



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

Construction Phase Monthly EM&A Report No.32
(For August 2018)

September 2018

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This Monthly EM&A Report No. 32 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', written in a cursive style.

Terence Kong
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Date

14 September 2018



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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 September 2018

Dear Sir,

Contract No. 3102
3RS Independent Environmental Checker Consultancy Services

Submission of Monthly EM&A Report No. 32 (August 2018)

Reference is made to the Environmental Team's submission of the Monthly EM&A Report No. 32 under Condition 3.5 of the Environmental Permit No. EP-489/2014 certified by the ET Leader on 14 September 2018.

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
MMHK	Mott MacDonald Hong Kong Limited
MMWP	Marine Mammal Watching Plan
MSS	Marine 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
PVD	Prefabricated Vertical Drain
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 32nd Construction Phase Monthly EM&A Report for the Project which summarizes the monitoring results and audit findings of the EM&A programme during the reporting period from 1 to 31 August 2018.

Key Activities in the Reporting Period

The key activities of the Project carried out in the reporting period included reclamation works and land-side works. Reclamation works included deep cement mixing (DCM) works, marine filling, seawall construction, laying of sand blanket, and prefabricated vertical drain (PVD) installation. Land-side works involved mainly 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	36
Noise monitoring	21
Water quality monitoring	12
Vessel line-transect surveys for Chinese White Dolphin (CWD) monitoring	2
Land-based theodolite tracking survey effort for CWD monitoring	5
Terrestrial ecology monitoring	1

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 Marine 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

		
<p>Environmental Management Meeting for EM&A Review with Works Contracts</p>	<p>C&D Waste Delivery Record Checking</p>	<p>Water Quality Monitoring Conducted by ET</p>

Results of Impact Monitoring

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

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

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

Summary of Upcoming Key Issues

Advanced Works:

Contract P560 (R) Aviation Fuel Pipeline Diversion Works

- Trench backfilling;
- Shoreline reinstatement next to the new pipe; and
- Stockpiling of excavated materials from previous HDD operation.

DCM Works:

Contract 3201 to 3203, and 3205 DCM Works

- DCM works

Reclamation Works:

Contract 3206 Main Reclamation Works

- Laying of sand blanket;
- PVD installation;
- Seawall construction;
- Marine filling; and

- DCM works.

Airfield Works:

Contract 3301 North Runway Crossover Taxiway

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

Terminal 2 Expansion Works:

Contract 3501 Antenna Farm and Sewage Pumping Station

- Excavation works;
- Pipe installation; and
- Electrical and mechanical (E&M) works and builders works of antenna farm.

Contract 3502 Terminal 2 Automated People Mover (APM) Depot Modification Works

- Site clearance;
- Brick laying;
- Fitting out of E&M works; and
- Cable tray installation.

Contract 3503 Terminal 2 Foundation and Substructure Works

- Site establishment;
- Drainage, utility, and road work;
- Piling works; and
- Demolition of footbridge.

Contract 3505 Terminal 2 Spectrum Lighting Mock-ups

- Assembly of structural frame;
- Floor drilling; and
- Installation of lighting fittings and panels.

Automated People Mover (APM) works:

Contract 3602 Existing APM System Modification Works

- Site establishment; and
- Construction of concrete plinth.

Baggage Handling System (BHS) works:

Contract 3603 3RS Baggage Handling System

- Site establishment.

Airport Support Infrastructure & Logistic Works:

Contract 3801 APM and BHS Tunnels on Existing Airport Island

- Site establishment;
- Diversion of underground utilities;
- Piling and foundation works; and
- Demolition of footbridge.

Summary Table

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

	Yes	No	Details	Analysis / Recommendation / Remedial Actions
Breach of Limit Level^		√	No breach of Limit Level was recorded.	Nil
Breach of Action Level^		√	No breach of Action Level was recorded.	Nil
Complaint Received	√		A complaint relating to the DEZ monitoring schedule for DCM works was received on 27 Aug 2018.	ET recommended the contractor to maintain good communication with dolphin observers and conduct regular review/training on contingency arrangement for different operational scenarios.
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 existing submarine aviation fuel pipelines and submarine power cables also require diversion as part of the works.

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

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

1.2 Scope of this Report

This is the 32nd Construction Phase Monthly EM&A Report for the Project which summarizes the key findings of the EM&A programme during the reporting period from 1 to 31 August 2018.

1.3 Project Organisation

The Project’s organization 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 9348

Advanced Works:

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

Deep Cement Mixing (DCM) Works:

Party	Position	Name	Telephone
Contract 3201 DCM (Package 1) (Penta-Ocean-China State-Dong-Ah Joint Venture)	Project Director	Tsugunari Suzuki	9178 9689
	Environmental Officer	Sandra Lo	6329 3513
Contract 3202 DCM (Package 2) (Samsung-BuildKing Joint Venture)	Project Manager	Ilkwon Nam	9643 3117
	Environmental Officer	Dickson Mak	9525 8408
Contract 3203 DCM (Package 3) (Sambo E&C Co., Ltd)	Project Manager	Eric Kan	9014 6758
	Environmental Officer	David Hung	9765 6151
Contract 3204 DCM (Package 4) (CRBC-SAMBO Joint Venture)	Project Manager	Kyung-Sik Yoo	9683 8697
	Environmental Officer	Kanny Cho	6799 8226

Deep Cement Mixing (DCM) Works:

Contract 3205 DCM (Package 5) (Bachy Soletanche - Sambo Joint Venture)	Deputy Project Director	Min Park	9683 0765
	Environmental Officer	Margaret Chung	9130 3696

Reclamation Works:

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

Airfield Works:

Party	Position	Name	Telephone
Contract 3301 North Runway Crossover Taxiway (FJT-CHEC-ZHEC Joint Venture)	Project Manager	Kin Hang Chung	9412 1386
	Environmental Officer	Nelson Tam	9721 3942

Terminal 2 (T2) Expansion Works:

Party	Position	Name	Telephone
Contract 3501 Antenna Farm and Sewage Pumping Station (Build King Construction Ltd.)	Project Manager	Raymond Au	6985 8860
	Environmental Officer	Edward Tam	9287 8270
Contract 3502 Terminal 2 APM Depot Modification Works (Build King Construction Ltd.)	Project Manager	Kivin Cheng	9380 3635
	Environmental Officer	Chun Pong Chan	9187 7118
Contract 3503 Terminal 2 Foundation and Substructure Works (Leighton – Chun Wo Joint Venture)	Construction Manager	Stephen O'Donoghue	9732 6787
	Environmental Officer	Stephen Tsang	5508 6361
Contract 3505 Terminal 2 Spectrum Lighting Mock- Ups (Union Contractors Ltd.)	Project Manager	Wylar Chan	9107 5920
	Environmental Officer	Kelvin Lam	9379 2446

Automated People Mover (APM) Works:

Party	Position	Name	Telephone
Contract 3602 Existing APM System Modification Works (Niigata Transys Co., Ltd.)	Project Manager	Kunihiro Tatecho	9755 0351
	Environmental Officer	Arthur Wong	9170 3394

Baggage Handling System (BHS) Works:

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

Airport Support Infrastructure and Logistic Works:

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

1.4 Summary of Construction Works

The key activities of the Project carried out in the reporting period included reclamation works and land-side works. Reclamation works included deep cement mixing (DCM) works, marine filling, seawall construction, laying of sand blanket, and prefabricated vertical drain (PVD) installation. Land-side works involved mainly foundation and substructure work for Terminal 2 expansion, modification and tunnel work for Automated People Mover (APM) and Baggage Handling System (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 the works area are presented in **Figure 1.1** to **Figure 1.2**.

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

Parameters	Status
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.
Terrestrial Ecology	
Pre-construction Egret Survey Plan	The Egret Survey Plan was submitted and approved by EPD under EP Condition 2.14.
Ecological Monitoring	On-going
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	On-going
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	
Baseline Monitoring	The baseline landscape & visual monitoring result has been reported in Baseline Monitoring Report and submitted to EPD under EP Condition 3.4.
Impact Monitoring	On-going
Environmental Auditing	
Regular site inspection	On-going
Marine Mammal Watching Plan (MMWP) implementation measures	On-going
Dolphin Exclusion Zone (DEZ) Plan implementation measures	On-going
SkyPier High Speed Ferries (HSF) implementation measures	On-going
Construction and Associated Vessels Implementation measures	On-going
Complaint Hotline and Email channel	On-going
Environmental Log Book	On-going

Taking into account the construction works in this reporting period, impact monitoring of air quality, noise, water quality, waste management, landscape & visual, terrestrial ecology, 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 summarized as below:

- Two dolphin observer trainings provided by ET: 9 and 21 August 2018
- Two skipper trainings provided by ET: 8 and 22 August 2018
- Nine environmental management meetings for EM&A review with works contracts: 16, 17, 22, 28, 29, 30 and 31 August 2018
- EPD sharing on key issues of environmental and waste management: 17 and 22 August 2018

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

2 Air Quality Monitoring

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

Table 2.1: Locations of Impact Air Quality Monitoring Stations

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

2.1 Action and Limit Levels

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

Table 2.2: Action and Limit Levels of Air Quality Monitoring

Monitoring Station	Action Level ($\mu\text{g}/\text{m}^3$)	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-002 (Serial No. 974350)	11 Sep 2017	Monthly EM&A Report No. 22, Appendix E
	SIBATA LD-3B-003 (Serial No. 276018)	11 Sep 2017	

2.3 Monitoring Methodology

2.3.1 Measuring Procedure

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

- a. The portable direct reading dust meter was mounted on a tripod at a height of 1.2 m above the ground.

- b. Prior to the measurement, the equipment was set up for 1 minute span check and 6 second background check.
- c. The one hour dust measurement was started. Site conditions and dust sources at the nearby area were recorded on a record sheet.
- d. When the measurement completed, the “Count” reading per hour was recorded for result calculation.

2.3.2 Maintenance and Calibration

The portable direct reading dust meter is calibrated every year against high volume sampler (HVS) to check the validity and accuracy of the results measured by direct reading method. The calibration record of the HVS provided in Appendix E of the Construction Phase Monthly EM&A Report No. 22, and the calibration certificates of portable direct reading dust meters listed in **Table 2.3** are still valid.

2.4 Summary of Monitoring Results

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

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

Table 2.4: Summary of Air Quality Monitoring Results

Monitoring Station	1-hr TSP Concentration Range (µg/m ³)	Action Level (µg/m ³)	Limit Level (µg/m ³)
AR1A	10 – 93	306	500
AR2	4 – 173	298	

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

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

2.5 Conclusion

No dust emission source from Project activities was observed during impact air quality monitoring. Major sources of dust observed at the monitoring stations during the monitoring sessions were local air pollution and nearby traffic emissions. It is considered that the monitoring work in the reporting period is effective and there was no adverse impact attributable to the Project activities.

3 Noise Monitoring

Noise monitoring in the form of 30-minute measurements of L_{eq} , L_{10} , and L_{90} levels was conducted once per week between 0700 and 1900 on normal weekdays at five 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. As described in Section 4.3.3 of the Manual, monitoring at NM2 will commence when the future residential buildings in Tung Chung West Development become occupied.

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) With the commencement of construction works of Tung Chung East Development near NM3A, the monitoring results obtained at NM3A would be affected by other construction project. According to Section 4.3.3 of the Manual, the noise monitoring at NM3A would be temporarily suspended starting from 1 Sep 2018 and resumed when Tung Chung East Development is completed.

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	75 dB(A) ⁽¹⁾

Note:

- (1) Reduced to 70dB(A) for school and 65dB(A) during school examination periods for NM4.

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	B&K 2238 (Serial No. 2381580)	10 May 2018	Monthly EM&A Report No. 30, Appendix D
	B&K 2238 (Serial No. 2808432)	30 Aug 2017	Monthly EM&A Report No. 21, Appendix E
	B&K 2238 (Serial No. 2800932)	26 Jul 2018	Appendix E
Acoustic Calibrator	B&K 4231 (Serial No. 3003246)	23 Jun 2018	Monthly EM&A Report No. 31, Appendix E
	B&K 4231 (Serial No. 3018753)	10 May 2018	Monthly EM&A Report No. 29, 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 1.2 m above the ground for free-field measurements at monitoring stations NM1A, NM4, NM5 and NM6. A correction of +3 dB(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 1 dB(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 still valid.

3.4 Summary of Monitoring Results

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

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

Table 3.4: Summary of Construction Noise Monitoring Results

Monitoring Station	Noise Level Range, dB(A)	Limit Level, dB(A)
	L_{eq} (30 mins)	L_{eq} (30 mins)
NM1A ⁽¹⁾	71 – 73	75
NM3A	57 – 65	75
NM4 ⁽¹⁾	63 – 66	70 ⁽²⁾
NM5 ⁽¹⁾	55 – 57	75
NM6 ⁽¹⁾	66 – 70	75

Notes:

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

The monitoring results were within the corresponding Action and 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 road traffic noise at NM1A, aircraft noise and noise from construction vessel near NM3A, and aircraft and helicopter noise near NM4, NM5, and NM6 during this reporting period. It is considered that the monitoring work during the reporting period is 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 22 water quality monitoring stations, comprising 12 impact (IM) stations, 7 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 3.1** 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	
SR1 ⁽¹⁾	Future Hong Kong-Zhuhai-Macao Bridge Hong Kong Boundary Crossing Facilities (HKBCF) Seawater Intake for cooling	812586	820069	<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
SR5A	San Tau Beach SSSI	810696	816593
SR6	Tai Ho Bay, Near Tai Ho Stream SSSI	814663	817899
SR7	Ma Wan Fish Culture Zone (FCZ)	823742	823636
SR8 ⁽⁶⁾	Seawater Intake for cooling at Hong Kong International Airport (East)	811418	820246

Notes:

- (1) The seawater intakes of SR1 for the future HKBCF is not yet in operation, hence no water quality impact monitoring was conducted at this station. The future permanent location for SR1 during impact monitoring is subject to finalisation after the HKBCF seawater intake is commissioned.
- (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) 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 abovementioned 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 SR1 & SR8)			
General Water Quality Monitoring	DO in mg/L (Surface, Middle & Bottom)	Surface and Middle 4.5 mg/L	Surface and Middle 4.1 mg/L 5 mg/L for Fish Culture Zone (SR7) only
		Bottom 3.4 mg/L	Bottom 2.7 mg/L
	Suspended Solids (SS) in mg/L	23	37
	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	3.2	3.6

Parameters	Action Level (AL)	Limit Level (LL)
regular DCM monitoring (Nickel) in µg/L		
Action and Limit Levels SR1		
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, SR6, SR8
Ebb Tide	
C1	SR4A, SR5A, SR6
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 Sep 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 ProDSS (Serial No. 16H104233)	27 Jun 2018	Monthly EM&A Report No. 31, Appendix E
	YSI ProDSS (Serial No. 16H104234)	25 Jul 2018	
	YSI ProDSS (Serial No. 17E100747)	27 Jun 2018	
	YSI ProDSS (Serial No. 17H105557)	25 Jul 2018	
	YSI 6920 V2 (Serial No. 0001C6A7)	20 Aug 2018	Appendix E
	YSI 6920 V2 (Serial No. 00019CB2)	20 Aug 2018	
Digital Titrator (measurement of total alkalinity)	Titrette Digital Burette 50ml Class A (Serial No. 10N65665)	19 Jun 2018	Monthly EM&A Report No. 31, 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 were 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 listed in **Table 4.4** are still valid.

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	2 mg/L
Heavy Metals			
Chromium (Cr)	ICP-MS	USEPA 6020A	0.2 µg/L
Nickel (Ni)	ICP-MS	USEPA 6020A	0.2 µg/L

4.4 Summary of Monitoring Results

The water quality monitoring schedule for the reporting period is updated and provided in **Appendix C**. Monitoring session on 14 August 2018 was cancelled due to adverse weather. It should be noted that Severe Tropical Storm Bebinca affected Hong Kong from 9 to 15 August 2018 and water quality monitoring results might be affected by this weather event.

The water quality monitoring results for turbidity, total alkalinity, nickel and chromium obtained during the reporting period were within their corresponding Action and Limit Levels.

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

Table 4.7 presents a summary of the DO compliance status at IM and SR stations at surface and middle waters during mid-ebb tide for the reporting period.

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

	IM1	IM2	IM3	IM4	IM5	IM6	IM7	IM8	IM9	IM10	IM11	IM12	SR2	SR3	SR4A	SR5A	SR6	SR7	
2/8/2018																			
4/8/2018																			
7/8/2018	D	D	D								D				D			D	
9/8/2018																			
11/8/2018																			
16/8/2018																			
18/8/2018																			
21/8/2018																			
23/8/2018																			
25/8/2018																			
28/8/2018																			
30/8/2018																			
No. of result triggering Action or Limit Level	1	1	1	0	0	0	0	0	1	1	1	1	0	0	1	1	0	0	1

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

Table 4.8 presents a summary of the DO compliance status at IM and SR stations at bottom water during mid-ebb tide for the reporting period.

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

	IM1	IM2	IM3	IM4	IM5	IM6	IM7	IM8	IM9	IM10	IM11	IM12	SR2	SR3	SR4A	SR5A	SR6	SR7	
2/8/2018																			
4/8/2018																			
7/8/2018												D							
9/8/2018																			
11/8/2018																			
16/8/2018																			
18/8/2018																			
21/8/2018																			
23/8/2018																			
25/8/2018																			
28/8/2018																			
30/8/2018																			
No. of result triggering Action or Limit Level	0	0	0	0	0	0	0	0	1	1	1	0	1	0	1	0	0	0	0

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

Monitoring results triggered the corresponding Action and Limit Levels on 7 Aug 2018. Some cases occurred at monitoring stations upstream of the Project during ebb tide and would unlikely be affected by the Project. Remaining cases triggered corresponding Action and Limit Levels at monitoring stations located downstream of the Project. Details of the Project’s marine construction activities and site observations on the concerned monitoring day were collected. The findings are summarized in **Table 4.9**.

Table 4.9: Summary of DO Compliance Status (Mid-Ebb Tide)

Date	Marine construction works nearby	Approximate distance from marine construction works	Status of water quality measures (if applicable)	Construction vessels in the vicinity	Turbidity / Silt plume observed near the monitoring station	Action or Limit Level triggered due to Project
07/08/2018	Marine filling, sand blanket laying and DCM works	Around 500m	Silt curtain deployed	No	No	No

According to the investigation findings, it was confirmed that marine filling, sand blanket laying and DCM works were operating normally with silt curtains deployed. Silt curtains were maintained properly except for a section of open sea silt curtain which was found to be disconnected and repair work was completed on the same day.

As monitoring results at upstream monitoring stations triggered the corresponding Action and Limit Levels, downstream cases at IM1, IM2, IM3, IM11, IM12, SR4A and SR7 on 7 August 2018 were considered due to external factors. In particular, DO depletion in the south western area of the Project was likely related to reduced flushing potential arising from slow water current speeds rather than the activities of the Project. No silt plume was observed during marine works and mitigation measures were implemented properly. The case was therefore considered not due to Project.

Table 4.10 presents a summary of the SS compliance status at IM and SR stations during mid-flood tide for the reporting period.

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

	IM1	IM2	IM3	IM4	IM5	IM6	IM7	IM8	IM9	IM10	IM11	IM12	SR3	SR4A	SR5A	SR6	SR7	SR8
2/8/2018																		
4/8/2018																		
7/8/2018																		
9/8/2018					D													
11/8/2018																		
16/8/2018																		
18/8/2018																		
21/8/2018																		
23/8/2018																		
25/8/2018																		
28/8/2018					D	D												
30/8/2018																		
No. of result triggering Action or Limit Level	0	0	0	0	2	1	0	0	0	0	0	0	0	1	0	0	0	0

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

Monitoring results triggered the corresponding Action Levels on 9 and 28 August 2018. The case at SR4A on 28 August 2018 was recorded at monitoring station located upstream of the Project during flood tide and would unlikely be affected by the Project. Investigation focusing on cases that occurred at monitoring stations located downstream of the Project were carried out. Details of the Project’s marine construction activities on concerned monitoring days was collected and findings are summarized in **Table 4.11**.

Table 4.11: Summary of Findings from Investigation of SS Monitoring Results (Mid-Flood Tide)

Date	Marine construction works nearby	Approximate distance from marine construction works	Status of water quality measures (if applicable)	Construction vessels in the vicinity	Turbidity / Silt plume observed near the monitoring station	Action or Limit Level triggered due to Project
09/08/2018	Marine filling, sand blanket laying and DCM works	Around 500m	Silt curtain deployed	No	No	No
28/08/2018	Marine filling and DCM works	Around 500m	Silt curtain deployed	No	No	No

Investigations confirmed that marine filling, sand blanket laying and DCM works were operating normally with silt curtains deployed. The silt curtains were maintained properly.

For monitoring result at IM5 on 9 August 2018, result at impact monitoring station IM6, which is closer to the active works area than IM5, was within the corresponding Action and Limit Level in the same tide. The SS result at IM5 was also within the baseline range. Combining above observations, this case was believed to be an isolated incident with no spatial nor temporal trend to indicate any connection to the Project. With no observable silt plume during marine works and properly implemented mitigation measures, the incident was considered not due to Project.

Regarding SS monitoring results at IM5 and IM6 on 28 August 2018, both recorded concentrations were within baseline range. As no silt plume was observed and mitigation measures were properly implemented during construction works, these cases were considered not related to Project.

4.5 Conclusion

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

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

Nevertheless, the non-project related triggers have been attended to and have initiated corresponding actions and measures. 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 for reclamation works including DCM works, marine filling, seawall construction, and sand blanket laying works properly 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.

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

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

Table 5.2: Construction Waste Statistics

	Excavated Material (m ³) ⁽¹⁾	C&D ⁽²⁾ 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)
Jan 2018 ⁽³⁾	-	4,310	-	-	-	-	-
Mar 2018 ⁽³⁾	-	5,563	-	-	-	-	-
Apr 2018 ⁽³⁾	-	3,514	-	-	-	-	-
May 2018 ⁽³⁾	-	4,350	-	-	-	-	-
Jun 2018 ⁽³⁾	-	1,440	-	-	-	-	228
Aug 2018 ⁽⁴⁾	1,192	3,030	0	10,347	588	25,400	239

Notes:

- (1) The excavated materials were temporarily stored at stockpiling area and will be reused in the Project.
- (2) C&D refers to Construction and Demolition.
- (3) Only updated figures are presented.
- (4) Metals and paper were recycled in the reporting period.

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 as proposed in the Manual 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 during the construction phase. In addition to the land-based theodolite tracking survey required for impact monitoring as stipulated in the Manual, supplemental theodolite tracking surveys have also been conducted during the implementation for the SkyPier HSF diversion and speed control in order to assist in monitoring the effectiveness of these measures, i.e. in total twice per month at the Sha Chau station and three times per month at the Lung Kwu Chau station.

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 summarized 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. For CWD monitoring for August 2018, data from 1 June 2018 to 31 August 2018 was used to calculate the running quarterly encounter rates STG & ANI;
- (2) Limit Level – two consecutive running quarters mean both the running quarterly encounter rates of the preceding month July 2018 (calculated by data from May 2018 to July 2018) and the running quarterly encounter rates of this month (calculated by data from June 2018 to August 2018).
- (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 follow the waypoints set for construction phase monitoring as proposed in the Manual and 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

Waypoint	Easting	Northing	Waypoint	Easting	Northing
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
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 covering the AW, WL and SWL areas as proposed in the Manual and 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 15-20 m vessel with a flying bridge observation platform about 4 to 5 m 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 minimize 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 photo both sides of every single dolphin in the group as the colouration and spotting pattern on both sides may not be identical. The photos were taken at the highest available resolution and stored on Compact Flash memory cards for transferring into a computer.

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

6.3.3 Land-based Theodolite Tracking Survey

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

Three surveyors (one theodolite operator, one computer operator, and one observer) were involved in each survey. Observers searched for dolphins using unaided eyes and handheld binoculars (7X50). Theodolite tracking sessions were initiated whenever an individual CWD or group of CWDs was located. Where possible, a distinguishable individual was selected, based on colouration, within the group. The focal individual was then continuously tracked via the theodolite, with a position recorded each time the dolphin surfaced. In case an individual could

not be positively distinguished from other members, the group was tracked by recording positions based on a central point within the group whenever the CWD surfaced. Tracking continued until animals were lost from view; moved beyond the range of reliable visibility (>1-3 km, 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 2-3 km of the station were tracked, with effort made to obtain at least two positions for each vessel.

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

6.4 Monitoring Results and Observations

6.4.1 Small Vessel Line-transect Survey

Survey Effort

Within this reporting period, two complete sets of small vessel line-transect surveys were conducted on the 2, 7, 16, 17, 20, 21, 22, and 23 August 2018, covering all transects in NEL, NWL, AW, WL and SWL survey areas for twice.

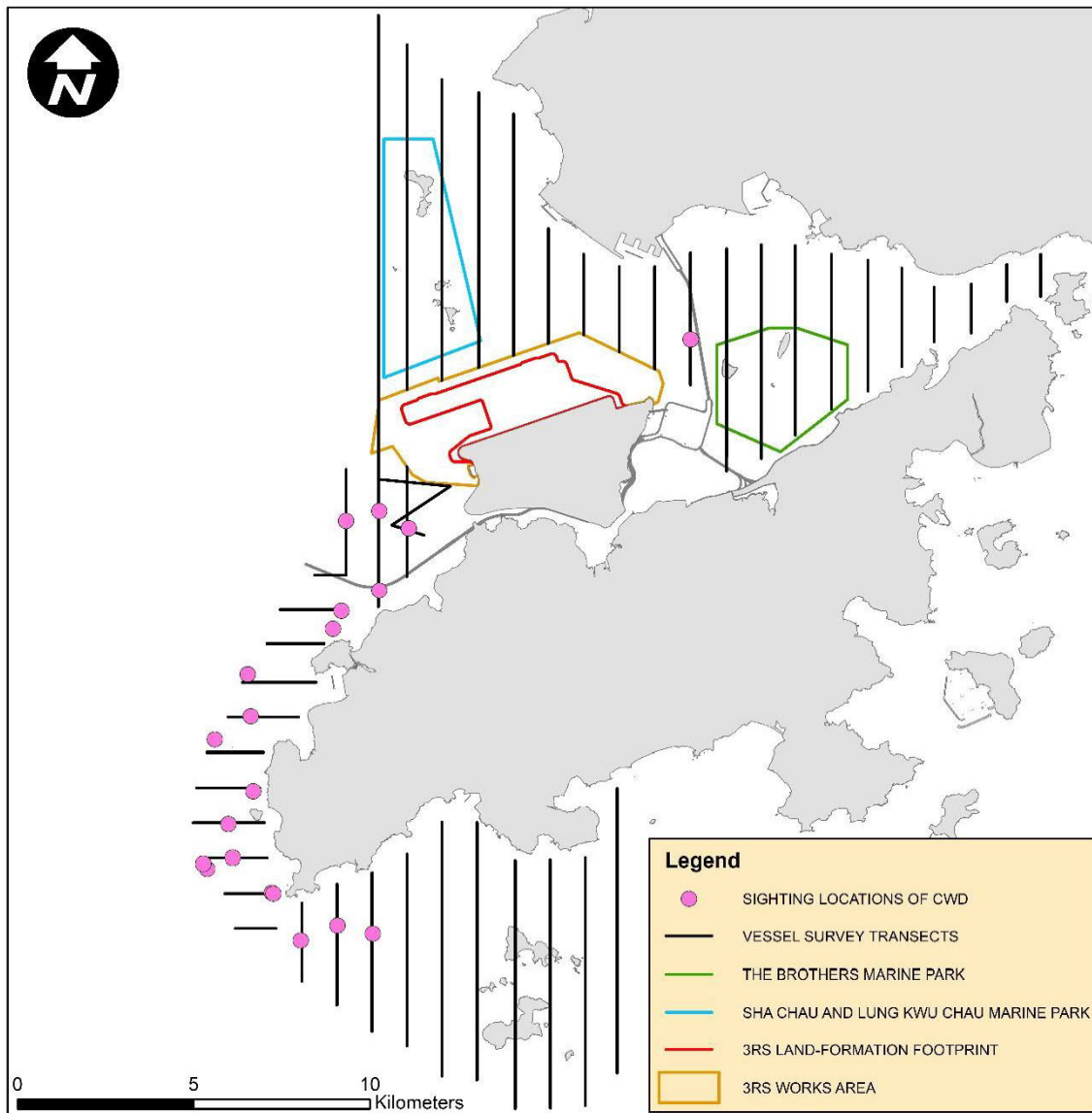
A total of around 457.79 km of survey effort was collected from these surveys, with around 97.56% of the total survey effort being conducted under favourable weather condition (i.e. Beaufort Sea State 3 or below with favourable visibility). Details of the survey effort are given in **Appendix D**.

Sighting Distribution

In August 2018, 20 sightings with 70 dolphins were sighted. Details of cetacean sightings are presented in **Appendix D**.

Distribution of all CWD sightings recorded in August 2018 is illustrated in **Figure 6.3**. In NWL, three CWD sightings were recorded at the southwestern part of the survey area. In WL, CWD sightings were scattered from the northern part of the survey area down to Fan Lau with more sightings located between Peaked Hill and Fan Lau. In SWL, three CWD sightings were recorded at relatively offshore waters in the western part of the survey area. It is worth noting that a sighting of a single dolphin was recorded on westernmost transect of NEL, near the northwestern corner of the Brothers Marine Park. This is the first CWD sighting in NEL since the commencement of CWD monitoring for the Project back in December 2015. This single dolphin was briefly seen with a few surfacing only and thus the survey team was unable to photograph it for photo-identification.

Figure 6.3: Sightings Distribution of Chinese White Dolphins



Remarks: Please note that there are 20 pink circles on the map indicating the sighting locations of CWD. Some of them were very close to each other and therefore appear overlapped on this distribution map.

Encounter Rate

Two types of dolphin encounter rates were calculated based on the data from August 2018. 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 August 2018, a total of around 446.60 km of survey effort were conducted under Beaufort Sea State 3 or below with favourable visibility, whilst a total number of 20 on-effort sightings with 70 dolphins were sighted under such condition. Calculation of the encounter rates in August 2018 are shown in **Appendix D**.

For the running quarter of the reporting period (i.e., from June to August 2018), a total of around 1200.60 km of survey effort were conducted under Beaufort Sea State 3 or below with favourable visibility, whilst a total number of 56 on-effort sightings and a total number of 187 dolphins from on-effort sightings were obtained under such condition. Calculation of the running quarterly encounter rates are shown in **Appendix D**.

The STG and ANI of CWD in the whole survey area (i.e. NEL, NWL, AW, WL and SWL) during the month of August 2018 and during the running quarter are presented in **Table 6.4** below and compared with the Action Level. The running quarterly encounter rates STG and ANI did not trigger Action Level.

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

	Encounter Rate (STG)	Encounter Rate (ANI)
August 2018	4.48	15.67
Running Quarter from June 2018 to August 2018 ⁽¹⁾	4.66	15.58
Action Level	Running quarterly ⁽¹⁾ < 1.86	Running quarterly ⁽¹⁾ < 9.35

Note: (1) Running quarterly encounter rates STG & ANI were calculated from data collected in the reporting period and the two preceding survey months, i.e. the data from June to August 2018, containing six sets of transect surveys for all monitoring areas. Action Level will be triggered if both STG and ANI fall below the criteria.

Group Size

In August 2018, 20 groups with 70 dolphins were sighted, and the average group size of CWDs was 3.50 dolphins per group. Sightings with small group size (i.e. 1-2 dolphins) were dominant. One sighting with large group size (i.e. 10 or more dolphins) were recorded in NWL.

Activities and Association with Fishing Boats

Three out of 20 sightings of CWDs were recorded engaging in feeding activities in August 2018. No association with operating fishing boats was observed in this reporting month.

Mother-calf Pair

In August 2018, three sightings were recorded with the presence of mother-and-unspotted calf or mother-and-unspotted juvenile pairs. Two of these sightings were sighted in WL while the remaining one was encountered in SWL.

6.4.2 Photo Identification

In August 2018, a total number of 41 different CWD individuals were identified for totally 48 times. A summary of photo identification works is presented in **Table 6.5**. Representative photos of these individuals are given in **Appendix D**.

Table 6.5: Summary of Photo Identification

Individual ID	Date of Sighting (dd-mmm-yy)	Sighting Group No.	Area	Individual ID	Date of Sighting (dd-mmm-yy)	Sighting Group No.	Area
NLMM015	2-Aug-18	1	NWL	WLMM028	21-Aug-18	2	WL
		3	NWL	WLMM029	2-Aug-18	1	NWL
NLMM019	2-Aug-18	1	NWL			21-Aug-18	2
NLMM033	21-Aug-18	5	WL	WLMM043	21-Aug-18	5	WL
NLMM043	2-Aug-18	1	NWL	WLMM053	2-Aug-18	1	NWL
NLMM056	21-Aug-18	1	WL	WLMM060	23-Aug-18	2	SWL
NLMM063	2-Aug-18	1	NWL	WLMM063	21-Aug-18	4	WL
NLMM066	2-Aug-18	1	NWL	WLMM065	21-Aug-18	6	WL
NLMM067	2-Aug-18	1	NWL				7
		21-Aug-18	5	WL	WLMM067	21-Aug-18	5
SLMM002	21-Aug-18	8	WL	WLMM071	23-Aug-18	2	SWL
SLMM003	21-Aug-18	8	WL	WLMM078	7-Aug-18	4	WL
SLMM010	21-Aug-18	7	WL	WLMM079	21-Aug-18	5	WL
		8	WL	WLMM081	2-Aug-18	1	NWL
SLMM012	21-Aug-18	8	WL	WLMM083	7-Aug-18	2	WL
SLMM019	23-Aug-18	1	SWL	WLMM087	2-Aug-18	1	NWL
		2	SWL	WLMM089	2-Aug-18	1	NWL
SLMM045	2-Aug-18	1	NWL	WLMM096	21-Aug-18	2	WL
SLMM053	21-Aug-18	2	WL	WLMM114	21-Aug-18	9	WL
SLMM057	2-Aug-18	1	NWL	WLMM115	2-Aug-18	2	NWL
WLMM006	2-Aug-18	1	NWL			7-Aug-18	2
WLMM008	7-Aug-18	4	WL	WLMM119	7-Aug-18	4	WL
WLMM009	21-Aug-18	2	WL	WLMM120	7-Aug-18	4	WL
WLMM027	22-Aug-18	1	SWL	WLMM121	21-Aug-18	5	WL

6.4.3 Land-based Theodolite Tracking Survey

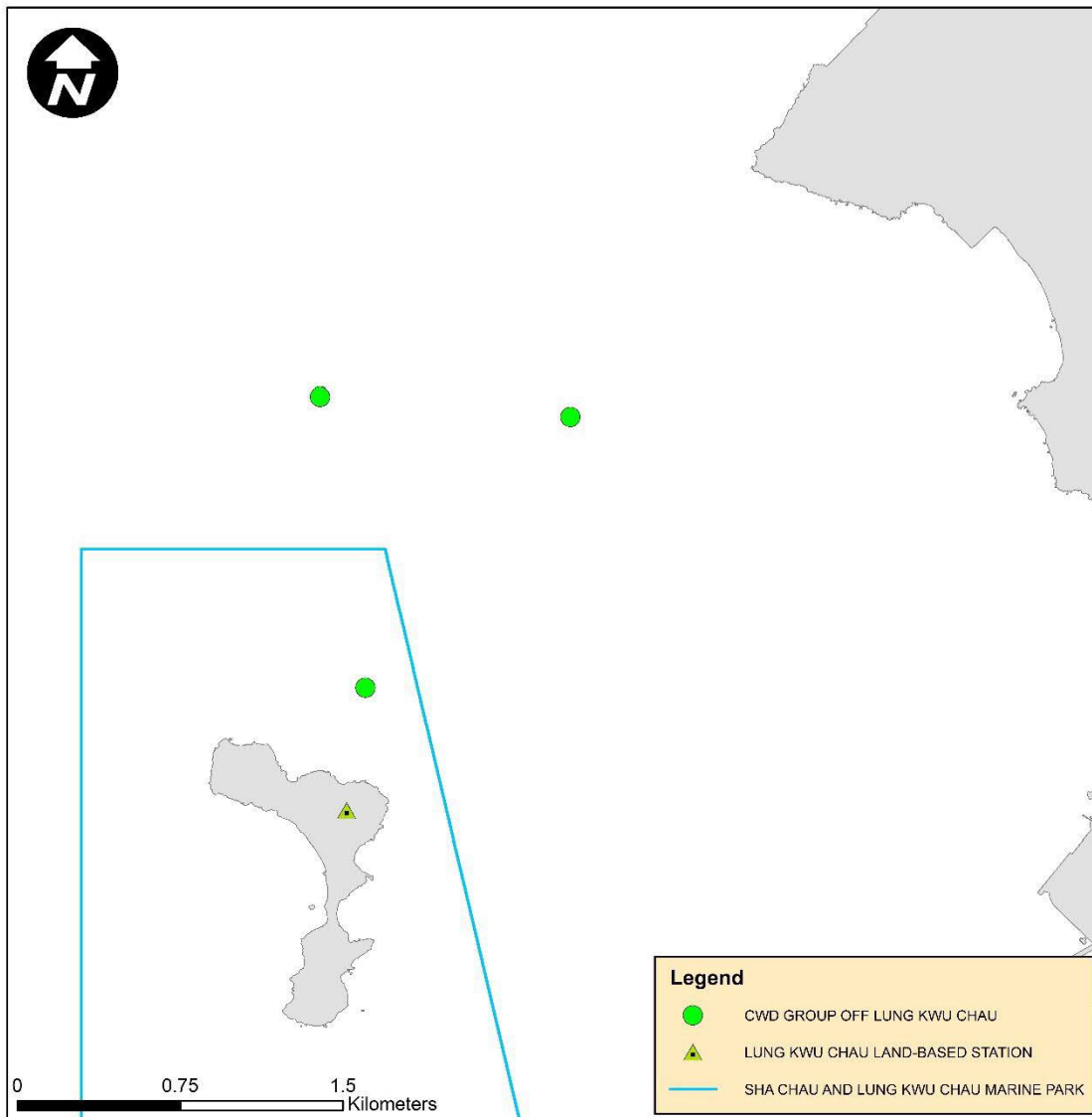
Survey Effort

Land-based theodolite tracking surveys were conducted at LKC on 1, 6 and 21 August 2018 and at SC on 2 and 9 August 2018, with a total of five days of land-based theodolite tracking survey effort accomplished in this reporting period. A total number of 3 CWD groups were tracked at LKC station during the surveys. Information of survey effort and CWD groups sighted during these land-based theodolite tracking surveys 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 August 2018 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	3	18:00	3	0.17
Sha Chau	2	12:00	0	0
TOTAL	5	30:00	3	0.1

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



6.5 Progress Update on Passive Acoustic Monitoring

Underwater acoustic monitoring using Passive Acoustic Monitoring (PAM) should be undertaken during land formation related construction works. In this reporting period, the Ecological Acoustic Recorder (EAR) was remained underwater and positioned at south of Sha Chau Island inside the SCLKCMP with 20% duty cycle (**Figure 6.5**). The EAR deployment is generally for 6 weeks prior to data retrieval for analysis. Acoustic data is reviewed to give an indication of CWDs occurrence

patterns and to obtain anthropogenic noise information simultaneously. Analysis (by a specialized team of acousticians) involved manually browsing through every acoustic recording and logging the occurrence of dolphin signals. All data 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.

6.6 Site Audit for CWD-related Mitigation Measures

During the reporting period, silt curtains were in place by the contractors for sand blanket laying works, in which dolphin observers were deployed by each contractor in accordance with the MMWP. Teams of at least two dolphin observers were deployed at 13 to 21 dolphin observation stations by the contractors for continuous monitoring of the DEZ by all contractors for ground improvement works (DCM works and PVD installation) and seawall construction in accordance with the DEZ Plan. Trainings for the proposed dolphin observers on the implementation of MMWP and DEZ monitoring were provided by the ET prior to the aforementioned works, with a cumulative total of 647 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 five days of land-based theodolite tracking survey effort as scheduled. The first CWD sighting in NEL since the commencement of CWD monitoring for the Project back in December 2015 was recorded in this reporting month. The running quarterly encounter rates STG and ANI in the reporting period did not trigger the Action Level for CWD monitoring.

7 Environmental Site Inspection and Audit

7.1 Environmental Site Inspection

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

During site inspections, environmental situation, status of implementation of pollution control and mitigation measures were observed both within the site area as well as outside the project sites which was likely to be affected, directly or indirectly, by the site activities. 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 appropriate 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 organized for the construction workforce by the contractors to ensure understanding and proper implementation of environmental protection and pollution control mitigation measures.

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

7.2 Audit of SkyPier High Speed Ferries

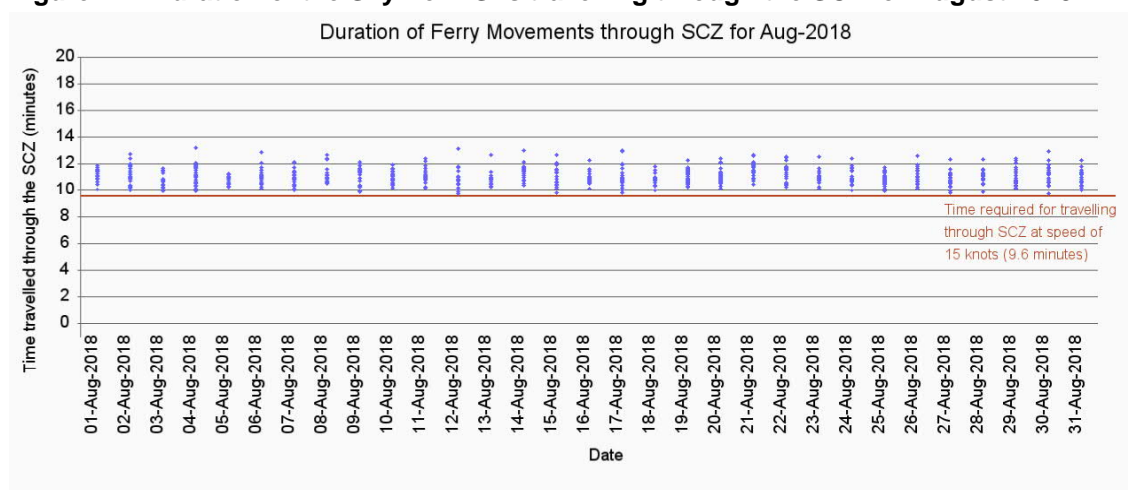
The Marine Travel Routes and Management Plan for High Speed Ferries of SkyPier (the SkyPier Plan) was submitted to the Advisory Council on the Environment for comment and subsequently submitted to and approved by EPD in November 2015 under EP Condition 2.10. The approved SkyPier Plan is available on the dedicated website of the Project. In the SkyPier Plan, AAHK has

committed to implement the mitigation measure of requiring HSFs of SkyPier travelling between HKIA and Zhuhai / Macau to start diverting the route with associated speed control across the area, i.e. Speed Control Zone (SCZ), with high CWD abundance. The route diversion and speed restriction at the SCZ have been implemented since 28 December 2015.

Key audit findings for the SkyPier HSFs travelling to/from Zhuhai and Macau against the requirements of the SkyPier Plan during the reporting period are summarized in **Table 7.1**. The daily movements of all SkyPier HSFs in this reporting period (i.e., 74 to 90 daily movements) were within the maximum daily cap of 125 daily movements. Status of compliance with the annual daily average of 99 movements will be further reviewed in the annual EM&A Report.

In total, 882 ferry movements between HKIA SkyPier and Zhuhai / Macau were recorded in August 2018 and the data are presented in **Appendix H**. The time spent by the SkyPier HSFs travelling through the SCZ in August 2018 were presented in **Figure 7.1**. It will take 9.6 minutes to travel through the SCZ when the SkyPier HSFs adopt the maximum allowable speed of 15 knots within the SCZ. **Figure 7.1** shows that all of the SkyPier HSFs spent more than 9.6 minutes to travel through the SCZ.

Figure 7.1: Duration of the SkyPier HSFs travelling through the SCZ for August 2018



Note: Data above the red line indicated that the time spent by the SkyPier HSFs travelling through the SCZ is more than 9.6 minutes, which is in compliance with the SkyPier Plan.

Two ferries were recorded with minor deviation from the diverted route on 2 August 2018, and 22 August 2018. Notices were sent to the ferry operators and the cases are under investigation by ET. The investigation results will be presented in the next monthly EM&A report.

As reported in the Construction Phase Monthly EM&A Report No. 31, three ferries were recorded with minor deviation from the diverted route on 12 July 2018, 14 July 2018, and 19 July 2018. ET’s investigation found that the vessel captains had to give way to a fishing boat for case on 12 July 2018 for safety reason, and give way to vessels for cases on both 14 July 2018, and 19 July 2018 for safety reason.

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

Requirements in the SkyPier Plan	1 August to 31 August 2018
Total number of ferry movements recorded and audited	882

Requirements in the SkyPier Plan**1 August to 31 August 2018**

Use diverted route and enter / leave SCZ through Gate Access Points	2 deviations.
Speed control in speed control zone	The average speeds taken within the SCZ by all HSFs were within 15 knots (10.2 knots to 14.0 knots), which complied with the SkyPier Plan. The time used by HSFs to travel through SCZ is presented in Figure 7.1 .
Daily Cap (including all SkyPier HSFs)	74 to 90 daily movements (within the maximum daily cap - 125 daily movements).

7.3 Audit of Construction and Associated Vessels

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

ET carried out the following actions during the reporting period:

- Two skipper training sessions were held for contractors' concerned skippers of relevant construction vessels to familiarize them with the predefined routes; general education on local cetaceans; guidelines for avoiding adverse water quality impact; the required environmental practices / measures while operating construction and associated vessels under the Project; and guidelines for operating vessels safely in the presence of CWDs. The list of all trained skippers was properly recorded and maintained by ET.
- Nine skipper training sessions were held by contractor's Environmental Officer. Competency tests were subsequently conducted with the trained skippers by ET.
- In this reporting period, twelve skippers were trained by ET and fourteen skippers were trained by contractor's Environmental Officer. In total, 1045 skippers were trained from August 2016 to August 2018.
- The Marine Surveillance System (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 ground improvement works (DCM works and PVD installation) 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 relevant records by the contractors and conducted competence checking to audit the implementation of DEZ.

7.5 Ecological Monitoring

In accordance with the Manual, ecological monitoring shall be undertaken monthly at the HDD daylighting location on Sheung Sha Chau Island during the HDD construction works period from August to March to identify and evaluate any impacts with appropriate actions taken as required to address and minimise any adverse impact found. During the reporting period, it was observed from the monthly ecological monitoring at the HDD daylighting location on Sheung Sha Chau that preparation works for shoreline landscape reinstatement were carried out under the Contract P560(R), and there was no encroachment of any works upon the egret area nor any significant disturbance to the ardeids on the island by the works. Sign of a few nursery activities by Little Egret were observed on trees located at the previously identified egret area where it is at the southern side of Sheung Sha Chau Island. At the HDD daylighting location, neither nest nor breeding activity of ardeids were found during the monthly ecological monitoring and weekly site inspections in the reporting period. The site photos and location map regarding the monthly ecological monitoring for the HDD works and egret area are provided in **Appendix D** for reference.

7.6 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	
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	Accepted / approved by EPD
2.13	Fisheries Management Plan	
2.14	Egret Survey Plan	
2.15	Silt Curtain Deployment Plan	
2.16	Spill Response Plan	
2.17	Detailed Plan on Deep Cement Mixing	
2.19	Waste Management Plan	
2.20	Supplementary Contamination Assessment Plan	
3.1	Updated EM&A Manual	
3.4	Baseline Monitoring Reports	

7.7 Compliance with Other Statutory Environmental Requirements

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

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

7.8.1 Complaints

A complaint relating to the DEZ monitoring schedule for DCM works was received on 27 Aug 2018. Investigation was conducted by the ET in accordance with the Manual and the Complaint Management Plan of the Project. Based on on-site inspection on the concerned barge Sambo 2HO in the Project area by ET and AAHK next day after receiving the complaint and the records provided by the contractor, the contractor had implemented DEZ monitoring for DCM works. Nevertheless, ET reminded the contractor to maintain good communication with dolphin observers and conduct regular review/training on contingency arrangement for different operational scenarios. Therefore, the complaint case was considered closed.

7.8.2 Notifications of Summons or Status of Prosecution

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

7.8.3 Cumulative Statistics

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

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

8.1 Construction Programme for the Coming Reporting Period

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

Advanced Works:

Contract P560 (R) Aviation Fuel Pipeline Diversion Works

- Trench backfilling;
- Shoreline reinstatement next to the new pipe; and
- Stockpiling of excavated materials from previous HDD operation.

DCM Works:

Contract 3201 to 3203, and 3205 DCM Works

- DCM works

Reclamation Works:

Contract 3206 Main Reclamation Works

- Laying of sand blanket;
- PVD installation;
- Seawall construction;
- Marine filling; and
- DCM works.

Airfield Works:

Contract 3301 North Runway Crossover Taxiway

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

Terminal 2 Expansion Works:

Contract 3501 Antenna Farm and Sewage Pumping Station

- Excavation works;
- Pipe installation; and
- Electrical and mechanical (E&M) works and builders works of antenna farm.

Contract 3502 Terminal 2 Automated People Mover (APM) Depot Modification Works

- Site clearance;
- Brick laying;
- Fitting out of E&M works; and

- Cable tray installation.

Contract 3503 Terminal 2 Foundation and Substructure Works

- Site establishment;
- Drainage, utility, and road work;
- Piling works; and
- Demolition of footbridge.

Contract 3505 Terminal 2 Spectrum Lighting Mock-ups

- Assembly of structural frame;
- Floor drilling; and
- Installation of lighting fittings and panels.

Automated People Mover (APM) works:

Contract 3602 Existing APM System Modification Works

- Site establishment; and
- Construction of concrete plinth.

Baggage Handling System (BHS) works:

Contract 3603 3RS Baggage Handling System

- Site establishment.

Airport Support Infrastructure & Logistic Works:

Contract 3801 APM and BHS Tunnels on Existing Airport Island

- Site establishment;
- Diversion of underground utilities;
- Piling and foundation works; and
- Demolition of footbridge.

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 laying of sand blanket, DCM works, and marine filling;
- DEZ monitoring for ground improvement works (DCM works and PVD installation) and seawall construction;
- Implementation of MMWP for silt curtain deployment by the contractors' dolphin observers;
- Terrestrial ecological monitoring on Sheung Sha Chau;
- Sorting, recycling, storage and disposal of general refuse and construction waste;
- Management of chemicals and avoidance of oil spillage on-site; and
- Acoustic decoupling measures for equipment on marine vessels.

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

8.3 Monitoring Schedule for the Coming Reporting Period

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

9 Conclusion and Recommendation

The key activities of the Project carried out in the reporting period included reclamation works and land-side works. Reclamation works included deep cement mixing (DCM) works, marine filling, seawall construction, laying of sand blanket, and prefabricated vertical drain (PVD) installation. Land-side works involved mainly foundation and substructure work for Terminal 2 expansion, modification and tunnel work for Automated People Mover (APM) and Baggage Handling System (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, terrestrial ecology, and CWD were conducted during the reporting period in accordance with the Manual.

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

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

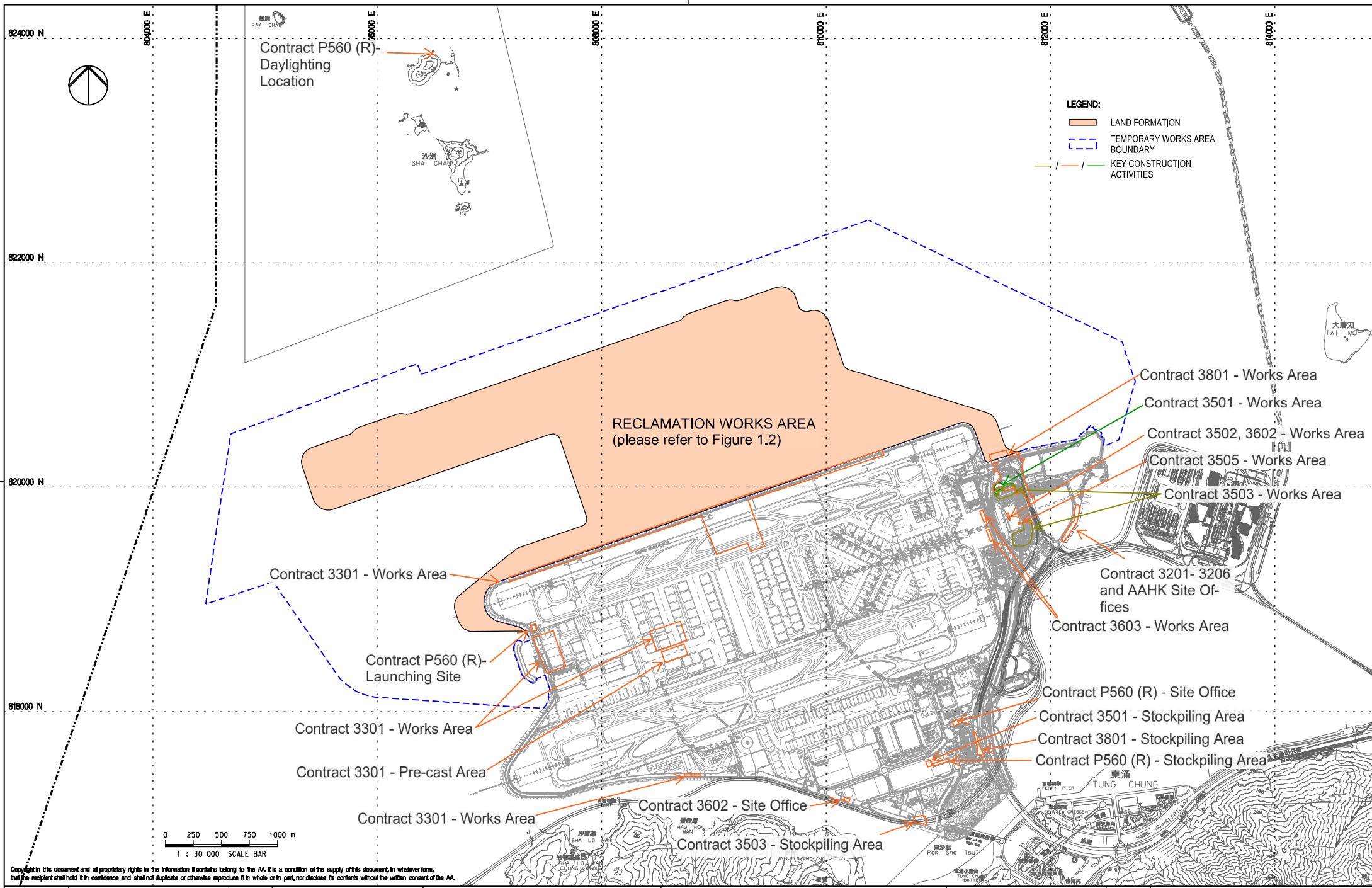
Weekly site inspections of the construction works were carried out by the ET to audit the implementation of proper environmental pollution control and mitigation measures for the Project. Bi-weekly site inspections were also conducted by the IEC. Site inspection findings were recorded in the site inspection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

On the implementation of the SkyPier Plan, the daily movements of all SkyPier high speed ferries (HSFs) in August 2018 were in the range of 74 to 90 daily movements, which are within the maximum daily cap of 125 daily movements. A total of 882 HSF movements under the SkyPier Plan were recorded in the reporting period. All HSFs had travelled through the SCZ with average speeds under 15 knots (10.2 to 14.0 knots), which were in compliance with the SkyPier Plan. Two deviations from the diverted route in August 2018 was recorded in the HSF monitoring. In summary, the ET and IEC have audited the HSF movements against the SkyPier Plan and conducted follow up investigations or actions accordingly.

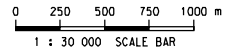
On the implementation of MTRMP-CAV, the MSS automatically recorded the deviation case such as speeding, entering no entry zone, not travelling through the designated gates. ET conducted checking to ensure the MSS records all deviation cases accurately. Training has been provided for the concerned skippers 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. 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



- LEGEND:**
- LAND FORMATION
 - TEMPORARY WORKS AREA BOUNDARY
 - / / KEY CONSTRUCTION ACTIVITIES



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A	31AUG15	FIRST ISSUE	DC



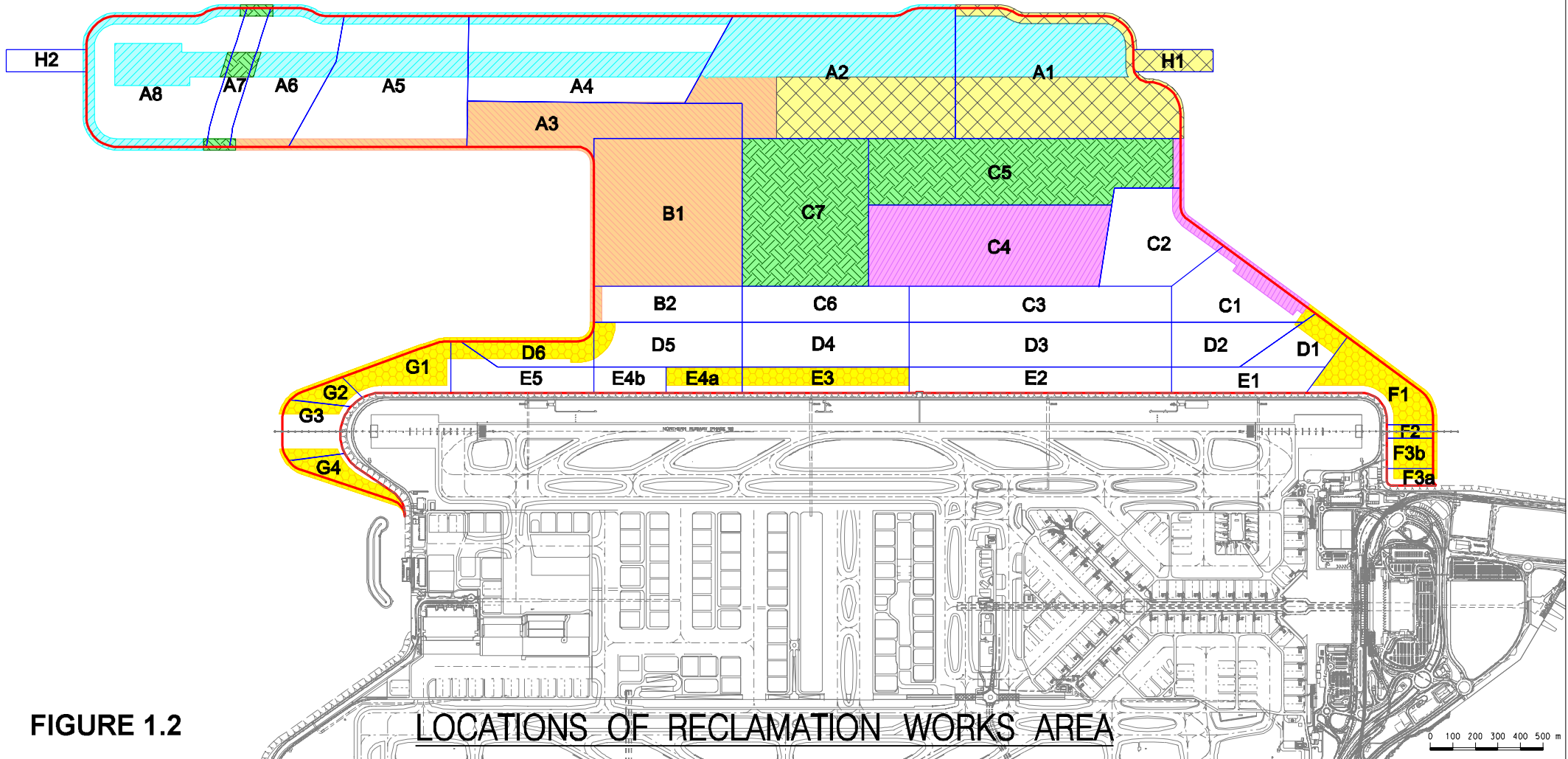
Title
LOCATIONS OF KEY CONSTRUCTION ACTIVITIES

Consultant's Signatures for Approval		Date
Design	DC	31AUG15
Checkers	DC	31AUG15
Design Supervisor	EC	31AUG15
Authorized Representative	JFP	31AUG15

EXPANSION OF HONG KONG INTERNATIONAL AIRPORT INTO A THREE-RUNWAY SYSTEM		Scale at A3
Drawing No.		1 : 30000
FIGURE 1.1		Rev. A



- LEGEND:
- "A1"** WORKS AREA
 - CONTRACT 3201
 - CONTRACT 3202
 - CONTRACT 3203
 - CONTRACT 3204
 - CONTRACT 3205
 - CONTRACT 3201 / 3202 / 3203 / 3204
 - CONTRACT 3206





806000 E

808000 E

810000 E

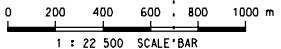
812000 E

814000 N

820000 N

818000 N

- LEGEND:**
- LAND FORMATION
 - NOISE MONITORING STATION (UPDATED EM&A MANUAL)
 - AIR QUALITY MONITORING STATION (UPDATED EM&A MANUAL)
 - CHEK LAP KOK WIND STATION



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



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

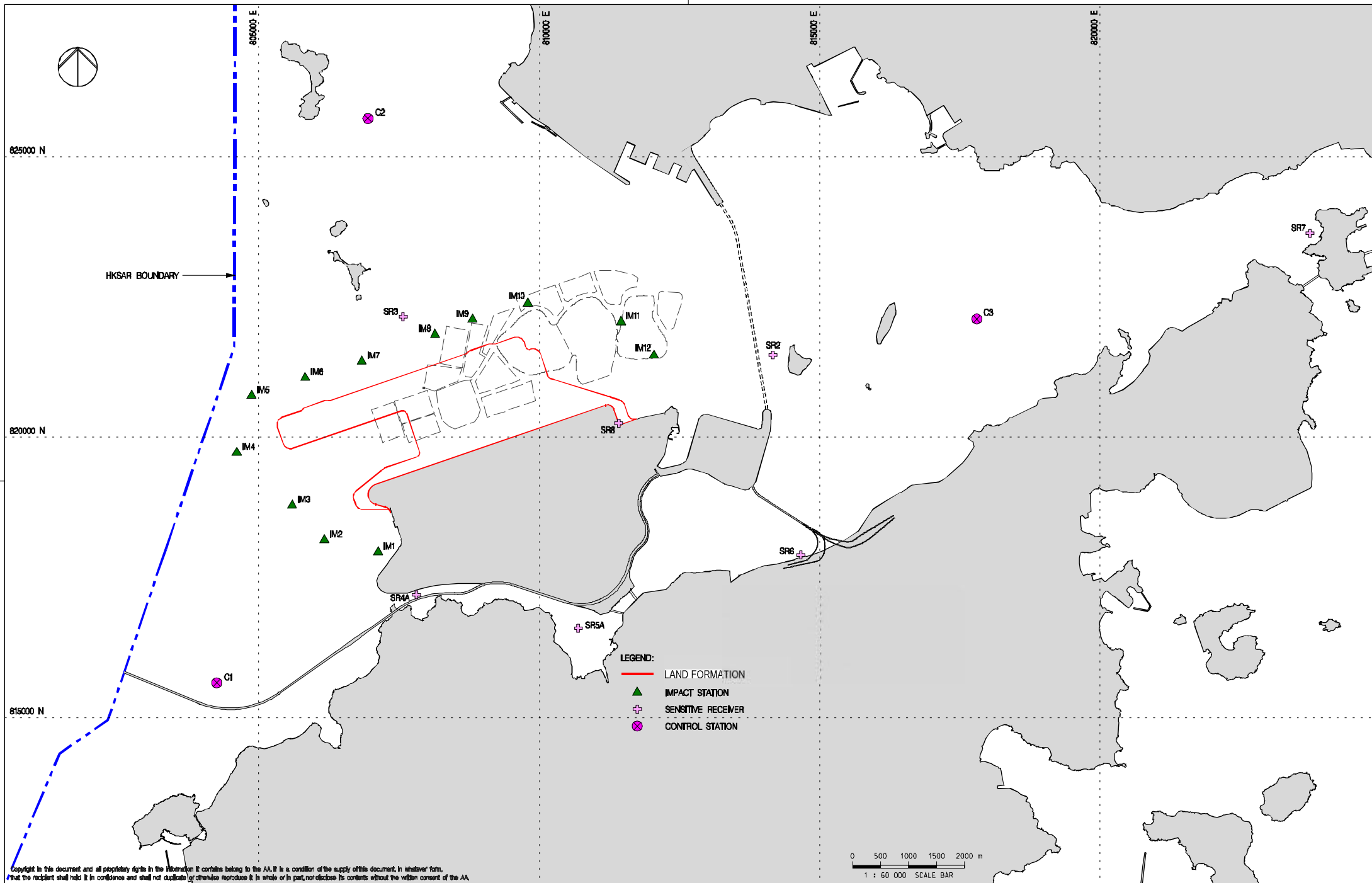
Consultant's Signatures for Approval		Date
Design	AM	11FEB16
Checkers	AM / TK	11FEB16
Approver	EC	11FEB16

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

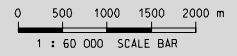
Drawing No. **FIGURE 2.1**

Scale at A3 **1 : 22500**

Rev. **C**



LEGEND:
 — LAND FORMATION
 ▲ IMPACT STATION
 + SENSITIVE RECEIVER
 ⊗ CONTROL STATION



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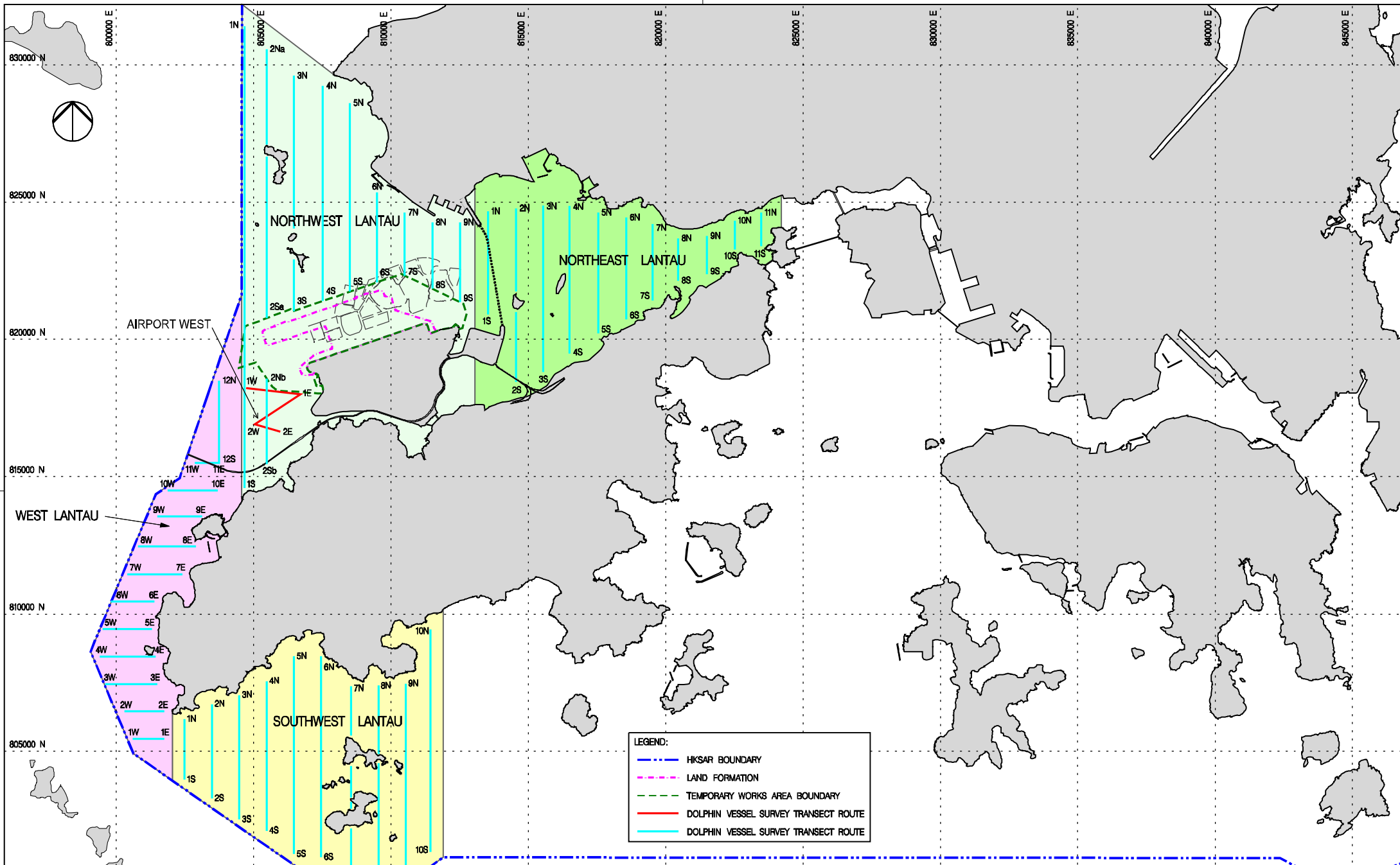
Rev.	Date	Description	Checked
A	25MAY17	FIRST ISSUE	IY
B	07AUG17	GENERAL REVISION	JL
C	25MAY18	GENERAL REVISION	SH



Title
WATER QUALITY MONITORING STATIONS

Consultant's Signatures for Approval		Date
Design	DC	25MAY18
Checkers	DC / TK	25MAY18
Approver	EC	25MAY18

EXPANSION OF HONG KONG INTERNATIONAL AIRPORT INTO A THREE-RUNWAY SYSTEM	
Drawing No.	Scale at AS 1 : 60000
FIGURE 3.1	Rev. C



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

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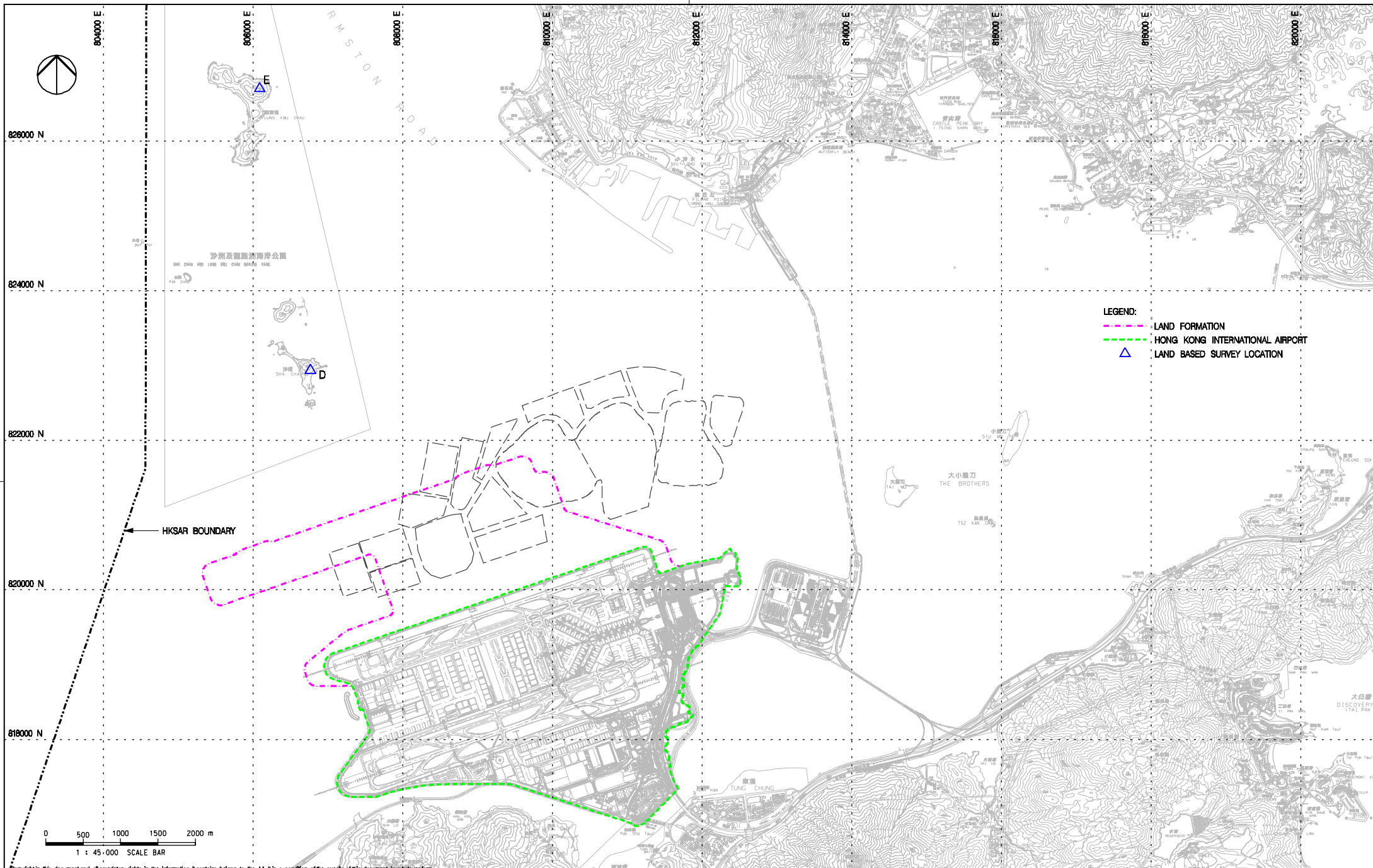
Rev.	Date	Description	Checked
A	02DEC16	FIRST ISSUE	JC
B	27JUL16	GENERAL REVISION	JT
C	06FEB17	GENERAL REVISION	JT
D	01MAR17	GENERAL REVISION	JT



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

Consultant's Signatures for Approval		Date
Design	JC	01MAR17
Checkers	JC / TK	01MAR17
Approver	EC	01MAR17

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



LEGEND:
 - - - - - LAND FORMATION
 - - - - - HONG KONG INTERNATIONAL AIRPORT
 ▲ LAND BASED SURVEY LOCATION

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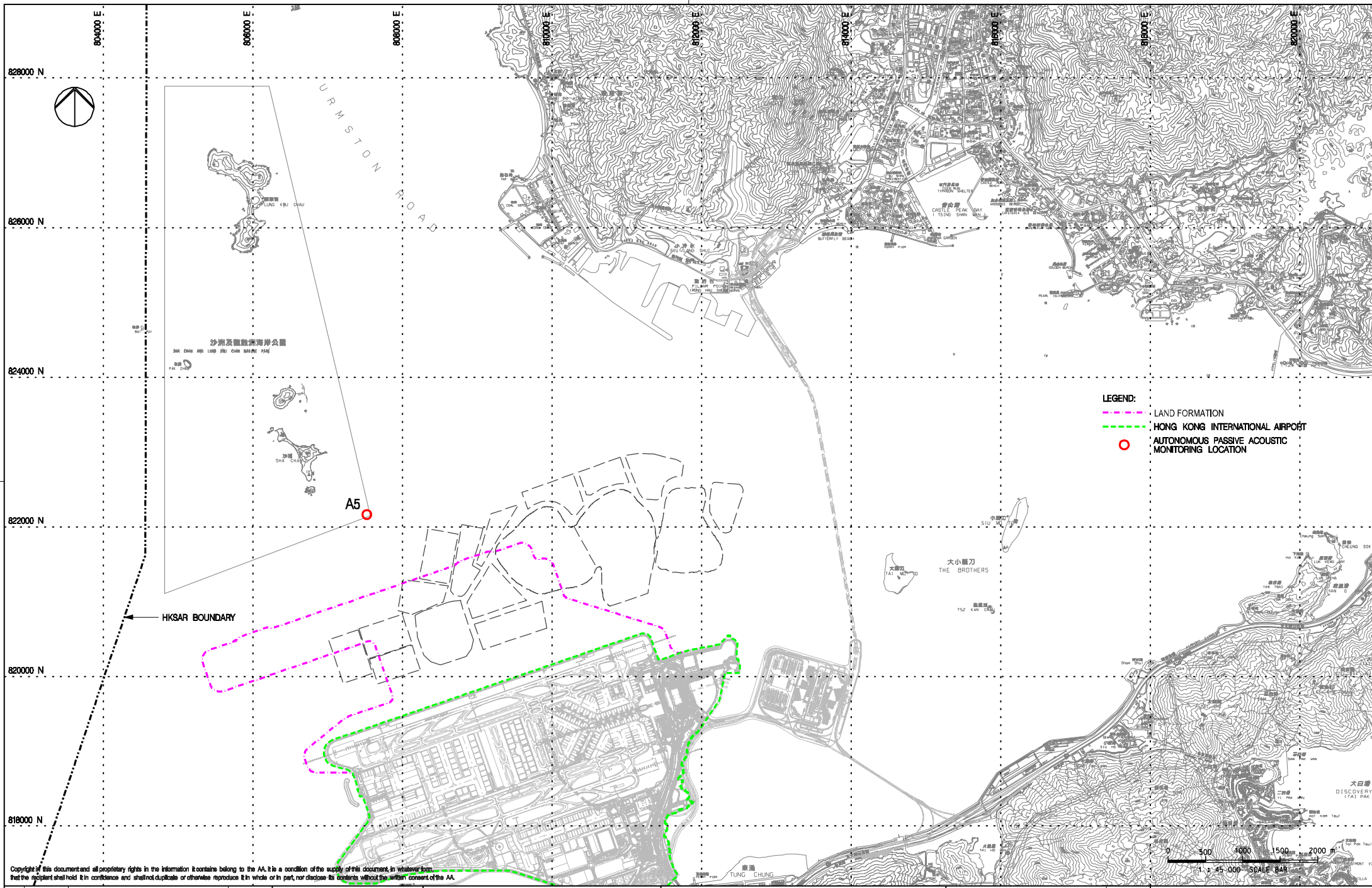
Rev.	Date	Description	Checked
A	02DEC16	FIRST ISSUE	JC
B	06FEB17	GENERAL REVISION	JC



Title
 LAND BASED DOLPHIN MONITORING
 IN BASELINE AND CONSTRUCTION PHASES

Consultant's Signatures for Approval		Date
Design	JC	06FEB17
Checkers	JC / TK	06FEB17
Approver	EC	06FEB17

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



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Rev.	Date	Description	Checked
A	29AUG17	FIRST ISSUE	JT



LOCATION FOR AUTONOMOUS PASSIVE ACOUSTIC MONITORING

Consultant's Signatures for Approval		Date
Design	JC	29AUG17
Checkers	JC / TK	29AUG17
Approver	EC	29AUG17

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

Drawing No. **FIGURE 6.5**

Scale at A3: **1:45000**

Rev. **A**

Appendix A. Contract Description

Contract Description

Contract No.	Contract Title	Contractor	Key Construction Activities
P560 (R)	Aviation Fuel Pipeline Diversion Works	Langfang Huayuan Mechanical and Electrical Engineering Co., Ltd.	Diversion of the existing submarine aviation fuel pipelines will use a horizontal directional drilling (HDD) method forming two rock drill holes by drilling through bedrock from a launching site located at the west of the airport island to a daylighting point adjacent to the offshore receiving platform at Sha Chau. Two new pipelines will be installed through the drilled tunnels. The total length is approximately 5 km. Drilling works will proceed from the HDD launching site at the airport island.
3201	Deep Cement Mixing (Package 1)	Penta-Ocean-China State-Dong-Ah Joint Venture	<p>The works covered by the Contract 3201, 3202, 3203, 3204 and 3205 comprise ground improvement of seabed using Deep Cement Mixing (DCM) method, the major construction activities including without limitation the following</p> <ul style="list-style-type: none"> • Geophysical surveys; • Supply and placing of geotextile and sand blanket under seawalls; • Supply, maintenance, installation and removal of silt curtain systems; • Preliminary construction trails; • Supply and installation of DCM clusters within the works areas; and • Coring, sampling and testing of DCM treated soils and reporting works.
3202	Deep Cement Mixing (Package 2)	Samsung-BuildKing Joint Venture	
3203	Deep Cement Mixing (Package 3)	Sambo E&C Co.,Ltd	
3204	Deep Cement Mixing (Package 4)	CRBC-SAMBO Joint Venture	
3205	Deep Cement Mixing (Package 5)	Bachy Soletanche- Sambo Joint Venture	
3206	Reclamation Contract	ZHEC-CCCC-CDC Joint Venture	<p>The works covered by the Contract 3206 comprise the formation of approximately 650 hectares of land north of the existing airport island for the project, the major construction activities including without limitation the following</p> <ul style="list-style-type: none"> • Site clearance and demolition; • Geotechnical and ground improvement works;

Contract No.	Contract Title	Contractor	Key Construction Activities
			<ul style="list-style-type: none"> • Seawall construction; • Marine and land filling works; and • Civil works.
3301	North Runway Crossover Taxiway	FJT-CHEC-ZHEC Joint Venture	<p>The works covered by the Contract 3301 comprise the construction of a new dual taxiway across the existing north runway and utility services and cable ducting systems. The major construction activities include without limitation the following:</p> <ul style="list-style-type: none"> • Construction of a new dual taxiway; • Cable ducting works; • Extension of existing portable water supply system; and • All associated works.
3501	Antenna Farm and Sewage Pumping Station	Build King Construction Limited	<p>The works covered by the Contract 3501 comprise the construction of antenna farm and sewage pumping station. The major construction activities include without limitation the following:</p> <ul style="list-style-type: none"> • Civil and structural engineering works; • Building services works; • Architectural builder's works and finishes; • Trenchless excavation for sewage rising mains; and • All associated works.
3502	Terminal 2 APM Depot Modification Works	Build King Construction Limited	<p>The works covered by the Contract 3502 comprise the modification of the existing Automatic People Mover (APM) Depot in the basement of T2, for the APM line running between T1 East Hall, West Hall and Midfield Concourse. The major construction activities include without limitation the following:</p> <ul style="list-style-type: none"> • Removal of the existing steel guide rails; • Removal of the existing mass concrete fill and re-construction of the reinforced concrete fill; • Construction of separation walls and walkways; • Removal of re-provision of existing building services and airport systems; and • All associated testing and commissioning works.
3503	Terminal 2 Foundation and	Leighton - Chun Wo Joint Venture	<p>The works covered by the Contract 3503 comprise the foundations for the new T2 terminal, two annex buildings and associated viaducts, construction</p>

Contract No.	Contract Title	Contractor	Key Construction Activities
	Substructure Works		<p>of the new T2 basement and south annex building structures, diaphragm walls, utility services and other advance works.</p> <p>The major construction activities include without limitation the following:</p> <ul style="list-style-type: none"> • Re-configuration and demolition of existing utilities and structures; • Pile foundations for the expanded T2 Terminal Building, South Annex Building, and North Annex Building; • Construction of new South Annex Building; • Diversion and provisions of utilities; and • All associated testing and commissioning works.
3505	Terminal 2 Spectrum Lighting Mock-ups	Union Contractors Ltd.	The works covered by the Contract 3505 comprise the design, supply, manufacture, delivery, and installation of the Spectrum Lighting Mock-ups to demonstrate the lighting effects on various interior elements of the new Terminal 2.
3602	Existing APM System Modification Works	Niigata Transys Co., Ltd.	<p>The works covered by the Contract 3602 comprise the detailed design, supply, manufacture, fabrication, implementation, testing and commissioning of the following modification works of the existing APM systems:</p> <ul style="list-style-type: none"> • Modification of existing APM depot and APM cars; • Modification of existing T1 & T2 tunnels; and • Preparation of new APM depot.
3603	3RS Baggage Handling System	VISH Consortium	The works covered by the Contract 3603 comprise the design, supply, manufacture, delivery, installation, testing and commissioning of the high-speed baggage handling system.
3801	APM and BHS Tunnels on Existing Airport Island	China State Construction Engineering (HK) Ltd.	<p>The works covered by the Contract 3801 comprise the construction of the APM and Baggage Handling System (BHS) tunnels on existing airport island.</p> <p>The major construction activities include without limitation the following:</p> <ul style="list-style-type: none"> • Construction of APM and BHS tunnels; • Construction of ventilation building and associated infrastructure; and • Construction, testing and commissioning of sewerage pumping station; and • Civil and structural engineering works.

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

Appendix B 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 <ul style="list-style-type: none"> 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	-	<ul style="list-style-type: none"> 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 <ul style="list-style-type: none"> 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 <ul style="list-style-type: none"> 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 <ul style="list-style-type: none"> Exposed earth should be properly treated by compaction, hydroseeding, vegetation planting or seeding 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	N/A

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			<p>Loading, Unloading or Transfer of Dusty Materials</p> <ul style="list-style-type: none"> 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	
			<p>Debris Handling</p> <ul style="list-style-type: none"> 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	
			<p>Transport of Dusty Materials</p> <ul style="list-style-type: none"> 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	
			<p>Wheel washing</p> <ul style="list-style-type: none"> 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	
			<p>Use of vehicles</p> <ul style="list-style-type: none"> 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	
			<p>Site hoarding</p> <ul style="list-style-type: none"> 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	
5.2.6.5	2.1	-	<p>Best Practices for Concrete Batching Plant</p> <p>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:</p> <p>Cement and other dusty materials</p>	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?^
			<ul style="list-style-type: none"> ▪ 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. 		
			<p>Other raw materials</p> <ul style="list-style-type: none"> ▪ 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; 	<p>Within Concrete Batching Plant / Duration of the construction phase</p>	<p>N/A</p>

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			<ul style="list-style-type: none"> ▪ 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. 		
			<p>Loading of materials for batching</p> <ul style="list-style-type: none"> ▪ Concrete truck shall be loaded in such a way as to minimise airborne dust emissions. The following control measures shall be implemented: <ul style="list-style-type: none"> (a) Pre-mixing the materials in a totally enclosed concrete mixer before loading the materials into the concrete truck is recommended. All dust-laden air generated by the pre-mixing process as well as the loading process shall be totally vented to fabric filtering system to meet the required emission limit; and (b) If truck mixing batching or other types of batching method is used, effective dust control measures acceptable to EPD shall be adopted. The dust control measures must have been demonstrated to EPD that they are capable to collect and vent all dust-laden air generated by the material loading/mixing to dust arrestment plant to meet the required emission limit. ▪ The loading bay shall be totally enclosed during the loading process. 	Within Concrete Batching Plant / Duration of the construction phase	N/A
			<p>Vehicles</p> <ul style="list-style-type: none"> ▪ 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
			<p>Housekeeping</p> <ul style="list-style-type: none"> ▪ 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	-	<p>Best Practices for Asphaltic Concrete Plant</p> <p>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:</p> <p>Design of Chimney</p> <ul style="list-style-type: none"> ▪ 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?^
			<ul style="list-style-type: none"> ▪ 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. 		
			<p>Cold feed side</p> <ul style="list-style-type: none"> ▪ 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. 	<p>Within Concrete Batching Plant / Duration of the construction phase</p>	<p>N/A</p>
			<p>Hot feed side</p> <ul style="list-style-type: none"> ▪ 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; 	<p>Within Concrete Batching Plant / Duration of the construction phase</p>	<p>N/A</p>

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			<ul style="list-style-type: none"> 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). 		
			<p>Material transportation</p> <ul style="list-style-type: none"> 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
			<p>Control of emissions from bitumen decanting</p> <ul style="list-style-type: none"> 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 <p>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.</p>	Within Concrete Batching Plant / Duration of the construction phase	N/A
			<p>Liquid fuel</p> <ul style="list-style-type: none"> 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
			<p>Housekeeping</p> <ul style="list-style-type: none"> 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	-	<p>Best Practices for Rock Crushing Plants</p> <p>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:</p>	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?^
			<p>Crushers</p> <ul style="list-style-type: none"> ▪ 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. 		
			<p>Vibratory screens and grizzlies</p> <ul style="list-style-type: none"> ▪ 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
			<p>Belt conveyors</p> <ul style="list-style-type: none"> ▪ 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?^
			<p>Storage piles and bins</p> <ul style="list-style-type: none"> 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
			<p>Rock drilling equipment</p> <ul style="list-style-type: none"> 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	-	<ul style="list-style-type: none"> Precautionary measures should be established to request barges to move away during typhoons. 	Construction Site / Construction Period	I
Table 6.40	3.2	-	<ul style="list-style-type: none"> 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	-	<ul style="list-style-type: none"> 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	-	<p>Good Site Practice</p> <p>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:</p> <ul style="list-style-type: none"> 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?^
			<ul style="list-style-type: none"> 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 <ul style="list-style-type: none"> QPME should be adopted as far as applicable. 	Within the Project site / During construction phase / Prior to commencement of operation	
7.5.6	4.3	-	Use of Movable Noise Barriers <ul style="list-style-type: none"> 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	
7.5.6	4.3	-	Use of Noise Enclosure/ Acoustic Shed <ul style="list-style-type: none"> 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	
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	<p>Marine Construction Activities</p> <p><u>General Measures to be Applied to All Works Areas</u></p> <ul style="list-style-type: none"> ▪ 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
			<p><u>Specific Measures to be Applied to All Works Areas</u></p> <ul style="list-style-type: none"> ▪ 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
			<ul style="list-style-type: none"> ▪ 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; 		N/A
			<ul style="list-style-type: none"> ▪ 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)
			<ul style="list-style-type: none"> ▪ 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?^
			<p><u>Specific Measures to be Applied to Land Formation Activities prior to Commencement of Marine Filling Works</u></p> <ul style="list-style-type: none"> ▪ 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; ▪ 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 	Within construction site / Duration of the construction phase	<p>NA</p> <p>*(The arrangement of silt curtain has been modified. The details can be referred to Silt Curtain Deployment Plan)</p> <p>For C7a, I</p> <p>For C8, N/A</p> <p>*(The requirement of silt curtain / screen has been modified. The details can be referred to Silt Curtain Deployment Plan)</p>
			<ul style="list-style-type: none"> ▪ The silt curtains and silt screens should be regularly checked and maintained. 		I
			<p><u>Specific Measures to be Applied to Land Formation Activities during Marine Filling Works</u></p> <ul style="list-style-type: none"> ▪ 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	<p>N/A *(The arrangement of silt curtain has been modified. The details can be referred to Silt Curtain Deployment Plan)</p>
			<ul style="list-style-type: none"> ▪ Double layer silt curtains to be applied at the south-western opening prior to commencement of marine filling activities; 		<p>N/A *(The arrangement of silt curtain has been modified. The details can be referred to Silt Curtain Deployment Plan)</p>
			<ul style="list-style-type: none"> ▪ 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 		<p>N/A</p> <p>*(The requirement of silt curtain / screen has been modified. The details can be referred to Silt Curtain Deployment Plan)</p>
			<ul style="list-style-type: none"> ▪ The silt curtains and silt screens should be regularly checked and maintained. 		N/A

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			<p><u>Specific Measures to be Applied to the Field Joint Excavation Works for the Submarine Cable Diversion</u></p> <ul style="list-style-type: none"> 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 and 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	-	<p>Modification of the Existing Seawall</p> <ul style="list-style-type: none"> 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	-	<p>Construction of New Stormwater Outfalls and Modifications to Existing Outfalls</p> <ul style="list-style-type: none"> 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	<p>Piling Activities for Construction of New Runway Approach Lights and HKIAAA Marker Beacons</p> <p>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.</p> <p><u>For construction of the eastern approach lights at the CMPs</u></p> <ul style="list-style-type: none"> 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	-	<p>Construction of Site Runoff and Drainage</p> <p>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:</p> <ul style="list-style-type: none"> 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?^
			<p>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);</p> <ul style="list-style-type: none"> 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
8.8.1.9	5.1	-	<p>Sewage Effluent from Construction Workforce</p> <ul style="list-style-type: none"> 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		<p>General Construction Activities</p> <ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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. <p>Drilling Activities for the Submarine Aviation Fuel Pipelines</p> <p>To prevent potential water quality impacts at Sha Chau, the following measures shall be applied:</p> <ul style="list-style-type: none"> A 'zero-discharge' policy shall be applied for all activities to be conducted at Sha Chau; No bulk storage of chemicals shall be permitted; and A containment pit shall be constructed around the drill holes. This containment pit shall be lined with impermeable lining and bunded on the outside to prevent inflow from off-site areas. 	Within construction site / During construction phase	I
			<p>At the airport island side of the drilling works, the following measures shall be applied for treatment of wastewater:</p> <ul style="list-style-type: none"> 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	-	<p>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:</p> <ul style="list-style-type: none"> 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 N/A

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			<ul style="list-style-type: none"> ▪ 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 HKIAAAA 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. 		N/A
10.5.1.1	7.1	-	<p>The following good site practices should be performed during the construction activities include:</p> <ul style="list-style-type: none"> ▪ 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	-	<p>The following practices should be performed to achieve waste reduction include:</p> <ul style="list-style-type: none"> ▪ 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?^
			<ul style="list-style-type: none"> 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		<ul style="list-style-type: none"> 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	-	<ul style="list-style-type: none"> 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	-	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	-	<p>The following mitigation measures are recommended during excavation and treatment of the sediments:</p> <ul style="list-style-type: none"> On-site remediation should be carried out in an enclosed area in order to minimise odour/dust emissions; 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; All practical measures, including but not limited to speed control for vehicles, should be taken to minimise dust emission; Good housekeeping should be maintained at all times at the sediment treatment facility and storage area; Treated and untreated sediment should be clearly separated and stored separately; and 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. 	Project Site Area / Construction Phase	N/A
10.5.1.18	7.1	-	<p>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</p>	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?^
			<p>followed to minimise potential impacts on water quality during transportation of the sediments requiring Type 1 disposal:</p> <ul style="list-style-type: none"> 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	-	<p>Contractor should register with the EPD as a chemical waste producer and to follow the relevant guidelines. The following measures should be implemented:</p> <ul style="list-style-type: none"> 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	
10.5.1.20	7.1	-	<ul style="list-style-type: none"> 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	
10.5.1.21	7.1	-	<ul style="list-style-type: none"> 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	N/A
Land Contamination – Construction Phase					
11.10.1.2 to 11.10.1.3	8.1	2.32	<p>For areas inaccessible during site reconnaissance survey</p> <ul style="list-style-type: none"> 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	
			<ul style="list-style-type: none"> 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. 		

