottom	3.4	0.2	136 278	26.8	26.8	7.9	7.9	24.6	6	8.7	4.8	4.8	8.9		5		89				<0.2	1.0
					Surface	1.0	0.2	290	27.7	27.7	7.9 7.9	7.9	20.8 20.8		4.4 74.3	5.2 5.2	5.1	5.3	Ŀ	8		-				-	-
SR3	Cloudy	Moderate	08:32	9.5	Middle	4.8	0.2	246 252	27.4 27.4	27.4	7.9	7.9	21.5 21.5		1.4 71.4	5.0 5.0	3.1	7.0 7.0	7.7	8	7	-	-	822151	807575	<u>-</u> .	
					Bottom	8.5	0.1	41	27.1	27.1	7.9	7.9	23.7 22	. 6	6.7 66.9	4.7	4.7	10.9	Ę	6	Ì	· ·					-
					Surface	8.5 1.0	0.2	43 252	27.1 27.0	27.0	7.9	7.9	23.7	6	8.4 69.4	4.7		10.7 5.9		8		<u> </u>				-	-
						1.0 4.6	0.1	275	27.0 26.3		7.9 7.9		22.2	6	8.3	4.8	4.5	5.9 6.7	ŀ	9 8		-				<u> </u>	-
SR4A	Cloudy	Calm	07:51	9.2	Middle	4.6	0.0	122	26.3	26.3	7.9	7.9	24.1 24.1	5	9.2 59.3	4.2		6.7	7.7	8	8	-	-	817166	807809		-
					Bottom	8.2 8.2	0.2	71 76	25.9 25.9	25.9	7.9 7.9	7.9	25.4 25.4		5.5 5.7 55.6	3.9 3.9	3.9	10.3 10.4	ŀ	8	-	-				-	-
					Surface	1.0	0.2	282 295	27.3 27.3	27.3	7.9 7.9	7.9	21.8 21.8		1.4 1.5 71.5	5.0 5.0		8.5 8.5		10 8		-					
SR5A	Fine	Calm	07:34	3.7	Middle	-	-	-	-	-	-					-	5.0	-	9.1	-	8	-	-	816604	810691	<u> </u>	· .
					Bottom	2.7	- 0.2	297	- 27.3	27.3	7.9	7.9	- 21.8 21.8		2.1 72.2	5.1	5.1	- 9.6	ŀ	- 7		-				-	-
						2.7	0.2	309 176	27.3 27.0		7.9 7.9	<u> </u>	21.8	- / 7	2.3	5.1	5.1	9.7 3.8		6 5							
					Surface	1.0	0.1	185	27.0	27.0	7.9	7.9	21.7 21.7		0.1 70.1	5.0	5.0	3.8	F	5		-					-
SR6A	Fine	Calm	07:07	4.1	Middle	-	-	-	-	-	-		-			-		-	4.1	-	6	-	-	817985	814738		
					Bottom	3.1 3.1	0.1	217	27.0 27.0	27.0	7.9 7.9	7.9	22.3 22.4 22.3		4.6 64.4	4.6	4.6	4.3 4.5	F	6 6						F. F	
					Surface	1.0	0.1	293	27.2	27.2	8.0	8.0	22.8 22.8	7	6.0 76.0	5.3		3.9		4	ļ	F-1					
SR7	Cloudy	Moderate	06:28	15.4	Middle	1.0	0.1	315 235	27.2 25.6	25.6	8.0 7.9	7.9	22.8		5.9 70.0 5.7 65.7	5.3 4.6	5.0	3.9 4.1	4.2	4 4	4			823646	823730		-
UK/	Cioudy	moderate	00.20	13.4		7.7 14.4	0.1 0.1	238 165	25.6 25.0		7.9 7.9		27.5	6	5.7	4.6 4.3		4.1 4.7	7.2	5 4	-	ΗŦ	- Ĩ-	023040	023730		
					Bottom	14.4	0.1	166	25.0	25.0	7.9	7.9	29.0 29.0	6	2.1 02.0	4.4	4.3	4.6		3	İ	\square				-	<u> </u>
					Surface	1.0 1.0	-	-	27.7 27.7	27.7	7.9 7.9	7.9	20.9 20.9		5.9 5.9 75.9	5.3 5.3	5.3	5.6 5.6	┝	5 5		<u> </u>					-
SR8	Cloudy	Calm	07:46	5.0	Middle	-	-	-	-	-	-	-		-		-	5.5	-	7.2	-	5	H	-	820409	811638	<u>-</u> .	
					Bottom	4.0	-	-	26.8	26.8	7.9	7.9	23.8 23.8		8.1 68.2	4.8	4.8	8.9	E	6	ţ	-					-
DA: Dopth Avor						4.0	-	-	26.8		7.9	1	23.8	6	8.3	4.8	Ĺ	8.9		5		<u> </u>					-

Expansion of Hong Kong International Airport into a Three-Runway System Water Quality Monitoring Water Quality Monitoring Results on 25 July 20 during Mid-Ebb Tide

<table-container> 1 1 1 1<th>Water Qual</th><th>ity Monit</th><th>oring Resu</th><th>its on</th><th></th><th>25 July 20</th><th>during Mid-</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></table-container>	Water Qual	ity Monit	oring Resu	its on		25 July 20	during Mid-																			
○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ <						Sampling Dept	h (m)	Speed		<u> </u>	mperature (°C)				_	(%)	Oxygen		NIU)	(mg	/L)	(ppn	n) Í	HK Grid	HK Grid	(µg/L) Nickel (µg/L)
	Station	Condition	Condition	Time	Depth (m)			, ,			Average	Value	Average	Value Average	e Valu	e Average			DA		DA		DA	(Northing)	(Easting)	
Image model Image model Image model Image mod						Surface	1.0	0.5	233	29.0	29.0	8.2	8.2	20.2	115.	4 115.5	7.9 6.7	3.6		3		91				<0.2 1.0
····································	C1	Fine	Moderate	15:53	9.0	Middle	4.5	0.5	216	26.3		8.1		26.1	79.3	3 79.3	5.5	4.0	5.0	5	5	89	90	815610	804236	<0.2 <0.2 1.0
						Bottom	8.0	0.5	221	24.3	24.3	8.0	8.0	30.9	57.1	57.1	4.0	7.5		6		91				<0.2 0.9
Image: Image:						Surface	1.0	0.2	141	27.6	27.6	8.0	8.0	21.3 21.2	73.6	3 73.7	5.2 4.0	5.4		4		87				<0.2 1.3
	C2	Cloudy	Moderate	14:51	11.2		5.6	0.5	160	27.2		8.0		22.3	64.9) 05.1	4.6	8.5	8.5	4	4	89	88	825677	806963	<0.2 <0.2 1.3
						Bottom	10.2	0.5	156	25.2	25.2	8.0	8.0	27.4	57.1	1 57.0	4.0	11.6		3		90				<0.2 1.2
Image Image <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td>1.0</td><td>0.4</td><td>308</td><td>26.9</td><td></td><td>8.1</td><td></td><td>24.5</td><td>82.7</td><td>7 02.0</td><td>5.8 5.5</td><td>3.2</td><td>-</td><td>4</td><td></td><td>87</td><td></td><td></td><td></td><td><0.2 1.3</td></th<>							1.0	0.4	308	26.9		8.1		24.5	82.7	7 02.0	5.8 5.5	3.2	-	4		87				<0.2 1.3
i i	C3	Cloudy	Moderate	16:22	12.0	Middle	6.0	0.2	279	26.7		8.1	8.1	24.9	74.7	7 74.9	5.2	4.8	4.8	4	4	88	89	822126	817780	<0.2 <0.2 1.3
						Bottom	11.0	0.1	120	24.8	24.8	8.1	8.1	28.8 20.9	66.0) 00.0	4.6 4.6	6.7	-	4		90				<0.2 1.3
M M0 M0 M I						Surface	1.0	0.1	205	27.5	27.5	8.1	8.1	23.7 23.6			6.2 6.2	7.8		5		87				<0.2 0.9
1 1	IM1	Fine	Moderate	15:31	5.3	Middle	-	-	-	-	-	-	-		-		-	-	11.0	-	5	-	89	817964	807119	- <0.2 - 0.9
Mage: Field and section (1) Mage: Field and section (2) Mage: Field and sect						Bottom	4.3	0.2	187	25.8	25.8	8.0	8.0	27.5 27.5	69.2	2 69.1	4.8 4.8	14.3	-	5		90				<0.2 0.9
index index <th< td=""><td></td><td></td><td></td><td></td><td></td><td>Surface</td><td>1.0</td><td>0.3</td><td>197</td><td>29.1</td><td>29.1</td><td>8.2</td><td>8.2</td><td>19.7 19.8</td><td>110.</td><td>5 110.5</td><td>7.6 6.2</td><td>3.8</td><td></td><td>8</td><td></td><td>85</td><td></td><td></td><td></td><td><0.2 0.8</td></th<>						Surface	1.0	0.3	197	29.1	29.1	8.2	8.2	19.7 19.8	110.	5 110.5	7.6 6.2	3.8		8		85				<0.2 0.8
1111100 <th< td=""><td>IM2</td><td>Fine</td><td>Moderate</td><td>15:23</td><td>7.4</td><td>Middle</td><td>3.7</td><td>0.3</td><td>157</td><td>26.2</td><td>26.2</td><td>8.0</td><td>8.0</td><td>26.4 26.3</td><td>69.1</td><td>I 69.1</td><td>4.8</td><td>7.2</td><td>7.4</td><td>4</td><td>6</td><td>88</td><td>88</td><td>818159</td><td>806160</td><td><0.2 <0.2 0.8 0.8</td></th<>	IM2	Fine	Moderate	15:23	7.4	Middle	3.7	0.3	157	26.2	26.2	8.0	8.0	26.4 26.3	69.1	I 69.1	4.8	7.2	7.4	4	6	88	88	818159	806160	<0.2 <0.2 0.8 0.8
Mage Mage						Bottom	6.4	0.2	121	25.3	25.3	8.0	8.0	28.7	65.0) 65.0	4.5 4.5	11.2	-	3		91				<0.2 0.8
Modeline File Modeline File Modeline File Fil							1.0	0.5	207	29.2		8.1		19.3	111.	0 111.0	7.7 6.3	3.9		9	ł	85				<0.2 0.9
i i	IM3	Fine	Moderate	15:16	7.8	Middle	3.9	0.4	163	26.4		8.0		26.0	68.5	5 68.5	4.8	8.4	8.1	8	8	88	88	818787	805593	<0.2 <0.2 0.9
M4 Fine Moderate 5:06 Fine Southood 1:00 0:0 1:00 1:00						Bottom	6.8	0.4	138	25.1	25.1	8.0	8.0	29.2	62.9	9 02.0	4.4	12.2		7		90				<0.2 0.9
index index <th< td=""><td></td><td></td><td></td><td></td><td></td><td>Surface</td><td>1.0</td><td>0.4</td><td>259</td><td>26.9</td><td>26.9</td><td>7.9</td><td>7.9</td><td>24.8</td><td>73.1</td><td>1 13.2</td><td>5.1</td><td>8.1</td><td></td><td>7</td><td>ļ</td><td>86</td><td></td><td></td><td></td><td><0.2 0.9</td></th<>						Surface	1.0	0.4	259	26.9	26.9	7.9	7.9	24.8	73.1	1 13.2	5.1	8.1		7	ļ	86				<0.2 0.9
i i	IM4	Fine	Moderate	15:06	8.7	Middle	4.4	0.3	213	25.4	25.4	7.9	7.9	28.4	58.6	50.0	4.1	11.8	12.0	8	8	87	88	819736	804590	<0.2 0.8 0.9
Moderale And erale And erale <th< td=""><td></td><td></td><td></td><td></td><td></td><td>Bottom</td><td>7.7</td><td>0.3</td><td>184</td><td>25.3</td><td>25.3</td><td>7.9</td><td>7.9</td><td>28.5</td><td>59.5</td><td>5 59.5</td><td>4.2</td><td>16.2</td><td></td><td>9</td><td></td><td>90</td><td></td><td></td><td></td><td><0.2 0.8</td></th<>						Bottom	7.7	0.3	184	25.3	25.3	7.9	7.9	28.5	59.5	5 59.5	4.2	16.2		9		90				<0.2 0.8
Mide 4.0 4.0 0.3 253 25.9 25.9 7.9 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td>1.0</td><td>0.4</td><td>299</td><td>28.0</td><td></td><td>8.0</td><td></td><td>22.4</td><td>89.1</td><td>1 09.2</td><td>6.2 5.3</td><td>5.3</td><td></td><td>6</td><td>-</td><td>86</td><td></td><td></td><td></td><td><0.2 0.8</td></t<>							1.0	0.4	299	28.0		8.0		22.4	89.1	1 09.2	6.2 5.3	5.3		6	-	86				<0.2 0.8
Image: bolic	IM5	Fine	Moderate	14:57	7.9	Middle	4.0	0.3	253	25.9	25.9	7.9	7.9	27.1	62.5	5 02.5	4.4	8.1	8.6	6	6	87	88	820733	804885	<0.2 <0.2 0.8 0.9
M6 Fine Moderate 14:50 Sufface 10 0.1 295 28.4 20.6 70.6 70.6 72.5 72.6 72.5 72.6 72.5 72.6 72.5 72.6 72.5 72.6 72.5 <						Bottom	6.9	0.2	189	25.8		7.9		27.2	62.0) 62.0	4.3 4.3	12.4		6	<u> </u>	91				<0.2 1.0
Image: here here here here here here here he						Surface	1.0	0.1	295	28.4	28.4	8.0	8.0	21.6	98.4	1 98.5	6.8 6.0	4.5	È	6	ļ	86				<0.2 0.9
Image: cond bind bind bind bind bind bind bind bi	IM6	Fine	Moderate	14:50	8.1	Middle	4.1	0.1	205	26.7	26.7	8.0	8.0	25.1	72.5	5 72.5	5.1	8.6	8.4	6	7	87	88	821069	805827	<0.2 <0.2 1.0
M7 Fine Moderate 9.4 Game 1.0 0.2 275 28.8 2.0 8.0 6.0 9.6.4 9.6.4 6.8 6.2 6.5 6.6 6.6 6.7 6.6 6.7 9.0 8.6 9.7 8.6 8.7 9.6 7.6						Bottom	7.1	0.1	148	26.4	26.4	8.0	8.0	25.9 25.9	70.6	5 70.6 S	4.9 4.9	12.0		7		90				<0.2 1.0
M0 4:4: 9:0 Midele 4:6: 0:0 216 27.4 27.4 8:0 8:0 23:5 23:5 79.6 5.5 9.9 8:5 6 6 8 8:13 8 8:13 8 8:13 <t< td=""><td></td><td></td><td></td><td></td><td></td><td>Surface</td><td>1.0</td><td>0.2</td><td>275</td><td>28.8</td><td>28.9</td><td>8.0</td><td>8.0</td><td>20.8</td><td>98.4</td><td>1 90.4</td><td>6.8 6.2</td><td>4.5</td><td></td><td>5</td><td>ļ</td><td>85</td><td></td><td></td><td></td><td><0.2 1.0</td></t<>						Surface	1.0	0.2	275	28.8	28.9	8.0	8.0	20.8	98.4	1 90.4	6.8 6.2	4.5		5	ļ	85				<0.2 1.0
Moderate Noderate Noderat Noderat Noderat No	IM7	Fine	Moderate	14:42	9.2	Middle	4.6	0.2	233	27.4	27.4	8.0	8.0	23.5	79.6	3 79.0	5.5	10.0	8.5	6	6	88	88	821344	806838	<0.2 <0.2 0.9 1.0
M8 Cloudy Moderate F:10 F:10 F:10 O.2 <							8.2	0.3	165	27.2		8.0	8.0	24.1	80.1	1 00.1	5.6 5.0	10.6		6		90				<0.2 0.9
IMMS Cloudy Moderate 15:10 7.9 Middle 4.0 0.2 134 27.2 27.2 8.1 6.1 22.6 73.2 7.3.2 5.1 6.3 6.2 5.0 6.3 6.2 6.3 6.1 22.6 7.3.2 7.3.2 5.1 6.3 6.2 5.0 6.3 6.2 5.0 6.3 6.2 5.0 6.3 6.2 5.0 6.3 6.2 6.3 6.2 7.3.2 7.4.3 7.4.6 5.2 5.2 6.3 6.3 6.1 22.7 7.4.7 7.4.6 5.2 5.2 8.0 6.3 6.1 2.2.7 7.4.7 7.4.6 5.2 5.2 8.0 6.3 6.1 2.2.7 7.4.7 7.4.6 5.2 5.2 8.0 6.3 6.1 2.2.7 7.4.7 7.4.6 5.2 5.2 8.0 6.3 6.1 2.2.7 7.4.7 7.4.6 5.2 5.2 8.0 6.3 6.1 2.2.7 7.4.7 7.4.6 5.2 5.2 8.0 6.3 6.1 2.2.7 7.4.7 7.4.6 5.2 5.2 8.0 6.3 9.0 6.0 6.0 7.0.7 7.0.7 7.4.7 7.4.7 7.4.6						Surface	1.0	0.2	355	27.7	27.7	8.1	8.1	20.9 20.8	80.8	3 00.9	5.7 5.4	4.5		5	ļ	87				<0.2 1.1
Bottom 6.9 0.1 16 27.1 21.1 8.1 8.1 22.7 74.7 74.6 5.2 5.2 8.2 6 90 CO.2 1.1	IM8	Cloudy	Moderate	15:10	7.9	Middle	4.0	0.2	134	27.2	27.2	8.1	8.1	22.6	73.2	2 73.2	5.1 5.1	6.3	6.2	5	6	87	88	821832	808145	<0.2 <0.2 1.2
	DA: Depth-Aver					Bottom					27.1		8.1													

DA: Depth-Averaged

Expansion of Hong Kong International Airport into a Three-Runway System Water Quality Monitoring during Mid-Ebb Tide Water Quality Monitoring Results on 25 July 20

Water Qual	ity Monit	oring Resu	its on		25 July 20	during Mid-		9			-																
Monitoring Station	Weather	Sea	Sampling	Water	Sampling Dep	th (m)	Current Speed	Current Direction	Water Te	mperature (°C)		рН	Sali	nity (ppt)	DO Saturatio (%)		ssolved)xygen	Turbidity	NTU)	Suspende (mg	ed Solids /L)		Alkalinity pm)	Coordinate HK Grid	Coordinate HK Grid	Chromium (µg/L)	Nickel (µg/L)
Station	Condition	Condition	Time	Depth (m)			(m/s)		Value	Average	Value	Avera	-	Average	Value Avera	-		Value	DA	Value	DA	Value	DA	(Northing)	(Easting)	Value DA	
					Surface	1.0	0.2	66 68	28.1 28.0	28.1	8.1 8.1	8.1	20.8	20.8	83.2 83.1 83.1	5.8		12.8 12.8	-	4 3	+	86 86	-			<0.2	1.0
IM9	Cloudy	Moderate	15:15	6.6	Middle	3.3	0.3	111 116	27.2 27.2	27.2	8.1 8.1		22.0		74.4 74.5	5.0	5.5	5.3 5.3	8.6	3	4	88 89	88	822074	808832	<0.2 <0.2	11
					Bottom	3.3 5.6	0.3	72	26.9	26.9	8.1	81	23.4	23.4	71.8 72	5.0	51	7.7	: E	6	ł	90				<0.2	1.0
						5.6	0.2	74	26.9 28.4		8.1 8.1		23.4		72.2	5.1		7.7		5		90 87				<0.2	1.1
					Surface	1.0	0.5	77	28.2	28.3	8.1	8.1	20.4	20.3	88.2 88.3	6.1	5.8	2.8		4	1	85	1			<0.2	1.2
IM10	Cloudy	Moderate	15:21	7.9	Middle	4.0	0.6	113 124	27.3 27.3	27.3	8.1 8.1	8.1	22.6 22.6		77.3 77.4	1 5.4 5.4		5.9 6.8	6.7	4 4	4	88 88	88	822408	809787	<0.2 <0.2 <0.2	1.1
					Bottom	6.9 6.9	0.4	104 105	26.9 26.9	26.9	8.1 8.1	8.1	23.5		70.7 70.7	, 5.0		10.9 11.0	F	4	Į	90 90				<0.2	1.0
					Surface	1.0	0.7	120	28.1	28.1	8.1	8.1	20.9	20.0	87.7	6.1		2.6		4		86				<0.2	1.0
IM11	Cloudy	Moderate	15:30	8.3	Middle	1.0 4.2	0.8	126 115	28.0 27.1	27.1	8.1 8.1	8.1	20.9 23.0		87.5 72.0 71.9	6.1		2.9 5.5	9.2	3 4	3	86 88	88	822041	811450	<0.2	1.0 2 1.2 1.1
INTI	Cibudy	woderate	15.50	0.5		4.2	0.6	122 118	27.0 26.8		8.1 8.1		23.1		72.4	5.0		5.8 18.6	5.2	3 3	3	89 90	00	022041	011450	<0.2	1.2
					Bottom	7.3	0.4	121	26.9	26.9	8.1	8.1	23.6	23.0	72.7	5.1	5.1	19.7		3		90				<0.2	1.1
					Surface	1.0 1.0	0.5	95 102	28.8 28.9	28.9	8.2 8.2	8.2	19.5		91.3 90.7 91.0	6.3		3.9 4.3		5 6		86 87				<0.2 <0.2	1.2
IM12	Cloudy	Moderate	15:36	9.0	Middle	4.5 4.5	0.4	116 116	27.4 27.3	27.4	8.1 8.1	8.1	21.4	21.4	80.6 79.7 80.3	5.7		6.6 6.9	6.2	4	4	88 89	89	821435	812060	<0.2 <0.2 <0.2	2 1.2 1.2
					Bottom	8.0 8.0	0.2	92 93	26.9 26.9	26.9	8.1		23.2		69.7 69.9 69.4	4.0	10	7.9	1	3	1	90 91				<0.2	1.2
					Surface	1.0		- 93	28.1	28.1	8.1	- 8.1	21.7		88.8 88.8	, 6.2		4.4		4		- 91				-	1.Z
						1.0	•	-	28.0	20.1	8.1	0.1	21.8	21.0	88.6	6.1	6.2	4.5	-	4	+ .	-				-	-
SR1A	Cloudy	Moderate	15:51	5.0	Middle	2.5 4.0	-		- 27.5	-		· ·	00.7	-		-		- 5.5	5.0	- 5	4	-	•	819981	812655	· ·	· ·
					Bottom	4.0	-	-	27.5	27.5	8.1 8.1		22.6	22.6	79.2 79.4 79.3	5.5	5.5	5.4		4		-				-	-
					Surface	1.0	0.5	86 86	28.0 27.9	28.0	8.1 8.1		21.1 21.3		91.2 90.4 90.4	3 <u>6.4</u> 6.3		3.5 3.8	-	5	+	88 87				<0.2	1.2
SR2	Cloudy	Moderate	16:03	4.5	Middle	-	-	-	-		-		-	-		-	6.4	-	4.3	-	4	-	89	821463	814179	- <0.2	
					Bottom	3.5	0.3	- 78	27.5	27.6	8.1	8.1	22.0		79.3 79.8	5.5		4.9		3	1	90				<0.2	1.3
						3.5	0.3	80 73	27.6 28.2		8.1 8.1		21.9		80.2 75. 84.3 84.3	5.6		4.9 3.8		4 4		90				<0.2	1.1
					Surface	1.0 4.4	0.1 0.2	75 195	28.1 27.3	28.2	8.1 8.1		20.7	20.6	84.2 75.4	5.9		3.9 4.5	F	3	Į	-				-	-
SR3	Cloudy	Moderate	15:05	8.8	Middle	4.4	0.2	209	27.3	27.3	8.1	8.1	22.5	22.5	75.2 75.2	5.3	5	4.6	7.3	4	4	-		822129	807581	-	-
					Bottom	7.8 7.8	0.1	124 133	26.7 26.7	26.7	8.1 8.1	8.1	23.9 23.9		64.5 64.6	3 4.5 4.5		13.7 13.6	_	6 5	-	-				-	-
					Surface	1.0	0.0	341 348	29.2 29.2	29.2	8.1 8.1	8.1	20.7		107.8 107.3	6 7.4		5.6 5.8	-	4	+	-				-	-
SR4A	Fine	Calm	16:17	9.6	Middle	4.8	0.1	57 58	25.6 25.6	25.6	8.0 8.0	8.0	29.0	27.0	62.3 62.3 62.3	4.4	5.9	10.7	9.6	4	5	-		817180	807796	<u> </u>	· .
					Bottom	8.6	0.2	68	25.2	25.2	8.0	8.0	28.8		61.7 61	, 4.3	12	12.4		5 4	ł	-				-	-
						8.6	0.2	69 292	25.2 29.3		8.0 8.2	-	28.8		61.8	4.3		12.4 5.3		6		-				-	-
					Surface	1.0	0.1	318	29.3	29.3	8.2		21.3	21.3	116.2 116.	3 7.9		5.3		5	1	-				-	-
SR5A	Fine	Calm	16:35	3.7	Middle	-	-	-	-	-	-		-		-	-		-	5.4	-	6	-		816569	810699	· ·	-
					Bottom	2.7	0.0	288 300	29.3 29.3	29.3	8.1 8.1	8.1	21.7	21.7	112.6 112.6	6 7.7		5.6 5.6	_	6 7	-	-				-	-
					Surface	1.0	0.1	28 29	28.6 28.6	28.6	8.1 8.1		23.2		98.9 98.6 98.6	3 <u>6.7</u> 6.7		10.4 10.5		11 12		-				-	-
SR6A	Fine	Calm	17:10	4.1	Middle	-	-	-	-		-		-			-	6.7	-	11.2	-	11	-	1.	817957	814718	-	
					Bottom	- 3.1	- 0.1	- 206	27.0	27.0	- 8.0		25.0		67.7 67.4	4.7		12.0		11	t	-	1			-	-
						3.1	0.1	222 61	27.0 28.3		8.0 8.2	-	25.0		67.9	4.7		12.0 1.8		10 5		-				-	
					Surface	1.0	0.7	66 14	28.2	28.3	8.2 8.1	8.2	21.3	21.3	102.0	1 7.1	6.5	1.8		4	1		1			-	-
SR7	Cloudy	Moderate	16:50	16.4	Middle	8.2	0.2	14	27.5	27.5	8.1	8.1	23.7		85.0	5.9	1	2.3	2.1	5	4		1 -	823638	823740	-	-
					Bottom	15.4 15.4	0.2	55 56	25.3 25.3	25.3	8.1 8.1	8.1	27.9 27.9	27.9	70.5 70.0	5.0		2.3 2.3	-	3		-				-	-
					Surface	1.0 1.0	-	-	28.5 28.5	28.5	8.1 8.1		21.5 21.5		84.4 84.1 84.3	3 <u>5.8</u> 5.8		9.4 10.1		4 5	-	-				-	
SR8	Cloudy	Moderate	15:43	4.9	Middle	-		-	-		-	1.	-	-		-	5.8	-	11.4	-	5	-	1.	820380	811611		
	, i				Bottom	- 3.9	-	-	- 28.2	28.2	- 8.1		- 21.7		- 84.0 84.	- 5.8		- 13.0		-	1	-				-	
DA: Depth-Aver					Bollom	3.9	-	-	28.2	20.2	8.1	0.	21.7	21.7	84.2 04.	5.8	5.8	13.3		5		-					-

Expansion of Hong Kong International Airport into a Three-Runway System Water Quality Monitoring Water Quality Monitoring Results on 25 July 20 during during Mid-Flood Tide

