



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

Construction Phase Monthly EM&A  
Report No. 71  
(For November 2021)

December 2021

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**This Monthly EM&A Report No. 71 has been reviewed and certified by**

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

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

**Certified by:**

A handwritten signature in black ink, appearing to read 'Terence Kong', written in a cursive style.

---

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

**Date**

14 December 2021



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**By Email**

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

Attn: Mr. Lawrence Tsui, Principal Manager, Environmental Compliance

14 December 2021

Dear Sir,

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

**Submission of Monthly EM&A Report No. 71 (November 2021)**

Reference is made to the Environmental Team's submission of the Monthly EM&A Report No. 71 under Condition 3.5 of the Environmental Permit No. EP-489/2014 certified by the ET Leader on 14 December 2021.

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
CTCC	Construction Traffic Control Centre
CWD	Chinese White Dolphin
DCM	Deep Cement Mixing
DEZ	Dolphin Exclusion Zone
DO	Dissolved Oxygen
EIA	Environmental Impact Assessment
EM&A	Environmental Monitoring & Audit
EP	Environmental Permit
EPD	Environmental Protection Department
EPSS	Emergency Power Supply Systems
ET	Environmental Team
FCZ	Fish Culture Zone
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	Maritime Surveillance System
MTRMP-CAV	Marine Travel Routes and Management Plan for Construction and Associated Vessel
NEL	Northeast Lantau
NWL	Northwest Lantau
PAM	Passive Acoustic Monitoring
PM	Project Manager
SC	Sha Chau
SCZ	Speed Control Zone
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 71<sup>st</sup> Construction Phase Monthly EM&A Report for the Project which summarises the monitoring results and audit findings of the EM&A programme during the reporting period from 1 to 30 November 2021.

## **Key Activities in the Reporting Period**

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




## **EM&A Activities Conducted in the Reporting Period**

The monthly EM&A programme was undertaken in accordance with the Manual of the Project. Summary of the monitoring activities during this reporting period is presented as below:

<b>Monitoring Activities</b>	<b>Number of Sessions</b>
1-hour Total Suspended Particulates (TSP) air quality monitoring	30
Noise monitoring	20
Water quality monitoring	13
Vessel line-transect surveys for Chinese White Dolphin (CWD) monitoring	2
Land-based theodolite tracking survey effort for CWD monitoring	2

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

### **Snapshots of EM&A Activities in the Reporting Period**

		
Impact Air Quality Monitoring conducted by ET in Tin Sum Village House	On-site Checking of Construction Noise Permit conducted by ET	Inspection of Contractor's Wastewater Treatment Facility by ET

### **Results of Impact Monitoring**

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

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

The water quality monitoring results for all parameters, except suspended solids (SS), obtained during the reporting period were within the corresponding Action and Limit Levels stipulated in the EM&A programme. Relevant investigation and follow-up actions will be conducted according to the EM&A programme if the corresponding Action and Limit Levels are triggered. For SS, one of the testing results triggered the relevant Action Level, and the corresponding investigation was conducted accordingly. The investigation findings revealed that the case was 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**

#### **Reclamation Works:**

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

- Land-based ground improvement works; and
- Seawall construction.

#### **Airfield Works**

##### **Contract 3301 North Runway Crossover Taxiway**

- Cable ducting works; and
- Paving works.

##### **Contract 3302 Eastern Vehicular Tunnel Advance Works**

- Piling and structure works;
- Ducting works; and
- Backfilling and reinstatement works.

##### **Contract 3303 Third Runway and Associated Works**

- Architectural, Builder's and Finishing works;
- Footing and utilities work;
- Piling work;
- Operation of asphalt plant; and

- Cable laying and ducting works.

#### **Contract 3305 Airfield Ground Lighting System**

- Site establishment;
- Cabling works;
- Network installation; and
- Genset installation.

#### **Contract 3306 Observation Facility Control System Supporting Interim 2RS and 3RS**

- Cabling works;
- Consoles installation; and
- System and network installation.

#### **Contract 3307 Fire Training Facility**

- Architectural, Builder's and Finishing works; and
- Drainage and utilities works; and
- Building construction.

#### **Contract 3308 Foreign Object Debris Detection System**

- Site formation; and
- Foreign Object Debris Tower installation.

#### **Contract 3310 North Runway Modification Works**

- Ground improvement works.

#### **Third Runway Concourse:**

#### **Contract 3403 New Integrated Airport Centres Building and Civil Works**

- Architectural, Builder's Work and Finishing works;
- Excavation and lateral support works;
- Drainage and ducting works; and
- Underground utilities construction.

#### **Contract 3404 Integrated Airport Control System**

- Equipment installation; and
- Cable laying.

#### **Contract 3405 Third Runway Concourse Foundation and Substructure Works**

- Foundation works;
- Piling work;
- Excavation and backfilling; and
- Road formation.

#### **Contract 3408 Third Runway Concourse and Apron Works**

- Site setup works; and
- Excavation and lateral support works.

#### **Terminal 2 Expansion:**

#### **Contract 3508 Terminal 2 Expansion Works**

- Excavation and footing construction;
- Site formation;
- Drainage works;
- Reinforced concrete works; and
- Builders' works.

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

#### **Contract 3601 New Automated People Mover System (TRC Line)**

- Pull out test for guideway;
- Guidebeam installation; and
- Concreting work.

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

- Car modification; and
- Concreting work.

#### **Contract 3603 Baggage Handling System (BHS)**

- BHS installation.

### **Construction Support (Facilities):**

#### **Contract 3721 Construction Support Infrastructure Works**

- Laying of drainage pipes and ducts;
- Site clearance;
- Paving works; and
- Road works.

#### **Contract 3723 Construction Support Facilities**

- Clearance works;
- Finishing works; and
- Installation of utility services works.

### **Airport Support Infrastructure:**

#### **Contract 3801 APM and BHS Tunnels on Existing Airport Island**

- Excavation and lateral support works;
- Rebar fixing; and
- Jacking slab construction.

#### **Contract 3802 APM and BHS Tunnels and Related Works**

- Construction of Airside Fire Station and marine sediment treatment plant;
- Installation of sheet pipes and dewatering well;
- Pre-drilling;
- Ground investigation works; and
- Ducting works.

### **Construction Support (Services / Licences):**

#### **Contract 3901A Concrete Batching Facility**

- Operation of concrete batching plant; and
- Material conveyor belt construction.

#### **Contract 3901B Concrete Batching Facility**

- Operation of concrete batching plant; and
- Superstructure works for conveyor belt.

## Summary Table

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

	Yes	No	Details	Analysis / Recommendation / Remedial Actions
Breach of Limit Level <sup>^</sup>		√	No breach of Limit Level was recorded.	Nil
Breach of Action Level <sup>^</sup>		√	No breach of Action Level was recorded.	Nil
Complaint Received	√		In the previous reporting period, a complaint regarding dust issue at 3RS construction site area near northeastern quay bus station was received on 29 October 2021.	ET requested the relevant contractor to provide information related to the complaint. Regular site inspections and ad-hoc inspection were conducted in which no item related to dust issue was recorded and water spraying at the concerned location was observed. All contractors were reminded to properly implement dust suppression measures, especially water spraying at their site area in accordance with the implementation schedule in the Updated EM&A Manual. Hence, the case was considered closed.
			A complaint regarding dust issue at 3RS construction site area was received on 7 November 2021.	ET requested the relevant contractor to provide information related to the complaint. During a regular site inspection, dust was observed when there was vehicle movement on haul road, and was rectified by the contractor afterwards. An ad-hoc inspection was conducted in which water spraying at the concerned haul road was observed. All contractors were reminded to properly implement dust mitigation measures, especially water spraying on the haul road in accordance with the implementation schedule in the Updated EM&A Manual. Hence, the case was considered closed.
			Two emails regarding dust issue at 3RS construction site area were received on 15 November 2021.	The complaint is under investigation. Findings will be reported in the next Monthly EM&A Report.
			A complaint regarding Non-road Mobile Machinery (NRMM) issue at 3RS contractor's works area was received on 24 November 2021.	ET requested the relevant contractor to provide information related to the complaint. According to the information received, the contractor had obtained a valid NRMM label for the concerned vehicle. All contractors were reminded to continue and regular update their NRMM plant inventory list, to self-check and ensure proper NRMM labels are displayed on their on-site vehicles and machines.

	Yes	No	Details	Analysis / Recommendation / Remedial Actions
				Hence, the case was considered closed.
Notification of any summons and status of prosecutions		√	No notification of summons nor prosecution was received.	Nil
Change that affect the EM&A		√	There was no change to the construction works that may affect the EM&A.	Nil

Note:

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



# 1 Introduction

## 1.1 Background

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

Airport Authority Hong Kong (AAHK) commissioned Mott MacDonald Hong Kong Limited (MMHK) to undertake the role of Environmental Team (ET) for carrying out the Environmental Monitoring & Audit (EM&A) works during the construction phase of the Project in accordance with the Updated EM&A Manual (the Manual) submitted under EP Condition 3.1<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 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 summary of construction works programme can be referred to **Section 1.4**. Description of relevant contracts was presented in **Appendix A**.

## 1.2 Scope of this Report

This is the 71<sup>st</sup> Construction Phase Monthly EM&A Report for the Project which summarises the key findings of the EM&A programme during the reporting period from 1 to 30 November 2021.

## 1.3 Project Organisation

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

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<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, Environmental Compliance, Sustainability	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
Independent Environmental Checker (IEC) (AECOM Asia Company Limited)	Independent Environmental Checker	Jackel Law	3922 9376
	Deputy Independent Environmental Checker	Roy Man	3922 9141

**Reclamation Works:**

Party	Position	Name	Telephone
Contract 3206 Main Reclamation Works (ZHEC-C-CCC-CDC Joint Venture)	Project Manager	Alan Mong	3763 1352
	Environmental Officer	Zhang Bin Wang	3763 1451

**Airfield Works:**

Party	Position	Name	Telephone
Contract 3301 North Runway Crossover Taxiway (FJT-CHEC-ZHEC Joint Venture)	Deputy Project Director	Kin Hang Chung	9800 0048
	Environmental Officer	Joe Wong	6182 0351
Contract 3302 Eastern Vehicular Tunnel Advance Works (China Road and Bridge Corporation)	Project Manager	Dickey Yau	5699 4503
	Environmental Officer	Dennis Ho	5645 0563
Contract 3303 Third Runway and Associated Works (SAPR Joint Venture)	Project Manager	Andrew Keung	6277 6628
	Environmental Officer	Max Chin	6447 5707
Contract 3305 Airfield Ground Lighting System (ADB Safegate Hong Kong Limited)	Project Manager	Allam Al-Turk	2944 9725
	Environmental Officer	Calvin Sze	9205 9277
Contract 3306 Observation Facility Control System Supporting Interim 2RS and 3RS (Chinney Alliance Engineering Limited)	Project Director	Dennis Yam	9551 9920
	Environmental Officer	Billy To	9056 6300
Contract 3307 Fire Training Facility (Paul Y. Construction Company Limited)	Project Manager	Steven Meredith	6109 1813
	Environmental Officer	Albert Chan	9700 1083

Party	Position	Name	Telephone
Contract 3308 Foreign Object Debris Detection System (DAS Aviation Services Group)	Project Manager	Jeffrey Yau	9873 7422
	Environmental Officer	Terry Siu	9141 2511
Contract 3310 North Runway Modification Works (China State Construction Engineering (Hong Kong) Ltd. - Fujita Corporation Joint Venture)	Project Manager	Kingsley Chiang	9424 8437
	Environmental Officer	Federick Wong	9842 2703

### Third Runway Concourse:

Party	Position	Name	Telephone
Contract 3402 New Integrated Airport Centres Enabling Works (Wing Hing Construction Co., Ltd.)	Contract Manager	Michael Kan	9206 0550
	Environmental Officer	Lisa He	5374 3418
Contract 3403 New Integrated Airport Centres Building and Civil Works (Sun Fook Kong Construction Limited)	Project Manager	Alice Leung	9220 3162
	Environmental Officer	Ray Cheung	9785 1566
Contract 3404 Integrated Airport Control System (Shun Hing Systems Integration Co., Ltd.)	Project Manager	Andy Ng	9102 2739
	Environmental Officer	Richard Ng	9802 9577
Contract 3405 Third Runway Concourse Foundation and Substructure Works (China Road and Bridge Corporation – Bachy Soletanche Group Limited – LT Sambo Co., Ltd. Joint Venture)	Project Manager	Francis Choi	9423 3469
	Environmental Officer	Jacky Lai	9028 8975
Contract 3408 Third Runway Concourse and Apron Works (Beijing Urban Construction Group Company Limited and Chevalier (Construction) Company Limited Joint Venture)	Assistant Project Manager	Qian Zhang	5377 7976
	Environmental Officer	Malcolm Leung	7073 7559

### Terminal 2 (T2) Expansion:

Party	Position	Name	Telephone
Contract 3503 Terminal 2 Foundation and Substructure Works (Leighton – Chun Wo Joint Venture)	Project Manager	Eric Wu	3973 1718
	Environmental Officer	Rex Yiu	6465 6861

Party	Position	Name	Telephone
Contract 3508 Terminal 2 Expansion Works (Gammon Engineering & Construction Company Limited)	Project Director	Richard Ellis	6201 5637
	Environmental Officer	Fanny Law	6184 4650

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

Party	Position	Name	Telephone
Contract 3601 New Automated People Mover System (TRC Line) (CRRRC Puzhen Bombardier Transportation Systems Limited and CRRRC Nanjing Puzhen Co., Ltd. Joint Venture)	Project Manager	Hongdan Wei	158 6180 9450
	Environmental Officer	P L Wong	9143 2185
Contract 3602 Existing APM System Modification Works (Niigata Transys Co., Ltd.)	Project Manager	Kunihiro Tatecho	9755 0351
	Environmental Officer	Carrie Kwan	9276 0551
Contract 3603 3RS Baggage Handling System (VISH Consortium)	Project Manager	K C Ho	9272 9626
	Environmental Officer	Eric Ha	9215 3432

#### Construction Support (Facilities):

Party	Position	Name	Telephone
Contract 3721 Construction Support Infrastructure Works (China State Construction Engineering (Hong Kong) Ltd.)	Site Agent	Thomas Lui	9011 5340
	Environmental Officer	Xavier Lam	9493 2944
Contract 3722 Western Support Area – Construction Support Facilities (Tapbo Construction Company Limited and Konwo Modular House Limited Joint Venture)	Deputy Project Director	Philip Kong	9337 8700
	Environmental Officer	Eddie Suen	6338 8862
Contract 3723 Eastern Support Area – Construction Support Facilities (Tapbo Construction Company Limited and Konwo Modular House Ltd. Joint Venture.)	Deputy Project Director	Philip Kong	9337 8700
	Environmental Officer	Eddie Suen	6338 8862
Contract 3728 Minor Site Works (Shun Yuen Construction Company Limited)	Contract Manager	C K Liu	9194 8739
	Environmental Officer	K F Li	9086 1793

Party	Position	Name	Telephone
Contract 3733 Emergency Repair Service (Wing Hing Construction Co., Ltd.)	Project Manager	Michael Kan	9206 0550
	Environmental Officer	Lisa He	5374 3418

#### Airport Support Infrastructure:

Party	Position	Name	Telephone
Contract 3801 APM and BHS Tunnels on Existing Airport Island (China State Construction Engineering (Hong Kong) Ltd.)	Project Manager	Kingsley Chiang	9424 8437
	Environmental Officer	Eunice Kwok	9243 1331
Contract 3802 APM and BHS Tunnels and Related Works (Gammon Construction Limited)	Project Director	John Adams	6111 6989
	Environmental Officer	Phoebe Ng	9869 1105

#### Construction Support (Services / Licences):

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

## 1.4 Summary of Construction Works

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

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

## 1.5 Summary of EM&A Programme Requirements

The status for all environmental aspects are presented in **Table 1.2**. The EM&A requirements remained unchanged during the reporting period.

**Table 1.2: Summary of Status of All Environmental Aspects under the Updated EM&A Manual**

Parameters	EM&A Requirements	Status
<b>Air Quality</b>		
Baseline Monitoring	At least 14 consecutive days before commencement of construction work	The baseline air quality monitoring result has been reported in Baseline Monitoring

Parameters	EM&A Requirements	Status
		Report and submitted to EPD under EP Condition 3.4.
Impact Monitoring	At least 3 times every 6 days	On-going
<b>Noise</b>		
Baseline Monitoring	Daily for a period of at least two weeks prior to the commencement of construction works	The baseline noise monitoring result has been reported in Baseline Monitoring Report and submitted to EPD under EP Condition 3.4.
Impact Monitoring	Weekly	On-going
<b>Water Quality</b>		
General Baseline Water Quality Monitoring for reclamation, water jetting and field joint works	Three days per week, at mid-flood and mid-ebb tides, for at least four weeks prior to the commencement of marine 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	Three days per week, at mid-flood and mid-ebb tides.	On-going for reclamation works. General impact water quality monitoring for water jetting works was completed on 23 May 2017.
Initial Intensive Deep Cement Mixing (DCM) Water Quality Monitoring	At least four weeks	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	Three times per week until completion of DCM works.	Due to the completion of all marine-based DCM works within May 2021, regular DCM monitoring was ceased at all monitoring stations starting from 24 June 2021 and would be resumed if there are marine-based DCM works in the coming future.
<b>Sewerage and Sewage Treatment</b>		
Methodology for carrying out annual sewage flow monitoring for concerned gravity sewer	Methodology to be prepared and submitted to EPD one year before the scheduled commencement of operation of the proposed third runway	The proposed methodology of the annual sewage flow monitoring was approved by EPD. The annual flow monitoring has been started since June 2021.
Details of the routine H <sub>2</sub> S monitoring system for the sewerage system of 3RS	Details to be prepared and submitted to EPD at least one year before commencement of the operation of 3RS	The details of the routine H <sub>2</sub> S monitoring system will be prepared and submitted to EPD at least one year before commencement of operation of 3RS.
<b>Waste Management</b>		
Waste Monitoring	At least weekly	On-going
<b>Land Contamination</b>		
Supplementary Contamination Assessment Plan (CAP)	At least 3 months before commencement of any soil remediation works.	The Supplementary CAP was submitted and approved by EPD under EP Condition 2.20.
Contamination Assessment Report (CAR) for Golf Course	CAR to be submitted for golf course	The CAR for Golf Course was submitted and accepted by EPD.
Contamination Assessment Reports (CAR) for Terminal 2 Emergency Power Supply Systems	CAR to be submitted for Terminal 2 Emergency Power Supply Systems	The CARs for Terminal 2 Emergency Power Supply Systems were submitted and accepted by EPD.
<b>Terrestrial Ecology</b>		
Pre-construction Egret Survey Plan	Once per month in the breeding season between April and July, prior to the commencement of HDD drilling works.	The Egret Survey Plan was submitted and approved by EPD under EP Condition 2.14.
Ecological Monitoring	Monthly monitoring during the HDD construction works period from August to March.	The terrestrial ecological monitoring at Sheung Sha Chau was completed in January 2019.

Parameters	EM&A Requirements	Status
<b>Marine Ecology</b>		
Pre-Construction Phase Coral Dive Survey	Prior to marine construction works	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	As per an enhanced monitoring programme based on the Coral Translocation Plan	The post-translocation monitoring programme according to the Coral Translocation Plan was completed in April 2018.
<b>Chinese White Dolphins (CWD)</b>		
Baseline Monitoring	6 months of baseline surveys before the commencement of land formation related construction works. Vessel line transect surveys: Two full surveys per month; Land-based theodolite tracking surveys: Two days per month at the Sha Chau station and two days per month at the Lung Kwu Chau station; and Passive Acoustic Monitoring (PAM): For the whole duration of baseline period.	Baseline CWD results were reported in the CWD Baseline Monitoring Report and submitted to EPD in accordance with EP Condition 3.4.
Impact Monitoring	Vessel line transect surveys: Two full surveys per month; Land-based theodolite tracking surveys: One day per month at the Sha Chau station and one day per month at the Lung Kwu Chau station; and PAM: For the whole duration for land formation related construction works.	On-going
<b>Landscape &amp; Visual</b>		
Landscape & Visual Plan	At least 3 months before the commencement of construction works on the formed land of the Project.	The Landscape & Visual Plan was submitted and approved by EPD under EP Condition 2.18
Baseline Monitoring	One-off survey within the Project site boundary prior to commencement of any construction works	The baseline landscape & visual monitoring result has been reported in Baseline Monitoring Report and submitted to EPD under EP Condition 3.4.
Impact Monitoring	Weekly	On-going
<b>Environmental Auditing</b>		
Regular site inspection	Weekly	On-going
Marine Mammal Watching Plan (MMWP) implementation measures	Monitor and check	On-going
Dolphin Exclusion Zone (DEZ) Plan implementation measures	Monitor and check	On-going
SkyPier High Speed Ferries (HSF) implementation measures	Monitor and check	On-going
Construction and Associated Vessels Implementation measures	Monitor and check	On-going
Silt Curtain Deployment Plan implementation measures	Monitor and check	On-going
Spill Response Plan implementation measures	Monitor and check	On-going
Complaint Hotline and Email channel	Construction phase	On-going

Parameters	EM&A Requirements	Status
Environmental Log Book	Construction phase	On-going

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

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

- One skipper training session provided by ET: 3 November 2021.
- Seventeen environmental management meetings for EM&A review with works contracts: 4, 11, 12, 15, 16, 17, 18, 19, 23 and 25 November 2021.

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



## 2 Air Quality Monitoring

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

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

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

### 2.1 Action and Limit Levels

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

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

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

### 2.2 Monitoring Equipment

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

**Table 2.3: Air Quality Monitoring Equipment**

Equipment	Brand and Model	Last Calibration Date	Calibration Certificate Provided in
Portable direct reading dust meter (Laser dust monitor)	SIBATA LD-3B-2 (Serial No. 296098)	20 Oct 2021	Monthly EM&A Report No. 70, Appendix E
	SIBATA LD-3B-1 (Serial No. 597337)	10 May 2021	Monthly EM&A Report No. 65, Appendix D

### 2.3 Monitoring Methodology

#### 2.3.1 Measuring Procedure

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

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

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

### 2.3.2 Maintenance and Calibration

The portable direct reading dust meter is calibrated every year against high volume sampler (HVS) to check the validity and accuracy of the results measured by direct reading method. The calibration record of the HVS provided in Appendix D of Construction Phase Monthly EM&A Report No. 65, and the calibration certificates of portable direct reading dust meters listed in **Table 2.3** are valid in the reporting period.

## 2.4 Summary of Monitoring Results

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

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

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

Monitoring Station	1-hr TSP Concentration Range ( $\mu\text{g}/\text{m}^3$ )	Action Level ( $\mu\text{g}/\text{m}^3$ )	Limit Level ( $\mu\text{g}/\text{m}^3$ )
AR1A	21 - 132	306	500
AR2	17 - 92	298	

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

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

## 2.5 Conclusion

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

## 3 Noise Monitoring

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

**Table 3.1: Locations of Impact Noise Monitoring Stations**

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

Note:

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

### 3.1 Action and Limit Levels

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

**Table 3.2: Action and Limit Levels for Noise Monitoring**

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

Note:

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

### 3.2 Monitoring Equipment

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

**Table 3.3: Noise Monitoring Equipment**

Equipment	Brand and Model	Last Calibration Date	Calibration Certificate Provided in
Integrated Sound Level Meter	Rion NL-52 (Serial No. 00998505)	20 Mar 2021	Monthly EM&A Report No. 63, Appendix E
	Rion NL-52 (Serial No. 01287679)	20 Jun 2021	Monthly EM&A Report No. 66, Appendix D
Acoustic Calibrator	Casella CEL-120/1 (Serial No. 2383737)	20 Jun 2021	Monthly EM&A Report No. 66, Appendix D
	Castle GA607 (Serial No. 040162)	20 Mar 2021	Monthly EM&A Report No. 63, Appendix E

### 3.3 Monitoring Methodology

#### 3.3.1 Monitoring Procedure

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

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

#### 3.3.2 Maintenance and Calibration

The maintenance and calibration procedures are summarised below:

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

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

### 3.4 Summary of Monitoring Results

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

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

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

Monitoring Station	Noise Level Range, dB(A)	Limit Level, dB(A)
	L <sub>eq</sub> (30mins)	L <sub>eq</sub> (30mins)
NM1A <sup>(1)</sup>	58 - 62	75
NM4 <sup>(1)</sup>	61 - 66	70 <sup>(2)</sup>
NM5 <sup>(1)(3)</sup>	54 - 58	75
NM6 <sup>(1)(3)</sup>	62 - 68	75

Notes:

- (1) +3dB(A) Façade correction included;
- (2) Reduced to 65dB(A) during school examination periods at NM4. School examination took place from 8 to 12 November during this reporting period.
- (3) Some of the noise measurement results were higher than the baseline monitoring levels. In order to reduce the influence of non-Project related noise on the monitoring results, these measurement results were corrected with reference to the baseline monitoring levels.

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

### 3.5 Conclusion

As the construction activities were far away from the monitoring stations, major sources of noise dominating the monitoring stations observed during the construction noise impact monitoring were traffic noise near NM1A, school activities at NM4 and aircraft noise near NM5 and NM6 during this reporting period. It is considered that the monitoring work during the reporting period was effective and there was no adverse impact attributable to the Project activities.

## 4 Water Quality Monitoring

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

**Table 4.1: Monitoring Locations of Impact Water Quality Monitoring**

Monitoring Station	Description	Coordinates	
		Easting	Northing
C1	Control Station	804247	815620
C2	Control Station	806945	825682
C3 <sup>(2)</sup>	Control Station	817803	822109
IM1	Impact Station	807132	817949
IM2	Impact Station	806166	818163
IM3	Impact Station	805594	818784
IM4	Impact Station	804607	819725
IM5	Impact Station	804867	820735
IM6	Impact Station	805828	821060
IM7	Impact Station	806835	821349
IM8	Impact Station	808140	821830
IM9	Impact Station	808811	822094
IM10	Impact Station	809794	822385
IM11	Impact Station	811460	822057
IM12	Impact Station	812046	821459
SR1A <sup>(1)</sup>	Hong Kong-Zhuhai-Macao Bridge Hong Kong Boundary Crossing Facilities (HKBCF) Seawater Intake for cooling	812660	819977
SR2	Planned marine park / hard corals at The Brothers / Tai Mo To	814166	821463
SR3	Sha Chau and Lung Kwu Chau Marine Park / fishing and spawning grounds in North Lantau	807571	822147
SR4A	Sha Lo Wan	807810	817189
SR5A	San Tau Beach SSSI	810696	816593
SR6A <sup>(3)</sup>	Tai Ho Bay, Near Tai Ho Stream SSSI	814739	817963
SR7	Ma Wan Fish Culture Zone (FCZ)	823742	823636
SR8 <sup>(4)</sup>	Seawater Intake for cooling at Hong Kong International Airport (East)	811623	820390

Notes:

- (1) With the operation of HKBCF, water quality monitoring at SR1A station was commenced on 25 October 2018. To better reflect the water quality in the immediate vicinity of the intake, the monitoring location of SR1A has been shifted closer to the intake starting from 5 January 2019.
- (2) 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.
- (3) As the access to SR6 was obstructed by the construction activities and temporary structures for Tung Chung New Town Extension, the monitoring location has been relocated to SR6A starting from 8 August 2019.
- (4) The monitoring location for SR8 is subject to further changes due to silt curtain arrangements and the progressive relocation of this seawater intake.

## 4.1 Action and Limit Levels

In accordance with the Manual, baseline water quality levels at the above-mentioned representative water quality monitoring stations were established as presented in the Baseline Water Quality Monitoring Report. The Action and Limit Levels of general water quality monitoring 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 are presented in **Table 4.3**.

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

Parameters	Action Level (AL)		Limit Level (LL)	
<b>Action and Limit Levels for general water quality monitoring (excluding SR1A &amp; SR8)</b>				
DO in mg/l (Surface, Middle & Bottom)	Surface and Middle		Surface and Middle	
	4.5mg/l		4.1mg/l	5mg/l for Fish Culture Zone (SR7) only
	Bottom		Bottom	
	3.4mg/l		2.7mg/l	
Suspended Solids (SS) in mg/l	23	or 120% of upstream control station at the same tide of the same day, whichever is higher	37	or 130% of upstream control station at the same tide of the same day, whichever is higher
Turbidity in NTU	22.6		36.1	
<b>Action and Limit Levels SR1A</b>				
SS (mg/l)	33		42	
<b>Action and Limit Levels SR8</b>				
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.

**Table 4.3: The Control and Impact Stations during Flood Tide and Ebb Tide for General Water Quality 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, SR6A, SR8
<b>Ebb Tide</b>	
C1	SR4A, SR5A, SR6A
C2	IM1, IM2, IM3, IM4, IM5, IM6, IM7, IM8, IM9, IM10, IM11, IM12, SR1A, SR2, SR3, SR7, SR8

Note:

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

## 4.2 Monitoring Equipment

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

**Table 4.4: Water Quality Monitoring Equipment**

Equipment	Brand and Model	Last Calibration Date	Calibration Certificate Provided in
Multifunctional Meter (measurement of DO, pH, temperature, salinity and turbidity)	YSI ProDSS (Serial No. 21G105356)	24 Sep 2021	Monthly EM&A Report No. 69, Appendix E
	YSI ProDSS (Serial No. 18A104824)	24 Sep 2021	Monthly EM&A Report No. 69, Appendix E
	YSI ProDSS (Serial No. 15M100005)	22 Oct 2021	Monthly EM&A Report No. 70, Appendix E
	YSI ProDSS (Serial No. 16H104233)	26 Nov 2021	<b>Appendix E</b>
	YSI ProDSS (Serial No. 16H104234)	26 Nov 2021	<b>Appendix E</b>

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 SS analysis were stored in high density polythene bottles with no preservative added, packed in ice (cooled to 4°C without being frozen), delivered to the laboratory within 24 hours of collection.

#### 4.3.2 Maintenance and Calibration

##### Calibration of In-situ Instruments

All in-situ monitoring instrument was checked, calibrated and certified by a laboratory accredited under HOKLAS before use. Responses of sensors and electrodes were checked with certified standard solutions before each use.

Wet bulb calibration for a DO meter was carried out before commencement of monitoring and after completion of all measurements each day. Calibration was not conducted at each monitoring location as daily calibration is adequate for the type of DO meter employed. A zero check in distilled water was performed with the turbidity probe at least once per monitoring day. The probe was then calibrated with a solution of known NTU. In addition, the turbidity probe was calibrated at least twice per month to establish the relationship between turbidity readings (in NTU) and levels of SS (in mg/l).

Calibration certificates of the monitoring equipment used in the reporting period are listed in **Table 4.4**.

#### 4.3.3 Laboratory Measurement / Analysis

Analysis of SS 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 determination. The SS determination works were started within 24 hours after collection of the water samples. The analysis of SS have followed the standard methods summarised in **Table 4.6**. The QA/QC procedures for laboratory measurement/ analysis of SS were presented in Appendix F of the Construction Phase Monthly EM&A Report No.8.

**Table 4.6: Laboratory Measurement/ Analysis of SS**

Parameters	Instrumentation	Analytical Method	Reporting Limit
SS	Analytical Balance	APHA 2540D	2mg/l

#### 4.4 Summary of Monitoring Results

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

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

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

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

	IM1	IM2	IM3	IM4	IM5	IM6	IM7	IM8	IM9	IM10	IM11	IM12	SR1A	SR2	SR3	SR4A	SR5A	SR6A	SR7	SR8	
02/11/2021																					
04/11/2021																					
06/11/2021																					
09/11/2021																					
11/11/2021																					
13/11/2021																					
16/11/2021																					
18/11/2021																					
20/11/2021																					
23/11/2021																					
25/11/2021																					
27/11/2021																					
30/11/2021																					
No. of result triggering Action or Limit Level	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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

For SS, one of the testing results triggered the corresponding Action Level, and investigation was conducted accordingly. The case occurred at monitoring station upstream of the Project during ebb tide and would unlikely be affected by the Project.

#### 4.5 Conclusion

During the reporting period, it is noted that most of the monitoring results were within their corresponding Action and Limit Levels, while one SS measurement result triggered the corresponding Action Level, investigation was conducted accordingly.

Based on the investigation findings, the result that triggered the corresponding Action Level was 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. This case appeared to be due to natural fluctuation or other sources not related to the Project.

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

In the meantime, the contractors were reminded to implement and maintain all mitigation measures as recommended in the Manual during weekly site inspection and regular environmental management meetings.

## 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 have taken actions to implement the recommended measures. Waste management audits were carried out by ET according to the requirement of the Waste Management Plan, Updated EM&A Manual and the implementation schedule of the waste management mitigation measures in **Appendix B**.

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

**Table 5.2: Construction Waste Statistics**

	C&D <sup>(1)</sup> Material Stockpiled for Reuse or Recycle (m <sup>3</sup> )	C&D Material Reused in the Project (m <sup>3</sup> )	C&D Material Reused in other Projects (m <sup>3</sup> )	C&D Material Transferred to Public Fill (m <sup>3</sup> )	Chemical Waste (kg)	Chemical Waste (l)	General Refuse (tonne)
October 2021 <sup>(2)(3)</sup>	8,018	20,471	24,211	*3,896	30	3,400	1,744
November 2021 <sup>(2)(4)</sup>	14,080	2,611	7,039	5,493	0	1,400	2,631

Notes:

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

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

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

### 5.3 Marine Sediment Management

Marine sediment is managed according to the EIA Report, Updated EM&A Manual and Waste Management Plan of the Project. The sampling process, storage conditions of the excavated marine sediment, treatment process, final backfilling location as well as associated records were inspected and checked by ET and verified by IEC to ensure they were in compliance with the requirements as stipulated in the Waste Management Plan.

Sampling works for marine sediment generated from the reclaimed land area was on-going during the reporting period. The details of the marine sediment sampling, treatment and backfilling will be reported in the subsequent EM&A Reports upon completion.

## 6 Chinese White Dolphin Monitoring

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

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

### 6.1 Action and Limit Levels

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

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

NEL, NWL, AW, WL and SWL as a Whole	
Action Level <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 encounter rates STG & ANI of this month will be calculated from the reporting period and the two preceding survey months.
- (2) Limit Level – two consecutive running quarters mean both the running quarterly encounter rates of the preceding month and the running quarterly encounter rates of this month.
- (3) Action Level and/or Limit Level will be triggered if both STG and ANI fall below the criteria.

### 6.2 CWD Monitoring Transects and Stations

#### 6.2.1 Small Vessel Line-transect Survey

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

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

**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
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

Waypoint	Easting	Northing	Waypoint	Easting	Northing
5N	806473	808458	10N	811446	809436

### 6.2.2 Land-based Theodolite Tracking Survey

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

**Table 6.3: Land-based Theodolite Survey Station Details**

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

## 6.3 CWD Monitoring Methodology

### 6.3.1 Small Vessel Line-transect Survey

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

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

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

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

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

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

During on-effort survey periods, the survey team recorded effort data including time, position (waypoints), weather conditions (Beaufort sea state and visibility) and distance travelled in each series with assistance of a handheld GPS device. The GPS device also continuously and automatically logged data including time, position (latitude and longitude) and vessel speed throughout the entire survey.

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

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

### 6.3.2 Photo Identification

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

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

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

### 6.3.3 Land-based Theodolite Tracking Survey

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

Three surveyors (one theodolite operator, one computer operator, and one observer) were involved in each survey. Observers searched for dolphins using unaided eyes and handheld binoculars (7X50). Theodolite tracking sessions were initiated whenever an individual CWD or group of CWDs was located. Where possible, a distinguishable individual was selected, based on colouration, within the group. The focal individual was then continuously tracked via the theodolite, with a position recorded each time the dolphin surfaced. In case an individual could not be positively distinguished from other members, the group was tracked by recording positions based on a central point within the group whenever the CWD surfaced. Tracking continued until animals were lost from view; moved beyond the range of reliable visibility (>1-3km, depending on station height); or environmental conditions obstructed visibility (e.g., intense haze, Beaufort sea state >4, or sunset), at which time the research effort was terminated. In addition to the tracking of CWD, all vessels that moved within 2-3km of the station were tracked, with effort made to obtain at least two positions for each vessel.



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

## 6.4 Monitoring Results and Observations

### 6.4.1 Small Vessel Line-transect Survey

#### Survey Effort

Within this reporting period, two complete sets of small vessel line-transect surveys were conducted on the 2, 3, 4, 5, 8, 10, 11 and 12 November 2021, covering all transects in NEL, NWL, AW, WL and SWL survey areas for twice.

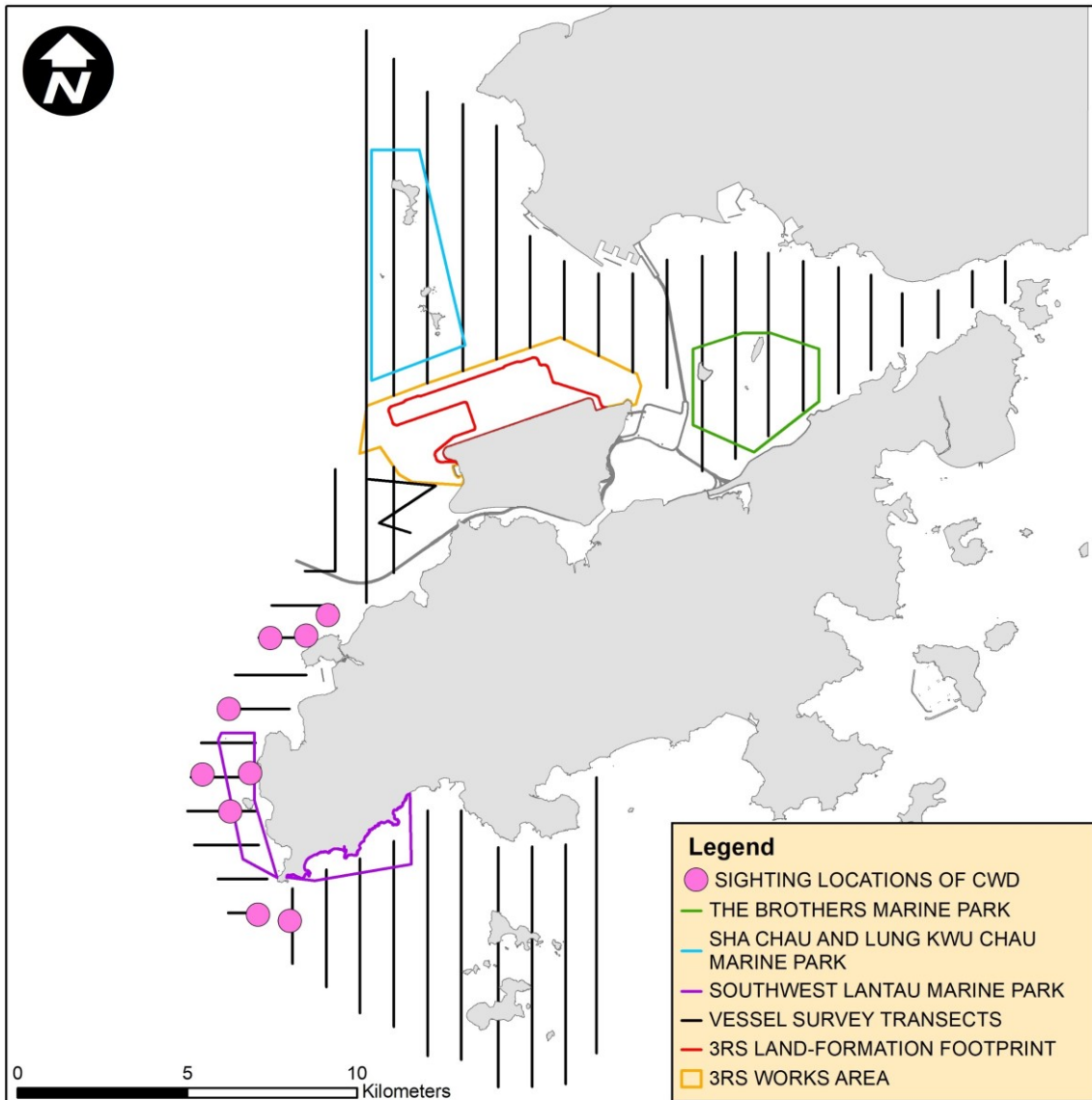
A total of around 453.75 km of survey effort was collected from these surveys and 370.62 km of the survey effort was being conducted under favourable weather condition (i.e. Beaufort Sea State 3 or below with favourable visibility). Details of the survey effort are given in **Appendix D**.

#### Sighting Distribution

In November 2021, 9 sightings with 33 dolphins were sighted. Amongst these sightings, 8 sightings of 32 dolphins were on-effort records under favourable weather condition (i.e. Beaufort Sea State 3 or below with favourable visibility). Details of cetacean sightings are presented in **Appendix D**.

Distribution of all CWD sightings recorded in November 2021 is illustrated in **Figure 6.3**. In WL, CWD groups were clustered at waters near Tai O and scattered at waters between Yi O and Fan Lau. While in SWL, the only CWD sighting was spotted off Fan Lau. There was no CWD sighting recorded in NEL and NWL survey areas during the reporting period.

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



Remarks: (1) Please note that there are 9 pink circles on the map indicating the sighting locations of CWDs. Some of them were very close to each other and therefore may appear overlapped on this distribution map. (2) Marine park excludes land area and the landward boundary generally follows the high water mark along the coastline.

**Encounter Rate**

Two types of dolphin encounter rates were calculated based on the vessel survey data. 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 November 2021, a total of around 370.62 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 32 dolphins were sighted under such condition. Calculation of the encounter rates for the month are shown in **Appendix D**.

For the running quarter of the reporting period (i.e., from September to November 2021), a total of around 1144.00 km of survey effort were conducted under Beaufort Sea State 3 or below with favourable visibility, whilst a total number of 36 on-effort sightings and a total number of 124 dolphins from on-effort sightings were obtained under such condition. Calculation of the running quarterly encounter rates are shown in **Appendix D**.

The STG and ANI of CWD in the whole survey area (i.e. NEL, NWL, AW, WL and SWL) during the month of November 2021 and during the running quarter are presented in **Table 6.4** below and compared with the Action Level. The running quarterly encounter rates STG and ANI remain above the Action Level, thus the Action Level is not triggered.

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

	Encounter Rate (STG)	Encounter Rate (ANI)
November 2021	2.16	8.63
Running Quarter from September to November 2021 <sup>(1)</sup>	3.15	10.84
Action Level	Running quarterly <sup>(1)</sup> STG < 1.86 & ANI < 9.35	

Note: (1) Running quarterly encounter rates STG & ANI were calculated from data collected in the reporting period and the two preceding survey months, i.e. the data from September to November 2021, 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 November 2021, 9 groups of 33 dolphins in total were sighted, and the average group size of CWDs was 3.7 dolphins per group. Numbers of CWD sightings with small group size (i.e. 1-2 dolphins) and medium group size (i.e. 3-9 dolphins) were similar. No CWD sighting with large group size (i.e. 10 or more dolphins) was recorded in this reporting month.

**Activities and Association with Fishing Boats**

Five CWD sightings were recorded engaging in feeding activities in November 2021. None of these sightings was observed associated with operating fishing boat.

### **Mother-calf Pair**

In November 2021, there were three CWD sightings recorded with the presence of mother-and-unspotted juvenile pair(s). Two of these sightings were recorded in WL survey area while the remaining one was recorded in SWL.

### **6.4.2 Photo Identification**

In November 2021, a total number of 16 different CWD individuals were identified for totally 20 times. A summary of photo identification works is presented in **Table 6.5**. Representative photos of these individuals are given in **Appendix D**.

**Table 6.5: Summary of Photo Identification**

Individual ID	Date of Sighting (dd-mmm-yy)	Sighting Group No.	Area	Individual ID	Date of Sighting (dd-mmm-yy)	Sighting Group No.	Area
SLMM003	04-Nov-21	3	WL	WLMM001	11-Nov-21	1	SWL
	11-Nov-21	1	SWL	WLMM003	04-Nov-21	1	WL
SLMM010	04-Nov-21	3	WL	WLMM043	03-Nov-21	1	WL
SLMM012	04-Nov-21	5	WL		04-Nov-21	1	WL
SLMM014	11-Nov-21	1	SWL	WLMM071	04-Nov-21	2	WL
SLMM027	04-Nov-21	5	WL	WLMM079	04-Nov-21	3	WL
SLMM037	04-Nov-21	3	WL		11-Nov-21	1	SWL
		5	WL	WLMM114	04-Nov-21	3	WL
SLMM058	04-Nov-21	2	WL	WLMM131	11-Nov-21	1	SWL
SLMM066	04-Nov-21	4	WL	WLMM149	04-Nov-21	2	WL

### **6.4.3 Land-based Theodolite Tracking Survey**

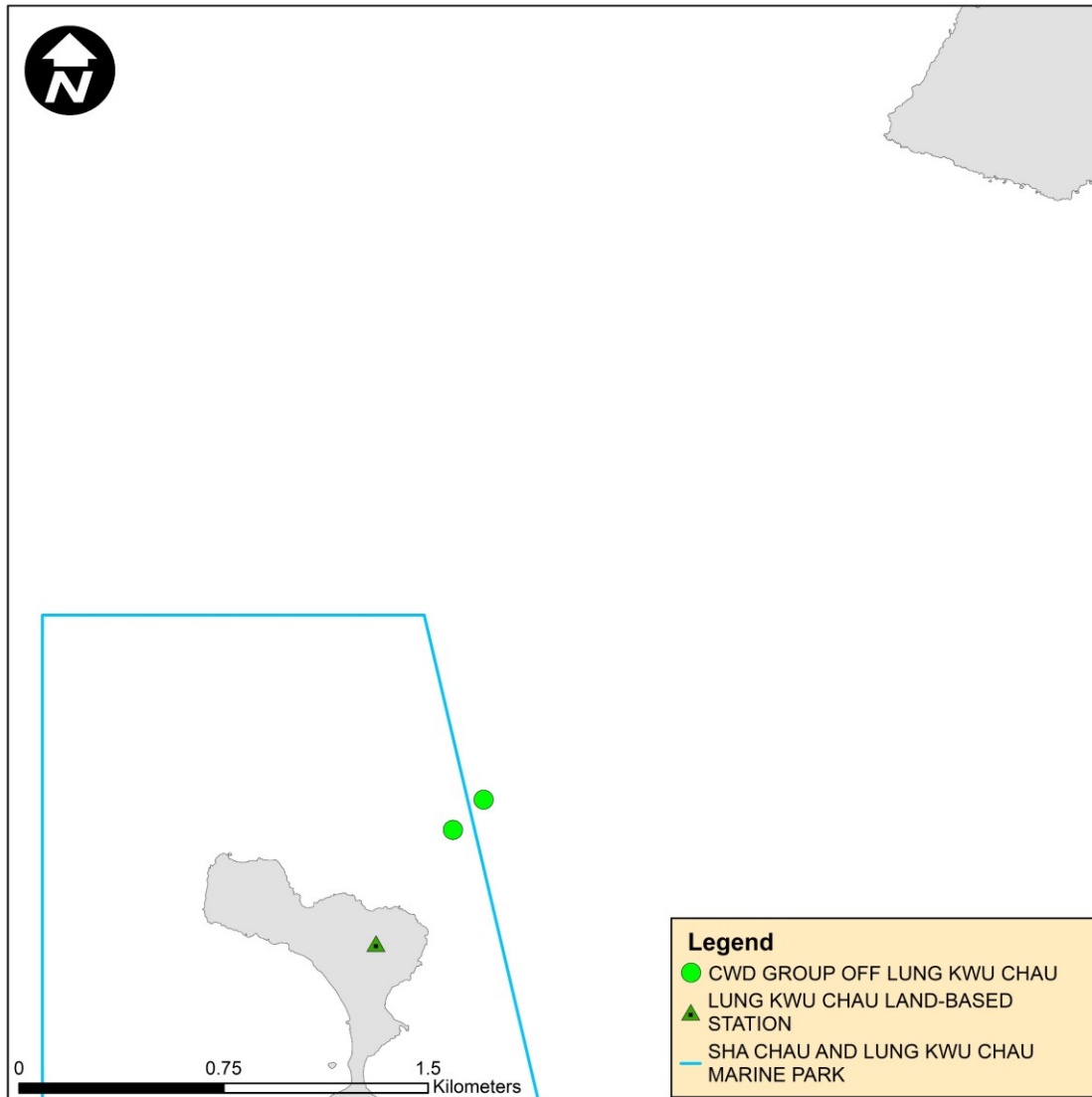
#### **Survey Effort**

Land-based theodolite tracking surveys were conducted at SC on 8 November 2021 and at LKC on 29 November 2021, with a total of two days of land-based theodolite tracking survey effort accomplished in this reporting period. Two CWD groups were tracked from LKC station during the reporting period. Information of survey effort and CWD groups are presented in **Table 6.6**. Details of the survey effort are presented in **Appendix D**. The first sighting location of CWD group tracked at LKC station during land-based theodolite tracking survey in November 2021 was depicted in **Figure 6.4**.

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

Land-based Station	No. of Survey Sessions	Survey Effort (hh:mm)	No. of CWD Groups Sighted	CWD Group Sighting per Survey Hour
Lung Kwu Chau	1	6:00	2	0.33
Sha Chau	1	6:00	0	0
<b>TOTAL</b>	<b>2</b>	<b>12:00</b>	<b>2</b>	<b>0.17</b>

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



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

## 6.5 Progress Update on Passive Acoustic Monitoring

Underwater acoustic monitoring using Passive Acoustic Monitoring (PAM) should be undertaken during land formation related construction works. Both C-POD and F-POD are considered as effective PAM devices in detecting CWD occurrence, and F-POD was the main PAM device deployed where feasible. During this reporting period, the F-POD was remained underwater and positioned at south of Sha Chau Island inside the SCLKCMP (**Figure 6.5**). The F-POD was last deployed on 11 October 2021 and the next re-deployment is scheduled in late December 2021 to retrieve the data for analysis. Acoustic data would be reviewed to give an indication of CWDs occurrence patterns and anthropogenic noise information. Analysis would involve use of proprietary software for objective automated data analyses and experienced analysts to perform visual validation for assessment of dolphin detection. As the period of data collection and analysis takes about four months, PAM results could not be reported in monthly intervals but report for supplementing the annual CWD monitoring analysis.

## 6.6 Site Audit for CWD-related Mitigation Measures

During the reporting period, silt curtains were in place by the contractor for marine filling and pile works, in which dolphin observers were deployed by contractor in accordance with the MMWP. Overall, 1 to 4 dolphin observation stations and teams of at least two dolphin observers were deployed by the contractors for continuous monitoring of the DEZ for seawall construction related works in accordance with the DEZ Plan. Trainings for the proposed dolphin observers on the implementation of MMWP and DEZ monitoring were provided by the ET prior to the aforementioned works, with a cumulative total of 704 individuals being trained and the training records kept by the ET. From the contractors' MMWP observation records, no dolphin or other marine mammals were observed within or around the silt curtains. As for DEZ monitoring records, no dolphin or other marine mammals were observed within or around the DEZs in this reporting month. These contractors' records were also audited by the ET during site inspection.

Audits of acoustic decoupling measures for construction vessels were carried out during weekly site inspection and the observations are summarised in **Section 7.1**. Audits of SkyPier high speed ferries route diversion and speed control and construction vessel management are presented in **Section 7.4** and **Section 7.5** respectively.

## 6.7 Timing of reporting CWD Monitoring Results

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

## 6.8 Summary of CWD Monitoring

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

## 7 Environmental Site Inspection and Audit

### 7.1 Environmental Site Inspection

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

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

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

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

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

### 7.2 Landscape and Visual Mitigation Measures

Implementation of applicable landscape and visual mitigation measures (reference to the environmental protection measures CM1 – CM10 in **Appendix B**) was monitored in accordance with the Manual. All measures undertaken by both the contractor and the landscape contractor during the construction phase and first year of the operation phase shall be audited by a landscape architect, as a member of the ET, on a regular basis to ensure compliance with the intended aims of the measures. Site inspections shall be undertaken at least once every two months during the operation phase.

The implementation status of the environmental protection measures are summarized below in **Table 7.1**. Examples of landscape and visual mitigation measures are shown in **Table 7.2**. The

monitoring programme for detailed design, construction, establishment works and long term management (10 years) stages is presented in **Table 7.3**. Event and Action Plan for Landscape and Visual impacts is stated in **Table 7.4**.






**Table 7.1: Landscape and Visual – Construction Phase Audit Summary**

Landscape and Visual Mitigation Measures during Construction	Implementation Status	Relevant Contract(s) in the Reporting Period
CM1- The construction area and contractor’s temporary works areas shall be minimised to avoid impacts on adjacent landscape.	The implementation of mitigation measures were checked by ET during weekly site inspection and reported by the Contractors during the monthly Environmental Management Meetings. Implementation of the measures CM5, CM6 and CM7 by Contractors was observed.	All works contracts
CM2 – Reduction of construction period to practical minimum		
CM3 – Phasing of the construction stage to reduce visual impacts during the construction phase.		
CM4 – Construction traffic (land and sea) including construction plants, construction vessels and barges shall be kept to a practical minimum.		
CM5 – Erection of decorative mesh screens or construction hoardings around works areas in visually unobtrusive colours.		
CM6 – Avoidance of excessive height and bulk of site buildings and structures		
CM7 – Control of night-time lighting by hooding all lights and through minimisation of night working periods		
CM8 – All existing trees shall be carefully protected during construction. Detailed Tree Protection Specification shall be provided in the Contract Specification. Under this specification, the Contractor shall be required to submit, for approval, a detailed working method statement for the protection of trees prior to undertaking any works adjacent to all retained trees, including trees in contractor’s works areas	Tree Protection Specifications have been provided in the relevant Contract Specifications respectively for implementation by the Contractors under the Project.	3302, 3503, 3508, 3602, 3801
	The Contractors’ performance on the implementation of the tree maintenance and protection measures were observed and checked by the ET weekly during construction period.	3802 (To be implemented)



Landscape and Visual Mitigation Measures during Construction	Implementation Status	Relevant Contract(s) in the Reporting Period
<p>CM9 – Trees unavoidably affected by the works shall be transplanted where practical. A detailed Tree Transplanting Specification shall be provided in the Contract Specification, if applicable. Sufficient time for necessary tree root and crown preparation periods shall be allowed in the project programme</p>	<p>Tree Transplanting Specifications have been provided in the relevant Contract Specifications respectively for implementation by the Contractors under the Project where trees will unavoidably be affected by the construction works.</p> <p>The Contractors were required to submit Method Statements for tree transplanting prior to the transplanting works. Tree inspections were conducted by ET to check the tree transplanting works implemented by the Contractors on site.</p> <p>The Contractors' performance on the implementation of trees maintenance and protection measures on transplanted trees were observed and checked by the ET bi-monthly during the 12-month establishment period after the completion of each batch of transplanting works.</p> <p>Long term management of the transplanted trees were currently monitored by ET annually.</p>	<p>3503, 3508, 3801</p> <p>3802 (To be implemented)</p>
<p>CM 10 – Land formation works shall be followed with advanced hydroseeding around taxiways and runways as soon as practical</p>	<p>To be implemented around taxiways and runways as soon as practicable.</p>	<p>To be implemented</p>

**Table 7.2: Examples of Landscape and Visual Mitigation Measures in the Reporting Period**

		
<p>Erection of site hoardings around works area in unobtrusive colours (CM5)</p>	<p>Avoidance of excessive height and bulk of site buildings (CM6)</p>	<p>Control of night-time lighting by hooding and minimisation of night working period (CM7)</p>
		
<p>General view of tree protection zone for retained tree (CM8)</p>	<p>General view of a transplanted tree (CM9)</p>	

In accordance with the Updated EM&A Manual, all existing trees shall be protected carefully during construction. Trees unavoidably affected by the works shall be transplanted where practical. In this reporting period, the cumulative total number of retained and transplanted trees under the Project were 57 and 26, respectively. The number of retained trees for C3801 has been changed from 15 to 17 when compared to those presented in the previous reporting month. This is because there was an update from Contractor of C3801 that only 28 trees instead of 30 trees were handed over from Contract 3801 to AAHK in October 2021. Details of the retained trees, transplanted trees and to-be-transplanted trees under the Project are summarized in **Table 7.5**.

Details of the retained trees are to be discussed in the Quarterly EM&A reports.

**Table 7.3: Monitoring Programme for Landscape and Visual**

Stage	Monitoring Task	Monitoring Report	Form of Approval	Frequency
Detailed Design	Checking of design works against the recommendations of the landscape and visual impact assessments within the EIA shall be undertaken during detailed design and tender stage, to ensure that they fulfil the intention of the mitigation measures. Any changes to the design, including design changes on site shall also be checked.	Report by AAHK / PM confirming that the design conforms to requirements of EP.	Approved by Client	At the end of the Detailed Design Phase
Construction	Checking of the contractor's operations during the construction period.	Report on Contractor's compliance, by ET	Counter signature of report by IEC	Weekly
Establishment Works	Checking of the planting works during the twelve-month Establishment Period after completion of each batch of transplanting works.	Report on Contractor's compliance, by ET	Counter signature of report by IEC	Every two months
Long Term Management (10 year)	Monitoring of the long-term management of the planting works in the period up to 10 years after completion of each batch of transplanting works.	Report on Compliance by ET or Maintenance Agency as appropriate	Counter signature of report by Management Agency	Annually

**Table 7.4: Event and Action Plan for Landscape and Visual**

Event Action Level	Action			
	ET	IEC	AAHK / PM	Contractor
Design Check	Check final design conforms to the requirements of EP and prepare report.	Check report. Recommend remedial design if necessary.	Undertake remedial design if necessary.	

Event Action Level	Action			
Non-conformity on one occasion	Identify source. Inform IEC and AAHK / PM. Discuss remedial actions with IEC, AAHK / PM and Contractor. Monitor remedial actions until rectification has been completed.	Check report. Check Contractor's working method. Discuss with ET and Contractor on possible remedial measures. Advise AAHK / PM on effectiveness of proposed remedial measures. Check implementation of remedial measures.	Notify Contractor. Ensure remedial measures are properly implemented.	Amend working methods to prevent recurrence of non-conformity. Rectify damage and undertake additional action necessary.
Repeated Non-conformity	Identify source. Inform IEC and AAHK / PM. Increase monitoring frequency. Discuss remedial actions with IEC, AAHK / PM and Contractor. Monitor remedial actions until rectification has been completed. If non-conformity stops, cease additional monitoring.	Check monitoring report. Check Contractor's working method. Discuss with ET and Contractor on possible remedial measures. Advise AAHK / PM on effectiveness of proposed remedial measures. Supervise implementation of remedial measures.	Notify Contractor. Ensure remedial measures area properly implemented.	Amend working methods to prevent recurrence of non-conformity. Rectify damage and undertake additional action necessary.

**Table 7.5: Summary of the Number of Retained, Transplanted and To-be-transplanted Trees in the Reporting Period**

Existing				
Contract	Retain (nos.)	Transplanted (nos.)		To-be-transplanted (nos.)
		Establishment Period	Maintenance Period	
3302	9	0	0	0
3503	8	6	3	0
3508 <sup>(1)</sup>	21	12	0	0
3602	2	0	0	0
3801	17	0	5 <sup>(2)</sup>	0
Sub-total	57	18	8	0
Provisional				
Contract	Retain (nos.)	Transplanted (nos.)		To-be-transplanted (nos.)
3508 <sup>(1)</sup>	51	0		10
Sub-total	51	0		10
<b>Grand Total</b>	<b>108</b>	<b>26</b>		<b>10</b>

Notes:

- (1) As some of the site areas have been handed over to Contract 3508, Contractor of Contract 3508 is currently managing the trees that are located within their site area. Existing trees to be managed by Contract 3508 is subject to change after initial tree surveys for each batch of site areas have been conducted by the Contractor.
- (2) Three transplanted trees (CT1194, CT1794 and CT1795) were subsequently felled after transplantation. Please refer to **Table 7.6** for details.

Summary of the updated transplanted trees and photos are presented in **Table 7.6** and **Table 7.7** respectively.

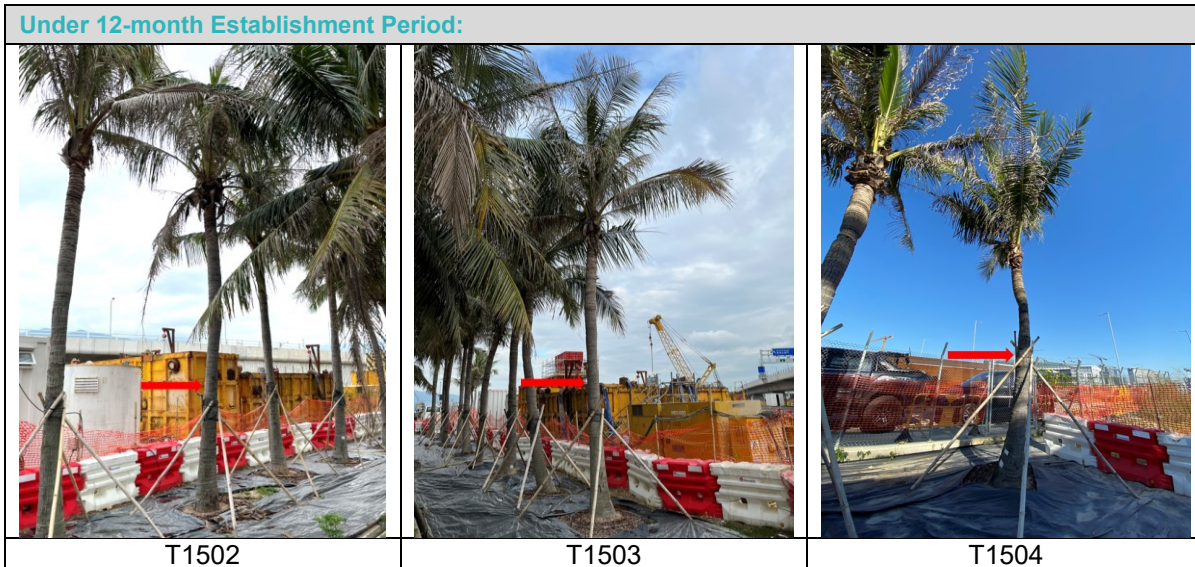
**Table 7.6: Summary of the Transplanted Trees Updated in the Reporting Period**

Tree ID	Transplant Date	Management Stage	Management Agency	Remarks
CT276	3 May 2018	<u>Establishment period</u> 4 May 2018 – May 2019	Contract 3801	Next inspection will be conducted in February 2022. Photos of the last inspection in February 2021 can be referred to Table 7.7 of the Construction Phase Monthly EM&A Report No.62.
		<u>Long Term Management period</u> Jun 2019 – May 2028	Southern Landside Petrol Filling Station	
CT1253	4 May 2018	<u>Establishment period</u> 5 May 2018 – May 2019	Contract 3801	
		<u>Long Term Management period</u> Jun 2019 – May 2028	Southern Landside Petrol Filling Station	
T835	22 Jan 2020	<u>Establishment period</u> 23 Jan 2020 – Jan 2021	Contract 3503	Next inspection will be conducted in February 2022. Photos of the last inspection in February 2021 can be referred to Table 7.7 of the Construction Phase Monthly EM&A Report No.62.
		<u>Long Term Management period</u> Feb 2021 – Jan 2030		
T836	13 Dec 2019	<u>Establishment period</u> 14 Dec 2020 – Jan 2021	Contract 3503	
		<u>Long Term Management period</u> Feb 2021 – Jan 2030		
T838	22 Jan 2020	<u>Establishment period</u> 23 Jan 2020 – Jan 2021	Contract 3503	
		<u>Long Term Management period</u> Feb 2021 – Jan 2030		
T812	21 Dec 2020	<u>Establishment period</u> 22 Dec 2020 – Dec 2021	Contract 3503	Next inspection will be conducted in December 2021. Photos of the last inspection in October 2021 can be referred to Table 7.7 of the Construction Phase Monthly EM&A Report No.70.
T814	20 Dec 2020	<u>Establishment period</u> 21 Dec 2020 – Dec 2021	Contract 3503	
T815	15 Dec 2020	<u>Establishment period</u> 16 Dec 2020 – Dec 2021	Contract 3503	
T829	18 Dec 2020	<u>Establishment period</u> 19 Dec 2020 – Dec 2021	Contract 3503	
T830	14 Dec 2020	<u>Establishment period</u> 15 Dec 2020 – Dec 2021	Contract 3503	
T831	19 Dec 2020	<u>Establishment period</u> 20 Dec 2020 – Dec 2021	Contract 3503	
T1493	6 Jul 2021	<u>Establishment period</u> 7 Jul 2021 – Jul 2022	Contract 3508	Next inspection will be conducted in January 2022. Photos of the last inspection in November 2021 were shown in <b>Table 7.7</b> .
T1494	6 Jul 2021	<u>Establishment period</u> 7 Jul 2021 – Jul 2022	Contract 3508	
T1495	10 Jul 2021	<u>Establishment period</u> 11 Jul 2021 – Jul 2022	Contract 3508	

Tree ID	Transplant Date	Management Stage	Management Agency	Remarks
T1496	5 Jul 2021	<u>Establishment period</u> 6 Jul 2021 – Jul 2022	Contract 3508	
T1497	5 Jul 2021	<u>Establishment period</u> 6 Jul 2021 – Jul 2022	Contract 3508	
T1498	29 Jun 2021	<u>Establishment period</u> 30 Jun 2021 – Jul 2022	Contract 3508	
T1499	29 Jun 2021	<u>Establishment period</u> 30 Jun 2021 – Jul 2022	Contract 3508	
T1500	30 Jun 2021	<u>Establishment period</u> 1 Jul 2021 – Jul 2022	Contract 3508	
T1501	30 Jun 2021	<u>Establishment period</u> 1 Jul 2021 – Jul 2022	Contract 3508	
T1502	5 Jul 2021	<u>Establishment period</u> 6 Jul 2021 – Jul 2022	Contract 3508	
T1503	6 Jul 2021	<u>Establishment period</u> 7 Jul 2021 – Jul 2022	Contract 3508	
T1504	24 Jun 2021	<u>Establishment period</u> 25 Jun 2021 – Jul 2022	Contract 3508	
CT1194	4 May 2018	<u>Establishment period</u> 5 May 2018 – May 2019  <u>Long Term Management period</u> Jun 2019 – May 2028	Contract 3801  Southern Landside Petrol Filling Station	NA  Uprooted and collapsed due to Typhoon Higos on 18 August 2020. Tree removal was conducted as recommended by tree specialist of the contractor of Southern Landside Petrol Filing Station.
CT1794	3 May 2018	<u>Establishment period</u> 4 May 2018 – May 2019  <u>Long Term Management period</u> Jun 2019 – May 2028	Contract 3801  AsiaWorld-Expo	NA  The tree within the land parcel was acquired by the government for construction of emergency hospital to handle COVID19 pandemic at AsiaWorld-Expo. The tree was felled in late 2020.
CT1795	3 May 2018	<u>Establishment period</u> 4 May 2018 – May 2019  <u>Long Term Management period</u> Jun 2019 – May 2028	Contract 3801  AsiaWorld-Expo	NA  The tree within the land parcel was acquired by the government for construction of emergency hospital to handle COVID19 pandemic at AsiaWorld-Expo. The tree was felled in late 2020.

**Table 7.7: Photos of the Existing Transplanted Trees Inspected in this Reporting Month**

Under 12-month Establishment Period:		
 <p>T1493</p>	 <p>T1494</p>	 <p>T1495</p>
 <p>T1496</p>	 <p>T1497</p>	 <p>T1498</p>
 <p>T1499</p>	 <p>T1500</p>	 <p>T1501</p>



### 7.3 Land Contamination Assessment

The Supplementary CAP was submitted to EPD pursuant to EP Condition 2.20. The CARs for Golf Course and T2 Emergency Power Supply Systems (EPSS) were submitted to EPD in accordance with EP Condition 1.9 and the Supplementary CAP in which no land contamination issues were identified. EPD has issued no further comment for aforesaid CARs. No leakage was found after the removal of underground fuel pipelines of T2 EPSS and all required additional photos have been submitted to EPD.

According to the approved supplementary CAP, there are 3 remaining locations where site re-appraisal / additional site investigation are proposed. Based on the latest construction information, there is no development programme for these locations at this stage. As such, the status of site re-appraisal/ additional site investigation shall be further updated upon latest development programme is available.

### 7.4 Audit of SkyPier High Speed Ferries

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

Due to the COVID-19 pandemic, all SkyPier HSF services to/from Zhuhai and Macau have been suspended from 25 March 2020 until further notice. No ferry movement between HKIA SkyPier and Zhuhai and Macau was recorded in November 2021. Key audit findings for the SkyPier HSFs travelling to/from Zhuhai and Macau against the requirements of the SkyPier Plan during the reporting period are summarised in **Table 7.8**.

The daily movement of all SkyPier HSFs, including those not using the diverted route, in this reporting period (i.e., 3 to 4 daily movements) were within the maximum daily cap of 125 daily movements. Status of compliance with the annual daily average of 99 movements will be further reviewed in the Annual EM&A Report.

As updated by CLP Power, the construction works of the Hong Kong Offshore LNG Terminal Project may affect the route diversion operation of the SkyPier HSFs from Q3 to Q4 2021. The captains were informed on the issue and ET will continue to closely monitor the implementation of the SkyPier Plan in the period.

**Table 7.8: Summary of Key Audit Findings against the SkyPier Plan**

Requirements in the SkyPier Plan	1 to 30 November 2021
Total number of ferry movements recorded and audited for HSF to/from Zhuhai and Macau	0
Use diverted route and enter / leave SCZ through Gate Access Points	0 deviation
Daily Cap for all SkyPier HSFs including those not using diverted route	3 to 4 daily movement (within the maximum daily cap - 125 daily movements)

### 7.5 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 May 2020 by EPD under EP Condition 2.9. The approved Plan is available on the dedicated website of the Project.

ET carried out the following actions during the reporting period:

- One skipper training session was held for contractors' concerned skippers of relevant construction vessels to familiarize them with the predefined routes; general education on local cetaceans; guidelines for avoiding adverse water quality impact; the required environmental practices / measures while operating construction and associated vessels under the Project; and guidelines for operating vessels safely in the presence of CWDs. The list of all trained skippers was properly recorded and maintained by ET.
- Four skipper training sessions were held by contractors' Environmental Officers. Competency tests were subsequently conducted with the trained skippers by ET. The list of all trained skippers was properly recorded and maintained by ET.
- In this reporting period, 9 skippers were trained by ET and 4 skippers were trained by contractors' Environmental Officers. In total, 1831 skippers were trained from August 2016 to November 2021.
- The MSS automatically recorded deviation cases such as speeding, entering no entry zone and not travelling through the designated gate. ET conducted checking to ensure the MSS records deviation cases accurately.
- Deviations such as speeding in the works area, entered no entry zone, and entering from non-designated gates were identified. All the concerned contractors were reminded to comply with the requirements of the MTRMP-CAV during the bi-weekly Construction Traffic Control Centre (CTCC) 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.

### 7.6 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 bored piling and seawall construction according to their Method Statement for DEZ Monitoring that followed the specifications and requirements of the DEZ Plan.



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

## 7.7 Status of Submissions under Environmental Permits

The current status of submissions under the EP up to the reporting period is presented in **Table 7.9**.