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			<ul style="list-style-type: none"> 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)
			<ul style="list-style-type: none"> 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	-	<p>If contaminated soil is identified, the following mitigation measures are for the excavation and transportation of contaminated materials (if any):</p> <ul style="list-style-type: none"> 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	<p>Pre-construction Egretty Survey</p> <ul style="list-style-type: none"> Conduct ecological survey for Sha Chau egretty to update the latest boundary of the egretty. 	Breeding season (April - July) prior to commencement of HDD drilling works at HKIA	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
12.7.2.3 and 12.7.2.6	9.1	2.30	Avoidance and Minimisation of Direct Impact to Egret <ul style="list-style-type: none"> 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	
12.7.2.5	9.1	2.30	Preservation of Nesting Vegetation <ul style="list-style-type: none"> 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	
12.7.2.4 and 12.7.2.6	9.1	2.30	Timing the Pipe Connection Works outside Ardeid's Breeding Season <ul style="list-style-type: none"> 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	
12.10.1.1	9.3	-	Ecological Monitoring <ul style="list-style-type: none"> 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	
Marine Ecological Impact – Pre-construction Phase					
13.11.4.1	10.2.2	-	<ul style="list-style-type: none"> Pre-construction phase Coral Dive Survey. 	HKIAAA artificial seawall	
Marine Ecological Impact – Construction Phase					
13.11.1.3 to 13.11.1.6	-	-	Minimisation of Land Formation Area <ul style="list-style-type: none"> 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	
13.11.1.7 to 13.11.1.10	-	2.31	Use of Construction Methods with Minimal Risk/Disturbance <ul style="list-style-type: none"> Use of non-dredge method for the main land formation and ancillary works including the diversion of the aviation fuel pipeline to the AFRF; 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; 	During construction phase at marine works area	

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			<ul style="list-style-type: none"> Use of bored piling in short duration to form the new approach lights and marker beacons for the new runway; 		N/A
			<ul style="list-style-type: none"> Avoid bored piling during CWD peak calving season (Mar to Jun); 		I
			<ul style="list-style-type: none"> Prohibition of underwater percussive piling; and 		I
			<ul style="list-style-type: none"> 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	-	-	<p>Mitigation for Indirect Disturbance due to Deterioration of Water Quality</p> <ul style="list-style-type: none"> Water quality mitigation measures during construction phases include consideration of alternative construction methods, deployment of silt curtain and good site practices; Alternative construction methods including use of non-dredge methods for ground improvement (e.g. Deep Cement Mixing (DCM), prefabricated vertical drains (PVD), sand compaction piles, steel cells, stone columns and vertical sand drains); Use of bored piling in short duration to form the new approach lights and marker beacons for the new runway; and <p>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.</p>	All works area during the construction phase	I
13.11.1.12	-	-	<p>Strict Enforcement of No-Dumping Policy</p> <ul style="list-style-type: none"> 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	-	-	<p>Good Construction Site Practices</p> <ul style="list-style-type: none"> 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
13.11.1.3 to 13.11.1.6	-	-	<p>Minimisation of Land Formation Area</p> <ul style="list-style-type: none"> 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	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
				to completion of construction	
13.11.5.4 to 13.11.5.13	10.3.1	-	<p>SkyPier High Speed Ferries' Speed Restrictions and Route Diversions</p> <ul style="list-style-type: none"> 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. <p>Other mitigation measures</p> <ul style="list-style-type: none"> 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	
13.11.5.14 to 13.11.5.18	10.3.1	2.31	<p>Dolphin Exclusion Zone</p> <ul style="list-style-type: none"> Establishment of a 24 hr Dolphin Exclusion Zone (DEZ) with a 250 m radius around the land formation works areas; 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 A DEZ would also be implemented during bored piling work but as a precautionary measure only. 	Marine waters around land formation works area during construction phase	
					N/A
13.11.5.19	10.4	2.31	<p>Acoustic Decoupling of Construction Equipment</p> <ul style="list-style-type: none"> 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	
13.11.5.20	10.6.1	2.29	<p>Spill Response Plan</p> <ul style="list-style-type: none"> 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. 	Construction phase	

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
13.11.5.21 to 13.11.5.23	10.6.1	-	Construction Vessel Speed Limits and Skipper Training <ul style="list-style-type: none"> 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 <ul style="list-style-type: none"> 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 <ul style="list-style-type: none"> Use of non-dredge method for the main land formation and ancillary works including the diversion of the aviation fuel pipeline to the AFRF; 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; Use of bored piling in short duration to form the new approach lights and marker beacons for the new runway; and 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. 	During construction phase at marine works area	I I N/A I
14.9.1.11	-	-	Strict Enforcement of No-Dumping Policy <ul style="list-style-type: none"> 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
14.9.1.12	-	-	Good Construction Site Practices <ul style="list-style-type: none"> 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 	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?^
			<ul style="list-style-type: none"> ▪ 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. 		
14.9.1.13 to 14.9.1.18	-		<p>Mitigation for Indirect Disturbance due to Deterioration of Water Quality</p> <ul style="list-style-type: none"> ▪ Water quality mitigation measures during construction phases include consideration of alternative construction methods, deployment of silt curtain and good site practices; ▪ Alternative construction methods including use of non-dredge methods for ground improvement (e.g. Deep Cement Mixing (DCM), prefabricated vertical drains (PVD), sand compaction piles, steel cells, stone columns and vertical sand drains); ▪ Use of bored piling in short duration to form the new approach lights and marker beacons for the new runway; and ▪ 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. 	All works area during the construction phase	
					N/A
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.	
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.	
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.	
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.	
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. –	

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
				may be disassembled in phases	
Table 15.6	12.3	-	CM6 - Avoidance of excessive height and bulk of site buildings and structures.	New passenger concourse, terminal 2 expansion and other proposed airport related buildings and structures under the project; 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; Upon handover and completion of works.	N/A
Cultural Heritage Impact – Construction Phase					
Not applicable.					

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
Health Impact – Aircraft Emissions					
Not applicable.					
Health Impact – Aircraft Noise					
Not applicable.					

Notes:

I= implemented where applicable;

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

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

Appendix C. Monitoring Schedule

Monitoring Schedule of This Reporting Period

Aug-18

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1 Site Inspection CWD Survey (Land-based) NM6	2 Site Inspection CWD Survey (Vessel, Land-based) Ecological Monitoring WQ General & Regular DCM mid-ebb: 16:16 mid-flood: 9:51	3 Site Inspection AR1A, AR2	4 WQ General & Regular DCM mid-ebb: 17:45 mid-flood: 11:50
5	6 Site Inspection CWD Survey (Land-based)	7 Site Inspection CWD Survey (Vessel) NM6 WQ General & Regular DCM mid-ebb: 9:19 mid-flood: 16:21	8 Site Inspection	9 Site Inspection CWD Survey (Land-based) AR1A, AR2 NM1A, NM3A, NM4, NM5 WQ General & Regular DCM mid-ebb: 11:13 mid-flood: 18:26	10 Site Inspection	11 WQ General & Regular DCM mid-ebb: 12:54 mid-flood: 19:58
12	13 NM6	14 Site Inspection WQ General & Regular DCM* mid-ebb: 15:14 mid-flood: 8:31	15 Site Inspection AR1A, AR2 NM1A, NM3A, NM4, NM5	16 Site Inspection CWD Survey (Vessel) WQ General & Regular DCM mid-ebb: 16:41 mid-flood: 10:17	17 Site Inspection CWD Survey (Vessel)	18 WQ General & Regular DCM mid-ebb: 18:26 mid-flood: 12:41
19	20 CWD Survey (Vessel)	21 Site Inspection CWD Survey (Vessel, Land-based) AR1A, AR2 NM1A, NM3A, NM4, NM5 WQ General & Regular DCM mid-ebb: 9:51 mid-flood: 17:28	22 Site Inspection CWD Survey (Vessel)	23 Site Inspection CWD Survey (Vessel) NM6 WQ General & Regular DCM mid-ebb: 11:22 mid-flood: 18:40	24 Site Inspection	25 WQ General & Regular DCM mid-ebb: 12:35 mid-flood: 19:36
26	27 AR1A, AR2 NM1A, NM3A, NM4, NM5	28 Site Inspection WQ General & Regular DCM mid-ebb: 14:10 mid-flood: 7:38	29 Site Inspection NM6	30 Site Inspection WQ General & Regular DCM mid-ebb: 15:13 mid-flood: 8:58	31 Site Inspection AR1A, AR2	
Notes: CWD - Chinese White Dolphin Air quality and Noise Monitoring Station WQ - Water Quality DCM - Deep Cement Mixing *WQ monitoring session on 14 August was cancelled due to typhoon.						

Tentative Monitoring Schedule of Next Reporting Period

Sep-18

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1 WQ General & Regular DCM mid-ebb: 16:29 mid-flood: 10:34
2	3	4 Site Inspection CWD Survey (Land-based) NM6 WQ General & Regular DCM mid-ebb: 7:21 mid-flood: 14:59	5 Site Inspection	6 Site Inspection AR1A, AR2 NM1A, NM4, NM5 WQ General & Regular DCM mid-ebb: 9:58 mid-flood: 17:25	7 Site Inspection CWD Survey (Vessel)	8 WQ General & Regular DCM mid-ebb: 11:51 mid-flood: 18:50
9	10 CWD Survey (Vessel) NM6	11 Site Inspection CWD Survey (Vessel) WQ General & Regular DCM mid-ebb: 14:09 mid-flood: 7:38	12 Site Inspection CWD Survey (Vessel, Land-based) AR1A, AR2 NM1A, NM4, NM5	13 Site Inspection CWD Survey (Land-based) Ecological Monitoring WQ General & Regular DCM mid-ebb: 15:29 mid-flood: 9:16	14 Site Inspection CWD Survey (Vessel)	15 WQ General & Regular DCM mid-ebb: 16:52 mid-flood: 11:07
16	17 CWD Survey (Vessel, Land-based)	18 Site Inspection CWD Survey (Vessel, Land-based) AR1A, AR2 NM1A, NM4, NM5 WQ General & Regular DCM mid-ebb: 7:36 mid-flood: 20:16	19 Site Inspection CWD Survey (Vessel)	20 Site Inspection NM6 WQ General & Regular DCM mid-ebb: 10:01 mid-flood: 17:41	21 Site Inspection	22 WQ General & Regular DCM mid-ebb: 11:29 mid-flood: 18:30
23	24 Site Inspection AR1A, AR2 NM1A, NM4, NM5	25 WQ General & Regular DCM mid-ebb: 13:10 mid-flood: 19:33	26 Site Inspection NM6	27 Site Inspection WQ General & Regular DCM mid-ebb: 14:15 mid-flood: 20:17	28 Site Inspection AR1A, AR2	29 WQ General & Regular DCM mid-ebb: 15:29 mid-flood: 9:40
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				

Appendix D. Monitoring Results

Air Quality Monitoring Results

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

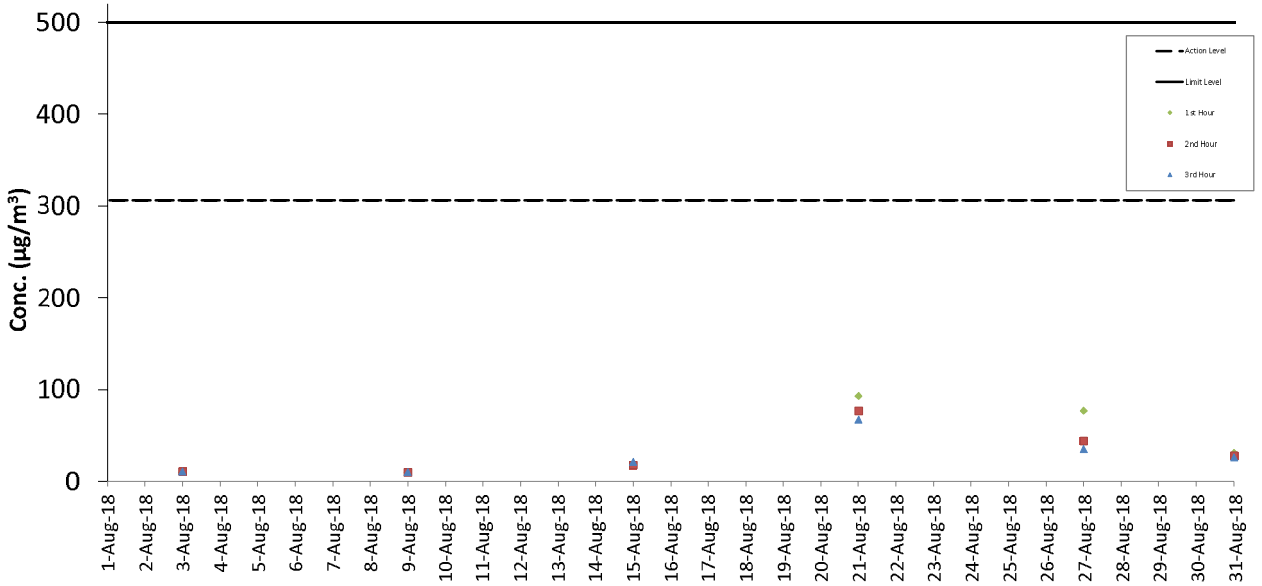
Date	Time	Weather	Wind Speed (m/s)	Wind Direction (deg)	1-hr TSP ($\mu\text{g}/\text{m}^3$)	Action Level ($\mu\text{g}/\text{m}^3$)	Limit Level ($\mu\text{g}/\text{m}^3$)
3-Aug-18	13:00	Fine	5.8	195	10	306	500
3-Aug-18	14:00	Fine	5.7	206	11	306	500
3-Aug-18	15:00	Fine	5.7	201	11	306	500
9-Aug-18	13:24	Sunny	--	--	10	306	500
9-Aug-18	14:24	Sunny	--	--	10	306	500
9-Aug-18	15:24	Sunny	--	--	10	306	500
15-Aug-18	14:08	Fine	4.9	148	18	306	500
15-Aug-18	15:08	Fine	5.2	105	18	306	500
15-Aug-18	16:08	Fine	5.4	122	21	306	500
21-Aug-18	13:00	Cloudy(13:00-15:00), rainy(15:00-16:00)	3.7	263	93	306	500
21-Aug-18	14:00	Cloudy(13:00-15:00), rainy(15:00-16:00)	2.6	230	77	306	500
21-Aug-18	15:00	Cloudy(13:00-15:00), rainy(15:00-16:00)	3.1	variable	67	306	500
27-Aug-18	13:03	Cloudy	3.1	267	77	306	500
27-Aug-18	14:03	Cloudy	4.1	243	44	306	500
27-Aug-18	15:03	Cloudy	1.8	328	35	306	500
31-Aug-18	09:55	Cloudy	6.2	197	31	306	500
31-Aug-18	10:55	Cloudy	4.5	187	28	306	500
31-Aug-18	13:00	Cloudy	5.3	141	26	306	500

1-hour TSP Results**Station: AR2- Village House, Tin Sum**

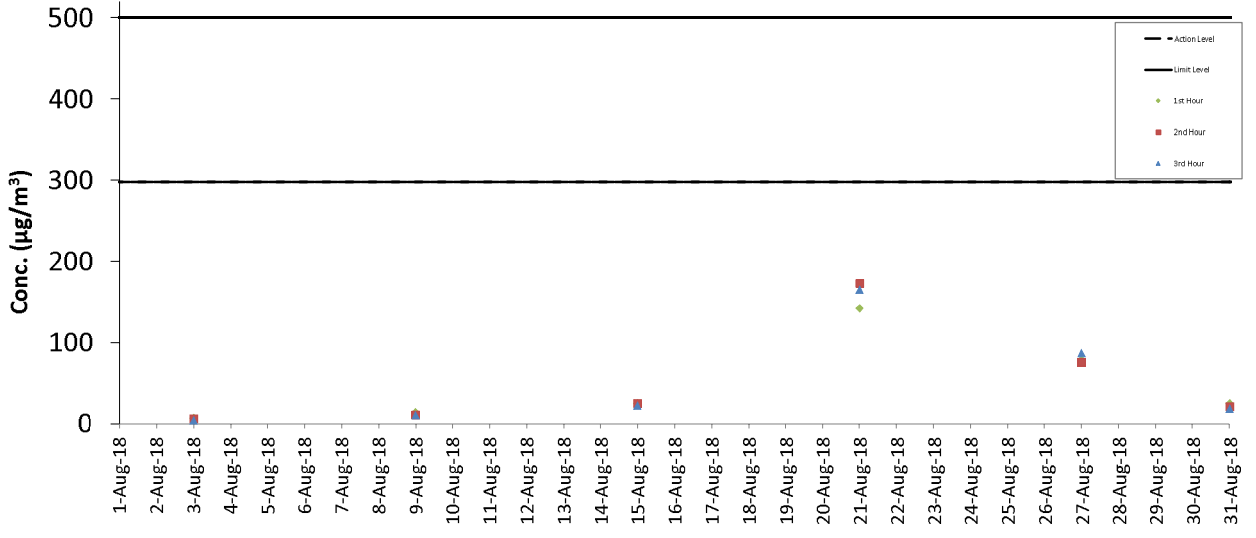
Date	Time	Weather	Wind Speed (m/s)	Wind Direction (deg)	1-hr TSP ($\mu\text{g}/\text{m}^3$)	Action Level ($\mu\text{g}/\text{m}^3$)	Limit Level ($\mu\text{g}/\text{m}^3$)
3-Aug-18	08:48	Sunny	5.5	195	7	298	500
3-Aug-18	09:48	Sunny	6.2	206	6	298	500
3-Aug-18	10:48	Sunny	6.3	225	4	298	500
9-Aug-18	08:56	Sunny	--	--	14	298	500
9-Aug-18	09:56	Sunny	--	--	11	298	500
9-Aug-18	10:56	Sunny	--	--	10	298	500
15-Aug-18	09:00	Fine	4.5	78	25	298	500
15-Aug-18	10:00	Fine	4.9	83	25	298	500
15-Aug-18	11:00	Fine	6.2	100	22	298	500
21-Aug-18	9:00	Cloudy	1.8	324	142	298	500
21-Aug-18	10:00	Cloudy	2.3	316	173	298	500
21-Aug-18	11:00	Cloudy	2.9	304	165	298	500
27-Aug-18	8:57	Cloudy	1.7	263	79	298	500
27-Aug-18	9:57	Cloudy	2.6	251	76	298	500
27-Aug-18	10:57	Cloudy	2.5	245	87	298	500
31-Aug-18	8:57	Cloudy	5.2	203	25	298	500
31-Aug-18	9:57	Cloudy	6.2	199	21	298	500
31-Aug-18	10:57	Cloudy	4.7	188	18	298	500

Remarks: Chek Lap Kok wind station was under maintenance on 9 Aug 2018.

AR1A 1-Hour TSP



AR2 1-Hour TSP



Noise Monitoring Results

Noise Measurement Results

Station: NM1A- Man Tung Road Park

Date	Weather	Time	Measured L ₁₀ dB(A)	Measured L ₅₀ dB(A)	L _{eq(30mins)} dB(A)
9-Aug-18	Sunny	13:44	73.0	58.0	72
9-Aug-18	Sunny	13:49	73.0	56.0	
9-Aug-18	Sunny	13:54	72.0	56.5	
9-Aug-18	Sunny	13:59	71.5	56.0	
9-Aug-18	Sunny	14:04	71.5	56.0	
9-Aug-18	Sunny	14:09	72.5	57.0	
15-Aug-18	Fine	14:30	73.0	53.0	73
15-Aug-18	Fine	14:35	73.5	58.0	
15-Aug-18	Fine	14:40	72.0	57.0	
15-Aug-18	Fine	14:45	71.5	58.5	
15-Aug-18	Fine	14:50	72.5	58.5	
15-Aug-18	Fine	14:55	72.0	57.5	
21-Aug-18	Cloudy	13:40	72.0	56.5	71
21-Aug-18	Cloudy	13:45	71.5	55.0	
21-Aug-18	Cloudy	13:50	73.0	55.0	
21-Aug-18	Cloudy	13:55	71.0	56.0	
21-Aug-18	Cloudy	14:00	73.0	53.5	
21-Aug-18	Cloudy	14:05	71.0	54.0	
27-Aug-18	Cloudy	13:15	70.5	55.0	72
27-Aug-18	Cloudy	13:20	71.5	55.5	
27-Aug-18	Cloudy	13:25	72.5	55.5	
27-Aug-18	Cloudy	13:30	73.5	55.0	
27-Aug-18	Cloudy	13:35	72.5	54.0	
27-Aug-18	Cloudy	13:40	72.5	54.5	

Remarks:

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

Noise Measurement Results

Station: NM3A- Site Office

Date	Weather	Time	Measured L ₁₀ dB(A)	Measured L ₅₀ dB(A)	L _{eq(30mins)} dB(A)
9-Aug-18	Sunny	09:41	71.0	64.5	65
9-Aug-18	Sunny	9:46	71.0	64.0	
9-Aug-18	Sunny	9:51	67.5	63.5	
9-Aug-18	Sunny	9:56	69.0	64.0	
9-Aug-18	Sunny	10:01	70.0	64.5	
9-Aug-18	Sunny	10:06	69.0	64.0	
15-Aug-18	Cloudy	10:36	68.5	54.5	57
15-Aug-18	Cloudy	10:41	69.5	56.0	
15-Aug-18	Cloudy	10:46	67.5	53.5	
15-Aug-18	Cloudy	10:51	65.0	54.0	
15-Aug-18	Cloudy	10:56	69.5	55.0	
15-Aug-18	Cloudy	11:01	65.0	54.5	
21-Aug-18	Sunny	9:16	67.5	59.0	63
21-Aug-18	Sunny	9:21	69.0	59.5	
21-Aug-18	Sunny	9:26	64.0	58.0	
21-Aug-18	Sunny	9:31	68.0	59.5	
21-Aug-18	Sunny	9:36	75.5	60.5	
21-Aug-18	Sunny	9:41	69.0	59.5	
27-Aug-18	Cloudy	9:06	64.0	60.5	63
27-Aug-18	Cloudy	9:11	65.5	62.0	
27-Aug-18	Cloudy	9:16	66.0	61.0	
27-Aug-18	Cloudy	9:21	63.5	60.5	
27-Aug-18	Cloudy	9:26	63.5	60.5	
27-Aug-18	Cloudy	9:31	65.0	61.0	

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)
9-Aug-18	Sunny	15:40	65.0	60.0	66
9-Aug-18	Sunny	15:45	64.0	60.5	
9-Aug-18	Sunny	15:50	66.0	60.5	
9-Aug-18	Sunny	15:55	64.5	60.0	
9-Aug-18	Sunny	16:00	64.0	60.0	
9-Aug-18	Sunny	16:05	63.5	60.0	
15-Aug-18	Cloudy	14:00	63.5	59.0	65
15-Aug-18	Cloudy	14:05	63.0	59.0	
15-Aug-18	Cloudy	14:10	63.5	59.5	
15-Aug-18	Cloudy	14:15	64.0	58.5	
15-Aug-18	Cloudy	14:20	64.0	59.5	
15-Aug-18	Cloudy	14:25	65.5	59.0	
21-Aug-18	Cloudy	13:53	64.0	59.0	65
21-Aug-18	Cloudy	13:58	63.0	59.0	
21-Aug-18	Cloudy	14:03	65.0	60.0	
21-Aug-18	Cloudy	14:08	64.5	60.0	
21-Aug-18	Cloudy	14:13	63.5	60.0	
21-Aug-18	Cloudy	14:18	64.0	60.0	
27-Aug-18	Cloudy	13:57	61.0	58.0	63
27-Aug-18	Cloudy	14:02	62.0	58.0	
27-Aug-18	Cloudy	14:07	61.5	58.5	
27-Aug-18	Cloudy	14:12	61.5	58.0	
27-Aug-18	Cloudy	14:17	63.5	58.0	
27-Aug-18	Cloudy	14:22	62.0	58.5	

Remarks:

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

Noise Measurement Results

Station: NM5- Village House, Tin Sum

Date	Weather	Time	Measured L ₁₀ dB(A)	Measured L ₉₀ dB(A)	L _{eq(30mins)} dB(A)
9-Aug-18	Sunny	09:08	55.0	50.0	57
9-Aug-18	Sunny	9:13	56.0	49.0	
9-Aug-18	Sunny	9:18	59.0	49.0	
9-Aug-18	Sunny	9:23	59.0	49.5	
9-Aug-18	Sunny	9:28	56.0	49.0	
9-Aug-18	Sunny	9:33	63.0	49.0	
15-Aug-18	Fine	09:05	59.0	49.0	56
15-Aug-18	Fine	9:10	55.0	47.0	
15-Aug-18	Fine	9:15	56.5	46.0	
15-Aug-18	Fine	9:20	54.0	46.0	
15-Aug-18	Fine	9:25	52.0	47.0	
15-Aug-18	Fine	9:30	55.0	48.5	
21-Aug-18	Cloudy	8:57	51.0	46.0	57
21-Aug-18	Cloudy	9:02	61.0	47.0	
21-Aug-18	Cloudy	9:07	54.0	47.0	
21-Aug-18	Cloudy	9:12	51.5	45.5	
21-Aug-18	Cloudy	9:17	53.0	46.5	
21-Aug-18	Cloudy	9:22	58.5	46.5	
27-Aug-18	Cloudy	8:58	53.0	46.5	55
27-Aug-18	Cloudy	9:03	53.5	46.5	
27-Aug-18	Cloudy	9:08	52.5	47.0	
27-Aug-18	Cloudy	9:13	57.0	46.5	
27-Aug-18	Cloudy	9:18	53.0	46.5	
27-Aug-18	Cloudy	9:23	51.5	45.5	

Remarks:

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

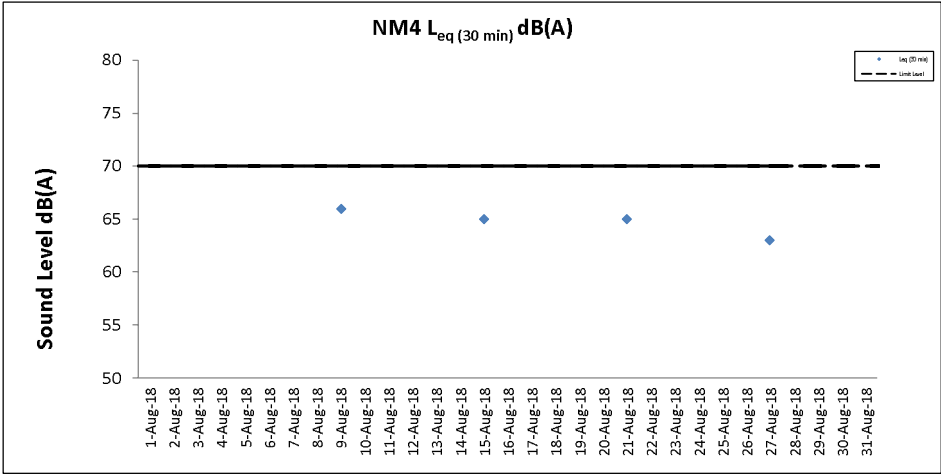
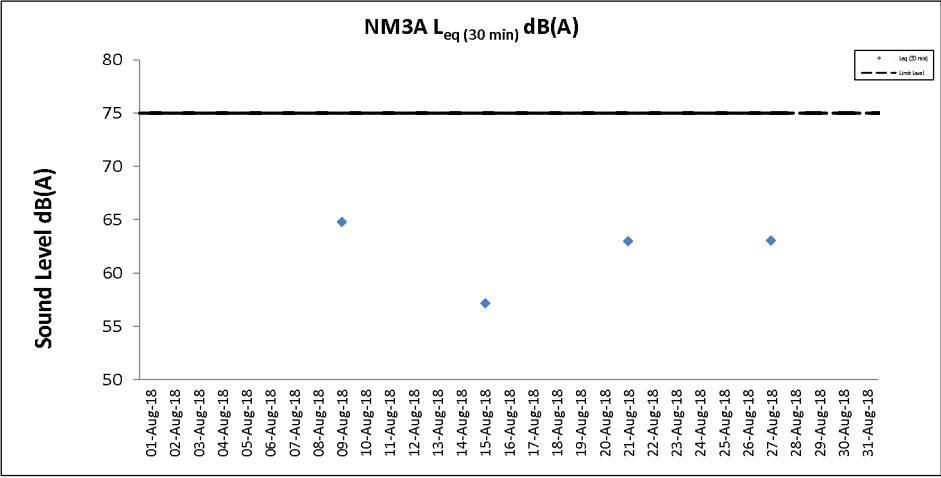
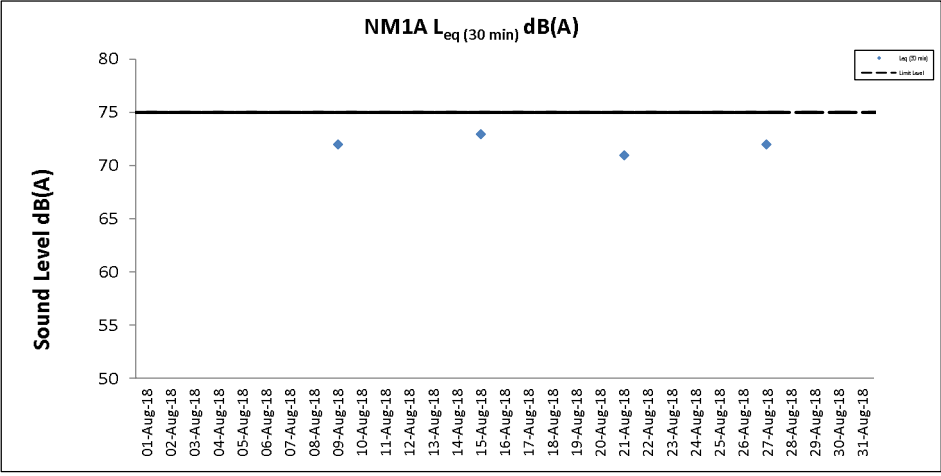
Noise Measurement Results

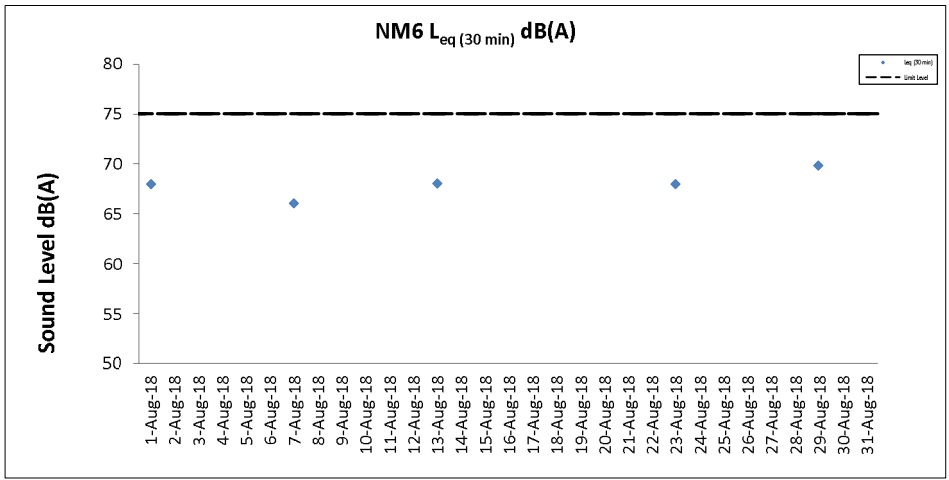
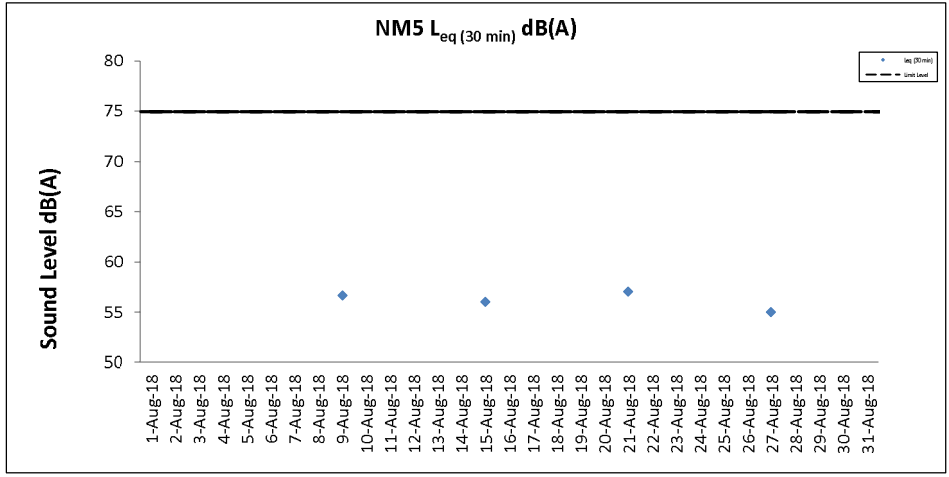
Station: NM6- House No.1 Sha Lo Wan

Date	Weather	Time	Measured L ₁₀ dB(A)	Measured L ₉₀ dB(A)	L _{eq(30mins)} dB(A)
1-Aug-18	Sunny	10:03	73.5	52.0	68
1-Aug-18	Sunny	10:08	68.5	52.0	
1-Aug-18	Sunny	10:13	75.5	51.5	
1-Aug-18	Sunny	10:18	74.0	53.5	
1-Aug-18	Sunny	10:23	71.5	50.0	
1-Aug-18	Sunny	10:28	71.5	50.0	
7-Aug-18	Sunny	09:42	69.5	52.5	66
7-Aug-18	Sunny	9:47	66.0	51.0	
7-Aug-18	Sunny	9:52	64.0	52.0	
7-Aug-18	Sunny	9:57	66.5	52.5	
7-Aug-18	Sunny	10:02	68.5	52.5	
7-Aug-18	Sunny	10:07	68.5	55.0	
13-Aug-18	Sunny	09:41	68.0	54.0	68
13-Aug-18	Sunny	9:46	65.5	52.5	
13-Aug-18	Sunny	9:51	61.0	53.0	
13-Aug-18	Sunny	9:56	71.5	56.0	
13-Aug-18	Sunny	10:01	69.0	60.0	
13-Aug-18	Sunny	10:06	69.5	54.5	
23-Aug-18	Cloudy	9:48	66.0	52.5	68
23-Aug-18	Cloudy	9:53	71.5	55.5	
23-Aug-18	Cloudy	9:58	74.0	49.5	
23-Aug-18	Cloudy	10:03	64.5	47.5	
23-Aug-18	Cloudy	10:08	70.5	48.5	
23-Aug-18	Cloudy	10:13	75.0	50.5	
29-Aug-18	Cloudy	9:39	72.0	52.0	70
29-Aug-18	Cloudy	9:44	76.0	50.0	
29-Aug-18	Cloudy	9:49	75.5	48.5	
29-Aug-18	Cloudy	9:54	70.0	49.0	
29-Aug-18	Cloudy	9:59	68.5	48.0	
29-Aug-18	Cloudy	10:04	70.0	50.0	

Remarks:

+3dB (A) correction was applied to free-field 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 August 18 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	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA		
C1	Fine	Moderate	15:57	9.1	Surface	1.0	0.4	275	30.2	30.2	8.0	8.0	16.9	16.9	93.3	93.0	6.4	6.4	10.0	5.3	6	7	90	92	815603	804253	<0.2	1.9	1.8	1.8		
						1.0	0.4	287	30.2	8.0	8.0	16.9	16.9	92.6	91.8	6.4	6.4	9.9	5.3	7	7	90	92	<0.2	1.8	1.8	1.8					
						4.6	0.1	42	28.9	28.9	7.9	7.9	26.0	26.3	63.5	63.6	4.2	4.2	10.5	10.8	8	7	92	92	<0.2	1.8	1.8	1.8				
					4.6	0.1	43	28.9	28.9	7.9	7.9	26.6	26.3	63.6	63.6	4.2	4.2	10.5	10.8	8	7	92	92	<0.2	1.8	1.8	1.8					
					8.1	0.1	205	28.4	28.4	7.8	7.8	30.2	30.2	60.3	61.3	4.0	4.1	12.0	4.1	8	4.1	8	4.1	94	94	<0.2	1.8	1.8	1.8			
					8.1	0.1	225	28.4	28.4	7.8	7.8	30.2	30.2	62.3	61.3	4.1	4.1	12.1	4.1	8	4.1	8	4.1	94	94	<0.2	1.8	1.8	1.8			
C2	Fine	Moderate	14:38	12.3	Surface	1.0	0.4	150	30.0	30.0	8.1	8.1	15.8	15.8	91.8	91.8	6.4	6.4	8.9	6.1	5	7	86	88	825701	806918	<0.2	1.8	1.8	1.8		
						1.0	0.4	152	30.0	30.0	8.1	8.1	15.8	15.8	91.7	91.8	6.4	6.4	9.0	6.1	6	7	86	88	<0.2	1.8	1.8	1.8				
						6.2	0.2	164	29.7	29.7	8.1	8.1	17.7	17.7	84.4	84.3	5.8	5.8	12.7	12.7	7	7	88	88	<0.2	2.0	1.8	1.8				
					6.2	0.3	165	29.7	29.7	8.1	8.1	17.7	17.7	84.2	84.3	5.8	5.8	12.8	12.7	7	7	88	88	<0.2	1.8	1.8	1.8					
					11.3	0.5	160	29.7	29.7	8.1	8.1	20.2	20.2	83.8	83.9	5.7	5.7	16.4	16.4	8	5.7	8	5.7	90	90	<0.2	1.8	1.8	1.8			
					11.3	0.5	173	29.7	29.7	8.1	8.1	20.2	20.2	84.0	83.9	5.7	5.7	16.5	16.5	9	5.7	9	5.7	90	90	<0.2	1.7	1.8	1.7			
C3	Cloudy	Moderate	16:28	12.1	Surface	1.0	0.4	143	30.2	30.2	8.2	8.2	16.6	16.6	84.1	83.8	5.8	5.8	10.0	4.8	6	8	88	88	822110	817776	<0.2	1.6	1.7	1.8		
						1.0	0.4	143	30.2	30.2	8.2	8.2	16.6	16.6	83.5	83.8	5.8	5.8	10.1	4.8	8	8	88	88	<0.2	1.7	1.7	1.7				
						6.1	0.2	171	28.7	28.7	8.1	8.1	26.6	26.6	56.5	56.4	3.8	3.8	12.8	14.1	8	8	89	89	<0.2	1.7	1.7	1.7				
					6.1	0.2	171	28.7	28.7	8.1	8.1	26.6	26.6	56.3	56.4	3.8	3.8	13.0	14.1	9	8	90	90	<0.2	1.7	1.7	1.7					
					11.1	0.4	157	28.3	28.3	8.0	8.0	29.8	29.8	60.6	60.8	4.0	4.0	19.4	4.0	9	4.0	92	92	<0.2	2.0	2.0	2.0					
					11.1	0.4	166	28.3	28.3	8.0	8.0	29.8	29.8	61.0	60.8	4.0	4.0	19.4	4.0	8	4.0	93	93	<0.2	2.3	2.3	2.3					
IM1	Fine	Moderate	15:36	5.6	Surface	1.0	0.2	219	30.1	30.1	7.9	7.9	15.4	15.4	94.3	94.3	6.5	6.5	14.1	6.5	6	6	85	85	817942	807128	<0.2	1.9	1.7	1.8		
						1.0	0.2	231	30.1	30.1	7.9	7.9	15.4	15.4	94.3	94.3	6.5	6.5	14.2	6.5	4	6	86	86	<0.2	1.7	1.7	1.7				
						2.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-
					2.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-	-
					4.6	0.2	152	29.8	29.8	7.9	7.9	17.5	17.5	92.2	92.4	6.4	6.4	27.2	6.4	6	6.4	6	6.4	90	90	<0.2	1.6	1.6	1.6			
					4.6	0.2	155	29.8	29.8	7.9	7.9	17.5	17.5	92.5	92.4	6.4	6.4	26.9	6.4	7	6.4	7	6.4	90	90	<0.2	1.8	1.8	1.8			
IM2	Fine	Moderate	15:27	8.0	Surface	1.0	0.1	2	30.3	30.3	8.0	8.0	15.9	15.9	96.4	96.3	6.6	6.6	9.4	6.5	4	5	88	89	818188	806137	<0.2	1.7	1.8	1.8		
						1.0	0.1	2	30.3	30.3	8.0	8.0	15.9	15.9	96.2	96.3	6.6	6.6	9.6	6.5	4	5	89	89	<0.2	1.8	1.8	1.8				
						4.0	0.1	196	30.2	30.2	8.0	8.0	16.0	16.0	92.6	92.5	6.4	6.4	12.5	6.4	5	5	90	90	<0.2	1.9	1.9	1.9				
					4.0	0.1	211	30.2	30.2	8.0	8.0	16.0	16.0	92.4	92.5	6.4	6.4	12.7	6.4	6	5	90	90	<0.2	2.0	2.0	2.0					
					7.0	0.3	77	29.0	29.0	7.8	7.8	27.0	27.0	67.7	68.0	4.5	4.5	19.4	4.5	7	4.5	7	4.5	92	92	<0.2	1.8	1.8	1.8			
					7.0	0.3	78	29.0	29.0	7.8	7.8	27.0	27.0	68.2	68.0	4.5	4.5	19.2	4.5	5	4.5	92	92	<0.2	1.8	1.8	1.8					
IM3	Fine	Moderate	15:15	8.1	Surface	1.0	0.2	12	30.2	30.2	7.9	7.9	15.9	15.9	89.2	89.1	6.2	6.2	10.1	5.8	5	5	85	86	818795	805594	<0.2	1.9	1.8	1.8		
						1.0	0.2	12	30.2	30.2	7.9	7.9	15.9	15.9	88.9	89.1	6.1	6.1	10.2	5.8	4	5	86	86	<0.2	1.8	1.8	1.8				
						4.1	0.1	17	29.7	29.7	7.9	7.9	17.5	17.5	79.9	79.8	5.5	5.5	12.8	5.5	6	5	90	90	<0.2	1.9	1.9	1.9				
					4.1	0.1	18	29.7	29.7	7.9	7.9	17.6	17.5	79.6	79.8	5.5	5.5	12.9	5.5	5	5	90	90	<0.2	1.9	1.9	1.9					
					7.1	0.4	73	29.1	29.1	7.8	7.8	26.2	26.2	72.3	72.6	4.8	4.8	21.0	4.8	6	4.8	6	4.8	92	92	<0.2	1.8	1.8	1.8			
					7.1	0.4	79	29.1	29.1	7.8	7.8	26.2	26.2	72.8	72.6	4.8	4.8	21.0	4.8	5	4.8	92	92	<0.2	1.6	1.6	1.6					
IM4	Fine	Moderate	15:04	7.9	Surface	1.0	0.4	15	30.1	30.1	7.9	7.9	16.8	16.8	87.5	87.5	6.0	6.0	9.3	5.6	3	4	90	90	819703	804587	<0.2	1.8	1.7	1.8		
						1.0	0.4	15	30.1	30.1	7.9	7.9	16.8	16.8	87.5	87.5	6.0	6.0	9.3	5.6	4	4	90	90	<0.2	1.7	1.7	1.7				
						4.0	0.1	33	29.5	29.5	7.9	7.9	19.4	19.4	74.4	74.5	5.1	5.1	15.7	5.1	4	4	92	92	<0.2	2.0	2.0	2.0				
					4.0	0.1	33	29.5	29.5	7.9	7.9	19.4	19.4	74.5	74.5	5.1	5.1	15.9	5.1	4	4	92	92	<0.2	1.7	1.7	1.7					
					6.9	0.3	67	29.2	29.2	7.8	7.8	25.0	25.0	71.9	72.2	4.8	4.8	23.8	4.8	4	4.8	4	4.8	93	93	<0.2	1.7	1.7	1.7			
					6.9	0.3	69	29.2	29.2	7.8	7.8	25.0	25.0	72.4	72.2	4.8	4.8	23.8	4.8	4	4.8	4	4.8	93	93	<0.2	1.8	1.8	1.8			
IM5	Fine	Moderate	14:53	7.6	Surface	1.0	0.4	354	30.6	30.6	8.0	8.0	14.7	14.7	91.8	91.7	6.3	6.3	9.8	5.6	3	4	87	88	820754	804866	<0.2	2.0	1.6	1.7		
						1.0	0.4	359	30.6	30.6	8.0	8.0	14.7	14.7	91.5	91.7	6.3	6.3	9.9	5.6	4	4	88	88	<0.2	1.6	1.6	1.6				
						3.8	0.4	14	29.5	29.5	7.9	7.9	21.8	21.8	72.8	72.8	4.9	4.9	18.5	4.9	4	4	90	90	<0.2	1.6	1.6	1.6				
					3.8	0.4	14	29.5	29.5	7.9	7.9	21.8	21.8	72.8	72.8	4.9	4.9	18.6	4.9	5	4	91	91	<0.2	1.6	1.6	1.6					
					6.6	0.3	30	29.5	29.5	7.9	7.9	22.6	22.6	76.6	76.8	5.2	5.2	20.5	5.2	5	5.2	5	5.2	92	92	<0.2	1.7	1.7	1.7			
					6.6	0.3	30	29.5	29.5	7.9	7.9	22.6	22.6	77.0	76.8	5.2	5.2	20.3	5.2	4	5.2	4	5.2	92	92	<0.2	1.8	1.8	1.8			
IM6	Fine	Moderate	14:43	7.4	Surface	1.0	0.4	23	30.0	30.0	8.0	8.0	16.1	16.1	88.9	88.9	6.2	6.2	10.0	6.0	3	4	86	86	821070	805805	<0.2	1.7	1.8	1.8		
						1.0	0.4	24	30.0																							

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

Water Quality Monitoring

Water Quality Monitoring Results on 02 August 18 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	DA	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA			
									Value	DA	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA	
C1	Cloudy	Moderate	10:24	9.3	Surface	1.0	0.5	34	29.8	29.8	8.0	8.0	16.4	16.4	84.9	84.8	5.9	5.5	13.5	29.3	6	6	87	91	815598	804241	<0.2	1.8	1.8	1.8			
						1.0	0.5	36	29.8	8.0	8.0	16.4	16.4	84.7	84.8	5.9	5.5	13.6	29.3	5	6	88	91	<0.2	1.6	1.8	1.8						
						4.7	0.4	27	29.5	8.0	8.0	19.8	19.8	75.0	74.9	5.1	5.1	24.8	29.3	5	6	92	91	<0.2	1.9	1.8	1.8						
					4.7	0.4	27	29.5	8.0	8.0	19.8	19.8	74.8	74.9	5.1	5.1	25.1	29.3	6	6	92	91	<0.2	1.8	1.8	1.8							
					8.3	0.3	28	29.1	7.9	7.9	26.6	26.6	63.4	63.5	4.2	4.2	49.6	29.3	6	6	94	91	<0.2	1.7	1.8	1.8							
					8.3	0.3	29	29.1	7.9	7.9	26.6	26.6	63.6	63.5	4.2	4.2	49.2	29.3	7	6	94	91	<0.2	1.8	1.8	1.8							
C2	Fine	Moderate	11:21	12.6	Surface	1.0	0.9	12	29.9	29.9	8.1	8.1	18.1	18.1	90.4	90.4	6.2	6.0	11.3	13.0	6	7	88	90	825692	806966	<0.2	1.9	1.9	1.9			
						1.0	0.9	12	29.9	8.1	8.1	18.1	18.1	90.3	90.4	6.2	6.0	11.3	13.0	6	7	88	90	<0.2	2.0	1.8	1.9						
						6.3	0.5	346	29.8	8.1	8.1	19.1	19.1	85.4	85.4	5.8	5.8	12.7	13.0	8	7	89	90	<0.2	1.8	1.8	1.9						
					6.3	0.5	318	29.8	8.1	8.1	19.1	19.1	85.4	85.4	5.8	5.8	12.7	13.0	8	7	90	91	<0.2	1.9	1.8	1.9							
					11.6	0.6	340	29.8	8.1	8.1	19.9	19.9	84.3	84.4	5.7	5.7	15.0	13.0	7	7	91	91	<0.2	1.9	1.8	1.8							
					11.6	0.6	347	29.8	8.1	8.1	19.9	19.9	84.4	84.4	5.7	5.7	15.0	13.0	8	7	91	91	<0.2	1.8	1.8	1.8							
C3	Cloudy	Moderate	09:00	11.2	Surface	1.0	0.6	34	30.1	30.1	8.2	8.2	17.6	17.6	94.3	94.2	6.5	6.2	7.7	10.9	4	5	86	88	822089	817796	<0.2	2.0	1.8	1.8			
						1.0	0.6	37	30.1	8.2	8.2	17.6	17.6	94.1	94.2	6.5	6.2	7.7	10.9	6	5	85	88	<0.2	1.8	1.8	1.8						
						5.6	0.5	212	30.1	8.1	8.1	18.5	18.5	85.9	85.9	5.9	5.9	9.4	10.9	5	5	88	88	<0.2	1.7	1.8	1.8						
					5.6	0.5	225	30.1	8.1	8.1	18.5	18.5	85.8	85.9	5.9	5.9	9.4	10.9	6	5	88	88	<0.2	2.0	1.7	1.8							
					10.2	0.4	247	29.3	8.0	8.0	24.9	24.9	70.4	70.6	4.7	4.7	15.5	10.9	6	5	90	90	<0.2	1.7	1.8	1.8							
					10.2	0.5	262	29.3	8.0	8.0	24.9	24.9	70.8	70.6	4.7	4.7	15.4	10.9	5	5	90	90	<0.2	1.8	1.8	1.8							
IM1	Cloudy	Moderate	10:41	5.4	Surface	1.0	0.3	27	29.9	29.9	8.0	8.0	15.4	15.4	91.6	91.6	6.4	6.4	9.2	9.3	5	5	88	90	817961	807105	<0.2	1.6	1.7	1.7			
						1.0	0.4	28	29.9	8.0	8.0	15.4	15.4	91.6	91.6	6.4	6.4	9.2	9.3	4	5	89	90	<0.2	1.6	1.7	1.7						
						2.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					2.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					4.4	0.2	346	29.9	8.0	8.0	16.4	16.4	91.9	91.9	6.4	6.4	9.3	9.3	5	5	90	90	5	5	90	91	<0.2	1.7	1.7	1.7			
					4.4	0.2	318	29.9	8.0	8.0	16.4	16.4	91.9	91.9	6.4	6.4	9.3	9.3	5	5	91	91	5	5	91	91	<0.2	1.7	1.7	1.7			
IM2	Cloudy	Moderate	10:50	7.8	Surface	1.0	0.5	38	29.9	29.9	8.0	8.0	14.7	14.7	88.7	88.6	6.2	6.1	9.7	12.2	4	6	86	88	818172	806175	<0.2	1.8	1.7	1.7			
						1.0	0.5	38	29.9	8.0	8.0	14.8	14.7	88.5	88.6	6.2	6.1	9.8	12.2	6	6	86	88	<0.2	1.7	1.7	1.7						
						3.9	0.5	35	29.6	8.0	8.0	16.9	16.9	86.9	86.9	6.0	6.0	11.6	12.2	5	6	88	88	<0.2	1.7	1.7	1.7						
					3.9	0.6	37	29.6	8.0	8.0	16.9	16.9	86.9	86.9	6.0	6.0	11.7	12.2	6	6	88	88	<0.2	1.6	1.7	1.7							
					6.8	0.3	13	29.7	8.0	8.0	18.1	18.1	87.5	87.6	6.0	6.0	15.3	12.2	6	6	90	90	<0.2	1.7	1.7	1.7							
					6.8	0.4	13	29.7	8.0	8.0	18.1	18.1	87.7	87.6	6.0	6.0	15.3	12.2	6	6	90	90	<0.2	1.7	1.7	1.7							
IM3	Fine	Moderate	10:58	8.5	Surface	1.0	0.4	32	30.0	30.0	8.0	8.0	14.7	14.7	87.1	87.1	6.1	5.9	10.8	17.9	4	4	88	90	818783	805610	<0.2	1.8	1.8	1.8			
						1.0	0.4	33	30.0	8.0	8.0	14.7	14.7	87.0	87.1	6.1	5.9	10.9	17.9	4	4	88	90	<0.2	1.7	1.8	1.8						
						4.3	0.6	30	29.6	8.0	8.0	17.5	17.5	82.8	82.7	5.7	5.7	15.4	17.9	4	4	89	90	<0.2	1.8	1.8	1.8						
					4.3	0.6	32	29.6	8.0	8.0	17.5	17.5	82.6	82.7	5.7	5.7	15.6	17.9	4	4	90	90	<0.2	1.7	1.8	1.8							
					7.5	0.5	20	29.5	8.0	8.0	21.9	21.9	81.5	81.7	5.5	5.5	27.5	17.9	4	4	92	90	<0.2	1.8	1.8	1.8							
					7.5	0.5	20	29.5	8.0	8.0	21.9	21.9	81.8	81.7	5.5	5.5	26.9	17.9	5	4	92	90	<0.2	1.8	1.8	1.8							
IM4	Fine	Moderate	11:09	8.2	Surface	1.0	0.5	11	30.3	30.2	7.9	7.9	14.1	14.0	87.2	87.2	6.1	5.8	9.6	13.8	3	3	88	90	819718	804620	<0.2	1.9	1.8	1.8			
						1.0	0.6	11	30.2	7.9	7.9	14.1	14.0	87.1	87.2	6.1	5.8	9.6	13.8	3	3	88	90	<0.2	1.8	1.8	1.8						
						4.1	0.7	6	29.6	8.0	8.0	17.4	17.4	79.0	78.9	5.5	5.5	12.0	13.8	3	3	89	90	<0.2	1.8	1.8	1.8						
					4.1	0.7	6	29.6	8.0	8.0	17.4	17.4	78.1	78.9	5.4	5.4	12.2	13.8	3	3	90	90	<0.2	1.8	1.8	1.8							
					7.2	0.5	355	29.5	7.9	7.9	23.3	23.3	76.1	76.1	5.1	5.1	19.7	13.8	4	4	92	90	<0.2	1.8	1.8	1.8							
					7.2	0.5	327	29.5	7.9	7.9	23.3	23.3	76.5	76.3	5.1	5.1	19.8	13.8	3	4	92	90	<0.2	1.8	1.8	1.8							
IM5	Fine	Moderate	11:19	7.5	Surface	1.0	0.7	23	30.0	30.0	8.0	8.0	16.5	16.5	87.2	87.2	6.0	5.9	9.2	14.6	4	4	88	90	820742	804847	<0.2	1.7	1.7	1.7			
						1.0	0.7	24	30.0	8.0	8.0	16.5	16.5	87.2	87.2	6.0	5.9	9.3	14.6	3	4	88	90	<0.2	1.8	1.7	1.7						
						3.8	0.7	30	29.7	8.0	8.0	17.8	17.8	82.7	82.7	5.7	5.7	12.1	14.6	4	4	90	90	<0.2	1.8	1.7	1.7						
					3.8	0.7	30	29.7	8.0	8.0	17.8	17.8	82.6	82.7	5.7	5.7	12.3	14.6	3	4	90	90	<0.2	1.7	1.7	1.7							
					6.5	0.5	43	29.5	7.9	7.9	22.9	22.9	81.3	81.6	5.5	5.5	22.2	14.6	4	4	92	90	<0.2	1.6	1.6	1.6							
					6.5	0.6	45	29.5	7.9	7.9	22.9	22.9	81.8	81.6	5.5	5.5	22.2	14.6	4	4	92	90	<0.2	1.6	1.6	1.6							
IM6	Fine	Moderate	11:33	7.7	Surface	1.0	0.6	12	30.0	30.0	8.0	8.0	18.3	18.3	87.8	87.8	6.0	5.9	11.1	12.2	6	6	88	90	821071	805857	<0.2	1.7	1.8	1.7			
						1.0	0.6	12	30.0	8.0	8.0	18.3	18.3	87.7	87.8	6.0	5.9	11.2	12.2	5	6	89	90	<0.2	1.8	1.8	1.8						
						3.9	0.5	16	29.8	8.0	8.0	19.0	19.0	84.9	84.9	5.8	5.8	11.9	12.2	7	6	90	90	<0.2	1.8	1.8	1.8						
					3.9	0.5	16	29.8	8.0	8.0	19.0	19.0	84.8	84.9	5.8	5.8	11.9</																

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

Water Quality Monitoring

Water Quality Monitoring Results on 02 August 18 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	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA			
IM9	Fine	Moderate	10:19	8.2	Surface	1.0	0.2	329	30.2	30.2	8.0	8.0	13.9	13.9	89.9	89.9	6.3	6.3	8.9	6.0	3	4	88	90	822071	808805	<0.2	<0.2	2.0	1.8					
						1.0	0.2	343	30.2	8.0	8.0	13.9	13.9	89.8	89.8	6.3	6.3	8.9	6.0	4	4	88	90	822071	808805	<0.2	<0.2	1.8	1.8						
						4.1	0.1	319	29.6	29.6	8.1	8.1	17.0	17.0	82.2	82.1	5.7	5.7	12.2	13.0	4	4	89	90	822071	808805	<0.2	<0.2	1.8	1.8					
					Middle	4.1	0.1	325	29.6	29.6	8.1	8.1	17.0	17.0	82.0	82.1	5.7	5.7	12.4	13.0	4	4	90	90	822071	808805	<0.2	<0.2	1.8	1.8					
						7.2	0.3	310	29.5	29.5	8.1	8.1	21.8	21.8	83.5	83.5	5.7	5.7	17.9	17.9	5	4	92	90	822071	808805	<0.2	<0.2	1.9	1.8					
						7.2	0.3	329	29.5	29.5	8.1	8.1	21.9	21.8	84.4	84.0	5.7	5.7	17.9	17.9	3	4	92	90	822071	808805	<0.2	<0.2	2.0	1.8					
IM10	Fine	Moderate	10:10	8.3	Surface	1.0	0.2	315	29.9	29.9	8.1	8.1	15.0	15.0	89.1	89.1	6.2	6.2	9.7	6.0	4	4	89	92	822358	809774	<0.2	<0.2	1.8	1.8					
						1.0	0.2	338	29.9	29.9	8.1	8.1	15.0	15.0	89.0	89.1	6.2	6.2	9.8	6.0	4	4	89	92	822358	809774	<0.2	<0.2	1.8	1.8					
						4.2	0.2	278	29.6	29.6	8.1	8.1	17.2	17.2	83.7	83.6	5.8	5.8	14.5	15.4	4	4	92	92	822358	809774	<0.2	<0.2	1.9	1.8					
					Middle	4.2	0.2	291	29.6	29.6	8.1	8.1	17.2	17.2	83.5	83.6	5.8	5.8	14.5	15.4	5	4	92	92	822358	809774	<0.2	<0.2	1.8	1.8					
						7.3	0.4	326	29.6	29.6	8.1	8.1	20.0	20.0	81.3	81.3	5.6	5.6	21.9	21.9	4	4	93	92	822358	809774	<0.2	<0.2	1.8	1.8					
						7.3	0.4	331	29.6	29.6	8.1	8.1	20.0	20.0	81.4	81.4	5.6	5.6	22.1	22.1	5	4	94	92	822358	809774	<0.2	<0.2	1.7	1.8					
IM11	Fine	Moderate	10:00	9.4	Surface	1.0	0.3	347	30.0	30.0	8.1	8.1	14.5	14.5	91.0	91.0	6.4	6.4	8.8	6.2	4	4	87	90	822035	811436	<0.2	<0.2	1.9	1.8					
						1.0	0.3	319	30.0	30.0	8.1	8.1	14.5	14.5	90.9	90.9	6.4	6.4	8.8	6.2	4	4	88	90	822035	811436	<0.2	<0.2	1.8	1.8					
						4.7	0.2	322	29.6	29.6	8.1	8.1	16.8	16.8	86.8	86.7	6.0	6.0	14.0	13.9	4	4	89	90	822035	811436	<0.2	<0.2	1.6	1.8					
					Middle	4.7	0.2	324	29.6	29.6	8.1	8.1	16.9	16.8	86.5	86.7	6.0	6.0	14.9	14.0	4	4	90	92	822035	811436	<0.2	<0.2	1.8	1.8					
						8.4	0.5	270	29.7	29.7	8.1	8.1	19.5	19.5	84.4	84.5	5.8	5.8	18.6	18.6	4	4	92	92	822035	811436	<0.2	<0.2	1.8	1.8					
						8.4	0.5	289	29.7	29.7	8.1	8.1	19.5	19.5	84.5	84.5	5.8	5.8	18.5	18.5	5	4	92	92	822035	811436	<0.2	<0.2	1.9	1.8					
IM12	Cloudy	Moderate	09:51	8.2	Surface	1.0	0.2	282	30.0	30.0	8.1	8.1	14.9	14.9	94.0	94.0	6.6	6.6	8.5	6.6	2	4	88	90	821475	812029	<0.2	<0.2	1.9	1.8					
						1.0	0.2	302	30.0	30.0	8.1	8.1	14.9	14.9	94.0	94.0	6.6	6.6	8.6	6.6	4	4	89	90	821475	812029	<0.2	<0.2	1.8	1.8					
						4.1	0.4	286	29.8	29.8	8.1	8.1	16.1	16.1	93.9	93.9	6.5	6.5	9.5	9.2	5	4	89	90	821475	812029	<0.2	<0.2	2.0	1.8					
					Middle	4.1	0.4	305	29.8	29.8	8.1	8.1	16.1	16.1	93.9	93.9	6.5	6.5	9.4	9.2	4	4	89	90	821475	812029	<0.2	<0.2	1.8	1.8					
						7.2	0.3	317	29.8	29.8	8.1	8.1	16.4	16.4	94.1	94.1	6.5	6.5	9.6	9.6	4	4	92	92	821475	812029	<0.2	<0.2	1.9	1.9					
						7.2	0.3	346	29.8	29.8	8.1	8.1	16.4	16.4	94.1	94.1	6.5	6.5	9.6	9.6	4	4	92	92	821475	812029	<0.2	<0.2	1.9	1.9					
SR2	Cloudy	Moderate	09:23	4.7	Surface	1.0	0.0	240	29.7	29.7	8.1	8.1	15.8	15.8	86.7	86.5	6.0	6.0	14.8	6.0	4	4	88	89	821490	814166	<0.2	<0.2	1.7	1.7					
						1.0	0.0	244	29.7	29.7	8.1	8.1	15.8	15.8	86.3	86.3	6.0	6.0	15.1	15.1	4	4	88	88	821490	814166	<0.2	<0.2	1.7	1.7					
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						3.7	0.0	325	29.5	29.5	8.1	8.1	19.3	19.3	88.5	88.7	6.1	6.1	18.4	18.4	4	4	90	90	821490	814166	<0.2	<0.2	1.9	1.8					
SR3	Fine	Moderate	10:53	9.6	Surface	1.0	0.4	28	30.0	30.0	8.1	8.1	18.0	18.0	90.4	90.4	6.2	6.2	10.4	6.1	9	10	-	-	822152	807566	-	-	-	-					
						1.0	0.5	30	30.0	30.0	8.1	8.1	18.0	18.0	90.4	90.4	6.2	6.2	10.4	10.4	8	10	-	-	822152	807566	-	-	-	-					
						4.8	0.3	11	29.8	29.8	8.1	8.1	19.3	19.3	86.1	86.1	5.9	5.9	12.1	11.8	9	10	-	-	822152	807566	-	-	-	-					
					Middle	4.8	0.3	11	29.8	29.8	8.1	8.1	19.3	19.3	86.1	86.1	5.9	5.9	12.2	12.2	10	10	-	-	822152	807566	-	-	-	-					
						8.6	0.2	332	29.8	29.8	8.1	8.1	19.8	19.8	86.8	86.9	5.9	5.9	13.0	13.0	11	11	-	-	822152	807566	-	-	-	-					
						8.6	0.2	356	29.8	29.8	8.1	8.1	19.8	19.8	86.9	86.9	5.9	5.9	12.9	12.9	12	12	-	-	822152	807566	-	-	-	-					
SR4A	Cloudy	Calm	10:01	9.4	Surface	1.0	0.1	128	30.2	30.2	8.0	8.0	18.1	18.1	89.5	89.4	6.1	6.1	9.0	5.7	3	4	-	-	817206	807786	-	-	-	-					
						1.0	0.1	139	30.2	30.2	8.0	8.0	18.1	18.1	89.2	89.2	6.1	6.1	9.1	11.6	3	4	-	-	817206	807786	-	-	-	-					
						4.7	0.1	232	30.0	30.0	8.0	8.0	19.4	19.4	76.2	76.0	5.2	5.2	11.3	11.4	4	4	-	-	817206	807786	-	-	-	-					
					Middle	4.7	0.1	243	30.0	30.0	8.0	8.0	19.4	19.4	75.8	75.8	5.2	5.2	11.4	11.4	4	4	-	-	817206	807786	-	-	-	-					
						8.4	0.2	235	29.4	29.4	7.9	7.9	25.2	25.2	71.8	72.1	4.8	4.8	14.5	14.5	4	4	-	-	817206	807786	-	-	-	-					
						8.4	0.2	244	29.4	29.4	7.9	7.9	25.2	25.2	72.3	72.3	4.8	4.8	14.5	14.5	4	4	-	-	817206	807786	-	-	-	-					
SR5A	Cloudy	Calm	09:43	4.7	Surface	1.0	0.3	309	30.3	30.3	8.0	8.0	20.2	20.2	86.2	86.3	5.8	5.8	14.9	5.8	7	7	-	-	816587	810679	-	-	-	-					
						1.0	0.3	333	30.3	30.3	8.0	8.0	20.2	20.2	86.3	86.3	5.8	5.8	14.9	16.1	6	7	-	-	816587	810679	-	-	-	-					
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
						3.7	0.2	302	30.3	30.3	8.0	8.0	20.2	20.2	86.9	87.0	5.9	5.9	17.0	17.0	7	7	-	-	816587	810679	-	-	-	-					
						3.7	0.2	311	30.3	30.3	8.0	8.0	20.2	20.2	87.1	87.0	5.9	5.9	17.5	17.5	8														

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

Water Quality Monitoring

Water Quality Monitoring Results on 04 August 18 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	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	16:59	8.6	Surface	1.0	0.3	210	30.3	8.2	8.2	20.6	20.6	105.5	105.5	7.1	7.0	11.6	14.5	10	9	85	88	815630	804276	<0.2	1.8	<0.2	1.8					
						1.0	0.3	211	30.3	8.2	8.2	20.6	20.6	105.5	105.5	7.1	7.0	11.6	14.5	9	9	86	88	<0.2	1.8	<0.2	1.8							
						4.3	0.3	219	30.3	8.2	8.2	22.6	22.6	104.3	104.3	6.9	6.8	13.5	14.5	9	9	88	88	<0.2	1.8	<0.2	1.8							
					Middle	4.3	0.3	237	30.3	8.2	8.2	22.6	22.6	104.3	104.3	6.9	6.8	13.5	14.5	8	9	88	88	<0.2	1.8	<0.2	1.8							
						7.6	0.5	198	30.2	8.2	8.2	24.5	24.5	103.0	103.0	6.8	6.8	18.3	14.5	8	9	90	88	<0.2	1.9	<0.2	1.9							
						7.6	0.5	205	30.2	8.2	8.2	24.5	24.5	103.0	103.0	6.8	6.8	18.3	14.5	9	9	91	88	<0.2	1.8	<0.2	1.8							
C2	Fine	Moderate	16:02	12.1	Surface	1.0	0.4	176	30.1	7.9	7.9	14.7	14.7	89.9	89.9	6.3	6.0	15.3	15.0	3	4	86	88	825652	806928	<0.2	0.8	<0.2	0.8					
						1.0	0.4	186	30.1	7.9	7.9	14.7	14.7	89.9	89.9	6.3	6.0	15.4	15.0	3	4	86	88	<0.2	0.9	<0.2	0.9							
						6.1	0.3	165	29.8	7.9	7.9	21.4	21.4	82.8	82.8	5.6	5.5	13.7	15.0	4	4	88	88	<0.2	0.8	<0.2	0.8							
					Middle	6.1	0.3	179	29.8	7.9	7.9	21.4	21.4	82.7	82.8	5.6	5.5	13.8	15.0	4	4	88	88	<0.2	0.8	<0.2	0.8							
						11.1	0.5	160	29.3	7.9	7.9	22.0	22.0	80.5	80.6	5.5	5.5	16.0	15.0	4	4	90	88	<0.2	0.8	<0.2	0.8							
						11.1	0.5	175	29.4	7.9	7.9	22.0	22.0	80.7	80.6	5.5	5.5	16.0	15.0	4	4	90	88	<0.2	0.8	<0.2	0.8							
C3	Fine	Moderate	17:56	12.3	Surface	1.0	0.4	143	29.2	8.0	8.0	22.7	22.7	87.5	87.5	5.9	5.9	11.4	10.5	4	4	86	88	822090	817813	<0.2	0.8	<0.2	0.8					
						1.0	0.4	144	29.2	8.0	8.0	22.7	22.7	87.5	87.5	5.9	5.9	11.4	10.5	4	4	85	89	<0.2	0.7	<0.2	0.7							
						6.2	0.2	198	29.2	8.0	8.0	26.0	26.0	87.5	87.5	5.8	5.8	10.0	10.5	5	4	89	88	<0.2	0.8	<0.2	0.8							
					Middle	6.2	0.2	217	29.2	8.0	8.0	26.0	26.0	87.5	87.5	5.8	5.8	10.0	10.5	4	4	88	88	<0.2	0.8	<0.2	0.8							
						11.3	0.4	173	29.2	8.0	8.0	26.5	26.5	88.0	88.0	5.8	5.8	10.0	10.5	5	4	90	88	<0.2	0.7	<0.2	0.7							
						11.3	0.5	178	29.2	8.0	8.0	26.5	26.5	88.0	88.0	5.8	5.8	10.0	10.5	4	4	90	88	<0.2	0.7	<0.2	0.7							
IM1	Cloudy	Moderate	16:43	5.4	Surface	1.0	0.1	155	30.3	8.2	8.2	22.1	22.1	103.9	103.9	6.9	6.9	9.6	10.5	5	6	85	86	817949	807130	<0.2	1.7	<0.2	1.5					
						1.0	0.1	156	30.3	8.2	8.2	22.2	22.1	103.9	103.9	6.9	6.9	9.6	10.5	6	6	86	86	<0.2	1.5	<0.2	1.5							
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	-	<0.2	-		
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	-
						4.4	0.2	170	30.3	8.2	8.2	22.4	22.4	102.4	102.4	6.8	6.8	11.4	10.5	6	6	89	88	<0.2	1.7	<0.2	1.7							
						4.4	0.2	185	30.3	8.2	8.2	22.4	22.4	102.4	102.4	6.8	6.8	11.4	10.5	7	6	89	88	<0.2	1.7	<0.2	1.7							
IM2	Cloudy	Moderate	16:37	8.9	Surface	1.0	0.2	190	30.4	8.2	8.2	19.0	19.0	104.1	104.1	7.0	7.0	10.5	11.2	10	11	85	86	818179	806167	<0.2	1.4	<0.2	1.5					
						1.0	0.3	205	30.4	8.2	8.2	19.0	19.0	104.1	104.1	7.0	7.0	10.5	11.2	11	11	86	87	<0.2	1.5	<0.2	1.5							
						4.5	0.3	198	30.3	8.2	8.2	21.0	21.0	102.9	102.9	6.9	6.9	11.7	11.2	11	11	87	87	<0.2	1.5	<0.2	1.5							
					Middle	4.5	0.3	202	30.3	8.2	8.2	21.0	21.0	102.9	102.9	6.9	6.9	11.7	11.2	11	11	87	87	<0.2	1.5	<0.2	1.5							
						7.9	0.1	125	30.3	8.2	8.2	22.1	22.1	102.4	102.4	6.8	6.8	11.4	11.2	12	11	88	88	<0.2	1.3	<0.2	1.3							
						7.9	0.1	135	30.3	8.2	8.2	22.1	22.1	102.4	102.4	6.8	6.8	11.4	11.2	11	11	88	88	<0.2	1.7	<0.2	1.7							
IM3	Cloudy	Moderate	16:32	8.5	Surface	1.0	0.2	201	30.4	8.2	8.2	18.0	18.0	104.2	104.2	7.1	7.1	10.3	10.9	7	8	86	86	818778	805564	<0.2	1.7	<0.2	1.8					
						1.0	0.2	219	30.4	8.2	8.2	18.0	18.0	104.2	104.2	7.1	7.1	10.3	10.9	8	8	86	87	<0.2	1.7	<0.2	1.7							
						4.3	0.2	176	30.4	8.2	8.2	20.1	20.1	103.3	103.3	7.0	7.0	10.9	10.9	8	8	87	88	<0.2	1.7	<0.2	1.7							
					Middle	4.3	0.2	185	30.4	8.2	8.2	20.1	20.1	103.3	103.3	7.0	7.0	10.9	10.9	8	8	87	88	<0.2	1.8	<0.2	1.8							
						7.5	0.1	194	30.3	8.2	8.2	20.7	20.7	102.8	102.8	6.9	6.9	11.4	11.4	9	9	89	89	<0.2	1.8	<0.2	1.8							
						7.5	0.1	194	30.3	8.2	8.2	20.8	20.8	102.8	102.8	6.9	6.9	11.4	11.4	9	9	89	89	<0.2	1.6	<0.2	1.6							
IM4	Cloudy	Moderate	16:24	8.1	Surface	1.0	0.3	165	30.4	8.2	8.2	17.6	17.6	104.8	104.8	7.2	7.2	11.5	11.6	8	8	85	86	819710	804608	<0.2	1.6	<0.2	1.7					
						1.0	0.3	166	30.4	8.2	8.2	17.7	17.6	104.8	104.8	7.2	7.2	11.5	11.6	7	8	86	86	<0.2	1.6	<0.2	1.6							
						4.1	0.2	170	30.4	8.2	8.2	17.9	17.9	104.2	104.2	7.1	7.1	11.1	11.6	8	8	87	86	<0.2	1.7	<0.2	1.7							
					Middle	4.1	0.2	178	30.4	8.2	8.2	17.9	17.9	104.2	104.2	7.1	7.1	11.1	11.6	8	8	86	86	<0.2	1.6	<0.2	1.6							
						7.1	0.2	162	30.3	8.2	8.2	18.3	18.3	103.1	103.1	7.0	7.0	12.2	12.2	8	8	89	89	<0.2	1.7	<0.2	1.7							
						7.1	0.3	175	30.2	8.2	8.2	18.3	18.3	103.1	103.1	7.0	7.0	12.2	12.2	9	8	89	89	<0.2	1.6	<0.2	1.6							
IM5	Cloudy	Moderate	16:15	7.4	Surface	1.0	0.2	154	30.3	8.1	8.1	16.4	16.4	100.8	100.8	6.9	6.9	12.5	15.5	8	8	86	86	820731	804838	<0.2	1.8	<0.2	1.8					
						1.0	0.2	159	30.3	8.1	8.1	16.4	16.4	100.8	100.8	6.9	6.9	12.5	15.5	7	8	86	88	<0.2	1.7	<0.2	1.7							
						3.7	0.1	241	30.3	8.1	8.1	16.4	16.4	100.1	100.1	6.9	6.9	16.8	15.5	8	8	88	89	<0.2	1.8	<0.2	1.8							
					Middle	3.7	0.1	248	30.3	8.1	8.1	16.4	16.4	100.1	100.1	6.9	6.9	16.8	15.5	7	8	89	88	<0.2	1.8	<0.2	1.8							
						6.4	0.2	265	30.2	8.1	8.1	16.4	16.5	100.1	100.3	6.9	6.9	18.2	15.5	7	8	88	89	<0.2	1.6	<0.2	1.6							
						6.4	0.2	288	30.2	8.1	8.1	16.5	16.5	100.5	100.3	6.9	6.9	16.1	15.5	8	8	89	89	<0.2	1.6	<0.2	1.6							
IM6	Cloudy	Moderate	16:08	7.3	Surface	1.0	0.3	150	30.3	8.1	8.1	16.1	16.1	100.7	100.7	6.9	6.9	13.6	16.4	8	8	85	86	821076	805830	<0.2	1.6	<0.2	1.5					
						1.0	0.3	151	30.3	8.1	8.1	16.1	16.1	100.7	100.7	6.9	6.9	13.6	16.4	8	8	86	87	<0.2	1.5	<0.2	1.5							
						3.7	0.3	187	30.3	8.1	8.1	16.2	16.2	100.0	100.1	6.9	6.9	14.9																

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

Water Quality Monitoring

Water Quality Monitoring Results on 04 August 18 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	DA	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA	Value	DA	Value	DA
IM9	Fine	Moderate	16:38	7.5	Surface	1.0	0.2	133	30.0	30.0	8.1	8.1	14.9	14.9	90.1	90.1	6.3	6.3	11.8	3	86	86	88	88	88	822077	808820	<0.2	1.0							
						1.0	0.2	137	30.0	8.1	8.1	14.9	14.9	90.1	90.1	6.3	6.3	11.8	2	88	88															
					Middle	3.8	0.2	104	29.7	29.7	8.1	8.1	15.8	15.8	85.7	85.6	6.0	6.0	13.0	2	88	88														
						3.8	0.2	108	29.7	29.7	8.1	8.1	15.8	15.8	85.5	85.6	6.0	6.0	13.1	3	88	88														
					Bottom	6.5	0.1	143	29.5	29.5	8.1	8.1	16.1	16.0	83.4	83.5	5.8	5.8	16.6	2	90	90														
						6.5	0.1	153	29.5	29.5	8.1	8.1	16.0	16.0	83.5	83.5	5.8	5.8	16.4	3	90	90														
IM10	Fine	Moderate	16:47	8.5	Surface	1.0	0.3	121	29.9	29.9	8.0	8.0	16.0	16.0	90.2	90.2	6.3	6.3	12.8	3	86	86	88	88	88	822381	809820	<0.2	1.2							
						1.0	0.3	122	29.9	29.9	8.0	8.0	16.0	16.0	90.2	90.2	6.3	6.3	12.8	2	86	86														
					Middle	4.3	0.3	101	29.7	29.7	8.1	8.1	17.2	17.2	86.6	86.6	6.0	6.0	13.5	3	88	88														
						4.3	0.3	102	29.7	29.7	8.1	8.1	17.2	17.2	86.6	86.6	6.0	6.0	13.5	2	88	88														
					Bottom	7.5	0.2	129	29.5	29.5	8.1	8.1	17.4	17.4	85.2	85.3	5.9	5.9	14.4	3	90	90														
						7.5	0.3	139	29.5	29.5	8.1	8.1	17.4	17.4	85.3	85.3	5.9	5.9	14.4	4	90	90														
IM11	Fine	Moderate	17:01	7.8	Surface	1.0	0.4	129	30.1	30.1	8.1	8.1	18.4	18.4	93.4	93.4	6.4	6.4	12.4	2	86	86	88	88	88	822055	811457	<0.2	1.4							
						1.0	0.4	134	30.1	30.1	8.1	8.1	18.4	18.4	93.4	93.4	6.4	6.4	12.4	3	86	86														
					Middle	3.9	0.4	113	29.7	29.7	8.1	8.1	21.1	21.1	87.9	87.9	5.9	5.9	14.6	2	88	88														
						3.9	0.4	116	29.7	29.7	8.1	8.1	21.0	21.1	87.8	87.9	5.9	5.9	14.8	2	88	88														
					Bottom	6.8	0.3	146	29.4	29.4	8.1	8.1	23.3	23.3	85.9	85.9	5.8	5.8	15.4	4	90	90														
						6.8	0.3	156	29.4	29.4	8.1	8.1	23.3	23.3	85.9	85.9	5.8	5.8	15.3	3	90	90														
IM12	Fine	Moderate	17:10	8.4	Surface	1.0	0.5	99	30.2	30.2	8.1	8.1	18.2	18.2	97.7	97.7	6.7	6.7	12.9	3	86	86	88	88	88	821436	812040	<0.2	0.8							
						1.0	0.5	102	30.2	30.2	8.1	8.1	18.2	18.2	97.6	97.7	6.7	6.7	12.9	2	86	86														
					Middle	4.2	0.5	102	29.9	29.9	8.1	8.1	20.1	20.1	93.8	93.8	6.4	6.4	14.6	3	88	88														
						4.2	0.5	105	29.9	29.9	8.1	8.1	20.2	20.1	93.7	93.8	6.4	6.4	14.7	4	88	88														
					Bottom	7.4	0.3	110	29.7	29.7	8.1	8.1	21.1	21.1	89.1	89.2	6.0	6.0	22.0	4	90	90														
						7.4	0.3	110	29.7	29.7	8.1	8.1	21.1	21.1	89.2	89.2	6.0	6.0	21.8	5	90	90														
SR2	Fine	Moderate	17:36	3.9	Surface	1.0	0.3	105	30.3	30.3	8.0	8.0	20.9	20.9	98.8	98.8	6.6	6.6	12.5	3	86	86	88	88	88	821472	814165	<0.2	0.7							
						1.0	0.3	106	30.3	30.3	8.0	8.0	20.9	20.9	98.7	98.8	6.6	6.6	12.5	4	86	86														
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						-	-	-	-	-	-	-
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						-	-	-	-	-	-	-
					Bottom	2.9	0.2	94	30.0	30.0	8.0	8.0	24.1	23.1	97.3	97.4	6.5	6.5	16.5	3	88	88														
						2.9	0.2	100	30.0	30.0	8.0	8.0	22.0	23.1	97.5	97.4	6.5	6.5	16.6	4	88	88														
SR3	Fine	Moderate	16:23	9.3	Surface	1.0	0.2	107	30.1	30.1	8.0	8.0	15.0	15.1	92.7	92.6	5.4	5.4	12.3	4	-	-	-	-	-	822159	807584	-	-							
						1.0	0.2	111	30.1	30.1	8.0	8.0	15.2	15.1	92.5	92.6	5.4	5.4	12.3	3	-	-														
					Middle	4.7	0.2	142	29.4	29.4	8.0	8.0	17.6	17.6	80.6	80.7	5.6	5.6	14.5	3	-	-														
						4.7	0.2	146	29.4	29.4	8.0	8.0	17.6	17.6	80.7	80.7	5.6	5.6	14.5	4	-	-														
					Bottom	8.3	0.2	215	29.5	29.5	8.0	8.0	18.2	18.2	82.9	83.0	5.7	5.7	18.4	3	-	-														
						8.3	0.2	224	29.5	29.5	8.0	8.0	18.2	18.2	83.1	83.1	5.7	5.7	18.3	3	-	-														
SR4A	Cloudy	Calm	17:21	8.3	Surface	1.0	0.1	342	30.3	30.3	8.2	8.2	21.2	21.2	101.5	101.5	6.8	6.8	11.5	5	-	-	-	-	-	817179	807825	-	-							
						1.0	0.1	353	30.3	30.3	8.2	8.2	21.2	21.2	101.5	101.5	6.8	6.8	11.5	5	-	-														
					Middle	4.2	0.1	301	30.3	30.3	8.2	8.2	21.2	21.2	100.9	100.9	6.8	6.8	13.6	6	-	-														
						4.2	0.1	304	30.3	30.3	8.2	8.2	21.2	21.2	100.9	100.9	6.8	6.8	13.6	7	-	-														
					Bottom	7.3	0.0	140	30.3	30.3	8.2	8.2	21.3	21.3	100.4	100.4	7.3	7.3	14.8	7	-	-														
						7.3	0.0	142	30.3	30.3	8.2	8.2	21.3	21.3	100.4	100.4	7.3	7.3	14.8	8	-	-														
SR5A	Cloudy	Calm	17:37	3.7	Surface	1.0	0.2	290	30.3	30.3	8.1	8.1	20.1	20.1	99.7	99.7	6.7	6.7	13.7	11	-	-	-	-	-	816580	810670	-	-							
						1.0	0.2	310	30.3	30.3	8.1	8.1	20.1	20.1	99.7	99.7	6.7	6.7	13.7	11	-	-														
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						-	-	-	-	-	-	-
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						-	-	-	-	-	-	
					Bottom	2.7	0.1	235	30.3	30.3	8.1	8.1	20.4	20.4	99.8	99.8	6.7	6.7	13.5	11	-	-														
						2.7	0.1	251	30.3	30.3	8.1	8.1	20.4	20.4	99.8	99.8	6.7	6.7	13.5	12	-	-														
SR6	Cloudy	Calm	17:58	3.9	Surface	1.0	0.2	22	30.2	30.2	8.1	8.1	19.9	19.9	97.2	97.2	6.6	6.6	13.0	5	-	-	-	-	-	817912	814667	-	-							
						1.0	0.2	22	30.2	30.2	8.1	8.1	19.9	19.9	97.2	97.2	6.6	6.6	13.0	5	-	-														
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						-	-	-	-	-	-	
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						-	-	-	-	-		
					Bottom	2.9	0.1	272	30.3	30.3	8.1	8.1	20.1	20.1	97.2	97.2	6.5	6.5	15.3	7	-	-														
						2.9	0.1	273	30.3	30.3	8.1	8.1	20.1	20.1	97.2	97.2	6.5	6.5	15.3	7	-	-														
SR7	Fine	Moderate	18:24	18.0	Surface	1.0	0.5	104	30.3	30.2	8.0	8.0	25.4	25.4	104.6	104.6	6.9	6.9	8.4	4	-	-	-	-	-	823640	823725	-	-							
						1.0	0.5	104	30.2	30.2	8.0	8.0	25.4	25.4	104.5	104.5	6.9	6.9	8.4	4	-	-														
					Middle	9.0	0.1	112	30.0	30.0	8.0	8.0	27.2	27.2	101.8	101.8	6.6	6.6	9.6	6	-	-														
						9.0	0.1	115	30.0	30.0	8.0	8.0	27.2	27.2	101.7	101.7	6.6	6.6	9.6	6	-	-														
					Bottom	17.0	0.2	107	30.0	30.0	8.0	8.0	28.2	28.2	101.7	101.8	6.6	6.6	12.3	5	-	-														
						17.0	0.3	116	30.0	30.0	8.0	8.0	28.2	28.2	101.8	101.8	6.6	6.6	12.4	5	-	-														
SR8	Fine	Moderate	17:20	4.0	Surface	1.0	-	-	30.1	30.1	8.1	8.1	20.8	20.8	99.1	99.2	6.7	6.7	14.2	4	-	-														