Monitoring	Veather						Current																					
Olevite a	Cauloi	Sea	Sampling	Water	Sampling Dep	oth (m)	Current Speed	Current	Water Te	mperature (°C)		рН	Sali	nity (ppt)		aturation (%)	Dissolv Oxyge		Turbidity(1	NTU) S	uspende (mg/	d Solids 'L)	Total Al (ppi		Coordinate HK Grid	Coordinate HK Grid	Chrom (µg/l	
Station Co	Condition	Condition	Time	Depth (m)			(m/s)	Direction	Value	Average	Value	Averag	le Value	Average	Value	Average	Value	DA	Value	DA	/alue	DA	Value	DA	(Northing)	(Easting)	Value	DA Value DA
					Surface	1.0	0.5	40 41	26.8 26.8	26.8	8.0 8.0	8.0	23.3 23.3	23.3	75.2 75.1	75.2	5.3 5.3	5.0	8.0 8.0		8 7		87 86				<0.2 <0.2	0.9
C1	Fine	Moderate	10:19	9.0	Middle	4.5 4.5	0.4	29 29	25.6 25.6	25.6	8.0 8.0	8.0	26.9 26.9	26.9	66.4 66.4	66.4	4.7		9.7 9.6	10.3	7 6	6	88 88	89	815601	804237	<0.2	<0.2 0.9 0.9
					Bottom	8.0 8.0	0.6	33 35	25.1 25.1	25.1	8.0 8.0	8.0	29.0 29.0	29.0	63.1 63.1	63.1	4.4	4.4	13.4 13.4		5 4		91 91				<0.2 <0.2	0.8
					Surface	1.0	0.3	350 354	27.8	27.8	8.0 8.0	8.0	19.0 19.0	19.0	71.9 71.9	71.9	5.1 5.1	4.9	3.2 3.1 4.3		5		86 85				<0.2 <0.2	1.2 1.2
C2 C	Cloudy	Moderate	10:32	12.3	Middle	6.2 6.2 11.3	0.4 0.4 0.4	28 28 346	26.7 26.6 26.2	26.7	8.0 8.0 8.0	8.0	22.6 22.6 25.0	22.6	65.7 65.4 59.4	65.6	4.6 4.6 4.2		4.3 4.3 10.2	5.9	4 5 6	5	88 87 90	88	825662	806965	<0.2 <0.2 <0.2	<0.2 1.2 1.3
					Bottom	11.3 11.3 1.0	0.4	359 241	26.2 27.5	26.2	8.0		25.0	25.0	59.6 75.6	59.5	4.2	4.2	10.2		6		90 90 86				<0.2	1.4
					Surface	1.0	0.3	250	27.4	27.5	8.1	8.1	21.7	21.6	75.5	75.6	5.2	5.1	2.2		2 3		85 89				<0.2	1.3
C3 C	Cloudy	Moderate	08:49	11.8	Middle	5.9 10.8	0.4	260	27.1 25.5	27.1	8.1 8.1	8.1	22.9	22.9	68.6 67.5	68.9	4.8	_	2.7	5.6	4 5	4	88 91	88	822117	817804	<0.2	<0.2 1.3 1.3 1.3 1.3 1.3
					Bottom	10.8 1.0	0.4	269 356	25.5 28.8	25.5	8.1 8.1	8.1	26.9 20.2	26.9	67.8 95.1	67.7	4.8	4.8	11.8 4.1		6 5		90 87				<0.2 <0.2	1.3
IM1	Fine	Moderate	10:38	5.4	Surface	1.0	0.2	328	28.8	28.8	8.1 -	8.1	20.2	20.2	95.0 -	95.1	6.6 -	6.6	4.2	7.6	4	5	88 -	89	817956	807142	<0.2	<0.2 - 0.9
IIVIT	FILE	Woderate	10.36	5.4	Bottom	- 4.4	- 0.2	- 243	- 26.8	26.9	- 8.0	8.0	- 25.7	25.6	- 72.9	72.9	- 5.0	5.0	- 11.2	/.0	- 5	5	- 90	05	817950	007142	- <0.2	1.0
					Surface	4.4	0.2	257 22	26.9 27.9	27.9	8.0 8.0		25.6 21.1		72.9 84.8	84.8	5.0	J.U	10.9 3.9		4		89 85				<0.2 <0.2	0.9
IM2	Fine	Moderate	10:46	7.7	Middle	1.0	0.5	22 356	27.9 27.5	27.5	8.0 8.0	8.0	21.1	23.3	84.8 81.8	81.8	5.7	5.8	3.9 5.4	7.2	4 5	4	85 88	88	818161	806185	<0.2 <0.2	<0.2 1.0 1.0
					Bottom	3.9 6.7 6.7	0.4 0.3 0.3	328 304 311	27.5 26.5 26.6	26.6	8.0 8.0 8.0		23.4 25.9 25.9	25.9	81.7 70.2 70.5	70.4	5.7 4.9 4.9	4.9	5.4 12.3 12.4		4 4 5		87 90 90				<0.2 <0.2 <0.2	0.9 1.0 1.0
					Surface	1.0	0.5	0	27.8	27.8	8.0 8.0	8.0	21.0	21.0	83.8 83.7	83.8	5.9	-	4.1	-	4 4		85 85				<0.2 <0.2	1.0
IM3	Fine	Moderate	10:53	8.0	Middle	4.0	0.4	334 344	26.9 26.9	26.9	8.0 8.0	8.0	24.7	24.7	72.8	72.8	5.1	5.5	7.6	8.9	4 4	4	88 87	87	818789	805598	-0.2	<0.2 1.1 1.1
					Bottom	7.0 7.0	0.4	294 297	26.3 26.3	26.3	8.0 8.0		26.4 26.4	26.4	67.8 67.8	67.8	4.7	4.7	15.0 15.0		3 4		90 89				<0.2 <0.2	1.1
					Surface	1.0	0.9	3 3	28.0 28.0	28.0	8.0 8.0	8.0	19.8 19.7	19.7	89.1 89.1	89.1	6.3 6.3	5.6	4.0 4.0		3 4		85 85				<0.2 <0.2	1.2
IM4	Fine	Moderate	11:02	8.9	Middle	4.5 4.5	0.8	337 340	26.6 26.6	26.6	8.0 8.0	8.0	25.5 25.6	25.5	69.2 69.1	69.2	4.8	0.0	6.7 6.8	7.5	4	4	87 88	87	819740	804583	<0.2 <0.2	<0.2 1.2 1.2
					Bottom	7.9 7.9 1.0	0.5 0.6 1.1	341 345 10	26.4 26.4	26.4	8.0 8.0	8.0	26.1 26.1 21.8	26.1	68.1 68.1	68.1	4./	4.7	11.9 11.7 6.4		4 5 4		90 89 85				<0.2 <0.2 <0.2	1.2 1.1 0.9
					Surface	1.0	1.1	10	27.7 27.7 27.1	27.7	8.0 8.0 8.0	8.0	21.8	21.8	85.0 85.1 75.0	85.1	5.9 5.9 5.2	5.6	6.4 6.4 8.7		4 3 5		85 87				<0.2 <0.2 <0.2	0.9
IM5	Fine	Moderate	11:08	8.1	Middle	4.1	0.9	5	27.1	27.1	8.0 8.0	8.0	24.3	24.3	75.0	75.0	5.2	_	8.6 13.0	9.3	6 7	5	87 90	87	820737	804855	<0.2	<0.2 1.0 1.0
					Bottom	7.1	0.6	19 157	26.7	26.7	8.0 8.0	8.0	25.2	25.2 18.9	72.3	72.3 95.3	5.0	5.0	13.0 3.9		6 9		89 84				<0.2	1.0
IM6	Fine	Moderate	11:14	8.2	Middle	1.0 4.1	0.2	171 79	28.9 27.9	28.9	8.0 8.0	0.0	18.9	22.6	95.3 89.6	95.3 89.7	66	6.4	4.0 8.6	8.2	10 10	10	85 88	87	821077	805826	<0.2 <0.2	1.0
INIO	T IIIC	Woderate	11.14	0.2	Bottom	4.1 7.2	0.2	81 69	28.0 27.8	27.8	8.0 8.1	8.1	22.6 23.1	23.1	89.7 89.4	89.4	6.2 6.2	6.2 -	8.5 11.9	0.2	11 10	10	88 89	07	021011	000020	<0.2 <0.2	1.1
					Surface	7.2	0.2	69 237	27.8 28.8	28.8	8.1	8.0	23.1	18.8	89.4 89.0	89.1	6.2	_	12.4 3.7		11 8		90 85				<0.2	1.1
IM7	Fine	Moderate	11:21	9.3	Middle	1.0 4.7 4.7	0.3 0.2 0.2	254 209 221	28.8 28.1 28.1	28.1	8.0 8.0 8.0		18.8 21.1 21.1	21.1	89.1 86.9 86.9	86.9	6.2 6.0 6.0	6.1	3.7 4.8 4.8	5.8	8 8 7	7	84 87 88	87	821353	806846	<0.2 <0.2 <0.2	<0.2 1.1 1.1
					Bottom	4.7 8.3 8.3	0.2	141 153	28.1 26.9 26.9	26.9	8.0 8.0 8.0	8.0	21.1 25.0 25.0	25.0	76.4 76.4	76.4	5.2	5.3	4.8 9.2 8.8	F	7 7 6		88 89 90				<0.2 <0.2 <0.2	1.1 1.1 1.2
					Surface	1.0	0.2	232	28.6	28.6	8.1 8.1	8.1	17.2	17.2	84.8 84.6	84.7	6.0		3.4		3 4		86 87				<0.2	1.4
IM8 C	Cloudy	Moderate	10:08	7.6	Middle	3.8	0.1	314 323	28.3 28.3	28.3	8.1 8.1	8.1	18.8	18.9	80.9 80.5	80.7	5.7	5.8	3.3 3.5	3.8	4 5	5	89 90	89	821840	808130	<0.2	<0.2 1.2 1.3
DA: Dopth Average					Bottom	6.6 6.6	0.1 0.1	296 313	28.1 28.2	28.2	8.1 8.1	8.1	19.6 19.5	19.6	79.2 79.4	79.3	5.6 5.6	5.6	4.5 4.6		6 6		90 91				<0.2 <0.2	1.2 1.4

Expansion of Hong Kong International Airport into a Three-Runway System Water Quality Monitoring Water Quality Monitoring Results on 25 July 20 during during Mid-Flood Tide

Water Qual	ity Monit	oring Resu	lts on		25 July 20	during Mid-	Flood Tio	le																		
Monitoring Station	Weather	Sea	Sampling	Water	Sampling Dep	oth (m)	Current Speed	Current Direction	Water Te	mperature (°C)		pН	Salin	ity (ppt)	DO Sa	aturation (%)	Dissolved Oxygen	Turbidity	NTU)	Suspende (mg/		Total Alkalinit (ppm)	Coordinate HK Grid	Coordinate HK Grid	Chromium (µg/L)	Nickel (µg/L)
Station	Condition	Condition	Time	Depth (m)			(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value DA	Value	DA	Value	DA	Value DA	(Northing)	(Easting)	Value DA	Value DA
					Surface	1.0	0.2	246 249	28.2 28.1	28.2	8.1 8.1	8.1	19.5 19.5	19.5	78.0 79.2	78.6	5.5	7.9 7.5		6	-	86 86			<0.2	1.3
IM9	Cloudy	Moderate	10:03	7.6	Middle	3.8	0.3	245	27.8	27.8	8.0	8.0	20.5	20.5	72.5	72.6	5.1 5.3	7.2	7.5	5	5	88	822075	808813	<0.2	1.5 1.2
	,					3.8 6.6	0.3	267 249	27.8 27.8		8.0 8.1		20.5 20.6		72.6 74.8		5.1	7.0 7.7		4	-	88 90			<0.2	1.3
					Bottom	6.6	0.2	263	27.8	27.8	8.1	8.1	20.6	20.6	75.2	75.0	5.3	7.4		4		90	<u> </u>		<0.2	1.2
					Surface	1.0	0.7	318 326	27.9 27.8	27.9	8.1 8.1	8.1	20.4 20.5	20.4	79.0 78.9	79.0	5.5 5.5 5.4	5.1 5.3		4	F	86 87			<0.2	1.3
IM10	Cloudy	Moderate	09:57	7.4	Middle	3.7 3.7	0.6	331 341	27.7	27.7	8.0 8.0	8.0	20.8	20.8	74.5 74.5	74.5	5.2 5.4	6.3 6.3	7.3	3 4	4	89 88 89	822371	809807	<0.2 <0.2	1.3 1.3
					Bottom	6.4	0.5	324	27.0	27.0	8.0	8.0	23.0	23.0	65.9	65.9	4.6 4.6	10.6		2	E	90			<0.2	1.3
						6.4	0.5	348 309	27.0 27.8		8.0 8.1		23.0		65.9 76.4		4.6	10.6 3.1		4		91 86			<0.2	1.4
					Surface	1.0	1.0	339	27.8	27.8	8.1	8.1	20.7	20.7	76.3	76.4	5.3 5.0	3.5		3	ļ	87			<0.2	1.4
IM11	Cloudy	Moderate	09:46	8.2	Middle	4.1	0.7	312 330	26.9 26.9	26.9	8.1 8.1	8.1	23.2 23.2	23.2	67.0 66.9	67.0	4.7 5.0	8.7 8.8	7.8	4	4	88 88 88	822045	811456	<0.2 <0.2 <0.2	1.3 1.3
					Bottom	7.2	0.4	311 317	26.0 26.0	26.0	8.0 8.0	8.0	25.4 25.4	25.4	62.6 63.0	62.8	4.4 4.4	11.3 11.6		4	F	90 90			<0.2 <0.2	1.2
					Surface	1.0	0.8	277	27.8	27.8	8.1	8.1	20.3	20.3	78.4	78.3	5.5	3.5		4		86			<0.2	1.2
						1.0 4.2	0.8	297 260	27.7 27.1		8.1 8.1		20.3 22.6		78.2 69.0		5.5 4.8 5.2	4.0 7.8		4 5	-	87 87 00			<0.2	1.3
IM12	Cloudy	Moderate	09:39	8.4	Middle	4.2	0.8	276	27.1	27.1	8.1	8.1	22.6	22.6	69.0	69.0	4.8	7.8	7.7	6	5	89 00	821456	812039	<0.2	1.2
					Bottom	7.4	0.4	281 306	26.3 26.3	26.3	8.0 8.0	8.0	25.0 25.0	25.0	60.5 60.5	60.5	4.2 4.2	11.2 11.8		6 6	ŀ	90 90			<0.2	1.3
					Surface	1.0	-	-	28.2 28.2	28.2	8.1 8.1	8.1	19.3 19.3	19.3	82.0 81.9	82.0	5.8 5.7	2.8 2.8		4	ļ		1		-	-
SR1A	Cloudy	Moderate	09:21	4.8	Middle	2.4	-		-		-		-		-		- 5.8	- 2.0	4.3	-	4	· .	819972	812657	· .	
U.I.I.	olouuy	modorato	00.21	1.0		2.4	-		- 27.8		- 8.1		- 21.6		- 72.6		5.1	- 5.7		- 5	·	· ·	0.0012	012001	-	·
					Bottom	3.8	-	-	27.8	27.8	8.1	8.1	21.6	21.6	73.1	72.9	5.1 5.1	5.9		4		-			-	-
					Surface	1.0	0.1	181 198	28.0 28.0	28.0	8.1 8.1	8.1	19.7 19.8	19.7	77.9 77.8	77.9	5.5 5.5 5.5	3.2 3.2		4	E	88 87			<0.2	1.3
SR2	Cloudy	Moderate	09:09	5.2	Middle		-	-	-			-	-	-	-		- 5.5	-	4.3	-	4	- 89	821452	814166	- <0.2	- 1.3
					Bottom	4.2	0.2	162	26.4	26.5	8.1	8.1	24.2	24.1	65.9	66.2	4.6 4.7	5.4		4	Ľ	90			<0.2	1.3
						4.2	0.2	175 303	26.5 28.6		8.1 8.1		24.0 17.0		66.5 83.5	83.4	4.7 ^{4.7} 5.9	5.2 3.1		4		90			<0.2	1.5 -
					Surface	1.0 4.6	0.2	323 292	28.5 28.1	28.6	8.1 8.1	8.1	17.1 18.8	17.0	83.3 76.6		5.9 5.4 5.7	3.1 3.5		5 5	F	-				-
SR3	Cloudy	Moderate	10:14	9.2	Middle	4.6	0.3	316	28.0	28.1	8.1	8.1	18.9	18.9	76.1	76.4	5.4	3.9	4.7	5	5		822167	807591	· ·	
					Bottom	8.2	0.1	73	27.7 27.8	27.8	8.1 8.1	8.1	21.4 21.3	21.4	73.4 73.7	73.6	5.1 5.1 5.1	7.2		5 5	ŀ	-			-	-
					Surface	1.0	0.2	242 263	28.1 28.1	28.1	8.0 8.0	8.0	22.4 22.4	22.4	83.7 83.6	83.7	5.8 5.8	6.3 6.3		12 12	ĺ				-	-
SR4A	Fine	Calm	09:53	9.6	Middle	4.8	0.0	265	27.6	27.6	8.0	8.0	23.4	23.4	74.1	74.1	5.1 5.5	7.6	8.7	10	11	-	817200	807803	-	· ·
U	1 110	ouin	00.00	0.0		4.8 8.6	0.0	286 70	27.6 26.7		8.0 8.0		23.4 25.7		74.1 66.1		5.1 4.6	7.5 12.0	0.1	11 9		· ·	0.1.200	001000	-	· ·
					Bottom	8.6	0.2	73	26.7	26.7	8.0	8.0	25.7	25.7	66.3	66.2	4.6	12.4		9		-			-	-
					Surface	1.0	0.2	275 278	28.3 28.3	28.3	8.0 8.0	8.0	22.6 22.6	22.6	86.6 86.6	86.6	6.0 6.0 6.0	8.6 8.7		9 10	F	-			-	-
SR5A	Fine	Calm	09:36	3.8	Middle	-	-	-	-	-	•		-	-	-	-	- 0.0	-	9.1	-	10	· ·	816586	810713		
					Bottom	2.8	0.2	282	28.3	28.3	8.0	8.0	22.6	22.6	86.3	86.4	5.9 5.9	9.6		10	ļ	-			-	-
					Surface	2.8	0.2	282 185	28.3 28.4	28.4	8.0 7.9	7.9	22.6 21.5	21.5	86.4 86.0	86.0	5.9 5.9	9.7 4.0		11 5		-			-	-
						1.0	0.0	190	28.4	20.4	7.9	7.9	21.5	21.5	86.0	00.0	5.9 5.9	4.0		4	F	-			-	-
SR6A	Fine	Calm	09:08	4.3	Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	5.1	-	5		817961	814735	· ·	
					Bottom	3.3 3.3	0.1	234 257	28.2 28.2	28.2	7.9	7.9	22.3 22.3	22.3	80.4 80.4	80.4	5.5 5.5 5.5	6.1 6.2		5 5	-	-			-	-
					Surface	1.0	0.0	116	27.2	27.2	8.0	8.0	21.4	21.4	77.0	76.9	5.4	2.1		4		-			-	
SR7	Cloudy	Moderate	08:20	16.7	Middle	1.0 8.4	0.0	123 184	27.1 26.6	26.6	8.0 8.0	8.0	21.4 24.3	24.3	76.7 68.9	68.9	5.4 4.8 5.1	2.1 1.9	2.3	4 4	5	· .	823614	823755	-	-
U.V.	Cioudy	Moderale	00.20	10.7		8.4 15.7	0.1	201 76	26.6 25.4		8.0 7.9		24.2 27.2		68.9 65.2		4.8 4.6	1.9 3.0	2.0	5 5	Ĭ	· ·	023014	020700	\vdash	
					Bottom	15.7	0.1	80	25.5	25.5	7.8	7.8	27.2	27.2	65.6	65.4	4.6 4.6	3.0		5		-			-	
					Surface	1.0	-	-	28.0 27.9	28.0	8.1 8.1	8.1	20.2 20.2	20.2	76.6 76.5	76.6	5.4 5.4 5.4	4.2 4.7		4 3	ŀ	-			-	
SR8	Cloudy	Moderate	09:31	5.0	Middle		-	-	-	-	-	-	-	-	-	-	- 0.4	-	6.3	-	5		820396	811606		
					Bottom	4.0	-	-	27.3	27.3	8.1	8.1	22.3	22.2	69.8	69.8	4.9 4.9	8.3		6	E	-			-	-
L					bollom	4.0	-	-	27.3	27.0	8.1	0.1	22.2		69.8	00.0	4.9 4.9	8.0		5		-	1			-

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

Water Qual	ity wonite	oring Resu	its on		28 July 20	during Mid-																			
Monitoring Station	Weather	Sea	Sampling	Water	Sampling Dept	h (m)	Current Speed	Current Direction	Water Te	emperature (°C)		pН	Salinity (ppt)	DO	Saturation (%)	Dissolved Oxygen	Turbidity	(NTU)	Suspende (mg	ed Solids g/L)	Total Alk (ppn	n) í	Coordinate HK Grid	Coordinate HK Grid	Chromium (µg/L) Nickel (µg/L)
Station	Condition	Condition	Time	Depth (m)			(m/s)		Value	Average	Value	Averag				Value DA	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)	Value DA Value DA
					Surface	1.0	0.4	238 239	28.3 28.3	28.3	8.2 8.2	8.2	21.0 21.0	99.3 99.0		6.9 6.9	4.5		7 6	1	83 84				<0.2 1.2 <0.2 1.2
C1	Fine	Moderate	07:28	8.6	Middle	4.3	0.4	209	26.1	26.1	8.0 8.0	8.0	26.9 26.9 26.9	70.1		4.9 5.9 4.9	6.8 6.9	6.3	7	7	87 88	88	815607	804225	<0.2 <0.2 1.2 1.2 <0.2
					Bottom	4.3 7.6	0.4	213 216	26.1 24.4	24.4	7.9	7.9	31.1 31.1	57.0	57.1	4.0 4.0	7.3		6 7	1	92				<0.2 1.2
						7.6	0.4	217	24.4 28.5		7.9 8.0		31.1	57.2 93.1		4.0 4.0 6.6	7.3		7	<u> </u>	93 85				<0.2 1.2 <0.2 1.4
					Surface	1.0	0.8	188	28.5	28.5	8.0	8.0	17.0	92.5	92.0	6.5 6.0	2.9		6	‡ '	86				<0.2 1.4
C2	Cloudy	Moderate	08:14	10.7	Middle	5.4 5.4	0.6	169 172	27.3 27.2	27.3	7.9 7.9	7.9	23.2 23.2 23.2	77.4 77.4		5.4 5.4	2.9 3.0	2.9	8 7	7	87 89	88	825667	806933	<0.2 <0.2 1.6 1.5 <0.2
					Bottom	9.7 9.7	0.5	173	26.3 26.3	26.3	7.9	7.9	25.4 25.4	71.1		5.0 5.0	2.9	-	8	+ '	90 91				<0.2 1.6 <0.2 1.6
					Surface	1.0	0.4	95	27.4	27.4	8.0	8.0	22.4 22.4	95.4	05.2	6.7	1.9		7	-	86				<0.2 1.5
C3	Cloudy	Moderate	06:14	12.6	Middle	1.0 6.3	0.5	98 31	27.4 25.7	25.7	8.0 8.0	8.0	22.4 26.7 26.7	94.9 82.1		6.6 5.8 6.2	1.9 1.6	2.1	8	8	85 88	88	822114	817822	<0.2 1.6 <0.2 <0.2 1.5 1.5
03	Cloudy	wouerate	00.14	12.0		6.3 11.6	0.1	32 288	25.7 24.6		8.0 8.0		26.8	81.9 74.5		5.8 5.3 5.0	1.6 2.8	2.1	7		89 90	00	022114	01/022	<0.2 <0.2 1.5 1.5 <0.2 1.5 <0.2 1.5 <0.2 1.5 <0.2 <0.2 1.5 <0.2 <0.2 <0.2 <0.2 <0.2 <0.2 <0.2 <0.2
					Bottom	11.6	0.1	291	24.6	24.6	8.0	8.0	29.4 29.4	74.8	/4./	5.3 5.3	2.8	-	9		90				<0.2 1.5
					Surface	1.0 1.0	0.0	245 258	26.1 25.9	26.0	8.0 8.0	8.0	26.2 26.3 26.3	73.2		5.1 5.1 5.1	6.8 6.9		5 6	1	84 85				<0.2 1.2 <0.2 1.1
IM1	Fine	Calm	07:48	4.5	Middle	-	-	-	•	-	-		· ·	-		- 5.1	-	7.6	•	6	-	86	817939	807149	- <0.2 - 1.2
					Bottom	3.5	0.0	61	25.2	25.2	7.9	7.9	29.5 29.5	64.1		4.5 4.5	8.4		6	1	88				<0.2 1.2
					Surface	3.5 1.0	0.0	64 146	25.2 27.2	27.3	7.9 8.0	8.0	29.5 29.5 23.6 23.6 23.6	64.4 81.2		4.5 4.5 5.7	8.5 5.8		5 7	<u> </u>	88 84				<0.2 1.3 <0.2 1.2
						1.0	0.3	157 123	27.3 24.9		8.0 7.9		23.6	80.9 57.9		5.6 4.1 4.9	6.0 7.1		6 6	- I	84 87				<0.2 1.2 <0.2 1.2
IM2	Fine	Moderate	07:56	6.7	Middle	3.4	0.1	123	24.9	24.9	7.9	7.9	29.9 29.9	58.1	58.0	4.1	7.1	7.2	7	6	88	88	818150	806183	<0.2 <0.2 1.2 1.2
					Bottom	5.7 5.7	0.1	340 313	24.8 24.8	24.8	7.9 7.9	7.9	30.4 30.3 30.3	58.9 59.0		4.1 4.1 4.1	8.7 8.7	-	5 6	1	92 92				<0.2 1.3 <0.2 1.2
					Surface	1.0 1.0	0.2	210 213	28.2 28.2	28.2	8.2 8.2	8.2	20.8 20.8	98.9 98.5		6.9 6.9	5.1 5.2	-	6 7		83 84				<0.2 1.3 <0.2 1.3
IM3	Fine	Moderate	08:02	7.0	Middle	3.5	0.2	153	24.8	24.8	7.9	7.9	30.1 20.1	54.9	54.0	3.8 5.4	6.6	6.4	6	6	88	88	818782	805613	<0.2 .0.2 1.3 1.2
					Bottom	3.5 6.0	0.2	156 66	24.8 24.6	24.6	7.9 7.9	7.9	30.2 30.8 30.8	54.8 56.0	56.1	3.8 3.9 3.9	6.7 7.5		7 5		88 91				<0.2 <0.2 1.3 1.3 <0.2 1.4
						6.0 1.0	0.0	68 215	24.6 27.9		7.9 8.0		30.8	56.2 92.9		3.9 3.5 6.4	7.5		4	<u> </u>	91 84				<0.2 1.3 <0.2 1.4
					Surface	1.0	0.9	219	27.9	27.9	8.0	8.0	22.0 21.9	92.7	92.0	6.4 6.2	6.1		5	‡ '	84				<0.2 1.2
IM4	Fine	Moderate	08:11	8.0	Middle	4.0 4.0	0.7	205 208	27.4 27.4	27.4	8.0 8.0	8.0	23.3 23.4 23.4	85.2 85.1		5.9 5.9	7.7 7.8	7.4	5 6	6	89 89	88	819733	804624	<0.2 <0.2 1.3 1.3 <0.2 1.3 1.3
					Bottom	7.0	0.6	199 212	27.0 27.1	27.1	8.0 8.0	8.0	24.4 24.4	79.7		5.5 5.6 5.6	8.4 8.3		6	- I	91 91				<0.2 1.3 <0.2 1.2
					Surface	1.0	0.7	216	28.7	28.7	8.2	8.2	18.0 18.0	108.0	107.0	7.6	4.1		7	-	84				<0.2 1.2
IM5	Fine	Moderate	08:20	7.6	Middle	1.0 3.8	0.7	231 220	28.6 28.1	28.1	8.2 8.1	8.1	18.0 20.9 20.9 20.9	107.8		7.6 6.7 7.2	4.2 6.0	5.7	7	6	84 87	88	820753	804872	<0.2 1.2 <0.2 <0.2 1.3 1.3
11415	T IIIC	Woderate	00.20	7.0		3.8 6.6	0.7	233	28.0 27.7		8.1 8.1		20.9	95.9 87.9		6.7 6.1 o.4	6.2 6.9	5.7	5		87 92	00	020733	004072	<0.2 <0.2 1.4 1.3 <0.2 1.3
					Bottom	6.6	0.5	221	27.7	27.7	8.1	8.1	22.5 22.6	88.0	88.0	6.1 6.1	7.0		5	<u> </u>	93				<0.2 1.2
					Surface	1.0 1.0	0.5	236 241	28.1 28.0	28.1	8.1 8.1	8.1	21.7 21.8 21.8	97.9 97.4		6.8 6.8 6.5	5.7 6.0		5 4	1	84 85				<0.2 1.2 <0.2 1.1
IM6	Fine	Moderate	08:28	6.9	Middle	3.5 3.5	0.5	230 245	27.8 27.8	27.8	8.0 8.0	8.0	22.3 22.4	88.5		6.1 0.5 6.1	7.2	6.9	5	6	87 89	88	821059	805831	<0.2 <0.2 1.1 1.2 <0.2
					Bottom	5.9	0.4	235	27.8	27.8	8.0	8.0	22.6 22.6	88.1	00 /	6.1 6.1	7.8		6	‡ '	91				<0.2 1.2
					Surface	5.9 1.0	0.5	255 241	27.8 28.5	28.5	8.0 8.1	8.1	22.6 22.0 20.8 20.8	88.7 101.3		6.1 0.1 7.0	7.5 4.3		7 8	<u> </u>	92 84				<0.2 1.4 <0.2 1.2
						1.0 4.1	0.4	260 232	28.5 27.9		8.1 8.0		20.8	101.1 88.8	2	7.0 6.1 6.6	4.3 6.4	F	9 8	+ . '	85 88				<0.2 1.3 <0.2 0.0 1.3 1.0
IM7	Fine	Moderate	08:37	8.1	Middle	4.1	0.3	249	27.9	27.9	8.0	8.0	22.6	88.8	00.0	6.1	6.7	6.2	8	8	89	88	821359	806829	<0.2 <0.2 1.2
					Bottom	7.1	0.2	261 274	27.9 27.9	27.9	8.0 8.0	8.0	22.7 22.7 22.7	89.0 89.1		6.2 6.2 6.2	7.9 7.8		7 7		92 92				<0.2 1.2 <0.2 1.2
					Surface	1.0 1.0	0.1	206 222	28.1 28.0	28.1	8.0 8.0	8.0	20.0 20.1	94.4		6.6	3.0 3.0		11 10		87 86				<0.2 1.4 <0.2 1.5
IM8	Cloudy	Moderate	07:47	7.4	Middle	3.7	0.3	145	27.6	27.6	8.0	8.0	21.3 21.4	86.1	96.0	6.0 6.3	4.8	5.1	8	9	88	88	821824	808138	<0.2 .0.2 1.6 1.5
						3.7 6.4	0.3	154 169	27.6 27.5		8.0 8.0		21.4	85.8 85.1		6.0 5.9	5.1 7.3		8		88 90				<0.2 1.7 <0.2 1.5
DA: Denth-Aver					Bottom	6.4	0.2	176	27.5	27.5	8.0	8.0	21.9 21.9	85.2	85.2	6.0 6.0	7.3		7		90				<0.2 1.4

