



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

Construction Phase Monthly EM&A Report No.29  
(For May 2018)

June 2018

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**This Monthly EM&A Report No. 29 has been reviewed and certified by**

**the Environmental Team Leader (ETL) in accordance with**

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

**Certified by:**

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

---

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

**Date**

14 June 2018

Our Ref : 60440482/C/JCHL180614

**By Email**

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

Attn: Mr. Lawrence Tsui, Principal Manager

14 June 2018

Dear Sir,

**Contract No. 3102**  
**3RS Independent Environmental Checker Consultancy Services**

**Submission of Monthly EM&A Report No. 29 (May 2018)**

Reference is made to the Environmental Team's submission of the Monthly EM&A Report No. 29 under Condition 3.5 of the Environmental Permit No. EP-489/2014 certified by the ET Leader on 14 June 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 29<sup>th</sup> 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 May 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 included site establishment, site office construction, road and drainage works, cable ducting, demolition of existing facilities, 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:

<b>Monitoring Activities</b>	<b>Number of Sessions</b>
1-hour Total Suspended Particulates (TSP) air quality monitoring	36
Noise monitoring	21
Water quality monitoring	14
Vessel line-transect surveys for Chinese White Dolphin (CWD) monitoring	2
Land-based theodolite tracking survey effort for CWD monitoring	5

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>Dolphin Observer Training Conducted by ET</p>	<p>Water Quality Monitoring Conducted by ET</p>	<p>Small Vessel Line-transect Survey of Chinese White Dolphin</p>

### **Results of Impact Monitoring**

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

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

The water quality monitoring results for dissolved oxygen (DO), turbidity and total alkalinity 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 suspended solids (SS), nickel, and chromium, 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**

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

#### **Advanced Works:**

##### **Contract P560 (R) Aviation Fuel Pipeline Diversion Works**

- Pipeline testing and commissioning; and
- Stockpiling of excavated materials from previous HDD operation.

#### **DCM Works:**

##### **Contract 3201 to 3205 DCM Works**

- DCM works

#### **Reclamation Works:**

##### **Contract 3206 Main Reclamation Works**

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

### **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
- Builders works of antenna farm.

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

- Site clearance;
- Brick laying;
- Fitting out of Electrical and mechanical (E&M) works;
- Steel platform erection; and
- Cable tray installation.

#### **Contract 3503 Terminal 2 Foundation and Substructure Works**

- Site establishment;
- Drainage, and road work; and
- Piling works

### **APM works:**

#### **Contract 3602 Existing APM System Modification Works**

- Site office establishment; and
- Concrete plinth construction.

### **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**

- Erection of hoarding;
- Diversion of underground utilities;
- Piling works; and
- Demolition of footbridge.

The key environmental issues will be associated with construction dust, construction noise, water quality, construction waste management, and CWD. The implementation of required mitigation measures by the contractor will be monitored by the ET.

### **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 on the water quality monitoring equipment of a DCM barge was received on 16 May 2018.	No abnormal observation was found regarding the water quality monitoring equipment during ET's site inspection.
			Another complaint was received on 28 May 2018 covering issues related to water quality and DEZ monitoring for DCM works.	The case is currently under investigation in accordance with the Manual and the Complaint Management Plan.
Notification of any summons and status of prosecutions		√	No notification of summons or prosecution was received.	Nil
			For the summonses received in June 2017 alleging use of powered mechanical equipment by the contractor outside the permitted hours for the aviation fuel pipeline diversion works in December 2016, the prosecution formally offered no evidence against the AAHK and all summonses issued to AAHK were dismissed. The contractor pleaded guilty to contravening the Noise Control Ordinance and was fined by the court on 21 May 2018.	
Change that affect the EM&A	√		Starting from 12 May 2018, some of the water quality impact stations surrounding the land formation footprint were realigned.	Nil

Note:

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

# 1 Introduction

## 1.1 Background

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

Airport Authority Hong Kong (AAHK) commissioned Mott MacDonald Hong Kong Limited (MMHK) to undertake the role of Environmental Team (ET) for carrying out the Environmental Monitoring & Audit (EM&A) works during the construction phase of the Project in accordance with the Updated EM&A Manual (the Manual) submitted under EP Condition 3.1<sup>1</sup>. 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 of the Construction Phase Monthly EM&A Report No. 25.

## 1.2 Scope of this Report

This is the 29<sup>th</sup> 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 May 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**.

---

<sup>1</sup> 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	Keith Chau	2972 1721
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 (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

**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

**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

**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 DCM works, marine filling, seawall construction, laying of sand blanket, and PVD installation. Land-side works included 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
<b>Air Quality</b>	
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
<b>Noise</b>	
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
<b>Water Quality</b>	
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
<b>Waste Management</b>	
Waste Monitoring	On-going
<b>Land Contamination</b>	
Supplementary Contamination Assessment Plan (CAP)	The Supplementary CAP was submitted and approved by EPD pursuant to EP condition 2.20.
Contamination Assessment Report (CAR) for Golf Course	The CAR for Golf Course was submitted to EPD.
<b>Terrestrial Ecology</b>	

Parameters	Status
Pre-construction Egret Survey Plan	The Egret Survey Plan was submitted and approved by EPD under EP Condition 2.14.
Ecological Monitoring	Construction works on Sheung Sha Chau Island was suspended during the ardeid's breeding season (between April and July). The ecological monitoring is therefore suspended.
<b>Marine Ecology</b>	
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
<b>Chinese White Dolphins (CWD)</b>	
<b>Vessel Survey, Land-based Theodolite Tracking and Passive Acoustic Monitoring (PAM)</b>	
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
<b>Landscape &amp; Visual</b>	
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
<b>Environmental Auditing</b>	
Regular site inspection	On-going
Marine Mammal Watching Plan (MMWP) implementation measures	On-going
Dolphin Exclusion Zone (DEZ) Plan implementation measures	On-going
SkyPier High Speed Ferries (HSF) implementation measures	On-going
Construction and Associated Vessels Implementation measures	On-going
Complaint Hotline and Email channel	On-going
Environmental Log Book	On-going

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

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

- One dolphin observer training provided by ET: 24 May 2018
- Three skipper trainings provided by ET: 2, 16 and 30 May 2018
- Nine environmental management meetings for EM&A review with works contracts: 11, 16, 23, 24, 25 and 30 May 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 A**.

## 2 Air Quality Monitoring

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

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

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

### 2.1 Action and Limit Levels

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

**Table 2.2: Action and Limit Levels of Air Quality Monitoring**

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

### 2.2 Monitoring Equipment

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

**Table 2.3: Air Quality Monitoring Equipment**

Equipment	Brand and Model	Last Calibration Date	Calibration Certificate Provided in
Portable direct reading dust meter (Laser dust monitor)	SIBATA LD-3B-001 (Serial No. 934393)	11 Oct 2017	Monthly EM&A Report No. 22, Appendix E
	SIBATA LD-3B-002 (Serial No. 974350)	11 Sep 2017	
	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 B**.

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

**Table 2.4: Summary of Air Quality Monitoring Results**

Monitoring Station	1-hr TSP Concentration Range ( $\mu\text{g}/\text{m}^3$ )	Action Level ( $\mu\text{g}/\text{m}^3$ )	Limit Level ( $\mu\text{g}/\text{m}^3$ )
AR1A	5 – 46	306	500
AR2	24 – 142	298	

The monitoring results complied with 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 <sup>(1)</sup>	Tung Chung West Development	To be determined
NM3A	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.

#### 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) <sup>(1)</sup>

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. 2800932)	17 Jul 2017	Monthly EM&A Report No. 19, Appendix E
	B&K 2238 (Serial No. 2808432)	30 Aug 2017	Monthly EM&A Report No. 21, Appendix E
Acoustic Calibrator	B&K 4231 (Serial No. 3003246)	16 May 2017	Monthly EM&A Report No. 17, Appendix D
	B&K 4231 (Serial No. 3004068)	17 Jul 2017	Monthly EM&A Report No. 19, Appendix E
	B&K 4231 (Serial No. 3018753)	10 May 2018	<b>Appendix D</b>

### 3.3 Monitoring Methodology

#### 3.3.1 Monitoring Procedure

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

- 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.
- Façade measurements were made at the monitoring station NM3A.
- Parameters such as frequency weighting, time weighting and measurement time were set.
- 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.
- 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.
- Noise measurement results were corrected with reference to the baseline monitoring levels.
- 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:

- The microphone head of the sound level meter was cleaned with soft cloth at regular intervals.
- 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 B**.

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

**Table 3.4: Summary of Construction Noise Monitoring Results**

Monitoring Station	Noise Level Range, dB(A)	Limit Level, dB(A)
	<i>Leq</i> (30 mins)	<i>Leq</i> (30 mins)
NM1A <sup>(1)</sup>	67 – 73	75
NM3A	61 – 63	75
NM4 <sup>(1)</sup>	60 – 66	70 <sup>(2)</sup>
NM5 <sup>(1)</sup>	53 – 67	75
NM6 <sup>(1)</sup>	70 – 73	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 complied with 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 at NM3A and NM4, and aircraft and helicopter noise at 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, turbidity, 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. Starting from 12 May 2018, some of the impact stations were realigned to maintain an appropriate buffer distance away from the enhanced silt curtain. Details of the enhanced silt curtain is provided in the Silt Curtain Deployment Plan. The updated monitoring locations are presented in **Figure 3.2**.

**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 <sup>(3)</sup>	Control Station	817803	822109	
IM1	Impact Station	806458	818351	<u>DCM Parameters</u>
		807132 (From 12 May 2018 onwards)	817949	Total Alkalinity, Heavy Metals <sup>(2)</sup>
IM2	Impact Station	806193	818852	
		806166 (From 12 May 2018 onwards)	818163	
IM3	Impact Station	806019	819411	
		805594 (From 12 May 2018 onwards)	818784	
IM4	Impact Station	805039	819570	
		804607 (From 12 May 2018 onwards)	819725	
IM5	Impact Station	804924	820564	
		804867 (From 12 May 2018 onwards)	820735	
IM6	Impact Station	805828	821060	
IM7	Impact Station	806835	821349	
IM8	Impact Station	807838	821695	
		808140 (From 12 May 2018 onwards)	821830	
IM9	Impact Station	808811	822094	
IM10	Impact Station	809838	822240	
		809794 (From 12 May 2018 onwards)	822385	

Monitoring Station	Description	Coordinates		Parameters
IM11	Impact Station	810545	821501	
		811460	822057	
		(From 12 May 2018 onwards)		
IM12	Impact Station	811519	821162	
		812046	821459	
		(From 12 May 2018 onwards)		
SR1 <sup>(1)</sup>	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 <sup>(3)</sup>	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 <sup>(2)(4)</sup>
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	
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 <sup>(5)</sup>	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		Surface and Middle	
		4.5 mg/L		4.1 mg/L	
		Bottom		5 mg/L for Fish Culture Zone (SR7) only	
		3.4 mg/L		Bottom	
			2.7 mg/L		
	Suspended Solids (SS) in mg/L	23	or 120% of upstream control station at the same tide of the same day, whichever is higher	37	or 130% of upstream control station at the same tide of the same day, whichever is higher
	Turbidity in NTU	22.6		36.1	
	Total Alkalinity in ppm	95		99	
Regular DCM Monitoring	Representative Heavy Metals for regular DCM monitoring (Chromium)	0.2		0.2	
	Representative Heavy Metals for regular DCM monitoring (Nickel)	3.2		3.6	
Action and Limit Levels SR1					
SS (mg/l)		To be determined prior to its commissioning		To be determined prior to its commissioning	
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
<b>Flood Tide</b>	
C1	IM1, IM2, IM3, IM4, IM5, IM6, IM7, IM8, SR3
SR2 <sup>(1)</sup>	IM7, IM8, IM9, IM10, IM11, IM12, SR1A, SR3, SR4A, SR5A, SR6, SR8
<b>Ebb Tide</b>	
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. 15M100005)	30 Apr 2018	Appendix D
	YSI ProDSS (Serial No. 16H104234)	30 Apr 2018	
	YSI ProDSS (Serial No. 17H105557)	30 Apr 2018	
	YSI 6920 V2 (Serial No. 0001C6A7)	2 Mar 2018	Monthly EM&A Report No. 27, Appendix D
	YSI 6920 (Serial No. 000109DF)	2 Mar 2018	
Digital Titrator (measurement of total alkalinity)	Titrette Digital Burette 50ml Class A (Serial No. 10N60623)	30 Apr 2018	Appendix D

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 22<sup>nd</sup> ed. and/or other methods as agreed by the EPD. In-situ measurements at monitoring locations including temperature, pH, DO, turbidity, salinity 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
<b>Heavy Metals</b>			
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 B**.

The sea conditions varied from calm to rough, and the weather conditions varied from sunny to rainy during the monitoring period.

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

For SS, nickel and chromium, 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 SS compliance status at IM and SR stations during mid-flood tide for the reporting period.

**Table 4.7: Summary of SS Compliance Status (Mid-Flood Tide)**

	IM1	IM2	IM3	IM4	IM5	IM6	IM7	IM8	IM9	IM10	IM11	IM12	SR2	SR3	SR4A	SR5A	SR6	SR7	SR8
01/05/2018																			
03/05/2018									D										
05/05/2018																			
08/05/2018																			
10/05/2018																			
12/05/2018																			
15/05/2018																			
17/05/2018																			
19/05/2018																			
22/05/2018																			
24/05/2018																			
26/05/2018																			
29/05/2018																			
31/05/2018																			
No. of result triggering Action or Limit Level	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0

Note: Detailed results are presented in **Appendix C**.

Legend:

	The monitoring results complied with 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 Level on one monitoring day. As part of the investigation on the downstream event, details of the Project's marine construction activities on the concerned monitoring day was collected, as well as any observations during the monitoring. The findings are summarized in **Table 4.8**.

**Table 4.8: Summary of Findings from Investigations 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
03/05/2018	DCM works and sand blanket laying	Around 500m	Silt curtain deployed	No	No	No

According to the investigation findings, it was confirmed that both DCM and sand blanket laying activities were operating normally with silt curtains deployed. The silt curtains were maintained properly.

For the monitoring results at IM9 on 3 May 2018, this station was located downstream of the Project during flood tide, which might be affected by Project's construction activities. However, it was noticed that no Action Level was triggered at other downstream monitoring stations. Thus, this appeared to be an isolated case with no observable spatial and temporal trend to indicate any effect due to Project activities. As there was no evidence of SS release due to Project activities from site observations and all mitigation measures were carried out properly, the case was considered not due to the Project.

**Table 4.9** presents a summary of the nickel compliance status at IM and SR stations during mid-ebb tide for the reporting period.

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

	IM1	IM2	IM3	IM4	IM5	IM6	IM7	IM8	IM9	IM10	IM11	IM12
01/05/2018												
03/05/2018											D	
05/05/2018												
08/05/2018												
10/05/2018												
12/05/2018												
15/05/2018												
17/05/2018												
19/05/2018												
22/05/2018												
24/05/2018												
26/05/2018												
29/05/2018												
31/05/2018												
No. of Exceedance	0	0	0	0	0	0	0	0	0	1	1	0

Note: Detailed results are presented in **Appendix C**.

Legend:

	The monitoring results complied with 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 Level on one monitoring day. The case of IM10 on 3 May 2018 occurred upstream of the Project during ebb tide, that would unlikely be affected by the Project. Therefore, investigation focusing on the case that occurred at the monitoring station located downstream of the Project was carried out.

As part of the investigation on the downstream event, details of the Project's marine construction activities on the concerned monitoring day was collected, as well as any observations during the monitoring. The findings are summarized in **Table 4.10**.

**Table 4.10: Summary of Findings from Investigation of Nickel Monitoring Results (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
03/05/2018	DCM works and sand blanket laying	Around 500m	Silt curtain deployed	No	No	No

According to the investigation findings, it was confirmed that both DCM and sand blanket laying activities were operating normally with silt curtains deployed. The silt curtains were maintained properly.

For the monitoring result at IM11 on 3 May 2018, this monitoring station was located downstream of the Project during ebb tide, which might be affected by Project's construction activities. However, it was noticed that Action Level was also triggered at IM10, a nearby IM station located upstream of the Project. This suggested that elevated nickel level was occurring over this area with sources originating outside of the Project boundaries. In addition, the monitoring result of IM11 was only marginally above the Action Level (3.4 µg/L compared to Action Level of 3.2 µg/L based on the results derived from baseline monitoring data) and was within the baseline range from past monitoring data.

Therefore, the case was considered not due to the Project and may be due to natural fluctuation or other sources not related to the Project.

**Table 4.11** presents a summary of the nickel compliance status at IM and SR stations during mid-flood tide for the reporting period.

**Table 4.11: Summary of Nickel Compliance Status (Mid-Flood Tide)**

	IM1	IM2	IM3	IM4	IM5	IM6	IM7	IM8	IM9	IM10	IM11	IM12
01/05/2018												
03/05/2018												
05/05/2018												
08/05/2018					D				D	D		
10/05/2018												
12/05/2018								D	D	D		
15/05/2018												
17/05/2018						D						
19/05/2018												
22/05/2018												
24/05/2018												
26/05/2018												
29/05/2018												
31/05/2018												
No. of result triggering Action or Limit Level	0	0	0	0	1	1	0	1	2	2	2	2

Note: Detailed results are presented in **Appendix C**.

Legend:

	The monitoring results complied with 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

Monitoring results triggered the corresponding Action and Limit Levels on four monitoring days. Some of the cases occurred at monitoring stations located upstream of the Project during flood tide, that would unlikely be affected by the Project. Therefore, investigations focusing on cases occurred at monitoring stations located downstream of the Project were carried out.

As part of the investigation on the downstream events, details of the Project's marine construction activities on the concerned monitoring days were collected, as well as any observations during the monitoring. The findings are summarized in **Table 4.12**.

**Table 4.12: Summary of Findings from Investigation of Nickel 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
08/05/2018	DCM works and sand blanket laying	Around 500m	Silt curtain deployed	No	No	No
12/05/2018	DCM works and sand blanket laying	Around 500m	Silt curtain deployed	No	No	No
17/05/2018	DCM works and sand blanket laying	Around 500m	Silt curtain deployed	No	No	No

According to the investigation findings, it was confirmed that both DCM and sand blanket laying activities were operating normally with silt curtains deployed. The silt curtains were maintained properly.

For the monitoring results at IM5, IM9 and IM10 on 8 May 2018, these stations were located downstream of the Project during flood tide, which might be affected by Project's construction activities. The monitoring results were marginally above the Action Level (3.3 µg/L at IM5 compared to Action Level of 3.2 µg/L based on the results derived from baseline monitoring data; 3.6 µg/L and 3.8 µg/L at IM9 and IM10 respectively compared to Action Level of 3.5 µg/L derived from control stations during the same tide) and were within the baseline range from past monitoring data. It was also noted that Action Level was triggered at IM12 which is located upstream of the Project. Based on the findings, the cases were considered not due to the Project.

For the monitoring result at IM8, IM9 and IM10 on 12 May 2018, it was noted that Limit Level was triggered at these IM stations adjacent to the eastern side of the Project area, including another nearby IM station (IM11) located upstream of the Project. This suggested that elevated nickel level was occurring over a large area with source(s) originating outside of the Project boundaries. Moreover, there was also no relevant site observations noticed and all mitigation measures were carried out properly. Therefore, the cases were considered not due to the Project.

The monitoring results at IM6 on 17 May 2018 appeared to be an isolated case with no observable spatial and temporal trend to indicate any effect due to Project activities. As all subsequent monitoring results at the station did not trigger any Action or Limit Level, no relevant site observations was noticed during monitoring, and all mitigation measures were carried out properly, the case was considered unlikely to be due to the Project.

**Table 4.13** presents a summary of the chromium compliance status at IM and SR stations during mid-flood tide for the reporting period.

**Table 4.13: Summary of Chromium Compliance Status (Mid-Flood Tide)**

	IM1	IM2	IM3	IM4	IM5	IM6	IM7	IM8	IM9	IM10	IM11	IM12
01/05/2018												
03/05/2018												
05/05/2018												
08/05/2018												
10/05/2018												
12/05/2018												
15/05/2018												
17/05/2018												
19/05/2018												
22/05/2018												
24/05/2018												
26/05/2018												
29/05/2018												
31/05/2018												
No. of result triggering Action or Limit Level	0	0	0	0	0	0	0	0	0	0	1	0

Note: Detailed results are presented in **Appendix C**.

Legend:

	The monitoring results complied with 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
	Upstream station with respect to the Project during the respective tide based on dominant tidal flow

Monitoring results triggered the corresponding Action Level on one monitoring day. The case occurred at monitoring station located upstream of the Project during flood tide, that would unlikely be affected by the Project.

## 4.5 Conclusion

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

The monitoring results complied with the Action or Limit Levels during the reporting period.

**Table 5.2: Construction Waste Statistics**

	Excavated Material (m <sup>3</sup> ) <sup>(1)</sup>	C&D <sup>(2)</sup> Material Reused in the Project (m <sup>3</sup> )	C&D Material Reused in other Projects (m <sup>3</sup> )	C&D Material Disposed of as Public Fill (m <sup>3</sup> )	Chemical Waste (kg)	Chemical Waste (L)	General Refuse (tonne)
Apr 2018 <sup>(3)</sup>	-	-	-	-	-	-	201
May 2018 <sup>(4)</sup>	3,074	1,094	0	6,419	165	19,400	205

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 <sup>(3)</sup>	Running quarterly <sup>(1)</sup> STG < 1.86 & ANI < 9.35
Limit Level <sup>(3)</sup>	Two consecutive running quarterly <sup>(2)</sup> (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 May 2018, data from 1 March 2018 to 31 May 2018 will be 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 April 2018 (calculated by data from February 2018 to April 2018) and the running quarterly encounter rates of this month (calculated by data from March 2018 to May 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
<b>NEL</b>					
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
<b>NWL</b>					
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
<b>AW</b>					
1W	804733	818205	2W	805045	816912
1E	806708	818017	2E	805960	816633
<b>WL</b>					
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			
<b>SWL</b>					
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 same location of the survey line where dolphins were spotted as far as practicable and began to survey on effort again.

Focal follows of dolphins were conducted 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 involved 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 3, 8, 9, 14, 16, 23, 24, and 25 May 2018, covering all transects in NEL, NWL, AW, WL and SWL survey areas for twice.

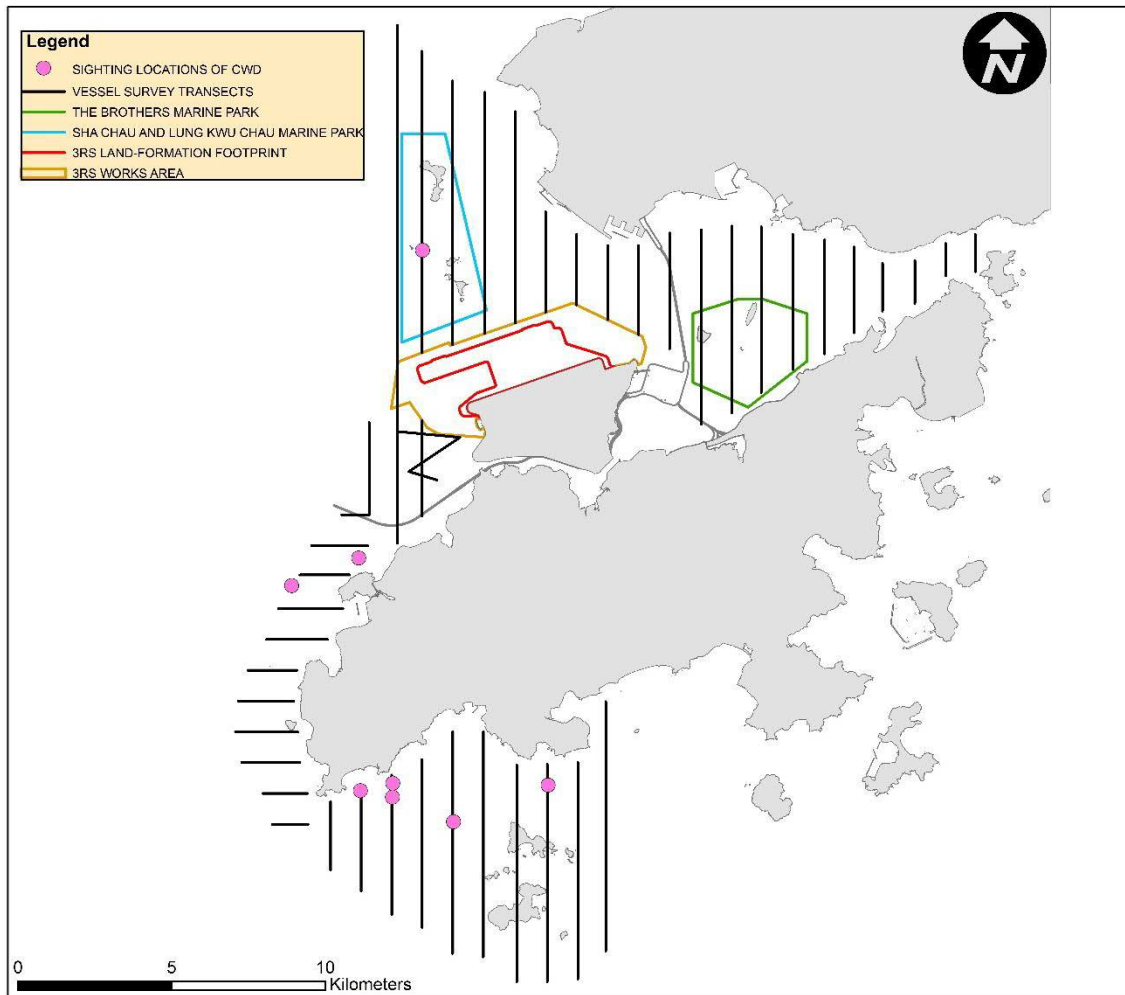
A total of around 458.62 km of survey effort was collected from these surveys, with around 91.84% of the total survey effort being conducted under favourable weather condition (i.e. Beaufort Sea State 3 or below with favourable visibility). Details of the survey effort are given in **Appendix C**.

#### Sighting Distribution

In May 2018, 8 sightings with 19 dolphins were sighted. Details of cetacean sightings are presented in **Appendix C**.

Distribution of all CWD sightings recorded in May 2018 is illustrated in **Figure 6.3**. In NWL, one CWD sighting was recorded and it was located within the SCLKCMP. In WL, CWD sightings were recorded around Tai O. In SWL, the majority of CWD sightings were recorded along the coastal waters from Fan Lau Tung Wan to Lo Kei Wan. No sightings of CWDs were recorded in NEL survey area.

**Figure 6.3: Sightings Distribution of Chinese White Dolphins**



### **Encounter Rate**

Two types of dolphin encounter rates were calculated based on the data from May 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 May 2018, a total of around 421.19 km of survey effort were conducted under Beaufort Sea State 3 or below with favourable visibility, whilst a total number of 8 on-effort sightings with 19

dolphins were sighted under such condition. Calculation of the encounter rates in May 2018 are shown in **Appendix C**.

For the running quarter of the reporting period (i.e., from March to May 2018), a total of around 1280.83 km of survey effort were conducted under Beaufort Sea State 3 or below with favourable visibility, whilst a total number of 39 on-effort sightings and a total number of 112 dolphins from on-effort sightings were obtained under such condition. Calculation of the running quarterly encounter rates are shown in **Appendix C**.

The STG and ANI of CWD in the whole survey area (i.e. NEL, NWL, AW, WL and SWL) during the month of May 2018 and during the running quarter are presented in **Table 6.4** below and compared with the Action Level. The running quarterly encounter rate STG remains above the Action Level but the running quarterly encounter rate ANI from March to May 2018 is below the Action Level. Nevertheless, the overall Action Level is not triggered.

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

	Encounter Rate (STG)	Encounter Rate (ANI)
May 2018	1.90	4.51
Running Quarter from March 2018 to May 2018 <sup>(1)</sup>	3.04	8.74
Action Level	Running quarterly <sup>(1)</sup> < 1.86	Running quarterly <sup>(1)</sup> < 9.35

Note: (1) Running quarterly encounter rates STG & ANI were calculated from data collected in the reporting period and the two preceding survey months, i.e. the data from March to May 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 May 2018, 8 groups with 19 dolphins were sighted, and the average group size of CWDs was 2.38 dolphins per group. Sightings with small group size (i.e. 1-2 dolphins) dominated. No sighting with large group size (i.e. 10 or more dolphins) was recorded.

### **Activities and Association with Fishing Boats**

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

### **Mother-calf Pair**

In May 2018, no mother-calf pair was observed.

## **6.4.2 Photo Identification**

In May 2018, a total number of 7 different CWD individuals were identified for totally 7 times. A summary of photo identification works is presented in **Table 6.5**. Representative photos of these individuals are given in **Appendix C**.

**Table 6.5: Summary of Photo Identification**

Individual ID	Date of Sighting (dd-mmm-yy)	Sighting Group No.	Area	Individual ID	Date of Sighting (dd-mmm-yy)	Sighting Group No.	Area
NLMM004	03-May-18	1	NWL	WLMM078	23-May-18	4	SWL
NLMM013	03-May-18	1	NWL	SLMM065	14-May-18	2	SWL
WLMM054	23-May-18	4	SWL	WLMM115	16-May-18	1	WL
WLMM076	23-May-18	4	SWL				

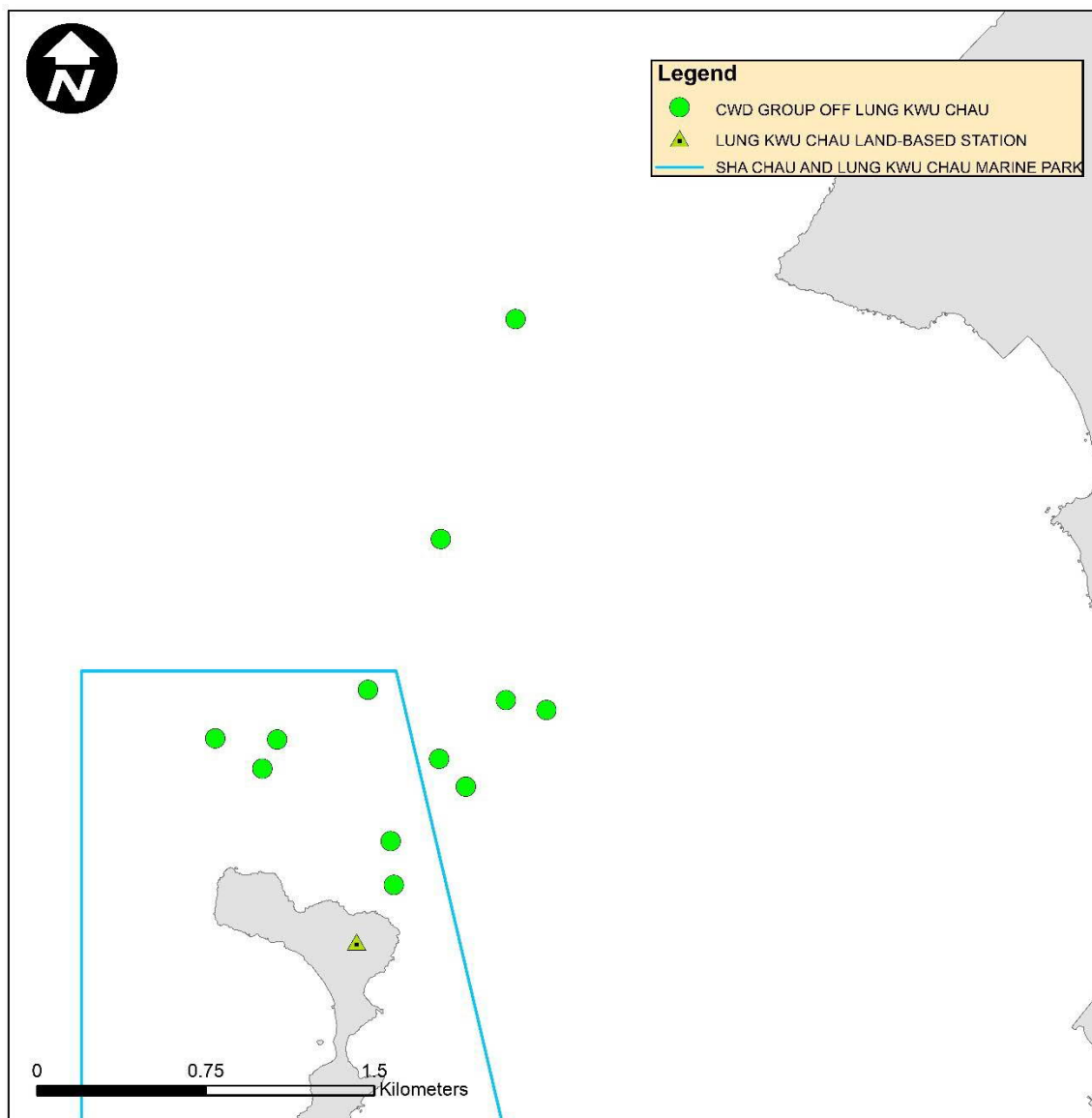
### 6.4.3 Land-based Theodolite Tracking Survey

#### **Survey Effort**

Land-based theodolite tracking surveys were conducted at LKC on 3, 28 and 29 May 2018 and at SC on 14 and 17 May 2018, with a total of five days of land-based theodolite tracking survey effort accomplished in this reporting period. A total number of 12 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 C**. The first sighting locations of CWD groups tracked at LKC station during land-based theodolite tracking surveys in May 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	12	0.67
Sha Chau	2	12:00	0	0
<b>TOTAL</b>	<b>5</b>	<b>30:00</b>	<b>12</b>	<b>0.4</b>

**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 retrieved on 7 May 2018 and subsequently redeployed and positioned at south of Sha Chau Island inside the SCLKCMP with 20% duty cycle (**Figure 6.5**). The EAR deployment is generally for 4-6 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 17 to 24 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 625 individuals being trained and the training records kept by the ET. From the contractors' MMWP observation records and DEZ monitoring records, no dolphin or other marine mammals were observed within or around the silt curtains or 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 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

Weekly site inspections of construction works were carried out by the ET to audit the implementation of proper environmental pollution control and mitigation measures for the Project. The weekly site inspection schedule of the construction works is provided in **Appendix B**. Bi-weekly site inspections were also conducted by the IEC. Observations have been recorded in the site inspection checklists and provided to the contractors together with the appropriate follow-up actions where necessary.

The key observations from site inspection and associated recommendations were related to display of appropriate permits; provision and maintenance of drip trays and spill kits; proper segregation and disposal of waste; proper implementation of dust suppression, acoustic decoupling, wastewater treatment, dark smoke prevention, and runoff prevention measures; as well as proper implementation DEZ and marine traffic monitoring.

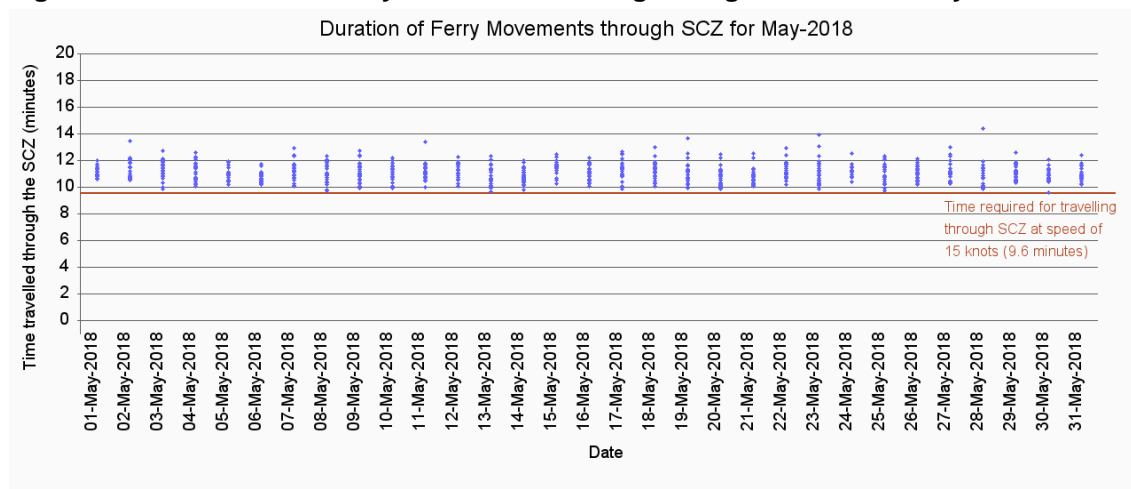
A summary of implementation status of the environmental mitigation measures for the construction phase of the Project during the reporting period is provided in **Appendix A**.

### 7.2 Audit of SkyPier High Speed Ferries

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

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., 89 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, 888 ferry movements between HKIA SkyPier and Zhuhai / Macau were recorded in May 2018 and the data are presented in **Appendix G**. The time spent by the SkyPier HSFs travelling through the SCZ in May 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 May 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.

All ferries followed the diverted route and complied with the speed limit within the SCZ during May 2018.

As mentioned in Monthly EM&A Report No. 28, there were four ferries were recorded with minor deviations from the diverted route during April 2018. Investigation were completed. It was found that the vessel captains had to give way to vessels and large container boat respectively to ensure safety for the deviation cases recorded on 4 and 13 April 2018. For the case on 6 April 2018, ET's investigation found that the deviation was due to strong wind and giving way to vessels at the portside to ensure safety. For the case on 28 April 2018, ET's investigation found that the vessel captain had to give way to vessel at the portside for safety reason.

Two meetings were held with the ferry operators on 19 and 27 April 2018 to review and discuss the deviation cases happened in the past few months as well as to share experience and recommendations to further strengthen the implementation of SkyPier Plan.

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

Requirements in the SkyPier Plan	1 May to 31 May 2018
Total number of ferry movements recorded and audited	888
Use diverted route and enter / leave SCZ through Gate Access Points	0 deviation.
Speed control in speed control zone	The average speeds taken within the SCZ by all HSFs were within 15 knots (9.4 knots to 14.1 knots), which complied with the SkyPier Plan. The time used by HSFs to travel through SCZ is presented in <b>Figure 7.1</b> .
Daily Cap (including all SkyPier HSFs)	89 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:

- Three skipper training sessions were held for contractors' concerned skippers of relevant construction vessels to familiarize them with the predefined routes; general education on local cetaceans; guidelines for avoiding adverse water quality impact; the required environmental practices / measures while operating construction and associated vessels under the Project; and guidelines for operating vessels safely in the presence of CWDs. The list of all trained skippers was properly recorded and maintained by ET.
- Five 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, thirty six skippers were trained by ET and twelve skippers were trained by contractor's Environmental Officer. In total, 967 skippers were trained from August 2016 to May 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. Since the construction works on Sheung Sha Chau is suspended during the ardeid's breeding season between April and July, no ecological monitoring was carried out in this reporting period.

According to the Manual, regular meetings with the Authority and relevant Government Departments (e.g. EPD and AFCD) will be arranged on a quarterly basis to review CWD distribution and abundance, in which the data collected from vessel survey, land-based surveys and the PAM will be reviewed in conjunction with the review of stranding data to interpret the full picture of CWD's latest status during construction phase. On 28 May 2018, a dolphin carcass was

sighted within the works area and the contractors notified the ET, AAHK and reported to the AFCD hotline for collection and investigation of the dolphin carcass.

## 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	Accepted / approved by EPD
2.4	Management Organizations	
2.5	Construction Works Schedule and Location Plans	
2.7	Marine Park Proposal	
2.8	Marine Ecology Conservation Plan	
2.9	Marine Travel Routes and Management Plan for Construction and Associated Vessels	
2.10	Marine Travel Routes and Management Plan for High Speed Ferries of SkyPier	
2.11	Marine Mammal Watching Plan	
2.12	Coral Translocation Plan	
2.13	Fisheries Management Plan	
2.14	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 E**.

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

### 7.8.1 Complaints

Two complaints were received in the reporting period.

The first complaint was received on 16 May 2018 regarding the water quality monitoring equipment of a DCM barge. Investigation was conducted by the ET. While the equipment was one of the specific contract requirements between AAHK and contractors, it is not a statutory requirement according to the EP and EM&A Manual. Nevertheless, based on ET's site inspections on the concerned barge, no abnormal observation was found regarding the equipment.

The second complaint was received on 28 May 2018 covering issues related to water quality and DEZ monitoring for DCM works. The case is currently under investigation by the ET in accordance with the Manual and the Complaint Management Plan.

#### 7.8.2 Notifications of Summons or Status of Prosecution

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

For the summonses received in June 2017 alleging use of powered mechanical equipment by the contractor outside the permitted hours for the aviation fuel pipeline diversion works in December 2016, the prosecution formally offered no evidence against the AAHK and all summonses issued to AAHK were dismissed. The contractor pleaded guilty to contravening the Noise Control Ordinance and was fined by the court on 21 May 2018.

#### 7.8.3 Cumulative Statistics

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

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

### 8.1 Construction Programme for the Coming Reporting Period

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

#### **Advanced Works:**

##### **Contract P560 (R) Aviation Fuel Pipeline Diversion Works**

- Pipeline testing and commissioning; and
- Stockpiling of excavated materials from previous HDD operation.

#### **DCM Works:**

##### **Contract 3201 to 3205 DCM Works**

- DCM works; and

#### **Reclamation Works:**

##### **Contract 3206 Main Reclamation Works**

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

#### **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
- 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;
- Steel platform erection; and

- Cable tray installation.

#### **Contract 3503 Terminal 2 Foundation and Substructure Works**

- Site establishment;
- Drainage, and road work; and
- Piling works

#### **APM works:**

#### **Contract 3602 Existing APM System Modification Works**

- Site office establishment; and
- Concrete plinth construction.

#### **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**

- Erection of hoarding;
- Diversion of underground utilities;
- Piling 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;
- Sorting, recycling, storage and disposal of general refuse and construction waste;
- Management of chemicals and avoidance of oil spillage on-site; and
- Acoustic decoupling measures for equipment on marine vessels.

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

## **8.3 Monitoring Schedule for the Coming Reporting Period**

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

## 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 DCM works, marine filling, seawall construction, laying of sand blanket, and PVD installation. Land-side works included 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, 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 DO, turbidity and total alkalinity 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 SS, chromium, and nickel, 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.

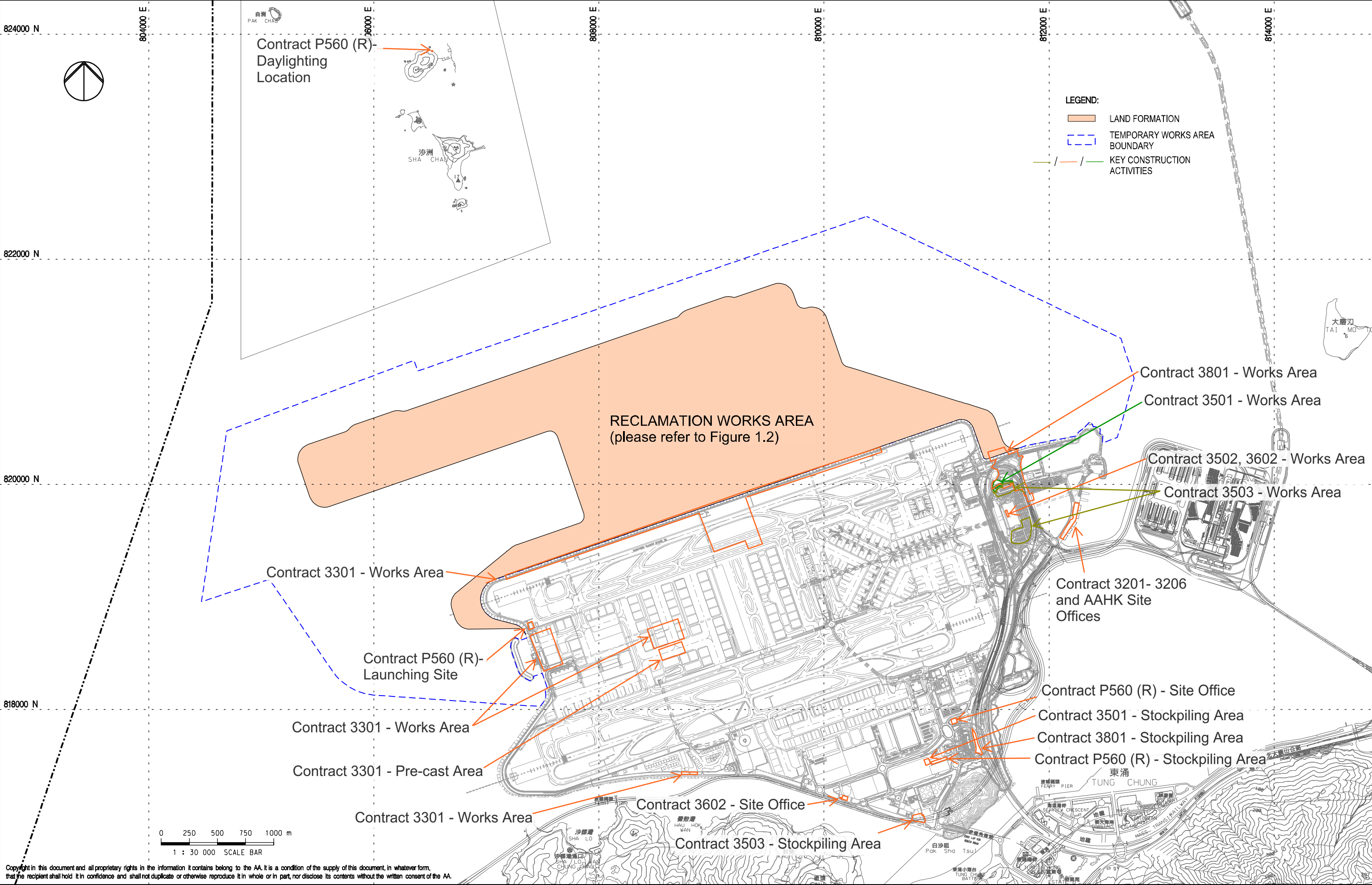
Weekly site inspections of the construction works were carried out by the ET to audit the implementation of proper environmental pollution control and mitigation measures for the Project. Bi-weekly site inspections were also conducted by the IEC. Site inspection findings were recorded in the site inspection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

On the implementation of MMWP, dolphin observers were deployed by the contractors laying of enhanced silt curtain and laying of silt curtains for sand blanket works in accordance with the MMWP. On the implementation of DEZ Plan, dolphin observers at 17 to 24 dolphin observation stations were deployed 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 were provided by the ET prior to the aforementioned works, with the training records kept by the ET. From the contractors' MMWP observation records and DEZ monitoring records, no dolphin or other marine mammals were observed within or around the silt curtains or the DEZs in this reporting month. The contractor's record was checked by the ET during site inspection. Audits of acoustic decoupling measures for construction vessels were also carried out by the ET, and relevant recommendations were made during regular site inspections.

On the implementation of the SkyPier Plan, the daily movements of all SkyPier high speed ferries (HSFs) in May 2018 were in the range of 89 to 90 daily movements, which are within the maximum daily cap of 125 daily movements. A total of 888 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 (9.4 to 14.1 knots), which were in compliance with the SkyPier Plan. All ferries followed the diverted route and complied with the speed limit within the SCZ during May 2018. In summary, the ET and IEC have audited the HSF movements against the SkyPier Plan and conducted follow up investigation or actions accordingly.

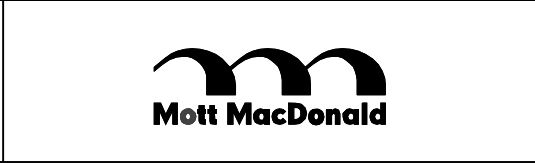
On the implementation of MTRMP-CAV, the MSS automatically recorded the deviation case such as speeding, entering no entry zone, not travelling through the designated gates. ET conducted checking to ensure the MSS records all deviation cases accurately. Training has been provided for the concerned skippers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



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Rev.	Date	Description	Checked
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
Authorised Representative	JFP	31AUG15

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



LEGEND:

"A1"	WORKS AREA
	CONTRACT 3201
	CONTRACT 3202
	CONTRACT 3203
	CONTRACT 3204
	CONTRACT 3205
	CONTRACT 3201 / 3202 / 3203 / 3204
	CONTRACT 3206

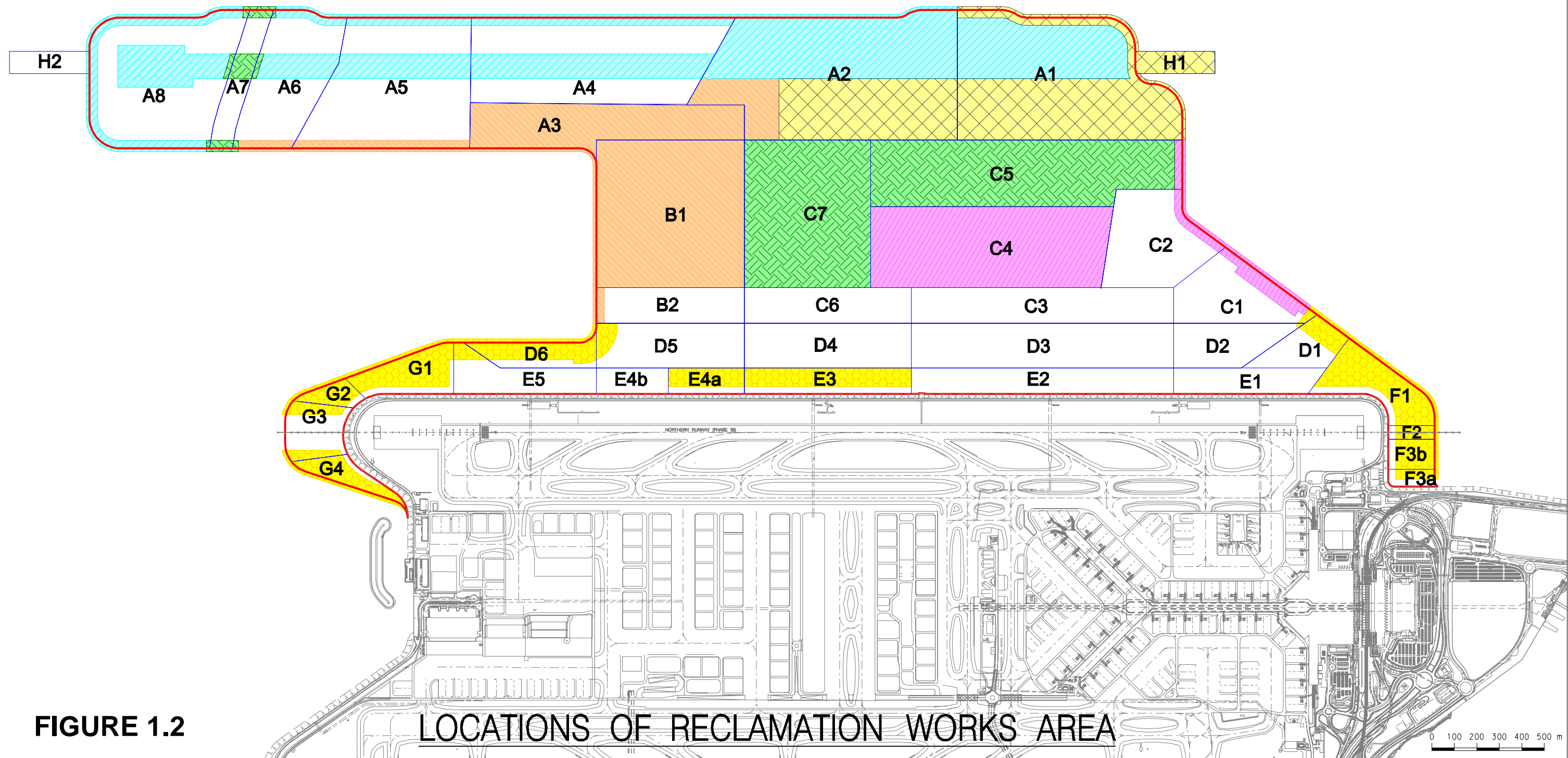
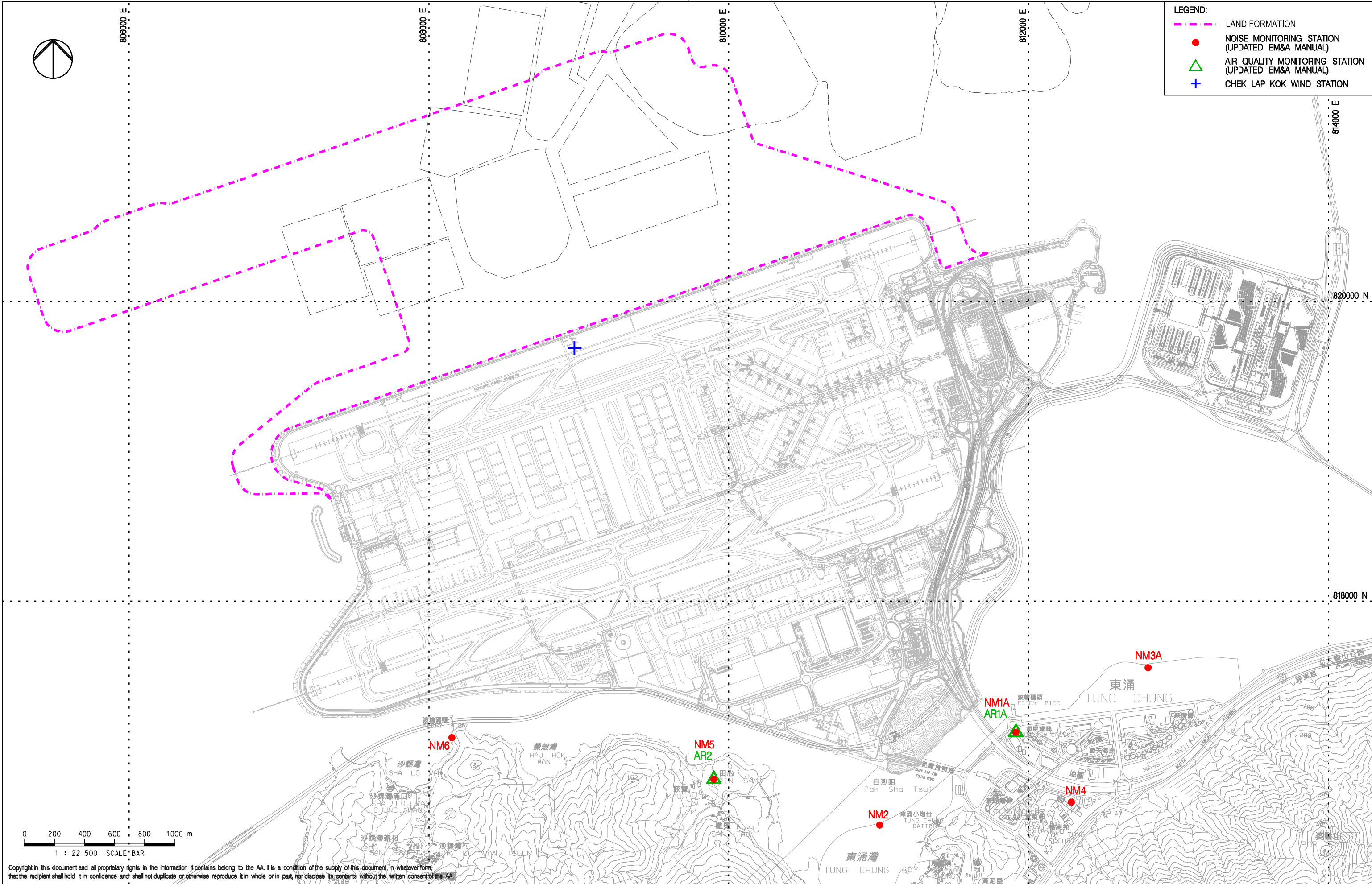


FIGURE 1.2

LOCATIONS OF RECLAMATION WORKS AREA



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

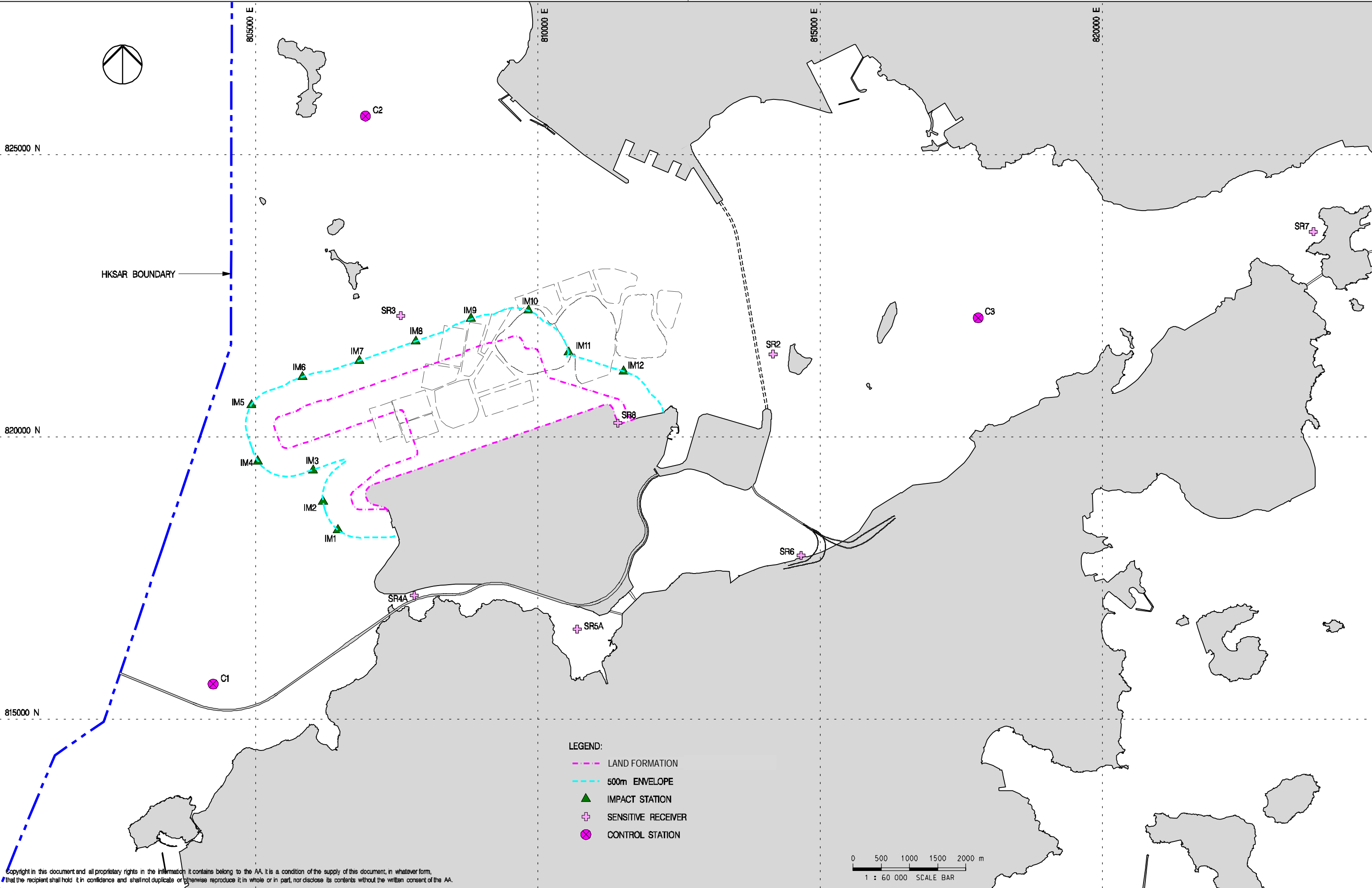


Title

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		Scale at A3
Drawing No.		1 : 22500
FIGURE 2.1		Rev. C



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A	02DEC15	FIRST ISSUE	DC
B	04MAY16	GENERAL REVISION	RO
C	06JUN16	GENERAL REVISION	LC
D	02AUG17	GENERAL REVISION	RO

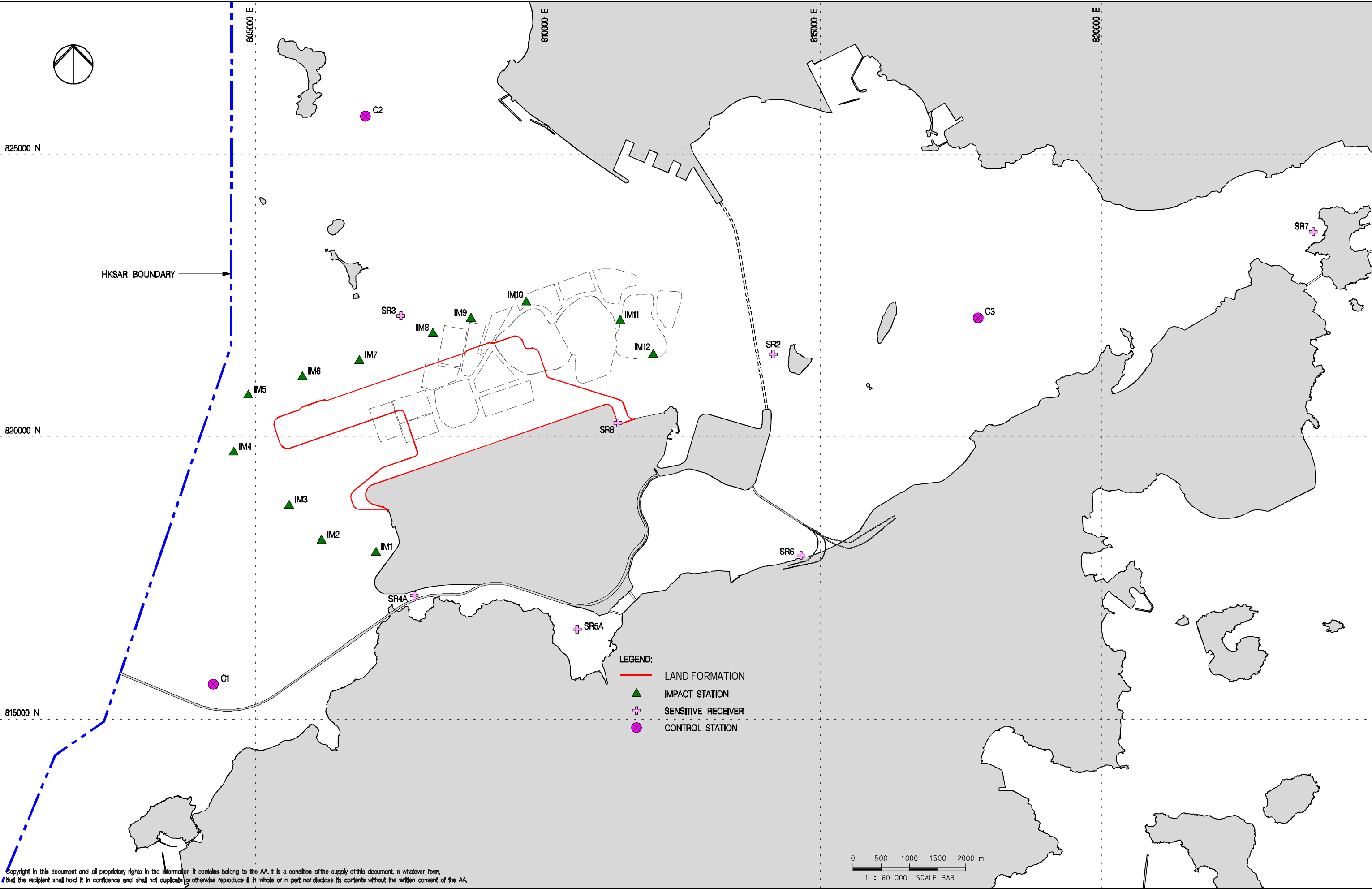


Title
WATER QUALITY MONITORING STATIONS

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

Date
02AUG17
02AUG17
02AUG17

EXPANSION OF HONG KONG INTERNATIONAL AIRPORT INTO A THREE-RUNWAY SYSTEM	
Drawing No.	Scale at A3 1 : 60000
FIGURE 3.1	
Rev.	D



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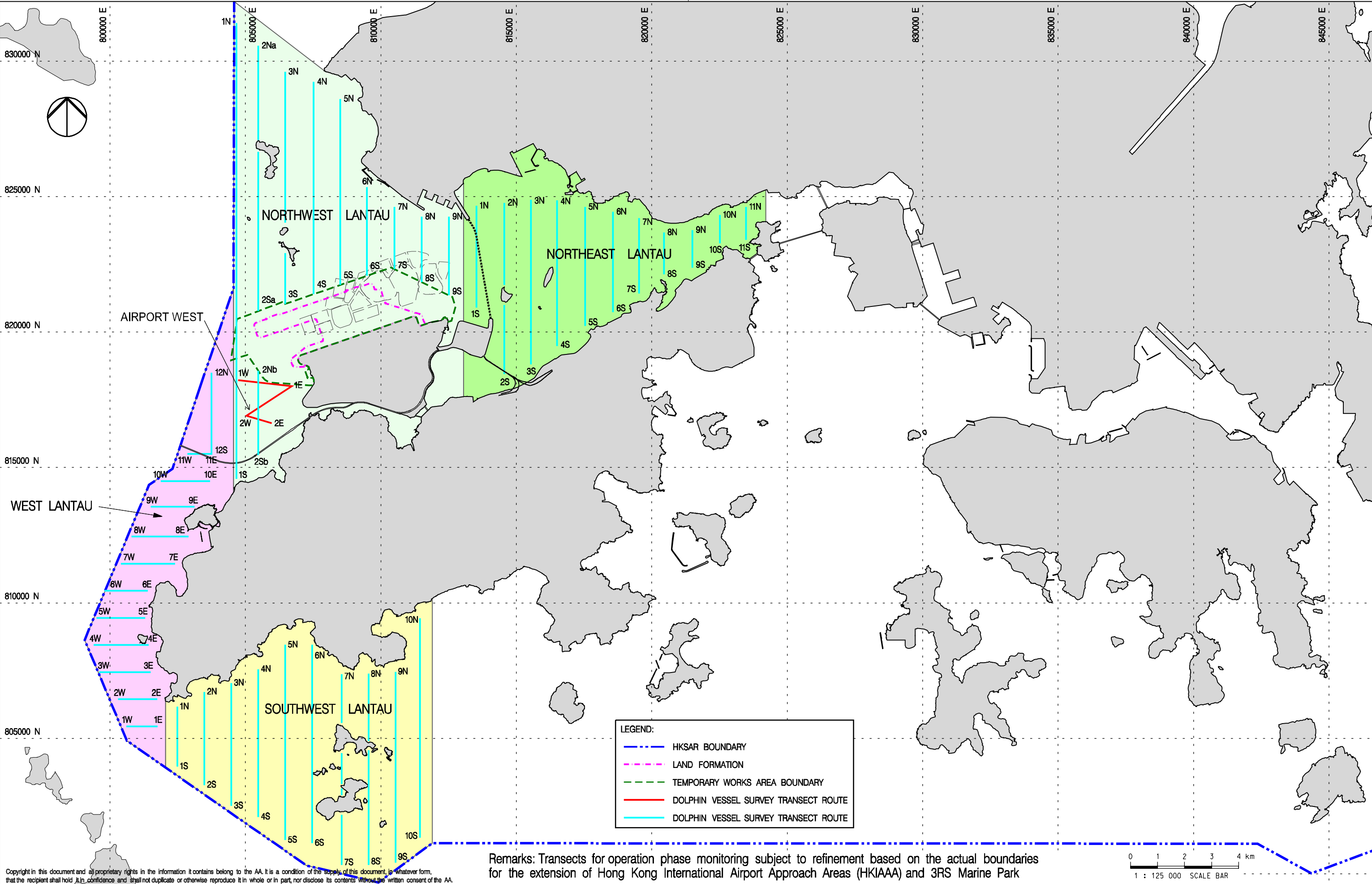
Rev.	Date	Description	Checked
A	25MAY17	FIRST ISSUE	HY
B	07AUG17	GENERAL REVISION	JL
C	25MAY18	GENERAL REVISION	SH



Title
WATER QUALITY MONITORING STATIONS (FROM 12 MAY 2018)

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		Scale at A3 1 : 60000
Drawing No.		Rev.
FIGURE 3.2		C



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

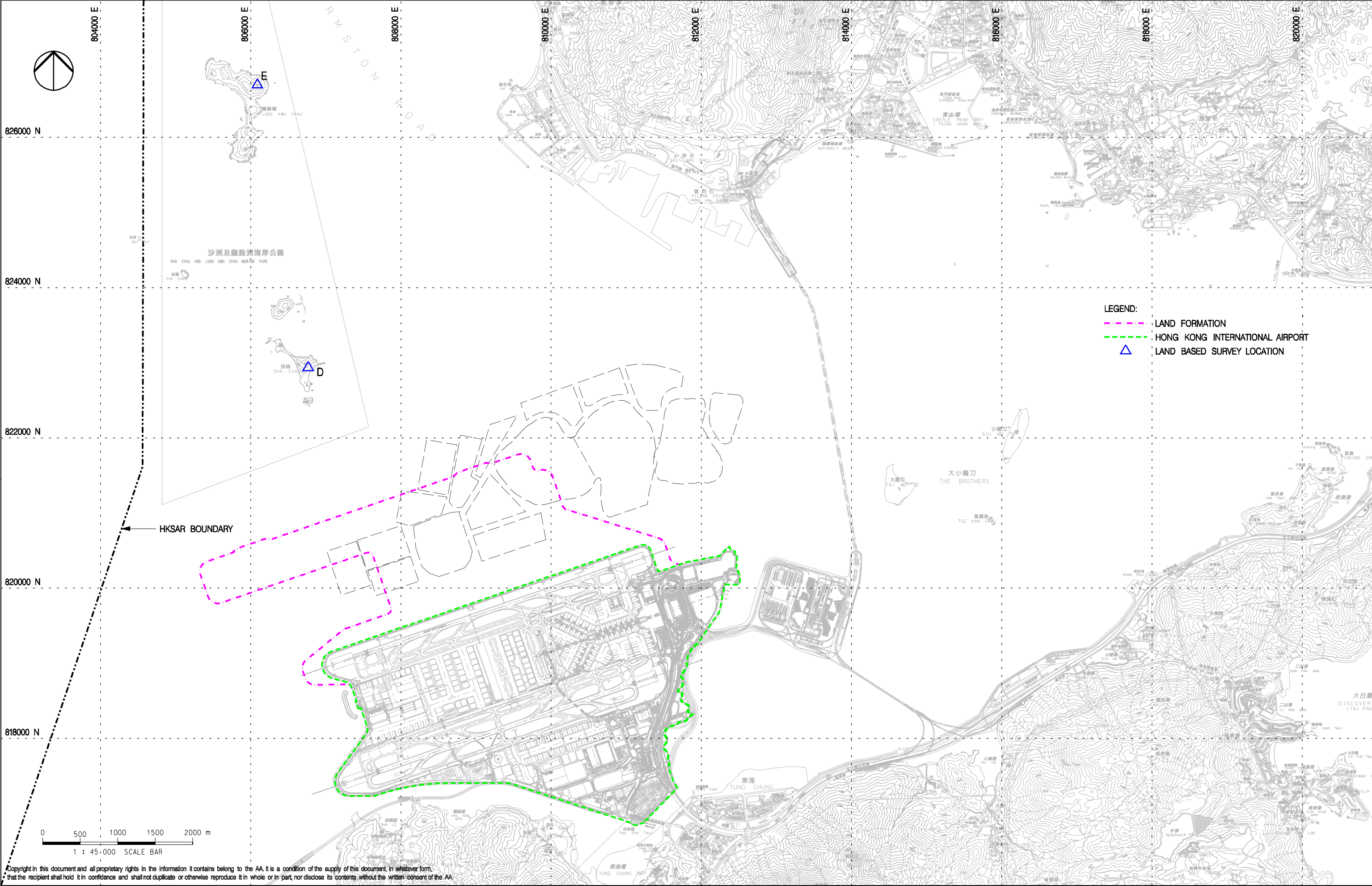
Rev.	Date	Description	Checked
A	02DEC15	FIRST ISSUE	JC
B	27JUL16	GENERAL REVISION	JT
C	06FEB17	GENERAL REVISION	JT
D	01MAR17	GENERAL REVISION	JT



Title  
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.	Scale at A3 1 : 125000
FIGURE 6.1	
Rev.	D



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



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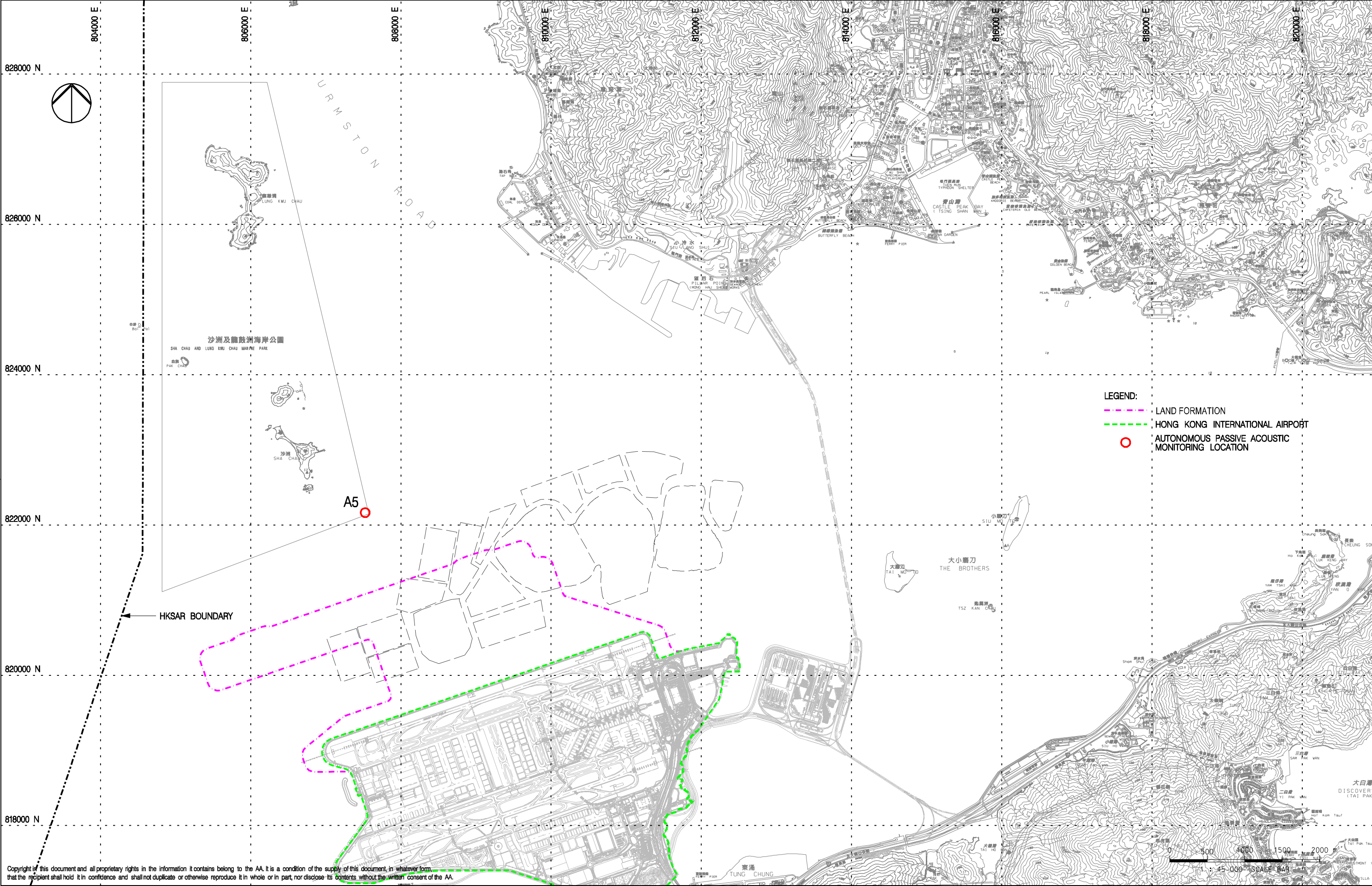
MOTT  
MACDONALD

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
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Rev.	Date	Description	Checked
A	29AUG17	FIRST ISSUE	JT



Title
LOCATION FOR AUTONOMOUS PASSIVE ACOUSTIC MONITORING

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

Date
29AUG17
29AUG17
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. Environmental Mitigation Implementation Schedule (EMIS) for Construction Phase**

# Appendix A 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?^
<b>Air Quality Impact – Construction Phase</b>					
5.2.6.2	2.1	-	<b>Dust Control Measures</b> <ul style="list-style-type: none"> <li>Water spraying for 12 times a day or once every two hours for 24-hour working at all active works area.</li> </ul>	Within construction site / Duration of the construction phase	I
5.2.6.3	2.1	-	<ul style="list-style-type: none"> <li>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.</li> </ul>	Within construction site / Duration of the construction phase	I
5.2.6.4	2.1	-	<p>Dust control practices as stipulated in the Air Pollution Control (Construction Dust) Regulation should be adopted. These practices include:</p> <p>Good Site Management</p> <ul style="list-style-type: none"> <li>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.</li> </ul> <p>Disturbed Parts of the Roads</p> <ul style="list-style-type: none"> <li>Each and every main temporary access should be paved with concrete, bituminous hardcore materials or metal plates and kept clear of dusty materials; or</li> <li>Unpaved parts of the road should be sprayed with water or a dust suppression chemical so as to keep the entire road surface wet.</li> </ul> <p>Exposed Earth</p> <ul style="list-style-type: none"> <li>Exposed earth should be properly treated by compaction, hydroseeding, vegetation planting or seating with latex, vinyl, bitumen within six months after the last construction activity on the site or part of the site where the exposed earth lies.</li> </ul>	Within construction site / Duration of the construction phase	I
				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"> <li>All dusty materials should be sprayed with water immediately prior to any loading or transfer operation so as to keep the dusty material wet.</li> </ul>	Within construction site / Duration of the construction phase	I
			<p>Debris Handling</p> <ul style="list-style-type: none"> <li>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</li> <li>Before debris is dumped into a chute, water should be sprayed so that it remains wet when it is dumped.</li> </ul>	Within construction site / Duration of the construction phase	I
			<p>Transport of Dusty Materials</p> <ul style="list-style-type: none"> <li>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.</li> </ul>	Within construction site / Duration of the construction phase	I
			<p>Wheel washing</p> <ul style="list-style-type: none"> <li>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.</li> </ul>	Within construction site / Duration of the construction phase	I
			<p>Use of vehicles</p> <ul style="list-style-type: none"> <li>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;</li> <li>Immediately before leaving the construction site, every vehicle should be washed to remove any dusty materials from its body and wheels; and</li> <li>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.</li> </ul>	Within construction site / Duration of the construction phase	I
			<p>Site hoarding</p> <ul style="list-style-type: none"> <li>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.</li> </ul>	Within construction site / Duration of the construction phase	I
5.2.6.5	2.1	-	<p><b>Best Practices for Concrete Batching Plant</b></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"> <li>▪ 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;</li> <li>▪ 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;</li> <li>▪ Vents of all silos shall be fitted with fabric filtering system to meet the required emission limit;</li> <li>▪ Vents of cement/PFA weighing scale shall be fitted with fabric filtering system to meet the required emission limit; and</li> <li>▪ Seating of pressure relief valves of all silos shall be checked, and the valves re-seated if necessary, before each delivery.</li> </ul>		
			<p>Other raw materials</p> <ul style="list-style-type: none"> <li>▪ 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;</li> <li>▪ 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;</li> <li>▪ 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;</li> <li>▪ 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;</li> <li>▪ All conveyor transfer points shall be totally enclosed. Openings for the passage of conveyors shall be fitted with adequate flexible seals;</li> <li>▪ Scrapers shall be provided at the turning points of all conveyors to remove dust adhered to the belt surface;</li> <li>▪ 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;</li> <li>▪ 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;</li> </ul>	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"> <li>The stockpile shall be enclosed at least on top and three sides and with flexible curtain to cover the entrance side;</li> <li>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</li> <li>The opening between the storage bin and weighing scale of the materials shall be fully enclosed.</li> </ul>		
			<p>Loading of materials for batching</p> <ul style="list-style-type: none"> <li>Concrete truck shall be loaded in such a way as to minimise airborne dust emissions. The following control measures shall be implemented:               <ol style="list-style-type: none"> <li>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</li> <li>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.</li> </ol> </li> <li>The loading bay shall be totally enclosed during the loading process.</li> </ul>	Within Concrete Batching Plant / Duration of the construction phase	N/A
			<p>Vehicles</p> <ul style="list-style-type: none"> <li>All practicable measures shall be taken to prevent or minimize the dust emission caused by vehicle movement; and</li> <li>All access and route roads within the premises shall be paved and adequately wetted.</li> </ul>	Within Concrete Batching Plant / Duration of the construction phase	N/A
			<p>Housekeeping</p> <ul style="list-style-type: none"> <li>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.</li> </ul>	Within Concrete Batching Plant / Duration of the construction phase	N/A
5.2.6.6	2.1	-	<p><b>Best Practices for Asphaltic Concrete Plant</b></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"> <li>The chimney shall not be less than 3 metres plus the building height or 8 metres above ground level, whichever is the greater;</li> <li>The efflux velocity of gases from the main chimney shall not be less than 12 m/s at full load condition;</li> </ul>	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"> <li>The flue gas exit temperature shall not be less than the acid dew point; and</li> <li>Release of the chimney shall be directed vertically upwards and not be restricted or deflected.</li> </ul>		
			<p>Cold feed side</p> <ul style="list-style-type: none"> <li>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;</li> <li>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;</li> <li>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;</li> <li>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;</li> <li>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;</li> <li>All conveyor transfer points shall be totally enclosed. Openings for the passages of conveyors shall be fitted with adequate flexible seals; and</li> <li>All materials returned from dust collection system shall be transferred in enclosed system and shall be stored inside bins or enclosures.</li> </ul>	<p>Within Concrete Batching Plant / Duration of the construction phase</p>	N/A
			<p>Hot feed side</p> <ul style="list-style-type: none"> <li>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;</li> <li>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;</li> <li>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;</li> <li>Chutes for carrying hot material shall be rigid and preferably fitted with abrasion resistant plate inside. They shall be inspected daily for leakages;</li> </ul>	<p>Within Concrete Batching Plant / Duration of the construction phase</p>	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"> <li>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</li> <li>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).</li> </ul>		
			<b>Material transportation</b> <ul style="list-style-type: none"> <li>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;</li> <li>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</li> <li>Haul roads inside the Works shall be adequately wetted with water and/or chemical suppressants by water trucks or water sprayers.</li> </ul>	Within Concrete Batching Plant / Duration of the construction phase	N/A
			<b>Control of emissions from bitumen decanting</b> <ul style="list-style-type: none"> <li>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;</li> <li>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;</li> <li>Proper chimney for the discharge of bitumen fumes shall be provided at high level;</li> <li>The emission of bitumen fumes shall not exceed the required emission limit; and</li> </ul> <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
			<b>Liquid fuel</b> <ul style="list-style-type: none"> <li>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.</li> </ul>	Within Concrete Batching Plant / Duration of the construction phase	N/A
			<b>Housekeeping</b> <ul style="list-style-type: none"> <li>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.</li> </ul>	Within Concrete Batching Plant / Duration of the construction phase	N/A
5.2.6.7	2.1	-	<b>Best Practices for Rock Crushing Plants</b> <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"> <li>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;</li> <li>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;</li> <li>Water sprayers shall be installed and operated in strategic locations at the feeding inlet of crushers; and</li> <li>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.</li> </ul>		
			<p>Vibratory screens and grizzlies</p> <ul style="list-style-type: none"> <li>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</li> <li>All grizzlies shall be enclosed on top and 3 sides and sufficient water sprayers shall be installed at their feeding and outlet areas.</li> </ul>	Within Concrete Batching Plant / Duration of the construction phase	N/A
			<p>Belt conveyors</p> <ul style="list-style-type: none"> <li>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;</li> <li>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</li> <li>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.</li> </ul>	Within Concrete Batching Plant / Duration of the construction phase	N/A

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			Storage piles and bins <ul style="list-style-type: none"> <li>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.</li> <li>The surface of all surge piles and stockpiles of blasted rocks or aggregates shall be kept sufficiently wet by water spraying wherever practicable;</li> <li>All open stockpiles for aggregates of size in excess of 5 mm shall be kept sufficiently wet by water spraying where practicable; or</li> <li>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.</li> <li>Scattered piles gathered beneath belt conveyors, inside and around enclosures shall be cleared regularly.</li> </ul>	Within Concrete Batching Plant / Duration of the construction phase	N/A
			Rock drilling equipment <ul style="list-style-type: none"> <li>Appropriate dust control equipment such as a dust extraction and collection system shall be used during rock drilling activities.</li> </ul>	Within Concrete Batching Plant / Duration of the construction phase	N/A
<b>Hazard to Human Life – Construction Phase</b>					
Table 6.40	3.2	-	<ul style="list-style-type: none"> <li>Precautionary measures should be established to request barges to move away during typhoons.</li> </ul>	Construction Site / Construction Period	I
Table 6.40	3.2	-	<ul style="list-style-type: none"> <li>An appropriate marine traffic management system should be established to minimize risk of ship collision.</li> </ul>	Construction Site / Construction Period	I
Table 6.40	3.2	-	<ul style="list-style-type: none"> <li>Location of all existing hydrant networks should be clearly identified prior to any construction works.</li> </ul>	Construction Site / Construction Period	I
<b>Noise Impact – Construction Phase</b>					
7.5.6	4.3	-	<b>Good Site Practice</b> 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: <ul style="list-style-type: none"> <li>only well-maintained plant to be operated on-site and plant should be serviced regularly during the construction works;</li> <li>machines and plant that may be in intermittent use to be shut down between work periods or should be throttled down to a minimum;</li> </ul>	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"> <li>plant known to emit noise strongly in one direction, should, where possible, be orientated to direct noise away from the NSRs;</li> <li>mobile plant should be sited as far away from NSRs as possible; and</li> <li>material stockpiles and other structures to be effectively utilised, where practicable, to screen noise from on-site construction activities.</li> </ul>		
7.5.6	4.3	-	<b>Adoption of QPME</b> <ul style="list-style-type: none"> <li>QPME should be adopted as far as applicable.</li> </ul>	Within the Project site / During construction phase / Prior to commencement of operation	I
7.5.6	4.3	-	<b>Use of Movable Noise Barriers</b> <ul style="list-style-type: none"> <li>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.</li> </ul>	Within the Project site / During construction phase / Prior to commencement of operation	I
7.5.6	4.3	-	<b>Use of Noise Enclosure/ Acoustic Shed</b> <ul style="list-style-type: none"> <li>Noise enclosure or acoustic shed should be used to cover stationary PME such as air compressor and generator.</li> </ul>	Within the Project site / During construction phase / Prior to commencement of operation	I
<b>Water Quality Impact – Construction Phase</b>					