**Table 7.9: Status of Submissions under Environmental Permit**

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

## 7.8 Compliance with Other Statutory Environmental Requirements

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

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

### 7.9.1 Complaints

#### **Complaint received in the previous reporting period**

As reported in the previous Monthly EM&A Report, a complaint regarding dust issue at 3RS construction site area near northeastern quay bus station was received on 29 October 2021. The case was investigated by ET in accordance with the Manual and the Complaint Management Plan of the Project. From the two videos provided by the complainant, ET recognized the location, identified a related contractor and requested them to provide information regarding the complaint. According to the information received, the concerned location is the haul road that link to the bus

station at 3RS northeastern quay. Based on the ET's weekly site inspections, no item related to dust issue on the above-mentioned haul road was recorded on the site environmental checklist. And during a joint ad-hoc inspection as conducted by EPD, ET, IEC, and AAHK around the public haul road near bus station of northeastern quay, water spraying at the concerned haul road was observed. Nevertheless, all air quality monitoring results from 27 October to 2 November 2021 were within the corresponding Action and Limit Levels. ET would continue to monitor the contractor's dust control layout plan and reminded all contractors to properly implement dust suppression measures, especially water spraying at their site area in accordance with the implementation schedule in the Updated EM&A Manual. Hence, the case was considered closed.

#### **Complaint received in this reporting period**

A complaint regarding dust issue at 3RS construction site area was received on 7 November 2021. The case was investigated by ET in accordance with the Manual and the Complaint Management Plan of the Project. From the photos provided by the complainant, ET recognized the location, identified a related contractor and requested them to provide information regarding the complaint. According to the contractor, water tankers were arranged to carry out water spraying for the site. The contractor also reviewed their dust control management plan and provided enhancement measures including the designation of a water tanker focusing on the watering along the concerned haul road, and extra water spraying at the related area by workers. At ET's weekly site inspection in early November 2021, dust was observed during vehicle movement on haul road and the contractor rectified the issue by providing photos on the next day documenting water spraying on haul road. A joint ad-hoc inspection by EPD, ET, IEC, and AAHK was also conducted around the concerned location after receiving the complaint, in which water spraying for the concerned haul road was observed. In parallel, all air quality monitoring results from 1 November to 8 November 2021 were within the corresponding Action and Limit Levels. ET would continue to monitor contractor's performance of water spraying in accordance with their dust control management plan and reminded all contractors to properly implement dust mitigation measures, especially water spraying on the haul road in accordance with the implementation schedule in the Updated EM&A Manual. Hence, the case was considered closed.

A complaint regarding Non-road Mobile Machinery (NRMM) issue at 3RS contractor's works area was received on 24 November 2021. The case was investigated by ET in accordance with the Manual and the Complaint Management Plan of the Project. From the photos provided by the complainant, ET recognized the location, identified a contractor and requested them to provide information regarding the complaint. According to the contractor, their concerned concrete pump truck (special purpose vehicle) has obtained a valid NRMM label. The contractor provided relevant photos of their concrete pump truck and NRMM label. The ET and IEC conducted NRMM random checks on the contractor during weekly site inspections and the ET reminded the contractor to display NRMM labels at conspicuous positions on their machines or vehicles and to strictly follow the NRMM labelling requirements and to have the label sizes of at least 200mm in width and 130 mm in height. The ET reminded all contractors to check and ensure proper NRMM labels are displayed on their on-site vehicles and machines. Hence the complaint case was considered closed.

Two emails regarding dust issue at 3RS construction site area were received on 15 November 2021. The case is under investigation and findings of the investigation will be reported in the next Monthly EM&A Report.

#### **7.9.2 Notifications of Summons or Status of Prosecution**

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

### 7.9.3 Cumulative Statistics

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

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

### 8.1 Construction Programme for the Coming Reporting Period

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

#### **Reclamation Works:**

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

- Land-based ground improvement works; and
- Seawall construction.

#### **Airfield Works:**

##### **Contract 3301 North Runway Crossover Taxiway**

- Cable ducting works; and
- Paving works.

##### **Contract 3302 Eastern Vehicular Tunnel Advance Works**

- Piling and structure works;
- Ducting works; and
- Backfilling and reinstatement works.

##### **Contract 3303 Third Runway and Associated Works**

- Architectural, Builder's and Finishing works;
- Footing and utilities work;
- Piling work;
- Operation of asphalt plant; and
- Cable laying and ducting works.

##### **Contract 3305 Airfield Ground Lighting System**

- Site establishment;
- Cabling works;
- Network installation; and
- Genset installation.

##### **Contract 3306 Observation Facility Control System Supporting Interim 2RS and 3RS**

- Cabling works;
- Consoles installation; and
- System and network installation.

##### **Contract 3307 Fire Training Facility**

- Architectural, Builder's and Finishing works;
- Drainage and utilities works; and
- Building construction.

##### **Contract 3308 Foreign Object Debris Detection System**

- Site formation; and
- Foreign Object Debris Tower installation.

### **Contract 3310 North Runway Modification Works**

- Ground improvement works.

### **Third Runway Concourse:**

### **Contract 3403 New Integrated Airport Centres Building and Civil Works**

- Architectural, Builder's Work and Finishing works;
- Excavation and lateral support works ;
- Drainage and ducting works; and
- Underground utilities construction.

### **Contract 3404 Integrated Airport Control System**

- Equipment installation; and
- Cable laying.

### **Contract 3405 Third Runway Concourse Foundation and Substructure Works**

- Foundation works;
- Piling work;
- Excavation and backfilling; and
- Road formation.

### **Contract 3408 Third Runway Concourse and Apron Works**

- Site setup works; and
- Excavation and lateral support works.

### **Terminal 2 Expansion:**

### **Contract 3508 Terminal 2 Expansion Works**

- Excavation and footing construction;
- Site formation;
- Drainage works;
- Reinforced concrete works; and
- Builders' works.

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

### **Contract 3601 New Automated People Mover System (TRC Line)**

- Pull out test for guideway;
- Guidebeam installation; and
- Concreting work.

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

- Car modification; and
- Concreting work.

### **Contract 3603 Baggage Handling System (BHS)**

- BHS installation.

### **Construction Support (Facilities):**

### **Contract 3721 Construction Support Infrastructure Works**

- Laying of drainage pipes and ducts;
- Site clearance;

- Paving works; and
- Road works.

#### **Contract 3723 Construction Support Facilities**

- Clearance works;
- Finishing works; and
- Installation of utility services works.

#### **Airport Support Infrastructure:**

#### **Contract 3801 APM and BHS Tunnels on Existing Airport Island**

- Excavation and lateral support works;
- Rebar fixing; and
- Jacking slab construction.

#### **Contract 3802 APM and BHS Tunnels and Related Works**

- Construction of Airside Fire Station and marine sediment treatment plant;
- Installation of sheet piles and dewatering well;
- Pre-drilling;
- Ground investigation works; and
- Ducting works.

#### **Construction Support (Services / Licenses):**

#### **Contract 3901A Concrete Batching Facility**

- Operation of concrete batching plant; and
- Material conveyor belt construction.

#### **Contract 3901B Concrete Batching Facility**

- Operation of concrete batching plant; and
- Superstructure works for conveyor belt.

## **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;
- DEZ monitoring for seawall construction;
- Implementation of MMWP for silt curtain deployment;
- Sorting, recycling, storage and disposal of general refuse and construction waste;
- Reuse of treated marine sediments from piling and excavation works;
- Management of chemicals and avoidance of oil spillage on-site; and
- Acoustic decoupling measures for equipment on marine vessels.

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

### 8.3 Monitoring Schedule for the Coming Reporting Period

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

### 8.4 Review of the Key Assumptions Adopted in the EIA Report

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

## 9 Conclusion and Recommendation

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

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

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

The water quality monitoring results for all parameters, except SS, obtained during the reporting period were within the corresponding Action and Limit Levels stipulated in the EM&A programme. Relevant investigation and follow-up actions will be conducted according to the EM&A programme if the corresponding Action and Limit Levels are triggered. For SS, one of the testing results triggered the relevant Action Level, and the corresponding investigation was conducted accordingly. The investigation findings concluded that the case was not related to the Project. To conclude, the construction activities in the reporting period did not introduce adverse impact to all water quality sensitive receivers.

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

On the implementation of the SkyPier Plan, due to the COVID-19 pandemic, all SkyPier HSF services to/from Zhuhai and Macau have been suspended from 25 March 2020 until further notice. No HSF movement between HKIA SkyPier and Zhuhai and Macau was recorded during the reporting period. Therefore, no deviation was recorded in the HSF monitoring in the reporting period. The daily movements of all SkyPier HSFs in the reporting period, including those not using the diverted route, were in the range of 3 to 4 daily movements, which are within the maximum daily cap of 125 daily movements.

On the implementation of MTRMP-CAV, the MSS automatically recorded the deviation case such as speeding, entering no entry zone and not travelling through the designated gates. ET conducted checking to ensure the MSS records all deviation cases accurately. Trainings have 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 CTCC representative to comply with the requirements of the MTRMP-CAV. The ET reminded contractors that all vessels shall avoid entering the no-entry zone, in particular the Brothers Marine Park and the Sha Chau & Lung Kwu Chau Marine Park. Three-month rolling programmes for construction vessel activities, which ensures the proposed vessels are necessary and minimal through good planning, were also received from contractors.



# Figures

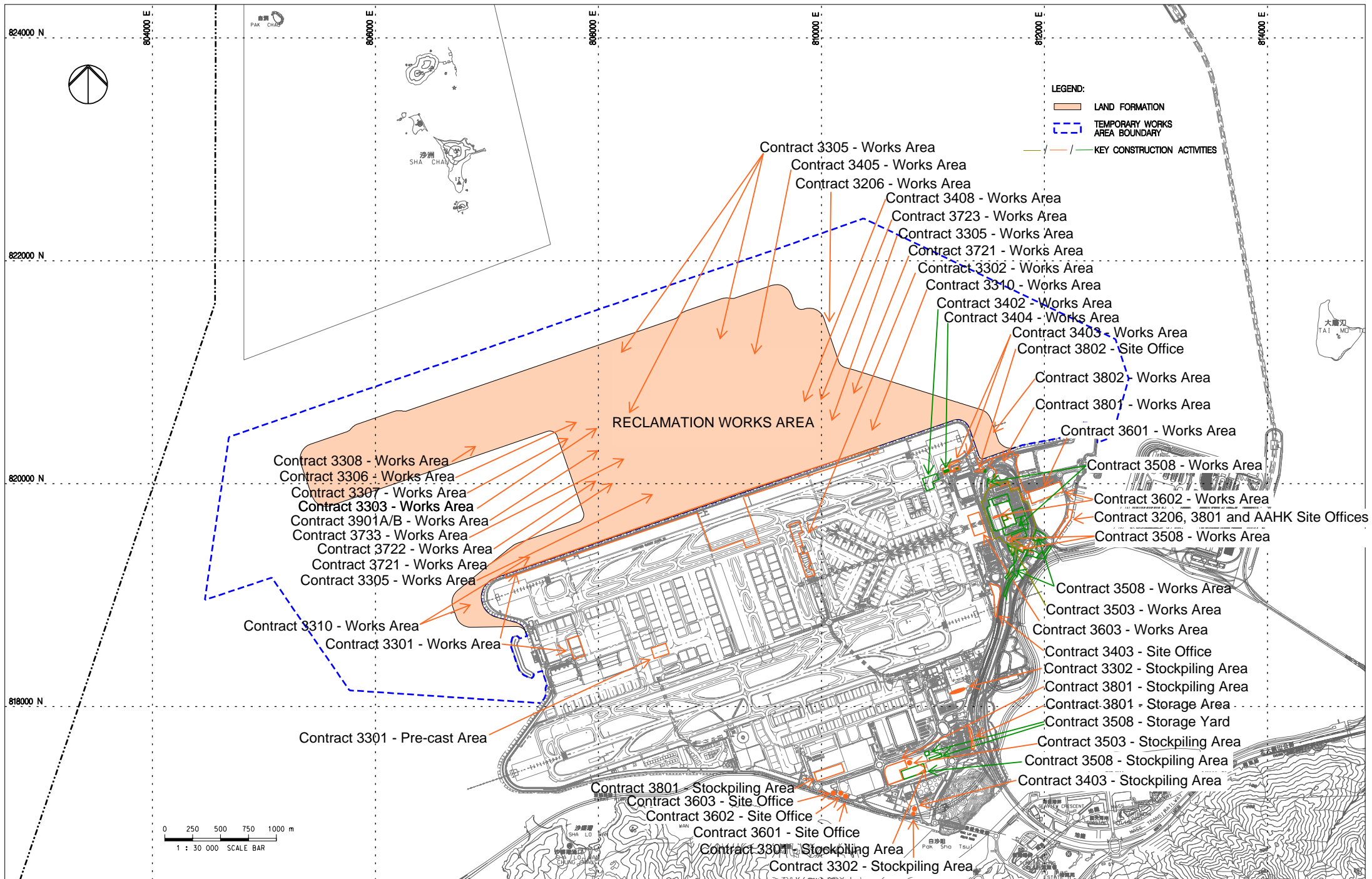


FIGURE 1.1 LOCATIONS OF KEY CONSTRUCTION ACTIVITIES

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



80000 E

80000 E

81000 E

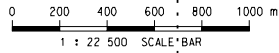
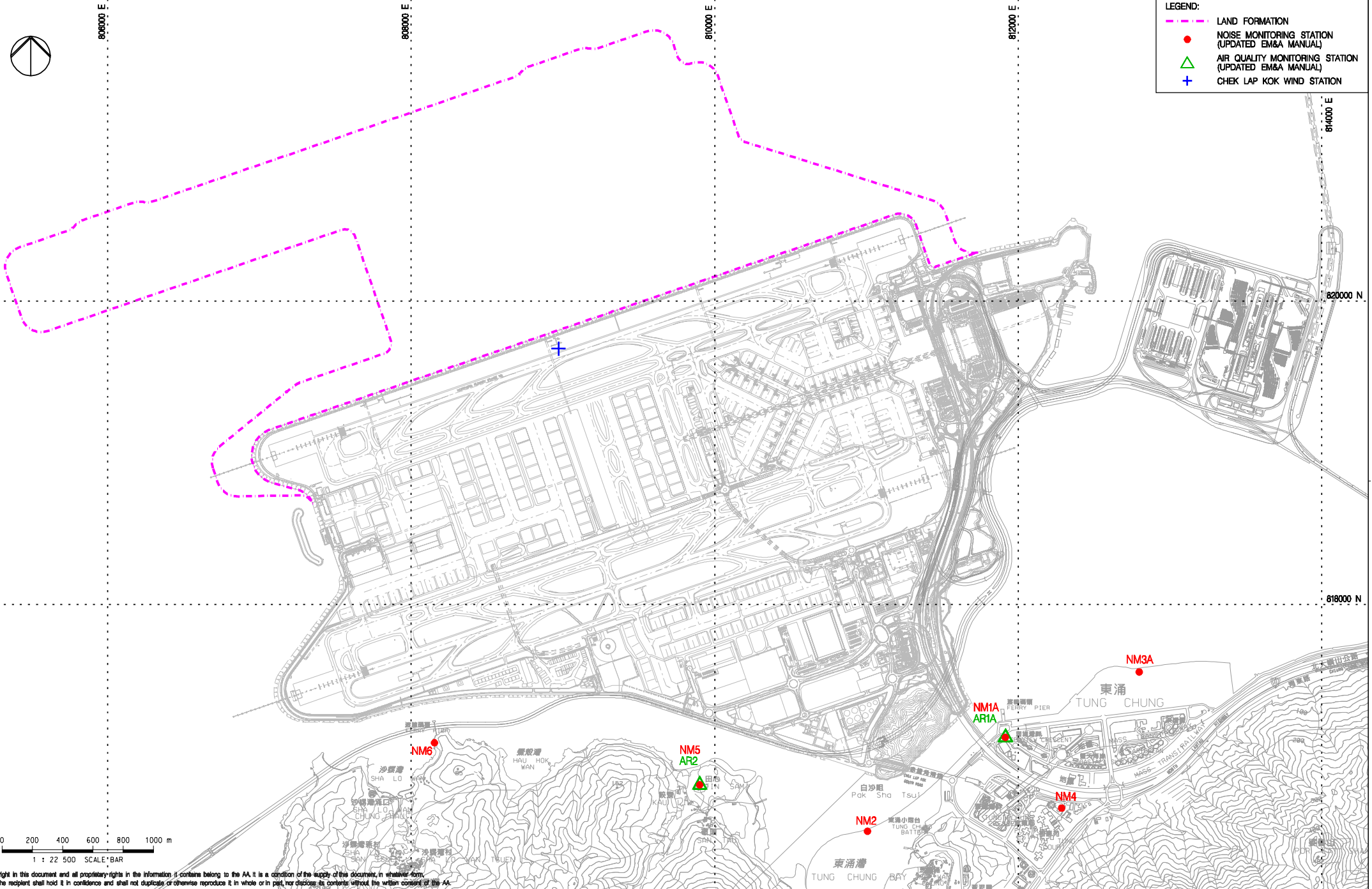
82000 E

84000 E

82000 N

81800 N

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



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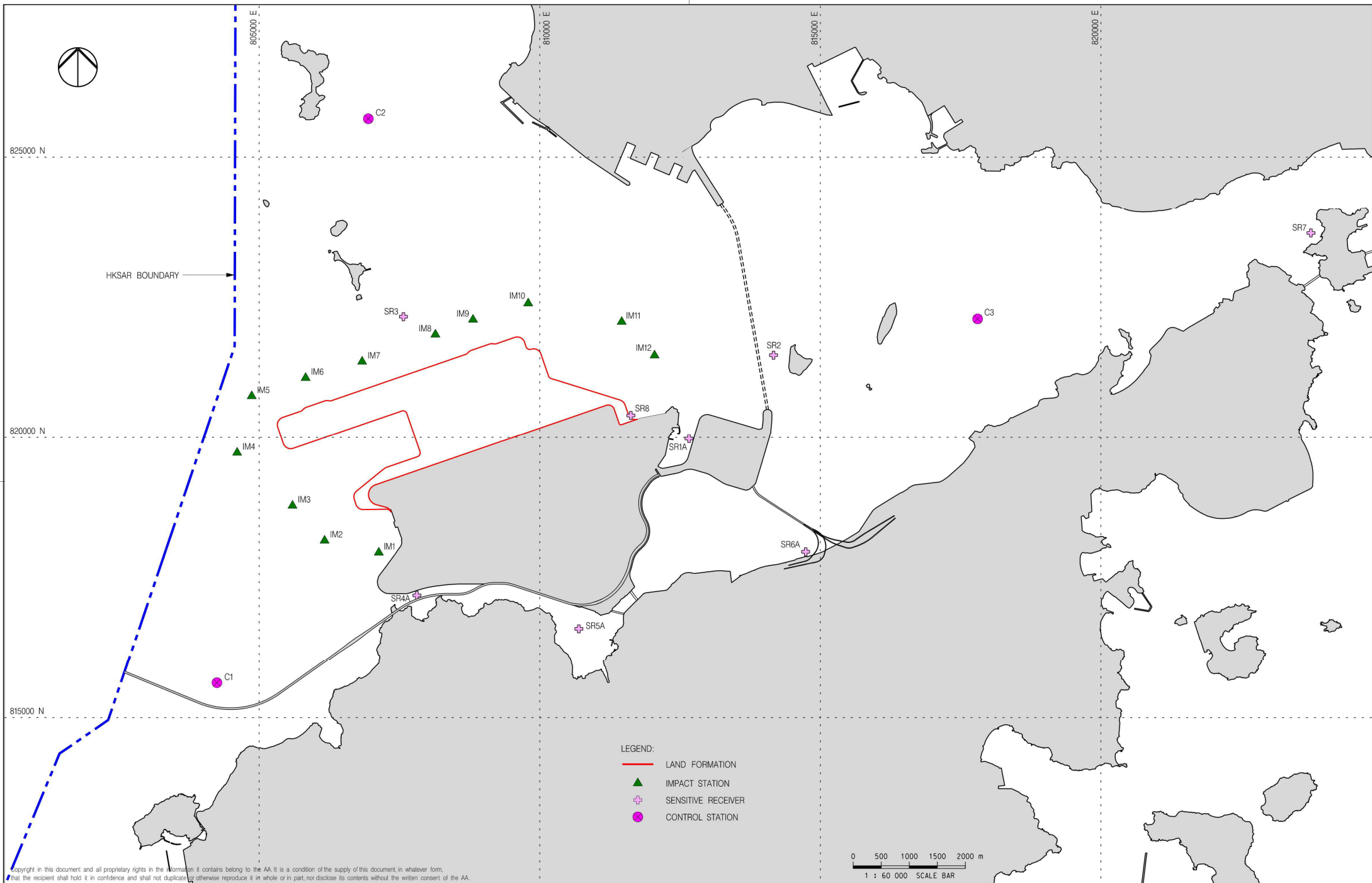
Rev.	Date	Description	Checked
A	06JAN16	FIRST ISSUE	RO
B	29JAN16	GENERAL REVISION	RO
C	11FEB16	GENERAL REVISION	RO
D	29OCT18	GENERAL REVISION	SH



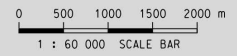
Title  
LOCATIONS OF AIR AND NOISE MONITORING STATIONS AND CHEK LAP KOK WIND STATION

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

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



- LEGEND:
- LAND FORMATION
  - ▲ IMPACT STATION
  - + SENSITIVE RECEIVER
  - CONTROL STATION



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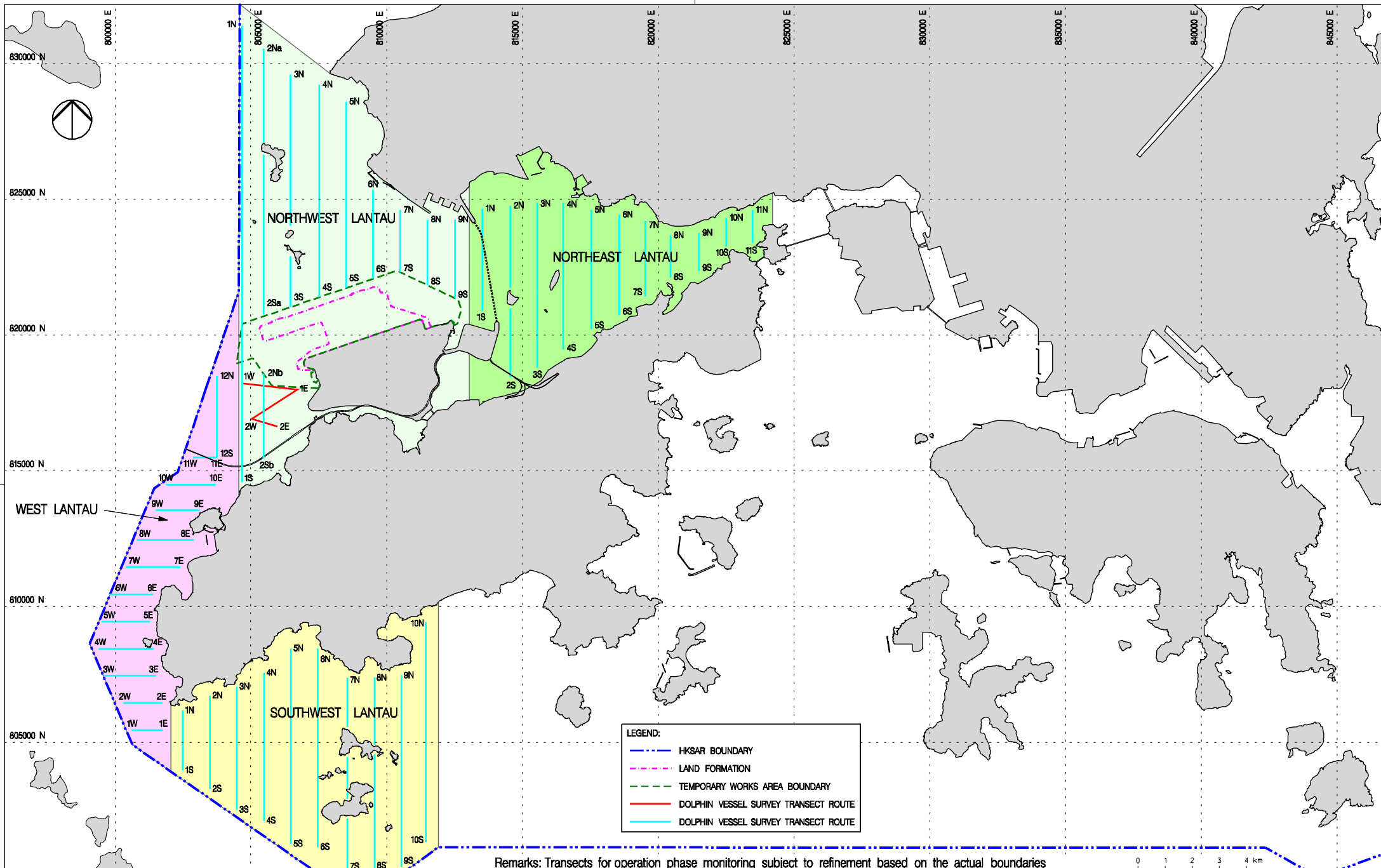
Rev.	Date	Description	Checked
A	21AUG19	FIRST ISSUE	VL



Title  
**WATER QUALITY MONITORING STATIONS**

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

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



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

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B	27JUL16	GENERAL REVISION	JT
C	08FEB17	GENERAL REVISION	JT
D	01MAR17	GENERAL REVISION	JT
E	29OCT18	GENERAL REVISION	SH
F	04APR19	GENERAL REVISION	SH

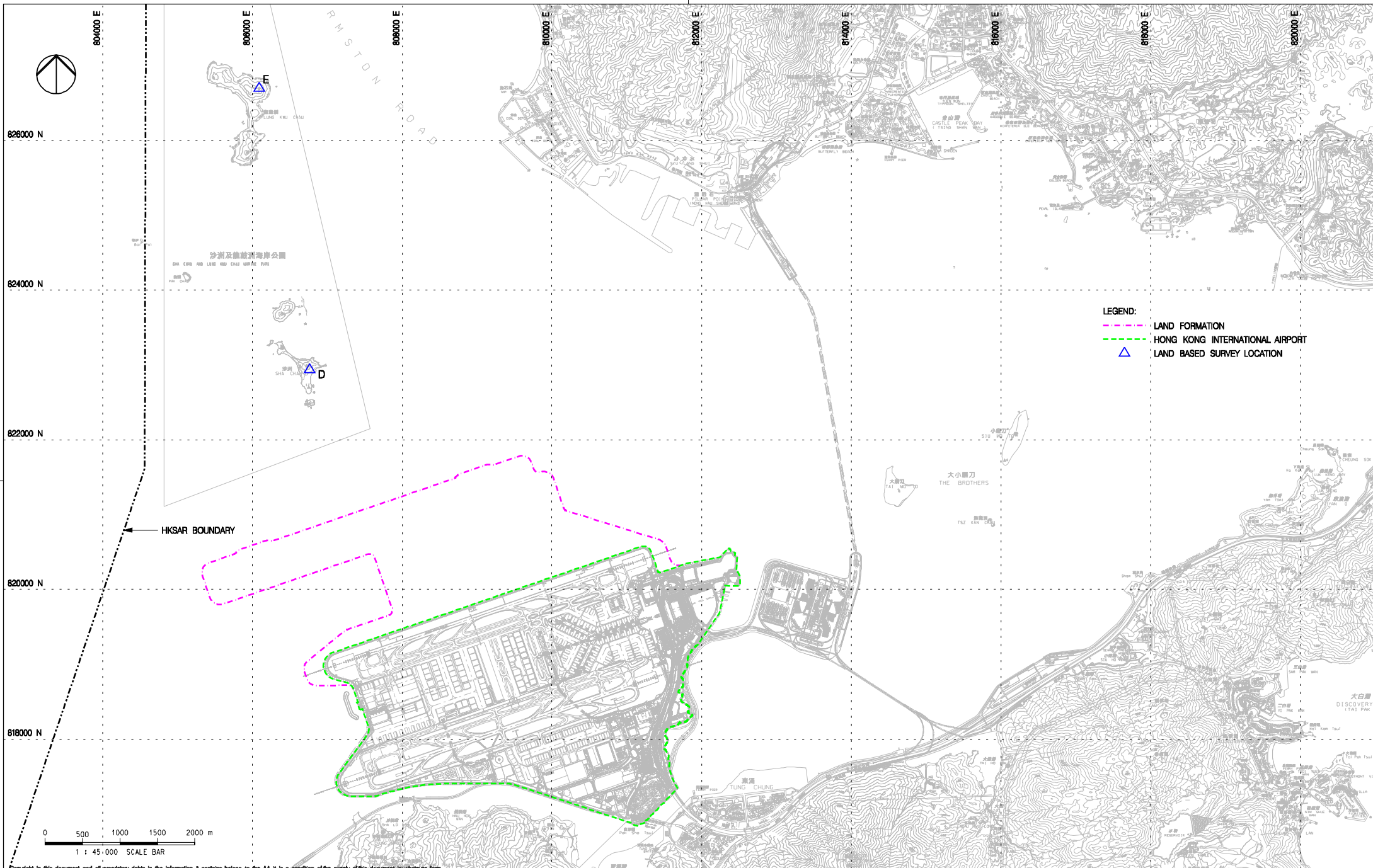


Title  
VESSEL BASED DOLPHIN MONITORING  
TRANSECTS IN CONSTRUCTION,  
POST-CONSTRUCTION AND OPERATION PHASES

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

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

FIGURE 6.1



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

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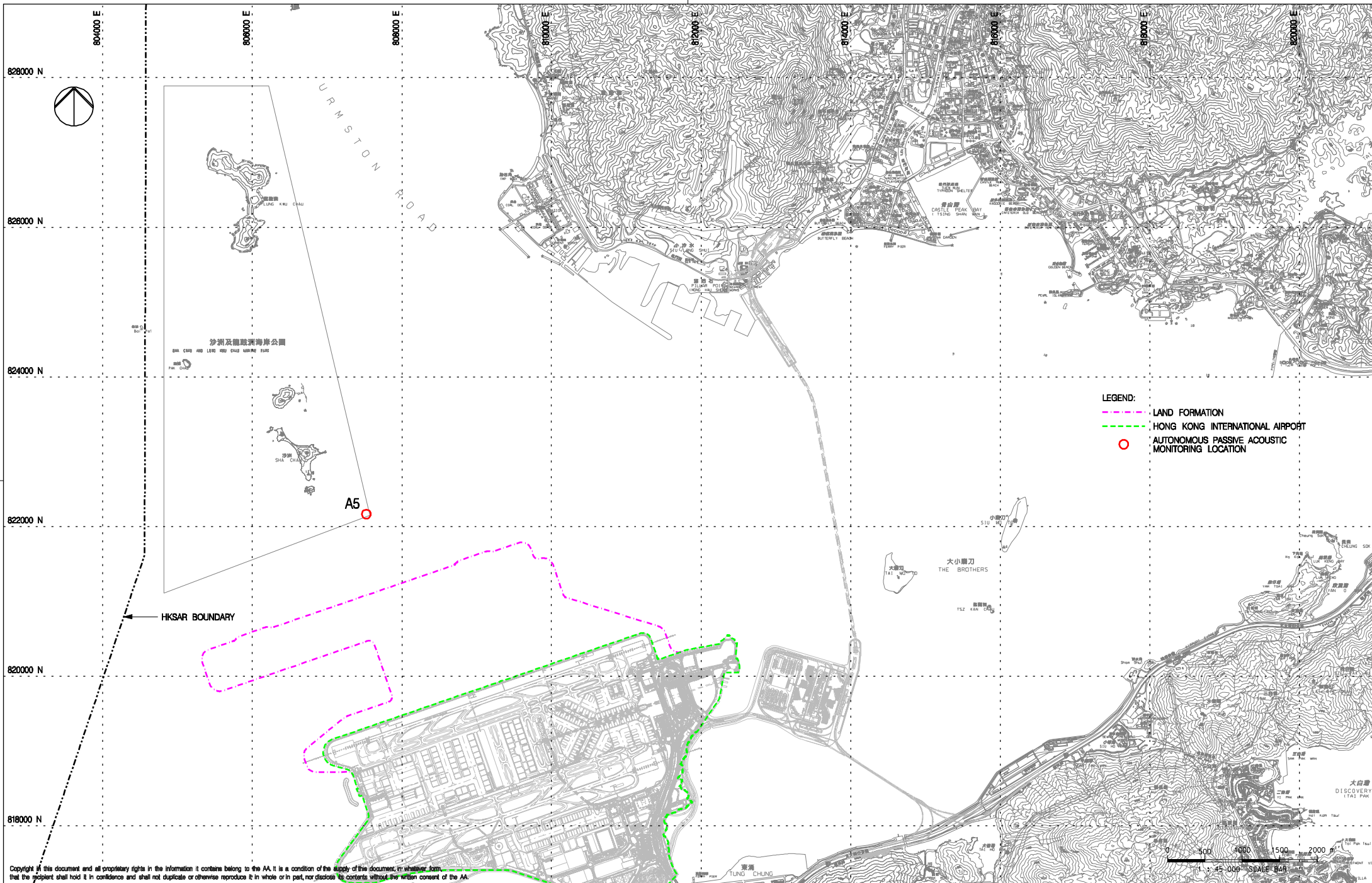
Rev.	Date	Description	Checked
A	02DEC15	FIRST ISSUE	JC
B	06FEB17	GENERAL REVISION	JC
C	29OCT18	GENERAL REVISION	SH



**Title**  
 LAND BASED DOLPHIN MONITORING  
 IN BASELINE AND CONSTRUCTION PHASES

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

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



- LEGEND:**
- - - LAND FORMATION
  - - - HONG KONG INTERNATIONAL AIRPORT
  - AUTONOMOUS PASSIVE ACOUSTIC MONITORING LOCATION

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



**Title**  
 LOCATION FOR AUTONOMOUS PASSIVE ACOUSTIC MONITORING

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

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

# Appendix A. Contract Description



## Contract Description

Contract No.	Contract Title	Contractor	Key Construction Activities
3206	Reclamation Contract	Zhen Hua Engineering Company Ltd.-China Communications Construction Company Ltd.-CCCC Dredging (Group) Company Ltd. Joint Venture	<p>The works covered by the Contract 3206 comprise the formation of approximately 650 hectares of land north of the existing airport island for the project, the major construction activities including without limitation the following</p> <ul style="list-style-type: none"> <li>• Geotechnical and ground improvement works;</li> <li>• Seawall construction;</li> <li>• Marine and land filling works; and</li> <li>• Civil works.</li> </ul>
3301	North Runway Crossover Taxiway	Fujita Corporation-China Harbour Engineering Company Ltd.-Zhen Hua Engineering Company Ltd. Joint Venture	<p>The works covered by the Contract 3301 comprise the construction of a new dual taxiway across the existing north runway and utility services and cable ducting systems. The major construction activities include without limitation the following:</p> <ul style="list-style-type: none"> <li>• Construction of a new dual taxiway;</li> <li>• Cable ducting works;</li> <li>• Extension of existing portable water supply system; and</li> <li>• All associated works.</li> </ul>
3302	Eastern Vehicular Tunnel Advance Works	China Road and Bridge Corporation	<p>The works covered by the Contract 3302 comprise the design and construction of the first section of the new Eastern Vehicular Tunnel and a Road Tunnel Plant Building. The major construction activities include without limitation the following:</p> <ul style="list-style-type: none"> <li>• Foundation and structural works;</li> <li>• Cast-in / Underground electrical &amp; mechanical works and utility services; and</li> <li>• All associated testing and commissioning works.</li> </ul>
3303	Third Runway and Associated Works	Sinohydro Corporation Limited, Powerchina Airport Construction Company Limited, Paul Y. Construction Company Limited, and Rock-One	<p>The works covered by the Contract 3303 comprise all elements of permanent works and temporary works required for the completion, commissioning and operation of the new North Runway and existing South Runway following the closure of the existing North Runway. The major construction activities include without limitation the following:</p> <ul style="list-style-type: none"> <li>• New runway, taxiways, and associated works;</li> </ul>

<b>Contract No.</b>	<b>Contract Title</b>	<b>Contractor</b>	<b>Key Construction Activities</b>
		Engineering Company Limited Joint Venture	<ul style="list-style-type: none"> <li>• Infrastructure works;</li> <li>• Construction of ancillary buildings and facilities;</li> <li>• Set up of various airport systems; and</li> <li>• All associated testing and commissioning works.</li> </ul>
3305	Airfield Ground Lighting System	ADB Safegate Hong Kong Limited	<p>The works covered by the Contract 3305 comprise the design, manufacture, installation and handover of the Airfield Ground Lighting (AGL) System. The major construction activities include without limitation the following:</p> <ul style="list-style-type: none"> <li>• Light fittings works;</li> <li>• Power Supply System installation;</li> <li>• Fibre optic cables and data cables supply and connection;</li> <li>• Set up Control and Communication system;</li> <li>• All associated testing and commissioning works.</li> </ul>
3306	Observation Facility Control Systems Supporting Interim 2RS and 3RS	Chinney Alliance Engineering Limited	<p>The works covered by the Contract 3306 comprise the design, procurement, manufacture, supply, installation, testing and commissioning of the Observation Facility Control Systems and Airfield Network for the interim Two-Runway System and Three-Runway System respectively. The major construction activities include without limitation the following:</p> <ul style="list-style-type: none"> <li>• Power Supply System installation;</li> <li>• Fibre optic cables and data cables supply and connection;</li> <li>• Set up Control and Communication system;</li> <li>• Minor building work and accessories; and</li> <li>• All associated testing and commissioning works.</li> </ul>
3307	Fire Training Facility	Paul Y. Construction Company Limited	<p>The works covered by the Contract 3307 comprise the construction of a Fire Training Facility on the new reclamation area to replace the existing facility at the Airport Island. The major construction activities include without limitation the following:</p> <ul style="list-style-type: none"> <li>• Building services works;</li> <li>• Civil works; and</li> <li>• All associated testing and temporary works.</li> </ul>
3308	Foreign Object Debris Detection System	DAS Aviation Services Group	<p>The works cover by the Contract 3308 comprise the entire expanded Foreign Object Debris (FOD) detection system required for the operation of new Three-Runway System at Hong Kong International Airport. The major construction activities include without limitation the following:</p>

Contract No.	Contract Title	Contractor	Key Construction Activities
			<ul style="list-style-type: none"> <li>• Excavation works;</li> <li>• Construction of FOD sensor towers;</li> <li>• Set up FOD detection system;</li> <li>• Civil and structural works; and</li> <li>• All associated electrical and mechanical works.</li> </ul>
3310	North Runway Modification Works	China State Construction Engineering (Hong Kong) Ltd. - Fujita Corporation Joint Venture	<p>The works cover by the Contract 3310 comprise the modification of north runway and the connections of taxiways to the modified north runway on existing airport island. The major construction activities include without limitation the following:</p> <ul style="list-style-type: none"> <li>• Modification works for existing north runway;</li> <li>• Connections works for new taxiways;</li> <li>• Construction of ancillary buildings/ facilities;</li> <li>• Building services and airport systems;</li> <li>• Infrastructure Works;</li> <li>• Underground utilities and services; and</li> <li>• All associated asphalt pavement work and earthwork.</li> </ul>
3402	New Integrated Airport Centers Enabling Works	Wing Hing Construction Co., Ltd.	<p>The works covered by the Contract 3402 comprise the enabling works for the new Integrated Airport Centers. The major construction activities include without limitation the following:</p> <ul style="list-style-type: none"> <li>• Site clearance and demolition;</li> <li>• Building services works;</li> <li>• Utilities diversion and installation works;</li> <li>• Roadworks including associated facilities; and</li> <li>• All associated testing and commissioning works.</li> </ul>
3403	New Integrated Airport Centres – Building and Civil Works	Sun Fook Kong Construction Limited	<p>The works covered by the Contract 3403 comprise the construction of a new Integrated Airport Centre (IAC) and a number of ancillary facilities and Additions and Alteration (A&amp;A) works for converting the existing IAC into a back-up IAC, including without limitation the following:</p> <ul style="list-style-type: none"> <li>• Site clearance and demolition;</li> <li>• Building structure and envelope;</li> <li>• Building Services and Airport Systems; and</li> <li>• Utilities division and installations.</li> </ul>

<b>Contract No.</b>	<b>Contract Title</b>	<b>Contractor</b>	<b>Key Construction Activities</b>
3404	Integrated Airport Control System	Shun Hing Systems Integration Co., Ltd.	<p>The works covered by the Contract 3404 comprise the design, supply, manufacture, delivery, installation, testing and commissioning of Integrated Airport Control System and conversion of the existing Integrated Airport Centre (IAC) into a Back-up IAC for the operation of interim Two-Runway System and Three-Runway System. The major construction activities include without limitation the following:</p> <ul style="list-style-type: none"> <li>• Cabling works</li> <li>• System configuration and programming works;</li> <li>• Set up Control and Communication system;</li> <li>• Decommissioning works; and</li> <li>• All associated testing and commissioning works.</li> </ul>
3405	Third Runway Concourse Foundation and Substructure Works	China Road and Bridge Corporation - Bachy Soletanche Group Limited - LT Sambo Co., Ltd. Joint Venture	<p>The works covered by the Contract 3405 comprise without limitation the following:</p> <ul style="list-style-type: none"> <li>• Piled foundation works;</li> <li>• Basement and tunnel structure works;</li> <li>• Associated internal reinforced concrete structures;</li> <li>• Backfilling and compaction of works area; and</li> <li>• Associated testing and temporary works.</li> </ul>
3408	Third Runway Concourse and Apron Works	Beijing Urban Construction Group Company Limited and Chevalier (Construction) Company Limited Joint Venture	<p>The works covered by the Contract 3408 comprise the design and construction of the Third Runway Concourse (TRC), the TRC Apron, two cross-field taxiways, Ancillary Buildings, specific section of the Eastern Vehicular Tunnel (EVT), and the associated infrastructure, testing, and commissioning works.</p>
3503	Terminal 2 Foundation and Substructure Works	Leighton - Chun Wo Joint Venture	<p>The works covered by the Contract 3503 comprise the foundations for the new T2 terminal, two annex buildings and associated viaducts, construction of the new T2 basement and south annex building structures, diaphragm walls, utility services and other advance works.</p> <p>The major construction activities include without limitation the following:</p> <ul style="list-style-type: none"> <li>• Re-configuration and demolition of existing utilities and structures;</li> </ul>

Contract No.	Contract Title	Contractor	Key Construction Activities
			<ul style="list-style-type: none"> <li>• Pile foundations for the expanded T2 Terminal Building, South Annex Building, and North Annex Building;</li> <li>• Construction of new South Annex Building;</li> <li>• Diversion and provisions of utilities; and</li> <li>• All associated testing and commissioning works.</li> </ul>
3508	Terminal 2 Expansion Works	Gammon Engineering and Construction Co., Ltd	<p>The works covered by the Contract 3508 comprise the construction of T2, North Annex Building (NAB) and South Annex Building (SAB) with interconnecting bridges, landside transport infrastructure including viaducts and at grade roads, underground utility services, one sewage pumping station with the associated electrical building, footbridges, external works and modification works to existing facilities. The major construction activities include without limitation the following:</p> <ul style="list-style-type: none"> <li>• Superstructure, interior landscaping, building services and airport system of T2, NAB, SAB and associated footbridges;</li> <li>• Additions and Alteration (A&amp;A) works of the existing Airport World Trade Centre (AWTC);</li> <li>• Modification of the existing APM and BHS tunnels;</li> <li>• External works and road networks around T2; and</li> <li>• Utilities.</li> <li>•</li> </ul>
3601	New Automated People Mover System (TRC Line)	CRRC Puzhen Bombardier Transportation Systems Limited and CRRC Nanjing Puzhen Co., Ltd. Joint Venture	<p>The works covered by the Contract 3601 comprise the initial phase of the Automated People Mover (APM) system connecting the Third Runway Concourse (TRC) and the APM Interchange Station in the modified T2, and extension of the new APM system into the new APM Depot east of T2. The major construction activities include without limitation the following:</p> <ul style="list-style-type: none"> <li>• New 3-guideway APM system between TRC and T2;</li> <li>• Extension of the TRC Line into the new APM Depot;</li> <li>• APM associated sub-systems (communications, signalling, etc.)</li> <li>• Associated civil works; and</li> <li>• All associated testing, commissioning works.</li> </ul>

<b>Contract No.</b>	<b>Contract Title</b>	<b>Contractor</b>	<b>Key Construction Activities</b>
3602	Existing APM System Modification Works	Niigata Transys Co., Ltd.	The works covered by the Contract 3602 comprise the detailed design, supply, manufacture, fabrication, implementation, testing and commissioning of the following modification works of the existing APM systems: <ul style="list-style-type: none"> <li>• Modification of existing APM depot and APM cars;</li> <li>• Modification of existing T1 &amp; T2 tunnels; and</li> <li>• Preparation of new APM depot.</li> </ul>
3603	3RS Baggage Handling System	Vanderlande Industries Hong Kong Limited and Shun Hing Systems Integration Company Limited	The works covered by the Contract 3603 comprise the design, supply, manufacture, delivery, installation, testing and commissioning of the high-speed baggage handling system.
3721	Construction Support Infrastructure Works	China State Construction Engineering (Hong Kong) Limited	The works covered by the Contract 3721 comprise the construction of the infrastructure works and building facilities on the reclaimed land formation. The major construction activities include without limitation the following: <ul style="list-style-type: none"> <li>• Project site road;</li> <li>• Utilities;</li> <li>• Cargo loading quays; and</li> <li>• Security fencing and hoarding.</li> </ul>
3722	Western Support Area – Construction Support Facilities	Tapbo Construction Company Limited and Konwo Modular House Limited Joint Venture	The works covered by the Contract 3722 comprise the design and construction of support facilities, including site office, Canteen, Safety Induction Centre and Medical Centre, Material Testing Laboratories and Typhoon Shelter, Vehicle Maintenance Facility and Fuel Storage Facility. The major construction activities include without limitation the following: <ul style="list-style-type: none"> <li>• Construction of support facilities;</li> <li>• Foundation and structural works; and</li> <li>• Building services works.</li> </ul>
3723	Eastern Support Area – Construction Support Facilities	Tapbo Construction Company Limited and Konwo Modular House Ltd. Joint Venture	The works covered by the Contract 3723 comprise the design and construction of support facilities, including site office, sewage treatment facility, canteen, and centralised power supply building. The major construction activities include without limitation the following: <ul style="list-style-type: none"> <li>• Construction of support facilities;</li> <li>• Foundation, structural and superstructure works;</li> </ul>

<b>Contract No.</b>	<b>Contract Title</b>	<b>Contractor</b>	<b>Key Construction Activities</b>
			<ul style="list-style-type: none"> <li>• Sewage pipe network and connection works; and</li> <li>• Building services works.</li> </ul>
3728	Minor Site Works	Shun Yuen Construction Company Limited	The works to be executed by the Contract 3728 comprise minor works within the Airside and Landside areas of the existing airport island to support the Project.
3733	Emergency Repair Service	Wing Hing Construction Co., Ltd.	<p>The works to be executed by the Contract 3733 comprise the provision of emergency repair service for Three Runway System (3RS) Project construction. The major construction activities include without limitation the following:</p> <ul style="list-style-type: none"> <li>• Construction of support facilities;</li> <li>• Building services works;</li> <li>• Security fencing and hoarding; and</li> <li>• Ground pavement works.</li> </ul>
3801	APM and BHS Tunnels on Existing Airport Island	China State Construction Engineering (Hong Kong) Limited	<p>The works covered by the Contract 3801 comprise the construction of the APM and Baggage Handling System (BHS) tunnels on existing airport island. The major construction activities include without limitation the following:</p> <ul style="list-style-type: none"> <li>• Construction of APM and BHS tunnels;</li> <li>• Construction of ventilation building and associated infrastructure; and</li> <li>• Construction, testing and commissioning of sewerage pumping station; and</li> <li>• Civil and structural engineering works.</li> </ul>
3802	APM and BHS Tunnels and Related Works	Gammon Construction Limited	<p>The works covered by the Contract 3802 comprise the construction of the APM and BHS tunnels on existing airport island. The major construction activities include without limitation the following:</p> <ul style="list-style-type: none"> <li>• Construction of APM/ BHS Tunnels;</li> <li>• Construction of ancillary buildings/ facilities;</li> <li>• Building services and airport systems;</li> <li>• Infrastructure Works;</li> <li>• Underground utilities and services; and</li> <li>• All associated testing and commissioning works.</li> </ul>
3901A	Concrete Batching Facility	K. Wah Concrete Company Limited	The works covered by the Contract 3901A comprise the establishment, operation and maintenance of a concrete batching facility at the Project Site

Contract No.	Contract Title	Contractor	Key Construction Activities
			<p>and the supply of concrete products. The major construction activities include without limitation the following:</p> <ul style="list-style-type: none"> <li>• Supply of all equipment for the installation of the Facility to the Site; and</li> <li>• Supply of all raw materials required for the production of ready mixed concrete products and the continual operation of the Facility.</li> </ul>
3901B	Concrete Batching Facility	Gammon Construction Limited	<p>The works covered by the Contract 3901B comprise the establishment, operation and maintenance of a concrete batching facility at the Project Site and the supply of concrete products. The major construction activities include without limitation the following:</p> <ul style="list-style-type: none"> <li>• Supply of all equipment for the installation of Facility to the Site; and</li> <li>• Supply of all raw materials required for the production of ready mixed concrete products and the continual operation of the Facility.</li> </ul>



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

# Environmental Mitigation Implementation Schedule (EMIS) for Construction Phase

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
<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	-	Dust control practices as stipulated in the Air Pollution Control (Construction Dust) Regulation should be adopted. These practices include: Good Site Management <ul style="list-style-type: none"> <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>	Within construction site / Duration of the construction phase	I
			Disturbed Parts of the Roads <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>	Within construction site / Duration of the construction phase	I
			Exposed Earth <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

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	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>▪ 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>	<p>Within Concrete Batching Plant / Duration of the construction phase</p>	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>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	
			<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	
			<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	
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	

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>	
			<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>	

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>		
			<p>Material transportation</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 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	
			<p>Control of emissions from bitumen decanting</p> <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	
			<p>Liquid fuel</p> <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	
			<p>Housekeeping</p> <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	
5.2.6.7	2.1	-	<p><b>Best Practices for Rock Crushing Plants</b></p> <p>The relevant best practices for dust control as stipulated in the Guidance Note on the Best Practicable Means for Mineral Works (Stone Crushing Plant) BPM 11/1 (95) as well as in the future Specified Process licence should be adopted. These include:</p>	Within Concrete Batching Plant / Duration of the construction phase	N/A

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			<p>Crushers</p> <ul style="list-style-type: none"> <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?^
			<p>Storage piles and bins</p> <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
			<p>Rock drilling equipment</p> <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	-	<p><b>Good Site Practice</b></p> <p>Good site practice and noise management can significantly reduce the impact of construction site activities on nearby NSRs. The following package of measures should be followed during each phase of construction:</p> <ul style="list-style-type: none"> <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	-	<p><b>Adoption of QPME</b></p> <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	-	<p><b>Use of Movable Noise Barriers</b></p> <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	-	<p><b>Use of Noise Enclosure/ Acoustic Shed</b></p> <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	<p><b>Marine Construction Activities</b></p> <p><u>General Measures to be Applied to All Works Areas</u></p> <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
			<p><u>Specific Measures to be Applied to All Works Areas</u></p> <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>		I
			<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 *(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>▪ 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?^
			<p><u>Specific Measures to be Applied to Land Formation Activities prior to Commencement of Marine Filling Works</u></p> <ul style="list-style-type: none"> <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>	<p>Within construction site / Duration of the construction phase</p>	<p>N/A</p> <p>*(The arrangement of silt curtain has been modified. The details can be referred to Silt Curtain Deployment Plan)</p>
			<ul style="list-style-type: none"> <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>		<p>For C7a, I</p> <p>For C8, I</p> <p>*(The requirement of silt curtain / screen has been modified. The details can be referred to Silt Curtain Deployment Plan)</p>
			<ul style="list-style-type: none"> <li>▪ The silt curtains and silt screens should be regularly checked and maintained.</li> </ul>		<p>I</p>
			<p><u>Specific Measures to be Applied to Land Formation Activities during Marine Filling Works</u></p> <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>	<p>Within construction site / Duration of the construction phase</p>	<p>I</p> <p>*(The arrangement of silt curtain has been modified. The details can be referred to Silt Curtain Deployment Plan)</p>
			<ul style="list-style-type: none"> <li>▪ Double layer silt curtains to be applied at the south-western opening prior to commencement of marine filling activities;</li> </ul>		<p>N/A</p> <p>*(The arrangement of silt curtain has been modified. The details can be referred to Silt Curtain Deployment Plan)</p>
			<ul style="list-style-type: none"> <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>		<p>N/A</p> <p>*(The requirement of silt curtain / screen has been modified. The details can be referred to Silt Curtain Deployment Plan)</p>
			<ul style="list-style-type: none"> <li>▪ The silt curtains and silt screens should be regularly checked and maintained.</li> </ul>		<p>I</p>

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			<p><u>Specific Measures to be Applied to the Field Joint Excavation Works for the Submarine Cable Diversion</u></p> <ul style="list-style-type: none"> <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 at 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	-	<p><b>Modification of the Existing Seawall</b></p> <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	I
8.8.1.5	5.1	-	<p><b>Construction of New Stormwater Outfalls and Modifications to Existing Outfalls</b></p> <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	I
8.8.1.6 8.8.1.7	5.1	2.27	<p><b>Piling Activities for Construction of New Runway Approach Lights and HKIAAA Marker Beacons</b></p> <p>Silt curtains shall be deployed around the piling activities to completely enclose the piling works and care should be taken to avoid spillage of excavated materials into the surrounding marine environment.</p> <p><u>For construction of the eastern approach lights at the CMPs</u></p> <ul style="list-style-type: none"> <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	I I
8.8.1.8	5.1	-	<p><b>Construction of Site Runoff and Drainage</b></p> <p>The site practices outlined in ProPECC Note PN 1/94 should be followed as far as practicable in order to minimise surface runoff and the chance of erosion. The following measures are recommended:</p> <ul style="list-style-type: none"> <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

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			<p>drainage system should be undertaken by the Contractors prior to the commencement of construction (for works areas located on the existing Airport island) or as soon as the new land is completed (for works areas located on the new landform);</p> <hr/> <ul style="list-style-type: none"> <li>▪ Sand/silt removal facilities such as sand/silt traps and sediment basins should be provided to remove sand/silt particles from runoff to meet the requirements of the TM-DSS standards under the WPCO. The design of efficient silt removal facilities should make reference to the guidelines in Appendix A1 of ProPECC Note PN 1/94. Sizes may vary depending upon the flow rate. The detailed design of the sand/silt traps should be undertaken by the Contractors prior to the commencement of construction;</li> </ul> <hr/> <ul style="list-style-type: none"> <li>▪ All drainage facilities and erosion and sediment control structures should be regularly inspected and maintained to ensure proper and efficient operation at all times and particularly during rainstorms. Deposited silt and grit should be regularly removed, at the onset of and after each rainstorm to ensure that these facilities are functioning properly;</li> </ul> <hr/> <ul style="list-style-type: none"> <li>▪ Measures should be taken to minimize the ingress of site drainage into excavations. If excavation of trenches in wet periods is necessary, they should be dug and backfilled in short sections wherever practicable. Water pumped out from foundation excavations should be discharged into storm drains via silt removal facilities;</li> </ul> <hr/> <ul style="list-style-type: none"> <li>▪ In the event that contaminated groundwater is identified at excavation areas, this should be treated on-site using a suitable wastewater treatment process. The effluent should be treated according to the requirements of the TM-DSS standards under the WPCO prior to discharge to foul sewers or collected for proper disposal off-site. No direct discharge of contaminated groundwater is permitted; and</li> </ul> <hr/> <ul style="list-style-type: none"> <li>▪ All vehicles and plant should be cleaned before leaving a construction site to ensure no earth, mud, debris and the like is deposited by them on roads. An adequately designed and sited wheel washing facility should be provided at construction site exits. Wash-water should have sand and silt settled out and removed regularly to ensure the continued efficiency of the process. The section of access road leading to, and exiting from, the wheel-wash bay to the public road should be paved with sufficient backfall toward the wheel-wash bay to prevent vehicle tracking of soil and silty water to public roads and drains. All washwater should be treated according to the requirements of the TM-DSS standards under the WPCO prior to discharge.</li> </ul>		
8.8.1.9	5.1	-	<p><b>Sewage Effluent from Construction Workforce</b></p> <ul style="list-style-type: none"> <li>▪ Temporary sanitary facilities, such as portable chemical toilets, should be employed on-site where necessary to handle sewage from the workforce. A licensed contractor should be employed to provide appropriate and adequate portable toilets and be responsible for appropriate disposal and maintenance.</li> </ul>	Within construction site / During construction phase	
8.8.1.10 8.8.1.11	5.1		<p><b>General Construction Activities</b></p> <ul style="list-style-type: none"> <li>▪ Construction solid waste, debris and refuse generated on-site should be collected, handled and disposed of properly to avoid entering any nearby storm water drain. Stockpiles of cement and other construction materials should be kept covered when not being used; and</li> </ul>	Within construction site / During construction phase	

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
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>	Within construction site / During construction phase	I
			<p>At the airport island side of the drilling works, the following measures shall be applied for treatment of wastewater:</p> <ul style="list-style-type: none"> <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
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					I
					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>▪ 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>		I
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	I I I I I
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	I
<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> <hr/> <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>		<p>I *(CAR for golf course and Terminal 2 Emergency Power Supply System Nos.1, 2, 3, 4 and 5)</p> <hr/> <p>N/A</p>
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	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
				HDD drilling works at HKIA	
12.7.2.3 and 12.7.2.6	9.1	2.30	<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	
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	
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	
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	
<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	
<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	
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> </ul>	During construction phase at marine works area	

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			<ul style="list-style-type: none"> <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>		
			<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>		
			<ul style="list-style-type: none"> <li>Avoid bored piling during CWD peak calving season (Mar to Jun);</li> </ul>		
			<ul style="list-style-type: none"> <li>Prohibition of underwater percussive piling; and</li> </ul>		
			<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>		
13.11.2.1 to 13.11.2.7	-	-	<p><b>Mitigation for Indirect Disturbance due to Deterioration of Water Quality</b></p> <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> <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> <li>Use of bored piling in short duration to form the new approach lights and marker beacons for the new runway; and</li> </ul> <p>Use of horizontal directional drilling (HDD) method and water jetting methods for placement of undersea cables and pipelines to minimise the disturbance to the CWDs and other marine ecological resources.</p>	All works area during the construction phase	
13.11.1.12	-	-	<p><b>Strict Enforcement of No-Dumping Policy</b></p> <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	
13.11.1.13	-	-	<p><b>Good Construction Site Practices</b></p> <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	

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
13.11.1.3 to 13.11.1.6	-	-	<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
13.11.5.4 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> <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> <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> <li>A DEZ would also be implemented during bored piling work but as a precautionary measure only.</li> </ul>	Marine waters around land formation works area during construction phase	I
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>	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>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>		
13.11.5.21 to 13.11.5.23	10.6.1	-	<p><b>Construction Vessel Speed Limits and Skipper Training</b></p> <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	
<b>Fisheries Impact – Construction Phase</b>					
14.9.1.2 to 14.9.1.5	-	-	<p><b>Minimisation of Land Formation Area</b></p> <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	
14.9.1.6	-	-	<p><b>Use of Construction Methods with Minimal Risk/Disturbance</b></p> <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 fisheries and the marine environment;</li> <li>Use of bored piling in short duration to form the new approach lights and marker beacons for the new runway; and</li> <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>	During construction phase at marine works area	
14.9.1.11	-	-	<p><b>Strict Enforcement of No-Dumping Policy</b></p> <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	

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
14.9.1.12	-		<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	
14.9.1.13 to 14.9.1.18	-		<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> <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> <li>Use of bored piling in short duration to form the new approach lights and marker beacons for the new runway; and</li> <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>	All works area during the construction phase	
<b>Landscape and Visual Impact – Construction Phase</b>					
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.	
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.	
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.	
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.	



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
Table 15.6	12.3	-	<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. – may be disassembled in phases	I
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.	I
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;	N/A

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

Notes:

“ - ” For items denoted as “ - ” provided under the columns of EM&A Ref. or EP Condition, environmental protection measures should be referred to the relevant paragraph(s) / table(s) in the approved EIA Report.

“ I ” Implemented where applicable.

“ N/A ” Not applicable to the construction works implemented during the reporting month.

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

## **Appendix C. Monitoring Schedule**

# **Monitoring Schedule of This Reporting Period**

# Nov-21

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	<b>1</b> Site Inspection	<b>2</b> Site Inspection CWD Survey (Vessel)  WQ General mid-ebb: 10:56 mid-flood: 17:26	<b>3</b> Site Inspection CWD Survey (Vessel)	<b>4</b> Site Inspection CWD Survey (Vessel) NM4, NM6 WQ General mid-ebb: 12:25 mid-flood: 18:20	<b>5</b> Site Inspection CWD Survey (Vessel) AR1A, AR2 NM1A, NM5	<b>6</b>   WQ General mid-ebb: 13:59 mid-flood: 08:14
<b>7</b>	<b>8</b> Site Inspection CWD Survey (Vessel, Land-based)	<b>9</b> Site Inspection  WQ General mid-ebb: 16:26 mid-flood: 11:18	<b>10</b> Site Inspection CWD Survey (Vessel) NM4, NM6	<b>11</b> Site Inspection CWD Survey (Vessel) AR1A, AR2 NM1A, NM5 WQ General mid-ebb: 05:32 mid-flood: 18:09	<b>12</b> Site Inspection CWD Survey (Vessel)	<b>13</b>   WQ General mid-ebb: 08:16 mid-flood: 16:06
<b>14</b>	<b>15</b> Site Inspection	<b>16</b> Site Inspection  NM4, NM6 WQ General mid-ebb: 11:05 mid-flood: 17:28	<b>17</b> Site Inspection  AR1A, AR2 NM1A, NM5	<b>18</b> Site Inspection   WQ General mid-ebb: 12:20 mid-flood: 18:07	<b>19</b> Site Inspection	<b>20</b>   WQ General mid-ebb: 13:28 mid-flood: 08:05
<b>21</b>	<b>22</b> Site Inspection  NM4, NM6	<b>23</b> Site Inspection  AR1A, AR2 NM1A, NM5 WQ General mid-ebb: 14:59 mid-flood: 10:11	<b>24</b>	<b>25</b> Site Inspection   WQ General mid-ebb: 04:00 mid-flood: 16:19	<b>26</b> Site Inspection	<b>27</b>   WQ General mid-ebb: 05:36 mid-flood: 18:10
<b>28</b>	<b>29</b> Site Inspection CWD Survey (Land-based) AR1A, AR2 NM1A, NM5	<b>30</b> Site Inspection  NM4, NM6 WQ General mid-ebb: 09:17 mid-flood: 16:02				
<b>Notes:</b> CWD - Chinese White Dolphin Air quality and Noise Monitoring Station WQ - Water Quality NM1A/AR1A - Man Tung Road Park NM4 - Ching Chung Hau Po Woon Primary School NM5/AR2 - Village House, Tin Sum NM6 - House No. 1, Sha Lo Wan						

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

# Dec-21

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			<b>1</b> CWD Survey (Vessel)	<b>2</b> Site Inspection  WQ General mid-ebb: 11:13 mid-flood: 17:03	<b>3</b> Site Inspection  CWD Survey (Vessel)	<b>4</b>  AR1A, AR2  WQ General mid-ebb: 13:00 mid-flood: 7:26
<b>5</b>	<b>6</b> Site Inspection CWD Survey (Vessel)	<b>7</b> Site Inspection CWD Survey (Vessel)  WQ General mid-ebb: 15:24 mid-flood: 10:14	<b>8</b> CWD Survey (Vessel)	<b>9</b> Site Inspection  NM4, NM6 WQ General mid-ebb: 17:40 mid-flood: 12:35	<b>10</b> Site Inspection  AR1A, AR2 NM1A, NM5	<b>11</b>  WQ General mid-ebb: 20:24 mid-flood: 14:26
<b>12</b>	<b>13</b> Site Inspection CWD Survey (Vessel)	<b>14</b> Site Inspection CWD Survey (Vessel)  NM4, NM6 WQ General mid-ebb: 9:38 mid-flood: 16:10	<b>15</b>	<b>16</b> Site Inspection CWD Survey (Vessel, Land-based) AR1A, AR2 NM1A, NM5 WQ General mid-ebb: 11:18 mid-flood: 16:57	<b>17</b> Site Inspection	<b>18</b>  WQ General mid-ebb: 12:35 mid-flood: 7:29
<b>19</b>	<b>20</b> Site Inspection CWD Survey (Land-based)	<b>21</b> Site Inspection  WQ General mid-ebb: 14:11 mid-flood: 9:21	<b>22</b>  AR1A, AR2 NM1A, NM5	<b>23</b> Site Inspection  NM4, NM6 WQ General mid-ebb: 15:23 mid-flood: 10:37	<b>24</b> Site Inspection	<b>25</b>  WQ General mid-ebb: 17:07 mid-flood: 12:05
<b>26</b>	<b>27</b>	<b>28</b> Site Inspection  AR1A, AR2 NM1A, NM5 WQ General mid-ebb: 7:02 mid-flood: 14:20	<b>29</b> Site Inspection  NM4, NM6	<b>30</b> Site Inspection  WQ General mid-ebb: 9:51 mid-flood: 15:39	<b>31</b> Site Inspection	
<b>Notes:</b> CWD - Chinese White Dolphin Air quality and Noise Monitoring Station WQ - Water Quality NM1A/AR1A - Man Tung Road Park NM4 - Ching Chung Hau Po Woon Primary School NM5/AR2 - Village House, Tin Sum NM6 - House No. 1, Sha Lo Wan						

## **Appendix D. Monitoring Results**



## **Air Quality Monitoring Results**

**1-hour TSP Results**

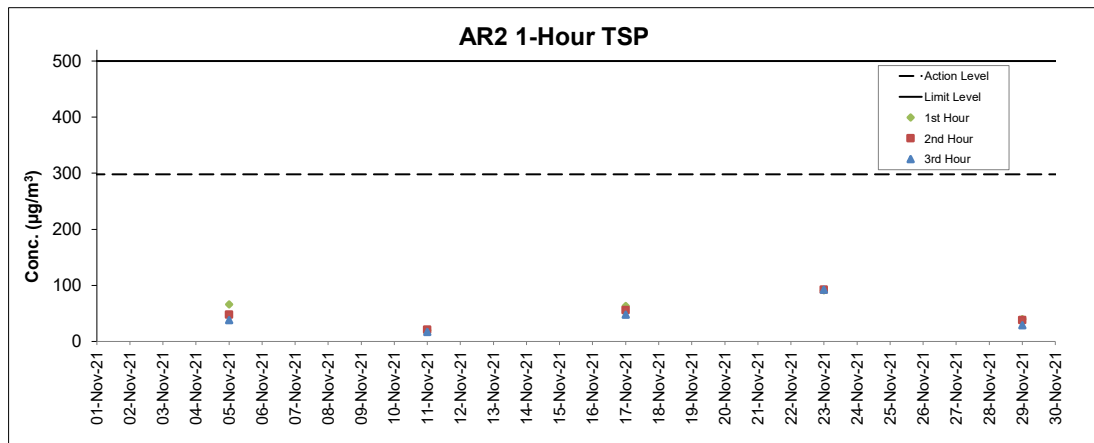
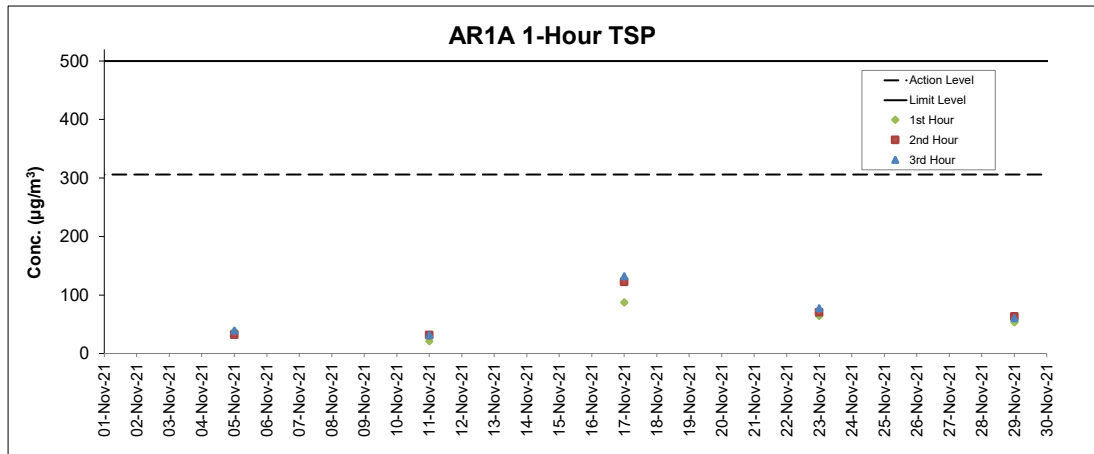
**Station: AR1A- Man Tung Road Park**

Date	Time	Weather	Wind Speed (m/s)	Wind Direction (deg)	1-hr TSP ( $\mu\text{g}/\text{m}^3$ )	Action Level ( $\mu\text{g}/\text{m}^3$ )	Limit Level ( $\mu\text{g}/\text{m}^3$ )
05-Nov-21	13:28	Sunny	3.3	265	38	306	500
05-Nov-21	14:28	Sunny	3.3	261	32	306	500
05-Nov-21	15:28	Sunny	2.8	Variable	39	306	500
11-Nov-21	12:43	Sunny	4.2	339	21	306	500
11-Nov-21	13:43	Sunny	4.4	332	31	306	500
11-Nov-21	14:43	Sunny	3.1	286	31	306	500
17-Nov-21	12:10	Fine	5.8	332	87	306	500
17-Nov-21	13:10	Fine	4.7	327	122	306	500
17-Nov-21	14:10	Fine	4.4	321	132	306	500
23-Nov-21	9:37	Fine	5.0	38	64	306	500
23-Nov-21	10:37	Fine	4.4	16	70	306	500
23-Nov-21	11:37	Fine	3.3	8	77	306	500
29-Nov-21	13:00	Sunny	4.7	304	53	306	500
29-Nov-21	14:00	Sunny	4.7	304	63	306	500
29-Nov-21	15:00	Sunny	3.3	291	60	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 ( $\mu\text{g}/\text{m}^3$ )
05-Nov-21	9:21	Sunny	5.8	85	66	298	500
05-Nov-21	10:21	Sunny	5.3	87	48	298	500
05-Nov-21	11:21	Sunny	4.7	102	38	298	500
11-Nov-21	8:42	Sunny	5.0	49	20	298	500
11-Nov-21	9:42	Sunny	3.3	56	21	298	500
11-Nov-21	10:42	Sunny	2.5	27	17	298	500
17-Nov-21	7:49	Fine	4.7	80	63	298	500
17-Nov-21	8:49	Fine	5.0	76	56	298	500
17-Nov-21	9:49	Fine	4.2	83	48	298	500
23-Nov-21	13:41	Fine	3.9	18	91	298	500
23-Nov-21	14:41	Fine	3.6	9	92	298	500
23-Nov-21	15:41	Fine	3.3	16	92	298	500
29-Nov-21	9:05	Sunny	2.8	32	40	298	500
29-Nov-21	10:05	Sunny	2.8	345	38	298	500
29-Nov-21	11:05	Sunny	1.7	Variable	29	298	500



**Notes**

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

## Noise Monitoring Results

### Noise Measurement Results

#### Station: NM1A- Man Tung Road Park

Date	Weather	Time	Measured L <sub>10</sub> dB(A)	Measured L <sub>90</sub> dB(A)	L <sub>eq(30mins)</sub> dB(A) ^
05-Nov-21	Sunny	13:32	59.5	57.2	61
05-Nov-21	Sunny	13:37	60.3	57.3	
05-Nov-21	Sunny	13:42	59.2	57.0	
05-Nov-21	Sunny	13:47	60.1	57.4	
05-Nov-21	Sunny	13:52	60.7	57.6	
05-Nov-21	Sunny	13:57	57.9	52.8	60
11-Nov-21	Sunny	12:46	56.5	50.6	
11-Nov-21	Sunny	12:51	62.9	51.7	
11-Nov-21	Sunny	12:56	59.4	50.6	
11-Nov-21	Sunny	13:01	57.8	47.7	
11-Nov-21	Sunny	13:06	59.3	50.4	58
11-Nov-21	Sunny	13:11	56.5	49.6	
17-Nov-21	Fine	12:12	57.2	48.8	
17-Nov-21	Fine	12:17	57.5	49.6	
17-Nov-21	Fine	12:22	60.3	50.5	
17-Nov-21	Fine	12:27	55.6	49.6	62
17-Nov-21	Fine	12:32	55.7	50.0	
17-Nov-21	Fine	12:37	59.0	50.8	
23-Nov-21	Fine	11:00	60.0	51.7	
23-Nov-21	Fine	11:05	61.8	51.3	
23-Nov-21	Fine	11:10	63.2	50.7	
23-Nov-21	Fine	11:15	65.1	51.3	
23-Nov-21	Fine	11:20	59.4	51.2	
23-Nov-21	Fine	11:25	62.3	52.6	
29-Nov-21	Sunny	13:18	61.6	52.1	62
29-Nov-21	Sunny	13:23	58.0	51.0	
29-Nov-21	Sunny	13:28	57.3	50.3	
29-Nov-21	Sunny	13:33	59.2	51.9	
29-Nov-21	Sunny	13:38	61.4	52.1	
29-Nov-21	Sunny	13:43	55.9	51.2	

Remarks:

(^) +3dB (A) correction in Leq(30mins) dB(A) was applied to free-field measurement.