DA: Depth-Averaged

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

Name Na	Water Qual	ity Monite	oring Resu	Its on		28 July 20	during Mid-	Ebb Tide	9																				
		Weather	Sea	Sampling	Water	Sampling Der	oth (m)			Water Te	mperature (°C)		pН	Sali	nity (ppt)					Turbidity(NTU)								Nickel (µg/L
	Station	Condition	Condition	Time	Depth (m)						Average		e Avera	•	Average		Average		DA		DA		DA		DA				
						Surface					28.2		8.0		19.6		96.8		0.5										
111 <th< td=""><td>IM9</td><td>Cloudy</td><td>Moderate</td><td>07:41</td><td>7.2</td><td>Middle</td><td>3.6</td><td>0.3</td><td>126</td><td>27.7</td><td>27.7</td><td>8.0</td><td>8.0</td><td>21.4</td><td>21.4</td><td>88.1</td><td>88.1</td><td>6.2</td><td>6.5</td><td>6.0</td><td>5.2</td><td>8</td><td>8</td><td>88</td><td>88</td><td>822099</td><td>808824</td><td><0.2</td><td>1.7</td></th<>	IM9	Cloudy	Moderate	07:41	7.2	Middle	3.6	0.3	126	27.7	27.7	8.0	8.0	21.4	21.4	88.1	88.1	6.2	6.5	6.0	5.2	8	8	88	88	822099	808824	<0.2	1.7
						Bottom	6.2	0.2	106	27.7	27.7	8.0	8.0	21.6	21.6	88.4	88.5	6.2	6.2	7.2		9		90				<0.2	1.7
1 1													-	21.6			100.0	7.0		2.0		12						<0.2	1.6
Image Image <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>-</td> <td>18.9</td> <td></td> <td></td> <td></td> <td></td> <td>6.8</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td><0.2</td> <td>1.5</td>													-	18.9					6.8									<0.2	1.5
111 <th< td=""><td>IM10</td><td>Cloudy</td><td>Moderate</td><td>07:33</td><td>6.4</td><td>Middle</td><td>3.2</td><td>0.5</td><td></td><td>27.9</td><td></td><td>8.0</td><td>0.0</td><td>20.7</td><td></td><td>94.0</td><td></td><td>6.6</td><td></td><td>2.8</td><td>2.7</td><td>9</td><td>10</td><td>88</td><td>88</td><td>822380</td><td>809790</td><td><0.2</td><td>1.5</td></th<>	IM10	Cloudy	Moderate	07:33	6.4	Middle	3.2	0.5		27.9		8.0	0.0	20.7		94.0		6.6		2.8	2.7	9	10	88	88	822380	809790	<0.2	1.5
<td></td> <td></td> <td></td> <td></td> <td></td> <td>Bottom</td> <td>5.4</td> <td>0.5</td> <td>93</td> <td>27.8</td> <td>27.8</td> <td>8.0</td> <td></td> <td>21.1</td> <td></td> <td>93.4</td> <td>93.5</td> <td>6.5</td> <td>6.5</td> <td>3.3</td> <td></td> <td>8</td> <td></td> <td>90</td> <td></td> <td></td> <td></td> <td><0.2</td> <td>1.5</td>						Bottom	5.4	0.5	93	27.8	27.8	8.0		21.1		93.4	93.5	6.5	6.5	3.3		8		90				<0.2	1.5
1 1 1 1 3 0 0 0 0 <td></td> <td></td> <td></td> <td></td> <td></td> <td>Surface</td> <td></td> <td></td> <td></td> <td></td> <td>28.3</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>102.6</td> <td></td> <td>7.4</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1.6</td>						Surface					28.3						102.6		7.4										1.6
	IM11	Cloudy	Moderate	07:19	7.0	Middle					28.2						98.8		7.1	1.9	3.9		6		88	822033	811477	<0.2	1.4 1.6
						Bottom	6.0	0.2	131	27.3	27.3	8.0	• • •	22.7		84.9	84.9	5.9	5.9	7.7		5		89				<0.2	1.8
						Surface					29.4		1	10.1	10.1		07.5												
Image Image <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>-</td><td>19.1</td><td></td><td></td><td></td><td></td><td>6.4</td><td></td><td></td><td></td><td>_</td><td></td><td></td><td></td><td></td><td>-0.2</td><td>16</td></th<>													-	19.1					6.4				_					-0.2	16
Image: Field image:	IM12	Cloudy	Moderate	07:11	9.4	Middle	4.7	0.4	98	27.5	27.6	8.0	8.0	21.5	21.5	86.1	86.2	6.0		4.6	4.2	8	7	89	88	821441	812039	<0.2	1.4
Bar and bar						Bottom	8.4			26.6	26.7	7.9	7.9	24.4	24.3	79.7	81.5	5.6	5.7	5.6		6		90					1.5
Set bit Set bit						Surface		-	-		28.3				19.5		96.3							-				-	
1 1 1 1 4 4 4 4 7 7 7 7 <td>SR1A</td> <td>Cloudy</td> <td>Moderate</td> <td>06:54</td> <td>5.2</td> <td>Middle</td> <td></td> <td></td> <td></td> <td>-</td> <td>-</td> <td>-</td> <td></td> <td>-</td> <td></td> <td>-</td> <td>-</td> <td>-</td> <td>6.7</td> <td></td> <td>2.5</td> <td>-</td> <td>6</td> <td></td> <td></td> <td>819978</td> <td>812656</td> <td>· ·</td> <td></td>	SR1A	Cloudy	Moderate	06:54	5.2	Middle				-	-	-		-		-	-	-	6.7		2.5	-	6			819978	812656	· ·	
Normal Normal Surface Surface <thsurface< th=""> <thsurface< th=""> <thsur< td=""><td></td><td></td><td></td><td></td><td></td><td>Bottom</td><td>4.2</td><td>-</td><td>-</td><td></td><td>27.7</td><td></td><td></td><td></td><td>21.4</td><td></td><td>92.6</td><td></td><td>6.5</td><td>2.7</td><td></td><td>6</td><td></td><td>-</td><td></td><td></td><td></td><td>-</td><td>-</td></thsur<></thsurface<></thsurface<>						Bottom	4.2	-	-		27.7				21.4		92.6		6.5	2.7		6		-				-	-
						Surface					28.4		-	21.4	10.4	97.2	07.2	6.8						-					1.7
SR2 Clud Moderne 64.1 4.5 Moderne 3.5 0.4 7.4												8.1		19.4	13.4	97.1	51.2	6.8	6.8									-	
Note: Note: Note: Note: Note: Note: State State <td>SR2</td> <td>Cloudy</td> <td>Moderate</td> <td>06:41</td> <td>4.5</td> <td>Middle</td> <td>-</td> <td></td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td></td> <td>-</td> <td></td> <td>-</td> <td>-</td> <td>-</td> <td></td> <td>-</td> <td>5.8</td> <td>-</td> <td>7</td> <td></td> <td>89</td> <td>821459</td> <td>814186</td> <td>-</td> <td>- 1.8</td>	SR2	Cloudy	Moderate	06:41	4.5	Middle	-		-	-	-	-		-		-	-	-		-	5.8	-	7		89	821459	814186	-	- 1.8
Red Additional 10 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td>Bottom</td> <td>3.5</td> <td>0.2</td> <td>89</td> <td>27.9</td> <td>27.9</td> <td>8.1</td> <td>8.1</td> <td>20.9</td> <td>20.9</td> <td>95.8</td> <td>95.8</td> <td>6.7</td> <td>6.7</td> <td>9.0</td> <td></td> <td>5</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						Bottom	3.5	0.2	89	27.9	27.9	8.1	8.1	20.9	20.9	95.8	95.8	6.7	6.7	9.0		5							
Red Mode 4.3 0.3 1.77 27.7 4.0 0.7 <						Surface					28.4				18.9		97.7		0.5					-				-	-
Image: black bl	SR3	Cloudy	Moderate	07:52	8.6	Middle					27.7				20.8		88.0		0.5		5.8		6		-	822165	807582		
SRA Fne Calm Or Suface 1.0 0.2 2.4<						Bottom	7.6	0.2	192	27.4	27.4	8.0	8.0	22.4	22.4	82.5	82.7	5.8	5.8	9.8		7		-				-	-
RAM Fine						Surface	1.0	0.2	237	28.4	28.4	8.1	81	22.4	20.4	93.5		6.5		6.1		6		-				-	-
NAA Find Calm 0.708 9.70 9.70 7.8 7.8 <													_	20.4					5.3				_					-	
ind ind <td>SR4A</td> <td>Fine</td> <td>Calm</td> <td>07:08</td> <td>9.0</td> <td></td> <td>4.5</td> <td>0.2</td> <td>71</td> <td></td> <td></td> <td>7.9</td> <td>7.9</td> <td>29.5</td> <td>29.5</td> <td>57.1</td> <td></td> <td>4.0</td> <td></td> <td>7.6</td> <td>7.3</td> <td></td> <td>6</td> <td>-</td> <td>-</td> <td>817172</td> <td>807811</td> <td><u> </u></td> <td></td>	SR4A	Fine	Calm	07:08	9.0		4.5	0.2	71			7.9	7.9	29.5	29.5	57.1		4.0		7.6	7.3		6	-	-	817172	807811	<u> </u>	
SR5 Fne Calm Osc.2 Asta Sumace 10 0 200 200 200 200 1000 1000 70 70 70 <th< td=""><td></td><td></td><td></td><td></td><td></td><td>Bottom</td><td>8.0</td><td>0.2</td><td>85</td><td>24.9</td><td>24.9</td><td>7.9</td><td>7.9</td><td>30.1</td><td>30.1</td><td>56.8</td><td>56.7</td><td>4.0</td><td>4.0</td><td>8.2</td><td></td><td>5</td><td></td><td></td><td></td><td></td><td></td><td>-</td><td>-</td></th<>						Bottom	8.0	0.2	85	24.9	24.9	7.9	7.9	30.1	30.1	56.8	56.7	4.0	4.0	8.2		5						-	-
SRA Fine Calm 06:52 3.5 Midel -						Surface					28.8				20.5		102.3		7 1					-				-	
Image: brain	SR5A	Fine	Calm	06:52	3.5	Middle	-	-	-	•	-	-				-		-	7.1		8.2		7	-		816594	810710		
SR6A Fine Surface 1.0 0.1 333 28.6 28.6 8.0 21.8 21.8 11.31 11.32 7.8						Bottom					28.8				20.6		101.0		7.0				ļ.	-				-	-
SR6A Fine Calm 05:7 4.3 Middle 1 0 0 0444 26.6 7 10.2 10.3 7.8<						Surface	1.0	0.1	333	28.6	28.6	8.0	8.0	21.8		113.1	113.2	7.8		6.4		7		-				-	
Image: brance	SDEA	Fino	Colm	05:57	4.2									21.8		- 113.2			7.8		70		7	-		917051	914760	-	
Image: cond bit in the image: cond bit in the	SKOA	Fille	Calm	05.57	4.5							- 79	_	22.2		- 107.8	-	- 74			1.0		<i>'</i>		-	017951	614760		
SR7 Cloudy Moderate 05:33 16.4 Surface 1.0 0.5 7.1 26.4 20.4 20.4 24.9						Bottom	3.3	0.1	10	28.5	28.5	7.9	7.9	22.2	22.2	108.0	107.9	7.4	7.4	9.0		6		-				-	-
SR7 Cloudy Moderate 05:33 16.4 Middle 8.2 0.1 312 25.0 7.9 7.9 28.6 7.8 7.4 7.4 7.2 7.4 7.2 7.4 7.2 7.4 7.2 7.4 7.2 7.4<						Surface	1.0	0.5	71	26.4	26.4	8.0	8.0	24.9	24.9	90.2	90.2	6.3	5.8	1.8		5	ł	-	1			-	-
SR8 Or.04 O	SR7	Cloudy	Moderate	05:33	16.4	Middle					25.0						74.0				2.0		4	-	-	823621	823739		
$ SR8 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$						Bottom	15.4			23.8	23.8	7.8	7.0	30.7		63.3	63.4	4.5	4.5	2.5		4	I	-				-	-
$ SR8 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$						Surface	1.0		-	28.4	28.4	8.1	8.1	18.2		96.6	96.5	6.8		2.3		11		-					
Bottom 3.7 - 28.7 8.1 8.1 18.9 95.7 6.7 6.7 3.4 12 -	SR8	Cloudy	Moderate	07:04	47			-	-	28.4		8.1		- 18.2		96.4		6.8 -	6.8		29	10 -	11	-	1.	820394	811609		
Bottom 3.7 28.7 28.7 8.1 8.1 18.9 95.7 95.7 6.7 5.7 5.7 3.4 12	GILO	Cloudy	Moderate	07.04	<i>i</i>		3.7			- 28.7	-	- 8.1		- 18.9	40.5	- 95.7	05.7	6.7	0-		2.5		+ ''			520554	011009		
	DA: Depth-Aver	aged				Bottom		-	-		28.7				18.9		95.7		6.7				İ	-	1			-	

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

Water Qua	lity Monite	oring Resu	ults on		28 July 20	during Mid-	Flood Ti	de																				
Monitoring	Weather	Sea	Sampling	Water	Sampling Dep	th (m)	Current Speed	Current	Water Te	emperature (°C)		pН	Sali	nity (ppt)	DOS	aturation (%)	Dissolv Oxyge		Turbidity(I	NTU) Su	spendeo (mg/l	l Solids _)	Total A (pp	lkalinity om)	Coordinate HK Grid	Coordinate HK Grid	Chrom (µg/	
Station	Condition	Condition	Time	Depth (m)			(m/s)	Direction	Value	Average	Value	Averaç		Average	Value	Average		DA	Value	DA	alue	DA	Value	DA	(Northing)	(Easting)		DA Value D
					Surface	1.0 1.0 4.1	0.3 0.3 0.5	17 18 47	29.4 29.4 27.2	29.4	8.2 8.2 8.1	8.2	16.9 16.8 23.9	16.8	118.1 118.0 84.8		8.2 8.2 5.9	7.1	4.1 4.2 5.5	_	6 6 5		84 86 88				<0.2 <0.2 <0.2	1.0 1.1
C1	Sunny	Moderate	12:54	8.2	Middle	4.1	0.5	47	27.2 25.3	27.2	8.1 8.0	8.1	23.9	23.9	84.5 63.7	84.7	5.9		5.5 6.8	5.5	6 5	5	90 92	89	815615	804268	<0.2	<0.2 1.2 1.
					Bottom	7.2	0.4	48	25.4 29.5	25.4	8.0 8.0	8.0	29.2	29.2	63.8 108.1	63.8	4.4	4.4	7.0		4		93 86				<0.2	1.3
C2	Sunny	Moderate	11:47	11.0	Surface	1.0	0.5	200 203	29.5 26.6	29.5 26.6	8.0 7.8	8.0 7.8	14.3	14.4 24.3	107.6 71.3	107.9 71.1	7.6 5.0	6.3	2.6 2.9	24 E	3 3		88 89	89	825684	806934	<0.2	1.8
02	Guility	Moderate	11.47	11.0	Bottom	5.5	0.3	217 227	26.6 26.2	26.2	7.8	7.8	24.4	25.5	70.9	70.1	5.0 4.9	4.9	2.9 4.8		4		88 90		020004	000334	<0.2 <0.2	1.6
					Surface	10.0 1.0 1.0	0.1 0.4 0.4	237 261 268	26.2 27.8 27.8	27.8	7.8 8.1 8.1	8.1	25.5 21.8 21.8	21.8	70.2 122.4 122.4	122.4	4.9 8.5 8.5		4.7 2.0 2.0		4 8 7	-	90 87 86	-			<0.2 <0.2 <0.2	1.5 1.6 1.6
C3	Sunny	Moderate	13:31	11.8	Middle	5.9	0.4	255 280	24.9 24.8	24.9	7.9 7.9	7.9	20.2	28.4	73.4	73.2	5.2 5.2	6.9	3.1 3.5	3.9	6 7	7	89 89	89	822124	817813	<0.2 <0.2 <0.2	<0.2 1.6 1.
					Bottom	10.8 10.8	0.5 0.5	272 285	24.2 24.2	24.2	7.9 7.9	7.9	29.9	29.9	66.7 67.2	67.0	4.8	4.8	6.3 6.5		6 6	-	90 90				<0.2 <0.2	1.5 1.6
					Surface	1.0	0.2	5 5	29.1 29.1	29.1	8.3 8.3	8.3	20.7 20.7	20.7	135.9 135.6	135.8	9.3 9.3	9.3	5.7 5.9		2		83 84				<0.2 <0.2	1.0 0.9
IM1	Sunny	Moderate	12:32	4.6	Middle	- 3.6	- 0.1	- 343	- 26.6	-	- 8.1		- 27.2		- 90.6		- 6.2		- 6.8	6.3	- 5	4	- 88	86	817927	807131	<0.2	<0.2 - 1.
					Bottom	3.6	0.1	316 340	26.7 28.3	26.7 28.3	8.1 8.2	8.1 8.2	27.2	27.2	91.5 116.8	91.1 116.6	6.3 8.1	6.3	6.7 5.9		4 8		89 83				<0.2 <0.2	1.0
IM2	Sunny	Moderate	12:25	6.6	Middle	1.0	0.5	313 350	28.3 26.6	26.6	8.2 8.1	8.1	21.7	25.7	116.3 84.3	84.2	8.0 5.9 5.8	7.0	6.2 7.7	7.5	9 6	7	84 88	88	818141	806182	<0.2	<0.2 1.0 1.
					Bottom	3.3 5.6 5.6	0.5 0.2 0.2	322 345 354	26.6 25.1 25.1	25.1	8.1 8.0 8.0	8.0	25.7 29.8 29.8	29.8	84.0 61.7 61.9	61.8	4.2	4.3	7.5 8.8 9.0		7 5 4	-	88 91 91				<0.2 <0.2 <0.2	1.0
					Surface	1.0 1.0	0.6 0.6	333 335	27.7 27.6	27.7	8.2 8.2	8.2	23.Z	23.1	123.7 121.5	122.6	8.6 8.4	6.8	5.1 5.0		6 5	ŀ	83 83				<0.2 <0.2	1.0 1.0
IM3	Sunny	Moderate	12:17	6.9	Middle	3.5 3.5 5.9	0.4 0.4 0.3	330 304 285	25.6 25.6 24.9	25.6	8.0 8.0 8.0	8.0	28.3 28.4 30.1	28.3	72.3 72.1 59.7	72.2	5.0 5.0 4.2		7.5 7.5 8.7	7.1	6 7 8	7	88 88 92	88	818783	805586	<0.2 <0.2 <0.2	<0.2 1.0 1.
					Bottom	5.9	0.3	295 313	24.9 24.9 27.8	24.9	8.0 8.3	8.0	30.1	30.1	59.9 120.4	59.8	4.2 8.3	4.2	8.5		8		93 83				<0.2	1.0
IM4	Sunny	Moderate	12:07	7.6	Middle	1.0 3.8	0.4 0.5	332 308	27.8 26.5	27.8	8.3 8.1	8.3	22.9 27.6	22.9 26.8	120.1 79.5	120.3 80.3	8.3 5.5	6.9	5.7 5.8	6.0	5 6	6	83 88	87	819711	804586	<0.2 <0.2	1.3
					Bottom	3.8 6.6 6.6	0.5 0.3 0.4	319 333 306	26.5 25.0 25.0	25.0	8.1 8.0 8.0	8.0	26.0	29.9	81.0 61.3 61.7	61.5	5.6 4.3 4.3	4.3	5.8 6.6 6.7		5 8 7		88 91 91				<0.2 <0.2 <0.2	<0.2 <u>1.2</u> 1. <u>1.3</u> 1.5
					Surface	1.0	0.4	295	28.6	28.6	8.2 8.2	8.2	10.2	18.4	116.5 116.2		8.2		5.3 5.6		4 3	-	84 85				<0.2 <0.2 <0.2	1.0
IM5	Sunny	Moderate	12:00	7.1	Middle	3.6 3.6	0.4 0.4	345 356	27.8 27.8	27.8	8.2 8.2	8.2	23.0	22.9	107.8 107.6	107.7	7.5 7.4	7.8	6.3 6.2	6.5	4 4	4	87 87	88	820748	804868	<0.2 <0.2	<0.2 1.0 1.
					Bottom	6.1 6.1 1.0	0.3 0.3 0.6	21 22 276	25.6 25.7 29.1	25.7	8.0 8.0 8.1	1	20.4	28.4	68.7 68.9 107.3	68.8	4.8 4.8 7.5	4.8	7.9 7.7 4.4		5 4 3		92 92 84				<0.2 <0.2 <0.2	1.0 0.9 1.0
					Surface	1.0	0.6	300	29.1 29.1 28.7	29.1	8.1 8.1	8.1	17.8	17.8	107.2	107.3	75	7.4	4.4 4.5 5.9	_ F	3 2		85 88				<0.2 <0.2 <0.2	1.0
IM6	Sunny	Moderate	11:54	7.0	Bottom	3.5 6.0	0.5 0.2	316 298	28.6 28.3	28.7 28.3	8.1 8.0	8.1 8.0	18.3	18.3 21.2	104.5 92.8	104.7 92.8	7.3 6.4	6.4	5.6 6.1	5.4	3 4	3	90 92	89	821076	805819	<0.2 <0.2	<0.2 0.9 1.
					Surface	6.0 1.0 1.0	0.2 0.4 0.5	315 240 256	28.3 29.0 29.0	29.0	8.0 8.1 8.1	8.1	21.3 17.8 17.8		92.7 103.0 102.8	102.9	6.4 7.2 7.2		6.2 3.9 4.0		4 4 4		92 84 84				<0.2 <0.2 <0.2	1.0 1.0 1.0
IM7	Sunny	Moderate	11:47	8.0	Middle	4.0	0.3	250 252 271	29.0 28.6 28.5	28.6	8.1 8.1	8.1	19.4	18.4	102.8 101.4 101.2	101.3	7.1	7.2	4.0 4.7 4.8	4.9	4 4 4	4	88 88	88	821354	806856	<0.2 <0.2 <0.2	<0.2 0.9 1.
					Bottom	7.0 7.0	0.3 0.4	256 262	28.4 28.4	28.4	8.1 8.1	8.1	21.2	21.2	92.2 92.6	92.4	6.4	6.4	5.7 6.0		3 4		91 92				<0.2 <0.2	1.0
					Surface	1.0 1.0 3.4	0.2 0.2 0.2	200 209 228	30.0 30.0 29.2	30.0	8.1 8.1 8.1	8.1	15.6 15.6 16.9	15.6	111.3 111.1 114.5		7.7 7.7 8.0	7.9	1.9 2.0 5.9		3 3 3	ŀ	85 87 89				<0.2 <0.2 <0.2	1.4 1.5 1.5
IM8	Sunny	Moderate	12:09	6.7	Middle	3.4 3.4 5.7	0.2 0.2 0.1	238 235	29.2 29.1 28.9	29.2	8.1 8.0	8.1	17.0 17.4	16.9	114.5 114.4 109.0		8.0 7.6	76	5.9 5.9 10.2	6.2	4	3	88 90	88	821840	808139	<0.2 <0.2	<0.2 1.4 1.
DA: Dopth Aug					Bottom	5.7	0.1	236	28.9	28.9	8.0	8.0	17.5	17.5	108.7	108.9	7.6	7.6	11.1		3		90	1			<0.2	1.4