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

Water Quality Monitoring

Water Quality Monitoring Results on 04 August 18 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	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA			
C1	Fine	Moderate	12:30	9.4	Surface	1.0	0.5	56	28.9	28.9	8.1	8.1	22.9	22.9	101.4	101.4	6.9	6.9	10.3	10.3	9	9	85	85	88	815615	804223	<0.2	1.4	1.5					
						1.0	0.5	60	28.9	28.9	8.1	8.1	22.8	22.9	101.4	101.4	6.9	6.9	10.3	10.3	9	9	87	87				<0.2	1.4						
						4.7	0.4	50	28.9	28.9	8.1	8.1	23.8	23.8	101.6	101.6	6.9	6.9	20.0	20.0	9	9	89	89				<0.2	1.6						
					4.7	0.4	54	28.9	28.9	8.1	8.1	23.8	23.8	101.6	101.6	6.9	6.9	20.0	20.0	9	9	88	88	<0.2				1.4							
					8.4	0.3	33	29.2	29.2	8.1	8.1	17.6	17.6	100.2	100.2	7.0	7.0	11.1	11.1	11	11	90	90	<0.2				1.7							
					8.4	0.3	35	29.2	29.2	8.1	8.1	17.6	17.6	100.2	100.2	7.0	7.0	11.1	11.1	11	11	91	91	<0.2				1.6							
C2	Fine	Moderate	12:34	12.5	Surface	1.0	0.9	10	29.7	29.7	7.9	7.9	16.2	16.2	91.9	91.9	6.4	6.4	9.8	9.8	6	6	86	86	89	825681	806966	<0.2	0.7	0.7					
						1.0	0.9	10	29.7	29.7	7.9	7.9	16.2	16.2	91.8	91.9	6.4	6.4	9.8	9.8	6	6	87	87				<0.2	0.7						
						6.3	0.5	342	29.8	29.8	8.0	8.0	21.1	21.1	84.8	84.8	5.7	5.7	11.2	11.2	5	5	88	88				<0.2	0.6						
					6.3	0.6	315	29.8	29.8	8.0	8.0	21.1	21.1	84.8	84.8	5.7	5.7	11.3	11.3	6	6	89	89	<0.2				0.7							
					11.5	0.6	340	29.6	29.6	8.0	8.0	22.9	22.9	81.8	82.0	6.5	6.5	13.7	13.7	7	7	91	91	<0.2				0.7							
					11.5	0.7	340	29.6	29.6	8.0	8.0	22.9	22.9	82.1	82.0	6.5	6.5	13.8	13.8	6	6	91	91	<0.2				0.7							
C3	Fine	Moderate	10:44	11.9	Surface	1.0	0.6	32	29.7	29.7	8.0	8.0	23.7	23.7	86.9	86.9	5.8	5.8	7.9	7.9	6	6	86	86	88	822101	817773	<0.2	0.6	0.6					
						1.0	0.6	32	29.7	29.7	8.0	8.0	23.7	23.7	86.9	86.9	5.8	5.8	7.9	7.9	5	5	86	86				<0.2	0.7						
						6.0	0.5	234	29.5	29.4	8.0	8.0	25.7	25.7	74.5	74.4	4.9	4.9	9.4	9.4	5	5	88	88				<0.2	0.6						
					6.0	0.5	240	29.4	29.4	8.0	8.0	25.7	25.7	74.2	74.4	4.9	4.9	9.4	9.4	6	6	88	88	<0.2				0.7							
					10.9	0.4	240	27.7	27.7	8.0	8.0	26.0	26.0	71.8	72.0	4.9	4.9	11.3	11.3	6	6	90	90	<0.2				0.6							
					10.9	0.5	256	27.8	27.7	8.0	8.0	26.1	26.0	72.1	72.0	4.9	4.9	11.2	11.2	5	5	90	90	<0.2				0.6							
IM1	Fine	Moderate	12:30	5.3	Surface	1.0	0.3	39	29.1	29.1	8.1	8.1	19.3	19.3	99.7	99.7	6.9	6.9	9.9	9.9	11	11	85	85	87	817922	807144	<0.2	1.5	1.5					
						1.0	0.3	41	29.1	29.1	8.1	8.1	19.3	19.3	99.7	99.7	6.9	6.9	9.9	9.9	11	11	86	86				<0.2	1.5						
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-		-	-	-	-	-
					4.3	0.3	327	29.0	29.0	8.1	8.1	22.4	22.4	100.2	100.2	6.8	6.8	14.1	14.1	11	11	89	89	<0.2				1.6							
					4.3	0.3	340	29.0	29.0	8.1	8.1	22.3	22.4	100.2	100.2	6.8	6.8	14.1	14.1	12	12	88	88	<0.2				1.4							
					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-		-	-	-	-	-
IM2	Fine	Moderate	12:18	8.3	Surface	1.0	0.5	43	29.3	29.3	8.1	8.1	19.6	19.6	102.4	102.4	7.0	7.0	9.7	9.7	7	7	86	86	88	818168	806165	<0.2	1.3	1.5					
						1.0	0.6	44	29.3	29.3	8.1	8.1	19.6	19.6	102.4	102.4	7.0	7.0	9.6	9.6	7	7	86	86				<0.2	1.6						
						4.2	0.3	11	28.9	28.9	8.1	8.1	23.9	23.8	100.7	100.7	6.8	6.8	14.6	14.6	8	8	89	89				<0.2	1.6						
					4.2	0.3	12	28.9	28.9	8.1	8.1	23.7	23.8	100.7	100.7	6.8	6.8	14.6	14.6	8	8	88	88	<0.2				1.4							
					7.3	0.4	357	28.9	28.9	8.2	8.2	26.9	26.9	99.9	99.9	6.6	6.6	24.5	24.5	10	10	90	90	<0.2				1.4							
					7.3	0.4	328	28.9	28.9	8.2	8.2	26.9	26.9	99.9	99.9	6.6	6.6	24.5	24.5	10	10	90	90	<0.2				1.5							
IM3	Fine	Moderate	12:14	8.7	Surface	1.0	0.4	39	29.1	29.1	8.1	8.1	21.8	21.8	102.1	102.0	7.0	7.0	8.4	8.4	9	9	85	85	88	818784	805594	<0.2	1.4	1.5					
						1.0	0.4	42	29.1	29.1	8.1	8.1	21.8	21.8	101.9	102.0	7.0	7.0	9.4	9.4	9	9	86	86				<0.2	1.5						
						4.4	0.3	21	28.9	28.9	8.1	8.1	26.0	26.0	100.2	100.2	6.7	6.7	13.4	13.4	9	9	89	89				<0.2	1.4						
					4.4	0.4	22	28.9	28.9	8.1	8.1	26.0	26.0	100.2	100.2	6.7	6.7	13.4	13.4	10	10	87	87	<0.2				1.5							
					7.7	0.4	338	28.8	28.8	8.2	8.2	26.8	26.8	100.4	100.4	6.7	6.7	13.3	13.3	10	10	90	90	<0.2				1.7							
					7.7	0.4	358	28.8	28.8	8.2	8.2	26.8	26.8	100.4	100.4	6.7	6.7	13.3	13.3	9	9	91	91	<0.2				1.6							
IM4	Fine	Moderate	11:57	8.2	Surface	1.0	0.5	35	29.0	29.0	8.1	8.1	25.4	25.4	101.9	101.9	6.8	6.8	8.9	8.9	10	10	85	85	88	819742	804610	<0.2	1.5	1.6					
						1.0	0.5	37	29.0	29.0	8.1	8.1	25.4	25.4	101.9	101.9	6.8	6.8	8.9	8.9	9	9	85	85				<0.2	1.5						
						4.1	0.5	32	28.9	28.9	8.1	8.1	27.6	27.6	101.7	101.7	6.7	6.7	10.2	10.2	10	10	89	89				<0.2	1.6						
					4.1	0.5	32	28.9	28.9	8.1	8.1	27.5	27.6	101.7	101.7	6.7	6.7	10.2	10.2	10	10	88	88	<0.2				1.6							
					7.2	0.3	330	29.1	29.1	8.2	8.2	21.5	21.5	101.9	101.9	6.9	6.9	10.8	10.8	10	10	89	89	<0.2				1.8							
					7.2	0.3	346	29.1	29.1	8.2	8.2	21.5	21.5	101.9	101.9	6.9	6.9	10.8	10.8	10	10	89	89	<0.2				1.7							
IM5	Fine	Moderate	11:35	7.4	Surface	1.0	0.4	21	28.8	28.8	8.2	8.2	27.6	27.6	101.0	101.0	6.7	6.7	13.5	13.5	10	10	85	85	87	820729	804837	<0.2	1.7	1.7					
						1.0	0.4	21	28.8	28.8	8.2	8.2	27.6	27.6	101.0	101.0	6.7	6.7	13.5	13.5	9	9	86	86				<0.2	1.7						
						3.7	0.5	28	28.8	28.8	8.2	8.2	28.2	28.2	101.1	101.1	6.7	6.7	14.3	14.3	9	9	85	85				<0.2	1.7						
					3.7	0.5	30	28.8	28.8	8.2	8.2	28.2	28.2	101.1	101.1	6.7	6.7	14.3	14.3	10	10	86	86	<0.2				1.5							
					6.4	0.2	346	29.1	29.1	8.1	8.1	23.2	23.2	96.2	96.2	6.5	6.5	11.8	11.8	11	11	90	90	<0.2				1.8							
					6.4	0.3	353	29.1	29.1	8.1	8.1	23.2	23.2	96.2	96.2	6.5	6.5	11.8	11.8	11	11	90	90	<0.2				1.6							
IM6	Fine	Moderate	11:18	7.4	Surface	1.0	0.3	47	28.8	28.8	8.1	8.1	27.6	27.6	96.6	96.6	6.4	6.4	11.1	11.1	13	13	85	85	89	821069	805848	<0.2	1.7	1.5					
						1.0	0.3	50	28.8	28.8	8.1	8.1	27.6	27.6	96.6	96.6	6.4	6.4	11.1	11.1	13	13	86	86				<0.2	1.5						
						3.7	0.4	56	28.8	28.8	8.1	8.1	27.7	27.7	97.9	97.9	6.5	6.5	11.4	11.4	12	12	87	87				<0.2	1.6						
					3.7	0.4	60	28.8	28.8	8.1	8.1	27.7	27.7	97.9	97.9	6.5	6.5	11.4	11.4	12	12	88	88	<0.2				1.4							
					6.4	0.4	322	29.0	29.0	8.1	8.1	19.2	19.1	94.8	94.8	6.6	6.6																		

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

Water Quality Monitoring

Water Quality Monitoring Results on 04 August 18 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	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA				
IM9	Fine	Moderate	12:01	7.8	Surface	1.0	0.1	342	29.8	8.1	8.1	19.2	19.1	89.5	89.5	6.1	6.1	18.2	7	87	87	87	87	87	87	822106	808783	<0.2	0.6	0.7	0.7					
						1.0	0.2	315	29.8	8.1	8.1	19.1	19.1	89.4	89.5	6.1	6.1	18.6	8	86	86	86	86	86	86	86	86	86	86	86	86	86	86			
					Middle	3.9	0.1	304	29.7	8.1	8.1	21.3	21.4	88.6	88.6	6.0	6.0	20.2	7	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89	
						3.9	0.2	319	29.7	8.1	8.1	21.5	21.4	88.5	88.6	6.0	6.0	20.2	7	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	
					Bottom	6.8	0.2	336	29.7	8.1	8.1	22.7	22.7	89.4	89.5	6.0	6.0	23.6	7	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91
						6.8	0.2	343	29.7	8.1	8.1	22.8	22.7	89.6	89.5	6.0	6.0	23.7	6	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90
IM10	Fine	Moderate	11:53	8.7	Surface	1.0	0.3	312	29.8	8.0	8.0	19.1	19.1	90.7	90.7	6.2	6.2	13.0	4	87	87	87	87	87	87	822356	809817	<0.2	0.8	0.8	0.8					
						1.0	0.3	322	29.8	8.0	8.0	19.1	19.1	90.6	90.7	6.2	6.2	13.0	4	87	87	87	87	87	87	87	87	87	87	87	87	87	87	87	87	
					Middle	4.4	0.1	276	29.7	8.0	8.0	21.4	21.4	89.5	89.5	6.0	6.0	14.9	4	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89
						4.4	0.1	293	29.7	8.0	8.0	21.5	21.4	89.4	89.5	6.0	6.0	14.8	5	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88
					Bottom	7.7	0.4	320	29.4	8.1	8.1	22.6	22.6	87.3	87.3	6.0	6.0	16.5	7	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91
						7.7	0.4	336	29.4	8.1	8.1	22.4	22.5	87.4	87.4	6.0	6.0	16.6	7	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90
IM11	Fine	Moderate	11:37	8.0	Surface	1.0	0.3	6	29.5	8.0	8.0	19.2	19.0	84.7	84.7	5.8	5.8	15.8	7	87	87	87	87	87	87	822065	811432	<0.2	0.8	0.8	0.8					
						1.0	0.3	337	29.5	8.0	8.0	18.9	19.0	84.6	84.7	5.8	5.8	15.7	8	86	86	86	86	86	86	86	86	86	86	86	86	86	86	86		
					Middle	4.0	0.2	325	29.0	8.1	8.1	21.3	21.3	75.3	75.3	5.1	5.1	17.4	8	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88
						4.0	0.2	342	29.0	8.1	8.1	21.3	21.3	75.3	75.3	5.1	5.1	17.5	8	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88
					Bottom	7.0	0.5	270	28.9	8.0	8.0	22.4	22.4	79.1	79.1	5.4	5.4	19.9	8	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90
						7.0	0.5	291	28.9	8.0	8.0	22.5	22.4	79.5	79.3	5.4	5.4	19.8	8	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91
IM12	Fine	Moderate	11:30	8.1	Surface	1.0	0.3	301	29.3	8.0	8.0	18.9	18.9	78.1	78.1	5.4	5.4	12.6	6	87	87	87	87	87	87	821482	812018	<0.2	0.8	0.8	0.8					
						1.0	0.3	305	29.3	8.0	8.0	18.9	18.9	78.1	78.1	5.4	5.4	12.6	5	86	86	86	86	86	86	86	86	86	86	86	86	86	86	86		
					Middle	4.1	0.4	308	29.1	8.0	8.0	21.7	21.7	75.2	75.2	5.1	5.1	14.5	7	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89
						4.1	0.4	334	29.1	8.0	8.0	21.6	21.7	75.1	75.2	5.1	5.1	14.6	7	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88
					Bottom	7.1	0.3	312	28.9	8.0	8.0	22.9	22.9	74.5	74.6	5.1	5.1	17.5	6	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91
						7.1	0.3	319	28.9	8.0	8.0	22.9	22.9	74.6	74.6	5.1	5.1	17.7	7	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90
SR2	Fine	Moderate	11:05	4.7	Surface	1.0	0.0	265	29.8	8.0	8.0	19.0	19.0	87.4	87.5	5.6	5.6	12.0	6	87	87	87	87	87	87	821462	814141	<0.2	0.8	0.7	0.7					
						1.0	0.0	288	29.8	8.0	8.0	19.0	19.0	87.5	87.5	5.6	5.6	12.1	7	86	86	86	86	86	86	86	86	86	86	86	86	86	86	86		
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
					Bottom	3.7	0.0	304	29.0	8.0	8.0	21.4	21.5	80.6	80.6	5.5	5.5	15.1	6	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	
						3.7	0.0	306	29.0	8.0	8.0	21.6	21.5	80.6	80.6	5.5	5.5	15.1	7	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88
SR3	Fine	Moderate	12:15	9.6	Surface	1.0	0.4	25	29.6	8.0	8.0	17.8	17.8	92.1	92.1	6.4	6.4	14.7	5	-	-	-	-	-	-	822167	807552	-	-	-	-					
						1.0	0.4	26	29.6	8.0	8.0	17.8	17.8	92.1	92.1	6.4	6.4	14.7	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
					Middle	4.8	0.3	11	29.6	8.0	8.0	21.3	21.5	89.6	89.7	6.1	6.1	17.2	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
						4.8	0.3	11	29.6	8.0	8.0	21.6	21.5	89.7	89.7	6.1	6.1	17.3	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
					Bottom	8.6	0.2	352	29.6	8.1	8.1	23.6	23.6	89.6	89.7	6.0	6.0	18.0	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
						8.6	0.2	324	29.6	8.1	8.1	23.6	23.6	89.7	89.7	6.0	6.0	18.4	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
SR4A	Fine	Calm	12:40	9.5	Surface	1.0	0.2	218	29.0	8.2	8.2	21.7	21.7	99.1	99.1	6.8	6.8	17.7	12	-	-	-	-	-	-	817169	807790	-	-	-	-					
						1.0	0.3	231	29.0	8.2	8.2	21.7	21.7	99.1	99.1	6.8	6.8	17.7	10	-	-	-	-	-	-	-	-	-	-	-	-	-				
					Middle	4.8	0.2	255	28.9	8.1	8.1	22.9	22.9	99.9	99.9	6.8	6.8	19.9	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
						4.8	0.2	262	28.9	8.1	8.1	23.0	22.9	99.9	99.9	6.8	6.8	19.9	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
					Bottom	8.5	0.1	259	29.1	8.1	8.1	18.9	19.0	101.9	101.9	7.0	7.0	9.1	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
						8.5	0.1	266	29.1	8.1	8.1	19.0	19.0	101.9	101.9	7.0	7.0	9.1	10	-	-	-	-	-	-	-	-	-	-	-	-	-				
SR5A	Fine	Calm	12:47	4.6	Surface	1.0	0.3	295	29.1	8.2	8.2	20.1	20.1	99.7	99.7	6.8	6.8	20.1	11	-	-	-	-	-	-	816616	810699	-	-	-	-					
						1.0	0.3	302	29.1	8.2	8.2	20.1	20.1	99.7	99.7	6.8	6.8	20.1	10	-	-	-	-	-	-	-	-	-	-	-						
					Middle	-	-	-	-	-																										

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

Water Quality Monitoring

Water Quality Monitoring Results on 07 August 18 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	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA	Value
C1	Fine	Calm	09:23	8.8	Surface	1.0	0.4	208	30.0	8.1	8.1	19.3	19.3	80.3	80.2	5.5	4.9	6.0	9.3	<2	2	74	76	815642	804219	<0.2	<0.2	<0.2	2.3	2.1			
						1.0	0.4	222	30.0	8.1	8.1	22.4	22.4	80.1	80.2	5.5	4.9	6.0	9.3	2	74	76	<0.2	<0.2	<0.2	1.9	1.9						
					Middle	4.4	0.4	213	29.5	8.0	8.0	22.4	22.4	63.5	63.5	4.3	4.3	5.8	4.3	2	76	76	<0.2	<0.2	<0.2	2.2	2.2						
						4.4	0.5	220	29.5	8.0	8.0	22.3	22.4	63.5	63.5	4.3	4.3	5.8	4.3	2	76	76	<0.2	<0.2	<0.2	2.1	2.1						
					Bottom	7.8	0.5	249	28.2	8.0	8.0	29.1	29.1	63.8	64.2	4.2	4.3	16.3	4.3	2	77	77	<0.2	<0.2	<0.2	2.2	2.2						
						7.8	0.5	262	28.2	8.0	8.0	29.1	29.1	64.6	64.2	4.3	4.3	16.3	4.3	3	77	77	<0.2	<0.2	<0.2	2.2	2.2						
C2	Sunny	Moderate	10:06	11.3	Surface	1.0	0.9	159	30.1	8.1	8.1	18.2	18.2	83.1	83.1	5.7	4.9	13.4	10.3	<2	3	67	70	825665	806971	<0.2	<0.2	<0.2	2.8	2.8			
						1.0	0.9	173	30.1	8.1	8.1	18.2	18.2	83.1	83.1	5.7	4.9	13.4	10.3	2	68	70	<0.2	<0.2	<0.2	2.7	2.7						
					Middle	5.7	0.6	167	28.7	8.1	8.1	26.3	26.3	60.5	60.5	4.1	4.1	8.5	4.1	3	69	70	<0.2	<0.2	<0.2	2.6	2.6						
						5.7	0.6	177	28.7	8.1	8.1	26.3	26.3	60.5	60.5	4.1	4.1	8.5	4.1	3	70	71	<0.2	<0.2	<0.2	2.6	2.6						
					Bottom	10.3	0.5	166	28.3	8.1	8.1	27.7	27.7	64.1	64.1	4.3	4.3	9.1	4.3	3	71	71	<0.2	<0.2	<0.2	3.0	3.0						
						10.3	0.5	174	28.3	8.1	8.1	27.7	27.7	64.1	64.1	4.3	4.3	9.1	4.3	2	72	72	<0.2	<0.2	<0.2	2.9	2.9						
C3	Fine	Moderate	08:13	12.1	Surface	1.0	0.3	100	30.0	8.0	8.0	20.6	20.6	80.7	80.7	5.5	5.2	6.4	7.1	<2	<2	69	71	822124	817781	<0.2	<0.2	<0.2	2.5	2.5			
						1.0	0.3	102	30.0	8.0	8.0	20.6	20.6	80.7	80.7	5.5	5.2	6.4	7.1	2	69	71	<0.2	<0.2	<0.2	2.0	2.0						
					Middle	6.1	0.1	87	29.4	7.9	7.9	22.9	22.9	73.4	73.4	4.9	4.9	6.8	4.9	2	71	71	<0.2	<0.2	<0.2	2.4	2.4						
						6.1	0.1	94	29.4	7.9	7.9	22.9	22.9	73.4	73.4	4.9	4.9	6.8	4.9	2	72	73	<0.2	<0.2	<0.2	2.4	2.4						
					Bottom	11.1	0.1	26	27.1	7.9	7.9	30.0	30.0	58.0	58.0	3.9	3.9	8.0	3.9	2	73	73	<0.2	<0.2	<0.2	1.8	1.8						
						11.1	0.1	27	27.1	7.9	7.9	30.0	30.0	58.0	58.0	3.9	3.9	8.0	3.9	2	73	73	<0.2	<0.2	<0.2	2.3	2.3						
IM1	Fine	Calm	09:48	5.0	Surface	1.0	0.1	264	28.9	8.0	8.0	26.0	26.0	47.8	47.9	3.2	3.2	8.1	11.0	3	4	73	74	817966	807130	<0.2	<0.2	<0.2	1.7	1.7			
						1.0	0.1	281	28.9	8.0	8.0	26.0	26.0	47.9	47.9	3.2	3.2	8.2	11.0	3	73	73	<0.2	<0.2	<0.2	1.6	1.6						
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	-	74	817966	807130	-	-	<0.2	-	-
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	-	74	817966	807130	-	-	<0.2	-	-
					Bottom	4.0	0.1	203	28.4	8.0	8.0	27.9	27.9	54.0	54.3	3.6	3.6	13.8	3.6	5	75	75	<0.2	<0.2	<0.2	1.7	1.7						
						4.0	0.1	212	28.4	8.0	8.0	27.9	27.9	54.5	54.3	3.6	3.6	13.7	3.6	6	75	75	<0.2	<0.2	<0.2	1.8	1.8						
IM2	Fine	Calm	09:55	7.2	Surface	1.0	0.5	187	29.6	8.0	8.0	21.9	21.9	65.4	65.3	4.4	3.7	10.0	10.8	4	4	73	75	818154	806175	<0.2	<0.2	<0.2	1.8	1.8			
						1.0	0.5	199	29.6	8.1	8.0	21.8	21.9	65.1	65.3	4.4	3.7	9.8	10.8	2	74	75	<0.2	<0.2	<0.2	1.9	1.9						
					Middle	3.6	0.3	203	28.5	8.0	8.0	27.5	27.5	45.4	45.4	3.0	3.0	10.2	3.0	4	75	75	<0.2	<0.2	<0.2	2.0	2.0						
						3.6	0.3	205	28.5	8.0	8.0	27.5	27.5	45.4	45.4	3.0	3.0	10.2	3.0	2	75	76	<0.2	<0.2	<0.2	1.9	1.9						
					Bottom	6.2	0.1	175	28.3	8.0	8.0	28.4	28.4	52.8	53.1	3.5	3.6	12.2	3.6	5	76	76	<0.2	<0.2	<0.2	1.7	1.7						
						6.2	0.1	175	28.3	8.0	8.0	28.4	28.4	53.3	53.1	3.6	3.6	12.3	3.6	7	76	76	<0.2	<0.2	<0.2	1.7	1.7						
IM3	Fine	Calm	10:02	7.5	Surface	1.0	0.6	186	29.9	8.1	8.1	19.3	19.4	77.7	77.6	5.3	4.4	9.0	10.0	4	5	74	76	818790	805575	<0.2	<0.2	<0.2	1.6	1.6			
						1.0	0.7	196	29.9	8.1	8.1	19.4	19.4	77.4	77.6	5.3	4.4	9.0	10.0	5	75	76	<0.2	<0.2	<0.2	1.6	1.6						
					Middle	3.8	0.5	184	28.8	8.0	8.0	25.6	25.6	50.7	50.8	3.4	3.4	9.7	3.4	5	76	76	<0.2	<0.2	<0.2	1.5	1.5						
						3.8	0.6	199	28.8	8.0	8.0	25.6	25.6	50.9	50.8	3.4	3.4	9.7	3.4	5	76	77	<0.2	<0.2	<0.2	1.4	1.4						
					Bottom	6.5	0.3	182	28.5	8.0	8.0	27.5	27.6	56.9	57.2	3.6	3.8	11.4	3.8	6	77	77	<0.2	<0.2	<0.2	1.4	1.4						
						6.5	0.3	199	28.5	8.0	8.0	27.6	27.6	57.4	57.2	3.8	3.8	11.4	3.8	7	77	77	<0.2	<0.2	<0.2	1.5	1.5						
IM4	Fine	Calm	10:12	7.4	Surface	1.0	0.5	175	30.2	8.1	8.1	17.0	17.0	86.1	86.1	5.9	5.7	6.4	10.3	<2	3	75	76	819697	804634	<0.2	<0.2	<0.2	1.8	1.8			
						1.0	0.6	178	30.2	8.1	8.1	17.0	17.0	86.1	86.1	5.9	5.7	6.4	10.3	2	75	76	<0.2	<0.2	<0.2	1.7	1.7						
					Middle	3.7	0.6	180	30.0	8.1	8.1	18.5	18.5	78.6	78.6	5.4	5.4	6.9	5.4	3	76	76	<0.2	<0.2	<0.2	1.8	1.8						
						3.7	0.7	196	30.0	8.1	8.1	18.5	18.5	78.5	78.5	5.4	5.4	7.0	5.4	3	76	76	<0.2	<0.2	<0.2	1.7	1.7						
					Bottom	6.4	0.5	189	28.4	7.9	7.9	27.8	27.8	59.3	59.7	4.0	4.0	17.4	4.0	4	77	77	<0.2	<0.2	<0.2	1.8	1.8						
						6.4	0.5	207	28.4	7.9	7.9	27.8	27.8	60.1	60.1	4.0	4.0	17.5	4.0	6	77	77	<0.2	<0.2	<0.2	1.8	1.8						
IM5	Fine	Calm	10:22	6.9	Surface	1.0	0.6	203	30.3	8.1	8.1	17.0	16.9	87.8	87.8	6.0	4.8	6.5	10.8	<2	2	75	77	820742	804893	<0.2	<0.2	<0.2	2.3	2.3			
						1.0	0.6	204	30.3	8.1	8.1	16.9	16.9	87.7	87.8	6.0	4.8	6.5	10.8	2	76	77	<0.2	<0.2	<0.2	2.0	2.0						
					Middle	3.5	0.6	199	29.3	8.0	8.0	23.3	23.3	53.8	53.8	3.6	3.6	10.2	3.6	3	76	77	<0.2	<0.2	<0.2	2.7	2.7						
						3.5	0.6	209	29.3	8.0	8.0	23.3	23.3	53.7	53.8	3.6	3.6	10.3	3.6	3	77	78	<0.2	<0.2	<0.2	2.6	2.6						
					Bottom	5.9	0.3	207	28.7	7.9	7.9	26.7	26.7	55.7	56.0	3.7	3.8	15.7	3.8	2	78	78	<0.2	<0.2	<0.2	2.7	2.7						
						5.9	0.3	225	28.7	7.9	7.9	26.8	26.7	56.3	56.0	3.8	3.8	15.8	3.8	3	78	78	<0.2	<0.2	<0.2	2.5	2.5						
IM6	Fine	Calm	10:30	6.7	Surface	1.0	0.5	178	30.4	8.1	8.1	16.5	16.5	83.5	83.5	5.7	4.8	6.2	9.2	2	3	76	77	821066	805839	<0.2	<0.2	<0.2	2.2	2.2			
						1.0	0.6	189	30.4	8.1	8.1	16.5	16.5	83.5	83.5	5.7	4.8	6.2	9														

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

Water Quality Monitoring

Water Quality Monitoring Results on 07 August 18 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	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA	Value	DA
IM9	Sunny	Moderate	09:28	7.4	Surface	1.0	0.3	136	30.5	8.1	8.1	18.3	18.3	78.9	78.9	5.4	4.2	7.0	9.8	2	3	68	70	822064	808817	<0.2	<0.2	<0.2	2.6	2.6				
						1.0	0.3	146	30.5	8.1	8.1	18.3	18.3	78.9	78.9	5.4	4.2	7.0	9.8	2	3	67	70	<0.2	<0.2	<0.2	2.6	2.6						
					Middle	3.7	0.4	140	29.2	8.0	8.0	25.4	25.4	45.7	45.6	3.1	3.0	11.0	11.1	3	3	71	70	<0.2	<0.2	<0.2	2.6	2.6						
						3.7	0.4	148	29.1	8.0	8.0	25.5	25.4	45.5	45.6	3.0	3.0	11.1	11.4	3	3	70	73	<0.2	<0.2	<0.2	2.5	2.5						
					Bottom	6.4	0.2	102	28.9	8.0	8.0	27.1	27.1	47.8	47.8	3.2	3.2	11.4	11.4	3	3	73	73	<0.2	<0.2	<0.2	2.6	2.6						
						6.4	0.2	111	28.9	8.0	8.0	27.1	27.1	47.8	47.8	3.2	3.2	11.4	11.4	3	3	73	73	<0.2	<0.2	<0.2	2.5	2.5						
IM10	Sunny	Moderate	09:20	9.0	Surface	1.0	0.6	122	29.7	8.0	8.0	22.3	22.3	58.2	58.2	3.9	3.5	9.4	15.7	2	3	69	71	822403	809805	<0.2	<0.2	<0.2	2.4	2.4				
						1.0	0.6	130	29.7	8.0	8.0	22.3	22.3	58.2	58.2	3.9	3.5	9.4	15.7	2	3	69	71	<0.2	<0.2	<0.2	2.4	2.4						
					Middle	4.5	0.4	99	28.9	8.0	8.0	25.9	25.9	46.8	46.8	3.1	3.1	14.9	14.9	3	3	71	72	<0.2	<0.2	<0.2	2.2	2.2						
						4.5	0.5	104	28.9	8.0	8.0	25.9	25.9	46.8	46.8	3.1	3.1	14.9	14.9	2	3	72	73	<0.2	<0.2	<0.2	2.6	2.6						
					Bottom	8.0	0.3	93	29.0	8.0	8.0	26.3	26.3	49.1	49.1	3.3	3.3	22.9	22.9	3	3	73	73	<0.2	<0.2	<0.2	2.2	2.2						
						8.0	0.3	96	29.0	8.0	8.0	26.3	26.3	49.1	49.1	3.3	3.3	22.9	22.9	3	3	74	74	<0.2	<0.2	<0.2	2.4	2.4						
IM11	Sunny	Moderate	09:07	9.3	Surface	1.0	0.5	84	30.3	8.0	8.0	19.5	19.5	71.4	71.4	4.8	4.1	8.9	17.2	3	3	69	71	822069	811462	<0.2	<0.2	<0.2	2.5	2.3				
						1.0	0.5	90	30.3	8.0	8.0	19.5	19.5	71.4	71.4	4.8	4.1	8.9	17.2	2	3	70	71	<0.2	<0.2	<0.2	2.1	2.3						
					Middle	4.7	0.5	95	29.2	7.9	7.9	24.9	24.9	51.6	51.6	3.4	3.4	17.6	17.6	3	3	71	72	<0.2	<0.2	<0.2	2.3	2.4						
						4.7	0.5	97	29.2	7.9	7.9	24.9	24.9	51.6	51.6	3.4	3.4	17.6	17.6	3	3	72	74	<0.2	<0.2	<0.2	2.4	2.4						
					Bottom	8.3	0.4	90	29.1	8.0	8.0	25.5	25.5	58.2	58.2	3.9	3.9	25.1	25.1	4	4	74	72	<0.2	<0.2	<0.2	2.4	2.3						
						8.3	0.4	96	29.1	8.0	8.0	25.5	25.5	58.2	58.2	3.9	3.9	25.1	25.1	3	3	72	72	<0.2	<0.2	<0.2	2.3	2.3						
IM12	Sunny	Moderate	08:58	10.6	Surface	1.0	0.4	90	30.5	8.1	8.1	17.6	17.6	81.7	81.7	5.6	4.6	8.8	13.3	4	4	69	72	821451	812050	<0.2	<0.2	<0.2	2.1	2.2				
						1.0	0.5	95	30.5	8.1	8.1	17.6	17.6	81.7	81.7	5.6	4.6	8.8	13.3	3	4	70	71	<0.2	<0.2	<0.2	2.1	2.1						
					Middle	5.3	0.6	111	29.5	7.9	7.9	23.8	23.8	51.9	51.9	3.5	3.5	12.6	12.6	4	4	72	71	<0.2	<0.2	<0.2	2.2	2.2						
						5.3	0.6	115	29.5	7.9	7.9	23.8	23.8	51.9	51.9	3.5	3.5	12.6	12.6	3	4	71	73	<0.2	<0.2	<0.2	2.1	2.2						
					Bottom	9.6	0.2	96	27.5	7.9	7.9	29.4	29.4	49.9	49.9	3.3	3.3	18.5	18.5	6	6	73	74	<0.2	<0.2	<0.2	2.2	2.2						
						9.6	0.2	102	27.5	7.9	7.9	29.4	29.4	49.9	49.9	3.3	3.3	18.5	18.5	4	4	74	74	<0.2	<0.2	<0.2	2.2	2.2						
SR2	Fine	Moderate	08:40	4.3	Surface	1.0	0.3	69	30.3	8.0	8.0	17.8	17.8	80.6	80.6	5.5	5.5	7.7	7.8	2	3	69	70	821436	814172	<0.2	<0.2	<0.2	2.7	2.6				
						1.0	0.3	71	30.3	8.0	8.0	17.8	17.8	80.6	80.6	5.5	5.5	7.7	7.8	3	3	69	71	<0.2	<0.2	<0.2	2.6	2.6						
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
					Bottom	3.3	0.2	60	29.8	7.9	7.9	21.2	21.2	77.2	77.2	5.2	5.2	7.9	7.9	3	3	71	73	<0.2	<0.2	<0.2	2.4	2.4						
						3.3	0.2	63	29.8	7.9	7.9	21.2	21.2	77.2	77.2	5.2	5.2	7.9	7.9	3	3	72	72	<0.2	<0.2	<0.2	2.2	2.2						
SR3	Sunny	Moderate	09:42	9.1	Surface	1.0	0.5	177	30.0	8.1	8.1	20.2	20.2	67.3	67.3	4.6	3.8	7.7	11.0	2	3	-	-	822157	807564	-	-	-	-	-				
						1.0	0.5	185	30.0	8.1	8.1	20.2	20.2	67.3	67.3	4.6	3.8	7.7	11.0	3	3	-	-	-	-	-	-	-	-	-	-			
					Middle	4.6	0.1	194	29.1	8.1	8.1	25.2	25.2	43.8	43.8	2.9	2.9	11.7	11.7	2	3	-	-	-	-	-	-	-	-	-	-	-		
						4.6	0.1	210	29.1	8.1	8.1	25.2	25.2	43.8	43.8	2.9	2.9	11.7	11.7	3	3	-	-	-	-	-	-	-	-	-	-	-		
					Bottom	8.1	0.1	345	28.7	8.1	8.1	28.1	28.1	43.9	43.9	2.9	2.9	13.7	13.7	3	3	-	-	-	-	-	-	-	-	-	-	-	-	
						8.1	0.1	346	28.7	8.1	8.1	28.1	28.1	43.9	43.9	2.9	2.9	13.7	13.7	3	3	-	-	-	-	-	-	-	-	-	-	-	-	
SR4A	Fine	Calm	09:04	9.4	Surface	1.0	0.1	63	29.3	8.0	8.0	22.9	22.9	61.7	61.7	4.2	3.7	8.4	13.9	2	3	-	-	817170	807796	-	-	-	-	-				
						1.0	0.2	63	29.3	8.0	8.0	22.9	22.9	61.8	61.8	4.2	3.7	8.4	13.9	2	3	-	-	-	-	-	-	-	-	-	-			
					Middle	4.7	0.2	63	28.4	8.0	8.0	27.8	27.8	46.2	46.3	3.1	3.1	14.1	14.2	3	3	-	-	-	-	-	-	-	-	-	-	-		
						4.7	0.2	64	28.4	8.0	8.0	27.8	27.8	46.3	46.3	3.1	3.1	14.2	14.2	3	3	-	-	-	-	-	-	-	-	-	-	-		
					Bottom	8.4	0.2	61	28.4	8.0	8.0	28.0	28.0	53.2	53.4	3.5	3.6	19.2	19.4	5	4	-	-	-	-	-	-	-	-	-	-	-		
						8.4	0.2	65	28.4	8.0	8.0	28.0	28.0	53.6	53.6	3.6	3.6	19.4	19.4	4	4	-	-	-	-	-	-	-	-	-	-	-		
SR5A	Fine	Calm	08:47	5.3	Surface	1.0	0.0	309	30.1	8.1	8.1	18.4	18.4	84.0	84.0	5.7	5.7	7.0	10.1	2	3	-	-	816574	810719	-	-	-	-	-				
						1.0	0.0	334	30.1	8.1	8.1	18.4	18.4	83.9	83.9	5.7	5.7	7.0	10.1	3	3	-	-	-	-	-	-	-	-	-				
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
					Bottom	4.3	0.1	267	29.2	7.9	7.9	25.5	25.5	54.1	54.4	3.6	3.6	13.2	13.2	4	4	-	-	-	-	-	-	-	-	-	-	-		
						4.3	0.1	277	29.2	7.9	7.9	25.5	25.5	54.6	54.4	3.6	3.6	13.2	13.2	3	3	-	-	-	-	-	-	-	-	-	-	-		
SR6	Fine	Calm	08:21	4.4	Surface	1.0	0.1	40	29.9	8.1	8.1	19.8	19.8	77.1	77.1	5.2	5.2	7.0	6.8	4	4	-	-	817920	814646	-	-	-	-	-				
						1.0	0.1	40	29.9	8.1	8.1	19.8																						

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

Water Quality Monitoring

Water Quality Monitoring Results on 07 August 18 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	Average	DA	Value	Average	DA		
									Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA	Value	Average			DA	Value	Average	DA	Value	Average	DA	
C1	Cloudy	Moderate	15:43	7.9	Surface	1.0	0.2	23	30.4	8.1	8.1	14.5	14.5	94.8	94.8	6.6	5.6	7.3	8.9	3	5	76	77	815648	804271	<0.2	<0.2	<0.2	3.2	2.8	2.8			
						1.0	0.3	24	30.4	8.1	8.1	14.6	14.6	94.8	94.8	6.6	5.6	7.3	8.9	3	5	76	77	815648	804271	<0.2	<0.2	<0.2	2.8	2.8	2.8			
						4.0	0.2	12	29.7	8.0	8.0	21.3	21.4	67.5	67.3	4.6	4.5	7.8	9.4	5	7	77	77	815648	804271	<0.2	<0.2	<0.2	2.6	2.6	2.6			
					Middle	4.0	0.2	12	29.7	8.0	8.0	21.4	21.4	67.1	67.3	4.5	4.5	7.9	9.4	4	7	77	77	815648	804271	<0.2	<0.2	<0.2	2.6	2.6	2.6			
						6.9	0.1	51	28.7	8.0	8.0	27.3	27.3	60.8	61.1	4.0	4.0	11.6	12.4	8	7	78	77	815648	804271	<0.2	<0.2	<0.2	2.6	2.6	2.6			
						6.9	0.1	52	28.7	8.0	8.0	27.3	27.3	61.4	61.1	4.1	4.1	11.4	12.4	7	7	78	77	815648	804271	<0.2	<0.2	<0.2	2.6	2.6	2.6			
C2	Cloudy	Moderate	14:36	10.2	Surface	1.0	0.9	172	30.6	8.0	8.0	15.1	15.1	84.3	84.3	5.8	4.9	10.4	12.4	5	6	67	69	825689	806924	<0.2	<0.2	<0.2	3.4	3.6	3.6			
						1.0	1.0	177	30.6	8.0	8.0	15.1	15.1	84.3	84.3	5.8	4.9	10.4	12.4	6	6	67	69	825689	806924	<0.2	<0.2	<0.2	3.4	3.6	3.6			
						5.1	0.2	194	28.7	8.0	8.0	26.1	26.1	57.6	57.6	3.9	3.9	12.7	12.7	5	6	70	71	825689	806924	<0.2	<0.2	<0.2	3.6	3.6	3.6			
					Middle	5.1	0.2	202	28.7	8.0	8.0	26.1	26.1	57.6	57.6	3.9	3.9	12.7	12.7	5	6	69	71	825689	806924	<0.2	<0.2	<0.2	3.6	3.6	3.6			
						9.2	0.1	15	28.4	8.0	8.0	27.2	27.2	60.1	60.1	4.0	4.0	14.0	14.0	6	7	71	72	825689	806924	<0.2	<0.2	<0.2	3.7	3.7	3.7			
						9.2	0.1	15	28.4	8.0	8.0	27.2	27.2	60.1	60.1	4.0	4.0	14.0	14.0	7	7	72	72	825689	806924	<0.2	<0.2	<0.2	3.8	3.8	3.8			
C3	Cloudy	Moderate	17:23	11.2	Surface	1.0	0.3	226	29.9	8.0	8.0	22.2	22.2	89.9	89.9	6.0	5.0	6.7	9.4	4	7	69	71	822131	817793	<0.2	<0.2	<0.2	1.9	1.8	1.8			
						1.0	0.3	245	29.9	8.0	8.0	22.2	22.2	89.9	89.9	6.0	5.0	6.7	9.4	4	7	70	71	822131	817793	<0.2	<0.2	<0.2	1.8	1.8	1.8			
						5.6	0.3	241	27.9	7.9	7.9	28.5	28.5	58.6	58.6	3.9	3.9	9.3	9.3	6	7	71	70	822131	817793	<0.2	<0.2	<0.2	1.9	1.8	1.8			
					Middle	5.6	0.3	252	27.9	7.9	7.9	28.5	28.5	58.6	58.6	3.9	3.9	9.3	9.3	6	7	70	71	822131	817793	<0.2	<0.2	<0.2	1.8	1.8	1.8			
						10.2	0.2	268	27.2	7.9	7.9	30.3	30.3	56.3	56.4	3.8	3.8	12.2	12.2	10	10	72	72	822131	817793	<0.2	<0.2	<0.2	1.8	1.8	1.8			
						10.2	0.2	293	27.2	7.9	7.9	30.3	30.3	56.4	56.4	3.8	3.8	12.2	12.2	9	10	72	72	822131	817793	<0.2	<0.2	<0.2	1.8	1.8	1.8			
IM1	Cloudy	Calm	15:24	4.1	Surface	1.0	0.1	176	29.5	8.1	8.1	22.1	22.1	73.0	73.0	4.9	4.9	11.7	14.8	12	12	75	76	817920	807121	<0.2	<0.2	<0.2	1.3	1.4	1.4			
						1.0	0.1	192	29.5	8.1	8.1	22.1	22.1	72.9	73.0	4.9	4.9	11.7	14.8	10	12	75	76	817920	807121	<0.2	<0.2	<0.2	1.4	1.4	1.4			
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						3.1	0.1	128	29.3	8.1	8.1	23.4	23.4	72.9	73.2	4.9	4.9	17.9	14.8	13	12	76	77	817920	807121	<0.2	<0.2	<0.2	1.4	1.4	1.4			
						3.1	0.1	132	29.3	8.1	8.1	23.3	23.3	73.4	73.2	4.9	4.9	17.9	14.8	14	12	77	77	817920	807121	<0.2	<0.2	<0.2	1.4	1.4	1.4			
IM2	Cloudy	Moderate	15:17	6.7	Surface	1.0	0.1	288	30.0	8.1	8.1	18.9	18.9	82.7	82.7	5.6	5.4	10.1	11.4	11	12	75	77	818158	806177	<0.2	<0.2	<0.2	2.1	2.2	2.1			
						1.0	0.1	310	30.0	8.1	8.1	19.0	19.0	82.7	82.7	5.6	5.4	10.1	11.4	11	12	76	77	818158	806177	<0.2	<0.2	<0.2	2.2	2.2	2.2			
						3.4	0.3	333	29.6	8.1	8.1	21.7	21.7	76.2	76.2	5.2	5.2	9.0	9.0	13	11	77	77	818158	806177	<0.2	<0.2	<0.2	2.1	2.1	2.1			
					Middle	3.4	0.3	351	29.6	8.1	8.1	21.7	21.7	76.2	76.2	5.2	5.2	9.0	9.0	11	11	77	77	818158	806177	<0.2	<0.2	<0.2	2.1	2.1	2.1			
						5.7	0.4	324	29.3	8.0	8.0	22.5	22.5	65.3	65.3	4.4	4.4	14.8	14.8	13	13	78	78	818158	806177	<0.2	<0.2	<0.2	2.2	2.2	2.2			
						5.7	0.4	340	29.3	8.0	8.0	22.5	22.5	65.3	65.3	4.4	4.4	15.1	15.1	11	11	78	78	818158	806177	<0.2	<0.2	<0.2	2.1	2.1	2.1			
IM3	Cloudy	Rough	15:10	7.0	Surface	1.0	0.4	217	30.4	8.1	8.1	17.7	17.7	83.5	83.5	5.7	4.8	10.0	12.7	11	12	75	77	818770	805614	<0.2	<0.2	<0.2	2.5	2.2	2.2			
						1.0	0.4	204	30.4	8.1	8.1	17.7	17.7	83.5	83.5	5.7	4.8	10.0	12.7	11	12	76	77	818770	805614	<0.2	<0.2	<0.2	2.5	2.2	2.2			
						3.5	0.1	245	29.2	8.0	8.0	23.5	23.5	56.7	56.7	3.8	3.8	13.5	13.5	11	11	77	77	818770	805614	<0.2	<0.2	<0.2	2.2	2.3	2.3			
					Middle	3.5	0.1	246	29.2	8.0	8.0	23.6	23.6	56.6	56.6	3.8	3.8	13.5	13.5	11	11	77	77	818770	805614	<0.2	<0.2	<0.2	2.3	2.3	2.3			
						6.0	0.4	358	28.8	8.0	8.0	25.4	25.5	52.4	52.5	3.5	3.5	14.6	14.6	13	13	78	78	818770	805614	<0.2	<0.2	<0.2	2.5	2.5	2.5			
						6.0	0.4	329	28.8	8.0	8.0	25.5	25.5	52.6	52.6	3.5	3.5	14.5	14.5	13	13	78	78	818770	805614	<0.2	<0.2	<0.2	2.5	2.5	2.5			
IM4	Cloudy	Moderate	15:01	6.9	Surface	1.0	0.2	255	30.0	8.1	8.1	17.1	17.1	80.0	80.0	5.5	5.4	11.3	16.9	7	7	75	77	819725	804603	<0.2	<0.2	<0.2	2.5	2.3	2.3			
						1.0	0.2	274	30.0	8.1	8.1	17.1	17.1	79.9	80.0	5.5	5.4	11.4	16.9	6	7	75	77	819725	804603	<0.2	<0.2	<0.2	2.3	2.3	2.3			
						3.5	0.1	264	29.9	8.0	8.0	18.4	18.3	75.4	75.4	5.2	5.2	13.5	13.6	6	7	77	77	819725	804603	<0.2	<0.2	<0.2	2.4	2.6	2.6			
					Middle	3.5	0.1	285	29.9	8.0	8.0	18.3	18.3	75.4	75.4	5.2	5.2	13.6	13.6	8	7	77	77	819725	804603	<0.2	<0.2	<0.2	2.6	2.6	2.6			
						5.9	0.2	222	29.5	8.0	8.0	21.3	21.3	73.2	73.4	5.0	5.0	25.9	25.9	8	8	78	78	819725	804603	<0.2	<0.2	<0.2	2.5	2.5	2.5			
						5.9	0.2	235	29.5	8.0	8.0	21.3	21.3	73.6	73.4	5.0	5.0	25.9	25.9	8	8	79	78	819725	804603	<0.2	<0.2	<0.2	2.6	2.6	2.6			
IM5	Cloudy	Moderate	14:54	6.3	Surface	1.0	0.6	237	30.1	8.0	8.0	15.8	15.8	75.1	75.0	5.2	5.1	9.6	12.1	5	5	75	77	820749	804859	<0.2	<0.2	<0.2	3.0	2.6	2.6			
						1.0	0.7	248	30.1	8.0	8.0	15.8	15.8	74.9	75.0	5.2	5.1	9.7	12.1	4	5	76	77	82074										

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

Water Quality Monitoring

Water Quality Monitoring Results on 09 August 18 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	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA	Value	DA
C1	Sunny	Moderate	11:43	8.7	Surface	1.0	1.0	234	30.0	30.0	8.3	8.3	24.0	24.0	101.4	101.4	6.7	5.7	6.6	13.7	4	4	71	74	815590	804237	<0.2	1.4	1.4					
						1.0	1.0	252	30.0		8.3	8.3	24.0	24.0	101.4	101.4	6.7		6.6		3		71				<0.2	1.3						
						4.4	0.9	224	29.5		8.2	8.2	25.1	25.1	69.7	69.7	4.6		14.4		3		74				<0.2	1.3						
					Middle	4.4	1.0	225	29.5	8.2	8.2	25.1	25.1	69.7	69.7	4.6	14.4	3	74	<0.2	1.4													
						7.7	0.7	220	29.0	8.1	8.1	27.4	27.4	66.5	66.5	4.4	20.0	4	76	<0.2	1.4													
						7.7	0.7	226	29.0	8.1	8.1	27.4	27.4	66.5	66.5	4.4	20.0	4	76	<0.2	1.4													
C2	Sunny	Rough	12:23	10.6	Surface	1.0	1.1	174	29.6	29.6	8.1	8.1	21.8	21.8	79.4	79.4	5.4	4.9	11.7	14.6	2	3	72	75	825687	806926	<0.2	1.8	1.7					
						1.0	1.2	187	29.6		8.1	8.1	21.8	21.8	79.4	79.4	5.4		11.7		3		73				<0.2	1.7						
						5.3	1.0	158	29.1		8.0	8.0	23.3	23.3	64.8	64.8	4.4		15.7		3		74				<0.2	1.7						
					Middle	5.3	1.0	170	29.1	8.0	8.0	23.3	23.3	64.8	64.8	4.4	15.7	4	75	<0.2	1.7													
						9.6	0.4	155	28.1	8.0	8.0	26.4	26.4	59.9	59.9	4.1	16.4	4	76	<0.2	1.8													
						9.6	0.4	159	28.1	8.0	8.0	26.4	26.4	59.9	59.9	4.1	16.4	3	77	<0.2	1.7													
C3	Sunny	Moderate	10:21	12.4	Surface	1.0	0.4	140	28.8	28.8	8.1	8.1	24.5	24.5	79.3	79.3	5.3	5.0	6.4	11.5	3	4	74	76	822103	817784	<0.2	1.4	1.4					
						1.0	0.5	142	28.8		8.1	8.1	24.5	24.5	79.3	79.3	5.3		6.4		4		75				<0.2	1.3						
						6.2	0.3	116	28.1		8.1	8.1	26.1	26.1	69.4	69.4	4.7		10.5		4		76				<0.2	1.3						
					Middle	6.2	0.3	118	28.1	8.1	8.1	26.1	26.1	69.4	69.4	4.7	10.5	3	75	<0.2	1.4													
						11.4	0.2	91	27.6	8.1	8.1	27.4	27.4	68.6	68.6	4.6	17.6	4	78	<0.2	1.4													
						11.4	0.2	93	27.6	8.1	8.1	27.4	27.4	68.6	68.6	4.6	17.6	4	77	<0.2	1.4													
IM1	Sunny	Moderate	12:11	4.8	Surface	1.0	0.2	181	29.4	29.4	8.1	8.1	25.4	25.4	67.3	67.2	4.5	4.5	15.5	17.7	4	4	71	73	817953	807141	<0.2	1.8	2.0					
						1.0	0.2	190	29.4		8.1	8.1	25.4	25.4	67.0	67.2	4.5		15.7		4		71				<0.2	2.0						
						2.4	-	-	-		-	-	-	-	-	-	-		-		-		-				-	-		-	-	-	-	-
					Middle	2.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						3.8	0.2	181	29.2	8.1	8.1	26.4	26.4	70.3	70.5	4.7	19.8	3	74	<0.2	1.8													
						3.8	0.2	196	29.2	8.1	8.1	26.4	26.4	70.6	70.5	4.7	19.9	4	74	<0.2	2.3													
IM2	Sunny	Moderate	12:18	6.9	Surface	1.0	0.9	231	29.7	29.7	8.2	8.2	24.5	24.5	76.5	76.4	5.1	4.9	9.8	15.3	3	3	71	74	818163	806160	<0.2	1.9	1.9					
						1.0	0.9	233	29.7		8.2	8.2	24.5	24.5	76.3	76.4	5.1		9.8		4		71				<0.2	2.0						
						3.5	0.7	223	29.3		8.1	8.1	25.3	25.3	69.1	69.1	4.6		13.7		3		74				<0.2	1.8						
					Middle	3.5	0.8	225	29.3	8.1	8.1	25.3	25.3	69.1	69.1	4.6	13.8	3	74	<0.2	1.8													
						5.9	0.6	223	29.1	8.2	8.2	26.2	26.2	66.0	66.1	4.4	22.4	3	76	<0.2	1.9													
						5.9	0.6	229	29.1	8.2	8.2	26.2	26.2	66.1	66.1	4.4	22.4	3	76	<0.2	1.8													
IM3	Sunny	Moderate	12:26	7.2	Surface	1.0	0.9	236	29.7	29.7	8.2	8.2	23.9	23.9	75.8	75.8	5.1	4.8	11.3	16.8	5	4	71	74	818758	805584	<0.2	2.0	1.9					
						1.0	0.9	252	29.7		8.2	8.2	23.9	23.9	75.7	75.8	5.0		11.5		4		71				<0.2	1.9						
						3.6	0.8	234	29.5		8.2	8.2	25.1	25.1	69.4	69.4	4.6		15.1		4		74				<0.2	2.0						
					Middle	3.6	0.9	239	29.5	8.2	8.2	25.1	25.1	69.3	69.4	4.6	15.3	4	74	<0.2	1.9													
						6.2	0.7	233	29.2	8.2	8.2	26.2	26.2	69.2	69.3	4.6	23.6	4	76	<0.2	1.9													
						6.2	0.7	250	29.2	8.2	8.2	26.2	26.2	69.3	69.3	4.6	23.8	5	76	<0.2	1.9													
IM4	Sunny	Moderate	12:38	7.0	Surface	1.0	1.1	235	30.1	30.1	8.1	8.1	21.4	21.4	72.3	72.2	4.9	4.5	16.0	19.2	3	3	71	74	819708	804584	<0.2	2.0	2.0					
						1.0	1.2	257	30.1		8.1	8.1	21.4	21.4	72.1	72.2	4.8		16.4		3		71				<0.2	2.0						
						3.5	0.9	234	29.4		8.1	8.1	24.8	24.8	63.5	63.5	4.2		18.6		2		74				<0.2	2.2						
					Middle	3.5	0.9	247	29.4	8.1	8.1	24.8	24.8	63.4	63.4	4.2	18.2	3	74	<0.2	1.9													
						6.0	0.6	225	29.2	8.1	8.1	26.2	26.2	63.9	64.0	4.2	23.1	3	76	<0.2	1.9													
						6.0	0.6	237	29.2	8.1	8.1	26.2	26.2	64.1	64.0	4.3	23.0	3	76	<0.2	1.9													
IM5	Sunny	Moderate	12:46	7.7	Surface	1.0	1.1	246	30.0	30.0	8.1	8.1	22.1	22.1	73.2	73.2	4.9	4.6	10.2	13.6	2	3	71	74	820721	804893	<0.2	2.4	2.3					
						1.0	1.1	269	30.0		8.1	8.1	22.1	22.1	73.2	73.2	4.9		10.2		2		71				<0.2	2.3						
						3.9	1.0	256	29.4		8.1	8.1	24.1	24.1	64.7	64.7	4.3		12.8		2		74				<0.2	2.2						
					Middle	3.9	1.0	278	29.4	8.1	8.1	24.1	24.1	64.7	64.7	4.3	13.0	2	74	<0.2	2.2													
						6.7	0.8	270	29.2	8.1	8.1	24.9	24.9	67.0	67.0	4.5	17.6	3	76	<0.2	2.2													
						6.7	0.9	276	29.2	8.1	8.1	24.9	24.9	67.3	67.2	4.5	17.5	4	76	<0.2	2.2													
IM6	Sunny	Moderate	12:52	7.4	Surface	1.0	1.2	248	30.0	30.0	8.0	8.0	22.1	22.1	74.1	73.9	5.0	4.6	11.3	15.9	2	2	71	74	821085	805805	<0.2	2.3	2.3					
						1.0	1.2	253	30.0		8.0	8.0	22.1	22.1	73.7	73.9	4.9		11.4		2		71				<0.2	2.3						
						3.7	1.0	259	29.3		8.0	8.0	24.3	24.3	63.1	63.1	4.2		14.2		2		74				<0.2	2.2						
					Middle	3.7	1.1	264	29.3	8.0	8.0	24.3	24.3	63.1	63.1	4.2	14.4	2	74	<0.2	2.3													
						6.4	0.8	266	29.2	8.1	8.1	24.9	24.9	68.6	68.6	4.6	22.2	2	76	<0.2	2.2													
						6.4	0.9	274	29.2	8.1	8.1	24.9	24.9	68.9	68.8	4.6	22.0	2	76	<0.2	2.2													
IM7	Sunny	Moderate	12:57	7.0	Surface	1.0	1.2	254	30.0	30.0	8.1	8.1	22.3	22.3	78.6	78.4	5.3	4.7	9.0	14.9	2	2	71	74	821326	806850	<0.2	2.2	2.4					
						1.0	1.2	257	30.0		8.1	8.1	22.3	22.3	78.2	78.4	5.2		9.1		2		71				<0.2	2.2						
						3.5	1.0	280	29.3		8.1	8.1	24.2	24.2	63.1	63.1	4.2		13.0		2		74				<0.2	2.3						
					Middle	3.5	1.0	263	29.3	8.1	8.1	24.2	24.2	63.1	63.1	4.2	13.3	2	74	<0.2	2.4													
						6.0	0.8	266	29.2	8.1	8.1	24.8	24.8	65.8	65.9	4.4	22.7	2	76	<0.2	2.3													
						6.0	0.8	279	29.2	8.1	8.1	24.8	24.8	66.0	65.9	4.4	22.5	2	76	<0.2	2.8													
IM8	Sunny	Moderate	11:52	7.0	Surface	1.0	0.5	188	29.7	29.7	8.1	8.1	21.2	21.2	76.4	76.4	5.2	4.9	6.5	7.7	3	3	73	75	821805	808157	<0.2	1.5	1.6					
						1.0	0.5	192	29.7		8.1	8.1	21.2																					

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

Water Quality Monitoring

Water Quality Monitoring Results on 09 August 18 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	DA	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA			
									Value	DA	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA	
C1	Fine	Moderate	17:44	7.5	Surface	1.0	0.1	282	29.8	8.1	8.1	23.7	23.7	74.8	74.7	5.0	14.0	10	70	70	70	73	815639	804229	<0.2	1.2	<0.2	1.2					
						1.0	0.2	290	29.8	8.1	8.1	23.7	23.7	74.6	74.7	5.0	14.0	11	70	70	73												
					Middle	3.8	0.1	87	29.5	29.5	8.0	8.0	24.7	24.7	65.4	65.4	4.4	17.7	13	73	73	73	73										
						3.8	0.1	93	29.5	29.5	8.0	8.0	24.7	24.7	65.3	65.4	4.4	17.7	12	73	73	73											
					Bottom	6.5	0.2	87	29.3	29.3	8.0	8.0	25.3	25.3	65.1	65.2	4.3	21.0	15	76	76	76	76	76									
						6.5	0.3	94	29.3	29.3	8.0	8.0	25.3	25.3	65.2	65.2	4.3	21.0	15	75	75	75	75										
C2	Cloudy	Rough	16:50	10.1	Surface	1.0	1.1	182	30.1	30.1	8.0	8.0	17.9	17.9	79.1	79.1	5.4	12.6	6	72	72	72	75	825662	806915	<0.2	3.0	<0.2	3.0				
						1.0	1.1	194	30.1	30.1	8.0	8.0	17.9	17.9	79.1	79.1	5.4	12.6	7	74	74	74											
					Middle	5.1	0.9	174	29.2	29.2	8.0	8.0	21.7	21.7	66.8	66.8	4.5	16.1	7	75	75	75	75										
						5.1	0.9	178	29.2	29.2	8.0	8.0	21.7	21.7	66.8	66.8	4.5	16.1	8	74	74	74											
					Bottom	9.1	0.5	181	28.9	28.9	8.0	8.0	23.2	23.2	67.7	67.7	4.6	15.9	8	76	76	76	76										
						9.1	0.5	196	28.9	28.9	8.0	8.0	23.2	23.2	67.7	67.7	4.6	15.9	8	76	76	76											
C3	Cloudy	Moderate	18:43	11.6	Surface	1.0	0.6	264	29.3	29.3	8.1	8.1	24.2	24.2	73.8	73.8	4.9	7.7	5	74	74	74	76	822082	817827	<0.2	1.4	<0.2	1.4				
						1.0	0.6	271	29.3	29.3	8.1	8.1	24.2	24.2	73.8	73.8	4.9	7.7	5	75	75	75											
					Middle	5.8	0.6	264	28.7	28.7	8.1	8.1	25.1	25.1	65.7	65.7	4.4	10.7	5	76	76	76	76										
						5.8	0.6	286	28.7	28.7	8.1	8.1	25.1	25.1	65.7	65.7	4.4	10.7	6	76	76	76											
					Bottom	10.6	0.3	276	27.9	27.9	8.0	8.0	26.8	26.8	64.8	64.8	4.4	16.5	6	77	77	77	77										
						10.6	0.4	293	27.9	27.9	8.0	8.0	26.8	26.8	64.8	64.8	4.4	16.5	5	77	77	77											
IM1	Fine	Moderate	17:26	4.4	Surface	1.0	0.2	77	30.0	30.0	8.1	8.1	24.0	24.0	78.8	78.7	5.2	12.2	21	71	71	71	73	817960	807125	<0.2	1.7	<0.2	1.7				
						1.0	0.3	82	30.0	30.0	8.1	8.1	24.0	24.0	78.6	78.7	5.2	12.2	21	71	71	71											
					Middle	2.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-	-
						2.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-	-
					Bottom	3.4	0.2	88	29.5	29.5	8.1	8.1	24.7	24.7	78.0	78.1	5.2	20.1	21	74	74	74	74										
						3.4	0.2	90	29.5	29.5	8.1	8.1	24.7	24.7	78.2	78.1	5.2	20.1	21	74	74	74											
IM2	Fine	Moderate	17:19	6.3	Surface	1.0	0.5	220	29.9	29.9	8.2	8.2	23.5	23.5	82.3	82.3	5.5	15.1	19	71	71	71	73	818135	806175	<0.2	1.7	<0.2	1.7				
						1.0	0.5	221	29.9	29.9	8.2	8.2	23.5	23.5	82.3	82.3	5.5	15.1	19	71	71	71											
					Middle	3.2	0.3	220	29.8	29.8	8.2	8.2	24.1	24.1	82.6	82.7	5.5	14.8	19	73	73	73	73										
						3.2	0.3	241	29.8	29.8	8.2	8.2	24.1	24.1	82.7	82.7	5.5	14.7	20	73	73	73											
					Bottom	5.3	0.2	252	29.7	29.7	8.1	8.1	24.7	24.7	88.1	88.3	5.9	14.4	21	76	76	76	76										
						5.3	0.2	270	29.7	29.7	8.1	8.1	24.7	24.7	88.5	88.3	5.9	14.6	22	76	76	76											
IM3	Cloudy	Moderate	17:12	6.6	Surface	1.0	0.6	263	29.9	29.9	8.0	8.0	22.9	22.9	81.0	81.0	5.4	17.3	19	71	71	71	74	818793	805610	<0.2	1.6	<0.2	1.6				
						1.0	0.6	265	29.9	29.9	8.0	8.0	22.9	22.9	80.9	81.0	5.4	17.4	20	71	71	71											
					Middle	3.3	0.4	247	29.9	29.9	8.0	8.0	22.9	22.9	81.5	81.6	5.4	19.1	18	74	74	74	74										
						3.3	0.4	258	29.9	29.9	8.0	8.0	22.9	22.9	81.6	81.6	5.5	19.2	19	74	74	74											
					Bottom	5.6	0.4	245	29.9	29.9	8.0	8.0	23.1	23.1	85.5	85.6	5.7	23.5	20	76	76	76	76										
						5.6	0.4	256	29.9	29.9	8.0	8.0	23.1	23.1	85.6	85.6	5.7	23.5	20	76	76	76											
IM4	Cloudy	Moderate	17:10	6.5	Surface	1.0	0.6	248	29.9	29.9	8.1	8.0	22.9	22.9	81.4	81.4	5.4	16.7	14	71	71	71	73	819710	804582	<0.2	1.7	<0.2	1.7				
						1.0	0.6	250	29.9	29.9	8.0	8.0	22.9	22.9	81.4	81.4	5.4	16.8	14	71	71	71											
					Middle	3.3	0.4	246	29.9	29.9	8.0	8.0	23.0	23.0	81.5	81.6	5.4	19.6	15	73	73	73	73										
						3.3	0.5	262	29.9	29.9	8.0	8.0	23.0	23.0	81.6	81.6	5.5	19.7	16	73	73	73											
					Bottom	5.5	0.4	247	29.9	29.9	8.1	8.1	23.0	23.0	85.6	85.7	5.7	21.5	27	76	76	76	76										
						5.5	0.4	262	29.9	29.9	8.1	8.1	23.0	23.0	85.7	85.7	5.7	21.4	28	76	76	76											
IM5	Cloudy	Moderate	17:00	6.5	Surface	1.0	0.6	253	29.6	29.6	8.1	8.1	23.0	23.0	74.4	74.4	5.0	15.7	22	71	71	71	74	820729	804880	<0.2	1.6	<0.2	1.6				
						1.0	0.6	245	29.6	29.6	8.1	8.1	23.0	23.0	74.4	74.4	5.0	15.7	23	71	71	71											
					Middle	3.3	0.6	245	29.6	29.6	8.1	8.1	23.0	23.0	74.3	74.4	5.0	20.1	25	74	74	74	74										
						3.3	0.6	257	29.6	29.6	8.1	8.1	23.0	23.0	74.4	74.4	5.0	20.2	25	74	74	74											
					Bottom	5.5	0.5	245	29.6	29.6	8.1	8.1	23.0	23.0	75.6	75.6	5.1	22.1	24	76	76	76	76										
						5.5	0.5	250	29.6	29.6	8.1	8.1	23.0	23.0	75.6	75.6	5.1	22.4	25	76	76	76											
IM6	Cloudy	Moderate	16:50	6.0	Surface	1.0	0.9	270	29.7	29.7	8.0	8.0	23.0	23.0	71.6	71.6	4.8	17.9	20	71	71	71	74	821036	805843	<0.2	1.7	<0.2	1.7				
						1.0	1.0	270	29.7	29.7	8.0	8.0	23.0	23.0	71.6	71.6	4.8	18.0	20	71	71	71											
					Middle	3.0	0.8	271	29.7	29.7	8.0	8.0	23.1	23.1	71.8	71.9	4.8	20.5	21	74	74	74	74										
						3.0	0.8	283	29.7	29.7	8.0	8.0	23.1	23.1	71.9	71.9	4.8	20.5	22	74	74	74											
					Bottom	5.0	0.7	269	29.7	29.7	8.0	8.0	23.1	23.1	75.0	75.1	5.0	22.3	23	76	76	76	76										
						5.0	0.8	273	29.7	29.7	8.0	8.0	23.1	23.1	75.1	75.1	5.0	22.5	24	76	76	76											
IM7	Sunny	Moderate	16:44	7.2	Surface	1.0	1.0	256	30.1	30.1	8.0	8.0	21.9	21.9	74.9	74.9	5.0	12.5	11	71	71	71	74	821351	806836	<0.2	1.5	<0.2	1.5				
						1.0	1.1	258	30.1	30.1	8.0	8.0	22.0	22.0	74.8	74.8	5.0	12.7	11	71	71	71											
					Middle	3.6	0.9	266	29.6	29.6	8.0	8.0	23.1	23.1	69.8	69.8	4.7	18.9	10	74	74	74	74										
						3.6	1.0	270	29.6	29.6	8.0	8.0	23.1	23.1	69.7	69.7	4.7	19.0	10	74	74	74											
					Bottom	6.2	0.8	272	29.6	29.6	7.9	7.9	23.3	23.3	71.8	71.8	4.8	23.6	10	76	76	76	76										
						6.2	0.9	279	29.6	29.6	7.9	7.9	23.3	23.3	71.7	71.7	4.8	23.6	10	76	76	76											
IM8	Cloudy																																

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

Water Quality Monitoring

Water Quality Monitoring Results on 09 August 18 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	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value			Value	Value	Value	Value	Value	Value
IM9	Cloudy	Moderate	17:26	6.6	Surface	1.0	0.4	163	30.0	30.0	8.1	8.1	20.8	20.8	86.4	86.4	5.8	5.8	11.8	8	72	75	822093	808800	<0.2	2.2	2.3					
						1.0	0.4	178	30.0	8.1	8.1	20.7	20.8	86.4	86.4	5.8	5.8	11.8	8	73	75	75	75	<0.2	2.2							
					Middle	3.3	0.1	148	29.8	29.8	8.1	8.1	21.3	21.3	78.7	78.7	5.3	5.3	13.8	7	74	75	75	75	<0.2	2.2						
						3.3	0.1	154	29.8	29.8	8.1	8.1	21.3	21.3	78.7	78.7	5.3	5.3	13.8	7	75	75	75	75	<0.2	2.3						
					Bottom	5.6	0.1	230	29.2	29.2	8.0	8.0	23.1	23.1	81.7	81.7	5.5	5.5	15.7	7	77	77	77	77	<0.2	2.4						
						5.6	0.1	246	29.2	29.2	8.0	8.0	23.1	23.1	81.7	81.7	5.5	5.5	15.7	7	77	77	77	77	<0.2	2.4						
IM10	Cloudy	Moderate	17:36	7.2	Surface	1.0	0.3	163	30.2	30.2	8.1	8.1	20.1	20.1	92.7	92.7	6.3	6.3	10.3	6	72	75	822378	809769	<0.2	2.3	2.4					
						1.0	0.3	163	30.2	8.1	8.1	20.1	20.1	92.7	92.7	6.3	6.3	10.3	7	74	75	75	75	<0.2	2.5							
					Middle	3.6	0.1	112	29.1	29.1	8.0	8.0	23.3	23.3	66.5	66.5	4.5	4.5	16.3	7	75	74	74	74	<0.2	2.6						
						3.6	0.1	113	29.1	29.1	8.0	8.0	23.3	23.3	66.5	66.5	4.5	4.5	16.3	7	74	74	74	74	<0.2	2.4						
					Bottom	6.2	0.1	44	29.0	29.0	8.0	8.0	23.5	23.5	73.8	73.8	5.0	5.0	16.4	7	77	77	77	77	<0.2	2.3						
						6.2	0.1	48	29.0	29.0	8.0	8.0	23.5	23.5	73.8	73.8	5.0	5.0	16.4	8	76	76	76	76	<0.2	2.4						
IM11	Cloudy	Moderate	17:50	7.8	Surface	1.0	0.2	304	29.6	29.6	8.0	8.0	22.6	22.6	77.1	77.1	5.2	5.2	8.8	7	74	75	822054	811444	<0.2	2.5	2.3					
						1.0	0.2	327	29.6	29.6	8.0	8.0	22.6	22.6	77.0	77.0	5.2	5.2	8.8	7	74	74	74	74	<0.2	2.4						
					Middle	3.9	0.2	311	29.2	29.2	8.0	8.0	23.4	23.4	69.6	69.6	4.7	4.7	11.2	6	74	74	74	74	<0.2	2.3						
						3.9	0.2	335	29.2	29.2	8.0	8.0	23.4	23.4	69.6	69.6	4.7	4.7	11.2	7	74	74	74	74	<0.2	2.3						
					Bottom	6.8	0.2	329	29.1	29.1	8.0	8.0	23.6	23.6	72.2	72.2	4.9	4.9	13.7	7	76	76	76	76	<0.2	2.2						
						6.8	0.2	339	29.1	29.1	8.0	8.0	23.6	23.6	72.2	72.2	4.9	4.9	13.7	7	77	77	77	77	<0.2	2.2						
IM12	Cloudy	Moderate	17:59	8.1	Surface	1.0	0.4	295	29.5	29.5	8.1	8.1	23.1	23.1	81.2	81.2	5.5	5.5	6.8	7	72	75	821487	812057	<0.2	2.0	2.0					
						1.0	0.4	314	29.5	29.5	8.1	8.1	23.1	23.1	81.2	81.2	5.5	5.5	6.8	7	73	74	74	74	<0.2	2.0						
					Middle	4.1	0.3	308	29.4	29.4	8.1	8.1	23.2	23.2	76.9	76.9	5.2	5.2	7.7	7	75	75	75	75	<0.2	2.0						
						4.1	0.3	321	29.4	29.4	8.1	8.1	23.2	23.2	76.9	76.9	5.2	5.2	7.7	7	76	76	76	76	<0.2	2.0						
					Bottom	7.1	0.3	295	29.2	29.2	8.0	8.0	23.7	23.7	76.3	76.3	5.1	5.1	8.9	8	76	76	76	76	<0.2	2.1						
						7.1	0.3	299	29.2	29.2	8.0	8.0	23.7	23.7	76.3	76.3	5.1	5.1	8.9	8	78	78	78	78	<0.2	2.0						
SR2	Cloudy	Moderate	18:16	4.5	Surface	1.0	0.2	303	29.5	29.5	8.1	8.1	23.5	23.5	82.0	82.0	5.5	5.5	11.6	7	74	75	821461	814158	<0.2	1.4	1.4					
						1.0	0.2	328	29.5	29.5	8.1	8.1	23.5	23.5	82.0	82.0	5.5	5.5	11.6	6	75	75	75	75	<0.2	1.4						
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	
					Bottom	3.5	0.2	306	29.5	29.5	8.1	8.1	23.5	23.5	88.5	88.5	5.9	5.9	12.7	8	76	76	76	76	<0.2	1.4						
						3.5	0.2	319	29.5	29.5	8.1	8.1	23.5	23.5	88.5	88.5	5.9	5.9	12.7	8	76	76	76	76	<0.2	1.4						
SR3	Cloudy	Rough	17:09	8.2	Surface	1.0	0.8	201	30.2	30.2	8.2	8.2	19.2	19.2	95.5	95.5	6.5	6.5	9.8	8	-	-	822138	807547	-	-	-					
						1.0	0.9	203	30.2	30.2	8.2	8.2	19.2	19.2	95.5	95.5	6.5	6.5	9.8	8	-	-	-	-	-	-						
					Middle	4.1	0.5	222	29.3	29.3	8.0	8.0	22.4	22.4	69.5	69.5	4.7	4.7	9.3	9	-	-	-	-	-	-		-	-			
						4.1	0.5	231	29.3	29.3	8.0	8.0	22.4	22.4	69.5	69.5	4.7	4.7	9.3	8	-	-	-	-	-	-		-	-			
					Bottom	7.2	0.4	244	29.0	29.0	8.0	8.0	23.1	23.1	75.7	75.7	5.1	5.1	11.7	9	-	-	-	-	-	-		-	-	-		
						7.2	0.4	247	29.0	29.0	8.0	8.0	23.1	23.1	75.7	75.7	5.1	5.1	11.7	8	-	-	-	-	-	-		-	-	-		
SR4A	Fine	Moderate	18:09	8.4	Surface	1.0	0.5	282	30.4	30.4	8.1	8.1	23.9	23.9	95.4	95.4	6.3	6.3	16.0	22	-	-	817163	807815	-	-	-					
						1.0	0.5	284	30.4	30.4	8.1	8.1	23.9	23.9	95.4	95.4	6.3	6.3	15.9	23	-	-	-	-	-	-						
					Middle	4.2	0.4	280	30.4	30.4	8.1	8.1	23.9	23.9	94.6	94.6	6.2	6.2	17.0	24	-	-	-	-	-	-		-	-			
						4.2	0.4	296	30.4	30.4	8.1	8.1	23.9	23.9	94.5	94.5	6.2	6.2	17.9	24	-	-	-	-	-	-		-	-			
					Bottom	7.4	0.4	279	30.4	30.4	8.1	8.1	24.0	24.0	92.8	92.8	6.1	6.1	22.3	23	-	-	-	-	-	-		-	-	-		
						7.4	0.4	289	30.4	30.4	8.1	8.1	24.0	24.0	92.8	92.8	6.1	6.1	22.5	24	-	-	-	-	-	-		-	-	-		
SR5A	Fine	Moderate	18:29	5.0	Surface	1.0	0.1	174	30.4	30.4	8.1	8.1	24.1	24.1	101.6	101.6	6.7	6.7	19.9	16	-	-	816580	810709	-	-	-					
						1.0	0.1	182	30.4	30.4	8.1	8.1	24.1	24.1	101.5	101.5	6.7	6.7	20.1	16	-	-	-	-	-	-						
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-		
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-		
					Bottom	4.0	0.1	172	30.5	30.5	8.0	8.0	24.1	24.1	101.7	101.7	6.7	6.7	22.2	17	-	-	-	-	-	-		-	-			
						4.0	0.1	176	30.5	30.5	8.0	8.0	24.1	24.1	101.7	101.7	6.7	6.7	21.8	17	-	-	-	-	-	-		-	-			
SR6	Fine	Moderate	19:04	4.0	Surface	1.0	0.2	221	29.9	29.9	8.1	8.1	24.0	24.0	85.5	85.4	5.7	5.7	13.6	13	-	-	817884	814663	-	-	-					
						1.0	0.2	224	29.9	29.9	8.1	8.1	24.0	24.0	85.2	85.4	5.7	5.7	13.7	14	-	-	-	-	-	-						
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-		
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-		
					Bottom	3.0	0.1	224	29.7	29.7	8.0	8.0	24.7	24.7	84.7	85.0	5.6	5.6	14.9	14	-	-	-	-	-	-		-	-			
						3.0	0.1	233	29.7	29.7	8.0	8.0	24.7	24.7	85.3	85.0	5.7	5.7	15.0	15	-	-	-	-	-	-		-	-			
SR7	Cloudy	Moderate	19:23	16.9	Surface	1.0	0.1	272	28.7	28.7	8.1	8.1	25.5	25.5	78.6	78.6	5.3	5.3	8.4	5	-	-	823627	823749	-	-						

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

Water Quality Monitoring

Water Quality Monitoring Results on 11 August 18 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	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value			Value	Value	Value	Value	Value	Value
C1	Rainy	Rough	12:22	8.6	Surface	1.0	0.7	223	28.6	28.6	8.0	8.0	23.7	23.7	72.8	72.8	4.9	4.9	12.9	7	75	75	815590	804248	<0.2	1.7	1.7					
						1.0	0.7	227	28.6	8.0	8.0	23.7	23.7	72.8	72.8	4.9	4.9	12.9	8	75	75											
					Middle	4.3	0.8	229	28.5	28.5	8.0	8.0	24.8	24.8	70.6	70.6	4.8	4.8	16.9	7	76	76										
						4.3	0.9	232	28.5	8.0	8.0	24.8	24.8	70.6	70.6	4.8	4.8	16.9	6	76	76											
					Bottom	7.6	0.5	237	28.5	28.5	8.0	8.0	26.5	26.5	74.6	74.6	5.0	5.0	14.8	8	77	77										
						7.6	0.6	255	28.5	8.0	8.0	26.5	26.5	74.6	74.6	5.0	5.0	14.8	7	77	77											
C2	Rainy	Rough	13:38	11.5	Surface	1.0	0.4	179	28.8	28.8	8.0	8.0	22.9	22.9	77.5	77.5	5.3	5.3	16.8	10	73	73	825661	806934	<0.2	1.7	1.8					
						1.0	0.4	182	28.8	8.0	8.0	22.9	22.9	77.5	77.5	5.3	5.3	16.8	9	72	72											
					Middle	5.8	0.4	112	28.7	28.7	8.1	8.1	24.5	24.5	75.9	75.9	5.1	5.1	16.3	10	74	74										
						5.8	0.4	114	28.7	8.1	8.1	24.5	24.5	75.9	75.9	5.1	5.1	16.3	9	74	74											
					Bottom	10.5	0.3	145	28.7	28.7	8.1	8.1	24.6	24.6	81.5	81.5	5.5	5.5	21.9	10	76	76										
						10.5	0.3	152	28.7	8.1	8.1	24.6	24.6	81.5	81.5	5.5	5.5	21.9	10	76	76											
C3	Rainy	Moderate	11:52	11.9	Surface	1.0	0.1	127	28.1	28.1	8.1	8.1	25.5	25.5	71.3	71.2	4.8	4.8	10.8	4	74	74	822094	817797	<0.2	1.8	1.8					
						1.0	0.1	135	28.1	28.1	8.1	8.1	25.5	25.5	71.1	71.2	4.8	4.8	10.9	4	74	74										
					Middle	6.0	0.2	354	27.1	27.1	8.0	8.0	28.3	28.3	61.9	61.9	4.2	4.2	12.7	4	75	75										
						6.0	0.2	326	27.1	27.1	8.0	8.0	28.3	28.3	61.9	61.9	4.2	4.2	12.7	4	76	76										
					Bottom	10.9	0.2	122	27.1	27.1	8.0	8.0	28.3	28.3	64.6	64.6	4.4	4.4	19.8	4	77	77										
						10.9	0.2	127	27.1	27.1	8.0	8.0	28.3	28.3	64.6	64.6	4.4	4.4	19.8	4	76	76										
IM1	Rainy	Rough	12:55	5.4	Surface	1.0	0.1	254	28.5	28.5	8.0	8.0	24.8	24.8	70.3	70.3	4.8	4.8	16.2	7	72	72	817946	807142	<0.2	1.8	1.8					
						1.0	0.1	271	28.5	8.0	8.0	24.8	24.8	70.3	70.3	4.8	4.8	16.2	8	73	73											
					Middle	2.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	
						2.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	
					Bottom	4.4	0.1	209	28.5	28.5	8.0	8.0	24.9	24.9	70.6	70.6	4.8	4.8	15.7	10	74	74										
						4.4	0.2	212	28.5	8.0	8.0	24.9	24.9	70.6	70.6	4.8	4.8	15.7	11	75	75											
IM2	Rainy	Rough	13:02	8.3	Surface	1.0	0.9	208	28.6	28.6	8.0	8.0	24.1	24.1	73.1	73.1	5.0	5.0	13.9	8	73	73	818157	806137	<0.2	1.6	1.6					
						1.0	0.9	228	28.6	8.0	8.0	24.1	24.1	73.1	73.1	5.0	5.0	13.9	8	72	72											
					Middle	4.2	0.7	203	28.6	28.6	8.0	8.0	24.3	24.3	70.9	70.9	4.8	4.8	16.6	9	74	74										
						4.2	0.7	206	28.6	8.0	8.0	24.3	24.3	70.9	70.9	4.8	4.8	16.6	9	75	75											
					Bottom	7.3	0.2	235	28.5	28.5	8.0	8.0	25.1	25.1	72.4	72.4	4.9	4.9	17.1	9	76	76										
						7.3	0.3	238	28.5	8.0	8.0	25.1	25.1	72.4	72.4	4.9	4.9	17.1	9	75	75											
IM3	Rainy	Rough	13:10	6.9	Surface	1.0	0.5	225	28.8	28.8	8.0	8.0	21.5	21.5	78.7	78.7	5.4	5.4	13.6	11	73	73	818782	805588	<0.2	1.6	1.7					
						1.0	0.5	234	28.8	8.0	8.0	21.5	21.5	78.7	78.7	5.4	5.4	13.6	11	73	73											
					Middle	3.5	0.4	220	28.8	28.8	8.0	8.0	22.6	22.6	78.4	78.4	5.3	5.3	15.7	14	75	75										
						3.5	0.5	235	28.8	8.0	8.0	22.6	22.6	78.4	78.4	5.3	5.3	15.7	15	76	76											
					Bottom	5.9	0.3	231	28.8	28.8	8.0	8.0	23.8	23.8	79.3	79.3	5.4	5.4	20.8	15	76	76										
						5.9	0.3	251	28.8	8.0	8.0	23.8	23.8	79.3	79.3	5.4	5.4	20.8	14	75	75											
IM4	Rainy	Rough	13:20	6.8	Surface	1.0	1.1	190	28.8	28.8	8.0	8.0	21.6	21.6	78.6	78.6	5.4	5.4	15.7	12	72	72	819736	804606	<0.2	1.7	1.7					
						1.0	1.1	197	28.8	8.0	8.0	21.6	21.6	78.6	78.6	5.4	5.4	15.7	13	73	73											
					Middle	3.4	1.0	195	28.8	28.8	8.0	8.0	22.7	22.7	78.1	78.1	5.3	5.3	14.1	12	74	74										
						3.4	1.1	213	28.8	8.0	8.0	22.7	22.7	78.1	78.1	5.3	5.3	14.1	13	75	75											
					Bottom	5.8	0.6	176	28.8	28.8	8.0	8.0	23.6	23.6	78.7	78.7	5.3	5.3	15.5	18	76	76										
						5.8	0.6	192	28.8	8.0	8.0	23.6	23.6	78.7	78.7	5.3	5.3	15.5	19	76	76											
IM5	Rainy	Rough	13:30	6.7	Surface	1.0	1.0	223	28.8	28.8	8.0	8.0	22.9	22.9	78.2	78.2	5.3	5.3	15.5	11	73	73	820707	804855	<0.2	1.8	1.7					
						1.0	1.0	224	28.8	8.0	8.0	22.9	22.9	78.2	78.2	5.3	5.3	15.5	11	73	73											
					Middle	3.4	0.8	217	28.8	28.8	8.0	8.0	24.0	24.0	78.0	78.0	5.3	5.3	14.2	13	75	75										
						3.4	0.9	232	28.8	8.0	8.0	24.0	24.0	78.0	78.0	5.3	5.3	14.2	12	74	74											
					Bottom	5.7	0.6	227	28.8	28.8	8.1	8.1	24.1	24.1	78.4	78.4	5.3	5.3	18.9	13	76	76										
						5.7	0.6	249	28.8	8.1	8.1	24.1	24.1	78.4	78.4	5.3	5.3	18.9	14	77	77											
IM6	Rainy	Rough	13:39	7.3	Surface	1.0	0.7	230	28.8	28.8	8.0	8.0	22.9	22.9	77.8	77.8	5.3	5.3	13.6	9	74	74	821056	805811	<0.2	1.6	1.6					
						1.0	0.8	247	28.8	8.0	8.0	22.9	22.9	77.8	77.8	5.3	5.3	13.6	9	73	73											
					Middle	3.7	0.7	246	28.8	28.8	8.1	8.1	24.0	24.0	76.3	76.3	5.2	5.2	16.4	10	75	75										
						3.7	0.8	263	28.8	8.1	8.1	24.0	24.0	76.3	76.3	5.2	5.2	16.4	11	74	74											
					Bottom	6.3	0.6	254	28.8	28.8	8.0	8.0	24.3	24.3	77.6	77.6	5.2	5.2	18.2	11	78	78										
						6.3	0.6	271	28.8	8.0	8.0	24.3	24.3	77.6	77.6	5.2	5.2	18.2	10	76	76											
IM7	Rainy	Rough	13:49	6.9	Surface	1.0	1.2	209	28.8	28.8	8.0	8.0	23.3	23.3	79.7	79.7	5.4	5.4	14.8	7	73	73	821346	806841	<0.2	1.8	1.8					
						1.0	1.3	213	28.8	8.0	8.0	23.3	23.3	79.7	79.7	5.4	5.4	14.8	7	73	73											
					Middle	3.5	1.0	226	28.7	28.7	8.1	8.1	24.1	24.1	81.0	81.0	5.5	5.5	16.5	8	75	75										
						3.5	1.1	247	28.7	28.7	8.1	8.1	24.1	24.1	81.0	81.0	5.5	5.5	16.5	7	74	74										
					Bottom	5.9	0.7	221	28.7	28.7	8.0	8.0	24.2	24.2	89.6	89.6	6.1	6.1	21.4	8	76	76										
						5.9	0.7	224	28.7	28.7	8.0	8.0	24.2	24.2	89.6	89.6	6.1	6.1	21.4	9	76	76										
IM8	Rainy	Rough	13:03	8.6	Surface	1.0	0.2	108	28.8	28.8	8.0	8.0	22.9	22.9	78.9	78.9	5.4	5.4	14.0	9	73	73	821855	808147	<0.2	1.9	1.8					
						1.0	0.2	114	28.8	8.0	8.0	22.9	22.9	78.9	78.9	5.4	5.4	14.0	9	72	72											
					Middle	4.3	0.5	112	28.8	28.8	8.1	8.1	24.1	24																		

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

Water Quality Monitoring

Water Quality Monitoring Results on 11 August 18 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	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA
IM9	Rainy	Rough	12:56	6.3	Surface	1.0	0.4	121	28.8	8.0	8.0	21.5	21.5	78.8	78.8	5.4	5.4	17.6	17.6	9	72	75	822102	808804	<0.2	1.7	1.8	1.8				
						1.0	0.4	126	28.8	8.0	8.0	21.5	21.5	78.8	78.8	5.4	5.4	17.6	17.6	10	73	75			<0.2	1.7	1.8	1.8				
						3.2	0.6	116	28.8	8.0	8.0	22.7	22.7	78.1	78.1	5.3	5.3	17.1	17.1	9	75	75			<0.2	1.7	1.7	1.7				
					Middle	3.2	0.6	124	28.8	8.0	8.0	22.7	22.7	78.1	78.1	5.3	5.3	17.1	17.1	10	76	76			<0.2	1.7	1.7	1.7	1.7			
						5.3	0.2	103	28.8	8.1	8.1	23.8	23.8	78.4	78.4	5.3	5.3	16.6	16.6	12	76	76			<0.2	1.7	1.7	1.7	1.7			
						5.3	0.2	106	28.8	8.1	8.1	23.8	23.8	78.4	78.4	5.3	5.3	16.6	16.6	11	77	77			<0.2	1.7	1.7	1.7	1.7			
IM10	Rainy	Rough	12:47	7.3	Surface	1.0	0.3	134	28.8	8.0	8.0	21.5	21.5	80.2	80.2	5.5	5.5	12.9	12.9	10	74	75	822376	809787	<0.2	1.8	1.8	1.8				
						1.0	0.3	136	28.8	8.0	8.0	21.5	21.5	80.2	80.2	5.5	5.5	12.9	12.9	11	73	74			<0.2	1.6	1.6	1.6				
						3.7	0.4	111	28.8	8.0	8.0	23.1	23.1	77.4	77.4	5.3	5.3	15.0	15.0	10	74	75			<0.2	1.7	1.7	1.7				
					Middle	3.7	0.4	114	28.8	8.0	8.0	23.1	23.1	77.4	77.4	5.3	5.3	15.0	15.0	9	75	75			<0.2	1.7	1.7	1.7	1.7			
						6.3	0.3	99	28.6	8.0	8.0	24.1	24.1	76.7	76.7	5.2	5.2	19.4	19.4	11	76	76			<0.2	1.7	1.7	1.7	1.7			
						6.3	0.3	99	28.6	8.0	8.0	24.1	24.1	76.7	76.7	5.2	5.2	19.4	19.4	10	75	75			<0.2	1.6	1.6	1.6	1.6			
IM11	Rainy	Rough	12:36	7.8	Surface	1.0	0.2	130	28.6	8.0	8.0	24.1	24.1	74.5	74.5	5.1	5.1	13.0	13.0	11	73	73	822050	811448	<0.2	1.6	1.6	1.6				
						1.0	0.2	138	28.6	8.0	8.0	24.1	24.1	74.5	74.5	5.1	5.1	13.0	13.0	10	73	73			<0.2	1.5	1.5	1.5				
						3.9	0.4	126	28.6	8.0	8.0	24.3	24.3	72.5	72.5	4.9	4.9	16.8	16.8	10	75	75			<0.2	1.6	1.6	1.6				
					Middle	3.9	0.5	130	28.6	8.0	8.0	24.3	24.3	72.5	72.5	4.9	4.9	16.8	16.8	11	74	74			<0.2	1.6	1.6	1.6	1.6			
						6.8	0.4	127	28.5	8.0	8.0	24.8	24.8	76.2	76.2	5.2	5.2	17.7	17.7	10	77	77			<0.2	1.7	1.7	1.7	1.7			
						6.8	0.4	130	28.5	8.0	8.0	24.8	24.8	76.2	76.2	5.2	5.2	17.7	17.7	11	77	77			<0.2	1.7	1.7	1.7	1.7			
IM12	Rainy	Rough	12:29	9.3	Surface	1.0	0.3	109	28.6	8.0	8.0	24.8	24.8	71.0	71.0	4.8	4.8	15.0	15.0	8	72	73	821479	812031	<0.2	1.7	1.7	1.7				
						1.0	0.3	114	28.6	8.0	8.0	24.8	24.8	71.0	71.0	4.8	4.8	15.0	15.0	8	73	73			<0.2	1.6	1.6	1.6				
						4.7	0.2	127	28.5	8.0	8.0	24.9	24.9	71.1	71.1	4.8	4.8	17.2	17.2	9	75	75			<0.2	1.6	1.6	1.6				
					Middle	4.7	0.3	136	28.5	8.0	8.0	24.9	24.9	71.1	71.1	4.8	4.8	17.2	17.2	9	75	75			<0.2	1.6	1.6	1.6	1.6			
						8.3	0.1	165	28.5	8.0	8.0	25.0	25.0	74.0	74.0	5.0	5.0	20.0	20.0	9	77	77			<0.2	1.6	1.6	1.6	1.6			
						8.3	0.2	179	28.5	8.0	8.0	25.0	25.0	74.0	74.0	5.0	5.0	20.0	20.0	8	76	76			<0.2	1.6	1.6	1.6	1.6			
SR2	Rainy	Moderate	12:13	4.8	Surface	1.0	0.2	87	28.5	8.0	8.0	24.4	24.4	74.8	74.8	5.1	5.1	17.3	17.3	12	74	75	821479	814192	<0.2	1.7	1.7	1.7				
						1.0	0.2	95	28.5	8.0	8.0	24.4	24.4	74.8	74.8	5.1	5.1	17.3	17.3	11	75	75			<0.2	1.6	1.6	1.6				
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						3.8	0.3	90	28.5	8.0	8.0	24.5	24.5	79.5	79.5	5.4	5.4	18.2	18.2	11	77	77			<0.2	1.8	1.8	1.8	1.8			
						3.8	0.3	91	28.5	8.0	8.0	24.5	24.5	79.5	79.5	5.4	5.4	18.2	18.2	11	76	76			<0.2	1.7	1.7	1.7	1.7			
SR3	Rainy	Rough	13:10	8.3	Surface	1.0	0.3	187	28.8	8.0	8.0	22.9	22.9	78.3	78.3	5.3	5.3	16.1	16.1	11	-	-	822146	807544	-	-	-	-				
						1.0	0.3	193	28.8	8.0	8.0	22.9	22.9	78.3	78.3	5.3	5.3	16.1	16.1	11	-	-			-	-	-	-				
						4.2	0.3	182	28.7	8.1	8.1	24.1	24.1	77.6	77.6	5.3	5.3	11.0	11.0	12	-	-			-	-	-	-				
					Middle	4.2	0.3	185	28.7	8.1	8.1	24.1	24.1	77.6	77.6	5.3	5.3	11.0	11.0	13	-	-			-	-	-	-	-	-		
						7.3	0.2	236	28.7	8.1	8.1	24.3	24.3	79.2	79.2	5.4	5.4	15.5	15.5	13	-	-			-	-	-	-	-			
						7.3	0.2	259	28.7	8.1	8.1	24.3	24.3	79.2	79.2	5.4	5.4	15.5	15.5	12	-	-			-	-	-	-	-			
SR4A	Rainy	Moderate	12:00	8.4	Surface	1.0	0.1	79	28.6	8.0	8.0	23.0	23.0	71.3	71.3	4.8	4.8	15.9	15.9	9	-	-	817177	807822	-	-	-	-				
						1.0	0.1	83	28.6	8.0	8.0	23.0	23.0	71.3	71.3	4.8	4.8	15.9	15.9	9	-	-			-	-	-	-				
						4.2	0.2	52	28.5	8.0	8.0	24.5	24.5	71.3	71.3	4.8	4.8	17.1	17.1	11	-	-			-	-	-	-				
					Middle	4.2	0.2	52	28.5	8.0	8.0	24.5	24.5	71.3	71.3	4.8	4.8	17.1	17.1	12	-	-			-	-	-	-				
						7.4	0.2	58	28.5	8.0	8.0	24.5	24.5	72.3	72.3	4.9	4.9	17.5	17.5	11	-	-			-	-	-	-				
						7.4	0.2	60	28.5	8.0	8.0	24.5	24.5	72.3	72.3	4.9	4.9	17.5	17.5	11	-	-			-	-	-	-				
SR5A	Rainy	Moderate	12:05	5.0	Surface	1.0	0.1	336	27.8	8.1	8.1	25.6	25.6	69.8	69.8	4.8	4.8	8.4	8.4	11	-	-	816604	810672	-	-	-	-				
						1.0	0.1	309	27.8	8.1	8.1	25.6	25.6	69.8	69.8	4.8	4.8	8.4	8.4	10	-	-			-	-	-	-				
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
						4.0	0.1	319	27.8	8.0	8.0	26.8	26.8	71.1	71.1	4.8	4.8	8.0	8.0	14	-	-			-	-	-	-				
						4.0	0.1	346	27.8	8.0	8.0	26.8	26.8	71.1	71.1	4.8	4.8	8.0	8.0	14	-	-			-	-	-	-				
SR6	Rainy	Moderate	11:37	4.6	Surface	1.0	0.1	88	27.8	8.0	8.0	25.6	25.6	69.7	69.7	4.8	4.8	9.7	9.7	11	-	-	817908	814687	-	-	-	-				
						1.0	0.1	93	27.8	8.0	8.0	25.6	25.6	69.7	69.7	4.8	4.8	9.7	9.7	10	-	-			-	-	-	-				
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
						3.6	0.1	90	27.7	8.0	8.0	27.5	27.5	69.8	69.8	4.7	4.7	11.3	11.3	10	-	-			-	-	-	-				
						3.6	0.1	94	27.7	8.0	8.0	27.5	27.5	69.8	69.8	4.7																