### 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) ^
04-Nov-21	Sunny	13:07	66.7	58.6	64
04-Nov-21	Sunny	13:12	64.1	58.4	
04-Nov-21	Sunny	13:17	64.0	58.6	
04-Nov-21	Sunny	13:22	61.5	58.1	
04-Nov-21	Sunny	13:27	61.2	57.7	
04-Nov-21	Sunny	13:32	60.3	56.3	61
10-Nov-21	Sunny	09:34	59.4	54.9	
10-Nov-21	Sunny	09:39	60.4	54.7	
10-Nov-21	Sunny	09:44	60.2	54.1	
10-Nov-21	Sunny	09:49	59.6	54.4	
10-Nov-21	Sunny	09:54	60.7	55.5	64
10-Nov-21	Sunny	09:59	60.4	54.9	
16-Nov-21	Sunny	13:12	63.3	58.5	
16-Nov-21	Sunny	13:17	64.0	58.6	
16-Nov-21	Sunny	13:22	61.9	58.0	
16-Nov-21	Sunny	13:27	63.3	57.4	64
16-Nov-21	Sunny	13:32	60.4	56.2	
16-Nov-21	Sunny	13:37	61.2	56.2	
22-Nov-21	Overcast	13:43	60.6	55.8	
22-Nov-21	Overcast	13:48	64.8	58.3	
22-Nov-21	Overcast	13:53	62.4	57.1	
22-Nov-21	Overcast	13:58	65.1	57.8	
22-Nov-21	Overcast	14:03	63.0	56.7	
22-Nov-21	Overcast	14:08	63.5	57.4	
30-Nov-21	Sunny	13:51	63.9	57.7	66
30-Nov-21	Sunny	13:56	65.9	57.7	
30-Nov-21	Sunny	14:01	66.6	59.1	
30-Nov-21	Sunny	14:06	63.6	58.5	
30-Nov-21	Sunny	14:11	64.2	58.2	
30-Nov-21	Sunny	14:16	63.9	58.1	

Remarks:

(^) +3dB (A) correction in Leq(30mins) dB(A) 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>50</sub> dB(A)	L <sub>eq(30mins)</sub> dB(A) ^
05-Nov-21	Sunny	09:26	53.8	48.4	58
05-Nov-21	Sunny	09:31	57.1	49.2	
05-Nov-21	Sunny	09:36	51.2	49.1	
05-Nov-21	Sunny	09:41	51.0	48.0	
05-Nov-21	Sunny	09:46	52.8	48.5	
05-Nov-21	Sunny	09:51	50.9	48.4	54
11-Nov-21	Sunny	08:46	56.3	46.1	
11-Nov-21	Sunny	08:51	52.4	45.3	
11-Nov-21	Sunny	08:56	50.1	45.2	
11-Nov-21	Sunny	09:01	53.6	47.0	
11-Nov-21	Sunny	09:06	49.7	45.8	58
11-Nov-21	Sunny	09:11	48.8	44.9	
17-Nov-21	Fine	07:52	58.2	45.5	
17-Nov-21	Fine	07:57	51.0	46.1	
17-Nov-21	Fine	08:02	53.5	45.5	
17-Nov-21	Fine	08:07	55.2	47.3	57*
17-Nov-21	Fine	08:12	53.8	48.7	
17-Nov-21	Fine	08:17	51.8	46.3	
23-Nov-21	Fine	14:15	60.4	50.8	
23-Nov-21	Fine	14:20	65.8	50.5	
23-Nov-21	Fine	14:25	58.3	50.4	55
23-Nov-21	Fine	14:30	51.8	48.3	
23-Nov-21	Fine	14:35	55.9	50.0	
23-Nov-21	Fine	14:40	55.5	49.1	
29-Nov-21	Sunny	09:07	54.2	48.5	
29-Nov-21	Sunny	09:12	53.0	48.3	55
29-Nov-21	Sunny	09:17	50.2	47.3	
29-Nov-21	Sunny	09:22	53.8	49.0	
29-Nov-21	Sunny	09:27	53.4	48.9	
29-Nov-21	Sunny	09:32	56.9	50.4	

Remarks:

(^) +3dB (A) correction in Leq(30mins) dB(A) was applied to free-field measurement.

(\*) The measurement result was corrected with reference to the baseline monitoring levels.

## Noise Measurement Results

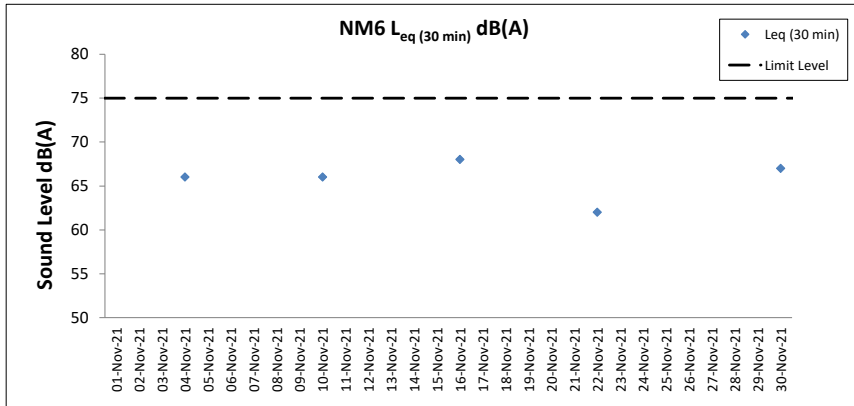
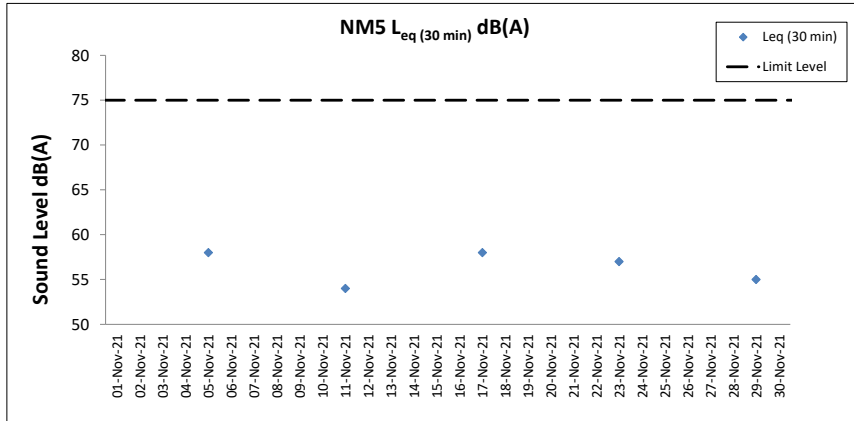
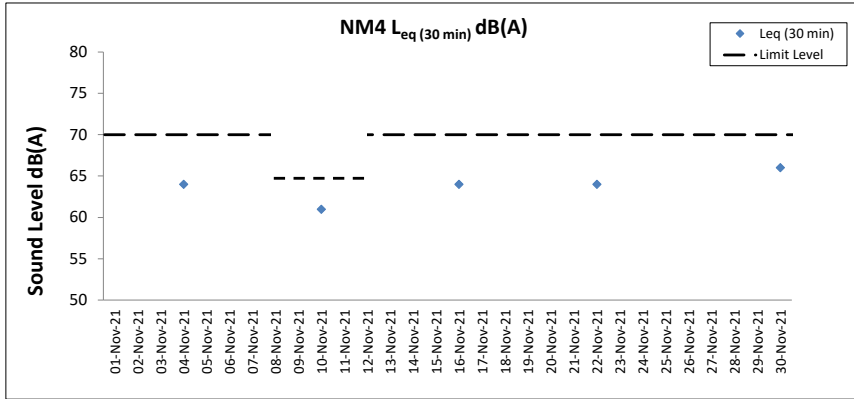
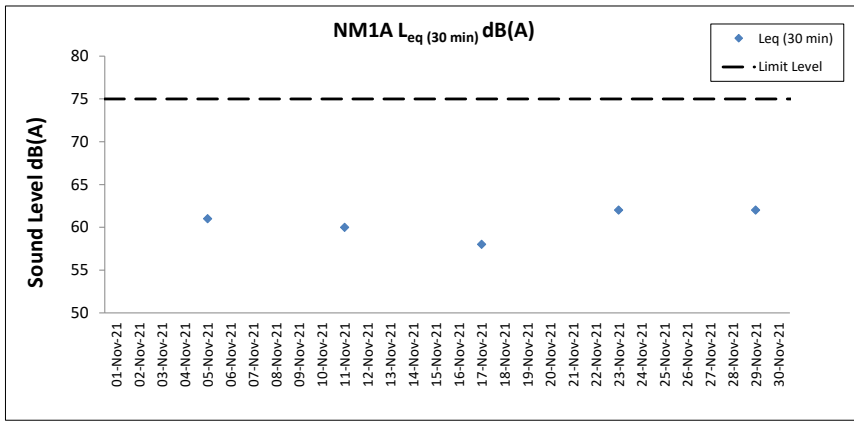
### Station: NM6- House No.1 Sha Lo Wan

Date	Weather	Time	Measured L <sub>10</sub> dB(A)	Measured L <sub>50</sub> dB(A)	L <sub>eq(30mins)</sub> dB(A) ^
04-Nov-21	Sunny	15:40	61.2	47.7	66
04-Nov-21	Sunny	15:45	65.0	47.2	
04-Nov-21	Sunny	15:50	66.1	45.5	
04-Nov-21	Sunny	15:55	51.5	43.0	
04-Nov-21	Sunny	16:00	69.2	44.8	
04-Nov-21	Sunny	16:05	58.9	46.1	66*
10-Nov-21	Sunny	15:41	72.3	51.0	
10-Nov-21	Sunny	15:46	70.2	56.4	
10-Nov-21	Sunny	15:51	71.3	54.7	
10-Nov-21	Sunny	15:56	71.9	56.2	
10-Nov-21	Sunny	16:01	70.1	49.3	68
10-Nov-21	Sunny	16:06	66.1	51.8	
16-Nov-21	Sunny	15:38	72.3	47.4	
16-Nov-21	Sunny	15:43	50.6	45.7	
16-Nov-21	Sunny	15:48	57.9	46.0	
16-Nov-21	Sunny	15:53	69.9	46.5	62*
16-Nov-21	Sunny	15:58	66.6	48.5	
16-Nov-21	Sunny	16:03	66.1	47.4	
22-Nov-21	Overcast	15:42	67.6	48.9	
22-Nov-21	Overcast	15:47	63.0	55.4	
22-Nov-21	Overcast	15:52	67.7	46.4	67
22-Nov-21	Overcast	15:57	66.4	49.5	
22-Nov-21	Overcast	16:02	63.7	50.2	
22-Nov-21	Overcast	16:07	72.4	58.9	
30-Nov-21	Sunny	15:43	65.8	56.1	
30-Nov-21	Sunny	15:48	68.8	52.0	67
30-Nov-21	Sunny	15:53	62.0	53.2	
30-Nov-21	Sunny	15:58	65.8	55.5	
30-Nov-21	Sunny	16:03	63.4	51.4	
30-Nov-21	Sunny	16:08	66.2	55.2	

Remarks:

(^) +3dB (A) correction in Leq(30mins) dB(A) was applied to free-field measurement.

(\*) The measurement result was corrected with reference to the baseline monitoring levels.



Notes

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

## **Water Quality Monitoring Results**

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

**Water Quality Monitoring Results on 02 November 21 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)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)								
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA										
C1	Fine	Calm	10:57	7.6	Surface	1.0	0.4	222	25.7	25.7	8.1	8.1	33.4	33.4	100.0	100.0	6.8	6.8	5.7	6.8	4	10	815618	804240								
						1.0	0.4	233	25.7	8.1	8.1	33.4	33.5	100.0	100.0	6.8	6.8	5.6	6.8	4												
						3.8	0.3	216	25.7	25.7	8.1	8.1	33.5	33.5	100.9	101.0	6.8	6.8	6.8	12												
					Middle	3.8	0.4	231	25.7	25.7	8.1	8.1	33.5	33.5	101.0	101.0	6.8	6.8	6.7	11												
						6.6	0.3	215	25.5	25.5	8.1	8.1	33.6	33.7	102.2	102.4	6.9	6.9	7.0	15												
						6.6	0.3	219	25.4	25.5	8.1	8.1	33.7	33.7	102.5	102.5	6.9	6.9	7.0	15												
					C2	Fine	Moderate	12:20	11.2	Surface	1.0	0.3	144	25.9	25.9	8.3	8.3	31.3	31.3	94.0	94.0				6.4	6.4	1.8	6.4	4	5	825672	806952
											1.0	0.3	153	25.9	25.9	8.3	8.3	31.3	31.3	94.0	94.0				6.4	6.2	1.8	6.2	4			
											5.6	0.4	140	25.7	25.7	8.2	8.2	31.9	31.9	87.8	87.8				6.0	6.0	4.5	6.0	5			
Middle	5.6	0.4	141	25.7						25.7	8.2	8.2	31.9	31.9	87.8	87.8	6.0	6.0	4.5	6.0	5											
	10.2	0.4	135	25.7						25.7	8.2	8.2	32.0	32.0	88.1	88.1	6.0	6.0	8.4	6.0	7											
	10.2	0.4	143	25.7						25.7	8.2	8.2	32.0	32.0	88.1	88.1	6.0	6.0	8.3	6.0	6											
C3	Cloudy	Moderate	09:50	12.4						Surface	1.0	0.3	135	26.0	26.0	8.1	8.1	32.6	32.6	82.8	82.8	5.6	5.6	1.6	5.6	4	3	822120	817793			
											1.0	0.3	143	26.0	26.0	8.1	8.1	32.6	32.6	82.7	82.7	5.6	5.6	1.6	5.6	4						
											6.2	0.2	130	26.0	26.0	8.1	8.1	32.6	32.6	82.3	82.3	5.6	5.6	1.7	5.6	3						
					Middle	6.2	0.2	136	26.0	26.0	8.1	8.1	32.6	32.6	82.3	82.3	5.6	5.6	1.7	5.6	3											
						11.4	0.2	141	26.0	26.0	8.0	8.0	32.6	32.6	81.9	81.9	5.5	5.5	2.3	5.5	3											
						11.4	0.2	145	26.0	26.0	8.0	8.0	32.6	32.6	81.9	81.9	5.5	5.5	2.3	5.5	3											
					IM1	Fine	Calm	11:17	4.4	Surface	1.0	0.2	198	25.5	25.5	8.1	8.1	33.3	33.3	99.9	99.9	6.8	6.8	6.1	6.8	5				6	817939	807151
											1.0	0.2	214	25.5	25.5	8.1	8.1	33.3	33.3	99.9	99.9	6.8	6.8	6.1	6.8	5						
											-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Middle	-	-	-	-						-	-	-	-	-	-	-	-	-	-	-	-	-	-									
	3.4	0.1	182	25.5						25.5	8.1	8.1	33.3	33.3	100.3	100.4	6.8	6.8	7.2	6.8	7.2	7										
	3.4	0.1	182	25.5						25.5	8.1	8.1	33.3	33.3	100.4	100.4	6.8	6.8	7.2	6.8	7.2	6										
IM2	Fine	Calm	11:24	6.4						Surface	1.0	0.2	171	25.5	25.5	8.1	8.1	33.2	33.2	101.4	101.4	6.9	6.9	5.0	6.9	4	4	818142	806164			
											1.0	0.2	177	25.5	25.5	8.1	8.1	33.2	33.2	101.4	101.4	6.9	7.0	4.9	6.9	4						
											3.2	0.2	156	25.5	25.5	8.1	8.1	33.3	33.3	102.5	102.6	7.0	7.0	6.1	7.0	4						
					Middle	3.2	0.2	171	25.5	25.5	8.1	8.1	33.3	33.3	102.7	102.7	7.0	7.0	6.2	7.0	4											
						5.4	0.2	149	25.5	25.5	8.1	8.1	33.3	33.3	104.9	105.2	7.1	7.2	7.1	7.1	4											
						5.4	0.2	158	25.5	25.5	8.1	8.1	33.3	33.3	105.5	105.5	7.2	7.2	7.1	7.1	4											
					IM3	Fine	Calm	11:30	6.6	Surface	1.0	0.3	129	25.5	25.5	8.1	8.1	33.0	33.0	100.2	100.4	6.8	6.8	4.4	6.8	4				4	818785	805573
											1.0	0.4	134	25.5	25.5	8.1	8.1	33.0	33.0	100.5	100.5	6.8	6.9	4.5	6.8	4						
											3.3	0.4	130	25.5	25.5	8.1	8.1	33.0	33.1	101.5	101.6	6.9	6.9	5.2	6.9	4						
Middle	3.3	0.4	137	25.5						25.5	8.1	8.1	33.1	33.1	101.7	101.7	6.9	6.9	5.1	6.9	4											
	5.6	0.3	127	25.5						25.5	8.1	8.1	33.1	33.1	103.5	103.8	7.0	7.1	6.1	7.0	4											
	5.6	0.4	138	25.5						25.5	8.1	8.1	33.1	33.1	104.1	104.1	7.1	7.1	6.1	7.1	5											
IM4	Fine	Calm	11:41	7.0						Surface	1.0	0.8	185	25.5	25.5	8.1	8.1	33.2	33.2	100.5	100.5	6.8	6.8	6.3	6.8	9	11	819732	804600			
											1.0	0.8	199	25.5	25.5	8.1	8.1	33.2	33.2	100.5	100.5	6.8	6.9	6.4	6.8	9						
											3.5	0.7	181	25.5	25.5	8.1	8.1	33.2	33.2	101.0	101.1	6.9	6.9	7.8	6.9	11						
					Middle	3.5	0.8	185	25.5	25.5	8.1	8.1	33.2	33.2	101.2	101.2	6.9	6.9	7.8	6.9	11											
						6.0	0.6	183	25.5	25.6	8.1	8.1	33.1	33.1	105.2	105.7	7.1	7.2	8.1	7.1	12											
						6.0	0.6	188	25.6	25.6	8.1	8.1	33.1	33.1	106.2	106.2	7.2	7.2	8.1	7.2	12											
					IM5	Fine	Calm	11:50	7.6	Surface	1.0	0.8	214	25.5	25.5	8.1	8.1	33.2	33.2	102.0	102.1	6.9	6.9	7.8	6.9	12				10	820711	804853
											1.0	0.8	220	25.5	25.5	8.1	8.1	33.2	33.2	102.1	102.1	6.9	7.0	7.8	6.9	11						
											3.8	0.8	212	25.5	25.5	8.1	8.1	33.2	33.2	103.5	103.6	7.0	7.0	8.1	7.0	10						
Middle	3.8	0.8	212	25.5						25.5	8.1	8.1	33.2	33.2	103.7	103.7	7.0	7.0	8.1	7.0	9											
	6.6	0.7	212	25.5						25.5	8.1	8.1	33.2	33.2	106.6	107.2	7.2	7.3	9.1	7.2	8											
	6.6	0.7	223	25.5						25.5	8.1	8.1	33.2	33.2	107.8	107.8	7.3	7.3	9.1	7.3	8											
IM6	Fine	Calm	11:58	6.8						Surface	1.0	0.7	239	25.5	25.5	8.1	8.1	32.9	32.9	100.1	100.1	6.8	6.8	7.1	6.8	6	6	821073	805838			
											1.0	0.7	252	25.5	25.5	8.1	8.1	32.9	32.9	100.1	100.1	6.8	6.8	7.2	6.8	6						
											3.4	0.6	234	25.5	25.5	8.1	8.1	33.1	33.1	100.5	100.7	6.8	6.8	8.2	6.8	6						
					Middle	3.4	0.6	244	25.5	25.5	8.1	8.1	33.1	33.1	100.8	100.8	6.8	6.8	8.3	6.8	6											
						5.8	0.5	233	25.5	25.5	8.1	8.1	33.1	33.1	103.0	103.6	7.0	7.1	9.1	7.0	6											
						5.8	0.6	236	25.5	25.5	8.1	8.1	33.1	33.1	104.2	104.2	7.1	7.1	9.1	7.1	7											
					IM7	Fine	Calm	12:09	7.8	Surface	1.0	0.5	242	25.5	25.5	8.1	8.1	32.7	32.7	102.6	102.8	7.0	7.0	3.5	7.0	10				9	821365	806821
											1.0	0.5	248	25.5	25.5	8.1	8.1	32.7	32.7	103.0	103.0	7.0	7.1	3.4	7.0	10						
											3.9	0.4	249	25.5	25.5	8.1	8.1	32.8	32.8	104.0	104.3	7.1	7.1	4.3	7.1	10						
Middle	3.9	0.5	257	25.5						25.5	8.1	8.1	32.8	32.8	104.5	104.5	7.1	7.1	4.2	7.1	10											
	6.8	0.3	251	25.5						25.5	8.1	8.1	32.8	32.8	106.1	106.5	7.2	7.3	5.9	7.2	7											
	6.8	0.3	253	25.5						25.5	8.1	8.1	32.7	32.7	106.8	106.8	7.3	7.3	5.8	7.3	8											
IM8	Fine	Moderate	11:51	7.8						Surface	1.0	0.4	147	25.7	25.7	8.3	8.3	32.1	32.1	92.4	92.4	6.3	6.3	3.1	6.3	4	6	821813	808152			
											1.0	0.4	155	25.7	25.7	8.3	8.3	32.1	32.1	92.4	92.4	6.3	6.3	3.0	6.3	4						
											3.9	0.4	141	25.5	25.5	8.3	8.3	32.4	32.4	90.7	90.7	6.2	6.2	8.4	6.2	6						
					Middle	3.9	0.4	142	25.5	25.5	8.3	8.3	32.4	32.4	90.7	90.7	6.2	6.2	8.5	6.2	6											
						6.8	0.3	138	25.5	25.5	8.2	8.2	32.6	32.6	90.5	90.5	6.2	6.2	7.6	6.2	7											
						6.8	0.3	142	25.5	25.5	8.2	8.2	32.6	32.6	90.5	90.5	6.2	6.2	7.5	6.2	7											

DA: Depth-Averaged

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

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



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

**Water Quality Monitoring Results on 02 November 21 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)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)						
									Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA										
IM9	Fine	Moderate	11:44	7.3	Surface	1.0	0.4	151	25.7	25.7	8.3	8.3	32.0	32.0	92.5	92.5	6.3	6.3	2.7	5.7	4	4	822085	808821						
						1.0	0.4	151	25.7		8.3	8.3	32.0	32.0	92.5	92.5	6.3		2.7											
						3.7	0.4	140	25.6		8.3	8.3	32.2	32.2	91.2	91.2	6.2		5.5											
					Middle	3.7	0.4	143	25.6	25.6	8.3	8.3	32.2	32.2	91.2	91.2	6.2	6.3	5.5	6.7	4				6	822394	809810			
						6.3	0.3	133	25.5		8.2	8.2	32.3	32.3	92.4	92.4	6.3		8.9											
						6.3	0.3	138	25.5		8.2	8.2	32.3	32.3	92.4	92.4	6.3		9.0											
					Bottom	1.0	0.3	153	25.7	25.7	8.3	8.3	32.1	32.1	91.7	91.7	6.2	6.2	3.9	7	7							7	822075	811452
						1.0	0.3	162	25.7		8.3	8.3	32.1	32.1	91.7	91.7	6.2		3.9											
						3.8	0.4	143	25.6		8.2	8.2	32.2	32.2	90.6	90.6	6.2		6.5											
Middle	3.8	0.4	147	25.6	25.6	8.2	8.2	32.2	32.2	90.6	90.6	6.2	6.2	6.4	7	6	8	821468	812047											
	6.5	0.3	147	25.5		8.2	8.2	32.2	32.2	90.1	90.2	6.2		9.8																
	6.5	0.3	157	25.5		8.2	8.2	32.2	32.2	90.2	90.2	6.2		9.9																
Bottom	1.0	0.4	166	25.6	25.6	8.3	8.3	32.0	32.0	91.4	91.4	6.2	6.2	3.5	7	7				8	821471	814184								
	1.0	0.4	170	25.6		8.3	8.3	32.0	32.0	91.4	91.4	6.2		3.6																
	3.6	0.3	153	25.6		8.3	8.3	32.0	32.0	90.9	90.9	6.2		6.4																
Middle	3.6	0.3	167	25.6	25.6	8.3	8.3	32.0	32.0	90.9	90.9	6.2	6.2	6.4	7	6							9	821452	811452					
	6.1	0.3	156	25.6		8.2	8.2	32.0	32.0	91.4	91.5	6.2		7.1																
	6.1	0.3	162	25.6		8.2	8.2	32.0	32.0	91.5	91.5	6.2		7.2																
Bottom	1.0	0.3	171	25.6	25.6	8.3	8.3	32.0	32.0	90.8	90.8	6.2	6.2	4.5	7	6	9	821468	812047											
	1.0	0.3	172	25.6		8.3	8.3	32.0	32.0	90.8	90.8	6.2		4.5																
	4.8	0.4	158	25.6		8.2	8.2	32.0	32.0	90.4	90.4	6.2		8.7																
Middle	4.8	0.4	162	25.6	25.6	8.2	8.2	32.0	32.0	90.4	90.4	6.2	6.2	8.6	8	8				9	821468	812047								
	8.6	0.2	168	25.5		8.2	8.2	32.0	32.0	90.4	90.4	6.2		19.1																
	8.6	0.2	170	25.5		8.2	8.2	32.0	32.0	90.4	90.4	6.2		19.2																
Bottom	1.0	-	-	25.6	25.6	8.1	8.1	32.0	32.0	88.3	88.3	6.0	6.0	2.6	3	2							3	819977	812666					
	1.0	-	-	25.6		8.1	8.1	32.0	32.0	88.3	88.3	6.0		2.7																
	2.7	-	-	-		-	-	-	-	-	-	-		-		-														
Middle	2.7	-	-	-	-	-	-	-	-	-	-	-	6.0	-	3	-	3	821471	814184											
	4.3	-	-	25.6		8.1	8.1	32.1	32.1	88.2	88.2	6.0		4.1																
	4.3	-	-	25.6		8.1	8.1	32.1	32.1	88.2	88.2	6.0		4.1																
Bottom	1.0	0.2	168	25.6	25.6	8.1	8.1	32.1	32.1	89.4	89.4	6.1	6.1	1.7	4	4				4	821471	814184								
	1.0	0.2	177	25.6		8.1	8.1	32.1	32.1	89.4	89.4	6.1		1.7																
	-	-	-	-		-	-	-	-	-	-	-		-		-														
Middle	-	-	-	-	-	-	-	-	-	-	-	-	6.0	-	3	-							3	822153	807593					
	4.1	0.2	149	25.6		8.0	8.0	32.2	32.2	88.4	88.5	6.0		2.0																
	4.1	0.2	154	25.6		8.0	8.0	32.2	32.2	88.6	88.6	6.0		2.1																
Bottom	1.0	0.3	165	25.7	25.7	8.3	8.3	31.8	31.8	94.4	94.4	6.4	6.4	1.9	2	2	2	822153	807593											
	1.0	0.3	166	25.7		8.3	8.3	31.8	31.8	94.4	94.4	6.4		1.8																
	4.4	0.4	155	25.6		8.3	8.3	32.2	32.2	92.2	92.1	6.3		4.7																
Middle	4.4	0.4	162	25.6	25.6	8.3	8.3	32.2	32.2	92.0	92.0	6.3	6.3	4.8	3	3				3	822153	807593								
	7.7	0.3	146	25.5		8.3	8.3	32.6	32.6	90.8	90.8	6.2		7.6																
	7.7	0.3	156	25.5		8.3	8.3	32.6	32.6	90.8	90.8	6.2		7.6																
Bottom	1.0	0.1	62	25.5	25.5	8.0	8.0	33.3	33.3	97.6	97.6	6.6	6.6	4.5	6	6							6	817177	807827					
	1.0	0.1	65	25.5		8.0	8.0	33.3	33.3	97.6	97.6	6.6		4.6																
	4.5	0.1	70	25.5		8.0	8.0	33.4	33.4	97.9	98.0	6.6		5.2																
Middle	4.5	0.1	70	25.5	25.5	8.0	8.0	33.3	33.3	98.0	98.0	6.7	6.7	5.1	5	5	5	817177	807827											
	8.0	0.1	63	25.5		8.0	8.0	33.3	33.3	99.0	99.1	6.7		6.6																
	8.0	0.1	66	25.5		8.0	8.0	33.3	33.3	99.1	99.1	6.7		6.6																
Bottom	1.0	0.1	314	25.5	25.5	8.0	8.0	32.8	32.8	96.3	96.3	6.5	6.5	6.2	5	5				5	816588	810706								
	1.0	0.1	314	25.5		8.0	8.0	32.8	32.8	96.2	96.2	6.5		6.2																
	-	-	-	-		-	-	-	-	-	-	-		-		-														
Middle	-	-	-	-	-	-	-	-	-	-	-	-	6.5	-	6	-							6	816588	810706					
	3.6	0.1	301	25.5		8.0	8.0	32.8	32.8	96.7	96.9	6.6		6.4																
	3.6	0.1	327	25.4		8.0	8.0	32.8	32.8	97.0	97.0	6.6		6.3																
Bottom	1.0	0.0	148	25.4	25.4	7.9	7.9	32.4	32.4	96.6	96.7	6.6	6.6	5.8	5	5	5	817949	814751											
	1.0	0.0	157	25.4		7.9	7.9	32.4	32.4	96.7	96.7	6.6		5.8																
	-	-	-	-		-	-	-	-	-	-	-		-		-														
Middle	-	-	-	-	-	-	-	-	-	-	-	-	6.6	-	6	-				6	817949	814751								
	3.8	0.0	152	25.4		7.9	7.9	32.3	32.3	97.7	97.9	6.7		6.2																
	3.8	0.0	155	25.4		7.9	7.9	32.3	32.3	98.0	98.0	6.7		6.3																
Bottom	1.0	0.4	21	26.1	26.1	8.2	8.2	32.6	32.6	79.9	79.9	5.4	5.4	1.6	4	4							4	823619	823727					
	1.0	0.4	22	26.1		8.2	8.2	32.6	32.6	79.9	79.9	5.4		1.6																
	7.9	0.4	47	26.1		8.2	8.2	32.6	32.6	79.4	79.4	5.4		2.5																
Middle	7.9	0.4	47	26.1	26.1	8.2	8.2	32.6	32.6	79.4	79.4	5.4	5.4	2.5	3	3	3	823619	823727											
	14.8	0.3	38	26.1		8.1	8.1	32.7	32.7	79.5	79.6	5.4		3.2																
	14.8	0.3	41	26.1		8.1	8.1	32.7	32.7	79.6	79.6	5.4		3.2																
Bottom	1.0	-	-	25.8	25.8	8.2	8.2	32.0	32.0	90.4	90.4	6.1	6.2	5.9	5	5				5	820375	811614								
	1.0	-	-	25.8		8.2	8.2	32.0	32.0	90.4	90.4	6.2		5.9																
	-	-	-	-		-	-	-	-	-	-	-		-		-														
Middle	-	-	-	-	-	-	-	-	-	-	-	-	6.2	-	4	-							4	820375	811614					
	4.0	-	-	25.7		8.2	8.2	32.0	32.0	90.8	90.9	6.2		4.8																
	4.0	-	-	25.7		8.2	8.2	32.0	32.0	90.8	90.9	6.2		4.8																

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

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

**Water Quality Monitoring Results on 02 November 21 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)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA		
C1	Fine	Calm	16:46	8.0	Surface	1.0	0.4	32	25.7	25.7	8.1	8.1	33.1	33.1	102.8	102.9	7.0	7.0	6.8	7.5	6	7	815609	804258
						1.0	0.4	34	25.7		8.1	8.1	33.1	33.1	102.9	7.0	6.8							
						4.0	0.4	30	25.8		8.1	8.1	33.1	33.1	103.3	103.4	7.0		7.2					
					Middle	4.0	0.4	32	25.8	25.8	8.1	8.1	33.1	33.1	103.3	103.4	7.0	7.1						
						7.0	0.4	25	25.8		8.1	8.1	33.1	33.1	104.0	104.1	7.0	8.6						
						7.0	0.4	25	25.8		8.1	8.1	33.1	33.1	104.2	104.1	7.0	8.7						
C2	Fine	Moderate	15:45	11.6	Surface	1.0	0.4	34	25.9	25.9	8.4	8.4	31.1	31.1	94.8	94.8	6.5	6.4	3.0	6.5	7	6	825683	806932
						1.0	0.4	36	25.9		8.4	8.4	31.1	31.1	94.7	6.5	3.1							
						5.8	0.4	36	25.7		8.4	8.4	31.4	31.4	91.0	6.2	6.3							
					Middle	5.8	0.4	39	25.7	25.7	8.4	8.4	31.4	31.4	91.1	6.2	6.3							
						10.6	0.4	41	25.7		8.4	8.4	31.5	31.5	90.5	6.2	10.0							
						10.6	0.4	44	25.7		8.4	8.4	31.5	31.5	90.5	6.2	10.1							
C3	Cloudy	Moderate	17:58	10.3	Surface	1.0	0.3	222	25.8	25.8	8.2	8.2	32.2	32.2	87.4	87.4	5.9	5.9	1.5	4.2	4	4	822118	817785
						1.0	0.3	241	25.8		8.2	8.2	32.2	32.2	87.3	5.9	1.5							
						5.2	0.3	225	25.9		8.2	8.2	32.3	32.3	85.3	5.8	3.7							
					Middle	5.2	0.3	234	25.9	25.9	8.2	8.2	32.3	32.3	85.3	5.8	3.9							
						9.3	0.4	207	25.9		8.1	8.1	32.3	32.3	85.5	5.8	7.0							
						9.3	0.4	217	25.9		8.1	8.1	32.3	32.3	85.5	5.8	7.3							
IM1	Fine	Calm	16:29	4.2	Surface	1.0	0.2	8	25.7	25.7	8.1	8.1	32.3	32.3	101.4	101.4	6.9	6.9	6.2	6.8	8	7	817953	807148
						1.0	0.3	8	25.7		8.1	8.1	32.3	32.3	101.4	6.9	6.1							
						-	-	-	-		-	-	-	-	-	-	-							
					Middle	-	-	-	-	25.7	-	-	-	-	-	-	-	-						
						3.2	0.1	354	25.7		8.1	8.1	32.3	32.3	101.4	101.4	6.9	7.5						
						3.2	0.1	326	25.7		8.1	8.1	32.3	32.3	101.4	6.9	7.4							
IM2	Fine	Calm	16:22	6.2	Surface	1.0	0.5	340	25.7	25.7	8.1	8.1	32.4	32.4	101.3	101.4	6.9	6.9	5.9	6.5	8	9	818178	806169
						1.0	0.5	352	25.7		8.1	8.1	32.4	32.4	101.4	6.9	6.0							
						3.1	0.5	342	25.7		8.1	8.1	32.4	32.4	101.5	6.9	6.4							
					Middle	3.1	0.5	349	25.7	25.7	8.1	8.1	32.4	32.4	101.6	6.9	6.3							
						5.2	0.4	345	25.7		8.1	8.1	32.4	32.4	101.7	6.9	7.1							
						5.2	0.4	348	25.7		8.1	8.1	32.4	32.4	101.7	6.9	7.0							
IM3	Fine	Calm	16:13	6.4	Surface	1.0	0.3	305	25.7	25.7	8.1	8.1	32.4	32.4	102.4	102.5	7.0	7.0	5.2	6.5	10	9	818804	805616
						1.0	0.3	324	25.7		8.1	8.1	32.4	32.4	102.5	7.0	5.2							
						3.2	0.3	310	25.7		8.1	8.1	32.4	32.4	103.4	7.0	6.7							
					Middle	3.2	0.3	333	25.7	25.7	8.1	8.1	32.4	32.4	103.5	7.0	6.7							
						5.4	0.4	304	25.7		8.1	8.1	32.4	32.4	104.3	7.1	7.6							
						5.4	0.4	332	25.7		8.1	8.1	32.4	32.4	104.5	7.1	7.6							
IM4	Fine	Calm	16:04	8.0	Surface	1.0	0.4	355	25.7	25.7	8.0	8.0	32.3	32.3	100.4	100.4	6.8	6.8	6.1	7.4	8	7	819712	804597
						1.0	0.4	327	25.7		8.0	8.0	32.3	32.3	100.4	6.8	6.1							
						4.0	0.3	329	25.7		8.0	8.0	32.3	32.3	100.6	6.8	7.2							
					Middle	4.0	0.4	357	25.7	25.7	8.0	8.0	32.3	32.3	100.6	6.8	7.1							
						7.0	0.3	324	25.7		8.0	8.0	32.3	32.3	100.7	6.8	8.8							
						7.0	0.3	355	25.7		8.0	8.0	32.2	32.3	100.7	6.8	8.9							
IM5	Fine	Calm	15:56	7.6	Surface	1.0	0.4	333	25.7	25.7	8.0	8.0	32.3	32.3	100.6	100.6	6.8	6.9	7.2	8.3	8	8	820747	804864
						1.0	0.4	333	25.7		8.0	8.0	32.3	32.3	100.6	6.8	7.1							
						3.8	0.4	335	25.7		8.0	8.0	32.3	32.3	100.8	6.9	8.6							
					Middle	3.8	0.4	340	25.7	25.7	8.0	8.0	32.3	32.3	100.9	6.9	8.5							
						6.6	0.4	336	25.7		8.0	8.0	32.3	32.3	101.4	6.9	9.0							
						6.6	0.4	309	25.7		8.0	8.0	32.3	32.3	101.5	6.9	9.1							
IM6	Fine	Calm	15:47	6.6	Surface	1.0	0.5	357	25.7	25.7	8.0	8.0	32.3	32.3	102.7	102.8	7.0	7.0	7.1	8.2	7	7	821042	805830
						1.0	0.5	328	25.7		8.0	8.0	32.3	32.3	102.7	7.0	7.2							
						3.3	0.5	325	25.7		8.0	8.0	32.3	32.3	103.4	7.0	8.2							
					Middle	3.3	0.5	345	25.7	25.7	8.0	8.0	32.3	32.3	103.6	7.0	8.3							
						5.6	0.5	326	25.7		8.0	8.0	32.3	32.3	111.4	112.2	7.6	9.1						
						5.6	0.5	335	25.7		8.0	8.0	32.3	32.3	113.0	7.7	9.2							
IM7	Fine	Calm	15:42	7.4	Surface	1.0	0.5	346	25.7	25.7	8.1	8.1	32.3	32.3	102.1	102.2	6.9	7.0	6.0	6.8	5	5	821355	806844
						1.0	0.5	318	25.7		8.1	8.1	32.3	32.3	102.2	6.9	6.1							
						3.7	0.5	350	25.7		8.1	8.1	32.3	32.3	102.3	7.0	7.1							
					Middle	3.7	0.6	322	25.7	25.7	8.1	8.1	32.3	32.3	102.4	7.0	7.1							
						6.4	0.4	355	25.7		8.1	8.1	32.3	32.3	102.6	7.0	7.1							
						6.4	0.5	356	25.7		8.1	8.1	32.3	32.3	102.7	7.0	7.2							
IM8	Fine	Moderate	16:09	7.2	Surface	1.0	0.3	237	25.9	25.9	8.3	8.3	31.8	31.8	93.3	93.3	6.3	6.4	3.1	4.4	5	6	821807	808141
						1.0	0.3	250	25.9		8.3	8.3	31.8	31.8	93.3	6.4	3.0							
						3.6	0.3	240	25.8		8.3	8.3	31.9	31.9	93.7	6.4	4.2							
					Middle	3.6	0.3	260	25.8	25.8	8.3	8.3	31.9	31.9	93.7	6.4	4.4							
						6.2	0.4	221	25.8		8.3	8.3	31.9	31.9	94.3	6.4	5.9							
						6.2	0.4	237	25.8		8.3	8.3	31.9	31.9	94.4	6.4	5.9							

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

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

**Water Quality Monitoring Results on 02 November 21 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)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)							
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA									
IM9	Fine	Moderate	16:16	6.9	Surface	1.0	0.2	222	26.1	26.1	8.3	8.3	31.7	31.7	96.1	96.1	6.5	6.5	1.4	4	4	822079	808804								
						1.0	0.2	239	26.1	8.3	31.7	96.1	6.5	1.4	4																
						3.5	0.2	219	25.9	8.3	31.7	94.1	6.4	1.8	4																
					Middle	3.5	0.2	225	25.9	25.9	8.3	31.7	31.7	94.1	94.1	6.4	6.4	1.9	4												
						5.9	0.3	222	25.8	8.3	31.9	92.7	6.3	3.3	4																
						5.9	0.3	239	25.8	25.8	8.3	31.9	31.9	92.7	92.7	6.3	6.3	3.3	4												
					IM10	Fine	Moderate	16:24	6.7	Surface	1.0	0.2	216	26.0	26.0	8.3	8.3	31.8	31.8	97.5				97.5	6.6	6.6	1.6	3	3	822382	809797
											1.0	0.2	226	26.0	8.3	31.8	97.5	6.5	1.7	3											
											3.4	0.2	219	25.9	8.3	32.0	92.2	6.3	2.7	3											
Middle	3.4	0.2	219	25.9						25.9	8.3	32.0	32.0	92.2	92.2	6.3	6.3	2.7	3												
	5.7	0.3	231	25.8						8.2	8.2	32.0	32.0	92.5	92.5	6.3	6.3	3.7	3												
	5.7	0.3	234	25.8						25.8	8.2	32.0	32.0	92.5	92.5	6.3	6.3	3.8	3												
IM11	Fine	Moderate	16:36	8.7						Surface	1.0	0.4	220	26.0	26.0	8.3	8.3	32.0	32.0	96.3	96.3	6.5	6.5	1.6	3	3	822070	811458			
											1.0	0.4	222	26.0	8.3	31.8	96.2	6.5	1.6	3											
											4.4	0.3	231	25.8	8.3	32.1	93.7	6.4	2.8	3											
					Middle	4.4	0.3	250	25.8	25.8	8.3	32.1	32.1	93.6	93.6	6.4	6.4	2.8	3												
						7.7	0.4	214	25.7	8.3	32.2	92.7	6.3	4.6	4																
						7.7	0.4	234	25.7	25.7	8.3	32.2	32.2	92.7	92.7	6.3	6.3	4.4	4												
					IM12	Fine	Moderate	16:44	8.8	Surface	1.0	0.4	247	25.8	25.8	8.2	8.2	32.1	32.1	95.3	95.3	6.5	6.5	2.3	3				4	821447	812030
											1.0	0.4	248	25.8	8.2	32.1	95.3	6.5	2.2	3											
											4.4	0.3	244	25.7	25.7	8.3	32.2	32.2	92.2	92.2	6.3	6.4	3.9	4							
Middle	4.4	0.3	248	25.7						25.7	8.3	32.2	32.2	92.2	92.2	6.3	6.3	4.0	4												
	7.8	0.3	245	25.7						25.7	8.3	32.2	32.2	93.1	93.2	6.3	6.3	7.5	4												
	7.8	0.3	267	25.7						25.7	8.3	32.2	32.2	93.2	93.2	6.3	6.3	7.2	4												
SR1A	Fine	Calm	17:19	4.8						Surface	1.0	-	-	26.0	26.0	8.3	8.3	31.9	31.9	92.3	92.4	6.3	6.3	3.0	6	5	819978	812661			
											1.0	-	-	26.0	8.3	31.9	92.4	6.3	3.1	5											
											2.4	-	-	-	-	-	-	-	-	-	-	-	-	-							
					Middle	2.4	-	-	-	-	-	-	-	-	-	-	-	-	-												
						3.8	-	-	25.9	25.9	8.3	8.3	32.0	32.0	92.8	92.9	6.3	6.3	8.4	5											
						3.8	-	-	25.9	25.9	8.3	32.0	32.0	92.9	92.9	6.3	6.3	8.3	5												
					SR2	Fine	Moderate	17:35	4.4	Surface	1.0	0.2	200	25.8	25.8	8.2	8.2	32.1	32.1	92.7	92.7	6.3	6.3	6.5	8				10	821473	814144
											1.0	0.2	218	25.8	8.2	32.1	92.7	6.3	6.6	8											
											-	-	-	-	-	-	-	-	-	-	-	-	-								
Middle	-	-	-	-						-	-	-	-	-	-	-	-	-													
	3.4	0.2	211	25.8						25.8	8.2	8.2	32.1	32.1	92.9	92.9	6.3	6.3	10.6	11											
	3.4	0.2	217	25.8						25.8	8.2	32.1	32.1	92.9	92.9	6.3	6.3	10.4	12												
SR3	Fine	Moderate	16:03	8.3						Surface	1.0	0.1	44	25.9	25.9	8.4	8.4	31.3	31.3	95.0	95.0	6.5	6.5	2.3	5	5	822125	807558			
											1.0	0.1	45	25.9	8.4	31.3	94.9	6.5	2.4	5											
											4.2	0.2	37	25.8	25.8	8.4	8.4	31.7	31.7	91.8	91.8	6.3	6.4	4.4	4						
					Middle	4.2	0.2	39	25.8	25.8	8.4	8.4	31.7	31.7	91.8	91.8	6.3	6.3	4.6	5											
						7.3	0.1	37	25.8	25.8	8.4	8.4	31.7	31.7	91.7	91.8	6.2	6.2	8.7	4											
						7.3	0.1	40	25.8	25.8	8.4	8.4	31.7	31.7	91.8	91.8	6.2	6.2	8.5	4											
					SR4A	Fine	Calm	17:09	7.6	Surface	1.0	0.1	208	25.7	25.7	8.1	8.1	33.2	33.2	101.9	101.9	6.9	6.9	6.1	9				9	817199	807800
											1.0	0.1	222	25.7	8.1	33.2	101.9	6.9	6.0	9											
											3.8	0.1	219	25.7	25.7	8.1	8.1	33.2	33.2	102.0	102.1	6.9	6.9	7.6	9						
Middle	3.8	0.1	227	25.7						25.7	8.1	8.1	33.2	33.2	102.1	102.1	6.9	6.9	7.5	9											
	6.6	0.0	223	25.8						25.8	8.1	8.1	33.2	33.2	102.3	102.4	6.9	6.9	8.4	10											
	6.6	0.0	223	25.8						25.8	8.1	8.1	33.2	33.2	102.4	102.4	6.9	6.9	8.4	10											
SR5A	Fine	Calm	17:26	4.8						Surface	1.0	0.1	323	25.7	25.7	8.1	8.1	33.0	33.0	104.3	104.4	7.1	7.1	8.2	8	8	816571	810679			
											1.0	0.1	339	25.7	8.1	33.0	104.5	7.1	7.1	8.1	8										
											-	-	-	-	-	-	-	-	-	-	-	-									
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-													
						3.8	0.1	302	25.7	25.7	8.1	8.1	33.0	33.0	106.0	106.3	7.2	7.2	9.5	7											
						3.8	0.1	323	25.7	25.7	8.1	8.1	33.0	33.0	106.5	106.5	7.2	7.2	9.4	7											
					SR6A	Fine	Calm	17:48	4.2	Surface	1.0	0.1	255	25.7	25.7	8.1	8.1	32.9	32.9	101.6	101.7	6.9	6.9	6.4	7				8	817983	814749
											1.0	0.1	279	25.7	8.1	32.9	101.7	6.9	6.4	7											
											-	-	-	-	-	-	-	-	-	-	-	-									
Middle	-	-	-	-						-	-	-	-	-	-	-	-	-													
	3.2	0.1	256	25.7						25.7	8.1	8.1	32.9	32.9	102.0	102.1	6.9	6.9	7.0	8											
	3.2	0.1	258	25.7						25.7	8.1	8.1	32.8	32.8	102.1	102.1	6.9	6.9	7.0	8											
SR7	Cloudy	Moderate	18:34	16.0						Surface	1.0	0.4	189	26.1	26.1	8.1	8.1	32.5	32.5	83.8	83.8	5.7	5.7	2.5	12	9	823653	823763			
											1.0	0.4	206	26.1	8.1	32.5	83.8	5.7	2.6	12											
											8.0	0.4	199	26.1	26.1	8.1	8.1	32.6	32.6	83.3	83.3	5.6	5.6	3.8	9						
					Middle	8.0	0.4	204	26.1	26.1	8.1	8.1	32.6	32.6	83.3	83.3	5.6	5.6	3.9	8											
						15.0	0.4	180	26.1	26.1	8.0	8.0	32.5	32.5	84.4	84.4	5.7	5.7	4.8	6											
						15.0	0.4	180	26.1	26.1	8.0	8.0	32.5	32.5	84.4	84.4	5.7	5.7	4.9	6											
					SR8	Fine	Moderate	16:52	4.9	Surface	1.0	-	-	25.9	25.9	8.2	8.2	32.0	32.0	94.3	94.3	6.4	6.4	4.3	4				6	820385	811623
											1.0	-	-	25.9	8.2	32.0	94.3	6.4	4.3	4											
											-	-	-	-	-	-	-	-	-	-	-	-									
Middle	-	-	-	-						-	-	-	-	-	-	-	-														
	3.9	-	-	25.8						25.8	8.2	8.2	32.1	32.1	94.5	94.6	6.4	6.4	4.6	7											
	3.9	-	-	25.8						25.8	8.2	8.2	32.1	32.1	94.6	94.6	6.4	6.4	4.5	7											

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

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

**Water Quality Monitoring Results on 04 November 21 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)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA		
C1	Fine	Moderate	11:51	7.7	Surface	1.0	0.2	257	25.2	25.2	8.2	8.2	32.1	32.1	93.6	93.6	6.4	6.4	4.2	3	4	815632	804227	
						1.0	0.2	280	25.2	8.2	8.2	32.1	32.1	93.6	93.6	6.4	6.4	4.0	3					
						3.9	0.1	229	25.1	8.2	8.2	32.3	32.3	93.7	93.7	6.4	6.4	7.3	4					
						3.9	0.1	239	25.1	8.2	8.2	32.3	32.3	93.7	93.7	6.4	6.4	7.0	5					
						6.7	0.1	187	25.1	8.2	8.2	32.3	32.3	93.7	93.8	6.4	6.4	5.4	5					
						6.7	0.1	202	25.1	8.2	8.2	32.3	32.3	93.8	93.8	6.4	6.4	5.4	4					
					Middle	1.0	0.2	21	25.7	25.7	7.7	7.7	31.4	31.4	91.3	91.4	6.2	6.2	7.1	6				
						1.0	0.2	21	25.7	25.7	7.7	7.7	31.4	31.4	91.4	91.4	6.2	6.3	7.1	5				
						6.1	0.2	353	25.7	25.7	7.8	7.8	31.5	31.5	92.2	92.3	6.3	6.3	8.8	5				
						6.1	0.2	325	25.6	25.6	7.8	7.8	31.5	31.5	92.3	92.3	6.3	6.3	8.8	6				
						11.2	0.3	27	25.4	25.4	7.8	7.8	31.6	31.6	92.5	92.6	6.3	6.4	9.1	4				
						11.2	0.3	29	25.4	25.4	7.8	7.8	31.6	31.6	92.6	92.6	6.4	6.4	9.0	5				
C2	Fine	Moderate	12:58	12.2	Surface	1.0	0.2	21	25.7	25.7	7.7	7.7	31.4	31.4	91.3	91.4	6.2	6.2	7.1	6	5	825676	806932	
						1.0	0.2	21	25.7	25.7	7.7	7.7	31.4	31.4	91.4	91.4	6.2	6.3	7.1	5				
						6.1	0.2	353	25.7	25.7	7.8	7.8	31.5	31.5	92.2	92.3	6.3	6.3	8.8	5				
						6.1	0.2	325	25.6	25.6	7.8	7.8	31.5	31.5	92.3	92.3	6.3	6.3	8.8	6				
						11.2	0.3	27	25.4	25.4	7.8	7.8	31.6	31.6	92.5	92.6	6.3	6.4	9.1	4				
						11.2	0.3	29	25.4	25.4	7.8	7.8	31.6	31.6	92.6	92.6	6.4	6.4	9.0	5				
					Middle	1.0	0.5	70	25.8	25.8	7.7	7.7	32.1	32.1	90.7	90.7	6.2	6.2	3.8	5				
						1.0	0.6	71	25.8	25.8	7.7	7.7	32.1	32.1	90.7	90.7	6.2	6.2	3.9	5				
						5.5	0.4	73	25.8	25.8	7.7	7.7	32.1	32.1	90.9	90.9	6.2	6.2	4.1	5				
						5.5	0.5	78	25.8	25.8	7.7	7.7	32.1	32.1	90.9	90.9	6.2	6.2	4.1	5				
						10.0	0.4	82	25.8	25.8	7.7	7.7	32.1	32.1	91.0	91.0	6.2	6.2	5.2	5				
						10.0	0.4	87	25.8	25.8	7.7	7.7	32.1	32.1	91.0	91.0	6.2	6.2	5.2	5				
C3	Fine	Moderate	11:10	11.0	Surface	1.0	0.1	199	25.1	25.1	8.2	8.2	32.0	32.0	92.4	92.5	6.4	6.4	4.7	4	5	822124	817820	
						1.0	0.1	214	25.1	25.1	8.2	8.2	32.0	32.0	92.5	92.5	6.4	6.4	4.7	5				
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
						3.9	0.1	160	25.0	25.0	8.1	8.1	32.0	32.0	94.0	94.1	6.5	6.5	4.0	5				
						3.9	0.1	165	25.0	25.0	8.1	8.1	32.0	32.0	94.2	94.2	6.5	6.5	4.2	6				
					Middle	1.0	0.0	294	25.1	25.1	8.2	8.2	32.0	32.0	91.4	91.4	6.3	6.3	5.3	7				
						1.0	0.0	313	25.1	25.1	8.2	8.2	32.0	32.0	91.4	91.4	6.3	6.3	5.3	7				
						3.3	0.1	35	25.1	25.1	8.2	8.2	32.1	32.1	91.4	91.5	6.3	6.3	5.5	7				
						3.3	0.1	37	25.1	25.1	8.2	8.2	32.1	32.1	91.5	91.5	6.3	6.3	5.6	6				
						5.5	0.1	89	25.1	25.1	8.2	8.2	32.2	32.2	91.5	91.6	6.3	6.3	3.4	6				
						5.5	0.1	90	25.1	25.1	8.2	8.2	32.2	32.2	91.6	91.6	6.3	6.3	3.2	7				
IM1	Fine	Moderate	12:17	4.9	Surface	1.0	0.1	199	25.1	25.1	8.2	8.2	32.0	32.0	92.4	92.5	6.4	6.4	4.7	4	5	817962	807130	
						1.0	0.1	214	25.1	25.1	8.2	8.2	32.0	32.0	92.5	92.5	6.4	6.4	4.7	5				
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
						3.9	0.1	160	25.0	25.0	8.1	8.1	32.0	32.0	94.0	94.1	6.5	6.5	4.0	5				
						3.9	0.1	165	25.0	25.0	8.1	8.1	32.0	32.0	94.2	94.2	6.5	6.5	4.2	6				
					Middle	1.0	0.0	294	25.1	25.1	8.2	8.2	32.0	32.0	91.4	91.4	6.3	6.3	5.3	7				
						1.0	0.0	313	25.1	25.1	8.2	8.2	32.0	32.0	91.4	91.4	6.3	6.3	5.3	7				
						3.3	0.1	35	25.1	25.1	8.2	8.2	32.1	32.1	91.4	91.5	6.3	6.3	5.5	7				
						3.3	0.1	37	25.1	25.1	8.2	8.2	32.1	32.1	91.5	91.5	6.3	6.3	5.6	6				
						5.5	0.1	89	25.1	25.1	8.2	8.2	32.2	32.2	91.5	91.6	6.3	6.3	3.4	6				
						5.5	0.1	90	25.1	25.1	8.2	8.2	32.2	32.2	91.6	91.6	6.3	6.3	3.2	7				
IM2	Fine	Moderate	12:32	6.5	Surface	1.0	0.0	229	25.2	25.2	8.2	8.2	32.0	32.0	93.4	93.4	6.4	6.4	4.8	6	6	818181	806148	
						1.0	0.0	237	25.2	25.2	8.2	8.2	32.0	32.0	93.4	93.4	6.4	6.4	4.8	7				
						3.4	0.0	56	25.1	25.1	8.2	8.2	32.1	32.1	93.6	93.7	6.4	6.4	6.1	5				
						3.4	0.0	59	25.1	25.1	8.2	8.2	32.1	32.1	93.7	93.7	6.5	6.5	6.2	6				
						5.8	0.0	90	25.1	25.1	8.2	8.2	32.1	32.1	95.1	95.2	6.6	6.6	6.4	5				
						5.8	0.0	96	25.1	25.1	8.2	8.2	32.1	32.1	95.3	95.3	6.6	6.6	6.6	6				
					Middle	1.0	0.2	342	25.1	25.1	8.2	8.2	32.0	32.0	93.1	93.1	6.4	6.4	6.3	8				
						1.0	0.2	348	25.1	25.1	8.2	8.2	32.0	32.0	93.0	93.0	6.4	6.4	6.2	9				
						3.6	0.2	30	25.1	25.1	8.2	8.2	32.1	32.1	93.2	93.3	6.4	6.4	6.5	10				
						3.6	0.2	32	25.1	25.1	8.2	8.2	32.1	32.1	93.3	93.3	6.4	6.4	6.7	9				
						6.1	0.2	12	25.1	25.1	8.2	8.2	32.1	32.1	94.8	94.9	6.5	6.5	7.4	9				
						6.1	0.2	12	25.1	25.1	8.2	8.2	32.1	32.1	94.9	94.9	6.5	6.5	7.4	10				
IM3	Fine	Moderate	12:44	6.8	Surface	1.0	0.0	229	25.2	25.2	8.2	8.2	32.0	32.0	93.4	93.4	6.4	6.4	4.8	6	6	818788	805592	
						1.0	0.0	237	25.2	25.2	8.2	8.2	32.0	32.0	93.4	93.4	6.4	6.4	4.8	7				
						3.4	0.0	56	25.1	25.1	8.2	8.2	32.1	32.1	93.6	93.7	6.4	6.4	6.1	5				
						3.4	0.0	59	25.1	25.1	8.2	8.2	32.1	32.1	93.7	93.7	6.5	6.5	6.2	6				
						5.8	0.0	90	25.1	25.1	8.2	8.2	32.1	32.1	95.1	95.2	6.6	6.6	6.4	5				
						5.8	0.0	96	25.1	25.1	8.2	8.2	32.1	32.1	95.3	95.3	6.6	6.6	6.6	6				
					Middle	1.0	0.2	342	25.1	25.1	8.2	8.2	32.0	32.0	93.1	93.1	6.4	6.4	6.3	8				
						1.0	0.2	348	25.1	25.1	8.2	8.2	32.0	32.0	93.0	93.0	6.4	6.4	6.2	9				
						3.6	0.2	30	25.1	25.1	8.2	8.2	32.1	32.1	93.2	93.3	6.4	6.4	6.5	10				
						3.6	0.2	32	25.1	25.1	8.2	8.2	32.1	32.1	93.3	93.3	6.4	6.4	6.7	9				
						6.1	0.2	12	25.1	25.1	8.2	8.2	32.1	32.1	94.8	94.9	6.5	6.5	7.4	9				
						6.1	0.2	12	25.1	25.1	8.2	8.2	32.1	32.1	94.9	94.9	6.5	6.5	7.4	10				
IM4	Fine	Moderate	12:56	7.1	Surface	1.0	0.2	342	25.1	25.1	8.2	8.2	32.0	32.0	93.1	93.1	6.4	6.4	6.3	8	9	819742	804610	
						1.0	0.2	348	25.1	25.1	8.2	8.2	32.0	32.0	93.0	93.0	6.4	6.4	6.2	9				
						3.6	0.2	30	25.1	25.1	8.2	8.2	32.1	32.1	93.2	93.3	6.4	6.4	6.5	10				
						3.6	0.2	32	25.1	25.1	8.2	8.2	32.1	32.1	93.3	93.3	6.4	6.4	6.7	9				
						6.1	0.2	12	25.1	25.1	8.2	8.2	32.1	32.1	94.8	94.9								

**Expansion of Hong Kong International Airport into a Three-Runway System**  
**Water Quality Monitoring**  
**Water Quality Monitoring Results on 04 November 21 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)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)											
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA													
IM9	Fine	Moderate	12:31	7.6	Surface	1.0	0.3	75	25.7	25.7	7.7	7.7	31.4	31.4	91.5	91.5	6.3	6.3	3.1	4.2	7	6	822097	808807											
						1.0	0.3	75	25.7		7.7	7.7	31.4	31.4	91.5	91.5	6.2		3.0		6														
						3.8	0.3	78	25.7		7.7	7.7	31.7	31.7	92.3	92.5	6.3		4.1		6														
					Middle	3.8	0.4	78	25.7	25.7	7.7	7.7	31.7	31.7	92.6	92.5	6.3	6.3	4.0	6.3	6				6	822097	808807								
						6.6	0.3	74	25.4		7.8	7.8	31.9	31.9	94.4	94.5	6.5		5.6		6														
						6.6	0.3	74	25.4		7.8	7.8	31.9	31.9	94.6	94.5	6.5		5.5		6														
					IM10	Fine	Moderate	12:25	9.0	Surface	1.0	0.4	95	25.7	25.7	7.7	7.7	32.2	32.2	91.1	91.1							6.2	6.3	5.1	6.3	8	6	822403	809813
											1.0	0.4	98	25.7		7.7	7.7	32.2	32.2	91.1	91.1							6.2		5.0		7			
											4.5	0.4	92	25.7		7.7	7.7	32.2	32.2	92.7	92.8							6.3		6.2		6			
Middle	4.5	0.4	96	25.7						25.7	7.7	7.7	32.2	32.2	92.9	92.8	6.3	6.3	6.3	6.3	5	6	822403	809813											
	8.0	0.2	90	25.4							7.7	7.7	32.4	32.4	94.2	94.4	6.4		7.7		6														
	8.0	0.2	90	25.3							7.7	7.7	32.4	32.4	94.5	94.5	6.5		7.7		5														
IM11	Fine	Moderate	12:17	8.2						Surface	1.0	0.2	84	25.7	25.7	7.6	7.6	32.1	32.1	91.0	91.0				6.2	6.2	4.0	5.2	6	6	822038	811441			
											1.0	0.2	91	25.7		7.6	7.6	32.1	32.1	91.0	91.0				6.2		4.1		6						
											4.1	0.1	84	25.7		7.6	7.6	32.1	32.1	91.7	91.8				6.2		5.2		6						
					Middle	4.1	0.2	86	25.7	25.7	7.7	7.6	32.1	32.1	91.9	91.8	6.3	6.3	5.1	6.3	7				6	822038	811441								
						7.2	0.1	90	25.7		7.7	7.7	32.1	32.1	94.3	94.5	6.4		6.3		7														
						7.2	0.1	97	25.7		7.7	7.7	32.1	32.1	94.6	94.5	6.4		6.3		6														
					IM12	Fine	Moderate	12:12	9.4	Surface	1.0	0.2	143	25.7	25.7	7.6	7.6	32.1	32.1	90.9	90.9	6.2	6.2	7.1				8.2	6				6	821459	812065
											1.0	0.2	146	25.7		7.6	7.6	32.1	32.1	90.9	90.9	6.2		7.1					5						
											4.7	0.1	117	25.7		7.6	7.6	32.1	32.1	91.4	91.5	6.2		8.2					6						
Middle	4.7	0.2	128	25.7						25.7	7.6	7.6	32.1	32.1	91.6	91.5	6.2	6.2	8.2	6.2	5	6	821459	812065											
	8.4	0.2	147	25.7							7.6	7.6	32.1	32.1	94.0	94.1	6.4		9.3		7														
	8.4	0.2	156	25.7							7.7	7.6	32.1	32.1	94.2	94.1	6.4		9.3		6														
SR1A	Fine	Moderate	11:45	5.0						Surface	1.0	-	-	25.6	25.6	7.7	7.7	32.2	32.2	88.9	88.9				6.1	6.1	2.6	3.3	5	6	819980	812654			
											1.0	-	-	25.6		7.7	7.7	32.2	32.2	88.9	88.9				6.1		2.7		6						
											2.5	-	-	-		-	-	-	-	-	-				-		-		-						
					Middle	2.5	-	-	-	-	-	-	-	-	-	-	-	-	6.1	-	6.1				-	6	819980	812654							
						2.5	-	-	-		-	-	-	-	-	-	-	-		-					-										
						4.0	-	-	25.6		7.7	7.7	32.2	32.2	89.6	89.7	6.1	4.0		6															
					Bottom	4.0	-	-	25.6	25.6	7.7	7.7	32.2	32.2	89.8	89.7	6.1	4.0	6																
						4.0	-	-	25.6		7.7	7.7	32.2	32.2	89.8	89.7	6.1	4.0	6																
						4.0	-	-	25.6		7.7	7.7	32.2	32.2	89.8	89.7	6.1	4.0	6																
SR2	Fine	Moderate	11:31	5.0	Surface	1.0	0.3	82	25.9	25.9	7.7	7.7	32.0	32.0	91.2	91.2	6.2	6.2	1.6	2.1	6	5	821458	814181											
						1.0	0.3	89	25.9		7.7	7.7	32.0	32.0	91.1	91.1	6.2		1.6		5														
						-	-	-	-		-	-	-	-	-	-	-		-		-														
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	6.2	-	6.2				-	5	821458	814181							
						-	-	-	-		-	-	-	-	-	-	-	-		-															
						4.0	0.2	72	25.9		7.7	7.7	32.0	32.0	91.1	91.1	6.2	2.6		5															
					Bottom	4.0	0.2	76	25.9	25.9	7.7	7.7	32.0	32.0	91.1	91.1	6.2	2.6	4																
						4.0	0.2	76	25.9		7.7	7.7	32.0	32.0	91.1	91.1	6.2	2.6	4																
						4.0	0.2	76	25.9		7.7	7.7	32.0	32.0	91.1	91.1	6.2	2.6	4																
SR3	Fine	Moderate	12:40	9.2	Surface	1.0	0.4	150	25.8	25.8	7.7	7.7	31.1	31.1	92.3	92.4	6.3	6.4	1.8	2.7	4	5	822168	807577											
						1.0	0.4	160	25.8		7.7	7.7	31.1	31.1	92.4	92.4	6.3		1.6		3														
						4.6	0.3	129	25.7		7.8	7.8	31.2	31.2	94.1	94.2	6.4		2.8		5														
					Middle	4.6	0.3	130	25.6	25.7	7.8	7.8	31.3	31.2	94.2	94.2	6.5	2.9	6																
						8.2	0.3	104	25.4		7.9	7.9	31.4	31.4	94.7	94.8	6.5	3.6	6																
						8.2	0.3	113	25.4		7.9	7.9	31.4	31.4	94.8	94.8	6.5	3.6	5																
					SR4A	Fine	Moderate	11:30	8.8	Surface	1.0	0.3	66	25.2	25.2	8.2	8.2	32.0	32.0	91.4	91.4				6.3	6.3	8.4	6.2	4	5	817201	807806			
											1.0	0.3	71	25.2		8.2	8.2	32.0	32.0	91.4	91.4				6.3		8.4		5						
											4.4	0.3	73	25.1		8.2	8.2	32.0	32.0	91.5	91.5				6.3		6.1		4						
Middle	4.4	0.3	77	25.1						25.1	8.2	8.2	32.0	32.0	91.5	91.5	6.3	6.1	5																
	7.8	0.2	64	25.1							8.2	8.2	32.0	31.9	91.8	91.8	6.3	4.0	4																
	7.8	0.2	64	25.2							8.2	8.2	31.9	31.9	91.8	91.8	6.3	4.0	5																
SR5A	Fine	Moderate	11:13	5.2						Surface	1.0	0.0	11	25.3	25.3	8.1	8.1	31.8	31.8	89.2	89.3	6.2	6.2	2.2	3.1	8	8	816569	810685						
											1.0	0.0	11	25.3		8.1	8.1	31.8	31.8	89.3	89.3	6.2		2.5		9									
											-	-	-	-		-	-	-	-	-	-	-		-		-									
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	6.2	-	6.2	-	8	816569	810685										
						-	-	-	-		-	-	-	-	-	-	-	-		-															
						4.2	0.1	2	25.2		8.1	8.1	31.8	31.8	90.4	90.5	6.2	3.9		7															
					Bottom	4.2	0.1	2	25.2	25.2	8.1	8.1	31.8	31.8	90.6	90.6	6.3	3.9	6																
						4.2	0.1	2	25.2		8.1	8.1	31.8	31.8	90.6	90.6	6.3	3.9	6																
						4.2	0.1	2	25.2		8.1	8.1	31.8	31.8	90.6	90.6	6.3	3.9	6																
SR6A	Fine	Moderate	10:44	4.7	Surface	1.0	0.1	53	25.1	25.1	8.1	8.1	31.2	31.2	86.9	86.9	6.0	6.0	4.8	4.9	7	7				817941	814751								
						1.0	0.1	57	25.1		8.1	8.1	31.2	31.2	86.9	86.9	6.0		4.9		8														
						-	-	-	-		-	-	-	-	-	-	-		-		-														
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	6.0	-	6.0		-	7	817941			814751							
						-	-	-	-		-	-	-	-	-	-	-	-		-															
						3.7	0.0	70	24.9		8.1	8.1	31.4	31.4	87.0	87.0	6.0	4.8		7															
					Bottom	3.7	0.0	70	24.9	25.0	8.1	8.1	31.4	31.4	87.0	87.0	6.0	4.8	7																
						3.7	0.0	73	25.0		8.1	8.1	31.4	31.4	87.0	87.0	6.0	5.2	6																
						3.7	0.0	73	25.0		8.1	8.1	31.4	31.4	87.0	87.0	6.0	5.2	6																
SR7	Fine	Moderate	10:45	16.0	Surface	1.0	0.5	64	25.7	25.7	7.7	7.7	32.1	32.1	91.1	91.2	6.2	6.2	2.5	3.4	4	5	823619			823735									
						1.0	0.5	64	25.7		7.7	7.7	32.1	32.1	91.2	91.2	6.2		2.6		4														
						8.0	0.4	49	25.8		7.7	7.7	32.1	32.1	91.9	92.0	6.2		3.5		5														
					Middle	8.0	0.4	50	25.8	25.8	7.7	7.7	32.1	32.1	92.0	92.0	6.3	3.5	5																
						15.0	0.3	33	25.8		7.7	7.7	32.1	32.1	92.6	92.7	6.3	4.1	6																
						15.0	0.3	34	25.8		7.7	7.7	32.1	32.1	92.8	92.8	6.3	4.2	5																
					SR8	Fine																													