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

Water Qual	ity Monit	oring Resu	lts on		28 July 20	during Mid-	Flood Ti	de																		
Monitoring	Weather	Sea	Sampling	Water	Sampling Dept	h (m)	Current Speed	Current	Water Te	mperature (°C)		pН	Salir	nity (ppt)		aturation %)	Dissolved Oxygen	Turbidity(NTU) Sus	ended S (mg/L)	olids	Total Alkalinity (ppm)	Coordinate HK Grid	Coordinate HK Grid	Chromiu (µg/L)	
Station	Condition	Condition	Time	Depth (m)		()	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value DA	Value	DA Va	ue	DA	Value DA	(Northing)	(Easting)	Value	DA Value DA
					Surface	1.0	0.1	284 306	29.9 29.9	29.9	8.1 8.1	8.1	16.2 16.1	16.1	115.0 115.0	115.0	8.0	2.3			-	86 86			<0.2	1.4
IM9	Sunny	Moderate	12:15	6.6	Middle	3.3	0.1	331	28.9	28.9	8.1 8.1	8.1	17.5	17.5	109.4	109.2	7.7 7.8	2.7	2.0		4	88 00	822086	808812	<0.2	.0.2 1.4 1.4
	-				Bottom	3.3 5.6	0.1	350 292	28.4	28.4	8.0	8.0	19.1	19.1	96.5	96.6	6.8 6.8	3.3				89 90			<0.2	1.4
						5.6	0.2	318 315	28.4 29.0		8.0 8.1		19.1 17.7		96.7 117.2		6.8 0.8 8.2	3.3 2.4			[90 86			<0.2	1.5
					Surface	1.0	0.2	325	29.0	29.0	8.1	8.1	17.9	17.8	116.9	117.1	8.2 7.8	2.4				86			<0.2	1.4
IM10	Sunny	Moderate	12:21	6.6	Middle	3.3 3.3	0.3	301 302	28.5 28.5	28.5	8.0 8.0	8.0	18.8 18.8	18.8	105.0 105.1	105.1	7.3	3.3 3.3			3	88 88 89	822381	809803	<0.2 <	0.2 1.4 1.4
					Bottom	5.6 5.6	0.3	295 306	28.0 28.0	28.0	7.9 7.9	7.9	20.4	20.4	91.1 91.2	91.2	6.4 6.4	6.3 6.3		<u>i</u>	F	90 90			<0.2 <0.2	1.4
					Surface	1.0	0.4	293	28.7	28.7	8.1	8.1	18.6	18.6	115.2	114.9	8.0	2.6		1	-	86			<0.2	1.3
IM11	Cupper	Moderate	12:32	7.2	Middle	1.0 3.6	0.4	295 298	28.6 28.0	28.0	8.1 7.9	7.9	18.6 20.8		114.5 92.0		8.0 6.4 7.2	2.7 5.5				87 88 88	822064	811476	<0.2 <0.2	<0.2 1.4 1.4 1.4
INTT	Sunny	woderate	12.32	1.2		3.6 6.2	0.5	322 299	28.0 26.6		7.9 7.9		20.8 24.6	20.8	91.1 80.8	91.6	6.4 5.7	5.8 8.1		i i	4	89 90	622064	011470	<0.2 <0.2	1.4
					Bottom	6.2	0.4	311	26.6	26.6	7.9	7.9	24.7	24.6	81.2	81.0	5.7 5.7	8.2				90			<0.2	1.4
					Surface	1.0	0.4	308 320	28.9 28.8	28.9	8.2 8.2	8.2	18.1 18.1	18.1	125.5 125.2	125.4	8.8 8.7 8.4	2.7 2.9			-	87 87			<0.2 <0.2	1.5 1.4
IM12	Sunny	Moderate	12:38	8.3	Middle	4.2	0.7	295 300	28.4 28.4	28.4	8.2 8.2	8.2	20.9	20.9	116.4 113.9	115.2	8.1 ^{0.4} 7.9	7.4 7.4			4	88 89	821467	812040	<0.2 <	<0.2 1.5 1.5
					Bottom	7.3	0.4	307	25.9	25.9	7.9	7.9	26.1	26.1	71.9	71.8	5.0 5.0	11.2		i	ļ	90			<0.2	1.4
					Surface	7.3	0.4	319 -	25.9 29.1	29.1	7.9 8.2	8.2	26.2 18.5	18.5	71.7 136.8	136.8	5.0 5.0 9.5	11.4 2.2				90			<0.2	-
						1.0	-	-	29.1		8.2	0.2	18.5	10.0	136.7	130.0	9.5 9.5	2.3		-	.	-			-	-
SR1A	Sunny	Moderate	12:55	4.9	Middle	2.5 3.9	-	-	- 28.8	-	- 8.2		- 19.9	-	-	•	- 8.7 0.0	- 3.0		_	4	· ·	819974	812659	-	· · ·
					Bottom	3.9		-	29.0	28.9	8.2	8.2	19.9	19.9	126.5 121.9	124.2	8.4 8.6	3.0				-			-	-
					Surface	1.0	0.4	4	28.5 28.5	28.5	8.2 8.2	8.2	20.5	20.5	121.8 119.6	120.7	8.4	5.8 6.3			-	88 89			<0.2	1.4
SR2	Sunny	Moderate	13:08	4.2	Middle	-	-	-	-	-	-	-	-	-	-	-	- 8.4	-			4	- 89	821448	814152	· .	<0.2 - 1.5
					Bottom	3.2	0.3	17	26.8	26.8	8.0	8.0	24.1	24.1	89.6	89.7	6.3 6.3	9.4		1	ļ	90			<0.2	1.5
					Surface	3.2	0.3	18 183	26.7 28.8	28.8	8.0 8.0	8.0	24.2 15.5	15.5	89.8 102.2	102.3	6.3 0.3 7.2	9.5 2.0		k k		90			<0.2	1.5
						1.0 4.3	0.4	193 207	28.8 28.4		8.0 8.0		15.6 18.4		102.4 97.0		7.3 6.8 7.0	2.0 3.0		1	F	-			-	
SR3	Sunny	Moderate	12:04	8.5	Middle	4.3	0.2	218	28.3	28.4	8.0	8.0	18.3	18.4	96.5	96.8	6.8	3.1	3.3	!	3		822157	807568	-	-
					Bottom	7.5 7.5	0.3	239 260	28.2 28.3	28.3	8.0 8.0	8.0	19.6 19.6	19.6	94.8 94.8	94.8	6.6 6.6	4.8 5.1		i i	-	-			-	-
					Surface	1.0	0.1	254 266	29.4 29.3	29.4	8.3 8.3	8.3	20.9 21.0	21.0	135.2 135.0	135.1	9.2	7.8 7.8		i		-			-	-
SR4A	Sunny	Calm	13:13	8.9	Middle	4.5 4.5	0.2	278 279	28.8 28.8	28.8	8.2 8.2	8.2	21.6 21.6	21.6	114.5 114.4	114.5	7.8 8.5 7.8	7.5 7.6	• 4	i	7		817211	807793	-	
					Bottom	7.9	0.2	274	26.3	26.3	8.0	8.0	27.4	27.4	71.5	71.7	5.0 5.0	10.0		1		-			-	-
						7.9	0.2	292 254	26.3 29.3		8.0 8.3		27.5 21.5		71.8 143.0		5.0 9.7	9.8 8.4		D 1		-			-	
					Surface	1.0	0.1	259	29.2	29.3	8.3	8.3	21.6	21.5	- 142.2	142.6	9.7 9.7	8.7		2	F	-			-	-
SR5A	Sunny	Calm	13:30	4.2	Middle	-	-	-	-	-	-	· ·	-	-	-	-	-	-	0.9		9	· ·	816597	810684	-	
					Bottom	3.2 3.2	0.1	293 321	29.0 29.0	29.0	8.3 8.3	8.3	21.8 21.8	21.8	128.2 127.9	128.1	8.7 8.7 8.7	9.4 9.2		i i		-			-	-
					Surface	1.0	0.1	292 318	29.4 29.4	29.4	8.4 8.4	8.4	20.6	20.6	165.9 165.9	165.9	11.3	5.4 5.5		-	-	-			-	-
SR6A	Sunny	Calm	14:11	4.1	Middle	-	-	-	•	-	-		-	-	-		- 11.3	-	e 0		8	· .	817974	814732	-	
					Bottom	3.1	0.1	328	29.2	29.2	8.3	8.3	21.3	21.3	- 151.5	151.1	10.3 10.3	8.0		i		-			-	-
						3.1	0.1	341 336	29.2 26.5		8.3 8.1		21.3 25.4		150.6 110.3		10.3 7.7	8.2 1.9				-			-	-
					Surface	1.0 8.2	0.2	339 51	26.5 25.0	26.5	8.1 7.9	8.1	25.4 28.0	25.4	110.2 73.8	110.3	7.7 5.2 6.5	2.0 2.2		k 1	F	-			E.	-
SR7	Sunny	Moderate	14:06	16.4	Middle	8.2	0.1	55	25.1	25.1	7.9	7.9	27.9	28.0	73.8	73.8	5.2	2.2	2.1		4	-	823659	823756		· · ·
					Bottom	15.4 15.4	0.2	72 73	23.5 23.5	23.5	7.9 7.9	7.9	31.2 31.2	31.2	64.8 65.2	65.0	4.6 4.6	4.0				-			-	-
					Surface	1.0 1.0	-	-	29.5 29.5	29.5	8.2 8.2	8.2	18.3 18.3	18.3	120.7 120.5	120.6	8.3 8.3	3.5 3.6		;	F	-			-	-
SR8	Sunny	Moderate	12:46	4.7	Middle	-	-	-	-	-	-		-	-	-		- 8.3	-		<u> </u>	6		820381	811644	-	
					Bottom	3.7	-	-	- 27.9	27.9	- 8.0	8.0	- 21.2	21.2	- 99.1	99.2	- 6.9 6.9	- 5.6		;	ŀ	-			-	· · ·
DA: Dopth Aver	<u> </u>				Dottom	3.7	-	-	27.9	21.3	8.0	3.0	21.2	21.2	99.3	JJ.2	6.9 0.9	5.6		1		-				

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

Name Name <th< th=""><th></th></th<>	
Landard Candor Tra Quelt N Tra Quelt N Solution Condor Solution Solution </td <td></td>	
Image: Final state Made: A A A A A A A A A A A A B B A A B	
C1 Fine Moderate 00:0 9.0 Mode 4.5 0.4 0.5 0.0 0.7 1.1 1.1 0.1 0.2 0.2 1.1 0.1 0.2 0.2 1.1 0.2	2 0.8
C2 Court A Case Cas	2 <0.2 0.8 0.6
Res Res Suffice 10 10 178 283 0.4 10.4<	2 0.9
C2 Cloudy Moderate 10.46 11.4 Mode 57 0.8 101 28.3 23.3 63.0 27.2 71 80.0 70 65.5 75.5 77	2 0.9
L L L Boltom 10.4 0.4 10.4 0.4 0.4 0.5 0.7 7.2	2 <0.2 1.0 0.8
C3 Cbudy Moderate 0.2 10 0.4 0.9 27.3 10.0 0.2 27.3 10.0 0.2 27.3 10.0 0.2 27.3 10.0	2 1.0
C3 Cduay Moderate 0e3.2 12.8 Moderate 0e3.2 12.8 Moderate 0e3.2 12.8 Moderate 0e3.2 12.8 Moderate 0e3.2 11.8 0.2 21.4 24.4 21.4 24.4 21.3 31.3 <t< td=""><td>2 0.8</td></t<>	2 0.8
Image: bolic	2 <0.2 0.7 0.6
M1 Fine Moderate 09.28 5.3 1.0 0.2 27.4 28.2 8.0 6.0 28.6 5.8 3.6 <	2 0.7
M1 Fne Moderate 0.928 5.3 Midele 1	2 0.6
Image: bolic	<0.2 - 0.7
Made Moderate 09:36 7.1 Surface 10 0.2 124 26.8 8.1 7.1 24.2 7.6 9.6 6.7 5.4 2.6 5.4 2.6 5.4 2.6 5.4 2.6 5.4 2.6 5.4 2.6 5.4 2.6 5.4 2.6 5.4 2.6 5.4 2.6 5.4 2.6 5.4 2.6 5.3 5.4 2.6 5.3 5.4 2.6 5.3 5.4 2.6 5.3 5.4 2.6 5.3 5.5 4.0 4.0 4.2 4.3	2 0.6
M2 Fine Moderate 09:30 7.1 Middle 36 0.2 131 24.6 7.9 7.9 29.0 6.0 6.0 5.2 5.4 6 90 91 91 <	2 0.7
Image: bolic	2 <0.2 0.7 0.7
Mag Fine Moderate 09:43 7.3 Surface 10 0.2 22.0 27.0 27.0 8.2 23.4 23.4 105.4 105.6 7.4 5.7 3.0 9.2 9.3 6.6 8.9 9.0 9.2 9.3 5.7 3.0 9.2 9.3 5.7 9.3	2 0.6
IM3 Fine Moderate 09/43 7.3 Middle 3.7 0.3 173 24.7 7.9 7.9 28.0 28.0	2 0.7
Image: Fine Moderate 0.5 Bottom 6.3 0.2 169 24.6 7.9 7.9 29.0 29.0 56.7 60.7 4.0 4.0 10.6 5 90 10 cold cold cold 4.0 4.0 4.0 4.0 4.0 4.0 10.6 5 90 10 cold cold 4.0	2 <0.2 0.8 0.7
Image: Marrow Moderate Op:54 8.3 Surface 1.0 1.0 168 28.4 28.4 8.3 18.9 19.4 12.43 12.4 8.7 8.3 2.1 2.5 6.5 8.8 8.9 8.9 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 2.6 2.1 1.24.3 1.24.3 1.24.3 1.24.3 1.24.4 8.7 8.3 2.1 2.	2 0.8
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	2 0.7
Bottom 7.3 0.6 182 25.0 7.9 7.9 28.2 26.2 62.3 62.4 4.4 10.8 5 90 0 0 0 0 Surface 1.0 0.6 197 27.8 8.2 <td>2 1.0 0.3</td>	2 1.0 0.3
Surrace 1.0 0.6 197 27.8 27.8 8.2 8.2 20.8 20.8 111.6 111.8 7.8 5.0 2.1 3 85	2 0.9
	2 0.8
IM5 Fine Moderate 10:05 7.6 Middle 3.8 0.5 219 26.5 8.0 8.0 24.5 24.5 84.7 84.6 5.9 0.3 3.2 5.2 3 4 89 88 820739 804851 <0 IM5 Fine Moderate 10:05 7.6 Middle 3.8 0.5 229 26.5 8.0 24.5 24.5 84.6 5.9 0.3 3.2 4 89 804851 <0	2 <0.2 1.2
Bottom 6.6 0.8 210 24.7 7.9 7.9 28.7 28.7 55.8 55.9 3.9 10.3 4 90 -0	2 1.0
Surface 1.0 0.4 216 27.8 8.3 8.3 20.9 127.0 126.9 8.9 2.0 3 86 <0 0.0 1.0 0.4 229 27.8 8.3 8.3 20.9 20.9 126.7 126.9 8.9 2.0 3 86 <0	2 0.7
IM6 Fine Moderate 10:14 7.4 Middle 3.7 0.4 225 27.4 8.1 8.1 22.5 103.5 103.5 7.2 0.1 2.3 5.8 4 5 89 89 821070 805843 c0 IM6 Fine Moderate 10:14 7.4 Middle 3.7 0.4 225 27.4 7.2 103.5 103.5 7.2 2.4 5 89 89 821070 805843 c0 c0	2 <0.2 0.9 0.6
Bottom Bot	2 0.9
Surface 1.0 0.1 283 28.6 28.6 8.4 8.4 20.8 20.8 158.4 16.9 1.9 4 86 <0 0.0 1.0 0.1 306 28.6 8.4 8.4 20.8 10.9 10.9 1.9 4 86 0.0 0	2 0.7
IM7 Fine Moderate 10:23 8.6 Middle 4.3 0.2 286 28.5 26.5 8.0 24.7 24.7 81.0 80.9 5.7 3.3 5.2 6 6 89 88 821331 806855 -CO	2 <0.2 0.9 0.6
Bottom 7.6 0.2 235 24.9 7.9 7.9 28.4 28.4 58.2 58.3 4.1 4.1 9.9 6 91 <0 0	2 0.9
Surface 1.0 0.1 194 27.8 8.3 8.3 23.0 22.9 126.9 127.1 8.8 4.0 6 87 c0 c0 1.0 0.1 195 27.8 8.3 8.3 23.0 22.9 127.1 8.8 4.0 6 87 88 40 6 87 80 90 90 127.2 <td>2 0.8</td>	2 0.8
IM8 Cloudy Moderate 10:15 7.7 Middle 3.9 0.1 189 26.6 8.1 8.1 25.9 25.9 83.9 5.8 7.3 5.4 5.7 5 6 90 90 821816 808147 column IM8 Cloudy Moderate 10:15 7.7 Middle 3.9 0.2 203 26.6 8.1 8.1 25.9 25.9 83.8 5.8 5.4 5.7 6 90 90 821816 808147 column	2 <0.2 0.8 0.8
Bottom 6.7 0.1 145 25.6 25.6 8.0 8.0 28.5 28.5 66.0 4.6 7.8 7 91	

DA: Depth-Averaged

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

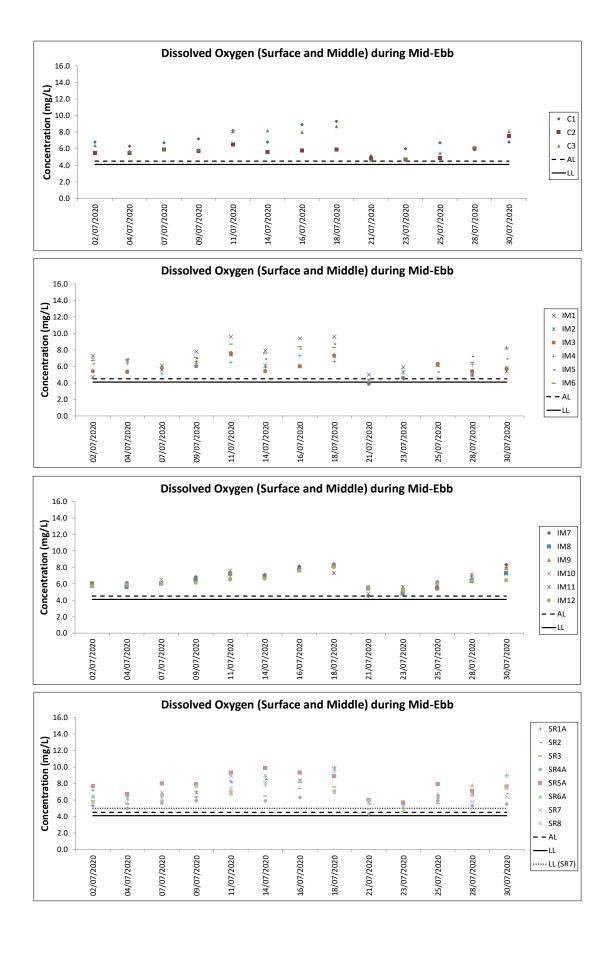
Water Qual	ity Monite	oring Resu	lts on		30 July 20	during Mid-	Ebb lide	9																		
Monitoring	Weather	Sea	Sampling	Water	Sampling De	oth (m)	Current Speed	Current	Water Te	mperature (°C)		pН	Salinity (ppt)	D	O Saturation (%)	Dissolved Oxygen	Turbidity	(NTU)	Suspende (mg			lkalinity om)	Coordinate HK Grid	Coordinate HK Grid	Chromium (µg/L)	Nickel (µg/L)
Station	Condition	Condition	Time	Depth (m)	Sampling De	pui (iii)	(m/s)	Direction	Value	Average	Value	Average	Value Averag	ge Va	alue Average	Value DA	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)	Value DA	Value DA
					Surface	1.0	0.1	76 78	28.2 28.2	28.2	8.4 8.4	8.4	22.1 22.1		1.3 141.2	9.8	3.6 3.6		7		86 86				<0.2 <0.2	1.0
IM9	Cloudy	Moderate	10:09	7.2	Middle	3.6	0.3	122 132	26.7 26.6	26.7	8.0 8.0	8.0	25.7 25.7 25.7	87	7.7 87.7	6.1 7.9 6.1	6.0 6.2	6.0	7	7	90 90	89	822099	808788	<0.2 <0.2	0.0
					Bottom	6.2	0.2	95	26.0	26.0	8.0	8.0	28.1 28.1	70	0.8 71.1	4.9 4.9	8.2		6		91	1			<0.2	1.0
					Surface	6.2	0.2	101 117	26.0 28.1	28.2	8.0 8.3	8.3	28.1 20.1 22.2 22.1	12	4.1 126.6	4.9 4.3	8.1 4.0		7		92 87				<0.2 <0.2	0.9
IM10	Cloudy	Moderate	09:59	7.8	Middle	1.0	0.7	124 112	28.2 26.5	26.5	8.3 8.0		22.1	12	9.0	8.9 5.6 7.2	4.1 6.7	6.4	8	7	87 89	89	822408	809800	<0.2 <0.2 <0.2	1.0 1.0 0.9
INTO	Cloudy	Moderate	09.59	7.0		3.9 6.8	0.7	119 103	26.4 26.2		8.0 8.0	8.0	26.4 20.3	8	5.0 80.9 1.0 5.2 TO 4	5.6	6.8 8.7	0.4	6 5	. '	89 90	09	622406	809800	<0.2	0.9 0.9
					Bottom	6.8	0.5	103 110	26.2 28.4	26.2	8.0 8.3	8.0	27.1 27.1 27.1 21.6 21.0	76	2.3 400.0	5.3 5.3 9.1	8.4		6		91 87				<0.2	0.9
					Surface	1.0	0.6	110	28.4	28.4	8.3	8.3	21.6 21.6	13	2.0 132.2	9.1 9.1	3.6		6		88	1			<0.2	0.9
IM11	Cloudy	Moderate	09:45	7.3	Middle	3.7 3.7	0.6	111 113	27.4 27.5	27.5	8.1 8.2	8.1	23.6 23.5 23.5		0.8 100.9	7.0	5.5 5.9	7.0	6 7	7	89 89	89	822054	811449	<0.2 <0.2 <0.2	0.9 0.9
					Bottom	6.3 6.3	0.5	107 113	26.0 26.0	26.0	8.0 8.0	8.0	27.6 27.6 27.6		7.9 78.1	5.4 5.4 5.4	11.7 11.6		7		91 91	-			<0.2 <0.2	1.0 0.9
					Surface	1.0	0.6	114 122	27.4 27.4	27.4	8.2 8.2	8.2	24.1 24.1 24.1		3.9 3.8 103.9	7.2 7.2	5.0 5.0		5 5		86 86				<0.2 <0.2	0.8
IM12	Cloudy	Moderate	09:37	9.8	Middle	4.9	0.3	104	26.5 26.5	26.5	8.0 8.0	8.0	26.4 26.5 26.4	79	9.7 9.7 9.7	5.5 5.5	7.7	7.2	6	6	88 88	88	821468	812032	<0.2 <0.2 <0.2	0.9 0.9
					Bottom	8.8	0.2	83	25.8	25.8	8.0	8.0	28.1 28.1	75	5.6 75.7	5.3 5.2	9.0		6		89	1			<0.2	0.8
					Surface	8.8	0.2	91	25.8 28.1	28.1	8.0 8.3	8.2	28.1 23.1 22.9 23.0	13	0.5 130.4	5.3 5.3 9.0	9.0 3.8		8		90 -				<0.2	1.0 -
SR1A	01			5.0		1.0	-	-	28.0	-	8.2	0.2	23.1 20.0	13	0.3	9.0 9.0	3.9	4.1	7	7	-		040070	812664	-	-
SRIA	Cloudy	Moderate	09:14	5.2	Middle	2.6 4.2	-	-	- 27.6		- 8.2	-	24.2 24.4	11		- 7.9 7.0	- 4.3	4.1	- 7	<i>'</i>	-	-	819976	812664	-	-
					Bottom	4.2	-	-	27.7	27.7	8.2	8.2	24.1	11	4.3	7.9	4.3		6		-				-	-
					Surface	1.0	0.4	89 91	27.3 27.3	27.3	8.1 8.1	8.1	24.4 24.4 24.4		7.9 98.0	6.8 6.8 6.8	4.4		5 5		86 87				<0.2 <0.2	0.9
SR2	Cloudy	Moderate	08:58	4.8	Middle	-	-	-	-	-	-	-	-			-	-	6.1	-	5	-	88	821447	814172	- <0.2	- 0.9
					Bottom	3.8 3.8	0.2	81 84	27.0 27.0	27.0	8.1 8.1	8.1	25.2 25.2		0.7 0.7 90.7	6.3 6.3	7.7 7.9		5 5		90 90				<0.2 <0.2	0.8
					Surface	1.0	0.3	166 172	28.1 28.1	28.1	8.3 8.3	8.3	22.6 22.6 22.6		6.5 6.3	9.4 9.4 7.6	3.9 3.8		3		-				-	-
SR3	Cloudy	Moderate	10:22	8.8	Middle	4.4	0.2	189	26.8	26.8	8.1 8.1	8.1	25.6 25.6 25.6	84	4.2 3.9 84.1	5.8 5.8 5.8	4.9	7.1	5	5	-	1.	822169	807589		
					Bottom	7.8	0.1	263	25.4	25.4	8.0	8.0	28.9 28.9	60	0.2 60.3	4.2 4.2	12.3		7		-				-	-
					Surface	7.8	0.1	272 7	25.4 27.2	27.2	8.0 8.1	8.1	28.9	10	1.2 100.8	7.1	12.2 4.0		6 4		-				-	-
SR4A	Fine	Calm	08:45	9.7	Middle	1.0	0.0	7 57	27.2 24.9	24.9	8.1 7.8	7.8	23.3 23.3 28.4 28.4	10	0.3 6.7 56.7	7.0 4.0 5.5	4.0 4.8	5.7	4	5	-		817176	807832	-	-
SR4A	Fille	Calm	06.45	9.7		4.9 8.7	0.1	60 48	24.9 24.8		7.8 7.8		28.4	56	0.7	4.0	4.8 8.3	5.7	5 5	5	-		01/1/0	607632	-	
					Bottom	8.7	0.1	49	24.8 28.1	24.8	7.8	7.8	28.7 28.7 28.7 22.5 20.5	56	0.6 440.0	4.0 4.0 4.0 7.6	8.2		5		-				-	-
					Surface	1.0	0.1	93	28.1	28.1	8.1	8.1	22.5 22.5		0.5 110.6	7.6 7.6	4.3		6		-				-	
SR5A	Fine	Calm	08:29	3.8	Middle	-	-	-	-	-	-	-				-	-	4.6	-	6	-	-	816578	810690	-	-
					Bottom	2.8	0.1	295 302	27.8 27.8	27.8	8.1 8.1	8.1	22.7 22.7 22.7		5.2 5.3 105.3	7.3 7.3 7.3	5.0 5.0		6 6		-				-	-
					Surface	1.0	0.1	11 11	27.8 27.7	27.8	8.0 8.0	8.0	22.2 22.3		8.4 108.3	7.5	7.7		6		-				-	-
SR6A	Fine	Calm	08:00	4.3	Middle	-	-	-	-	-	-	-				7.5 7.5	-	9.3	-	6	-	.	817968	814729		
					Bottom	3.3	0.1	213	27.1	27.1	8.0	8.0	23.7 23.7		7.6 97.8	6.8 6.8	10.5		6		-	1			-	-
					Surface	3.3	0.1	214 50	27.1 25.6	25.6	8.0 8.1	8.1	23.7 23.7 28.8 28.8 28.8	95	7.9 57.0 5.2 95.2	6.6	3.4		6 6		-				-	-
SR7	Cloudy	Moderate	07:53	15.8	Middle	1.0 7.9	0.7	50 25	25.6 25.4	25.4	8.1 8.0		28.8	9:	0.2	6.6 6.2 6.4	3.4 3.5	3.6	4	6	-		823659	823725	-	-
SR/	Cioudy	wouerate	07.53	10.0		7.9 14.8	0.5	27 46	25.4 23.8		8.0 7.8	8.0	29.4 29.3	80	88.6 8.5 2.7 70.0	6.2	3.4 3.8	3.0	5 8	0	-	.	023039	023125	-	
					Bottom	14.8	0.7	47	23.7 28.1	23.8	7.8	7.8	32.3 32.3	73	3.2 73.0	5.2 5.2 8.9	3.9		7		-					-
					Surface	1.0	-	-	28.1	28.1	8.2	8.2	22.4 22.4		8.8 8.7	8.9 8.9	4.7		6		-	1			-	-
SR8	Cloudy	Moderate	09:26	5.4	Middle	-	-	-	-	-	-	-				-	-	4.9	-	7	-	-	820369	811622		-
					Bottom	4.4	-	-	27.8 27.8	27.8	8.2 8.2	8.2	23.5 23.5 23.5		3.1 2.9 113.0	7.8 7.8 7.8	5.1 5.1		8 7		-				<u> </u> - -	-
DA: Depth-Aver	hane							-												·						