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

Water Quality Monitoring

Water Quality Monitoring Results on 11 August 18 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	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA				
C1	Rainy	Moderate	19:20	8.6	Surface	1.0	0.5	33	28.5	28.5	8.0	8.0	21.5	21.5	68.2	68.2	4.7	4.6	13.1	13.9	7	8	73	75	815598	804225	<0.2	<0.2	2.0	2.0						
						1.0	0.6	35	28.5	8.0	8.0	21.5	21.5	68.2	68.2	4.7	4.6	13.1	13.9	7	8	73	75	<0.2	<0.2	2.0	2.0									
						4.3	0.5	39	26.6	26.6	8.0	8.0	25.2	25.2	63.3	63.3	4.4	4.4	14.5	14.5	8	8	75	75	<0.2	<0.2	1.8	1.8								
					Middle	4.3	0.5	39	26.6	26.6	8.0	8.0	25.2	25.2	63.3	63.3	4.4	4.4	14.5	14.5	8	8	75	75	<0.2	<0.2	1.8	1.8								
						7.6	0.5	40	26.4	26.4	8.0	8.0	26.3	26.3	53.2	53.2	3.7	3.7	14.2	14.2	9	9	77	77	<0.2	<0.2	1.8	1.8								
						7.6	0.5	41	26.4	26.4	8.0	8.0	26.3	26.3	53.2	53.2	3.7	3.7	14.2	14.2	9	9	77	77	<0.2	<0.2	2.1	2.1								
C2	Rainy	Moderate	18:13	12.2	Surface	1.0	0.1	112	28.6	28.6	8.0	8.0	22.6	22.6	84.4	84.4	5.8	5.6	12.3	15.4	9	9	74	75	825707	806954	<0.2	<0.2	2.0	1.7						
						1.0	0.1	112	28.6	28.6	8.0	8.0	22.6	22.6	84.4	84.4	5.8	5.6	12.3	15.4	9	9	74	75	<0.2	<0.2	1.8	1.7								
						6.1	0.1	308	27.7	27.7	8.0	8.0	23.5	23.5	78.8	78.8	5.4	5.4	15.4	15.4	8	8	75	74	<0.2	<0.2	1.9	1.9								
					Middle	6.1	0.1	331	27.7	27.7	8.0	8.0	23.5	23.5	78.8	78.8	5.4	5.4	15.4	15.4	8	8	75	74	<0.2	<0.2	1.9	1.9								
						11.2	0.1	341	27.1	27.1	8.0	8.0	24.2	24.2	72.6	72.6	5.0	5.0	18.5	18.5	9	9	78	77	<0.2	<0.2	1.0	1.0								
						11.2	0.1	314	27.1	27.1	8.0	8.0	24.2	24.2	72.6	72.6	5.0	5.0	18.6	18.6	8	8	77	77	<0.2	<0.2	1.8	1.8								
C3	Cloudy	Moderate	19:58	11.2	Surface	1.0	0.4	244	28.1	28.1	8.0	8.0	24.4	24.4	74.4	74.4	5.1	4.8	11.9	13.8	6	7	74	76	822128	817827	<0.2	<0.2	1.7	1.9						
						1.0	0.4	255	28.1	28.1	8.0	8.0	24.4	24.4	74.4	74.4	5.1	4.8	11.9	13.8	6	7	75	76	<0.2	<0.2	2.1	1.7								
						5.6	0.2	259	27.8	27.8	8.0	8.0	26.3	26.3	64.3	64.3	4.4	4.4	12.8	12.9	7	7	76	76	<0.2	<0.2	1.8	1.8								
					Middle	5.6	0.3	262	27.8	27.8	8.0	8.0	26.3	26.3	64.3	64.3	4.4	4.4	12.8	12.9	7	7	76	76	<0.2	<0.2	1.8	1.8								
						10.2	0.2	249	26.9	26.9	8.0	8.0	27.9	27.9	59.2	59.2	4.0	4.0	16.5	16.5	7	7	78	77	<0.2	<0.2	2.1	1.9								
						10.2	0.2	270	26.9	26.9	8.0	8.0	27.9	27.9	59.2	59.2	4.0	4.0	16.5	16.5	8	8	77	77	<0.2	<0.2	1.9	1.9								
IM1	Cloudy	Moderate	18:59	5.5	Surface	1.0	0.2	76	28.5	28.5	8.0	8.0	23.2	23.2	67.7	67.7	4.6	4.6	15.2	16.8	9	9	74	74	817930	807130	<0.2	<0.2	2.0	1.9						
						1.0	0.3	77	28.5	28.5	8.0	8.0	23.2	23.2	67.7	67.7	4.6	4.6	15.2	16.8	9	9	74	74	<0.2	<0.2	1.9	1.9								
						2.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	<0.2	-	-			
					Middle	2.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	<0.2	-	-
						4.5	0.3	69	26.8	26.8	8.0	8.0	24.8	24.8	55.8	55.8	3.9	3.9	18.4	18.4	10	9	75	75	<0.2	<0.2	2.0	1.9								
						4.5	0.3	70	26.8	26.8	8.0	8.0	24.8	24.8	55.8	55.8	3.9	3.9	18.4	18.4	9	9	75	75	<0.2	<0.2	1.9	1.9								
IM2	Cloudy	Moderate	18:52	8.4	Surface	1.0	0.2	54	28.7	28.7	8.0	8.0	21.4	21.4	71.2	71.2	4.9	4.7	13.7	16.5	7	7	73	74	818139	806171	<0.2	<0.2	2.0	1.9						
						1.0	0.2	55	28.7	28.7	8.0	8.0	21.4	21.4	71.2	71.2	4.9	4.7	13.7	16.5	7	7	73	74	<0.2	<0.2	1.8	1.8								
						4.2	0.3	61	26.7	26.7	8.0	8.0	22.0	22.0	63.6	63.6	4.5	4.5	17.0	17.0	7	7	74	74	<0.2	<0.2	2.0	2.0								
					Middle	4.2	0.3	65	26.7	26.7	8.0	8.0	22.0	22.0	63.6	63.6	4.5	4.5	17.0	17.0	7	7	74	74	<0.2	<0.2	1.9	1.9								
						7.4	0.3	43	26.5	26.5	8.0	8.0	22.7	22.7	57.6	57.6	4.1	4.1	18.7	18.7	7	7	78	76	<0.2	<0.2	1.9	1.9								
						7.4	0.4	44	26.5	26.5	8.0	8.0	22.7	22.7	57.6	57.6	4.1	4.1	18.7	18.7	7	7	76	76	<0.2	<0.2	1.9	1.9								
IM3	Cloudy	Moderate	18:44	7.9	Surface	1.0	0.1	332	28.1	28.1	8.0	8.0	21.4	21.4	68.4	68.4	4.7	4.5	14.9	14.8	8	8	74	75	818795	805608	<0.2	<0.2	1.8	1.9						
						1.0	0.1	332	28.1	28.1	8.0	8.0	21.4	21.4	68.4	68.4	4.7	4.5	14.9	14.8	8	8	72	75	<0.2	<0.2	1.9	1.9								
						4.0	0.2	47	26.9	26.9	8.0	8.0	22.3	22.3	60.5	60.5	4.3	4.3	12.9	12.9	8	8	76	75	<0.2	<0.2	2.0	1.8								
					Middle	4.0	0.2	48	26.9	26.9	8.0	8.0	22.3	22.3	60.5	60.5	4.3	4.3	12.9	12.9	7	7	75	76	<0.2	<0.2	1.8	1.8								
						6.9	0.5	42	26.4	26.4	8.0	8.0	24.8	24.7	53.3	53.3	3.7	3.7	16.6	16.6	9	9	76	76	<0.2	<0.2	2.0	2.0								
						6.9	0.5	45	26.4	26.4	8.0	8.0	24.7	24.7	53.3	53.3	3.7	3.7	16.6	16.6	9	9	77	77	<0.2	<0.2	1.7	1.7								
IM4	Cloudy	Moderate	18:32	8.2	Surface	1.0	0.3	321	28.6	28.6	8.1	8.1	21.8	21.8	69.1	69.1	4.7	4.6	11.9	16.1	8	7	73	74	819747	804589	<0.2	<0.2	1.9	1.9						
						1.0	0.3	323	28.6	28.6	8.1	8.1	21.8	21.8	69.1	69.1	4.7	4.6	11.9	16.1	7	7	74	75	<0.2	<0.2	2.0	2.0								
						4.1	0.3	328	26.5	26.5	8.0	8.0	21.1	21.1	62.2	62.2	4.4	4.4	16.6	16.6	8	7	74	75	<0.2	<0.2	1.9	1.9								
					Middle	4.1	0.3	340	26.5	26.5	8.0	8.0	21.0	21.1	62.2	62.2	4.4	4.4	16.6	16.6	7	7	75	75	<0.2	<0.2	1.9	1.9								
						7.2	0.2	343	26.2	26.2	8.0	8.0	23.3	23.3	55.7	55.7	3.9	3.9	19.9	19.9	7	7	77	76	<0.2	<0.2	1.7	1.7								
						7.2	0.2	316	26.2	26.2	8.0	8.0	23.3	23.3	55.7	55.7	3.9	3.9	19.9	19.9	7	7	76	76	<0.2	<0.2	1.9	1.9								
IM5	Rainy	Moderate	18:26	7.1	Surface	1.0	0.5	318	27.7	27.7	8.1	8.1	22.4	22.4	71.4	71.4	5.0	4.8	12.3	15.8	9	10	75	74	820707	804855	<0.2	<0.2	2.0	1.8						
						1.0	0.6	337	27.7	27.7	8.1	8.1	22.3	22.4	71.4	71.4	5.0	4.8	12.3	15.8	8	10	74	74	<0.2	<0.2	1.5	1.3								
						3.6	0.5	288	26.5	26.5	8.1	8.1	24.7	24.7	65.6	65.6	4.6	4.6	15.6	15.6	12	12	76	74	<0.2	<0.2	2.0	2.0								
					Middle	3.6	0.5	312	26.5	26.5	8.1	8.1	24.7	24.7	65.6	65.6	4.6	4.6	15.6	15.6	12	12	74	74	<0.2	<0.2	1.8	1.8								
						6.1	0.6	290	26.5	26.5	8.1	8.1	24.1	24.1	58.8	58.8	4.1	4.1	19.6	19.6	11	11	78	78	<0.2	<0.2	2.0	2.0								
						6.1	0.6	306	26.5	26.5	8.1	8.1	24.1	24.1	58.8	58.8	4.1	4.1	19.6	19.6	10	10	77	77	<0.2	<0.2	2.0	2.0								
IM6	Rainy	Moderate	18:18	7.1	Surface	1.0	0.7	302	27.6	27.6	8.1	8.1	21.7	21.7	71.0	71.0	5.1	5.0	14.3	16.1	8	9	74	75	821060	805819	<0.2	&								

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

Water Quality Monitoring

Water Quality Monitoring Results on 11 August 18 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	18:44	7.1	Surface	1.0	0.1	274	29.1	8.0	8.0	21.9	21.9	78.0	78.0	5.3	5.2	11.5	14.5	9	10	73	75	822078	808818	<0.2	<0.2	2.0	1.9							
						1.0	0.1	277	29.1	8.0	8.0	21.9	21.9	78.0	78.0	5.3	5.2	11.5	14.5	9	10	73	75	822078	808818	<0.2	<0.2	2.2	1.9							
						3.6	0.0	68	27.5	8.0	8.0	21.9	21.9	71.2	71.2	5.0	5.0	14.2	14.2	9	10	74	75	822078	808818	<0.2	<0.2	1.8	1.9							
					Middle	3.6	0.0	71	27.5	8.0	8.0	21.9	21.9	71.2	71.2	5.0	5.0	14.2	14.2	9	10	74	75	822078	808818	<0.2	<0.2	1.8	1.9							
						6.1	0.2	103	27.3	8.0	8.0	23.6	23.6	69.0	69.0	4.8	4.8	17.8	17.8	10	10	77	77	822078	808818	<0.2	<0.2	1.9	1.9							
						6.1	0.2	108	27.3	8.0	8.0	23.6	23.6	69.0	69.0	4.8	4.8	17.8	17.8	10	10	77	77	822078	808818	<0.2	<0.2	1.7	1.9							
IM10	Cloudy	Moderate	18:51	7.6	Surface	1.0	0.1	172	28.9	8.0	8.0	20.7	20.7	75.5	75.5	5.2	5.2	12.7	13.6	10	10	72	75	822356	809786	<0.2	<0.2	1.9	1.9							
						1.0	0.1	183	28.9	8.0	8.0	20.7	20.7	75.5	75.5	5.2	5.2	12.7	13.6	9	10	73	75	822356	809786	<0.2	<0.2	2.0	1.9							
						3.8	0.1	330	27.4	8.0	8.0	21.9	21.9	73.2	73.2	5.1	5.1	13.7	13.7	10	10	75	75	822356	809786	<0.2	<0.2	1.8	1.9							
					Middle	3.8	0.1	336	27.4	8.0	8.0	21.9	21.9	73.2	73.2	5.1	5.1	13.7	13.7	10	10	75	75	822356	809786	<0.2	<0.2	1.8	1.9							
						6.6	0.3	346	27.3	8.0	8.0	23.0	23.0	66.2	66.2	4.6	4.6	14.4	14.4	11	11	77	77	822356	809786	<0.2	<0.2	1.9	1.9							
						6.6	0.4	318	27.3	8.0	8.0	23.0	23.0	66.2	66.2	4.6	4.6	14.4	14.4	11	11	77	77	822356	809786	<0.2	<0.2	1.9	1.9							
IM11	Cloudy	Moderate	19:02	7.7	Surface	1.0	0.3	301	28.6	8.0	8.0	21.2	21.2	73.3	73.3	5.0	4.9	12.2	14.9	10	10	74	74	822072	811439	<0.2	<0.2	2.1	1.9							
						1.0	0.3	327	28.6	8.0	8.0	21.2	21.2	73.3	73.3	5.0	4.9	12.2	14.9	10	10	74	74	822072	811439	<0.2	<0.2	1.9	1.9							
						3.9	0.2	323	27.9	8.0	8.0	24.0	24.0	68.6	68.6	4.7	4.7	14.9	14.9	10	10	74	74	822072	811439	<0.2	<0.2	1.7	1.9							
					Middle	3.9	0.2	333	27.9	8.0	8.0	24.0	24.0	68.6	68.6	4.7	4.7	14.9	14.9	10	10	74	74	822072	811439	<0.2	<0.2	2.0	1.9							
						6.7	0.1	347	27.6	8.0	8.0	24.9	24.9	62.8	62.8	4.3	4.3	17.6	17.6	10	10	77	77	822072	811439	<0.2	<0.2	2.0	1.9							
						6.7	0.1	352	27.6	8.0	8.0	24.9	24.9	62.8	62.8	4.3	4.3	17.7	17.7	11	11	77	77	822072	811439	<0.2	<0.2	1.9	1.9							
IM12	Cloudy	Moderate	19:08	8.1	Surface	1.0	0.4	279	28.7	8.0	8.0	22.5	22.5	69.8	69.8	4.8	4.7	11.9	15.0	6	7	72	74	821466	812034	<0.2	<0.2	2.0	2.0							
						1.0	0.4	301	28.7	8.0	8.0	22.5	22.5	69.8	69.8	4.8	4.7	11.9	15.0	7	7	73	74	821466	812034	<0.2	<0.2	1.9	2.0							
						4.1	0.3	276	28.2	8.0	8.0	24.9	24.9	66.6	66.6	4.5	4.5	13.7	13.7	7	7	74	74	821466	812034	<0.2	<0.2	2.1	1.9							
					Middle	4.1	0.3	299	28.2	8.0	8.0	24.9	24.9	66.6	66.6	4.5	4.5	13.7	13.7	7	7	75	75	821466	812034	<0.2	<0.2	1.9	2.0							
						7.1	0.1	219	28.0	8.0	8.0	24.9	24.9	62.9	62.9	4.3	4.3	19.2	19.2	8	8	76	76	821466	812034	<0.2	<0.2	2.2	1.8							
						7.1	0.1	224	27.9	8.0	8.0	24.9	24.9	62.9	62.9	4.3	4.3	19.3	19.3	8	8	76	76	821466	812034	<0.2	<0.2	1.8	1.8							
SR2	Cloudy	Moderate	19:37	4.5	Surface	1.0	0.1	54	28.1	8.0	8.0	21.4	21.4	72.3	72.3	5.0	5.0	15.2	15.7	10	13	75	76	821460	814195	<0.2	<0.2	1.8	1.9							
						1.0	0.1	57	28.1	8.0	8.0	21.4	21.4	72.3	72.3	5.0	5.0	15.2	15.7	11	13	75	76	821460	814195	<0.2	<0.2	1.9	1.9							
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
						3.5	0.1	6	28.0	8.0	8.0	24.8	24.8	63.2	63.2	4.3	4.3	16.7	16.7	15	15	76	76	821460	814195	<0.2	<0.2	1.8	1.8							
						3.5	0.1	6	28.0	8.0	8.0	24.8	24.8	63.2	63.2	4.3	4.3	15.8	15.8	14	14	76	76	821460	814195	<0.2	<0.2	2.1	1.8							
SR3	Rainy	Moderate	18:33	8.6	Surface	1.0	0.2	265	28.5	8.0	8.0	22.1	22.1	77.4	77.4	5.3	5.4	11.1	14.0	6	8	-	-	822164	807556	-	-	-	-							
						1.0	0.2	277	28.5	8.0	8.0	22.1	22.1	77.4	77.4	5.3	5.4	11.1	14.0	7	8	-	-	822164	807556	-	-	-	-							
						4.3	0.1	98	27.6	8.0	8.0	23.5	23.5	80.2	80.2	5.5	5.5	14.2	14.2	8	8	-	-	822164	807556	-	-	-	-							
					Middle	4.3	0.1	106	27.6	8.0	8.0	23.5	23.5	80.2	80.2	5.5	5.5	14.4	14.4	8	8	-	-	822164	807556	-	-	-	-							
						7.6	0.1	305	26.9	8.0	8.0	24.2	24.2	79.7	79.7	5.6	5.6	16.6	16.6	9	9	-	-	822164	807556	-	-	-	-							
						7.6	0.1	330	26.9	8.0	8.0	24.2	24.2	79.7	79.7	5.6	5.6	16.6	16.6	8	8	-	-	822164	807556	-	-	-	-							
SR4A	Rainy	Moderate	19:36	8.8	Surface	1.0	0.0	247	28.3	8.0	8.0	20.8	20.8	72.2	72.2	5.0	4.8	15.9	13.6	6	6	-	-	817201	807793	-	-	-	-							
						1.0	0.0	257	28.3	8.0	8.0	20.8	20.8	72.2	72.2	5.0	4.8	15.9	13.6	7	6	-	-	817201	807793	-	-	-	-							
						4.4	0.1	91	26.6	8.0	8.0	23.6	23.6	64.5	64.5	4.5	4.5	13.2	13.2	6	6	-	-	817201	807793	-	-	-	-							
					Middle	4.4	0.1	97	26.6	8.0	8.0	23.6	23.6	64.5	64.5	4.5	4.5	13.2	13.2	6	6	-	-	817201	807793	-	-	-	-							
						7.8	0.0	87	26.6	8.0	8.0	26.3	26.3	59.4	59.4	4.1	4.1	11.7	11.7	6	6	-	-	817201	807793	-	-	-	-							
						7.8	0.0	91	26.6	8.0	8.0	26.3	26.3	59.4	59.4	4.1	4.1	11.7	11.7	7	6	-	-	817201	807793	-	-	-	-							
SR5A	Rainy	Moderate	19:56	3.5	Surface	1.0	0.2	287	28.5	8.0	8.0	22.6	22.6	65.6	65.6	4.5	4.5	13.7	15.5	6	7	-	-	816612	810698	-	-	-	-							
						1.0	0.2	309	28.5	8.0	8.0	22.7	22.6	65.6	65.6	4.5	4.5	13.7	15.5	7	7	-	-	816612	810698	-	-	-	-							
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
						2.5	0.3	292	28.4	8.0	8.0	24.4	24.4	61.2	61.2	4.2	4.2	17.3	17.3	7	7	-	-	816612	810698	-	-	-	-							
						2.5	0.3	294	28.4	8.0	8.0	24.4	24.4	61.2	61.2	4.2	4.2	17.3	17.3	8	8	-	-	816612	810698	-	-	-	-							
SR6	Rainy	Moderate	20:17	3.6	Surface	1.0	0.0	186	29.0	8.0	8.0	22.0	22.0	73.4	73.4	5.0	5.0	11.2	10.6	8	8	-	-</													

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

Water Quality Monitoring

Water Quality Monitoring Results on 16 August 18 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	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA
C1	Cloudy	Moderate	16:16	9.5	Surface	1.0	0.1	243	29.1	8.1	8.1	22.3	22.3	84.1	84.1	5.7	5.6	8.5	12.1	5	7	81	83	815593	804252	<0.2	2.0	2.4				
						1.0	0.1	248	29.1	29.1	8.1	8.1	22.3	22.3	84.0	84.0	5.7	5.6	8.4	12.1	6	7	81	83	<0.2	2.3						
					Middle	4.8	0.1	240	28.8	28.8	8.2	8.2	26.5	26.5	81.9	81.9	5.5	5.5	11.7	12.1	7	6	83	83	<0.2	2.5						
						4.8	0.1	249	28.8	28.8	8.2	8.2	26.5	26.5	81.9	81.9	5.5	5.5	11.7	12.1	6	6	84	84	<0.2	2.5						
					Bottom	8.5	0.0	233	28.8	28.8	8.2	8.2	27.8	27.8	80.7	80.7	5.3	5.3	16.2	12.1	9	6	85	84	<0.2	2.5						
						8.5	0.0	255	28.8	28.8	8.2	8.2	27.8	27.8	80.7	80.7	5.3	5.3	16.1	12.1	9	6	84	84	<0.2	2.4						
C2	Cloudy	Moderate	15:35	11.4	Surface	1.0	0.1	65	29.2	8.1	8.1	23.7	23.7	83.7	83.7	5.6	5.6	10.6	12.1	8	8	80	82	825685	806929	<0.2	3.5	3.4				
						1.0	0.1	70	29.2	29.2	8.1	8.1	23.7	23.7	83.7	83.7	5.6	5.6	10.7	12.1	8	8	80	82	<0.2	3.7						
					Middle	5.7	0.2	98	29.1	29.1	8.1	8.1	23.9	23.9	82.5	82.5	5.6	5.6	12.1	12.1	9	8	82	82	<0.2	3.4						
						5.7	0.2	99	29.1	29.1	8.1	8.1	23.9	23.9	82.5	82.5	5.6	5.6	12.1	12.1	9	8	82	82	<0.2	3.3						
					Bottom	10.4	0.4	152	29.1	29.1	8.1	8.1	24.1	24.1	81.9	81.9	5.5	5.5	13.6	12.1	7	8	84	84	<0.2	3.2						
						10.4	0.4	158	29.1	29.1	8.1	8.1	24.1	24.1	81.9	81.9	5.5	5.5	13.6	12.1	8	8	84	84	<0.2	3.4						
C3	Cloudy	Moderate	17:25	12.6	Surface	1.0	0.2	108	29.1	8.0	8.0	23.3	23.3	77.5	77.5	5.2	5.2	14.0	14.3	15	16	80	82	822108	817791	<0.2	1.9	1.9				
						1.0	0.2	109	29.1	29.1	8.0	8.0	23.3	23.3	77.5	77.5	5.2	5.2	14.0	14.3	14	16	80	82	<0.2	1.8						
					Middle	6.3	0.3	87	29.1	29.1	8.0	8.0	23.3	23.3	77.5	77.5	5.2	5.2	14.0	14.3	16	16	82	82	<0.2	1.8						
						6.3	0.3	93	29.1	29.1	8.0	8.0	23.3	23.3	77.5	77.5	5.2	5.2	14.0	14.3	15	16	83	84	<0.2	2.0						
					Bottom	11.6	0.2	65	29.2	29.2	8.0	8.0	23.6	23.6	77.9	77.9	5.3	5.3	14.9	14.3	16	16	84	84	<0.2	1.8						
						11.6	0.2	70	29.2	29.2	8.0	8.0	23.6	23.6	77.9	77.9	5.3	5.3	14.9	14.3	17	16	84	84	<0.2	2.0						
IM1	Cloudy	Moderate	15:56	5.7	Surface	1.0	0.2	192	29.3	8.1	8.1	22.5	22.5	84.6	84.6	5.7	5.7	9.1	11.4	6	6	81	82	817969	807124	<0.2	2.4	2.3				
						1.0	0.2	192	29.3	29.3	8.1	8.1	22.5	22.5	84.5	84.5	5.7	5.7	9.2	11.4	6	6	81	82	<0.2	2.4						
					Middle	2.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	6	-	-	<0.2	-					
						2.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	6	-	-	<0.2		-			
					Bottom	4.7	0.2	244	29.1	29.1	8.1	8.1	24.3	24.3	80.7	80.7	5.4	5.4	13.6	11.4	5	6	83	84	<0.2	1.9						
						4.7	0.2	251	29.1	29.1	8.1	8.1	24.3	24.3	80.7	80.7	5.4	5.4	13.8	11.4	5	6	84	84	<0.2	2.4						
IM2	Cloudy	Moderate	15:47	7.8	Surface	1.0	0.1	92	29.2	8.1	8.1	23.8	23.8	82.9	82.9	5.6	5.6	9.5	10.6	5	6	81	83	818136	806165	<0.2	2.5	2.5				
						1.0	0.1	100	29.2	29.2	8.1	8.1	23.8	23.8	82.9	82.9	5.6	5.6	9.5	10.6	4	6	81	83	<0.2	2.5						
					Middle	3.9	0.0	119	29.1	29.1	8.1	8.1	24.1	24.1	82.2	82.2	5.5	5.5	9.7	10.6	6	6	83	83	<0.2	2.3						
						3.9	0.0	130	29.1	29.1	8.1	8.1	24.1	24.1	82.2	82.2	5.5	5.5	9.7	10.6	5	6	84	84	<0.2	2.6						
					Bottom	6.8	0.1	155	29.1	29.1	8.1	8.1	24.8	24.8	81.7	81.7	5.5	5.5	12.6	10.6	8	6	85	85	<0.2	2.7						
						6.8	0.1	163	29.1	29.1	8.1	8.1	24.8	24.8	81.7	81.7	5.5	5.5	12.6	10.6	7	6	85	85	<0.2	2.5						
IM3	Cloudy	Moderate	15:39	8.0	Surface	1.0	0.1	47	29.0	8.1	8.1	23.4	23.4	81.5	81.5	5.5	5.5	9.5	13.2	6	7	81	83	818810	805574	<0.2	2.5	2.5				
						1.0	0.1	47	29.0	29.0	8.1	8.1	23.4	23.4	81.4	81.4	5.5	5.5	9.5	13.2	6	7	80	84	<0.2	2.7						
					Middle	4.0	0.1	288	29.0	29.0	8.1	8.1	25.4	25.4	79.3	79.3	5.3	5.3	14.3	13.2	7	7	84	84	<0.2	2.4						
						4.0	0.1	306	29.0	29.0	8.1	8.1	25.4	25.4	79.3	79.3	5.3	5.3	14.4	13.2	8	7	84	84	<0.2	2.5						
					Bottom	7.0	0.1	205	29.0	29.0	8.1	8.1	25.7	25.7	80.2	80.2	5.4	5.4	15.7	13.2	8	7	84	84	<0.2	2.6						
						7.0	0.1	220	29.0	29.0	8.1	8.1	25.7	25.7	80.2	80.2	5.4	5.4	15.7	13.2	8	7	83	83	<0.2	2.5						
IM4	Cloudy	Moderate	15:29	8.2	Surface	1.0	0.1	113	29.0	8.1	8.1	24.9	24.9	80.4	80.4	5.4	5.4	13.0	16.8	7	8	81	83	819750	804634	<0.2	2.8	2.7				
						1.0	0.1	115	29.0	29.0	8.1	8.1	24.9	24.9	80.4	80.4	5.4	5.4	13.1	16.8	7	8	81	83	<0.2	2.6						
					Middle	4.1	0.0	184	29.0	29.0	8.1	8.1	25.6	25.6	78.9	78.9	5.3	5.3	16.2	16.8	7	8	84	83	<0.2	2.7						
						4.1	0.0	197	29.0	29.0	8.1	8.1	25.6	25.6	78.9	78.9	5.3	5.3	16.0	16.8	7	8	83	83	<0.2	2.6						
					Bottom	7.2	0.1	195	29.0	29.0	8.1	8.1	25.8	25.8	79.5	79.5	5.3	5.3	21.2	16.8	8	8	84	84	<0.2	2.6						
						7.2	0.1	202	29.0	29.0	8.1	8.1	25.8	25.8	79.5	79.5	5.3	5.3	21.2	16.8	9	8	84	84	<0.2	2.7						
IM5	Cloudy	Moderate	15:20	7.5	Surface	1.0	0.1	84	29.2	8.1	8.1	22.8	22.8	85.4	85.4	5.8	5.6	10.2	17.0	5	5	79	82	820746	804887	<0.2	2.3	1.9				
						1.0	0.1	87	29.2	29.2	8.1	8.1	22.8	22.8	85.3	85.3	5.8	5.6	10.4	17.0	4	5	80	82	<0.2	1.8						
					Middle	3.8	0.1	125	29.0	29.0	8.1	8.1	24.9	24.9	79.6	79.6	5.3	5.3	15.8	17.0	6	5	81	82	<0.2	2.2						
						3.8	0.1	129	29.0	29.0	8.1	8.1	24.9	24.9	79.6	79.6	5.3	5.3	15.8	17.0	5	5	82	83	<0.2	1.8						
					Bottom	6.5	0.0	195	28.9	28.9	8.1	8.1	25.5	25.5	80.1	80.1	5.4	5.4	24.9	17.0	6	5	83	84	<0.2	1.7						
						6.5	0.0	212	29.0	28.9	8.1	8.1	25.5	25.5	80.2	80.2	5.4	5.4	24.9	17.0	5	5	84	84	<0.2	1.7						
IM6	Cloudy	Moderate	15:11	7.6	Surface	1.0	0.1	52	29.3	8.1	8.1	23.5	23.5	86.2	86.2	5.8	5.7	9.6	14.3	4	6	80	81	821045	805844	<0.2	1.8	1.8				
						1.0	0.1	53	29.3	29.3	8.1	8.1	23.5	23.5	86.2	86.2	5.8	5.7	9.7	14.3	5	6	79	82	<0.2	1.8						
					Middle	3.8	0.1	76	29.0	29.0	8.1	8.1	24.1	24.1	82.5	82.5	5.6	5.6	13.4	14.3	6	6	81	82	<0.2	1.9						
						3.8	0.1	81	29.0	29.0	8.1	8.1	24.1	24.1	82.5	82.5	5.6	5.6	13.4	14.3	6	6	82	82	<0.2	1.7						
					Bottom	6.6	0.2	99	29.0	29.0	8.1	8.1	24.9	24.9	81.6	81.6	5.5	5.5	19.8	14.3	8	6	83	83	<0.2	1.9						
						6.6	0.2	104	29.0																							

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

Water Quality Monitoring

Water Quality Monitoring Results on 16 August 18 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	16:08	7.7	Surface	1.0	0.4	114	29.1	8.1	8.1	24.8	24.8	80.4	80.4	5.4	9.8	6	81	83	822107	808806	<0.2	2.1	2.0											
						1.0	0.4	116	29.1	8.1	8.1	24.8	24.8	80.4	80.4	5.4	9.7	6	80	83	<0.2	1.9														
						3.9	0.3	103	29.0	8.1	8.1	25.6	25.6	78.4	78.4	5.2	12.4	7	82	85	<0.2	2.0														
					3.9	0.3	104	29.0	8.1	8.1	25.6	25.6	78.4	78.4	5.2	12.4	7	82	85	<0.2	2.1															
					6.7	0.4	78	28.9	8.1	8.1	25.9	25.9	78.1	78.1	5.2	21.8	9	85	88	<0.2	2.0															
					6.7	0.5	78	28.9	8.1	8.1	25.9	25.9	78.2	78.2	5.2	21.8	10	85	88	<0.2	2.2															
IM10	Cloudy	Moderate	16:16	7.4	Surface	1.0	0.5	116	29.0	8.1	8.1	23.2	23.2	81.0	81.0	5.5	10.1	6	80	82	822408	809777	<0.2	2.2	2.2											
						1.0	0.5	116	29.0	8.1	8.1	23.2	23.2	80.9	80.9	5.5	10.1	6	80	83	<0.2	2.0														
						3.7	0.4	105	29.0	8.1	8.1	25.5	25.5	78.7	78.7	5.3	15.2	5	82	85	<0.2	2.3														
					3.7	0.4	113	29.0	8.1	8.1	25.5	25.5	78.7	78.7	5.3	15.2	5	83	86	<0.2	2.3															
					6.4	0.2	90	29.0	8.1	8.1	25.7	25.7	78.8	78.8	5.3	16.4	8	84	87	<0.2	2.1															
					6.4	0.3	90	29.0	8.1	8.1	25.7	25.7	78.9	78.9	5.3	16.4	7	85	88	<0.2	2.3															
IM11	Cloudy	Moderate	16:27	7.8	Surface	1.0	0.4	126	29.2	8.1	8.1	22.8	22.8	82.7	82.7	5.6	9.1	7	80	83	822055	811430	<0.2	2.3	2.3											
						1.0	0.4	130	29.2	8.1	8.1	22.8	22.8	82.7	82.7	5.6	9.2	8	80	83	<0.2	2.3														
						3.9	0.5	119	29.1	8.1	8.1	24.6	24.6	80.2	80.2	5.4	11.9	8	83	86	<0.2	2.4														
					3.9	0.5	126	29.1	8.1	8.1	24.6	24.6	80.1	80.1	5.4	11.9	8	83	86	<0.2	2.4															
					6.8	0.4	110	29.0	8.1	8.1	25.3	25.3	79.6	79.6	5.3	16.4	8	85	88	<0.2	2.1															
					6.8	0.4	110	29.0	8.1	8.1	25.3	25.3	79.6	79.6	5.3	16.4	8	85	88	<0.2	2.4															
IM12	Cloudy	Moderate	16:34	8.7	Surface	1.0	0.5	101	29.3	8.1	8.1	22.8	22.8	84.2	84.2	5.7	9.8	5	80	83	821486	812057	<0.2	2.4	2.2											
						1.0	0.5	102	29.3	8.1	8.1	22.8	22.8	84.1	84.1	5.7	9.9	5	80	83	<0.2	2.0														
						4.4	0.4	95	29.2	8.1	8.1	23.6	23.6	81.1	81.1	5.5	16.1	6	83	86	<0.2	2.3														
					4.4	0.4	103	29.2	8.1	8.1	23.6	23.6	81.1	81.1	5.5	16.4	6	82	85	<0.2	2.1															
					7.7	0.3	102	29.1	8.1	8.1	24.3	24.3	80.2	80.2	5.4	20.7	8	85	88	<0.2	2.0															
					7.7	0.3	108	29.1	8.1	8.1	24.3	24.3	80.2	80.2	5.4	20.6	8	85	88	<0.2	2.2															
SR2	Cloudy	Moderate	17:04	4.8	Surface	1.0	0.6	106	29.3	8.1	8.1	22.8	22.8	83.3	83.3	5.6	10.7	5	80	83	821478	814156	<0.2	2.0	2.1											
						1.0	0.6	108	29.3	8.1	8.1	22.9	22.9	83.3	83.3	5.6	10.8	6	80	83	<0.2	2.2														
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-							
					3.8	0.4	100	29.2	8.1	8.1	23.6	23.6	82.8	82.8	5.6	12.3	5	83	86	<0.2	1.9															
					3.8	0.4	105	29.2	8.1	8.1	23.6	23.6	82.8	82.8	5.6	12.3	6	82	85	<0.2	2.1															
					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-							
SR3	Cloudy	Moderate	15:54	9.7	Surface	1.0	0.3	105	29.3	8.1	8.1	23.5	23.5	85.7	85.7	5.8	8.2	6	-	-	822132	807592	-	-	-											
						1.0	0.3	112	29.3	8.1	8.1	23.5	23.5	85.6	85.6	5.8	8.4	6	-	-	-	-														
						4.9	0.3	66	29.0	8.1	8.1	24.5	24.5	81.6	81.6	5.5	10.4	8	-	-	-	-														
					4.9	0.4	66	29.0	8.1	8.1	24.5	24.5	81.6	81.6	5.5	10.5	8	-	-	-	-															
					8.7	0.3	87	29.0	8.1	8.1	25.0	25.0	80.9	80.9	5.4	16.0	9	-	-	-	-															
					8.7	0.3	93	29.0	8.1	8.1	25.0	25.0	80.9	80.9	5.4	16.1	9	-	-	-	-															
SR4A	Cloudy	Calm	16:39	8.4	Surface	1.0	0.3	98	29.3	8.1	8.1	22.7	22.7	84.3	84.3	5.7	10.0	6	-	-	817182	807810	-	-	-											
						1.0	0.3	107	29.3	8.1	8.1	22.7	22.7	84.3	84.3	5.7	10.1	5	-	-	-	-														
						4.2	0.3	88	29.2	8.1	8.1	23.9	23.9	80.7	80.7	5.4	14.8	6	-	-	-	-														
					4.2	0.3	90	29.2	8.1	8.1	23.9	23.9	80.7	80.7	5.4	14.8	6	-	-	-	-															
					7.4	0.2	86	29.1	8.1	8.1	24.1	24.1	81.6	81.6	5.5	20.6	9	-	-	-	-															
					7.4	0.2	87	29.1	8.1	8.1	24.1	24.1	81.7	81.7	5.5	20.7	10	-	-	-	-															
SR5A	Cloudy	Calm	16:57	4.8	Surface	1.0	0.0	15	29.1	8.0	8.0	23.3	23.3	77.9	77.9	5.3	14.3	15	-	-	816619	810712	-	-	-											
						1.0	0.0	15	29.1	8.0	8.0	23.3	23.3	77.9	77.9	5.3	14.3	14	-	-	-	-														
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-								
					3.8	0.0	49	29.1	8.0	8.0	23.3	23.3	79.4	79.4	5.4	14.9	16	-	-	-	-															
					3.8	0.0	50	29.1	8.0	8.0	23.3	23.3	79.5	79.5	5.4	14.9	16	-	-	-	-															
					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-														
SR6	Cloudy	Calm	17:29	4.2	Surface	1.0	0.1	49	29.0	8.0	8.0	22.8	22.7	80.8	80.8	5.5	9.6	7	-	-	817897	814643	-	-	-											
						1.0	0.1	52	29.0	8.0	8.0	22.7	22.7	80.7	80.7	5.5	9.6	7	-	-	-	-														
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-													
					3.2	0.1	82	28.9	7.9	7.9	23.3	23.3	80.1	80.1	5.4	9.3	9	-	-	-	-															
					3.2	0.1	83	28.9	7.9	7.9	23.3	23.3	80.3	80.2	5.4	9.4	8	-	-	-	-															
					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-														
SR7	Cloudy	Moderate	17:50	18.6	Surface	1.0	0.6	73	29.0	8.0	8.0	23.1	23.1	79.4	79.4	5.4	8.7	9	-	-	823662	823756	-	-	-											
						1.0	0.6	74	29.0	8.0	8.0	23.1	23.1	79.3	79.3	5.4	8.8	9	-	-	-	-														
						9.3	0.3	33	29.0	8.0	8.0	23.3	23.3	77.1	77.1	5.2	10.7	10	-	-	-	-														
					9.3	0.3	33	29.0	8.0	8.0	23.3	23.3	77.1	77.1	5.2	10.7	9	-	-	-	-															
					17.6	0.2	39	28.9	8.0	8.0	23.4	23.4	78.3	78.3	5.3	13.4	12	-	-	-	-															
					17.6	0.2	41	29.0	8.0	8.0	23.4	23.4	78.3	78.3	5.3	13.4	12	-	-	-	-															
SR8	Cloudy	Moderate	16:51	3.9	Surface	1.0	-	-	29.1	8.1	8.1	21.5	21.5	84.9	84.9	5.8	7.8	7	-	-	820246	811418	-	-	-											
						1.0	-	-	29.1	8.1	8.1	21.5	21.5	84.9	84.9	5.8	7.8	7	-	-	-	-														
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-													
					2.9	-	-	28.9	8.1	8.1	24.3	24.3	84.2	84.2	5.7	8.3	8	-	-	-	-															
					2.9	-	-	28.9	8.1	8.1	24.3	24.3	84.2	84.2	5.7	8.3	8	-	-	-	-															
					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-														

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 16 August 18 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	DA	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA		
									Value	DA	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA
C1	Cloudy	Moderate	10:03	9.0	Surface	1.0	0.6	19	29.0	8.1	8.1	23.8	23.8	82.5	82.5	5.6	5.5	9.1	13.4	7	12	80	83	815625	804257	<0.2	<0.2	1.6	1.6			
						1.0	0.6	20	29.0	8.1	8.1	23.8	23.8	82.5	82.5	5.6	5.5	9.2	13.4	7	12	81	83			<0.2	<0.2	1.5	1.6			
						4.5	0.7	25	28.9	8.1	8.1	25.9	25.9	78.8	78.8	5.3	5.3	12.4	13.4	11	12	83	83			<0.2	<0.2	1.7	1.7			
					4.5	0.7	26	28.9	8.1	8.1	25.9	25.9	78.8	78.8	5.3	5.3	12.3	13.4	12	12	83	83			<0.2	<0.2	1.5	1.5				
					8.0	0.5	27	28.9	8.1	8.1	26.2	26.2	79.3	79.3	5.3	5.3	18.7	13.4	17	16	84	84			<0.2	<0.2	1.7	1.7				
					8.0	0.5	29	28.9	8.1	8.1	26.2	26.2	79.4	79.4	5.3	5.3	18.9	13.4	16	16	84	84			<0.2	<0.2	1.5	1.5				
C2	Cloudy	Moderate	10:57	12.7	Surface	1.0	0.2	358	29.1	8.0	8.0	21.3	21.3	79.7	79.7	5.4	5.5	13.7	17.2	9	14	81	83	825683	806921	<0.2	<0.2	1.8	1.9			
						1.0	0.2	329	29.1	8.0	8.0	21.3	21.3	79.7	79.7	5.4	5.5	13.7	17.2	9	14	80	83			<0.2	<0.2	2.0	1.8			
						6.4	0.6	324	29.0	8.1	8.1	23.6	23.6	81.2	81.2	5.5	5.5	17.9	17.2	16	15	83	85			<0.2	<0.2	1.8	1.8			
					6.4	0.6	345	29.0	8.1	8.1	23.6	23.6	81.2	81.2	5.5	5.5	18.0	17.2	15	16	83	85			<0.2	<0.2	1.8	1.8				
					11.7	0.5	320	29.1	8.1	8.1	23.8	23.8	81.1	81.1	5.5	5.5	19.9	17.2	16	16	85	85			<0.2	<0.2	1.8	1.9				
					11.7	0.5	344	29.1	8.1	8.1	23.9	23.8	81.1	81.1	5.5	5.5	20.1	17.2	17	17	85	85			<0.2	<0.2	1.9	1.9				
C3	Cloudy	Moderate	09:08	12.4	Surface	1.0	0.5	250	28.9	8.0	8.0	23.3	23.3	79.3	79.3	5.4	5.4	11.2	15.4	11	13	80	82	822114	817805	<0.2	<0.2	1.6	1.6			
						1.0	0.5	268	28.9	8.0	8.0	23.3	23.3	79.3	79.3	5.4	5.4	11.4	15.4	12	13	80	82			<0.2	<0.2	1.6	1.6			
						6.2	0.5	266	28.8	8.0	8.0	23.3	23.3	79.0	79.0	5.4	5.4	15.2	15.4	12	11	82	83			<0.2	<0.2	1.5	1.5			
					6.2	0.6	275	28.8	8.0	8.0	23.3	23.3	79.0	79.0	5.4	5.4	15.3	15.4	11	15	82	84			<0.2	<0.2	1.6	1.6				
					11.4	0.5	269	28.8	8.0	8.0	23.4	23.4	79.0	79.0	5.4	5.4	19.4	15.4	15	15	84	84			<0.2	<0.2	1.6	1.6				
					11.4	0.6	278	28.8	8.0	8.0	23.4	23.4	79.0	79.0	5.4	5.4	19.7	15.4	15	15	84	84			<0.2	<0.2	1.6	1.6				
IM1	Cloudy	Moderate	10:22	5.7	Surface	1.0	0.4	346	29.0	8.0	8.0	23.9	23.9	79.7	79.7	5.4	5.4	15.4	17.9	19	21	80	82	817923	807153	<0.2	<0.2	1.6	1.5			
						1.0	0.4	318	29.0	8.0	8.0	23.9	23.9	79.7	79.7	5.4	5.4	15.6	17.9	19	21	80	82			<0.2	<0.2	1.5	1.5			
						2.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					2.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					4.7	0.3	3	29.0	8.0	8.0	23.9	23.9	82.4	82.5	5.6	5.6	20.3	17.9	22	21	83	83			<0.2	<0.2	1.5	1.5				
					4.7	0.4	3	29.0	8.0	8.0	23.9	23.9	82.6	82.5	5.6	5.6	20.4	17.9	23	21	83	83			<0.2	<0.2	1.5	1.5				
IM2	Cloudy	Moderate	10:30	8.1	Surface	1.0	0.6	24	29.1	8.1	8.1	23.8	23.8	81.9	81.9	5.5	5.4	10.5	15.1	3	4	81	82	818169	806182	<0.2	<0.2	1.5	1.6			
						1.0	0.6	24	29.1	8.1	8.1	23.8	23.8	81.8	81.9	5.5	5.5	10.6	15.1	3	4	80	83			<0.2	<0.2	1.5	1.6			
						4.1	0.5	18	29.0	8.1	8.1	25.0	25.0	78.6	78.6	5.3	5.3	14.6	15.1	3	3	83	83			<0.2	<0.2	1.6	1.6			
					4.1	0.5	18	29.0	8.1	8.1	25.0	25.0	78.6	78.6	5.3	5.3	14.8	15.1	3	3	83	83			<0.2	<0.2	1.6	1.6				
					7.1	0.4	13	29.0	8.1	8.1	25.2	25.2	78.6	78.6	5.3	5.3	19.9	15.1	4	4	84	83			<0.2	<0.2	1.6	1.6				
					7.1	0.5	13	29.0	8.1	8.1	25.2	25.2	78.6	78.6	5.3	5.3	20.1	15.1	5	4	83	83			<0.2	<0.2	1.5	1.5				
IM3	Cloudy	Moderate	10:43	8.2	Surface	1.0	0.6	26	29.0	8.1	8.1	23.2	23.2	83.8	83.8	5.7	5.6	9.8	13.0	3	4	80	82	818762	805586	<0.2	<0.2	1.6	1.7			
						1.0	0.6	27	29.0	8.1	8.1	23.2	23.2	83.7	83.8	5.7	5.6	9.9	13.0	3	4	81	83			<0.2	<0.2	1.7	1.7			
						4.1	0.4	25	29.0	8.1	8.1	24.6	24.6	80.9	80.9	5.4	5.4	11.3	13.0	4	4	82	83			<0.2	<0.2	1.6	1.7			
					4.1	0.4	26	29.0	8.1	8.1	24.6	24.6	80.9	80.9	5.4	5.4	11.4	13.0	4	4	83	84			<0.2	<0.2	1.7	1.7				
					7.2	0.3	0	28.9	8.1	8.1	25.1	25.1	79.9	79.9	5.4	5.4	17.4	13.0	4	4	84	83			<0.2	<0.2	1.7	1.7				
					7.2	0.3	0	28.9	8.1	8.1	25.1	25.1	79.9	79.9	5.4	5.4	17.9	13.0	4	4	83	83			<0.2	<0.2	1.6	1.6				
IM4	Cloudy	Moderate	10:53	8.2	Surface	1.0	0.6	14	29.0	8.1	8.1	22.8	22.8	85.1	85.1	5.8	5.6	8.7	15.5	2	3	80	81	819706	804602	<0.2	<0.2	1.7	1.9			
						1.0	0.7	14	29.0	8.1	8.1	22.8	22.8	85.0	85.0	5.8	5.6	8.8	15.5	3	3	79	82			<0.2	<0.2	2.0	1.9			
						4.1	0.6	10	28.9	8.1	8.1	24.7	24.7	80.9	80.9	5.4	5.4	16.9	15.5	2	3	81	83			<0.2	<0.2	1.9	1.8			
					4.1	0.6	10	28.9	8.1	8.1	24.7	24.7	80.9	80.9	5.4	5.4	16.8	15.5	3	3	82	82			<0.2	<0.2	2.0	1.8				
					7.2	0.4	9	28.9	8.1	8.1	25.2	25.2	80.6	80.6	5.4	5.4	20.9	15.5	4	4	83	83			<0.2	<0.2	1.8	1.8				
					7.2	0.5	9	28.9	8.1	8.1	25.2	25.2	80.7	80.7	5.4	5.4	20.8	15.5	4	4	83	83			<0.2	<0.2	1.9	1.9				
IM5	Cloudy	Moderate	11:01	7.6	Surface	1.0	0.7	1	29.1	8.1	8.1	22.9	22.9	85.3	85.3	5.8	5.7	9.7	15.0	3	4	81	82	820739	804873	<0.2	<0.2	1.7	1.8			
						1.0	0.7	1	29.1	8.1	8.1	22.9	22.9	85.2	85.3	5.8	5.7	9.8	15.0	4	4	80	83			<0.2	<0.2	1.8	1.8			
						3.8	0.6	356	28.9	8.1	8.1	23.9	23.9	81.4	81.4	5.5	5.5	14.9	15.0	4	3	83	82			<0.2	<0.2	1.8	1.7			
					3.8	0.6	328	28.9	8.1	8.1	23.9	23.9	81.4	81.4	5.5	5.5	14.9	15.0	3	3	82	84			<0.2	<0.2	1.8	1.8				
					6.6	0.4	356	28.9	8.1	8.1	24.3	24.3	81.4	81.4	5.5	5.5	20.2	15.0	5	5	84	83			<0.2	<0.2	1.7	1.7				
					6.6	0.4	356	28.9	8.1	8.1	24.3	24.3	81.5	81.5	5.5	5.5	20.3	15.0	5	5	83	83			<0.2	<0.2	1.7	1.7				
IM6	Cloudy	Moderate	11:09	7.6	Surface	1.0	0.4	63	29.1	8.1	8.1	23.4	23.4	82.4	82.4	5.6	5.6	10.4	15.5	10	10	80	83	821056	805833	<0.2	<0.2	1.6	1.6			
						1.0	0.4	63	29.1	8.1	8.1	23.4	23.4	82.3	82.4	5.6	5.6	10.8	15.5	9	10	79	8									

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

Water Quality Monitoring

Water Quality Monitoring Results on 16 August 18 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	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA		
IM9	Cloudy	Moderate	10:26	7.9	Surface	1.0	0.2	287	29.1	29.1	8.1	8.1	22.7	22.7	85.6	85.6	5.8	5.8	9.3	9.3	2	2	81	81	822122	808792	<0.2	1.6	1.7	1.7				
						1.0	0.2	298	29.1	29.1	8.1	8.1	22.7	22.7	85.5	85.5	5.8	5.8	9.4	9.4	2	2	81	81	<0.2	1.7	1.7	1.7						
					Middle	4.0	0.2	315	28.9	28.9	8.1	8.1	24.9	24.9	79.9	79.9	5.4	5.4	13.7	13.7	3	3	83	83	<0.2	1.6	1.7	1.7	1.7					
						4.0	0.2	333	28.9	28.9	8.1	8.1	24.9	24.9	79.9	79.9	5.4	5.4	13.6	13.6	2	2	83	83	<0.2	1.7	1.7	1.7						
					Bottom	6.9	0.2	310	28.9	28.9	8.1	8.1	25.2	25.2	80.1	80.1	5.4	5.4	17.5	17.5	7	7	85	85	<0.2	1.7	1.7	1.7	1.7					
						6.9	0.2	325	28.9	28.9	8.1	8.1	25.2	25.2	80.1	80.1	5.4	5.4	17.6	17.6	8	8	85	85	<0.2	2.0	1.7	1.7						
IM10	Cloudy	Moderate	10:19	8.1	Surface	1.0	0.3	330	29.0	29.0	8.1	8.1	23.2	23.2	84.1	84.1	5.7	5.7	8.7	8.7	2	2	81	81	822389	809791	<0.2	1.6	1.7	1.7				
						1.0	0.4	342	29.0	29.0	8.1	8.1	23.2	23.2	84.1	84.1	5.7	5.7	8.8	8.8	2	2	81	81	<0.2	1.7	1.7	1.7						
					Middle	4.1	0.3	335	28.9	28.9	8.1	8.1	24.9	24.9	80.5	80.5	5.4	5.4	17.6	17.6	4	4	83	83	<0.2	1.6	1.7	1.7	1.7					
						4.1	0.3	349	28.9	28.9	8.1	8.1	24.9	24.9	80.5	80.5	5.4	5.4	17.6	17.6	4	4	83	83	<0.2	1.7	1.7	1.7						
					Bottom	7.1	0.2	297	28.9	28.9	8.1	8.1	25.1	25.1	80.6	80.6	5.4	5.4	23.6	23.6	6	6	85	85	<0.2	1.7	1.7	1.7	1.7					
						7.1	0.2	303	28.9	28.9	8.1	8.1	25.1	25.1	80.7	80.7	5.4	5.4	23.6	23.6	7	7	85	85	<0.2	1.6	1.7	1.7						
IM11	Cloudy	Moderate	10:08	8.2	Surface	1.0	0.6	287	29.2	29.2	8.1	8.1	23.8	23.8	82.3	82.3	5.5	5.5	9.2	9.2	4	4	81	81	822033	811432	<0.2	1.6	1.6	1.6				
						1.0	0.6	311	29.2	29.2	8.1	8.1	23.8	23.8	82.3	82.3	5.5	5.5	9.3	9.3	4	4	81	81	<0.2	1.5	1.6	1.6						
					Middle	4.1	0.5	280	29.0	29.0	8.1	8.1	24.9	24.9	78.5	78.5	5.3	5.3	13.5	13.5	5	5	83	83	<0.2	1.6	1.6	1.6	1.6					
						4.1	0.5	288	29.0	29.0	8.1	8.1	24.9	24.9	78.5	78.5	5.3	5.3	13.4	13.4	5	5	83	83	<0.2	1.5	1.6	1.6						
					Bottom	7.2	0.3	319	29.0	29.0	8.1	8.1	25.2	25.2	78.5	78.5	5.3	5.3	17.7	17.7	6	6	85	85	<0.2	1.7	1.7	1.7	1.7					
						7.2	0.3	345	29.0	29.0	8.1	8.1	25.2	25.2	78.5	78.5	5.3	5.3	17.6	17.6	7	7	85	85	<0.2	1.7	1.7	1.7						
IM12	Cloudy	Moderate	10:01	8.5	Surface	1.0	0.6	276	29.0	29.0	8.0	8.0	23.9	23.9	79.3	79.3	5.3	5.3	12.6	12.6	19	19	81	81	821465	812057	<0.2	1.6	1.7	1.7				
						1.0	0.7	287	29.0	29.0	8.0	8.0	23.9	23.9	79.2	79.2	5.3	5.3	12.5	12.5	20	20	81	81	<0.2	1.6	1.6	1.6						
					Middle	4.3	0.7	265	29.0	29.0	8.1	8.1	24.1	24.1	79.3	79.3	5.3	5.3	18.0	18.0	22	22	83	83	<0.2	2.0	1.6	1.7	1.7					
						4.3	0.8	290	29.0	29.0	8.1	8.1	24.1	24.1	79.4	79.4	5.3	5.3	18.2	18.2	21	21	83	83	<0.2	1.6	1.6	1.6						
					Bottom	7.5	0.6	282	29.0	29.0	8.1	8.1	24.1	24.1	79.0	79.0	5.3	5.3	26.0	26.0	24	24	85	85	<0.2	1.7	1.7	1.7	1.7					
						7.5	0.6	293	29.0	29.0	8.1	8.1	24.1	24.1	79.0	79.0	5.3	5.3	25.9	25.9	24	24	85	85	<0.2	1.7	1.7	1.7						
SR2	Cloudy	Moderate	09:30	5.3	Surface	1.0	0.2	350	28.9	28.9	8.0	8.0	22.9	22.9	78.6	78.6	5.3	5.3	12.8	12.8	12	12	81	81	821472	814147	<0.2	1.7	1.6	1.5				
						1.0	0.2	353	28.9	28.9	8.0	8.0	22.9	22.9	78.6	78.6	5.3	5.3	12.8	12.8	12	12	81	81	<0.2	1.6	1.6	1.6						
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					Bottom	4.3	0.1	359	28.9	28.9	8.0	8.0	23.1	23.1	78.1	78.1	5.3	5.3	13.5	13.5	12	12	83	83	<0.2	1.4	1.4	1.4	1.4					
						4.3	0.1	330	28.9	28.9	8.0	8.0	23.1	23.1	78.1	78.1	5.3	5.3	13.6	13.6	12	12	83	83	<0.2	1.3	1.3	1.3	1.3					
SR3	Cloudy	Moderate	10:38	9.1	Surface	1.0	0.2	11	29.0	29.0	8.1	8.1	23.5	23.5	82.4	82.4	5.6	5.6	14.7	14.7	10	10	-	-	822126	807546	-	-	-	-				
						1.0	0.3	11	29.0	29.0	8.1	8.1	23.5	23.5	82.4	82.4	5.6	5.6	14.8	14.8	11	11	-	-	-	-	-	-	-	-	-			
					Middle	4.6	0.2	336	29.0	29.0	8.1	8.1	23.6	23.6	81.3	81.3	5.5	5.5	17.0	17.0	11	11	-	-	-	-	-	-	-	-	-	-	-	
						4.6	0.2	345	29.0	29.0	8.1	8.1	23.6	23.6	81.3	81.3	5.5	5.5	16.7	16.7	10	10	-	-	-	-	-	-	-	-	-	-		
					Bottom	8.1	0.1	39	29.0	29.0	8.1	8.1	23.7	23.7	80.7	80.7	5.5	5.5	20.8	20.8	11	11	-	-	-	-	-	-	-	-	-	-	-	-
						8.1	0.1	40	29.0	29.0	8.1	8.1	23.7	23.7	80.8	80.8	5.5	5.5	21.0	21.0	11	11	-	-	-	-	-	-	-	-	-	-	-	
SR4A	Cloudy	Moderate	09:40	9.5	Surface	1.0	0.1	252	28.9	28.9	8.0	8.0	22.9	22.9	78.4	78.5	5.3	5.3	12.9	12.9	10	10	-	-	817190	807807	-	-	-	-				
						1.0	0.2	268	28.9	28.9	8.0	8.0	22.9	22.9	78.5	78.5	5.3	5.3	13.0	13.0	10	10	-	-	-	-	-	-	-	-	-			
					Middle	4.8	0.2	231	28.9	28.9	8.0	8.0	23.1	23.1	78.3	78.3	5.3	5.3	14.6	14.6	10	10	-	-	-	-	-	-	-	-	-	-	-	
						4.8	0.2	241	28.9	28.9	8.0	8.0	23.1	23.1	78.3	78.3	5.3	5.3	14.7	14.7	10	10	-	-	-	-	-	-	-	-	-	-		
					Bottom	8.5	0.2	242	28.9	28.9	8.0	8.0	23.1	23.1	79.2	79.3	5.4	5.4	19.0	19.0	10	10	-	-	-	-	-	-	-	-	-	-	-	
						8.5	0.2	259	28.9	28.9	8.0	8.0	23.1	23.1	79.3	79.3	5.4	5.4	19.0	19.0	10	10	-	-	-	-	-	-	-	-	-	-		
SR5A	Cloudy	Calm	09:23	5.3	Surface	1.0	0.3	294	28.9	28.9	8.0	8.0	23.3	23.3	79.6	79.6	5.4	5.4	16.6	16.6	14	14	-	-	816579	810679	-	-	-	-				
						1.0	0.3	295	28.9	28.9	8.0	8.0	23.3	23.3	79.6	79.6	5.4	5.4	16.7	16.7	13	13	-	-	-	-	-	-	-					
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
					Bottom	4.3	0.3	294	28.8	28.8	7.9	7.9	23.4	23.4	80.4	80.5	5.5	5.5	21.7	21.7	15	15	-	-	-	-	-	-	-	-	-	-		
						4.3	0.3	302	28.8	28.8	7.9	7.9	23.4	23.4	80.5	80.5	5.5	5.5	21.6	21.6	15	15	-	-	-	-	-	-	-	-	-			
SR6	Cloudy	Calm	09:37	4.5	Surface	1.0	0.2	239	28.8	28.8	8.0	8.0	23.1	23.1	77.9	77.9	5.3	5.3	9.8	9.8	6	6	-	-</										

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

Water Quality Monitoring

Water Quality Monitoring Results on 18 August 18 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	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA
C1	Fine	Moderate	17:44	8.0	Surface	1.0	0.6	192	29.3	7.9	7.9	14.2	14.2	84.4	84.4	6.0	6.0	5.3	4	72	4	72	74	815643	804252	<0.2	2.2	2.4				
						1.0	0.6	209	29.3	7.9	7.9	14.2	14.2	84.4	84.4	6.0	6.0	5.3	4	71	4	71	4	71	74	815643	804252		<0.2	2.3		
					Middle	4.0	0.3	226	29.0	7.9	7.9	19.3	19.3	85.4	85.4	5.9	5.9	5.4	4	74	4	74	4	74	74	815643	804252		<0.2	2.5		
						4.0	0.3	231	29.0	7.9	7.9	19.3	19.3	85.4	85.4	5.9	5.9	5.4	4	74	4	74	4	74	74	815643	804252		<0.2	2.5		
					Bottom	7.0	0.4	281	29.2	7.8	7.8	24.6	24.6	80.1	80.1	5.4	5.4	11.6	5.4	11.6	4	76	4	76	4	76	74		815643	804252	<0.2	2.5
						7.0	0.4	298	29.2	7.8	7.8	24.6	24.6	80.1	80.1	5.4	5.4	11.6	5.4	11.6	4	75	4	75	4	75	74		815643	804252	<0.2	2.4
C2	Fine	Moderate	16:55	10.8	Surface	1.0	0.7	182	28.6	8.0	8.0	22.2	22.2	76.5	76.5	5.2	5.2	6.9	4	71	4	71	73	825653	806922	<0.2	3.5	3.4				
						1.0	0.7	189	28.6	8.0	8.0	22.2	22.2	76.5	76.5	5.2	5.2	6.9	4	71	4	71	4	71	73	825653	806922		<0.2	3.7		
					Middle	5.4	0.2	193	28.6	8.0	8.0	23.4	23.4	73.2	73.2	5.0	5.0	7.7	4	73	4	73	4	73	73	825653	806922		<0.2	3.4		
						5.4	0.2	204	28.6	8.0	8.0	23.4	23.4	73.2	73.2	5.0	5.0	7.7	4	73	4	73	4	73	73	825653	806922		<0.2	3.3		
					Bottom	9.8	0.1	305	28.6	8.0	8.0	23.5	23.5	73.1	73.1	5.0	5.0	8.0	6	75	6	75	6	75	6	75	73		825653	806922	<0.2	3.2
						9.8	0.1	317	28.6	8.0	8.0	23.5	23.5	73.1	73.1	5.0	5.0	8.0	6	75	6	75	6	75	6	75	73		825653	806922	<0.2	3.4
C3	Fine	Moderate	19:10	11.6	Surface	1.0	0.4	88	28.9	7.9	7.9	17.3	17.3	74.3	74.3	5.2	5.2	8.3	5	71	5	71	73	822136	817791	<0.2	1.9	1.9				
						1.0	0.4	91	28.9	7.9	7.9	17.3	17.3	74.3	74.3	5.2	5.2	8.3	5	71	5	71	5	71	73	822136	817791		<0.2	1.8		
					Middle	5.8	0.2	88	28.9	7.9	7.9	20.7	20.7	71.9	71.9	4.9	4.9	9.1	6	73	6	73	6	73	73	822136	817791		<0.2	1.8		
						5.8	0.2	89	28.9	7.9	7.9	20.7	20.7	71.9	71.9	4.9	4.9	9.1	5	73	5	73	5	73	73	822136	817791		<0.2	2.0		
					Bottom	10.6	0.1	80	28.9	7.9	7.9	21.9	21.9	70.7	70.7	4.8	4.8	10.4	6	75	6	75	6	75	6	75	73		822136	817791	<0.2	1.8
						10.6	0.1	87	28.9	7.9	7.9	21.9	21.9	70.7	70.7	4.8	4.8	10.3	6	75	6	75	6	75	6	75	73		822136	817791	<0.2	2.0
IM1	Fine	Moderate	18:04	4.5	Surface	1.0	0.1	5	29.1	7.9	7.9	20.5	20.5	81.6	81.6	5.6	5.6	4.8	6	71	6	71	72	817944	807111	<0.2	2.4	2.3				
						1.0	0.2	5	29.1	7.9	7.9	20.5	20.5	81.6	81.6	5.6	5.6	4.8	5	70	5	70	5	70	72	817944	807111		<0.2	2.4		
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	72	817944		807111	<0.2	-	
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	72	817944		807111	<0.2	-	
					Bottom	3.5	0.0	6	29.1	7.9	7.9	23.3	23.3	79.9	79.9	5.4	5.4	6.7	6	73	6	73	6	73	6	73	72		817944	807111	<0.2	2.0
						3.5	0.0	6	29.1	7.9	7.9	23.3	23.3	79.9	79.9	5.4	5.4	6.7	7	73	7	73	7	73	7	73	72		817944	807111	<0.2	2.4
IM2	Fine	Moderate	18:11	6.7	Surface	1.0	0.4	200	29.2	8.0	8.0	20.0	20.0	80.8	80.8	5.6	5.6	5.9	3	72	3	72	73	818164	806136	<0.2	2.5	2.5				
						1.0	0.4	214	29.2	8.0	8.0	20.0	20.0	80.8	80.8	5.6	5.6	5.9	3	71	3	71	3	71	73	818164	806136		<0.2	2.5		
					Middle	3.4	0.2	220	29.1	8.0	8.0	24.5	24.5	78.2	78.2	5.2	5.2	8.5	4	73	4	73	4	73	73	818164	806136		<0.2	2.3		
						3.4	0.2	241	29.1	8.0	8.0	24.5	24.5	78.2	78.2	5.2	5.2	8.5	4	73	4	73	4	73	73	818164	806136		<0.2	2.6		
					Bottom	5.7	0.1	297	29.1	8.0	8.0	26.0	26.0	79.1	79.1	5.3	5.3	8.8	4	75	4	75	4	75	4	75	73		818164	806136	<0.2	2.7
						5.7	0.1	315	29.1	8.0	8.0	26.0	26.0	79.1	79.1	5.3	5.3	8.8	5	75	5	75	5	75	5	75	73		818164	806136	<0.2	2.5
IM3	Fine	Moderate	18:17	7.5	Surface	1.0	0.5	218	29.3	7.9	7.9	18.7	18.7	79.2	79.2	5.5	5.5	3.1	5	71	5	71	73	818794	805604	<0.2	2.5	2.5				
						1.0	0.6	220	29.3	7.9	7.9	18.7	18.7	79.2	79.2	5.5	5.5	3.1	6	71	6	71	6	71	73	818794	805604		<0.2	2.7		
					Middle	3.8	0.5	225	29.1	8.0	8.0	22.9	22.9	78.2	78.2	5.3	5.3	6.0	8	73	8	73	8	73	73	818794	805604		<0.2	2.4		
						3.8	0.5	232	29.1	8.0	8.0	22.9	22.9	78.2	78.2	5.3	5.3	6.0	7	74	7	74	7	74	73	818794	805604		<0.2	2.5		
					Bottom	6.5	0.3	229	29.1	7.9	7.9	27.6	27.6	84.1	84.1	5.6	5.6	14.0	9	74	9	74	9	74	9	74	73		818794	805604	<0.2	2.6
						6.5	0.3	234	29.1	7.9	7.9	27.6	27.6	84.1	84.1	5.6	5.6	14.0	9	75	9	75	9	75	9	75	73		818794	805604	<0.2	2.5
IM4	Fine	Moderate	18:26	7.4	Surface	1.0	0.6	214	29.5	7.9	7.9	14.0	14.0	77.5	77.5	5.5	5.5	6.0	4	72	4	72	73	819716	804608	<0.2	2.8	2.7				
						1.0	0.7	227	29.5	7.9	7.9	14.0	14.0	77.5	77.5	5.5	5.5	6.0	5	71	5	71	5	71	73	819716	804608		<0.2	2.6		
					Middle	3.7	0.3	239	29.2	7.9	7.9	22.7	22.7	78.2	78.2	5.3	5.3	10.3	4	73	4	73	4	73	73	819716	804608		<0.2	2.7		
						3.7	0.4	260	29.2	7.9	7.9	22.7	22.7	78.2	78.2	5.3	5.3	10.3	5	73	5	73	5	73	73	819716	804608		<0.2	2.6		
					Bottom	6.4	0.2	279	29.2	7.7	7.7	23.2	23.2	85.5	85.5	5.8	5.8	10.8	5	75	5	75	5	75	5	75	73		819716	804608	<0.2	2.6
						6.4	0.2	285	29.2	7.7	7.7	23.2	23.2	85.5	85.5	5.8	5.8	10.8	5	74	5	74	5	74	5	74	73		819716	804608	<0.2	2.7
IM5	Fine	Moderate	18:38	6.6	Surface	1.0	0.5	229	29.6	7.9	7.9	15.1	15.1	77.3	77.3	5.4	5.4	5.8	4	71	4	71	73	820714	804864	<0.2	2.4	2.5				
						1.0	0.5	231	29.6	7.9	7.9	15.1	15.1	77.3	77.3	5.4	5.4	5.8	4	70	4	70	4	70	73	820714	804864		<0.2	2.6		
					Middle	3.3	0.5	255	29.3	7.9	7.9	19.2	19.2	73.1	73.1	5.0	5.0	6.5	5	72	5	72	5	72	73	820714	804864		<0.2	2.5		
						3.3	0.5	259	29.3	7.9	7.9	19.2	19.2	73.1	73.1	5.0	5.0	6.5	5	72	5	72	5	72	73	820714	804864		<0.2	2.6		
					Bottom	5.6	0.3	249	29.3	7.8	7.8	21.4	21.4	76.9	76.9	5.2	5.2	6.3	5	75	5	75	5	75	5	75	73		820714	804864	<0.2	2.6
						5.6	0.3	251	29.3	7.8	7.8	21.4	21.4	76.9	76.9	5.2	5.2	6.3	4	75	4	75	4	75								

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

Water Quality Monitoring

Water Quality Monitoring Results on 18 August 18 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	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value
IM9	Fine	Moderate	18:08	6.9	Surface	1.0	0.4	188	28.8	28.8	8.0	8.0	20.9	20.9	77.5	77.5	5.3	5.3	10.2	5.3	4	71	73	822109	808798	<0.2	2.7	2.6			
						1.0	0.4	201	28.8	28.8	8.0	8.0	20.9	20.9	77.5	77.5	5.3	5.3	10.3	5.3	5	72	73	<0.2	2.5						
					Middle	3.5	0.1	196	28.8	28.8	8.1	8.1	21.9	21.9	77.9	77.9	5.3	5.3	15.2	5.3	5	73	73	<0.2	2.6						
						3.5	0.1	202	28.8	28.8	8.1	8.1	21.9	21.9	77.9	77.9	5.3	5.3	15.2	5.3	6	73	73	<0.2	2.6						
					Bottom	5.9	0.1	191	28.9	28.9	7.9	7.9	19.9	19.9	77.8	77.8	5.4	5.4	7.9	5.4	6	75	75	<0.2	2.7						
						5.9	0.1	196	28.9	28.9	7.9	7.9	19.9	19.9	77.9	77.9	5.4	5.4	7.9	5.4	6	75	75	<0.2	2.6						
IM10	Fine	Moderate	18:19	6.7	Surface	1.0	0.5	141	28.8	28.8	8.0	8.0	20.5	20.5	78.1	78.2	5.4	5.4	10.6	5.4	4	71	73	822355	809788	<0.2	2.4	2.4			
						1.0	0.5	144	28.8	28.8	8.0	8.0	20.5	20.5	78.2	78.2	5.4	5.4	9.8	5.5	5	71	74	<0.2	2.4						
					Middle	3.4	0.3	117	28.8	28.8	8.1	8.1	21.3	21.3	80.1	80.1	5.5	5.5	10.8	5.5	4	74	73	<0.2	2.3						
						3.4	0.3	124	28.8	28.8	8.1	8.1	21.3	21.3	80.1	80.1	5.5	5.5	10.8	5.5	4	73	75	<0.2	2.3						
					Bottom	5.7	0.2	95	28.9	28.9	7.9	7.9	18.8	18.8	78.2	78.2	5.4	5.4	8.5	5.4	4	75	75	<0.2	2.4						
						5.7	0.2	98	28.9	28.9	7.9	7.9	18.8	18.8	78.2	78.2	5.4	5.4	8.5	5.4	5	75	75	<0.2	2.4						
IM11	Fine	Moderate	18:30	7.9	Surface	1.0	0.4	106	28.9	28.9	7.9	7.9	20.8	20.8	71.5	71.5	4.9	4.9	14.8	4.9	4	72	74	822051	811487	<0.2	2.3	2.3			
						1.0	0.4	110	28.9	28.9	7.9	7.9	20.8	20.8	71.5	71.5	4.9	4.9	15.0	4.9	4	71	74	<0.2	2.3						
					Middle	4.0	0.4	79	28.9	28.9	7.9	7.9	21.3	21.3	71.3	71.4	4.9	4.9	21.3	4.9	4	74	73	<0.2	2.2						
						4.0	0.4	80	28.9	28.9	7.9	7.9	21.3	21.3	71.4	71.4	4.9	4.9	21.5	4.9	4	73	76	<0.2	2.2						
					Bottom	6.9	0.1	93	28.9	28.9	7.9	7.9	18.2	18.2	78.4	78.4	5.5	5.5	8.1	5.5	5	76	75	<0.2	2.2						
						6.9	0.1	99	28.9	28.9	7.9	7.9	18.2	18.2	78.3	78.3	5.5	5.5	8.1	5.5	5	75	75	<0.2	2.2						
IM12	Fine	Moderate	18:46	8.3	Surface	1.0	0.4	102	28.9	28.9	7.9	7.9	19.8	19.8	73.1	73.1	5.1	5.1	11.9	5.1	5	71	73	821476	812039	<0.2	2.5	2.6			
						1.0	0.4	108	28.9	28.9	7.9	7.9	19.8	19.8	73.1	73.1	5.1	5.1	12.0	5.1	4	71	73	<0.2	2.4						
					Middle	4.2	0.2	95	28.9	28.9	7.9	7.9	20.6	20.6	73.0	73.0	5.0	5.0	17.9	5.0	4	73	73	<0.2	2.5						
						4.2	0.2	97	28.9	28.9	7.9	7.9	20.6	20.6	73.0	73.0	5.0	5.0	17.8	5.0	4	73	73	<0.2	2.7						
					Bottom	7.3	0.0	107	28.9	28.9	7.9	7.9	16.1	16.4	73.7	73.7	5.2	5.2	9.2	5.2	5	75	75	<0.2	2.6						
						7.3	0.0	111	28.9	28.9	7.9	7.9	16.7	16.4	73.6	73.6	5.2	5.2	9.3	5.2	5	75	75	<0.2	2.8						
SR2	Fine	Moderate	19:02	3.9	Surface	1.0	0.4	85	29.1	29.1	7.9	7.9	15.5	15.5	75.7	75.7	5.3	5.3	8.2	5.3	5	71	72	821474	814141	<0.2	2.3	2.4			
						1.0	0.5	85	29.1	29.1	7.9	7.9	15.5	15.5	75.7	75.7	5.3	5.3	8.2	5.3	4	72	73	<0.2	2.2						
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-
					Bottom	2.9	0.1	74	28.9	28.9	7.9	7.9	19.4	19.4	73.6	73.6	5.1	5.1	9.2	5.1	5	73	73	<0.2	2.7						
						2.9	0.1	75	28.9	28.9	7.9	7.9	19.4	19.4	73.6	73.6	5.1	5.1	9.1	5.1	5	73	73	<0.2	2.5						
SR3	Fine	Moderate	17:33	8.5	Surface	1.0	0.5	191	28.7	28.7	8.0	8.0	22.1	22.1	73.5	73.5	5.0	5.0	8.5	5.0	4	-	-	822151	807588	-	-	-			
						1.0	0.5	195	28.7	28.7	8.0	8.0	22.1	22.1	73.5	73.5	5.0	5.0	8.5	5.0	3	-	-	-	-						
					Middle	4.3	0.4	205	28.6	28.6	8.0	8.0	23.0	23.0	72.1	72.1	4.9	4.9	8.6	4.9	4	-	-	-	-						
						4.3	0.4	215	28.6	28.6	8.0	8.0	23.0	23.0	72.1	72.1	4.9	4.9	8.6	4.9	4	-	-	-	-						
					Bottom	7.5	0.2	231	28.6	28.6	8.0	8.0	23.2	23.2	72.2	72.2	4.9	4.9	8.5	4.9	6	-	-	-	-						
						7.5	0.3	253	28.6	28.6	8.0	8.0	23.2	23.2	72.2	72.2	4.9	4.9	8.5	4.9	7	-	-	-	-						
SR4A	Fine	Moderate	17:25	9.5	Surface	1.0	0.2	260	29.1	29.1	7.9	7.9	22.4	22.4	77.3	77.3	5.2	5.2	3.8	5.2	5	-	-	817171	807825	-	-	-			
						1.0	0.2	273	29.1	29.1	7.9	7.9	22.4	22.4	77.3	77.3	5.2	5.2	3.8	5.2	4	-	-	-	-						
					Middle	4.8	0.1	265	29.1	29.1	7.9	7.9	26.0	26.0	76.9	76.9	5.1	5.1	6.9	5.1	6	-	-	-	-						
						4.8	0.1	282	29.1	29.1	7.9	7.9	26.0	26.0	76.9	76.9	5.1	5.1	6.9	5.1	6	-	-	-	-						
					Bottom	8.5	0.1	260	29.1	29.1	7.9	7.9	27.2	27.2	79.0	79.0	5.2	5.2	12.6	5.2	7	-	-	-	-						
						8.5	0.1	261	29.1	29.1	7.9	7.9	27.2	27.2	79.0	79.0	5.2	5.2	12.6	5.2	6	-	-	-	-						
SR5A	Fine	Moderate	17:09	4.5	Surface	1.0	0.1	335	29.1	29.1	7.6	7.6	21.2	21.2	76.9	76.9	5.3	5.3	1.0	5.3	5	-	-	816614	810722	-	-	-			
						1.0	0.2	342	29.1	29.1	7.6	7.6	21.2	21.2	76.9	76.9	5.3	5.3	1.0	5.3	5	-	-	-	-						
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	
					Bottom	3.5	0.2	314	29.1	29.1	7.4	7.4	21.9	21.9	81.5	81.5	5.6	5.6	3.1	5.6	5	-	-	-	-						
						3.5	0.2	337	29.1	29.1	7.4	7.4	21.9	21.9	81.5	81.5	5.6	5.6	3.1	5.6	5	-	-	-	-						
SR6	Fine	Moderate	16:46	3.9	Surface	1.0	0.0	346	29.1	29.1	7.8	7.8	22.2	22.2	69.9	69.9	4.8	4.8	4.0	4.8	9	-	-	817873	814659	-	-	-			
						1.0	0.0	356	29.1	29.1	7.8	7.8	22.2	22.2	69.9	69.9	4.8	4.8	4.0	4.8	10	-	-	-	-						
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-		
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-		
					Bottom	2.9	0.0	288	29.1	29.1	7.8	7.8	22.4	22.4	68.5	68.5	4.7	4.7	23.3	4.7	11	-	-	-	-						
						2.9	0.0	291	29.1	29.1	7.8	7.8	22.4	22.4	68.5	68.5	4.7	4.7	23.3	4.7	10	-	-	-	-						
SR7	Fine	Moderate	19:38	17.7	Surface	1.0	0.5	74	29.1	29.1	7.9	7.9	14.5	14.4	73.7	73.7	5.2	5.2	8.9	5.2	4	-	-	823626	823725	-	-	-			
						1.0	0.6	77	29.1	29.1	7.9	7.9	14.4	14.4	73.6	73.6	5.2	5.2	8.4	5.2	4	-	-	-	-						
					Middle	8.9	0.1	354	28.8	28.8	7.9	7.9	22.4	22.4	69.1	69.1	4.7	4.7	10.3	4.7	6	-	-	-	-						
						8																									

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

Water Quality Monitoring

Water Quality Monitoring Results on 18 August 18 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	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA
C1	Fine	Moderate	12:12	8.2	Surface	1.0	0.3	57	29.7	29.7	8.0	8.0	14.3	14.3	79.2	79.2	5.6	5.6	7.1	7.1	4	4	72	72	815590	804262	<0.2	<0.2	2.1	2.3		
						1.0	0.3	58	29.7	29.7	8.0	8.0	14.3	14.3	79.2	79.2	5.6	5.6	7.1	7.1	3	3	72	72	<0.2	<0.2	1.5	1.5				
						4.1	0.4	52	29.1	29.1	8.1	8.1	24.8	24.8	77.1	77.1	5.2	5.2	13.6	13.6	4	4	73	73	<0.2	<0.2	2.5	2.5				
					4.1	0.5	55	29.1	29.1	8.1	8.1	24.8	24.8	77.1	77.1	5.2	5.2	13.6	13.6	4	4	73	73	<0.2	<0.2	2.1	2.1					
					7.2	0.4	48	29.1	29.1	8.1	8.1	26.8	26.8	77.4	77.4	5.1	5.1	17.1	17.1	6	6	75	75	<0.2	<0.2	2.5	2.5					
					7.2	0.4	48	29.1	29.1	8.1	8.1	26.8	26.8	77.4	77.4	5.1	5.1	17.1	17.1	6	6	76	76	<0.2	<0.2	2.6	2.6					
C2	Fine	Moderate	13:07	11.4	Surface	1.0	0.4	193	28.5	28.5	8.0	8.0	25.0	25.0	69.0	69.0	4.7	4.7	7.2	7.2	4	4	71	71	825709	806928	<0.2	<0.2	3.0	2.8		
						1.0	0.4	209	28.5	28.5	8.0	8.0	25.0	25.0	69.0	69.0	4.7	4.7	7.2	7.2	3	3	71	71	<0.2	<0.2	2.9	2.9				
						5.7	0.1	225	28.4	28.4	8.1	8.1	26.0	26.0	67.1	67.1	4.5	4.5	8.5	8.5	4	4	73	73	<0.2	<0.2	3.2	3.2				
					5.7	0.1	230	28.4	28.4	8.1	8.1	26.0	26.0	67.1	67.1	4.5	4.5	8.5	8.5	4	4	73	73	<0.2	<0.2	2.9	2.9					
					10.4	0.2	308	28.0	28.0	8.1	8.1	28.2	28.2	63.2	63.2	4.2	4.2	11.7	11.7	5	5	75	75	<0.2	<0.2	2.9	2.9					
					10.4	0.2	327	28.0	28.0	8.1	8.1	28.2	28.2	63.2	63.2	4.2	4.2	11.7	11.7	6	6	75	75	<0.2	<0.2	2.1	2.1					
C3	Fine	Moderate	11:12	12.2	Surface	1.0	0.4	245	29.4	29.4	7.9	7.9	15.7	15.7	75.0	75.0	5.3	5.3	8.0	8.0	4	4	71	71	822121	817784	<0.2	<0.2	1.9	1.8		
						1.0	0.4	267	29.4	29.4	7.9	7.9	15.7	15.7	74.9	74.9	5.3	5.3	8.0	8.0	4	4	71	71	<0.2	<0.2	1.5	1.5				
						6.1	0.4	255	28.9	28.9	7.9	7.9	19.8	19.8	72.1	72.2	5.0	5.0	8.4	8.4	4	4	73	73	<0.2	<0.2	1.8	1.8				
					6.1	0.5	266	28.9	28.9	7.9	7.9	19.8	19.8	72.2	72.2	5.0	5.0	8.5	8.5	4	4	73	73	<0.2	<0.2	1.6	1.6					
					11.2	0.3	296	28.9	28.9	7.9	7.9	20.4	20.4	71.8	71.8	4.9	4.9	11.7	11.7	5	5	75	75	<0.2	<0.2	1.9	1.9					
					11.2	0.3	297	28.9	28.9	7.9	7.9	20.4	20.4	71.8	71.8	4.9	4.9	11.8	11.8	5	5	74	74	<0.2	<0.2	2.0	2.0					
IM1	Fine	Moderate	11:51	4.6	Surface	1.0	0.4	322	29.5	29.5	8.0	8.0	16.2	16.2	85.8	85.8	6.0	6.0	4.5	4.5	6	6	71	71	817934	807119	<0.2	<0.2	1.8	1.9		
						1.0	0.4	331	29.5	29.5	8.0	8.0	16.2	16.2	85.8	85.8	6.0	6.0	4.5	4.5	5	5	72	72	<0.2	<0.2	2.0	2.0				
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					3.6	0.3	10	29.4	29.4	8.0	8.0	19.0	19.0	84.9	84.9	5.8	5.8	5.5	5.5	5	5	74	74	<0.2	<0.2	2.0	2.0					
					3.6	0.3	10	29.4	29.4	8.0	8.0	19.0	19.0	84.9	84.9	5.8	5.8	5.5	5.5	6	6	73	73	<0.2	<0.2	1.7	1.7					
					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
IM2	Fine	Moderate	11:44	7.1	Surface	1.0	0.7	5	29.3	29.3	8.1	8.1	20.2	20.2	80.8	80.8	5.5	5.5	3.9	3.9	3	3	71	71	818138	806183	<0.2	<0.2	2.0	1.9		
						1.0	0.8	5	29.3	29.3	8.1	8.1	20.2	20.2	80.8	80.8	5.5	5.5	3.9	3.9	4	4	72	72	<0.2	<0.2	2.0	2.0				
						3.6	0.4	19	29.2	29.2	8.1	8.1	24.6	24.6	77.0	77.0	5.2	5.2	6.9	6.9	4	4	73	73	<0.2	<0.2	1.9	1.9				
					3.6	0.4	20	29.2	29.2	8.1	8.1	24.6	24.6	77.0	77.0	5.2	5.2	6.9	6.9	4	4	73	73	<0.2	<0.2	1.8	1.8					
					6.1	0.3	3	29.2	29.2	8.1	8.1	26.1	26.1	77.7	77.7	5.2	5.2	10.0	10.0	4	4	75	75	<0.2	<0.2	2.0	2.0					
					6.1	0.4	3	29.2	29.2	8.1	8.1	26.1	26.1	77.7	77.7	5.2	5.2	10.0	10.0	5	5	74	74	<0.2	<0.2	1.8	1.8					
IM3	Fine	Moderate	11:38	7.1	Surface	1.0	0.3	266	29.7	29.7	8.1	8.1	18.7	18.7	81.0	81.0	5.6	5.6	1.0	1.0	4	4	72	72	818767	805578	<0.2	<0.2	2.4	2.0		
						1.0	0.4	267	29.7	29.7	8.1	8.1	18.7	18.7	81.0	81.0	5.6	5.6	1.0	1.0	4	4	71	71	<0.2	<0.2	2.2	2.2				
						3.6	0.2	306	29.2	29.2	8.1	8.1	23.5	23.5	77.0	77.0	5.2	5.2	3.4	3.4	5	5	73	73	<0.2	<0.2	1.7	1.7				
					3.6	0.2	325	29.2	29.2	8.1	8.1	23.5	23.5	77.0	77.0	5.2	5.2	3.4	3.4	6	6	73	73	<0.2	<0.2	2.1	2.1					
					6.1	0.2	5	29.2	29.2	8.1	8.1	25.1	25.1	78.0	78.0	5.2	5.2	9.1	9.1	5	5	74	74	<0.2	<0.2	1.6	1.6					
					6.1	0.2	5	29.2	29.2	8.1	8.1	25.1	25.1	78.0	78.0	5.2	5.2	9.1	9.1	5	5	75	75	<0.2	<0.2	2.2	2.2					
IM4	Fine	Moderate	11:29	7.6	Surface	1.0	0.3	291	29.5	29.5	8.0	8.0	17.9	17.9	75.5	75.5	5.2	5.2	5.3	5.3	7	7	72	72	819714	804618	<0.2	<0.2	2.0	2.1		
						1.0	0.3	293	29.5	29.5	8.0	8.0	17.9	17.9	75.5	75.5	5.2	5.2	5.3	5.3	6	6	71	71	<0.2	<0.2	2.1	2.1				
						3.8	0.3	323	29.2	29.2	8.1	8.1	22.9	22.9	74.0	74.0	5.0	5.0	12.5	12.5	7	7	73	73	<0.2	<0.2	1.8	1.8				
					3.8	0.3	343	29.2	29.2	8.1	8.1	22.9	22.9	74.0	74.0	5.0	5.0	12.5	12.5	7	7	73	73	<0.2	<0.2	2.0	2.0					
					6.6	0.3	14	29.2	29.2	8.1	8.1	26.4	26.4	73.8	73.8	4.9	4.9	13.8	13.8	7	7	74	74	<0.2	<0.2	2.2	2.2					
					6.6	0.3	15	29.2	29.2	8.1	8.1	26.4	26.4	73.8	73.8	4.9	4.9	13.8	13.8	8	8	75	75	<0.2	<0.2	2.3	2.3					
IM5	Fine	Moderate	11:18	7.0	Surface	1.0	0.2	291	29.6	29.6	8.0	8.0	15.8	15.8	76.2	76.2	5.3	5.3	3.6	3.6	3	3	71	71	820751	804887	<0.2	<0.2	2.7	2.5		
						1.0	0.3	300	29.6	29.6	8.0	8.0	15.8	15.8	76.2	76.2	5.2	5.2	3.6	3.6	4	4	70	70	<0.2	<0.2	2.8	2.8				
						3.5	0.2	328	29.3	29.3	8.0	8.0	19.5	19.5	75.7	75.7	5.2	5.2	10.6	10.6	4	4	73	73	<0.2	<0.2	2.4	2.4				
					3.5	0.2	351	29.3	29.3	8.0	8.0	19.5	19.5	75.7	75.7	5.2	5.2	10.6	10.6	4	4	74	74	<0.2	<0.2	2.5	2.5					
					6.0	0.2	7	29.3	29.3	7.9	7.9	22.7	22.7	77.5	77.5	5.2	5.2	10.7	10.7	4	4	75	75	<0.2	<0.2	2.3	2.3					
					6.0	0.2	7	29.3	29.3	7.9	7.9	22.7	22.7	77.5	77.5	5.2	5.2	10.7	10.7	4	4	75	75	<0.2	<0.2	2.5	2.5					
IM6	Fine	Moderate	11:12	7.2	Surface	1.0	0.4	280	29.7	29.7	7.9	7.9	15.8	15.8	74.8	74.8	5.2	5.2	2.5	2.5	4	4	71	71	821038	805808	<0.2	<0.2	2.4	2.5		
						1.0	0.4	283	29.7	29.7	7.9	7.9	15.8	15.8	74.8	74.8	5.2	5.2	2.5	2.5	3	3										

