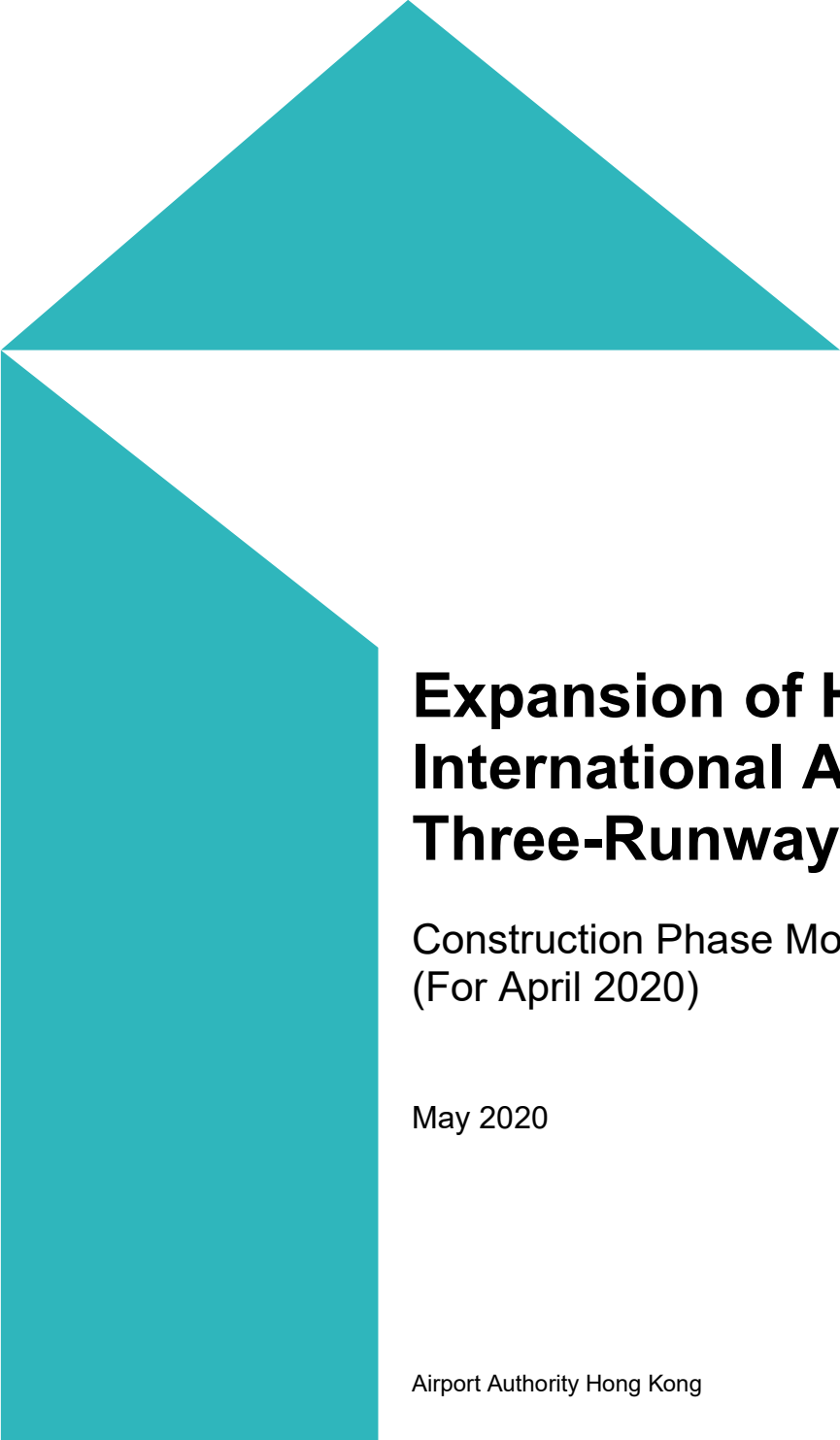




Expansion of Hong Kong International Airport into a Three-Runway System

Construction Phase Monthly EM&A Report No.52
(For April 2020)

May 2020

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

Construction Phase Monthly EM&A Report No.52
(For April 2020)

May 2020

This Monthly EM&A Report No. 52 has been reviewed and certified by

the Environmental Team Leader (ETL) in accordance with

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

Certified by:

A handwritten signature in black ink, appearing to read 'Terence Kong', is positioned above a horizontal line.

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

Date

14 May 2020



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By Email

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

Attn: Mr. Lawrence Tsui, Principal Manager

14 May 2020

Dear Sir,

Contract No. 3102
3RS Independent Environmental Checker Consultancy Services

Submission of Monthly EM&A Report No. 52 (April 2020)

Reference is made to the Environmental Team's submission of the Monthly EM&A Report No. 52 under Condition 3.5 of the Environmental Permit No. EP-489/2014 certified by the ET Leader on 14 May 2020.

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

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

Yours faithfully,
AECOM Asia Co. Ltd.

Jackel Law
Independent Environmental Checker

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Abbreviations

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

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

Executive Summary

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

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

This is the 52nd 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 30 April 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	20
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

		
Land-Based Theodolite Tracking Survey for CWD at Lung Kwu Chau	Dust Suppression Measure conducted by Contractor	Impact Noise Monitoring conducted by ET in Sha Lo Wan

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, water quality, construction waste, and CWD did not trigger the corresponding Action and Limit Levels in the reporting period.

Summary of Upcoming Key Issues

Advanced Works:

Contract P560 (R) Aviation Fuel Pipeline Diversion Works

- Stockpiling of construction materials

Reclamation Works:

Contract 3205 DCM works

- DCM works

Contract 3206 Main Reclamation Works

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

Airfield Works:

Contract 3301 North Runway Crossover Taxiway

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

Contract 3302 Eastern Vehicular Tunnel Advance Works

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

- Site establishment.

Contract 3303 Third Runway and Associated Works

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

Third Runway Concourse:**Contract 3402 New Integrated Airport Centres Enabling Works**

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

Contract 3403 New Integrated Airport Centres Building and Civil Works

- Site establishment; and
- Foundation works.

Contract 3405 Three Runway Concourse Foundation and Substructure Works

- Site establishment.

Terminal 2 Expansion:**Contract 3501 Antenna Farm and Sewage Pumping Station**

- Site clearance.

Contract 3503 Terminal 2 Foundation and Substructure Works

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

Automated People Mover (APM) and Baggage Handling System (BHS):**Contract 3601 New Automated People Mover System (TRC Line)**

- Construction of site office.

Contract 3602 Existing APM System Modification Works

- Modification works at APM depot.

Construction Support (Facilities):**Contract 3721 Construction Support Infrastructure Works**

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

Contract 3722 Construction Support Facilities

- Formboard erecting and concreting; and
- Site Establishment.

Airport Support Infrastructure:**Contract 3801 APM and BHS Tunnels on Existing Airport Island**

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

Construction Support (Services / Licences):

Contract 3901B Concrete Batching Facility

- Footing construction; and
- Erection of steelwork.

Summary Table

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

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

Note:

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

1 Introduction

1.1 Background

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

Airport Authority Hong Kong (AAHK) commissioned Mott MacDonald Hong Kong Limited (MMHK) to undertake the role of Environmental Team (ET) for carrying out the Environmental Monitoring & Audit (EM&A) works during the construction phase of the Project in accordance with the Updated EM&A Manual (the Manual) submitted under EP Condition 3.1¹. 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 the Construction Phase Monthly EM&A Report No. 51.

1.2 Scope of this Report

This is the 52nd 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 30 April 2020.

1.3 Project Organisation

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

¹ The Manual is available on the Project’s dedicated website (accessible at: <http://env.threerunwaysystem.com/en/index.html>).

Table 1.1: Contact Information of Key Personnel

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

Advanced Works:

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

Reclamation Works:

Party	Position	Name	Telephone
Contract 3205 DCM (Package 5) (Bachy Soletanche - Sambo Joint Venture)	Deputy Project Director	Min Park	9683 0765
	Environmental Officer	William Chan	5408 3045
Contract 3206 Main Reclamation Works (ZHEC-CCCC-CDC Joint Venture)	Project Manager	Kim Chuan Lim	3763 1509
	Environmental Officer	Kwai Fung Wong	3763 1452

Airfield Works:

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

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

Third Runway Concourse:

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

Terminal 2 (T2) Expansion:

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

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

Party	Position	Name	Telephone
Contract 3601 New Automated People Mover System (TRC Line) (CRRC Puzhen Bombardier Transportation Systems Limited and CRRC Nanjing Puzhen Co., Ltd. Joint Venture)	Project Manager	Hongdan Wei	158 6180 9450
	Environmental Officer	K F Li	9086 1793
Contract 3602 Existing APM System Modification Works (Niigata Transys Co., Ltd.)	Project Manager	Kunihiro Tatecho	9755 0351
	Environmental Officer	Yolanda Gao	5399 3509
Contract 3603 3RS Baggage Handling System (VISH Consortium)	Project Manager	K C Ho	9272 9626
	Environmental Officer	Eric Ha	9215 3432

Construction Support (Facilities):

Party	Position	Name	Telephone
Contract 3721 Construction Support Infrastructure Works (China State Construction Engineering (Hong Kong) Ltd.)	Site Agent	Thomas Lui	9011 5340
	Environmental Officer	Xavier Lam	9493 2944
Contract 3722 Western Support Area – Construction Support Facilities (Tapbo Construction Company Limited and Konwo Modular House Limited Joint Venture)	Deputy Project Director	Philip Kong	9049 3161
	Environmental Officer	Sampson Lo	9752 9118

Airport Support Infrastructure:

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

Construction Support (Services / Licences):

Party	Position	Name	Telephone
Contract 3901B Concrete Batching Facility (Gammon Construction Limited)	Senior Project Manager	Gabriel Chan	2435 3260
	Environmental Officer	Rex Wong	2695 6319

1.4 Summary of Construction Works

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

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

1.5 Summary of EM&A Programme Requirements

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

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

Parameters	Status
Air Quality	
Baseline Monitoring	The baseline air quality monitoring result has been reported in Baseline Monitoring Report and submitted to EPD under EP Condition 3.4.
Impact Monitoring	On-going
Noise	
Baseline Monitoring	The baseline noise monitoring result has been reported in Baseline Monitoring Report and submitted to EPD under EP Condition 3.4.
Impact Monitoring	On-going
Water Quality	
General Baseline Water Quality Monitoring for reclamation, water jetting and field joint works	The baseline water quality monitoring result has been reported in Baseline Water Quality Monitoring Report and submitted to EPD under EP Condition 3.4.
General Impact Water Quality Monitoring for reclamation, water jetting and field joint works	On-going
Initial Intensive Deep Cement Mixing (DCM) Water Quality Monitoring	The Initial Intensive DCM Monitoring Report was submitted and approved by EPD in accordance with the Detailed Plan on DCM.
Regular DCM Water Quality Monitoring	On-going
Waste Management	
Waste Monitoring	On-going
Land Contamination	
Supplementary Contamination Assessment Plan (CAP)	The Supplementary CAP was submitted to EPD pursuant to EP Condition 2.20.
Contamination Assessment Report (CAR) for Golf Course	The CAR for Golf Course was submitted to EPD.
Contamination Assessment Report (CAR) for Terminal 2 Emergency Power Supply System No.1 (Volumes 1 and 2)	The CAR for Terminal 2 Emergency Power Supply System No.1 (Volumes 1 and 2) was submitted to EPD.
Terrestrial Ecology	
Pre-construction Egret Survey Plan	The Egret Survey Plan was submitted and approved by EPD under EP Condition 2.14.
Ecological Monitoring	The terrestrial ecological monitoring at Sheung Sha Chau was completed in January 2019.
Marine Ecology	
Pre-Construction Phase Coral Dive Survey	The Coral Translocation Plan was submitted and approved by EPD under EP Condition 2.12.
Coral Translocation	The coral translocation was completed.
Post-Translocation Coral Monitoring	The post-translocation monitoring programme according to the Coral Translocation Plan was completed in April 2018.
Chinese White Dolphins (CWD)	
Vessel Survey, Land-based Theodolite Tracking and Passive Acoustic Monitoring (PAM)	
Baseline Monitoring	Baseline CWD results were reported in the CWD Baseline Monitoring Report and submitted to EPD in accordance with EP Condition 3.4.
Impact Monitoring	On-going
Landscape & Visual	
Landscape & Visual Plan	The Landscape & Visual Plan was submitted to EPD under EP Condition 2.18
Baseline Monitoring	The baseline landscape & visual monitoring result has been reported in Baseline Monitoring Report and submitted to EPD under EP Condition 3.4.

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

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

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

- Three skipper training sessions provided by ET: 1, 15 and 29 April 2020;
- Two dolphin observer training sessions provided by ET: 14 and 20 April 2020;
- One environmental briefing on EP and EM&A requirements of the 3RS Project provided by ET;
- Fourteen environmental management meetings for EM&A review with works contracts: 1, 3, 9, 15, 21, 22, 23, 24, 27, 28 and 29 April 2020.

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

2 Air Quality Monitoring

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

Table 2.1: Locations of Impact Air Quality Monitoring Stations

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

2.1 Action and Limit Levels

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

Table 2.2: Action and Limit Levels of Air Quality Monitoring

Monitoring Station	Action Level ($\mu\text{g}/\text{m}^3$)	Limit Level ($\mu\text{g}/\text{m}^3$)
AR1A	306	500
AR2	298	

2.2 Monitoring Equipment

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

Table 2.3: Air Quality Monitoring Equipment

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

2.3 Monitoring Methodology

2.3.1 Measuring Procedure

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

- The portable direct reading dust meter was mounted on a tripod at a height of 1.2m above the ground.
- 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 ($\mu\text{g}/\text{m}^3$)	Action Level ($\mu\text{g}/\text{m}^3$)	Limit Level ($\mu\text{g}/\text{m}^3$)
AR1A	5 - 32	306	500
AR2	4 - 22	298	

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

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

2.5 Conclusion

No dust emission source was observed at the monitoring stations during the monitoring sessions. As the sensitive receivers were far away from the construction activities, with the implementation of dust control measures, there was no adverse impact at the sensitive receivers attributable to the works of the Project.

3 Noise Monitoring

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

Table 3.1: Locations of Impact Noise Monitoring Stations

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

Note:

- (1) As described in Section 4.3.3 of the Manual, noise monitoring at NM2 will only commence after occupation of the future Tung Chung West Development.
- (2) According to Section 4.3.3 of the Manual, the noise monitoring at NM3A was temporarily suspended starting from 1 September 2018 and would be resumed with the completion of the Tung Chung East Development.

3.1 Action and Limit Levels

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

Table 3.2: Action and Limit Levels for Noise Monitoring

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

Note:

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

3.2 Monitoring Equipment

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

Table 3.3: Noise Monitoring Equipment

Equipment	Brand and Model	Last Calibration Date	Calibration Certificate Provided in
Integrated Sound Level Meter	Rion NL-52 (Serial No. 01287679)	21 Sep 2019	Monthly EM&A Report No. 45, Appendix D
	Rion NL-52 (Serial No. 00998505)	24 Mar 2020	Appendix D
Acoustic Calibrator	Casella CEL-120/1 (Serial No. 2383737)	21 Sep 2019	Monthly EM&A Report No. 45, Appendix D
	Castle GA607 (Serial No. 040162)	14 Jul 2019	Monthly EM&A Report No. 43, Appendix D

3.3 Monitoring Methodology

3.3.1 Monitoring Procedure

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

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

3.3.2 Maintenance and Calibration

The maintenance and calibration procedures are summarised below:

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

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

3.4 Summary of Monitoring Results

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

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

Table 3.4: Summary of Construction Noise Monitoring Results

Monitoring Station	Noise Level Range, dB(A)	Limit Level, dB(A)
	<i>Leq</i> (30mins)	<i>Leq</i> (30mins)
NM1A ⁽¹⁾	67 - 71	75
NM4 ⁽¹⁾	61 - 64	70 ⁽²⁾
NM5 ⁽¹⁾	55 - 58	75
NM6 ⁽¹⁾	62 - 68	75

Notes:

- (1) +3dB(A) Façade correction included;
- (2) Reduced to 65dB(A) during school examination periods at NM4. No school examination took place during this reporting period.

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

3.5 Conclusion

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

4 Water Quality Monitoring

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

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

Monitoring Station	Description	Coordinates		Parameters
		Easting	Northing	
C1	Control Station	804247	815620	<u>General Parameters</u>
C2	Control Station	806945	825682	DO, pH, Temperature, Salinity, Turbidity, SS
C3 ⁽³⁾	Control Station	817803	822109	
IM1	Impact Station	807132	817949	<u>DCM Parameters</u>
IM2	Impact Station	806166	818163	Total Alkalinity, Heavy Metals ⁽²⁾
IM3	Impact Station	805594	818784	
IM4	Impact Station	804607	819725	
IM5	Impact Station	804867	820735	
IM6	Impact Station	805828	821060	
IM7	Impact Station	806835	821349	
IM8	Impact Station	808140	821830	
IM9	Impact Station	808811	822094	
IM10	Impact Station	809794	822385	
IM11	Impact Station	811460	822057	
IM12	Impact Station	812046	821459	
SR1A ⁽¹⁾	Hong Kong-Zhuhai-Macao Bridge Hong Kong Boundary Crossing Facilities (HKBCF) Seawater Intake for cooling	812660	819977	<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	

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

Notes:

- (1) With the operation of HKBCF, water quality monitoring at SR1A station was commenced on 25 October 2018. To better reflect the water quality in the immediate vicinity of the intake, the monitoring location of SR1A has been shifted closer to the intake starting from 5 January 2019.
- (2) Details of selection criteria for the two heavy metals for regular DCM monitoring refer to the Detailed Plan on Deep Cement Mixing available on the dedicated 3RS website (<http://env.threerunwaysystem.com/en/ep-submissions.html>). DCM specific water quality monitoring parameters (total alkalinity and heavy metals) were only conducted at C1 to C3, SR2, and IM1 to IM12.
- (3) According to the Baseline Water Quality Monitoring Report, C3 station is not adequately representative as a control station of impact/ SR stations during the flood tide. The control reference has been changed from C3 to SR2 from 1 September 2016 onwards.
- (4) Total alkalinity and heavy metals results are collected at SR2 as a control station for regular DCM monitoring.
- (5) As the access to SR6 was obstructed by the construction activities and temporary structures for Tung Chung New Town Extension, the monitoring location has been relocated to SR6A starting from 8 August 2019.
- (6) The monitoring location for SR8 is subject to further changes due to silt curtain arrangements and the progressive relocation of this seawater intake.

4.1 Action and Limit Levels

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

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

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

Notes:

- (1) For DO measurement, non-compliance occurs when monitoring result is lower than the limits.
- (2) For parameters other than DO, non-compliance of water quality results when monitoring results is higher than the limits.
- (3) Depth-averaged results are used unless specified otherwise.
- (4) Details of selection criteria for the two heavy metals for regular DCM monitoring refer to the Detailed Plan on Deep Cement Mixing available on the dedicated 3RS website (<http://env.threerunwaysystem.com/en/ep-submissions.html>)
- (5) The Action and Limit Levels for the two representative heavy metals chosen will be the same as that for the intensive DCM monitoring.

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

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

Note:

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

4.2 Monitoring Equipment

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

Table 4.4: Water Quality Monitoring Equipment

Equipment	Brand and Model	Last Calibration Date	Calibration Certificate Provided in
Multifunctional Meter (measurement of DO, pH, temperature, salinity and turbidity)	YSI 6920V2 (Serial No. 0001C6A7)	21 Apr 2020	Appendix D
	YSI 6920V2 (Serial No. 00019CB2)	21 Apr 2020	
	YSI ProDSS (Serial No. 17H105557)	11 Mar 2020	Monthly EM&A Report No. 51, Appendix E
	YSI ProDSS (Serial No. 16H104234)	11 Mar 2020	
	YSI ProDSS (Serial No. 17E100747)	11 Mar 2020	
	YSI ProDSS (Serial No. 18A104824)	11 Mar 2020	
Digital Titrator (measurement of total alkalinity)	Titrette Bottle-top Burette, 50ml (Serial No. 10N60623)	5 Mar 2020	Monthly EM&A Report No. 51, Appendix E

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

Table 4.5: Other Monitoring Equipment

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

4.3 Monitoring Methodology

4.3.1 Measuring Procedure

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

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

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

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

4.4 Summary of Monitoring Results

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

The water quality monitoring results for all parameters (i.e. DO, total alkalinity, turbidity, SS, chromium, and nickel) obtained during the reporting period were within their corresponding Action and Limit Levels. The detailed monitoring results are presented in **Appendix C**.

4.5 Conclusion

During the reporting period, all monitoring results were within the corresponding Action and Limit Levels. Nevertheless, as part of the EM&A programme, the construction methods and mitigation measures for water quality will continue to be monitored and opportunities for further enhancement will continue to be explored and implemented where possible, to strive for better protection of water quality and the marine environment.

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

5 Waste Management

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

5.1 Action and Limit Levels

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

Table 5.1: Action and Limit Levels for Construction Waste

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

5.2 Waste Management Status

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

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

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

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

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

Table 5.2: Construction Waste Statistics

	C&D ⁽¹⁾ Material Stockpiled for Reuse or Recycle (m ³)	C&D Material Reused in the Project (m ³)	C&D Material Reused in other Projects (m ³)	C&D Material Transferred to Public Fill (m ³)	Chemical Waste (kg)	Chemical Waste (l)	General Refuse (tonne)
March 2020 ⁽²⁾⁽³⁾	5,861*	23,125	0	4,654	1,070	8,400	1,350

	C&D ⁽¹⁾ Material Stockpiled for Reuse or Recycle (m ³)	C&D Material Reused in the Project (m ³)	C&D Material Reused in other Projects (m ³)	C&D Material Transferred to Public Fill (m ³)	Chemical Waste (kg)	Chemical Waste (l)	General Refuse (tonne)
April 2020 ⁽²⁾⁽⁴⁾	2,809	14,720	0	2,700	0	4,800	998

Notes:

- (1) C&D refers to Construction and Demolition.
- (2) Metals, paper and/or plastics were recycled in the reporting period.
- (3) Updated figure for the previous month is reported and marked with an asterisk (*). Updated figures for earlier months will be reported in the forthcoming Annual EM&A Report.
- (4) The data was based on the information provided by contractors up to the submission date of this Monthly EM&A Report, and might be updated in the forthcoming Monthly EM&A Report.

6 Chinese White Dolphin Monitoring

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

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

6.1 Action and Limit Levels

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

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

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

Notes: (referring to the baseline monitoring report)

- (1) Action Level – running quarterly STG & ANI will be calculated from the three preceding survey months.
- (2) Limit Level – two consecutive running quarters mean both the running quarterly encounter rates of the preceding month and the running quarterly encounter rates of this month.
- (3) Action Level and/or Limit Level will be triggered if both STG and ANI fall below the criteria.

6.2 CWD Monitoring Transects and Stations

6.2.1 Small Vessel Line-transect Survey

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

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

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

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

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

6.2.2 Land-based Theodolite Tracking Survey

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

Table 6.3: Land-based Theodolite Survey Station Details

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

6.3 CWD Monitoring Methodology

6.3.1 Small Vessel Line-transect Survey

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

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

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

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

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

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

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

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

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

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

6.3.2 Photo Identification

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

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

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

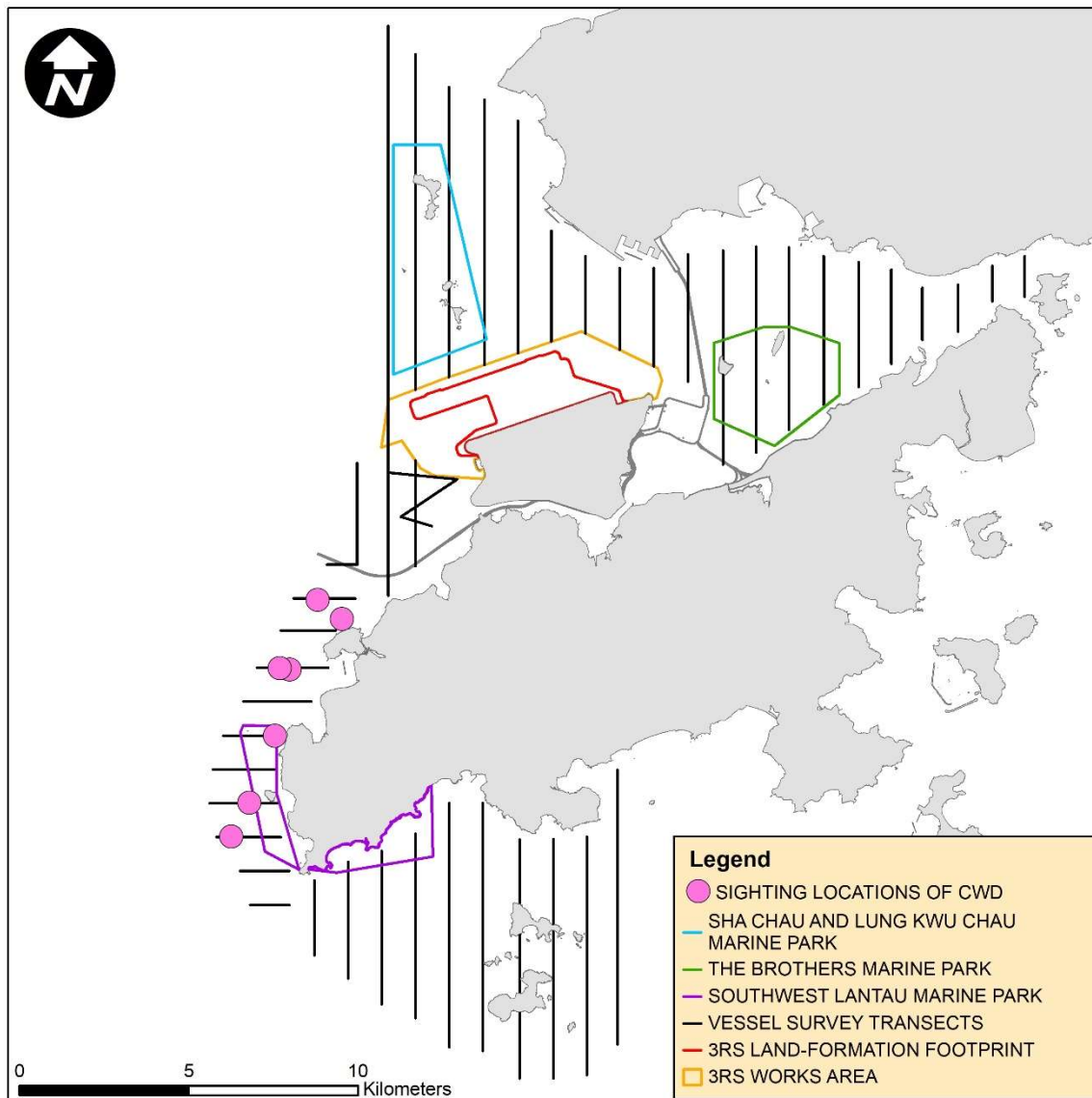
Within this reporting period, two complete sets of small vessel line-transect surveys were conducted on the 3, 7, 9, 15, 16, 17, 20 and 21 April 2020, covering all transects in NEL, NWL, AW, WL and SWL survey areas for twice.

A total of around 455.28 km of survey effort was collected from these surveys and around 97.4% 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 April 2020, seven sightings with 30 dolphins were sighted. All these sightings are on-effort sightings under favourable weather condition (i.e. Beaufort Sea State 3 or below with favourable visibility). Details of cetacean sightings are presented in **Appendix C**.

Distribution of all CWD sightings recorded in April 2020 is illustrated in **Figure 6.3**. All CWD sightings were recorded in WL, scattered from Tai O to Peaked Hill. One of the sightings was recorded within the newly designated Southwest Lantau Marine Park. No sightings of CWD were recorded in neither NEL, NWL, AW nor SWL survey areas.

Figure 6.3: Sightings Distribution of Chinese White Dolphins

Remarks: (1) Please note that there are seven pink circles on the map indicating the sighting locations of CWDs. Some of them were very close to each other and therefore may appear overlapped on this distribution map. (2) Marine park excludes land area and the landward boundary generally follows the high water mark along the coastline.

Encounter Rate

Two types of dolphin encounter rates were calculated based on the data from April 2020. They included the number of dolphin sightings per 100 km survey effort (STG) and total number of dolphins per 100 km survey effort (ANI) in the whole survey area (i.e. NEL, NWL, AW, WL and SWL). In the calculation of dolphin encounter rates, only survey data collected under favourable weather condition (i.e. Beaufort Sea State 3 or below with favourable visibility) were used. The formulae used for calculation of the encounter rates are shown below:

Encounter Rate by Number of Dolphin Sightings (STG)

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

Encounter Rate by Number of Dolphins (ANI)

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

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

In April 2020, a total of around 443.28 km of survey effort were conducted under Beaufort Sea State 3 or below with favourable visibility, whilst a total number of seven on-effort sightings with 30 dolphins were sighted under such condition. Calculation of the encounter rates in April 2020 are shown in **Appendix C**.

For the running quarter of the reporting period (i.e., from February 2020 to April 2020), a total of around 1270.97 km of survey effort were conducted under Beaufort Sea State 3 or below with favourable visibility, whilst a total number of 30 on-effort sightings and a total number of 97 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 April 2020 and during the running quarter are presented in **Table 6.4** below and compared with the Action Level. The running quarterly encounter rate STG remains above the Action Level but the running quarterly encounter rate ANI is below the Action Level. Nevertheless, the overall Action Level is not triggered.

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

	Encounter Rate (STG)	Encounter Rate (ANI)
April 2020	1.58	6.77
Running Quarter from February 2020 to April 2020 ⁽¹⁾	2.36	7.63
Action Level	Running quarterly ⁽¹⁾ STG < 1.86 & ANI < 9.35	

Note: (1) Running quarterly encounter rates STG & ANI were calculated from data collected in the reporting period and the two preceding survey months, i.e. the data from February 2020 to April 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 April 2020, seven groups with 30 dolphins were sighted, and the average group size of CWDs was 4.3 dolphins per group. Sightings with small group size (i.e. 1-2 dolphins) accounted for more than half of all sightings. One CWD sighting with large group size (i.e. 10 or more dolphins) was recorded.

Activities and Association with Fishing Boats

Three sightings of CWDs were recorded engaging in feeding activities in April 2020 and two of them were observed in association with operating purse seiner and pair trawler respectively.

Mother-calf Pair

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

6.4.2 Photo Identification

In April 2020, a total number of 21 different CWD individuals were identified for totally 24 times. A summary of photo identification works is presented in **Table 6.5**. Representative photos of these individuals are given in **Appendix C**.

Table 6.5: Summary of Photo Identification

Individual ID	Date of Sighting (dd-mmm-yy)	Sighting Group No.	Area	Individual ID	Date of Sighting (dd-mmm-yy)	Sighting Group No.	Area
NLMM057	9-Apr-2020	1	WL	WLMM006	9-Apr-2020	6	WL
		3	WL	WLMM007	9-Apr-2020	6	WL
NLMM070	9-Apr-2020	3	WL	WLMM013	9-Apr-2020	6	WL
SLMM002	9-Apr-2020	6	WL	WLMM028	9-Apr-2020	6	WL
SLMM007	9-Apr-2020	6	WL	WLMM029	9-Apr-2020	6	WL
SLMM014	9-Apr-2020	6	WL	WLMM056	9-Apr-2020	1	WL
SLMM028	9-Apr-2020	6	WL	WLMM060	9-Apr-2020	1	WL
SLMM031	9-Apr-2020	6	WL	WLMM075	9-Apr-2020	1	WL
SLMM037	9-Apr-2020	1	WL			3	WL
SLMM045	9-Apr-2020	4	WL	WLMM114	9-Apr-2020	1	WL
SLMM050	9-Apr-2020	6	WL			2	WL
SLMM058	9-Apr-2020	6	WL	WLMM131	15-Apr-2020	1	WL

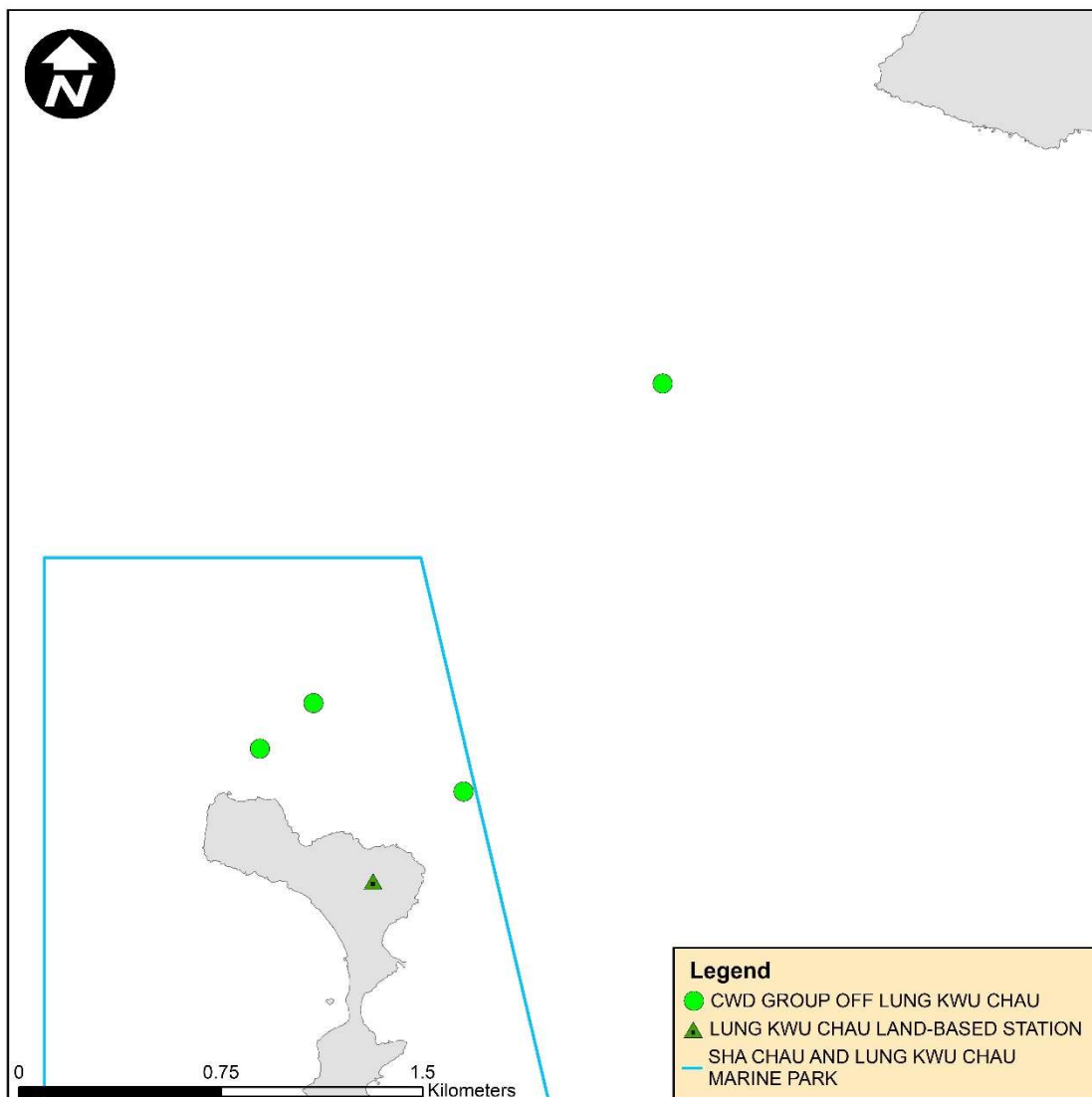
6.4.3 Land-based Theodolite Tracking Survey

Survey Effort

Land-based theodolite tracking surveys were conducted at LKC on 16 April 2020 and at SC on 9 April 2020, with a total of two days of land-based theodolite tracking survey effort accomplished in this reporting period. Four CWD groups were tracked at LKC station during the survey. Information of survey effort and CWD groups are presented in **Table 6.6**. Details of the survey effort and CWD groups tracked are presented in **Appendix D**. The first sighting locations of CWD groups tracked at LKC station during land-based theodolite tracking surveys in April 2020 were depicted in **Figure 6.4**. No CWD group was sighted from SC station in this reporting month.

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

Land-based Station	No. of Survey Sessions	Survey Effort (hh:mm)	No. of CWD Groups Sighted	CWD Group Sighting per Survey Hour
Lung Kwu Chau	1	6:00	4	0.67
Sha Chau	1	6:00	0	0
TOTAL	2	12:00	4	0.33

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

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

6.5 Progress Update on Passive Acoustic Monitoring

Underwater acoustic monitoring using Passive Acoustic Monitoring (PAM) should be undertaken during land formation related construction works. In this reporting period, the Ecological Acoustic Recorder (EAR) was retrieved on 8 April 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 5 dolphin observation stations and teams of at least two dolphin observers were deployed by the contractors for continuous monitoring of the DEZ for DCM and seawall construction works in accordance with the DEZ Plan. Trainings for the proposed dolphin observers on the implementation of MMWP and DEZ monitoring were provided by the ET prior to the aforementioned works, with a cumulative total of 687 individuals being trained and the training records kept by the ET. From the contractors' MMWP observation records, no dolphin or other marine mammals were observed within or around the silt curtains. As for DEZ monitoring records, no dolphin or other marine mammals were observed within or around the DEZs in this reporting month. These contractors' records were also audited by the ET during site inspection.

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

6.7 Timing of Reporting CWD Monitoring Results

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

6.8 Summary of CWD Monitoring

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

7 Environmental Site Inspection and Audit

7.1 Environmental Site Inspection

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

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

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

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

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, a cumulative total of 231 and 8 trees were retained and transplanted. The Contractors' performance on existing trees maintenance and protection measures on retained and transplanted trees were regularly checked by the ET. In case of non-conformity, specific recommendations would be made, and actions will be carried out according to the Event and Action Plan.

A summary of implementation status of the environmental mitigation measures for the construction phase of the Project during the reporting period is provided in **Appendix 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 ferry service between HKIA SkyPier and Macau has been suspended from 4 February 2020 and all SkyPier HSF services have been suspended from 25 March 2020 until further notice. No ferry movements between HKIA SkyPier and Zhuhai and Macau was recorded in April 2020.

Key audit findings for the SkyPier HSFs travelling to/from Zhuhai and Macau against the requirements of the SkyPier Plan during the reporting period are summarised in **Table 7.1**. There were no daily movements of all SkyPier HSFs in this reporting period. Status of compliance with the annual daily average of 99 movements will be further reviewed in the annual EM&A Report.

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

Requirements in the SkyPier Plan	1 to 30 April 2020
Total number of ferry movements recorded and audited	0
Use diverted route and enter / leave SCZ through Gate Access Points	0 deviation
Daily Cap (including all SkyPier HSFs)	0 daily movement (within the maximum daily cap - 125 daily movements).

7.3 Audit of Construction and Associated Vessels

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

ET carried out the following actions during the reporting period:

- Three skipper training sessions were held for contractors' concerned skippers of relevant construction vessels to familiarize them with the predefined routes; general education on local cetaceans; guidelines for avoiding adverse water quality impact; the required environmental practices / measures while operating construction and associated vessels under the Project; and guidelines for operating vessels safely in the presence of CWDs. The list of all trained skippers was properly recorded and maintained by ET.
- Eleven skipper training sessions were held by contractors' Environmental Officers. Competency tests were subsequently conducted with the trained skippers by ET. The list of all trained skippers was properly recorded and maintained by ET.
- In this reporting period, 11 skippers were trained by ET and 79 skippers were trained by contractors' Environmental Officers. In total, 1448 skippers were trained from August 2016 to April 2020.
- The MSS automatically recorded deviation cases such as speeding, entering no entry zone and not travelling through the designated gate. ET conducted checking to ensure the MSS records deviation cases accurately.

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

7.4 Implementation of Dolphin Exclusion Zone

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

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

7.5 Status of Submissions under Environmental Permits

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

Table 7.2: Status of Submissions under Environmental Permit

EP Condition	Submission	Status
2.1	Complaint Management Plan	Accepted / approved by EPD
2.4	Management Organizations	
2.5	Construction Works Schedule and Location Plans	
2.7	Marine Park Proposal	
2.8	Marine Ecology Conservation Plan	
2.9	Marine Travel Routes and Management Plan for Construction and Associated Vessels	
2.10	Marine Travel Routes and Management Plan for High Speed Ferries of SkyPier	
2.11	Marine Mammal Watching Plan	
2.12	Coral Translocation Plan	
2.13	Fisheries Management Plan	
2.14	Egrettry 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 by EPD
3.1	Updated EM&A Manual	
3.4	Baseline Monitoring Reports	

7.6 Compliance with Other Statutory Environmental Requirements

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

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

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

7.7.1 Complaints

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

7.7.2 Notifications of Summons or Status of Prosecution

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

7.7.3 Cumulative Statistics

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

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

8.1 Construction Programme for the Coming Reporting Period

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

Advanced Works:

Contract P560 (R) Aviation Fuel Pipeline Diversion Works

- Stockpiling of construction materials

Reclamation Works:

Contract 3205 DCM works

- DCM works

Contract 3206 Main Reclamation Works

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

Airfield Works:

Contract 3301 North Runway Crossover Taxiway

- Cable ducting works;
- Subgrade compaction and paving works; and
- Drainage construction works;

Contract 3302 Eastern Vehicular Tunnel Advance Works

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

Contract 3303 Third Runway and Associated Works

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

Third Runway Concourse:

Contract 3402 New Integrated Airport Centres Enabling Works

- Potable water and seawater works;

- Footing construction;
- Road works; and
- Sewerage and pipe works.

Contract 3403 New Integrated Airport Centres Building and Civil Works

- Site establishment; and
- Foundation works.

Contract 3405 Three Runway Concourse Foundation and Substructure Works

- Site establishment.

Terminal 2 Expansion:**Contract 3501 Antenna Farm and Sewage Pumping Station**

- Site clearance.

Contract 3503 Terminal 2 Foundation and Substructure Works

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

Automated People Mover (APM) and Baggage Handling System (BHS):**Contract 3601 New Automated People Mover System (TRC Line)**

- Construction of site office.

Contract 3602 Existing APM System Modification Works

- Modification works at APM depot.

Construction Support (Facilities):**Contract 3721 Construction Support Infrastructure Works**

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

Contract 3722 Construction Support Facilities

- Formboard erecting and concreting; and
- Site Establishment.

Airport Support Infrastructure:**Contract 3801 APM and BHS Tunnels on Existing Airport Island**

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

Construction Support (Services / Licenses):**Contract 3901B Concrete Batching Facility**

- Footing construction; and

- Erection of steelwork.

8.2 Key Environmental Issues for the Coming Reporting Period

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

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

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

8.3 Monitoring Schedule for the Coming Reporting Period

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

8.4 Review of the Key Assumptions Adopted in the EIA Report

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

9 Conclusion and Recommendation

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

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

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

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

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

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

Figures

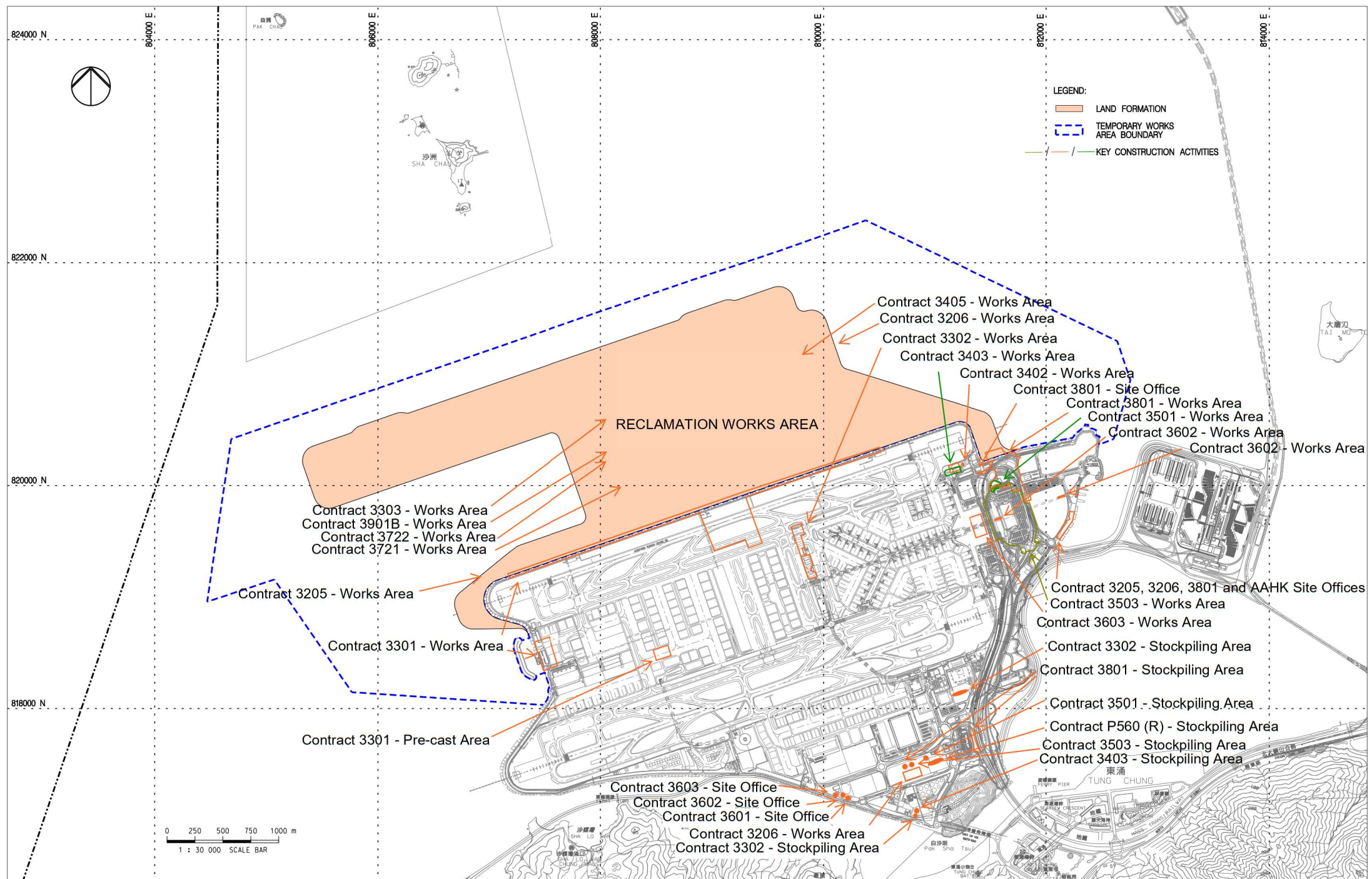
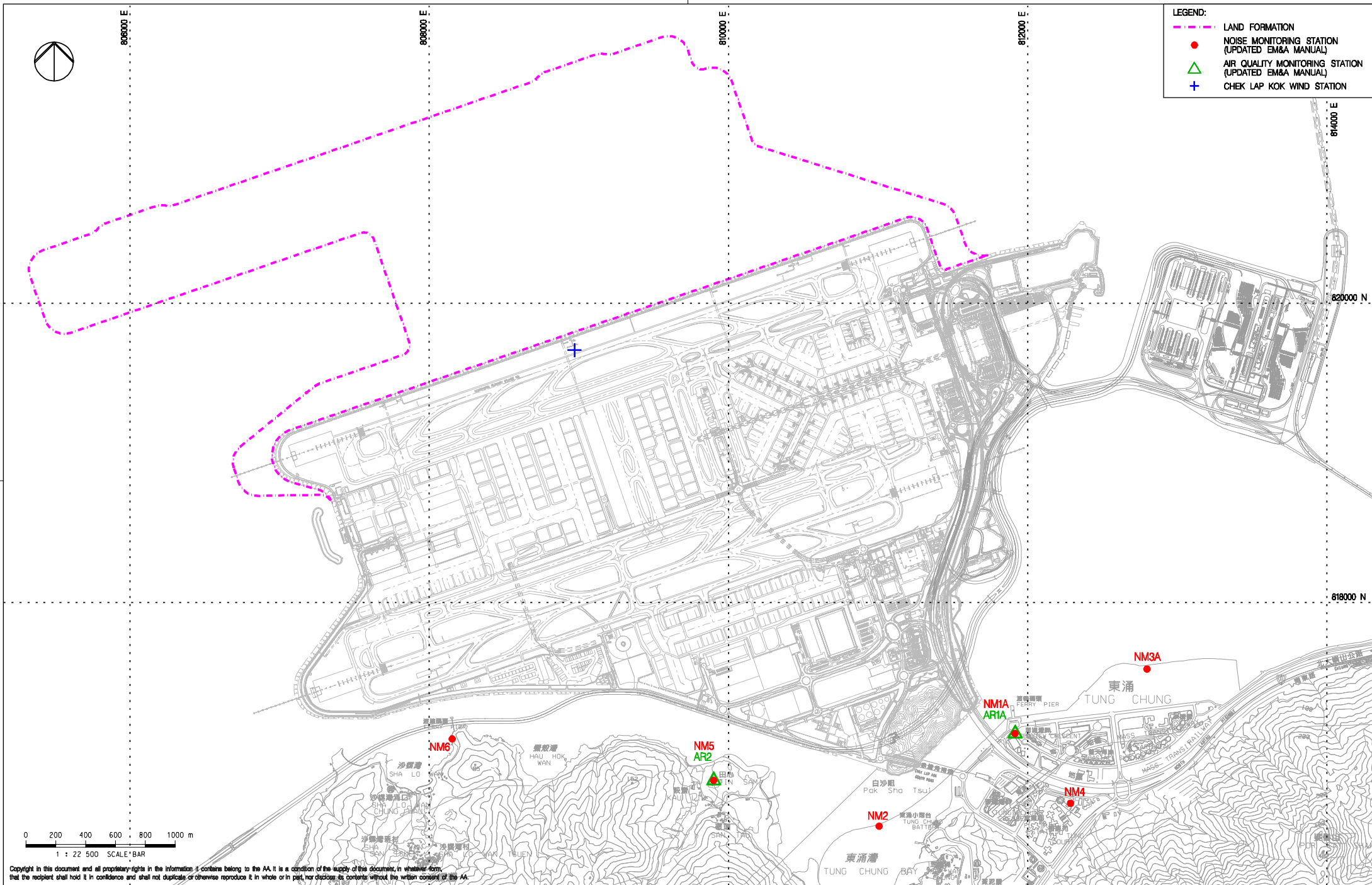


FIGURE 1.1 LOCATIONS OF KEY CONSTRUCTION ACTIVITIES

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



Rev.	Date	Description	Checked
A	06JAN16	FIRST ISSUE	RO
B	29JAN16	GENERAL REVISION	RO
C	11FEB16	GENERAL REVISION	RO
D	29OCT18	GENERAL REVISION	SH



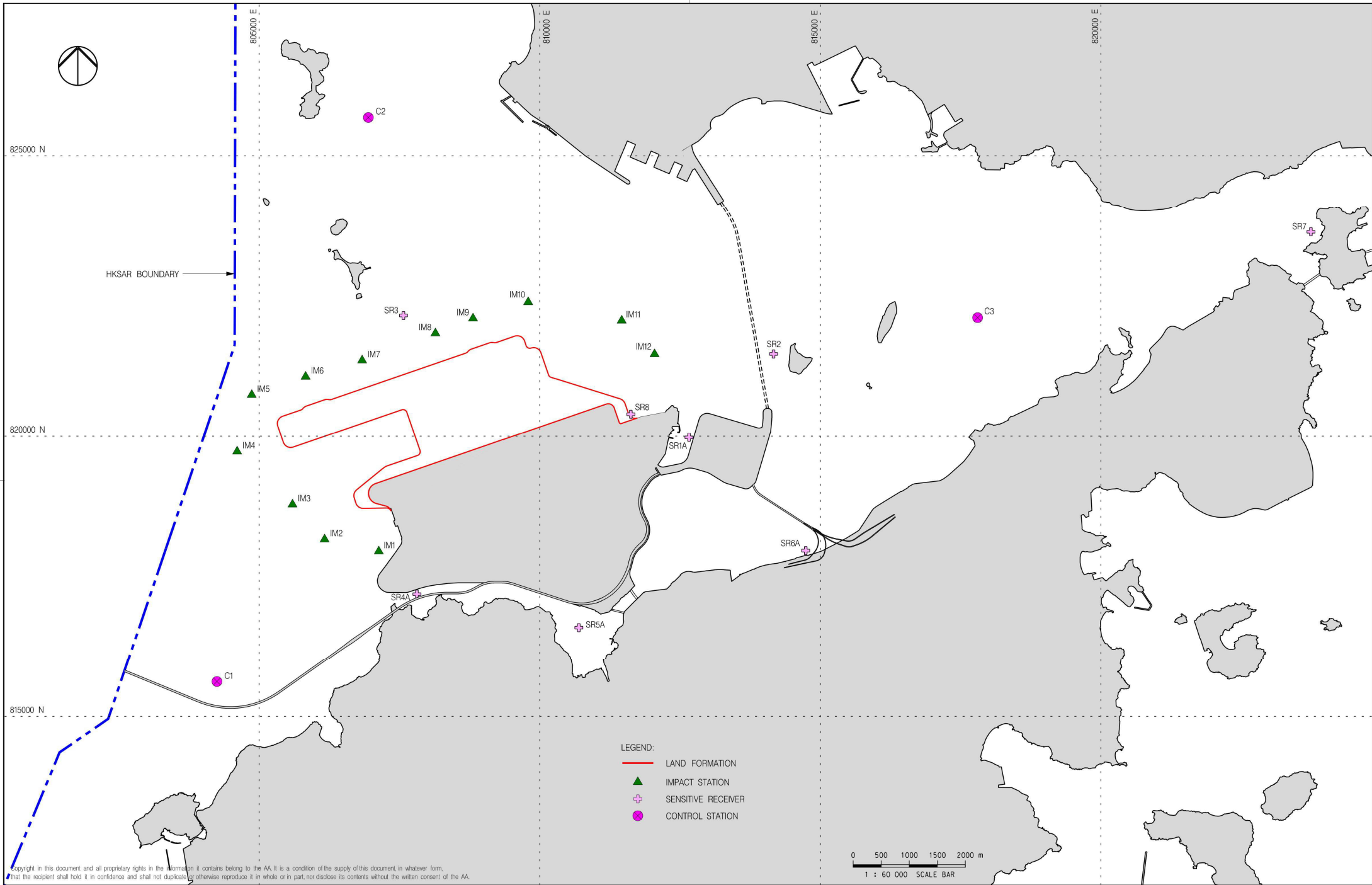
香港國際機場
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Title
LOCATIONS OF AIR AND NOISE MONITORING STATIONS AND CHEK LAP KOK WIND STATION

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

EXPANSION OF HONG KONG INTERNATIONAL AIRPORT INTO A THREE-RUNWAY SYSTEM		Scale at A3 1:22500
Drawing No.	FIGURE 2.1	Rev. D



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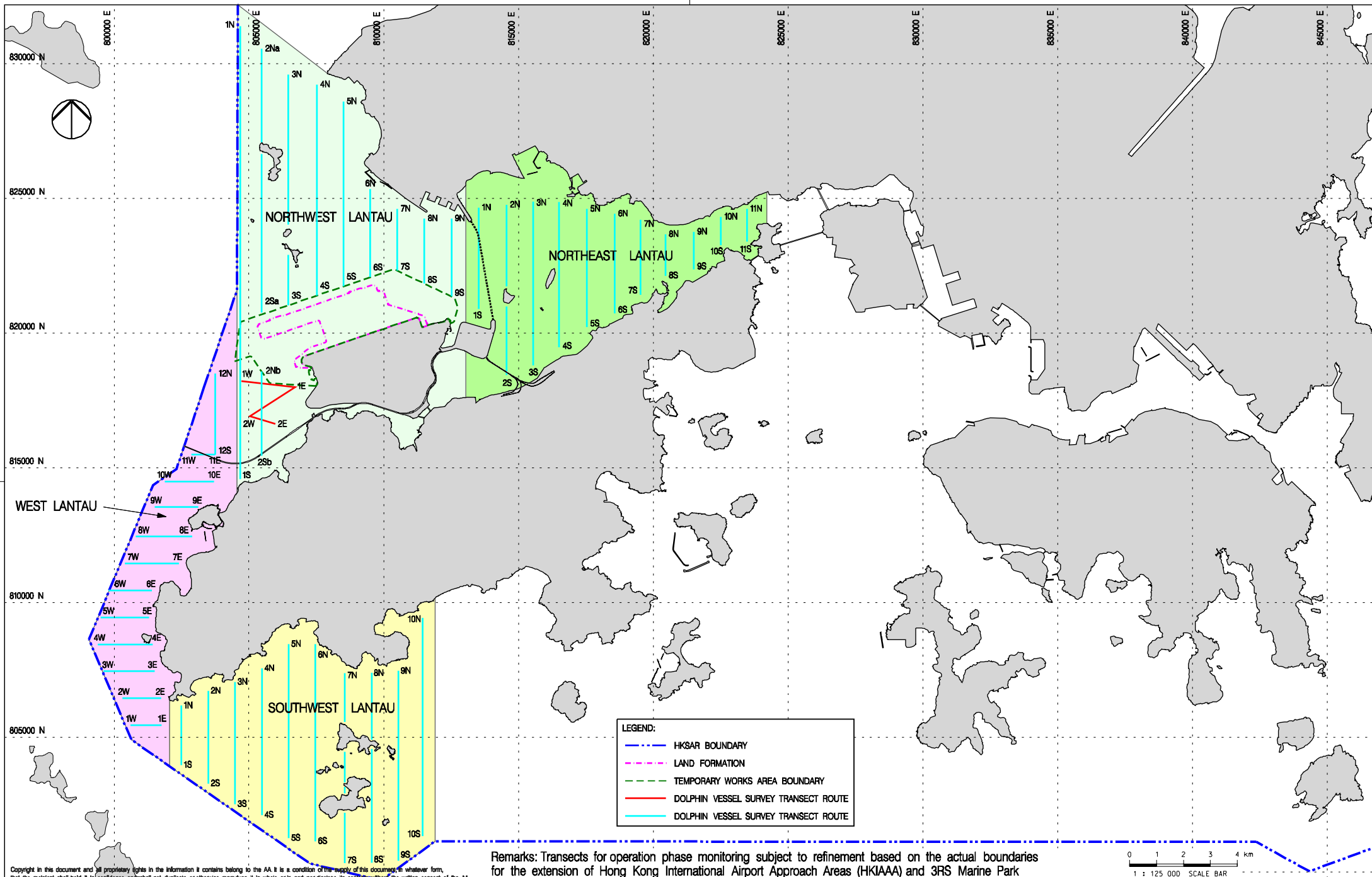
Rev.	Date	Description	Checked
A	21AUG19	FIRST ISSUE	VL



Title
WATER QUALITY MONITORING STATIONS

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

EXPANSION OF HONG KONG INTERNATIONAL AIRPORT INTO A THREE-RUNWAY SYSTEM	
Drawing No.	
FIGURE 4.1	
Scale at A3	1 : 60000
Rev.	A



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

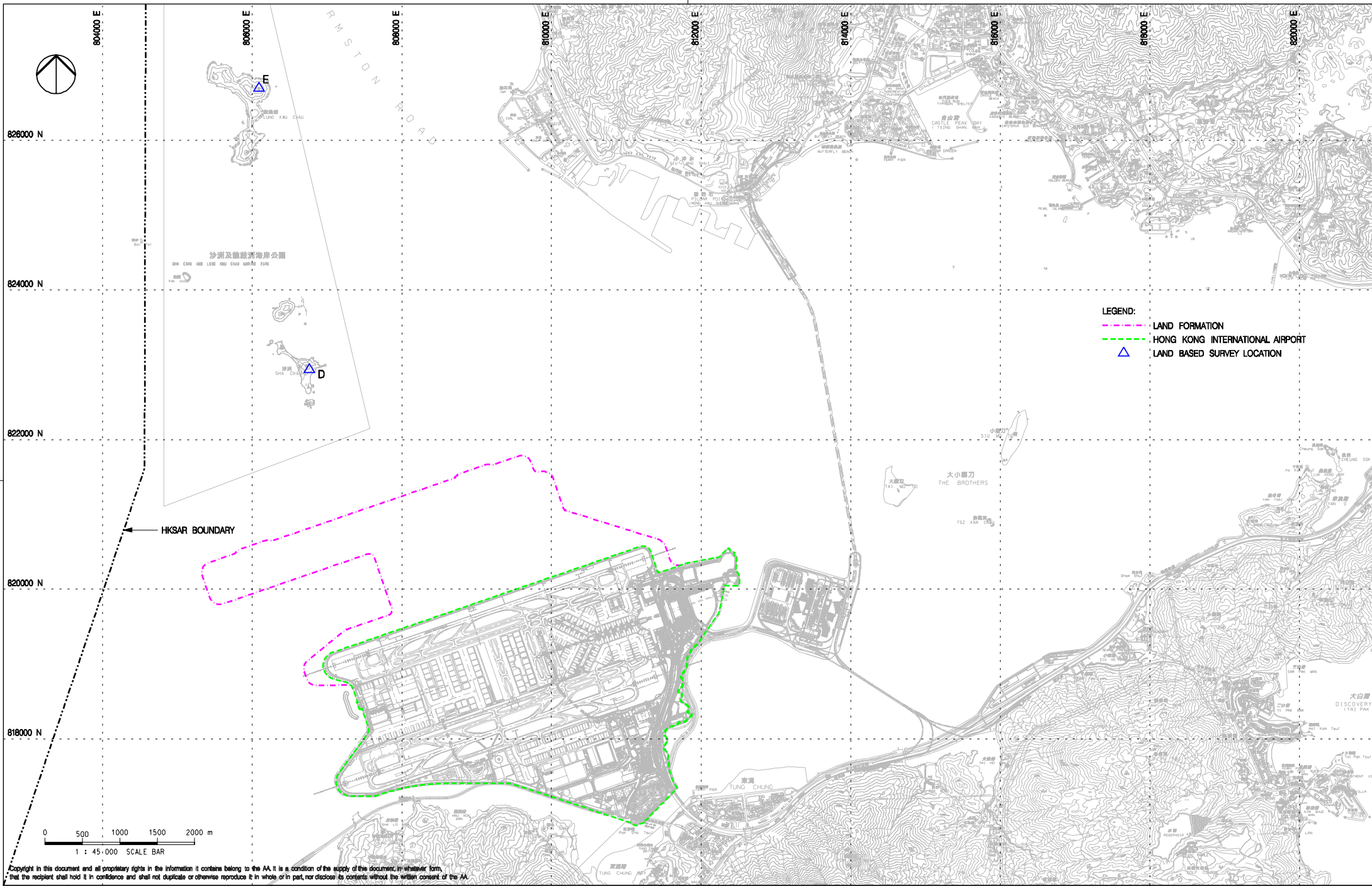
Rev.	Date	Description	Checked
B	27JUL16	GENERAL REVISION	JT
C	06FEB17	GENERAL REVISION	JT
D	01MAR17	GENERAL REVISION	JT
E	29OCT18	GENERAL REVISION	SH
F	04APR19	GENERAL REVISION	SH



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

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

EXPANSION OF HONG KONG INTERNATIONAL AIRPORT INTO A THREE-RUNWAY SYSTEM		Scale at A3 1 : 125000
Drawing No.	FIGURE 6.1	Rev. F



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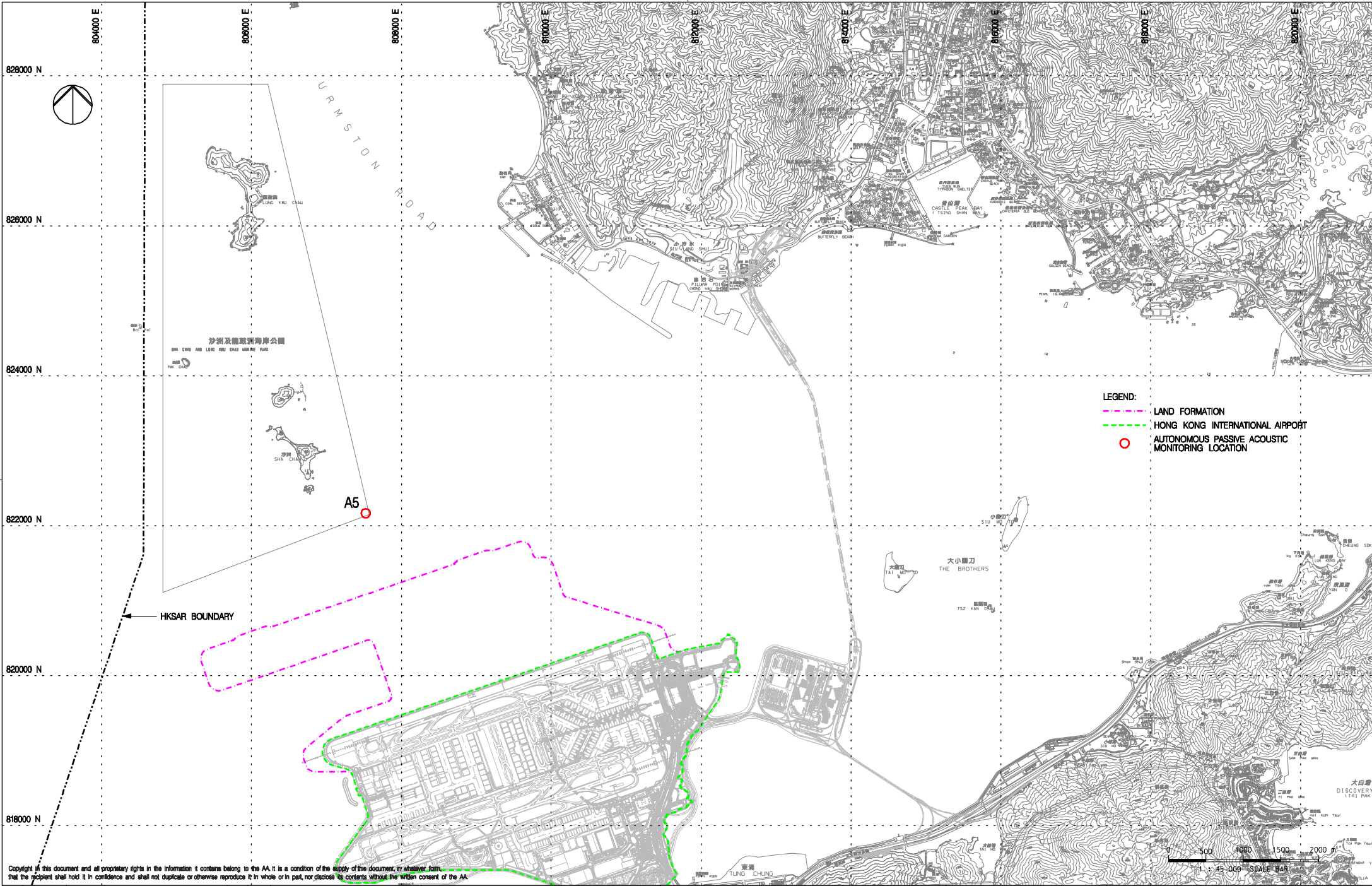
Rev.	Date	Description	Checked
A	02DEC15	FIRST ISSUE	JC
B	06FEB17	GENERAL REVISION	JC
C	29OCT18	GENERAL REVISION	SH



Title
LAND BASED DOLPHIN MONITORING
IN BASELINE AND CONSTRUCTION PHASES

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

EXPANSION OF HONG KONG INTERNATIONAL AIRPORT INTO A THREE-RUNWAY SYSTEM	
Drawing No.	
FIGURE 6.2	
Scale at A3 1 : 45000	Rev. C



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A	29AUG17	FIRST ISSUE	JT
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C	29OCT18	GENERAL REVISION	SH



Title
LOCATION FOR AUTONOMOUS PASSIVE
ACOUSTIC MONITORING

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

EXPANSION OF HONG KONG INTERNATIONAL AIRPORT INTO A THREE-RUNWAY SYSTEM	
Drawing No.	
FIGURE 6.5	
Scale at A3 1:45000	Rev. C

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

Environmental Mitigation Implementation Schedule (EMIS) for Construction Phase

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

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

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

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

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

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

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

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

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

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

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

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

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			drainage system should be undertaken by the Contractors prior to the commencement of construction (for works areas located on the existing Airport island) or as soon as the new land is completed (for works areas located on the new landform); - Sand/silt removal facilities such as sand/silt traps and sediment basins should be provided to remove sand/silt particles from runoff to meet the requirements of the TM-DSS standards under the WPCO. The design of efficient silt removal facilities should make reference to the guidelines in Appendix A1 of ProPECC Note PN 1/94. Sizes may vary depending upon the flow rate. The detailed design of the sand/silt traps should be undertaken by the Contractors prior to the commencement of construction; - 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; - 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; - 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 - All vehicles and plant should be cleaned before leaving a construction site to ensure no earth, mud, debris and the like is deposited by them on roads. An adequately designed and sited wheel washing facility should be provided at construction site exits. Wash-water should have sand and silt settled out and removed regularly to ensure the continued efficiency of the process. The section of access road leading to, and exiting from, the wheel-wash bay to the public road should be paved with sufficient backfall toward the wheel-wash bay to prevent vehicle tracking of soil and silty water to public roads and drains. All washwater should be treated according to the requirements of the TM-DSS standards under the WPCO prior to discharge.		I I I N/A I
8.8.1.9	5.1	-	Sewage Effluent from Construction Workforce Temporary sanitary facilities, such as portable chemical toilets, should be employed on-site where necessary to handle sewage from the workforce. A licensed contractor should be employed to provide appropriate and adequate portable toilets and be responsible for appropriate disposal and maintenance.	Within construction site / During construction phase	I
8.8.1.10 8.8.1.11	5.1		General Construction Activities Construction solid waste, debris and refuse generated on-site should be collected, handled and disposed of properly to avoid entering any nearby storm water drain. Stockpiles of cement and other construction materials should be kept covered when not being used; and	Within construction site / During construction phase	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
8.8.1.12 8.8.1.13	5.1	2.28	▪ 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. Drilling Activities for the Submarine Aviation Fuel Pipelines To prevent potential water quality impacts at Sha Chau, the following measures shall be applied: ▪ A 'zero-discharge' policy shall be applied for all activities to be conducted at Sha Chau; ▪ No bulk storage of chemicals shall be permitted; and ▪ A containment pit shall be constructed around the drill holes. This containment pit shall be lined with impermeable lining and bunded on the outside to prevent inflow from off-site areas. At the airport island side of the drilling works, the following measures shall be applied for treatment of wastewater: ▪ During pipe cleaning, appropriate desilting or sedimentation device should be provided on site for treatment before discharge. The Contractor should ensure discharge water from the sedimentation tank meet the WPCO/TM requirements before discharge; and ▪ Drilling fluid used in drilling activities should be reconditioned and reused as far as possible. Temporary enclosed storage locations should be provided on-site for any unused chemicals that needs to be transported away after all the related construction activities are completed. The requirements in ProPECC Note PN 1/94 should be adhered to in the handling and disposal of bentonite slurries.	Within construction site / During construction phase	I
Waste Management Implication – Construction Phase					
10.5.1.1	7.1	-	Opportunities to minimise waste generation and maximise the reuse of waste materials generated by the project have been incorporated where possible into the planning, design and construction stages, and the following measures have been recommended: ▪ The relevant construction methods (particularly for the tunnel works) and construction programme have been carefully planned and developed to minimise the extent of excavation and to maximise the on-site reuse of inert C&D materials generated by the project as far as practicable. Temporary stockpiling areas will also be provided to facilitate on-site reuse of inert C&D materials; ▪ 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; ▪ 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; ▪ 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	Project Site Area / During design and construction phase	I
					I
					I
					I

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

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

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

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

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

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

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

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

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

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

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

Notes:

I= implemented where applicable;

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

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

Appendix B. Monitoring Schedule

Monitoring Schedule of This Reporting Period

Apr-20

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

Tentative Monitoring Schedule of Next Reporting Period

May-20

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1	2 AR1A, AR2 WQ General & Regular DCM mid-ebb: 09:16 mid-flood: 13:56
3	4 CWD Survey (Vessel)	5 Site Inspection WQ General & Regular DCM mid-ebb: 11:33 mid-flood: 17:33	6 CWD Survey (Vessel)	7 Site Inspection CWD Survey (Vessel) WQ General & Regular DCM mid-ebb: 12:53 mid-flood: 19:31	8 Site Inspection AR1A, AR2 NM1A, NM4, NM5, NM6	9 WQ General & Regular DCM mid-ebb: 14:19 mid-flood: 07:37
10	11 CWD Survey (Vessel)	12 Site Inspection CWD Survey (Vessel, Land-based) WQ General & Regular DCM mid-ebb: 16:37 mid-flood: 09:23	13 CWD Survey (Vessel)	14 Site Inspection AR1A, AR2 NM1A, NM4, NM5, NM6 WQ General & Regular DCM mid-ebb: 18:31 mid-flood: 05:59	15 Site Inspection	16 WQ General & Regular DCM mid-ebb: 09:52 mid-flood: 14:30
17	18 CWD Survey (Vessel)	19 Site Inspection CWD Survey (Vessel) WQ General & Regular DCM mid-ebb: 11:35 mid-flood: 17:27	20 CWD Survey (Land-based) AR1A, AR2 NM1A, NM4, NM5, NM6	21 Site Inspection WQ General & Regular DCM mid-ebb: 12:31 mid-flood: 05:56	22 Site Inspection	23 WQ General & Regular DCM mid-ebb: 13:30 mid-flood: 20:20
24	25	26 Site Inspection AR1A, AR2 NM1A, NM4, NM5, NM6 WQ General & Regular DCM mid-ebb: 15:19 mid-flood: 08:09	27	28 Site Inspection WQ General & Regular DCM mid-ebb: 16:53 mid-flood: 09:28	29 Site Inspection	30 WQ General & Regular DCM mid-ebb: 07:12 mid-flood: 11:50
31		Notes: CWD - Chinese White Dolphin Air quality and Noise Monitoring Station WQ - Water Quality DCM - Deep Cement Mixing NM1A/AR1A - Man Tung Road Park NM4 - Ching Chung Hau Po Woon Primary School NM5/AR2 - Village House, Tin Sum NM6 - House No. 1, Sha Lo Wan				

Appendix C. Monitoring Results

Air Quality Monitoring Results

1-hour TSP Results

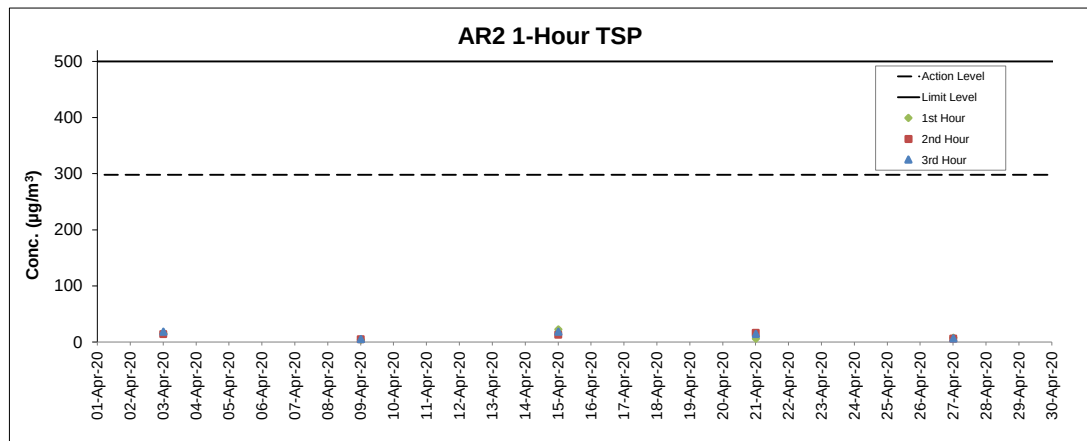
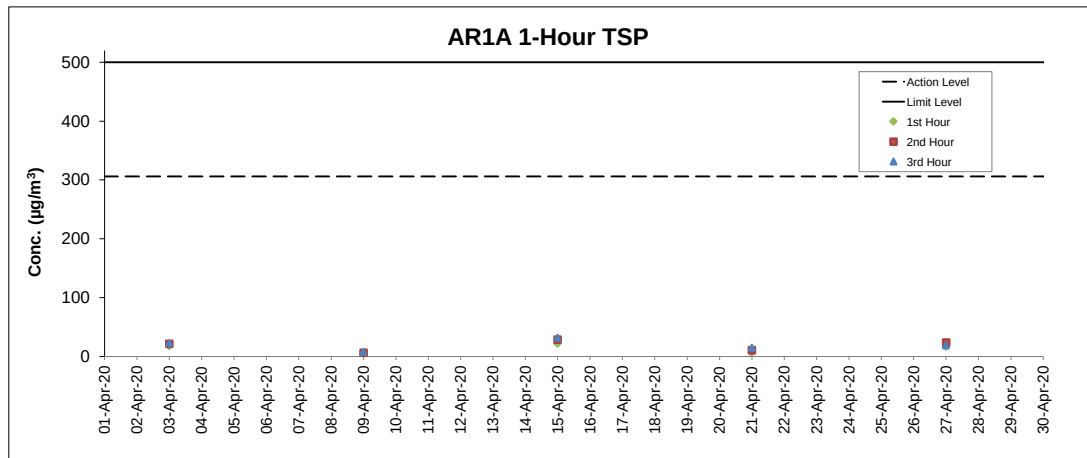
Station: AR1A- Man Tung Road Park

Date	Time	Weather	Wind Speed (m/s)	Wind Direction (deg)	1-hr TSP ($\mu\text{g}/\text{m}^3$)	Action Level ($\mu\text{g}/\text{m}^3$)	Limit Level ($\mu\text{g}/\text{m}^3$)
03-Apr-20	12:43	Cloudy	10.6	88	18	306	500
03-Apr-20	13:43	Cloudy	8.3	84	22	306	500
03-Apr-20	14:43	Cloudy	5.3	74	23	306	500
09-Apr-20	12:39	Sunny	5.3	261	5	306	500
09-Apr-20	13:39	Sunny	3.9	257	7	306	500
09-Apr-20	14:39	Sunny	3.3	260	8	306	500
15-Apr-20	12:50	Sunny	3.1	266	22	306	500
15-Apr-20	13:50	Sunny	3.9	258	29	306	500
15-Apr-20	14:50	Sunny	4.7	262	32	306	500
21-Apr-20	12:33	Sunny	7.5	150	7	306	500
21-Apr-20	13:33	Sunny	6.9	153	11	306	500
21-Apr-20	14:33	Sunny	7.2	138	15	306	500
27-Apr-20	13:05	Cloudy	3.6	259	17	306	500
27-Apr-20	14:05	Cloudy	3.9	262	24	306	500
27-Apr-20	15:05	Cloudy	4.2	251	19	306	500

1-hour TSP Results

Station: AR2- Village House, Tin Sum

Date	Time	Weather	Wind Speed (m/s)	Wind Direction (deg)	1-hr TSP ($\mu\text{g}/\text{m}^3$)	Action Level ($\mu\text{g}/\text{m}^3$)	Limit Level ($\mu\text{g}/\text{m}^3$)
03-Apr-20	9:05	Cloudy	8.3	84	15	298	500
03-Apr-20	10:05	Cloudy	8.3	92	14	298	500
03-Apr-20	11:05	Cloudy	10.3	90	18	298	500
09-Apr-20	9:00	Sunny	3.3	54	4	298	500
09-Apr-20	10:00	Sunny	3.1	49	5	298	500
09-Apr-20	11:00	Sunny	2.2	342	5	298	500
15-Apr-20	9:10	Sunny	1.7	359	22	298	500
15-Apr-20	10:10	Sunny	2.8	269	13	298	500
15-Apr-20	11:10	Sunny	3.3	252	18	298	500
21-Apr-20	9:00	Sunny	4.2	160	6	298	500
21-Apr-20	10:00	Sunny	5.6	147	16	298	500
21-Apr-20	11:00	Sunny	6.1	155	14	298	500
27-Apr-20	9:00	Cloudy	2.5	50	7	298	500
27-Apr-20	10:00	Cloudy	3.3	55	6	298	500
27-Apr-20	11:00	Cloudy	3.1	54	7	298	500



Notes

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

Noise Monitoring Results

Noise Measurement Results

Station: NM1A- Man Tung Road Park

Date	Weather	Time	Measured L ₁₀ dB(A)	Measured L ₉₀ dB(A)	L _{eq(30mins)} dB(A)
03-Apr-20	Cloudy	13:03	69.3	52.1	67
03-Apr-20	Cloudy	13:08	67.2	52.1	
03-Apr-20	Cloudy	13:13	68.9	52.7	
03-Apr-20	Cloudy	13:18	65.6	49.2	
03-Apr-20	Cloudy	13:23	65.6	52.5	
03-Apr-20	Cloudy	13:28	67.5	52.6	
09-Apr-20	Sunny	14:48	69.3	51.3	71
09-Apr-20	Sunny	14:53	65.7	50.1	
09-Apr-20	Sunny	14:58	72.4	51.5	
09-Apr-20	Sunny	15:03	73.0	51.8	
09-Apr-20	Sunny	15:08	70.4	50.2	
09-Apr-20	Sunny	15:13	72.7	51.1	
15-Apr-20	Sunny	14:57	68.4	51.0	71
15-Apr-20	Sunny	15:02	71.5	48.5	
15-Apr-20	Sunny	15:07	73.9	52.9	
15-Apr-20	Sunny	15:12	72.6	52.2	
15-Apr-20	Sunny	15:17	65.6	50.1	
15-Apr-20	Sunny	15:22	67.2	51.3	
21-Apr-20	Sunny	12:54	70.8	51.4	71
21-Apr-20	Sunny	12:59	70.7	50.5	
21-Apr-20	Sunny	13:04	73.3	52.5	
21-Apr-20	Sunny	13:09	72.7	51.6	
21-Apr-20	Sunny	13:14	74.4	52.2	
21-Apr-20	Sunny	13:19	70.3	52.7	
27-Apr-20	Cloudy	13:20	68.7	48.7	71
27-Apr-20	Cloudy	13:25	71.4	50.6	
27-Apr-20	Cloudy	13:30	84.8	52.9	
27-Apr-20	Cloudy	13:35	72.9	54.1	
27-Apr-20	Cloudy	13:40	70.0	51.9	
27-Apr-20	Cloudy	13:45	71.8	50.8	

Remarks:

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

Noise Measurement Results

Station: NM4- Ching Chung Hau Po Woon Primary School

Date	Weather	Time	Measured L ₁₀ dB(A)	Measured L ₉₀ dB(A)	L _{eq(30mins)} dB(A)
03-Apr-20	Cloudy	13:53	63.5	57.6	64
03-Apr-20	Cloudy	13:58	62.9	57.4	
03-Apr-20	Cloudy	14:03	61.9	57.7	
03-Apr-20	Cloudy	14:08	65.2	59.4	
03-Apr-20	Cloudy	14:13	64.6	58.7	
03-Apr-20	Cloudy	14:18	61.6	57.4	
09-Apr-20	Cloudy	14:04	61.6	56.7	63
09-Apr-20	Cloudy	14:09	62.4	57.4	
09-Apr-20	Cloudy	14:14	63.1	56.9	
09-Apr-20	Cloudy	14:19	61.0	56.5	
09-Apr-20	Cloudy	14:24	62.4	56.3	
09-Apr-20	Cloudy	14:29	64.1	55.8	
15-Apr-20	Sunny	13:32	59.5	55.2	61
15-Apr-20	Sunny	13:37	60.8	55.5	
15-Apr-20	Sunny	13:42	61.2	55.5	
15-Apr-20	Sunny	13:47	61.2	54.9	
15-Apr-20	Sunny	13:52	61.0	56.4	
15-Apr-20	Sunny	13:57	60.1	54.9	
21-Apr-20	Sunny	13:00	60.9	57.2	62
21-Apr-20	Sunny	13:05	62.2	57.6	
21-Apr-20	Sunny	13:10	61.0	57.2	
21-Apr-20	Sunny	13:15	59.7	56.8	
21-Apr-20	Sunny	13:20	61.2	57.1	
21-Apr-20	Sunny	13:25	63.3	56.6	
27-Apr-20	Sunny	13:03	59.5	55.3	61
27-Apr-20	Sunny	13:08	60.6	55.2	
27-Apr-20	Sunny	13:13	59.2	55.0	
27-Apr-20	Sunny	13:18	61.2	55.8	
27-Apr-20	Sunny	13:23	59.8	55.2	
27-Apr-20	Sunny	13:28	59.5	54.7	

Remarks:

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

Noise Measurement Results

Station: NM5- Village House, Tin Sum

Date	Weather	Time	Measured L ₁₀ dB(A)	Measured L ₉₀ dB(A)	L _{eq(30mins)} dB(A)
03-Apr-20	Cloudy	9:16	59.0	51.7	57
03-Apr-20	Cloudy	9:21	52.9	50.5	
03-Apr-20	Cloudy	9:26	54.5	50.7	
03-Apr-20	Cloudy	9:31	54.3	50.6	
03-Apr-20	Cloudy	9:36	56.5	50.1	
03-Apr-20	Cloudy	9:41	56.0	51.3	58
09-Apr-20	Sunny	10:11	51.4	44.9	
09-Apr-20	Sunny	10:16	58.7	46.4	
09-Apr-20	Sunny	10:21	50.1	45.6	
09-Apr-20	Sunny	10:26	49.6	44.8	
09-Apr-20	Sunny	10:31	48.7	43.3	
09-Apr-20	Sunny	10:36	51.9	45.6	55
15-Apr-20	Sunny	9:37	57.1	43.8	
15-Apr-20	Sunny	9:42	53.8	43.5	
15-Apr-20	Sunny	9:47	52.4	43.6	
15-Apr-20	Sunny	9:52	57.3	44.2	
15-Apr-20	Sunny	9:57	52.9	44.3	
15-Apr-20	Sunny	10:02	55.0	43.3	57
21-Apr-20	Sunny	9:45	55.8	44.6	
21-Apr-20	Sunny	9:50	54.7	43.9	
21-Apr-20	Sunny	9:55	63.9	44.5	
21-Apr-20	Sunny	10:00	51.0	42.5	
21-Apr-20	Sunny	10:05	55.4	44.6	58
21-Apr-20	Sunny	10:10	56.7	42.9	
27-Apr-20	Cloudy	9:06	49.7	45.2	
27-Apr-20	Cloudy	9:11	53.1	45.2	
27-Apr-20	Cloudy	9:16	56.5	46.0	
27-Apr-20	Cloudy	9:21	54.2	47.0	58
27-Apr-20	Cloudy	9:26	56.0	48.1	
27-Apr-20	Cloudy	9:31	64.3	46.2	

Remarks:

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

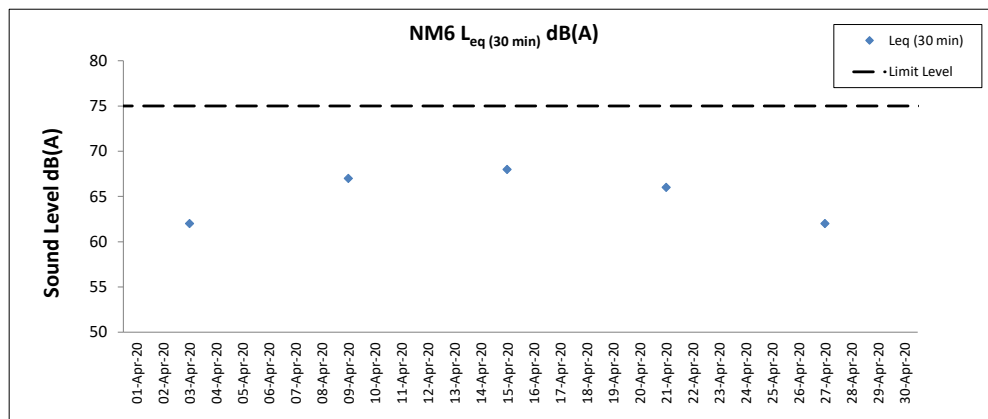
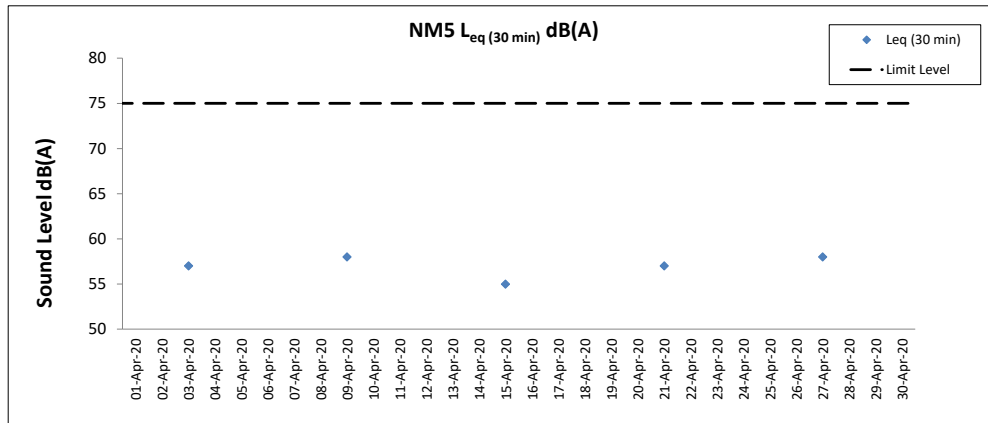
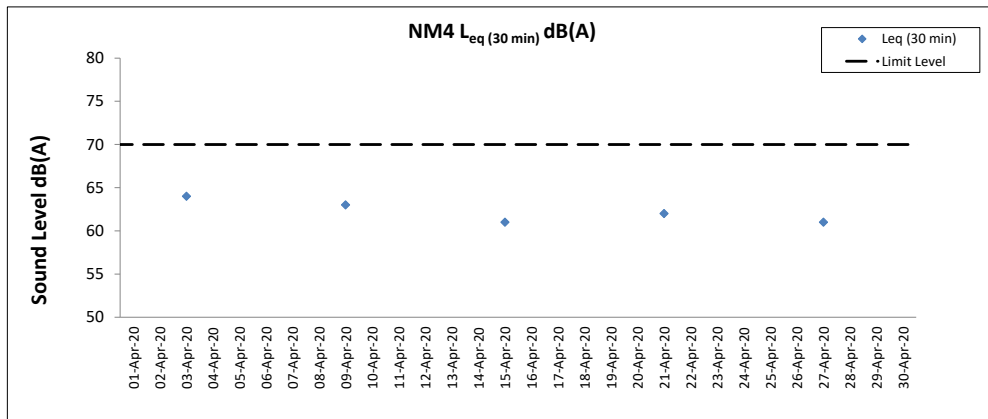
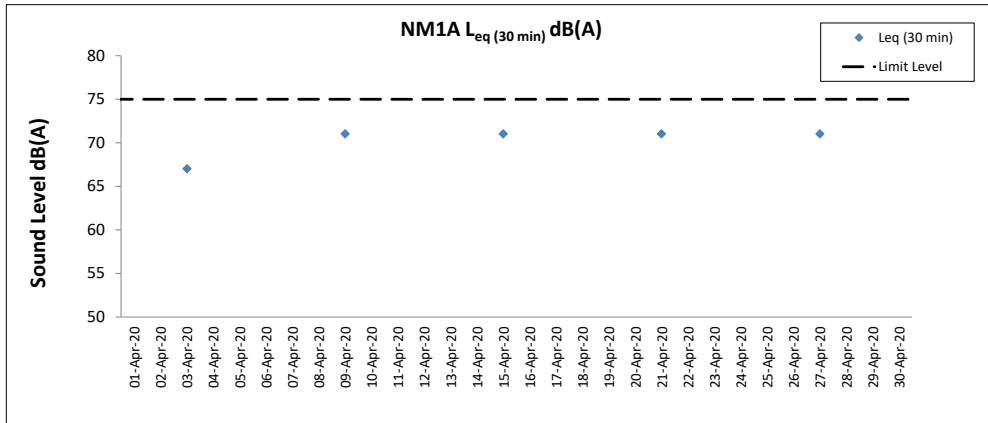
Noise Measurement Results