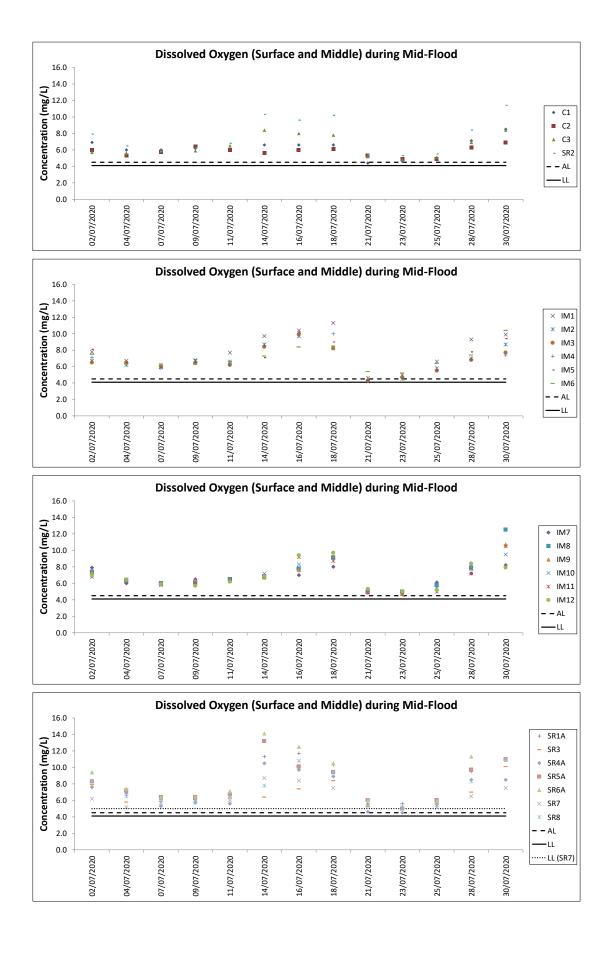
Expansion of Hong Kong International Airport into a Three-Runway System Water Quality Monitoring Water Quality Monitoring Results on 30 July 20 during during Mid-Flood Tide

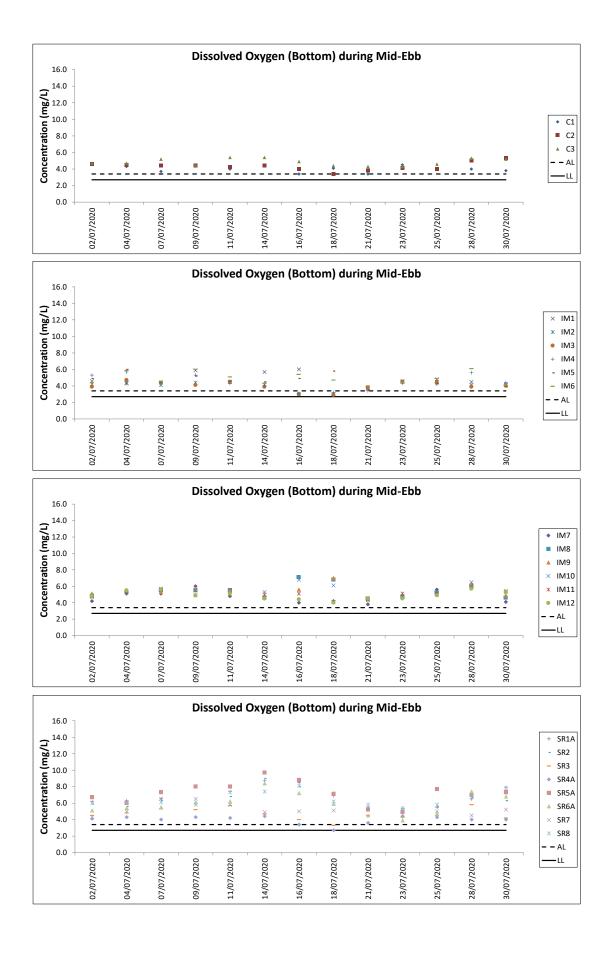
Water Qua	lity Monito	oring Resu	ilts on		30 July 20	during Mid-	Flood Ti	de																				
Monitoring	Weather	Sea	Sampling	Water	Sampling De	oth (m)	Current Speed	Current	Water Te	mperature (°C)		pН	Sali	ity (ppt)		aturation (%)	Dissol Oxyg		Turbidity(NTU) S	uspende (mg/	d Solids 'L)	Total A (pp	lkalinity om)	Coordinate HK Grid	Coordinate HK Grid	Chron (µg/	
Station	Condition	Condition	Time	Depth (m)			(m/s)	Direction	Value	Average	Value	Averag		Average		Average		DA	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)		
					Surface	1.0	0.4	47 50	28.9 28.9	28.9	8.4 8.4	8.4	19.4 19.4	19.4	150.0 149.6	149.8	10.4 10.4	8.5	6.0 5.9	-	11 10		87 87				<0.2 <0.2	0.9
C1	Fine	Moderate	16:27	8.0	Middle	4.0	0.3	47 51	26.6 26.6	26.6	8.1 8.1	8.1	24.5 24.5	24.5	94.0 93.6	93.8	6.6 6.6	0.5	8.7 8.7	9.0	12 11	12	89 89	89	815628	804246	<0.2	<0.2 0.9 0.
					Bottom	7.0 7.0	0.3	41 43	25.1 25.1	25.1	7.9 7.9	7.9	28.1 28.1	28.1	65.1 65.2	65.2	4.6 4.6	4.6	12.2 12.3	F	13 12		92 91	1			<0.2 <0.2	0.9
					Surface	1.0	0.5	227 230	29.4	29.4	8.3 8.2	8.2	16.8 16.8	16.8	117.3 117.3	117.3	8.2 8.1	-	5.3		6		82 83				<0.2	1.4
C2	Fine	Rough	15:10	11.1	Middle	5.6	0.4	289	26.5	26.5	8.1	8.1	26.0	26.0	80.6	80.4	5.6	6.9	4.5	8.1	7	7	86	87	825677	806940	<0.2	1.5 1
					Bottom	5.6	0.4	310 300	26.5 26.1	26.1	8.1 8.1	8.1	26.0 27.5	27.5	80.2 78.7	78.8	5.6 5.5	5.5	4.6		7 8		86 93				<0.2 <0.2	1.5
					Surface	10.1 1.0	0.3	302 257	26.1 27.9	27.9	8.1 8.5		27.5 24.9	24.9	78.9 167.9	167.5	5.5		14.4 3.6		7 10		93 83				<0.2 <0.2	1.5 0.8
C3	Fine	Moderate	17:21	12.2	Middle	1.0 6.1	0.4	270 256	27.9 24.7	24.7	8.5 8.0	8.0	24.9 30.6	30.6	167.0 76.1	76.1	5.3	8.4	3.6 5.0	5.3	10 12	11	84 87	88	822126	817820	<0.2 <0.2	<0.2 0.8 0.
0.5	T IIIC	Woderate	17.21	12.2	Bottom	6.1 11.2	0.6	266 273	24.6 24.4	24.4	8.0 8.0	8.0	30.7 31.3	31.3	76.1 71.8	71.9	5.3 5.0	5.0	5.2 7.0	0.0	11 12		87 92		022120	017020	<0.2 <0.2	<0.2 0.8 0. 0.7
						11.2 1.0	0.3	290 133	24.4 28.1		8.0 8.3		31.3 23.2		71.9 143.8		5.0 9.9	5.0	7.2 4.6		12 10		92 88				<0.2 <0.2	0.7
					Surface	1.0	0.0	143	28.1	28.1	8.3	8.3	23.2	23.2	- 143.4	143.6	9.8	9.9	4.7	F	11		88				<0.2	0.9
IM1	Fine	Moderate	16:06	4.7	Middle	- 3.7	- 0.2	- 267	- 25.9	-	- 8.1	-	- 27.1		- 109.5	· -	- 7.6		- 6.3	5.5	- 9	10	- 90	89	817950	807152	- <0.2	<0.2 0.
					Bottom	3.7	0.2	285	25.8	25.9	8.1 8.4	8.1	27.1	27.1	109.7	109.6	7.7	7.7	6.4 4.1		8		89 87				<0.2	0.9
					Surface	1.0	0.6	10 10 357	28.7 25.8	28.7	8.4 8.0	8.4	20.7	20.7	161.8 89.3	162.0	11.2	8.7	4.1 8.4	F	7 8		86 89				<0.2	0.8
IM2	Fine	Moderate	15:57	6.6	Middle	3.3 5.6	0.3	328	25.8 24.9	25.8	8.0 7.9	8.0	26.7	26.6	88.4 62.6	88.9	6.2 4.4		8.6	8.5	7	8	89 91	89	818154	806157	<0.2 <0.2 <0.2	<0.2 1.0 1.
					Bottom	5.6	0.2	353	24.9	24.9	7.9	7.9	28.7	28.6	63.2	62.9	4.5	4.5	13.0		10		91				<0.2	1.0
					Surface	1.0	0.6	11	28.7 28.7	28.7	8.5 8.5	8.5	20.7	20.7	158.5 157.4	158.0	10.9	7.7	2.8	E	7 7		87 87				<0.2 <0.2	0.9
IM3	Fine	Moderate	15:49	6.5	Middle	3.3 3.3	0.3	349 321	25.1 25.1	25.1	7.9	7.9	28.0 28.1	28.1	64.4 64.2	64.3	4.5 4.5		6.7 6.9	7.1	6 7	7	89 89	89	818790	805574	<0.2 <0.2	<0.2 1.0 0.
					Bottom	5.5 5.5	0.3	309 329	24.8 24.8	24.8	7.9 7.9	7.9	28.8 28.7	28.8	57.9 58.5	58.2	4.1	4.1	11.8 11.9		7 6		91 91				<0.2 <0.2	0.9
					Surface	1.0 1.0	0.7	339 341	27.2 27.2	27.2	8.3 8.3	8.3	24.2 24.2	24.2	132.3 133.2	132.8	9.2 9.2	7.4	3.0 3.0	E	6 7		86 87				<0.2 <0.2	1.0
IM4	Fine	Moderate	15:36	7.8	Middle	3.9 3.9	0.6	355 327	25.4 25.3	25.4	8.0 8.0	8.0	27.5 27.6	27.6	80.3 80.9	80.6	5.6 5.7		3.6 3.6	5.4	7 7	7	89 89	89	819735	804618	<0.2 <0.2	<0.2 0.9 0.
					Bottom	6.8 6.8	0.5	338 359	24.6 24.6	24.6	7.9 7.9	7.9	29.1 29.1	29.1	59.0 59.5	59.3	4.2 4.2	4.2	9.4 9.5	_	8 7		91 90				<0.2 <0.2	0.9
					Surface	1.0	0.4	350 322	28.3 28.3	28.3	8.4 8.4	8.4	21.9 21.9	21.9	149.6 149.6	149.6	10.3 10.3	9.4	4.1 4.2	-	5 6		86 86				<0.2 <0.2	1.0
IM5	Fine	Moderate	15:25	6.9	Middle	3.5 3.5	0.6	354 326	27.1 27.0	27.1	8.2 8.2	8.2	24.8 24.9	24.9	121.8 120.7	121.3	8.4 8.4	5.4	4.6 4.6	5.2	7 8	7	89 89	89	820744	804882	<0.2 <0.2	<0.2 0.9 0.
					Bottom	5.9 5.9	0.4	3	25.6 25.6	25.6	8.0 8.0	8.0	27.5 27.4	27.4	83.2 83.6	83.4	5.8 5.9	5.9	6.8 6.9	F	8		91 91				<0.2 <0.2	0.9
					Surface	1.0	0.5	281 301	29.2 29.2	29.2	8.4 8.4	8.4	17.5	17.4	160.3 160.4	160.4	11.2 11.2		2.8 2.9	-	6 7		86 86				<0.2 <0.2	1.3
IM6	Fine	Moderate	15:18	6.7	Middle	3.4	0.4	284 307	28.3 28.3	28.3	8.3 8.3	8.3	20.7	20.7	137.6 136.9	137.3	9.6 9.5	10.4	5.3 5.3	6.7	5 6	6	89 89	89	821074	805816	<0.2 <0.2	<0.2 1.4 1.
					Bottom	5.7	0.1	66 66	26.2 26.2	26.2	8.1 8.1	8.1	26.6 26.6	26.6	95.0 95.3	95.2	6.6	6.6	12.1 12.0	F	5		91 90				<0.2 <0.2	1.3
	1				Surface	1.0	0.6	264 280	29.5 29.5	29.5	8.3 8.3	8.3	15.5	15.5	138.1 137.8	138.0	9.7	-	2.5	+	7 6		86 86				<0.2 <0.2 <0.2	1.5
IM7	Fine	Moderate	15:12	8.5	Middle	4.3	0.5	268 286	27.4	27.4	8.0 8.0	8.0	21.9	21.9	94.7 94.5	94.6	6.6 6.6	8.2	2.2	5.6	5	6	88 88	88	821327	806828	<0.2 <0.2 <0.2	<0.2 1.5 1.
					Bottom	4.3 7.5 7.5	0.3	200 277 297	27.4 26.3 26.3	26.3	8.0 8.0	8.0	21.9 25.3 25.3	25.3	94.5 79.3 79.9	79.6	5.0	5.6	12.1	þ	5		90				<0.2 <0.2 <0.2	1.4
					Surface	1.0	0.4	291	29.8	29.8	8.6	8.6	20.0	20.0	195.6	195.5	13.3		3.9		7		83				<0.2	1.1
IM8	Fine	Moderate	15:39	7.2	Middle	1.0	0.2	310 276	29.8 28.9	28.9	8.6 8.5	8.5	20.0	21.4	195.3 169.5	169.4	11.6	12.5	4.0	5.8	6 6	6	84 87	88	821822	808149	<0.2 <0.2	<0.2 1.0 1.
					Bottom	3.6 6.2	0.3	301 232	28.8 28.2	28.2	8.5 8.2		21.5 22.4	22.4	169.2 130.2	130.2	11.6 9.0	9.0	6.0 7.6	E	5 5		87 92				<0.2 <0.2	1.0
					Bottom	6.2	0.2	237	28.2	20.2	8.2	0.2	22.4		130.1		9.0	2.0	7.7		5		92				<0.2	1.1

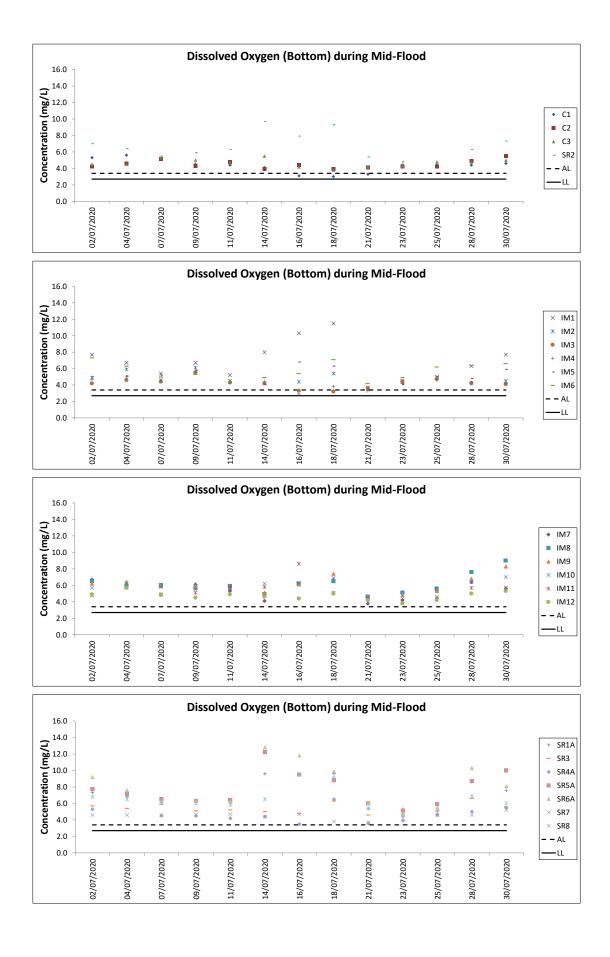
Expansion of Hong Kong International Airport into a Three-Runway System Water Quality Monitoring Water Quality Monitoring Results on 30 July 20 during during Mid-Flood Tide

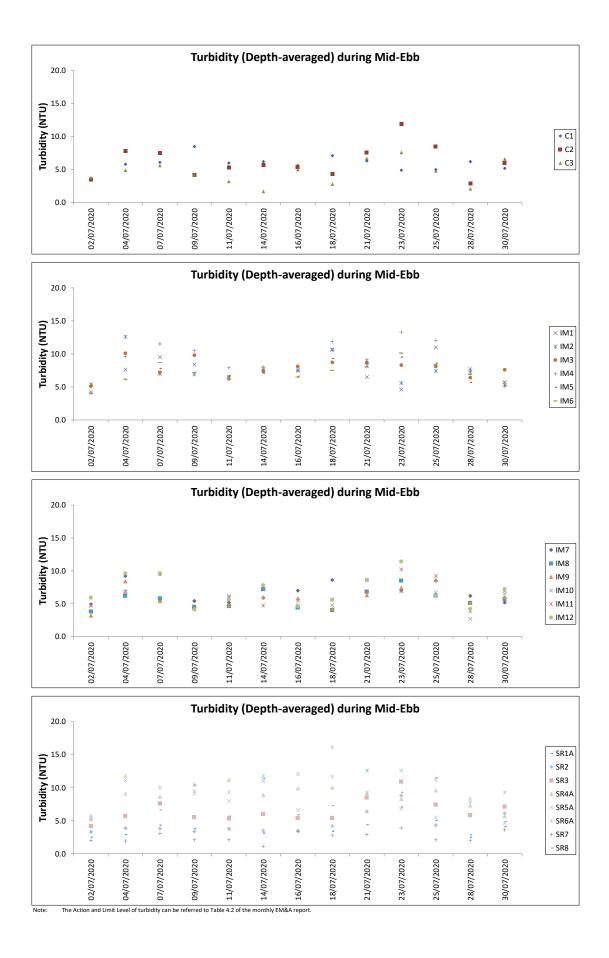
Water Qual	ity Monit	oring Resu	lts on		30 July 20	during Mid-	Flood Tie	de																				
Monitoring Station	Weather	Sea	Sampling	Water	Sampling I	Depth (m)	Current Speed	Current Direction	Water Te	emperature (°C)		рH	Salinity (pp	t)	DO Sa	turation %)	Dissolved Oxygen	Turbidity	(NTU) S	uspende (mg/	d Solids 'L)	Total A (pp		Coordinate HK Grid	Coordinate HK Grid	Chror (µg		Nickel (µg/L)
51211011	Condition	Condition	Time	Depth (m)			(m/s)		Value	Average	Value	Average			Value	Average	Value DA	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)	Value		Value DA
					Surface	1.0 1.0	0.4	253 260	28.9 28.8	28.9	8.5 8.5	8.5	21.9 21.9 21	.9 1	175.0 174.7	174.9	12.0 11.9 10.7	5.2 5.1		7 8		83 84				<0.2 <0.2	t E	0.9
IM9	Fine	Moderate	15:46	6.9	Middle	3.5 3.5	0.4	248 254	28.2 28.3	28.3	8.4 8.4	8.4	22.9 22.9 22		138.6 138.6	138.6	9.5	13.0 13.1	9.5	8	8	87 87	88	822117	808795	<0.2 <0.2	<0.2	0.9 0.9
					Bottom	5.9 5.9	0.3	261 282	27.8 27.8	27.8	8.2 8.2	8.2	23.6 23.6 23		123.2 117.6	120.4	8.5 8.1 8.3	10.7		8 9		92 92				<0.2 <0.2		1.1
					Surface	1.0	0.4	318 339	28.8 28.8	28.8	8.5 8.5	8.5	22.1 22.1 22		171.8 171.4	171.6	11.7	4.7 4.7		8		85 85				<0.2 <0.2		0.9
IM10	Fine	Moderate	15:57	7.7	Middle	3.9	0.3	310 335	27.3	27.3	8.1 8.1	8.1	24.7 24	7 1	105.2 105.4	105.3	7.3 7.3 9.5	8.1 8.1	7.0	7 7 7	7	86 87	88	822400	809786	<0.2	[0.8 0.9
					Bottom	6.7	0.2	300	27.2	27.2	8.1	8.1	24.9 24	<u>م</u> 1	101.2	101.4	7.0 7.0	8.3		6		92				<0.2	t E	0.8
					Surface	6.7 1.0	0.2	320 299	27.2 29.2	29.2	8.1 8.6	8.6	24.9 23 23.0 23	0 1	101.6 196.8	193.9	7.0 7.0	8.3 4.7		5 8		92 84				<0.2 <0.2		0.8
IM11	Fine	Moderate	16:11	7.5	Middle	1.0 3.8	0.5	300 281	29.2 27.3	27.3	8.6 8.2	8.2	23.0	7 1	191.0 113.1	113.0	12.9 7.8 10.5	4.7 4.9	6.0	9 7	8	84 86	88	822052	811472	<0.2 <0.2		0.9
IIVITT	Fille	woderate	10.11	7.5		3.8 6.5	0.5	281 270	27.3 25.7		8.2 8.0		24.7	1	112.9 82.1		7.8 5.7	5.0 8.2	0.0	8	0	87 93	00	022002	011472	<0.2 <0.2		0.8
					Bottom	6.5 1.0	0.2	286 272	25.7 27.5	25.7	8.0 8.3	8.0	28.3 28 25.1 or	.3	82.4 132.2	82.3	5.7 5.7 9.1	8.3 6.8		8		94 82				<0.2 <0.2		0.8
					Surface	1.0	0.4	276	27.5	27.5	8.3 8.1	8.3	25.1 25	' 1	132.0 97.4	132.1	9.1 7.9	6.8 8.2		8		82				<0.2	t E	0.7
IM12	Fine	Moderate	16:20	9.3	Middle	4.7	0.2	302	26.7	26.7	8.1	8.1	26.0 26	.a 📑	97.6	97.5	6.7 6.8	8.1	8.0	10	9	85 85	86	821448	812049	<0.2 <0.2	<0.2	0.8
					Bottom	8.3 8.3	0.1	205 211	25.6 25.6	25.6	8.0 8.0	8.0	28.6 28.6 28	.b .	76.5 76.8	76.7	5.3 5.3	9.0 9.0		10 9		90 91				<0.2 <0.2		0.8
					Surface	1.0	-	-	28.9 28.9	28.9	8.5 8.5	8.5	23.5 23.5 23		161.8 162.2	162.0	11.0 11.0 11.0	6.0 6.2		9 8		-				-	i H	-
SR1A	Fine	Moderate	16:41	5.0	Middle	2.5	-	-	•	-	-	-		-	-	-	- 11.0	-	9.3	-	8		-	819978	812664	-	F	
					Bottom	4.0 4.0	-	-	27.6 27.6	27.6	8.2 8.2	8.2	25.2 25.1 25	2 1	110.6	110.6	7.6 7.6 7.6	12.7 12.4		7		-				-	r F	-
					Surface	1.0	0.4	308 316	27.9 27.9	27.9	8.4 8.4	8.4	24.8 24.8 24	。 1	166.4 165.6	166.0	11.4	6.1 6.2		10 9		86 86				<0.2 <0.2		0.7
SR2	Fine	Moderate	16:55	4.6	Middle	-	-	-	-	-	-				-	-	- 11.4	-	11.9	-	9	-	88	821453	814159	-	<0.2	- 0.8
					Bottom	3.6	0.2	299	26.4	26.4	8.2	8.2	27.2 27		-	105.3	7.3 7.3	17.5		8		90				<0.2		0.9
					Surface	3.6 1.0	0.2	311 273	26.4 29.7	29.7	8.2 8.5	8.5	18.3 18	2 1	105.2 173.3	173.1	7.3 11.9	17.7 4.2		8 6		90				<0.2		-
SR3	Fine	Rough	15:31	8.6	Middle	1.0 4.3	0.3	294 225	29.7 28.1	28.1	8.5 8.2	8.2	18.3 21.9 21	1	172.9 117.9	117.9	11.9 8.2 10.1	4.2 3.6	5.9	6 6	6	-		822148	807567	-	i.L	-
GILO	1 110	rtougn	10.01	0.0	Bottom	4.3 7.6	0.2	229 186	28.1 26.6	26.6	8.2 8.1	8.0	26.4 26	4	117.8 84.4	81.6	8.2 5.8 5.6	3.6 10.0	0.0	6 7	0	-		022110	001001	-	i E	-
					1	7.6	0.2	191 35	26.6 28.8		8.0 8.4		26.5	1	78.7 146.6		5.4 5.0 10.0	9.8 6.8		6 11						-		-
					Surface	1.0 4.8	0.1	35 48	28.8 27.0	28.8	8.4 8.1	8.4	22.3 22	1	146.1 101.0	146.4	10.0 7.0 8.5	7.0 10.9		11 12		-				-	r F	-
SR4A	Fine	Calm	16:48	9.5	Middle	4.8	0.2	51 51	27.0	27.0	8.1 8.0	8.1	24.8 24	° 1	100.9 77.7	101.0	7.0	11.3 15.3	11.1	11 12	11	-	-	817211	807790	-	, - F	
					Bottom	8.5	0.2	53	25.7	25.7	8.0	8.0	27.1 27		77.9	77.8	5.4 5.5 11.0	15.4		11 12						-		-
					Surface	1.0	0.1	284 302	29.3	29.3	8.4 8.4	8.4	22.4 22.4 22		162.8 162.5	162.7	11.0 11.0	5.8		12		•				-	ı F	-
SR5A	Fine	Calm	17:06	3.7	Middle		-	-	-	-	-	-			-	-	-	-	6.1	-	11	-	-	816607	810680	-	; - L	<u>·</u> ·
					Bottom	2.7	0.1	302 328	28.2 28.3	28.3	8.4 8.4	8.4	23.3 23.3 23		145.7 146.3	146.0	10.0 10.0	6.5 6.4		10 10		-				-	i E	-
					Surface	1.0	0.1	131 141	28.3 28.1	28.2	8.4 8.4	8.4	23.2 23		161.8 155.6	158.7	11.1 10.7 10.9	10.1 9.8	-	12 11		-				-	i F	-
SR6A	Fine	Calm	17:33	4.0	Middle	-	-	-	-	-	-			_	-		- 10.9	-	9.2	-	12	-	-	817965	814748	-	, - F	
					Bottom	3.0	0.1	178 181	27.0 27.0	27.0	8.2 8.2	8.2	24.4 24		117.0	116.9	8.1 8.1 8.1	8.3 8.4		12 12		-				-	ı F	-
					Surface	1.0	0.0	291	26.2	26.2	8.2	8.2	28.2 28	2 1	114.2 114.0	114.1	7.9	3.5		4							; _ _	
SR7	Fine	Moderate	18:03	15.9	Middle	1.0 8.0	0.0	310 142	26.2 25.8	25.8	8.2 8.2	8.2	28.2	1 1	102.0	101.8	7.9 7.0 7.5	3.5 4.4	4.3	5 3	3	•	-	823658	823753	-	, . F	
					Bottom	8.0 14.9	0.1	145 71	25.8 24.5	24.6	8.2 8.0	8.0	29.1 31.3 21	2	101.6 74.7	74.9	7.0 5.2 5.2	4.4 5.2		2	-	-				-	; L	-
					Surface	14.9	0.1	- 77	24.7 28.7	24.0	8.0 8.5	8.4	31.1 31 23.1 23		75.1 161.9	161.6	5.2 5.2 11.0	5.0 5.4		3 7		•				-		-
						1.0	-	-	28.7	20.7	8.4	6.4	23.1 23	' 1	161.3	0.101	11.0	5.4	F_	8		•				-	ι F	
SR8	Fine	Moderate	16:32	4.7	Middle	3.7	-	-	- 26.5	-	- 8.1	1 -		-	- 86.0		- 6.0	- 8.8	7.1	- 11	10	•	-	820405	811635	-	, - -	
					Bottom	3.7	-	-	26.5	26.5	8.1	8.1	26.7 26		86.1	86.1	6.0 6.0	8.8		12		-				-		- <u> </u>