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

Water Quality Monitoring

Water Quality Monitoring Results on 18 August 18 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	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value			Value	Value	Value	Value	Value	Value	Value	Value
IM9	Fine	Moderate	11:52	6.9	Surface	1.0	0.2	217	29.0	29.0	7.9	7.9	19.5	19.5	80.7	80.7	5.6	5.6	6.7	6.7	2	2	71	71	822082	808806	<0.2	<0.2	3.2	3.2				
						1.0	0.2	231	29.0	7.9	7.9	19.5	19.5	80.7	80.7	5.6	5.6	6.7	6.7	2	2	71	71	<0.2	<0.2	3.4	3.4							
					Middle	3.5	0.2	275	28.9	28.9	8.0	8.0	19.7	19.7	77.0	77.0	5.3	5.3	7.8	7.8	3	3	73	73	<0.2	<0.2	3.3	3.3						
						3.5	0.2	293	28.9	28.9	8.0	8.0	19.7	19.7	76.9	76.9	5.3	5.3	7.8	7.8	3	3	73	73	<0.2	<0.2	3.0	3.0						
					Bottom	5.9	0.2	266	28.8	28.8	8.0	8.0	22.0	22.0	71.9	71.9	4.9	4.9	15.2	15.2	4	4	75	75	<0.2	<0.2	1.9	1.9						
						5.9	0.2	279	28.8	28.8	8.0	8.0	22.0	22.0	71.9	71.9	4.9	4.9	15.2	15.2	3	3	75	75	<0.2	<0.2	2.4	2.4						
IM10	Fine	Moderate	11:45	7.5	Surface	1.0	0.1	299	28.7	28.7	8.0	8.0	23.8	23.8	68.3	68.4	4.6	4.6	19.2	19.2	2	2	71	71	822384	809779	<0.2	<0.2	1.5	1.5				
						1.0	0.1	309	28.7	28.7	8.0	8.0	23.8	23.8	68.4	68.4	4.6	4.6	19.2	19.2	2	2	71	71	<0.2	<0.2	1.4	1.4						
					Middle	3.8	0.2	303	29.2	29.2	7.9	7.9	18.1	18.1	78.2	78.2	5.4	5.4	8.1	8.1	2	2	73	73	<0.2	<0.2	1.5	1.5						
						3.8	0.2	320	29.2	29.2	7.9	7.9	18.1	18.1	78.2	78.2	5.4	5.4	8.2	8.2	2	2	73	73	<0.2	<0.2	1.5	1.5						
					Bottom	6.5	0.4	304	28.8	28.8	8.0	8.0	20.9	20.9	75.3	75.3	5.2	5.2	11.5	11.5	3	3	75	75	<0.2	<0.2	1.5	1.5						
						6.5	0.4	307	28.8	28.8	8.0	8.0	20.9	20.9	75.3	75.3	5.2	5.2	11.7	11.7	3	3	75	75	<0.2	<0.2	1.5	1.5						
IM11	Fine	Moderate	11:33	7.4	Surface	1.0	0.3	326	28.7	28.7	8.0	8.0	23.9	23.9	72.3	72.4	4.9	4.9	20.1	20.1	3	3	71	71	822056	811435	<0.2	<0.2	1.5	1.5				
						1.0	0.3	331	28.7	28.7	8.0	8.0	23.9	23.9	72.4	72.4	4.9	4.9	20.2	20.2	2	2	71	71	<0.2	<0.2	1.5	1.5						
					Middle	3.7	0.4	311	29.5	29.5	7.9	7.9	16.2	16.2	77.8	77.8	5.4	5.4	7.6	7.6	2	2	73	73	<0.2	<0.2	1.6	1.6						
						3.7	0.5	312	29.5	29.5	7.9	7.9	16.2	16.2	77.8	77.8	5.4	5.4	7.6	7.6	3	3	73	73	<0.2	<0.2	1.5	1.5						
					Bottom	6.4	0.2	292	29.2	29.2	7.9	7.9	17.7	17.7	75.7	75.7	5.3	5.3	8.0	8.0	3	3	75	75	<0.2	<0.2	1.5	1.5						
						6.4	0.2	313	29.2	29.2	7.9	7.9	17.8	17.8	75.7	75.7	5.3	5.3	8.0	8.0	3	3	75	75	<0.2	<0.2	1.6	1.6						
IM12	Fine	Moderate	11:25	8.7	Surface	1.0	0.5	302	28.9	28.9	7.9	7.9	20.8	20.8	73.4	73.5	5.0	5.0	11.5	11.5	3	3	71	71	821462	812036	<0.2	<0.2	1.5	1.5				
						1.0	0.5	332	28.9	28.9	7.9	7.9	20.8	20.8	73.5	73.5	5.0	5.0	11.5	11.5	4	4	71	71	<0.2	<0.2	1.4	1.4						
					Middle	4.4	0.4	286	29.5	29.5	7.9	7.9	14.7	14.7	77.1	77.1	5.4	5.4	8.4	8.4	4	4	73	73	<0.2	<0.2	1.3	1.3						
						4.4	0.5	297	29.5	29.5	7.9	7.9	14.7	14.7	77.1	77.1	5.4	5.4	8.4	8.4	4	4	73	73	<0.2	<0.2	1.8	1.8						
					Bottom	7.7	0.2	250	29.1	29.1	7.9	7.9	16.9	16.9	74.1	74.0	5.2	5.2	9.5	9.5	5	5	75	75	<0.2	<0.2	1.5	1.5						
						7.7	0.2	270	29.0	29.1	7.9	7.9	16.9	16.9	73.9	74.0	5.2	5.2	9.6	9.6	5	5	75	75	<0.2	<0.2	1.3	1.3						
SR2	Fine	Moderate	11:18	4.4	Surface	1.0	0.2	332	29.1	29.1	7.9	7.9	17.2	17.2	74.6	74.6	5.2	5.2	8.8	8.8	3	3	71	71	821463	814153	<0.2	<0.2	1.5	1.5				
						1.0	0.2	305	29.1	29.1	7.9	7.9	17.2	17.2	74.5	74.5	5.2	5.2	8.8	8.8	3	3	71	71	<0.2	<0.2	1.5	1.5						
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					Bottom	3.4	0.1	327	28.9	28.9	7.9	7.9	20.1	20.1	74.3	74.3	5.1	5.1	9.9	9.9	4	4	73	73	<0.2	<0.2	1.4	1.4						
						3.4	0.1	356	28.9	28.9	7.9	7.9	20.1	20.1	74.3	74.3	5.1	5.1	9.9	9.9	4	4	73	73	<0.2	<0.2	1.4	1.4						
SR3	Fine	Moderate	12:34	8.8	Surface	1.0	0.4	180	29.0	29.0	8.0	8.0	21.3	21.3	77.7	77.7	5.3	5.3	6.7	6.7	3	3	-	-	822167	807561	-	-	-	-				
						1.0	0.4	197	29.0	29.0	8.0	8.0	21.3	21.3	77.7	77.7	5.3	5.3	6.6	6.6	4	4	-	-	-	-	-	-	-	-				
					Middle	4.4	0.3	213	28.6	28.6	8.0	8.0	24.0	24.0	68.1	68.1	4.6	4.6	8.5	8.5	3	3	-	-	-	-	-	-	-	-	-	-		
						4.4	0.3	229	28.6	28.6	8.0	8.0	24.0	24.0	68.0	68.0	4.6	4.6	8.6	8.6	4	4	-	-	-	-	-	-	-	-	-			
					Bottom	7.8	0.3	260	28.3	28.3	8.0	8.0	26.6	26.6	66.0	66.0	4.4	4.4	12.8	12.8	5	5	-	-	-	-	-	-	-	-	-	-		
						7.8	0.3	284	28.3	28.3	8.0	8.0	26.6	26.6	66.0	66.0	4.4	4.4	12.6	12.6	5	5	-	-	-	-	-	-	-	-	-	-		
SR4A	Fine	Moderate	12:31	8.2	Surface	1.0	0.1	40	29.1	29.1	7.9	7.9	22.7	22.7	76.1	76.1	5.2	5.2	10.6	10.6	7	7	-	-	817168	807796	-	-	-	-				
						1.0	0.1	41	29.1	29.1	7.9	7.9	22.7	22.7	76.1	76.1	5.2	5.2	10.6	10.6	7	7	-	-	-	-	-	-	-					
					Middle	4.1	0.2	251	29.1	29.1	7.8	7.8	23.5	23.5	72.7	72.7	4.9	4.9	11.5	11.5	8	8	-	-	-	-	-	-	-	-				
						4.1	0.2	261	29.1	29.1	7.8	7.8	23.5	23.5	72.7	72.7	4.9	4.9	11.5	11.5	8	8	-	-	-	-	-	-	-					
					Bottom	7.2	0.2	263	29.4	29.4	8.0	8.0	23.4	23.4	77.6	77.6	5.2	5.2	6.9	6.9	9	9	-	-	-	-	-	-	-	-				
						7.2	0.2	266	29.4	29.4	8.0	8.0	23.4	23.4	77.6	77.6	5.2	5.2	6.9	6.9	8	8	-	-	-	-	-	-	-					
SR5A	Fine	Moderate	12:51	4.2	Surface	1.0	0.1	318	29.2	29.2	7.9	7.9	22.5	22.5	77.2	77.2	5.2	5.2	8.8	8.8	6	6	-	-	816583	810677	-	-	-	-				
						1.0	0.2	334	29.2	29.2	7.9	7.9	22.5	22.5	77.2	77.2	5.2	5.2	8.8	8.8	6	6	-	-	-	-	-	-						
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
					Bottom	3.2	0.1	315	29.2	29.2	8.0	8.0	25.4	25.4	75.9	75.9	5.1	5.1	10.4	10.4	7	7	-	-	-	-	-	-	-					
						3.2	0.1	315	29.2	29.2	8.0	8.0	25.4	25.4	75.9	75.9	5.1	5.1	10.4	10.4	7	7	-	-	-	-	-	-	-					
SR6	Fine	Moderate	13:16	4.5	Surface	1.0	0.1	289	29.3	29.3	8.0	8.0	24.0	24.0	77.7	77.7	5.2	5.2	7.5	7.5	3	3	-	-	817914	814657	-	-	-	-				
						1.0	0.1	305	29.3	29.3	8.0	8.0	24.0	24.0	77.7	77.7	5.2	5.2	7.5	7.5	3	3	-	-	-	-	-	-						

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

Water Quality Monitoring

Water Quality Monitoring Results on 21 August 18 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	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value
C1	Misty	Moderate	09:51	8.9	Surface	1.0	0.4	219	29.4	8.1	8.1	14.3	14.3	86.3	86.3	6.1	2.7	6	80	82	815610	804273	<0.2	2.5	2.5						
						1.0	0.4	226	29.4	8.0	8.1	14.3	14.3	86.3	86.3	6.1	2.7	5	80	82											
						4.5	0.4	226	28.7	8.0	8.0	24.8	24.8	65.7	65.7	4.4	3.8	5	80	82											
					4.5	0.5	232	28.7	8.0	8.0	24.8	24.8	65.7	65.7	4.4	3.8	5	82	82	<0.2	2.5										
					7.9	0.4	217	28.5	8.0	8.0	26.8	26.8	65.9	65.9	4.4	15.5	5	85	82	<0.2	2.6										
					7.9	0.4	227	28.5	8.0	8.0	26.8	26.8	66.0	66.0	4.4	15.7	4	85	82	<0.2	2.6										
C2	Misty	Moderate	11:23	9.2	Surface	1.0	0.5	198	29.7	8.0	8.0	17.1	17.0	83.8	83.6	5.8	2.8	5	79	82	825652	806959	<0.2	2.8	2.8						
						1.0	0.6	209	29.7	8.0	8.0	17.0	17.0	83.4	83.6	5.8	2.8	5	79	82											
						4.6	0.8	152	29.0	8.0	8.0	23.7	23.7	68.0	68.0	4.6	4.2	5	82	82	<0.2	2.7									
					4.6	0.9	156	29.0	8.0	8.0	23.7	23.7	67.9	68.0	4.6	4.3	6	81	82	<0.2	2.8										
					8.2	0.6	111	28.8	8.0	8.0	31.0	31.0	66.4	66.4	4.3	9.1	6	84	82	<0.2	2.8										
					8.2	0.6	117	28.8	8.0	8.0	31.0	31.0	66.5	66.5	4.3	9.1	5	84	82	<0.2	2.9										
C3	Misty	Moderate	09:01	12.3	Surface	1.0	0.5	137	29.2	8.1	8.1	19.6	19.6	82.6	82.5	5.7	2.4	4	79	82	822123	817774	<0.2	2.7	2.6						
						1.0	0.5	148	29.2	8.1	8.1	19.6	19.6	82.4	82.5	5.7	2.4	4	80	82											
						6.2	0.2	90	28.7	8.1	8.1	24.2	24.3	73.4	73.0	5.0	2.1	6	82	82	<0.2	2.8									
					6.2	0.2	92	28.4	8.1	8.1	24.3	24.3	72.5	73.0	4.9	2.2	5	82	82	<0.2	2.4										
					11.3	0.5	57	27.7	8.1	8.1	29.9	29.9	58.6	58.4	3.9	2.6	6	84	82	<0.2	2.3										
					11.3	0.5	61	27.7	8.1	8.1	29.9	29.9	58.2	58.4	3.9	2.6	7	84	82	<0.2	2.4										
IM1	Misty	Moderate	10:16	5.1	Surface	1.0	0.1	176	29.0	8.0	8.0	30.2	30.2	85.6	85.7	6.0	5.0	6	80	82	817949	807155	<0.2	1.6	1.6						
						1.0	0.1	180	29.0	8.0	8.0	30.2	30.2	85.7	85.7	6.0	5.0	6	80	82											
						2.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	<0.2	-		
					2.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	<0.2	-
					4.1	0.1	170	28.7	8.0	8.0	31.5	31.4	66.4	66.4	4.3	7.7	7	84	82	<0.2	1.6										
					4.1	0.1	184	28.7	8.0	8.0	31.4	31.4	66.4	66.4	4.3	7.7	8	85	82	<0.2	1.8										
IM2	Misty	Moderate	10:25	7.2	Surface	1.0	0.4	220	29.1	8.0	8.0	26.0	25.9	71.7	71.8	4.8	4.4	7	81	83	818185	806175	<0.2	1.6	1.9						
						1.0	0.4	232	29.1	8.0	8.0	25.9	25.9	71.8	71.8	4.8	4.5	7	81	83											
						3.6	0.2	214	28.7	8.0	8.0	31.5	31.5	64.4	64.4	4.3	9.2	7	82	83	<0.2	1.7									
					3.6	0.2	216	28.7	8.0	8.0	31.5	31.5	64.3	64.4	4.3	9.2	7	82	83	<0.2	2.2										
					6.2	0.2	165	28.6	8.0	8.0	32.1	32.1	65.2	65.2	4.2	11.9	7	84	83	<0.2	2.1										
					6.2	0.2	167	28.6	8.0	8.0	32.1	32.1	65.2	65.2	4.2	11.8	8	84	83	<0.2	2.2										
IM3	Misty	Moderate	10:34	7.3	Surface	1.0	0.6	192	29.3	8.0	8.0	21.8	21.8	80.0	80.0	5.4	4.1	7	81	84	818780	805566	<0.2	2.3	2.4						
						1.0	0.6	192	29.3	8.0	8.0	21.9	21.8	79.9	80.0	5.4	4.1	8	82	84											
						3.7	0.4	201	28.8	8.0	8.0	30.0	30.0	66.5	66.5	4.4	9.0	10	84	85	<0.2	2.3									
					3.7	0.4	204	28.8	8.0	8.0	30.0	30.0	66.5	66.5	4.4	8.9	9	85	85	<0.2	2.4										
					6.3	0.2	191	28.7	8.0	8.0	31.3	31.3	67.9	68.1	4.4	8.4	10	86	86	<0.2	2.3										
					6.3	0.2	209	28.7	8.0	8.0	31.3	31.3	68.2	68.1	4.4	8.4	10	86	86	<0.2	2.4										
IM4	Misty	Moderate	10:45	7.4	Surface	1.0	0.7	192	29.7	8.0	8.0	13.8	13.8	90.3	90.2	6.4	4.0	6	81	83	819751	804630	<0.2	2.8	3.0						
						1.0	0.7	198	29.7	8.0	8.0	13.8	13.8	90.1	90.2	6.3	4.0	6	81	83											
						3.7	0.6	189	29.2	8.0	8.0	23.4	23.4	74.3	74.2	5.0	8.3	6	83	83	<0.2	2.8									
					3.7	0.6	206	29.2	8.0	8.0	23.5	23.4	74.1	74.2	5.0	8.5	8	83	83	<0.2	3.2										
					6.4	0.4	182	28.8	8.0	8.0	31.0	31.0	70.9	71.0	4.6	22.0	7	84	86	<0.2	3.1										
					6.4	0.5	194	28.8	8.0	8.0	31.0	31.0	71.1	71.0	4.6	21.8	8	85	86	<0.2	3.3										
IM5	Misty	Moderate	10:59	7.0	Surface	1.0	0.8	199	29.6	8.0	8.0	14.9	15.0	89.8	89.8	6.3	3.6	4	82	85	820742	804867	<0.2	3.4	3.4						
						1.0	0.8	200	29.6	8.0	8.0	15.0	15.0	89.7	89.8	6.3	3.6	4	82	85											
						3.5	0.6	210	29.1	8.0	8.0	25.5	25.6	70.1	70.1	4.7	5.0	5	85	85	<0.2	3.3									
					3.5	0.6	218	29.1	8.0	8.0	25.6	25.6	70.0	70.1	4.7	5.1	6	85	85	<0.2	3.4										
					6.0	0.5	213	28.8	8.0	8.0	30.0	30.0	71.4	71.4	4.7	8.1	6	86	86	<0.2	3.4										
					6.0	0.5	220	28.8	8.0	8.0	30.0	30.0	71.7	71.6	4.7	7.9	6	87	86	<0.2	3.4										
IM6	Misty	Moderate	11:10	6.7	Surface	1.0	0.4	232	29.7	8.0	8.0	16.9	16.9	82.5	82.4	5.7	3.4	4	82	85	821033	805799	<0.2	2.7	3.1						
						1.0	0.4	236	29.7	8.0	8.0	16.9	16.9	82.3	82.4	5.7	3.4	4	83	85											
						3.4	0.4	267	29.0	7.9	7.9	26.8	26.8	64.4	64.4	4.3	6.3	5	84	85	<0.2	2.8									
					3.4	0.5	291	29.0	7.9	7.9	26.8	26.8	64.3	64.4	4.3	6.4	4	85	85	<0.2	3.4										
					5.7	0.2	259	28.8	8.0	8.0	30.2	30.2	65.0	65.0	4.2	29.2	4	87	87	<0.2	3.6										
					5.7	0.2	281	28.8	8.0	8.0	30.2	30.2	65.0	65.0	4.3	29.2	5	87	87	<0.2	3.3										
IM7	Misty	Moderate	11:20	8.1	Surface	1.0	0.6	223	29.7	8.0	8.0	18.3	18.3	85.7	85.6	5.9	2.6	5	82	84	821344	806810	<0.2	3.0	3.0						
						1.0	0.6	235	29.7	8.0	8.0	18.3	18.3	85.5	85.6	5.9	2.6	4	82	84											
						4.1	0.6	239	29.1	7.9	7.9	23.0	23.0	71.7	71.6	4.8	2.6	5	84	84	<0.2	3.0									
					4.1	0.6	260	29.1	7.9	7.9	23.0	23.0	71.4	71.4	4.8	2.7	5	84	84	<0.2	3.1										
					7.1	0.2	223	28.8	8.0	8.0	31.3	31.2	68.9	69.0	4.5	16.6	5	86	86	<0.2	3.0										
					7.1	0.2	231	28.8	8.0	8.0	31.2	31.2	69.1	69.0	4.5	16.3	6	87	86	<0.2	2.9										
IM8	Misty	Moderate	10:46	7.8	Surface	1.0	0.3	179	29.6	8.0	8.0	15.5	15.5	88.3	88.2	6.2	3.4	4	79	82	821811	808131	<0.2	2.5	2.6						
						1.0	0.3	193	29.6	8.0	8.0	15.4	15.5	88.1	88.2	6.2	3.4	4	79	82											
						3.9	0.3	142	29.1	7.9	7.9	25.1	25.1	68.6	68.6	4.6	3.8	4	82	82	<0.2	2.5									
					3.9	0.3	151	29.1	7.9	7.9	25.2	25.1	68.6	68.6	4.6	3.8	4	82	82	<0.2	2.8										
					6.8	0.3	133	28.9	8.0	8.0	29.5	29.5	67.5	67.6	4.4	6.9	7	84	84	<0.2	2.6										
					6.8	0.4	138	28.9	8.0	8.0	29.5	29.5	67.6																		

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

Water Quality Monitoring

Water Quality Monitoring Results on 21 August 18 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	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA
IM9	Misty	Moderate	10:37	7.0	Surface	1.0	0.3	166	29.8	29.8	8.0	8.0	13.6	13.7	93.1	93.1	6.6	3.9	5	79	82	822068	808802	<0.2	2.7	2.6						
						1.0	0.3	180	29.8	8.0	8.0	13.7	13.7	93.0	93.0	6.5	3.9	6	80	82	822068	808802	<0.2	2.6								
						3.5	0.3	154	29.2	29.2	8.0	8.0	23.6	23.7	73.1	73.0	4.9	10.1	6	81	82	822068	808802	<0.2	2.6							
					3.5	0.4	163	29.2	29.2	8.0	8.0	23.7	23.7	72.9	73.0	4.9	10.4	6	82	84	822068	808802	<0.2	2.4								
					6.0	0.4	129	28.8	28.8	8.0	8.0	30.9	30.9	69.5	69.7	4.5	22.9	7	84	84	822068	808802	<0.2	2.5								
					6.0	0.4	135	28.8	28.8	8.0	8.0	30.9	30.9	69.9	69.7	4.6	22.7	6	84	84	822068	808802	<0.2	2.6								
IM10	Misty	Moderate	10:28	6.7	Surface	1.0	0.5	183	29.4	29.4	8.0	8.0	21.0	20.9	85.1	85.1	5.8	4.0	3	79	82	822397	809812	<0.2	2.5	2.6						
						1.0	0.6	190	29.4	29.4	8.0	8.0	20.9	20.9	85.1	85.1	5.8	4.0	4	79	82	822397	809812	<0.2	2.5							
						3.4	0.5	161	28.8	28.8	8.0	8.0	30.3	30.2	66.2	66.2	4.3	8.2	5	82	84	822397	809812	<0.2	2.8							
					3.4	0.5	165	28.8	28.8	8.0	8.0	30.2	30.2	66.2	66.2	4.3	8.1	4	82	84	822397	809812	<0.2	2.5								
					5.7	0.4	119	28.7	28.7	8.0	8.0	31.2	31.2	67.7	67.7	4.4	7.0	5	84	84	822397	809812	<0.2	2.5								
					5.7	0.4	125	28.7	28.7	8.0	8.0	31.2	31.2	67.8	67.8	4.4	7.1	6	84	84	822397	809812	<0.2	2.6								
IM11	Misty	Moderate	10:10	8.0	Surface	1.0	0.7	121	29.0	29.0	8.0	8.0	26.9	26.9	83.8	83.6	5.8	4.8	4	79	82	822049	811452	<0.2	2.5	2.7						
						1.0	0.7	132	29.0	29.0	8.0	8.0	26.9	26.9	83.4	83.6	5.8	4.8	5	79	82	822049	811452	<0.2	2.5							
						4.0	0.7	130	28.7	28.7	8.0	8.0	31.6	31.6	66.5	66.5	4.4	8.7	5	82	84	822049	811452	<0.2	2.5							
					4.0	0.7	135	28.7	28.7	8.0	8.0	31.6	31.6	66.5	66.5	4.4	8.7	4	82	84	822049	811452	<0.2	2.7								
					7.0	0.4	127	28.6	28.6	8.0	8.0	32.1	32.1	64.2	64.3	4.2	12.2	5	84	84	822049	811452	<0.2	2.9								
					7.0	0.4	139	28.6	28.6	8.0	8.0	32.1	32.1	64.3	64.3	4.2	12.2	5	84	84	822049	811452	<0.2	2.8								
IM12	Misty	Moderate	10:00	8.9	Surface	1.0	0.6	163	28.9	28.9	8.0	8.0	30.5	30.5	70.0	70.7	4.7	6.1	6	79	82	821446	812054	<0.2	2.5	2.6						
						1.0	0.7	177	28.9	28.9	8.0	8.0	30.5	30.5	71.4	70.7	4.7	6.1	6	82	84	821446	812054	<0.2	2.5							
						4.5	0.6	155	28.8	28.8	8.0	8.0	31.2	31.2	68.9	69.0	4.5	12.6	7	82	84	821446	812054	<0.2	2.5							
					4.5	0.6	155	28.8	28.8	8.0	8.0	31.2	31.2	69.1	69.0	4.5	12.9	6	82	84	821446	812054	<0.2	2.9								
					7.9	0.6	109	28.7	28.7	8.0	8.0	31.6	31.6	64.8	64.8	4.2	30.8	7	84	84	821446	812054	<0.2	2.6								
					7.9	0.6	114	28.7	28.7	8.0	8.0	31.6	31.6	64.8	64.8	4.2	30.5	7	84	84	821446	812054	<0.2	2.5								
SR2	Misty	Moderate	09:27	4.5	Surface	1.0	0.5	98	29.3	29.3	8.1	8.1	15.0	15.0	90.6	90.2	6.4	2.8	4	79	82	821461	814194	<0.2	2.2	2.4						
						1.0	0.5	103	29.3	29.3	8.1	8.1	15.0	15.0	89.8	90.2	6.3	2.8	5	79	82	821461	814194	<0.2	2.2							
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	80	821461		814194	<0.2	2.2			
					3.5	0.2	70	29.3	29.3	8.1	8.1	19.6	19.6	86.3	86.3	5.9	2.5	6	82	84	821461	814194	<0.2	2.6								
					3.5	0.3	71	29.3	29.3	8.1	8.1	19.6	19.6	86.3	86.3	5.9	2.8	7	81	81	821461	814194	<0.2	2.6								
					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	80	821461		814194	<0.2	2.2			
SR3	Misty	Moderate	10:53	8.5	Surface	1.0	0.4	192	29.8	29.8	8.0	8.0	16.3	16.3	85.7	85.6	5.9	3.2	3	-	-	822132	807564	-	-	-						
						1.0	0.4	204	29.8	29.8	8.0	8.0	16.3	16.3	85.5	85.6	5.9	3.2	4	-	-	822132	807564	-	-							
						4.3	0.2	136	29.2	29.2	7.9	7.9	23.1	23.1	72.6	72.6	4.9	4.6	3	-	-	822132	807564	-	-							
					4.3	0.2	148	29.2	29.2	7.9	7.9	23.0	23.1	72.5	72.6	4.9	4.8	3	-	-	822132	807564	-	-								
					7.5	0.3	100	28.8	28.8	8.0	8.0	30.4	30.4	67.7	67.8	4.4	18.2	3	-	-	822132	807564	-	-								
					7.5	0.3	108	28.8	28.8	8.0	8.0	30.4	30.4	67.9	67.9	4.4	17.9	4	-	-	822132	807564	-	-								
SR4A	Misty	Moderate	09:31	9.0	Surface	1.0	0.1	312	29.1	29.1	8.0	8.0	22.7	22.7	72.9	72.8	4.9	6.0	4	-	-	817163	807781	-	-	-						
						1.0	0.1	334	29.1	29.1	8.0	8.0	22.7	22.7	72.7	72.8	4.9	6.0	4	-	-	817163	807781	-	-							
						4.5	0.1	84	28.7	28.7	8.0	8.0	23.5	23.5	66.2	66.2	4.5	10.7	5	-	-	817163	807781	-	-							
					4.5	0.1	92	28.7	28.7	8.0	8.0	23.5	23.5	66.2	66.2	4.5	10.8	5	-	-	817163	807781	-	-								
					8.0	0.1	55	28.7	28.7	8.0	8.0	23.4	23.4	68.2	68.3	4.6	14.7	5	-	-	817163	807781	-	-								
					8.0	0.1	57	28.7	28.7	8.0	8.0	23.4	23.4	68.3	68.3	4.6	14.8	5	-	-	817163	807781	-	-								
SR5A	Misty	Calm	09:14	5.3	Surface	1.0	0.0	85	29.5	29.5	7.9	7.9	22.5	22.5	77.3	77.3	5.2	4.0	5	-	-	816601	810708	-	-	-						
						1.0	0.0	85	29.5	29.5	7.9	7.9	22.5	22.5	77.3	77.3	5.2	4.0	5	-	-	816601	810708	-	-							
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	816601	810708		-	-				
					4.3	0.1	337	28.8	28.8	7.9	7.9	25.4	25.4	64.8	64.9	4.4	9.0	4	-	-	816601	810708	-	-								
					4.3	0.1	355	28.8	28.8	7.9	7.9	25.4	25.4	65.0	64.9	4.4	8.7	5	-	-	816601	810708	-	-								
					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	816601	810708		-	-				
SR6	Misty	Calm	08:48	4.6	Surface	1.0	0.0	342	29.3	29.3	7.9	7.9	24.0	24.0	83.1	83.0	5.5	3.8	5	-	-	817876	814692	-	-	-						
						1.0	0.0	315	29.3	29.3	7.9	7.9	24.0	24.0	82.8	83.0	5.5	3.8	5	-	-	817876	814692	-	-							
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	817876	814692		-	-				
					3.6	0.1	251	29.0	29.0	7.7	7.7	24.3	24.3	59.0	59.1	4.0	10.0	7	-	-	817876	814692	-	-								
					3.6	0.1	265	29.0	29.0	7.7	7.7	24.3	24.3	59.1	59.1	4.0	10.0	7	-	-	817876	814692	-	-								
					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	817876	814692		-	-				
SR7	Misty	Moderate	08:14	18.6	Surface	1.0	0.5	105	29.1	29.0	7.9	7.8	20.6	20.7	87.4	87.4	6.0	2.0	6	-	-	823632	823728	-	-	-						
						1.0	0.6	105	28.9	29.0	7.7	7.8	20.9	20.7	87.4	87.4	6.0	2.0	5	-	-	823632	823728	-	-							
						9.3	0.4	101	29.1	29.0	7.9	7.8	20.8	20.9	81.1	79.6	5.6	2.5	6	-	-	823632	823728	-	-							
					9.3	0.4	105	28.8	29.0	7.8	7.8																					

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

Water Quality Monitoring

Water Quality Monitoring Results on 21 August 18 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	DA	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA	Value	DA	Value	DA
C1	Misty	Moderate	16:56	7.7	Surface	1.0	0.2	89	30.4	8.1	8.1	19.8	19.8	106.8	106.7	7.2	6.3	5.4	8.6	7	7	83	85	85	85	815632	804252	<0.2	2.6	2.5						
						1.0	0.2	96	30.4	8.1	8.1	19.8	19.8	106.6	106.7	7.2	6.3	5.3	8.6	7	7	83	85	85	85			<0.2	2.6							
					Middle	3.9	0.2	68	29.7	8.1	8.1	21.3	21.3	80.0	79.7	5.4	5.4	7.0	10.1	7	7	83	85	85	85			<0.2	2.4							
						3.9	0.2	71	29.6	8.1	8.1	21.3	21.3	79.4	79.7	5.4	5.4	7.1	10.1	7	7	83	85	85	85			<0.2	2.4							
					Bottom	6.7	0.2	46	28.7	8.0	8.0	31.9	31.9	31.9	31.9	71.5	71.7	4.6	4.7	13.5	13.5	7	7	85	85			85	85		<0.2	2.6				
						6.7	0.2	46	28.7	8.0	8.0	31.9	31.9	71.8	71.7	4.7	4.7	13.5	13.5	7	7	85	85	85	85			<0.2	2.3							
C2	Misty	Moderate	15:43	9.1	Surface	1.0	0.5	208	29.8	8.0	8.0	18.5	18.5	89.9	89.9	6.2	6.1	3.2	2.9	7	7	81	83	83	83	825696	806958	<0.2	2.6	2.5						
						1.0	0.6	213	29.8	8.0	8.0	18.5	18.5	89.9	89.9	6.2	6.1	3.1	2.9	7	7	81	83	83	83			<0.2	2.6							
					Middle	4.6	0.6	176	29.6	7.9	7.9	19.4	19.4	86.4	86.4	5.9	5.9	2.9	2.9	8	7	83	83	83	83			<0.2	2.4							
						4.6	0.6	190	29.6	7.9	7.9	19.4	19.4	86.3	86.3	5.9	5.9	2.9	2.9	7	7	83	83	83	83			<0.2	2.4							
					Bottom	8.1	0.1	288	29.4	7.9	7.9	21.5	21.5	84.8	84.9	5.8	5.8	2.7	2.7	7	7	85	85	85	85			<0.2	2.5							
						8.1	0.1	311	29.4	7.9	7.9	21.5	21.5	85.0	84.9	5.8	5.8	2.7	2.7	8	8	85	85	85	85			<0.2	2.5							
C3	Misty	Moderate	17:55	12.0	Surface	1.0	0.3	221	29.8	8.0	8.0	21.2	21.2	88.1	88.0	6.0	5.3	6.4	10.1	7	7	81	83	83	83	822081	817824	<0.2	2.6	2.6						
						1.0	0.4	234	29.8	8.0	8.0	21.2	21.2	87.9	88.0	5.9	5.3	6.4	10.1	7	7	81	83	83	83			<0.2	2.5							
					Middle	6.0	0.5	243	29.4	7.9	7.9	23.6	23.6	70.4	70.4	4.7	4.7	10.0	10.1	7	7	83	83	83	83			<0.2	2.7							
						6.0	0.5	259	29.4	7.9	7.9	23.6	23.6	70.3	70.4	4.7	4.7	10.1	10.1	6	7	83	83	83	83			<0.2	2.6							
					Bottom	11.0	0.2	276	29.1	7.9	7.9	27.5	27.5	65.9	66.0	4.4	4.4	13.7	13.7	7	7	85	85	85	85			<0.2	2.7							
						11.0	0.2	276	29.1	7.9	7.9	27.5	27.5	66.0	66.0	4.4	4.4	13.7	13.7	6	7	85	85	85	85			<0.2	2.6							
IM1	Misty	Moderate	16:35	4.6	Surface	1.0	0.2	232	29.9	8.0	8.0	24.9	24.9	79.0	78.9	5.2	5.2	6.3	10.6	8	8	81	81	83	83	817940	807136	<0.2	1.3	1.3						
						1.0	0.3	255	29.9	8.0	8.0	24.9	24.9	78.8	78.9	5.2	5.2	6.4	10.6	7	8	81	81	83	83			<0.2	1.2							
					Middle	2.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-		-	-	-	-	-	
						2.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-		-	-	-	-	-	
					Bottom	3.6	0.0	61	29.0	8.0	8.0	29.3	29.3	71.0	71.0	4.6	4.7	14.6	14.9	8	8	85	85	85	85			<0.2	1.2							
						3.6	0.0	62	29.0	8.0	8.0	29.4	29.3	71.0	71.0	4.7	4.7	14.9	14.9	8	8	85	85	85	85			<0.2	1.3							
IM2	Misty	Moderate	16:26	6.7	Surface	1.0	0.1	319	30.1	8.1	8.1	21.9	21.9	93.3	93.2	6.2	5.4	6.1	10.3	6	8	80	81	83	83	818156	806193	<0.2	1.7	1.7						
						1.0	0.1	324	30.1	8.1	8.1	21.9	21.9	93.0	93.2	6.2	5.4	6.1	10.3	7	8	81	82	83	83			<0.2	1.8							
					Middle	3.4	0.1	289	29.0	8.0	8.0	27.3	27.3	69.3	69.3	4.6	4.6	9.0	9.2	7	8	82	82	83	83			<0.2	1.6							
						3.4	0.1	307	29.0	8.0	8.0	27.3	27.3	69.2	69.3	4.6	4.6	9.2	9.2	8	8	82	82	83	83			<0.2	1.7							
					Bottom	5.7	0.1	332	28.8	8.0	8.0	31.1	31.1	68.1	68.2	4.4	4.4	15.7	15.8	9	8	85	85	85	85			<0.2	1.7							
						5.7	0.2	349	28.8	8.0	8.0	31.1	31.1	68.2	68.2	4.4	4.4	15.8	15.8	8	8	85	85	85	85			<0.2	1.7							
IM3	Misty	Moderate	16:17	6.8	Surface	1.0	0.4	238	29.9	8.1	8.1	20.1	20.1	92.1	92.0	6.2	5.4	8.3	9.7	8	9	81	81	83	83	818754	805566	<0.2	2.2	2.2						
						1.0	0.4	240	30.0	8.1	8.1	20.1	20.1	91.9	92.0	6.2	5.4	8.1	9.7	8	9	81	81	83	83			<0.2	2.2							
					Middle	3.4	0.1	320	29.0	8.0	8.0	27.6	27.6	69.1	69.1	4.6	4.6	10.2	10.2	9	9	83	83	83	83			<0.2	2.1							
						3.4	0.1	351	29.0	8.0	8.0	27.6	27.6	69.1	69.1	4.6	4.6	10.2	10.2	10	10	83	83	83	83			<0.2	2.1							
					Bottom	5.8	0.3	17	28.7	8.0	8.0	31.6	31.6	67.8	67.9	4.4	4.4	10.6	10.7	10	11	85	85	85	85			<0.2	2.2							
						5.8	0.3	17	28.7	8.0	8.0	31.6	31.6	67.9	67.9	4.4	4.4	10.7	10.7	11	11	85	85	85	85			<0.2	2.2							
IM4	Misty	Moderate	16:07	7.0	Surface	1.0	0.3	229	30.4	8.0	8.0	17.6	17.6	98.7	98.6	6.7	6.0	4.1	11.4	6	6	81	81	83	83	819718	804577	<0.2	2.8	2.7						
						1.0	0.3	241	30.4	8.0	8.0	17.6	17.6	98.5	98.6	6.7	6.0	4.2	11.4	5	6	81	81	83	83			<0.2	2.6							
					Middle	3.5	0.1	240	29.5	8.0	8.0	22.4	22.4	78.0	78.0	5.3	5.3	8.7	8.8	6	6	83	83	83	83			<0.2	2.6							
						3.5	0.1	258	29.5	8.0	8.0	22.4	22.4	77.9	78.0	5.3	5.3	8.8	8.8	6	6	83	83	83	83			<0.2	2.6							
					Bottom	6.0	0.0	56	29.0	8.0	8.0	27.2	27.2	70.5	70.5	4.7	4.7	21.3	21.4	7	6	84	85	85	85			<0.2	2.5							
						6.0	0.0	58	29.0	8.0	8.0	27.2	27.2	70.5	70.5	4.7	4.7	21.4	21.4	6	6	85	85	85	85			<0.2	2.7							
IM5	Misty	Moderate	15:58	6.5	Surface	1.0	0.6	252	29.8	8.0	8.0	19.2	19.2	88.4	88.3	6.0	5.5	4.2	9.6	6	6	80	81	83	83	820750	804884	<0.2	2.6	2.5						
						1.0	0.7	261	29.8	8.0	8.0	19.2	19.2	88.2	88.3	6.0	5.5	4.2	9.6	6	6	81	82	83	83			<0.2	2.5							
					Middle	3.3	0.6	246	29.2	7.9	7.9	23.6	23.6	73.7	73.7	5.0	5.0	9.2	9.2	6	6	82	82	83	83			<0.2	2.5							
						3.3	0.6	268	29.2	7.9	7.9	23.6	23.6	73.7	73.7	5.0	5.0	9.2	9.2	6	6	83	83	83	83			<0.2	2.5							
					Bottom	5.5	0.4	246	29.1	7.9	7.9	25.2	25.2	73.1	73.2	4.9	4.9	15.4	15.4	7	7	85	85	85	85			<0.2	2.4							
						5.5	0.4	263	29.1	7.9	7.9	25.2	25.2	73.2	73.2	4.9	4.9	15.4	15.4	7	7	86	86	86	86			<0.2	2.5							
IM6	Misty	Moderate	15:51	6.2	Surface	1.0	0.7	271	29.6	8.0	8.0	19.5	19.5	84.4	84.4	5.8	5.2	3.5	7.7	4	5	80	81	83	83	821078	805805	<0.2	2.5	2.4						
						1.0	0.8	274	29.6	8.0	8.0	19.5	19.5	84.3	84.4	5.8	5.2	3.5	7.7	4	5	81	82	83	83			<0.2	2.6							
					Middle	3.1	0.5	261	29.0	7.9	7.9	25.8	25.8	66.6	66.7	4.5	4.5	7.1	7.2	5	5	82	82	83												

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

Water Quality Monitoring

Water Quality Monitoring Results on 21 August 18 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	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA	Value
IM9	Misty	Moderate	16:15	6.6	Surface	1.0	0.2	231	30.3	30.3	8.0	8.0	18.2	18.2	93.2	93.1	6.4	5.3	5.5	5.3	4	4	81	83	822118	808781	<0.2	2.5	2.7	2.7			
						1.0	0.2	232	30.3	8.0	8.0	18.2	18.2	92.9	93.1	6.3	5.3	4	4	81	83	<0.2	2.6	2.6	2.6								
					Middle	3.3	0.2	250	29.1	29.1	8.0	8.0	25.9	25.9	69.4	69.4	4.6	4.6	14.7	14.7	4	4	81	83	<0.2	2.6	2.6	2.6					
						3.3	0.2	262	29.1	29.1	8.0	8.0	25.9	25.9	69.3	69.4	4.6	4.6	14.5	14.5	5	5	83	83	<0.2	2.7	2.7	2.7					
					Bottom	5.6	0.1	297	29.0	29.0	8.0	8.0	27.7	27.7	68.9	68.9	4.6	4.6	21.7	21.7	5	5	85	85	<0.2	2.8	2.8	2.8					
						5.6	0.1	305	29.0	29.0	8.0	8.0	27.7	27.7	68.9	68.9	4.6	4.6	21.8	21.8	4	4	85	85	<0.2	2.7	2.7	2.7					
IM10	Misty	Moderate	16:27	7.0	Surface	1.0	0.3	327	29.9	29.9	8.1	8.1	20.2	20.2	91.2	91.1	6.2	9.5	5.3	9.4	11	11	81	83	822397	809775	<0.2	2.6	2.6	2.6			
						1.0	0.3	351	29.9	29.9	8.1	8.1	20.2	20.2	91.0	91.1	6.2	9.4	12	12	81	83	<0.2	2.7	2.7	2.7							
					Middle	3.5	0.3	338	28.8	28.8	8.0	8.0	29.7	29.7	65.8	65.8	4.3	10.5	11.4	11.4	4	4	81	83	<0.2	2.6	2.6	2.6					
						3.5	0.4	359	28.8	28.8	8.0	8.0	29.7	29.7	65.8	65.8	4.3	10.5	12	12	83	83	<0.2	2.6	2.6	2.6							
					Bottom	6.0	0.1	306	28.7	28.7	8.0	8.0	31.7	31.7	68.9	68.9	4.5	14.2	11	11	85	85	<0.2	2.6	2.6	2.6							
						6.0	0.1	337	28.7	28.7	8.0	8.0	31.7	31.7	69.1	69.0	4.5	14.0	12	12	85	85	<0.2	2.6	2.6	2.6							
IM11	Misty	Moderate	16:43	7.1	Surface	1.0	0.4	316	30.0	30.0	8.1	8.1	22.3	22.3	92.6	92.6	6.2	6.6	5.4	6.6	5	5	81	83	822040	811451	<0.2	2.5	2.5	2.5			
						1.0	0.4	329	30.0	30.0	8.1	8.1	22.3	22.3	92.6	92.6	6.2	6.6	5	5	81	83	<0.2	2.6	2.6	2.6							
					Middle	3.6	0.4	270	29.0	29.0	8.1	8.1	27.8	27.8	68.6	68.6	4.5	9.3	12.0	12.0	6	6	83	83	<0.2	2.5	2.5	2.5					
						3.6	0.4	292	29.0	29.0	8.1	8.1	27.8	27.8	68.6	68.6	4.5	9.4	6	6	85	85	<0.2	2.5	2.5	2.5							
					Bottom	6.1	0.3	286	28.7	28.7	8.0	8.0	31.8	31.8	66.7	66.8	4.3	20.1	6	6	85	85	<0.2	2.5	2.5	2.5							
						6.1	0.3	303	28.7	28.7	8.0	8.0	31.8	31.8	66.8	66.8	4.3	20.0	6	6	85	85	<0.2	2.5	2.5	2.5							
IM12	Misty	Moderate	16:53	8.4	Surface	1.0	0.5	269	30.2	30.2	8.0	8.0	24.0	24.0	82.7	82.6	5.5	4.9	5.1	5.0	4	4	81	83	821454	812052	<0.2	2.4	2.4	2.4			
						1.0	0.5	273	30.2	30.2	8.0	8.0	24.1	24.0	82.5	82.6	5.5	5.0	4	4	81	83	<0.2	2.6	2.6	2.6							
					Middle	4.2	0.6	288	29.3	29.3	8.0	8.0	27.9	27.9	72.0	72.0	4.7	7.6	6.5	6.5	5	5	83	83	<0.2	2.6	2.6	2.6					
						4.2	0.6	315	29.3	29.3	8.0	8.0	27.9	27.9	71.9	72.0	4.7	7.7	5	5	83	83	<0.2	2.6	2.6	2.6							
					Bottom	7.4	0.3	272	29.0	29.0	8.0	8.0	30.1	30.1	72.4	72.5	4.7	7.0	5	5	85	85	<0.2	2.5	2.5	2.5							
						7.4	0.3	296	29.0	29.0	8.0	8.0	30.2	30.1	72.6	72.5	4.7	7.0	5	5	85	85	<0.2	2.7	2.7	2.7							
SR2	Misty	Moderate	17:30	4.5	Surface	1.0	0.1	342	29.8	29.8	8.0	8.0	20.5	20.5	85.0	85.0	5.8	6.2	5.8	6.3	5	5	81	81	821452	814163	<0.2	2.6	2.6	2.6			
						1.0	0.1	348	29.8	29.8	8.0	8.0	20.5	20.5	84.9	85.0	5.8	6.3	5	5	81	81	<0.2	2.6	2.6	2.6							
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					Bottom	3.5	0.1	349	29.4	29.4	7.9	7.9	24.7	24.7	78.3	78.5	5.2	8.5	6	6	83	83	<0.2	2.7	2.7	2.7							
						3.5	0.1	321	29.4	29.4	7.9	7.9	24.7	24.7	78.6	78.5	5.2	8.5	6	6	83	83	<0.2	2.6	2.6	2.6							
SR3	Misty	Moderate	16:00	8.3	Surface	1.0	0.4	237	29.8	29.8	8.0	8.0	18.6	18.6	85.3	85.2	5.8	3.5	5.3	3.5	4	4	-	-	822161	807568	-	-	-	-			
						1.0	0.5	244	29.8	29.8	8.0	8.0	18.6	18.6	85.1	85.2	5.8	3.5	4	4	-	-	-	-	-	-	-	-	-	-			
					Middle	4.2	0.4	243	29.0	29.0	7.9	7.9	25.4	25.4	71.3	71.4	4.8	5.7	7.1	7.1	3	3	-	-	-	-	-	-	-	-	-	-	
						4.2	0.4	256	29.0	29.0	7.9	7.9	25.4	25.4	71.5	71.4	4.8	5.7	4	4	-	-	-	-	-	-	-	-	-	-	-		
					Bottom	7.3	0.3	299	28.9	28.9	7.9	7.9	26.8	26.8	66.7	66.8	4.4	12.0	4	4	-	-	-	-	-	-	-	-	-	-	-		
						7.3	0.3	327	28.9	28.9	7.9	7.9	26.8	26.8	66.8	66.8	4.4	11.9	4	4	-	-	-	-	-	-	-	-	-	-	-		
SR4A	Misty	Moderate	17:15	8.0	Surface	1.0	0.4	243	29.8	29.8	8.0	8.0	20.6	20.6	81.9	81.8	5.6	7.1	4.9	7.2	5	5	-	-	817162	807821	-	-	-	-			
						1.0	0.4	256	29.8	29.8	8.0	8.0	20.6	20.6	81.7	81.8	5.5	7.2	6	6	-	-	-	-	-	-	-	-	-				
					Middle	4.0	0.2	244	29.1	29.1	8.0	8.0	26.8	26.8	63.3	63.3	4.2	12.5	12.9	12.9	6	6	-	-	-	-	-	-	-	-			
						4.0	0.2	257	29.1	29.1	8.0	8.0	26.8	26.8	63.3	63.3	4.2	12.4	6	6	-	-	-	-	-	-	-	-	-				
					Bottom	7.0	0.0	228	28.9	28.9	8.0	8.0	29.5	29.5	63.7	63.8	4.2	19.1	5	5	-	-	-	-	-	-	-	-	-	-			
						7.0	0.0	233	28.9	28.9	8.0	8.0	29.5	29.5	63.8	63.8	4.2	19.1	6	6	-	-	-	-	-	-	-	-	-				
SR5A	Misty	Calm	17:35	4.8	Surface	1.0	0.4	337	29.7	29.7	8.0	8.0	21.5	21.5	88.7	88.7	6.0	6.0	6.0	6.0	6	6	-	-	816575	810681	-	-	-	-			
						1.0	0.4	351	29.7	29.7	8.0	8.0	21.5	21.5	88.6	88.7	6.0	6.0	6	6	-	-	-	-	-	-	-	-					
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
					Bottom	3.8	0.3	312	29.2	29.2	7.9	7.9	25.9	25.9	70.1	70.2	4.7	9.7	7.9	7.9	6	6	-	-	-	-	-	-	-				
						3.8	0.3	329	29.2	29.2	7.9	7.9	25.9	25.9	70.3	70.2	4.7	9.7	7	7	-	-	-	-	-	-	-	-					
SR6	Misty	Calm	18:18	3.9	Surface	1.0	0.1	173	30.1	30.1	8.2	8.2	19.6	19.6	122.5	122.4	8.3	3.9	8.3	3.9	5	5	-	-	817890	814649	-	-	-	-			
						1.0	0.1	180	30.1	30.1	8.2	8.2	19.6	19.6	122.2	122.4	8.3	3.9	5	5	-	-	-	-	-	-	-						
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
					Bottom	2.9	0.0	178	29.2	29.2	7.9	7.9	23.4	23.4	74.0	74.1	5.0	7.2	5.6	5.0	6	6											

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

Water Quality Monitoring

Water Quality Monitoring Results on 23 August 18 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	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA
C1	Cloudy	Moderate	10:57	8.9	Surface	1.0	0.5	228	29.1	29.1	8.1	8.1	25.6	25.6	93.3	93.3	6.2	5.1	2.9	11.0	3	4	78	85	815620	804258	<0.2	1.6	1.4	1.4		
						1.0	0.5	229	29.1	8.1	8.1	25.6	25.6	93.3	93.3	6.2	5.1	2.9	11.0	3	4	80	85	<0.2	1.4	1.4	1.4					
						4.5	0.5	220	28.3	8.0	8.0	32.1	32.1	60.1	60.1	3.9	3.9	10.7	11.0	3	4	88	85	<0.2	1.4	1.4	1.4					
					4.5	0.6	239	28.3	8.0	8.0	32.1	32.1	60.1	60.1	3.9	3.9	10.7	11.0	3	4	84	85	<0.2	1.4	1.4	1.4						
					7.9	0.4	215	28.2	8.0	8.0	32.4	32.4	66.4	66.4	4.3	4.3	19.4	11.0	6	4	92	85	<0.2	1.1	1.1	1.1						
					7.9	0.4	234	28.2	8.0	8.0	32.4	32.4	66.4	66.4	4.3	4.3	19.4	11.0	6	4	90	85	<0.2	1.5	1.5	1.5						
C2	Cloudy	Moderate	12:17	10.5	Surface	1.0	1.0	166	29.0	29.0	7.8	7.8	19.8	19.7	88.5	88.3	6.1	5.3	3.3	5.7	4	5	82	86	825711	806922	<0.2	2.6	2.6	2.6		
						1.0	1.0	172	29.0	7.8	7.8	19.7	19.7	88.1	88.3	6.1	5.3	3.4	5.7	4	5	83	86	<0.2	2.6	2.6	2.6					
						5.3	0.5	167	27.7	7.8	7.8	27.6	27.6	65.5	65.4	4.4	4.4	5.5	5.7	4	5	85	86	<0.2	2.6	2.6	2.6					
					5.3	0.6	171	27.7	7.8	7.8	27.7	27.6	65.2	65.4	4.4	4.4	5.8	5.7	5	5	86	86	<0.2	2.6	2.6	2.6						
					9.5	0.3	158	27.4	7.8	7.8	28.8	28.7	65.2	65.4	4.4	4.4	8.0	5.7	5	5	89	86	<0.2	2.5	2.5	2.5						
					9.5	0.3	169	27.6	7.8	7.8	28.7	28.7	65.6	65.4	4.4	4.4	8.1	5.7	5	5	89	86	<0.2	2.5	2.5	2.5						
C3	Cloudy	Moderate	10:19	11.7	Surface	1.0	0.3	114	28.1	28.1	7.8	7.8	24.9	24.9	88.4	88.4	6.0	5.6	4.1	6.9	4	5	85	88	822118	817783	<0.2	1.6	1.6	1.6		
						1.0	0.3	122	28.1	7.8	7.8	24.9	24.9	88.4	88.4	6.0	5.6	4.1	6.9	4	5	85	88	<0.2	1.5	1.5	1.5					
						5.9	0.3	100	27.7	7.8	7.8	27.5	27.5	75.3	75.3	5.1	5.1	3.7	6.9	6	5	84	88	<0.2	1.6	1.6	1.6					
					5.9	0.3	102	27.7	7.8	7.8	27.5	27.5	75.2	75.3	5.1	5.1	3.7	6.9	6	5	84	88	<0.2	1.6	1.6	1.6						
					10.7	0.3	58	26.9	7.7	7.7	29.9	29.9	67.9	68.0	4.6	4.6	12.9	6.9	6	5	95	88	<0.2	1.7	1.7	1.7						
					10.7	0.3	58	26.8	7.7	7.7	30.0	29.9	68.1	68.0	4.6	4.6	12.9	6.9	6	5	94	88	<0.2	1.6	1.6	1.6						
IM1	Cloudy	Moderate	11:19	5.2	Surface	1.0	0.2	352	29.2	29.2	8.2	8.2	25.0	25.0	97.5	97.5	6.5	6.5	5.3	8.9	6	7	74	79	817932	807131	<0.2	1.4	1.4	1.4		
						1.0	0.2	324	29.2	8.2	8.2	25.0	25.0	97.5	97.5	6.5	6.5	5.3	8.9	6	7	79	79	<0.2	1.4	1.4	1.4					
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-
					4.2	0.0	12	28.7	8.0	8.0	30.2	30.2	73.0	73.0	4.8	4.8	12.4	8.9	7	6	80	79	<0.2	1.4	1.4	1.4						
					4.2	0.0	12	28.7	8.0	8.0	30.2	30.2	73.0	73.0	4.8	4.8	12.4	8.9	6	6	83	79	<0.2	1.4	1.4	1.4						
					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	-	-
IM2	Cloudy	Moderate	11:26	7.4	Surface	1.0	0.6	197	29.0	29.0	8.1	8.1	26.8	26.8	81.2	81.2	5.4	4.8	3.7	6.1	5	6	84	88	818149	806175	<0.2	1.7	1.6	1.6		
						1.0	0.6	206	29.0	8.1	8.1	26.8	26.8	81.2	81.2	5.4	4.8	3.7	6.1	5	6	86	88	<0.2	1.6	1.6	1.6					
						3.7	0.5	197	28.6	8.0	8.0	30.7	30.7	64.4	64.4	4.2	4.2	6.3	6.1	5	6	87	88	<0.2	1.2	1.2	1.2					
					3.7	0.5	214	28.6	8.0	8.0	30.7	30.7	64.4	64.4	4.2	4.2	6.3	6.1	5	6	88	88	<0.2	1.2	1.2	1.2						
					6.4	0.3	199	28.5	8.0	8.0	31.3	31.3	67.2	67.2	4.4	4.4	8.2	6.1	7	6	91	88	<0.2	1.2	1.2	1.2						
					6.4	0.3	210	28.5	8.0	8.0	31.3	31.3	67.2	67.2	4.4	4.4	8.2	6.1	8	6	90	88	<0.2	1.3	1.3	1.3						
IM3	Cloudy	Moderate	11:33	7.5	Surface	1.0	0.6	208	29.3	29.3	8.2	8.2	22.4	22.4	98.7	98.7	6.7	5.7	4.8	7.1	7	7	83	87	818770	805589	<0.2	1.9	1.6	1.6		
						1.0	0.6	222	29.3	8.2	8.2	22.4	22.4	98.7	98.7	6.7	5.7	4.8	7.1	7	7	84	87	<0.2	1.6	1.6	1.6					
						3.8	0.6	207	28.9	8.0	8.0	28.2	28.2	71.6	71.6	4.7	4.7	7.0	7.1	7	7	87	87	<0.2	1.6	1.6	1.6					
					3.8	0.7	225	28.9	8.0	8.0	28.2	28.2	71.6	71.6	4.7	4.7	7.0	7.1	7	7	86	87	<0.2	2.1	2.1	2.1						
					6.5	0.4	207	28.5	8.0	8.0	31.3	31.3	66.2	66.2	4.3	4.3	9.6	7.1	7	7	90	87	<0.2	1.6	1.6	1.6						
					6.5	0.4	219	28.5	8.0	8.0	31.3	31.3	66.2	66.2	4.3	4.3	9.6	7.1	7	7	89	87	<0.2	1.5	1.5	1.5						
IM4	Cloudy	Moderate	11:43	7.5	Surface	1.0	0.6	200	29.4	29.4	8.2	8.2	19.1	19.1	90.1	90.1	6.2	5.3	6.5	14.9	4	5	82	86	819707	804605	<0.2	2.1	1.9	1.9		
						1.0	0.6	214	29.4	8.2	8.2	19.1	19.1	90.1	90.1	6.2	5.3	6.5	14.9	4	5	82	86	<0.2	1.9	1.9	1.9					
						3.8	0.6	200	28.6	8.0	8.0	30.0	30.0	65.0	65.0	4.3	4.3	18.0	14.9	4	5	84	86	<0.2	1.6	1.6	1.6					
					3.8	0.6	208	28.6	8.0	8.0	30.0	30.0	65.0	65.0	4.3	4.3	18.0	14.9	4	5	86	86	<0.2	1.9	1.9	1.9						
					6.5	0.5	204	28.4	8.0	8.0	31.4	31.4	69.7	69.7	4.6	4.6	20.3	14.9	7	5	90	86	<0.2	1.9	1.9	1.9						
					6.5	0.5	212	28.4	8.0	8.0	31.4	31.4	69.7	69.7	4.6	4.6	20.3	14.9	7	5	90	86	<0.2	1.8	1.8	1.8						
IM5	Cloudy	Moderate	11:54	7.0	Surface	1.0	0.7	198	29.7	29.7	8.1	8.1	16.8	16.8	104.7	104.7	7.3	6.5	2.3	6.7	4	5	82	84	820734	804874	<0.2	2.3	2.2	2.1		
						1.0	0.8	209	29.7	8.1	8.1	16.8	16.8	104.7	104.7	7.3	6.5	2.3	6.7	4	5	81	84	<0.2	2.4	2.4	2.4					
						3.5	0.5	209	29.3	8.1	8.1	26.2	26.2	85.3	85.3	5.7	5.7	3.3	6.7	5	5	81	84	<0.2	2.2	2.2	2.2					
					3.5	0.5	214	29.3	8.1	8.1	26.2	26.2	85.3	85.3	5.7	5.7	3.3	6.7	4	5	84	84	<0.2	2.4	2.4	2.4						
					6.0	0.4	210	28.6	8.0	8.0	30.8	30.8	62.1	62.1	4.1	4.1	14.6	6.7	6	5	88	84	<0.2	1.7	1.7	1.7						
					6.0	0.4	227	28.6	8.0	8.0	30.8	30.8	62.1	62.1	4.1	4.1	14.6	6.7	6	5	90	84	<0.2	1.8	1.8	1.8						
IM6	Cloudy	Moderate	12:02	6.9	Surface	1.0	0.4	198	29.3	29.3	8.1	8.1	23.1	23.1	93.8	93.8	6.3	5.6	2.5	6.4	4	5	82	86	821061	805855	<0.2	2.3	2.1	1.8		
						1.0	0.5	212	29.3	8.1	8.1	23.1	23.1	93.8	93.8	6.3	5.6	2.5	6.4	3	5	82	86	<0.2	2.1	2.1	2.1					
						3.5	0.4	203	29.1	8.0	8.0	26.8	26.8	74.2	74.2	4.9	4.9	3.5	6.4	5	5	86	86	<0.2	1.7	1.7	1.7					
					3.5	0.4	212	29.1	8.0	8.0	26.8	26.8	74.2	74.2	4.9	4.9	3.5	6.4	5	5	87	86	<0.2									

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

Water Quality Monitoring

Water Quality Monitoring Results on 23 August 18 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	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA
IM9	Cloudy	Moderate	11:40	7.0	Surface	1.0	0.4	158	29.0	29.0	7.8	7.8	20.5	20.5	106.1	106.0	7.3	3.0	3	82	86	86	822086	808800	<0.2	2.0	1.8	1.8				
						1.0	0.4	168	29.0	29.0	7.8	7.8	20.5	20.5	105.8	106.0	7.3	3.1	3	85	85	85			<0.2	1.9	1.8	1.8				
						3.5	0.2	133	28.6	28.6	7.7	7.7	26.0	26.0	67.0	67.0	4.5	5.7	3	82	86	86			<0.2	1.8	1.6	1.8	1.8			
					Middle	3.5	0.3	145	28.6	28.6	7.7	7.7	26.0	26.0	67.0	67.0	4.5	5.7	3	82	86	86			<0.2	1.8	1.6	1.8	1.8			
						6.0	0.1	136	28.5	28.5	7.7	7.7	27.2	27.2	64.3	64.5	4.3	7.6	3	90	90	90			<0.2	1.6	1.8	1.8	1.8			
						6.0	0.1	143	28.5	28.5	7.7	7.7	27.2	27.2	64.7	64.5	4.3	8.0	3	90	90	90			<0.2	1.6	1.8	1.8	1.8			
IM10	Cloudy	Moderate	11:31	7.5	Surface	1.0	0.6	129	29.0	29.0	7.8	7.8	20.8	20.8	94.3	94.3	6.5	3.4	3	87	87	87	822406	809806	<0.2	2.0	1.9	1.9				
						1.0	0.6	136	29.0	29.0	7.8	7.8	20.7	20.8	94.3	94.3	6.5	3.3	4	88	88	88			<0.2	1.8	1.8	1.9				
						3.8	0.5	107	28.5	28.5	7.7	7.7	27.5	27.5	62.2	62.4	4.2	9.0	5	89	89	89			<0.2	1.8	1.8	1.9				
					Middle	3.8	0.5	114	28.5	28.5	7.7	7.7	27.5	27.5	62.5	62.4	4.2	8.4	4	89	89	89			<0.2	1.7	1.7	1.9				
						6.5	0.3	97	28.4	28.4	7.7	7.7	27.8	27.8	61.3	61.4	4.1	12.1	4	92	92	92			<0.2	1.9	1.9	1.9				
						6.5	0.3	104	28.4	28.4	7.7	7.7	27.8	27.8	61.5	61.4	4.1	12.1	4	93	93	93			<0.2	2.0	2.0	1.9	1.9			
IM11	Cloudy	Moderate	11:18	8.2	Surface	1.0	0.6	100	28.9	28.9	7.8	7.8	21.2	21.2	98.9	98.8	6.8	3.1	3	86	86	86	822048	811484	<0.2	1.9	1.8	1.8				
						1.0	0.6	104	28.9	28.9	7.8	7.8	21.3	21.2	98.7	98.8	6.8	3.1	3	87	87	87			<0.2	1.6	1.6	1.8				
						4.1	0.5	106	28.4	28.4	7.7	7.7	27.0	27.0	60.5	60.5	4.1	12.2	4	84	84	84			<0.2	1.7	1.7	1.8				
					Middle	4.1	0.5	109	28.4	28.4	7.7	7.7	27.0	27.0	60.5	60.5	4.1	12.5	3	85	85	85			<0.2	2.0	2.0	1.7	1.8			
						7.2	0.3	117	28.3	28.3	7.7	7.7	27.3	27.3	60.8	60.9	4.1	15.3	5	91	91	91			<0.2	1.7	1.7	1.7				
						7.2	0.3	121	28.3	28.3	7.7	7.7	27.3	27.3	60.9	60.9	4.1	15.0	5	92	92	92			<0.2	1.7	1.7	1.7				
IM12	Cloudy	Moderate	11:10	8.4	Surface	1.0	0.5	81	28.9	28.9	7.8	7.8	21.8	21.8	93.4	93.5	6.4	3.4	3	85	85	85	821473	812071	<0.2	1.6	1.7	1.7				
						1.0	0.6	89	28.9	28.9	7.8	7.8	21.8	21.8	93.5	93.5	6.4	3.4	3	86	86	86			<0.2	1.7	1.7	1.7				
						4.2	0.5	89	28.8	28.8	7.8	7.8	23.2	23.2	81.9	81.8	5.6	4.1	3	87	87	87			<0.2	1.6	1.6	1.7				
					Middle	4.2	0.6	89	28.8	28.8	7.8	7.8	23.2	23.2	81.6	81.8	5.5	4.1	3	88	88	88			<0.2	1.7	1.7	1.7				
						7.4	0.4	124	28.5	28.5	7.7	7.7	26.8	26.8	66.8	66.9	4.5	14.8	4	91	91	91			<0.2	1.7	1.7	1.7				
						7.4	0.4	135	28.5	28.5	7.8	7.7	26.8	26.8	67.0	66.9	4.5	14.8	4	92	92	92			<0.2	1.6	1.6	1.7				
SR2	Cloudy	Moderate	10:47	5.0	Surface	1.0	0.5	86	28.9	28.9	7.8	7.8	21.2	21.2	93.5	93.4	6.4	3.2	2	86	86	86	821439	814169	<0.2	1.6	2.0	2.0				
						1.0	0.6	92	28.9	28.9	7.8	7.8	21.2	21.2	93.2	93.4	6.4	3.2	2	86	86	86			<0.2	2.0	2.0	2.0				
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						4.0	0.2	49	28.4	28.4	7.7	7.7	25.7	25.7	68.6	68.8	4.6	6.2	3	82	82	82			<0.2	2.0	2.0	2.0				
						4.0	0.3	51	28.4	28.4	7.7	7.7	25.7	25.7	68.9	68.8	4.6	6.4	3	83	83	83			<0.2	2.2	2.2	2.2				
SR3	Cloudy	Moderate	11:52	9.1	Surface	1.0	0.6	179	29.0	29.0	7.8	7.8	21.0	21.1	110.2	110.1	7.5	3.1	3	-	-	-	822158	807556	-	-	-	-				
						1.0	0.6	181	29.0	29.0	7.8	7.8	21.1	21.1	109.9	110.1	7.5	3.2	2	-	-	-	-	-	-	-	-	-				
						4.6	0.2	222	28.5	28.5	7.7	7.7	26.9	26.9	62.6	62.6	4.2	6.9	3	-	-	-	-	-	-	-	-					
					Middle	4.6	0.2	232	28.5	28.5	7.7	7.7	26.9	26.9	62.6	62.6	4.2	6.8	4	-	-	-	-	-	-	-	-	-				
						8.1	0.0	307	28.1	28.1	7.7	7.7	27.6	28.6	61.8	61.9	4.1	9.1	4	-	-	-	-	-	-	-	-					
						8.1	0.0	322	28.1	28.1	7.8	7.7	29.7	28.6	62.0	61.9	4.1	9.4	4	-	-	-	-	-	-	-	-					
SR4A	Cloudy	Moderate	10:38	9.4	Surface	1.0	0.2	82	29.0	29.0	8.1	8.1	26.5	26.5	86.9	86.9	5.8	4.5	4	-	-	-	817185	807828	-	-	-	-				
						1.0	0.2	84	29.0	29.0	8.1	8.1	26.5	26.5	86.9	86.9	5.8	4.5	4	-	-	-	-	-	-	-	-					
						4.7	0.2	54	28.6	28.6	8.0	8.0	30.7	30.7	59.9	59.9	3.9	15.2	6	-	-	-	-	-	-	-						
					Middle	4.7	0.2	58	28.6	28.6	8.0	8.0	30.7	30.7	59.9	59.9	3.9	15.2	6	-	-	-	-	-	-	-						
						8.4	0.2	81	28.6	28.6	8.0	8.0	30.8	30.8	64.0	64.0	4.2	19.7	8	-	-	-	-	-	-							
						8.4	0.2	83	28.6	28.6	8.0	8.0	30.8	30.8	64.0	64.0	4.2	19.7	8	-	-	-	-	-	-							
SR5A	Rainy	Moderate	10:21	4.8	Surface	1.0	0.0	23	29.8	29.8	8.2	8.2	22.9	22.9	94.1	94.1	6.3	3.7	5	-	-	-	816612	810724	-	-	-	-				
						1.0	0.0	24	29.8	29.8	8.2	8.2	22.9	22.9	94.1	94.1	6.3	3.7	5	-	-	-	-	-								
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-								
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
						3.8	0.0	236	29.7	29.7	8.0	8.0	25.5	25.5	90.4	90.4	6.0	3.9	6	-	-	-	-	-								
						3.8	0.0	258	29.7	29.7	8.0	8.0	25.5	25.5	90.4	90.4	6.0	3.9	7	-	-	-	-	-								
SR6	Cloudy	Calm	09:52	4.7	Surface	1.0	0.1	64	29.2	29.2	8.1	8.1	22.7	22.7	85.4	85.4	5.8	6.0	5	-	-	-	817914	814653	-	-	-	-				
						1.0	0.1	68	29.2	29.2	8.1	8.1	22.7	22.7	85.4	85.4	5.8	6.0	6	-	-	-	-	-								
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-								
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-								
						3.7	0.0	144	28.8	28.8	7.9	7.9	26.2	26.2	65.3	65.3	4.4	12.8	6	-	-	-	-	-								
						3.7	0.0	154	28.8	28.8	7.9	7.9	26.2	26.2	65.3	65.3	4.4	12.8	6	-	-	-	-	-								
SR7	Cloudy	Moderate	09:37	19.8	Surface	1.0	0.5	91	28.3	28.3	7.8	7.8	23.8	23.8	99.6	99.7	6.8	3.1	2	-	-	-	823650	823723	-	-	-	-				
						1.0	0.5	94	28.3	28.3	7.8	7.8	23.8	23.8	99.7	99.7	6.8	3.1	2	-	-	-	-	-								

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

Water Quality Monitoring

Water Quality Monitoring Results on 23 August 18 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	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	17:55	7.9	Surface	1.0	0.1	185	29.6	8.2	8.2	21.4	21.4	96.9	96.9	6.6	7.2	7	83	87	815593	804251	<0.2	1.7	1.8					
						1.0	0.1	186	29.6	8.2	8.2	21.4	21.4	96.9	96.9	6.6	7.2	6	82	87	81	804251	<0.2	1.8						
						4.0	0.1	356	29.0	8.1	8.1	26.1	26.1	72.1	72.1	4.8	10.3	8	86	87	81	804251	<0.2	2.0						
					4.0	0.1	328	29.0	8.1	8.1	26.1	26.1	72.1	72.1	4.8	10.3	8	87	87	81	804251	<0.2	1.9							
					6.9	0.1	166	28.4	8.0	8.0	31.2	31.2	66.3	66.3	4.3	16.3	10	90	91	81	804251	<0.2	1.6							
					6.9	0.1	167	28.4	8.0	8.0	31.2	31.2	66.3	66.3	4.3	16.3	10	91	91	81	804251	<0.2	1.7							
C2	Cloudy	Moderate	16:59	9.8	Surface	1.0	0.8	173	28.8	7.7	7.7	21.3	21.2	67.4	67.5	4.6	5.1	3	81	85	825708	806947	<0.2	2.5	2.5					
						1.0	0.8	186	28.8	7.7	7.7	21.2	21.2	67.5	67.5	4.6	5.1	2	82	85	82	806947	<0.2	2.6						
						4.9	0.3	184	27.9	7.7	7.7	26.8	26.8	57.7	57.7	3.9	6.5	4	85	86	85	806947	<0.2	2.5						
					4.9	0.3	202	27.9	7.7	7.7	26.8	26.8	57.7	57.7	3.9	6.5	3	86	88	85	806947	<0.2	2.6							
					8.8	0.1	351	27.8	7.7	7.7	27.2	27.2	57.5	57.5	3.9	6.5	4	88	88	85	806947	<0.2	2.2							
					8.8	0.1	323	27.8	7.7	7.7	27.3	27.2	57.5	57.5	3.9	6.5	4	88	88	85	806947	<0.2	2.3							
C3	Cloudy	Moderate	18:48	12.1	Surface	1.0	0.5	271	29.0	7.9	7.9	23.0	23.0	117.3	116.6	8.0	4.6	7	81	86	822123	817814	<0.2	1.5	1.2					
						1.0	0.5	283	28.9	7.9	7.9	23.0	23.0	115.9	116.6	7.9	4.6	8	82	85	86	822123	817814	<0.2		1.4				
						6.1	0.5	262	27.8	7.8	7.8	27.8	27.9	64.8	64.4	4.4	6.8	9	85	86	85	822123	817814	<0.2		1.0				
					6.1	0.5	265	27.7	7.8	7.8	27.9	27.9	64.0	64.4	4.3	7.2	10	86	86	85	822123	817814	<0.2	1.0						
					11.1	0.3	280	27.6	7.8	7.8	28.3	28.3	60.3	60.3	4.1	8.6	11	90	90	86	822123	817814	<0.2	1.3						
					11.1	0.4	296	27.6	7.8	7.8	28.3	28.3	60.3	60.3	4.1	8.4	12	90	90	86	822123	817814	<0.2	1.1						
IM1	Cloudy	Moderate	17:38	4.1	Surface	1.0	0.2	41	29.3	8.2	8.2	25.8	25.8	88.8	88.8	5.9	10.2	14	83	87	817927	807156	<0.2	0.7	0.7					
						1.0	0.2	43	29.3	8.2	8.2	25.8	25.8	88.8	88.8	5.9	10.2	14	82	85	86	817927	807156	<0.2		0.9				
						2.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	85	817927		807156	<0.2	-		
					2.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	85	817927		807156	<0.2	-		
					3.1	0.1	5	28.8	8.0	8.0	30.6	30.6	84.3	84.3	5.5	12.1	17	87	88	85	817927	807156	<0.2	0.5						
					3.1	0.1	5	28.8	8.0	8.0	30.6	30.6	84.3	84.3	5.5	12.1	16	88	88	85	817927	807156	<0.2	0.6						
IM2	Cloudy	Moderate	17:32	6.2	Surface	1.0	0.4	202	29.6	8.2	8.2	20.6	20.6	91.9	91.9	6.3	8.8	14	83	86	818166	806163	<0.2	0.9	0.8					
						1.0	0.4	221	29.6	8.2	8.2	20.6	20.6	91.9	91.9	6.3	8.8	15	82	87	86	818166	806163	<0.2		0.8				
						3.1	0.1	203	28.9	8.1	8.1	28.0	28.0	75.5	75.5	5.0	8.0	18	87	88	85	818166	806163	<0.2		1.0				
					3.1	0.1	204	28.9	8.1	8.1	28.0	28.0	75.5	75.5	5.0	8.0	19	86	89	85	818166	806163	<0.2	0.7						
					5.2	0.1	130	28.8	8.1	8.1	28.7	28.7	76.1	76.1	5.0	7.8	20	89	88	85	818166	806163	<0.2	0.7						
					5.2	0.1	135	28.8	8.1	8.1	28.7	28.7	76.1	76.1	5.0	7.8	21	88	88	85	818166	806163	<0.2	0.9						
IM3	Cloudy	Moderate	17:26	6.4	Surface	1.0	0.5	232	29.7	8.1	8.1	18.0	18.0	96.8	96.8	6.7	8.3	15	82	85	818775	805581	<0.2	1.5	1.6					
						1.0	0.5	252	29.7	8.1	8.1	18.0	18.0	96.8	96.8	6.7	8.3	16	81	83	86	818775	805581	<0.2		1.5				
						3.2	0.2	226	29.2	8.1	8.1	24.4	24.4	83.2	83.2	5.6	11.4	15	83	83	85	818775	805581	<0.2		1.6				
					3.2	0.2	236	29.2	8.1	8.1	24.4	24.4	83.2	83.2	5.6	11.4	16	83	83	85	818775	805581	<0.2	1.7						
					5.4	0.3	11	28.7	8.0	8.0	29.8	29.8	75.2	75.2	4.9	16.9	17	89	89	85	818775	805581	<0.2	1.7						
					5.4	0.3	12	28.7	8.0	8.0	29.8	29.8	76.1	76.1	5.0	16.7	17	90	90	85	818775	805581	<0.2	1.8						
IM4	Cloudy	Moderate	17:18	6.7	Surface	1.0	0.2	264	29.5	8.0	8.0	21.3	21.3	89.4	89.4	6.1	9.9	12	80	86	819737	804600	<0.2	1.4	1.5					
						1.0	0.2	286	29.5	8.0	8.0	21.3	21.3	89.4	89.4	6.1	9.9	13	82	86	86	819737	804600	<0.2		1.6				
						3.4	0.3	227	29.3	8.0	8.0	22.9	22.9	84.9	84.9	5.7	13.9	17	85	86	85	819737	804600	<0.2		1.6				
					3.4	0.4	235	29.3	8.0	8.0	22.9	22.9	84.9	84.9	5.7	13.9	16	86	86	85	819737	804600	<0.2	1.4						
					5.7	0.3	226	29.2	8.0	8.0	23.6	23.6	83.3	83.3	5.6	17.1	21	91	91	85	819737	804600	<0.2	1.2						
					5.7	0.3	232	29.2	8.0	8.0	23.6	23.6	83.3	83.3	5.6	17.1	22	90	90	85	819737	804600	<0.2	1.8						
IM5	Cloudy	Moderate	17:11	6.2	Surface	1.0	0.5	228	29.5	8.0	8.0	20.8	20.8	86.6	86.6	5.9	13.7	14	82	86	820725	804849	<0.2	1.8	1.6					
						1.0	0.5	230	29.5	8.0	8.0	20.8	20.8	86.6	86.6	5.9	13.7	14	81	86	86	820725	804849	<0.2		1.5				
						3.1	0.5	248	29.3	8.0	8.0	22.8	22.8	83.6	83.6	5.6	19.7	15	86	87	85	820725	804849	<0.2		1.3				
					3.1	0.5	260	29.3	8.0	8.0	22.8	22.8	83.6	83.6	5.6	19.7	15	87	87	85	820725	804849	<0.2	1.5						
					5.2	0.4	241	29.1	8.0	8.0	24.1	24.1	81.8	81.8	5.5	13.4	17	90	90	86	820725	804849	<0.2	1.7						
					5.2	0.4	260	29.1	8.0	8.0	24.1	24.1	81.8	81.8	5.5	13.4	17	90	90	86	820725	804849	<0.2	2.0						
IM6	Cloudy	Moderate	17:05	6.2	Surface	1.0	0.7	251	29.2	8.0	8.0	22.6	22.6	80.7	80.7	5.5	16.9	12	82	86	821048	805834	<0.2	1.5	1.7					
						1.0	0.7	268	29.2	8.0	8.0	22.6	22.6	80.7	80.7	5.5	16.9	12	80	82	86	821048	805834	<0.2		1.5				
						3.1	0.6	252	29.1	7.9	7.9	23.7	23.7	80.0	80.0	5.4	16.8	15	82	83	85	821048	805834	<0.2		1.8				
					3.1	0.7	257	29.1	7.9	7.9	23.7	23.7	80.0	80.0	5.4	16.8	15	83	83	85	821048	805834	<0.2	1.6						
					5.2	0.4	247	29.0	7.9	7.9	25.0	25.0	81.7	81.7	5.5	19.6	16	92	92	85	821048	805834	<0.2	1.7						
					5.2	0.5	271	29.0	7.9	7.9	25.0	25.0	81.7	81.7	5.5	19.6	16	94	94	85	821048	805834	<0.2	1.8						
IM7	Cloudy	Moderate	16:57	7.2	Surface	1.0	0.6	243	29.2	7.9	7.9	21.1	21.1	74.6	74.6	5.1	6.8	10	82	86	821327	806842	<0.2	1.4	1.5					
						1.0	0.6	249	29.2	7.9	7.9	21.1	21.1	74.6	74.6	5.1	6.8	10	83	85	86	821327	806842	<0.2		1.5				
						3.6	0.5	255	28.8	7.9	7.9	25.8	2																	

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

Water Quality Monitoring

Water Quality Monitoring Results on 25 August 18 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	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value			Value	Value	Value	Value	Value	Value	Value	Value
C1	Cloudy	Moderate	12:13	9.0	Surface	1.0	0.5	226	29.8	29.8	8.1	8.1	23.4	22.9	102.2	102.0	6.8	6.0	3.4	5.8	6	6	81	86	815637	804243	<0.2	1.7	<0.2	1.8				
						1.0	0.5	243	29.8	8.1	8.1	22.3	22.9	101.8	102.0	6.8	6.0	3.4	5.8	5	6	81	86	81	86	<0.2	1.8	<0.2	1.8					
						4.5	0.5	233	28.4	28.4	8.1	8.1	28.9	28.8	78.7	78.6	5.2	5.5	5.5	5.8	6	6	85	87	85	87	<0.2	1.9	<0.2	2.4				
					4.5	0.5	242	28.4	28.4	8.1	8.1	28.7	28.8	78.5	78.6	5.2	5.8	5.8	5.8	6	6	87	87	87	87	<0.2	1.9	<0.2	1.9					
					8.0	0.5	217	27.4	27.4	8.0	8.0	33.4	33.4	62.1	63.0	4.1	4.2	4.1	4.2	4.2	4.2	5	6	92	91	92	91	<0.2	1.8	<0.2	1.8			
					8.0	0.5	228	27.4	27.4	8.0	8.0	33.4	33.4	63.9	63.0	4.2	4.2	4.2	4.2	4.2	4.2	6	6	91	91	91	91	<0.2	1.8	<0.2	1.8			
C2	Cloudy	Moderate	10:56	11.4	Surface	1.0	1.3	187	29.6	29.6	8.3	8.3	23.7	23.7	88.4	88.2	5.9	5.3	9.7	14.1	5	6	82	86	825671	806963	<0.2	1.9	<0.2	1.8				
						1.0	1.3	194	29.6	29.6	8.3	8.3	23.7	23.7	87.9	88.2	5.9	5.3	9.8	14.1	5	6	83	86	83	86	<0.2	1.8	<0.2	1.8				
						5.7	1.2	191	28.7	28.7	8.2	8.2	28.7	28.7	69.8	69.8	4.6	4.6	15.6	15.6	6	6	85	86	85	86	<0.2	2.0	<0.2	2.0				
					5.7	1.2	199	28.7	28.7	8.2	8.2	28.7	28.7	69.8	69.8	4.6	4.6	15.6	15.6	5	6	86	86	86	86	<0.2	1.8	<0.2	1.8					
					10.4	0.5	180	28.5	28.5	8.2	8.2	30.4	30.4	76.5	76.8	5.0	5.0	17.0	17.0	7	7	89	89	89	89	<0.2	2.0	<0.2	2.0					
					10.4	0.5	196	28.5	28.5	8.2	8.2	30.4	30.4	77.0	76.8	5.0	5.0	16.8	16.8	7	7	89	89	89	89	<0.2	1.9	<0.2	1.9					
C3	Cloudy	Moderate	12:40	11.2	Surface	1.0	0.5	121	29.5	29.5	8.2	8.2	25.1	25.4	82.7	82.6	5.5	4.7	11.9	15.6	6	9	81	85	822127	817809	<0.2	1.8	<0.2	1.7				
						1.0	0.6	128	29.5	29.5	8.2	8.2	25.8	25.4	82.4	82.6	5.5	4.7	11.9	15.6	6	9	82	84	82	84	<0.2	1.8	<0.2	1.8				
						5.6	0.2	117	28.0	28.0	8.2	8.2	32.4	32.4	59.7	59.8	3.9	3.9	14.3	14.3	8	9	84	88	84	88	<0.2	1.7	<0.2	1.7				
					5.6	0.3	117	28.0	28.0	8.2	8.2	32.4	32.4	59.8	59.8	3.9	3.9	14.4	14.4	8	9	84	88	84	88	<0.2	1.9	<0.2	1.9					
					10.2	0.4	69	28.0	28.0	8.1	8.1	32.5	32.5	69.9	70.2	4.6	4.6	20.5	20.5	12	12	88	88	88	88	<0.2	1.8	<0.2	1.8					
					10.2	0.4	72	28.0	28.0	8.1	8.1	32.5	32.5	70.5	70.2	4.6	4.6	20.6	20.6	12	12	89	89	89	89	<0.2	1.8	<0.2	1.8					
IM1	Cloudy	Moderate	11:53	5.5	Surface	1.0	0.1	189	29.4	29.4	8.1	8.1	26.7	26.6	89.8	89.8	5.9	5.9	7.8	9.6	7	7	74	79	817957	807114	<0.2	1.8	<0.2	1.7				
						1.0	0.1	196	29.5	29.5	8.1	8.1	26.5	26.6	89.8	89.8	5.9	5.9	7.7	9.6	6	7	75	75	75	75	<0.2	1.7	<0.2	1.7				
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					4.5	0.1	170	28.0	28.0	8.0	8.0	31.3	31.3	75.6	75.9	5.0	5.0	11.5	11.5	8	8	80	80	80	80	<0.2	1.8	<0.2	1.8					
					4.5	0.1	177	28.0	28.0	8.0	8.0	31.3	31.3	76.1	75.9	5.0	5.0	11.5	11.5	9	9	86	86	86	86	<0.2	1.8	<0.2	1.8					
					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
IM2	Cloudy	Moderate	11:44	7.5	Surface	1.0	0.5	196	28.8	28.8	8.1	8.1	28.3	28.3	81.4	81.5	5.4	4.8	8.3	9.8	8	8	85	88	818160	806136	<0.2	1.9	<0.2	1.8				
						1.0	0.5	210	28.8	28.8	8.1	8.1	28.2	28.3	81.5	81.5	5.4	4.8	8.3	9.8	8	8	87	87	87	87	<0.2	1.8	<0.2	1.8				
						3.8	0.3	184	28.0	28.0	8.0	8.0	31.5	31.5	62.0	62.2	4.1	4.1	10.5	10.5	8	8	87	88	87	88	<0.2	1.8	<0.2	1.7				
					3.8	0.3	186	28.0	28.0	8.0	8.0	31.5	31.5	62.3	62.2	4.1	4.1	10.5	10.5	8	8	88	88	88	88	<0.2	1.8	<0.2	1.8					
					6.5	0.2	161	27.8	27.8	8.0	8.0	32.2	32.2	69.7	70.2	4.6	4.6	10.6	10.6	8	8	90	90	90	90	<0.2	1.8	<0.2	1.8					
					6.5	0.2	170	27.8	27.8	8.0	8.0	32.2	32.2	70.6	70.2	4.6	4.6	10.6	10.6	8	8	91	91	91	91	<0.2	1.7	<0.2	1.7					
IM3	Cloudy	Moderate	11:36	7.8	Surface	1.0	0.4	201	29.8	29.8	8.2	8.2	23.8	23.8	101.9	101.8	6.8	5.6	4.7	10.6	6	7	83	87	818801	805587	<0.2	1.6	<0.2	1.8				
						1.0	0.4	206	29.8	29.8	8.2	8.2	23.8	23.8	101.7	101.8	6.8	5.6	4.7	10.6	6	7	84	86	84	86	<0.2	1.8	<0.2	1.8				
						3.9	0.3	190	28.3	28.3	8.0	8.0	29.8	29.8	67.0	67.0	4.4	4.4	11.4	11.4	7	7	86	87	86	87	<0.2	1.8	<0.2	1.8				
					3.9	0.3	204	28.3	28.3	8.0	8.0	29.8	29.8	67.0	67.0	4.4	4.4	11.5	11.5	7	7	87	87	87	87	<0.2	1.8	<0.2	1.8					
					6.8	0.2	147	27.8	27.8	8.0	8.0	32.1	32.1	68.8	69.0	4.5	4.5	15.7	15.7	8	8	89	89	89	89	<0.2	1.8	<0.2	1.8					
					6.8	0.2	159	27.8	27.8	8.0	8.0	32.1	32.1	69.2	69.0	4.5	4.5	15.6	15.6	8	8	90	90	90	90	<0.2	1.8	<0.2	1.8					
IM4	Cloudy	Moderate	11:26	7.9	Surface	1.0	0.3	201	29.3	29.3	8.1	8.1	22.3	22.3	91.1	91.1	6.2	5.2	5.0	14.1	8	9	82	86	819711	804590	<0.2	1.7	<0.2	1.8				
						1.0	0.4	201	29.3	29.3	8.1	8.1	22.3	22.3	91.1	91.1	6.2	5.2	5.0	14.1	8	9	82	86	82	86	<0.2	2.0	<0.2	1.8				
						4.0	0.3	177	28.1	28.1	8.0	8.0	31.1	31.1	62.9	63.0	4.1	4.1	17.2	17.2	9	9	85	87	85	87	<0.2	1.8	<0.2	1.7				
					4.0	0.3	189	28.1	28.1	8.0	8.0	31.1	31.1	63.0	63.0	4.1	4.1	17.4	17.4	9	9	87	87	87	87	<0.2	1.7	<0.2	1.7					
					6.9	0.2	175	28.0	28.0	8.0	8.0	31.5	31.4	68.5	68.7	4.5	4.5	20.1	20.1	10	10	90	90	90	90	<0.2	1.8	<0.2	1.8					
					6.9	0.2	188	28.0	28.0	8.0	8.0	31.4	31.4	68.9	68.7	4.5	4.5	20.1	20.1	10	10	90	90	90	90	<0.2	1.8	<0.2	1.8					
IM5	Cloudy	Moderate	11:16	7.4	Surface	1.0	0.2	204	29.6	29.6	8.1	8.1	20.6	20.6	93.2	93.1	6.3	5.3	3.7	12.0	6	8	82	85	820739	804850	<0.2	1.7	<0.2	1.6				
						1.0	0.3	212	29.6	29.6	8.1	8.1	20.7	20.6	92.9	93.1	6.3	5.3	3.8	12.0	6	8	82	84	82	84	<0.2	1.8	<0.2	1.8				
						3.7	0.2	187	28.3	28.2	8.0	8.0	29.9	29.9	65.1	65.2	4.3	4.3	13.9	13.9	7	7	84	84	84	84	<0.2	1.7	<0.2	1.7				
					3.7	0.2	202	28.2	28.2	8.0	8.0	29.9	29.9	65.2	65.2	4.3	4.3	14.2	14.2	7	7	84	84	84	84	<0.2	1.7	<0.2	1.7					
					6.4	0.2	157	28.0	28.0	8.0	8.0	31.3	31.3	72.8	73.1	4.8	4.8	18.5	18.5	10	10</													