Station: NM6- House No.1 Sha Lo Wan

Date	Weather	Time	Measured L ₁₀ dB(A)	Measured L ₉₀ dB(A)	L _{eq(30mins)} dB(A)
03-Apr-20	Cloudy	15:47	70.2	51.0	62
03-Apr-20	Cloudy	15:52	67.2	48.1	
03-Apr-20	Cloudy	15:57	67.5	48.5	
03-Apr-20	Cloudy	16:02	66.0	47.0	
03-Apr-20	Cloudy	16:07	68.3	48.8	
03-Apr-20	Cloudy	16:12	67.4	44.9	67
09-Apr-20	Cloudy	15:49	66.3	45.5	
09-Apr-20	Cloudy	15:54	63.6	45.4	
09-Apr-20	Cloudy	15:59	68.4	51.8	
09-Apr-20	Cloudy	16:04	63.5	46.6	
09-Apr-20	Cloudy	16:09	62.9	43.8	68
09-Apr-20	Cloudy	16:14	60.2	42.3	
15-Apr-20	Sunny	15:43	61.9	49.9	
15-Apr-20	Sunny	15:48	59.5	48.4	
15-Apr-20	Sunny	15:53	60.4	47.5	
15-Apr-20	Sunny	15:58	66.6	49.8	66
15-Apr-20	Sunny	16:03	65.6	59.3	
15-Apr-20	Sunny	16:08	65.4	59.3	
21-Apr-20	Cloudy	15:43	71.6	64.3	
21-Apr-20	Cloudy	15:48	67.9	61.5	
21-Apr-20	Cloudy	15:53	67.5	63.3	62
21-Apr-20	Cloudy	15:58	67.6	63.9	
21-Apr-20	Cloudy	16:03	68.5	60.3	
21-Apr-20	Cloudy	16:08	68.8	60.7	
27-Apr-20	Sunny	15:43	61.0	45.3	
27-Apr-20	Sunny	15:48	59.7	45.6	62
27-Apr-20	Sunny	15:53	71.2	45.0	
27-Apr-20	Sunny	15:58	52.0	43.3	
27-Apr-20	Sunny	16:03	57.2	47.3	
27-Apr-20	Sunny	16:08	68.8	49.3	

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 April 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)				
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA	
C1	Fine	Rough	19:07	8.8	Surface	1.0	0.4	217	21.8	21.8	7.8	7.8	33.6	33.6	96.2	96.2	6.9	6.8	4.3	6.5	6	7	86	90	815608	804239	<0.2	1.0	<0.2	1.0			
						1.0	0.4	224	21.8	21.8	7.8	7.8	33.6	33.6	96.1	96.1	6.9	6.9	4.4	6.5	6	7	86	90			<0.2	0.9		0.9			
					Middle	4.4	0.4	211	21.9	21.9	7.8	7.8	33.6	33.7	92.6	92.6	6.7	6.7	6.2	6.5	8	7	90	88			<0.2	1.2		1.2			
						4.4	0.4	228	21.9	21.9	7.8	7.8	33.7	33.7	92.6	92.6	6.7	6.7	6.7	6.5	6	7	90	88			<0.2	1.2		1.2			
					Bottom	7.8	0.2	209	21.8	21.8	7.8	7.8	34.1	34.1	93.4	93.4	6.7	6.7	8.6	6.5	8	7	94	88			<0.2	0.9		0.9			
						7.8	0.3	210	21.8	21.8	7.8	7.8	34.1	34.1	93.3	93.4	6.7	6.7	8.7	6.5	7	7	93	88			<0.2	0.8		0.8			
C2	Cloudy	Moderate	18:05	12.2	Surface	1.0	0.1	169	21.7	21.7	8.1	8.1	29.5	29.5	93.0	93.0	6.9	6.9	1.4	2.4	7	5	85	88	825695	806932	<0.2	1.2	<0.2	1.2			
						1.0	0.1	171	21.7	21.7	8.1	8.1	29.5	29.5	92.9	92.9	6.9	6.9	1.4	2.4	5	5	85	88			<0.2	1.2		1.2			
					Middle	6.1	0.1	122	21.6	21.6	8.1	8.1	30.3	30.3	92.1	92.0	6.8	6.8	1.5	2.4	5	4	88	87			<0.2	1.1		1.1			
						6.1	0.1	132	21.6	21.6	8.1	8.1	30.3	30.3	91.9	91.8	6.8	6.8	1.6	2.4	3	4	88	87			<0.2	1.1		1.1			
					Bottom	11.2	0.1	92	21.6	21.6	8.0	8.0	32.0	32.0	86.2	86.2	6.3	6.3	4.2	4.2	4	4	90	90			<0.2	1.1		1.1			
						11.2	0.1	95	21.6	21.6	8.0	8.0	32.0	32.0	86.2	86.2	6.3	6.3	4.2	4.2	4	4	90	90			<0.2	1.1		1.1			
C3	Cloudy	Moderate	20:14	12.8	Surface	1.0	0.2	87	21.5	21.5	8.1	8.1	31.1	31.1	92.2	92.3	6.8	6.8	2.4	3.1	5	4	85	87	822087	817783	<0.2	0.8	<0.2	0.8			
						1.0	0.2	87	21.5	21.5	8.1	8.1	31.1	31.1	92.3	92.3	6.8	6.8	2.4	3.1	5	4	85	87			<0.2	0.7		0.7			
					Middle	6.4	0.3	105	21.5	21.5	8.1	8.1	31.3	31.3	91.8	91.8	6.8	6.8	2.5	3.1	4	4	87	87			<0.2	0.8		0.8			
						6.4	0.3	113	21.5	21.5	8.1	8.1	31.3	31.3	91.8	91.8	6.8	6.8	2.5	3.1	5	4	87	87			<0.2	0.9		0.9			
					Bottom	11.8	0.3	122	21.5	21.5	8.2	8.2	32.3	32.3	90.3	90.3	6.6	6.6	4.3	3.1	3	4	90	90			<0.2	0.7		0.7			
						11.8	0.3	127	21.5	21.5	8.2	8.2	32.3	32.3	90.3	90.3	6.6	6.6	4.3	3.1	2	4	89	89			<0.2	0.7		0.7			
IM1	Fine	Moderate	18:49	5.4	Surface	1.0	0.2	167	21.9	21.9	7.8	7.8	33.8	33.8	91.3	91.2	6.6	6.6	7.4	7.8	10	9	86	85	817932	807146	<0.2	0.8	<0.2	0.8			
						1.0	0.2	179	21.9	21.9	7.8	7.8	33.8	33.8	91.1	91.1	6.6	6.6	7.4	7.8	9	9	85	85			<0.2	0.7		0.7			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-		-	<0.2	-	-
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-		-	<0.2	-	-
					Bottom	4.4	0.2	188	21.9	21.9	7.8	7.8	33.9	33.9	91.3	91.2	6.6	6.6	8.6	7.8	8	8	93	94			<0.2	0.6		0.6			
						4.4	0.2	204	21.9	21.9	7.8	7.8	33.9	33.9	91.2	91.3	6.6	6.6	7.8	7.8	8	8	94	94			<0.2	0.6		0.6			
IM2	Fine	Rough	18:43	7.1	Surface	1.0	0.2	178	21.9	21.9	7.7	7.7	33.7	33.7	94.8	94.7	6.8	6.8	4.6	5.4	6	6	86	86	818147	806183	<0.2	0.6	<0.2	0.6			
						1.0	0.2	181	21.9	21.9	7.7	7.7	33.7	33.7	94.6	94.7	6.8	6.8	4.6	5.4	6	6	86	86			<0.2	0.6		0.6			
					Middle	3.6	0.2	176	21.9	21.9	7.8	7.8	33.7	33.7	91.8	91.8	6.6	6.6	5.4	5.4	7	90	89	90			<0.2	0.6		0.6			
						3.6	0.2	186	21.9	21.9	7.8	7.8	33.7	33.7	91.8	91.8	6.6	6.6	5.5	5.6	6	6	89	89			<0.2	0.5		0.5			
					Bottom	6.1	0.1	148	21.9	21.9	7.8	7.8	33.8	33.8	91.8	91.6	6.6	6.6	6.2	6.2	7	7	93	93			<0.2	0.6		0.6			
						6.1	0.2	152	21.9	21.9	7.8	7.8	33.9	33.8	91.3	91.6	6.6	6.6	6.1	6.1	6	6	94	94			<0.2	0.6		0.6			
IM3	Fine	Rough	18:36	7.4	Surface	1.0	0.3	224	21.9	21.9	7.7	7.7	33.6	33.6	94.7	94.7	6.8	6.8	4.9	5.9	11	9	82	83	818767	805596	<0.2	0.6	<0.2	0.6			
						1.0	0.3	233	21.9	21.9	7.7	7.7	33.6	33.6	94.7	94.7	6.8	6.8	4.9	5.9	9	9	83	86			<0.2	0.7		0.7			
					Middle	3.7	0.2	221	21.9	21.9	7.7	7.7	33.6	33.6	91.8	91.8	6.6	6.6	5.7	5.9	9	9	86	87			<0.2	0.6		0.6			
						3.7	0.2	224	21.9	21.9	7.7	7.7	33.6	33.6	91.8	91.8	6.6	6.6	5.8	5.9	9	9	87	87			<0.2	0.6		0.6			
					Bottom	6.4	0.2	198	22.0	22.0	7.6	7.6	33.7	33.7	91.0	91.0	6.6	6.6	7.1	6.6	8	7	90	90			<0.2	0.6		0.6			
						6.4	0.2	214	22.0	22.0	7.6	7.6	33.7	33.7	91.0	91.0	6.6	6.6	7.1	6.6	7	7	91	91			<0.2	0.6		0.6			
IM4	Fine	Moderate	18:27	8.2	Surface	1.0	0.4	200	21.8	21.8	7.7	7.7	31.9	31.9	95.0	95.0	6.9	6.9	3.6	5.0	6	6	83	83	819709	804605	<0.2	0.7	<0.2	0.7			
						1.0	0.4	212	21.8	21.8	7.7	7.7	31.9	31.9	94.9	94.9	6.9	6.9	3.7	5.0	6	6	83	87			<0.2	0.7		0.7			
					Middle	4.1	0.2	198	21.9	21.9	7.7	7.7	33.3	33.3	92.3	92.3	6.7	6.7	5.2	7.3	7	7	87	87			<0.2	0.7		0.7			
						4.1	0.2	210	21.9	21.9	7.7	7.7	33.3	33.3	92.2	92.3	6.7	6.7	5.2	7.3	5	6	87	87			<0.2	0.6		0.6			
					Bottom	7.2	0.2	183	22.0	22.0	7.7	7.7	33.5	33.5	91.9	91.9	6.6	6.6	6.1	6.1	7	7	91	91			<0.2	0.6		0.6			
						7.2	0.2	189	22.0	22.0	7.7	7.7	33.5	33.5	91.9	91.9	6.6	6.6	6.1	6.1	5	6	91	91			<0.2	0.8		0.8			
IM5	Fine	Moderate	18:21	8.0	Surface	1.0	0.5	233	21.7	21.7	7.7	7.7	31.3	31.3	93.0	93.0	6.8	6.8	5.6	7.3	6	6	83	82	820746	804855	<0.2	1.0	<0.2	1.0			
						1.0	0.6	247	21.7	21.7	7.7	7.7	31.3	31.3	93.0	93.0	6.8	6.8	5.6	7.3	6	6	82	87			<0.2	0.9		0.9			
					Middle	4.0	0.6	233	21.9	21.9	7.8	7.8	32.3	32.3	91.6	91.6	6.7	6.7	7.4	7.5	6	6	87	87			<0.2	0.9		0.9			
						4.0	0.6	238	21.9	21.9	7.8	7.8	32.2	32.3	91.6	91.6	6.7	6.7	7.5	7.5	6	6	87	87			<0.2	1.0		1.0			
					Bottom	7.0	0.5	227	21.9	21.9	7.8	7.8	33.4	33.4	89.9	89.9	6.5	6.5	8.7	8.7	5	5	91	91			<0.2	0.9		0.9			
						7.0	0.5	243	21.9	21.9	7.8	7.8	33.4	33.4	89.9	89.9	6.5	6.5	8.7	8.7	6	6	90	90			<0.2	0.9		0.9			
IM6	Fine	Moderate	18:15	7.6	Surface	1.0	0.3	245	21.7	21.7	7.7	7.7	31.0	31.0	91.5	91.4	6.7	6.7	5.4	6.9	6	6	83	83	821080	805833	<0.2	0.9	<0.2	0.9			
						1.0	0.3	263	21.7	21.7	7.7	7.7	31.0	31.0	91.3	91.3	6.7	6.7	5.4	6.9	6	6	83	88			<0.2	0.9		0.9			
					Middle	3.8	0.2	257	21.7	21.7	7.8	7.8	31.4	31.4	90.3	90.3	6.6	6.6	6.5	6.7	6	6	87	88			<0.2	1.0		1.0			
						3.8	0.2	272	21.7	21.7	7.8	7.8	31.4	31.4	90.3	90.3	6.6	6.6	6.7	6.7	6	6	88	88			<0.2	1.0		1.0			
					Bottom	6.6	0.1	194	21.8	21.8	7.8	7.8	33.2	33.2	89.4	89.3	6.5	6.5	9.1	8.5	5	5	92	92			<0.2	0.9		0.9			
						6.6	0.1	206	21.8	21.8	7.8	7.8	33.2	33.2	89.1	89.3	6.5	6.5	8.5	8.5	6	6	92	92			<0.2	1.0		1.0			
IM7	Fine	Moderate	18:08	8.8	Surface	1.0	0.2	259	21.7	21.7	7.6	7.6	30.7	30.7	92.2	92.3	6.8	6.7	5.3	8.1	6	6	85	88	821357	806833	<0.2	1.1	<0.2	1.1			
						1.0	0.2	267	21.7	21.7	7.6	7.6	30.7	30.7	92.3	92.3	6.8	6.8	5.4	7.3	7	6	84	88			<0.2	1.1		1.1			
					Middle	4.4	0.1	199	21.7	21.7	7.7	7.7	31.3	31.3	89.6	89.6	6.6	6.6	9.5	9.5	6	4	88	88			<0.2	1.1		1.1			
						4.4	0.1	213	21.7	21.7	7.7	7.7	31.3	31.3	89.6	89.6	6.6	6.6	9.5	9.5	4	4	88	88			<0.2	1.1		1.1			
					Bottom	7.8	0.1	126	21.8	21.8	7.6	7.6	33.1	33.1	89.1	89.1	6.5	6.5	9.4	9.4	6	6	89	89			<0.2	1.2		1.2			
						7.8	0.1	128	21.8	21.8	7.6	7.6	33.1	33.1	89.1	89.1	6.5	6.5	9.5	9.5	6												

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

Water Quality Monitoring

Water Quality Monitoring Results on 02 April 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)							
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA	Value	DA	Value	DA
IM9	Cloudy	Moderate	18:47	7.6	Surface	1.0	0.2	90	21.6	21.6	8.2	8.2	30.6	30.6	92.3	92.4	6.8		4.0		5		87		88	822081	808789	<0.2	1.0	1.0						
						1.0	0.2	98	21.6		8.2		30.6		92.4		6.8	6.9	4.1		6		86					<0.2	1.0							
					Middle	3.8	0.2	66	21.7	21.7	8.2	8.2	30.8	30.8	93.4	93.4	6.9		6.1		6		89					<0.2	1.1							
						3.8	0.2	67	21.7		8.2		30.8		93.4		6.9		6.1		4		88					<0.2	1.0							
					Bottom	6.6	0.2	69	21.7	21.7	8.2	8.2	31.4	31.4	94.2	94.2	6.9	6.9	7.8		5		90					<0.2	1.0							
						6.6	0.2	75	21.7		8.2		31.4		94.2		6.9		7.8		5		90					<0.2	1.0							
IM10	Cloudy	Moderate	18:56	7.7	Surface	1.0	0.6	99	21.6	21.6	8.2	8.2	30.7	30.7	92.3	92.4	6.8		3.6		7		86		88	822366	809790	<0.2	0.8	0.8						
						1.0	0.6	103	21.6		8.2		30.7		92.4		6.8	6.8	3.6		8		86					<0.2	0.7							
					Middle	3.9	0.5	80	21.6	21.6	8.2	8.2	30.7	30.7	92.6	92.7	6.8		3.6		6		88					<0.2	0.8							
						3.9	0.6	86	21.6		8.2		30.7		92.7		6.8		3.5		5		88					<0.2	0.8							
					Bottom	6.7	0.5	104	21.6	21.6	8.2	8.2	31.6	31.6	88.4	88.4	6.5	6.5	7.1		5		90					<0.2	0.8							
						6.7	0.5	112	21.6		8.2		31.6		88.3		6.5		7.1		5		91					<0.2	0.8							
IM11	Cloudy	Moderate	19:09	8.5	Surface	1.0	0.4	156	21.5	21.5	8.2	8.2	30.4	30.4	90.5	90.6	6.7		3.8		8		86		88	822048	811462	<0.2	0.8	0.9						
						1.0	0.4	161	21.5		8.2		30.4		90.6		6.7	6.7	3.8		6		86					<0.2	0.9							
					Middle	4.3	0.4	140	21.6	21.6	8.2	8.2	30.6	30.6	89.7	89.7	6.6		4.9		7		88					<0.2	0.9							
						4.3	0.5	146	21.6		8.2		30.6		89.7		6.6		5.0		6		87					<0.2	0.9							
					Bottom	7.5	0.3	142	21.5	21.5	8.2	8.2	31.6	31.6	88.2	88.3	6.5	6.5	9.7		4		90					<0.2	0.8							
						7.5	0.3	155	21.5		8.2		31.6		88.4		6.5		9.7		5		89					<0.2	0.8							
IM12	Cloudy	Moderate	19:17	8.8	Surface	1.0	0.3	95	21.6	21.6	8.2	8.2	30.4	30.4	90.1	90.1	6.7		4.8		5		87		88	821455	812069	<0.2	0.9	0.9						
						1.0	0.4	96	21.6		8.2		30.4		90.1		6.7	6.7	4.8		4		86					<0.2	0.8							
					Middle	4.4	0.4	94	21.6	21.6	8.2	8.2	30.5	30.5	89.0	88.9	6.6		6.1		6		87					<0.2	0.8							
						4.4	0.4	95	21.6		8.2		30.5		88.8		6.6		6.2		4		88					<0.2	0.8							
					Bottom	7.8	0.3	105	21.5	21.5	8.2	8.2	31.5	31.5	88.7	88.8	6.5	6.5	10.0		6		90					<0.2	0.9							
						7.8	0.3	110	21.5		8.2		31.5		88.8		6.5		10.0		6		90					<0.2	0.9							
SR1A	Cloudy	Moderate	19:39	5.3	Surface	1.0	-	-	21.5	21.5	8.2	8.2	30.3	30.3	86.7	86.7	6.4		4.0		5		-		-	819971	812655	-	-	-						
						1.0	-	-	21.5		8.2		30.3		86.7		6.4	6.4	4.0		4		-					-	-							
					Middle	2.7	-	-	-	-	-	-	-	-	-	-	-					5		-					-		-					
						2.7	-	-	-	-	-	-	-	-	-	-	-					-		-					-		-					
					Bottom	4.3	-	-	21.6	21.6	8.2	8.2	31.3	31.3	84.9	84.9	6.2	6.2	5.3		6		-					-			-	-				
						4.3	-	-	21.6		8.2		31.3		84.9		6.2		5.3		6		-					-			-	-				
SR2	Cloudy	Moderate	19:52	4.9	Surface	1.0	0.4	70	21.5	21.5	8.2	8.2	30.4	30.4	91.0	91.0	6.7		2.8		5		87		88	821440	814160	<0.2	0.9	0.9						
						1.0	0.4	73	21.5		8.2		30.4		91.0		6.7	6.7	2.9		4		88					<0.2	1.0							
					Middle	-	-	-	-	-	-	-	-	-	-	-	-					5		-					-		-					
						-	-	-	-	-	-	-	-	-	-	-	-					-		-					-		-					
					Bottom	3.9	0.2	67	21.5	21.5	8.2	8.2	31.5	31.5	90.2	90.2	6.6	6.6	4.2		6		89					<0.2	0.9							
						3.9	0.2	69	21.5		8.2		31.6		90.2		6.6		4.1		4		89					<0.2	0.8							
SR3	Cloudy	Moderate	18:31	9.5	Surface	1.0	0.2	207	21.6	21.6	8.1	8.1	30.3	30.3	91.7	91.7	6.8		3.7		3		-		-	822134	807580	-	-	-						
						1.0	0.2	212	21.6		8.1		30.3		91.6		6.8	6.8	3.7		3		-					-	-							
					Middle	4.8	0.1	208	21.6	21.6	8.2	8.2	30.8	30.8	91.2	91.2	6.7		5.5		4		-					-	-							
						4.8	0.1	212	21.6		8.2		30.8		91.2		6.7		5.5		5		-					-	-							
					Bottom	8.5	0.0	45	21.7	21.7	8.2	8.2	32.4	32.4	91.9	92.0	6.7	6.7	7.5		4		-					-	-							
						8.5	0.0	45	21.7		8.2		32.4		92.0		6.7		7.6		4		-					-	-							
SR4A	Fine	Calm	19:30	8.4	Surface	1.0	0.0	162	22.0	22.0	7.8	7.8	30.1	30.1	94.9	94.9	7.0		3.8		6		-		-	817209	807793	-	-	-						
						1.0	0.0	171	22.0		7.8		30.1		94.8		7.0	6.8	3.9		4		-					-	-							
					Middle	4.2	0.1	75	21.9	21.9	7.8	7.8	34.0	34.0	90.8	90.8	6.5		7.3		5		-					-	-							
						4.2	0.1	80	21.9		7.8		34.0		90.8		6.5		7.3		4		-					-	-							
					Bottom	7.4	0.1	73	21.9	21.9	7.8	7.8	34.0	34.0	91.1	91.1	6.6	6.6	8.7		5		-					-	-							
						7.4	0.1	74	21.9		7.8		34.0		91.0		6.5		8.4		5		-					-	-							
SR5A	Fine	Calm	19:48	5.2	Surface	1.0	0.1	307	21.8	21.8	7.8	7.8	29.0	29.0	91.0	91.0	6.8		4.8		3		-		-	816581	810700	-	-	-						
						1.0	0.1	328	21.8		7.8		29.0		91.0		6.8	6.8	4.9		4		-					-	-							
					Middle	-	-	-	-	-	-	-	-	-	-	-	-					5		-					-		-					
						-	-	-	-	-	-	-	-	-	-	-	-					-		-				-								
					Bottom	4.2	0.0	245	21.8	21.8	7.7	7.7	33.4	33.4	90.2	90.1	6.5	6.5	5.8		5		-					-	-							
						4.2	0.0	246	21.8		7.7		33.3		90.1		6.5		5.5		5		-					-	-							
SR6A	Fine	Calm	20:17	4.3	Surface	1.0	0.0	345	21.6	21.6	7.7	7.7	28.4	28.4	86.9	86.6	6.5		5.5		4		-		-	817970	814737	-	-	-						
						1.0	0.0	317	21.6		7.7		28.4		86.3		6.5		5.5		5		-					-	-							
					Middle	-	-	-	-	-	-	-	-	-	-	-	-					5		-					-		-					
						-	-	-	-	-	-	-	-	-	-	-	-					-		-				-								
					Bottom	3.3	0.0	203	21.6	21.5	7.7	7.7	31.1	31.1	86.6	86.8	6.4	6.4	5.1		4		-					-	-							
						3.3	0.0	212	21.5		7.7		31.1		86.9		6.4		4.9		6		-					-	-							
SR7	Cloudy	Moderate	20:44	16.0	Surface	1.0	0.6	56	21.5	21.5	8.0	8.0	32.5	32.5	90.1	90.1	6.6		2.3		4		-		-	823625	823761	-	-	-						
						1.0	0.6	59	21.5		8.0		32.5		90.0		6.6	6.6	2.3		5		-					-	-							
					Middle	8.0	0.4	51	21.5	21.5	8.0	8.0	32.6	32.6	89.9	90.0	6.6		2.2		3		-					-	-							
						8.0	0.4	53	21.5		8.0		32.6		90.0		6.6		2.2		4		-					-	-							
					Bottom	15.0	0.3	24	21.5	21.5	8.1	8.1	32.7	32.7	89.7	89.8	6.6	6.6	2.5		4		-					-	-							
						15.0	0.3	25	21.5		8.1		32.7		89.8		6.6		2.5		4		-					-	-							
SR8	Cloudy	Moderate	19:29	5.1	Surface	1.0	-	-	21.8	21.8	8.2	8.2	30.0	30.0	89.0	89.0	6.6		5.8		7		-		-	820376	811644	-	-	-						
						1.0	-	-	21.8		8.2		30.0		89.0		6.6	6.6	5.6		6		-					-	-							
					Middle	-	-	-	-	-	-	-	-	-	-	-	-					7		-					-		-					
						-	-	-	-	-	-	-	-	-	-	-	-					-		-				-								
					Bottom	4.1	-	-	21.6	21.6	8.1	8.1	31.1	31.1	88.4	88.5	6.5	6.5	8.6		8		-					-	-							
						4.1	-	-	21.6		8.1		31.1		88.5		6.5		8.7		7		-					-	-							

Water Quality Monitoring Results on 02 April 20 during Mid-Flood Tide

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 April 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)			
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA				
IM9	Cloudy	Rough	08:10	7.4	Surface	1.0	0.1	247	21.5	21.5	8.1	8.1	28.3	28.3	90.2	90.2	6.8		4.5		7		84		822092	808808	<0.2		1.2			
						1.0	0.1	262	21.5		8.1		28.3		90.1		6.8	6.8	4.5		6		84				<0.2		1.3			
					Middle	3.7	0.0	170	21.5	21.5	8.1	8.1	28.4	28.4	90.7	90.7	6.8		5.0		5	6	88				<0.2	<0.2	1.1	1.2		
						3.7	0.0	183	21.5		8.1		28.4		90.7		6.8		5.0		5		87				<0.2		1.1			
					Bottom	6.4	0.1	45	21.5	21.5	8.2	8.2	31.8	31.8	90.4	90.5	6.6	6.6	7.1		6		89				<0.2		1.2			
						6.4	0.2	48	21.5		8.2		31.8		90.5		6.6	6.6	7.1		6		90				<0.2		1.2			
IM10	Cloudy	Rough	08:01	7.1	Surface	1.0	0.0	300	21.5	21.5	8.1	8.1	28.3	28.3	89.6	89.6	6.7		4.9		6		84		822404	809791	<0.2		1.3			
						1.0	0.0	326	21.5		8.1		28.3		89.5		6.7	6.7	4.9		6		85				<0.2		1.2			
					Middle	3.6	0.2	104	21.6	21.6	8.1	8.1	29.6	29.6	89.7	89.8	6.7	6.7	5.4		5	5	86				<0.2	<0.2	1.2	1.2		
						3.6	0.2	104	21.6		8.1		29.6		89.8		6.7		5.4		5		87				<0.2		1.2			
					Bottom	6.1	0.2	87	21.5	21.5	8.1	8.1	30.9	30.9	91.6	91.7	6.8	6.8	6.2		4		89				<0.2		1.2			
						6.1	0.2	95	21.5		8.1		30.9		91.7		6.8	6.8	6.2		5		89				<0.2		1.1			
IM11	Cloudy	Rough	07:51	8.6	Surface	1.0	0.1	271	21.4	21.4	8.2	8.2	29.7	29.7	90.3	90.3	6.7		3.9		4		85		822058	811474	<0.2		1.1			
						1.0	0.1	280	21.4	21.4	8.2	8.2	29.7	29.7	90.3		6.7	3.9		3		85		<0.2				1.1				
					Middle	4.3	0.1	273	21.4	21.4	8.2	8.2	29.7	29.7	89.3	89.3	6.6	6.7	3.0		7	5	88				<0.2	<0.2	1.0	1.1		
						4.3	0.1	296	21.4		8.2		29.7		89.3		6.6		3.0		6		88				<0.2		1.2			
					Bottom	7.6	0.1	113	21.5	21.5	8.2	8.2	29.8	29.8	88.9	89.0	6.6	6.6	3.2		5		90				<0.2		1.1			
						7.6	0.1	117	21.5		8.3		29.8		89.0		6.6	6.6	3.2		7		90				<0.2		1.1			
IM12	Cloudy	Rough	07:42	7.9	Surface	1.0	0.1	72	21.4	21.4	8.1	8.1	29.6	29.6	89.4	89.5	6.7		3.7		5		85		821461	812052	<0.2		1.1			
						1.0	0.1	78	21.4	21.4	8.1		29.6		89.5		6.7	3.7		7		86		<0.2				1.1				
					Middle	4.0	0.1	78	21.4	21.4	8.1	8.1	29.6	29.6	89.8	89.8	6.7	6.7	3.6		7	7	88				<0.2	<0.2	1.2	1.1		
						4.0	0.1	80	21.4		8.1		29.6		89.7		6.7		3.7		8		88				<0.2		1.0			
					Bottom	6.9	0.1	115	21.5	21.5	8.1	8.1	30.1	30.1	91.3	91.4	6.8	6.8	3.4		8		90				<0.2		1.1			
						6.9	0.1	117	21.5		8.1		30.1		91.4		6.8	6.8	3.5		6		90				<0.2		1.3			
SR1A	Cloudy	Moderate	07:20	5.1	Surface	1.0	-	-	21.2	21.2	8.0	8.0	27.3	27.3	87.9	88.0	6.7		3.6		3		-		819973	812661	-	-	-	-		
						1.0	-	-	21.2		8.0		27.3		88.0		6.7	3.6		2		-		-			-	-	-			
					Middle	2.6	-	-	-	-	-	-	-	-	-	-					6.7		-				-		-	-	-	-
						2.6	-	-	-		-		-		-		-				-		-				-		-	-	-	-
					Bottom	4.1	-	-	21.5	21.5	8.1	8.1	30.2	30.2	88.1	88.1	6.5	6.5	4.5		2		-				-		-	-	-	-
						4.1	-	-	21.5		8.1		30.2		88.1		6.5	6.5	4.4		3		-				-		-	-	-	-
SR2	Cloudy	Moderate	07:01	4.8	Surface	1.0	0.3	346	21.4	21.4	8.0	8.0	30.1	30.1	89.9	89.9	6.7		2.3		6		86		821466	814168	<0.2		1.1			
						1.0	0.3	318	21.4		8.0		30.1		89.8		6.7	2.3		4		86		<0.2				1.0				
					Middle	-	-	-	-	-	-	-	-	-	-	-					6.7		-				-		<0.2	<0.2	1.0	1.1
						-	-	-	-		-		-		-		-				-		-				-		<0.2		1.0	
					Bottom	3.8	0.2	339	21.4	21.4	8.1	8.1	30.6	30.6	89.3	89.3	6.6	6.6	4.8		5		88				<0.2		1.0			
						3.8	0.2	312	21.4		8.1		30.6		89.3		6.6	6.6	4.8		4		89				<0.2		1.1			
SR3	Cloudy	Rough	08:22	9.0	Surface	1.0	0.2	247	21.4	21.4	8.1	8.1	28.3	28.3	91.2	91.2	6.8		6.9		6		-		822149	807554	-	-	-	-		
						1.0	0.3	251	21.4		8.1		28.3		91.1		6.8	7.0		6		-		-			-	-	-			
					Middle	4.5	0.3	220	21.5	21.5	8.1	8.1	29.5	29.5	90.2	90.3	6.7	6.8	5.4		6	7	-				-	-	-	-	-	
						4.5	0.3	222	21.5		8.1		29.5		90.3		6.7		5.4		8		-				-	-	-	-		
					Bottom	8.0	0.2	172	21.5	21.5	8.2	8.2	32.1	32.1	92.0	92.0	6.7	6.7	7.3		6		-				-		-	-	-	
						8.0	0.2	175	21.5		8.2		32.1		92.0		6.7	6.7	7.3		7		-				-		-	-	-	
SR4A	Fine	Moderate	07:14	8.7	Surface	1.0	0.1	78	21.3	21.3	7.8	7.8	30.4	30.4	91.8	91.9	6.8		4.0		5		-		817196	807825	-	-	-	-		
						1.0	0.1	83	21.3		7.8		30.4		91.9		6.8	4.2		6		-		-			-	-	-			
					Middle	4.4	0.2	69	21.6	21.6	7.8	7.8	33.1	33.1	89.5	89.5	6.5	6.5	6.5		5	5	-				-		-	-	-	
						4.4	0.2	69	21.6		7.8		33.1		89.5		6.5		6.5		5		-				-		-	-	-	
					Bottom	7.7	0.2	63	21.6	21.6	7.8	7.8	33.3	33.3	90.4	90.4	6.6	6.6	6.8		4		-				-		-	-	-	
						7.7	0.2	66	21.6		7.8		33.3		90.4		6.6	6.6	6.8		4		-				-		-	-	-	
SR5A	Fine	Calm	06:57	4.0	Surface	1.0	0.1	304	21.3	21.3	7.8	7.8	27.9	27.9	87.7	87.7	6.6		3.5		5		-		816599	810688	-	-	-	-		
						1.0	0.1	333	21.3		7.8		27.9		87.7		6.6	3.5		5		-		-				-	-	-		
					Middle	-	-	-	-	-	-	-	-	-	-	-					6.6		-				-		-	-	-	-
						-	-	-	-		-		-		-		-				-		-				-		-	-		
					Bottom	3.0	0.1	311	21.4	21.4	7.8	7.8	28.5	28.5	87.8	87.7	6.6	6.6	4.1		4		-				-		-	-	-	-
						3.0	0.1	330	21.4		7.8		28.5		87.7		6.6	6.6	4.0		4		-				-		-	-	-	
SR6A	Fine	Calm	06:31	4.0	Surface	1.0	0.0	221	21.5	21.5	7.7	7.7	28.5	28.6	86.5	86.5	6.5		3.3		3		-		817951	814743	-	-	-	-		
						1.0	0.0	226	21.5		7.7		28.7		86.4		6.5		3.5		4		-				-		-	-		
					Middle	-	-	-	-	-	-	-	-	-	-	-					6.5		-				-		-	-	-	-
						-	-	-	-		-		-		-		-				-		-				-		-	-		
					Bottom	3.0	0.0	218	21.5	21.5	7.7	7.7	29.0	29.0	86.7	87.3	6.5	6.5	3.8		5		-				-		-	-	-	-
						3.0	0.0	236	21.5		7.7		29.0		87.3		6.5	6.5	3.8		5		-				-		-	-	-	
SR7	Cloudy	Moderate	06:03	15.6	Surface	1.0	0.1	27	21.4	21.4	8.1	8.1	31.9	31.9	89.0	89.0	6.5		1.5		4		-		823647	823765	-	-	-	-		
						1.0	0.1	29	21.4		8.1		31.9		88.9		6.5	1.5		3		-		-				-	-	-		
					Middle	7.8	0.2	356	21.5	21.5	8.0	8.0	32.8	32.8	88.8	88.8	6.5	6.5	3.5		3	3	-				-		-	-	-	
						7.8	0.2	328	21.5		8.0		32.8		88.8		6.5		3.5		2		-				-		-	-	-	
					Bottom	14.6	0.1	14	21.5	21.5	8.0	8.0	32.8	32.8	88.7	88.6	6.5	6.5	3.1		3		-				-		-	-	-	
						14.6	0.1	14	21.5		8.0		32.8		88.5		6.5	6.5	3.0		4		-				-		-	-	-	
SR8	Cloudy	Rough	07:33	4.9	Surface	1.0	-	-	21.5	21.5	8.0	8.0	29.1	29.1	95.2	95.3	7.1		6.4		4		-		820384	811643	-	-	-	-		
						1.0	-	-	21.5		8.0		29.1		95.4		7.1	6.4		4		-		-				-	-	-		
					Middle	-	-	-	-	-	-	-	-	-	-	-					7.1		-				-		-	-	-	-
						-	-	-	-																							

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

Water Quality Monitoring

Water Quality Monitoring Results on 04 April 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)					
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA		
C1	Cloudy	Moderate	10:35	8.3	Surface	1.0	0.1	190	21.6	21.6	8.1	8.1	30.3	30.3	95.6	95.6	7.1	1.8		<2		83		88	815615	804229	<0.2		0.8	0.9				
						1.0	0.1	208	21.6		8.1		30.3		95.5		7.1	7.0	1.9		<2		84					<0.2			0.8			
					Middle	4.2	0.1	188	21.6	21.6	8.1	8.1	32.7	32.7	92.7	92.7	6.8	3.3		<2		88					<0.2		0.8					
						4.2	0.1	205	21.6		8.1		32.7		92.7		6.8	3.3		<2		89					<0.2		1.0					
					Bottom	7.3	0.1	206	21.7	21.7	8.1	8.1	33.2	33.2	92.8	92.8	6.7	6.7		2		92					<0.2		1.0					
						7.3	0.1	211	21.7		8.1		33.2		92.8		6.7	6.7		3		93					<0.2		0.9					
C2	Cloudy	Moderate	11:58	11.6	Surface	1.0	0.5	160	21.6	21.6	8.1	8.1	26.2	26.2	91.3	91.4	6.9	3.2		3		84		86	825675	806932	<0.2		1.3	1.3				
						1.0	0.5	167	21.6		8.1		26.2		91.5		6.9	6.8	3.2		3		84					<0.2			1.2			
					Middle	5.8	0.3	164	21.7	21.7	8.1	8.1	30.5	30.5	90.0	90.0	6.6	6.4		3		87					<0.2		1.3					
						5.8	0.3	175	21.7		8.1		30.5		90.0		6.6	6.4		3	3	87					<0.2		1.3					
					Bottom	10.6	0.1	136	21.6	21.6	8.1	8.1	31.1	31.1	87.7	87.8	6.5	6.5	8.7		3		88					<0.2			1.3			
						10.6	0.1	137	21.6		8.1		31.1		87.8		6.5	8.7		3		88					<0.2		1.3					
C3	Cloudy	Moderate	09:34	12.3	Surface	1.0	0.3	102	21.4	21.4	8.0	8.0	31.1	31.1	90.7	90.7	6.7	1.1		2		85		88	822120	817780	<0.2		0.6	0.6				
						1.0	0.3	102	21.4		8.0		31.1		90.7		6.7	6.6	1.1		3		86					<0.2			0.6			
					Middle	6.2	0.3	82	21.5	21.5	8.0	8.0	32.6	32.6	88.5	88.6	6.5	2.3		<2		88					<0.2		0.6					
						6.2	0.3	87	21.5		8.0		32.6		88.6		6.5	2.3		<2		89					<0.2		0.6					
					Bottom	11.3	0.2	61	21.4	21.4	8.0	8.0	32.8	32.8	89.3	89.4	6.5	6.5	3.4		<2		90					<0.2			0.7			
						11.3	0.2	65	21.4		8.0		32.8		89.5		6.5	3.3		<2		91					<0.2		0.7					
IM1	Rainy	Moderate	10:56	4.7	Surface	1.0	0.1	200	21.6	21.6	8.0	8.0	30.0	30.0	94.4	94.4	7.0	4.8		3		88		90	817925	807144	<0.2		1.2	1.2				
						1.0	0.1	203	21.6		8.0		30.0		94.3		7.0	7.0	4.8		3		89					<0.2			1.4			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-		-	<0.2		-
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-		-	<0.2		-
					Bottom	3.7	0.1	210	21.7	21.7	8.0	8.0	32.0	32.0	92.1	92.2	6.7	6.7	10.1		4		91					<0.2			1.1			
						3.7	0.1	211	21.7		8.0		32.0		92.2		6.7	10.0		4		92					<0.2		1.2					
IM2	Rainy	Moderate	11:04	6.7	Surface	1.0	0.1	186	21.6	21.6	8.1	8.1	29.0	29.0	95.4	95.4	7.1	2.3		2		85		89	818164	806144	<0.2		1.0	1.0				
						1.0	0.1	199	21.6		8.1		29.0		95.3		7.1	7.1	2.3		2		85					<0.2			1.0			
					Middle	3.4	0.1	142	21.7	21.7	8.1	8.1	30.1	30.1	94.3	94.3	7.0	2.5		2		89					<0.2		0.9					
						3.4	0.1	146	21.7		8.1		30.1		94.3		7.0	2.6		3	3	89					<0.2		1.0					
					Bottom	5.7	0.1	54	21.7	21.7	8.1	8.1	32.3	32.3	92.1	92.1	6.7	6.7	3.6		3		92					<0.2			1.0			
						5.7	0.1	56	21.7		8.1		32.3		92.1		6.7	3.6		3		93					<0.2		1.0					
IM3	Rainy	Moderate	11:11	6.8	Surface	1.0	0.1	86	21.6	21.6	8.0	8.0	29.1	29.1	94.8	94.9	7.1	2.3		3		85		89	818774	805593	<0.2		0.9	1.0				
						1.0	0.1	89	21.6		8.0		29.1		94.9		7.1	6.9	2.3		3		86					<0.2			0.9			
					Middle	3.4	0.0	41	21.7	21.7	8.0	8.0	32.3	32.3	92.4	92.4	6.7	3.9		3		89					<0.2		1.0					
						3.4	0.0	41	21.7		8.0		32.3		92.3		6.7	3.9		3	3	91					<0.2		1.1					
					Bottom	5.8	0.0	24	21.7	21.7	8.0	8.0	32.4	32.4	94.5	94.5	6.9	6.9	4.4		3		93					<0.2			1.1			
						5.8	0.0	25	21.7		8.0		32.4		94.4		6.9	4.4		3		92					<0.2		1.0					
IM4	Rainy	Moderate	11:21	7.7	Surface	1.0	0.2	166	21.7	21.7	8.1	8.1	29.4	29.4	93.5	93.6	6.9	3.5		5		87		91	819715	804590	<0.2		1.3	1.3				
						1.0	0.2	176	21.7		8.1		29.4		93.6		6.9	6.8	3.5		5		88					<0.2			1.3			
					Middle	3.9	0.2	152	21.8	21.8	8.1	8.1	31.9	31.9	92.0	92.0	6.7	4.1		5		91					<0.2		1.3					
						3.9	0.2	155	21.8		8.1		31.9		92.0		6.7	4.1		5	5	92					<0.2		1.3					
					Bottom	6.7	0.1	156	21.8	21.8	8.1	8.1	32.3	32.3	91.4	91.4	6.7	6.7	5.9		4		92					<0.2			1.3			
						6.7	0.1	168	21.8		8.1		32.3		91.4		6.7	5.9		4		93					<0.2		1.4					
IM5	Rainy	Moderate	11:31	7.4	Surface	1.0	0.1	235	21.6	21.6	8.1	8.1	28.1	28.1	94.1	94.1	7.0	3.8		5		87		88	820742	804862	<0.2		1.3	1.3				
						1.0	0.2	256	21.6		8.1		28.1		94.1		7.0	7.0	3.8		5		86					<0.2			1.3			
					Middle	3.7	0.1	190	21.7	21.7	8.1	8.1	31.0	31.0	93.9	93.9	6.9	3.1		4		87					<0.2		1.3					
						3.7	0.1	201	21.7		8.1		31.0		93.9		6.9	3.1		3	4	88					<0.2		1.3					
					Bottom	6.4	0.1	181	21.8	21.8	8.1	8.1	32.1	32.1	90.9	91.0	6.6	6.6	6.1		4		91					<0.2			1.4			
						6.4	0.1	183	21.8		8.1		32.1		91.0		6.6	6.1		4		91					<0.2		1.3					
IM6	Rainy	Moderate	11:40	7.0	Surface	1.0	0.1	295	21.7	21.7	8.1	8.1	28.0	28.0	93.8	93.8	7.0	4.0		3		86		89	821083	805809	<0.2		1.3	1.3				
						1.0	0.1	307	21.7		8.1		28.0		93.8		7.0	7.0	4.0		3		86					<0.2			1.3			
					Middle	3.5	0.1	171	21.7	21.7	8.1	8.1	30.8	30.8	93.2	93.3	6.9	4.9		4		89					<0.2		1.3					
						3.5	0.1	175	21.7		8.1		30.8		93.3		6.9	4.9		4	4	90					<0.2		1.3					
					Bottom	6.0	0.1	144	21.7	21.7	8.1	8.1	31.8	31.8	93.0	93.0	6.8	6.8	7.2		5		92					<0.2			1.3			
						6.0	0.1	155	21.7		8.1		31.8		92.9		6.8	7.2		5		93					<0.2		1.5					
IM7	Rainy	Moderate	11:49	8.2	Surface	1.0	0.0	338	21.6	21.6	8.1	8.1	26.8	26.8	94.3	94.3	7.1	2.9		4		84		89	821337	806850	<0.2		1.3	1.3				
						1.0	0.0	311	21.6		8.1		26.8		94.3		7.1	6.9	3.0		2		86					<0.2			1.4			
					Middle	4.1	0.1	92	21.7	21.7	8.1	8.1	31.0	31.0	90.8	90.8	6.7	5.5		4		88					<0.2		1.3					
						4.1	0.1	97	21.7		8.1		31.0		90.8		6.7	5.4		4	4	89					<0.2		1.3					
					Bottom	7.2	0.1	142	21.7	21.7	8.1	8.1	31.5	31.5	92.4	92.4	6.8	6.8	7.1		3		93					<0.2			1.2			
						7.2	0.1	148	21.7		8.1		31.5		92.4		6.8	7.1		3		93					<0.2		1.3					
IM8	Cloudy	Moderate	11:23	7.8	Surface	1.0	0.1	20	21.6	21.6	8.1	8.1	26.0	26.0	90.2	90.2	6.8	3.3		2		85		87	821829	808134	<0.2		1.3	1.3				
						1.0	0.1	21	21.6		8.1		26.0		90.2		6.8	6.8	3.3		2		85					<0.2			1.4			
					Middle	3.9	0.2	71	21.7	21.7	8.1	8.1	29.3	29.3	90.1	90.1	6.7	4.4		3		87					<0.2		1.2					
						3.9	0.2	74	21.7		8.1		29.3		90.1		6.7	4.4		3	3	87					<0.2		1.4					
					Bottom	6.8	0.2	57	21.7	21.7	8.2	8.2	30.9	30.9	91.7	91.8	6.7	6.8	7.0		4		89					<0.2			1.3			
						6.8	0.2	62	21.7		8.2		30.9		91.9		6.8	7.0		4		89					<0.2		1.3					

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

Water Quality Monitoring

Water Quality Monitoring Results on 04 April 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)					
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA						
IM9	Cloudy	Moderate	11:15	7.4	Surface	1.0	0.2	110	21.7	21.7	8.1	8.1	26.2	26.2	90.4	90.5	6.8		2.6		4		85		822100	808803	<0.2		1.2	1.3				
						1.0	0.2	115	21.7		8.1		26.2		90.5		6.8		2.6		4		84				<0.2		1.3					
					Middle	3.7	0.2	50	21.7	21.7	8.1	8.1	27.6	27.6	90.4	90.4	6.8	6.8	3.6	4.9	4	4	86				<0.2		1.2					
						3.7	0.3	53	21.7		8.1		27.6		90.4		6.8		3.6		3		87				<0.2		1.3					
					Bottom	6.4	0.3	54	21.7	21.7	8.1	8.1	30.7	30.7	90.6	90.7	6.7	6.7	8.4		3		89				<0.2		1.3					
						6.4	0.3	55	21.7		8.1		30.7		90.8		6.7		8.4		3		88				<0.2		1.3					
IM10	Cloudy	Moderate	11:06	7.9	Surface	1.0	0.4	132	21.6	21.6	8.1	8.1	26.7	26.7	92.1	92.1	6.9		2.8		4		85		822369	809816	<0.2		1.2	1.2				
						1.0	0.4	132	21.6		8.1		26.7		92.1		7.0	6.9	2.8		4		89				<0.2		1.2					
					Middle	4.0	0.4	127	21.6	21.6	8.1	8.1	26.8	26.8	91.7	91.7	6.9	6.9	3.6	5.4	3	3	88				<0.2		1.3					
						4.0	0.5	139	21.6		8.1		26.8		91.7		6.9		3.7		3		88				<0.2		1.2					
					Bottom	6.9	0.4	119	21.7	21.7	8.1	8.1	29.6	29.6	91.6	91.6	6.8	6.8	9.8		3		89				<0.2		1.2					
						6.9	0.4	119	21.7		8.1		29.7		91.6		6.8		9.8		3		89				<0.2		1.2					
IM11	Cloudy	Moderate	10:51	9.3	Surface	1.0	0.6	114	21.7	21.7	8.1	8.1	26.4	26.4	90.9	90.9	6.9		3.1		6		85		822077	811445	<0.2		1.2	1.3				
						1.0	0.7	118	21.7		8.1		26.4		90.8		6.9	6.8	3.1		6		85				<0.2		1.3					
					Middle	4.7	0.5	97	21.7	21.7	8.1	8.1	29.1	29.1	89.3	89.3	6.6	6.6	5.4	5.6	5	5	87				<0.2		1.2					
						4.7	0.5	106	21.7		8.1		29.1		89.3		6.6		5.5		5		88				<0.2		1.4					
					Bottom	8.3	0.3	88	21.6	21.6	8.1	8.1	31.1	31.1	87.6	87.6	6.5	6.5	8.1		4		88				<0.2		1.3					
						8.3	0.3	90	21.6		8.1		31.1		87.5		6.4	6.5	8.2		4		89				<0.2		1.3					
IM12	Cloudy	Moderate	10:36	8.8	Surface	1.0	0.4	118	21.6	21.6	8.1	8.1	26.3	26.3	90.3	90.4	6.8		3.4		2		85		821435	812039	<0.2		1.2	1.2				
						1.0	0.5	118	21.6		8.1		26.3		90.4		6.8	6.8	3.4		2		85				<0.2		1.2					
					Middle	4.4	0.3	107	21.6	21.6	8.1	8.1	30.0	30.0	90.2	90.1	6.7	6.7	3.8	3.8	3	3	87				<0.2		1.1					
						4.4	0.3	110	21.6		8.1		30.0		90.0		6.7		3.8		3		88				<0.2		1.2					
					Bottom	7.8	0.1	75	21.5	21.5	8.1	8.1	31.3	31.3	89.2	89.2	6.6	6.6	4.3		4		89				<0.2		1.1					
						7.8	0.1	78	21.5		8.1		31.3		89.2		6.6		4.3		4		89				<0.2		1.2					
SR1A	Cloudy	Moderate	10:12	5.1	Surface	1.0	-	-	21.4	21.4	8.0	8.0	29.1	29.1	90.4	90.4	6.8		2.6		3		-		819981	812659	-	-	-	-				
						1.0	-	-	21.4		8.0		29.1		90.4		6.7	6.8	2.6		3		-				-	-	-					
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-					-		-				-	-		-	-	-	
						2.6	-	-	-	-	-	-	-	-	-	-					-		-				-	-	-		-	-		
					Bottom	4.1	-	-	21.5	21.5	8.0	8.0	30.6	30.6	89.0	89.0	6.6	6.6	3.6		3		-				-		-		-	-	-	
						4.1	-	-	21.5		8.0		30.6		88.9		6.6		3.7		3		-				-		-		-	-	-	
SR2	Cloudy	Moderate	09:58	4.9	Surface	1.0	0.1	50	21.5	21.5	8.0	8.0	30.6	30.7	88.7	88.8	6.6		4.1		2		87		821464	814144	<0.2		1.2	1.2				
						1.0	0.1	51	21.5		8.0		30.7		88.8		6.6	6.6	4.2		<2		87				<0.2		1.2					
					Middle	-	-	-	-	-	-	-	-	-	-	-	-					-		-				-			<0.2		-	
						-	-	-	-	-	-	-	-	-	-	-					-		-				-		<0.2			-		
					Bottom	3.9	0.1	40	21.5	21.5	8.0	8.0	31.2	31.2	89.7	89.7	6.6	6.6	5.9		3		89				<0.2		1.2					
						3.9	0.1	42	21.5		8.0		31.2		89.7		6.6		5.9		3		89				<0.2		1.2					
SR3	Cloudy	Moderate	11:30	9.1	Surface	1.0	0.1	133	21.6	21.6	8.1	8.1	26.4	26.4	91.5	91.5	6.9		3.3		3		-		822152	807579	-	-	-	-				
						1.0	0.1	134	21.6		8.1		26.4		91.4		6.9	6.9	3.4		3		-				-	-	-		-			
					Middle	4.6	0.2	75	21.7	21.7	8.2	8.2	29.9	29.9	91.7	91.7	6.8	6.8	5.4	6.2	3	3	-				-		-		-	-	-	
						4.6	0.2	79	21.7		8.2		29.9		91.6		6.8		5.4		3		-				-		-		-	-	-	
					Bottom	8.1	0.1	163	21.7	21.7	8.2	8.2	30.9	30.9	91.7	91.8	6.7	6.8	9.7		3		-				-		-		-	-	-	
						8.1	0.1	166	21.7		8.2		30.9		91.9		6.8	6.8	9.7		3		-				-		-		-	-	-	
SR4A	Cloudy	Calm	10:13	8.7	Surface	1.0	0.2	82	21.6	21.6	8.1	8.1	30.1	30.1	93.9	93.9	6.9		4.9		5		-		817181	807807	-	-	-	-				
						1.0	0.2	85	21.6		8.1		30.1		93.9		6.9	6.8	4.9		5		-				-	-	-		-			
					Middle	4.4	0.2	66	21.7	21.7	8.1	8.1	32.1	32.1	91.2	91.3	6.7	6.7	9.3	8.1	5	5	-				-		-		-	-	-	
						4.4	0.2	70	21.7		8.1		32.1		91.3		6.7		9.3		4		-				-		-		-	-	-	
					Bottom	7.7	0.2	72	21.7	21.7	8.1	8.1	32.1	32.1	92.7	92.7	6.8	6.8	10.1		4		-		-		-	-	-	-				
7.7	0.2	72	21.7		8.1		32.1		92.6		6.8	6.8	10.1		4		-		-		-	-	-	-	-									
SR5A	Cloudy	Calm	09:55	4.3	Surface	1.0	0.1	152	21.6	21.6	8.1	8.1	30.4	30.4	91.7	91.7	6.8		5.5		8		-		816593	810705	-	-	-	-				
						1.0	0.1	155	21.6		8.1		30.4		91.7		6.8	6.8	5.5		9		-				-	-	-		-			
					Middle	-	-	-	-	-	-	-	-	-	-	-					-		-				-		-		-	-	-	
						-	-	-	-	-	-	-	-	-	-	-					-		-				-		-		-	-	-	
					Bottom	3.3	0.1	42	21.6	21.6	8.1	8.1	30.6	30.6	91.5	91.5	6.8	6.8	5.5		8		-		-		-	-	-	-				
3.3	0.1	43	21.6		8.1		30.6		91.5		6.8		5.5		8		-		-		-	-	-	-	-									
SR6A	Cloudy	Calm	09:26	4.1	Surface	1.0	0.0	164	21.5	21.5	8.3	8.3	29.8	29.8	90.3	90.3	6.7		3.3		2		-		817969	814745	-	-	-	-				
						1.0	0.0	174	21.5		8.3		29.8		90.3		6.7	6.7	3.3		2		-				-	-	-		-			
					Middle	-	-	-	-	-	-	-	-	-	-	-					-		-				-		-		-	-	-	
						-	-	-	-	-	-	-	-	-	-	-					-		-				-		-		-	-	-	
					Bottom	3.1	0.0	159	21.5	21.5	8.2	8.2	30.7	30.7	88.0	88.0	6.5	6.5	5.0		3		-		-		-	-	-	-				
3.1	0.0	162	21.5		8.2		30.7		88.0		6.5		5.0		3		-		-		-	-	-	-	-									
SR7	Cloudy	Moderate	08:53	16.0	Surface	1.0	0.1	312	21.4	21.4	7.9	7.9	32.9	32.9	87.3	87.3	6.4		2.4		4		-		823651	823718	-	-	-	-				
						1.0	0.1	330	21.4		7.9		32.9		87.2		6.4	6.4	2.4		4		-				-	-	-		-			
					Middle	8.0	0.1	65	21.4	21.4	7.9	7.9	33.1	33.1	86.9	87.0	6.3	6.3	2.7	2.8	3	3	-				-		-		-	-	-	
						8.0	0.1	70	21.4		7.9		33.1		87.0		6.3		2.8		3		-				-		-		-	-	-	
					Bottom	15.0	0.1	105	21.4	21.4	7.9	7.9	33.2	33.2	87.2	87.2	6.4	6.4	3.1		3		-				-		-		-	-	-	
						15.0	0.1	109	21.4		7.9		33.2		87.2		6.4		3.1		3		-				-		-		-	-	-	
SR8	Cloudy	Moderate	10:26	4.8	Surface	1.0	-	-	21.6	21.6	8.1	8.1	26.9	26.9	91.7	91.8	6.9		4.9		4		-		820388	811627	-	-	-	-				
						1.0	-	-	21.6		8.1		26.9		91.8		6.9	6.9	5.0		4		-				-	-	-		-			
					Middle	-	-	-	-	-	-																							

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

Water Quality Monitoring

Water Quality Monitoring Results on 04 April 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)		
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA			
C1	Cloudy	Moderate	15:18	8.9	Surface	1.0	0.2	49	21.7	21.7	8.0	8.0	30.9	30.9	96.7	96.7	7.1	7.1	2.8	3	3	86	91	815611	804258	<0.2	<0.2	1.0	1.0		
						1.0	0.2	52	21.7		8.0		30.9		96.7		7.1		2.8	3		87				<0.2	<0.2	1.0	1.0		
					Middle	4.5	0.4	46	21.7	21.7	8.0	8.0	33.2	33.2	94.2	94.2	6.8	6.8	5.0	3	3	91	91			<0.2	<0.2	0.9	0.9		
						4.5	0.4	47	21.7		8.0		33.2		94.2		6.8		5.0	3		92				<0.2	<0.2	0.9	0.9		
					Bottom	7.9	0.3	44	21.7	21.7	8.1	8.1	33.3	33.3	93.8	93.8	6.8	6.8	9.8	2	2	94	94			<0.2	<0.2	1.0	1.0		
						7.9	0.3	46	21.7		8.1		33.3		93.7		6.8		9.8	2		95				<0.2	<0.2	0.9	0.9		
C2	Cloudy	Moderate	13:54	11.4	Surface	1.0	0.3	178	21.8	21.8	8.0	8.0	25.2	25.2	91.5	91.5	6.9	6.9	2.8	3	3	84	87	825671	806942	<0.2	<0.2	1.5	1.5		
						1.0	0.3	194	21.8		8.0		25.3		91.4		6.9		2.8	3		84				<0.2	<0.2	1.5	1.5		
					Middle	5.7	0.3	191	21.7	21.7	8.1	8.1	30.1	30.1	90.8	90.8	6.7	6.7	5.6	4	4	87	89			<0.2	<0.2	1.6	1.6		
						5.7	0.3	200	21.7		8.1		30.1		90.8		6.7		5.7	4		87				<0.2	<0.2	1.5	1.5		
					Bottom	10.4	0.1	326	21.8	21.8	8.1	8.1	31.0	31.0	92.0	92.0	6.7	6.7	9.9	4	4	89	91			<0.2	<0.2	1.6	1.6		
						10.4	0.1	327	21.8		8.1		31.0		92.0		6.7		9.8	4		88				<0.2	<0.2	1.6	1.6		
C3	Cloudy	Moderate	15:56	11.2	Surface	1.0	0.1	246	21.7	21.7	8.2	8.2	30.3	30.3	92.2	92.2	6.8	6.8	1.7	4	4	86	87	822109	817819	<0.2	<0.2	0.9	0.9		
						1.0	0.1	248	21.7		8.2		30.3		92.2		6.8		1.7	4		87				<0.2	<0.2	0.9	0.9		
					Middle	5.6	0.2	257	21.5	21.5	8.2	8.2	32.1	32.1	88.2	88.2	6.5	6.5	5.5	3	3	89	89			<0.2	<0.2	1.0	1.0		
						5.6	0.3	282	21.5		8.2		32.1		88.1		6.5		5.7	3		89				<0.2	<0.2	0.9	0.9		
					Bottom	10.2	0.3	270	21.4	21.4	8.2	8.2	32.9	32.9	87.6	87.7	6.4	6.4	8.8	3	3	91	91			<0.2	<0.2	0.9	0.9		
						10.2	0.4	284	21.4		8.2		32.9		87.7		6.4		9.1	3		91				<0.2	<0.2	0.9	0.9		
IM1	Cloudy	Moderate	14:58	5.3	Surface	1.0	0.1	16	21.9	21.9	8.0	8.0	30.1	30.1	96.5	96.5	7.1	7.1	3.2	5	5	88	88	817961	807135	<0.2	<0.2	0.9	1.0		
						1.0	0.1	17	21.9		8.0		30.1		96.5		7.1		3.2	5		88				<0.2	<0.2	1.0	1.0		
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	<0.2	-	-
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	<0.2	-
					Bottom	4.3	0.1	34	21.7	21.7	8.0	8.0	32.3	32.3	93.6	93.6	6.8	6.8	8.5	4	4	90	90			<0.2	<0.2	1.0	1.0		
						4.3	0.1	35	21.7		8.0		32.3		93.5		6.8		8.5	4		90				<0.2	<0.2	0.9	0.9		
IM2	Cloudy	Moderate	14:50	6.2	Surface	1.0	0.2	329	21.8	21.8	8.0	8.0	29.9	29.9	96.6	96.6	7.1	7.1	2.3	3	3	87	88	818167	806167	<0.2	<0.2	1.0	1.0		
						1.0	0.2	303	21.8		8.0		29.9		96.6		7.1		2.3	3		88				<0.2	<0.2	1.0	1.0		
					Middle	3.1	0.2	338	21.7	21.7	8.0	8.0	31.2	31.2	94.4	94.4	6.9	6.9	3.1	3	3	91	91			<0.2	<0.2	1.0	1.0		
						3.1	0.2	354	21.7		8.0		31.3		94.4		6.9		3.2	3		92				<0.2	<0.2	0.9	0.9		
					Bottom	5.2	0.2	18	21.7	21.7	8.0	8.0	32.6	32.6	93.8	93.8	6.8	6.8	10.9	4	4	95	95			<0.2	<0.2	0.9	0.9		
						5.2	0.2	18	21.7		8.0		32.6		93.8		6.8		10.9	4		95				<0.2	<0.2	1.0	1.0		
IM3	Cloudy	Moderate	14:29	7.0	Surface	1.0	0.1	300	21.9	21.9	8.0	8.0	30.3	30.3	96.4	96.4	7.1	7.1	2.6	3	3	87	87	818762	805613	<0.2	<0.2	0.9	0.9		
						1.0	0.1	308	21.9		8.0		30.3		96.3		7.1		2.6	3		87				<0.2	<0.2	0.9	0.9		
					Middle	3.5	0.1	339	21.8	21.8	8.0	8.0	31.7	31.7	94.5	94.5	6.9	6.9	4.4	4	4	90	91			<0.2	<0.2	0.9	0.9		
						3.5	0.1	347	21.8		8.0		31.7		94.5		6.9		4.4	4		91				<0.2	<0.2	0.9	0.9		
					Bottom	6.0	0.2	1	21.7	21.7	8.0	8.0	32.6	32.6	93.7	93.7	6.8	6.8	13.0	4	4	95	95			<0.2	<0.2	0.9	0.9		
						6.0	0.2	1	21.7		8.0		32.6		93.6		6.8		13.0	4		95				<0.2	<0.2	0.9	0.9		
IM4	Cloudy	Moderate	14:19	7.8	Surface	1.0	0.1	334	21.9	21.9	8.0	8.0	31.5	31.5	95.0	95.0	6.9	6.9	4.9	5	5	86	86	819724	804601	<0.2	<0.2	1.2	1.2		
						1.0	0.2	307	21.9		8.0		31.5		95.0		6.9		4.9	5		86				<0.2	<0.2	1.2	1.2		
					Middle	3.9	0.1	338	21.8	21.8	8.0	8.0	31.7	31.7	93.9	93.9	6.9	6.9	7.1	5	5	90	90			<0.2	<0.2	1.2	1.2		
						3.9	0.1	340	21.8		8.0		31.7		93.9		6.9		7.1	5		90				<0.2	<0.2	1.2	1.2		
					Bottom	6.8	0.2	18	21.8	21.8	8.1	8.1	32.6	32.6	93.0	93.0	6.8	6.8	6.7	5	5	95	95			<0.2	<0.2	1.2	1.2		
						6.8	0.2	19	21.8		8.1		32.6		93.0		6.8		6.7	6		95				<0.2	<0.2	1.2	1.2		
IM5	Sunny	Moderate	14:09	7.1	Surface	1.0	0.1	12	21.7	21.7	8.0	8.0	29.2	29.2	94.5	94.5	7.0	7.0	4.2	5	5	88	89	820711	804850	<0.2	<0.2	1.3	1.3		
						1.0	0.2	12	21.7		8.0		29.2		94.5		7.0		4.2	5		89				<0.2	<0.2	1.3	1.3		
					Middle	3.6	0.3	14	21.8	21.8	8.0	8.0	30.8	30.8	91.2	91.2	6.7	6.7	6.5	4	4	91	91			<0.2	<0.2	1.3	1.3		
						3.6	0.3	14	21.8		8.0		30.8		91.2		6.7		6.5	4		92				<0.2	<0.2	1.3	1.3		
					Bottom	6.1	0.2	18	21.8	21.8	8.0	8.0	32.0	32.0	93.1	93.2	6.8	6.8	6.4	3	3	92	92			<0.2	<0.2	1.3	1.3		
	6.1	0.2	18	21.8		8.0		32.0		93.2		6.8		6.4	3		93				<0.2	<0.2	1.3	1.3							
IM6	Sunny	Moderate	14:01	6.7	Surface	1.0	0.1	248	21.8	21.8	8.0	8.0	26.7	26.7	95.4	95.5	7.2	7.2	2.1	2	2	85	87	821061	805820	<0.2	<0.2	1.4	1.5		
						1.0	0.1	258	21.8		8.0		26.7		95.5		7.2		2.1	2		87				<0.2	<0.2	1.5	1.5		
					Middle	3.4	0.1	7	21.7	21.7	8.0	8.0	30.6	30.6	91.3	91.3	6.7	6.7	5.1	4	4	91	91			<0.2	<0.2	1.5	1.5		
						3.4	0.1	7	21.7		8.0		30.6		91.3		6.7		5.0	4		93				<0.2	<0.2	1.5	1.5		
					Bottom	5.7	0.2	42	21.7	21.7	8.0	8.0	31.1	31.1	91.1	91.2	6.7	6.7	5.0	4	4	94	94			<0.2	<0.2	1.5	1.5		
						5.7	0.2	45	21.7		8.0		31.1		91.2		6.7		5.0	5		95				<0.2	<0.2	1.4	1.4		
IM7	Sunny	Moderate	13:50	8.0	Surface	1.0	0.2	256	21.7	21.7	8.0	8.0	26.6	26.6	94.3	94.2	7.1	7.1	2.1	3	3	87	89	821366	806831	<0.2	<0.2	1.3	1.4		
						1.0	0.2	263	21.7		8.0		26.6		94.1		7.1		2.1	4		87				<0.2	<0.2	1.4	1.4		
					Middle	4.0	0.0	336	21.7	21.7	7.9	7.9	27.6	27.6	93.1	93.2	7.0	7.0	2.9	3	3	89	90			<0.2	<0.2	1.3	1.4		
						4.0	0.0	309	21.7		7.9		27.6		93.2		7.0		2.9	3		89				<0.2	<0.2	1.4	1.4		
					Bottom	7.0	0.1	75	21.7	21.7	7.9	7.9	31.2	31.2	91.9	91.9	6.7	6.7	6.3	3	3	94	94			<0.2	<0.2	1.4	1.4		
						7.0	0.1	76	21.7		7.9		31.2		91.8		6.7		6.3	3		94				<0.2	<0.2	1.4	1.4		
IM8	Fine	Moderate	14:20	7.8	Surface	1.0	0.1	288	21.9	21.9	8.1	8.1	26.6	26.6	94.4	94.4	7.1	7.1	2.1	2	2	85	87	821853	808142	<0.2	<0.2	1.3	1.4		
						1.0	0.1	292	21.9		8.1		26.6		94.4		7.1		2.1	2		85				<0.2	<0.2</				

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

Water Quality Monitoring

Water Quality Monitoring Results on 04 April 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)						
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA							
IM9	Fine	Moderate	14:28	7.5	Surface	1.0	0.1	285	21.7	21.7	8.1	8.1	27.0	27.0	92.4	92.4	6.9	-	2.8	-	3	-	85	-	87	822070	808810	<0.2	-	1.4	-				
						1.0	0.1	293	21.7	21.7	8.1	8.1	27.0	27.0	92.3	92.3	6.9	-	2.8	-	3	-	85	-				<0.2	-	1.4	-				
					Middle	3.8	0.2	282	21.7	21.7	8.1	8.1	27.5	27.5	91.3	91.3	6.8	-	4.3	-	4	-	87	-				<0.2	-	1.4	-				
						3.8	0.2	300	21.7	21.7	8.1	8.1	27.5	27.5	91.3	91.3	6.8	-	4.3	-	4	-	87	-				<0.2	-	1.4	-				
					Bottom	6.5	0.1	263	21.7	21.7	8.1	8.1	30.4	30.4	91.4	91.5	6.7	-	7.4	-	4	-	89	-				<0.2	-	1.4	-				
						6.5	0.1	265	21.7	21.7	8.1	8.1	30.4	30.4	91.5	91.5	6.7	-	7.4	-	4	-	89	-				<0.2	-	1.5	-				
IM10	Fine	Moderate	14:39	9.0	Surface	1.0	0.2	297	22.0	22.0	8.1	8.1	27.0	27.0	93.2	93.3	7.0	-	2.5	-	4	-	85	-	87	822387	809775	<0.2	-	1.4	-				
						1.0	0.2	305	22.0	22.0	8.1	8.1	27.0	27.0	93.3	93.3	7.0	-	2.6	-	4	-	84	-				<0.2	-	1.4	-				
					Middle	4.5	0.3	297	21.7	21.7	8.1	8.1	27.8	27.9	90.7	90.7	6.8	-	5.0	-	3	-	87	-				<0.2	-	1.3	-				
						4.5	0.3	306	21.7	21.7	8.1	8.1	27.9	27.9	90.7	90.7	6.8	-	5.0	-	3	-	88	-				<0.2	-	1.4	-				
					Bottom	8.0	0.4	286	21.7	21.7	8.2	8.2	30.9	30.9	90.7	90.8	6.7	-	7.5	-	3	-	89	-				<0.2	-	1.3	-				
						8.0	0.4	293	21.7	21.7	8.2	8.2	30.9	30.9	90.8	90.8	6.7	-	7.5	-	3	-	90	-				<0.2	-	1.4	-				
IM11	Fine	Moderate	14:50	9.1	Surface	1.0	0.2	348	21.9	21.9	8.2	8.2	27.6	27.6	92.8	92.8	6.9	-	2.9	-	3	-	84	-	87	822052	811444	<0.2	-	1.5	-				
						1.0	0.2	356	21.9	21.9	8.2	8.2	27.6	27.6	92.7	92.7	6.9	-	2.9	-	3	-	85	-				<0.2	-	1.4	-				
					Middle	4.6	0.3	310	21.7	21.7	8.2	8.2	29.5	29.5	89.4	89.4	6.6	-	6.0	-	4	-	87	-				<0.2	-	1.4	-				
						4.6	0.3	340	21.7	21.7	8.2	8.2	29.5	29.5	89.4	89.4	6.6	-	6.1	-	4	-	88	-				<0.2	-	1.4	-				
					Bottom	8.1	0.3	305	21.6	21.6	8.1	8.1	30.8	30.8	89.4	89.5	6.6	-	10.3	-	5	-	90	-				<0.2	-	1.5	-				
						8.1	0.3	326	21.6	21.6	8.1	8.1	30.8	30.8	89.6	89.5	6.6	-	10.5	-	5	-	90	-				<0.2	-	1.4	-				
IM12	Fine	Moderate	14:58	9.3	Surface	1.0	0.2	302	21.8	21.8	8.1	8.1	27.5	27.5	91.1	91.1	6.8	-	3.3	-	4	-	85	-	88	821435	812030	<0.2	-	1.5	-				
						1.0	0.2	321	21.8	21.8	8.1	8.1	27.5	27.5	91.0	91.0	6.8	-	3.4	-	4	-	86	-				<0.2	-	1.5	-				
					Middle	4.7	0.3	273	21.6	21.6	8.2	8.2	30.4	30.4	87.0	87.0	6.4	-	7.5	-	4	-	88	-				<0.2	-	1.5	-				
						4.7	0.3	289	21.6	21.6	8.2	8.2	30.4	30.4	87.0	87.0	6.4	-	7.6	-	4	-	88	-				<0.2	-	1.4	-				
					Bottom	8.3	0.3	303	21.5	21.5	8.1	8.1	31.2	31.2	87.2	87.3	6.4	-	10.3	-	3	-	90	-				<0.2	-	1.5	-				
						8.3	0.3	314	21.5	21.5	8.1	8.1	31.2	31.2	87.4	87.4	6.4	-	10.3	-	3	-	90	-				<0.2	-	1.4	-				
SR1A	Cloudy	Moderate	15:18	5.3	Surface	1.0	-	-	21.9	21.9	8.1	8.1	27.2	27.2	94.0	94.0	7.0	-	2.5	-	4	-	-	-	-	819971	812654	-	-	-	-				
						1.0	-	-	21.9	21.9	8.1	8.1	27.2	27.2	94.0	94.0	7.0	-	2.5	-	4	-	-	-				-	-	-	-				
					Middle	2.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-	-	-	-	-	
						2.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-	-	-	-	-	
					Bottom	4.3	-	-	21.6	21.6	8.1	8.1	28.3	28.3	93.3	93.3	7.0	-	2.9	-	5	-	-	-				-	-	-	-	-	-	-	-
						4.3	-	-	21.6	21.6	8.1	8.1	28.3	28.3	93.3	93.3	7.0	-	2.9	-	4	-	-	-				-	-	-	-	-	-	-	-
SR2	Cloudy	Moderate	15:31	4.7	Surface	1.0	0.3	340	21.8	21.8	8.2	8.2	28.8	28.8	91.8	91.8	6.8	-	4.1	-	4	-	87	-	89	821478	814162	<0.2	-	1.0	-				
						1.0	0.3	358	21.8	21.8	8.2	8.2	28.9	28.8	91.8	91.8	6.8	-	4.1	-	5	-	88	-				<0.2	-	0.9	-				
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	<0.2	-	-	-	-	
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	<0.2	-	-	-	-	
					Bottom	3.7	0.3	339	21.6	21.6	8.2	8.2	30.6	30.6	93.3	93.3	6.9	-	5.4	-	4	-	89	-				<0.2	-	0.9	-				
						3.7	0.3	353	21.6	21.6	8.2	8.2	30.6	30.6	93.3	93.3	6.9	-	5.4	-	4	-	90	-				<0.2	-	0.9	-				
SR3	Fine	Moderate	14:13	8.9	Surface	1.0	0.2	208	21.9	21.9	8.1	8.1	27.2	27.2	92.8	92.8	6.9	-	2.4	-	4	-	-	-	-	822161	807557	-	-	-	-				
						1.0	0.2	223	21.9	21.9	8.1	8.1	27.2	27.2	92.7	92.7	6.9	-	2.4	-	4	-	-	-				-	-	-	-	-			
					Middle	4.5	0.1	274	21.6	21.6	8.1	8.1	27.8	27.8	92.1	92.1	6.9	-	3.6	-	4	-	-	-				-	-	-	-	-	-		
						4.5	0.1	288	21.6	21.6	8.1	8.1	27.8	27.8	92.0	92.1	6.9	-	3.5	-	4	-	-	-				-	-	-	-	-	-		
					Bottom	7.9	0.1	40	21.7	21.7	8.1	8.1	30.9	30.9	91.7	91.6	6.7	-	6.6	-	3	-	-	-				-	-	-	-	-	-	-	
						7.9	0.1	41	21.7	21.7	8.1	8.1	30.9	30.9	91.5	91.5	6.7	-	6.7	-	3	-	-	-				-	-	-	-	-	-	-	
SR4A	Cloudy	Calm	15:38	8.3	Surface	1.0	0.1	74	21.9	21.9	7.9	7.9	30.1	30.1	94.9	95.0	7.0	-	3.6	-	5	-	-	-	-	817179	807816	-	-	-	-				
						1.0	0.1	79	21.9	21.9	7.9	7.9	30.1	30.1	95.0	95.0	7.0	-	3.6	-	5	-	-	-				-	-	-	-	-			
					Middle	4.2	0.1	65	21.7	21.7	7.9	7.9	31.3	31.3	92.5	92.5	6.8	-	6.0	-	5	-	-	-				-	-	-	-	-	-		
						4.2	0.1	67	21.7	21.7	7.9	7.9	31.3	31.3	92.5	92.5	6.8	-	6.1	-	5	-	-	-				-	-	-	-	-	-		
					Bottom	7.3	0.2	77	21.7	21.7	7.9	7.9	32.1	32.1	91.5	91.5	6.7	-	8.5	-	5	-	-	-				-	-	-	-	-	-	-	
						7.3	0.2	79	21.7	21.7	7.9	7.9	32.1	32.1	91.5	91.5	6.7	-	8.5	-	6	-	-	-				-	-	-	-	-	-	-	
SR5A	Cloudy	Calm	15:56	3.8	Surface	1.0	0.1	211	21.9	21.9	7.9	7.9	30.3	30.3	94.5	94.5	6.9	-	3.6	-	6	-	-	-	-	816610	810709	-	-	-	-				
						1.0	0.1	228	21.9	21.9	7.9	7.9	30.3	30.3	94.4	94.4	6.9	-	3.6	-	6	-	-	-				-	-	-	-	-			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-	-	-	-	-	
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-	-	-	-	-	
					Bottom	2.8	0.1	241	21.7	21.7	7.9	7.9	30.5	30.5	93.3	93.3	6.9	-	4.3	-	4	-	-	-				-	-	-	-	-	-	-	
						2.8	0.1	258	21.7	21.7	7.9	7.9	30.5	30.5	93.3	93.3	6.9	-	4.3	-	4	-	-	-				-	-	-	-	-	-	-	
SR6A	Cloudy	Calm	16:24	3.5	Surface	1.0	0.0	162	21.9	21.9	7.9	7.9	29.0	29.0	94.4	94.4	7.0	-	2.3	-	4	-	-	-	-	817949	814722	-	-	-	-				
						1.0	0.0	169	21.9	21.9	7.9	7.9	29.0	29.0	94.4	94.4	7.0	-	2.3	-	4	-	-	-				-	-	-	-	-			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-	-	-	-		
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-	-	-	-		
					Bottom	2.5	0.0	90	21.8	21.8	7.9	7.9	29.3	29.3	93.6	93.6	6.9	-	2.6	-	4	-	-	-				-	-	-	-	-	-	-	
						2.5	0.0	94	21.8	21.8	7.9	7.9	29.3	29.3	93.6	93.6	6.9	-	2.6	-	4	-	-	-				-	-	-	-	-	-	-	
SR7	Cloudy	Moderate	16:31	15.4	Surface	1.0	0.0	228	21.5	21.5	8.2	8.2	32.9	32.9	88.0	88.1	6.4	-	1.4	-	4	-	-	-	-	823626	823760	-	-	-	-				
						1.0	0.0	237	21.5	21.5	8.2	8.2	32.9	32.9	88.1	88.1	6.4	-	1.4	-	4	-	-	-				-	-	-	-	-			
					Middle	7.7	0.0	263	21.5	21.5	8.2	8.2	33.0	33.0	87.9	87.8	6.4	-	1.6	-	4	-	-	-				-	-	-	-	-	-		
						7.7	0.0	277	2																										

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

Water Quality Monitoring

Water Quality Monitoring Results on 07 April 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)			
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA
C1	Cloudy	Moderate	12:46	8.2	Surface	1.0	0.7	216	21.0	21.0	8.1	8.1	28.6	28.6	93.5	93.5	7.1		5.2		8		85		815627	804233	<0.2		1.0			
						1.0	0.7	229	21.0	21.0	8.1	8.1	28.6	28.6	93.4	93.4	7.1		5.2		9		85				<0.2		0.9			
					Middle	4.1	0.7	211	20.9	20.9	8.1	8.1	30.5	30.5	90.4	90.4	6.8	7.0	10.0	10.2	8	9	88	88			<0.2		0.9	0.9		
						4.1	0.7	222	20.9	20.9	8.1	8.1	30.5	30.5	90.4	90.4	6.8		10.2		8		88				<0.2		1.0			
					Bottom	7.2	0.5	215	20.9	20.9	8.1	8.1	30.9	30.9	90.2	90.2	6.7	6.7	15.2	15.2	10	10	91	91			<0.2		0.9			
						7.2	0.6	233	20.9	20.9	8.1	8.1	30.9	30.9	90.2	90.2	6.7		15.2		8		90				<0.2		0.9			
C2	Fine	Moderate	13:41	11.2	Surface	1.0	1.1	173	21.2	21.2	8.0	8.0	24.1	24.0	87.7	87.7	6.8		12.8		7		85		825689	806924	<0.2		1.1			
						1.0	1.1	182	21.2	21.2	8.0	8.0	24.0	24.0	87.6	87.6	6.8	6.7	12.5		8		85				<0.2		1.1			
					Middle	5.6	1.0	174	21.1	21.1	8.0	8.0	29.7	29.7	88.0	88.1	6.6		15.1	14.3	7	7	88	88			<0.2		1.2	1.2		
						5.6	1.1	189	21.1	21.1	8.0	8.0	29.7	29.7	88.1	88.1	6.6		14.8		7		88				<0.2		1.2			
					Bottom	10.2	0.5	177	21.1	21.1	8.0	8.0	30.3	30.3	89.1	89.1	6.7	6.7	15.4	15.0	6	6	91	91			<0.2		1.2			
						10.2	0.5	193	21.1	21.1	8.0	8.0	30.3	30.3	89.1	89.1	6.6	6.7	15.0		7		91				<0.2		1.2			
C3	Fine	Moderate	11:38	12.5	Surface	1.0	0.5	94	21.2	21.2	8.0	8.0	31.3	31.3	88.2	88.2	6.5		2.8		5		86		822114	817779	<0.2		0.6			
						1.0	0.5	98	21.2	21.2	8.0	8.0	31.3	31.3	88.1	88.1	6.5		2.8		5		86				<0.2		0.6			
					Middle	6.3	0.5	94	21.2	21.2	8.0	8.0	31.4	31.4	88.0	88.0	6.5	6.5	3.9	4.8	6	5	89	89			<0.2		0.6	0.6		
						6.3	0.5	102	21.2	21.2	8.0	8.0	31.4	31.4	87.9	88.0	6.5		3.9		5		89				<0.2		0.6			
					Bottom	11.5	0.4	96	21.2	21.2	8.0	8.0	31.6	31.6	88.6	88.7	6.6	6.6	7.8	7.5	5	5	93	93			<0.2		0.6			
						11.5	0.5	104	21.2	21.2	8.0	8.0	31.6	31.6	88.7	88.7	6.6	6.6	7.7		5		92				<0.2		0.6			
IM1	Cloudy	Moderate	13:10	4.9	Surface	1.0	0.0	261	21.0	21.0	8.1	8.1	28.9	28.9	93.4	93.4	7.0		6.3		7		87		817972	807123	<0.2		0.9			
						1.0	0.0	282	21.0	21.0	8.1	8.1	28.9	28.9	93.4	93.4	7.0		6.4		8		87				<0.2		0.8			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	7.0			7.3	-	7	-			88		<0.2		-	
						-	-	-	-	-	-	-	-	-	-	-	-					-		-				<0.2		-		
					Bottom	3.9	0.1	229	20.8	20.8	8.0	8.0	29.5	29.5	92.9	93.0	7.0	7.0	8.3		6	6	89	89			<0.2		0.8	0.8		
						3.9	0.1	234	20.8	20.8	8.0	8.0	29.5	29.5	93.0	93.0	7.0	7.0	8.3		6		88				<0.2		0.8			
IM2	Cloudy	Moderate	13:18	6.6	Surface	1.0	0.2	106	20.9	20.9	8.2	8.2	30.0	30.0	91.0	91.1	6.8		14.0		8		84		818169	806187	<0.2		1.0			
						1.0	0.2	107	20.9	20.9	8.2	8.2	30.0	30.0	91.1	91.1	6.8	6.8	13.9	14.9	9	14	84	87			<0.2		0.9			
					Middle	3.3	0.1	83	20.9	20.9	8.2	8.2	30.3	30.3	89.7	89.7	6.7		15.8	16	17	14	87	87			<0.2		1.0	1.0		
						3.3	0.1	89	20.9	20.9	8.2	8.2	30.3	30.3	89.7	89.7	6.7		15.8		17		87				<0.2		1.1			
					Bottom	5.6	0.1	64	20.9	20.9	8.2	8.2	30.4	30.4	91.4	91.5	6.8	6.8	15.0	17	16	19	89	89			<0.2		0.9	0.9		
						5.6	0.1	67	20.9	20.9	8.2	8.2	30.4	30.4	91.5	91.5	6.8	6.8	15.1		16		89				<0.2		0.9			
IM3	Cloudy	Moderate	13:26	6.5	Surface	1.0	0.1	142	20.9	20.9	8.2	8.2	29.8	29.8	89.8	89.8	6.7		15.3		22		84		818786	805580	<0.2		0.9			
						1.0	0.1	152	20.9	20.9	8.2	8.2	29.8	29.8	89.8	89.8	6.7		15.5		22		85				<0.2		0.9			
					Middle	3.3	0.1	110	20.9	20.9	8.2	8.2	29.9	29.9	89.0	89.0	6.7	6.7	18.9	18.7	18	19	87	87			<0.2		0.9	0.9		
						3.3	0.1	112	20.9	20.9	8.2	8.2	29.9	29.9	89.0	89.0	6.7		18.8		19		87				<0.2		0.9			
					Bottom	5.5	0.1	108	20.9	20.9	8.2	8.2	30.0	30.0	88.8	88.8	6.7	6.7	21.8	18	18	19	88	88			<0.2		0.8	0.8		
						5.5	0.1	118	20.9	20.9	8.2	8.2	30.0	30.0	88.8	88.8	6.7	6.7	21.7		16		89				<0.2		0.9			
IM4	Cloudy	Moderate	13:39	7.4	Surface	1.0	1.0	198	21.1	21.1	8.2	8.2	29.4	29.4	91.9	91.9	6.9		14.7		20		84		819736	804630	<0.2		0.9			
						1.0	1.1	211	21.1	21.1	8.2	8.2	29.4	29.4	91.8	91.8	6.9	6.9	14.8	18.2	19	19	85	87			<0.2		0.9			
					Middle	3.7	0.9	196	21.0	21.0	8.2	8.2	29.7	29.7	91.2	91.2	6.8		19.3	20	20	19	87	87			<0.2		1.0	0.9		
						3.7	1.0	210	21.0	21.0	8.2	8.2	29.7	29.7	91.1	91.1	6.8		19.3		18		88				<0.2		0.9			
					Bottom	6.4	0.9	196	21.0	21.0	8.2	8.2	29.7	29.7	90.6	90.6	6.8	6.8	20.7	18	18	19	89	89			<0.2		1.0			
						6.4	0.9	205	21.0	21.0	8.2	8.2	29.7	29.7	90.6	90.6	6.8	6.8	20.6		18		89				<0.2		0.9			
IM5	Cloudy	Moderate	13:54	6.8	Surface	1.0	1.3	209	21.0	21.0	8.1	8.1	24.7	24.7	90.5	90.5	7.0		10.6		9		84		820719	804861	<0.2		1.3			
						1.0	1.4	220	21.0	21.0	8.1	8.1	24.7	24.7	90.5	90.5	7.0		10.6		10		85				<0.2		1.4			
					Middle	3.4	1.0	216	21.0	21.0	8.1	8.1	26.3	26.3	89.1	89.2	6.8	6.9	16.4	15.1	10	11	88	88			<0.2		1.3	1.4		
						3.4	1.1	228	21.0	21.0	8.1	8.1	26.3	26.3	89.2	89.2	6.8		16.5		11		88				<0.2		1.4			
					Bottom	5.8	0.9	220	21.0	21.0	8.1	8.1	27.4	27.4	89.3	89.4	6.8	6.8	18.1	12	12	11	89	89			<0.2		1.4			
						5.8	0.9	229	21.0	21.0	8.1	8.1	27.4	27.4	89.4	89.4	6.8	6.8	18.1		11		89				<0.2		1.4			
IM6	Cloudy	Moderate	14:08	6.3	Surface	1.0	0.8	251	21.0	21.0	8.1	8.1	29.0	29.0	90.3	90.3	6.8		12.0		6		84		821061	805812	<0.2		1.2			
						1.0	0.8	268	21.0	21.0	8.1	8.1	29.1	29.0	90.3	90.3	6.8	6.8	12.2	17.3	5	6	83	87			<0.2		1.2			
					Middle	3.2	0.7	251	20.9	20.9	8.1	8.1	29.8	29.8	89.6	89.7	6.7		19.5	5	5	87	87	<0.2				1.2	1.2			
						3.2	0.8	257	20.9	20.9	8.1	8.1	29.8	29.8	89.6	89.7	6.7		19.5		6		87				<0.2		1.2			
					Bottom	5.3	0.6	252	20.9	20.9	8.1	8.1	29.9	29.9	90.1	90.2	6.8	6.8	20.2	6	6	89	89	<0.2				1.3				
						5.3	0.6	260	20.9	20.9	8.1	8.1	29.9	29.9	90.2	90.2	6.8	6.8	20.2		7		88				<0.2		1.2			
IM7	Cloudy	Moderate	14:20	7.9	Surface	1.0	0.8	232	21.2	21.2	8.1	8.1	27.2	27.2	91.1	91.1	6.9		11.7		11		85		821354	806848	<0.2		1.4			
						1.0	0.9	244	21.2	21.2	8.1	8.1	27.2	27.2	91.1	91.1	6.9	6.8	11.9	15.2	10	10	86	88			<0.2		1.4			
					Middle	4.0	0.8	238	21.1	21.1	8.1	8.1	28.8	28.8	89.6	89.6	6.7		15.8	9	9	88	88	<0.2				1.4	1.4			
						4.0	0.8	243	21.1	21.1	8.1	8.1	28.8	28.8	89.6	89.6	6.8		16.0		9		88				<0.2		1.4			
					Bottom	6.9	0.7	256	21.0	21.0	8.1	8.1	29.1	29.1	91.4	91.5	6.9	6.9	18.1	9	9	89	89	<0.2				1.5				
						6.9	0.7	262	21.0	21.0	8.1	8.1	29.1	29.1	91.5	91.5	6.9	6.9	17.9		9		89				<0.2		1.4			
IM8	Fine	Moderate	13:12	7.6	Surface	1.0	0.1	243	21.1	21.1	8.0	8.0	27.4	27.4	90.9	90.9	6.9		7.9		6		85		821836	808136	<0.2		1.2			
						1.0	0.1	245	21.1	21.1	8.0	8.0	27.4	27.4	90.9	90.9	6.9	6.9	8.0	10.8	5	5	85	88			<0.2					