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

**Water Quality Monitoring Results on 04 November 21 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)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)								
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA										
C1	Misty	Moderate	17:47	7.8	Surface	1.0	0.5	41	25.0	25.0	8.2	8.2	32.4	32.4	97.4	97.3	6.7	6.7	7.6	8.9	9	9	815597	804258								
						1.0	0.5	44	25.0		8.2	8.2	32.4	32.4	97.1	6.7	7.5															
						3.9	0.5	34	25.0		8.2	8.2	32.4	32.4	95.6	6.6	12.5															
					Middle	3.9	0.5	35	25.0	8.2	8.2	32.4	32.4	95.8	6.6	12.0																
						6.8	0.5	34	25.0	8.2	8.2	32.3	32.3	97.0	6.7	7.2																
						6.8	0.5	36	25.0	8.2	8.2	32.3	32.3	97.1	6.7	6.8																
					C2	Misty	Rough	16:41	12.4	Surface	1.0	0.4	342	25.8	25.8	8.0	8.0	31.2	31.2	92.0	92.0				6.3	6.3	4.3	5.4	4	5	825673	806949
											1.0	0.4	315	25.8		8.0	8.0	31.3	31.3	92.0	6.3				4.4							
											6.2	0.4	337	25.8		8.0	8.0	31.3	31.3	92.4	6.3				5.3							
Middle	6.2	0.4	339	25.8						8.0	8.0	31.2	31.2	92.4	6.3	5.4																
	11.4	0.3	341	25.9						8.0	8.0	31.2	31.2	92.7	6.3	6.7																
	11.4	0.3	357	25.9						8.0	8.0	31.1	31.1	92.8	6.3	6.6																
C3	Misty	Rough	18:43	12.0						Surface	1.0	0.4	264	26.1	26.1	8.0	8.0	32.3	32.2	92.5	92.5	6.3	6.3	4.3	4.0	7	7	822123	817810			
											1.0	0.5	289	26.1		8.0	8.0	32.2	32.2	92.5	6.2	4.3										
											6.0	0.4	267	26.6		8.0	8.0	31.9	31.9	93.7	6.3	5.6										
					Middle	6.0	0.5	274	26.6	8.0	8.0	31.9	31.9	94.0	6.3	5.7																
						11.0	0.5	272	26.8	8.0	8.0	31.7	31.7	95.1	6.4	2.0																
						11.0	0.5	283	26.9	8.0	8.0	31.7	31.7	96.1	6.4	1.9																
					IM1	Misty	Moderate	17:25	5.1	Surface	1.0	0.1	66	25.0	25.0	8.1	8.1	32.0	32.0	95.4	95.4	6.6	6.6	7.4	9.1	5				5	817964	807113
											1.0	0.1	70	25.0		8.1	8.1	32.0	32.0	95.4	6.6	7.4										
											-	-	-	-		-	-	-	-	-	-	-										
Middle	-	-	-	-						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-							
	4.1	0.2	40	25.0						8.1	8.1	32.1	32.1	94.6	94.8	6.5	6.5	10.8														
	4.1	0.2	41	25.0						8.1	8.1	32.1	32.1	94.9	94.9	6.5	6.5	10.8														
IM2	Misty	Moderate	17:17	6.8						Surface	1.0	0.2	6	25.1	25.1	8.1	8.1	31.9	31.9	94.6	94.7	6.5	6.6	9.7	9.8	11	10	818143	806164			
											1.0	0.3	6	25.1		8.1	8.1	31.9	31.9	94.7	6.5	9.9										
											3.4	0.2	351	25.1		8.1	8.1	31.9	31.9	96.2	6.6	10.4										
					Middle	3.4	0.3	359	25.1	8.1	8.1	31.9	31.9	96.3	6.6	10.3																
						5.8	0.2	5	25.1	8.1	8.1	31.9	31.9	101.3	7.0	9.3																
						5.8	0.2	5	25.1	8.1	8.1	31.9	31.9	101.7	7.0	9.3																
					IM3	Misty	Moderate	17:08	6.5	Surface	1.0	0.3	335	25.1	25.1	8.1	8.1	31.9	31.9	94.9	94.9	6.5	6.5	6.8	8.7	9				10	818773	805617
											1.0	0.3	344	25.1		8.1	8.1	31.9	31.9	94.9	6.5	6.9										
											3.3	0.2	348	25.1		8.1	8.1	32.0	32.0	95.2	6.5	9.2										
Middle	3.3	0.2	320	25.1						8.1	8.1	32.0	32.0	95.2	6.5	9.6																
	5.5	0.3	337	25.1						8.1	8.1	32.0	32.0	98.0	6.7	10.1																
	5.5	0.3	349	25.1						8.1	8.1	32.0	32.0	98.7	6.8	9.8																
IM4	Misty	Moderate	16:58	7.1						Surface	1.0	0.4	6	25.1	25.1	8.2	8.2	32.0	32.0	94.5	94.5	6.5	6.5	4.8	5.3	12	12	819725	804607			
											1.0	0.5	6	25.1		8.2	8.2	32.0	32.0	94.5	6.5	4.7										
											3.6	0.5	352	25.1		8.1	8.1	32.0	32.0	95.0	6.5	5.0										
					Middle	3.6	0.5	324	25.1	8.1	8.1	32.0	32.0	95.1	6.5	5.0																
						6.1	0.4	7	25.1	8.1	8.1	32.0	32.0	96.1	6.6	6.1																
						6.1	0.4	7	25.1	8.1	8.1	32.0	32.0	99.0	6.8	6.1																
					IM5	Misty	Moderate	16:52	7.4	Surface	1.0	0.7	10	25.1	25.1	8.1	8.1	31.8	31.8	93.9	93.9	6.5	6.5	6.6	7.5	15				16	820722	804874
											1.0	0.7	10	25.1		8.1	8.1	31.8	31.8	93.9	6.5	6.8										
											3.7	0.5	34	25.1		8.1	8.1	32.0	32.0	93.7	6.5	6.8										
Middle	3.7	0.5	37	25.0						8.1	8.1	32.0	32.0	93.8	6.5	7.1																
	6.4	0.3	29	25.0						8.1	8.1	32.0	32.0	95.8	6.6	9.0																
	6.4	0.4	30	25.0						8.1	8.1	32.0	32.0	96.1	6.6	8.7																
IM6	Misty	Moderate	16:45	6.6						Surface	1.0	0.1	332	25.0	25.0	8.1	8.1	30.8	30.8	93.3	93.3	6.5	6.5	2.7	4.1	4	4	821075	805808			
											1.0	0.1	336	25.0		8.1	8.1	30.8	30.8	93.3	6.5	2.9										
											3.3	0.2	45	25.0		8.1	8.1	31.2	31.1	92.8	6.4	3.5										
					Middle	3.3	0.2	46	25.0	8.1	8.1	31.1	31.1	92.9	6.4	3.4																
						5.6	0.2	61	25.0	8.1	8.1	31.7	31.7	93.2	6.4	6.0																
						5.6	0.2	62	25.0	8.1	8.1	31.7	31.7	93.3	6.4	6.0																
					IM7	Misty	Moderate	16:38	7.7	Surface	1.0	0.1	263	25.0	25.0	8.1	8.1	30.9	30.9	91.8	91.7	6.4	6.3	2.6	4.5	2				3	821367	806853
											1.0	0.1	282	25.0		8.1	8.1	30.9	30.9	91.6	6.3	2.6										
											3.9	0.1	141	25.0		8.1	8.1	31.2	31.2	90.4	6.2	3.8										
Middle	3.9	0.1	150	25.0						8.1	8.1	31.2	31.2	90.4	6.2	3.8																
	6.7	0.2	160	25.0						8.1	8.1	31.7	31.7	90.6	6.3	7.2																
	6.7	0.2	161	25.0						8.1	8.1	31.7	31.7	90.7	6.3	7.1																
IM8	Misty	Rough	17:09	8.0						Surface	1.0	0.1	240	26.0	26.0	7.9	7.9	31.2	31.3	94.9	95.0	6.5	6.5	2.7	4.2	6	6	821816	808148			
											1.0	0.1	242	26.0		7.9	7.9	31.3	31.3	95.0	6.5	2.7										
											4.0	0.0	129	26.0		7.9	7.9	31.3	31.3	95.2	6.5	4.8										
					Middle	4.0	0.0	131	26.0	7.9	7.9	31.3	31.3	95.2	6.5	4.8																
						7.0	0.1	295	26.1	7.9	7.9	31.2	31.1	96.1	6.5	5.0																
						7.0	0.1	317	26.2	7.9	7.9	31.1	31.1	96.5	6.6	5.1																

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

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

**Water Quality Monitoring Results on 04 November 21 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)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)									
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA											
IM9	Misty	Rough	17:24	7.6	Surface	1.0	0.3	230	25.8	25.8	7.9	7.9	31.6	31.6	92.9	92.9	6.3	6.3	6.8	6.8	5	5	6	822077	808811								
						1.0	0.3	242	25.8	7.9	7.9	31.6	31.6	92.8	92.8	6.3	6.3	6.8	6.8	5	5												
						3.8	0.2	252	25.8	25.8	7.9	7.9	31.8	31.8	92.9	92.9	6.3	6.3	7.0	7.0	6	6											
					Middle	3.8	0.2	256	25.8	25.8	7.9	7.9	31.8	31.8	92.9	92.9	6.3	6.3	7.1	7.1	6	6											
						6.6	0.2	216	25.9	25.9	7.9	7.9	31.7	31.6	94.5	94.6	6.4	6.4	8.6	8.6	6	6											
						6.6	0.2	228	25.9	25.9	7.9	7.9	31.6	31.6	94.7	94.7	6.4	6.4	8.5	8.5	7	7											
					IM10	Misty	Rough	17:39	8.6	Surface	1.0	0.5	328	25.8	25.8	7.9	7.9	31.9	31.9	92.8	92.8	6.3				6.3	3.4	3.4	5	5	6	822364	809778
											1.0	0.5	357	25.8	25.8	7.9	7.9	31.9	31.9	92.7	92.7	6.3				6.3	3.3	3.3	5	5			
											4.3	0.5	322	25.8	25.8	7.9	7.9	32.0	32.0	93.6	93.7	6.4				6.4	4.1	4.1	5	5			
Middle	4.3	0.6	325	25.8						25.8	7.9	7.9	32.0	32.0	93.7	93.7	6.4	6.4	4.2	4.2	6	6											
	7.6	0.5	319	26.2						26.3	7.9	7.9	31.7	31.6	95.1	95.3	6.4	6.4	5.6	5.6	7	7											
	7.6	0.5	334	26.3						26.3	7.9	7.9	31.6	31.6	95.5	95.5	6.5	6.5	5.6	5.6	6	6											
IM11	Misty	Rough	17:46	8.8						Surface	1.0	0.6	287	25.9	25.9	7.9	7.9	31.7	31.7	94.2	94.2	6.4	6.4	3.5	3.5	6	6	6	822042	811480			
											1.0	0.6	302	25.9	25.9	7.9	7.9	31.7	31.7	94.2	94.2	6.4	6.4	3.5	3.5	6	6						
											4.4	0.6	291	26.0	26.0	7.9	7.9	31.7	31.7	95.0	95.1	6.4	6.4	4.6	4.6	6	6						
					Middle	4.4	0.6	301	26.0	26.0	7.9	7.9	31.7	31.7	95.1	95.1	6.4	6.4	4.6	4.6	7	7											
						7.8	0.5	296	26.3	26.3	7.9	7.9	31.5	31.4	95.9	96.1	6.5	6.5	5.9	5.9	7	7											
						7.8	0.5	320	26.3	26.3	7.9	7.9	31.4	31.4	96.2	96.2	6.5	6.5	5.8	5.8	6	6											
					IM12	Misty	Rough	17:55	9.9	Surface	1.0	0.6	276	25.9	25.9	7.9	7.9	32.1	32.1	92.5	92.5	6.3	6.3	3.4	3.4	6	6				6	821461	812065
											1.0	0.6	285	25.9	25.9	7.9	7.9	32.1	32.1	92.5	92.5	6.3	6.3	3.3	3.3	6	6						
											5.0	0.6	280	25.9	26.0	7.9	7.9	32.0	32.0	93.6	93.7	6.4	6.4	4.3	4.3	6	6						
Middle	5.0	0.6	288	26.0						26.0	7.9	7.9	31.9	31.9	93.7	93.7	6.4	6.4	4.4	4.4	7	7											
	8.9	0.6	273	26.4						26.5	7.9	7.9	31.7	31.6	95.1	95.3	6.4	6.4	5.3	5.3	7	7											
	8.9	0.6	293	26.5						26.5	7.9	7.9	31.6	31.6	95.4	95.4	6.4	6.4	5.2	5.2	6	6											
SR1A	Misty	Rough	18:17	4.8						Surface	1.0	-	-	26.3	26.3	7.8	7.8	32.0	32.0	94.9	94.9	6.4	6.4	8.8	8.8	6	6	5	819975	812665			
											1.0	-	-	26.3	26.3	7.8	7.8	32.0	32.0	94.9	94.9	6.4	6.4	8.9	8.9	5	5						
											2.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
					Middle	2.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-										
						3.8	-	-	26.3	26.3	7.8	7.8	32.0	32.0	95.2	95.3	6.4	6.4	9.0	9.0	5	5											
						3.8	-	-	26.3	26.3	7.8	7.8	32.0	32.0	95.3	95.3	6.4	6.4	9.1	9.1	4	4											
					SR2	Misty	Rough	18:26	4.0	Surface	1.0	0.2	74	26.1	26.2	7.8	7.8	32.0	32.0	95.4	95.5	6.5	6.5	3.3	3.3	5	5				6	821472	814159
											1.0	0.2	78	26.2	26.2	7.8	7.8	31.9	32.0	95.5	95.5	6.5	6.5	3.3	3.3	6	6						
											-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Middle	-	-	-	-						-	-	-	-	-	-	-	-	-	-	-	-	-	-										
	3.0	0.2	75	26.5						26.6	7.9	7.9	31.7	31.7	96.9	97.3	6.5	6.5	4.2	4.2	5	5											
	3.0	0.2	76	26.6						26.6	7.9	7.9	31.6	31.6	97.6	97.6	6.6	6.6	4.3	4.3	6	6											
SR3	Misty	Rough	16:55	9.4						Surface	1.0	0.1	284	25.8	25.8	8.0	8.0	31.6	31.6	92.2	92.2	6.3	6.3	5.5	5.5	7	7	6	822126	807574			
											1.0	0.1	287	25.8	25.8	8.0	8.0	31.6	31.6	92.1	92.1	6.3	6.3	5.6	5.6	6	6						
											4.7	0.0	295	25.8	25.8	8.0	8.0	31.8	31.7	92.7	92.8	6.3	6.3	6.9	6.9	6	6						
					Middle	4.7	0.0	298	25.8	25.8	8.0	8.0	31.7	31.7	92.8	92.8	6.3	6.3	6.9	6.9	7	7											
						8.4	0.1	351	25.9	26.0	8.0	8.0	31.6	31.6	93.2	93.3	6.3	6.3	7.1	7.1	6	6											
						8.4	0.1	356	26.0	26.0	8.0	8.0	31.6	31.6	93.3	93.3	6.3	6.3	7.0	7.0	6	6											
					SR4A	Misty	Moderate	18:12	8.6	Surface	1.0	0.1	83	25.0	25.0	8.1	8.1	32.0	32.0	95.6	95.6	6.6	6.6	10.5	10.5	8	8				8	817179	807790
											1.0	0.1	83	25.0	25.0	8.1	8.1	32.0	32.0	95.6	95.6	6.6	6.6	10.5	10.5	8	8						
											4.3	0.1	139	25.0	25.0	8.1	8.1	32.0	32.0	96.0	96.1	6.6	6.6	11.8	11.8	8	8						
Middle	4.3	0.1	142	25.0						25.0	8.1	8.1	32.0	32.0	96.1	96.1	6.6	6.6	11.8	11.8	8	8											
	7.6	0.1	136	25.0						25.0	8.1	8.1	32.0	32.0	99.1	99.3	6.8	6.8	6.9	6.9	8	8											
	7.6	0.1	148	25.0						25.0	8.1	8.1	32.0	32.0	99.5	99.5	6.8	6.8	6.8	6.8	7	7											
SR5A	Misty	Moderate	18:36	4.3						Surface	1.0	0.1	277	25.0	25.0	8.1	8.1	31.9	31.9	95.0	95.1	6.5	6.5	10.0	10.0	9	9	9	816570	810710			
											1.0	0.1	283	25.0	25.0	8.1	8.1	31.9	31.9	95.1	95.1	6.5	6.5	10.0	10.0	9	9						
											-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-										
						3.3	0.1	278	25.0	25.0	8.1	8.1	31.9	31.9	96.6	96.9	6.6	6.6	9.3	9.3	9	9											
						3.3	0.1	289	25.0	25.0	8.1	8.1	31.9	31.9	97.1	97.1	6.7	6.7	9.7	9.7	8	8											
					SR6A	Misty	Moderate	19:11	4.6	Surface	1.0	0.1	229	24.8	24.8	8.1	8.1	31.6	31.6	92.6	92.6	6.4	6.4	6.1	6.1	5	5				5	817944	814741
											1.0	0.1	239	24.8	24.8	8.1	8.1	31.6	31.6	92.5	92.5	6.4	6.4	6.1	6.1	5	5						
											-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Middle	-	-	-	-						-	-	-	-	-	-	-	-	-	-	-	-	-	-										
	3.6	0.1	226	24.8						24.8	8.1	8.1	31.6	31.6	92.9	93.1	6.4	6.4	5.8	5.8	5	5											
	3.6	0.1	243	24.8						24.8	8.1	8.1	31.6	31.6	93.2	93.2	6.5	6.5	5.8	5.8	6	6											
SR7	Misty	Rough	19:10	16.0						Surface	1.0	0.3	13	26.0	26.0	8.0	8.0	32.3	32.3	88.4	88.4	6.0	6.0	1.1	1.1	7	7	7	823612	823745			
											1.0	0.3	13	26.0	26.0	8.0	8.0	32.3	32.3	88.4	88.4	6.0	6.0	1.2	1.2	6	6						
											8.0	0.3	20	26.0	26.0	8.0	8.0	32.3	32.3	89.3	89.5	6.0	6.0	2.0	2.0	7	7						
					Middle	8.0	0.4	21	26.0	26.0	8.0	8.0	32.3	32.3	89.6	89.6	6.1	6.1	2.1	2.1	7	7											
						15.0	0.3	37	26.0	26.1	8.0	8.0	32.3	32.3	91.5	91.6	6.2	6.2	3.9	3.9	7	7											
						15.0	0.3	39	26.1	26.1	8.0	8.0	32.3	32.3	91.7	91.7	6.2	6.2	3.8	3.8	8	8											
					SR8	Misty	Rough	18:07	4.6	Surface	1.0	-	-	26.2	26.3	7.9	7.9	32.0	32.0	96.8	96.9	6.5	6.5	5.2	5.2	7							

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

**Water Quality Monitoring Results on 06 November 21 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)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)		
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA				
C1	Sunny	Moderate	13:28	7.4	Surface	1.0	0.0	247	25.4	25.4	8.1	8.1	29.8	29.8	91.2	91.2	6.3	6.3	3.9	5.5	4	815615	804223			
						1.0	0.0	249	25.4		8.1	8.1	29.8	29.8	91.2	91.2	6.3		3.9							
						3.7	0.1	180	25.4		8.1	8.1	30.4	30.4	90.4	90.4	6.2		5.1							
					Middle	3.7	0.1	188	25.4	25.4	8.1	8.1	30.4	30.4	90.4	90.4	6.2	6.2	5.1	5.5	4	815615	804223			
						6.4	0.1	181	25.4		8.1	8.1	30.9	30.9	89.8	89.8	6.2		7.5							
						6.4	0.1	182	25.4		8.1	8.1	30.9	30.9	89.8	89.8	6.2		7.5							
Bottom	6.4	0.1	181	25.4	25.4	8.1	8.1	30.9	30.9	89.8	89.8	6.2	6.2	7.5	5.5	4	815615	804223								
	6.4	0.1	182	25.4		8.1	8.1	30.9	30.9	89.8	89.8	6.2		7.5												
	6.4	0.1	182	25.4		8.1	8.1	30.9	30.9	89.8	89.8	6.2		7.5												
C2	Sunny	Moderate	12:15	11.4	Surface	1.0	0.1	315	26.2	26.2	8.0	8.0	30.5	30.6	98.2	98.1	6.7	6.7	6.9	8.0	8	825690	806950			
						1.0	0.1	345	26.2		8.0	8.0	30.6	30.6	98.0	98.0	6.7		7.0							
						5.7	0.2	50	26.1		8.1	8.1	31.2	31.2	97.2	97.2	6.6		7.5							
					Middle	5.7	0.2	54	26.1	26.1	8.1	8.1	31.3	31.3	97.1	97.1	6.6	6.6	7.5	8.0	8	825690	806950			
						10.4	0.4	74	26.0		8.1	8.1	31.8	31.8	97.0	97.0	6.6		9.6							
						10.4	0.4	78	26.0		8.1	8.1	31.8	31.8	97.0	97.0	6.6		9.6							
Bottom	10.4	0.4	74	26.0	26.0	8.1	8.1	31.8	31.8	97.0	97.0	6.6	6.6	9.6	8.0	8	825690	806950								
	10.4	0.4	78	26.0		8.1	8.1	31.8	31.8	97.0	97.0	6.6		9.6												
	10.4	0.4	78	26.0		8.1	8.1	31.8	31.8	97.0	97.0	6.6		9.6												
C3	Cloudy	Moderate	13:56	11.7	Surface	1.0	0.4	84	26.2	26.2	8.0	8.0	32.2	32.2	96.7	96.8	6.5	6.4	6.1	10.6	7	822104	817795			
						1.0	0.4	91	26.2		8.0	8.0	32.2	32.2	96.9	96.9	6.5		6.1							
						5.9	0.4	105	26.1		8.0	8.0	32.6	32.6	92.3	92.3	6.2		13.7							
					Middle	5.9	0.4	111	26.1	26.1	8.0	8.0	32.6	32.6	92.3	92.3	6.2	6.2	13.8	10.6	7	822104	817795			
						10.7	0.2	98	26.1		8.0	8.0	32.6	32.6	92.6	92.7	6.3		12.4							
						10.7	0.2	105	26.1		8.0	8.0	32.5	32.5	92.8	92.8	6.3		11.5							
Bottom	10.7	0.2	98	26.1	26.1	8.0	8.0	32.6	32.6	92.6	92.7	6.3	6.3	12.4	10.6	7	822104	817795								
	10.7	0.2	105	26.1		8.0	8.0	32.5	32.5	92.8	92.8	6.3		11.5												
	10.7	0.2	105	26.1		8.0	8.0	32.5	32.5	92.8	92.8	6.3		11.5												
IM1	Sunny	Moderate	13:08	4.2	Surface	1.0	0.1	184	25.3	25.3	8.1	8.1	31.5	31.5	91.1	91.1	6.3	6.3	3.6	5.1	5	817966	807116			
						1.0	0.1	188	25.3		8.1	8.1	31.5	31.5	91.1	91.1	6.3		3.6							
						-	-	-	-		-	-	-	-	-	-	-		-					-		
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.1	5	817966	807116
						-	-	-	-		-	-	-	-	-	-	-	-	-							
						-	-	-	-		-	-	-	-	-	-	-	-	-							
Bottom	3.2	0.1	162	25.3	25.3	8.1	8.1	31.6	31.6	90.8	90.8	6.2	6.2	6.5	5.1	5	817966	807116								
	3.2	0.1	168	25.3		8.1	8.1	31.6	31.6	90.8	90.8	6.2		6.6												
	3.2	0.1	168	25.3		8.1	8.1	31.6	31.6	90.8	90.8	6.2		6.6												
IM2	Sunny	Moderate	12:51	7.3	Surface	1.0	0.1	136	25.4	25.4	8.1	8.1	30.6	30.6	90.6	90.6	6.3	6.3	3.4	4.8	4	818159	806171			
						1.0	0.1	140	25.4		8.1	8.1	30.6	30.6	90.6	90.6	6.3		3.4							
						3.7	0.1	123	25.4		8.1	8.1	30.6	30.6	90.3	90.3	6.2		4.5							
					Middle	3.7	0.1	134	25.4	25.4	8.1	8.1	30.6	30.6	90.3	90.3	6.2	6.2	4.5	4.8	4	818159	806171			
						6.3	0.0	195	25.4		8.1	8.1	30.6	30.6	91.2	91.3	6.3		6.5							
						6.3	0.0	209	25.4		8.1	8.1	30.6	30.6	91.3	91.3	6.3		6.6							
Bottom	6.3	0.0	195	25.4	25.4	8.1	8.1	30.6	30.6	91.2	91.3	6.3	6.3	6.5	4.8	4	818159	806171								
	6.3	0.0	209	25.4		8.1	8.1	30.6	30.6	91.3	91.3	6.3		6.6												
	6.3	0.0	209	25.4		8.1	8.1	30.6	30.6	91.3	91.3	6.3		6.6												
IM3	Sunny	Moderate	12:45	8.1	Surface	1.0	0.1	25	25.4	25.4	8.1	8.1	30.4	30.4	91.3	91.3	6.3	6.3	5.1	7.6	4	818796	805610			
						1.0	0.1	26	25.4		8.1	8.1	30.4	30.4	91.2	91.2	6.3		5.1							
						4.1	0.1	30	25.4		8.1	8.1	30.5	30.5	90.9	90.9	6.3		8.2							
					Middle	4.1	0.1	32	25.4	25.4	8.1	8.1	30.5	30.5	90.9	90.9	6.3	6.3	8.2	7.6	4	818796	805610			
						7.1	0.1	352	25.4		8.1	8.1	30.6	30.6	90.6	90.6	6.3		9.5							
						7.1	0.1	353	25.4		8.1	8.1	30.6	30.6	90.6	90.6	6.3		9.6							
Bottom	7.1	0.1	352	25.4	25.4	8.1	8.1	30.6	30.6	90.6	90.6	6.3	6.3	9.5	7.6	4	818796	805610								
	7.1	0.1	353	25.4		8.1	8.1	30.6	30.6	90.6	90.6	6.3		9.6												
	7.1	0.1	353	25.4		8.1	8.1	30.6	30.6	90.6	90.6	6.3		9.6												
IM4	Sunny	Moderate	12:38	7.7	Surface	1.0	0.1	16	25.4	25.4	8.1	8.1	30.4	30.4	91.4	91.4	6.3	6.3	3.4	4.7	9	819721	804627			
						1.0	0.1	17	25.4		8.1	8.1	30.4	30.4	91.3	91.3	6.3		3.5							
						3.9	0.1	10	25.4		8.1	8.1	30.5	30.5	90.9	90.9	6.3		4.4							
					Middle	3.9	0.1	10	25.4	25.4	8.1	8.1	30.5	30.5	90.9	90.9	6.3	6.3	4.5	4.7	9	819721	804627			
						6.7	0.1	357	25.4		8.1	8.1	30.5	30.5	91.3	91.3	6.3		6.1							
						6.7	0.1	328	25.4		8.1	8.1	30.5	30.5	91.3	91.3	6.3		6.2							
Bottom	6.7	0.1	357	25.4	25.4	8.1	8.1	30.5	30.5	91.3	91.3	6.3	6.3	6.1	4.7	9	819721	804627								
	6.7	0.1	328	25.4		8.1	8.1	30.5	30.5	91.3	91.3	6.3		6.2												
	6.7	0.1	328	25.4		8.1	8.1	30.5	30.5	91.3	91.3	6.3		6.2												
IM5	Sunny	Moderate	12:30	8.0	Surface	1.0	0.2	5	25.4	25.4	8.1	8.1	30.8	30.8	90.7	90.7	6.3	6.3	5.7	5.7	9	820744	804874			
						1.0	0.2	5	25.4		8.1	8.1	30.8	30.8	90.7	90.7	6.3		5.7							
						4.0	0.2	1	25.4		8.1	8.1	30.8	30.8	90.3	90.3	6.2		6.2							
					Middle	4.0	0.2	1	25.4	25.4	8.1	8.1	30.8	30.8	90.3	90.3	6.2	6.2	6.2	5.7	9	820744	804874			
						7.0	0.2	340	25.4		8.1	8.1	30.8	30.8	89.8	89.9	6.2		5.0							
						7.0	0.2	342	25.4		8.1	8.1	30.8	30.8	89.9	89.9	6.2		5.0							
Bottom	7.0	0.2	340	25.4	25.4	8.1	8.1	30.8	30.8	89.8	89.9	6.2	6.2	5.0	5.7	9	820744	804874								
	7.0	0.2	342	25.4		8.1	8.1	30.8	30.8	89.9	89.9	6.2		5.0												
	7.0	0.2	342	25.4		8.1	8.1	30.8	30.8	89.9	89.9	6.2		5.0												
IM6	Sunny	Moderate	12:21	7.2	Surface	1.0	0.1	250	25.4	25.4	8.1	8.1	30.8	30.8	90.6	90.6	6.2	6.2	4.7	7.4	5	821070	805817			
						1.0	0.1	256	25.4		8.1	8.1	30.8	30.8	90.6	90.6	6.2		4.8							
						3.6	0.0	304	25.4		8.1	8.1	30.8	30.8	90.5	90.5	6.2		8.5							
					Middle	3.6	0.0	324	25.4	25.4	8.1	8.1	30.8	30.8	90.5	90.5	6.2	6.2	8.5	7.4	5	821070				



**Expansion of Hong Kong International Airport into a Three-Runway System**  
**Water Quality Monitoring**  
**Water Quality Monitoring Results on 06 November 21 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)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)								
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA										
IM9	Sunny	Moderate	12:44	6.6	Surface	1.0	0.3	74	26.3	26.3	8.0	8.0	30.2	30.3	99.4	99.4	6.8	6.8	6.1	11.4	6	6	822083	808832								
						1.0	0.4	74	26.3		8.1	8.1	30.3	30.3	99.4	99.4	6.8		6.0													
						3.3	0.3	84	26.1		26.1	8.1	8.1	31.4	31.5	98.2	98.2		6.7		13.4											
					Middle	3.3	0.3	87	26.1	8.1	8.1	31.5	31.5	98.2	98.2	6.7	14.1															
						5.6	0.2	73	26.1	26.2	8.1	8.1	31.4	31.3	99.2	99.3	6.7	14.2														
						5.6	0.3	77	26.2	8.1	8.1	31.2	31.2	99.4	99.4	6.8	14.6															
					IM10	Sunny	Moderate	12:51	7.5	Surface	1.0	0.4	94	26.3	26.3	8.1	8.1	31.1	31.2	101.4	101.2				6.9	6.7	8.5	10.2	8	7	822407	809777
											1.0	0.5	98	26.2		8.1	8.1	31.2	31.2	101.0	101.0				6.8		8.3					
											3.8	0.3	96	26.1		26.1	8.1	8.1	31.7	31.7	97.0				97.0		6.6		9.5			
Middle	3.8	0.3	101	26.1						8.1	8.1	31.7	31.7	97.0	97.0	6.6	10.0															
	6.5	0.1	97	26.1						26.1	8.1	8.1	31.8	31.8	97.2	97.4	6.6	12.2														
	6.5	0.1	100	26.1						8.1	8.1	31.8	31.8	97.5	97.5	6.6	12.7															
IM11	Sunny	Moderate	12:58	8.1						Surface	1.0	0.3	94	26.2	26.2	8.0	8.0	30.9	31.0	98.8	98.7	6.7	6.7	6.3	8.2	6	7	822044	811465			
											1.0	0.3	97	26.2		8.0	8.0	31.0	31.0	98.6	98.6	6.7		6.4								
											4.1	0.2	103	26.1		26.1	8.0	8.0	31.5	31.5	97.5	97.5		6.6		8.3						
					Middle	4.1	0.2	110	26.1	8.0	8.0	31.5	31.5	97.5	97.5	6.6	8.7															
						7.1	0.2	106	26.1	26.1	8.1	8.1	31.6	31.6	97.6	97.7	6.6	10.1														
						7.1	0.2	108	26.1	8.1	8.1	31.5	31.5	97.7	97.7	6.6	9.7															
					IM12	Sunny	Moderate	13:03	9.3	Surface	1.0	0.2	128	26.1	26.1	8.0	8.0	31.6	31.6	97.8	97.7	6.6	6.6	6.5	9.1	4				4	821465	812025
											1.0	0.2	137	26.1		8.0	8.0	31.7	31.7	97.6	97.6	6.6		6.7								
											4.7	0.2	123	26.1		26.1	8.0	8.0	31.9	31.9	97.2	97.2		6.6		7.7						
Middle	4.7	0.2	127	26.1						8.0	8.0	31.9	31.9	97.2	97.2	6.6	7.8															
	8.3	0.2	110	26.1						26.1	8.0	8.0	31.9	31.9	97.3	97.3	6.6	13.0														
	8.3	0.2	115	26.1						8.0	8.0	31.9	31.9	97.3	97.3	6.6	12.9															
SR1A	Sunny	Moderate	13:26	5.0						Surface	1.0	-	-	26.0	26.0	8.0	8.0	32.0	32.0	97.5	97.5	6.6	6.6	6.9	8.4	4	5	819974	812659			
											1.0	-	-	26.0		8.0	8.0	32.0	32.0	97.4	97.4	6.6		7.0								
											2.5	-	-	-		-	-	-	-	-	-	-		-		-						
					Middle	2.5	-	-	-	-	-	-	-	-	-	-	-	-														
						4.0	-	-	26.0	26.0	8.0	8.0	32.0	32.0	97.3	97.4	6.6	9.9														
						4.0	-	-	26.0	8.0	8.0	32.0	32.0	97.4	97.4	6.6	9.9															
					SR2	Sunny	Moderate	13:40	4.6	Surface	1.0	0.2	119	26.3	26.3	8.0	8.0	31.5	31.5	99.5	99.5	6.7	6.7	7.0	7.1	5				5	821460	814143
											1.0	0.2	120	26.3		8.0	8.0	31.6	31.6	99.5	99.5	6.7		6.8								
											-	-	-	-		-	-	-	-	-	-	-		-		-						
Middle	-	-	-	-						-	-	-	-	-	-	-	-	-														
	3.6	0.2	114	26.3						26.3	8.0	8.0	31.6	31.6	100.2	100.4	6.8	7.5														
	3.6	0.2	114	26.3						8.0	8.0	31.6	31.6	100.5	100.5	6.8	7.2															
SR3	Sunny	Moderate	12:35	8.4						Surface	1.0	0.2	98	26.2	26.2	8.0	8.0	30.6	30.6	96.7	96.7	6.6	6.6	6.4	10.8	6	6	822163	807559			
											1.0	0.2	101	26.1		8.0	8.0	30.6	30.6	96.6	96.6	6.6		5.8								
											4.2	0.2	103	26.0		26.0	8.0	8.0	31.2	31.2	95.8	95.8		6.5		12.1						
					Middle	4.2	0.2	113	26.0	8.0	8.0	31.2	31.2	95.8	95.8	6.5	12.4															
						7.4	0.3	84	26.0	26.0	8.0	8.0	31.3	31.3	96.2	96.2	6.5	14.1														
						7.4	0.3	84	26.0	8.0	8.0	31.3	31.3	96.2	96.2	6.5	14.1															
					SR4A	Sunny	Moderate	13:46	9.4	Surface	1.0	0.3	78	25.4	25.4	8.1	8.1	29.9	29.9	90.8	90.8	6.3	6.3	3.9	6.5	3				3	817196	807794
											1.0	0.3	78	25.4		8.1	8.1	29.9	29.9	90.8	90.8	6.3		3.9								
											4.7	0.3	69	25.4		25.4	8.1	8.1	30.5	30.5	90.1	90.1		6.2		6.3						
Middle	4.7	0.3	73	25.4						8.1	8.1	30.5	30.5	90.1	90.1	6.2	6.4															
	8.4	0.3	64	25.4						25.4	8.1	8.1	31.0	31.0	89.1	89.1	6.1	9.2														
	8.4	0.3	68	25.4						8.1	8.1	31.0	31.0	89.1	89.1	6.1	9.2															
SR5A	Sunny	Calm	14:03	3.8						Surface	1.0	0.0	47	25.2	25.2	8.1	8.1	31.4	31.4	88.6	88.6	6.1	6.1	4.1	5.4	3	3	816605	810675			
											1.0	0.0	49	25.2		8.1	8.1	31.4	31.4	88.6	88.6	6.1		4.1								
											-	-	-	-		-	-	-	-	-	-	-		-		-						
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-														
						2.8	0.0	173	25.2	25.2	8.1	8.1	31.4	31.4	90.3	90.4	6.2	6.8														
						2.8	0.0	174	25.2	8.1	8.1	31.4	31.4	90.4	90.4	6.2	6.8															
					SR6A	Sunny	Calm	14:23	4.6	Surface	1.0	0.0	306	25.2	25.2	8.1	8.1	31.4	31.4	88.2	88.2	6.1	6.1	3.3	3.4	2				2	817980	814731
											1.0	0.0	331	25.2		8.1	8.1	31.4	31.4	88.2	88.2	6.1		3.3								
											-	-	-	-		-	-	-	-	-	-	-		-		-						
Middle	-	-	-	-						-	-	-	-	-	-	-	-	-														
	3.6	0.0	284	25.2						25.2	8.1	8.1	31.4	31.4	88.9	88.9	6.1	3.6														
	3.6	0.0	302	25.2						8.1	8.1	31.4	31.4	88.9	88.9	6.1	3.6															
SR7	Cloudy	Moderate	14:21	16.2						Surface	1.0	0.2	65	26.4	26.4	8.0	8.0	32.4	32.4	99.4	99.4	6.7	6.5	4.7	5.7	3	3	823648	823728			
											1.0	0.2	65	26.3		8.0	8.0	32.4	32.4	99.3	99.3	6.7		4.8								
											8.1	0.1	36	26.1		26.1	8.0	8.0	32.5	32.5	93.1	93.2		6.3		6.1						
					Middle	8.1	0.2	39	26.1	8.0	8.0	32.5	32.5	93.2	93.2	6.3	5.9															
						15.2	0.2	347	26.1	26.1	8.0	8.0	32.6	32.6	93.7	93.8	6.3	6.2														
						15.2	0.2	319	26.1	8.0	8.0	32.6	32.6	93.8	93.8	6.3	6.2															
					SR8	Sunny	Moderate	13:10	5.0	Surface	1.0	-	-	26.5	26.5	8.1	8.1	31.8	31.8	101.0	101.0	6.8	6.8	6.4	10.6	3				5	820410	811615
											1.0	-	-	26.5		8.1	8.1	31.8	31.8	100.9	100.9	6.8		6.5								
											-	-	-	-		-	-	-	-	-	-	-		-		-						
Middle	-	-	-	-						-	-	-	-	-	-	-	-	-														
	4.0	-	-	26.2						26.3	8.1	8.1	31.8	31.8	100.4	100.5	6.8	14.9														
	4.0	-	-	26.3						8.1	8.1	31.8	31.8	100.6	100.6	6.8	14.4															

DA: Depth-Averaged  
Calm: Small or no wave; Moderate: Between calm and rough; Rough: While 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 06 November 21 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)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)			
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA					
C1	Fine	Moderate	08:33	7.2	Surface	1.0	0.4	50	25.5	25.5	8.1	8.1	28.9	28.9	90.9	90.9	6.3	6.3	6.3	4.6	3	815642	804243				
						1.0	0.4	52	25.5		8.1	8.1	28.9	28.9	90.9	90.9	6.3										
						3.6	0.3	55	25.4		8.1	8.1	29.1	29.1	90.2	90.2	6.3										
					Middle	3.6	0.3	55	25.4	25.4	8.1	8.1	29.1	29.1	90.2	90.2	6.3	6.3	4.8	4.8	3	815642	804243				
						6.2	0.3	36	25.4		8.1	8.1	30.1	30.1	90.1	90.1	6.2										
						6.2	0.4	36	25.4		8.1	8.1	30.1	30.1	90.1	90.1	6.2										
C2	Sunny	Moderate	08:42	12.6	Surface	1.0	0.3	354	26.1	26.1	8.0	8.0	29.8	29.8	96.3	96.3	6.6	6.6	7.0	9.7	5	825676	806946				
						1.0	0.3	326	26.1		8.0	8.0	29.8	29.8	96.2	96.2	6.6										
						6.3	0.3	340	26.0		8.0	8.0	30.2	30.2	95.5	95.5	6.5										
					Middle	6.3	0.3	356	26.0	26.0	8.0	8.0	30.2	30.2	95.5	95.5	6.5	6.5	8.7	8.7	5	825676	806946				
						11.6	0.3	329	26.0		8.0	8.0	30.2	30.2	95.6	95.6	6.5										
						11.6	0.3	342	26.0		8.0	8.0	30.2	30.2	95.7	95.7	6.6										
C3	Cloudy	Moderate	07:00	11.2	Surface	1.0	0.3	254	26.0	26.0	8.0	8.0	31.8	31.8	96.9	96.9	6.6	6.6	7.1	9.0	6	822094	817826				
						1.0	0.4	264	26.0		8.0	8.0	31.8	31.8	96.9	96.9	6.6										
						5.6	0.3	253	26.0		8.0	8.0	31.9	31.9	96.5	96.5	6.5										
					Middle	5.6	0.3	258	26.0	26.0	8.0	8.0	31.9	31.9	96.5	96.5	6.5	6.5	9.5	9.5	7	822094	817826				
						10.2	0.3	250	26.0		8.0	8.0	32.0	32.0	96.3	96.3	6.5										
						10.2	0.3	272	26.0		8.0	8.0	32.0	32.0	96.3	96.3	6.5										
IM1	Fine	Moderate	08:51	4.9	Surface	1.0	0.1	348	25.2	25.2	8.1	8.1	31.5	31.5	90.1	90.1	6.2	6.2	3.2	4.0	4	817937	807153				
						1.0	0.1	355	25.2		8.1	8.1	31.5	31.5	90.1	90.1	6.2										
						-	-	-	-		-	-	-	-	-	-	-										
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						3.9	0.1	12	25.2		25.2	8.1	8.1	31.5	31.5	90.5	90.5	6.2	6.2	4.8	4.8	3	817937	807153			
						3.9	0.1	12	25.2			8.1	8.1	31.5	31.5	90.6	90.6	6.2									
-	-	-	-	-	-	-	-	-	-	-																	
IM2	Fine	Moderate	08:58	8.8	Surface	1.0	0.2	5	25.2	25.2	8.1	8.1	31.3	31.3	91.4	91.4	6.3	6.3	3.6	4.4	5	818159	806162				
						1.0	0.2	5	25.2		8.1	8.1	31.3	31.3	91.4	91.4	6.3										
						4.4	0.2	358	25.2		8.1	8.1	31.4	31.4	90.7	90.7	6.3										
					Middle	4.4	0.3	329	25.2	25.2	8.1	8.1	31.4	31.4	90.7	90.7	6.3	6.3	4.7	4.7	5	818159	806162				
						7.8	0.2	349	25.2		8.1	8.1	31.5	31.5	90.1	90.1	6.2										
						7.8	0.2	321	25.2		8.1	8.1	31.5	31.5	90.2	90.2	6.2										
IM3	Fine	Moderate	09:06	8.2	Surface	1.0	0.3	353	25.3	25.3	8.1	8.1	29.9	29.9	92.1	92.1	6.4	6.4	3.1	5.7	3	818786	805593				
						1.0	0.3	354	25.3		8.1	8.1	29.9	29.9	92.1	92.1	6.4										
						4.1	0.3	336	25.2		8.1	8.1	30.6	30.6	92.0	92.0	6.4										
					Middle	4.1	0.3	348	25.2	25.2	8.1	8.1	30.6	30.6	92.0	92.0	6.4	6.4	5.3	5.3	4	818786	805593				
						7.2	0.3	330	25.2		8.1	8.1	31.2	31.2	92.2	92.2	6.4										
						7.2	0.3	344	25.2		8.1	8.1	31.2	31.2	92.2	92.2	6.4										
IM4	Fine	Moderate	09:13	7.5	Surface	1.0	0.5	358	25.2	25.2	8.1	8.1	30.0	30.0	91.8	91.8	6.4	6.4	3.4	5.2	3	819701	804594				
						1.0	0.5	329	25.2		8.1	8.1	30.0	30.0	91.8	91.8	6.4										
						3.8	0.5	356	25.2		8.1	8.1	31.1	31.1	91.6	91.6	6.3										
					Middle	3.8	0.5	328	25.2	25.2	8.1	8.1	31.1	31.1	91.6	91.6	6.3	6.3	5.8	5.8	3	819701	804594				
						6.5	0.4	358	25.2		8.1	8.1	31.2	31.2	91.8	91.8	6.3										
						6.5	0.4	329	25.2		8.1	8.1	31.2	31.2	91.8	91.8	6.3										
IM5	Fine	Moderate	09:22	8.1	Surface	1.0	0.6	15	25.3	25.3	8.1	8.1	31.5	31.5	91.5	91.5	6.3	6.3	3.8	6.5	3	820752	804874				
						1.0	0.7	15	25.3		8.1	8.1	31.5	31.5	91.5	91.5	6.3										
						4.1	0.6	10	25.3		8.1	8.1	31.5	31.5	91.5	91.5	6.3										
					Middle	4.1	0.6	10	25.3	25.3	8.1	8.1	31.5	31.5	91.5	91.5	6.3	6.3	6.7	6.7	4	820752	804874				
						7.1	0.5	17	25.3		8.1	8.1	31.6	31.6	91.3	91.3	6.3										
						7.1	0.5	17	25.3		8.1	8.1	31.6	31.6	91.4	91.4	6.3										
IM6	Fine	Moderate	09:28	7.1	Surface	1.0	0.1	297	25.4	25.4	8.1	8.1	30.6	30.6	91.0	91.0	6.3	6.3	4.8	5.6	3	821053	805843				
						1.0	0.1	323	25.4		8.1	8.1	30.6	30.6	91.1	91.1	6.3										
						3.6	0.1	15	25.4		8.1	8.1	30.6	30.6	90.2	90.2	6.2										
					Middle	3.6	0.1	15	25.4	25.4	8.1	8.1	30.6	30.6	90.2	90.2	6.2	6.2	5.8	5.8	4	821053	805843				
						6.1	0.2	28	25.4		8.1	8.1	30.6	30.6	90.0	90.0	6.2										
						6.1	0.2	28	25.4		8.1	8.1	30.6	30.6	90.0	90.0	6.2										
IM7	Fine	Moderate	09:37	8.7	Surface	1.0	0.1	64	25.4	25.4	8.1	8.1	30.8	30.8	90.7	90.7	6.3	6.3	3.5	4.4	3	821331	806842				
						1.0	0.1	68	25.4		8.1	8.1	30.8	30.8	90.7	90.7	6.3										
						4.4	0.2	86	25.3		8.1	8.1	30.8	30.8	90.7	90.7	6.3										
					Middle	4.4	0.2	88	25.3	25.3	8.1	8.1	30.8	30.8	90.7	90.7	6.3	6.3	4.7	4.7	4	821331	806842				
						7.7	0.2	91	25.3		8.1	8.1	30.8	30.8	91.1	91.1	6.3										
						7.7	0.2	92	25.3		8.1	8.1	30.8	30.8	91.2	91.2	6.3										
IM8	Sunny	Moderate	08:23	7.6	Surface	1.0	0.1	64	26.1	26.1	8.0	8.0	29.8	29.8	96.7	96.7	6.6	6.6	6.3	6.7	6	821840	808147				
						1.0	0.1	70	26.1		8.0	8.0	29.8	29.8	96.7	96.7	6.6										
						3.8	0.1	87	26.1		8.0	8.0	29.8	29.8	96.9	96.9	6.6										
					Middle	3.8	0.1	94	26.1	26.1	8.0	8.0	29.8	29.8	97.0	97.0	6.6	6.6	6.8	6.8	5	821840	808147				
						6.6	0.1	271	26.1		8.0	8.0	29.8	29.8	97.9	97.9	6.7										
						6.6	0.1	276	26.1		8.0	8.0	29.8	29.8	98.3	98.3	6.7										

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

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

**Water Quality Monitoring Results on 06 November 21 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)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)							
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA									
IM9	Sunny	Moderate	08:16	7.3	Surface	1.0	0.0	242	25.9	25.9	8.0	8.0	30.5	30.5	95.9	95.9	6.6	6.6	9.5	11	7	822099	808801								
						1.0	0.0	262	25.9	25.9	8.0	8.0	30.5	30.5	95.9	95.9	6.6	6.6	10.0	10											
						3.7	0.1	115	25.9	25.9	8.0	8.0	30.5	30.5	95.8	95.8	6.6	6.6	10.9	5											
					Middle	3.7	0.1	121	25.9	25.9	8.0	8.0	30.5	30.5	95.7	95.7	6.6	6.6	11.2	6											
						6.3	0.1	82	25.9	25.9	8.0	8.0	30.5	30.4	95.7	95.7	6.6	6.6	12.0	5											
						6.3	0.1	82	25.9	25.9	8.0	8.0	30.4	30.4	95.7	95.7	6.6	6.6	12.1	6											
					IM10	Sunny	Moderate	08:11	7.4	Surface	1.0	0.5	295	25.9	25.9	8.0	8.0	30.4	30.4	96.1				96.1	6.6	6.6	10.0	14	13	822396	809816
											1.0	0.5	311	25.9	25.9	8.0	8.0	30.4	30.4	96.1				96.1	6.6	6.6	10.0	15			
											3.7	0.4	296	25.9	25.9	8.0	8.0	30.4	30.4	95.9				96.0	6.6	6.6	10.0	13			
Middle	3.7	0.4	299	25.9						25.9	8.0	8.0	30.4	30.4	96.0	96.0	6.6	6.6	10.1	12											
	6.4	0.3	297	25.9						25.9	8.0	8.0	30.4	30.4	96.2	96.2	6.6	6.6	12.3	11											
	6.4	0.4	303	25.9						25.9	8.0	8.0	30.4	30.4	96.2	96.2	6.6	6.6	12.8	11											
IM11	Sunny	Moderate	08:03	8.6						Surface	1.0	0.5	307	25.9	25.9	8.0	8.0	31.9	31.9	97.0	97.0	6.6	6.6	9.1	14	13	822063	811448			
											1.0	0.5	311	25.9	25.9	8.0	8.0	31.9	31.9	97.0	97.0	6.6	6.6	9.4	14						
											4.3	0.4	308	25.9	25.9	8.1	8.1	32.0	32.0	96.5	96.5	6.6	6.6	13.1	13						
					Middle	4.3	0.4	315	25.9	25.9	8.1	8.1	32.0	32.0	96.5	96.5	6.6	6.6	13.5	13											
						7.6	0.4	309	25.9	25.9	8.1	8.1	32.0	32.0	96.5	96.6	6.6	6.6	13.8	11											
						7.6	0.5	326	25.9	25.9	8.1	8.1	32.0	32.0	96.6	96.6	6.6	6.6	13.6	12											
					IM12	Sunny	Moderate	07:57	8.0	Surface	1.0	0.5	287	26.0	26.0	8.0	8.0	31.8	31.8	97.5	97.5	6.6	6.6	10.8	5				11	821468	812058
											1.0	0.5	300	26.0	26.0	8.0	8.0	31.8	31.8	97.5	97.5	6.6	6.6	10.9	11						
											4.0	0.5	289	26.0	26.0	8.0	8.0	31.8	31.8	97.6	97.6	6.6	6.6	10.7	11						
Middle	4.0	0.6	296	26.0						26.0	8.0	8.0	31.8	31.8	97.6	97.6	6.6	6.6	10.1	12											
	7.0	0.4	284	26.0						26.0	8.0	8.0	31.9	31.9	98.1	98.2	6.7	6.7	12.9	12											
	7.0	0.4	308	26.0						26.0	8.0	8.0	31.9	31.9	98.2	98.2	6.7	6.7	12.6	13											
SR1A	Cloudy	Moderate	07:30	5.5						Surface	1.0	-	-	25.9	25.9	8.0	8.0	31.6	31.6	96.4	96.4	6.6	6.6	6.4	5	7	819972	812654			
											1.0	-	-	25.9	25.9	8.0	8.0	31.7	31.6	96.4	96.4	6.6	6.6	6.4	5						
											2.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
					Middle	2.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-											
						4.5	-	-	25.9	25.9	8.0	8.0	32.0	31.9	98.2	98.3	6.7	6.7	6.3	5											
						4.5	-	-	25.9	25.9	8.0	8.0	31.9	31.9	98.4	98.4	6.7	6.7	6.2	11											
					SR2	Cloudy	Moderate	07:23	4.2	Surface	1.0	0.1	63	25.9	25.9	8.0	8.0	31.8	31.8	98.5	98.6	6.7	6.7	9.8	5				5	821467	814147
											1.0	0.1	63	25.9	25.9	8.0	8.0	31.8	31.8	98.6	98.6	6.7	6.7	10.0	4						
											-	-	-	-	-	-	-	-	-	-	-	-	-	-							
Middle	-	-	-	-						-	-	-	-	-	-	-	-	-	-	-											
	3.2	0.1	55	25.9						25.9	8.0	8.0	31.8	31.8	99.7	99.8	6.8	6.8	12.5	5											
	3.2	0.1	55	25.9						25.9	8.0	8.0	31.8	31.8	99.8	99.8	6.8	6.8	12.5	4											
SR3	Sunny	Moderate	08:26	8.4						Surface	1.0	0.1	25	26.1	26.1	8.0	8.0	29.7	29.7	96.3	96.3	6.6	6.6	6.2	6	5	822127	807567			
											1.0	0.1	27	26.1	26.1	8.0	8.0	29.7	29.7	96.2	96.3	6.6	6.6	6.4	6						
											4.2	0.1	27	26.1	26.1	8.0	8.0	29.8	29.8	95.9	95.9	6.6	6.6	7.3	6						
					Middle	4.2	0.1	28	26.1	26.1	8.0	8.0	29.8	29.8	95.8	95.8	6.6	6.6	7.4	5											
						7.4	0.1	286	26.1	26.1	8.0	8.0	29.8	29.8	95.6	95.6	6.6	6.6	10.3	4											
						7.4	0.1	300	26.1	26.1	8.0	8.0	29.8	29.8	95.6	95.6	6.6	6.6	9.9	5											
					SR4A	Fine	Moderate	08:10	9.6	Surface	1.0	0.1	124	25.4	25.4	8.1	8.1	29.0	29.0	90.7	90.7	6.3	6.3	5.1	4				3	817177	807792
											1.0	0.1	132	25.4	25.4	8.1	8.1	29.0	29.0	90.7	90.7	6.3	6.3	5.1	4						
											4.8	0.1	105	25.4	25.4	8.1	8.1	30.1	30.1	90.5	90.5	6.3	6.3	3.1	3						
Middle	4.8	0.1	110	25.4						25.4	8.1	8.1	30.1	30.1	90.5	90.5	6.3	6.3	3.2	3											
	8.6	0.1	79	25.3						25.3	8.1	8.1	30.8	30.8	90.6	90.7	6.3	6.3	3.9	3											
	8.6	0.1	84	25.3						25.3	8.1	8.1	30.8	30.8	90.7	90.7	6.3	6.3	4.0	3											
SR5A	Fine	Calm	07:50	4.1						Surface	1.0	0.1	288	25.2	25.2	8.0	8.0	31.2	31.2	87.7	87.7	6.0	6.0	3.6	4	4	816589	810680			
											1.0	0.1	309	25.2	25.2	8.0	8.0	31.2	31.2	87.7	87.7	6.0	6.0	3.6	3						
											-	-	-	-	-	-	-	-	-	-	-	-	-	-							
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-												
						3.1	0.1	293	25.3	25.3	8.0	8.0	31.2	31.2	88.0	88.0	6.1	6.1	4.2	4											
						3.1	0.1	297	25.2	25.3	8.0	8.0	31.2	31.2	88.0	88.0	6.1	6.1	4.2	4											
					SR6A	Fine	Calm	07:22	4.2	Surface	1.0	0.1	232	25.2	25.2	8.0	8.0	31.2	31.2	87.7	87.7	6.0	6.0	2.5	3				3	817971	814716
											1.0	0.1	239	25.2	25.2	8.0	8.0	31.2	31.2	87.6	87.6	6.0	6.0	2.5	2						
											-	-	-	-	-	-	-	-	-	-	-	-	-	-							
Middle	-	-	-	-						-	-	-	-	-	-	-	-	-	-												
	3.2	0.1	228	25.2						25.2	8.0	8.0	31.2	31.2	87.6	87.6	6.0	6.0	3.5	2											
	3.2	0.1	231	25.2						25.2	8.0	8.0	31.2	31.2	87.6	87.6	6.0	6.0	3.6	3											
SR7	Cloudy	Moderate	06:31	16.4						Surface	1.0	0.2	58	26.0	26.0	8.0	8.0	31.8	31.8	97.0	97.0	6.6	6.6	6.6	5	6	823643	823753			
											1.0	0.2	60	26.0	26.0	8.0	8.0	31.8	31.8	97.0	97.0	6.6	6.6	6.6	6						
											8.2	0.2	71	26.0	26.0	8.0	8.0	32.0	32.0	96.5	96.5	6.5	6.5	10.4	6						
					Middle	8.2	0.2	73	26.0	26.0	8.0	8.0	32.0	32.0	96.5	96.5	6.5	6.5	9.9	7											
						15.4	0.2	74	26.0	26.0	8.0	8.0	32.0	32.0	97.0	97.1	6.6	6.6	13.4	6											
						15.4	0.2	74	26.0	26.0	8.0	8.0	32.0	32.0	97.1	97.1	6.6	6.6	13.6	7											
					SR8	Sunny	Moderate	07:50	5.0	Surface	1.0	-	-	26.0	26.0	8.0	8.0	30.7	30.7	95.5	95.5	6.5	6.5	7.5	8				6	820404	811613
											1.0	-	-	26.0	26.0	8.0	8.0	30.7	30.7	95.4	95.4	6.5	6.5	7.6	4						
											-	-	-	-	-	-	-	-	-	-	-	-	-	-							
Middle	-	-	-	-						-	-	-	-	-	-	-	-	-	-												
	4.0	-	-	25.7						25.7	8.0	8.0	31.0	31.0	96.0	96.0	6.6	6.6	13.3	8											
	4.0	-	-	25.6						25.7	8.0	8.0	31.1	31.0	96.0	96.0	6.6	6.6	12.8	5											

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

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

**Water Quality Monitoring Results on 09 November 21 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)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)								
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA										
C1	Cloudy	Rough	15:44	8.4	Surface	1.0	0.6	210	23.9	24.0	8.2	8.2	30.6	30.7	98.6	98.7	7.0	7.0	5.0	7.2	4	4	815632	804226								
						1.0	0.6	226	24.0	8.2	8.2	30.7	31.9	98.8	100.4	7.0	7.0	5.2	7.0	5												
						4.2	0.5	222	24.2	8.2	8.2	31.9	31.9	100.4	100.4	7.0	7.0	8.9	7.0	3												
					Middle	4.2	0.5	238	24.2	8.2	8.2	31.9	31.9	100.3	100.3	7.0	7.0	8.9	7.0	3												
						7.4	0.5	208	24.2	8.2	8.2	31.9	31.9	99.8	99.8	7.0	7.0	7.4	7.0	3												
						7.4	0.5	221	24.2	8.2	8.2	31.9	31.9	99.7	99.7	7.0	7.0	7.8	7.0	3												
					C2	Fine	Rough	14:51	12.4	Surface	1.0	0.3	80	24.7	24.7	8.1	8.1	31.0	31.0	99.3	99.3				6.9	6.9	10.7	13.3	12	11	825668	806942
											1.0	0.3	85	24.7	8.1	8.1	31.0	31.0	99.2	99.2	6.9				6.9	11.0	6.9	11				
											6.2	0.3	77	24.6	8.1	8.1	31.1	31.1	99.1	99.1	6.9				6.9	14.9	6.9	11				
Middle	6.2	0.3	84	24.6						8.1	8.1	31.1	31.1	99.1	99.1	6.9	6.9	15.0	6.9	11												
	11.4	0.2	57	24.6						8.2	8.2	31.1	31.1	99.6	99.6	6.9	6.9	14.2	6.9	10												
	11.4	0.2	59	24.6						8.2	8.2	31.1	31.1	99.7	99.7	7.0	7.0	14.0	7.0	10												
C3	Fine	Rough	16:50	12.4						Surface	1.0	0.4	66	25.4	25.4	8.1	8.1	32.1	32.1	98.7	98.7	6.8	6.8	4.2	4.5	5	5	822086	817788			
											1.0	0.4	69	25.4	8.1	8.1	32.1	32.2	98.7	97.4	6.8	6.8	4.2	6.8	5							
											6.2	0.4	68	25.4	8.1	8.1	32.2	32.2	97.4	97.4	6.7	6.7	4.5	6.7	5							
					Middle	6.2	0.4	69	25.4	8.1	8.1	32.2	32.2	97.4	97.4	6.7	6.7	4.5	6.7	5												
						11.4	0.3	75	25.5	8.1	8.1	32.5	32.5	97.5	97.5	6.6	6.6	5.0	6.7	4												
						11.4	0.3	80	25.5	8.1	8.1	32.5	32.5	97.6	97.6	6.7	6.7	5.0	6.7	5												
					IM1	Cloudy	Rough	15:32	5.2	Surface	1.0	0.2	111	24.0	24.0	8.2	8.2	30.1	30.1	94.4	94.4	6.7	6.7	6.7	5.2	4				4	817952	807134
											1.0	0.2	111	24.0	8.2	8.2	30.1	30.1	94.4	94.4	6.7	6.7	6.3	6.7	4							
											-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Middle	-	-	-	-						-	-	-	-	-	-	-	-	-	-	-	-											
	4.2	0.1	132	24.0						24.0	8.1	8.1	30.1	30.1	95.6	95.6	6.8	6.8	4.0	6.8	3											
	4.2	0.1	134	24.0						24.0	8.1	8.1	30.1	30.1	95.7	95.7	6.8	6.8	3.9	6.8	4											
IM2	Cloudy	Rough	15:26	6.4						Surface	1.0	0.3	188	23.9	23.9	8.2	8.2	30.3	30.3	93.8	93.9	6.7	6.7	3.2	2.9	4	4	818164	806165			
											1.0	0.3	199	23.9	8.2	8.2	30.3	30.4	93.9	94.3	6.7	6.7	3.2	6.7	4							
											3.2	0.3	198	23.9	8.2	8.2	30.4	30.4	94.2	94.3	6.7	6.7	2.7	6.7	4							
					Middle	3.2	0.3	206	23.9	8.2	8.2	30.4	30.4	94.3	94.3	6.7	6.7	2.6	6.7	4												
						5.4	0.3	202	23.9	8.2	8.2	30.4	30.4	94.5	94.5	6.7	6.7	2.8	6.7	4												
						5.4	0.3	203	23.9	8.2	8.2	30.4	30.4	94.4	94.4	6.7	6.7	3.0	6.7	3												
					IM3	Cloudy	Rough	15:20	6.9	Surface	1.0	0.4	210	23.9	23.9	8.2	8.2	30.4	30.4	95.6	95.7	6.8	6.8	1.5	2.1	3				4	818799	805604
											1.0	0.4	212	23.9	8.2	8.2	30.4	30.4	95.7	95.7	6.8	6.8	1.4	6.8	3							
											3.5	0.3	199	24.0	8.2	8.2	30.6	30.6	96.1	96.2	6.8	6.8	2.3	6.8	4							
Middle	3.5	0.3	213	24.0						8.2	8.2	30.6	30.6	96.2	96.2	6.8	6.8	2.5	6.8	4												
	5.9	0.3	210	24.0						8.2	8.2	30.9	30.9	96.5	96.6	6.8	6.8	2.4	6.8	4												
	5.9	0.3	228	24.0						8.2	8.2	30.9	30.9	96.6	96.6	6.8	6.8	2.6	6.8	5												
IM4	Cloudy	Rough	15:13	7.6						Surface	1.0	0.4	209	24.0	24.0	8.2	8.2	30.7	30.7	101.1	101.0	7.1	7.1	5.6	9.2	3	3	819742	804613			
											1.0	0.4	218	24.0	8.2	8.2	30.7	30.7	100.9	100.9	7.1	7.0	5.6	7.0	4							
											3.8	0.4	213	24.1	8.2	8.2	31.2	31.2	97.3	97.2	6.8	6.8	8.8	6.8	3							
					Middle	3.8	0.4	231	24.1	8.2	8.2	31.2	31.2	97.1	97.1	6.8	6.8	8.5	6.8	3												
						6.6	0.4	203	24.1	8.2	8.2	31.4	31.4	96.7	96.7	6.8	6.8	13.1	6.8	3												
						6.6	0.4	217	24.1	8.2	8.2	31.4	31.4	96.7	96.7	6.8	6.8	13.4	6.8	3												
					IM5	Cloudy	Rough	15:06	8.2	Surface	1.0	0.4	220	23.9	23.9	8.2	8.2	30.2	30.2	93.3	93.4	6.6	6.6	5.8	6.0	4				3	820747	804875
											1.0	0.4	231	23.9	8.2	8.2	30.2	30.2	93.4	93.4	6.6	6.6	5.8	6.6	3							
											4.1	0.4	211	23.9	8.2	8.2	30.4	30.4	94.8	94.9	6.7	6.7	6.7	6.7	3							
Middle	4.1	0.4	216	23.9						8.2	8.2	30.4	30.4	94.9	94.9	6.7	6.7	6.6	6.7	4												
	7.2	0.4	224	23.9						8.2	8.2	30.5	30.5	96.4	96.5	6.8	6.8	5.4	6.8	3												
	7.2	0.4	234	23.9						8.2	8.2	30.5	30.5	96.6	96.6	6.8	6.8	5.5	6.8	3												
IM6	Cloudy	Rough	15:00	7.8						Surface	1.0	0.4	223	24.2	24.2	8.1	8.1	29.9	29.9	92.6	92.6	6.5	6.5	5.9	8.2	3	3	821071	805811			
											1.0	0.4	240	24.2	8.1	8.1	29.9	29.9	92.6	92.6	6.5	6.5	5.5	6.5	3							
											3.9	0.4	225	24.1	8.1	8.1	30.2	30.2	92.0	92.0	6.5	6.5	8.0	6.5	3							
					Middle	3.9	0.4	244	24.1	8.1	8.1	30.2	30.2	92.0	92.0	6.5	6.5	8.9	6.5	3												
						6.8	0.5	229	24.1	8.1	8.1	30.2	30.2	92.2	92.3	6.5	6.5	10.7	6.5	3												
						6.8	0.5	251	24.1	8.1	8.1	30.2	30.2	92.3	92.3	6.5	6.5	10.5	6.5	2												
					IM7	Cloudy	Rough	14:52	8.2	Surface	1.0	0.5	234	24.2	24.2	8.1	8.1	29.9	29.9	92.9	92.9	6.6	6.6	3.6	6.1	4				3	821334	806855
											1.0	0.5	245	24.2	8.1	8.1	29.9	29.9	92.9	92.9	6.6	6.6	3.6	6.6	3							
											4.1	0.5	220	24.1	8.1	8.1	30.0	30.0	92.5	92.5	6.6	6.6	5.1	6.6	4							
Middle	4.1	0.5	226	24.1						8.1	8.1	30.0	30.0	92.5	92.5	6.6	6.6	5.5	6.6	3												
	7.2	0.5	233	24.1						8.1	8.1	30.0	30.0	92.7	92.8	6.6	6.6	9.4	6.6	3												
	7.2	0.5	235	24.1						8.1	8.1	30.0	30.0	92.8	92.8	6.6	6.6	9.4	6.6	3												
IM8	Fine	Rough	15:15	7.8						Surface	1.0	0.5	82	24.9	24.9	8.1	8.1	30.6	30.6	99.0	99.0	6.9	6.9	8.5	11.2	10	9	821812	808163			
											1.0	0.6	82	24.9	8.1	8.1	30.6	30.6	99.0	99.0	6.9	6.9	8.6	6.9	9							
											3.9	0.4	71	24.7	8.1	8.1	31.0	30.9	98.3	98.3	6.9	6.9	10.6	6.9	8							
					Middle	3.9	0.5	72	24.7	8.1	8.1	30.9	30.9	98.3	98.3	6.9	6.9	10.7	6.9	9												
						6.8	0.5	50	24.6	8.1	8.1	31.1	31.1	99.3	99.3	6.9	6.9	14.3	6.9	9												
						6.8	0.5	54	24.6	8.1	8.1	31.1	31.1	99.4	99.4	6.9	6.9	14.3	6.9	8												