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

Water Quality Monitoring

Water Quality Monitoring Results on 25 August 18 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	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA	Value
IM9	Cloudy	Moderate	11:30	7.4	Surface	1.0	0.4	158	29.4	29.4	8.2	8.2	22.9	23.0	90.2	90.2	6.1	6.1	10.6	5.1	6	8	82	86	822107	808836	<0.2	1.7	1.8	1.8			
						1.0	0.4	165	29.4	8.2	8.2	23.0	23.0	90.1	90.1	6.1	6.1	10.7	5.1	6	8	83	86	85	86	<0.2	1.8	1.8	1.8				
						3.7	0.3	176	28.3	8.1	8.1	31.4	31.4	60.3	60.4	4.0	4.0	15.4	15.8	7	8	85	85	85	85	<0.2	1.8	1.8	1.8				
					Middle	3.7	0.4	185	28.3	8.1	8.1	31.4	31.4	60.4	60.4	4.0	4.0	15.5	15.8	8	8	8	8	8	8	85	86	<0.2	1.7	1.8	1.8		
						6.4	0.2	162	28.3	8.1	8.1	31.5	31.5	66.6	66.6	4.4	4.4	21.2	21.2	9	9	9	9	9	9	90	90	<0.2	1.8	1.8	1.8		
						6.4	0.3	172	28.3	8.1	8.1	31.5	31.5	66.9	66.8	4.4	4.4	21.3	21.3	10	10	10	10	10	10	90	90	<0.2	1.7	1.8	1.8		
IM10	Cloudy	Moderate	11:41	7.3	Surface	1.0	0.8	150	29.9	29.9	8.3	8.3	24.0	24.0	99.4	99.3	6.6	6.6	9.6	5.8	7	9	84	87	822385	809775	<0.2	1.6	1.8	1.8			
						1.0	0.8	163	29.9	8.3	8.3	24.0	24.0	99.2	99.3	6.6	6.6	9.6	5.8	7	9	85	86	85	86	<0.2	1.9	1.8	1.8				
						3.7	0.5	141	28.7	8.2	8.2	29.5	29.5	76.3	76.3	5.0	5.0	13.0	13.3	8	9	8	9	86	87	86	87	<0.2	1.8	1.8	1.8		
					Middle	3.7	0.5	155	28.7	8.2	8.2	29.5	29.5	76.6	76.5	5.0	5.0	12.9	13.3	8	9	8	9	87	88	87	88	<0.2	1.8	1.8	1.8		
						6.3	0.5	135	28.2	8.1	8.1	31.8	31.8	65.8	65.8	4.3	4.3	17.4	17.4	10	10	10	10	10	10	89	90	<0.2	1.8	1.8	1.8		
						6.3	0.5	144	28.2	8.1	8.1	31.8	31.8	66.2	66.0	4.3	4.3	17.4	17.4	11	11	11	11	11	11	90	90	<0.2	1.8	1.8	1.8		
IM11	Cloudy	Moderate	11:56	8.3	Surface	1.0	0.8	137	29.1	29.1	8.3	8.3	27.7	27.7	84.5	84.5	5.6	5.6	11.7	4.8	8	8	83	86	822061	811441	<0.2	1.8	1.8	1.8			
						1.0	0.9	140	29.1	8.3	8.3	27.7	27.7	84.4	84.5	5.6	5.6	11.6	4.8	8	8	8	8	83	83	85	85	<0.2	1.9	1.8	1.8		
						4.2	0.7	120	28.3	8.1	8.1	31.2	31.2	59.8	59.8	3.9	3.9	14.2	13.5	10	10	10	10	10	10	85	85	<0.2	1.9	1.8	1.8		
					Middle	4.2	0.7	124	28.3	8.1	8.1	31.2	31.2	59.8	59.8	3.9	3.9	14.2	13.5	10	10	10	10	10	10	10	10	85	85	<0.2	1.9	1.8	1.8
						7.3	0.5	127	28.1	8.1	8.1	32.2	32.2	61.1	61.2	4.0	4.0	14.6	13.5	11	10	11	10	11	10	90	90	<0.2	1.7	1.8	1.8		
						7.3	0.6	131	28.1	8.1	8.1	32.2	32.2	61.2	61.2	4.0	4.0	14.5	13.5	11	10	11	10	11	10	90	90	<0.2	1.8	1.8	1.8		
IM12	Cloudy	Moderate	12:01	9.1	Surface	1.0	0.5	123	29.9	29.9	8.3	8.3	23.3	23.2	93.9	93.9	6.3	6.3	10.3	5.1	6	8	82	86	821460	812068	<0.2	1.7	1.8	1.8			
						1.0	0.5	123	30.0	8.3	8.3	23.2	23.2	93.9	93.9	6.3	6.3	10.2	5.1	7	8	7	8	82	82	85	85	<0.2	1.8	1.8	1.8		
						4.6	0.7	119	28.3	8.1	8.1	31.2	31.2	59.6	59.6	3.9	3.9	17.9	16.6	8	8	8	8	8	8	85	86	<0.2	1.8	1.8	1.8		
					Middle	4.6	0.8	128	28.3	8.1	8.1	31.2	31.2	59.5	59.6	3.9	3.9	18.0	16.6	8	8	8	8	8	8	8	8	85	86	<0.2	1.8	1.8	1.8
						8.1	0.5	114	28.2	8.1	8.1	32.0	32.0	65.3	65.5	4.3	4.3	21.6	16.6	9	8	9	8	9	8	90	90	<0.2	1.9	1.8	1.8		
						8.1	0.5	115	28.2	8.1	8.1	32.0	32.0	65.6	65.5	4.3	4.3	21.5	16.6	8	8	8	8	8	8	90	90	<0.2	1.8	1.8	1.8		
SR2	Cloudy	Moderate	12:22	3.8	Surface	1.0	0.6	118	29.8	29.8	8.3	8.3	24.6	24.4	96.7	96.7	6.4	6.4	8.7	6.4	9	10	81	83	821437	814191	<0.2	1.9	2.0	1.9			
						1.0	0.6	122	29.8	8.3	8.3	24.2	24.4	96.6	96.6	6.4	6.4	8.7	6.4	9	10	9	10	81	81	81	81	<0.2	2.0	1.9	1.9		
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						2.8	0.5	110	29.1	29.1	8.3	8.3	27.4	27.4	91.6	91.7	6.1	6.1	10.0	6.4	6.1	6.1	10	10	10	10	84	85	<0.2	1.8	1.8	1.8	
						2.8	0.5	115	29.1	29.1	8.3	8.3	27.4	27.4	91.7	91.7	6.1	6.1	10.0	6.4	6.1	6.1	10	10	10	10	85	85	<0.2	1.8	1.8	1.8	
SR3	Cloudy	Moderate	11:13	9.2	Surface	1.0	0.8	185	29.8	29.8	8.2	8.2	21.5	21.7	97.4	97.3	6.6	6.6	8.3	6.2	5	6	-	-	822175	807579	-	-	-	-			
						1.0	0.8	191	29.8	8.2	8.2	21.9	21.7	97.1	97.3	6.5	6.5	8.4	6.2	5	6	-	-	-	-	-	-	-	-	-			
						4.6	0.7	182	29.3	8.2	8.2	25.6	25.6	87.0	86.9	5.8	5.8	10.6	12.2	6	6	6	6	6	6	6	6	-	-	-	-		
					Middle	4.6	0.7	196	29.3	8.2	8.2	25.6	25.6	86.7	86.9	5.8	5.8	10.6	12.2	6	6	6	6	6	6	6	6	6	6	-	-	-	-
						8.2	0.5	197	28.5	8.0	8.0	30.7	30.7	82.7	83.1	5.4	5.4	17.5	5.5	6	5.5	6	5.5	6	5.5	6	5.5	6	5.5	-	-	-	-
						8.2	0.5	199	28.5	8.0	8.0	30.7	30.7	83.5	83.5	5.5	5.5	17.6	5.5	6	5.5	6	5.5	6	5.5	6	5.5	6	5.5	-	-	-	-
SR4A	Cloudy	Calm	12:37	8.9	Surface	1.0	0.1	74	29.7	29.7	8.1	8.1	23.9	23.9	94.8	94.7	6.3	6.3	8.1	5.0	5	7	-	-	817194	807833	-	-	-	-			
						1.0	0.1	80	29.7	8.1	8.1	23.9	23.9	94.5	94.5	6.3	6.3	8.2	5.0	5	7	-	-	-	-	-	-	-	-	-			
						4.5	0.2	66	27.7	8.0	8.0	32.4	32.4	56.9	57.0	3.7	3.7	11.0	11.8	4	7	-	-	-	-	-	-	-	-	-			
					Middle	4.5	0.2	70	27.7	8.0	8.0	32.4	32.4	57.0	57.0	3.8	3.8	11.1	11.8	7	7	-	-	-	-	-	-	-	-	-	-		
						7.9	0.1	74	27.7	8.0	8.0	32.5	32.5	61.5	61.6	4.0	4.0	16.2	4.1	10	4.1	10	4.1	10	4.1	10	4.1	10	4.1	-	-	-	-
						7.9	0.1	75	27.7	8.0	8.0	32.5	32.5	61.7	61.7	4.1	4.1	16.3	4.1	10	4.1	10	4.1	10	4.1	10	4.1	10	4.1	-	-	-	-
SR5A	Cloudy	Calm	12:57	5.3	Surface	1.0	0.1	321	29.9	29.9	8.3	8.3	24.3	24.3	106.3	105.9	7.0	7.0	4.8	7.0	7	8	-	-	816580	810682	-	-	-	-			
						1.0	0.1	322	29.9	8.3	8.3	24.3	24.3	105.4	105.9	7.0	7.0	4.9	7.0	7	8	-	-	-	-	-	-	-	-				
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
						4.3	0.1	283	29.1	29.1	8.1	8.1	27.1	27.1	100.0	100.4	6.6	6.6	6.6	6.7	9	6.7	9	6.7	9	6.7	9	6.7	9	6.7	9	6.7	
						4.3	0.1	291	29.1	29.1	8.1	8.1	27.1	27.1	100.8	100.4	6.7	6.7	6.7	6.7	9	6.7	9	6.7	9								

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

Water Quality Monitoring

Water Quality Monitoring Results on 25 August 18 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	DA	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
									Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Calm	19:57	9.1	Surface	1.0	0.5	39	29.2	8.1	8.1	20.7	20.7	88.5	88.4	6.1	5.2	9	83	87	815625	804274	<0.2	1.8	1.8					
						1.0	0.5	40	29.2	8.1	8.1	20.7	20.7	88.3	88.4	6.0	5.3	9	84	87	815625	804274	<0.2	1.8						
						4.6	0.5	41	28.1	8.0	8.0	30.4	30.7	62.7	62.7	4.1	26.3	10	87	89	815625	804274	<0.2	1.8						
					4.6	0.5	42	28.1	8.0	8.0	31.0	30.7	62.6	62.7	4.1	26.9	10	86	89	815625	804274	<0.2	1.7							
					8.1	0.3	39	27.7	8.0	8.0	32.4	32.4	63.8	63.8	4.2	46.6	10	90	90	815625	804274	<0.2	2.0							
					8.1	0.3	40	27.7	8.0	8.0	32.4	32.4	64.1	64.0	4.2	46.6	11	90	90	815625	804274	<0.2	1.8							
C2	Cloudy	Moderate	21:20	11.9	Surface	1.0	0.5	89	29.4	8.2	8.2	19.1	19.1	71.6	71.3	4.9	12.2	8	83	86	825699	806954	<0.2	1.8	1.9					
						1.0	0.6	94	29.4	8.2	8.2	19.1	19.1	71.0	71.3	4.9	12.3	8	83	86	825699	806954	<0.2	1.9						
						6.0	0.2	190	28.3	8.1	8.1	31.4	31.4	65.2	65.3	4.3	17.0	9	86	87	825699	806954	<0.2	2.0						
					6.0	0.3	198	28.3	8.1	8.1	31.4	31.4	65.3	65.3	4.3	16.7	10	87	89	825699	806954	<0.2	1.8							
					10.9	0.8	125	28.3	8.0	8.0	31.5	31.5	75.8	76.1	5.0	16.5	11	89	90	825699	806954	<0.2	2.1							
					10.9	0.8	129	28.3	8.0	8.0	31.5	31.5	76.3	76.1	5.0	16.7	11	90	90	825699	806954	<0.2	1.9							
C3	Cloudy	Moderate	18:21	11.6	Surface	1.0	0.5	244	29.3	8.2	8.2	23.1	23.1	92.4	92.4	6.2	8.1	7	85	89	822105	817810	<0.2	1.8	1.8					
						1.0	0.5	266	29.3	8.2	8.2	23.1	23.1	92.4	92.4	6.2	8.2	6	86	89	822105	817810	<0.2	1.9						
						5.8	0.6	269	29.3	8.2	8.2	24.2	24.2	90.3	90.3	6.1	9.7	7	89	90	822105	817810	<0.2	1.8						
					5.8	0.6	292	29.3	8.2	8.2	24.2	24.2	90.2	90.3	6.0	9.7	8	89	90	822105	817810	<0.2	1.8							
					10.6	0.4	280	29.1	8.1	8.1	25.2	25.2	90.4	90.5	6.0	12.0	7	92	92	822105	817810	<0.2	1.8							
					10.6	0.5	303	29.2	8.1	8.1	25.2	25.2	90.5	90.5	6.0	12.0	8	92	92	822105	817810	<0.2	1.7							
IM1	Cloudy	Calm	20:05	5.9	Surface	1.0	0.1	219	29.2	8.0	8.0	20.2	20.2	85.6	85.6	5.9	3.6	5	83	86	817923	807125	<0.2	1.7	1.7					
						1.0	0.1	223	29.2	8.0	8.0	20.2	20.2	85.5	85.6	5.9	3.6	5	83	86	817923	807125	<0.2	1.7						
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-		
					4.9	0.1	41	28.6	8.0	8.0	26.9	26.9	83.6	83.7	5.6	5.0	6	87	89	817923	807125	<0.2	1.5							
					4.9	0.1	44	28.6	8.0	8.0	26.9	26.9	83.8	83.7	5.6	5.0	7	89	89	817923	807125	<0.2	1.7							
					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	
IM2	Cloudy	Calm	20:14	8.3	Surface	1.0	0.2	268	29.2	8.0	8.0	20.3	20.3	80.9	80.7	5.5	5.8	4	83	88	818140	806147	<0.2	1.6	1.7					
						1.0	0.2	268	29.2	8.0	8.0	20.3	20.3	80.5	80.7	5.5	5.9	4	83	88	818140	806147	<0.2	1.5						
						4.2	0.2	44	28.4	8.0	8.0	27.8	27.8	69.1	69.0	4.6	13.9	4	87	88	818140	806147	<0.2	1.6						
					4.2	0.2	47	28.4	8.0	8.0	27.8	27.8	68.9	69.0	4.6	14.3	5	88	88	818140	806147	<0.2	1.8							
					7.3	0.3	50	27.8	8.0	8.0	32.4	32.4	70.5	70.8	4.6	16.7	6	94	94	818140	806147	<0.2	1.8							
					7.3	0.3	54	27.8	8.0	8.0	32.4	32.4	71.0	70.8	4.7	16.7	6	94	94	818140	806147	<0.2	2.0							
IM3	Cloudy	Calm	20:21	7.9	Surface	1.0	0.1	277	29.1	8.1	8.1	22.7	22.7	87.6	87.6	5.9	4.0	5	82	83	818757	805569	<0.2	1.7	1.8					
						1.0	0.1	284	29.1	8.1	8.1	22.7	22.7	87.6	87.6	5.9	4.0	6	83	84	818757	805569	<0.2	1.8						
						4.0	0.3	56	28.6	8.1	8.1	27.1	27.1	77.9	77.9	5.2	5.8	6	83	84	818757	805569	<0.2	1.7						
					4.0	0.4	58	28.6	8.1	8.1	27.1	27.1	77.8	77.8	5.2	5.8	6	84	84	818757	805569	<0.2	2.0							
					6.9	0.2	63	27.7	8.0	8.0	32.3	32.3	66.6	66.8	4.4	24.7	7	87	87	818757	805569	<0.2	1.8							
					6.9	0.3	69	27.7	8.0	8.0	32.3	32.3	66.9	66.8	4.4	24.7	6	87	87	818757	805569	<0.2	1.8							
IM4	Cloudy	Calm	20:32	8.4	Surface	1.0	0.1	7	29.3	8.0	8.0	19.0	19.0	74.0	73.7	5.1	10.5	4	80	86	819709	804632	<0.2	1.8	1.6					
						1.0	0.1	7	29.3	8.0	8.0	19.0	19.0	73.4	73.7	5.1	10.9	5	81	86	819709	804632	<0.2	1.5						
						4.2	0.1	92	27.9	8.0	8.0	31.8	31.8	63.1	63.2	4.2	21.7	4	85	87	819709	804632	<0.2	1.8						
					4.2	0.1	97	27.9	8.0	8.0	31.8	31.8	63.3	63.2	4.2	21.8	5	87	87	819709	804632	<0.2	1.6							
					7.4	0.1	63	27.9	8.0	8.0	32.0	32.0	71.7	72.0	4.7	22.0	5	91	91	819709	804632	<0.2	1.5							
					7.4	0.1	63	27.9	8.0	8.0	32.0	32.0	72.2	72.0	4.7	21.5	6	91	91	819709	804632	<0.2	1.6							
IM5	Cloudy	Calm	20:43	7.9	Surface	1.0	0.1	70	28.9	8.0	8.0	27.0	26.1	83.5	83.8	5.5	6.6	4	82	87	820714	804869	<0.2	1.7	1.7					
						1.0	0.1	70	29.0	8.0	8.0	25.3	26.1	84.0	83.8	5.4	6.4	4	82	87	820714	804869	<0.2	1.6						
						4.0	0.2	101	28.1	8.0	8.0	30.9	30.9	66.8	66.9	4.4	12.8	5	86	88	820714	804869	<0.2	1.8						
					4.0	0.2	109	28.1	8.0	8.0	30.9	30.9	66.9	66.9	4.4	12.8	5	88	88	820714	804869	<0.2	1.6							
					6.9	0.2	90	28.0	8.0	8.0	31.3	31.3	73.7	73.7	4.8	13.8	6	90	90	820714	804869	<0.2	1.7							
					6.9	0.2	91	28.1	8.0	8.0	31.3	31.3	74.2	74.0	4.9	13.9	6	92	92	820714	804869	<0.2	1.5							
IM6	Cloudy	Calm	20:53	7.4	Surface	1.0	0.1	59	29.2	8.1	8.1	24.3	24.4	91.7	91.7	6.2	5.0	5	82	87	821054	805811	<0.2	1.6	1.7					
						1.0	0.1	63	29.2	8.1	8.1	24.5	24.4	91.6	91.7	6.1	5.0	5	83	84	821054	805811	<0.2	1.7						
						3.7	0.3	94	28.5	8.0	8.0	28.4	28.4	73.5	73.6	4.9	13.5	5	84	85	821054	805811	<0.2	1.8						
					3.7	0.3	96	28.5	8.0	8.0	28.4	28.4	73.6	73.6	4.9	13.7	5	85	85	821054	805811	<0.2	1.8							
					6.4	0.2	129	28.2	8.0	8.0	30.4	30.4	77.3	77.6	5.1	23.6	6	92	92	821054	805811	<0.2	1.8							
					6.4	0.2	138	28.2	8.0	8.0	30.4	30.4	77.8	77.6	5.1	23.6	7	93	93	821054	805811	<0.2	1.7							
IM7	Cloudy	Calm	21:02	9.3	Surface	1.0	0.2	155	29.2	8.1	8.1	23.4	23.3	92.2	91.7	6.2	5.3	5	81	86	821326	806847	<0.2	1.8	1.8					
						1.0	0.2	158	29.2	8.1	8.1	23.2	23.3	91.2	91.7	6.2	5.5	5	83	85	821326	806847	<0.2	1.7						
						4.7	0.2	95	28.8	8.1	8.1	26.7	26.7	82.6	82.6	5.5	8.3	6	85	87	821326	806847	<0.2	1.8						
					4.7	0.2	103	28.8	8.1	8.1	26.7	26.7	82.5	82.6	5.5	8.5	6	87	89	821326	806847	<0.2	1.7							
					8.3	0.2	72																							

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

Water Quality Monitoring

Water Quality Monitoring Results on 25 August 18 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	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value
IM9	Cloudy	Moderate	20:35	7.6	Surface	1.0	0.1	148	29.4	8.3	8.3	21.8	21.8	86.6	86.5	5.9	5.0	9.4	11.0	5	6	85	88	822116	808813	<0.2	1.8	1.8			
						1.0	0.1	150	29.4	8.3	8.3	21.8	21.8	86.4	86.5	5.9	5.0	9.5	11.0	5	6	86	88	<0.2	1.8						
					Middle	3.8	0.0	312	28.1	8.2	8.2	31.8	31.8	61.9	62.0	4.1	4.1	10.2	10.4	6	6	88	89	<0.2	1.8						
						3.8	0.0	313	28.1	8.2	8.2	31.8	31.8	62.0	62.0	4.1	4.1	10.4	10.4	6	6	89	89	<0.2	1.8						
					Bottom	6.6	0.2	70	28.0	8.2	8.2	32.4	32.4	68.3	68.6	4.5	4.5	13.4	13.4	6	6	89	90	<0.2	1.8						
						6.6	0.2	73	28.0	8.2	8.2	32.4	32.4	68.8	68.6	4.5	4.5	12.9	12.9	6	6	90	90	<0.2	1.8						
IM10	Cloudy	Moderate	20:20	7.4	Surface	1.0	0.1	330	29.4	8.3	8.3	20.9	20.9	78.5	78.3	5.4	4.9	11.4	16.4	15	16	83	87	822409	809816	<0.2	1.9	1.9			
						1.0	0.2	334	29.3	8.3	8.3	20.9	20.9	78.0	78.3	5.3	4.9	11.6	16.4	15	16	83	87	<0.2	1.8						
					Middle	3.7	0.3	43	28.6	8.2	8.2	28.2	28.2	67.1	67.0	4.4	4.4	19.2	19.5	15	16	87	88	<0.2	2.0						
						3.7	0.4	44	28.6	8.2	8.2	28.3	28.2	66.8	67.0	4.4	4.4	19.5	18.5	16	17	88	89	<0.2	1.7						
					Bottom	6.4	0.3	318	28.0	8.2	8.2	32.4	32.4	68.5	68.5	4.5	4.5	18.3	18.3	17	17	89	89	<0.2	2.0						
						6.4	0.3	328	28.0	8.2	8.2	32.4	32.4	68.9	68.7	4.5	4.5	18.4	18.4	17	17	89	89	<0.2	1.7						
IM11	Cloudy	Moderate	20:12	8.3	Surface	1.0	0.5	309	29.4	8.2	8.2	18.3	18.3	94.3	94.3	6.5	6.5	8.5	8.4	4	6	85	86	822082	811486	<0.2	1.8	1.8			
						1.0	0.5	337	29.4	8.2	8.2	18.3	18.3	94.3	94.3	6.5	6.5	8.5	8.4	4	6	86	86	<0.2	1.8						
					Middle	4.2	0.6	300	29.4	8.2	8.2	18.3	18.3	94.5	94.5	6.5	6.5	8.7	8.7	5	6	86	86	<0.2	1.8						
						4.2	0.6	310	29.4	8.2	8.2	18.3	18.3	94.4	94.5	6.5	6.5	8.7	8.7	6	6	86	90	<0.2	1.7						
					Bottom	7.3	0.4	292	29.4	8.2	8.2	18.4	18.4	94.4	94.2	6.5	6.5	7.9	8.0	7	7	90	91	<0.2	1.8						
						7.3	0.4	309	29.4	8.1	8.2	18.4	18.4	94.0	94.2	6.5	6.5	8.0	8.0	7	7	91	91	<0.2	1.7						
IM12	Cloudy	Moderate	20:05	8.8	Surface	1.0	0.5	275	29.5	8.3	8.3	23.3	23.3	95.1	95.1	6.4	6.2	10.9	14.8	5	6	82	86	821470	812066	<0.2	1.7	1.7			
						1.0	0.5	299	29.5	8.3	8.3	23.3	23.3	95.0	95.1	6.4	6.2	10.9	14.8	5	6	83	86	<0.2	1.7						
					Middle	4.4	0.6	288	29.5	8.3	8.3	23.9	23.9	89.3	89.1	6.0	6.0	11.9	12.0	6	6	86	87	<0.2	1.6						
						4.4	0.6	297	29.5	8.3	8.3	23.9	23.9	88.8	89.1	5.9	5.9	12.0	12.0	6	6	87	89	<0.2	1.7						
					Bottom	7.8	0.3	270	28.6	8.0	8.0	30.1	30.1	70.0	70.0	4.6	4.6	21.3	21.6	8	8	89	90	<0.2	1.7						
						7.8	0.3	274	28.6	8.0	8.0	30.1	30.1	70.0	70.0	4.6	4.6	21.6	21.6	8	8	90	90	<0.2	1.7						
SR2	Cloudy	Calm	19:50	4.1	Surface	1.0	0.2	299	29.6	8.3	8.3	25.7	25.7	101.5	101.5	6.7	6.7	9.3	9.6	4	5	85	87	821437	814190	<0.2	2.0	1.8			
						1.0	0.2	303	29.6	8.3	8.3	25.7	25.7	101.4	101.4	6.7	6.7	9.3	9.6	4	5	85	88	<0.2	1.8						
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-
					Bottom	3.1	0.2	326	29.6	8.2	8.2	26.3	26.3	99.4	99.6	6.6	6.6	9.8	9.8	5	6	88	88	<0.2	1.6						
						3.1	0.2	350	29.6	8.2	8.2	26.3	26.3	99.7	99.6	6.6	6.6	9.8	9.8	6	6	88	88	<0.2	1.6						
SR3	Cloudy	Moderate	20:50	9.3	Surface	1.0	0.5	171	29.5	8.2	8.2	19.8	19.8	87.0	86.9	6.0	5.0	9.2	13.6	4	5	-	-	822160	807573	-	-	-			
						1.0	0.5	186	29.5	8.2	8.2	19.8	19.8	86.8	86.9	5.9	5.0	9.3	13.6	4	5	-	-	-	-	-	-				
					Middle	4.7	0.3	240	28.2	8.1	8.1	31.9	31.9	61.4	61.5	4.0	4.0	11.8	11.6	5	5	-	-	-	-	-	-		-	-	
						4.7	0.3	260	28.2	8.1	8.1	31.9	31.9	61.6	61.5	4.0	4.0	11.6	11.6	5	5	-	-	-	-	-	-		-	-	
					Bottom	8.3	0.2	281	28.1	8.0	8.0	32.1	32.1	69.5	69.7	4.5	4.6	19.6	20.1	7	7	-	-	-	-	-	-		-	-	
						8.3	0.3	295	28.2	8.0	8.0	32.1	32.1	69.9	69.9	4.6	4.6	20.1	20.1	7	7	-	-	-	-	-	-		-	-	
SR4A	Cloudy	Calm	18:37	9.3	Surface	1.0	0.2	74	29.2	8.1	8.1	22.6	22.6	94.5	94.5	6.4	6.1	6.7	8.3	4	6	-	-	817216	807780	-	-	-			
						1.0	0.2	74	29.2	8.1	8.1	22.6	22.6	94.4	94.4	6.4	6.1	6.9	8.3	4	6	-	-	-	-	-	-				
					Middle	4.7	0.1	73	29.2	8.1	8.1	23.8	23.8	86.9	86.6	5.8	5.8	7.4	7.4	5	6	-	-	-	-	-	-		-		
						4.7	0.1	77	29.2	8.1	8.1	23.8	23.8	86.3	86.6	5.8	5.8	7.4	7.4	6	6	-	-	-	-	-	-		-		
					Bottom	8.3	0.2	71	28.5	8.0	8.0	29.9	29.8	79.0	79.3	5.2	5.2	10.7	10.6	7	7	-	-	-	-	-	-		-		
						8.3	0.2	71	28.5	8.0	8.0	29.8	29.8	79.6	79.6	5.2	5.2	10.6	10.6	7	7	-	-	-	-	-	-		-		
SR5A	Cloudy	Calm	18:20	5.6	Surface	1.0	0.1	85	29.1	8.2	8.2	24.4	24.4	103.7	103.6	7.0	7.0	3.3	4.8	4	5	-	-	816587	810708	-	-	-			
						1.0	0.1	85	29.1	8.2	8.2	24.4	24.4	103.5	103.6	6.9	7.0	3.3	4.8	4	5	-	-	-	-	-	-				
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	
					Bottom	4.6	0.1	129	29.0	8.1	8.1	27.2	27.2	94.6	94.8	6.3	6.3	6.2	6.2	6	6	-	-	-	-	-	-		-		
						4.6	0.1	140	29.0	8.1	8.1	27.2	27.2	94.9	94.8	6.3	6.3	6.2	6.2	6	6	-	-	-	-	-	-		-		
SR6	Cloudy	Calm	17:52	4.8	Surface	1.0	0.1	232	29.0	8.0	8.0	23.1	23.1	91.8	91.8	6.2	6.2	4.1	5.4	5	7	-	-	817913	814642	-	-	-			
						1.0	0.1	241	29.0	8.0	8.0	23.1	23.1	91.7	91.8	6.2	6.2	4.2	5.4	5	7	-	-	-	-	-	-				
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-		
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-		
					Bottom	3.8	0.1	223	28.8	8.0	8.0	25.3	25.3	89.3	89.4	6.0	6.0	6.6	6.5	8	8	-	-	-	-	-	-		-		
						3.8	0.1	234	28.8	8.0	8.0	25.3	25.3	89.4	89.4	6.0	6.0	6.5	6.5	8	8	-	-	-	-	-	-		-		
SR7	Cloudy	Moderate	17:52	18.4	Surface	1.0	0.2	266	28.7	8.1	8.1	26.4	26.4	86.6	86.5	5.8	5.1	7.3	11.2	6	6	-	-	823615	823741	-	-	-			
						1.0	0.2	289	28.7	8.1	8.1	26.4	26.4	86.4	86.5	5.8	5.1	7.3	11.2	5	6	-	-	-	-						

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

Water Quality Monitoring

Water Quality Monitoring Results on 28 August 18 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	DA	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA					
									Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA			
C1	Rainy	Rough	13:54	8.7	Surface	1.0	0.4	220	28.1	8.4	8.4	26.3	26.3	81.2	81.2	5.5	5.2	10.2	26.3	7	8	82	88	88	88	815590	804245	<0.2	1.2	1.2					
						1.0	0.4	228	28.1	8.4	8.4	26.3	26.3	81.2	81.2	5.5	5.2	10.2	26.3	7	8	83	88	88	88			<0.2	1.2						
						4.4	0.6	203	28.0	8.4	8.4	29.2	29.2	72.8	72.8	4.9	4.4	16.8	26.3	8	8	88	88	88	88			<0.2	1.3						
					4.4	0.7	218	28.0	8.4	8.4	29.2	29.2	72.8	72.8	4.9	4.4	16.8	26.3	8	8	88	88	88	88	<0.2			1.2							
					7.7	0.4	216	27.1	8.4	8.4	32.2	32.2	66.3	66.3	4.4	4.4	51.8	26.3	9	8	92	88	88	88	<0.2			1.0							
					7.7	0.4	225	27.1	8.4	8.4	32.2	32.2	66.3	66.3	4.4	4.4	51.8	26.3	9	8	93	88	88	88	<0.2			1.2							
C2	Rainy	Moderate	12:33	12.2	Surface	1.0	0.3	155	28.2	8.3	8.3	28.2	28.2	117.3	117.2	7.8	6.6	6.2	8.6	3	4	83	86	86	86	825652	806928	<0.2	0.5	0.5					
						1.0	0.3	163	28.2	8.3	8.3	28.2	28.2	117.0	117.2	7.8	6.6	6.2	8.6	4	4	83	86	86	86			<0.2	0.4						
						6.1	0.3	172	25.8	8.1	8.1	30.5	30.5	77.0	77.0	5.3	5.3	8.8	8.6	4	4	86	87	87	87			<0.2	0.5						
					6.1	0.3	187	25.8	8.1	8.1	30.5	30.5	76.9	77.0	5.3	5.3	8.8	8.6	3	4	87	87	87	87	<0.2			0.4							
					11.2	0.5	166	25.4	8.1	8.1	31.1	31.1	77.1	77.1	5.3	5.3	10.9	8.6	4	4	89	89	89	89	<0.2			0.6							
					11.2	0.5	169	25.4	8.1	8.1	31.1	31.1	77.7	77.4	5.3	5.3	10.9	8.6	4	4	90	89	89	89	<0.2			0.4							
C3	Rainy	Moderate	14:22	12.1	Surface	1.0	0.4	125	27.6	8.3	8.3	28.5	28.5	106.8	106.8	7.2	6.7	8.3	11.8	2	3	82	86	86	86	822109	817791	<0.2	0.3	0.4					
						1.0	0.4	127	27.6	8.3	8.3	28.5	28.5	106.7	106.8	7.2	6.7	8.3	11.8	2	3	82	86	86	86			<0.2	0.4						
						6.1	0.2	80	27.1	8.2	8.2	29.3	29.3	90.8	90.7	6.1	6.1	9.6	11.8	2	3	86	87	87	87			<0.2	0.5						
					6.1	0.2	87	27.1	8.2	8.2	29.3	29.3	90.5	90.7	6.1	6.1	9.6	11.8	3	3	87	87	87	87	<0.2			0.3							
					11.1	0.4	39	25.3	8.1	8.1	30.6	30.6	75.5	75.6	5.2	5.2	17.4	11.8	4	4	90	89	89	89	<0.2			0.4							
					11.1	0.5	40	25.2	8.1	8.1	30.6	30.6	75.6	75.6	5.2	5.2	17.4	11.8	4	4	92	89	89	89	<0.2			0.4							
IM1	Rainy	Rough	13:34	5.4	Surface	1.0	0.2	172	28.5	8.4	8.4	25.5	25.5	84.4	84.4	5.7	5.7	9.7	14.7	5	7	83	84	84	84	817960	807154	<0.2	1.1	1.3					
						1.0	0.2	177	28.5	8.4	8.4	25.5	25.5	84.4	84.4	5.7	5.7	9.7	14.7	5	7	84	84	84	84			<0.2	1.3						
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-		-	-	-	-	<0.2
					4.4	0.2	174	28.0	8.4	8.4	29.6	29.6	72.9	72.9	4.8	4.8	19.6	14.7	8	7	87	87	87	87	<0.2			1.4							
					4.4	0.2	186	28.0	8.4	8.4	29.6	29.6	72.9	72.9	4.8	4.8	19.6	14.7	9	7	87	87	87	87	<0.2			1.4							
					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-		-	-	-	-	-
IM2	Rainy	Rough	13:25	7.4	Surface	1.0	0.3	96	28.1	8.4	8.4	26.1	26.1	81.2	81.2	5.5	5.1	9.5	22.6	5	6	82	83	83	83	818120	806191	<0.2	1.4	1.2					
						1.0	0.3	97	28.1	8.4	8.4	26.1	26.1	81.2	81.2	5.5	5.1	9.5	22.6	5	6	83	83	83	83			<0.2	1.4						
						3.7	0.2	157	27.8	8.4	8.4	28.6	28.6	68.6	68.6	4.6	4.6	13.4	22.6	6	6	88	88	88	88			<0.2	1.0						
					3.7	0.3	171	27.8	8.4	8.4	28.6	28.6	68.6	68.6	4.6	4.6	13.4	22.6	6	6	86	86	86	86	<0.2			1.1							
					6.4	0.2	156	27.4	8.4	8.4	31.0	31.0	66.1	66.1	4.4	4.4	44.8	22.6	7	6	93	88	88	88	<0.2			1.0							
					6.4	0.2	170	27.4	8.4	8.4	31.0	31.0	66.1	66.1	4.4	4.4	44.8	22.6	7	6	92	88	88	88	<0.2			1.0							
IM3	Rainy	Rough	13:16	7.5	Surface	1.0	0.1	54	28.2	8.4	8.4	25.9	25.9	79.9	79.9	5.4	5.1	9.5	14.1	5	6	82	83	83	83	818745	805577	<0.2	1.2	1.2					
						1.0	0.2	56	28.2	8.4	8.4	25.9	25.9	79.9	79.9	5.4	5.1	9.5	14.1	5	6	83	83	83	83			<0.2	1.2						
						3.8	0.2	187	27.9	8.4	8.4	28.8	28.8	71.0	71.0	4.7	4.7	15.8	14.1	5	6	85	86	86	86			<0.2	1.2						
					3.8	0.2	200	27.9	8.4	8.4	28.8	28.8	71.0	71.0	4.7	4.7	15.8	14.1	5	6	86	86	86	86	<0.2			1.3							
					6.5	0.2	112	27.7	8.3	8.3	30.8	30.8	74.6	74.6	5.0	5.0	17.0	14.1	7	6	89	89	89	89	<0.2			1.0							
					6.5	0.3	115	27.7	8.3	8.3	30.8	30.8	74.6	74.6	5.0	5.0	17.0	14.1	6	6	91	89	89	89	<0.2			1.1							
IM4	Rainy	Rough	13:03	8.0	Surface	1.0	0.3	140	28.0	8.4	8.4	28.9	28.9	74.1	74.1	4.9	4.9	14.3	17.7	12	12	81	82	82	82	819690	804638	<0.2	1.0	1.0					
						1.0	0.3	145	28.0	8.4	8.4	28.9	28.9	74.1	74.1	4.9	4.9	14.3	17.7	12	12	82	82	82	82			<0.2	1.2						
						4.0	0.3	159	27.9	8.4	8.4	29.1	29.1	71.6	71.6	4.8	4.8	18.5	17.7	12	12	87	87	87	87			<0.2	1.0						
					4.0	0.3	161	27.9	8.4	8.4	29.1	29.1	71.6	71.6	4.8	4.8	18.5	17.7	12	12	87	87	87	87	<0.2			0.9							
					7.0	0.3	147	27.8	8.3	8.3	29.8	29.8	78.7	78.7	5.2	5.2	20.2	17.7	12	12	93	87	87	87	<0.2			1.0							
					7.0	0.4	150	27.8	8.3	8.3	29.8	29.8	78.7	78.7	5.2	5.2	20.2	17.7	12	12	94	87	87	87	<0.2			1.0							
IM5	Rainy	Rough	12:53	7.8	Surface	1.0	0.1	149	28.0	8.4	8.4	28.7	28.7	72.1	72.1	4.8	4.7	14.1	17.7	12	15	82	83	83	83	820703	804841	<0.2	1.0	1.1					
						1.0	0.1	163	28.0	8.4	8.4	28.7	28.7	72.1	72.1	4.8	4.7	14.1	17.7	14	15	83	83	83	83			<0.2	1.0						
						3.9	0.2	178	27.9	8.3	8.3	29.3	29.3	67.6	67.6	4.5	4.5	22.1	17.7	16	15	87	88	88	88			<0.2	1.0						
					3.9	0.2	178	27.9	8.3	8.3	29.3	29.3	67.6	67.6	4.5	4.5	22.1	17.7	16	15	88	88	88	88	<0.2			1.0							
					6.8	0.2	146	27.7	8.3	8.3	30.4	30.4	69.1	69.1	4.6	4.6	17.0	17.7	16	15	91	88	88	88	<0.2			1.1							
					6.8	0.2	149	27.7	8.3	8.3	30.4	30.4	69.1	69.1	4.6	4.6	17.0	17.7	16	15	91	88	88	88	<0.2			1.4							
IM6	Rainy	Rough	12:35	7.6	Surface	1.0	0.2	37	28.3	8.4	8.4	27.4	27.4	77.1	77.1	5.2	5.0	13.2	20.7	13	14	81	82	82	82	821028	805822	<0.2	1.2	1.1					
						1.0	0.2	40	28.3	8.4	8.4	27.4	27.4	77.1	77.1	5.2	5.0	13.2	20.7	13	14	82	82	82	82			<0.2	1.1						
						3.8	0.2	112	28.1	8.4	8.4	28.3	28.3	71.4	71.4	4.8	4.8	22.0	20.7	13	14	85	86	86	86			<0.2	1.1						
					3.8	0.2	119	28.1	8.4	8.4	28.3	28.3	71.4	71.4	4.8	4.8	22.0																		

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

Water Quality Monitoring

Water Quality Monitoring Results on 28 August 18 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	DA	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA		
									Value	DA	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA
C1	Cloudy	Moderate	07:39	9.1	Surface	1.0	0.3	17	28.1	8.3	8.3	25.3	25.3	76.9	76.9	5.2	4.6	11.2	14.0	11	12	81	87	815600	804245	<0.2	<0.2	1.3	1.3			
						1.0	0.4	18	28.1	8.3	8.3	25.3	25.3	76.9	76.9	5.2	4.6	11.2	14.0	11	12	81	87	815600	804245	<0.2	<0.2	1.4	1.3			
						4.6	0.3	23	26.9	8.3	8.3	33.2	33.2	59.8	59.8	4.0	4.6	15.5	14.0	12	12	88	87	815600	804245	<0.2	<0.2	1.3	1.3			
					4.6	0.4	23	26.9	8.3	8.3	33.2	33.2	59.8	59.8	4.0	4.6	15.5	14.0	12	12	86	87	815600	804245	<0.2	<0.2	1.4	1.1				
					8.1	0.3	23	26.9	8.2	8.2	33.6	33.6	63.0	63.0	4.2	4.2	15.3	14.0	12	12	93	87	815600	804245	<0.2	<0.2	1.1	1.1				
					8.1	0.3	23	26.9	8.2	8.2	33.6	33.6	63.0	63.0	4.2	4.2	15.3	14.0	12	12	90	87	815600	804245	<0.2	<0.2	1.2	1.2				
C2	Rainy	Moderate	08:33	12.4	Surface	1.0	0.5	13	25.9	25.9	8.1	8.1	29.8	29.8	80.1	80.1	5.5	5.2	6.5	9.1	6	6	82	86	825679	806930	<0.2	<0.2	0.5	0.5		
						1.0	0.5	13	25.9	8.1	8.1	29.8	29.8	80.0	80.0	5.5	5.2	6.3	9.1	6	6	83	86	825679	806930	<0.2	<0.2	0.4	0.4			
						6.2	0.5	356	25.2	8.1	8.1	30.3	30.3	69.7	69.6	4.8	5.2	9.7	9.1	6	6	85	86	825679	806930	<0.2	<0.2	0.6	0.6			
					6.2	0.5	328	25.2	8.1	8.1	30.3	30.3	69.5	69.5	4.8	5.2	9.6	9.1	6	6	86	86	825679	806930	<0.2	<0.2	0.4	0.4				
					11.4	0.4	329	23.2	8.0	8.0	31.9	31.9	65.5	65.6	4.7	4.7	11.4	11.3	6	6	89	86	825679	806930	<0.2	<0.2	0.4	0.4				
					11.4	0.4	352	23.2	8.0	8.0	31.9	31.9	65.7	65.6	4.7	4.7	11.3	11.3	6	6	90	86	825679	806930	<0.2	<0.2	0.4	0.4				
C3	Cloudy	Moderate	06:36	12.5	Surface	1.0	0.5	287	27.5	27.5	8.2	8.2	28.9	28.9	87.8	87.6	5.9	5.5	5.6	8.1	5	6	81	85	822092	817826	<0.2	<0.2	0.3	0.4		
						1.0	0.5	307	27.5	8.2	8.2	28.9	28.9	87.4	87.6	5.9	5.5	5.6	8.1	5	6	82	85	822092	817826	<0.2	<0.2	0.4	0.3			
						6.3	0.4	260	25.3	8.1	8.1	30.3	30.3	73.8	73.8	5.1	5.1	7.9	8.1	6	6	86	85	822092	817826	<0.2	<0.2	0.6	0.6			
					6.3	0.4	264	25.3	8.1	8.1	30.3	30.3	73.7	73.7	5.1	5.1	7.9	8.1	7	6	85	85	822092	817826	<0.2	<0.2	0.5	0.5				
					11.5	0.4	274	23.7	8.0	8.0	31.6	31.6	75.7	75.9	5.3	5.4	10.8	10.8	7	6	88	88	822092	817826	<0.2	<0.2	0.3	0.3				
					11.5	0.4	283	23.7	8.0	8.0	31.6	31.6	76.1	75.9	5.4	5.4	10.8	10.8	7	6	88	88	822092	817826	<0.2	<0.2	0.3	0.3				
IM1	Cloudy	Moderate	07:16	5.5	Surface	1.0	0.7	42	28.3	28.3	8.3	8.3	26.6	26.6	80.4	80.4	5.4	5.4	19.6	19.2	12	14	75	79	817958	807144	<0.2	<0.2	1.3	1.4		
						1.0	0.7	43	28.3	8.3	8.3	26.6	26.6	80.4	80.4	5.4	5.4	19.6	19.2	12	14	77	79	817958	807144	<0.2	<0.2	1.4	1.4			
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					4.5	0.6	40	28.3	8.3	8.3	27.2	27.2	84.1	84.2	5.6	5.7	18.8	19.2	16	14	81	79	817958	807144	<0.2	<0.2	1.3	1.3				
					4.5	0.6	42	28.3	8.3	8.3	27.2	27.2	84.3	84.2	5.7	5.7	18.8	19.2	17	14	83	79	817958	807144	<0.2	<0.2	1.2	1.2				
					4.5	0.6	42	28.3	8.3	8.3	27.2	27.2	84.3	84.2	5.7	5.7	18.8	19.2	17	14	83	79	817958	807144	<0.2	<0.2	1.2	1.2				
IM2	Cloudy	Moderate	07:09	8.1	Surface	1.0	0.7	2	28.2	28.2	8.3	8.3	26.5	26.5	77.0	77.0	5.2	5.1	17.0	14.3	4	6	85	89	818131	806178	<0.2	<0.2	1.2	1.2		
						1.0	0.8	2	28.2	8.3	8.3	26.5	26.5	77.0	77.0	5.2	5.1	17.0	14.3	5	6	86	89	818131	806178	<0.2	<0.2	1.4	1.4			
						4.1	0.5	353	28.1	8.3	8.3	27.2	27.2	73.4	73.4	4.9	4.9	14.0	14.3	6	6	89	89	818131	806178	<0.2	<0.2	1.1	1.1			
					4.1	0.6	359	28.1	8.3	8.3	27.2	27.2	73.4	73.4	4.9	4.9	14.0	14.3	6	6	90	89	818131	806178	<0.2	<0.2	1.2	1.2				
					7.1	0.4	354	28.1	8.3	8.3	28.8	28.8	75.8	75.8	5.1	5.1	12.0	14.3	7	6	92	89	818131	806178	<0.2	<0.2	1.2	1.2				
					7.1	0.4	326	28.1	8.3	8.3	28.8	28.8	75.8	75.8	5.1	5.1	12.0	14.3	7	6	93	89	818131	806178	<0.2	<0.2	1.3	1.3				
IM3	Cloudy	Moderate	07:02	8.3	Surface	1.0	0.8	14	28.2	28.2	8.3	8.3	26.1	26.1	75.8	75.8	5.1	4.9	12.2	12.9	10	14	83	87	818746	805551	<0.2	<0.2	1.3	1.3		
						1.0	0.9	14	28.2	8.3	8.3	26.1	26.1	75.8	75.8	5.1	4.9	12.2	12.9	11	14	84	87	818746	805551	<0.2	<0.2	1.3	1.3			
						4.2	0.5	16	28.0	8.3	8.3	29.0	29.0	70.3	70.3	4.7	4.7	14.0	12.9	14	14	86	87	818746	805551	<0.2	<0.2	1.2	1.2			
					4.2	0.5	16	28.0	8.3	8.3	29.0	29.0	70.3	70.3	4.7	4.7	14.0	12.9	14	14	87	87	818746	805551	<0.2	<0.2	1.4	1.4				
					7.3	0.4	0	28.0	8.3	8.3	29.2	29.2	73.1	73.1	4.9	4.9	12.6	12.9	16	14	90	87	818746	805551	<0.2	<0.2	1.1	1.1				
					7.3	0.4	0	28.0	8.3	8.3	29.2	29.2	73.1	73.1	4.9	4.9	12.6	12.9	16	14	90	87	818746	805551	<0.2	<0.2	1.2	1.2				
IM4	Cloudy	Moderate	06:51	8.4	Surface	1.0	0.7	8	28.1	28.1	8.2	8.2	27.5	27.5	73.1	73.1	4.9	4.8	10.4	13.0	10	11	82	86	819703	804628	<0.2	<0.2	1.4	1.4		
						1.0	0.7	8	28.1	8.2	8.2	27.5	27.5	73.1	73.1	4.9	4.8	10.4	13.0	10	11	85	86	819703	804628	<0.2	<0.2	1.3	1.3			
						4.2	0.5	6	28.0	8.2	8.2	28.9	28.9	69.8	69.8	4.7	4.7	11.8	13.0	12	11	82	86	819703	804628	<0.2	<0.2	1.4	1.4			
					4.2	0.5	6	28.0	8.2	8.2	28.9	28.9	69.8	69.8	4.7	4.7	11.8	13.0	11	11	87	86	819703	804628	<0.2	<0.2	1.6	1.6				
					7.4	0.4	10	28.0	8.2	8.2	29.0	29.0	73.4	73.4	4.9	4.9	16.8	13.0	11	11	90	86	819703	804628	<0.2	<0.2	1.2	1.2				
					7.4	0.4	10	28.0	8.2	8.2	29.0	29.0	73.4	73.4	4.9	4.9	16.8	13.0	12	11	89	86	819703	804628	<0.2	<0.2	1.2	1.2				
IM5	Cloudy	Moderate	06:41	7.6	Surface	1.0	0.2	7	28.1	28.1	8.2	8.2	27.4	27.4	76.3	76.3	5.1	5.2	15.2	16.6	26	27	82	86	820703	804841	<0.2	<0.2	1.3	1.3		
						1.0	0.2	7	28.1	8.2	8.2	27.4	27.4	76.3	76.3	5.1	5.2	15.2	16.6	26	27	82	86	820703	804841	<0.2	<0.2	1.4	1.4			
						3.8	0.2	11	28.1	8.3	8.3	27.5	27.5	78.7	78.7	5.3	5.3	12.2	16.6	27	27	85	86	820703	804841	<0.2	<0.2	1.4	1.4			
					3.8	0.2	11	28.1	8.3	8.3	27.5	27.5	78.7	78.7	5.3	5.3	12.2	16.6	26	27	87	86	820703	804841	<0.2	<0.2	1.2	1.2				
					6.6	0.2	344	28.1	8.3	8.3	27.5	27.5	83.5	83.5	5.6	5.6	22.4	16.6	27	27	90	86	820703	804841	<0.2	<0.2	1.3	1.3				
					6.6	0.2	316	28.1																								

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

Water Quality Monitoring

Water Quality Monitoring Results on 28 August 18 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	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value			Value	Value	Value	Value	Value	Value	Value
IM9	Rainy	Moderate	07:51	8.1	Surface	1.0	0.3	326	26.3	26.3	8.2	8.2	30.1	30.1	91.2	91.1	6.2	6.0	7.3	12.8	6	6	82	86	822103	808829	<0.2	<0.2	0.5	0.4			
						1.0	0.4	349	26.3	26.1	8.2	8.2	30.1	30.1	91.0	91.0	6.2	6.0	7.3	12.8	5	6	82	86	<0.2	<0.2	0.3	0.4					
						4.1	0.4	319	26.1	26.1	8.2	8.2	30.3	30.3	83.1	83.0	5.7	5.1	11.5	11.5	6	6	86	86	<0.2	<0.2	0.3	0.4					
					4.1	0.5	314	26.1	26.1	8.2	8.2	30.3	30.3	82.8	83.0	5.7	5.1	11.5	11.5	5	6	86	86	<0.2	<0.2	0.3	0.4						
					7.1	0.3	276	24.1	24.1	8.1	8.1	31.8	31.8	72.3	72.4	5.1	5.1	19.7	19.7	6	6	89	89	<0.2	<0.2	0.5	0.4						
					7.1	0.3	283	24.1	24.1	8.1	8.1	31.8	31.8	72.5	72.4	5.1	5.1	19.7	19.7	7	7	90	90	<0.2	<0.2	0.4	0.4						
IM10	Rainy	Moderate	07:40	8.5	Surface	1.0	0.5	314	26.5	26.5	8.2	8.2	29.8	29.8	86.0	85.9	5.9	5.3	9.5	14.1	6	6	82	86	822413	809789	<0.2	<0.2	0.5	0.4			
						1.0	0.6	340	26.5	26.5	8.2	8.2	29.8	29.8	85.7	85.9	5.8	5.3	9.5	14.1	5	6	82	86	<0.2	<0.2	0.5	0.4					
						4.3	0.5	319	25.4	25.4	8.1	8.1	30.8	30.8	68.8	68.6	4.7	4.7	15.9	15.9	5	6	86	86	<0.2	<0.2	0.4	0.4					
					4.3	0.6	341	25.4	25.4	8.1	8.1	30.9	30.8	68.4	68.6	4.7	4.7	15.9	15.9	5	6	86	86	<0.2	<0.2	0.4	0.4						
					7.5	0.4	294	23.6	23.6	8.0	8.0	32.0	32.0	67.2	67.2	4.7	4.7	16.8	16.8	7	7	88	88	<0.2	<0.2	0.4	0.4						
					7.5	0.4	321	23.6	23.6	8.0	8.0	32.0	32.0	67.5	67.4	4.8	4.8	16.8	16.8	7	7	89	89	<0.2	<0.2	0.4	0.4						
IM11	Rainy	Moderate	07:27	9.5	Surface	1.0	0.3	309	27.2	27.2	8.2	8.2	29.2	29.2	86.8	86.6	5.9	5.6	7.5	10.7	6	7	82	85	822054	811463	<0.2	<0.2	0.4	0.4			
						1.0	0.4	339	27.2	27.2	8.2	8.2	29.2	29.2	86.3	86.6	5.8	5.6	7.5	10.7	5	7	82	85	<0.2	<0.2	0.5	0.4					
						4.8	0.4	311	25.3	25.3	8.1	8.1	30.6	30.6	76.5	76.5	5.3	5.3	11.8	11.8	6	7	85	85	<0.2	<0.2	0.3	0.4					
					4.8	0.5	338	25.3	25.3	8.1	8.1	30.6	30.6	76.4	76.5	5.3	5.3	11.8	11.8	6	7	85	85	<0.2	<0.2	0.4	0.4						
					8.5	0.1	327	24.4	24.4	8.1	8.1	31.4	31.4	77.1	77.2	5.4	5.4	12.7	12.7	9	9	86	86	<0.2	<0.2	0.4	0.4						
					8.5	0.1	329	24.4	24.4	8.1	8.1	31.4	31.4	77.3	77.2	5.4	5.4	12.7	12.7	9	9	86	86	<0.2	<0.2	0.4	0.4						
IM12	Cloudy	Moderate	07:18	8.5	Surface	1.0	0.6	297	27.5	27.5	8.2	8.2	28.9	28.9	93.1	93.0	6.3	5.8	8.5	3.6	5	7	81	85	821475	812021	<0.2	<0.2	0.4	0.5			
						1.0	0.7	314	27.5	27.5	8.2	8.2	28.9	28.9	92.9	93.0	6.2	5.8	8.5	3.6	6	7	82	85	<0.2	<0.2	0.4	0.5					
						4.3	0.7	280	25.3	25.3	8.1	8.1	30.2	30.2	77.4	77.4	5.4	5.4	1.1	1.1	7	7	85	86	<0.2	<0.2	0.4	0.5					
					4.3	0.7	307	25.3	25.3	8.1	8.1	30.2	30.2	77.3	77.4	5.4	5.4	1.1	1.1	7	7	86	86	<0.2	<0.2	0.5	0.4						
					7.5	0.3	255	24.4	24.4	8.1	8.1	31.2	31.2	77.9	78.1	5.5	5.5	1.2	1.2	8	8	88	88	<0.2	<0.2	0.6	0.4						
					7.5	0.3	272	24.4	24.4	8.1	8.1	31.2	31.2	78.2	78.1	5.5	5.5	1.2	1.2	8	8	89	89	<0.2	<0.2	0.4	0.4						
SR2	Cloudy	Moderate	06:54	5.1	Surface	1.0	0.1	331	25.8	25.8	8.1	8.1	30.1	30.1	81.7	81.7	5.6	5.6	3.8	4.5	5	7	84	85	821457	814172	<0.2	<0.2	0.5	0.5			
						1.0	0.1	346	25.8	25.8	8.1	8.1	30.1	30.1	81.6	81.7	5.6	5.6	3.8	4.5	6	7	85	85	<0.2	<0.2	0.5	0.5					
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					4.1	0.1	19	25.2	25.2	8.1	8.1	30.3	30.3	79.3	79.4	5.5	5.5	5.1	5.1	9	9	86	86	<0.2	<0.2	0.5	0.5						
					4.1	0.2	20	25.2	25.2	8.1	8.1	30.3	30.3	79.4	79.4	5.5	5.5	5.1	5.1	8	8	87	87	<0.2	<0.2	0.3	0.3						
					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SR3	Rainy	Moderate	08:12	9.3	Surface	1.0	0.3	350	26.2	26.2	8.1	8.1	29.6	29.6	82.1	82.1	5.6	5.3	7.8	9.1	9	10	-	-	822171	807584	-	-	-	-			
						1.0	0.3	322	26.2	26.2	8.1	8.1	29.6	29.6	82.0	82.1	5.6	5.3	7.8	9.1	9	10	-	10	-	-	-	-	-	-	-	-	
						4.7	0.2	18	24.6	24.5	8.0	8.0	30.8	30.8	71.5	71.5	5.0	5.0	9.2	9.2	10	10	-	10	-	-	-	-	-	-	-	-	-
					4.7	0.2	19	24.5	24.4	8.1	8.1	30.8	30.8	71.5	71.5	5.0	5.0	9.2	9.2	10	10	-	10	-	-	-	-	-	-	-	-	-	-
					8.3	0.2	44	24.4	24.4	8.1	8.1	31.2	31.2	73.4	73.5	5.1	5.1	10.3	10.3	11	11	-	-	-	-	-	-	-	-	-	-	-	-
					8.3	0.2	45	24.4	24.4	8.1	8.1	31.2	31.2	73.5	73.5	5.1	5.1	10.3	10.3	11	11	-	-	-	-	-	-	-	-	-	-	-	-
SR4A	Cloudy	Calm	07:59	8.8	Surface	1.0	0.3	56	28.3	28.3	8.3	8.3	26.3	26.3	79.5	79.5	5.4	5.4	13.9	13.0	28	33	-	-	817197	807793	-	-	-	-			
						1.0	0.3	58	28.3	28.3	8.3	8.3	26.3	26.3	79.5	79.5	5.4	5.4	13.9	13.0	28	33	-	33	-	-	-	-	-	-	-	-	
						4.4	0.5	55	28.2	28.2	8.2	8.2	26.3	26.3	79.5	79.5	5.4	5.4	10.3	10.3	32	32	-	-	-	-	-	-	-	-	-	-	-
					4.4	0.6	60	28.2	28.2	8.2	8.2	26.3	26.3	79.5	79.5	5.4	5.4	10.3	10.3	32	32	-	-	-	-	-	-	-	-	-	-	-	-
					7.8	0.6	43	28.2	28.2	8.2	8.2	26.3	26.3	80.9	80.9	5.5	5.5	14.8	14.8	38	38	-	-	-	-	-	-	-	-	-	-	-	-
					7.8	0.6	47	28.2	28.2	8.2	8.2	26.3	26.3	80.9	80.9	5.5	5.5	14.8	14.8	37	37	-	-	-	-	-	-	-	-	-	-	-	-
SR5A	Cloudy	Calm	08:12	5.4	Surface	1.0	0.3	320	28.6	28.6	8.4	8.4	26.3	26.3	78.7	78.7	5.3	5.3	10.4	12.1	20	22	-	-	816612	810704	-	-	-	-			
						1.0	0.4	330	28.6	28.6	8.4	8.4	26.3	26.3	78.7	78.7	5.3	5.3	10.4	12.1	21	22	-	22	-	-	-	-	-	-	-	-	
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					4.4	0.3	17	28.6	28.6	8.4	8.4	26.4	26.4	84.5	84.5	5.7	5.7	13.7	13.7	23	23	-	22	-	-	-	-	-	-	-	-	-	
					4.4	0.4	17	28.6	28.6	8.4	8.4	26.4	26.4	84.5	84.5	5.7	5.7	13.7	13.7	23	23	-	22	-	-	-	-	-	-	-	-	-	-
					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SR6	Cloudy	Calm	08:32	4.3	Surface	1.0	0.1	266	28.6	28.6	8.4	8.4	26.3	26.3	75.6	75.6	5.1	5.1	18.9	15.6	13	13	-	-	817912	814654	-	-	-				

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

Water Quality Monitoring

Water Quality Monitoring Results on 30 August 18 during Mid-Ebb Tide

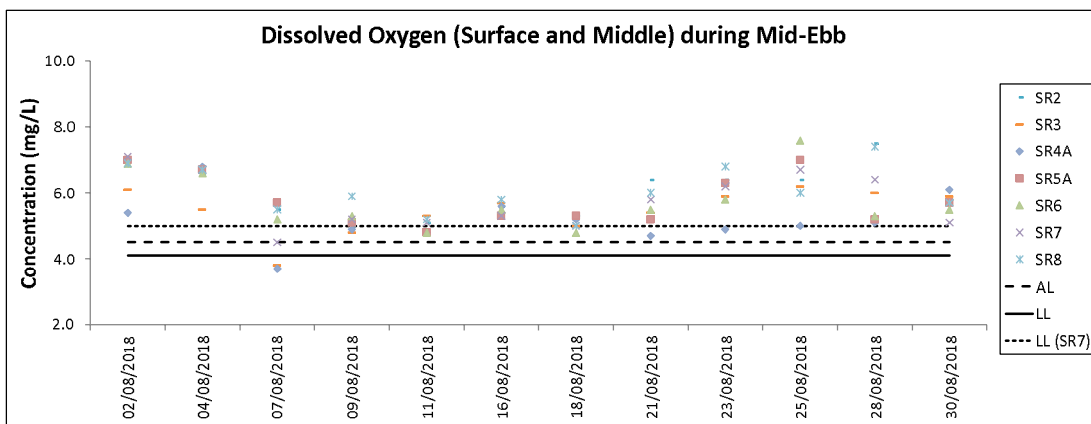
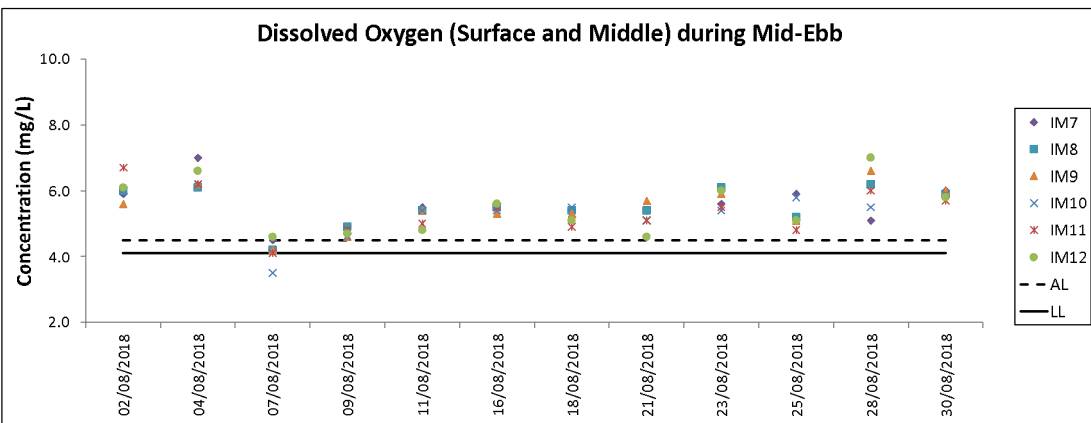
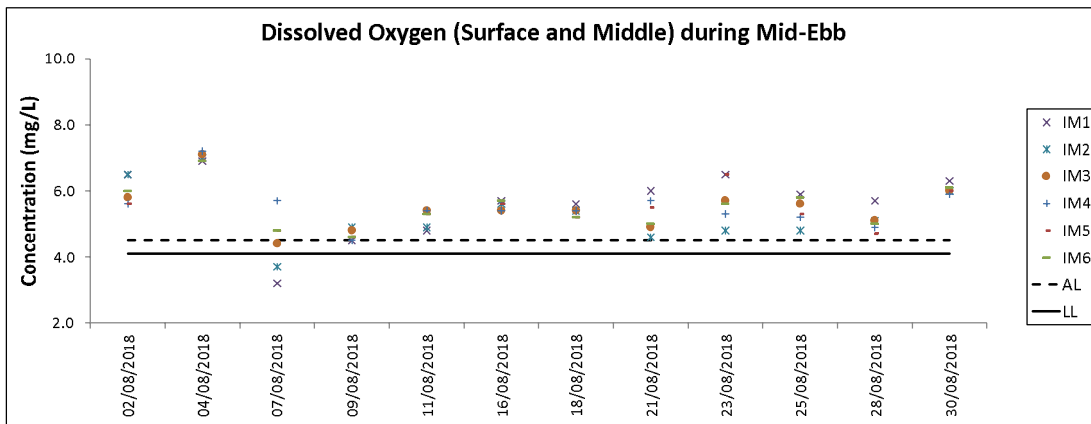
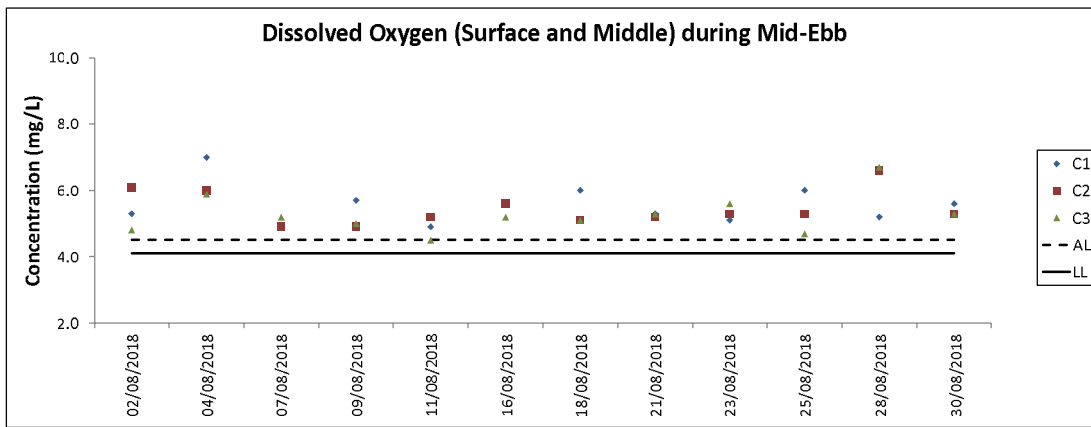
Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity (NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (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	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA
IM9	Cloudy	Moderate	14:11	8.0	Surface	1.0	0.4	82	28.2	28.2	7.9	7.9	19.2	19.2	85.1	85.2	6.0	6.0	15.3	6.0	9	83	86	822087	808819	<0.2	2.6	2.5				
						1.0	0.5	89	28.2	28.2	7.9	7.9	19.2	19.2	85.2	85.2	6.0	6.0	15.4	6.0	9	83	86	822087	808819	<0.2	2.4					
					Middle	4.0	0.5	89	28.1	28.1	8.0	8.0	21.3	21.3	85.0	85.0	5.9	5.9	15.5	5.9	11	87	86	822087	808819	<0.2	2.6					
						4.0	0.5	86	28.1	28.1	8.0	8.0	21.3	21.3	85.0	85.0	5.9	5.9	15.5	5.9	11	85	86	822087	808819	<0.2	2.5					
					Bottom	7.0	0.3	77	28.1	28.1	8.0	8.0	21.5	21.5	86.2	86.2	6.0	6.0	14.3	6.0	14	89	86	822087	808819	<0.2	2.6					
						7.0	0.3	84	28.1	28.1	8.0	8.0	21.5	21.5	86.2	86.2	6.0	6.0	14.3	6.0	14	90	86	822087	808819	<0.2	2.4					
IM10	Cloudy	Moderate	14:18	7.2	Surface	1.0	0.6	84	28.2	28.2	7.9	7.9	19.4	19.4	83.4	83.4	5.9	5.9	12.4	5.9	9	83	86	822410	809815	<0.2	2.7	2.6				
						1.0	0.6	90	28.2	28.2	7.9	7.9	19.4	19.4	83.4	83.4	5.9	5.9	12.4	5.9	9	82	86	822410	809815	<0.2	2.7					
					Middle	3.6	0.6	96	28.1	28.1	8.0	8.0	21.4	21.4	83.7	83.7	5.8	5.8	13.1	5.8	10	85	86	822410	809815	<0.2	2.5					
						3.6	0.6	101	28.1	28.1	8.0	8.0	21.4	21.4	83.7	83.7	5.8	5.8	13.1	5.8	10	86	86	822410	809815	<0.2	2.6					
					Bottom	6.2	0.5	93	28.1	28.1	7.9	7.9	21.5	21.5	87.8	87.8	6.1	6.1	17.3	6.1	12	88	86	822410	809815	<0.2	2.6					
						6.2	0.5	100	28.1	28.1	7.9	7.9	21.5	21.5	87.8	87.8	6.1	6.1	17.3	6.1	12	89	86	822410	809815	<0.2	2.5					
IM11	Cloudy	Moderate	14:27	7.6	Surface	1.0	0.6	87	28.1	28.1	8.0	8.0	19.7	19.7	81.2	81.1	5.7	5.7	13.3	5.7	11	83	86	822063	811452	<0.2	2.6	2.6				
						1.0	0.6	89	28.1	28.1	8.0	8.0	19.7	19.7	80.9	80.9	5.7	5.7	13.3	5.7	11	81	86	822063	811452	<0.2	2.6					
					Middle	3.8	0.6	95	28.1	28.1	8.0	8.0	20.8	20.8	79.7	79.7	5.6	5.6	14.3	5.6	10	87	86	822063	811452	<0.2	2.6					
						3.8	0.6	100	28.1	28.1	8.0	8.0	20.8	20.8	79.7	79.7	5.6	5.6	14.3	5.6	10	86	86	822063	811452	<0.2	2.6					
					Bottom	6.6	0.2	100	28.0	28.0	7.9	7.9	22.9	22.9	82.6	82.6	5.7	5.7	15.6	5.7	10	89	86	822063	811452	<0.2	2.5					
						6.6	0.2	100	28.0	28.0	7.9	7.9	22.9	22.9	82.6	82.6	5.7	5.7	15.6	5.7	11	89	86	822063	811452	<0.2	2.5					
IM12	Cloudy	Moderate	14:35	8.8	Surface	1.0	0.7	90	28.1	28.1	8.2	8.2	19.6	19.6	82.2	82.2	5.8	5.8	13.1	5.8	12	82	86	821471	812024	<0.2	2.4	2.5				
						1.0	0.7	95	28.1	28.1	8.2	8.2	19.6	19.6	82.2	82.2	5.8	5.8	13.1	5.8	12	83	86	821471	812024	<0.2	2.4					
					Middle	4.4	0.6	92	28.0	28.0	8.0	8.0	21.3	21.3	82.7	82.7	5.8	5.8	13.7	5.8	12	86	86	821471	812024	<0.2	2.4					
						4.4	0.6	100	28.0	28.0	8.0	8.0	21.3	21.3	82.7	82.7	5.8	5.8	13.7	5.8	11	85	86	821471	812024	<0.2	2.5					
					Bottom	7.8	0.4	110	28.0	28.0	8.0	8.0	22.1	22.1	85.8	85.8	5.9	5.9	13.8	5.9	12	88	86	821471	812024	<0.2	2.5					
						7.8	0.4	119	28.0	28.0	8.0	8.0	22.1	22.1	85.8	85.8	5.9	5.9	13.8	5.9	12	89	86	821471	812024	<0.2	2.8					
SR2	Cloudy	Moderate	14:58	4.6	Surface	1.0	0.8	71	28.1	28.1	8.0	8.0	19.9	19.9	82.2	82.2	5.8	5.8	14.4	5.8	13	83	86	821490	814161	<0.2	2.5	2.6				
						1.0	0.8	73	28.1	28.1	8.0	8.0	19.9	19.9	82.2	82.2	5.8	5.8	14.4	5.8	14	81	86	821490	814161	<0.2	2.6					
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-
					Bottom	3.6	0.4	78	28.0	28.0	7.9	7.9	22.1	22.1	83.4	83.4	5.8	5.8	14.2	5.8	15	87	86	821490	814161	<0.2	2.5					
						3.6	0.4	79	28.0	28.0	7.9	7.9	22.1	22.1	83.4	83.4	5.8	5.8	14.2	5.8	16	85	86	821490	814161	<0.2	2.6					
SR3	Rainy	Moderate	14:00	9.3	Surface	1.0	0.4	32	28.3	28.3	7.8	7.8	18.3	18.3	81.9	81.9	5.8	5.8	13.0	5.8	7	-	-	822142	807591	-	-	-				
						1.0	0.4	32	28.3	28.3	7.8	7.8	18.3	18.3	81.9	81.9	5.8	5.8	13.0	5.8	7	-	-	822142	807591	-	-					
					Middle	4.7	0.3	74	28.2	28.2	7.9	7.9	20.4	20.4	84.6	84.6	5.9	5.9	18.1	5.9	8	-	-	822142	807591	-	-					
						4.7	0.4	74	28.2	28.2	7.9	7.9	20.4	20.4	84.6	84.6	5.9	5.9	18.1	5.9	8	-	-	822142	807591	-	-					
					Bottom	8.3	0.1	277	28.2	28.2	7.9	7.9	21.0	21.0	88.4	88.4	6.1	6.1	16.6	6.1	8	-	-	822142	807591	-	-					
						8.3	0.1	294	28.2	28.2	7.9	7.9	21.0	21.0	88.4	88.4	6.1	6.1	16.6	6.1	9	-	-	822142	807591	-	-					
SR4A	Rainy	Moderate	15:14	9.6	Surface	1.0	0.3	85	28.0	28.0	7.9	7.9	21.1	21.1	87.4	87.4	6.1	6.1	17.0	6.1	11	-	-	817169	807790	-	-	-				
						1.0	0.3	91	28.0	28.0	7.9	7.9	21.1	21.1	87.4	87.4	6.1	6.1	17.0	6.1	12	-	-	817169	807790	-	-					
					Middle	4.8	0.2	78	28.0	28.0	7.9	7.9	21.2	21.2	87.4	87.4	6.1	6.1	18.5	6.1	12	-	-	817169	807790	-	-					
						4.8	0.2	81	28.0	28.0	7.9	7.9	21.2	21.2	87.4	87.4	6.1	6.1	18.6	6.1	12	-	-	817169	807790	-	-					
					Bottom	8.6	0.2	73	28.0	28.0	7.9	7.9	21.3	21.3	88.4	88.5	6.2	6.2	20.1	6.2	14	-	-	817169	807790	-	-					
						8.6	0.2	74	28.0	28.0	7.9	7.9	21.3	21.3	88.5	88.5	6.2	6.2	20.0	6.2	14	-	-	817169	807790	-	-					
SR5A	Rainy	Moderate	15:30	5.3	Surface	1.0	0.1	39	27.7	27.7	7.9	7.9	22.1	22.1	81.7	81.7	5.7	5.7	8.0	5.7	9	-	-	816594	810715	-	-	-				
						1.0	0.1	40	27.7	27.7	7.9	7.9	22.1	22.1	81.7	81.7	5.7	5.7	7.9	5.7	10	-	-	816594	810715	-	-					
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	
					Bottom	4.3	0.1	142	27.8	27.8	7.9	7.9	22.3	22.3	85.2	85.3	5.9	5.9	8.6	5.9	13	-	-	816594	810715	-	-					
						4.3	0.1	149	27.8	27.8	7.9	7.9	22.3	22.3	85.3	85.3	5.9	5.9	8.7	5.9	14	-	-	816594	810715	-	-					
SR6	Rainy	Moderate	16:08	4.9	Surface	1.0	0.1	28	27.9	27.9	7.9	7.9	21.6	21.6	79.3	79.4	5.5	5.5	11.3	5.5	11	-	-	817884	814667	-	-	-				
						1.0	0.1	28	27.9	27.9	7.9	7.9	21.6	21.6	79.5	79.4	5.5	5.5	11.4	5.5	10	-	-	817884	814667	-	-					
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-		
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-		
					Bottom	3.9	0.1	118	27.9	27.9																						

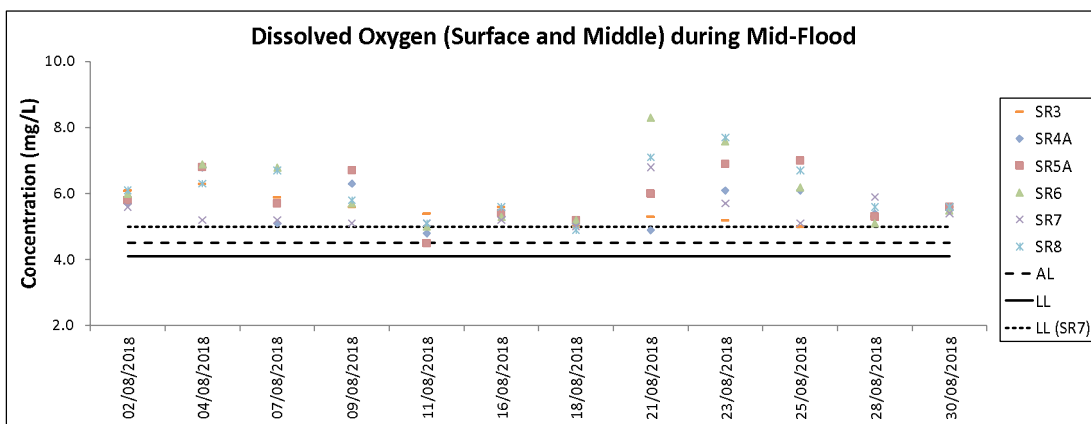
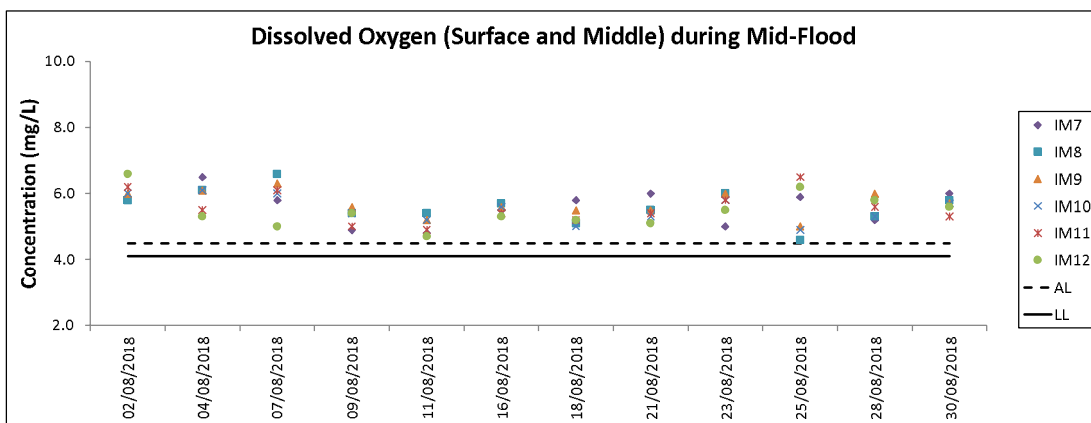
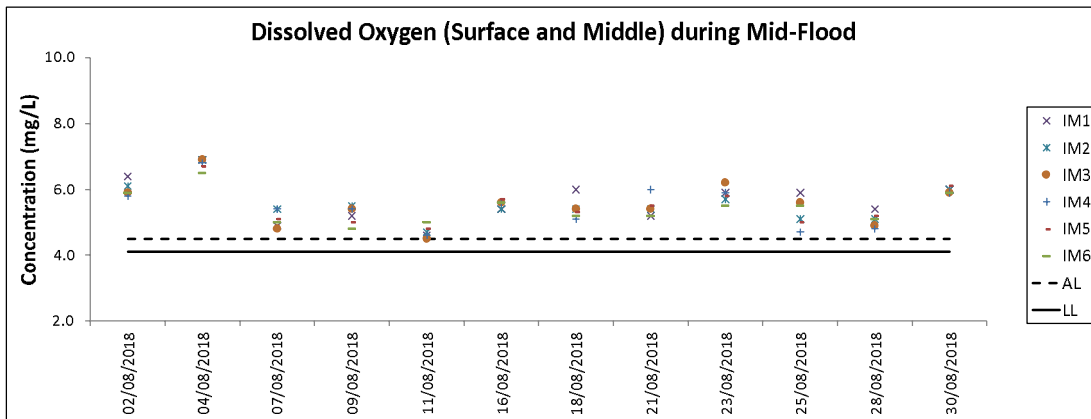
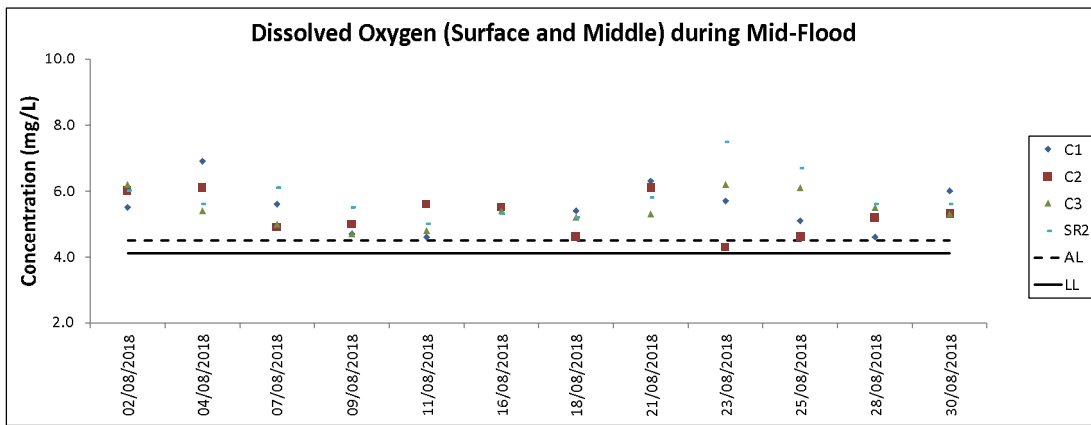
Expansion of Hong Kong International Airport into a Three-Runway System

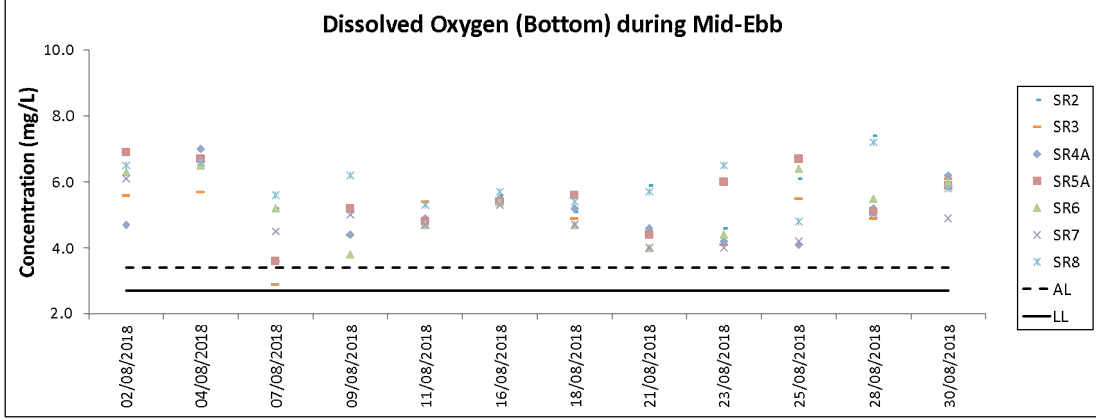
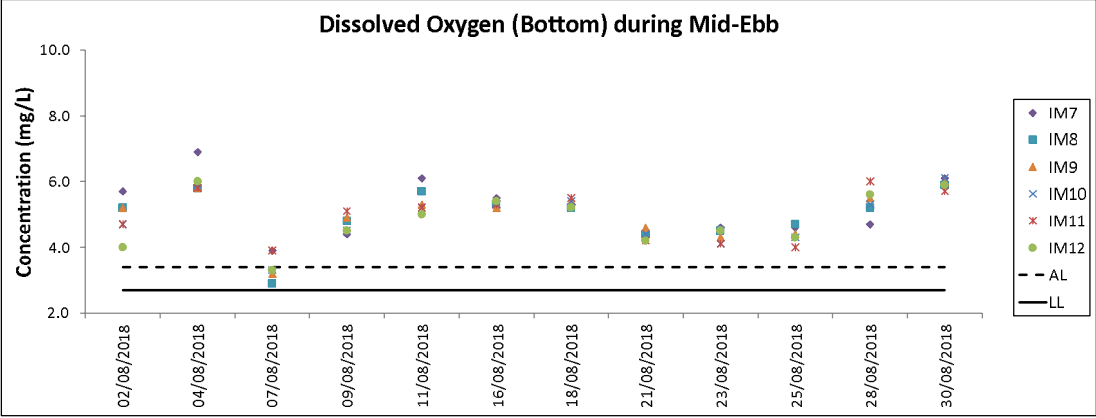
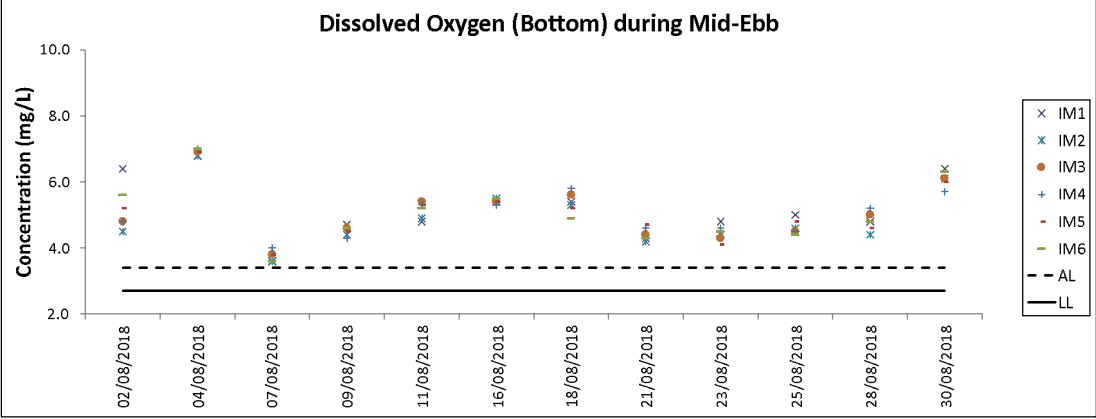
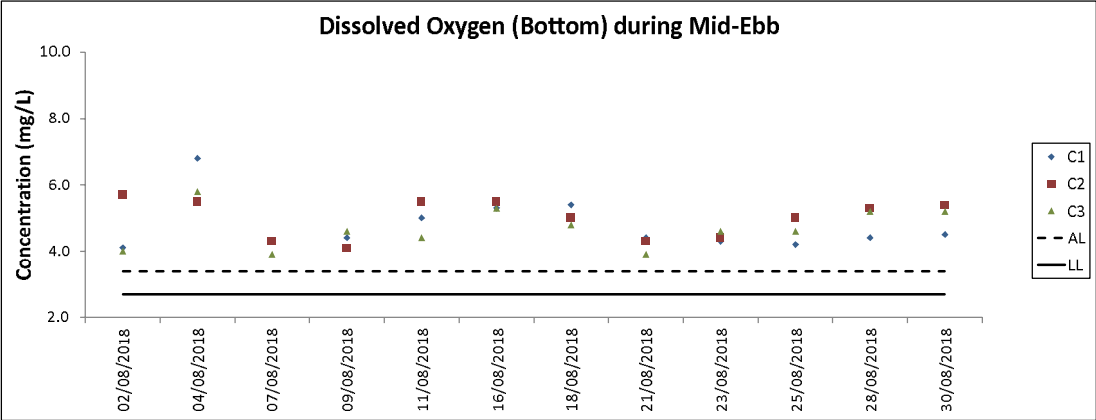
Water Quality Monitoring