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	<b>Marine Construction Activities</b> <u>General Measures to be Applied to All Works Areas</u> <ul style="list-style-type: none"> <li>▪ Barges or hoppers shall not be filled to a level which will cause overflow of materials or pollution of water during loading or transportation;</li> <li>▪ Use of Lean Material Overboard (LMOB) systems shall be prohibited;</li> <li>▪ Excess materials shall be cleaned from the decks and exposed fittings of barges and hopper dredgers before the vessels are moved;</li> <li>▪ Plants should not be operated with leaking pipes and any pipe leakages shall be repaired quickly;</li> <li>▪ Adequate freeboard shall be maintained on barges to reduce the likelihood of decks being washed by wave action;</li> <li>▪ 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;</li> <li>▪ 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</li> <li>▪ 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.</li> </ul>	Within construction site / Duration of the construction phase	I
			<u>Specific Measures to be Applied to All Works Areas</u> <ul style="list-style-type: none"> <li>▪ The daily maximum production rates shall not exceed those assumed in the water quality assessment in the EIA report;</li> <li>▪ 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;</li> </ul>	Within construction site / Duration of the construction phase	I
			<ul style="list-style-type: none"> <li>▪ 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;</li> </ul>		N/A
			<ul style="list-style-type: none"> <li>▪ Closed grab dredger shall be used to excavate marine sediment;</li> <li>▪ Silt curtains surrounding the closed grab dredger shall be deployed in accordance with the Silt Curtain Deployment Plan; and</li> </ul>		N/A
			<ul style="list-style-type: none"> <li>▪ The Silt Curtain Deployment Plan shall be implemented.</li> </ul>		I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			<u>Specific Measures to be Applied to Land Formation Activities prior to Commencement of Marine Filling Works</u> <ul style="list-style-type: none"> <li>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;</li> </ul>	Within construction site / Duration of the construction phase	NA *(The arrangement of silt curtain has been modified. The details can be referred to Silt Curtain Deployment Plan)
			<ul style="list-style-type: none"> <li>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</li> </ul>		For C7a, I For C8, N/A *(The requirement of silt curtain / screen has been modified. The details can be referred to Silt Curtain Deployment Plan)
			<ul style="list-style-type: none"> <li>The silt curtains and silt screens should be regularly checked and maintained.</li> </ul>		I
			<u>Specific Measures to be Applied to Land Formation Activities during Marine Filling Works</u> <ul style="list-style-type: none"> <li>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;</li> </ul>	Within construction site / Duration of the construction phase	N/A *(The arrangement of silt curtain has been modified. The details can be referred to Silt Curtain Deployment Plan)
			<ul style="list-style-type: none"> <li>Double layer silt curtains to be applied at the south-western opening prior to commencement of marine filling activities;</li> </ul>		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"> <li>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</li> </ul>		N/A *(The requirement of silt curtain / screen has been modified. The details can be referred to Silt Curtain Deployment Plan)
			<ul style="list-style-type: none"> <li>The silt curtains and silt screens should be regularly checked and maintained.</li> </ul>		N/A

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			<u>Specific Measures to be Applied to the Field Joint Excavation Works for the Submarine Cable Diversion</u> <ul style="list-style-type: none"> <li>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</li> <li>Silt curtains surrounding the closed grab dredger to be deployed as a precautionary measure.</li> </ul>	Within construction site / Duration of the construction phase	N/A
8.8.1.4	5.1	-	<b>Modification of the Existing Seawall</b> <ul style="list-style-type: none"> <li>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.</li> </ul>	At the existing northern seawall / Duration of the construction phase	N/A
8.8.1.5	5.1	-	<b>Construction of New Stormwater Outfalls and Modifications to Existing Outfalls</b> <ul style="list-style-type: none"> <li>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.</li> </ul>	Within construction site / Duration of the construction phase	N/A
8.8.1.6 8.8.1.7	5.1	2.27	<b>Piling Activities for Construction of New Runway Approach Lights and HKIAAA Marker Beacons</b> <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"> <li>Ground improvement via DCM using a close-spaced layout shall be completed prior to commencement of piling works;</li> <li>Steel casings shall be installed to enclose the excavation area prior to commencement of excavation;</li> <li>The excavated materials shall be removed using a closed grab within the steel casings;</li> <li>No discharge of the cement mixed materials into the marine environment will be allowed; and</li> <li>Excavated materials shall be treated and reused on-site.</li> </ul>	Within construction site / Duration of the construction phase	N/A
8.8.1.8	5.1	-	<b>Construction of Site Runoff and Drainage</b> <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"> <li>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</li> </ul>	Within construction site / Duration of the construction phase	I

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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"> <li>▪ 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.</li> </ul> <p><b>Drilling Activities for the Submarine Aviation Fuel Pipelines</b></p> <p>To prevent potential water quality impacts at Sha Chau, the following measures shall be applied:</p> <ul style="list-style-type: none"> <li>▪ A 'zero-discharge' policy shall be applied for all activities to be conducted at Sha Chau;</li> <li>▪ No bulk storage of chemicals shall be permitted; and</li> <li>▪ 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.</li> </ul> <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"> <li>▪ 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</li> <li>▪ 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.</li> </ul>	Within construction site / During construction phase	I
<b>Waste Management Implication – Construction Phase</b>					
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"> <li>▪ 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&amp;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&amp;D materials;</li> <li>▪ Priority should be given to collect and reuse suitable inert C&amp;D materials generated from other concurrent projects and the Government's PFRF as fill materials for the proposed land formation works;</li> <li>▪ 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;</li> <li>▪ 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</li> </ul>	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"> <li>For the marine sediments expected to be excavated from the piling works of TRC, APM &amp; BHS tunnels, airside tunnels and other facilities on the proposed land formation area, piling work of marine sections of the approach lights and HKIAAA beacons, basement works for some of T2 expansion area and excavation works for the proposed APM depot should be treated and reused on-site as backfilling materials, although required treatment level / detail and the specific re-use mode are under development.</li> </ul>		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"> <li>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;</li> <li>Training of site personnel in proper waste management and chemical waste handling procedures;</li> <li>Provision of sufficient waste disposal points and regular collection for disposal;</li> <li>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;</li> <li>Stockpiles of C&amp;D materials should be kept wet or covered by impervious sheets to avoid wind-blown dust;</li> <li>All dusty materials including C&amp;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;</li> <li>C&amp;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;</li> <li>The speed of the trucks including dump trucks carrying C&amp;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</li> <li>To avoid or minimise dust emission during transport of C&amp;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.</li> </ul>	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"> <li>Use of steel or aluminium formworks and falseworks for temporary works as far as practicable;</li> <li>Adoption of repetitive design to allow reuse of formworks as far as practicable;</li> <li>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;</li> </ul>	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"> <li>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;</li> <li>Any unused chemicals or those with remaining functional capacity should be collected for reused as far as practicable;</li> <li>Proper storage and site practices to minimise the potential for damage or contamination of construction materials; and</li> <li>Plan and stock construction materials carefully to minimise amount of waste generated and avoid unnecessary generation of waste.</li> </ul>		
10.5.1.5	7.1		<ul style="list-style-type: none"> <li>Inert and non-inert C&amp;D materials should be handled and stored separately to avoid mixing the two types of materials.</li> </ul>	Project Site Area / Construction Phase	I
10.5.1.5	7.1	-	<ul style="list-style-type: none"> <li>Any recyclable materials should be segregated from the non-inert C&amp;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.</li> </ul>	Project Site Area / Construction Phase	I
10.5.1.6	7.1	-	<ul style="list-style-type: none"> <li>A trip-ticket system promulgated shall be developed in order to monitor the off-site delivery of surplus inert C&amp;D materials that could not be reused on-site for the proposed land formation work at the PFRF and to control fly tipping.</li> </ul>	Project Site Area / Construction Phase	I
10.5.1.6	7.1	2.32	<ul style="list-style-type: none"> <li>The Contractor should prepare and implement a Waste Management Plan detailing various waste arising and waste management practices.</li> </ul>	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"> <li>On-site remediation should be carried out in an enclosed area in order to minimise odour/dust emissions;</li> <li>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;</li> <li>All practical measures, including but not limited to speed control for vehicles, should be taken to minimise dust emission;</li> <li>Good housekeeping should be maintained at all times at the sediment treatment facility and storage area;</li> <li>Treated and untreated sediment should be clearly separated and stored separately; and</li> <li>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.</li> </ul>	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"> <li>Bottom opening of barges shall be fitted with tight fitting seals to prevent leakage of material;</li> <li>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</li> <li>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.</li> </ul>		
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"> <li>Good quality containers compatible with the chemical wastes should be used;</li> <li>Incompatible chemicals should be stored separately;</li> <li>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</li> <li>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.</li> </ul>	Project Site Area / Construction Phase	I
10.5.1.20	7.1	-	<ul style="list-style-type: none"> <li>General refuse should be stored in enclosed bins or compaction units separated from inert C&amp;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.</li> </ul>	Project Site Area / Construction Phase	I
10.5.1.21	7.1	-	<ul style="list-style-type: none"> <li>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.</li> </ul>	Project Site Area / Construction Phase	N/A
<b>Land Contamination – Construction Phase</b>					
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"> <li>Further site reconnaissance would be conducted once the areas are accessible in order to identify any land contamination concern for the areas.</li> </ul>	Project Site Area inaccessible during site reconnaissance / Prior to Construction Phase	I
			<ul style="list-style-type: none"> <li>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.</li> </ul>		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"> <li>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.</li> </ul>		I *(CAR for golf course)
			<ul style="list-style-type: none"> <li>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.</li> </ul>		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"> <li>To minimize the incidents of construction workers coming in contact with any contaminated materials, bulk earth-moving excavation equipment should be employed;</li> <li>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;</li> <li>Stockpiling of contaminated excavated materials on site should be avoided as far as possible;</li> <li>The use of any contaminated soil for landscaping purpose should be avoided unless pre-treatment was carried out;</li> <li>Vehicles containing any excavated materials should be suitably covered to reduce dust emissions and/or release of contaminated wastewater;</li> <li>Truck bodies and tailgates should be sealed to prevent any discharge;</li> <li>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;</li> <li>Speed control for trucks carrying contaminated materials should be exercised. 8km/h is the recommended speed limit;</li> <li>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</li> <li>Maintain records of waste generation and disposal quantities and disposal arrangements.</li> </ul>	Project Site Area / Construction Phase	N/A
<b>Terrestrial Ecological – Construction Phase</b>					
12.10.1.1	9.2	2.14	<p><b>Pre-construction Egretty Survey</b></p> <ul style="list-style-type: none"> <li>Conduct ecological survey for Sha Chau egretty to update the latest boundary of the egretty.</li> </ul>	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	<b>Avoidance and Minimisation of Direct Impact to Egret</b> <ul style="list-style-type: none"> <li>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;</li> <li>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</li> <li>The containment pit at the daylighting location shall be covered or camouflaged.</li> </ul>	During construction phase at Sheung Sha Chau Island	I
12.7.2.5	9.1	2.30	<b>Preservation of Nesting Vegetation</b> <ul style="list-style-type: none"> <li>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.</li> </ul>	During construction phase at Sheung Sha Chau Island	I
12.7.2.4 and 12.7.2.6	9.1	2.30	<b>Timing the Pipe Connection Works outside Ardeid's Breeding Season</b> <ul style="list-style-type: none"> <li>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.</li> </ul>	During construction phase at Sheung Sha Chau Island	I
12.10.1.1	9.3	-	<b>Ecological Monitoring</b> <ul style="list-style-type: none"> <li>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.</li> </ul>	at Sheung Sha Chau Island	I
<b>Marine Ecological Impact – Pre-construction Phase</b>					
13.11.4.1	10.2.2	-	<ul style="list-style-type: none"> <li>Pre-construction phase Coral Dive Survey.</li> </ul>	HKIAAA artificial seawall	I
<b>Marine Ecological Impact – Construction Phase</b>					
13.11.1.3 to 13.11.1.6	-	-	<b>Minimisation of Land Formation Area</b> <ul style="list-style-type: none"> <li>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.</li> </ul>	Land formation footprint / during detailed design phase to completion of construction	I
13.11.1.7 to 13.11.1.10	-	2.31	<b>Use of Construction Methods with Minimal Risk/Disturbance</b> <ul style="list-style-type: none"> <li>Use of non-dredge method for the main land formation and ancillary works including the diversion of the aviation fuel pipeline to the AFRF;</li> <li>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;</li> </ul>	During construction phase at marine works area	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			<ul style="list-style-type: none"> <li>Use of bored piling in short duration to form the new approach lights and marker beacons for the new runway;</li> </ul>		N/A
			<ul style="list-style-type: none"> <li>Avoid bored piling during CWD peak calving season (Mar to Jun);</li> </ul>		I
			<ul style="list-style-type: none"> <li>Prohibition of underwater percussive piling; and</li> </ul>		I
			<ul style="list-style-type: none"> <li>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.</li> </ul>		I
13.11.2.1 to 13.11.2.7	-	-	<b>Mitigation for Indirect Disturbance due to Deterioration of Water Quality</b> <ul style="list-style-type: none"> <li>Water quality mitigation measures during construction phases include consideration of alternative construction methods, deployment of silt curtain and good site practices;</li> </ul>	All works area during the construction phase	I
			<ul style="list-style-type: none"> <li>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);</li> </ul>		I
			<ul style="list-style-type: none"> <li>Use of bored piling in short duration to form the new approach lights and marker beacons for the new runway; and</li> </ul>		N/A
			Use of horizontal directional drilling (HDD) method and water jetting methods for placement of undersea cables and pipelines to minimise the disturbance to the CWDs and other marine ecological resources.		I
13.11.1.12	-	-	<b>Strict Enforcement of No-Dumping Policy</b> <ul style="list-style-type: none"> <li>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;</li> <li>Mandatory educational programme of the no-dumping policy be made available to all construction site personnel for all project-related works;</li> <li>Fines for infractions should be implemented; and</li> <li>Unscheduled, on-site audits shall be implemented.</li> </ul>	All works area during the construction phase	I
13.11.1.13	-	-	<b>Good Construction Site Practices</b> <ul style="list-style-type: none"> <li>Regular inspection of the integrity and effectiveness of all silt curtains and monitoring of effluents to ensure that any discharge meets effluent discharge guidelines;</li> <li>Keep the number of working or stationary vessels present on-site to the minimum anytime; and</li> <li>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.</li> </ul>	All works area during the construction phase	I
13.11.1.3 to 13.11.1.6	-	-	<b>Minimisation of Land Formation Area</b> <ul style="list-style-type: none"> <li>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.</li> </ul>	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	-	<b>SkyPier High Speed Ferries' Speed Restrictions and Route Diversions</b> <ul style="list-style-type: none"> <li>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 <b>Drawing No. MCL/P132/EIA/13-023</b> 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&amp;A data and taking reference to changes in total SkyPier HSF numbers; and</li> <li>A maximum of 10 knots will be enforced through the designated SCLKC Marine Park area at all times.</li> </ul>	Area between the footprint and SCLKC Marine Park during construction phase	I
			<b>Other mitigation measures</b> <ul style="list-style-type: none"> <li>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</li> <li>The effectiveness of the CWD mitigation measures after implementation of initial six month SkyPier HSF diversion and speed restriction will be reviewed.</li> </ul>	Area between the footprint and SCLKC Marine Park during construction phase	I
13.11.5.14 to 13.11.5.18	10.3.1	2.31	<b>Dolphin Exclusion Zone</b> <ul style="list-style-type: none"> <li>Establishment of a 24 hr Dolphin Exclusion Zone (DEZ) with a 250 m radius around the land formation works areas;</li> </ul>	Marine waters around land formation works area during construction phase	I
			<ul style="list-style-type: none"> <li>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</li> </ul>		I
			<ul style="list-style-type: none"> <li>A DEZ would also be implemented during bored piling work but as a precautionary measure only.</li> </ul>		N/A
13.11.5.19	10.4	2.31	<b>Acoustic Decoupling of Construction Equipment</b> <ul style="list-style-type: none"> <li>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</li> <li>Specific acoustic decoupling measures shall be specified during the detailed design of the project for use during the land formation works.</li> </ul>	Around coastal works area during construction phase	I
13.11.5.20	10.6.1	2.29	<b>Spill Response Plan</b> <ul style="list-style-type: none"> <li>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.</li> </ul>	Construction phase	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
13.11.5.21 to 13.11.5.23	10.6.1	-	<b>Construction Vessel Speed Limits and Skipper Training</b> <ul style="list-style-type: none"> <li>A speed limit of 10 knots should be strictly observed for construction vessels at areas with the highest CWD densities; and</li> <li>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.</li> </ul>	All areas north and west of Lantau Island during construction phase	I
<b>Fisheries Impact – Construction Phase</b>					
14.9.1.2 to 14.9.1.5	-	-	<b>Minimisation of Land Formation Area</b> <ul style="list-style-type: none"> <li>Minimise the overall size of the land formation needed for the additional facilities to minimise the overall loss of habitat for fisheries resources.</li> </ul>	Land formation footprint / during detailed design phase to completion of construction	I
14.9.1.6	-	-	<b>Use of Construction Methods with Minimal Risk/Disturbance</b> <ul style="list-style-type: none"> <li>Use of non-dredge method for the main land formation and ancillary works including the diversion of the aviation fuel pipeline to the AFRF;</li> </ul>	During construction phase at marine works area	I
			<ul style="list-style-type: none"> <li>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;</li> </ul>		I
			<ul style="list-style-type: none"> <li>Use of bored piling in short duration to form the new approach lights and marker beacons for the new runway; and</li> </ul>		N/A
			<ul style="list-style-type: none"> <li>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.</li> </ul>		I
14.9.1.11	-	-	<b>Strict Enforcement of No-Dumping Policy</b> <ul style="list-style-type: none"> <li>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;</li> <li>Mandatory educational programme of the no-dumping policy be made available to all construction site personnel for all project-related works;</li> <li>Fines for infractions should be implemented; and</li> <li>Unscheduled, on-site audits shall be implemented.</li> </ul>	All works area during the construction phase	I
14.9.1.12	-	-	<b>Good Construction Site Practices</b> <ul style="list-style-type: none"> <li>Regular inspection of the integrity and effectiveness of all silt curtains and monitoring of effluents to ensure that any discharge meets effluent discharge guidelines;</li> <li>Keep the number of working or stationary vessels present on-site to the minimum anytime; and</li> </ul>	All works area during the construction phase	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
14.9.1.13 to 14.9.1.18	-		▪ 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	
			<b>Mitigation for Indirect Disturbance due to Deterioration of Water Quality</b>		
			▪ 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		N/A
			▪ Use of horizontal directional drilling (HDD) method and water jetting methods for placement of undersea cables and pipelines to minimise the disturbance to fisheries resources.		I
Landscape and Visual Impact – Construction Phase					
Table 15.6	12.3	-	<b>CM1</b> - The construction area and contractor's temporary works areas should be minimised to avoid impacts on adjacent landscape.	All works areas for duration of works; Upon handover and completion of works.	I
Table 15.6	12.3	-	<b>CM2</b> - Reduction of construction period to practical minimum.	All works areas for duration of works; Upon handover and completion of works.	I
Table 15.6	12.3	-	<b>CM3</b> - Phasing of the construction stage to reduce visual impacts during the construction phase.	All works areas for duration of works; Upon handover and completion of works.	I
Table 15.6	12.3	-	<b>CM4</b> - Construction traffic (land and sea) including construction plants, construction vessels and barges should be kept to a practical minimum.	All works areas for duration of works; Upon handover and completion of works.	I
Table 15.6	12.3	-	<b>CM5</b> - 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. –	I

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	-	<b>CM6</b> - 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	-	<b>CM7</b> - 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	-	<b>CM8</b> - 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	-	<b>CM9</b> - 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	-	<b>CM10</b> - 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
<b>Cultural Heritage Impact – Construction Phase</b>					
Not applicable.					

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

Notes:

I= implemented where applicable;

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

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

# Appendix B.     Monitoring Schedule

## **Monitoring Schedule of This Reporting Period**

# May-18

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		<b>1</b>  WQ General & Regular DCM mid-ebb: 13:51 mid-flood: 07:23	<b>2</b> Site Inspection  NM6	<b>3</b> Site Inspection CWD Survey (Vessel, Land-based)  WQ General & Regular DCM mid-ebb: 15:00 mid-flood: 08:18	<b>4</b> Site Inspection  AR1A, AR2	<b>5</b>  WQ General & Regular DCM mid-ebb: 16:17 mid-flood: 09:16
<b>6</b>	<b>7</b>	<b>8</b> Site Inspection CWD Survey (Vessel)  WQ General & Regular DCM mid-ebb: 19:01 mid-flood: 06:30	<b>9</b> Site Inspection CWD Survey (Vessel)	<b>10</b> Site Inspection  AR1A, AR2 NM1A, NM3A, NM4, NM5, NM6  WQ General & Regular DCM mid-ebb: 10:08 mid-flood: 15:03	<b>11</b> Site Inspection	<b>12</b>  WQ General & Regular DCM mid-ebb: 11:17 mid-flood: 17:01
<b>13</b>	<b>14</b> CWD Survey (Vessel, Land-based)  NM6	<b>15</b> Site Inspection  WQ General & Regular DCM mid-ebb: 12:55 mid-flood: 06:22	<b>16</b> Site Inspection CWD Survey (Vessel) AR1A, AR2 NM1A, NM3A, NM4, NM5	<b>17</b> Site Inspection CWD Survey (Land-based)  WQ General & Regular DCM mid-ebb: 14:16 mid-flood: 07:30	<b>18</b> Site Inspection	<b>19</b>  WQ General & Regular DCM mid-ebb: 15:51 mid-flood: 08:48
<b>20</b>	<b>21</b> Site Inspection  AR1A, AR2 NM1A, NM3A, NM4, NM5	<b>22</b>  WQ General & Regular DCM mid-ebb: 19:00 mid-flood: 12:01	<b>23</b> Site Inspection CWD Survey (Vessel)	<b>24</b> Site Inspection CWD Survey (Vessel)  NM6  WQ General & Regular DCM mid-ebb: 09:43 mid-flood: 15:13	<b>25</b> Site Inspection CWD Survey (Vessel) AR1A, AR2	<b>26</b>  WQ General & Regular DCM mid-ebb: 11:12 mid-flood: 17:21
<b>27</b>	<b>28</b> CWD Survey (Land-based)	<b>29</b> Site Inspection CWD Survey (Land-based)  NM6  WQ General & Regular DCM mid-ebb: 12:57 mid-flood: 06:17	<b>30</b> Site Inspection	<b>31</b> Site Inspection  AR1A, AR2 NM1A, NM3A, NM4, NM5  WQ General & Regular DCM mid-ebb: 14:07 mid-flood: 07:16		
		<b>Notes:</b>  CWD - Chinese White Dolphin  Air quality and Noise Monitoring Station  WQ - Water Quality DCM - Deep Cement Mixing  NM1A/AR1A - Man Tung Road Park NM3A - Site Office NM4 - Ching Chung Hau Po Woon Primary School NM5/AR2 - Village House, Tin Sum NM6 - House No. 1, Sha Lo Wan				

## **Tentative Monitoring Schedule of Next Reporting Period**

# Jun-18

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1 Site Inspection	2  WQ General & Regular DCM mid-ebb: 15:17 mid-flood: 08:18
3	4 CWD Survey (Vessel) NM6	5 Site Inspection  WQ General & Regular DCM mid-ebb: 17:19 mid-flood: 10:11	6 Site Inspection AR1A, AR2 NM1A, NM3A, NM4, NM5	7 Site Inspection  WQ General & Regular DCM mid-ebb: 19:15 mid-flood: 12:56	8 Site Inspection	9  WQ General & Regular DCM mid-ebb: 10:00 mid-flood: 15:33
10	11 AR1A, AR2 NM1A, NM3A, NM4, NM5	12 Site Inspection CWD Survey (Land-based)  WQ General & Regular DCM mid-ebb: 11:53 mid-flood: 18:32	13 Site Inspection CWD Survey (Vessel) NM6	14 Site Inspection CWD Survey (Vessel)  WQ General & Regular DCM mid-ebb: 13:19 mid-flood: 20:23	15 Site Inspection CWD Survey (Land-based) AR1A, AR2	16  WQ General & Regular DCM mid-ebb: 14:53 mid-flood: 07:51
17	18	19 Site Inspection CWD Survey (Vessel, Land-based) NM6  WQ General & Regular DCM mid-ebb: 17:33 mid-flood: 10:34	20 Site Inspection CWD Survey (Vessel, Land-based)	21 Site Inspection CWD Survey (Vessel, Land-based) AR1A, AR2 NM1A, NM3A, NM4, NM5  WQ General & Regular DCM mid-ebb: 19:50 mid-flood: 13:31	22 Site Inspection	23  WQ General & Regular DCM mid-ebb: 10:00 mid-flood: 16:12
24	25 CWD Survey (Vessel) NM6	26 Site Inspection CWD Survey (Vessel)  WQ General & Regular DCM mid-ebb: 12:04 mid-flood: 19:05	27 Site Inspection AR1A, AR2 NM1A, NM3A, NM4, NM5	28 Site Inspection  WQ General & Regular DCM mid-ebb: 13:16 mid-flood: 20:25	29 Site Inspection	30  WQ General & Regular DCM mid-ebb: 14:24 mid-flood: 07:24
		<b>Notes:</b>  CWD - Chinese White Dolphin  Air quality and Noise Monitoring Station  WQ - Water Quality DCM - Deep Cement Mixing  NM1A/AR1A - Man Tung Road Park NM3A - Site Office NM4 - Ching Chung Hau Po Woon Primary School NM5/AR2 - Village House, Tin Sum NM6 - House No. 1, Sha Lo Wan				

# Appendix C. Monitoring Results

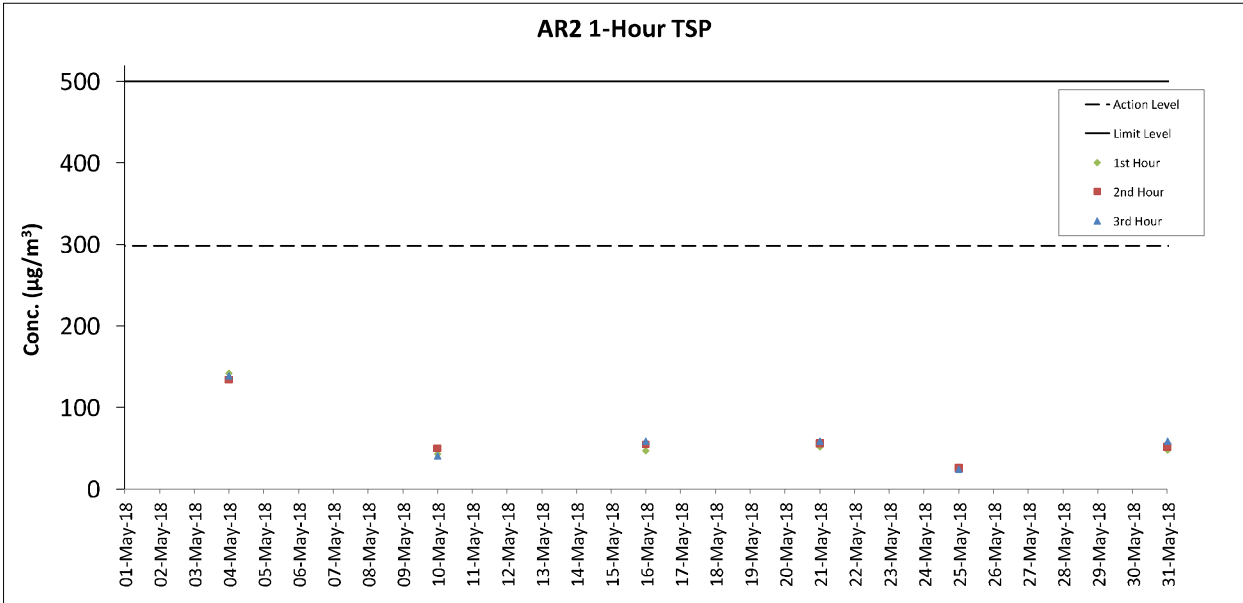
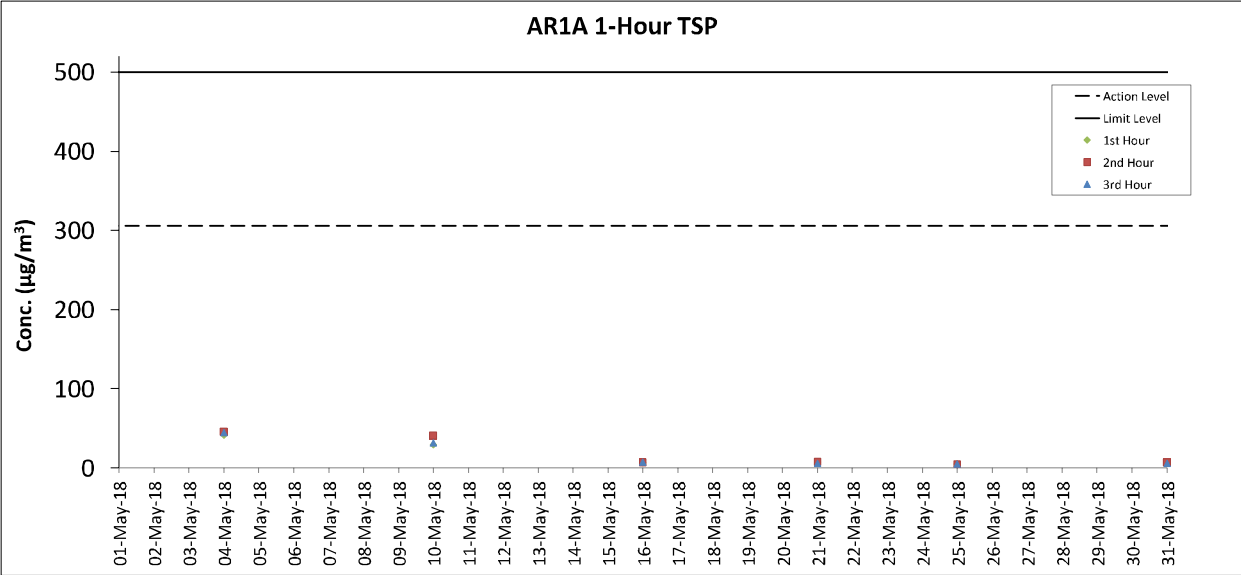
# Air Quality Monitoring Results

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

Date	Time	Weather	Wind Speed (m/s)	Wind Direction (deg)	1-hr TSP ( $\mu\text{g}/\text{m}^3$ )	Action Level ( $\mu\text{g}/\text{m}^3$ )	Limit Level ( $\mu\text{g}/\text{m}^3$ )
04-May-18	13:00	Fine	8.4	195	42	306	500
04-May-18	14:00	Fine	6.9	206	46	306	500
04-May-18	15:00	Fine	8.8	102	45	306	500
10-May-18	13:00	Cloudy	11.1	195	30	306	500
10-May-18	14:00	Cloudy	11.6	206	41	306	500
10-May-18	15:00	Cloudy	11.8	101	32	306	500
16-May-18	13:00	Sunny	3.7	195	7	306	500
16-May-18	14:00	Sunny	5.0	206	7	306	500
16-May-18	15:00	Sunny	2.5	211	8	306	500
21-May-18	13:00	Sunny	5.8	195	8	306	500
21-May-18	14:00	Sunny	4.9	206	8	306	500
21-May-18	15:00	Sunny	2.9	357	6	306	500
25-May-18	13:00	Sunny	6.4	195	5	306	500
25-May-18	14:00	Sunny	4.6	206	5	306	500
25-May-18	15:00	Sunny	6.4	217	5	306	500
31-May-18	13:00	Sunny	4.1	195	8	306	500
31-May-18	14:00	Sunny	5.5	206	7	306	500
31-May-18	15:00	Sunny	6.6	243	6	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 ( $\mu\text{g}/\text{m}^3$ )
04-May-18	09:00	Fine	8.2	195	142	298	500
04-May-18	10:00	Fine	9.4	206	134	298	500
04-May-18	11:00	Fine	9.9	93	139	298	500
10-May-18	08:53	Cloudy	11.6	195	43	298	500
10-May-18	09:53	Cloudy	10.6	206	50	298	500
10-May-18	10:53	Cloudy	11.6	103	41	298	500
16-May-18	09:00	Sunny	4.5	195	47	298	500
16-May-18	10:00	Sunny	4.6	206	55	298	500
16-May-18	11:00	Sunny	4.6	148	59	298	500
21-May-18	09:00	Sunny	1.7	195	52	298	500
21-May-18	10:00	Sunny	1.9	206	56	298	500
21-May-18	11:00	Sunny	3.1	298	59	298	500
25-May-18	09:00	Sunny	2.4	195	27	298	500
25-May-18	10:00	Sunny	4.4	206	26	298	500
25-May-18	11:00	Sunny	3.8	163	24	298	500
31-May-18	09:00	Sunny	3.3	195	48	298	500
31-May-18	10:00	Sunny	3.9	206	52	298	500
31-May-18	11:00	Sunny	3.0	279	59	298	500



# Noise Monitoring Results

## Noise Measurement Results

### Station: NM1A- Man Tung Road Park

Date	Weather	Time	Measured L <sub>10</sub> dB(A)	Measured L <sub>30</sub> dB(A)	L <sub>eq(30mins)</sub> dB(A)
10-May-18	Cloudy	13:20	72.5	56.0	72
10-May-18	Cloudy	13:25	72.5	56.5	
10-May-18	Cloudy	13:30	73.5	57.0	
10-May-18	Cloudy	13:35	73.0	57.0	
10-May-18	Cloudy	13:40	72.5	58.5	
10-May-18	Cloudy	13:45	72.0	57.5	
16-May-18	Sunny	13:14	72.0	55.0	72
16-May-18	Sunny	13:19	71.5	53.5	
16-May-18	Sunny	13:24	73.5	55.0	
16-May-18	Sunny	13:29	71.5	53.5	
16-May-18	Sunny	13:34	73.5	54.5	
16-May-18	Sunny	13:39	73.0	54.5	
21-May-18	Sunny	13:15	75.0	56.5	73
21-May-18	Sunny	13:20	71.5	54.0	
21-May-18	Sunny	13:25	73.0	54.0	
21-May-18	Sunny	13:30	72.5	54.5	
21-May-18	Sunny	13:35	73.5	56.5	
21-May-18	Sunny	13:40	74.5	60.0	
31-May-18	Sunny	13:13	73.5	60.5	67
31-May-18	Sunny	13:18	73.5	59.0	
31-May-18	Sunny	13:23	73.5	62.0	
31-May-18	Sunny	13:28	73.5	64.0	
31-May-18	Sunny	13:33	73.0	60.5	
31-May-18	Sunny	13:38	73.0	60.5	

Remarks:

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

## Noise Measurement Results

### Station: NM3A- Site Office

Date	Weather	Time	Measured L <sub>10</sub> dB(A)	Measured L <sub>30</sub> dB(A)	L <sub>eq(30mins)</sub> dB(A)
10-May-18	Cloudy	11:22	67.5	61.5	61
10-May-18	Cloudy	11:27	68.0	61.5	
10-May-18	Cloudy	11:32	68.5	61.0	
10-May-18	Cloudy	11:37	65.5	61.0	
10-May-18	Cloudy	11:42	68.0	61.0	
10-May-18	Cloudy	11:47	68.0	61.5	
16-May-18	Sunny	09:35	63.0	61.5	62
16-May-18	Sunny	09:40	62.5	61.5	
16-May-18	Sunny	09:45	62.5	61.5	
16-May-18	Sunny	09:50	62.5	61.5	
16-May-18	Sunny	09:55	62.5	61.0	
16-May-18	Sunny	10:00	62.0	61.0	
21-May-18	Sunny	10:45	69.5	62.5	63
21-May-18	Sunny	10:50	69.0	63.0	
21-May-18	Sunny	10:55	70.0	63.5	
21-May-18	Sunny	11:00	67.0	63.0	
21-May-18	Sunny	11:05	67.0	63.5	
21-May-18	Sunny	11:10	71.0	63.0	
31-May-18	Sunny	11:30	64.0	61.5	63
31-May-18	Sunny	11:35	63.0	61.5	
31-May-18	Sunny	11:40	63.0	62.0	
31-May-18	Sunny	11:45	62.5	61.5	
31-May-18	Sunny	11:50	63.0	61.5	
31-May-18	Sunny	11:55	63.5	61.5	

## Noise Measurement Results

### Station: NM4- Ching Chung Hau Po Woon Primary School

Date	Weather	Time	Measured L <sub>10</sub> dB(A)	Measured L <sub>90</sub> dB(A)	L <sub>eq(30mins)</sub> dB(A)
10-May-18	Cloudy	13:57	64.0	60.5	60
10-May-18	Cloudy	14:02	64.0	60.0	
10-May-18	Cloudy	14:07	66.5	61.5	
10-May-18	Cloudy	14:12	67.5	62.0	
10-May-18	Cloudy	14:17	67.0	61.5	
10-May-18	Cloudy	14:22	65.5	61.0	
16-May-18	Sunny	14:57	63.0	60.5	66
16-May-18	Sunny	15:02	63.0	60.5	
16-May-18	Sunny	15:07	64.5	61.0	
16-May-18	Sunny	15:12	66.5	61.5	
16-May-18	Sunny	15:17	63.5	61.0	
16-May-18	Sunny	15:22	64.5	61.0	
21-May-18	Sunny	14:25	63.0	59.5	65
21-May-18	Sunny	14:30	63.5	59.5	
21-May-18	Sunny	14:35	64.0	61.0	
21-May-18	Sunny	14:40	64.0	61.0	
21-May-18	Sunny	14:45	64.5	60.5	
21-May-18	Sunny	14:50	64.0	61.0	
31-May-18	Sunny	13:50	63.5	60.5	66
31-May-18	Sunny	13:55	64.5	61.5	
31-May-18	Sunny	14:00	64.0	61.0	
31-May-18	Sunny	14:05	65.0	61.0	
31-May-18	Sunny	14:10	66.0	61.5	
31-May-18	Sunny	14:15	64.5	61.0	

Remarks:

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

## Noise Measurement Results

### Station: NM5- Village House, Tin Sum

Date	Weather	Time	Measured L <sub>10</sub> dB(A)	Measured L <sub>90</sub> dB(A)	L <sub>eq(30mins)</sub> dB(A)
10-May-18	Cloudy	08:54	59.5	50.5	59
10-May-18	Cloudy	08:59	61.0	50.0	
10-May-18	Cloudy	09:04	59.5	50.5	
10-May-18	Cloudy	09:09	60.5	51.0	
10-May-18	Cloudy	09:14	58.5	50.5	
10-May-18	Cloudy	09:19	58.0	51.0	
16-May-18	Sunny	09:02	48.5	43.0	53
16-May-18	Sunny	09:07	50.5	44.0	
16-May-18	Sunny	09:12	53.5	43.0	
16-May-18	Sunny	09:17	50.5	44.0	
16-May-18	Sunny	09:22	52.0	43.5	
16-May-18	Sunny	09:27	52.5	43.5	
21-May-18	Sunny	09:10	58.5	54.0	59
21-May-18	Sunny	09:15	61.0	52.5	
21-May-18	Sunny	09:20	56.0	51.0	
21-May-18	Sunny	09:25	55.0	51.0	
21-May-18	Sunny	09:30	54.5	52.0	
21-May-18	Sunny	09:35	61.5	49.0	
31-May-18	Sunny	09:26	67.0	52.5	67
31-May-18	Sunny	09:31	70.5	54.5	
31-May-18	Sunny	09:36	67.0	54.0	
31-May-18	Sunny	09:41	68.0	55.5	
31-May-18	Sunny	09:46	67.0	57.5	
31-May-18	Sunny	09:51	71.0	58.0	

Remarks:

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

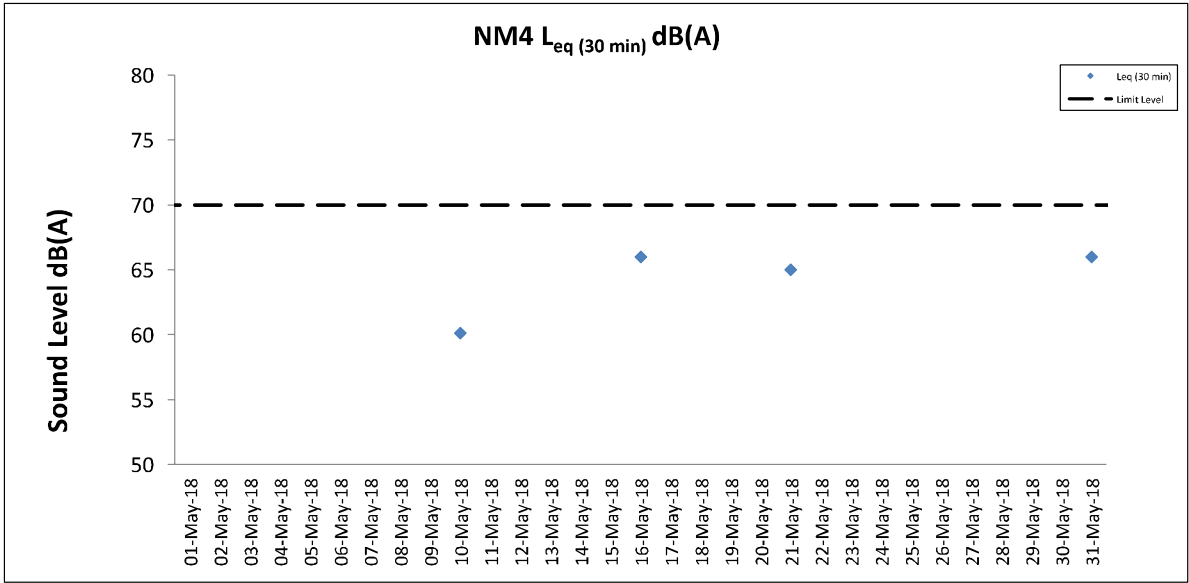
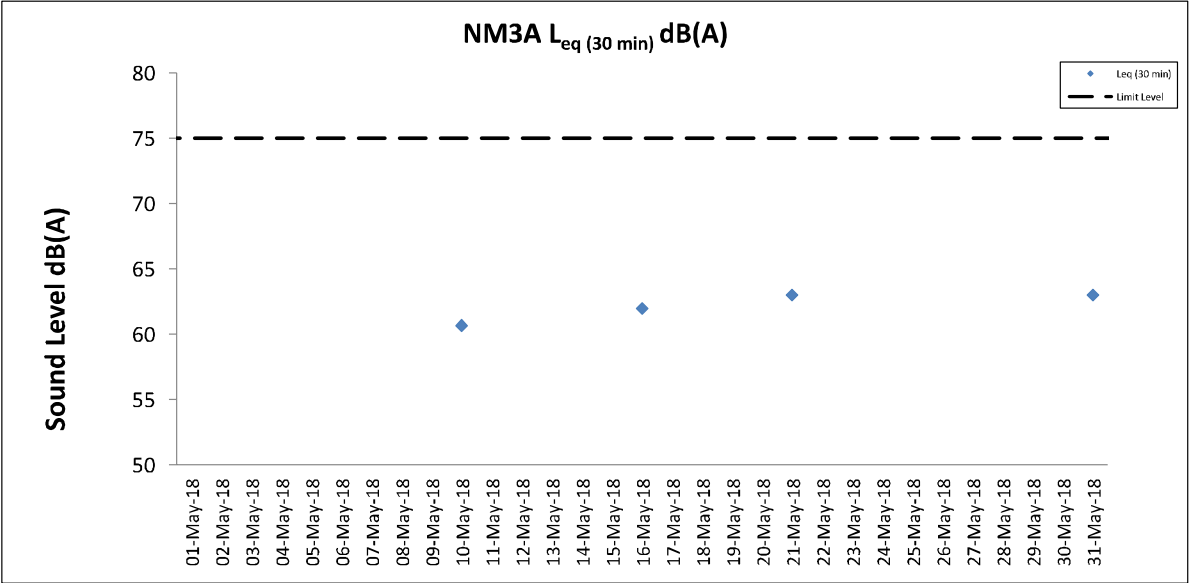
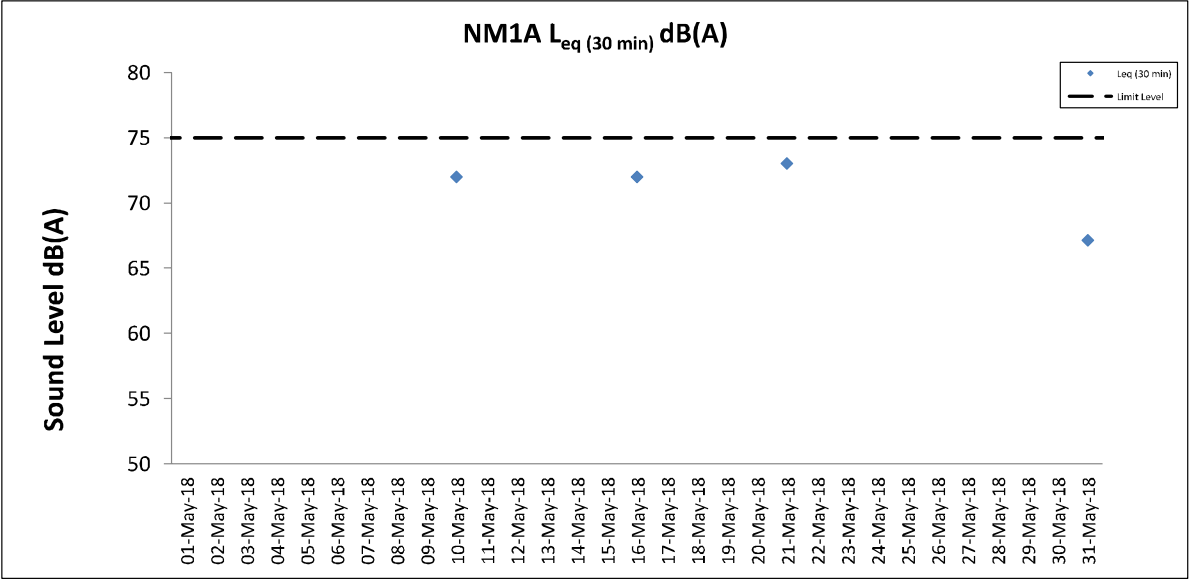
## Noise Measurement Results

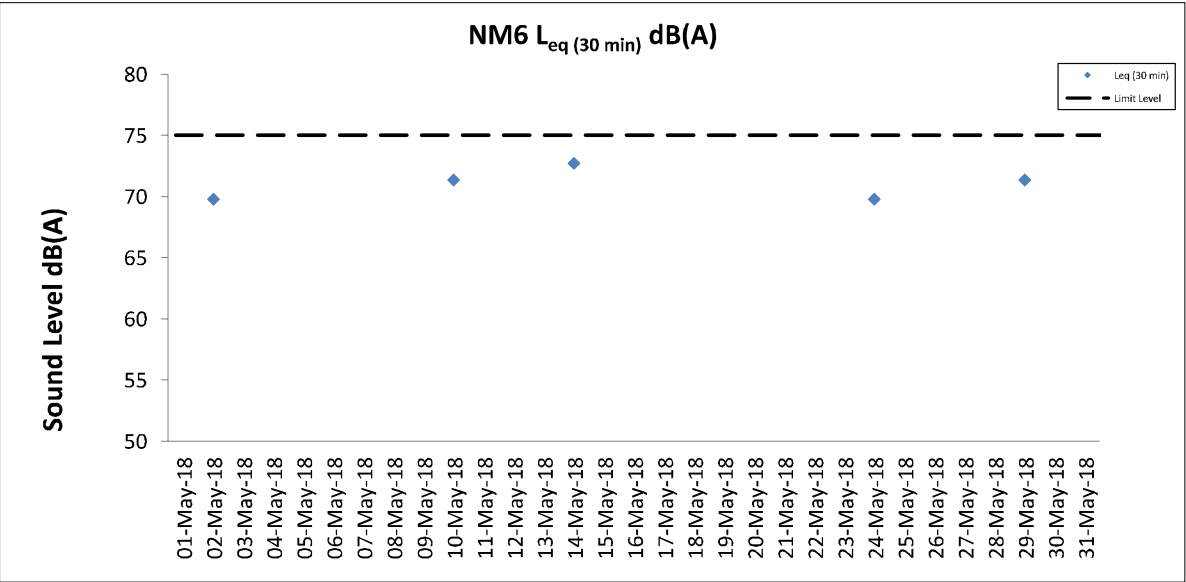
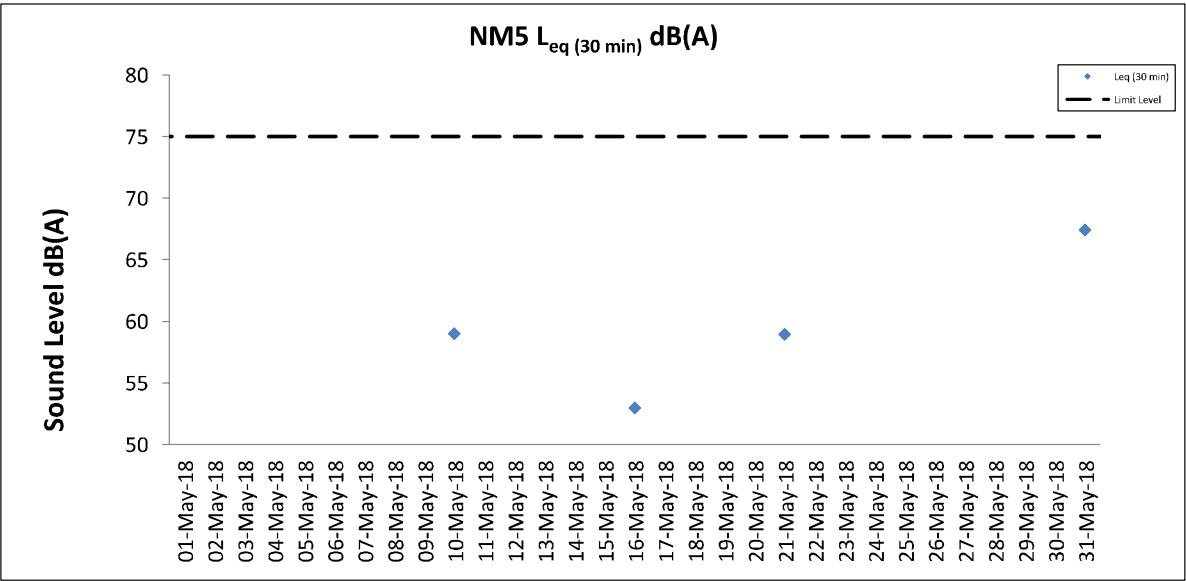
### Station: NM6- House No.1 Sha Lo Wan

Date	Weather	Time	Measured $L_{10}$ dB(A)	Measured $L_{90}$ dB(A)	$L_{eq(30mins)}$ dB(A)
02-May-18	Sunny	09:42	74.0	49.0	70
02-May-18	Sunny	09:47	70.0	47.5	
02-May-18	Sunny	09:52	69.0	50.0	
02-May-18	Sunny	09:57	76.0	48.5	
02-May-18	Sunny	10:02	75.5	48.5	
02-May-18	Sunny	10:07	74.0	50.0	
10-May-18	Cloudy	10:19	69.5	60.0	71
10-May-18	Cloudy	10:24	68.0	58.5	
10-May-18	Cloudy	10:29	70.0	58.5	
10-May-18	Cloudy	10:34	75.5	67.0	
10-May-18	Cloudy	10:39	74.5	66.5	
10-May-18	Cloudy	10:44	72.0	60.5	
14-May-18	Sunny	09:40	76.0	50.5	73
14-May-18	Sunny	09:45	77.5	48.5	
14-May-18	Sunny	09:50	73.0	48.5	
14-May-18	Sunny	09:55	73.0	49.5	
14-May-18	Sunny	10:00	75.5	53.0	
14-May-18	Sunny	10:05	73.0	54.5	
24-May-18	Sunny	09:41	74.5	48.0	70
24-May-18	Sunny	09:46	72.5	49.5	
24-May-18	Sunny	09:51	72.0	47.0	
24-May-18	Sunny	09:56	72.5	46.5	
24-May-18	Sunny	10:01	70.5	48.0	
24-May-18	Sunny	10:06	73.0	49.5	
29-May-18	Sunny	09:40	75.0	51.5	71
29-May-18	Sunny	09:45	74.0	49.5	
29-May-18	Sunny	09:50	77.0	53.5	
29-May-18	Sunny	09:55	76.0	49.0	
29-May-18	Sunny	10:00	75.0	50.5	
29-May-18	Sunny	10:05	67.0	47.5	

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 01 May 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
C1	Sunny	Moderate	13:06	8.8	Surface	1.0	0.4	222	25.4	25.3	8.2	8.2	28.3	28.5	120.7	120.8	8.4	8.3	9.0	16.3	6	7	84	87	815612	804243	<0.2	<0.2	3.2	3.1
						1.0	0.4	226	25.2	8.2	8.2	28.7	28.5	120.8	120.8	8.5	8.3	9.3	7		84		3.2							
					Middle	4.4	0.5	204	24.8	24.8	8.2	8.2	30.2	30.2	116.9	116.6	8.2	8.3	14.4	6	87	3.0								
						4.4	0.5	210	24.8	8.2	8.2	30.2	30.2	116.2	116.2	8.1	8.3	15.6	7	87	3.1									
					Bottom	7.8	0.5	222	24.5	24.5	8.2	8.2	31.4	31.4	112.5	112.6	7.8	7.8	24.9	8	90	3.1								
						7.8	0.5	236	24.5	8.2	8.2	31.4	31.4	112.6	112.6	7.8	7.8	24.8	10	90	3.2									
C2	Fine	Moderate	12:07	12.1	Surface	1.0	0.5	147	25.5	25.5	7.8	7.8	25.8	25.8	85.6	85.7	6.1	6.1	7.5	10.4	8	9	84	87	825687	806954	<0.2	<0.2	3.1	2.9
						1.0	0.5	153	25.5	7.8	7.8	25.8	25.8	85.8	85.7	6.1	6.1	7.4	9		85		3.0							
					Middle	6.1	0.4	159	24.9	24.9	7.9	7.9	28.3	28.3	86.8	86.8	6.1	6.1	10.4	8	87	3.1								
						6.1	0.4	168	24.9	7.9	7.9	28.3	28.3	86.8	86.8	6.1	6.1	10.5	7	87	2.9									
					Bottom	11.1	0.4	167	24.9	24.9	7.9	7.9	28.7	28.7	88.1	88.2	6.2	6.2	13.2	10	89	2.6								
						11.1	0.4	180	24.9	7.9	7.9	28.7	28.7	88.2	88.2	6.2	6.2	13.1	9	89	2.9									
C3	Fine	Moderate	14:15	11.7	Surface	1.0	0.4	70	25.3	25.3	7.9	7.9	28.1	28.1	91.0	91.0	6.4	6.4	10.6	10.6	14	15	85	87	822100	817815	<0.2	<0.2	1.5	1.5
						1.0	0.4	74	25.3	7.9	7.9	28.1	28.1	91.0	91.0	6.4	6.4	10.7	12		84		1.5							
					Middle	5.9	0.4	101	25.2	25.2	7.9	7.9	28.3	28.3	90.6	90.6	6.4	6.4	10.3	15	87	1.5								
						5.9	0.4	101	25.2	7.9	7.9	28.3	28.3	90.6	90.6	6.4	6.4	10.5	16	87	1.5									
					Bottom	10.7	0.3	82	25.0	25.0	7.9	7.9	28.8	28.8	90.1	90.2	6.3	6.3	10.7	20	89	1.5								
						10.7	0.3	86	25.0	7.9	7.9	28.8	28.8	90.2	90.2	6.3	6.3	10.8	19	89	1.4									
IM1	Sunny	Moderate	12:48	7.5	Surface	1.0	0.3	213	25.3	25.3	8.2	8.2	28.9	28.9	114.0	114.0	8.0	7.9	9.6	10.0	6	5	85	88	818341	806463	<0.2	<0.2	3.1	3.1
						1.0	0.3	231	25.3	8.2	8.2	28.9	28.9	113.9	114.0	7.9	7.9	9.7	5		85		3.1							
					Middle	3.8	0.3	201	24.9	24.9	8.2	8.2	29.6	29.6	112.1	112.0	7.8	7.8	10.0	8	88	3.0								
						3.8	0.3	215	24.9	8.2	8.2	29.7	29.6	111.9	112.0	7.8	7.8	10.1	8	88	3.1									
					Bottom	6.5	0.3	178	24.8	24.8	8.2	8.2	30.2	30.2	109.5	109.5	7.7	7.7	10.3	9	91	2.9								
						6.5	0.3	183	24.8	8.2	8.2	30.2	30.2	109.5	109.5	7.6	7.7	10.2	11	91	3.5									
IM2	Sunny	Moderate	12:43	8.5	Surface	1.0	0.2	227	25.1	25.1	8.2	8.2	29.2	29.2	114.2	114.2	8.0	7.9	10.7	14.3	4	4	85	88	818839	806214	<0.2	<0.2	3.0	3.0
						1.0	0.2	249	25.1	8.2	8.2	29.2	29.2	114.1	114.2	8.0	7.9	10.7	4		85		3.0							
					Middle	4.3	0.4	191	24.9	24.9	8.2	8.2	29.9	29.9	110.7	110.7	7.7	7.7	14.3	8	88	3.0								
						4.3	0.4	192	24.9	8.2	8.2	29.9	29.9	110.6	110.7	7.7	7.7	14.5	7	88	3.0									
					Bottom	7.5	0.4	181	24.7	24.7	8.2	8.2	30.6	30.6	109.9	110.0	7.7	7.7	18.0	12	91	2.9								
						7.5	0.4	189	24.7	8.2	8.2	30.6	30.6	110.0	110.0	7.7	7.7	17.8	12	91	2.9									
IM3	Sunny	Moderate	12:37	8.8	Surface	1.0	0.3	212	25.3	25.3	8.2	8.2	29.5	29.5	114.7	114.7	8.0	7.9	12.0	16.7	4	5	85	88	819399	806022	<0.2	<0.2	2.9	3.0
						1.0	0.3	218	25.3	8.2	8.2	29.5	29.5	114.6	114.7	8.0	7.9	12.1	5		86		3.0							
					Middle	4.4	0.4	176	25.0	25.0	8.2	8.2	30.2	30.2	111.2	111.2	7.7	7.7	15.6	8	88	3.0								
						4.4	0.4	176	25.0	8.2	8.2	30.2	30.2	111.1	111.2	7.7	7.7	15.9	9	88	3.0									
					Bottom	7.8	0.3	169	24.8	24.8	8.2	8.2	30.5	30.5	109.3	109.3	7.6	7.6	22.2	12	91	3.0								
						7.8	0.3	183	24.8	8.2	8.2	30.5	30.5	109.3	109.3	7.6	7.6	22.3	10	91	2.9									
IM4	Sunny	Moderate	12:30	8.1	Surface	1.0	0.3	179	25.0	25.0	8.2	8.2	30.7	30.7	110.9	110.8	7.7	7.6	14.7	16.0	8	7	84	86	819549	805045	<0.2	<0.2	3.0	3.0
						1.0	0.4	180	25.0	8.2	8.2	30.7	30.7	110.7	110.8	7.7	7.6	14.8	7		84		3.0							
					Middle	4.1	0.3	153	24.6	24.6	8.2	8.2	30.8	30.8	108.1	108.1	7.5	7.5	16.9	10	86	3.0								
						4.1	0.4	163	24.6	8.2	8.2	30.8	30.8	108.0	108.0	7.5	7.5	17.0	10	86	2.9									
					Bottom	7.1	0.2	180	24.6	24.6	8.2	8.2	30.9	30.9	108.0	108.0	7.5	7.5	16.4	18	90	3.1								
						7.1	0.3	197	24.6	8.2	8.2	30.9	30.9	107.9	107.9	7.5	7.5	16.2	17	90	3.0									
IM5	Sunny	Moderate	12:20	7.4	Surface	1.0	0.2	156	25.0	25.0	8.2	8.2	29.9	29.9	110.1	110.1	7.7	7.6	12.9	17.3	9	8	84	86	820572	804924	<0.2	<0.2	3.0	3.0
						1.0	0.3	168	25.0	8.2	8.2	29.9	29.9	110.0	110.0	7.7	7.7	13.0	8		84		3.0							
					Middle	3.7	0.3	175	24.9	24.9	8.2	8.2	30.2	30.2	107.7	107.7	7.5	7.5	15.9	14	86	2.9								
						3.7	0.3	181	24.9	8.2	8.2	30.2	30.2	107.6	107.7	7.5	7.5	16.0	12	86	2.8									
					Bottom	6.4	0.2	164	24.8	24.8	8.2	8.2	30.5	30.5	106.7	106.7	7.5	7.5	23.1	15	91	3.0								
						6.4	0.3	164	24.8	8.2	8.2	30.5	30.5	106.7	106.7	7.5	7.5	23.0	14	91	3.0									
IM6	Sunny	Moderate	12:14	7.5	Surface	1.0	0.2	189	25.2	25.2	8.2	8.2	29.9	29.9	110.7	110.7	7.7	7.6	12.9	13.8	8	7	84	87	821088	805845	<0.2	<0.2	3.1	3.0
						1.0	0.3	207	25.3	8.2	8.2	29.9	29.9	110.4	110.7	7.7	7.6	13.1	7		84		2.9							
					Middle	3.8	0.2	175	24.9	24.9	8.2	8.2	30.3	30.3	107.6	107.6	7.5	7.5	14.5	14	87	3.0								
						3.8	0.3	178	24.9	8.2	8.2	30.3	30.3	107.5	107.6	7.5	7.5	14.4	14	87	3.0									
					Bottom	6.5	0.1	197	24.9	24.9	8.2	8.2	30.4	30.4	106.8	106.8	7.4	7.4	14.0	15	91	3.1								
						6.5	0.1	215	24.9	8.2	8.2	30.4	30.4	106.8	106.8	7.4	7.4	13.9	16	90	3.0									
IM7	Sunny	Moderate	12:07	9.1	Surface	1.0	0.2	182	25.5	25.5	8.1	8.1	28.3	28.4	108.0	108.1	7.5	7.5	13.0	14.6	8	9	83	86	821341	806823	<0.2	<0.2	2.9	3.0
						1.0	0.2	183	25.5	8.1	8.1	28.4	28.4	108.1	108.1	7.5	7.5	13.1	9		84		3.1							
					Middle	4.6	0.2	136	25.0	25.0	8.2	8.2	29.9	29.9	107.0	107.0	7.5	7.5	15.1	13	87	3.1								
						4.6	0.3	138	25.0	8.2	8.2	29.9	29.9	106.9	107.0	7.5	7.5	15.1	14	87	3.0									
					Bottom	8.1	0.3	116	24.9	24.9	8.2	8.2	30.1	30.1	106.1	106.1	7.4	7.4	15.7	14	89	3.0								
						8.1	0.3	119	24.9	8.2	8.2	30.1	30.1	106.1	106.1	7.4	7.4	15.8	14	90	3.0									
IM8	Fine	Moderate	12:37	8.4	Surface	1.0	0.2	144	25.3	25.3	8.0	8.0	27.2	27.2	98.3	98.5	6.9	7.1	5.9	7.7	7	8	85	87	821697	807846	<0.2	<0.2	2.0	2.0
						1.0	0.2	147	25.3	8.0	8.0	27.2	27.2	98.6	98.6	6.9	7.1	5.9	8		85		2.0							
					Middle	4.2	0.2	81	25.1	25.1	8.0	8.0	28.7	28.7	102.4	102.5	7.2	7.2	7.3	9	88	2.1								
						4.2	0.2	85	25.1	8.0	8.0	28.7	28.7	102.5	102.5	7.2	7.2	7.4	9	87	2.0									
					Bottom	7.4	0.2	63	25.1	25.1	8.0	8.0	29.1	29.1	103.9	103.9	7.3	7.3	9.8	9	89	2.0								
						7.4	0.2	66	25.1	8.0	8.0	29.1	29.1	103.8	103.8	7.3	7.3	9.9	9	90	2.0									

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

## Water Quality Monitoring

## Water Quality Monitoring Results on 01 May 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
IM9	Fine	Moderate	12:46	7.4	Surface	1.0	0.4	131	25.2	25.2	8.0	8.0	27.9	27.9	98.1	98.2	6.9	7.0	6.9	8.0	11	12	85	88	822084	808836	<0.2	<0.2	3.3	2.6
						1.0	0.5	136	25.2		8.0	8.0	27.9	27.9	98.2	98.2	6.9		7.0		11		85				<0.2		3.4	
					Middle	3.7	0.4	114	25.1	25.1	8.0	8.0	28.6	28.6	100.4	100.4	7.0	7.2	6.5	10	87	90	<0.2	2.7						
						3.7	0.4	114	25.1		8.0	8.0	28.6	28.6	100.4	100.4	7.0		6.5		10		88	<0.2	2.0					
					Bottom	6.4	0.3	75	25.1	25.1	8.0	8.0	29.0	29.0	103.5	103.6	7.2	7.2	10.4	15	16	89	<0.2	2.2						
						6.4	0.4	76	25.1		8.0	8.0	29.0	29.0	103.6	103.6	7.2		10.8		15		90	<0.2	2.0					
IM10	Fine	Moderate	13:01	8.4	Surface	1.0	0.7	117	25.3	25.3	7.9	7.9	27.4	27.4	97.7	97.7	6.9	6.9	6.5	9.9	8	8	85	87	822239	809850	<0.2	<0.2	1.9	1.9
						1.0	0.7	127	25.3		7.9	7.9	27.4	27.4	97.6	97.6	6.9		6.6		7		85				<0.2		1.9	
					Middle	4.2	0.5	107	25.1	25.1	8.0	8.0	28.2	28.2	97.1	97.1	6.8	6.8	9.6	8	7	87	<0.2	2.1						
						4.2	0.6	109	25.1		8.0	8.0	28.3	28.3	97.1	97.1	6.8		9.6		7		87	<0.2	1.9					
					Bottom	7.4	0.4	91	25.1	25.1	8.0	8.0	28.5	28.4	97.3	97.3	6.8	6.8	13.5	9	8	89	<0.2	1.9						
						7.4	0.4	99	25.1		8.0	8.0	28.4	28.4	97.3	97.3	6.8		13.6		9		89	<0.2	1.9					
IM11	Fine	Moderate	13:18	6.4	Surface	1.0	0.6	114	25.6	25.6	7.9	7.9	27.3	27.3	97.9	98.0	6.9	6.9	5.8	8.1	8	12	85	87	821488	810543	<0.2	<0.2	1.6	1.6
						1.0	0.7	117	25.6		8.0	8.0	27.3	27.3	98.0	98.0	6.9		5.9		9		85				<0.2		1.6	
					Middle	3.2	0.5	115	25.3	25.3	8.0	8.0	27.7	27.6	98.7	98.7	6.9	6.9	7.0	11	10	87	<0.2	1.6						
						3.2	0.5	121	25.3		8.0	8.0	27.6	27.6	98.7	98.7	6.9		7.2		11		87	<0.2	1.6					
					Bottom	5.4	0.4	103	25.3	25.4	8.0	8.0	28.2	28.2	100.9	100.9	7.1	7.1	11.2	15	16	89	<0.2	1.5						
						5.4	0.4	112	25.4		8.0	8.0	28.2	28.2	100.9	100.9	7.1		11.6		15		90	<0.2	1.5					
IM12	Fine	Moderate	13:25	9.2	Surface	1.0	0.5	111	25.9	25.9	7.9	7.9	26.8	26.8	100.1	100.2	7.0	7.1	4.0	7.3	8	10	85	87	821169	811547	<0.2	<0.2	2.0	2.0
						1.0	0.5	112	25.9		8.0	8.0	26.8	26.8	100.3	100.3	7.0		4.0		8		85				<0.2		2.0	
					Middle	4.6	0.6	93	25.4	25.4	8.0	8.0	27.9	27.9	101.7	101.8	7.1	7.1	7.1	10	10	88	<0.2	2.1						
						4.6	0.6	94	25.4		8.0	8.0	27.9	27.9	101.8	101.8	7.1		7.2		10		87	<0.2	2.0					
					Bottom	8.2	0.4	75	25.5	25.5	8.0	8.0	28.3	28.3	102.4	102.4	7.2	7.2	10.7	14	12	89	<0.2	1.9						
						8.2	0.4	81	25.5		8.0	8.0	28.3	28.3	102.4	102.4	7.2		10.7		14		90	<0.2	2.0					
SR2	Fine	Moderate	13:58	3.9	Surface	1.0	0.5	68	25.3	25.3	7.9	7.9	27.7	27.7	94.4	94.5	6.6	6.6	9.0	10.5	10	12	85	86	821490	814159	<0.2	<0.2	1.6	1.6
						1.0	0.5	72	25.3		7.9	7.9	27.7	27.7	94.5	94.5	6.6		9.1		10		85				<0.2		1.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	6.6	-	10.5	-	12	-	86			<0.2	<0.2	-	
						-	-	-	-		-	-	-	-	-	-	-		-		-		-						-	
					Bottom	2.9	0.4	59	25.3	25.3	8.0	8.0	27.8	27.8	95.1	95.2	6.7	6.7	11.9	14	14	87	<0.2	1.6						
						2.9	0.4	63	25.3		8.0	8.0	27.8	27.8	95.2	95.2	6.7		12.0		14		87	<0.2	1.6					
SR3	Fine	Moderate	12:31	8.7	Surface	1.0	0.3	183	25.6	25.6	7.9	7.9	26.1	26.1	94.7	94.7	6.7	6.7	5.0	9.3	8	14	-	-	822140	807580	-	-	-	-
						1.0	0.3	196	25.6		7.9	7.9	26.1	26.1	94.7	94.7	6.7		5.0		9		-							
					Middle	4.4	0.1	143	25.2	25.2	7.9	7.9	27.4	27.4	94.8	94.9	6.7	6.7	7.6	10	14	16	-	-			<0.2	<0.2	-	
						4.4	0.1	155	25.2		7.9	7.9	27.4	27.4	94.9	94.9	6.7		7.7		16		-							
					Bottom	7.7	0.3	55	25.0	25.0	8.0	8.0	29.4	29.4	101.7	101.7	7.1	7.1	15.1	19	20	-	-	-			<0.2	<0.2	-	
						7.7	0.3	57	25.0		8.0	8.0	29.4	29.4	101.6	101.6	7.1		15.2		19		-							
SR4A	Sunny	Calm	13:29	8.0	Surface	1.0	0.3	49	25.6	25.6	8.2	8.2	29.1	29.1	108.9	108.9	7.6	7.5	13.6	16.5	11	12	-	-	817194	807780	-	-	-	-
						1.0	0.3	52	25.6		8.2	8.2	29.1	29.1	108.8	108.8	7.5		13.7		10		-							
					Middle	4.0	0.2	56	25.2	25.2	8.2	8.2	29.5	29.5	105.8	105.8	7.4	7.4	17.2	10	10	-	-			<0.2	<0.2	-		
						4.0	0.2	60	25.2		8.2	8.2	29.5	29.5	105.7	105.7	7.4		17.4		9		-							
					Bottom	7.0	0.2	48	25.1	25.1	8.2	8.2	29.6	29.6	105.5	105.5	7.4	7.4	18.7	16	16	-	-	-			<0.2	<0.2	-	
						7.0	0.2	49	25.1		8.2	8.2	29.6	29.6	105.5	105.5	7.4		18.5		16		-							
SR5A	Sunny	Calm	13:45	4.8	Surface	1.0	0.1	51	25.8	25.8	8.1	8.1	29.1	29.1	105.9	105.9	7.3	7.3	11.0	11.2	6	6	-	-	816563	810716	-	-	-	-
						1.0	0.1	54	25.7		8.1	8.1	29.1	29.1	105.9	105.9	7.3		11.1		6		-							
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	7.3	-	11.2	-	6	-	-			<0.2	<0.2	-	
						-	-	-	-		-	-	-	-	-	-	-		-		-		-				-	-		
					Bottom	3.8	0.0	356	25.8	25.8	8.1	8.1	29.0	29.0	106.8	106.9	7.4	7.4	11.3	5	6	-	-	-			<0.2	<0.2	-	
						3.8	0.0	328	25.8		8.1	8.1	29.0	29.0	106.9	106.9	7.4		11.3		5		-							
SR6	Sunny	Calm	14:08	4.1	Surface	1.0	0.2	80	25.8	25.8	8.1	8.1	28.7	28.7	106.0	105.9	7.3	7.3	8.7	9.7	9	12	-	-	817888	814651	-	-	-	-
						1.0	0.2	80	25.8		8.1	8.1	28.7	28.7	105.8	105.8	7.3		8.8		9		-							
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	7.3	-	9.7	-	12	-	-			<0.2	<0.2	-	
						-	-	-	-		-	-	-	-	-	-	-		-		-		-				-	-		
					Bottom	3.1	0.1	64	25.7	25.7	8.1	8.1	29.1	29.1	105.4	105.4	7.3	7.3	10.4	15	13	-	-	-			<0.2	<0.2	-	
						3.1	0.1	64	25.7		8.1	8.1	29.1	29.1	105.4	105.4	7.3		11.0		15		-							
SR7	Fine	Moderate	14:42	19.1	Surface	1.0	0.8	87	25.5	25.6	7.9	7.9	27.7	27.7	96.1	96.1	6.7	6.6	2.8	3.4	6	8	-	-	823661	823761	-	-	-	-
						1.0	0.9	93	25.6		7.9	7.9	27.7	27.7	96.1	96.1	6.7		2.8		6		-							
					Middle	9.6	0.5	83	25.0	25.0	7.9	7.9	28.9	28.9	91.6	91.7	6.4	6.4	3.3	9	9	-	-	-			<0.2	<0.2	-	
						9.6	0.6	83	25.0		7.9	7.9	28.9	28.9	91.7	91.7	6.4		3.2		9		-							
					Bottom	18.1	0.2	80	25.0	25.0	7.9	7.9	29.0	29.1	91.1	91.1	6.4	6.4	4.3	8	9	-	-	-			<0.2	<0.2	-	
						18.1	0.2	81	25.0		7.9	7.9	29.1	29.1	91.1	91.1	6.4		4.3		8		-							
SR8	Fine	Moderate	13:40	3.7	Surface	1.0	-	-	25.7	25.7	8.0	8.0	27.1	27.1	101.1	101.2	7.1	7.1	4.3	6.1	9	8	-	-	820246	811418	-	-	-	-
						1.0	-	-	25.7		8.0	8.0	27.1	27.1	101.2	101.2	7.1		4.4		8		-							
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	6.1	-	8	-	-	-	-			<0.2	<0.2	-	
						-	-	-	-		-	-	-	-	-	-	-		-		-		-				-	-		
					Bottom	2.7	-	-	25.6	25.6	8.0	8.0	27.6	27.6	103.8	103.8	7.3	7.3	7.8	8	8	-	-	-			<0.2	<0.2	-	
						2.7	-	-	25.6		8.0	8.0	27.6	27.6	103.8	103.8	7.3		7.8		8		-							

### Water Quality Monitoring Results on

01 May 18

during Mid-Flood Tide

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

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

**Water Quality Monitoring**

**Water Quality Monitoring Results on 01 May 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
IM9	Cloudy	Moderate	08:03	7.5	Surface	1.0	0.4	337	25.2	25.2	7.9	7.9	26.3	26.3	87.4	87.4	6.2	6.2	7.3	7.1	10	10	84	87	822112	808803	<0.2	2.3	2.1					
						1.0	0.4	341	25.2	25.2	7.9	7.9	26.3	26.3	87.4	87.4	6.2	6.2	7.3	7.1	10	10	85	87										
					Middle	3.8	0.4	337	25.2	25.2	7.9	7.9	26.3	26.3	87.7	87.7	6.2	6.2	7.0	7.0	9	9	87	87										
						3.8	0.5	355	25.2	25.2	7.9	7.9	26.3	26.3	87.7	87.7	6.2	6.2	7.0	7.0	10	10	87	88										
					Bottom	6.5	0.4	322	25.2	25.2	7.9	7.9	26.3	26.3	88.2	88.3	6.3	6.3	7.0	7.1	11	11	88	89										
						6.5	0.4	334	25.2	25.2	7.9	7.9	26.3	26.3	88.3	88.3	6.3	6.3	7.1	7.1	11	11	89	89										
IM10	Cloudy	Moderate	07:55	8.7	Surface	1.0	0.5	302	25.2	25.2	7.9	7.9	26.3	26.3	88.9	88.9	6.3	6.3	5.8	8.7	8	9	85	87	822227	809845	<0.2	2.1	2.6					
						1.0	0.5	328	25.2	25.2	7.9	7.9	26.3	26.3	88.9	88.9	6.3	6.3	5.8	8.7	9	8	85	86										
					Middle	4.4	0.5	306	25.2	25.2	7.9	7.9	26.5	26.5	88.7	88.7	6.3	6.3	9.3	11.4	10	8	86	89										
						4.4	0.5	316	25.2	25.2	7.9	7.9	26.5	26.5	88.7	88.6	6.3	6.3	9.3	11.1	9	8	86	89										
					Bottom	7.7	0.4	316	25.2	25.2	7.9	7.9	26.7	26.7	88.6	88.6	6.3	6.3	11.4	11.1	10	9	89	89										
						7.7	0.5	346	25.2	25.2	7.9	7.9	26.7	26.7	88.6	88.6	6.3	6.3	11.1	11.1	9	8	89	89										
IM11	Cloudy	Moderate	07:35	8.1	Surface	1.0	0.4	280	25.2	25.2	7.9	7.9	26.7	26.7	89.8	89.8	6.4	6.4	9.3	10.8	16	16	84	85	821518	810516	<0.2	2.2	2.4					
						1.0	0.4	285	25.2	25.2	7.9	7.9	26.7	26.7	89.8	89.8	6.4	6.4	9.6	10.6	16	16	85	87										
					Middle	4.1	0.4	295	25.2	25.2	7.9	7.9	27.0	27.0	90.1	90.1	6.4	6.4	10.6	12.6	18	16	87	89										
						4.1	0.4	318	25.2	25.2	7.9	7.9	27.0	27.0	90.1	90.3	6.4	6.4	10.6	12.6	18	16	87	89										
					Bottom	7.1	0.4	299	25.2	25.2	7.9	7.9	27.4	27.4	90.3	90.4	6.4	6.4	12.6	12.4	18	18	89	89										
						7.1	0.4	327	25.2	25.2	7.9	7.9	27.4	27.4	90.4	90.4	6.4	6.4	12.4	12.4	18	18	89	89										
IM12	Cloudy	Moderate	07:28	7.8	Surface	1.0	0.9	279	25.2	25.2	7.9	7.9	27.1	27.1	90.1	90.1	6.4	6.4	5.7	7.9	6	5	84	87	821171	811500	<0.2	2.2	2.4					
						1.0	0.9	294	25.2	25.2	7.9	7.9	27.1	27.1	90.1	90.1	6.4	6.4	5.7	7.9	5	5	84	87										
					Middle	3.9	0.8	281	25.2	25.2	7.9	7.9	27.6	27.6	90.7	90.8	6.4	6.4	7.6	10.4	5	5	87	89										
						3.9	0.9	306	25.2	25.2	7.9	7.9	27.6	27.6	90.8	90.8	6.4	6.4	7.7	10.4	5	5	87	89										
					Bottom	6.8	0.7	281	25.2	25.2	7.9	7.9	27.8	27.8	91.1	91.1	6.4	6.4	10.4	10.4	5	5	89	89										
						6.8	0.7	294	25.2	25.2	7.9	7.9	27.8	27.8	91.1	91.1	6.4	6.4	10.4	10.4	5	5	89	89										
SR2	Cloudy	Moderate	06:55	4.4	Surface	1.0	0.2	83	25.2	25.2	7.9	7.9	26.7	26.7	88.0	88.0	6.2	6.2	5.3	5.7	6	6	84	85	821458	814157	<0.2	1.9	2.0					
						1.0	0.2	90	25.2	25.2	7.9	7.9	26.7	26.7	88.0	88.0	6.2	6.2	5.2	5.2	6	6	85	87										
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						-	-	-	-	-
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						-	-	-	-	-
					Bottom	3.4	0.2	36	25.2	25.2	7.9	7.9	27.4	27.4	88.3	88.3	6.2	6.2	6.2	6.2	5	5	87	87										
						3.4	0.2	36	25.2	25.2	7.9	7.9	27.5	27.4	88.3	88.3	6.2	6.2	6.3	6.3	6	6	87	87										
SR3	Cloudy	Moderate	08:20	9.4	Surface	1.0	0.3	37	25.3	25.3	7.8	7.8	24.0	24.0	86.1	86.1	6.2	6.3	3.6	6.2	<2	<2	-	-	822168	807580	-	-	-					
						1.0	0.4	38	25.3	25.3	7.8	7.8	24.0	24.0	86.1	86.1	6.2	6.3	3.6	6.2	<2	<2	-	-										
					Middle	4.7	0.6	24	25.2	25.2	8.0	8.0	26.3	26.3	88.6	88.6	6.3	6.3	5.9	9.0	3	3	-	-										
						4.7	0.6	25	25.2	25.2	8.0	8.0	26.3	26.3	88.6	88.6	6.3	6.3	6.0	9.0	3	3	-	-										
					Bottom	8.4	0.6	22	25.2	25.2	8.0	8.0	26.7	26.7	89.2	89.2	6.3	6.3	9.4	9.0	2	4	-	-										
						8.4	0.6	24	25.2	25.2	8.0	8.0	26.7	26.7	89.2	89.2	6.3	6.3	9.0	9.0	4	4	-	-										
SR4A	Fine	Calm	07:17	8.2	Surface	1.0	0.3	253	25.4	25.4	8.1	8.1	29.3	29.3	99.5	99.5	6.9	6.9	10.5	11.7	4	6	-	-	817161	807784	-	-	-					
						1.0	0.3	263	25.4	25.4	8.1	8.1	29.3	29.3	99.5	99.5	6.9	6.9	10.7	12.3	6	6	-	-										
					Middle	4.1	0.3	250	25.4	25.4	8.1	8.1	29.4	29.4	99.1	99.1	6.9	6.9	12.4	12.1	6	6	-	-										
						4.1	0.3	263	25.4	25.4	8.1	8.1	29.4	29.4	99.1	99.1	6.9	6.8	12.4	12.1	6	6	-	-										
					Bottom	7.2	0.1	247	25.4	25.4	8.1	8.1	29.4	29.4	97.4	97.2	6.8	6.8	12.1	11.3	7	7	-	-										
						7.2	0.1	258	25.4	25.4	8.1	8.1	29.4	29.0	97.2	97.7	6.8	6.8	12.1	11.3	7	6	-	-										
SR5A	Fine	Calm	07:02	4.8	Surface	1.0	0.4	287	25.4	25.4	8.1	8.1	29.0	29.0	97.7	97.7	6.8	6.8	11.3	11.7	7	6	-	-	816596	810695	-	-	-					
						1.0	0.4	308	25.4	25.4	8.1	8.1	29.0	29.0	97.7	97.7	6.8	6.8	11.3	11.3	6	6	-	-										
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						-	-	-	-	-
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						-	-	-	-	-
					Bottom	3.8	0.3	298	25.4	25.4	8.1	8.1	29.0	29.0	96.5	96.4	6.7	6.7	12.0	12.0	6	6	-	-										
						3.8	0.4	306	25.4	25.4	8.1	8.1	29.0	29.0	96.4	96.5	6.7	6.7	12.0	12.0	6	6	-	-										
SR6	Fine	Calm	06:41	4.0	Surface	1.0	0.3	275	25.1	25.1	8.0	8.0	28.6	28.6	93.4	93.4	6.6	6.6	9.9	10.1	6	6	-	-	817914	814668	-	-	-					
						1.0	0.3	295	25.1	25.1	8.0	8.0	28.6	28.6	93.3	93.4	6.5	6.5	9.9	9.9	6	6	-	-										
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						-	-	-	-	-
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						-	-	-	-	-
					Bottom	3.0	0.2	275	25.1	25.1	8.0	8.0	28.8	28.8	92.7	92.3	6.5	6.4	10.3	10.4	6	8	-	-										
						3.0	0.2	279	25.1	25.1	8.0	8.0	28.8	28.8	91.8	91.0	6.4	6.4	2.9	2.8	5	5	-	-										
SR7	Cloudy	Moderate	06:02	18.6	Surface	1.0	0.1	206	25.1	25.1	7.9	7.9	27.6	27.6	91.0	91.0	6.4	6.4	2.8	2.6	4	4	-	-	823610	823727	-	-	-					
						1.0	0.1	210	25.1	25.1	7.9	7.9	27.6	27.6	91.0	91.0	6.4	6.4	2.8	2.3	4	4	-	-										
					Middle	9.3	0.2	198	24.9	24.9	7.9	7.9	28.3	28.3	89.4	89.3	6.3	6.3	2.4	2.5	4	4	-	-										
						9.3	0.2	203	24.9	24.9	7.9	7.9	28.4	28.3	89.3	89.3	6.3	6.2	2.3	2.5	4	4	-	-										
					Bottom	17.6	0.1	93	24.7	24.7	7.9	7.9	29.3	29.3	87.6	87.6	6.2	6.2	2.5	2.5	4	4	-	-										
						17.6	0.1	99	24.7	24.7	7.9	7.9	29.3	29.3	87.6	87.6	6.2	6.2	2.5	2.5	4	4	-	-										
SR8	Cloudy	Moderate	07:21	3.7	Surface	1.0	-	-	25.2	25.2	7.9	7.9	26.6	26.5	89.4	89.4	6.3	6.3	3.6	4.4	6	5	-	-	820246	811418	-	-	-					
						1.0	-	-	25.2	25.2	7.9	7.9	26.5	26.5	89.4	89.4	6.3	6.3	3.6	3.6	5	4	-	-										
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						-	-	-	-	-
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						-	-	-	-	-
					Bottom	2.7	-	-	25.2	25.2	7.9	7.9	27.1	27.0	90.0	90.0	6.4	6.4	5.5	5.2	5	4	-	-										
						2.7	-	-	25.2	25.2	7.9	7.9	27.0	27.0	90.0	90.0	6.4	6.4	5.5	5.2	4	4	-	-										