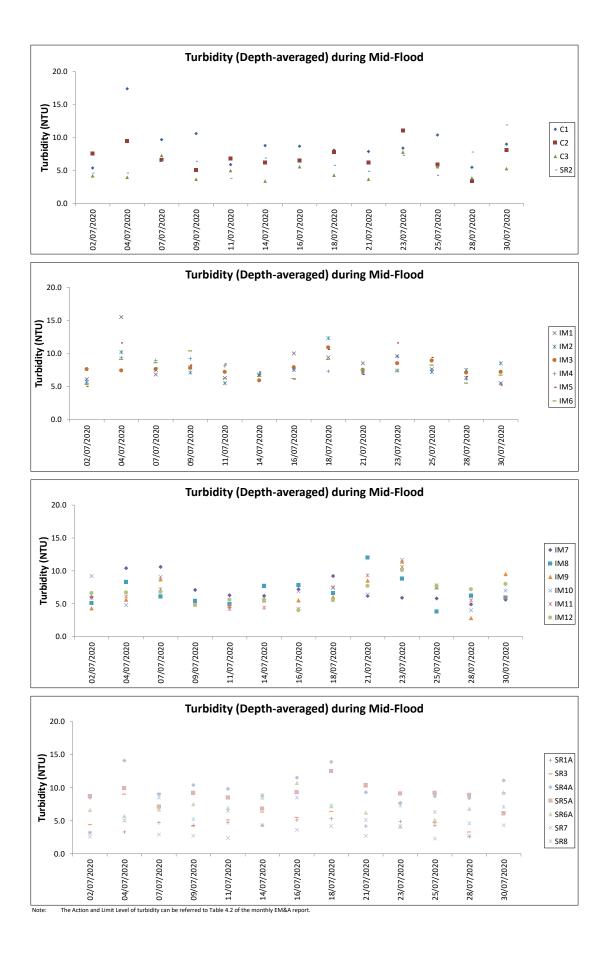


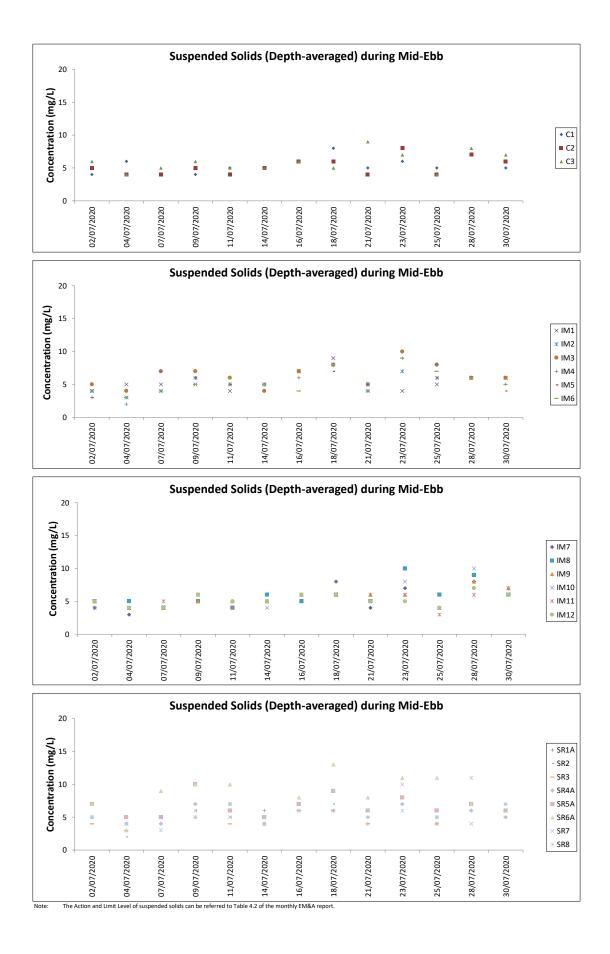


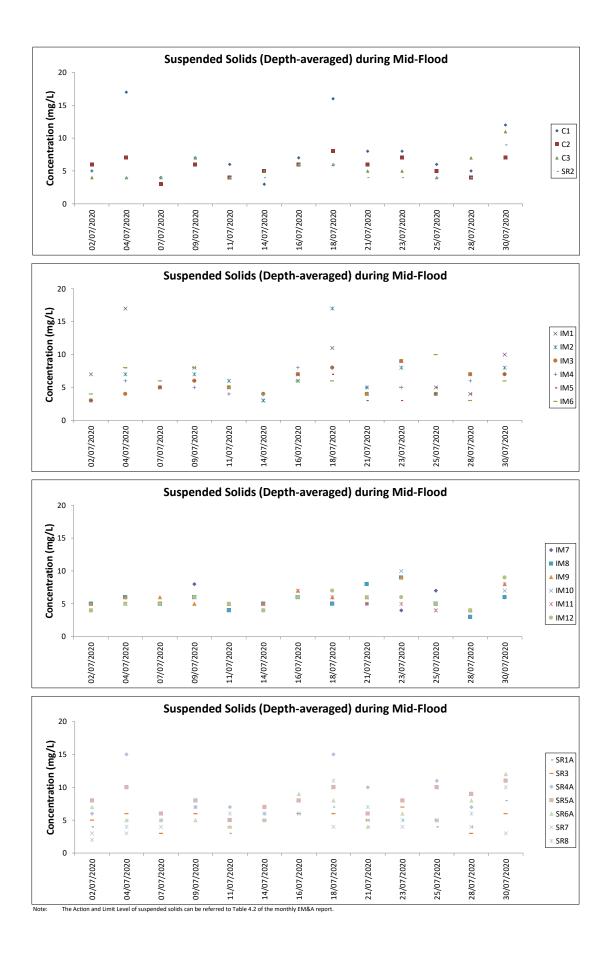


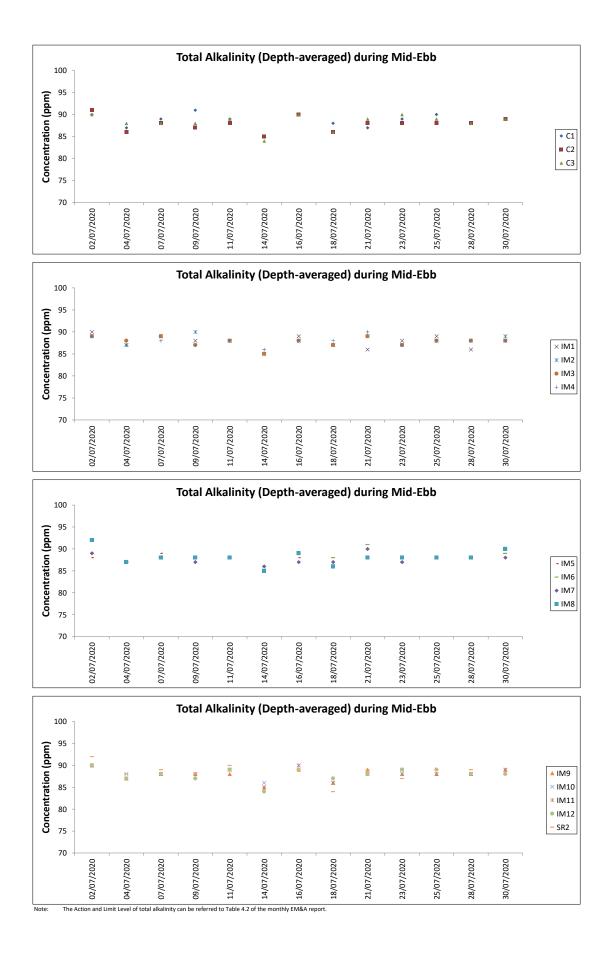


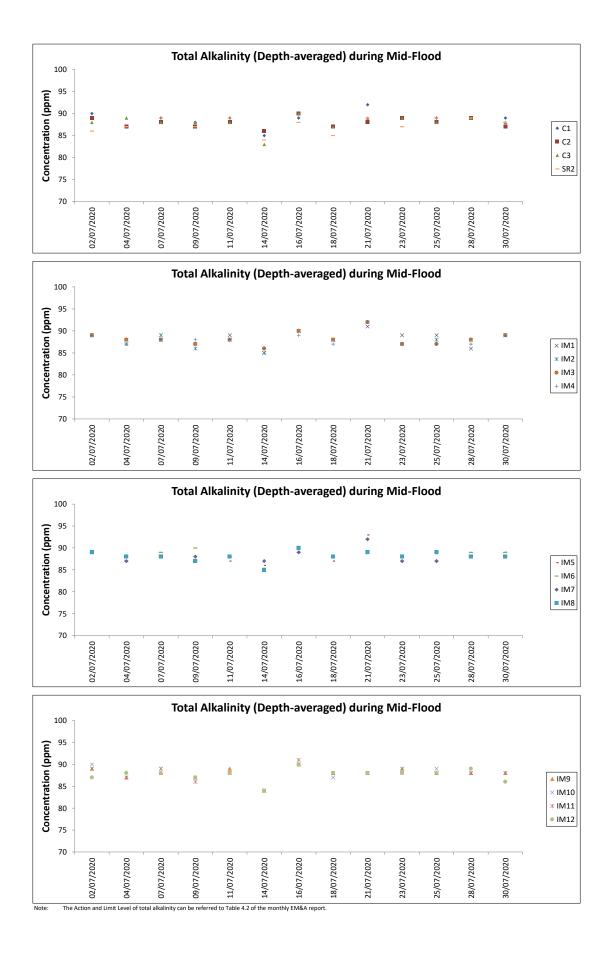


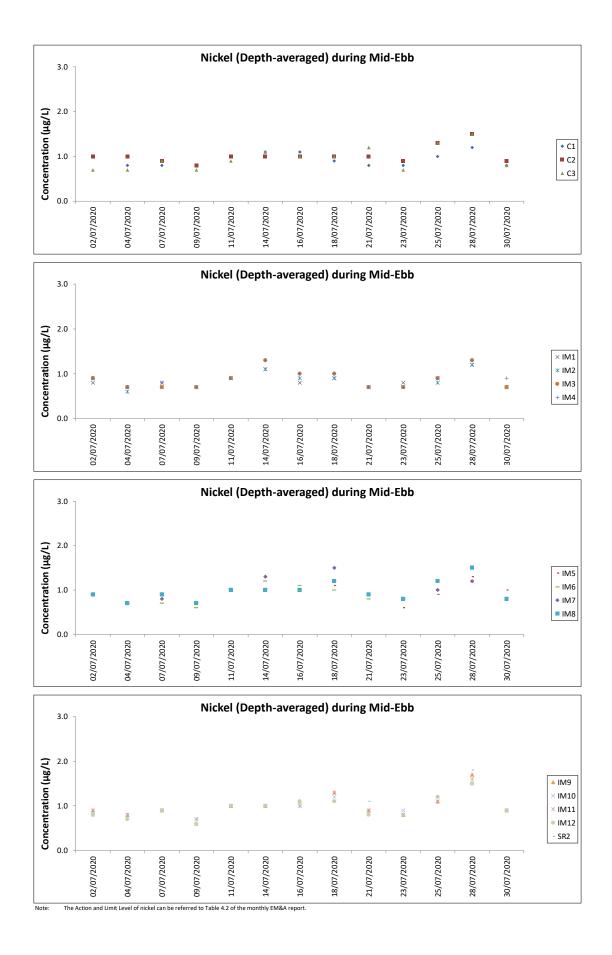


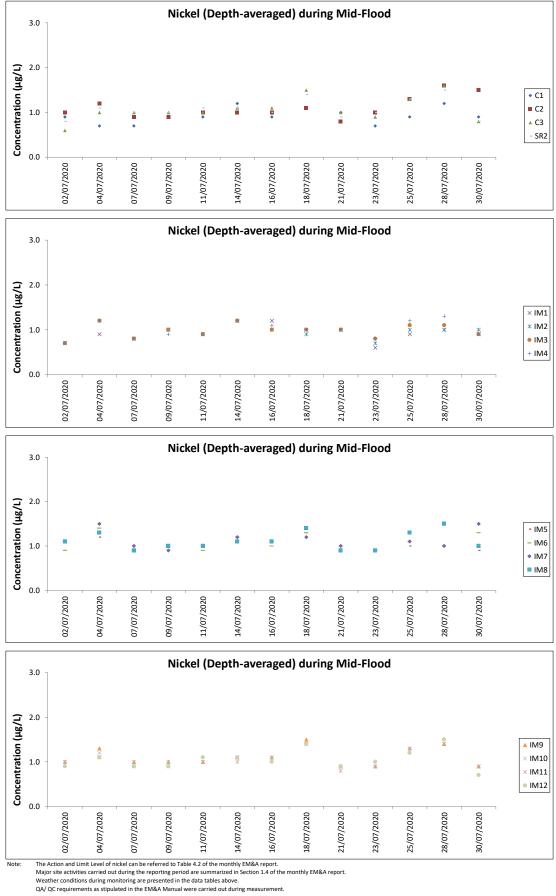


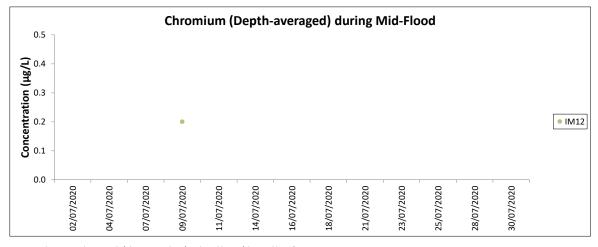












 $\label{eq:Note:theorem} Note: \qquad The Action and Limit Level of chromium can be referred to Table 4.2 of the monthly EM&A report. \\ All other chromium in the reporting period was below the reporting limit 0.2 \mug/L.$

Investigation for Cases Triggered the Action and Limit Levels during June 2020

Further to Section 4.4 of Construction Phase Monthly EM&A Report No. 54, the investigation of the downstream monitoring stations with consecutive DO levels triggered Action and Limit Level is updated and presented as follows.

For the cases recorded between 11 and 25 June 2020, further investigation comprising additional monitoring in the vicinity of the affected IM stations (i.e. IM2, IM3 and IM4) was carried out and analysed together with the details of the construction activities undertaken during the water quality monitoring events. Additional monitoring of DO measurement was carried out on 23, 24, 26 June 2020 at the western part of the 3RS marine work site and in-situ water quality monitoring was also conducted around the closest DCM barge which was in operation during the monitoring of 9 July 2020. The further investigation analysed all potential causes of the sustained low DO levels that were particularly prevalent in the area of IM2 to IM4. These included possible sources from the marine construction activities in the vicinity; and whether the low DO levels were associated with natural phenomena. Based on the additional monitoring results and analysis carried out, there was no evidence linking the construction activities to the low DO levels, and no evidence of any malpractices that would result in the low DO levels. Conversely, the additional monitoring showed the low DO levels were present over a large area, covering the western part of the 3RS marine work site, with similarly low DO levels observed at SR4A which is also located nearby. It is also noted that similar sustained low DO levels have occurred in this area in the previous wet seasons (i.e. June 2017 and July 2019). These findings suggest that the area of IM2 to IM4, similar to SR4A, is likely naturally susceptible to low DO levels during the wet season as a result of the combination of climatic and hydrological conditions in this area.

For DO results recorded in ebb tide at IM2, IM3, IM4 and SR4A between 11 and 25 June 2020 and IM1 on 11 June 2020 which triggered Action or Limit Level, no silt plume was observed at the monitoring stations when impact water quality monitoring was undertaken at these monitoring stations and appropriate mitigation measures including localized silt curtain and enhanced silt curtain were implemented by contractors between 11 and 25 June 2020. DO levels recorded at most of the impact stations were within their baseline range. These findings, coupled with the findings of the further investigation, suggest that these cases were not caused by the Project.

For DO results recorded in flood tide at IM5, IM6 and SR3 on 13 June 2020 and IM7 on 11 and 13 June 2020 which triggered Action Level, no silt plume was observed at the monitoring stations when impact water quality monitoring was undertaken at these water quality monitoring stations and appropriate mitigation measures including localized silt curtain and enhanced silt curtain were implemented by contractors between 11 and 25 June 2020. During the same tide, DO Action Levels were also triggered at adjacent upstream monitoring stations (i.e. IM2, IM3 and IM4). In addition, DO levels recorded at most of the impact and sensitive stations were also within their baseline ranges. These suggest the presence of external sources might affect the water quality at western part of the 3RS marine work site. Therefore, the cases were considered unlikely due to the Project.

Investigation for Cases Triggered the Action and Limit Levels during July 2020

During the reporting period, all the DO results which triggered Action or Limit Level were recorded at monitoring stations located at the western part of the 3RS marine work site. The ET checked with all contractors and confirmed that only DCM works and marine filling activities were undertaking at this area, localised and enhanced silt curtains were deployed and there was no abnormal operation. The contractors had also checked the maintenance record of all plant and equipment and confirmed that there was no spillage incident or abnormal observation.

For DO results recorded in ebb tide at IM2, IM3 and IM4 on 16 July 2020 which triggered Action Level, no silt plume was observed at the monitoring stations. DO Action Level at IM3 and IM4 were also triggered during flood tide when these IM stations were located upstream of the Project area. This suggested that the source of the low DO levels was not restricted to the areas downstream of the Project. Low DO level was also recorded at C1, which was located upstream of the Project area during flood tide and outside the influence of the Project. In addition, DO levels at these stations were within

their baseline ranges during baseline monitoring of the Project. In accordance with the Event and Action Plan, repeat measurement was conducted on 17 July 2020 during ebb tide. Similar DO levels were also recorded during repeat measurement, which suggested that the low DO levels were not due to one-off or localized incident.

For DO results recorded in ebb tide at IM1, IM2, IM3, IM4 and SR4A on 18 July 2020 which triggered Action Level, no silt plume was observed at the monitoring stations. DO levels recorded at these downstream impact and sensitive receiver stations were also similar to that recorded at their upstream control station C2. This suggested the presence of external sources that might affect the DO levels around the western part of the 3RS marine work site. In addition, DO levels recorded at these monitoring stations were within their baseline ranges during baseline monitoring of the Project. In accordance with the Event and Action Plan, repeat measurement was conducted on 19 July 2020 during ebb tide. Similar DO levels were also recorded during repeat measurement, which suggested that the low DO levels were not due to one-off or localized incident.

For DO results recorded in ebb tide at IM2, IM3, IM4 and SR4A, and in flood tide at IM5 on 21 July 2020 which triggered Action or Limit Level, no silt plume was observed at the monitoring stations. As DO Action Level were triggered at adjacent upstream monitoring stations during the same tide (i.e. IM5 and IM6 during ebb tide; IM1, IM3 and IM4 during flood tide), downstream cases at IM2, IM3 and IM4 during ebb tide and IM5 during flood tide were considered due to external factors. For SR4A, no Action or Limit Level was triggered at downstream impact station located closer to the Project Area, namely IM1. In accordance with the Event and Action Plan, repeat measurement was conducted on 22 July 2020 during ebb tide at IM2, IM3, IM4 and SR4A. Monitoring results showed that only DO levels at IM4 and SR4A still triggered the Action Level. For the repeat measurement undertaken at IM5 during the flood tide of 22 July 2020, the measured DO levels still triggered the Action Level.

The low DO levels recorded on 16, 18 and 21 July 2020 around the western part of the 3RS marine works site have been investigated. There were no evidence showing that the low DO levels were associated with the construction activities near the monitoring stations. In addition, some of the repeat measurement results still triggered the Action Level. Therefore, it is likely that the cases were caused by a potential large scale event affecting the DO levels in the western part of the 3RS marine work site. Hence, these cases were considered not due to the Project.

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

Chinese White Dolphin Monitoring Results

CWD Small Vessel Line-transect Survey

Survey Effort Data

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
4-May-20	NEL	2	32.350	SPRING	32166	3RS ET	Р
4-May-20	NEL	3	4.500	SPRING	32166	3RS ET	Р
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	Р
6-May-20	NWL	3	45.000	SPRING	32166	3RS ET	Р
6-May-20	NWL	3	13.400	SPRING	32166	3RS ET	S
7-May-20	AW	3	4.890	SPRING	32166	3RS ET	Р
7-May-20	WL	3	19.292	SPRING	32166	3RS ET	Р
7-May-20	WL	3	11.318	SPRING	32166	3RS ET	S
11-May-20	SWL	1	2.700	SPRING	32166	3RS ET	Р
11-May-20	SWL	2	51.714	SPRING	32166	3RS ET	Р
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	Р
12-May-20	SWL	3	11.880	SPRING	32166	3RS ET	Р
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	Р
13-May-20	WL	1	1.220	SPRING	32166	3RS ET	Р
13-May-20	WL	2	9.124	SPRING	32166	3RS ET	Р
13-May-20	WL	3	2.062	SPRING	32166	3RS ET	Р
13-May-20	WL	4	6.239	SPRING	32166	3RS ET	Р
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	Р
18-May-20	NEL	3	12.500	SPRING	32166	3RS ET	Р
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	Р
20-May-20	NWL	3	43.690	SPRING	32166	3RS ET	Р
20-May-20	NWL	4	17.310	SPRING	32166	3RS ET	Р
20-May-20	NWL	3	9.100	SPRING	32166	3RS ET	S
20-May-20	NWL	4	2.600	SPRING	32166	3RS ET	S
9-Jun-20	NWL	2	2.300	SUMMER	32166	3RS ET	Р
9-Jun-20	NWL	3	61.400	SUMMER	32166	3RS ET	Р
9-Jun-20	NWL	2	1.500	SUMMER	32166	3RS ET	S
9-Jun-20	NWL	3	10.200	SUMMER	32166	3RS ET	S
11-Jun-20	AW	2	4.760	SUMMER	32166	3RS ET	Р
11-Jun-20	WL	2	1.520	SUMMER	32166	3RS ET	Р
11-Jun-20	WL	3	16.937	SUMMER	32166	3RS ET	Р
11-Jun-20	WL	2	1.060	SUMMER	32166	3RS ET	S
11-Jun-20	WL	3	7.545	SUMMER	32166	3RS ET	S
16-Jun-20	AW	3	4.970	SUMMER	32166	3RS ET	Р
16-Jun-20	WL	2	3.459	SUMMER	32166	3RS ET	Р
16-Jun-20	WL	3	15.008	SUMMER	32166	3RS ET	Р

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
16-Jun-20	WL	4	1.050	SUMMER	32166	3RS ET	Р
16-Jun-20	WL	2	1.080	SUMMER	32166	3RS ET	S
16-Jun-20	WL	3	8.877	SUMMER	32166	3RS ET	S
17-Jun-20	NWL	2	3.700	SUMMER	32166	3RS ET	Р
17-Jun-20	NWL	3	52.050	SUMMER	32166	3RS ET	Р
17-Jun-20	NWL	4	7.600	SUMMER	32166	3RS ET	Р
17-Jun-20	NWL	2	1.200	SUMMER	32166	3RS ET	S
17-Jun-20	NWL	3	8.000	SUMMER	32166	3RS ET	S
17-Jun-20	NWL	4	3.200	SUMMER	32166	3RS ET	S
18-Jun-20	SWL	2	5.388	SUMMER	32166	3RS ET	Р
18-Jun-20	SWL	3	34.630	SUMMER	32166	3RS ET	Р
18-Jun-20	SWL	4	12.720	SUMMER	32166	3RS ET	Р
18-Jun-20	SWL	2	3.312	SUMMER	32166	3RS ET	S
18-Jun-20	SWL	3	11.120	SUMMER	32166	3RS ET	S
18-Jun-20	SWL	4	1.870	SUMMER	32166	3RS ET	S
22-Jun-20	SWL	2	9.376	SUMMER	32166	3RS ET	Р
22-Jun-20	SWL	3	31.756	SUMMER	32166	3RS ET	Р
22-Jun-20	SWL	4	3.650	SUMMER	32166	3RS ET	Р
22-Jun-20	SWL	2	3.471	SUMMER	32166	3RS ET	S
22-Jun-20	SWL	3	10.290	SUMMER	32166	3RS ET	S
23-Jun-20	NEL	2	21.700	SUMMER	32166	3RS ET	Р
23-Jun-20	NEL	3	15.280	SUMMER	32166	3RS ET	Р
23-Jun-20	NEL	2	6.500	SUMMER	32166	3RS ET	S
23-Jun-20	NEL	3	3.820	SUMMER	32166	3RS ET	S
24-Jun-20	NEL	2	31.670	SUMMER	32166	3RS ET	Р
24-Jun-20	NEL	3	5.950	SUMMER	32166	3RS ET	Р
24-Jun-20	NEL	2	6.880	SUMMER	32166	3RS ET	S
24-Jun-20	NEL	3	3.100	SUMMER	32166	3RS ET	S
6-Jul-20	AW	3	4.900	SUMMER	32166	3RS ET	Р
6-Jul-20	WL	3	14.052	SUMMER	32166	3RS ET	Р
6-Jul-20	WL	4	4.029	SUMMER	32166	3RS ET	Р
6-Jul-20	WL	3	5.088	SUMMER	32166	3RS ET	S
6-Jul-20	WL	4	3.731	SUMMER	32166	3RS ET	S
8-Jul-20	NEL	2	0.500	SUMMER	32166	3RS ET	Р
8-Jul-20	NEL	3	33.650	SUMMER	32166	3RS ET	Р
8-Jul-20	NEL	4	3.230	SUMMER	32166	3RS ET	Р
8-Jul-20	NEL	2	2.000	SUMMER	32166	3RS ET	S
8-Jul-20	NEL	3	7.720	SUMMER	32166	3RS ET	S
9-Jul-20	NEL	2	1.300	SUMMER	32166	3RS ET	Р
9-Jul-20	NEL	3	25.670	SUMMER	32166	3RS ET	Р
9-Jul-20	NEL	4	9.820	SUMMER	32166	3RS ET	Р
9-Jul-20	NEL	2	1.000	SUMMER	32166	3RS ET	S
9-Jul-20	NEL	3	9.910	SUMMER	32166	3RS ET	S
10-Jul-20	NWL	3	49.090	SUMMER	32166	3RS ET	Р
10-Jul-20	NWL	4	14.710	SUMMER	32166	3RS ET	Р
10-Jul-20	NWL	2	2.100	SUMMER	32166	3RS ET	S
10-Jul-20	NWL	3	10.000	SUMMER	32166	3RS ET	S
13-Jul-20	AW	2	0.980	SUMMER	32166	3RS ET	Р
13-Jul-20	AW	3	3.950	SUMMER	32166	3RS ET	S

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
13-Jul-20	WL	2	7.997	SUMMER	32166	3RS ET	Р
13-Jul-20	WL	3	6.388	SUMMER	32166	3RS ET	Р
13-Jul-20	WL	2	2.175	SUMMER	32166	3RS ET	S
13-Jul-20	WL	3	5.392	SUMMER	32166	3RS ET	S
20-Jul-20	SWL	2	44.018	SUMMER	32166	3RS ET	Р
20-Jul-20	SWL	3	3.890	SUMMER	32166	3RS ET	Р
20-Jul-20	SWL	2	12.803	SUMMER	32166	3RS ET	S
20-Jul-20	SWL	3	1.000	SUMMER	32166	3RS ET	S
21-Jul-20	SWL	1	8.130	SUMMER	32166	3RS ET	Р
21-Jul-20	SWL	2	26.735	SUMMER	32166	3RS ET	Р
21-Jul-20	SWL	3	15.310	SUMMER	32166	3RS ET	Р
21-Jul-20	SWL	1	1.034	SUMMER	32166	3RS ET	S
21-Jul-20	SWL	2	12.790	SUMMER	32166	3RS ET	S
21-Jul-20	SWL	3	0.920	SUMMER	32166	3RS ET	S
22-Jul-20	NWL	1	14.280	SUMMER	32166	3RS ET	Р
22-Jul-20	NWL	2	35.930	SUMMER	32166	3RS ET	Р
22-Jul-20	NWL	3	12.500	SUMMER	32166	3RS ET	Р
22-Jul-20	NWL	1	1.300	SUMMER	32166	3RS ET	S
22-Jul-20	NWL	2	9.190	SUMMER	32166	3RS ET	S
22-Jul-20	NWL	3	1.100	SUMMER	32166	3RS ET	S