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

Water Quality Monitoring

Water Quality Monitoring Results on 07 April 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)				
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA	
IM9	Fine	Moderate	13:07	7.3	Surface	1.0	0.3	149	21.2	21.1	8.0	8.0	27.5	27.5	90.0	90.1	6.8		6.8		7		85		822101	808792	<0.2		1.0				
						1.0	0.3	160	21.1		8.0		27.6		90.2		6.8		7.5		7		85				<0.2		1.0				
					Middle	3.7	0.3	145	20.9	20.9	8.0	8.0	28.5	28.5	90.4	90.4	6.8	6.8	8.4		7	7	88				<0.2		1.0				
						3.7	0.3	148	20.9		8.0		28.5		90.4		6.8		8.6		6		88				<0.2		1.0				
					Bottom	6.3	0.3	139	21.0	21.0	8.0	8.0	29.7	29.7	92.1	92.6	6.9	7.0	10.8		6		91				<0.2		1.0				
						6.3	0.3	149	21.0		8.0		29.7		93.1		7.0		10.3		7		91				<0.2		1.0				
IM10	Fine	Moderate	12:59	7.7	Surface	1.0	0.8	107	21.2	21.2	8.0	8.0	27.5	27.5	91.3	91.3	6.9		8.8		5		83		822368	809800	<0.2		1.0				
						1.0	0.8	114	21.2		8.0		27.5		91.3		6.9	7.0	8.9		4		82				<0.2		1.0				
					Middle	3.9	0.8	93	21.0	21.0	8.0	8.0	28.3	28.3	92.8	92.9	7.0		10.2		4	6	86				<0.2		1.0				
						3.9	0.8	96	21.0		8.0		28.3		92.9		7.0		10.3		6		87				<0.2		0.9				
					Bottom	6.7	0.5	85	20.9	20.9	8.0	8.0	28.6	28.5	96.1	96.6	7.3	7.3	11.4		7		90				<0.2		0.9				
						6.7	0.6	92	20.9		8.0		28.5		97.1		7.3		11.0		8		90				<0.2		1.0				
IM11	Fine	Moderate	12:46	7.8	Surface	1.0	0.9	107	21.1	21.1	8.0	8.0	27.7	27.7	90.4	90.6	6.8		11.7		8		83		822066	811479	<0.2		0.6				
						1.0	1.0	117	21.1		8.0		27.7		90.7		6.9	6.9	11.8		8		83				<0.2		0.6				
					Middle	3.9	0.9	99	21.0	21.0	8.0	8.0	28.4	28.4	91.1	91.2	6.9		12.0		8	9	86				<0.2		0.6				
						3.9	0.9	102	21.0		8.0		28.4		91.2		6.9		12.0		9		87				<0.2		0.6				
					Bottom	6.8	0.8	92	21.0	21.0	8.0	8.0	28.9	28.8	91.8	92.1	6.9	7.0	13.3		9		90				<0.2		0.6				
						6.8	0.8	99	21.0		8.0		28.8		92.4		7.0		13.6		10		90				<0.2		0.6				
IM12	Fine	Moderate	12:38	9.7	Surface	1.0	0.8	99	21.2	21.2	8.0	8.0	27.6	27.5	89.6	89.6	6.8		7.0		6		85		821444	812067	<0.2		0.6				
						1.0	0.9	107	21.2		8.0		27.5		89.5		6.8	6.8	7.1		5		85				<0.2		0.6				
					Middle	4.9	0.6	95	20.9	20.9	8.0	8.0	28.8	28.8	90.6	90.8	6.8	6.8	8.5		6	6	88				<0.2		0.6				
						4.9	0.6	102	20.9		8.0		28.8		91.0		6.9		8.3		5		88				<0.2		0.6				
					Bottom	8.7	0.5	88	20.9	20.9	8.0	8.0	29.1	29.1	92.3	92.7	7.0	7.0	10.3		6		91				<0.2		0.6				
						8.7	0.5	96	20.9		8.0		29.1		93.0		7.0		10.9		5		92				<0.2		0.6				
SR1A	Fine	Calm	12:18	5.6	Surface	1.0	-	-	20.9	20.9	8.0	8.0	29.6	29.6	88.7	88.8	6.7		5.9		3		-		819974	812656	-		-				
						1.0	-	-	20.9		8.0		29.6		88.8		6.7	6.7	6.4		4		-				-		-				
					Middle	2.8	-	-	-	-	-	-	-	-	-	-	-	6.7	-	-		-		-				-		-			
						2.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4		-				-		-			
					Bottom	4.6	-	-	21.0	21.0	8.0	8.0	30.0	30.0	90.2	90.5	6.8	6.8	10.5		4		-				-		-		-		
						4.6	-	-	21.0		8.0		30.0		90.7		6.8		10.5		4		-				-		-		-		
SR2	Fine	Moderate	12:04	4.7	Surface	1.0	0.6	70	21.1	21.1	8.0	8.0	25.7	25.7	90.1	90.4	6.9		3.7		5		84		821460	814152	<0.2		0.6				
						1.0	0.6	71	21.2		8.0		25.7		90.6		6.9	6.9	3.9		6		85				<0.2		0.6				
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	6.9	-	-		-		-				-		<0.2		0.6	
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6		-				-		<0.2		0.6	
					Bottom	3.7	0.3	58	21.0	21.0	8.0	8.0	29.6	29.7	92.2	92.4	6.9	6.9	6.6		5		89				<0.2		0.6				
						3.7	0.3	63	21.0		8.0		29.7		92.5		6.9		6.9		6		89				<0.2		0.5				
SR3	Fine	Moderate	13:18	8.8	Surface	1.0	0.2	216	21.1	21.1	8.0	8.0	28.0	28.0	89.4	89.5	6.8		7.2		8		-		822158	807564	-		-				
						1.0	0.2	227	21.0		8.0		28.0		89.6		6.8	6.8	7.6		7		-				-		-				
					Middle	4.4	0.2	209	20.9	20.9	8.0	8.0	28.9	28.9	89.7	89.6	6.8	6.8	10.0		7	7	-				-		-				
						4.4	0.2	214	20.9		8.0		28.9		89.5		6.8		10.3		6		-				-		-				
					Bottom	7.8	0.2	225	20.9	20.9	8.0	8.0	29.6	29.6	89.8	89.8	6.7	6.7	11.2		6		-				-		-				
						7.8	0.2	242	20.9		8.0		29.7		89.8		6.7		11.2		6		-				-		-				
SR4A	Cloudy	Calm	12:26	8.0	Surface	1.0	0.1	44	20.9	20.9	8.1	8.1	28.6	28.6	91.6	91.6	6.9		8.2		10		-		817178	807805	-		-				
						1.0	0.1	46	20.9		8.1		28.6		91.6		6.9	6.9	8.2		10		-				-		-				
					Middle	4.0	0.2	54	20.8	20.8	8.1	8.1	29.0	29.0	89.3	89.4	6.8	6.9	9.7		8	9	-				-		-				
						4.0	0.2	55	20.8		8.1		29.0		89.4		6.8		9.8		8		-				-		-				
					Bottom	7.0	0.1	45	20.8	20.8	8.1	8.1	29.4	29.4	91.4	91.4	6.9	6.9	12.2		9		-		-		-						
SR5A	Fine	Calm	12:06	3.7	Surface	1.0	0.2	96	20.9	20.9	8.1	8.1	29.7	29.7	91.2	91.2	6.9		11.5		12		-		816614	810677	-		-				
						1.0	0.2	101	20.9		8.1		29.7		91.2		6.9	6.9	11.5		11		-				-		-				
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	6.9	-	-		-		-				-		-			
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12		-				-		-			
					Bottom	2.7	0.1	53	20.9	20.9	8.0	8.0	30.1	30.1	91.7	91.8	6.9	6.9	8.8		11		-				-		-				
						2.7	0.1	53	20.9		8.0		30.1		91.8		6.9		8.8		12		-				-		-				
SR6A	Fine	Calm	11:28	4.1	Surface	1.0	0.1	279	20.9	20.9	8.0	8.0	30.2	30.2	90.2	90.2	6.8		13.4		16		-		817950	814721	-		-				
						1.0	0.1	293	20.9		8.0		30.2		90.2		6.8		13.5		16		-				-		-				
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	6.8	-	-		-		-				-		-			
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14.0		-				-		-			
					Bottom	3.1	0.1	287	20.9	20.9	7.9	7.9	30.2	30.2	92.1	92.2	6.9	6.9	14.4		17		-		-		-						
SR7	Fine	Calm	11:00	18.0	Surface	1.0	0.5	56	21.1	21.1	8.0	8.0	32.1	32.1	85.8	86.0	6.3		4.1		8		-		823641	823764	-		-				
						1.0	0.5	57	21.1		8.0		32.1		86.1		6.3	6.3	4.2		9		-				-		-				
					Middle	9.0	0.3	39	21.1	21.1	8.0	8.0	32.3	32.3	85.4	85.4	6.3	6.3	5.6		9	8	-				-		-				
						9.0	0.4	41	21.1		8.0		32.3		85.3		6.3		5.9		9		-				-		-				
					Bottom	17.0	0.2	330	21.1	21.1	8.0	8.0	32.4	32.4	84.8	84.8	6.2	6.2	6.9		7		-				-		-				
						17.0	0.2	359	21.1		8.0		32.4		84.7		6.2		7.3		8		-				-		-				
SR8	Fine	Calm	12:29	4.5	Surface	1.0	-	-	21.1	21.1	8.0	8.0	28.6	28.6	91.3	91.4	6.9		10.4		19		-		820405	811640	-		-				
						1.0	-	-	21.1		8.0		28.6		91.4		6.9	6.9	10.5		21		-				-		-				
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	6.9	-	-		-		-				-		-			
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19		-				-		-			
					Bottom	3.5	-	-	21.1	21.1	8.0	8.0	28.6	28.6	93.5	94.0	7.1	7.1	10.8		18		-		-		-						
3.5	-	-	21.1		8.0		28.6		94.5		7.1		10.8		19		-		-														

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

Water Quality Monitoring

Water Quality Monitoring Results on 07 April 20 during Mid-Flood Tide

Monitoring Station	Weather	Sea	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grd (Northing)	Coordinate HK Grd (Easting)	Chromium (µg/L)		Nickel (µg/L)			
	Condition	Condition							Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA
C1	Cloudy	Moderate	18:08	8.3	Surface	1.0	0.5	33	21.0	21.0	8.1	8.1	28.1	28.1	91.4	91.4	6.9		15.2		9		86		815616	804236	<0.2		1.0			
						1.0	0.5	34	21.0		8.1		28.1		91.4		6.9		15.3		10		87				<0.2		1.0			
					Middle	4.2	0.5	32	21.0	21.0	8.1	8.1	29.4	29.4	91.2	91.3	6.9	6.9	17.2		10	10	89				<0.2		1.0			
						4.2	0.6	34	21.0		8.1		29.4		91.3		6.9		17.5		10		88				<0.2		1.0			
					Bottom	7.3	0.6	36	20.9	20.9	8.0	8.0	30.3	30.3	91.2	91.3	6.8	6.8	19.9		12		91				<0.2		1.0			
						7.3	0.7	36	20.9		8.0		30.3		91.3		6.8		20.3		11		91				<0.2		1.0			
C2	Fine	Moderate	16:48	11.2	Surface	1.0	0.5	186	21.1	21.1	8.0	8.0	23.7	23.7	86.0	86.0	6.7		9.4		12		84		825697	806952	<0.2		1.6			
						1.0	0.5	186	21.1		8.0		23.7		85.9		6.7		9.4		11		84				<0.2		1.5			
					Middle	5.6	0.3	167	21.2	21.2	8.0	8.0	27.4	27.4	86.3	86.4	6.5	6.6	11.0		12	12	87				<0.2		1.6			
						5.6	0.3	171	21.2		8.0		27.4		86.4		6.5		11.0		11		88				<0.2		1.6			
					Bottom	10.2	0.2	267	21.2	21.2	8.0	8.0	28.9	28.9	88.9	89.2	6.7	6.7	12.1		12		92				<0.2		1.6			
						10.2	0.2	268	21.2		8.0		28.9		89.5		6.7		11.7		12		91				<0.2		1.7			
C3	Fine	Moderate	18:34	12.2	Surface	1.0	0.7	253	21.1	21.1	7.9	7.9	29.9	29.9	88.2	88.3	6.6		4.5		7		83		822088	817805	<0.2		1.6			
						1.0	0.7	276	21.1		7.9		30.0		88.3		6.6		4.9		7		84				<0.2		1.6			
					Middle	6.1	0.7	250	21.2	21.2	7.9	7.9	31.2	31.2	87.7	87.7	6.5	6.6	4.9		6	7	88				<0.2		1.7			
						6.1	0.8	265	21.2		7.9		31.2		87.7		6.5		5.3		7		88				<0.2		1.7			
					Bottom	11.2	0.6	256	21.1	21.1	8.0	8.0	31.2	31.2	88.7	89.0	6.6	6.6	8.7		7		91				<0.2		1.6			
						11.2	0.6	279	21.1		8.0		31.2		89.2		6.6		8.8		6		92				<0.2		1.7			
IM1	Cloudy	Moderate	17:45	5.0	Surface	1.0	0.2	4	21.1	21.1	8.1	8.1	29.1	29.1	92.3	92.3	6.9		7.9		9		87		817963	807133	<0.2		1.0			
						1.0	0.2	4	21.1		8.1		29.1		92.3		6.9		7.9		8		87				<0.2		1.1			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.9		-				-		<0.2		-	
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-	-	-	-
					Bottom	4.0	0.1	340	20.9	20.9	8.1	8.1	30.0	30.0	92.2	92.3	6.9	6.9	12.8		8		89				<0.2		1.0			
						4.0	0.1	313	20.9		8.1		30.0		92.3		6.9		12.8		7		88				<0.2		1.0			
IM2	Cloudy	Moderate	17:36	6.6	Surface	1.0	0.4	5	21.0	21.0	8.1	8.1	29.0	29.0	91.2	91.3	6.9		13.8		15		85		818179	806189	<0.2		1.1			
						1.0	0.4	5	21.0		8.1		29.0		91.3		6.9		13.7		13		86				<0.2		1.0			
					Middle	3.3	0.4	2	21.1	21.1	8.1	8.1	29.4	29.4	91.5	91.5	6.9	6.9	16.5		14	15	87				<0.2		1.1			
						3.3	0.4	2	21.1		8.1		29.4		91.5		6.9		16.4		15		88				<0.2		1.1			
					Bottom	5.6	0.3	354	21.1	21.1	8.1	8.1	29.4	29.4	91.7	91.7	6.9	6.9	20.5		16		89				<0.2		1.1			
						5.6	0.3	326	21.1		8.1		29.4		91.7		6.9		20.5		14		89				<0.2		1.1			
IM3	Cloudy	Moderate	17:28	6.7	Surface	1.0	0.5	1	21.0	21.0	8.1	8.1	29.1	29.1	91.0	91.0	6.8		15.5		16		85		818795	805615	<0.2		1.2			
						1.0	0.5	1	21.0		8.1		29.1		91.0		6.8		15.6		17		85				<0.2		1.2			
					Middle	3.4	0.4	351	21.0	21.0	8.1	8.1	29.6	29.6	90.7	90.7	6.8	6.8	19.5		17	16	88				<0.2		1.2			
						3.4	0.4	323	21.0		8.1		29.6		90.7		6.8		19.6		16		87				<0.2		1.2			
					Bottom	5.7	0.4	344	21.0	21.0	8.1	8.1	29.9	29.9	90.5	90.6	6.8	6.8	21.8		16		89				<0.2		1.2			
						5.7	0.4	316	21.0		8.1		29.9		90.7		6.8		21.5		14		89				<0.2		1.2			
IM4	Cloudy	Moderate	17:15	7.6	Surface	1.0	0.7	326	21.0	21.0	8.1	8.1	29.7	29.7	91.3	91.3	6.9		18.5		18		85		819739	804588	<0.2		1.0			
						1.0	0.7	344	21.0		8.1		29.7		91.3		6.9		18.7		18		85				<0.2		1.1			
					Middle	3.8	0.6	330	21.0	21.0	8.1	8.1	30.0	30.0	90.7	90.7	6.8	6.9	20.7		19	22	88				<0.2		1.0			
						3.8	0.6	330	21.0		8.1		30.0		90.7		6.8		20.8		22		88				<0.2		1.0			
					Bottom	6.6	0.5	331	20.9	20.9	8.1	8.1	30.3	30.3	91.0	91.1	6.8	6.8	22.0		27		89				<0.2		1.0			
						6.6	0.5	337	20.9		8.1		30.3		91.1		6.8		21.8		29		89				<0.2		1.0			
IM5	Cloudy	Moderate	17:06	6.8	Surface	1.0	0.4	324	21.2	21.2	8.1	8.1	26.6	26.6	90.4	90.4	6.9		7.7		10		84		820758	804867	<0.2		1.6			
						1.0	0.4	338	21.2		8.1		26.6		90.4		6.9		7.7		10		85				<0.2		1.5			
					Middle	3.4	0.4	330	21.1	21.1	8.1	8.1	28.1	28.1	89.9	89.9	6.8	6.9	8.3		10	10	87				<0.2		1.5			
						3.4	0.4	343	21.1		8.1		28.1		89.9		6.8		8.3		11		87				<0.2		1.5			
					Bottom	5.8	0.5	340	21.1	21.1	8.1	8.1	29.8	29.8	91.3	91.3	6.8	6.8	9.8		10		88				<0.2		1.5			
						5.8	0.5	344	21.1		8.1		29.8		91.2		6.8		9.8		10		88				<0.2		1.5			
IM6	Cloudy	Moderate	16:58	6.5	Surface	1.0	0.4	273	21.2	21.2	8.1	8.1	26.1	26.1	88.8	88.8	6.8		7.0		10		85		821051	805811	<0.2		1.6			
						1.0	0.5	277	21.2		8.1		26.1		88.7		6.8		7.0		10		84				<0.2		1.5			
					Middle	3.3	0.4	275	21.2	21.2	8.0	8.0	26.2	26.2	88.7	88.7	6.8	6.8	7.2		11	11	88				<0.2		1.4			
						3.3	0.5	299	21.2		8.0		26.2		88.7		6.8		7.2		10		87				<0.2		1.4			
					Bottom	5.5	0.4	276	21.2	21.2	8.0	8.0	26.2	26.2	89.4	89.4	6.8	6.8	7.8		11		89				<0.2		1.5			
						5.5	0.4	297	21.2		8.0		26.2		89.4		6.8		7.9		11		88				<0.2		1.4			
IM7	Cloudy	Moderate	16:49	8.4	Surface	1.0	0.6	246	21.2	21.2	8.1	8.1	25.8	25.8	88.3	88.4	6.8		6.8		11		85		821329	806849	<0.2		1.6			
						1.0	0.6	258	21.2		8.1		25.8		88.4		6.8		6.6		10		85				<0.2		1.6			
					Middle	4.2	0.6	252	21.2	21.2	8.1	8.1	26.3	26.3	87.9	87.9	6.7	6.8	7.6		10	10	88				<0.2		1.5			
						4.2	0.6	252	21.2		8.1		26.3		87.9		6.7		7.7		9		87				<0.2		1.6			
					Bottom	7.4	0.5	260	21.2	21.2	8.1	8.1	26.6	26.6	88.3	88.3	6.7	6.7	9.0		8		89				<0.2		1.6			
						7.4	0.5	276	21.2		8.1		26.6		88.2		6.7		9.1		9		89				<0.2		1.5			
IM8	Fine	Moderate	17:10	7.3	Surface	1.0	0.3	211	21.2	21.2	8.0	8.0	24.6	24.6	89.5	89.6	6.9		5.2		7		82		821834	808123	<0.2		1.7			
						1.0	0.3	221	21.2		8.0		24.6		89.6		6.9		5.3		8		84				<0.2		1.6			
					Middle	3.7	0.3	227	21.2	21.2	8.0	8.0	25.1	25.1	90.1	90.3	6.9	6.9	6.2		7	8	89				<0.2		1.6			
						3.7	0.3	230	21.2		8.0		25.1		90.4		6.9		6.4		8		90				<0.2		1.6			
					Bottom	6.3	0.2	236	21.2	21.2	8.0	8.0	25.5	25.5	91.9	92.4	7.0	7.1	7.1		8		91				<0.2		1.6			
						6.3	0.2	246	21.2		8.0		25.5		92.9		7.1		6.8		8		92				<0.2		1.6			

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

Water Quality Monitoring

Water Quality Monitoring Results on 07 April 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)					
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA	Value	DA
IM9	Fine	Moderate	17:15	7.0	Surface	1.0	0.2	231	21.1	21.1	8.0	8.0	24.4	24.4	89.8	89.9	6.9	-	4.6	-	6	-	85	-	822089	808812	<0.2	-	1.6	-				
						1.0	0.2	235	21.1	21.1	8.0	8.0	24.4	24.4	89.9	89.9	6.9	-	4.6	-	7	-	86	-			<0.2	-	1.6	-				
					Middle	3.5	0.2	220	21.2	21.2	8.0	8.0	24.8	24.8	91.6	91.7	7.0	7.0	5.0	5.2	7	7	88	88			<0.2	-	1.7	-				
						3.5	0.2	225	21.2	21.2	8.0	8.0	24.8	24.8	91.8	91.7	7.1	7.1	5.0	5.0	7	7	88	88			<0.2	-	1.6	-				
					Bottom	6.0	0.2	220	21.2	21.2	8.0	8.0	25.4	25.3	94.5	95.0	7.2	7.3	5.7	5.7	7	7	89	89			<0.2	-	1.6	-				
						6.0	0.2	233	21.2	21.2	8.0	8.0	25.3	25.3	95.5	95.0	7.3	7.3	6.0	6.0	6	6	90	90			<0.2	-	1.6	-				
IM10	Fine	Moderate	17:22	7.7	Surface	1.0	0.4	314	21.1	21.1	8.0	8.0	25.1	25.1	89.3	89.4	6.9	-	6.2	-	5	-	87	-	822374	809773	<0.2	-	1.7	-				
						1.0	0.4	319	21.1	21.1	8.0	8.0	25.1	25.1	89.4	89.4	6.9	-	6.3	-	5	-	86	-			<0.2	-	1.6	-				
					Middle	3.9	0.5	320	21.2	21.1	8.0	8.0	26.1	26.1	91.3	91.6	7.0	7.0	5.9	5.9	6	6	90	90			<0.2	-	1.6	-				
						3.9	0.5	329	21.1	21.1	8.0	8.0	26.1	26.1	91.8	91.6	7.0	7.0	5.7	5.7	6	6	90	90			<0.2	-	1.6	-				
					Bottom	6.7	0.5	326	21.1	21.1	8.0	8.0	27.8	27.8	93.5	93.9	7.1	7.1	9.1	9.1	5	5	92	92			<0.2	-	1.6	-				
						6.7	0.5	335	21.1	21.1	8.0	8.0	27.8	27.8	94.3	93.9	7.1	7.1	9.4	9.4	6	6	93	93			<0.2	-	1.6	-				
IM11	Fine	Moderate	17:34	7.0	Surface	1.0	0.2	50	21.1	21.1	8.0	8.0	27.6	27.6	91.4	91.5	6.9	-	12.7	-	8	-	86	-	822054	811460	<0.2	-	1.7	-				
						1.0	0.2	52	21.1	21.1	8.0	8.0	27.6	27.6	91.5	91.5	6.9	-	13.1	-	8	-	87	-			<0.2	-	1.6	-				
					Middle	3.5	0.3	63	21.0	21.0	8.0	8.0	28.1	28.1	92.3	92.3	7.0	7.0	14.2	14.2	7	7	91	91			<0.2	-	1.6	-				
						3.5	0.3	64	21.0	21.0	8.0	8.0	28.1	28.1	92.2	92.3	7.0	7.0	14.4	14.4	7	7	90	90			<0.2	-	1.6	-				
					Bottom	6.0	0.2	69	21.0	21.0	8.0	8.0	28.4	28.4	93.9	94.0	7.1	7.1	16.1	16.1	6	6	92	92			<0.2	-	1.6	-				
						6.0	0.2	69	21.0	21.0	8.0	8.0	28.4	28.4	94.1	94.0	7.1	7.1	16.1	16.1	7	7	93	93			<0.2	-	1.6	-				
IM12	Fine	Moderate	17:40	9.2	Surface	1.0	0.5	306	21.0	21.0	8.0	8.0	27.8	27.8	90.3	90.3	6.8	-	8.5	-	10	-	86	-	821474	812034	<0.2	-	1.6	-				
						1.0	0.5	331	21.0	21.0	8.0	8.0	27.8	27.8	90.2	90.2	6.8	-	8.9	-	9	-	87	-			<0.2	-	1.6	-				
					Middle	4.6	0.6	304	21.1	21.1	8.0	8.0	28.2	28.2	90.4	90.5	6.8	6.8	9.5	9.5	10	10	92	92			<0.2	-	1.6	-				
						4.6	0.6	309	21.1	21.1	8.0	8.0	28.2	28.2	90.5	90.5	6.8	6.8	9.7	9.7	10	10	91	91			<0.2	-	1.6	-				
					Bottom	8.2	0.6	296	21.0	21.0	8.0	8.0	29.4	29.4	91.3	91.6	6.9	6.9	10.3	10.3	10	10	93	93			<0.2	-	1.6	-				
						8.2	0.6	307	21.0	21.0	8.0	8.0	29.4	29.4	91.9	91.6	6.9	6.9	10.0	10.0	11	11	93	93			<0.2	-	1.6	-				
SR1A	Fine	Calm	17:57	5.4	Surface	1.0	-	-	21.1	21.1	7.9	7.9	28.1	28.1	92.4	92.4	7.0	-	5.2	-	11	-	-	-	819974	812660	-	-	-	-				
						1.0	-	-	21.1	21.1	7.9	7.9	28.1	28.1	92.4	92.4	7.0	-	5.2	-	10	-	-	-			-	-	-	-				
					Middle	2.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.0	-	-	-			10	-	-	-	-	-	-	-
						2.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-	-	-	-	-	
					Bottom	4.4	-	-	21.1	21.1	7.9	7.9	29.1	29.0	94.6	95.2	7.1	7.2	5.5	5.5	10	10	-	-			-	-	-	-	-	-	-	-
						4.4	-	-	21.1	21.1	7.9	7.9	29.0	29.0	95.7	95.2	7.2	7.2	5.4	5.4	10	10	-	-			-	-	-	-	-	-	-	-
SR2	Fine	Calm	18:11	4.8	Surface	1.0	0.2	165	21.1	21.1	7.9	7.9	29.2	29.2	90.0	90.0	6.8	-	5.7	-	6	-	85	-	821457	814150	<0.2	-	1.6	-				
						1.0	0.2	166	21.1	21.1	7.9	7.9	29.2	29.2	90.0	90.0	6.8	-	5.9	-	6	-	85	-			<0.2	-	1.6	-				
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.8	-	-	-			-	-	-	-	<0.2	-	1.6	-
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-	-	-	-	-	
					Bottom	3.8	0.2	173	21.1	21.1	7.9	7.9	29.3	29.3	93.8	94.0	7.0	7.1	8.5	8.5	7	7	91	91			<0.2	-	1.6	-				
						3.8	0.2	187	21.1	21.1	7.9	7.9	29.3	29.3	94.0	93.9	7.1	7.1	8.7	8.7	6	6	91	91			<0.2	-	1.6	-				
SR3	Fine	Moderate	17:04	9.0	Surface	1.0	0.3	213	21.2	21.2	8.0	8.0	25.1	25.1	88.2	88.2	6.8	-	5.9	-	7	-	-	-	822163	807568	-	-	-	-				
						1.0	0.3	221	21.2	21.2	8.0	8.0	25.1	25.1	88.2	88.2	6.8	-	6.0	-	6	-	-	-			-	-	-	-	-	-		
					Middle	4.5	0.2	257	21.2	21.2	8.0	8.0	25.7	25.7	89.1	89.3	6.8	6.8	6.6	6.6	6	6	-	-			-	-	-	-	-	-	-	
						4.5	0.2	282	21.2	21.2	8.0	8.0	25.8	25.8	89.5	89.6	6.9	6.9	6.6	6.6	7	7	-	-			-	-	-	-	-	-	-	
					Bottom	8.0	0.2	235	21.2	21.2	8.0	8.0	25.8	25.8	91.7	92.1	7.0	7.1	6.9	6.9	7	7	-	-			-	-	-	-	-	-	-	-
						8.0	0.2	257	21.2	21.2	8.0	8.0	25.8	25.8	92.5	92.1	7.1	7.1	7.0	7.0	8	8	-	-			-	-	-	-	-	-	-	-
SR4A	Cloudy	Calm	18:30	8.8	Surface	1.0	0.0	36	21.0	21.0	8.1	8.1	30.1	30.1	90.2	90.2	6.7	-	15.9	-	10	-	-	-	817206	807804	-	-	-	-				
						1.0	0.0	39	21.0	21.0	8.1	8.1	30.1	30.1	90.2	90.2	6.7	-	15.9	-	17	-	-	-			-	-	-	-	-	-		
					Middle	4.4	0.0	348	21.0	21.0	8.0	8.0	30.1	30.1	90.0	90.1	6.7	6.7	16.5	16.5	15	15	-	-			-	-	-	-	-	-	-	
						4.4	0.0	354	21.0	21.0	8.0	8.0	30.1	30.1	90.1	90.1	6.7	6.7	16.5	16.5	18	18	-	-			-	-	-	-	-	-	-	
					Bottom	7.8	0.1	342	21.0	21.0	8.0	8.0	30.2	30.2	90.3	90.4	6.8	6.8	17.1	17.1	24	24	-	-			-	-	-	-	-	-	-	-
						7.8	0.1	348	21.0	21.0	8.0	8.0	30.2	30.2	90.4	90.4	6.8	6.8	17.2	17.2	24	24	-	-			-	-	-	-	-	-	-	-
SR5A	Cloudy	Calm	18:47	3.9	Surface	1.0	0.1	290	21.1	21.1	8.0	8.0	30.3	30.3	89.6	89.6	6.7	-	12.1	-	18	-	-	-	816612	810699	-	-	-	-				
						1.0	0.1	313	21.1	21.1	8.0	8.0	30.3	30.3	89.6	89.6	6.7	-	12.1	-	19	-	-	-			-	-	-	-	-	-		
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.7	-	-	-			-	-	-	-	-	-	-	
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-	-	-	-	-	
					Bottom	2.9	0.1	304	21.1	21.1	8.0	8.0	30.3	30.3	88.9	88.9	6.6	6.6	13.3	13.3	20	20	-	-			-	-	-	-	-	-	-	-
						2.9	0.1	333	21.1	21.1	8.0	8.0	30.3	30.3	88.9	88.9	6.6	6.6	13.4	13.4	18	18	-	-			-	-	-	-	-	-	-	-
SR6A	Cloudy	Calm	19:15	4.1	Surface	1.0	0.1	225	21.1	21.1	8.0	8.0	29.2	29.2	90.2	90.2	6.8	-	5.2	-	7	-	-	-	817964	814759	-	-	-	-				
						1.0	0.1	239	21.1	21.1	8.0	8.0	29.2	29.2	90.2	90.2	6.8	-	5.2	-	7	-	-	-			-	-	-	-	-			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.8	-	-	-			-	-	-	-	-	-	-	
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-	-	-	-	-	
					Bottom	3.1	0.0	269	21.1	21.1	7.9	7.9	29.6	29.6	91.3	91.4	6.8	6.8	6.2	6.2	14	14	-	-			-	-	-	-	-	-	-	-
						3.1	0.0	285	21.1	21.1	7.9	7.9	29.6	29.6	91.4	91.4	6.8	6.8	6.2	6.2	7	7	-	-			-	-	-	-	-	-	-	-
SR7	Fine	Moderate	19:10	20.3	Surface	1.0	0.2	332	21.1	21.1	7.9	7.9	31.1	31.1	86.4	86.4	6.4	-	4.4	-	6	-	-	-	823619	823760	-	-	-	-				

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

Water Quality Monitoring

Water Quality Monitoring Results on 09 April 20 during Mid-Ebb Tide

Monitoring Station	Weather	Sea	Sampling	Water	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)			
	Condition	Condition	Time	Depth (m)					Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA
C1	Sunny	Moderate	13:57	8.1	Surface	1.0	0.7	222	21.6	21.6	7.9	7.9	24.8	24.9	91.8	91.9	7.0		5.1		6		85		88	815638	804227	<0.2	1.8			
						1.0	0.8	223	21.6		7.9		24.9		91.9		7.0		5.2		6		85									
					Middle	4.1	0.8	211	21.0	21.0	8.0	8.0	27.1	27.1	89.5	89.5	6.8	6.9	8.9		5	5	88	88								
						4.1	0.8	222	21.0		8.0		27.1		89.4		6.8		9.2		5		88									
					Bottom	7.1	0.6	211	20.9	20.9	7.9	7.9	27.9	27.9	88.7	88.7	6.7	6.7	11.8		5		90									
						7.1	0.6	219	20.9		7.9		27.9		88.7		6.7		11.8		5		90									
C2	Fine	Moderate	15:19	11.0	Surface	1.0	1.3	175	21.6	21.6	7.7	7.7	18.9	18.9	84.8	84.8	6.7		7.1		6		87		90	825701	806935	<0.2	1.1			
						1.0	1.3	179	21.6		7.7		18.9		84.7		6.7	6.7	7.2		6		86									
					Middle	5.5	1.2	177	21.4	21.4	7.7	7.7	21.9	22.0	84.6	84.7	6.6	6.6	9.3		7	7	90	90								
						5.5	1.2	179	21.4		7.7		22.0		84.8		6.6		9.6		7		90									
					Bottom	10.0	1.0	168	21.0	21.0	7.7	7.7	25.4	25.4	84.2	84.4	6.5	6.5	11.5		7		92									
						10.0	1.0	168	21.0		7.7		25.4		84.6		6.5		11.6		8		93									
C3	Fine	Moderate	12:52	13.4	Surface	1.0	0.6	86	21.3	21.3	7.7	7.7	28.2	28.2	86.3	86.4	6.5		5.3		6		84		88	822093	817788	<0.2	1.8			
						1.0	0.6	92	21.3		7.7		28.2		86.4		6.5	6.5	5.3		6		85									
					Middle	6.7	0.4	102	21.1	21.1	7.8	7.8	29.4	29.4	86.5	86.4	6.5	6.5	5.9		7	7	88	88								
						6.7	0.4	102	21.1		7.8		29.4		86.3		6.5		5.8		7		89									
					Bottom	12.4	0.4	123	21.1	21.1	7.8	7.8	30.3	30.3	87.0	87.1	6.5	6.5	6.2		8		92									
						12.4	0.4	126	21.1		7.8		30.3		87.1		6.5		6.3		8		92									
IM1	Sunny	Moderate	14:19	4.6	Surface	1.0	0.0	120	22.3	22.3	7.8	7.8	24.6	24.6	93.5	93.5	7.1		4.8		5		86		87	817926	807117	<0.2	1.3			
						1.0	0.0	122	22.3		7.8		24.6		93.5		7.1		4.8		5		86									
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	7.1		-		-	-	-						-		
						-	-	-	-	-	-	-	-	-	-	-	-	-		-		-	-	-						-		
					Bottom	3.6	0.0	229	22.0	22.0	7.8	7.8	25.1	25.1	91.4	91.4	6.9	6.9	5.9		7		88									
						3.6	0.0	232	22.0		7.8		25.1		91.4		6.9		5.9		7		88									
IM2	Sunny	Moderate	14:26	6.4	Surface	1.0	0.2	103	21.2	21.2	7.9	7.9	26.9	26.9	88.8	88.8	6.7		16.3		11		84		87	818146	806181	<0.2	1.2			
						1.0	0.2	108	21.2		7.9		26.9		88.8		6.7	6.7	16.4		11		85									
					Middle	3.2	0.1	96	21.0	21.0	8.0	8.0	27.2	27.2	88.2	88.2	6.7	6.7	18.2		10	10	87	87								
						3.2	0.1	98	21.0		8.0		27.2		88.2		6.7		18.4		10		88									
					Bottom	5.4	0.2	106	21.0	21.0	7.9	7.9	27.2	27.2	87.2	87.2	6.6	6.6	20.2		9	9	89	89								
						5.4	0.2	106	21.0		7.9		27.2		87.2		6.6		20.2		9		89									
IM3	Sunny	Moderate	14:34	6.5	Surface	1.0	0.1	233	21.2	21.1	7.9	7.9	27.0	27.0	88.5	88.7	6.7		14.1		13		85		87	818768	805608	<0.2	1.1			
						1.0	0.1	238	21.1		7.9		27.0		88.8		6.7	6.7	14.4		13		85									
					Middle	3.3	0.0	283	21.0	21.0	7.9	7.9	27.2	27.2	88.7	88.7	6.7	6.7	17.2		12	12	87	87								
						3.3	0.0	311	21.0		7.9		27.2		88.6		6.7		17.4		12		88									
					Bottom	5.5	0.1	257	21.0	21.0	7.9	7.9	27.2	27.2	88.3	88.3	6.7	6.7	20.8		11	11	89	89								
						5.5	0.1	271	21.0		7.9		27.2		88.2		6.7		20.5		11		89									
IM4	Sunny	Moderate	14:44	7.2	Surface	1.0	1.3	197	21.8	21.8	7.8	7.8	25.4	25.5	90.9	90.9	6.9		14.2		11		84		87	819727	804599	<0.2	1.5			
						1.0	1.4	203	21.8		7.8		25.5		90.9		6.9	6.8	14.2		11		85									
					Middle	3.6	1.2	196	21.5	21.5	7.9	7.9	26.1	26.1	88.9	88.9	6.7	6.7	16.0		11	11	87	87								
						3.6	1.3	208	21.5		7.9		26.1		88.9		6.7		16.0		11		87									
					Bottom	6.2	0.9	197	21.4	21.4	7.9	7.9	26.6	26.6	88.5	88.5	6.7	6.7	18.4		10	10	89	89								
						6.2	1.0	197	21.4		7.9		26.6		88.5		6.7		18.4		11		89									
IM5	Sunny	Moderate	14:58	6.5	Surface	1.0	1.3	217	21.8	21.8	7.8	7.8	23.4	23.4	89.8	89.8	6.9		13.0		15		84		87	820757	804880	<0.2	1.7			
						1.0	1.4	221	21.8		7.8		23.4		89.7		6.9	6.8	13.0		14		85									
					Middle	3.3	1.1	218	21.7	21.7	7.9	7.9	25.4	25.4	88.9	89.0	6.7	6.7	16.6		12	12	87	87								
						3.3	1.2	239	21.7		7.9		25.4		89.0		6.7		16.6		12		87									
					Bottom	5.5	1.0	217	21.8	21.8	7.9	7.9	25.9	25.9	88.5	88.5	6.7	6.7	17.3		10	10	89	89								
						5.5	1.1	222	21.8		7.9		25.9		88.4		6.7		17.3		9		89									
IM6	Sunny	Moderate	15:09	6.3	Surface	1.0	0.8	242	22.1	22.1	7.8	7.8	24.0	24.0	90.7	90.7	6.9		8.4		12		84		87	821074	805815	<0.2	1.4			
						1.0	0.9	246	22.1		7.8		23.9		90.7		6.9	6.7	8.5		12		84									
					Middle	3.2	0.8	244	21.2	21.2	7.9	7.9	26.2	26.2	85.7	85.7	6.5	6.5	11.6		10	10	88	88								
						3.2	0.9	259	21.3		7.9		26.2		85.7		6.5		11.6		10		88									
					Bottom	5.3	0.8	245	21.1	21.1	7.9	7.9	26.8	26.8	84.6	84.6	6.4	6.4	15.3		9	9	89	89								
						5.3	0.8	265	21.1		7.9		26.8		84.5		6.4		15.2		9		89									
IM7	Sunny	Moderate	15:21	7.4	Surface	1.0	1.0	249	21.5	21.5	7.9	7.9	25.3	25.3	89.1	89.1	6.8		7.8		10		85		87	821350	806811	<0.2	1.5			
						1.0	1.0	269	21.5		7.9		25.3		89.0		6.8	6.8	7.8		9		85									
					Middle	3.7	1.0	251	21.2	21.2	7.9	7.9	26.2	26.2	87.8	87.9	6.7	6.7	9.5		8	8	87	88								
						3.7	1.0	254	21.2		7.9		26.2		88.0		6.7		9.4		8		88									
					Bottom	6.4	0.7	259	21.2	21.2	7.9	7.9	26.3	26.3	86.9	86.9	6.6	6.6	11.3		8	8	89	89								
						6.4	0.8	264	21.2		7.9		26.3		86.8		6.6		11.3		8		89									
IM8	Fine	Moderate	14:47	7.6	Surface	1.0	0.3	185	21.5	21.5	7.7	7.7	23.8	23.8	89.2	89.2	6.9		7.9		6		86		90	821822	808146	<0.2	1.6			
						1.0	0.3	201	21.5		7.7		23.8		89.1		6.9	6.9	8.1		6		87									
					Middle	3.8	0.3	192	21.3	21.3	7.7	7.7	25.5	25.5	89.0	89.1	6.8	6.8	9.6		6	6	90	90								
						3.8	0.4	200	21.3		7.7		25.5		89.1		6.8		9.8		6		90									
					Bottom	6.6	0.2	207	21.2	21.2	7.7	7.7	25.9	26.0	90.2	90.6	6.9	6.9	10.3		6	6	92	92								
						6.6	0.3	210	21.2		7.7		26.1		90.9		6.9	6.9	10.0		6		92									

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

Water Quality Monitoring

Water Quality Monitoring Results on 09 April 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)					
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA	Value	DA
IM9	Fine	Moderate	14:41	7.0	Surface	1.0	0.4	150	21.4	21.4	7.7	7.7	23.9	23.9	88.8	88.8	6.8	-	7.9	-	7	-	84	-	822117	808828	<0.2	-	1.6	-				
						1.0	0.4	152	21.3	-	-	-	-	6.8	-	8.3	-	7	-	84	-	<0.2	-	1.6			-							
					Middle	3.5	0.4	146	21.2	21.2	7.7	7.7	25.3	25.3	89.5	89.6	6.9	-	9.6	-	7	-	87	-			<0.2	-	1.6	-				
						3.5	0.4	150	21.2	-	-	-	-	89.7	-	6.9	-	9.9	-	6	-	88	-	<0.2			-	1.6	-					
					Bottom	6.0	0.3	141	21.2	21.2	7.7	7.7	26.0	26.0	91.9	92.4	7.0	7.1	10.6	-	6	-	92	-			<0.2	-	1.6	-				
						6.0	0.3	144	21.2	-	-	-	-	92.9	-	7.1	-	10.5	-	6	-	91	-	<0.2			-	1.6	-					
IM10	Fine	Moderate	14:33	7.4	Surface	1.0	0.8	102	22.4	22.4	7.7	7.7	23.1	23.1	91.1	91.0	6.9	-	9.8	-	12	-	83	-	822375	809770	<0.2	-	1.7	-				
						1.0	0.8	109	22.3	-	-	-	-	6.9	-	10.0	-	12	-	83	-	<0.2	-	1.7			-							
					Middle	3.7	0.7	92	21.2	21.2	7.7	7.7	25.5	25.5	90.8	90.9	7.0	7.0	10.8	-	10	-	87	-			<0.2	-	1.6	-				
						3.7	0.8	100	21.2	-	-	-	-	90.9	-	7.0	-	10.6	-	10	-	87	-	<0.2			-	1.6	-					
					Bottom	6.4	0.7	91	21.2	21.2	7.7	7.7	25.6	25.6	93.3	93.4	7.1	7.2	12.4	-	6	-	92	-			<0.2	-	1.6	-				
						6.4	0.7	93	21.2	-	-	-	-	93.4	-	7.2	-	12.3	-	6	-	92	-	<0.2			-	1.6	-					
IM11	Fine	Moderate	14:20	8.1	Surface	1.0	0.9	104	21.8	21.7	7.7	7.7	23.0	23.0	89.6	89.6	6.9	-	9.5	-	12	-	85	-	822063	811440	<0.2	-	1.7	-				
						1.0	1.0	113	21.7	-	-	-	-	6.9	-	9.6	-	12	-	86	-	<0.2	-	1.7			-							
					Middle	4.1	0.9	102	21.4	21.4	7.7	7.7	23.6	23.7	90.6	90.7	7.0	7.0	10.0	-	11	-	88	-			<0.2	-	1.7	-				
						4.1	1.0	107	21.4	-	-	-	-	90.7	-	7.0	-	10.1	-	11	-	89	-	<0.2			-	1.7	-					
					Bottom	7.1	0.8	100	21.4	21.4	7.7	7.7	24.0	24.0	92.0	92.5	7.1	7.1	11.6	-	8	-	89	-			<0.2	-	1.7	-				
						7.1	0.8	108	21.5	21.4	7.7	7.7	23.9	24.0	93.0	92.5	7.1	-	11.5	-	9	-	90	-			<0.2	-	1.6	-				
IM12	Fine	Moderate	14:08	10.8	Surface	1.0	0.8	92	21.6	21.6	7.7	7.7	23.8	23.8	88.6	88.5	6.8	-	9.9	-	10	-	83	-	821463	812023	<0.2	-	1.5	-				
						1.0	0.8	94	21.6	-	-	-	-	6.8	-	9.8	-	11	-	84	-	<0.2	-	1.5			-							
					Middle	5.4	0.6	83	21.1	21.1	7.7	7.7	25.6	25.6	88.0	88.1	6.7	-	10.2	-	8	-	88	-			<0.2	-	1.5	-				
						5.4	0.6	87	21.1	-	-	-	-	88.2	-	6.8	-	10.1	-	8	-	88	-	<0.2			-	1.5	-					
					Bottom	9.8	0.4	73	21.1	21.1	7.7	7.7	25.9	25.9	89.5	89.6	6.9	6.9	12.2	-	6	-	91	-			<0.2	-	1.5	-				
						9.8	0.5	74	21.1	-	-	-	-	89.7	-	6.9	-	12.2	-	6	-	92	-	<0.2			-	1.5	-					
SR1A	Fine	Calm	13:38	4.9	Surface	1.0	-	-	21.3	21.3	7.7	7.7	24.8	24.8	88.6	88.8	6.8	-	8.7	-	13	-	-	-	819976	812666	-	-	-	-				
						1.0	-	-	21.3	-	-	-	-	6.8	-	8.0	-	14	-	-	-	-	-	-			-	-	-					
					Middle	2.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-	-	-			
						2.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-	-				
					Bottom	3.9	-	-	21.2	21.2	7.8	7.8	26.4	26.4	89.7	89.7	6.8	6.8	5.0	-	11	-	-	-			-	-	-	-	-	-		
						3.9	-	-	21.2	-	7.8	-	26.4	-	89.7	-	6.8	-	5.1	-	11	-	-	-			-	-	-	-	-	-		
SR2	Fine	Calm	13:22	4.7	Surface	1.0	0.7	65	21.2	21.2	7.7	7.7	24.8	24.8	86.9	86.9	6.7	-	10.9	-	7	-	85	-	821458	814174	<0.2	-	1.4	-				
						1.0	0.7	68	21.2	-	-	-	-	6.7	-	10.9	-	7	-	85	-	<0.2	-	1.4			-							
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-	-	-			
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-	-	-			
					Bottom	3.7	0.4	67	21.1	21.1	7.7	7.7	26.1	26.1	87.2	87.3	6.7	6.7	11.3	-	10	-	91	-			<0.2	-	1.3	-				
						3.7	0.4	71	21.1	-	-	-	-	87.3	-	6.7	-	11.2	-	10	-	91	-	<0.2			-	1.4	-					
SR3	Fine	Moderate	14:53	8.8	Surface	1.0	0.4	198	21.7	21.7	7.8	7.8	24.9	24.9	91.1	91.1	6.9	-	8.2	-	7	-	-	-	822139	807566	-	-	-	-				
						1.0	0.4	208	21.7	-	-	-	-	6.9	-	8.4	-	6	-	-	-	-	-	-			-	-	-	-				
					Middle	4.4	0.5	203	21.2	21.2	7.8	7.8	26.2	26.2	90.1	90.1	6.9	-	10.6	-	6	-	-	-			-	-	-	-	-	-		
						4.4	0.5	222	21.2	-	-	-	-	90.1	-	6.9	-	10.8	-	6	-	-	-	-			-	-	-	-	-			
					Bottom	7.8	0.4	221	21.2	21.2	7.7	7.7	26.5	26.5	91.1	91.2	6.9	6.9	12.6	-	5	-	-	-			-	-	-	-	-	-		
						7.8	0.4	224	21.2	-	-	-	-	91.2	-	6.9	-	12.4	-	5	-	-	-	-			-	-	-	-	-	-		
SR4A	Sunny	Calm	13:37	8.3	Surface	1.0	0.1	240	21.4	21.4	7.9	7.9	25.5	25.5	89.4	89.3	6.8	-	13.1	-	16	-	-	-	817209	807800	-	-	-	-				
						1.0	0.1	256	21.4	-	-	-	-	6.8	-	13.1	-	16	-	-	-	-	-	-			-	-	-	-				
					Middle	4.2	0.1	251	21.2	21.2	7.9	7.9	25.8	25.8	87.7	87.7	6.7	-	16.0	-	16	-	-	-			-	-	-	-	-			
						4.2	0.1	272	21.2	-	-	-	-	87.7	-	6.7	-	16.1	-	16	-	-	-	-			-	-	-	-	-			
					Bottom	7.3	0.1	276	21.1	21.1	7.9	7.9	26.2	26.2	86.5	86.6	6.6	6.6	20.8	-	15	-	-	-			-	-	-	-	-	-		
						7.3	0.1	299	21.1	-	-	-	-	86.6	-	6.6	-	18.5	-	15	-	-	-	-			-	-	-	-	-	-		
SR5A	Sunny	Calm	13:19	3.7	Surface	1.0	0.2	81	21.6	21.6	7.9	7.9	26.0	26.0	89.8	89.8	6.8	-	18.5	-	23	-	-	-	816590	810704	-	-	-	-				
						1.0	0.2	88	21.6	-	-	-	-	6.8	-	16.5	-	22	-	-	-	-	-	-			-	-	-	-				
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-	-	-			
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-	-	-			
					Bottom	2.7	0.2	95	21.6	21.6	7.9	7.9	26.0	26.0	88.9	88.8	6.7	6.7	17.4	-	22	-	-	-			-	-	-	-	-	-		
						2.7	0.2	96	21.6	-	-	-	-	88.8	-	6.7	-	17.3	-	21	-	-	-	-			-	-	-	-	-	-		
SR6A	Sunny	Calm	12:37	4.2	Surface	1.0	0.0	29	21.7	21.7	7.9	7.9	26.2	26.2	90.7	90.7	6.9	-	6.2	-	8	-	-	-	817972	814740	-	-	-	-				
						1.0	0.0	29	21.7	-	-	-	-	6.8	-	6.2	-	8	-	-	-	-	-	-			-	-	-	-				
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-	-	-			
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-	-	-			
					Bottom	3.2	0.0	67	21.6	21.6	7.9	7.9	26.5	26.5	89.2	89.2	6.7	6.7	7.6	-	7	-	-	-			-	-	-	-	-	-		
						3.2	0.0	68	21.6	-	-	-	-	89.2	-	6.7	-	7.6	-	7	-	-	-	-			-	-	-	-	-	-		
SR7	Fine	Calm	12:11	23.0	Surface	1.0	0.6	93	21.2	21.2	7.8	7.8	30.3	30.3	86.1	86.1	6.4	-	3.5	-	5	-	-	-	823619	823724	-	-	-	-				
						1.0	0.7	93	21.2	-	-	-	-	6.4	-	3.5	-	6	-	-	-	-	-	-			-	-	-	-				
					Middle	11.5	0.3	68	21.2	21.2	7.8	7.8	30.8	30.8	85.6	85.6	6.4	6.4	4.4	-	6	-	-	-			-	-	-	-	-			
						11.5	0.3	70	21.2	-	-	-	-	85.6	-	6.4	-	4.6	-	6	-	-	-	-			-	-	-	-	-			
					Bottom	22.0	0.3	29	21.2	21.2	7.9	7.9	30.8	30.8	84.9	85.0	6.3	6.3	5.2	-	8	-	-	-			-	-	-	-	-	-		
						22.0	0.3	30	21.2	-	-	-	-	85.0	-	6.3	-	5.4	-	8	-	-	-	-			-	-	-	-	-	-		
SR8	Fine	Calm	13:51	4.2	Surface	1.0	-	-	21.2	21.2	7.7	7.7	24.7	24.7	88.3	88.2	6.8	-	288.3	-	41	-	-	-	820367	811627	-	-	-	-				
						1.0	-	-	21.2	-	-	-	-	6.8	-	291.7	-	41	-	-	-	-	-	-			-	-	-	-				
					Middle	-	-	-	-	-																								

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

Water Quality Monitoring

Water Quality Monitoring Results on 09 April 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grd (Northing)	Coordinate HK Grd (Easting)	Chromium (µg/L)		Nickel (µg/L)								
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA									
C1	Cloudy	Moderate	19:54	8.0	Surface	1.0	0.5	38	21.5	21.5	7.8	7.8	25.0	25.0	90.0	90.1	6.9	6.9	17.1	19.3	26	23	85	88	815619	804229	<0.2	<0.2	1.3	1.3							
						1.0	0.5	41	21.5		7.8		25.0		90.1		6.9		17.0		25		86				<0.2		1.2								
					Middle	4.0	0.4	37	21.4	21.4	7.8	7.8	26.4	26.4	89.1	89.1	6.8		18.0		23		88				<0.2		1.3								
						4.0	0.4	38	21.4		7.8		26.4		89.1		6.8		19.0		24		89				<0.2		1.3								
					Bottom	7.0	0.3	37	21.3	21.3	7.7	7.7	26.8	26.8	88.4	88.4	6.7		6.7		21.8						90		<0.2		1.3						
						7.0	0.3	37	21.3		7.7		26.8		88.3		6.7				21.8						91		<0.2		1.3						
C2	Fine	Rough	18:38	10.8	Surface	1.0	0.6	198	21.1	21.1	7.7	7.7	19.0	19.0	81.9	81.8	6.5	6.5	11.7	13.6	19	17	86	90	825705	806959	<0.2	<0.2	2.1	2.2							
						1.0	0.7	217	21.1		7.7		19.0		81.7		6.5		11.9		19		87				<0.2		2.2								
					Middle	5.4	0.3	192	21.0	21.0	7.7	7.7	22.2	22.2	81.9	82.0	6.4		13.0		18		92				<0.2		2.2								
						5.4	0.3	199	21.0		7.7		22.2		82.0		6.4		13.3		17		91				<0.2		2.2								
					Bottom	9.8	0.3	265	21.1	21.1	7.7	7.7	25.1	25.1	83.1	83.2	6.4		6.4		15.7						93		<0.2		2.1						
						9.8	0.3	285	21.1		7.7		25.1		83.2		6.4				16.1						93		<0.2		2.2						
C3	Fine	Moderate	20:32	12.8	Surface	1.0	0.6	256	21.3	21.3	7.8	7.8	25.7	25.7	88.3	88.3	6.7	6.6	6.4	8.1	9	8	82	87	822088	817798	<0.2	<0.2	2.1	2.2							
						1.0	0.6	265	21.3		7.8		25.7		88.3		6.7		6.3		9		82				<0.2		2.1								
					Middle	6.4	0.7	247	21.2	21.2	7.8	7.8	28.7	28.7	86.8	86.9	6.5		8.4		8		87				<0.2		2.2								
						6.4	0.8	258	21.2		7.8		28.7		86.9		6.5		8.5		8		87				<0.2		2.1								
					Bottom	11.8	0.6	249	21.2	21.2	7.8	7.8	28.7	28.7	87.4	87.6	6.6		6.6		9.3						91		<0.2		2.2						
						11.8	0.7	250	21.2		7.8		28.7		87.8		6.6				9.6						92		<0.2		2.2						
IM1	Cloudy	Moderate	19:31	4.6	Surface	1.0	0.3	14	21.5	21.5	7.8	7.8	25.5	25.5	90.4	90.4	6.9	6.9	14.3	16.8	17	15	85	87	817960	807151	<0.2	<0.2	1.3	1.2							
						1.0	0.3	14	21.5		7.8		25.5		90.4		6.9		14.4		17		86				<0.2		1.2								
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-		-	-	-	<0.2	-	-	-
						-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-		-	-	-	<0.2	-	-	-
					Bottom	3.6	0.2	11	21.6	21.6	7.8	7.8	26.0	26.0	89.7	89.8	6.8		6.8		19.3						88		<0.2		1.2						
						3.6	0.2	11	21.6		7.8		26.0		89.8		6.8				19.3						88		<0.2		1.2						
IM2	Cloudy	Moderate	19:23	6.5	Surface	1.0	0.4	2	21.5	21.5	7.8	7.8	25.5	25.5	88.6	88.6	6.8	6.7	15.3	18.2	14	15	84	87	818165	806185	<0.2	<0.2	1.2	1.2							
						1.0	0.4	2	21.5		7.8		25.5		88.6		6.7		15.4		14		85				<0.2		1.2								
					Middle	3.3	0.3	350	21.5	21.5	7.8	7.8	25.9	25.9	88.3	88.3	6.7		18.4		15		87				<0.2		1.2								
						3.3	0.4	322	21.5		7.8		25.9		88.3		6.7		18.3		15		88				<0.2		1.2								
					Bottom	5.5	0.3	338	21.4	21.4	7.8	7.8	26.3	26.3	87.7	87.7	6.7		20.9		15		90				<0.2		1.2								
						5.5	0.4	349	21.4		7.8		26.3		87.6		6.7		20.7		16		90				<0.2		1.3								
IM3	Cloudy	Moderate	19:16	6.6	Surface	1.0	0.5	347	21.5	21.5	7.8	7.8	25.3	25.3	89.2	89.2	6.8	6.8	12.7	15.3	14	13	84	87	818803	805587	<0.2	<0.2	1.3	1.3							
						1.0	0.5	347	21.5		7.8		25.3		89.2		6.8		12.7		14		85				<0.2		1.3								
					Middle	3.3	0.5	331	21.4	21.4	7.8	7.8	26.3	26.3	88.1	88.1	6.7		14.9		13		88				<0.2		1.3								
						3.3	0.5	350	21.4		7.8		26.3		88.0		6.7		15.0		14		88				<0.2		1.3								
					Bottom	5.6	0.4	320	21.4	21.4	7.8	7.8	26.5	26.5	86.9	86.9	6.6		18.3		12		89				<0.2		1.3								
						5.6	0.5	347	21.4		7.8		26.5		86.9		6.6		18.0		12		90				<0.2		1.2								
IM4	Cloudy	Moderate	19:03	7.4	Surface	1.0	0.7	331	21.4	21.4	7.8	7.8	26.6	26.6	89.3	89.4	6.8	6.8	14.3	16.8	13	14	85	87	819732	804616	<0.2	<0.2	1.3	1.3							
						1.0	0.7	336	21.4		7.8		26.6		89.4		6.8		14.4		13		85				<0.2		1.3								
					Middle	3.7	0.6	331	21.4	21.4	7.8	7.8	26.6	26.6	88.8	88.8	6.7		16.9		14		87				<0.2		1.4								
						3.7	0.7	338	21.4		7.8		26.6		88.7		6.7		17.0		14		87				<0.2		1.3								
					Bottom	6.4	0.6	335	21.4	21.4	7.8	7.8	26.6	26.6	88.8	88.8	6.7		19.1		14		89				<0.2		1.3								
						6.4	0.6	352	21.4		7.8		26.6		88.8		6.7		19.3		14		89				<0.2		1.4								
IM5	Cloudy	Moderate	18:54	6.5	Surface	1.0	0.5	333	21.5	21.5	7.8	7.8	21.6	21.6	87.5	87.5	6.8	6.8	10.6	10.9	15	15	85	88	820755	804856	<0.2	<0.2	1.8	1.8							
						1.0	0.5	355	21.5		7.8		21.6		87.5		6.8		10.6		14		86				<0.2		1.7								
					Middle	3.3	0.6	345	21.7	21.7	7.8	7.8	24.4	24.4	88.3	88.3	6.7		10.5		15		87				<0.2		1.7								
						3.3	0.6	352	21.7		7.8		24.4		88.3		6.7		10.5		15		89				<0.2		1.8								
					Bottom	5.5	0.5	348	21.5	21.5	7.8	7.8	26.1	26.1	87.4	87.4	6.6		11.7		16		90				<0.2		1.7								
						5.5	0.6	355	21.5		7.8		26.1		87.4		6.6		11.7		15		89				<0.2		1.8								
IM6	Cloudy	Moderate	18:47	6.3	Surface	1.0	0.4	285	21.4	21.4	7.7	7.7	20.3	20.3	84.3	84.3	6.6	6.6	13.5	14.5	13	15	84	87	821066	805842	<0.2	<0.2	1.9	1.9							
						1.0	0.4	309	21.4		7.7		20.3		84.3		6.6		13.6		13		85				<0.2		1.9								
					Middle	3.2	0.3	295	21.4	21.4	7.7	7.7	20.4	20.4	83.9	83.9	6.6		15.2		15		87				<0.2		1.8								
						3.2	0.3	304	21.4		7.7		20.4		83.9		6.6		14.7		16		88				<0.2		1.9								
					Bottom	5.3	0.3	293	21.4	21.4	7.7	7.7	20.4	20.4	83.6	83.6	6.6		15.0		17		89				<0.2		1.8								
						5.3	0.3	308	21.4		7.7		20.4		83.6		6.6		15.0		17		89				<0.2		1.8								
IM7	Cloudy	Moderate	18:39	7.8	Surface	1.0	0.4	246	21.4	21.4	7.7	7.7	17.8	17.9	82.4	82.4	6.6	6.5	9.2	12.3	10	9	84	87	821371	806851	<0.2	<0.2	2.2	2.2							
						1.0	0.4	269	21.4		7.7		17.9		82.4		6.6		9.2		9		85				<0.2		2.2								
					Middle	3.9	0.4	248	21.4	21.4	7.7	7.7	20.4	20.4	81.8	81.8	6.4		12.3		9		88				<0.2		2.1								
						3.9	0.4	271	21.4		7.7		20.4		81.8		6.4		12.3		9		88				<0.2		2.2								
					Bottom	6.8	0.4	265	21.3	21.3	7.7	7.7	21.1	21.1	80.8	80.8	6.3		15.3		8		88				<0.2		2.3								
						6.8	0.4	265	21.3		7.7		21.1		80.8		6.3		15.3		8		88				<0.2		2.2								
IM8	Fine	Moderate	19:00	7.2	Surface	1.0	0.2	203	21.4	21.4	7.7	7.7	17.7	17.7	84.9	85.0	6.8	6.9	9.9	12.6	10	9	87	90	821848	808129	<0.2	<0.2	2.1	2.1							
						1.0	0.2	219	21.4		7.7		17.7		85.0		6.8		10.0		11		86				<0.2		2.1								
					Middle	3.6	0.1	256	21.4	21.4	7.7	7.7	18.5	18.5	87.2	87.5	6.9		11.8		9		91				<0.2		2.2								
						3.6	0.1	267	21.4		7.7		18.5		87.7		7.0		12.1		9		91				<0.2		2.1								
					Bottom	6.2	0.2	273	21.4	21.4	7.7	7.7	18.5	18.5	89.5	90.2	7.1		15.9		8		92				<0.2		2.1								
						6.2	0.2	297	21.4		7.7		18.5		90.9		7.2		16.1		8		93				<0.2		2.1								

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

Water Quality Monitoring

Water Quality Monitoring Results on 09 April 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)						
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA	Value	DA	
IM9	Fine	Moderate	19:08	6.6	Surface	1.0	0.2	287	21.5	21.5	7.6	7.6	18.3	18.3	85.6	85.7	6.8		8.3		8		86		90	822079	808816	<0.2	2.0	2.1					
						1.0	0.2	295	21.5		7.6		18.3		85.7		6.8		8.8		8		87					<0.2	2.0						
					Middle	3.3	0.2	292	21.5	21.5	7.7	7.7	18.2	18.2	85.5	85.5	6.8	6.8	9.0	9.2	9	9	90	90				<0.2	2.0						
						3.3	0.2	312	21.5		7.7		18.2		85.5		6.8		9.0		9		91					<0.2	2.2						
					Bottom	5.6	0.2	298	21.5	21.5	7.7	7.7	18.8	18.8	86.1	86.0	6.8	6.8	10.1		9		92					<0.2	2.1						
						5.6	0.2	325	21.5		7.7		18.8		85.9		6.8	6.8	10.2		10		93					<0.2	2.0						
IM10	Fine	Moderate	19:16	7.0	Surface	1.0	0.6	313	21.5	21.5	7.7	7.7	19.8	19.8	87.2	87.3	6.9		12.8		9		83		87	822374	809782	<0.2	2.2	2.2					
						1.0	0.6	330	21.5		7.7		19.8		87.3		6.9	7.0	12.9		8		83					<0.2	2.1						
					Middle	3.5	0.6	312	21.7	21.7	7.7	7.7	20.8	20.8	89.4	89.5	7.0		14.9	14.5	13	12	87	87				<0.2	2.2						
						3.5	0.7	321	21.7		7.7		20.8		89.5		7.0		14.9		14		87					<0.2	2.1						
					Bottom	6.0	0.6	312	21.7	21.7	7.7	7.7	21.1	21.1	91.1	91.7	7.1	7.2	15.7		14		91					<0.2	2.2						
						6.0	0.6	312	21.7		7.7		21.1		92.2		7.2		15.5		14		91					<0.2	2.1						
IM11	Fine	Moderate	19:28	7.1	Surface	1.0	0.7	333	21.6	21.6	7.7	7.7	21.1	21.1	87.9	87.9	6.9		10.8		10		82		87	822048	811441	<0.2	2.2	2.2					
						1.0	0.7	338	21.6	21.6	7.7	7.7	21.0	21.1	87.9	87.9	6.9	6.9	10.9		10		82					<0.2	2.1						
					Middle	3.6	0.6	315	21.4	21.4	7.8	7.8	24.7	24.7	88.6	88.7	6.8	6.9	12.8	12.7	7	8	87	87				<0.2	2.1						
						3.6	0.6	327	21.4	21.4	7.8	7.8	24.7	24.7	88.8	88.7	6.8	6.8	12.9		7		88					<0.2	2.2						
					Bottom	6.1	0.6	295	21.3	21.3	7.8	7.8	25.8	25.8	92.0	92.8	7.0	7.1	14.3		7		91					<0.2	2.2						
						6.1	0.6	310	21.3	21.3	7.8	7.8	25.8	25.8	93.6	92.8	7.1	7.1	14.7		7		92					<0.2	2.1						
IM12	Fine	Moderate	19:35	9.0	Surface	1.0	0.6	264	21.6	21.6	7.7	7.7	21.7	21.7	88.0	88.1	6.8		11.1		6		82		86	821474	812034	<0.2	2.1	2.1					
						1.0	0.6	278	21.6	21.6	7.7	7.7	21.6	21.7	88.1	88.1	6.9	6.9	11.3		6		82					<0.2	2.2						
					Middle	4.5	0.5	256	21.5	21.5	7.8	7.8	25.1	25.1	88.4	88.5	6.8	6.8	13.3	13.4	8	8	86	86				<0.2	2.0						
						4.5	0.5	256	21.5	21.5	7.8	7.8	25.1	25.1	88.6	88.6	6.8	6.8	13.3		8		86					<0.2	2.1						
					Bottom	8.0	0.4	257	21.6	21.6	7.8	7.8	25.4	25.4	89.6	89.7	6.8	6.8	15.6		10		91					<0.2	2.0						
						8.0	0.4	262	21.6	21.6	7.8	7.8	25.4	25.4	89.8	89.7	6.8	6.8	15.8		9		91					<0.2	2.2						
SR1A	Fine	Calm	19:54	4.1	Surface	1.0	-	-	21.7	21.7	7.8	7.8	22.2	22.0	92.6	92.7	7.2		7.4		7		-		-	819974	812659	-	-	-					
						1.0	-	-	21.7	21.7	7.8	7.8	21.8	22.0	92.7	92.7	7.2	7.2	7.4		7		-					-	-						
					Middle	2.1	-	-	-	-	-	-	-	-	-	-	-	-	-	7.2	-	7.5	-	8				-	-		-	-	-	-	
						2.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-		-	-	-	-	
					Bottom	3.1	-	-	21.7	21.7	7.8	7.8	24.2	24.2	96.1	96.6	7.4	7.4	7.8		9		-					-			-	-	-	-	-
						3.1	-	-	21.7	21.7	7.8	7.8	24.1	24.2	97.1	97.1	7.4	7.4	7.5		9		-					-			-	-	-	-	-
SR2	Fine	Calm	20:06	4.6	Surface	1.0	0.1	169	21.4	21.4	7.8	7.8	24.7	24.7	88.7	88.8	6.8		8.2		7		82		85	821444	814144	<0.2	2.1	2.1					
						1.0	0.1	181	21.4	21.4	7.8	7.8	24.7	24.7	88.8	88.8	6.8	6.8	8.1		7		82					<0.2	2.1						
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.8	-	8.4	-	7				-	-		-	<0.2	2.1		
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-		-	-	-	-	
					Bottom	3.6	0.2	145	21.4	21.4	7.8	7.8	25.2	25.2	89.5	89.8	6.8	6.9	8.6		6		87					<0.2	2.1						
						3.6	0.2	148	21.4	21.4	7.8	7.8	25.2	25.2	90.0	90.0	6.8	6.9	8.6		6		87					<0.2	2.1						
SR3	Fine	Moderate	18:54	8.0	Surface	1.0	0.4	229	21.4	21.4	7.7	7.7	17.5	17.5	83.8	83.9	6.7		10.7		11		-		-	822170	807568	-	-	-					
						1.0	0.4	231	21.4	21.4	7.7	7.7	17.5	17.5	83.9	83.9	6.7	6.7	11.0		11		-					-	-						
					Middle	4.0	0.2	249	21.4	21.4	7.7	7.7	19.8	19.8	84.4	84.4	6.7	6.7	13.5	12.9	13	14	-	-				-	-		-	-	-	-	
						4.0	0.2	251	21.4	21.4	7.7	7.7	19.8	19.8	84.4	84.4	6.7	6.7	13.5		13		-					-	-		-	-	-	-	
					Bottom	7.0	0.2	262	21.4	21.4	7.7	7.7	20.3	20.3	85.2	85.3	6.7	6.7	14.3		17		-					-	-		-	-	-	-	-
						7.0	0.2	271	21.4	21.4	7.8	7.7	20.3	20.3	85.3	85.3	6.7	6.7	14.3		17		-					-	-		-	-	-	-	-
SR4A	Cloudy	Calm	20:14	8.4	Surface	1.0	0.2	75	21.6	21.6	7.7	7.7	25.8	25.8	90.0	90.0	6.8		16.7		22		-		-	817176	807793	-	-	-					
						1.0	0.2	79	21.6	21.6	7.7	7.7	25.8	25.8	90.0	90.0	6.8	6.7	16.7		22		-					-	-						
					Middle	4.2	0.2	65	21.8	21.8	7.7	7.7	26.3	26.3	88.0	88.0	6.6	6.6	14.7	15.6	22	22	-	-				-	-		-	-	-	-	
						4.2	0.2	69	21.8	21.8	7.7	7.7	26.3	26.3	88.0	88.0	6.6	6.6	14.8		22		-					-	-		-	-	-	-	
					Bottom	7.4	0.2	72	21.8	21.8	7.7	7.7	26.4	26.4	89.2	89.2	6.7	6.7	15.2		22		-					-	-		-	-	-	-	-
						7.4	0.2	77	21.8	21.8	7.7	7.7	26.4	26.4	89.2	89.2	6.7	6.7	15.2		22		-					-	-		-	-	-	-	-
SR5A	Cloudy	Calm	20:31	3.9	Surface	1.0	0.1	75	21.7	21.7	7.7	7.7	26.5	26.5	89.5	89.6	6.8		10.2		16		-		-	816593	810674	-	-	-					
						1.0	0.1	82	21.7	21.7	7.7	7.7	26.5	26.5	89.6	89.6	6.8	6.8	10.2		15		-					-	-						
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	6.8	-	10.3	-	16	-				-	-		-	-	-	-	
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-		-	-	-	-	
					Bottom	2.9	0.0	30	21.7	21.7	7.6	7.6	26.5	26.5	89.0	89.0	6.7	6.7	10.4		16		-					-	-		-	-	-	-	-
						2.9	0.0	32	21.7	21.7	7.6	7.6	26.5	26.5	89.0	89.0	6.7	6.7	10.4		15		-					-	-		-	-	-	-	-
SR6A	Cloudy	Calm	21:07	4.3	Surface	1.0	0.0	225	21.5	21.5	7.6	7.6	24.1	24.1	88.5	88.5	6.8		5.9		10		-		-	817967	814724	-	-	-					
						1.0	0.0	244	21.5	21.5	7.6	7.6	24.1	24.1	88.5	88.5	6.8	6.8	5.9		9		-					-	-						
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	6.8	-	6.1	-	8	-				-	-		-	-	-	-	
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-		-	-	-	-	
					Bottom	3.3	0.0	323	21.6	21.6	7.6	7.6	25.2	25.2	88.2	88.2	6.7	6.7	6.3		7		-					-	-		-	-	-	-	-
						3.3	0.0	335	21.6	21.6	7.6	7.6	25.2	25.2	88.2	88.2	6.7	6.7	6.4		7		-					-	-		-	-	-	-	-
SR7	Fine	Moderate	21:11	20.0	Surface	1.0	0.1	290	21.2	21.2	7.8	7.8	29.2	29.2	86.0	86.0	6.4		7.5		9		-		-	823642	823728	-	-	-					
						1.0	0.1	300	21.2	21.2	7.8	7.8	29.2	29.2	85.9	85.9	6.4	6.5	7.4		9		-					-	-						
					Middle	10.0	0.1	92	21.2	21.2	7.8	7.8	30.2	30.2	87.3	87.3	6.5	6.5	9.0	9.2	6	7	-	-				-	-		-	-	-	-	
						10.0	0.2	101	21.2	21.2	7.8	7.8	30.2	30.2	87.2	87.3	6.5	6.5	8.9		7		-					-	-		-	-	-	-	
					Bottom	19.0	0.2	103	21.2	21.2	7.8	7.8	30.3	30.3	87.8	88.0	6.5	6.6	11.0		5		-					-	-		-	-	-	-	-
						19.0																													

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

Water Quality Monitoring

Water Quality Monitoring Results on 11 April 20 during Mid-Ebb Tide

Monitoring Station	Weather	Sea	Sampling	Water	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)		
	Condition	Condition	Time	Depth (m)					Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value
C1	Cloudy	Moderate	14:42	8.6	Surface	1.0	0.6	222	21.4	21.4	7.9	7.9	25.4	25.1	93.2	93.2	7.1		5.4		5		86		815618	804237	<0.2		1.1		
						1.0	0.6	241	21.4		7.9		24.8		93.2		7.1		5.5		4		87				<0.2		1.0		
					Middle	4.3	0.6	210	21.2	21.2	7.9	7.9	28.0	28.0	91.6	91.6	6.9	7.0	9.5	9.5	5	5	89	89			<0.2	<0.2	1.2	1.2	
						4.3	0.6	218	21.2		7.9		28.0		91.6		6.9		9.5		5		89				<0.2		1.4		
					Bottom	7.6	0.5	204	21.2	21.2	7.9	7.9	29.1	29.1	90.4	90.4	6.8	6.8	13.5	13.5	5		91				<0.2	<0.2	1.3		
						7.6	0.5	209	21.2		7.9		29.1		90.3		6.8		13.3		5		91				<0.2	<0.2	1.2	1.2	
C2	Cloudy	Moderate	13:35	11.5	Surface	1.0	0.7	178	21.5	21.5	7.8	7.8	21.4	21.4	86.9	87.0	6.8		6.7		7		88		825680	806963	<0.2		2.0		
						1.0	0.7	182	21.5		7.8		21.4		87.0		6.8	6.7	6.7		6		87				<0.2		1.8		
					Middle	5.8	0.5	161	21.3	21.3	7.8	7.8	25.2	25.2	86.4	86.3	6.6	6.7	12.4	12.4	6	6	90	90			<0.2	<0.2	1.8	1.8	
						5.8	0.5	161	21.3		7.8		25.2		86.2		6.6		12.3		6		90				<0.2		1.9		
					Bottom	10.5	0.3	125	21.3	21.3	7.9	7.9	26.7	26.7	86.0	86.0	6.5	6.5	12.4	12.4	5		93				<0.2	<0.2	1.6		
						10.5	0.3	132	21.3		7.9		26.7		86.0		6.5		12.5		5		92				<0.2	<0.2	1.9	1.9	
C3	Cloudy	Moderate	15:31	10.7	Surface	1.0	0.4	94	21.6	21.6	7.9	7.9	25.0	25.0	88.7	88.7	6.8		5.9		9		86		822125	817824	<0.2		1.6		
						1.0	0.4	98	21.6		7.9		25.0		88.7		6.8	6.8	5.9	9	9	86	86	<0.2			<0.2	1.4			
					Middle	5.4	0.4	110	21.5	21.5	7.9	7.9	25.4	25.4	87.8	87.8	6.7	6.8	8.9	8.9	8	8	88	88			<0.2	<0.2	1.4	1.4	
						5.4	0.4	119	21.5		7.9		25.4		87.8		6.7		9.0		8		87				<0.2		1.4		
					Bottom	9.7	0.4	68	21.3	21.3	7.9	7.9	27.4	27.4	85.9	85.9	6.5	6.5	14.2	14.2	7		90				<0.2	<0.2	1.3		
						9.7	0.4	72	21.3		7.9		27.4		85.8		6.5		14.1		7		91				<0.2	<0.2	1.2	1.2	
IM1	Cloudy	Moderate	14:23	5.3	Surface	1.0	0.1	184	21.8	21.8	7.8	7.8	24.0	24.0	93.4	93.4	7.1		4.7		4		86		817937	807137	<0.2		1.3		
						1.0	0.2	184	21.8		7.8		24.0		93.3		7.1		4.7		4		86				<0.2		1.2		
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	7.1		-		-		-			-	<0.2		-	
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-	-	
					Bottom	4.3	0.1	190	21.5	21.5	7.8	7.8	26.0	26.0	90.6	90.6	6.9	6.9	9.9	9.9	4		88				<0.2	<0.2	1.2		
						4.3	0.1	205	21.5		7.8		26.0		90.6		6.9	6.9	9.8		5		88				<0.2	<0.2	1.1	1.1	
IM2	Cloudy	Moderate	14:16	7.6	Surface	1.0	0.3	181	21.6	21.5	7.9	7.9	23.8	23.8	92.9	92.9	7.1		3.9		5		85		818171	806174	<0.2		1.2		
						1.0	0.3	189	21.5		7.9		23.8		92.9		7.1	7.0	3.9	5	5	84	84	<0.2			<0.2	1.2			
					Middle	3.8	0.2	170	21.3	21.3	7.9	7.9	26.5	26.5	91.1	91.1	6.9	7.0	6.2	6.2	4	4	87	87			<0.2	<0.2	1.3	1.3	
						3.8	0.2	184	21.3		7.9		26.5		91.1		6.9		6.2		4		87				<0.2	<0.2	1.2		
					Bottom	6.6	0.2	148	21.3	21.3	7.9	7.9	27.6	27.6	90.4	90.4	6.8	6.8	10.4	10.4	3		89				<0.2	<0.2	1.4		
						6.6	0.2	151	21.3		7.9		27.6		90.3		6.8	6.8	10.3		3		89				<0.2	<0.2	1.1	1.1	
IM3	Cloudy	Moderate	14:09	7.9	Surface	1.0	0.3	147	21.5	21.5	7.9	7.9	25.2	25.2	92.2	92.2	7.0		4.6		3		84		818768	805590	<0.2		1.2		
						1.0	0.3	160	21.5		7.9		25.2		92.2		7.0	7.0	4.6	3	3	84	84	<0.2			<0.2	1.4			
					Middle	4.0	0.3	142	21.3	21.3	7.9	7.9	27.3	27.3	91.4	91.4	6.9	7.0	6.1	6.1	5	5	87	87			<0.2	<0.2	1.2	1.2	
						4.0	0.3	151	21.3		7.9		27.3		91.3		6.9		6.1		5		87				<0.2		1.4		
					Bottom	6.9	0.3	138	21.2	21.2	7.9	7.9	28.1	28.1	89.9	89.9	6.8	6.8	14.4	14.4	6		89				<0.2	<0.2	1.4		
						6.9	0.3	140	21.2		7.9		28.1		89.9		6.8	6.8	14.4		6		90				<0.2	<0.2	1.4	1.4	
IM4	Cloudy	Moderate	14:01	8.5	Surface	1.0	0.6	189	21.4	21.4	7.9	7.9	24.8	24.8	90.9	90.9	7.0		8.7		7		84		819739	804617	<0.2		1.6		
						1.0	0.6	203	21.4		7.9		24.8		90.9		7.0	6.9	8.7	7	7	85	85	<0.2			<0.2	1.5			
					Middle	4.3	0.5	159	21.4	21.4	7.9	7.9	27.4	27.4	89.4	89.4	6.7	6.9	12.6	12.6	8	8	87	87			<0.2	<0.2	1.5	1.5	
						4.3	0.5	171	21.4		7.9		27.4		89.4		6.7		12.9		8		87				<0.2	<0.2	1.4		
					Bottom	7.5	0.3	153	21.3	21.3	7.9	7.8	28.9	28.9	89.2	89.3	6.7	6.7	15.7	15.7	8		89				<0.2	<0.2	1.5		
						7.5	0.4	163	21.3		7.8		28.9		89.3		6.7	6.7	15.5		8		89				<0.2	<0.2	1.6	1.6	
IM5	Cloudy	Moderate	13:54	8.2	Surface	1.0	0.5	224	21.4	21.4	7.8	7.8	25.0	25.0	90.6	90.6	6.9		7.5		9		84		820726	804879	<0.2		1.4		
						1.0	0.6	245	21.4		7.8		25.0		90.6		6.9	6.9	7.5	9	9	84	84	<0.2			<0.2	1.4			
					Middle	4.1	0.5	201	21.4	21.4	7.9	7.9	27.2	27.2	89.3	89.4	6.8	6.9	10.4	10.4	8	8	87	87			<0.2	<0.2	1.5	1.5	
						4.1	0.5	206	21.4		7.9		27.2		89.4		6.8		10.6		8		87				<0.2	<0.2	1.5		
					Bottom	7.2	0.4	192	21.3	21.3	7.9	7.9	28.5	28.5	88.7	88.7	6.7	6.7	14.3	14.3	8		89				<0.2	<0.2	1.6		
						7.2	0.4	195	21.3		7.9		28.5		88.7		6.7	6.7	14.3		8		90				<0.2	<0.2	1.4	1.4	
IM6	Cloudy	Moderate	13:47	7.7	Surface	1.0	0.3	251	21.4	21.4	7.9	7.9	25.9	25.9	90.5	90.5	6.9		9.9		6		84		821082	805816	<0.2		1.4		
						1.0	0.3	253	21.4		7.9		25.9		90.5		6.9	6.9	9.8	6	6	85	85	<0.2			<0.2	1.3			
					Middle	3.9	0.3	229	21.3	21.3	7.9	7.9	27.3	27.3	89.9	89.9	6.8	6.8	12.3	12.3	7	7	87	87			<0.2	<0.2	1.5	1.5	
						3.9	0.3	231	21.3		7.9		27.2		89.9		6.8		12.5		7		87				<0.2	<0.2	1.4		
					Bottom	6.7	0.3	202	21.3	21.3	7.9	7.9	28.0	28.0	89.3	89.3	6.7	6.7	15.0	15.0	8		89				<0.2	<0.2	1.5		
						6.7	0.3	202	21.3		7.9		28.0		89.3		6.7	6.7	14.8		8		89				<0.2	<0.2	1.5	1.5	
IM7	Cloudy	Moderate	13:39	9.0	Surface	1.0	0.2	252	21.4	21.4	7.8	7.8	24.0	24.0	89.3	89.3	6.9		10.1		6		85		821362	806826	<0.2		1.6		
						1.0	0.2	269	21.4		7.8		24.0		89.3		6.9	6.9	10.2	6	6	85	85	<0.2			<0.2	1.6			
					Middle	4.5	0.1	228	21.3	21.3	7.9	7.9	26.5	26.5	90.0	90.0	6.8	6.9	13.9	13.9	5	5	87	87			<0.2	<0.2	1.5	1.5	
						4.5	0.1	229	21.3		7.9		26.5		90.0		6.8		13.9		5		87				<0.2	<0.2	1.5		
					Bottom	8.0	0.2	136	21.3	21.3	7.9	7.9	27.5	27.5	89.4	89.5	6.8	6.8	15.5	15.5	4		89				<0.2	<0.2	1.5		
						8.0	0.2	137	21.3		7.9		27.5		89.5		6.8	6.8	15.6		4		89				<0.2	<0.2	1.5	1.5	
IM8	Cloudy	Moderate	14:00	8.3	Surface	1.0	0.2	201	21.4	21.4	7.9	7.9	22.7	22.6	88.0	88.0	6.8		7.0		4		84		821811	808119	<0.2		1.7		
						1.0	0.2	204	21.4		7.9		22.6		88.0		6.8	6.8	7.1	4	4	84	84	<0.2			<0.2	1.6			
					Middle	4.2	0.0	211	21.3	21.3	7.9	7.9	25.6	25.6	87.8	87.9	6.7	6.7	9.0	9.0	5	5	86	86			<0.2	<0.2	1.6	1.6	
						4.2	0.0	213	21.3		7.9		25.6		87.9		6.7		8.9		5		86				<0.2	<0.2			