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

## Water Quality Monitoring

## Water Quality Monitoring Results on 03 May 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
C1	Cloudy	Moderate	14:14	9.0	Surface	1.0	0.5	240	26.7	26.6	8.2	8.2	26.7	26.8	126.8	126.8	8.8	8.8	8.6	13.9	7	83	86	815649	804258	<0.2	<0.2	0.9	1.1	
						1.0	0.5	259	26.6	26.6	8.2	8.2	26.8	26.8	126.8	126.8	8.8	8.8	8.7	13.9	6	83	86	815649	804258	<0.2	<0.2	0.9	1.1	
					Middle	4.5	0.5	205	25.3	25.3	8.2	8.2	30.1	30.1	119.1	119.0	8.3	8.3	12.2	13.9	5	86	86	815649	804258	<0.2	<0.2	0.9	1.0	
						4.5	0.5	209	25.3	25.3	8.2	8.2	30.1	30.1	118.9	118.9	8.2	8.2	12.3	13.9	7	86	86	815649	804258	<0.2	<0.2	1.0	1.2	
					Bottom	8.0	0.4	200	25.0	25.0	8.2	8.2	31.4	31.4	114.3	114.3	7.9	7.9	20.9	7.9	8	88	88	815649	804258	<0.2	<0.2	1.2	1.2	
						8.0	0.4	216	25.0	25.0	8.2	8.2	31.4	31.4	114.3	114.3	7.9	7.9	20.7	7.9	9	88	88	815649	804258	<0.2	<0.2	1.2	1.2	
C2	Cloudy	Moderate	13:17	12.1	Surface	1.0	0.6	176	26.1	26.1	7.9	7.9	24.7	24.7	88.8	88.8	6.3	6.3	13.1	14.0	6	85	85	825652	806960	<0.2	<0.2	0.7	1.0	
						1.0	0.6	193	26.0	26.0	7.9	7.9	24.7	24.7	88.6	88.6	6.3	6.3	13.7	14.0	8	85	85	825652	806960	<0.2	<0.2	1.0	1.1	
					Middle	6.1	0.4	164	25.7	25.7	7.9	7.9	26.7	26.6	88.4	88.5	6.2	6.2	15.2	14.0	6	88	88	825652	806960	<0.2	<0.2	1.1	1.5	
						6.1	0.4	170	25.7	25.7	7.9	7.9	26.6	26.6	88.5	88.5	6.2	6.2	14.9	14.0	7	89	89	825652	806960	<0.2	<0.2	1.2	1.2	
					Bottom	11.1	0.2	160	25.4	25.4	7.9	7.9	28.6	28.6	88.8	88.8	6.2	6.2	13.6	14.0	7	91	91	825652	806960	<0.2	<0.2	2.3	2.3	
						11.1	0.3	167	25.4	25.4	7.9	7.9	28.6	28.6	88.8	88.8	6.2	6.2	13.5	14.0	6	92	92	825652	806960	<0.2	<0.2	2.4	2.4	
C3	Cloudy	Moderate	14:58	12.0	Surface	1.0	0.4	57	26.1	26.1	7.9	7.9	27.0	27.1	98.5	98.5	6.8	6.8	3.6	4.6	5	85	85	822118	817784	<0.2	<0.2	1.0	1.0	
						1.0	0.4	62	26.1	26.1	7.9	7.9	27.1	27.1	98.4	98.5	6.8	6.8	3.7	4.6	4	85	85	822118	817784	<0.2	<0.2	0.8	0.8	
					Middle	6.0	0.3	81	25.5	25.5	7.9	7.9	28.7	28.7	92.2	92.1	6.4	6.4	5.1	4.6	4	89	89	822118	817784	<0.2	<0.2	0.8	0.8	
						6.0	0.3	85	25.4	25.5	7.9	7.9	28.8	28.7	92.0	92.1	6.4	6.4	5.0	4.6	6	89	89	822118	817784	<0.2	<0.2	0.9	0.9	
					Bottom	11.0	0.3	62	25.5	25.5	8.0	8.0	28.8	28.8	93.6	93.6	6.5	6.5	5.1	4.6	8	91	91	822118	817784	<0.2	<0.2	1.4	1.4	
						11.0	0.3	63	25.6	25.6	8.0	8.0	28.7	28.7	93.9	93.8	6.5	6.5	5.1	4.6	6	91	91	822118	817784	<0.2	<0.2	1.3	1.3	
IM1	Cloudy	Moderate	13:57	7.7	Surface	1.0	0.3	157	26.4	26.3	8.2	8.2	27.4	27.5	117.6	117.4	8.1	8.1	11.0	14.8	5	84	84	818363	806487	<0.2	<0.2	1.0	1.4	
						1.0	0.3	159	26.2	26.3	8.2	8.2	27.5	27.5	117.1	117.4	8.1	8.1	11.2	14.8	6	84	84	818363	806487	<0.2	<0.2	1.1	1.1	
					Middle	3.9	0.2	148	25.4	25.4	8.2	8.2	29.9	29.9	113.8	113.7	7.9	7.9	12.5	14.8	8	86	86	818363	806487	<0.2	<0.2	1.3	1.3	
						3.9	0.2	150	25.4	25.4	8.2	8.2	29.9	29.9	113.6	113.6	7.9	7.9	12.7	14.8	7	86	86	818363	806487	<0.2	<0.2	1.4	1.4	
					Bottom	6.7	0.2	145	25.2	25.2	8.2	8.2	30.3	30.3	109.7	109.7	7.6	7.6	20.1	13.7	13	87	87	818363	806487	<0.2	<0.2	1.7	1.7	
						6.7	0.3	150	25.2	25.2	8.2	8.2	30.3	30.3	109.6	109.6	7.6	7.6	21.2	13.7	11	88	88	818363	806487	<0.2	<0.2	1.6	1.6	
IM2	Cloudy	Moderate	13:52	8.5	Surface	1.0	0.3	215	26.6	26.6	8.2	8.2	26.9	26.9	118.9	118.9	8.2	8.2	10.3	13.3	5	83	83	818876	806180	<0.2	<0.2	1.1	1.4	
						1.0	0.3	221	26.6	26.6	8.2	8.2	26.9	26.9	118.8	118.8	8.2	8.2	10.3	13.3	7	84	84	818876	806180	<0.2	<0.2	0.8	0.8	
					Middle	4.3	0.3	171	25.5	25.5	8.2	8.2	29.4	29.4	111.5	111.5	7.7	7.7	13.7	13.3	6	85	85	818876	806180	<0.2	<0.2	1.3	1.3	
						4.3	0.3	183	25.5	25.5	8.2	8.2	29.4	29.4	111.4	111.5	7.7	7.7	13.8	13.3	7	85	85	818876	806180	<0.2	<0.2	1.4	1.4	
					Bottom	7.5	0.2	191	25.3	25.3	8.2	8.2	30.0	30.0	109.6	109.6	7.6	7.6	15.7	13.3	10	88	88	818876	806180	<0.2	<0.2	1.9	1.9	
						7.5	0.2	207	25.3	25.3	8.2	8.2	30.0	30.0	109.7	109.7	7.6	7.6	15.8	13.3	11	88	88	818876	806180	<0.2	<0.2	1.9	1.9	
IM3	Cloudy	Moderate	13:47	8.7	Surface	1.0	0.2	237	26.0	26.0	8.2	8.2	27.8	27.8	121.1	120.8	8.4	8.4	10.6	14.0	3	84	84	819424	806010	<0.2	<0.2	1.2	1.4	
						1.0	0.2	241	26.0	26.0	8.2	8.2	27.8	27.8	120.4	120.8	8.3	8.3	10.6	14.0	5	84	84	819424	806010	<0.2	<0.2	1.2	1.2	
					Middle	4.4	0.3	198	25.7	25.7	8.2	8.2	28.7	28.7	113.0	113.0	7.8	7.8	14.0	14.0	9	85	85	819424	806010	<0.2	<0.2	1.4	1.4	
						4.4	0.3	214	25.7	25.7	8.2	8.2	28.7	28.7	113.0	113.0	7.8	7.8	14.2	14.0	10	86	86	819424	806010	<0.2	<0.2	1.3	1.3	
					Bottom	7.7	0.3	166	25.4	25.4	8.2	8.2	29.9	29.8	110.9	110.9	7.7	7.7	17.2	13.7	13	89	89	819424	806010	<0.2	<0.2	1.8	1.8	
						7.7	0.3	168	25.4	25.4	8.2	8.2	29.8	29.8	110.9	110.9	7.7	7.7	17.2	13.7	12	89	89	819424	806010	<0.2	<0.2	1.7	1.7	
IM4	Cloudy	Moderate	13:39	8.0	Surface	1.0	0.2	219	26.2	26.2	8.2	8.2	28.0	28.0	117.9	117.8	8.1	8.1	11.0	13.7	3	84	84	819582	805027	<0.2	<0.2	2.4	2.4	
						1.0	0.2	223	26.2	26.2	8.2	8.2	28.0	28.0	117.7	117.7	8.1	8.1	11.1	13.7	5	84	84	819582	805027	<0.2	<0.2	2.5	2.5	
					Middle	4.0	0.3	177	25.3	25.3	8.2	8.2	30.4	30.4	112.5	112.5	7.8	7.8	13.9	13.7	10	86	86	819582	805027	<0.2	<0.2	2.2	2.2	
						4.0	0.3	177	25.3	25.3	8.2	8.2	30.4	30.4	112.5	112.5	7.8	7.8	14.0	13.7	11	86	86	819582	805027	<0.2	<0.2	2.4	2.4	
					Bottom	7.0	0.2	161	25.1	25.1	8.2	8.2	30.9	30.9	109.7	109.7	7.6	7.6	16.0	13.7	12	88	88	819582	805027	<0.2	<0.2	2.3	2.3	
						7.0	0.2	174	25.1	25.1	8.2	8.2	30.9	30.9	109.6	109.6	7.6	7.6	16.4	13.7	14	88	88	819582	805027	<0.2	<0.2	2.3	2.3	
IM5	Cloudy	Moderate	13:30	7.3	Surface	1.0	0.1	201	26.4	26.4	8.2	8.2	27.5	27.5	117.2	117.2	8.1	8.1	11.2	13.3	4	83	83	820585	804929	<0.2	<0.2	3.0	2.8	
						1.0	0.1	204	26.4	26.4	8.2	8.2	27.5	27.5	117.2	117.2	8.1	8.1	11.3	13.3	5	83	83	820585	804929	<0.2	<0.2	2.8	2.8	
					Middle	3.7	0.3	156	25.5	25.5	8.2	8.2	29.9	29.9	112.7	112.7	7.8	7.8	14.0	13.3	8	85	85	820585	804929	<0.2	<0.2	2.7	2.7	
						3.7	0.3	162	25.5	25.5	8.2	8.2	29.9	29.9	112.6	112.6	7.8	7.8	14.1	13.3	9	85	85	820585	804929	<0.2	<0.2	2.9	2.9	
					Bottom	6.3	0.3	175	25.3	25.3	8.2	8.2	30.1	30.1	110.9	110.9	7.7	7.7	14.8	13.3	11	88	88	820585	804929	<0.2	<0.2	2.8	2.8	
						6.3	0.3	175	25.3	25.3	8.2	8.2	30.1	30.1	110.9	110.9	7.7	7.7	14.3	13.3	10	88	88	820585	804929	<0.2	<0.2	2.7	2.7	
IM6	Cloudy	Moderate	13:22	7.4	Surface	1.0	0.2	153	26.5	26.4	8.2	8.2	27.5	27.5	118.0	117.9	8.1	8.1	10.9	17.2	10	85	85	821088	805853	<0.2	<0.2	0.6	0.6	
						1.0	0.2	163	26.4	26.4	8.2	8.2	27.5	27.5	117.7	117.9	8.1	8.1	11.1	17.2	8	85	85	821088	805853	<0.2	<0.2	0.6	0.6	
					Middle	3.7	0.2	160	25.4	25.4	8.2	8.2	29.8	29.8	109.6	109.6	7.6	7.6	17.2	17.2	12	86	86	821088	805853	<0.2	<0.2	0.8	0.8	
						3.7	0.2	170	25.4	25.4	8.2	8.2	29.8	29.8	109.5	109.5	7.6	7.6	17.3	17.2	12	86	86	821088	805853	<0.2	<0.2	0.8	0.8	
					Bottom	6.4	0.1	141	25.3	25.3	8.2	8.2	30.0	30.0	107.7	107.7	7.5	7.5	23.6	14.0	14	89	89	821088	805853	<0.2	<0.2	1.6	1.6	
						6.4	0.1	146	25.3	2																				

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

## Water Quality Monitoring

## Water Quality Monitoring Results on 03 May 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
IM9	Sunny	Moderate	13:48	7.6	Surface	1.0	0.4	126	26.0	26.0	8.0	8.0	26.2	26.3	102.1	102.2	7.1	5.6	7.2	8.1	6	86	88	822118	808789	<0.2	3.2	3.2						
						1.0	0.4	135	26.0	8.0	8.0	102.2	102.2	7.2	5.7	6	85	<0.2			3.2													
					Middle	3.8	0.3	109	25.9	25.9	8.0	8.0	26.7	26.8	103.0	103.0	7.2	6.8	7.1		8.1	5	88			89	<0.2		3.2					
						3.8	0.3	117	25.9	25.9	8.0	8.0	26.9	26.8	103.0	103.0	7.2	7.6				7	89				<0.2		3.2					
					Bottom	6.6	0.4	89	25.8	25.8	8.0	8.0	101.6	101.6	7.1	7.1	11.6	6	91			<0.2	3.2											
						6.6	0.4	97	25.8	25.8	8.0	8.0	27.5	27.5	101.5	101.5	7.1	11.2	8			91	<0.2			3.3								
IM10	Cloudy	Moderate	13:56	7.4	Surface	1.0	0.6	116	26.2	26.2	8.0	8.0	26.0	26.1	105.7	105.6	7.4	6.3	7.2	8.7		4	85	89	822240	809852	<0.2	3.3	3.4					
						1.0	0.6	121	26.1	26.1	8.0	8.0	26.2	26.2	105.5	105.5	7.4	6.7				5	86				<0.2	3.9						
					Middle	3.7	0.5	108	25.9	25.9	8.0	8.0	26.8	26.8	100.4	100.4	7.0	8.6	7.0		8.7	5	89	89			<0.2	3.2						
						3.7	0.6	112	25.9	25.9	8.0	8.0	26.8	26.8	100.4	100.4	7.0	8.8				4	89				<0.2	3.4						
					Bottom	6.4	0.5	98	25.9	25.9	8.0	8.0	26.7	26.7	100.6	100.6	7.0	10.8	7.0			8.7	5	91			91	<0.2		3.1				
						6.4	0.5	100	25.9	25.9	8.0	8.0	26.7	26.7	100.5	100.6	7.0	10.8					4	92				<0.2		3.2				
IM11	Cloudy	Moderate	14:08	8.8	Surface	1.0	0.6	115	26.3	26.3	8.0	8.0	25.9	25.9	104.8	104.8	7.3	5.2	7.3	7.4			4	85	88	821515	810548	<0.2	3.3	3.4				
						1.0	0.6	126	26.2	26.2	8.0	8.0	25.9	25.9	104.8	104.8	7.3	5.5					4	85				<0.2	3.3					
					Middle	4.4	0.4	107	26.1	26.1	8.0	8.0	26.4	26.4	104.5	104.5	7.3	7.9	7.3		7.4		5	88	88			<0.2	3.6					
						4.4	0.4	112	26.1	26.1	8.0	8.0	26.4	26.4	104.4	104.4	7.3	8.0					5	88				<0.2	3.4					
					Bottom	7.8	0.3	101	26.1	26.1	8.0	8.0	26.7	26.7	103.8	103.8	7.2	9.0	7.2			7.4	5	91	91			<0.2	3.4					
						7.8	0.3	108	26.2	26.2	8.0	8.0	26.7	26.7	103.5	103.7	7.2	8.6					5	91				<0.2	3.4					
IM12	Cloudy	Moderate	14:15	9.2	Surface	1.0	0.5	116	26.5	26.5	8.0	8.0	25.6	25.7	107.5	107.6	7.5	4.6	7.6	7.4			8	86	88	821132	811531	<0.2	2.2	2.3				
						1.0	0.6	124	26.5	26.5	8.0	8.0	25.7	25.7	107.6	107.6	7.5	4.7					9	85				<0.2	2.2					
					Middle	4.6	0.4	97	26.4	26.4	8.0	8.0	26.4	26.5	108.9	109.0	7.6	7.4	7.6		7.4		7	88	88			<0.2	2.2					
						4.6	0.4	102	26.4	26.4	8.0	8.0	26.5	26.5	109.1	109.1	7.6	7.9					9	88				<0.2	2.4					
					Bottom	8.2	0.4	80	26.4	26.4	8.0	8.0	27.0	27.0	108.6	108.6	7.5	9.9	7.5			7.4	8	91	90			<0.2	2.2					
						8.2	0.4	81	26.4	26.4	8.0	8.0	27.0	27.0	108.5	108.6	7.5	9.7					9	90				<0.2	2.3					
SR2	Cloudy	Moderate	14:39	4.1	Surface	1.0	0.5	90	26.3	26.3	8.0	8.0	26.1	26.1	98.7	98.7	6.9	7.0	6.9	7.4			8	87	89	821455	814166	<0.2	2.3	2.3				
						1.0	0.5	92	26.3	26.3	8.0	8.0	26.1	26.1	98.7	98.7	6.9	7.2					8	87				<0.2	2.2					
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	6.9		7.4		-	-	8			-	89		-	<0.2	-	
						-	-	-	-	-	-	-	-	-	-	-	-	-					-	-				-			-	-	-	
					Bottom	3.1	0.3	86	26.3	26.4	8.0	8.0	26.1	26.1	98.6	98.6	6.9	7.8	6.9			7.4	9	90	90			<0.2	2.3					
						3.1	0.3	92	26.4	26.4	8.0	8.0	26.1	26.1	98.6	98.6	6.9	7.8					8	90				<0.2	2.2					
SR3	Cloudy	Moderate	13:35	9.2	Surface	1.0	0.4	181	25.9	25.9	8.0	8.0	26.0	26.1	96.3	96.6	6.8	8.3	7.0	10.5			4	-	5	822145	807545	-	-	-				
						1.0	0.4	187	25.9	25.9	8.0	8.0	26.1	26.1	96.8	96.8	6.8	8.6					5	-				-	-					
					Middle	4.6	0.2	145	25.7	25.7	8.0	8.0	27.8	27.8	103.7	103.8	7.2	11.6	7.2		10.5		5	-	4			-	-		-			
						4.6	0.2	154	25.7	25.7	8.0	8.0	27.9	27.8	103.9	103.8	7.2	11.7					4	-				-	-					
					Bottom	8.2	0.2	57	25.8	25.8	8.0	8.0	27.6	27.5	102.9	102.8	7.2	11.7	7.2			10.5	6	-	5			-	-		-			
						8.2	0.3	62	25.8	25.8	8.0	8.0	27.5	27.5	102.6	102.8	7.2	11.3					5	-				-	-					
SR4A	Cloudy	Calm	14:37	8.4	Surface	1.0	0.2	84	26.8	26.8	8.2	8.2	27.4	27.4	115.7	115.3	7.9	14.1	7.7	21.3			10	-	17	817178	807789	-	-	-				
						1.0	0.2	88	26.8	26.8	8.2	8.2	27.4	27.4	114.8	114.8	7.9	14.5					11	-				-	-					
					Middle	4.2	0.2	84	25.4	25.4	8.2	8.2	29.8	29.8	106.6	106.6	7.4	21.3	7.3		21.3		14	-	13			-	-		-			
						4.2	0.2	86	25.4	25.4	8.2	8.2	29.7	29.7	106.6	106.6	7.4	21.5					13	-				-	-					
					Bottom	7.4	0.1	70	25.3	25.3	8.2	8.2	30.2	30.1	105.4	105.5	7.3	28.2	7.3			21.3	28	-	26			-	-		-			
						7.4	0.1	71	25.3	25.3	8.2	8.2	30.1	30.1	105.6	105.5	7.3	27.9					27	-			-	-						
SR5A	Cloudy	Calm	14:53	4.7	Surface	1.0	0.1	7	27.2	27.2	8.1	8.1	27.3	27.3	111.2	111.2	7.6	10.0	7.6	10.3			7	-	7	816595	810682	-	-	-				
						1.0	0.1	7	27.2	27.2	8.1	8.1	27.3	27.3	111.1	111.1	7.6	10.0					5	-				-	-					
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	7.6		10.3		-	-	7			-	-		-			
						-	-	-	-	-	-	-	-	-	-	-	-	-					-	-				-	-		-			
					Bottom	3.7	0.1	81	27.1	27.1	8.1	8.1	27.3	27.3	108.4	108.3	7.4	10.6	7.4			10.3	7	-	7			-	-		-			
						3.7	0.1	85	27.1	27.1	8.1	8.1	27.3	27.3	108.3	108.3	7.4	10.6					7	-			-	-						
SR6	Cloudy	Calm	15:16	4.2	Surface	1.0	0.1	71	26.9	26.9	8.1	8.1	27.0	27.0	113.7	113.6	7.8	10.8	7.8	11.1			8	-	9	817923	814648	-	-	-				
						1.0	0.1	74	26.9	26.9	8.1	8.1	27.0	27.0	113.5	113.6	7.8	10.8					6	-				-	-					
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	7.8		11.1		-	-	9			-	-		-			
						-	-	-	-	-	-	-	-	-	-	-	-	-					-	-				-	-		-			
					Bottom	3.2	0.1	68	26.7	26.8	8.1	8.1	27.4	27.4	110.4	109.8	7.6	11.3	7.6			11.1	11	-	9			-	-		-			
						3.2	0.1	73	26.8	26.8	8.1	8.1	27.4	27.4	109.8	110.1	7.5	11.4					9	-			-	-						
SR7	Cloudy	Moderate	15:26	17.8	Surface	1.0	0.7	78	25.7	25.7	8.0	8.0	28.2	28.2	97.6	97.5	6.8	2.1	6.8	2.6			4	-	4	823613	823761	-	-	-				
						1.0	0.8	78	25.7	25.7	8.0	8.0	28.3	29.3	97.3	96.1	6.8	2.1					5	-				-	-					
					Middle	8.9	0.5	76	25.4	25.4	8.0	8.0	29.3	29.3	96.1	96.1	6.7	2.8	6.7		2.6		4	-	3			-	-		-			
						8.9	0.5	77	25.4	25.4	8.0	8.0	29.3	29.3	96.1	96.1	6.7	2.9					3	-				-	-					
					Bottom	16.8	0.2	30	25.4	25.5	8.0	8.0	29.2	29.2	96.6	96.7	6.7	3.1	6.7			2.6	4	-	4			-	-		-			
						16.8	0.2	30	25.5	25.5	8.0	8.0	29.1	29.2	96.8	96.7	6.7	2.9					4	-			-	-						
SR8	Cloudy	Moderate	14:26	4.2	Surface	1.0	-	-	26.4	26.4	8.0	8.0	26.2	26.2	101.5	101.5	7.1	5.8	7.1	5.9			7	-	9	820246	811418	-	-	-				
						1.0	-	-	26.4	26.4	8.0	8.0	26.3	26.2	101.4	101.4	7.0	5.9					8	-				-	-					
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	7.1		5.9		-	-	9			-	-		-			
						-	-	-	-	-	-	-	-	-	-	-	-	-					-	-				-	-		-			
					Bottom	3.2	-	-	26.4	26.4	8.0	8.0	26.3	26.3	101.5	101.5	7.1	6.0	7.1			5.9	9	-	10			-	-		-			
						3.2	-	-	26.4	26.4	8.0	8.0	26.3	26.3	101.5	101.5	7.1	5.9					10	-			-	-						

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

**Water Quality Monitoring**

**Water Quality Monitoring Results on 03 May 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
C1	Cloudy	Moderate	08:46	8.7	Surface	1.0	0.6	50	25.8	25.8	8.1	8.1	26.9	26.9	107.4	107.4	7.5	7.5	13.4	18.4	5		83		815608	804220	<0.2		1.8	1.5	
						1.0	0.7	52	25.8	8.1	8.1	26.9	26.9	107.4	107.4	7.5	7.5	13.1	18.4	5		83		<0.2				1.8			
					Middle	4.4	0.4	46	25.2	25.2	8.2	8.2	30.4	30.4	108.9	109.0	7.5	7.5	16.3	18.4	10	14	85	86			<0.2	<0.2	1.3		
						4.4	0.5	48	25.2	25.2	8.2	8.2	30.5	30.5	109.0	109.0	7.5	7.5	16.8	18.4	12		86				<0.2	<0.2	1.3		
					Bottom	7.7	0.4	42	25.2	25.2	8.2	8.2	30.5	30.5	107.2	107.1	7.4	7.4	25.4	18.4	24		88				<0.2	<0.2	1.2		
						7.7	0.5	43	25.2	25.2	8.2	8.2	30.5	30.5	106.9	107.1	7.4	7.4	25.3	18.4	26		88				<0.2	<0.2	1.4		
C2	Sunny	Moderate	09:25	13.5	Surface	1.0	0.5	354	26.0	26.0	7.8	7.8	21.6	21.6	87.5	87.5	6.3	6.3	3.8	6.2	5	5	83	87	825663	806974	<0.2	<0.2	4.0	3.5	
						1.0	0.5	326	26.0	26.0	7.8	7.8	21.6	21.6	87.4	87.5	6.3	6.3	3.8	6.2	5		83				<0.2	<0.2	3.6		
					Middle	6.8	0.6	348	25.9	25.9	7.8	7.8	24.8	24.9	86.8	86.8	6.1	6.1	4.0	6.2	6	5	88	88			<0.2	<0.2	3.4		
						6.8	0.7	320	25.9	25.9	7.8	7.8	24.9	24.9	86.7	86.8	6.1	6.1	3.8	6.2	5		88				<0.2	<0.2	3.2		
					Bottom	12.5	0.5	354	25.8	25.8	7.8	7.8	25.3	25.3	86.4	86.4	6.1	6.1	10.8	6.2	6	5	91	91			<0.2	<0.2	3.4		
						12.5	0.5	326	25.8	25.8	7.8	7.8	25.3	25.3	86.5	86.5	6.1	6.1	10.9	6.2	4		91				<0.2	<0.2	3.5		
C3	Cloudy	Moderate	07:36	11.6	Surface	1.0	0.4	264	25.9	25.9	7.9	7.9	26.2	26.2	91.8	91.8	6.4	6.4	3.0	4.7	6	5	84	88	822121	817827	<0.2	<0.2	2.0	2.4	
						1.0	0.4	273	25.9	25.9	7.9	7.9	26.2	26.2	91.8	91.8	6.4	6.4	3.0	4.7	4		84				<0.2	<0.2	2.4		
					Middle	5.8	0.6	269	25.4	25.4	7.9	7.9	28.3	28.3	90.0	90.0	6.3	6.3	4.3	4.7	6	5	88	88			<0.2	<0.2	2.7		
						5.8	0.6	277	25.4	25.4	7.9	7.9	28.4	28.3	89.9	90.0	6.3	6.3	4.8	4.7	4		89				<0.2	<0.2	2.3		
					Bottom	10.6	0.6	272	25.2	25.2	7.9	7.9	29.0	29.0	89.6	89.6	6.3	6.3	6.5	4.7	6	5	91	91			<0.2	<0.2	2.2		
						10.6	0.6	275	25.2	25.2	7.9	7.9	29.0	29.0	89.6	89.6	6.3	6.3	6.3	4.7	6		91				<0.2	<0.2	2.9		
IM1	Cloudy	Moderate	09:04	7.8	Surface	1.0	0.5	12	26.0	26.0	8.1	8.1	26.4	26.4	105.8	105.8	7.4	7.4	10.6	15.1	5	6	84	86	818332	806460	<0.2	<0.2	1.8	1.9	
						1.0	0.6	12	26.0	26.0	8.1	8.1	26.5	26.4	105.7	105.8	7.4	7.4	10.7	15.1	6		84				<0.2	<0.2	1.8		
					Middle	3.9	0.5	9	25.9	25.9	8.1	8.1	27.0	27.0	105.5	105.6	7.4	7.4	12.1	15.1	5	6	86	86			<0.2	<0.2	1.8		
						3.9	0.5	9	25.9	25.9	8.1	8.1	27.0	27.0	105.6	105.6	7.4	7.4	12.5	15.1	6		86				<0.2	<0.2	1.8		
					Bottom	6.8	0.4	352	25.8	25.8	8.1	8.1	28.5	28.5	105.8	105.8	7.3	7.3	22.4	15.1	8	6	88	88			<0.2	<0.2	1.8		
						6.8	0.4	324	25.8	25.8	8.1	8.1	28.5	28.5	105.7	105.8	7.3	7.3	22.4	15.1	6		88				<0.2	<0.2	2.2		
IM2	Cloudy	Moderate	09:09	8.6	Surface	1.0	0.5	16	26.0	26.0	8.1	8.1	26.4	26.4	104.3	104.3	7.3	7.3	11.1	16.5	4	6	84	86	818823	806205	<0.2	<0.2	1.9	1.8	
						1.0	0.5	16	26.0	26.0	8.1	8.1	26.4	26.4	104.3	104.3	7.3	7.3	11.2	16.5	3		84				<0.2	<0.2	1.9		
					Middle	4.3	0.6	12	26.0	26.0	8.1	8.1	26.5	26.5	104.6	104.7	7.3	7.3	16.1	16.5	5	6	85	86			<0.2	<0.2	1.9		
						4.3	0.6	12	26.0	26.0	8.1	8.1	26.5	26.5	104.7	104.7	7.3	7.3	16.1	16.5	5		86				<0.2	<0.2	1.9		
					Bottom	7.6	0.5	8	25.8	25.8	8.1	8.1	28.5	28.5	104.7	104.7	7.3	7.3	22.4	16.5	8	6	87	88			<0.2	<0.2	1.6		
						7.6	0.5	8	25.8	25.8	8.1	8.1	28.5	28.5	104.6	104.6	7.3	7.3	22.2	16.5	9		88				<0.2	<0.2	1.8		
IM3	Cloudy	Moderate	09:14	8.7	Surface	1.0	0.6	18	26.0	26.0	8.1	8.1	26.0	26.0	104.6	104.6	7.3	7.3	10.1	14.3	4	5	83	86	819409	806042	<0.2	<0.2	1.9	1.8	
						1.0	0.6	18	26.0	26.0	8.1	8.1	26.0	26.0	104.6	104.6	7.3	7.3	10.2	14.3	3		84				<0.2	<0.2	2.0		
					Middle	4.4	0.7	21	25.8	25.8	8.1	8.1	26.4	26.4	105.3	105.4	7.4	7.4	12.6	14.3	5	5	86	86			<0.2	<0.2	2.0		
						4.4	0.7	21	25.8	25.8	8.1	8.1	26.4	26.4	105.4	105.4	7.4	7.4	12.2	14.3	6		86				<0.2	<0.2	1.8		
					Bottom	7.7	0.5	16	25.7	25.7	8.1	8.1	28.2	28.2	104.7	104.7	7.3	7.3	20.3	14.3	5	5	88	88			<0.2	<0.2	1.6		
						7.7	0.5	16	25.7	25.7	8.1	8.1	28.2	28.2	104.7	104.7	7.3	7.3	20.2	14.3	6		88				<0.2	<0.2	1.6		
IM4	Cloudy	Moderate	09:21	8.2	Surface	1.0	0.5	3	25.9	25.9	8.1	8.1	26.3	26.3	108.0	108.1	7.6	7.6	10.2	16.0	5	8	84	86	819543	805046	<0.2	<0.2	1.9	1.6	
						1.0	0.6	3	25.9	25.9	8.1	8.1	26.3	26.3	108.2	108.1	7.6	7.6	10.4	16.0	5		85				<0.2	<0.2	1.8		
					Middle	4.1	0.6	7	25.7	25.7	8.2	8.2	28.2	28.3	108.9	108.9	7.6	7.6	15.8	16.0	5	8	86	86			<0.2	<0.2	1.6		
						4.1	0.7	7	25.7	25.7	8.2	8.2	28.3	28.3	108.8	108.8	7.6	7.6	16.1	16.0	6		86				<0.2	<0.2	1.6		
					Bottom	7.2	0.6	12	25.6	25.6	8.2	8.2	29.2	29.2	105.7	105.7	7.3	7.3	21.8	15.8	11	7	88	88			<0.2	<0.2	1.2		
						7.2	0.6	12	25.6	25.6	8.2	8.2	29.2	29.2	105.7	105.7	7.3	7.3	21.9	15.8	13		88				<0.2	<0.2	1.2		
IM5	Cloudy	Moderate	09:32	7.5	Surface	1.0	0.8	6	26.0	26.0	8.1	8.1	26.4	26.4	107.2	107.2	7.5	7.5	10.0	15.8	7	7	86	86	820583	804948	<0.2	<0.2	2.0	1.8	
						1.0	0.9	6	26.0	26.0	8.1	8.1	26.4	26.4	107.2	107.1	7.5	7.5	10.3	15.8	6		86				<0.2	<0.2	1.9		
					Middle	3.8	0.9	8	25.9	25.9	8.1	8.1	26.8	26.8	107.1	107.1	7.5	7.5	14.9	15.8	5	7	88	88			<0.2	<0.2	1.8		
						3.8	0.9	8	25.9	25.9	8.1	8.1	26.9	26.8	107.1	107.1	7.5	7.5	15.2	15.8	7		88				<0.2	<0.2	1.7		
					Bottom	6.5	0.7	5	25.6	25.6	8.2	8.2	29.0	28.9	105.5	105.5	7.3	7.3	22.1	15.8	8	7	90	90			<0.2	<0.2	1.7		
						6.5	0.7	5	25.6	25.6	8.2	8.2	28.9	28.9	105.5	105.5	7.3	7.3	22.2	15.8	7		90				<0.2	<0.2	1.6		
IM6	Cloudy	Moderate	09:39	7.4	Surface	1.0	0.3	17	26.1	26.1	8.1	8.1	26.3	26.3	105.0	105.1	7.3	7.3	14.2	19.2	11	12	85	87	821032	805847	<0.2	<0.2	1.8	1.7	
						1.0	0.3	18	26.1	26.1	8.1	8.1	26.4	26.3	105.1	105.1	7.3	7.3	14.3	19.2	10		85				<0.2	<0.2	1.7		
					Middle	3.7	0.3	28	25.9	25.9	8.1	8.1	27.2	27.2	104.5	104.5	7.3	7.3	19.8	19.2	10	12	88	88			<0.2	<0.2	1.8		
						3.7	0.3	30	25.9	25.9	8.1	8.1	27.2	27.2	104.5	104.5	7.3	7.3	19.8	19.2	10		88				<0.2	<0.2	1.6		
					Bottom	6.4	0.3	33	25.9	25.9	8.1	8.1	27.4	27.3	103.7	103.7	7.2	7.2	23.6	19.2	14	12	89	89			<0.2	<0.2	1.5		
						6.4	0.3	36	25.9	25.9	8.1	8.1	27.3	27.3	103.7	103.7	7.2	7.2	23.6	19.2	16		89				<0.2	<0.2	1.5		
IM7	Cloudy	Moderate	09:46	8.7	Surface	1.0	0.5	17	26.0	26.0	8.1	8.1	27.2	27.2	106.5	106.4	7.4	7.4	18.5	21.2	14	19	86	88	821355	806828	<0.2	<0.2	1.6	1.6	
						1.0	0.6	18	26.0	26.0	8.1	8.1	27.2	27.3	106.3	106.6	7.4	7.4	18.7	21.2	13		86				<0.2	<0.2	1.5		
					Middle	4.4	0.4	22	26.0	26.0	8.1	8.1	27.3	27.3	105.6	105.6	7.4	7.4	20.4	21.2	21	19	88	88			<0.2	<0.2	1.5		
						4.4	0.5	22	26.0	26.0	8.1	8.1	27.3	27.3	105.5	105.6	7.4	7.4	20.5	21.2	21		88				<0.2	<0.2	1.4		

### Water Quality Monitoring Results on

during Mid-Flood Tide

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

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

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

**Water Quality Monitoring**

**Water Quality Monitoring Results on 05 May 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	Average	DA	Value	DA	
C1	Fine	Moderate	15:40	8.6	Surface	1.0	0.5	241	25.8	25.8	8.3	8.3	29.6	29.6	119.6	119.6	8.2		10.3		4		86		815591	804260	<0.2	<0.2		1.4		
						1.0	0.5	254	25.8		8.3		29.6		119.6	8.2		10.3		5		85		<0.2			<0.2		1.4			
					Middle	4.3	0.5	219	25.1	25.1	8.2	8.2	31.3	31.3	106.1	106.1	7.3	7.8	20.0	18.4	5	10	88	88			<0.2	<0.2	<0.2	1.4	1.4	
						4.3	0.5	239	25.1		8.2		31.3		106.1	7.3	20.0			7		88		<0.2			<0.2		1.4	1.4		
					Bottom	7.6	0.4	206	25.0	25.0	8.2	8.2	31.5	31.5	107.0	7.4	7.4	25.0	20	90	90		<0.2	<0.2				1.0	1.0			
						7.6	0.4	210	25.0		8.2		31.5		107.0	7.4	25.0			20	90	90		<0.2			<0.2		1.0	1.0		
C2	Sunny	Moderate	14:34	12.1	Surface	1.0	0.4	204	26.2	26.2	7.9	7.9	25.6	25.6	97.7	97.7	6.8		6.6		6		85		825661	806970	<0.2	<0.2		3.2		
						1.0	0.5	216	26.2		7.9		25.6		97.7	6.8	6.7			6		86		<0.2			<0.2		2.9			
					Middle	6.1	0.5	162	25.5	25.5	7.9	7.9	27.0	27.0	91.8	91.8	6.5	6.6	8.1	7.9	6	6	88	88			<0.2	<0.2	<0.2	3.0	3.0	
						6.1	0.6	162	25.5		7.9		27.0		91.7	6.4	8.0			5		88		<0.2			<0.2		3.0	3.0		
					Bottom	11.1	0.3	143	25.2	25.2	7.9	7.9	29.5	29.5	88.8	88.8	6.2	6.2	8.9	6.2	8.9	7	90	90				<0.2	<0.2		2.9	2.9
						11.1	0.3	145	25.2		7.9		29.5		88.9	88.9	6.2		8.9		7		90				<0.2	<0.2		2.9	2.9	
C3	Sunny	Moderate	16:35	12.0	Surface	1.0	0.1	92	25.4	25.4	8.0	8.0	29.3	29.3	100.0	100.0	7.0		4.7		4		86		822129	817775	<0.2	<0.2		1.5		
						1.0	0.2	95	25.4		8.0		29.3		100.0	7.0	4.7			2		85		<0.2			<0.2		1.6			
					Middle	6.0	0.2	94	25.4	25.4	8.0	8.0	29.4	29.4	99.5	99.5	6.9	7.0	4.4	5.5	3	3	88	88			<0.2	<0.2	<0.2	1.6	1.6	
						6.0	0.2	99	25.4		8.0		29.4		99.5	6.9	4.4			2		87		<0.2			<0.2		1.7	1.7		
					Bottom	11.0	0.2	50	25.1		8.0		30.1		94.7	6.6	7.4			4		90		<0.2			<0.2		1.7	1.7		
						11.0	0.2	51	25.1	25.1	8.0	8.0	30.1	30.1	94.6	94.7	6.6	6.6	7.3	5	90	90		<0.2			<0.2		1.5	1.5		
IM1	Fine	Moderate	15:21	7.6	Surface	1.0	0.3	205	25.8	25.8	8.3	8.3	29.7	29.7	119.6	119.6	8.2		9.4		3		86		818332	806464	<0.2	<0.2		1.3		
						1.0	0.3	206	25.8		8.3		29.7		119.6	8.2		9.4		5		85		<0.2			<0.2		1.4			
					Middle	3.8	0.3	182	25.4	25.4	8.3	8.3	30.2	30.2	112.8	112.8	7.8	8.0	11.5	11.2	6	5	88	88			<0.2	<0.2	<0.2	1.2	1.4	
						3.8	0.3	186	25.4		8.3		30.2		112.8	7.8	11.5			4		88		<0.2			<0.2		1.2	1.2		
					Bottom	6.6	0.4	181	25.2	25.2	8.2	8.2	30.8	30.8	114.3	114.3	7.9	7.9	12.8	7.9	6	90	90				<0.2	<0.2		1.1	1.3	
						6.6	0.4	197	25.2		8.2		30.8		114.3	7.9	12.8			7		90		<0.2			<0.2		1.3	1.3		
IM2	Fine	Moderate	15:15	8.9	Surface	1.0	0.3	216	25.7	25.7	8.3	8.3	29.8	29.8	119.0	119.0	8.2		9.3		5		86		818874	806185	<0.2	<0.2		1.2		
						1.0	0.4	222	25.7		8.3		29.8		118.9	8.2	9.4			6		85		<0.2			<0.2		1.3	1.3		
					Middle	4.5	0.3	200	25.5	25.5	8.3	8.3	29.9	29.9	115.0	115.0	8.0	9.5	9.5	9.5	6	5	88	88			<0.2	<0.2	<0.2	1.3	1.3	
						4.5	0.3	213	25.5		8.3		29.9		115.0	8.0	9.5			4		88		<0.2			<0.2		1.4	1.4		
					Bottom	7.9	0.3	177	25.4	25.4	8.2	8.2	30.3	30.3	114.6	114.6	7.9	7.9	9.6	7.9	5	90	90				<0.2	<0.2		1.3	1.3	
						7.9	0.3	191	25.4		8.2		30.3		114.6	7.9	9.6			6		90		<0.2			<0.2		1.3	1.3		
IM3	Fine	Moderate	15:08	8.6	Surface	1.0	0.2	229	25.7	25.7	8.3	8.3	29.8	29.8	120.4	120.3	8.3		9.6		3		86		819417	806032	<0.2	<0.2		1.3		
						1.0	0.2	249	25.7		8.3		29.8		120.2	8.3	9.7			5		85		<0.2			<0.2		1.3	1.3		
					Middle	4.3	0.3	211	25.5	25.5	8.3	8.3	30.0	30.0	116.0	116.0	8.0	8.2	10.9	10.6	5	6	88	88			<0.2	<0.2	<0.2	1.5	1.3	
						4.3	0.3	221	25.5		8.3		30.0		116.0	8.0	10.9			6		88		<0.2			<0.2		1.3	1.3		
					Bottom	7.6	0.3	191	25.4	25.4	8.2	8.2	30.2	30.2	116.6	116.6	8.1	8.1	11.3		7	90	90				<0.2	<0.2		1.3	1.3	
						7.6	0.3	210	25.4		8.2		30.2		116.6	8.1	11.3			8		90		<0.2			<0.2		1.3	1.3		
IM4	Fine	Moderate	15:00	8.1	Surface	1.0	0.2	216	25.7	25.7	8.3	8.3	29.7	29.7	114.6	114.6	7.9		11.7		4		85		819568	805065	<0.2	<0.2		1.5		
						1.0	0.2	226	25.7		8.3		29.7		114.6	7.9	11.7			5		86		<0.2			<0.2		1.5	1.5		
					Middle	4.1	0.4	193	25.3	25.3	8.2	8.2	30.5	30.5	111.0	111.0	7.7	7.8	14.7	14.2	5	7	88	88			<0.2	<0.2	<0.2	1.3	1.3	
						4.1	0.4	211	25.3		8.2		30.5		111.0	7.7	14.7			5		88		<0.2			<0.2		1.2	1.2		
					Bottom	7.1	0.3	204	25.2	25.2	8.2	8.2	30.8	30.8	113.1	113.1	7.8	7.8	16.2	7.8	10	90	90				<0.2	<0.2		1.0	1.0	
						7.1	0.3	218	25.2		8.2		30.8		113.1	7.8	16.2			10		90		<0.2			<0.2		1.0	1.0		
IM5	Fine	Moderate	14:51	7.5	Surface	1.0	0.2	222	25.7	25.7	8.2	8.2	29.3	29.3	115.0	115.0	7.9		11.0		6		86		820590	804902	<0.2	<0.2		1.5		
						1.0	0.2	241	25.7		8.2		29.3		115.0	7.9	11.0			7		86		<0.2			<0.2		1.4	1.4		
					Middle	3.8	0.2	182	25.3	25.3	8.2	8.2	30.0	30.0	108.4	108.4	7.5	7.7	14.1	13.0	5	7	88	88			<0.2	<0.2	<0.2	1.5	1.5	
						3.8	0.2	189	25.3		8.2		30.0		108.4	7.5	14.1			6		88		<0.2			<0.2		1.4	1.4		
					Bottom	6.5	0.2	184	25.3	25.3	8.2	8.2	30.5	30.5	111.7	111.7	7.7	7.7	13.9	7.7	8	91	90				<0.2	<0.2		1.4	1.4	
						6.5	0.2	201	25.3		8.2		30.5		111.7	7.7	13.9			8		90		<0.2			<0.2		1.3	1.3		
IM6	Fine	Moderate	14:42	7.2	Surface	1.0	0.3	222	25.9	25.9	8.3	8.3	29.5	29.5	121.7	121.7	8.4		11.2		6		86		821081	805850	<0.2	<0.2		1.4		
						1.0	0.3	234	25.9		8.3		29.5		121.7	8.4	11.2			4		86		<0.2			<0.2		1.4	1.4		
					Middle	3.6	0.2	211	25.6	25.6	8.2	8.2	29.6	29.6	114.8	114.8	7.9	8.2	15.5	14.6	5	6	88	88			<0.2	<0.2	<0.2	1.5	1.4	
						3.6	0.2	218	25.6		8.2		29.6		114.8	7.9	15.5			7		88		<0.2			<0.2		1.4	1.4		
					Bottom	6.2	0.2	221	25.4	25.4	8.2	8.2	30.3	30.3	116.0	116.0	8.0	8.0	17.1	8.0	6	90	90				<0.2	<0.2		1.4	1.4	
						6.2	0.2	233	25.4		8.2		30.3		116.0	8.0	17.1			6		91		<0.2			<0.2		1.5	1.5		
IM7	Fine	Moderate	14:35	8.8	Surface	1.0	0.2	204	26.1	26.1	8.2	8.2	27.1	27.1	114.4	114.4	8.0		9.8		4		88		821349	806851	<0.2	<0.2		2.3		
						1.0	0.2	206	26.1		8.2		27.1		114.4	8.0	9.9			3		85		<0.2			<0.2		2.3	2.3		
					Middle	4.4	0.2	111	25.6	25.6	8.2	8.2	29.9	29.9	112.0	112.0	7.7	7.9	13.7	13.3	8	7	88	87			<0.2	<0.2	<0.2	1.5	1.6	
						4.4	0.3	118	25.6		8.2		29.9		112.0	7.7	13.7			8		87		<0.2			<0.2		1.6	1.6		
					Bottom	7.8	0.2	156	25.3	25.3	8.2	8.2	30.2	30.2	111.0	111.0	7.7	7.7	16.4	7.7	8	90	90				<0.2	<0.2		1.4	1.4	
						7.8	0.2	166	25.3		8.2		30.2		111.0	7.7	16.4			10		90		<0.2			<0.2		1.5	1.5		
IM8	Sunny	Moderate	14:59	8.7	Surface	1.0	0.2	207	26.1	26.1	8.0	8.0	26.3	26.3	107.5	107.6	7.5		4.3		4		86		821710	807853	<0.2	<0.2		3.7	</	

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

**Water Quality Monitoring**

**Water Quality Monitoring Results on 05 May 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	Average	DA	Value	DA					
IM9	Sunny	Moderate	15:08	7.3	Surface	1.0	0.3	155	25.8	25.8	8.0	8.0	27.6	27.6	102.2	102.2	7.1	7.1			4		86		822115	808781	<0.2	<0.2		2.5	2.4					
						1.0	0.3	165	25.8		8.0	8.0	27.6	27.6	102.2	102.2	7.1	7.2			4		86				<0.2	<0.2		2.3						
					Middle	3.7	0.3	144	25.5	25.5	8.1	8.1	28.1	28.2	103.4	103.5	7.2	7.5	7.8	7.8	4	4	88	88			<0.2	<0.2	<0.2	2.8						
						3.7	0.3	148	25.5		8.1	8.1	28.2	28.2	103.5	103.5	7.2	7.5			3		88				<0.2	<0.2		2.4						
					Bottom	6.3	0.2	85	25.5	25.5	8.1	8.1	29.2	29.2	108.8	108.8	7.6	8.8	7.6	7.6	4	4	90	90			<0.2	<0.2		2.2						
						6.3	0.2	86	25.5		8.1	8.1	29.2	29.2	108.7	108.7	7.6	8.7			4		91				<0.2	<0.2		2.3						
IM10	Sunny	Moderate	15:18	7.7	Surface	1.0	0.5	140	26.2	26.2	8.0	8.0	26.4	26.4	103.4	103.4	7.2	4.7			4		85		822224	809829	<0.2	<0.2		2.6	2.6					
						1.0	0.6	142	26.2		8.0	8.0	26.4	26.4	103.4	103.4	7.2	4.7			4		86				<0.2	<0.2		2.5						
					Middle	3.9	0.5	118	25.7	25.7	8.0	8.0	27.5	27.5	101.1	101.2	7.1	7.3	8.1	8.1	4	4	88	88			<0.2	<0.2	<0.2	2.6						
						3.9	0.5	127	25.7		8.0	8.0	27.5	27.5	101.2	101.2	7.1	7.3			4		88				<0.2	<0.2		2.6						
					Bottom	6.7	0.4	88	25.5	25.5	8.1	8.1	28.8	28.8	105.5	105.5	7.3	12.2	7.3	7.3	3	3	90	90			<0.2	<0.2		2.6						
						6.7	0.4	89	25.5		8.1	8.1	28.8	28.8	105.5	105.5	7.3	12.2			3		90				<0.2	<0.2		2.5						
IM11	Sunny	Moderate	15:33	6.5	Surface	1.0	0.3	112	25.9	25.9	8.1	8.1	27.6	27.7	113.7	113.7	7.9	6.5			4		86		821493	810532	<0.2	<0.2		2.7	2.7					
						1.0	0.3	121	25.9		8.1	8.1	27.7	27.7	113.6	113.6	7.9	6.5			4		86				<0.2	<0.2		2.7						
					Middle	3.3	0.3	100	25.8	25.8	8.1	8.1	28.1	28.1	112.3	112.3	7.8	6.9	8.2	8.2	5	5	88	88			<0.2	<0.2	<0.2	2.8						
						3.3	0.4	103	25.8		8.1	8.1	28.1	28.1	112.2	112.2	7.8	7.1			6		88				<0.2	<0.2		2.6						
					Bottom	5.5	0.3	75	25.6	25.6	8.2	8.2	28.8	28.8	110.1	110.1	7.6	11.2	7.6	7.6	5	5	90	90			<0.2	<0.2		2.7						
						5.5	0.3	80	25.6		8.2	8.2	28.8	28.8	110.1	110.1	7.6	11.4			6		90				<0.2	<0.2		2.5						
IM12	Sunny	Moderate	15:41	8.9	Surface	1.0	0.4	122	26.0	26.0	8.1	8.1	27.5	27.6	111.7	111.7	7.8	5.2			5		85		821158	811503	<0.2	<0.2		2.4	2.5					
						1.0	0.4	127	26.0		8.1	8.1	27.6	27.6	111.6	111.6	7.8	5.5			5		86				<0.2	<0.2		2.4						
					Middle	4.5	0.3	100	25.9	25.9	8.1	8.1	28.0	28.0	110.0	110.0	7.6	6.4	7.3	7.3	4	4	88	88			<0.2	<0.2	<0.2	2.4						
						4.5	0.4	102	25.8		8.1	8.1	28.0	28.0	109.9	109.9	7.6	6.5			2		88				<0.2	<0.2		2.6						
					Bottom	7.9	0.3	74	25.8	25.8	8.1	8.1	28.8	28.8	108.3	108.3	7.5	10.1	7.5	7.5	8	8	90	90			<0.2	<0.2		2.5						
						7.9	0.3	77	25.8		8.1	8.1	28.8	28.8	108.3	108.3	7.5	10.2			6		91				<0.2	<0.2		2.5						
SR2	Sunny	Moderate	16:15	4.6	Surface	1.0	0.5	92	25.9	25.9	8.1	8.1	27.8	27.8	108.4	108.4	7.5	5.2			5		86		821452	814139	<0.2	<0.2		2.5	2.4					
						1.0	0.5	92	25.9		8.1	8.1	27.8	27.8	108.3	108.3	7.5	5.1			4		86				<0.2	<0.2		2.5						
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-	-		-	-	-		
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-	-		-	-	-		
					Bottom	3.6	0.4	89	25.6	25.6	8.1	8.1	28.4	28.4	101.4	101.5	7.1	11.4	7.1	7.1	5	5	88	88			<0.2	<0.2		2.3						
						3.6	0.4	90	25.6		8.1	8.1	28.4	28.4	101.5	101.5	7.1	11.2			5		88				<0.2	<0.2		2.4						
SR3	Sunny	Moderate	14:54	9.2	Surface	1.0	0.4	205	26.0	26.0	8.0	8.0	26.7	26.7	104.3	104.3	7.3	5.0			6		-	-	822142	807554	-	-		-	-					
						1.0	0.4	220	26.0		8.0	8.0	26.7	26.7	104.3	104.3	7.3	5.1			5		-	-			-	-		-						
					Middle	4.6	0.2	196	25.4	25.4	8.0	8.0	28.2	28.2	101.7	101.8	7.1	8.5	7.9	7.9	5	5	-	-			-	-	-	-		-	-			
						4.6	0.2	208	25.4		8.0	8.0	28.2	28.2	101.9	101.9	7.1	8.5			5		-	-			-	-	-	-		-	-			
					Bottom	8.2	0.2	39	25.4	25.4	8.1	8.1	29.4	29.4	105.8	105.8	7.4	10.3	7.4	7.4	6	6	-	-			-	-	-	-		-	-	-	-	
						8.2	0.2	41	25.4		8.1	8.1	29.5	29.4	105.8	105.8	7.4	10.2			4		-	-			-	-	-	-		-	-	-	-	
SR4A	Cloudy	Calm	16:00	8.4	Surface	1.0	0.1	84	26.1	26.1	8.3	8.3	29.9	29.9	120.5	120.5	8.3	11.6			7		-	-	817208	807784	-	-		-	-					
						1.0	0.1	91	26.1		8.3	8.3	29.9	29.9	120.5	120.5	8.3	11.6			8		-	-			-	-		-						
					Middle	4.2	0.1	64	25.6	25.6	8.3	8.3	30.1	30.1	112.4	112.4	7.7	14.4	14.1	14.1	10	10	-	-			-	-	-	-		-	-			
						4.2	0.1	67	25.6		8.3	8.3	30.1	30.1	112.4	112.4	7.7	14.4			8		-	-			-	-	-	-		-	-			
					Bottom	7.4	0.2	68	25.3	25.3	8.2	8.2	30.4	30.4	111.7	111.7	7.7	16.2	7.7	7.7	12	12	-	-			-	-	-	-		-	-	-	-	
						7.4	0.2	71	25.3		8.2	8.2	30.4	30.4	111.7	111.7	7.7	16.2			14		-	-			-	-	-	-		-	-	-	-	
SR5A	Cloudy	Calm	16:16	3.7	Surface	1.0	0.1	17	25.9	25.9	8.2	8.2	28.7	28.7	110.6	110.6	7.6	9.9			6		-	-	816587	810702	-	-		-	-					
						1.0	0.1	17	25.9		8.2	8.2	28.7	28.7	110.6	110.6	7.6	9.9			6		-	-			-	-		-						
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-	-		-	-	-		
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-	-		-	-	-		
					Bottom	2.7	0.0	317	25.5	25.5	8.2	8.2	29.3	29.3	110.8	110.8	7.7	13.0	7.7	7.7	8	8	-	-			-	-	-	-		-	-	-	-	
						2.7	0.0	331	25.5		8.2	8.2	29.3	29.3	110.8	110.8	7.7	13.0			6		-	-			-	-	-	-		-	-	-	-	
SR6	Cloudy	Calm	16:38	4.0	Surface	1.0	0.1	28	26.0	26.0	8.2	8.2	28.3	28.3	114.0	114.0	7.9	10.1			8		-	-	817925	814644	-	-		-	-					
						1.0	0.1	29	26.0		8.2	8.2	28.3	28.3	114.0	114.0	7.9	10.1			7		-	-			-	-		-						
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-	-		-	-	-		
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-	-		-	-	-		
					Bottom	3.0	0.1	76	25.8	25.8	8.2	8.2	28.3	28.3	112.7	112.7	7.8	9.4	7.8	7.8	7	7	-	-			-	-	-	-		-	-	-	-	
						3.0	0.1	83	25.9		8.2	8.2	28.3	28.3	112.9	112.8	7.8	9.6			8		-	-			-	-	-	-		-	-	-	-	
SR7	Sunny	Moderate	17:07	18.6	Surface	1.0	0.6	82	25.5	25.5	8.0	8.0	29.2	29.2	104.6	104.5	7.3	3.8			3		-	-	823642	823722	-	-		-	-					
						1.0	0.7	87	25.5		8.0	8.0	29.2	29.2	104.4	104.4	7.2	3.8			3		-	-			-	-		-						
					Middle	9.3	0.3	61	25.2	25.2	8.0	8.0	30.4	30.4	100.7	100.7	7.0	4.1	4.4	4.4	4	4	-	-			-	-	-	-		-	-			
						9.3	0.3	66	25.2		8.0	8.0	30.4	30.4	100.7	100.7	7.0	4.2			5		-	-			-	-	-	-		-	-	-		
					Bottom	17.6	0.2	89	25.2	25.2	8.0	8.0	30.4	30.4	100.5	100.5	7.0	5.2	7.0	7.0	3	3	-	-			-	-	-	-		-	-	-	-	
						17.6	0.2	97	25.2		8.0	8.0	30.4	30.4	100.5	100.5	7.0	5.1			4		-	-			-	-	-	-		-	-	-	-	
SR8	Sunny	Moderate	15:54	3.8	Surface	1.0	-	-	26.2	26.2	8.1	8.1	28.1	28.1	111.1	111.1	7.7	6.4			7		-	-	820246	811418	-	-		-	-					
						1.0	-	-	26.2																											

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

## Water Quality Monitoring

## Water Quality Monitoring Results on 05 May 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	DA
C1	Fine	Moderate	09:29	9.4	Surface	1.0	0.2	30	25.4	25.4	8.2	8.2	29.7	29.7	109.5	109.5	7.6	7.6	11.4	11.4	8	8	86	86	815630	804245	<0.2	<0.2		1.4	
						1.0	0.2	30	25.4	8.2	8.2	29.7	29.7	109.5	109.5	7.6	7.6	11.4	11.4	8	8	86	86	<0.2			<0.2	1.3			
					Middle	4.7	0.3	49	25.1	25.1	8.2	8.2	30.8	30.8	104.8	104.8	7.3	7.3	13.5	13.5	21	21	88	88			<0.2	<0.2	<0.2	1.1	
						4.7	0.3	53	25.1	25.1	8.2	8.2	30.8	30.8	104.8	104.8	7.3	7.2	13.3	13.3	20	20	88	90			<0.2	<0.2	<0.2	1.0	
					Bottom	8.4	0.3	44	25.0	25.0	8.2	8.2	30.9	30.9	104.1	104.1	7.2	7.2	15.7	15.7	22	22	90	90			<0.2	<0.2	<0.2	1.1	
						8.4	0.3	44	25.0	25.0	8.2	8.2	30.9	30.9	104.1	104.1	7.2	7.2	15.7	15.7	22	22	90	90			<0.2	<0.2	<0.2	1.1	
C2	Fine	Moderate	10:36	12.4	Surface	1.0	0.5	317	26.0	26.0	7.9	7.9	25.7	25.7	87.1	87.1	6.2	6.2	5.5	5.5	3	3	86	86	825694	806951	<0.2	<0.2		2.5	
						1.0	0.5	322	26.0	26.0	7.9	7.9	25.7	25.7	87.1	87.1	6.2	6.2	5.5	5.5	3	3	85	88			<0.2	<0.2	2.5		
					Middle	6.2	0.6	348	25.5	25.5	7.9	7.9	26.2	26.2	84.0	84.0	6.0	6.0	4.5	4.5	4	4	88	88			<0.2	<0.2	<0.2	2.7	
						6.2	0.6	320	25.5	25.5	7.9	7.9	26.2	26.2	83.9	83.9	6.0	6.0	4.5	4.5	2	4	88	89			<0.2	<0.2	<0.2	2.6	
					Bottom	11.4	0.5	355	25.4	25.4	8.0	8.0	27.6	27.6	83.6	83.6	6.0	6.0	8.3	8.3	4	5	89	90			<0.2	<0.2	<0.2	2.6	
						11.4	0.6	327	25.4	25.4	8.0	8.0	27.6	27.6	83.6	83.6	6.0	6.0	8.5	8.5	5	5	90	90			<0.2	<0.2	<0.2	2.8	
C3	Fine	Moderate	08:27	11.9	Surface	1.0	0.4	284	25.2	25.2	8.0	8.0	28.3	28.3	97.1	97.1	6.8	6.8	4.2	4.2	3	3	85	85	822116	817786	<0.2	<0.2		1.5	
						1.0	0.4	286	25.2	25.2	8.0	8.0	28.3	28.3	97.0	97.0	6.8	6.8	4.3	4.3	3	3	85	87			<0.2	<0.2	1.3		
					Middle	6.0	0.3	259	25.0	25.0	8.0	8.0	29.9	30.0	92.6	92.6	6.5	6.5	3.7	3.7	2	3	87	87			<0.2	<0.2	<0.2	1.3	
						6.0	0.3	269	25.0	25.0	8.0	8.0	30.0	30.0	92.5	92.5	6.4	6.4	3.7	3.7	3	3	87	89			<0.2	<0.2	<0.2	2.2	
					Bottom	10.9	0.3	271	25.0	25.0	8.0	8.0	30.4	30.4	91.5	91.5	6.4	6.4	4.5	4.5	5	5	89	89			<0.2	<0.2	<0.2	2.0	
						10.9	0.3	273	25.0	25.0	8.0	8.0	30.3	30.3	91.6	91.6	6.4	6.4	4.6	4.6	4	4	89	89			<0.2	<0.2	<0.2	2.0	
IM1	Fine	Moderate	09:47	7.5	Surface	1.0	0.3	330	25.3	25.3	8.2	8.2	29.9	29.9	108.2	108.2	7.5	7.5	10.3	10.3	6	6	86	86	818362	806482	<0.2	<0.2		0.8	
						1.0	0.4	351	25.3	25.3	8.2	8.2	29.9	29.9	108.2	108.2	7.5	7.5	10.3	10.3	7	7	86	88			<0.2	<0.2	0.7		
					Middle	3.8	0.4	6	25.2	25.2	8.2	8.2	30.0	30.0	106.9	106.9	7.4	7.4	11.1	11.1	5	5	88	88			<0.2	<0.2	<0.2	0.8	
						3.8	0.5	6	25.2	25.2	8.2	8.2	30.0	30.0	106.9	106.9	7.4	7.4	11.1	11.1	7	7	88	90			<0.2	<0.2	0.8		
					Bottom	6.5	0.4	10	25.2	25.2	8.2	8.2	30.0	30.0	106.5	106.5	7.4	7.4	10.7	10.7	8	10	90	91			<0.2	<0.2	<0.2	0.8	
						6.5	0.4	10	25.2	25.2	8.2	8.2	30.0	30.0	106.5	106.5	7.4	7.4	10.7	10.7	10	10	91	91			<0.2	<0.2	<0.2	0.8	
IM2	Fine	Moderate	09:53	8.3	Surface	1.0	0.4	318	25.4	25.4	8.2	8.2	29.9	29.9	110.7	110.7	7.7	7.7	9.0	9.0	4	4	86	86	818879	806209	<0.2	<0.2		0.8	
						1.0	0.4	336	25.4	25.4	8.2	8.2	29.9	29.9	110.7	110.7	7.7	7.7	9.0	9.0	4	4	86	88			<0.2	<0.2	0.8		
					Middle	4.2	0.4	10	25.3	25.3	8.2	8.2	29.9	29.9	108.9	108.9	7.6	7.6	10.2	10.2	5	5	88	88			<0.2	<0.2	<0.2	0.8	
						4.2	0.4	10	25.3	25.3	8.2	8.2	29.9	29.9	108.9	108.9	7.6	7.6	10.2	10.2	6	6	88	91			<0.2	<0.2	<0.2	0.8	
					Bottom	7.3	0.4	17	25.3	25.3	8.2	8.2	29.9	29.9	108.2	108.2	7.5	7.5	10.4	10.4	6	6	91	91			<0.2	<0.2	<0.2	0.8	
						7.3	0.4	18	25.3	25.3	8.2	8.2	29.9	29.9	108.2	108.2	7.5	7.5	10.4	10.4	7	7	91	91			<0.2	<0.2	<0.2	0.8	
IM3	Fine	Moderate	10:02	8.6	Surface	1.0	0.3	324	25.4	25.4	8.2	8.2	29.2	29.2	110.4	110.4	7.7	7.7	9.7	9.7	5	5	86	86	819387	805994	<0.2	<0.2		1.0	
						1.0	0.3	348	25.4	25.4	8.2	8.2	29.2	29.2	110.4	110.4	7.7	7.7	9.7	9.7	4	5	86	88			<0.2	<0.2	1.0		
					Middle	4.3	0.3	5	25.3	25.3	8.2	8.2	29.6	29.6	108.7	108.7	7.6	7.6	12.1	12.1	5	5	88	89			<0.2	<0.2	<0.2	1.0	
						4.3	0.3	5	25.3	25.3	8.2	8.2	29.6	29.6	108.6	108.6	7.5	7.5	12.3	12.3	6	6	89	91			<0.2	<0.2	<0.2	0.9	
					Bottom	7.6	0.4	18	25.2	25.2	8.2	8.2	29.9	29.9	107.9	107.9	7.5	7.5	14.0	14.0	5	6	91	91			<0.2	<0.2	<0.2	0.9	
						7.6	0.5	18	25.2	25.2	8.2	8.2	29.9	29.9	107.9	107.9	7.5	7.5	14.0	14.0	6	6	91	91			<0.2	<0.2	<0.2	0.9	
IM4	Fine	Moderate	10:12	8.2	Surface	1.0	0.4	3	25.4	25.4	8.2	8.2	29.4	29.4	110.8	110.8	7.7	7.7	10.4	10.4	6	6	86	87	819586	805009	<0.2	<0.2		0.9	
						1.0	0.4	3	25.4	25.4	8.2	8.2	29.4	29.4	110.8	110.8	7.7	7.6	10.4	10.4	6	5	87	89			<0.2	<0.2	1.0		
					Middle	4.1	0.5	10	25.3	25.3	8.2	8.2	29.5	29.5	108.0	108.0	7.5	7.5	12.4	12.4	5	5	89	89			<0.2	<0.2	<0.2	1.0	
						4.1	0.5	10	25.3	25.3	8.2	8.2	29.5	29.5	108.0	108.0	7.5	7.4	12.2	12.2	5	5	89	92			<0.2	<0.2	1.0		
					Bottom	7.2	0.4	5	25.2	25.2	8.2	8.2	30.2	30.2	106.0	106.0	7.4	7.4	14.5	14.5	19	20	92	91			<0.2	<0.2	<0.2	0.7	
						7.2	0.4	5	25.2	25.2	8.2	8.2	30.2	30.2	106.0	106.0	7.4	7.4	14.5	14.5	20	20	91	91			<0.2	<0.2	<0.2	0.9	
IM5	Fine	Moderate	10:24	7.5	Surface	1.0	0.4	347	25.4	25.4	8.2	8.2	29.3	29.3	109.8	109.8	7.6	7.6	14.8	14.8	10	11	87	86	820579	804934	<0.2	<0.2		0.9	
						1.0	0.4	319	25.4	25.4	8.2	8.2	29.3	29.3	109.8	109.8	7.6	7.6	14.8	14.8	11	11	86	88			<0.2	<0.2	0.8		
					Middle	3.8	0.6	351	25.3	25.3	8.2	8.2	29.8	29.8	108.3	108.3	7.5	7.5	17.4	17.4	19	21	88	88			<0.2	<0.2	<0.2	0.9	
						3.8	0.6	355	25.3	25.3	8.2	8.2	29.8	29.8	108.3	108.3	7.5	7.5	17.5	17.5	21	21	88	90			<0.2	<0.2	<0.2	0.8	
					Bottom	6.5	0.4	6	25.3	25.3	8.2	8.2	30.0	30.0	107.8	107.8	7.5	7.5	20.0	20.0	35	33	90	91			<0.2	<0.2	<0.2	0.8	
						6.5	0.5	6	25.3	25.3	8.2	8.2	30.0	30.0	107.8	107.8	7.5	7.5	20.1	20.1	33	33	91	91			<0.2	<0.2	<0.2	0.9	
IM6	Fine	Moderate	10:32	7.4	Surface	1.0	0.2	6	25.4	25.4	8.2	8.2	29.0	29.0	106.9	106.9	7.5	7.4	14.4	14.6	8	9	87	86	821045	805855	<0.2	<0.2		1.3	
						1.0	0.2	6	25.4	25.4	8.2	8.2	29.0	29.0	106.9	106.9	7.4	7.4	14.6	14.6	9	9	86	89			<0.2	<0.2	1.0		
					Middle	3.7	0.3	15	25.4	25.4	8.2	8.2	29.1	29.1	106.2	106.2	7.4	7.4	16.3	16.3	9	10	89	91			<0.2	<0.2	<0.2	1.0	
						3.7	0.3	15	25.4	25.4	8.2	8.2	29.1	29.1	106.2	106.2	7.4	7.4	16.3	16.3	10	14	89	91			<0.2	<0.2	<0.2	1.1	
					Bottom	6.4	0.3	26	25.3	25.3	8.2	8.2	29.1	29.1	105.8	105.8	7.4	7.4	18.7	18.7	14	15	91	92			<0.2	<0.2	<0.2	1.1	
						6.4	0.3	26	25.3	25.3	8.2	8.2	29.1	29.1	105.8	105.8	7.4	7.4	18.7	18.7	15	15	92	92			<0.2	<0.2	<0.2	0.9	
IM7	Fine	Moderate	10:42	8.6	Surface	1.0	0.1	302	25.7	25.7	8.2	8.2	27.1	27.1	107.2	107.2	7.5	7.5	11.7	11.7	7	6	86	86	821365	806848	<0.2	<0.2		1.8	
						1.0	0.1	304	25.7	25.7	8.2	8.2	27.1	27.1	107.2	107.2	7.5	7.5	11.7	11.7	6	6	86	89			<0.2	<0.2	1.2		
					Middle	4.3	0.3	358	25.5	25.5	8.2	8.2	28.8	28.8	106.6																

**Water Quality Monitoring Results on 05 May 18 during Mid-Flood Tide**

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 08 May 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	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	18:20	8.9	Surface	1.0	0.2	25	27.0	8.4	8.4	25.4	25.4	114.1	114.1	7.9	7.9	9.1	7.5	5	83	86	86	815649	804237	<0.2	1.3	1.1	1.1	
						1.0	0.2	25	27.0	8.4	8.4	25.4	25.4	114.1	114.1	7.9	7.9	9.1	7.5	6	84	86	86							
					Middle	4.5	0.3	51	25.2	8.2	8.2	31.8	31.8	103.7	103.7	7.1	7.1	12.9	12.8	4	86	85	85							
						4.5	0.4	53	25.2	8.2	8.2	31.8	31.8	103.7	103.7	7.1	7.1	12.9	12.8	5	85	87	87							
					Bottom	7.9	0.2	55	25.1	8.2	8.2	32.2	32.2	105.3	105.3	7.2	7.2	16.3	16.4	12	87	88	88							
						7.9	0.3	56	25.1	8.2	8.2	32.2	32.2	105.5	105.4	7.2	7.2	16.4	16.4	12	88	88	88							
					Surface	1.0	0.1	331	27.2	7.7	7.7	19.9	19.9	95.4	95.4	6.8	6.8	1.0	2.9	5	83	85	85			<0.2	3.3	3.2	3.2	3.2
						1.0	0.1	343	27.2	7.7	7.7	19.9	19.9	95.3	95.4	6.8	6.8	1.0	2.9	5	84	85	85							
C2	Cloudy	Moderate	17:17	12.4	Middle	6.2	0.3	3	26.7	7.8	7.8	27.0	27.0	88.8	88.7	6.1	6.1	1.3	2.9	4	85	85	85							
						6.2	0.3	3	26.7	7.8	7.8	27.1	27.0	88.6	88.7	6.1	6.1	1.3	2.9	4	85	87	87							
					Bottom	11.4	0.3	336	26.3	7.7	7.7	27.8	27.8	83.1	83.3	5.7	5.7	6.5	6.5	6	87	87	87							
						11.4	0.3	309	26.3	7.7	7.7	27.8	27.8	83.4	83.3	5.8	5.8	6.5	6.5	5	87	87	87							
					Surface	1.0	0.1	2	27.1	7.9	7.9	23.1	23.1	109.1	109.1	7.6	7.6	0.4	0.8	2	85	86	86			<0.2	2.4	2.4	2.4	2.4
						1.0	0.1	2	27.1	7.9	7.9	23.1	23.1	109.0	109.1	7.6	7.6	0.5	0.8	3	86	84	84							
					Middle	6.1	0.3	250	26.1	7.8	7.8	28.5	28.5	93.5	93.5	6.5	6.5	0.6	0.8	4	84	84	84							
						6.1	0.3	269	26.1	7.8	7.8	28.6	28.5	93.5	93.5	6.5	6.5	0.6	0.8	5	84	87	87							
C3	Cloudy	Moderate	19:14	12.1	Bottom	11.1	0.2	304	25.4	7.8	7.8	31.3	31.3	92.0	92.1	6.3	6.3	1.5	1.5	11	87	88	88							
						11.1	0.2	329	25.4	7.8	7.8	31.3	31.3	92.2	92.1	6.3	6.3	1.5	1.5	12	88	88	88							
					Surface	1.0	0.2	326	26.6	8.3	8.3	25.9	25.9	112.0	112.0	7.8	7.8	8.6	9.1	5	84	84	84			<0.2	1.8	1.8	1.8	1.8
						1.0	0.2	348	26.6	8.3	8.3	25.9	25.9	112.0	112.0	7.8	7.8	8.6	9.1	6	84	85	85							
					Middle	3.8	0.2	344	26.2	8.2	8.2	28.2	28.2	107.8	107.8	7.4	7.4	9.0	9.1	7	85	86	86							
						3.8	0.2	316	26.2	8.2	8.2	28.2	28.2	107.8	107.8	7.4	7.4	9.0	9.1	6	86	88	88							
					Bottom	6.5	0.2	10	25.7	8.2	8.2	30.2	30.2	107.8	107.8	7.4	7.4	9.6	9.6	10	88	87	87							
						6.5	0.3	10	25.7	8.2	8.2	30.2	30.2	107.8	107.8	7.4	7.4	9.6	9.6	8	87	87	87							
IM1	Cloudy	Moderate	18:01	7.5	Surface	1.0	0.1	327	26.7	8.3	8.3	24.0	24.0	110.9	110.9	7.8	7.8	8.7	11.4	7	84	84	84	818353	806485	<0.2	2.6	2.7	2.7	2.7
						1.0	0.1	348	26.7	8.3	8.3	24.0	24.0	110.9	110.9	7.8	7.8	8.7	11.4	6	84	86	86							
					Middle	4.4	0.1	29	26.0	8.2	8.2	28.4	28.4	105.9	105.9	7.3	7.3	10.5	11.4	6	86	85	85							
						4.4	0.1	30	26.0	8.2	8.2	28.4	28.4	105.9	105.9	7.3	7.3	10.5	11.4	5	86	87	87							
					Bottom	7.8	0.1	33	25.8	8.2	8.2	30.6	30.6	107.6	107.6	7.4	7.4	14.9	14.9	10	87	88	88							
						7.8	0.1	33	25.8	8.2	8.2	30.6	30.6	107.6	107.6	7.4	7.4	14.9	14.9	12	88	88	88							
					Surface	1.0	0.3	346	26.9	8.3	8.3	24.3	24.3	118.8	118.8	8.3	8.3	7.8	7.8	4	84	84	84			<0.2	2.9	3.0	3.0	3.0
						1.0	0.3	353	26.9	8.3	8.3	24.3	24.3	118.8	118.8	8.3	8.3	7.8	7.8	3	84	86	86							
IM2	Cloudy	Moderate	17:56	8.8	Middle	4.4	0.2	0	26.0	8.2	8.2	28.1	28.1	103.5	103.5	7.2	7.2	11.5	11.0	6	86	85	85							
						4.4	0.2	0	26.0	8.2	8.2	28.1	28.1	103.5	103.5	7.2	7.2	11.5	11.0	4	86	87	87							
					Bottom	7.8	0.3	60	25.5	8.2	8.2	30.9	30.9	103.7	103.7	7.1	7.1	13.6	13.6	5	87	88	88							
						7.8	0.3	64	25.5	8.2	8.2	30.9	30.9	103.7	103.7	7.1	7.1	13.6	13.6	5	88	88	88							
					Surface	1.0	0.5	304	26.7	8.3	8.3	24.0	24.0	115.7	115.7	8.1	8.1	7.7	9.1	4	83	84	84			<0.2	1.9	2.0	2.0	2.0
						1.0	0.5	328	26.7	8.3	8.3	24.0	24.0	115.7	115.7	8.1	8.1	7.7	9.1	5	84	85	85							
					Middle	3.9	0.1	307	25.6	8.2	8.2	29.8	29.8	104.8	104.8	7.2	7.2	9.8	9.1	5	86	85	85							
						3.9	0.1	312	25.6	8.2	8.2	29.8	29.8	104.8	104.8	7.2	7.2	9.8	9.1	6	85	88	88							
IM3	Cloudy	Moderate	17:51	8.8	Bottom	6.8	0.1	279	25.6	8.2	8.2	30.9	30.9	107.2	107.3	7.4	7.4	9.8	9.7	6	88	88	88</							

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

**Water Quality Monitoring**

**Water Quality Monitoring Results on 08 May 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)	
IM9	Cloudy	Moderate	17:52	7.2	Surface	1.0	0.1	286	27.3	7.7	7.7	19.9	19.9	96.8	96.8	6.9	6.9	0.8	0.8	2	4	83	85	822099	808787	<0.2	<0.2	3.1	3.1	
						1.0	0.2	295	27.3	7.7	7.7	20.0	19.9	96.7	96.8	6.9	6.9	0.8	0.8	4	4	83	85							
					Middle	3.6	0.1	294	27.2	7.8	7.8	21.7	21.7	96.0	96.0	6.8	6.8	1.1	1.1	3	4	86	86							
						3.6	0.2	320	27.2	7.8	7.8	21.7	21.7	96.0	96.0	6.8	6.8	1.1	1.1	4	4	86	86							
					Bottom	6.2	0.0	263	27.1	7.8	7.8	22.9	22.9	96.2	96.2	6.7	6.7	1.9	1.9	3	4	87	87							
						6.2	0.0	280	27.1	7.8	7.8	22.9	22.9	96.3	96.3	6.7	6.7	2.0	2.0	5	4	87	87							
					Surface	1.0	0.1	308	27.3	7.7	7.7	20.7	20.7	97.0	97.0	6.8	6.8	0.8	0.8	7	4	84	86							
						1.0	0.1	333	27.3	7.8	7.7	20.7	20.7	96.9	97.0	6.8	6.8	0.8	0.8	7	4	84	86							
IM10	Cloudy	Moderate	18:01	8.6	Surface	4.3	0.1	314	27.1	7.8	7.8	22.2	22.2	94.7	94.6	6.7	6.7	1.9	1.9	5	6	86	86	822236	809823	<0.2	<0.2	3.5	3.5	
						4.3	0.1	315	27.1	7.8	7.8	22.2	22.2	94.5	94.6	6.6	6.6	2.0	2.0	6	6	86	86							
					Middle	7.6	0.0	322	27.0	7.7	7.7	25.2	25.2	94.7	94.7	6.6	6.6	2.6	2.6	5	6	87	87							
						7.6	0.0	327	27.0	7.7	7.7	25.2	25.2	94.9	94.8	6.6	6.6	2.4	2.4	6	6	88	88							
					Bottom	1.0	0.1	313	27.2	7.8	7.8	21.0	21.0	98.3	98.2	6.9	6.9	1.1	1.1	6	5	83	85							
						1.0	0.1	327	27.2	7.8	7.8	21.0	21.0	98.0	98.0	6.9	6.9	1.2	1.2	5	5	84	85							
					Middle	4.2	0.1	275	26.8	7.8	7.8	25.5	25.6	95.6	95.7	6.6	6.6	2.2	2.2	4	4	85	85							
						4.2	0.1	293	26.7	7.8	7.8	25.7	25.6	95.8	95.7	6.6	6.6	2.4	2.4	4	4	85	85							
IM11	Cloudy	Moderate	18:14	8.3	Surface	7.3	0.1	314	26.6	7.8	7.8	26.9	26.8	92.2	92.3	6.4	6.4	3.3	3.3	4	4	88	88	821483	810562	<0.2	<0.2	3.1	3.2	
						7.3	0.1	317	26.7	7.8	7.8	26.8	26.8	92.4	92.3	6.4	6.4	3.0	3.0	5	4	87	88							
					Middle	1.0	0.1	290	27.2	7.8	7.8	20.1	20.1	100.3	100.3	7.1	7.1	0.6	0.6	4	4	83	85							
						1.0	0.1	317	27.1	7.8	7.8	20.1	20.1	100.3	100.3	7.1	7.1	0.6	0.6	2	4	84	85							
					Bottom	4.5	0.3	271	26.5	7.8	7.8	26.3	26.3	94.9	94.9	6.6	6.6	1.6	1.6	5	4	85	85							
						4.5	0.3	274	26.5	7.8	7.8	26.3	26.3	94.8	94.9	6.6	6.6	1.8	1.8	3	4	86	86							
					Bottom	8.0	0.2	285	26.2	7.7	7.7	28.5	28.5	89.3	89.4	6.2	6.2	3.0	3.0	7	4	88	88							
						8.0	0.2	305	26.2	7.7	7.7	28.4	28.5	89.4	89.4	6.2	6.2	3.0	3.0	5	4	88	88							
SR2	Cloudy	Moderate	18:53	3.6	Surface	1.0	0.2	130	27.2	7.8	7.8	21.6	21.6	103.2	103.2	7.3	7.3	0.7	0.7	5	4	84	84	821476	814136	<0.2	<0.2	3.1	3.1	
						1.0	0.2	138	27.2	7.8	7.8	21.6	21.6	103.2	103.2	7.3	7.3	0.7	0.7	4	4	84	84							
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-							
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-							
					Bottom	2.6	0.1	170	27.1	7.8	7.8	22.4	22.4	102.8	102.8	7.2	7.2	0.8	0.8	4	4	86	86							
						2.6	0.1	183	27.1	7.8	7.8	22.4	22.4	102.8	102.8	7.2	7.2	0.8	0.8	3	4	86	86							
					Surface	1.0	0.1	333	27.2	7.8	7.8	19.1	19.1	96.3	96.3	6.9	6.9	0.8	0.8	3	4	-	-							
						1.0	0.2	335	27.2	7.8	7.8	19.1	19.1	96.3	96.3	6.9	6.9	0.8	0.8	4	4	-	-							
SR3	Cloudy	Moderate	17:39	9.2	Middle	4.6	0.1	23	27.1	7.8	7.8	23.3	23.3	94.0	93.9	6.6	6.6	1.8	1.8	4	4	-	-	822173	807585	-	-	-	-	
						4.6	0.2	23	27.1	7.8	7.8	23.4	23.4	93.8	93.8	6.5	6.5	1.9	1.9	4	4	-	-							
					Bottom	8.2	0.1	59	27.1	7.8	7.8	24.0	24.0	93.3	93.5	6.5	6.5	2.8	2.8	4	4	-	-							
						8.2	0.1	60	27.1	7.8	7.8	24.0	24.0	93.6	93.6	6.5	6.5	2.9	2.9	4	4	-	-							
					Surface	1.0	0.2	274	26.7	8.3	8.3	24.3	24.3	108.4	108.4	7.6	7.6	9.0	9.0	4	4	-	-							
						1.0	0.2	277	26.7	8.3	8.3	24.3	24.3	108.4	108.4	7.6	7.6	9.0	9.0	6	4	-	-							
					Middle	4.7	0.1	257	26.2	8.2	8.2	28.6	28.6	103.4	103.4	7.1	7.1	11.2	11.2	6	7	-	-							
						4.7	0.1	264	26.2	8.2	8.2	28.6	28.6	103.4	103.4	7.1	7.1	11.2	11.2	7	7	-	-							
SR4A	Cloudy	Moderate	18:40	9.3	Bottom	8.3	0.0	79	26.1	8.2	8.2	28.9	28.9	102.7	102.7	7.1	7.1	13.3	13.3	9	4	-	-	817199	807810	-	-	-	-	
						8.3	0.0	83	26.1	8.2	8.2	28.9	28.9	102.7	102.7	7.1	7.1	13.3	13.3	8	4	-	-							
					Surface	1.0	0.1	190	26.7																					