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

CWD Small Vessel Line-transect Survey

DATE	STG #	TIME	CWD/FP	GP SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.	P/S
7-May-20	1	1032	CWD	1	WL	3	177	ON	3RS ET	22.2692	113.8499	SPRING	NONE	Р
7-May-20	2	1115	CWD	1	WL	3	19	ON	3RS ET	22.2409	113.8395	SPRING	NONE	Р
7-May-20	3	1121	CWD	15	WL	3	257	ON	3RS ET	22.2411	113.8362	SPRING	NONE	Р
11-May-20	1	1052	FP	1	SWL	2	421	ON	3RS ET	22.1620	113.9362	SPRING	NONE	Р
11-May-20	2	1055	FP	4	SWL	2	22	ON	3RS ET	22.1606	113.9360	SPRING	NONE	Р
11-May-20	3	1058	FP	2	SWL	2	181	ON	3RS ET	22.1554	113.9361	SPRING	NONE	Р
11-May-20	4	1513	CWD	13	SWL	2	191	ON	3RS ET	22.1850	113.8500	SPRING	NONE	Р
12-May-20	1	1051	FP	4	SWL	2	14	ON	3RS ET	22.1543	113.9363	SPRING	NONE	Р
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	Р
12-May-20	6	1546	CWD	1	SWL	3	279	ON	3RS ET	22.1946	113.8500	SPRING	NONE	Р
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	Р
13-May-20	3	1140	CWD	16	WL	3	78	ON	3RS ET	22.2414	113.8286	SPRING	PURSE SEINER	Р
13-May-20	4	1231	CWD	1	WL	4	60	ON	3RS ET	22.2149	113.8309	SPRING	NONE	Р
11-Jun-20	1	1028	CWD	2	WL	3	396	ON	3RS ET	22.2636	113.8574	SUMMER	NONE	S
11-Jun-20	2	1050	CWD	3	WL	3	6	ON	3RS ET	22.2552	113.8359	SUMMER	NONE	S
11-Jun-20	3	1121	CWD	5	WL	3	323	ON	3RS ET	22.2408	113.8315	SUMMER	NONE	Р
11-Jun-20	4	1213	CWD	5	WL	3	689	ON	3RS ET	22.2140	113.8257	SUMMER	NONE	Р
11-Jun-20	5	1243	CWD	7	WL	3	1028	ON	3RS ET	22.2055	113.8330	SUMMER	NONE	Р
11-Jun-20	6	1311	CWD	3	WL	3	86	ON	3RS ET	22.1958	113.8329	SUMMER	NONE	Р
11-Jun-20	7	1325	CWD	6	WL	3	70	ON	3RS ET	22.1958	113.8408	SUMMER	NONE	Р
16-Jun-20	1	1041	CWD	1	WL	2	75	ON	3RS ET	22.2609	113.8522	SUMMER	NONE	Р
16-Jun-20	2	1055	CWD	6	WL	3	124	ON	3RS ET	22.2607	113.8495	SUMMER	NONE	Р
16-Jun-20	3	1244	CWD	1	WL	3	112	ON	3RS ET	22.2049	113.8345	SUMMER	NONE	Р
16-Jun-20	4	1310	CWD	3	WL	2	65	ON	3RS ET	22.2532	113.8336	SUMMER	NONE	Р
16-Jun-20	5	1345	CWD	8	WL	2	203	ON	3RS ET	22.1945	113.8423	SUMMER	NONE	S
18-Jun-20	1	1248	CWD	5	SWL	2	118	ON	3RS ET	22.1970	113.9082	SUMMER	NONE	Р
18-Jun-20	2	1321	CWD	6	SWL	3	85	ON	3RS ET	22.1937	113.8972	SUMMER	GILLNETTER	Р
18-Jun-20	3	1550	CWD	2	SWL	3	46	ON	3RS ET	22.1852	113.8492	SUMMER	NONE	Р

Sighting Data

DATE	STG #	TIME	CWD/FP	GP SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.	P/S
22-Jun-20	1	1144	CWD	4	SWL	2	807	ON	3RS ET	22.1939	113.9179	SUMMER	NONE	Р
22-Jun-20	2	1256	CWD	4	SWL	3	178	ON	3RS ET	22.1881	113.9054	SUMMER	NONE	S
22-Jun-20	3	1321	CWD	3	SWL	2	898	ON	3RS ET	22.2123	113.8979	SUMMER	NONE	Р
22-Jun-20	4	1344	CWD	4	SWL	2	386	ON	3RS ET	22.1934	113.8979	SUMMER	NONE	Р
22-Jun-20	5	1432	CWD	1	SWL	3	520	ON	3RS ET	22.1688	113.8879	SUMMER	NONE	Р
22-Jun-20	6	1453	CWD	5	SWL	3	305	ON	3RS ET	22.1898	113.8883	SUMMER	NONE	Р
22-Jun-20	7	1548	CWD	1	SWL	3	225	ON	3RS ET	22.1795	113.8686	SUMMER	NONE	Р
22-Jun-20	8	1607	CWD	1	SWL	2	67	ON	3RS ET	22.1904	113.8593	SUMMER	NONE	Р
22-Jun-20	9	1614	CWD	2	SWL	2	36	ON	3RS ET	22.1824	113.8596	SUMMER	NONE	Р
6-Jul-20	1	1037	CWD	1	WL	3	326	ON	3RS ET	22.2643	113.8574	SUMMER	NONE	S
6-Jul-20	2	1111	CWD	11	WL	4	634	ON	3RS ET	22.2468	113.8514	SUMMER	NONE	S
6-Jul-20	3	1216	CWD	1	WL	3	284	ON	3RS ET	22.2120	113.8363	SUMMER	NONE	Р
6-Jul-20	4	1245	CWD	2	WL	3	329	ON	3RS ET	22.1961	113.8400	SUMMER	NONE	Р
13-Jul-20	1	1033	CWD	5	WL	2	1238	ON	3RS ET	22.2672	113.8600	SUMMER	NONE	S
13-Jul-20	2	1126	CWD	4	WL	3	601	ON	3RS ET	22.2416	113.8299	SUMMER	NONE	Р
13-Jul-20	3	1144	CWD	5	WL	3	1020	ON	3RS ET	22.2377	113.8266	SUMMER	NONE	S
13-Jul-20	4	1203	CWD	1	WL	3	13	ON	3RS ET	22.2235	113.8242	SUMMER	NONE	Р
13-Jul-20	5	1223	CWD	4	WL	3	322	ON	3RS ET	22.2142	113.8266	SUMMER	NONE	Р
13-Jul-20	6	1304	CWD	18	WL	3	211	ON	3RS ET	22.2020	113.8240	SUMMER	NONE	S
13-Jul-20	7	1338	CWD	19	WL	3	221	ON	3RS ET	22.1962	113.8332	SUMMER	NONE	Р
13-Jul-20	8	1410	CWD	4	WL	3	129	ON	3RS ET	22.1910	113.8419	SUMMER	NONE	S
20-Jul-20	1	1028	CWD	1	SWL	2	171	ON	3RS ET	22.2119	113.9359	SUMMER	NONE	Р
20-Jul-20	2	1237	CWD	1	SWL	2	268	ON	3RS ET	22.1767	113.9072	SUMMER	NONE	S
20-Jul-20	3	1249	CWD	4	SWL	2	362	ON	3RS ET	22.1845	113.9046	SUMMER	NONE	S
20-Jul-20	4	1407	CWD	9	SWL	3	255	ON	3RS ET	22.1673	113.8883	SUMMER	NONE	Р
20-Jul-20	5	1424	CWD	5	SWL	2	243	ON	3RS ET	22.1776	113.8883	SUMMER	NONE	Р
20-Jul-20	6	1510	CWD	1	SWL	2	130	ON	3RS ET	22.1765	113.8784	SUMMER	NONE	Р
20-Jul-20	7	1532	CWD	5	SWL	3	247	ON	3RS ET	22.1682	113.8685	SUMMER	NONE	Р
20-Jul-20	8	1604	CWD	3	SWL	2	51	ON	3RS ET	22.1962	113.8586	SUMMER	NONE	Р
20-Jul-20	9	1640	CWD	2	SWL	2	42	ON	3RS ET	22.1921	113.8494	SUMMER	NONE	Р
21-Jul-20	1	1054	FP	7	SWL	1	146	ON	3RS ET	22.1486	113.9340	SUMMER	NONE	S
21-Jul-20	2	1255	CWD	3	SWL	3	46	ON	3RS ET	22.1928	113.8977	SUMMER	NONE	Р
21-Jul-20	3	1410	CWD	2	SWL	2	161	ON	3RS ET	22.1915	113.8790	SUMMER	NONE	Р

DATE	STG #	TIME	CWD/FP	GP SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.	P/S
21-Jul-20	4	1426	CWD	3	SWL	2	241	ON	3RS ET	22.1723	113.8788	SUMMER	NONE	Р
21-Jul-20	5	1511	CWD	4	SWL	2	21	ON	3RS ET	22.1962	113.8587	SUMMER	NONE	Р
21-Jul-20	6	1537	CWD	1	SWL	2	524	ON	3RS ET	22.1700	113.8560	SUMMER	NONE	S
21-Jul-20	7	1551	CWD	3	SWL	3	188	ON	3RS ET	22.1862	113.8493	SUMMER	PURSE SEINER	Р
22-Jul-20	1	1202	CWD	2	NWL	2	308	ON	3RS ET	22.3963	113.8876	SUMMER	NONE	Р

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 394.792 km of survey effort was collected under Beaufort Sea State 3 or below with favourable visibility; total no. of 27 on-effort sightings and total number of 113 dolphins from on-effort sightings were collected under such condition. Calculation of the encounter rates in July 2020 are shown as below:

Encounter Rate by Number of Dolphin Sightings (STG) in July 2020	Encounter Rate by Number of Dolphins (ANI) in July 2020
$STG = \frac{27}{394.792} \ x \ 100 = 6.84$	$ANI = \frac{113}{394.792} \ x \ 100 = 28.62$

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

A total of 1228.858 km of survey effort was collected under Beaufort Sea State 3 or below with favourable visibility; total no. of 60 on-effort sightings and total number of 260 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)	Running Quarterly Encounter Rate by Number of Dolphins (ANI)
$STG = \frac{60}{1228.858} \times 100 = 4.88$	$ANI = \frac{260}{1228.858} \ x \ 100 = 21.16$

Photo Identification

WLMM102_20200706_1_6

CWD Small Vessel Line-transect Survey



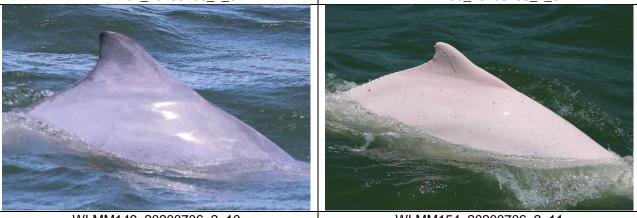


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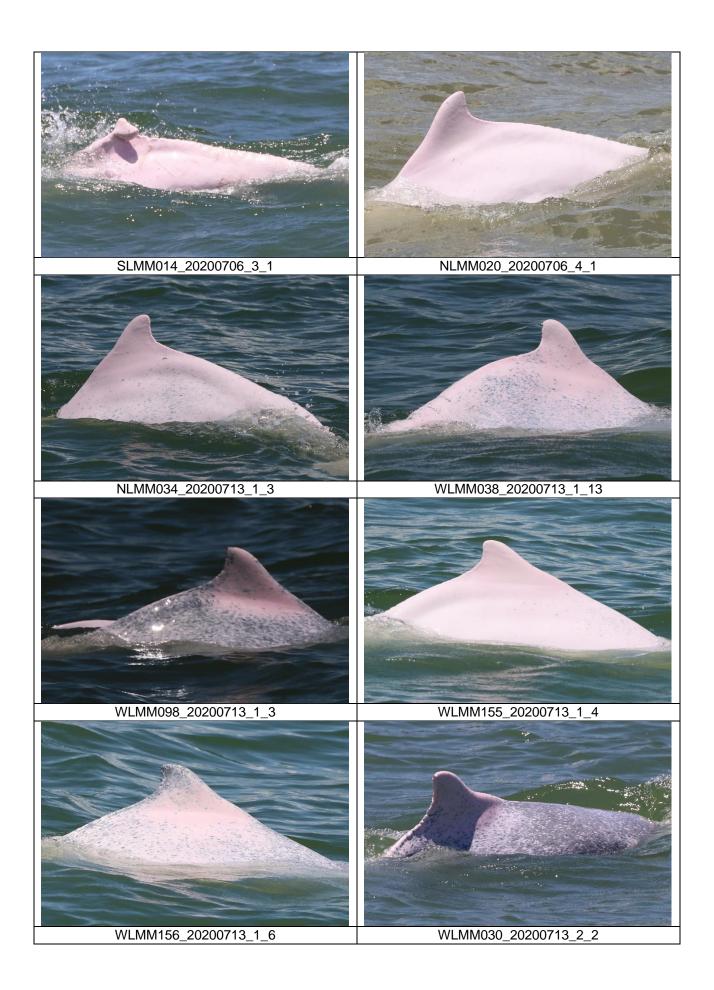
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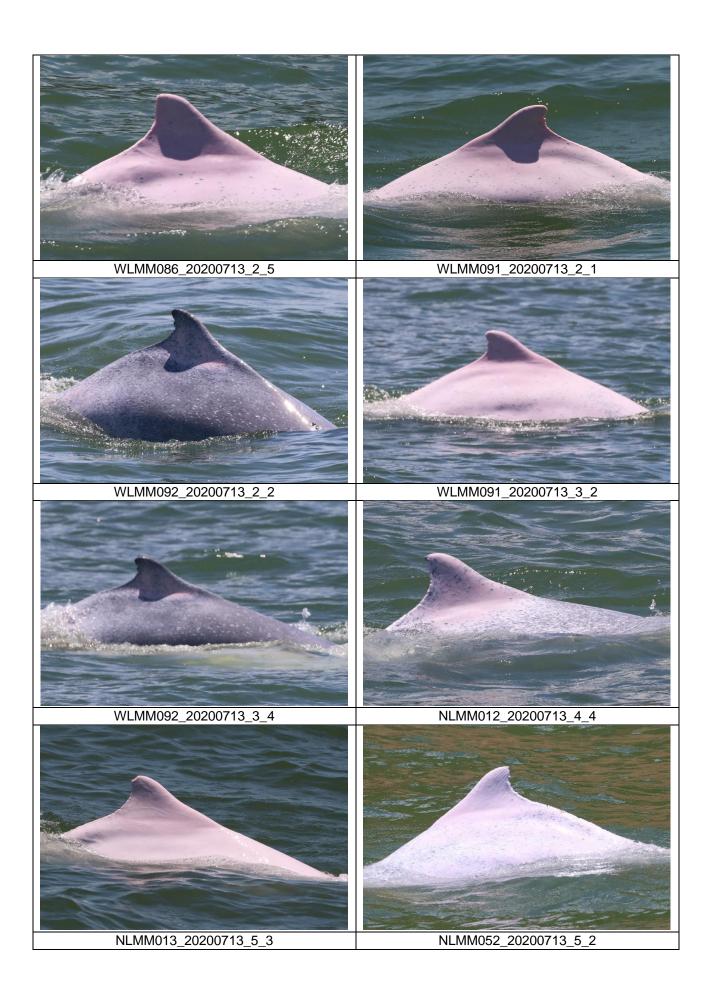
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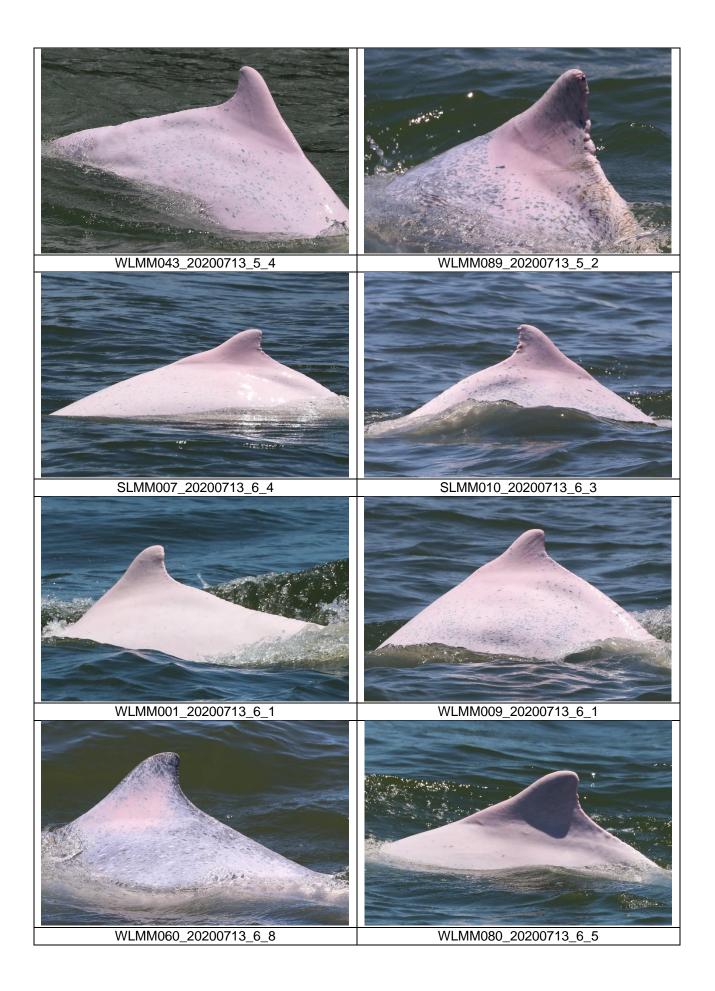


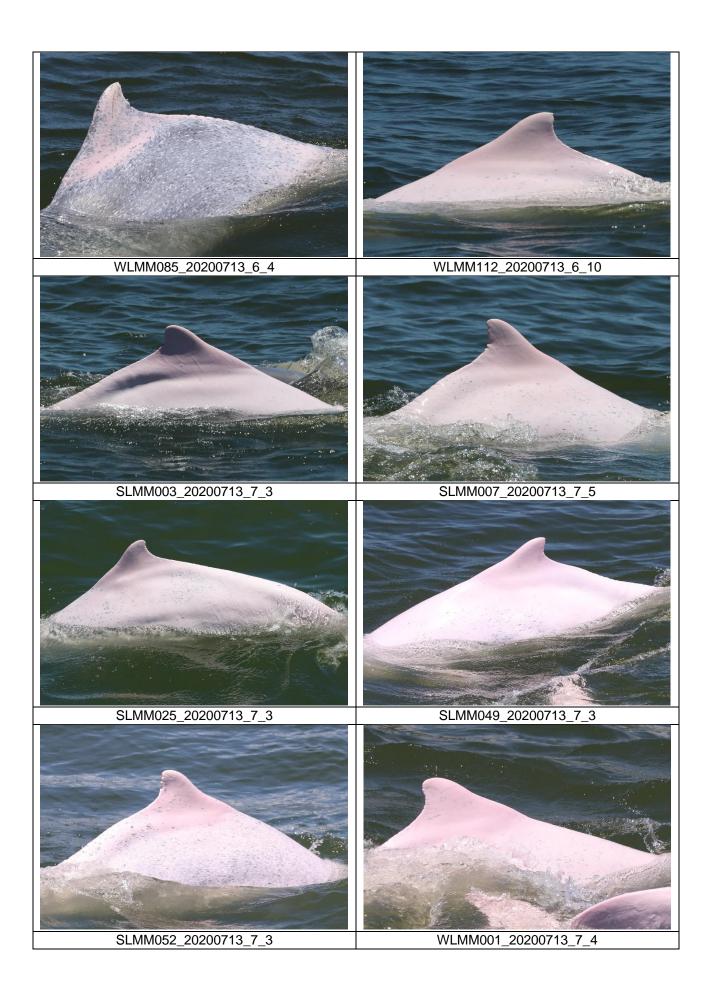
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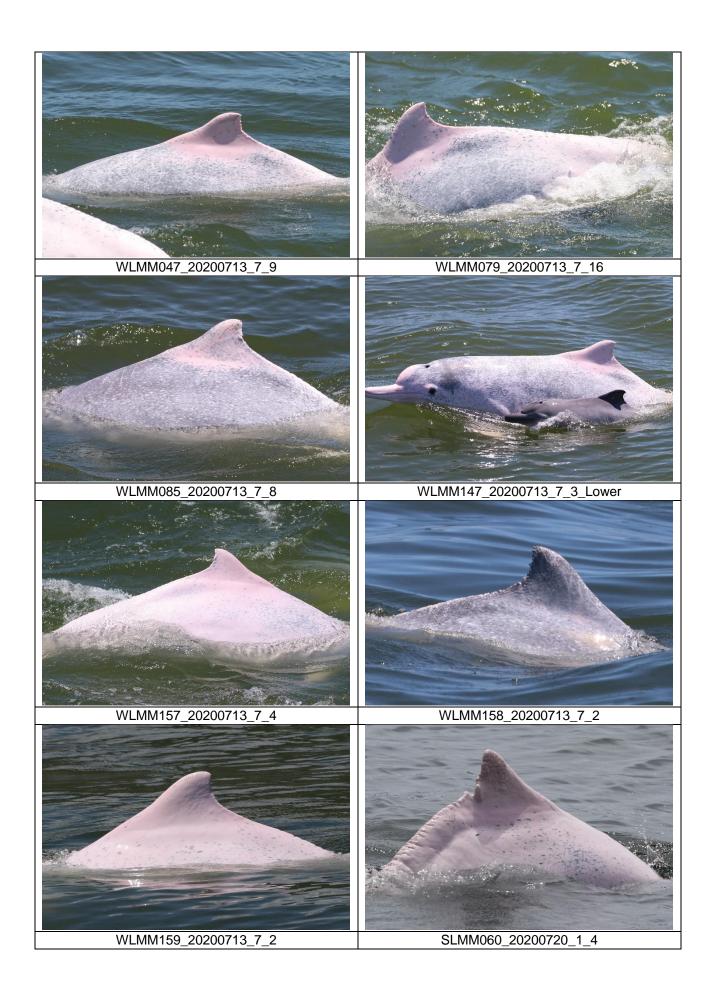
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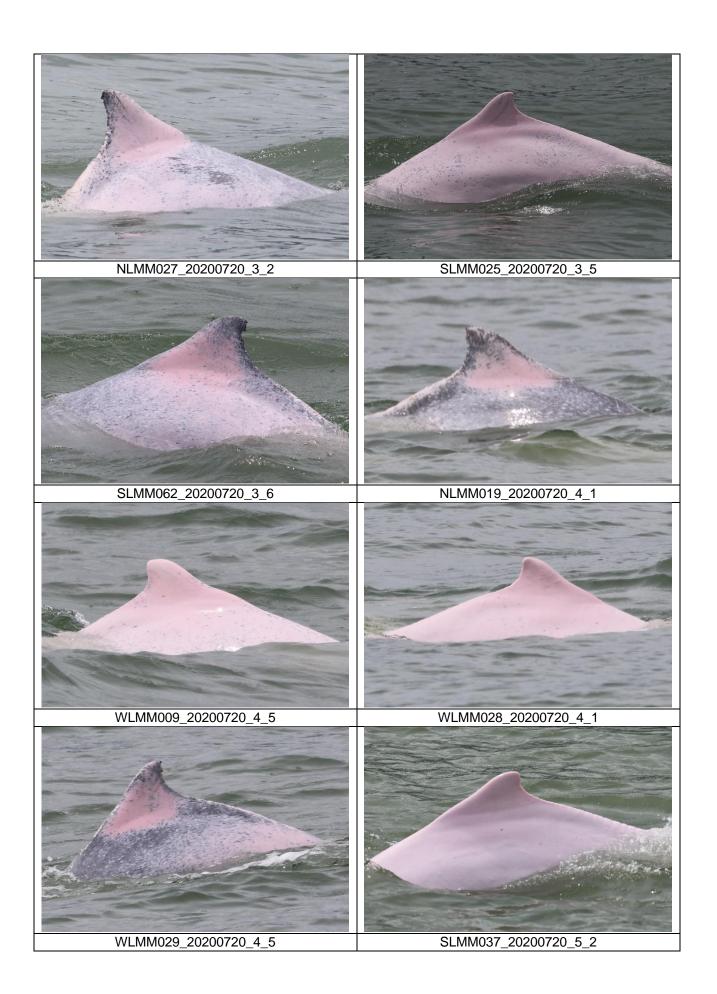


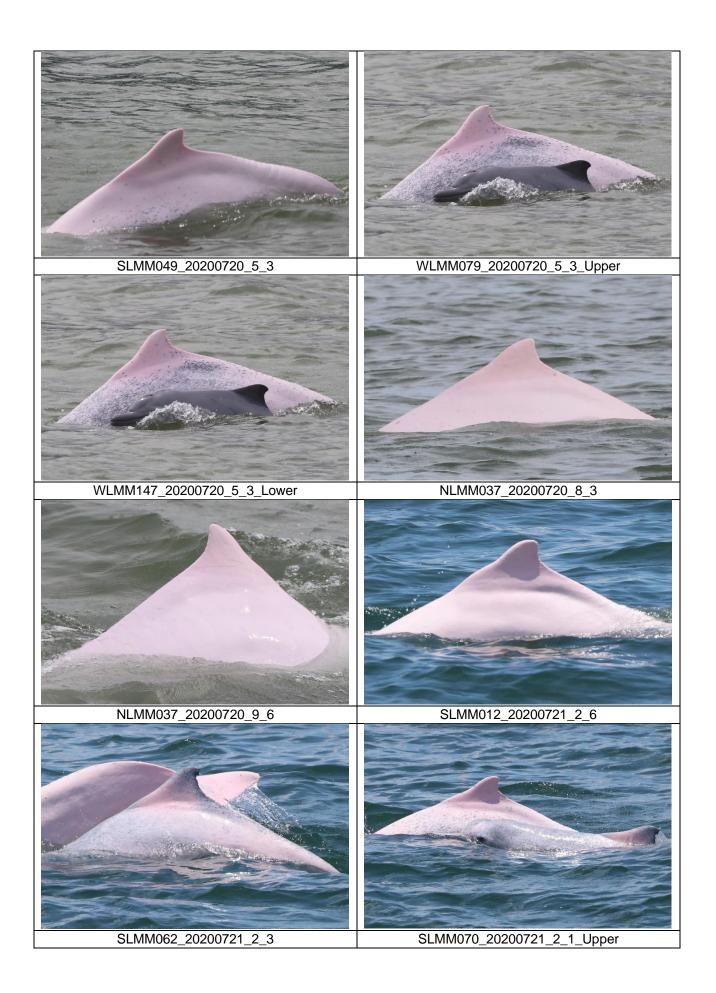


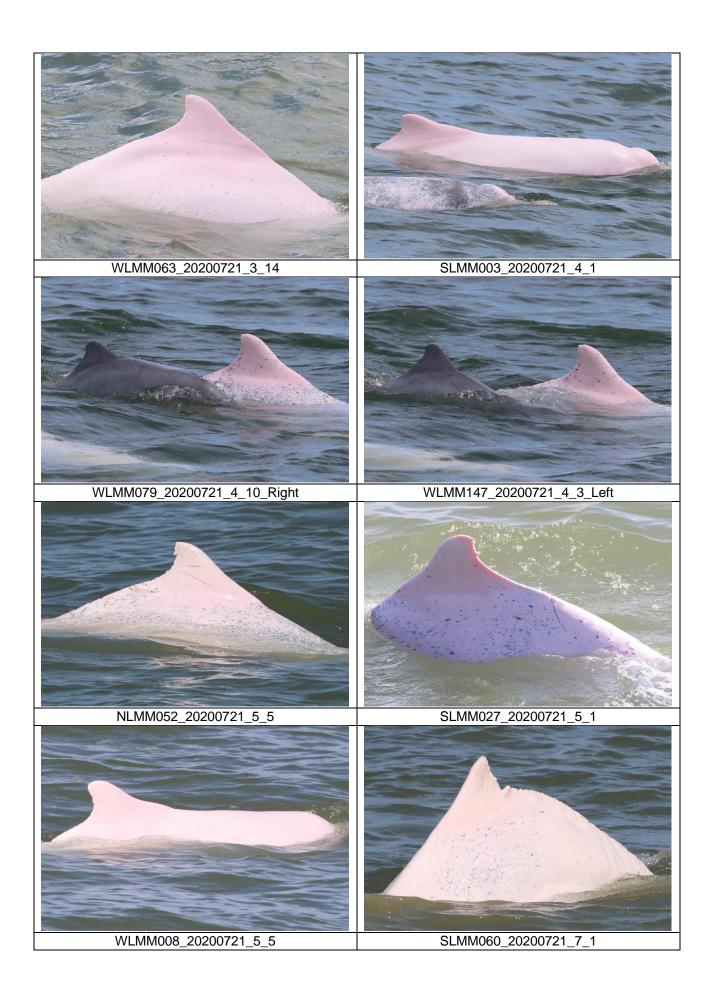


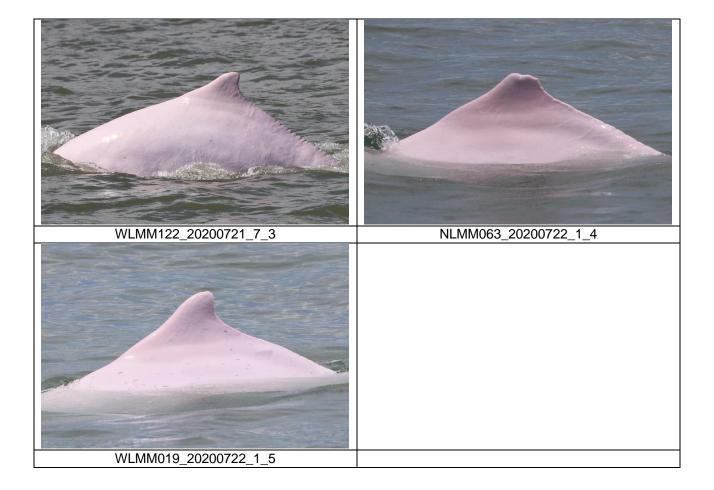












CWD Groups by Survey Date

Date	Station	Start Time	End Time	Duration	Beaufort Range	Visibility	No. of Focal Follow Dolphin Groups Tracked	Dolphin Group Size Range
7/Jul/20	Sha Chau	10:45	16:45	6:00	2-3	1	0	-
15/Jul/20	Lung Kwu Chau	8:54	14:54	6:00	2	1	0	-

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

Appendix D. Calibration Certificates



輝創工程有限公司

Sun Creation Engineering Limited

Calibration & Testing Laboratory

Certificate of Calibration 校正證書

Certificate No.: C203701 證書編號

Description / 儀器名 Manufacturer / 製造 Model No. / 型號 Serial No. / 編號 Supplied By / 委託者	街: Castle: GA607: 040162	Date of Receipt / 收件日期:26 June 2020
TEST CONDITION Temperature / 溫度 Line Voltage / 電壓	: $(23 \pm 2)^{\circ}C$	Relative Humidity / 相對濕度 : (50 ± 25)%
TEST SPECIFICAT	「IONS / 測試規範	
DATE OF TEST / 🥻	即試日期 : 4 July 2020	
The results do not exe	即武結果 he particular unit-under-test only. ceed manufacturer's specification. ed in the subsequent page(s).	
The Government ofThe Bruel & Kjaer	sed for calibration are traceable to National Stand f The Hong Kong Special Administrative Region Calibration Laboratory, Denmark ies / Keysight Technologies ice Center, USA	
Tested By 測試	:H T Wong Assistant Engineer	

written approval of this laboratory. 本證書所載枝正用之測試器材均可溯源至國際標準。局部複印本證書需先獲本實驗所書面批准。



輝創工程有限公司

Sun Creation Engineering Limited

Calibration & Testing Laboratory

Certificate of Calibration 校正證書

Certificate No.: C203701 證書編號

- 1. The unit-under-test (UUT) was allowed to stabilize in the laboratory for over 12 hours before the commencement of the test.
- 2. The results presented are the mean of 3 measurements at each calibration point.
- 3. Test equipment :

Equipment ID	Description	Certificate No.
CL130	Universal Counter	C193756
CL281	Multifunction Acoustic Calibrator	CDK1806821
TST150A	Measuring Amplifier	C201309

- 4. Test procedure : MA100N.
- 5. Results :
- 5.1 Sound Level Accuracy

UUT	Measured Value	Mfr's Spec.	Uncertainty of Measured Value
Nominal Value	(dB)	(dB)	(dB)
94 dB, 1 kHz	94.0	± 0.3	± 0.2
104 dB, 1 kHz	104.0		± 0.3

5.2 Frequency Accuracy

UUT Nominal Value	Measured Value	Mfr's	Uncertainty of Measured Value
(kHz)	(kHz)	Spec.	(Hz)
1	1.000	1 kHz ± 1 %	± 1

Remark : The uncertainties are for a confidence probability of not less than 95 %.