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

**Expansion of Hong Kong International Airport into a Three-Runway System**  
**Water Quality Monitoring**  
**Water Quality Monitoring Results on 09 November 21 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)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)									
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA											
IM9	Fine	Rough	15:21	7.5	Surface	1.0	0.7	62	24.9	24.9	8.1	8.1	30.6	30.6	99.4	99.4	6.9	6.9	7.4	7.4	8	8	7	822110	808815								
						1.0	0.8	62	24.9	8.1	8.1	30.6	30.6	99.4	99.4	6.9	6.9	7.4	7.4	8	8												
						3.8	0.6	76	24.7	24.7	8.1	8.1	31.0	31.0	98.7	98.7	6.9	6.9	9.4	9.4	8	8											
					Middle	3.8	0.6	79	24.7	24.7	8.1	8.1	31.0	31.0	98.7	98.7	6.9	6.9	9.6	9.6	7	7				8	8						
						6.5	0.4	67	24.6	24.6	8.1	8.1	31.1	31.1	99.1	99.1	6.9	6.9	10.9	10.9	6	6											
						6.5	0.4	67	24.6	24.6	8.1	8.1	31.1	31.1	99.1	99.1	6.9	6.9	10.7	10.7	7	7											
					IM10	Fine	Rough	15:27	7.9	Surface	1.0	0.5	57	25.0	25.0	8.1	8.1	30.5	30.5	100.5	100.5	7.0				7.0	5.9	5.9	6	6	7	822384	809806
											1.0	0.5	61	25.0	25.0	8.1	8.1	30.5	30.5	100.4	100.4	7.0				7.0	5.9	5.9	7	7			
											4.0	0.5	58	24.8	24.9	8.1	8.1	30.8	30.8	98.9	98.9	6.9				6.9	8.6	8.6	7	7			
Middle	4.0	0.5	59	24.9						24.9	8.1	8.1	30.8	30.8	98.9	98.9	6.9	6.9	8.4	8.4	6	6											
	6.9	0.4	65	24.8						24.8	8.1	8.1	30.9	30.9	98.8	98.8	6.9	6.9	9.5	9.5	7	7											
	6.9	0.4	70	24.8						24.8	8.1	8.1	30.9	30.9	98.8	98.8	6.9	6.9	9.4	9.4	7	7											
IM11	Fine	Moderate	15:36	9.4						Surface	1.0	0.4	84	25.2	25.2	8.1	8.1	31.2	31.2	97.8	97.8	6.8	6.8	6.7	6.7	8	8	8	822050	811460			
											1.0	0.4	87	25.2	25.2	8.1	8.1	31.2	31.2	97.8	97.8	6.8	6.8	6.7	6.7	8	8						
											4.7	0.4	89	25.2	25.2	8.1	8.1	31.3	31.3	97.3	97.3	6.7	6.7	7.2	7.2	8	8						
					Middle	4.7	0.5	92	25.2	25.2	8.1	8.1	31.3	31.3	97.2	97.2	6.7	6.7	7.3	7.3	8	8											
						8.4	0.3	68	25.2	25.2	8.1	8.1	31.5	31.5	96.3	96.3	6.6	6.6	11.4	11.4	8	8											
						8.4	0.3	69	25.2	25.2	8.1	8.1	31.5	31.5	96.3	96.3	6.6	6.6	11.4	11.4	7	7											
					IM12	Fine	Moderate	15:42	9.4	Surface	1.0	0.4	90	25.1	25.1	8.1	8.1	31.3	31.3	97.0	97.0	6.7	6.7	7.3	7.3	9	9				8	821457	812031
											1.0	0.4	94	25.1	25.1	8.1	8.1	31.3	31.3	97.0	97.0	6.7	6.7	7.3	7.3	9	9						
											4.7	0.4	105	25.2	25.2	8.1	8.1	31.3	31.3	96.9	96.9	6.7	6.7	7.8	7.8	8	8						
Middle	4.7	0.4	107	25.2						25.2	8.1	8.1	31.3	31.3	96.9	96.9	6.7	6.7	7.8	7.8	8	8											
	8.4	0.3	88	25.2						25.2	8.1	8.1	31.3	31.3	97.3	97.3	6.7	6.7	8.3	8.3	7	7											
	8.4	0.3	94	25.2						25.2	8.1	8.1	31.3	31.3	97.3	97.3	6.7	6.7	8.3	8.3	8	8											
SR1A	Fine	Calm	16:15	5.1						Surface	1.0	-	-	24.8	24.8	8.1	8.1	31.0	31.0	97.6	97.6	6.8	6.8	7.5	7.5	7	7	7	819976	812662			
											1.0	-	-	24.8	24.8	8.1	8.1	31.0	31.0	97.6	97.6	6.8	6.8	7.5	7.5	6	6						
											2.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
						4.1	-	-	24.8	24.8	8.1	8.1	31.1	31.1	98.3	98.3	6.8	6.8	8.6	8.6	6	6											
						4.1	-	-	24.8	24.8	8.1	8.1	31.1	31.1	98.5	98.5	6.9	6.9	8.6	8.6	7	7											
					SR2	Fine	Rough	16:31	4.7	Surface	1.0	0.3	134	25.2	25.2	8.1	8.1	31.3	31.3	98.3	98.3	6.8	6.8	5.4	5.4	5	5				4	821440	814160
											1.0	0.3	137	25.2	25.2	8.1	8.1	31.3	31.3	98.3	98.3	6.8	6.8	5.4	5.4	4	4						
											-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Middle	-	-	-	-						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
	3.7	0.2	142	25.4						25.4	8.1	8.1	32.0	32.0	96.2	96.2	6.6	6.6	8.0	8.0	4	4											
	3.7	0.2	153	25.4						25.4	8.1	8.1	32.0	32.0	96.3	96.3	6.6	6.6	8.0	8.0	4	4											
SR3	Fine	Rough	15:09	9.2						Surface	1.0	0.3	103	24.9	24.9	8.1	8.1	30.6	30.6	98.6	98.6	6.9	6.9	7.3	7.3	8	8	8	822139	807559			
											1.0	0.4	111	24.9	24.9	8.1	8.1	30.6	30.6	98.6	98.6	6.9	6.9	7.3	7.3	8	8						
											4.6	0.4	122	24.8	24.8	8.1	8.1	30.7	30.7	98.3	98.3	6.8	6.8	9.9	9.9	8	8						
					Middle	4.6	0.4	124	24.8	24.8	8.1	8.1	30.7	30.7	98.3	98.3	6.8	6.8	10.2	10.2	8	8											
						8.2	0.3	95	24.6	24.6	8.1	8.1	31.0	31.0	98.6	98.6	6.9	6.9	13.7	13.7	7	7											
						8.2	0.3	99	24.6	24.6	8.1	8.1	31.0	31.0	98.6	98.6	6.9	6.9	13.9	13.9	8	8											
					SR4A	Cloudy	Moderate	15:55	8.8	Surface	1.0	0.4	99	23.9	23.9	8.2	8.2	30.1	30.1	93.6	93.6	6.6	6.6	2.6	2.6	4	4				4	817197	807787
											1.0	0.4	105	23.9	23.9	8.2	8.2	30.1	30.1	93.6	93.6	6.6	6.6	2.8	2.8	4	4						
											4.4	0.4	103	23.9	23.9	8.2	8.2	30.2	30.2	93.5	93.5	6.6	6.6	4.5	4.5	4	4						
Middle	4.4	0.4	106	23.9						23.9	8.2	8.2	30.2	30.2	93.6	93.6	6.6	6.6	4.6	4.6	4	4											
	7.8	0.4	110	23.9						23.9	8.1	8.1	30.2	30.2	94.8	94.8	6.7	6.7	6.4	6.4	3	3											
	7.8	0.4	115	23.9						23.9	8.1	8.1	30.2	30.2	94.9	94.9	6.7	6.7	6.7	6.7	3	3											
SR5A	Cloudy	Moderate	16:11	4.2						Surface	1.0	0.3	108	23.9	23.9	8.1	8.1	29.7	29.7	93.0	93.1	6.6	6.6	8.3	8.3	5	5	4	816582	810715			
											1.0	0.3	111	23.9	23.9	8.1	8.1	29.7	29.7	93.1	93.1	6.6	6.6	8.4	8.4	4	4						
											-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
						3.2	0.2	109	23.8	23.8	8.1	8.1	29.7	29.7	94.0	94.1	6.7	6.7	9.0	9.0	4	4											
						3.2	0.2	114	23.8	23.8	8.1	8.1	29.7	29.7	94.2	94.2	6.7	6.7	8.8	8.8	4	4											
					SR6A	Cloudy	Moderate	16:36	3.6	Surface	1.0	0.2	101	24.3	24.3	8.1	8.1	30.0	30.0	94.5	94.6	6.7	6.7	6.5	6.5	4	4				5	817957	814731
											1.0	0.2	104	24.3	24.3	8.1	8.1	30.0	30.0	94.7	94.7	6.7	6.7	6.6	6.6	5	5						
											-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Middle	-	-	-	-						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
	2.6	0.2	122	24.3						24.3	8.1	8.1	30.0	30.0	95.5	95.7	6.7	6.7	7.4	7.4	4	4											
	2.6	0.2	130	24.3						24.3	8.1	8.1	30.0	30.0	95.8	95.8	6.8	6.8	7.5	7.5	5	5											
SR7	Fine	Rough	17:19	15.8						Surface	1.0	0.4	82	25.5	25.5	8.1	8.1	32.5	32.5	96.4	96.4	6.6	6.6	4.0	4.0	4	4	4	823635	823739			
											1.0	0.5	82	25.5	25.5	8.1	8.1	32.5	32.5	96.4	96.4	6.6	6.6	4.0	4.0	4	4						
											7.9	0.4	87	25.5	25.5	8.1	8.1	32.5	32.5	96.5	96.5	6.6	6.6	4.3	4.3	4	4						
					Middle	7.9	0.4	87	25.5	25.5	8.1	8.1	32.5	32.5	96.5	96.5	6.6	6.6	4.3	4.3	4	4											
						14.8	0.2	85	25.5	25.5	8.1	8.1	32.5	32.5	97.2	97.2	6.6	6.6	4.1	4.1	3	3											
						14.8	0.2	92	25.5	25.5	8.1	8.1	32.5	32.5	97.2	97.2	6.6	6.6	4.0	4.0	3	3											
					SR8	Fine	Moderate	15:50	5.0	Surface	1.0	-	-	25.5	25.5	8.1	8.1	30.9	30.9	99.3	99.3	6.8	6.8	8.7	8.7	1							

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

**Water Quality Monitoring Results on 09 November 21 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)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)						
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA								
C1	Fine	Moderate	11:41	7.9	Surface	1.0	0.4	17	24.0	24.0	8.2	8.2	31.0	31.0	94.8	94.8	6.7	6.7	12.2	14.0	5	815617	804233							
						1.0	0.4	18	24.0		8.2	8.2	31.0	31.0	94.8	94.8	6.7		12.2											
						4.0	0.4	13	24.0		24.0	8.2	8.2	31.0	31.0	94.3	94.3		6.7					12.9						
					Middle	4.0	0.4	13	24.0	24.0	8.2	8.2	31.0	31.0	94.3	94.3	6.7	12.8												
						6.9	0.4	11	24.0	24.0	8.0	8.0	31.1	31.1	94.1	94.1	6.6	16.9												
						6.9	0.4	11	24.0	24.0	8.0	8.0	31.1	31.1	94.1	94.1	6.6	16.9												
					C2	Fine	Rough	12:14	11.6	Surface	1.0	0.4	6	25.1	25.1	8.0	8.0	30.2	30.2	99.2	99.2			6.9	6.9	5.5	7.5	6	825676	806924
											1.0	0.4	6	25.1		8.0	8.0	30.2	30.2	99.1	99.1			6.9		5.5				
											5.8	0.4	9	25.0		25.0	8.0	8.0	30.3	30.3	98.3			98.3		6.8				
Middle	5.8	0.4	9	25.0						25.0	8.0	8.0	30.3	30.3	98.3	98.3	6.8	6.2												
	10.6	0.3	30	24.8						24.8	8.0	8.0	30.5	30.5	98.9	98.9	6.9	10.9												
	10.6	0.4	31	24.8						24.8	8.0	8.0	30.5	30.5	98.9	98.9	6.9	11.0												
C3	Fine	Rough	10:11	10.9						Surface	1.0	0.4	223	25.3	25.3	8.1	8.1	31.5	31.5	96.0	96.0	6.6	6.6	5.7	7.7	6	822116	817814		
											1.0	0.5	224	25.3		8.1	8.1	31.5	31.5	96.0	96.0	6.6		5.7						
											5.5	0.5	236	25.3		25.4	8.1	8.1	31.6	31.7	94.7	94.7		6.5						
					Middle	5.5	0.5	251	25.4	25.4	8.1	8.1	31.7	31.7	94.6	94.6	6.5	5.7												
						9.9	0.4	240	25.6	25.6	8.1	8.1	32.2	32.2	95.0	95.0	6.5	11.9												
						9.9	0.5	248	25.6	25.6	8.1	8.1	32.2	32.2	95.1	95.1	6.5	11.6												
					IM1	Fine	Moderate	11:59	5.5	Surface	1.0	0.1	100	24.0	24.0	8.2	8.2	30.0	30.0	93.2	93.2	6.6	6.6	2.8	2.8	3			817940	807137
											1.0	0.1	101	23.9		8.2	8.2	30.0	30.0	93.2	93.2	6.6		2.6						
											-	-	-	-		-	-	-	-	-	-	-		-						
Middle	-	-	-	-						-	-	-	-	-	-	-	-	-												
	4.5	0.1	111	23.9						23.9	8.1	8.1	30.2	30.2	93.6	93.7	6.6	2.9												
	4.5	0.1	119	23.9						23.9	8.1	8.1	30.2	30.2	93.7	93.7	6.6	3.0												
IM2	Fine	Moderate	12:05	6.8						Surface	1.0	0.2	73	24.1	24.1	8.1	8.1	29.9	29.9	91.7	91.7	6.5	6.5	6.7	11.5	3	818151	806181		
											1.0	0.2	76	24.1		8.1	8.1	29.9	29.9	91.7	91.7	6.5		6.7						
											3.4	0.2	74	24.0		24.0	8.1	8.1	30.0	30.0	90.7	90.7		6.4						
					Middle	3.4	0.2	79	24.0	24.0	8.1	8.1	30.0	30.0	90.7	90.7	6.4	14.4												
						5.8	0.2	65	24.0	24.0	8.1	8.1	29.9	29.9	90.8	91.0	6.4	13.3												
						5.8	0.2	67	24.0	24.0	8.1	8.1	29.9	29.9	91.1	91.1	6.5	13.7												
					IM3	Fine	Moderate	12:10	6.8	Surface	1.0	0.3	68	24.0	24.0	8.1	8.1	30.0	30.0	91.9	91.9	6.5	6.5	4.0	9.7	5			818780	805579
											1.0	0.3	73	24.0		8.1	8.1	30.0	30.0	91.8	91.8	6.5		3.9						
											3.4	0.3	65	23.9		23.9	8.1	8.1	30.0	30.0	91.1	91.1		6.5						
Middle	3.4	0.3	66	23.9						23.9	8.1	8.1	30.0	30.0	91.1	91.1	6.5	8.4												
	5.8	0.2	53	23.9						23.9	8.1	8.1	30.0	30.0	91.2	91.3	6.5	16.9												
	5.8	0.2	57	23.9						23.9	8.1	8.1	30.0	30.0	91.4	91.4	6.5	16.9												
IM4	Fine	Moderate	12:18	8.2						Surface	1.0	0.3	55	23.9	23.9	8.1	8.1	30.0	30.0	91.7	91.7	6.5	6.5	6.5	7.8	4	819724	804601		
											1.0	0.3	57	23.9		8.1	8.1	30.0	30.0	91.7	91.7	6.5		6.4						
											4.1	0.2	50	23.9		23.9	8.1	8.1	30.0	30.0	91.5	91.6		6.5						
					Middle	4.1	0.2	54	23.9	23.9	8.1	8.1	30.0	30.0	91.6	91.6	6.5	7.8												
						7.2	0.2	44	23.9	23.9	8.1	8.1	30.0	30.0	91.9	92.0	6.5	9.3												
						7.2	0.2	47	23.9	23.9	8.1	8.1	30.0	30.0	92.0	92.0	6.5	9.2												
					IM5	Fine	Moderate	12:24	8.0	Surface	1.0	0.3	41	24.0	24.0	8.1	8.1	29.9	29.9	89.7	89.7	6.4	6.4	12.1	13.6	4			820753	804849
											1.0	0.3	43	24.0		8.1	8.1	29.9	29.9	89.7	89.7	6.4		12.2						
											4.0	0.2	38	24.0		24.0	8.1	8.1	29.9	29.9	89.5	89.5		6.4						
Middle	4.0	0.2	39	24.0						24.0	8.1	8.1	29.9	29.9	89.5	89.5	6.4	18.3												
	7.0	0.3	39	24.0						24.0	8.1	8.1	29.9	29.9	90.1	90.2	6.4	10.6												
	7.0	0.3	39	24.0						24.0	8.1	8.1	29.9	29.9	90.2	90.2	6.4	10.3												
IM6	Fine	Moderate	12:29	7.2						Surface	1.0	0.3	32	24.3	24.3	8.1	8.1	29.9	29.9	92.2	92.2	6.5	6.5	2.6	5.9	4	821066	805841		
											1.0	0.3	34	24.2		8.1	8.1	29.9	29.9	92.2	92.2	6.5		2.5						
											3.6	0.3	30	24.2		24.2	8.1	8.1	30.1	30.1	92.1	92.1		6.5						
					Middle	3.6	0.3	31	24.2	24.2	8.1	8.1	30.1	30.1	92.0	92.0	6.5	8.5												
						6.2	0.3	28	24.1	24.1	8.1	8.1	30.2	30.2	91.9	92.0	6.5	6.7												
						6.2	0.3	30	24.1	24.1	8.1	8.1	30.2	30.2	92.0	92.0	6.5	6.6												
					IM7	Fine	Moderate	12:36	7.6	Surface	1.0	0.4	21	24.3	24.3	8.1	8.1	29.7	29.7	91.7	91.7	6.5	6.5	5.7	8.0	4			821349	806824
											1.0	0.4	22	24.3		8.1	8.1	29.7	29.7	91.7	91.7	6.5		5.8						
											3.8	0.3	20	24.3		24.3	8.1	8.1	29.7	29.7	91.7	91.8		6.5						
Middle	3.8	0.3	21	24.3						24.3	8.1	8.1	29.7	29.7	91.8	91.8	6.5	8.8												
	6.6	0.3	18	24.0						24.0	8.1	8.1	30.2	30.2	92.8	92.9	6.6	9.5												
	6.6	0.3	18	24.0						24.0	8.1	8.1	30.2	30.2	92.9	92.9	6.6	9.5												
IM8	Fine	Rough	11:49	7.6						Surface	1.0	0.1	103	25.1	25.1	8.0	8.0	30.5	30.5	97.4	97.4	6.8	6.8	7.9	10.2	8	821845	808126		
											1.0	0.1	109	25.1		8.0	8.0	30.5	30.5	97.3	97.3	6.8		8.1						
											3.8	0.1	101	25.0		25.0	8.0	8.0	30.5	30.5	96.3	96.3		6.7						
					Middle	3.8	0.2	107	25.0	25.0	8.0	8.0	30.5	30.5	96.3	96.3	6.7	11.0												
						6.6	0.1	92	24.9	24.9	8.0	8.0	30.5	30.5	96.8	96.8	6.7	11.8												
						6.6	0.1	95	24.9	24.9	8.0	8.0	30.5	30.5	96.7	96.7	6.7	11.7												

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

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

**Water Quality Monitoring Results on 09 November 21 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)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)		
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA				
IM9	Fine	Rough	11:43	7.2	Surface	1.0	0.1	149	24.7	24.7	8.1	8.1	30.6	30.6	97.5	97.5	6.8	6.8	11.9	17	17	822109	808812			
						1.0	0.1	155	24.7	8.1	8.1	30.6	30.6	97.5	97.5	6.8	6.8	11.9	18							
					Middle	3.6	0.1	153	24.7	24.7	8.1	8.1	30.6	30.6	97.4	97.5	6.8	6.8	14.5	18				13.9		
						3.6	0.1	156	24.7	24.7	8.1	8.1	30.6	30.6	97.5	97.5	6.8	6.8	14.5	17						
					Bottom	6.2	0.1	105	24.7	24.7	8.1	8.1	30.6	30.6	98.0	98.0	6.9	6.9	15.3	17						
						6.2	0.1	108	24.7	24.7	8.1	8.1	30.6	30.6	98.0	98.0	6.9	6.9	15.3	16						
IM10	Fine	Rough	11:36	7.7	Surface	1.0	0.6	342	24.9	24.9	8.1	8.1	30.9	30.9	97.2	97.2	6.8	6.8	13.8	14	16	822395	809796			
						1.0	0.6	315	24.9	24.9	8.1	8.1	30.9	30.9	97.2	97.2	6.8	6.8	13.7	15						
					Middle	3.9	0.5	341	24.9	24.9	8.1	8.1	30.9	30.9	97.2	97.2	6.8	6.8	13.8	16						
						3.9	0.6	348	24.8	24.8	8.1	8.1	30.9	30.9	97.2	97.2	6.8	6.8	13.9	17						
					Bottom	6.7	0.5	338	24.8	24.8	8.1	8.1	30.9	30.9	97.9	98.0	6.8	6.8	16.5	16						
						6.7	0.5	341	24.8	24.8	8.1	8.1	30.9	30.9	98.0	98.0	6.8	6.8	16.0	16						
IM11	Fine	Rough	11:27	8.4	Surface	1.0	0.6	335	24.8	24.8	8.1	8.1	31.0	31.0	97.7	97.7	6.8	6.8	12.1	15	14	822044	811481			
						1.0	0.6	338	24.8	24.8	8.1	8.1	31.0	31.0	97.7	97.7	6.8	6.8	12.0	14						
					Middle	4.2	0.5	336	24.8	24.8	8.1	8.1	31.0	31.0	97.4	97.4	6.8	6.8	14.1	14						
						4.2	0.5	309	24.8	24.8	8.1	8.1	31.0	31.0	97.4	97.4	6.8	6.8	13.9	15						
					Bottom	7.4	0.4	339	24.8	24.8	8.1	8.1	31.0	31.0	97.8	97.9	6.8	6.8	15.2	12						
						7.4	0.4	312	24.8	24.8	8.1	8.1	31.0	31.0	97.9	97.9	6.8	6.8	15.4	13						
IM12	Fine	Rough	11:20	9.1	Surface	1.0	0.5	283	24.9	24.9	8.1	8.1	31.0	31.0	97.5	97.5	6.8	6.8	15.2	23	22	821455	812022			
						1.0	0.5	287	24.9	24.9	8.1	8.1	31.0	31.0	97.5	97.5	6.8	6.8	15.1	22						
					Middle	4.6	0.5	284	24.8	24.8	8.1	8.1	31.0	31.0	97.4	97.4	6.8	6.8	17.5	22						
						4.6	0.5	288	24.8	24.8	8.1	8.1	31.0	31.0	97.4	97.4	6.8	6.8	17.5	23						
					Bottom	8.1	0.5	284	24.8	24.8	8.1	8.1	31.0	31.0	97.6	97.6	6.8	6.8	19.0	21						
						8.1	0.5	294	24.8	24.8	8.1	8.1	31.0	31.0	97.6	97.6	6.8	6.8	18.8	22						
SR1A	Fine	Calm	10:48	4.8	Surface	1.0	-	-	24.8	24.8	8.1	8.1	30.9	30.9	96.2	96.3	6.7	6.7	7.1	9	9	819981	812663			
						1.0	-	-	24.8	24.8	8.1	8.1	30.9	30.9	96.3	96.3	6.7	6.7	7.1	9						
					Middle	2.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-
						2.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-
					Bottom	3.8	-	-	24.8	24.8	8.1	8.1	30.9	30.9	96.7	96.8	6.7	6.7	7.9	8						
						3.8	-	-	24.8	24.8	8.1	8.1	30.9	30.9	96.8	96.8	6.7	6.7	7.8	8						
SR2	Fine	Rough	10:33	4.5	Surface	1.0	0.2	294	24.8	24.8	8.1	8.1	31.0	31.0	98.2	98.2	6.8	6.8	10.2	12	12	821459	814162			
						1.0	0.2	311	24.8	24.8	8.1	8.1	31.0	31.0	98.2	98.2	6.8	6.8	10.1	12						
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-
					Bottom	3.5	0.2	319	24.8	24.8	8.1	8.1	31.0	31.0	99.1	99.2	6.9	6.9	12.6	12						
						3.5	0.2	335	24.8	24.8	8.1	8.1	31.0	31.0	99.2	99.2	6.9	6.9	12.4	11						
SR3	Fine	Rough	11:55	8.9	Surface	1.0	0.1	35	25.0	25.0	8.0	8.0	30.2	30.2	98.2	98.2	6.8	6.8	6.0	5	5	822157	807551			
						1.0	0.1	36	25.0	25.0	8.0	8.0	30.3	30.3	98.1	98.1	6.8	6.8	6.0	6						
					Middle	4.5	0.1	14	25.0	25.0	8.0	8.0	30.3	30.3	97.2	97.2	6.8	6.8	6.6	5						
						4.5	0.1	14	25.0	25.0	8.0	8.0	30.3	30.3	97.2	97.2	6.8	6.8	6.6	6						
					Bottom	7.9	0.1	21	25.0	25.0	8.0	8.0	30.4	30.4	97.3	97.4	6.8	6.8	8.9	5						
						7.9	0.1	22	25.0	25.0	8.1	8.0	30.4	30.4	97.4	97.4	6.8	6.8	8.9	5						
SR4A	Fine	Moderate	11:18	9.0	Surface	1.0	0.3	222	23.8	23.8	8.1	8.1	29.5	29.5	91.0	91.1	6.5	6.5	1.2	4	4	817210	807821			
						1.0	0.3	243	23.8	23.8	8.1	8.1	29.6	29.6	91.2	91.2	6.5	6.5	1.3	4						
					Middle	4.5	0.3	221	23.7	23.7	8.2	8.2	30.0	30.0	92.6	92.6	6.6	6.6	2.0	3						
						4.5	0.3	234	23.7	23.7	8.2	8.2	30.1	30.1	92.6	92.6	6.6	6.6	2.1	4						
					Bottom	8.0	0.3	208	23.6	23.6	8.2	8.2	30.4	30.4	93.1	93.2	6.6	6.6	8.9	3						
						8.0	0.3	211	23.6	23.6	8.2	8.2	30.4	30.4	93.2	93.2	6.6	6.6	8.5	4						
SR5A	Fine	Moderate	11:01	4.2	Surface	1.0	0.3	210	23.8	23.8	8.1	8.1	29.9	29.9	89.6	89.6	6.4	6.4	2.2	4	4	816589	810718			
						1.0	0.3	229	23.8	23.8	8.1	8.1	29.9	29.9	89.6	89.6	6.4	6.4	2.2	4						
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-
					Bottom	3.2	0.3	198	23.8	23.8	8.1	8.1	29.9	29.9	90.6	90.9	6.5	6.5	3.3	4						
						3.2	0.3	202	23.8	23.8	8.1	8.1	29.9	29.9	91.1	91.1	6.5	6.5	3.7	3						
SR6A	Fine	Moderate	10:34	3.6	Surface	1.0	0.2	223	24.0	24.0	7.9	7.9	29.8	29.8	90.4	90.5	6.4	6.4	1.6	3	4	817981	814721			
						1.0	0.2	224	24.0	24.0	7.9	7.9	29.8	29.8	90.5	90.5	6.4	6.4	1.7	2						
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-
					Bottom	2.6	0.2	221	23.9	23.9	7.9	7.9	29.7	29.7	91.4	91.5	6.5	6.5	3.5	5						
						2.6	0.2	241	23.9	23.9	7.9	7.9	29.7	29.7	91.6	91.6	6.5	6.5	3.7	4						
SR7	Fine	Moderate	09:43	15.6	Surface	1.0	0.2	213	25.3	25.3	8.0	8.0	31.8	31.8	95.4	95.4	6.6	6.6	4.8	6	5	823640	823758			
						1.0	0.2	225	25.3	25.3	8.0	8.0	31.8	31.8	95.4	95.4	6.6	6.6	4.8	5						
					Middle	7.8	0.2	213	25.4	25.4	8.0	8.0	32.0	32.0	94.9	94.9	6.5	6.5	5.6	5						
						7.8	0.2	219	25.4	25.4	8.0	8.0	32.0	32.0	94.9	94.9	6.5	6.5	5.7	6						
					Bottom	14.6	0.2	215	25.4	25.4	8.0	8.0	32.2	32.2	95.5	95.6	6.5	6.5	9.6	5						
						14.6	0.2	223	25.4	25.4	8.0	8.0	32.2	32.2	95.6	95.6	6.5	6.5	9.0	5						
SR8	Fine	Moderate	11:12	4.9	Surface	1.0	-	-	24.9	24.9	8.1	8.1	30.5	30.5	98.9	98.9	6.9	6.9	12.0	21	21	820385	811600			
						1.0	-	-	24.9	24.9	8.1	8.1	30.5	30.5	98.9	98.9	6.9	6.9	11.9	22						
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-
					Bottom	3.9	-	-	24.7	24.7	8.1	8.1	30.9	30.9	98.0	98.1	6.8	6.8	15.0	19						
						3.9	-	-	24.7	24.7	8.1	8.1	30.9	30.9	98.1	98.1	6.8	6.8	14.8	20						

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

**Water Quality Monitoring Results on 11 November 21 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)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)								
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA										
C1	Fine	Rough	04:56	7.0	Surface	1.0	0.5	162	23.6	23.6	8.2	8.2	32.1	32.1	90.8	90.8	6.4	6.5	3.5	4.1	30	29	815597	804261								
						1.0	0.5	163	23.6		8.2	8.2	32.1	32.1	90.8	90.8	6.4		3.5													
						3.5	0.4	165	23.7		8.2	8.2	32.1	32.1	93.9	93.9	6.6		3.7													
					Middle	3.5	0.4	177	23.7	23.7	8.2	8.2	32.1	32.1	93.8	93.8	6.6	6.6	3.7	6.6	30											
						6.0	0.4	170	23.8		8.1	8.1	32.2	32.2	93.7	93.7	6.6		5.1													
						6.0	0.4	174	23.8		8.1	8.1	32.2	32.2	93.7	93.7	6.6		5.0													
					C2	Fine	Calm	07:12	12.2	Surface	1.0	0.7	200	23.3	23.3	8.1	8.1	29.8	29.8	93.2	93.3				6.7	6.8	1.8	2.7	8	8	825684	806922
											1.0	0.8	214	23.3		8.1	8.1	29.9	29.9	93.3	93.3				6.7		1.7					
											6.1	0.8	178	23.4		8.1	8.1	30.0	30.0	94.1	94.3				6.8		2.9					
Middle	6.1	0.8	184	23.4						23.4	8.1	8.1	30.0	30.0	94.5	94.5	6.8	6.9	2.8	6.9	7											
	11.2	0.6	176	23.4							8.1	8.1	29.9	29.9	95.2	95.4	6.8		3.5													
	11.2	0.7	190	23.4							8.1	8.1	29.8	29.8	95.5	95.5	6.9		3.5													
C3	Fine	Calm	04:55	11.0						Surface	1.0	0.3	70	23.7	23.7	8.1	8.1	31.1	31.1	91.3	91.4	6.5	6.6	1.8	2.5	9	8	822129	817782			
											1.0	0.3	75	23.7		8.1	8.1	31.1	31.1	91.5	91.4	6.5		1.8								
											5.5	0.3	73	23.7		8.0	8.0	30.9	30.9	92.9	93.1	6.6		2.6								
					Middle	5.5	0.3	80	23.7	23.7	8.0	8.0	30.9	30.9	93.2	93.2	6.6	6.8	2.5	6.8	7											
						10.0	0.2	93	23.7		8.0	8.0	30.8	30.7	94.6	95.2	6.7		3.2													
						10.0	0.2	98	23.7		8.0	8.0	30.6	30.6	95.7	95.7	6.8		3.2													
					IM1	Fine	Rough	05:26	4.5	Surface	1.0	0.1	18	23.6	23.6	8.2	8.2	32.1	32.1	94.5	94.5	6.7	6.7	3.0	3.0	9				10	817936	807118
											1.0	0.1	19	23.6		8.2	8.2	32.1	32.1	94.5	94.5	6.7		3.0								
											-	-	-	-		-	-	-	-	-	-	-		-		-						
Middle	-	-	-	-						-	-	-	-	-	-	-	-	-	-	-	-	-	-									
	3.5	0.1	9	23.6							8.2	8.2	32.1	32.1	94.5	94.5	6.7	2.9														
	3.5	0.1	9	23.6							8.2	8.2	32.1	32.1	94.5	94.5	6.7	2.9														
IM2	Fine	Rough	05:35	7.3						Surface	1.0	0.2	8	23.6	23.7	8.2	8.2	32.1	32.1	94.1	94.1	6.6	6.6	3.2	4.9	9	11	818173	806145			
											1.0	0.2	8	23.7		8.2	8.2	32.1	32.1	94.1	94.1	6.6		3.2								
											3.7	0.1	0	23.7		8.2	8.2	32.2	32.2	94.2	94.2	6.6		4.7								
					Middle	3.7	0.1	0	23.7	23.7	8.2	8.2	32.2	32.2	94.1	94.1	6.6	6.6	4.7	6.6	12											
						6.3	0.1	11	23.8		8.2	8.2	32.2	32.2	93.7	93.7	6.6		6.9													
						6.3	0.2	11	23.8		8.2	8.2	32.2	32.2	93.7	93.7	6.6		7.0													
					IM3	Fine	Rough	05:49	7.1	Surface	1.0	0.2	215	23.9	23.9	8.2	8.2	31.4	31.4	93.2	93.2	6.6	6.6	9.5	7.7	6				7	818795	805615
											1.0	0.2	219	23.9		8.2	8.2	31.4	31.4	93.2	93.2	6.6		9.6								
											3.6	0.2	221	23.9		8.1	8.1	31.4	31.4	93.2	93.2	6.6		6.4								
Middle	3.6	0.2	240	23.9						23.9	8.1	8.1	31.4	31.4	93.2	93.2	6.6	6.6	6.5	6.6	7											
	6.1	0.2	206	23.9							8.1	8.1	31.4	31.4	93.2	93.3	6.6		7.3													
	6.1	0.2	215	23.9							8.1	8.1	31.4	31.4	93.3	93.3	6.6		7.3													
IM4	Fine	Rough	06:00	7.2						Surface	1.0	0.7	187	24.3	24.3	8.2	8.2	31.2	31.2	90.7	90.7	6.4	6.4	10.2	11.6	8	8	819723	804597			
											1.0	0.8	198	24.3		8.2	8.2	31.2	31.2	90.7	90.7	6.4		10.3								
											3.6	0.7	187	24.3		8.2	8.2	31.2	31.2	90.8	90.8	6.4		11.4								
					Middle	3.6	0.7	203	24.3	24.3	8.2	8.2	31.2	31.2	90.8	90.8	6.4	6.5	11.5	6.5	7											
						6.2	0.5	185	24.2		8.2	8.2	31.2	31.2	92.5	92.7	6.5		13.2													
						6.2	0.5	194	24.2		8.2	8.2	31.2	31.2	92.8	92.8	6.5		13.3													
					IM5	Fine	Rough	06:09	7.4	Surface	1.0	0.8	227	24.1	24.1	8.2	8.2	30.9	30.9	91.2	91.2	6.4	6.4	10.1	12.2	11				19	820715	804860
											1.0	0.8	227	24.1		8.2	8.2	30.9	30.9	91.2	91.2	6.4		10.1								
											3.7	0.8	224	24.1		8.1	8.1	30.9	30.9	91.3	91.3	6.4		11.8								
Middle	3.7	0.8	242	24.1						24.1	8.1	8.1	30.9	30.9	91.3	91.3	6.4	6.6	11.9	6.6	20											
	6.4	0.6	228	24.1							8.2	8.2	31.0	31.0	92.8	92.9	6.5		14.8													
	6.4	0.7	240	24.1							8.2	8.2	31.0	31.0	92.9	92.9	6.6		14.8													
IM6	Fine	Rough	06:22	7.9						Surface	1.0	0.8	257	24.1	24.1	8.3	8.3	30.9	30.9	91.0	91.0	6.4	6.4	10.5	12.3	34	30	821053	805825			
											1.0	0.8	257	24.1		8.3	8.3	30.9	30.9	91.0	91.0	6.4		10.6								
											4.0	0.7	255	24.1		8.3	8.3	30.9	30.9	90.8	90.8	6.4		11.6								
					Middle	4.0	0.8	273	24.1	24.1	8.3	8.3	30.9	30.9	90.8	90.8	6.4	6.4	11.7	6.4	31											
						6.9	0.7	256	24.1		8.2	8.2	30.9	30.9	90.7	90.7	6.4		14.8													
						6.9	0.7	279	24.1		8.2	8.2	30.9	30.9	90.7	90.7	6.4		14.8													
					IM7	Fine	Rough	06:32	7.5	Surface	1.0	0.8	202	24.1	24.1	8.2	8.2	30.7	30.7	91.1	91.1	6.4	6.4	7.8	10.5	17				21	821353	806826
											1.0	0.8	216	24.1		8.2	8.2	30.7	30.7	91.0	91.0	6.4		7.9								
											3.8	0.7	202	24.2		8.1	8.1	31.0	31.0	91.0	91.0	6.4		12.4								
Middle	3.8	0.8	206	24.2						24.2	8.1	8.1	31.0	31.0	91.0	91.0	6.4	6.4	12.4	6.4	19											
	6.5	0.6	205	24.2							8.1	8.1	31.1	31.1	91.0	91.0	6.4		11.2													
	6.5	0.7	222	24.2							8.1	8.1	31.1	31.1	91.0	91.0	6.4		11.2													
IM8	Fine	Calm	06:41	8.0						Surface	1.0	0.4	244	23.5	23.5	8.1	8.1	30.7	30.7	92.3	92.4	6.6	6.6	1.1	1.8	9	8	821835	808143			
											1.0	0.5	251	23.5		8.1	8.1	30.7	30.7	92.4	92.4	6.6		1.0								
											4.0	0.4	228	23.5		8.1	8.1	30.7	30.7	93.2	93.3	6.6		1.7								
					Middle	4.0	0.4	238	23.5	23.5	8.1	8.1	30.7	30.7	93.4	93.4	6.7	6.8	1.7	6.8	7											
						7.0	0.3	221	23.5		8.1	8.1	30.6	30.6	94.4	94.8	6.7		2.7													
						7.0	0.3	229	23.5		8.1	8.1	30.6	30.6	95.2	95.2	6.8		2.7													

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



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

**Water Quality Monitoring Results on 11 November 21 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)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)							
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA			Value	DA					
IM9	Fine	Calm	06:35	7.6	Surface	1.0	0.2	202	<u>23.6</u>	23.6	8.1	8.1	<u>30.7</u>	<u>30.7</u>	<u>92.6</u>	<u>92.7</u>	6.6	6.7	1.0	1.6	7	7	822097	808826							
						1.0	0.2	219	<u>23.6</u>	8.1	8.1	<u>30.7</u>	<u>30.7</u>	<u>92.7</u>	<u>93.5</u>	6.6	6.7	1.1	7	7											
						3.8	0.3	203	<u>23.6</u>	8.1	8.1	<u>30.7</u>	<u>30.7</u>	<u>93.4</u>	<u>94.9</u>	6.7	6.8	1.4	7	6											
					Middle	3.8	0.3	212	<u>23.5</u>	23.6	8.1	8.1	<u>30.7</u>	<u>30.6</u>	<u>93.5</u>	<u>94.9</u>	6.7	6.8	1.4	7	7										
						6.6	0.1	189	<u>23.5</u>	23.5	8.1	8.1	<u>30.6</u>	<u>30.6</u>	<u>94.6</u>	<u>95.1</u>	6.7	6.8	2.4	7	7										
						6.6	0.2	199	<u>23.5</u>	23.5	8.1	8.1	<u>30.6</u>	<u>30.6</u>	<u>95.1</u>	<u>95.1</u>	6.8	6.8	2.4	7	7										
					IM10	Fine	Calm	06:27	9.0	Surface	1.0	0.3	127	<u>23.6</u>	23.6	8.1	8.1	<u>30.7</u>	<u>30.7</u>	<u>91.6</u>	<u>91.7</u>	6.5			6.6	1.0	1.1	9	9	822393	809797
											1.0	0.3	131	<u>23.6</u>	23.6	8.1	8.1	<u>30.7</u>	<u>30.7</u>	<u>91.8</u>	<u>92.5</u>	6.5			6.6	1.0	9	9			
											4.5	0.3	145	<u>23.6</u>	23.6	8.1	8.1	<u>30.7</u>	<u>30.7</u>	<u>92.4</u>	<u>93.8</u>	6.6			6.7	1.1	9	9			
Middle	4.5	0.4	150	<u>23.6</u>						23.6	8.1	8.1	<u>30.7</u>	<u>30.6</u>	<u>92.6</u>	<u>93.8</u>	6.6	6.7	1.1	8	7										
	8.0	0.3	135	<u>23.5</u>						23.6	8.1	8.1	<u>30.6</u>	<u>30.6</u>	<u>93.5</u>	<u>94.0</u>	6.7	6.7	1.3	7	7										
	8.0	0.3	144	<u>23.6</u>						23.6	8.1	8.1	<u>30.5</u>	<u>30.5</u>	<u>94.0</u>	<u>94.0</u>	6.7	6.7	1.2	7	7										
IM11	Fine	Calm	06:15	8.2						Surface	1.0	0.3	98	<u>23.5</u>	23.5	8.1	8.1	<u>30.8</u>	<u>30.8</u>	<u>91.5</u>	<u>91.6</u>	6.5	6.6	2.0	2.3	8	7	822062	811459		
											1.0	0.3	103	<u>23.5</u>	23.5	8.1	8.1	<u>30.9</u>	<u>30.8</u>	<u>91.6</u>	<u>92.5</u>	6.5	6.6	1.9	7	7					
											4.1	0.4	113	<u>23.4</u>	23.4	8.1	8.1	<u>30.8</u>	<u>30.8</u>	<u>92.4</u>	<u>93.8</u>	6.6	6.7	2.0	7	7					
					Middle	4.1	0.4	116	<u>23.4</u>	23.4	8.1	8.1	<u>30.8</u>	<u>30.8</u>	<u>92.5</u>	<u>94.1</u>	6.6	6.7	2.0	7	7										
						7.2	0.4	111	<u>23.4</u>	23.4	8.1	8.1	<u>30.8</u>	<u>30.8</u>	<u>93.8</u>	<u>94.1</u>	6.7	6.7	3.0	6	6										
						7.2	0.4	119	<u>23.4</u>	23.4	8.1	8.1	<u>30.8</u>	<u>30.8</u>	<u>94.3</u>	<u>94.3</u>	6.7	6.7	3.1	7	7										
					IM12	Fine	Calm	06:07	9.4	Surface	1.0	0.4	123	<u>22.9</u>	22.9	8.1	8.1	<u>30.7</u>	<u>30.7</u>	<u>93.6</u>	<u>93.7</u>	6.7	6.8	1.2	2.1	7	8			821467	812062
											1.0	0.4	132	<u>22.9</u>	22.9	8.1	8.1	<u>30.7</u>	<u>30.7</u>	<u>93.7</u>	<u>94.0</u>	6.8	6.8	1.2	8	8					
											4.7	0.3	119	<u>22.9</u>	22.9	8.1	8.1	<u>30.7</u>	<u>30.7</u>	<u>94.0</u>	<u>94.1</u>	6.8	6.8	2.0	7	7					
Middle	4.7	0.3	125	<u>22.9</u>						22.9	8.1	8.1	<u>30.7</u>	<u>30.6</u>	<u>94.1</u>	<u>95.0</u>	6.8	6.9	2.0	8	7										
	8.4	0.4	127	<u>22.8</u>						22.9	8.1	8.1	<u>30.6</u>	<u>30.6</u>	<u>94.7</u>	<u>95.2</u>	6.8	6.9	3.2	7	7										
	8.4	0.4	139	<u>22.9</u>						22.9	8.1	8.1	<u>30.6</u>	<u>30.6</u>	<u>95.2</u>	<u>95.2</u>	6.9	6.9	3.2	7	7										
SR1A	Fine	Calm	05:41	5.0						Surface	1.0	-	-	<u>23.2</u>	23.2	8.1	8.1	<u>30.6</u>	<u>30.6</u>	<u>91.9</u>	<u>92.0</u>	6.6	6.6	3.6	3.3	8	8	819972	812666		
											1.0	-	-	<u>23.2</u>	23.2	8.1	8.1	<u>30.6</u>	<u>30.6</u>	<u>92.1</u>	<u>92.1</u>	6.6	6.6	3.5	9	9					
											2.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
					Middle	2.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	8					
						4.0	-	-	<u>22.9</u>	22.9	8.1	8.1	<u>30.5</u>	<u>30.5</u>	<u>93.3</u>	<u>93.5</u>	6.7	6.8	3.1	7	7										
						4.0	-	-	<u>22.9</u>	22.9	8.1	8.1	<u>30.5</u>	<u>30.5</u>	<u>93.7</u>	<u>93.7</u>	6.8	6.8	3.1	7	7										
					SR2	Fine	Calm	05:22	5.2	Surface	1.0	0.3	84	<u>22.9</u>	22.9	8.1	8.1	<u>30.8</u>	<u>30.8</u>	<u>95.1</u>	<u>95.1</u>	6.8	6.8	1.1	1.3	7	7			821479	814143
											1.0	0.3	90	<u>22.9</u>	22.9	8.1	8.1	<u>30.8</u>	<u>30.8</u>	<u>95.1</u>	<u>95.1</u>	6.8	6.8	1.0	6	6					
											-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Middle	-	-	-	-						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	7					
	4.2	0.3	82	<u>22.9</u>						22.9	8.1	8.1	<u>30.8</u>	<u>30.8</u>	<u>96.5</u>	<u>96.7</u>	6.9	7.0	1.6	7	7										
	4.2	0.3	89	<u>22.9</u>						22.9	8.1	8.1	<u>30.8</u>	<u>30.8</u>	<u>96.8</u>	<u>96.8</u>	7.0	7.0	1.5	6	6										
SR3	Fine	Calm	06:47	9.2						Surface	1.0	0.5	232	<u>23.4</u>	23.4	8.1	8.1	<u>30.2</u>	<u>30.2</u>	<u>90.9</u>	<u>91.0</u>	6.5	6.5	3.2	4.5	7	7	822147	807562		
											1.0	0.6	243	<u>23.4</u>	23.4	8.1	8.1	<u>30.2</u>	<u>30.2</u>	<u>91.0</u>	<u>92.1</u>	6.5	6.6	3.2	7	7					
											4.6	0.7	212	<u>23.4</u>	23.4	8.1	8.1	<u>30.3</u>	<u>30.3</u>	<u>92.0</u>	<u>92.1</u>	6.6	6.6	4.4	7	7					
					Middle	4.6	0.8	215	<u>23.4</u>	23.4	8.1	8.1	<u>30.3</u>	<u>30.3</u>	<u>92.1</u>	<u>92.8</u>	6.6	6.6	4.4	7	7										
						8.2	0.5	212	<u>23.4</u>	23.4	8.1	8.1	<u>30.3</u>	<u>30.3</u>	<u>92.7</u>	<u>92.8</u>	6.6	6.6	6.0	7	7										
						8.2	0.5	215	<u>23.4</u>	23.4	8.1	8.1	<u>30.3</u>	<u>30.3</u>	<u>92.9</u>	<u>92.9</u>	6.6	6.6	5.9	6	6										
					SR4A	Fine	Moderate	04:35	9.1	Surface	1.0	0.7	265	<u>23.6</u>	23.7	8.3	8.3	<u>32.1</u>	<u>32.1</u>	<u>94.3</u>	<u>94.3</u>	6.7	6.6	3.1	5.0	8	7			817182	807819
											1.0	0.7	266	<u>23.7</u>	23.7	8.3	8.3	<u>32.1</u>	<u>32.1</u>	<u>94.3</u>	<u>93.9</u>	6.6	6.6	3.2	6	6					
											4.6	0.6	264	<u>23.7</u>	23.7	8.2	8.2	<u>32.1</u>	<u>32.1</u>	<u>93.9</u>	<u>93.8</u>	6.6	6.6	5.9	6	6					
Middle	4.6	0.6	269	<u>23.7</u>						23.7	8.2	8.2	<u>32.1</u>	<u>32.2</u>	<u>93.9</u>	<u>93.8</u>	6.6	6.6	5.9	7	6										
	8.1	0.5	267	<u>23.8</u>						23.8	8.2	8.2	<u>32.2</u>	<u>32.2</u>	<u>93.8</u>	<u>93.8</u>	6.6	6.6	6.1	6	6										
	8.1	0.6	272	<u>23.8</u>						23.8	8.2	8.2	<u>32.2</u>	<u>32.2</u>	<u>93.8</u>	<u>93.8</u>	6.6	6.6	6.1	5	5										
SR5A	Fine	Moderate	04:22	3.8						Surface	1.0	0.2	254	<u>23.6</u>	23.6	8.2	8.1	<u>32.1</u>	<u>32.1</u>	<u>94.6</u>	<u>94.6</u>	6.7	6.7	3.1	3.5	5	5	816581	810704		
											1.0	0.2	271	<u>23.6</u>	23.6	8.1	8.1	<u>32.1</u>	<u>32.1</u>	<u>94.6</u>	<u>94.6</u>	6.7	6.7	3.2	6	6					
											-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	5					
						2.8	0.2	259	<u>23.7</u>	23.7	8.1	8.1	<u>32.1</u>	<u>32.1</u>	<u>94.4</u>	<u>94.5</u>	6.7	6.7	3.8	4	4										
						2.8	0.2	264	<u>23.7</u>	23.7	8.1	8.1	<u>32.1</u>	<u>32.1</u>	<u>94.5</u>	<u>94.5</u>	6.7	6.7	3.9	5	5										
					SR6A	Fine	Moderate	04:03	4.1	Surface	1.0	0.0	37	<u>23.6</u>	23.6	8.2	8.2	<u>32.1</u>	<u>32.1</u>	<u>94.6</u>	<u>94.6</u>	6.7	6.7	3.3	3.8	9	8			817986	814728
											1.0	0.0	39	<u>23.6</u>	23.6	8.2	8.2	<u>32.1</u>	<u>32.1</u>	<u>94.6</u>	<u>94.6</u>	6.7	6.7	3.3	8	8					
											-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Middle	-	-	-	-						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	8					
	3.1	0.0	47	<u>23.7</u>						23.7	8.2	8.2	<u>32.1</u>	<u>32.1</u>	<u>94.8</u>	<u>94.8</u>	6.7	6.7	4.2	8	8										
	3.1	0.0	51	<u>23.7</u>						23.7	8.2	8.2	<u>32.2</u>	<u>32.2</u>	<u>94.8</u>	<u>94.8</u>	6.7	6.7	4.3	7	7										
SR7	Fine	Calm	04:16	16.0						Surface	1.0	0.5	114	<u>24.2</u>	24.2	8.0	8.0	<u>31.7</u>	<u>31.7</u>	<u>88.9</u>	<u>88.9</u>	6.2	6.2	4.9	5.7	8	8	823633	823751		
											1.0	0.5	117	<u>24.2</u>	24.2	8.0	8.0	<u>31.7</u>	<u>31.7</u>	<u>88.9</u>	<u>89.2</u>	6.2	6.3	4.9	8	8					
											8.0	0.4	119	<u>24.2</u>	24.2	8.0	8.0	<u>31.7</u>	<u>31.7</u>	<u>89.1</u>	<u>89.2</u>	6.2	6.3	5.1	7	7					
					Middle	8.0	0.4	123	<u>24.2</u>	24.2	8.0																				

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

Water Quality Monitoring Results on 11 November 21 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)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)			
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA					
C1	Fine	Rough	17:32	7.8	Surface	1.0	0.3	33	23.5	23.5	8.0	8.0	31.7	31.7	95.5	95.5	6.8	6.8	7.5	9.7	12	12	815630	804245			
						1.0	0.3	35	23.5		8.0	8.0	31.7	31.7	95.5	95.5	6.8		7.5								
						3.9	0.3	7	23.5		8.0	8.0	31.9	31.9	94.8	94.8	6.7		10.3								
					Middle	3.9	0.3	7	23.5	23.5	8.0	8.0	31.9	31.9	94.9	94.9	6.7	10.3	6.7	11							
						6.8	0.2	8	23.5		8.1	8.1	32.2	32.2	95.3	95.3	6.7	11.2									
						6.8	0.2	8	23.5		8.1	8.1	32.2	32.2	95.4	95.4	6.7	11.3									
C2	Fine	Calm	16:25	12.4	Surface	1.0	0.7	209	23.3	23.3	8.1	8.1	29.3	29.3	91.5	91.5	6.6	6.6	2.5	3.6	6	7	825672	806926			
						1.0	0.7	211	23.3		8.1	8.1	29.4	29.4	91.5	91.5	6.6		2.5								
						6.2	0.4	206	23.3		8.2	8.2	29.4	29.4	91.7	91.7	6.6		3.6								
					Middle	6.2	0.4	214	23.3	23.4	8.2	8.2	29.5	29.5	91.7	91.7	6.6	3.6	6.7	7							
						11.4	0.3	186	23.4		8.2	8.3	29.5	29.5	92.2	92.2	6.7	4.7									
						11.4	0.3	187	23.4		8.3	8.3	29.5	29.5	92.6	92.6	6.7	4.8									
C3	Fine	Calm	18:30	12.0	Surface	1.0	0.2	256	23.9	23.9	8.1	8.1	31.1	31.1	93.1	93.1	6.6	6.6	4.3	5.3	5	6	822124	817804			
						1.0	0.2	269	23.9		8.1	8.1	31.1	31.1	93.1	93.1	6.6		4.4								
						6.0	0.3	278	23.9		8.1	8.1	31.1	31.1	93.9	93.9	6.6		5.4								
					Middle	6.0	0.3	305	23.9	23.9	8.1	8.1	31.1	31.1	94.0	94.0	6.6	5.4	6.7	6							
						11.0	0.3	272	23.9		8.1	8.1	31.1	31.1	95.2	95.2	6.7	6.0									
						11.0	0.3	291	23.9		8.1	8.1	31.1	31.1	95.5	95.5	6.7	6.0									
IM1	Sunny	Moderate	17:12	5.0	Surface	1.0	0.2	49	23.8	23.8	8.0	8.0	31.8	31.8	96.2	96.2	6.8	6.8	6.1	8.1	10	9	817926	807147			
						1.0	0.2	50	23.8		8.0	8.0	31.8	31.8	96.2	96.2	6.8		6.1								
						-	-	-	-		-	-	-	-	-	-	-		-		-						
					Middle	-	-	-	-	23.8	-	-	-	-	-	-	-	-	-	-	-				-	-	-
						4.0	0.2	44	23.8		8.1	8.1	32.0	32.0	96.7	96.8	6.8	10.1									
						4.0	0.2	47	23.8		8.1	8.1	32.0	32.0	96.8	96.8	6.8	10.1									
IM2	Sunny	Rough	17:05	6.9	Surface	1.0	0.4	27	23.7	23.7	8.1	8.1	31.7	31.7	96.0	96.0	6.8	6.8	4.1	9.2	7	7	818169	806153			
						1.0	0.4	28	23.7		8.1	8.1	31.7	31.7	96.0	96.0	6.8		4.1								
						3.5	0.4	22	23.6		8.1	8.1	31.9	31.9	95.0	95.0	6.7		11.1								
					Middle	3.5	0.4	22	23.6	23.6	8.1	8.1	31.9	31.9	95.0	95.0	6.7	11.1	6.7	7							
						5.9	0.3	23	23.6		8.1	8.1	32.0	32.0	95.3	95.3	6.7	12.5									
						5.9	0.3	23	23.6		8.1	8.1	32.0	32.0	95.4	95.4	6.7	12.5									
IM3	Sunny	Rough	16:59	7.9	Surface	1.0	0.4	41	23.8	23.8	8.1	8.1	31.9	31.9	97.1	97.1	6.8	6.8	3.9	5.7	9	8	818770	805608			
						1.0	0.5	42	23.8		8.1	8.1	32.0	32.0	97.1	97.1	6.8		3.9								
						4.0	0.4	41	23.8		8.1	8.1	32.0	32.0	96.9	96.9	6.8		4.2								
					Middle	4.0	0.5	41	23.8	23.8	8.1	8.1	32.0	32.0	96.9	96.9	6.8	4.2	6.8	8							
						6.9	0.4	43	23.8		8.1	8.1	32.1	32.1	96.5	96.5	6.8	8.9									
						6.9	0.4	43	23.8		8.1	8.1	32.1	32.1	96.5	96.5	6.8	8.9									
IM4	Sunny	Rough	16:49	8.0	Surface	1.0	0.4	38	23.7	23.7	8.1	8.1	32.0	32.0	95.8	95.8	6.8	6.8	4.0	4.1	6	9	819748	804621			
						1.0	0.4	41	23.7		8.1	8.1	32.0	32.0	95.8	95.8	6.7		4.0								
						4.0	0.4	38	23.7		8.1	8.1	32.1	32.1	95.5	95.5	6.7		4.1								
					Middle	4.0	0.4	39	23.7	23.7	8.1	8.1	32.1	32.1	95.5	95.5	6.7	4.2	6.7	9							
						7.0	0.3	34	23.7		8.1	8.1	32.1	32.1	95.6	95.6	6.7	4.1									
						7.0	0.3	36	23.7		8.1	8.1	32.1	32.1	95.6	95.6	6.7	4.1									
IM5	Sunny	Rough	16:42	8.1	Surface	1.0	0.3	37	24.1	24.1	7.9	7.9	31.0	31.0	91.6	91.7	6.4	6.4	6.2	7.0	16	14	820742	804857			
						1.0	0.3	38	24.1		7.9	7.9	31.0	31.0	91.7	91.7	6.4		6.2								
						4.1	0.3	34	24.1		7.9	7.9	31.0	31.0	91.6	91.6	6.4		6.8								
					Middle	4.1	0.3	37	24.1	24.1	7.9	7.9	31.0	31.0	91.6	91.6	6.4	6.9	6.5	15							
						7.1	0.3	35	24.1		7.9	7.9	31.0	31.0	91.8	91.9	6.5	8.0									
						7.1	0.3	36	24.1		7.9	7.9	31.0	31.0	91.9	91.9	6.5	8.0									
IM6	Sunny	Rough	16:32	7.9	Surface	1.0	0.4	34	24.1	24.1	8.0	8.0	30.6	30.6	91.7	91.7	6.5	6.5	5.3	6.6	13	13	821036	805836			
						1.0	0.4	35	24.1		8.0	8.0	30.6	30.6	91.7	91.7	6.5		5.3								
						4.0	0.3	33	24.1		7.9	7.9	30.9	30.9	91.4	91.4	6.4		6.7								
					Middle	4.0	0.4	34	24.1	24.1	7.9	7.9	30.9	30.9	91.4	91.4	6.4	6.8	6.4	14							
						6.9	0.3	34	24.1		8.0	8.0	31.0	31.0	91.4	91.4	6.4	7.7									
						6.9	0.3	36	24.1		8.0	8.0	31.0	31.0	91.4	91.4	6.4	7.6									
IM7	Sunny	Rough	16:25	7.6	Surface	1.0	0.5	36	24.1	24.1	8.1	8.1	30.3	30.3	92.7	92.7	6.6	6.6	4.9	7.3	11	11	821360	806858			
						1.0	0.5	37	24.1		8.1	8.1	30.3	30.3	92.7	92.7	6.6		4.8								
						3.8	0.4	39	24.1		8.1	8.1	30.8	30.8	91.8	91.8	6.5		7.7								
					Middle	3.8	0.5	39	24.1	24.1	8.1	8.1	30.8	30.8	91.8	91.8	6.5	7.8	6.5	12							
						6.6	0.4	39	24.1		8.1	8.1	31.2	31.2	92.2	92.3	6.5	9.2									
						6.6	0.4	40	24.1		8.1	8.1	31.2	31.2	92.3	92.3	6.5	9.2									
IM8	Fine	Calm	16:49	8.0	Surface	1.0	0.2	252	23.4	23.4	8.1	8.1	29.9	29.9	93.1	93.2	6.7	6.7	1.8	2.5	7	6	821841	808152			
						1.0	0.3	259	23.4		8.1	8.1	29.9	29.9	93.2	93.2	6.7		1.9								
						4.0	0.1	217	23.4		8.1	8.1	30.0	30.0	93.6	93.7	6.7		2.6								
					Middle	4.0	0.1	230	23.4	23.4	8.1	8.1	30.0	30.0	93.6	93.6	6.7	2.5	6.9	7							
						7.0	0.3	218	23.4		8.1	8.1	30.0	29.9	94.9	95.2	6.8	3.1									
						7.0	0.3	235	23.4		8.1	8.1	29.9	29.9	95.4	95.4	6.9	3.1									

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

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

**Water Quality Monitoring Results on 11 November 21 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)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)								
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA										
IM9	Fine	Calm	16:56	7.6	Surface	1.0	0.2	260	23.4	23.4	8.1	8.1	30.0	30.0	93.4	93.5	6.7	6.8	3.1	4.2	7	8	822104	808809								
						1.0	0.2	265	23.4		8.1	8.1	30.0	30.0	93.5	94.1	6.7		3.2													
						3.8	0.3	234	23.4		8.1	8.1	30.0	30.0	94.1	94.4	6.8		4.2													
					Middle	3.8	0.3	243	23.4	23.4	8.1	8.1	30.1	30.0	94.4	94.4	6.8	6.9	4.1													
						6.6	0.2	276	23.4		8.1	8.1	30.2	30.1	95.4	95.7	6.8		5.2													
						6.6	0.3	278	23.4		8.1	8.1	30.1	30.1	96.0	96.0	6.9		5.2													
					IM10	Fine	Calm	17:04	8.6	Surface	1.0	0.3	274	23.3	23.3	8.1	8.1	30.4	30.4	94.3	94.4				6.8	6.8	1.2	2.2	8	6	822369	809794
											1.0	0.4	291	23.3		8.1	8.1	30.5	30.5	94.4	95.0				6.8		1.2					
											4.3	0.3	278	23.2		8.1	8.1	30.5	30.5	94.9	95.0				6.8		2.5					
Middle	4.3	0.3	280	23.2						23.2	8.1	8.1	30.5	30.5	95.0	95.0	6.8	6.9	2.4													
	7.6	0.3	328	23.1							8.1	8.1	30.5	30.5	95.4	95.7	6.9		3.1													
	7.6	0.3	344	23.2							8.1	8.1	30.5	30.5	95.9	95.9	6.9		3.1													
IM11	Fine	Calm	17:16	8.5						Surface	1.0	0.4	292	23.4	23.4	8.1	8.1	30.8	30.8	94.0	94.1	6.7	6.7	1.1	1.5	6	7	822064	811458			
											1.0	0.4	310	23.4		8.1	8.1	30.8	30.8	94.1	94.4	6.7		1.0								
											4.3	0.4	291	23.4		8.1	8.1	30.8	30.8	94.3	94.4	6.7		1.2								
					Middle	4.3	0.5	305	23.4	23.4	8.1	8.1	30.8	30.8	94.5	94.5	6.7	6.8	1.1													
						7.5	0.4	276	23.4		8.1	8.1	30.8	30.8	95.1	95.3	6.8		2.3													
						7.5	0.4	282	23.4		8.1	8.1	30.8	30.8	95.4	95.4	6.8		2.3													
					IM12	Fine	Calm	17:25	9.8	Surface	1.0	0.4	269	23.0	23.0	8.1	8.1	30.7	30.7	95.5	95.5	6.9	6.9	2.1	3.4	5				6	821459	812064
											1.0	0.4	284	22.9		8.1	8.1	30.7	30.7	95.4	95.4	6.9		2.1								
											4.9	0.4	284	22.9		8.1	8.1	30.7	30.7	95.3	95.4	6.9		3.5								
Middle	4.9	0.4	294	22.9						22.9	8.1	8.1	30.7	30.7	95.4	95.4	6.9	6.9	3.5													
	8.8	0.3	277	22.9							8.1	8.1	30.7	30.7	95.8	96.0	6.9		4.5													
	8.8	0.3	278	22.9							8.1	8.1	30.7	30.7	96.1	96.1	6.9		4.5													
SR1A	Fine	Calm	17:50	4.8						Surface	1.0	-	-	23.5	23.5	8.1	8.1	30.5	30.5	92.1	92.4	6.6	6.6	2.6	2.8	6	6	819977	812658			
											1.0	-	-	23.5		8.1	8.1	30.5	30.5	92.6	92.6	6.6		2.6								
											2.4	-	-	-		-	-	-	-	-	-	-		-		-						
					Middle	2.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
						3.8	-	-	23.5		8.1	8.1	30.6	30.5	93.9	94.1	6.7	3.0														
						3.8	-	-	23.5		8.1	8.1	30.5	30.5	94.2	94.2	6.7	3.0														
					SR2	Fine	Calm	18:04	4.0	Surface	1.0	0.2	110	23.5	23.5	8.1	8.1	30.6	30.6	95.1	95.2	6.8	6.8	1.4	2.2	5				6	821471	814176
											1.0	0.2	118	23.5		8.1	8.1	30.6	30.6	95.2	95.2	6.8		1.4								
											-	-	-	-		-	-	-	-	-	-	-		-		-						
Middle	-	-	-	-						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
	3.0	0.0	180	23.8							8.1	8.1	30.5	30.5	95.9	96.1	6.8	2.9														
	3.0	0.0	191	23.8							8.1	8.1	30.5	30.5	96.2	96.2	6.8	2.9														
SR3	Fine	Calm	16:43	10.4						Surface	1.0	0.4	217	23.4	23.4	8.1	8.1	29.8	29.8	93.0	93.1	6.7	6.7	1.5	2.3	6	8	822124	807567			
											1.0	0.4	220	23.4		8.1	8.1	29.8	29.8	93.1	93.1	6.7		1.4								
											5.2	0.4	221	23.4		8.1	8.1	29.8	29.8	93.9	94.0	6.7		2.4								
					Middle	5.2	0.4	224	23.4	23.4	8.1	8.1	29.8	29.8	94.1	94.1	6.8	6.9	2.4													
						9.4	0.2	223	23.3		8.1	8.1	29.8	29.8	95.3	95.5	6.8		3.1													
						9.4	0.2	223	23.4		8.1	8.1	29.8	29.8	95.7	95.7	6.9		3.1													
					SR4A	Fine	Rough	17:51	9.9	Surface	1.0	0.0	194	23.7	23.7	8.1	8.1	31.2	31.2	94.5	94.5	6.7	6.7	5.3	5.9	9				9	817167	807821
											1.0	0.0	200	23.7		8.1	8.1	31.2	31.2	94.5	94.5	6.7		5.3								
											5.0	0.0	170	23.6		8.0	8.0	31.3	31.3	94.3	94.3	6.7		6.1								
Middle	5.0	0.0	171	23.6						23.6	8.0	8.0	31.3	31.3	94.3	94.3	6.7	6.7	6.0													
	8.9	0.0	32	23.6							8.1	8.1	31.3	31.3	94.6	94.6	6.7		6.5													
	8.9	0.0	32	23.6							8.1	8.1	31.3	31.3	94.6	94.6	6.7		6.4													
SR5A	Fine	Moderate	18:07	4.6						Surface	1.0	0.1	276	24.0	24.0	8.2	8.2	31.1	31.1	93.1	93.1	6.6	6.6	5.8	6.4	9	9	816601	810681			
											1.0	0.1	283	24.0		8.2	8.2	31.1	31.1	93.1	93.1	6.6		5.9								
											-	-	-	-		-	-	-	-	-	-	-		-		-						
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
						3.6	0.1	277	23.9		8.2	8.2	31.2	31.2	92.8	92.8	6.6	6.9														
						3.6	0.1	300	23.9		8.2	8.2	31.2	31.2	92.8	92.8	6.6	6.9														
					SR6A	Fine	Moderate	18:33	4.5	Surface	1.0	0.1	62	24.4	24.4	8.1	8.1	31.1	31.1	92.2	92.2	6.5	6.5	6.7	6.4	10				10	817948	814724
											1.0	0.1	63	24.4		8.1	8.1	31.1	31.1	92.2	92.2	6.5		6.7								
											-	-	-	-		-	-	-	-	-	-	-		-		-						
Middle	-	-	-	-						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
	3.5	0.0	126	24.5							8.1	8.1	31.4	31.4	91.0	91.1	6.3	6.1														
	3.5	0.0	136	24.5							8.1	8.1	31.4	31.4	91.1	91.1	6.4	6.2														
SR7	Fine	Calm	18:56	16.0						Surface	1.0	0.3	281	23.9	23.9	8.1	8.1	31.1	31.1	91.6	91.7	6.5	6.5	1.3	1.9	5	5	823624	823720			
											1.0	0.3	296	23.9		8.1	8.1	31.1	31.1	91.7	92.1	6.5		1.3								
											8.0	0.1	197	23.9		8.1	8.1	31.1	31.1	92.0	92.1	6.5		2.1								
					Middle	8.0	0.1	200	23.9	23.9	8.1	8.1	31.2	31.2	92.1	92.1	6.5	6.5	2.0													
						15.0	0.1	347	23.9		8.1	8.1	31.2	31.2	92.3	92.4	6.5		2.2													
						15.0	0.1	347	23.9		8.1	8.1	31.2	31.2	92.4	92.4	6.5		2.2													
					SR8	Fine	Calm	17:44	4.6	Surface	1.0	-	-	23.4	23.4	8.1	8.1	30.4	30.4	90.9	91.1	6.5	6.5	1.5	1.8	5				6	820384	811606
											1.0	-	-	23.4		8.1	8.1	30.4	30.4	91.2	91.2	6.5		1.5								
											-	-	-	-		-	-	-	-	-	-	-		-		-						
Middle	-	-	-	-						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
	3.6	-	-	23.4							8.1	8.1	30.4	30.4	92.6	92.7	6.6	2.2														
	3.6	-	-	23.4							8.1	8.1	30.4	30.4	92.6	92.6	6.6	2.2														