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

Water Quality Monitoring

Water Quality Monitoring Results on 08 May 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
					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
C1	Rainy	Moderate	07:02	8.7	Surface	1.0	0.1	248	26.6	26.6	8.2	8.2	22.2	22.2	109.9	109.8	7.8	7.6	9.9	11.4	5	8	85	87	815649	804243	<0.2	<0.2	2.5	1.8	
						1.0	0.1	254	26.6	8.2	8.2	22.3	109.7	109.8	7.8	7.6	10.0	11.4	4	8	86	88	<0.2	<0.2			2.5				
					Middle	4.4	0.1	89	26.0	26.0	8.2	8.2	29.7	29.7	106.0	106.0	7.3	7.3	11.4	11.4	9	8	88	88			<0.2	<0.2	1.6		1.7
						4.4	0.1	89	26.0	26.0	8.2	8.2	29.7	29.7	106.0	106.0	7.3	7.3	11.4	11.4	10	8	88	88			<0.2	<0.2	1.3		
					Bottom	7.7	0.0	329	25.5	25.5	8.2	8.2	31.1	31.1	103.0	103.0	7.1	7.1	12.8	12.8	9	8	88	88			<0.2	<0.2	1.2		1.2
						7.7	0.0	343	25.5	25.5	8.2	8.2	31.1	31.1	103.0	103.0	7.1	7.1	12.8	12.8	8	8	88	88			<0.2	<0.2	1.2		
C2	Rainy	Moderate	07:44	11.6	Surface	1.0	0.1	127	27.1	27.1	7.7	7.7	20.3	20.3	93.4	93.4	6.6	6.6	1.6	1.6	6	4	83	85	825668	806941	<0.2	<0.2	3.2	3.3	
						1.0	0.1	132	27.1	27.1	7.7	7.7	20.3	20.3	93.3	93.4	6.6	6.6	1.6	1.6	4	4	83	85			<0.2	<0.2	3.4		
					Middle	5.8	0.0	123	26.6	26.6	7.8	7.8	25.5	25.5	90.2	90.0	6.3	6.3	2.3	2.4	6	5	85	85			<0.2	<0.2	3.3		3.3
						5.8	0.0	123	26.6	26.6	7.8	7.8	25.5	25.5	89.7	87.8	6.2	6.1	2.4	8.0	5	4	85	87			<0.2	<0.2	3.3		
					Bottom	10.6	0.2	154	26.3	26.3	7.8	7.8	27.7	27.7	87.8	87.8	6.1	6.1	8.0	8.6	4	4	87	87			<0.2	<0.2	3.3		3.3
						10.6	0.2	169	26.3	26.3	7.8	7.8	27.7	27.7	87.8	87.8	6.1	6.1	8.6	8.6	4	4	87	87			<0.2	<0.2	3.3		
C3	Rainy	Moderate	05:41	12.2	Surface	1.0	0.1	60	26.6	26.6	7.8	7.8	25.3	25.4	98.4	98.4	6.9	6.8	0.5	0.5	4	3	84	85	822089	817800	<0.2	<0.2	2.6	2.7	
						1.0	0.1	65	26.6	26.6	7.8	7.8	25.5	25.4	98.3	98.4	6.8	6.6	0.5	1.0	3	3	84	85			<0.2	<0.2	2.7		
					Middle	6.1	0.4	260	25.9	25.9	7.8	7.8	27.6	27.6	94.5	94.5	6.6	6.6	1.0	1.0	5	4	85	86			<0.2	<0.2	2.8		2.8
						6.1	0.4	270	25.9	25.9	7.8	7.8	27.6	27.6	94.4	93.7	6.6	6.5	1.2	1.2	4	4	87	87			<0.2	<0.2	2.7		
					Bottom	11.2	0.2	276	25.7	25.7	7.8	7.8	30.0	30.0	93.7	93.7	6.5	6.5	1.2	1.2	4	4	88	88			<0.2	<0.2	2.8		2.8
						11.2	0.2	289	25.7	25.7	7.8	7.8	30.0	30.0	93.7	93.7	6.5	6.5	1.2	1.2	4	4	88	88			<0.2	<0.2	2.8		
IM1	Cloudy	Moderate	07:24	7.0	Surface	1.0	0.1	197	26.8	26.8	8.2	8.2	22.5	22.5	111.5	111.5	7.9	7.9	7.8	7.8	4	2	83	83	818379	806466	<0.2	<0.2	2.7	2.5	
						1.0	0.1	215	26.8	26.8	8.2	8.2	22.5	111.5	111.5	7.9	7.9	7.8	7.8	2	2	83	83	<0.2			<0.2	2.8			
					Middle	3.5	0.1	166	26.9	26.9	8.2	8.2	25.4	25.4	113.1	113.1	7.8	7.8	10.4	10.4	4	6	86	85			<0.2	<0.2	2.6		2.6
						3.5	0.1	178	26.9	26.9	8.2	8.2	25.4	25.4	113.1	113.1	7.8	7.8	10.4	10.4	6	6	85	85			<0.2	<0.2	2.6		
					Bottom	6.0	0.1	80	26.8	26.8	8.3	8.3	26.1	26.1	112.3	112.3	7.8	7.8	14.0	14.0	9	8	87	88			<0.2	<0.2	2.2		2.2
						6.0	0.2	85	26.8	26.8	8.3	8.3	26.1	26.1	112.3	112.3	7.8	7.8	14.0	14.0	8	8	88	88			<0.2	<0.2	2.2		
IM2	Cloudy	Moderate	07:29	8.3	Surface	1.0	0.1	249	26.8	26.8	8.2	8.2	22.4	22.4	109.5	109.5	7.7	7.7	7.7	7.7	4	2	84	84	818838	806168	<0.2	<0.2	2.8	2.6	
						1.0	0.1	270	26.8	26.8	8.2	8.2	22.4	109.5	109.5	7.7	7.7	7.7	7.7	2	4	84	85	<0.2			<0.2	2.8			
					Middle	4.2	0.0	0	26.9	26.9	8.2	8.2	25.5	25.5	110.3	110.3	7.6	7.6	10.1	10.1	4	3	85	86			<0.2	<0.2	2.8		2.8
						4.2	0.0	0	26.9	26.9	8.2	8.2	25.5	25.5	110.3	110.3	7.6	7.6	10.1	10.1	3	4	86	86			<0.2	<0.2	2.8		
					Bottom	7.3	0.0	121	26.8	26.8	8.2	8.2	25.7	25.7	108.7	108.7	7.5	7.5	8.5	8.5	6	5	87	88			<0.2	<0.2	2.1		2.2
						7.3	0.0	127	26.8	26.8	8.2	8.2	25.7	25.7	108.7	108.7	7.5	7.5	8.5	8.5	5	4	88	88			<0.2	<0.2	2.2		
IM3	Cloudy	Moderate	07:35	8.5	Surface	1.0	0.1	204	26.8	26.8	8.2	8.2	23.1	23.1	109.6	109.6	7.7	7.7	7.3	7.3	2	3	84	84	819400	806018	<0.2	<0.2	2.7	2.5	
						1.0	0.1	216	26.8	26.8	8.2	8.2	23.1	109.6	109.6	7.7	7.7	7.3	7.3	3	4	84	85	<0.2			<0.2	2.7			
					Middle	4.3	0.0	188	26.9	26.9	8.2	8.2	25.2	25.2	110.3	110.3	7.6	7.6	8.0	8.0	4	4	86	85			<0.2	<0.2	2.5		2.4
						4.3	0.0	200	26.9	26.9	8.2	8.2	25.2	25.2	110.3	110.3	7.6	7.6	8.0	8.0	4	4	85	85			<0.2	<0.2	2.4		
					Bottom	7.5	0.1	59	26.9	26.9	8.2	8.2	25.5	25.5	108.6	108.6	7.5	7.5	9.5	9.5	4	4	88	88			<0.2	<0.2	2.5		2.4
						7.5	0.1	63	26.9	26.9	8.2	8.2	25.5	25.5	108.6	108.6	7.5	7.5	9.5	9.5	6	4	88	88			<0.2	<0.2	2.4		
IM4	Cloudy	Moderate	07:42	7.6	Surface	1.0	0.2	221	26.5	26.5	8.2	8.2	21.7	21.7	108.5	108.5	7.7	7.7	7.4	7.4	4	2	83	84	819556	805032	<0.2	<0.2	3.3	2.7	
						1.0	0.2	221	26.5	26.5	8.2	8.2	21.7	108.5	108.5	7.7	7.7	7.4	7.4	2	4	84	85	<0.2			<0.2	3.2			
					Middle	3.8	0.1	188	26.8	26.8	8.3	8.3	26.0	26.0	111.0	111.0	7.7	7.7	12.2	12.2	4	4	86	85			<0.2	<0.2	2.5		2.6
						3.8	0.1	194	26.8	26.8	8.3	8.3	26.0	26.0	111.0	111.0	7.7	7.7	12.2	12.2	4	4	85	85			<0.2	<0.2	2.6		
					Bottom	6.6	0.2	40	26.0	26.0	8.2	8.2	28.8	28.8	107.0	107.0	7.4	7.4	15.1	15.1	7	9	87	87			<0.2	<0.2	2.3		2.2
						6.6	0.2	41	26.0	26.0	8.2	8.2	28.8	28.8	107.0	107.0	7.4	7.4	15.1	15.1	9	4	87	84			<0.2	<0.2	2.2		
IM5	Cloudy	Moderate	07:52	6.8	Surface	1.0	0.0	208	26.9	26.9	8.1	8.1	19.2	19.2	106.5	106.5	7.6	7.5	7.5	7.5	4	4	84	84	820593	804931	<0.2	<0.2	3.9	3.3	
						1.0	0.0	212	26.9	26.9	8.1	8.1	19.2	106.5	106.5	7.6	7.5	7.5	7.5	4	4	84	85	<0.2			<0.2	4.0			
					Middle	3.4	0.2	89	26.8	26.8	8.2	8.2	24.9	24.9	105.4	105.4	7.3	7.3	8.5	8.5	3	3	85	86			<0.2	<0.2	3.7		3.6
						3.4	0.2	90	26.8	26.8	8.2	8.2	24.9	24.9	105.4	105.4	7.3	7.3	8.5	8.5	3	3	86	87			<0.2	<0.2	3.4		
					Bottom	5.8	0.1	91	26.8	26.8	8.2	8.2	25.1	25.1	105.0	105.0	7.3	7.3	9.5	9.5	8	8	87	88			<0.2	<0.2	2.4		2.4
						5.8	0.1	95	26.8	26.8	8.2	8.2	25.1	25.1	105.0	105.0	7.3	7.3	9.5	9.5	8	8	88	88			<0.2	<0.2	2.4		
IM6	Cloudy	Moderate	08:00	6.8	Surface	1.0	0.2	231	26.8	26.8	8.1	8.1	18.3	18.3	103.6	103.6	7.5	8.1	2	3	84	84	821050	805813	<0.2	<0.2	3.9	3.1			
						1.0	0.2	235	26.8	26.8	8.1	8.1	18.3	103.6	103.6	7.5	8.1	3	4	84	86	<0.2			<0.2	3.8					
					Middle	3.4	0.1	87	26.8	26.8	8.2	8.2	23.9	23.9	104.3	104.3	7.3	7.3	9.8	9.8	4	4			86	88	<0.2		<0.2	2.9	2.5
						3.4	0.1	88	26.8	26.8	8.2	8.2	23.9	23.9	104.3	104.3	7.3	7.3	9.8	9.8	4	4			86	88	<0.2		<0.2	2.9	
					Bottom	5.8	0.2	104	26.8	26.8	8.2	8.2	24.9	24.9	104.7	104.7	7.3	7.3	14.7	14.7	5	6			88	87	<0.2		<0.2	2.5	2.6
						5.8	0.2	106	26.8	26.8	8.2	8.2	24.9	24.9	104.7	104.7	7.3	7.3	14.7	14.7	6	4			87	87	<0.2		<0.2	2.6	
IM7	Cloudy	Moderate	08:08	8.4	Surface	1.0	0.1	192	26.9	26.9	8.1	8.1	19.8	19.8	104.6	104.6	7.5	7.6	4	2	84	86	821366	806810	<0.2	<0.2	3.9	3.2			
						1.0	0.1	195	26.9	26.9	8.1	8.1	19.8	104.6	104.6	7.5	7.6	2	4	84	86	<0.2			<0.2	4.0					
					Middle	4.2	0.1	50	26.8	26.8	8.2	8.2	24.0	24.0	103.7	103.7	7.3	7.3	9.0	9.0	5	5			86	86	<0.2				

**Water Quality Monitoring Results on 08 May 18 during Mid-Flood Tide**

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

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

**Water Quality Monitoring**

**Water Quality Monitoring Results on 10 May 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)	
C1	Cloudy	Moderate	09:58	8.8	Surface	1.0	0.0	262	25.4	8.3	8.3	29.1	29.1	104.5	7.3	7.1	7.6	4	82	4	82	85	815607	804243	<0.2	1.4	<0.2	1.5		
						1.0	0.0	276	25.4	8.3	8.3	29.1	29.1	103.4	104.0	7.2	7.7	4	83	4	83	85	815607	804243	<0.2	1.5				
					Middle	4.4	0.4	162	25.3	8.2	8.2	31.1	31.1	99.9	99.9	6.9	9.6	4	84	4	84	85	815607	804243	<0.2	1.6				
						4.4	0.4	165	25.3	8.2	8.2	31.1	31.1	99.9	99.9	6.9	9.6	4	85	4	85	85	815607	804243	<0.2	1.4				
					Bottom	7.8	0.1	195	25.3	8.2	8.2	31.6	31.6	100.6	100.6	6.9	10.1	5	87	5	87	85	815607	804243	<0.2	1.4				
						7.8	0.1	204	25.3	8.2	8.2	31.6	31.6	100.6	100.6	6.9	10.2	4	87	4	87	85	815607	804243	<0.2	1.5				
C2	Cloudy	Rough	11:25	12.0	Surface	1.0	0.5	190	26.0	8.1	8.1	22.4	22.4	98.1	98.1	7.0	9.8	5	84	5	84	86	825691	806958	<0.2	3.2	<0.2	2.6		
						1.0	0.5	194	26.0	8.1	8.1	22.4	22.4	98.1	98.1	7.0	9.8	5	84	5	84	86	825691	806958	<0.2	3.2				
					Middle	6.0	0.4	199	25.8	8.1	8.1	27.5	27.5	96.9	96.9	6.8	9.4	5	86	5	86	85	825691	806958	<0.2	2.6				
						6.0	0.4	200	25.8	8.1	8.1	27.5	27.5	96.9	96.9	6.8	9.4	6	85	6	85	85	825691	806958	<0.2	2.8				
					Bottom	11.0	0.4	204	25.7	8.1	8.1	29.0	29.0	98.2	98.2	6.8	10.0	5	87	5	87	85	825691	806958	<0.2	2.0				
						11.0	0.4	205	25.7	8.1	8.1	29.0	29.0	98.2	98.2	6.8	10.0	5	87	5	87	85	825691	806958	<0.2	2.0				
C3	Cloudy	Rough	09:10	12.2	Surface	1.0	0.2	355	25.0	8.1	8.1	31.6	31.6	97.2	97.2	6.7	7.3	4	85	4	85	86	822137	817814	<0.2	1.2	<0.2	0.9		
						1.0	0.2	327	25.0	8.1	8.1	31.6	31.6	97.2	97.2	6.7	7.3	4	85	4	85	86	822137	817814	<0.2	1.1				
					Middle	6.1	0.1	121	24.9	8.1	8.1	32.8	32.8	95.6	95.6	6.6	7.9	5	87	5	87	86	822137	817814	<0.2	0.9				
						6.1	0.1	120	24.9	8.1	8.1	32.8	32.8	95.6	95.6	6.6	7.9	3	86	3	86	86	822137	817814	<0.2	0.8				
					Bottom	11.2	0.2	110	24.9	8.1	8.1	32.8	32.8	96.5	96.5	6.6	7.6	6	87	6	87	87	822137	817814	<0.2	0.7				
						11.2	0.2	119	24.9	8.1	8.1	32.8	32.8	96.5	96.5	6.6	7.6	6	87	6	87	87	822137	817814	<0.2	0.7				
IM1	Cloudy	Rough	10:19	7.7	Surface	1.0	0.1	234	25.3	8.3	8.3	30.2	30.2	105.6	105.6	7.3	7.7	6	83	6	83	85	818345	806452	<0.2	1.3	<0.2	1.2		
						1.0	0.1	248	25.3	8.3	8.3	30.2	30.2	105.6	105.6	7.3	7.8	7	83	7	83	85	818345	806452	<0.2	1.2				
					Middle	3.9	0.1	207	25.3	8.3	8.3	30.2	30.2	104.2	104.1	7.2	8.5	5	84	5	84	85	818345	806452	<0.2	1.2				
						3.9	0.1	211	25.3	8.3	8.3	30.2	30.2	103.9	104.1	7.2	8.4	6	84	6	84	85	818345	806452	<0.2	1.2				
					Bottom	6.7	0.1	130	25.3	8.2	8.2	30.7	30.7	103.0	103.1	7.1	9.4	5	87	5	87	87	818345	806452	<0.2	1.3				
						6.7	0.1	140	25.3	8.2	8.2	30.7	30.7	103.1	103.1	7.1	9.4	7	87	7	87	87	818345	806452	<0.2	1.1				
IM2	Cloudy	Rough	10:24	8.2	Surface	1.0	0.1	233	25.3	8.3	8.3	30.2	30.2	106.4	106.4	7.4	8.2	7	82	7	82	85	818832	806214	<0.2	1.2	<0.2	1.3		
						1.0	0.1	243	25.3	8.3	8.3	30.2	30.2	106.4	106.4	7.4	8.2	6	82	6	82	85	818832	806214	<0.2	1.4				
					Middle	4.1	0.1	197	25.3	8.3	8.3	30.2	30.2	105.0	105.0	7.3	8.5	8	85	8	85	85	818832	806214	<0.2	1.3				
						4.1	0.1	209	25.3	8.3	8.3	30.2	30.2	105.0	105.0	7.3	8.5	6	85	6	85	85	818832	806214	<0.2	1.4				
					Bottom	7.2	0.1	176	25.3	8.3	8.3	30.3	30.3	104.4	104.4	7.2	8.8	9	86	9	86	87	818832	806214	<0.2	1.2				
						7.2	0.1	185	25.3	8.3	8.3	30.3	30.3	104.4	104.4	7.2	8.8	8	87	8	87	87	818832	806214	<0.2	1.3				
IM3	Cloudy	Rough	10:31	8.5	Surface	1.0	0.1	233	25.3	8.3	8.3	30.2	30.2	106.2	106.1	7.4	8.2	5	83	5	83	85	819438	805999	<0.2	1.3	<0.2	1.3		
						1.0	0.1	254	25.3	8.3	8.3	30.2	30.2	106.0	106.0	7.3	8.2	6	83	6	83	85	819438	805999	<0.2	1.3				
					Middle	4.3	0.1	230	25.3	8.3	8.3	30.2	30.2	105.4	105.4	7.3	8.3	8	85	8	85	85	819438	805999	<0.2	1.3				
						4.3	0.1	240	25.3	8.3	8.3	30.2	30.2	105.4	105.4	7.3	8.3	7	85	7	85	85	819438	805999	<0.2	1.3				
					Bottom	7.5	0.1	206	25.3	8.3	8.3	30.2	30.2	105.3	105.3	7.3	8.1	12	87	12	87	87	819438	805999	<0.2	1.3				
						7.5	0.1	211	25.3	8.3	8.3	30.2	30.2	105.3	105.3	7.3	8.1	13	87	13	87	87	819438	805999	<0.2	1.3				
IM4	Cloudy	Rough	10:38	7.5	Surface	1.0	0.3	225	25.3	8.3	8.3	30.0	30.0	106.5	106.5	7.4	8.0	8	84	8	84	85	819558	805020	<0.2	1.4	<0.2	1.6		
						1.0	0.3	244	25.3	8.3	8.3	30.0	30.0	106.4	106.4	7.4	8.0	8	84	8	84	85	819558	805020	<0.2	1.6				
					Middle	3.8	0.4	243	25.3	8.3	8.3	30.0	30.0	105.0	105.0	7.3	8.2	7	85	7	85	85	819558	805020	<0.2	1.6				
						3.8	0.4	262	25.3	8.3	8.3	30.0	30.0	104.9	104.9	7.3	8.2	7	85	7	85	85	819558	805020	<0.2	1.6				
					Bottom	6.5	0.4	237	25.3	8.3	8.3	30.2	30.3	104.2	104.2	7.2	8.6	9	87	9	87	87	819558	805020	<0.2	1.7				
						6.5	0.4	245	25.3	8.3	8.3	30.3	30.3	104.2	104.2	7.2	8.7	8	87	8	87	87	819558	805020	<0.2	1.6				
IM5	Cloudy	Rough	10:50	6.9	Surface	1.0	0.1	248	25.3	8.3	8.3	30.1	30.1	104.5	104.5	7.3	8.4	8	84	8	84	85	820570	804934	<0.2	1.7	<0.2	1.7		
						1.0	0.1	259	25.3	8.3																				

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

## Water Quality Monitoring

## Water Quality Monitoring Results on 10 May 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)	
IM9	Cloudy	Rough	10:43	7.2	Surface	1.0	0.2	240	25.5	25.5	8.2	8.2	28.0	28.0	102.0	102.0	7.1	7.1	9.0	9.0	8	8	84	84	822083	808812	<0.2	1.8		
						1.0	0.2	255	25.5		8.2	8.2	28.0	28.0	102.0	102.0	7.1	7.1	9.0	9.0	8	8	84	84						
					Middle	3.6	0.3	218	25.5	25.5	8.2	8.2	28.2	28.2	101.3	101.3	7.1	7.1	9.4	9.4	11	11	85	85						
						3.6	0.3	227	25.5		8.2	8.2	28.2	28.2	101.3	101.3	7.1	7.1	9.4	9.4	12	12	86	86						
					Bottom	6.2	0.1	218	25.2	25.2	8.2	8.2	30.7	30.7	101.6	101.6	7.0	7.0	9.6	9.6	15	15	87	87						
						6.2	0.1	239	25.2		8.2	8.2	30.7	30.7	101.6	101.6	7.0	7.0	9.6	9.6	16	16	87	87						
IM10	Cloudy	Rough	10:35	8.1	Surface	1.0	0.2	173	25.5	25.5	8.2	8.2	28.4	28.4	101.1	101.1	7.1	7.1	9.1	9.1	13	13	84	84	822254	809850	<0.2	1.7		
						1.0	0.2	185	25.5		8.2	8.2	28.4	28.4	101.1	101.1	7.1	7.1	9.1	9.1	13	13	84	84						
					Middle	4.1	0.2	163	25.5	25.5	8.2	8.2	28.5	28.5	100.4	100.4	7.0	7.0	9.5	9.5	12	12	85	85						
						4.1	0.2	168	25.5		8.2	8.2	28.5	28.5	100.4	100.4	7.0	7.0	9.5	9.5	13	13	86	86						
					Bottom	7.1	0.2	129	25.4	25.4	8.2	8.2	29.1	29.1	100.2	100.2	7.0	7.0	9.7	9.7	16	16	87	87						
						7.1	0.3	136	25.4		8.2	8.2	29.1	29.1	100.2	100.2	7.0	7.0	9.7	9.7	19	19	87	87						
IM11	Cloudy	Rough	10:17	7.3	Surface	1.0	0.2	140	25.4	25.4	8.2	8.2	28.9	28.9	100.6	100.6	7.0	7.0	9.0	9.0	8	8	84	84	821484	810534	<0.2	1.5		
						1.0	0.2	153	25.4		8.2	8.2	28.9	28.9	100.6	100.6	7.0	7.0	9.0	9.0	6	6	85	85						
					Middle	3.7	0.3	124	25.4	25.4	8.2	8.2	28.9	28.9	100.6	100.6	7.0	7.0	10.1	10.1	10	10	85	85						
						3.7	0.3	132	25.4		8.2	8.2	28.9	28.9	100.6	100.6	7.0	7.0	10.1	10.1	10	10	86	86						
					Bottom	6.3	0.2	119	25.3	25.3	8.2	8.2	29.9	29.9	102.5	102.5	7.1	7.1	10.2	10.2	10	10	87	87						
						6.3	0.2	127	25.3		8.2	8.2	29.9	29.9	102.6	102.6	7.1	7.1	10.0	10.0	9	9	86	86						
IM12	Cloudy	Rough	10:07	9.0	Surface	1.0	0.2	101	25.4	25.4	8.1	8.1	28.8	28.8	96.1	96.1	6.7	6.7	11.3	11.3	8	8	83	83	821158	811491	<0.2	1.7		
						1.0	0.2	108	25.4		8.1	8.1	28.8	28.8	96.1	96.1	6.7	6.7	11.3	11.3	8	8	84	84						
					Middle	4.5	0.2	108	25.4	25.4	8.1	8.1	28.8	28.8	95.9	95.9	6.7	6.7	13.0	13.0	10	10	86	86						
						4.5	0.2	112	25.4		8.1	8.1	28.8	28.8	95.9	95.9	6.7	6.7	13.0	13.0	10	10	85	85						
					Bottom	8.0	0.2	120	25.5	25.5	8.1	8.1	28.8	28.8	97.8	97.8	6.8	6.8	13.1	13.1	13	13	86	86						
						8.0	0.2	129	25.5		8.1	8.1	28.8	28.8	97.8	97.8	6.8	6.8	13.1	13.1	14	14	86	86						
SR2	Cloudy	Rough	09:33	4.9	Surface	1.0	0.1	41	25.4	25.4	8.1	8.1	29.0	29.0	95.9	95.9	6.7	6.7	8.5	8.5	7	7	85	85	821479	814163	<0.2	1.6		
						1.0	0.1	42	25.4		8.1	8.1	29.0	29.0	95.9	95.9	6.7	6.7	8.5	8.5	6	6	84	84						
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
						-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-							
					Bottom	3.9	0.2	61	25.4	25.4	8.1	8.1	30.2	30.2	97.6	97.6	6.8	6.8	7.9	7.9	6	6	87	87						
						3.9	0.2	62	25.4		8.1	8.1	30.2	30.2	97.6	97.6	6.8	6.8	7.9	7.9	7	7	86	86						
SR3	Cloudy	Rough	11:00	9.0	Surface	1.0	0.3	218	25.7	25.7	8.2	8.2	27.2	27.2	102.0	102.0	7.1	7.1	9.2	9.2	5	5	-	-	822133	807565	-	-		
						1.0	0.3	228	25.7		8.2	8.2	27.2	27.2	102.0	102.0	7.1	7.1	9.2	9.2	7	7	-	-						
					Middle	4.5	0.3	220	25.5	25.5	8.2	8.2	28.3	28.3	101.5	101.5	7.1	7.1	10.0	10.0	6	6	-	-						
						4.5	0.3	238	25.5		8.2	8.2	28.3	28.3	101.5	101.5	7.1	7.1	10.0	10.0	8	8	-	-						
					Bottom	8.0	0.3	254	25.2	25.2	8.3	8.3	30.4	30.4	101.6	101.6	7.0	7.0	10.0	10.0	7	7	-	-						
						8.0	0.3	258	25.2		8.3	8.3	30.4	30.4	101.6	101.6	7.0	7.0	10.0	10.0	8	8	-	-						
SR4A	Cloudy	Moderate	09:39	8.4	Surface	1.0	0.0	168	25.2	25.2	8.2	8.2	28.9	28.9	104.7	104.7	7.3	7.3	7.6	7.6	5	5	-	-	817187	807816	-	-		
						1.0	0.0	180	25.2		8.2	8.2	28.9	28.9	104.7	104.7	7.3	7.3	7.6	7.6	7	7	-	-						
					Middle	4.2	0.2	101	25.2	25.2	8.2	8.2	29.5	29.5	103.0	103.0	7.2	7.2	8.7	8.7	7	7	-	-						
						4.2	0.2	101	25.2		8.2	8.2	29.5	29.5	102.9	102.9	7.2	7.2	8.8	8.8	6	6	-	-						
					Bottom	7.4	0.2	87	25.2	25.2	8.2	8.2	30.8	30.8	100.2	100.2	6.9	6.9	12.2	12.2	12	12	-	-						
						7.4	0.2	90	25.2		8.2	8.2	30.8	30.8	100.2	100.2	6.9	6.9	12.2	12.2	11	11	-	-						
SR5A	Cloudy	Moderate	09:22	4.9	Surface	1.0	0.0	227	25.5	25.5	8.2	8.2	24.7	24.7	99.1	99.0	7.1	7.1	7.7	7.7	6	6	-	-	816608	810715	-	-		
						1.0	0.0	246	25.5		8.2	8.2	24.7</																	

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

**Water Quality Monitoring**

**Water Quality Monitoring Results on 10 May 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)	
C1	Cloudy	Rough	14:26	8.8	Surface	1.0	0.1	7	25.4		8.3	8.3	30.4	30.4	104.8	104.6	7.2	7.2	7.0	8.7	6	84	87	815626	804268	<0.2	<0.2	0.9	0.9	
						1.0	0.1	7	25.4		8.3	8.3	30.4	30.4	104.3	104.6	7.2	7.2	7.0	8.8	5	84	87	815626	804268	<0.2	<0.2	0.8	0.8	
					Middle	4.4	0.2	48	25.3	25.3	8.2	8.2	31.2	31.3	97.6	97.5	6.7	6.7	11.4	11.2	9	87	87	815626	804268	<0.2	<0.2	0.9	0.9	
						4.4	0.2	51	25.3		8.2	8.2	31.3	31.3	97.4	97.5	6.7	6.7	11.4	11.6	7	87	87	815626	804268	<0.2	<0.2	1.0	1.0	
					Bottom	7.8	0.1	16	25.2	25.2	8.2	8.2	31.7	31.7	98.5	98.9	6.8	6.8	6.8	14.1	10	89	89	815626	804268	<0.2	<0.2	0.9	0.9	
						7.8	0.1	16	25.2		8.2	8.2	31.7	31.7	99.3	98.9	6.8	6.8	6.8	14.0	8	89	89	815626	804268	<0.2	<0.2	0.9	0.9	
C2	Cloudy	Rough	13:24	11.6	Surface	1.0	0.5	219	26.0	26.0	8.1	8.1	21.6	21.6	98.7	98.7	7.1	7.1	7.0	9.4	8	83	85	825701	806917	<0.2	<0.2	3.3	3.3	
						1.0	0.6	238	26.0		8.1	8.1	21.6	21.6	98.7	98.7	7.1	7.1	7.0	9.4	7	83	85	825701	806917	<0.2	<0.2	3.2	3.2	
					Middle	5.8	0.5	224	25.6	25.6	8.2	8.2	28.5	28.5	98.4	98.4	6.8	6.8	6.9	7.6	8	85	87	825701	806917	<0.2	<0.2	2.4	2.5	
						5.8	0.6	225	25.6		8.2	8.2	28.5	28.5	98.4	98.4	6.8	6.8	6.9	7.6	10	85	87	825701	806917	<0.2	<0.2	2.5	2.5	
					Bottom	10.6	0.3	221	25.7	25.7	8.1	8.1	29.3	29.3	99.0	99.0	6.9	6.9	6.9	7.8	8	87	86	825701	806917	<0.2	<0.2	1.8	1.8	
						10.6	0.3	235	25.7		8.1	8.1	29.3	29.3	99.0	99.0	6.9	6.9	6.9	7.8	10	86	86	825701	806917	<0.2	<0.2	1.8	1.8	
C3	Cloudy	Rough	15:48	12.1	Surface	1.0	0.3	252	25.2	25.2	8.2	8.2	30.7	30.7	102.9	102.9	7.1	7.1	6.9	6.8	5	84	87	822129	817806	<0.2	<0.2	1.2	1.1	
						1.0	0.4	270	25.2		8.2	8.2	30.7	30.7	102.9	102.9	7.1	7.1	6.9	6.8	3	85	87	822129	817806	<0.2	<0.2	1.1	1.1	
					Middle	6.1	0.2	261	25.0	25.0	8.2	8.2	32.2	32.2	96.6	96.6	6.6	6.6	7.5	7.9	3	87	86	822129	817806	<0.2	<0.2	1.3	1.3	
						6.1	0.2	284	25.0		8.2	8.2	32.2	32.2	96.6	96.6	6.6	6.6	7.5	7.9	3	86	86	822129	817806	<0.2	<0.2	1.2	1.2	
					Bottom	11.1	0.1	252	25.0	25.0	8.2	8.2	32.4	32.4	102.0	102.0	7.0	7.0	7.0	7.9	5	88	88	822129	817806	<0.2	<0.2	0.9	0.9	
						11.1	0.1	257	25.0		8.2	8.2	32.4	32.4	102.0	102.0	7.0	7.0	7.0	7.9	4	89	89	822129	817806	<0.2	<0.2	0.9	0.9	
IM1	Cloudy	Rough	14:05	8.1	Surface	1.0	0.1	0	25.2	25.2	8.3	8.3	30.6	30.6	105.4	105.4	7.3	7.3	8.6	8.4	6	83	85	818350	806456	<0.2	<0.2	1.0	1.0	
						1.0	0.1	0	25.2		8.3	8.3	30.6	30.6	105.4	105.4	7.3	7.3	8.6	8.4	6	83	85	818350	806456	<0.2	<0.2	1.0	1.0	
					Middle	4.1	0.1	13	25.2	25.2	8.3	8.3	30.6	30.6	104.8	104.8	7.3	7.3	8.6	8.5	9	85	86	818350	806456	<0.2	<0.2	1.1	1.1	
						4.1	0.2	13	25.2		8.3	8.3	30.6	30.6	104.8	104.8	7.3	7.3	8.6	8.5	8	86	87	818350	806456	<0.2	<0.2	1.1	1.1	
					Bottom	7.1	0.2	30	25.2	25.2	8.3	8.3	30.6	30.6	104.6	104.6	7.2	7.2	8.9	8.9	11	87	88	818350	806456	<0.2	<0.2	1.0	1.0	
						7.1	0.2	31	25.2		8.3	8.3	30.6	30.6	104.6	104.6	7.2	7.2	8.9	8.9	9	88	88	818350	806456	<0.2	<0.2	1.1	1.1	
IM2	Cloudy	Rough	14:00	7.8	Surface	1.0	0.1	260	25.2	25.2	8.3	8.3	30.4	30.4	107.0	107.0	7.4	7.4	8.2	7.4	8	84	86	818826	806206	<0.2	<0.2	1.9	2.2	
						1.0	0.1	274	25.2		8.3	8.3	30.4	30.4	107.0	107.0	7.4	7.4	8.2	7.5	8	84	86	818826	806206	<0.2	<0.2	2.2	2.2	
					Middle	3.9	0.1	9	25.2	25.2	8.3	8.3	30.4	30.4	106.0	106.0	7.4	7.4	8.2	8.0	10	86	87	818826	806206	<0.2	<0.2	2.1	2.1	
						3.9	0.1	9	25.2		8.3	8.3	30.4	30.4	106.0	106.0	7.4	7.4	8.2	8.1	9	87	87	818826	806206	<0.2	<0.2	2.3	2.3	
					Bottom	6.8	0.1	56	25.2	25.2	8.3	8.3	30.4	30.4	105.5	105.6	7.3	7.3	8.9	9.0	9	88	88	818826	806206	<0.2	<0.2	2.2	2.2	
						6.8	0.1	59	25.2		8.3	8.3	30.4	30.4	105.6	105.6	7.3	7.3	8.9	9.0	8	88	88	818826	806206	<0.2	<0.2	2.3	2.3	
IM3	Cloudy	Rough	13:54	8.5	Surface	1.0	0.3	248	25.3	25.3	8.3	8.3	29.1	29.1	104.6	104.6	7.3	7.3	11.3	11.8	12	83	85	819410	806048	<0.2	<0.2	2.2	2.2	
						1.0	0.3	271	25.3		8.3	8.3	29.1	29.1	104.5	104.5	7.3	7.3	11.3	11.8	11	83	85	819410	806048	<0.2	<0.2	2.1	2.1	
					Middle	4.3	0.2	253	25.3	25.3	8.3	8.3	29.2	29.2	104.1	104.1	7.3	7.3	11.3	11.1	13	84	85	819410	806048	<0.2	<0.2	2.2	2.2	
						4.3	0.2	271	25.3		8.3	8.3	29.2	29.2	104.1	104.1	7.3	7.3	11.3	11.1	14	85	85	819410	806048	<0.2	<0.2	2.2	2.2	
					Bottom	7.5	0.1	346	25.2	25.2	8.3	8.3	29.7	29.7	104.5	104.5	7.3	7.3	11.0	11.0	13	87	87	819410	806048	<0.2	<0.2	2.2	2.2	
						7.5	0.1	357	25.2		8.3	8.3	29.7	29.7	104.5	104.5	7.3	7.3	11.0	11.0	15	87	87	819410	806048	<0.2	<0.2	2.2	2.2	
IM4	Cloudy	Rough	13:44	7.8	Surface	1.0	0.3	278	25.3	25.3	8.3	8.3	29.1	29.1	106.9	106.9	7.5	7.5	8.9	8.7	5	82	85	819556	805065	<0.2	<0.2	2.2	2.1	
						1.0	0.3	291	25.3		8.3	8.3	29.1	29.1	106.9	106.9	7.5	7.5	8.9	8.6	7	83	85	819556	805065	<0.2	<0.2	2.2	2.2	
					Middle	3.9	0.3	286	25.3	25.3	8.3	8.3	29.4	29.4	106.4	106.4	7.4	7.4	8.9	9.0	7	85	85	819556	805065	<0.2	<0.2	2.1	2.1	
						3.9	0.3	291	25.3		8.3	8.3	29.4	29.4	106.4	106.4	7.4	7.4	8.9	9.0	7	85	85	819556	805065	<0.2	<0.2	2.0	2.0	
					Bottom	6.8	0.2	348	25.3	25.3	8.3	8.3	29.6	29.6	106.4	106.4	7.4	7.4	8.9	9.0	8	87	87	819556	805065	<0.2	<0.2	2.1	2.1	
						6.8	0.2	320	25.3		8.3	8.3	29.6	29.6	106.4	106.4	7.4	7.4	8.9	9.0	8	87	87	819556	805065	<0.2	<0.2	2.1	2.1	
IM5	Cloudy	Rough	13:35	7																										

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

**Water Quality Monitoring**

**Water Quality Monitoring Results on 10 May 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)	
IM9	Cloudy	Rough	14:06	7.5	Surface	1.0	0.3	242	25.9		8.2	8.2	26.7	26.7	109.2	109.1	7.6	7.7	7.7	7.7	5	4	84	84	822101	808838	<0.2	2.1	2.1	
						1.0	0.3	256	25.9		8.2	8.2	26.8	26.7	109.0	109.1	7.6	7.7	7.7	7.7	4	4	84	84						
					Middle	3.8	0.4	251	25.8	25.8	8.2	8.2	27.1	27.1	107.8	107.8	7.5	7.8	7.8	7.8	4	4	86	86						
						3.8	0.4	254	25.8		8.2	8.2	27.1	27.1	107.8	107.8	7.5	7.8	7.8	7.8	4	4	85	85						
						6.5	0.3	267	25.8		8.2	8.2	27.5	27.5	108.4	108.4	7.6	7.7	7.7	7.7	4	4	86	86						
						6.5	0.3	282	25.8	25.8	8.2	8.2	27.5	27.5	108.4	108.4	7.6	7.7	7.7	7.7	4	4	87	87						
IM10	Cloudy	Rough	14:18	7.6	Surface	1.0	0.4	260	25.6	25.6	8.2	8.2	28.2	28.2	106.8	106.8	7.4	8.2	8.2	8.2	4	4	84	84	822225	809814	<0.2	1.8	1.8	
						1.0	0.4	280	25.6		8.2	8.2	28.2	28.2	106.8	106.8	7.4	8.2	8.2	8.2	3	4	85	85						
					Middle	3.8	0.4	260	25.6	25.6	8.2	8.2	28.3	28.3	104.1	104.1	7.3	8.7	8.7	8.7	4	5	86	86						
						3.8	0.4	273	25.6		8.2	8.2	28.3	28.3	104.1	104.1	7.3	8.7	8.7	8.7	4	4	87	87						
						6.6	0.3	288	25.5		8.2	8.2	28.6	28.6	104.8	104.8	7.3	9.4	9.4	9.4	6	6	88	88						
						6.6	0.3	309	25.5	25.5	8.2	8.2	28.6	28.6	104.8	104.8	7.3	9.4	9.4	9.4	6	6	87	87						
IM11	Cloudy	Rough	14:40	8.8	Surface	1.0	0.4	273	25.4	25.4	8.2	8.2	28.9	28.9	103.6	103.6	7.2	8.6	8.6	8.6	7	6	84	84	821524	810566	<0.2	1.6	1.6	
						1.0	0.4	281	25.4		8.2	8.2	28.9	28.9	103.6	103.6	7.2	8.6	8.6	8.6	5	6	85	85						
					Middle	4.4	0.3	261	25.4	25.4	8.2	8.2	29.0	29.0	102.5	102.5	7.1	8.8	8.8	8.8	6	6	85	85						
						4.4	0.3	268	25.4		8.2	8.2	29.0	29.0	102.5	102.5	7.1	8.8	8.8	8.8	5	5	86	86						
						7.8	0.1	270	25.4	25.4	8.2	8.2	29.0	29.0	105.3	105.3	7.3	8.7	8.7	8.7	5	5	87	87						
						7.8	0.1	282	25.4		8.2	8.2	29.0	29.0	105.3	105.3	7.3	8.7	8.7	8.7	5	5	86	86						
IM12	Cloudy	Rough	14:53	7.9	Surface	1.0	0.5	271	25.4	25.4	8.2	8.2	29.0	29.0	99.3	99.3	6.9	8.1	8.1	8.1	4	4	84	84	821159	811489	<0.2	1.6	1.7	
						1.0	0.5	285	25.4		8.2	8.2	29.0	29.0	99.3	99.3	6.9	8.1	8.1	8.1	4	4	85	85						
					Middle	4.0	0.2	265	25.4	25.4	8.2	8.2	29.1	29.1	96.2	96.2	6.7	8.7	8.7	8.7	6	5	87	87						
						4.0	0.3	288	25.4		8.2	8.2	29.1	29.1	96.2	96.2	6.7	8.7	8.7	8.7	6	5	86	86						
						6.9	0.1	252	25.4	25.4	8.2	8.2	29.8	29.8	94.9	94.9	6.6	9.6	9.6	9.6	6	6	89	89						
						6.9	0.1	254	25.4		8.2	8.2	29.8	29.8	94.9	94.9	6.6	9.6	9.6	9.6	6	6	89	89						
SR2	Cloudy	Rough	15:23	4.4	Surface	1.0	0.2	318	25.3	25.3	8.2	8.2	29.4	29.4	99.1	99.1	6.9	9.1	9.1	9.1	5	8	84	84	821465	814187	<0.2	1.6	1.6	
						1.0	0.3	335	25.3		8.2	8.2	29.4	29.4	99.1	99.1	6.9	9.1	9.1	9.1	6	8	84	84						
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-							
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-							
						3.4	0.1	189	25.3	25.3	8.1	8.1	30.1	30.1	103.4	103.4	7.2	11.7	11.7	11.7	9	8	87	87						
SR3	Cloudy	Rough	13:47	8.5	Surface	1.0	0.4	226	26.0	26.0	8.1	8.1	24.5	24.5	105.0	105.0	7.4	8.8	8.8	8.8	6	6	-	-	822117	807588	-	-	-	
						1.0	0.4	231	26.0		8.1	8.1	24.5	24.5	105.0	105.0	7.4	8.8	8.8	8.8	4	6	-	-						
					Middle	4.3	0.3	221	26.0	26.0	8.1	8.1	25.4	25.4	104.3	104.3	7.3	8.7	8.7	8.7	7	6	-	-						
						4.3	0.3	232	26.0		8.1	8.1	25.4	25.4	104.3	104.3	7.3	8.7	8.7	8.7	5	5	-	-						
						7.5	0.3	278	25.6	25.6	8.2	8.2	28.1	28.1	103.9	103.9	7.2	9.1	9.1	9.1	6	6	-	-						
						7.5	0.3	279	25.6		8.2	8.2	28.1	28.1	103.9	103.9	7.2	9.1	9.1	9.1	5	5	-	-						
SR4A	Cloudy	Moderate	14:47	8.6	Surface	1.0	0.2	247	25.2	25.2	8.2	8.2	27.2	27.2	105.0	105.0	7.4	8.0	8.0	8.0	6	11	-	-	817194	807821	-	-	-	
						1.0	0.2	248	25.2		8.2	8.2	27.2	27.2	105.0	105.0	7.4	8.0	8.0	8.0	6	11	-	-						
					Middle	4.3	0.1	91	25.2	25.2	8.2	8.2	29.6	29.6	100.4	100.4	7.0	11.4	11.4	11.4	11	11	-	-						
						4.3	0.1	98	25.2		8.2	8.2	29.6	29.6	100.3	100.3	7.0	11.4	11.4	11.4	11	11	-	-						
						7.6	0.1	78	25.2	25.1	8.2	8.2	30.7	30.7	99.4	99.4	6.9	12.4	12.4	12.4	16	11	-	-						
						7.6	0.1	84	25.1		8.2	8.2	30.7	30.7	99.5	99.5	6.9	12.5	12.5	12.5	14	11	-	-						
SR5A	Cloudy	Moderate	15:05	5.2	Surface	1.0	0.1	30	25.4	25.4	8.2	8.2	26.5	26.5	101.3</															

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

**Water Quality Monitoring**

**Water Quality Monitoring Results on 12 May 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)	
C1	Sunny	Moderate	11:40	8.5	Surface	1.0	0.5	251	25.7		8.2	8.2	27.7	27.7	100.3	100.3	7.0		8.6		3		75		815602	804266	<0.2	2.4	1.9	
						1.0	0.6	252	25.7		8.2		27.7		100.2		7.0		8.7		4		75							
					Middle	4.3	0.5	244	25.2	25.2	8.2	8.2	31.1	31.1	93.7	93.7	6.5	6.8	15.2	13.6	6	6	76	77						
						4.3	0.6	263	25.2		8.2		31.1		93.7		6.5		15.1		6		77							
					Bottom	7.5	0.0	246	25.2	25.2	8.2	8.2	31.1	31.1	94.3	94.3	6.5	6.5	17.1		8		79							
						7.5	0.0	263	25.2		8.2		31.1		94.4	94.4	6.5	6.5	17.1		10		79							
C2	Sunny	Moderate	12:29	11.2	Surface	1.0	0.9	157	26.2	26.2	8.1	8.1	20.5	20.5	93.5	93.5	6.7		9.9		5		74		825670	806971	<0.2	3.7	3.7	
						1.0	1.0	159	26.3		8.1		20.5		93.5		6.7		9.9		5		75							
					Middle	5.6	0.5	166	25.5	25.5	8.1	8.1	27.9	27.9	91.8	91.8	6.4	6.6	10.7	11.4	5	5	76	77						
						5.6	0.6	179	25.5		8.1		27.9		91.8		6.4		10.7		5		77							
					Bottom	10.2	0.3	157	25.3	25.3	8.1	8.1	30.4	30.4	91.5	91.5	6.3	6.3	13.7		5		79							
						10.2	0.4	162	25.3		8.1		30.4		91.5		6.3		13.7		4		79							
C3	Sunny	Moderate	10:17	12.8	Surface	1.0	0.3	68	25.6	25.6	8.2	8.2	29.3	29.3	100.8	100.8	7.0		7.4		3		77		822084	817829	<0.2	2.4	2.4	
						1.0	0.3	71	25.6		8.2		29.3		100.8		7.0		7.4		4		76							
					Middle	6.4	0.3	89	25.2	25.2	8.1	8.1	30.4	30.4	96.3	96.3	6.7	6.9	8.3	8.4	6	5	77	78						
						6.4	0.4	94	25.2		8.1		30.4		96.3		6.7		8.3		4		78							
					Bottom	11.8	0.3	77	25.0	25.0	8.1	8.1	32.2	32.2	96.6	96.6	6.7	6.7	9.4		5		79							
						11.8	0.3	77	25.0		8.1		32.2		96.6		6.7		9.4		5		79							
IM1	Sunny	Moderate	11:20	4.9	Surface	1.0	0.1	234	25.7	25.7	8.2	8.2	27.3	27.3	98.9	98.9	6.9	6.9	10.4		6		76		817949	807127	<0.2	2.2	2.0	
						1.0	0.2	234	25.7		8.2		27.3		98.9		6.9		10.4		6		77							
					Middle	2.5	0.1	263		-	-	-	-	-	-	-	-	-	-	12.6	-	7	-	78						
						2.5	0.1	284													-		-							
					Bottom	3.9	0.0	231	25.4	25.4	8.2	8.2	30.0	30.0	96.3	96.4	6.7	6.7	14.8		7		78							
						3.9	0.0	235	25.4		8.2		30.0		96.4		6.7		14.7		8		79							
IM2	Sunny	Moderate	12:00	7.2	Surface	1.0	0.5	177	25.9	25.9	8.2	8.2	26.0	26.0	99.5	99.5	7.0	6.8	8.7		7		75		818151	806173	<0.2	3.4	3.2	
						1.0	0.5	187	25.9		8.2		26.0		99.4		7.0		8.7		8		75							
					Middle	3.6	0.3	178	25.4	25.4	8.2	8.2	29.6	29.6	95.8	95.8	6.6	6.8	10.9	10.8	6	7	76	77						
						3.6	0.3	179	25.4		8.2		29.6		95.7		6.6		11.0		6		76							
					Bottom	6.2	0.1	193	25.3	25.3	8.2	8.2	30.3	30.3	96.3	96.4	6.7	6.7	12.7		7		79							
						6.2	0.1	207	25.3		8.2		30.3		96.4		6.7		12.7		6		79							
IM3	Sunny	Moderate	12:08	7.4	Surface	1.0	0.4	223	26.3	26.3	8.2	8.2	24.0	24.0	100.6	100.6	7.1	6.9	11.2		9		75		818811	805620	<0.2	2.5	2.3	
						1.0	0.4	224	26.3		8.2		24.0		100.5		7.1		11.2		8		75							
					Middle	3.7	0.4	225	25.4	25.4	8.2	8.2	29.4	29.4	96.1	96.1	6.7	6.9	13.7	13.1	8	8	76	77						
						3.7	0.4	241	25.4		8.2		29.4		96.1		6.7		13.8		8		76							
					Bottom	6.4	0.3	224	25.4	25.4	8.2	8.2	29.9	29.9	96.2	96.2	6.7	6.7	14.2		8		78							
						6.4	0.3	231	25.4		8.2		29.9		96.2		6.7		14.2		9		79							
IM4	Sunny	Calm	12:17	7.5	Surface	1.0	0.5	193	26.1	26.1	8.2	8.2	23.7	23.7	99.6	99.6	7.1	6.9	11.5		6		76		819723	804612	<0.2	2.8	2.8	
						1.0	0.5	210	26.1		8.2		23.8		99.5		7.1		11.6		6		76							
					Middle	3.8	0.4	192	25.4	25.4	8.2	8.2	29.5	29.5	94.4	94.4	6.6	6.9	20.4	19.7	5	6	77	77						
						3.8	0.4	209	25.4		8.2		29.5		94.4		6.6		20.7		6		77							
					Bottom	6.5	0.2	193	25.4	25.4	8.2	8.2	29.7	29.7	96.7	96.8	6.7	6.7	27.0		7		78							
						6.5	0.2	207	25.4		8.2		29.7		96.9		6.7		27.0		8		79							
IM5	Sunny	Calm	12:29	6.7	Surface	1.0	0.6	228	26.6	26.6	8.1	8.1	20.5	20.5	99.3	99.3	7.1	7.0	10.5		7		76		820732	804847	<0.2	3.3	3.3	
						1.0	0.7	248	26.6		8.1		20.6		99.3		7.1		10.5		7		76							
					Middle	3.4	0.7	221	25.8	25.8	8.2	8.2	23.8	23.8	95.9	95.9	6.8	6.8	15.7	15.6	5	6	77	77						
						3.4	0.7	234	25.8		8																			

**Water Quality Monitoring Results on 12 May 18 during Mid-Ebb Tide**

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

**Water Quality Monitoring Results on 12 May 18 during Mid-Flood Tide**

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

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

## Water Quality Monitoring

## Water Quality Monitoring Results on 12 May 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)	
IM9	Sunny	Moderate	15:46	6.4	Surface	1.0	0.1	226	28.1	8.0	8.0	12.4	12.4	107.6	107.6	7.9	7.9	11.0	11.0	8	8	74	74	822074	808817	<0.2	<0.2	4.1	4.1	
						1.0	0.2	241	28.1	8.0	8.0	12.4	12.4	107.6	107.6	7.9	7.9	11.0	11.0	9	9	73	73							
					Middle	3.2	0.2	283	26.6	8.1	8.1	20.0	20.0	109.4	109.4	7.9	7.9	11.1	11.1	9	9	75	75							
						3.2	0.2	294	26.6	8.1	8.1	20.0	20.0	109.4	109.4	7.9	7.9	11.1	11.1	8	8	75	75							
					Bottom	5.4	0.1	294	26.2	8.1	8.1	22.5	22.5	105.9	105.9	7.5	7.5	10.4	10.4	9	9	77	77							
						5.4	0.1	307	26.2	8.1	8.1	22.5	22.5	105.9	105.9	7.5	7.5	10.4	10.4	9	9	76	76							
IM10	Sunny	Moderate	15:54	6.6	Surface	1.0	0.2	231	27.2	8.1	8.1	17.3	17.3	111.4	111.4	8.0	8.0	10.8	10.8	8	8	74	74	822392	809796	<0.2	<0.2	4.1	4.1	
						1.0	0.2	250	27.2	8.1	8.1	17.3	17.3	111.4	111.4	8.0	8.0	10.8	10.8	8	8	75	75							
					Middle	3.3	0.2	302	26.3	8.1	8.1	19.2	19.2	103.0	103.0	7.5	7.5	12.4	12.4	9	9	75	75							
						3.3	0.2	315	26.3	8.1	8.1	19.2	19.2	103.0	103.0	7.5	7.5	12.4	12.4	8	8	76	76							
					Bottom	5.6	0.3	317	25.9	8.1	8.1	24.6	24.6	105.0	105.0	7.4	7.4	13.4	13.4	8	8	77	77							
						5.6	0.4	336	25.9	8.1	8.1	24.6	24.6	105.0	105.0	7.4	7.4	13.4	13.4	8	8	76	76							
IM11	Sunny	Moderate	16:04	6.6	Surface	1.0	0.1	326	27.0	8.2	8.2	19.5	19.5	105.6	105.6	7.5	7.5	11.0	11.0	7	7	75	75	822035	811472	<0.2	<0.2	3.7	3.7	
						1.0	0.1	330	27.0	8.2	8.2	19.5	19.5	105.6	105.6	7.5	7.5	11.0	11.0	8	8	74	74							
					Middle	3.3	0.2	335	26.1	8.2	8.2	23.3	23.3	100.3	100.3	7.1	7.1	12.0	12.0	8	8	76	76							
						3.3	0.2	308	26.1	8.2	8.2	23.3	23.3	100.3	100.3	7.1	7.1	12.0	12.0	8	8	77	77							
					Bottom	5.6	0.4	317	25.8	8.2	8.2	27.7	27.7	100.4	100.4	7.0	7.0	11.9	11.9	10	10	77	77							
						5.6	0.4	341	25.8	8.2	8.2	27.7	27.7	100.4	100.4	7.0	7.0	11.9	11.9	8	8	77	77							
IM12	Sunny	Moderate	16:12	8.9	Surface	1.0	0.4	302	26.4	8.2	8.2	23.5	23.5	99.2	99.2	7.0	7.0	11.1	11.1	6	6	75	75	821462	812024	<0.2	<0.2	3.2	3.2	
						1.0	0.4	331	26.4	8.2	8.2	23.5	23.5	99.2	99.2	7.0	7.0	11.1	11.1	8	8	74	74							
					Middle	4.5	0.4	276	25.6	8.2	8.2	27.0	27.0	92.2	92.2	6.5	6.5	14.4	14.4	9	9	77	77							
						4.5	0.4	302	25.6	8.2	8.2	27.0	27.0	92.2	92.2	6.5	6.5	14.4	14.4	7	7	76	76							
					Bottom	7.9	0.3	274	25.3	8.1	8.1	29.6	29.6	93.2	93.2	6.5	6.5	19.1	19.1	8	8	77	77							
						7.9	0.3	289	25.3	8.1	8.1	29.6	29.6	93.2	93.2	6.5	6.5	19.1	19.1	8	8	77	77							
SR2	Sunny	Moderate	16:42	4.5	Surface	1.0	0.4	322	26.3	8.2	8.2	25.4	25.4	107.7	107.7	7.5	7.5	11.1	11.1	9	9	76	76	821460	814174	<0.2	<0.2	2.2	2.2	
						1.0	0.4	330	26.3	8.2	8.2	25.4	25.4	107.7	107.7	7.5	7.5	11.1	11.1	8	8	77	77							
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-							
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-							
					Bottom	3.5	0.4	324	26.0	8.1	8.1	26.5	26.5	107.1	107.1	7.5	7.5	11.5	11.5	9	9	77	77							
						3.5	0.4	331	26.0	8.1	8.1	26.5	26.5	107.1	107.1	7.5	7.5	11.5	11.5	9	9	77	77							
SR3	Sunny	Moderate	15:33	8.2	Surface	1.0	0.5	193	26.8	8.1	8.1	15.9	15.9	100.1	100.1	7.3	7.3	11.3	11.3	7	7	-	-	822146	807547	-	-	-	-	
						1.0	0.5	194	26.8	8.1	8.1	15.9	15.9	100.1	100.1	7.3	7.3	11.3	11.3	7	7	-	-							
					Middle	4.1	0.3	240	25.9	8.1	8.1	24.1	24.1	95.0	95.0	6.8	6.8	9.8	9.8	7	7	-	-							
						4.1	0.3	246	25.9	8.1	8.1	24.1	24.1	95.0	95.0	6.8	6.8	9.8	9.8	8	8	-	-							
					Bottom	7.2	0.2	237	25.8	8.1	8.1	25.6	25.6	97.3	97.3	6.9	6.9	9.7	9.7	8	8	-	-							
						7.2	0.2	259	25.8	8.1	8.1	25.6	25.6	97.3	97.3	6.9	6.9	9.7	9.7	8	8	-	-							
SR4A	Sunny	Calm	16:34	8.2	Surface	1.0	0.4	236	26.1	8.2	8.2	27.6	27.6	102.9	102.9	7.1	7.1	11.4	11.4	8	8	-	-	817166	807824	-	-	-	-	
						1.0	0.4	237	26.1	8.2	8.2	27.6	27.6	102.9	102.9	7.1	7.1	11.5	11.5	9	9	-	-							
					Middle	4.1	0.3	237	26.0	8.2	8.2	27.8	27.8	99.1	99.1	6.9	6.9	13.9	13.9	11	11	-	-							
						4.1	0.4	253	26.0	8.2	8.2	27.8	27.8	99.1	99.1	6.9	6.9	13.9	13.9	9	9	-	-							
					Bottom	7.2	0.2	226	25.6	8.2	8.2	28.7	28.7	96.8	96.8	6.7	6.7	17.8	17.8	11</										

**Water Quality Monitoring Results on 15 May 18 during Mid-Ebb Tide**

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 15 May 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)	
IM9	Sunny	Moderate	11:44	7.7	Surface	1.0	0.3	121	27.1	8.1	8.1	20.3	20.3	99.9	99.8	7.1	7.0	14.6	19.1	10	11	75	77	822083	808808	<0.2	2.3	2.3		
						1.0	0.3	127	27.1	8.1	8.1	20.3	20.3	99.7	99.8	7.1	7.0	14.7	19.1	11	11	74	77							
					Middle	3.9	0.3	115	26.7	8.1	8.1	22.8	22.8	96.8	96.8	6.8	6.9	20.6	19.1	11	11	77	77							
						3.9	0.3	121	26.7	8.1	8.1	22.8	22.8	96.8	96.8	6.8	6.9	20.7	19.1	10	11	76	77							
					Bottom	6.7	0.2	92	26.7	8.1	8.1	23.1	23.1	97.8	97.9	6.9	6.9	22.1	19.1	10	11	79	77							
						6.7	0.2	97	26.7	8.1	8.1	23.1	23.1	97.9	97.9	6.9	6.9	22.1	19.1	11	11	78	77							
IM10	Sunny	Moderate	11:51	7.1	Surface	1.0	0.5	131	27.2	8.1	8.1	20.6	20.6	98.1	98.0	6.9	6.8	13.1	15.9	11	13	75	76	822366	809782	<0.2	2.5	2.6		
						1.0	0.5	131	27.2	8.1	8.1	20.6	20.6	97.9	98.0	6.9	6.8	13.1	15.9	12	13	74	76							
					Middle	3.6	0.5	135	26.8	8.1	8.1	22.3	22.3	95.0	95.0	6.7	6.7	16.5	15.9	15	13	76	77							
						3.6	0.6	138	26.8	8.1	8.1	22.3	22.3	95.0	95.0	6.7	6.7	16.6	15.9	13	13	77	77							
					Bottom	6.1	0.3	127	26.7	8.1	8.1	23.1	23.1	96.2	96.2	6.8	6.8	18.1	15.9	15	13	78	78							
						6.1	0.4	131	26.7	8.1	8.1	23.1	23.1	96.2	96.2	6.8	6.8	18.0	15.9	13	13	78	78							
IM11	Sunny	Moderate	12:00	8.6	Surface	1.0	0.9	112	27.4	8.1	8.1	20.3	20.3	103.2	103.2	7.3	7.2	12.2	13.9	10	11	75	77	822048	811440	<0.2	2.4	2.4		
						1.0	1.0	117	27.3	8.2	8.1	20.3	20.3	103.1	103.1	7.3	7.2	12.3	13.9	11	11	74	77							
					Middle	4.3	0.8	108	27.0	8.1	8.1	21.5	21.5	98.4	98.4	7.0	7.0	13.5	13.9	11	11	77	77							
						4.3	0.9	112	27.0	8.1	8.1	21.5	21.5	98.3	98.3	7.0	7.0	13.6	13.9	12	11	77	77							
					Bottom	7.6	0.4	99	26.7	8.1	8.1	23.6	23.6	97.0	97.1	6.8	6.8	15.7	13.9	10	11	78	79							
						7.6	0.4	99	26.7	8.1	8.1	23.6	23.6	97.1	97.1	6.8	6.8	15.9	13.9	11	11	79	79							
IM12	Sunny	Moderate	12:07	8.8	Surface	1.0	0.5	77	27.6	8.2	8.2	20.6	20.6	105.9	105.9	7.5	7.4	13.3	15.3	12	13	74	77	821456	812056	<0.2	2.4	2.4		
						1.0	0.6	84	27.6	8.2	8.2	20.6	20.6	105.9	105.9	7.5	7.4	13.4	15.3	13	13	75	77							
					Middle	4.4	0.6	86	27.5	8.2	8.2	20.7	20.7	103.1	103.1	7.3	7.3	15.3	15.3	12	13	77	77							
						4.4	0.6	91	27.5	8.2	8.2	20.7	20.7	103.0	103.1	7.3	7.3	15.3	15.3	13	13	76	77							
					Bottom	7.8	0.5	111	26.9	8.2	8.2	22.4	22.4	98.8	98.8	7.0	7.0	17.4	15.3	14	13	78	79							
						7.8	0.5	111	26.9	8.2	8.2	22.4	22.4	98.8	98.8	7.0	7.0	17.0	15.3	12	13	79	79							
SR2	Sunny	Moderate	12:36	4.2	Surface	1.0	0.5	96	27.2	8.2	8.2	21.9	21.9	100.1	100.1	7.0	7.0	14.6	17.5	12	13	74	76	821456	814169	<0.2	2.4	2.4		
						1.0	0.6	100	27.2	8.2	8.2	21.9	21.9	100.1	100.1	7.0	7.0	14.5	17.5	12	13	75	76							
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	17.5	-	-	-	76							
						-	-	-	-	-	-	-	-	-	-	-	-	-	17.5	-	-	-	76							
					Bottom	3.2	0.4	93	26.9	8.1	8.1	22.6	22.6	98.1	98.1	6.9	6.9	20.5	17.5	13	13	77	76							
						3.2	0.4	102	26.9	8.1	8.1	22.6	22.6	98.1	98.1	6.9	6.9	20.5	17.5	13	13	76	76							
SR3	Sunny	Moderate	11:30	9.4	Surface	1.0	0.2	158	27.4	8.1	8.1	19.9	19.9	103.1	103.1	7.3	7.1	12.5	16.2	8	8	-	-	822117	807585	-	-	-		
						1.0	0.2	169	27.4	8.1	8.1	19.9	19.9	103.1	103.1	7.3	7.1	12.5	16.2	8	8	-	-							
					Middle	4.7	0.2	159	26.7	8.1	8.1	22.8	22.8	95.8	95.8	6.8	6.8	16.7	16.2	8	8	-	-							
						4.7	0.2	159	26.7	8.1	8.1	22.8	22.8	95.8	95.8	6.8	6.8	16.8	16.2	8	8	-	-							
					Bottom	8.4	0.1	111	26.6	8.1	8.1	23.4	23.4	96.6	96.6	6.8	6.8	19.4	16.2	8	8	-	-							
						8.4	0.1	119	26.6	8.1	8.1	23.4	23.4	96.5	96.5	6.8	6.8	19.3	16.2	10	8	-	-							
SR4A	Sunny	Calm	12:32	8.6	Surface	1.0	0.2	52	28.3	8.2	8.2	19.7	19.7	107.2	107.2	7.5	7.5	15.6	16.9	10	11	-	-	817194	807836	-	-	-		
						1.0	0.3	54	28.3	8.2	8.2	19.7	19.7	107.2	107.2	7.5	7.5	15.6	16.9	10	11	-	-							
					Middle	4.3	0.3	69	28.4	8.2	8.2	20.0	20.0	106.9	106.9	7.4	7.4	15.7	16.9	11	11	-	-							
						4.3	0.4	71	28.4	8.2	8.2	20.0	20.0	106.9	106.9	7.4	7.4	15.7	16.9	11	11	-	-							
					Bottom	7.6	0.3	58	28.1	8.2	8.2	21.8	21.8	105.7	105.7	7.3	7.3	19.3	16.9	11	11	-	-							
						7.6	0.3	59	28.1	8.2	8.2	21.8	21.8	105.7	105.7	7.3	7.3	19.3	16.9	11	11	-	-							
SR5A	Sunny	Calm	12:48	5.0	Surface	1.0	0.1	57	28.5	8.2	8.2	19.8	19.8	106.1	106.1	7.4	7.4	13.1	13.3	8	8	-	-	816597	810667	-	-	-		
						1.0	0.1	60	28.5	8.2	8.2	19.8	19.8	106.1	106.1	7.4	7.4	13.1	13.3	8	8	-	-							

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

## Water Quality Monitoring

## Water Quality Monitoring Results on 15 May 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)	
C1	Cloudy	Calm	06:59	8.8	Surface	1.0	0.3	239	26.9	26.9	8.2	8.2	17.4	17.4	102.2	102.2	7.4	7.4	18.9	18.9	9	74	74	74	815644	804242	<0.2	2.4	2.4	
						1.0	0.3	259	26.9		8.2	8.2	17.4	17.4	102.2	102.2	7.4	7.4	18.9	18.9	8	75	75	75						
					Middle	4.4	0.3	231	26.9	26.9	8.2	8.2	16.6	16.6	102.3	102.3	7.4	7.4	20.1	20.1	8	76	76	76						
						4.4	0.3	245	26.9		8.2	8.2	16.6	16.6	102.3	102.3	7.4	7.4	20.1	20.1	9	76	76	76						
					Bottom	7.8	0.0	208	26.8	26.8	8.2	8.2	18.8	18.8	103.0	103.0	7.4	7.4	16.1	16.1	14	77	77	77						
						7.8	0.0	213	26.8		8.2	8.2	18.8	18.8	103.0	103.0	7.4	7.4	16.1	16.1	13	77	77	77						
C2	Cloudy	Moderate	07:42	12.4	Surface	1.0	0.6	341	27.1	27.1	8.1	8.1	19.1	19.1	92.8	92.8	6.6	6.6	11.3	11.3	6	75	75	75	825657	806968	<0.2	3.1	3.1	
						1.0	0.6	350	27.1		8.1	8.1	19.1	19.1	92.7	92.8	6.6	6.6	11.4	11.4	8	75	75	75						
					Middle	6.2	0.5	2	26.7	26.7	8.1	8.1	21.3	21.3	88.7	88.7	6.3	6.3	15.1	15.1	7	76	76	76						
						6.2	0.5	2	26.7		8.1	8.1	21.3	21.3	88.7	88.7	6.3	6.3	15.2	15.2	8	77	77	77						
					Bottom	11.4	0.4	13	26.7	26.7	8.1	8.1	22.3	22.3	89.0	89.0	6.3	6.3	18.3	18.3	6	79	79	79						
						11.4	0.4	14	26.7		8.1	8.1	22.3	22.3	89.0	89.0	6.3	6.3	18.6	18.6	7	78	78	78						
C3	Cloudy	Moderate	05:48	11.0	Surface	1.0	0.9	236	27.0	27.0	8.2	8.2	22.1	22.1	99.5	99.5	7.0	7.0	10.2	10.2	4	74	74	74	822138	817827	<0.2	2.6	2.6	
						1.0	0.9	247	27.0		8.2	8.2	22.1	22.1	99.5	99.5	7.0	7.0	10.2	10.2	4	75	75	75						
					Middle	5.5	0.9	256	26.8	26.8	8.2	8.2	23.8	23.8	97.8	97.8	6.9	6.9	10.5	10.5	6	76	76	76						
						5.5	0.9	272	26.8		8.2	8.2	23.9	23.9	97.8	97.8	6.8	6.8	10.5	10.5	7	77	77	77						
					Bottom	10.0	0.6	276	26.5	26.5	8.1	8.1	26.0	26.0	96.8	96.9	6.7	6.7	11.1	11.1	6	78	78	78						
						10.0	0.6	298	26.5		8.1	8.1	26.0	26.0	96.9	96.9	6.7	6.7	11.2	11.2	7	78	78	78						
IM1	Fine	Calm	07:15	5.5	Surface	1.0	0.6	35	27.0	27.0	8.2	8.2	19.2	19.2	103.2	103.2	7.4	7.4	12.7	12.7	8	74	74	74	817938	807160	<0.2	2.6	2.6	
						1.0	0.6	37	27.0		8.2	8.2	19.2	19.2	103.2	103.2	7.4	7.4	12.7	12.7	8	74	74	74						
					Middle	2.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
						2.8	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-							
					Bottom	4.5	0.5	36	27.0	27.0	8.2	8.2	18.9	18.9	103.5	103.5	7.4	7.4	10.5	10.5	8	77	77	77						
						4.5	0.5	36	27.0		8.2	8.2	18.9	18.9	103.5	103.5	7.4	7.4	10.5	10.5	10	77	77	77						
IM2	Fine	Calm	07:22	8.0	Surface	1.0	0.3	2	27.2	27.2	8.2	8.2	17.6	17.6	103.2	103.2	7.4	7.4	14.7	14.7	10	75	75	75	818175	806189	<0.2	2.5	2.4	
						1.0	0.4	2	27.2		8.2	8.2	17.6	17.6	103.2	103.2	7.4	7.4	14.7	14.7	9	74	74	74						
					Middle	4.0	0.3	0	26.9	26.9	8.2	8.2	18.5	18.5	103.3	103.3	7.4	7.4	19.9	19.9	9	76	76	76						
						4.0	0.3	0	26.9		8.2	8.2	18.5	18.5	103.3	103.3	7.4	7.4	19.9	19.9	8	77	77	77						
					Bottom	7.0	0.2	284	26.9	26.9	8.2	8.2	19.5	19.5	103.5	103.5	7.4	7.4	10.9	10.9	11	77	77	77						
						7.0	0.2	290	26.9		8.2	8.2	19.5	19.5	103.5	103.5	7.4	7.4	10.9	10.9	10	76	76	76						
IM3	Fine	Calm	07:29	8.1	Surface	1.0	0.7	23	27.0	27.0	8.2	8.2	16.0	16.0	103.0	103.0	7.5	7.5	15.2	15.2	8	74	74	74	818776	805602	<0.2	2.3	2.4	
						1.0	0.7	24	27.0		8.2	8.2	16.0	16.0	103.0	103.0	7.5	7.5	15.2	15.2	8	75	75	75						
					Middle	4.1	0.6	16	26.9	26.9	8.2	8.2	17.6	17.6	102.0	102.0	7.4	7.4	13.0	13.0	7	76	76	76						
						4.1	0.7	17	26.9		8.2	8.2	17.6	17.6	102.0	102.0	7.4	7.4	13.0	13.0	8	77	77	77						
					Bottom	7.1	0.4	359	26.9	26.9	8.2	8.2	19.0	19.0	102.4	102.4	7.3	7.3	14.9	14.9	10	78	78	78						
						7.1	0.4	330	26.9		8.2	8.2	19.0	19.0	102.4	102.4	7.3	7.3	14.9	14.9	12	77	77	77						
IM4	Fine	Calm	07:36	8.2	Surface	1.0	0.6	14	26.9	26.9	8.2	8.2	17.5	17.5	102.9	102.9	7.4	7.4	15.2	15.2	9	74	74	74	819701	804602	<0.2	2.1	2.2	
						1.0	0.6	15	26.9		8.2	8.2	17.5	17.5	102.9	102.9	7.4	7.4	15.2	15.2	7	73	73	73						
					Middle	4.1	0.6	20	26.9	26.9	8.2	8.2	19.0	19.0	102.7	102.7	7.4	7.4	16.5	16.5	8	75	75	75						
						4.1	0.6	20	26.9		8.2	8.2	19.0	19.0	102.7	102.7	7.4	7.4	16.5	16.5	8	76	76	76						
					Bottom	7.2	0.4	23	26.9	26.9	8.2	8.2	20.2	20.2	103.3	103.3	7.4	7.4	12.2	12.2	10	77	77	77						
						7.2	0.4	25	26.9		8.2	8.2	20.2	20.2	103.3	103.3	7.4	7.4	12.2	12.2	11	76	76							

**Water Quality Monitoring Results on 15 May 18 during Mid-Flood Tide**

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

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

**Water Quality Monitoring**

**Water Quality Monitoring Results on 17 May 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)	
C1	Sunny	Moderate	13:40	9.2	Surface	1.0	0.6	209	27.8	8.2	8.2	21.8	21.8	101.1	101.1	7.0	6.7	12.1	18.2	6	7	85	87	815600	804270	<0.2	1.9	1.5		
						1.0	0.6	225	27.8	8.2	8.2	21.8	21.8	101.1	101.1	7.0	6.7	12.1	18.2	5	7	85	87							
					Middle	4.6	0.8	188	26.3	8.2	8.2	27.6	27.6	92.3	92.3	6.4	6.4	22.3	18.2	8	7	88	87							
						4.6	0.9	206	26.3	8.2	8.2	27.6	27.6	92.3	92.3	6.4	6.4	22.3	18.2	8	7	87	87							
					Bottom	8.2	0.5	190	26.1	8.2	8.2	28.7	28.7	92.6	92.6	6.4	6.4	20.1	18.2	7	7	88	87							
						8.2	0.6	190	26.1	8.2	8.2	28.7	28.7	92.6	92.6	6.4	6.4	20.1	18.2	9	7	89	87							
C2	Sunny	Moderate	12:36	12.5	Surface	1.0	0.7	164	27.6	7.9	7.9	20.7	20.7	86.7	86.7	6.1	6.0	10.6	15.9	13	16	81	83	825652	806960	<0.2	2.9	3.2		
						1.0	0.7	174	27.6	7.9	7.9	20.7	20.7	86.7	86.7	6.1	6.0	10.7	15.9	14	16	81	83							
					Middle	6.3	0.4	174	27.0	7.9	7.9	22.8	22.9	83.7	83.7	5.9	5.9	10.6	15.9	15	16	83	83							
						6.3	0.5	186	27.0	7.9	7.9	22.9	22.9	83.7	83.7	5.9	5.9	10.8	15.9	16	16	83	85							
					Bottom	11.5	0.3	136	26.6	7.9	7.9	25.2	25.2	82.2	82.2	5.7	5.7	26.6	15.9	18	16	85	85							
						11.5	0.3	142	26.6	7.9	7.9	25.2	25.2	82.3	82.3	5.7	5.7	26.4	15.9	17	16	85	85							
C3	Sunny	Moderate	14:23	12.2	Surface	1.0	0.4	108	27.2	8.0	8.0	24.0	24.0	89.2	89.2	6.2	6.2	7.5	8.6	13	14	83	85	822104	817829	<0.2	2.3	2.3		
						1.0	0.5	109	27.2	8.0	8.0	24.0	24.0	89.2	89.2	6.2	6.2	7.4	8.6	12	14	84	85							
					Middle	6.1	0.3	97	27.1	8.0	8.0	24.5	24.5	88.6	88.6	6.1	6.1	6.9	8.6	12	14	85	86							
						6.1	0.3	104	27.1	8.0	8.0	24.5	24.5	88.6	88.6	6.1	6.1	6.9	8.6	11	14	86	86							
					Bottom	11.2	0.4	45	26.8	8.0	8.0	25.6	25.6	86.2	86.2	6.0	6.0	11.6	8.6	16	14	86	86							
						11.2	0.4	48	26.8	8.0	8.0	25.6	25.6	86.2	86.2	6.0	6.0	11.6	8.6	17	14	86	86							
IM1	Sunny	Moderate	13:20	5.4	Surface	1.0	0.1	184	28.1	8.2	8.2	21.9	21.9	96.6	96.6	6.7	6.7	15.1	16.7	5	8	85	85	817944	807151	<0.2	2.2	1.8		
						1.0	0.1	201	28.1	8.2	8.2	21.9	21.9	96.6	96.6	6.7	6.7	15.1	16.7	5	8	85	85							
					Middle	2.7	-	-	-	-	-	-	-	-	-	-	-	-	16.7	16.7	-	8	-	-						
						2.7	-	-	-	-	-	-	-	-	-	-	-	-	16.7	16.7	-	8	-	-						
					Bottom	4.4	0.2	166	26.5	8.2	8.2	26.6	26.6	96.3	96.3	6.7	6.7	18.3	16.7	10	8	87	88							
						4.4	0.2	176	26.5	8.2	8.2	26.6	26.6	96.3	96.3	6.7	6.7	18.3	16.7	12	8	88	88							
IM2	Sunny	Moderate	13:13	7.8	Surface	1.0	0.4	169	28.0	8.2	8.2	21.8	21.8	101.4	101.4	7.0	6.8	10.5	14.2	6	8	85	87	818185	806160	<0.2	1.5	1.6		
						1.0	0.4	174	28.0	8.2	8.2	21.8	21.8	101.4	101.4	7.0	6.8	10.5	14.2	5	8	85	87							
					Middle	3.9	0.4	167	26.5	8.2	8.2	26.0	26.0	95.0	95.0	6.6	6.6	15.4	14.2	6	8	87	88							
						3.9	0.4	182	26.5	8.2	8.2	26.0	26.0	95.0	95.0	6.6	6.6	15.4	14.2	6	8	88	88							
					Bottom	6.8	0.3	157	26.4	8.2	8.2	27.3	27.3	97.7	97.7	6.8	6.8	16.7	14.2	12	8	88	88							
						6.8	0.3	159	26.4	8.2	8.2	27.3	27.3	97.7	97.7	6.8	6.8	16.7	14.2	10	8	88	88							
IM3	Sunny	Moderate	13:07	8.1	Surface	1.0	0.3	193	27.0	8.2	8.2	23.8	23.8	97.1	97.1	6.8	6.8	12.8	16.7	3	5	85	86	818757	805597	<0.2	1.7	1.6		
						1.0	0.3	207	27.0	8.2	8.2	23.8	23.8	97.1	97.1	6.8	6.8	12.8	16.7	4	5	86	87							
					Middle	4.1	0.3	181	26.9	8.2	8.2	25.4	25.4	96.2	96.2	6.7	6.7	15.2	16.7	3	5	87	88							
						4.1	0.4	187	26.9	8.2	8.2	25.4	25.4	96.2	96.2	6.7	6.7	15.2	16.7	5	5	88	89							
					Bottom	7.1	0.3	149	26.4	8.2	8.2	27.2	27.2	96.4	96.4	6.7	6.7	22.0	16.7	6	5	89	88							
						7.1	0.3	150	26.4	8.2	8.2	27.2	27.2	96.4	96.4	6.7	6.7	22.0	16.7	6	5	88	88							
IM4	Sunny	Moderate	12:58	8.0	Surface	1.0	0.4	184	27.2	8.2	8.2	26.1	26.1	94.4	94.4	6.5	6.4	17.5	21.8	9	12	83	85	819734	804618	<0.2	1.4	1.3		
						1.0	0.4	186	27.2	8.2	8.2	26.1	26.1	94.4	94.4	6.5	6.4	17.5	21.8	9	12	83	85							
					Middle	4.0	0.4	183	26.4	8.2	8.2	26.8	26.8	91.1	91.1	6.3	6.3	22.4	21.8	10	12	85	85							
						4.0	0.4	193	26.4	8.2	8.2	26.8	26.8	91.1	91.1	6.3	6.3	22.4	21.8	10	12	85	85							
					Bottom	7.0	0.3	169	26.3	8.2	8.2	27.6	27.6	91.0	91.0	6.3	6.3	25.6	21.8	16	12	87	87							
						7.0	0.3	184	26.3	8.2	8.2	27.6	27.6	91.0	91.0	6.3	6.3	25.6	21.8	15	12	88	88							
IM5	Sunny	Moderate	12:50	7.6	Surface	1.0	0.4	186	26.9	8.2	8.2	25.5	25.5	94.8	94.8	6.6	6.5	17.4												

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

**Water Quality Monitoring**

**Water Quality Monitoring Results on 17 May 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)	
IM9	Sunny	Moderate	13:11	7.7	Surface	1.0	0.3	110	27.2	27.3	8.0	8.0	22.4	22.4	90.1	90.1	6.3	6.3	7.4	9.4	4	5	81	85	822093	808835	<0.2	<0.2	2.6	2.6
						1.0	0.4	120	27.3	27.3	8.0	8.0	22.4	22.4	90.1	90.1	6.3	6.3	7.4	9.4	4	5	82	85	822093	808835	<0.2	<0.2	2.5	2.5
					Middle	3.9	0.4	107	27.0	27.0	8.0	8.0	22.9	22.9	89.9	90.0	6.3	6.3	8.5	9.4	5	5	86	85	822093	808835	<0.2	<0.2	2.6	2.6
						3.9	0.4	114	27.0	27.0	8.0	8.0	22.9	22.9	90.0	90.0	6.3	6.3	8.5	9.4	4	5	86	85	822093	808835	<0.2	<0.2	2.5	2.5
					Bottom	6.7	0.3	84	26.7	26.7	8.0	8.0	24.3	24.3	89.3	89.4	6.2	6.2	12.2	9.4	7	5	87	85	822093	808835	<0.2	<0.2	2.4	2.4
						6.7	0.3	84	26.7	26.7	8.0	8.0	24.3	24.3	89.4	89.4	6.2	6.2	12.2	9.4	6	5	87	85	822093	808835	<0.2	<0.2	2.5	2.5
IM10	Sunny	Moderate	13:18	7.5	Surface	1.0	0.9	116	28.0	28.0	8.0	8.0	21.3	21.3	94.0	94.0	6.5	6.5	10	13.2	10	9	83	86	822378	809773	<0.2	<0.2	2.4	2.4
						1.0	1.0	116	28.0	28.0	8.0	8.0	21.3	21.3	94.0	94.0	6.5	6.5	10	13.2	8	9	84	86	822378	809773	<0.2	<0.2	2.3	2.3
					Middle	3.8	0.8	108	27.5	27.5	8.0	8.0	22.2	22.2	91.9	91.9	6.4	6.4	9.3	13.2	9	9	86	86	822378	809773	<0.2	<0.2	2.4	2.4
						3.8	0.9	109	27.5	27.5	8.0	8.0	22.2	22.2	91.8	91.9	6.4	6.4	9.6	13.2	8	9	86	86	822378	809773	<0.2	<0.2	2.3	2.3
					Bottom	6.5	0.6	108	27.0	27.0	8.0	8.0	23.4	23.4	89.8	89.8	6.3	6.3	23.6	13.2	10	9	87	88	822378	809773	<0.2	<0.2	2.4	2.4
						6.5	0.6	117	27.0	27.0	8.0	8.0	23.4	23.4	89.8	89.8	6.3	6.3	23.4	13.2	8	9	88	88	822378	809773	<0.2	<0.2	2.4	2.4
IM11	Sunny	Moderate	13:27	9.5	Surface	1.0	0.9	116	27.6	27.6	8.0	8.0	21.5	21.5	91.3	91.2	6.4	6.4	9.8	16.3	7	8	81	84	822076	811489	<0.2	<0.2	2.4	2.4
						1.0	0.9	127	27.6	27.6	8.0	8.0	21.5	21.5	91.1	91.2	6.4	6.4	9.9	16.3	7	8	82	84	822076	811489	<0.2	<0.2	2.3	2.3
					Middle	4.8	0.8	111	27.3	27.3	8.0	8.0	22.0	22.0	89.5	89.5	6.3	6.3	18.4	16.3	7	8	84	84	822076	811489	<0.2	<0.2	2.3	2.3
						4.8	0.8	118	27.3	27.3	8.0	8.0	22.0	22.0	89.4	89.5	6.3	6.3	18.6	16.3	8	8	84	86	822076	811489	<0.2	<0.2	2.3	2.3
					Bottom	8.5	0.5	91	27.2	27.2	8.0	8.0	22.3	22.3	89.3	89.4	6.3	6.3	20.5	16.3	8	8	86	86	822076	811489	<0.2	<0.2	2.3	2.3
						8.5	0.6	93	27.2	27.2	8.0	8.0	22.4	22.3	89.4	89.4	6.3	6.3	20.8	16.3	9	8	87	87	822076	811489	<0.2	<0.2	2.3	2.3
IM12	Sunny	Moderate	13:35	11.3	Surface	1.0	0.6	105	27.6	27.6	8.0	8.0	21.4	21.4	90.3	90.3	6.3	6.3	11.0	15.1	8	11	81	84	821484	812058	<0.2	<0.2	2.4	2.4
						1.0	0.6	113	27.5	27.5	8.0	8.0	21.5	21.4	90.2	90.3	6.3	6.3	11.1	15.1	10	11	81	84	821484	812058	<0.2	<0.2	2.4	2.4
					Middle	5.7	0.6	102	27.2	27.2	8.0	8.0	22.4	22.4	89.1	89.1	6.2	6.2	17.7	15.1	11	11	83	84	821484	812058	<0.2	<0.2	2.4	2.4
						5.7	0.6	104	27.2	27.2	8.0	8.0	22.4	22.4	89.1	89.1	6.2	6.2	16.9	15.1	11	11	84	84	821484	812058	<0.2	<0.2	2.4	2.4
					Bottom	10.3	0.4	89	27.2	27.2	8.1	8.1	22.7	22.7	89.0	89.0	6.2	6.2	16.8	15.1	12	11	86	86	821484	812058	<0.2	<0.2	2.4	2.4
						10.3	0.4	96	27.2	27.2	8.1	8.1	22.7	22.7	89.0	89.0	6.2	6.2	17.1	15.1	13	11	86	86	821484	812058	<0.2	<0.2	2.4	2.4
SR2	Sunny	Moderate	14:05	3.7	Surface	1.0	0.6	81	27.4	27.4	8.0	8.0	22.0	22.0	89.0	89.0	6.2	6.2	12.3	13.8	10	10	83	86	821444	814137	<0.2	<0.2	2.5	2.5
						1.0	0.6	81	27.4	27.4	8.0	8.0	22.0	22.0	89.0	89.0	6.2	6.2	12.4	13.8	9	10	83	86	821444	814137	<0.2	<0.2	2.4	2.4
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13.8	-	10	86	821444	814137	<0.2	<0.2	-	-	
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	13.8	-	10	86	821444	814137	<0.2	<0.2	-	-	
					Bottom	2.7	0.4	83	27.3	27.3	8.0	8.0	22.3	22.3	88.5	88.5	6.2	6.2	15.7	13.8	10	10	88	88	821444	814137	<0.2	<0.2	2.6	2.6
						2.7	0.4	89	27.3	27.3	8.0	8.0	22.3	22.3	88.5	88.5	6.2	6.2	14.8	13.8	10	10	88	88	821444	814137	<0.2	<0.2	2.5	2.5
SR3	Sunny	Moderate	12:58	9.4	Surface	1.0	0.2	185	27.5	27.5	8.0	8.0	21.4	21.4	91.1	91.2	6.4	6.4	7.5	11.1	8	7	-	-	822149	807600	-	-	-	-
						1.0	0.2	193	27.5	27.5	8.0	8.0	21.4	21.4	91.2	91.2	6.4	6.4	7.4	11.1	7	7	-	-	822149	807600	-	-	-	-
					Middle	4.7	0.2	126	27.3	27.3	8.0	8.0	22.5	22.5	91.8	91.8	6.4	6.4	7.9	11.1	7	7	-	-	822149	807600	-	-	-	-
						4.7	0.2	133	27.3	27.3	8.0	8.0	22.5	22.5	91.8	91.8	6.4	6.4	8.2	11.1	6	7	-	-	822149	807600	-	-	-	-
					Bottom	8.4	0.2	26	26.7	26.8	8.0	8.0	25.1	25.0	90.8	91.0	6.3	6.3	17.9	11.1	6	7	-	-	822149	807600	-	-	-	-
						8.4	0.2	26	26.8	26.8	8.0	8.0	25.0	25.0	91.1	91.1	6.3	6.3	17.9	11.1	8	7	-	-	822149	807600	-	-	-	-
SR4A	Sunny	Moderate	14:03	9.4	Surface	1.0	0.2	108	28.3	28.3	8.2	8.2	22.2	22.2	96.7	96.7	6.7	6.7	15.6	17.9	6	9	-	-	817163	807833	-	-	-	-
						1.0	0.2	118	28.3	28.3	8.2	8.2	22.2	22.2	96.7	96.7	6.7	6.7	15.6	17.9	8	9	-	-	817163	807833	-	-	-	-
					Middle	4.7	0.2	92	26.4	26.4	8.2	8.2	26.9	26.9	93.1	93.1	6.5	6.5	20.0	17.9	9	9	-	-	817163	807833	-	-	-	-
						4.7	0.2	99	26.4	26.4	8.2	8.2	26.9	26.9	93.1	93.1	6.5	6.5	20.0	17.9	9	9	-	-	817163	807833	-	-	-	-
					Bottom	8.4	0.2	85	26.4	26.4	8.2	8.2	27.0	27.0	94.7	94.7	6.6	6.6	18.2	17.9	10	9	-	-	817163	807833	-	-	-	-
						8.4	0.2	86	26.4	26.4	8.2	8.2	27.0	27.0	94.7	94.7	6.6	6.6	18.2	17.9	12	9	-	-	817163	807833	-	-	-	-
SR5A	Sunny	Calm	14:19																											