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

Water Quality Monitoring

Water Quality Monitoring Results on 11 April 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)					
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA	Value	DA
IM9	Cloudy	Moderate	14:07	7.9	Surface	1.0	0.3	124	21.5	21.5	7.9	7.9	22.3	22.3	88.5	88.5	6.9	-	5.4	-	6	-	85	-	822099	808790	<0.2	-	1.6	-				
						1.0	0.3	130	21.5	-	7.9	-	22.3	-	88.5	-	6.9	-	5.4	-	7	-	85	-			<0.2	-	1.8	-				
					Middle	4.0	0.3	138	21.3	21.3	7.9	7.9	24.4	24.4	87.3	87.3	6.7	6.8	10.2	9.0	6	6	87	87			<0.2	-	1.6	-				
						4.0	0.3	139	21.3	-	7.9	-	24.4	-	87.2	-	6.7	-	10.3	-	6	-	88	-			<0.2	-	1.5	-				
					Bottom	6.9	0.2	79	21.3	21.3	7.9	7.9	25.8	25.8	89.5	89.5	6.8	6.8	11.3	-	6	-	89	-			<0.2	-	1.5	-				
						6.9	0.2	82	21.3	-	7.9	-	25.8	-	89.5	-	6.8	-	11.5	-	5	-	89	-			<0.2	-	1.6	-				
IM10	Cloudy	Moderate	14:15	8.1	Surface	1.0	0.7	122	21.6	21.6	7.9	7.9	22.1	22.1	89.6	89.7	7.0	-	4.8	-	4	-	86	-	822386	809809	<0.2	-	1.4	-				
						1.0	0.8	126	21.6	-	7.9	-	22.1	-	89.7	-	7.0	-	4.8	-	4	-	86	-			<0.2	-	1.8	-				
					Middle	4.1	0.7	110	21.5	21.5	7.9	7.9	22.8	22.8	89.9	89.9	7.0	7.0	7.7	9.5	4	5	87	87			<0.2	-	1.5	-				
						4.1	0.7	115	21.5	-	7.9	-	22.8	-	89.8	-	6.9	-	7.7	-	4	-	88	-			<0.2	-	1.5	-				
					Bottom	7.1	0.5	94	21.3	21.3	7.9	7.9	25.4	25.4	87.5	87.5	6.7	6.7	15.9	-	6	-	89	-			<0.2	-	1.6	-				
						7.1	0.6	95	21.3	-	7.9	-	25.4	-	87.4	-	6.7	-	15.9	-	6	-	89	-			<0.2	-	1.7	-				
IM11	Cloudy	Moderate	14:27	8.7	Surface	1.0	0.8	122	21.5	21.5	7.9	7.9	22.7	22.7	89.1	89.1	6.9	-	6.5	-	4	-	85	-	822051	811451	<0.2	-	1.6	-				
						1.0	0.9	126	21.5	-	7.9	-	22.7	-	89.1	-	6.9	-	6.6	-	4	-	85	-			<0.2	-	1.6	-				
					Middle	4.4	0.8	120	21.4	21.4	7.9	7.9	24.0	24.0	88.5	88.5	6.8	6.9	10.3	10.3	4	5	87	87			<0.2	-	1.5	-				
						4.4	0.9	120	21.4	-	7.9	-	24.0	-	88.5	-	6.8	-	10.5	-	4	-	87	-			<0.2	-	1.6	-				
					Bottom	7.7	0.4	118	21.4	21.4	7.9	7.9	25.0	25.0	88.2	88.3	6.8	6.8	13.8	-	6	-	89	-			<0.2	-	1.6	-				
						7.7	0.4	127	21.4	21.4	7.9	7.9	25.0	25.0	88.3	88.3	6.8	6.8	13.9	-	6	-	89	-			<0.2	-	1.6	-				
IM12	Cloudy	Moderate	14:34	8.3	Surface	1.0	0.8	110	21.7	21.7	7.9	7.9	23.1	23.1	89.4	89.4	6.9	-	6.2	-	7	-	85	-	821476	812024	<0.2	-	1.5	-				
						1.0	0.9	114	21.7	-	7.9	-	23.1	-	89.4	-	6.9	-	6.2	-	7	-	84	-			<0.2	-	1.4	-				
					Middle	4.2	0.6	99	21.4	21.4	7.9	7.9	25.1	25.1	87.5	87.5	6.7	6.8	9.5	9.5	7	7	86	87			<0.2	-	1.4	-				
						4.2	0.6	108	21.4	-	7.9	-	25.1	-	87.5	-	6.7	-	9.1	-	7	-	87	-			<0.2	-	1.5	-				
					Bottom	7.3	0.3	101	21.3	21.3	7.9	7.9	26.0	26.0	86.1	86.2	6.6	6.6	13.2	-	6	-	89	-			<0.2	-	1.4	-				
						7.3	0.3	109	21.3	21.3	7.9	7.9	26.0	26.0	86.2	86.2	6.6	6.6	13.0	-	6	-	90	-			<0.2	-	1.5	-				
SR1A	Cloudy	Moderate	14:55	5.6	Surface	1.0	-	-	21.5	21.5	7.8	7.8	23.4	23.4	88.5	88.5	6.8	-	7.6	-	7	-	-	-	819979	812665	-	-	-	-				
						1.0	-	-	21.5	-	7.8	-	23.4	-	88.5	-	6.8	-	7.6	-	7	-	-	-			-	-	-	-				
					Middle	2.8	-	-	-	-	-	-	-	-	-	-	-	6.8	-	-	-	8	-	-			-	-	-	-	-			
						2.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-	-	-			
					Bottom	4.6	-	-	21.4	21.4	7.8	7.8	25.1	25.1	87.4	87.5	6.7	6.7	7.1	-	9	-	-	-			-	-	-	-	-			
						4.6	-	-	21.4	-	7.8	-	25.1	-	87.5	-	6.7	-	7.2	-	9	-	-	-			-	-	-	-	-			
SR2	Cloudy	Moderate	15:08	3.9	Surface	1.0	0.5	63	21.8	21.8	7.8	7.8	23.1	23.1	89.5	89.6	6.9	-	6.9	-	6	-	85	-	821483	814175	<0.2	-	1.5	-				
						1.0	0.5	64	21.8	-	7.8	-	23.1	-	89.6	-	6.9	-	6.8	-	6	-	84	-			<0.2	-	1.5	-				
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	6.9	-	-	-	7	-	-			-	-	-	<0.2	-	-	-	
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-	-	-			
					Bottom	2.9	0.3	53	21.5	21.5	7.8	7.8	24.7	24.7	88.0	87.9	6.7	6.7	8.2	-	8	-	85	-			<0.2	-	1.5	-				
						2.9	0.3	57	21.5	-	7.8	-	24.7	-	87.9	-	6.7	-	8.6	-	8	-	86	-			<0.2	-	1.5	-				
SR3	Cloudy	Moderate	13:53	9.8	Surface	1.0	0.1	220	21.7	21.7	7.8	7.8	21.6	21.6	88.6	88.6	6.9	-	5.3	-	5	-	-	-	822131	807576	-	-	-	-				
						1.0	0.1	228	21.7	-	7.8	-	21.6	-	88.6	-	6.9	-	5.4	-	5	-	-	-			-	-	-	-				
					Middle	4.9	0.1	241	21.3	21.3	7.8	7.8	25.6	25.6	87.0	87.0	6.6	6.8	9.5	9.0	5	5	-	-			-	-	-	-	-	-		
						4.9	0.2	263	21.3	21.3	7.8	7.8	25.6	25.6	87.0	87.0	6.6	-	9.6	-	5	-	-	-			-	-	-	-	-			
					Bottom	8.8	0.1	26	21.3	21.3	7.9	7.9	26.7	26.7	88.7	88.7	6.7	6.7	12.1	-	5	-	-	-			-	-	-	-	-	-		
						8.8	0.1	27	21.3	21.3	7.9	7.9	26.7	26.7	88.7	88.7	6.7	-	11.9	-	4	-	-	-			-	-	-	-	-			
SR4A	Cloudy	Calm	15:04	8.1	Surface	1.0	0.1	79	21.8	21.8	7.8	7.8	24.3	24.3	92.3	92.3	7.0	-	6.5	-	4	-	-	-	817211	807809	-	-	-	-				
						1.0	0.2	86	21.8	-	7.8	-	24.3	-	92.2	-	7.0	-	6.5	-	4	-	-	-			-	-	-	-				
					Middle	4.1	0.1	65	21.5	21.5	7.8	7.8	26.1	26.1	89.8	89.8	6.8	6.9	11.3	10.1	5	5	-	-			-	-	-	-	-	-		
						4.1	0.1	70	21.5	-	7.8	-	26.1	-	89.7	-	6.8	-	11.3	-	5	-	-	-			-	-	-	-	-			
					Bottom	7.1	0.2	68	21.4	21.4	7.8	7.8	26.3	26.3	88.9	88.9	6.7	6.7	12.5	-	6	-	-	-			-	-	-	-	-			
						7.1	0.2	74	21.4	21.4	7.8	7.8	26.3	26.3	88.8	88.8	6.7	-	12.6	-	6	-	-	-			-	-	-	-	-			
SR5A	Cloudy	Calm	15:20	3.8	Surface	1.0	0.0	318	22.3	22.3	7.8	7.8	25.4	25.4	92.9	92.9	7.0	-	6.7	-	6	-	-	-	816599	810693	-	-	-	-				
						1.0	0.0	341	22.3	-	7.8	-	25.4	-	92.8	-	7.0	-	6.8	-	6	-	-	-			-	-	-	-				
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	7.0	-	-	-	8.1	-	7			-	-	-	-	-	-		
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-	-	-			
					Bottom	2.8	0.1	347	21.7	21.7	7.8	7.8	26.1	26.1	90.0	90.0	6.8	6.8	9.4	-	7	-	-	-			-	-	-	-	-	-		
						2.8	0.1	351	21.7	-	7.8	-	26.1	-	90.0	-	6.8	-	9.4	-	7	-	-	-			-	-	-	-	-	-		
SR6A	Cloudy	Calm	15:47	4.2	Surface	1.0	0.0	313	21.6	21.6	7.8	7.8	24.6	24.6	87.7	87.7	6.7	-	4.7	-	5	-	-	-	817948	814729	-	-	-	-				
						1.0	0.0	327	21.6	-	7.8	-	24.6	-	87.7	-	6.7	-	4.8	-	5	-	-	-			-	-	-	-				
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	6.7	-	-	-	5.1	-	5			-	-	-	-	-	-		
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-	-	-			
					Bottom	3.2	0.1	262	21.5	21.5	7.7	7.7	25.1	25.1	86.8	86.8	6.6	6.6	5.4	-	4	-	-	-			-	-	-	-	-	-		
						3.2	0.1	287	21.5	-	7.7	-	25.2	-	86.8	-	6.6	-	5.5	-	4	-	-	-			-	-	-	-	-	-		
SR7	Cloudy	Moderate	15:59	14.6	Surface	1.0	1.0	82	21.5	21.5	7.9	7.9	24.6	24.6	88.9	88.8	6.8	-	3.0	-	3	-	-	-	823637	823731	-	-	-	-				
						1.0	1.0	83	21.5	-	7.9	-	24.6	-	88.7	-	6.8	-	3.0	-	3	-	-	-			-	-	-	-				
					Middle	7.3	0.6	68	21.4	21.4	7.9	7.9	26.5	26.5	87.6	87.6	6.6	6.7	4.2	4.4	6	5	-	-			-	-	-	-	-			
						7.3	0.7	74	21.4	-	7.9	-	26.5	-	87.5	-	6.6	-	4.2	-	6	-	-	-			-	-	-	-	-			
					Bottom	13.6	0.3	40	21.4	21.4	7.9	7.9	27.8	27.8	87.1	87.1	6.6	6.6	6.0	-	7	-	-	-			-	-	-	-	-			
						13.6	0.3	41	21.4	21.4	7.9	7.9	27.8	27.8	87.1	87.1	6.6	6.6	6.0															

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

Water Quality Monitoring

Water Quality Monitoring Results on 11 April 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA		
C1	Cloudy	Moderate	09:31	8.5	Surface	1.0	0.7	41	21.2	21.2	7.9	7.9	25.6	25.6	91.0	91.0	7.0		13.7		12		86		815601	804257	<0.2	1.6		
						1.0	0.7	42	21.2		7.9		25.6		91.0		7.0	6.9	14.0		13		86				<0.2	1.7		
					Middle	4.3	0.7	36	21.3	21.3	7.9	7.9	28.5	28.5	90.9	90.9	6.8		16.4		10		88				<0.2	1.6		
						4.3	0.7	38	21.3		7.9		28.5		90.9		6.8		16.2		10	11	89				<0.2	1.6		
					Bottom	7.5	0.7	38	21.3	21.3	7.8	7.8	29.6	29.6	90.5	90.5	6.8	6.8	18.6		10		91				<0.2	1.7		
						7.5	0.7	41	21.3		7.8		29.6		90.4		6.8		18.8		10		91				<0.2	1.5		
C2	Cloudy	Moderate	10:10	12.2	Surface	1.0	0.5	342	21.1	21.1	7.9	7.9	20.1	20.1	84.6	84.6	6.7		5.4		6		88		825705	806953	<0.2	1.9		
						1.0	0.6	358	21.1		7.9		20.2		84.6		6.7	6.7	5.4		6		89				<0.2	1.8		
					Middle	6.1	0.5	359	21.2	21.2	7.9	7.9	21.7	21.7	84.6	84.7	6.6		10.5		6	6	90				<0.2	2.0		
						6.1	0.5	330	21.2		7.9		21.7		84.7		6.6		10.6		6		91				<0.2	2.0		
					Bottom	11.2	0.4	11	21.2	21.2	7.9	7.9	23.1	23.1	84.1	84.0	6.5	6.5	13.0		5		93				<0.2	2.0		
						11.2	0.5	11	21.2		7.9		23.1		83.9		6.5		13.0		5		92				<0.2	1.9		
C3	Foggy	Moderate	07:48	11.1	Surface	1.0	0.8	259	21.4	21.4	7.9	7.9	23.9	23.9	87.4	87.4	6.7		4.6		6		87		822104	817820	<0.2	1.6		
						1.0	0.8	269	21.4		7.9		23.9		87.3		6.7	6.7	4.6		6		86				<0.2	1.4		
					Middle	5.6	0.7	248	21.3	21.3	7.9	7.9	26.0	26.0	86.3	86.3	6.6		5.7		6	6	91				<0.2	1.6		
						5.6	0.7	259	21.3		7.9		26.0		86.3		6.6		5.7		6		91				<0.2	1.5		
					Bottom	10.1	0.5	254	21.3	21.3	7.9	7.9	28.0	28.0	85.8	85.8	6.5	6.5	9.2		7		92				<0.2	1.5		
						10.1	0.6	263	21.3		7.9		28.0		85.8		6.5		9.1		7		92				<0.2	1.5		
IM1	Cloudy	Moderate	09:48	5.5	Surface	1.0	0.2	22	21.4	21.4	7.8	7.8	26.7	26.7	88.7	88.8	6.7		14.5		17		86		817966	807111	<0.2	1.1		
						1.0	0.3	24	21.4		7.8		26.7		88.8		6.7	6.7	14.5		17		87				<0.2	1.1		
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	<0.2	-
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	<0.2	-
					Bottom	4.5	0.1	59	21.3	21.3	7.7	7.7	27.0	27.0	88.2	88.2	6.7	6.7	17.8		17		89				<0.2	1.2		
						4.5	0.1	60	21.3		7.7		27.0		88.1		6.7		17.8		18		89				<0.2	1.3		
IM2	Cloudy	Moderate	09:55	8.0	Surface	1.0	0.3	12	21.3	21.3	7.9	7.9	27.1	27.1	90.8	90.8	6.9		16.4		8		85		818148	806162	<0.2	1.5		
						1.0	0.4	12	21.3		7.9		27.1		90.7		6.9	6.9	16.5		8		85				<0.2	1.3		
					Middle	4.0	0.3	11	21.3	21.3	7.9	7.9	27.3	27.3	90.1	90.2	6.8		18.6		8	7	88				<0.2	1.5		
						4.0	0.3	11	21.3		7.9		27.3		90.2		6.8		18.8		8		88				<0.2	1.4		
					Bottom	7.0	0.4	8	21.3	21.3	7.8	7.8	27.3	27.3	89.8	89.9	6.8	6.8	20.8		6		89				<0.2	1.6		
						7.0	0.4	8	21.3		7.8		27.3		89.9		6.8		20.8		6		89				<0.2	1.4		
IM3	Cloudy	Moderate	10:01	8.2	Surface	1.0	0.5	353	21.3	21.3	7.9	7.9	25.3	25.4	90.9	90.9	7.0		8.7		8		85		818787	805591	<0.2	1.5		
						1.0	0.6	359	21.3		7.9		25.4		90.9		6.9	6.9	8.8		8		85				<0.2	1.4		
					Middle	4.1	0.5	351	21.3	21.3	7.9	7.9	26.7	26.7	90.4	90.4	6.9		11.1		8	8	88				<0.2	1.5		
						4.1	0.5	323	21.3		7.9		26.7		90.4		6.9		11.2		8		89				<0.2	1.3		
					Bottom	7.2	0.5	342	21.3	21.3	7.8	7.8	28.0	28.0	89.3	89.3	6.7	6.7	15.8		9		89				<0.2	1.4		
						7.2	0.5	315	21.3		7.8		28.0		89.3		6.7		16.1		8		90				<0.2	1.4		
IM4	Cloudy	Moderate	10:09	8.8	Surface	1.0	0.9	351	21.3	21.3	7.9	7.9	24.3	24.3	91.2	91.2	7.0		7.1		8		84		819727	804600	<0.2	1.4		
						1.0	1.0	323	21.3		7.9		24.3		91.2		7.0	6.9	7.1		8		85				<0.2	1.4		
					Middle	4.4	0.8	357	21.3	21.3	7.9	7.9	28.1	28.1	89.9	90.0	6.8		10.2		8		87				<0.2	1.4		
						4.4	0.8	357	21.3		7.9		28.1		90.0		6.8		10.3		8		88				<0.2	1.5		
					Bottom	7.8	0.7	353	21.3	21.3	7.9	7.9	28.2	28.2	89.5	89.5	6.7	6.7	12.6		8		89				<0.2	1.4		
						7.8	0.8	325	21.3		7.9		28.2		89.5		6.7		12.5		8		90				<0.2	1.4		
IM5	Cloudy	Moderate	10:15	7.9	Surface	1.0	1.2	15	21.3	21.3	7.9	7.9	24.9	24.8	92.1	92.2	7.1		13.7		9		84		820729	804860	<0.2	1.3		
						1.0	1.2	15	21.3		7.9		24.8		92.2		7.1	7.0	13.6		9		84				<0.2	1.4		
					Middle	4.0	1.1	16	21.3	21.3	7.9	7.9	26.8	26.8	89.8	89.8	6.8		16.2		12	11	87				<0.2	1.5		
						4.0	1.1	17	21.3		7.9		26.8		89.8		6.8		16.1		12		87				<0.2	1.4		
					Bottom	6.9	0.9	20	21.3	21.3	7.9	7.9	26.9	26.9	89.4	89.5	6.8	6.8	19.8		13		89				<0.2	1.5		
						6.9	0.9	20	21.3		7.9		26.9		89.5		6.8		19.5		13		89				<0.2	1.4		
IM6	Cloudy	Moderate	10:23	8.2	Surface	1.0	0.1	259	21.2	21.2	7.9	7.9	19.3	19.3	88.3	88.3	7.0		5.3		5		85		821050	805830	<0.2	2.1		
						1.0	0.1	276	21.2		7.9		19.3		88.3		7.0	7.0	5.3		5		85				<0.2	1.8		
					Middle	4.1	0.2	47	21.3	21.3	7.9	7.9	22.6	22.6	88.6	88.6	6.9		8.7		5	5	88				<0.2	2.0		
						4.1	0.2	47	21.3		7.9		22.6		88.6		6.9		8.7		5		88				<0.2	1.9		
					Bottom	7.2	0.2	79	21.4	21.4	7.8	7.8	25.6	25.6	89.0	89.0	6.8	6.8	11.9		6		89				<0.2	2.0		
						7.2	0.2	82	21.4		7.8		25.6		89.0		6.8		11.6		6		89				<0.2	2.1		
IM7	Cloudy	Moderate	10:30	9.1	Surface	1.0	0.1	168	21.2	21.2	7.8	7.8	19.9	19.9	87.6	87.6	6.9		4.9		6		85		821358	806814	<0.2	2.0		
						1.0	0.1	176	21.2		7.8		19.9		87.6		6.9	6.9	4.9		6		85				<0.2	2.0		
					Middle	4.6	0.3	97	21.3	21.3	7.9	7.9	23.4	23.4	89.1	89.1	6.9		12.9		5	5	88				<0.2	2.1		
						4.6	0.3	100	21.3		7.9		23.5		89.0		6.9		12.9		5		88				<0.2	2.0		
					Bottom	8.1	0.2	106	21.3	21.3	7.9	7.9	25.3	25.3	88.8	88.8	6.8	6.8	15.2		4		89				<0.2	2.0		
						8.1	0.2	106	21.3		7.9		25.3		88.8		6.8		15.2		4		90				<0.2	2.1		
IM8	Cloudy	Moderate	09:15	8.2	Surface	1.0	0.3	60	21.2	21.2	7.8	7.8	19.5	19.5	87.3	87.3	6.9		3.7		6		86		821841	808155	<0.2	1.9		
						1.0	0.3	65	21.2		7.8		19.5		87.3		6.9	6.9	3.7		6		87				<0.2	2.0		
					Middle	4.1	0.2	68	21.2	21.2	7.8	7.8	20.9	20.9	86.3	86.4	6.8		7.7		5	5	89				<0.2	1.9		
						4.1	0.2	73	21.2		7.8		20.9		86.4		6.8		7.7		5		89				<0.2	2.0		
					Bottom	7.2	0.1	116	21.3	21.3	7.8	7.8	21.4	21.4	87.6	87.7	6.9	6.9	10.6		3		92				<0.2	2.0		
						7.2	0.2	121	21.3		7.8		21.4		87.7		6.9		10.5		3		93				<0.2	2.0		

Water Quality Monitoring

11 April 20

during Mid-Flood Tide

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**

Water Quality Monitoring

	Weather	Sea	Sample
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DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 14 April 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)						
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA							
IM9	Cloudy	Moderate	16:37	7.7	Surface	1.0	0.3	139	21.6	21.6	8.1	8.1	23.9	24.0	100.3	100.1	7.7	-	2.5	-	3	-	87	-	89	822112	808800	<0.2	1.5						
						1.0	0.3	151	21.6	-	8.1	8.1	24.1	-	99.8	-	7.7	-	2.6	-	3	-	87	-											
					Middle	3.9	0.2	115	21.5	21.5	8.1	8.1	24.7	24.7	97.9	97.7	7.5	-	3.2	-	4	-	88	-											
						3.9	0.2	123	21.5	-	8.1	8.1	24.7	-	97.5	-	7.5	-	3.5	-	3	-	89	-											
					Bottom	6.7	0.3	92	21.4	21.4	8.1	8.1	29.5	29.4	96.3	96.4	7.2	-	6.3	-	5	-	90	-											
						6.7	0.3	99	21.4	-	8.1	8.1	29.4	-	96.4	-	7.2	-	6.4	-	5	-	91	-											
IM10	Cloudy	Moderate	16:43	7.2	Surface	1.0	0.4	110	21.6	21.6	8.1	8.1	24.4	24.3	97.9	97.7	7.5	-	2.4	-	3	-	86	-	88	822399	809796	<0.2	1.4						
						1.0	0.4	119	21.6	-	8.1	8.1	24.2	-	97.5	-	7.5	-	2.4	-	3	-	87	-											
					Middle	3.6	0.4	94	21.4	21.4	8.1	8.1	25.5	25.5	96.3	96.3	7.3	-	2.5	-	4	-	88	-											
						3.6	0.4	96	21.4	-	8.1	8.1	25.5	-	96.3	-	7.3	-	2.5	-	3	-	87	-											
					Bottom	6.2	0.3	72	21.4	21.4	8.1	8.1	28.7	28.8	96.2	96.4	7.2	-	5.7	-	4	-	90	-											
						6.2	0.4	76	21.4	-	8.1	8.1	28.9	-	96.5	-	7.2	-	6.0	-	4	-	91	-											
IM11	Cloudy	Moderate	16:52	8.4	Surface	1.0	0.6	100	21.6	21.6	8.1	8.1	24.6	24.7	99.4	99.3	7.6	-	2.6	-	3	-	86	-	89	822051	811440	<0.2	1.5						
						1.0	0.6	103	21.6	-	8.1	8.1	24.7	-	99.1	-	7.6	-	2.6	-	3	-	87	-											
					Middle	4.2	0.6	93	21.4	21.4	8.1	8.1	25.5	25.5	92.9	92.7	7.1	-	4.0	-	4	-	89	-											
						4.2	0.6	97	21.4	-	8.1	8.1	25.5	-	92.4	-	7.0	-	4.4	-	4	-	88	-											
					Bottom	7.4	0.3	90	21.3	21.3	8.1	8.1	28.6	28.6	91.4	91.5	6.9	-	6.4	-	4	-	90	-											
						7.4	0.3	98	21.3	-	8.1	8.1	28.6	-	91.6	-	6.9	-	6.4	-	4	-	91	-											
IM12	Cloudy	Moderate	16:58	8.8	Surface	1.0	0.6	97	21.6	21.6	8.1	8.1	24.3	24.3	97.9	97.8	7.5	-	3.1	-	4	-	87	-	89	821467	812026	<0.2	1.4						
						1.0	0.6	105	21.6	-	8.1	8.1	24.3	-	97.7	-	7.5	-	3.4	-	4	-	86	-											
					Middle	4.4	0.5	86	21.3	21.3	8.1	8.1	27.1	27.1	91.9	91.8	7.0	-	4.3	-	4	-	88	-											
						4.4	0.5	91	21.3	-	8.1	8.1	27.1	-	91.7	-	6.9	-	4.4	-	4	-	89	-											
					Bottom	7.8	0.3	72	21.3	21.3	8.1	8.1	28.4	28.4	91.6	91.7	6.9	-	4.5	-	4	-	91	-											
						7.8	0.3	75	21.3	-	8.1	8.1	28.4	-	91.7	-	6.9	-	4.6	-	3	-	91	-											
SR1A	Cloudy	Moderate	17:15	5.0	Surface	1.0	-	-	21.5	21.5	8.1	8.1	25.7	25.7	92.6	92.5	7.0	-	3.7	-	3	-	-	-	-	819979	812657	-	-						
						1.0	-	-	21.5	-	8.1	8.1	25.7	-	92.3	-	7.0	-	3.8	-	3	-	-	-											
					Middle	2.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						-	-	-	-	-	-
						2.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						-	-	-	-	-	-
					Bottom	4.0	-	-	21.3	21.3	8.0	8.0	28.3	28.3	91.9	92.0	6.9	-	3.8	-	4	-	-	-											
						4.0	-	-	21.3	-	8.0	8.0	28.3	-	92.1	-	6.9	-	3.9	-	4	-	-	-											
SR2	Cloudy	Moderate	17:26	4.4	Surface	1.0	0.4	70	21.5	21.5	8.1	8.1	26.1	26.2	95.9	96.0	7.3	-	2.9	-	3	-	88	-	89	821450	814159	<0.2	1.4						
						1.0	0.5	76	21.5	-	8.1	8.1	26.2	-	96.0	-	7.3	-	2.9	-	4	-	88	-											
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						-	-	-	-	-	-
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						-	-	-	-	-	-
					Bottom	3.4	0.3	68	21.5	21.5	8.1	8.1	27.3	27.2	97.4	97.6	7.4	-	3.0	-	3	-	90	-											
						3.4	0.3	72	21.4	-	8.1	8.1	27.0	-	97.8	-	7.4	-	2.9	-	3	-	91	-											
SR3	Cloudy	Moderate	16:26	8.8	Surface	1.0	0.1	232	21.6	21.6	8.1	8.1	24.3	24.3	99.0	98.9	7.6	-	2.5	-	4	-	-	-	-	822151	807579	-	-						
						1.0	0.1	254	21.6	-	8.1	8.1	24.3	-	98.8	-	7.6	-	2.5	-	4	-	-	-											
					Middle	4.4	0.1	191	21.3	21.3	8.1	8.1	28.0	28.0	95.2	95.4	7.2	-	4.4	-	4	-	-	-											
						4.4	0.1	194	21.3	-	8.1	8.1	28.0	-	95.5	-	7.2	-	4.6	-	3	-	-	-											
					Bottom	7.8	0.1	121	21.3	21.3	8.1	8.1	29.3	29.4	97.4	97.5	7.3	-	7.3	-	3	-	-	-											
						7.8	0.1	131	21.3	-	8.1	8.1	29.4	-	97.6	-	7.3	-	7.3	-	3	-	-	-											
SR4A	Cloudy	Moderate	17:43	9.2	Surface	1.0	0.1	57	21.6	21.6	8.0	8.0	27.5	27.5	103.2	103.2	7.7	-	7.2	-	3	-	-	-	-	817185	807795	-	-						
						1.0	0.1	57	21.6	-	8.0	8.0	27.5	-	103.2	-	7.7	-	7.1	-	3	-	-	-											
					Middle	4.6	0.1	74	21.3	21.3	8.0	8.0	30.5	30.5	96.3	96.3	7.2	-	8.8	-	3	-	-	-											
						4.6	0.1	78	21.3	-	8.0	8.0	30.5	-	96.3	-	7.2	-	8.7	-	3	-	-	-											
					Bottom	8.2	0.1	71	21.3	21.3	7.9	7.9	30.8	30.8	95.1	95.1	7.1	-	11.8	-	4	-	-	-											
						8.2	0.1	74	21.3	-	7.9	7.9	30.8	-	95.1	-	7.1	-	11.8	-	4	-	-	-											
SR5A	Cloudy	Moderate	18:00	3.9	Surface	1.0	0.0	61	21.6	21.6	8.1	8.1	27.4	27.4	100.9	100.8	7.6	-	5.8	-	5	-	-	-	-	816577	810682	-	-						
						1.0	0.0	63	21.6	-	8.1	8.1	27.4	-	100.7	-	7.6	-	5.8	-	5	-	-	-											
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						-	-	-	-	-	-
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						-	-	-	-	-	-
					Bottom	2.9	0.0	168	21.3	21.3	8.0	8.0	28.1	28.1	96.6	96.6	7.3	-	7.2	-	7	-	-	-											
						2.9	0.0	170	21.3	-	8.0	8.0	28.1	-	96.5	-	7.3	-	7.2	-	6	-	-	-											
SR6A	Cloudy	Moderate	18:29	4.0	Surface	1.0	0.0	31	21.3	21.3	7.9	7.9	26.8	26.8	90.5	90.5	6.9	-	7.9	-	7	-	-	-	-	817976	814725	-	-						
						1.0	0.0	32	21.3	-	7.9	7.9	26.8	-	90.5	-	6.9	-	8.3	-	6	-	-	-											
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						-	-	-	-	-	-
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						-	-	-	-	-	-
					Bottom	3.0	0.0	263	21.2	21.2	7.9	7.9	28.1	28.1	86.9	87.0	6.6	-	11.7	-	9	-	-	-											
						3.0	0.0	287	21.2	-	7.9	7.9	28.1	-	87.0	-	6.6	-	12.9	-	9	-	-	-											
SR7	Cloudy	Moderate	18:10	16.4	Surface	1.0	0.6	53	21.3	21.3	8.1	8.1	27.2	27.2	96.8	96.6	7.3	-	1.9	-	<2	-	-	-	-	823658	823734	-	-						
						1.0	0.6	53	21.3	-	8.1	8.1	27.2	-	96.4	-	7.3	-	1.9	-	<2	-	-	-											
					Middle	8.2	0.3	26	21.3	21.3	8.1	8.1	29.6	29.6	93.3	93.3	7.0	-	1.9	-	2	-	-	-											
						8.2	0.3	26	21.3	-	8.1	8.1	29.7	-	93.3	-	7.0	-	2.0	-	2	-	-	-											
					Bottom	15.4	0.2	356	21.2	21.2	8.1	8.1	30.3	30.3	93.7	93.8	7.0	-	2.5	-	2	-	-	-											
						15.4	0.2	328	21.2	-	8.1	8.1	30.3	-	93.8	-	7.0	-	2.5	-	3	-	-	-											
SR8	Cloudy	Moderate	17:07	5.4	Surface	1.0	-	-	22.1	22.1	8.0	8.0	25.0	25.0	97.0	96.9	7.3	-	3.4	-	3	-	-	-	-	820379	811645	-	-						
						1.0	-	-	22.1	-	8.0	8.0	25.1	-	96.8	-	7.3	-	3.4	-	2	-	-	-											
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						-	-	-	-	-	-
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						-	-	-	-	-	-
					Bottom	4.4	-	-	21.8	21.9	8.0	8.0	26.0	26.0	96.2	96.2	7.3	-	3.8	-	3	-	-	-											
						4.4	-	-	21.9	-	8.0	8.0	26.0	-	96.2	-	7.3	-	3.4	-	3	-	-	-											

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

Water Quality Monitoring

Water Quality Monitoring Results on 14 April 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)					
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA	Value	DA
C1	Cloudy	Moderate	10:52	8.2	Surface	1.0	0.4	29	21.1	21.1	8.0	8.0	28.6	28.6	97.9	97.9	7.4		4.8		4		87		815638	804244	<0.2		1.2					
						1.0	0.4	30	21.1		8.0		28.6		97.9		7.4		4.8		4		86				<0.2		1.1					
					Middle	4.1	0.3	30	21.2	21.2	8.0	8.0	31.7	31.7	96.2	96.2	7.1	7.3	9.1		4	4	89				<0.2		1.3	1.2				
						4.1	0.3	32	21.2		8.0		31.7		96.2		7.1		9.4		4		89				<0.2		1.2					
					Bottom	7.2	0.2	37	21.2	21.2	8.0	8.0	31.8	31.8	95.2	95.2	7.0	7.0	13.4		3		91				<0.2		1.2					
						7.2	0.2	39	21.2		8.0		31.8		95.2		7.0		13.0		3		91				<0.2		1.3					
C2	Cloudy	Moderate	11:23	12.5	Surface	1.0	0.3	337	21.2	21.2	8.1	8.1	22.0	22.0	93.1	93.0	7.3		3.4		4		86		825663	806948	<0.2		1.4					
						1.0	0.3	345	21.2	21.2	8.1		22.0		92.8		7.3		3.6		4		86				<0.2		1.4					
					Middle	6.3	0.5	4	21.3	21.3	8.1	8.1	28.1	28.2	92.5	92.6	7.0	7.2	6.7		5	5	87				<0.2		1.4	1.4				
						6.3	0.5	4	21.3		8.1		28.2		92.6		7.0		7.4		5		88				<0.2		1.3					
					Bottom	11.5	0.2	13	21.3	21.3	8.1	8.1	29.0	29.0	93.0	93.0	7.0	7.0	13.5		5		90				<0.2		1.3					
						11.5	0.3	13	21.3		8.1		29.0		93.0		7.0		13.7		6		90				<0.2		1.4					
C3	Cloudy	Moderate	09:39	12.2	Surface	1.0	0.2	230	21.1	21.1	8.0	8.0	26.1	26.0	93.4	93.4	7.1		2.8		4		86		822127	817789	<0.2		1.0					
						1.0	0.2	244	21.1	21.1	8.0		25.9		93.4		7.2		2.7		4		87				<0.2		1.4					
					Middle	6.1	0.3	252	21.1	21.2	8.0	8.0	28.2	28.2	90.5	90.4	6.8	7.0	2.4		3	3	88				<0.2		1.4	1.3				
						6.1	0.3	275	21.2		8.0		28.2		90.2		6.8		2.8		3		88				<0.2		1.4					
					Bottom	11.2	0.3	254	21.2	21.2	8.0	8.0	31.0	31.0	89.2	89.3	6.6	6.6	8.1		3		91				<0.2		1.3					
						11.2	0.3	254	21.2		8.0		31.0		89.3		6.6		8.0		2		90				<0.2		1.4					
IM1	Cloudy	Moderate	11:12	5.3	Surface	1.0	0.2	12	21.1	21.1	8.0	8.0	27.7	27.7	96.6	96.5	7.3		5.0		3		87		817929	807121	<0.2		1.1					
						1.0	0.3	13	21.1	21.1	8.0		27.7		96.3		7.3		5.0		4		87				<0.2		1.1					
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	7.3		-		-		-				<0.2		-	1.1			
						-	-	-	-	-	-	-	-	-	-	-	-			-		-		-				-		-				
					Bottom	4.3	0.2	1	21.3	21.3	8.0	8.0	30.1	30.1	93.8	93.8	7.0	7.0	10.0		4		89				<0.2		1.1					
						4.3	0.2	1	21.3		8.0		30.1		93.8		7.0		10.2		4		89				<0.2		1.1					
IM2	Cloudy	Moderate	11:19	7.3	Surface	1.0	0.2	338	21.1	21.1	8.1	8.1	27.9	27.9	99.3	99.3	7.5		4.9		4		85		818177	806160	<0.2		1.0					
						1.0	0.2	311	21.1	21.1	8.1		27.9		99.3		7.5		4.9		4		86				<0.2		1.0					
					Middle	3.7	0.3	9	21.1	21.1	8.0	8.0	28.4	28.4	98.2	98.2	7.4	7.5	4.9		6	5	88				<0.2		0.9	1.0				
						3.7	0.3	9	21.1		8.0		28.4		98.2		7.4		4.9		5		89				<0.2		1.0					
					Bottom	6.3	0.2	356	21.2	21.2	8.0	8.0	30.6	30.6	96.0	96.1	7.1	7.1	6.5		6		90				<0.2		1.0					
						6.3	0.2	328	21.2		8.0		30.6		96.1		7.1		6.3		6		90				<0.2		1.0					
IM3	Cloudy	Moderate	11:26	7.5	Surface	1.0	0.4	348	21.0	21.0	8.1	8.1	27.1	27.1	99.4	99.4	7.6		4.6		5		85		818760	805584	<0.2		1.1					
						1.0	0.4	355	21.0	21.0	8.1		27.1		99.4		7.6		4.7		4		85				<0.2		1.0					
					Middle	3.8	0.3	341	21.1	21.1	8.1	8.1	28.9	28.9	97.3	97.3	7.3	7.5	4.4		5	6	88				<0.2		1.0	1.0				
						3.8	0.4	344	21.1		8.1		28.9		97.3		7.3		4.5		6		88				<0.2		1.0					
					Bottom	6.5	0.3	325	21.2	21.2	8.0	8.0	30.8	30.8	95.6	95.6	7.1	7.1	9.8		8		89				<0.2		1.0					
						6.5	0.3	343	21.2		8.0		30.8		95.6		7.1		9.8		8		90				<0.2		1.0					
IM4	Cloudy	Moderate	11:35	8.4	Surface	1.0	0.6	350	20.6	20.6	8.1	8.1	26.2	26.2	99.2	99.2	7.6		4.3		6		85		819742	804624	<0.2		1.0					
						1.0	0.7	356	20.6	20.6	8.1		26.2		99.1		7.6		4.3		6		86				<0.2		1.0					
					Middle	4.2	0.6	336	21.2	21.2	8.1	8.1	29.8	29.8	95.8	95.8	7.2	7.4	5.2		4		88				<0.2		0.9	1.0				
						4.2	0.6	309	21.2		8.1		29.8		95.8		7.2		5.2		4		88				<0.2		1.0					
					Bottom	7.4	0.4	2	21.3	21.3	8.1	8.1	31.2	31.2	94.7	94.7	7.0	7.0	12.0		3		90				<0.2		1.0					
						7.4	0.4	2	21.3		8.1		31.2		94.6		7.0		12.0		4		89				<0.2		1.0					
IM5	Cloudy	Moderate	11:42	7.6	Surface	1.0	0.8	0	20.9	21.0	8.1	8.1	26.7	26.7	97.3	97.2	7.4		4.7		4		85		820716	804858	<0.2		1.1					
						1.0	0.9	0	21.0	21.0	8.1		26.7		97.0		7.4		5.0		4		85				<0.2		1.1					
					Middle	3.8	0.6	10	21.3	21.3	8.1	8.1	30.1	30.1	95.3	95.3	7.1	7.3	8.1		4	5	88				<0.2		1.1	1.1				
						3.8	0.6	10	21.3		8.1		30.1		95.3		7.1		8.1		4		87				<0.2		1.0					
					Bottom	6.6	0.5	25	21.3	21.3	8.1	8.0	30.4	30.4	94.9	94.9	7.0	7.1	10.1		6		89				<0.2		1.0					
						6.6	0.5	27	21.3		8.0		30.4		94.9		7.1		10.1		5		89				<0.2		1.0					
IM6	Cloudy	Moderate	11:51	7.5	Surface	1.0	0.1	161	21.1	21.1	8.1	8.1	24.5	24.5	95.7	95.7	7.4		5.0		5		84		821052	805838	<0.2		1.0					
						1.0	0.1	161	21.1	21.1	8.1		24.6		95.6		7.4		5.0		4		85				<0.2		1.0					
					Middle	3.8	0.2	82	21.3	21.3	8.1	8.1	29.9	29.9	94.1	94.1	7.0	7.2	9.7		4	4	87				<0.2		1.0	1.0				
						3.8	0.2	88	21.3		8.1		29.9		94.1		7.0		9.7		4		87				<0.2		1.0					
					Bottom	6.5	0.2	104	21.3	21.3	8.1	8.1	30.2	30.2	94.4	94.4	7.0	7.0	9.5		4		88				<0.2		1.0					
						6.5	0.2	108	21.3		8.1		30.2		94.4		7.0		9.6		4		89				<0.2		1.0					
IM7	Cloudy	Moderate	12:00	8.3	Surface	1.0	0.1	289	21.2	21.2	8.1	8.1	25.0	25.0	94.0	94.1	7.2		4.9		4		85		821334	806814	<0.2		1.5					
						1.0	0.1	305	21.2	21.2	8.1		25.0		94.1		7.2		4.9		4		85				<0.2		1.5					
					Middle	4.2	0.2	87	21.2	21.2	8.1	8.1	27.9	27.9	94.6	94.6	7.1	7.2	6.4		5	6	87				<0.2		1.5	1.5				
						4.2	0.2	90	21.2		8.1		27.9		94.5		7.1		6.4		6		87				<0.2		1.5					
					Bottom	7.3	0.3	99	21.3	21.3	8.1	8.1	30.0	30.0	94.0	94.0	7.0	7.0	9.7		7		89				<0.2		1.6					
						7.3	0.3	99	21.3		8.1		30.0		94.0		7.0		9.6		7		90				<0.2		1.1					
IM8	Cloudy	Moderate	11:00	8.0	Surface	1.0	0.2	264	21.2	21.2	8.1	8.1	23.8	23.8	93.4	93.4	7.2		3.7		5		86		821806	808157	<0.2		1.4					
						1.0	0.3	264	21.2	21.2	8.1		23.8		93.3		7.2		3.8		4		87				<0.2		1.3					
					Middle	4.0	0.1	334	21.3	21.3	8.1	8.1	28.0	28.1	93.6	93.6	7.1	7.1	6.6		5	5	89				<0.2		1.4	1.4				
						4.0	0.1	340	21.3		8.1		28.1		93.6		7.0		7.0		5		87				<0.2		1.4					
					Bottom	7.0	0.1	56	21.3	21.3	8.1	8.1	28.5	28.5	93.9	94.0	7.1	7.1	8.9		5		90				<0.2		1.3					
						7.0	0.1	57	21.3		8.1		28.5		94.0		7.1		8.8		5		91				<0.2		1.3					

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

Water Quality Monitoring

Water Quality Monitoring Results on 14 April 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)		
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA			
IM9	Cloudy	Moderate	10:54	7.5	Surface	1.0	0.2	253	21.3	21.3	8.0	8.0	25.2	25.2	91.7	91.6	7.0		4.8		5		87		822114	808814	<0.2		1.3		
						1.0	0.2	254	21.3		8.0		25.2		91.5		7.0	7.0	4.8		4		86				<0.2		1.3		
					Middle	3.8	0.2	267	21.3	21.3	8.0	8.0	26.0	26.1	90.7	90.7	6.9		5.9		4	4	88				<0.2	<0.2	1.3	1.3	
						3.8	0.3	284	21.3		8.0		26.3		90.7		6.9		5.9		4		88				<0.2		1.4		
					Bottom	6.5	0.2	274	21.3	21.3	8.0	8.0	27.4	27.4	91.7	91.9	6.9	7.0	5.8		2		90				<0.2		1.3		
						6.5	0.2	288	21.3		8.0		27.4		92.0		7.0		6.5		3		91				<0.2		1.3		
IM10	Cloudy	Moderate	10:47	7.8	Surface	1.0	0.5	297	21.3	21.3	8.0	8.0	25.0	25.0	91.4	91.3	7.0		4.8		4		86		822400	809780	<0.2		1.3		
						1.0	0.5	310	21.3		8.0		25.0		91.2		7.0	6.9	4.8		4		85				<0.2		1.4		
					Middle	3.9	0.4	297	21.3	21.3	8.0	8.0	27.0	27.0	88.8	88.7	6.7		7.2		3	3	88				<0.2	<0.2	1.4	1.4	
						3.9	0.4	308	21.3		8.0		27.0		88.6		6.7		7.3		3		87				<0.2		1.3		
					Bottom	6.8	0.3	263	21.3	21.3	8.0	8.0	28.6	28.6	88.7	88.8	6.7	6.7	8.0		2		90				<0.2		1.3		
						6.8	0.3	268	21.3		8.0		28.6		88.9		6.7		8.0		2		91				<0.2		1.4		
IM11	Cloudy	Moderate	10:37	8.0	Surface	1.0	0.3	289	21.2	21.2	8.1	8.1	23.8	23.8	92.5	92.4	7.2		3.2		2		86		822039	811438	<0.2		1.4		
						1.0	0.4	299	21.2		8.1		23.8		92.2		7.1	6.9	3.2		2		87				<0.2		1.3		
					Middle	4.0	0.4	276	21.3	21.3	8.0	8.0	28.0	28.0	89.2	89.2	6.7		5.1		4	4	88				<0.2	<0.2	1.4	1.4	
						4.0	0.4	294	21.3		8.0		28.0		89.2		6.7		5.0		4		89				<0.2		1.3		
					Bottom	7.0	0.4	256	21.2	21.2	8.0	8.0	28.9	28.9	89.4	89.5	6.7	6.7	6.0		5		90				<0.2		1.4		
						7.0	0.4	265	21.2		8.0		28.9		89.6		6.7		5.9		5		90				<0.2		1.3		
IM12	Cloudy	Moderate	10:31	8.2	Surface	1.0	0.3	278	21.2	21.2	8.0	8.0	24.2	24.2	91.1	91.0	7.0		3.1		5		86		821482	812032	<0.2		1.4		
						1.0	0.3	284	21.2		8.1		24.1		90.8		7.0		3.2		4		87				<0.2		1.4		
					Middle	4.1	0.4	265	21.3	21.3	8.0	8.0	28.1	28.0	89.0	89.0	6.7	6.9	3.7		4	4	88				<0.2	<0.2	1.4	1.4	
						4.1	0.4	272	21.3		8.0		28.0		89.0		6.7		3.7		3		88				<0.2		1.4		
					Bottom	7.2	0.4	273	21.2	21.2	8.0	8.0	29.8	29.8	88.4	88.6	6.6	6.6	12.7		3		90				<0.2		1.3		
						7.2	0.4	280	21.2		8.0		29.8		88.7		6.6		13.0		2		91				<0.2		1.4		
SR1A	Cloudy	Moderate	10:13	5.4	Surface	1.0	-	-	21.0	21.0	8.0	8.0	23.9	23.9	92.6	92.6	7.2		3.5		5		-		819972	812656	-	-	-	-	
						1.0	-	-	21.0		8.0		23.9		92.5		7.2	7.2	3.5		4		-				-	-	-	-	
					Middle	2.7	-	-	-	-	-	-	-	-	-	-	-							-				-	-	-	-
						2.7	-	-	-	-	-	-	-		-		-							-				-	-	-	-
					Bottom	4.4	-	-	21.0	21.0	8.0	8.0	25.2	25.2	91.5	91.6	7.0	7.1	3.5		4		-				-		-	-	-
						4.4	-	-	21.0		8.0		25.2		91.7		7.1		3.5		4		-				-		-	-	
SR2	Cloudy	Moderate	10:00	4.9	Surface	1.0	0.1	309	21.3	21.3	8.0	8.0	23.7	23.8	90.2	90.1	7.0		4.5		5		87		821468	814147	<0.2		1.3		
						1.0	0.1	315	21.3		8.0		23.8		89.9		6.9	7.0	4.9		5		88				<0.2		1.4		
					Middle	-	-	-	-	-	-	-	-	-	-	-	-							-				<0.2		-	-
						-	-	-	-	-	-		-		-		-							-				<0.2		-	-
					Bottom	3.9	0.1	275	21.2	21.2	8.0	8.0	27.8	27.8	90.2	90.6	6.8	6.8	6.5		4		90				<0.2		1.3		
						3.9	0.1	276	21.2		8.0		27.8		90.6		6.8		6.4		3		90				<0.2		1.4		
SR3	Cloudy	Moderate	11:05	8.8	Surface	1.0	0.2	272	21.0	21.0	8.0	8.0	22.8	22.8	95.0	95.0	7.4		3.0		5		-		822131	807568	-	-	-	-	
						1.0	0.2	284	21.0		8.1		22.8		95.0		7.4	7.3	3.0		6		-				-	-	-	-	
					Middle	4.4	0.1	307	21.2	21.2	8.1	8.1	26.6	26.6	93.5	93.6	7.1		3.6		4	5	-				-	-	-	-	
						4.4	0.1	309	21.2		8.1		26.6		93.6		7.1		3.8		5		-				-	-	-	-	
					Bottom	7.8	0.2	22	21.3	21.3	8.1	8.1	29.0	29.0	94.5	94.6	7.1	7.1	6.3		5		-				-		-	-	-
						7.8	0.2	23	21.3		8.1		29.0		94.6		7.1		6.3		4		-				-		-	-	
SR4A	Cloudy	Calm	10:29	9.4	Surface	1.0	0.0	344	21.0	21.1	7.9	7.9	28.0	28.0	95.0	95.0	7.2		6.0		6		-		817189	807827	-	-	-	-	
						1.0	0.0	355	21.1		7.9		28.0		94.9		7.2	7.1	6.0		6		-				-	-	-	-	
					Middle	4.7	0.1	223	21.2	21.2	7.9	7.9	29.3	29.3	93.0	93.0	7.0		8.9		7	7	-				-	-	-	-	
						4.7	0.1	237	21.2		7.9		29.3		93.0		7.0		8.8		7		-				-	-	-	-	
					Bottom	8.4	0.0	74	21.2	21.2	7.9	7.9	29.8	29.8	92.2	92.3	6.9	6.9	9.1		8		-				-		-	-	
						8.4	0.0	81	21.2		7.9		29.8		92.3		6.9		9.1		8		-				-		-	-	
SR5A	Cloudy	Calm	10:12	3.5	Surface	1.0	0.1	318	20.9	20.9	7.8	7.8	27.1	27.1	95.1	95.1	7.2		5.1		4		-		816574	810714	-	-	-	-	
						1.0	0.1	331	20.9		7.8		27.1		95.0		7.2	7.2	5.1		4		-				-	-	-	-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-							-				-	-	-	-
						-	-	-	-	-	-		-		-		-							-				-	-	-	
					Bottom	2.5	0.1	320	21.0	21.0	7.9	7.9	27.3	27.3	94.4	94.4	7.2	7.2	6.1		7		-				-		-	-	-
						2.5	0.1	338	20.9		7.9		27.3		94.4		7.2		6.1		6		-				-		-	-	
SR6A	Cloudy	Calm	09:44	4.1	Surface	1.0	0.0	22	21.2	21.2	7.9	7.9	26.8	26.8	90.1	90.1	6.8		4.6		4		-		817955	814721	-	-	-	-	
						1.0	0.0	24	21.2		7.9		26.8		90.0		6.8	6.8	4.7		5		-				-	-	-	-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-							-				-	-	-	-
						-	-	-	-	-	-		-		-		-							-				-	-	-	
					Bottom	3.1	0.0	338	21.3	21.3	7.9	7.9	27.5	27.5	90.3	90.4	6.8	6.8	5.2		4		-				-		-	-	-
						3.1	0.0	359	21.3		7.9		27.5		90.4		6.8		5.2		4		-				-		-	-	
SR7	Cloudy	Moderate	09:09	16.4	Surface	1.0	0.0	259	21.0	21.0	8.0	8.0	28.7	28.7	91.7	91.6	6.9		2.2		3		-		823622	823743	-	-	-	-	
						1.0	0.0	259	21.0		8.0		28.7		91.5		6.9	6.8	2.2		2		-				-	-	-	-	
					Middle	8.2	0.1	89	21.2	21.2	8.0	8.0	30.6	30.6	90.1	90.1	6.7		2.3		3	3	-				-	-	-	-	
						8.2	0.1	93	21.2		8.0		30.6		90.0		6.7		2.5		4		-				-	-	-	-	
					Bottom	15.4	0.1	171	21.2	21.2	8.0	8.0	31.8	31.8	89.8	89.9	6.6	6.6	2.7		4		-				-		-	-	
						15.4	0.1	175	21.2		8.0		31.8		89.9		6.6		2.8		4		-				-		-	-	
SR8	Cloudy	Moderate	10:23	5.5	Surface	1.0	-	-	21.0	21.0	8.0	8.0	22.8	22.8	93.5	93.4	7.3		3.3		4		-		820373	811638	-	-	-	-	
						1.0	-	-	21.0		8.0		22.8		93.3		7.3	7.3	3.3		4		-				-	-	-	-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-							-				-	-	-	-
						-	-	-	-	-	-		-		-		-							-				-	-	-	
					Bottom	4.5	-	-	21.2	21.2	8.0	8.0	26.																		

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

Water Quality Monitoring

Water Quality Monitoring Results on 16 April 20 during Mid-Ebb Tide

Monitoring Station	Weather	Sea	Sampling	Water	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)						
	Condition	Condition	Time	Depth (m)					Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA			
C1	Cloudy	Moderate	20:19	8.2	Surface	1.0	0.4	209	21.5	21.5	8.1	8.1	25.8	25.8	102.5	102.4	7.8		2.8		6		86		815606	804238	<0.2		1.3	1.3					
						1.0	0.5	217	21.5		8.1		25.8		102.3		7.8		2.8		6		85				<0.2		1.3						
					Middle	4.1	0.4	213	21.5	21.5	8.1	8.1	27.9	27.9	99.0	99.0	7.4	7.6	3.8		7	6	88				<0.2		1.4						
						4.1	0.5	231	21.5		8.1		27.9		99.0		7.4		3.8		6		88				<0.2		1.3						
					Bottom	7.2	0.3	227	21.5	21.5	8.1	8.1	28.3	28.3	99.2	99.3	7.5	7.5	4.8		7		89				<0.2		1.4						
						7.2	0.3	231	21.5		8.1		28.3		99.3		7.5		4.8		6		90				<0.2		1.3						
C2	Cloudy	Moderate	18:57	12.4	Surface	1.0	0.1	200	23.0	23.0	8.1	8.1	21.0	20.9	110.5	110.4	8.4		2.5		5		86		825684	806962	<0.2		1.7	1.6					
						1.0	0.2	201	23.0		8.1		20.9		110.2		8.4	7.6	2.5		4		86				<0.2		1.6						
					Middle	6.2	0.3	172	21.5	21.5	8.0	8.0	28.2	28.2	89.7	89.6	6.7		3.4		6	6	88				<0.2		1.5						
						6.2	0.3	180	21.5		8.0		28.2		89.5		6.7		3.6		7		88				<0.2		1.6						
					Bottom	11.4	0.2	179	21.3	21.3	8.0	8.0	30.8	30.8	83.6	83.7	6.2	6.2	5.7		7		89				<0.2		1.7						
						11.4	0.2	192	21.3		8.0		30.8		83.7		6.2		5.5		6		89				<0.2		1.6						
C3	Cloudy	Moderate	20:44	11.8	Surface	1.0	0.1	157	22.5	22.5	8.1	8.1	24.8	24.8	104.1	104.0	7.8		2.4		5		84		822123	817796	<0.2		1.7	1.8					
						1.0	0.1	166	22.5		8.1		24.8		103.8		7.8	7.5	2.4		5		84				<0.2		1.7						
					Middle	5.9	0.1	59	21.7	21.7	8.1	8.1	28.2	28.2	95.2	95.2	7.1	2.1	2.1		4	5	89				<0.2		1.8						
						5.9	0.1	61	21.7		8.1		28.2		95.1		7.1		2.2		5		89				<0.2		1.8						
					Bottom	10.8	0.1	84	21.4	21.4	8.1	8.1	30.8	30.8	91.4	91.5	6.8	6.8	3.8		5		89				<0.2		1.8						
						10.8	0.1	88	21.4		8.1		30.8		91.6		6.8		3.8		4		90				<0.2		1.8						
IM1	Cloudy	Moderate	20:01	4.6	Surface	1.0	0.2	152	21.8	21.8	8.1	8.1	27.0	27.0	100.7	100.7	7.6		2.3		5		86		817926	807142	<0.2		1.5	1.4					
						1.0	0.2	167	21.8		8.1		27.0		100.6		7.6	7.6	2.3		6		87				<0.2		1.3						
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-		-	<0.2		-	
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-		-	-	-	-	
					Bottom	3.6	0.1	205	21.7	21.7	8.1	8.1	28.7	28.7	97.8	97.9	7.3	7.3	5.0		6		89				<0.2		1.3						
						3.6	0.1	207	21.7		8.1		28.7		98.0		7.3		4.5		6		89				<0.2		1.3						
IM2	Cloudy	Moderate	19:54	6.7	Surface	1.0	0.2	178	21.8	21.8	8.1	8.1	27.6	27.6	102.6	102.5	7.7		2.6		6		86		818172	806174	<0.2		1.3	1.3					
						1.0	0.2	187	21.8		8.1		27.6		102.4		7.7	7.7	2.5		5		86				<0.2		1.3						
					Middle	3.4	0.2	178	21.8	21.8	8.1	8.1	27.7	27.7	101.7	101.7	7.6		2.5		6	6	88				<0.2		1.3						
						3.4	0.2	179	21.8		8.1		27.7		101.6		7.6		2.5		5		88				<0.2		1.3						
					Bottom	5.7	0.2	135	21.8	21.8	8.1	8.1	28.2	28.2	101.6	101.7	7.6	7.6	2.5		6		90				<0.2		1.3						
						5.7	0.2	140	21.8		8.1		28.2		101.7		7.6		2.5		6		90				<0.2		1.3						
IM3	Cloudy	Moderate	19:47	6.9	Surface	1.0	0.3	123	21.8	21.8	8.1	8.1	24.7	24.7	99.3	99.4	7.6		2.4		6		86		818773	805584	<0.2		1.4	1.4					
						1.0	0.3	125	21.8		8.1		24.8		99.4		7.6	7.6	2.4		6		87				<0.2		1.4						
					Middle	3.5	0.3	137	21.8	21.8	8.1	8.1	26.5	26.5	100.2	100.3	7.6		2.6		6	6	89				<0.2		1.4						
						3.5	0.3	146	21.8		8.1		26.5		100.3		7.6		2.6		6		89				<0.2		1.4						
					Bottom	5.9	0.2	130	21.9	21.9	8.1	8.1	27.3	27.3	99.5	99.6	7.5	7.5	3.1		7		90				<0.2		1.4						
						5.9	0.2	136	21.9		8.1		27.3		99.6		7.5		3.1		6		91				<0.2		1.4						
IM4	Cloudy	Moderate	19:38	7.8	Surface	1.0	0.6	177	21.8	21.8	8.1	8.1	25.5	25.5	99.7	99.8	7.6		3.0		6		86		819748	804619	<0.2		1.3	1.4					
						1.0	0.6	179	21.8		8.1		25.6		99.8		7.6	7.6	3.2		6		86				<0.2		1.4						
					Middle	3.9	0.6	193	21.8	21.8	8.1	8.1	27.5	27.5	100.8	100.8	7.6		5.1		6	6	88				<0.2		1.4						
						3.9	0.6	206	21.8		8.1		27.5		100.8		7.6		5.2		5		89				<0.2		1.4						
					Bottom	6.8	0.4	163	21.8	21.8	8.1	8.1	29.0	29.1	100.8	100.8	7.5	7.5	4.9		5		90				<0.2		1.3						
						6.8	0.4	164	21.8		8.1		29.1		100.8		7.5		5.0		5		91				<0.2		1.3						
IM5	Cloudy	Moderate	19:31	7.4	Surface	1.0	0.4	212	21.7	21.7	8.1	8.1	24.7	24.7	100.5	100.6	7.7		2.8		6		86		820756	804882	<0.2		1.5	1.4					
						1.0	0.4	215	21.7		8.1		24.7		100.7		7.7	7.7	2.9		5		86				<0.2		1.5						
					Middle	3.7	0.4	213	21.8	21.8	8.2	8.2	27.1	27.1	101.9	101.9	7.7		4.5		6	6	89				<0.2		1.3						
						3.7	0.4	219	21.8		8.2		27.1		101.9		7.7		4.4		5		89				<0.2		1.3						
					Bottom	6.4	0.3	192	21.8	21.8	8.1	8.1	29.0	29.0	101.7	101.7	7.6	7.6	5.7		6		90				<0.2		1.4						
						6.4	0.3	210	21.8		8.1		29.0		101.7		7.6		5.6		5		90				<0.2		1.5						
IM6	Cloudy	Moderate	19:24	7.1	Surface	1.0	0.3	228	21.7	21.7	8.1	8.1	25.6	25.6	98.9	99.0	7.5		3.5		6		86		821066	805804	<0.2		1.5	1.5					
						1.0	0.3	242	21.7		8.1		25.6		99.0		7.5	7.5	3.5		5		87				<0.2		1.5						
					Middle	3.6	0.3	230	21.7	21.7	8.1	8.1	27.9	28.0	100.1	100.1	7.5		3.8		7	6	88				<0.2		1.4						
						3.6	0.3	238	21.7		8.1		28.0		100.1		7.5		3.8		6		88				<0.2		1.5						
					Bottom	6.1	0.2	206	21.8	21.8	8.2	8.2	30.8	30.8	102.7	102.7	7.6	7.6	7.7		7		90				<0.2		1.5						
						6.1	0.2	212	21.8		8.2		30.8		102.6		7.5		7.1		6		90				<0.2		1.5						
IM7	Cloudy	Moderate	19:16	8.3	Surface	1.0	0.1	217	21.8	21.8	8.1	8.1	25.9	25.9	98.4	98.4	7.4		3.6		6		86		821339	806827	<0.2		1.5	1.6					
						1.0	0.1	225	21.8		8.1		25.9		98.4		7.4	7.5	3.7		5		86				<0.2		1.7						
					Middle	4.2	0.3	204	21.8	21.8	8.1	8.1	27.1	27.1	99.9	100.0	7.5		4.7		6	6	88				<0.2		1.6						
						4.2	0.3	211	21.8		8.1		27.1		100.0		7.5		4.8		5		89				<0.2		1.5						
					Bottom	7.3	0.1	173	21.8	21.8	8.1	8.1	32.0	32.0	101.4	101.4	7.4	7.4	8.5		6		90				<0.2		1.6						
						7.3	0.1	183	21.8		8.1		32.0		101.4		7.4		8.6		5		90				<0.2		1.6						
IM8	Cloudy	Moderate	19:18	7.8	Surface	1.0	0.2	121	23.1	23.1	8.1	8.1	21.7	21.7	109.4	109.2	8.3		3.1		6		84		821806	808124	<0.2		1.6	1.6					
						1.0	0.2	124	23.1		8.1		21.8		109.0		8.2	7.8	3.4		7		85				<0.2		1.5						
					Middle	3.9	0.2	140	21.7	21.7	8.1	8.1	28.0	28.0	98.8	98.8	7.4		5.6		5	6	88				<0.2		1.6						
						3.9	0.2	142	21.7		8.1		28.0		98.7		7.4		5.8		5		88				<0.2		1.6						
					Bottom	6.8	0.1	57	21.6	21.6	8.1	8.1	29.5	29.5	98.6	98.7	7.3	7.3	7.2		6		89				<0.2		1.6						
						6.8	0.2	57	21.6		8.1		29.5		98.8		7.3																		

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

Water Quality Monitoring

Water Quality Monitoring Results on 16 April 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grd (Northing)	Coordinate HK Grd (Easting)	Chromium (µg/L)		Nickel (µg/L)					
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA	Value	DA
IM9	Cloudy	Moderate	19:25	7.4	Surface	1.0	0.2	116	22.8	22.7	8.1	8.1	22.4	22.4	109.7	109.6	8.3	8.1	2.8		7		85		822109	808800	<0.2		1.6					
						1.0	0.2	126	22.6		8.1	8.1	22.5		109.4		8.3		2.9		6		85				<0.2		1.6					
					Middle	3.7	0.3	121	21.9	21.9	8.1	8.1	25.1	25.1	103.0	103.0	7.8	8.1	5.1	6.1	6	6	88	88			<0.2	<0.2	1.5	1.6				
						3.7	0.3	129	21.9		8.1	8.1	25.1		102.9		7.8		5.8		4		89				<0.2	<0.2	1.6					
					Bottom	6.4	0.3	74	21.6	21.6	8.1	8.1	28.6	28.6	98.9	99.1	7.4	7.4	9.9	6	6	90	90	<0.2			<0.2	1.5	1.5					
						6.4	0.3	77	21.6		8.1	8.1	28.5		99.2		7.4		9.9	5	5	90		<0.2			<0.2	1.5						
IM10	Cloudy	Moderate	19:32	6.7	Surface	1.0	0.5	118	23.0	23.0	8.1	8.1	21.1	21.1	109.2	109.0	8.3	8.1	2.3		6		85		822377	809796	<0.2		1.5					
						1.0	0.5	122	23.0		8.1	8.1	21.1		108.8		8.3		2.2		6		85				<0.2	<0.2	1.6					
					Middle	3.4	0.5	110	21.8	21.8	8.1	8.1	25.7	25.7	97.9	97.8	7.4	7.9	5.8	6.7	5	5	89	89			<0.2	<0.2	1.5	1.6				
						3.4	0.5	115	21.7		8.1	8.1	25.8		97.6		7.4		6.2		5		89				<0.2	<0.2	1.6					
					Bottom	5.7	0.4	96	21.6	21.6	8.1	8.1	27.7	27.7	98.4	98.6	7.4	7.4	12.1	5	5	90	90	<0.2			<0.2	1.6	1.6					
						5.7	0.4	99	21.6		8.1	8.1	27.7		98.8		7.4		11.9	5	5	90		<0.2			<0.2	1.6						
IM11	Cloudy	Moderate	19:43	8.2	Surface	1.0	0.6	116	23.0	23.0	8.1	8.1	21.6	21.6	107.7	107.6	8.2	8.1	2.2		4		87		822063	811443	<0.2		1.6					
						1.0	0.6	123	23.0		8.1	8.1	21.6		107.4		8.1		2.2		5		87				<0.2	<0.2	1.8					
					Middle	4.1	0.4	113	21.6	21.6	8.1	8.1	27.2	27.2	94.1	94.0	7.1	7.6	5.2	5.2	5	5	89	89			<0.2	<0.2	1.8	1.7				
						4.1	0.4	119	21.6		8.1	8.1	27.3		93.8		7.1		5.6		5		89				<0.2	<0.2	1.7					
					Bottom	7.2	0.3	114	21.6	21.6	8.1	8.1	27.8	27.8	94.7	95.1	7.2	7.2	7.9	5	5	89	89	<0.2			<0.2	1.8	1.7					
						7.2	0.3	115	21.6		8.1	8.1	27.8		95.5		7.2		7.9	4	4	90		<0.2			<0.2	1.7						
IM12	Cloudy	Moderate	19:49	9.3	Surface	1.0	0.5	112	22.8	22.8	8.1	8.1	22.1	22.1	108.9	108.8	8.3	8.1	2.3		5		86		821470	812064	<0.2		1.7					
						1.0	0.5	119	22.8		8.1	8.1	22.1		108.7		8.3		2.4		5		86				<0.2	<0.2	1.6	1.6				
					Middle	4.7	0.4	112	21.8	21.8	8.1	8.1	26.0	26.1	96.5	96.1	7.3	7.8	4.1	3.9	4	5	88	88			<0.2	<0.2	1.7	1.7				
						4.7	0.5	115	21.8		8.1	8.1	26.3		95.7		7.2		4.3		6		88				<0.2	<0.2	1.7					
					Bottom	8.3	0.4	105	21.6	21.6	8.1	8.1	27.5	27.5	94.4	94.5	7.1	7.1	5.1	5	5	89	89	<0.2			<0.2	1.7	1.7					
						8.3	0.4	114	21.6		8.1	8.1	27.5		94.6		7.1		4.9	6	6	89		<0.2			<0.2	1.8						
SR1A	Cloudy	Calm	20:12	5.0	Surface	1.0	-	-	22.6	22.6	8.1	8.1	24.0	24.0	102.3	102.3	7.7	7.7	3.7		5		-	-	819973	812663	-	-	-	-				
						1.0	-	-	22.6		8.1	8.1	24.0		102.2		7.7		3.8		6		-	-			-	-	-	-				
					Middle	2.5	-	-	-	-	-	-	-	-	-	-	7.7	7.7	-	-	-	-	-	-			-	-	-	-	-	-	-	
						2.5	-	-	-	-	-	-	-	-	-	-			-		-	-	-	-			-	-	-	-	-	-	-	
					Bottom	4.0	-	-	21.8	21.9	8.1	8.1	26.5	26.5	94.2	94.2	7.1	7.1	4.5	5	5	-	-	-			-	-	-	-	-	-	-	-
						4.0	-	-	21.9		8.1	8.1	26.5		94.2		7.1		4.6	6	6	-	-	-			-	-	-	-	-	-	-	-
SR2	Cloudy	Moderate	20:24	4.6	Surface	1.0	0.4	91	22.4	22.4	8.1	8.1	23.8	23.8	104.1	104.0	7.9	7.9	2.4		5		84		821477	814170	<0.2		1.6					
						1.0	0.4	93	22.4		8.1	8.1	23.8		103.9		7.9		2.4		5		84				<0.2	<0.2	1.8	1.7				
					Middle	-	-	-	-	-	-	-	-	-	-	-	7.9	7.9	-	-	-	-	-	-			-	-	-	-	-	-	-	
						-	-	-	-	-	-	-	-	-	-	-			-		-	-	-	-			-	-	-	-	-	-	-	
					Bottom	3.6	0.3	91	21.7	21.7	8.1	8.1	27.0	27.0	97.5	97.7	7.3	7.4	3.3	6	6	87	88	<0.2			<0.2	1.7	1.7					
						3.6	0.3	91	21.7		8.1	8.1	27.0		97.9		7.4		3.3	5	5	88		<0.2			<0.2	1.7						
SR3	Cloudy	Moderate	19:13	9.0	Surface	1.0	0.0	201	22.3	22.3	8.1	8.1	22.0	22.0	108.1	107.9	8.3	8.1	2.7		6		-	-	822170	807569	-	-	-	-				
						1.0	0.0	208	22.2		8.1	8.1	22.0		107.7		8.3		2.8		5		-	-			-	-	-	-	-	-		
					Middle	4.5	0.2	158	21.7	21.7	8.1	8.1	26.6	26.6	98.4	98.3	7.4	7.9	3.2	6.3	6	6	-	-			-	-	-	-	-	-	-	
						4.5	0.2	171	21.7		8.1	8.1	26.6		98.2		7.4		3.3		6		-	-			-	-	-	-	-	-	-	
					Bottom	8.0	0.0	149	21.6	21.6	8.1	8.1	29.5	29.5	97.1	97.2	7.2	7.2	13.1	5	5	-	-	-			-	-	-	-	-	-	-	
						8.0	0.0	151	21.6		8.1	8.1	29.5		97.3		7.2		12.6	5	5	-	-	-			-	-	-	-	-	-	-	
SR4A	Cloudy	Calm	20:42	8.8	Surface	1.0	0.2	259	21.8	21.8	8.1	8.1	27.3	27.3	101.1	101.1	7.6	7.6	2.8		6		-	-	817188	807803	-	-	-	-				
						1.0	0.2	259	21.8		8.1	8.1	27.3		101.0		7.6		2.8		7		-	-			-	-	-	-	-	-		
					Middle	4.4	0.1	65	21.8	21.8	8.1	8.1	27.9	27.9	100.8	100.8	7.6	7.6	3.7	3.5	6	6	-	-			-	-	-	-	-	-		
						4.4	0.1	71	21.8		8.1	8.1	27.9		100.8		7.6		3.7		5		-	-			-	-	-	-	-	-		
					Bottom	7.8	0.0	61	21.8	21.8	8.1	8.1	29.5	29.5	100.3	100.3	7.4	7.4	4.1	5	5	-	-	-			-	-	-	-	-	-		
						7.8	0.0	66	21.8		8.1	8.1	29.5		100.3		7.4		4.1	5	5	-	-	-			-	-	-	-	-	-	-	
SR5A	Cloudy	Calm	21:01	3.7	Surface	1.0	0.1	308	21.8	21.8	8.1	8.1	28.5	28.5	101.3	101.3	7.6	7.6	2.3		6		-	-	816578	810709	-	-	-	-				
						1.0	0.1	312	21.8		8.1	8.1	28.5		101.3		7.6		2.2		7		-	-			-	-	-	-	-	-		
					Middle	-	-	-	-	-	-	-	-	-	-	-	7.6	7.6	-	-	-	-	-	-			-	-	-	-	-	-		
						-	-	-	-	-	-	-	-	-	-	-			-		-	-	-	-			-	-	-	-	-	-		
					Bottom	2.7	0.1	304	21.8	21.8	8.1	8.1	29.9	29.9	100.8	100.8	7.5	7.5	4.0	6	6	-	-	-			-	-	-	-	-	-		
						2.7	0.1	317	21.8		8.1	8.1	29.9		100.7		7.5		4.0	7	7	-	-	-			-	-	-	-	-	-	-	
SR6A	Cloudy	Calm	21:29	3.9	Surface	1.0	0.0	316	21.8	21.8	8.1	8.1	27.9	28.0	101.3	101.3	7.6	7.6	2.2		9		-	-	817980	814722	-	-	-	-				
						1.0	0.0	341	21.8		8.1	8.1	28.0		101.3		7.6		2.2		10		-	-			-	-	-	-	-	-		
					Middle	-	-	-	-	-	-	-	-	-	-	-	7.6	7.6	-	-	-	-	-	-			-	-	-	-	-	-		
						-	-	-	-	-	-	-	-	-	-	-			-		-	-	-	-			-	-	-	-	-	-		
					Bottom	2.9	0.0	240	21.8	21.8	8.1	8.1	28.4	28.4	101.1	101.1	7.6	7.6	3.2	10	10	-	-	-			-	-	-	-	-	-	-	
						2.9	0.0	246	21.8		8.1	8.1	28.4		101.1		7.6		3.2	9	9	-	-	-			-	-	-	-	-	-	-	
SR7	Cloudy	Moderate	21:13	15.9	Surface	1.0	0.4	109	22.5	22.5	8.1	8.1	25.2	25.2	106.4	106.4	8.0	7.8	1.7		4		-	-	823654	823735	-	-	-	-				
						1.0	0.5	117	22.5		8.1	8.1	25.2		106.3		8.0		1.7		3		-	-			-	-	-	-	-	-		
					Middle	8.0	0.4	95	22.0	22.0	8.1	8.1	26.8	26.9	101.2	100.9	7.6	1.9	5	4	-	-	-	-			-	-	-	-	-	-		
						8.0	0.5	99	22.0		8.1	8.1	26.9		100.6		7.5		1.9		5		-	-			-	-	-	-	-	-		
					Bottom	14.9	0.4	92	21.7	21.7	8.1	8.1	29.0	28.9	96.6	96.7	7.2	7.2	2.4	5														

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

Water Quality Monitoring

Water Quality Monitoring Results on 16 April 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA		
C1	Fine	Moderate	08:30	8.3	Surface	1.0	0.1	29	21.7	21.7	8.1	8.1	24.2	24.2	89.5	89.6	6.9		3.0		4		84		87	815622	804261	<0.2	1.5	
						1.0	0.1	30	21.7	21.7	8.1	8.1	24.2	24.2	89.7	89.6	6.9		3.1		4		84					<0.2	1.5	
					Middle	4.2	0.1	43	21.8	21.8	8.1	8.1	25.7	25.7	90.6	90.6	6.9	6.9	6.4		5	5	87					<0.2	1.4	
						4.2	0.1	47	21.8	21.8	8.1	8.1	25.6	25.6	90.6	90.6	6.9		6.2		4		87					<0.2	1.5	
					Bottom	7.3	0.1	54	21.8	21.8	8.1	8.1	26.8	26.8	93.1	93.1	7.0	7.0	10.5		5		89					<0.2	1.5	
						7.3	0.1	54	21.8	21.8	8.1	8.1	26.8	26.8	93.1	93.1	7.0	7.0	10.8		5		89					<0.2	1.5	
C2	Cloudy	Moderate	09:31	12.0	Surface	1.0	0.1	88	21.7	21.7	8.1	8.1	23.0	23.0	94.0	93.8	7.2		3.2		4		86		89	825698	806936	<0.2	2.1	
						1.0	0.1	89	21.7	21.7	8.1	8.1	23.0	23.0	93.5	93.8	7.2		3.2		4		86					<0.2	1.9	
					Middle	6.0	0.1	157	21.5	21.5	8.1	8.0	27.0	27.0	89.5	89.4	6.8	7.0	3.9		4	4	89					<0.2	2.1	
						6.0	0.1	159	21.4	21.4	8.0	8.0	27.0	27.0	89.2	89.4	6.7		4.4		5		89					<0.2	2.0	
					Bottom	11.0	0.2	156	21.3	21.3	8.0	8.0	30.4	30.4	84.6	84.8	6.3	6.3	8.3		4		90					<0.2	2.0	
						11.0	0.3	161	21.3	21.3	8.0	8.0	30.4	30.4	84.9	84.8	6.3		8.7		5		91					<0.2	2.0	
C3	Cloudy	Moderate	07:24	12.2	Surface	1.0	0.2	228	21.3	21.3	8.1	8.1	25.1	25.1	95.2	95.1	7.3		1.6		3		82		86	822087	817784	<0.2	1.6	
						1.0	0.2	250	21.3	21.3	8.1	8.1	25.0	25.0	95.0	95.1	7.3		1.6		4		83					<0.2	1.6	
					Middle	6.1	0.3	254	21.3	21.3	8.1	8.1	31.3	31.3	90.9	91.0	6.7	7.0	2.6		3	4	84					<0.2	1.7	
						6.1	0.4	267	21.3	21.3	8.1	8.1	31.3	31.3	91.0	91.0	6.7		2.8		4		85					<0.2	1.8	
					Bottom	11.2	0.2	272	21.2	21.2	8.1	8.1	31.4	31.4	91.7	91.8	6.8	6.8	3.9		6		90					<0.2	1.8	
						11.2	0.2	290	21.2	21.2	8.1	8.1	31.4	31.4	91.9	91.8	6.8		4.0		5		90					<0.2	1.8	
IM1	Fine	Moderate	08:10	4.9	Surface	1.0	0.0	315	21.8	21.8	8.1	8.1	26.9	26.9	94.2	94.2	7.1		5.8		4		84		86	817950	807137	<0.2	1.4	
						1.0	0.0	332	21.8	21.8	8.1	8.1	26.9	26.9	94.1	94.2	7.1		6.2		5		84					<0.2	1.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	7.1		-		-		-					<0.2	-
						-	-	-	-	-	-	-	-	-	-	-	-		-		-		-					<0.2	-	
					Bottom	3.9	0.0	8	21.9	21.9	8.1	8.1	27.6	27.6	93.8	93.8	7.0	7.0	3.7		6		87					<0.2	1.4	
						3.9	0.0	8	21.9	21.9	8.1	8.1	27.6	27.6	93.8	93.8	7.0		3.6		6		87					<0.2	1.5	
IM2	Fine	Moderate	08:01	6.8	Surface	1.0	0.1	312	21.8	21.8	8.0	8.0	24.9	24.9	89.5	89.5	6.8		2.3		5		85		87	818178	806170	<0.2	1.5	
						1.0	0.1	317	21.8	21.8	8.0	8.0	24.9	24.9	89.4	89.6	6.8	6.8	2.3		4		85					<0.2	1.5	
					Middle	3.4	0.2	37	21.8	21.8	8.1	8.1	25.6	25.6	89.5	89.6	6.8	6.8	2.7		4	4	87					<0.2	1.6	
						3.4	0.2	38	21.8	21.8	8.1	8.1	25.6	25.6	89.6	89.6	6.8		2.8		4		87					<0.2	1.6	
					Bottom	5.8	0.1	42	21.8	21.8	8.1	8.1	27.5	27.5	90.3	90.3	6.8	6.8	4.8		4		89					<0.2	1.6	
						5.8	0.1	45	21.8	21.8	8.1	8.1	27.5	27.5	90.3	90.3	6.8		4.8		5		89					<0.2	1.6	
IM3	Fine	Moderate	07:56	7.0	Surface	1.0	0.1	307	21.9	21.9	8.1	8.1	24.6	24.6	93.0	93.0	7.1		3.2		6		84		87	818788	805579	<0.2	1.4	
						1.0	0.1	311	21.9	21.9	8.1	8.1	24.6	24.6	93.0	93.0	7.1		3.2		6		84					<0.2	1.4	
					Middle	3.5	0.1	41	21.9	21.9	8.1	8.1	27.2	27.2	92.8	92.8	7.0	7.1	3.4		5	6	86					<0.2	1.4	
						3.5	0.1	42	21.9	21.9	8.1	8.1	27.2	27.2	92.8	92.8	7.0		3.5		6		87					<0.2	1.4	
					Bottom	6.0	0.1	53	21.9	21.9	8.1	8.1	30.0	30.0	92.5	92.5	6.8	6.8	3.6		7		89					<0.2	1.4	
						6.0	0.1	54	21.9	21.9	8.1	8.1	30.0	30.0	92.5	92.5	6.8		3.7		8		90					<0.2	1.4	
IM4	Fine	Moderate	07:44	7.6	Surface	1.0	0.2	9	21.9	21.9	8.1	8.1	26.6	26.6	93.6	93.6	7.0		5.1		4		85		87	819738	804587	<0.2	1.7	
						1.0	0.2	9	21.9	21.9	8.1	8.1	26.6	26.6	93.6	93.6	7.0		5.3		5		85					<0.2	1.6	
					Middle	3.8	0.1	42	21.9	21.9	8.1	8.1	27.5	27.5	93.3	93.3	7.0	7.0	5.3		4	5	86					<0.2	1.7	
						3.8	0.1	45	21.9	21.9	8.1	8.1	27.5	27.5	93.3	93.3	7.0		5.5		5		87					<0.2	1.6	
					Bottom	6.6	0.1	38	21.8	21.8	8.1	8.1	28.4	28.4	93.1	93.1	6.9	6.9	8.6		5		89					<0.2	1.6	
						6.6	0.1	38	21.8	21.8	8.1	8.1	28.5	28.4	93.1	93.1	6.9		8.9		5		90					<0.2	1.7	
IM5	Fine	Moderate	07:37	7.2	Surface	1.0	0.3	340	21.8	21.9	8.1	8.1	23.4	23.4	93.5	93.5	7.2		5.0		5		84		86	820735	804867	<0.2	1.8	
						1.0	0.3	355	21.9	21.9	8.1	8.1	23.4	23.4	93.5	93.5	7.2		5.0		6		84					<0.2	1.8	
					Middle	3.6	0.1	332	21.9	21.9	8.1	8.1	28.5	28.5	93.3	93.3	6.9	7.1	5.2		5	5	86					<0.2	1.8	
						3.6	0.1	343	21.9	21.9	8.1	8.1	28.5	28.5	93.3	93.3	6.9		5.3		4		86					<0.2	1.8	
					Bottom	6.2	0.2	34	21.8	21.8	8.1	8.1	29.4	29.4	93.0	93.0	6.9	6.9	8.4		4		89					<0.2	1.8	
						6.2	0.2	34	21.8	21.8	8.1	8.1	29.4	29.4	92.9	93.0	6.9		8.4		5		89					<0.2	1.8	
IM6	Fine	Moderate	07:30	7.1	Surface	1.0	0.1	214	21.8	21.8	8.1	8.1	22.6	22.6	93.8	93.7	7.2		2.5		5		85		87	821066	805837	<0.2	2.1	
						1.0	0.1	215	21.8	21.8	8.1	8.1	22.6	22.6	93.6	93.7	7.2		2.8		4		85					<0.2	2.0	
					Middle	3.6	0.2	74	21.7	21.7	8.1	8.1	24.6	24.6	92.5	92.5	7.1	7.2	3.4		5	86		<0.2				2.1		
						3.6	0.2	81	21.7	21.7	8.1	8.1	24.6	24.6	92.5	92.5	7.1		3.2		5		87					<0.2	2.0	
					Bottom	6.1	0.2	67	21.7	21.7	8.1	8.1	27.2	27.2	92.7	92.8	7.0	7.0	6.4		6		90					<0.2	2.0	
						6.1	0.2	67	21.7	21.7	8.1	8.1	27.2	27.2	92.8	92.8	7.0		5.9		6		90					<0.2	2.0	
IM7	Fine	Moderate	07:21	8.0	Surface	1.0	0.1	288	21.7	21.7	8.1	8.1	21.7	21.7	92.8	92.8	7.2		2.1		6		86		88	821333	806830	<0.2	2.2	
						1.0	0.1	306	21.7	21.7	8.1	8.1	21.7	21.7	92.8	92.8	7.2		2.1		7		85					<0.2	2.2	
					Middle	4.0	0.2	89	21.7	21.7	8.1	8.1	29.0	29.0	92.6	92.6	6.9	7.1	4.1		7	7	88					<0.2	2.2	
						4.0	0.3	91	21.7	21.7	8.1	8.1	29.0	29.0	92.5	92.6	6.9		4.2		7		87					<0.2	2.2	
					Bottom	7.0	0.3	93	21.6	21.6	8.0	8.0	31.3	31.3	92.7	92.8	6.8	6.8	7.5		7		90					<0.2	2.2	
						7.0	0.3	99	21.6	21.6	8.0	8.1	31.3	31.3	92.9	92.8	6.8		7.5		7		89					<0.2	2.3	
IM8	Cloudy	Moderate	09:06	7.8	Surface	1.0	0.1	61	21.8	21.8	8.0	8.0	21.8	21.7	93.6	93.6	7.3		3.8		8		85		88	821831	808146	<0.2	2.0	
						1.0	0.1	66	21.7	21.7	8.0	8.0	21.7	21.7	93.5	93.5	7.2	7.2	3.7		7		86					<0.2	1.9	
					Middle	3.9	0.2	89	21.6	21.6	8.1	8.1	24.9	24.8	93.4	93.5	7.1		3.3		6		88					<0.2	2.0	
						3.9	0.2	96	21.6	21.6	8.1	8.1	24.8	24.8	93.6	93.5	7.1		3.3		7		89					<0.2	2.2	
					Bottom	6.8	0.2	82	21.7	21.7	8.1	8.1	26.6	26.6	96.5	96.5	7.3	7.3	5.4		6		89					<0.2	2.1	
						6.8	0.2	85	21.7	21.7	8.1	8.1	26.6	26.6	96.5	96.5	7.3		5.4		6		89					<0.2	2.1	

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

Water Quality Monitoring

Water Quality Monitoring Results on 16 April 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)		
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA			
IM9	Cloudy	Moderate	08:59	7.4	Surface	1.0	0.3	95	21.7	21.7	8.0	8.0	23.3	23.2	92.4	92.3	7.1		3.7		7		85		87	822087	808828	<0.2	2.0	2.0	
						1.0	0.3	102	21.7		8.0		23.2		92.2		7.1	7.1	3.7		6		86								
					Middle	3.7	0.3	95	21.6	21.6	8.1	8.1	24.6	24.6	92.2	92.3	7.0		4.0	4.7	6	6	86								
						3.7	0.3	102	21.6		8.1		24.6		92.4		7.1		4.2		6		87								
					Bottom	6.4	0.3	77	21.6	21.6	8.1	8.1	26.7	26.7	94.0	94.2	7.1	7.1	6.0		5		88								
						6.4	0.3	80	21.6		8.1		26.8		94.4		7.1		6.5		5		88								
IM10	Cloudy	Moderate	08:50	7.2	Surface	1.0	0.4	106	21.7	21.7	8.0	8.0	23.0	23.0	92.7	92.7	7.1		3.5		4		85		87	822400	809777	<0.2	2.0	2.0	
						1.0	0.4	107	21.7		8.0		23.0		92.7		7.1	7.1	3.5		4		85								
					Middle	3.6	0.3	90	21.7	21.7	8.0	8.0	24.7	24.7	92.4	92.5	7.0		3.3	4.2	3	4	86								
						3.6	0.3	91	21.7		8.1		24.7		92.5		7.0		3.3		3		87								
					Bottom	6.2	0.3	98	21.6	21.6	8.1	8.1	26.5	26.5	92.5	92.6	7.0	7.0	5.8		4		89								
						6.2	0.3	102	21.6		8.1		26.5		92.7		7.0		5.9		5		89								
IM11	Cloudy	Moderate	08:36	7.6	Surface	1.0	0.3	119	21.7	21.7	8.1	8.1	22.6	22.6	95.3	95.2	7.4		2.7		5		84		86	822045	811450	<0.2	1.6	1.7	
						1.0	0.3	130	21.7		8.1		22.6		95.0		7.3	7.2	2.6		4		85								
					Middle	3.8	0.4	107	21.6	21.6	8.1	8.1	25.4	25.4	92.1	91.9	7.0		3.2	3.9	6	5	85								
						3.8	0.4	116	21.6		8.1		25.4		91.7		7.0		3.5		6		85								
					Bottom	6.6	0.2	107	21.4	21.4	8.0	8.0	29.1	29.1	91.7	91.9	6.8	6.9	5.7		6		89								
						6.6	0.2	110	21.4		8.0		29.1		92.1		6.9		5.8		5		89								
IM12	Cloudy	Moderate	08:26	9.4	Surface	1.0	0.3	123	21.8	21.8	8.1	8.1	21.9	21.9	94.6	94.4	7.3		3.3		3		82		84	821457	812033	<0.2	1.6	1.6	
						1.0	0.3	125	21.8		8.1		21.9		94.1		7.3	7.1	3.2		4		82								
					Middle	4.7	0.1	98	21.7	21.7	8.1	8.1	27.6	27.6	91.2	91.1	6.8		3.1	5.0	5	5	84								
						4.7	0.1	107	21.6		8.1		27.5		90.9		6.8		3.5		4		85								
					Bottom	8.4	0.1	345	21.4	21.4	8.1	8.0	29.6	29.6	89.2	89.3	6.6	6.7	8.5		6		85								
						8.4	0.1	317	21.4		8.0		29.6		89.4		6.7		8.4		6		86								
SR1A	Cloudy	Calm	08:03	5.3	Surface	1.0	-	-	21.7	21.7	8.1	8.1	23.4	23.4	93.7	93.6	7.2		2.5		4		-		-	819972	812655	-	-	-	
						1.0	-	-	21.7		8.1		23.3		93.5		7.2	7.2	2.5		3		-								
					Middle	2.7	-	-	-	-	-	-	-	-	-	-	-			5.2		4		-							
						2.7	-	-	-	-	-	-	-		-		-					-		-							
					Bottom	4.3	-	-	21.4	21.4	8.0	8.0	28.9	28.9	91.4	91.8	6.8	6.9	7.7		3		-								
						4.3	-	-	21.4		8.0		28.9		92.1		6.9		8.0		4		-								
SR2	Cloudy	Moderate	07:51	4.9	Surface	1.0	0.2	355	21.8	21.8	8.1	8.1	22.2	22.2	96.6	96.6	7.5		2.8		4		84		86	821483	814151	<0.2	1.8	1.8	
						1.0	0.2	357	21.8		8.1		22.2		96.5		7.4	7.5	2.8		4		84								
					Middle	-	-	-	-	-	-	-	-	-	-	-	-			3.0		4		-							
						-	-	-	-	-	-	-	-		-		-					-		-							
					Bottom	3.9	0.2	322	21.5	21.5	8.1	8.1	28.4	28.4	92.9	93.2	7.0	7.0	3.3		4		88								
						3.9	0.2	343	21.5		8.1		28.5		93.4		7.0		3.3		4		89								
SR3	Cloudy	Moderate	09:12	9.3	Surface	1.0	0.1	160	21.6	21.6	8.0	8.0	23.4	23.5	91.9	91.9	7.1		3.7		4		-		-	822133	807559	-	-	-	
						1.0	0.1	174	21.6		8.0		23.5		91.9		7.1	7.1	3.7		5		-								
					Middle	4.7	0.0	151	21.6	21.6	8.1	8.1	25.8	25.8	92.6	92.7	7.0		3.9	5.4	5	6	-								
						4.7	0.0	157	21.6		8.1		25.8		92.8		7.0		4.1		6		-								
					Bottom	8.3	0.1	1	21.7	21.7	8.1	8.1	27.3	27.4	95.4	95.5	7.2	7.2	8.7		6		-								
						8.3	0.1	1	21.7		8.1		27.4		95.5		7.2		8.7		7		-								
SR4A	Fine	Calm	08:52	9.0	Surface	1.0	0.3	75	21.7	21.7	8.1	8.1	24.3	24.3	90.2	90.3	6.9		2.7		5		-		-	817175	807819	-	-	-	
						1.0	0.3	75	21.7		8.1		24.3		90.4		6.9	7.0	2.7	4.8	6	6	-								
					Middle	4.5	0.2	64	21.7	21.7	8.1	8.1	25.3	25.3	91.9	92.0	7.0		3.2		5		-								
						4.5	0.3	67	21.7		8.1		25.4		92.0		7.0		3.3		6		-								
					Bottom	8.0	0.2	61	21.8	21.8	8.1	8.1	27.3	27.3	93.2	93.2	7.0	7.0	8.5		6		-								
						8.0	0.2	66	21.8		8.1		27.3		93.2		7.0		8.5		6		-								
SR5A	Fine	Calm	09:10	3.7	Surface	1.0	0.1	344	21.8	21.8	8.1	8.1	25.3	25.3	94.0	94.0	7.1		2.6		5		-		-	816584	810707	-	-	-	
						1.0	0.2	352	21.8		8.1		25.3		93.9		7.1	7.1	2.6		4		-								
					Middle	-	-	-	-	-	-	-	-	-	-	-	-			3.3		5		-							
						-	-	-	-	-	-	-	-		-		-					-		-							
					Bottom	2.7	0.1	330	21.9	21.9	8.1	8.1	27.7	27.7	93.4	93.4	7.0	7.0	4.0		6		-								
						2.7	0.1	338	21.9		8.1		27.7		93.4		7.0		4.0		5		-								
SR6A	Fine	Calm	09:39	4.1	Surface	1.0	0.0	147	21.8	21.9	8.1	8.1	27.4	27.4	94.1	94.1	7.1		2.7		4		-		-	817982	814756	-	-	-	
						1.0	0.0	150	21.9		8.1		27.5		94.1		7.1	7.1	2.7		4		-								
					Middle	-	-	-	-	-	-	-	-	-	-	-	-			2.8		4		-							
						-	-	-	-	-	-	-	-		-		-					-		-							
					Bottom	3.1	0.0	269	21.9	21.9	8.1	8.1	28.2	28.2	94.1	94.1	7.0	7.0	2.8		4		-								
						3.1	0.0	283	21.9		8.1		28.2		94.1		7.0		2.8		3		-								
SR7	Cloudy	Moderate	06:53	16.1	Surface	1.0	0.0	323	21.4	21.4	8.0	8.0	30.0	30.0	91.0	91.0	6.8		1.6		4		-		-	823614	823730	-	-	-	
						1.0	0.0	351	21.4		8.0		30.0		91.0		6.8	6.7	1.6		3		-								
					Middle	8.1	0.1	89	21.3	21.3	8.0	8.0	31.2	31.3	89.7	89.8	6.6		2.5	2.2	3	4	-								
						8.1	0.1	94	21.2		8.0		31.3		89.8		6.6		2.5		3		-								
					Bottom	15.1	0.2	149	21.2	21.2	8.0	8.0	32.0	32.0	90.0	90.0	6.6	6.6	2.7		4		-								
						15.1	0.2	158	21.2		8.0		32.0		90.0		6.6		2.6		4		-								
SR8	Cloudy	Calm	08:15	5.1	Surface	1.0	-	-	21.6	21.6	8.1	8.1	20.5	20.5	95.3	95.2	7.5		3.5		3		-		-	820368	811616	-	-	-	
						1.0	-	-	21.6		8.1		20.5		95.1		7.4	7.5	3.5		3		-								
					Middle	-	-	-	-	-	-	-	-	-	-	-	-			3.5		4		-							
						-	-	-	-	-	-	-	-		-		-					-		-							
					Bottom	4.1	-	-	21.6	21.6	8.1	8.1	26.2	26.2	93.2	93.3	7.0	7.1	3.4		5		-								
						4.1	-	-	21.6		8.1		26.3		93.3		7.1		3.5		5		-								