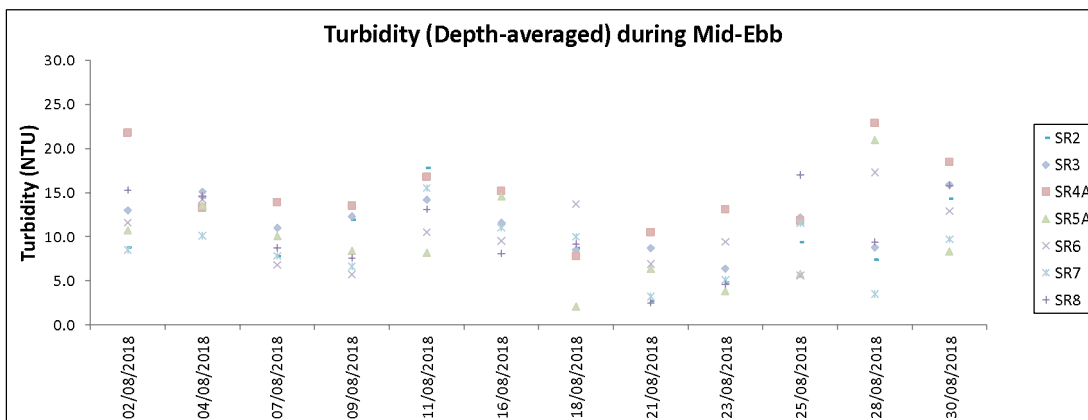
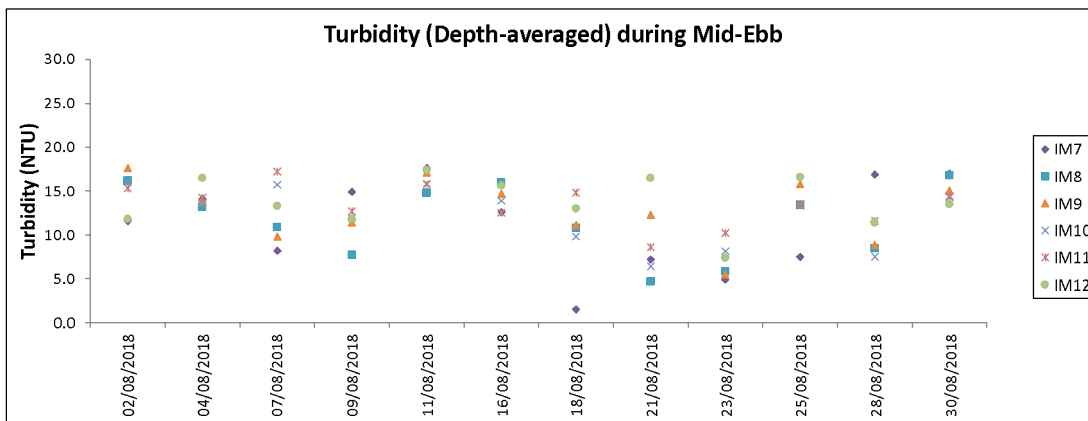
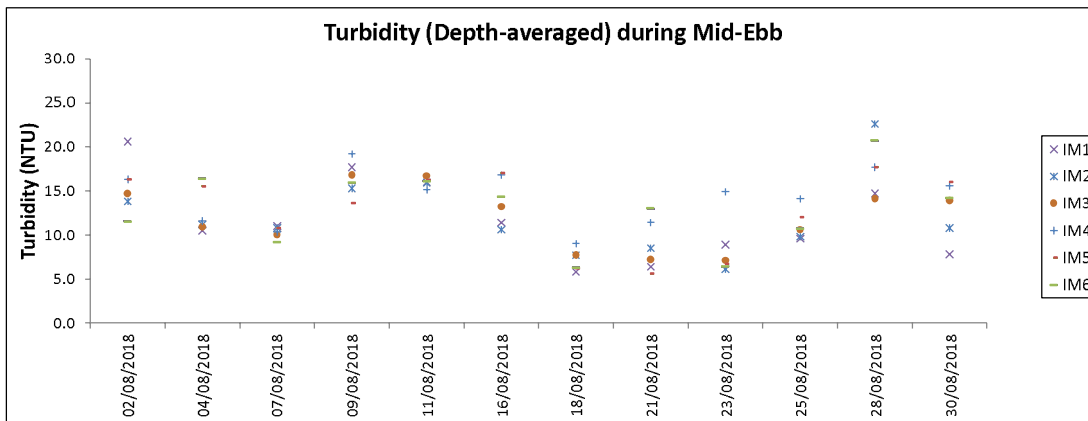
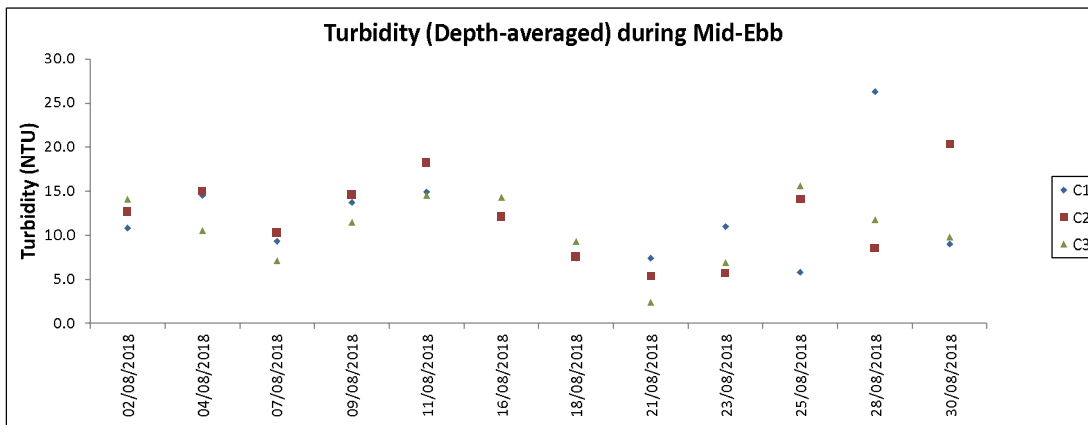
Water Quality Monitoring Results on 30 August 18 during Mid-Flood Tide

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	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA
C1	Cloudy	Moderate	09:38	9.1	Surface	1.0	0.7	39	28.1	7.9	7.9	19.3	19.3	86.8	86.8	6.1	6.0	14.2	17.3	11	12	82	86	815641	804249	<0.2	<0.2	1.6	1.5			
						1.0	0.8	40	28.1	7.9	7.9	19.3	19.3	86.7	86.8	6.1	6.0	14.4	17.3	11	12	83	86	<0.2	<0.2	1.6	1.5					
						4.6	0.7	44	28.0	7.9	7.9	21.9	21.9	82.9	82.9	5.8	5.8	17.2	17.0	12	12	85	85	<0.2	<0.2	1.5	1.4					
					Middle	4.6	0.7	44	28.0	7.9	7.9	21.9	21.9	82.9	82.9	5.8	5.8	17.0	17.0	12	12	85	85	<0.2	<0.2	1.5	1.4					
						8.1	0.5	44	27.9	7.9	7.9	23.4	23.4	80.8	80.8	5.6	5.6	20.5	20.5	13	13	89	89	<0.2	<0.2	1.4	1.6					
						8.1	0.5	48	27.9	7.9	7.9	23.4	23.4	80.8	80.8	5.6	5.6	20.3	20.3	13	13	89	89	<0.2	<0.2	1.6	1.6					
C2	Cloudy	Moderate	10:26	12.2	Surface	1.0	0.6	353	28.3	7.8	7.8	16.6	16.6	78.4	78.4	5.6	5.3	11.0	14.2	7	7	77	83	825699	806966	<0.2	<0.2	2.6	2.5			
						1.0	0.6	358	28.3	7.8	7.8	16.6	16.6	78.4	78.4	5.6	5.3	11.0	14.2	6	7	79	83	<0.2	<0.2	2.6	2.5					
						6.1	0.4	16	28.3	7.8	7.8	19.9	19.9	72.2	72.2	5.0	5.0	14.9	15.1	6	7	83	89	<0.2	<0.2	3.0	2.0					
					Middle	6.1	0.4	17	28.3	7.8	7.8	19.9	19.9	72.2	72.2	5.0	5.0	15.1	15.1	7	7	84	89	<0.2	<0.2	2.0	2.4					
						11.2	0.4	316	28.2	7.8	7.8	21.2	21.2	76.4	76.4	5.3	5.3	16.7	16.7	8	8	89	86	<0.2	<0.2	2.4	2.5					
						11.2	0.4	339	28.2	7.8	7.8	21.2	21.2	76.4	76.4	5.3	5.3	16.7	16.7	7	7	86	89	<0.2	<0.2	2.5	2.5					
C3	Rainy	Moderate	08:33	11.5	Surface	1.0	0.6	270	28.1	7.9	7.9	21.0	21.0	77.2	77.2	5.4	5.3	10.9	14.1	7	8	89	88	822106	817786	<0.2	<0.2	2.6	2.6			
						1.0	0.7	293	28.1	7.9	7.9	21.0	21.0	77.2	77.2	5.4	5.3	10.9	14.1	7	8	87	87	<0.2	<0.2	2.5	2.5					
						5.8	0.7	254	28.0	7.9	7.9	22.7	22.7	73.4	73.4	5.1	5.1	12.5	12.5	8	8	87	86	<0.2	<0.2	2.6	2.6					
					Middle	5.8	0.8	277	28.0	7.9	7.9	22.7	22.7	73.4	73.4	5.1	5.1	12.5	12.5	8	8	86	88	<0.2	<0.2	2.5	2.5					
						10.5	0.5	278	27.8	7.9	7.9	24.1	24.1	72.1	72.1	5.0	5.0	18.9	18.9	9	9	88	89	<0.2	<0.2	2.9	2.5					
						10.5	0.5	296	27.8	7.9	7.9	24.1	24.1	72.1	72.1	5.0	5.0	18.9	18.9	9	9	89	89	<0.2	<0.2	2.5	2.5					
IM1	Cloudy	Moderate	09:46	5.8	Surface	1.0	0.4	6	27.9	7.9	7.9	22.2	22.2	86.9	86.9	6.0	6.0	16.6	18.9	17	18	82	86	817925	807151	<0.2	<0.2	1.4	1.5			
						1.0	0.4	6	27.9	7.9	7.9	22.2	22.2	86.9	86.9	6.0	6.0	16.6	18.9	17	18	83	89	<0.2	<0.2	1.4	1.6					
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						4.8	0.4	13	27.9	7.9	7.9	22.2	22.2	87.6	87.7	6.1	6.1	21.2	21.2	18	18	89	90	<0.2	<0.2	1.5	1.6					
						4.8	0.4	13	27.9	7.9	7.9	22.2	22.2	87.7	87.7	6.1	6.1	21.2	21.2	18	18	90	90	<0.2	<0.2	1.6	1.6					
IM2	Cloudy	Moderate	09:52	8.2	Surface	1.0	0.7	27	28.0	7.9	7.9	22.0	22.0	86.7	86.7	6.0	6.0	11.1	16.5	10	14	81	84	818185	806160	<0.2	<0.2	1.2	1.4			
						1.0	0.8	28	28.0	7.9	7.9	22.0	22.0	86.7	86.7	6.0	6.0	11.1	16.5	10	14	80	84	<0.2	<0.2	1.4	1.4					
						4.1	0.6	24	28.0	7.9	7.9	22.1	22.1	85.4	85.4	5.9	5.9	17.7	17.9	14	14	84	88	<0.2	<0.2	1.6	1.4					
					Middle	4.1	0.6	24	28.0	7.9	7.9	22.1	22.1	85.4	85.4	5.9	5.9	17.9	17.9	14	14	84	88	<0.2	<0.2	1.6	1.4					
						7.2	0.6	17	28.1	7.9	7.9	22.3	22.3	84.9	84.9	5.9	5.9	20.7	20.6	17	18	88	89	<0.2	<0.2	1.4	1.5					
						7.2	0.6	18	28.1	7.9	7.9	22.3	22.3	84.9	84.9	5.9	5.9	20.6	20.6	18	18	89	89	<0.2	<0.2	1.5	1.5					
IM3	Cloudy	Moderate	10:00	8.0	Surface	1.0	0.7	19	28.1	7.9	7.9	21.7	21.7	85.2	85.2	5.9	5.9	17.0	19.5	10	12	81	86	818764	805600	<0.2	<0.2	1.6	1.5			
						1.0	0.7	19	28.1	7.9	7.9	21.7	21.7	85.2	85.2	5.9	5.9	17.1	19.5	11	12	81	86	<0.2	<0.2	1.5	1.5					
						4.0	0.4	25	28.1	7.9	7.9	22.2	22.2	83.6	83.6	5.8	5.8	19.4	19.6	12	12	86	86	<0.2	<0.2	1.4	1.4					
					Middle	4.0	0.5	25	28.1	7.9	7.9	22.2	22.2	83.6	83.6	5.8	5.8	19.6	19.6	12	12	86	86	<0.2	<0.2	1.4	1.4					
						7.0	0.4	21	28.1	7.9	7.9	22.3	22.3	83.8	83.9	5.8	5.8	21.9	21.9	14	14	90	91	<0.2	<0.2	1.6	1.4					
						7.0	0.4	22	28.1	7.9	7.9	22.3	22.3	83.9	83.9	5.8	5.8	21.9	21.9	14	14	91	91	<0.2	<0.2	1.4	1.4					
IM4	Cloudy	Moderate	10:09	8.3	Surface	1.0	0.9	26	28.1	7.9	7.9	20.1	20.1	87.6	87.6	6.1	5.9	11.9	15.3	10	11	81	85	819741	804586	<0.2	<0.2	1.4	1.5			
						1.0	0.9	27	28.1	7.9	7.9	20.1	20.1	87.5	87.6	6.1	6.1	12.0	15.3	10	11	80	85	<0.2	<0.2	1.3	1.5					
						4.2	0.5	31	28.1	7.9	7.9	21.9	21.9	82.4	82.4	5.7	5.7	15.9	15.7	10	10	84	85	<0.2	<0.2	1.7	1.6					
					Middle	4.2	0.5	33	28.1	7.9	7.9	21.9	21.9	82.4	82.4	5.7	5.7	15.7	15.7	10	10	85	85	<0.2	<0.2	1.6	1.6					
						7.3	0.4	18	28.1	7.9	7.9	22.0	22.0	83.7	83.8	5.8	5.8	18.0	18.0	12	12	90	89	<0.2	<0.2	1.5	1.5					
						7.3	0.5	19	28.1	7.9	7.9	22.0	22.0	83.8	83.8	5.8	5.8	18.2	18.2	11	11	89	89	<0.2	<0.2	1.5	1.5					
IM5	Cloudy	Moderate	10:16	7.4	Surface	1.0	0.6	21	28.1	7.9	7.9	20.2	20.2	87.3	87.3	6.1	6.1	16.2	19.5	9	10	80	85	820723	804853	<0.2	<0.2	1.7	1.6			
						1.0	0.7	22	28.1	7.9	7.9	20.2	20.2	87.3	87.3	6.1	6.1	16.5	19.5	9	10	80	85	<0.2	<0.2	1.7	1.6					
						3.7	0.6	11	28.1	7.9	7.9	20.9	20.9	85.5	85.5	6.0	6.0	19.6	19.7	10	10	85	86	<0.2	<0.2	1.6	1.5					
					Middle	3.7	0.7	11	28.1	7.9	7.9	20.9	20.9	85.5	85.5	6.0	6.0	19.7	19.7	10	10	86	86	<0.2	<0.2	1.5	1.5					
						6.4	0.5	15	28.1	7.9	7.9	21.2	21.2	86.3	86.4	6.0	6.0	22.6	22.5	12	12	89	89	<0.2	<0.2	1.6	1.6					
						6.4	0.6	15	28.1	7.9	7.9	21.2	21.2	86.4	86.4	6.0	6.0	22.5	22.5	12	12	89	89	<0.2	<0.2	1.6	1.6					
IM6	Cloudy	Moderate	10:26	7.8	Surface	1.0	0.4	34	28.1	7.9	7.9	21.3	21.3	85.3	85.3	5.9	5.9	14.0	16.9	14	16	80	84	821046	805837	<0.2	<0.2	1.6	1.6			
						1.0	0.4	36	28.1	7.9	7.9	21.3	21.3	85.3	85.3	5.9	5.9	14.1	16.9	14	16	80	84	<0.2	<0.2	1.6	1.8					
						3.9	0.4	41	28.1	7.9	7.9	21.4	21.4	85.4	85.4	5.9	5.9	15.9	16.0	16	16	84	90	<0.2	<0.2	1.7	1.6					
					Middle	3.9	0.4																									

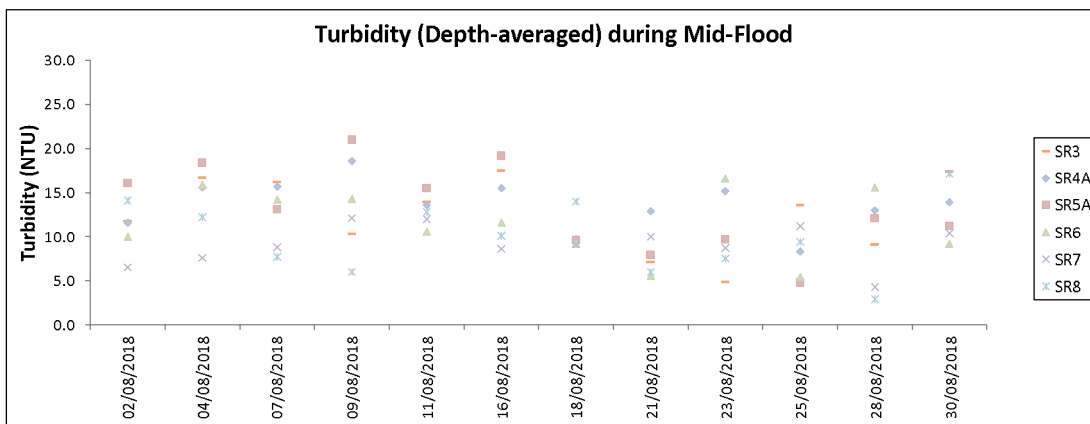
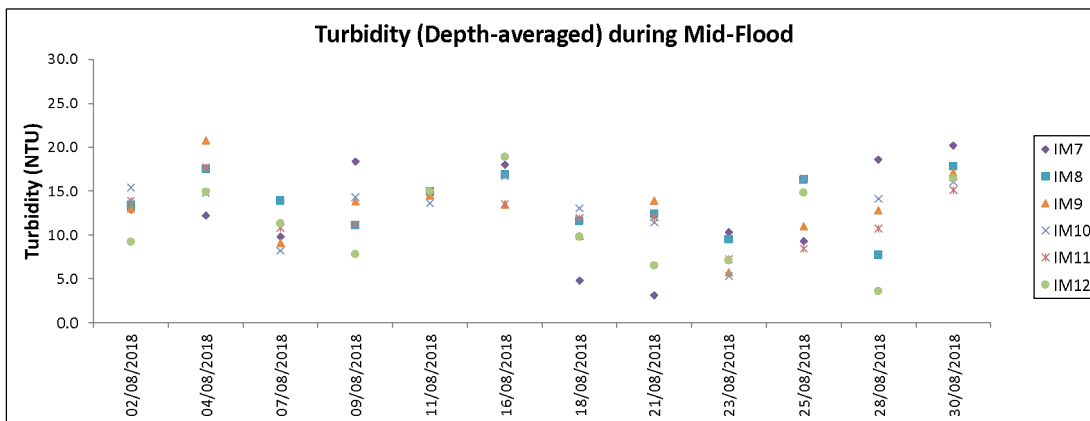
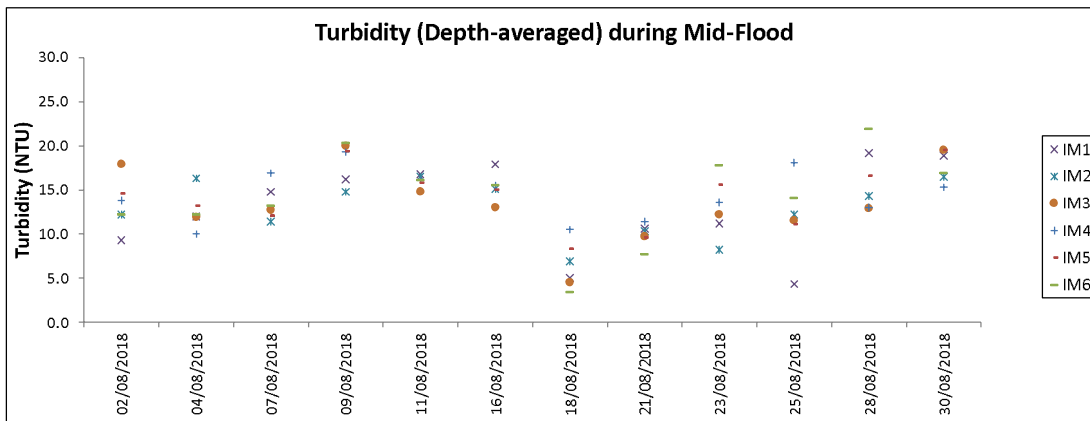
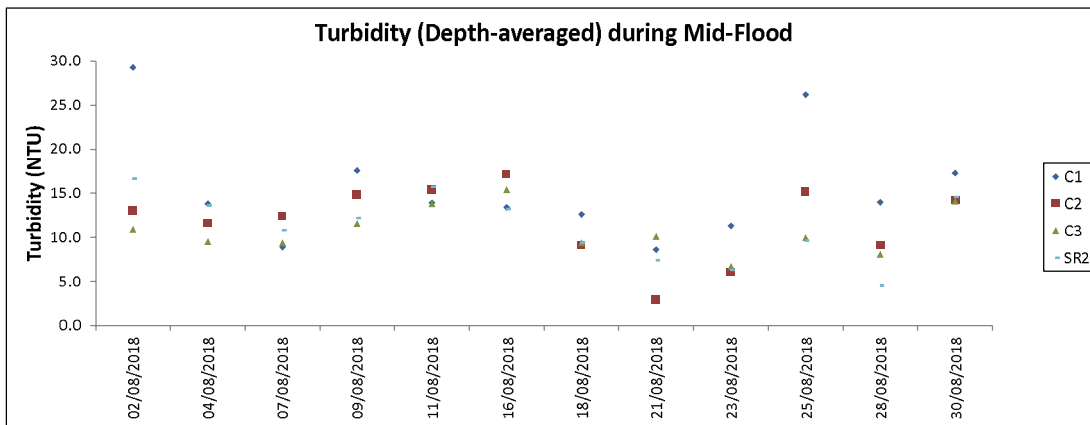




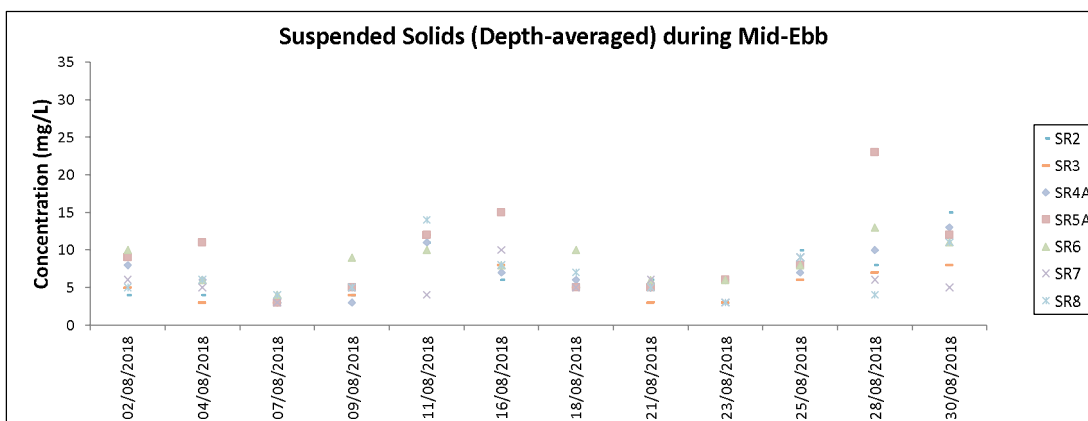
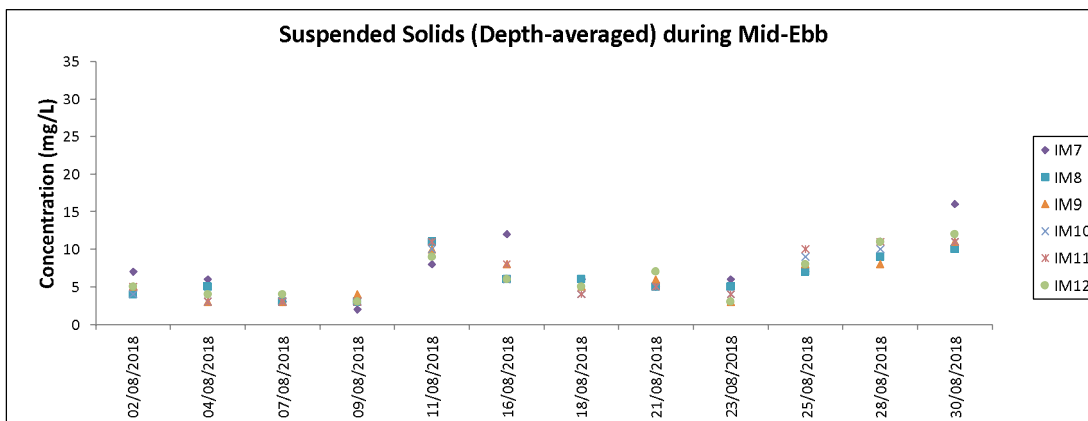
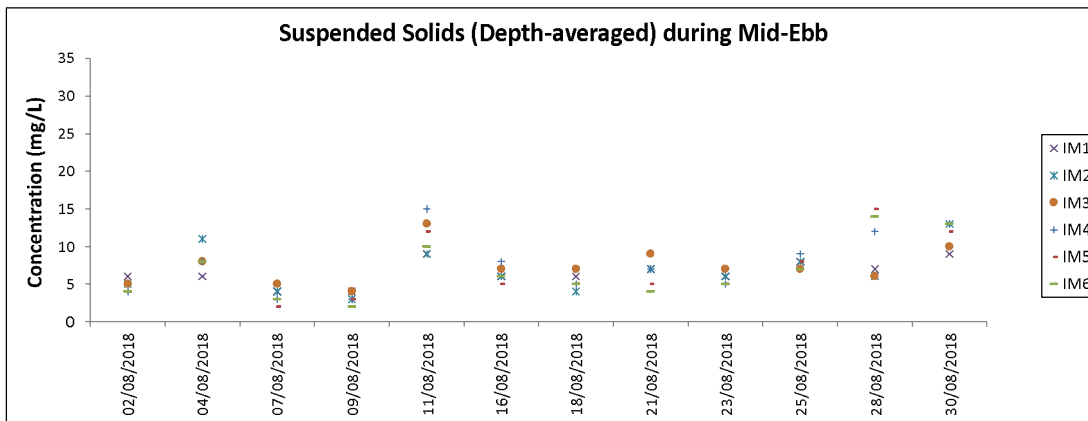
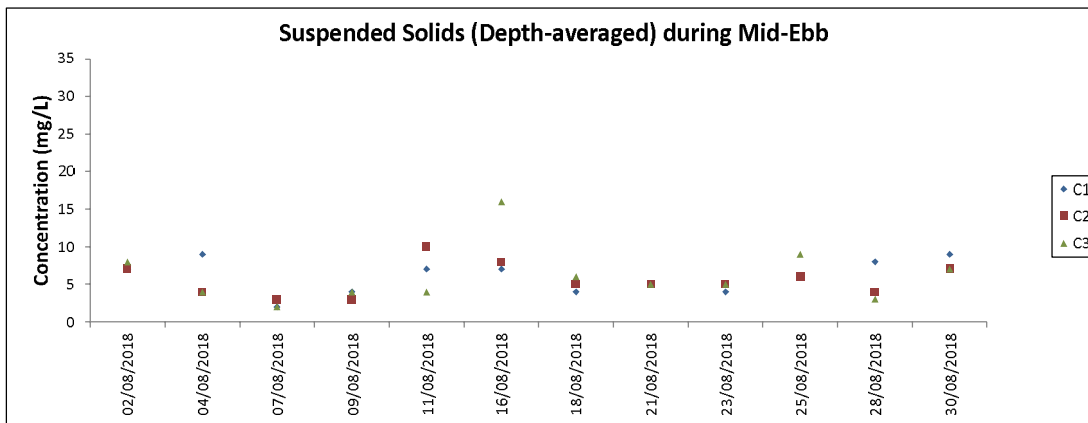




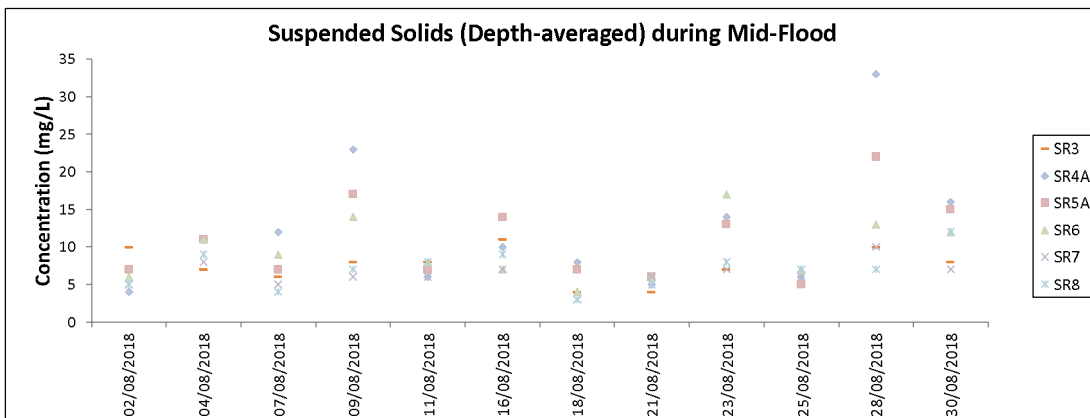
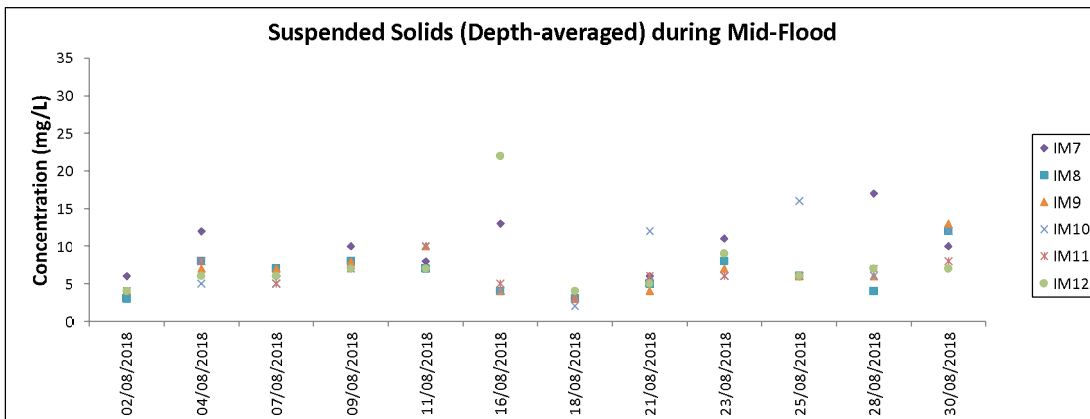
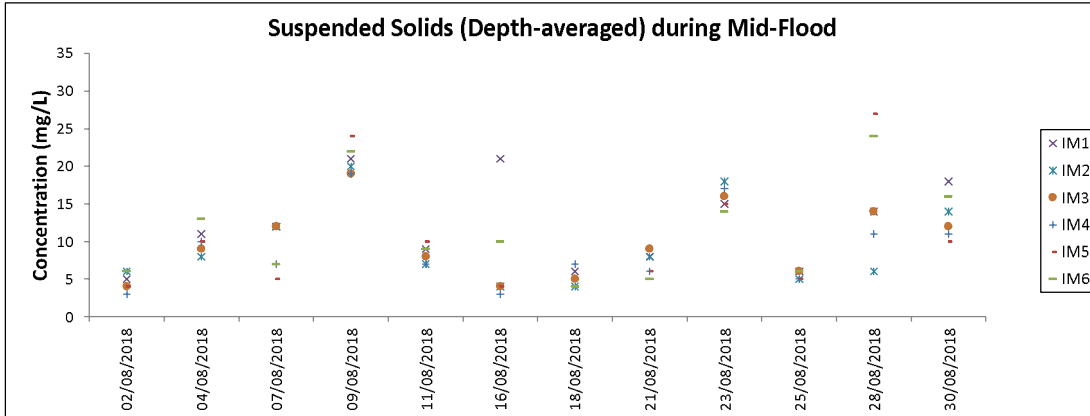
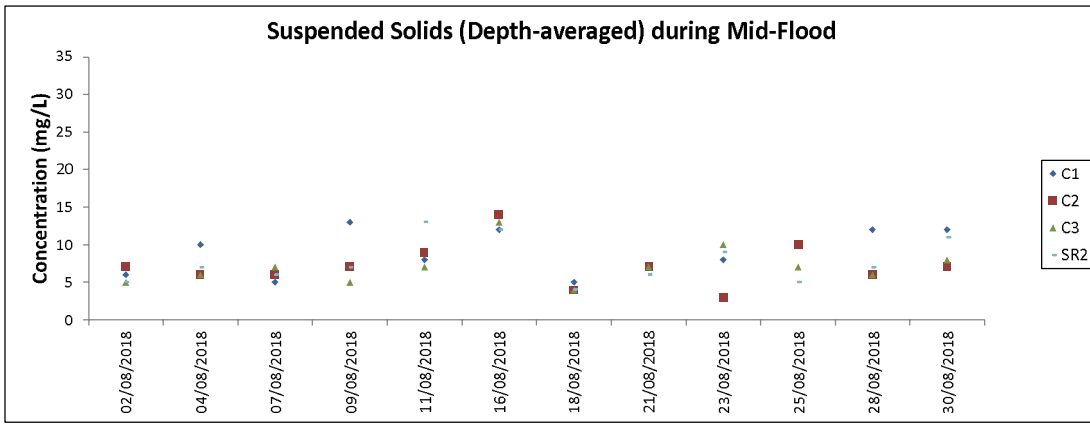
Note: The Action and Limit Level of turbidity can be referred to Table 4.2 of the monthly EM&A report.



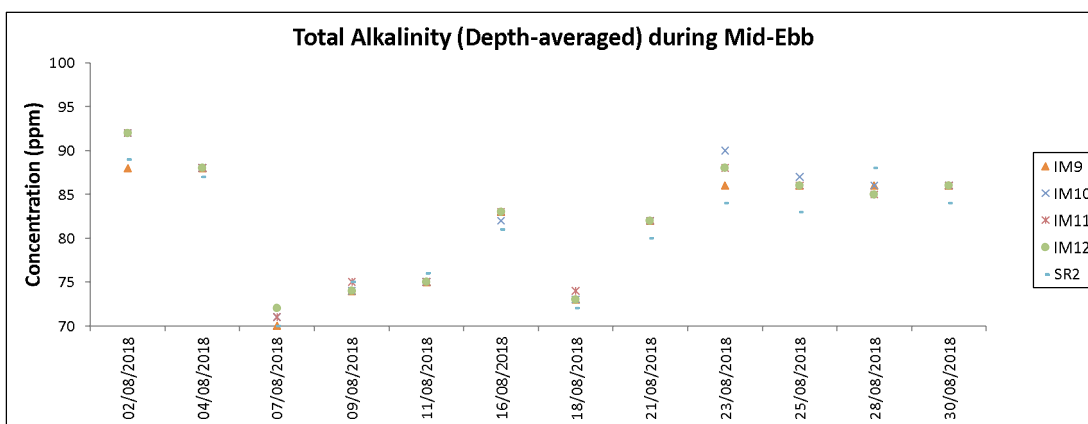
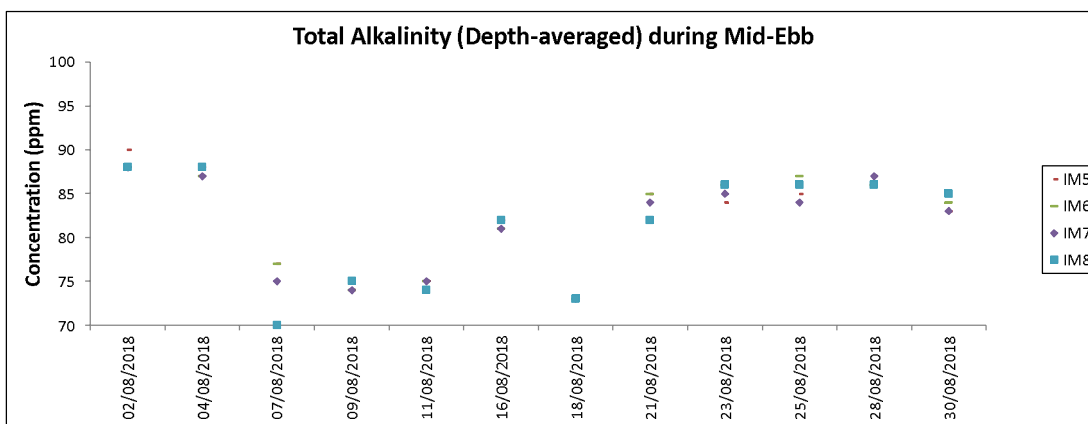
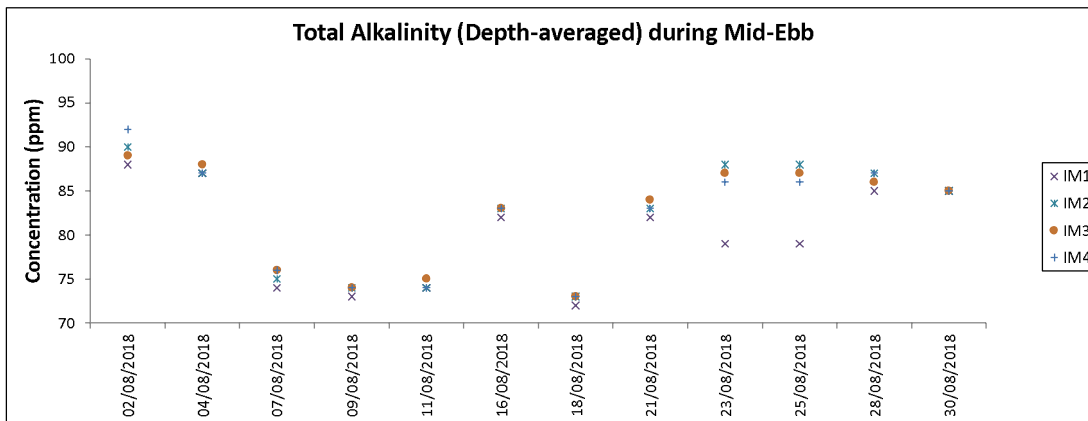
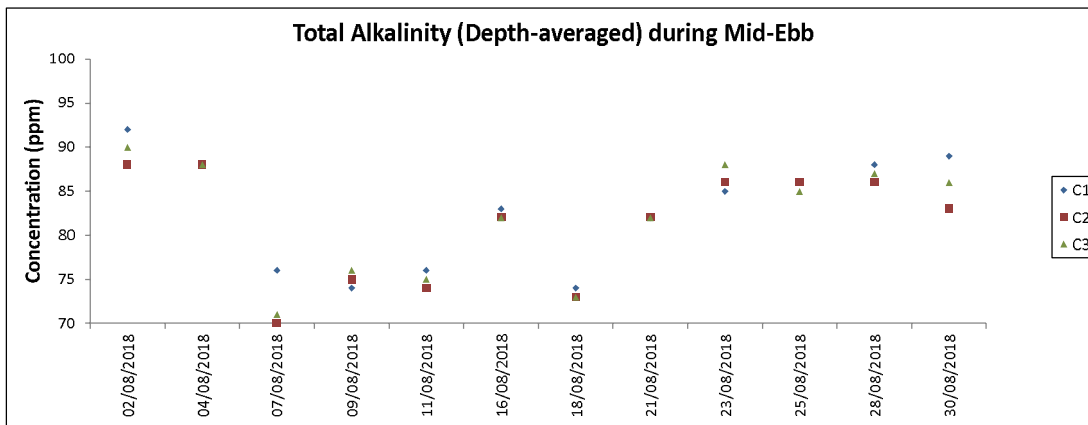
Note: The Action and Limit Level of turbidity can be referred to Table 4.2 of the monthly EM&A report.



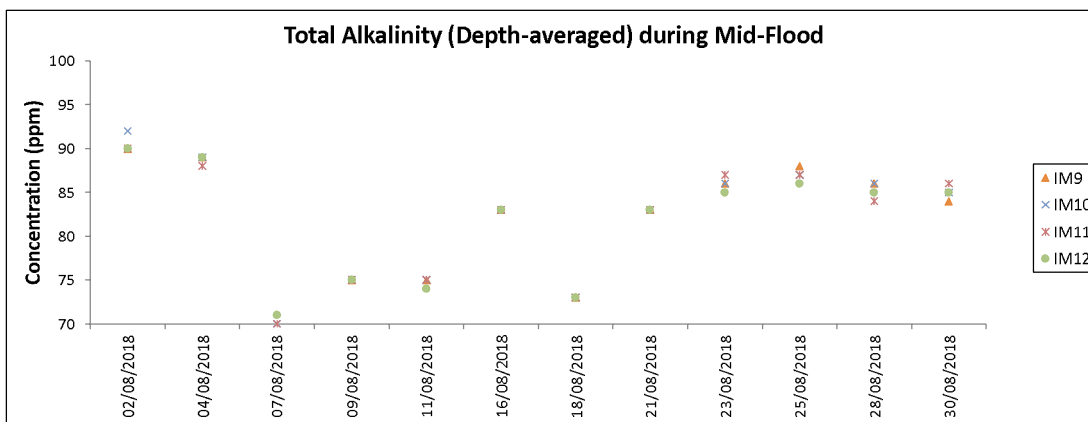
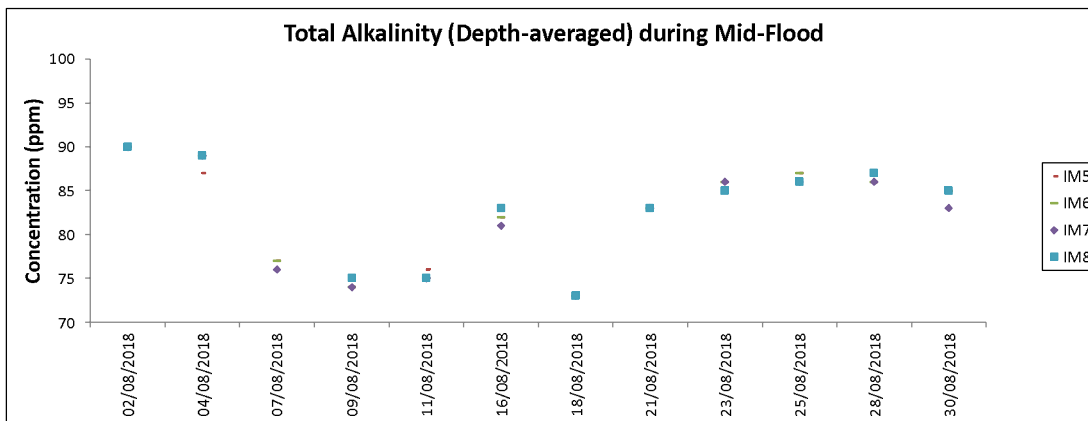
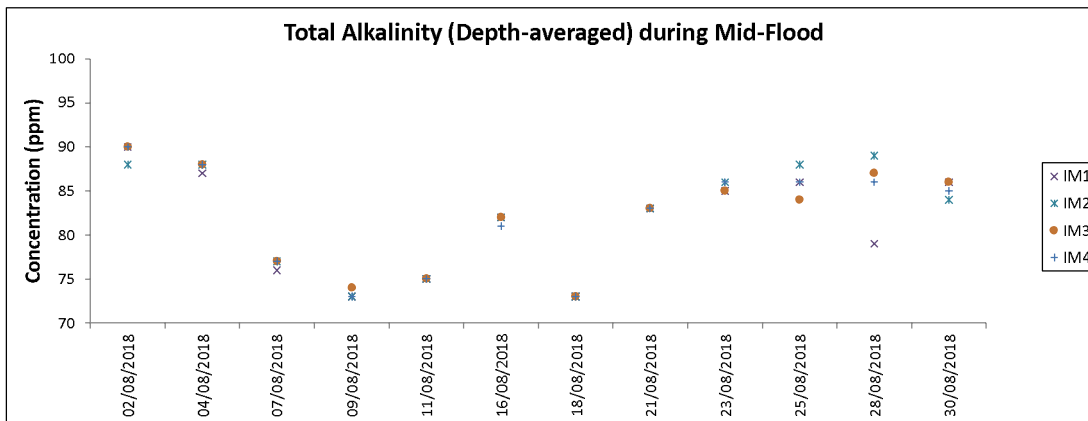
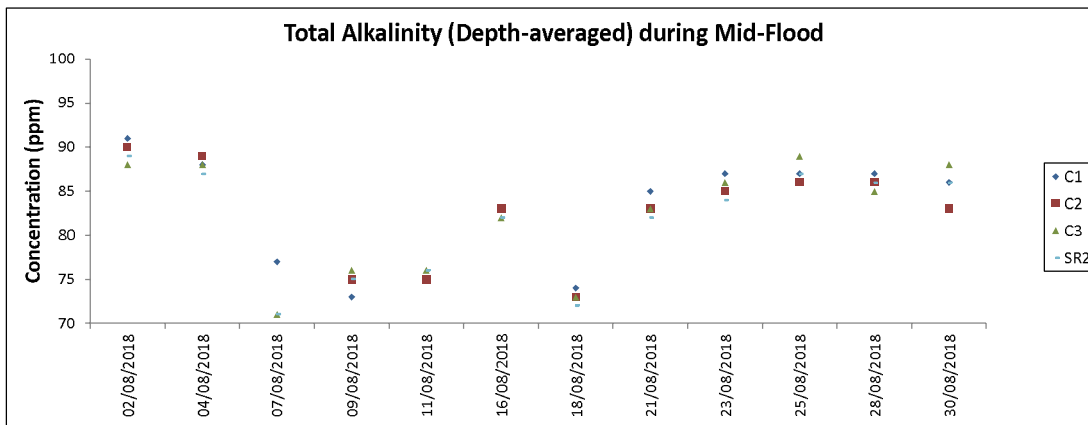
Note: The Action and Limit Level of suspended solids can be referred to Table 4.2 of the monthly EM&A report.



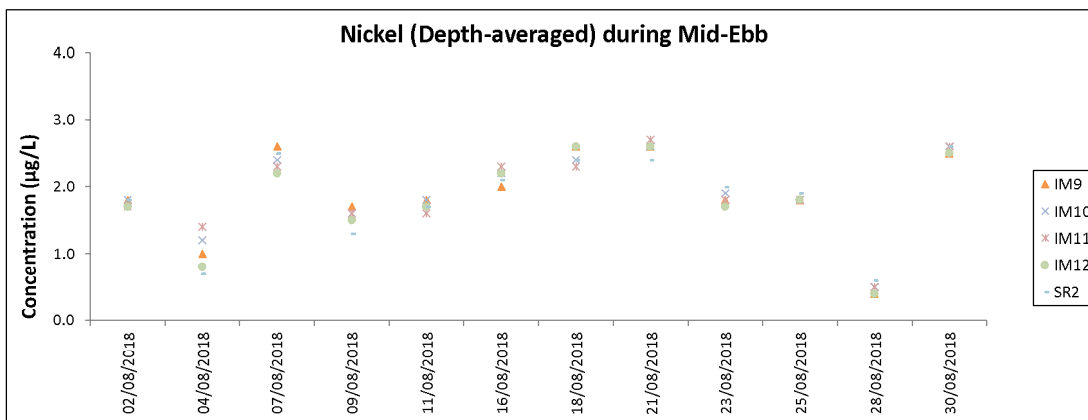
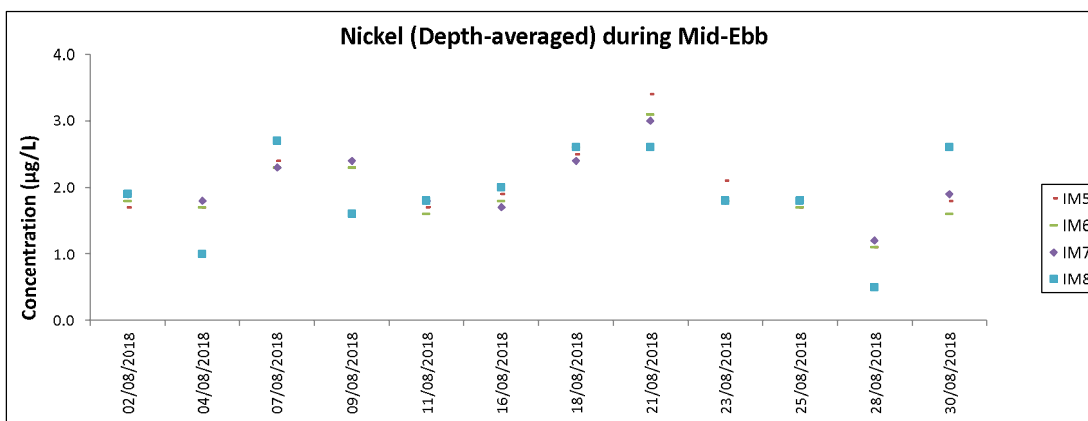
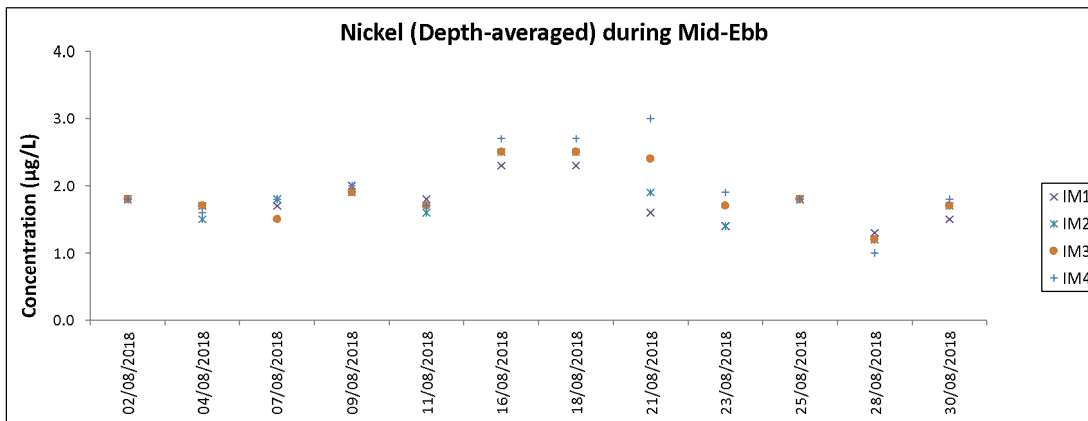
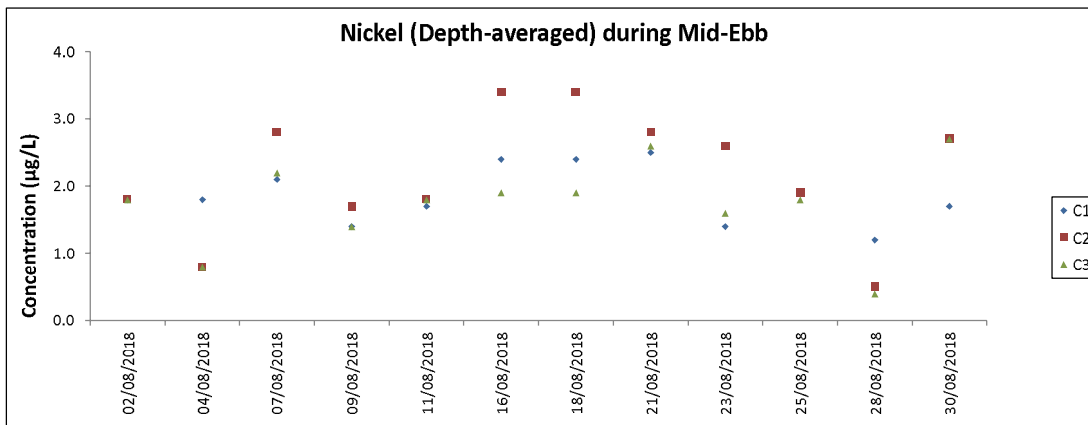
Note: The Action and Limit Level of suspended solids can be referred to Table 4.2 of the monthly EM&A report.



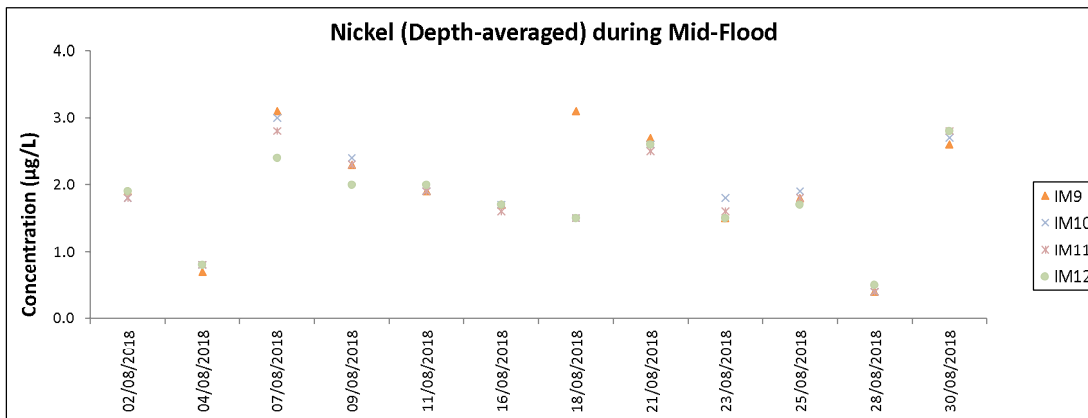
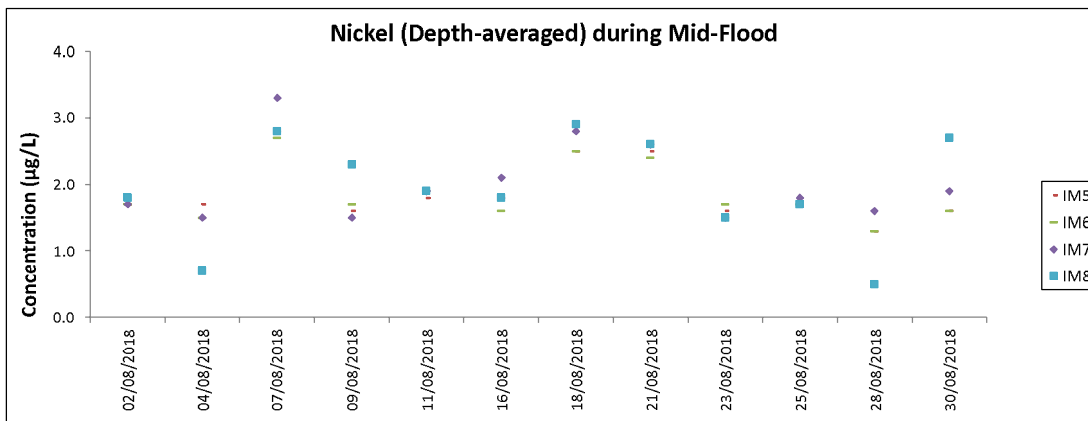
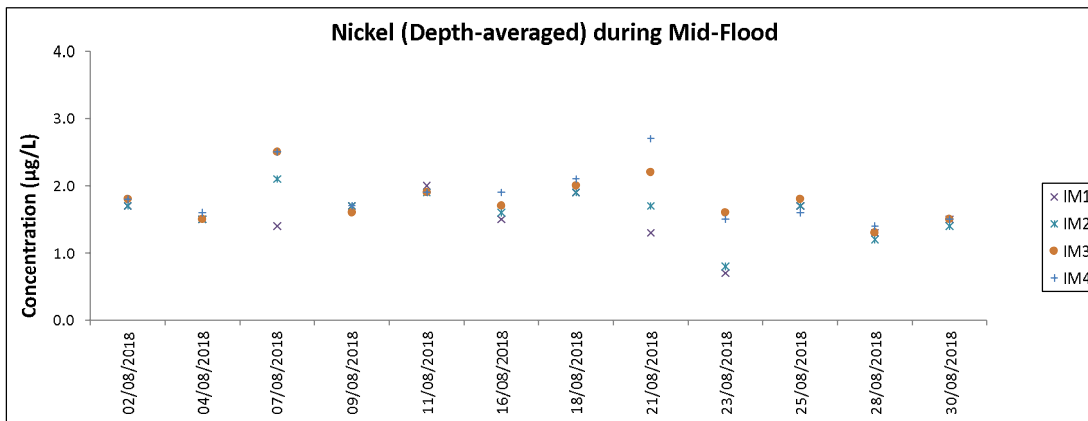
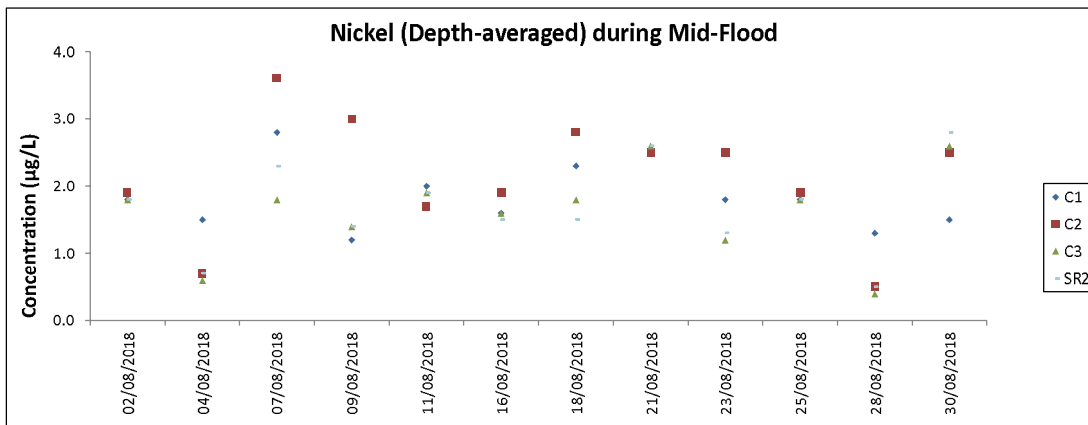
Note: The Action and Limit Level of total alkalinity can be referred to Table 4.2 of the monthly EM&A report.



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.

Chinese White Dolphin Monitoring Results

CWD Small Vessel Line-transect Survey

Survey Effort Data

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
04-Jun-18	NEL	3	25.370	SUMMER	32166	3RS ET	P
04-Jun-18	NEL	4	12.140	SUMMER	32166	3RS ET	P
04-Jun-18	NEL	3	6.690	SUMMER	32166	3RS ET	S
04-Jun-18	NEL	4	3.400	SUMMER	32166	3RS ET	S
19-Jun-18	NWL	3	26.640	SUMMER	32166	3RS ET	P
19-Jun-18	NWL	4	36.150	SUMMER	32166	3RS ET	P
19-Jun-18	NWL	3	8.580	SUMMER	32166	3RS ET	S
19-Jun-18	NWL	4	4.130	SUMMER	32166	3RS ET	S
20-Jun-18	NEL	2	26.500	SUMMER	32166	3RS ET	P
20-Jun-18	NEL	3	9.030	SUMMER	32166	3RS ET	P
20-Jun-18	NEL	4	2.130	SUMMER	32166	3RS ET	P
20-Jun-18	NEL	2	9.000	SUMMER	32166	3RS ET	S
20-Jun-18	NEL	3	0.940	SUMMER	32166	3RS ET	S
21-Jun-18	SWL	2	7.120	SUMMER	32166	3RS ET	P
21-Jun-18	SWL	3	44.051	SUMMER	32166	3RS ET	P
21-Jun-18	SWL	4	3.720	SUMMER	32166	3RS ET	P
21-Jun-18	SWL	2	2.200	SUMMER	32166	3RS ET	S
21-Jun-18	SWL	3	13.730	SUMMER	32166	3RS ET	S
22-Jun-18	NWL	2	13.400	SUMMER	32166	3RS ET	P
22-Jun-18	NWL	3	44.550	SUMMER	32166	3RS ET	P
22-Jun-18	NWL	4	5.060	SUMMER	32166	3RS ET	P
22-Jun-18	NWL	2	5.400	SUMMER	32166	3RS ET	S
22-Jun-18	NWL	3	3.960	SUMMER	32166	3RS ET	S
22-Jun-18	NWL	4	2.790	SUMMER	32166	3RS ET	S
25-Jun-18	SWL	2	7.272	SUMMER	32166	3RS ET	P
25-Jun-18	SWL	3	27.789	SUMMER	32166	3RS ET	P
25-Jun-18	SWL	4	14.840	SUMMER	32166	3RS ET	P
25-Jun-18	SWL	5	5.230	SUMMER	32166	3RS ET	P
25-Jun-18	SWL	2	5.402	SUMMER	32166	3RS ET	S
25-Jun-18	SWL	3	3.810	SUMMER	32166	3RS ET	S
25-Jun-18	SWL	4	4.030	SUMMER	32166	3RS ET	S
25-Jun-18	SWL	5	1.210	SUMMER	32166	3RS ET	S
26-Jun-18	WL	2	4.210	SUMMER	32166	3RS ET	P
26-Jun-18	WL	3	15.962	SUMMER	32166	3RS ET	P
26-Jun-18	WL	3	11.178	SUMMER	32166	3RS ET	S
26-Jun-18	AW	2	2.940	SUMMER	32166	3RS ET	P
26-Jun-18	AW	3	1.900	SUMMER	32166	3RS ET	P
27-Jun-18	AW	2	4.720	SUMMER	32166	3RS ET	P
27-Jun-18	WL	2	4.010	SUMMER	32166	3RS ET	P
27-Jun-18	WL	3	12.576	SUMMER	32166	3RS ET	P
27-Jun-18	WL	4	2.970	SUMMER	32166	3RS ET	P
27-Jun-18	WL	3	8.257	SUMMER	32166	3RS ET	S
27-Jun-18	WL	4	1.967	SUMMER	32166	3RS ET	S
05-Jul-18	NWL	2	4.400	SUMMER	32166	3RS ET	P
05-Jul-18	NWL	3	20.570	SUMMER	32166	3RS ET	P
05-Jul-18	NWL	4	37.860	SUMMER	32166	3RS ET	P
05-Jul-18	NWL	2	1.900	SUMMER	32166	3RS ET	S

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
05-Jul-18	NWL	3	4.170	SUMMER	32166	3RS ET	S
05-Jul-18	NWL	4	5.600	SUMMER	32166	3RS ET	S
09-Jul-18	NEL	2	7.900	SUMMER	32166	3RS ET	P
09-Jul-18	NEL	3	21.800	SUMMER	32166	3RS ET	P
09-Jul-18	NEL	4	7.500	SUMMER	32166	3RS ET	P
09-Jul-18	NEL	2	2.400	SUMMER	32166	3RS ET	S
09-Jul-18	NEL	3	7.700	SUMMER	32166	3RS ET	S
11-Jul-18	AW	1	2.230	SUMMER	32166	3RS ET	P
11-Jul-18	AW	2	2.610	SUMMER	32166	3RS ET	P
11-Jul-18	WL	1	0.935	SUMMER	32166	3RS ET	P
11-Jul-18	WL	2	5.562	SUMMER	32166	3RS ET	P
11-Jul-18	WL	3	9.521	SUMMER	32166	3RS ET	P
11-Jul-18	WL	4	2.406	SUMMER	32166	3RS ET	P
11-Jul-18	WL	2	3.839	SUMMER	32166	3RS ET	S
11-Jul-18	WL	3	4.997	SUMMER	32166	3RS ET	S
11-Jul-18	WL	4	1.230	SUMMER	32166	3RS ET	S
17-Jul-18	AW	2	4.530	SUMMER	32166	3RS ET	P
17-Jul-18	WL	1	1.730	SUMMER	32166	3RS ET	P
17-Jul-18	WL	2	9.190	SUMMER	32166	3RS ET	P
17-Jul-18	WL	3	6.564	SUMMER	32166	3RS ET	P
17-Jul-18	WL	4	0.430	SUMMER	32166	3RS ET	P
17-Jul-18	WL	1	1.070	SUMMER	32166	3RS ET	S
17-Jul-18	WL	2	5.640	SUMMER	32166	3RS ET	S
17-Jul-18	WL	3	4.746	SUMMER	32166	3RS ET	S
19-Jul-18	NEL	2	20.870	SUMMER	32166	3RS ET	P
19-Jul-18	NEL	3	16.680	SUMMER	32166	3RS ET	P
19-Jul-18	NEL	2	8.630	SUMMER	32166	3RS ET	S
19-Jul-18	NEL	3	1.050	SUMMER	32166	3RS ET	S
20-Jul-18	NWL	1	9.440	SUMMER	32166	3RS ET	P
20-Jul-18	NWL	2	19.567	SUMMER	32166	3RS ET	P
20-Jul-18	NWL	3	33.930	SUMMER	32166	3RS ET	P
20-Jul-18	NWL	2	3.400	SUMMER	32166	3RS ET	S
20-Jul-18	NWL	3	8.660	SUMMER	32166	3RS ET	S
26-Jul-18	SWL	2	32.460	SUMMER	32166	3RS ET	P
26-Jul-18	SWL	3	22.153	SUMMER	32166	3RS ET	P
26-Jul-18	SWL	4	0.487	SUMMER	32166	3RS ET	P
26-Jul-18	SWL	2	8.040	SUMMER	32166	3RS ET	S
26-Jul-18	SWL	3	6.770	SUMMER	32166	3RS ET	S
26-Jul-18	SWL	4	0.580	SUMMER	32166	3RS ET	S
30-Jul-18	SWL	2	37.816	SUMMER	32166	3RS ET	P
30-Jul-18	SWL	3	17.730	SUMMER	32166	3RS ET	P
30-Jul-18	SWL	2	12.124	SUMMER	32166	3RS ET	S
30-Jul-18	SWL	3	3.490	SUMMER	32166	3RS ET	S
2-Aug-18	NWL	2	9.284	SUMMER	32166	3RS ET	P
2-Aug-18	NWL	3	46.887	SUMMER	32166	3RS ET	P
2-Aug-18	NWL	4	6.300	SUMMER	32166	3RS ET	P
2-Aug-18	NWL	2	2.029	SUMMER	32166	3RS ET	S
2-Aug-18	NWL	3	9.770	SUMMER	32166	3RS ET	S
2-Aug-18	NWL	4	0.400	SUMMER	32166	3RS ET	S

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
7-Aug-18	AW	2	4.960	SUMMER	32166	3RS ET	P
7-Aug-18	WL	1	2.480	SUMMER	32166	3RS ET	P
7-Aug-18	WL	2	8.859	SUMMER	32166	3RS ET	P
7-Aug-18	WL	3	4.158	SUMMER	32166	3RS ET	P
7-Aug-18	WL	4	3.370	SUMMER	32166	3RS ET	P
7-Aug-18	WL	2	3.270	SUMMER	32166	3RS ET	S
7-Aug-18	WL	3	4.142	SUMMER	32166	3RS ET	S
7-Aug-18	WL	4	1.120	SUMMER	32166	3RS ET	S
16-Aug-18	NEL	1	0.900	SUMMER	32166	3RS ET	P
16-Aug-18	NEL	2	29.510	SUMMER	32166	3RS ET	P
16-Aug-18	NEL	3	7.200	SUMMER	32166	3RS ET	P
16-Aug-18	NEL	1	0.400	SUMMER	32166	3RS ET	S
16-Aug-18	NEL	2	9.690	SUMMER	32166	3RS ET	S
16-Aug-18	DB	2	5.590	SUMMER	32166	3RS ET	P
16-Aug-18	DB	3	4.520	SUMMER	32166	3RS ET	P
16-Aug-18	DB	2	4.520	SUMMER	32166	3RS ET	S
16-Aug-18	DB	3	1.070	SUMMER	32166	3RS ET	S
17-Aug-18	DB	2	12.070	SUMMER	32166	3RS ET	P
17-Aug-18	DB	2	3.830	SUMMER	32166	3RS ET	S
17-Aug-18	NEL	2	35.410	SUMMER	32166	3RS ET	P
17-Aug-18	NEL	3	1.100	SUMMER	32166	3RS ET	P
17-Aug-18	NEL	2	9.880	SUMMER	32166	3RS ET	S
17-Aug-18	NEL	3	0.200	SUMMER	32166	3RS ET	S
20-Aug-18	NWL	1	9.500	SUMMER	32166	3RS ET	P
20-Aug-18	NWL	2	51.800	SUMMER	32166	3RS ET	P
20-Aug-18	NWL	3	1.300	SUMMER	32166	3RS ET	P
20-Aug-18	NWL	1	1.000	SUMMER	32166	3RS ET	S
20-Aug-18	NWL	2	11.000	SUMMER	32166	3RS ET	S
21-Aug-18	AW	1	4.700	SUMMER	32166	3RS ET	P
21-Aug-18	WL	2	24.554	SUMMER	32166	3RS ET	P
21-Aug-18	WL	3	3.309	SUMMER	32166	3RS ET	P
21-Aug-18	WL	2	7.939	SUMMER	32166	3RS ET	S
21-Aug-18	WL	3	0.572	SUMMER	32166	3RS ET	S
22-Aug-18	SWL	2	50.350	SUMMER	32166	3RS ET	P
22-Aug-18	SWL	3	4.900	SUMMER	32166	3RS ET	P
22-Aug-18	SWL	2	13.170	SUMMER	32166	3RS ET	S
22-Aug-18	SWL	3	2.400	SUMMER	32166	3RS ET	S
23-Aug-18	SWL	2	51.850	SUMMER	32166	3RS ET	P
23-Aug-18	SWL	3	2.905	SUMMER	32166	3RS ET	P
23-Aug-18	SWL	2	11.220	SUMMER	32166	3RS ET	S
23-Aug-18	SWL	3	4.000	SUMMER	32166	3RS ET	S

Notes: CWD monitoring survey data of the two preceding survey months (i.e. June and July 2018) 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
21-Jun-18	1	1054	CWD	1	SWL	3	51	ON	3RS ET	22.1914	113.8491	SUMMER	NONE	P
21-Jun-18	2	1219	CWD	3	SWL	3	21	ON	3RS ET	22.2040	113.8781	SUMMER	NONE	P
21-Jun-18	3	1331	CWD	6	SWL	3	11	ON	3RS ET	22.1907	113.8973	SUMMER	NONE	P
21-Jun-18	4	1606	FP	3	SWL	3	24	ON	3RS ET	22.1653	113.9368	SUMMER	NONE	P
25-Jun-18	1	1059	CWD	1	SWL	4	138	ON	3RS ET	22.1822	113.8686	SUMMER	NONE	P
25-Jun-18	2	1308	CWD	4	SWL	3	119	ON	3RS ET	22.1934	113.9080	SUMMER	NONE	P
25-Jun-18	3	1332	CWD	8	SWL	3	32	ON	3RS ET	22.1945	113.9083	SUMMER	NONE	P
25-Jun-18	4	1356	CWD	1	SWL	3	129	ON	3RS ET	22.1780	113.9054	SUMMER	NONE	S
25-Jun-18	5	1456	CWD	4	SWL	2	6	ON	3RS ET	22.1805	113.9218	SUMMER	NONE	S
25-Jun-18	6	1519	CWD	7	SWL	2	29	ON	3RS ET	22.1867	113.9181	SUMMER	NONE	P
26-Jun-18	1	1137	CWD	1	WL	3	33	ON	3RS ET	22.2154	113.8192	SUMMER	NONE	P
27-Jun-18	1	1049	CWD	2	WL	3	51	ON	3RS ET	22.2524	113.8341	SUMMER	NONE	S
27-Jun-18	2	1106	CWD	3	WL	3	188	ON	3RS ET	22.2497	113.8406	SUMMER	NONE	P
27-Jun-18	3	1141	CWD	2	WL	3	27	ON	3RS ET	22.2331	113.8236	SUMMER	NONE	S
27-Jun-18	4	1200	CWD	5	WL	3	30	ON	3RS ET	22.2318	113.8390	SUMMER	NONE	P
27-Jun-18	5	1226	CWD	1	WL	3	122	ON	3RS ET	22.2237	113.8249	SUMMER	NONE	P
27-Jun-18	6	1234	CWD	12	WL	3	38	ON	3RS ET	22.2166	113.8199	SUMMER	NONE	S
27-Jun-18	7	1309	CWD	2	WL	3	145	ON	3RS ET	22.2141	113.8319	SUMMER	NONE	P
27-Jun-18	8	1341	CWD	2	WL	4	165	ON	3RS ET	22.1938	113.8425	SUMMER	NONE	S
11-Jul-18	1	1007	CWD	2	WL	2	569	ON	3RS ET	22.2873	113.8608	SUMMER	NONE	P
11-Jul-18	2	1027	CWD	1	WL	2	151	ON	3RS ET	22.2731	113.8471	SUMMER	NONE	S
11-Jul-18	3	1045	CWD	1	WL	2	247	ON	3RS ET	22.2692	113.8602	SUMMER	NONE	P
11-Jul-18	4	1108	CWD	1	WL	3	470	ON	3RS ET	22.2601	113.8498	SUMMER	NONE	P
11-Jul-18	5	1212	CWD	1	WL	3	303	ON	3RS ET	22.2232	113.8315	SUMMER	NONE	P
11-Jul-18	6	1237	CWD	3	WL	3	201	ON	3RS ET	22.2132	113.8211	SUMMER	NONE	P
11-Jul-18	7	1308	CWD	12	WL	3	159	ON	3RS ET	22.2050	113.8345	SUMMER	NONE	P
11-Jul-18	8	1403	CWD	10	WL	3	163	ON	3RS ET	22.1950	113.8422	SUMMER	NONE	S
17-Jul-18	1	1033	CWD	3	WL	2	696	ON	3RS ET	22.2607	113.8455	SUMMER	NONE	P
17-Jul-18	2	1100	CWD	1	WL	2	83	ON	3RS ET	22.2504	113.8371	SUMMER	NONE	P
17-Jul-18	3	1122	CWD	3	WL	3	501	ON	3RS ET	22.2415	113.8447	SUMMER	NONE	P
17-Jul-18	4	1201	CWD	1	WL	3	90	ON	3RS ET	22.2148	113.8195	SUMMER	NONE	S
17-Jul-18	5	1232	CWD	3	WL	3	46	ON	3RS ET	22.2009	113.8247	SUMMER	NONE	S

DATE	STG #	TIME	CWD/FP	GP SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.	P/S
20-Jul-18	1	1040	CWD	1	NWL	3	680	ON	3RS ET	22.2720	113.8702	SUMMER	NONE	P
20-Jul-18	2	1233	CWD	2	NWL	2	N/A	OFF	3RS ET	22.3495	113.8832	SUMMER	NONE	P
20-Jul-18	3	1251	CWD	2	NWL	2	N/A	OFF	3RS ET	22.3446	113.8860	SUMMER	NONE	P
26-Jul-18	1	1152	CWD	2	SWL	2	30	ON	3RS ET	22.1924	113.8878	SUMMER	NONE	P
26-Jul-18	2	1255	CWD	1	SWL	2	28	ON	3RS ET	22.1821	113.8982	SUMMER	NONE	P
26-Jul-18	3	1412	FP	2	SWL	3	52	ON	3RS ET	22.1540	113.9177	SUMMER	NONE	P
30-Jul-18	1	1244	CWD	1	SWL	3	252	ON	3RS ET	22.1949	113.8973	SUMMER	NONE	P
30-Jul-18	2	1317	CWD	2	SWL	2	85	ON	3RS ET	22.1986	113.9080	SUMMER	NONE	P
30-Jul-18	3	1345	CWD	3	SWL	3	401	ON	3RS ET	22.1717	113.9079	SUMMER	NONE	P
30-Jul-18	4	1611	CWD	3	SWL	2	219	ON	3RS ET	22.2085	113.9363	SUMMER	NONE	P
2-Aug-18	1	1029	CWD	15	NWL	2	999	ON	3RS ET	22.2945	113.8705	SUMMER	NONE	P
2-Aug-18	2	1122	CWD	1	NWL	3	12	ON	3RS ET	22.2741	113.8705	SUMMER	NONE	P
2-Aug-18	3	1156	CWD	2	NWL	2	17	ON	3RS ET	22.2901	113.8786	SUMMER	NONE	P
7-Aug-18	1	1008	CWD	2	WL	1	250	ON	3RS ET	22.2920	113.8613	SUMMER	NONE	P
7-Aug-18	2	1043	CWD	5	WL	2	69	ON	3RS ET	22.2642	113.8578	SUMMER	NONE	S
7-Aug-18	3	1328	CWD	2	WL	2	524	ON	3RS ET	22.2027	113.8233	SUMMER	NONE	S
7-Aug-18	4	1344	CWD	5	WL	2	352	ON	3RS ET	22.1966	113.8411	SUMMER	NONE	P
17-Aug-18	1	1149	CWD	1	NEL	2	8	ON	3RS ET	22.3387	113.9562	SUMMER	NONE	P
21-Aug-18	1	1025	CWD	2	WL	2	22	ON	3RS ET	22.2688	113.8601	SUMMER	NONE	P
21-Aug-18	2	1052	CWD	5	WL	2	267	ON	3RS ET	22.2526	113.8343	SUMMER	NONE	S
21-Aug-18	3	1133	CWD	1	WL	2	380	ON	3RS ET	22.2417	113.8352	SUMMER	NONE	P
21-Aug-18	4	1149	CWD	1	WL	2	181	ON	3RS ET	22.2357	113.8253	SUMMER	NONE	S
21-Aug-18	5	1209	CWD	8	WL	2	93	ON	3RS ET	22.2226	113.8359	SUMMER	NONE	P
21-Aug-18	6	1241	CWD	2	WL	2	26	ON	3RS ET	22.2140	113.8291	SUMMER	NONE	P
21-Aug-18	7	1304	CWD	2	WL	2	26	ON	3RS ET	22.2055	113.8303	SUMMER	NONE	P
21-Aug-18	8	1320	CWD	5	WL	2	160	ON	3RS ET	22.2039	113.8222	SUMMER	NONE	S
21-Aug-18	9	1340	CWD	2	WL	3	162	ON	3RS ET	22.1963	113.8415	SUMMER	NONE	P
22-Aug-18	1	1439	CWD	3	SWL	2	17	ON	3RS ET	22.1860	113.8689	SUMMER	NONE	P
23-Aug-18	1	1457	CWD	1	SWL	2	161	ON	3RS ET	22.1881	113.8592	SUMMER	NONE	P
23-Aug-18	2	1522	CWD	5	SWL	2	263	ON	3RS ET	22.1842	113.8491	SUMMER	NONE	P

Abbreviations: STG# = Sighting Number; GP SZ = Dolphin 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 (i.e. June and July 2018) are presented for reference only. No relevant figure or text will be mentioned in the 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 August 2018 encounter rates STG and ANI in the whole survey area (NEL, NWL, AW, WL, SWL):

A total of 446.598 km of survey effort was collected under Beaufort Sea State 3 or below with favourable visibility; total no. of 20 on-effort sightings and total number of 70 dolphins from on-effort sightings were collected under such condition. Calculation of the encounter rates in August 2018 are shown as below:

Encounter Rate by Number of Dolphin Sightings (STG) in August 2018

$$STG = \frac{20}{446.598} \times 100 = 4.48$$

Encounter Rate by Number of Dolphins (ANI) in August 2018

$$ANI = \frac{70}{446.598} \times 100 = 15.67$$

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

A total of 1200.599 km of survey effort was collected under Beaufort Sea State 3 or below with favourable visibility; total no. of 56 on-effort sightings and total number of 187 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)









$$STG = \frac{56}{1200.599} \times 100 = 4.66$$









Running Quarterly Encounter Rate by Number of Dolphins (ANI)

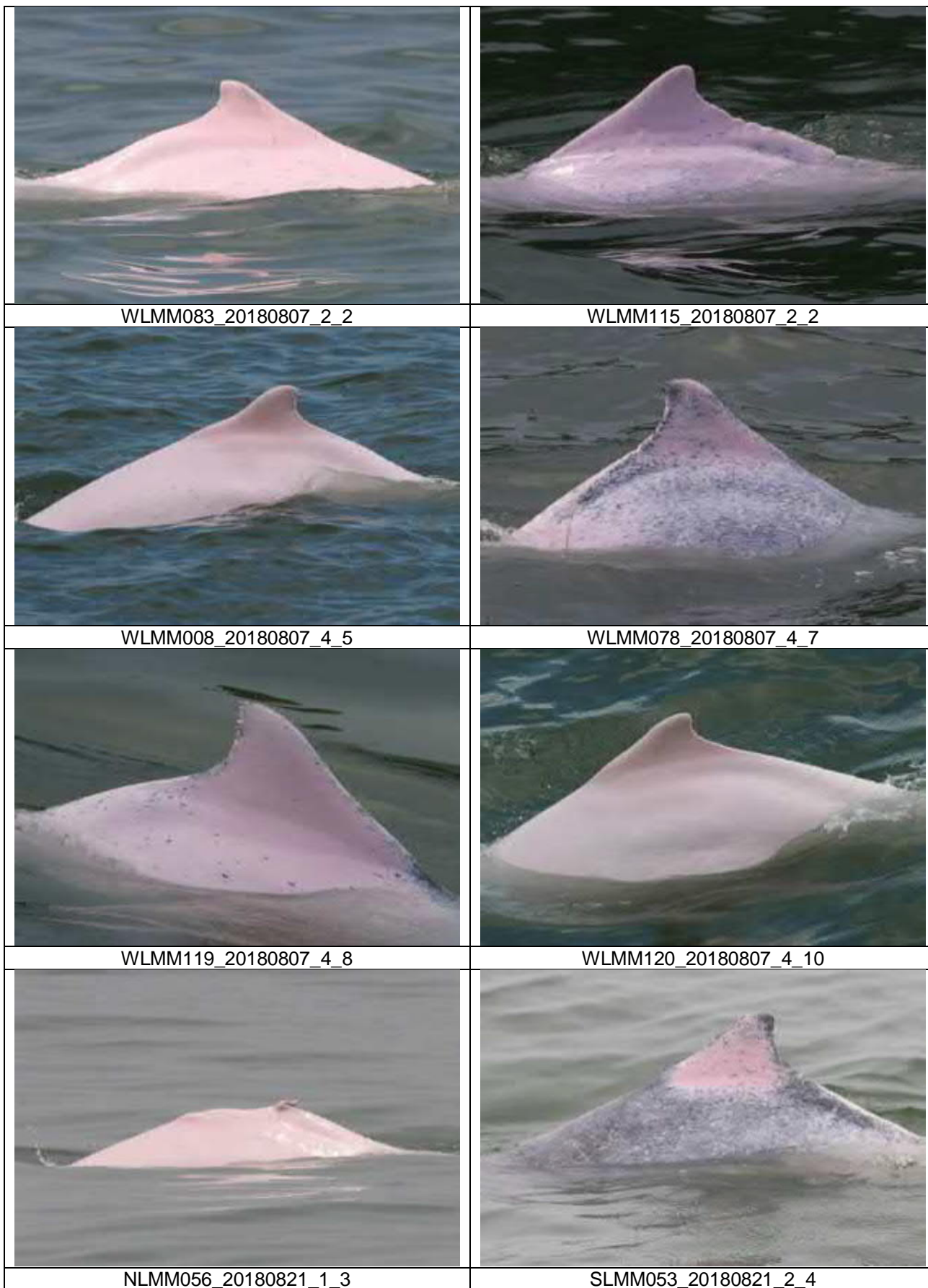
$$ANI = \frac{187}{1200.599} \times 100 = 15.58$$

CWD Small Vessel Line-transect Survey









Photo Identification









	
NLMM015_20180802_1_12	NLMM019_20180802_1_11
	
NLMM043_20180802_1_5	NLMM063_20180802_1_3
	
NLMM066_20180802_1_9	NLMM067_20180802_1_4
	
SLMM045_20180802_1_4	SLMM057_20180802_1_7

	
WLMM006_20180802_1_10	WLMM029_20180802_1_1_Lower
	
WLMM053_20180802_1_1	WLMM081_20180802_1_3
	
WLMM087_20180802_1_7	WLMM089_20180802_1_1
	
WLMM115_20180802_2_1	NLMM015_20180802_3_3



	
WLMM009_20180821_2_2	WLMM028_20180821_2_13
	
WLMM029_20180821_2_6	WLMM096_20180821_2_5
	
WLMM063_20180821_4_7	NLMM033_20180821_5_19
	
NLMM067_20180821_5_8_Right	WLMM043_20180821_5_1

	
WLMM067_20180821_5_3	WLMM079_20180821_5_10
	
WLMM121_20180821_5_18	WLMM065_20180821_6_8
	
SLMM010_20180821_7_1	WLMM065_20180821_7_3
	
SLMM002_20180821_8_1_Upper	SLMM003_20180821_8_1_Right

	
SLMM010_20180821_8_2	SLMM012_20180821_8_2
	
WLMM114_20180821_9_1	WLMM027_20180822_1_6
	
SLMM019_20180823_1_5	SLMM019_20180823_2_2
	
WLMM060_20180823_2_5	WLMM071_20180823_2_12

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
1/Aug/18	Lung Kwu Chau	8:50	14:50	6:00	2-3	2	3	1-4
2/Aug/18	Sha Chau	9:05	15:05	6:00	3	2	0	N/A
6/Aug/18	Lung Kwu Chau	8:58	13:28	4:30	2	3	0	N/A
9/Aug/18	Sha Chau	8:38	14:38	6:00	3	2	0	N/A
21/Aug/18	Lung Kwu Chau	8:52	16:22	7:30	2	3-4	0	N/A

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

Ecological Monitoring

Ecological Monitoring – location map and site photos regarding the monthly ecological monitoring for the egret area on Sheung Sha Chau and the HDD works

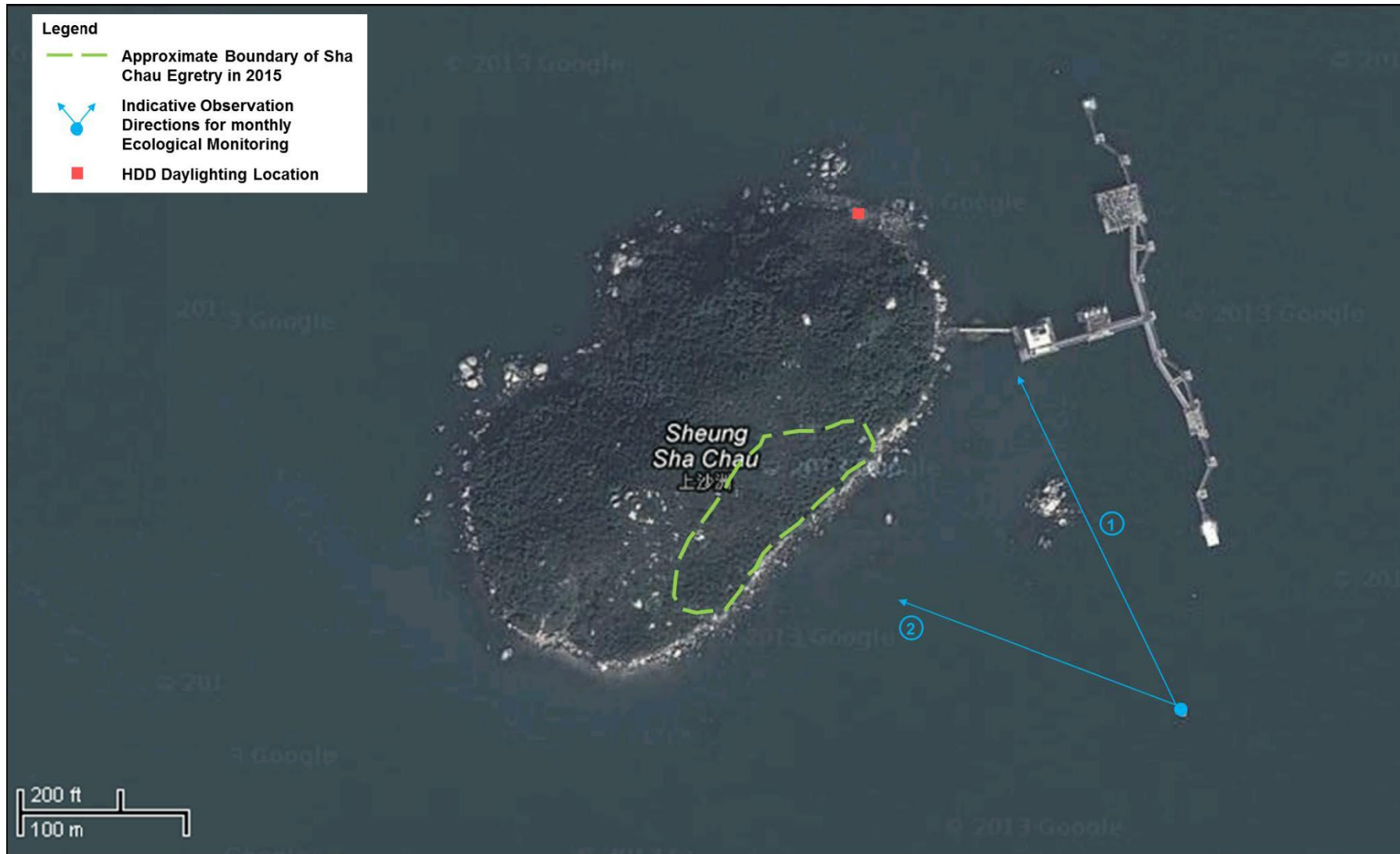


Photo record of View 1



Photo record of View 2



Appendix E. Calibration Certificates



CERTIFICATE OF CALIBRATION

Certificate No.: 18CA0725 03 Page 1 of 2

Item tested

Description:	Sound Level Meter (Type 1)	Microphone
Manufacturer:	B & K	B & K
Type/Model No.:	2238	4188
Serial/Equipment No.:	2800932	2791360
Adaptors used:	-	-

Item submitted by

Customer Name: Alkins China Limited.
Address of Customer: -
Request No.: -
Date of receipt: 25-Jul-2018

Date of test: 26-Jul-2018

Reference equipment used in the calibration

Description:	Model:	Serial No.	Expiry Date:	Traceable to:
Multi function sound calibrator	B&K 4226	2288444	08-Sep-2018	CIGISMEC
Signal generator	DS 360	33873	24-Apr-2019	CEPREI
Signal generator	DS 360	61227	23-Apr-2019	CEPREI

Ambient conditions

Temperature: 21 ± 1 °C
Relative humidity: 55 ± 10 %
Air pressure: 1005 ± 5 hPa

Test specifications

- The Sound Level Meter has been calibrated in accordance with the requirements as specified in BS 7580: Part 1: 1997 and the lab calibration procedure SMTP004-CA-152.
- The electrical tests were performed using an electrical signal substituted for the microphone which was removed and replaced by an equivalent capacitance within a tolerance of $\pm 20\%$.
- The acoustic calibration was performed using an B&K 4226 sound calibrator and corrections was applied for the difference between the free-field and pressure responses of the Sound Level Meter.

Test results

This is to certify that the Sound Level Meter conforms to BS 7580: Part 1: 1997 for the conditions under which the test was performed.

Details of the performed measurements are presented on page 2 of this certificate.

Actual Measurement data are documented on worksheets.

Approved Signatory:



Feng Jun Qi

Date: 26-Jul-2018

Company Chop:



Comments: The results reported in this certificate refer to the condition of the instrument on the date of calibration and carry no implication regarding the long-term stability of the instrument.



CERTIFICATE OF CALIBRATION

(Continuation Page)

Certificate No.: 18CA0725 03

Page 2 of 2

1. Electrical Tests

The electrical tests were performed using an equivalent capacitance substituted for the microphone. The results are given in below with test status and the estimated uncertainties. The "Pass" means the result of the test is inside the tolerances stated in the test specifications. The "-" means the result of test is outside these tolerances.

Test:	Subtest:	Status:	Expanded Uncertainty (dB)	Coverage Factor
Self-generated noise	A	Pass	0.3	2.1
	C	Pass	1.0	
	Lin	Pass	2.0	
Linearity range for Leq	At reference range, Step 5 dB at 4 kHz	Pass	0.3	2.2
	Reference SPL on all other ranges	Pass	0.3	
	2 dB below upper limit of each range	Pass	0.3	
	2 dB above lower limit of each range	Pass	0.3	
Linearity range for SPL	At reference range, Step 5 dB at 4 kHz	Pass	0.3	
	A	Pass	0.3	
	C	Pass	0.3	
Frequency weightings	Lin	Pass	0.3	
	Single Burst Fast	Pass	0.3	
	Single Burst Slow	Pass	0.3	
Time weightings	Single 100µs rectangular pulse	Pass	0.3	
	Crest factor of 3	Pass	0.3	
Peak response	Single burst 5 ms at 2000 Hz	Pass	0.3	
	Repeated at frequency of 100 Hz	Pass	0.3	
R.M.S. accuracy	1 ms burst duty factor 1/10 ³ at 4kHz	Pass	0.3	
	1 ms burst duty factor 1/10 ⁴ at 4kHz	Pass	0.3	
Time weighting I	Single burst 10 ms at 4 kHz	Pass	0.4	
	Single burst 10 ms at 4 kHz	Pass	0.4	
Time averaging	SPL	Pass	0.3	
	Leq	Pass	0.4	

2. Acoustic tests

The complete sound level meter was calibrated on the reference range using a B&K 4226 acoustic calibrator with 1000Hz and SPL 94 dB. The sensitivity of the sound level meter was adjusted. The test result at 125 Hz and 8000 Hz are given in below with test status and the estimated uncertainties.

Test:	Subtest	Status	Expanded Uncertainty (dB)	Coverage Factor
Acoustic response	Weighting A at 125 Hz	Pass	0.3	
	Weighting A at 8000 Hz	Pass	0.5	

3. Response to associated sound calibrator

N/A

The expanded uncertainties have been calculated in accordance with the ISO Publication "Guide to the expression of uncertainty in measurement", and gives an interval estimated to have a level of confidence of 95%. A coverage factor of 2 is assumed unless explicitly stated.