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

**Water Quality Monitoring**

**Water Quality Monitoring Results on 17 May 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)	
C1	Cloudy	Calm	07:16	9.4	Surface	1.0	0.9	36	26.7		8.1	8.1	22.2	22.2	93.7	93.7	6.6		20.8		7		83		815604.655	804252.88	<0.2	3.2	2.5	
						1.0	0.9	38	26.7		8.1	8.1	22.2	22.2	93.7	93.7	6.6		20.8		8		83							
					Middle	4.7	0.6	34	26.0	26.0	8.2	8.2	28.9	28.9	92.2	92.2	6.4	6.5	19.5	20.1	8	8	85	85						
						4.7	0.7	34	26.0		8.2	8.2	28.9	28.9	92.2	92.2	6.4		19.5		9		86							
					Bottom	8.4	0.5	32	26.0	26.0	8.2	8.2	29.2	29.2	95.6	95.6	6.6	6.6	20.1		8		87							
						8.4	0.5	34	26.0		8.2	8.2	29.2	29.2	95.6	95.6	6.6		20.1		8		88							
C2	Sunny	Moderate	08:31	12.9	Surface	1.0	0.6	346	27.4	27.4	7.9	7.9	18.6	18.6	85.2	85.1	6.1		7.1		6		83		825665	806920	<0.2	3.3	2.8	
						1.0	0.6	356	27.4		7.9	7.9	18.7	18.6	85.0	85.1	6.1		7.2		6		84							
					Middle	6.5	0.5	348	27.2	27.2	8.0	8.0	20.1	20.2	83.0	83.0	5.9	6.0	15.0	15.1	6	7	85	85						
						6.5	0.6	320	27.2		8.0	8.0	20.2	20.2	82.9	83.0	5.9		15.1		6		86							
					Bottom	11.9	0.4	17	27.1	27.1	8.0	8.0	20.8	20.8	82.5	82.5	5.8	5.8	23.3		7		87							
						11.9	0.4	17	27.1		8.0	8.0	20.8	20.8	82.5	82.5	5.8		23.1		8		87							
C3	Fine	Calm	06:45	11.7	Surface	1.0	0.7	243	27.2	27.2	7.9	7.9	22.2	22.2	87.6	87.6	6.1		5.2		5		81		822118	817793	<0.2	3.5	3.6	
						1.0	0.8	266	27.2		7.9	7.9	22.2	22.2	87.5	87.6	6.1	6.1	5.1		5		82							
					Middle	5.9	0.8	248	26.7	26.7	7.9	7.9	24.8	24.8	85.4	85.4	6.0	6.0	4.2		9	7	83	83						
						5.9	0.8	265	26.7		7.9	7.9	24.8	24.8	85.4	85.4	6.0		4.3		9		83							
					Bottom	10.7	0.7	270	26.2	26.2	7.9	7.9	27.9	27.9	83.8	83.9	5.8	5.8	16.1		8		85							
						10.7	0.7	290	26.2		7.9	7.9	27.9	27.9	84.0	83.9	5.8		15.9		8		85							
IM1	Fine	Calm	06:52	5.6	Surface	1.0	0.3	25	27.1	27.1	8.2	8.2	23.8	23.8	94.6	94.6	6.6		18.4		9		83		817944.608	807130.69	<0.2	2.8	2.6	
						1.0	0.3	25	27.1		8.2	8.2	23.8	23.8	94.6	94.6	6.6	6.6	18.4		8		84							
					Middle	2.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	85	85					
						2.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-							
					Bottom	4.6	0.3	23	27.1	27.1	8.2	8.2	24.0	24.0	96.4	96.4	6.7	6.7	22.3		10		85							
						4.6	0.3	24	27.1		8.2	8.2	24.0	24.0	96.4	96.4	6.7		22.3		10		86							
IM2	Fine	Calm	06:45	8.2	Surface	1.0	0.8	14	27.1	27.1	8.1	8.1	22.0	22.0	96.0	96.0	6.8		19.4		5		83		818164.487	806164.35	<0.2	2.4	2.4	
						1.0	0.8	14	27.1		8.1	8.1	22.0	22.0	96.0	96.0	6.8		19.4		6		83							
					Middle	4.1	0.7	2	26.8	26.8	8.2	8.2	24.3	24.3	94.7	94.7	6.6	6.7	18.6	19.7	8	7	86	85						
						4.1	0.7	2	26.8		8.2	8.2	24.3	24.3	94.7	94.7	6.6		18.6		7		85							
					Bottom	7.2	0.5	354	26.8	26.8	8.2	8.2	25.7	25.7	95.9	95.9	6.6	6.6	21.2		6		86							
						7.2	0.5	326	26.8		8.2	8.2	25.7	25.7	95.9	95.9	6.6		21.2		8		87							
IM3	Fine	Calm	06:37	8.3	Surface	1.0	0.8	11	27.2	27.2	8.1	8.1	20.2	20.2	95.9	95.9	6.8		20.8		7		84		818769.889	805592.82	<0.2	2.7	2.7	
						1.0	0.8	11	27.2		8.1	8.1	20.2	20.2	95.9	95.9	6.8	6.7	20.8	21.6	7	7	83	86						
					Middle	4.2	0.8	3	26.9	26.9	8.1	8.1	23.5	23.5	94.4	94.4	6.6	6.8	20.8		6		86							
						4.2	0.8	3	26.9		8.1	8.1	23.5	23.5	94.4	94.4	6.6		20.8		7		85							
					Bottom	7.3	0.6	0	26.8	26.8	8.1	8.1	26.1	26.1	98.3	98.3	6.8	6.8	23.2		7		88							
						7.3	0.7	0	26.8		8.1	8.1	26.1	26.1	98.3	98.3	6.8		23.2		9		88							
IM4	Fine	Calm	06:28	8.2	Surface	1.0	0.9	40	27.0	27.0	8.1	8.1	21.3	21.3	94.0	94.0	6.7		17.6		7		83		819734.471	804618.49	<0.2	2.7	2.7	
						1.0	1.0	41	27.0		8.1	8.1	21.3	21.3	94.0	94.0	6.7	6.6	17.6	20.9	8	8	84	86						
					Middle	4.1	0.7	32	26.5	26.5	8.1	8.1	25.2	25.2	93.7	93.7	6.5	6.5	20.4		7		87							
						4.1	0.8	34	26.5		8.1	8.1	25.2	25.2	93.7	93.7	6.5		20.4		7		88							
					Bottom	7.2	0.5	32	26.5	26.5	8.1	8.1	26.0	26.0	96.0	96.0	6.7	6.7	24.8		9		88							
						7.2	0.5	34	26.5		8.1	8.1	26.0	26.0	96.0	96.0	6.7		24.8		7		87							
IM5	Fine	Calm	06:18	8.3	Surface	1.0	0.8	29	27.2	27.2	8.1	8.1	21.1	21.1	94.7	94.7	6.7		19.8		8		83		820731.698	804868.5	<0.2	2.5	2.5	
						1.0	0.8	31	27.2																					

**Water Quality Monitoring Results on 17 May 18 during Mid-Flood Tide**

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

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

**Water Quality Monitoring**

**Water Quality Monitoring Results on 19 May 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)	
C1	Sunny	Moderate	15:19	8.6	Surface	1.0	0.6	226	28.5	8.1	8.1	22.9	22.9	96.0	96.0	6.6	6.3	13.1	19.3	8	8	73	75	815602	804250	<0.2	<0.2	2.0	2.1	
						1.0	0.6	238	28.5	8.1	8.1	22.9	22.9	96.0	96.0	6.6	6.3	13.1	19.3	9	8	73	75	815602	804250	<0.2	<0.2	2.1	2.1	
					Middle	4.3	0.6	218	26.6	8.1	8.1	27.7	27.7	87.8	87.8	6.0	6.0	24.5	19.3	7	8	75	75	815602	804250	<0.2	<0.2	2.1	2.1	
						4.3	0.6	239	26.6	8.1	8.1	27.7	27.7	87.8	87.8	6.0	6.0	24.5	19.3	7	8	75	75	815602	804250	<0.2	<0.2	2.0	2.2	
					Bottom	7.6	0.4	216	26.4	8.1	8.1	28.9	28.9	96.0	96.0	6.6	6.6	20.4	19.3	8	8	77	77	815602	804250	<0.2	<0.2	2.2	2.2	
						7.6	0.4	228	26.4	8.1	8.1	28.9	28.9	96.0	96.0	6.6	6.6	20.4	19.3	7	8	76	76	815602	804250	<0.2	<0.2	2.2	2.2	
C2	Sunny	Moderate	14:09	12.3	Surface	1.0	0.5	178	28.6	8.0	8.0	19.7	19.7	94.1	94.2	6.5	6.3	12.3	15.5	9	10	72	74	825693	806974	<0.2	<0.2	3.7	3.7	
						1.0	0.5	192	28.6	8.0	8.0	19.7	19.7	94.2	94.2	6.5	6.3	12.3	15.5	8	10	72	74	825693	806974	<0.2	<0.2	3.3	3.3	
					Middle	6.2	0.5	161	27.7	8.0	8.0	22.1	22.1	86.9	86.9	6.1	6.1	15.6	15.5	10	10	74	74	825693	806974	<0.2	<0.2	3.4	3.4	
						6.2	0.5	169	27.7	8.0	8.0	22.2	22.1	86.9	86.9	6.1	6.1	15.8	15.5	8	10	74	74	825693	806974	<0.2	<0.2	3.6	3.6	
					Bottom	11.3	0.4	147	27.1	8.0	8.0	26.3	26.3	87.4	87.4	6.0	6.0	18.5	15.5	11	10	76	76	825693	806974	<0.2	<0.2	3.8	3.8	
						11.3	0.4	152	27.1	8.0	8.0	26.3	26.3	87.5	87.5	6.0	6.0	18.6	15.5	11	10	76	76	825693	806974	<0.2	<0.2	4.1	4.1	
C3	Sunny	Moderate	15:57	11.9	Surface	1.0	0.5	105	28.1	8.0	8.0	24.0	24.0	95.4	95.4	6.5	6.4	11.9	14.6	10	9	72	74	822086	817802	<0.2	<0.2	2.6	2.6	
						1.0	0.5	113	28.1	8.0	8.0	24.0	24.0	95.4	95.4	6.5	6.4	11.9	14.6	9	9	72	74	822086	817802	<0.2	<0.2	2.8	2.8	
					Middle	6.0	0.2	77	27.8	8.0	8.0	24.9	24.9	92.3	92.3	6.3	6.3	12.8	14.6	8	9	74	75	822086	817802	<0.2	<0.2	2.4	2.4	
						6.0	0.2	79	27.8	8.0	8.0	24.9	24.9	92.3	92.3	6.3	6.3	12.9	14.6	9	9	75	75	822086	817802	<0.2	<0.2	2.5	2.5	
					Bottom	10.9	0.2	39	26.9	8.0	8.0	27.7	27.7	86.8	86.8	5.9	6.0	19.2	14.6	10	9	76	76	822086	817802	<0.2	<0.2	2.5	2.5	
						10.9	0.2	42	26.9	8.0	8.0	27.7	27.7	86.9	86.9	6.0	6.0	19.1	14.6	9	9	76	76	822086	817802	<0.2	<0.2	2.3	2.3	
IM1	Sunny	Moderate	15:02	5.5	Surface	1.0	0.2	221	28.5	8.1	8.1	22.8	22.8	92.4	92.4	6.3	6.3	15.2	16.8	6	8	75	75	817972	807111	<0.2	<0.2	2.0	2.0	
						1.0	0.2	242	28.5	8.1	8.1	22.8	22.8	92.4	92.4	6.3	6.3	15.2	16.8	4	8	75	75	817972	807111	<0.2	<0.2	2.0	2.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	16.8	-	-	8	76	817972	807111	<0.2	<0.2	-	-	
						-	-	-	-	-	-	-	-	-	-	-	-	-	16.8	-	-	8	76	817972	807111	<0.2	<0.2	-	-	
					Bottom	4.5	0.2	179	26.8	8.1	8.1	27.0	27.0	94.3	94.3	6.5	6.5	18.4	16.8	11	8	77	77	817972	807111	<0.2	<0.2	1.9	1.9	
						4.5	0.2	184	26.8	8.1	8.1	27.0	27.0	94.3	94.3	6.5	6.5	18.4	16.8	12	8	78	78	817972	807111	<0.2	<0.2	1.9	1.9	
IM2	Sunny	Moderate	14:56	7.7	Surface	1.0	0.4	188	28.7	8.1	8.1	22.5	22.5	91.0	91.0	6.2	6.1	13.7	16.5	7	8	73	73	818153	806152	<0.2	<0.2	2.5	2.5	
						1.0	0.4	188	28.7	8.1	8.1	22.5	22.5	91.0	91.0	6.2	6.1	13.7	16.5	8	8	73	73	818153	806152	<0.2	<0.2	2.6	2.6	
					Middle	3.9	0.4	190	26.7	8.1	8.1	27.0	27.0	85.7	85.7	5.9	5.9	17.0	16.5	8	8	75	75	818153	806152	<0.2	<0.2	2.5	2.5	
						3.9	0.4	190	26.7	8.1	8.1	27.0	27.0	85.7	85.7	5.9	5.9	17.0	16.5	8	8	75	75	818153	806152	<0.2	<0.2	2.4	2.4	
					Bottom	6.7	0.2	161	26.5	8.1	8.1	27.8	27.8	89.9	89.9	6.2	6.2	18.7	16.5	8	8	77	77	818153	806152	<0.2	<0.2	2.4	2.4	
						6.7	0.2	161	26.5	8.1	8.1	27.8	27.8	89.9	89.9	6.2	6.2	18.7	16.5	8	8	77	77	818153	806152	<0.2	<0.2	2.2	2.2	
IM3	Sunny	Moderate	14:50	8.1	Surface	1.0	0.3	202	28.1	8.1	8.1	23.3	23.3	89.4	89.4	6.1	5.9	14.9	21.5	7	8	73	74	818811	805569	<0.2	<0.2	2.3	2.3	
						1.0	0.4	208	28.1	8.1	8.1	23.3	23.3	89.4	89.4	6.1	5.9	14.9	21.5	6	8	74	74	818811	805569	<0.2	<0.2	2.4	2.4	
					Middle	4.1	0.3	179	26.9	8.1	8.1	25.9	25.9	82.8	82.8	5.7	5.7	22.9	21.5	9	8	74	75	818811	805569	<0.2	<0.2	2.3	2.3	
						4.1	0.3	188	26.9	8.1	8.1	25.9	25.9	82.8	82.8	5.7	5.7	22.9	21.5	9	8	75	75	818811	805569	<0.2	<0.2	2.6	2.6	
					Bottom	7.1	0.2	175	26.4	8.1	8.1	28.1	28.1	81.0	81.0	5.6	5.6	26.6	21.5	10	8	77	77	818811	805569	<0.2	<0.2	2.5	2.5	
						7.1	0.2	182	26.4	8.1	8.1	28.1	28.1	81.0	81.0	5.6	5.6	26.6	21.5	9	8	77	77	818811	805569	<0.2	<0.2	2.5	2.5	
IM4	Sunny	Moderate	14:40	8.3	Surface	1.0	0.4	217	28.6	8.1	8.1	22.3	22.3	84.1	84.1	5.8	5.7	21.9	20.9	7	7	74	73	819708	804591	<0.2	<0.2	2.4	2.3	
						1.0	0.4	229	28.6	8.1	8.1	22.3	22.3	84.1	84.1	5.8	5.7	21.9	20.9	7	7	73	73	819708	804591	<0.2	<0.2	2.3	2.3	
					Middle	4.2	0.4	206	26.5	8.1	8.1	27.1	27.1	81.5	81.5	5.6	5.6	20.8	20.9	6	7	75	75	819708	804591	<0.2	<0.2	2.3	2.3	
						4.2	0.5	210	26.5	8.1	8.1	27.1	27.1	81.5	81.5	5.6	5.6	20.8	20.9	6	7	75	75	819708	804591	<0.2	<0.2	2.3	2.3	
					Bottom	7.3	0.4	182	26.2	8.1	8.1	28.7	28.7	82.3	82.3	5.7	5.7	19.9	20.9	8	7	77	77	819708	804591	<0.2	<0.2	2.4	2.4	
						7.3	0.4	187	26.2	8.1	8.1	28.7	28.7	82.3	82.3	5.7	5.7	19.9	20.9	7	7	76	76	819708	804591	<0.2	<0.2	2.3	2.3	
IM5	Sunny	Moderate	14:33	7.8	Surface	1.0	0.3	185	27.7	8.1	8.1	23.7	23.6	85.7																

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

**Water Quality Monitoring**

**Water Quality Monitoring Results on 19 May 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)	
IM9	Sunny	Moderate	14:42	7.8	Surface	1.0	0.3	108	29.1	29.1	8.0	8.0	20.0	20.0	99.2	99.2	6.8	6.8	11.5	DA	5	73	75	75	822092	808835	<0.2	2.6	2.7	
						1.0	0.3	113	29.1	29.1	8.0	8.0	20.0	20.0	99.2	99.2	6.8	6.8	11.5	DA	7	72	75	75	822092	808835	<0.2	2.6	2.7	
					Middle	3.9	0.4	124	27.5	27.5	8.0	8.0	23.5	23.5	88.7	88.7	6.2	6.2	16.9	15.4	7	75	75	75	822092	808835	<0.2	2.6	2.7	
						3.9	0.4	126	27.5	27.5	8.0	8.0	23.5	23.5	88.7	88.7	6.2	6.2	16.9	15.4	7	74	75	75	822092	808835	<0.2	2.6	2.7	
					Bottom	6.8	0.3	99	27.3	27.3	8.0	8.0	24.2	24.2	90.1	90.1	6.2	6.2	17.8	17.8	7	76	76	76	822092	808835	<0.2	2.6	2.7	
						6.8	0.3	101	27.3	27.3	8.0	8.0	24.2	24.2	90.3	90.2	6.3	6.3	17.8	17.8	6	76	76	76	822092	808835	<0.2	2.6	2.7	
IM10	Sunny	Moderate	14:49	7.9	Surface	1.0	0.8	116	28.9	28.9	8.0	8.0	20.6	20.6	97.3	97.3	6.7	6.7	12.7	DA	9	73	74	74	822383	809794	<0.2	2.5	2.6	
						1.0	0.8	118	28.9	28.9	8.0	8.0	20.6	20.6	97.3	97.3	6.7	6.7	12.7	DA	9	72	74	74	822383	809794	<0.2	2.5	2.6	
					Middle	4.0	0.7	107	27.4	27.4	8.0	8.0	23.7	23.7	87.8	87.8	6.1	6.1	17.2	17.1	8	74	75	75	822383	809794	<0.2	2.5	2.6	
						4.0	0.7	114	27.4	27.4	8.0	8.0	23.7	23.7	87.9	87.9	6.1	6.1	17.3	17.1	10	75	75	75	822383	809794	<0.2	2.5	2.6	
					Bottom	6.9	0.5	95	27.3	27.3	8.0	8.0	24.3	24.3	88.4	88.4	6.1	6.1	21.3	21.3	9	76	76	76	822383	809794	<0.2	2.6	2.6	
						6.9	0.5	97	27.3	27.3	8.0	8.0	24.2	24.2	88.5	88.5	6.1	6.1	21.4	21.4	9	76	76	76	822383	809794	<0.2	2.5	2.5	
IM11	Sunny	Moderate	14:59	8.6	Surface	1.0	0.7	124	28.6	28.6	8.0	8.0	20.4	20.4	94.9	94.8	6.6	6.6	14.0	DA	9	73	75	75	822081	811446	<0.2	2.6	2.7	
						1.0	0.7	129	28.6	28.6	8.0	8.0	20.4	20.4	94.7	94.8	6.6	6.6	14.1	DA	9	72	75	75	822081	811446	<0.2	2.6	2.7	
					Middle	4.3	0.6	112	27.9	27.9	8.0	8.0	21.9	21.9	90.6	90.6	6.3	6.3	15.4	15.6	10	75	75	75	822081	811446	<0.2	2.7	2.7	
						4.3	0.6	113	27.9	27.9	8.0	8.0	21.9	21.9	90.6	90.6	6.3	6.3	15.4	15.6	9	75	75	75	822081	811446	<0.2	2.7	2.7	
					Bottom	7.6	0.3	99	27.6	27.6	8.0	8.0	23.6	23.6	90.2	90.3	6.2	6.2	17.6	17.6	9	76	76	76	822081	811446	<0.2	2.8	2.8	
						7.6	0.4	108	27.6	27.6	8.0	8.0	23.6	23.6	90.3	90.3	6.2	6.2	17.7	17.7	9	77	77	77	822081	811446	<0.2	2.7	2.7	
IM12	Sunny	Moderate	15:07	10.0	Surface	1.0	0.7	116	28.7	28.7	8.0	8.0	20.7	20.7	97.3	97.3	6.7	6.7	11.9	DA	7	72	75	75	821483	812074	<0.2	2.7	2.6	
						1.0	0.7	118	28.7	28.7	8.0	8.0	20.7	20.7	97.2	97.3	6.7	6.7	11.9	DA	6	73	75	75	821483	812074	<0.2	2.5	2.6	
					Middle	5.0	0.6	97	28.2	28.2	8.0	8.0	21.9	21.9	94.0	94.0	6.5	6.5	13.7	15.0	6	75	75	75	821483	812074	<0.2	2.6	2.6	
						5.0	0.6	97	28.2	28.2	8.0	8.0	21.9	21.9	94.0	94.0	6.5	6.5	13.7	15.0	6	74	75	75	821483	812074	<0.2	2.6	2.6	
					Bottom	9.0	0.4	82	28.0	27.9	8.0	8.0	23.0	23.0	92.4	92.4	6.4	6.4	19.2	19.2	7	76	76	76	821483	812074	<0.2	2.7	2.7	
						9.0	0.4	86	27.9	27.9	8.0	8.0	23.0	23.0	92.4	92.4	6.4	6.4	19.3	19.3	8	77	77	77	821483	812074	<0.2	2.6	2.6	
SR2	Sunny	Moderate	15:38	3.6	Surface	1.0	0.4	86	28.1	28.1	8.0	8.0	22.0	22.0	92.3	92.3	6.4	6.4	15.2	DA	6	72	74	74	821441	814145	<0.2	2.8	2.8	
						1.0	0.5	94	28.1	28.1	8.0	8.0	22.0	22.0	92.2	92.3	6.4	6.4	15.2	DA	6	73	74	74	821441	814145	<0.2	2.7	2.7	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15.7	-	-	-	-	821441	814145	<0.2	-	-	
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	15.7	-	-	-	-	821441	814145	<0.2	-	-	
					Bottom	2.6	0.3	76	28.0	28.0	8.0	8.0	22.5	22.5	92.3	92.3	6.4	6.4	16.7	15.8	6	75	75	75	821441	814145	<0.2	2.9	2.9	
						2.6	0.3	76	28.0	28.0	8.0	8.0	22.5	22.5	92.3	92.3	6.4	6.4	15.8	15.8	8	74	74	74	821441	814145	<0.2	2.8	2.8	
SR3	Sunny	Moderate	14:29	9.4	Surface	1.0	0.2	164	28.5	28.5	8.0	8.0	20.3	20.3	95.2	95.2	6.6	6.6	12.1	DA	7	-	-	-	822137	807573	-	-	-	
						1.0	0.2	179	28.5	28.5	8.0	8.0	20.3	20.3	95.2	95.2	6.6	6.6	12.1	DA	8	-	-	-	822137	807573	-	-	-	
					Middle	4.7	0.1	124	27.6	27.6	8.0	8.0	23.0	23.0	89.2	89.2	6.2	6.2	14.2	14.3	10	-	-	-	822137	807573	-	-	-	
						4.7	0.1	132	27.6	27.6	8.0	8.0	23.0	23.0	89.1	89.1	6.2	6.2	14.4	14.3	9	-	-	-	822137	807573	-	-	-	
					Bottom	8.4	0.3	27	26.9	26.9	8.0	8.0	26.4	26.4	88.1	88.2	6.1	6.1	16.4	16.4	9	-	-	-	822137	807573	-	-	-	
						8.4	0.3	27	26.9	26.9	8.0	8.0	26.4	26.4	88.3	88.3	6.1	6.1	16.5	16.5	9	-	-	-	822137	807573	-	-	-	
SR4A	Sunny	Calm	15:44	8.9	Surface	1.0	0.2	132	28.3	28.3	8.1	8.1	23.2	23.2	85.5	85.5	5.9	5.9	15.9	DA	6	-	-	-	817185	807839	-	-	-	
						1.0	0.2	137	28.3	28.3	8.1	8.1	23.2	23.2	85.5	85.5	5.9	5.9	15.9	DA	6	-	-	-	817185	807839	-	-	-	
					Middle	4.5	0.2	93	26.6	26.6	8.1	8.1	27.4	27.4	82.9	82.9	5.7	5.7	21.2	19.6	7	-	-	-	817185	807839	-	-	-	
						4.5	0.2	93	26.6	26.6	8.1	8.1	27.4	27.4	82.9	82.9	5.7	5.7	21.2	19.6	7	-	-	-	817185	807839	-	-	-	
					Bottom	7.9	0.1	110	26.6	26.6	8.1	8.1	27.6	27.6	85.4	85.4	5.9	5.9	21.7	21.7	7	-	-	-	817185	807839	-	-	-	
						7.9	0.1	119	26.6	26.6	8.1	8.1	27.6	27.6	85.4	85.4	5.9	5.9	21.7	21.7	7	-	-	-	817185	807839	-	-	-	
SR5A	Sunny	Calm	16:01	3.6	Surface	1.0	0.0	233	28.5	28.5	8.1	8.1	21.9	21.9	94.9	94.9	6.5	6.5	13.7	DA	7	-	-	-	816576	810722	-	-	-	
						1.0	0.0	234	28.5	28.5	8.1	8.1	21.9	21.9	94.9	94.9	6.5	6.5	13.7	DA										

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

**Water Quality Monitoring**

**Water Quality Monitoring Results on 19 May 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)	
C1	Sunny	Calm	09:07	9.2	Surface	1.0	0.6	14	27.3	27.3	8.1	8.1	22.4	22.4	88.4	88.4	6.2	6.2	16.0	16.0	10	10	73	73	815603	804246	<0.2	2.4	2.3	
						1.0	0.7	14	27.3	27.3	8.1	8.1	22.4	22.4	88.4	88.4	6.2	6.2	16.0	16.0	10	10	73	73			<0.2	2.1		
					Middle	4.6	0.7	17	26.5	26.5	8.1	8.1	28.0	28.0	82.0	82.0	5.6	5.6	19.5	19.5	9	9	75	75			<0.2	2.2		
						4.6	0.7	18	26.5	26.5	8.1	8.1	28.0	28.0	82.0	82.0	5.6	5.6	19.5	19.5	9	9	75	75			<0.2	2.2		
					Bottom	8.2	0.4	23	26.2	26.2	8.1	8.1	29.0	29.0	82.5	82.5	5.7	5.7	25.0	25.0	11	11	76	76			<0.2	2.4		
						8.2	0.4	24	26.2	26.2	8.1	8.1	29.0	29.0	82.5	82.5	5.7	5.7	25.0	25.0	11	11	76	76			<0.2	2.3		
C2	Fine	Moderate	09:48	12.4	Surface	1.0	0.6	2	27.9	27.9	7.9	7.9	17.9	17.9	89.2	89.2	6.3	6.3	13.0	13.0	6	6	73	73	825681	806946	<0.2	3.8	3.4	
						1.0	0.6	2	27.9	27.9	7.9	7.9	18.0	17.9	89.2	89.2	6.3	6.3	13.0	13.0	7	7	73	73			<0.2	3.6		
					Middle	6.2	0.5	358	27.9	27.9	7.9	7.9	20.8	20.8	87.6	87.6	6.1	6.1	14.9	14.9	6	6	75	75			<0.2	3.1		
						6.2	0.6	329	27.9	27.9	7.9	7.9	20.8	20.8	87.5	87.5	6.1	6.1	14.8	14.8	6	6	75	75			<0.2	3.2		
					Bottom	11.4	0.5	326	27.5	27.5	8.0	8.0	23.6	23.5	85.6	85.6	5.9	5.9	17.1	17.1	5	5	77	77			<0.2	3.4		
						11.4	0.5	339	27.5	27.5	8.0	8.0	23.5	23.5	85.6	85.6	5.9	5.9	17.0	17.0	6	6	76	76			<0.2	3.2		
C3	Fine	Moderate	07:58	11.7	Surface	1.0	0.5	260	27.9	27.9	8.1	8.1	21.7	21.7	91.6	91.6	6.4	6.4	9.9	9.9	6	6	72	72	822136	817818	<0.2	2.5	2.4	
						1.0	0.5	272	27.9	27.9	8.1	8.1	21.7	21.7	91.6	91.6	6.4	6.4	9.9	9.9	6	6	73	73			<0.2	2.4		
					Middle	5.9	0.7	262	27.8	27.8	8.1	8.1	22.5	22.5	90.2	90.2	6.3	6.3	10.2	10.2	4	4	74	74			<0.2	2.4		
						5.9	0.7	263	27.8	27.8	8.1	8.1	22.5	22.5	90.1	90.1	6.3	6.3	10.2	10.2	4	4	75	75			<0.2	2.5		
					Bottom	10.7	0.5	282	27.4	27.4	8.1	8.1	24.9	24.9	89.7	89.7	6.2	6.2	9.9	9.9	4	4	76	76			<0.2	2.5		
						10.7	0.5	300	27.4	27.4	8.1	8.1	24.9	24.9	89.6	89.6	6.2	6.2	9.7	9.7	5	5	76	76			<0.2	2.2		
IM1	Sunny	Calm	09:24	5.8	Surface	1.0	0.5	348	27.6	27.6	8.1	8.1	23.2	23.2	87.9	87.9	6.1	6.1	17.4	17.4	6	6	75	75	817940	807158	<0.2	1.9	2.0	
						1.0	0.5	320	27.6	27.6	8.1	8.1	23.2	23.2	87.9	87.9	6.1	6.1	17.4	17.4	6	6	74	74			<0.2	2.0		
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			<0.2	-		
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2		-				
					Bottom	4.8	0.2	353	27.2	27.2	8.1	8.1	24.8	24.8	86.1	86.1	6.0	6.0	22.2	22.2	10	10	77	77		<0.2	2.0			
						4.8	0.2	325	27.2	27.2	8.1	8.1	24.8	24.8	86.1	86.1	6.0	6.0	22.2	22.2	11	11	76	76		<0.2	2.1			
IM2	Sunny	Moderate	09:32	8.1	Surface	1.0	0.5	7	27.8	27.8	8.1	8.1	22.0	22.0	89.9	89.9	6.3	6.3	16.7	16.7	4	4	73	73	818140	806177	<0.2	2.2	2.0	
						1.0	0.5	7	27.8	27.8	8.1	8.1	22.0	22.0	89.9	89.9	6.3	6.3	16.7	16.7	3	3	73	73			<0.2	2.1		
					Middle	4.1	0.5	10	27.1	27.1	8.1	8.1	24.3	24.3	87.0	87.0	6.0	6.0	18.8	18.8	5	5	74	74			<0.2	1.9		
						4.1	0.6	10	27.1	27.1	8.1	8.1	24.3	24.3	87.0	87.0	6.0	6.0	18.8	18.8	6	6	75	75			<0.2	1.9		
					Bottom	7.1	0.5	2	27.3	27.3	8.1	8.1	25.2	25.2	97.2	97.2	6.7	6.7	22.3	22.3	8	8	77	77			<0.2	1.9		
						7.1	0.5	2	27.3	27.3	8.1	8.1	25.2	25.2	97.2	97.2	6.7	6.7	22.3	22.3	7	7	76	76			<0.2	1.9		
IM3	Sunny	Moderate	09:40	8.2	Surface	1.0	0.5	39	28.0	28.0	8.1	8.1	20.2	20.2	93.3	93.3	6.5	6.5	13.4	13.4	4	4	74	74	818809	805592	<0.2	1.6	1.8	
						1.0	0.5	41	28.0	28.0	8.1	8.1	20.2	20.2	93.3	93.3	6.5	6.5	13.4	13.4	4	4	75	75			<0.2	1.6		
					Middle	4.1	0.6	40	27.7	27.7	8.1	8.1	22.6	22.6	91.4	91.4	6.4	6.4	19.4	19.4	5	5	75	75			<0.2	1.9		
						4.1	0.7	41	27.7	27.7	8.1	8.1	22.6	22.6	91.4	91.4	6.4	6.4	19.4	19.4	4	4	75	75			<0.2	2.0		
					Bottom	7.2	0.5	37	27.2	27.2	8.1	8.1	25.9	25.9	97.0	97.0	6.7	6.7	20.6	20.6	4	4	77	77			<0.2	2.0		
						7.2	0.5	39	27.2	27.2	8.1	8.1	25.9	25.9	97.0	97.0	6.7	6.7	20.6	20.6	5	5	77	77			<0.2	1.8		
IM4	Sunny	Moderate	09:49	8.1	Surface	1.0	0.8	20	27.6	27.6	8.1	8.1	20.1	20.1	91.7	91.7	6.5	6.5	14.4	14.4	6	6	74	74	819747	804617	<0.2	2.0	1.9	
						1.0	0.8	20	27.6	27.6	8.1	8.1	20.1	20.1	91.7	91.7	6.5	6.5	14.4	14.4	4	4	75	75			<0.2	2.0		
					Middle	4.1	0.8	19	26.8	26.8	8.1	8.1	26.3	26.3	86.4	86.4	6.0	6.0	22.5	22.5	6	6	77	77			<0.2	1.9		
						4.1	0.9	19	26.8	26.8	8.1	8.1	26.3	26.3	86.4	86.4	6.0	6.0	22.5	22.5	7	7	76	76			<0.2	1.8		
					Bottom	7.1	0.5	13	26.9	26.9	8.1	8.1	26.5	26.5	94.6	94.6	6.5	6.5	22.1	22.1	7	7	77	77			<0.2	1.9		
						7.1	0.6	13	26.9	26.9	8.1	8.1	26.5	26.5	94.6	94.6	6.5	6.5	22.1	22.1	8	8	77	77			<0.2	2.0		
IM5	Sunny	Moderate	09:56	7.7	Surface	1.0	0.6	11	27.7	27.7	8.1	8.1	21.5	21.5	90.7	90.7	6.3	6.3	19.4	19.4	8	8	75	75	820724	8				

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

Water Quality Monitoring

Water Quality Monitoring Results on 19 May 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)	
IM9	Fine	Moderate	09:16	7.7	Surface	1.0	0.3	322	28.1	28.1	8.1	8.1	19.8	19.8	92.6	92.6	6.5	6.5	18.4	19.4	10	10	73	75	822103	808789	<0.2	2.5	2.5	
						1.0	0.4	344	28.1		8.1	8.1	19.8	19.8	92.6	92.6	6.5	6.5	18.4	19.4	10	10	73	75						
					Middle	3.9	0.3	329	28.1	28.1	8.1	8.1	19.8	19.8	92.1	92.2	6.5	6.5	19.9	19.4	9	9	75	75						
						3.9	0.3	341	28.1		8.1	8.1	19.8	19.8	92.2	92.2	6.5	6.5	20.0	19.4	9	9	75	75						
					Bottom	6.7	0.3	331	28.0	28.0	8.1	8.1	19.9	19.9	94.0	94.0	6.6	6.6	19.9	19.4	10	10	77	77						
						6.7	0.3	305	28.0		8.1	8.1	19.9	19.9	94.1	94.1	6.6	6.6	20.0	19.4	9	9	77	77						
IM10	Fine	Moderate	09:07	8.9	Surface	1.0	0.6	295	28.2	28.2	8.0	8.0	19.2	19.2	93.5	93.5	6.6	6.6	12.2	15.6	5	5	73	75	822405	809823	<0.2	2.6	2.6	
						1.0	0.6	297	28.2		8.0	8.0	19.2	19.2	93.5	93.5	6.6	6.6	12.3	15.6	4	4	73	75						
					Middle	4.5	0.6	304	27.9	27.9	8.0	8.0	20.7	20.7	90.8	90.8	6.3	6.3	15.1	15.6	4	4	75	75						
						4.5	0.6	323	27.9		8.0	8.0	20.7	20.7	90.7	90.7	6.3	6.3	15.2	15.6	5	5	75	75						
					Bottom	7.9	0.5	328	27.7	27.7	8.0	8.0	22.5	22.5	90.1	90.1	6.3	6.3	19.4	19.4	5	5	77	77						
						7.9	0.5	352	27.7		8.0	8.0	22.5	22.5	90.1	90.1	6.3	6.3	19.4	19.4	6	6	77	77						
IM11	Fine	Moderate	08:57	7.7	Surface	1.0	0.8	298	28.0	28.0	8.0	8.0	20.8	20.8	90.6	90.6	6.3	6.3	12.8	17.3	5	5	73	75	822051	811466	<0.2	2.4	2.4	
						1.0	0.8	320	28.0		8.0	8.0	20.8	20.8	90.6	90.6	6.3	6.3	12.9	17.3	6	6	73	75						
					Middle	3.9	0.7	291	27.9	27.9	8.0	8.0	22.5	22.5	89.5	89.5	6.2	6.2	18.2	17.3	6	6	75	75						
						3.9	0.7	304	27.9		8.0	8.0	22.5	22.5	89.5	89.5	6.2	6.2	18.4	17.3	6	6	75	75						
					Bottom	6.7	0.4	286	27.6	27.6	8.0	8.0	23.6	23.6	90.8	90.8	6.3	6.3	20.5	17.3	10	10	77	77						
						6.7	0.4	289	27.6		8.0	8.0	23.6	23.6	91.0	90.9	6.3	6.3	20.7	17.3	8	8	77	77						
IM12	Fine	Moderate	08:51	8.9	Surface	1.0	0.7	286	28.2	28.2	8.0	8.0	20.1	20.1	93.1	93.1	6.5	6.5	12.6	15.9	6	5	73	75	821429	812062	<0.2	2.6	2.6	
						1.0	0.7	291	28.2		8.0	8.0	20.1	20.1	93.0	93.0	6.5	6.5	12.7	15.9	5	5	73	75						
					Middle	4.5	0.7	293	27.8	27.8	8.0	8.0	22.0	22.0	90.0	90.0	6.3	6.3	14.6	15.9	5	5	75	75						
						4.5	0.7	317	27.8		8.0	8.0	22.0	22.0	89.9	90.0	6.3	6.3	14.8	15.9	5	5	75	75						
					Bottom	7.9	0.4	264	27.3	27.3	8.0	8.0	24.7	24.7	87.5	87.5	6.0	6.0	20.3	15.9	6	5	77	77						
						7.9	0.4	285	27.3		8.0	8.0	24.7	24.7	87.6	87.6	6.0	6.0	20.4	15.9	5	5	77	77						
SR2	Fine	Moderate	08:18	4.7	Surface	1.0	0.1	7	28.0	28.0	8.0	8.0	20.6	20.5	90.3	90.3	6.3	6.3	13.3	15.8	5	5	73	73	821442	814145	<0.2	2.7	2.7	
						1.0	0.1	7	28.0		8.0	8.0	20.5	20.5	90.2	90.3	6.3	6.3	13.4	15.8	5	5	73	73						
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15.8	-	-	-	74						
						-	-	-	-		-	-	-	-	-	-	-	-	-	15.8	-	-	-	74						
					Bottom	3.7	0.1	156	27.3	27.3	8.0	8.0	24.7	24.7	88.2	88.2	6.1	6.1	18.2	15.8	6	6	75	75						
						3.7	0.1	159	27.3		8.0	8.0	24.8	24.7	88.2	88.2	6.1	6.1	18.2	15.8	6	6	75	75						
SR3	Fine	Moderate	09:30	9.6	Surface	1.0	0.2	348	28.2	28.2	8.0	8.0	18.3	18.3	92.5	92.5	6.5	6.5	13.0	16.7	5	6	-	-	822120	807574	-	-	-	
						1.0	0.2	358	28.2		8.0	8.0	18.3	18.3	92.5	92.5	6.5	6.5	13.0	16.7	6	6	-	-						
					Middle	4.8	0.5	10	27.9	27.9	8.1	8.1	20.6	20.6	91.2	91.2	6.4	6.4	16.3	16.7	5	6	-	-						
						4.8	0.5	10	27.9		8.1	8.1	20.6	20.6	91.2	91.2	6.4	6.4	16.2	16.7	6	6	-	-						
					Bottom	8.6	0.5	18	27.8	27.8	8.1	8.1	20.9	20.9	91.6	91.6	6.4	6.4	20.9	16.7	6	6	-	-						
						8.6	0.5	18	27.8		8.1	8.1	20.9	20.9	91.5	91.5	6.4	6.4	20.9	16.7	5	6	-	-						
SR4A	Sunny	Calm	08:45	9.8	Surface	1.0	0.3	276	27.9	27.9	8.1	8.1	21.4	21.4	89.4	89.4	6.2	6.2	12.6	14.7	5	6	-	-	817164	807811	-	-	-	
						1.0	0.3	281	27.9		8.1	8.1	21.4	21.4	89.4	89.4	6.2	6.2	12.6	14.7	5	6	-	-						
					Middle	4.9	0.3	275	27.6	27.6	8.1	8.1	22.4	22.4	87.5	87.5	6.1	6.1	14.7	14.7	5	6	-	-						
						4.9	0.3	279	27.6		8.1	8.1	22.3	22.3	87.5	87.5	6.1	6.1	14.8	14.7	6	6	-	-						
					Bottom	8.8	0.0	38	27.3	27.4	8.1	8.1	24.8	24.7	88.3	88.3	6.1	6.1	16.5	14.7	8	6	-	-						

**Water Quality Monitoring Results on 22 May 18 during Mid-Ebb Tide**

Note: Access to IM2 was blocked by a barge. The monitoring at IM2 was slightly shifted to the closest safe and accessible location temporarily.

Note: Access to IM2 was blocked by a barge. The monitoring at IM2 was slightly shifted to the closest safe and accessible location temporarily.

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

## Water Quality Monitoring

## Water Quality Monitoring Results on 22 May 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)	
IM9	Sunny	Moderate	17:45	7.5	Surface	1.0	0.3	110	29.1	8.1	8.1	20.3	20.3	106.5	106.4	7.3	6.8	10.0	10.7	5	6	82	84	822078	808824	<0.2	2.5	2.5		
						1.0	0.3	111	29.1	8.1	8.1	20.3	20.3	106.2	106.4	7.3	6.8	10.0	10.7	6	6	81	84							
					Middle	3.8	0.4	107	28.2	8.1	8.1	22.8	22.8	90.1	90.1	6.2	6.5	10.6	10.6	6	6	84	83							
						3.8	0.4	115	28.2	8.1	8.1	22.8	22.8	90.1	90.1	6.2	6.5	10.6	10.6	6	6	83	86							
					Bottom	6.5	0.3	84	28.0	8.1	8.1	24.6	24.6	94.4	94.5	6.5	6.5	11.5	11.5	6	6	86	85							
						6.5	0.3	85	28.0	8.1	8.1	24.6	24.6	94.6	94.5	6.5	6.5	11.5	11.5	4	4	86	86							
IM10	Sunny	Moderate	17:53	7.6	Surface	1.0	0.3	133	29.3	8.1	8.1	20.6	20.6	101.5	101.4	6.9	6.5	9.7	11.8	4	5	81	81	822396	809776	<0.2	2.4	2.6		
						1.0	0.3	139	29.3	8.1	8.1	20.6	20.6	101.3	101.4	6.9	6.5	9.7	11.8	5	5	81	83							
					Middle	3.8	0.3	130	28.1	8.1	8.1	23.3	23.3	88.1	88.1	6.1	6.0	11.5	11.6	4	6	84	85							
						3.8	0.3	137	28.1	8.1	8.1	23.3	23.3	88.1	88.1	6.0	6.0	11.6	11.6	6	6	84	85							
					Bottom	6.6	0.3	67	28.0	8.1	8.1	24.6	24.6	90.7	90.8	6.2	6.2	14.2	14.3	6	6	85	86							
						6.6	0.3	72	28.0	8.1	8.1	24.6	24.6	90.9	90.8	6.2	6.2	14.3	14.3	6	6	86	86							
IM11	Sunny	Moderate	18:02	6.8	Surface	1.0	0.4	124	29.7	8.2	8.2	19.8	19.8	113.8	113.7	7.8	7.1	9.6	10.8	4	4	81	81	822037	811432	<0.2	2.5	2.5		
						1.0	0.4	131	29.7	8.2	8.2	19.8	19.8	113.6	113.7	7.7	7.1	9.6	10.8	3	4	81	84							
					Middle	3.4	0.3	113	28.7	8.1	8.1	21.7	21.7	95.3	95.2	6.5	6.5	10.8	10.8	5	4	84	84							
						3.4	0.3	122	28.7	8.1	8.1	21.7	21.7	95.1	95.1	6.5	6.5	10.8	10.8	4	4	84	86							
					Bottom	5.8	0.3	108	28.0	8.1	8.0	24.2	24.2	88.6	88.8	6.1	6.1	12.1	12.1	4	3	86	86							
						5.8	0.3	115	28.0	8.0	8.0	24.2	24.2	88.9	88.8	6.1	6.1	12.1	12.1	3	3	86	86							
IM12	Sunny	Moderate	18:10	9.8	Surface	1.0	0.5	115	29.4	8.2	8.2	20.0	20.0	112.0	111.8	7.7	6.9	10.0	11.4	5	5	81	82	821440	812022	<0.2	2.2	2.2		
						1.0	0.5	121	29.4	8.2	8.2	20.0	20.0	111.6	111.8	7.6	6.9	10.0	11.4	4	5	82	84							
					Middle	4.9	0.5	110	28.5	8.1	8.1	22.2	22.2	90.9	90.9	6.2	6.2	11.0	11.0	6	5	84	83							
						4.9	0.5	113	28.5	8.1	8.1	22.2	22.2	90.8	90.9	6.2	6.2	11.0	11.0	5	5	84	83							
					Bottom	8.8	0.3	97	27.0	8.0	8.0	27.9	27.9	81.9	82.1	5.6	5.6	13.2	13.2	6	6	86	86							
						8.8	0.4	99	27.0	8.0	8.0	27.9	27.9	82.2	82.1	5.6	5.6	13.2	13.2	6	6	86	86							
SR2	Sunny	Moderate	18:37	4.2	Surface	1.0	0.4	100	29.1	8.1	8.1	20.9	20.9	107.9	108.0	7.4	7.4	9.7	10.6	3	5	81	81	821492	814164	<0.2	2.2	2.2		
						1.0	0.5	101	29.1	8.1	8.1	20.9	20.9	108.0	108.0	7.4	7.4	9.7	10.6	4	5	81	81							
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-							
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-							
					Bottom	3.2	0.3	93	28.4	8.1	8.1	22.7	22.7	94.6	94.7	6.5	6.5	11.4	11.4	6	6	84	83							
						3.2	0.4	97	28.4	8.1	8.1	22.7	22.7	94.7	94.7	6.5	6.5	11.4	11.4	6	6	84	83							
SR3	Sunny	Moderate	17:33	9.3	Surface	1.0	0.2	183	29.6	8.2	8.2	19.2	19.2	116.4	116.1	8.0	6.8	9.9	12.3	5	6	-	-	822171	807587	-	-	-		
						1.0	0.2	199	29.6	8.2	8.2	19.2	19.2	115.7	116.1	7.9	6.8	9.9	12.3	7	6	-	-							
					Middle	4.7	0.3	173	27.9	8.0	8.0	24.0	24.0	81.1	81.2	5.6	5.6	11.8	11.9	6	6	-	-							
						4.7	0.3	173	27.8	8.0	8.0	24.0	24.0	81.1	81.2	5.6	5.6	11.8	11.9	7	6	-	-							
					Bottom	8.3	0.1	28	27.3	8.0	8.0	27.1	27.1	82.2	82.3	5.6	5.6	15.0	15.0	6	5	-	-							
						8.3	0.1	30	27.3	8.0	8.0	27.1	27.1	82.3	82.3	5.6	5.6	15.0	15.0	5	5	-	-							
SR4A	Sunny	Calm	18:38	8.5	Surface	1.0	0.2	84	30.1	8.3	8.3	20.6	20.6	143.5	143.2	9.7	7.5	4.2	8.7	5	6	-	-	817172	807820	-	-	-		
						1.0	0.2	84	30.1	8.3	8.3	20.6	20.6	142.9	143.2	9.6	7.5	4.2	8.7	6	6	-	-							
					Middle	4.3	0.2	84	27.3	8.0	8.0	27.1	27.0	78.5	78.6	5.4	5.3	9.0	12.9	5	6	-	-							
						4.3	0.2	89	27.4	8.0	8.0	27.0	27.0	78.7	78.7	5.4	5.3	8.9	12.9	6	6	-	-							
					Bottom	7.5	0.2	93	27.3	8.0	8.0	27.6	27.6	76.1	77.9	5.2	5.3	13.2	12.9	6	6	-	-							
						7.5	0.2	99	27.3	8.0	8.0	27.6	27.6	79.7	79.7	5.4	5.3	12.9	12.9	6	6	-	-							
SR5A	Sunny	Calm	18:55	3.9	Surface	1.0	0.0	32	29.9	8.4	8.4	21.9	21.9	159.1	159.1	10.7	10.7	5.1	12.6	9	10	-	-	816566	810689	-	-	-		
						1.0	0.0	33	29.9	8.4	8.4	21.9	21.9	159.0	159.0	10.7	10.7	5.1	12.6	10	10	-	-							
					Middle	-	-	-	-																					

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

## Water Quality Monitoring

## Water Quality Monitoring Results on 22 May 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)	
C1	Sunny	Moderate	12:31	9.1	Surface	1.0	0.3	40	29.7		8.2	8.2	21.4	21.4	128.0	127.9	8.6	6.8	4.1	8.2	7	7	80	83	815608	804242	<0.2	1.6	1.4	
						1.0	0.3	43	29.7		8.2	8.2	21.5	21.4	127.7	127.9	8.6	6.8	4.1	8.2	7	7	81	83						
					Middle	4.6	0.3	21	26.7	26.7	8.0	8.0	28.9	29.0	72.4	72.3	4.9	6.8	7.9	8.2	5	7	83	83						
						4.6	0.3	22	26.6		8.0	8.0	29.1	29.0	72.1	72.3	4.9	6.8	8.4	8.2	5	7	83	83						
					Bottom	8.1	0.2	28	26.4	26.4	8.0	8.0	30.1	30.1	73.1	73.1	5.0	5.0	12.2	12.2	7	7	84	85						
						8.1	0.2	28	26.4		8.0	8.0	30.1	30.1	73.4	73.3	5.0	5.0	12.3	12.3	6	7	85	85						
C2	Sunny	Moderate	13:23	12.7	Surface	1.0	0.2	11	29.9	29.9	8.1	8.1	18.5	18.5	104.1	104.0	7.1	6.5	10.0	11.0	7	6	82	84	825692	806915	<0.2	3.0	2.7	
						1.0	0.3	11	29.9		8.1	8.1	18.5	18.5	103.9	104.0	7.1	6.5	10.0	11.0	5	6	81	84						
					Middle	6.4	0.2	351	28.0	28.0	8.0	8.0	23.8	23.8	84.4	84.4	5.8	5.7	10.4	10.4	6	6	84	84						
						6.4	0.3	323	28.0		8.0	8.0	23.8	23.8	84.4	84.4	5.8	5.7	10.4	10.4	5	6	84	86						
					Bottom	11.7	0.3	341	27.7	27.7	8.0	8.0	25.6	25.6	83.2	83.2	5.7	5.7	12.4	12.6	7	6	86	86						
						11.7	0.3	314	27.7		8.0	8.0	25.6	25.6	83.1	83.2	5.7	5.7	12.6	12.6	6	6	86	86						
C3	Sunny	Moderate	11:20	12.1	Surface	1.0	0.4	277	28.9	28.9	8.1	8.1	20.9	20.9	101.7	101.6	7.0	6.5	9.3	9.3	5	6	81	83	822079	817775	<0.2	2.2	2.4	
						1.0	0.4	279	28.9		8.1	8.1	20.9	20.9	101.5	101.6	7.0	6.5	9.3	9.3	6	6	81	83						
					Middle	6.1	0.5	260	27.6	27.6	8.1	8.1	25.8	25.8	88.4	88.4	6.0	6.0	8.4	8.4	6	6	83	84						
						6.1	0.5	270	27.6		8.1	8.1	25.8	25.8	88.3	88.4	6.0	6.0	8.4	8.4	5	6	83	84						
					Bottom	11.1	0.3	281	26.6	26.6	8.1	8.1	29.8	29.8	84.0	84.0	5.7	5.7	10.2	10.2	7	7	85	85						
						11.1	0.4	294	26.6		8.1	8.1	29.8	29.8	84.0	84.0	5.7	5.7	10.1	10.1	8	7	85	85						
IM1	Sunny	Moderate	12:49	5.5	Surface	1.0	0.3	32	29.7	29.8	8.1	8.1	21.3	21.3	110.6	110.6	7.5	7.5	4.4	4.4	5	4	80	80	817974	807116	<0.2	2.2	1.9	
						1.0	0.3	32	29.8		8.1	8.1	21.3	21.3	110.6	110.6	7.5	7.5	4.4	4.4	4	4	80	80						
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-							
					Bottom	4.5	0.2	319	27.7	27.8	8.0	8.0	26.0	26.0	92.3	92.4	6.3	6.3	8.5	8.7	5	6	83	83						
						4.5	0.2	334	27.8		8.1	8.0	26.0	26.0	92.4	92.4	6.3	6.3	8.7	8.7	6	6	83	83						
IM2	Sunny	Moderate	12:57	8.0	Surface	1.0	0.2	28	29.9	29.9	8.1	8.1	20.0	20.0	113.6	113.6	7.7	7.1	4.1	4.1	6	5	81	83	818144	806169	<0.2	2.5	1.9	
						1.0	0.2	29	29.9		8.1	8.1	20.1	20.0	113.5	113.6	7.7	7.1	4.1	4.1	5	5	81	83						
					Middle	4.0	0.3	10	27.7	27.7	8.0	8.0	25.6	25.6	95.1	95.0	6.5	6.5	4.4	4.5	6	5	83	83						
						4.0	0.4	10	27.7		8.0	8.0	25.6	25.6	94.8	95.0	6.5	6.5	4.5	4.5	5	5	83	83						
					Bottom	7.0	0.3	348	26.9	27.0	8.0	8.0	28.0	28.0	77.2	77.3	5.3	5.3	13.4	13.4	11	11	85	85						
						7.0	0.3	320	27.0		8.0	8.0	28.0	28.0	77.3	77.3	5.3	5.3	13.4	13.4	12	11	85	85						
IM3	Sunny	Moderate	13:04	7.9	Surface	1.0	0.2	38	29.6	29.6	8.1	8.1	19.8	19.8	117.9	117.8	8.1	6.7	4.4	4.4	4	6	80	81	818783	805579	<0.2	2.1	1.9	
						1.0	0.2	41	29.6		8.1	8.1	19.9	19.9	117.6	117.8	8.0	6.7	4.5	4.5	6	6	81	83						
					Middle	4.0	0.3	53	27.1	27.1	8.0	8.0	25.4	25.5	78.9	78.7	5.4	5.4	8.5	9.0	6	7	83	83						
						4.0	0.3	56	27.0		8.0	8.0	25.5	25.5	78.4	78.4	5.4	5.4	9.0	9.0	7	7	83	83						
					Bottom	6.9	0.3	41	26.8	26.8	8.0	8.0	28.7	28.7	76.2	76.6	5.2	5.2	10.4	10.3	9	8	85	85						
						6.9	0.3	44	26.8		8.0	8.0	28.7	28.7	76.9	76.6	5.2	5.2	10.3	10.3	8	8	85	85						
IM4	Sunny	Moderate	13:14	8.1	Surface	1.0	0.3	11	28.8	28.8	8.1	8.1	19.7	19.8	109.5	109.4	7.6	6.3	5.1	5.1	8	8	81	82	819749	804582	<0.2	1.7	1.6	
						1.0	0.3	11	28.8		8.1	8.1	19.8	19.8	109.2	109.4	7.6	6.3	5.1	5.1	8	8	82	83						
					Middle	4.1	0.3	17	26.5	26.5	8.0	8.0	29.4	29.4	71.5	71.6	4.9	4.9	14.4	14.4	7	8	83	85						
						4.1	0.3	18	26.5		8.0	8.0	29.4	29.4	71.6	71.6	4.9	4.9	14.4	14.4	8	8	83	85						
					Bottom	7.1	0.3	20	26.6	26.6	8.0	8.0	29.5	29.5	73.1	73.2	5.0	5.0	17.2	17.2	14	13	85	85						
						7.1	0.3	20	26.6		8.0	8.0	29.5	29.5	73.3	73.2	5.0	5.0	16.7	16.7	13	13	85	85						
IM5	Sunny	Moderate	13:21	7.5	Surface	1.0	0.3	16	29.1	29.1	8.1	8.1	19.7	19.7	108.0	107.9	7.4	6.5	5.0	5.0	6	7	82	84	820733	804885	<0.2	2.1	1.8	

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

**Water Quality Monitoring**

**Water Quality Monitoring Results on 22 May 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)	
IM9	Sunny	Moderate	12:45	7.8	Surface	1.0	0.1	26	29.5		8.1	8.1	18.8	18.8	111.1	111.1	7.6		10.8		4		82		822077	808839	<0.2	2.6		
						1.0	0.1	26	29.5		8.1	8.1	18.8	18.8	111.0	111.1	7.6		10.8		3		82							
					Middle	3.9	0.2	351	28.9	28.9	8.1	8.1	20.2	20.2	97.1	97.0	6.7	7.2	15.8	14.4	5	5	84	84						
						3.9	0.2	323	28.9		8.1	8.1	20.2	20.2	96.8	97.0	6.7		15.8		6		84							
					Bottom	6.8	0.2	277	28.4	28.4	8.0	8.0	21.9	21.9	89.2	89.3	6.1	6.2	16.6		4		86							
						6.8	0.2	294	28.4	28.4	8.0	8.0	21.9	21.9	89.3	89.3	6.2		16.7		5		86							
IM10	Sunny	Moderate	12:36	8.0	Surface	1.0	0.2	330	29.5	29.5	8.1	8.1	19.7	19.7	109.6	109.6	7.5		10.0		3		82		822376	809790	<0.2	2.5		
						1.0	0.2	336	29.5		8.1	8.1	19.7	19.7	109.6	109.6	7.5		9.9		4		82							
					Middle	4.0	0.2	322	29.2	29.2	8.1	8.1	20.1	20.1	104.1	104.1	7.1	7.3	10.8	14.4	4	4	84	84						
						4.0	0.2	349	29.2		8.1	8.1	20.1	20.1	104.0	104.1	7.1		10.8		5		84							
					Bottom	7.0	0.3	317	27.8	27.8	8.0	8.0	24.8	24.8	83.3	83.3	5.7	5.7	22.5		6		86							
						7.0	0.3	332	27.8	27.8	8.0	8.0	24.8	24.8	83.5	83.4	5.7		22.4		4		86							
IM11	Sunny	Moderate	12:24	7.3	Surface	1.0	0.2	327	29.5	29.5	8.1	8.1	19.1	19.1	112.1	112.1	7.7		9.9		5		82		822067	811450	<0.2	2.6		
						1.0	0.2	344	29.5		8.1	8.1	19.1	19.1	112.0	112.1	7.7		9.9		5		82							
					Middle	3.7	0.2	316	29.0	29.0	8.1	8.1	20.1	20.1	101.4	101.3	7.0	7.4	9.7		5	5	84	84						
						3.7	0.2	328	29.0		8.1	8.1	20.1	20.1	101.1	101.3	7.0		9.7		4		84							
					Bottom	6.3	0.4	279	27.9	27.9	8.0	8.0	24.4	24.4	86.6	86.6	5.9	5.9	9.7		4		87							
						6.3	0.4	282	27.9	27.9	8.0	8.0	24.4	24.4	86.6	86.6	5.9		9.7		4		86							
IM12	Sunny	Moderate	12:17	9.3	Surface	1.0	0.3	294	29.1	29.1	8.1	8.1	19.7	19.7	100.6	100.5	6.9		10.4		7		82		821475	812042	<0.2	2.6		
						1.0	0.3	295	29.1		8.1	8.1	19.7	19.7	100.4	100.5	6.9		10.4		5		82							
					Middle	4.7	0.3	299	28.0	28.0	8.0	8.0	24.2	24.2	85.5	85.5	5.9	6.4	12.6	13.6	5	6	84	84						
						4.7	0.3	303	28.0		8.0	8.0	24.2	24.2	85.5	85.5	5.9		12.6		6		84							
					Bottom	8.3	0.1	284	27.2	27.2	8.0	8.0	27.3	27.3	82.2	82.4	5.6	5.6	17.8		6		86							
						8.3	0.1	303	27.2	27.2	8.0	8.0	27.3	27.3	82.5	82.4	5.6		17.9		8		86							
SR2	Sunny	Moderate	11:42	4.1	Surface	1.0	0.1	284	29.3	29.3	8.1	8.1	19.5	19.5	106.7	106.7	7.3		9.8		4		82		821478	814175	<0.2	2.2		
						1.0	0.1	287	29.3		8.1	8.1	19.5	19.5	106.7	106.7	7.3		9.9		5		82							
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	7.3		-		-		83						
						-	-	-	-	-	-	-	-	-	-	-	-			-		-								
					Bottom	3.1	0.2	324	28.7	28.7	8.1	8.1	21.2	21.2	103.3	103.3	7.1	7.1	10.2		6		84							
						3.1	0.2	338	28.7		8.1	8.1	21.2	21.2	103.3	103.3	7.1		10.2		4		84							
SR3	Sunny	Moderate	13:00	9.5	Surface	1.0	0.1	309	29.3	29.3	8.1	8.1	19.0	19.0	102.8	102.8	7.1		10.0		4		-		822120	807568	-	-	-	-
						1.0	0.1	322	29.3		8.1	8.1	19.0	19.0	102.8	102.8	7.1		10.0		4		-							
					Middle	4.8	0.2	32	28.6	28.6	8.1	8.1	20.9	20.9	93.7	93.7	6.5	6.8	11.2	11.7	4	4	-	-						
						4.8	0.2	32	28.6		8.1	8.1	20.9	20.9	93.6	93.7	6.5		11.2		3		-							
					Bottom	8.5	0.3	55	27.8	27.8	8.0	8.0	24.8	24.7	84.2	84.3	5.8	5.8	13.9		3		-							
						8.5	0.3	60	27.8		8.0	8.0	24.7	24.7	84.3	84.3	5.8		13.9		3		-							
SR4A	Sunny	Calm	12:10	9.3	Surface	1.0	0.2	258	28.5	28.5	8.1	8.1	22.8	22.8	105.3	105.0	7.2		5.5		5		-		817195	807825	-	-	-	-
						1.0	0.2	267	28.5		8.1	8.1	22.8	22.8	104.7	104.7	7.2		5.6		4		-							
					Middle	4.7	0.0	6	27.0	27.0	8.0	8.0	27.8	27.8	76.3	76.3	5.2	6.2	7.8	7.5	8	7	-	-						
						4.7	0.0	6	27.0		8.0	8.0	27.8	27.8	76.3	76.3	5.2		7.8		8		-							
					Bottom	8.3	0.1	62	27.0	27.0	8.0	8.0	28.1	28.1	77.4	77.7	5.3	5.3	9.3		10		-							
						8.3	0.1	65	27.0		8.0	8.0	28.1	28.1	77.9	77.9	5.3		9.2		9		-							
SR5A	Sunny	Calm	11:54	4.8	Surface	1.0	0.1	325	28.8	28.8	8.1	8.1	22.2	22.2	109.7	107.3	7.5		5.5		2		-		816587	810703	-	-	-	-
						1.0	0.1	331	28.8		8.1	8.1	22.2	22.2	104.9	104.9	7.2		5.6		4		-							

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

**Water Quality Monitoring**

**Water Quality Monitoring Results on 24 May 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)	
C1	Sunny	Moderate	10:35	9.3	Surface	1.0	0.6	226	28.4	8.0	8.0	22.1	22.1	84.3	84.3	5.8	7.7	10.9	7.4	5	4	81	84	815590	804273	<0.2	1.8	1.6		
						1.0	0.6	236	28.4	8.0	8.0	22.1	22.1	84.3	84.3	5.8	7.7	10.9	7.4	4	4	81	84							
					Middle	4.7	0.6	218	30.4	8.3	8.3	16.5	16.5	139.6	139.5	9.6	6.0	5.0	6.3	3	5	83	84							
						4.7	0.6	221	30.4	8.3	8.3	16.5	16.5	139.3	139.5	9.6	6.0	5.0	6.3	3	5	84	86							
					Bottom	8.3	0.4	216	28.5	8.0	8.0	21.9	21.9	86.7	86.8	6.0	6.0	6.3	6.2	5	6	86	86							
						8.3	0.4	229	28.5	8.0	8.0	21.9	21.9	86.8	86.8	6.0	6.0	6.2	6.2	5	6	86	86							
C2	Sunny	Moderate	11:13	11.6	Surface	1.0	0.1	144	29.5	8.1	8.1	15.7	15.7	118.7	118.6	8.3	7.1	5.6	6.5	4	6	82	85	825696	806922	<0.2	1.8	1.9		
						1.0	0.1	146	29.5	8.1	8.1	15.7	15.7	118.5	118.6	8.3	7.1	5.3	6.5	4	6	82	85							
					Middle	5.8	0.1	145	27.8	7.9	7.9	24.8	24.8	85.0	84.9	5.8	7.1	4.1	6.5	8	6	85	86							
						5.8	0.1	155	27.8	7.9	7.9	24.8	24.8	84.8	84.9	5.8	7.1	4.0	6.5	8	6	86	87							
					Bottom	10.6	0.3	129	27.3	7.9	7.9	26.7	26.7	77.7	77.7	5.3	5.3	9.9	6.5	7	6	87	88							
						10.6	0.3	136	27.3	7.9	7.9	26.7	26.7	77.8	77.8	5.3	5.3	10.1	6.5	6	6	88	88							
C3	Sunny	Moderate	08:52	11.4	Surface	1.0	0.2	168	28.0	8.0	8.0	24.6	24.6	98.9	98.7	6.8	6.2	2.9	4.4	4	4	82	85	822080	817778	<0.2	1.1	1.3		
						1.0	0.2	174	28.0	8.0	8.0	24.6	24.6	98.5	98.7	6.7	6.2	2.9	4.4	4	4	83	83							
					Middle	5.7	0.1	245	26.8	8.2	8.2	28.8	28.9	83.6	83.5	5.7	6.2	4.2	4.4	4	4	83	84							
						5.7	0.1	262	26.8	8.2	8.2	29.0	28.9	83.3	83.5	5.7	6.2	4.2	4.4	4	4	84	88							
					Bottom	10.4	0.2	103	26.7	8.2	8.2	29.8	29.8	82.4	82.5	5.6	5.6	6.3	4.4	5	4	88	88							
						10.4	0.2	111	26.7	8.2	8.2	29.8	29.8	82.5	82.5	5.6	5.6	6.3	4.4	4	4	88	88							
IM1	Sunny	Moderate	10:35	5.2	Surface	1.0	0.2	221	30.2	8.3	8.3	16.7	16.7	144.8	144.8	9.9	9.9	5.2	5.2	7	7	85	85	817949	807147	<0.2	2.4	2.5		
						1.0	0.2	230	30.2	8.3	8.3	16.7	16.7	144.8	144.8	9.9	9.9	5.2	5.2	6	7	85	85							
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	5.2	-	-	-	86	86						
						-	-	-	-	-	-	-	-	-	-	-	-	-	5.2	-	-	-	86	86						
					Bottom	4.2	0.2	179	28.8	8.0	8.0	20.8	20.8	95.3	95.3	6.6	6.6	5.1	6.3	8	8	87	87							
						4.2	0.2	191	28.8	8.0	8.0	20.8	20.8	95.3	95.3	6.6	6.6	5.1	6.3	8	8	87	87							
IM2	Sunny	Moderate	10:24	7.9	Surface	1.0	0.4	188	30.1	8.4	8.4	16.7	16.7	149.6	149.5	10.3	8.6	5.3	6.0	8	8	82	84	818169	806194	<0.2	2.5	2.5		
						1.0	0.4	194	30.1	8.4	8.4	16.7	16.7	149.3	149.5	10.3	8.6	5.4	6.0	9	8	82	84							
					Middle	4.0	0.4	190	28.9	8.1	8.1	20.7	20.7	100.8	100.9	6.9	6.3	5.8	6.0	7	8	83	85							
						4.0	0.4	204	28.9	8.1	8.1	20.7	20.7	101.0	100.9	6.9	6.3	5.8	6.0	8	8	84	85							
					Bottom	6.9	0.2	161	28.7	8.0	8.0	21.4	21.4	91.7	91.6	6.3	6.3	6.9	6.3	9	8	85	86							
						6.9	0.2	166	28.7	8.0	8.0	21.4	21.4	91.5	91.6	6.3	6.3	6.9	6.3	9	8	86	86							
IM3	Sunny	Moderate	10:16	7.8	Surface	1.0	0.3	202	29.8	8.3	8.3	17.8	17.8	138.9	138.8	9.6	8.4	5.0	6.7	7	8	81	83	818761	805597	<0.2	2.3	2.3		
						1.0	0.3	204	29.8	8.3	8.3	17.8	17.8	138.7	138.8	9.5	8.4	5.0	6.7	6	8	81	83							
					Middle	3.9	0.3	179	29.1	8.1	8.1	19.7	19.7	105.8	105.8	7.3	8.4	4.6	6.7	8	8	83	83							
						3.9	0.3	179	29.1	8.1	8.1	19.7	19.7	105.7	105.8	7.3	8.4	4.6	6.7	7	8	83	83							
					Bottom	6.8	0.2	175	28.0	7.9	7.9	24.3	24.2	71.4	71.5	4.9	4.9	10.5	6.7	9	8	85	85							
						6.8	0.2	188	28.0	7.9	7.9	24.2	24.2	71.5	71.5	4.9	4.9	10.4	6.7	9	8	85	85							
IM4	Sunny	Moderate	09:31	8.0	Surface	1.0	0.4	217	26.9	8.0	8.0	29.1	29.0	80.7	78.8	5.3	6.8	3.4	4.5	6	7	81	84	819727	804622	<0.2	2.4	2.4		
						1.0	0.4	230	26.9	8.0	8.0	28.9	29.0	78.9	78.8	5.4	6.8	3.4	4.5	7	7	81	84							
					Middle	4.0	0.4	206	29.3	8.3	8.3	19.3	19.3	120.2	120.2	8.3	6.8	5.4	4.5	7	7	83	84							
						4.0	0.5	220	29.2	8.3	8.3	19.3	19.3	120.1	120.1	8.3	6.8	5.5	4.5	6	7	84	85							
					Bottom	7.0	0.4	182	28.2	8.0	8.0	23.9	23.9	88.1	88.2	6.0	6.0	4.8	4.5	10	7	85	86							
						7.0	0.4	193	28.2	8.0	8.0	23.9	23.9	88.2	88.2	6.0	6.0	4.8	4.5	8	7	86	86							
IM5	Sunny	Moderate	09:03	7.4	Surface	1.0	0.3	185	27.1	8.0	8.0	28.0	28.0	84.8	85.0	5.8	7.3	3.0	3.3	5	7	81	85	820733	804859					

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

## Water Quality Monitoring

## Water Quality Monitoring Results on 24 May 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)	
IM9	Sunny	Moderate	10:36	7.4	Surface	1.0	0.3	110	29.0	8.1	8.1	18.5	18.5	110.5	110.6	7.7	7.1	4.2	4.9	3	5	82	84	822096	808823	<0.2	<0.2	2.2	2.1	
						1.0	0.4	118	29.0	8.1	8.1	18.5	18.5	110.6	110.6	7.7	7.1	4.2	4.9	4	5	82	84	822096	808823	<0.2	<0.2	2.2	2.1	
					Middle	3.7	0.4	107	28.5	8.0	8.0	21.6	21.6	93.9	93.9	6.5	6.5	4.8	4.9	4	5	84	84	822096	808823	<0.2	<0.2	2.1	2.1	
						3.7	0.4	115	28.5	8.0	8.0	21.6	21.6	93.9	93.9	6.5	6.5	4.8	4.9	5	5	84	84	822096	808823	<0.2	<0.2	2.0	2.0	
					Bottom	6.4	0.3	84	28.4	8.0	8.0	22.1	22.1	90.9	90.9	6.3	6.3	5.8	6.3	6	5	85	85	822096	808823	<0.2	<0.2	1.9	1.9	
						6.4	0.3	90	28.4	8.0	8.0	22.1	22.1	90.9	90.9	6.3	6.3	5.8	6.3	7	5	86	86	822096	808823	<0.2	<0.2	1.9	1.9	
IM10	Sunny	Moderate	10:18	7.5	Surface	1.0	0.3	133	29.4	8.3	8.3	16.8	16.8	108.6	108.6	7.6	6.8	3.7	6.5	4	7	83	84	822382	809821	<0.2	<0.2	2.4	2.1	
						1.0	0.3	137	29.4	8.3	8.3	16.8	16.8	108.6	108.6	7.6	6.8	3.7	6.5	4	7	84	84	822382	809821	<0.2	<0.2	2.6	2.1	
					Middle	3.8	0.3	130	28.4	8.3	8.3	22.0	22.0	87.7	87.7	6.0	6.0	6.9	6.5	6	7	86	86	822382	809821	<0.2	<0.2	1.9	2.1	
						3.8	0.3	140	28.4	8.3	8.3	22.0	22.0	87.7	87.7	6.0	6.0	7.0	6.5	7	7	86	86	822382	809821	<0.2	<0.2	2.0	2.1	
					Bottom	6.5	0.3	67	28.4	8.3	8.3	22.2	22.2	87.1	87.1	6.0	6.0	8.8	6.0	10	7	90	90	822382	809821	<0.2	<0.2	1.8	2.1	
						6.5	0.3	68	28.4	8.3	8.3	22.2	22.2	87.3	87.2	6.0	6.0	8.7	6.0	11	7	90	90	822382	809821	<0.2	<0.2	1.8	2.1	
IM11	Sunny	Moderate	10:03	6.7	Surface	1.0	0.4	124	29.2	8.3	8.3	17.3	17.3	111.2	111.1	7.8	7.1	4.3	8.7	6	8	83	83	822035	811475	<0.2	<0.2	2.5	2.3	
						1.0	0.4	125	29.1	8.3	8.3	17.3	17.3	111.0	111.0	7.8	7.1	4.3	8.7	6	8	83	83	822035	811475	<0.2	<0.2	2.4	2.3	
					Middle	3.4	0.3	113	28.5	8.3	8.3	21.7	21.7	91.5	91.5	6.3	6.3	8.3	8.7	6	8	85	85	822035	811475	<0.2	<0.2	2.4	2.3	
						3.4	0.3	120	28.5	8.3	8.3	21.7	21.7	91.5	91.5	6.3	6.3	8.4	8.7	6	8	86	86	822035	811475	<0.2	<0.2	2.4	2.3	
					Bottom	5.7	0.3	108	28.5	8.3	8.3	22.6	22.5	89.1	89.2	6.1	6.1	13.6	8.7	14	8	88	88	822035	811475	<0.2	<0.2	2.0	2.0	
						5.7	0.3	113	28.6	8.3	8.3	22.5	22.5	89.3	89.2	6.1	6.1	13.5	8.7	12	8	88	88	822035	811475	<0.2	<0.2	2.0	2.0	
IM12	Sunny	Moderate	09:55	9.6	Surface	1.0	0.5	115	29.5	8.0	8.0	16.5	16.5	125.9	125.8	8.8	7.3	3.7	11.3	5	8	83	83	821468	812017	<0.2	<0.2	2.6	2.3	
						1.0	0.5	121	29.5	8.0	8.0	16.5	16.5	125.6	125.6	8.8	7.3	3.7	11.3	7	8	83	83	821468	812017	<0.2	<0.2	2.6	2.3	
					Middle	4.8	0.5	110	28.0	8.1	8.1	23.7	23.6	83.3	83.4	5.7	7.3	15.6	11.3	8	8	85	85	821468	812017	<0.2	<0.2	2.1	2.3	
						4.8	0.5	115	28.1	8.1	8.1	23.6	23.6	83.5	83.4	5.7	7.3	15.3	11.3	7	8	85	85	821468	812017	<0.2	<0.2	2.3	2.3	
					Bottom	8.6	0.3	97	27.5	8.1	8.1	25.7	25.7	75.5	75.8	5.2	5.2	14.9	11.3	10	8	87	87	821468	812017	<0.2	<0.2	1.9	2.1	
						8.6	0.4	98	27.5	8.1	8.1	25.8	25.7	76.0	75.8	5.2	5.2	14.8	11.3	8	8	87	87	821468	812017	<0.2	<0.2	2.1	2.1	
SR2	Sunny	Moderate	09:25	4.3	Surface	1.0	0.4	100	29.1	8.2	8.2	18.0	18.0	109.2	109.2	7.6	7.6	2.5	3.8	5	7	83	83	821471	814138	<0.2	<0.2	2.6	2.4	
						1.0	0.5	109	29.1	8.2	8.2	17.9	18.0	109.1	109.1	7.6	7.6	2.5	3.8	5	7	83	83	821471	814138	<0.2	<0.2	2.5	2.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	3.8	-	7	-	84	84	821471	814138	<0.2	<0.2	-	-
						-	-	-	-	-	-	-	-	-	-	-	-	-	3.8	-	7	-	84	84	821471	814138	<0.2	<0.2	-	-
					Bottom	3.3	0.3	93	28.9	8.2	8.2	19.6	19.5	107.0	107.0	7.4	7.4	5.0	3.8	9	7	85	85	821471	814138	<0.2	<0.2	2.2	2.2	
						3.3	0.4	96	28.9	8.2	8.2	19.5	19.5	107.0	107.0	7.4	7.4	5.0	3.8	8	7	86	86	821471	814138	<0.2	<0.2	2.2	2.2	
SR3	Sunny	Moderate	10:49	9.2	Surface	1.0	0.2	183	29.0	8.1	8.1	18.5	18.5	110.6	110.6	7.7	7.1	3.4	5.1	4	7	-	-	822119	807591	-	-	-	-	
						1.0	0.2	197	29.0	8.1	8.1	18.5	18.5	110.6	110.6	7.7	7.1	3.3	5.1	6	7	-	-	822119	807591	-	-	-	-	
					Middle	4.6	0.3	173	28.5	8.0	8.0	21.6	21.6	92.5	92.5	6.4	7.1	4.2	5.1	7	7	-	-	822119	807591	-	-	-	-	
						4.6	0.3	181	28.5	8.0	8.0	21.6	21.6	92.5	92.5	6.4	7.1	4.2	5.1	7	7	-	-	822119	807591	-	-	-	-	
					Bottom	8.2	0.1	28	27.9	8.0	8.0	24.2	24.2	84.8	84.9	5.8	5.8	7.7	5.1	9	7	-	-	822119	807591	-	-	-	-	
						8.2	0.1	29	27.9	8.0	8.0	24.2	24.2	84.9	84.9	5.8	5.8	7.7	5.1	10	7	-	-	822119	807591	-	-	-	-	
SR4A	Sunny	Calm	10:43	9.1	Surface	1.0	0.2	132	28.2	8.0	8.0	23.2	23.2	80.6	80.8	5.5	7.4	10.1	6.7	7	7	-	-	817206	807795	-	-	-	-	
						1.0	0.2	137	28.2	8.0	8.0	23.1	23.1	80.9	80.9	5.6	7.4	9.6	6.7	6	7	-	-	817206	807795	-	-	-	-	
					Middle	4.6	0.2	93	30.3	8.3	8.3	16.7	16.7	135.7	135.6	9.3	7.4	5.0	6.7	6	7	-	-	817206	807795	-	-	-	-	
						4.6	0.2	94	30.3	8.3	8.3	16.7	16.7	135.5	135.5	9.3	7.4	5.0	6.7	6	7	-	-	817206	807795	-	-	-	-	
					Bottom	8.1	0.1	110	28.8	8.0	8.0	21.0	21.0	95.4	95.5	6.6	6.6	5.3	6.6	6	7	-	-	817206	807795	-	-	-	-	
						8.1	0.1	120	28.8	8.0	8.0	20.9	20.9	95.5	95.5	6.6	6.6	5.5	6.6	8	7	-	-	817206	807795	-	-	-	-	
SR5A	Sunny	Calm	10:52	4.8	Surface	1.0	0.0	233	28.4	8.0	8.0	22.3	22.3	85.1	85.2	5.9	5.9	7.4	6.5	6	8	-	-	816568	810716	-	-	-	-	
						1.0	0.0	252	28.4	8.0	8.0	22.3	22.3	85.2	85.2	5.9	5.9	7.4	6.5	6	8	-	-	816568	81					

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

**Water Quality Monitoring**

**Water Quality Monitoring Results on 24 May 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)		
C1	Sunny	Moderate	13:56	8.6	Surface	1.0	0.6	14	28.5	28.5	8.0	8.0	22.0	22.0	85.2	85.3	5.9	7.0	5.8	7.0	8	8	83	85	815623	804271	<0.2	2.1	2.0		
						1.0	0.7	14	28.5		8.0	8.0	22.0	22.0	85.3	85.3	5.9	7.0		7.0			83								
					Middle	4.3	0.7	17	28.3	28.3	8.0	8.0	23.0	23.0	81.4	81.4	5.6	9.2		9.2	9	9	86	85			<0.2	2.0			
						4.3	0.7	18	28.3		8.0	8.0	23.0	23.0	81.4	81.4	5.6	9.4		9.4			85				<0.2	2.0			
					Bottom	7.6	0.4	23	29.3	29.3	8.2	8.2	18.2	18.2	111.9	111.9	7.7	4.2	7.7	4.2	9	9	87	85			<0.2	2.0			
						7.6	0.4	25	29.3		8.2	8.2	18.2	18.2	111.9	111.9	7.7	4.2		4.2			87				<0.2	2.0			
C2	Sunny	Moderate	13:29	12.1	Surface	1.0	0.2	11	29.0	29.0	8.0	8.0	17.6	17.6	97.5	97.6	6.8	4.0	6.2	4.0	8	8	82	84	825652	806918	<0.2	2.4	2.2		
						1.0	0.3	11	29.0		8.0	8.0	17.6	17.6	97.7	97.6	6.8	4.0		4.0			82								
					Middle	6.1	0.2	351	27.9	27.9	7.9	7.9	24.8	24.8	82.3	82.3	5.6	3.5		3.5	12	11	83	85			<0.2	2.5			
						6.1	0.3	323	27.9		7.9	7.9	24.8	24.8	82.2	82.3	5.6	3.6		3.6			84				<0.2	2.4			
					Bottom	11.1	0.3	341	27.2	27.2	7.9	7.9	27.1	27.1	73.1	73.1	5.0	9.8	5.0	9.8	13	12	85	85			<0.2	1.7			
						11.1	0.3	352	27.2		7.9	7.9	27.1	27.1	73.1	73.1	5.0	9.9		9.9			85				<0.2	1.7			
C3	Sunny	Moderate	15:16	11.9	Surface	1.0	0.4	277	29.4	29.4	8.2	8.2	21.5	21.5	135.8	135.6	9.2	3.4	7.6	3.4	7	7	83	84	822093	817812	<0.2	1.8	1.5		
						1.0	0.4	284	29.4		8.2	8.2	21.5	21.5	135.4	135.6	9.2	3.4		3.4			83								
					Middle	6.0	0.5	260	27.2	27.2	8.0	8.0	27.2	27.2	88.0	88.0	6.0	2.8	3.8	2.8	7	7	84	85			<0.2	1.7			
						6.0	0.5	284	27.2		8.0	8.0	27.2	27.2	87.9	88.0	6.0	2.9		2.9			84				<0.2	1.9			
					Bottom	10.9	0.3	281	26.4	26.5	7.9	7.9	30.3	30.3	82.3	82.4	5.6	5.1	5.6	5.1	5	8	85	85			<0.2	1.0			
						10.9	0.4	283	26.5		7.9	7.9	30.3	30.3	82.5	82.4	5.6	5.0		5.0			85				<0.2	1.0			
IM1	Sunny	Moderate	14:09	5.5	Surface	1.0	0.5	348	28.4	28.4	8.0	8.0	22.2	22.2	84.1	84.1	5.8	8.4	5.8	8.4	8	8	83	85	817954	807111	<0.2	2.8	2.7		
						1.0	0.5	320	28.4		8.0	8.0	22.2	22.2	84.1	84.1	5.8	8.4		8.4			84								
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	-	85			<0.2	-			
						-	-	-	-		-	-	-	-	-	-	-	-		-			-				<0.2	-			
					Bottom	4.5	0.2	353	28.4	28.4	8.0	8.0	22.5	22.5	83.3	83.4	5.7	10.7	5.7	10.7	8	8	87	87			<0.2	2.6			
						4.5	0.2	325	28.4		8.0	8.0	22.5	22.5	83.4	83.4	5.7	10.7		10.7			87				<0.2	2.5			
IM2	Sunny	Moderate	14:16	7.7	Surface	1.0	0.5	7	29.2	29.2	8.1	8.1	18.0	18.0	104.3	104.3	7.2	4.7	6.6	4.7	7	6	84	85	818162	806175	<0.2	2.6	2.6		
						1.0	0.5	7	29.1		8.1	8.1	18.0	18.0	104.2	104.3	7.2	4.7		4.7			84								
					Middle	3.9	0.5	10	28.4	28.4	8.1	8.1	22.2	22.2	85.5	85.4	5.9	13.0	5.9	13.0	8	8	85	86			<0.2	2.6			
						3.9	0.5	10	28.4		8.1	8.1	22.3	22.3	85.3	85.4	5.9	13.1		13.1			86				<0.2	2.6			
					Bottom	6.7	0.5	2	28.3	28.3	8.1	8.1	22.9	22.9	85.5	85.6	5.9	17.5	5.9	17.5	9	11	88	88			<0.2	2.5			
						6.7	0.5	2	28.3		8.1	8.1	22.9	22.9	85.7	85.6	5.9	17.4		17.4			88				<0.2	2.5			
IM3	Sunny	Moderate	14:24	7.8	Surface	1.0	0.5	39	28.9	28.9	8.2	8.2	17.4	17.3	105.8	105.5	7.4	6.2	6.7	6.2	7	6	84	86	818807	805589	<0.2	2.6	2.6		
						1.0	0.5	42	28.8		8.2	8.2	17.3	17.3	105.1	105.5	7.4	6.3		6.3			84								
					Middle	3.9	0.6	40	28.6	28.6	8.1	8.1	21.6	21.6	87.7	87.7	6.0	8.6	6.0	8.6	6	6	86	86			<0.2	2.7			
						3.9	0.6	40	28.6		8.1	8.1	21.7	21.7	87.7	87.7	6.0	9.0		9.0			86				<0.2	2.5			
					Bottom	6.8	0.5	37	28.5	28.5	8.1	8.1	22.2	22.2	87.1	87.1	6.0	13.4	6.0	13.4	6	6	88	87			<0.2	2.5			
						6.8	0.5	37	28.5		8.1	8.1	22.2	22.2	87.1	87.1	6.0	13.4		13.4			87				<0.2	2.6			
IM4	Sunny	Moderate	14:35	8.2	Surface	1.0	0.8	20	29.4	29.4	8.2	8.2	16.8	16.8	122.1	122.0	8.5	5.3	7.5	5.3	6	7	83	85	819723	804618	<0.2	2.7	2.6		
						1.0	0.9	21	29.4		8.2	8.2	16.8	16.8	121.9	122.0	8.5	5.4		5.4			83								
					Middle	4.1	0.8	19	28.6	28.6	8.1	8.1	21.7	21.7	93.8	93.9	6.5	7.2	6.5	7.2	7	7	85	86							