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

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

**Water Quality Monitoring Results on 13 November 21 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)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA			
C1	Fine	Moderate	08:33	8.4	Surface	1.0	0.4	204	23.2	23.3	7.9	7.9	31.4	31.4	93.6	93.5	6.7	6.5	0.8	5.2	6	5	815610	804223	
						1.0	0.4	219	23.3		7.9	7.9	31.4	31.4	93.3	93.5	6.7		0.8						
					Middle	4.2	0.4	218	23.9	23.9	7.9	7.9	31.1	31.1	88.1	88.0	6.2	5.9	3.1	5	3.5				
						4.2	0.4	236	23.9		7.9	7.9	31.1	31.1	87.8	88.0	6.2		3.5						
					Bottom	7.4	0.2	189	24.2	24.2	7.9	7.9	33.2	33.2	85.7	83.9	6.0	5.9	11.1	4	11.8				
						7.4	0.2	194	24.1		7.9	7.9	33.2	33.2	82.1	83.9	5.7		11.8						
C2	Fine	Calm	09:46	11.2	Surface	1.0	0.7	168	23.8	23.8	8.1	8.1	31.7	31.7	101.3	101.3	7.1	7.2	2.2	3.5	5	6	825678	806950	
						1.0	0.7	168	23.8		8.1	8.1	31.7	31.7	101.3	101.3	7.1		2.2						
					Middle	5.6	0.5	156	23.8	23.8	8.1	8.1	31.9	31.9	102.3	102.5	7.2	7.3	3.4	6	3.5				
						5.6	0.6	160	23.8		8.1	8.1	31.9	31.9	102.7	102.5	7.2		3.5						
					Bottom	10.2	0.4	151	23.8	23.8	8.1	8.1	31.8	31.8	103.8	104.0	7.3	7.3	5.0	7	5.0				
						10.2	0.5	161	23.8		8.1	8.1	31.8	31.8	104.1	104.0	7.3		5.0						
C3	Fine	Calm	07:07	11.0	Surface	1.0	0.2	80	24.1	24.1	8.1	8.1	32.6	32.6	100.3	100.6	7.0	7.1	3.0	3.4	5	5	822086	817814	
						1.0	0.2	80	24.1		8.1	8.1	32.6	32.6	100.8	100.6	7.0		3.0						
					Middle	5.5	0.1	79	24.2	24.2	8.1	8.1	32.6	32.6	102.7	102.9	7.2	7.4	3.1	5	3.0				
						5.5	0.1	79	24.2		8.1	8.1	32.6	32.6	103.0	102.9	7.2		3.0						
					Bottom	10.0	0.1	94	24.2	24.2	8.1	8.1	32.6	32.6	104.8	105.2	7.3	7.4	4.0	6	4.1				
						10.0	0.1	101	24.1		8.1	8.1	32.6	32.6	105.5	105.2	7.4		4.1						
IM1	Fine	Moderate	08:57	5.4	Surface	1.0	0.0	240	23.5	23.6	7.9	7.9	31.8	31.8	87.3	87.2	6.2	6.2	3.9	6.9	5	4	817941	807115	
						1.0	0.0	244	23.6		7.9	7.9	31.9	31.9	87.0	87.2	6.1		4.3						
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-
						-	-	-	-		-	-	-	-	-	-	-	-	-	-	-				-
					Bottom	4.4	0.0	213	23.8	23.8	7.9	7.8	32.2	32.2	78.8	78.5	5.5	5.5	9.4	3	10.0				
						4.4	0.0	223	23.8		7.9	7.8	32.2	32.2	78.2	78.5	5.5		10.0						
IM2	Fine	Moderate	09:07	6.4	Surface	1.0	0.2	168	23.3	23.3	8.1	8.1	31.3	31.3	93.8	93.9	6.7	6.7	0.6	1.5	4	5	818182	806188	
						1.0	0.2	178	23.3		8.1	8.1	31.3	31.3	93.9	93.9	6.7		0.6						
					Middle	3.2	0.1	206	23.3	23.3	8.0	8.0	31.5	31.5	93.1	93.0	6.6	6.5	1.4	5	1.4				
						3.2	0.1	212	23.3		8.0	8.0	31.5	31.5	92.9	93.0	6.6		1.4						
					Bottom	5.4	0.2	167	23.5	23.5	8.0	8.0	31.8	31.8	91.2	91.1	6.5	6.5	2.4	6	2.6				
						5.4	0.2	182	23.5		8.0	8.0	31.8	31.8	90.9	91.1	6.4		2.6						
IM3	Fine	Moderate	09:17	6.6	Surface	1.0	0.3	120	23.5	23.5	8.0	8.0	31.3	31.4	86.6	86.6	6.2	6.1	6.0	7.4	5	6	818794	805603	
						1.0	0.3	124	23.5		8.0	8.0	31.4	31.4	86.5	86.6	6.1		6.2						
					Middle	3.3	0.3	107	23.7	23.8	8.0	8.0	31.9	32.0	85.2	85.1	6.0	6.0	7.6	5	8.2				
						3.3	0.3	117	23.8		8.0	8.0	32.0	32.0	85.0	85.1	6.0		8.2						
					Bottom	5.6	0.2	58	23.8	23.8	7.9	7.9	32.4	32.4	80.0	79.8	5.6	5.6	8.2	6	8.4				
						5.6	0.2	61	23.8		7.9	7.9	32.4	32.4	79.5	79.8	5.6		8.4						
IM4	Fine	Moderate	09:29	8.1	Surface	1.0	0.6	192	23.5	23.5	8.1	8.1	31.5	31.5	92.8	92.8	6.6	6.6	3.9	7.6	5	4	819742	804583	
						1.0	0.7	210	23.5		8.1	8.1	31.5	31.5	92.8	92.8	6.6		4.1						
					Middle	4.1	0.7	185	23.5	23.5	8.0	8.0	31.5	31.5	91.5	91.5	6.5	6.4	8.5	4	8.6				
						4.1	0.7	200	23.5		8.0	8.0	31.6	31.6	91.4	91.5	6.5		8.6						
					Bottom	7.1	0.5	187	23.5	23.5	8.0	8.0	31.6	31.6	90.5	90.5	6.4	6.4	10.2	3	10.2				
						7.1	0.5	199	23.5		8.0	8.0	31.6	31.6	90.5	90.5	6.4		10.2						
IM5	Fine	Moderate	09:40	7.8	Surface	1.0	0.7	214	23.5	23.5	8.1	8.1	31.6	31.6	91.9	91.9	6.5	6.4	3.7	5.4	6	5	820741	804873	
						1.0	0.8	231	23.5		8.1	8.1	31.6	31.6	91.8	91.9	6.5		3.8						
					Middle	3.9	0.6	219	23.6	23.6	8.0	8.0	31.7	31.7	89.8	89.7	6.4	6.3	5.8	5	5.9				
						3.9	0.7	237	23.6		8.0	8.0	31.7	31.7	89.6	89.7	6.3		5.9						
					Bottom	6.8	0.6	221	23.5	23.5	8.0	8.0	31.7	31.7	88.3	88.3	6.3	6.3	6.6	4	6.4				
						6.8	0.6	240	23.5		8.0	8.0	31.7	31.7	88.2	88.3	6.3		6.4						
IM6	Fine	Moderate	09:50	6.8	Surface	1.0	0.5	236	23.3	23.3	8.1	8.1	31.2	31.2	90.2	90.1	6.4	6.4	1.3	4.5	3	4	821055	805846	
						1.0	0.6	252	23.3		8.1	8.1	31.2	31.2	89.9	90.1	6.4		1.4						
					Middle	3.4	0.6	234	23.4	23.4	8.1	8.1	31.4	31.4	88.4	88.4	6.3	5.9	1.8	4	1.8				
						3.4	0.7	252	23.4		8.1	8.1	31.4	31.4	88.3	88.4	6.3		1.8						
					Bottom	5.8	0.4	241	23.3	23.3	8.0	8.0	31.4	31.4	82.6	82.4	5.9	5.9	10.3	5	10.3				
						5.8	0.4	259	23.3		8.0	8.0	31.4	31.4	82.1	82.4	5.8		10.3						
IM7	Fine	Moderate	10:00	8.1	Surface	1.0	0.5	222	23.3	23.3	8.2	8.2	31.1	31.1	93.0	92.9	6.6	6.6	1.1	1.7	6	5	821350	806825	
						1.0	0.5	227	23.3		8.2	8.2	31.1	31.1	92.8	92.9	6.6		1.1						
					Middle	4.1	0.5	220	23.3	23.3	8.2	8.2	31.2	31.2	90.7	90.6	6.5	6.3	1.7	4	1.8				
						4.1	0.5	235	23.3		8.2	8.2	31.2	31.2	90.4	90.6	6.5		1.8						
					Bottom	7.1	0.3	246	23.3	23.3	8.2	8.2	31.3	31.3	88.7	88.6	6.3	6.3	2.3	5	2.3				
						7.1	0.3	266	23.3		8.2	8.2	31.3	31.3	88.5	88.6	6.3		2.3						
IM8	Fine	Calm	09:18	7.2	Surface	1.0	0.3	240	23.2	23.2	8.1	8.1	31.8	31.8	104.9	104.9	7.5	7.5	4.0	4.6	4	3	821828	808152	
						1.0	0.3	261	23.2		8.1	8.1	31.8	31.8	104.9	104.9	7.5		4.1						
					Middle	3.6	0.2	246	23.2	23.2	8.1	8.1	31.9	31.9	105.4	105.5	7.5	7.6	4.3	3	4.3				
						3.6	0.2	256	23.2		8.1	8.1	31.9	31.9	105.5	105.5	7.5		4.3						
					Bottom	6.2	0.2	230	23.2	23.2	8.1	8.1	31.8	31.8	106.2	106.5	7.6	7.6	5.6	2	5.6				
						6.2	0.2	246	23.2		8.1	8.1	31.9	31.9	106.8	106.5	7.6		5.5						

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

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Water Quality Monitoring

Water Quality Monitoring Results on 13 November 21 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)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)							
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA									
									Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA											
IM9	Fine	Calm	09:12	7.0	Surface	1.0	0.3	180	23.2	23.2	8.1	8.1	31.8	31.8	104.5	104.6	7.4	7.5	6.5	7.3	4	3	822090	808826							
						1.0	0.3	190	23.2		8.1	31.8	104.7	7.5	6.5	4															
						3.5	0.2	180	23.2		8.1	31.8	105.3	7.5	7.2	3															
					Middle	3.5	0.3	182	23.2	23.2	8.1	8.1	31.9	31.8	105.5	105.4	7.5	7.6	7.1	7.6	3	7.6									
						6.0	0.2	187	23.2		8.1	31.8	106.2	7.6	8.2	3															
						6.0	0.2	191	23.2		8.1	31.8	106.4	7.6	8.1	3															
					IM10	Fine	Calm	08:59	9.0	Surface	1.0	0.6	167	23.4	23.4	8.1	8.1	32.1	32.0	102.9	103.0	7.3			7.3	5.0	6.2	<2	<2	822397	809785
											1.0	0.6	170	23.4		8.1	32.0	103.0	7.3	5.0	<2										
											4.5	0.7	152	23.4		8.1	32.1	103.6	7.3	5.8	<2										
Middle	4.5	0.7	156	23.4						23.4	8.1	8.1	32.1	32.1	103.9	103.8	7.4	7.5	5.9	7.5	<2	7.5									
	8.0	0.5	153	23.4							8.1	32.1	104.9	7.4	7.8	<2															
	8.0	0.5	155	23.3							8.1	32.1	105.1	7.5	7.8	<2															
IM11	Fine	Calm	08:15	8.2						Surface	1.0	0.4	137	23.9	23.9	8.1	8.1	31.9	31.9	99.6	99.6	7.0	7.0	7.2	8.1	4	5	822060	811477		
											1.0	0.5	137	23.9		8.1	32.0	99.5	7.0	7.2	4										
											4.1	0.4	136	24.0		8.1	32.0	100.1	7.0	8.2	5										
					Middle	4.1	0.5	144	24.0	24.0	8.1	8.1	32.0	32.0	100.4	100.3	7.0	7.4	8.1	7.4	5	6									
						7.2	0.3	139	24.0		8.1	32.0	104.5	7.3	9.1	6															
						7.2	0.4	142	23.9		8.1	31.9	106.7	7.5	9.0	6															
					IM12	Fine	Calm	08:07	9.4	Surface	1.0	0.3	122	23.6	23.6	8.1	8.1	31.8	31.8	101.4	101.4	7.2	7.2	2.1	3.1	5	4			821463	812045
											1.0	0.3	128	23.6		8.1	31.8	101.4	7.2	2.1	5										
											4.7	0.3	120	23.7		8.1	31.8	101.0	7.1	3.1	4										
Middle	4.7	0.4	124	23.7						23.7	8.1	8.1	31.8	31.8	101.0	101.0	7.1	7.5	3.2	7.5	4	3									
	8.4	0.4	118	23.7							8.1	31.8	105.1	7.4	4.0	3															
	8.4	0.4	128	23.6							8.1	31.8	105.7	7.5	4.1	2															
SR1A	Fine	Calm	07:42	5.0						Surface	1.0	-	-	24.0	24.0	8.1	8.1	32.2	32.2	99.0	99.1	6.9	6.9	3.5	4.0	2	3	819973	812660		
											1.0	-	-	24.0		8.1	32.3	99.2	6.9	3.5	2										
											2.5	-	-	-		-	-	-	-	-	-	-		-		-					
					Middle	2.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-							
						4.0	-	-	24.0		8.1	8.1	32.2	32.2	99.7	99.8	7.0	7.0	4.5	7.0	4	5									
						4.0	-	-	24.0		8.1	32.2	99.9	7.0	4.4	5															
					SR2	Fine	Calm	07:31	5.2	Surface	1.0	0.2	118	24.0	24.1	8.1	8.1		32.3		32.3		102.1	102.3	7.1	7.2	3.7			4.1	6
											1.0	0.2	118	24.1		8.1	32.3	102.4	7.2	3.6	6										
											-	-	-	-		-	-	-	-	-	-	-	-	-	-		-				
Middle	-	-	-	-						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-							
	-	-	-	-							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
	-	-	-	-							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Bottom	4.2	0.2	128	24.1						24.1	8.1	8.1	32.4	32.4	105.8	106.9	7.4	7.5	4.7	7.5	3	3									
	4.2	0.2	134	24.0							8.1	32.5	108.0	7.6	4.6	3															
	-	-	-	-							-	-	-	-	-	-	-		-		-		-	-	-	-	-				
SR3	Fine	Calm	09:24	9.2	Surface	1.0	0.3	232	23.2	23.3	8.1	8.1	31.7	31.7	103.5	103.6	7.4	7.4	4.1	5.2	4	4	822125	807576							
						1.0	0.3	245	23.3		8.1	31.8	103.6	7.4	4.2	4															
						4.6	0.2	230	23.4		8.1	32.0	104.9	7.4	5.1	4															
					Middle	4.6	0.2	234	23.4	23.4	8.1	8.1	32.0	32.0	105.2	105.1	7.5	7.6	5.1	7.6	3	3									
						8.2	0.1	266	23.3		8.1	31.9	105.9	7.5	6.2	3															
						8.2	0.1	267	23.3		8.1	31.9	106.3	7.6	6.2	3															
					SR4A	Fine	Moderate	08:10	8.2	Surface	1.0	0.1	304	23.6	23.6	8.0	8.0	31.5	31.5	91.8	91.8	6.5			6.5	1.4	2.0	5	5	817206	807827
											1.0	0.1	328	23.6		8.0	31.5	91.7	6.5	1.4	5										
											4.1	0.1	226	23.8		7.9	32.0	86.5	6.1	2.3	5										
Middle	4.1	0.1	234	23.8						23.8	7.9	7.9	32.0	32.0	86.4	86.5	6.1	5.9	2.3	5.9	5	3									
	7.2	0.1	228	23.8							7.9	32.1	84.5	5.9	2.4	3															
	7.2	0.1	234	23.8							7.9	32.1	84.3	5.9	2.5	4															
SR5A	Fine	Moderate	07:51	3.7						Surface	1.0	0.1	285	23.3	23.3	8.0	8.0	31.4	31.4	90.7	90.6	6.5	6.5	8.7	7.8	5	5	816601	810701		
											1.0	0.1	296	23.3		8.0	31.4	90.5	6.4	9.1	4										
											-	-	-	-		-	-	-	-	-	-	-		-		-					
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
						-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
						-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
					Bottom	2.7	0.0	314	23.3	23.3	8.0	8.0	31.5	31.5	86.9	86.8	6.2	6.2	6.6	6.2	6	6									
						2.7	0.0	327	23.3		8.0	31.5	86.7	6.2	6.6	6															
						-	-	-	-		-	-	-	-	-	-	-		-		-		-	-	-	-	-				
SR6A	Fine	Moderate	07:21	4.3	Surface	1.0	0.1	119	24.0	24.0	8.1	8.1	31.2	31.2	92.0	92.0	6.5	6.5	4.0	4.1	4	5	817949	814745							
						1.0	0.1	122	24.0		8.1	31.2	92.0	6.5	4.0	5															
						-	-	-	-		-	-	-	-	-	-	-		-		-				-	-	-	-	-		
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-				
						-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-			-	-	-				
						-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-			-	-	-				
					Bottom	3.3	0.1	153	24.1	24.1	8.1	8.1	31.3	31.3	92.2	92.2	6.5	6.5	4.0	6.5	5	6									
						3.3	0.1	167	24.1		8.1	31.3	92.2	6.5	4.2	6															
						-	-	-	-		-	-	-	-	-	-	-		-		-				-	-	-	-	-		
SR7	Fine	Calm	06:35	16.0	Surface	1.0	0.1	40	24.8	24.8	8.0	8.0	33.2	33.2	98.8	98.9	6.8	6.8	2.2	3.2	4	4	823624	823721							
						1.0	0.1	42	24.8		8.0	33.2	98.9	6.8	2.2	4															
						8.0	0.1	57	24.7		8.0	33.2	99.3	6.8	3.3	4															
					Middle	8.0	0.1	60	24.7	24.7	8.0	8.0	33.2	33.2	99.4	99.4	6.8	7.0	3.2	7.0	4	5									
						15.0	0.1	62	24.7		8.0	33.1	101.4	7.0	4.3	5															
						15.0	0.1	67	24.7		8.0	33.1	101.6	7.0	4.3	5															
					SR8	Fine	Calm	07:55	5.0	Surface	1.0	-	-	23.6	23.6	8.1	8.1	31.8	31.8	99.8	99.8	7.1			7.1	2.2	3.1	3	5	820395	811629
											1.0	-	-	23.6		8.1	31.8	99.8	7.1	2.1	4										
											-	-	-	-		-	-	-	-	-	-	-				-		-			
Middle	-	-	-	-						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
	-	-	-	-							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
	-	-	-	-							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Bottom	4.0	-	-	23.6						23.6	8.1	8.1	31.8	31.8	99.8	99.8	7.1	7.1	4.0	7.1	5	6									
	4.0	-	-	23.6							8.1	31.8	99.8	7.1	4.0	6															
	-	-	-	-							-	-	-	-	-	-	-		-		-		-	-	-	-	-				

DA: Depth-Averaged  
Calm: Small or no wave; Moderate: Between calm and rough; Rough: While 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 13 November 21 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)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA		
C1	Fine	Moderate	15:38	8.1	Surface	1.0	0.2	63	24.0	24.0	8.0	8.0	31.8	31.9	97.1	97.0	6.8	6.7	3.5	6	5	815631	804232	
						1.0	0.2	68	24.0	8.0	8.0	31.9	31.9	96.8	96.8	6.8	6.7	3.8	6					
						4.1	0.2	61	24.2	24.2	8.0	8.0	32.5	32.5	94.7	94.7	6.6	6.6	10.4	5				
					4.1	0.2	63	24.2	8.0	8.0	32.5	32.5	94.6	94.6	6.6	6.6	11.0	5						
					7.1	0.3	44	24.3	24.3	8.0	8.0	32.7	32.7	92.7	92.6	6.4	6.4	12.8	4					
					7.1	0.4	47	24.3	8.0	8.0	32.7	32.7	92.5	92.5	6.4	6.4	12.7	3						
C2	Fine	Calm	14:30	12.4	Surface	1.0	0.1	311	23.9	23.9	8.2	8.2	31.5	31.5	102.7	102.7	7.2	7.2	2.3	3	5	825688	806951	
						1.0	0.1	338	23.9	8.2	8.2	31.5	31.5	102.6	102.6	7.2	7.2	2.3	4					
						6.2	0.2	301	23.9	23.9	8.2	8.2	31.6	31.6	102.5	102.6	7.2	7.2	3.3	4				
					6.2	0.2	322	23.9	8.2	8.2	31.6	31.6	102.5	102.5	7.2	7.2	3.3	4						
					11.4	0.2	284	23.8	23.9	8.2	8.2	31.6	31.6	103.1	103.3	7.3	7.3	4.2	6					
					11.4	0.2	309	23.9	8.2	8.2	31.6	31.6	103.5	103.5	7.3	7.3	4.2	6						
C3	Fine	Calm	16:24	12.0	Surface	1.0	0.3	288	24.6	24.6	8.1	8.1	32.9	32.9	100.9	101.0	7.0	7.1	3.2	3	5	822132	817805	
						1.0	0.3	305	24.5	8.1	8.1	33.0	33.0	101.0	101.0	7.0	7.1	3.1	4					
						6.0	0.4	292	24.4	24.4	8.1	8.1	33.1	33.1	101.8	102.1	7.1	7.1	4.2	4				
					6.0	0.4	319	24.3	8.1	8.1	33.1	33.1	102.3	102.3	7.1	7.1	4.3	5						
					11.0	0.3	293	24.2	24.2	8.1	8.1	33.2	33.2	103.9	104.3	7.2	7.3	5.2	6					
					11.0	0.4	321	24.1	8.1	8.1	33.2	33.2	104.7	104.7	7.3	7.3	5.2	6						
IM1	Fine	Moderate	15:15	4.8	Surface	1.0	0.0	185	24.2	24.2	8.1	8.1	31.8	31.8	103.0	102.9	7.2	7.2	1.5	4	4	817971	807137	
						1.0	0.0	188	24.2	8.1	8.1	31.8	31.8	102.7	102.7	7.2	7.2	1.5	4					
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
					3.8	0.0	36	24.1	24.1	8.1	8.1	32.0	32.0	89.7	89.6	6.3	6.3	9.0	3					
					3.8	0.0	36	24.1	8.1	8.1	32.0	32.0	89.5	89.5	6.3	6.3	9.4	3						
					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
IM2	Fine	Moderate	15:08	6.4	Surface	1.0	0.3	34	23.9	23.9	8.1	8.1	31.7	31.7	95.1	95.0	6.7	6.6	3.9	5	4	818163	806170	
						1.0	0.3	37	23.9	8.1	8.1	31.7	31.7	94.8	94.8	6.7	6.6	4.0	5					
						3.2	0.2	356	24.0	24.0	8.1	8.1	31.9	31.9	92.0	91.9	6.5	6.5	8.6	4				
					3.2	0.2	328	24.0	8.1	8.1	31.9	31.9	91.8	91.8	6.4	6.4	8.3	4						
					5.4	0.2	336	24.0	24.1	7.8	7.8	32.0	32.0	90.7	90.6	6.4	6.4	8.2	3					
					5.4	0.2	344	24.1	8.1	8.1	32.0	32.0	90.5	90.5	6.3	6.3	8.2	3						
IM3	Fine	Moderate	15:02	6.6	Surface	1.0	0.1	51	23.8	23.8	7.9	7.9	31.4	31.4	93.8	93.6	6.6	6.6	3.3	5	4	818791	805575	
						1.0	0.1	53	23.7	7.9	7.9	31.4	31.4	93.4	93.4	6.6	6.6	3.5	4					
						3.3	0.1	328	23.7	23.7	7.9	7.9	31.5	31.5	91.8	91.7	6.5	6.5	4.5	4				
					3.3	0.1	338	23.7	7.9	7.9	31.5	31.5	91.6	91.6	6.5	6.5	4.8	4						
					5.6	0.2	344	23.7	23.7	7.9	7.9	31.6	31.6	90.8	90.7	6.4	6.4	6.6	4					
					5.6	0.2	316	23.7	8.1	8.1	31.6	31.6	90.5	90.5	6.4	6.4	6.4	4						
IM4	Fine	Moderate	14:52	8.6	Surface	1.0	0.3	12	23.7	23.7	7.9	7.9	31.4	31.4	92.7	92.5	6.6	6.4	0.9	6	5	819727	804594	
						1.0	0.3	12	23.7	7.9	7.9	31.4	31.4	92.3	92.3	6.5	6.4	1.1	6					
						4.3	0.3	27	23.7	23.8	7.9	7.9	31.7	31.7	89.8	89.7	6.3	6.3	2.0	4				
					4.3	0.4	27	23.8	8.1	8.1	31.7	31.7	89.6	89.6	6.3	6.3	2.0	4						
					7.6	0.3	32	23.8	23.8	7.8	7.8	31.8	31.7	82.1	81.8	5.8	5.8	2.1	4					
					7.6	0.3	33	23.8	8.1	8.1	31.7	31.7	81.4	81.4	5.7	5.7	2.1	4						
IM5	Fine	Moderate	14:41	7.3	Surface	1.0	0.4	32	23.8	23.8	8.0	8.0	31.5	31.5	95.1	95.0	6.7	6.7	2.6	4	4	820718	804874	
						1.0	0.4	34	23.8	8.0	8.0	31.5	31.5	94.9	94.9	6.7	6.7	2.6	4					
						3.7	0.4	26	23.8	23.8	8.0	8.0	31.6	31.6	93.1	93.0	6.6	6.6	3.3	4				
					3.7	0.4	28	23.8	8.0	8.0	31.6	31.6	92.9	92.9	6.6	6.6	3.3	4						
					6.3	0.4	21	23.8	23.8	7.9	7.9	31.6	31.6	90.0	89.9	6.3	6.3	4.0	4					
					6.3	0.4	21	23.8	8.1	8.1	31.6	31.6	89.8	89.8	6.3	6.3	3.9	4						
IM6	Fine	Moderate	14:31	7.1	Surface	1.0	0.1	214	23.8	23.8	8.1	8.1	31.3	31.3	93.5	93.4	6.6	6.5	0.8	3	4	821067	805839	
						1.0	0.1	216	23.8	8.1	8.1	31.3	31.3	93.2	93.2	6.6	6.5	0.7	3					
						3.6	0.1	235	23.8	23.8	8.1	8.1	31.3	31.3	90.6	90.5	6.4	6.4	0.7	4				
					3.6	0.1	239	23.7	8.1	8.1	31.3	31.3	90.3	90.3	6.4	6.4	0.6	4						
					6.1	0.1	305	23.7	23.8	8.1	8.1	31.3	31.3	88.8	88.8	6.3	6.3	0.5	4					
					6.1	0.1	315	23.8	8.1	8.1	31.3	31.3	88.7	88.7	6.3	6.3	0.5	4						
IM7	Fine	Moderate	14:21	8.0	Surface	1.0	0.2	225	24.2	24.2	8.1	8.1	31.2	31.2	95.4	95.4	6.7	6.7	0.5	5	4	821347	806819	
						1.0	0.2	231	24.2	8.1	8.1	31.2	31.2	95.4	95.4	6.7	6.7	0.5	4					
						4.0	0.2	258	23.9	23.9	8.2	8.2	31.4	31.4	93.8	93.7	6.6	6.6	1.3	3				
					4.0	0.2	262	23.9	8.2	8.2	31.4	31.4	93.6	93.6	6.6	6.6	1.3	3						
					7.0	0.1	277	23.8	23.8	8.1	8.1	31.4	31.4	91.8	91.6	6.5	6.5	1.3	3					
					7.0	0.1	301	23.8	8.1	8.1	31.4	31.4	91.3	91.3	6.5	6.5	1.3	3						
IM8	Fine	Calm	14:54	8.0	Surface	1.0	0.1	290	23.6	23.6	8.2	8.2	31.9	31.9	105.3	105.4	7.4	7.4	3.5	4	4	821810	808146	
						1.0	0.1	314	23.6	8.2	8.2	31.9	31.9	105.4	105.4	7.4	7.5	3.6	4					
						4.0	0.1	279	23.6	23.6	8.2	8.2	32.0	32.0	105.7	105.8	7.5	7.5	4.2	4				
					4.0	0.1	300	23.6	8.2	8.2	32.0	32.0	105.9	105.9	7.5	7.5	4.1	4						
					7.0	0.1	292	23.6	23.6	8.2	8.2	32.0	32.0	106.6	106.8	7.5	7.5	5.6	3					
					7.0	0.1	296	23.6	8.2	8.2	32.0	32.0	106.9	106.9	7.5	7.5	5.6	3						

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



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

**Water Quality Monitoring Results on 16 November 21 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)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA		
C1	Fine	Calm	10:57	8.2	Surface	1.0	0.2	176	24.0	24.0	8.1	8.1	33.7	33.7	114.3	114.2	7.9	7.9	4.5	7	6	815614	804238	
						1.0	0.3	177	24.0	8.1	8.1	33.7	33.7	114.0	112.1	7.9	7.9	4.5	7					
						4.1	0.2	180	24.0	8.1	8.1	33.7	33.7	112.1	112.1	7.8	7.8	5.1	6					
					Middle	4.1	0.2	189	24.0	8.1	8.1	33.7	33.7	112.0	112.1	7.8	7.8	5.0	6					
						7.2	0.2	173	24.0	8.1	8.1	33.7	33.7	112.0	112.1	7.8	7.8	7.0	6					
						7.2	0.2	185	24.0	8.1	8.1	33.7	33.7	112.1	112.1	7.8	7.8	7.0	6					
C2	Sunny	Moderate	12:16	11.8	Surface	1.0	0.3	173	23.9	23.9	8.2	8.2	31.9	31.9	95.6	95.5	6.7	6.7	1.8	4	3	825678	806961	
						1.0	0.3	177	23.9	8.2	8.2	31.9	31.9	95.4	95.0	6.7	6.7	1.9	3					
						5.9	0.3	176	23.8	8.2	8.2	32.1	32.1	95.0	95.0	6.7	6.7	4.3	3					
					Middle	5.9	0.3	191	23.8	8.2	8.2	32.1	32.1	95.0	95.0	6.7	6.7	4.8	3					
						10.8	0.4	180	23.8	8.3	8.3	32.1	32.1	95.0	95.0	6.7	6.7	9.8	2					
						10.8	0.4	187	23.8	8.3	8.3	32.1	32.1	95.0	95.0	6.7	6.7	9.7	2					
C3	Sunny	Moderate	10:01	11.1	Surface	1.0	0.2	133	24.6	24.6	8.0	8.0	32.8	32.8	91.2	91.2	6.3	6.3	0.3	2	4	822085	817818	
						1.0	0.2	138	24.6	8.0	8.0	32.8	32.8	91.2	91.0	6.3	6.3	0.3	2					
						5.6	0.3	138	24.6	8.0	8.0	32.8	32.8	90.9	91.0	6.3	6.3	0.6	4					
					Middle	5.6	0.3	149	24.6	8.0	8.0	32.8	32.8	91.0	91.6	6.3	6.3	0.6	4					
						10.1	0.3	135	24.6	8.0	8.0	32.8	32.8	91.5	91.6	6.3	6.3	2.3	6					
						10.1	0.3	142	24.6	8.0	8.0	32.8	32.8	91.6	91.6	6.3	6.3	2.4	6					
IM1	Fine	Calm	11:17	4.4	Surface	1.0	0.1	17	23.8	23.8	8.2	8.2	33.4	33.3	124.9	124.9	8.7	8.7	5.8	4	5	817939	807150	
						1.0	0.1	17	23.8	8.2	8.2	33.3	33.3	124.8	124.8	8.7	8.7	5.8	4					
						-	-	-	-	-	-	-	-	-	-	-	-	-	-					
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
						3.4	0.0	258	23.8	8.2	8.2	33.3	33.3	120.9	120.6	8.4	8.4	6.0	5					
						3.4	0.0	267	23.8	8.2	8.2	33.3	33.3	120.2	120.2	8.4	8.4	6.0	5					
IM2	Fine	Calm	11:25	6.4	Surface	1.0	0.2	219	23.7	23.7	8.2	8.2	33.4	33.4	121.9	121.5	8.5	8.2	4.1	4	4	818157	806150	
						1.0	0.2	235	23.6	8.2	8.2	33.4	33.4	121.1	121.5	8.5	8.2	4.1	4					
						3.2	0.2	197	23.6	8.1	8.1	33.4	33.4	112.6	112.5	7.9	7.9	5.1	4					
					Middle	3.2	0.2	215	23.6	8.1	8.1	33.4	33.4	112.3	112.3	7.9	7.9	5.1	4					
						5.4	0.2	178	23.6	8.1	8.1	33.3	33.2	112.9	113.2	7.9	8.0	6.6	4					
						5.4	0.2	192	23.6	8.1	8.1	33.1	33.1	113.5	113.2	8.0	8.0	6.6	4					
IM3	Fine	Calm	11:30	6.8	Surface	1.0	0.3	127	23.7	23.7	8.1	8.1	33.3	33.3	112.9	113.0	7.9	7.9	2.1	2	3	818804	805579	
						1.0	0.3	134	23.7	8.2	8.2	33.3	33.3	113.0	113.0	7.9	7.9	2.1	3					
						3.4	0.3	122	23.7	8.1	8.1	33.4	33.4	112.4	112.3	7.9	7.9	3.5	3					
					Middle	3.4	0.3	128	23.7	8.1	8.1	33.4	33.4	112.2	112.3	7.8	7.8	3.5	3					
						5.8	0.2	139	23.7	8.1	8.1	33.4	33.4	110.9	110.6	7.8	7.8	4.9	5					
						5.8	0.2	142	23.7	8.1	8.1	33.4	33.4	110.3	110.3	7.7	7.7	5.0	4					
IM4	Fine	Calm	11:41	8.6	Surface	1.0	0.5	216	23.7	23.7	8.1	8.1	33.3	33.3	109.1	109.0	7.6	7.6	6.5	4	6	819745	804591	
						1.0	0.5	234	23.7	8.1	8.1	33.3	33.3	108.9	108.9	7.6	7.6	6.6	5					
						4.3	0.5	210	23.7	8.1	8.1	33.4	33.4	108.5	108.5	7.6	7.6	7.1	5					
					Middle	4.3	0.5	219	23.7	8.1	8.1	33.4	33.4	108.4	108.5	7.6	7.6	7.1	6					
						7.6	0.4	198	23.7	8.1	8.1	33.4	33.4	108.0	108.0	7.6	7.6	8.8	7					
						7.6	0.4	199	23.7	8.1	8.1	33.4	33.4	107.9	107.9	7.5	7.5	8.7	7					
IM5	Fine	Calm	11:50	6.8	Surface	1.0	0.6	163	23.7	23.7	8.2	8.2	33.4	33.4	115.8	114.2	8.1	7.9	3.4	6	6	820725	804868	
						1.0	0.6	164	23.7	8.2	8.2	33.4	33.4	112.6	111.4	7.9	7.9	3.3	6					
						3.4	0.5	171	23.7	8.1	8.1	33.4	33.4	111.5	111.4	7.8	7.8	4.2	6					
					Middle	3.4	0.5	186	23.7	8.1	8.1	33.4	33.4	111.3	111.3	7.8	7.8	4.2	5					
						5.8	0.4	170	23.7	8.1	8.1	33.4	33.4	111.0	110.8	7.8	7.8	5.3	5					
						5.8	0.5	182	23.7	8.1	8.1	33.4	33.4	110.6	110.6	7.7	7.7	5.4	5					
IM6	Fine	Calm	11:58	7.0	Surface	1.0	0.2	254	23.7	23.7	8.2	8.2	33.3	33.3	114.0	113.9	8.0	8.0	7.5	4	5	821048	805804	
						1.0	0.2	267	23.7	8.2	8.2	33.3	33.3	113.8	113.5	8.0	8.0	7.5	4					
						3.5	0.3	241	23.6	8.2	8.2	33.4	33.5	113.5	113.5	8.0	8.0	8.9	4					
					Middle	3.5	0.3	242	23.5	8.2	8.2	33.5	33.5	113.4	113.5	8.0	8.0	8.8	4					
						6.0	0.3	247	23.2	8.1	8.1	33.7	33.8	112.9	112.9	8.0	8.0	9.0	6					
						6.0	0.3	258	23.1	8.1	8.1	33.8	33.8	112.8	112.8	7.9	7.9	9.0	6					
IM7	Fine	Calm	12:10	7.8	Surface	1.0	0.2	210	23.7	23.7	8.2	8.2	33.0	33.0	116.4	116.4	8.2	8.2	3.2	4	3	821356	806858	
						1.0	0.2	225	23.7	8.2	8.2	33.1	33.2	116.4	116.6	8.2	8.2	3.2	4					
						3.9	0.1	187	23.7	8.2	8.2	33.2	33.2	116.5	116.6	8.2	8.2	4.2	3					
					Middle	3.9	0.1	198	23.7	8.2	8.2	33.2	33.2	116.7	117.9	8.2	8.3	4.1	3					
						6.8	0.1	179	23.7	8.2	8.2	33.2	33.2	117.5	117.9	8.2	8.3	5.5	3					
						6.8	0.1	184	23.7	8.2	8.2	33.1	33.2	118.2	118.2	8.3	8.3	5.6	2					
IM8	Sunny	Moderate	11:47	7.2	Surface	1.0	0.2	76	23.8	23.8	8.1	8.1	32.1	32.1	102.1	102.2	7.2	7.2	1.0	2	3	821807	808125	
						1.0	0.2	77	23.8	8.1	8.1	32.1	32.1	102.2	102.1	7.2	7.2	1.0	3					
						3.6	0.3	75	23.7	8.1	8.1	32.3	32.3	102.1	102.1	7.2	7.2	1.7	3					
					Middle	3.6	0.3	81	23.7	8.1	8.1	32.4	32.3	102.1	102.1	7.2	7.1	1.8	2					
						6.2	0.3	81	23.7	8.2	8.2	32.9	32.9	101.7	101.7	7.1	7.1	3.6	4					
						6.2	0.3	83	23.7	8.2	8.2	32.9	32.9	101.7	101.7	7.1	7.1	3.6	4					

DA: Depth-Averaged

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

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



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**Water Quality Monitoring**

**Water Quality Monitoring Results on 16 November 21 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)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
									Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA		
IM9	Sunny	Moderate	11:42	7.0	Surface	1.0	0.2	82	23.7	23.7	8.1	8.1	32.2	32.2	101.0	101.1	7.1	7.1	1.5	4.7	4	4	822087	808814
						1.0	0.2	84	23.7		8.1	8.1	32.2	32.2	101.1	101.1	7.1		1.6					
						3.5	0.3	81	23.7	8.2	8.2	32.5	32.5	101.1	101.1	7.1	4.5							
					Middle	3.5	0.3	82	23.7	23.7	8.2	8.2	32.6	32.6	101.1	101.1	7.1	4.8						
						6.0	0.3	90	23.7		8.2	8.2	32.7	32.7	100.9	100.9	7.1	7.8						
						6.0	0.3	92	23.7	8.2	8.2	32.7	32.7	100.8	100.8	7.1	8.0							
IM10	Sunny	Moderate	11:34	7.6	Surface	1.0	0.2	99	23.6	23.6	8.2	8.2	32.3	32.3	98.6	98.6	7.0	7.0	3.7	5.1	7	6	822395	809786
						1.0	0.2	108	23.6		8.2	8.2	32.3	32.3	98.6	98.6	6.9		3.8					
						3.8	0.3	90	23.6	8.2	8.2	32.4	32.4	98.2	98.2	6.9	5.4							
					Middle	3.8	0.3	94	23.6	23.6	8.2	8.2	32.4	32.4	98.2	98.2	6.9	5.4						
						6.6	0.4	99	23.6		8.2	8.1	32.5	32.4	97.5	97.5	6.9	6.2						
						6.6	0.4	105	23.6	8.1	8.1	32.4	32.4	97.5	97.5	6.9	6.1							
IM11	Sunny	Moderate	11:23	8.1	Surface	1.0	0.2	101	23.8	23.8	8.1	8.1	32.1	32.1	98.5	98.5	6.9	6.9	2.9	3.7	6	5	822066	811473
						1.0	0.2	102	23.8		8.1	8.1	32.1	32.1	98.5	98.5	6.9		3.0					
						4.1	0.3	113	23.8	8.1	8.1	32.1	32.1	98.2	98.2	6.9	2.9							
					Middle	4.1	0.3	115	23.8	23.8	8.1	8.1	32.1	32.1	98.2	98.2	6.9	3.0						
						7.1	0.3	123	23.8		8.1	8.1	32.1	32.1	97.5	97.5	6.9	5.3						
						7.1	0.3	133	23.8	8.1	8.1	32.1	32.1	97.4	97.4	6.9	5.1							
IM12	Sunny	Moderate	11:16	8.4	Surface	1.0	0.4	112	23.7	23.7	8.2	8.2	32.1	32.1	97.8	97.8	6.9	6.9	3.4	6.2	4	5	821455	812041
						1.0	0.4	116	23.7		8.2	8.2	32.1	32.1	97.7	97.7	6.9		3.6					
						4.2	0.5	132	23.7	8.2	8.2	32.1	32.1	97.3	97.3	6.9	5.9							
					Middle	4.2	0.5	139	23.7	23.7	8.2	8.2	32.1	32.1	97.3	97.3	6.9	5.8						
						7.4	0.5	133	23.7		8.2	8.2	32.1	32.1	97.1	97.1	6.8	9.2						
						7.4	0.5	136	23.7	8.2	8.2	32.1	32.1	97.1	97.1	6.8	9.3							
SR1A	Sunny	Moderate	10:39	5.0	Surface	1.0	-	-	24.0	24.0	8.1	8.1	32.0	32.0	96.5	96.5	6.8	6.8	1.2	1.9	2	4	819971	812657
						1.0	-	-	24.0		8.1	8.1	32.0	32.0	96.5	96.5	6.8		1.2					
						2.5	-	-	-	-	-	-	-	-	-	-	-	-						
					Middle	2.5	-	-	-	-	-	-	-	-	-	-	-	-						
						4.0	-	-	23.9		8.1	8.1	32.1	32.1	95.5	95.5	6.7	2.6						
						4.0	-	-	23.9	8.1	8.1	32.1	32.1	95.6	95.6	6.7	2.6							
SR2	Sunny	Moderate	10:23	3.7	Surface	1.0	0.2	123	24.2	24.2	8.2	8.2	32.3	32.3	95.2	95.2	6.6	6.6	1.7	1.7	4	5	821485	814167
						1.0	0.2	125	24.2		8.2	8.2	32.3	32.3	95.2	95.2	6.6		1.7					
						-	-	-	-	-	-	-	-	-	-	-	-	-						
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-						
						-	-	-	-		-	-	-	-	-	-	-	-						
						2.7	0.2	125	24.2	24.2	8.2	8.2	32.3	32.3	95.1	95.1	6.6	1.7						
2.7	0.2	135	24.2	8.2	8.2	32.3	32.3	95.1	95.1		6.6	1.7												
SR3	Sunny	Moderate	11:53	8.6	Surface	1.0	0.3	176	23.8	23.8	8.1	8.1	32.2	32.2	100.5	100.6	7.1	7.1	1.8	3.9	5	4	822144	807562
						1.0	0.3	178	23.8		8.1	8.1	32.2	32.2	100.6	100.6	7.1		1.8					
						4.3	0.3	181	23.6	8.2	8.2	32.6	32.6	101.7	101.8	7.2	3.7							
					Middle	4.3	0.3	188	23.6	23.6	8.2	8.2	32.6	32.6	101.9	101.8	7.2	3.9						
						7.6	0.3	183	23.7		8.2	8.2	32.9	32.9	102.4	102.4	7.2	5.8						
						7.6	0.3	190	23.7	8.2	8.2	32.9	32.9	102.4	102.4	7.2	6.2							
SR4A	Fine	Calm	10:38	9.0	Surface	1.0	0.2	75	23.6	23.6	8.1	8.1	33.5	33.5	113.2	113.0	7.9	7.9	4.2	5.1	6	5	817175	807786
						1.0	0.2	78	23.6		8.1	8.1	33.5	33.5	112.8	112.8	7.9		4.1					
						4.5	0.2	66	23.6	8.1	8.1	33.5	33.5	111.2	111.2	7.8	5.0							
					Middle	4.5	0.2	69	23.6	23.6	8.1	8.1	33.5	33.5	111.1	111.1	7.8	5.1						
						8.0	0.1	78	23.6		8.1	8.1	33.6	33.5	110.6	110.6	7.7	6.2						
						8.0	0.1	84	23.6	8.1	8.1	33.5	33.5	110.5	110.5	7.7	6.2							
SR5A	Fine	Calm	10:22	4.2	Surface	1.0	0.0	359	23.6	23.6	8.1	8.1	33.0	33.0	114.0	112.2	8.0	7.9	7.0	7.3	6	6	816591	810700
						1.0	0.0	330	23.6		8.1	8.1	33.0	33.0	110.3	112.2	7.8		7.1					
						-	-	-	-	-	-	-	-	-	-	-	-	-						
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-						
						-	-	-	-		-	-	-	-	-	-	-	-						
						3.2	0.1	322	23.5	23.5	8.1	8.1	33.2	33.1	109.3	109.3	7.7	7.5						
3.2	0.1	349	23.5	8.1	8.1	33.1	33.1	109.2	109.2		7.7	7.5												
SR6A	Fine	Calm	09:56	4.8	Surface	1.0	0.0	43	23.8	23.8	8.0	8.0	32.4	32.4	100.7	100.7	7.1	7.1	8.2	8.7	9	10	817960	814718
						1.0	0.0	43	23.8		8.0	8.0	32.4	32.4	100.6	100.6	7.1		8.2					
						-	-	-	-	-	-	-	-	-	-	-	-	-						
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-						
						-	-	-	-		-	-	-	-	-	-	-	-						
						3.8	0.1	289	23.8	23.8	8.0	8.0	32.4	32.4	100.2	100.2	7.0	9.2						
3.8	0.1	299	23.8	8.0	8.0	32.4	32.4	100.1	100.1		7.0	9.1												
SR7	Sunny	Moderate	09:20	16.4	Surface	1.0	0.3	46	24.6	24.6	7.9	7.9	32.8	32.8	90.4	90.4	6.3	6.3	1.1	1.5	5	5	823636	823758
						1.0	0.3	50	24.6		7.9	7.9	32.8	32.8	90.4	90.4	6.3		1.1					
						8.2	0.3	52	24.5	7.9	7.9	32.8	32.8	90.3	90.3	6.2	1.6							
					Middle	8.2	0.3	55	24.5	24.5	7.9	7.9	32.8	32.8	90.3	90.3	6.2	1.6						
						15.4	0.4	66	24.5		7.9	7.9	32.9	32.9	89.9	89.9	6.2	1.9						
						15.4	0.4	69	24.5	7.9	7.9	32.9	32.9	89.9	89.9	6.2	1.9							
SR8	Sunny	Moderate	11:08	4.6	Surface	1.0	-	-	24.2	24.2	8.0	8.0	32.1	32.1	98.1	98.1	6.9	6.9	1.4	2.8	5	4	820396	811631
						1.0	-	-	24.2		8.0	8.0	32.1	32.1	98.0	98.0	6.9		1.5					
						-	-	-	-	-	-	-	-	-	-	-	-	-						
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-						
						-	-	-	-		-	-	-	-	-	-	-	-						
						3.6	-	-	23.9	23.9	8.1	8.1	32.2	32.2	94.7	94.7	6.6	4.1						
3.6	-	-	23.9	8.1	8.1	32.2	32.2	94.6	94.6		6.6	4.1												

DA: Depth-Averaged

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

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

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

**Water Quality Monitoring Results on 16 November 21 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)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA		
C1	Fine	Moderate	16:51	8.0	Surface	1.0	0.7	42	23.8	23.8	8.1	8.1	32.5	32.5	110.4	110.4	7.7	7.7	3.4	4.4	4	4	815630	804224
						1.0	0.7	43	23.8		8.1	8.1	32.5	32.5	110.3	110.3	7.7		3.5					
						4.0	0.6	34	23.8		8.1	8.1	32.5	32.5	110.3	110.3	7.7		4.3					
					Middle	4.0	0.7	35	23.8	8.1	8.1	32.5	32.5	110.3	110.3	7.7	4.2							
						7.0	0.6	40	23.8	8.1	8.1	32.5	32.5	110.4	110.4	7.7	5.6							
						7.0	0.7	40	23.8	8.1	8.1	32.5	32.5	110.4	110.4	7.8	5.5							
C2	Cloudy	Moderate	15:51	11.1	Surface	1.0	0.6	11	24.0	24.0	8.2	8.2	30.5	30.5	100.0	99.9	7.1	6.9	0.6	3.6	4	5	825674	806933
						1.0	0.6	11	24.0		8.2	8.2	30.6	30.6	99.7	99.7	7.0		0.6					
						5.6	0.5	8	23.9		8.1	8.1	31.6	31.6	95.9	95.9	6.7		3.3					
					Middle	5.6	0.6	8	23.9	8.1	8.1	31.6	31.6	95.9	95.9	6.7	3.5							
						10.1	0.3	351	24.0	8.1	8.1	31.7	31.7	95.8	95.8	6.7	6.7							
						10.1	0.4	323	24.0	8.1	8.1	31.7	31.7	95.8	95.8	6.7	6.8							
C3	Cloudy	Moderate	17:54	12.2	Surface	1.0	0.7	264	24.9	24.9	8.0	8.0	32.2	32.2	104.4	104.5	7.3	7.3	5.9	6.9	8	7	822109	817782
						1.0	0.7	265	24.8		8.0	8.0	32.3	32.3	104.5	104.5	7.3		5.9					
						6.1	0.8	265	24.7		8.0	8.0	32.4	32.4	105.3	105.6	7.3		7.0					
					Middle	6.1	0.9	281	24.6	8.0	8.0	32.4	32.4	105.8	105.8	7.4	7.0							
						11.2	0.5	269	24.5	8.0	8.0	32.5	32.5	107.3	107.8	7.5	8.0							
						11.2	0.6	293	24.4	8.0	8.0	32.5	32.5	108.2	108.2	7.6	8.0							
IM1	Fine	Moderate	16:30	4.2	Surface	1.0	0.3	10	23.8	23.8	8.1	8.1	32.5	32.5	110.4	110.4	7.8	7.8	5.2	5.6	3	5	817962	807151
						1.0	0.3	10	23.8		8.1	8.1	32.5	32.5	110.3	110.3	7.8		5.2					
						-	-	-	-		-	-	-	-	-	-	-		-		-			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-						
						3.2	0.2	5	23.8	8.1	8.1	32.5	32.4	110.3	110.3	7.7	6.1							
						3.2	0.2	5	23.8	8.1	8.1	32.4	32.4	110.3	110.3	7.7	6.0							
IM2	Fine	Moderate	16:23	6.2	Surface	1.0	0.4	0	23.8	23.8	8.1	8.1	32.5	32.5	110.4	110.4	7.7	7.7	4.6	5.6	3	5	818149	806161
						1.0	0.4	0	23.8		8.1	8.1	32.5	32.5	110.4	110.4	7.7		4.6					
						3.1	0.4	8	23.8		8.1	8.1	32.6	32.6	110.3	110.3	7.7		5.4					
					Middle	3.1	0.4	8	23.8	8.1	8.1	32.6	32.6	110.3	110.3	7.7	5.4							
						5.2	0.3	358	23.8	8.1	8.1	32.6	32.5	110.3	110.3	7.7	6.9							
						5.2	0.3	329	23.8	8.1	8.1	32.5	32.5	110.3	110.3	7.7	6.8							
IM3	Fine	Moderate	16:16	6.4	Surface	1.0	0.4	340	23.8	23.8	8.1	8.1	32.5	32.5	110.3	110.3	7.7	7.7	3.0	4.3	4	4	818776	805571
						1.0	0.4	340	23.8		8.1	8.1	32.5	32.5	110.2	110.2	7.7		3.0					
						3.2	0.4	335	23.8		8.1	8.1	32.5	32.5	110.2	110.2	7.7		4.4					
					Middle	3.2	0.4	344	23.8	8.1	8.1	32.5	32.5	110.1	110.1	7.7	4.4							
						5.4	0.4	339	23.8	8.1	8.1	32.4	32.3	110.2	110.2	7.7	5.4							
						5.4	0.4	312	23.8	8.1	8.1	32.3	32.3	110.2	110.2	7.8	5.5							
IM4	Fine	Moderate	16:06	8.0	Surface	1.0	0.9	344	23.8	23.8	8.1	8.1	32.4	32.4	110.4	110.4	7.8	7.8	2.4	3.4	6	5	819720	804626
						1.0	1.0	359	23.8		8.1	8.1	32.5	32.5	110.4	110.4	7.7		2.5					
						4.0	0.7	342	23.8		8.1	8.1	32.5	32.5	110.4	110.4	7.7		3.2					
					Middle	4.0	0.8	315	23.8	8.1	8.1	32.5	32.5	110.4	110.4	7.7	3.1							
						7.0	0.6	335	23.8	8.1	8.1	32.5	32.5	110.4	110.4	7.7	4.7							
						7.0	0.6	343	23.8	8.1	8.1	32.5	32.5	110.4	110.4	7.8	4.7							
IM5	Fine	Moderate	15:58	7.6	Surface	1.0	0.9	10	23.8	23.8	8.2	8.2	32.5	32.5	110.4	110.4	7.8	7.8	3.2	4.3	5	5	820748	804848
						1.0	1.0	10	23.8		8.2	8.2	32.5	32.5	110.4	110.4	7.8		3.2					
						3.8	0.9	9	23.8		8.2	8.2	32.5	32.5	110.4	110.4	7.7		4.4					
					Middle	3.8	0.9	9	23.8	8.2	8.2	32.5	32.5	110.3	110.3	7.7	4.3							
						6.6	0.8	9	23.8	8.2	8.2	32.6	32.7	110.2	110.2	7.7	5.4							
						6.6	0.8	9	23.8	8.2	8.2	32.7	32.7	110.2	110.2	7.7	5.4							
IM6	Fine	Moderate	15:51	6.6	Surface	1.0	0.1	50	23.8	23.8	8.2	8.2	32.5	32.5	110.9	110.9	7.8	7.8	5.8	6.6	4	5	821083	805837
						1.0	0.1	51	23.7		8.2	8.2	32.5	32.5	110.9	110.9	7.8		5.8					
						3.3	0.3	37	23.7		8.2	8.2	32.6	32.6	110.9	110.9	7.8		6.5					
					Middle	3.3	0.4	40	23.7	8.2	8.2	32.6	32.6	110.9	110.9	7.8	6.4							
						5.6	0.4	44	23.8	8.2	8.2	32.6	32.5	111.0	111.1	7.8	7.4							
						5.6	0.4	44	23.8	8.2	8.2	32.5	32.5	111.1	111.1	7.8	7.5							
IM7	Fine	Moderate	15:46	7.8	Surface	1.0	0.1	223	23.8	23.8	8.2	8.2	32.5	32.5	111.7	111.7	7.8	7.8	5.4	6.2	5	5	821371	806839
						1.0	0.1	244	23.8		8.2	8.2	32.5	32.5	111.7	111.7	7.8		5.4					
						3.9	0.2	115	23.8		8.2	8.2	32.5	32.5	111.7	111.7	7.8		6.2					
					Middle	3.9	0.2	126	23.8	8.2	8.2	32.5	32.5	111.7	111.7	7.8	6.1							
						6.8	0.2	92	23.8	8.2	8.2	32.5	32.5	111.7	111.7	7.8	7.1							
						6.8	0.2	95	23.8	8.2	8.2	32.5	32.5	111.7	111.7	7.8	7.0							
IM8	Cloudy	Moderate	16:13	7.6	Surface	1.0	0.2	73	24.0	24.0	8.2	8.2	32.0	32.0	100.3	100.3	7.0	7.0	1.9	2.1	4	6	821847	808153
						1.0	0.2	77	24.0		8.2	8.2	32.0	32.0	100.2	100.2	7.0		1.9					
						3.8	0.2	74	23.9		8.1	8.1	32.0	32.0	100.0	100.0	7.0		2.2					
					Middle	3.8	0.2	77	23.9	8.1	8.1	32.0	32.0	100.0	100.0	7.0	2.2							
						6.6	0.1	76	23.9	8.1	8.1	32.0	32.0	99.9	99.9	7.0	2.2							
						6.6	0.1	76	23.9	8.1	8.1	32.0	32.0	99.9	99.9	7.0	2.1							

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

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

Water Quality Monitoring Results on **16 November 21** 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)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)		
								Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA			Value	DA
IM9	Cloudy	Moderate	16:20	7.2	Surface	81	0.3	24.0	24.0	8.1	8.1	32.0	32.0	100.4	100.4	7.0	7.0	2.6	2.8	5	4	822094	808825		
							0.3	24.0						32.0		100.4		7.0		2.6					
							0.3	23.9						32.0		100.2		7.0		3.2					
					Middle	81	0.3	23.9	23.9	8.1	8.1	32.0	32.0	100.2	100.2	7.0	7.0	3.3	3.3	4	4	3	4	3	
							0.2	23.9						32.0		99.9		7.0		2.5					
							0.2	23.9						32.0		99.9		7.0		2.5					
IM10	Cloudy	Moderate	16:37	8.8	Surface	304	0.7	23.9	23.9	8.1	8.1	31.2	31.2	109.6	109.7	7.8	7.9	7.0	8.2	4	5	822406	809805		
							0.7	23.9						31.2		109.7		7.8		4					
							0.6	23.8						31.2		110.1		7.9		8.2					
					Middle	301	0.6	23.8	23.8	8.1	8.1	31.2	31.2	110.2	110.2	7.9	7.9	8.2	8.2	4	4	6	4	5	
							0.6	23.8						31.2		110.2		7.9		8.2					
							0.5	23.9						31.2		111.0		7.9		9.3					
Bottom	310	0.5	23.9	23.9	8.2	8.2	31.2	31.1	111.2	111.2	7.9	7.9	9.3	7.9	6	6	5	5	5						
		0.5	23.9						31.1		111.4		7.9		9.3										
		0.5	23.9						31.1		111.4		7.9		9.3										
IM11	Cloudy	Moderate	16:48	7.8	Surface	300	0.7	24.5	24.5	8.1	8.1	31.4	31.4	108.0	108.1	7.6	7.7	5.9	6.9	7	6	822047	811447		
							0.7	24.5						31.4		108.1		7.6		7					
							0.6	24.3						31.5		108.4		7.7		7.0					
					Middle	302	0.6	24.3	24.3	8.1	8.1	31.5	31.5	108.5	108.5	7.7	7.7	7.0	7.0	6	6	6	6	6	
							0.6	24.3						31.6		108.6		7.7		7.0					
							0.4	24.2						31.6		109.2		7.7		7.8					
Bottom	340	0.4	24.1	24.2	8.1	8.1	31.6	31.7	109.4	109.4	7.7	7.8	7.8	7.8	5	5	5	5	5						
		0.4	24.1						31.7		109.6		7.8		7.8										
		0.4	24.1						31.7		109.6		7.8		7.8										
IM12	Cloudy	Moderate	16:53	8.6	Surface	281	0.8	24.4	24.4	8.1	8.1	31.4	31.4	109.4	109.5	7.7	7.8	4.8	6.2	6	5	821450	812038		
							0.8	24.4						31.4		109.5		7.7		4.8					
							0.7	24.3						31.4		109.9		7.8		6.1					
					Middle	279	0.7	24.3	24.3	8.1	8.1	31.5	31.4	110.0	110.0	7.8	7.8	6.1	6.1	5	5	5	5	5	
							0.7	24.3						31.5		110.1		7.8		6.1					
							0.6	24.2						31.5		111.0		7.8		7.7					
Bottom	297	0.7	24.2	24.2	8.1	8.1	31.5	31.5	111.2	111.2	7.9	7.9	7.7	7.7	4	4	4	4	4						
		0.7	24.2						31.5		111.4		7.9		7.7										
		0.7	24.2						31.5		111.4		7.9		7.7										
SR1A	Cloudy	Moderate	17:20	5.2	Surface		-	24.4	24.4	8.1	8.1	31.4	31.4	107.8	107.8	7.6	7.6	7.6	8.0	5	6	819975	812660		
							-	24.4						31.5		107.8		7.6		6					
							-	24.4						31.5		107.8		7.6		6					
					Middle		-	24.4	24.4	8.1	8.1	31.4	31.4	107.9	107.9	7.6	7.6	8.3	8.3	6	6	6	6	6	
							-	24.4						31.4		107.9		7.6		8.3					
							-	24.4						31.4		107.9		7.6		8.3					
SR2	Cloudy	Moderate	17:34	4.6	Surface	341	0.2	24.4	24.4	8.1	8.1	31.4	31.4	107.4	107.5	7.6	7.6	7.6	8.0	6	7	821482	814150		
							0.2	24.4						31.4		107.5		7.6		6					
							-	24.4						-		-		-		-					
					Middle		-	24.4	24.4	8.1	8.1	31.4	31.4	107.8	107.8	7.6	7.6	8.5	8.5	7	7	7	7	7	
							-	24.4						31.4		107.8		7.6		8.5					
							-	24.4						31.4		107.8		7.6		8.5					
SR3	Cloudy	Moderate	16:09	8.4	Surface	72	0.3	23.9	23.9	8.2	8.2	31.9	31.9	99.8	99.8	7.0	7.0	2.0	3.1	5	5	822145	807573		
							0.3	23.9						31.9		99.8		7.0		2.0					
							0.2	23.9						32.0		99.6		7.0		2.4					
					Middle	73	0.2	23.9	23.9	8.2	8.2	32.0	32.0	99.6	99.6	7.0	7.0	2.3	2.3	4	4	4	4	4	
							0.2	23.9						32.0		99.6		7.0		2.3					
							0.2	23.9						32.0		98.3		6.9		5.0					
Bottom	58	0.2	23.9	23.9	8.2	8.2	32.0	32.0	98.2	98.2	6.9	6.9	5.0	5.0	5	5	5	5	5						
		0.2	23.9						32.0		98.0		6.9		5.1										
		0.2	23.9						32.0		98.0		6.9		5.1										
SR4A	Fine	Moderate	17:10	7.6	Surface	142	0.1	23.8	23.8	8.1	8.1	32.5	32.5	110.4	110.4	7.7	7.7	3.0	4.1	5	5	817176	807791		
							0.1	23.8						32.5		110.3		7.7		3.0					
							0.1	23.8						32.6		110.3		7.7		4.2					
					Middle	83	0.1	23.8	23.8	8.1	8.1	32.6	32.6	110.3	110.3	7.7	7.7	4.2	4.2	5	5	5	5	5	
							0.1	23.8						32.6		110.3		7.7		4.2					
							0.1	23.8						32.5		110.3		7.7		5.1					
Bottom	109	0.1	23.8	23.8	8.1	8.1	32.5	32.5	110.3	110.3	7.7	7.7	5.0	5.0	4	4	4	4	4						
		0.1	23.8						32.5		110.3		7.7		5.0										
		0.1	23.8						32.5		110.3		7.7		5.0										
SR5A	Fine	Moderate	17:28	4.0	Surface	255	0.1	23.8	23.8	8.1	8.1	32.5	32.5	110.4	110.4	7.7	7.7	4.1	5.0	3	5	816613	810686		
							0.1	23.8						32.6		110.4		7.7		4.1					
							0.1	23.8						32.6		110.4		7.7		4.1					
					Middle		-	23.8	23.8	8.1	8.1	32.6	32.6	110.3	110.3	7.7	7.7	5.8	5.8	5	5	5	5	5	
							-	23.8						32.6		110.3		7.7		5.8					
							-	23.8						32.6		110.3		7.7		5.8					
Bottom	296	0.1	23.8	23.8	8.1	8.1	32.6	32.6	110.3	110.3	7.7	7.7	5.8	5.8	6	6	6	6	6						
		0.1	23.8						32.6		110.3		7.7		5.8										
		0.1	23.8						32.6		110.3		7.7		5.8										
SR6A	Fine	Moderate	17:53	4.2	Surface	227	0.1	23.8	23.8	8.1	8.1	32.5	32.5	110.3	110.3	7.7	7.7	6.8	7.0	7	6	817985	814759		
							0.1	23.8						32.5		110.3		7.7		6.9					
							-	23.8						-		-		-		-					
					Middle		-	23.8	23.8	8.1	8.1	32.6	32.6	110.3	110.3	7.7	7.7	7.2	7.2	6	6	6	6	6	
							-	23.8						32.6		110.3		7.7		7.2					
							-	23.8						32.6		110.3		7.7		7.2					
Bottom	233	0.0	23.8	23.8	8.1	8.1	32.6	32.6	110.3	110.3	7.7	7.7	7.2	7.2	6	6	6	6	6						
		0.0	23.8						32.7		110.3		7.7		7.1										
		0.0	23.8						32.7		110.3		7.7		7.1										
SR7	Cloudy	Moderate	18:30	16.8	Surface	108	0.2	24.9	24.9	8.1	8.1	32.2	32.2	101.7	101.8	7.1	7.2	8.2	9.2	7	6	823648	823738		
							0.2	24.9						32.2		101.9		7.1		8.2					
							0.2	24.9						32.3		102.9		7.2		9.5					
					Middle	67	0.2	24.9	24.9	8.1	8.1	32.3	32.3	103.2	103.1	7.2	7.2	9.5	9.5	6	6	6	6	6	
							0.2	24.9						32.3		103.2		7.2		9.5					
							0.3	24.9						32.3		104.0		7.2		9.8					
Bottom	33	0.3	24.9	24.9	8.1	8.1	32.3	32.3	104.2	104.1	7.2	7.2	9.8	9.8	6	6	6	6	6						
		0.4	24.9						32.3		104.2		7.2		9.8										
		0.4	24.9						32.3		104.2		7.2		9.8										
SR8	Cloudy	Moderate	17:01	4.2	Surface		-	24.4	24.4	8.1	8.1	31.4	31.4	108.5	108.6	7.6	7.7	11.3	11.8	4	4	820413	811641		
							-	24.4						31.4		108.6		7.7		11.3					
							-	24.4						-		-		-		-					
					Middle		-	24.4	24.4	8.1	8.1	31.6	31.6	108.6	108.6	7.6	7.7	12.2	12.2	4	4	4	4	4	
							-	24.4						31.6		108.6		7.6		12.2					
							-	24.4						31.6		108.6		7.6		12.2					

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

Water Quality Monitoring

Water Quality Monitoring Results on 18 November 21 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)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA		
C1	Cloudy	Moderate	11:37	8.2	Surface	1.0	0.1	74	23.2	23.2	8.3	8.3	32.4	32.4	108.5	108.4	7.7	7.4	5.5	8.3	9	6	815604	804233
						1.0	0.1	75	23.2		8.3	8.3	32.4	32.4	98.6	7.7	5.6							
						4.1	0.1	105	23.1		8.3	8.3	32.6	32.6	99.8	7.1	8.7							
					Middle	4.1	0.1	109	23.1	23.1	8.3	8.3	32.6	32.6	99.6	7.1	8.9							
						7.2	0.0	85	23.1		8.3	8.3	32.6	32.6	98.5	7.0	10.4							
						7.2	0.0	86	23.1		8.3	8.3	32.6	32.6	98.4	7.0	10.6							
C2	Sunny	Rough	10:37	8.6	Surface	1.0	0.1	183	23.7	23.7	8.0	8.0	31.5	31.5	98.6	98.6	7.0	7.0	2.6	3.8	3	4	825693	806957
						1.0	0.1	191	23.7		8.0	8.0	31.5	31.5	98.6	7.0	2.7							
						4.3	0.1	170	23.7		7.9	7.9	31.8	31.8	99.1	7.0	4.4							
					Middle	4.3	0.1	176	23.7	23.7	7.9	7.9	31.8	31.8	99.1	7.0	4.4							
						7.6	0.1	307	23.7		7.9	7.9	32.2	32.2	101.9	7.2	4.3							
						7.6	0.1	334	23.7		7.9	7.9	32.2	32.2	102.0	7.2	4.3							
C3	Sunny	Rough	12:32	10.7	Surface	1.0	0.2	38	24.1	24.1	8.1	8.1	32.5	32.5	95.2	95.2	6.7	6.6	4.8	4	4	822103	817810	
						1.0	0.2	40	24.1		8.1	8.1	32.5	32.5	95.2	6.6	4.9							
						5.4	-	330	24.2		8.1	8.1	32.5	32.5	94.0	6.6	5.3							
					Middle	5.4	-	340	24.2	24.2	8.1	8.1	32.5	32.5	94.0	6.6	5.3							
						9.7	0.1	223	24.2		8.0	8.0	32.5	32.5	93.7	6.5	9.5							
						9.7	0.1	233	24.2		8.0	8.0	32.5	32.5	93.8	6.5	9.6							
IM1	Cloudy	Moderate	11:17	5.1	Surface	1.0	0.1	182	23.2	23.2	8.3	8.3	32.5	32.5	113.7	113.5	8.1	8.1	5.4	4	4	817934	807140	
						1.0	0.1	185	23.2		8.3	8.3	32.5	32.5	113.2	8.0	5.5							
						-	-	-	-		-	-	-	-	-	-	-							
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
						4.1	0.1	188	23.0		8.3	8.3	32.6	32.6	109.4	109.3	7.8	6.0						
						4.1	0.1	203	23.0		8.3	8.3	32.6	32.6	109.1	7.8	6.0							
IM2	Cloudy	Moderate	11:11	7.0	Surface	1.0	0.1	81	23.1	23.1	8.3	8.3	32.5	32.5	107.6	107.5	7.6	7.6	5.4	7	9	818142	806174	
						1.0	0.1	81	23.1		8.3	8.3	32.5	32.5	107.3	7.6	5.5							
						3.5	0.1	166	23.1		8.3	8.3	32.5	32.5	106.6	7.6	6.3							
					Middle	3.5	0.1	180	23.1	23.1	8.3	8.3	32.5	32.5	106.6	7.6	6.6							
						6.0	0.1	172	23.0		8.3	8.3	32.5	32.6	100.1	7.1	7.9							
						6.0	0.1	182	23.0		8.3	8.3	32.6	32.6	100.0	7.1	8.0							
IM3	Cloudy	Moderate	11:05	7.1	Surface	1.0	0.1	106	23.2	23.2	8.3	8.3	32.5	32.5	109.2	109.1	7.7	7.6	6.0	8	8	818762	805595	
						1.0	0.1	114	23.2		8.3	8.3	32.5	32.5	109.0	7.7	6.0							
						3.6	0.0	34	23.1		8.3	8.3	32.5	32.5	106.1	7.5	7.7							
					Middle	3.6	0.0	36	23.1	23.1	8.3	8.3	32.5	32.5	106.0	7.5	8.0							
						6.1	0.1	186	23.0		8.3	8.3	32.5	32.5	101.0	7.2	10.6							
						6.1	0.1	198	23.0		8.3	8.3	32.5	32.5	100.8	7.2	11.1							
IM4	Cloudy	Moderate	10:56	8.0	Surface	1.0	0.1	167	23.1	23.1	8.3	8.3	32.4	32.4	109.8	109.7	7.8	7.6	5.9	7	9	819716	804603	
						1.0	0.1	167	23.1		8.3	8.3	32.4	32.4	109.5	7.8	5.9							
						4.0	0.1	152	23.1		8.3	8.3	32.5	32.5	104.0	7.4	5.8							
					Middle	4.0	0.1	163	23.1	23.1	8.3	8.3	32.5	32.5	103.8	7.4	5.8							
						7.0	0.1	136	23.0		8.3	8.3	32.5	32.5	102.7	7.3	5.8							
						7.0	0.1	136	23.0		8.3	8.3	32.5	32.5	102.7	7.3	5.9							
IM5	Cloudy	Moderate	10:49	8.4	Surface	1.0	0.2	215	23.0	23.0	8.3	8.3	32.1	32.1	104.3	104.3	7.4	7.4	4.3	4	3	820720	804850	
						1.0	0.2	235	23.0		8.3	8.3	32.1	32.1	104.3	7.4	4.4							
						4.2	0.3	200	23.0		8.3	8.3	32.4	32.4	103.4	7.4	6.7							
					Middle	4.2	0.3	215	23.0	23.0	8.3	8.3	32.4	32.4	102.9	7.3	7.0							
						7.4	0.2	204	23.0		8.3	8.3	32.5	32.5	97.9	7.0	8.3							
						7.4	0.2	215	23.0		8.3	8.3	32.5	32.5	97.5	6.9	8.3							
IM6	Cloudy	Moderate	10:42	7.7	Surface	1.0	0.1	206	23.0	23.0	8.2	8.2	31.6	31.6	99.8	99.8	7.1	7.1	3.9	6	8	821047	805819	
						1.0	0.1	217	23.0		8.2	8.2	31.7	31.7	99.7	7.1	4.0							
						3.9	0.1	185	23.0		8.2	8.2	32.0	32.0	98.7	7.0	4.8							
					Middle	3.9	0.1	191	23.0	23.0	8.2	8.2	32.0	32.0	98.7	7.0	4.9							
						6.7	0.1	176	23.0		8.2	8.2	32.3	32.3	92.1	6.6	5.9							
						6.7	0.1	176	23.0		8.2	8.2	32.3	32.3	92.0	6.6	6.0							
IM7	Cloudy	Moderate	10:35	8.4	Surface	1.0	0.0	312	23.0	23.0	8.3	8.3	31.9	31.9	99.6	99.6	7.1	7.1	7.6	8	8	821355	806844	
						1.0	0.0	321	23.0		8.3	8.3	31.9	31.9	99.6	7.1	8.0							
						4.2	0.1	91	23.0		8.3	8.3	32.3	32.3	98.7	7.0	7.3							
					Middle	4.2	0.1	93	23.0	23.0	8.3	8.3	32.3	32.3	98.6	7.0	7.3							
						7.4	0.1	152	23.0		8.3	8.3	32.2	32.2	95.7	6.8	8.3							
						7.4	0.1	157	23.0		8.3	8.3	32.2	32.2	95.5	6.8	8.3							
IM8	Sunny	Rough	10:57	8.1	Surface	1.0	0.1	199	23.7	23.7	8.0	8.0	31.6	31.6	99.1	99.1	7.0	7.0	5.7	4	3	821814	808118	
						1.0	0.1	204	23.7		8.0	8.0	31.6	31.6	99.1	7.0	5.8							
						4.1	0.0	302	23.7		7.9	7.9	31.6	31.6	99.3	7.0	3.7							
					Middle	4.1	0.0	305	23.7	23.7	7.9	7.9	31.6	31.6	99.3	7.0	3.8							
						7.1	0.1	43	23.7		7.9	7.9	32.1	32.1	100.7	7.1	6.1							
						7.1	0.2	43	23.7		7.9	7.9	32.1	32.1	100.6	7.1	6.1							