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

Water Quality Monitoring

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

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)					
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA	Value	DA
C1	Fine	Moderate	11:33	8.3	Surface	1.0	0.1	79	22.5	22.5	8.2	8.2	23.8	23.7	116.1	115.8	8.8	8.1	5.5	5.3	9	10	85	89	815639	804256	<0.2	<0.2	1.1	1.2				
						1.0	0.1	85	22.5	8.2	8.2	23.7	30.9	115.5	101.7	8.7	3.8	5.5	10	86	89	<0.2	<0.2	1.1			1.1							
					Middle	4.2	0.1	100	21.7	21.7	8.2	8.2	30.9	30.9	101.6	101.7	7.5	7.5	3.9	5.3	9	10	89	90			<0.2	<0.2	1.0	1.1				
						4.2	0.1	100	21.7	8.2	8.2	30.9	30.9	101.7	101.7	7.5	7.5	3.9	5.3	9	10	89	90	<0.2			<0.2	1.1	1.1					
					Bottom	7.3	0.0	88	21.6	21.6	8.1	8.1	31.6	31.6	105.5	105.6	7.7	7.8	6.5	10	91	91	<0.2	<0.2			1.2	1.2						
						7.3	0.0	91	21.6	8.1	8.1	31.6	31.6	105.7	105.6	7.8	7.8	6.5	11	91	91	<0.2	<0.2	1.4			1.4							
C2	Fine	Moderate	12:17	11.8	Surface	1.0	0.1	10	22.8	22.8	8.3	8.3	20.9	20.9	131.2	131.0	10.0	8.6	7.0	6.7	8	9	86	88	825665	806951	<0.2	<0.2	1.5	1.5				
						1.0	0.1	10	22.8	8.3	8.3	20.9	25.8	130.7	94.0	10.0	7.2	5.8	6.7	8	9	87	88	<0.2			<0.2	1.4	1.4					
					Middle	5.9	0.1	172	21.9	21.9	8.0	8.0	25.8	25.8	94.0	93.8	7.1	7.1	5.8	6.7	9	9	88	87			<0.2	<0.2	1.6	1.6				
						5.9	0.1	178	21.8	8.0	8.0	25.8	29.9	93.8	89.3	7.1	6.1	5.8	6.7	9	9	88	90	<0.2			<0.2	1.6	1.5					
					Bottom	10.8	0.1	206	21.6	21.6	8.0	8.0	29.9	29.9	89.3	89.4	6.6	6.6	7.1	10	90	90	<0.2	<0.2			1.5	1.5						
						10.8	0.1	218	21.6	8.0	8.0	29.9	29.9	89.5	89.4	6.6	6.6	6.9	10	90	90	<0.2	<0.2	1.4			1.4							
C3	Fine	Moderate	10:23	12.6	Surface	1.0	0.2	39	22.7	22.7	8.3	8.3	24.2	23.9	133.3	132.8	10.0	8.7	2.9	3.3	6	6	86	88	822090	817820	<0.2	<0.2	1.6	1.5				
						1.0	0.2	41	22.6	8.3	8.3	23.6	30.5	132.3	101.2	2.9	2.9	5	6	87	88	<0.2	<0.2	1.6			1.6							
					Middle	6.3	0.2	51	21.8	21.8	8.1	8.1	30.5	30.5	101.2	101.2	7.4	7.4	2.9	3.3	6	6	88	88			<0.2	<0.2	1.6	1.6				
						6.3	0.2	55	21.8	8.1	8.1	30.5	31.4	101.2	97.5	7.4	3.9	6	6	88	90	<0.2	<0.2	1.4			1.4							
					Bottom	11.6	0.1	45	21.6	21.6	8.1	8.1	31.4	31.4	97.5	97.6	7.2	7.2	3.9	6	90	90	<0.2	<0.2			1.4	1.4						
						11.6	0.2	45	21.6	8.1	8.1	31.4	31.4	97.6	97.6	7.2	7.2	4.2	6	91	91	<0.2	<0.2	1.4			1.4							
IM1	Fine	Moderate	11:56	5.1	Surface	1.0	0.1	180	23.2	23.2	8.2	8.2	24.2	24.2	134.7	134.6	10.0	10.0	12.4	13.8	8	10	86	88	817947	807132	<0.2	<0.2	1.1	1.1				
						1.0	0.1	191	23.2	23.2	8.2	8.2	24.2	24.2	134.5	134.6	10.0	12.6	9	10	86	88	<0.2	<0.2			1.1	1.1						
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	<0.2	<0.2	-	-			
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	<0.2	<0.2	-	-			
					Bottom	4.1	0.1	190	22.1	22.1	8.0	8.0	28.8	28.7	106.3	106.4	7.9	7.9	15.1	11	89	90	<0.2	<0.2			1.2	1.2						
						4.1	0.1	191	22.1	22.1	8.0	8.0	28.7	28.7	106.5	106.4	7.9	7.9	15.1	10	90	90	<0.2	<0.2			1.1	1.1						
IM2	Fine	Moderate	12:05	6.9	Surface	1.0	0.1	88	22.4	22.4	8.2	8.2	25.1	25.1	117.3	117.1	8.8	8.2	4.6	7.2	9	10	85	88	818186	806178	<0.2	<0.2	0.9	1.0				
						1.0	0.1	91	22.4	8.2	8.2	25.1	29.7	116.8	100.9	8.8	4.6	9	10	85	88	<0.2	<0.2	1.1			1.1							
					Middle	3.5	0.1	165	21.8	21.8	8.1	8.1	29.7	29.7	100.9	101.0	7.5	7.5	5.1	7.2	9	10	88	90			<0.2	<0.2	1.0	1.0				
						3.5	0.1	165	21.8	8.1	8.1	29.7	30.0	101.0	100.0	7.5	5.1	9	12	88	90	<0.2	<0.2	1.0			1.0							
					Bottom	5.9	0.1	171	21.8	21.8	8.2	8.2	30.0	30.0	100.0	100.0	7.4	7.4	11.7	12	90	90	<0.2	<0.2			1.0	1.0						
						5.9	0.1	187	21.8	8.2	8.2	30.0	30.0	100.0	100.0	7.4	11.8	13	90	90	<0.2	<0.2	1.0	1.0										
IM3	Fine	Moderate	12:12	7.0	Surface	1.0	0.1	100	22.7	22.7	8.2	8.2	23.7	23.7	117.5	117.2	8.9	8.2	6.2	6.6	9	12	84	87	818789	805611	<0.2	<0.2	1.0	1.1				
						1.0	0.1	105	22.7	8.2	8.2	23.7	28.4	116.9	101.9	8.8	7.1	6.2	6.6	9	12	85	88	<0.2			<0.2	1.1	1.1					
					Middle	3.5	0.0	37	22.1	22.1	8.1	8.1	28.4	28.4	101.9	101.9	7.5	7.5	7.1	6.6	12	12	88	87			<0.2	<0.2	1.0	1.0				
						3.5	0.0	37	22.1	8.1	8.1	28.4	29.9	101.9	105.4	7.5	6.1	12	10	87	90	<0.2	<0.2	1.0			1.1							
					Bottom	6.0	0.1	176	21.8	21.8	8.1	8.1	29.9	29.9	105.4	105.6	7.8	7.8	6.5	15	89	89	<0.2	<0.2			1.1	1.1						
						6.0	0.1	190	21.8	8.1	8.1	29.9	29.9	105.7	105.6	7.8	6.5	14	89	89	<0.2	<0.2	1.1	1.1										
IM4	Fine	Moderate	12:22	7.8	Surface	1.0	0.1	160	22.5	22.5	8.1	8.1	24.5	24.4	105.6	105.6	7.9	7.8	6.6	8.7	9	10	85	87	819711	804604	<0.2	<0.2	1.4	1.4				
						1.0	0.1	171	22.5	8.1	8.1	24.4	27.8	105.5	103.1	7.9	6.6	8	10	85	87	<0.2	<0.2	1.5			1.4							
					Middle	3.9	0.1	155	22.2	22.2	8.2	8.2	27.8	27.8	103.1	103.1	7.6	8.4	10	10	87	87	<0.2	<0.2			1.4	1.4						
						3.9	0.1	166	22.2	8.2	8.2	27.8	99.9	103.1	100.0	7.7	8.4	9	11	87	89	<0.2	<0.2	1.4			1.4							
					Bottom	6.8	0.1	132	22.0	22.0	8.1	8.1	28.7	28.7	99.9	100.0	7.4	7.4	10.9	10	89	89	<0.2	<0.2			1.4	1.5						
						6.8	0.1	135	22.0	8.1	8.1	28.7	28.7	100.0	100.0	7.4	11.2	10	10	89	89	<0.2	<0.2	1.5			1.5							
IM5	Fine	Moderate	12:31	7.1	Surface	1.0	0.2	214	22.8	22.8	8.2	8.2	23.4	23.4	125.2	125.1	9.4	8.7	6.1	6.4	12	11	84	87	820742	804847	<0.2	<0.2	1.3	1.2				
						1.0	0.2	230	22.8	8.2	8.2	23.4	25.6	124.9	106.3	9.4	6.1	12	11	85	88	<0.2	<0.2	1.3			1.1							
					Middle	3.6	0.2	206	22.5	22.5	8.2	8.2	25.6	25.6	106.7	106.5	8.0	6.2	10	10	87	88	<0.2	<0.2			1.1	1.1						
						3.6	0.3	223	22.5	8.2	8.2	25.6	28.1	106.3	101.7	7.9	6.2	10	10	88	88	<0.2	<0.2	1.1			1.1							
					Bottom	6.1	0.2	201	22.1	22.1	8.1	8.1	28.1	28.1	101.7	101.7	7.5	6.9	10	11	88	89	<0.2	<0.2			1.2	1.2						
						6.1	0.2	211	22.1	8.1	8.1	28.1	28.1	101.7	101.7	7.5	6.9	11	11	89	89	<0.2	<0.2	1.2			1.2							
IM6	Fine	Moderate	12:39	7.2	Surface	1.0	0.1	211	22.8	22.8	8.2	8.2	23.3	23.3	114.8	114.6	8.7	8.4	8	8.8	8	9	84	87	821042	805835	<0.2	<0.2	1.5	1.6				
						1.0	0.1	218	22.8	8.2	8.2	23.3	25.4	114.4	109.6	8.6	6.8	8	8	85	88	<0.2	<0.2	1.5			1.5							
					Middle	3.6	0.1	170	22.4	22.4	8.2	8.2	25.4	25.4	109.5	109.6	8.2	8.8	8	9	87	88	<0.2	<0.2			1.7	1.7						
						3.6	0.1	178	22.4	8.0	8.0	27.0	27.0	109.6	106.1	8.2	8.8	9	9	88	89	<0.2	<0.2	1.5			1.6							
					Bottom	6.2	0.1	190	22.4	22.4	8.0	8.0	27.0	27.0	106.1	106.1	7.9	7.9	10.7	9	89	89	<0.2	<0.2			1.6	1.5						
						6.2	0.1	190	22.4	8.0	8.0	27.0	27.0	106.1	106.1	7.9	10.8	9	9	89	89	<0.2	<0.2	1.5			1.5							
IM7	Fine	Moderate	12:48	8.0	Surface	1.0	0.0	314	22.4	22.4	8.1	8.1	24.0	24.0	104.1	104.0	7.9	7.6	6.3	8.4	7	8	84	86	821353	806835	<0.2	<0.2	1.4	1.4				
						1.0	0.0	337	22.4	8.1	8.1	24.0	25.6	103.9	96.6	7.8	6.4	8	8	84	87	<0.2	<0.2	1.4			1.4							
					Middle	4.0	0.1	92	22.2	22.2	8.1	8.1	25.6	25.6	96.6	96.6	7.3	8.4	7	8	87	87	<0.2	<0.2			1.4	1.4						
						4.0	0.1	93	22.2	8.1	8.1	25.6	26.2	96.5	94.0	7.3	8.4	8	9	87	88	<0.2	<0.2	1.4			1.4							
					Bottom	7.0	0.1	158	22.0	22.0	8.1	8.1	26.2	26.2	94.0	94.0	7.1	10.2	9	10	88	88	<0.2	<0.2			1.5	1.5						
						7.0	0.1	160	22.0	8.1	8.1	26.2	26.2	94.0	94.0	7.1	10.4	10	10	88	88	<0.2	<0.2	1.4			1.4							
IM8	Fine	Moderate	11:52	7.2	Surface	1.0	0.2	52	22.5	22.5	8.2	8.2	22.2																					

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

Water Quality Monitoring

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

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)						
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA	Value	DA	
IM9	Fine	Moderate	11:46	7.3	Surface	1.0	0.5	128	22.8	22.8	8.3	8.3	19.8	19.7	126.2	125.8	9.7	8.9	6.0	7.0	8	7	86	88	822084	808792	<0.2	1.5	1.6						
						1.0	0.5	139	22.7	22.7	8.4	8.3	19.6	19.6	125.3	125.8	9.7	8.9	6.0	7.0	7	7	86	86											
					Middle	3.7	0.5	133	22.4	22.4	8.1	8.1	24.5	24.6	107.6	107.4	8.1	8.1	6.8	7.0	8	8	88	87						<0.2	1.5	1.6			
						3.7	0.5	144	22.4	22.4	8.1	8.1	24.6	24.6	107.1	107.4	8.1	8.1	6.9	7.0	7	7	90	89									<0.2	1.5	1.6
					Bottom	6.3	0.5	125	22.3	22.3	8.1	8.1	25.1	25.1	102.2	102.2	7.7	7.7	8.0	7.7	7	7	91	90						<0.2	1.5	1.7			
						6.3	0.5	125	22.3	22.3	8.1	8.1	25.1	25.2	102.2	101.5	7.7	7.6	8.1	7.6	7	7	90	91						<0.2	1.5	1.7			
IM10	Fine	Moderate	11:39	7.6	Surface	1.0	0.6	106	22.7	22.7	8.4	8.4	18.9	18.9	129.9	129.3	10.1	9.2	6.1	9.0	8	8	86	88	822362	809776	<0.2	1.5	1.5						
						1.0	0.7	114	22.7	22.7	8.4	8.4	18.9	18.9	128.7	129.3	10.0	9.2	6.2	9.0	8	8	88	89						<0.2	1.5	1.6			
					Middle	3.8	0.5	91	22.5	22.5	8.2	8.2	23.2	23.2	110.3	110.3	8.4	8.4	7.5	8.0	8	8	89	88						<0.2	1.5	1.6			
						3.8	0.5	96	22.5	22.5	8.2	8.2	23.2	23.2	110.3	110.3	8.4	8.0	8	8	90	88	<0.2	1.5									1.4		
					Bottom	6.6	0.4	86	22.3	22.3	8.1	8.1	25.2	25.2	101.4	101.5	7.6	7.6	13.0	13.2	8	7	91	90						<0.2	1.5	1.5			
						6.6	0.4	93	22.3	22.3	8.1	8.1	25.2	25.2	101.5	101.5	7.6	7.6	13.0	13.2	8	7	91	90						<0.2	1.5	1.5			
IM11	Fine	Moderate	11:27	7.8	Surface	1.0	0.8	86	22.9	22.9	8.4	8.4	18.8	18.8	140.2	139.8	10.8	9.2	4.9	5.7	8	8	88	89	822041	811443	<0.2	1.5	1.5						
						1.0	0.8	88	22.8	22.8	8.4	8.4	18.8	18.8	139.3	139.8	10.8	9.2	4.9	5.7	8	8	89	89						<0.2	1.5	1.5			
					Middle	3.9	0.6	79	22.2	22.2	8.1	8.1	26.6	26.6	100.7	100.8	7.5	7.5	5.5	5.4	8	9	90	90						<0.2	1.5	1.6			
						3.9	0.7	82	22.2	22.1	8.1	8.1	26.5	26.9	100.9	96.9	7.5	6.6	9	9	91	91	<0.2	1.6									1.4		
					Bottom	6.8	0.3	67	22.1	22.1	8.1	8.1	26.9	26.9	96.9	96.9	7.2	7.2	6.6	6.6	10	10	93	93						<0.2	1.6	1.4			
						6.8	0.3	67	22.1	22.1	8.1	8.1	26.9	26.9	96.9	96.9	7.2	7.2	6.6	6.6	10	10	93	93						<0.2	1.6	1.4			
IM12	Fine	Moderate	11:19	8.9	Surface	1.0	0.4	128	22.5	22.5	8.3	8.3	20.1	20.1	117.9	115.6	9.1	8.2	5.6	6.7	12	11	86	87	821478	812027	<0.2	1.6	1.6						
						1.0	0.4	133	22.4	22.4	8.3	8.3	20.2	20.1	113.3	115.6	8.8	8.2	5.6	6.7	11	11	87	88						<0.2	1.6	1.6			
					Middle	4.5	0.2	129	22.2	22.2	8.1	8.1	25.2	25.2	98.9	98.8	7.5	7.4	6.3	6.3	9	9	88	88						<0.2	1.6	1.6			
						4.5	0.3	138	22.1	22.2	8.1	8.1	25.2	25.2	98.6	98.8	7.4	6.3	8	8	90	90	<0.2	1.6									1.6		
					Bottom	7.9	0.2	130	21.9	21.9	8.1	8.1	28.0	28.0	97.8	97.9	7.3	7.3	8.2	8.2	7	7	90	90						<0.2	1.6	1.6			
						7.9	0.2	135	21.9	21.9	8.1	8.1	28.0	28.0	97.9	97.9	7.3	7.3	8.3	8.3	8	8	90	90						<0.2	1.7	1.7			
SR1A	Fine	Moderate	10:59	5.2	Surface	1.0	-	-	22.4	22.4	8.2	8.2	23.1	23.2	117.5	117.2	8.9	8.9	5.5	5.7	8	7	-	-	819983	812663	-	-	-						
						1.0	-	-	22.4	22.4	8.2	8.2	23.2	23.2	116.8	117.2	8.9	8.9	5.4	5.7	7	7	-	-											
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-	-	-	5.7	-	8	-	-						-	-	-	-	-	
						2.6	-	-	-	-	-	-	-	-	-	-	-	-	-	5.7	-	8	-	-						-	-	-	-	-	
					Bottom	4.2	-	-	22.2	22.2	8.1	8.1	27.0	26.9	104.3	104.5	7.8	7.8	6.1	6.0	8	7	-	-						-	-	-	-	-	-
						4.2	-	-	22.2	22.2	8.1	8.1	26.9	26.9	104.6	104.5	7.8	7.8	6.0	6.0	7	7	-	-						-	-	-	-	-	-
SR2	Fine	Moderate	10:48	4.6	Surface	1.0	0.2	90	22.8	22.8	8.3	8.3	21.3	21.3	131.7	131.5	10.0	10.0	3.9	4.0	8	9	88	87	821473	814164	<0.2	1.6	1.4						
						1.0	0.2	92	22.8	22.8	8.3	8.3	21.4	21.3	131.3	131.5	10.0	10.0	3.9	4.0	9	9	87	87						<0.2	1.4	1.4			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.0	-	9	-	-						-	-	-	-	-	
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.0	-	9	-	-						-	-	-	-	-	
					Bottom	3.6	0.1	31	22.7	22.7	8.3	8.3	24.4	24.4	121.3	121.1	9.1	9.1	4.1	4.1	9	9	90	90						<0.2	1.4	1.3			
						3.6	0.1	31	22.7	22.7	8.3	8.3	24.4	24.4	120.9	121.1	9.1	9.1	4.1	4.1	9	9	91	91						<0.2	1.4	1.3			
SR3	Fine	Moderate	11:57	8.8	Surface	1.0	0.0	51	22.4	22.4	8.3	8.3	20.5	20.3	116.1	114.9	8.9	8.3	6.5	7.1	8	8	-	-	822153	807579	-	-	-						
						1.0	0.0	56	22.4	22.4	8.3	8.3	20.2	20.3	113.7	114.9	8.7	8.3	6.4	6.4	8	8	-	-											
					Middle	4.4	0.2	197	22.2	22.2	8.1	8.1	25.5	25.5	102.4	102.4	7.7	7.7	6.7	6.8	7	7	-	-											
						4.4	0.2	204	22.2	22.2	8.1	8.1	25.5	25.5	102.3	102.3	7.7	7.7	6.8	6.8	8	8	-	-											
					Bottom	7.8	0.1	221	22.0	22.0	8.1	8.1	26.4	26.4	96.2	96.2	7.2	7.2	8.0	8.1	8	8	-	-											
						7.8	0.1	240	22.0	22.0	8.1	8.1	26.4	26.4	96.2	96.2	7.2	7.2	8.1	8.1	8	8	-	-											
SR4A	Fine	Calm	11:12	8.9	Surface	1.0	0.2	75	23.1	23.1	8.2	8.2	23.5	23.5	123.9	123.8	9.3	8.7	7.7	11.8	10	11	-	-	817210	807818	-	-	-						
						1.0	0.2	82	23.1	23.1	8.2	8.2	23.5	23.5	123.6	123.8	9.3	8.7	7.7	11.8	10	11	-	-											
					Middle	4.5	0.1	40	22.2	22.2	8.1	8.1	28.0	28.0	107.4	107.4	8.0	8.0	12.1	12.2	10	10	-	-											
						4.5	0.1	42	22.2	22.2	8.1	8.1	28.0	28.0	107.3	107.3	8.0	8.0	12.2	12.2	10	10	-	-											
					Bottom	7.9	0.1	68	22.1	22.1	8.1	8.1	28.4	28.4	106.6	106.6	7.9	7.9	15.5	15.4	14	15	-	-											
						7.9	0.1	68	22.1	22.1	8.1	8.1	28.4	28.4	106.6	106.6	7.9	7.9	15.4	15.4	15	15	-	-											
SR5A	Fine	Calm	10:51	3.7	Surface	1.0	0.1	34	23.4	23.4	8.2	8.2	23.5	23.5	138.3	138.3	10.3	10.3	5.3	6.2	11	11	-	-	816610	810691	-	-	-						
						1.0	0.1	37	23.4	23.4	8.2	8.2	23.6	23.6	138.3	138.3	10.3	10.3	5.4	6.2	11	11	-	-											
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.2	-	11	-	-						-	-	-	-	-	
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.2	-	11	-	-						-	-	-	-	-	
					Bottom	2.7	0.1	9	23.0	23.0	8.1	8.1	24.3	24.3	131.0	131.1	9.8	9.8	7.1	7.1	10	11	-	-											
						2.7	0.1	9	23.0	23.0	8.1	8.1	24.3	24.3	131.1	131.1	9.8	9.8	7.1	7.1	11	11	-	-											
SR6A	Fine	Calm	10:21	4.2	Surface	1.0	0.1	189	23.0	23.0	8.1	8.1	24.8	24.8	113.9	113.8	8.5	8.5	12.2	11.0	23	24	-	-	817946	814729	-	-	-						
						1.0	0.1	196	23.0	23.0	8.1	8.1	24.8	24.8	113.6	113.6	8.5	8.5	12.2	11.0	24	24	-	-											
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11.0	-	19	-	-						-	-	-	-	-	
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	11.0	-	19	-	-						-	-	-	-	-	
					Bottom	3.2	0.0	204	22.5	22.5	8.1	8.1	26.1	26.1	106.8	106.9	8.0	8.0	9.8	9.8	14	14	-	-											
						3.2	0.0	205	22.5	22.5	8.1	8.1	26.1	26.1	106.9	106.9	8.0	8.0	9.9	9.9	14	14	-	-											
SR7	Fine	Moderate	09:49	16.4	Surface	1.0	0.1	215	21.9	21.9	8.0	8.0	29.3	29.3	104.4	104.2	7.7	7.3	3.0	3.5	5	5	-	-	823622	823755	-	-	-						
						1.0	0.1	218	21.8	21.8	8.0	8.0	29.3	29.3	104.0	104.2	7.7	7.3	3.0	3.5	5	5	-	-											
					Middle	8.2	0.2	210	21.6	21.6	8.0	8.0	31.9	31.9	93.3	93.3	6.8	6.8	3.6	3.6	4	4	-	-											
						8.2	0.2	212	21.6	21.6	8.0	8.0	31.9	31.9	93.3	93.3	6.8	6.8	3.6	3.6	4	4	-	-											
					Bottom	15.4	0.2	181	21.6	21.6	8.0	8.0	31.9	31.9																					

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

Water Quality Monitoring

Water Quality Monitoring Results on 18 April 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)							
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA	Value	DA	Value	DA
C1	Cloudy	Moderate	15:53	8.5	Surface	1.0	0.5	46	23.6	23.6	8.2	8.2	21.0	21.0	152.7	152.3	11.5	3.7	10.1	3.7	8	7	85	86	815604	804263	<0.2	1.1								
						1.0	0.5	48	23.6	23.6	8.2	8.2	21.0	21.0	151.9	11.4	3.7	7	86	88																
					Middle	4.3	0.2	62	22.7	22.7	8.1	8.1	25.8	25.8	116.5	116.4	8.7	4.6	4.5	6	88	88														
						4.3	0.2	62	22.7	22.7	8.1	8.1	25.8	25.8	116.2	116.4	8.6	4.6	4.5	7	88	88														
					Bottom	7.5	0.0	33	22.0	22.0	8.0	8.0	29.2	29.2	111.2	111.4	8.2	5.2	7	90	90															
						7.5	0.0	33	22.0	22.0	8.0	8.0	29.2	29.2	111.5	111.4	8.2	5.2	6	90	90															
C2	Fine	Moderate	14:29	11.4	Surface	1.0	0.6	174	23.6	23.6	8.5	8.5	20.2	20.2	154.6	154.7	11.7	4.9	9.6	4.9	6	5	86	87	825681	806938	<0.2	1.2								
						1.0	0.6	185	23.6	23.6	8.5	8.5	20.2	20.2	154.8	11.7	5.1	5	87	88																
					Middle	5.7	0.6	174	22.1	22.1	8.0	8.0	24.7	24.7	98.7	98.0	7.5	5.1	5.7	5	88	89														
						5.7	0.6	182	22.0	22.0	8.0	8.0	24.7	24.7	97.3	98.0	7.4	5.1	6	89	90															
					Bottom	10.4	0.4	146	21.8	21.8	8.0	8.0	28.3	28.3	91.3	91.4	6.8	6.6	6	90	90															
						10.4	0.4	152	21.8	21.8	8.0	8.0	28.3	28.3	91.4	91.4	6.8	7.2	6	90	90															
C3	Fine	Moderate	16:14	12.1	Surface	1.0	0.4	243	22.4	22.4	8.3	8.3	25.0	24.9	123.8	124.2	9.3	3.1	8.6	3.1	6	6	86	88	822093	817813	<0.2	1.3								
						1.0	0.4	262	22.3	22.3	8.3	8.3	24.8	24.9	124.5	9.4	3.1	6	88	88																
					Middle	6.1	0.4	242	22.0	22.0	8.1	8.1	28.3	28.3	106.0	105.9	7.9	3.5	3.6	5	88	87														
						6.1	0.4	259	22.0	22.0	8.1	8.1	28.3	28.3	105.7	105.9	7.9	3.7	5	87	88															
					Bottom	11.1	0.3	261	21.8	21.8	8.1	8.1	31.1	31.1	99.4	101.2	7.3	4.2	5	90	90															
						11.1	0.3	272	21.8	21.8	8.1	8.1	31.1	31.1	102.9	101.2	7.6	4.2	4	90	90															
IM1	Cloudy	Moderate	15:29	4.7	Surface	1.0	0.1	49	23.6	23.6	8.2	8.2	24.5	24.5	146.2	146.2	10.8	6.4	10.8	6.4	8	8	86	85	817925	807149	<0.2	0.9								
						1.0	0.1	49	23.6	23.6	8.2	8.2	24.5	24.5	146.1	10.8	6.4	8	85	85																
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					-	-	-	-	-			
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					-	-	-	-	-			
					Bottom	3.7	0.1	12	22.1	22.1	7.9	7.9	29.0	29.0	110.3	110.3	8.1	7.5	9	88	88															
						3.7	0.2	12	22.1	22.1	7.9	7.9	29.0	29.0	110.3	110.3	8.1	7.5	8	88	88															
IM2	Cloudy	Moderate	15:22	7.1	Surface	1.0	0.3	20	24.3	24.3	8.2	8.2	20.5	20.5	163.7	163.3	12.2	3.7	9.8	3.7	8	7	85	85	818182	806154	<0.2	1.2								
						1.0	0.4	20	24.3	24.3	8.2	8.2	20.5	20.5	162.9	12.1	3.8	7	85	85																
					Middle	3.6	0.2	312	22.1	22.1	8.2	8.2	28.3	28.3	100.7	100.7	7.5	7.2	7	87	87															
						3.6	0.2	322	22.1	22.1	8.2	8.2	28.3	28.3	100.7	100.7	7.5	7.2	7	87	87															
					Bottom	6.1	0.1	319	21.8	21.8	8.2	8.2	30.2	30.2	98.5	98.5	7.3	11.2	8	90	90															
						6.1	0.2	347	21.8	21.8	8.2	8.2	30.2	30.2	98.5	98.5	7.3	11.0	7	89	89															
IM3	Cloudy	Moderate	15:13	7.2	Surface	1.0	0.1	312	24.0	24.0	8.2	8.2	20.7	20.7	176.1	175.9	13.2	4.4	10.7	4.4	9	10	85	84	818775	805597	<0.2	1.2								
						1.0	0.2	324	24.0	24.0	8.2	8.2	20.7	20.7	175.6	13.1	4.5	10	84	84																
					Middle	3.6	0.2	286	22.2	22.2	8.1	8.1	28.0	28.0	109.8	110.0	8.1	4.7	9	87	87															
						3.6	0.2	288	22.2	22.2	8.1	8.1	28.0	28.0	110.1	110.0	8.2	4.7	10	87	87															
					Bottom	6.2	0.2	323	21.8	21.8	8.2	8.1	30.3	30.3	98.1	98.1	7.2	10.1	10	90	90															
						6.2	0.2	333	21.8	21.8	8.1	8.1	30.3	30.3	98.1	98.1	7.2	10.1	10	89	89															
IM4	Cloudy	Moderate	15:04	8.0	Surface	1.0	0.2	207	24.1	24.1	8.4	8.4	20.2	20.2	172.7	172.5	12.9	4.6	10.4	4.6	10	10	84	84	819711	804597	<0.2	1.3								
						1.0	0.2	210	24.1	24.1	8.4	8.4	20.2	20.2	172.2	12.9	4.7	11	84	84																
					Middle	4.0	0.1	305	22.3	22.3	8.1	8.1	26.7	26.7	105.5	105.5	7.9	7.4	10	87	87															
						4.0	0.2	333	22.3	22.3	8.1	8.1	26.7	26.7	105.4	105.5	7.8	7.4	10	87	87															
					Bottom	7.0	0.3	331	21.8	21.8	8.1	8.1	29.7	29.7	100.8	101.0	7.5	10.5	10	90	90															
						7.0	0.3	346	21.8	21.8	8.1	8.1	29.7	29.7	101.2	101.0	7.5	10.6	11	90	90															
IM5	Cloudy	Moderate	14:55	7.3	Surface	1.0	0.2	250	24.2	24.2	8.2	8.2	20.2	20.2	188.4	188.2	14.1	3.9	11.5	3.9	11	10	84	84	820726	804887	<0.2	1.2								
						1.0	0.2	267	24.2	24.2	8.2	8.2	20.2	20.2	187.9	14.1	3.9	10	84	84																
					Middle	3.7	0.3	290	22.6	22.6	8.1	8.1	24.3	24.2	118.5	118.6	8.9	6.0	10	87	88															
						3.7	0.3	293	22.6	22.6	8.1	8.1	24.2	24.2	118.6	118.6	8.9	6.0	9	88	88															
					Bottom	6.3	0.2	284	22.3	22.3	8.0	8.0	26.7	26.7	114.4	114.6	8.5	8.8	9	89	89															
						6.3	0.2	304	22.3	22.3	8.0	8.0	26.7	26.7	114.7	114.6	8.5	8.8	10	90	90															
IM6	Cloudy	Moderate	14:47	7.0	Surface	1.0	0.3	263	23.6	23.6	8.2	8.2	19.2	19.2	180.0	179.6	13.7	4.8	11.0	4.8	11	10	84	85	821081	805830	<0.2	1.5								
						1.0	0.3	267	23.6	23.6	8.2	8.2	19.3	19.3	179.2	13.6	4.8	11	85	85																
					Middle	3.5	0.3	280	22.4	22.4	8.1	8.1	25.2	25.2	110.9	111.1	8.3	5.5	9	87	87															
						3.5	0.3	304	22.4	22.4	8.1	8.1	25.2	25.2	111.3	111.3	8.4	5.6	10	87	87															
					Bottom	6.0	0.2	264	22.3	22.3	8.1	8.1	26.5	26.5	132.2	132.8	9.9	7.2	10	89	89															
						6.0	0.2	275	22.3	22.3	8.1	8.1	26.5	26.5	133.5	132.8	9.9	7.0	10	90	90															
IM7	Cloudy	Rough	14:37	8.4	Surface	1.0	0.4	258	23.5	23.5	8.3	8.3	19.6	19.6	163.1	162.4	12.4	4.8	10.1	4.8	11	10	84	84	821348	806823	<0.2	1.7								
						1.0	0.4	264	23.5	23.5	8.3	8.3	19.7	19.6	161.6	12.3	4.8	10	84	84																
					Middle	4.2	0.3	259	22.4	22.4	8.0	8.0	25.3	25.3	103.9	103.8	7.8	4.9	10	87	87															
						4.2	0.3	272	22.4	22.4	8.0	8.0	25.3	25.3	103.8	103.9	7.8	5.0	10	87	87															
					Bottom	7.4	0.2	245	22.2	22.2	7.9	7.9	26.5	26.5	103.2	103.3	7.7	7.4	8	89	89															
						7.4	0.2	245	22.2	22.2	7.9	7.9	26.5	26.5	103.3	103.3	7.7	7.4	9	89	89															
IM8	Fine	Moderate	14:51	7.6	Surface	1.0	0.3	197	23.0	23.0	8.4	8.4	20.8	20.9	157.0	157.0	11.9	6.1	10.4	6.1	9	8	87	88	821820	808139	<0.2	1.3								
						1.0	0.3	204	23.0	23.0	8.4	8.4	20.9	20.9	156.9	11.9	6.1	8	88	89																
					Middle	3.8	0.2	207	22.5	22.5	8.2	8.2	23.0	23.1	117.3	117.3	8.9	5.7	9	88	89															
						3.8	0.2	208	22.5	22.5	8.2	8.2	23.1	23.1	117.3	117.3	8.9	5.8	9	89	90															
					Bottom	6.6	0.2	275	22.5	22.5	8.2	8.2	23.8	23.8	117.3	117.3	8.9	9.1	9	90	90															
						6.6	0.2	296	22.5	22.5	8.2	8.2	23.8	23.8	117.2	117.3	8.9	10.1	8	91	91															

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

Water Quality Monitoring

Water Quality Monitoring Results on 18 April 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)								
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA	Value	DA			
IM9	Fine	Moderate	14:58	7.2	Surface	1.0	0.2	239	23.1	23.1	8.4	8.4	20.8	20.8	152.0	151.9	11.6	10.2	5.2	8	8	86	87	822110	808833	<0.2	1.4	1.4									
						1.0	0.2	256	23.1	23.1	8.4	8.4	20.8	20.8	151.8	11.5	5.2	8	8	87	88																
					Middle	3.6	0.2	222	22.6	22.6	8.2	8.2	23.0	23.0	116.2	116.2	8.8	8.3	5.8	6.5	7	8	89						88	<0.2	1.5	1.4					
						3.6	0.2	233	22.5	22.5	8.2	8.2	23.0	23.0	116.1	8.8	5.9	7	8	88	89																
					Bottom	6.2	0.1	203	22.4	22.4	8.2	8.2	24.3	24.3	109.7	109.7	8.3	8.3	8.4	8	8	90	90						<0.2				1.4	1.5			
						6.2	0.1	203	22.4	22.4	8.2	8.2	24.3	24.3	109.7	8.3	8.7	8	8	90	90																
IM10	Fine	Moderate	15:05	6.8	Surface	1.0	0.1	140	23.4	23.4	8.5	8.5	20.1	20.1	163.1	162.8	12.4	10.5	5.4	7	7	87	86	822398	809785	<0.2	1.3	1.3									
						1.0	0.1	142	23.4	23.4	8.5	8.5	20.1	20.1	162.5	12.3	5.4	7	7	86	89																
					Middle	3.4	0.1	74	22.5	22.5	8.2	8.2	23.7	23.7	115.0	114.8	8.7	5.5	8	5.3	8	8	89							88	<0.2	1.2			1.3		
						3.4	0.1	81	22.5	22.5	8.2	8.2	23.7	23.7	114.6	8.7	5.4	9	8	88	90																
					Bottom	5.8	0.1	61	22.4	22.4	8.2	8.2	24.1	24.1	109.9	110.0	8.3	8.3	5.0	8	8	90	90						<0.2	1.3			1.3				
						5.8	0.1	66	22.4	22.4	8.2	8.2	24.1	24.1	110.0	8.3	5.0	8	8	90	90																
IM11	Fine	Moderate	15:15	8.8	Surface	1.0	0.2	22	23.0	23.0	8.4	8.4	21.3	21.3	144.9	144.6	11.0	9.6	5.5	11	10	86	88	822041	811446	<0.2	1.4	1.4									
						1.0	0.2	23	22.9	22.9	8.4	8.4	21.3	21.3	144.3	11.0	5.5	10	88	89																	
					Middle	4.4	0.2	43	22.1	22.1	8.2	8.2	24.0	24.0	109.3	108.4	8.3	6.5	6.6	7	8	89	87								<0.2	1.4		1.4			
						4.4	0.2	43	22.1	22.1	8.2	8.2	24.0	24.0	107.4	8.2	6.6	8	8	87	90																
					Bottom	7.8	0.3	60	21.9	21.9	8.1	8.1	28.2	28.1	100.6	101.0	7.5	7.2	7.2	6	6	91	90						<0.2	1.4			1.3				
						7.8	0.3	63	21.9	21.9	8.1	8.1	28.1	28.1	101.3	7.5	7.1	5	5	90	90																
IM12	Fine	Moderate	15:21	8.9	Surface	1.0	0.1	313	23.4	23.4	8.5	8.5	20.5	20.5	162.6	162.3	12.3	10.0	7.3	8	9	86	88	821473	812045	<0.2	1.3	1.3									
						1.0	0.1	321	23.4	23.4	8.5	8.5	20.5	20.5	162.0	12.3	7.1	9	9	86	88																
					Middle	4.5	0.2	298	22.3	22.3	8.1	8.1	24.4	24.4	101.6	101.5	7.7	5.4	9	6.1	9	9	88								90	<0.2		1.2	1.3		
						4.5	0.2	306	22.2	22.2	8.1	8.1	24.4	24.4	101.3	101.5	7.7	5.4	9	9	88	90															
					Bottom	7.9	0.3	285	21.9	21.9	8.1	8.1	28.3	28.2	94.7	94.8	7.0	5.6	9	9	90	90	<0.2						1.3	1.2							
						7.9	0.4	298	21.9	21.9	8.1	8.1	28.2	28.2	94.9	94.8	7.1	5.7	9	9	91	91															
SR1A	Fine	Moderate	15:39	5.1	Surface	1.0	-	-	23.0	23.0	8.5	8.5	21.3	21.3	146.0	145.4	11.1	11.1	5.5	10	10	-		-	819977	812659	-	-			-						
						1.0	-	-	23.0	23.0	8.5	8.5	21.3	21.3	144.8	11.0	5.6	10	10	-	-																
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-								-	-	-	-	-	-
						2.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-								-	-	-	-	-	
					Bottom	4.1	-	-	22.9	22.9	8.3	8.3	23.5	23.5	121.8	121.9	9.2	5.9	11	9.2	5.9	10	10	-					-	-		-	-	-	-		
						4.1	-	-	22.9	22.9	8.3	8.3	23.5	23.5	121.9	121.9	9.2	6.0	10	9.2	6.0	10	10	-					-	-		-	-	-	-		
SR2	Fine	Moderate	15:52	4.6	Surface	1.0	0.1	262	23.0	23.0	8.4	8.4	21.9	21.9	154.3	154.5	11.7	11.7	5.1	7	8	87	89	821449	814150	<0.2	1.3	1.3									
						1.0	0.1	273	23.0	23.0	8.5	8.4	21.9	21.9	154.6	11.7	5.1	8	8	89	89																
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						-	-	-	-	-	-			
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						-	-	-	-	-				
					Bottom	3.6	0.1	294	22.8	22.8	8.3	8.3	23.0	23.0	132.2	132.0	10.0	5.2	8	5.1	8	8	90						90	<0.2	1.3	1.2					
						3.6	0.1	322	22.9	22.9	8.3	8.3	23.0	23.0	131.7	132.0	9.9	5.2	7	91	91																
SR3	Fine	Moderate	14:44	8.4	Surface	1.0	0.1	216	22.7	22.7	8.4	8.4	20.8	20.8	136.0	135.2	10.4	9.2	6.0	8	8	-	-	822127	807575	-	-	-									
						1.0	0.1	227	22.7	22.7	8.4	8.4	20.8	20.8	134.3	10.3	6.2	8	8	-	-																
					Middle	4.2	0.3	115	22.3	22.3	8.1	8.1	23.5	23.5	107.0	107.0	8.1	8.4	8	9.8	8	9	8						8				-	-	-	-	
						4.2	0.4	126	22.3	22.3	8.1	8.1	23.5	23.5	106.9	107.0	8.1	8.7	9	8.7	9	8	8						-				-	-	-		
					Bottom	7.4	0.3	104	22.2	22.2	8.1	8.1	25.8	25.8	101.2	101.2	7.6	15.2	10	7.6	15.2	10	10						-	-	-	-	-	-			
						7.4	0.3	111	22.2	22.2	8.1	8.1	25.9	25.8	101.1	101.2	7.6	14.5	9	7.6	14.5	9	9						-	-	-	-	-	-			
SR4A	Cloudy	Calm	16:13	9.2	Surface	1.0	0.2	254	23.7	23.7	8.3	8.3	23.1	23.1	136.5	136.0	10.1	8.9	6.7	10	11	-	-	817178	807803	-	-	-									
						1.0	0.2	256	23.7	23.7	8.3	8.3	23.1	23.1	135.4	10.0	6.8	11	10	-	-																
					Middle	4.6	0.1	96	22.0	22.0	8.1	8.1	29.0	29.0	103.6	103.7	7.7	8.6	12	8.9	8.6	11	11						-	-	-	-	-				
						4.6	0.1	97	22.0	22.0	8.1	8.1	29.0	29.0	103.7	7.7	8.6	11	11	-	-	-	-						-	-	-	-	-				
					Bottom	8.2	0.1	89	21.9	21.9	8.1	8.1	29.6	29.6	104.8	105.0	7.7	11.2	11	7.8	11.2	12	11						-	-	-	-	-	-			
						8.2	0.1	93	21.9	21.9	8.1	8.1	29.6	29.6	105.1	105.0	7.8	11.2	12	11	12	12	-						-	-	-	-	-	-			
SR5A	Cloudy	Calm	16:32	3.9	Surface	1.0	0.1	274	23.5	23.5	8.2	8.2	23.9	23.9	142.0	141.8	10.5	10.5	5.4	11	12	-	-	816616	810678	-	-	-									
						1.0	0.2	275	23.5	23.5	8.2	8.2	23.9	23.9	141.6	10.5	5.4	12	12	-	-																
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						-	-	-	-	-	-			
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						-	-	-	-	-				
					Bottom	2.9	0.1	302	22.9	22.9	8.0	8.0	25.6	25.6	120.7	120.7	9.0	7.2	12	9.0	7.2	13	13						-	-	-	-	-	-	-		
						2.9	0.1	308	22.9	22.9	8.0	8.0	25.6	25.6	120.7	9.0	7.2	13	13	-	-	-	-						-	-	-	-	-	-			
SR6A	Cloudy	Calm	17:00	4.3	Surface	1.0	0.1	164	23.2	23.2	8.2	8.2	23.6	23.6	156.3	156.1	11.7	11.7	6.5	14	14	-	-	817983	814718	-	-	-									
						1.0	0.1	165	23.2	23.2	8.2	8.2	23.6	23.6	155.8	11.6	6.5	14	14	-	-																
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						-	-	-	-	-	-			
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						-	-	-	-	-				
					Bottom	3.3	0.0	194	23.2	23.2	8.1	8.1	24.1	24.1	151.9	151.8	11.3	6.3	13	11.3	6.3	13	13						-	-	-	-	-	-	-		
						3.3	0.0	206	23.2	23.2	8.1	8.1	24.1	24.1	151.7	151.8	11.3	6.3	12	11.3	6.3	12	12						-	-	-	-	-	-	-		
SR7	Fine	Moderate	16:46	16.4	Surface	1.0	0.0	147	22.4	22.4	8.4	8.4	25.7	25.7	132.8	132.3	9.9	8.5	2.9	9	10	-	-	823639	823737	-	-	-									
						1.0	0.0	154	22.4	22.4	8.4	8.4	25.7	25.7	131.8	9.9	2.9	10	9	-	-																
					Middle	8.2	0.1	65	21.7	21.7	8.1	8.1	31.1	31.1	96.3	96.3	7.1	3.3	9	7.1	3.3	10	10						-	-	-	-	-				
						8.2	0.1	68	21.7	21.7	8.1	8.1	31.1	31.1	96.2	96.2	7.1	3.3	9	7.1	3.3	10	10						-	-	-	-	-				
					Bottom	15.4	0.1	203	21.6	21.6	8.1	8.1	31.7	31.7	96.2	96.4	7.1	3.3	10	7.1	3.3	10	10						-	-	-	-	-	-			
						15.4	0.1	214	21.6	21.6	8.1	8.1	31.7	31.7	96.5	96.5	7.1	3.3	10	7.1	3.3	10	10						-	-	-	-	-	-			
SR8	Fine	Moderate	15:29	5.2	Surface	1.0	-	-	23.1	23.1	8.5	8.5	21.0	21.0	150.1	149.5	11.4	11.4	8.4	14	15	-	-	820447													

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

Water Quality Monitoring

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

Monitoring Station	Weather	Sea	Sampling	Water	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)									
	Condition	Condition	Time	Depth (m)					Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA								
C1	Cloudy	Moderate	12:18	8.8	Surface	1.0	0.4	250	24.1	24.1	8.4	8.4	22.3	22.4	113.3	113.1	8.4		2.4		4		86		89	815608	804263	<0.2	1.1	1.2								
						1.0	0.4	274	24.1		8.4		22.4		112.8		8.3	7.6	2.6		4		87															
					Middle	4.4	0.5	203	22.0	22.0	8.1	8.1	30.3	30.3	92.8	92.9	6.8		8.1		5		89								5	5	88	89	88	89	88	89
						4.4	0.5	203	22.0		8.1		30.3		92.9		6.8		8.5		5		88															
					Bottom	7.8	0.2	229	22.0	22.0	8.1	8.1	31.0	31.0	91.0	91.2	6.7	6.7	14.9		5		90								5	5	88	89	88	89	88	89
						7.8	0.2	229	22.0		8.1		31.0		91.3		6.7		15.2		5		91															
C2	Fine	Moderate	14:11	12.0	Surface	1.0	0.9	162	25.0	25.0	8.2	8.2	20.0	20.0	118.4	118.4	8.7		3.7		2		84		86	825689	806944	<0.2	1.2	1.2								
						1.0	0.9	168	25.0		8.2		20.0		118.3		8.7	8.4	3.7		3		84															
					Middle	6.0	0.8	159	23.1	23.1	8.2	8.2	24.4	24.4	107.9	107.9	8.0		3.7		3		87								3	3	87	88	87	88	87	88
						6.0	0.8	168	23.0		8.2		24.4		107.8		8.0		3.7		3		87															
					Bottom	11.0	0.4	155	22.6	22.6	8.2	8.2	27.4	27.4	97.8	97.8	7.2	7.2	8.5		4		88								4	4	88	89	88	89	88	89
						11.0	0.4	161	22.6		8.2		27.4		97.8		7.2		8.5		4		88															
C3	Fine	Moderate	11:34	13.1	Surface	1.0	0.5	64	23.8	23.8	8.0	8.0	24.2	24.3	118.4	118.4	8.7		2.5		<2		85		87	822106	817799	<0.2	1.0	1.1								
						1.0	0.5	68	23.8		8.0		24.3		118.3		8.7	8.3	2.5		<2		85															
					Middle	6.6	0.4	105	22.7	22.7	7.9	7.9	28.7	28.7	106.8	106.9	7.8		3.2		2		88								3	3	88	87	88	87	88	87
						6.6	0.4	106	22.7		7.9		28.7		106.9		7.8		3.2		2		87															
					Bottom	12.1	0.2	69	22.3	22.3	7.9	7.9	30.5	30.5	100.1	100.2	7.3	7.3	3.9		4		90								4	4	90	89	90	89	90	89
						12.1	0.2	69	22.3		7.9		30.5		100.2		7.3		3.9		4		89															
IM1	Cloudy	Moderate	12:40	4.8	Surface	1.0	0.1	189	23.4	23.4	8.3	8.3	24.0	24.0	110.2	110.2	8.2		8.5		3		87		88	817969	807137	<0.2	1.0	0.9								
						1.0	0.1	195	23.4		8.3		23.9		110.2		8.2	8.2	9.0		4		86															
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-							-	-	-	-	-	-	-	-
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-							-	-	-	-	-	-	-	-
					Bottom	3.8	0.1	207	22.7	22.7	8.2	8.2	26.5	26.5	96.8	96.9	7.2	7.2	12.8		7		90								6	6	90	89	90	89	90	89
						3.8	0.1	219	22.7		8.2		26.5		96.9		7.2		12.7		7		90															
IM2	Cloudy	Moderate	12:47	6.9	Surface	1.0	0.2	132	24.3	24.3	8.4	8.4	21.8	21.8	119.1	119.0	8.8		1.5		3		85		88	818185	806185	<0.2	1.0	1.1								
						1.0	0.2	132	24.2		8.4		21.8		118.8		8.8	8.3	1.6		3		87															
					Middle	3.5	0.3	127	23.1	23.1	8.2	8.2	24.7	24.7	104.6	104.5	7.8		4.6		4		88								4	4	88	87	88	87	88	87
						3.5	0.3	136	23.1		8.2		24.7		104.3		7.8		4.6		4		87															
					Bottom	5.9	0.1	91	22.3	22.3	8.2	8.2	29.2	29.2	93.8	93.9	6.9	6.9	6.0		6		90								5	5	90	89	90	89	90	89
						5.9	0.1	99	22.3		8.2		29.2		93.9		6.9		5.4		5		91															
IM3	Cloudy	Moderate	12:55	7.0	Surface	1.0	0.1	304	24.3	24.3	8.3	8.3	22.2	22.2	112.1	112.1	8.3		2.3		3		86		88	818773	805591	<0.2	0.9	1.0								
						1.0	0.1	324	24.3		8.3		22.2		112.0		8.3	8.0	2.3		3		86															
					Middle	3.5	0.3	163	23.2	23.2	8.3	8.3	24.7	24.7	103.9	103.8	7.7		5.8		3		87								3	3	87	88	87	88	87	88
						3.5	0.3	176	23.2		8.3		24.7		103.6		7.7		5.9		3		88															
					Bottom	6.0	0.3	109	22.4	22.4	8.1	8.1	28.2	28.2	97.8	97.9	7.2	7.2	9.3		2		90								2	2	90	89	90	89	90	89
						6.0	0.3	109	22.4		8.1		28.3		97.9		7.2		8.6		2		90															
IM4	Cloudy	Moderate	13:04	7.8	Surface	1.0	0.9	182	23.4	23.4	8.3	8.3	23.7	23.8	112.9	112.8	8.4		5.8		7		86		88	819747	804587	<0.2	0.8	0.6								
						1.0	0.9	196	23.4		8.3		23.8		112.7		8.4	8.4	5.9		7		87															
					Middle	3.9	0.7	179	23.3	23.3	8.3	8.3	23.9	23.9	111.6	111.5	8.3		6.9		10		88								9	9	88	87	88	87	88	87
						3.9	0.8	180	23.3		8.3		24.0		111.4		8.3		6.9		10		87															
					Bottom	6.8	0.6	176	23.3	23.3	8.3	8.3	24.1	24.1	109.1	108.9	8.1	8.1	13.3		11		90								11	11	90	89	90	89	90	89
						6.8	0.6	186	23.3		8.3		24.1		108.6		8.1		12.8		11		91															
IM5	Cloudy	Moderate	13:14	7.3	Surface	1.0	0.8	189	24.7	24.7	8.3	8.3	22.3	22.3	118.8	118.7	8.7		3.6		3		86		88	820755	804871	<0.2	0.8	0.9								
						1.0	0.8	202	24.7		8.3		22.3		118.5		8.7	8.6	3.6		3		86															
					Middle	3.7	0.7	196	23.5	23.5	8.3	8.3	23.4	23.3	113.0	113.0	8.4		5.3		3		88								3	3	88	87	88	87	88	87
						3.7	0.7	198	23.5		8.3		23.2		113.0		8.4		5.7		3		87															
					Bottom	6.3	0.6	193	23.1	23.1	8.3	8.3	24.5	24.5	106.7	106.7	7.9	7.9	9.6		3		90								3	3	90	89	90	89	90	89
						6.3	0.6	194	23.1		8.3		24.5		106.6		7.9		10.0		3		90															
IM6	Cloudy	Moderate	13:21	7.1	Surface	1.0	0.6	216	24.2	24.2	8.3	8.3	22.6	22.6	116.2	116.2	8.6		3.0		4		87		88	821054	805822	<0.2	0.8	0.7								
						1.0	0.6	237	24.2		8.3		22.6		116.2		8.6	8.6	3.0		4		86															
					Middle	3.6	0.5	211	24.1	24.1	8.3	8.3	22.8	22.8	115.4	115.4	8.5		3.1		4		87								4	4	87	88	87	88	87	88
						3.6	0.6	225	24.1		8.3		22.8		115.3		8.5		3.2		4		88															
					Bottom	6.1	0.4	219	23.3	23.3	8.3	8.3	23.6	23.6	105.9	105.8	7.9	7.9	8.1		4		90								4	4	90	89	90	89	90	89
						6.1	0.4	232	23.3		8.3		23.6		105.7		7.9		8.5		4		91															
IM7	Cloudy	Moderate	13:30	8.2	Surface	1.0	0.3	268	24.9	24.8	8.3	8.3	21.9	22.0	118.6	118.2	8.7		2.5		2		86		88	821367	806854	<0.2	0.8	0.7								
						1.0	0.3	278	24.7		8.3		22.0		117.8		8.6	8.5	2.6		2		87															
					Middle	4.1	0.3	244	23.3	23.3	8.3	8.3	23.1	23.1	111.2	111.2	8.3		3.9		2		88								2	2	88	87	88	87	88	87
						4.1	0.3	253	23.3		8.3		23.1		111.1		8.3		3.8		2		87															
					Bottom	7.2	0.2	227	23.1	23.1	8.2	8.2	24.4	24.4	106.2	106.1	7.9	7.9	7.5		3		90								3	3	90	89	90	89	90	89
						7.2	0.2	245	23.1		8.2		24.4		106.0		7.9		7.5		3		91															
IM8	Fine	Moderate	13:40	7.6	Surface	1.0	0.2	209	23.7	23.7	8.3	8.3	22.4	22.4	118.5	118.5	8.8		4.1		6		84		86	821811	808129	<0.2	0.9	0.8								
						1.0	0.2	213	23.7		8.3		22.4		118.5		8.8	8.6	4.1		6		84															
					Middle	3.8	0.3	188	23.2	23.2	8.3	8.3	23.5	23.5	110.6	110.6	8.3		6.8		5		87								5	5	86	87	86	87	86	87
						3.8	0.3	193	23.2																													

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

Water Quality Monitoring

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

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)		
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA			
IM9	Fine	Moderate	13:34	7.2	Surface	1.0	0.3	113	23.8	23.8	8.3	8.3	21.9	21.9	125.5	125.4	9.4		4.7		2		85		822085	808791	<0.2		1.0		
						1.0	0.3	118	23.8		8.3		21.9		125.2		9.3	8.9	4.8		2		84				<0.2		0.9		
					Middle	3.6	0.4	116	23.3	23.3	8.3	8.3	22.9	23.1	114.1	114.1	8.5		6.7		2	3	87				<0.2		0.9		
						3.6	0.4	119	23.3		8.3		23.2		114.0		8.5		7.4		3		86				<0.2		1.0		
					Bottom	6.2	0.4	101	23.1	23.1	8.3	8.3	24.2	24.2	107.7	107.7	8.0	8.0	11.0		3		88				<0.2		1.0		
						6.2	0.4	105	23.1		8.3		24.2		107.6		8.0		11.2		3		88				<0.2		1.0		
IM10	Fine	Moderate	13:23	7.1	Surface	1.0	0.7	103	24.4	24.4	8.3	8.3	21.3	21.3	122.7	122.7	9.1		3.0		3		84		822403	809798	<0.2		0.7		
						1.0	0.8	104	24.4		8.3		21.3		122.7		9.1	8.9	3.0		3		85				<0.2		0.7		
					Middle	3.6	0.8	103	23.6	23.6	8.3	8.3	22.5	22.5	117.5	117.5	8.8		4.4		2	2	87				<0.2		0.8		
						3.6	0.8	104	23.6		8.3		22.5		117.4		8.7		4.5		2		86				<0.2		0.8		
					Bottom	6.1	0.6	103	23.2	23.2	8.2	8.2	23.9	23.9	107.5	107.4	8.0	8.0	12.6		<2		88				<0.2		0.9		
						6.1	0.6	108	23.2		8.2		23.9		107.3		8.0		12.4		<2		89				<0.2		0.8		
IM11	Fine	Moderate	13:08	8.3	Surface	1.0	0.7	109	24.0	24.0	8.2	8.2	22.6	22.6	118.9	118.9	8.8		3.9		3		84		822061	811436	<0.2		0.8		
						1.0	0.7	116	24.0		8.2		22.6		118.9		8.8	8.6	4.2		3		85				<0.2		0.8		
					Middle	4.2	0.6	112	23.3	23.3	8.3	8.3	23.7	23.7	113.3	113.3	8.4		10.0		4	4	86				<0.2		0.8		
						4.2	0.6	117	23.3		8.3		23.7		113.2		8.4		10.0		4		87				<0.2		0.7		
					Bottom	7.3	0.4	116	23.3	23.3	8.3	8.3	23.7	23.7	111.9	111.9	8.3	8.3	10.5		4		88				<0.2		0.8		
						7.3	0.4	120	23.3		8.3		23.7		111.8		8.3		10.4		4		88				<0.2		0.8		
IM12	Fine	Moderate	12:59	9.7	Surface	1.0	0.7	113	24.1	24.1	8.3	8.3	22.4	22.4	119.6	119.6	8.8		4.2		6		84		821460	812056	<0.2		0.8		
						1.0	0.7	114	24.1		8.3		22.4		119.6		8.8	8.7	4.6		6		84				<0.2		0.8		
					Middle	4.9	0.5	114	23.5	23.5	8.2	8.2	23.2	23.2	113.9	113.9	8.5		9.0		6	6	87				<0.2		0.9		
						4.9	0.5	115	23.5		8.2		23.2		113.9		8.5		9.3		6		86				<0.2		0.8		
					Bottom	8.7	0.4	108	23.3	23.3	8.2	8.2	24.1	24.1	109.0	109.1	8.1	8.1	11.5		5		89				<0.2		0.9		
						8.7	0.4	115	23.3		8.2		24.0		109.2		8.1		11.3		5		88				<0.2		0.8		
SR1A	Fine	Moderate	12:20	5.1	Surface	1.0	-	-	23.9	23.9	8.2	8.2	22.4	22.4	114.6	114.6	8.5		5.5		4		-		819982	812664	-	-	-		
						1.0	-	-	23.9		8.2		22.4		114.6		8.5	8.5	5.5		4		-				-	-	-		
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-					5		-				-	-	-	
						2.6	-	-	-	-	-	-	-	-	-	-	-					-		-			-	-			
					Bottom	4.1	-	-	23.3	23.3	8.1	8.1	25.2	25.2	111.8	111.8	8.3	8.3	6.5		5		-				-		-	-	
						4.1	-	-	23.3		8.1		25.1		111.7		8.3		6.4		5		-				-	-	-		
SR2	Fine	Moderate	12:05	4.9	Surface	1.0	0.7	85	23.9	23.9	8.1	8.1	21.7	21.7	114.3	114.3	8.5		3.9		3		86		821446	814164	<0.2		0.9		
						1.0	0.7	85	23.9		8.1		21.7		114.3		8.5	8.5	3.9		3		86				<0.2		0.9		
					Middle	-	-	-	-	-	-	-	-	-	-	-	-					3		-				<0.2		-	
						-	-	-	-	-	-	-	-	-	-	-	-					-		<0.2				-			
					Bottom	3.9	0.3	61	23.3	23.3	8.0	8.0	24.5	24.5	110.4	110.4	8.2	8.2	4.1		3		88				<0.2		0.9		
						3.9	0.4	64	23.3		8.0		24.4		110.3		8.2		4.1		3		88				<0.2		0.9		
SR3	Fine	Moderate	13:46	8.8	Surface	1.0	0.3	193	24.6	24.6	8.3	8.3	21.1	21.1	130.6	130.6	9.6		3.4		4		-		822145	807556	-	-	-		
						1.0	0.3	200	24.6		8.3		21.1		130.5		9.6	9.1	3.4		4		-				-	-	-		
					Middle	4.4	0.3	181	23.3	23.3	8.3	8.3	23.2	23.2	114.8	114.8	8.6		6.4		3	3	-				-	-	-		
						4.4	0.4	189	23.3		8.3		23.3		114.7		8.6		6.6		3		-				-	-	-		
					Bottom	7.8	0.2	190	23.1	23.1	8.2	8.2	24.4	24.4	107.0	107.0	8.0	8.0	9.6		2		-				-	-	-		
						7.8	0.2	203	23.1		8.2		24.4		107.0		8.0		9.5		2		-				-	-	-		
SR4A	Cloudy	Moderate	11:59	8.4	Surface	1.0	0.0	161	24.3	24.3	8.4	8.4	21.4	21.4	113.4	113.1	8.4		5.8		6		-		817198	807826	-	-	-		
						1.0	0.0	166	24.3		8.4		21.4		112.7		8.3	7.9	6.6		6		-				-	-	-		
					Middle	4.2	0.3	56	22.8	22.8	8.2	8.2	26.1	26.1	100.3	100.2	7.4		10.3		5	5	-				-	-	-		
						4.2	0.3	58	22.8		8.2		26.2		100.1		7.4		10.4		5		-				-	-	-		
					Bottom	7.4	0.3	57	22.7	22.7	8.2	8.2	26.6	26.6	98.9	98.9	7.3	7.3	16.1		4		-				-	-	-		
						7.4	0.3	59	22.7		8.2		26.6		98.9		7.3		16.1		4		-				-	-	-		
SR5A	Cloudy	Calm	11:42	5.2	Surface	1.0	0.1	84	24.3	24.3	8.3	8.3	22.6	22.6	123.0	123.0	9.0		4.2		3		-		816579	810691	-	-	-		
						1.0	0.1	92	24.3		8.3		22.6		122.9		9.0	9.0	4.1		3		-				-	-	-		
					Middle	-	-	-	-	-	-	-	-	-	-	-	-					4		-				-	-	-	
						-	-	-	-	-	-	-	-	-	-	-	-					-		-			-	-			
					Bottom	4.2	0.2	42	24.3	24.3	8.3	8.3	22.7	22.7	118.9	118.8	8.8	8.8	4.7		5		-				-		-	-	
						4.2	0.2	44	24.3		8.3		22.7		118.6		8.7		4.6		5		-				-	-	-		
SR6A	Cloudy	Calm	11:15	4.6	Surface	1.0	0.1	15	24.3	24.3	8.2	8.2	22.8	22.8	118.0	118.0	8.7		8.1		6		-		817960	814761	-	-	-		
						1.0	0.1	15	24.3		8.2		22.8		117.9		8.7	8.7	8.2		6		-				-	-	-		
					Middle	-	-	-	-	-	-	-	-	-	-	-	-					6		-				-	-	-	
						-	-	-	-	-	-	-	-	-	-	-	-					-		-			-	-			
					Bottom	3.6	0.0	208	23.8	23.8	8.1	8.1	23.3	23.3	115.2	113.5	8.5	8.4	8.0		5		-				-		-	-	
						3.6	0.0	213	23.8		8.1		23.3		111.8		8.3		7.9		5		-				-	-	-		
SR7	Fine	Moderate	10:54	15.6	Surface	1.0	0.2	63	23.1	23.1	8.1	8.1	27.6	27.6	111.0	110.9	8.1		2.8		4		-		823637	823741	-	-	-		
						1.0	0.2	64	23.1		8.1		27.6		110.8		8.1	7.7	2.8		3		-				-	-	-		
					Middle	7.8	0.2	91	22.2	22.2	8.1	8.1	30.7	30.7	100.1	100.1	7.3		4.5		2	3	-				-	-	-		
						7.8	0.2	91	22.2		8.1		30.6		100.1		7.3		4.5		2		-				-	-	-		
					Bottom	14.6	0.1	54	22.1	22.1	8.2	8.2	31.4	31.4	97.1	97.1	7.1	7.1	4.5		2		-				-	-	-		
						14.6	0.1	58	22.1		8.3		31.4		97.1		7.1		4.5		2		-				-	-	-		
SR8	Fine	Moderate	12:49	4.8	Surface	1.0	-	-	24.5	24.5	8.2	8.2	23.4	23.4	118.9	118.9	8.7		5.9		7		-		820389	811628	-	-	-		
						1.0	-	-	24.5		8.2		23.4		118.9		8.7	8.7	5.9		7		-				-	-	-		
					Middle	-	-	-	-	-	-	-	-	-	-	-	-					6		-				-	-	-	
						-	-	-	-	-	-	-	-	-	-	-	-					-		-			-	-			
					Bottom	3.8	-	-	23.9	23.9	8.3	8.3	23.																		

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

Water Quality Monitoring

Water Quality Monitoring Results on 21 April 20 during Mid-Flood Tide

Monitoring Station	Weather	Sea	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)					
	Condition	Condition							Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA	Value	DA
C1	Cloudy	Moderate	17:58	8.3	Surface	1.0	0.4	30	24.2	24.2	8.3	8.3	22.6	22.6	114.6	114.4	8.5		3.2		5		86		815624	804264	<0.2		0.8					
						1.0	0.4	30	24.2		8.3		22.6		114.1		8.4		3.2		5		86				<0.2		0.8					
					Middle	4.2	0.3	17	22.9	22.9	8.2	8.2	25.6	25.6	102.0	101.9	7.6	8.0	6.8	5.8	5	5	88	88			<0.2	<0.2	0.8	0.8				
						4.2	0.4	17	22.8		8.2		25.6		101.7		7.6		6.5		4		88				<0.2		0.7					
					Bottom	7.3	0.3	40	22.4	22.4	8.2	8.2	28.8	28.8	94.0	94.2	6.9	6.9	7.5		4		90				<0.2		0.8					
						7.3	0.4	42	22.4		8.2		28.8		94.4		6.9		7.6		4		91				<0.2		0.8					
C2	Fine	Moderate	16:43	11.6	Surface	1.0	0.5	171	24.0	24.0	7.8	7.8	19.1	19.1	102.1	102.1	7.7		6.2		4		84		825681	806942	<0.2		1.2					
						1.0	0.6	184	24.0		7.8		19.1		102.1		7.7		6.3		4		84				<0.2		1.2					
					Middle	5.8	0.3	172	22.8	22.8	7.8	7.8	25.1	25.1	102.3	102.3	7.6	7.7	5.5	6.7	4	5	87	87			<0.2	<0.2	1.5	1.4				
						5.8	0.3	175	22.8		7.8		25.1		102.3		7.6		5.5		4		86				<0.2		1.5					
					Bottom	10.6	0.3	306	22.6	22.6	7.8	7.8	26.9	26.9	99.5	99.5	7.4	7.4	8.4		6		89				<0.2		1.5					
						10.6	0.3	309	22.6		7.8		26.9		99.5		7.4		8.3		6		89				<0.2		1.5					
C3	Fine	Moderate	18:49	11.5	Surface	1.0	0.5	240	23.6	23.6	8.1	8.1	24.6	24.6	114.9	114.8	8.5		2.7		2		86		822095	817789	<0.2		1.1					
						1.0	0.6	243	23.6		8.1		24.6		114.7		8.4		2.7		2		86				<0.2		1.0					
					Middle	5.8	0.6	246	22.7	22.7	8.1	8.1	28.3	28.3	104.7	104.7	7.7	8.1	3.1	4.7	2	2	88	88			<0.2	<0.2	1.1	1.1				
						5.8	0.6	255	22.7		8.1		28.3		104.6		7.7		3.1		2		88				<0.2		1.0					
					Bottom	10.5	0.5	268	22.4	22.4	8.0	8.0	30.0	30.0	98.5	98.5	7.2	7.2	8.3		3		90				<0.2		1.1					
						10.5	0.5	280	22.4		8.0		30.0		98.5		7.2		8.1		3		90				<0.2		1.1					
IM1	Cloudy	Moderate	17:36	4.9	Surface	1.0	0.0	125	24.7	24.7	8.4	8.4	22.5	22.5	110.3	110.1	8.1		3.4		6		86		817927	807119	<0.2		1.0					
						1.0	0.0	125	24.7		8.4		22.4		109.9		8.0		3.3		6		88				<0.2		1.2					
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	8.1	3.5	7	7	-	-	-			-	<0.2	<0.2	-	1.1			
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-	-	-	-	-	
					Bottom	3.9	0.1	24	23.1	23.1	8.2	8.2	26.1	26.2	103.5	101.9	7.6	7.5	3.9		8		90				<0.2		1.2					
						3.9	0.1	24	23.0		8.2		26.2		100.2		7.4		3.6		8		90				<0.2		1.0					
IM2	Cloudy	Moderate	17:29	6.8	Surface	1.0	0.3	22	23.6	23.6	8.2	8.2	23.8	23.9	109.1	109.0	8.1		4.0		7		86		818164	806187	<0.2		0.9					
						1.0	0.4	23	23.6		8.2		24.0		108.9		8.1		4.0		7		86				<0.2		1.0					
					Middle	3.4	0.2	318	22.9	22.9	8.2	8.2	25.2	25.3	101.7	101.4	7.6	7.8	7.8	9.1	6	6	87	87			<0.2	<0.2	1.1	1.0				
						3.4	0.2	330	22.8		8.2		25.5		101.0		7.5		8.6		6		89				<0.2		0.9					
					Bottom	5.8	0.1	311	22.6	22.6	8.2	8.2	27.9	28.0	95.0	94.9	7.0	7.0	14.8		6		90				<0.2		1.0					
						5.8	0.1	320	22.6		8.2		28.0		94.8		7.0		15.3		6		90				<0.2		1.1					
IM3	Cloudy	Moderate	17:23	7.0	Surface	1.0	0.5	328	24.0	24.0	8.3	8.3	24.0	24.1	107.7	107.5	7.9		4.2		6		86		818764	805614	<0.2		1.0					
						1.0	0.5	352	24.0		8.3		24.2		107.2		7.9		4.3		6		87				<0.2		1.2					
					Middle	3.5	0.4	339	22.6	22.6	8.2	8.2	26.0	26.0	99.4	99.1	7.4	7.7	7.2	6.6	4	5	88	88			<0.2	<0.2	1.1	1.1				
						3.5	0.4	312	22.6		8.2		26.0		98.7		7.4		6.8		4		87				<0.2		1.1					
					Bottom	6.0	0.4	334	22.4	22.4	8.2	8.2	28.7	28.7	93.9	94.0	6.9	6.9	8.3		4		90				<0.2		1.2					
						6.0	0.4	307	22.4	22.4	8.2	8.2	28.7	28.7	94.1	94.0	6.9	6.9	8.8		4		91				<0.2		1.1					
IM4	Cloudy	Moderate	17:14	7.4	Surface	1.0	0.5	336	24.1	24.1	8.3	8.3	23.3	23.3	112.8	112.8	8.3		3.1		8		86		819741	804630	<0.2		1.1					
						1.0	0.5	357	24.1		8.3		23.4		112.7		8.3		3.2		8		87				<0.2		1.2					
					Middle	3.7	0.6	329	23.1	23.1	8.2	8.2	24.8	24.9	105.0	104.8	7.8	8.1	6.8	7.8	8	7	88	88			<0.2	<0.2	1.1	1.1				
						3.7	0.6	303	23.0		8.2		24.9		104.5		7.8		7.6		8		87				<0.2		1.1					
					Bottom	6.4	0.4	339	22.5	22.5	8.2	8.2	28.2	28.2	96.0	96.2	7.1	7.1	13.1		6		90				<0.2		1.0					
						6.4	0.4	312	22.5		8.2		28.2		96.4		7.1		13.3		6		90				<0.2		1.0					
IM5	Cloudy	Moderate	17:06	7.0	Surface	1.0	0.4	306	24.6	24.6	8.3	8.3	21.4	21.4	119.2	119.2	8.8		4.9		12		85		820755	804866	<0.2		1.0					
						1.0	0.4	314	24.6		8.3		21.5		119.1		8.8		4.8		12		86				<0.2		1.0					
					Middle	3.5	0.5	309	23.9	23.9	8.3	8.3	22.0	22.1	117.1	116.8	8.7	8.8	7.6	6.9	12	12	89	89			<0.2	<0.2	1.0	1.0				
						3.5	0.5	321	23.7		8.3		22.1		116.4		8.7		8.0		12		87				<0.2		1.0					
					Bottom	6.0	0.4	330	23.6	23.6	8.3	8.3	24.5	24.4	107.4	107.6	7.9	8.0	8.3		11		91				<0.2		1.1					
						6.0	0.4	355	23.6		8.3		24.3		107.7		8.0		8.0		11		92				<0.2		1.1					
IM6	Cloudy	Moderate	16:59	6.6	Surface	1.0	0.6	274	24.4	24.4	8.1	8.1	19.8	19.8	109.0	109.2	8.1		4.6		6		87		821082	805809	<0.2		1.0					
						1.0	0.6	296	24.4		8.1		19.8		109.4		8.2		4.7		6		87				<0.2		0.9					
					Middle	3.3	0.4	281	24.3	24.3	8.3	8.3	21.5	21.5	118.5	118.5	8.8	8.5	5.2	5.3	7	7	88	88			<0.2	<0.2	1.1	1.0				
						3.3	0.5	301	24.3		8.3		21.5		118.5		8.8		5.2		7		89				<0.2		0.9					
					Bottom	5.6	0.3	280	24.3	24.3	8.3	8.3	21.5	21.5	117.6	117.5	8.7	8.7	6.0		8		90				<0.2		1.0					
						5.6	0.4	286	24.3		8.3		21.5		117.3		8.7		6.0		9		90				<0.2		1.0					
IM7	Cloudy	Moderate	16:43	7.8	Surface	1.0	0.5	271	24.5	24.3	8.2	8.2	20.7	21.0	111.1	113.7	8.2		4.6		8		86		821352	806845	<0.2		1.1					
						1.0	0.5	284	24.1	24.0	8.3	8.3	21.4	22.0	115.9	115.9	8.7	8.5	4.8	8.0	7	7	87	88			<0.2	<0.2	1.1	1.1				
					Middle	3.9	0.3	243	24.0	24.0	8.3	8.3	22.0	22.0	115.8	115.8	8.6	9.0	9.2		7		88				<0.2		1.0					
						3.9	0.3	267	24.0		8.3		22.0		115.8		8.6		9.0		7		87				<0.2		1.0					
					Bottom	6.8	0.4	268	24.0	24.0	8.3	8.3	22.1	22.1	115.1	115.0	8.5	8.5	10.3		6		91				<0.2		1.1					
						6.8	0.4	286	24.0		8.3		22.1		114.9		8.5		10.4		6		90				<0.2		1.2					
IM8	Fine	Moderate	17:09	7.5	Surface	1.0	0.2	240	24.8	24.8	8.0	8.0	19.9	19.9	111.1	111.2	8.2		5.1		6		85		821837	808138	<0.2		1.5					
						1.0	0.2	241	24.8		8.0		19.9		111.2		8.2		5.0		6		84				<0.2		1.5					
					Middle	3.8	0.2	265	24.4	24.4	8.1	8.1	20.9	20.9	116.0	116.1	8.6	8.4	11.6	10.6	4	5	86	87			<0.2	<0.2	1.6	1.5				
						3.8	0.2	275	24.4		8.1		20.9		116.1		8.6		12.0		4		87				<0.2		1.5					
					Bottom	6.5	0.2	260	24.1	24.1	8.1	8.1	21.5	21.5	114.0	114.0	8.5	8.5	14.9		4	</												

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

Water Quality Monitoring

Water Quality Monitoring Results on 21 April 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)					
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA	Value	DA
IM9	Fine	Moderate	17:18	6.7	Surface	1.0	0.2	246	24.9	24.9	8.0	8.0	19.9	19.9	113.5	113.7	8.4	8.6	4.1	4.4	5	6	85	87	822077	808798	<0.2	1.5						
						1.0	0.2	265	24.9																				<0.2	1.4				
					Middle	3.4	0.3	271	24.4	24.4	8.1	8.1	21.2	21.2	118.8	118.8	8.8		3.7		5		86				<0.2	1.5						
						3.4	0.3	282	24.4										3.7		5		87				<0.2	1.5						
					Bottom	5.7	0.3	277	24.1	24.1	8.1	8.1	21.9	21.9	114.3	114.3	8.5	8.5	5.4		6		89				<0.2	1.6						
						5.7	0.3	282	24.1										5.3		7		89				<0.2	1.4						
IM10	Fine	Moderate	17:27	7.6	Surface	1.0	0.3	282	24.3	24.3	8.1	8.1	21.3	21.3	117.3	117.2	8.7	8.6	5.2	5.4	6	5	85	84	822393	809771	<0.2	1.5						
						1.0	0.3	296	24.3																				<0.2	1.5				
					Middle	3.8	0.3	297	23.8	23.8	8.1	8.1	22.5	22.5	114.5	114.6	8.5		4.8		5		87				<0.2	1.4						
						3.8	0.4	301	23.8										4.8		5		88				<0.2	1.4						
					Bottom	6.6	0.3	291	23.6	23.6	8.0	8.0	23.1	23.1	107.7	107.6	8.0	8.0	6.3		5		89				<0.2	1.5						
						6.6	0.3	319	23.6										6.4		5		89				<0.2	1.4						
IM11	Fine	Moderate	17:41	7.4	Surface	1.0	0.5	299	23.7	23.7	8.1	8.1	22.8	22.8	114.7	114.7	8.5	8.4	5.3	8.5	6	4	85	87	822052	811453	<0.2	1.2						
						1.0	0.6	300	23.7																				<0.2	1.2				
					Middle	3.7	0.6	301	23.5	23.5	8.1	8.1	23.1	23.1	111.3	111.3	8.3		7.2		4		87				<0.2	1.2						
						3.7	0.6	329	23.5										7.3		4		87				<0.2	1.2						
					Bottom	6.4	0.4	288	23.3	23.3	8.0	8.0	23.8	23.8	105.3	105.2	7.8	7.8	12.9		3		89				<0.2	1.2						
						6.4	0.4	304	23.3										13.0		2		89				<0.2	1.2						
IM12	Fine	Moderate	17:49	7.9	Surface	1.0	0.5	285	24.2	24.2	8.1	8.1	22.2	22.2	118.4	118.4	8.8	8.5	3.9	7.0	3	4	84	86	821467	812069	<0.2	1.2						
						1.0	0.5	297	24.2																				<0.2	1.1				
					Middle	4.0	0.5	287	23.4	23.4	8.1	8.1	23.4	23.4	110.8	110.8	8.2		6.4		4		86				<0.2	1.3						
						4.0	0.5	309	23.4										6.4		4		87				<0.2	1.2						
					Bottom	6.9	0.6	284	23.1	23.1	8.1	8.1	25.5	25.5	104.6	104.6	7.7	7.7	10.9		6		88				<0.2	1.2						
						6.9	0.7	311	23.1										10.4		6		89				<0.2	1.2						
SR1A	Fine	Moderate	18:10	4.9	Surface	1.0	-	-	24.3	24.3	8.1	8.1	23.2	23.2	116.1	116.1	8.5	8.5	4.7	5.1	5	-	-	-	819974	812664	-	-						
						1.0	-	-	24.3																				-	-				
					Middle	2.5	-	-	-	-	-	-	-	-	-	-	-	-	-	8.5	-	-	5	-			-	-	-	-	-	-		
						2.5	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-			-	-	-	-	-			
					Bottom	3.9	-	-	24.2	24.2	8.1	8.1	23.5	23.5	114.9	114.9	8.4	8.4	5.5		5		-				-	-	-	-	-	-		
						3.9	-	-	24.2										5.5		5		-				-	-	-	-	-	-		
SR2	Fine	Moderate	18:23	4.8	Surface	1.0	0.4	331	23.9	23.9	8.1	8.1	23.9	23.9	112.8	112.8	8.3	8.3	4.9	5.5	4	5	86	85	821484	814173	<0.2	1.0						
						1.0	0.5	349	23.9																					<0.2	1.1			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	-			-	-	-	-	<0.2	-		
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-	-	-			
					Bottom	3.8	0.1	297	23.3	23.3	8.0	8.0	25.6	25.6	104.5	104.2	7.7	7.7	6.1		5		88				<0.2	1.0						
						3.8	0.1	298	23.3										6.1		5		87				<0.2	1.0						
SR3	Fine	Moderate	17:03	8.4	Surface	1.0	0.3	215	24.6	24.6	8.0	8.0	20.1	20.2	116.1	116.1	8.6	8.5	3.9	6.5	7	6	-	-	822125	807557	-	-						
						1.0	0.3	222	24.5																				-	-				
					Middle	4.2	0.2	256	23.9	23.9	8.0	8.0	21.7	21.7	110.9	110.9	8.3		4.8		6		-				-	-	-	-	-			
						4.2	0.3	277	23.9										4.9		7		-				-	-	-	-	-			
					Bottom	7.4	0.1	242	23.5	23.5	8.0	8.0	22.5	22.5	107.6	107.5	8.0	8.0	10.0		6		-				-	-	-	-	-			
						7.4	0.2	255	23.5										11.4		5		-				-	-	-	-	-			
SR4A	Cloudy	Moderate	18:16	8.6	Surface	1.0	0.1	196	24.5	24.5	8.3	8.3	22.6	22.6	116.0	115.7	8.5	8.4	7.5	8.5	10	9	-	-	817207	807806	-	-						
						1.0	0.1	206	24.4																				-	-				
					Middle	4.3	0.1	172	24.0	24.0	8.3	8.3	22.9	22.9	112.8	112.7	8.3		8.0		10		-				-	-	-	-	-			
						4.3	0.1	172	23.9										8.0		10		-				-	-	-	-	-			
					Bottom	7.6	0.2	79	23.5	23.5	8.3	8.3	24.9	24.9	103.3	103.2	7.6	7.6	9.7		8		-				-	-	-	-	-			
						7.6	0.2	85	23.5										10.3		8		-				-	-	-	-	-			
SR5A	Cloudy	Calm	18:32	4.8	Surface	1.0	0.2	268	24.3	24.4	8.4	8.4	22.8	22.8	118.7	118.7	8.7	8.7	7.3	8.7	10	9	-	-	816612	810712	-	-						
						1.0	0.2	290	24.4																				-	-				
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.7	-	-	9	-			-	-	-	-	-	-		
						-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-			-	-	-	-	-			
					Bottom	3.8	0.2	281	24.5	24.5	8.4	8.4	23.1	23.1	117.3	117.1	8.6	8.6	9.9		8		-				-	-	-	-	-	-		
						3.8	0.2	307	24.5										9.9		8		-				-	-	-	-	-			
SR6A	Cloudy	Calm	18:58	4.0	Surface	1.0	0.1	210	24.0	24.0	8.3	8.3	24.3	24.3	112.7	112.6	8.3	8.3	7.7	8.6	8	9	-	-	817975	814730	-	-						
						1.0	0.1	224	24.0																				-	-				
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	-			-	-	-	-	-	-		
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-	-	-			
					Bottom	3.0	0.1	229	24.0	24.0	8.3	8.3	24.4	24.4	111.9	111.9	8.2	8.2	9.2		10		-				-	-	-	-	-	-		
						3.0	0.1	231	23.9										9.8		10		-				-	-	-	-	-			
SR7	Fine	Moderate	19:26	16.0	Surface	1.0	0.0	184	22.9	22.9	8.0	8.0	28.3	28.3	105.1	105.1	7.7	7.6	3.0	4.1	5	4	-	-	823654	823746	-	-						
						1.0	0.0	200	22.9																				-	-				
					Middle	8.0	0.1	169	22.6	22.6	8.0	8.0	29.3	29.4	101.3	101.3	7.4		4.0		3		-				-	-	-	-	-			
						8.0	0.1	171	22.6										4.1		4		-				-	-	-	-	-			
					Bottom	15.0	0.1	130	22.3	22.3	8.0	8.0	30.9	30.9	96.0	96.0	7.0	7.0	5.2		2		-				-	-	-	-	-			
						15.0	0.1	140	22.3										5.3		2		-				-	-	-	-	-			
SR8	Fine	Moderate	18:00	4.7	Surface	1.0	-	-	24.3	24.3	8.1	8.1	22.2	22.2	117.7	117.6	8.7	8.7	4.1	6.6	5	5	-	-	820395	811619	-	-						
						1.0	-	-	24.3																				-	-				
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	-			-	-	-	-	-	-		
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-	-	-			
					Bottom	3.7	-	-	23.9	23.9	8.1	8.1	22.9	22.9	112.0	111.9	8.3	8.3	9.1		4		-				-	-	-	-	-	-		
						3.7	-	-	23.9										9.1		4		-				-	-	-	-	-	-		