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

**Water Quality Monitoring**

**Water Quality Monitoring Results on 24 May 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)	
IM9	Sunny	Moderate	14:06	7.7	Surface	1.0	0.1	26	30.2	30.2	8.3	8.3	16.5	16.5	155.3	155.2	10.7	8.9	4.2	7.0	7	83	86	822122	808785	<0.2	<0.2	2.6	2.5	
						1.0	0.1	28	30.2		8.3	8.3	16.5	16.5	155.1	155.2	10.7	8.9	4.2	7.0	6	84	86	822122	808785	<0.2	<0.2	2.5	2.5	
					Middle	3.9	0.2	351	28.9	28.9	8.0	8.0	20.4	20.4	103.5	103.5	7.1	7.1	4.9	7.0	7	86	86	822122	808785	<0.2	<0.2	2.5	2.5	
						3.9	0.2	323	28.9	28.9	8.0	8.0	20.5	20.4	103.4	103.5	7.1	7.1	5.4	7.0	5	86	86	822122	808785	<0.2	<0.2	2.4	2.4	
					Bottom	6.7	0.2	277	28.5	28.5	7.9	7.9	21.7	21.7	90.5	90.6	6.2	6.2	11.4	7.0	7	88	88	822122	808785	<0.2	<0.2	2.5	2.5	
						6.7	0.2	299	28.5	28.5	7.9	7.9	21.7	21.7	90.7	90.6	6.2	6.2	11.6	7.0	7	88	88	822122	808785	<0.2	<0.2	2.4	2.4	
IM10	Sunny	Moderate	14:14	8.1	Surface	1.0	0.2	330	29.8	29.8	8.2	8.2	17.8	17.7	145.1	145.0	10.0	8.4	3.8	5.6	6	81	83	822400	809823	<0.2	<0.2	2.3	2.3	
						1.0	0.2	355	29.8	29.8	8.2	8.2	17.7	17.7	144.9	145.0	10.0	8.4	3.8	5.6	6	82	83	822400	809823	<0.2	<0.2	2.3	2.3	
					Middle	4.1	0.2	322	28.7	28.7	8.0	8.0	20.9	20.9	98.0	98.2	6.8	6.8	4.4	5.6	8	83	84	822400	809823	<0.2	<0.2	2.3	2.3	
						4.1	0.2	335	28.7	28.7	8.0	8.0	20.8	20.9	98.3	98.2	6.8	6.8	4.3	5.6	8	84	85	822400	809823	<0.2	<0.2	2.2	2.2	
					Bottom	7.1	0.3	317	28.2	28.2	7.9	7.9	22.9	22.9	80.8	80.8	5.5	5.5	8.6	5.6	7	85	85	822400	809823	<0.2	<0.2	2.2	2.2	
						7.1	0.3	319	28.2	28.2	7.9	7.9	22.9	22.9	80.7	80.8	5.5	5.5	8.6	5.6	6	85	85	822400	809823	<0.2	<0.2	2.2	2.2	
IM11	Sunny	Moderate	14:26	7.2	Surface	1.0	0.2	327	29.8	29.8	8.3	8.3	18.3	18.3	144.8	144.7	9.9	8.2	3.7	5.7	5	84	86	822030	811471	<0.2	<0.2	2.2	2.1	
						1.0	0.2	347	29.7	29.7	8.3	8.3	18.3	18.3	144.6	144.7	9.9	8.2	3.7	5.7	6	84	86	822030	811471	<0.2	<0.2	2.2	2.1	
					Middle	3.6	0.2	316	28.5	28.5	8.0	8.0	22.1	22.1	93.4	93.4	6.4	6.4	4.8	5.7	6	86	86	822030	811471	<0.2	<0.2	2.2	2.1	
						3.6	0.2	340	28.4	28.4	8.0	8.0	22.1	22.1	93.4	93.4	6.4	6.4	4.8	5.7	5	86	86	822030	811471	<0.2	<0.2	2.2	2.1	
					Bottom	6.2	0.4	279	27.5	27.5	7.9	7.9	27.0	27.0	87.9	88.1	6.0	6.0	8.5	5.7	8	90	90	822030	811471	<0.2	<0.2	1.8	1.9	
						6.2	0.4	282	27.5	27.5	7.9	7.9	27.0	27.0	88.3	88.1	6.0	6.0	8.4	5.7	6	90	90	822030	811471	<0.2	<0.2	1.9	1.9	
IM12	Sunny	Moderate	14:33	9.4	Surface	1.0	0.3	294	28.5	28.5	8.0	8.0	21.6	21.5	95.9	96.0	6.6	6.4	4.0	5.1	6	82	84	821450	812023	<0.2	<0.2	2.2	2.0	
						1.0	0.3	322	28.5	28.5	8.0	8.0	21.5	21.5	96.0	96.0	6.6	6.4	4.0	5.1	7	82	84	821450	812023	<0.2	<0.2	2.3	2.0	
					Middle	4.7	0.3	299	28.0	28.1	7.9	7.9	23.8	23.8	89.9	89.9	6.2	6.2	4.0	5.1	6	83	83	821450	812023	<0.2	<0.2	1.9	2.0	
						4.7	0.3	324	28.1	28.1	7.9	7.9	23.7	23.8	89.9	89.9	6.2	6.2	4.0	5.1	5	83	83	821450	812023	<0.2	<0.2	2.0	2.0	
					Bottom	8.4	0.1	284	27.6	27.6	7.9	7.9	25.8	25.8	81.5	81.6	5.6	5.6	7.4	5.1	6	85	86	821450	812023	<0.2	<0.2	1.8	1.7	
						8.4	0.1	291	27.6	27.6	7.9	7.9	25.8	25.8	81.6	81.6	5.6	5.6	7.2	5.1	6	86	86	821450	812023	<0.2	<0.2	1.7	1.7	
SR2	Sunny	Calm	14:53	4.2	Surface	1.0	0.1	284	29.7	29.7	8.2	8.2	20.3	20.3	142.8	142.7	9.7	9.7	3.0	3.5	4	85	85	821476	814142	<0.2	<0.2	2.4	1.8	
						1.0	0.1	295	29.7	29.7	8.2	8.2	20.3	20.3	142.6	142.6	9.7	9.7	3.0	3.5	5	85	85	821476	814142	<0.2	<0.2	1.8	1.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	9.7	3.5	-	-	-	86	814142	<0.2	<0.2	-	-	
						-	-	-	-	-	-	-	-	-	-	-	-	-	9.7	3.5	-	-	-	86	814142	<0.2	<0.2	-	-	
					Bottom	3.2	0.2	324	28.9	28.9	8.1	8.1	22.0	22.0	123.5	123.4	8.4	8.4	4.0	3.5	6	87	88	821476	814142	<0.2	<0.2	2.1	2.1	
						3.2	0.2	337	28.9	28.9	8.1	8.1	22.0	22.0	123.3	123.4	8.4	8.4	3.9	3.5	5	88	88	821476	814142	<0.2	<0.2	2.1	2.1	
SR3	Sunny	Moderate	13:49	9.3	Surface	1.0	0.1	309	30.2	30.2	8.2	8.2	16.7	16.7	136.1	135.9	9.4	7.7	4.3	8.0	4	-	-	-	822138	807565	-	-	-	-
						1.0	0.1	310	30.2	30.2	8.2	8.2	16.7	16.7	135.7	135.9	9.3	7.7	4.4	8.0	6	-	-	-	822138	807565	-	-	-	-
					Middle	4.7	0.2	32	28.2	28.2	7.9	7.9	22.1	22.1	86.7	86.7	6.0	6.0	8.3	8.0	6	-	-	-	822138	807565	-	-	-	-
						4.7	0.2	32	28.2	28.2	7.9	7.9	22.1	22.1	86.6	86.6	6.0	6.0	8.7	8.0	4	-	-	-	822138	807565	-	-	-	-
					Bottom	8.3	0.3	55	27.7	27.7	7.9	7.9	24.9	24.9	78.7	78.9	5.4	5.4	11.1	10.2	6	-	-	-	822138	807565	-	-	-	-
						8.3	0.3	60	27.7	27.7	7.9	7.9	24.9	24.9	79.1	79.1	5.4	5.4	11.1	10.2	6	-	-	-	822138	807565	-	-	-	-
SR4A	Sunny	Calm	13:48	8.4	Surface	1.0	0.3	276	28.3	28.3	8.0	8.0	22.9	22.9	81.0	81.0	5.6	6.8	8.4	10.2	6	-	-	-	817171	807800	-	-	-	-
						1.0	0.3	290	28.3	28.3	8.0	8.0	22.9	22.9	81.0	81.0	5.6	6.8	8.4	10.2	5	-	-	-	817171	807800	-	-	-	-
					Middle	4.2	0.3	275	27.9	27.9	8.0	8.0	24.5	24.5	77.2	77.3	5.3	6.8	16.4	10.2	5	-	-	-	817171	807800	-	-	-	-
						4.2	0.4	299	27.9	27.9	8.0	8.0	24.5	24.5	77.3	77.3	5.3	6.8	16.7	10.2	5	-	-	-	817171	807800	-	-	-	-
					Bottom	7.4	0.0	38	28.9	28.9	8.1	8.1	19.4	19.4	98.3	98.3	6.8	6.8	5.5	6.8	5	-	-	-	817171	807800	-	-	-	-
						7.4	0.0	41	28.9	28.9	8.1	8.1	19.4	19.4	98.3	98.3	6.8	6.8	5.7	6.8	5	-	-	-	817171	807800	-	-	-	-
SR5A	Sunny	Calm	13:40	3.8	Surface	1.0	0.2	272	28.2	28.2	8.0	8.0	23.2	23.2	80.5	80.6	5.5	5.5	9.7	7.4	5	-	-	-	816593	810705	-	-	-	-

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

**Water Quality Monitoring**

**Water Quality Monitoring Results on 26 May 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)	
C1	Sunny	Moderate	11:23	8.6	Surface	1.0	0.2	25	28.1	28.1	8.0	8.0	18.3	18.3	85.3	85.3	6.0	5.9	17.4	20.6	4	77	76	815627	804260	<0.2	<0.2	2.3	2.1	
						1.0	0.2	27	28.1		8.0	8.0	18.3	18.3	85.3	85.3	6.0	5.9	17.4	20.6	6	77	76	815627	804260	<0.2	<0.2	1.8	2.1	
					Middle	4.3	0.3	51	27.8	27.8	7.9	7.9	24.9	24.9	84.4	84.4	5.8	5.9	21.5	20.6	5	74	76	815627	804260	<0.2	<0.2	2.1	2.1	
						4.3	0.4	55	27.8		7.9	7.9	24.9	24.9	84.4	84.4	5.8	5.9	21.5	20.6	4	76	76	815627	804260	<0.2	<0.2	2.0	2.1	
					Bottom	7.6	0.2	55	27.0	27.0	7.8	7.8	27.9	27.9	96.5	96.5	6.6	6.6	23.0	20.6	5	75	76	815627	804260	<0.2	<0.2	1.9	2.1	
						7.6	0.3	60	27.0		7.8	7.8	27.9	27.9	96.5	96.5	6.6	6.6	23.0	20.6	4	79	76	815627	804260	<0.2	<0.2	2.3	2.1	
C2	Cloudy	Moderate	12:50	11.4	Surface	1.0	0.8	178	29.8	29.9	8.0	8.0	18.1	18.1	101.7	101.8	7.0	6.4	7.8	12.0	8	75	77	825686	806943	<0.2	<0.2	2.0	2.0	
						1.0	0.8	181	29.9		8.0	8.0	18.0	18.0	101.8	101.8	7.0	6.4	7.8	12.0	8	75	77	825686	806943	<0.2	<0.2	1.9	2.0	
					Middle	5.7	0.7	172	28.4	28.4	7.9	7.9	20.6	20.7	83.8	83.6	5.8	6.4	13.3	12.0	9	76	77	825686	806943	<0.2	<0.2	2.4	2.0	
						5.7	0.7	181	28.3		7.9	7.9	20.7	20.7	83.4	83.6	5.8	6.4	13.2	12.0	9	77	77	825686	806943	<0.2	<0.2	2.0	2.0	
					Bottom	10.4	0.6	150	27.7	27.7	7.9	7.9	26.1	26.1	74.7	74.9	5.1	5.1	14.9	12.0	8	78	78	825686	806943	<0.2	<0.2	2.5	2.0	
						10.4	0.6	151	27.7		7.9	7.9	26.1	26.1	75.0	74.9	5.1	5.1	14.8	12.0	8	78	78	825686	806943	<0.2	<0.2	1.2	2.0	
C3	Cloudy	Moderate	10:27	12.3	Surface	1.0	0.7	111	28.5	28.5	8.1	8.1	22.9	22.9	93.5	93.5	6.4	6.3	3.7	4.6	6	73	75	822082	817773	<0.2	<0.2	1.5	1.8	
						1.0	0.8	120	28.5		8.1	8.1	22.9	22.9	93.5	93.5	6.4	6.3	3.7	4.6	6	73	75	822082	817773	<0.2	<0.2	1.8	1.8	
					Middle	6.2	0.4	95	28.2	28.2	8.1	8.1	24.2	24.3	91.6	91.6	6.2	6.2	4.4	4.6	5	74	75	822082	817773	<0.2	<0.2	1.7	1.8	
						6.2	0.4	95	28.2		8.1	8.1	24.3	24.3	91.6	91.6	6.2	6.2	4.5	4.6	7	75	76	822082	817773	<0.2	<0.2	1.8	1.8	
					Bottom	11.3	0.2	88	28.0	28.0	8.1	8.1	25.0	25.0	90.8	90.8	6.2	6.2	5.6	4.6	7	76	77	822082	817773	<0.2	<0.2	1.8	1.8	
						11.3	0.2	90	28.0		8.1	8.1	25.0	25.0	90.8	90.8	6.2	6.2	5.6	4.6	7	77	77	822082	817773	<0.2	<0.2	1.8	1.8	
IM1	Sunny	Moderate	11:40	5.3	Surface	1.0	0.2	326	28.7	28.7	8.1	8.1	18.8	18.8	91.6	91.6	6.4	6.4	15.9	16.3	4	79	78	817973	807107	<0.2	<0.2	1.6	1.8	
						1.0	0.2	331	28.7		8.0	8.1	18.8	18.8	91.6	91.6	6.4	6.4	15.9	16.3	6	77	78	817973	807107	<0.2	<0.2	1.9	1.8	
					Middle	2.7	-	-	-	-	-	-	-	-	-	-	-	-	-	16.3	-	-	-	78	817973	807107	<0.2	<0.2	-	1.8
						2.7	-	-	-		-	-	-	-	-	-	-	-	-	16.3	-	-	-	78	817973	807107	<0.2	<0.2	-	1.8
					Bottom	4.3	0.2	10	28.1	28.1	7.9	7.9	23.3	23.3	96.2	96.2	6.6	6.6	16.7	16.3	4	78	77	817973	807107	<0.2	<0.2	1.7	2.0	
						4.3	0.3	10	28.1		7.9	7.9	23.3	23.3	96.2	96.2	6.6	6.6	16.7	16.3	4	77	77	817973	807107	<0.2	<0.2	2.0	2.0	
IM2	Sunny	Moderate	11:46	6.6	Surface	1.0	0.1	327	29.0	29.0	8.1	8.1	18.7	18.7	90.7	90.7	6.3	6.0	16.2	18.8	5	74	76	818183	806167	<0.2	<0.2	1.4	1.7	
						1.0	0.1	366	29.0		8.1	8.1	18.7	18.7	90.7	90.7	6.3	6.0	16.2	18.8	6	76	75	818183	806167	<0.2	<0.2	1.8	1.7	
					Middle	3.3	0.1	29	27.7	27.7	7.9	7.9	24.0	24.0	81.1	81.1	5.6	6.0	21.1	18.8	6	75	75	818183	806167	<0.2	<0.2	1.9	1.7	
						3.3	0.1	31	27.7		7.9	7.9	24.0	24.0	81.1	81.1	5.6	6.0	21.1	18.8	7	75	79	818183	806167	<0.2	<0.2	1.8	1.7	
					Bottom	5.6	0.1	33	26.8	26.8	7.8	7.8	27.5	27.5	92.6	92.6	6.3	6.3	19.1	18.8	8	79	78	818183	806167	<0.2	<0.2	1.6	1.7	
						5.6	0.1	35	26.8		7.8	7.8	27.5	27.5	92.6	92.6	6.3	6.3	19.1	18.8	8	78	78	818183	806167	<0.2	<0.2	1.5	1.7	
IM3	Sunny	Moderate	11:51	6.5	Surface	1.0	0.3	346	29.4	29.4	8.1	8.1	18.6	18.6	102.8	102.8	7.1	6.9	13.2	15.3	6	78	80	818770	805580	<0.2	<0.2	1.9	1.9	
						1.0	0.3	318	29.4		8.1	8.1	18.6	18.6	102.8	102.8	7.1	6.9	13.2	15.3	4	76	80	818770	805580	<0.2	<0.2	2.0	1.9	
					Middle	3.3	0.2	0	28.8	28.8	8.0	8.0	19.7	19.7	94.9	94.9	6.6	6.9	14.3	15.3	5	77	80	818770	805580	<0.2	<0.2	2.0	1.9	
						3.3	0.2	0	28.8		8.0	8.0	19.7	19.7	94.9	94.9	6.6	6.9	14.3	15.3	6	77	80	818770	805580	<0.2	<0.2	2.0	1.9	
					Bottom	5.5	0.3	60	27.8	27.8	7.9	7.9	26.2	26.2	104.1	104.1	7.1	7.1	18.3	15.3	6	82	76	818770	805580	<0.2	<0.2	1.5	1.8	
						5.5	0.3	63	27.8		7.9	7.9	26.2	26.2	104.1	104.1	7.1	7.1	18.3	15.3	5	88	76	818770	805580	<0.2	<0.2	1.8	1.8	
IM4	Sunny	Moderate	11:59	6.8	Surface	1.0	0.5	304	29.4	29.4	8.0	8.0	17.8	17.8	99.0	99.0	6.9	6.7	18.9	20.4	6	76	76	819707	804619	<0.2	<0.2	1.0	1.6	
						1.0	0.5	307	29.4		8.0	8.0	17.8	17.8	99.0	99.0	6.9	6.7	18.9	20.4	4	73	76	819707	804619	<0.2	<0.2	1.9	1.6	
					Middle	3.4	0.1	307	28.8	28.8	7.9	7.9	19.2	19.2	93.1	93.1	6.5	6.9	19.2	20.4	6	79	80	819707	804619	<0.2	<0.2	1.6	1.6	
						3.4	0.1	335	28.8		7.9	7.9	19.2	19.2	93.1	93.1	6.5	6.9	19.2	20.4	5	80	74	819707	804619	<0.2	<0.2	1.2	1.6	
					Bottom	5.8	0.1	279	28.7	28.7	7.9	7.9	23.3	23.3	102.0	102.0	6.9	6.9	23.0	20.4	6	74	76	819707	804619	<0.2	<0.2	1.5	1.6	
						5.8	0.1	300	28.7		7.9	7.9	23.3	23.3	102.0	102.0	6.													

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

## Water Quality Monitoring

## Water Quality Monitoring Results on 26 May 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)	
IM9	Cloudy	Moderate	12:12	7.0	Surface	1.0	0.5	135	29.7	8.0	8.0	18.4	18.4	105.3	105.2	7.2	6.9	6.9	5	74	75	74	75	822066	808800	<0.2	2.1	2.1		
						1.0	0.5	142	29.7	8.0	8.0	18.4	18.4	105.1	105.2	7.2	7.0	7.0	5	74	75	74	75							
					Middle	3.5	0.4	143	29.1	8.0	8.0	18.8	18.8	95.0	95.0	6.6	9.2	9.2	6	75	75	75	75							
						3.5	0.4	155	29.1	8.0	8.0	18.8	18.8	95.0	95.0	6.6	9.3	9.3	6	75	75	75	75							
					Bottom	6.0	0.3	122	28.6	8.0	8.0	21.2	21.2	86.6	86.7	6.0	11.1	11.1	6	76	76	76	76							
						6.0	0.3	131	28.6	8.0	8.0	21.2	21.2	86.7	86.7	6.0	11.1	11.1	6	77	77	77	77							
IM10	Cloudy	Moderate	12:02	7.1	Surface	1.0	0.7	120	29.5	8.0	8.0	18.0	18.0	103.8	103.8	7.2	7.0	7.0	5	73	73	73	73	822399	809820	<0.2	2.6	2.3		
						1.0	0.7	129	29.5	8.0	8.0	18.0	18.0	103.8	103.8	7.2	7.1	7.1	6	73	75	75	75							
					Middle	3.6	0.7	126	29.3	8.0	8.0	18.4	18.4	99.8	99.8	6.9	8.3	8.3	7	75	75	75	75							
						3.6	0.8	127	29.3	8.0	8.0	18.4	18.4	99.7	99.7	6.9	8.4	8.4	6	75	75	75	75							
					Bottom	6.1	0.5	115	28.7	8.0	8.0	20.6	20.6	90.1	90.1	6.2	11.5	11.5	6	77	77	77	77							
						6.1	0.5	115	28.7	8.0	8.0	20.6	20.6	90.2	90.2	6.2	11.4	11.4	6	77	77	77	77							
IM11	Cloudy	Moderate	11:45	7.3	Surface	1.0	0.7	110	29.2	8.0	8.0	18.7	18.7	101.3	101.2	7.0	5.4	5.4	4	73	74	74	74	822058	811431	<0.2	3.2	2.7		
						1.0	0.7	116	29.2	8.0	8.0	18.7	18.7	101.1	101.2	7.0	5.5	5.5	4	74	74	74	74							
					Middle	3.7	0.6	104	28.7	8.0	8.0	20.2	20.2	89.4	89.4	6.2	12.0	12.0	4	74	75	75	75							
						3.7	0.6	111	28.7	8.0	8.0	20.2	20.2	89.4	89.4	6.2	12.5	12.5	5	75	75	75	75							
					Bottom	6.3	0.5	102	28.7	8.0	8.0	20.3	20.3	89.6	89.7	6.2	14.8	14.8	4	77	77	77	77							
						6.3	0.5	112	28.7	8.0	8.0	20.3	20.3	89.7	89.7	6.2	14.9	14.9	4	77	77	77	77							
IM12	Cloudy	Moderate	11:36	7.7	Surface	1.0	0.7	101	29.2	8.0	8.0	19.2	19.2	97.2	97.2	6.7	6.0	6.0	4	73	73	73	73	821470	812037	<0.2	2.2	2.3		
						1.0	0.7	106	29.2	8.0	8.0	19.2	19.2	97.1	97.1	6.7	6.1	6.1	6	73	75	75	75							
					Middle	3.9	0.6	104	28.8	8.0	8.0	20.1	20.1	88.8	88.8	6.1	11.0	11.0	5	75	75	75	75							
						3.9	0.7	106	28.8	8.0	8.0	20.1	20.1	88.8	88.8	6.1	11.1	11.1	7	75	75	75	75							
					Bottom	6.7	0.4	89	28.7	8.0	8.0	20.6	20.6	88.0	88.2	6.1	20.5	20.5	5	77	76	76	76							
						6.7	0.4	93	28.7	8.0	8.0	20.6	20.6	88.3	88.2	6.1	20.5	20.5	5	76	76	76	76							
SR2	Cloudy	Moderate	11:02	4.2	Surface	1.0	0.7	94	29.3	8.1	8.1	18.4	18.4	104.1	104.1	7.2	3.8	3.8	2	74	74	74	74	821445	814151	<0.2	2.0	1.9		
						1.0	0.7	95	29.3	8.1	8.1	18.4	18.4	104.0	104.0	7.2	3.8	3.8	2	74	74	74	74							
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-							
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-								
					Bottom	3.2	0.4	105	28.9	8.1	8.1	20.0	20.0	96.5	96.5	6.7	5.6	5.6	3	77	77	77	77							
						3.2	0.4	109	28.9	8.1	8.1	20.0	20.0	96.5	96.5	6.7	5.7	5.7	4	77	77	77	77							
SR3	Cloudy	Moderate	12:26	9.1	Surface	1.0	0.3	195	29.2	8.0	8.0	19.0	19.0	98.8	98.8	6.7	5.8	5.8	5	-	-	-	-	822145	807549	-	-	-		
						1.0	0.3	197	29.2	8.0	8.0	19.0	19.0	98.7	98.8	6.7	5.9	5.9	5	-	-	-	-							
					Middle	4.6	0.3	187	28.8	8.0	8.0	19.7	19.7	90.7	90.7	6.3	6.3	6.3	5	-	-	-	-							
						4.6	0.3	202	28.8	8.0	8.0	19.7	19.7	90.7	90.7	6.3	6.4	6.4	5	-	-	-	-							
					Bottom	8.1	0.2	223	28.5	7.9	7.9	22.2	22.2	85.5	85.6	5.9	10.8	10.8	6	-	-	-	-							
						8.1	0.2	229	28.5	7.9	7.9	22.2	22.2	85.7	85.7	5.9	10.8	10.8	5	-	-	-	-							
SR4A	Sunny	Moderate	11:05	8.8	Surface	1.0	0.2	274	29.5	8.1	8.1	18.3	18.3	85.7	85.7	5.9	19.8	19.8	3	-	-	-	-	817173	807815	-	-	-		
						1.0	0.2	287	29.5	8.1	8.1	18.3	18.3	85.7	85.7	5.9	19.8	19.8	5	-	-	-	-							
					Middle	4.4	0.1	257	27.1	7.9	7.9	26.3	26.3	77.6	77.6	5.3	21.2	21.2	4	-	-	-	-							
						4.4	0.1	279	27.1	7.9	7.9	26.3	26.3	77.6	77.6	5.3	21.2	21.2	4	-	-	-	-							
					Bottom	7.8	0.0	79	27.1	7.8	7.8	26.5	26.5	85.0	85.3	5.8	22.7	22.7	7	-	-	-	-							
						7.8	0.0	85	27.1	7.8	7.8	26.5	26.5	85.5	85.9	5.9	22.7	22.7	9	-	-	-	-							
SR5A	Sunny	Moderate	10:49	4.5	Surface	1.0	0.1	190	29.4	8.1	8.1	18.2	18.3	107.8	107.8	7.5	11.7	11.7	4	-	-	-	-	816588	810685	-	-	-		
						1.0	0.1	195	29.4	8.1	8.1	18.3																		

**Water Quality Monitoring Results on 26 May 18 during Mid-Flood Tide**

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

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

**Water Quality Monitoring**

**Water Quality Monitoring Results on 26 May 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)	
IM9	Sunny	Moderate	16:18	7.1	Surface	1.0	0.1	285	30.5	8.1	8.1	16.3	16.3	118.5	118.4	8.1	7.5	6.0	5.9	5	5	73	75	822081	808804	<0.2	2.8			
						1.0	0.1	300	30.5	8.1	8.1	16.3	16.3	118.3	118.4	8.1	7.5	6.0	5.9	5	5	73	75							
					Middle	3.6	0.1	237	29.3	7.9	7.9	19.0	19.0	99.1	99.1	6.8	6.3	5.2	5.9	5	5	75	75							
						3.6	0.1	258	29.3	7.9	7.9	19.0	19.0	99.0	99.1	6.8	6.3	5.2	5.9	5	5	75	75							
					Bottom	6.1	0.1	298	28.9	7.9	7.9	20.3	20.3	92.0	92.1	6.3	6.3	6.5	5.9	5	5	77	77							
						6.1	0.2	311	28.9	7.9	7.9	20.3	20.3	92.1	92.1	6.3	6.3	6.5	5.9	5	5	77	77							
IM10	Sunny	Moderate	16:28	6.3	Surface	1.0	0.2	349	30.7	8.2	8.2	16.4	16.4	129.8	129.7	8.9	7.5	5.5	7.2	4	4	74	74	822388	809803	<0.2	2.3			
						1.0	0.2	321	30.7	8.2	8.2	16.4	16.4	129.6	129.7	8.9	7.5	5.6	7.2	3	4	75	75							
					Middle	3.2	0.4	318	28.9	7.9	7.9	20.5	20.4	88.8	88.8	6.1	6.1	7.1	7.2	6	4	77	77							
						3.2	0.5	327	28.9	7.9	7.9	20.4	20.4	88.8	88.8	6.1	6.1	7.1	7.2	4	4	77	77							
					Bottom	5.3	0.4	302	28.8	7.9	7.9	20.7	20.7	86.5	86.6	6.0	6.0	8.6	7.2	4	4	78	78							
						5.3	0.4	322	28.8	7.9	7.9	20.7	20.7	86.6	86.6	6.0	6.0	8.9	7.2	4	4	78	78							
IM11	Sunny	Moderate	16:41	7.1	Surface	1.0	0.4	328	29.8	8.0	8.0	18.7	18.7	111.2	111.2	7.6	6.9	4.9	7.8	5	4	74	74	822066	811486	<0.2	2.2			
						1.0	0.5	346	29.8	8.0	8.0	18.7	18.7	111.2	111.2	7.6	6.9	4.8	7.8	4	4	75	75							
					Middle	3.6	0.6	302	28.8	8.0	8.0	20.5	20.5	89.3	89.2	6.2	6.1	6.6	7.8	4	4	77	77							
						3.6	0.6	330	28.8	8.0	8.0	20.5	20.5	89.0	89.0	6.1	6.1	6.7	7.8	4	4	77	77							
					Bottom	6.1	0.3	289	28.2	7.9	7.9	23.4	23.4	79.3	79.4	5.4	5.4	12.2	7.8	3	4	78	78							
						6.1	0.3	305	28.2	7.9	7.9	23.4	23.4	79.4	79.4	5.4	5.4	11.7	7.8	4	4	78	78							
IM12	Sunny	Moderate	16:49	7.5	Surface	1.0	0.6	304	29.5	8.1	8.1	19.3	19.3	109.7	109.7	7.5	7.5	4.6	8.6	2	2	75	75	821448	812019	<0.2	2.3			
						1.0	0.6	331	29.5	8.1	8.1	19.3	19.3	109.6	109.6	7.5	7.5	4.8	8.6	2	2	76	76							
					Middle	3.8	0.6	289	29.5	8.1	8.1	21.1	21.1	109.3	109.3	7.4	7.4	6.4	8.6	2	2	77	77							
						3.8	0.6	316	29.5	8.1	8.1	21.1	21.1	109.2	109.3	7.4	7.4	6.1	8.6	2	2	77	77							
					Bottom	6.5	0.4	287	28.7	7.9	7.9	23.0	23.0	95.0	94.8	6.5	6.5	14.5	8.6	3	2	79	79							
						6.5	0.4	292	28.7	7.9	7.9	23.1	23.0	94.6	94.6	6.4	6.4	15.1	8.6	2	2	79	79							
SR2	Sunny	Moderate	17:23	4.1	Surface	1.0	0.2	306	28.9	8.0	8.0	22.3	22.3	97.0	97.0	6.6	6.6	11.0	13.3	5	6	76	76	821489	814143	<0.2	1.9			
						1.0	0.2	320	28.9	8.0	8.0	22.3	22.3	97.0	97.0	6.6	6.6	11.0	13.3	6	6	76	76							
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	13.3	-	-	-	77							
						-	-	-	-	-	-	-	-	-	-	-	-	-	13.3	-	-	-	77							
					Bottom	3.1	0.2	324	28.7	7.9	7.9	22.9	22.9	92.0	92.0	6.3	6.3	15.5	13.3	6	6	78	78							
						3.1	0.2	329	28.7	7.9	7.9	22.9	22.9	92.0	92.0	6.3	6.3	15.7	13.3	6	6	78	78							
SR3	Sunny	Moderate	16:02	8.0	Surface	1.0	0.2	200	30.5	8.1	8.1	16.2	16.2	127.8	127.7	8.8	7.5	5.8	8.0	4	5	-	-	822132	807570	-	-			
						1.0	0.2	205	30.5	8.1	8.1	16.2	16.2	127.5	127.7	8.8	7.5	5.9	8.0	5	5	-	-							
					Middle	4.0	0.1	232	28.9	7.9	7.9	19.9	19.9	89.1	89.1	6.1	6.1	6.5	8.0	4	5	-	-							
						4.0	0.1	233	28.9	7.9	7.9	20.0	19.9	89.0	89.0	6.1	6.1	6.6	8.0	3	5	-	-							
					Bottom	7.0	0.1	285	28.8	7.9	7.9	20.5	20.5	88.3	88.4	6.1	6.1	11.7	8.0	6	5	-	-							
						7.0	0.1	309	28.8	7.9	7.9	20.5	20.5	88.5	88.5	6.1	6.1	11.4	8.0	7	5	-	-							
SR4A	Sunny	Moderate	16:52	8.6	Surface	1.0	0.2	78	29.6	8.0	8.0	20.2	20.2	97.1	97.1	6.6	6.4	19.2	20.7	7	7	-	-	817167	807811	-	-			
						1.0	0.2	84	29.6	8.0	8.0	20.2	20.2	97.1	97.1	6.6	6.4	19.2	20.7	8	7	-	-							
					Middle	4.3	0.1	65	29.1	7.9	7.9	21.3	21.3	91.4	91.4	6.2	6.2	21.4	20.7	7	7	-	-							
						4.3	0.1	67	29.1	7.9	7.9	21.3	21.3	91.4	91.4	6.2	6.2	21.4	20.7	7	7	-	-							
					Bottom	7.6	0.1	171	28.4	7.9	7.9	23.1	23.1	94.7	94.7	6.5	6.5	21.4	20.7	8	7	-	-							
						7.6	0.1	176	28.4	7.9	7.9	23.1	23.1	94.7	94.7	6.5	6.5	21.4	20.7	6	7	-	-							
SR5A	Sunny	Moderate	17:09	4.5	Surface	1.0	0.1	74	29.6	8.0	8.0	20.9	20.9	108.2	108.2	7.3	7.3	19.4	19.3	10	10	-	-	816606	810678	-	-			
						1.0	0.1	79	29.6	8.0	8.0	20.9	20.9	108.2	108.2	7.3	7.3	19.4	19.3	11	10	-	-							
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	19.3	-	-	-	-							

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

**Water Quality Monitoring**

**Water Quality Monitoring Results on 29 May 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)	
C1	Sunny	Moderate	12:13	8.9	Surface	1.0	0.6	226	30.7	30.8	7.9	7.9	21.6	21.6	107.4	107.3	7.1	6.8	11.0	7.7	4	4	82	85	815613	804217	<0.2	<0.2	1.8	
						1.0	0.6	246	30.8	30.8	7.9	7.9	21.6	21.6	107.1	107.3	7.1	6.8	11.0	7.7	3	3	82	85						
					Middle	4.5	0.6	218	29.8	29.8	7.9	7.9	23.0	23.0	90.4	90.4	6.0	6.8	4.0	7.7	5	4	84	85						
						4.5	0.6	222	29.8	29.8	7.9	7.9	23.0	23.0	90.3	90.4	6.0	6.8	4.1	7.7	4	4	84	85						
					Bottom	7.9	0.4	216	28.7	28.7	7.9	7.9	25.0	25.0	77.4	77.5	5.2	6.8	8.0	7.7	5	5	88	88						
						7.9	0.4	223	28.7	28.7	7.9	7.9	25.0	25.0	77.6	77.5	5.2	6.8	8.3	7.7	5	5	88	88						
C2	Sunny	Calm	11:13	11.9	Surface	1.0	0.1	144	29.4	29.4	7.9	7.9	21.9	21.9	86.1	86.1	5.8	5.3	5.4	10.6	5	4	82	84	825706	806959	<0.2	<0.2	1.9	
						1.0	0.1	145	29.4	29.4	7.9	7.9	21.9	21.9	86.0	86.1	5.8	5.3	5.5	10.6	4	4	82	84						
					Middle	6.0	0.1	145	28.4	28.4	7.8	7.8	24.4	24.4	70.3	70.2	4.8	5.3	9.8	10.6	7	7	83	83						
						6.0	0.1	147	28.3	28.4	7.8	7.8	24.5	24.4	70.1	70.2	4.8	5.3	10.2	10.6	6	6	84	83						
					Bottom	10.9	0.3	129	27.5	27.5	7.9	7.9	27.7	27.7	69.6	69.7	4.7	4.7	16.1	10.6	7	7	85	86						
						10.9	0.3	133	27.5	27.5	7.9	7.9	27.7	27.7	69.7	69.7	4.7	4.7	16.5	10.6	7	7	86	86						
C3	Sunny	Calm	12:39	11.5	Surface	1.0	0.2	168	28.3	28.3	7.9	7.9	26.1	26.1	84.0	84.0	5.7	5.7	6.5	6.8	6	6	81	83	822122	817785	<0.2	<0.2	1.9	
						1.0	0.2	179	28.3	28.3	7.9	7.9	26.1	26.1	84.0	84.0	5.7	5.7	6.5	6.8	7	7	82	83						
					Middle	5.8	0.1	245	28.2	28.2	7.9	7.9	26.7	26.7	83.1	83.2	5.6	5.7	6.5	6.8	6	7	83	83						
						5.8	0.1	262	28.1	28.1	7.9	7.9	26.7	26.7	83.2	83.2	5.6	5.7	6.5	6.8	8	8	83	83						
					Bottom	10.5	0.2	103	28.1	28.1	7.9	7.9	26.8	26.8	84.6	84.9	5.7	5.7	7.2	6.8	8	7	85	86						
						10.5	0.2	103	28.1	28.1	7.9	7.9	26.8	26.8	84.6	84.9	5.7	5.7	7.4	6.8	7	7	86	86						
IM1	Sunny	Moderate	11:57	5.5	Surface	1.0	0.2	221	30.3	30.3	7.9	7.9	21.7	21.7	105.8	105.8	7.1	7.1	1.6	4.1	4	5	82	83	817964	807131	<0.2	<0.2	2.1	
						1.0	0.2	241	30.2	30.2	7.9	7.9	21.7	21.7	105.7	105.8	7.1	7.1	1.7	4.1	5	5	83	83						
					Middle	2.8	-	-	-	-	-	-	-	-	-	-	-	-	-	4.1	-	-	-	-						
						2.8	-	-	-	-	-	-	-	-	-	-	-	-	-	4.1	-	-	-	-						
					Bottom	4.5	0.2	179	28.8	28.8	7.9	7.9	24.4	24.4	84.4	84.5	5.7	5.7	6.5	4.1	5	4	87	88						
						4.5	0.2	182	28.8	28.8	7.9	7.9	24.4	24.4	84.5	84.5	5.7	5.7	6.5	4.1	4	4	88	88						
IM2	Sunny	Moderate	11:51	7.6	Surface	1.0	0.4	188	30.2	30.3	7.9	7.9	22.1	22.0	95.7	95.6	6.4	6.2	1.7	5.9	4	3	83	83	818133	806137	<0.2	<0.2	1.9	
						1.0	0.4	190	30.3	30.3	7.9	7.9	22.0	22.0	95.4	95.6	6.4	6.2	1.6	5.9	3	3	83	86						
					Middle	3.8	0.4	190	29.2	29.2	7.9	7.9	22.9	22.9	87.6	87.6	5.9	5.9	3.5	5.9	3	3	86	86						
						3.8	0.4	194	29.1	29.1	7.9	7.9	23.0	22.9	87.5	87.6	5.9	5.9	3.7	5.9	3	3	86	86						
					Bottom	6.6	0.2	161	29.2	29.2	7.9	7.9	25.2	25.1	79.5	80.1	5.3	5.4	12.8	5.9	3	3	87	88						
						6.6	0.2	172	29.3	29.3	7.9	7.9	25.1	25.1	80.6	80.1	5.4	5.4	12.4	5.9	5	5	88	88						
IM3	Sunny	Moderate	11:46	7.8	Surface	1.0	0.3	202	29.0	29.0	7.8	7.8	24.1	24.1	79.3	79.4	5.3	5.2	2.9	3.9	4	5	84	83	818784	805609	<0.2	<0.2	1.8	
						1.0	0.3	202	29.0	29.0	7.8	7.8	24.1	24.1	79.5	79.4	5.4	5.2	2.9	3.9	5	5	83	85						
					Middle	3.9	0.3	179	28.5	28.5	7.8	7.8	25.2	25.2	74.9	74.9	5.1	5.1	3.4	3.9	6	6	85	85						
						3.9	0.3	180	28.5	28.5	7.8	7.8	25.2	25.2	74.9	74.9	5.1	5.1	3.4	3.9	7	7	85	88						
					Bottom	6.8	0.2	175	28.5	28.5	7.9	7.9	25.6	25.5	76.2	76.3	5.1	5.1	5.4	3.9	7	6	88	88						
						6.8	0.2	192	28.5	28.5	7.9	7.9	25.5	25.5	76.4	76.4	5.1	5.1	5.4	3.9	6	6	88	88						
IM4	Sunny	Moderate	11:38	8.2	Surface	1.0	0.4	217	29.1	29.1	7.9	7.9	23.9	23.9	87.7	87.6	5.9	5.6	1.9	2.6	5	4	83	83	819732	804626	<0.2	<0.2	2.0	
						1.0	0.4	220	29.1	29.1	7.9	7.9	23.9	23.9	87.5	87.6	5.9	5.6	1.9	2.6	4	4	83	86						
					Middle	4.1	0.4	206	28.4	28.4	7.8	7.8	25.5	25.5	77.0	77.1	5.2	5.2	3.0	2.6	4	6	86	86						
						4.1	0.5	223	28.4	28.4	7.9	7.9	25.5	25.5	77.1	77.1	5.2	5.2	3.0	2.6	6	6	86	88						
					Bottom	7.2	0.4	182	28.4	28.4	7.9	7.9	25.5	25.5	78.8	79.0	5.3	5.3	2.9	2.6	6	6	88	88						
						7.2	0.4	199	28.4	28.4	7.9	7.9	25.5	25.5	79.2	79.2	5.3	5.3	2.9	2.6	6									

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

**Water Quality Monitoring**

**Water Quality Monitoring Results on 29 May 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)	
IM9	Sunny	Calm	11:41	7.6	Surface	1.0	0.3	110	28.6	7.9	7.9	24.1	24.1	78.1	78.1	5.3	5.3	6.2	6.2	8	8	85	85	822066	808810	<0.2	<0.2	2.0	1.9	
						1.0	0.4	112	28.6	7.9	7.9	24.1	24.1	78.1	78.1	5.3	5.3	6.1	6.1	8	8	85	85							
					Middle	3.8	0.4	107	28.2	7.8	7.8	25.4	25.4	74.4	74.5	5.0	5.0	6.8	6.8	8	8	86	86							
						3.8	0.4	109	28.2	7.8	7.8	25.4	25.4	74.5	74.5	5.1	5.1	6.8	6.8	8	8	86	86							
					Bottom	6.6	0.3	84	28.1	7.9	7.9	25.7	25.7	75.8	75.8	5.1	5.1	7.5	7.5	7	7	87	87							
						6.6	0.3	87	28.1	7.9	7.9	25.7	25.7	76.2	76.0	5.2	5.2	7.5	7.5	8	8	87	87							
IM10	Sunny	Calm	11:48	7.5	Surface	1.0	0.3	133	29.1	7.9	7.9	22.8	22.8	86.8	86.8	5.9	5.9	4.9	4.9	8	8	85	85	822371	809797	<0.2	<0.2	1.8	1.8	
						1.0	0.3	137	29.1	7.9	7.9	22.8	22.8	86.8	86.8	5.9	5.9	5.0	5.0	8	8	86	86							
					Middle	3.8	0.3	130	28.6	7.9	7.9	23.5	23.5	78.6	78.7	5.4	5.4	6.7	6.7	7	7	87	87							
						3.8	0.3	131	28.5	7.9	7.9	23.5	23.5	78.8	78.7	5.4	5.4	6.9	6.9	7	7	88	88							
					Bottom	6.5	0.3	67	28.0	7.8	7.8	25.7	25.7	72.7	72.7	4.9	4.9	15.8	15.8	7	7	89	89							
						6.5	0.3	70	28.0	7.8	7.8	25.7	25.7	72.9	72.8	4.9	4.9	15.8	15.8	6	6	89	89							
IM11	Sunny	Calm	11:58	6.9	Surface	1.0	0.4	124	30.0	8.0	7.9	21.6	21.6	103.4	103.3	6.9	6.9	3.2	3.2	7	7	86	86	822058	811463	<0.2	<0.2	2.1	2.1	
						1.0	0.4	136	30.0	7.9	7.9	21.6	21.6	103.2	103.3	6.9	6.9	3.4	3.4	6	6	86	86							
					Middle	3.5	0.3	113	28.8	7.9	7.9	23.4	23.4	86.8	87.0	5.9	5.9	7.4	7.4	6	6	88	88							
						3.5	0.3	115	28.9	7.9	7.9	23.3	23.4	87.2	87.0	5.9	5.9	7.1	7.1	8	8	88	88							
					Bottom	5.9	0.3	108	28.2	7.8	7.8	25.2	25.2	73.3	73.4	5.0	5.0	16.9	16.9	7	7	89	89							
						5.9	0.3	109	28.2	7.8	7.8	25.2	25.2	73.4	73.4	5.0	5.0	17.1	17.1	7	7	90	90							
IM12	Sunny	Calm	12:04	9.7	Surface	1.0	0.5	115	30.1	8.0	8.0	21.9	21.9	102.0	101.9	6.8	6.8	3.0	3.0	6	6	84	84	821477	812041	<0.2	<0.2	2.1	2.2	
						1.0	0.5	123	30.1	8.0	8.0	21.9	21.9	101.8	101.9	6.8	6.8	3.1	3.1	6	6	84	84							
					Middle	4.9	0.5	110	28.3	7.9	7.9	25.1	25.1	73.7	73.7	5.0	5.0	16.3	16.3	5	5	86	86							
						4.9	0.6	115	28.3	7.9	7.9	25.1	25.1	73.6	73.7	5.0	5.0	16.7	16.7	6	6	86	86							
					Bottom	8.7	0.3	97	28.3	7.9	7.9	25.2	25.2	75.9	76.2	5.1	5.1	26.0	26.0	6	6	88	88							
						8.7	0.3	101	28.3	7.9	7.9	25.2	25.2	76.5	76.2	5.2	5.2	28.2	28.2	5	5	88	88							
SR2	Sunny	Calm	12:21	4.3	Surface	1.0	0.4	100	29.9	8.0	7.9	22.6	22.7	96.8	96.7	6.5	6.5	5.0	5.0	4	4	81	81	821446	814185	<0.2	<0.2	2.1	2.2	
						1.0	0.5	104	29.9	7.9	7.9	22.7	22.7	96.6	96.7	6.5	6.5	5.3	5.3	4	4	81	81							
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-							
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-								
					Bottom	3.3	0.3	93	28.7	7.9	7.9	24.4	24.4	84.4	84.7	5.7	5.7	11.0	11.0	5	5	83	83							
						3.3	0.4	93	28.7	7.9	7.9	24.4	24.4	84.9	84.7	5.7	5.7	10.7	10.7	5	5	84	84							
SR3	Sunny	Calm	11:29	9.4	Surface	1.0	0.2	183	29.2	8.0	8.0	22.6	22.6	92.9	92.6	6.3	6.3	3.5	3.5	4	4	-	-	822117	807577	-	-	-	-	
						1.0	0.2	188	29.2	8.0	8.0	22.6	22.6	92.3	92.6	6.2	6.2	3.5	3.5	4	4	-	-							
					Middle	4.7	0.3	173	28.4	7.9	7.9	24.6	24.5	75.9	76.0	5.2	5.2	5.3	5.3	5	5	-	-							
						4.7	0.3	176	28.4	7.9	7.9	24.6	24.5	76.0	76.0	5.2	5.2	5.5	5.5	5	5	-	-							
					Bottom	8.4	0.1	28	28.1	7.8	7.8	25.3	25.4	72.4	72.5	4.9	4.9	6.5	6.5	5	5	-	-							
						8.4	0.1	29	28.1	7.8	7.8	25.4	25.4	72.6	72.5	4.9	4.9	6.6	6.6	4	4	-	-							
SR4A	Sunny	Calm	12:33	8.6	Surface	1.0	0.2	132	28.7	7.9	7.9	26.0	26.0	84.8	84.7	5.7	5.7	2.9	2.9	10	10	-	-	817191	807809	-	-	-	-	
						1.0	0.2	140	28.7	7.9	7.9	26.0	26.0	84.6	84.7	5.7	5.7	2.8	2.8	10	10	-	-							
					Middle	4.3	0.2	93	28.4	7.9	7.9	26.8	26.8	82.9	82.9	5.6	5.6	3.3	3.3	8	8	-	-							
						4.3	0.2	95	28.4	7.9	7.9	26.8	26.8	82.8	82.9	5.6	5.6	3.5	3.5	10	10	-	-							
					Bottom	7.6	0.1	110	28.1	7.9	7.9	27.5	27.4	77.4	77.4	5.2	5.2	4.7	4.7	9	9	-	-							
						7.6	0.1	111	28.1	7.9	7.9	27.4	27.4	77.4	77.4	5.2	5.2	4.7	4.7	10	10	-	-							
SR5A	Sunny	Calm	12:50	4.0	Surface	1.0	0.0	233	29.6	7.9	7.9	24.1	24.1	103.6	103.7	6.9	6.9	1.5	1.5	6	6	-	-	816621						

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

## Water Quality Monitoring

## Water Quality Monitoring Results on 29 May 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)	
C1	Fine	Calm	06:20	8.9	Surface	1.0	0.6	14	28.9	28.9	7.9	7.9	24.2	24.2	80.7	80.7	5.4	5.4	6.5	6.5	12	12	81	85	815616	804239	<0.2	<0.2	1.9	1.8
						1.0	0.7	15	28.9	28.9	7.9	7.9	24.3	24.3	80.6	80.7	5.4	5.4	6.5	6.5	10	12	82	85						
					Middle	4.5	0.7	17	28.8	28.8	7.9	7.9	24.4	24.4	79.8	79.8	5.4	5.4	7.2	7.2	11	12	84	85						
						4.5	0.7	17	28.8	28.8	7.9	7.9	24.4	24.4	79.7	79.8	5.4	5.4	7.2	7.2	12	12	85	85						
					Bottom	7.9	0.4	23	28.8	28.8	7.9	7.9	24.6	24.6	80.3	80.4	5.4	5.4	7.2	7.2	13	13	88	88						
						7.9	0.4	24	28.8	28.8	7.9	7.9	24.6	24.6	80.4	80.4	5.4	5.4	7.0	7.0	15	15	87	87						
C2	Fine	Moderate	07:54	12.6	Surface	1.0	0.2	11	28.9	28.9	7.9	7.9	22.4	22.4	79.0	79.0	5.4	5.4	5.2	5.2	4	4	83	86	825696	806970	<0.2	<0.2	1.5	2.1
						1.0	0.2	11	28.9	28.9	7.9	7.9	22.4	22.4	78.9	79.0	5.4	5.4	5.3	5.3	6	6	84	86						
					Middle	6.3	0.2	351	28.6	28.6	7.8	7.8	23.5	23.5	73.1	73.1	5.0	5.0	8.7	8.7	4	5	85	86						
						6.3	0.3	323	28.6	28.6	7.8	7.8	23.6	23.6	73.0	73.1	5.0	5.0	8.3	8.3	5	5	86	88						
					Bottom	11.6	0.3	341	28.5	28.5	7.9	7.9	23.9	23.9	74.2	74.4	5.0	5.0	13.2	13.2	4	4	88	88						
						11.6	0.3	314	28.5	28.5	7.9	7.9	23.9	23.9	74.5	74.4	5.1	5.1	12.9	12.9	5	5	88	88						
C3	Fine	Calm	05:56	12.1	Surface	1.0	0.4	277	28.4	28.4	7.9	7.9	25.1	25.0	81.9	81.9	5.6	5.6	2.4	2.4	4	4	81	83	822113	817799	<0.2	<0.2	1.4	1.3
						1.0	0.4	293	28.4	28.4	7.9	7.9	25.0	25.0	81.9	81.9	5.6	5.6	2.4	2.4	4	4	81	83						
					Middle	6.1	0.5	260	27.8	27.8	7.9	7.9	26.9	27.0	77.0	76.9	5.2	5.2	2.4	2.4	5	4	83	84						
						6.1	0.5	280	27.7	27.7	7.9	7.9	27.2	27.0	76.7	76.9	5.2	5.2	2.4	2.4	4	4	84	85						
					Bottom	11.1	0.3	281	27.5	27.5	7.9	7.9	28.0	28.0	77.3	77.4	5.2	5.2	2.4	2.4	3	3	85	86						
						11.1	0.3	291	27.5	27.5	7.9	7.9	27.9	28.0	77.5	77.4	5.2	5.2	2.4	2.4	4	4	86	86						
IM1	Sunny	Calm	06:34	5.4	Surface	1.0	0.5	348	29.0	29.1	7.9	7.9	23.6	23.6	83.7	83.7	5.6	5.6	3.2	3.2	8	7	82	82	817959	807129	<0.2	<0.2	1.4	1.5
						1.0	0.5	354	29.1	29.1	7.9	7.9	23.6	23.6	83.7	83.7	5.6	5.6	3.2	3.2	7	7	82	82						
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-							
					Bottom	4.4	0.2	353	28.7	28.7	7.9	7.9	24.8	24.8	81.7	81.9	5.5	5.5	4.3	4.3	8	9	83	83						
						4.4	0.2	356	28.7	28.7	7.9	7.9	24.8	24.8	82.1	81.9	5.5	5.5	4.3	4.3	9	9	83	83						
IM2	Sunny	Calm	06:40	8.1	Surface	1.0	0.5	7	29.1	29.1	7.9	7.9	23.6	23.6	83.3	83.3	5.6	5.6	2.5	2.5	7	9	82	84	818141	806193	<0.2	<0.2	1.5	1.4
						1.0	0.5	7	29.1	29.1	7.9	7.9	23.6	23.6	83.3	83.3	5.6	5.6	2.5	2.5	9	9	82	84						
					Middle	4.1	0.5	10	28.7	28.7	7.8	7.8	24.8	24.8	77.5	77.4	5.2	5.2	4.2	4.2	7	8	84	84						
						4.1	0.6	10	28.7	28.7	7.8	7.8	24.8	24.8	77.3	77.4	5.2	5.2	4.2	4.2	8	10	84	86						
					Bottom	7.1	0.5	2	28.2	28.2	7.8	7.8	26.6	26.6	75.3	75.4	5.1	5.1	8.5	8.5	10	11	86	85						
						7.1	0.5	2	28.2	28.2	7.8	7.8	26.6	26.6	75.5	75.4	5.1	5.1	8.1	8.1	11	11	85	85						
IM3	Sunny	Calm	06:46	7.8	Surface	1.0	0.5	39	29.1	29.1	7.9	7.9	23.7	23.7	82.0	82.0	5.5	5.5	2.8	2.8	7	7	81	83	818754	805620	<0.2	<0.2	1.4	1.1
						1.0	0.5	42	29.1	29.1	7.9	7.9	23.7	23.7	81.9	82.0	5.5	5.5	2.9	2.9	7	7	81	83						
					Middle	3.9	0.6	40	28.8	28.8	7.8	7.8	24.4	24.4	79.0	79.1	5.3	5.3	5.6	5.6	7	7	83	83						
						3.9	0.7	41	28.8	28.8	7.8	7.8	24.4	24.4	79.1	79.1	5.3	5.3	5.8	5.8	6	6	83	83						
					Bottom	6.8	0.5	37	28.8	28.8	7.9	7.9	24.6	24.6	82.4	82.5	5.6	5.6	7.9	7.9	7	7	86	86						
						6.8	0.5	38	28.8	28.8	7.9	7.9	24.6	24.6	82.5	82.5	5.6	5.6	7.9	7.9	7	7	86	86						
IM4	Sunny	Moderate	06:53	8.2	Surface	1.0	0.8	20	29.2	29.2	7.8	7.8	22.5	22.5	79.1	79.1	5.4	5.4	3.0	3.0	4	4	81	82	819753	804624	<0.2	<0.2	1.4	1.6
						1.0	0.8	21	29.2	29.2	7.8	7.8	22.5	22.5	79.0	79.1	5.4	5.4	3.0	3.0	4	4	82	84						
					Middle	4.1	0.8	19	28.9	28.9	7.9	7.9	23.5	23.5	74.8	74.9	5.1	5.1	7.3	7.3	4	4	84	84						
						4.1	0.8	19	28.9	28.9	7.9	7.9	23.5	23.5	74.9	74.9	5.1	5.1	7.4	7.4	4	4	84	84						
					Bottom	7.2	0.5	13	28.9	28.9	7.9	7.9	23.7	23.7	76.3	76.4	5.2	5.2	10.0	10.0	5	5	86	87						
						7.2	0.5	13	28.9	28.9	7.9	7.9	23.7	23.7	76.4															

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

**Water Quality Monitoring**

**Water Quality Monitoring Results on 29 May 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)	
IM9	Fine	Moderate	07:14	7.6	Surface	1.0	0.1	26	28.4	7.9	7.9	24.8	75.0	5.1	5.1	4.9	5.2	4	4	81	84	822122	808795	<0.2	<0.2	1.4	1.5		
						1.0	0.1	26	28.4	7.9	7.9	24.8	74.9	5.1	5.1	4.9	5.2	4	4	82	84			<0.2	<0.2	1.4	1.5		
					Middle	3.8	0.2	351	28.0	7.8	7.8	26.1	69.6	4.7	4.7	6.3	4	4	83	84			<0.2	<0.2	1.5	1.6			
						3.8	0.2	323	28.0	7.8	7.8	26.1	69.6	4.7	4.7	6.2	3	3	84	86			<0.2	<0.2	1.5	1.6			
					Bottom	6.6	0.2	277	27.8	7.8	7.8	26.6	68.2	4.6	4.6	10.7	5	5	86	88			<0.2	<0.2	1.5	1.6			
						6.6	0.2	290	27.8	7.8	7.8	26.6	68.5	4.6	4.6	10.8	4	4	86	88			<0.2	<0.2	1.5	1.6			
IM10	Fine	Moderate	07:06	7.9	Surface	1.0	0.2	330	28.7	7.9	7.9	23.7	81.9	5.6	5.6	5.9	4	4	83	86	822409	809813	<0.2	<0.2	1.5	1.6			
						1.0	0.2	333	28.7	7.9	7.9	23.7	81.8	5.6	5.6	6.4	4	4	84	85			<0.2	<0.2	1.6	1.6			
					Middle	4.0	0.2	322	28.5	7.9	7.9	24.6	77.0	5.2	5.2	11.8	5	5	85	86			<0.2	<0.2	1.6	1.7			
						4.0	0.2	348	28.5	7.9	7.9	24.6	77.0	5.2	5.2	11.9	6	6	86	88			<0.2	<0.2	1.4	1.7			
					Bottom	6.9	0.3	317	28.5	7.9	7.9	24.7	78.9	5.3	5.3	20.7	6	6	88	88			<0.2	<0.2	1.7	1.8			
						6.9	0.3	320	28.5	7.9	7.9	24.7	79.2	5.4	5.4	20.5	6	6	88	88			<0.2	<0.2	1.7	1.8			
IM11	Fine	Moderate	06:50	7.3	Surface	1.0	0.2	327	28.7	7.9	7.9	23.6	83.0	5.6	5.6	5.4	6	6	83	83	822083	811431	<0.2	<0.2	1.5	1.5			
						1.0	0.2	340	28.7	7.9	7.9	23.6	82.8	5.6	5.6	5.4	6	6	83	85			<0.2	<0.2	1.4	1.4			
					Middle	3.7	0.2	316	28.6	7.9	7.9	24.0	80.1	5.4	5.4	8.1	4	4	85	86			<0.2	<0.2	1.4	1.6			
						3.7	0.2	341	28.6	7.9	7.9	24.0	80.0	5.4	5.4	8.4	6	6	86	88			<0.2	<0.2	1.4	1.6			
					Bottom	6.3	0.4	279	27.9	7.9	7.9	26.6	74.9	5.1	5.1	13.5	6	6	88	88			<0.2	<0.2	1.6	1.2			
						6.3	0.4	301	27.9	7.9	7.9	26.6	75.0	5.1	5.1	13.6	5	5	88	88			<0.2	<0.2	1.2	1.2			
IM12	Fine	Moderate	06:43	9.4	Surface	1.0	0.3	294	28.6	7.9	7.9	24.2	81.1	5.5	5.5	9.2	7	7	81	83	821454	812045	<0.2	<0.2	1.6	1.5			
						1.0	0.3	304	28.6	7.9	7.9	24.2	81.1	5.5	5.5	9.1	8	8	81	83			<0.2	<0.2	1.5	1.5			
					Middle	4.7	0.3	299	28.5	7.9	7.9	24.3	79.9	5.4	5.4	12.2	9	9	83	83			<0.2	<0.2	1.6	1.6			
						4.7	0.3	326	28.5	7.9	7.9	24.3	80.0	5.4	5.4	12.0	9	9	83	83			<0.2	<0.2	1.6	1.6			
					Bottom	8.4	0.1	284	28.4	7.9	7.9	24.6	79.4	5.4	5.4	13.0	15	15	86	86			<0.2	<0.2	1.5	1.4			
						8.4	0.1	305	28.4	7.9	7.9	24.6	79.6	5.4	5.4	12.8	13	13	86	86			<0.2	<0.2	1.4	1.4			
SR2	Fine	Calm	06:18	4.2	Surface	1.0	0.1	284	28.8	7.9	7.9	23.3	80.4	5.5	5.5	4.2	3	3	83	83	821445	814169	<0.2	<0.2	1.3	1.3			
						1.0	0.1	296	28.8	7.9	7.9	23.2	80.6	5.5	5.5	4.1	4	4	83	83			<0.2	<0.2	1.2	1.2			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			<0.2	<0.2	-	-		
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			<0.2	<0.2	-	-		
					Bottom	3.2	0.2	324	28.7	7.9	7.9	23.6	80.2	5.4	5.4	4.9	4	4	85	86			<0.2	<0.2	1.4	1.4			
						3.2	0.2	353	28.7	7.9	7.9	23.5	80.5	5.5	5.5	4.8	2	2	86	86			<0.2	<0.2	1.4	1.4			
SR3	Fine	Moderate	07:26	9.6	Surface	1.0	0.1	309	28.3	7.9	7.9	25.0	75.3	5.1	5.1	5.3	3	3	-	-	822134	807560	-	-	-	-			
						1.0	0.1	337	28.3	7.9	7.9	25.1	75.4	5.1	5.1	5.4	4	4	-	-			-	-	-	-			
					Middle	4.8	0.2	32	28.3	7.9	7.9	25.7	78.0	5.3	5.3	6.3	4	4	-	-			-	-	-	-			
						4.8	0.2	34	28.4	7.9	7.9	25.7	79.9	5.4	5.4	6.5	2	2	-	-			-	-	-	-			
					Bottom	8.6	0.3	55	28.0	7.9	7.9	26.1	67.2	4.6	4.6	10.0	4	4	-	-			-	-	-	-			
						8.6	0.3	57	28.1	7.9	7.9	26.0	67.5	4.6	4.6	9.0	3	3	-	-			-	-	-	-			
SR4A	Fine	Calm	06:04	9.2	Surface	1.0	0.3	276	28.9	7.9	7.9	24.1	84.8	5.7	5.7	3.7	3	3	-	-	817184	807808	-	-	-	-			
						1.0	0.4	297	28.9	7.9	7.9	24.0	84.8	5.7	5.7	3.7	4	4	-	-			-	-	-	-			
					Middle	4.6	0.3	275	28.1	7.8	7.8	26.7	77.6	5.2	5.2	4.6	2	2	-	-			-	-	-	-			
						4.6	0.4	295	28.1	7.8	7.8	26.7	77.5	5.2	5.2	4.6	2	2	-	-			-	-	-	-			
					Bottom	8.2	0.0	38	27.6	7.8	7.8	28.3	73.9	5.0	5.0	8.9	2	2	-	-			-	-	-	-			
						8.2	0.0	41	27.6	7.8	7.8	28.4	73.9	5.0	5.0	8.9	3	3	-	-			-	-	-	-			
SR5A	Fine	Calm	05:33	4.9	Surface	1.0	0.2	272	28.0	7.7	7.7	27.1	77.6	5.2	5.2	7.0	3	3	-	-	816606	810695	-	-	-	-			
						1.0	0.3	290	28.0	7.7	7.7	27.1	77.6	5.2	5.2	7.0	2	2	-	-			-	-	-	-			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-	-		
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-	-		
					Bottom	3.9	0.2	269	27.6	7.7	7.7	28.3	75.6	5.1	5.1	3.0	3	3	-	-			-	-	-	-			
						3.9	0.3	281	27.6	7.7	7.7	28.3	75.7	5.1	5.1	2.9	2	2	-	-			-	-	-	-			
SR6	Fine	Calm	05:33	4.7	Surface	1.0	0.3	276	28.0	7.6	7.6	27.1	77.9	5.3	5.3	3.2	4	4	-	-	817908	814650	-	-	-	-			
						1.0	0.3	295	27.9	7.6	7.6	27.2	77.8	5.2	5.2	3.3	4	4	-	-			-	-	-	-			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-	-		
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-	-		
					Bottom	3.7	0.2	288	27.7	7.6																			

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

**Water Quality Monitoring**

**Water Quality Monitoring Results on 31 May 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)	
C1	Sunny	Moderate	13:27	8.6	Surface	1.0	0.6	226	30.0	30.0	8.0	8.0	22.0	22.1	115.0	114.9	7.7	7.7	1.5	7.7	7	7	81	85	815631	804245	<0.2	1.9	1.8	
						1.0	0.6	247	30.0		8.0	8.0	22.1	22.1	114.8	114.9	7.7	7.7	1.6	7.7	7	7	82	85						
					Middle	4.3	0.6	218	29.7	29.7	8.0	8.0	22.4	22.4	112.7	112.7	7.6	7.6	2.5	7.6	6	6	85	85						
						4.3	0.6	228	29.7		8.0	8.0	22.4	22.4	112.7	112.7	7.6	7.6	2.4	7.6	6	6	85	85						
					Bottom	7.6	0.4	216	29.4	29.4	8.0	8.0	22.9	22.9	109.5	109.5	7.4	7.4	3.8	7.4	7	7	88	88						
						7.6	0.4	218	29.4		8.0	8.0	22.9	22.9	109.5	109.5	7.4	7.4	3.8	7.4	6	6	88	88						
C2	Sunny	Moderate	12:23	12.5	Surface	1.0	0.7	188	29.7	29.7	7.9	7.9	21.9	21.9	100.0	100.0	6.7	6.7	3.8	6.7	4	4	83	86	825683	806922	<0.2	1.9	2.0	
						1.0	0.7	192	29.7		7.9	7.9	21.9	21.9	99.9	100.0	6.7	6.7	3.8	6.7	3	3	83	86						
					Middle	6.3	0.6	168	29.1	29.1	7.9	7.9	23.4	23.4	85.5	85.5	5.8	5.8	3.3	5.8	4	4	86	86						
						6.3	0.6	179	29.1		7.9	7.9	23.4	23.4	85.5	85.5	5.8	5.8	3.4	5.8	4	4	86	86						
					Bottom	11.5	0.3	127	28.6	28.6	7.8	7.8	25.5	25.5	81.1	81.2	5.5	5.5	4.0	5.5	4	4	87	88						
						11.5	0.3	128	28.6		7.8	7.8	25.5	25.5	81.2	81.2	5.5	5.5	3.9	5.5	4	4	88	88						
C3	Sunny	Moderate	13:44	11.7	Surface	1.0	0.4	113	28.9	28.9	8.0	8.0	25.0	25.0	104.6	104.5	7.0	7.0	2.3	7.0	6	6	81	84	822137	817821	<0.2	1.6	1.6	
						1.0	0.4	121	28.9		8.0	8.0	25.0	25.0	104.4	104.5	7.0	7.0	2.3	7.0	5	5	82	84						
					Middle	5.9	0.3	92	28.8	28.8	8.0	8.0	25.6	25.6	100.8	100.8	6.8	6.8	2.0	6.8	5	5	83	86						
						5.9	0.3	96	28.8		8.0	8.0	25.6	25.6	100.7	100.7	6.8	6.8	2.0	6.8	6	6	84	86						
					Bottom	10.7	0.4	55	28.8	28.8	8.0	8.0	25.8	25.8	100.1	100.1	6.7	6.7	1.8	6.7	6	6	86	87						
						10.7	0.4	59	28.8		8.0	8.0	25.8	25.8	100.1	100.1	6.7	6.7	1.8	6.7	5	5	87	87						
IM1	Sunny	Moderate	13:11	5.4	Surface	1.0	0.1	184	29.9	29.9	8.0	8.0	21.4	21.4	113.0	113.0	7.6	7.6	1.9	7.6	5	5	82	85	817937	807158	<0.2	2.0	2.0	
						1.0	0.1	195	29.9		8.0	8.0	21.5	21.4	112.9	113.0	7.6	7.6	1.9	7.6	3	3	82	85						
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
						-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-							
					Bottom	4.4	0.2	166	29.3	29.3	8.0	8.0	23.1	23.1	98.9	98.9	6.7	6.7	5.7	6.7	4	4	87	87						
						4.4	0.2	173	29.3		8.0	8.0	23.1	23.1	98.9	98.9	6.7	6.7	5.6	6.7	5	5	87	87						
IM2	Sunny	Moderate	13:06	8.9	Surface	1.0	0.4	188	29.5	29.5	7.9	7.9	21.9	21.9	101.8	101.8	6.9	6.9	1.8	6.9	5	5	81	84	818173	806164	<0.2	2.0	2.0	
						1.0	0.4	197	29.5		7.9	7.9	21.9	21.9	101.8	101.8	6.9	6.9	1.9	6.9	5	5	82	84						
					Middle	4.5	0.4	190	29.2	29.2	7.9	7.9	22.3	22.3	94.8	94.8	6.4	6.4	2.6	6.4	6	6	85	86						
						4.5	0.4	198	29.2		7.9	7.9	22.3	22.3	94.8	94.8	6.4	6.4	2.6	6.4	4	4	84	86						
					Bottom	7.9	0.2	161	29.0	29.0	7.9	7.9	23.9	23.8	88.4	88.5	6.0	6.0	17.4	6.0	4	4	86	86						
						7.9	0.2	162	29.0		7.9	7.9	23.8	23.8	88.5	88.5	6.0	6.0	17.5	6.0	4	4	86	86						
IM3	Sunny	Moderate	13:01	8.5	Surface	1.0	0.3	202	29.6	29.6	7.9	7.9	21.5	21.5	105.8	105.7	7.2	7.2	1.5	7.2	2	2	82	85	818791	805601	<0.2	2.0	2.0	
						1.0	0.3	208	29.6		7.9	7.9	21.5	21.5	105.6	105.7	7.1	7.1	1.6	7.1	3	3	82	84						
					Middle	4.3	0.3	179	29.0	29.0	7.9	7.9	23.4	23.4	87.0	87.0	5.9	5.9	8.0	5.9	3	3	84	84						
						4.3	0.3	184	29.0		7.9	7.9	23.4	23.4	87.0	87.0	5.9	5.9	8.4	5.9	2	2	84	84						
					Bottom	7.5	0.2	175	29.0	29.0	7.9	7.9	23.4	23.4	88.2	88.4	6.0	6.0	10.1	6.0	4	4	88	87						
						7.5	0.2	177	29.0		7.9	7.9	23.4	23.4	88.5	88.5	6.0	6.0	10.2	6.0	4	4	87	87						
IM4	Sunny	Moderate	12:55	8.1	Surface	1.0	0.4	217	29.7	29.7	7.9	7.9	21.8	21.8	105.4	105.5	7.1	7.1	2.3	7.1	3	3	83	85	819699	804579	<0.2	1.9	2.0	
						1.0	0.4	227	29.7		7.9	7.9	21.8	21.8	105.5	105.5	7.1	7.1	2.2	7.1	2	2	83	84						
					Middle	4.1	0.4	206	28.9	28.9	7.9	7.9	23.6	23.6	87.7	87.6	5.9	5.9	3.6	5.9	3	3	84	84						
						4.1	0.5	206	28.9		7.9	7.9	23.6	23.6	87.5	87.5	5.9	5.9	3.8	5.9	3	3	84	84						
					Bottom	7.1	0.4	182	28.7	28.7	7.9	7.9	24.6	24.5	86.0	86.1	5.8	5.8	5.5	5.8	5	5	87	87						
						7.1	0.4	188	28.7		7.9	7.9	24.5	24.5	86.1	86.1	5.8	5.8	5.4	5.8	3	3	87	87						
IM5	S																													

### Water Quality Monitoring Results on

31 May 18

during Mid-Ebb Tide

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 31 May 18 during Mid-Flood Tide

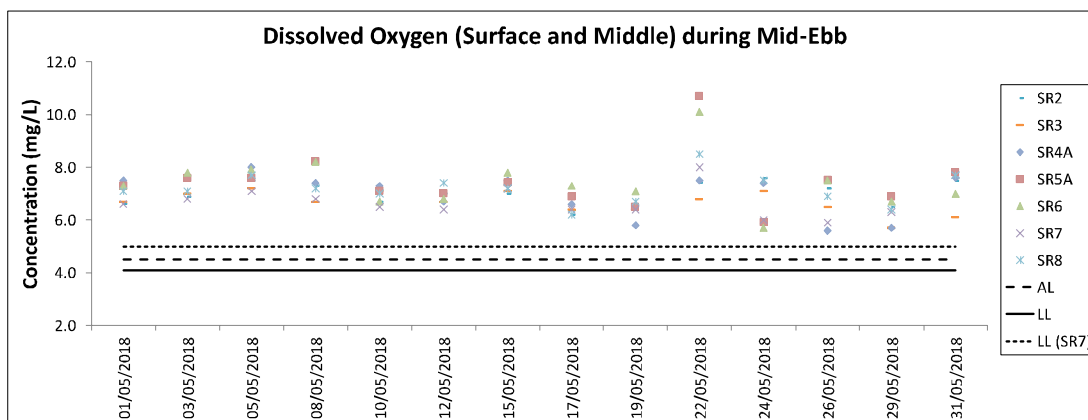
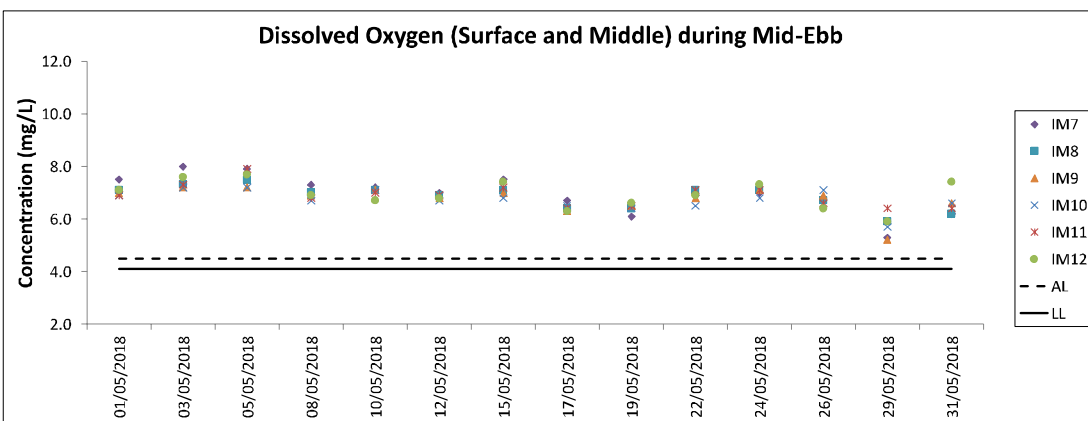
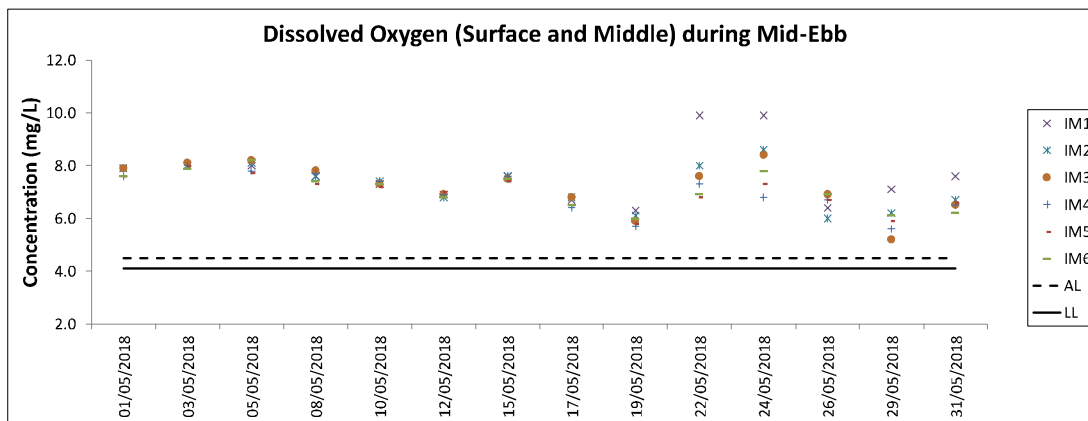
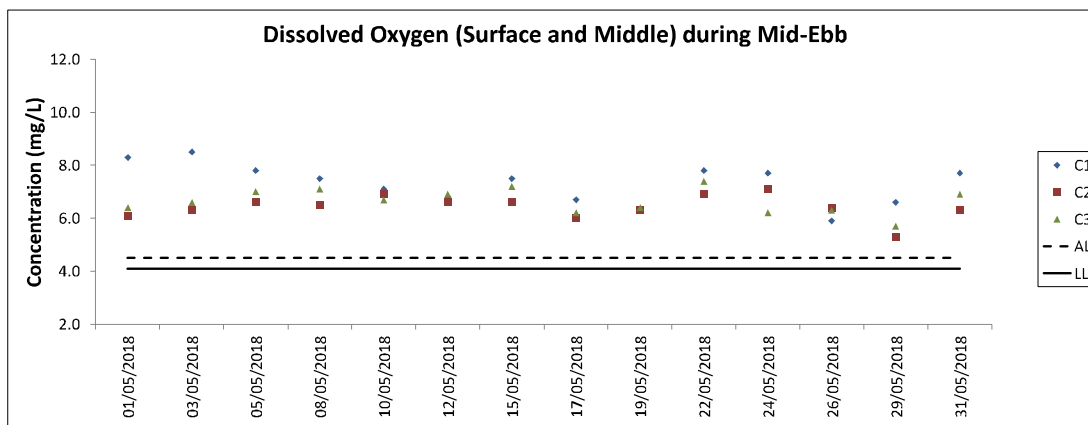
Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity (NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)		
C1	Sunny	Moderate	07:29	9.4	Surface	1.0	0.6	14	29.3	29.3	8.0	8.0	22.9	22.9	92.9	92.9	6.3	6.2	2.6	3.6	2	4	84	87	815638	804240	<0.2	1.9	1.9		
						1.0	0.7	14	29.2		8.0	8.0	22.9	22.9	92.8	92.9	6.3		2.6		3		84				<0.2	1.8			
					Middle	4.7	0.7	17	28.9	28.9	7.9	7.9	24.2	24.2	90.3	90.1	6.1	6.0	3.6	4.4	3	4	86				<0.2	2.0			
						4.7	0.7	17	28.9		7.9	7.9	24.3	24.2	89.9	90.1	6.1		3.6		4		86				<0.2	2.1			
					Bottom	8.4	0.4	23	28.6	28.6	7.9	7.9	25.5	25.5	88.8	88.8	6.0	6.0	4.4	4.5	4	5	89				<0.2	2.0			
						8.4	0.4	25	28.6		7.9	7.9	25.4	25.5	89.1	89.0	6.0		4.5		5		90				<0.2	1.8			
C2	Sunny	Moderate	08:25	12.4	Surface	1.0	0.6	338	29.4	29.4	7.9	7.9	20.6	20.6	87.5	87.5	6.0	5.9	4.9	6.8	3	5	83	86	825688	806918	<0.2	2.6	2.5		
						1.0	0.6	353	29.4		7.9	7.9	20.6	20.6	87.5	87.5	6.0		4.8		4		84				<0.2	2.5			
					Middle	6.2	0.6	357	29.3	29.3	7.9	7.9	23.2	23.2	85.0	85.0	5.7	5.5	2.5	13.7	5	6	86				<0.2	2.5			
						6.2	0.7	358	29.3		7.9	7.9	23.2	23.2	85.0	85.0	5.7		2.5		6		86				<0.2	2.6			
					Bottom	11.4	0.4	22	29.0	29.0	7.9	7.9	24.2	24.2	80.9	81.1	5.5	5.5	13.7	12.2	6	7	87				<0.2	2.5			
						11.4	0.4	22	29.0		7.9	7.9	24.1	24.2	81.3	81.3	5.5		12.2		7		87				<0.2	2.4			
C3	Sunny	Moderate	07:00	11.9	Surface	1.0	0.8	248	29.2	29.2	8.0	8.0	23.1	23.1	92.9	92.9	6.3	6.2	1.5	1.5	4	5	81	84	822120	817801	<0.2	2.0	2.1		
						1.0	0.8	254	29.2		8.0	8.0	23.1	23.1	92.8	92.9	6.3		1.5		4		82				<0.2	2.3			
					Middle	6.0	0.8	268	28.9	28.9	8.0	8.0	24.2	24.3	91.2	91.1	6.1	6.1	1.6	1.6	4	5	83				<0.2	2.2			
						6.0	0.8	282	28.9		8.0	8.0	24.3	24.3	91.0	91.1	6.1		1.5		5		84				<0.2	1.9			
					Bottom	10.9	0.7	278	28.7	28.7	8.0	8.0	25.1	25.1	90.8	90.9	6.1	6.1	1.6	1.5	6	5	86				<0.2	1.9			
						10.9	0.7	292	28.7		8.0	8.0	25.0	25.1	91.0	90.9	6.1		1.5		5		86				<0.2	2.0			
IM1	Sunny	Moderate	07:50	5.3	Surface	1.0	0.3	25	29.4	29.4	8.0	8.0	22.3	22.3	95.3	95.3	6.4	6.4	3.5	4.9	5	5	84	86	817958	807155	<0.2	2.1	2.1		
						1.0	0.3	27	29.3		8.0	8.0	22.3	22.3	95.3	95.3	6.4		3.8		5		84				<0.2	2.0			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	86				<0.2	-		
						-	-	-	-		-	-	-	-	-	-	-		-		-		-	<0.2			-				
					Bottom	4.3	0.3	23	29.0	29.0	7.9	7.9	24.5	24.6	88.8	88.7	6.0	6.0	6.2	6.4	5	5	88	<0.2			2.2				
						4.3	0.3	24	29.0		7.9	7.9	24.6	24.6	88.5	88.7	5.9		6.4		5		89	<0.2			2.1				
IM2	Sunny	Moderate	07:56	8.3	Surface	1.0	0.5	7	29.4	29.4	8.0	8.0	22.1	22.1	94.3	94.2	6.4	6.3	3.3	6.4	3	5	83	86	818189	806159	<0.2	2.1	2.1		
						1.0	0.5	7	29.3		8.0	8.0	22.2	22.1	94.0	94.2	6.4		3.6		5		84				<0.2	2.0			
					Middle	4.2	0.5	10	29.1	29.1	7.9	7.9	24.3	24.3	92.1	92.1	6.2	6.2	5.2	5.1	4	5	85				<0.2	1.9			
						4.2	0.6	10	29.1		7.9	7.9	24.3	24.3	92.1	92.1	6.2		5.1		5		86				<0.2	2.1			
					Bottom	7.3	0.5	2	28.8	28.8	7.9	7.9	25.1	25.1	82.6	82.7	5.6	5.6	10.3	10.9	5	5	88				<0.2	2.5			
						7.3	0.5	2	28.8		7.9	7.9	25.1	25.1	82.7	82.7	5.6		10.9		5		88				<0.2	2.1			
IM3	Sunny	Moderate	08:06	8.7	Surface	1.0	0.5	39	29.3	29.3	7.9	7.9	22.0	22.0	92.1	92.0	6.2	6.2	3.4	6.6	4	5	84	86	818770	805578	<0.2	2.0	2.1		
						1.0	0.5	39	29.3		7.9	7.9	22.0	22.0	91.9	92.0	6.2		3.6		4		84				<0.2	2.2			
					Middle	4.4	0.6	40	28.9	28.9	7.9	7.9	23.7	23.7	90.0	89.9	6.1	6.1	7.2	7.7	3	4	85				<0.2	2.1			
						4.4	0.6	43	28.9		7.9	7.9	23.7	23.7	89.7	89.7	6.1		7.7		4		86				<0.2	2.2			
					Bottom	7.7	0.5	37	28.7	28.8	7.9	7.9	25.6	25.6	81.6	81.8	5.5	5.5	9.2	8.4	7	5	89				<0.2	2.0			
						7.7	0.5	38	28.8		7.9	7.9	25.6	25.6	82.0	81.8	5.5		8.4		5		89				<0.2	2.0			
IM4	Sunny	Moderate	08:12	8.2	Surface	1.0	0.8	20	29.4	29.4	7.9	7.9	22.4	22.5	91.8	91.7	6.2	6.1	3.0	7.3	3	4	83	87	819712	804601	<0.2	2.0	2.1		
						1.0	0.8	21	29.3		7.9	7.9	22.5	22.5	91.6	91.7	6.2		3.1		3		84				<0.2	2.1			
					Middle	4.1	0.8	19	28.9	28.9	7.9	7.9	23.6	23.6	89.0	88.9	6.0	6.0	7.7	8.0	4	5	87				<0.2	2.0			
						4.1	0.8	20	28.8		7.9	7.9	23.6	23.6	88.8	88.9	6.0		8.0												