Note :

Only the original copy or the laboratory's certified true copy is valid.

The values given in this Certificate only relate to the values measured at the time of the test and any uncertainties quoted will not include allowance for the equipment long term drift, variations with environment changes, vibration and shock during transportation, overloading, mis-handling, or the capability of any other laboratory to repeat the measurement. Sun Creation Engineering Limited shall not be liable for any loss or damage resulting from the use of the equipment.

本證書所載校正用之測試器材均可溯源至國際標準。局部複印本證書需先獲本實驗所書面批准。

The test equipment used for calibration is traceable to the National Standards as specified in this certificate. This certificate shall not be reproduced except in full, without the prior written approval of this laboratory.



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PART A - CUSTOMER INFORMATION

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

PART B - DESCRIPTION

: YSI ProDSS (Multi-Parameters)
: YSI (a xylem brand)
: 17E100747
: Jul 20, 2020
: Jul 20, 2020
: Oct 19, 2020

PART C - REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

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

PART D - CALIBRATION RESULTS^(b,c)

(1) pH at 25°C

Target (pH unit)	Displayed Reading ^(d) (pH Unit)	Tolerance ^(e) (pH Unit)	Results
4.00	4.02	0.02	Satisfactory
7.42	7.44	0.02	Satisfactory
10.01	10.09	0.08	Satisfactory

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

(2) Temperature

Reading of Ref. thermometer	Displayed Reading (°C)	Tolerance (°C)	Results
10	10.0	0.0	Satisfactory
28	27.5	-0.5	Satisfactory
48	49.0	1.0	Satisfactory

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

~ CONTINUED ON NEXT PAGE ~

Remark(s): -

The "Date of Next Calibration" is recommended according to best practice principals as practiced by QPT or quoted form relevant international standards.

The results relate only to the calibrated equipment as received (b)

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

"Displayed Reading" denotes the figure shown on item under calibration/ checking regardless of equipment precision or significant figures. The "Tolerance Limit" mentioned is referenced to YSI product specifications. (d)

(e)

LEE Chun-ning, Desmond

Senior Chemist



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PART D - CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
0.10	0.29	0.19	Satisfactory
1.89	2.04	0.15	Satisfactory
4.51	4.22	-0.29	Satisfactory
6.90	7.10	0.20	Satisfactory

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

(4) Conductivity at 25°C

Conc. of KCl (M)	Expected Reading (µS/cm)	Displayed Reading (µS/cm)	Tolerance (%)	Results
0.001	146.9	147.2	0.20	Satisfactory
0.01	1412	1462	3.54	Satisfactory
0.1	12890	12417	-3.67	Satisfactory
0.5	58670	57942	-1.24	Satisfactory
1.0	111900	111098	-0.72	Satisfactory

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

(5) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	9.98	-0.20	Satisfactory
20	20.09	0.45	Satisfactory
30	30.31	1.03	Satisfactory

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

(6) Turbidity

Expected Reading (NTU)	Displayed Reading ^(f) (NTU)	Tolerance ^(g) (%)	Results
0	0.21		Satisfactory
10	10.11	1.1	Satisfactory
20	20.22	1.1	Satisfactory
100	104.37	4.4	Satisfactory
800	793.41	-0.8	Satisfactory

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

~ END OF REPORT ~

<u>Remark(s): -</u>

⁽⁰⁾ "Displayed Reading" presents the figures shown on item under calibration/ checking regardless of equipment precision or significant figures.
 ^(g) The "Tolerance Limit" mentioned is the acceptance criteria applicable for similar equipment used by Quality Pro Test-Consult Ltd. or quoted form relevant international standards.



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PART A - CUSTOMER INFORMATION

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

PART B – DESCRIPTION

Name of Equipment	: YSI 6920V2 (Multi-Parameters)
Manufacturer	: YSI (a xylem brand)
Serial Number	: 0001C6A7
Date of Received	: Jul 20, 2020
Date of Calibration	: Jul 20, 2020
Date of Next Calibration(a)	: Oct 19, 2020

PART C - REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

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

PART D - CALIBRATION RESULTS^(b,c)

(1) pH at 25°C

Target (pH unit)	Displayed Reading ^(d) (pH Unit)	Tolerance ^(e) (pH Unit)	Results
4.00	4.01	0.01	Satisfactory
7.42	7.44	0.02	Satisfactory
10.01	10.10	0.09	Satisfactory

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

(2) Temperature

Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)	Results
10	10.03	0.03	Satisfactory
28	28.06	0.06	Satisfactory
48	47.90	-0.10	Satisfactory

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

~ CONTINUED ON NEXT PAGE ~

Remark(s): -

(0) The "Date of Next Calibration" is recommended according to best practice principals as practiced by QPT or quoted form relevant international standards.

(b) The results relate only to the calibrated equipment as received

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

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

(e) The "Tolerance Limit" mentioned is referenced to YSI product specifications.

LEE Chun-ning, Desmond Senior Chemist



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PART D - CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
0.10	0.32	0.22	Satisfactory
1.89	2.02	0.13	Satisfactory
4.51	4.24	-0.27	Satisfactory
6.90	7.12	0.22	Satisfactory

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

(4) Conductivity at 25°C

Conc. of KCl (M)	Expected Reading (µS/cm)	Displayed Reading (µS/cm)	Tolerance (%)	Results
0.001	146.9	147.9	0.68	Satisfactory
0.01	1412	1453	2.90	Satisfactory
0.1	12890	12360	-4.11	Satisfactory
0.5	58670	58122	-0.93	Satisfactory
1.0	111900	110812	-0.97	Satisfactory

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

(5) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	10.01	0.10	Satisfactory
20	20.11	0.55	Satisfactory
30	30.28	0.93	Satisfactory

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

(6) Turbidity

Expected Reading (NTU)	Displayed Reading ^(f) (NTU)	Tolerance ^(g) (%)	Results
0	0.18		Satisfactory
10	10.12	1.2	Satisfactory
20	20.19	1.0	Satisfactory
100	103.98	4.0	Satisfactory
800	795.11	-0.6	Satisfactory

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

~ END OF REPORT ~

<u>Remark(s): -</u>

- "Displayed Reading" presents the figures shown on item under calibration/ checking regardless of equipment precision or significant figures. The "Tolerance Limit" mentioned is the acceptance criteria applicable for similar equipment used by Quality Pro Test-Consult Ltd. or quoted form (g) relevant international standards.

Appendix E. Status of Environmental Permits and Licences

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

Contract No.	Description	Location	Permit/ Reference No.	Status
3205	Notification of Construction Work under APCO	Works area of 3205	453653	Receipt acknowledged by EPD on 25 Feb 2020
	Registration as Chemical Waste	Works Area of 3205	WPN 5213-951- B2502-01	Registration was updated on 25 Sep 2017
	Producer	Works Area of 3205	WPN 5111-421- B2509-01	Registration was updated on 25 Sep 2017
	Construction Noise Permit (General Works)	Works Area of 3205	GW-RS0436-20	Valid from 30 Jun 2020 to 29 Dec 2020
	Discharge License under WPCO	Works area of 3205	WT00028370- 2017	Valid from 21 Jun 2017 to 30 Jun 2022
	Bill Account for disposal	Works area of 3205	A/C 7026295	Approval granted from EPD on 9 Nov 2016
3206	Notification of Construction Work	Works area of 3206	409237	Receipt acknowledged by EPD on 25 Oct 2016
	under APCO	Works area of 3206 (Area 11)	447899	Receipt acknowledged by EPD on 8 Aug 2019
	Registration as Chemical Waste	Site office of 3206	WPN 5213-951- Z4035-01	Completion of Registration on 18 Nov 2016
	Producer	Works area of 3206	WPN 5213-951- Z4035-02	Completion of Registration on 18 Nov 2016
		Works Area of 3206 (Area 11)	WPN 5213-951- Z4035-04	Completion of Registration on 4 Sep 2019
	Construction Noise Permit (General Works)	Works Area of 3206	GW-RS0423-20	Valid from 30 Jun 2020 to 15 Dec 2020
		Works Area of 3206 (Area 11)	GW-RS0414-20	Valid from 25 Jun 2020 to 24 Dec 2020
		Works Area of 3206	GW-RS0156-20	Superseded by GW-RS0501-20
			GW-RS0501-20	Valid from 20 Jul 2020 to 20 Dec 2020
	Bill Account for disposal	Works area of 3206	A/C 7026398	Approval granted from EPD on 16 Nov 2016
3301	Notification of Construction Work under APCO	Works area of 3301	415821	Receipt acknowledged by EPD on 19 Apr 2017
	Registration as Chemical Waste Producer	Works area of 3301	WPN 5213-951- F2718-02	Completion of Registration on 9 Jun 2017

Contract No.	Description	Location	Permit/ Reference No.	Status
	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	Works area of 3302	440222	Receipt acknowledged by EPD on 10 Dec 2018
	under APCO	Staging area of 3302	2018CES1	Receipt acknowledged by EPD on 21 Dec 2018
			454882	Receipt acknowledged by EPD on 2 Apr 2020
	Registration as Chemical Waste Producer	Works area of 3302	5296-951-C4331- 01	Completion of Registration on 4 Jan 2019
	Discharge License under WPCO	Works area of 3302	WT00034539- 2019	Valid from 11 Mar 2020 to 31 Mar 2025
		Works area of 3302	WT00034541- 2019	Valid from 14 Oct 2019 to 31 Oct 2024
	Bill Account for disposal	Works area of 3302	A/C 7032881	Approval granted from EPD on 8 Jan 2019
	Construction Noise Permit (General	Works area of 3302	GW-RS1162-19	Valid from 7 Jan 2020 to 6 Jul 2020
	Works)		GW-RS0438-20	Valid from 7 Jul 2020 to 6 Jan 2021
			GW-RS0447-20	Valid from 7 Jul 2020 to 6 Jan 2021
3303	Notification of Construction Work under APCO	Works area of 3303	445611	Receipt acknowledged by EPD on 27 May 2019
	Registration as Chemical Waste Producer	Works area of 3303	5213-951-S4174- 01	Completion of Registration on 17 Jun 2019
	Discharge License under WPCO	Works area of 3303	WT00035689- 2020	Valid from 11 May 2020 to 31 May 2025
	Bill Account for disposal	Works area of 3303	A/C 7034272	Approval granted from EPD on 10 Jun 2019
	Construction Noise Permit (General Works)	Works area of 3303 (Existing airport)	GW-RS0335-20	Valid from 27 May 2020 to 15 Nov 2020
		Works area of 3303	GW-RS0154-20	Superseded by GW-RS0476-20
		(Reclamation area)	GW-RS0476-20	Valid from 20 July 2020 to 14 Jan 2021
307	Notification of Construction Work under APCO	Works area of 3307	454964	Receipt acknowledged by EPD on 6 Apr 2020
	Registration as Chemical Waste Producer	Works area of 3307	5211-951-P3379- 01	Completion of Registration on 8 Jun 2020
	Bill Account for disposal	Works area of 3307	A/C 7037129	Approval granted from EPD on 5 May 2020
	Construction Noise Permit (General Works)	Works area of 3307	GW-RS0495-20	Valid from 19 July 2020 to 15 Jan 2021

Contract No.	Description	Location	Permit/ Reference No.	Status
3402	Notification of Construction Work	Works area of 3402	440808	Receipt acknowledged by EPD on 31 Dec 2018
	under APCO	Stockpiling area of 3402	441960	Receipt acknowledged by EPD on 8 Feb 2019
	Registration as Chemical Waste Producer	Works area of 3402	WPN 5213-951- W1172-05	Registration was updated on 25 Feb 2019
	Discharge License under WPCO	Works area of 3402	WT00033685- 2019	Valid from 20 Jun 2019 to 30 Jun 2024
	Bill Account for disposal	Works area of 3402	A/C 7032577	Approval granted from EPD on 27 Nov 2018
	Construction Noise Permit (General Works)	Works area of 3402	GW-RS0070-20	Valid from 3 Feb 2020 to 1 Aug 2020
3403	Notification of Construction Work under APCO	Works area of 3403	450860	Receipt acknowledged by EPD on 11 Nov 2019
	Registration as Chemical Waste Producer	Works area of 3403	WPN 5213-951- S4218-01	Completion of Registration on 9 Jan 2020
	Discharge License under WPCO	Works area of 3403	WT00035841- 2020	Valid from 5 Jun 2020 to 30 Jun 2025
	Bill Account for disposal	Works area of 3403	A/C 7035267	Approval granted from EPD on 30 Sep 2019
	Construction Noise Permit (General Works)	Works area of 3403	GW-RS0334-20	Valid from 29 May 2020 to 28 Nov 2020
3405	Notification of Construction Work under APCO	Works area of 3405	453447	Receipt acknowledged by EPD on 18 Feb 2020
	Registration as Chemical Waste Producer	Works area of 3405	WPN 5218-951- C4431-01	Completion of Registration on 12 Mar 2020
	Bill Account for disposal	Works area of 3405	A/C 7036796	Approval granted from EPD on 20 Mar 2020
	Construction Noise Permit (General Works)	Works area of 3405	GW-RS0429-20	Valid from 30 Jun 2020 to 29 Dec 2020
3503	Notification of Construction Work	Works area of 3503	435180	Receipt acknowledged by EPD on 29 Jun 2018
	under APCO	Stockpiling area of 3503	454450	Receipt acknowledged by EPD on 17 Mar 2020
		Stockpiling area of 3503	449570	Receipt acknowledged by EPD on 30 Sep 2019
	Registration as Chemical Waste Producer	Works area of 3503	WPN 5113-951- L2845-02	Completion of Registration on 8 Jan 2018
	Discharge License under WPCO	Works area of 3503	WT00031258- 2018	Valid from 7 Jun 2018 to 30 Jun 2023
	Bill Account for disposal	Works area of 3503	A/C 7029665	Approval granted from EPD on 27 Dec 2017
	Construction Noise Permit (General	Works area of 3503	GW-RS0351-20	Valid from 24 May 2020 to 31 Oct 2020
	Works)	Stockpiling area of 3503	GW-RS0385-20	Valid from 11 Jul 2020 to 31 Dec 2020

Contract No.	Description	Location	Permit/ Reference No.	Status
		Works area of 3503 (Special Case)	GW-RS0261-20	Valid from 26 Apr 2020 to 1 Jul 2020
		Works area of 3503 (Special Case)	GW-RS0442-20	Valid from 2 Jul 2020 to 31 Dec 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 7029991	Approval granted from EPD on 1 Feb 2018
3602	Notification of Construction Work under APCO	Works area of 3602	421278	Receipt acknowledged by EPD on 18 Sep 2017
	Registration as Chemical Waste	Works area of 3602	WPN 5296-951- N2673-01	Completion of Registration on 9 Oct 2017
	Producer	Site office of 3602	WPN 5296-951- N2673-02	Completion of Registration on 11 Dec 2017
	Bill Account for disposal	Works area of 3602	A/C 7028942	Approval granted from EPD on 6 Oct 2017
	Construction Noise Permit (General Works)	Works area of 3602	GW-RS0133-20	Valid from 1 Apr 2020 to 30 Sep 2020
3603	Notification of Construction Work under APCO	Site office of 3603	433604	Receipt acknowledged by EPD on 16 May 2018
	Registration as Chemical Waste Producer	Works area of 3603	WPN 5296-951- S4069-01	Completion of Registration on 22 Jan 2018
	Bill Account for disposal	Works area of 3603	A/C 7030002	Approval granted from EPD on 1 Feb 2018
	Construction Noise Permit (General Works)	Works area of 3603	GW-RS0165-20	Valid from 8 Apr 2020 to 7 Oct 2020
3721	Notification of Construction Work under APCO	Works area of 3721	448657	Receipt acknowledged by EPD on 02 Sep 2019
	Registration as Chemical Waste Producer	Works area of 3721	WPN 5218-951- C4412-01	Completion of Registration on 9 Dec 2019
	Bill Account for disposal	Works area of 3721	A/C 705234	Approval granted from EPD on 25 Sep 2019
	Construction Noise Permit (General Works)	Works area of 3721	GW-RS0419-20	Valid from 30 Jun 2020 to 29 Dec 2020
3722	Notification of Construction Work	Works area of 3722A	453195	Receipt acknowledged by EPD on 11 Feb 2020
	under APCO	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	Works area of 3722A	WPN 5218-951- T3863-01	Completion of Registration on 18 Mar 2020
	Producer	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-RS0304-20	Valid from 9 May 2020 to 7 Nov 2020
3801	Notification of Construction Work	Works area of 3801	418345	Receipt acknowledged by EPD on 26 Jun 2017
	under APCO		430372	Receipt acknowledged by EPD on 2 Feb 2018
			435652	Receipt acknowledged by EPD on 16 Ju 2018
			451991	Receipt acknowledged by EPD on 18 Dec 2019
		Stockpiling area of 3801	450940	Receipt acknowledged by EPD on 13 Nov 2019
	Registration as Chemical Waste Producer	Works area of 3801	WPN 5296-951- C1169-53	Completion of Registration on 14 Aug 2018
	Discharge License under WPCO	Works and stockpiling area of 3801	WT00029535- 2017	Valid from 24 Nov 2017 to 30 Nov 2022
	Bill Account for disposal	Works area of 3801	A/C 7028254	Approval granted from EPD on 3 Jul 2017
	Construction Noise	Works and	GW-RS1212-19	Valid from 9 Jan 2020 to 8 Jul 2020
	Permit (General Works)	stockpiling area of 3801	GW-RS0475-20	Valid from 12 Jul 2020 to 8 Jan 2021
		Works area of 3801 (Special Case)	GW-RS0366-20	Valid from 2 Jun 2020 to 1 Aug 2020
802	Notification of Construction Work under APCO	Works area of 3802	458122	Receipt acknowledged by EPD on 14 Ju 2020
	Bill Account for disposal	Works area of 3802	A/C 7037575	Approval granted from EPD on 15 Jur 2020
3901A	Notification of Construction Work under APCO	Works area of 3901A	456240	Receipt acknowledged by EPD on 18 May 2020
	Specified Process license under APCO	Works area of 3901A	443180	Receipt acknowledged by EPD on 15 Ma 2019

Contract No.	Description	Location	Permit/ Reference No.	Status
	Registration as Chemical Waste Producer	Works area of 3901A	WPN 5218-951- K3400-01	Completion of Registration on 17 Jul 2020
	Construction Noise Permit (General Works)	Works area of 3901A	GW-RS0298-20	Valid from 25 May 2020 to 24 Nov 2020
3901B	Notification of Construction Work under APCO	Works area of 3901B	452168	Receipt acknowledged by EPD on 23 Dec 2019
	Specified Process license under APCO	Works area of 3901B	443181	Receipt acknowledged by EPD on 15 Mar 2019
	Registration as Chemical Waste Producer	Works area of 3901B	WPN 5218-951- G2880-01	Completion of Registration on 17 Jan 2020
	Bill Account for disposal	Works area of 3901B	A/C 7032417	Approval granted from EPD on 13 Nov 2018
	Construction Noise Permit (General Works)	Works area of 3901B	GW-RS0106-20	Valid from 2 Mar 2020 to 19 Aug 2020

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	2	0	0		
From 28 December 2015 to end of the reporting period	19	1	1		

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

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

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM- Macao (Maritime Ferry Terminal) <u>YFT</u> - Macao (Taipa) <u>ZUI</u> - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
1-Jul	10:16	3A061	YFT	Arrival	12.1	-	-
1-Jul	13:53	3A161	YFT	Departure	12.4	-	-
1-Jul	19:54	3A065	YFT	Arrival	12.3	-	-
1-Jul	23:18	3A165	YFT	Departure	13.2	-	-
2-Jul	9:56	3A061	YFT	Arrival	12.2	-	-
2-Jul	13:53	3A161	YFT	Departure	12.4	-	-
2-Jul	19:53	3A065	YFT	Arrival	12.6	-	-
2-Jul	22:56	3A165	YFT	Departure	13.1	-	-
3-Jul	10:06	85912	YFT	Arrival	11.1	-	-
3-Jul	13:49	8S192	YFT	Departure	11.9	-	-
3-Jul	19:37	8S916	YFT	Arrival	12.1	-	-
3-Jul	22:57	8S198	YFT	Departure	11.3	-	-
4-Jul	9:42	85912	YFT	Arrival	12.5	-	-
4-Jul	13:37	8S192	YFT	Departure	12.1	-	-
4-Jul	19:32	85916	YFT	Arrival	12.7	-	-
4-Jul	22:51	8S198	YFT	Departure	13.1	-	-
5-Jul	9:54	3A061	YFT	Arrival	12.3	-	-
5-Jul	13:48	3A161	YFT	Departure	11.4	-	-
5-Jul	19:54	3A065	YFT	Arrival	11.5	-	-
5-Jul	22:36	3A165	YFT	Departure	12	-	-
6-Jul	10:06	3A061	YFT	Arrival	11.7	-	-
6-Jul	13:46	3A161	YFT	Departure	12.1	-	-
6-Jul	19:52	3A065	YFT	Arrival	11.7	-	-
6-Jul	22:49	3A165	YFT	Departure	12.2	-	-
7-Jul	9:48	85912	YFT	Arrival	12.3	-	-
7-Jul	13:54	8S192	YFT	Departure	13.2	-	-
7-Jul	19:47	85916	YFT	Arrival	12.5	-	-
7-Jul	22:29	85198	YFT	Departure	13.4	-	-
8-Jul	9:46	85912	YFT	Arrival	12.5	-	-
8-Jul	13:41	8S192	YFT	Departure	12.6	-	-
8-Jul	19:37	85916	YFT	Arrival	11.9	-	-
8-Jul	22:42	85198	YFT	Departure	12.5	-	-
9-Jul	10:08	3A061	YFT	Arrival	11.7	-	-
9-Jul	13:50	3A161	YFT	Departure	12.2	-	-
9-Jul	20:00	3A065	YFT	Arrival	11.9	-	-
9-Jul	23:19	3A165	YFT	Departure	13.4	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) <u>YFT</u> Macao (Taipa) <u>ZUI</u> - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
10-Jul	10:05	3A061	YFT	Arrival	11.6	-	-
10-Jul	13:52	3A161	YFT	Departure	12.3	-	-
10-Jul	19:54	3A065	YFT	Arrival	12.6	-	-
10-Jul	22:52	3A165	YFT	Departure	13.4	-	-
11-Jul	9:58	85912	YFT	Arrival	12.7	-	-
11-Jul	13:46	8S192	YFT	Departure	12.2	-	-
11-Jul	20:10	85916	YFT	Arrival	11.9	-	-
11-Jul	23:12	8S198	YFT	Departure	12.8	-	-
12-Jul	10:11	85912	YFT	Arrival	10.6	-	-
12-Jul	13:51	8S192	YFT	Departure	12.7	-	-
12-Jul	19:45	85916	YFT	Arrival	10.8	-	-
12-Jul	23:29	8\$198	YFT	Departure	13	-	-
13-Jul	9:50	3A061	YFT	Arrival	12.4	-	-
13-Jul	13:53	3A161	YFT	Departure	12.5	-	-
13-Jul	19:53	3A065	YFT	Arrival	12.2	-	-
13-Jul	22:29	3A165	YFT	Departure	11.4	-	-
14-Jul	10:03	3A061	YFT	Arrival	12.2	-	-
14-Jul	13:50	3A161	YFT	Departure	12.1	-	-
14-Jul	20:09	3A065	YFT	Arrival	12.6	-	-
14-Jul	22:35	3A165	YFT	Departure	12.3	-	-
15-Jul	10:22	85912	YFT	Arrival	12.7	-	-
15-Jul	13:50	8S192	YFT	Departure	12.1	-	-
15-Jul	20:12	8S916	YFT	Arrival	11.4	-	-
15-Jul	23:04	8S198	YFT	Departure	13	-	-
16-Jul	10:42	85912	YFT	Arrival	12.7	-	-
16-Jul	14:03	8S192	YFT	Departure	12.7	-	-
16-Jul	19:38	8S916	YFT	Arrival	12.5	-	-
16-Jul	23:01	8S198	YFT	Departure	12.5	-	-