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

Water Quality Monitoring

Water Quality Monitoring Results on 23 April 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)					
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA	Value	DA
C1	Rainy	Moderate	13:43	8.4	Surface	1.0	0.4	219	22.8	22.8	7.7	7.7	27.5	27.5	93.5	93.5	6.9	6.8	2.4	8.0	4	4	86	89	815608	804266	<0.2	0.6	0.6					
						1.0	0.5	223	22.8	22.8	7.7	7.7	27.5	27.5	93.5	93.5	6.9	6.8	2.4	8.0	4	4	86	89			<0.2	0.6						
					Middle	4.2	0.4	200	22.8	22.8	7.7	7.7	29.0	29.0	90.9	90.8	6.6	6.6	7.6	8.0	4	4	89	88			<0.2	0.6		0.6				
						4.2	0.4	212	22.8	22.8	7.7	7.7	29.0	29.0	90.7	90.7	6.6	6.6	7.6	8.0	4	4	88	88			<0.2	0.6						
					Bottom	7.4	0.4	204	22.8	22.8	7.7	7.7	29.3	29.3	89.8	89.8	6.5	6.5	14.0	8.0	4	4	91	90			<0.2	0.6		0.6				
						7.4	0.4	208	22.8	22.8	7.7	7.7	29.3	29.3	89.8	89.8	6.5	6.5	13.8	8.0	5	5	91	90			<0.2	0.7						
C2	Cloudy	Moderate	14:40	11.5	Surface	1.0	1.1	172	23.2	23.2	8.2	8.2	23.4	23.4	94.1	94.1	7.0	6.9	4.3	8.6	5	5	85	88	825694	806939	<0.2	0.7	0.7					
						1.0	1.1	187	23.2	23.0	8.2	8.2	23.4	23.4	94.0	94.0	7.0	6.9	4.4	8.6	5	5	85	88			<0.2	0.7						
					Middle	5.8	1.0	167	23.0	23.0	8.2	8.2	25.4	25.4	90.1	90.2	6.7	6.7	10.3	8.6	4	4	88	88			<0.2	0.7		0.7				
						5.8	1.0	175	23.0	23.0	8.2	8.2	25.4	25.4	90.2	90.2	6.7	6.7	10.4	8.6	4	4	88	88			<0.2	0.8						
					Bottom	10.5	0.4	150	22.8	22.8	8.2	8.2	29.3	29.3	91.0	91.1	6.6	6.6	11.2	8.6	3	3	90	90			<0.2	0.7		0.6				
						10.5	0.4	160	22.8	22.8	8.2	8.2	29.3	29.3	91.1	91.1	6.6	6.6	11.2	8.6	4	4	90	90			<0.2	0.6						
C3	Cloudy	Moderate	12:24	12.6	Surface	1.0	0.4	63	23.1	23.1	8.2	8.2	26.1	26.1	96.0	95.9	7.1	7.0	1.6	1.8	3	3	87	88	822127	817783	<0.2	0.9	0.9					
						1.0	0.4	64	23.1	23.1	8.2	8.2	26.1	26.1	95.8	95.8	7.1	7.0	1.6	1.8	4	4	88	88			<0.2	0.8						
					Middle	6.3	0.2	95	22.6	22.6	8.2	8.2	29.5	29.5	92.6	92.6	6.8	6.8	1.7	1.8	3	3	89	89			<0.2	1.0		0.9				
						6.3	0.2	104	22.6	22.6	8.2	8.2	29.5	29.5	92.6	92.6	6.8	6.8	1.7	1.8	3	3	89	89			<0.2	0.9						
					Bottom	11.6	0.2	66	22.5	22.5	8.1	8.1	31.2	31.2	93.8	93.8	6.8	6.8	2.1	1.8	4	4	91	91			<0.2	0.9		0.9				
						11.6	0.2	70	22.5	22.5	8.1	8.1	31.2	31.2	93.8	93.8	6.8	6.8	2.1	1.8	4	4	91	91			<0.2	0.9						
IM1	Cloudy	Moderate	14:06	4.9	Surface	1.0	0.2	172	22.8	22.8	7.7	7.7	27.9	27.9	86.1	86.1	6.3	6.3	9.8	11.2	3	3	87	87	817935	807119	<0.2	0.8	0.8					
						1.0	0.2	174	22.8	22.8	7.7	7.7	27.9	27.9	86.1	86.1	6.3	6.3	9.9	11.2	4	4	87	87			<0.2	0.7						
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11.2	-	-	-	-			-	88		88	<0.2	-	0.8	
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	11.2	-	-	-	-			-	88		88	<0.2	-		
					Bottom	3.9	0.1	180	22.7	22.7	7.7	7.7	28.5	28.5	86.3	86.3	6.3	6.3	12.5	11.2	5	5	89	89			<0.2	0.8		0.7				
						3.9	0.1	180	22.7	22.7	7.7	7.7	28.5	28.5	86.3	86.3	6.3	6.3	12.5	11.2	6	6	89	89			<0.2	0.7						
IM2	Cloudy	Moderate	14:14	6.8	Surface	1.0	0.2	152	22.8	22.8	7.7	7.7	27.6	27.6	90.7	90.8	6.7	6.7	4.9	9.0	4	4	85	85	818140	806148	<0.2	0.7	0.7					
						1.0	0.2	159	22.8	22.8	7.7	7.7	27.6	27.6	90.8	90.8	6.7	6.7	4.9	9.0	5	5	85	85			<0.2	0.6						
					Middle	3.4	0.3	155	22.8	22.8	7.7	7.7	27.6	27.6	90.4	90.4	6.6	6.6	6.5	9.0	6	6	88	88			<0.2	0.6		0.6				
						3.4	0.3	158	22.8	22.8	7.7	7.7	27.7	27.6	90.4	90.4	6.6	6.6	6.7	9.0	6	6	88	88			<0.2	0.8						
					Bottom	5.8	0.2	148	22.8	22.8	7.7	7.7	28.7	28.7	88.6	88.6	6.5	6.5	15.6	9.0	7	7	90	90			<0.2	0.7		0.8				
						5.8	0.2	160	22.8	22.8	7.7	7.7	28.7	28.7	88.5	88.5	6.5	6.5	15.5	9.0	6	6	90	90			<0.2	0.8						
IM3	Cloudy	Moderate	14:22	7.0	Surface	1.0	0.4	136	22.8	22.8	7.7	7.7	27.8	27.8	89.9	89.8	6.6	6.6	11.1	14.2	9	9	85	85	818766	805611	<0.2	0.7	0.7					
						1.0	0.5	139	22.8	22.8	7.7	7.7	27.8	27.8	89.7	89.7	6.6	6.6	11.1	14.2	9	9	85	85			<0.2	0.6						
					Middle	3.5	0.3	126	22.8	22.8	7.7	7.7	28.2	28.2	89.1	89.1	6.5	6.5	14.3	14.2	10	10	88	88			<0.2	0.7		0.7				
						3.5	0.3	135	22.8	22.8	7.7	7.7	28.2	28.2	89.1	89.1	6.5	6.5	14.3	14.2	8	8	88	88			<0.2	0.7						
					Bottom	6.0	0.3	109	22.8	22.8	7.7	7.7	28.4	28.4	88.5	88.5	6.5	6.5	17.4	14.2	9	9	90	90			<0.2	0.7		0.7				
						6.0	0.3	111	22.8	22.8	7.7	7.7	28.4	28.4	88.6	88.6	6.5	6.5	17.1	14.2	10	10	90	90			<0.2	0.7						
IM4	Cloudy	Moderate	14:32	7.3	Surface	1.0	0.9	192	22.9	22.9	7.7	7.7	26.5	26.5	90.8	90.8	6.7	6.7	7.5	10.9	8	8	85	84	819737	804612	<0.2	0.6	0.7					
						1.0	0.9	207	22.9	22.9	7.7	7.7	26.4	26.4	90.8	90.8	6.7	6.7	7.5	10.9	7	7	84	84			<0.2	0.7						
					Middle	3.7	0.8	183	22.8	22.8	7.7	7.7	28.0	28.0	90.4	90.4	6.6	6.6	10.8	10.9	7	7	88	88			<0.2	0.6		0.6				
						3.7	0.8	197	22.8	22.8	7.7	7.7	28.0	28.0	90.4	90.4	6.6	6.6	10.9	10.9	8	8	88	88			<0.2	0.7						
					Bottom	6.3	0.6	177	22.8	22.8	7.7	7.7	28.2	28.2	90.3	90.3	6.6	6.6	14.2	14.2	8	8	89	89			<0.2	0.8		0.7				
						6.3	0.7	185	22.8	22.8	7.7	7.7	28.2	28.2	90.3	90.3	6.6	6.6	14.2	14.2	8	8	89	89			<0.2	0.7						
IM5	Cloudy	Moderate	14:44	7.2	Surface	1.0	1.0	212	23.0	23.0	7.6	7.6	25.4	25.4	92.4	92.4	6.8	6.8	4.9	7.6	5	5	85	85	820751	804884	<0.2	1.0	1.0					
						1.0	1.1	214	23.0	23.0	7.6	7.6	25.4	25.4	92.3	92.3	6.8	6.8	5.0	7.6	6	6	85	85			<0.2	0.9						
					Middle	3.6	0.9	203	22.8	22.8	7.7	7.7	27.5	27.5	92.1	92.1	6.8	6.8	7.8	7.6	7	7	88	88			<0.2	1.0		0.9				
						3.6	0.9	203	22.8	22.8	7.7	7.7	27.5	27.5	92.1	92.1	6.8	6.8	7.8	7.6	8	8	89	89			<0.2	1.0						
					Bottom	6.2	0.7	198	22.8	22.8	7.7	7.7	27.9	27.9	91.4	91.4	6.7	6.7	10.0	10.0	8	8	90	90			<0.2	0.9		1.0				
						6.2	0.7	217	22.8	22.8	7.7	7.7	27.9	27.9	91.4	91.4	6.7	6.7	10.0	10.0	8	8	90	90			<0.2	1.0						
IM6	Cloudy	Moderate	14:55	6.7	Surface	1.0	0.9	249	23.2	23.2	7.7	7.7	23.9	23.9	92.2	92.2	6.9	6.9	6.2	10.9	6	6	85	84	821075	805838	<0.2	1.1	1.1					
						1.0	1.0	252	23.2	23.2	7.7	7.7	23.9	23.9	92.2	92.2	6.9	6.9	6.3	10.9	4	4	84	84			<0.2	1.3						
					Middle	3.4	0.7	241	22.8	22.8	7.7	7.7	27.6	27.6	88.9	88.9	6.5	6.5	11.0	10.9	4	4	88	88			<0.2	1.2		0.8				
						3.4	0.7	241	22.8	22.8	7.7	7.7	27.6	27.6	88.9	88.9	6.5	6.5	11.0	10.9	4	4	88	88			<0.2	1.2						
					Bottom	5.7	0.5	242	22.7	22.7	7.7	7.7	28.1	28.1	88.6	88.7	6.5	6.5	15.5	15.5	4	4	89	89			<0.2	1.0		1.2				
						5.7	0.5	246	22.7	22.7	7.7	7.7	28.1	28.1	88.7	88.7	6.5	6.5	15.5	15.5	5	5	90	90			<0.2	1.2						
IM7	Cloudy	Moderate	15:06	7.1	Surface	1.0	0.6	230	23.1	23.1	7.7	7.7	24.2	24.2	92.1	92.0	6.9	6.9	4.1	5.1	4	4	85	84	821331	806858	<0.2	1.2	1.2					
						1.0	0.7	249	23.1	23.1	7.7	7.7	24.2	24.2	91.9	91.9	6.9	6.9	4.1	5.1	5	5	84	88			<0.2	1.2						
					Middle	3.6	0.6	246	23.0	23.0	7.7	7.7	24.6	24.6	90.8	90.8	6.8	6.8	5.3	5.1	5	5	88	88			<0.2	1.1		1.1				
						3.6	0.6	260	23.0	23.0	7.7	7.7	24.6	24.6	90.8	90.8	6.8	6.8	5.0	5.1	5	5	88	89			<0.2	1.2						
					Bottom	6.1	0.4	273	22.9	22.9	7.7	7.7	25.8	25.8	88.5	88.5	6.6	6.6	6.0	6.0	5	5	89	89			<0.2	1.2		1.1				
						6.1	0.5	277	22.9	22.9	7.7	7.7	25.8	25.8	88.4	88.5	6.5	6.5	5.9	5.9	5	5	89	89			<0.2	1.1						
IM8	Cloudy	Moderate	14:10	7.8	Surface</																													

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

Water Quality Monitoring

Water Quality Monitoring Results on 23 April 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)					
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA	Value	DA
IM9	Cloudy	Moderate	14:04	7.6	Surface	1.0	0.4	101	23.3	23.3	8.3	8.3	24.1	24.1	93.3	93.3	6.9	6.8	4.4	8.3	3	4	85	88	822109	808797	<0.2	0.8	0.7					
						1.0	0.4	109	23.3		8.3	8.3	24.1	24.1	93.2	93.3	6.9		4.5		4		85				<0.2	0.7						
					Middle	3.8	0.4	102	23.0	23.0	8.3	8.3	26.1	26.1	91.0	91.0	6.7	9.3	3	4	88	<0.2	0.8											
						3.8	0.4	109	23.0		8.3	8.3	26.1	26.1	91.0	91.0	6.7	9.5	4		89	<0.2	0.6											
					Bottom	6.6	0.3	54	22.9	22.9	8.2	8.2	27.8	27.7	93.7	93.8	6.9	11.1	3	4	90	<0.2	0.6											
						6.6	0.4	54	22.9		8.2	8.2	27.7	27.7	93.8	93.8	6.9	10.7	4		90	<0.2	0.7											
IM10	Cloudy	Moderate	13:56	7.8	Surface	1.0	0.7	139	23.3	23.3	8.2	8.2	24.1	24.1	93.8	93.8	7.0	6.9	6.0	11.2	4	4	85	88	822365	809795	<0.2	0.8	0.7					
						1.0	0.8	144	23.3		8.2	8.2	24.1	24.1	93.7	93.8	7.0		6.2		3		86				<0.2	0.7						
					Middle	3.9	0.6	131	22.9	22.9	8.2	8.2	26.5	26.5	91.8	91.8	6.8	12.9	4	4	88	<0.2	0.8											
						3.9	0.7	136	22.9		8.2	8.2	26.5	26.5	91.8	91.8	6.8	13.0	4		88	<0.2	0.7											
					Bottom	6.8	0.5	131	22.9	22.9	8.1	8.1	26.7	26.7	93.7	93.9	6.9	14.5	3	4	89	<0.2	0.7											
						6.8	0.6	132	22.9		8.1	8.1	26.7	26.7	94.0	93.9	6.9	14.3	3		90	<0.2	0.7											
IM11	Rainy	Moderate	13:41	8.5	Surface	1.0	0.9	103	23.2	23.2	8.2	8.2	24.5	24.5	93.9	93.8	7.0	6.9	7.1	10.3	5	5	85	88	822054	811458	<0.2	0.8	0.8					
						1.0	0.9	107	23.2		8.2	8.2	24.5	24.5	93.7	93.8	7.0		6.4		4		85				<0.2	0.7						
					Middle	4.3	0.8	102	23.0	23.0	8.2	8.2	26.7	26.7	91.6	91.6	6.7	9.8	4	4	88	<0.2	0.8											
						4.3	0.9	107	23.0		8.2	8.2	26.7	26.7	91.6	91.6	6.7	9.6	4		88	<0.2	0.7											
					Bottom	7.5	0.6	99	23.0	23.0	8.2	8.2	27.2	27.2	91.8	91.8	6.7	14.3	4	4	90	<0.2	0.7											
						7.5	0.6	107	23.0		8.2	8.2	27.2	27.2	91.8	91.8	6.7	14.3	5		90	<0.2	0.7											
IM12	Rainy	Moderate	13:32	10.8	Surface	1.0	0.8	102	23.3	23.3	8.3	8.3	23.9	23.9	93.9	93.9	7.0	6.8	5.3	9.7	5	4	84	88	821442	812045	<0.2	0.7	0.8					
						1.0	0.9	106	23.3		8.3	8.3	23.9	23.9	93.8	93.9	7.0		5.4		5		85				<0.2	0.8						
					Middle	5.4	0.6	87	23.0	23.0	8.2	8.2	27.0	27.0	90.2	90.2	6.6	10.2	4	4	88	<0.2	0.8											
						5.4	0.6	94	23.0		8.2	8.2	27.0	27.0	90.2	90.2	6.6	10.5	3		88	<0.2	0.8											
					Bottom	9.8	0.3	94	23.0	23.0	8.2	8.2	27.5	27.5	89.8	89.8	6.6	13.3	4	4	90	<0.2	0.9											
						9.8	0.3	99	23.0		8.2	8.2	27.5	27.5	89.7	89.8	6.6	13.2	4		90	<0.2	0.7											
SR1A	Rainy	Calm	13:01	5.2	Surface	1.0	-	-	23.1	23.1	8.2	8.2	25.7	25.7	95.0	95.0	7.0	7.0	5.2	6.1	6	6	-	-	819978	812658	-	-	-					
						1.0	-	-	23.1		8.2	8.2	25.8	25.7	94.9	95.0	7.0		5.3		6		-											
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-		-	-	-		
						2.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-		-	-	-		
					Bottom	4.2	-	-	23.1	8.2	8.2	27.0	26.9	96.0	96.2	7.0	7.1	6.8	5	4	-	-	-	-			-	-		-	-	-	-	-
						4.2	-	-	23.1	8.2	8.2	26.9	26.9	96.3	96.2	7.1	7.1	6.9	5		-	-	-	-			-	-		-	-	-	-	
SR2	Rainy	Moderate	12:48	5.0	Surface	1.0	0.3	111	23.1	23.0	8.2	8.2	25.5	25.5	97.3	97.4	7.2	7.2	3.2	3.3	5	5	85	87	821440	814151	<0.2	0.8	0.7					
						1.0	0.4	117	23.0		8.2	8.2	25.5	25.5	97.4	97.4	7.2		3.2		5		85				<0.2	0.7						
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-		-	-	-	-	
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-		-	-	-	-	
					Bottom	4.0	0.2	112	23.0	23.0	8.2	8.2	28.5	28.5	98.8	98.9	7.2	7.2	3.4	5	4	88	<0.2	0.6										
						4.0	0.2	113	23.0		8.2	8.2	28.5	28.5	99.0	98.9	7.2	7.2	3.3	5		89	<0.2	0.6										
SR3	Cloudy	Moderate	14:16	9.3	Surface	1.0	0.5	160	23.1	23.1	8.3	8.3	24.0	24.0	92.6	92.6	6.9	6.8	4.6	7.8	5	5	-	-	822150	807553	-	-	-					
						1.0	0.5	161	23.1		8.3	8.3	24.0	24.0	92.5	92.6	6.9		4.7		5		-											
					Middle	4.7	0.3	163	22.9	22.9	8.3	8.3	26.5	26.5	90.7	90.7	6.7	8.6	4	4	-	-	-	-			-	-		-	-	-		
						4.7	0.3	171	22.9		8.3	8.3	26.5	26.5	90.7	90.7	6.7	8.7	4		-	-	-	-			-	-		-	-	-		
					Bottom	8.3	0.1	315	22.8	22.8	8.3	8.3	28.2	28.2	92.1	92.1	6.7	10.0	5	4	-	-	-	-			-	-		-	-	-	-	-
						8.3	0.1	335	22.8		8.3	8.3	28.2	28.2	92.1	92.1	6.7	9.9	4		-	-	-	-			-	-		-	-	-	-	-
SR4A	Rainy	Calm	13:22	9.1	Surface	1.0	0.2	82	22.8	22.8	7.7	7.7	27.6	27.6	88.8	88.9	6.5	6.5	5.7	7.8	6	7	-	-	817195	807790	-	-	-					
						1.0	0.2	88	22.8		7.7	7.7	27.6	27.6	88.9	88.9	6.5		5.8		7		-											
					Middle	4.6	0.2	59	22.8	22.8	7.7	7.7	28.1	28.1	86.7	86.8	6.4	8.2	7	4	-	-	-	-			-	-		-	-	-		
						4.6	0.2	63	22.8		7.7	7.7	28.1	28.1	86.8	86.8	6.4	8.3	7		-	-	-	-			-	-		-	-	-		
					Bottom	8.1	0.2	56	22.8	22.8	7.7	7.7	28.3	28.3	85.6	85.7	6.3	9.4	7	4	-	-	-	-			-	-		-	-	-	-	
						8.1	0.2	60	22.8		7.7	7.7	28.3	28.3	85.7	85.7	6.3	9.2	7		-	-	-	-			-	-		-	-	-	-	
SR5A	Rainy	Calm	13:03	3.7	Surface	1.0	0.1	301	23.1	23.1	7.7	7.7	25.7	25.7	88.2	88.3	6.5	6.5	7.6	8.8	8	7	-	-	816592	810708	-	-	-					
						1.0	0.1	315	23.1		7.7	7.7	25.7	25.7	88.3	88.3	6.5		7.7		7		-											
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-		-	-	-	-	
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-		-	-	-	-	
					Bottom	2.7	0.1	320	23.0	23.0	7.7	7.7	26.5	26.5	85.9	85.9	6.3	10.0	7	4	-	-	-	-			-	-		-	-	-	-	-
						2.7	0.1	332	23.0		7.7	7.7	26.5	26.5	85.9	85.9	6.3	9.9	6		-	-	-	-			-	-		-	-	-	-	-
SR6A	Rainy	Calm	12:25	4.2	Surface	1.0	0.1	12	23.1	23.1	7.7	7.7	25.4	25.4	94.1	94.1	7.0	7.0	10.3	12.2	8	7	-	-	817979	814751	-	-	-					
						1.0	0.1	12	23.1		7.7	7.7	25.4	25.4	94.0	94.1	7.0		10.2		8		-											
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-		-	-	-	-	
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-		-	-	-	-	
					Bottom	3.2	0.1	23	23.1	23.1	7.7	7.7	25.4	25.4	93.2	93.2	6.9	14.1	7	4	-	-	-	-			-	-		-	-	-	-	-
						3.2	0.1	24	23.1		7.7	7.7	25.4	25.4	93.2	93.2	6.9	14.0	6		-	-	-	-			-	-		-	-	-	-	-
SR7	Cloudy	Moderate	11:49	15.7	Surface	1.0	0.2	78	22.7	22.7	8.0	8.0	29.6	29.6	92.7	92.7	6.8	6.6	1.0	1.1	2	2	-	-	823631	823728	-	-	-					
						1.0	0.3	83	22.7		8.0	8.0	29.6	29.6	92.6	92.7	6.7		1.0		<2		-				-							
					Middle	7.9	0.1	69	22.5	22.5	7.9	7.9	30.1	30.1	89.9	89.9	6.5	1.2	3	4	-	-	-	-			-	-		-	-	-		
						7.9	0.1	74	22.5		7.9	7.9	30.1	30.1	89.9	89.9	6.5	1.2	2		-	-	-	-			-	-		-	-	-		
					Bottom	14.7	0.1	285	22.4	22.4	7.9	7.9	31.7	31.7	89.7	89.7	6.5	1.2	<2	4	-	-	-	-			-	-		-	-	-	-	-
						14.7	0.1	288	22.4		7.9	7.9	31.7	31.7	89.7	89.7	6.5	1.2	3		-	-	-	-			-	-		-	-	-	-	
SR8	Rainy	Calm	13:22	5.3	Surface	1.0	-	-	23.2	23.2	8.2	8.2	25.4	25.4	94.2	94.3	7.0	7.0	4.4	4.5	6	6	-	-	820432	811766	-	-	-					
						1.0	-	-	23.2		8.2	8.2	25.5	25.5	94.3	94.3	7.0		4.4		5		-											
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-		-	-			

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

Water Quality Monitoring

Water Quality Monitoring Results on 23 April 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)			
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA
C1	Cloudy	Moderate	19:15	8.0	Surface	1.0	0.4	40	22.8	22.8	7.7	7.7	27.0	27.0	90.2	90.2	6.7		9.8	10	86		89		815639	804233	<0.2	0.9	0.9			
						1.0	0.4	43	22.8		7.7	7.7	27.0		90.2		6.7	6.7	9.8	11	86				<0.2	0.9						
					Middle	4.0	0.4	26	22.8	22.8	7.7	7.7	27.9	27.9	89.7	89.7	6.6		12.1	11	89	89			<0.2	1.0						
						4.0	0.5	26	22.8		7.7		27.9		89.6		6.6		12.1	10	90				<0.2	1.0						
					Bottom	7.0	0.4	30	22.8	22.8	7.8	7.8	28.3	28.3	88.7	88.7	6.5	6.5	16.0	10	91	89			<0.2	0.9						
						7.0	0.4	32	22.8		7.8	7.8	28.3		88.6		6.5		15.9	10	91				<0.2	0.9						
C2	Cloudy	Moderate	18:02	10.8	Surface	1.0	0.7	209	23.0	23.0	8.2	8.2	22.3	22.3	91.4	91.4	6.9		7.8	6	84		88		825660	806957	<0.2	1.1	1.0			
						1.0	0.7	211	23.0		8.2	8.2	22.3		91.4		6.9	6.8	8.0	4	85				<0.2	1.1						
					Middle	5.4	0.5	203	23.1	23.1	8.2	8.2	26.2	26.2	89.9	89.9	6.6		11.1	5	88	88			<0.2	0.8						
						5.4	0.5	222	23.1		8.2		26.2		89.9		6.6		11.1	6	88				<0.2	1.0						
					Bottom	9.8	0.2	274	23.0	23.0	8.2	8.2	26.8	26.8	90.1	90.1	6.6	6.6	11.6	5	90	89			<0.2	0.9						
						9.8	0.2	293	23.0		8.2	8.2	26.8		90.1		6.6	6.6	11.7	6	90				<0.2	0.8						
C3	Rainy	Moderate	20:00	12.2	Surface	1.0	0.7	252	22.9	22.9	8.3	8.3	27.8	27.8	92.5	92.5	6.8		3.6	6	87		88		822122	817790	<0.2	0.8	0.7			
						1.0	0.7	273	22.9		8.3	8.3	27.7		92.5		6.8	6.7	3.7	4	88				<0.2	0.8						
					Middle	6.1	0.6	245	22.6	22.6	8.3	8.3	30.0	30.0	91.4	91.4	6.6		6.0	5	88	88			<0.2	0.7						
						6.1	0.6	265	22.6		8.3		30.0		91.4		6.6		6.3	4	88				<0.2	0.8						
					Bottom	11.2	0.3	250	22.6	22.6	8.3	8.3	30.3	30.2	92.0	92.1	6.7	6.7	7.3	4	90	89			<0.2	0.7						
						11.2	0.3	270	22.6		8.3		30.2		92.1		6.7	6.7	7.3	4	91				<0.2	0.6						
IM1	Cloudy	Moderate	18:53	4.5	Surface	1.0	0.2	19	22.8	22.8	7.7	7.7	27.6	27.6	85.4	85.5	6.3		10.7	12	87		88		817932	807148	<0.2	0.7	0.8			
						1.0	0.2	19	22.8		7.7	7.7	27.6		85.5		6.3	6.3	10.7	13	87				<0.2	0.9						
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	<0.2	-
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	
					Bottom	3.5	0.1	11	22.7	22.7	7.7	7.7	27.6	27.6	85.6	85.6	6.3	6.3	10.5	14	89	89			<0.2	0.8						
						3.5	0.1	11	22.7		7.7	7.7	27.6		85.6		6.3	6.3	10.6	16	89				<0.2	0.7						
IM2	Cloudy	Moderate	18:44	6.5	Surface	1.0	0.4	355	22.8	22.8	7.7	7.7	27.3	27.3	89.0	89.0	6.6		8.7	12	85		86		818182	806143	<0.2	0.7	0.7			
						1.0	0.4	327	22.8		7.7	7.7	27.3		89.0		6.6	6.6	8.7	13	86				<0.2	0.9						
					Middle	3.3	0.3	356	22.8	22.8	7.7	7.7	27.4	27.4	88.6	88.7	6.5	6.6	9.9	13	88	88			<0.2	0.8						
						3.3	0.4	328	22.8		7.7		27.4		88.7		6.5		10.0	12	89				<0.2	0.7						
					Bottom	5.5	0.4	345	22.8	22.8	7.7	7.7	27.8	27.8	87.5	87.6	6.4	6.4	12.8	11	90	90			<0.2	0.7						
						5.5	0.4	317	22.8		7.7	7.7	27.8		87.7		6.4	6.4	12.6	12	90				<0.2	0.6						
IM3	Cloudy	Moderate	18:37	6.8	Surface	1.0	0.4	332	22.8	22.8	7.7	7.7	27.3	27.3	87.5	87.6	6.4		13.1	15	86		85		818761	805586	<0.2	0.9	1.1			
						1.0	0.4	349	22.8		7.7	7.7	27.3		87.6		6.4	6.4	13.1	14	85				<0.2	1.0						
					Middle	3.4	0.4	340	22.8	22.8	7.7	7.7	27.5	27.5	87.4	87.4	6.4		15.1	13	89	88			<0.2	1.2						
						3.4	0.4	313	22.8		7.7		27.5		87.4		6.4		15.1	14	88				<0.2	1.2						
					Bottom	5.8	0.3	328	22.8	22.8	7.7	7.7	27.9	27.9	87.1	87.1	6.4	6.4	19.2	14	90	90			<0.2	1.0						
						5.8	0.3	337	22.8		7.7	7.7	27.9		87.1		6.4	6.4	19.5	16	90				<0.2	1.1						
IM4	Cloudy	Moderate	18:26	7.5	Surface	1.0	0.4	295	22.8	22.8	7.7	7.7	26.6	26.6	88.9	89.0	6.6		6.2	12	85		88		819742	804593	<0.2	0.9	1.0			
						1.0	0.4	307	22.8		7.7	7.7	26.6		89.0		6.6	6.6	6.2	12	85				<0.2	1.0						
					Middle	3.8	0.5	307	22.7	22.7	7.7	7.7	27.6	27.6	88.8	88.9	6.5		7.1	12	88	88			<0.2	1.0						
						3.8	0.5	320	22.7		7.7		27.6		88.9		6.5		7.2	13	88				<0.2	1.1						
					Bottom	6.5	0.4	313	22.7	22.7	7.7	7.7	28.0	28.0	88.1	88.1	6.5	6.5	10.0	13	90	89			<0.2	0.9						
						6.5	0.5	336	22.7		7.7		28.0		88.0		6.5	6.5	10.1	14	90				<0.2	1.0						
IM5	Cloudy	Moderate	18:18	6.3	Surface	1.0	0.4	271	23.1	23.1	7.6	7.6	23.7	23.7	91.5	91.5	6.8		14.0	19	85		85		820729	804856	<0.2	0.9	1.1			
						1.0	0.4	283	23.1		7.6	7.6	23.7		91.4		6.8	6.8	14.1	20	85				<0.2	1.1						
					Middle	3.2	0.3	267	23.1	23.1	7.6	7.6	23.7	23.7	91.1	91.2	6.8		16.1	20	88	88			<0.2	1.1						
						3.2	0.3	278	23.1		7.6	7.6	23.7		91.2		6.8		15.8	21	89				<0.2	1.1						
					Bottom	5.3	0.3	276	23.1	23.1	7.6	7.6	23.7	23.7	90.9	90.9	6.8	6.8	16.6	21	90	89			<0.2	1.1						
						5.3	0.3	296	23.1		7.6	7.6	23.7		90.9		6.8	6.8	16.7	20	90				<0.2	1.3						
IM6	Cloudy	Moderate	18:10	6.5	Surface	1.0	0.7	260	23.1	23.1	7.6	7.6	23.6	23.6	91.9	91.9	6.9		17.5	17	85		85		821036	805845	<0.2	0.8	1.1			
						1.0	0.7	270	23.1		7.6	7.6	23.6		91.9		6.9	6.9	17.3	15	88				<0.2	0.9						
					Middle	3.3	0.6	262	23.1	23.1	7.6	7.6	23.7	23.7	91.3	91.3	6.8		12.8	18	85	85			<0.2	1.1						
						3.3	0.6	265	23.1		7.6		23.7		91.2		6.8		12.7	17	88				<0.2	1.2						
					Bottom	5.5	0.5	255	23.1	23.1	7.7	7.7	23.7	23.7	90.1	90.1	6.7	6.7	12.1	16	89	89			<0.2	1.2						
						5.5	0.5	256	23.1		7.7		23.7		90.0		6.7	6.7	11.9	17	89				<0.2	1.2						
IM7	Cloudy	Moderate	18:01	7.4	Surface	1.0	0.7	242	23.1	23.1	7.6	7.6	23.6	23.6	92.0	92.0	6.9		11.2	11	84		87		821343	806851	<0.2	0.9	1.2			
						1.0	0.7	254	23.1		7.6	7.6	23.6		92.0		6.9	6.9	11.3	10	85				<0.2	1.1						
					Middle	3.7	0.6	244	23.1	23.1	7.6	7.6	23.6	23.6	92.0	92.0	6.9		12.9	11	87	87			<0.2	1.3						
						3.7	0.6	266	23.1		7.6		23.6		91.9		6.9	6.9	13.0	13	87				<0.2	1.2						
					Bottom	6.4	0.6	253	23.1	23.1	7.7	7.7	23.7	23.7	91.5	91.5	6.8	6.8	14.7	15	89	89			<0.2	1.2						
						6.4	0.6	263	23.1		7.7	7.7	23.7		91.5		6.8	6.8	14.7	14	89				<0.2	1.2						
IM8	Cloudy	Moderate	18:26	6.9	Surface	1.0	0.3	219	23.2	23.2	8.3	8.3	23.7	23.7	94.5	94.5	7.1		5.3	10	85		88		821852	808158	<0.2	0.9	0.9			
						1.0	0.3	221	23.2		8.3	8.3	23.7		94.4		7.0	7.1	5.4	8	86				<0.2	1.0						
					Middle	3.5	0.3	236	23.2	23.2	8.3	8.3	24.0	24.0	95.6	95.7	7.1		6.5	10	89	89			<0.2	0.9						
						3.5	0.3	252	23.2		8.3		24.1		95.8		7.1		6.5	8	89				<0.2	0.9						
					Bottom	5.9	0.3	259	23.2	23.2	8.3	8.3	24.2	24.2	97.4	97.4	7.3	7.3	6.9	10	89	89			<0.2	0.9						
						5.9	0.3	280	23.2		8.3	8.3	24.2		97.4		7.3	7.3	6.9	10	90				<0.2	0.9						

Water Quality Monitoring Results on 23 April 20 during Mid-Flood Tide

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 25 April 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)					
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA	Value	DA
C1	Cloudy	Moderate	13:47	8.3	Surface	1.0	0.4	229	22.3	22.3	7.5	7.5	28.6	28.6	89.4	89.5	6.6	6.6	6.7	9.5	10	9	87	89	815640	804227	<0.2	<0.2	1.0					
						1.0	0.5	242	22.3	22.3	7.5	7.5	28.6	28.6	89.5	89.5	6.6	6.6	6.7	10	87	87												
					Middle	4.2	0.4	203	22.1	22.1	7.5	7.5	31.3	31.3	91.2	91.3	6.6	6.6	9.6	9.5	10	9	90	89										
						4.2	0.4	204	22.1	22.1	7.5	7.5	31.3	31.3	91.3	91.3	6.6	6.6	9.8	9	89	89												
					Bottom	7.3	0.3	203	22.2	22.2	7.5	7.5	31.7	31.7	90.8	90.9	6.6	6.6	12.2	9	91	90												
						7.3	0.3	213	22.2	22.2	7.5	7.5	31.7	31.7	90.9	90.9	6.6	6.6	12.1	8	92	90												
C2	Rainy	Moderate	12:37	11.4	Surface	1.0	0.3	147	22.4	22.4	8.1	8.1	27.2	27.2	85.9	85.9	6.4	6.4	9.9	12.2	12	12	86	88	825666	806924	<0.2	<0.2	1.8					
						1.0	0.4	150	22.4	22.4	8.1	8.1	27.2	27.2	85.8	85.8	6.4	6.4	10.1	11	86	86												
					Middle	5.7	0.4	129	22.4	22.4	8.1	8.1	28.0	28.1	85.4	85.4	6.3	6.3	11.4	12.2	12	12	87	88										
						5.7	0.4	129	22.4	22.4	8.1	8.1	28.1	28.1	85.4	85.4	6.3	6.3	11.4	12	88	88												
					Bottom	10.4	0.4	143	22.4	22.4	8.1	8.1	28.5	28.5	85.7	85.8	6.3	6.3	14.9	13	90	90												
						10.4	0.4	147	22.4	22.4	8.1	8.1	28.5	28.5	85.8	85.8	6.3	6.3	15.5	12	91	90												
C3	Rainy	Moderate	14:22	12.6	Surface	1.0	0.5	56	22.4	22.4	8.1	8.1	28.4	28.5	85.9	85.9	6.3	6.3	6.4	6.6	8	9	86	86	822123	817789	<0.2	<0.2	1.2					
						1.0	0.6	59	22.4	22.4	8.1	8.1	28.5	28.5	85.8	85.8	6.3	6.3	6.5	7	86	86												
					Middle	6.3	0.4	60	22.4	22.4	8.1	8.1	29.3	29.4	85.4	85.4	6.3	6.3	6.9	6.6	10	9	89	88										
						6.3	0.4	63	22.4	22.4	8.1	8.1	29.4	29.4	85.4	85.4	6.3	6.3	6.8	9	88	88												
					Bottom	11.6	0.3	40	22.3	22.3	8.1	8.1	30.1	30.1	86.0	86.1	6.3	6.3	6.4	11	90	90												
						11.6	0.3	41	22.3	22.3	8.1	8.1	30.1	30.1	86.2	86.3	6.3	6.3	6.5	11	90	90												
IM1	Cloudy	Moderate	13:27	5.1	Surface	1.0	0.1	190	22.3	22.3	7.5	7.5	28.4	28.4	88.5	88.5	6.5	6.5	13.0	14.0	10	9	87	88	817927	807129	<0.2	<0.2	1.1					
						1.0	0.1	194	22.3	22.3	7.5	7.5	28.4	28.4	88.5	88.5	6.5	6.5	13.0	9	87	87												
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						-	-	-	-	-
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						-	-	-	-	-
					Bottom	4.1	0.2	175	22.2	22.2	7.5	7.5	30.1	30.1	90.7	90.7	6.6	6.6	15.1	8	89	89												
						4.1	0.2	190	22.2	22.2	7.5	7.5	30.1	30.1	90.7	90.7	6.6	6.6	15.0	9	89	89												
IM2	Cloudy	Moderate	13:19	7.2	Surface	1.0	0.2	181	22.3	22.3	7.5	7.5	28.5	28.5	90.9	91.0	6.7	6.7	8.0	10.4	9	9	85	85	818156	806150	<0.2	<0.2	1.2					
						1.0	0.2	183	22.3	22.3	7.5	7.5	28.5	28.5	91.1	91.1	6.7	6.7	8.0	9	85	85												
					Middle	3.6	0.2	156	22.2	22.2	7.5	7.5	30.1	30.1	91.6	91.5	6.7	6.7	10.3	8	88	88												
						3.6	0.3	165	22.2	22.2	7.5	7.5	30.1	30.1	91.4	91.5	6.7	6.7	10.5	9	88	88												
					Bottom	6.2	0.2	138	22.2	22.2	7.5	7.5	30.8	30.8	90.9	91.0	6.6	6.6	12.8	8	90	90												
						6.2	0.2	147	22.2	22.2	7.5	7.5	30.8	30.8	91.0	91.0	6.6	6.6	12.7	9	89	89												
IM3	Cloudy	Moderate	13:12	7.5	Surface	1.0	0.2	146	22.2	22.2	7.5	7.5	28.5	28.5	90.6	90.7	6.7	6.7	5.4	9.7	9	9	85	85	818790	805601	<0.2	<0.2	1.2					
						1.0	0.2	158	22.2	22.2	7.5	7.5	28.5	28.5	90.7	90.7	6.7	6.7	5.5	8	85	85												
					Middle	3.8	0.3	148	22.3	22.3	7.5	7.5	29.0	29.0	89.9	90.0	6.6	6.6	9.2	9	88	88												
						3.8	0.3	150	22.3	22.3	7.5	7.5	29.0	29.0	90.0	90.0	6.6	6.6	9.2	8	88	88												
					Bottom	6.5	0.3	145	22.2	22.2	7.5	7.5	31.0	31.0	91.6	91.6	6.7	6.7	14.7	9	90	90												
						6.5	0.3	150	22.2	22.2	7.5	7.5	31.0	31.0	91.6	91.6	6.7	6.7	14.4	10	90	90												
IM4	Cloudy	Moderate	13:03	8.4	Surface	1.0	0.5	187	22.3	22.3	7.5	7.5	28.5	28.5	89.6	89.7	6.6	6.6	8.2	9.2	10	9	85	86	819722	804620	<0.2	<0.2	1.2					
						1.0	0.6	201	22.3	22.3	7.5	7.5	28.5	28.5	89.8	89.8	6.6	6.6	8.2	8	86	86												
					Middle	4.2	0.3	157	22.2	22.2	7.6	7.6	30.3	30.3	91.3	91.3	6.7	6.7	8.1	9	88	88												
						4.2	0.3	161	22.2	22.2	7.6	7.6	30.3	30.3	91.3	91.3	6.7	6.7	8.1	8	88	88												
					Bottom	7.4	0.2	146	22.2	22.2	7.6	7.6	31.3	31.3	90.8	90.9	6.6	6.6	11.3	8	90	90												
						7.4	0.3	154	22.2	22.2	7.6	7.6	31.3	31.3	90.9	90.9	6.6	6.6	11.1	9	90	90												
IM5	Cloudy	Moderate	12:55	7.9	Surface	1.0	0.4	222	22.3	22.3	7.5	7.5	28.1	28.1	89.2	89.2	6.6	6.6	8.5	10.3	8	8	85	85	820723	804875	<0.2	<0.2	1.3					
						1.0	0.4	233	22.3	22.3	7.5	7.5	28.1	28.1	89.2	89.2	6.6	6.6	8.5	7	85	85												
					Middle	4.0	0.4	185	22.3	22.3	7.6	7.6	29.8	29.8	90.4	90.4	6.6	6.6	9.9	8	88	88												
						4.0	0.4	187	22.3	22.3	7.6	7.6	29.8	29.8	90.4	90.4	6.6	6.6	10.0	8	88	88												
					Bottom	6.9	0.4	173	22.2	22.2	7.6	7.6	30.5	30.4	90.6	90.6	6.6	6.6	12.5	7	90	90												
						6.9	0.4	175	22.2	22.2	7.6	7.6	30.4	30.4	90.6	90.6	6.6	6.6	12.4	8	90	90												
IM6	Cloudy	Moderate	12:47	7.8	Surface	1.0	0.2	252	22.4	22.4	7.5	7.5	26.9	26.9	88.8	88.8	6.6	6.6	8.7	11.9	7	7	85	85	821038	805809	<0.2	<0.2	1.4					
						1.0	0.2	259	22.4	22.4	7.5	7.5	26.9	26.9	88.8	88.8	6.6	6.6	8.7	7	85	85												
					Middle	3.9	0.2	195	22.3	22.3	7.6	7.6	29.2	29.2	89.0	89.0	6.5	6.5	12.3	6	88	88												
						3.9	0.2	204	22.3	22.3	7.6	7.6	29.2	29.2	89.0	89.0	6.5	6.5	12.3	6	88	88												
					Bottom	6.8	0.2	181	22.2	22.2	7.6	7.6	29.8	29.8	89.7	89.7	6.6	6.6	14.8	8	89	89												
						6.8	0.3	195	22.2	22.2	7.6	7.6	29.8	29.8	89.7	89.7	6.6	6.6	14.8	7	90	90												
IM7	Cloudy	Moderate	12:39	8.9	Surface	1.0	0.1	321	22.4	22.4	7.6	7.6	27.2	27.2	88.7	88.8	6.6	6.6	9.1	7	85	85	821370	806815	<0.2	<0.2	1.4							
						1.0	0.1	323	22.4	22.4	7.6	7.6	27.2	27.2	88.6	88.6	6.6	6.6	9.1	6	85	85												
					Middle	4.5	0.1	134	22.2	22.2	7.6	7.6	28.9	28.9	89.1	89.1	6.6	6.6	12.1	6	88	88												
						4.5	0.1	139	22.2	22.2	7.6	7.6	28.9	28.9	89.0	89.0	6.6	6.6	12.1	7	89	89												
					Bottom	7.9	0.2	142	22.2	22.2	7.7	7.7	29.1	29.1	89.7	89.7	6.6	6.6	12.1	7	90	90												
						7.9	0.2	142	22.2	22.2	7.7	7.7	29.1	29.1	89.6	89.6	6.6	6.6	12.1	7	90	90												
IM8	Cloudy	Moderate	13:01	8.0	Surface	1.0	0.2	51	22.4	22.4	8.1	8.1	26.6	26.7	88.9	89.0	6.6	6.6	8.1	10.0	9	8	86	86	821853	808134	<0.2	<0.2	1.7					
						1.0	0.2	52	22.4	22.4	8.1	8.1	26.7	26.7	89.0	89.0	6.6	6.6	8.2	9	86	86												
					Middle	4.0	0.2	76	22.3	22.3	8.1	8.1	27.6	27.7	89.7	89.8	6.7	6.7	10.0	8	88	88												
						4.0	0.2	83	22.3	22.3	8.1	8.1	27.8	27.7	89.9	89.9	6.7	6.7	10.3	8	87	87												
					Bottom	7.0	0.3	50	22.2	22.2	8.1	8.1	28.4	28.4	90.7	90.8	6.7	6.7	11.6	8	90	90												
						7.0	0.3	51	22.2	22.2	8.1	8.1	28.3	28.4	90.9	90.9	6.7	6.7	11.5	8	90	90												

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

Water Quality Monitoring

Water Quality Monitoring Results on 25 April 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Gnd (Northing)	Coordinate HK Gnd (Easting)	Chromium (µg/L)		Nickel (µg/L)							
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA	Value	DA	Value	DA
IM9	Cloudy	Moderate	13:09	7.7	Surface	1.0	0.3	76	22.4	22.4	8.1	8.1	27.2	27.2	87.4	87.5	6.5	6.5	9.3	10	86	86	88	88	822075	808792	<0.2	1.3	1.3							
						1.0	0.3	76	22.4	22.4	8.1	8.1	27.3	27.3	87.5	87.5	6.5	6.5	9.5	10	87	87	95	95												
					Middle	3.9	0.3	96	22.3	22.3	8.1	8.1	27.7	27.7	87.8	87.8	6.5	6.5	10.3	10	88	88	87	87						<0.2	1.2	1.2				
						3.9	0.4	102	22.3	22.3	8.1	8.1	27.7	27.7	87.8	87.8	6.5	6.5	10.4	10	87	87	90	90						<0.2	1.2	1.2				
					Bottom	6.7	0.3	84	22.2	22.2	8.1	8.1	28.2	28.2	90.3	90.4	6.7	6.7	14.1	11	90	90	91	91						<0.2	1.3	1.3				
						6.7	0.3	92	22.2	22.2	8.1	8.1	28.2	28.2	90.5	90.4	6.7	6.7	14.2	10	91	91	90	90						<0.2	1.2	1.2				
IM10	Cloudy	Moderate	13:16	7.8	Surface	1.0	0.7	130	22.4	22.4	8.1	8.1	27.3	27.4	87.4	87.3	6.5	6.5	5.7	10	86	86	88	88	822387	809810	<0.2	1.6	1.6							
						1.0	0.8	140	22.4	22.4	8.1	8.1	27.4	27.4	87.2	87.3	6.5	6.5	5.5	9	86	86	88	88												
					Middle	3.9	0.5	121	22.3	22.3	8.1	8.1	28.1	28.1	86.7	86.7	6.4	6.4	12.4	9	88	88	87	87						<0.2	1.5	1.5				
						3.9	0.5	127	22.3	22.3	8.1	8.1	28.1	28.1	86.7	86.7	6.4	6.4	12.1	9	87	87	90	90						<0.2	1.4	1.4				
					Bottom	6.8	0.4	122	22.3	22.3	8.1	8.1	28.2	28.2	86.8	86.9	6.4	6.4	12.8	9	90	90	90	90						<0.2	1.6	1.6				
						6.8	0.4	126	22.3	22.3	8.1	8.1	28.2	28.2	86.9	86.9	6.4	6.4	12.8	10	90	90	90	90						<0.2	1.6	1.6				
IM11	Cloudy	Moderate	13:27	8.3	Surface	1.0	0.9	102	22.5	22.5	8.1	8.1	27.3	27.4	87.7	87.7	6.5	6.5	6.3	10	86	86	88	88	822066	811437	<0.2	1.2	1.2							
						1.0	0.9	103	22.5	22.5	8.1	8.1	27.4	27.4	87.7	87.7	6.5	6.5	6.4	11	86	86	88	88												
					Middle	4.2	0.9	104	22.4	22.4	8.1	8.1	27.7	27.8	87.3	87.3	6.5	6.5	6.8	9	88	88	89	89						<0.2	1.2	1.2				
						4.2	0.9	104	22.4	22.4	8.1	8.1	27.8	27.8	87.3	87.3	6.5	6.5	6.8	8	90	90	90	90						<0.2	1.0	1.0				
					Bottom	7.3	0.6	94	22.4	22.4	8.1	8.1	28.5	28.5	88.9	89.1	6.6	6.6	9.2	8	91	91	91	91						<0.2	1.0	1.0				
						7.3	0.6	96	22.4	22.4	8.1	8.1	28.4	28.4	89.2	89.1	6.6	6.6	8.8	8	91	91	91	91						<0.2	1.0	1.0				
IM12	Cloudy	Moderate	13:32	9.5	Surface	1.0	0.6	92	22.4	22.4	8.1	8.1	27.9	27.9	86.3	86.4	6.4	6.4	12.4	12	86	86	88	88	821460	812058	<0.2	1.0	1.0							
						1.0	0.6	100	22.4	22.4	8.1	8.1	27.9	27.9	86.4	86.4	6.4	6.4	12.7	11	86	86	88	88												
					Middle	4.8	0.5	99	22.4	22.4	8.1	8.1	28.0	28.0	87.4	87.4	6.5	6.5	15.1	11	88	88	87	87						<0.2	1.0	1.0				
						4.8	0.6	104	22.4	22.4	8.1	8.1	28.1	28.0	87.9	87.7	6.5	6.5	15.4	11	87	87	91	91						<0.2	1.0	1.0				
					Bottom	8.5	0.5	100	22.3	22.3	8.1	8.1	28.3	28.3	89.8	90.0	6.6	6.6	18.5	10	91	91	91	91						<0.2	1.0	1.0				
						8.5	0.5	102	22.3	22.3	8.1	8.1	28.3	28.3	90.1	90.0	6.7	6.7	18.1	11	91	91	91	91						<0.2	1.1	1.1				
SR1A	Cloudy	Moderate	13:50	5.2	Surface	1.0	-	-	22.5	22.5	8.1	8.1	26.6	26.6	88.7	88.9	6.6	6.6	7.3	11	-	-	-	-	819976	812662	-	-	-							
						1.0	-	-	22.5	22.5	8.1	8.1	26.6	26.6	89.0	88.9	6.6	6.6	7.5	11	-	-	-	-												
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						-	-	-	-	-		
						2.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						-	-	-	-	-		
					Bottom	4.2	-	-	22.4	22.4	8.1	8.1	26.8	26.8	91.0	91.2	6.8	6.8	8.1	12	-	-	-	-						-	-	-	-	-	-	
						4.2	-	-	22.3	22.4	8.1	8.1	26.8	26.8	91.4	91.2	6.8	6.8	8.2	12	-	-	-	-						-	-	-	-	-	-	
SR2	Rainy	Moderate	14:01	4.5	Surface	1.0	0.5	85	22.5	22.5	8.1	8.1	27.1	27.1	89.8	90.0	6.7	6.7	9.1	9	86	86	88	88	821464	814172	<0.2	1.1	1.1							
						1.0	0.5	86	22.5	22.5	8.1	8.1	27.1	27.1	90.1	90.0	6.7	6.7	9.3	9	88	88	87	87						<0.2	1.1	1.1				
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						-	-	-	-	-		
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						-	-	-	-	-		
					Bottom	3.5	0.3	85	22.2	22.2	8.1	8.1	27.4	27.4	92.0	92.3	6.8	6.9	11.7	7	90	90	90	90						<0.2	1.0	1.0				
						3.5	0.3	93	22.2	22.2	8.1	8.1	27.5	27.4	92.6	92.3	6.9	6.9	11.8	7	91	91	91	91						<0.2	1.0	1.0				
SR3	Rainy	Moderate	12:56	9.1	Surface	1.0	0.1	169	22.5	22.5	8.1	8.1	26.4	26.5	88.4	88.5	6.6	6.6	8.1	7	-	-	-	-	822148	807558	-	-	-							
						1.0	0.1	177	22.5	22.5	8.1	8.1	26.5	26.5	88.5	88.5	6.6	6.6	8.4	7	-	-	-	-												
					Middle	4.6	0.1	200	22.3	22.3	8.1	8.1	27.7	27.8	89.9	90.0	6.7	6.7	11.2	6	-	-	-	-						-	-	-	-			
						4.6	0.1	218	22.3	22.3	8.1	8.1	27.9	27.8	90.1	90.0	6.7	6.7	11.4	7	-	-	-	-						-	-	-	-			
					Bottom	8.1	0.1	72	22.2	22.2	8.1	8.1	28.4	28.4	91.1	91.2	6.7	6.7	12.6	7	-	-	-	-						-	-	-	-	-		
						8.1	0.1	74	22.3	22.3	8.1	8.1	28.4	28.4	91.3	91.2	6.7	6.7	12.5	8	-	-	-	-						-	-	-	-	-		
SR4A	Cloudy	Calm	14:12	9.2	Surface	1.0	0.0	247	22.3	22.3	7.5	7.5	29.1	29.1	88.2	88.2	6.5	6.5	10.4	10	-	-	-	-	817200	807831	-	-	-							
						1.0	0.0	248	22.3	22.3	7.5	7.5	29.1	29.1	88.2	88.2	6.5	6.5	10.5	9	-	-	-	-												
					Middle	4.6	0.0	89	22.2	22.2	7.5	7.5	30.2	30.2	89.5	89.5	6.5	6.5	15.0	10	-	-	-	-						-	-	-	-			
						4.6	0.0	92	22.2	22.2	7.5	7.5	30.2	30.2	89.5	89.5	6.5	6.5	15.0	9	-	-	-	-						-	-	-	-			
					Bottom	8.2	0.0	27	22.2	22.2	7.5	7.5	30.3	30.3	89.1	89.1	6.5	6.5	16.0	8	-	-	-	-						-	-	-	-	-		
						8.2	0.0	28	22.2	22.2	7.5	7.5	30.3	30.3	89.1	89.1	6.5	6.5	16.1	7	-	-	-	-						-	-	-	-	-		
SR5A	Cloudy	Calm	14:31	3.4	Surface	1.0	0.1	321	22.4	22.4	7.5	7.5	27.7	27.7	86.6	86.6	6.4	6.4	9.3	7	-	-	-	-	816592	810706	-	-	-							
						1.0	0.1	340	22.4	22.4	7.5	7.5	27.7	27.7	86.5	86.5	6.4	6.4	9.4	8	-	-	-	-												
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						-	-	-	-	-		
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						-	-	-	-	-		
					Bottom	2.4	0.1	335	22.2	22.2	7.5	7.5	28.2	28.2	86.9	87.0	6.4	6.4	13.5	9	-	-	-	-						-	-	-	-	-	-	
						2.4	0.1	351	22.2	22.2	7.5	7.5	28.2	28.2	87.0	87.0	6.4	6.4	13.6	10	-	-	-	-						-	-	-	-	-	-	
SR6A	Cloudy	Calm	15:03	3.9	Surface	1.0	0.0	268	22.6	22.6	7.5	7.5	26.7	26.7	86.8	86.8	6.4	6.4	15.4	14	-	-	-	-	817967	814728	-	-	-							
						1.0	0.0	276	22.6	22.6	7.5	7.5	26.7	26.7	86.8	86.8	6.4	6.4	15.6	15	-	-	-	-												
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						-	-	-	-	-		
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						-	-	-	-	-		
					Bottom	2.9	0.1	275	22.6	22.6	7.5	7.5	26.8	26.8	88.2	88.2	6.5	6.5	18.2	15	-	-	-	-						-	-	-	-	-	-	
						2.9	0.1	300	22.6	22.6	7.5	7.5	26.8	26.8	88.2	88.2	6.5	6.5	18.3	14	-	-	-	-						-	-	-	-	-	-	
SR7	Rainy	Moderate	14:51	16.4	Surface	1.0	0.6	57	22.5	22.5	8.1	8.1	28.5	28.5	87.1	87.1	6.4	6.4	3.8	8	-	-	-	-	823617	823754	-	-	-							
						1.0	0.7	60	22.5	22.5	8.1	8.1	28.6	28.6	87.0	87.0	6.4	6.4	3.8	8	-	-	-	-												
					Middle	8.2	0.3	30	22.4	22.4	8.1	8.1	29.1	29.1	86.8	86.9	6.4	6.4	4.0	9	-	-	-	-						-	-	-	-	-		
						8.2	0.3	31	22.4	22.4	8.1	8.1	29.1	29.1	86.9	86.9	6.4	6.4																		

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

Water Quality Monitoring

Water Quality Monitoring Results on 25 April 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)							
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA	Value	DA	Value	DA
C1	Cloudy	Moderate	08:14	8.2	Surface	1.0	0.5	44	22.0	22.0	7.6	7.6	28.0	28.0	90.2	90.2	6.7	6.7	7.8	10.7	10	9	86	89	815610	804238	<0.2	1.2	1.1							
						1.0	0.6	44	22.0		7.6		28.0		90.2		6.7		7.8		8		87				<0.2	1.1								
					Middle	4.1	0.5	39	22.2	22.2	7.7	7.7	30.3	30.3	90.8	90.8	6.6	6.6	10.8		8		89				<0.2	1.1	1.1							
						4.1	0.5	39	22.2		7.7		30.3		90.8		6.6		10.5		9		90				<0.2	1.1								
					Bottom	7.2	0.6	34	22.2	22.2	7.7	7.7	31.0	31.0	90.1	90.1	6.6	6.6	13.7		8		91				<0.2	1.1								
						7.2	0.7	36	22.2		7.7		31.0		90.0		6.6	6.6	13.4		8		92				<0.2	1.2	1.2							
C2	Cloudy	Moderate	08:39	12.2	Surface	1.0	0.5	28	22.5	22.5	8.1	8.1	25.4	25.5	88.4	88.4	6.6	6.6	5.9	10.1	7	7	86	88	825658	806960	<0.2	1.4	1.4							
						1.0	0.5	28	22.5		8.1		25.5		88.4		6.6		5.9		7		86				<0.2	1.4								
					Middle	6.1	0.6	8	22.5	22.5	8.1	8.1	25.9	25.9	88.7	88.8	6.6	6.6	8.3		8		89				<0.2	1.5	1.5							
						6.1	0.6	8	22.5		8.1		26.0		88.8		6.6		9.1		7		88				<0.2	1.5								
					Bottom	11.2	0.5	4	22.5	22.5	8.1	8.1	26.4	26.4	92.1	92.3	6.9	6.9	16.0		7		90				<0.2	1.3	1.3							
						11.2	0.5	4	22.5		8.1		26.4		92.5		6.9	6.9	15.3		8		90				<0.2	1.4	1.4							
C3	Cloudy	Moderate	06:36	12.0	Surface	1.0	0.5	279	22.4	22.4	8.1	8.1	27.1	27.1	86.8	86.8	6.4	6.4	5.0	8.4	10	8	86	88	822124	817824	<0.2	1.1	1.1							
						1.0	0.5	294	22.4		8.1		27.2		86.7		6.4	6.4	5.0		9		88				<0.2	1.1								
					Middle	6.0	0.5	267	22.4	22.4	8.1	8.1	27.7	27.7	86.8	86.8	6.4	6.4	6.9		7		88				<0.2	1.2	1.2							
						6.0	0.6	277	22.4		8.1		27.7		86.8		6.4	6.4	7.8		7		89				<0.2	1.0	1.0							
					Bottom	11.0	0.4	266	22.3	22.3	8.1	8.1	29.5	29.5	87.2	87.3	6.4	6.4	13.0		8		91				<0.2	1.0	1.0							
						11.0	0.5	278	22.3		8.1		29.5		87.4		6.4	6.4	12.6		7		90				<0.2	1.1	1.1							
IM1	Cloudy	Moderate	08:32	5.3	Surface	1.0	0.2	16	22.2	22.2	7.7	7.7	28.2	28.2	85.5	85.5	6.3	6.3	14.0	14.9	14	13	87	89	817928	807135	<0.2	1.1	1.0							
						1.0	0.2	16	22.2		7.7		28.2		85.5		6.3	6.3	14.1		13		87				<0.2	1.0								
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	89			<0.2	-	-							
						-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-					<0.2	-	-							
					Bottom	4.3	0.1	27	22.3	22.3	7.7	7.7	28.4	28.4	85.8	85.9	6.3	6.3	15.7		11		90				<0.2	0.9	0.9							
						4.3	0.1	28	22.3		7.7		28.4		85.9		6.3	6.3	15.8		12		90				<0.2	1.0	1.0							
IM2	Cloudy	Moderate	08:40	7.6	Surface	1.0	0.5	3	21.9	21.9	7.6	7.6	28.0	28.0	90.2	90.2	6.7	6.7	5.0	11.1	10	9	86	88	818170	806157	<0.2	0.9	0.9							
						1.0	0.5	3	21.9		7.6		28.0		90.2		6.7	6.7	5.1		9		85				<0.2	0.9								
					Middle	3.8	0.4	2	22.2	22.2	7.6	7.6	28.9	28.9	89.6	89.7	6.6	6.6	12.1		9		88				<0.2	0.9	0.9							
						3.8	0.4	2	22.2		7.6		28.9		89.7		6.6	6.6	12.2		10		88				<0.2	0.9								
					Bottom	6.6	0.4	355	22.2	22.2	7.6	7.6	29.1	29.1	90.0	90.0	6.6	6.6	16.1		10		90				<0.2	0.9	0.9							
						6.6	0.4	327	22.2		7.6		29.1		90.0		6.6	6.6	15.8		9		90				<0.2	1.0	1.0							
IM3	Cloudy	Moderate	08:47	7.8	Surface	1.0	0.4	343	22.1	22.1	7.6	7.6	28.6	28.6	89.8	89.8	6.6	6.6	7.3	10.2	9	10	85	88	818787	805576	<0.2	0.9	0.9							
						1.0	0.4	356	22.1		7.6		28.6		89.8		6.6	6.6	7.3		10		85				<0.2	0.9								
					Middle	3.9	0.4	336	22.3	22.3	7.6	7.6	29.2	29.2	89.3	89.3	6.6	6.6	9.6		9		89				<0.2	0.8	0.8							
						3.9	0.4	355	22.3		7.6		29.2		89.3		6.6	6.6	9.6		10		89				<0.2	0.8								
					Bottom	6.8	0.4	336	22.3	22.3	7.6	7.6	29.2	29.2	89.8	89.8	6.6	6.6	13.9		10		89				<0.2	1.0	1.0							
						6.8	0.4	355	22.3		7.6		29.2		89.7		6.6	6.6	13.7		9		90				<0.2	0.9	0.9							
IM4	Cloudy	Moderate	08:56	8.5	Surface	1.0	0.6	351	22.2	22.2	7.5	7.5	29.0	29.0	90.1	90.2	6.6	6.6	16.1	16.5	13	14	85	88	819743	804623	<0.2	0.8	0.8							
						1.0	0.7	352	22.2		7.5		29.0		90.2		6.6	6.6	16.1		14		85				<0.2	0.8								
					Middle	4.3	0.7	345	22.3	22.3	7.5	7.5	29.4	29.4	89.1	89.2	6.5	6.5	16.1		9		89				<0.2	0.9	0.9							
						4.3	0.8	359	22.3		7.5		29.4		89.2		6.5	6.5	16.0		10		88				<0.2	0.9								
					Bottom	7.5	0.6	345	22.3	22.3	7.5	7.5	29.4	29.4	89.5	89.5	6.6	6.6	17.2		10		89				<0.2	0.8	0.8							
						7.5	0.7	317	22.3		7.5		29.4		89.5		6.6	6.6	17.2		12		90				<0.2	0.8								
IM5	Cloudy	Moderate	09:02	8.0	Surface	1.0	0.9	13	22.2	22.2	7.5	7.5	28.9	28.9	89.0	89.0	6.6	6.6	12.2	13.9	12	12	85	88	820735	804861	<0.2	0.8	0.8							
						1.0	1.0	13	22.2		7.5		28.9		89.0		6.6	6.6	12.2		12		85				<0.2	0.8								
					Middle	4.0	0.9	14	22.2	22.2	7.5	7.5	28.9	28.9	89.3	89.3	6.6	6.6	14.8		14		89				<0.2	0.8	0.8							
						4.0	1.0	15	22.2		7.5		28.9		89.2		6.6	6.6	14.8		15		89				<0.2	0.9	0.9							
					Bottom	7.0	0.9	17	22.2	22.2	7.5	7.5	28.9	28.9	89.5	89.5	6.6	6.6	14.5		15		90				<0.2	0.8	0.8							
						7.0	0.9	17	22.2		7.5		28.9		89.4		6.6	6.6	14.6		16		90				<0.2	0.8								
IM6	Cloudy	Moderate	09:11	7.9	Surface	1.0	0.1	294	22.4	22.4	7.4	7.4	25.7	25.7	87.7	87.7	6.6	6.6	6.4	9.0	18	17	84	88	821058	805823	<0.2	0.7	0.8							
						1.0	0.1	309	22.4		7.4		25.7		87.7		6.6	6.6	6.5		19		85				<0.2	0.8								
					Middle	4.0	0.1	63	22.3	22.3	7.4	7.4	26.9	26.9	87.2	87.2	6.5	6.5	8.2		17		89				<0.2	0.8	0.8							
						4.0	0.1	63	22.3		7.4		26.9		87.2		6.5	6.5	8.3		16		90				<0.2	0.8								
					Bottom	8.9	0.3	59	22.2	22.2	7.4	7.4	27.8	27.8	87.5	87.5	6.5	6.5	12.3		17		90				<0.2	0.8	0.8							
						6.9	0.3	60	22.2		7.4		27.8		87.4		6.5	6.5	12.1		16		90				<0.2	0.7	0.7							
IM7	Cloudy	Moderate	09:20	9.1	Surface	1.0	0.1	279	22.4	22.4	7.4	7.4	25.3	25.3	87.9	87.9	6.6	6.6	5.8	9.9	7	7	85	88	821362	806839	<0.2	1.2	1.2							
						1.0	0.1	282	22.4		7.4		25.3		87.8		6.6	6.6	5.9		8		85				<0.2	1.2	1.2							
					Middle	4.6	0.1	161	22.4	22.4	7.4	7.4	26.2	26.2	87.3	87.3	6.5	6.5	9.8		6		89				<0.2	1.2	1.2							
						4.6	0.1	172	22.4		7.4		26.2		87.3		6.5	6.5	9.8		8		89				<0.2	1.2	1.2							
					Bottom	8.1	0.2	122	22.2	22.2	7.4	7.4	28.1	28.1	86.5	86.5	6.4	6.4	14.0		8		90				<0.2	1.2	1.2							
						8.1	0.2	123	22.2		7.4		28.1		86.5		6.4	6.4	13.8		8		91				<0.2	1.2	1.2							
IM8	Cloudy	Moderate	08:12	8.1	Surface	1.0	0.1	93	22.3	22.3	8.1	8.1	25.9	25.9	89.5	89.6	6.7	6.7	8.4	9.8	8	8	86	88	821815	808125	<0.2	1.1	1.1							
						1.0	0.1	93	22.3		8.1		26.0		89.6		6.7	6.7	8.7		8		87				<0.2	1.1								
					Middle	4.1	0.1	85	22.3	22.3	8.1	8.1	26.0	26.0	90.6	90.8	6.8	6.8	10.0		7		88				<0.2	1.2	1.2							
						4.1	0.1	90	22.3		8.1		26.0		90.9		6																			

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

Water Quality Monitoring

Water Quality Monitoring Results on 25 April 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)							
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA	Value	DA	Value	DA
IM9	Cloudy	Moderate	08:07	7.7	Surface	1.0	0.3	237	22.4	22.4	8.1	8.1	26.2	26.2	87.1	87.1	6.5	6.5	13.4	9	86	88	822102	808791	<0.2	<0.2	1.4	1.3								
						1.0	0.3	242	22.4	22.4	8.1	8.1	26.2	26.2	87.1	87.1	6.5	6.5	13.4	10	85	85	85	85	822102	808791	<0.2	<0.2	1.4	1.3						
					Middle	3.9	0.2	244	22.4	22.4	8.1	8.1	26.2	26.2	87.2	87.2	6.5	6.5	12.1	9	87	88	88	88	822102	808791	<0.2	<0.2	1.4	1.3						
						3.9	0.2	266	22.4	22.4	8.1	8.1	26.2	26.2	87.2	87.2	6.5	6.5	12.5	9	88	88	88	88	822102	808791	<0.2	<0.2	1.4	1.3						
					Bottom	6.7	0.1	221	22.4	22.4	8.1	8.1	26.2	26.2	88.2	88.2	6.6	6.6	16.9	9	90	90	90	90	822102	808791	<0.2	<0.2	1.3	1.3						
						6.7	0.1	224	22.4	22.4	8.1	8.1	26.2	26.2	88.4	88.4	6.6	6.6	17.1	9	90	90	90	90	822102	808791	<0.2	<0.2	1.3	1.3						
IM10	Cloudy	Moderate	07:58	8.3	Surface	1.0	0.8	314	22.2	22.2	8.1	8.1	26.2	26.2	88.6	88.6	6.6	6.6	6.8	13	86	88	822403	809806	<0.2	<0.2	1.7	1.5								
						1.0	0.9	331	22.2	22.2	8.1	8.1	26.2	26.2	88.6	88.6	6.6	6.6	6.7	14	86	86	86	86	822403	809806	<0.2	<0.2	1.7	1.5						
					Middle	4.2	0.7	318	22.3	22.3	8.1	8.1	26.4	26.4	88.4	88.5	6.6	6.6	12.6	10	87	88	88	88	822403	809806	<0.2	<0.2	1.5	1.5						
						4.2	0.7	331	22.3	22.3	8.1	8.1	26.4	26.4	88.5	88.5	6.6	6.6	12.4	10	88	88	88	88	822403	809806	<0.2	<0.2	1.4	1.4						
					Bottom	7.3	0.6	325	22.3	22.3	8.1	8.1	26.4	26.4	90.5	90.8	6.8	6.8	15.5	10	90	90	90	90	822403	809806	<0.2	<0.2	1.4	1.4						
						7.3	0.6	331	22.3	22.3	8.1	8.1	26.4	26.4	91.0	90.8	6.8	6.8	15.9	10	90	90	90	90	822403	809806	<0.2	<0.2	1.4	1.4						
IM11	Cloudy	Moderate	07:30	8.1	Surface	1.0	0.7	293	22.4	22.4	8.1	8.1	26.5	26.5	88.4	88.4	6.6	6.6	11.7	11	86	88	822064	811461	<0.2	<0.2	1.2	1.2								
						1.0	0.7	297	22.4	22.4	8.1	8.1	26.5	26.5	88.4	88.4	6.6	6.6	12.7	11	86	86	86	86	822064	811461	<0.2	<0.2	1.2	1.2						
					Middle	4.1	0.6	296	22.4	22.4	8.1	8.1	26.5	26.5	88.7	88.8	6.6	6.6	14.4	9	88	88	88	88	822064	811461	<0.2	<0.2	1.2	1.2						
						4.1	0.6	309	22.4	22.4	8.1	8.1	26.5	26.5	88.9	88.8	6.6	6.6	14.4	10	87	87	87	87	822064	811461	<0.2	<0.2	1.2	1.2						
					Bottom	7.1	0.5	303	22.4	22.4	8.1	8.1	26.6	26.6	90.8	91.2	6.8	6.8	16.9	10	90	90	90	90	822064	811461	<0.2	<0.2	1.2	1.2						
						7.1	0.5	310	22.4	22.4	8.1	8.1	26.6	26.6	91.5	91.2	6.8	6.8	16.5	9	91	91	91	91	822064	811461	<0.2	<0.2	1.2	1.2						
IM12	Cloudy	Moderate	07:24	9.2	Surface	1.0	0.6	275	22.2	22.2	8.1	8.1	26.3	26.3	87.8	87.8	6.6	6.6	5.5	13	86	88	821470	812060	<0.2	<0.2	1.1	1.1								
						1.0	0.6	298	22.2	22.2	8.1	8.1	26.3	26.3	87.7	87.7	6.6	6.6	5.5	12	87	87	87	87	821470	812060	<0.2	<0.2	1.1	1.1						
					Middle	4.6	0.7	274	22.3	22.3	8.1	8.1	26.7	26.7	87.2	87.2	6.5	6.5	5.5	10	88	88	88	88	821470	812060	<0.2	<0.2	1.1	1.1						
						4.6	0.7	277	22.3	22.3	8.1	8.1	26.7	26.7	87.2	87.2	6.5	6.5	5.5	10	87	87	87	87	821470	812060	<0.2	<0.2	1.1	1.1						
					Bottom	8.2	0.5	275	22.4	22.4	8.1	8.1	27.1	27.1	87.8	87.8	6.5	6.5	10.6	9	90	90	90	90	821470	812060	<0.2	<0.2	1.1	1.1						
						8.2	0.5	296	22.4	22.4	8.1	8.1	27.1	27.1	88.0	87.9	6.5	6.5	10.3	8	91	91	91	91	821470	812060	<0.2	<0.2	1.0	1.0						
SR1A	Cloudy	Moderate	07:06	5.1	Surface	1.0	-	-	22.3	22.3	8.1	8.1	26.1	26.1	88.5	88.7	6.6	6.6	4.7	8	-	-	819982	812657	-	-	-	-								
						1.0	-	-	22.3	22.3	8.1	8.1	26.1	26.1	88.9	88.9	6.7	6.7	4.8	9	-	-	-	-	819982	812657	-	-	-	-						
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-	-	-	4.9	-	-	-	-	819982	812657	-	-	-	-						
						2.6	-	-	-	-	-	-	-	-	-	-	-	-	-	4.9	-	-	-	-	819982	812657	-	-	-	-						
					Bottom	4.1	-	-	22.3	22.3	8.1	8.1	26.1	26.1	90.7	90.9	6.8	6.8	5.0	8	-	-	-	-	819982	812657	-	-	-	-						
						4.1	-	-	22.3	22.3	8.1	8.1	26.1	26.1	91.0	90.9	6.8	6.8	5.0	7	-	-	-	-	819982	812657	-	-	-	-						
SR2	Cloudy	Moderate	06:54	5.2	Surface	1.0	0.0	103	22.4	22.4	8.1	8.1	27.0	27.0	87.3	87.4	6.5	6.5	9.4	14	86	88	821476	814177	<0.2	<0.2	1.1	1.1								
						1.0	0.0	106	22.4	22.4	8.1	8.1	27.0	27.0	87.5	87.4	6.5	6.5	9.7	13	87	87	87	87	821476	814177	<0.2	<0.2	1.1	1.1						
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.1	-	-	-	-	821476	814177	<0.2	<0.2	1.0	1.0						
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.1	-	-	-	-	821476	814177	<0.2	<0.2	1.0	1.0						
					Bottom	4.2	0.1	8	22.4	22.4	8.1	8.1	27.1	27.1	89.1	89.3	6.6	6.6	10.6	14	90	90	90	90	821476	814177	<0.2	<0.2	1.0	1.0						
						4.2	0.1	8	22.4	22.4	8.1	8.1	27.1	27.1	89.3	89.3	6.6	6.6	10.7	14	90	90	90	90	821476	814177	<0.2	<0.2	1.0	1.0						
SR3	Cloudy	Moderate	08:19	9.2	Surface	1.0	0.1	56	22.4	22.4	8.1	8.1	24.9	25.0	88.8	88.8	6.7	6.7	5.0	7	-	-	822158	807562	-	-	-	-								
						1.0	0.1	57	22.4	22.4	8.1	8.1	25.0	25.0	88.8	88.8	6.7	6.7	5.5	6	-	-	-	-	822158	807562	-	-	-	-						
					Middle	4.6	0.0	6	22.4	22.4	8.1	8.1	25.7	25.7	89.2	89.3	6.7	6.7	8.5	8	-	-	-	-	822158	807562	-	-	-	-						
						4.6	0.0	6	22.4	22.4	8.1	8.1	25.7	25.7	89.3	89.3	6.7	6.7	8.7	7	-	-	-	-	822158	807562	-	-	-	-						
					Bottom	8.2	0.0	57	22.4	22.4	8.1	8.1	25.8	25.8	91.9	92.0	6.9	6.9	11.1	9	-	-	-	-	822158	807562	-	-	-	-						
						8.2	0.0	61	22.4	22.4	8.1	8.1	25.8	25.8	92.1	92.0	6.9	6.9	11.3	8	-	-	-	-	822158	807562	-	-	-	-						
SR4A	Cloudy	Calm	07:51	9.0	Surface	1.0	0.1	228	22.2	22.2	7.6	7.6	27.6	27.6	84.7	84.8	6.3	6.3	10.5	11	-	-	817196	807832	-	-	-	-								
						1.0	0.1	234	22.2	22.2	7.6	7.6	27.6	27.6	84.8	84.8	6.3	6.3	10.7	10	-	-	-	-	817196	807832	-	-	-	-						
					Middle	4.5	0.0	228	22.2	22.2	7.6	7.6	27.6	27.6	84.5	84.6	6.3	6.3	10.2	12	-	-	-	-	817196	807832	-	-	-	-						
						4.5	0.0	231	22.2	22.2	7.6	7.6	27.6	27.6	84.6	84.6	6.3	6.3	10.3	12	-	-	-	-	817196	807832	-	-	-	-						
					Bottom	8.0	0.0	30	22.1	22.1	7.6	7.6	27.6	27.6	85.1	85.2	6.3	6.3	9.9	12	-	-	-	-	817196	807832	-	-	-	-						
						8.0	0.0	32	22.1	22.1	7.6	7.6	27.6	27.6	85.3	85.3	6.3	6.3	10.3	12	-	-	-	-	817196	807832	-	-	-	-						
SR5A	Rainy	Calm	07:34	3.5	Surface	1.0	0.1	298	22.3	22.3	7.6	7.6	27.1	27.1	84.9	85.0	6.3	6.3	8.2	10	-	-	816616	810685	-	-	-	-								
						1.0	0.1	309	22.3	22.3	7.6	7.6	27.1	27.1	85.1	85.1	6.3	6.3	8.2	12	-	-	-	-	816616	810685	-	-	-	-						
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.5	-	-	-	-	816616	810685	-	-	-	-						
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.5	-	-	-	-	816616	810685	-	-	-	-						
					Bottom	2.5	0.1	298	22.3	22.3	7.7	7.7	27.1	27.1	87.2	87.3	6.5	6.5	8.7	9	-	-	-	-	816616	810685	-	-	-	-						
						2.5	0.1	311	22.3	22.3	7.7	7.7	27.1	27.1	87.3	87.3	6.5	6.5	8.7	10	-	-	-	-	816616	810685	-	-	-	-						
SR6A	Rainy	Calm	07:08	4.1	Surface	1.0	0.1	246	22.4	22.4	7.6	7.6	26.7	26.7	88.7	88.8	6.6	6.6	4.2	6	-	-	817982	814742	-	-	-	-								
						1.0	0.1	270	22.4	22.4	7.6	7.6	26.8	26.8	88.8	88.8	6.6	6.6	4.2	5	-	-	-	-	817982	814742	-	-	-	-						
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.6	-	-	-	-	817											

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

Water Quality Monitoring

Water Quality Monitoring Results on 28 April 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Gnd (Northing)	Coordinate HK Gnd (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Moderate	15:36	8.2	Surface	1.0	0.4	224	23.8	23.8	8.1	8.1	27.9	27.9	100.4	100.4	7.2	7.1	4.0	8.7	8	10	86	89	815604	804229	<0.2	<0.2	1.1	
						1.0	0.4	237	23.8	23.8	8.1	8.1	27.9	27.9	100.3	100.3	7.2	7.1	4.1	8.7	9	10	86	89						
					Middle	4.1	0.4	200	23.2	23.2	8.1	8.1	29.5	29.5	96.4	96.3	7.0	6.9	6.9	8.7	11	10	89	89						
						4.1	0.4	205	23.2	23.2	8.1	8.1	29.5	29.5	96.2	96.3	6.9	7.1	7.1	8.7	10	10	89	89						
					Bottom	7.2	0.3	196	22.7	22.7	8.1	8.1	31.0	31.0	93.1	93.1	6.7	6.7	15.7	8.7	11	10	91	89						
						7.2	0.3	206	22.7	22.7	8.1	8.1	31.0	31.0	93.1	93.1	6.7	6.7	14.6	8.7	10	10	91	89						
C2	Fine	Moderate	14:30	12.7	Surface	1.0	0.2	205	23.8	23.8	8.0	8.0	24.2	24.2	95.3	95.3	7.0	6.1	6.1	10.6	10	10	85	88	825696	806924	<0.2	<0.2	1.4	
						1.0	0.2	219	23.8	23.8	8.0	8.0	24.2	24.2	95.2	95.3	7.0	6.2	6.2	10.6	10	10	86	88						
					Middle	6.4	0.5	160	22.9	22.9	8.1	8.1	26.2	26.2	85.4	85.3	6.3	6.3	10.9	10.6	10	10	88	89						
						6.4	0.5	164	22.9	22.9	8.1	8.1	26.2	26.2	85.1	85.3	6.3	6.3	10.9	10.6	9	10	88	89						
					Bottom	11.7	0.4	149	22.7	22.7	8.1	8.1	28.8	28.8	85.1	85.5	6.2	6.3	15.0	10.6	10	10	90	89						
						11.7	0.4	151	22.7	22.7	8.1	8.1	28.8	28.8	85.8	85.5	6.3	6.3	14.3	10.6	9	10	90	89						
C3	Fine	Moderate	16:25	11.8	Surface	1.0	0.2	136	23.4	23.4	7.9	7.9	27.1	27.1	91.3	91.3	6.7	5.8	5.8	7.2	10	10	86	86	822121	817783	<0.2	<0.2	1.3	
						1.0	0.2	138	23.4	23.4	7.9	7.9	27.1	27.1	91.2	91.3	6.6	5.8	5.8	7.2	10	10	86	86						
					Middle	5.9	0.3	120	23.2	23.2	7.9	7.9	27.6	27.7	89.8	89.8	6.5	6.4	6.4	7.2	9	10	89	88						
						5.9	0.3	129	23.2	23.2	7.9	7.9	27.8	27.8	89.8	89.8	6.5	6.5	6.5	7.2	10	10	88	88						
					Bottom	10.8	0.3	24	22.7	22.7	7.9	7.9	29.6	29.6	85.6	85.6	6.2	6.2	9.2	7.2	9	10	90	89						
						10.8	0.3	24	22.7	22.7	7.9	7.9	29.6	29.6	85.8	85.7	6.2	6.2	9.4	7.2	9	10	90	89						
IM1	Fine	Moderate	15:16	5.1	Surface	1.0	0.1	159	24.2	24.2	8.1	8.1	27.1	27.1	93.6	93.6	6.7	6.9	6.9	8.9	10	8	87	87	817928	807112	<0.2	<0.2	1.1	
						1.0	0.1	165	24.2	24.2	8.1	8.1	27.1	27.1	93.5	93.6	6.7	7.0	7.0	8.9	8	8	87	87						
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.9	-	8	88	88						
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.9	-	8	88	88						
					Bottom	4.1	0.2	156	23.0	23.0	8.0	8.0	29.2	29.2	89.6	89.7	6.5	6.5	10.8	8.9	7	8	89	89						
						4.1	0.2	167	23.0	23.0	8.0	8.0	29.2	29.2	89.7	89.7	6.5	6.5	10.7	8.9	7	8	89	89						
IM2	Fine	Moderate	15:09	7.3	Surface	1.0	0.2	186	23.5	23.5	8.1	8.1	27.4	27.4	95.3	95.3	6.9	4.9	4.9	6.6	7	7	86	86	818167	806177	<0.2	<0.2	1.2	
						1.0	0.2	203	23.5	23.5	8.1	8.1	27.5	27.4	95.3	95.3	6.9	4.9	4.9	6.6	8	7	86	86						
					Middle	3.7	0.1	152	23.1	23.1	8.1	8.1	29.3	29.3	93.7	93.7	6.8	5.2	5.2	6.6	7	7	88	88						
						3.7	0.1	159	23.0	23.0	8.1	8.1	29.3	29.3	93.6	93.6	6.8	5.4	5.4	6.6	6	7	88	88						
					Bottom	6.3	0.2	116	22.8	22.8	8.1	8.1	30.4	30.4	90.7	90.7	6.6	9.7	9.7	6.6	7	7	89	89						
						6.3	0.2	120	22.8	22.8	8.1	8.1	30.4	30.4	90.7	90.7	6.6	9.7	9.7	6.6	6	7	90	89						
IM3	Fine	Moderate	15:03	7.6	Surface	1.0	0.2	134	23.2	23.2	8.1	8.0	28.4	28.4	92.0	91.9	6.7	5.5	5.5	7.8	9	10	85	85	818775	805578	<0.2	<0.2	1.1	
						1.0	0.2	134	23.2	23.2	8.0	8.0	28.4	28.4	91.8	91.8	6.7	5.7	5.7	7.8	9	10	85	85						
					Middle	3.8	0.3	145	22.9	22.9	8.0	8.0	29.3	29.3	89.4	89.5	6.5	8.8	8.8	7.8	9	10	89	88						
						3.8	0.3	157	22.9	22.9	8.0	8.0	29.3	29.3	89.6	89.5	6.5	8.8	8.8	7.8	10	10	88	88						
					Bottom	6.6	0.2	120	22.8	22.8	8.0	8.0	30.4	30.4	90.2	90.2	6.5	8.8	8.8	7.8	11	10	90	89						
						6.6	0.2	125	22.8	22.8	8.0	8.0	30.4	30.4	90.2	90.2	6.5	8.9	8.9	7.8	10	10	90	89						
IM4	Fine	Moderate	14:54	8.6	Surface	1.0	0.5	189	23.4	23.4	8.0	8.0	27.9	27.9	91.5	91.5	6.6	7.6	7.6	8.7	9	11	85	85	819704	804621	<0.2	<0.2	1.1	
						1.0	0.5	194	23.3	23.3	8.0	8.0	27.9	27.9	91.5	91.5	6.6	7.6	7.6	8.7	8	11	85	85						
					Middle	4.3	0.4	176	23.1	23.1	8.0	8.0	28.6	28.6	90.3	90.3	6.6	8.6	8.6	8.7	12	11	88	88						
						4.3	0.4	178	23.1	23.1	8.0	8.0	28.6	28.6	90.2	90.3	6.6	8.5	8.5	8.7	11	11	88	88						
					Bottom	7.6	0.3	144	22.8	22.8	8.0	8.0	30.4	30.4	89.6	89.6	6.5	9.8	9.8	8.7	11	10	90	89						
						7.6	0.3	149	22.8	22.8	8.0	8.0	30.4	30.4	89.5	89.5	6.5	9.8	9.8	8.7	12	11	89	89						
IM5	Fine	Moderate	14:46	8.0	Surface	1.0	0.4	219	23.3	23.3	8.1	8.1	27.6	27.6	94.1	94.2	6.9	6.2	6.2	7.2	7	8	85	85	820749	804887	<0.2	<0.2	1.4	
						1.0	0.4	227	23.3	23.3	8.1	8.1	27.6	27.6	94.2	94.2	6.9	6.3	6.3	7.2	8	8	85	85						
					Middle	4.0	0.4	188	23.2	23.2	8.1	8.1	28.9	28.9	92.6	92.6	6.7	6.3	6.3	7.2	9	10	88	87						
						4.0	0.4	192	23.2	23.2	8.1	8.1	28.9	28.9	92.5	92.5	6.7	6.4	6.4	7.2	10	10	87	87						
					Bottom	7.0	0.3	179	22.8	22.8	8.1	8.1	30.1	30.1	90.5	90.5	6.6	9.1	9.1	6.6	10	10	89	89						
						7.0	0.4	194	22.8	22.8	8.1	8.1	30.1	30.1	90.5	90.5	6.5	9.1	9.1	6.6	10	10	89	89						
IM6	Fine	Moderate	14:39	7.7	Surface	1.0	0.3	255	23.5	23.5	8.0	8.0	26.1	26.1	92.1	92.1	6.7	6.9	6.9	7	8	85	85	821080	805837	<0.2	<0.2	1.5		
						1.0	0.3	268	23.5	23.5	8.0	8.0	26.1	26.1	92.1	92.1	6.7	6.9	6.9	7	8	85	85							
					Middle	3.9	0.3	209	23.0	23.0	8.1	8.1	28.6	28.6	91.6	91.6	6.7	8.1	8.1	7.7	7	8	87						87	
						3.9	0.3	222	23.0	23.0	8.1	8.1	28.6	28.6	91.6	91.6	6.7	8.1	8.1	7.7	8	8	87						87	
					Bottom	6.7	0.3	186	22.9	22.9	8.1	8.1	29.5	29.5	89.9	89.9	6.5	10.2	10.2	8	8	89	88							
						6.7	0.3	197	22.9	22.9	8.1	8.1	29.5	29.5	89.8	89.9	6.5	10.2	10.2	7	8	88	88							
IM7	Fine	Moderate	14:28	9.1	Surface	1.0	0.2	232	23.2	23.2	8.1	8.1	26.0	26.0	90.1	90.1	6.6	7.2	7.2	7	6	86	86	821369	806840	<0.2	<0.2	1.5		
						1.0	0.2	247	23.2	23.2	8.1	8.1	26.0	26.0	90.1	90.1	6.6	7.3	7.3	7	6	86	86							
					Middle	4.6	0.1	170	23.3	23.3	8.1	8.1	27.4	27.4	90.1	90.1	6.6	9.3	9.3	6	6	89	88							
						4.6	0.1	170	23.3	23.3	8.1	8.1	27.4	27.4	90.0	90.1	6.6	9.3	9.3	6	6	88	88							
					Bottom	8.1	0.2	129	22.9	22.9	8.1	8.1	28.8	28.8	88.3	88.4	6.4	11.2	11.2	6	6	90	89							
						8.1	0.2	141	22.9	22.9	8.1	8.1	28.8	28.8	88.4	88.4	6.4	11.2	11.2	6	6	90	89							
IM8	Fine	Moderate	14:57	8.2	Surface	1.0	0.1	195	23.7	23.7	8.1	8.1	24.8	24.9	95.1	95.0	7.0	5.9	5.9	8	8	84	84	821814	808133	<0.2	<0.2	1.4		
						1.0	0.1	202	23.6	23.6	8.1	8.1	25.1	24.9	94.9	94.9	7.0	6.2	6.2	9	8	84	84							
					Middle	4.1	0.1	161	23.0	23.0	8.1	8.1	26.7	26.7	89.1	89.1	6.6	9.5	9.5	8	8	88	89							
						4.1	0.1	162	23.0	23.0	8.1	8.1	26.8	26.7	89.0	89.1	6.5	10.0	10.0	8	8	89	89							
					Bottom	7.2	0.2	13	22.9	22.9	8.1	8.1	27.8	27.8	89.4	89.5	6.5	11.9	11.9	8	8	89	89							
						7.2	0.2	13	22.9	22.9	8.1	8.1	27.8	27.8	89.6	89.5	6.6	11.7	11.7	8	8	90	89							