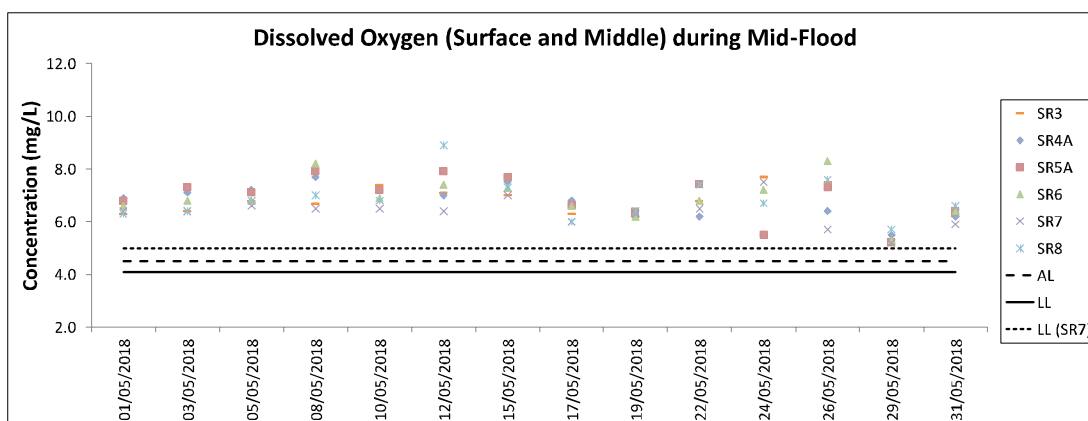
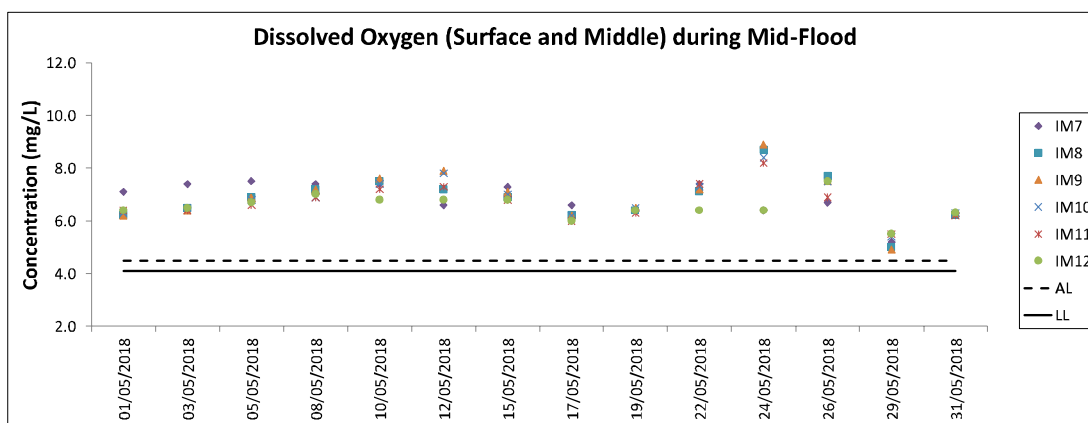
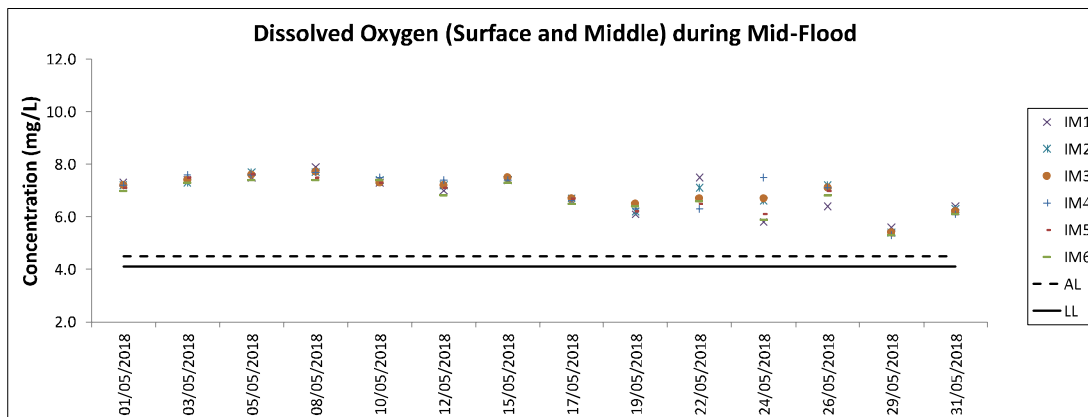
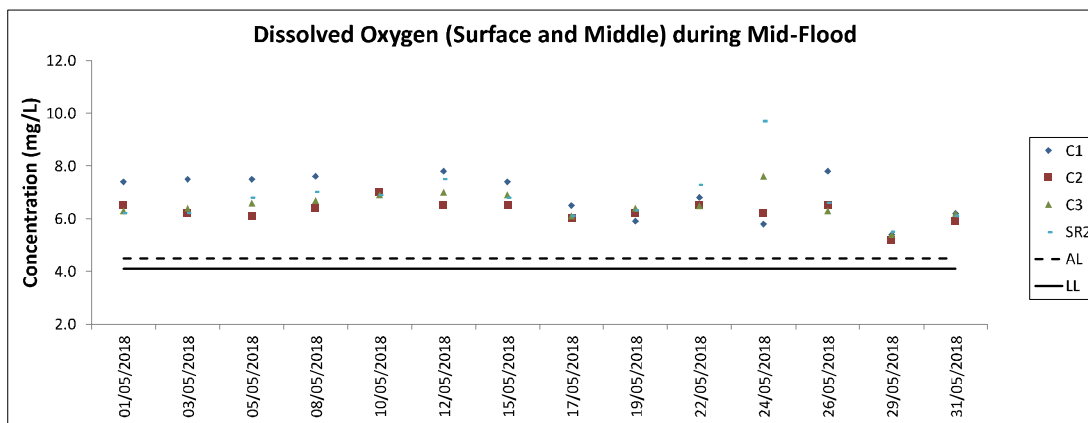
## Expansion of Hong Kong International Airport into a Three-Runway System

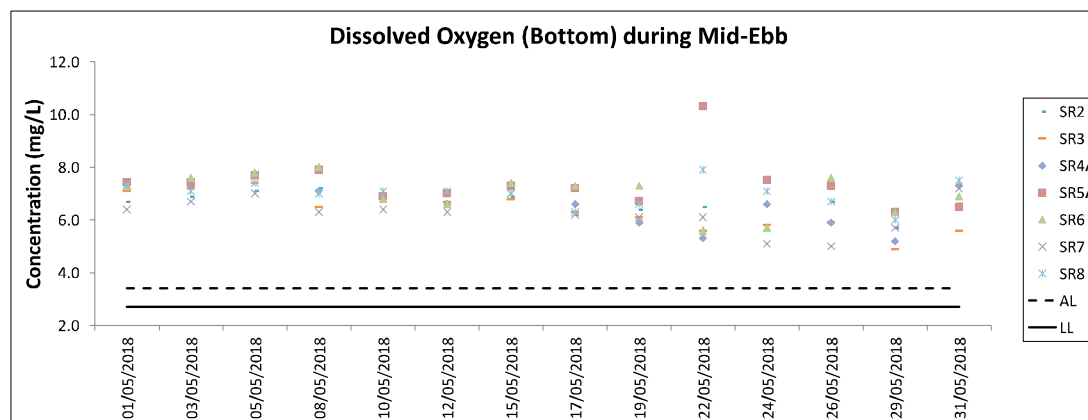
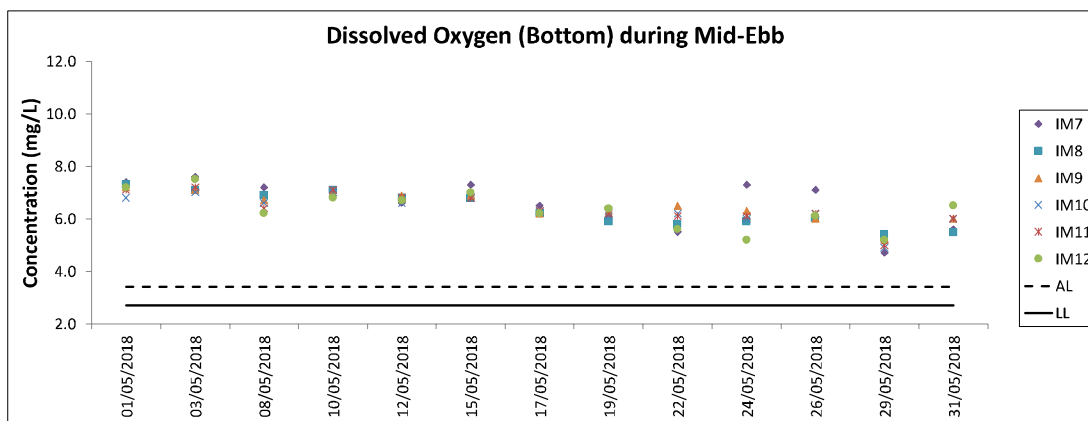
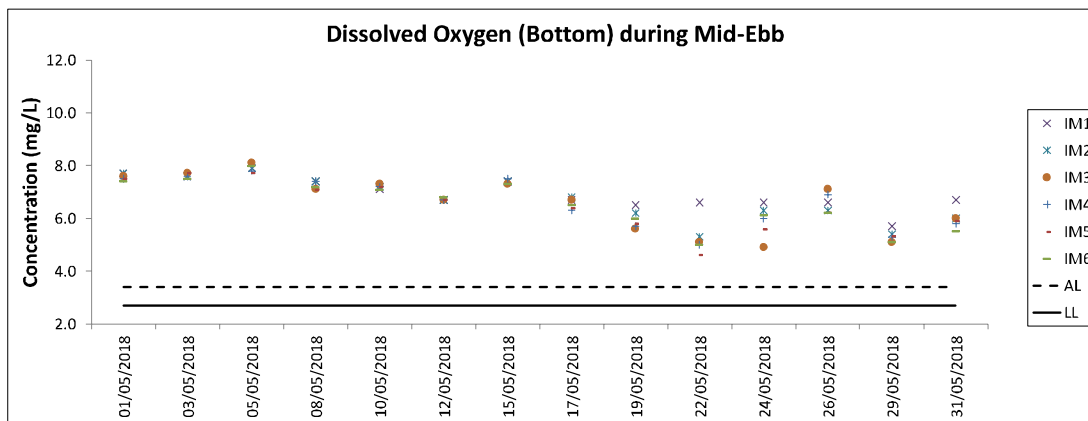
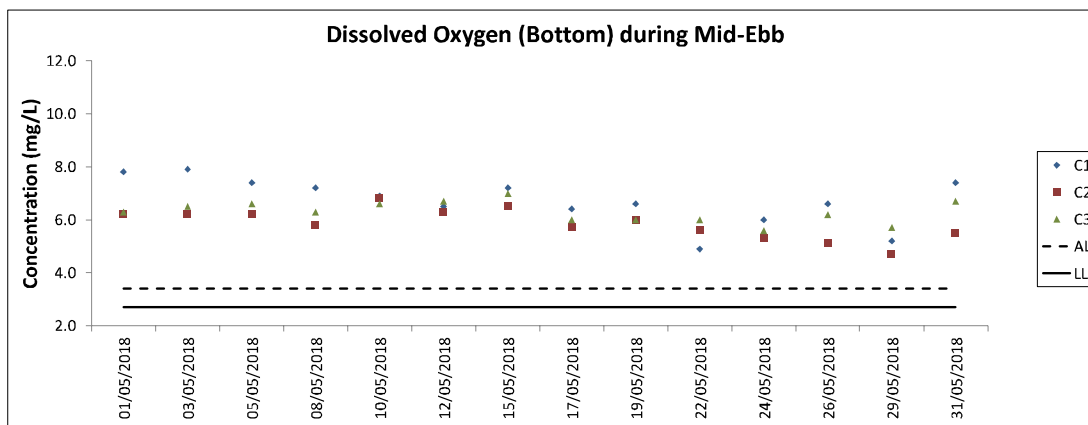
## Water Quality Monitoring

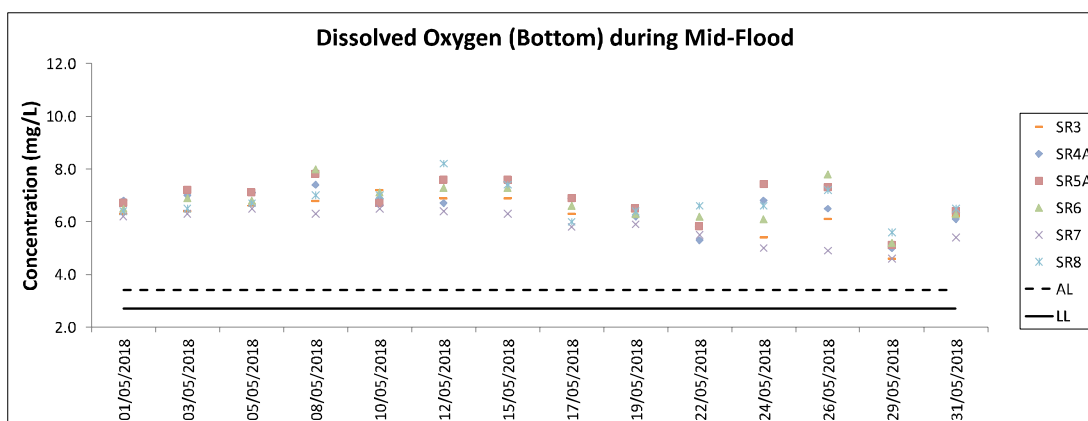
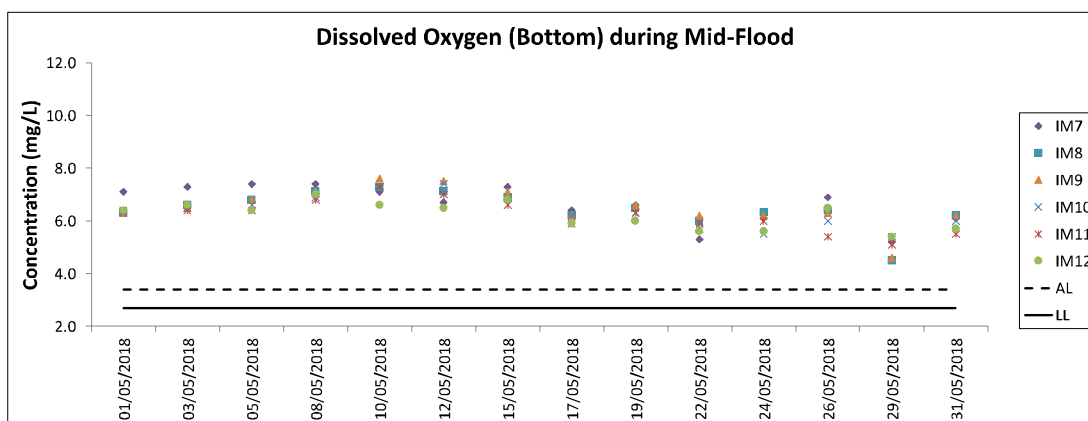
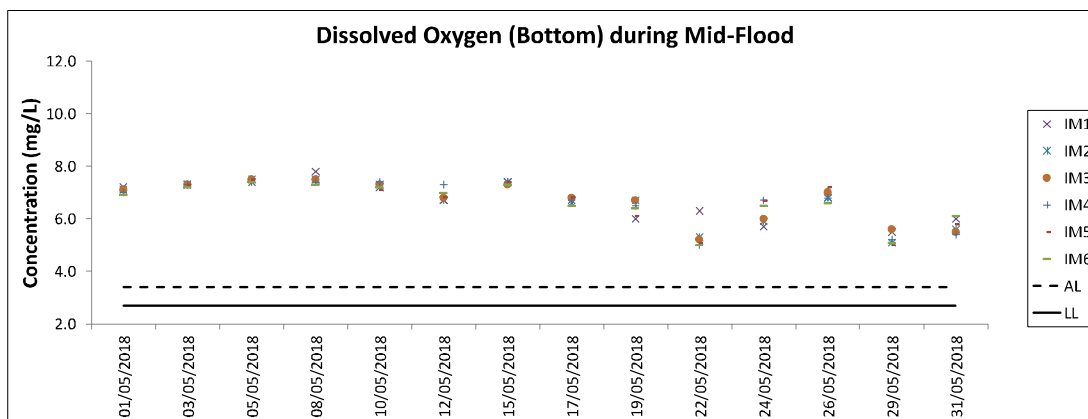
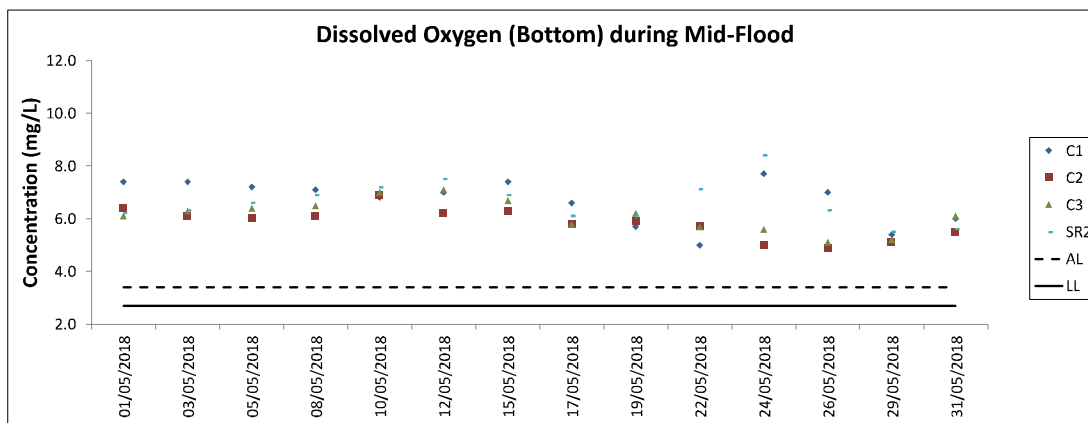
## Water Quality Monitoring Results on 31 May 18 during Mid-Flood Tide

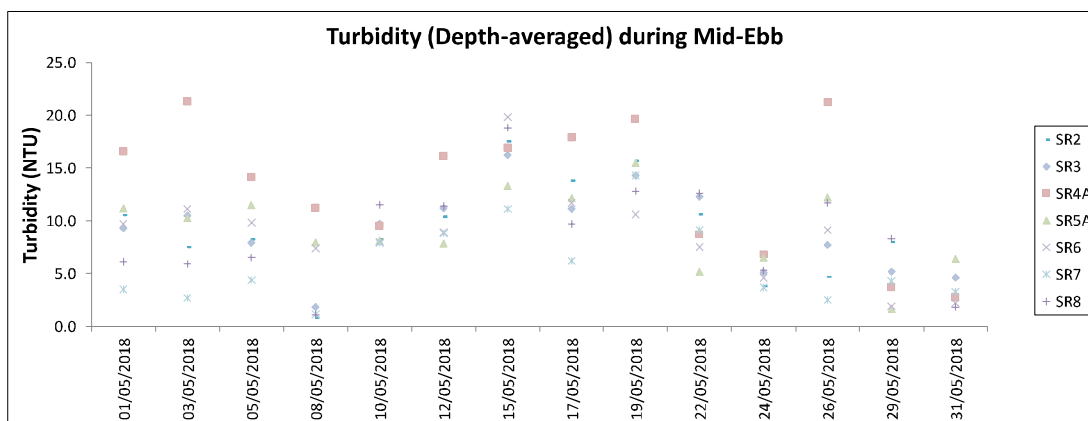
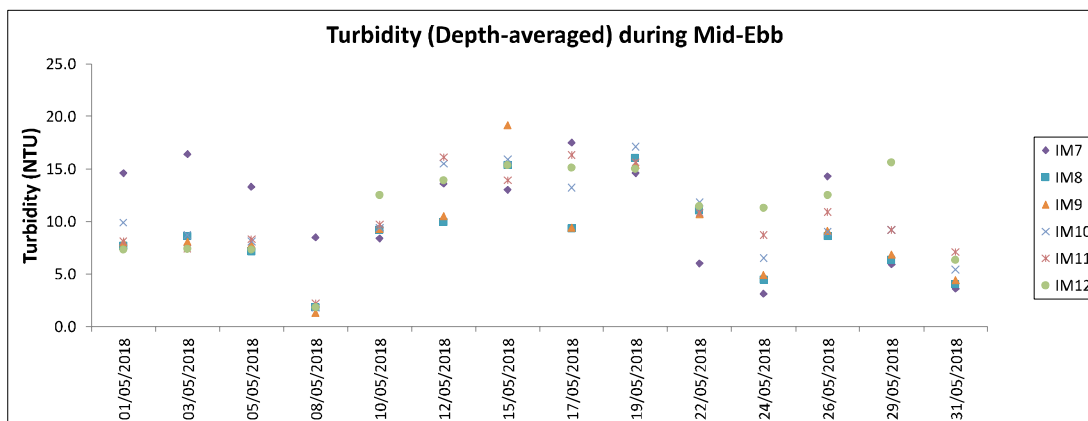
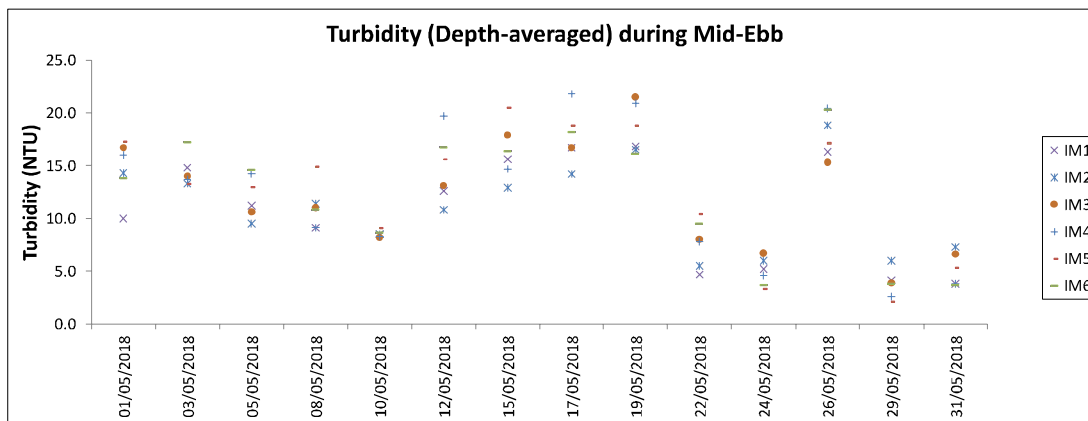
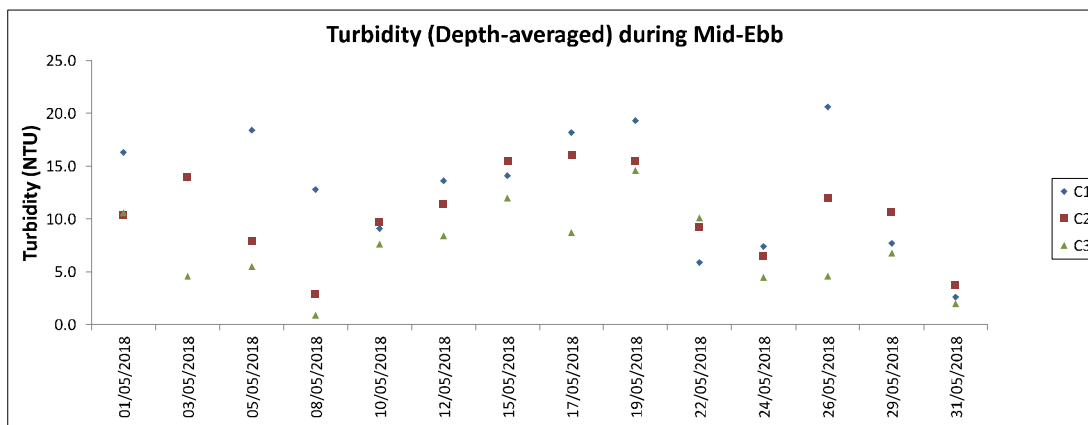
Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity (NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
IM9	Sunny	Moderate	07:57	7.7	Surface	1.0	0.2	45	29.4	7.9	7.9	21.4	21.4	92.4	92.3	6.3	6.3	4.0	6.3	6	81	84	82	822106	808832	<0.2	<0.2	2.1	2.1	
						1.0	0.2	48	29.4	7.9	7.9	21.4	21.4	92.2	92.3	6.3	6.3	4.1	6.3	5	82	83	82	84	808832	<0.2	<0.2	1.9	1.9	
					Middle	3.9	0.2	344	29.3	8.0	8.0	21.6	21.6	90.7	90.7	6.2	6.2	4.9	6.2	7	83	84	83			<0.2	<0.2	2.2	2.2	
						3.9	0.2	356	29.3	8.0	8.0	21.6	21.6	90.6	90.7	6.2	6.2	5.1	6.2	8	84	87	<0.2		<0.2	2.1	2.1			
					Bottom	6.7	0.2	336	29.3	8.0	8.0	22.0	21.9	91.3	91.3	6.2	6.2	7.9	6.2	8	87	87	87		<0.2	<0.2	2.1	2.1		
						6.7	0.2	338	29.3	8.0	8.0	21.9	21.9	91.8	91.6	6.2	6.2	7.8	6.2	7	87	87	<0.2		<0.2	2.1	2.1			
IM10	Sunny	Moderate	07:51	6.9	Surface	1.0	0.6	315	29.4	7.9	7.9	21.9	21.9	93.4	93.4	6.3	6.3	2.5	6.3	3	82	84	82	84	822386	809772	<0.2	<0.2	2.2	2.2
						1.0	0.6	343	29.4	7.9	7.9	21.9	21.9	93.4	93.4	6.3	6.3	2.5	6.3	4	82	83	82			<0.2	<0.2	1.9	1.9	
					Middle	3.5	0.5	318	29.3	7.9	7.9	22.5	22.6	92.9	92.9	6.3	6.3	3.9	6.3	6	83	84	83			<0.2	<0.2	1.8	1.8	
						3.5	0.5	334	29.2	7.9	7.9	22.6	22.6	92.8	92.9	6.3	6.3	4.0	6.3	5	84	86	84			<0.2	<0.2	2.0	2.0	
					Bottom	5.9	0.4	321	29.1	8.0	8.0	23.5	23.4	88.8	88.8	6.0	6.0	9.8	6.0	6	86	87	86			<0.2	<0.2	2.0	2.0	
						5.9	0.4	338	29.2	8.0	8.0	23.4	23.4	88.9	88.9	6.0	6.0	9.4	6.0	6	87	87	87			<0.2	<0.2	2.0	2.0	
IM11	Sunny	Moderate	07:41	8.3	Surface	1.0	0.6	322	29.4	7.9	7.9	22.2	22.2	93.4	93.4	6.3	6.3	3.0	6.3	5	82	84	82	84	822031	811444	0.5	0.5	2.2	2.2
						1.0	0.6	331	29.4	7.9	7.9	22.2	22.2	93.3	93.4	6.3	6.3	3.0	6.3	4	82	84	82			<0.2	<0.2	2.1	2.1	
					Middle	4.2	0.5	308	29.0	7.9	7.9	24.2	24.2	89.0	89.0	6.0	6.0	7.2	6.0	6	84	87	84			<0.2	<0.2	2.0	2.0	
						4.2	0.5	322	28.9	7.9	7.9	24.2	24.2	88.9	89.0	6.0	6.0	7.4	6.0	6	84	87	84			<0.2	<0.2	2.0	2.0	
					Bottom	7.3	0.3	285	28.7	7.9	7.9	25.5	25.4	82.2	82.3	5.5	5.5	9.7	5.5	6	87	87	87			<0.2	<0.2	2.0	2.0	
						7.3	0.4	295	28.7	7.9	7.9	25.4	25.4	82.4	82.3	5.5	5.5	9.3	5.5	7	87	87	87			<0.2	<0.2	2.2	2.2	
IM12	Sunny	Moderate	07:35	7.8	Surface	1.0	0.7	288	29.4	8.0	8.0	22.3	22.3	95.7	95.7	6.5	6.5	2.6	6.5	5	81	84	82	84	821473	812037	<0.2	<0.2	4.3	4.3
						1.0	0.7	294	29.4	8.0	8.0	22.3	22.3	95.7	95.7	6.5	6.5	2.8	6.5	4	82	84	82			<0.2	<0.2	4.1	4.1	
					Middle	3.9	0.6	275	29.1	7.9	7.9	24.4	24.4	91.3	91.3	6.1	6.1	6.3	6.1	8	84	86	84			<0.2	<0.2	3.2	3.2	
						3.9	0.6	288	29.0	7.9	7.9	24.4	24.4	91.3	91.3	6.1	6.1	6.2	6.1	6	84	86	84			<0.2	<0.2	3.7	3.7	
					Bottom	6.8	0.4	262	28.8	7.9	7.9	25.0	25.0	85.3	85.4	5.7	5.7	11.6	5.7	7	86	86	86			<0.2	<0.2	8.8	8.8	
						6.8	0.4	265	28.8	7.9	7.9	25.0	25.0	85.4	85.4	5.7	5.7	11.4	5.7	7	86	86	86			<0.2	<0.2	9.2	9.2	
SR2	Sunny	Moderate	07:20	4.6	Surface	1.0	0.3	312	29.3	7.9	7.9	22.8	22.8	89.7	89.7	6.1	6.1	3.6	6.1	5	82	84	82	84	821454	814169	<0.2	<0.2	2.0	2.0
						1.0	0.3	338	29.3	7.9	7.9	22.9	22.8	89.6	89.7	6.0	6.0	3.9	6.0	5	82	84	82			<0.2	<0.2	2.4	2.4	
					Middle	2.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			<0.2	<0.2	-	-	
						2.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2		<0.2	-	-			
					Bottom	3.6	0.4	331	28.9	7.9	7.9	24.3	24.3	82.8	82.9	5.6	5.6	7.6	5.6	6	86	86	86		<0.2	<0.2	2.1	2.1		
						3.6	0.4	347	29.0	7.9	7.9	24.2	24.3	83.0	82.9	5.6	5.6	7.4	5.6	5	86	86	86		<0.2	<0.2	1.6	1.6		
SR3	Sunny	Moderate	08:08	9.6	Surface	1.0	0.5	45	29.7	7.9	7.9	21.0	21.0	92.8	92.7	6.3	6.3	2.7	6.3	6	-	-	-	84	822152	807543	-	-	-	-
						1.0	0.6	48	29.6	7.9	7.9	21.1	21.1	92.6	92.7	6.3	6.3	2.7	6.3	5	-	-	-			<0.2	<0.2	-	-	
					Middle	4.8	0.6	30	29.3	8.0	8.0	21.8	21.8	90.6	90.6	6.1	6.1	3.7	6.1	6	-	-	-			-	-	-	-	
						4.8	0.6	30	29.3	8.0	8.0	21.9	21.8	90.5	90.6	6.1	6.1	3.9	6.1	5	-	-	-			-	-	-	-	
					Bottom	8.6	0.6	26	29.3	7.9	7.9	22.1	22.1	90.9	91.0	6.2	6.2	4.9	6.2	6	-	-	-			-	-	-	-	
						8.6	0.6	26	29.3	7.9	7.9	22.1	22.1	91.0	91.0	6.2	6.2	5.0	6.2	7	-	-	-			-	-	-	-	
SR4A	Sunny	Moderate	07:09	9.5	Surface	1.0	0.3	276	29.2	8.0	8.0	23.2	23.2	92.5	92.4	6.2	6.2	1.5	6.2	3	-	-	-	84	817172	807822	-	-	-	-
						1.0	0.4	293	29.2	8.0	8.0	23.3	23.2	92.3	92.4	6.2	6.2	1.5	6.2	2	-	-	-			-	-	-	-	
					Middle	4.8	0.3	275	28.8	8.0	8.0	24.5	24.6	90.2	90.1	6.1	6.1	2.7	6.1	4	-	-	-			-	-	-	-	
						4.8	0.4	277	28.8	8.0	8.0	24.6	24.6	89.9	89.9	6.1	6.1	2.7	6.1	4	-	-	-			-	-	-	-	
					Bottom	8.5	0.0	38	28.6	8.0	8.0	25.3	25.2	89.7	89.9	6.0	6.0	3.5	6.0	5	-	-	-			-	-	-	-	
						8.5	0.0	38	28.7	8.0	8.0	25.2	25.2	90.0	89.9	6.1	6.1	3.6	6.1	5	-	-	-			-	-	-	-	
SR5A	Sunny	Moderate	06:55	4.6	Surface	1.0	0.2	272	29.1	8.0	8.0	23.5	23.5	94.6	94.6	6.4	6.4	1.7	6.4	4	-	-	-	84	816605	810677	-	-	-	-
						1.0	0.3	280	29.1	8.0	8.0	23.5	23.5	94.6	94.6	6.4	6.4	1.7	6.4	2	-	-	-							



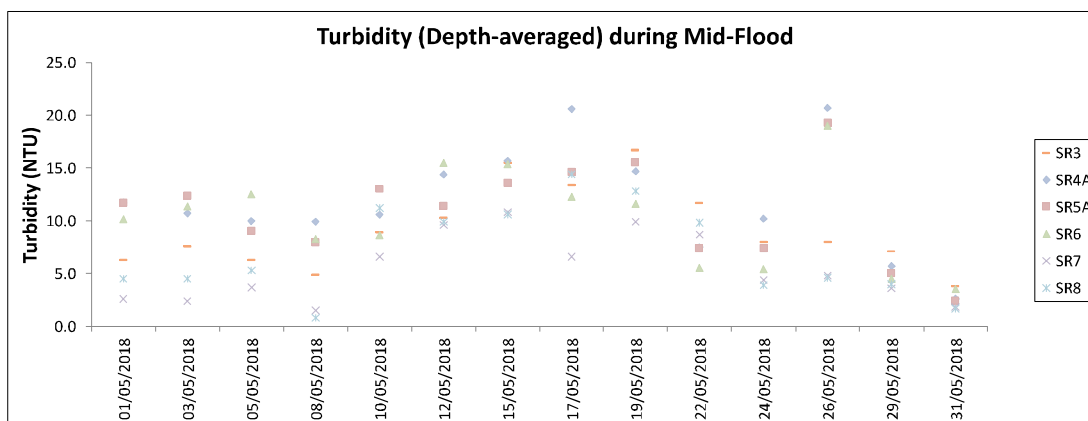
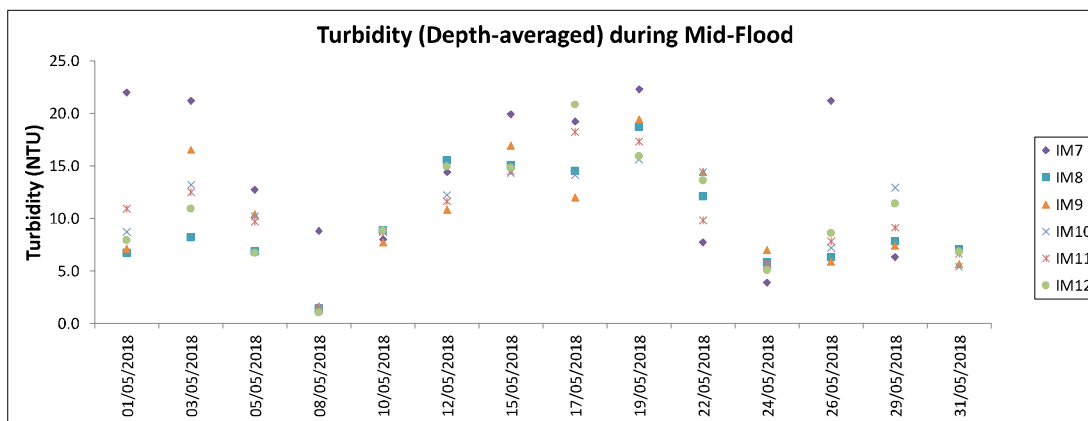
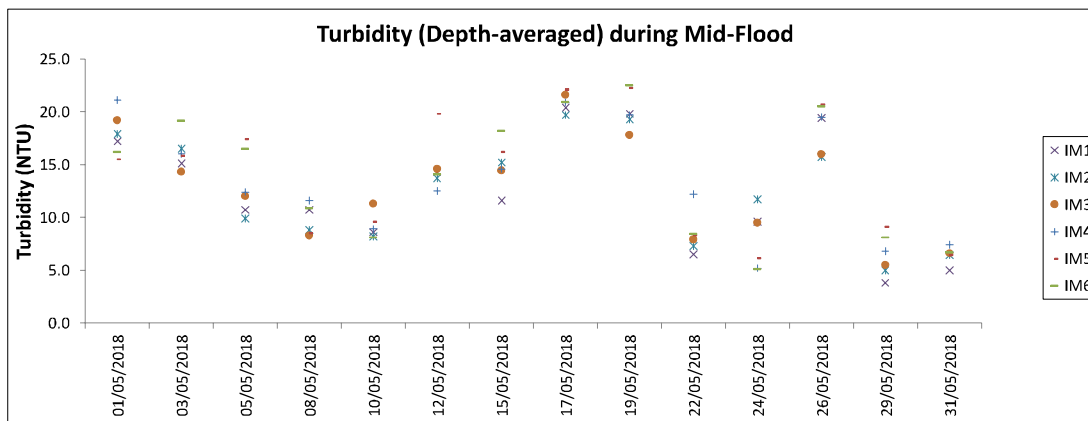
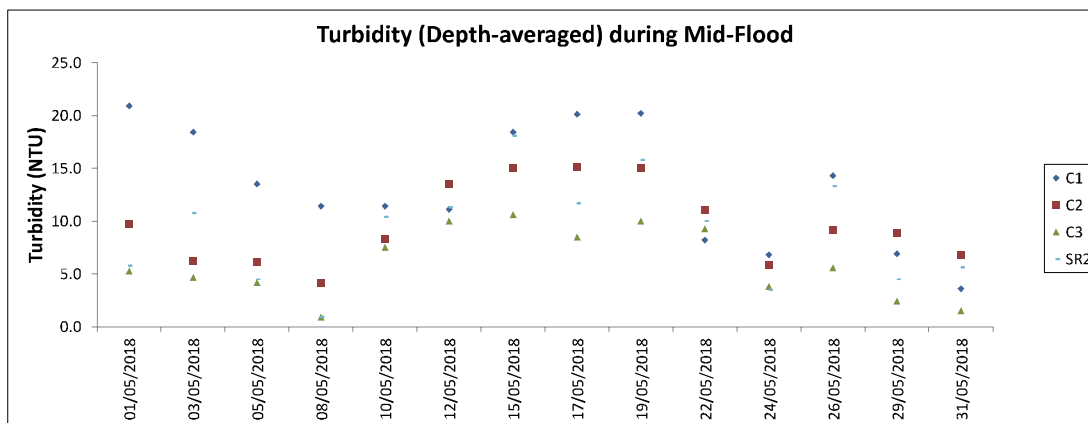




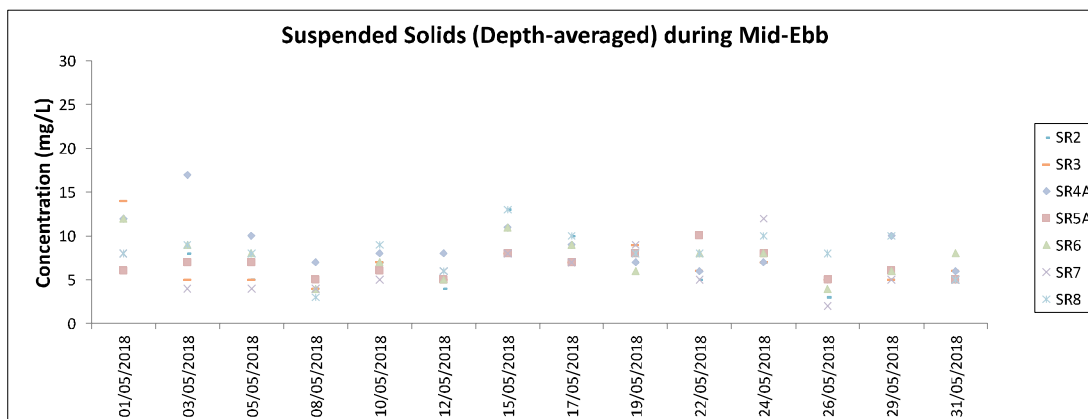
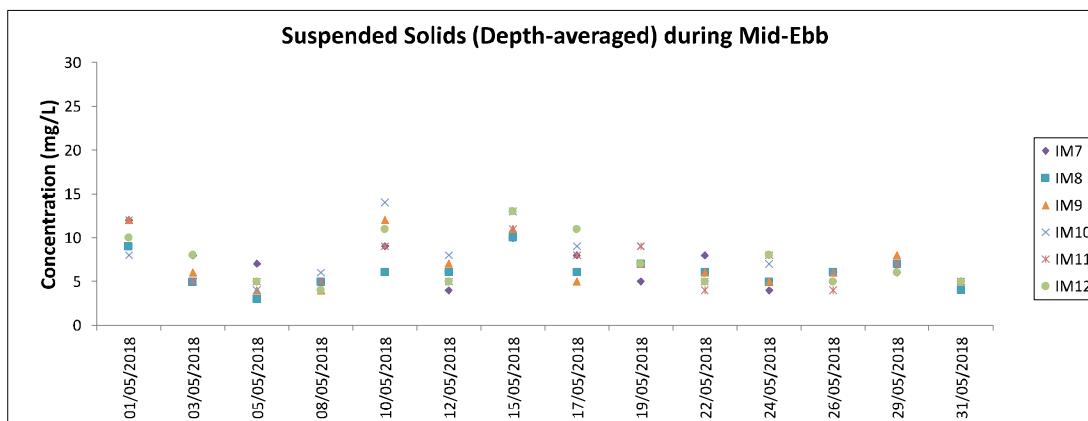
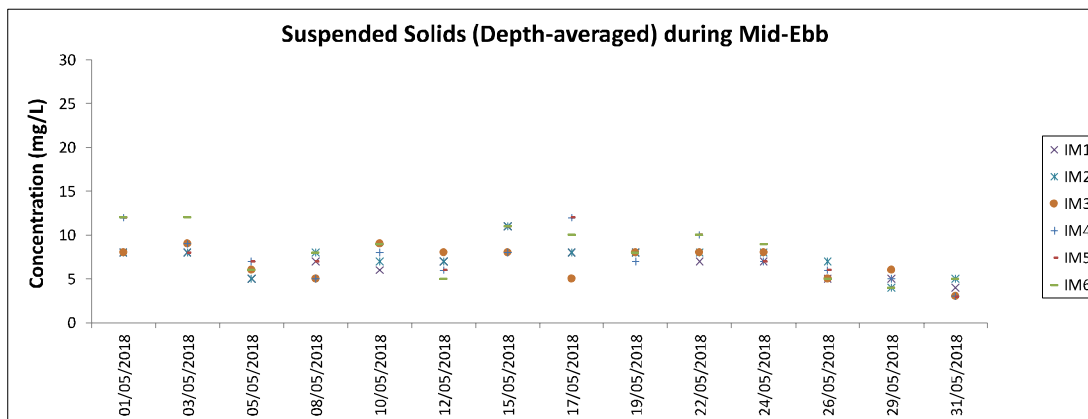
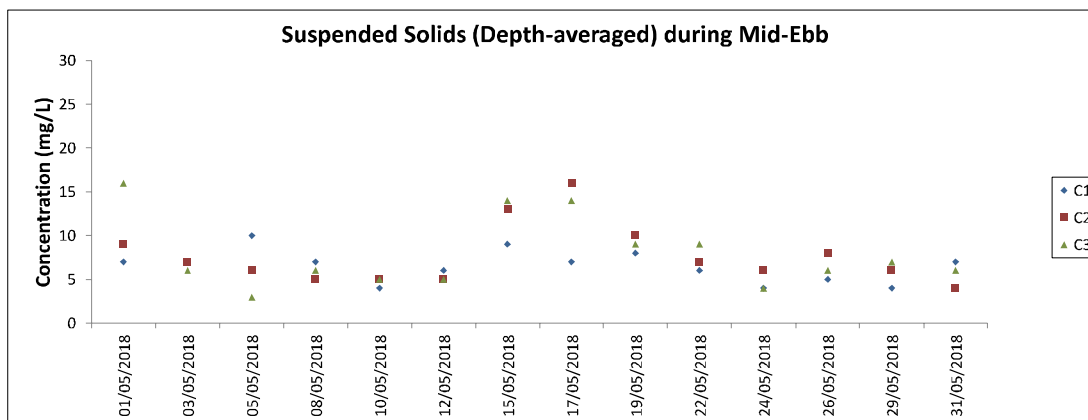




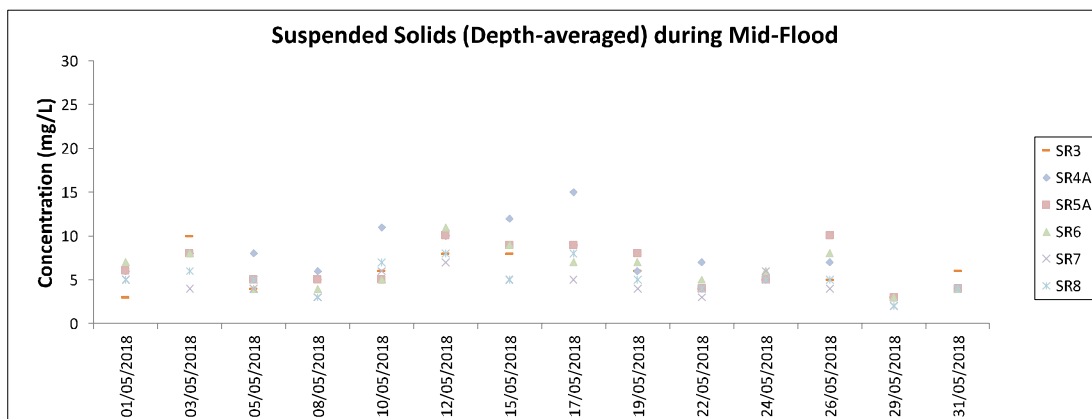
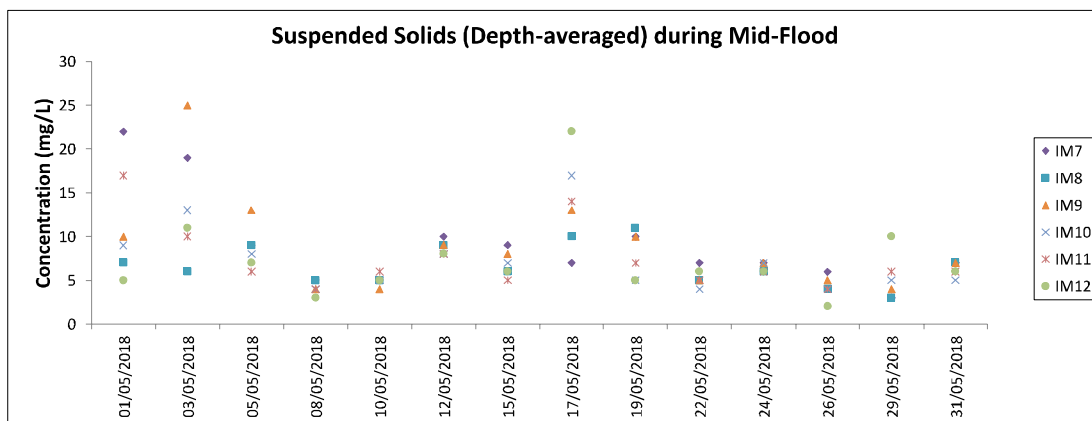
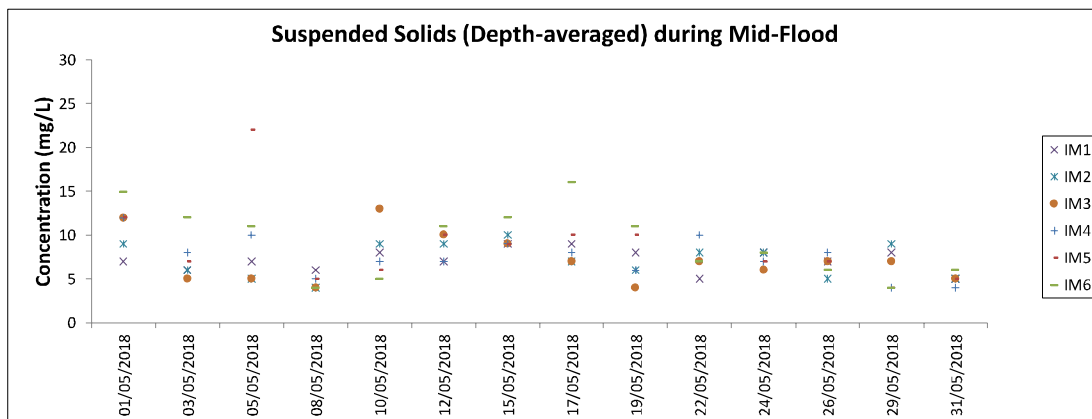
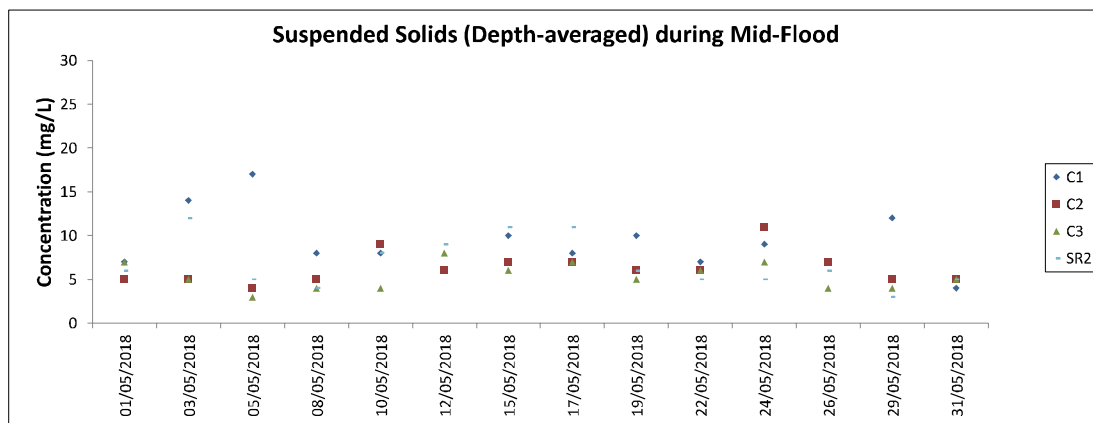
Note: The Action and Limit Level of turbidity can be referred to Table 4.2 of the monthly EM&A report.



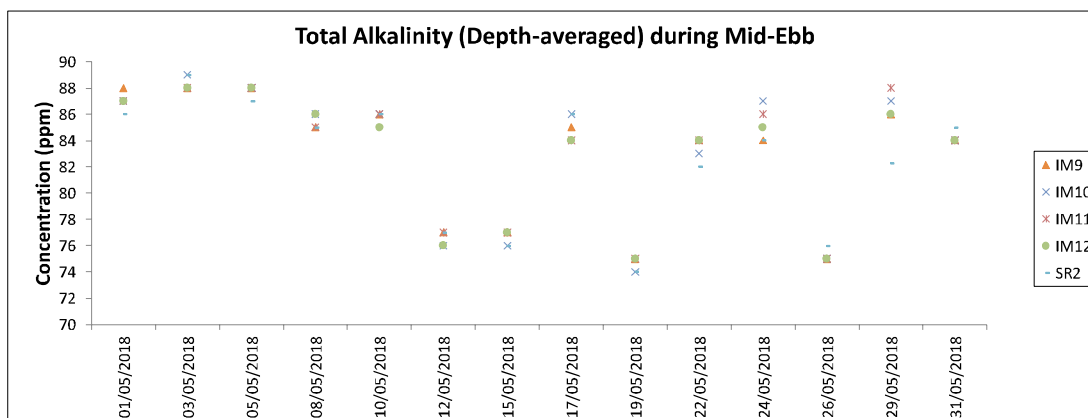
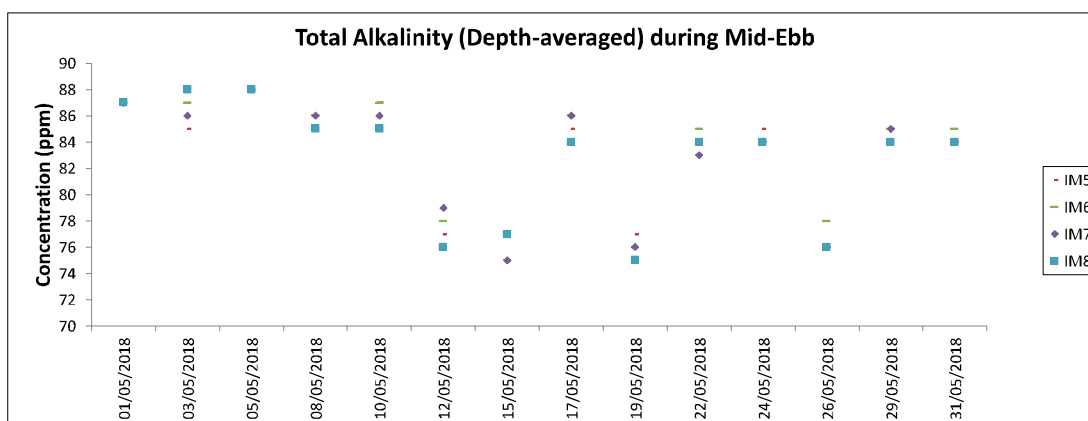
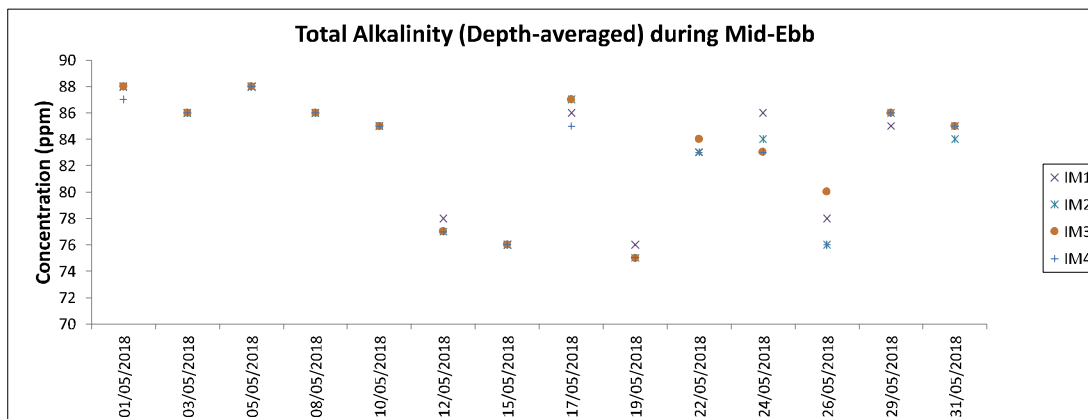
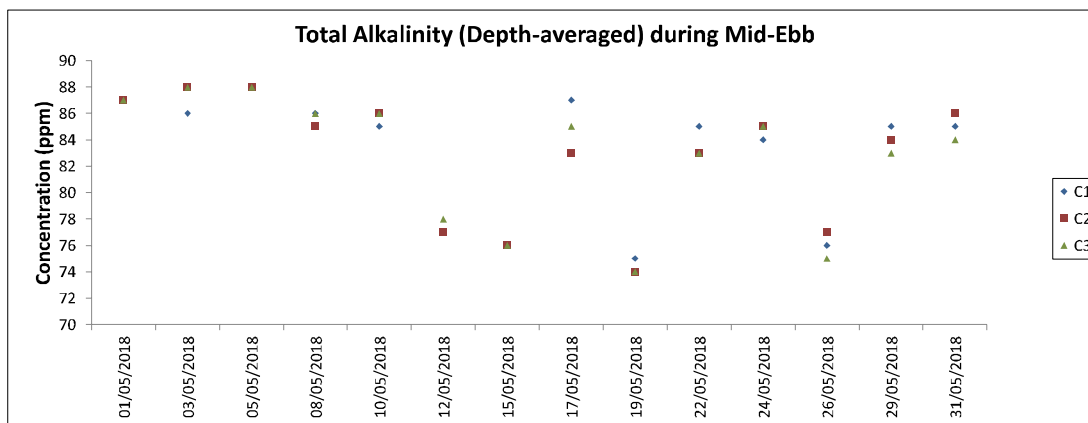
Note: The Action and Limit Level of turbidity can be referred to Table 4.2 of the monthly EM&A report.



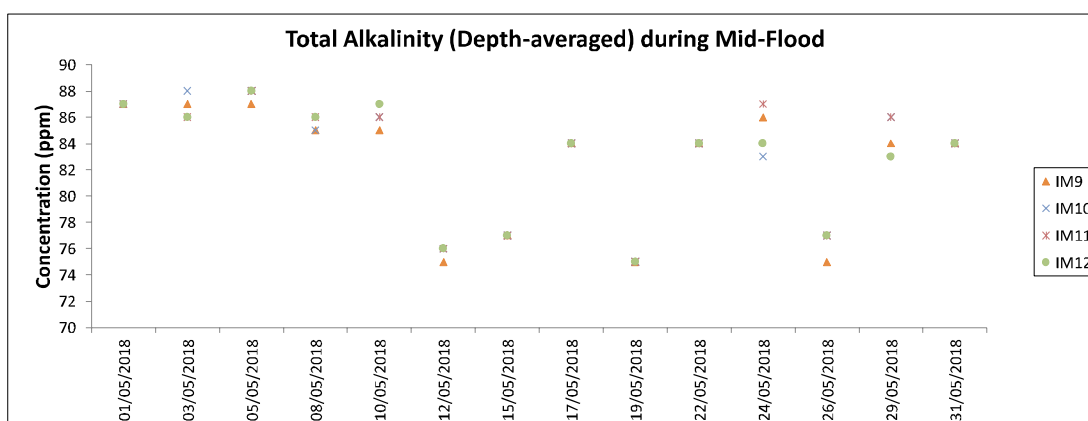
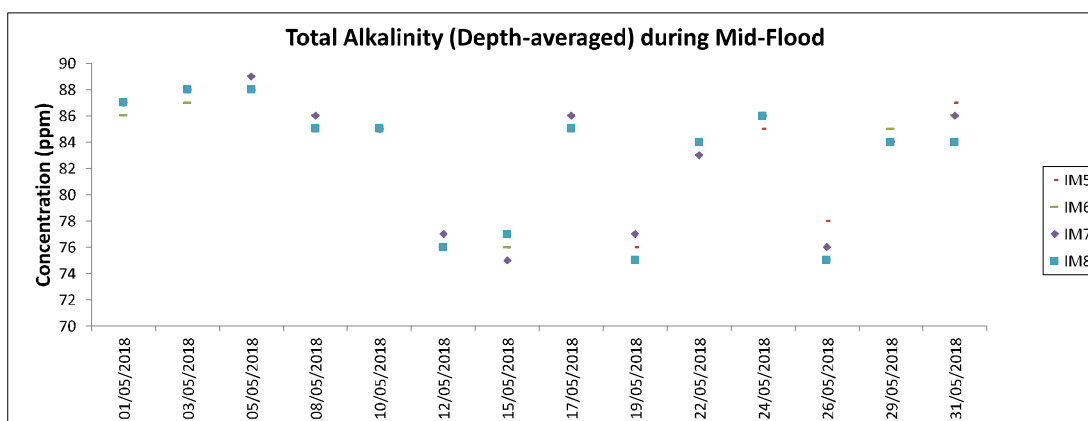
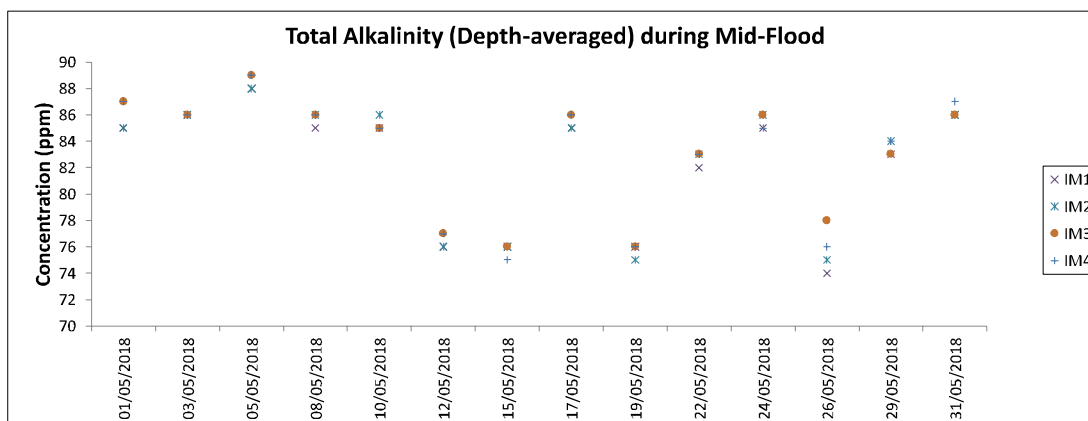
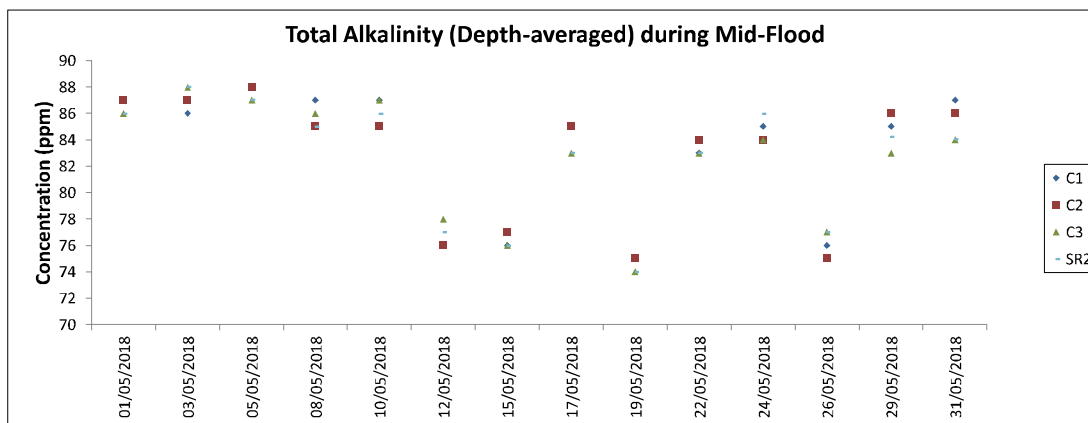
Note: The Action and Limit Level of suspended solids can be referred to Table 4.2 of the monthly EM&A report.



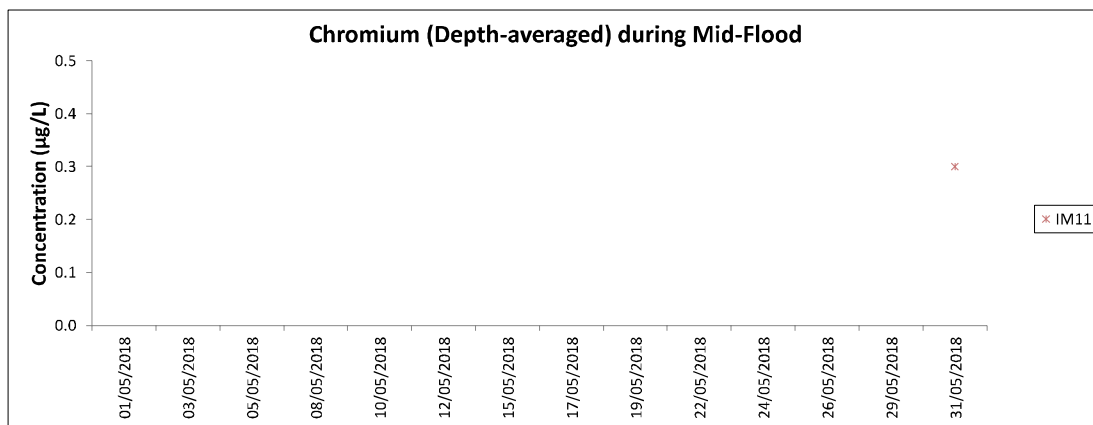
Note: The Action and Limit Level of suspended solids can be referred to Table 4.2 of the monthly EM&A report.



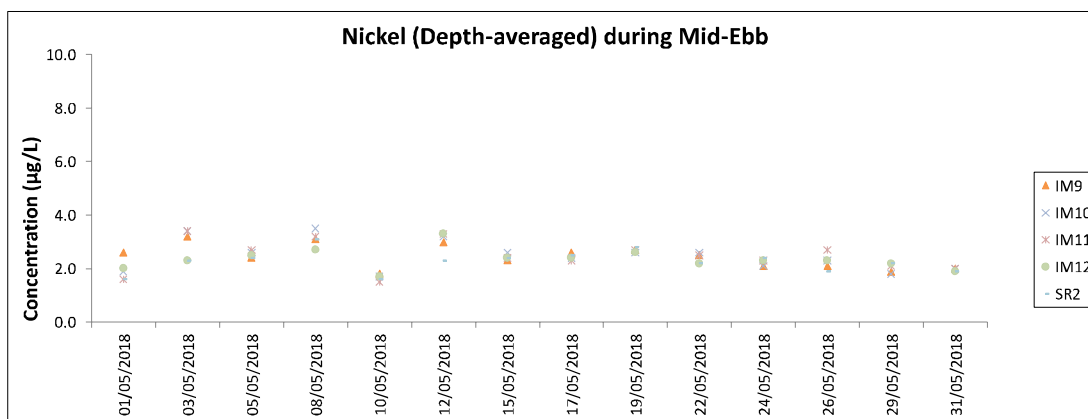
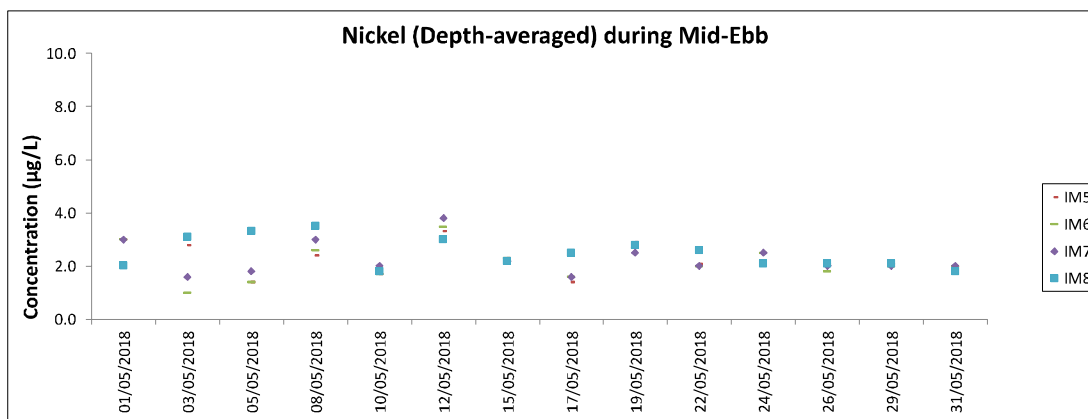
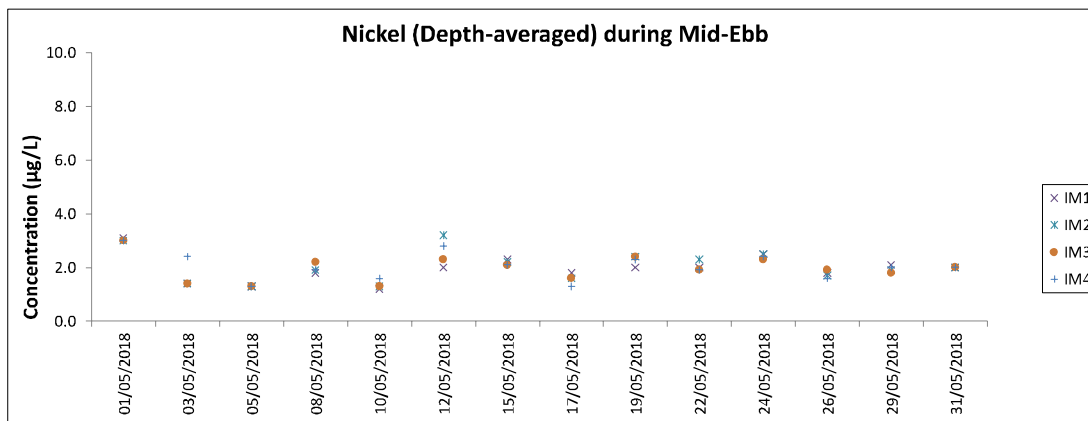
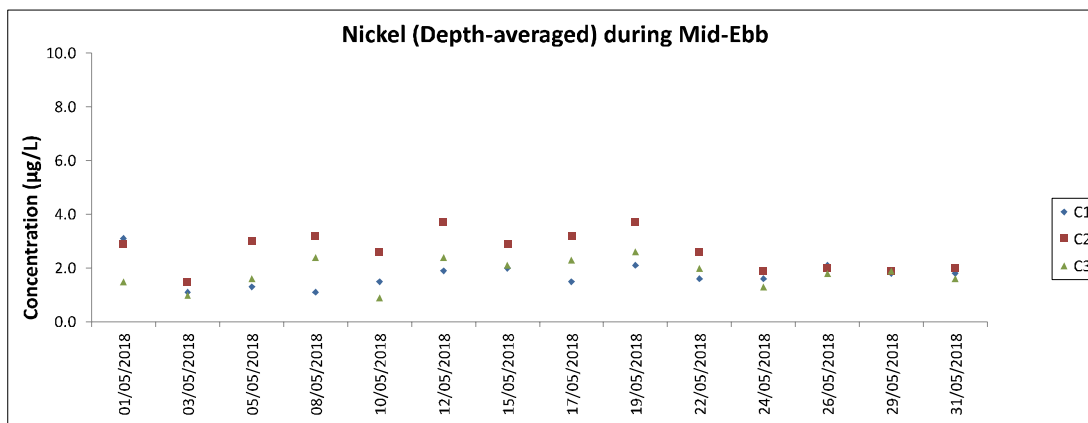
Note: The Action and Limit Level of total alkalinity can be referred to Table 4.2 of the monthly EM&A report.



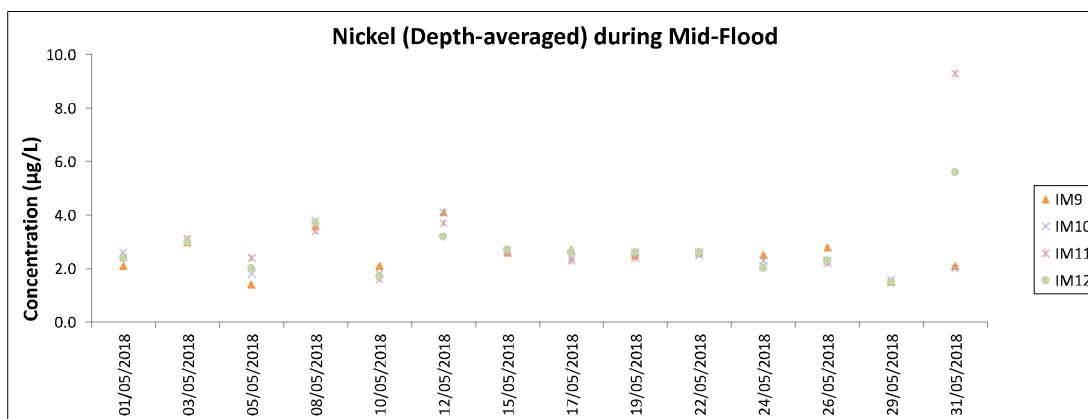
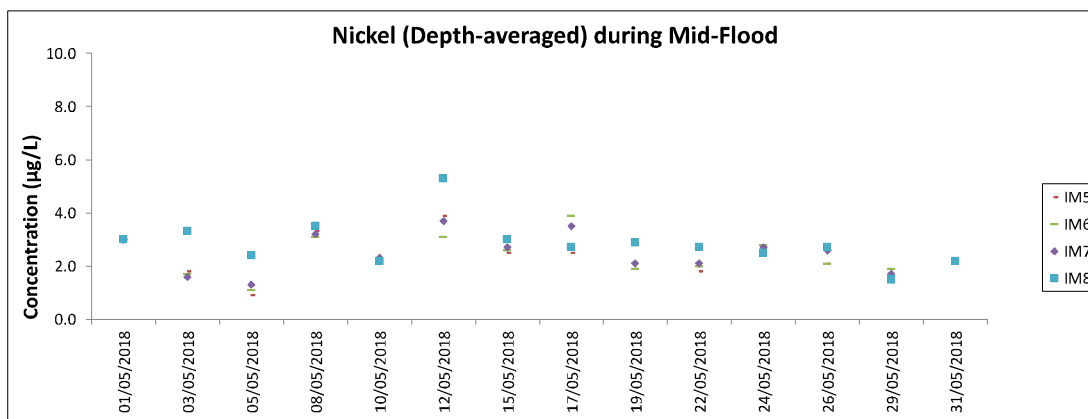
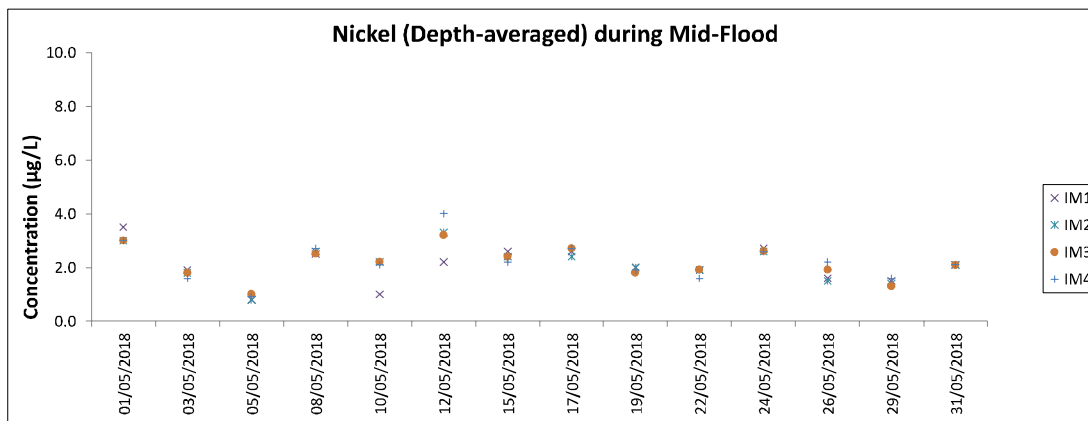
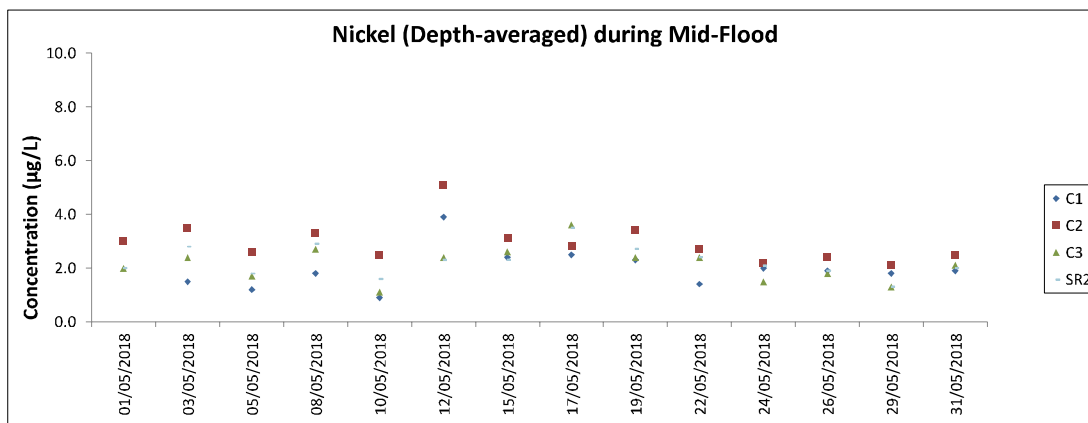
Note: The Action and Limit Level of total alkalinity can be referred to Table 4.2 of the monthly EM&A report.



All chromium results at ebb tide and other chromium results at flood tide of the reporting period were 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.



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

## **Chinese White Dolphin Monitoring Results**

## CWD Small Vessel Line-transect Survey

## Survey Effort Data

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE
05-Mar-18	SWL	1	40.540	SPRING	32166	3RS ET
05-Mar-18	SWL	2	21.840	SPRING	32166	3RS ET
07-Mar-18	NEL	2	6.660	SPRING	32166	3RS ET
07-Mar-18	NEL	3	29.130	SPRING	32166	3RS ET
07-Mar-18	NEL	4	11.510	SPRING	32166	3RS ET
08-Mar-18	NEL	2	25.549	SPRING	32166	3RS ET
08-Mar-18	NEL	3	21.251	SPRING	32166	3RS ET
12-Mar-18	AW	2	1.070	SPRING	32166	3RS ET
12-Mar-18	AW	3	3.660	SPRING	32166	3RS ET
12-Mar-18	WL	2	32.876	SPRING	32166	3RS ET
12-Mar-18	WL	3	0.550	SPRING	32166	3RS ET
12-Mar-18	SWL	2	1.970	SPRING	32166	3RS ET
12-Mar-18	SWL	3	14.329	SPRING	32166	3RS ET
12-Mar-18	SWL	4	2.130	SPRING	32166	3RS ET
13-Mar-18	AW	1	4.700	SPRING	32166	3RS ET
13-Mar-18	WL	2	22.370	SPRING	32166	3RS ET
13-Mar-18	WL	3	9.417	SPRING	32166	3RS ET
13-Mar-18	WL	4	1.643	SPRING	32166	3RS ET
13-Mar-18	SWL	3	6.820	SPRING	32166	3RS ET
14-Mar-18	NWL	2	59.690	SPRING	32166	3RS ET
14-Mar-18	NWL	3	14.666	SPRING	32166	3RS ET
21-Mar-18	SWL	2	16.139	SPRING	32166	3RS ET
21-Mar-18	SWL	3	10.311	SPRING	32166	3RS ET
21-Mar-18	SWL	4	23.030	SPRING	32166	3RS ET
22-Mar-18	NWL	2	34.844	SPRING	32166	3RS ET
22-Mar-18	NWL	3	37.876	SPRING	32166	3RS ET
03-Apr-18	SWL	1	14.910	SPRING	32166	3RS ET
03-Apr-18	SWL	2	45.610	SPRING	32166	3RS ET
03-Apr-18	SWL	3	2.000	SPRING	32166	3RS ET
04-Apr-18	SWL	1	31.340	SPRING	32166	3RS ET
04-Apr-18	SWL	2	28.140	SPRING	32166	3RS ET
04-Apr-18	SWL	3	2.610	SPRING	32166	3RS ET
11-Apr-18	AW	2	4.770	SPRING	32166	3RS ET
11-Apr-18	WL	2	14.970	SPRING	32166	3RS ET
11-Apr-18	WL	3	16.070	SPRING	32166	3RS ET
11-Apr-18	SWL	2	2.140	SPRING	32166	3RS ET
11-Apr-18	SWL	3	4.680	SPRING	32166	3RS ET
12-Apr-18	AW	2	3.530	SPRING	32166	3RS ET
12-Apr-18	AW	3	1.280	SPRING	32166	3RS ET
12-Apr-18	WL	2	12.481	SPRING	32166	3RS ET
12-Apr-18	WL	3	18.889	SPRING	32166	3RS ET
12-Apr-18	SWL	2	6.735	SPRING	32166	3RS ET
18-Apr-18	NEL	2	30.140	SPRING	32166	3RS ET
18-Apr-18	NEL	3	17.060	SPRING	32166	3RS ET
19-Apr-18	NWL	2	15.530	SPRING	32166	3RS ET
19-Apr-18	NWL	3	53.430	SPRING	32166	3RS ET
19-Apr-18	NWL	4	6.030	SPRING	32166	3RS ET

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE
23-Apr-18	NWL	2	39.210	SPRING	32166	3RS ET
23-Apr-18	NWL	3	31.250	SPRING	32166	3RS ET
23-Apr-18	NWL	4	4.500	SPRING	32166	3RS ET
27-Apr-18	NEL	1	22.760	SPRING	32166	3RS ET
27-Apr-18	NEL	2	23.840	SPRING	32166	3RS ET
03-May-18	NWL	2	38.810	SPRING	32166	3RS ET
03-May-18	NWL	3	34.290	SPRING	32166	3RS ET
03-May-18	NWL	4	2.300	SPRING	32166	3RS ET
08-May-18	NWL	2	56.994	SPRING	32166	3RS ET
08-May-18	NWL	3	18.306	SPRING	32166	3RS ET
09-May-18	AW	3	0.851	SPRING	32166	3RS ET
09-May-18	AW	4	3.879	SPRING	32166	3RS ET
09-May-18	WL	2	4.840	SPRING	32166	3RS ET
09-May-18	WL	3	4.940	SPRING	32166	3RS ET
09-May-18	WL	4	14.440	SPRING	32166	3RS ET
09-May-18	WL	5	7.080	SPRING	32166	3RS ET
14-May-18	SWL	2	30.850	SPRING	32166	3RS ET
14-May-18	SWL	3	38.892	SPRING	32166	3RS ET
14-May-18	SWL	4	1.550	SPRING	32166	3RS ET
16-May-18	AW	2	1.060	SPRING	32166	3RS ET
16-May-18	AW	3	3.640	SPRING	32166	3RS ET
16-May-18	WL	2	2.390	SPRING	32166	3RS ET
16-May-18	WL	3	21.580	SPRING	32166	3RS ET
16-May-18	WL	4	7.180	SPRING	32166	3RS ET
23-May-18	SWL	2	37.660	SPRING	32166	3RS ET
23-May-18	SWL	3	32.490	SPRING	32166	3RS ET
24-May-18	NEL	2	31.200	SPRING	32166	3RS ET
24-May-18	NEL	3	15.800	SPRING	32166	3RS ET
25-May-18	NEL	2	27.700	SPRING	32166	3RS ET
25-May-18	NEL	3	18.900	SPRING	32166	3RS ET
25-May-18	NEL	4	1.000	SPRING	32166	3RS ET

Notes:

CWD monitoring survey data of the two preceding survey months (i.e. March and April 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.
05-Mar-18	1	1328	FP	2	SWL	2	58	ON	3RS ET	22.1574	113.8973	SPRING	NONE
05-Mar-18	2	1338	FP	2	SWL	2	145	ON	3RS ET	22.1484	113.8941	SPRING	NONE
05-Mar-18	3	1454	FP	3	SWL	2	103	ON	3RS ET	22.1824	113.8685	SPRING	NONE
12-Mar-18	1	1146	CWD	10	WL	2	122	ON	3RS ET	22.2076	113.8396	SPRING	NONE
12-Mar-18	2	1208	CWD	2	WL	2	17	ON	3RS ET	22.2053	113.8384	SPRING	NONE
12-Mar-18	3	1412	CWD	1	SWL	3	164	ON	3RS ET	22.1995	113.8784	SPRING	NONE
13-Mar-18	1	1037	CWD	2	WL	2	56	ON	3RS ET	22.2666	113.8596	SPRING	NONE
13-Mar-18	2	1128	CWD	1	WL	2	140	ON	3RS ET	22.2348	113.8251	SPRING	NONE
13-Mar-18	3	1205	CWD	5	WL	2	384	ON	3RS ET	22.2231	113.8195	SPRING	NONE
13-Mar-18	4	1244	CWD	1	WL	4	12	ON	3RS ET	22.2143	113.8273	SPRING	NONE
13-Mar-18	5	1324	CWD	1	WL	2	36	ON	3RS ET	22.1961	113.8406	SPRING	NONE
14-Mar-18	1	1000	CWD	2	NWL	2	65	ON	3RS ET	22.3539	113.8689	SPRING	NONE
14-Mar-18	2	1013	CWD	2	NWL	2	335	ON	3RS ET	22.3431	113.8687	SPRING	NONE
14-Mar-18	3	1126	CWD	2	NWL	2	N/A	OFF	3RS ET	22.3245	113.8729	SPRING	NONE
14-Mar-18	4	1208	CWD	4	NWL	2	57	ON	3RS ET	22.3912	113.8785	SPRING	NONE
14-Mar-18	5	1253	CWD	1	NWL	3	587	ON	3RS ET	22.3824	113.8888	SPRING	NONE
14-Mar-18	6	1310	CWD	2	NWL	3	13	ON	3RS ET	22.3837	113.8887	SPRING	NONE
21-Mar-18	1	1050	FP	4	SWL	2	59	ON	3RS ET	22.1486	113.9340	SPRING	NONE
21-Mar-18	2	1106	FP	1	SWL	2	201	ON	3RS ET	22.1599	113.9272	SPRING	NONE
21-Mar-18	3	1111	FP	2	SWL	2	262	ON	3RS ET	22.1658	113.9272	SPRING	NONE
21-Mar-18	4	1202	FP	1	SWL	2	30	ON	3RS ET	22.1453	113.9176	SPRING	NONE
21-Mar-18	5	1311	FP	1	SWL	4	225	ON	3RS ET	22.1641	113.8975	SPRING	NONE
22-Mar-18	1	1219	CWD	6	NWL	3	981	ON	3RS ET	22.3840	113.8774	SPRING	PURSE SEINER
22-Mar-18	2	1305	CWD	2	NWL	3	579	ON	3RS ET	22.3952	113.8893	SPRING	NONE
22-Mar-18	3	1418	CWD	1	NWL	2	50	ON	3RS ET	22.3780	113.8980	SPRING	NONE
22-Mar-18	4	1454	CWD	1	NWL	2	51	ON	3RS ET	22.3760	113.9062	SPRING	NONE
03-Apr-18	1	1048	FP	1	SWL	1	1489	ON	3RS ET	22.1788	113.9360	SPRING	NONE
03-Apr-18	2	1056	FP	2	SWL	1	192	ON	3RS ET	22.1652	113.9359	SPRING	NONE
04-Apr-18	1	1058	FP	3	SWL	1	23	ON	3RS ET	22.1556	113.9361	SPRING	NONE
04-Apr-18	2	1208	FP	2	SWL	1	116	ON	3RS ET	22.1499	113.9178	SPRING	NONE
04-Apr-18	3	1216	FP	1	SWL	1	85	ON	3RS ET	22.1415	113.9128	SPRING	NONE

DATE	STG #	TIME	CWD/FP	GP SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.
04-Apr-18	4	1335	FP	5	SWL	2	176	ON	3RS ET	22.1487	113.8963	SPRING	NONE
04-Apr-18	5	1405	CWD	2	SWL	2	78	ON	3RS ET	22.2025	113.8879	SPRING	NONE
11-Apr-18	1	1034	CWD	2	WL	2	444	ON	3RS ET	22.2666	113.8595	SPRING	PURSE SEINER
11-Apr-18	2	1108	CWD	1	WL	3	117	ON	3RS ET	22.2500	113.8442	SPRING	NONE
11-Apr-18	3	1129	CWD	3	WL	3	511	ON	3RS ET	22.2414	113.8365	SPRING	SHRIMP TRAWLER
11-Apr-18	4	1226	CWD	3	WL	3	119	ON	3RS ET	22.2145	113.8315	SPRING	NONE
12-Apr-18	1	1029	CWD	2	WL	2	N/A	OFF	3RS ET	22.2601	113.8489	SPRING	NONE
12-Apr-18	2	1054	CWD	6	WL	3	285	ON	3RS ET	22.2507	113.8431	SPRING	NONE
12-Apr-18	3	1130	CWD	8	WL	2	18	ON	3RS ET	22.2416	113.8367	SPRING	NONE
12-Apr-18	4	1201	CWD	3	WL	3	136	ON	3RS ET	22.2321	113.8322	SPRING	NONE
12-Apr-18	5	1242	CWD	5	WL	3	119	ON	3RS ET	22.2145	113.8317	SPRING	NONE
12-Apr-18	6	1345	CWD	1	WL	3	N/A	OFF	3RS ET	22.1919	113.8428	SPRING	NONE
12-Apr-18	7	1352	CWD	3	SWL	2	320	ON	3RS ET	22.1928	113.8491	SPRING	NONE
12-Apr-18	8	1421	CWD	1	SWL	2	21	ON	3RS ET	22.1684	113.8577	SPRING	NONE
19-Apr-18	1	0953	CWD	1	NWL	3	114	ON	3RS ET	22.3730	113.8693	SPRING	NONE
19-Apr-18	2	1207	CWD	1	NWL	2	15	ON	3RS ET	22.3832	113.8769	SPRING	NONE
19-Apr-18	3	1235	CWD	5	NWL	2	410	ON	3RS ET	22.4063	113.8775	SPRING	NONE
19-Apr-18	4	1316	CWD	5	NWL	2	N/A	OFF	3RS ET	22.4033	113.8881	SPRING	NONE
23-Apr-18	1	0946	CWD	6	NWL	2	413	ON	3RS ET	22.3930	113.8703	SPRING	NONE
03-May-18	1	1131	CWD	2	NWL	3	35	ON	3RS ET	22.3558	113.8781	SPRING	NONE
14-May-18	1	1057	CWD	2	SWL	2	151	ON	3RS ET	22.1972	113.8588	SPRING	NONE
14-May-18	2	1115	CWD	5	SWL	2	121	ON	3RS ET	22.1994	113.8690	SPRING	NONE
14-May-18	3	1139	CWD	1	SWL	2	4	ON	3RS ET	22.1953	113.8689	SPRING	NONE
14-May-18	4	1250	CWD	1	SWL	3	191	ON	3RS ET	22.1881	113.8882	SPRING	NONE
14-May-18	5	1537	FP	6	SWL	3	21	ON	3RS ET	22.1652	113.9273	SPRING	NONE
14-May-18	6	1602	FP	3	SWL	3	116	ON	3RS ET	22.1439	113.9274	SPRING	NONE
14-May-18	7	1610	FP	1	SWL	3	16	ON	3RS ET	22.1462	113.9327	SPRING	NONE
14-May-18	8	1622	FP	3	SWL	3	509	ON	3RS ET	22.1633	113.9366	SPRING	NONE
16-May-18	1	1036	CWD	1	WL	3	225	ON	3RS ET	22.2655	113.8581	SPRING	NONE
16-May-18	2	1059	CWD	2	WL	3	122	ON	3RS ET	22.2573	113.8370	SPRING	NONE
23-May-18	1	1039	FP	2	SWL	3	15	ON	3RS ET	22.1684	113.9365	SPRING	NONE
23-May-18	2	1046	FP	2	SWL	3	37	ON	3RS ET	22.1651	113.9361	SPRING	NONE

DATE	STG #	TIME	CWD/FP	GP SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.
23-May-18	3	1110	FP	3	SWL	3	182	ON	3RS ET	22.1618	113.9279	SPRING	NONE
23-May-18	4	1138	CWD	5	SWL	2	1155	ON	3RS ET	22.1989	113.9180	SPRING	NONE
23-May-18	5	1238	FP	4	SWL	3	17	ON	3RS ET	22.1411	113.9136	SPRING	NONE

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

Notes:

CWD monitoring survey data of the two preceding survey months (i.e. March and April 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 May 2018 encounter rates STG and ANI in the whole survey area (NEL, NWL, AW, WL, SWL):

A total of 421.193 km of survey effort was collected under Beaufort Sea State 3 or below with favourable visibility; total no. of 8 on-effort sightings and total number of 19 dolphins from on-effort sightings were collected under such condition. Calculation of the encounter rates in May 2018 are shown as below:

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

$$STG = \frac{8}{421.193} \times 100 = 1.90$$

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

$$ANI = \frac{19}{421.193} \times 100 = 4.51$$

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

A total of 1280.826 km of survey effort was collected under Beaufort Sea State 3 or below with favourable visibility; total no. of 39 on-effort sightings and total number of 112 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)








$$STG = \frac{39}{1280.826} \times 100 = 3.04$$

Running Quarterly Encounter Rate by Number of Dolphins (ANI)

$$ANI = \frac{112}{1280.826} \times 100 = 8.74$$

## CWD Small Vessel Line-transect Survey

## Photo Identification

	
NLMM004_20180503_1_27	NLMM013_20180503_1_10
	
SLMM065_20180514_2_14	WLMM115_20180516_1_15
	
WLMM054_20180523_4_11	WLMM076_20180523_4_6
	
WLMM078_20180523_4_10	

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

<b>Date</b>	<b>Station</b>	<b>Start Time</b>	<b>End Time</b>	<b>Duration</b>	<b>Beaufort Range</b>	<b>Visibility</b>	<b>No. of Focal Follow Dolphin Groups Tracked</b>	<b>Dolphin Group Size Range</b>
3/May/18	Lung Kwu Chau	9:20	15:20	6:00	2-3	3	1	2
14/May/18	Sha Chau	8:50	14:50	6:00	2-3	2	0	N/A
17/May/18	Sha Chau	8:45	14:45	6:00	2-3	2	0	N/A
28/May/18	Lung Kwu Chau	8:54	14:54	6:00	2-3	2-3	7	1-3
29/May/18	Lung Kwu Chau	8:50	14:50	6:00	2	2	4	1-4

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

# Appendix D. Calibration Certificates



輝創工程有限公司

Sun Creation Engineering Limited

Calibration & Testing Laboratory

# Certificate of Calibration

## 校正證書

Certificate No. : C182423

證書編號

ITEM TESTED / 送檢項目 (Job No. / 序引編號 : IC18-0873)

Date of Receipt / 收件日期 : 27 April 2018

Description / 儀器名稱 : Acoustical Calibrator  
Manufacturer / 製造商 : Brüel & Kjær  
Model No. / 型號 : 4231  
Serial No. / 編號 : 3018753  
Supplied By / 委託者 : Atkins China Limited  
13/F., Wharf T&T Centre, Harbour City,  
Tsim Sha Tsui, Kowloon, Hong Kong

### TEST CONDITIONS / 測試條件

Temperature / 溫度 :  $(23 \pm 2)^{\circ}\text{C}$

Relative Humidity / 相對濕度 :  $(50 \pm 25)\%$

Line Voltage / 電壓 : ---

### TEST SPECIFICATIONS / 測試規範

Calibration check

DATE OF TEST / 測試日期 : 10 May 2018

### TEST RESULTS / 測試結果

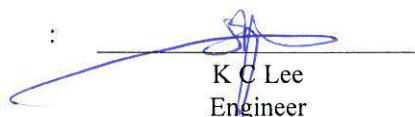
The results apply to the particular unit-under-test only.  
The results do not exceed manufacturer's specification.  
The results are detailed in the subsequent page(s).