DA: Depth-Averaged

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

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

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

Water Quality Monitoring Results on 18 November 21 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)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)			
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA			Value	DA	
					1.0	0.1			98	23.7	23.7	8.0	8.0	32.3	32.3	101.2	101.2	7.1		3.2		3					
IM9	Sunny	Rough	11:04	7.5	Surface		1.0	0.1	98	23.7	23.7	8.0	8.0	32.3	32.3	101.2	101.2	7.1		3.2		3	4	822116	808830		
					Middle		1.0	0.1	105	23.7	23.7	8.0	8.0	32.3	32.3	101.2	101.2	7.1	7.1	3.2		4					
					Middle		3.8	0.2	62	23.7	23.7	8.0	8.0	32.3	32.3	101.0	101.0	7.1		5.5		4					
					Middle		3.8	0.2	62	23.7	23.7	8.0	8.0	32.3	32.3	101.0	101.0	7.1		5.5		5					
					Bottom		6.5	0.1	75	23.7	23.7	8.0	8.0	32.3	32.3	100.7	100.7	7.1	7.1	7.2		5					
					Bottom		6.5	0.1	81	23.7	23.7	8.0	8.0	32.3	32.3	100.7	100.7	7.1	7.1	7.2		5					
IM10	Sunny	Rough	11:11	7.6	Surface		1.0	0.4	105	23.9	23.9	8.0	8.0	32.3	32.3	102.3	102.3	7.2		5.4		7	6	822392	809797		
					Middle		1.0	0.4	109	23.9	23.9	8.0	8.0	32.3	32.3	102.3	102.3	7.2	7.2	5.5		7					
					Middle		3.8	0.4	98	23.9	23.9	7.9	7.9	32.3	32.3	101.9	101.9	7.1		4.8		6					
					Middle		3.8	0.4	99	23.9	23.9	7.9	7.9	32.3	32.3	101.8	101.8	7.1		4.8		6					
					Bottom		6.6	0.3	66	23.8	23.8	7.9	7.9	32.3	32.3	101.5	101.5	7.1	7.1	6.5		4					
					Bottom		6.6	0.3	72	23.8	23.8	7.9	7.9	32.3	32.3	101.5	101.5	7.1	7.1	6.6		4					
IM11	Sunny	Rough	11:20	7.9	Surface		1.0	0.1	84	23.9	23.9	8.0	8.0	32.4	32.4	101.9	101.9	7.1		4.9		5	4	822071	811438		
					Middle		1.0	0.1	89	23.9	23.9	8.0	8.0	32.4	32.4	101.9	101.9	7.1	7.1	5.0		5					
					Middle		4.0	0.2	92	23.9	23.9	8.0	8.0	32.4	32.4	101.7	101.7	7.1		5.0		4					
					Middle		4.0	0.2	101	23.9	23.9	8.0	8.0	32.4	32.4	101.7	101.7	7.1		5.0		4					
					Bottom		6.9	0.1	109	23.9	23.9	7.9	7.9	32.4	32.4	101.4	101.4	7.1	7.1	6.5		4					
					Bottom		6.9	0.1	112	23.9	23.9	7.9	7.9	32.4	32.4	101.4	101.4	7.1	7.1	6.6		4					
IM12	Sunny	Rough	11:26	8.0	Surface		1.0	0.3	107	23.9	23.9	8.0	8.0	32.4	32.4	97.5	97.5	6.8		6.1		6	5	821473	812064		
					Middle		1.0	0.3	108	23.9	23.9	8.0	8.0	32.4	32.4	97.5	97.5	6.8	6.8	6.1		6					
					Middle		4.0	0.2	88	23.9	23.9	7.9	7.9	32.4	32.4	97.3	97.3	6.8		7.5		6					
					Middle		4.0	0.2	92	23.9	23.9	7.9	7.9	32.4	32.4	97.3	97.3	6.8		7.4		4					
					Bottom		7.0	0.2	124	23.9	23.9	7.8	7.8	32.4	32.4	97.2	97.2	6.8	6.8	9.9		4					
					Bottom		7.0	0.2	129	23.9	23.9	7.8	7.8	32.4	32.4	97.3	97.3	6.8	6.8	9.9		4					
SR1A	Sunny	Moderate	11:55	4.7	Surface		1.0	-	-	23.8	23.8	8.1	8.1	32.3	32.3	99.3	99.3	7.0		3.9		2	3	819974	812657		
					Middle		1.0	-	-	23.8	23.8	8.1	8.1	32.3	32.3	99.3	99.3	7.0	7.0	4.0		2					
					Bottom		2.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-
					Bottom		2.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-
					Bottom		3.7	-	-	23.8	23.8	8.1	8.1	32.3	32.3	99.6	99.6	7.0	7.0	5.1		3					
					Bottom		3.7	-	-	23.8	23.8	8.1	8.1	32.3	32.3	99.6	99.6	7.0	7.0	5.1		3					
SR2	Sunny	Rough	12:09	4.4	Surface		1.0	0.2	12	23.8	23.8	8.1	8.1	32.4	32.4	100.0	100.0	7.0		5.6		3	4	821446	814188		
					Middle		1.0	0.2	13	23.8	23.8	8.1	8.1	32.4	32.4	100.0	100.0	7.0	7.0	5.7		4					
					Bottom		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	
					Bottom		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	
					Bottom		3.4	0.2	14	23.8	23.8	7.9	7.9	32.3	32.3	100.1	100.2	7.0	7.0	7.1		4					
					Bottom		3.4	0.2	14	23.8	23.8	7.9	7.9	32.3	32.3	100.2	100.2	7.0	7.0	7.1		4					
SR3	Sunny	Rough	10:52	7.8	Surface		1.0	0.1	155	23.7	23.7	7.9	7.9	31.7	31.7	100.2	100.2	7.1		2.1		3	4	822155	807574		
					Middle		1.0	0.1	168	23.7	23.7	7.9	7.9	31.7	31.7	100.2	100.2	7.1	7.1	2.1		3					
					Bottom		3.9	0.1	168	23.7	23.7	7.9	7.9	32.2	32.2	101.9	101.9	7.2	7.2	3.5		4					
					Bottom		3.9	0.1	175	23.7	23.7	7.9	7.9	32.2	32.2	101.9	101.9	7.2	7.2	3.6		4					
					Bottom		6.8	0.1	300	23.7	23.7	7.9	7.9	32.6	32.6	102.6	102.6	7.2	7.2	6.5		4					
					Bottom		6.8	0.1	325	23.7	23.7	7.9	7.9	32.6	32.6	102.6	102.6	7.2	7.2	6.6		4					
SR4A	Cloudy	Moderate	11:59	8.3	Surface		1.0	0.2	79	23.1	23.1	8.3	8.3	32.6	32.6	108.5	108.4	7.7		6.1		9	8	817194	807791		
					Middle		1.0	0.2	84	23.1	23.1	8.3	8.3	32.6	32.6	108.2	108.2	7.7	7.6	6.3		9					
					Bottom		4.2	0.1	42	23.1	23.1	8.3	8.3	32.6	32.6	105.9	105.8	7.5		6.7		8					
					Bottom		4.2	0.1	43	23.1	23.1	8.3	8.3	32.6	32.6	105.6	105.6	7.5		6.8		8					
					Bottom		7.3	0.1	63	23.1	23.1	8.3	8.3	32.6	32.6	102.8	102.7	7.3	7.3	7.4		8					
					Bottom		7.3	0.1	66	23.1	23.1	8.3	8.3	32.6	32.6	102.6	102.6	7.3	7.3	7.4		8					
SR5A	Cloudy	Moderate	12:15	4.4	Surface		1.0	0.1	355	23.2	23.2	8.3	8.3	32.4	32.4	109.9	109.8	7.8		6.7		6	6	816594	810699		
					Middle		1.0	0.1	327	23.2	23.2	8.3	8.3	32.4	32.4	109.7	109.7	7.8	7.8	6.8		7					
					Bottom		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	
					Bottom		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	
					Bottom		3.4	0.1	8	23.2	23.2	8.3	8.3	32.4	32.4	106.9	106.5	7.6	7.6	7.2		6					
					Bottom		3.4	0.1	8	23.2	23.2	8.3	8.3	32.4	32.4	106.1	106.5	7.5	7.5	7.3		5					
SR6A	Cloudy	Moderate	12:55	4.5	Surface		1.0	0.1	182	23.3	23.3	8.3	8.3	31.6	31.6	103.1	103.0	7.3		5.5		8	7	817965	814724		
					Middle		1.0	0.1	189	23.3	23.3	8.3	8.3	31.7	31.7	102.8	102.8	7.3	7.3	5.6		7					
					Bottom		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	
					Bottom		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	
					Bottom		3.5	0.0	202	23.2	23.2	8.2	8.2	31.7	31.6	97.1	97.0	6.9	6.9	11.4		6					
					Bottom		3.5	0.0	207	23.2	23.2	8.2	8.2	31.6	31.6	96.8	96.8	6.9	6.9	12.6		6					
SR7	Sunny	Rough	13:08	15.7	Surface		1.0	0.1	350	24.4	24.4	8.1	8.1	32.8	32.8	95.0	95.0	6.6		3.9		5	5	823634	823726		
					Middle		1.0	0.1	322	24.4	24.4	8.1	8.1	32.8	32.8	95.0	95.0	6.6	6.8	4.0		6					
					Bottom		7.9	0.1	85	24.4	24.4	8.2	8.2	32.8	32.8	98.0	98.0	6.9		4.1		5					
					Bottom		7.9	0.1	87	24.4	24.4	8.2	8.2	32.8	32.8	98.0	98.0	6.9		4.2		5					
					Bottom		14.7	0.1	209	24.4	24.4	8.3	8.3	32.8	32.8	98.8	98.8	7.0	7.0	5.3		4					
					Bottom		14.7	0.1	226	24.4	24.4	8.3	8.3	32.8	32.8	98.8	98.8	7.0	7.0	5.4		4					
SR8	Sunny	Moderate	11:34	4.3	Surface		1.0	-	-	23.8	23.8	8.1	8.1	32.3	32.3	100.8	100.8	7.1		4.3		4	5	820388	811638		
					Middle		1.0	-	-	23.8	23.8	8.1	8.1	32.3	32.3	100.7	100.7	7.1									

**Expansion of Hong Kong International Airport into a Three-Runway System**  
**Water Quality Monitoring**  
**Water Quality Monitoring Results on 18 November 21 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)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)		
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA				
C1	Cloudy	Moderate	17:39	8.4	Surface	1.0	0.1	146	23.0	23.0	8.3	8.3	32.4	32.4	102.8	102.7	7.3		3.9		4	5	815598	804228		
						1.0	0.1	158	23.0		8.3	8.3	32.4	32.4	102.6	102.7	7.3	7.3	4.0		4					
						4.2	0.1	188	23.0		8.3	8.3	32.5	32.5	102.2	102.2	7.3		8.6		4					
					Middle	4.2	0.1	193	23.0	8.3	8.3	32.5	32.5	102.1	102.1	7.3		8.5		5						
						7.4	0.1	190	23.0	8.2	8.2	32.6	32.6	100.5	100.5	7.1	7.1	10.6		7						
						7.4	0.1	202	23.0	8.2	8.2	32.6	32.6	100.4	100.4	7.1	7.1	10.7		7						
C2	Fine	Rough	19:15	9.1	Surface	1.0	0.1	164	23.8	23.8	8.0	8.0	31.6	31.6	98.4	98.5	7.0		2.3		5	6	825668	806959		
						1.0	0.1	172	23.8		8.0	8.0	31.6	31.6	98.5	98.5	7.0	7.1	2.3		5					
						4.6	0.2	151	23.7		8.0	8.0	31.9	31.9	100.3	100.3	7.1		4.6		5					
					Middle	4.6	0.2	153	23.7	8.0	8.0	31.9	31.9	100.3	100.3	7.1		4.6		5						
						8.1	0.4	177	23.7	8.1	8.1	32.5	32.5	103.8	103.8	7.3	7.3	5.4		6						
						8.1	0.4	177	23.7	8.1	8.1	32.5	32.5	103.8	103.8	7.3	7.3	5.4		7						
C3	Fine	Rough	16:56	11.5	Surface	1.0	0.1	222	24.1	24.1	8.0	7.9	32.5	32.5	95.2	95.2	6.6		2.0		9	7	822113	817799		
						1.0	0.1	223	24.1		7.9	7.9	32.5	32.5	95.2	95.2	6.6	6.6	2.1		8					
						5.8	0.1	234	24.2		7.9	7.9	32.5	32.5	94.3	94.3	6.6		4.8		6					
					Middle	5.8	0.1	239	24.2	7.9	7.9	32.5	32.5	94.3	94.3	6.6		4.8		6						
						10.5	0.2	254	24.2	7.9	7.9	32.6	32.6	94.6	94.6	6.6	6.6	8.0		5						
						10.5	0.2	266	24.2	7.9	7.9	32.6	32.6	94.6	94.6	6.6	6.6	8.1		5						
IM1	Cloudy	Moderate	18:00	5.2	Surface	1.0	0.1	175	23.0	23.0	8.3	8.3	32.5	32.5	105.4	105.4	7.5		5.5		4	5	817942	807110		
						1.0	0.1	184	23.0		8.3	8.3	32.5	32.5	105.3	105.3	7.5	7.5	5.6		4					
						-	-	-	-		-	-	-	-	-	-	-	-	-	-	-				-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-
						4.2	0.1	170	23.0	8.3	8.3	32.4	32.4	102.7	102.6	7.3	7.3	6.0		5						
						4.2	0.1	172	23.0	8.3	8.3	32.4	32.4	102.4	102.4	7.3	7.3	5.9		5						
IM2	Cloudy	Moderate	18:08	7.1	Surface	1.0	0.2	342	23.0	23.0	8.3	8.3	32.6	32.6	103.9	103.9	7.4		2.7		6	5	818148	806189		
						1.0	0.2	355	23.0		8.3	8.3	32.6	32.6	103.9	103.9	7.4	7.3	3.1		6					
						3.6	0.1	325	23.0		8.3	8.3	32.6	32.6	101.4	101.4	7.2		4.2		5					
					Middle	3.6	0.1	350	23.0	8.3	8.3	32.6	32.6	101.4	101.4	7.2		4.5		5						
						6.1	0.1	288	23.0	8.2	8.2	32.5	32.5	100.0	99.9	7.1	7.1	6.2		5						
						6.1	0.1	305	23.0	8.2	8.2	32.5	32.5	99.8	99.8	7.1	7.1	6.2		5						
IM3	Cloudy	Moderate	18:14	7.2	Surface	1.0	0.2	331	23.0	23.0	8.3	8.3	32.5	32.5	102.4	102.4	7.3		3.8		7	8	818760	805583		
						1.0	0.2	343	23.0		8.3	8.3	32.5	32.5	102.3	102.3	7.3	7.3	3.8		7					
						3.6	0.1	310	23.0		8.3	8.3	32.5	32.5	101.1	101.1	7.2		4.4		8					
					Middle	3.6	0.1	316	23.0	8.3	8.3	32.5	32.5	101.0	101.0	7.2		4.4		9						
						6.2	0.0	243	23.0	8.3	8.3	32.5	32.5	99.5	99.5	7.1	7.1	5.4		9						
						6.2	0.0	253	23.0	8.3	8.3	32.5	32.5	99.4	99.4	7.1	7.1	5.5		8						
IM4	Cloudy	Moderate	18:24	8.0	Surface	1.0	0.0	33	23.0	23.0	8.3	8.3	32.5	32.5	103.0	103.0	7.3		3.1		6	5	819742	804601		
						1.0	0.0	35	23.0		8.3	8.3	32.5	32.5	102.9	102.9	7.3	7.3	3.1		6					
						4.0	0.1	25	23.0		8.3	8.3	32.5	32.5	100.7	100.7	7.2		3.9		5					
					Middle	4.0	0.1	25	23.0	8.3	8.3	32.5	32.5	100.6	100.6	7.2		3.9		5						
						7.0	0.1	321	23.0	8.3	8.3	32.5	32.5	99.0	98.9	7.0	7.0	3.9		3						
						7.0	0.1	335	23.0	8.3	8.3	32.5	32.5	98.8	98.8	7.0	7.0	3.8		3						
IM5	Cloudy	Moderate	18:32	8.3	Surface	1.0	0.2	262	23.0	23.0	8.3	8.3	32.5	32.5	102.1	102.0	7.3		3.9		3	4	820713	804860		
						1.0	0.2	281	23.0		8.3	8.3	32.5	32.5	101.8	101.8	7.2	7.2	4.1		3					
						4.2	0.2	284	23.0		8.3	8.3	32.5	32.5	100.6	100.6	7.2		5.1		4					
					Middle	4.2	0.2	305	23.0	8.3	8.3	32.5	32.5	100.4	100.4	7.2		5.2		5						
						7.3	0.1	39	23.0	8.3	8.3	32.5	32.5	99.4	99.4	7.1	7.1	5.5		5						
						7.3	0.1	40	23.0	8.3	8.3	32.5	32.5	98.7	98.7	7.0	7.1	5.6		5						
IM6	Cloudy	Moderate	18:40	8.4	Surface	1.0	0.2	236	22.9	22.9	8.2	8.2	31.6	31.6	98.4	98.3	7.0		4.2		2	3	821041	805808		
						1.0	0.2	244	22.9		8.2	8.2	31.6	31.6	98.2	98.2	7.0	7.0	4.4		2					
						4.2	0.1	211	23.0		8.2	8.2	32.1	32.1	96.3	96.2	6.9		5.8		3					
					Middle	4.2	0.1	211	23.0	8.2	8.2	32.1	32.1	96.1	96.1	6.9		5.9		3						
						7.4	0.1	108	23.0	8.2	8.2	32.2	32.2	94.0	93.9	6.7	6.7	2.2		3						
						7.4	0.1	111	23.0	8.2	8.2	32.2	32.2	93.8	93.8	6.7	6.7	2.3		3						
IM7	Cloudy	Moderate	18:49	8.8	Surface	1.0	0.1	275	23.0	23.0	8.2	8.2	31.4	31.4	99.1	99.2	7.1		8.9		2	3	821367	806828		
						1.0	0.1	276	23.0		8.2	8.2	31.4	31.4	99.2	99.2	7.1	7.1	8.9		3					
						4.4	0.1	146	23.0		8.2	8.2	32.2	32.2	98.7	98.6	7.0		1.7		3					
					Middle	4.4	0.1	154	23.0	8.2	8.2	32.3	32.2	98.4	98.4	7.0		1.9		3						
						7.8	0.2	158	23.0	8.2	8.2	32.3	32.2	97.9	97.9	7.0	7.0	1.9		3						
						7.8	0.2	170	23.0	8.2	8.2	32.2	32.2	97.8	97.8	7.0	7.0	1.8		3						
IM8	Fine	Rough	18:47	8.6	Surface	1.0	0.4	98	23.7	23.7	8.0	8.0	31.6	31.6	99.3	99.3	7.0		1.9		7	6	821845	808158		
						1.0	0.4	107	23.7		8.0	8.0	31.6	31.6	99.3	99.3	7.0	7.1	1.9		6					
						4.3	0.4	82	23.7		8.0	8.0	32.0	31.9	100.2	100.3	7.1		2.2		5					
					Middle	4.3	0.4	83	23.7	8.0	8.0	31.9	31.9	100.2	100.3	7.1		2.2		5						
						7.6	0.1	63	23.7	8.0	8.0	32.2	32.2	101.0	101.0	7.1	7.1	3.7		5						
						7.6	0.1	68	23.7	8.0	8.0	32.2	32.2	101.0	101.0	7.1	7.1	3.7		5						

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 18 November 21 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)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)					
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA							
									Value		Value		Value		Value		Value		Value		Value								
IM9	Fine	Rough	18:39	8.3	Surface	1.0	0.3	84	<u>23.7</u>	23.7	7.9	7.9	32.3	32.3	101.2	101.2	7.1	7.1	2.1	7	7	7	822117	808792					
						1.0	0.3	91	23.7	7.9	7.9	32.3	32.3	101.2	101.2	7.1	7.1	2.2	7	7	7								
						4.2	0.4	72	23.7	7.9	7.9	32.3	32.3	100.8	100.8	7.1	7.1	5.6	7	7	7								
					Middle	4.2	0.4	78	<u>23.7</u>	23.7	7.9	7.9	32.3	32.3	100.8	100.8	7.1	7.1	5.6	7	7	7							
						7.3	0.2	91	23.7	23.7	7.9	7.9	32.3	32.3	100.6	100.6	7.1	7.1	8.0	7	7	7							
						7.3	0.2	96	<u>23.7</u>	23.7	7.9	7.9	32.3	32.3	100.6	100.6	7.1	7.1	8.0	7	7	7							
IM10	Fine	Rough	18:31	8.5	Surface	1.0	0.5	72	<u>23.8</u>	23.8	7.8	7.8	32.3	32.3	102.2	102.2	7.2	7.2	4.3	6	6	6	822405	809786					
						1.0	0.5	73	23.8	7.8	7.8	32.3	32.3	102.2	102.2	7.2	7.2	4.3	6	6	6								
						4.3	0.3	94	23.8	7.8	7.8	32.3	32.3	102.0	102.0	7.2	7.2	4.1	6	6	6								
					Middle	4.3	0.3	94	23.8	23.8	7.8	7.8	32.3	32.3	101.9	102.0	7.2	7.2	4.1	6	6	6							
						7.5	0.5	76	23.8	23.8	7.9	7.9	32.4	32.4	102.1	102.1	7.2	7.2	4.6	8	8	8							
						7.5	0.6	79	23.8	23.8	7.9	7.9	32.4	32.4	102.1	102.1	7.2	7.2	4.5	8	8	8							
IM11	Fine	Rough	18:21	9.6	Surface	1.0	0.1	100	<u>23.9</u>	23.9	7.9	7.9	32.4	32.4	101.7	101.7	7.1	7.1	4.3	7	7	7	822041	811463					
						1.0	0.1	102	<u>23.9</u>	23.9	7.9	7.9	32.4	32.4	101.7	101.7	7.1	7.1	4.4	7	7	7							
						4.8	0.1	132	<u>23.9</u>	23.9	7.8	7.8	32.4	32.4	101.9	101.9	7.1	7.1	5.5	6	6	6							
					Middle	4.8	0.2	144	<u>23.9</u>	23.9	7.8	7.8	32.4	32.4	101.9	101.9	7.1	7.1	5.4	6	6	6							
						8.6	0.2	165	<u>23.9</u>	23.9	7.9	7.9	32.4	32.4	102.2	102.2	7.2	7.2	6.9	5	5	5							
						8.6	0.2	170	<u>23.9</u>	23.9	7.9	7.9	32.4	32.4	102.2	102.2	7.2	7.2	6.8	5	5	5							
IM12	Fine	Rough	18:13	9.7	Surface	1.0	0.1	238	<u>23.9</u>	23.9	7.9	7.9	32.4	32.4	97.5	97.5	6.8	6.8	3.2	4	4	4	821482	812063					
						1.0	0.1	246	<u>23.9</u>	23.9	7.9	7.9	32.4	32.4	97.5	97.5	6.8	6.8	3.3	4	4	4							
						4.9	0.1	251	<u>23.9</u>	23.9	7.9	7.9	32.4	32.4	97.7	97.7	6.9	6.9	4.4	6	6	6							
					Middle	4.9	0.1	273	<u>23.9</u>	23.9	7.9	7.9	32.4	32.4	97.7	97.7	6.9	6.9	4.4	6	6	6							
						8.7	0.2	166	<u>23.9</u>	23.9	8.0	8.0	32.4	32.4	95.1	95.1	6.6	6.6	4.9	8	8	8							
						8.7	0.2	167	<u>23.9</u>	23.9	8.0	8.0	32.4	32.4	95.1	95.1	6.6	6.6	4.9	7	7	7							
SR1A	Fine	Moderate	17:33	4.9	Surface	1.0	-	-	<u>23.8</u>	23.8	8.1	8.1	32.3	32.3	99.6	99.6	7.0	7.0	2.0	4	4	4	819982	812658					
						1.0	-	-	<u>23.8</u>	23.8	8.1	8.1	32.3	32.3	99.6	99.6	7.0	7.0	2.0	5	5	5							
						2.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-		
					Middle	2.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-	6	6
						3.9	-	-	<u>23.8</u>	23.8	8.2	8.2	32.3	32.3	100.0	100.1	7.0	7.0	2.3	6	6	6			6	6			
						3.9	-	-	<u>23.8</u>	23.8	8.2	8.2	32.3	32.3	100.1	100.1	7.0	7.0	2.3	7	7	7			7	7			
SR2	Fine	Moderate	17:17	4.8	Surface	1.0	0.2	321	<u>23.8</u>	23.8	8.0	8.0	32.4	32.4	100.6	100.6	7.1	7.1	5.2	5	5	5	821451	814170					
						1.0	0.2	326	<u>23.8</u>	23.8	8.0	8.0	32.4	32.4	100.6	100.6	7.1	7.1	5.2	5	5	5							
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-		
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-	5	5
						3.8	0.1	22	<u>23.8</u>	23.8	8.1	8.1	32.4	32.4	100.9	101.0	7.1	7.1	6.6	6	6	6			6	6			
						3.8	0.1	23	<u>23.8</u>	23.8	8.1	8.1	32.4	32.4	101.0	101.0	7.1	7.1	6.6	5	5	5			5	5			
SR3	Fine	Rough	18:54	7.6	Surface	1.0	0.4	120	<u>23.7</u>	23.7	8.0	8.0	31.8	31.8	100.3	100.3	7.1	7.1	3.2	3	3	3	822134	807571					
						1.0	0.4	125	<u>23.7</u>	23.7	8.0	8.0	31.8	31.8	100.3	100.3	7.1	7.1	3.3	3	3	3							
						3.8	0.3	112	<u>23.7</u>	23.7	8.0	8.0	32.4	32.4	102.6	102.6	7.2	7.2	5.2	5	5	5							
					Middle	3.8	0.4	114	<u>23.7</u>	23.7	8.0	8.0	32.4	32.4	102.5	102.5	7.2	7.2	5.3	5	5	5							
						6.6	0.3	109	<u>23.7</u>	23.7	8.0	8.0	32.9	32.9	103.7	103.7	7.3	7.3	10.0	5	5	5							
						6.6	0.3	118	<u>23.7</u>	23.7	8.0	8.0	32.9	32.9	103.7	103.7	7.3	7.3	10.0	5	5	5							
SR4A	Cloudy	Moderate	17:13	8.7	Surface	1.0	0.1	35	<u>23.1</u>	23.1	8.3	8.3	32.6	32.6	110.2	110.2	7.8	7.8	2.2	7	7	7	817198	807797					
						1.0	0.1	37	<u>23.1</u>	23.1	8.3	8.3	32.6	32.6	110.1	110.1	7.8	7.8	2.2	7	7	7							
						4.4	0.3	92	<u>23.0</u>	23.0	8.3	8.3	32.6	32.6	108.2	108.0	7.7	7.7	2.9	7	7	7							
					Middle	4.4	0.3	92	<u>23.0</u>	23.0	8.3	8.3	32.6	32.6	107.8	107.8	7.7	7.7	3.1	7	7	7							
						7.7	0.3	70	<u>23.0</u>	23.0	8.3	8.3	32.6	32.6	105.1	105.0	7.5	7.5	4.5	7	7	7							
						7.7	0.3	74	<u>23.0</u>	23.0	8.3	8.3	32.6	32.6	104.9	104.9	7.5	7.5	4.8	7	7	7							
SR5A	Cloudy	Moderate	16:52	4.7	Surface	1.0	0.2	87	<u>23.1</u>	23.1	8.2	8.2	32.1	32.1	102.4	102.3	7.3	7.3	1.5	8	8	8	816570	810702					
						1.0	0.2	93	<u>23.1</u>	23.1	8.2	8.2	32.1	32.1	102.2	102.2	7.3	7.3	1.5	8	8	8							
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-		
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-	7	7
						3.7	0.1	99	<u>23.0</u>	23.0	8.2	8.2	32.1	32.1	99.3	99.2	7.1	7.1	2.6	6	6	6			6	6			
						3.7	0.1	102	<u>23.0</u>	23.0	8.2	8.2	32.1	32.1	99.1	99.1	7.1	7.1	2.6	6	6	6			6	6			
SR6A	Cloudy	Moderate	16:23	4.5	Surface	1.0	0.1	146	<u>22.9</u>	22.9	8.1	8.1	31.7	31.7	96.1	96.2	6.9	6.9	11.1	7	7	7	817951	814751					
						1.0	0.1	157	<u>22.9</u>	22.9	8.1	8.1	31.7	31.7	96.2	96.2	6.9	6.9	11.5	7	7	7							
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-		
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-	8	8
						3.5	0.1	85	<u>22.8</u>	22.8	8.1	8.1	31.7	31.7	96.4	96.5	6.9	6.9	7.5	8	8	8			8	8			
						3.5	0.1	87	<u>22.8</u>	22.8	8.1	8.1	31.7	31.7	96.5	96.5	6.9	6.9	7.2	8	8	8			8	8			
SR7	Fine	Rough	16:27	16.9	Surface	1.0	0.1	274	<u>24.4</u>	24.4	8.2	8.2	32.8	32.8	89.3	89.3	6.2	6.2	1.9	4	4	4	823626	823728					
						1.0	0.1	292	<u>24.4</u>	24.4	8.2	8.2	32.8	32.8	89.3	89.3	6.2	6.2	2.0	4	4	4							
						8.5	0.1	48	<u>24.4</u>	24.4	8.0	8.0	32.8	32.8	89.1	89.2	6.2	6.2	2.3	6	6	6							
					Middle	8.5	0.1	48	<u>24.4</u>	24.4	8.0	8.0	32.8	32.8	89.1	89.2	6.2	6.2	2.3	6	6	6							
						15.9	0.1	89	<u>24.4</u>	24.4	7.8	7.8	32.8	32.8	89.3	89.3	6.2	6.2	2.9	6	6	6							
						15.9	0.1	89	<u>24.3</u>	24.3	7.8	7.8	32.8	32.8	89.3	89.3	6.2	6.2	2.9	6	6	6							
SR8	Fine	Moderate	18:03	5.5	Surface	1.0	-	-	<u>23.8</u>	23.8	8.0	8.0	32.3	32.3	101.3	101.3	7.1	7.1	3.3	7	7	7	820380	811626					
						1.0	-	-	<u>23.8</u>	23.8	8.0	8.0	32.3	32.3	101.3	101.3	7.1	7.1	3.3	7	7	7							
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-		
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-	6	6
						4.5	-	-	<u>23.8</u>	23.8	8.0	8.0	32.3	32.3	101.1	101.1	7.1	7.1	4.5	5	5	5			5	5			
						4.5	-	-	<u>23.8</u>	23.8	8.0	8.0	32.3	32.3	101.1	101.1	7.1	7.1	4.6	5	5	5			5	5			

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

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

**Water Quality Monitoring Results on 20 November 21 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)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)								
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA										
C1	Cloudy	Moderate	12:50	8.6	Surface	1.0	0.2	218	23.6	23.6	8.3	8.3	31.5	31.6	116.1	116.0	8.2	7.8	4.0	8.7	9	10	815626	804267								
						1.0	0.2	225	23.5		8.3	8.3	31.6	32.3	115.8	102.3	8.2		4.3													
						4.3	0.2	228	23.2		8.3	8.3	32.3	32.3	102.3	102.3	7.3		9.6													
					Middle	4.3	0.2	233	23.2	23.2	8.3	8.3	32.3	32.3	102.2	102.3	7.3	9.9														
						7.6	0.2	218	23.2		8.3	8.3	32.5	32.5	102.2	102.3	7.2	12.2														
						7.6	0.2	218	23.2		8.3	8.3	32.5	32.5	102.4	102.3	7.3	12.2														
					C2	Fine	Moderate	11:45	12.4	Surface	1.0	0.3	219	23.8	23.8	8.1	8.1	31.5	31.5	108.0	108.0				7.6	7.6	2.0	3.4	9	9	825659	806942
											1.0	0.3	237	23.8		8.1	8.1	31.5	31.5	108.0	108.0				7.6		2.0					
											6.2	0.3	191	23.8		8.1	8.1	31.5	31.5	108.0	108.0				7.6		3.1					
Middle	6.2	0.3	204	23.8						23.8	8.1	8.1	31.5	31.5	108.0	108.0	7.6	3.2														
	11.4	0.2	192	23.8							8.1	8.1	31.5	31.5	108.0	108.0	7.6	4.9														
	11.4	0.2	206	23.8							8.1	8.1	31.5	31.5	108.0	108.0	7.6	5.0														
C3	Fine	Moderate	13:22	12.0						Surface	1.0	0.4	64	23.9	23.9	8.2	8.2	32.7	32.7	117.9	118.0	8.2	8.3	4.1	5.2	7	8	822105	817815			
											1.0	0.4	67	23.9		8.2	8.2	32.7	32.7	118.0	118.2	8.3		4.0								
											6.0	0.4	79	23.9		8.2	8.2	32.7	32.7	118.1	118.2	8.3		5.4								
					Middle	6.0	0.4	84	23.9	23.9	8.2	8.2	32.7	32.7	118.2	118.2	8.3	5.3														
						11.0	0.3	72	23.9		8.2	8.2	32.6	32.6	118.4	118.4	8.3	6.3														
						11.0	0.3	76	23.9		8.2	8.2	32.6	32.6	118.4	118.4	8.3	6.3														
					IM1	Cloudy	Moderate	12:32	5.2	Surface	1.0	0.1	194	23.3	23.3	8.3	8.3	31.9	31.9	115.6	115.3	8.2	8.2	5.3	5.8	7				6	817928	807114
											1.0	0.1	212	23.3		8.3	8.3	31.9	31.9	115.0	115.3	8.2		5.4								
											-	-	-	-		-	-	-	-	-	-	-		-		-						
Middle	-	-	-	-						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
	4.2	0.1	165	23.3							8.3	8.3	31.8	31.8	110.0	109.9	7.8	6.2														
	4.2	0.1	169	23.3							8.3	8.3	31.8	31.8	109.7	109.9	7.8	6.4														
IM2	Cloudy	Moderate	12:24	7.1						Surface	1.0	0.1	82	23.3	23.3	8.3	8.3	31.5	31.5	114.9	114.8	8.2	7.9	4.3	6.3	5	6	818148	806157			
											1.0	0.1	83	23.3		8.3	8.3	31.6	31.5	114.7	114.8	8.2		4.4								
											3.6	0.0	99	23.2		8.3	8.3	31.7	31.7	107.5	107.4	7.7		6.0								
					Middle	3.6	0.0	99	23.2	23.2	8.3	8.3	31.7	31.7	107.3	107.4	7.6	6.2														
						6.1	0.1	172	23.2		8.3	8.3	31.8	31.7	106.7	106.7	7.6	8.4														
						6.1	0.1	183	23.2		8.3	8.3	31.7	31.7	106.7	106.7	7.6	8.6														
					IM3	Cloudy	Moderate	12:16	7.3	Surface	1.0	0.1	89	23.3	23.3	8.3	8.3	31.5	31.5	112.0	111.9	8.0	7.9	5.4	8.7	8				13	818803	805596
											1.0	0.1	93	23.3		8.3	8.3	31.5	31.5	111.8	111.9	8.0		5.4								
											3.7	0.1	114	23.2		8.3	8.3	31.6	31.6	108.0	108.0	7.7		9.2								
Middle	3.7	0.1	121	23.2						23.2	8.3	8.3	31.6	31.6	107.9	108.0	7.7	10.3														
	6.3	0.1	111	23.2							8.3	8.3	31.6	31.6	107.4	107.4	7.7	10.8														
	6.3	0.2	121	23.2							8.3	8.3	31.6	31.6	107.4	107.4	7.7	11.0														
IM4	Cloudy	Moderate	12:07	8.0						Surface	1.0	0.1	228	23.3	23.3	8.3	8.3	31.5	31.5	111.6	111.5	7.9	7.8	4.4	4.7	10	11	819701	804596			
											1.0	0.1	232	23.3		8.3	8.3	31.5	31.5	111.3	111.5	7.9		4.5								
											4.0	0.2	229	23.2		8.3	8.3	31.6	31.6	108.5	108.3	7.7		4.7								
					Middle	4.0	0.2	231	23.2	23.2	8.3	8.3	31.6	31.6	108.1	108.3	7.7	4.8														
						7.0	0.3	206	23.2		8.3	8.3	31.6	31.6	106.9	106.9	7.6	5.0														
						7.0	0.3	220	23.2		8.3	8.3	31.6	31.6	106.8	106.9	7.6	5.0														
					IM5	Cloudy	Moderate	12:00	8.6	Surface	1.0	0.2	302	23.2	23.2	8.3	8.3	31.7	31.7	111.6	111.6	7.9	7.9	5.4	5.7	9				10	820744	804866
											1.0	0.2	311	23.2		8.3	8.3	31.7	31.7	111.5	111.6	7.9		5.4								
											4.3	0.2	318	23.3		8.3	8.3	31.7	31.7	109.3	109.2	7.8		6.1								
Middle	4.3	0.2	325	23.3						23.3	8.3	8.3	31.7	31.7	109.1	109.2	7.8	5.9														
	7.6	0.1	303	23.3							8.3	8.3	31.7	31.7	107.4	107.3	7.6	5.7														
	7.6	0.2	305	23.3							8.3	8.3	31.7	31.7	107.2	107.3	7.6	5.7														
IM6	Cloudy	Moderate	11:53	7.6						Surface	1.0	0.3	246	23.3	23.3	8.3	8.3	31.2	31.2	107.1	107.1	7.6	7.6	2.1	2.2	10	7	821078	805816			
											1.0	0.3	257	23.3		8.3	8.3	31.2	31.2	107.1	107.1	7.6		2.1								
											3.8	0.3	268	23.2		8.3	8.3	31.3	31.3	106.4	106.4	7.6		2.0								
					Middle	3.8	0.3	285	23.2	23.2	8.3	8.3	31.3	31.3	106.3	106.4	7.6	2.0														
						6.6	0.3	246	23.2		8.3	8.3	31.7	31.6	105.4	105.5	7.5	2.5														
						6.6	0.3	257	23.2		8.3	8.3	31.6	31.6	105.5	105.5	7.5	2.5														
					IM7	Cloudy	Moderate	11:43	8.2	Surface	1.0	0.3	237	23.3	23.3	8.3	8.3	31.2	31.2	106.4	106.4	7.6	7.6	2.1	1.9	10				12	821365	806829
											1.0	0.3	244	23.3		8.3	8.3	31.2	31.2	106.3	106.4	7.6		2.1								
											4.1	0.2	223	23.2		8.3	8.3	31.7	31.7	105.1	105.1	7.5		1.9								
Middle	4.1	0.2	241	23.1						23.2	8.3	8.3	31.7	31.7	105.1	105.1	7.5	1.8														
	7.2	0.1	221	23.2							8.3	8.3	31.6	31.6	105.3	105.4	7.5	1.8														
	7.2	0.1	239	23.2							8.3	8.3	31.6	31.6	105.4	105.4	7.5	1.8														
IM8	Fine	Moderate	12:10	7.0						Surface	1.0	0.1	106	23.9	23.9	8.2	8.2	31.9	31.9	113.7	113.7	8.0	8.0	3.5	4.4	4	3	821836	808118			
											1.0	0.1	116	23.9		8.2	8.2	31.9	31.9	113.6	113.7	8.0		3.6								
											3.5	0.1	59	23.9		8.2	8.2	31.9	31.9	113.4	113.4	8.0		4.1								
					Middle	3.5	0.1	63	23.9	23.9	8.2	8.2	31.9	31.9	113.3	113.4	8.0	4.2														
						6.0	0.0	334	23.9		8.2	8.2	31.9	31.9	112.5	112.4	7.9	5.6														
						6.0	0.0	357	23.9		8.2	8.2	32.0	32.0	112.3	112.4	7.9	5.7														

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



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

Water Quality Monitoring Results on 20 November 21 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)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)				
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA						
IM9	Fine	Moderate	12:14	6.6	Surface	1.0	0.2	143	23.8	23.8	8.2	8.2	32.2	32.2	112.5	112.5	7.9	7.9	6.1	4	5	822106	808831					
						1.0	0.3	144	23.8	8.2	8.2	32.2	32.2	112.5	112.5	7.9	7.9	6.0	4									
					Middle	3.3	0.3	95	23.8	23.8	8.2	8.2	32.4	32.4	111.9	111.9	7.9	7.9	7.4	5								
						3.3	0.3	100	23.8	23.8	8.2	8.2	32.4	32.4	111.8	111.8	7.9	7.9	7.4	5								
					Bottom	5.6	0.2	90	23.8	23.8	8.2	8.2	32.5	32.5	111.4	111.3	7.8	7.8	8.1	6								
						5.6	0.2	97	23.8	23.8	8.2	8.2	32.5	32.5	111.2	111.3	7.8	7.8	8.1	7								
IM10	Fine	Moderate	12:19	7.6	Surface	1.0	0.4	101	23.9	23.9	8.2	8.2	32.2	32.2	109.8	109.8	7.7	7.7	3.1	5	6	822394	809816					
						1.0	0.5	107	23.9	23.9	8.2	8.2	32.3	32.3	109.7	109.7	7.7	7.7	3.0	5								
					Middle	3.8	0.4	107	23.8	23.8	8.2	8.2	32.5	32.5	108.5	108.5	7.6	7.6	4.5	6								
						3.8	0.4	110	23.8	23.8	8.2	8.2	32.5	32.5	108.5	108.5	7.6	7.6	4.5	6								
					Bottom	6.6	0.3	88	23.8	23.8	8.2	8.2	32.6	32.6	108.7	108.8	7.6	7.6	5.1	7								
						6.6	0.3	92	23.8	23.8	8.2	8.2	32.6	32.6	108.9	108.8	7.6	7.6	5.0	7								
IM11	Fine	Moderate	12:28	7.0	Surface	1.0	0.5	109	23.9	23.9	8.2	8.2	32.7	32.7	114.3	114.3	8.0	8.0	2.2	7	8	822045	811468					
						1.0	0.6	113	23.9	23.9	8.2	8.2	32.7	32.7	114.2	114.2	8.0	8.0	2.2	7								
					Middle	3.5	0.4	117	23.9	23.9	8.2	8.2	32.7	32.7	114.0	114.0	8.0	8.0	3.7	8								
						3.5	0.4	119	23.9	23.9	8.2	8.2	32.7	32.7	113.9	113.9	8.0	8.0	3.6	9								
					Bottom	6.0	0.3	100	23.9	23.9	8.2	8.2	32.7	32.7	113.7	113.7	8.0	8.0	4.7	9								
						6.0	0.3	101	23.9	23.9	8.2	8.2	32.6	32.6	113.6	113.7	7.9	7.9	4.7	9								
IM12	Fine	Moderate	12:32	8.8	Surface	1.0	0.4	96	24.0	24.0	8.2	8.2	32.7	32.7	117.0	117.0	8.2	8.2	2.2	10	8	821447	812029					
						1.0	0.4	104	24.0	24.0	8.2	8.2	32.7	32.7	116.9	117.0	8.2	8.2	2.2	9								
					Middle	4.4	0.3	89	24.0	24.0	8.2	8.2	32.7	32.7	115.5	115.4	8.1	8.1	3.5	8								
						4.4	0.3	92	24.0	24.0	8.2	8.2	32.7	32.7	115.3	115.3	8.1	8.1	3.5	8								
					Bottom	7.8	0.2	85	24.0	24.0	8.2	8.2	32.7	32.7	114.5	114.4	8.0	8.0	4.3	7								
						7.8	0.2	85	24.0	24.0	8.2	8.2	32.7	32.7	114.2	114.2	8.0	8.0	4.2	7								
SR1A	Fine	Moderate	12:54	4.8	Surface	1.0	-	-	23.6	23.6	8.2	8.2	33.1	33.1	115.5	115.3	8.1	8.1	4.1	7	8	819973	812665					
						1.0	-	-	23.5	23.5	8.2	8.2	33.1	33.1	115.0	115.0	8.1	8.1	4.1	7								
					Middle	2.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-	-	-
						2.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-	-	-
					Bottom	3.8	-	-	23.3	23.3	8.2	8.2	33.2	33.2	113.5	113.4	8.0	8.0	5.6	9								
						3.8	-	-	23.3	23.3	8.2	8.2	33.3	33.3	113.2	113.2	8.0	8.0	5.6	9								
SR2	Fine	Moderate	13:03	4.0	Surface	1.0	0.4	92	24.0	24.0	8.2	8.2	32.7	32.7	118.4	118.4	8.3	8.3	4.4	8	7	821462	814157					
						1.0	0.4	98	24.0	24.0	8.2	8.2	32.7	32.7	118.3	118.3	8.3	8.3	4.3	7								
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-	-	-
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-	-	-
					Bottom	3.0	0.3	94	24.0	24.0	8.2	8.2	32.7	32.7	117.9	117.8	8.2	8.2	5.5	7								
						3.0	0.3	94	24.0	24.0	8.2	8.2	32.7	32.7	117.7	117.7	8.2	8.2	5.4	6								
SR3	Fine	Moderate	12:07	10.4	Surface	1.0	0.2	247	23.9	23.9	8.3	8.3	31.9	31.9	113.6	113.6	8.0	8.0	2.1	5	4	822126	807581					
						1.0	0.2	257	23.9	23.9	8.3	8.3	31.9	31.9	113.6	113.6	8.0	8.0	2.2	4								
					Middle	5.2	0.1	211	23.9	23.9	8.3	8.3	31.9	31.9	113.5	113.5	8.0	8.0	3.5	4								
						5.2	0.1	228	23.9	23.9	8.3	8.3	31.9	31.9	113.5	113.5	8.0	8.0	3.5	3								
					Bottom	9.4	0.1	83	23.9	23.9	8.3	8.3	31.9	31.8	113.5	113.6	8.0	8.0	4.7	3								
						9.4	0.1	88	23.9	23.9	8.3	8.3	31.8	31.8	113.6	113.6	8.0	8.0	4.7	3								
SR4A	Cloudy	Moderate	13:12	8.6	Surface	1.0	0.2	74	23.4	23.4	8.3	8.3	31.7	31.7	115.0	115.0	8.2	8.2	4.7	6	7	817172	807798					
						1.0	0.2	77	23.4	23.4	8.3	8.3	31.7	31.7	115.0	115.0	8.2	8.2	4.7	6								
					Middle	4.3	0.3	71	23.3	23.3	8.3	8.3	31.8	31.8	113.6	113.5	8.1	8.1	5.1	7								
						4.3	0.3	75	23.3	23.3	8.3	8.3	31.8	31.8	113.3	113.3	8.1	8.1	5.1	7								
					Bottom	7.6	0.2	71	23.2	23.2	8.3	8.3	31.8	31.8	108.8	108.8	7.7	7.7	5.4	9								
						7.6	0.2	71	23.2	23.2	8.3	8.3	31.8	31.8	108.8	108.8	7.7	7.7	5.4	9								
SR5A	Cloudy	Moderate	13:29	3.9	Surface	1.0	0.1	283	23.6	23.6	8.3	8.3	31.9	31.9	113.2	113.1	8.0	8.0	5.2	8	8	816614	810678					
						1.0	0.1	310	23.6	23.6	8.3	8.3	31.9	31.9	113.0	113.0	8.0	8.0	5.0	8								
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-	-	-
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-	-	-
					Bottom	2.9	0.0	269	23.6	23.6	8.3	8.3	31.9	31.9	110.9	110.8	7.8	7.8	5.1	7								
						2.9	0.0	295	23.6	23.6	8.3	8.3	31.9	31.9	110.7	110.7	7.8	7.8	5.1	7								
SR6A	Cloudy	Moderate	14:10	4.2	Surface	1.0	0.0	235	23.7	23.7	8.3	8.3	31.7	31.7	115.5	115.4	8.2	8.2	5.3	6	8	817954	814722					
						1.0	0.0	253	23.7	23.7	8.3	8.3	31.7	31.7	115.2	115.2	8.1	8.1	5.6	6								
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-	-	-
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-	-	-
					Bottom	3.2	0.0	245	23.6	23.6	8.3	8.3	31.8	31.8	107.7	107.6	7.6	7.6	8.1	9								
						3.2	0.0	266	23.6	23.6	8.3	8.3	31.8	31.8	107.5	107.5	7.6	7.6	8.0	9								
SR7	Fine	Moderate	13:48	16.0	Surface	1.0	0.6	91	23.9	23.9	8.2	8.2	32.7	32.7	116.6	116.6	8.2	8.2	6.1	7	5	823617	823749					
						1.0	0.6	93	23.9	23.9	8.2	8.2	32.7	32.7	116.6	116.6	8.2	8.2	6.2	7								
					Middle	8.0	0.4	65	23.9	23.9	8.2	8.2	32.7	32.7	116.8	116.9	8.2	8.2	7.1	5								
						8.0	0.4	70	23.9	23.9	8.2	8.2	32.7	32.7	116.9	116.9	8.2	8.2	7.2	5								
					Bottom	15.0	0.3	44	23.9	23.9	8.2	8.2	32.7	32.6	117.2	117.3	8.2	8.2	8.1	4								
						15.0	0.4	47	23.9	23.9	8.2	8.2	32.6	32.6	117.3	117.3	8.2	8.2	8.0	4								
SR8	Fine	Moderate	12:38	4.6	Surface	1.0	-	-	24.3	24.3	8.2	8.2	32.5	32.5	117.3	117.2	8.2	8.2	8.1	7	7	820384	811619					
						1.0	-	-	24.3	24.3	8.2	8.2	32.5	32.5	117.0	117.0	8.1	8.1	8.1	7								
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-	-	-
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-	-	-
					Bottom	3.6	-	-	24.0	24.1	8.2	8.2	32.6	32.6	114.3	114.1	8.0	8.0	9.1	6								
						3.6	-	-	24.1	2																		

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

**Water Quality Monitoring**

**Water Quality Monitoring Results on 20 November 21 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)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)								
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA										
C1	Cloudy	Moderate	08:32	8.2	Surface	1.0	0.6	53	23.1	23.1	8.3	8.3	31.5	31.5	107.6	107.6	7.7	7.7	8.9	9.8	6	5	815630	804269								
						1.0	0.6	57	23.1		8.3	8.3	31.5	31.5	107.5	107.5	7.7		8.9													
						4.1	0.6	51	23.1		8.3	8.3	31.7	31.7	107.3	107.3	7.7		9.8													
					Middle	4.1	0.6	55	23.1	23.1	8.3	8.3	31.7	31.7	107.3	107.3	7.7	7.7	9.6													
						7.2	0.5	56	23.1		8.3	8.3	31.7	31.7	107.2	107.2	7.6		10.6													
						7.2	0.5	58	23.1		8.3	8.3	31.7	31.7	107.2	107.2	7.7		11.0													
					C2	Fine	Moderate	09:21	12.2	Surface	1.0	0.1	196	23.8	23.8	8.1	8.1	31.5	31.5	108.0	108.0				7.6	7.6	3.6	4.5	3	4	825686	806937
											1.0	0.1	200	23.8		8.1	8.1	31.6	31.6	108.0	108.0				7.6		3.5					
											6.1	0.1	169	23.8		8.1	8.1	31.6	31.6	108.1	108.1				7.6		4.1					
Middle	6.1	0.2	173	23.8						23.8	8.1	8.1	31.6	31.6	108.0	108.0	7.6	7.6	4.2													
	11.2	0.1	130	23.8							8.1	8.1	31.6	31.6	108.1	108.2	7.6		5.9													
	11.2	0.1	139	23.8							8.1	8.1	31.6	31.6	108.2	108.2	7.6		6.0													
C3	Fine	Moderate	07:45	11.0						Surface	1.0	0.1	200	24.0	24.0	8.1	8.1	32.9	32.9	106.7	106.7	7.4	7.4	5.1	6.4	3	4	822111	817794			
											1.0	0.1	209	24.0		8.1	8.1	32.9	32.9	106.7	106.7	7.4		5.0								
											5.5	0.1	246	24.0		8.1	8.1	32.9	32.9	106.6	106.7	7.4		6.1								
					Middle	5.5	0.1	254	24.0	24.0	8.1	8.1	32.9	32.9	106.7	106.7	7.4	7.4	6.1													
						10.0	0.1	270	24.0		8.1	8.1	32.9	32.9	107.1	107.1	7.5		7.9													
						10.0	0.1	293	24.0		8.1	8.1	32.9	32.9	107.1	107.1	7.5		7.9													
					IM1	Cloudy	Moderate	08:51	5.2	Surface	1.0	0.1	348	23.1	23.1	8.3	8.3	31.9	31.9	109.0	109.0	7.8	7.8	3.5	3.6	4				4	817943	807121
											1.0	0.1	320	23.1		8.3	8.3	31.9	31.9	109.0	109.0	7.8		3.5								
											-	-	-	-		-	-	-	-	-	-	-		-								
Middle	-	-	-	-						-	-	-	-	-	-	-	-	-	-													
	-	-	-	-							-	-	-	-	-	-	-		-													
	-	-	-	-							-	-	-	-	-	-	-		-													
Bottom	4.2	0.1	5	23.0						23.0	8.3	8.3	31.9	31.9	107.1	107.0	7.6	7.6	3.8													
	4.2	0.1	5	23.0							8.3	8.3	32.0	32.0	106.8	106.8	7.6		3.7													
	-	-	-	-							-	-	-	-	-	-	-		-													
IM2	Cloudy	Moderate	08:58	6.8	Surface	1.0	0.3	5	23.1	23.1	8.3	8.3	31.8	31.8	106.3	106.3	7.6	7.6	8.6	9.3	3	7	818164	806163								
						1.0	0.3	5	23.1		8.3	8.3	31.8	31.8	106.2	106.2	7.6		8.7													
						3.4	0.3	9	23.1		8.3	8.3	31.8	31.8	105.7	105.7	7.5		9.6													
					Middle	3.4	0.3	9	23.1	23.1	8.3	8.3	31.8	31.8	105.7	105.7	7.5	7.5	9.9													
						5.8	0.3	14	23.1		8.3	8.3	31.8	31.8	105.4	105.4	7.5		10.0													
						5.8	0.3	14	23.1		8.3	8.3	31.8	31.8	105.3	105.3	7.5		9.1													
					IM3	Cloudy	Moderate	09:04	7.1	Surface	1.0	0.4	357	23.1	23.1	8.3	8.3	31.7	31.7	107.5	107.4				7.7	7.7	8.8	8.6	7	7	818781	805604
											1.0	0.4	328	23.1		8.3	8.3	31.7	31.7	107.3	107.3				7.7		8.8					
											3.6	0.4	355	23.1		8.3	8.3	31.7	31.7	106.7	106.7				7.6		9.4					
Middle	3.6	0.4	327	23.1						23.1	8.3	8.3	31.7	31.7	106.6	106.6	7.6	7.6	9.4													
	6.1	0.3	354	22.9							8.3	8.3	31.8	31.8	106.5	106.5	7.6		7.3													
	6.1	0.3	356	22.9							8.3	8.3	31.8	31.8	106.4	106.4	7.6		7.8													
IM4	Cloudy	Moderate	09:13	8.1						Surface	1.0	0.6	343	23.1	23.1	8.3	8.3	31.3	31.3	109.0	109.0	7.8	7.8	7.5	9.6	9	8	819714	804625			
											1.0	0.6	352	23.1		8.3	8.3	31.4	31.4	108.9	108.9	7.8		7.7								
											4.1	0.6	345	23.1		8.3	8.3	31.4	31.4	108.1	108.1	7.7		9.2								
					Middle	4.1	0.6	345	23.1	23.1	8.3	8.3	31.4	31.4	108.1	108.1	7.7	7.7	9.6													
						7.1	0.4	340	23.0		8.3	8.3	31.4	31.4	107.5	107.5	7.7		11.7													
						7.1	0.5	313	23.0		8.3	8.3	31.4	31.4	107.4	107.4	7.7		12.0													
					IM5	Cloudy	Moderate	09:20	7.9	Surface	1.0	0.7	6	23.1	23.1	8.3	8.3	31.7	31.7	107.2	107.2	7.7	7.7	9.1	10.1	7				7	820742	804888
											1.0	0.8	6	23.1		8.3	8.3	31.7	31.7	107.1	107.1	7.7		9.3								
											4.0	0.8	15	23.1		8.3	8.3	31.7	31.6	106.6	106.6	7.6		10.1								
Middle	4.0	0.8	15	23.1						23.1	8.3	8.3	31.6	31.6	106.5	106.5	7.6	7.6	10.3													
	6.9	0.6	16	23.0							8.3	8.3	31.7	31.7	105.6	105.6	7.6		10.8													
	6.9	0.7	16	23.0							8.3	8.3	31.7	31.7	105.5	105.5	7.5		11.0													
IM6	Cloudy	Moderate	09:29	7.5						Surface	1.0	0.0	6	23.2	23.2	8.2	8.2	30.9	30.9	103.1	103.1	7.4	7.4	2.3	4.4	5	8	821072	805827			
											1.0	0.0	6	23.2		8.2	8.2	30.9	30.9	103.1	103.1	7.4		2.3								
											3.8	0.1	71	23.2		8.2	8.2	31.1	31.1	104.0	104.1	7.4		2.8								
					Middle	3.8	0.1	72	23.2	23.2	8.2	8.2	31.1	31.1	104.1	104.1	7.4	7.4	3.1													
						6.5	0.2	81	23.1		8.3	8.3	31.7	31.7	104.7	104.7	7.5		7.9													
						6.5	0.2	85	23.0		8.3	8.3	31.7	31.7	104.7	104.7	7.5		8.1													
					IM7	Cloudy	Moderate	09:36	8.5	Surface	1.0	0.3	231	23.2	23.2	8.2	8.2	31.0	31.0	103.7	103.8	7.4	7.4	4.0	6.5	5				7	821346	806820
											1.0	0.3	244	23.2		8.2	8.2	31.0	31.0	103.9	103.9	7.4		4.2								
											4.3	0.1	201	23.2		8.3	8.3	31.3	31.3	104.8	104.9	7.5		5.9								
Middle	4.3	0.1	201	23.2						23.2	8.3	8.3	31.3	31.3	104.8	104.9	7.5	7.5	6.4													
	7.5	0.1	212	23.1							8.3	8.3	31.7	31.7	104.3	104.3	7.4		9.2													
	7.5	0.1	230	23.1							8.3	8.3	31.8	31.7	104.3	104.3	7.4		9.6													
IM8	Fine	Moderate	09:00	8.0						Surface	1.0	0.2	241	23.9	23.9	8.1	8.1	31.3	31.3	107.1	107.1	7.6	7.6	2.2	3.4	7	8	821835	808118			
											1.0	0.2	253	23.9		8.1	8.1	31.3	31.3	107.1	107.1	7.6		2.1								
											4.0	0.1	263	23.8		8.1	8.1	31.3	31.3	107.1	107.1	7.6		3.6								
					Middle	4.0	0.2	277	23.8	23.8	8.1	8.1	31.3	31.3	107.1	107.1	7.6	7.6	3.6													
						7.0	0.0	94	23.8		8.1	8.1	31.3	31.3	107.2	107.3	7.6		4.6													
						7.0	0.0	101	23.9		8.1	8.1	31.3	31.3	107.3	107.3	7.6		4.6													

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

**Expansion of Hong Kong International Airport into a Three-Runway System  
Water Quality Monitoring  
Water Quality Monitoring Results on 20 November 21 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)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)				
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA						
IM9	Fine	Moderate	08:56	7.6	Surface	1.0	0.1	81	23.7	23.7	8.1	8.1	31.9	31.9	109.5	109.6	7.7	7.8	3.9	4.4	7	822095	808806					
						1.0	0.1	85	23.7		8.1	8.1	32.0	32.0	109.6	109.6	7.7		4.0									
						3.8	0.1	69	23.5		8.1	8.1	32.2	32.3	109.8	109.8	7.8		4.2									
					Middle	3.8	0.1	73	23.4	23.5	8.1	8.1	32.3	23.4	8.1	8.1	32.3	32.3	109.7	109.8	7.8	7.8	4.2					
						6.6	0.1	315	23.2		8.1	8.1	32.4		32.4	109.1	109.0		7.8	5.1								
						6.6	0.1	344	23.1		8.1	8.1	32.3		32.4	108.9	109.0		7.8	5.0								
					Bottom	1.0	0.2	78	23.7	23.7	8.2	8.1	32.8	23.7	8.2	8.1	32.8	32.9	113.0	113.0	7.9	8.0	5.6	7	7	822365	809775	
						1.0	0.2	78	23.6		8.1	8.1	32.9		33.0	113.0	112.8		8.0	5.5								
						4.5	0.1	113	23.4		8.1	8.1	33.0		33.1	112.8	112.8		8.0	6.2								
Middle	4.5	0.1	114	23.3	23.4	8.1	8.1	33.1	23.4	8.1	8.1	33.1	33.1	112.7	112.7	8.0	8.0	6.2	7	6	822070	811470						
	8.0	0.1	245	23.1		8.1	8.1	33.3		33.4	112.5	112.4		8.0	7.1													
	8.0	0.1	256	23.0		8.1	8.1	33.5		33.4	112.3	112.4		8.0	7.1													
Bottom	1.0	0.1	244	23.8	23.8	8.2	8.2	32.6	23.8	8.2	8.2	32.6	32.6	112.0	112.0	7.9	7.9	6.0	6	8221454	812062							
	1.0	0.1	256	23.8		8.2	8.2	32.6		32.6	112.0	111.4		7.9	6.0													
	4.1	0.1	284	23.8		8.1	8.1	32.6		32.6	111.4	111.4		7.8	7.5													
Middle	4.1	0.1	288	23.8	23.8	8.1	8.1	32.6	23.8	8.1	8.1	32.6	32.6	111.3	111.4	7.8	7.8	7.6	6	8221454	812062							
	7.2	0.1	272	23.8		8.1	8.1	32.7		32.7	110.8	110.8		7.8	8.0													
	7.2	0.1	289	23.8		8.1	8.1	32.7		32.7	110.8	110.8		7.8	8.0													
Bottom	1.0	0.1	312	23.8	23.8	8.2	8.2	32.6	23.8	8.2	8.2	32.6	32.6	112.1	112.1	7.9	7.9	7.2	5	821442	814185							
	1.0	0.1	331	23.8		8.2	8.2	32.6		32.6	112.0	111.7		7.9	7.2													
	4.7	0.1	300	23.8		8.2	8.2	32.6		32.6	111.7	111.6		7.8	8.1													
Middle	4.7	0.1	329	23.8	23.8	8.2	8.2	32.6	23.8	8.2	8.2	32.6	32.6	111.6	111.7	7.8	7.8	8.2	6	821454	812062							
	8.4	0.1	148	23.8		8.2	8.2	32.6		32.6	111.3	111.3		7.8	9.1													
	8.4	0.1	158	23.8		8.2	8.2	32.6		32.6	111.3	111.3		7.8	9.0													
Bottom	1.0	-	-	23.8	23.8	8.1	8.1	32.8	23.8	8.1	8.1	32.8	32.8	108.6	108.6	7.6	7.6	3.7	5	819971	812655							
	1.0	-	-	23.8		8.1	8.1	32.8		32.8	108.6	108.6		7.6	3.8													
	2.5	-	-	-		-	-	-		-	-	-		-	-	-												
Middle	2.5	-	-	-	23.8	8.1	8.1	32.7	23.8	8.1	8.1	32.7	32.7	108.5	108.5	7.6	7.6	4.6	4	821442	814185							
	2.5	-	-	-		8.1	8.1	32.7		32.7	108.5	108.5		7.6	4.7													
	4.0	-	-	23.8		8.1	8.1	32.7		32.7	108.5	108.5		7.6	4.7													
Bottom	1.0	0.2	311	23.8	23.8	8.2	8.2	32.6	23.8	8.2	8.2	32.6	32.6	111.2	111.2	7.8	7.8	6.5	4	821442	814185							
	1.0	0.2	332	23.8		8.2	8.2	32.6		32.6	111.1	111.1		7.8	6.5													
	-	-	-	-		-	-	-		-	-	-		-	-	-												
Middle	-	-	-	-	23.8	8.2	8.2	32.6	23.8	8.2	8.2	32.6	32.6	110.7	110.6	7.8	7.8	6.7	6	822124	807561							
	-	-	-	-		8.2	8.2	32.6		32.6	110.7	110.6		7.8	6.7													
	3.2	0.1	307	23.8		8.2	8.2	32.6		32.6	110.7	110.6		7.8	6.7													
Bottom	3.2	0.1	317	23.8	23.8	8.2	8.2	32.6	23.8	8.2	8.2	32.6	32.6	110.5	110.6	7.8	7.8	6.7	6	822124	807561							
	1.0	0.1	247	23.9		23.9	8.1	8.1		31.3	23.9	8.1		8.1	31.3	31.3		106.6				106.7	7.5	7.5	4.2	6	822124	807561
	1.0	0.1	249	23.9			8.1	8.1		31.3		31.3		106.7	106.9			7.5				4.1						
4.1	0.1	215	23.9	8.1	8.1		31.3	31.3	106.9	106.9		7.5	5.3															
Middle	4.1	0.1	230	23.9	23.9	8.1	8.1	31.3	23.9	8.1	8.1	31.3	31.3	106.9	106.9	7.5	7.5	5.3	5	817197	807794							
	7.2	0.2	5	23.9		8.1	8.1	31.3		31.4	107.1	107.1		7.6	6.3													
	7.2	0.2	5	23.9		8.1	8.1	31.5		31.4	107.1	107.1		7.6	6.3													
Bottom	1.0	0.0	69	23.1	23.1	8.2	8.2	32.0	23.1	8.2	8.2	32.0	32.0	105.2	105.2	7.5	7.5	3.9	9	816573	810699							
	1.0	0.0	71	23.1		8.2	8.2	32.0		32.0	105.2	105.0		7.5	3.9													
	4.7	0.1	62	23.1		8.2	8.2	32.0		32.0	105.0	105.0		7.5	3.8													
Middle	4.7	0.1	66	23.1	23.1	8.2	8.2	32.0	23.1	8.2	8.2	32.0	32.0	105.0	105.0	7.5	7.5	3.9	10	816573	810699							
	8.3	0.1	26	23.1		8.2	8.2	32.0		32.0	105.1	105.1		7.5	3.7													
	8.3	0.1	28	23.1		8.2	8.2	32.0		32.0	105.1	105.1		7.5	3.7													
Bottom	1.0	0.1	259	23.2	23.2	8.2	8.2	32.0	23.2	8.2	8.2	32.0	32.0	103.7	103.7	7.4	7.4	4.6	6	817962	814758							
	1.0	0.1	260	23.2		8.2	8.2	32.0		32.0	103.7	103.7		7.4	4.9													
	-	-	-	-		-	-	-		-	-	-		-	-	-												
Middle	-	-	-	-	23.2	8.2	8.2	32.0	23.2	8.2	8.2	32.0	32.0	103.6	103.6	7.4	7.4	6.0	5	817962	814758							
	-	-	-	-		8.2	8.2	32.0		32.0	103.6	103.6		7.4	6.0													
	3.1	0.1	249	23.2		8.2	8.2	32.0		32.0	103.6	103.6		7.4	6.0													
Bottom	3.1	0.1	259	23.2	23.2	8.2	8.2	32.0	23.2	8.2	8.2	32.0	32.0	103.6	103.6	7.4	7.4	6.0	5	817962	814758							
	1.0	0.2	316	23.2		23.2	8.2	8.2		32.0	23.2	8.2		8.2	32.0	32.0		103.6				103.6	7.4	7.4	5.1	6	820386	811621
	1.0	0.2	347	23.2			8.2	8.2		32.0		32.0		103.5	103.6			7.4				5.2						
-	-	-	-	-	-		-	-	-	-		-	-	-														
Middle	-	-	-	-	23.2	8.2	8.2	32.0	23.2	8.2	8.2	32.0	32.0	103.5	103.5	7.4	7.4	5.1	5	820386	811621							
	-	-	-	-		8.2	8.2	32.0		32.0	103.5	103.5		7.4	5.2													
	3.6	0.2	313	23.1		8.2	8.2	32.0		32.0	103.5	103.5		7.4	5.6													
Bottom	3.6	0.2	316	23.1	23.1	8.2	8.2	32.0	23.1	8.2	8.2	32.0	32.0	103.5	103.5	7.4	7.4	5.6	7	820386	811621							
	1.0	0.1	288	24.2		24.2	8.0	8.0		33.1	24.2	8.0		8.0	33.1	33.1		99.1				99.1	6.9	6.9	5.1	4	823643	823759
	1.0	0.1	307	24.2			8.0	8.0		33.1		33.1		99.1	99.1			6.9				5.1						
8.0	0.1	70	24.1	8.0	8.0		33.1	33.1	99.7	99.9		6.9	6.6															
Middle	8.0	0.2	72	24.1	24.1	8.0	8.0	33.1	24.1	8.0	8.0	33.1	33.1	100.0	100.0	6.9	7.0	6.5	3	823643	823759							
	15.0	0.1	63	24.1		8.0	8.0	33.1		33.1	100.6	100.7		7.0	7.1													
	15.0	0.1	67	24.1		8.0	8.0	33.1		33.1	100.8	100.7		7.0	7.2													
Bottom	1.0	-	-	23.3	23.3	8.2	8.2	33.0	23.3	8.2	8.2	33.0	33.0	112.2	112.2	7.9	7.9	6.3	7	820386	811621							
	1.0	-	-	23.2		8.2	8.2	33.0		33.0	112.1	112.1		7.9	6.3													
	-	-	-	-		-	-	-		-	-	-		-	-	-												
Middle	-	-	-	-	22.9	8.1	8.1	33.3	22.9	8.1	8.1	33.3	33.3	111.4	111.4	7.9	7.9	7.5	6	820386	811621							
	-	-	-	-		8.1	8.1	33.3		33.3	111.4	1																