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

Water Quality Monitoring

Water Quality Monitoring Results on 28 April 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)			
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA
IM9	Fine	Moderate	15:03	7.4	Surface	1.0	0.2	140	23.9	23.9	8.1	8.1	24.9	25.0	96.1	96.1	7.0	6.8	5.9	8.0	8	85	88	822076	808821	<0.2	<0.2	1.4	1.4			
						1.0	0.2	142	23.8		8.1		25.0		96.1		7.0		6.1	7	7	85					<0.2	<0.2	1.2			
					Middle	3.7	0.3	141	23.2	23.2	8.1	8.1	26.2	26.2	90.5	90.4	6.7	6.8	8.1	7	89	88	88			<0.2	<0.2	1.4				
						3.7	0.3	141	23.2		8.1		26.3		90.2		6.6		8.3	8	88	90	88			<0.2	<0.2	1.4				
					Bottom	6.4	0.1	67	23.0	23.0	8.1	8.1	26.8	26.8	88.6	88.7	6.5	6.5	9.8	8	90	90	88			<0.2	<0.2	1.5				
						6.4	0.1	72	23.0		8.1		26.8		88.8		6.5		9.9	9	90	90	88			<0.2	<0.2	1.4				
IM10	Fine	Moderate	15:17	8.2	Surface	1.0	0.4	138	23.8	23.8	8.3	8.3	25.3	25.3	96.7	96.7	7.1	7.1	6.3	7	85	86	88	822406	809811	<0.2	<0.2	1.2	1.2			
						1.0	0.5	147	23.7		8.3		25.3		96.6		7.1		6.3	6	86	88	88			<0.2	<0.2	1.3				
					Middle	4.1	0.6	127	23.4	23.4	8.3	8.3	26.0	26.1	95.5	95.5	7.0	7.7	7.6	7	88	89	90			<0.2	<0.2	1.3	1.2			
						4.1	0.6	134	23.4		8.3		26.1		95.4		7.0		7.6	8	88	89	90			<0.2	<0.2	1.2				
					Bottom	7.2	0.4	112	23.1	23.2	8.4	8.4	26.9	26.9	90.2	90.3	6.6	6.6	15.1	8	90	90	88			<0.2	<0.2	1.2				
						7.2	0.4	119	23.2		8.4		26.8		90.3		6.6		14.6	7	90	90	88			<0.2	<0.2	1.2				
IM11	Fine	Moderate	15:27	8.1	Surface	1.0	0.9	100	23.6	23.6	8.2	8.2	25.6	25.6	94.1	94.1	6.9	6.8	6.5	7	85	86	88	822041	811450	<0.2	<0.2	1.2	1.3			
						1.0	0.9	101	23.6		8.2		25.6		94.0		6.9		6.6	7	86	88	88			<0.2	<0.2	1.3				
					Middle	4.1	0.9	107	23.3	23.3	8.2	8.2	25.9	26.0	92.0	91.9	6.8	6.8	8.3	7	88	88	88			<0.2	<0.2	1.3				
						4.1	0.9	116	23.3		8.2		26.0		91.8		6.7		8.5	6	88	88	88			<0.2	<0.2	1.3				
					Bottom	7.1	0.6	98	23.1	23.1	8.2	8.2	26.8	26.7	90.0	90.1	6.6	6.6	18.2	6	90	90	88			<0.2	<0.2	1.3				
						7.1	0.7	98	23.1		8.2		26.7		90.1		6.6		18.3	6	90	90	88			<0.2	<0.2	1.2				
IM12	Fine	Moderate	15:34	8.9	Surface	1.0	0.6	116	23.9	23.9	8.2	8.2	25.4	25.4	94.2	94.1	6.9	6.8	6.2	7	85	85	88	821474	812048	<0.2	<0.2	1.2	1.2			
						1.0	0.6	124	23.8		8.2		25.4		93.9		6.9		6.3	7	85	88	88			<0.2	<0.2	1.2				
					Middle	4.5	0.6	119	23.4	23.4	8.2	8.2	26.0	26.1	90.3	90.1	6.6	6.8	8.5	7	88	89	90			<0.2	<0.2	1.3				
						4.5	0.6	125	23.3	23.4	8.2	8.2	26.2	26.1	89.9	90.1	6.6	6.6	8.6	6	89	89	88			<0.2	<0.2	1.2				
					Bottom	7.9	0.2	93	23.0	23.0	8.2	8.2	27.1	27.0	87.8	87.9	6.5	6.5	16.5	6	89	90	88			<0.2	<0.2	1.2				
						7.9	0.3	101	23.0	23.0	8.2	8.2	27.0	27.0	88.0	87.9	6.5	6.5	16.8	7	90	90	88			<0.2	<0.2	1.2				
SR1A	Fine	Calm	15:53	5.0	Surface	1.0	-	-	23.4	23.4	8.2	8.2	26.4	26.4	89.5	89.5	6.5	6.5	8.6	6	-	-	-	819980	812664	-	-	-	-			
						1.0	-	-	23.4		8.2		26.4		89.4		6.5		8.6	6	-	-	-			-	-	-	-			
					Middle	2.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
						2.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
					Bottom	4.0	-	-	23.3	23.3	8.2	8.2	26.6	26.6	89.9	90.2	6.6	6.6	8.8	9	-	-	-	-	-	-	-	-	-	-	-	-
						4.0	-	-	23.3		8.3		26.7		90.4		6.6		8.8	9	-	-	-	-	-	-	-	-	-	-	-	-
SR2	Fine	Moderate	16:05	4.0	Surface	1.0	0.5	114	23.5	23.5	8.2	8.2	26.3	26.3	95.4	95.4	7.0	7.0	6.0	8	84	84	87	821440	814158	<0.2	<0.2	1.3	1.2			
						1.0	0.6	116	23.4	23.5	8.2	8.2	26.4	26.3	95.3	95.4	7.0	7.0	6.1	8	84	84	87			<0.2	<0.2	1.2				
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
					Bottom	3.0	0.4	114	23.1	23.1	8.2	8.2	26.9	26.9	91.8	92.0	6.7	6.8	12.7	8	89	89	87			<0.2	<0.2	1.2				
						3.0	0.5	119	23.1	23.1	8.2	8.2	26.9	26.9	92.2	92.0	6.8	6.8	12.3	7	89	89	87			<0.2	<0.2	1.2				
SR3	Fine	Moderate	14:51	9.2	Surface	1.0	0.2	188	24.1	24.1	8.2	8.2	24.6	24.6	98.2	98.2	7.2	6.9	5.4	9	-	-	-	822129	807558	-	-	-	-			
						1.0	0.2	204	24.1		8.2		24.6		98.1		7.2		5.4	9	-	-	-			-	-	-	-	-		
					Middle	4.6	0.1	274	23.0	23.0	8.3	8.3	27.1	27.2	88.3	88.4	6.5	6.5	10.5	8	-	-	-	-	-	-	-	-	-	-	-	
						4.6	0.1	283	22.9		8.3		27.3		88.5		6.5		10.6	9	-	-	-	-	-	-	-	-	-	-	-	
					Bottom	8.2	0.2	19	23.0	23.0	8.3	8.3	28.1	28.1	89.9	90.0	6.6	6.6	11.0	8	-	-	-	-	-	-	-	-	-	-	-	
						8.2	0.2	20	23.0		8.3		28.1		90.0		6.6		10.8	9	-	-	-	-	-	-	-	-	-	-	-	
SR4A	Fine	Calm	15:59	9.2	Surface	1.0	0.2	50	24.0	24.0	8.0	8.0	27.8	27.8	94.9	94.9	6.8	6.6	8.5	7	-	-	-	817178	807832	-	-	-	-			
						1.0	0.2	51	24.0		8.0		27.8		94.9		6.8		8.6	8	-	-	-			-	-	-	-	-		
					Middle	4.6	0.1	80	23.0	23.0	8.0	8.0	29.4	29.4	88.3	88.3	6.4	6.4	12.7	9	-	-	-	-	-	-	-	-	-	-		
						4.6	0.1	87	23.0		8.0		29.4		88.2		6.4		12.8	10	-	-	-	-	-	-	-	-	-	-	-	
					Bottom	8.2	0.1	71	22.8	22.8	8.0	8.0	29.8	29.8	88.2	88.3	6.4	6.4	14.6	10	-	-	-	-	-	-	-	-	-	-	-	
						8.2	0.2	75	22.8		8.0		29.8		88.3		6.4		14.5	9	-	-	-	-	-	-	-	-	-	-	-	
SR5A	Fine	Calm	16:16	3.9	Surface	1.0	0.0	181	24.2	24.1	8.0	8.0	26.5	26.5	94.0	93.9	6.8	6.8	8.4	10	-	-	-	816575	810705	-	-	-	-			
						1.0	0.0	197	24.1		8.0		26.5		93.8		6.8		8.4	11	-	-	-			-	-	-	-			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
					Bottom	2.9	0.0	185	23.3	23.3	8.1	8.1	27.5	27.5	90.3	90.3	6.6	6.6	12.2	9	-	-	-	-	-	-	-	-	-	-	-	
						2.9	0.0	199	23.3		8.1		27.6		90.3		6.6		12.2	8	-	-	-	-	-	-	-	-	-	-	-	
SR6A	Fine	Calm	16:46	4.4	Surface	1.0	0.1	40	23.1	23.1	8.0	8.0	26.5	26.5	87.4	87.5	6.4	6.4	12.4	18	-	-	-	817939	814740	-	-	-	-			
						1.0	0.1	43	23.1		8.0		26.5		87.5		6.4		12.3	18	-	-	-			-	-	-	-			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
					Bottom	3.4	0.1	227	23.1	23.1	8.0	8.0	27.7	27.7	85.9	86.0	6.3	6.3	17.5	18	-	-	-	-	-	-	-	-	-	-	-	
						3.4	0.1	249	23.1	23.1	8.0	8.0	27.7	27.7	86.1		6.3		17.6	17	-	-	-	-	-	-	-	-	-	-	-	
SR7	Fine	Moderate	16:57	15.9	Surface	1.0	0.7	72	23.4	23.4	7.9	7.9	27.3	27.3	94.2	94.2	6.9	6.7	4.4	6	-	-	-	823633	823719	-	-	-	-			
						1.0	0.7	75	23.4		7.9		27.3		94.2		6.9		4.4	7	-	-	-	-	-	-	-	-	-	-		
					Middle	8.0	0.3	29	22.9	22.9	8.0	8.0	29.0	29.0	89.1	89.1	6.5	6.5	4.6	7	-	-	-	-	-	-	-	-	-	-		
						8.0	0.3	31	22.9		8.0		29.1		89.1		6.5		4.6	6	-	-	-	-	-	-	-	-	-	-		
					Bottom	14.9	0.4	25	22.9	22.9	8.0	8.0	29.2	29.2	90.3	90.4	6.6	6.6	4.7	5	-	-</										

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

Water Quality Monitoring

Water Quality Monitoring Results on 28 April 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity (NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)							
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA	Value	DA	Value	DA
C1	Fine	Moderate	09:32	8.0	Surface	1.0	0.4	31	23.0	23.0	8.2	8.2	28.1	28.1	90.3	90.3	6.6	6.6	6.6	6.6	7	7	87	89	815604	804249	<0.2	1.2	1.2							
						1.0	0.4	32	23.0		8.2	8.2	28.1		90.3		6.6	6.7	7	7	87	87														
					Middle	4.0	0.4	31	22.7	22.7	8.2	8.2	30.7	30.7	88.6	88.6	6.4	9.6	7	7	89	89														
						4.0	0.5	31	22.7		8.2	8.2	30.7		88.6		6.4	9.2	7	7	89	89														
					Bottom	7.0	0.5	34	22.6	22.6	8.3	8.3	31.6	31.6	87.5	87.5	6.3	12.9	7	7	91	91														
						7.0	0.6	36	22.6		8.3	8.3	31.6		87.5		6.3	13.0	8	8	92	92														
C2	Fine	Moderate	10:40	12.9	Surface	1.0	0.4	353	23.6	23.6	8.1	8.1	23.1	23.1	93.3	93.2	6.9	4.8	6	6	85	88	825676	806965	<0.2	1.2	1.2									
						1.0	0.5	325	23.6		8.1	8.1	23.1		93.1		6.9	4.8	5	5	85	85														
					Middle	6.5	0.4	333	22.9	22.9	8.1	8.1	26.3	26.3	84.4	84.4	6.2	6.8	5	6	88	89														
						6.5	0.5	306	22.9		8.1	8.1	26.3		84.3		6.2	6.1	6	6	88	88														
					Bottom	11.9	0.4	330	22.7	22.7	8.2	8.2	27.7	27.7	82.1	82.2	6.0	8.3	6	6	89	89														
						11.9	0.4	304	22.7		8.2	8.2	27.7		82.2		6.0	9.0	7	7	90	90														
C3	Fine	Moderate	08:42	12.8	Surface	1.0	0.4	247	22.9	22.9	7.8	7.8	25.2	25.2	90.7	90.7	6.7	4.8	6	6	88	88	822096	817804	<0.2	1.2	1.2									
						1.0	0.4	253	22.9		7.8	7.8	25.2		90.6		6.7	4.8	5	5	88	88														
					Middle	6.4	0.6	260	22.6	22.6	7.8	7.8	29.4	29.4	84.3	84.4	6.2	4.7	5	6	89	89														
						6.4	0.7	272	22.6		7.8	7.8	29.5		84.4		6.2	4.8	6	6	89	89														
					Bottom	11.8	0.5	269	22.6	22.6	7.8	7.8	30.4	30.4	84.9	85.0	6.2	10.9	6	6	90	90														
						11.8	0.5	273	22.6		7.9	7.8	30.4		85.0		6.2	10.1	6	6	90	90														
IM1	Fine	Moderate	09:51	5.5	Surface	1.0	0.2	17	23.1	23.1	8.2	8.2	27.4	27.4	86.9	86.9	6.4	13.2	6	6	88	88	817955	807153	<0.2	1.2	1.1									
						1.0	0.2	18	23.1		8.2	8.2	27.4		86.9		6.4	13.4	5	5	87	87														
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						-	-	-	-	-	-	-	-	-
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						-	-	-	-	-	-	-	-	-
					Bottom	4.5	0.1	347	22.9	22.9	8.2	8.2	28.4	28.4	86.0	86.0	6.3	16.4	6	6	90	90														
						4.5	0.1	319	22.9		8.2	8.2	28.4		86.0		6.3	16.4	6	6	89	89														
IM2	Fine	Moderate	09:59	7.6	Surface	1.0	0.3	353	23.2	23.2	8.1	8.1	26.7	26.7	90.0	90.0	6.6	7.8	6	6	85	85	818185	806167	<0.2	1.2	1.2									
						1.0	0.3	325	23.2		8.1	8.1	26.7		89.9		6.6	8.0	6	6	86	86														
					Middle	3.8	0.3	6	22.8	22.8	8.1	8.1	29.3	29.3	88.4	88.4	6.4	13.7	6	6	88	88														
						3.8	0.4	6	22.8		8.1	8.1	29.3		88.3		6.4	13.8	5	5	88	88														
					Bottom	6.6	0.2	6	22.8	22.8	8.1	8.1	29.5	29.5	88.1	88.1	6.4	17.5	5	5	90	90														
						6.6	0.2	6	22.8		8.1	8.1	29.5		88.0		6.4	17.3	5	5	90	90														
IM3	Fine	Moderate	10:06	7.8	Surface	1.0	0.4	324	23.4	23.4	8.1	8.1	26.2	26.2	91.6	91.6	6.7	6.0	4	4	85	85	818760	805592	<0.2	1.2	1.2									
						1.0	0.5	348	23.4		8.1	8.1	26.2		91.5		6.7	6.1	6	6	85	85														
					Middle	3.9	0.5	345	23.0	23.0	8.1	8.1	27.4	27.4	88.9	88.9	6.5	9.8	5	5	88	88														
						3.9	0.5	317	23.0		8.1	8.1	27.4		88.9		6.5	10.1	5	5	88	88														
					Bottom	6.8	0.3	349	22.8	22.8	8.0	8.0	29.7	29.7	88.2	88.3	6.4	13.6	5	5	90	90														
						6.8	0.3	321	22.8		8.0	8.0	29.7		88.3		6.4	13.3	5	5	89	89														
IM4	Fine	Moderate	10:19	8.7	Surface	1.0	0.7	337	23.1	23.1	8.1	8.1	26.2	26.2	91.2	91.1	6.7	6.8	6	6	85	85	819739	804593	<0.2	1.3	1.3									
						1.0	0.7	346	23.1		8.1	8.1	26.2		91.0		6.7	6.8	6	6	85	85														
					Middle	4.4	0.7	2	22.9	22.9	8.1	8.1	28.0	28.0	88.8	88.7	6.5	10.3	8	8	88	88														
						4.4	0.7	2	22.9		8.1	8.1	28.0		88.6		6.5	10.5	8	8	88	88														
					Bottom	7.7	0.6	358	22.6	22.6	8.1	8.1	29.8	29.8	86.9	86.9	6.3	14.4	8	8	90	90														
						7.7	0.6	329	22.6		8.1	8.1	29.8		86.9		6.3	14.4	9	9	89	89														
IM5	Fine	Moderate	10:24	8.1	Surface	1.0	0.9	4	22.9	22.8	8.1	8.1	28.0	28.0	87.1	87.0	6.4	16.2	6	6	86	86	820748	804853	<0.2	1.1	1.1									
						1.0	0.9	4	22.8		8.1	8.1	28.0		86.9		6.4	16.5	5	5	85	85														
					Middle	4.1	0.7	7	22.7	22.7	8.1	8.1	28.8	28.8	86.4	86.4	6.3	18.7	5	6	88	87														
						4.1	0.7	7	22.7		8.1	8.1	28.8		86.3		6.3	18.8	6	6	87	87														
					Bottom	7.1	0.5	26	22.6	22.6	8.1	8.1	29.3	29.3	85.9	85.9	6.3	20.2	7	7	89	89														
						7.1	0.6	28	22.6		8.1	8.1	29.3		85.8		6.3	20.1	7	7	90	90														
IM6	Fine	Moderate	10:32	7.9	Surface	1.0	0.0	90	23.2	23.2	8.0	8.0	25.5	25.5	89.5	89.5	6.6	10.5	5	5	85	86	821075	805851	<0.2	1.6	1.6									
						1.0	0.0	97	23.2		8.0	8.0	25.5		89.4		6.6	10.5	6	6	86	86														
					Middle	4.0	0.1	53	23.0	23.0	8.0	8.0	27.0	27.0	87.1	87.1	6.4	14.3	6	6	88	88														
						4.0	0.1	54	23.0		8.0	8.0	27.0		87.1		6.4	14.3	6	6	88	88														
					Bottom	8.9	0.3	61	22.8	22.8	8.0	8.0	28.5	28.5	86.9	86.9	6.4	18.3	6	6	90	90														
						8.9	0.3	63	22.8		8.0	8.0	28.5		86.9		6.4	18.1	6	6	89	89														
IM7	Fine	Moderate	10:41	9.2	Surface	1.0	0.0	71	23.5	23.5	8.0	8.0	24.3	24.3	90.1	90.1	6.7	4.4	4	4	86	86	821328	806815	<0.2	1.7	1.6									
						1.0	0.0	75	23.5		8.0	8.0	24.3		90.0		6.7	4.4	4	4	86	86														
					Middle	4.6	0.1	94	23.1	23.1	8.0	8.0	25.5	25.5	87.4	87.4	6.5	8.8	5	4	88	88														
						4.6	0.1	97	23.1		8.0	8.0	25.5		87.4		6.5	9.0	5	4	88	88														
					Bottom	8.2	0.3	83	22.8	22.8	8.0	8.0	28.4	28.4	85.9	85.9	6.3	15.1	5	5	90	90														
						8.2	0.3	87	22.8		8.0	8.0	28.4		85.8		6.3	15.1	4	4	90	90														
IM8	Fine	Moderate	10:12	8.0	Surface	1.0	0.1	137	23.2	23.2	8.0	8.0	24.9	24.9	87.7	87.7	6.5	7.7	5	4	87	87	821830	808123	<0.2	1.2	1.2									
						1.0	0.1	145	23.2		8.0	8.0	24.9		87.7		6.5	7.7	4	4	87	87														
					Middle	4.0	0.0	54	23.0	23.0	8.0	8.0	25.8	25.9	86.9	86.9	6.4	10.4	5	5	88	88														
						4.0	0.0	57	23.0		8.0	8.0	26.0		86.8		6.4	10.5	6	6	88	88														
					Bottom	7.0	0.2	42	23.0	23.0	8.0	8.0	25.9	25.9	86.6	86.7	6.4	10.3	6	6	89	89														
						7.0	0.2	43	23.0		8.0	8.0	25.9		86.8		6.4	10.0	5	5	90	90														

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

Water Quality Monitoring

Water Quality Monitoring Results on 28 April 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)					
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA	Value	DA
IM9	Fine	Moderate	10:06	7.5	Surface	1.0	0.1	187	23.3	23.3	7.9	7.9	25.2	25.3	86.7	86.7	6.4	6.4	10.9	6	6	87	89	822071	808828	<0.2	1.2	1.2						
						1.0	0.1	204	23.3	23.1	7.9	7.9	25.3	25.8	86.6	86.6	6.4	6.4	11.0	7	7	87	89											
					Middle	3.8	0.1	174	23.1	23.1	7.9	7.9	25.8	25.8	85.8	85.8	6.3	6.3	12.9	5	5	89	89											
						3.8	0.1	188	23.1	23.1	7.9	7.9	25.8	25.8	85.8	85.8	6.3	6.3	13.0	5	5	89	89											
					Bottom	6.5	0.1	158	23.1	23.1	8.0	8.0	25.8	25.8	86.8	86.8	6.4	6.4	14.3	5	5	90	90											
						6.5	0.1	163	23.1	23.1	8.0	8.0	25.8	25.8	87.2	87.2	6.4	6.4	14.1	5	5	90	90											
IM10	Fine	Moderate	09:55	7.8	Surface	1.0	0.7	322	23.3	23.3	7.9	7.9	25.0	25.0	87.8	87.8	6.5	6.5	6.7	4	4	85	86	822401	809778	<0.2	1.2	1.3						
						1.0	0.7	335	23.3	23.3	7.9	7.9	25.0	25.0	87.7	87.7	6.5	6.5	6.9	5	5	86	88											
					Middle	3.9	0.4	320	23.0	23.0	7.9	7.9	26.5	26.5	84.5	84.5	6.2	6.2	8.4	5	5	88	88											
						3.9	0.4	327	23.0	23.0	7.9	7.9	26.5	26.5	84.4	84.5	6.2	6.2	8.3	6	6	88	88											
					Bottom	6.8	0.3	319	22.9	22.9	8.0	8.0	26.7	26.7	84.7	84.8	6.2	6.3	12.0	6	6	90	90											
						6.8	0.3	336	22.9	22.9	8.0	8.0	26.7	26.7	84.9	84.8	6.3	6.3	12.4	6	6	90	90											
IM11	Fine	Moderate	09:44	8.4	Surface	1.0	0.7	276	23.1	23.1	7.9	7.9	25.0	25.0	88.8	88.7	6.6	6.6	5.3	4	4	86	86	822060	811461	<0.2	1.2	1.2						
						1.0	0.7	284	23.1	23.1	7.9	7.9	25.0	25.0	88.5	88.5	6.6	6.6	5.4	4	4	86	86											
					Middle	4.2	0.6	278	22.9	22.9	8.0	8.0	26.6	26.6	85.5	85.5	6.3	6.3	7.8	5	4	88	89											
						4.2	0.7	301	22.9	22.9	8.0	8.0	26.7	26.6	85.5	85.5	6.3	6.3	7.7	4	4	89	89											
					Bottom	7.4	0.4	273	22.9	22.9	8.0	8.0	27.4	27.3	87.1	87.2	6.4	6.4	12.0	4	4	89	90											
						7.4	0.7	298	23.2	22.9	8.0	8.0	27.2	27.3	87.3	87.3	6.4	6.4	11.7	5	5	90	90											
IM12	Fine	Moderate	09:34	8.6	Surface	1.0	0.7	288	23.2	23.2	7.9	7.9	26.0	26.0	88.6	88.6	6.5	6.5	5.5	7	6	86	88	821482	812053	<0.2	1.1	1.1						
						1.0	0.7	309	23.2	23.2	7.9	7.9	26.0	26.0	88.6	88.6	6.5	6.5	5.5	7	6	86	88											
					Middle	4.3	0.6	288	23.0	23.0	7.9	7.9	26.7	26.7	86.4	86.4	6.4	6.4	7.4	6	6	88	89											
						4.3	0.6	291	23.0	23.0	7.9	7.9	26.7	26.7	86.5	86.5	6.4	6.4	7.5	5	5	89	90											
					Bottom	7.6	0.3	283	22.9	22.9	8.0	8.0	27.2	27.2	86.3	86.3	6.3	6.3	10.9	5	5	90	90											
						7.6	0.3	288	22.9	22.9	8.0	8.0	27.3	27.2	86.4	86.4	6.3	6.3	10.2	5	5	90	90											
SR1A	Fine	Calm	09:15	4.9	Surface	1.0	-	-	23.1	23.1	7.9	7.9	24.4	24.4	88.9	88.8	6.6	6.6	5.6	4	4	-	-	819975	812659	-	-	-						
						1.0	-	-	23.1	23.1	7.9	7.9	24.4	24.4	88.7	88.7	6.6	6.6	5.6	3	3	-	-											
					Middle	2.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						-	-	-	-		
						2.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						-	-	-	-		
					Bottom	3.9	-	-	22.9	23.0	7.9	7.9	25.6	25.6	88.0	88.1	6.5	6.5	6.2	4	4	-	-											
						3.9	-	-	23.0	23.0	7.9	7.9	25.6	25.6	88.1	88.1	6.5	6.5	6.2	4	4	-	-											
SR2	Fine	Moderate	09:03	4.6	Surface	1.0	0.2	114	23.2	23.2	7.9	7.9	25.3	25.3	88.6	88.6	6.6	6.6	5.8	7	6	86	87	821478	814173	<0.2	1.1	1.1						
						1.0	0.2	121	23.2	23.2	7.9	7.9	25.3	25.3	88.4	88.5	6.5	6.6	5.9	6	6	87	88											
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						-	-	-	-	-	
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						-	-	-	-	-	
					Bottom	3.6	0.2	92	22.8	22.9	7.9	7.9	28.0	27.9	87.3	87.3	6.4	6.4	7.6	4	4	88	89											
						3.6	0.2	96	22.9	22.9	7.9	7.9	27.9	27.9	87.6	87.5	6.4	6.4	7.8	5	5	89	89											
SR3	Fine	Moderate	10:18	9.6	Surface	1.0	0.2	274	23.2	23.2	7.9	7.9	24.3	24.3	89.2	89.1	6.6	6.6	5.7	5	5	-	-	822147	807556	-	-	-						
						1.0	0.2	275	23.2	23.2	7.9	7.9	24.3	24.3	89.0	89.1	6.6	6.6	5.7	4	4	-	-											
					Middle	4.8	0.1	317	23.0	23.0	8.0	8.0	24.8	24.9	88.1	88.1	6.5	6.5	5.8	4	5	-	-											
						4.8	0.1	334	23.0	23.0	8.0	8.0	25.0	24.9	88.0	88.1	6.5	6.5	5.7	5	5	-	-											
					Bottom	8.6	0.1	25	22.9	22.9	8.0	8.0	26.4	26.4	88.2	88.4	6.5	6.5	16.1	5	5	-	-											
						8.6	0.1	26	22.9	22.9	8.0	8.0	26.4	26.4	88.5	88.4	6.5	6.5	16.0	6	6	-	-											
SR4A	Fine	Calm	09:11	9.4	Surface	1.0	0.2	246	23.1	23.1	8.2	8.2	25.9	25.9	87.3	87.3	6.4	6.4	6.1	7	7	-	-	817173	807812	-	-	-						
						1.0	0.3	257	23.1	23.1	8.2	8.2	25.9	25.9	87.2	87.3	6.4	6.4	6.1	7	7	-	-											
					Middle	4.7	0.1	277	23.0	23.0	8.2	8.2	27.6	27.6	85.7	85.7	6.3	6.3	8.4	8	8	-	-											
						4.7	0.1	283	23.0	23.0	8.2	8.2	27.6	27.6	85.7	85.7	6.3	6.3	8.4	8	8	-	-											
					Bottom	8.4	0.1	61	22.9	22.9	8.2	8.2	28.2	28.1	85.1	85.1	6.2	6.2	12.7	8	8	-	-											
						8.4	0.1	63	22.9	22.9	8.2	8.2	28.1	28.1	85.1	85.1	6.2	6.2	12.9	8	8	-	-											
SR5A	Fine	Calm	08:54	3.7	Surface	1.0	0.1	278	23.2	23.2	8.1	8.1	26.0	26.0	87.3	87.2	6.4	6.4	7.6	6	6	-	-	816571	810706	-	-	-						
						1.0	0.1	282	23.2	23.2	8.1	8.1	26.0	26.0	87.1	87.2	6.4	6.4	7.7	6	6	-	-											
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						-	-	-	-	-	
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						-	-	-	-	-	
					Bottom	2.7	0.1	285	23.2	23.2	8.1	8.1	26.3	26.3	86.3	86.2	6.3	6.3	10.4	7	7	-	-											
						2.7	0.1	299	23.2	23.2	8.1	8.1	26.3	26.3	86.1	86.1	6.3	6.3	10.5	8	8	-	-											
SR6A	Fine	Calm	08:24	4.5	Surface	1.0	0.1	254	23.1	23.1	8.2	8.2	25.8	25.8	86.5	86.5	6.4	6.4	4.1	6	6	-	-	817952	814750	-	-	-						
						1.0	0.1	262	23.1	23.1	8.2	8.2	25.8	25.8	86.5	86.5	6.4	6.4	4.1	6	6	-	-											
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						-	-	-	-	-	
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						-	-	-	-	-	
					Bottom	3.5	0.0	9	23.3	23.3	8.2	8.2	26.4	26.4	86.6	86.6	6.4	6.4	4.5	6	6	-	-											
						3.5	0.0	9	23.3	23.3	8.2	8.2	26.4	26.4	86.6	86.6	6.4	6.4	4.5	7	7	-	-											
SR7	Fine	Moderate	08:11	15.8	Surface	1.0	0.1	249	22.7	22.7	7.7	7.7	27.1	27.1	87.0	86.9	6.4	6.4	4.1	4	4	-	-	823634	823750	-	-	-						
						1.0	0.1	266	22.7	22.7	7.7	7.7	27.1	27.1	86.8	86.8	6.4	6.4	4.1	4	4	-	-											
					Middle	7.9	0.1	235	22.6	22.6	7.7	7.7	29.1	29.2	84.2	84.2	6.2	6.2	3.9	3	3	-	-											
						7.9	0.1	241	22.6	22.6	7.7	7.7	29.2	29.2	84.1	84.1	6.1	6.1	3.9	4	4	-	-											
					Bottom	14.8	0.2	108	22.6	22.6	7.8	7.8	30.7	30.7	84.0	84.1	6.1	6.1	4.3	4	4	-	-											
						14.8	0.2	116	22.6	22.6	7.8	7.8	30.7	30.7	84.1	84.1	6.1	6.1	4.3	4	4	-	-											
SR8	Fine	Calm	09:26	5.3	Surface	1.0	-	-	23.4	23.4	7.9	7.9	24.6	24.6	88.4	88.4	6.5	6.5	8.0	5	5	-	-	820403	811618	-	-	-						
						1.0	-	-	23.4	23.4	7.9	7.9	24.6	24.6	88.3	88.3	6.5	6.5	8.1	5	5	-	-											
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						-	-	-	-	-	
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						-	-	-	-	-	
					Bottom	4.3	-	-	23.0	23.0	7.9	7.9	27.0	27.0	85.7	86.0	6.3	6.3	10.8	8	8	-	-											
						4.3	-	-	23.0	23.0	8.0	7.9	27.0	27.0	86.2	86.0	6.3	6.3	10.2	8	8	-	-											

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

Water Quality Monitoring

Water Quality Monitoring Results on 30 April 20 during Mid-Ebb Tide

Monitoring Station	Weather	Sea	Sampling	Water	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)							
	Condition	Condition	Time	Depth (m)					Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA				
C1	Fine	Moderate	17:25	8.0	Surface	1.0	0.4	214	25.3	25.3	8.4	8.4	25.2	25.2	156.0	155.6	11.1	2.7	4	4	87	87	89	815608	804233	<0.2	1.4	1.4								
						1.0	0.4	217	25.3	25.3	8.4	8.4	25.2	25.2	155.2	155.2	11.1	2.7	4	4	87	87														
					Middle	4.0	0.4	231	23.8	23.8	8.1	8.1	28.0	28.0	116.3	116.1	8.4	2.8	3	3	89	89														
						4.0	0.4	247	23.8	23.8	8.1	8.1	28.0	28.0	115.9	115.9	8.3	2.8	3	3	89	89														
					Bottom	7.0	0.4	232	23.0	23.0	8.1	8.1	30.8	30.8	97.1	97.3	7.0	8.7	3	3	90	90														
						7.0	0.4	245	23.0	23.0	8.1	8.1	30.8	30.8	97.4	97.4	7.0	8.9	2	2	91	91														
C2	Fine	Rough	16:18	12.5	Surface	1.0	0.3	214	24.9	24.9	8.3	8.3	23.3	23.3	144.9	144.2	10.5	4.2	5	5	86	86	88	825664	806925	<0.2	2.0	2.0								
						1.0	0.3	228	24.9	24.9	8.3	8.3	23.3	23.3	143.4	143.4	10.4	4.3	5	5	86	86														
					Middle	6.3	0.5	166	23.2	23.2	8.2	8.2	28.1	28.3	87.2	87.0	6.3	8.1	4	4	88	88														
						6.3	0.6	173	23.1	23.1	8.2	8.2	28.4	28.4	86.7	86.7	6.3	8.3	4	4	88	88														
					Bottom	11.5	0.4	152	22.9	22.9	8.3	8.3	29.8	29.8	80.7	80.9	5.8	18.7	4	4	89	89														
						11.5	0.4	154	22.9	22.9	8.3	8.3	29.8	29.8	81.1	80.9	5.9	18.9	4	4	89	89														
C3	Fine	Moderate	18:03	12.2	Surface	1.0	0.2	101	23.9	23.9	8.5	8.5	26.7	26.7	111.6	111.6	8.1	4.4	4	4	87	87	89	822100	817788	<0.2	1.7	1.7								
						1.0	0.2	103	23.9	23.9	8.5	8.5	26.7	26.7	111.5	111.5	8.1	4.4	4	4	88	88														
					Middle	6.1	0.1	355	23.8	23.8	8.5	8.5	27.4	27.4	104.2	104.1	7.5	4.3	4	4	88	88														
						6.1	0.1	327	23.8	23.8	8.5	8.5	27.4	27.4	104.0	104.0	7.5	4.2	4	4	89	89														
					Bottom	11.2	0.1	75	23.0	23.0	8.5	8.5	30.3	30.2	88.4	88.5	6.4	5.5	4	4	90	90														
						11.2	0.1	81	23.0	23.0	8.5	8.5	30.2	30.2	88.6	88.6	6.4	5.7	4	4	90	90														
IM1	Fine	Moderate	17:05	5.1	Surface	1.0	0.1	287	25.3	25.3	8.3	8.3	25.9	25.8	132.7	132.5	9.4	2.9	6	6	87	87	88	817951	807137	<0.2	1.2	1.2								
						1.0	0.1	295	25.3	25.3	8.3	8.3	25.8	25.8	132.3	132.3	9.4	3.1	6	6	87	87														
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	9.4	-	-	-	-							-	-	-	-	-	-	-	-
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-							-	-	-	-	-	-	-	-
					Bottom	4.1	0.1	253	23.3	23.3	8.1	8.1	29.7	29.7	99.6	99.6	7.2	6.3	3	3	88	88														
						4.1	0.1	255	23.3	23.3	8.1	8.1	29.7	29.7	99.6	99.6	7.2	6.6	4	4	88	88														
IM2	Fine	Moderate	16:59	7.2	Surface	1.0	0.1	200	24.8	24.8	8.2	8.2	26.1	26.1	133.8	133.1	9.6	3.5	4	4	85	85	87	818184	806175	<0.2	1.1	1.1								
						1.0	0.1	202	24.7	24.7	8.2	8.2	26.1	26.1	132.4	132.4	9.5	3.5	4	4	84	84														
					Middle	3.6	0.1	156	23.3	23.3	8.1	8.1	29.4	29.4	98.7	98.8	7.1	5.2	3	3	88	88														
						3.6	0.2	167	23.3	23.3	8.1	8.1	29.4	29.4	98.8	98.8	7.1	4.9	3	3	87	87														
					Bottom	6.2	0.2	136	23.1	23.1	8.1	8.1	30.4	30.4	94.6	94.7	6.8	8.8	2	2	89	89														
						6.2	0.2	141	23.1	23.1	8.1	8.1	30.4	30.4	94.8	94.7	6.8	8.7	3	3	89	89														
IM3	Fine	Moderate	16:53	7.5	Surface	1.0	0.0	208	24.3	24.3	8.1	8.1	26.6	26.6	117.5	117.4	8.5	3.7	2	2	86	86	87	818795	805577	<0.2	0.9	0.9								
						1.0	0.0	219	24.3	24.3	8.1	8.1	26.6	26.6	117.3	117.3	8.4	3.6	2	2	85	85														
					Middle	3.8	0.2	163	23.2	23.2	8.0	8.0	29.8	29.8	93.7	93.7	6.8	5.8	3	3	88	88														
						3.8	0.3	172	23.2	23.2	8.0	8.0	29.9	29.8	93.6	93.7	6.7	5.9	3	3	88	88														
					Bottom	6.5	0.2	156	23.1	23.1	8.1	8.1	30.4	30.4	93.6	93.8	6.7	9.2	4	4	89	89														
						6.5	0.3	156	23.1	23.1	8.1	8.1	30.4	30.4	93.9	93.8	6.8	9.2	4	4	88	88														
IM4	Fine	Moderate	16:44	8.3	Surface	1.0	0.7	220	24.6	24.6	8.3	8.3	26.2	26.2	137.2	136.8	9.8	3.6	3	3	84	84	87	819701	804620	<0.2	0.8	0.8								
						1.0	0.7	237	24.5	24.5	8.3	8.3	26.3	26.2	136.3	136.3	9.8	3.7	3	3	85	85														
					Middle	4.2	0.6	206	23.8	23.8	8.1	8.1	27.7	27.7	108.8	108.6	7.8	4.6	3	3	89	89														
						4.2	0.6	211	23.8	23.8	8.1	8.1	27.7	27.7	108.4	108.4	7.8	4.6	3	3	88	88														
					Bottom	7.3	0.5	205	23.3	23.3	8.0	8.0	29.4	29.4	96.2	96.2	6.9	7.3	4	4	89	89														
						7.3	0.5	216	23.3	23.3	8.1	8.0	29.4	29.4	96.1	96.2	6.9	7.3	4	4	89	89														
IM5	Fine	Moderate	16:37	7.9	Surface	1.0	0.4	236	25.0	25.0	8.3	8.3	25.0	25.0	150.9	149.7	10.8	3.5	3	3	84	84	87	820725	804843	<0.2	0.9	0.9								
						1.0	0.4	242	25.0	25.0	8.3	8.3	25.1	25.0	148.5	148.5	10.6	3.5	3	3	85	85														
					Middle	4.0	0.3	225	23.4	23.4	8.0	8.0	28.6	28.5	98.4	98.5	7.1	4.5	3	3	88	88														
						4.0	0.3	245	23.4	23.4	8.0	8.0	28.5	28.5	98.5	98.5	7.1	4.3	3	3	89	89														
					Bottom	6.9	0.3	229	23.3	23.3	8.1	8.1	29.0	29.0	97.6	97.8	7.0	9.5	2	2	89	89														
						6.9	0.3	242	23.3	23.3	8.1	8.1	29.0	29.0	98.0	97.8	7.1	9.6	2	2	89	89														
IM6	Fine	Moderate	16:31	7.4	Surface	1.0	0.4	216	24.6	24.6	8.3	8.3	26.1	26.1	147.6	144.4	10.6	2.9	2	2	85	85	88	821061	805847	<0.2	0.9	0.9								
						1.0	0.4	217	24.6	24.6	8.3	8.3	26.1	26.1	141.1	141.1	10.1	3.0	2	2	86	86														
					Middle	3.7	0.4	223	24.0	24.0	8.1	8.1	27.0	27.0	119.6	119.6	8.6	3.6	2	2	89	89														
						3.7	0.4	228	24.0	24.0	8.1	8.1	27.1	27.0	119.5	119.5	8.6	3.7	2	2	88	88														
					Bottom	6.4	0.3	209	23.4	23.4	8.1	8.1	28.7	28.6	99.3	99.4	7.2	6.5	3	3	89	89														
						6.4	0.3	214	23.4	23.4	8.1	8.1	28.6	28.6	99.4	99.4	7.2	6.3	3	3	89	89														
IM7	Fine	Rough	16:23	8.9	Surface	1.0	0.1	225	25.4	25.4	8.5	8.5	24.4	24.4	177.9	177.5	12.7	2.9	2	2	86	86	88	821326	806818	<0.2	0.9	0.9								
						1.0	0.1	241	25.4	25.4	8.5	8.5	24.4	24.4	177.0	177.0	12.7	2.9	2	2	85	85														
					Middle	4.5	0.1	177	23.6	23.6	8.0	8.0	26.9	26.9	96.5	96.6	7.0	6.4	3	3	88	88														
						4.5	0.1	187	23.6	23.6	8.0	8.0	26.9	26.9	96.7	96.6	7.0	6.5	3	3	88	88														
					Bottom	7.9	0.1	152	23.4	23.4	8.1	8.1	28.8	28.8	97.2	97.3	7.0	9.4	4	4	90	90														
						7.9	0.1	153	23.4	23.4	8.1	8.1	28.8	28.8	97.4	97.3	7.0	8.9	4	4	90	90														
IM8	Fine	Rough	16:41	7.9	Surface	1.0	0.1	334	24.6	24.6	8.5	8.5	24.5	24.5	134.2	134.1	9.7	4.6	4	4	85	85	88	821806	808150	<0.2	1.8	1.8								
						1.0	0.1	357	24.6	24.6	8.5	8.5	24.5	24.5	134.0	134.0	9.7	4.6	4	4	86	86														
					Middle	4.0	0.1	176	23.8	23.8	8.5	8.5	26.8	26.8	102.3	102.1	7.4	6.1	4	4	89	89														
						4.0	0.1	180	23.7	23.7	8.5	8.5	26.8	26.8	101.9	101.9	7.4	6.1	4	4	89	89														
					Bottom	6.9	0.1	77	23.5	23.5	8.5	8.5	28.2	28.2	98.1	98.3	7.1	13.0	4	4	90	90														
						6.9	0.1	77	23.5	23.5	8.5	8.5	28.2	28.2	98.5	98.3	7.1	13.0	4	4	90	90														

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

Water Quality Monitoring

Water Quality Monitoring Results on 30 April 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)								
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA									
IM9	Fine	Rough	16:50	7.6	Surface	1.0	0.3	102	24.4	24.4	8.5	8.5	24.7	24.8	125.0	124.9	9.1		4.7		5		85		88	822098	808806	<0.2		1.9	1.9						
						1.0	0.3	109	24.3		8.5		24.8		124.7		9.1	8.5	4.8		5		85					<0.2		1.9							
					Middle	3.8	0.2	116	23.9	23.9	8.5	8.5	26.0	26.1	106.8	106.9	7.8		5.8		5	5	88					<0.2		2.0							
						3.8	0.2	118	23.9		8.5		26.2		106.9		7.8		5.8		5		88					<0.2		1.9							
					Bottom	6.6	0.2	69	23.6	23.6	8.5	8.5	27.7	27.6	98.8	99.2	7.2	7.2	17.5		6		90					<0.2		1.9							
						6.6	0.2	72	23.6		8.5		27.6		99.5		7.2		17.7		6		90					<0.2		1.8							
IM10	Fine	Rough	16:56	7.2	Surface	1.0	0.5	126	24.3	24.3	8.6	8.6	25.0	25.0	150.8	147.7	10.9		4.7		7		85		87	822393	809780	<0.2		1.3	1.1						
						1.0	0.5	131	24.3		8.6		25.1		144.5		10.5	9.7	4.8		7		86					<0.2		1.2							
					Middle	3.6	0.4	107	24.1	24.1	8.6	8.5	25.4	25.4	120.2	120.1	8.7		5.3		5	5	87					<0.2		1.1							
						3.6	0.5	108	24.1		8.5		25.5		119.9		8.7		5.8		5		87					<0.2		1.0							
					Bottom	6.2	0.3	96	23.7	23.7	8.5	8.5	27.0	27.0	101.8	101.9	7.4	7.4	10.6		4		89					<0.2		1.0							
						6.2	0.3	100	23.7		8.5		27.0		102.0		7.4		10.7		4		89					<0.2		1.1							
IM11	Fine	Moderate	17:06	8.9	Surface	1.0	0.6	110	25.0	25.1	8.6	8.6	24.0	24.0	144.8	144.8	10.4		4.1		4		85		88	822035	811441	<0.2		1.0	1.1						
						1.0	0.6	114	25.1		8.6		24.0		144.7		10.4	9.1	4.2		4		86					<0.2		1.0							
					Middle	4.5	0.5	105	23.8	23.8	8.6	8.6	25.9	25.9	106.8	106.7	7.8		6.9		4	4	89					<0.2		1.2							
						4.5	0.5	108	23.7		8.6		26.0		106.5		7.8		7.3		4		89					<0.2		1.0							
					Bottom	7.9	0.5	114	23.7	23.7	8.6	8.6	26.2	26.2	102.5	102.6	7.5	7.5	9.5		5		90					<0.2		1.1							
						7.9	0.5	117	23.7		8.6		26.2		102.6		7.5		9.3		5		90					<0.2		1.0							
IM12	Fine	Moderate	17:12	9.5	Surface	1.0	0.5	111	24.2	24.2	8.6	8.6	25.1	25.1	122.6	122.1	8.9		4.5		5		85		88	821445	812030	<0.2		1.1	1.0						
						1.0	0.5	114	24.2		8.6		25.1		121.5		8.8		4.6		5		85					<0.2		1.1							
					Middle	4.8	0.3	113	23.8	23.8	8.5	8.5	26.0	26.1	101.9	101.9	7.4		8.1		5	5	89					<0.2		1.1							
						4.8	0.4	115	23.8		8.5		26.1		101.8		7.4		8.4		5		89					<0.2		0.9							
					Bottom	8.5	0.1	73	23.7	23.7	8.5	8.4	26.6	26.6	94.1	94.3	6.8	6.9	10.2		4		90					<0.2		1.0							
						8.5	0.1	74	23.7		8.4		26.6		94.5		6.9		10.0		4		90					<0.2		1.0							
SR1A	Fine	Calm	17:30	4.6	Surface	1.0	-	-	24.6	24.6	8.6	8.6	24.9	25.0	116.2	116.0	8.4		4.6		4		-		-	819975	812664	-	-	-	-						
						1.0	-	-	24.6		8.6		25.1		115.8		8.4	8.4	4.7		4		-					-		-							
					Middle	2.3	-	-	-	-	-	-	-	-	-	-	-					5.1		4					-			-		-			
						2.3	-	-	-	-	-	-	-	-	-	-	-					-		-					-			-		-			
					Bottom	3.6	-	-	23.9	24.0	8.5	8.5	26.5	26.4	97.4	97.5	7.1	7.1	5.4		5		-					-		-			-		-		
						3.6	-	-	24.0		8.5		26.4		97.5		7.1		5.5		5		-					-		-			-		-		
SR2	Fine	Moderate	17:43	4.9	Surface	1.0	0.4	97	24.5	24.5	8.6	8.6	25.1	25.1	132.2	132.7	9.6		4.2		5		85		87	821483	814175	<0.2		1.0	1.0						
						1.0	0.4	106	24.4		8.6		25.2		133.1		9.6	9.6	4.4		6		85					<0.2		1.0							
					Middle	-	-	-	-	-	-	-	-	-	-	-	-					5.0		-					-			<0.2		-			
						-	-	-	-		-	-	-	-	-	-	-					-		-					-			<0.2		-			
					Bottom	3.9	0.2	86	23.8	23.8	8.5	8.5	26.1	26.1	102.3	102.4	7.5	7.5	5.8		4		88					<0.2		1.0							
						3.9	0.2	92	23.8		8.5		26.1		102.5		7.5		5.7		4		89					<0.2		1.0							
SR3	Fine	Rough	16:35	9.2	Surface	1.0	0.2	198	24.2	24.2	8.5	8.5	24.3	24.3	134.1	133.1	9.8		5.2		5		-		-	822142	807574	-	-	-	-						
						1.0	0.2	212	24.1		8.5		24.3		132.1		9.7	8.4	5.6		5		-					-		-			-				
					Middle	4.6	0.2	203	23.5	23.5	8.5	8.5	27.6	27.7	97.8	97.8	7.1		8.8		5	5	-					-		-			-		-		
						4.6	0.2	209	23.5		8.5		27.7		97.8		7.1		9.1		5		-					-		-			-		-		
					Bottom	8.2	0.0	7	23.5	23.5	8.5	8.5	28.3	28.3	98.5	98.7	7.1	7.1	10.3		5		-					-		-			-		-		
						8.2	0.0	7	23.5		8.5		28.3		98.8		7.1		9.9		5		-					-		-			-		-		
SR4A	Fine	Calm	17:47	9.5	Surface	1.0	0.1	253	25.4	25.4	8.2	8.2	26.0	25.9	126.8	126.6	9.0		3.3		4		-		-	817201	807800	-	-	-	-						
						1.0	0.2	277	25.4		8.2		25.9		126.4		9.0	8.1	3.3		4		-					-		-			-				
					Middle	4.8	0.1	252	23.4	23.4	8.1	8.1	29.4	29.4	100.1	100.1	7.2		6.8		4	4	-					-		-			-		-		
						4.8	0.1	266	23.4		8.1		29.4		100.0		7.2		7.0		4		-					-		-			-		-		
					Bottom	8.5	0.0	282	23.3	23.3	8.1	8.1	29.8	29.8	100.4	100.6	7.2	7.2	8.7		3		-					-		-			-		-		
						8.5	0.0	305	23.3		8.1		29.8		100.7		7.2		8.5		3		-					-		-			-		-		
SR5A	Fine	Calm	18:05	3.8	Surface	1.0	0.0	340	25.2	25.2	8.2	8.2	26.3	26.3	123.2	123.0	8.7		3.7		4		-		-	816575	810686	-	-	-	-						
						1.0	0.0	343	25.2		8.2		26.3		122.8		8.7	8.7	3.7		4		-					-		-			-				
					Middle	-	-	-	-	-	-	-	-	-	-	-	-					4.4		-					-			-		-		-	
						-	-	-	-		-	-	-	-	-	-	-					-		-					-			-		-			
					Bottom	2.8	0.1	8	24.1	24.1	8.1	8.1	26.9	26.9	106.8	106.7	7.7	7.7	5.1		7		-					-		-			-		-		
						2.8	0.1	8	24.1		8.1		26.9		106.6		7.7		5.1		7		-					-		-			-		-		
SR6A	Fine	Calm	18:31	4.3	Surface	1.0	0.1	35	24.7	24.7	8.1	8.1	26.1	26.1	111.8	111.9	8.0		6.4		5		-		-	817944	814720	-	-	-	-						
						1.0	0.1	37	24.7		8.1		26.1		111.9		8.0		6.4		5		-					-		-			-				
					Middle	-	-	-	-	-	-	-	-	-	-	-	-					8.0		-					-			-		-		-	
						-	-	-	-		-	-	-	-	-	-	-					-		-					-			-		-			
					Bottom	3.3	0.0	252	23.9	23.9	8.1	8.1	26.6	26.6	92.9	92.9	6.7	6.7	9.2		2		-					-		-			-		-		
						3.3	0.0	265	23.9		8.1		26.6		92.9		6.7		9.3		2		-					-		-			-		-		
SR7	Fine	Moderate	18:32	16.1	Surface	1.0	0.6	85	24.7	24.7	8.5	8.5	25.4	25.4	134.0	133.9	9.6		3.8		4		-		-	823647	823754	-	-	-	-						
						1.0	0.6	89	24.7		8.5		25.4		133.7		9.6	8.9	3.9		4		-					-		-			-				
					Middle	8.1	0.1	91	23.8	23.8	8.5	8.5	26.9	27.0	113.2	113.2	8.2		3.6		4	4	-					-		-			-		-		
						8.1	0.1	97	23.7		8.5		27.0		113.2		8.2		3.6		4		-					-		-			-		-		
					Bottom	15.1	0.1	90	23.5	23.5	8.5	8.5	28.1	28.1	102.7	102.7	7.4	7.4	3.6		3		-					-		-			-		-		
						15.1	0.1	98	23.5		8.5		28.1		102.7		7.4		3.6		3		-					-		-			-		-		
SR8	Fine	Moderate	17:21	5.2	Surface	1.0	-	-	25.1	25.1	8.5																										

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

Water Quality Monitoring

Water Quality Monitoring Results on 30 April 20 during Mid-Flood Tide

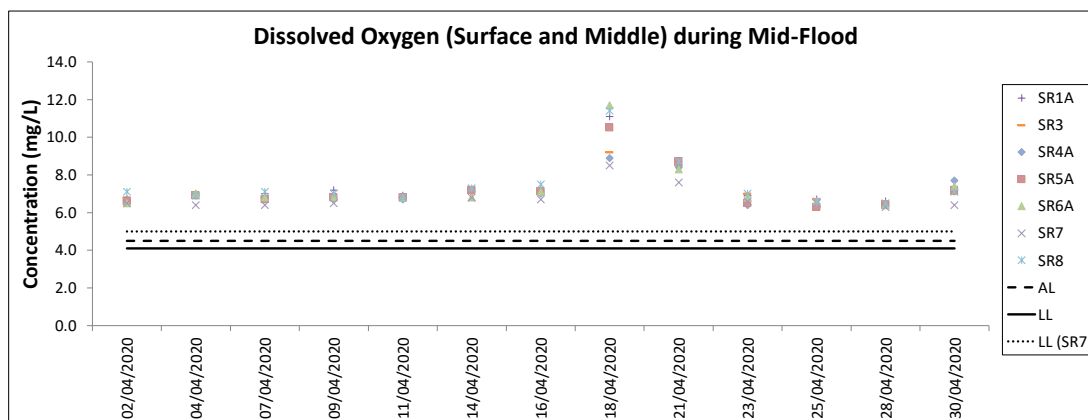
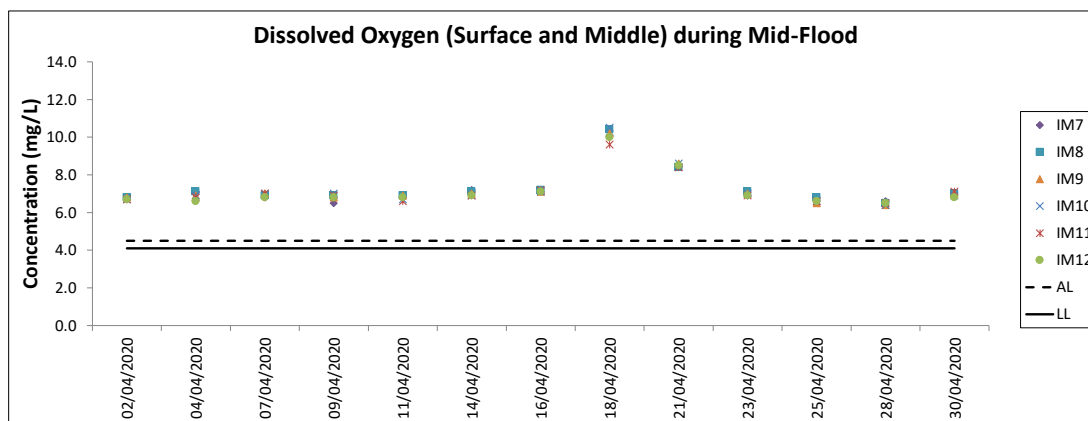
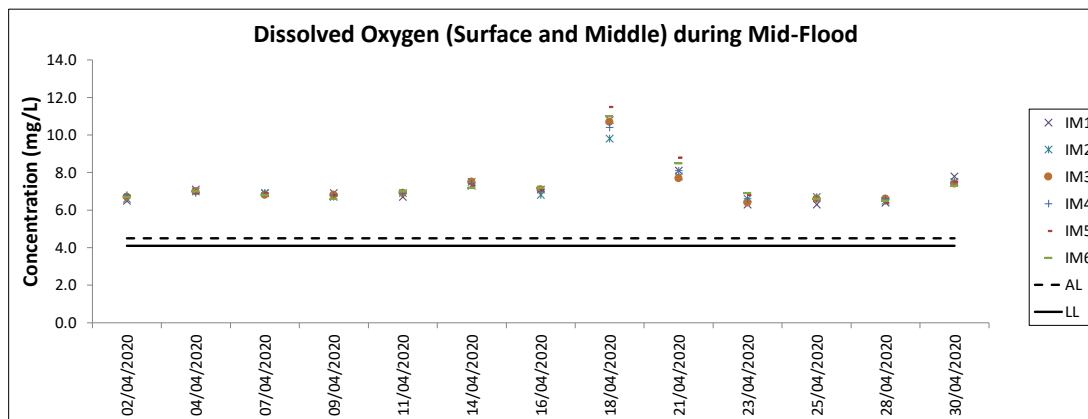
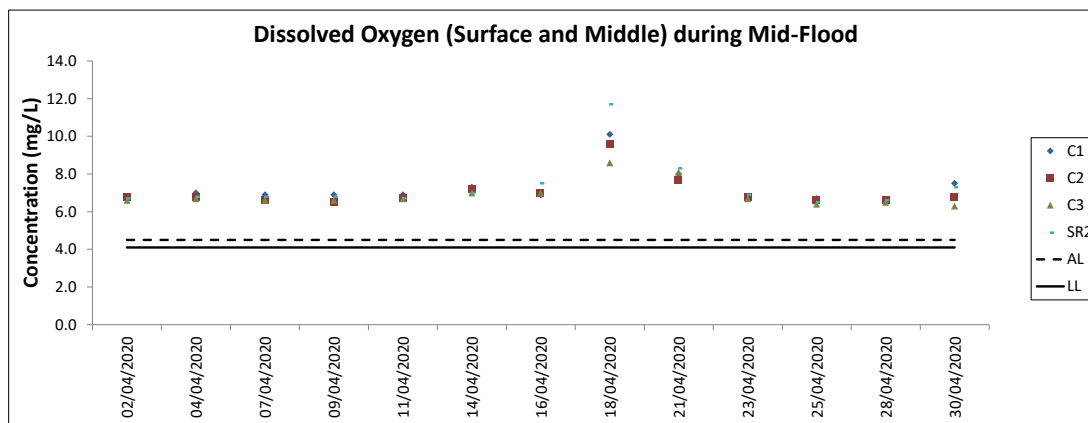
Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)												
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA	Value	DA	Value	DA					
C1	Cloudy	Moderate	05:37	8.2	Surface	1.0	0.1	4	23.6	23.6	8.1	8.1	26.1	26.0	105.2	105.1	7.7	7.5	6.9	3.2	3	3	89	815607	804261	<0.2	0.7	0.7													
						1.0	0.1	4	23.6	8.1	8.1	26.0	104.9	7.7	4	87	<0.2												0.7												
					Middle	4.1	0.2	52	23.3	23.3	8.1	8.1	29.8	29.8	99.8	99.8	7.2												2.2	3	88	<0.2	0.7								
						4.1	0.2	56	23.3	8.1	8.1	29.8	99.7	99.8	7.2	2.2	3												89	<0.2	0.8										
					Bottom	7.2	0.2	51	23.1	23.1	8.1	8.1	30.5	30.5	96.2	96.2	6.9												4.7	3	91	<0.2	0.7								
						7.2	0.2	55	23.1	8.1	8.1	30.5	96.2	6.9	4.9	3	91												<0.2	0.8											
C2	Fine	Moderate	06:35	11.5	Surface	1.0	0.1	179	23.7	23.7	8.2	8.2	23.3	23.3	91.2	91.3	6.8	6.8	6.0	3	3	88	825697	806957	<0.2	2.2	2.0														
						1.0	0.1	184	23.7	8.2	8.2	23.3	91.3	6.8	5.0	3	86											<0.2	1.6												
					Middle	5.8	0.0	101	23.4	23.4	8.2	8.2	25.6	25.6	91.3	91.1	6.7											6.5	3	88	<0.2	2.2									
						5.8	0.0	106	23.3	8.2	8.2	25.6	90.9	91.1	6.7	6.7	2											89	<0.2	2.2											
					Bottom	10.5	0.1	185	23.3	23.4	8.2	8.2	27.3	27.2	83.9	84.2	6.1											6.5	3	90	<0.2	2.2									
						10.5	0.1	191	23.4	8.2	8.2	27.0	84.5	84.2	6.1	6.2	3											90	<0.2	2.1											
C3	Cloudy	Rough	04:39	11.4	Surface	1.0	0.1	341	23.1	23.1	7.9	7.9	28.1	28.2	88.8	88.6	6.5	6.3	4.4	3	3	89	822093	817806	<0.2	1.2	1.2														
						1.0	0.1	353	23.1	7.9	7.9	28.3	88.4	6.4	3.9	3	88											<0.2	1.3												
					Middle	5.7	0.1	290	22.9	22.9	7.9	7.9	29.8	29.8	86.3	86.3	6.2											4.0	3	89	<0.2	1.2									
						5.7	0.1	307	22.9	7.9	7.9	29.8	86.2	86.3	6.2	4.1	3											89	<0.2	1.1											
					Bottom	10.4	0.0	328	22.9	22.9	7.9	7.9	30.1	30.1	85.2	85.4	6.2											5.1	3	90	<0.2	1.1									
						10.4	0.0	352	22.9	7.9	7.9	30.1	85.5	85.4	6.2	5.1	4											90	<0.2	1.2											
IM1	Fine	Moderate	05:57	5.0	Surface	1.0	0.0	316	23.8	23.8	8.1	8.1	25.1	25.1	106.0	105.9	7.8	7.8	3.9	2	2	89	817947	807129	<0.2	1.1	1.1														
						1.0	0.0	327	23.8	8.1	8.1	25.2	105.8	7.7	3.6	2	89											<0.2	1.1												
					Middle	-	-	-	-	-	-	-	-	-	-	-	-											-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-	-	-	-	-	-	-	-	-											-	-	-	-	-	-	-	-	-	-	-	-	-	-
					Bottom	4.0	0.0	279	23.8	23.8	8.1	8.1	25.4	25.4	104.1	104.0	7.6											7.6	4.3	2	89	<0.2	1.1								
						4.0	0.0	284	23.8	8.1	8.1	25.4	103.8	7.6	4.3	2	90											<0.2	1.1												
IM2	Fine	Moderate	06:04	6.9	Surface	1.0	0.0	273	23.9	23.9	8.1	8.1	25.5	25.5	105.2	105.1	7.7	7.5	4.8	3	3	88	818165	806175	<0.2	1.2	1.2														
						1.0	0.0	290	23.9	8.1	8.1	25.5	105.0	7.7	3.5	4	85											<0.2	1.3												
					Middle	3.5	0.1	102	23.7	23.7	8.1	8.1	27.1	27.1	98.9	98.9	7.2											4.1	3	88	<0.2	1.2									
						3.5	0.1	105	23.7	8.1	8.1	27.1	98.9	7.2	4.1	3	88											<0.2	1.2												
					Bottom	5.9	0.1	195	23.2	23.2	8.1	8.1	28.8	28.8	90.9	90.9	6.6											7.0	3	89	<0.2	1.2									
						5.9	0.1	208	23.2	8.1	8.1	28.8	90.9	6.6	6.9	3	90											<0.2	1.2												
IM3	Fine	Moderate	06:11	7.2	Surface	1.0	0.1	301	23.8	23.8	8.1	8.1	25.9	25.9	103.1	103.1	7.5	7.4	4.4	3	3	88	818765	805601	<0.2	1.2	1.2														
						1.0	0.1	311	23.8	8.1	8.1	25.9	103.0	7.5	3.2	4	85											<0.2	1.2												
					Middle	3.6	0.1	324	23.7	23.7	8.1	8.1	26.6	26.6	99.1	99.0	7.2											4.0	3	88	<0.2	1.2									
						3.6	0.1	329	23.7	8.1	8.1	26.6	98.9	7.2	4.0	3	88											<0.2	1.2												
					Bottom	6.2	0.1	259	23.2	23.2	8.1	8.1	28.7	28.7	91.1	91.1	6.6											6.1	3	89	<0.2	1.2									
						6.2	0.1	269	23.2	8.1	8.1	28.7	91.1	6.6	6.2	3	89											<0.2	1.2												
IM4	Fine	Moderate	06:20	8.1	Surface	1.0	0.1	272	23.6	23.6	8.1	8.1	25.4	25.3	102.5	102.5	7.5	7.5	3.0	4	4	87	819730	804604	<0.2	1.3	1.3														
						1.0	0.1	276	23.6	8.1	8.1	25.3	102.4	7.5	2.8	4	85											<0.2	1.3												
					Middle	4.1	0.1	346	23.8	23.8	8.1	8.1	26.6	26.6	102.7	102.7	7.4											3.2	4	88	<0.2	1.3									
						4.1	0.1	318	23.8	8.1	8.1	26.6	102.7	7.5	3.2	4	87											<0.2	1.3												
					Bottom	7.1	0.1	357	23.8	23.8	8.1	8.1	27.0	26.9	99.5	99.4	7.2											3.1	5	89	<0.2	1.3									
						7.1	0.1	328	23.8	8.1	8.1	26.9	99.3	7.2	3.1	4	89											<0.2	1.3												
IM5	Fine	Moderate	06:29	7.5	Surface	1.0	0.1	335	23.7	23.8	8.1	8.1	23.9	23.8	101.6	101.7	7.5	7.5	4.6	4	4	87	820732	804871	<0.2	1.6	1.6														
						1.0	0.1	351	23.8	8.1	8.1	23.8	101.7	7.5	3.7	4	84											<0.2	1.6												
					Middle	3.8	0.1	28	23.8	23.8	8.1	8.1	26.7	26.7	101.4	101.5	7.4											3.6	4	88	<0.2	1.6									
						3.8	0.1	28	23.8	8.1	8.1	26.7	101.5	7.4	3.5	4	87											<0.2	1.7												
					Bottom	6.5	0.1	85	23.7	23.7	8.1	8.1	27.0	27.0	97.2	97.2	7.1											6.5	4	89	<0.2	1.6									
						6.5	0.1	85	23.7	8.1	8.1	27.0	97.1	7.0	7.1	4	89											<0.2	1.6												
IM6	Fine	Moderate	06:37	7.3	Surface	1.0	0.1	279	23.9	23.9	8.1	8.1	24.2	24.2	99.2	99.2	7.3	7.3	4.8	3	3	87	821072	805810	<0.2	1.6	1.6														
						1.0	0.1	300	23.8	8.1	8.1	24.2	99.2	7.3	3.9	3	85											<0.2	1.6												
					Middle	3.7	0.0	314	23.7	23.7	8.1	8.1	26.1	26.1	99.0	99.0	7.2											4.7	3	88	<0.2	1.6									
						3.7	0.0	338	23.7	8.1	8.1	26.1	99.0	7.2	4.7	3	87											<0.2	1.6												
					Bottom	6.3	0.0	153	23.6	23.6	8.1	8.1	27.0	27.0	97.4	97.4	7.1											5.6	3	88	<0.2	1.6									
						6.3	0.0	166	23.6	8.1	8.1	27.0	97.3	7.1	5.6	3	89											<0.2	1.6												
IM7	Fine	Moderate	06:46	8.6	Surface	1.0	0.1	271	23.9	23.9	8.0	8.0	22.8	22.9	94.5	94.4	7.0	7.0	4.4	5	4	88	821333	806848	<0.2	1.9	1.9														
						1.0	0.1	288	23.8	8.0	8.0	22.9	94.3	7.0	3.4	5	86											<0.2	2.0												
					Middle	4.3	0.1	165	23.7	23.7	8.1	8.1	25.6	25.7	95.4	95.6	7.0											4.0	4	88	<0.2	1.9									
						4.3	0.1	172	23.7	8.1	8.1	25.7	95.8	7.0	4.0	4	88											<0.2	2.0												
					Bottom	7.6	0.1	98	23.7	23.7	8.1	8.1	26.7	26.7	97.0	97.0	7.1											5.8	3	90	<0.2	1.9									
						7.6	0.1	101	23.7	8.1	8.1	26.7	96.9	7.0	5.8	3	90											<0.2	1.9												
IM8	Fine	Moderate	06:09	7.8	Surface	1.0	0.0	139	23.9	23.9	8.2	8.2	23.2	23.2	94.8	94.7	7.0	7.0	6.0	2	3	88	821833	808118	<0.2	1.9	1.9														
						1.0	0.0	147	23.9	8.2	8.2	23.3	94.5	7.0	4.9	2	86											<0.2	1.9												
					Middle	3.9	0.0	108	23.7	23.7	8.2	8.2	24.3	24.4	94.6	94.8	7.0											5.8	3	88	<0.2	1.8									
						3.9	0.0	110	23.7	8.2	8.2	24.4	94.9	7.0	5.9	3	88											<0.2	1.9												
					Bottom	6.8	0.1	84	23.6	23.6	8.2	8.2	26.6	26.6	94.1	94.0	6.9											7.2	3	89	<0.2	1.8									
						6.8	0.1	89	23.6	8.2	8.2	26.6	93.8	6.8	7.1	3	89											<0.2	1.9												

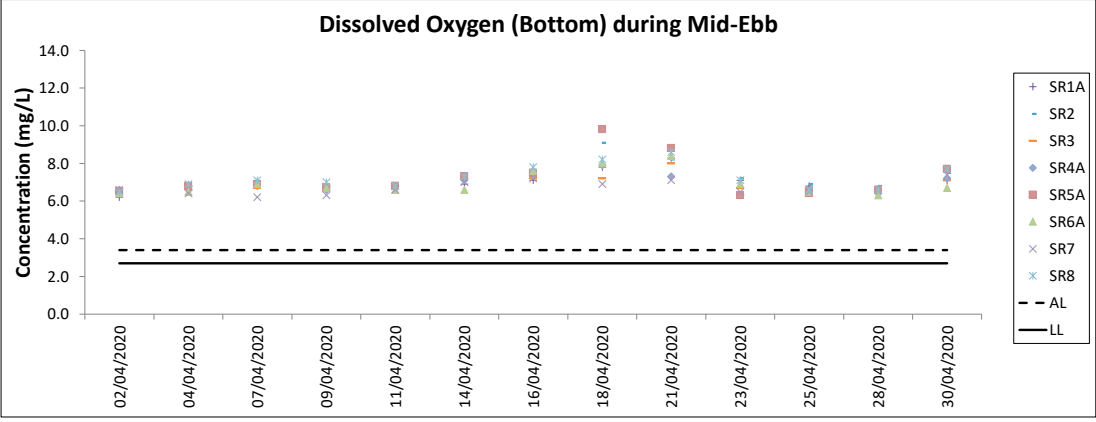
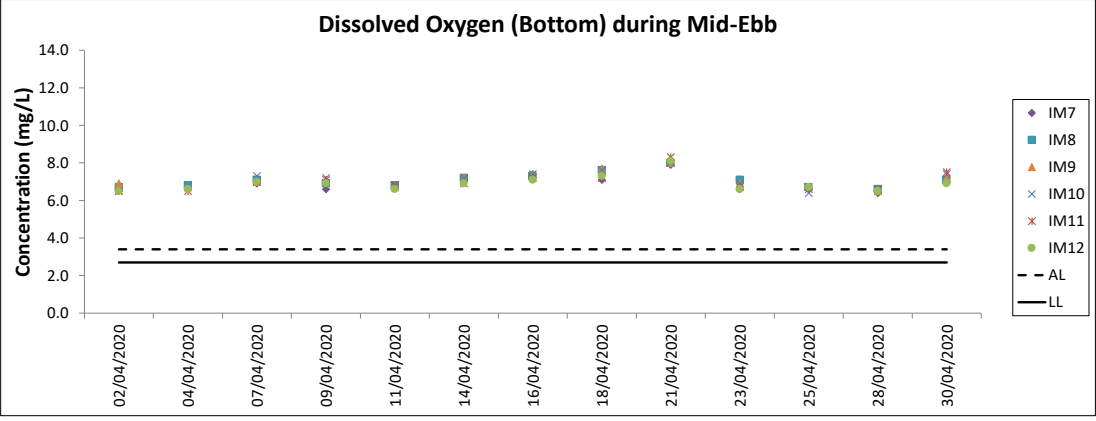
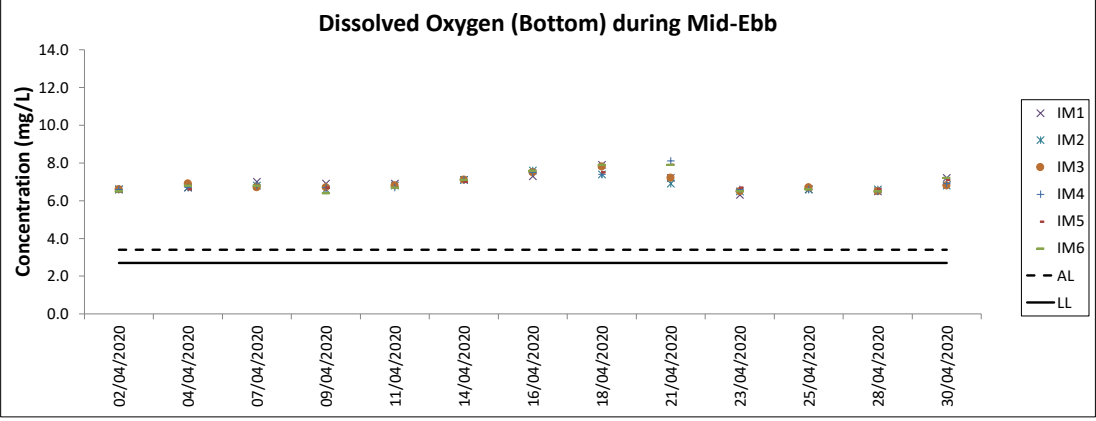
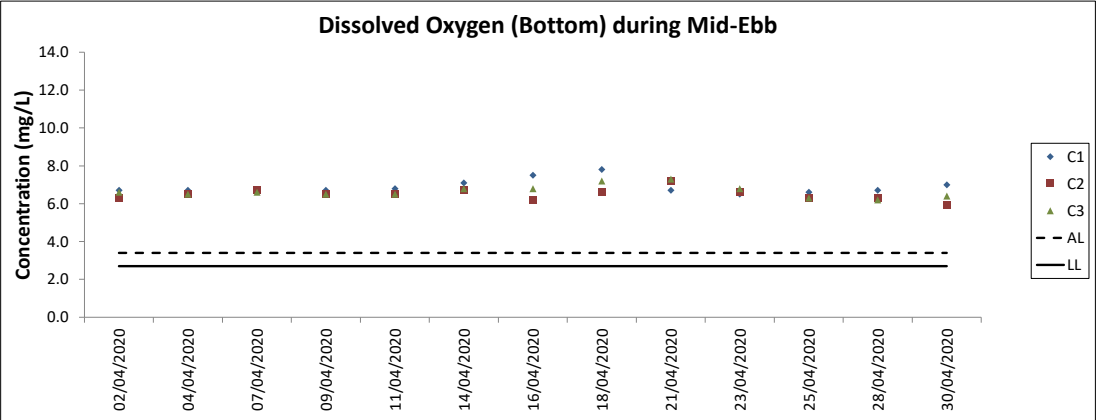
Expansion of Hong Kong International Airport into a Three-Runway System

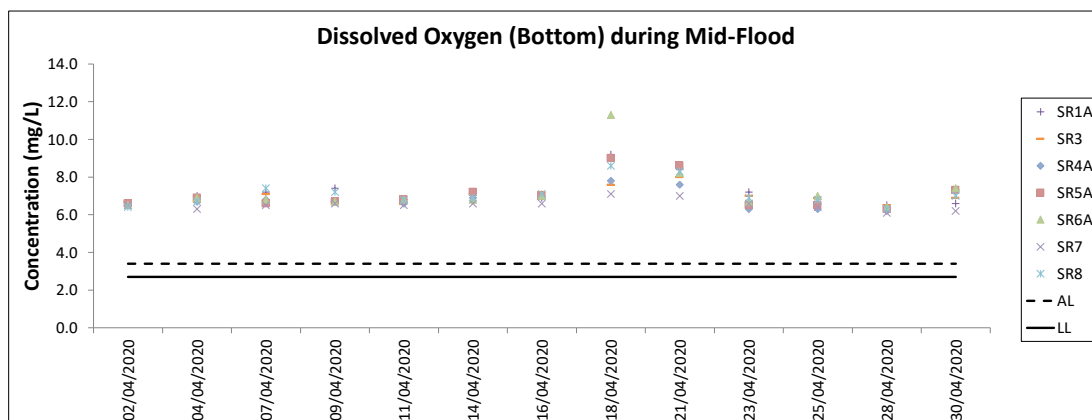
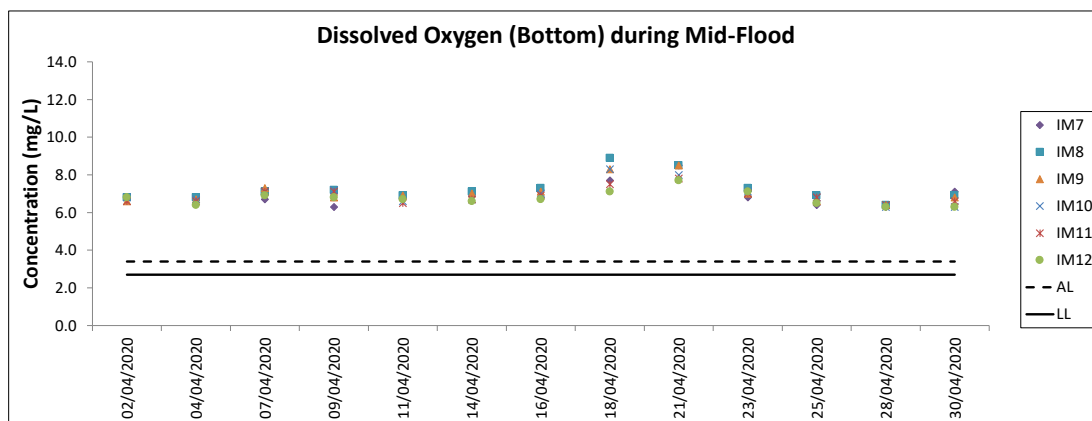
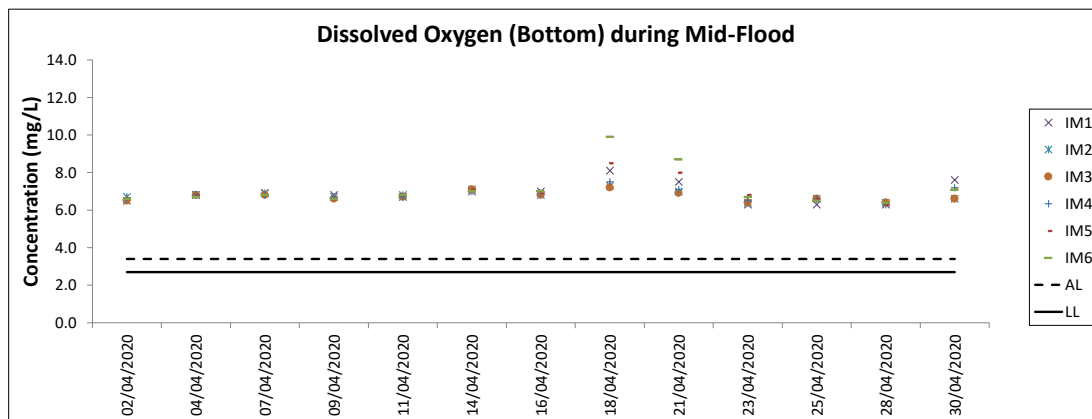
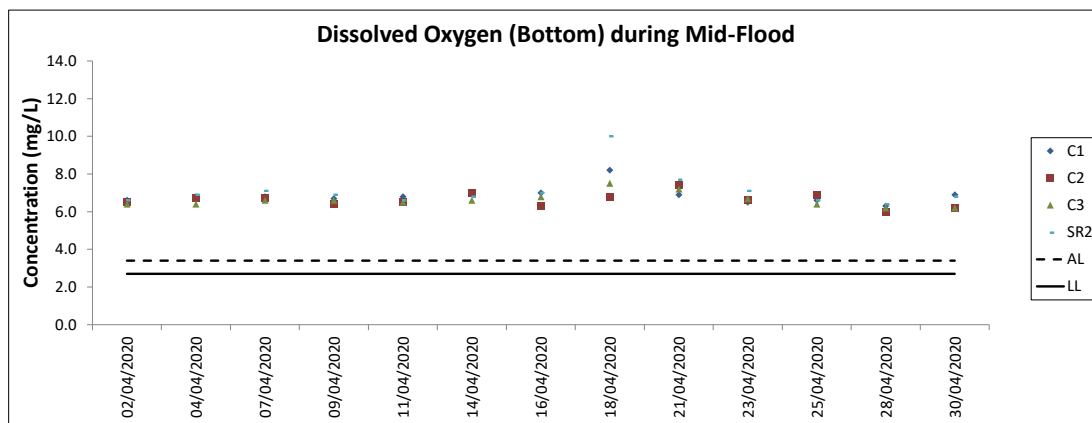
Water Quality Monitoring