The test equipment used for calibration are traceable to National Standards via :

- The Government of The Hong Kong Special Administrative Region Standard & Calibration Laboratory
- Agilent Technologies / Keysight Technologies
- Rohde & Schwarz Laboratory, Germany
- Fluke Everett Service Center, USA

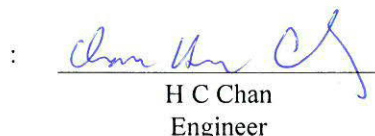
Tested By

測試

  
K C Lee  
Engineer

Certified By

核證

  
H C Chan  
Engineer

Date of Issue

簽發日期

10 May 2018

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

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

Sun Creation Engineering Limited – Calibration & Testing Laboratory

c/o 4/F, 1 Hing On Lane, Tuen Mun, New Territories, Hong Kong

輝創工程有限公司 — 校正及檢測實驗室

c/o 香港新界屯門興安里一號四樓

Tel/電話: (852) 2927 2606 Fax/傳真: (852) 2744 8986

E-mail/電郵: callab@suncreation.com

Website/網址: www.suncreation.com

# Certificate of Calibration

## 校正證書

Certificate No. : C182423  
證書編號

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

Equipment ID	Description	Certificate No.
CL130	Universal Counter	C173864
CL281	Multifunction Acoustic Calibrator	PA160023
TST150A	Measuring Amplifier	C181288

- Test procedure : MA100N.

- Results :

### 5.1 Sound Level Accuracy

UUT Nominal Value	Measured Value (dB)	Mfr's Spec. (dB)	Uncertainty of Measured Value (dB)
94 dB, 1 kHz	94.0	± 0.2	± 0.2
114 dB, 1 kHz	114.0		

### 5.2 Frequency Accuracy

UUT Nominal Value (kHz)	Measured Value (kHz)	Mfr's Spec.	Uncertainty of Measured Value (Hz)
1	1.000 0	1 kHz ± 0.1 %	± 0.1

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

#### Note :

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

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

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

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

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輝創工程有限公司 — 校正及檢測實驗室

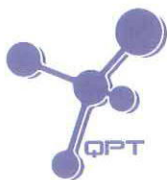
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## CALIBRATION REPORT

Test Report No. : AH050001  
Date of Issue : 10 May 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 – SAMPLE INFORMATION

Description of Samples : Titrette® bottle-top burette, 50mL  
Brand Name : BRAND  
Model Number : 6761161  
Serial Number : 10N60623  
Date of Received : Apr 30, 2018  
Date of Calibration : Apr 30, 2018  
Date of Next Calibration<sup>(a)</sup> : Jul 30, 2018

### PART C – CALIBRATION REQUESTED


<u>Parameter</u>	<u>Reference Method</u>
Accuracy Test	In-house Method (Gravimetric Method)

~ Continued On Next Page ~

Remark(s): -

<sup>(a)</sup> The "Date of Next Calibration" is recommended according to best practice principals as practiced by QPT or quoted from relevant international standards.

APPROVED SIGNATORY:

  
\_\_\_\_\_  
LAM Ho-yee, Emma  
Assistant Laboratory Manager



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## CALIBRATION REPORT

Test Report No. : AH050001  
Date of Issue : 10 May 2018  
Page No. : 2 of 2

### PART D – RESULT<sup>(b),(c)</sup>

Water temperature: 25.0 °C

Relative humidity: 53%

z-Factor: 1.0040

Trial	Nominal volume (mL) at interval				
	3	3	3	3	3
	Range: (1-4)	Range: (16-19)	Range: (23-26)	Range: (34-37)	Range: (42-45)
1	2.9796	2.9794	2.9762	2.9761	2.9768
2	2.9815	2.9853	2.9763	2.9812	2.9778
3	2.9818	2.9833	2.9781	2.9801	2.9792
4	2.9849	2.9868	2.9766	2.9801	2.9857
5	2.9824	2.9808	2.9771	2.9777	2.9845
6	2.9781	2.9772	2.9803	2.9816	2.9785
7	2.9875	2.9803	2.9772	2.9831	2.9813
8	2.9826	2.9795	2.9818	2.9849	2.9773
9	2.9825	2.9845	2.9796	2.9776	2.9792
10	2.9865	2.9794	2.9808	2.9777	2.9791
Average (g)	2.9827	2.9817	2.9784	2.9800	2.9799
Standard deviation	0.0029	0.0031	0.0021	0.0028	0.0030
Calculated volume (mL)	2.9947	2.9936	2.9903	2.9919	2.9919
Error (%)	-0.1776	-0.2141	-0.3229	-0.2690	-0.2713
RSD (%)	0.0967	0.1043	0.0688	0.0927	0.1003

### Acceptance Criteria <sup>(d)</sup>

Accuracy (%Error)	< ±1%	< ±1%	< ±1%	< ±1%	< ±1%
Precision (%RSD)	< 1%	< 1%	< 1%	< 1%	< 1%

~ END OF REPORT ~

#### Remark(s): -

<sup>(b)</sup> The results relate only to the tested sample as received

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

<sup>(d)</sup> The "acceptance criteria" is applicable for similar equipment used by QPT or quoted from relevant international standards.



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## REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AH040199  
Date of Issue : 04 May 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 ProDSS (Multi-Parameters)  
Manufacturer : YSI (a xylem brand)  
Serial Number : 15M100005  
Date of Received : Apr 30, 2018  
Date of Calibration : Apr 30, 2018 to Apr 30, 2018  
Date of Next Calibration<sup>(a)</sup> : Jul 30, 2018

### PART C – REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

Parameter	Reference Method
pH at 25°C	APHA 21e 4500-H <sup>+</sup> 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<sup>(b,c)</sup>

#### (1) pH at 25°C

Target (pH unit)	Displayed Reading <sup>(d)</sup> (pH Unit)	Tolerance <sup>(e)</sup> (pH Unit)	Results
4.00	4.07	0.07	Satisfactory
7.42	7.49	0.07	Satisfactory
10.01	10.08	0.07	Satisfactory

Tolerance of pH should be less than  $\pm 0.10$  (pH unit)

#### (2) Temperature

Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)	Results
13.0	13.1	0.1	Satisfactory
25.0	25.2	0.2	Satisfactory
38.0	37.9	-0.1	Satisfactory

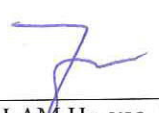
Tolerance limit of temperature should be less than  $\pm 2.0$  (°C)

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#### 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



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## REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AH040199  
Date of Issue : 04 May 2018  
Page No. : 2 of 2

### PART D – CALIBRATION RESULTS (Cont'd)

#### (3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
0.00	0.08	0.08	Satisfactory
2.56	2.63	0.07	Satisfactory
4.72	4.64	-0.08	Satisfactory
6.76	6.66	-0.10	Satisfactory

Tolerance limit of dissolved oxygen should be less than  $\pm 0.20$  (mg/L)

#### (4) Conductivity at 25°C

Conc. of KCl (M)	Expected Reading ( $\mu\text{S/cm}$ )	Displayed Reading ( $\mu\text{S/cm}$ )	Tolerance (%)	Results
0.001	146.9	151.6	3.2	Satisfactory
0.01	1412	1429	1.2	Satisfactory
0.1	12890	12834	-0.4	Satisfactory
0.5	58670	57932	-1.3	Satisfactory
1.0	111900	108516	-3.0	Satisfactory

Tolerance limit of conductivity should be less than  $\pm 10.0$  (%)

#### (5) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	9.92	-0.8	Satisfactory
20	20.28	1.4	Satisfactory
30	30.61	2.0	Satisfactory

Tolerance limit of salinity should be less than  $\pm 10.0$  (%)

#### (6) Turbidity

Expected Reading (NTU)	Displayed Reading <sup>(f)</sup> (NTU)	Tolerance <sup>(g)</sup> (%)	Results
0	0.1	--	--
10	10.2	2.0	Satisfactory
20	19.7	-1.5	Satisfactory
100	107.2	7.2	Satisfactory
800	807.6	1.0	Satisfactory

Tolerance limit of turbidity should be less than  $\pm 10.0$  (%)

~ END OF REPORT ~

Remark(s): -

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

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



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## REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AH040200  
Date of Issue : 04 May 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 ProDSS (Multi-Parameters)  
Manufacturer : YSI (a xylem brand)  
Serial Number : 16H104234  
Date of Received : Apr 30, 2018  
Date of Calibration : Apr 30, 2018 to Apr 30, 2018  
Date of Next Calibration<sup>(a)</sup> : Jul 30, 2018

### PART C – REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

Parameter	Reference Method
pH at 25°C	APHA 21e 4500-H <sup>+</sup> 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<sup>(b,c)</sup>

#### (1) pH at 25°C

Target (pH unit)	Displayed Reading <sup>(d)</sup> (pH Unit)	Tolerance <sup>(e)</sup> (pH Unit)	Results
4.00	4.05	0.05	Satisfactory
7.42	7.46	0.04	Satisfactory
10.01	10.08	0.07	Satisfactory

Tolerance of pH should be less than  $\pm 0.10$  (pH unit)

#### (2) Temperature

Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)	Results
13.0	13.1	0.1	Satisfactory
25.0	25.1	0.1	Satisfactory
38.0	38.3	0.3	Satisfactory

Tolerance limit of temperature should be less than  $\pm 2.0$  (°C)

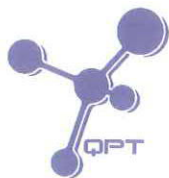
~ CONTINUED ON NEXT PAGE ~

#### Remark(s): -

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



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## REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AH040200  
Date of Issue : 04 May 2018  
Page No. : 2 of 2

### PART D – CALIBRATION RESULTS (Cont'd)

#### (3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
0.00	0.11	0.11	Satisfactory
2.56	2.68	0.12	Satisfactory
4.72	4.69	-0.03	Satisfactory
6.76	6.7	-0.06	Satisfactory

Tolerance limit of dissolved oxygen should be less than  $\pm 0.20$  (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	143.2	-2.5	Satisfactory
0.01	1412	1437	1.8	Satisfactory
0.1	12890	12840	-0.4	Satisfactory
0.5	58670	57789	-1.5	Satisfactory
1.0	111900	108344	-3.2	Satisfactory

Tolerance limit of conductivity should be less than  $\pm 10.0$  (%)

#### (5) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	9.87	-1.3	Satisfactory
20	20.23	1.2	Satisfactory
30	30.60	2.0	Satisfactory

Tolerance limit of salinity should be less than  $\pm 10.0$  (%)

#### (6) Turbidity

Expected Reading (NTU)	Displayed Reading <sup>(f)</sup> (NTU)	Tolerance <sup>(g)</sup> (%)	Results
0	0.1	--	--
10	10.1	1.0	Satisfactory
20	19.7	-1.5	Satisfactory
100	103.4	3.4	Satisfactory
800	813.2	1.7	Satisfactory

Tolerance limit of turbidity should be less than  $\pm 10.0$  (%)

~ END OF REPORT ~

#### Remark(s): -

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

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



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## REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AH040201  
Date of Issue : 04 May 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 ProDSS (Multi-Parameters)  
Manufacturer : YSI (a xylem brand)  
Serial Number : 17H105557  
Date of Received : Apr 30, 2018  
Date of Calibration : Apr 30, 2018 to Apr 30, 2018  
Date of Next Calibration<sup>(a)</sup> : Jul 30, 2018

### PART C – REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

<u>Parameter</u>	<u>Reference Method</u>
pH at 25°C	APHA 21e 4500-H <sup>+</sup> 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<sup>(b,c)</sup>

#### (1) pH at 25°C

Target (pH unit)	Displayed Reading <sup>(d)</sup> (pH Unit)	Tolerance <sup>(e)</sup> (pH Unit)	Results
4.00	4.04	0.04	Satisfactory
7.42	7.45	0.03	Satisfactory
10.01	10.07	0.06	Satisfactory

Tolerance of pH should be less than  $\pm 0.10$  (pH unit)

#### (2) Temperature

Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)	Results
13.0	13.2	0.2	Satisfactory
25.0	25.2	0.2	Satisfactory
38.0	38.1	0.1	Satisfactory

Tolerance limit of temperature should be less than  $\pm 2.0$  (°C)

~ CONTINUED ON NEXT PAGE ~

#### Remark(s): -

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



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## REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AH040201  
Date of Issue : 04 May 2018  
Page No. : 2 of 2

### PART D – CALIBRATION RESULTS (Cont'd)

#### (3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
0.00	0.14	0.14	Satisfactory
2.56	2.64	0.08	Satisfactory
4.72	4.66	-0.06	Satisfactory
6.76	6.67	-0.09	Satisfactory

Tolerance limit of dissolved oxygen should be less than  $\pm 0.20$  (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	150.1	2.2	Satisfactory
0.01	1412	1439	1.9	Satisfactory
0.1	12890	12876	-0.1	Satisfactory
0.5	58670	57766	-1.5	Satisfactory
1.0	111900	108629	-2.9	Satisfactory

Tolerance limit of conductivity should be less than  $\pm 10.0$  (%)

#### (5) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	9.9	-1.0	Satisfactory
20	20.34	1.7	Satisfactory
30	30.54	1.8	Satisfactory

Tolerance limit of salinity should be less than  $\pm 10.0$  (%)

#### (6) Turbidity

Expected Reading (NTU)	Displayed Reading <sup>(f)</sup> (NTU)	Tolerance <sup>(g)</sup> (%)	Results
0	0.1	--	--
10	10.2	2.0	Satisfactory
20	19.6	-2.0	Satisfactory
100	103	3.0	Satisfactory
800	808.3	1.0	Satisfactory

Tolerance limit of turbidity should be less than  $\pm 10.0$  (%)

~ END OF REPORT ~

#### Remark(s): -

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

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

## Appendix E. Status of Environmental Permits and Licences

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

Contract No.	Description	Location	Permit/ Reference No.	Status
P560 (R)	Notification of Construction Work under APCO	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
		Sheung Sha Chau	GW-RW0533-17	Valid until 8 Apr 2018
		Stockpiling Area	GW-RS0043-18	Valid until 13 Aug 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-RS0315-18	Superseded by GW-RS0428-18 on 29 May 2018
		Works area of 3201	GW-RS0428-18	Valid until 24 Nov 2018
	Registration as Chemical Waste Producer	Works area of 3201	WPN 5213-951-P3231-01	Completion of Registration on 9 Sep 2016

Contract No.	Description	Location	Permit/ Reference No.	Status
3202	Bill Account for disposal		A/C 7025760	Approval granted from EPD on 31 Aug 2016
	Notification of Construction Work under APCO	Works area of 3202	407624	Receipt acknowledged by EPD on 15 Sep 2016
	Construction Noise Permit (General Works)	Works area of 3202	GW-RS0316-18	Superseded by GW-RS0429-18 on 30 May 2018
		Works area of 3202	GW-RS0429-18	Valid until 24 Nov 2018
	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
3203	Bill Account for disposal		A/C 7025739	Approval granted from EPD on 31 August 2016
	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-RS0317-18	Superseded by GW-RS0430-18 on 29 May 2018
		Works area of 3203	GW-RS0430-18	Valid until 24 Nov 2018
	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
3204	Bill Account for disposal		A/C 7025846	Approval granted from EPD on 9 Sep 2016
	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-RS0318-18	Superseded by GW-RS0431-18 on 29 May 2018
		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
3205	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
	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

Contract No.	Description	Location	Permit/ Reference No.	Status
	Construction Noise Permit (General Works)	Works Area of 3205	GW-RS0319-18	Superseded by GW-RS0432-18 on 29 May 2018
		Works Area of 3205	GW-RS0432-18	Valid until 24 Nov 2018
	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
		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-RS0320-18	Valid until 10 Oct 2018
3301	Bill Account for disposal	Works area of 3206	A/C 7026398	Approval granted from EPD on 16 Nov 2016
	Notification of Construction Work under APCO	Works area of 3301	415821	Receipt acknowledged by EPD on 19 Apr 2017
	Registration as Chemical Waste Producer	Works area of 3301	WPN 5213-951-F2718-02	Completion of Registration on 9 Jun 2017
	Bill Account for disposal	Works area of 3301	A/C 7027728	Approval granted from EPD on 8 May 2017
3501	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
	Notification of Construction Work under APCO	Works area of 3501	417903	Receipt acknowledged by EPD on 13 Jun 2017
	Registration as Chemical Waste Producer	Works area of 3501	WPN 5213-951-B2520-02	Completion of Registration on 25 Jul 2017
3502	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-RS0299-18	Valid until 30 Sep 2018
	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

Contract No.	Description	Location	Permit/ Reference No.	Status
	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	424591	Receipt acknowledged by EPD on 8 Dec 2017
	Registration as Chemical Waste Producer	Works area of 3503	WPN 5113-951-L2845-02	Completion of Registration on 8 Jan 2018
	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-RS0290-18	Valid until 8 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
3801	Notification of Construction Work under APCO	Works area of 3801	418345	Receipt acknowledged by EPD on 26 Jun 2017
		Works area of 3801	430372	Receipt acknowledged by EPD on 2 Feb 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	Valid until 26 Oct 2018
		Works area of 3801	GW-RS0343-18	Valid until 29 Jun 2018
		Works area of 3801	GW-RS0229-18	Valid until 22 May 2018
			GW-RS0399-18	Valid until 22 Jul 2018

## Appendix F. 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	2	0	1
From 28 December 2015 to end of the reporting period	12	1	1

## **Appendix G. Data of SkyPier HSF Movements to/from Zhuhai and Macau (between 1 and 31 May 2018)**

**Data of SkyPier HSF Movements to/from Zhuhai and Macau (between 1 and 31 May 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-May	08:16	3A061	YFT	Arrival	12	-	-
01-May	08:17	8S210	XZM	Arrival	12.2	-	-
01-May	09:55	3A062	YFT	Arrival	12.4	-	-
01-May	10:15	3A163	YFT	Departure	12.4	-	-
01-May	10:37	8S212	XZM	Arrival	11.9	-	-
01-May	10:46	3A081	ZUI	Arrival	13.3	-	-
01-May	11:11	8S121	XZM	Departure	12.2	-	-
01-May	11:20	3A063	YFT	Arrival	11.7	-	-
01-May	12:19	3A168	YFT	Departure	11.7	-	-
01-May	12:25	3A181	ZUI	Departure	13.2	-	-
01-May	12:45	8S215	XZM	Arrival	11.6	-	-
01-May	12:56	3A064	YFT	Arrival	12.6	-	-
01-May	13:20	8S123	XZM	Departure	12.8	-	-
01-May	13:46	3A082	ZUI	Arrival	13	-	-
01-May	14:16	3A164	YFT	Departure	12.7	-	-
01-May	14:16	3A182	ZUI	Departure	12.8	-	-
01-May	14:55	3A065	YFT	Arrival	12.2	-	-
01-May	16:23	3A167	YFT	Departure	11.9	-	-
01-May	16:41	8S218	XZM	Arrival	11.4	-	-
01-May	16:44	3A083	ZUI	Arrival	12.5	-	-
01-May	16:59	8S126	XZM	Departure	12.4	-	-
01-May	16:59	3A067	YFT	Arrival	12.8	<= 5	< 1min
01-May	17:03	3A183	ZUI	Departure	11.9	-	-
01-May	19:09	3A166	YFT	Departure	12.8	-	-
01-May	19:46	3A084	ZUI	Arrival	11.9	-	-
01-May	20:20	3A185	ZUI	Departure	12.6	-	-
01-May	20:51	8S2113	XZM	Arrival	11.9	<= 5	< 1min
01-May	21:09	3A169	YFT	Departure	12.2	-	-
01-May	21:55	8S522	XZM	Departure	12.8	-	-
02-May	08:15	3A061	YFT	Arrival	11.3	-	-
02-May	08:20	8S210	XZM	Arrival	11.6	-	-
02-May	09:58	3A062	YFT	Arrival	11.2	-	-
02-May	10:13	3A163	YFT	Departure	12.6	-	-
02-May	10:36	8S212	XZM	Arrival	11.7	-	-
02-May	10:44	3A081	ZUI	Arrival	11.9	-	-
02-May	11:00	8S121	XZM	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)
02-May	11:18	3A063	YFT	Arrival	11.8	-	-
02-May	12:26	3A181	ZUI	Departure	12.3	-	-
02-May	12:27	3A168	YFT	Departure	11.1	-	-
02-May	12:44	8S215	XZM	Arrival	12.4	-	-
02-May	12:53	3A064	YFT	Arrival	11.9	-	-
02-May	13:14	8S123	XZM	Departure	11.3	-	-
02-May	13:48	3A082	ZUI	Arrival	12.5	-	-
02-May	14:12	3A182	ZUI	Departure	12.7	-	-
02-May	14:13	3A164	YFT	Departure	11.4	-	-
02-May	14:54	3A065	YFT	Arrival	12.1	-	-
02-May	16:13	3A167	YFT	Departure	10.1	-	-
02-May	16:43	3A083	ZUI	Arrival	12.9	-	-
02-May	16:47	8S218	XZM	Arrival	11.9	-	-
02-May	17:02	3A067	YFT	Arrival	12.8	-	-
02-May	17:06	3A183	ZUI	Departure	12	-	-
02-May	17:07	8S126	XZM	Departure	11.3	-	-
02-May	18:55	3A166	YFT	Departure	12.3	-	-
02-May	19:49	3A084	ZUI	Arrival	12.3	-	-
02-May	20:13	3A185	ZUI	Departure	12.9	-	-
02-May	20:51	8S2113	XZM	Arrival	11.3	-	-
02-May	20:59	3A169	YFT	Departure	12.8	-	-
02-May	22:01	8S522	XZM	Departure	11.5	-	-
03-May	08:18	3A061	YFT	Arrival	12.5	-	-
03-May	08:24	8S210	XZM	Arrival	11.3	-	-
03-May	09:59	3A062	YFT	Arrival	11.7	-	-
03-May	10:16	3A163	YFT	Departure	12	-	-
03-May	10:40	8S212	XZM	Arrival	11.5	-	-
03-May	10:46	3A081	ZUI	Arrival	11.4	-	-
03-May	11:03	8S121	XZM	Departure	11.3	-	-
03-May	11:16	3A063	YFT	Arrival	11.6	-	-
03-May	12:13	3A168	YFT	Departure	11.6	-	-
03-May	12:17	3A181	ZUI	Departure	12.6	-	-
03-May	12:41	8S215	XZM	Arrival	12.6	-	-
03-May	12:55	3A064	YFT	Arrival	12.1	-	-
03-May	13:11	8S123	XZM	Departure	12.8	-	-
03-May	13:36	3A082	ZUI	Arrival	13.8	-	-
03-May	14:13	3A182	ZUI	Departure	13.6	-	-
03-May	14:18	3A164	YFT	Departure	11.9	-	-
03-May	14:53	3A065	YFT	Arrival	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)
03-May	16:18	3A167	YFT	Departure	11.3	-	-
03-May	16:39	3A083	ZUI	Arrival	12.3	-	-
03-May	16:42	8S218	XZM	Arrival	11.2	-	-
03-May	16:58	3A067	YFT	Arrival	11.4	-	-
03-May	17:08	3A183	ZUI	Departure	11.7	-	-
03-May	17:09	8S126	XZM	Departure	13.1	-	-
03-May	18:57	3A166	YFT	Departure	12.3	-	-
03-May	19:50	3A084	ZUI	Arrival	11.7	-	-
03-May	20:12	3A185	ZUI	Departure	12.8	-	-
03-May	20:58	3A169	YFT	Departure	12.4	-	-
03-May	21:03	8S2113	XZM	Arrival	10.7	<= 5	< 1min
03-May	21:59	8S522	XZM	Departure	11.9	-	-
04-May	08:12	3A061	YFT	Arrival	11.5	-	-
04-May	08:24	8S210	XZM	Arrival	11.8	-	-
04-May	09:56	3A062	YFT	Arrival	11.1	-	-
04-May	10:13	3A163	YFT	Departure	12.9	-	-
04-May	10:32	8S212	XZM	Arrival	12.2	-	-
04-May	10:44	3A081	ZUI	Arrival	11.8	-	-
04-May	10:58	8S121	XZM	Departure	13.5	-	-
04-May	11:23	3A063	YFT	Arrival	12.6	-	-
04-May	12:16	3A181	ZUI	Departure	12.9	-	-
04-May	12:16	3A168	YFT	Departure	12.7	-	-
04-May	12:47	8S215	XZM	Arrival	10.8	-	-
04-May	12:58	3A064	YFT	Arrival	11.8	-	-
04-May	13:14	8S123	XZM	Departure	13.2	-	-
04-May	13:41	3A082	ZUI	Arrival	11.6	-	-
04-May	14:15	3A164	YFT	Departure	11.8	-	-
04-May	14:19	3A182	ZUI	Departure	11.1	-	-
04-May	15:01	3A065	YFT	Arrival	12.9	-	-
04-May	16:14	3A167	YFT	Departure	12.8	-	-
04-May	16:32	8S218	XZM	Arrival	12.2	-	-
04-May	16:39	3A083	ZUI	Arrival	12.4	-	-
04-May	16:58	3A067	YFT	Arrival	11.9	-	-
04-May	17:05	8S126	XZM	Departure	13.1	-	-
04-May	17:06	3A183	ZUI	Departure	11.9	-	-
04-May	18:56	3A166	YFT	Departure	12	-	-
04-May	19:50	3A084	ZUI	Arrival	12.2	-	-
04-May	20:14	3A185	ZUI	Departure	13.3	-	-
04-May	20:58	8S2113	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)
04-May	20:59	3A169	YFT	Departure	13.4	-	-
04-May	21:57	8S522	XZM	Departure	11.3	-	-
05-May	08:16	3A061	YFT	Arrival	13	-	-
05-May	08:18	8S210	XZM	Arrival	12.7	-	-
05-May	10:00	3A062	YFT	Arrival	12.5	-	-
05-May	10:20	3A163	YFT	Departure	12.4	-	-
05-May	10:37	8S212	XZM	Arrival	10.9	-	-
05-May	10:42	3A081	ZUI	Arrival	13	-	-
05-May	11:05	8S121	XZM	Departure	11.9	-	-
05-May	11:15	3A063	YFT	Arrival	12.3	-	-
05-May	12:22	3A168	YFT	Departure	12.7	-	-
05-May	12:23	3A181	ZUI	Departure	13.1	-	-
05-May	12:53	8S215	XZM	Arrival	11.5	-	-
05-May	12:55	3A064	YFT	Arrival	12.4	-	-
05-May	13:24	8S123	XZM	Departure	13.1	-	-
05-May	13:47	3A082	ZUI	Arrival	11.6	-	-
05-May	14:13	3A182	ZUI	Departure	12.2	-	-
05-May	14:14	3A164	YFT	Departure	12.3	-	-
05-May	15:03	3A065	YFT	Arrival	11.9	-	-
05-May	16:24	3A167	YFT	Departure	13.3	-	-
05-May	16:47	3A083	ZUI	Arrival	11.8	-	-
05-May	16:50	8S218	XZM	Arrival	11.4	-	-
05-May	16:58	3A067	YFT	Arrival	12.5	-	-
05-May	17:05	8S126	XZM	Departure	12.9	-	-
05-May	17:08	3A183	ZUI	Departure	12.3	-	-
05-May	18:57	3A166	YFT	Departure	12.4	-	-
05-May	19:53	3A084	ZUI	Arrival	12.1	-	-
05-May	20:13	3A185	ZUI	Departure	12.9	-	-
05-May	20:53	8S2113	XZM	Arrival	11.7	-	-
05-May	20:56	3A169	YFT	Departure	12.3	-	-
05-May	22:08	8S522	XZM	Departure	12.9	-	-
06-May	08:14	3A061	YFT	Arrival	12.3	-	-
06-May	08:18	8S210	XZM	Arrival	13.1	<= 5	< 1min
06-May	10:03	3A062	YFT	Arrival	12.9	-	-
06-May	10:22	3A163	YFT	Departure	13.3	-	-
06-May	10:38	8S212	XZM	Arrival	11.4	-	-
06-May	10:46	3A081	ZUI	Arrival	12.2	-	-
06-May	11:10	8S121	XZM	Departure	11.7	-	-
06-May	11:17	3A063	YFT	Arrival	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)
06-May	12:28	3A181	ZUI	Departure	12.8	-	-
06-May	12:31	3A168	YFT	Departure	11.6	-	-
06-May	12:47	8S215	XZM	Arrival	13.1	-	-
06-May	13:00	3A064	YFT	Arrival	12.4	-	-
06-May	13:21	8S123	XZM	Departure	12.3	-	-
06-May	13:52	3A082	ZUI	Arrival	11.6	-	-
06-May	14:23	3A182	ZUI	Departure	12.5	-	-
06-May	14:26	3A164	YFT	Departure	12.9	-	-
06-May	15:01	3A065	YFT	Arrival	12.5	-	-
06-May	16:25	3A167	YFT	Departure	13	-	-
06-May	16:58	3A067	YFT	Arrival	13	-	-
06-May	16:59	8S218	XZM	Arrival	12.8	-	-
06-May	17:02	3A083	ZUI	Arrival	12.3	-	-
06-May	17:13	8S126	XZM	Departure	13.3	-	-
06-May	17:22	3A183	ZUI	Departure	12.6	-	-
06-May	19:10	3A166	YFT	Departure	12.7	<= 5	< 1min
06-May	20:02	3A084	ZUI	Arrival	12.5	-	-
06-May	20:25	3A185	ZUI	Departure	13.3	-	-
06-May	21:06	8S2113	XZM	Arrival	12.6	-	-
06-May	21:09	3A169	YFT	Departure	13	-	-
06-May	22:11	8S522	XZM	Departure	12.7	-	-
07-May	08:16	8S210	XZM	Arrival	12.4	-	-
07-May	08:19	3A061	YFT	Arrival	12.1	-	-
07-May	10:03	3A062	YFT	Arrival	12.1	-	-
07-May	10:20	3A163	YFT	Departure	12.7	-	-
07-May	10:32	8S212	XZM	Arrival	12.8	-	-
07-May	10:41	3A081	ZUI	Arrival	12.6	-	-
07-May	10:59	8S121	XZM	Departure	13.4	-	-
07-May	11:22	3A063	YFT	Arrival	11.9	-	-
07-May	12:22	3A168	YFT	Departure	11.9	-	-
07-May	12:25	3A181	ZUI	Departure	12.2	-	-
07-May	12:49	8S215	XZM	Arrival	10.5	-	-
07-May	13:03	3A064	YFT	Arrival	12.1	-	-
07-May	13:18	8S123	XZM	Departure	11.7	-	-
07-May	13:42	3A082	ZUI	Arrival	11	-	-
07-May	14:16	3A164	YFT	Departure	12.7	-	-
07-May	14:18	3A182	ZUI	Departure	11.8	-	-
07-May	14:58	3A065	YFT	Arrival	11.7	-	-
07-May	16:17	3A167	YFT	Departure	13.5	-	-

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)
07-May	16:52	3A083	ZUI	Arrival	12.3	-	-
07-May	17:01	3A067	YFT	Arrival	12.9	-	-
07-May	17:05	8S218	XZM	Arrival	11	-	-
07-May	17:11	3A183	ZUI	Departure	12.8	-	-
07-May	17:29	8S126	XZM	Departure	11.6	-	-
07-May	19:09	3A166	YFT	Departure	11	-	-
07-May	19:42	3A084	ZUI	Arrival	12.2	-	-
07-May	20:15	3A185	ZUI	Departure	12.4	-	-
07-May	20:58	8S2113	XZM	Arrival	12.5	-	-
07-May	21:05	3A169	YFT	Departure	11.9	-	-
07-May	22:03	8S522	XZM	Departure	13.3	-	-
08-May	08:14	3A061	YFT	Arrival	11.4	-	-
08-May	08:20	8S210	XZM	Arrival	11.5	-	-
08-May	09:56	3A062	YFT	Arrival	13.2	-	-
08-May	10:17	3A163	YFT	Departure	13.9	-	-
08-May	10:36	3A081	ZUI	Arrival	11.6	-	-
08-May	10:39	8S212	XZM	Arrival	11.3	-	-
08-May	11:10	8S121	XZM	Departure	11.9	-	-
08-May	11:18	3A063	YFT	Arrival	11.7	-	-
08-May	12:13	3A168	YFT	Departure	12.7	-	-
08-May	12:15	3A181	ZUI	Departure	12	-	-
08-May	12:45	8S215	XZM	Arrival	12.7	-	-
08-May	12:54	3A064	YFT	Arrival	13.3	-	-
08-May	13:07	8S123	XZM	Departure	13.1	-	-
08-May	13:49	3A082	ZUI	Arrival	12.6	-	-
08-May	14:14	3A164	YFT	Departure	13.9	-	-
08-May	14:20	3A182	ZUI	Departure	12.5	-	-
08-May	14:56	3A065	YFT	Arrival	11.9	-	-
08-May	16:21	3A167	YFT	Departure	12.3	-	-
08-May	16:28	8S218	XZM	Arrival	11.6	-	-
08-May	16:46	3A083	ZUI	Arrival	11.8	-	-
08-May	17:00	3A067	YFT	Arrival	13.1	-	-
08-May	17:02	3A183	ZUI	Departure	12.4	-	-
08-May	17:07	8S126	XZM	Departure	13.4	-	-
08-May	19:11	3A166	YFT	Departure	13.1	-	-
08-May	19:35	3A084	ZUI	Arrival	11.9	-	-
08-May	20:08	3A185	ZUI	Departure	12.8	-	-
08-May	21:02	8S2113	XZM	Arrival	11	-	-
08-May	21:05	3A169	YFT	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)
08-May	21:56	8S522	XZM	Departure	11.6	-	-
09-May	08:14	3A061	YFT	Arrival	11.8	-	-
09-May	08:17	8S210	XZM	Arrival	11.8	-	-
09-May	09:56	3A062	YFT	Arrival	12.3	-	-
09-May	10:14	3A163	YFT	Departure	12.3	-	-
09-May	10:43	8S212	XZM	Arrival	11.1	-	-
09-May	10:46	3A081	ZUI	Arrival	12.1	-	-
09-May	11:06	8S121	XZM	Departure	12.5	-	-
09-May	11:21	3A063	YFT	Arrival	11.6	-	-
09-May	12:14	3A181	ZUI	Departure	12.9	-	-
09-May	12:23	3A168	YFT	Departure	12.5	-	-
09-May	12:43	8S215	XZM	Arrival	12.3	-	-
09-May	12:55	3A064	YFT	Arrival	10.7	-	-
09-May	13:18	8S123	XZM	Departure	13.2	-	-
09-May	13:45	3A082	ZUI	Arrival	11.6	-	-
09-May	14:13	3A164	YFT	Departure	11.9	-	-
09-May	14:15	3A182	ZUI	Departure	11	-	-
09-May	15:01	3A065	YFT	Arrival	11.5	-	-
09-May	16:22	3A167	YFT	Departure	12.1	-	-
09-May	16:43	8S218	XZM	Arrival	12.4	-	-
09-May	16:46	3A083	ZUI	Arrival	12	-	-
09-May	16:58	3A067	YFT	Arrival	11.7	-	-
09-May	17:07	3A183	ZUI	Departure	11.9	-	-
09-May	17:09	8S126	XZM	Departure	13.5	-	-
09-May	19:08	3A166	YFT	Departure	13.7	-	-
09-May	19:52	3A084	ZUI	Arrival	12.4	-	-
09-May	20:13	3A185	ZUI	Departure	13.3	-	-
09-May	20:49	8S2113	XZM	Arrival	12.6	-	-
09-May	21:01	3A169	YFT	Departure	12.9	-	-
09-May	21:58	8S522	XZM	Departure	12.3	-	-
10-May	08:12	3A061	YFT	Arrival	11.9	-	-
10-May	08:16	8S210	XZM	Arrival	11.7	-	-
10-May	09:55	3A062	YFT	Arrival	11.5	-	-
10-May	10:17	3A163	YFT	Departure	11.7	-	-
10-May	10:33	3A081	ZUI	Arrival	12.3	-	-
10-May	10:34	8S212	XZM	Arrival	12.1	-	-
10-May	11:09	8S121	XZM	Departure	13.2	-	-
10-May	11:14	3A063	YFT	Arrival	13.6	-	-
10-May	12:14	3A168	YFT	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)
10-May	12:20	3A181	ZUI	Departure	12.6	-	-
10-May	12:47	8S215	XZM	Arrival	12	-	-
10-May	13:00	3A064	YFT	Arrival	11.7	-	-
10-May	13:22	8S123	XZM	Departure	12.9	-	-
10-May	13:50	3A082	ZUI	Arrival	12	-	-
10-May	14:18	3A164	YFT	Departure	12.1	-	-
10-May	14:19	3A182	ZUI	Departure	12.6	-	-
10-May	14:55	3A065	YFT	Arrival	13.5	-	-
10-May	16:17	3A167	YFT	Departure	13.7	-	-
10-May	16:42	8S218	XZM	Arrival	10.9	-	-
10-May	16:51	3A083	ZUI	Arrival	12.7	-	-
10-May	17:03	3A183	ZUI	Departure	12.7	-	-
10-May	17:03	3A067	YFT	Arrival	11.6	-	-
10-May	17:03	8S126	XZM	Departure	12.5	-	-
10-May	19:00	3A166	YFT	Departure	11.3	-	-
10-May	19:56	3A084	ZUI	Arrival	12.8	-	-
10-May	20:23	3A185	ZUI	Departure	12.6	-	-
10-May	21:05	3A169	YFT	Departure	11.1	-	-
10-May	21:13	8S2113	XZM	Arrival	11.8	-	-
11-May	08:15	3A061	YFT	Arrival	11.6	-	-
11-May	08:19	8S210	XZM	Arrival	12.1	-	-
11-May	09:48	3A062	YFT	Arrival	11.7	-	-
11-May	10:14	3A163	YFT	Departure	11.9	-	-
11-May	10:31	8S212	XZM	Arrival	12.9	-	-
11-May	10:38	3A081	ZUI	Arrival	12.4	-	-
11-May	11:05	8S121	XZM	Departure	13	-	-
11-May	11:16	3A063	YFT	Arrival	12.6	-	-
11-May	12:12	3A168	YFT	Departure	12.4	-	-
11-May	12:18	3A181	ZUI	Departure	12.7	-	-
11-May	12:41	8S215	XZM	Arrival	11.9	-	-
11-May	13:00	3A064	YFT	Arrival	11.6	-	-
11-May	13:12	8S123	XZM	Departure	12.6	-	-
11-May	13:50	3A082	ZUI	Arrival	11.6	-	-
11-May	14:13	3A182	ZUI	Departure	12.5	-	-
11-May	14:15	3A164	YFT	Departure	11.8	-	-
11-May	15:02	3A065	YFT	Arrival	12.8	-	-
11-May	16:11	3A167	YFT	Departure	12.7	-	-
11-May	16:34	3A083	ZUI	Arrival	12.1	-	-
11-May	16:43	8S218	XZM	Arrival	10.2	-	-

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)
11-May	16:56	3A067	YFT	Arrival	11.6	-	-
11-May	16:57	3A183	ZUI	Departure	12.7	-	-
11-May	17:07	8S126	XZM	Departure	13.6	-	-
11-May	19:03	3A166	YFT	Departure	12.2	-	-
11-May	19:44	3A084	ZUI	Arrival	11.9	-	-
11-May	20:12	3A185	ZUI	Departure	12.2	-	-
11-May	21:01	8S2113	XZM	Arrival	0.0 **	-	-
11-May	21:10	3A169	YFT	Departure	12.3	-	-
11-May	22:00	8S522	XZM	Departure	11.7	-	-
12-May	08:20	3A061	YFT	Arrival	11.6	-	-
12-May	08:29	8S210	XZM	Arrival	11.6	-	-
12-May	09:52	3A062	YFT	Arrival	11.5	-	-
12-May	10:13	3A163	YFT	Departure	11.5	-	-
12-May	10:30	8S212	XZM	Arrival	11.9	-	-
12-May	10:39	3A081	ZUI	Arrival	12.5	-	-
12-May	11:19	8S121	XZM	Departure	12.5	-	-
12-May	11:24	3A063	YFT	Arrival	12	-	-
12-May	12:11	3A181	ZUI	Departure	11.1	-	-
12-May	12:12	3A168	YFT	Departure	12.9	-	-
12-May	12:42	8S215	XZM	Arrival	12.7	-	-
12-May	12:53	3A064	YFT	Arrival	12.1	-	-
12-May	13:17	8S123	XZM	Departure	13.2	-	-
12-May	13:51	3A082	ZUI	Arrival	12.3	-	-
12-May	14:16	3A182	ZUI	Departure	12	-	-
12-May	14:17	3A164	YFT	Departure	12.3	-	-
12-May	14:58	3A065	YFT	Arrival	12.5	-	-
12-May	16:16	3A167	YFT	Departure	12.8	-	-
12-May	16:39	8S218	XZM	Arrival	12.9	-	-
12-May	16:55	3A083	ZUI	Arrival	11.7	-	-
12-May	16:58	3A067	YFT	Arrival	11.8	-	-
12-May	17:00	8S126	XZM	Departure	13.5	-	-
12-May	17:09	3A183	ZUI	Departure	11.4	-	-
12-May	19:05	3A166	YFT	Departure	12.8	-	-
12-May	19:40	3A084	ZUI	Arrival	13	-	-
12-May	20:17	3A185	ZUI	Departure	12.9	-	-
12-May	20:54	8S2113	XZM	Arrival	11.8	-	-
12-May	21:17	3A169	YFT	Departure	11.6	-	-
12-May	21:56	8S522	XZM	Departure	11.6	-	-
13-May	08:14	3A061	YFT	Arrival	13.3	-	-

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)
13-May	08:17	8S210	XZM	Arrival	12.7	-	-
13-May	10:01	3A062	YFT	Arrival	12	-	-
13-May	10:20	3A163	YFT	Departure	12.5	-	-
13-May	10:37	8S212	XZM	Arrival	12	-	-
13-May	10:43	3A081	ZUI	Arrival	12.5	-	-
13-May	11:18	8S121	XZM	Departure	13	-	-
13-May	11:25	3A063	YFT	Arrival	13.5	-	-
13-May	12:15	3A181	ZUI	Departure	12.8	-	-
13-May	12:18	3A168	YFT	Departure	13.7	-	-
13-May	12:43	8S215	XZM	Arrival	11.7	-	-
13-May	12:54	3A064	YFT	Arrival	12	-	-
13-May	13:19	8S123	XZM	Departure	11.9	-	-
13-May	13:55	3A082	ZUI	Arrival	12.2	<= 5	< 2min
13-May	14:17	3A164	YFT	Departure	12	-	-
13-May	14:28	3A182	ZUI	Departure	12.9	-	-
13-May	14:53	3A065	YFT	Arrival	13	-	-
13-May	16:22	3A167	YFT	Departure	14.1	-	-
13-May	16:49	8S218	XZM	Arrival	11	-	-
13-May	16:58	3A083	ZUI	Arrival	12.8	-	-
13-May	17:07	3A067	YFT	Arrival	11.6	-	-
13-May	17:26	8S126	XZM	Departure	12.9	-	-
13-May	17:28	3A183	ZUI	Departure	13.6	-	-
13-May	19:14	3A166	YFT	Departure	12.2	-	-
13-May	19:58	3A084	ZUI	Arrival	12.1	-	-
13-May	20:19	3A185	ZUI	Departure	13.3	-	-
13-May	20:51	8S2113	XZM	Arrival	11.3	-	-
13-May	21:11	3A169	YFT	Departure	13.4	-	-
13-May	21:57	8S522	XZM	Departure	12	-	-
14-May	08:14	3A061	YFT	Arrival	13	-	-
14-May	08:20	8S210	XZM	Arrival	12.7	-	-
14-May	10:19	3A062	YFT	Arrival	11.8	-	-
14-May	10:35	3A163	YFT	Departure	11.8	-	-
14-May	10:47	3A081	ZUI	Arrival	12.8	-	-
14-May	10:52	8S212	XZM	Arrival	12.1	-	-
14-May	11:13	8S121	XZM	Departure	12.2	-	-
14-May	11:18	3A063	YFT	Arrival	12.3	-	-
14-May	12:29	3A168	YFT	Departure	12.2	-	-
14-May	12:33	3A181	ZUI	Departure	13.3	-	-
14-May	12:51	8S215	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)
14-May	13:08	3A064	YFT	Arrival	11.5	-	-
14-May	13:42	8S123	XZM	Departure	12.1	-	-
14-May	13:46	3A082	ZUI	Arrival	12.6	-	-
14-May	14:28	3A164	YFT	Departure	11.9	-	-
14-May	14:29	3A182	ZUI	Departure	12.5	-	-
14-May	15:14	3A065	YFT	Arrival	12	-	-
14-May	16:29	3A167	YFT	Departure	12.4	-	-
14-May	16:34	8S218	XZM	Arrival	12.4	-	-
14-May	17:05	3A083	ZUI	Arrival	12.7	-	-
14-May	17:22	8S126	XZM	Departure	12.6	-	-
14-May	17:23	3A183	ZUI	Departure	13.4	-	-
14-May	17:31	3A067	YFT	Arrival	11.3	-	-
14-May	19:26	3A166	YFT	Departure	12.6	-	-
14-May	19:55	3A084	ZUI	Arrival	13.2	-	-
14-May	20:11	3A185	ZUI	Departure	13.1	-	-
14-May	20:56	8S2113	XZM	Arrival	11.5	-	-
14-May	21:29	3A169	YFT	Departure	13.9	-	-
15-May	08:15	3A061	YFT	Arrival	11.7	-	-
15-May	08:19	8S210	XZM	Arrival	12.5	-	-
15-May	09:57	3A062	YFT	Arrival	11.7	-	-
15-May	10:20	3A163	YFT	Departure	11.9	-	-
15-May	10:39	8S212	XZM	Arrival	11.9	-	-
15-May	10:45	3A081	ZUI	Arrival	12.8	-	-
15-May	11:07	8S121	XZM	Departure	11.3	-	-
15-May	11:17	3A063	YFT	Arrival	12.1	-	-
15-May	12:07	3A168	YFT	Departure	11.6	-	-
15-May	12:14	3A181	ZUI	Departure	12.2	-	-
15-May	12:40	8S215	XZM	Arrival	12.3	-	-
15-May	12:56	3A064	YFT	Arrival	12.7	-	-
15-May	13:15	8S123	XZM	Departure	12	-	-
15-May	13:56	3A082	ZUI	Arrival	11	-	-
15-May	14:20	3A164	YFT	Departure	12	-	-
15-May	14:22	3A182	ZUI	Departure	11.1	-	-
15-May	14:58	3A065	YFT	Arrival	10.9	-	-
15-May	16:21	3A167	YFT	Departure	12.7	-	-
15-May	16:43	3A083	ZUI	Arrival	11.8	-	-
15-May	16:50	8S218	XZM	Arrival	11.6	-	-
15-May	16:58	3A067	YFT	Arrival	11.7	-	-
15-May	17:02	3A183	ZUI	Departure	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)
15-May	17:04	8S126	XZM	Departure	12.2	-	-
15-May	19:12	3A166	YFT	Departure	12.9	-	-
15-May	19:44	3A084	ZUI	Arrival	12.1	-	-
15-May	20:10	3A185	ZUI	Departure	12	-	-
15-May	20:55	8S2113	XZM	Arrival	11.5	-	-
15-May	21:12	3A169	YFT	Departure	11.8	-	-
16-May	08:12	3A061	YFT	Arrival	11.5	-	-
16-May	08:23	8S210	XZM	Arrival	13	-	-
16-May	09:55	3A062	YFT	Arrival	12.6	-	-
16-May	10:27	3A163	YFT	Departure	12.5	-	-
16-May	10:32	8S212	XZM	Arrival	13	-	-
16-May	10:43	3A081	ZUI	Arrival	13.6	-	-
16-May	11:12	8S121	XZM	Departure	13.1	-	-
16-May	11:17	3A063	YFT	Arrival	12.4	-	-
16-May	12:16	3A181	ZUI	Departure	12.8	-	-
16-May	12:25	3A168	YFT	Departure	13	-	-
16-May	12:42	8S215	XZM	Arrival	13	-	-
16-May	13:09	3A064	YFT	Arrival	12.9	-	-
16-May	13:14	8S123	XZM	Departure	11.7	-	-
16-May	13:47	3A082	ZUI	Arrival	12.6	-	-
16-May	14:22	3A182	ZUI	Departure	12.2	-	-
16-May	14:26	3A164	YFT	Departure	12.3	-	-
16-May	15:05	3A065	YFT	Arrival	12.1	-	-
16-May	16:17	3A167	YFT	Departure	11.6	-	-
16-May	16:38	3A083	ZUI	Arrival	12.8	-	-
16-May	16:40	8S218	XZM	Arrival	12.8	-	-
16-May	16:55	3A183	ZUI	Departure	12.3	-	-
16-May	16:58	3A067	YFT	Arrival	12	-	-
16-May	17:03	8S126	XZM	Departure	11.1	-	-
16-May	18:57	3A166	YFT	Departure	13.2	-	-
16-May	19:48	3A084	ZUI	Arrival	12.2	-	-
16-May	20:16	3A185	ZUI	Departure	13.2	-	-
16-May	21:08	8S2113	XZM	Arrival	11.5	-	-
16-May	21:10	3A169	YFT	Departure	12.1	-	-
16-May	22:03	8S522	XZM	Departure	11.9	-	-
17-May	08:16	3A061	YFT	Arrival	11.2	-	-
17-May	08:18	8S210	XZM	Arrival	12.4	-	-
17-May	10:02	3A062	YFT	Arrival	11.5	-	-
17-May	10:18	3A163	YFT	Departure	11.6	-	-

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)
17-May	10:30	8S212	XZM	Arrival	12.5	-	-
17-May	10:36	3A081	ZUI	Arrival	12.2	-	-
17-May	11:12	8S121	XZM	Departure	11.9	-	-
17-May	11:19	3A063	YFT	Arrival	13.5	<= 5	< 1min
17-May	12:11	3A181	ZUI	Departure	12.6	-	-
17-May	12:19	3A168	YFT	Departure	13.8	-	-
17-May	12:52	8S215	XZM	Arrival	11.8	-	-
17-May	13:01	3A064	YFT	Arrival	12	-	-
17-May	13:21	8S123	XZM	Departure	12.4	-	-
17-May	13:48	3A082	ZUI	Arrival	10.7	-	-
17-May	14:26	3A164	YFT	Departure	10.9	-	-
17-May	14:26	3A182	ZUI	Departure	12.6	-	-
17-May	14:52	3A065	YFT	Arrival	13.1	-	-
17-May	16:16	3A167	YFT	Departure	13.5	-	-
17-May	16:34	3A083	ZUI	Arrival	12.2	-	-
17-May	16:45	8S218	XZM	Arrival	11.9	-	-
17-May	17:05	3A067	YFT	Arrival	12.4	-	-
17-May	17:06	3A183	ZUI	Departure	12.1	-	-
17-May	17:07	8S126	XZM	Departure	10.8	-	-
17-May	19:07	3A166	YFT	Departure	12.4	-	-
17-May	19:44	3A084	ZUI	Arrival	11.2	-	-
17-May	20:24	3A185	ZUI	Departure	11.8	-	-
17-May	21:10	8S2113	XZM	Arrival	11.8	-	-
17-May	21:15	3A169	YFT	Departure	12.4	-	-
18-May	08:19	3A061	YFT	Arrival	12.6	-	-
18-May	08:21	8S210	XZM	Arrival	11.9	-	-
18-May	09:54	3A062	YFT	Arrival	11.7	-	-
18-May	10:12	3A163	YFT	Departure	11.9	-	-
18-May	10:35	3A081	ZUI	Arrival	10.5	-	-
18-May	10:37	8S212	XZM	Arrival	11.8	-	-
18-May	10:58	8S121	XZM	Departure	12.8	-	-
18-May	11:14	3A063	YFT	Arrival	11.8	-	-
18-May	12:18	3A168	YFT	Departure	12.2	-	-
18-May	12:19	3A181	ZUI	Departure	13.3	-	-
18-May	12:42	8S215	XZM	Arrival	13.2	-	-
18-May	12:58	3A064	YFT	Arrival	12.3	-	-
18-May	13:12	8S123	XZM	Departure	13.5	-	-
18-May	13:54	3A082	ZUI	Arrival	12.6	-	-
18-May	14:19	3A182	ZUI	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)
18-May	14:21	3A164	YFT	Departure	12.3	-	-
18-May	14:53	3A065	YFT	Arrival	12	-	-
18-May	16:13	3A167	YFT	Departure	11.5	-	-
18-May	16:36	8S218	XZM	Arrival	13	-	-
18-May	16:39	3A083	ZUI	Arrival	12.2	-	-
18-May	16:56	3A183	ZUI	Departure	11.5	-	-
18-May	17:03	3A067	YFT	Arrival	11.8	-	-
18-May	17:07	8S126	XZM	Departure	12.5	-	-
18-May	19:02	3A166	YFT	Departure	12.1	-	-
18-May	19:34	3A084	ZUI	Arrival	12.7	-	-
18-May	20:05	3A185	ZUI	Departure	11	-	-
18-May	21:04	8S2113	XZM	Arrival	10.4	-	-
18-May	21:06	3A169	YFT	Departure	11.6	-	-
18-May	22:00	8S522	XZM	Departure	12.6	-	-
19-May	08:16	3A061	YFT	Arrival	12.5	-	-
19-May	08:18	8S210	XZM	Arrival	12.3	-	-
19-May	09:51	3A062	YFT	Arrival	11.7	-	-
19-May	10:11	3A163	YFT	Departure	12.6	-	-
19-May	10:35	8S212	XZM	Arrival	11.7	-	-
19-May	10:46	3A081	ZUI	Arrival	13	-	-
19-May	11:01	8S121	XZM	Departure	12.8	-	-
19-May	11:24	3A063	YFT	Arrival	11.7	-	-
19-May	12:20	3A181	ZUI	Departure	13.7	-	-
19-May	12:21	3A168	YFT	Departure	12.1	-	-
19-May	12:51	8S215	XZM	Arrival	10.8	-	-
19-May	12:56	3A064	YFT	Arrival	12.1	-	-
19-May	13:25	8S123	XZM	Departure	13.3	-	-
19-May	13:42	3A082	ZUI	Arrival	11.5	-	-
19-May	14:17	3A182	ZUI	Departure	10	-	-
19-May	14:21	3A164	YFT	Departure	12.2	-	-
19-May	15:02	3A065	YFT	Arrival	11.2	-	-
19-May	16:08	3A167	YFT	Departure	11.7	-	-
19-May	16:38	8S218	XZM	Arrival	11.7	-	-
19-May	16:42	3A083	ZUI	Arrival	13.2	-	-
19-May	16:58	3A183	ZUI	Departure	12.4	-	-
19-May	17:01	8S126	XZM	Departure	12.8	-	-
19-May	17:08	3A067	YFT	Arrival	12	-	-
19-May	19:02	3A166	YFT	Departure	11.7	-	-
19-May	19:46	3A084	ZUI	Arrival	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)
19-May	20:09	3A185	ZUI	Departure	12.8	-	-
19-May	20:53	8S2113	XZM	Arrival	12.2	-	-
19-May	20:59	3A169	YFT	Departure	12.2	-	-
19-May	21:57	8S522	XZM	Departure	13.6	-	-
20-May	08:14	3A061	YFT	Arrival	12.5	-	-
20-May	08:22	8S210	XZM	Arrival	12.2	-	-
20-May	09:55	3A062	YFT	Arrival	13.3	-	-
20-May	10:21	3A163	YFT	Departure	13.8	-	-
20-May	10:36	8S212	XZM	Arrival	12.1	-	-
20-May	10:43	3A081	ZUI	Arrival	10.9	-	-
20-May	11:11	8S121	XZM	Departure	12.4	-	-
20-May	11:17	3A063	YFT	Arrival	12	-	-
20-May	12:28	3A168	YFT	Departure	13.3	-	-
20-May	12:30	3A181	ZUI	Departure	13.2	-	-
20-May	12:53	8S215	XZM	Arrival	11.2	-	-
20-May	12:54	3A064	YFT	Arrival	13.4	-	-
20-May	13:14	8S123	XZM	Departure	12.6	-	-
20-May	14:10	3A082	ZUI	Arrival	11.2	-	-
20-May	14:19	3A164	YFT	Departure	13.7	-	-
20-May	14:38	3A182	ZUI	Departure	12.8	-	-
20-May	14:59	3A065	YFT	Arrival	12.9	-	-
20-May	16:14	3A167	YFT	Departure	13	-	-
20-May	16:57	8S218	XZM	Arrival	11.7	-	-
20-May	16:59	3A083	ZUI	Arrival	13.5	-	-
20-May	17:02	3A067	YFT	Arrival	13.7	-	-
20-May	17:12	8S126	XZM	Departure	12.1	-	-
20-May	17:17	3A183	ZUI	Departure	12.1	-	-
20-May	19:06	3A166	YFT	Departure	12.4	-	-
20-May	19:56	3A084	ZUI	Arrival	13.2	-	-
20-May	20:14	3A185	ZUI	Departure	12.1	-	-
20-May	20:59	8S2113	XZM	Arrival	11.7	-	-
20-May	21:05	3A169	YFT	Departure	12.8	-	-
20-May	21:54	8S522	XZM	Departure	12.1	-	-
21-May	08:13	3A061	YFT	Arrival	12.2	-	-
21-May	08:24	8S210	XZM	Arrival	11.1	-	-
21-May	09:56	3A062	YFT	Arrival	12.9	-	-
21-May	10:18	3A163	YFT	Departure	12.9	-	-
21-May	10:35	8S212	XZM	Arrival	12	-	-
21-May	10:48	3A081	ZUI	Arrival	10.8	-	-

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)
21-May	11:11	8S121	XZM	Departure	11.9	<= 5	< 1min
21-May	11:20	3A063	YFT	Arrival	12.8	-	-
21-May	12:18	3A168	YFT	Departure	12.7	-	-
21-May	12:24	3A181	ZUI	Departure	13.8	-	-
21-May	12:40	8S215	XZM	Arrival	12.9	-	-
21-May	13:05	3A064	YFT	Arrival	13.1	-	-
21-May	13:18	8S123	XZM	Departure	12.9	-	-
21-May	13:41	3A082	ZUI	Arrival	11.5	-	-
21-May	14:17	3A182	ZUI	Departure	12.9	-	-
21-May	14:20	3A164	YFT	Departure	13.4	-	-
21-May	14:58	3A065	YFT	Arrival	12.5	-	-
21-May	16:20	3A167	YFT	Departure	13.2	-	-
21-May	16:28	8S218	XZM	Arrival	12.4	-	-
21-May	16:41	3A083	ZUI	Arrival	13.5	-	-
21-May	17:01	3A067	YFT	Arrival	12.5	-	-
21-May	17:03	3A183	ZUI	Departure	12.8	-	-
21-May	17:06	8S126	XZM	Departure	12.4	-	-
21-May	19:05	3A166	YFT	Departure	12.5	-	-
21-May	19:52	3A084	ZUI	Arrival	13.3	-	-
21-May	20:16	3A185	ZUI	Departure	12.4	-	-
21-May	20:56	8S2113	XZM	Arrival	12.6	-	-
21-May	21:12	3A169	YFT	Departure	13	-	-
22-May	08:13	3A061	YFT	Arrival	12.6	-	-
22-May	08:19	8S210	XZM	Arrival	13	-	-
22-May	10:05	3A062	YFT	Arrival	12.5	-	-
22-May	10:23	3A163	YFT	Departure	13.4	-	-
22-May	10:30	3A081	ZUI	Arrival	11.6	-	-
22-May	10:37	8S212	XZM	Arrival	12.4	-	-
22-May	11:13	8S121	XZM	Departure	12.7	-	-
22-May	11:22	3A063	YFT	Arrival	11.5	-	-
22-May	12:15	3A181	ZUI	Departure	11.9	-	-
22-May	12:21	3A168	YFT	Departure	11.8	-	-
22-May	12:47	8S215	XZM	Arrival	11.6	-	-
22-May	12:54	3A064	YFT	Arrival	12.3	-	-
22-May	13:19	8S123	XZM	Departure	12.3	-	-
22-May	13:39	3A082	ZUI	Arrival	12.7	-	-
22-May	14:17	3A182	ZUI	Departure	12.3	-	-
22-May	14:21	3A164	YFT	Departure	12.7	-	-
22-May	14:55	3A065	YFT	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)
22-May	16:18	3A167	YFT	Departure	12.3	-	-
22-May	16:38	3A083	ZUI	Arrival	12.4	-	-
22-May	16:40	8S218	XZM	Arrival	11	-	-
22-May	16:58	3A183	ZUI	Departure	11.5	-	-
22-May	17:03	3A067	YFT	Arrival	12	-	-
22-May	17:05	8S126	XZM	Departure	11.6	-	-
22-May	19:06	3A166	YFT	Departure	12.6	-	-
22-May	19:39	3A084	ZUI	Arrival	12	-	-
22-May	20:10	3A185	ZUI	Departure	10.5	-	-
22-May	20:57	8S2113	XZM	Arrival	12.2	-	-
22-May	21:05	3A169	YFT	Departure	12.2	-	-
23-May	08:11	3A061	YFT	Arrival	12.1	-	-
23-May	08:16	8S210	XZM	Arrival	13.5	-	-
23-May	09:57	3A062	YFT	Arrival	13.4	-	-
23-May	10:13	3A163	YFT	Departure	13.8	-	-
23-May	10:28	3A081	ZUI	Arrival	13.2	-	-
23-May	10:52	8S212	XZM	Arrival	11.8	-	-
23-May	11:14	8S121	XZM	Departure	10.4	-	-
23-May	11:18	3A063	YFT	Arrival	12.2	-	-
23-May	12:27	3A168	YFT	Departure	12.5	-	-
23-May	12:31	3A181	ZUI	Departure	11.9	-	-
23-May	12:44	8S215	XZM	Arrival	11.6	-	-
23-May	12:54	3A064	YFT	Arrival	13	-	-
23-May	13:10	8S123	XZM	Departure	11.4	-	-
23-May	13:51	3A082	ZUI	Arrival	11.8	-	-
23-May	14:15	3A164	YFT	Departure	13.2	-	-
23-May	14:17	3A182	ZUI	Departure	11.6	-	-
23-May	15:10	3A065	YFT	Arrival	11.9	-	-
23-May	16:16	3A167	YFT	Departure	12.8	-	-
23-May	16:37	8S218	XZM	Arrival	9.8	-	-
23-May	16:45	3A083	ZUI	Arrival	12.5	-	-
23-May	17:01	3A067	YFT	Arrival	13	-	-
23-May	17:08	8S126	XZM	Departure	12.3	-	-
23-May	17:11	3A183	ZUI	Departure	12.2	-	-
23-May	18:55	3A166	YFT	Departure	12.9	-	-
23-May	19:31	3A084	ZUI	Arrival	12.3	-	-
23-May	20:12	3A185	ZUI	Departure	11	-	-
23-May	20:55	8S2113	XZM	Arrival	11.6	-	-
23-May	21:01	3A169	YFT	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)
24-May	08:11	3A061	YFT	Arrival	12	-	-
24-May	08:15	8S210	XZM	Arrival	12.6	-	-
24-May	09:55	3A062	YFT	Arrival	12.1	-	-
24-May	10:15	3A163	YFT	Departure	12.6	-	-
24-May	10:38	3A081	ZUI	Arrival	12.2	-	-
24-May	10:38	8S212	XZM	Arrival	11.9	-	-
24-May	11:12	8S121	XZM	Departure	12	-	-
24-May	11:17	3A063	YFT	Arrival	11.8	-	-
24-May	12:26	3A168	YFT	Departure	12	-	-
24-May	12:33	3A181	ZUI	Departure	11.8	-	-
24-May	12:41	8S215	XZM	Arrival	12.7	-	-
24-May	12:52	3A064	YFT	Arrival	12.2	-	-
24-May	13:14	8S123	XZM	Departure	13.3	-	-
24-May	13:47	3A082	ZUI	Arrival	12.5	-	-
24-May	14:14	3A182	ZUI	Departure	13.1	-	-
24-May	14:17	3A164	YFT	Departure	12.6	-	-
24-May	15:02	3A065	YFT	Arrival	11.6	-	-
24-May	16:19	3A167	YFT	Departure	12.2	-	-
24-May	16:36	8S218	XZM	Arrival	12.6	-	-
24-May	16:41	3A083	ZUI	Arrival	10.8	-	-
24-May	16:59	8S126	XZM	Departure	13.2	-	-
24-May	17:04	3A183	ZUI	Departure	12.2	-	-
24-May	17:06	3A067	YFT	Arrival	11.8	-	-
24-May	19:00	3A166	YFT	Departure	13.1	-	-
24-May	19:30	3A084	ZUI	Arrival	12.1	-	-
24-May	20:21	3A185	ZUI	Departure	12.4	-	-
24-May	20:56	8S2113	XZM	Arrival	12.5	-	-
24-May	21:08	3A169	YFT	Departure	12.6	-	-
25-May	08:09	3A061	YFT	Arrival	12.1	-	-
25-May	08:12	8S210	XZM	Arrival	13	-	-
25-May	09:55	3A062	YFT	Arrival	11	-	-
25-May	10:22	3A163	YFT	Departure	12.2	-	-
25-May	10:26	3A081	ZUI	Arrival	12.6	-	-
25-May	10:32	8S212	XZM	Arrival	12.8	-	-
25-May	11:01	8S121	XZM	Departure	13.1	-	-
25-May	11:12	3A063	YFT	Arrival	12.6	-	-
25-May	12:21	3A181	ZUI	Departure	11.6	-	-
25-May	12:21	3A168	YFT	Departure	14	<= 5	< 1min
25-May	12:41	8S215	XZM	Arrival	11.3	-	-

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)
25-May	12:56	3A064	YFT	Arrival	11.6	-	-
25-May	13:16	8S123	XZM	Departure	13.4	-	-
25-May	13:50	3A082	ZUI	Arrival	11.7	-	-
25-May	14:14	3A182	ZUI	Departure	13.2	-	-
25-May	14:15	3A164	YFT	Departure	12.5	-	-
25-May	14:54	3A065	YFT	Arrival	12.8	-	-
25-May	16:23	3A167	YFT	Departure	13.7	-	-
25-May	16:41	3A083	ZUI	Arrival	11.9	-	-
25-May	16:50	8S218	XZM	Arrival	11.1	-	-
25-May	17:01	3A183	ZUI	Departure	11.6	-	-
25-May	17:08	3A067	YFT	Arrival	12	-	-
25-May	17:08	8S126	XZM	Departure	13.6	-	-
25-May	19:06	3A166	YFT	Departure	12.7	-	-
25-May	19:42	3A084	ZUI	Arrival	12.8	-	-
25-May	20:20	3A185	ZUI	Departure	11.8	-	-
25-May	20:55	8S2113	XZM	Arrival	12.2	-	-
25-May	21:03	3A169	YFT	Departure	13.1	-	-
25-May	22:05	8S522	XZM	Departure	11.7	-	-
26-May	08:18	3A061	YFT	Arrival	12	-	-
26-May	08:20	8S210	XZM	Arrival	13.1	-	-
26-May	09:49	3A062	YFT	Arrival	12	-	-
26-May	10:16	3A163	YFT	Departure	11.6	-	-
26-May	10:35	8S212	XZM	Arrival	12.4	-	-
26-May	10:46	3A081	ZUI	Arrival	12	-	-
26-May	11:03	8S121	XZM	Departure	13	-	-
26-May	11:17	3A063	YFT	Arrival	12.7	-	-
26-May	12:13	3A168	YFT	Departure	12.2	-	-
26-May	12:19	3A181	ZUI	Departure	12.9	-	-
26-May	12:44	8S215	XZM	Arrival	11.9	-	-
26-May	12:54	3A064	YFT	Arrival	11.8	-	-
26-May	13:14	8S123	XZM	Departure	12.8	-	-
26-May	13:39	3A082	ZUI	Arrival	11.7	-	-
26-May	14:15	3A164	YFT	Departure	11.6	-	-
26-May	14:17	3A182	ZUI	Departure	13.2	-	-
26-May	14:56	3A065	YFT	Arrival	12.3	-	-
26-May	16:15	3A167	YFT	Departure	13	-	-
26-May	16:39	8S218	XZM	Arrival	12.2	-	-
26-May	16:46	3A083	ZUI	Arrival	11.5	-	-
26-May	16:56	3A067	YFT	Arrival	11.2	-	-

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)
26-May	16:57	8S126	XZM	Departure	12.9	-	-
26-May	17:02	3A183	ZUI	Departure	11.9	-	-
26-May	19:09	3A166	YFT	Departure	12.3	-	-
26-May	19:43	3A084	ZUI	Arrival	12.3	-	-
26-May	20:11	3A185	ZUI	Departure	13.3	-	-
26-May	20:48	8S2113	XZM	Arrival	11.4	-	-
26-May	20:56	3A169	YFT	Departure	12.4	-	-
26-May	22:02	8S522	XZM	Departure	11.6	-	-
27-May	08:15	3A061	YFT	Arrival	12.2	-	-
27-May	08:20	8S210	XZM	Arrival	12.1	-	-
27-May	10:03	3A062	YFT	Arrival	11.3	-	-
27-May	10:24	3A163	YFT	Departure	10.4	-	-
27-May	10:37	8S212	XZM	Arrival	12.3	-	-
27-May	10:45	3A081	ZUI	Arrival	12.2	-	-
27-May	11:15	8S121	XZM	Departure	12	-	-
27-May	11:21	3A063	YFT	Arrival	12.6	-	-
27-May	12:25	3A181	ZUI	Departure	13.1	-	-
27-May	12:25	3A168	YFT	Departure	13.2	-	-
27-May	12:47	8S215	XZM	Arrival	12.2	-	-
27-May	12:54	3A064	YFT	Arrival	11.6	-	-
27-May	13:17	8S123	XZM	Departure	13.1	-	-
27-May	13:39	3A082	ZUI	Arrival	12.3	-	-
27-May	14:17	3A182	ZUI	Departure	12.4	-	-
27-May	14:19	3A164	YFT	Departure	10.9	-	-
27-May	15:03	3A065	YFT	Arrival	12.4	-	-
27-May	16:20	3A167	YFT	Departure	12.3	-	-
27-May	16:58	8S218	XZM	Arrival	11.9	-	-
27-May	17:04	3A083	ZUI	Arrival	12.2	-	-
27-May	17:08	3A067	YFT	Arrival	11	-	-
27-May	17:18	8S126	XZM	Departure	13.3	-	-
27-May	17:21	3A183	ZUI	Departure	13	-	-
27-May	19:06	3A166	YFT	Departure	12.4	-	-
27-May	19:56	3A084	ZUI	Arrival	13.2	-	-
27-May	20:12	3A185	ZUI	Departure	12.5	-	-
27-May	20:51	8S2113	XZM	Arrival	12.1	-	-
27-May	21:06	3A169	YFT	Departure	12.4	-	-
27-May	22:00	8S522	XZM	Departure	11.9	-	-
28-May	08:17	3A061	YFT	Arrival	11.8	-	-
28-May	08:26	8S210	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-May	09:54	3A062	YFT	Arrival	11.9	-	-
28-May	10:22	3A163	YFT	Departure	12.7	-	-
28-May	10:28	3A081	ZUI	Arrival	13.2	-	-
28-May	10:35	8S212	XZM	Arrival	12.6	-	-
28-May	11:11	8S121	XZM	Departure	12.6	-	-
28-May	11:19	3A063	YFT	Arrival	13.6	-	-
28-May	12:28	3A181	ZUI	Departure	13.5	-	-
28-May	12:32	3A168	YFT	Departure	13.7	-	-
28-May	12:40	8S215	XZM	Arrival	12.3	-	-
28-May	13:07	3A064	YFT	Arrival	12.5	-	-
28-May	13:14	8S123	XZM	Departure	13.5	-	-
28-May	13:41	3A082	ZUI	Arrival	12.7	-	-
28-May	14:21	3A164	YFT	Departure	12	-	-
28-May	14:25	3A182	ZUI	Departure	12.7	-	-
28-May	15:01	3A065	YFT	Arrival	13.4	-	-
28-May	16:12	3A167	YFT	Departure	13.8	-	-
28-May	16:40	8S218	XZM	Arrival	9.4	-	-
28-May	16:45	3A083	ZUI	Arrival	12.7	-	-
28-May	16:52	3A067	YFT	Arrival	11.4	-	-
28-May	17:05	8S126	XZM	Departure	13.4	-	-
28-May	17:08	3A183	ZUI	Departure	13.6	-	-
28-May	18:59	3A166	YFT	Departure	13.4	-	-
28-May	19:44	3A084	ZUI	Arrival	12.7	-	-
28-May	20:19	3A185	ZUI	Departure	11.7	-	-
28-May	21:00	8S2113	XZM	Arrival	11.4	-	-
28-May	21:27	3A169	YFT	Departure	12.7	-	-
29-May	08:14	3A061	YFT	Arrival	10.8	-	-
29-May	08:29	8S210	XZM	Arrival	11.9	-	-
29-May	09:57	3A062	YFT	Arrival	11.2	-	-
29-May	10:20	3A163	YFT	Departure	11.6	-	-
29-May	10:29	8S212	XZM	Arrival	12.4	-	-
29-May	10:29	3A081	ZUI	Arrival	12.2	-	-
29-May	11:06	8S121	XZM	Departure	11.8	-	-
29-May	11:13	3A063	YFT	Arrival	12	-	-
29-May	12:14	3A168	YFT	Departure	12.6	-	-
29-May	12:19	3A181	ZUI	Departure	13	-	-
29-May	12:43	8S215	XZM	Arrival	12.3	-	-
29-May	13:00	3A064	YFT	Arrival	11.8	-	-
29-May	13:14	8S123	XZM	Departure	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)
29-May	13:46	3A082	ZUI	Arrival	13	-	-
29-May	14:22	3A164	YFT	Departure	11.5	-	-
29-May	14:22	3A182	ZUI	Departure	13.2	-	-
29-May	14:57	3A065	YFT	Arrival	12.6	-	-
29-May	16:16	3A167	YFT	Departure	12.6	-	-
29-May	16:40	3A083	ZUI	Arrival	13	-	-
29-May	16:42	8S218	XZM	Arrival	11.7	-	-
29-May	16:59	3A183	ZUI	Departure	12.8	-	-
29-May	17:05	8S126	XZM	Departure	11.4	-	-
29-May	17:17	3A067	YFT	Arrival	11.6	-	-
29-May	19:01	3A166	YFT	Departure	11.5	-	-
29-May	19:46	3A084	ZUI	Arrival	12.1	-	-
29-May	20:16	3A185	ZUI	Departure	12.3	-	-
29-May	20:49	8S2113	XZM	Arrival	12.6	-	-
29-May	20:57	3A169	YFT	Departure	12.7	-	-
30-May	08:17	3A061	YFT	Arrival	12.2	-	-
30-May	08:19	8S210	XZM	Arrival	11.4	-	-
30-May	09:58	3A062	YFT	Arrival	12.4	-	-
30-May	10:37	8S212	XZM	Arrival	12.7	-	-
30-May	10:38	3A081	ZUI	Arrival	11.8	-	-
30-May	10:48	3A163	YFT	Departure	13	-	-
30-May	11:07	8S121	XZM	Departure	12.4	-	-
30-May	11:19	3A063	YFT	Arrival	11.3	-	-
30-May	12:23	3A181	ZUI	Departure	12.3	-	-
30-May	12:24	3A168	YFT	Departure	12.5	-	-
30-May	12:37	8S215	XZM	Arrival	13	-	-
30-May	13:08	3A064	YFT	Arrival	12.8	-	-
30-May	13:11	8S123	XZM	Departure	12.9	-	-
30-May	13:37	3A082	ZUI	Arrival	14.1	-	-
30-May	14:12	3A182	ZUI	Departure	13.1	-	-
30-May	14:15	3A164	YFT	Departure	13	-	-
30-May	14:58	3A065	YFT	Arrival	11.7	-	-
30-May	16:19	3A167	YFT	Departure	12.8	-	-
30-May	16:41	3A083	ZUI	Arrival	13.1	-	-
30-May	16:43	8S218	XZM	Arrival	12.4	-	-
30-May	17:03	8S126	XZM	Departure	12.6	-	-
30-May	17:04	3A183	ZUI	Departure	12.5	-	-
30-May	17:11	3A067	YFT	Arrival	12.1	-	-
30-May	19:00	3A166	YFT	Departure	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)
30-May	19:34	3A084	ZUI	Arrival	11.9	-	-
30-May	20:08	3A185	ZUI	Departure	13	-	-
30-May	20:52	8S2113	XZM	Arrival	12.3	-	-
30-May	21:01	3A169	YFT	Departure	13	-	-
30-May	22:02	8S522	XZM	Departure	12.8	-	-
31-May	08:18	3A061	YFT	Arrival	11.9	-	-
31-May	08:49	8S210	XZM	Arrival	12.8	-	-
31-May	09:58	3A062	YFT	Arrival	11.4	-	-
31-May	10:15	3A163	YFT	Departure	11.7	-	-
31-May	10:32	8S212	XZM	Arrival	11.7	-	-
31-May	10:38	3A081	ZUI	Arrival	12.7	-	-
31-May	11:05	8S121	XZM	Departure	12.3	-	-
31-May	11:14	3A063	YFT	Arrival	12.3	-	-
31-May	12:17	3A168	YFT	Departure	12.2	-	-
31-May	12:22	3A181	ZUI	Departure	13	-	-
31-May	12:39	8S215	XZM	Arrival	11.5	-	-
31-May	12:59	3A064	YFT	Arrival	12.2	-	-
31-May	13:13	8S123	XZM	Departure	13.3	-	-
31-May	13:41	3A082	ZUI	Arrival	13	-	-
31-May	14:15	3A182	ZUI	Departure	13.2	-	-
31-May	14:17	3A164	YFT	Departure	12.6	-	-
31-May	14:57	3A065	YFT	Arrival	13	-	-
31-May	16:16	3A167	YFT	Departure	12.5	-	-
31-May	16:31	3A083	ZUI	Arrival	12.8	-	-
31-May	16:38	8S218	XZM	Arrival	11	-	-
31-May	17:02	3A067	YFT	Arrival	12.6	-	-
31-May	17:03	8S126	XZM	Departure	12.6	-	-
31-May	17:16	3A183	ZUI	Departure	12.5	-	-
31-May	18:59	3A166	YFT	Departure	12.4	-	-
31-May	19:40	3A084	ZUI	Arrival	11.7	-	-
31-May	20:14	3A185	ZUI	Departure	12.7	-	-
31-May	20:54	8S2113	XZM	Arrival	11	-	-
31-May	21:12	3A169	YFT	Departure	12.2	-	-

#### Follow-up on instantaneous speeding

Referring to the data of SkyPier HSF movements in May 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 9 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, and avoiding debris. 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 May 2018. Vessel captains were requested to provide the AIS plots to indicate the vessel entered the SCZ though the gate access points with no speeding in the SCZ.