Calibrated by:

Date:

Fung Chi Yip
26-Jul-2018

- End -

Checked by:

Date:

Lam Tze Wai
26-Jul-2018

The standard(s) and equipment used in the calibration are traceable to national or international recognised standards and are calibrated on a schedule to maintain the required accuracy level.



Test Data for Sound Level Meter

Page 1 of 5

Sound level meter type: 2238 Serial No. 2800932 Date 26-Jul-2018
Microphone type: 4188 Serial No. 2791360
Report: 18CA0725 03

SELF GENERATED NOISE TEST

The noise test is performed in the most sensitive range of the SLM with the microphone replaced by an equivalent impedance.

Noise level in A weighting 12.6 dB
Noise level in C weighting 15.5 dB
Noise level in Lin 21.1 dB

LINEARITY TEST

The linearity is tested relative to the reference sound pressure level using a continuous sinusoidal signal of frequency 4 kHz. The measurement is made on the reference range for indications at 5 dB intervals starting from the 94 dB reference sound pressure level. And until within 5 dB of the upper and lower limits of the reference range, the measurements shall be made at 1 dB intervals. (SLM set to LEQ/SPL)

Reference/Expected level	Actual level		Tolerance	Deviation	
	non-integrated	integrated		non-integrated	integrated
dB	dB	dB	+/- dB	dB	dB
94.0	94.0	94.0	0.7	0.0	0.0
99.0	99.0	99.0	0.7	0.0	0.0
104.0	104.0	104.0	0.7	0.0	0.0
109.0	109.0	109.0	0.7	0.0	0.0
114.0	114.0	114.0	0.7	0.0	0.0
119.0	119.0	119.0	0.7	0.0	0.0
124.0	123.9	123.9	0.7	-0.1	-0.1
125.0	124.9	124.9	0.7	-0.1	-0.1
126.0	125.9	125.9	0.7	-0.1	-0.1
127.0	126.9	126.9	0.7	-0.1	-0.1
128.0	127.9	127.9	0.7	-0.1	-0.1
129.0	128.8	128.8	0.7	-0.2	-0.2
130.0	129.8	129.8	0.7	-0.2	-0.2
89.0	89.0	89.0	0.7	0.0	0.0
84.0	84.0	84.0	0.7	0.0	0.0
79.0	79.0	79.0	0.7	0.0	0.0
74.0	74.0	74.0	0.7	0.0	0.0
69.0	69.0	69.0	0.7	0.0	0.0
64.0	64.0	64.0	0.7	0.0	0.0
59.0	59.0	59.0	0.7	0.0	0.0
54.0	54.1	54.1	0.7	0.1	0.1
53.0	53.0	53.0	0.7	0.0	0.0
52.0	52.0	52.0	0.7	0.0	0.0
51.0	51.0	51.0	0.7	0.0	0.0
50.0	50.0	50.0	0.7	0.0	0.0

Measurements for an indication of the reference SPL on all other ranges which include it

Other ranges	Expected level	Actual level	Tolerance	Deviation
dB	dB	dB	+/- dB	dB
60-140	94.0	94.0	0.7	0.0



Test Data for Sound Level Meter

Page 2 of 5

Sound level meter type: 2238 Serial No. 2800932 Date 26-Jul-2018
Microphone type: 4188 Serial No. 2791360
Report: 18CA0725.03

50-130	94.0	94.0	0.7	0.0
40-120	94.0	94.0	0.7	0.0
30-110	94.0	94.0	0.7	0.0
20-100	94.0	93.9	0.7	-0.1

Measurements on all level ranges for indications 2 dB below the upper limit and 2 dB above the lower limit

Ranges	Reference/Expected level	Actual level	Tolerance	Deviation
dB	dB	dB	+/- dB	dB
60-140	62.0	62.0	0.7	0.0
	138.0	137.9	0.7	-0.1
50-130	52.0	52.0	0.7	0.0
	128.0	127.9	0.7	-0.1
40-120	42.0	42.0	0.7	0.0
	118.0	117.8	0.7	-0.2
30-110	32.0	32.0	0.7	0.0
	108.0	107.9	0.7	-0.1
20-100	30.0	30.0	0.7	0.0
	98.0	97.9	0.7	-0.1
10-90	30.0	29.9	0.7	-0.1
	88.0	87.9	0.7	-0.1
0-80	30.0	29.9	0.7	-0.1
	78.0	77.9	0.7	-0.1

FREQUENCY WEIGHTING TEST

The frequency response of the weighting networks are tested at octave intervals over the frequency ranges 31.5 Hz to 12500 Hz. The signal level at 1000 Hz is set to give an indication of the reference SPL.

Frequency weighting A:

Frequency	Ref. level	Expected level	Actual level	Tolerance(dB)		Deviation
				+	-	
Hz	dB	dB	dB			dB
1000.0	94.0	94.0	94.0	0.0	0.0	0.0
31.6	94.0	54.6	54.7	1.5	1.5	0.1
63.1	94.0	67.8	67.7	1.5	1.5	-0.1
125.9	94.0	77.9	77.8	1.0	1.0	-0.1
251.2	94.0	85.4	85.3	1.0	1.0	-0.1
501.2	94.0	90.8	90.7	1.0	1.0	-0.1
1995.0	94.0	95.2	95.2	1.0	1.0	0.0
3981.0	94.0	95.0	94.9	1.0	1.0	-0.1
7943.0	94.0	92.9	92.8	1.5	3.0	-0.1
12590.0	94.0	89.7	89.5	3.0	6.0	-0.2

Frequency weighting C:

Frequency	Ref. level	Expected level	Actual level	Tolerance(dB)		Deviation
				+	-	
Hz	dB	dB	dB			dB
1000.0	94.0	94.0	94.0	0.0	0.0	0.0
31.6	94.0	91.0	90.9	1.5	1.5	-0.1
63.1	94.0	93.2	93.2	1.5	1.5	0.0
125.9	94.0	93.8	93.7	1.0	1.0	-0.1



Test Data for Sound Level Meter

Page 3 of 5

Sound level meter type: 2238 Serial No. 2800932 Date: 26-Jul-2018
Microphone type: 4188 Serial No. 2791360
Report: 18CA0725 03

251.2	94.0	94.0	93.9	1.0	1.0	-0.1
501.2	94.0	94.0	94.0	1.0	1.0	0.0
1995.0	94.0	93.8	93.8	1.0	1.0	0.0
3981.0	94.0	93.2	93.1	1.0	1.0	-0.1
7943.0	94.0	91.0	90.9	1.5	3.0	-0.1
12590.0	94.0	87.8	87.6	3.0	6.0	-0.2

Frequency weighting Lin:

Frequency Hz	Ref. level dB	Expected level dB	Actual level dB	Tolerance(dB)		Deviation dB
				+	-	
1000.0	94.0	94.0	94.0	0.0	0.0	0.0
31.6	94.0	94.0	93.9	1.5	1.5	-0.1
63.1	94.0	94.0	93.9	1.5	1.5	-0.1
125.9	94.0	94.0	93.9	1.0	1.0	-0.1
251.2	94.0	94.0	94.0	1.0	1.0	0.0
501.2	94.0	94.0	94.0	1.0	1.0	0.0
1995.0	94.0	94.0	94.0	1.0	1.0	0.0
3981.0	94.0	94.0	94.0	1.0	1.0	0.0
7943.0	94.0	94.0	94.2	1.5	3.0	0.2
12590.0	94.0	94.0	94.2	3.0	6.0	0.2

TIME WEIGHTING FAST TEST

Time weighting F is tested on the reference range with a single sinusoidal burst of duration 200 ms at a frequency 2000 Hz and an amplitude which produces an indication 4 dB below the upper limit of the primary indicator range when the signal is continuous. (Weight A, Maximum hold)

Ref. level dB	Expected level dB	Actual level dB	Tolerance(dB)		Deviation dB
			+	-	
109.0	108.0	108.0	1.0	1.0	0.0

TIME WEIGHTING SLOW TEST

Time weighting S is tested on the reference range with a single sinusoidal burst of duration 500 ms at a frequency 2000 Hz and an amplitude which produces an indication 4 dB below the upper limit of the primary indicator range when the signal is continuous. (Weight A, Maximum hold)

Ref. level dB	Expected level dB	Actual level dB	Tolerance(dB)		Deviation dB
			+	-	
109.0	104.9	104.9	1.0	1.0	0.0

PEAK RESPONSE TEST

The onset time of the peak detector is tested on the reference range by comparing the response to a 100 us rectangular test pulse with the response to a 10 ms reference pulse of the same amplitude. The amplitude of the 10 ms reference pulse is such as to produce an indication 1 dB below the upper limit of the primary indicator range.

Positive polarities: (Weighting Z, set the generator signal to single, Lzpmx)

Ref. level dB	Response to		Tolerance +/- dB	Deviation dB
	10 ms	100 us		
112.0	112.0	112.1	2.0	0.1

Negative polarities:

Ref. level dB	Response to		Tolerance +/- dB	Deviation dB
	10 ms	100 us		
112.0	112.0	112.1	2.0	0.1



Test Data for Sound Level Meter

Page 4 of 5

Sound level meter type: 2238 Serial No. 2800932 Date 26-Jul-2018
Microphone type: 4188 Serial No. 2791360
Report: 18CA0725.03

RMS ACCURACY TEST

The RMS detector accuracy is tested on the reference range for a crest factor of 3.

Test frequency: 2000 Hz
Amplitude: 2 dB below the upper limit of the primary indicator range.
Burst repetition frequency: 40 Hz
Tone burst signal: 11 cycles of a sine wave of frequency 2000 Hz. (Set to INT)

	Ref. Level	Expected level	Tone burst signal	Tolerance	Deviation
Time weighting	dB	dB	indication(dB)	+/- dB	dB
Slow	111.0+6.6	111.0	110.9	0.5	-0.1

TIME WEIGHTING IMPULSE TEST

Time weighting I is tested on the reference range (Set the SLM to LAImax)

Test frequency: 2000 Hz
Amplitude: The upper limit of the primary indicator range.

Single sinusoidal burst of duration 5 ms:

Ref. Level	Single burst indication		Tolerance	Deviation
dB	Expected (dB)	Actual (dB)	+/- dB	dB
113.0	104.2	104.1	2.0	-0.1

Repeated at 100 Hz

Ref. Level	Repeated burst indication		Tolerance	Deviation
dB	Expected (dB)	Actual (dB)	+/- dB	dB
113.0	110.3	110.2	1.0	-0.1

TIME AVERAGING TEST

This test compares the SLM reading for continuous sine signals with readings obtained from a sine tone burst sequence having the same RMS level. The test level is 30 dB below the upper limit of the linearity range and repeated for Type 1 SLM with 40 dB below the upper limit of the linearity.

Frequency of tone burst: 4000 Hz

Duration of tone burst: 1 ms

Repetition Time	Level of tone burst	Expected Leq	Actual Leq	Tolerance	Deviation	Remarks
msec	dB	dB	dB	+/- dB	dB	
1000	83.0	83.0	82.6	1.0	-0.4	60s integ.
10000	73.0	73.0	72.6	1.0	-0.4	6min, integ.

PULSE RANGE AND SOUND EXPOSURE LEVEL TEST

The test tone burst signal is superimposed on a baseline signal corresponding to the lower limit of reference range

Test frequency: 4000 Hz

Integration time: 10 sec

The integrating sound level meter set to Leq:

Duration	Rms level of tone burst (dB)	Expected	Actual	Tolerance	Deviation
msec	dB	dB	dB	+/- dB	dB
10	116.0	86.0	85.9	1.7	-0.1

The integrating sound level meter set to SEL:

Duration	Rms level of tone burst (dB)	Expected	Actual	Tolerance	Deviation
msec	dB	dB	dB	+/- dB	dB
10.0	116.0	96.0	95.9	1.7	-0.1



Test Data for Sound Level Meter

Sound level meter type: 2238 Serial No. 2800932 Date 26-Jul-2018
Microphone type: 4188 Serial No. 2791360
Report: 18CA0725 03

OVERLOAD INDICATION TEST

For SLM capable of operating in a non-integrating mode.

Test frequency: 2000 Hz
Amplitude: 2 dB below the upper limit of the primary indicator range.
Burst repetition frequency: 40 Hz
Tone burst signal: 11 cycles of a sine wave of frequency 2000 Hz.

Level	Level reduced by	Further reduced	Difference	Tolerance	Deviation
at overload (dB)	1 dB	3 dB	dB	dB	dB
125.1	124.1	121.1	3.0	1.0	0.0

For integrating SLM, with the instrument indicating Leq.

For integrating SLM, with the instrument indicating Leq and set to the reference range. The test signal as following
The test tone burst signal is superimposed on a baseline signal corresponding to the lower limit of reference range
Test frequency: 4000 Hz
Integration time: 10 sec
Single burst duration: 1 msec

Rms level	Level reduced by	Expected level	Actual level	Tolerance	Deviation
at overload (dB)	1 dB	dB	dB	dB	dB
130.5	129.5	89.5	89.4	2.2	-0.1

ACOUSTIC TEST

The acoustic test of the complete SLM is tested at the frequency 125 Hz and 8000 Hz using a B&K type 4226 Multifunction Acoustic Calibrator. The test is performed in A weighting.

Frequency Hz	Expected level dB	Actual level	Tolerance (dB)		Deviation dB
		Measured (dB)	+	-	
1000	94.0	94.0	0.0	0.0	0.0
125	77.9	78.1	1.0	1.0	0.2
8000	92.9	93.1	1.5	3.0	0.2

-----END-----



專業化驗有限公司

QUALITY PRO TEST-CONSULT LIMITED

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Email: info@qualityprotest.com; Website: www.qualityprotest.com

Tel: (852) 3956 8717; Fax: (852) 3956 3928

REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AH080234
Date of Issue : 21 August 2018
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 6920 v2 (Multi-Parameters)
Manufacturer : YSI (a xylem brand)
Serial Number : 0001C6A7
Date of Received : Aug 20, 2018
Date of Calibration : Aug 20, 2018
Date of Next Calibration^(a) : Nov 20, 2018

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	4.05	0.05	Satisfactory
7.42	7.46	0.04	Satisfactory
10.01	10.04	0.03	Satisfactory

Tolerance of pH should be less than ± 0.10 (pH unit)

(2) Temperature

Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)	Results
17.0	17.2	0.2	Satisfactory
26.3	26.2	-0.1	Satisfactory
54.3	53.8	-0.5	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 the acceptance criteria applicable for similar equipment used by QPT or quoted from relevant international standards.

APPROVED SIGNATORY:


LAM Ho-yee, Emma
Assistant Laboratory Manager



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., Point, Hong Kong

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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
0.00	0.06	0.06	Satisfactory
2.81	2.92	0.11	Satisfactory
4.18	4.23	0.05	Satisfactory
7.76	7.80	0.04	Satisfactory

Tolerance limit of dissolved oxygen should be less than ± 0.20 (mg/L)

(4) Conductivity at 25°C

Conc. of KCl (M)	Expected Reading ($\mu\text{S}/\text{cm}$)	Displayed Reading ($\mu\text{S}/\text{cm}$)	Tolerance (%)	Results
0.001	146.9	152.3	3.7	Satisfactory
0.01	1412	1427	1.1	Satisfactory
0.1	12890	12676	-1.7	Satisfactory
0.5	58670	57968	-1.2	Satisfactory
1.0	111900	108346	-3.2	Satisfactory

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

(5) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	9.98	-0.2	Satisfactory
20	19.97	-0.2	Satisfactory
30	30.10	0.3	Satisfactory

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

(6) Turbidity

Expected Reading (NTU)	Displayed Reading ^(a) (NTU)	Tolerance ^(a) (%)	Results
0	0.4	--	--
10	10.2	2.0	Satisfactory
20	20.3	1.5	Satisfactory
100	101.5	1.5	Satisfactory
800	821.7	2.7	Satisfactory

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

- END OF REPORT -

Remark(s): -

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

^(b) 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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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 6920 v2 (Multi-Parameters)
Manufacturer : YSI (a xylem brand)
Serial Number : 00019CB2
Date of Received : Aug 20, 2018
Date of Calibration : Aug 20, 2018
Date of Next Calibration^(a) : Nov 20, 2018

PART C – REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

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

PART D – CALIBRATION RESULTS^(b,c)

(1) pH at 25°C

Target (pH unit)	Displayed Reading ^(d) (pH Unit)	Tolerance ^(e) (pH Unit)	Results
4.00	4.04	0.04	Satisfactory
7.42	7.43	0.01	Satisfactory
10.01	9.97	-0.04	Satisfactory

Tolerance of pH should be less than ± 0.10 (pH unit)

(2) Temperature

Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)	Results
17.0	17.1	0.1	Satisfactory
26.3	26.2	-0.1	Satisfactory
54.3	54.0	-0.3	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 the acceptance criteria applicable for similar equipment used by QPT or quoted from relevant international standards.

APPROVED SIGNATORY:

LAM Ho-ye, Emma
Assistant Laboratory Manager



REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

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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
0.00	0.05	0.05	Satisfactory
2.81	2.93	0.12	Satisfactory
4.18	4.24	0.06	Satisfactory
7.76	7.81	0.05	Satisfactory

Tolerance limit of dissolved oxygen should be less than ± 0.20 (mg/L)

(4) Conductivity at 25°C

Conc. of KCl (M)	Expected Reading ($\mu\text{S}/\text{cm}$)	Displayed Reading ($\mu\text{S}/\text{cm}$)	Tolerance (%)	Results
0.001	146.9	152.5	3.8	Satisfactory
0.01	1412	1424	0.8	Satisfactory
0.1	12890	12688	-1.6	Satisfactory
0.5	58670	57972	-1.2	Satisfactory
1.0	111900	109256	-2.4	Satisfactory

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

(5) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	9.98	-0.2	Satisfactory
20	20.17	0.9	Satisfactory
30	30.24	0.8	Satisfactory

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

(6) Turbidity

Expected Reading (NTU)	Displayed Reading ^(a) (NTU)	Tolerance ^(a) (%)	Results
0	0.5	--	--
10	10.3	3.0	Satisfactory
20	21.2	6.0	Satisfactory
100	100.8	0.8	Satisfactory
800	797.6	-0.3	Satisfactory

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

~ END OF REPORT ~

Remark(s): -

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

^(b) 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 F. Status of Environmental Permits and Licences

	Description		Permit/ Reference No.	Status	
EIAO	Environmental Permit		EP-489/2014	Approved on 7 Nov 2014	
Contract No.	Description	Location	Permit/ Reference No.	Status	
P560 (R)	Notification of Construction Work under APCO	Launching Site	423880	Receipt acknowledged by EPD on 1 Dec 2017	
		Site Office	397151	Receipt acknowledged by EPD on 15 Jan 2016	
		Stockpiling Area	398015	Receipt acknowledged by EPD on 18 Jan 2016	
		Sheung Sha Chau	405860	Receipt acknowledged by EPD on 5 Aug 2016	
	Construction Noise Permit (General Works)	Launching Site	GW-RS0326-18	Valid until 23 Oct 2018	
		Stockpiling Area	GW-RS0043-18	Superseded by GW-RS0683-18 on 6 Aug 2018	
			GW-RS0683-18	Valid until 3 Feb 2018	
	Discharge License under WPCO	Launching Site	WT00024249-2016	Valid from to 25 Apr 2016 to 30 Apr 2021	
		Stockpiling Area	WT00024250-2016	Approved on 25 Apr 2016 to 30 Apr 2021	
	Registration as Chemical Waste Producer	Launching Site	WPN 5213-951-L2902-01	Registration was updated on 29 Sep 2017	
		Sheung Sha Chau	WPN 5111-434-L2902-03	Registration was updated on 6 Oct 2017	
		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
	3201	Notification of Construction Work under APCO	Works area of 3201	406004	Receipt acknowledged by EPD on 10 Aug 2016
Construction Noise Permit (General Works)		Works area of 3201	GW-RS0428-18	Superseded by GW-0761-18 on 30 Aug 2018	
		Works area of 3201	GW-RS0761-18	Valid until 28 Feb 2019	
Registration as Chemical Waste Producer		Works area of 3201	WPN 5213-951-P3231-01	Completion of Registration on 9 Sep 2016	
Bill Account for disposal			A/C 7025760	Approval granted from EPD on 31 Aug 2016	
3202	Notification of Construction Work under APCO	Works area of 3202	435685	Receipt acknowledged by EPD on 17 Jul 2018	
	Construction Noise Permit (General Works)	Works area of 3202	GW-RS0429-18	Valid until 24 Nov 2018	

Contract No.	Description	Location	Permit/ Reference No.	Status
	Registration as Chemical Waste Producer	Works area of 3202	WPN 5213-951-S3967-01	Registration was updated on 23 May 2017
	Discharge License under WPCO	Works area of 3202	WT00028293-2017	Valid from 12 Jun 2017 to 30 Jun 2022
	Bill Account for disposal		A/C 7025739	Approval granted from EPD on 31 August 2016
3203	Notification of Construction Work under APCO	Works area of 3203	407053	Receipt acknowledged by EPD on 2 Sep 2016
	Construction Noise Permit (General Works)	Works area of 3203	GW-RS0575-18	Valid until 4 Jan 2019
	Registration as Chemical Waste Producer	Works area of 3203	WPN 5213-951-S3954-01	Registration was updated on 12 Dec 2016
	Discharge License under WPCO	Works area of 3203	WT00028251-2017	Valid from 9 Jun 2017 to 30 Jun 2022
	Bill Account for disposal		A/C 7025846	Approval granted from EPD on 9 Sep 2016
3204	Notification of Construction Work under APCO	Works area of 3204	406446	Receipt acknowledged by EPD on 19 Aug 2016
	Construction Noise Permit (General Works)	Works Area of 3204	GW-RS0431-18	Valid until 24 Nov 2018
	Registration as Chemical Waste Producer	Works Area of 3204	WPN 5213-951-C4102-01	Completion of Registration on 15 Sep 2016
		Site Office of 3204	WPN 5213-951-C4102-02	Completion of Registration on 17 Mar 2017
	Discharge License under WPCO	Works area of 3204	WT00028245-2017	Valid from 5 Jun 2017 to 30 Jun 2022
	Bill Account for disposal		A/C 7025969	Approval granted from EPD on 21 Sep 2016
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-RS0576-18	Valid until 4 Jan 2019
	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
	Registration as Chemical Waste Producer	Site office of 3206	WPN 5213-951-Z4035-01	Completion of Registration on 18 Nov 2016

Contract No.	Description	Location	Permit/ Reference No.	Status
		Works area of 3206	WPN 5213-951-Z4035-02	Completion of Registration on 18 Nov 2016
	Construction Noise Permit (General Works)	Works Area of 3206	GW-RS0577-18	Superseded by GW-RS0668-18 on 2 Aug 2018
		Works Area of 3206	GW-RS0668-18	Valid until 30 Jan 2019
		Works Area of 3206	GW-RS0596-18	Valid until 10 Jan 2019
	Bill Account for disposal	Works area of 3206	A/C 7026398	Approval granted from EPD on 16 Nov 2016
3301	Notification of Construction Work under APCO	Works area of 3301	415821	Receipt acknowledged by EPD on 19 Apr 2017
	Registration as Chemical Waste Producer	Works area of 3301	WPN 5213-951-F2718-02	Completion of Registration on 9 Jun 2017
	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-RS0270-18	Valid until 5 Oct 2018
		Works area of 3301	GW-RS0288-17	Valid until 5 Oct 2018
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-RS0541-18	Valid until 31 Oct 2018
3502	Notification of Construction Work under APCO	Works area of 3502	417511	Receipt acknowledged by EPD on 2 Jun 2017
	Registration as Chemical Waste Producer	Works area of 3502	WPN 5213-951-B2520-01	Completion of Registration on 3 Jul 2017
	Bill Account for disposal	Works area of 3502	A/C 7028050	Approval granted from EPD on 21 Jun 2017
	Construction Noise Permit (General Works)	Works area of 3502	GW-RS0193-18	Valid until 10 Sep 2018
3503	Notification of Construction Work under APCO	Works area of 3503	435180	Receipt acknowledged by EPD on 29 Jun 2018
	Registration as Chemical Waste Producer	Works area of 3503	WPN 5113-951-L2845-02	Completion of Registration on 8 Jan 2018

Contract No.	Description	Location	Permit/ Reference No.	Status
	Discharge License under WPCO	Works area of 3503	WT00031258-2018	Valid from 7 Jun 2018 to 30 Jun 2023
	Bill Account for disposal	Works area of 3503	A/C 7029665	Approval granted from EPD on 27 Dec 2017
	Construction Noise Permit (General Works)	Works area of 3503	GW-RS0629-18	Valid until 22 Jan 2019
		Stockpiling area of 3503	GW-RS0384-18	Valid until 13 Nov 2018
3505	Bill Account for disposal	Works area of 3505	A/C 7030321	Approval granted from EPD on 16 Mar 2018
	Construction Noise Permit (General Works)	Works area of 3505	GW-RS0497-18	Valid until 31 Oct 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
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-RS0771-18	Valid until 23 Feb 2019
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
	Registration as Chemical Waste Producer	Works area of 3801	WPN 5296-951-C1169-51	Completion of Registration on 4 Aug 2017
	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-RS0340-18	Superseded by GW-RS0684-18 on 6 Aug 2018
			GW-RS0684-18	Valid until 2 Feb 2019

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

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 Prosecution

Reporting Period	Cumulative Statistics		
	Complaints	Notifications of Summons	Prosecutions
This reporting period	1	0	0
From 28 December 2015 to end of the reporting period	14	1	1

Appendix H. Data of SkyPier HSF Movements to/from Zhuhai and Macau (between 1 and 31 August 2018)

Data of SkyPier HSF Movements to/from Zhuhai and Macau (between 1 and 31 August 2018)

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM- Macao (Maritime Ferry Terminal) YFT- Macao (Taipa) ZUI- Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
01-Aug	08:13	3A061	YFT	Arrival	12.5	-	-
01-Aug	08:26	8S210	XZM	Arrival	12.4	-	-
01-Aug	09:49	3A062	YFT	Arrival	11.8	-	-
01-Aug	10:38	3A163	YFT	Departure	12.1	-	-
01-Aug	10:43	8S212	XZM	Arrival	11.5	-	-
01-Aug	10:53	3A081	ZUI	Arrival	12.5	-	-
01-Aug	11:09	8S121	XZM	Departure	12.3	-	-
01-Aug	11:15	3A063	YFT	Arrival	12.2	-	-
01-Aug	12:20	3A181	ZUI	Departure	13.1	-	-
01-Aug	12:22	3A168	YFT	Departure	12.3	-	-
01-Aug	12:49	8S215	XZM	Arrival	12.5	-	-
01-Aug	13:05	3A064	YFT	Arrival	12.2	-	-
01-Aug	13:20	8S123	XZM	Departure	13	-	-
01-Aug	13:47	3A082	ZUI	Arrival	11.8	-	-
01-Aug	14:23	3A164	YFT	Departure	12.2	-	-
01-Aug	14:23	3A182	ZUI	Departure	11.7	-	-
01-Aug	14:59	3A065	YFT	Arrival	11.9	-	-
01-Aug	16:26	3A167	YFT	Departure	12.5	-	-
01-Aug	16:39	8S218	XZM	Arrival	12.7	-	-
01-Aug	17:02	3A083	ZUI	Arrival	13.5	-	-
01-Aug	17:07	3A067	YFT	Arrival	12.4	-	-
01-Aug	17:29	3A183	ZUI	Departure	11.6	-	-
01-Aug	17:29	8S126	XZM	Departure	12.5	-	-
01-Aug	19:00	3A166	YFT	Departure	13	-	-
01-Aug	19:38	3A084	ZUI	Arrival	12.2	-	-
01-Aug	20:14	3A185	ZUI	Departure	11.9	-	-
01-Aug	21:03	8S2113	XZM	Arrival	11.8	-	-
01-Aug	21:17	3A169	YFT	Departure	13	-	-
01-Aug	22:14	8S522	XZM	Departure	11.8	-	-
02-Aug	08:18	3A061	YFT	Arrival	11.4	-	-
02-Aug	08:26	8S210	XZM	Arrival	12.5	-	-
02-Aug	10:07	3A062	YFT	Arrival	11	-	-
02-Aug	10:34	3A163	YFT	Departure	12.6	-	-
02-Aug	10:44	8S212	XZM	Arrival	11.8	-	-
02-Aug	10:50	3A081	ZUI	Arrival	12.4	-	-
02-Aug	11:07	8S121	XZM	Departure	12.4	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM- Macao (Maritime Ferry Terminal) YFT- Macao (Taipa) ZUI- Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
02-Aug	11:12	3A063	YFT	Arrival	13.2	-	-
02-Aug	12:28	3A168	YFT	Departure	13.6	-	-
02-Aug	12:30	3A181	ZUI	Departure	13.2	-	-
02-Aug	12:54	8S215	XZM	Arrival	11.7	-	-
02-Aug	12:59	3A064	YFT	Arrival	11.3	-	-
02-Aug	13:16	8S123	XZM	Departure	11.4	-	-
02-Aug	13:44	3A082	ZUI	Arrival	11.8	-	-
02-Aug	14:15	3A182	ZUI	Departure	13.3	-	-
02-Aug	14:22	3A164	YFT	Departure	12.1	-	-
02-Aug	14:50	3A065	YFT	Arrival	13.4	-	-
02-Aug	16:22	3A167	YFT	Departure	13.8	-	-
02-Aug	16:40	8S218	XZM	Arrival	10.7	-	-
02-Aug	16:45	3A083	ZUI	Arrival	13.1	-	-
02-Aug	17:03	3A067	YFT	Arrival	12.5	-	-
02-Aug	17:17	8S126	XZM	Departure	11.5	-	-
02-Aug	17:17	3A183	ZUI	Departure	12.5	-	-
02-Aug	19:23	3A166	YFT	Departure	12	-	-
02-Aug	19:59	3A084	ZUI	Arrival	13.1	-	-
02-Aug	20:19	3A185	ZUI	Departure	12.3	-	-
02-Aug	20:55	8S2113	XZM	Arrival	12.7	-	-
02-Aug	21:08	3A169	YFT	Departure	11.6	-	-
02-Aug	22:08	8S522	XZM	Departure	13.1	-	-
03-Aug	08:24	3A061	YFT	Arrival	11.3	-	-
03-Aug	08:36	8S210	XZM	Arrival	12.6	-	-
03-Aug	10:02	3A062	YFT	Arrival	11.7	-	-
03-Aug	10:17	3A163	YFT	Departure	11.9	-	-
03-Aug	10:47	8S212	XZM	Arrival	11.9	-	-
03-Aug	10:50	3A081	ZUI	Arrival	13.2	-	-
03-Aug	11:13	8S121	XZM	Departure	11.4	-	-
03-Aug	11:21	3A063	YFT	Arrival	12.1	-	-
03-Aug	12:39	3A181	ZUI	Departure	13	-	-
03-Aug	12:41	3A168	YFT	Departure	13	-	-
03-Aug	13:02	8S215	XZM	Arrival	12.4	-	-
03-Aug	13:05	3A064	YFT	Arrival	10.2	-	-
03-Aug	13:28	8S123	XZM	Departure	12.9	-	-
03-Aug	13:44	3A082	ZUI	Arrival	12.4	-	-
03-Aug	14:27	3A164	YFT	Departure	11.8	-	-
03-Aug	14:29	3A182	ZUI	Departure	12.7	-	-
03-Aug	15:03	3A065	YFT	Arrival	12.6	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT - Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
03-Aug	16:15	3A167	YFT	Departure	12.5	-	-
03-Aug	16:53	8S218	XZM	Arrival	11.2	-	-
03-Aug	16:55	3A083	ZUI	Arrival	13.3	-	-
03-Aug	17:03	3A067	YFT	Arrival	12	-	-
03-Aug	17:28	8S126	XZM	Departure	13.7	-	-
03-Aug	17:32	3A183	ZUI	Departure	11.7	-	-
03-Aug	19:07	3A166	YFT	Departure	13	-	-
03-Aug	19:37	3A084	ZUI	Arrival	13.3	-	-
03-Aug	20:24	3A185	ZUI	Departure	12.7	-	-
03-Aug	20:59	8S2113	XZM	Arrival	12.9	-	-
03-Aug	21:13	3A169	YFT	Departure	13.1	-	-
04-Aug	08:15	3A061	YFT	Arrival	12.3	-	-
04-Aug	08:28	8S210	XZM	Arrival	13.1	-	-
04-Aug	10:01	3A062	YFT	Arrival	11.4	-	-
04-Aug	10:16	3A163	YFT	Departure	11.6	-	-
04-Aug	10:39	8S212	XZM	Arrival	12.7	-	-
04-Aug	10:51	3A081	ZUI	Arrival	12.9	-	-
04-Aug	11:09	8S121	XZM	Departure	12.7	-	-
04-Aug	11:20	3A063	YFT	Arrival	11.2	-	-
04-Aug	12:16	3A181	ZUI	Departure	12.6	-	-
04-Aug	12:16	3A168	YFT	Departure	12.1	-	-
04-Aug	12:38	8S215	XZM	Arrival	12	-	-
04-Aug	12:52	3A064	YFT	Arrival	11.4	-	-
04-Aug	13:19	8S123	XZM	Departure	12.2	-	-
04-Aug	13:48	3A082	ZUI	Arrival	11.5	-	-
04-Aug	14:16	3A164	YFT	Departure	11.8	-	-
04-Aug	14:17	3A182	ZUI	Departure	13.4	-	-
04-Aug	14:56	3A065	YFT	Arrival	10.3	-	-
04-Aug	16:20	3A167	YFT	Departure	11.7	-	-
04-Aug	16:38	8S218	XZM	Arrival	12	-	-
04-Aug	16:40	3A083	ZUI	Arrival	13.1	-	-
04-Aug	16:58	3A067	YFT	Arrival	12.4	-	-
04-Aug	17:19	3A183	ZUI	Departure	13.2	-	-
04-Aug	17:24	8S126	XZM	Departure	12.9	-	-
04-Aug	19:34	3A166	YFT	Departure	12.8	-	-
04-Aug	19:59	3A084	ZUI	Arrival	13.7	-	-
04-Aug	20:40	3A185	ZUI	Departure	12.3	-	-
04-Aug	21:08	8S2113	XZM	Arrival	12.4	-	-
04-Aug	21:30	3A169	YFT	Departure	12.3	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT - Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
04-Aug	22:18	8S522	XZM	Departure	13.2	-	-
05-Aug	08:14	3A061	YFT	Arrival	12.5	-	-
05-Aug	08:25	8S210	XZM	Arrival	12.1	-	-
05-Aug	10:01	3A062	YFT	Arrival	12.7	-	-
05-Aug	10:18	3A163	YFT	Departure	12.9	-	-
05-Aug	10:38	8S212	XZM	Arrival	12.4	-	-
05-Aug	10:47	3A081	ZUI	Arrival	13	-	-
05-Aug	11:07	8S121	XZM	Departure	12.3	-	-
05-Aug	11:12	3A063	YFT	Arrival	12.2	-	-
05-Aug	12:24	3A181	ZUI	Departure	13.4	-	-
05-Aug	12:29	3A168	YFT	Departure	12.5	-	-
05-Aug	12:43	8S215	XZM	Arrival	12.6	-	-
05-Aug	12:53	3A064	YFT	Arrival	12.4	-	-
05-Aug	13:18	8S123	XZM	Departure	12.4	-	-
05-Aug	14:02	3A082	ZUI	Arrival	12.3	-	-
05-Aug	14:36	3A182	ZUI	Departure	12.1	-	-
05-Aug	14:37	3A164	YFT	Departure	12.7	-	-
05-Aug	14:51	3A065	YFT	Arrival	12.1	-	-
05-Aug	16:29	3A167	YFT	Departure	13.2	-	-
05-Aug	16:51	8S218	XZM	Arrival	12.4	-	-
05-Aug	16:54	3A083	ZUI	Arrival	12.9	-	-
05-Aug	16:59	3A067	YFT	Arrival	13.2	-	-
05-Aug	17:28	3A183	ZUI	Departure	12.9	-	-
05-Aug	17:28	8S126	XZM	Departure	12.9	-	-
05-Aug	19:21	3A166	YFT	Departure	12.8	-	-
05-Aug	19:34	3A084	ZUI	Arrival	13.3	-	-
05-Aug	20:22	3A185	ZUI	Departure	12.8	<= 5	< 1min
05-Aug	21:02	8S2113	XZM	Arrival	12.1	-	-
05-Aug	21:13	3A169	YFT	Departure	12.8	-	-
05-Aug	22:05	8S522	XZM	Departure	12.5	-	-
06-Aug	08:15	3A061	YFT	Arrival	12.9	-	-
06-Aug	08:21	8S210	XZM	Arrival	12.6	-	-
06-Aug	10:14	3A062	YFT	Arrival	11.6	-	-
06-Aug	10:36	3A163	YFT	Departure	10.6	-	-
06-Aug	10:40	8S212	XZM	Arrival	12.9	-	-
06-Aug	10:55	3A081	ZUI	Arrival	13	-	-
06-Aug	10:59	8S121	XZM	Departure	13.3	-	-
06-Aug	11:21	3A063	YFT	Arrival	11.8	-	-
06-Aug	12:19	3A168	YFT	Departure	12.5	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT - Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
06-Aug	12:24	3A181	ZUI	Departure	12.2	-	-
06-Aug	12:39	8S215	XZM	Arrival	12.4	-	-
06-Aug	13:03	3A064	YFT	Arrival	11.6	-	-
06-Aug	13:18	8S123	XZM	Departure	12.8	-	-
06-Aug	13:47	3A082	ZUI	Arrival	12.6	-	-
06-Aug	14:29	3A182	ZUI	Departure	12.3	-	-
06-Aug	14:32	3A164	YFT	Departure	12	-	-
06-Aug	14:57	3A065	YFT	Arrival	11.8	-	-
06-Aug	16:19	3A167	YFT	Departure	12.4	-	-
06-Aug	16:47	8S218	XZM	Arrival	12.2	-	-
06-Aug	16:49	3A083	ZUI	Arrival	12.2	-	-
06-Aug	16:59	3A067	YFT	Arrival	11.6	-	-
06-Aug	17:34	8S126	XZM	Departure	12.6	-	-
06-Aug	17:34	3A183	ZUI	Departure	12.2	-	-
06-Aug	19:20	3A166	YFT	Departure	13.4	-	-
06-Aug	19:40	3A084	ZUI	Arrival	12.6	-	-
06-Aug	20:19	3A185	ZUI	Departure	12.3	-	-
06-Aug	21:06	8S2113	XZM	Arrival	11.3	-	-
06-Aug	21:19	3A169	YFT	Departure	12.2	-	-
06-Aug	22:13	8S522	XZM	Departure	12.3	-	-
07-Aug	08:16	3A061	YFT	Arrival	11.6	-	-
07-Aug	08:19	8S210	XZM	Arrival	13	-	-
07-Aug	09:55	3A062	YFT	Arrival	12.5	-	-
07-Aug	10:22	3A163	YFT	Departure	12.4	-	-
07-Aug	10:42	8S212	XZM	Arrival	12.5	-	-
07-Aug	10:56	3A081	ZUI	Arrival	13.2	-	-
07-Aug	11:09	8S121	XZM	Departure	12	-	-
07-Aug	11:21	3A063	YFT	Arrival	11.2	-	-
07-Aug	12:25	3A168	YFT	Departure	11.3	-	-
07-Aug	13:01	3A181	ZUI	Departure	11.8	-	-
07-Aug	13:12	8S215	XZM	Arrival	12.1	-	-
07-Aug	13:17	3A064	YFT	Arrival	12	-	-
07-Aug	13:38	8S123	XZM	Departure	10.2	-	-
07-Aug	13:50	3A082	ZUI	Arrival	12.8	-	-
07-Aug	14:21	3A182	ZUI	Departure	13	-	-
07-Aug	14:21	3A164	YFT	Departure	12.5	-	-
07-Aug	15:09	3A065	YFT	Arrival	12.2	-	-
07-Aug	16:27	3A167	YFT	Departure	12.6	-	-
07-Aug	16:35	8S218	XZM	Arrival	11.7	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM- Macao (Maritime Ferry Terminal) YFT- Macao (Taipa) ZUI- Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
07-Aug	17:00	3A083	ZUI	Arrival	12.5	-	-
07-Aug	17:29	3A067	YFT	Arrival	12.2	-	-
07-Aug	17:30	3A183	ZUI	Departure	12.8	-	-
07-Aug	17:32	8S126	XZM	Departure	11.9	-	-
07-Aug	19:14	3A166	YFT	Departure	13.6	-	-
07-Aug	19:38	3A084	ZUI	Arrival	13.4	-	-
07-Aug	20:17	3A185	ZUI	Departure	12.2	-	-
07-Aug	20:56	8S2113	XZM	Arrival	12.1	-	-
07-Aug	21:08	3A169	YFT	Departure	12.7	-	-
08-Aug	08:16	3A061	YFT	Arrival	12.3	-	-
08-Aug	08:32	8S210	XZM	Arrival	11.9	-	-
08-Aug	10:08	3A062	YFT	Arrival	12.8	-	-
08-Aug	10:28	3A163	YFT	Departure	12.7	-	-
08-Aug	10:38	8S212	XZM	Arrival	12.7	-	-
08-Aug	10:53	3A081	ZUI	Arrival	12.7	-	-
08-Aug	11:16	8S121	XZM	Departure	11.7	-	-
08-Aug	11:23	3A063	YFT	Arrival	12.4	-	-
08-Aug	12:15	3A181	ZUI	Departure	10.7	-	-
08-Aug	12:18	3A168	YFT	Departure	11	-	-
08-Aug	12:39	8S215	XZM	Arrival	12.5	-	-
08-Aug	12:57	3A064	YFT	Arrival	12.4	-	-
08-Aug	13:18	8S123	XZM	Departure	12.9	-	-
08-Aug	13:41	3A082	ZUI	Arrival	12.2	-	-
08-Aug	14:21	3A182	ZUI	Departure	12.9	-	-
08-Aug	14:27	3A164	YFT	Departure	12.8	-	-
08-Aug	14:59	3A065	YFT	Arrival	12.4	<= 5	< 1min
08-Aug	16:23	3A167	YFT	Departure	12.1	-	-
08-Aug	16:46	8S218	XZM	Arrival	10.8	-	-
08-Aug	16:52	3A083	ZUI	Arrival	12.2	-	-
08-Aug	17:04	3A067	YFT	Arrival	11	-	-
08-Aug	17:17	3A183	ZUI	Departure	12.4	-	-
08-Aug	17:26	8S126	XZM	Departure	12.7	-	-
08-Aug	19:07	3A166	YFT	Departure	12	-	-
08-Aug	20:04	3A084	ZUI	Arrival	12.2	-	-
08-Aug	20:24	3A185	ZUI	Departure	12.6	-	-
08-Aug	21:02	8S2113	XZM	Arrival	12.6	-	-
08-Aug	21:10	3A169	YFT	Departure	13	-	-
09-Aug	08:14	3A061	YFT	Arrival	13.8	-	-
09-Aug	08:18	8S210	XZM	Arrival	13.2	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT - Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
09-Aug	10:05	3A062	YFT	Arrival	13.1	-	-
09-Aug	10:24	3A163	YFT	Departure	13.2	-	-
09-Aug	10:44	8S212	XZM	Arrival	13.2	-	-
09-Aug	10:55	3A081	ZUI	Arrival	13.3	-	-
09-Aug	11:10	8S121	XZM	Departure	12.7	-	-
09-Aug	11:16	3A063	YFT	Arrival	12	-	-
09-Aug	12:21	3A168	YFT	Departure	11.3	-	-
09-Aug	12:30	3A181	ZUI	Departure	11.7	-	-
09-Aug	12:49	8S215	XZM	Arrival	12.4	-	-
09-Aug	12:55	3A064	YFT	Arrival	12.7	-	-
09-Aug	13:23	8S123	XZM	Departure	12.1	-	-
09-Aug	13:49	3A082	ZUI	Arrival	12.6	-	-
09-Aug	14:19	3A182	ZUI	Departure	12.2	-	-
09-Aug	14:23	3A164	YFT	Departure	11.9	-	-
09-Aug	14:56	3A065	YFT	Arrival	11.2	-	-
09-Aug	16:16	3A167	YFT	Departure	11.9	-	-
09-Aug	16:44	8S218	XZM	Arrival	12.1	-	-
09-Aug	16:48	3A083	ZUI	Arrival	11.7	-	-
09-Aug	17:00	3A067	YFT	Arrival	11.8	-	-
09-Aug	17:05	3A183	ZUI	Departure	13.7	-	-
09-Aug	17:13	8S126	XZM	Departure	13.7	-	-
09-Aug	19:19	3A166	YFT	Departure	12.5	-	-
09-Aug	19:55	3A084	ZUI	Arrival	11.4	-	-
09-Aug	20:24	3A185	ZUI	Departure	13.3	-	-
09-Aug	20:55	8S2113	XZM	Arrival	12.2	-	-
09-Aug	21:19	3A169	YFT	Departure	12.3	-	-
10-Aug	08:18	3A061	YFT	Arrival	12.1	-	-
10-Aug	08:21	8S210	XZM	Arrival	13.1	-	-
10-Aug	10:01	3A062	YFT	Arrival	12.1	-	-
10-Aug	10:20	3A163	YFT	Departure	11.4	-	-
10-Aug	10:40	8S212	XZM	Arrival	12.6	-	-
10-Aug	11:00	3A081	ZUI	Arrival	12.7	-	-
10-Aug	11:10	8S121	XZM	Departure	11.7	-	-
10-Aug	11:14	3A063	YFT	Arrival	13.4	-	-
10-Aug	12:24	3A168	YFT	Departure	13.1	-	-
10-Aug	12:29	3A181	ZUI	Departure	11.6	-	-
10-Aug	12:45	8S215	XZM	Arrival	12.3	-	-
10-Aug	12:57	3A064	YFT	Arrival	11.9	-	-
10-Aug	13:31	8S123	XZM	Departure	11.9	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM- Macao (Maritime Ferry Terminal) YFT- Macao (Taipa) ZUI- Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
10-Aug	13:49	3A082	ZUI	Arrival	12.2	-	-
10-Aug	14:27	3A182	ZUI	Departure	11.9	-	-
10-Aug	14:28	3A164	YFT	Departure	11.9	-	-
10-Aug	14:55	3A065	YFT	Arrival	12.8	-	-
10-Aug	16:21	3A167	YFT	Departure	13	-	-
10-Aug	16:41	8S218	XZM	Arrival	12.3	-	-
10-Aug	16:44	3A083	ZUI	Arrival	12.6	-	-
10-Aug	16:58	3A067	YFT	Arrival	11.8	-	-
10-Aug	17:17	3A183	ZUI	Departure	12.9	-	-
10-Aug	17:20	8S126	XZM	Departure	12.3	-	-
10-Aug	19:20	3A166	YFT	Departure	12.1	-	-
10-Aug	19:46	3A084	ZUI	Arrival	11.7	-	-
10-Aug	20:26	3A185	ZUI	Departure	12.5	-	-
10-Aug	21:05	8S2113	XZM	Arrival	12.2	-	-
10-Aug	21:26	3A169	YFT	Departure	12	-	-
10-Aug	22:12	8S522	XZM	Departure	12.5	-	-
11-Aug	08:23	3A061	YFT	Arrival	11.4	-	-
11-Aug	08:34	8S210	XZM	Arrival	12.5	-	-
11-Aug	10:13	3A062	YFT	Arrival	11.9	-	-
11-Aug	10:35	3A163	YFT	Departure	12.4	-	-
11-Aug	10:43	8S212	XZM	Arrival	12.2	-	-
11-Aug	10:52	3A081	ZUI	Arrival	13.4	-	-
11-Aug	11:15	3A063	YFT	Arrival	11.9	-	-
11-Aug	11:15	8S121	XZM	Departure	12.2	-	-
11-Aug	12:21	3A168	YFT	Departure	11	-	-
11-Aug	12:29	3A181	ZUI	Departure	12.3	-	-
11-Aug	12:48	8S215	XZM	Arrival	12.2	-	-
11-Aug	13:02	3A064	YFT	Arrival	12.6	-	-
11-Aug	13:28	8S123	XZM	Departure	11.7	-	-
11-Aug	13:52	3A082	ZUI	Arrival	12.4	-	-
11-Aug	14:34	3A164	YFT	Departure	12.4	-	-
11-Aug	14:37	3A182	ZUI	Departure	12.2	-	-
11-Aug	14:59	3A065	YFT	Arrival	11.9	-	-
11-Aug	16:30	3A167	YFT	Departure	11.2	-	-
11-Aug	16:53	8S218	XZM	Arrival	12.2	-	-
11-Aug	16:55	3A083	ZUI	Arrival	12.6	-	-
11-Aug	17:05	3A067	YFT	Arrival	12.1	-	-
11-Aug	17:16	3A183	ZUI	Departure	12.5	-	-
11-Aug	17:23	8S126	XZM	Departure	12.1	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT - Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
11-Aug	19:22	3A166	YFT	Departure	11.8	-	-
11-Aug	20:00	3A084	ZUI	Arrival	12.1	-	-
11-Aug	20:31	3A185	ZUI	Departure	13.2	-	-
11-Aug	21:06	8S2113	XZM	Arrival	12	-	-
11-Aug	21:20	3A169	YFT	Departure	12.8	<= 5	< 1min
11-Aug	22:19	8S522	XZM	Departure	12.1	-	-
12-Aug	08:13	3A061	YFT	Arrival	12.5	-	-
12-Aug	08:32	8S210	XZM	Arrival	10.3	-	-
12-Aug	10:02	3A062	YFT	Arrival	13.8	-	-
12-Aug	10:43	3A163	YFT	Departure	14	-	-
12-Aug	10:50	8S212	XZM	Arrival	11.5	-	-
12-Aug	11:01	3A081	ZUI	Arrival	12.5	-	-
12-Aug	11:21	8S121	XZM	Departure	12.7	-	-
12-Aug	11:21	3A063	YFT	Arrival	12.3	-	-
12-Aug	12:38	3A168	YFT	Departure	12.5	-	-
12-Aug	12:41	3A181	ZUI	Departure	13	-	-
12-Aug	12:48	8S215	XZM	Arrival	12.3	-	-
12-Aug	13:11	3A064	YFT	Arrival	13.6	-	-
12-Aug	13:56	3A082	ZUI	Arrival	11.6	-	-
12-Aug	14:29	8S123	XZM	Departure	11.9	-	-
12-Aug	14:33	3A182	ZUI	Departure	12.9	-	-
12-Aug	15:09	3A065	YFT	Arrival	12.5	-	-
12-Aug	15:18	3A164	YFT	Departure	13.3	-	-
12-Aug	16:22	3A167	YFT	Departure	12.6	-	-
12-Aug	16:28	8S218	XZM	Arrival	12.7	-	-
12-Aug	16:56	3A067	YFT	Arrival	13	-	-
12-Aug	16:56	3A083	ZUI	Arrival	12.2	-	-
12-Aug	17:47	3A183	ZUI	Departure	12	-	-
12-Aug	17:56	8S126	XZM	Departure	10.8	-	-
12-Aug	19:15	3A166	YFT	Departure	12.7	-	-
12-Aug	19:53	3A084	ZUI	Arrival	11	-	-
12-Aug	20:25	3A185	ZUI	Departure	13.5	-	-
12-Aug	21:11	8S2113	XZM	Arrival	11.9	-	-
12-Aug	21:13	3A169	YFT	Departure	13.2	-	-
12-Aug	22:27	8S522	XZM	Departure	12.2	-	-
13-Aug	08:14	3A061	YFT	Arrival	11.2	-	-
13-Aug	08:27	8S210	XZM	Arrival	11.2	-	-
13-Aug	10:02	3A062	YFT	Arrival	11.6	-	-
13-Aug	10:47	3A081	ZUI	Arrival	11.7	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT - Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
13-Aug	10:48	3A163	YFT	Departure	12.6	-	-
13-Aug	10:56	8S212	XZM	Arrival	12.6	-	-
13-Aug	11:14	3A063	YFT	Arrival	12.5	-	-
13-Aug	11:36	8S121	XZM	Departure	12.6	-	-
13-Aug	12:29	3A168	YFT	Departure	13.1	-	-
13-Aug	12:35	3A181	ZUI	Departure	12.4	-	-
13-Aug	13:01	8S215	XZM	Arrival	12.2	-	-
13-Aug	13:21	3A064	YFT	Arrival	12.2	-	-
13-Aug	13:34	8S123	XZM	Departure	12.6	-	-
13-Aug	13:54	3A082	ZUI	Arrival	12.5	-	-
13-Aug	14:34	3A182	ZUI	Departure	12.7	-	-
13-Aug	14:45	3A164	YFT	Departure	13	-	-
13-Aug	15:00	3A065	YFT	Arrival	12.5	-	-
13-Aug	16:44	3A167	YFT	Departure	12.2	-	-
13-Aug	17:17	3A083	ZUI	Arrival	12.4	-	-
13-Aug	17:20	8S218	XZM	Arrival	12	-	-
13-Aug	17:27	3A067	YFT	Arrival	12.4	-	-
13-Aug	17:49	3A183	ZUI	Departure	11.9	-	-
13-Aug	17:53	8S126	XZM	Departure	13.2	-	-
13-Aug	19:35	3A166	YFT	Departure	12.4	-	-
13-Aug	20:03	3A084	ZUI	Arrival	10.7	-	-
13-Aug	20:26	3A185	ZUI	Departure	12.7	-	-
13-Aug	20:59	8S2113	XZM	Arrival	12.9	<= 5	< 1min
13-Aug	21:29	3A169	YFT	Departure	12.4	-	-
13-Aug	22:31	8S522	XZM	Departure	12.8	-	-
14-Aug	08:20	3A061	YFT	Arrival	12.2	-	-
14-Aug	08:24	8S210	XZM	Arrival	12.9	-	-
14-Aug	09:51	3A062	YFT	Arrival	11.7	-	-
14-Aug	10:30	3A163	YFT	Departure	12.4	-	-
14-Aug	10:33	8S212	XZM	Arrival	12.9	-	-
14-Aug	10:41	3A081	ZUI	Arrival	11.2	-	-
14-Aug	11:11	8S121	XZM	Departure	11.6	-	-
14-Aug	11:14	3A063	YFT	Arrival	12.2	-	-
14-Aug	12:29	3A168	YFT	Departure	12.6	-	-
14-Aug	12:36	3A181	ZUI	Departure	13.1	-	-
14-Aug	12:54	8S215	XZM	Arrival	12	-	-
14-Aug	12:58	3A064	YFT	Arrival	12.1	-	-
14-Aug	13:49	8S123	XZM	Departure	12.6	-	-
14-Aug	13:53	3A082	ZUI	Arrival	13	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT - Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
14-Aug	14:34	3A164	YFT	Departure	11.5	-	-
14-Aug	14:37	3A182	ZUI	Departure	12.9	-	-
14-Aug	15:06	3A065	YFT	Arrival	12.3	-	-
14-Aug	16:26	3A167	YFT	Departure	13.1	-	-
14-Aug	16:33	3A083	ZUI	Arrival	12.5	-	-
14-Aug	16:46	8S218	XZM	Arrival	11.6	-	-
14-Aug	17:08	3A067	YFT	Arrival	11.8	<= 5	< 1min
14-Aug	17:22	3A183	ZUI	Departure	11.9	-	-
14-Aug	17:55	8S126	XZM	Departure	10.5	-	-
14-Aug	20:15	8S2113	XZM	Arrival	11.9	-	-
15-Aug	08:22	8S210	XZM	Arrival	11.2	-	-
15-Aug	08:26	3A061	YFT	Arrival	10.7	-	-
15-Aug	09:41	3A062	YFT	Arrival	13.3	-	-
15-Aug	10:18	3A163	YFT	Departure	13.9	-	-
15-Aug	10:42	8S212	XZM	Arrival	10.2	-	-
15-Aug	10:48	8S121	XZM	Departure	11.5	-	-
15-Aug	11:20	3A063	YFT	Arrival	11.7	-	-
15-Aug	12:22	3A168	YFT	Departure	11.8	-	-
15-Aug	12:41	8S215	XZM	Arrival	13.2	-	-
15-Aug	12:53	3A064	YFT	Arrival	13.2	-	-
15-Aug	13:35	8S123	XZM	Departure	13	-	-
15-Aug	13:49	3A082	ZUI	Arrival	12.8	-	-
15-Aug	14:27	3A164	YFT	Departure	13.9	-	-
15-Aug	14:29	3A182	ZUI	Departure	13.2	-	-
15-Aug	15:00	3A065	YFT	Arrival	11.8	-	-
15-Aug	16:21	3A167	YFT	Departure	11.8	-	-
15-Aug	16:48	8S218	XZM	Arrival	12.5	-	-
15-Aug	16:50	3A083	ZUI	Arrival	11.4	-	-
15-Aug	16:56	3A067	YFT	Arrival	13.5	-	-
15-Aug	17:23	8S126	XZM	Departure	12.7	-	-
15-Aug	17:25	3A183	ZUI	Departure	13.1	-	-
15-Aug	19:23	3A166	YFT	Departure	12.5	-	-
15-Aug	19:40	3A084	ZUI	Arrival	11.8	-	-
15-Aug	20:15	3A185	ZUI	Departure	12.3	-	-
15-Aug	21:00	8S2113	XZM	Arrival	12.8	-	-
15-Aug	21:19	3A169	YFT	Departure	12	-	-
15-Aug	22:07	8S522	XZM	Departure	12	-	-
16-Aug	08:13	3A061	YFT	Arrival	12.1	-	-
16-Aug	08:15	8S210	XZM	Arrival	12.9	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM- Macao (Maritime Ferry Terminal) YFT- Macao (Taipa) ZUI- Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
16-Aug	10:03	3A062	YFT	Arrival	11.7	-	-
16-Aug	10:20	3A163	YFT	Departure	12.6	-	-
16-Aug	10:45	8S212	XZM	Arrival	10.8	-	-
16-Aug	10:49	3A081	ZUI	Arrival	12.1	-	-
16-Aug	11:13	8S121	XZM	Departure	12.2	-	-
16-Aug	11:19	3A063	YFT	Arrival	11.4	-	-
16-Aug	12:24	3A168	YFT	Departure	12.3	-	-
16-Aug	12:28	3A181	ZUI	Departure	13.1	-	-
16-Aug	12:42	8S215	XZM	Arrival	11.4	-	-
16-Aug	13:00	3A064	YFT	Arrival	12.4	-	-
16-Aug	13:38	8S123	XZM	Departure	11.8	-	-
16-Aug	13:45	3A082	ZUI	Arrival	12.6	-	-
16-Aug	14:30	3A182	ZUI	Departure	11.1	-	-
16-Aug	14:32	3A164	YFT	Departure	12.5	-	-
16-Aug	14:58	3A065	YFT	Arrival	12.3	-	-
16-Aug	16:23	3A167	YFT	Departure	12.7	-	-
16-Aug	16:47	8S218	XZM	Arrival	11.9	-	-
16-Aug	16:52	3A083	ZUI	Arrival	13.5	-	-
16-Aug	17:05	3A067	YFT	Arrival	12.1	-	-
16-Aug	17:23	3A183	ZUI	Departure	12.7	-	-
16-Aug	17:24	8S126	XZM	Departure	12.9	-	-
16-Aug	19:13	3A166	YFT	Departure	11.7	-	-
16-Aug	20:04	3A084	ZUI	Arrival	12.7	-	-
16-Aug	20:31	3A185	ZUI	Departure	12.3	-	-
16-Aug	21:07	8S2113	XZM	Arrival	12.4	-	-
16-Aug	21:36	3A169	YFT	Departure	12.1	-	-
17-Aug	08:20	8S210	XZM	Arrival	12.6	-	-
17-Aug	08:25	3A061	YFT	Arrival	12.5	-	-
17-Aug	10:05	3A062	YFT	Arrival	11.4	-	-
17-Aug	10:24	3A163	YFT	Departure	12.8	-	-
17-Aug	10:42	8S212	XZM	Arrival	11.6	-	-
17-Aug	10:50	3A081	ZUI	Arrival	12.5	-	-
17-Aug	11:06	8S121	XZM	Departure	12	-	-
17-Aug	11:20	3A063	YFT	Arrival	12.8	-	-
17-Aug	12:18	3A168	YFT	Departure	13.6	-	-
17-Aug	12:21	3A181	ZUI	Departure	13.1	-	-
17-Aug	12:44	8S215	XZM	Arrival	12.4	-	-
17-Aug	13:04	3A064	YFT	Arrival	10.5	-	-
17-Aug	13:25	8S123	XZM	Departure	12.2	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT - Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
17-Aug	13:46	3A082	ZUI	Arrival	11.9	-	-
17-Aug	14:20	3A164	YFT	Departure	12.5	-	-
17-Aug	14:21	3A182	ZUI	Departure	12.8	-	-
17-Aug	14:55	3A065	YFT	Arrival	13.3	-	-
17-Aug	16:18	3A167	YFT	Departure	13.9	-	-
17-Aug	16:43	8S218	XZM	Arrival	10.5	-	-
17-Aug	16:45	3A083	ZUI	Arrival	13.3	-	-
17-Aug	17:00	3A067	YFT	Arrival	11.3	-	-
17-Aug	17:05	3A183	ZUI	Departure	12.6	-	-
17-Aug	17:11	8S126	XZM	Departure	12.7	-	-
17-Aug	19:19	3A166	YFT	Departure	12.1	-	-
17-Aug	19:53	3A084	ZUI	Arrival	13.1	-	-
17-Aug	20:14	3A185	ZUI	Departure	12.5	-	-
17-Aug	21:04	8S2113	XZM	Arrival	12.4	-	-
17-Aug	21:05	3A169	YFT	Departure	11	-	-
17-Aug	22:10	8S522	XZM	Departure	12	-	-
18-Aug	08:17	3A061	YFT	Arrival	11.5	-	-
18-Aug	08:20	8S210	XZM	Arrival	12.8	-	-
18-Aug	10:05	3A062	YFT	Arrival	12.4	-	-
18-Aug	10:18	3A163	YFT	Departure	12	-	-
18-Aug	10:31	8S212	XZM	Arrival	12.5	-	-
18-Aug	10:48	3A081	ZUI	Arrival	12.6	-	-
18-Aug	11:03	8S121	XZM	Departure	13.2	-	-
18-Aug	11:13	3A063	YFT	Arrival	12.6	-	-
18-Aug	12:14	3A181	ZUI	Departure	13.1	-	-
18-Aug	12:15	3A168	YFT	Departure	13.1	-	-
18-Aug	12:40	8S215	XZM	Arrival	12.6	-	-
18-Aug	12:58	3A064	YFT	Arrival	10.9	<= 5	< 1min
18-Aug	13:31	8S123	XZM	Departure	13.6	-	-
18-Aug	13:50	3A082	ZUI	Arrival	11.8	-	-
18-Aug	14:18	3A164	YFT	Departure	13.1	-	-
18-Aug	14:18	3A182	ZUI	Departure	12.5	-	-
18-Aug	14:56	3A065	YFT	Arrival	12.9	-	-
18-Aug	16:21	3A167	YFT	Departure	13.6	-	-
18-Aug	16:47	8S218	XZM	Arrival	12.6	-	-
18-Aug	16:50	3A083	ZUI	Arrival	13.1	-	-
18-Aug	17:00	3A067	YFT	Arrival	12.4	-	-
18-Aug	17:24	3A183	ZUI	Departure	13.1	-	-
18-Aug	17:26	8S126	XZM	Departure	13.6	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT - Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
18-Aug	19:17	3A166	YFT	Departure	12.5	-	-
18-Aug	20:03	3A084	ZUI	Arrival	12.7	-	-
18-Aug	20:25	3A185	ZUI	Departure	12.5	-	-
18-Aug	20:56	8S2113	XZM	Arrival	11.8	-	-
18-Aug	21:08	3A169	YFT	Departure	12.4	-	-
18-Aug	22:12	8S522	XZM	Departure	12.4	-	-
19-Aug	08:15	3A061	YFT	Arrival	12.1	-	-
19-Aug	08:18	8S210	XZM	Arrival	13.2	-	-
19-Aug	10:24	3A062	YFT	Arrival	12	-	-
19-Aug	10:46	3A163	YFT	Departure	12.3	-	-
19-Aug	10:50	3A081	ZUI	Arrival	12.9	-	-
19-Aug	10:53	8S212	XZM	Arrival	11.1	-	-
19-Aug	11:14	8S121	XZM	Departure	12.5	-	-
19-Aug	11:17	3A063	YFT	Arrival	11.9	-	-
19-Aug	12:20	3A168	YFT	Departure	11.7	-	-
19-Aug	12:22	3A181	ZUI	Departure	12.8	-	-
19-Aug	12:51	8S215	XZM	Arrival	11.7	-	-
19-Aug	13:16	3A064	YFT	Arrival	11.1	-	-
19-Aug	13:28	8S123	XZM	Departure	11.6	-	-
19-Aug	13:53	3A082	ZUI	Arrival	13.2	-	-
19-Aug	14:34	3A182	ZUI	Departure	11.8	-	-
19-Aug	14:37	3A164	YFT	Departure	12.5	-	-
19-Aug	14:59	3A065	YFT	Arrival	11.7	-	-
19-Aug	16:23	3A167	YFT	Departure	12.2	-	-
19-Aug	16:55	8S218	XZM	Arrival	11.5	-	-
19-Aug	17:00	3A083	ZUI	Arrival	12.8	-	-
19-Aug	17:01	3A067	YFT	Arrival	12.1	-	-
19-Aug	17:28	8S126	XZM	Departure	11.7	-	-
19-Aug	17:28	3A183	ZUI	Departure	12.7	-	-
19-Aug	19:23	3A166	YFT	Departure	11.9	-	-
19-Aug	19:37	3A084	ZUI	Arrival	13.2	-	-
19-Aug	20:26	3A185	ZUI	Departure	12.1	-	-
19-Aug	20:52	8S2113	XZM	Arrival	13	-	-
19-Aug	21:04	3A169	YFT	Departure	13.2	-	-
19-Aug	22:11	8S522	XZM	Departure	12.6	-	-
20-Aug	08:19	3A061	YFT	Arrival	12.6	-	-
20-Aug	08:29	8S210	XZM	Arrival	11	-	-
20-Aug	10:15	3A062	YFT	Arrival	13.1	-	-
20-Aug	10:37	3A163	YFT	Departure	12.8	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT - Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
20-Aug	10:51	8S121	XZM	Departure	12.3	-	-
20-Aug	10:51	8S212	XZM	Arrival	11.9	-	-
20-Aug	10:53	3A081	ZUI	Arrival	12.9	-	-
20-Aug	11:21	3A063	YFT	Arrival	11.2	-	-
20-Aug	12:30	3A181	ZUI	Departure	12.2	-	-
20-Aug	12:33	3A168	YFT	Departure	11	-	-
20-Aug	12:53	8S215	XZM	Arrival	12.2	-	-
20-Aug	12:56	3A064	YFT	Arrival	12.5	-	-
20-Aug	13:40	8S123	XZM	Departure	12	-	-
20-Aug	13:53	3A082	ZUI	Arrival	11.9	-	-
20-Aug	14:30	3A164	YFT	Departure	12.1	-	-
20-Aug	14:35	3A182	ZUI	Departure	12.9	-	-
20-Aug	15:01	3A065	YFT	Arrival	11.3	-	-
20-Aug	16:23	8S218	XZM	Arrival	12.6	-	-
20-Aug	16:37	3A167	YFT	Departure	12.5	-	-
20-Aug	17:02	3A067	YFT	Arrival	12.7	-	-
20-Aug	17:05	3A083	ZUI	Arrival	12.4	-	-
20-Aug	17:28	3A183	ZUI	Departure	13.4	-	-
20-Aug	17:47	8S126	XZM	Departure	12.3	-	-
20-Aug	19:07	3A166	YFT	Departure	12.7	-	-
20-Aug	19:36	3A084	ZUI	Arrival	11.7	-	-
20-Aug	20:16	3A185	ZUI	Departure	12.1	-	-
20-Aug	20:59	8S2113	XZM	Arrival	12.2	-	-
20-Aug	21:49	3A169	YFT	Departure	12.2	-	-
20-Aug	22:10	8S522	XZM	Departure	11.7	-	-
21-Aug	08:16	3A061	YFT	Arrival	12.6	-	-
21-Aug	08:26	8S210	XZM	Arrival	13	-	-
21-Aug	10:05	3A062	YFT	Arrival	10.8	-	-
21-Aug	10:22	3A163	YFT	Departure	10.7	-	-
21-Aug	10:49	3A081	ZUI	Arrival	13	-	-
21-Aug	10:50	8S212	XZM	Arrival	11.8	-	-
21-Aug	11:11	8S121	XZM	Departure	11.4	-	-
21-Aug	11:19	3A063	YFT	Arrival	11.8	-	-
21-Aug	12:33	3A181	ZUI	Departure	11.9	-	-
21-Aug	12:35	3A168	YFT	Departure	11.8	-	-
21-Aug	12:48	8S215	XZM	Arrival	11.3	-	-
21-Aug	13:02	3A064	YFT	Arrival	11.4	-	-
21-Aug	13:19	8S123	XZM	Departure	11.4	-	-
21-Aug	14:02	3A082	ZUI	Arrival	12	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT - Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
21-Aug	14:26	3A164	YFT	Departure	11.6	-	-
21-Aug	14:29	3A182	ZUI	Departure	12.5	-	-
21-Aug	15:04	3A065	YFT	Arrival	11.5	-	-
21-Aug	16:15	3A167	YFT	Departure	11.5	-	-
21-Aug	16:50	3A083	ZUI	Arrival	12.2	-	-
21-Aug	16:50	8S218	XZM	Arrival	11.2	-	-
21-Aug	17:01	3A067	YFT	Arrival	11.3	-	-
21-Aug	17:22	3A183	ZUI	Departure	13	-	-
21-Aug	17:29	8S126	XZM	Departure	11.5	-	-
21-Aug	19:26	3A166	YFT	Departure	12	-	-
21-Aug	20:03	3A084	ZUI	Arrival	12.5	-	-
21-Aug	20:26	3A185	ZUI	Departure	12.7	-	-
21-Aug	21:03	8S2113	XZM	Arrival	11.9	-	-
21-Aug	21:22	3A169	YFT	Departure	12.2	-	-
22-Aug	08:15	3A061	YFT	Arrival	10.9	-	-
22-Aug	08:18	8S210	XZM	Arrival	13	-	-
22-Aug	09:59	3A062	YFT	Arrival	11.6	-	-
22-Aug	10:19	3A163	YFT	Departure	11.5	-	-
22-Aug	10:48	8S212	XZM	Arrival	11.7	-	-
22-Aug	10:53	3A081	ZUI	Arrival	12.1	-	-
22-Aug	11:12	8S121	XZM	Departure	11.9	-	-
22-Aug	11:22	3A063	YFT	Arrival	11.8	-	-
22-Aug	12:18	3A168	YFT	Departure	12.1	-	-
22-Aug	12:19	3A181	ZUI	Departure	11.7	-	-
22-Aug	12:45	8S215	XZM	Arrival	12	-	-
22-Aug	13:03	3A064	YFT	Arrival	11.7	-	-
22-Aug	13:21	8S123	XZM	Departure	11.8	-	-
22-Aug	13:42	3A082	ZUI	Arrival	13.1	-	-
22-Aug	14:20	3A182	ZUI	Departure	13	-	-
22-Aug	14:21	3A164	YFT	Departure	11.1	-	-
22-Aug	15:03	3A065	YFT	Arrival	12	-	-
22-Aug	16:24	3A167	YFT	Departure	12.3	-	-
22-Aug	16:46	8S218	XZM	Arrival	11.9	-	-
22-Aug	16:48	3A083	ZUI	Arrival	12.4	-	-
22-Aug	17:05	3A067	YFT	Arrival	10.9	-	-
22-Aug	17:10	3A183	ZUI	Departure	12.9	-	-
22-Aug	17:15	8S126	XZM	Departure	13	-	-
22-Aug	19:30	3A166	YFT	Departure	13	-	-
22-Aug	19:57	3A084	ZUI	Arrival	12.3	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT - Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
22-Aug	20:18	3A185	ZUI	Departure	13.3	-	-
22-Aug	21:01	8S2113	XZM	Arrival	11.6	-	-
22-Aug	21:09	3A169	YFT	Departure	12	-	-
23-Aug	08:15	3A061	YFT	Arrival	12.3	-	-
23-Aug	08:17	8S210	XZM	Arrival	13.1	-	-
23-Aug	09:51	3A062	YFT	Arrival	10.9	-	-
23-Aug	10:26	3A163	YFT	Departure	12.8	-	-
23-Aug	10:43	8S212	XZM	Arrival	12.9	-	-
23-Aug	10:51	3A081	ZUI	Arrival	12.7	-	-
23-Aug	11:10	8S121	XZM	Departure	12.6	-	-
23-Aug	11:17	3A063	YFT	Arrival	12.6	-	-
23-Aug	12:24	3A168	YFT	Departure	12.6	-	-
23-Aug	12:29	3A181	ZUI	Departure	12	-	-
23-Aug	12:36	8S215	XZM	Arrival	12.2	-	-
23-Aug	12:57	3A064	YFT	Arrival	12.7	-	-
23-Aug	13:16	8S123	XZM	Departure	11.7	-	-
23-Aug	13:49	3A082	ZUI	Arrival	12.5	-	-
23-Aug	14:17	3A164	YFT	Departure	12.6	-	-
23-Aug	14:23	3A182	ZUI	Departure	12	-	-
23-Aug	14:59	3A065	YFT	Arrival	12.5	-	-
23-Aug	16:21	3A167	YFT	Departure	13.4	-	-
23-Aug	16:29	8S218	XZM	Arrival	11.9	-	-
23-Aug	16:50	3A083	ZUI	Arrival	12.4	-	-
23-Aug	16:57	3A067	YFT	Arrival	11.7	-	-
23-Aug	17:21	3A183	ZUI	Departure	13.5	-	-
23-Aug	17:26	8S126	XZM	Departure	12.5	-	-
23-Aug	19:18	3A166	YFT	Departure	13.2	-	-
23-Aug	20:04	3A084	ZUI	Arrival	12.4	-	-
23-Aug	20:28	3A185	ZUI	Departure	13.3	-	-
23-Aug	21:01	8S2113	XZM	Arrival	12	-	-
23-Aug	21:16	3A169	YFT	Departure	11.9	-	-
24-Aug	08:14	3A061	YFT	Arrival	13.6	-	-
24-Aug	08:26	8S210	XZM	Arrival	11.6	-	-
24-Aug	10:16	3A062	YFT	Arrival	12.7	-	-
24-Aug	10:32	3A163	YFT	Departure	12.6	-	-
24-Aug	10:43	8S212	XZM	Arrival	12.3	-	-
24-Aug	10:54	3A081	ZUI	Arrival	13.1	-	-
24-Aug	11:06	8S121	XZM	Departure	11	-	-
24-Aug	11:17	3A063	YFT	Arrival	12.7	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT - Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
24-Aug	12:23	3A181	ZUI	Departure	11.7	-	-
24-Aug	12:25	3A168	YFT	Departure	12.8	-	-
24-Aug	12:49	8S215	XZM	Arrival	12.6	-	-
24-Aug	12:57	3A064	YFT	Arrival	12.7	-	-
24-Aug	13:24	8S123	XZM	Departure	12.6	-	-
24-Aug	13:47	3A082	ZUI	Arrival	12.5	-	-
24-Aug	14:14	3A182	ZUI	Departure	12.5	-	-
24-Aug	14:18	3A164	YFT	Departure	12.6	-	-
24-Aug	14:55	3A065	YFT	Arrival	12.5	-	-
24-Aug	16:24	3A167	YFT	Departure	12.3	-	-
24-Aug	16:29	8S218	XZM	Arrival	11.9	-	-
24-Aug	16:45	3A083	ZUI	Arrival	12.3	-	-
24-Aug	17:04	3A067	YFT	Arrival	11.8	-	-
24-Aug	17:07	3A183	ZUI	Departure	12.5	-	-
24-Aug	17:09	8S126	XZM	Departure	13	-	-
24-Aug	19:24	3A166	YFT	Departure	12.5	-	-
24-Aug	19:54	3A084	ZUI	Arrival	12.4	-	-
24-Aug	20:32	3A185	ZUI	Departure	13	-	-
24-Aug	20:56	8S2113	XZM	Arrival	11.4	-	-
24-Aug	21:26	3A169	YFT	Departure	12.9	-	-
25-Aug	08:14	3A061	YFT	Arrival	12.3	-	-
25-Aug	08:17	8S210	XZM	Arrival	13.2	-	-
25-Aug	10:03	3A062	YFT	Arrival	12.3	-	-
25-Aug	10:32	3A163	YFT	Departure	12.2	-	-
25-Aug	10:43	8S212	XZM	Arrival	13	-	-
25-Aug	10:48	3A081	ZUI	Arrival	13.1	-	-
25-Aug	11:00	8S121	XZM	Departure	13.3	-	-
25-Aug	11:14	3A063	YFT	Arrival	12.6	-	-
25-Aug	12:13	3A181	ZUI	Departure	12	-	-
25-Aug	12:14	3A168	YFT	Departure	12.8	-	-
25-Aug	12:42	8S215	XZM	Arrival	12.7	-	-
25-Aug	13:00	3A064	YFT	Arrival	12.4	-	-
25-Aug	13:19	8S123	XZM	Departure	12.3	-	-
25-Aug	13:48	3A082	ZUI	Arrival	11.8	-	-
25-Aug	14:28	3A164	YFT	Departure	11.8	-	-
25-Aug	14:28	3A182	ZUI	Departure	11.9	-	-
25-Aug	14:55	3A065	YFT	Arrival	12.8	-	-
25-Aug	16:20	3A167	YFT	Departure	12.8	-	-
25-Aug	16:45	8S218	XZM	Arrival	11.8	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT - Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
25-Aug	16:51	3A083	ZUI	Arrival	12.9	-	-
25-Aug	16:58	3A067	YFT	Arrival	11.6	-	-
25-Aug	17:15	8S126	XZM	Departure	12.7	-	-
25-Aug	17:15	3A183	ZUI	Departure	12.9	-	-
25-Aug	19:22	3A166	YFT	Departure	13.7	-	-
25-Aug	19:57	3A084	ZUI	Arrival	12.4	-	-
25-Aug	20:19	3A185	ZUI	Departure	13.4	-	-
25-Aug	20:51	8S2113	XZM	Arrival	12.2	-	-
25-Aug	21:10	3A169	YFT	Departure	11.9	-	-
25-Aug	22:00	8S522	XZM	Departure	12.5	-	-
26-Aug	08:17	3A061	YFT	Arrival	11.4	-	-
26-Aug	08:28	8S210	XZM	Arrival	11.7	-	-
26-Aug	10:12	3A062	YFT	Arrival	11.8	-	-
26-Aug	10:29	3A163	YFT	Departure	12.3	-	-
26-Aug	10:40	8S212	XZM	Arrival	11.4	-	-
26-Aug	10:53	3A081	ZUI	Arrival	13.2	-	-
26-Aug	11:14	8S121	XZM	Departure	10.8	-	-
26-Aug	11:14	3A063	YFT	Arrival	11.9	-	-
26-Aug	12:35	3A181	ZUI	Departure	12.5	-	-
26-Aug	12:36	3A168	YFT	Departure	10.4	-	-
26-Aug	12:42	8S215	XZM	Arrival	12.8	-	-
26-Aug	13:01	3A064	YFT	Arrival	12.2	-	-
26-Aug	13:25	8S123	XZM	Departure	12.9	-	-
26-Aug	13:46	3A082	ZUI	Arrival	11.9	-	-
26-Aug	14:24	3A182	ZUI	Departure	12.5	-	-
26-Aug	14:28	3A164	YFT	Departure	12.4	-	-
26-Aug	15:02	3A065	YFT	Arrival	12.3	-	-
26-Aug	16:23	3A167	YFT	Departure	11.7	-	-
26-Aug	16:51	3A083	ZUI	Arrival	12.8	-	-
26-Aug	16:51	8S218	XZM	Arrival	12.3	-	-
26-Aug	17:02	3A067	YFT	Arrival	11.5	-	-
26-Aug	17:20	3A183	ZUI	Departure	12.3	-	-
26-Aug	17:40	8S126	XZM	Departure	13	-	-
26-Aug	19:12	3A166	YFT	Departure	12.7	-	-
26-Aug	19:40	3A084	ZUI	Arrival	12.4	<= 5	< 1min
26-Aug	20:21	3A185	ZUI	Departure	13.4	-	-
26-Aug	20:51	8S2113	XZM	Arrival	11.8	-	-
26-Aug	21:10	3A169	YFT	Departure	12.9	<= 5	< 1min
26-Aug	22:07	8S522	XZM	Departure	12.1	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT - Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
27-Aug	08:10	3A061	YFT	Arrival	12.7	-	-
27-Aug	08:22	8S210	XZM	Arrival	12.6	-	-
27-Aug	10:10	3A062	YFT	Arrival	13.2	-	-
27-Aug	10:29	8S212	XZM	Arrival	12.6	-	-
27-Aug	10:30	3A163	YFT	Departure	13.8	-	-
27-Aug	10:45	3A081	ZUI	Arrival	11.8	-	-
27-Aug	11:15	8S121	XZM	Departure	12	-	-
27-Aug	11:23	3A063	YFT	Arrival	12.7	<= 5	< 1min
27-Aug	12:25	3A168	YFT	Departure	12.8	-	-
27-Aug	12:27	3A181	ZUI	Departure	13.2	-	-
27-Aug	12:40	8S215	XZM	Arrival	12.7	-	-
27-Aug	12:54	3A064	YFT	Arrival	13.7	-	-
27-Aug	13:20	8S123	XZM	Departure	12.9	-	-
27-Aug	13:48	3A082	ZUI	Arrival	12.6	-	-
27-Aug	14:28	3A164	YFT	Departure	13.9	<=15	< 1min
27-Aug	14:33	3A182	ZUI	Departure	12	-	-
27-Aug	15:09	3A065	YFT	Arrival	12.2	-	-
27-Aug	16:22	3A167	YFT	Departure	12.7	-	-
27-Aug	16:41	8S218	XZM	Arrival	13.2	-	-
27-Aug	16:43	3A083	ZUI	Arrival	12.9	-	-
27-Aug	17:01	3A067	YFT	Arrival	13.2	<= 5	< 1min
27-Aug	17:07	3A183	ZUI	Departure	12.2	<= 10	< 1min
27-Aug	17:10	8S126	XZM	Departure	12.2	-	-
27-Aug	19:18	3A166	YFT	Departure	12.3	-	-
27-Aug	19:53	3A084	ZUI	Arrival	12.1	-	-
27-Aug	20:29	3A185	ZUI	Departure	13.8	-	-
27-Aug	21:06	8S2113	XZM	Arrival	11	-	-
27-Aug	21:52	3A169	YFT	Departure	12.5	-	-
28-Aug	08:19	3A061	YFT	Arrival	12	-	-
28-Aug	08:21	8S210	XZM	Arrival	12	-	-
28-Aug	10:21	3A062	YFT	Arrival	12.1	<= 5	< 1min
28-Aug	10:32	3A163	YFT	Departure	12.9	-	-
28-Aug	10:50	3A081	ZUI	Arrival	13	-	-
28-Aug	10:54	8S212	XZM	Arrival	12.1	-	-
28-Aug	11:16	8S121	XZM	Departure	12.3	-	-
28-Aug	11:22	3A063	YFT	Arrival	12.1	-	-
28-Aug	12:36	3A168	YFT	Departure	13	-	-
28-Aug	12:38	3A181	ZUI	Departure	12.1	-	-
28-Aug	12:45	8S215	XZM	Arrival	12.2	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT - Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
28-Aug	13:00	3A064	YFT	Arrival	12.2	-	-
28-Aug	13:47	8S123	XZM	Departure	12.9	-	-
28-Aug	13:56	3A082	ZUI	Arrival	12.1	-	-
28-Aug	14:28	3A164	YFT	Departure	12.2	-	-
28-Aug	14:32	3A182	ZUI	Departure	13	-	-
28-Aug	15:07	3A065	YFT	Arrival	13	-	-
28-Aug	16:13	3A167	YFT	Departure	12.5	-	-
28-Aug	16:40	8S218	XZM	Arrival	11.7	-	-
28-Aug	16:43	3A083	ZUI	Arrival	12.5	-	-
28-Aug	16:58	3A067	YFT	Arrival	12.6	<= 5	< 2min
28-Aug	17:02	3A183	ZUI	Departure	11.8	-	-
28-Aug	17:07	8S126	XZM	Departure	11	-	-
28-Aug	19:19	3A166	YFT	Departure	12.3	<= 5	< 2min
28-Aug	19:53	3A084	ZUI	Arrival	12.5	-	-
28-Aug	20:22	3A185	ZUI	Departure	13.8	-	-
28-Aug	21:05	8S2113	XZM	Arrival	11.9	-	-
28-Aug	21:27	3A169	YFT	Departure	11.8	-	-
28-Aug	22:07	8S522	XZM	Departure	12.1	-	-
29-Aug	08:16	3A061	YFT	Arrival	11.9	<= 5	< 1min
29-Aug	08:24	8S210	XZM	Arrival	12.1	-	-
29-Aug	09:59	3A062	YFT	Arrival	11.6	-	-
29-Aug	10:21	3A163	YFT	Departure	11.6	-	-
29-Aug	10:37	8S212	XZM	Arrival	11.3	-	-
29-Aug	10:45	3A081	ZUI	Arrival	12.9	-	-
29-Aug	11:12	8S121	XZM	Departure	13.1	-	-
29-Aug	11:16	3A063	YFT	Arrival	13.1	-	-
29-Aug	12:24	3A168	YFT	Departure	12.6	-	-
29-Aug	12:24	3A181	ZUI	Departure	12.8	-	-
29-Aug	12:49	8S215	XZM	Arrival	12.1	-	-
29-Aug	12:59	3A064	YFT	Arrival	11.7	-	-
29-Aug	13:26	8S123	XZM	Departure	12.7	-	-
29-Aug	13:46	3A082	ZUI	Arrival	12.4	-	-
29-Aug	14:24	3A164	YFT	Departure	11	-	-
29-Aug	14:25	3A182	ZUI	Departure	12.2	-	-
29-Aug	14:55	3A065	YFT	Arrival	12.6	-	-
29-Aug	16:22	3A167	YFT	Departure	12.6	-	-
29-Aug	16:43	8S218	XZM	Arrival	12.5	-	-
29-Aug	16:48	3A083	ZUI	Arrival	13.4	-	-
29-Aug	17:05	3A067	YFT	Arrival	11.7	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM- Macao (Maritime Ferry Terminal) YFT- Macao (Taipa) ZUI- Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
29-Aug	17:07	3A183	ZUI	Departure	12.2	-	-
29-Aug	17:11	8S126	XZM	Departure	12.7	-	-
29-Aug	19:19	3A166	YFT	Departure	11.1	-	-
29-Aug	19:56	3A084	ZUI	Arrival	12.7	-	-
29-Aug	20:39	3A185	ZUI	Departure	13.4	-	-
29-Aug	21:05	8S2113	XZM	Arrival	12	-	-
29-Aug	21:39	3A169	YFT	Departure	12.8	<= 5	< 1min
29-Aug	22:18	8S522	XZM	Departure	12.4	-	-
30-Aug	08:15	8S210	XZM	Arrival	11.7	-	-
30-Aug	08:18	3A061	YFT	Arrival	10.5	-	-
30-Aug	09:56	3A062	YFT	Arrival	12	-	-
30-Aug	10:22	3A163	YFT	Departure	12	-	-
30-Aug	10:37	8S212	XZM	Arrival	13	-	-
30-Aug	10:47	3A081	ZUI	Arrival	11.8	-	-
30-Aug	11:01	8S121	XZM	Departure	13.1	-	-
30-Aug	11:17	3A063	YFT	Arrival	11.6	-	-
30-Aug	12:19	3A181	ZUI	Departure	12.9	-	-
30-Aug	12:19	3A168	YFT	Departure	11.8	-	-
30-Aug	12:37	8S215	XZM	Arrival	12.1	-	-
30-Aug	12:58	3A064	YFT	Arrival	12.6	-	-
30-Aug	13:21	8S123	XZM	Departure	12.1	-	-
30-Aug	13:43	3A082	ZUI	Arrival	12.6	-	-
30-Aug	14:16	3A164	YFT	Departure	12.8	-	-
30-Aug	14:19	3A182	ZUI	Departure	12	-	-
30-Aug	14:52	3A065	YFT	Arrival	11.9	-	-
30-Aug	16:19	3A167	YFT	Departure	11.6	-	-
30-Aug	16:34	8S218	XZM	Arrival	12.1	-	-
30-Aug	16:47	3A083	ZUI	Arrival	13.1	-	-
30-Aug	16:59	3A067	YFT	Arrival	12.8	-	-
30-Aug	17:09	8S126	XZM	Departure	12.1	-	-
30-Aug	17:09	3A183	ZUI	Departure	12.1	-	-
30-Aug	19:07	3A166	YFT	Departure	11.1	-	-
30-Aug	19:58	3A084	ZUI	Arrival	12.8	-	-
30-Aug	20:17	3A185	ZUI	Departure	12.8	-	-
30-Aug	20:55	8S2113	XZM	Arrival	11.4	-	-
30-Aug	21:11	3A169	YFT	Departure	14	-	-
30-Aug	22:06	8S522	XZM	Departure	12.4	-	-
31-Aug	08:14	3A061	YFT	Arrival	11.8	-	-
31-Aug	08:18	8S210	XZM	Arrival	11.1	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT - Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
31-Aug	10:03	3A062	YFT	Arrival	11.4	-	-
31-Aug	10:20	3A163	YFT	Departure	12.4	-	-
31-Aug	10:37	8S212	XZM	Arrival	12.4	-	-
31-Aug	10:51	3A081	ZUI	Arrival	12.5	-	-
31-Aug	11:04	8S121	XZM	Departure	13.4	-	-
31-Aug	11:23	3A063	YFT	Arrival	12.4	-	-
31-Aug	12:22	3A168	YFT	Departure	12.8	-	-
31-Aug	12:26	3A181	ZUI	Departure	12.8	-	-
31-Aug	12:41	8S215	XZM	Arrival	12.1	-	-
31-Aug	12:53	3A064	YFT	Arrival	12	-	-
31-Aug	13:16	8S123	XZM	Departure	12.7	-	-
31-Aug	13:53	3A082	ZUI	Arrival	13.1	-	-
31-Aug	14:24	3A164	YFT	Departure	12	-	-
31-Aug	14:25	3A182	ZUI	Departure	13.4	-	-
31-Aug	14:57	3A065	YFT	Arrival	12.8	-	-
31-Aug	16:14	3A167	YFT	Departure	13.2	-	-
31-Aug	16:43	3A083	ZUI	Arrival	13.2	-	-
31-Aug	16:43	8S218	XZM	Arrival	12.2	-	-
31-Aug	16:55	3A067	YFT	Arrival	12.2	-	-
31-Aug	17:13	3A183	ZUI	Departure	12	-	-
31-Aug	17:17	8S126	XZM	Departure	12.7	-	-
31-Aug	19:10	3A166	YFT	Departure	12.7	-	-
31-Aug	19:58	3A084	ZUI	Arrival	12.8	-	-
31-Aug	20:22	3A185	ZUI	Departure	12.8	-	-
31-Aug	21:02	8S2113	XZM	Arrival	11.5	-	-
31-Aug	21:03	3A169	YFT	Departure	13.6	-	-
31-Aug	21:50	8S522	XZM	Departure	12.1	-	-

** Insufficient or no AIS data for speed calculation.

Follow-up on instantaneous speeding

Referring to the data of SkyPier HSF movements in August 2018, instantaneous speeding (i.e. a sudden change in speed at over 15 knots for a short period of time) within the SCZ was recorded from 17 HSF movements of which the durations of all instantaneous speeding cases were less than two minutes. The AIS data and ferry operators' responses showed the cases were due to local strong water currents, giving way to vessels, and residual speed. The captains had reduced speed and maintained the speed at less than 15 knots after the incidents.

One HSFs with insufficient transmission of AIS data was received in August 2018. Vessel captain was requested to provide the AIS plots to indicate the vessel entered the SCZ though the gate access points with no speeding in the SCZ.