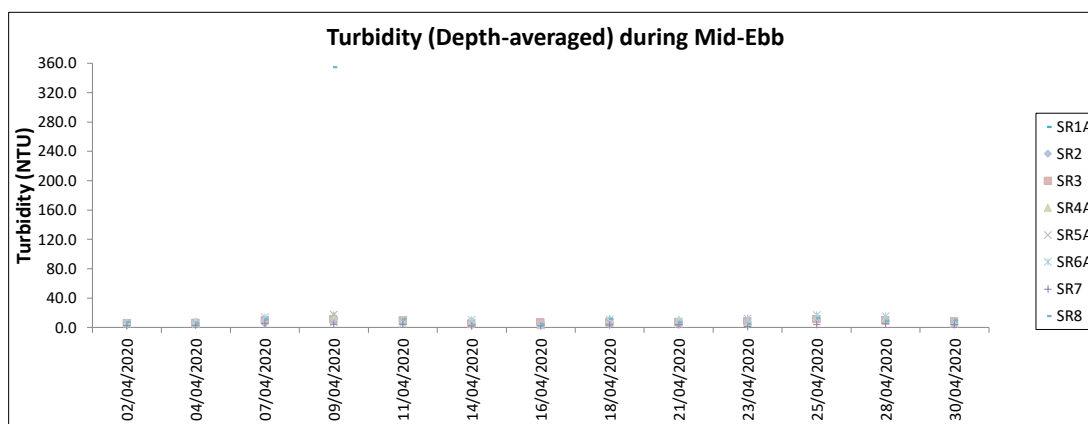
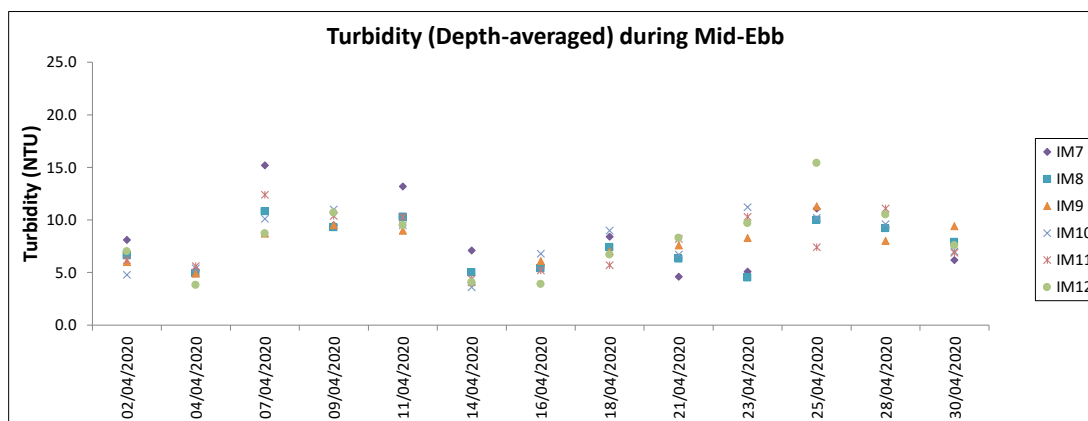
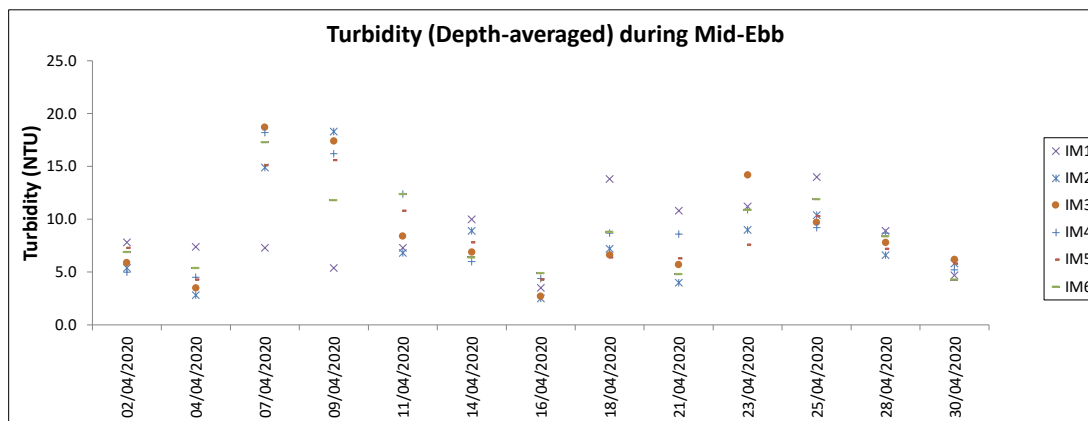
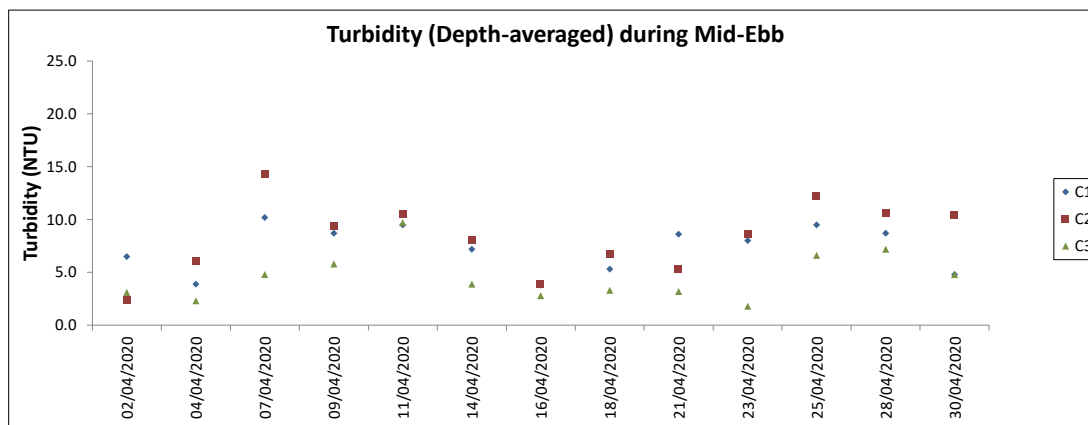
Water Quality Monitoring Results on 30 April 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)					
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA	Value	DA
IM9	Fine	Moderate	06:03	7.4	Surface	1.0	0.2	127	23.8	23.8	8.2	8.2	23.0	23.0	93.6	93.6	6.9		4.9		3		85		87	822079	808807	<0.2		1.9	1.8			
						1.0	0.2	138	23.8		8.2		23.1		93.6		6.9		4.9		3		86					<0.2	1.8					
					Middle	3.7	0.1	137	23.7	23.7	8.2	8.2	23.9	23.9	94.2	94.3	7.0	7.0	5.8		3		87					<0.2	1.9					
						3.7	0.2	147	23.7		8.2		23.9		94.3		7.0		6.0		3		87					<0.2	1.8					
					Bottom	6.4	0.2	66	23.7	23.7	8.2	8.1	25.3	25.2	92.7	92.6	6.8	6.8	6.6		4		88					<0.2	1.7					
						6.4	0.2	69	23.7		8.1		25.2		92.5		6.8		6.4		4		88					<0.2	1.7					
IM10	Fine	Moderate	05:56	8.2	Surface	1.0	0.4	118	24.0	24.0	8.2	8.2	23.6	23.7	94.7	94.6	7.0		4.9		4		85		88	822366	809781	<0.2		1.8	1.9			
						1.0	0.4	121	23.9		8.2		23.8		94.4		6.9	6.9	4.9		4		85					<0.2	1.8					
					Middle	4.1	0.3	132	23.8	23.8	8.1	8.1	24.2	24.2	93.6	93.6	6.9	5.2		4		89		<0.2				1.9						
						4.1	0.4	142	23.8		8.1		24.2		93.6		6.9		5.3		3		90					<0.2	1.9					
					Bottom	7.2	0.2	81	23.6	23.6	8.1	8.1	26.5	26.5	86.8	86.9	6.3	6.3	5.5		3		90					<0.2	1.9					
						7.2	0.3	82	23.6		8.1		26.4		86.9		6.3		5.5		3		90					<0.2	2.0					
IM11	Fine	Moderate	05:43	8.1	Surface	1.0	0.3	114	24.0	24.0	8.2	8.2	22.9	22.9	97.6	97.5	7.2		4.9		4		85		88	822069	811467	<0.2		1.8	1.8			
						1.0	0.3	114	24.0		8.2		22.9		97.3		7.2	7.1	5.1		3		86					<0.2	1.9					
					Middle	4.1	0.2	30	23.7	23.7	8.1	8.1	25.8	25.9	95.0	95.0	6.9	6.2		4		89		<0.2				1.8						
						4.1	0.2	31	23.7		8.1		26.0		95.0		6.9		6.2		4		89					<0.2	1.7					
					Bottom	7.1	0.2	356	23.4	23.4	8.1	8.1	27.2	27.2	90.4	90.4	6.6	6.6	5.7		3		90					<0.2	1.9					
						7.1	0.2	328	23.4		8.1		27.1		90.3		6.6		5.7		3		90					<0.2	1.8					
IM12	Fine	Moderate	05:35	8.7	Surface	1.0	0.3	107	23.7	23.7	8.1	8.1	24.5	24.5	94.7	94.5	7.0		5.7		4		84		88	821454	812060	<0.2		1.8	1.7			
						1.0	0.3	117	23.7		8.1		24.5		94.3		6.9	5.6		4		85		<0.2				1.7						
					Middle	4.4	0.0	116	23.4	23.4	8.1	8.1	27.2	27.2	91.9	91.9	6.7	5.0		4		88		<0.2				1.7						
						4.4	0.0	119	23.4		8.1		27.3		91.9		6.7		5.1		4		89					<0.2	1.5					
					Bottom	7.7	0.0	97	23.2	23.2	8.1	8.1	27.9	27.9	86.7	86.7	6.3	6.3	6.5		4		90					<0.2	1.8					
						7.7	0.0	98	23.2		8.1		27.9		86.7		6.3		6.5		4		90					<0.2	1.8					
SR1A	Cloudy	Calm	05:17	4.7	Surface	1.0	-	-	23.8	23.8	8.1	8.1	25.6	25.7	98.4	98.4	7.2		4.3		4		-		-	819982	812660	-	-	-	-			
						1.0	-	-	23.7		8.1		25.9		98.3		7.2	7.2	4.4		4		-											
					Middle	2.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.8		-					4		-			-	-
						2.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-		-		
					Bottom	3.7	-	-	23.5	23.5	8.1	8.0	27.0	27.0	91.0	91.0	6.6	6.6	5.3		3		-					-		-			-	-
						3.7	-	-	23.5		8.0		27.0		91.0		6.6		5.3		3		-					-		-			-	-
SR2	Cloudy	Moderate	05:03	4.6	Surface	1.0	0.3	3	23.8	23.8	8.0	8.0	25.4	25.4	100.1	100.1	7.3		4.3		4		85		87	821479	814145	<0.2		2.1	2.1			
						1.0	0.3	3	23.8		8.0		25.4		100.0		7.3	7.3	4.3		4		86					<0.2	2.1					
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.5		-					4		-			-	-
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-		-		
					Bottom	3.6	0.3	7	23.5	23.5	8.0	8.0	26.7	26.7	93.3	93.3	6.8	6.8	4.7		3		88					<0.2	2.1					
						3.6	0.3	7	23.5		8.0		26.7		93.2		6.8		4.7		3		89					<0.2	2.2					
SR3	Fine	Moderate	06:14	9.0	Surface	1.0	0.0	164	23.9	23.9	8.2	8.2	21.5	21.6	94.4	94.3	7.0		4.9		4		-		-	822160	807551	-	-	-	-			
						1.0	0.0	166	23.8		8.2		21.6		94.2		7.0	7.0	5.0		4		-											
					Middle	4.5	0.1	197	23.6	23.6	8.2	8.2	26.0	26.1	95.5	95.6	7.0	6.8		3		-		-					-	-				
						4.5	0.1	210	23.6		8.2		26.1		95.7		7.0	7.0	3		-		-					-	-					
					Bottom	8.0	0.1	44	23.6	23.6	8.2	8.2	26.6	26.6	95.4	95.3	6.9	6.9	9.3		2		-					-		-		-		
						8.0	0.1	47	23.6		8.2		26.6		95.1		6.9		9.1		2		-					-		-		-		
SR4A	Cloudy	Calm	05:17	9.1	Surface	1.0	0.3	85	23.7	23.7	8.1	8.1	24.7	24.6	106.1	106.0	7.8		3.8		4		-		-	817175	807786	-	-	-	-			
						1.0	0.3	86	23.7		8.1		24.6		105.8		7.8	7.7	3.8		4		-											
					Middle	4.6	0.2	80	23.9	23.9	8.1	8.1	25.9	25.9	104.1	104.0	7.6	5.8		4		-		-					-	-				
						4.6	0.2	83	23.9		8.1		25.9		103.9		7.6	5.9		4		-		-					-	-				
					Bottom	8.1	0.1	86	23.9	23.9	8.1	8.1	26.4	26.4	101.0	101.0	7.3	6.3		4		-		-					-	-				
						8.1	0.1	91	23.9		8.1		26.4		101.0		7.3	7.3	6.5		4		-					-		-		-		
SR5A	Cloudy	Calm	04:58	3.7	Surface	1.0	0.1	96	23.6	23.6	8.1	8.1	27.2	27.2	98.7	98.9	7.2		3.9		4		-		-	816582	810707	-	-	-	-			
						1.0	0.1	103	23.5		8.1		27.1		99.1		7.2	7.2	3.8		4		-											
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.2		-					4		-			-	-
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-				
					Bottom	2.7	0.1	83	23.6	23.6	8.1	8.1	26.6	26.6	100.2	100.2	7.3	3.6		4		-		-					-	-				
						2.7	0.1	86	23.6		8.1		26.6		100.1		7.3	3.7		4		-		-					-	-				
SR6A	Cloudy	Calm	04:30	4.2	Surface	1.0	0.0	191	23.6	23.6	8.1	8.1	25.7	25.7	101.7	101.6	7.4		2.6		8		-		-	817947	814749	-	-	-	-			
						1.0	0.0	199	23.6		8.1		25.7		101.5		7.4	2.7		7		-												
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.4		-					-		-		-		
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-					
					Bottom	3.2	0.0	10	23.6	23.6	8.0	8.0	25.9	25.9	101.1	101.2	7.4	3.1		7		-		-					-	-				
						3.2	0.0	10	23.6		8.0		25.9		101.2		7.4	3.0		7		-		-					-	-				
SR7	Cloudy	Moderate	04:03	15.8	Surface	1.0	0.1	51	23.2	23.2	7.8	7.8	28.2	28.2	90.0	90.0	6.5		4.0		3		-		-	823655	823731	-	-	-	-			
						1.0	0.1	51	23.2		7.8		28.2		89.9		6.5	4.0		3		-												
					Middle	7.9	0.1	144	22.8	22.8	7.8	7.8	30.9	31.0	85.8	85.8	6.2	4.8		3		-		-					-	-				
						7.9	0.1	153	22.8		7.8		31.0		85.8		6.2	4.8		3		-		-					-	-				
					Bottom	14.8	0.1	67	22.7	22.7	7.8	7.8	31.4	31.4	85.6	85.6	6.2	4.8		4		-		-					-	-				
						14.8	0.1	70	22.7		7.8		31.4		85.6		6.2	4.8		4		-		-					-	-				
SR8	Cloudy	Calm	05:26	4.4	Surface	1.0	-	-	23.7	23.7	8.1	8.1	24.5	24.5	96.5	96.3	7.1		5.4		3		-		-	820373	811614	-	-	-	-			
						1.0	-	-	23.7		8.1		24.5		96.1		7.1	5.4		3		-												
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.1		-					-		-		-		
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-					
					Bottom	3.4	-	-	23.7	23.7	8.1	8.1	26.4	26.4	95.6	95.6	7.0	5.6		5		-		-					-	-				
						3.4	-	-	23.7		8.1		26.3		95.5		7.0	5.6		5		-		-					-	-				

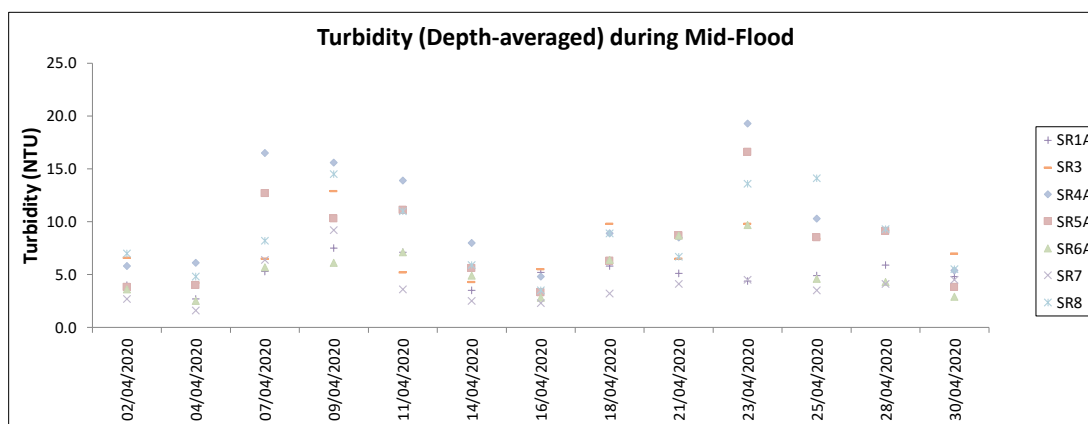
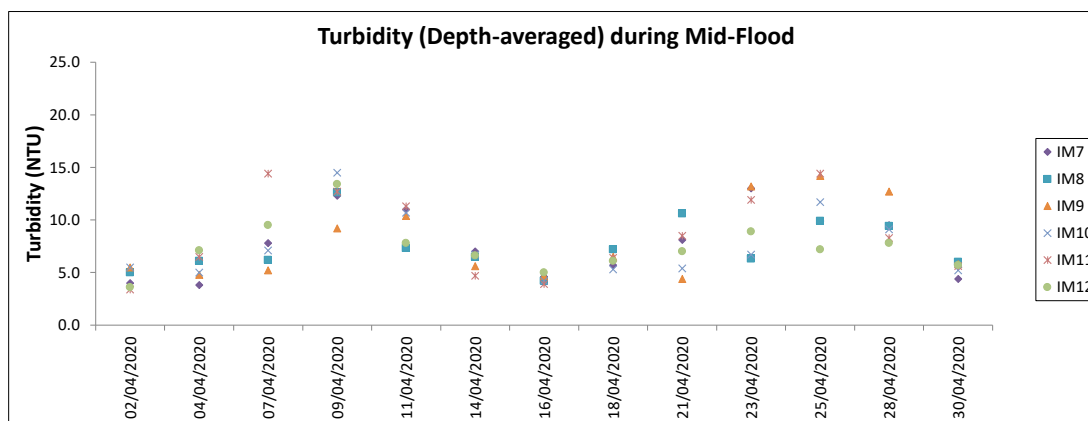
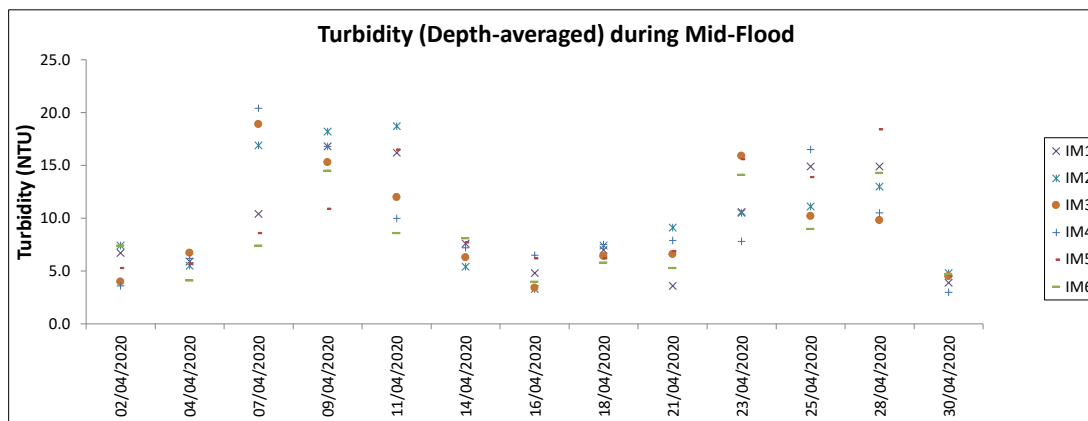
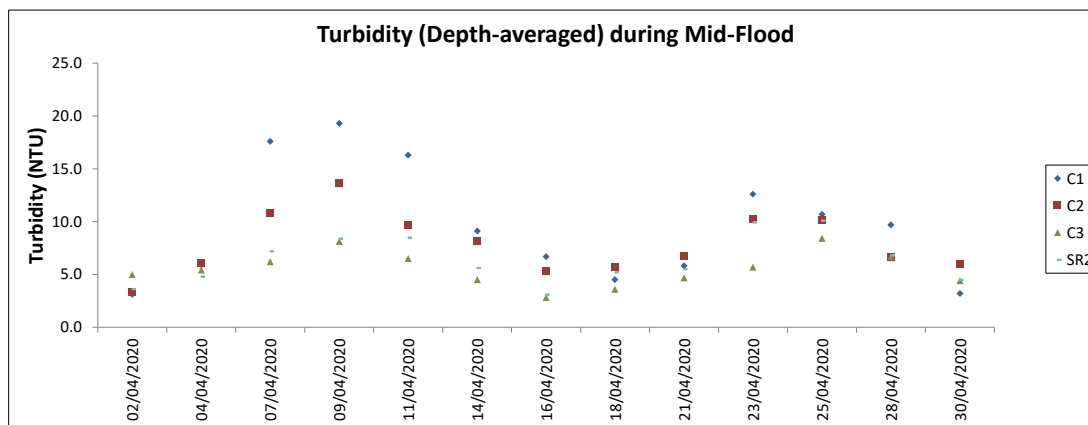




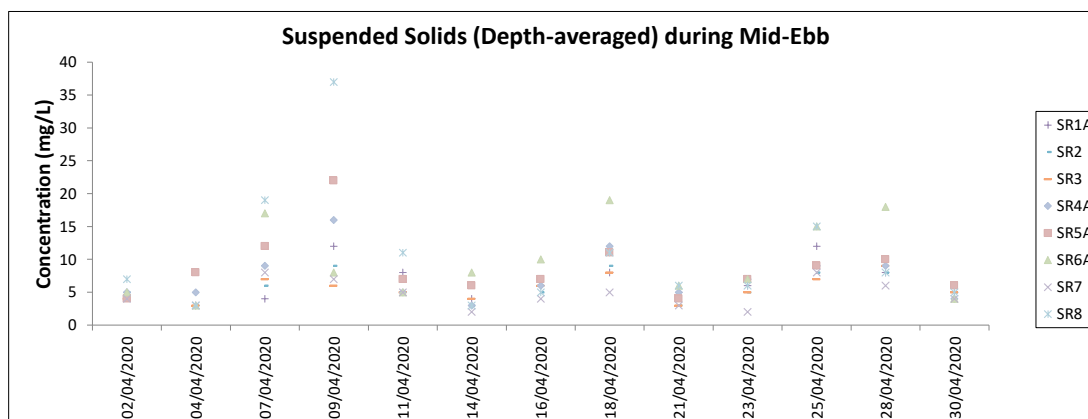
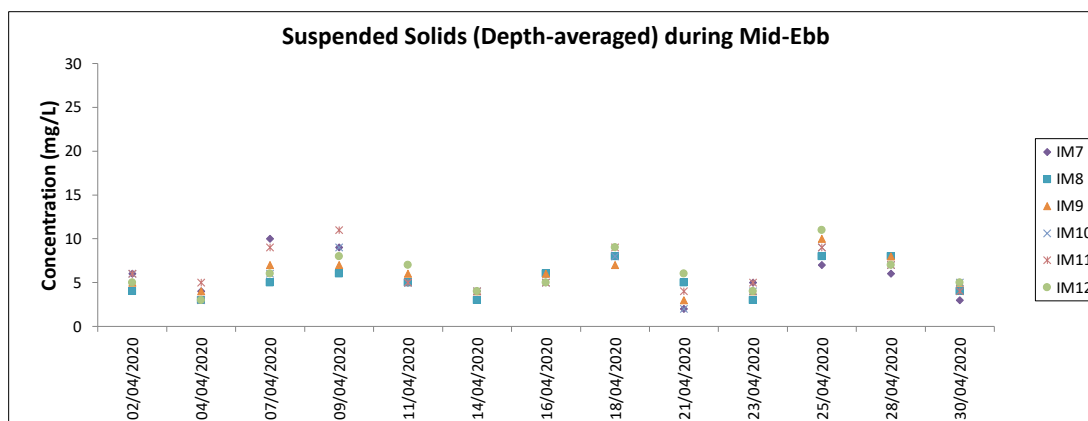
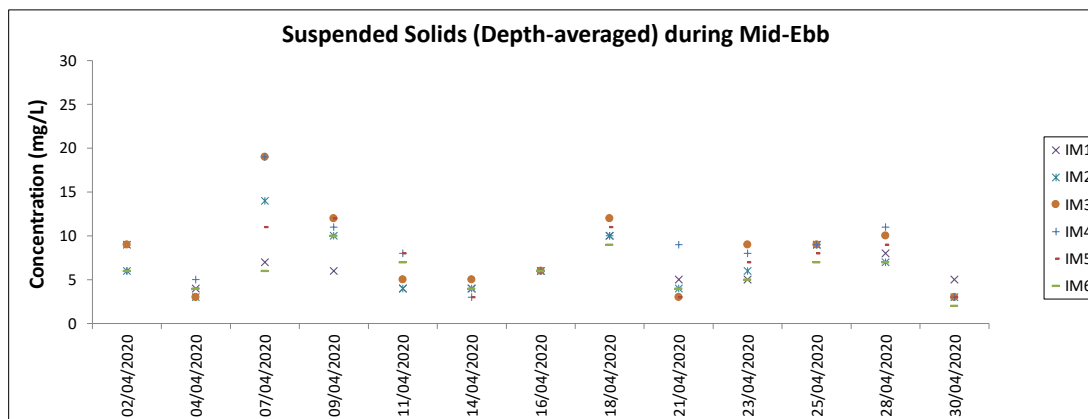
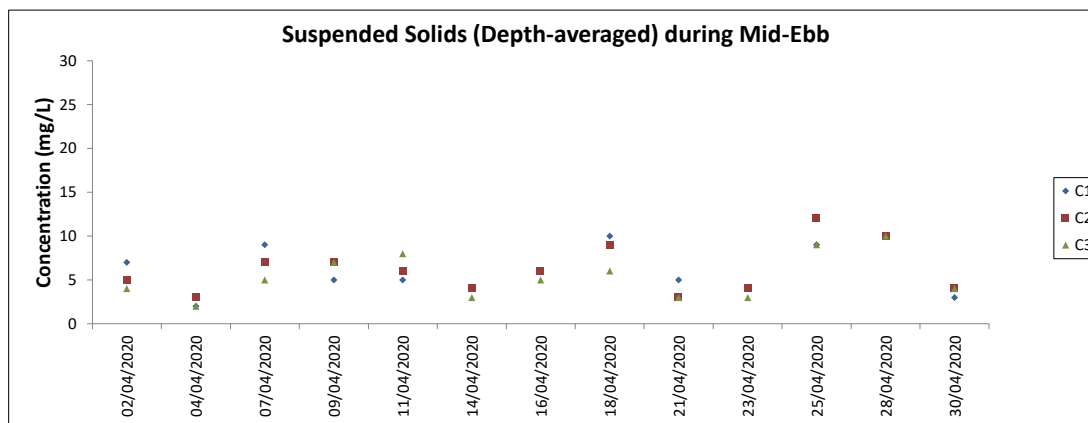




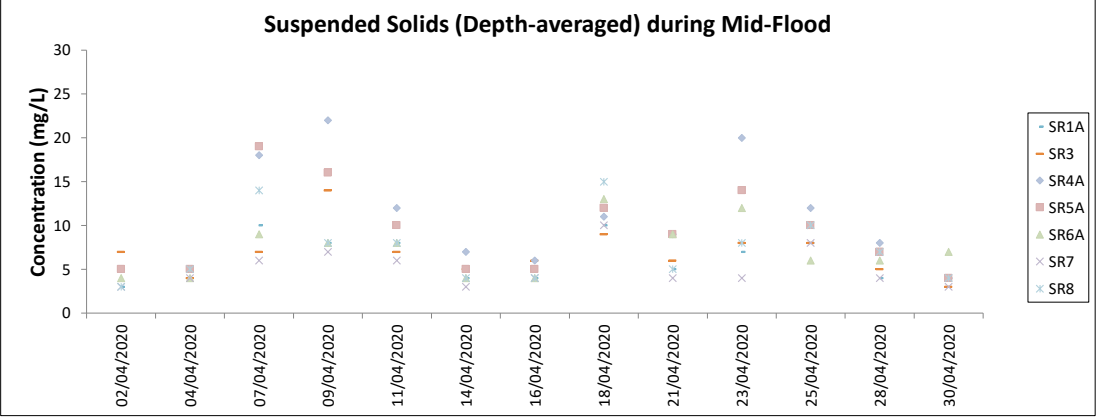
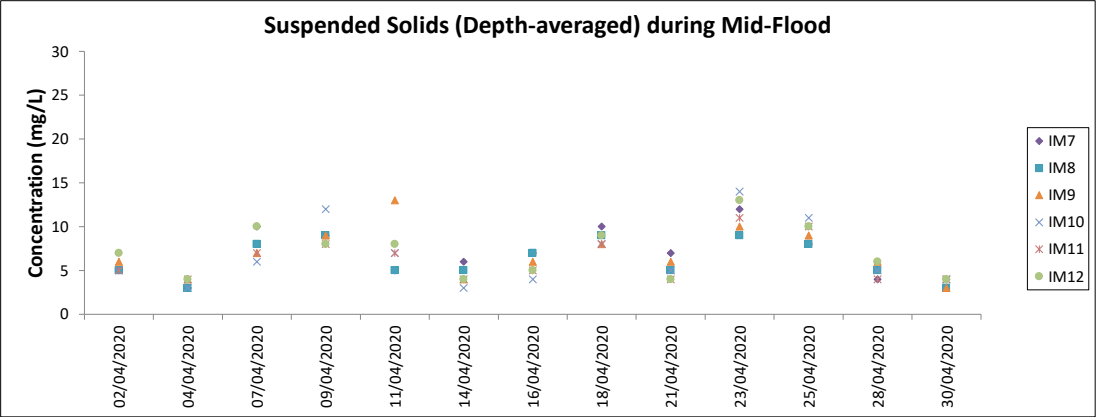
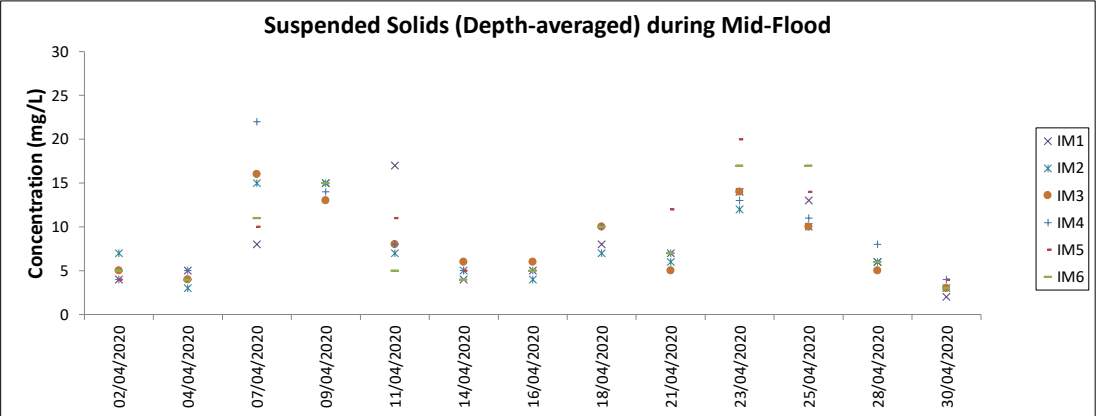
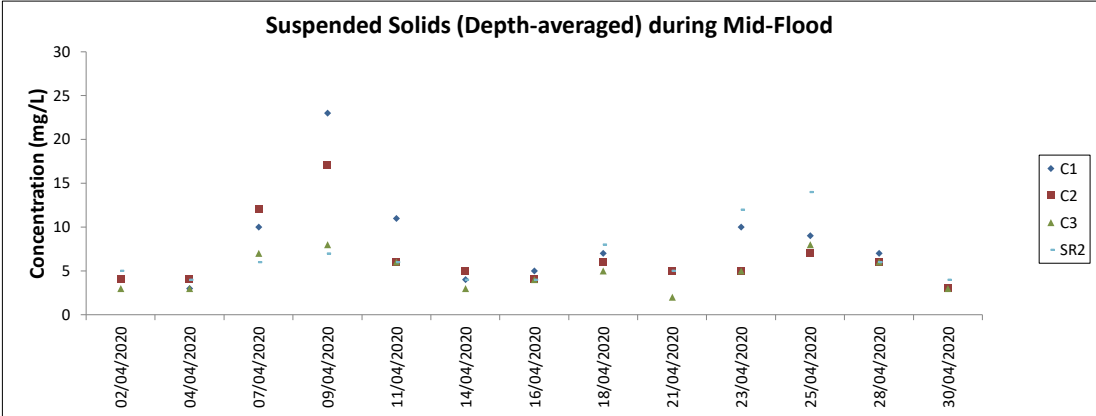
Note: The Action and Limit Level of turbidity can be referred to Table 4.2 of the monthly EM&A report.



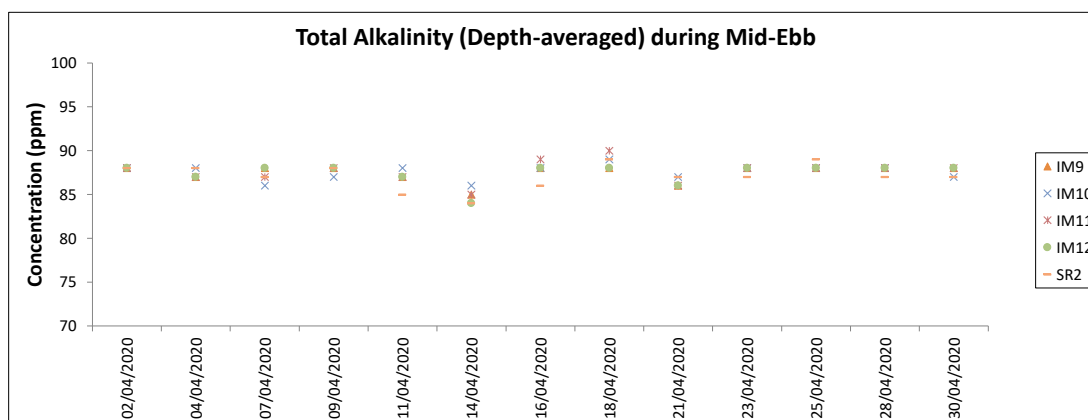
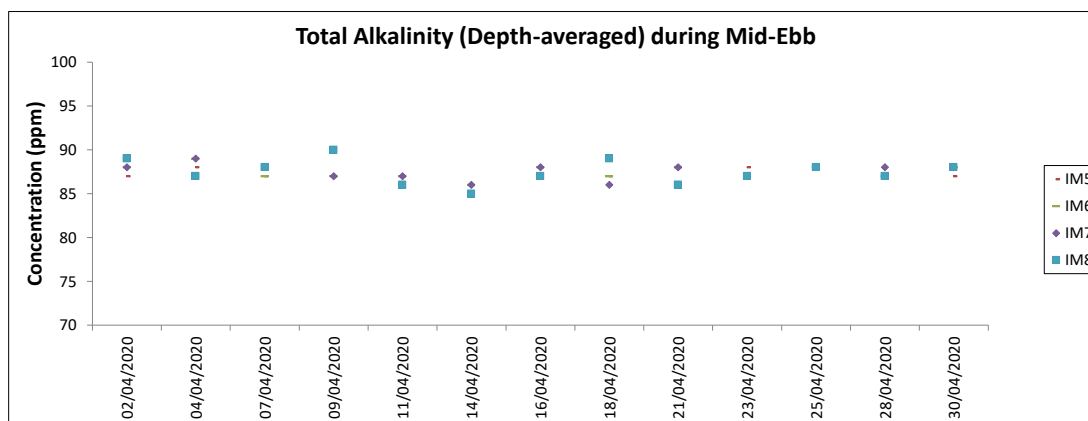
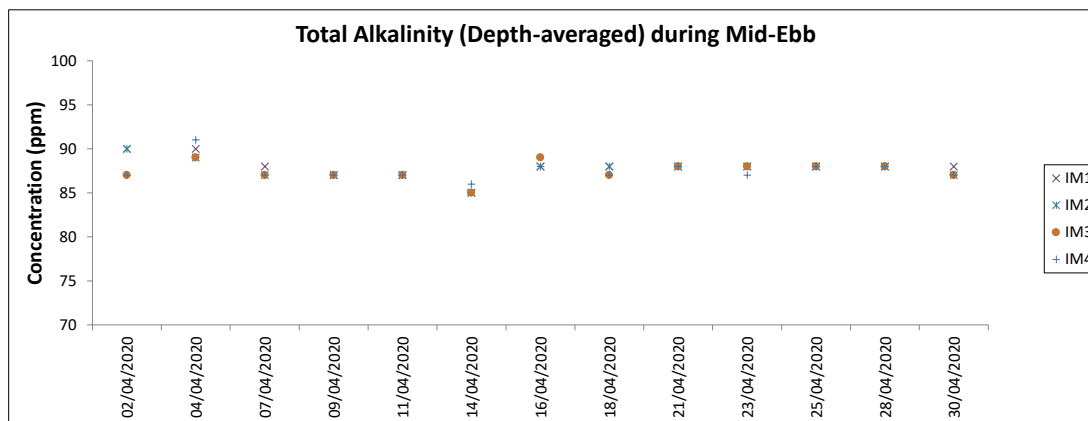
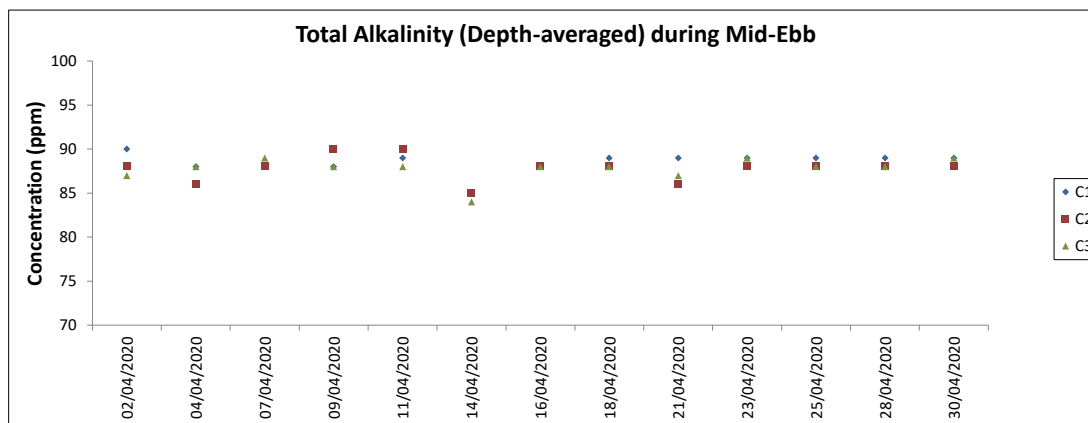
Note: The Action and Limit Level of turbidity can be referred to Table 4.2 of the monthly EM&A report.



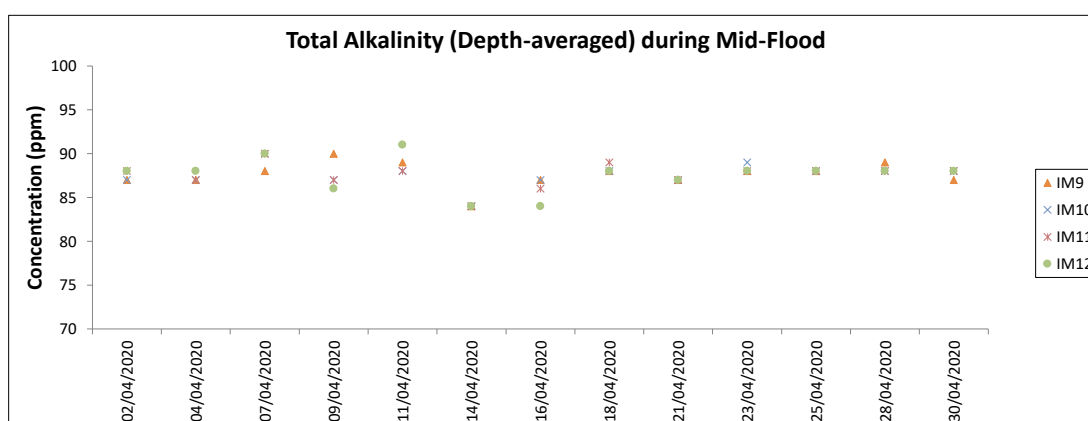
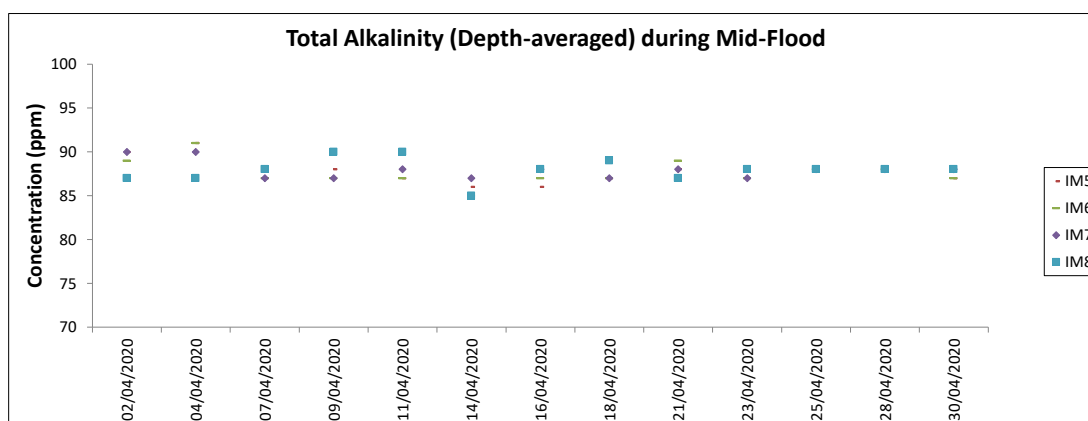
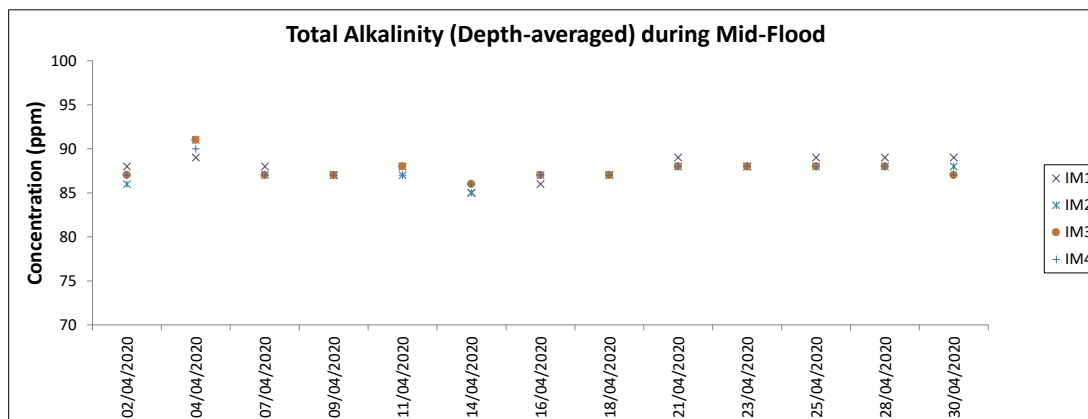
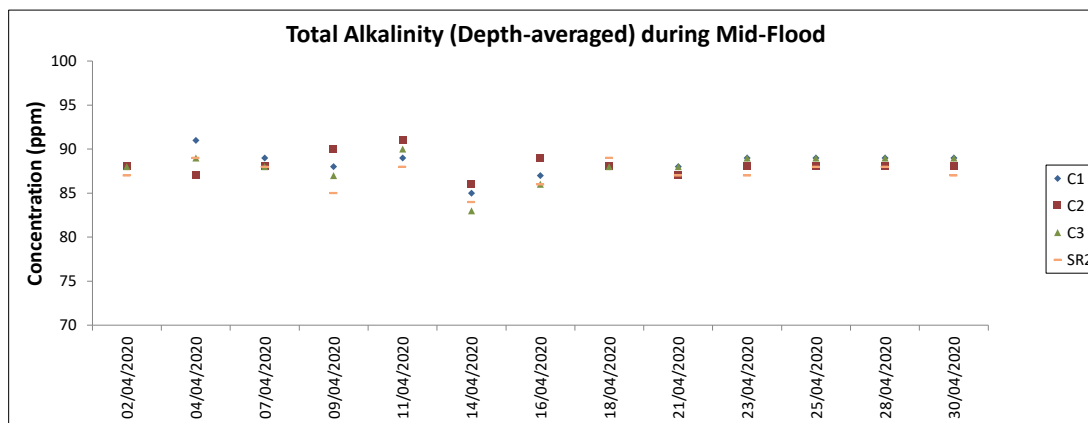
Note: The Action and Limit Level of suspended solids can be referred to Table 4.2 of the monthly EM&A report.



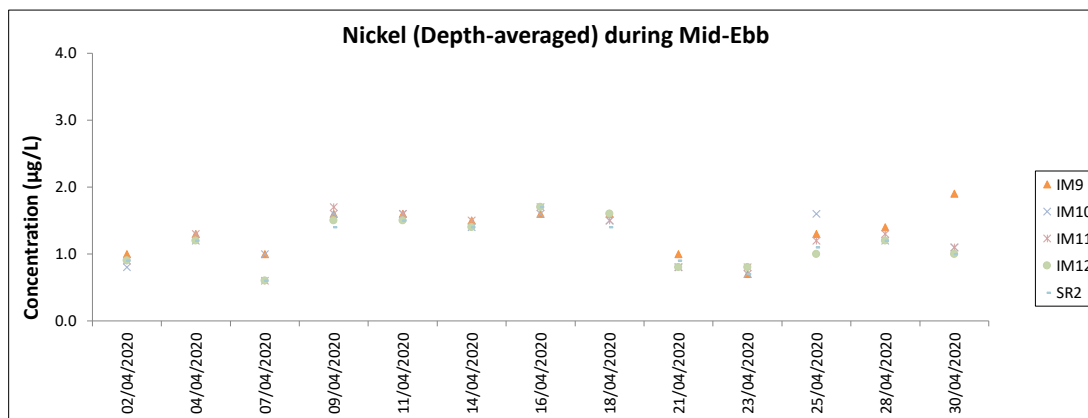
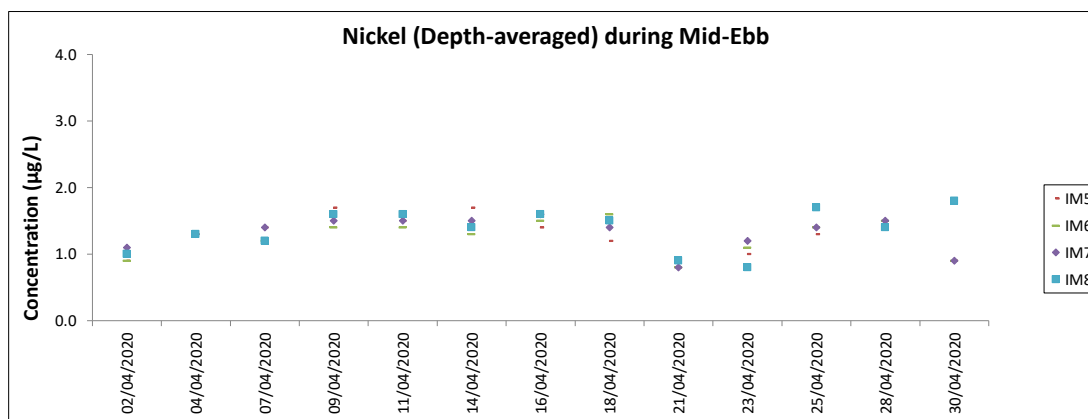
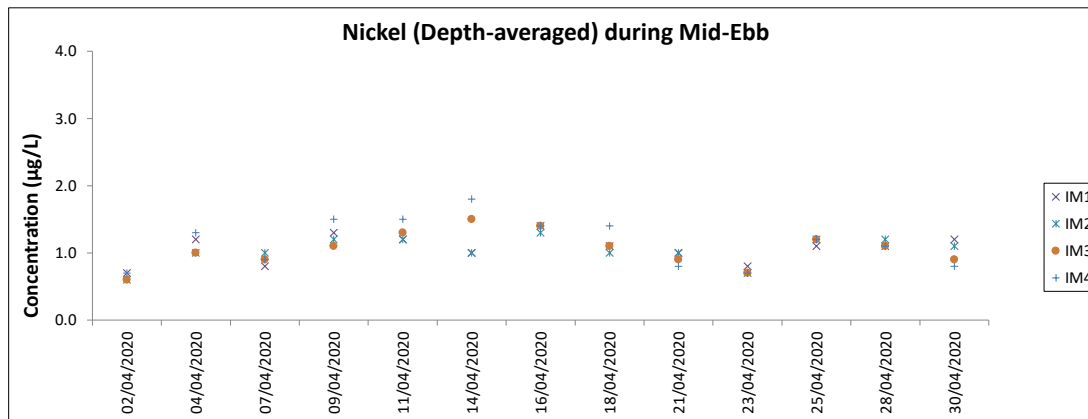
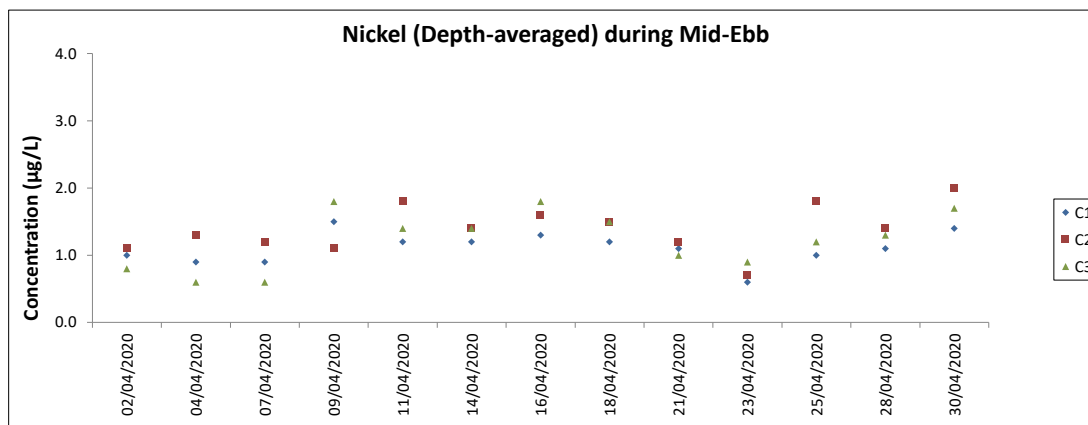
Note: The Action and Limit Level of suspended solids can be referred to Table 4.2 of the monthly EM&A report.



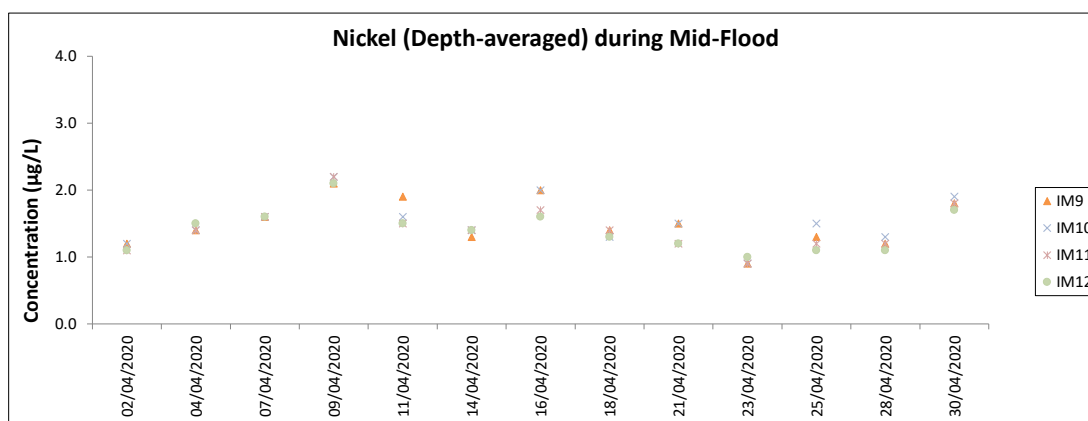
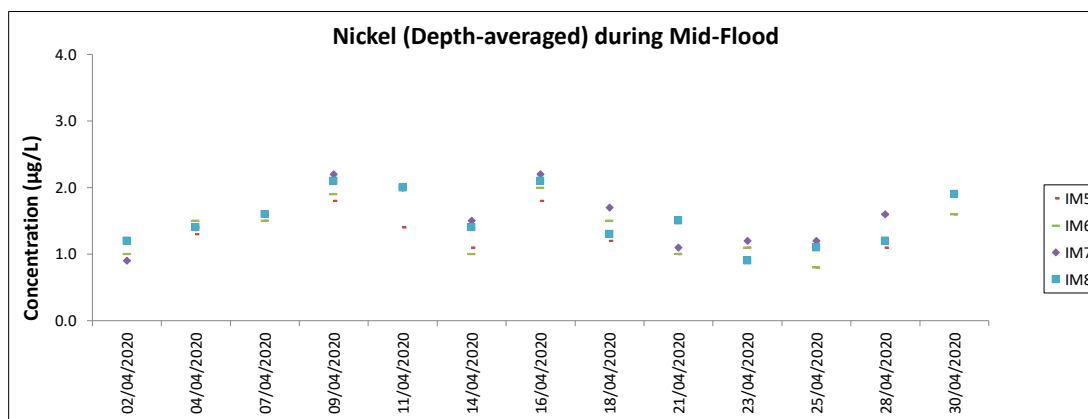
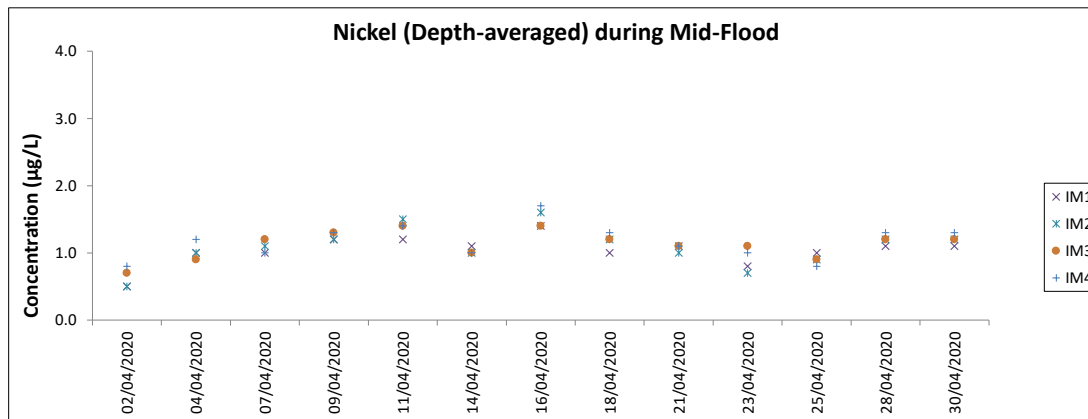
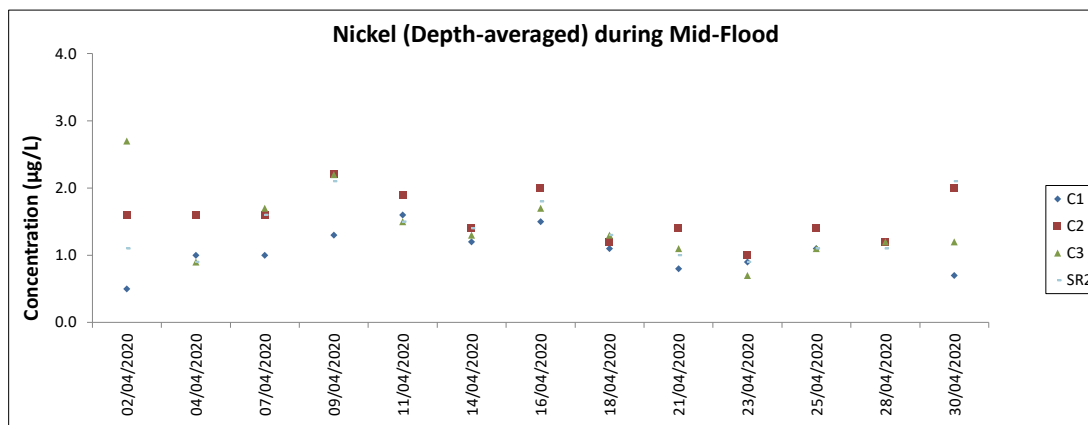
Note: The Action and Limit Level of total alkalinity can be referred to Table 4.2 of the monthly EM&A report.



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



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



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

Chinese White Dolphin Monitoring Results

CWD Small Vessel Line-transect Survey

Survey Effort Data

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
10-Feb-20	NWL	2	58.000	WINTER	32166	3RS ET	P
10-Feb-20	NWL	3	5.360	WINTER	32166	3RS ET	P
10-Feb-20	NWL	2	11.700	WINTER	32166	3RS ET	S
11-Feb-20	NWL	2	30.200	WINTER	32166	3RS ET	P
11-Feb-20	NWL	3	33.800	WINTER	32166	3RS ET	P
11-Feb-20	NWL	2	4.600	WINTER	32166	3RS ET	S
11-Feb-20	NWL	3	6.900	WINTER	32166	3RS ET	S
12-Feb-20	AW	2	4.552	WINTER	32166	3RS ET	P
12-Feb-20	WL	2	18.710	WINTER	32166	3RS ET	P
12-Feb-20	WL	3	0.959	WINTER	32166	3RS ET	P
12-Feb-20	WL	2	8.676	WINTER	32166	3RS ET	S
12-Feb-20	WL	3	1.631	WINTER	32166	3RS ET	S
17-Feb-20	NEL	2	7.100	WINTER	32166	3RS ET	P
17-Feb-20	NEL	3	29.780	WINTER	32166	3RS ET	P
17-Feb-20	NEL	2	3.900	WINTER	32166	3RS ET	S
17-Feb-20	NEL	3	6.420	WINTER	32166	3RS ET	S
18-Feb-20	NEL	2	15.530	WINTER	32166	3RS ET	P
18-Feb-20	NEL	3	21.650	WINTER	32166	3RS ET	P
18-Feb-20	NEL	2	5.120	WINTER	32166	3RS ET	S
18-Feb-20	NEL	3	5.000	WINTER	32166	3RS ET	S
20-Feb-20	AW	3	4.920	WINTER	32166	3RS ET	P
20-Feb-20	WL	2	13.391	WINTER	32166	3RS ET	P
20-Feb-20	WL	3	5.057	WINTER	32166	3RS ET	P
20-Feb-20	WL	2	9.593	WINTER	32166	3RS ET	S
20-Feb-20	WL	4	1.013	WINTER	32166	3RS ET	S
21-Feb-20	SWL	3	26.930	WINTER	32166	3RS ET	P
21-Feb-20	SWL	4	18.000	WINTER	32166	3RS ET	P
21-Feb-20	SWL	5	9.200	WINTER	32166	3RS ET	P
21-Feb-20	SWL	3	7.600	WINTER	32166	3RS ET	S
21-Feb-20	SWL	4	7.700	WINTER	32166	3RS ET	S
21-Feb-20	SWL	5	1.270	WINTER	32166	3RS ET	S
26-Feb-20	SWL	1	1.800	WINTER	32166	3RS ET	P
26-Feb-20	SWL	2	49.708	WINTER	32166	3RS ET	P
26-Feb-20	SWL	3	0.840	WINTER	32166	3RS ET	P
26-Feb-20	SWL	2	13.918	WINTER	32166	3RS ET	S
26-Feb-20	SWL	3	1.970	WINTER	32166	3RS ET	S
2-Mar-20	NEL	2	2.500	SPRING	32166	3RS ET	P
2-Mar-20	NEL	3	32.140	SPRING	32166	3RS ET	P
2-Mar-20	NEL	4	2.600	SPRING	32166	3RS ET	P
2-Mar-20	NEL	2	1.200	SPRING	32166	3RS ET	S
2-Mar-20	NEL	3	8.160	SPRING	32166	3RS ET	S
2-Mar-20	NEL	4	1.000	SPRING	32166	3RS ET	S
6-Mar-20	NEL	2	3.460	SPRING	32166	3RS ET	P
6-Mar-20	NEL	3	33.340	SPRING	32166	3RS ET	P
6-Mar-20	NEL	2	1.200	SPRING	32166	3RS ET	S
6-Mar-20	NEL	3	9.900	SPRING	32166	3RS ET	S
11-Mar-20	NWL	2	4.786	SPRING	32166	3RS ET	P

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
11-Mar-20	NWL	3	53.890	SPRING	32166	3RS ET	P
11-Mar-20	NWL	4	1.400	SPRING	32166	3RS ET	P
11-Mar-20	NWL	3	12.430	SPRING	32166	3RS ET	S
12-Mar-20	AW	4	4.920	SPRING	32166	3RS ET	P
12-Mar-20	WL	3	1.675	SPRING	32166	3RS ET	P
12-Mar-20	WL	4	15.140	SPRING	32166	3RS ET	P
12-Mar-20	WL	5	2.008	SPRING	32166	3RS ET	P
12-Mar-20	WL	3	0.480	SPRING	32166	3RS ET	S
12-Mar-20	WL	4	7.380	SPRING	32166	3RS ET	S
12-Mar-20	WL	5	1.762	SPRING	32166	3RS ET	S
17-Mar-20	NWL	2	39.340	SPRING	32166	3RS ET	P
17-Mar-20	NWL	3	23.260	SPRING	32166	3RS ET	P
17-Mar-20	NWL	4	1.000	SPRING	32166	3RS ET	P
17-Mar-20	NWL	2	6.700	SPRING	32166	3RS ET	S
17-Mar-20	NWL	3	4.900	SPRING	32166	3RS ET	S
18-Mar-20	AW	2	5.000	SPRING	32166	3RS ET	P
18-Mar-20	WL	2	9.543	SPRING	32166	3RS ET	P
18-Mar-20	WL	3	9.425	SPRING	32166	3RS ET	P
18-Mar-20	WL	2	7.497	SPRING	32166	3RS ET	S
18-Mar-20	WL	3	2.691	SPRING	32166	3RS ET	S
19-Mar-20	SWL	1	6.940	SPRING	32166	3RS ET	P
19-Mar-20	SWL	2	38.570	SPRING	32166	3RS ET	P
19-Mar-20	SWL	3	8.050	SPRING	32166	3RS ET	P
19-Mar-20	SWL	2	14.355	SPRING	32166	3RS ET	S
19-Mar-20	SWL	3	2.200	SPRING	32166	3RS ET	S
23-Mar-20	SWL	1	6.890	SPRING	32166	3RS ET	P
23-Mar-20	SWL	2	45.972	SPRING	32166	3RS ET	P
23-Mar-20	SWL	1	1.350	SPRING	32166	3RS ET	S
23-Mar-20	SWL	2	14.535	SPRING	32166	3RS ET	S
3-Apr-20	NEL	2	1.270	SPRING	32166	3RS ET	P
3-Apr-20	NEL	3	26.900	SPRING	32166	3RS ET	P
3-Apr-20	NEL	4	8.700	SPRING	32166	3RS ET	P
3-Apr-20	NEL	3	9.830	SPRING	32166	3RS ET	S
3-Apr-20	NEL	4	1.000	SPRING	32166	3RS ET	S
7-Apr-20	NEL	1	10.100	SPRING	32166	3RS ET	P
7-Apr-20	NEL	2	27.170	SPRING	32166	3RS ET	P
7-Apr-20	NEL	1	1.000	SPRING	32166	3RS ET	S
7-Apr-20	NEL	2	9.330	SPRING	32166	3RS ET	S
9-Apr-20	AW	2	5.030	SPRING	32166	3RS ET	P
9-Apr-20	WL	2	10.238	SPRING	32166	3RS ET	P
9-Apr-20	WL	3	6.538	SPRING	32166	3RS ET	P
9-Apr-20	WL	4	1.390	SPRING	32166	3RS ET	P
9-Apr-20	WL	2	6.432	SPRING	32166	3RS ET	S
9-Apr-20	WL	3	2.932	SPRING	32166	3RS ET	S
9-Apr-20	WL	4	0.910	SPRING	32166	3RS ET	S
15-Apr-20	AW	2	5.040	SPRING	32166	3RS ET	P
15-Apr-20	WL	2	20.680	SPRING	32166	3RS ET	P
15-Apr-20	WL	2	10.420	SPRING	32166	3RS ET	S
16-Apr-20	SWL	2	52.486	SPRING	32166	3RS ET	P

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
16-Apr-20	SWL	2	15.854	SPRING	32166	3RS ET	S
17-Apr-20	SWL	2	26.394	SPRING	32166	3RS ET	P
17-Apr-20	SWL	3	27.056	SPRING	32166	3RS ET	P
17-Apr-20	SWL	2	9.230	SPRING	32166	3RS ET	S
17-Apr-20	SWL	3	8.050	SPRING	32166	3RS ET	S
20-Apr-20	NWL	2	41.800	SPRING	32166	3RS ET	P
20-Apr-20	NWL	3	22.200	SPRING	32166	3RS ET	P
20-Apr-20	NWL	2	7.600	SPRING	32166	3RS ET	S
20-Apr-20	NWL	3	4.200	SPRING	32166	3RS ET	S
21-Apr-20	NWL	2	26.840	SPRING	32166	3RS ET	P
21-Apr-20	NWL	3	36.760	SPRING	32166	3RS ET	P
21-Apr-20	NWL	2	4.300	SPRING	32166	3RS ET	S
21-Apr-20	NWL	3	7.600	SPRING	32166	3RS ET	S

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

CWD Small Vessel Line-transect Survey

Sighting Data

DATE	STG #	TIME	CWD/FP	GP SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.	P/S
10-Feb-20	1	0953	CWD	5	NWL	2	31	ON	3RS ET	22.3704	113.8700	WINTER	NONE	P
12-Feb-20	1	0936	CWD	6	AW	2	11	ON	3RS ET	22.3032	113.8723	WINTER	NONE	P
12-Feb-20	2	1103	CWD	2	WL	2	22	ON	3RS ET	22.2688	113.8576	WINTER	NONE	P
12-Feb-20	3	1129	CWD	1	WL	2	365	ON	3RS ET	22.2554	113.8358	WINTER	NONE	S
12-Feb-20	4	1143	CWD	1	WL	2	80	ON	3RS ET	22.2502	113.8347	WINTER	NONE	P
12-Feb-20	5	1231	CWD	1	WL	2	317	ON	3RS ET	22.2232	113.8359	WINTER	NONE	P
12-Feb-20	6	1249	CWD	1	WL	2	38	ON	3RS ET	22.2229	113.8313	WINTER	NONE	P
12-Feb-20	7	1304	CWD	3	WL	2	43	ON	3RS ET	22.2145	113.8270	WINTER	NONE	P
20-Feb-20	1	1048	CWD	2	WL	2	45	ON	3RS ET	22.2599	113.8494	WINTER	NONE	P
20-Feb-20	2	1054	CWD	2	WL	2	175	ON	3RS ET	22.2611	113.8428	WINTER	NONE	P
20-Feb-20	3	1148	CWD	6	WL	2	305	ON	3RS ET	22.2235	113.8328	WINTER	NONE	P
20-Feb-20	4	1238	CWD	3	WL	2	282	ON	3RS ET	22.2005	113.8254	WINTER	NONE	S
26-Feb-20	1	1049	FP	2	SWL	2	294	ON	3RS ET	22.1800	113.9361	WINTER	NONE	P
26-Feb-20	2	1058	FP	1	SWL	2	69	ON	3RS ET	22.1669	113.9362	WINTER	NONE	P
26-Feb-20	3	1102	FP	2	SWL	2	604	ON	3RS ET	22.1632	113.9361	WINTER	NONE	P
26-Feb-20	4	1110	FP	2	SWL	2	1	ON	3RS ET	22.1489	113.9347	WINTER	NONE	S
26-Feb-20	5	1113	FP	2	SWL	2	11	ON	3RS ET	22.1473	113.9332	WINTER	NONE	S
26-Feb-20	6	1118	FP	1	SWL	2	246	ON	3RS ET	22.1437	113.9283	WINTER	NONE	S
26-Feb-20	7	1122	FP	3	SWL	2	89	ON	3RS ET	22.1484	113.9275	WINTER	NONE	S
26-Feb-20	8	1149	FP	2	SWL	2	179	ON	3RS ET	22.2012	113.9271	WINTER	NONE	P
26-Feb-20	9	1222	FP	1	SWL	2	137	ON	3RS ET	22.1533	113.9178	WINTER	NONE	P
26-Feb-20	10	1226	FP	1	SWL	2	124	ON	3RS ET	22.1489	113.9177	WINTER	NONE	P
26-Feb-20	11	1229	FP	1	SWL	2	32	ON	3RS ET	22.1468	113.9181	WINTER	NONE	P
26-Feb-20	12	1242	FP	1	SWL	3	293	ON	3RS ET	22.1493	113.9085	WINTER	NONE	P
26-Feb-20	13	1249	FP	1	SWL	2	3	ON	3RS ET	22.1549	113.9062	WINTER	NONE	S
26-Feb-20	14	1352	FP	1	SWL	2	171	ON	3RS ET	22.1555	113.8976	WINTER	NONE	P
26-Feb-20	15	1544	CWD	2	SWL	2	745	ON	3RS ET	22.1784	113.8498	WINTER	NONE	P
11-Mar-20	1	0938	CWD	8	NWL	2	712	ON	3RS ET	22.4130	113.8701	SPRING	NONE	P
11-Mar-20	2	1055	CWD	2	NWL	3	118	ON	3RS ET	22.2980	113.8701	SPRING	NONE	P
12-Mar-20	1	1030	CWD	4	WL	4	N/A	OFF	3RS ET	22.2778	113.8565	SPRING	NONE	P
12-Mar-20	2	1046	CWD	1	WL	5	36	ON	3RS ET	22.2693	113.8518	SPRING	NONE	P
12-Mar-20	3	1056	CWD	1	WL	3	192	ON	3RS ET	22.2635	113.8568	SPRING	NONE	S

DATE	STG #	TIME	CWD/FP	GP SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.	P/S
12-Mar-20	4	1108	CWD	4	WL	3	440	ON	3RS ET	22.2611	113.8489	SPRING	NONE	P
12-Mar-20	5	1136	CWD	2	WL	3	751	ON	3RS ET	22.2482	113.8517	SPRING	NONE	S
18-Mar-20	1	1052	CWD	1	WL	3	102	ON	3RS ET	22.2605	113.8500	SPRING	NONE	P
18-Mar-20	2	1201	CWD	5	WL	2	147	ON	3RS ET	22.2324	113.8236	SPRING	NONE	S
18-Mar-20	3	1246	CWD	2	WL	3	29	ON	3RS ET	22.2130	113.8365	SPRING	NONE	S
19-Mar-20	1	1035	FP	3	SWL	1	38	ON	3RS ET	22.2111	113.9360	SPRING	NONE	P
19-Mar-20	2	1042	FP	1	SWL	2	79	ON	3RS ET	22.1984	113.9363	SPRING	NONE	P
19-Mar-20	3	1046	FP	2	SWL	2	230	ON	3RS ET	22.1951	113.9362	SPRING	NONE	P
19-Mar-20	4	1050	FP	11	SWL	2	162	ON	3RS ET	22.1909	113.9357	SPRING	NONE	P
19-Mar-20	5	1106	FP	2	SWL	2	8	ON	3RS ET	22.1708	113.9359	SPRING	NONE	P
19-Mar-20	6	1216	FP	2	SWL	2	352	ON	3RS ET	22.1552	113.9177	SPRING	NONE	P
19-Mar-20	7	1221	FP	1	SWL	2	62	ON	3RS ET	22.1487	113.9176	SPRING	NONE	P
19-Mar-20	8	1259	FP	3	SWL	2	452	ON	3RS ET	22.1924	113.9078	SPRING	NONE	P
19-Mar-20	9	1408	FP	2	SWL	2	146	ON	3RS ET	22.1909	113.8878	SPRING	NONE	P
23-Mar-20	1	1047	FP	3	SWL	2	128	ON	3RS ET	22.1813	113.9359	SPRING	NONE	P
23-Mar-20	2	1050	FP	6	SWL	2	37	ON	3RS ET	22.1788	113.9358	SPRING	NONE	P
23-Mar-20	3	1056	FP	1	SWL	2	179	ON	3RS ET	22.1704	113.9365	SPRING	NONE	P
23-Mar-20	4	1101	FP	1	SWL	2	228	ON	3RS ET	22.1633	113.9357	SPRING	NONE	P
23-Mar-20	5	1118	FP	2	SWL	2	36	ON	3RS ET	22.1532	113.9275	SPRING	NONE	P
23-Mar-20	6	1127	FP	1	SWL	2	267	ON	3RS ET	22.1710	113.9278	SPRING	NONE	P
23-Mar-20	7	1207	FP	4	SWL	2	139	ON	3RS ET	22.1632	113.9183	SPRING	NONE	P
23-Mar-20	8	1224	FP	4	SWL	2	245	ON	3RS ET	22.1449	113.9080	SPRING	NONE	P
23-Mar-20	9	1231	FP	2	SWL	2	165	ON	3RS ET	22.1549	113.9047	SPRING	NONE	S
23-Mar-20	10	1332	FP	5	SWL	2	424	ON	3RS ET	22.1535	113.8977	SPRING	NONE	P
23-Mar-20	11	1338	FP	1	SWL	2	237	ON	3RS ET	22.1488	113.8931	SPRING	NONE	S
23-Mar-20	12	1346	FP	1	SWL	2	3	ON	3RS ET	22.1578	113.8879	SPRING	NONE	P
23-Mar-20	13	1355	FP	2	SWL	2	431	ON	3RS ET	22.1743	113.8880	SPRING	NONE	P
23-Mar-20	14	1359	FP	1	SWL	2	274	ON	3RS ET	22.1816	113.8878	SPRING	NONE	P
23-Mar-20	15	1426	FP	1	SWL	2	572	ON	3RS ET	22.1932	113.8780	SPRING	NONE	P
23-Mar-20	16	1455	FP	4	SWL	2	351	ON	3RS ET	22.1597	113.8721	SPRING	NONE	S
23-Mar-20	17	1519	CWD	4	SWL	2	535	ON	3RS ET	22.1996	113.8618	SPRING	NONE	P
23-Mar-20	18	1607	CWD	3	SWL	2	299	ON	3RS ET	22.1951	113.8503	SPRING	NONE	P
9-Apr-20	1	1031	CWD	7	WL	2	264	ON	3RS ET	22.2687	113.8500	SPRING	PURSE SEINER	P

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

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 443.280 km of survey effort was collected under Beaufort Sea State 3 or below with favourable visibility; total no. of 7 on-effort sightings and total number of 30 dolphins from on-effort sightings were collected under such condition. Calculation of the encounter rates in April 2020 are shown as below:

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

$$STG = \frac{7}{443.280} \times 100 = 1.58$$

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

$$ANI = \frac{30}{443.280} \times 100 = 6.77$$

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

A total of 1270.974 km of survey effort was collected under Beaufort Sea State 3 or below with favourable visibility; total no. of 30 on-effort sightings and total number of 97 dolphins from on-effort sightings were collected under such condition. Calculation of the running quarterly encounter rates are shown as below:

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

$$STG = \frac{30}{1270.974} \times 100 = 2.36$$

Running Quarterly Encounter Rate by Number of Dolphins (ANI)

$$ANI = \frac{97}{1270.974} \times 100 = 7.63$$

CWD Small Vessel Line-transect Survey

Photo Identification

	
NLMM057_20200409_1_11	SLMM037_20200409_1_3
	
WLMM056_20200409_1_13	WLMM060_20200409_1_2
	
WLMM075_20200409_1_4	WLMM114_20200409_1_4
	
WLMM114_20200409_2_4	NLMM057_20200409_3_5

	
NLMM070_20200409_3_6	WLMM075_20200409_3_5
	
SLMM045_20200409_4_3	SLMM002_20200409_6_2
	
SLMM007_20200409_6_5	SLMM014_20200409_6_4
	
SLMM028_20200409_6_7	SLMM031_20200409_6_5

	
SLMM050_20200409_6_12	SLMM058_20200409_6_2
	
WLMM006_20200409_6_3	WLMM007_20200409_6_2
	
WLMM013_20200409_6_6	WLMM028_20200409_6_1
	
WLMM029_20200409_6_4	WLMM131_20200415_1_3

CWD Land-based Theodolite Tracking Survey**CWD Groups by Survey Date**

Date	Station	Start Time	End Time	Duration	Beaufort Range	Visibility	No. of Focal Follow Dolphin Groups Tracked	Dolphin Group Size Range
9/Apr/20	Sha Chau	10:34	16:34	6:00	2	2	0	-
16/Apr/20	Lung Kwu Chau	9:09	15:09	6:00	2	2-3	4	1-4

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

Appendix D. Calibration Certificates



MAXLAB

CALIBRATION CERTIFICATE

Certificate Information

Date of Issue

24-Mar-2020

Certificate Number

MLCN200615S

Customer Information

Company Name

Mott MacDonald Hong Kong Limited

Address

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

Equipment-under-Test (EUT)

Description

Sound Level Meter

Manufacturer

Rion

Model Number

NL-52

Serial Number

00998505

Equipment Number

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Calibration Particular

Date of Calibration

24-Mar-2020

Calibration Equipment

4231(MLTE008) / AV180068 / 13-May-2020

Calibration Procedure

MLCG00, MLCG15

Calibration Conditions

Laboratory	Temperature	23 °C ± 5 °C
	Relative Humidity	55% ± 25%
EUT	Stabilizing Time	Over 3 hours
	Warm-up Time	10 minutes
	Power Supply	Internal battery

Calibration Results

Calibration data were detailed in the continuation pages.

Approved By & Date

K.O. Lo

24-Mar-2020

Statements

- * Calibration equipment used for this calibration are traceable to national / international standards.
- * The results on this Calibration Certificate only relate to the values measured at the time of the calibration and the uncertainties quoted will not include allowance for the EUT long term drift, variation with environmental changes, vibration and shock during transportation, overloading, mishandling, misuse, and the capacity of any other laboratory to repeat the measurement.
- * MaxLab Calibration Centre Limited shall not be liable for any loss or damage resulting from the use of the EUT.
- * The copy of this Certificate is owned by MaxLab Calibration Centre Limited. No part of this Certificate may be reproduced without the prior written approval of MaxLab Calibration Centre Limited.



MAXLAB

Certificate No. MLCN200615S

Calibration Data						
Frequency / Time Weighting	Range	EUT Reading	Standard Reading	EUT Error	Calibration Uncertainty	
A / FAST (1 kHz Input)	25 - 138 dB	94.0 dB	94.0 dB	0.0 dB	0.2 dB	
		114.0 dB	114.0 dB	0.0 dB	0.2 dB	
C / FAST (1 kHz Input)	33 - 138 dB	94.0 dB	94.0 dB	0.0 dB	0.2 dB	
		114.0 dB	114.0 dB	0.0 dB	0.2 dB	
Z / FAST (1 kHz Input)	38 - 138 dB	94.0 dB	94.0 dB	0.0 dB	0.2 dB	
		114.0 dB	114.0 dB	0.0 dB	0.2 dB	
A / SLOW (1 kHz Input)	25 - 138 dB	94.0 dB	94.0 dB	0.0 dB	0.2 dB	
		114.0 dB	114.0 dB	0.0 dB	0.2 dB	
C / SLOW (1 kHz Input)	33 - 138 dB	94.0 dB	94.0 dB	0.0 dB	0.2 dB	
		114.0 dB	114.0 dB	0.0 dB	0.2 dB	
Z / SLOW (1 kHz Input)	38 - 138 dB	94.0 dB	94.0 dB	0.0 dB	0.2 dB	
		114.0 dB	114.0 dB	0.0 dB	0.2 dB	

- END -

Calibrated By :

Date :

Dan
24-Mar-2020

Checked By :

Date :

K.O. Lo
24-Mar-2020

Page 2 of 2



專業化驗有限公司

QUALITY PRO TEST-CONSULT LIMITED

Unit 10, 14/F, Wah Wai Centre, 38-40 Au Pui Wan St., Fotan, Hong Kong

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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AJ040073
Date of Issue : 21 April 2020
Page No. : 1 of 2

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 : Apr 21, 2020
Date of Calibration : Apr 21, 2020
Date of Next Calibration^(a) : Jul 20, 2020

PART C – REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

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

PART D – CALIBRATION RESULTS^(b,c)

(1) pH at 25°C

Target (pH unit)	Displayed Reading ^(d) (pH Unit)	Tolerance ^(e) (pH Unit)	Results
4.00	4.02	0.02	Satisfactory
7.42	7.46	0.04	Satisfactory
10.01	10.10	0.09	Satisfactory

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

(2) Temperature

Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)	Results
10.0	10.1	0.1	Satisfactory
28.0	28.1	0.1	Satisfactory
49.0	49.1	0.1	Satisfactory

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

~ CONTINUED ON NEXT PAGE ~

Remark(s): -

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


LEE Chun-ning, Desmond
Senior Chemist



REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AJ040073
Date of Issue : 21 April 2020
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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
0.78	0.59	-0.19	Satisfactory
2.18	2.26	0.08	Satisfactory
5.67	5.55	-0.12	Satisfactory
8.03	8.11	0.08	Satisfactory

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

(4) Conductivity at 25°C

Conc. of KCl (M)	Expected Reading ($\mu\text{S/cm}$)	Displayed Reading ($\mu\text{S/cm}$)	Tolerance (%)	Results
0.001	146.9	147.6	0.48	Satisfactory
0.01	1412	1458	3.26	Satisfactory
0.1	12890	12666	-1.74	Satisfactory
0.5	58670	59424	1.29	Satisfactory
1.0	111900	110688	-1.08	Satisfactory

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

(5) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	9.95	-0.50	Satisfactory
20	19.96	-0.20	Satisfactory
30	30.34	1.13	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	--	Satisfactory
10	9.90	-1.0	Satisfactory
20	19.80	-1.0	Satisfactory
100	98.9	-1.1	Satisfactory
800	793.2	-0.8	Satisfactory

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

~ END OF REPORT ~

Remark(s): -

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

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



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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AJ040072
Date of Issue : 21 April 2020
Page No. : 1 of 2

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 : 00019CB2
Date of Received : Apr 21, 2020
Date of Calibration : Apr 21, 2020
Date of Next Calibration^(a) : Jul 20, 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	9.96	-0.05	Satisfactory

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

(2) Temperature

Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)	Results
10.0	10.1	0.1	Satisfactory
28.0	28.0	0.0	Satisfactory
49.0	49.1	0.1	Satisfactory

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

~ CONTINUED ON NEXT PAGE ~

Remark(s): -

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


LEE Chun-ning, Desmond
Senior Chemist



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Report No. : AJ040072
Date of Issue : 21 April 2020
Page No. : 2 of 2

PART D – CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
0.78	0.60	-0.18	Satisfactory
2.18	2.22	0.04	Satisfactory
5.67	5.57	-0.10	Satisfactory
8.03	8.12	0.09	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 ($\mu\text{S/cm}$)	Displayed Reading ($\mu\text{S/cm}$)	Tolerance (%)	Results
0.001	146.9	147.7	0.54	Satisfactory
0.01	1412	1438	1.84	Satisfactory
0.1	12890	12741	-1.16	Satisfactory
0.5	58670	59364	1.18	Satisfactory
1.0	111900	110822	-0.96	Satisfactory

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

(5) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	9.94	-0.60	Satisfactory
20	20.04	0.20	Satisfactory
30	30.52	1.73	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	--	Satisfactory
10	9.90	-1.0	Satisfactory
20	19.70	-1.5	Satisfactory
100	97.8	-2.2	Satisfactory
800	794.2	-0.7	Satisfactory

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

~ END OF REPORT ~

Remark(s): -

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

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

Appendix E. Status of Environmental Permits and Licences

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

Contract No.	Description	Location	Permit/ Reference No.	Status
P560 (R)	Notification of Construction Work under APCO	Stockpiling Area	398015	Receipt acknowledged by EPD on 18 Jan 2016
	Discharge License under WPCO	Stockpiling Area	WT00024250-2016	Valid from 25 Apr 2016 to 30 Apr 2021
	Registration as Chemical Waste Producer	Stockpiling Area	WPN 5213-951-L2902-02	Registration was updated on 3 Oct 2016
	Bill Account for disposal		A/C 7023982	Approval granted from EPD on 14 Dec 2015
3205	Notification of Construction Work under APCO	Works area of 3205	409041	Receipt acknowledged by EPD on 19 Oct 2016
	Registration as Chemical Waste Producer	Works Area of 3205	WPN 5213-951-B2502-01	Registration was updated on 25 Sep 2017
		Works Area of 3205	WPN 5111-421-B2509-01	Registration was updated on 25 Sep 2017
	Construction Noise Permit (General Works)	Works Area of 3205	GW-RS0143-20	Valid from 19 Mar 2020 to 17 Sep 2020
	Discharge License under WPCO	Works area of 3205	WT00028370-2017	Valid from 21 Jun 2017 to 30 Jun 2022
	Bill Account for disposal	Works area of 3205	A/C 7026295	Approval granted from EPD on 9 Nov 2016
3206	Notification of Construction Work under APCO	Works area of 3206	409237	Receipt acknowledged by EPD on 25 Oct 2016
		Works area of 3206 (Area 11)	447899	Receipt acknowledged by EPD on 8 Aug 2019
	Registration as Chemical Waste Producer	Site office of 3206	WPN 5213-951-Z4035-01	Completion of Registration on 18 Nov 2016
		Works area of 3206	WPN 5213-951-Z4035-02	Completion of Registration on 18 Nov 2016
		Works Area of 3206 (Area 11)	WPN 5213-951-Z4035-04	Completion of Registration on 4 Sep 2019
	Construction Noise Permit (General Works)	Works Area of 3206	GW-RS0161-20	Superseded by GW-RS0267-20
			GW-RS0267-20	Valid from 24 Apr 2020 to 15 Oct 2020
		Works Area of 3206 (Area 11)	GW-RS1170-19	Valid from 2 Jan 2020 to 24 Jun 2020

Contract No.	Description	Location	Permit/ Reference No.	Status
3301		Works Area of 3206	GW-RS0156-20	Valid from 24 Mar 2020 to 19 Jul 2020
	Bill Account for disposal	Works area of 3206	A/C 7026398	Approval granted from EPD on 16 Nov 2016
	Notification of Construction Work under APCO	Works area of 3301	415821	Receipt acknowledged by EPD on 19 Apr 2017
	Registration as Chemical Waste Producer	Works area of 3301	WPN 5213-951-F2718-02	Completion of Registration on 9 Jun 2017
	Discharge License under WPCO	Works area of 3301	WT00029286-2017	Valid from 20 Sep 2017 to 30 Sep 2022
	Bill Account for disposal	Works area of 3301	A/C 7027728	Approval granted from EPD on 8 May 2017
	Construction Noise Permit (General Works)	Works area of 3301 (Cable ducting works)	GW-RS0129-20	Valid from 4 Mar 2020 to 13 Sep 2020
3302		Works area of 3301	GW-RS0865-19	Superseded by GW-RS0212-20
			GW-RS0212-20	Valid until from 12 Apr 2020 to 11 Oct 2020
	Notification of Construction Work under APCO	Works area of 3302	440222	Receipt acknowledged by EPD on 10 Dec 2018
		Staging area of 3302	2018CES1	Receipt acknowledged by EPD on 21 Dec 2018
			454882	Receipt acknowledged by EPD on 2 Apr 2020
	Registration as Chemical Waste Producer	Works area of 3302	5296-951-C4331-01	Completion of Registration on 4 Jan 2019
	Discharge License under WPCO	Works area of 3302	WT00034539-2019	Valid from 11 Mar 2020 to 31 Mar 2025
		Staging area of 3302	WT00034541-2019	Valid from 14 Oct 2019 to 31 Oct 2024
	Bill Account for disposal	Works area of 3302	A/C 7032881	Approval granted from EPD on 8 Jan 2019
	Construction Noise Permit (General Works)	Works area of 3302	GW-RS1162-19	Valid from 7 Jan 2020 to 6 Jul 2020
3303	Notification of Construction Work under APCO	Works area of 3303	445611	Receipt acknowledged by EPD on 27 May 2019
	Registration as Chemical Waste Producer	Works area of 3303	5213-951-S4174-01	Completion of Registration on 17 Jun 2019
	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-RS0134-20	Superseded by GW-RS0222-20
			GW-RS0222-20	Valid from 9 Apr 2020 to 5 Oct 2020
		Works area of 3303 (Reclamation area)	GW-RS0154-20	Valid from 19 Mar 2020 to 17 Sep 2020
3402	Notification of Construction Work under APCO	Works area of 3402	440808	Receipt acknowledged by EPD on 31 Dec 2018
		Stockpiling area of 3402	441960	Receipt acknowledged by EPD on 8 Feb 2019

Contract No.	Description	Location	Permit/ Reference No.	Status
	Registration as Chemical Waste Producer	Works area of 3402	WPN 5213-951-W1172-05	Registration was updated on 25 Feb 2019
	Discharge License under WPCO	Works area of 3402	WT00033685-2019	Valid from 20 Jun 2019 to 30 Jun 2024
	Bill Account for disposal	Works area of 3402	A/C 7032577	Approval granted from EPD on 27 Nov 2018
	Construction Noise Permit (General Works)	Works area of 3402	GW-RS0070-20	Valid from 3 Feb 2020 to 1 Aug 2020
3403	Notification of Construction Work under APCO	Works area of 3403	450860	Receipt acknowledged by EPD on 11 Nov 2019
	Registration as Chemical Waste Producer	Works area of 3403	WPN 5213-951-S4218-01	Completion of Registration on 9 Jan 2020
	Bill Account for disposal	Works area of 3403	A/C 7035267	Approval granted from EPD on 30 Sep 2019
	Construction Noise Permit (General Works)	Works area of 3403	GW-RS0078-20	Superseded by GW-RS0225-20
			GW-RS0225-20	Valid from 11 Apr 2020 to 30 Sep 2020
	Construction Noise Permit (Special Case)	Works area of 3403	GW-RS0178-20	Valid from 1 Apr 2020 to 30 Apr 2020
3405	Notification of Construction Work under APCO	Works area of 3405	453447	Receipt acknowledged by EPD on 18 Feb 2020
	Registration as Chemical Waste Producer	Works area of 3405	WPN 5218-951-C4431-01	Completion of Registration on 12 Mar 2020
	Bill Account for disposal	Works area of 3405	A/C 7036796	Approval granted from EPD on 20 Mar 2020
	Construction Noise Permit (General Works)	Works area of 3405	GW-RS0275-20	Valid from 24 Apr 2020 to 21 Oct 2020
3501	Notification of Construction Work under APCO	Works area of 3501	434640	Receipt acknowledged by EPD on 13 Jun 2018
	Registration as Chemical Waste Producer	Works area of 3501	WPN 5213-951-B2520-02	Completion of Registration on 25 Jul 2017
	Discharge License under WPCO	Works area of 3501	WT00031400-2018	Valid from 30 Aug 2018 to 31 Aug 2023
	Bill Account for disposal	Works area of 3501	A/C 7028144	Approval granted from EPD on 23 Jun 2017
	Construction Noise Permit (General Works)	Works area of 3501	GW-RS0796-19	Valid from 5 Sep 2019 to 2 Mar 2020
3503	Notification of Construction Work under APCO	Works area of 3503	435180	Receipt acknowledged by EPD on 29 Jun 2018
		Stockpiling area of 3503	439777	Receipt acknowledged by EPD on 26 Nov 2018
	Registration as Chemical Waste Producer	Works area of 3503	WPN 5113-951-L2845-02	Completion of Registration on 8 Jan 2018
	Discharge License under WPCO	Works area of 3503	WT00031258-2018	Valid from 7 Jun 2018 to 30 Jun 2023

Contract No.	Description	Location	Permit/ Reference No.	Status
	Bill Account for disposal	Works area of 3503	A/C 7029665	Approval granted from EPD on 27 Dec 2017
	Construction Noise Permit (General Works)	Works area of 3503	GW-RS0124-20	Superseded by GW-RS0221-20
			GW-RS0221-20	Valid from 15 Apr 2020 to 30 Sep 2020
		Works area of 3503 (Special Case)	GW-RS0139-20	Valid from 9 Mar 2020 to 31 May 2020
			GW-RS0261-20	Valid from 26 Apr 2020 to 1 Jul 2020
		Stockpiling area of 3503	GW-RS1012-19	Valid from 14 Nov 2019 to 13 May 2020
		Stockpiling area of 3503	GW-RS1180-19	Valid from 4 Jan 2020 to 30 Jun 2020
3601	Notification of Construction Work under APCO	Works area of 3601	451765	Receipt acknowledged by EPD on 10 Dec 2019
	Registration as Chemical Waste Producer	Works area of 3601	WPN 7119-951-C4421-01	Completion of Registration on 9 Jan 2020
	Bill Account for disposal	Works area of 3601	A/C 702991	Approval granted from EPD on 1 Feb 2018
3602	Notification of Construction Work under APCO	Works area of 3602	421278	Receipt acknowledged by EPD on 18 Sep 2017
	Registration as Chemical Waste Producer	Works area of 3602	WPN 5296-951-N2673-01	Completion of Registration on 9 Oct 2017
		Site office of 3602	WPN 5296-951-N2673-02	Completion of Registration on 11 Dec 2017
	Bill Account for disposal	Works area of 3602	A/C 7028942	Approval granted from EPD on 6 Oct 2017
	Construction Noise Permit (General Works)	Works area of 3602	GW-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-RS0909-19	Superseded by GW-RS0165-20
			GW-RS0165-20	Valid from 8 Apr 2020 to 7 Oct 2020
3721	Notification of Construction Work under APCO	Works area of 3721	448657	Receipt acknowledged by EPD on 02 Sep 2019
	Registration as Chemical Waste Producer	Works area of 3721	WPN 5218-951-C4412-01	Completion of Registration on 9 Dec 2019
	Bill Account for disposal	Works area of 3721	A/C 705234	Approval granted from EPD on 25 Sep 2019
	Construction Noise Permit (General Works)	Works area of 3721	GW-RS0172-20	Valid from 19 Mar 2020 to 17 Sep 2020

Contract No.	Description	Location	Permit/ Reference No.	Status
3722	Notification of Construction Work under APCO	Works area of 3722A	453195	Receipt acknowledged by EPD on 11 Feb 2020
		Works area of 3722B	453671	Receipt acknowledged by EPD on 25 Feb 2020
		Works area of 3722C	453673	Receipt acknowledged by EPD on 25 Feb 2020
		Works area of 3722D	453675	Receipt acknowledged by EPD on 25 Feb 2020
	Bill Account for disposal	Works area of 3722A	A/C 7036752	Approval granted from EPD on 11 Mar 2020
		Works area of 3722D	A/C 7036795	Approval granted from EPD on 20 Mar 2020
	Construction Noise Permit (General Works)	Works area of 3722A, 3722B, 3722C and 3722D	GW-RS0155-20	Valid from 19 Mar 2020 to 17 Sep 2020
3801	Notification of Construction Work under APCO	Works area of 3801	418345	Receipt acknowledged by EPD on 26 Jun 2017
			430372	Receipt acknowledged by EPD on 2 Feb 2018
			435652	Receipt acknowledged by EPD on 16 Jul 2018
			450940	Receipt acknowledged by EPD on 13 Nov 2019
	Registration as Chemical Waste Producer	Works area of 3801	WPN 5296-951-C1169-53	Completion of Registration on 14 Aug 2018
	Discharge License under WPCO	Works and stockpiling area of 3801	WT00029535-2017	Valid from 24 Nov 2017 to 30 Nov 2022
	Bill Account for disposal	Works area of 3801	A/C 7028254	Approval granted from EPD on 3 Jul 2017
	Construction Noise Permit (General Works)	Works and stockpiling area of 3801	GW-RS1212-19	Valid from 9 Jan 2020 to 8 Jul 2020
		Works area of 3801	GW-RS0152-20	Valid from 27 Mar 2020 to 26 Jun 2020
			GW-RS0113-20	Valid from 7 Mar 2020 to 2 Jun 2020
3901B	Notification of Construction Work under APCO	Works area of 3901B	452168	Receipt acknowledged by EPD on 23 Dec 2019
	Specified Process license under APCO	Works area of 3901B	443181	Receipt acknowledged by EPD on 15 Mar 2019
	Registration as Chemical Waste Producer	Works area of 3901B	WPN 5218-951-G2880-01	Completion of Registration on 17 Jan 2020
	Bill Account for disposal	Works area of 3901B	A/C 7032417	Approval granted from EPD on 13 Nov 2018
	Construction Noise Permit (General Works)	Works area of 3901B	GW-RS0106-20	Valid from 2 Mar 2020 to 19 Aug 2020

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

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

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

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

Statistics for Complaints, Notifications of Summons and Prosecutions

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