**Expansion of Hong Kong International Airport into a Three-Runway System**  
**Water Quality Monitoring**  
**Water Quality Monitoring Results on 23 November 21 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)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)								
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA										
C1	Misty	Moderate	14:41	8.2	Surface	1.0	0.4	211	22.7	22.7	8.2	8.2	32.7	32.7	98.2	98.2	7.0	7.0	1.1	7.0	7	13	815642	804261								
						1.0	0.4	216	22.7	8.2	8.2	32.7	32.7	98.2	98.2	7.0	7.0	1.1	7.0	7												
						4.1	0.3	207	22.7	8.2	8.2	32.7	32.7	98.5	98.6	7.0	7.0	2.4	7.0	16												
					Middle	4.1	0.3	218	22.7	8.2	8.2	32.7	32.7	98.6	98.6	7.1	7.1	2.3	7.1	16												
						7.2	0.2	204	22.7	8.2	8.2	32.7	32.7	99.1	99.2	7.1	7.1	3.0	7.1	16												
						7.2	0.2	205	22.7	8.2	8.2	32.7	32.7	99.3	99.2	7.1	7.1	3.1	7.1	17												
					C2	Cloudy	Moderate	13:33	12.0	Surface	1.0	0.3	219	22.8	22.8	8.2	8.2	31.5	31.5	103.3	103.3				7.4	7.4	6.9	7.4	8	8	825660	806941
											1.0	0.3	237	22.8	8.2	8.2	31.6	31.6	103.3	103.3	7.4				7.4	6.9	7.4	7				
											6.0	0.3	191	22.8	8.2	8.2	31.6	31.6	102.9	102.9	7.4				7.4	7.1	7.4	8				
Middle	6.0	0.3	204	22.8						8.2	8.2	31.6	31.6	102.9	102.9	7.4	7.4	7.2	7.4	9												
	11.0	0.2	192	22.6						8.2	8.2	31.7	31.7	102.5	102.5	7.4	7.4	8.0	7.4	8												
	11.0	0.2	206	22.6						8.2	8.2	31.7	31.7	102.5	102.5	7.4	7.4	8.1	7.4	9												
C3	Cloudy	Moderate	15:25	11.4						Surface	1.0	0.4	64	23.5	23.5	8.1	8.1	33.0	33.0	98.6	98.6	6.9	6.9	4.2	6.9	4	5	822107	817823			
											1.0	0.3	67	23.5	8.1	8.1	33.0	33.0	98.6	98.6	6.9	6.9	4.2	6.9	4							
											5.7	0.4	79	23.6	8.1	8.1	33.1	33.1	97.8	97.8	6.9	6.9	4.5	6.9	5							
					Middle	5.7	0.4	84	23.6	8.1	8.1	33.1	33.1	97.8	97.8	6.9	6.9	4.6	6.9	6												
						10.4	0.3	72	23.6	8.1	8.1	33.2	33.2	97.5	97.6	6.8	6.9	6.1	6.9	6												
						10.4	0.3	76	23.6	8.1	8.1	33.2	33.2	97.6	97.6	6.9	6.9	6.2	6.9	7												
					IM1	Misty	Moderate	14:21	4.2	Surface	1.0	0.1	181	21.7	21.7	8.3	8.3	30.9	30.9	101.4	101.4	7.5	7.5	2.2	7.5	15				16	817963	807115
											1.0	0.1	189	21.7	8.3	8.3	30.9	30.9	101.4	101.4	7.5	7.5	2.2	7.5	15							
											-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Middle	-	-	-	-						-	-	-	-	-	-	-	-	-	-	-	-	-										
	3.2	0.1	174	21.7						21.7	8.3	8.3	30.9	30.9	101.4	101.5	7.5	7.5	3.8	7.5	16											
	3.2	0.1	175	21.7						21.7	8.3	8.3	30.9	30.9	101.6	101.5	7.5	7.5	3.9	7.5	17											
IM2	Misty	Moderate	14:12	7.0						Surface	1.0	0.1	180	22.2	22.2	8.2	8.2	31.6	31.6	98.2	98.3	7.1	7.1	1.0	7.1	14	12	818139	806173			
											1.0	0.1	187	22.2	8.2	8.2	31.6	31.6	98.3	98.3	7.1	7.1	1.1	7.1	14							
											3.5	0.2	152	22.3	8.2	8.2	31.7	31.7	98.8	98.9	7.2	7.2	1.9	7.2	12							
					Middle	3.5	0.2	166	22.3	8.2	8.2	31.7	31.7	98.9	98.9	7.2	7.2	1.8	7.2	13												
						6.0	0.1	146	22.2	8.2	8.2	31.6	31.6	99.1	99.2	7.2	7.2	2.1	7.2	9												
						6.0	0.1	152	22.2	8.2	8.2	31.4	31.4	99.3	99.2	7.2	7.2	2.1	7.2	8												
					IM3	Misty	Moderate	14:05	7.0	Surface	1.0	0.2	184	22.1	22.1	8.2	8.2	31.4	31.4	97.9	98.0	7.1	7.1	2.8	7.1	7				8	818787	805586
											1.0	0.2	186	22.1	8.2	8.2	31.4	31.4	98.0	98.0	7.1	7.1	2.7	7.1	8							
											3.5	0.1	175	22.2	8.2	8.2	31.5	31.5	98.3	98.4	7.1	7.1	3.2	7.1	8							
Middle	3.5	0.1	190	22.2						8.2	8.2	31.5	31.5	98.4	98.4	7.1	7.1	3.2	7.1	7												
	6.0	0.2	176	22.2						8.2	8.2	31.4	31.4	98.8	98.9	7.2	7.2	4.6	7.2	8												
	6.0	0.2	180	22.1						8.2	8.2	31.3	31.4	98.9	98.9	7.2	7.2	4.6	7.2	8												
IM4	Misty	Moderate	13:55	8.6						Surface	1.0	0.2	180	22.2	22.2	8.3	8.3	31.9	31.9	99.0	99.1	7.2	7.2	1.2	7.2	8	8	819736	804583			
											1.0	0.2	196	22.2	8.3	8.3	31.9	31.9	99.1	99.1	7.2	7.2	1.2	7.2	7							
											4.3	0.2	155	22.2	8.3	8.3	31.9	31.9	99.5	99.5	7.2	7.2	2.2	7.2	8							
					Middle	4.3	0.2	162	22.2	8.3	8.3	31.9	31.9	99.5	99.5	7.2	7.2	2.2	7.2	7												
						7.6	0.2	115	22.2	8.3	8.3	31.8	31.8	99.7	99.7	7.2	7.2	3.5	7.2	8												
						7.6	0.2	117	22.2	8.3	8.3	31.8	31.8	99.7	99.7	7.2	7.2	3.5	7.2	8												
					IM5	Misty	Moderate	13:48	8.4	Surface	1.0	0.2	225	22.1	22.1	8.3	8.3	31.3	31.3	95.9	95.9	7.0	7.0	1.0	7.0	8				8	820739	804869
											1.0	0.3	237	22.1	8.3	8.3	31.3	31.3	95.9	95.9	7.0	7.0	1.1	7.0	8							
											4.2	0.2	200	22.1	8.2	8.2	31.3	31.3	96.7	96.8	7.0	7.0	1.9	7.0	8							
Middle	4.2	0.2	200	22.1						8.2	8.2	31.3	31.3	96.8	96.8	7.1	7.1	1.9	7.1	8												
	7.4	0.2	157	22.1						8.2	8.2	31.2	31.2	97.1	97.2	7.1	7.1	2.1	7.1	9												
	7.4	0.2	168	22.1						8.2	8.2	31.2	31.2	97.2	97.2	7.1	7.1	2.1	7.1	8												
IM6	Misty	Moderate	13:39	6.4						Surface	1.0	0.1	235	22.0	22.0	8.3	8.3	30.9	30.9	94.8	94.9	6.9	7.0	2.1	7.0	6	7	821055	805848			
											1.0	0.1	256	22.0	8.3	8.3	30.9	30.9	95.0	95.0	6.9	7.0	2.1	7.0	6							
											3.2	0.1	194	22.0	8.3	8.3	30.9	30.9	95.8	95.9	7.0	7.0	3.8	7.0	7							
					Middle	3.2	0.2	194	22.0	8.3	8.3	30.9	30.9	95.9	95.9	7.0	7.0	3.7	7.0	7												
						5.4	0.1	157	22.0	8.3	8.3	30.9	30.9	96.4	96.5	7.0	7.1	4.4	7.1	8												
						5.4	0.1	164	22.0	8.3	8.3	30.9	30.9	96.6	96.5	7.1	7.1	4.5	7.1	8												
					IM7	Misty	Moderate	13:26	8.2	Surface	1.0	0.1	276	22.1	22.1	8.2	8.2	30.8	30.8	94.3	94.3	6.9	6.9	1.5	6.9	7				7	821325	806819
											1.0	0.1	299	22.1	8.2	8.2	30.8	30.8	94.3	94.3	6.9	6.9	1.5	6.9	6							
											4.1	0.1	121	22.1	8.2	8.2	30.8	30.8	94.2	94.2	6.9	6.9	2.2	6.9	7							
Middle	4.1	0.1	130	22.1						8.2	8.2	30.8	30.8	94.2	94.2	6.9	6.9	2.2	6.9	8												
	7.2	0.0	142	22.1						8.2	8.2	30.8	30.8	94.1	94.1	6.9	6.9	3.7	6.9	8												
	7.2	0.0	146	22.1						8.2	8.2	30.8	30.8	94.1	94.1	6.9	6.9	3.7	6.9	8												
IM8	Cloudy	Moderate	13:55	7.7						Surface	1.0	0.1	106	22.6	22.6	8.2	8.2	31.5	31.5	103.6	103.6	7.5	7.5	5.8	7.5	9	9	821819	808120			
											1.0	0.1	116	22.6	8.2	8.2	31.5	31.5	103.6	103.6	7.5	7.5	5.8	7.5	9							
											3.9	0.1	59	22.5	8.2	8.2	31.5	31.5	102.4	102.4	7.4	7.4	7.2	7.4	9							
					Middle	3.9	0.1	63	22.5	8.2	8.2	31.5	31.5	102.4	102.4	7.4	7.4	7.3	7.4	10												
						6.7	0.0	334	22.5	8.2	8.2	31.6	31.6	102.2	102.2	7.4	7.4	8.3	7.4	10												
						6.7	0.0	357	22.5	8.2	8.2	31.6	31.6	102.2	102.2	7.4	7.4	8.2	7.4	9												

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



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

Water Quality Monitoring

Water Quality Monitoring Results on 23 November 21 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)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA		
C1	Misty	Moderate	10:44	7.8	Surface	1.0	0.2	13	22.4	22.4	8.2	8.2	31.7	31.7	97.2	97.2	7.0	7.0	7.3	7.3	11	11		
						1.0	0.3	14	22.4	22.4	8.2	8.2	31.7	31.7	97.2	97.2	7.0	7.0	7.3	7.3	10	10		
						3.9	0.1	37	22.4	22.4	8.2	8.2	31.8	31.8	97.3	97.3	7.0	7.0	8.4	8.4	10	10		
					Middle	3.9	0.1	37	22.4	22.4	8.2	8.2	31.8	31.8	97.3	97.3	7.0	7.0	8.5	8.5	11	11		
						6.8	0.0	38	22.4	22.4	8.2	8.2	31.7	31.7	97.9	97.9	7.1	7.1	9.6	9.6	12	12		
						6.8	0.0	41	22.4	22.4	8.2	8.2	31.7	31.7	97.9	97.9	7.1	7.1	9.6	9.6	10	10		
					Bottom	1.0	0.1	196	23.2	23.2	8.2	8.2	31.9	31.9	102.3	102.3	7.3	7.3	5.3	5.3	6	6		
						1.0	0.1	200	23.2	23.2	8.2	8.2	31.9	31.9	102.3	102.3	7.3	7.3	5.3	5.3	7	7		
						6.0	0.1	169	23.3	23.3	8.2	8.2	31.9	31.9	101.8	101.8	7.2	7.2	6.2	6.2	9	9		
Middle	6.0	0.2	173	23.3	23.3	8.2	8.2	31.9	31.9	101.8	101.8	7.2	7.2	6.3	6.3	9	9							
	10.9	0.1	130	23.3	23.3	8.2	8.2	31.9	31.9	101.6	101.6	7.2	7.2	7.3	7.3	9	9							
	10.9	0.1	139	23.3	23.3	8.2	8.2	31.9	31.9	101.7	101.7	7.2	7.2	7.2	7.2	10	10							
C2	Cloudy	Moderate	10:51	11.9	Surface	1.0	0.1	200	23.3	23.3	8.2	8.2	32.3	32.3	101.4	101.4	7.2	7.2	4.7	4.7	7	7		
						1.0	0.1	209	23.3	23.3	8.2	8.2	32.3	32.3	101.4	101.4	7.2	7.2	4.7	4.7	8	8		
						5.6	0.1	246	23.4	23.4	8.1	8.1	32.5	32.5	99.5	99.5	7.0	7.0	5.6	5.6	5	5		
					Middle	5.6	0.1	254	23.4	23.4	8.1	8.1	32.5	32.5	99.4	99.4	7.0	7.0	5.5	5.5	6	6		
						10.1	0.1	270	23.5	23.5	8.2	8.2	32.6	32.6	98.9	98.9	7.0	7.0	6.1	6.1	4	4		
						10.1	0.1	293	23.5	23.5	8.2	8.2	32.6	32.6	98.9	98.9	7.0	7.0	5.8	5.8	5	5		
					Bottom	1.0	0.0	282	21.9	21.9	8.2	8.2	31.0	31.0	97.5	97.5	7.1	7.1	2.5	2.5	10	10		
						1.0	0.0	299	21.9	21.9	8.2	8.2	31.0	31.0	97.5	97.5	7.1	7.1	2.6	2.6	11	11		
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Middle	3.8	0.0	106	21.8	21.8	8.2	8.2	31.0	31.0	97.5	97.5	7.1	7.1	3.6	3.6	10	10							
	3.8	0.0	109	21.8	21.8	8.2	8.2	31.0	31.0	97.6	97.6	7.2	7.2	3.6	3.6	9	9							
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
IM1	Misty	Moderate	11:05	4.8	Surface	1.0	0.1	282	22.0	22.0	8.2	8.2	30.9	30.9	96.0	96.0	7.0	7.0	4.1	4.1	11	11		
						1.0	0.1	300	22.0	22.0	8.2	8.2	30.9	30.9	96.0	96.0	7.0	7.0	4.0	4.0	11	11		
						3.3	0.1	51	22.0	22.0	8.2	8.2	30.9	30.9	96.4	96.4	7.0	7.0	5.2	5.2	13	13		
					Middle	3.3	0.1	55	22.0	22.0	8.2	8.2	30.9	30.9	96.4	96.4	7.1	7.1	5.2	5.2	14	14		
						5.6	0.1	73	22.0	22.0	8.2	8.2	30.8	30.8	96.9	96.9	7.1	7.1	6.6	6.6	16	16		
						5.6	0.1	73	22.0	22.0	8.2	8.2	30.8	30.8	97.0	97.0	7.1	7.1	6.7	6.7	15	15		
					Bottom	1.0	0.1	329	22.0	22.0	8.2	8.2	30.7	30.7	96.1	96.1	7.0	7.0	1.1	1.1	21	21		
						1.0	0.1	336	22.0	22.0	8.2	8.2	30.7	30.7	96.3	96.3	7.0	7.0	1.2	1.2	20	20		
						3.4	0.0	5	22.0	22.0	8.2	8.2	30.7	30.7	96.5	96.5	7.1	7.1	2.2	2.2	16	16		
Middle	3.4	0.0	5	22.0	22.0	8.2	8.2	30.7	30.7	96.5	96.5	7.1	7.1	2.2	2.2	15	15							
	5.8	0.1	70	22.0	22.0	8.2	8.2	30.7	30.7	96.8	96.8	7.1	7.1	3.3	3.3	12	12							
	5.8	0.1	73	22.0	22.0	8.2	8.2	30.7	30.7	97.0	97.0	7.1	7.1	3.3	3.3	13	13							
IM2	Misty	Moderate	11:12	6.6	Surface	1.0	0.2	283	22.0	22.0	8.2	8.2	30.6	30.6	96.8	96.8	7.1	7.1	4.8	4.8	18	18		
						1.0	0.2	310	22.0	22.0	8.2	8.2	30.6	30.6	96.8	96.8	7.1	7.1	4.7	4.7	17	17		
						4.3	0.1	318	22.0	22.0	8.2	8.2	30.6	30.6	97.3	97.3	7.1	7.1	5.2	5.2	16	16		
					Middle	4.3	0.1	321	22.0	22.0	8.2	8.2	30.6	30.6	97.3	97.3	7.1	7.1	5.2	5.2	16	16		
						7.6	0.1	13	22.0	22.0	8.2	8.2	30.5	30.5	97.7	97.7	7.2	7.2	6.6	6.6	11	11		
						7.6	0.1	13	22.0	22.0	8.2	8.2	30.5	30.5	97.8	97.8	7.2	7.2	6.6	6.6	11	11		
					Bottom	1.0	0.1	287	21.9	21.9	8.2	8.2	30.5	30.5	95.3	95.4	7.0	7.0	1.0	1.0	18	18		
						1.0	0.2	306	21.9	21.9	8.2	8.2	30.5	30.5	95.4	95.4	7.0	7.0	1.1	1.1	17	17		
						4.0	0.1	3	21.9	21.9	8.2	8.2	30.5	30.5	96.0	96.1	7.0	7.0	1.6	1.6	19	19		
Middle	4.0	0.1	3	21.9	21.9	8.2	8.2	30.5	30.5	96.1	96.1	7.1	7.1	1.5	1.5	19	19							
	7.0	0.1	61	21.9	21.9	8.2	8.2	30.5	30.5	96.5	96.6	7.1	7.1	2.3	2.3	20	20							
	7.0	0.1	61	21.9	21.9	8.2	8.2	30.5	30.5	96.7	96.7	7.1	7.1	2.3	2.3	19	19							
IM3	Misty	Moderate	11:18	6.8	Surface	1.0	0.1	235	22.0	22.0	8.2	8.2	31.0	31.0	95.0	95.0	6.9	6.9	2.1	2.1	20	20		
						1.0	0.1	241	22.0	22.0	8.2	8.2	31.0	31.0	95.0	95.0	6.9	6.9	2.1	2.1	21	21		
						3.6	0.1	115	21.9	21.9	8.2	8.2	31.0	31.0	95.9	96.0	7.0	7.0	3.2	3.2	19	19		
					Middle	3.6	0.1	124	21.9	21.9	8.2	8.2	31.0	31.0	96.1	96.0	7.0	7.0	3.2	3.2	20	20		
						6.2	0.1	95	21.9	21.9	8.2	8.2	31.0	31.0	96.6	96.7	7.1	7.1	4.2	4.2	19	19		
						6.2	0.1	96	21.9	21.9	8.2	8.2	31.0	31.0	96.7	96.7	7.1	7.1	4.2	4.2	20	20		
					Bottom	1.0	0.2	249	22.0	22.0	8.2	8.2	30.8	30.8	94.8	94.9	6.9	6.9	1.8	1.8	13	13		
						1.0	0.2	273	22.0	22.0	8.2	8.2	30.8	30.8	94.9	94.9	6.9	6.9	1.7	1.7	12	12		
						3.9	0.1	128	22.0	22.0	8.2	8.2	30.8	30.8	95.4	95.5	7.0	7.0	2.2	2.2	15	15		
Middle	3.9	0.1	137	22.0	22.0	8.2	8.2	30.8	30.8	95.5	95.5	7.0	7.0	2.2	2.2	16	16							
	6.8	0.2	68	22.0	22.0	8.2	8.2	30.8	30.8	95.9	96.1	7.0	7.0	3.0	3.0	16	16							
	6.8	0.2	74	22.0	22.0	8.2	8.2	30.8	30.8	96.2	96.2	7.0	7.0	3.1	3.1	17	17							
IM4	Misty	Moderate	11:27	8.6	Surface	1.0	0.2	241	22.8	22.8	8.2	8.2	31.6	31.6	101.7	101.7	7.3	7.3	5.6	5.6	6	6		
						1.0	0.2	253	22.8	22.8	8.2	8.2	31.6	31.6	101.7	101.7	7.3	7.3	5.7	5.7	7	7		
						3.7	0.1	263	22.8	22.8	8.2	8.2	31.6	31.6	101.6	101.6	7.3	7.3	6.3	6.3	8	8		
					Middle	3.7	0.2	277	22.8	22.8	8.2	8.2	31.6	31.6	101.6	101.6	7.3	7.3	6.3	6.3	7	7		
						6.4	0.0	94	22.8	22.8	8.2	8.2	31.6	31.6	101.6	101.6	7.3	7.3	6.5	6.5	8	8		
						6.4	0.0	101	22.8	22.8	8.2	8.2	31.6	31.6	101.6	101.6	7.3	7.3	6.5	6.5	8	8		
					Bottom	1.0	0.2	241	22.8	22.8	8.2	8.2	31.6	31.6	101.7	101.7	7.3	7.3	5.6	5.6	6	6		
						1.0	0.2	253	22.8	22.8	8.2	8.2	31.6	31.6	101.7	101.7	7.3	7.3	5.7	5.7	7	7		
						3.7	0.1	263	22.8	22.8	8.2	8.2	31.6	31.6	101.6	101.6	7.3	7.3	6.3	6.3	8	8		
Middle	3.7	0.2	277	22.8	22.8	8.2	8.2	31.6	31.6	101.6	101.6	7.3	7.3	6.3	6.3	7	7							
	6.4	0.0	94	22.8	22.8	8.2	8.2	31.6	31.6	101.6	101.6	7.3	7.3	6.5	6.5	8	8							
	6.4	0.0	101	22.8	22.8	8.2	8.2	31.6	31.6	101.6	101.6	7.3	7.3	6.5	6.5	8	8							
Bottom	1.0	0.2	241	22.8	22.8	8.2	8.2	31.6	31.6	101.7	101.7	7.3	7.3	5.6	5.6	6	6							
	1.0	0.2	253	22.8	22.8	8.2	8.2	31.6	31.6	101.7	101.7	7.3	7.3	5.7	5.7	7	7							
	3.7	0.1	263	22.8	22.8	8.2	8.2	31.6	31.6	101.6	101.6	7.3	7.3	6.3	6.3	8	8							
Middle	3.7	0.2	277	22.8	22.8	8.2	8.2	31.6	31.6	101.6	101.6	7.3	7.3	6.3	6.3	7	7							
	6.4	0.0	94																					

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

**Water Quality Monitoring Results on 23 November 21 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)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA		
IM9	Cloudy	Moderate	10:22	7.7	Surface	1.0	0.1	81	22.8	22.8	8.2	8.2	31.5	31.5	103.6	103.6	7.4	7.4	9.0	12	13	822093	808803	
						1.0	0.1	85	22.8	8.2	8.2	31.5	31.5	103.6	103.6	7.4	7.4	8.9	11					
						3.9	0.1	89	22.8	8.2	8.2	31.5	31.5	103.4	103.4	7.4	7.4	10.7	13					
					Middle	3.9	0.1	73	22.8	8.2	8.2	31.5	31.5	103.4	103.4	7.4	7.4	10.9	13					
						6.7	0.1	315	22.8	8.2	8.2	31.5	31.5	103.2	103.2	7.4	7.4	10.0	16					
						6.7	0.1	344	22.8	8.2	8.2	31.5	31.5	103.2	103.2	7.4	7.4	9.8	15					
IM10	Cloudy	Moderate	10:16	7.2	Surface	1.0	0.2	78	22.9	22.9	8.2	8.2	31.7	31.7	103.4	103.4	7.4	7.4	6.7	9	8	822387	809797	
						1.0	0.2	78	22.9	8.2	8.2	31.7	31.7	103.4	103.4	7.4	7.4	6.7	8					
						3.6	0.1	113	22.9	8.2	8.2	31.7	31.7	103.0	103.0	7.4	7.4	7.6	8					
					Middle	3.6	0.1	114	22.9	8.2	8.2	31.7	31.7	103.0	103.0	7.4	7.4	7.6	8					
						6.2	0.1	245	22.9	8.2	8.2	31.7	31.7	102.6	102.6	7.3	7.3	8.8	8					
						6.2	0.1	256	22.9	8.2	8.2	31.7	31.7	102.5	102.5	7.3	7.3	8.9	8					
IM11	Cloudy	Moderate	10:07	7.8	Surface	1.0	0.1	244	22.9	22.9	8.2	8.2	31.9	31.9	104.4	104.4	7.5	7.5	7.0	9	8	822052	811477	
						1.0	0.1	256	22.9	8.2	8.2	31.9	31.9	104.4	104.4	7.5	7.5	7.0	9					
						3.9	0.1	284	23.0	8.2	8.2	32.1	32.1	103.9	103.9	7.4	7.4	8.0	7					
					Middle	3.9	0.1	288	23.0	8.2	8.2	32.1	32.1	103.9	103.9	7.4	7.4	8.0	8					
						6.8	0.1	272	22.9	8.2	8.2	32.1	32.1	103.4	103.4	7.4	7.4	10.1	7					
						6.8	0.1	289	22.9	8.2	8.2	32.1	32.1	103.4	103.4	7.4	7.4	10.2	8					
IM12	Cloudy	Moderate	10:01	9.0	Surface	1.0	0.1	312	23.0	23.0	8.2	8.2	32.2	32.2	103.9	103.9	7.4	7.4	8.9	9	9	821449	812051	
						1.0	0.1	331	23.0	8.2	8.2	32.2	32.2	103.9	103.9	7.4	7.4	9.0	8					
						4.5	0.1	300	23.0	8.2	8.2	32.2	32.2	103.8	103.8	7.4	7.4	8.7	10					
					Middle	4.5	0.1	329	23.0	8.2	8.2	32.2	32.2	103.8	103.8	7.4	7.4	8.8	9					
						8.0	0.1	148	23.0	8.2	8.2	32.2	32.2	103.5	103.5	7.4	7.4	10.5	10					
						8.0	0.1	158	23.0	8.2	8.2	32.2	32.2	103.5	103.5	7.4	7.4	10.5	9					
SR1A	Cloudy	Calm	09:31	5.1	Surface	1.0	-	-	22.7	22.7	8.2	8.2	32.0	32.0	100.5	100.5	7.2	7.2	11.5	14	16	819971	812664	
						1.0	-	-	22.7	22.7	8.2	8.2	32.0	32.0	100.5	100.5	7.2	7.2	11.0	14				
						2.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
						4.1	-	-	22.8	22.8	8.2	8.2	32.1	32.1	100.8	100.9	7.2	7.2	10.4	17				
						4.1	-	-	22.8	22.8	8.2	8.2	32.1	32.1	100.9	100.9	7.2	7.2	10.5	18				
SR2	Cloudy	Moderate	09:17	4.9	Surface	1.0	0.2	311	23.1	23.1	8.2	8.2	32.2	32.2	101.5	101.5	7.2	7.2	9.3	13	11	821468	814189	
						1.0	0.2	332	23.1	23.1	8.2	8.2	32.2	32.2	101.5	101.5	7.2	7.2	9.2	12				
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
						3.9	0.1	307	23.1	23.1	8.2	8.2	32.2	32.2	101.3	101.3	7.2	7.2	9.3	10				
						3.9	0.1	317	23.1	23.1	8.2	8.2	32.2	32.2	101.3	101.3	7.2	7.2	9.2	9				
SR3	Cloudy	Moderate	10:33	9.1	Surface	1.0	0.1	247	22.9	22.9	8.1	8.1	31.5	31.5	102.4	102.4	7.3	7.3	7.0	7	8	822164	807582	
						1.0	0.1	249	22.9	22.9	8.1	8.1	31.5	31.5	102.4	102.4	7.3	7.3	7.0	8				
						4.6	0.1	215	22.9	22.9	8.2	8.2	31.6	31.6	101.5	101.5	7.3	7.3	6.6	9				
					Middle	4.6	0.1	230	22.9	22.9	8.2	8.2	31.6	31.6	101.5	101.5	7.3	7.3	6.5	8				
						8.1	0.2	5	22.9	22.9	8.2	8.2	31.6	31.6	101.5	101.5	7.3	7.3	8.0	8				
						8.1	0.2	5	22.9	22.9	8.2	8.2	31.6	31.6	101.5	101.5	7.3	7.3	8.2	9				
SR4A	Misty	Moderate	10:21	9.4	Surface	1.0	0.2	79	21.9	21.9	8.2	8.2	31.2	31.2	94.1	94.1	6.9	6.9	1.1	16	13	817175	807804	
						1.0	0.2	82	21.9	21.9	8.2	8.2	31.2	31.2	94.1	94.1	6.9	6.9	1.1	15				
						4.7	0.2	73	21.9	21.9	8.2	8.2	31.2	31.2	95.0	95.0	6.9	6.9	1.6	14				
					Middle	4.7	0.2	75	21.9	21.9	8.2	8.2	31.2	31.2	95.0	95.0	6.9	6.9	1.7	14				
						8.4	0.2	55	21.9	21.9	8.2	8.2	31.2	31.2	95.4	95.5	7.0	7.0	2.7	10				
						8.4	0.2	58	21.9	21.9	8.2	8.2	31.2	31.2	95.6	95.6	7.0	7.0	2.7	10				
SR5A	Misty	Moderate	10:03	3.2	Surface	1.0	0.1	259	22.0	22.0	8.2	8.2	31.5	31.5	95.6	95.6	7.0	7.0	2.5	14	12	816570	810713	
						1.0	0.1	260	22.0	22.0	8.2	8.2	31.5	31.5	95.6	95.6	7.0	7.0	2.4	13				
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
						2.2	0.1	249	22.0	22.0	8.2	8.2	31.4	31.4	95.9	96.0	7.0	7.0	3.4	10				
						2.2	0.1	259	22.0	22.0	8.2	8.2	31.4	31.4	96.1	96.0	7.0	7.0	3.5	11				
SR6A	Misty	Moderate	09:35	4.8	Surface	1.0	0.0	216	21.9	21.9	8.2	8.2	31.3	31.3	96.6	96.6	7.1	7.1	2.8	12	13	817950	814739	
						1.0	0.0	219	21.9	21.9	8.2	8.2	31.3	31.3	96.6	96.6	7.1	7.1	2.7	12				
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
						3.8	0.0	257	21.9	21.9	8.2	8.2	31.3	31.3	96.7	96.8	7.1	7.1	3.5	13				
						3.8	0.0	266	21.9	21.9	8.2	8.2	31.3	31.3	96.8	96.8	7.1	7.1	3.5	14				
SR7	Cloudy	Moderate	08:31	15.8	Surface	1.0	0.1	288	23.4	23.4	8.1	8.1	32.7	32.7	99.4	99.4	5.3	5.3	4.8	10	7	823633	823732	
						1.0	0.1	307	23.4	23.4	8.1	8.1	32.7	32.7	99.3	99.4	5.3	5.3	4.8	9				
						7.9	0.1	70	23.6	23.6	8.1	8.1	33.0	33.0	97.2	97.2	4.6	4.6	5.2	6				
					Middle	7.9	0.2	72	23.6	23.6	8.1	8.1	33.0	33.0	97.1	97.2	4.6	4.6	5.3	7				
						14.8	0.1	63	23.6	23.6	8.0	8.0	33.0	33.0	98.4	98.5	4.3	4.3	5.5	4				
						14.8	0.1	67	23.6	23.6	8.0	8.0	33.0	33.0	98.5	98.5	4.4	4.4	5.5	5				
SR8	Cloudy	Moderate	09:53	3.8	Surface	1.0	-	-	22.7	22.7	8.2	8.2	31.5	31.5	104.6	104.6	7.5	7.5	6.1	5	6	820371	811622	
						1.0	-	-	22.7	22.7	8.2	8.2	31.5	31.5	104.6	104.6	7.5	7.5	6.2	6				
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
						2.8	-	-	22.7	22.7	8.2	8.2	31.5	31.5	104.4	104.5	7.5	7.5	7.1	6				
						2.8	-	-	22.7	22.7	8.2	8.2	31.5	31.5	104.5	104.5	7.5	7.5	7.0	7				

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

**Expansion of Hong Kong International Airport into a Three-Runway System**  
**Water Quality Monitoring**  
**Water Quality Monitoring Results on 25 November 21 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)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)						
								Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA								
C1	Cloudy	Calm	03:26	7.4	Surface	1.0	0.1	190	21.8	8.3	8.3	31.8	31.8	98.3	98.3	7.2	7.1	4.3	6.7	8	7	815610	804238						
						1.0	0.1	199	21.8	8.3	8.3	31.8	31.8	98.3	98.3	7.2	7.1	4.3	6.7	8	7								
					Middle	3.7	0.1	188	21.7	8.3	8.3	32.2	32.2	95.7	95.7	7.0	7.1	7.2	6.9	7	6			8	6				
						3.7	0.1	194	21.7	8.3	8.3	32.2	32.2	95.6	95.6	7.0	7.1	7.2	6.9	7	6								
					Bottom	6.4	0.1	206	21.7	8.3	8.3	32.5	32.5	94.3	94.3	6.9	6.9	8.5	6.9	6	6					6	6		
						6.4	0.1	216	21.7	8.3	8.3	32.5	32.5	94.3	94.3	6.9	6.9	8.6	6.9	6	6								
C2	Fine	Calm	05:39	11.6	Surface	1.0	0.3	146	22.6	8.0	8.0	31.0	31.0	97.2	97.2	7.0	7.0	1.5	2.7	7	6	825666	806939						
						1.0	0.3	153	22.6	8.0	8.0	31.0	31.0	97.2	97.2	7.0	7.0	1.5	2.7	6	6								
					Middle	5.8	0.2	138	22.6	8.0	8.0	31.0	31.0	97.3	97.4	7.0	7.1	2.6	6.8	6	6								
						5.8	0.2	145	22.6	8.1	8.1	31.0	31.0	97.4	97.9	7.0	7.1	2.7	6.8										
					Bottom	10.6	0.2	128	22.6	8.1	8.1	31.0	31.0	97.8	97.9	7.1	7.1	3.9	6.8					5	5				
						10.6	0.2	135	22.6	8.1	8.1	31.0	31.0	97.9	97.9	7.1	7.1	4.0	6.8										
C3	Fine	Calm	03:41	11.0	Surface	1.0	0.4	160	22.7	7.8	7.8	32.3	32.3	94.0	94.1	6.7	6.8	1.8	3.0			4	5			822111	817808		
						1.0	0.4	165	22.7	7.8	7.8	32.3	32.3	94.2	94.4	6.8	6.8	1.9	3.1			4	5						
					Middle	5.5	0.3	166	22.6	7.8	7.8	32.3	32.3	94.4	94.4	6.8	6.8	3.1	6.8	5	5								
						5.5	0.4	167	22.6	7.8	7.8	32.3	32.3	94.4	94.4	6.8	6.8	3.2	6.8										
					Bottom	10.0	0.3	155	22.6	7.8	7.8	32.3	32.3	94.9	95.1	6.8	6.8	4.0	6.8			5	5						
						10.0	0.4	164	22.6	7.8	7.8	32.3	32.3	95.2	95.2	6.8	6.8	4.1	6.8										
IM1	Cloudy	Calm	03:47	4.7	Surface	1.0	0.1	200	22.0	8.3	8.3	32.3	32.3	98.1	98.1	7.1	7.1	2.9	3.4					6	6	817932	807110		
						1.0	0.1	206	22.0	8.3	8.3	32.3	32.3	98.1	98.1	7.1	7.1	3.0	3.4					7	6				
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-			6	6
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-					
					Bottom	3.7	0.1	210	22.0	8.3	8.3	32.4	32.4	98.0	98.0	7.1	7.1	3.8	6.8	6	6								
						3.7	0.1	216	22.0	8.3	8.3	32.4	32.4	98.0	98.0	7.1	7.1	3.8	6.8										
IM2	Cloudy	Moderate	03:56	6.3	Surface	1.0	0.1	186	21.7	8.3	8.3	31.8	31.8	99.6	99.6	7.3	7.2	3.9	5.3			6	7	818153	806162				
						1.0	0.1	188	21.7	8.3	8.3	31.8	31.8	99.5	99.5	7.3	7.2	3.8	5.3			6	7						
					Middle	3.2	0.1	142	21.7	8.3	8.3	32.2	32.2	95.5	95.6	7.0	7.0	5.8	6.9			6	6						
						3.2	0.1	155	21.7	8.3	8.3	32.2	32.2	95.6	95.6	7.0	7.0	5.8	6.9										
					Bottom	5.3	0.1	54	21.7	8.3	8.3	32.3	32.3	94.5	94.5	6.9	6.9	6.3	6.8	8	8								
						5.3	0.1	58	21.7	8.3	8.3	32.3	32.3	94.5	94.5	6.9	6.9	6.3	6.8										
IM3	Sunny	Moderate	04:04	6.7	Surface	1.0	0.1	86	21.7	8.3	8.3	31.9	31.9	97.5	97.5	7.1	7.0	1.9	2.6					8	9	818798	805591		
						1.0	0.1	90	21.7	8.3	8.3	31.9	31.9	97.5	97.5	7.1	7.0	1.9	2.6					8	9				
					Middle	3.4	0.0	41	21.6	8.3	8.3	32.1	32.1	94.9	94.9	6.9	6.9	2.7	6.8			8	8						
						3.4	0.0	44	21.6	8.3	8.3	32.2	32.2	94.9	94.9	6.9	6.8	2.6	6.8										
					Bottom	5.7	0.0	24	21.6	8.2	8.2	32.2	32.2	93.7	93.7	6.8	6.8	3.2	6.8	9	9								
						5.7	0.0	24	21.6	8.2	8.2	32.2	32.2	93.7	93.7	6.8	6.8	3.2	6.8										
IM4	Sunny	Moderate	04:14	8.4	Surface	1.0	0.2	166	21.6	8.3	8.3	31.9	31.9	96.0	96.0	7.0	7.0	3.6	4.8					9	9	819732	804592		
						1.0	0.2	181	21.6	8.3	8.3	31.9	31.9	96.0	96.0	7.0	7.0	3.4	4.8					9	9				
					Middle	4.2	0.2	152	21.6	8.3	8.3	31.9	31.9	96.0	96.0	7.0	7.0	4.6	6.8			9	9						
						4.2	0.2	152	21.6	8.3	8.3	31.9	31.9	96.0	96.0	7.0	7.0	4.6	6.8										
					Bottom	7.4	0.1	156	21.6	8.3	8.3	31.9	31.9	95.5	95.6	7.0	7.0	6.3	6.8	8	8								
						7.4	0.1	158	21.6	8.3	8.3	31.9	31.9	95.6	95.6	7.0	7.0	6.2	6.8										
IM5	Sunny	Moderate	04:24	7.6	Surface	1.0	0.1	235	21.7	8.3	8.3	31.3	31.3	102.6	102.6	7.5	7.3	1.5	2.0					7	6	820711	804881		
						1.0	0.2	258	21.7	8.3	8.3	31.3	31.3	102.5	102.5	7.5	7.3	1.5	2.0					6	6				
					Middle	3.8	0.1	190	21.7	8.3	8.3	31.9	31.9	96.4	96.4	7.0	7.0	2.1	6.8			6	6						
						3.8	0.1	205	21.7	8.3	8.3	31.9	31.9	96.4	96.4	7.0	7.0	2.1	6.8										
					Bottom	6.6	0.1	181	21.7	8.2	8.2	32.1	32.1	93.3	93.3	6.8	6.8	2.4	6.8	6	6								
						6.6	0.1	196	21.7	8.2	8.2	32.1	32.1	93.3	93.3	6.8	6.8	2.4	6.8										
IM6	Sunny	Moderate	04:31	7.2	Surface	1.0	0.1	295	21.9	8.2	8.2	30.7	30.7	98.5	98.5	7.2	7.2	2.6	3.7					6	6	821060	805833		
						1.0	0.1	308	21.9	8.2	8.2	30.7	30.7	98.4	98.4	7.2	7.2	2.6	3.7					6	6				
					Middle	3.6	0.1	171	21.9	8.2	8.2	31.0	31.0	97.2	97.2	7.1	7.1	3.8	6.6			6	6						
						3.6	0.1	171	21.9	8.2	8.2	31.0	31.0	97.2	97.2	7.1	7.1	3.8	6.6										
					Bottom	6.2	0.1	144	21.8	8.2	8.2	32.1	32.1	90.8	90.8	6.6	6.6	4.7	6.6	7	7								
						6.2	0.1	150	21.8	8.2	8.2	32.1	32.1	90.8	90.8	6.6	6.6	4.7	6.6										
IM7	Sunny	Moderate	04:39	8.4	Surface	1.0	0.0	338	21.9	8.2	8.2	30.5	30.5	98.5	98.5	7.2	7.2	2.5	3.5					4	6	821360	806832		
						1.0	0.0	344	21.9	8.2	8.2	30.5	30.5	98.5	98.5	7.2	7.2	2.6	3.5					4	6				
					Middle	4.2	0.1	92	21.8	8.2	8.2	30.7	30.7	96.4	96.4	7.1	7.1	3.3	6.8			7	7						
						4.2	0.1	100	21.8	8.2	8.2	30.8	30.8	96.4	96.4	7.1	7.1	3.3	6.8										
					Bottom	7.4	0.1	142	21.9	8.2	8.2	32.1	32.1	93.9	93.9	6.8	6.8	4.7	6.8	7	7								
						7.4	0.1	148	21.8	8.2	8.2	32.1	32.1	93.9	93.9	6.8	6.8	4.7	6.8										
IM8	Fine	Calm	05:12	7.4	Surface	1.0	0.1	102	22.4	7.9	7.9	30.9	30.9	97.2	97.2	7.1	7.1	2.7	2.9					6	5	821812	808126		
						1.0	0.1	103	22.4	7.9	7.9	30.9	30.9	97.2	97.2	7.1	7.1	2.7	2.9					6	5				
					Middle	3.7	0.0	109	22.4	8.0	8.0	30.9	30.9	97.1	97.2	7.1	7.1	3.0	6.8			6	6						
						3.7	0.0	112	22.4	8.0	8.0	30.9	30.9	97.2	97.2	7.1	7.1	3.0	6.8										
					Bottom	6.4	0.1	174	22.4	8.0	8.0	30.9	30.9	97.7	97.8	7.1	7.1	3.1	6.8	4	4								
						6.4	0.1	189	22.4	8.1	8.1	30.9	30.9	97.9	97.9	7.1	7.1	3.1	6.8										

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



Expansion of Hong Kong International Airport into a Three-Runway System  
 Water Quality Monitoring  
 Water Quality Monitoring Results on 25 November 21 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)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA			
IM9	Fine	Calm	05:07	6.8	Surface	1.0	0.1	115	22.3	22.3	8.0	8.0	31.1	31.1	97.4	97.4	7.1	7.1	1.8	1.8	4	4	6	822085	808821
						1.0	0.1	119	22.3	8.0	8.0	31.1	31.1	97.4	97.4	7.1	7.1	2.2	2.2	5	5				
						3.4	0.0	136	22.3	8.0	8.0	31.1	31.1	97.4	97.4	7.1	7.1	2.2	2.2	6	6				
					Middle	3.4	0.0	140	22.3	22.3	8.0	8.0	31.1	31.1	97.4	97.4	7.1	7.1	3.0	3.0	7	7			
						5.8	0.1	136	22.3	22.3	8.1	8.1	31.1	31.1	97.5	97.6	7.1	7.1	3.0	3.0	7	7			
						5.8	0.1	144	22.3	22.3	8.1	8.1	31.1	31.1	97.6	97.6	7.1	7.1	3.0	3.0	7	7			
					Bottom	1.0	0.4	138	22.3	22.3	8.1	8.1	31.9	31.9	95.9	95.9	6.9	6.9	3.4	3.4	5	5			
						1.0	0.4	147	22.3	22.3	8.1	8.1	31.9	31.9	95.9	95.9	6.9	6.9	3.3	3.3	5	5			
						3.8	0.4	133	22.3	22.3	8.1	8.1	32.0	32.0	96.0	96.1	6.9	6.9	3.8	3.8	6	6			
IM10	Fine	Calm	04:59	7.6	Surface	1.0	0.4	147	22.3	22.3	8.1	8.1	31.9	31.9	95.9	95.9	6.9	6.9	3.4	3.4	5	5	6	822393	809779
						1.0	0.4	147	22.3	22.3	8.1	8.1	31.9	31.9	95.9	95.9	6.9	6.9	3.3	3.3	5	5			
						3.8	0.4	133	22.3	22.3	8.1	8.1	32.0	32.0	96.0	96.1	6.9	6.9	3.8	3.8	6	6			
					Middle	3.8	0.4	139	22.3	22.3	8.1	8.1	32.0	32.0	96.2	96.2	7.0	7.0	3.7	3.7	6	6			
						6.6	0.3	137	22.3	22.3	8.1	8.1	32.0	32.0	96.8	97.0	7.0	7.0	4.9	4.9	6	6			
						6.6	0.3	145	22.3	22.3	8.2	8.1	32.0	32.0	97.1	97.1	7.0	7.0	4.8	4.8	6	6			
					Bottom	1.0	0.5	113	22.5	22.5	8.1	8.1	32.2	32.2	94.9	95.0	6.8	6.8	6.2	6.2	5	5			
						1.0	0.5	114	22.4	22.4	8.1	8.1	32.2	32.2	95.0	95.0	6.8	6.8	6.3	6.3	6	6			
						4.0	0.5	116	22.4	22.4	8.1	8.1	32.2	32.2	95.2	95.2	6.9	6.9	7.6	7.6	6	6			
IM11	Fine	Calm	04:49	8.0	Surface	1.0	0.5	116	22.4	22.4	8.1	8.1	32.2	32.2	95.2	95.2	6.9	6.9	7.7	7.7	6	6	7	822041	811476
						1.0	0.5	114	22.4	22.4	8.1	8.1	32.2	32.2	95.2	95.2	6.9	6.9	7.7	7.7	6	6			
						4.0	0.5	124	22.4	22.4	8.1	8.1	32.2	32.2	95.2	95.2	6.9	6.9	7.7	7.7	6	6			
					Middle	4.0	0.5	124	22.4	22.4	8.1	8.1	32.2	32.2	95.2	95.2	6.9	6.9	7.7	7.7	6	6			
						7.0	0.4	114	22.4	22.4	8.2	8.2	32.2	32.2	95.5	95.6	6.9	6.9	8.0	8.0	8	8			
						7.0	0.5	114	22.4	22.4	8.2	8.2	32.2	32.2	95.7	95.7	6.9	6.9	8.0	8.0	8	8			
					Bottom	1.0	0.6	131	22.5	22.5	8.2	8.2	32.3	32.3	95.2	95.3	6.8	6.8	4.1	4.1	5	5			
						1.0	0.6	142	22.5	22.5	8.2	8.2	32.3	32.3	95.3	95.3	6.9	6.9	4.2	4.2	6	6			
						4.1	0.5	124	22.5	22.5	8.2	8.2	32.3	32.3	95.7	95.8	6.9	6.9	5.0	5.0	7	7			
IM12	Fine	Calm	04:42	8.2	Surface	1.0	0.6	142	22.5	22.5	8.2	8.2	32.3	32.3	95.7	95.8	6.9	6.9	5.1	5.1	7	7	6	821446	812044
						1.0	0.6	142	22.5	22.5	8.2	8.2	32.3	32.3	95.7	95.8	6.9	6.9	5.1	5.1	7	7			
						4.1	0.5	124	22.5	22.5	8.2	8.2	32.3	32.3	95.8	95.8	6.9	6.9	5.1	5.1	7	7			
					Middle	4.1	0.5	132	22.5	22.5	8.2	8.2	32.3	32.3	95.8	95.8	6.9	6.9	5.1	5.1	7	7			
						7.2	0.4	124	22.5	22.5	8.3	8.3	32.3	32.3	96.3	96.4	6.9	6.9	6.5	6.5	6	6			
						7.2	0.4	128	22.5	22.5	8.3	8.3	32.3	32.3	96.5	96.5	6.9	6.9	6.5	6.5	7	7			
					Bottom	1.0	-	-	22.6	22.6	7.7	7.7	32.2	32.2	94.7	94.7	6.8	6.8	8.3	8.3	10	10			
						1.0	-	-	22.6	22.6	7.7	7.7	32.2	32.2	94.7	94.7	6.8	6.8	8.3	8.3	11	11			
						2.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
SR1A	Fine	Calm	04:18	5.0	Surface	1.0	-	-	22.6	22.6	7.7	7.7	32.2	32.2	94.7	94.7	6.8	6.8	8.3	8.3	10	10	10	819971	812663
						1.0	-	-	22.6	22.6	7.7	7.7	32.2	32.2	94.7	94.7	6.8	6.8	8.3	8.3	11	11			
						2.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
					Middle	2.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
						4.0	-	-	22.6	22.6	7.7	7.7	32.2	32.2	94.9	95.0	6.8	6.8	9.1	9.1	9	9			
						4.0	-	-	22.6	22.6	7.7	7.7	32.2	32.2	95.0	95.0	6.8	6.8	9.0	9.0	9	9			
					Bottom	1.0	0.1	122	22.5	22.5	7.8	7.8	32.2	32.2	95.6	95.7	6.9	6.9	3.7	3.7	6	6			
						1.0	0.1	122	22.4	22.4	7.8	7.8	32.2	32.2	95.7	95.7	6.9	6.9	3.7	3.7	7	7			
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
SR2	Fine	Calm	04:02	4.2	Surface	1.0	0.1	122	22.5	22.5	7.8	7.8	32.2	32.2	95.6	95.7	6.9	6.9	3.7	3.7	6	6	8	821475	814143
						1.0	0.1	122	22.4	22.4	7.8	7.8	32.2	32.2	95.7	95.7	6.9	6.9	3.7	3.7	7	7			
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
						3.2	0.1	135	22.4	22.5	7.8	7.8	32.2	32.2	95.9	96.1	6.9	6.9	4.3	4.3	10	10			
						3.2	0.1	143	22.5	22.5	7.8	7.8	32.2	32.2	96.2	96.2	6.9	6.9	4.3	4.3	10	10			
					Bottom	1.0	0.1	198	22.6	22.6	7.9	7.9	30.9	30.9	98.1	98.2	7.1	7.1	1.7	1.7	5	5			
						1.0	0.1	217	22.6	22.6	7.9	7.9	30.9	30.9	98.2	98.2	7.1	7.1	1.7	1.7	5	5			
						4.3	0.1	199	22.6	22.6	8.0	8.0	30.9	30.9	98.0	98.0	7.1	7.1	2.7	2.7	6	6			
SR3	Fine	Calm	05:19	8.6	Surface	1.0	0.1	199	22.6	22.6	8.0	8.0	30.9	30.9	98.0	98.0	7.1	7.1	2.7	2.7	6	6	6	822129	807591
						1.0	0.1	213	22.5	22.5	8.0	8.0	30.9	30.9	98.0	98.0	7.1	7.1	2.7	2.7	6	6			
						4.3	0.1	213	22.5	22.5	8.0	8.0	30.9	30.9	98.0	98.0	7.1	7.1	2.7	2.7	6	6			
					Middle	4.3	0.1	213	22.5	22.5	8.0	8.0	30.9	30.9	98.0	98.0	7.1	7.1	2.7	2.7	6	6			
						7.6	0.1	171	22.5	22.6	8.0	8.0	31.0	30.9	98.3	98.4	7.1	7.1	3.7	3.7	6	6			
						7.6	0.1	181	22.6	22.6	8.0	8.0	30.9	30.9	98.4	98.4	7.1	7.1	3.8	3.8	6	6			
					Bottom	1.0	0.2	82	21.9	21.9	8.3	8.3	32.3	32.3	95.7	95.7	7.0	7.0	1.1	1.1	6	6			
						1.0	0.2	88	21.8	21.8	8.3	8.3	32.3	32.3	95.7	95.7	7.0	7.0	1.1	1.1	7	7			
						3.5	0.2	66	21.8	21.8	8.3	8.3	32.4	32.4	95.4	95.4	6.9	6.9	1.6	1.6	7	7			
SR4A	Cloudy	Calm	03:11	7.0	Surface	3.5	0.2	66	21.8	21.8	8.3	8.3	32.4	32.4	95.4	95.4	6.9	6.9	1.7	1.7	8	8	7	817189	807824
						3.5	0.2	68	21.8	21.8	8.3	8.3	32.4	32.4	95.4	95.4	6.9	6.9	1.7	1.7	8	8			
						6.0	0.2	72	21.8	21.8	8.3	8.3	32.5	32.5	94.3	94.3	6.9	6.9	3.1	3.1	8	8			
					Middle	6.0	0.2	72	21.8	21.8	8.3	8.3	32.5	32.5	94.3	94.3	6.9	6.9	3.1	3.1	8	8			
						6.0	0.2	77	21.8	21.8	8.3	8.3	32.5	32.5	94.2	94.2	6.8	6.8	3.0	3.0	8	8			
						1.0	0.1	152	21.6	21.6	8.2	8.2	31.7	31.7	94.4	94.4	6.9								

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

**Water Quality Monitoring Results on 25 November 21 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)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)							
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA									
C1	Sunny	Calm	15:57	7.7	Surface	1.0	0.2	49	22.1	22.1	8.3	8.3	32.1	32.1	102.1	102.1	7.4	7.4	1.2	1.2	4	4	815634	804246							
						1.0	0.2	53	22.1	8.3	8.3	32.1	32.1	102.1	102.1	7.4	7.4	1.2	1.2	4	4										
						3.9	0.4	46	22.2	22.2	8.3	8.3	32.6	32.6	95.9	95.9	6.9	6.9	2.6	2.6	4	4									
					Middle	3.9	0.4	50	22.2	22.2	8.3	8.3	32.6	32.6	95.8	95.8	6.9	6.9	2.7	2.7	4	4									
						6.7	0.3	44	22.1	22.1	8.3	8.3	32.8	32.8	94.4	94.4	6.8	6.8	3.3	3.3	4	4									
						6.7	0.3	44	22.1	22.1	8.3	8.3	32.8	32.8	94.4	94.4	6.8	6.8	3.3	3.3	4	4									
					Bottom	1.0	0.2	66	22.6	22.6	7.8	7.8	31.3	31.3	96.2	96.2	7.0	7.0	1.5	1.5	3	3									
						1.0	0.2	67	22.6	22.6	7.8	7.8	31.3	31.3	96.2	96.2	6.9	6.9	1.5	1.5	3	3									
						5.7	0.2	47	22.5	22.5	7.8	7.7	31.4	31.4	95.9	95.9	6.9	6.9	2.4	2.4	4	4									
C2	Fine	Calm	14:36	11.4	Surface	1.0	0.2	67	22.5	22.5	7.8	7.8	31.4	31.4	95.9	95.9	6.9	6.9	2.4	2.4	4	4	825695	806924							
						5.7	0.2	47	22.5	22.5	7.8	7.7	31.4	31.4	95.9	95.9	6.9	6.9	2.5	2.5	4	4									
						5.7	0.2	49	22.5	22.5	7.7	7.7	31.4	31.4	95.9	95.9	6.9	6.9	3.3	3.3	4	4									
					Middle	10.4	0.2	38	22.5	22.5	7.7	7.7	31.5	31.5	95.9	95.9	6.9	6.9	3.3	3.3	6	6									
						10.4	0.2	41	22.5	22.5	7.7	7.7	31.5	31.5	95.9	95.9	6.9	6.9	3.3	3.3	5	5									
						1.0	0.1	84	23.3	23.3	8.1	8.1	32.7	32.7	93.0	93.0	6.6	6.6	1.8	1.8	4	4									
					Bottom	1.0	0.1	86	23.3	23.3	8.1	8.1	32.7	32.7	93.2	93.2	6.6	6.6	1.7	1.7	4	4									
						6.0	0.1	85	23.3	23.3	8.1	8.1	32.7	32.7	93.7	93.7	6.6	6.6	2.1	2.1	5	5									
						6.0	0.1	90	23.3	23.3	8.1	8.1	32.7	32.7	93.9	93.9	6.6	6.6	2.1	2.1	5	5									
C3	Fine	Calm	17:10	12.0	Surface	1.0	0.1	20	23.3	23.3	8.1	8.1	32.7	32.7	94.3	94.3	6.7	6.7	3.2	3.2	6	6	822086	817820							
						11.0	0.1	20	23.3	23.3	8.1	8.1	32.7	32.7	94.8	94.8	6.7	6.7	3.2	3.2	6	6									
						11.0	0.1	20	23.3	23.3	8.1	8.1	32.7	32.7	94.8	94.8	6.7	6.7	3.2	3.2	6	6									
					Middle	1.0	0.1	16	22.1	22.1	8.3	8.3	31.9	31.9	103.0	103.0	7.5	7.5	2.2	2.2	6	6									
						1.0	0.1	16	22.1	22.1	8.3	8.3	31.9	31.9	103.0	103.0	7.5	7.5	2.2	2.2	6	6									
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-						
					Bottom	3.7	0.1	34	22.1	22.1	8.3	8.3	32.0	32.0	101.7	101.7	7.4	7.4	4.0	4.0	4	4									
						3.7	0.1	34	22.1	22.1	8.3	8.3	32.0	32.0	101.7	101.7	7.4	7.4	3.8	3.8	4	4									
						1.0	0.2	329	22.0	22.0	8.3	8.3	32.0	32.0	100.8	100.8	7.3	7.3	1.3	1.3	4	4									
IM2	Sunny	Moderate	15:30	6.6	Surface	1.0	0.2	341	22.0	22.0	8.3	8.3	32.0	32.0	100.7	100.7	7.3	7.3	1.2	1.2	4	4	818168	806167							
						3.3	0.2	338	22.0	22.0	8.3	8.3	32.3	32.3	98.8	98.8	7.2	7.2	1.8	1.8	5	5									
						3.3	0.2	345	22.0	22.0	8.3	8.3	32.3	32.3	98.7	98.7	7.2	7.2	1.8	1.8	5	5									
					Middle	5.6	0.2	18	21.9	21.9	8.3	8.3	32.4	32.4	96.6	96.6	7.0	7.0	2.6	2.6	6	6									
						5.6	0.2	18	21.9	21.9	8.3	8.3	32.4	32.4	96.5	96.5	7.0	7.0	2.5	2.5	6	6									
						1.0	0.1	300	22.0	22.0	8.3	8.3	31.9	31.9	100.5	100.5	7.3	7.3	2.6	2.6	5	5									
					IM3	Sunny	Moderate	15:22	6.8	Surface	1.0	0.1	318	22.0	22.0	8.3	8.3	31.9	31.9	100.5	100.5	7.3			7.3	2.6	2.6	5	5	818771	805575
											3.4	0.1	339	21.7	21.7	8.3	8.3	32.3	32.3	94.2	94.2	6.9			6.9	3.3	3.3	6	6		
											3.4	0.1	312	21.7	21.7	8.3	8.3	32.3	32.3	94.2	94.2	6.9			6.9	3.3	3.3	6	6		
Middle	5.8	0.2	1	21.7						21.7	8.3	8.3	32.3	32.3	93.7	93.7	6.8	6.8	4.3	4.3	6	6									
	5.8	0.2	1	21.7						21.7	8.3	8.3	32.3	32.3	93.8	93.8	6.8	6.8	4.4	4.4	6	6									
	1.0	0.1	334	21.8						21.8	8.3	8.3	32.0	32.0	99.1	99.1	7.2	7.2	2.1	2.1	4	4									
IM4	Sunny	Moderate	15:12	8.5						Surface	1.0	0.1	307	21.8	21.8	8.3	8.3	32.0	32.0	99.1	99.1	7.2	7.2	2.2	2.2	4	4	819701	804594		
											4.3	0.1	338	21.7	21.7	8.3	8.3	32.1	32.1	94.2	94.2	6.9	6.9	3.5	3.5	4	4				
											4.3	0.1	342	21.7	21.7	8.3	8.3	32.1	32.1	94.2	94.2	6.9	6.9	3.5	3.5	4	4				
					Middle	7.5	0.2	18	21.6	21.6	8.3	8.3	32.2	32.1	93.3	93.4	6.8	6.8	4.1	4.1	6	6									
						7.5	0.2	19	21.6	21.6	8.3	8.3	32.1	32.1	93.4	93.4	6.8	6.8	4.1	4.1	6	6									
						1.0	0.1	12	21.9	21.9	8.3	8.3	31.7	31.7	101.8	101.8	7.4	7.4	1.1	1.1	6	6									
					IM5	Sunny	Moderate	15:04	7.6	Surface	1.0	0.2	12	21.9	21.9	8.3	8.3	31.7	31.7	101.8	101.8	7.4	7.4	1.0	1.0	5	5			820734	804855
											3.8	0.3	14	21.8	21.8	8.3	8.3	32.0	32.0	96.8	96.8	7.1	7.1	1.4	1.4	5	5				
											3.8	0.3	14	21.8	21.8	8.3	8.3	32.0	32.0	96.8	96.8	7.1	7.1	1.4	1.4	5	5				
Middle	6.6	0.2	18	21.8						21.8	8.3	8.3	32.1	32.1	93.5	93.6	6.8	6.8	2.4	2.4	5	5									
	6.6	0.2	18	21.8						21.8	8.3	8.3	32.1	32.1	93.6	93.6	6.8	6.8	2.4	2.4	5	5									
	1.0	0.1	248	21.9						21.9	8.3	8.3	30.6	30.6	100.5	100.5	7.4	7.4	2.4	2.4	4	4									
IM6	Sunny	Moderate	14:56	7.1						Surface	1.0	0.1	264	21.9	21.9	8.3	8.3	30.6	30.6	100.5	100.5	7.4	7.4	2.4	2.4	4	4	821060	805848		
											3.6	0.1	7	21.8	21.8	8.3	8.3	31.2	31.2	96.3	96.3	7.1	7.1	3.9	3.9	4	4				
											3.6	0.1	7	21.8	21.8	8.3	8.3	31.2	31.2	96.3	96.3	7.1	7.1	3.9	3.9	4	4				
					Middle	6.1	0.2	42	21.8	21.8	8.2	8.2	32.2	32.2	89.9	89.9	6.5	6.5	4.6	4.6	4	4									
						6.1	0.2	45	21.8	21.8	8.2	8.2	32.2	32.2	89.9	89.9	6.5	6.5	4.5	4.5	5	5									
						1.0	0.2	256	21.9	21.9	8.3	8.3	30.5	30.5	99.7	99.7	7.3	7.3	2.9	2.9	6	6									
					IM7	Sunny	Moderate	14:48	8.2	Surface	1.0	0.2	281	21.9	21.9	8.3	8.3	30.5	30.5	99.7	99.7	7.3	7.3	2.9	2.9	5	5			821340	806816
											4.1	0.0	336	21.9	21.9	8.3	8.3	31.1	31.1	97.3	97.3	7.1	7.1	3.1	3.1	5	5				
											4.1	0.0	355	21.9	21.9	8.3	8.3	31.1	31.1	97.3	97.3	7.1	7.1	3.2	3.2	5	5				
Middle	7.2	0.1	75	21.8						21.8	8.3	8.3	32.0	32.0	94.8	94.8	6.9	6.9	3.9	3.9	4	4									
	7.2	0.1	80	21.8						21.8	8.3	8.3	32.0	32.0	94.8	94.8	6.9	6.9	3.8	3.8	4	4									
	1.0	0.1	62	22.5						22.5	8.2	8.2	31.1	31.1	98.7	98.7	7.1	7.1	3.9	3.9	4	4									
IM8	Fine	Calm	15:01	7.4						Surface	1.0	0.1	62	22.5	22.5	8.2	8.2	31.1	31.1	98.7	98.7	7.1	7.1	3.9	3.9	4	4	821846	808140		
											3.7	0.1	44	22.4	22.4	8.2	8.2	31.2	31.2	98.8	98.9	7.2	7.2	4.1	4.1	4	4				
											3.7	0.2	44	22.3	22.4	8.2	8.2	31.3	31.2	98.9	98.9	7.2	7.2	4.0	4.0	4	4				
					Middle	6.4	0.1	55	22.1																						

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

Water Quality Monitoring

Water Quality Monitoring Results on **25 November 21 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)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA		
IM9	Fine	Calm	15:06	7.2	Surface	1.0	0.2	43	22.6	22.6	8.2	8.2	30.9	30.9	99.1	99.2	7.2	7.2	2.0	7.2	4	4	822076	808798
						1.0	0.2	43	22.6	8.2	8.2	30.9	30.9	99.1	99.2	7.2	7.2	2.1	7.2	5				
						3.6	0.2	61	22.4	22.4	8.2	8.2	31.0	31.0	99.2	99.2	7.2	7.2	3.1	7.2	4			
					3.6	0.2	61	22.3	22.4	8.2	8.2	31.1	31.0	99.1	99.2	7.2	7.2	3.2	7.2	4				
					6.2	0.2	48	22.1	22.1	8.2	8.2	31.2	31.3	98.6	98.5	7.2	7.2	4.7	7.2	4				
					6.2	0.2	51	22.0	22.1	8.2	8.2	31.3	31.3	98.3	98.5	7.2	7.2	4.6	7.2	3				
IM10	Fine	Calm	15:13	7.6	Surface	1.0	0.3	85	22.6	22.6	8.2	8.2	31.5	31.5	99.3	99.3	7.2	7.2	1.6	7.2	3	3	822361	809796
						1.0	0.3	85	22.6	22.6	8.2	8.2	31.5	31.5	99.2	99.3	7.2	7.2	1.6	7.2	3			
						3.8	0.2	70	22.4	22.4	8.2	8.2	31.8	31.9	99.2	99.3	7.2	7.2	2.9	7.2	3			
					3.8	0.3	73	22.4	22.4	8.2	8.2	31.9	31.9	99.4	99.3	7.2	7.2	2.8	7.2	3				
					6.6	0.1	50	22.1	22.1	8.2	8.2	32.0	31.9	100.6	100.8	7.3	7.4	3.8	7.4	4				
					6.6	0.1	50	22.0	22.1	8.2	8.2	31.9	31.9	101.0	100.8	7.4	7.4	3.7	7.4	4				
IM11	Fine	Calm	15:23	7.8	Surface	1.0	0.1	41	22.7	22.7	8.2	8.2	32.2	32.2	99.0	99.0	7.1	7.1	2.7	7.1	3	4	822049	811459
						1.0	0.1	44	22.7	22.7	8.2	8.2	32.2	32.2	99.0	99.0	7.1	7.1	2.6	7.1	3			
						3.9	0.1	49	22.6	22.6	8.2	8.2	32.2	32.2	99.3	99.4	7.1	7.1	3.3	7.1	3			
					3.9	0.1	49	22.6	22.6	8.2	8.2	32.2	32.2	99.4	99.4	7.1	7.1	3.3	7.1	4				
					6.8	0.1	20	22.2	22.2	8.2	8.2	32.5	32.5	98.8	98.7	7.1	7.1	4.4	7.1	5				
					6.8	0.1	21	22.1	22.2	8.2	8.2	32.6	32.5	98.6	98.6	7.1	7.1	4.3	7.1	5				
IM12	Fine	Calm	15:30	9.6	Surface	1.0	0.2	136	22.7	22.7	8.2	8.2	32.2	32.2	97.9	98.0	7.0	7.0	1.6	7.0	7	7	821481	812028
						1.0	0.2	136	22.7	22.7	8.2	8.2	32.2	32.2	98.0	98.0	7.0	7.0	1.6	7.0	8			
						4.8	0.2	144	22.7	22.7	8.2	8.2	32.2	32.2	98.6	98.6	7.1	7.1	2.4	7.1	7			
					4.8	0.2	155	22.6	22.6	8.2	8.2	32.2	32.2	98.6	98.6	7.1	7.1	2.5	7.1	7				
					8.6	0.1	165	22.3	22.3	8.2	8.2	32.4	32.5	98.4	98.4	7.1	7.1	3.3	7.1	6				
					8.6	0.1	166	22.2	22.3	8.2	8.2	32.5	32.5	98.4	98.4	7.1	7.1	3.2	7.1	6				
SR1A	Fine	Calm	16:35	4.8	Surface	1.0	-	-	22.8	22.8	8.1	8.1	32.0	32.0	99.5	99.5	7.1	7.1	3.1	7.1	5	6	819981	812663
						1.0	-	-	22.8	22.8	8.1	8.1	32.0	32.0	99.5	99.5	7.1	7.1	3.1	7.1	5			
						2.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
					2.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
					3.8	-	-	22.9	22.9	8.1	8.1	31.9	31.9	99.9	99.9	7.1	7.1	4.2	7.1	7				
					3.8	-	-	22.9	22.9	8.1	8.1	31.9	31.9	99.9	99.9	7.1	7.1	4.1	7.1	7				
SR2	Fine	Calm	16:49	4.0	Surface	1.0	0.2	81	22.7	22.7	8.1	8.1	32.2	32.2	96.8	96.8	6.9	6.9	3.7	6.9	7	7	821444	814158
						1.0	0.2	83	22.7	22.7	8.1	8.1	32.2	32.2	96.8	96.8	6.9	6.9	3.6	6.9	7			
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
					3.0	0.1	68	22.7	22.7	8.1	8.1	32.2	32.2	96.8	96.9	6.9	6.9	4.7	6.9	7				
					3.0	0.1	68	22.7	22.7	8.1	8.1	32.2	32.2	96.9	96.9	6.9	6.9	4.8	6.9	7				
SR3	Fine	Calm	14:56	8.8	Surface	1.0	0.0	181	22.6	22.6	8.3	8.3	31.0	31.0	100.2	100.3	7.2	7.2	5.1	7.2	5	5	822169	807552
						1.0	0.0	188	22.6	22.6	8.3	8.3	31.0	31.0	100.3	100.3	7.2	7.2	5.1	7.2	5			
						4.4	0.0	354	22.6	22.6	8.3	8.3	31.0	31.0	100.4	100.5	7.3	7.3	6.8	7.3	5			
					4.4	0.0	357	22.5	22.6	8.3	8.3	31.1	31.0	100.5	100.5	7.3	7.3	6.7	7.3	4				
					7.8	0.1	73	22.2	22.2	8.3	8.3	31.3	31.3	101.0	101.1	7.3	7.4	7.2	7.4	4				
					7.8	0.1	73	22.2	22.2	8.3	8.3	31.3	31.3	101.2	101.2	7.4	7.4	7.1	7.4	4				
SR4A	Sunny	Calm	16:16	9.0	Surface	1.0	0.1	74	22.2	22.2	8.3	8.3	32.1	32.1	102.8	102.8	7.4	7.4	1.4	7.4	3	4	817168	807802
						1.0	0.1	79	22.2	22.2	8.3	8.3	32.1	32.1	102.8	102.8	7.4	7.4	1.4	7.4	3			
						4.5	0.1	65	22.1	22.1	8.3	8.3	32.2	32.2	101.3	101.3	7.3	7.3	2.5	7.3	4			
					4.5	0.1	68	22.1	22.1	8.3	8.3	32.2	32.2	101.3	101.3	7.3	7.3	2.6	7.3	4				
					8.0	0.2	77	22.0	22.0	8.3	8.3	32.4	32.4	98.7	98.7	7.2	7.2	3.1	7.2	5				
					8.0	0.2	78	22.0	22.0	8.3	8.3	32.4	32.4	98.7	98.7	7.2	7.2	3.1	7.2	5				
SR5A	Sunny	Calm	16:31	3.8	Surface	1.0	0.1	211	21.8	21.8	8.2	8.2	31.8	31.8	95.8	95.8	7.0	7.0	3.4	7.0	5	4	816601	810719
						1.0	0.1	230	21.8	21.8	8.2	8.2	31.8	31.8	95.7	95.7	7.0	7.0	3.4	7.0	4			
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
					2.8	0.1	241	21.7	21.7	8.2	8.2	31.8	31.8	94.1	94.1	6.9	6.9	5.2	6.9	4				
					2.8	0.1	255	21.7	21.7	8.2	8.2	31.8	31.8	94.1	94.1	6.9	6.9	5.2	6.9	3				
SR6A	Sunny	Calm	16:59	3.4	Surface	1.0	0.0	162	22.1	22.1	8.3	8.3	31.4	31.4	105.9	105.9	7.7	7.7	3.4	7.7	4	6	817976	814743
						1.0	0.0	173	22.1	22.1	8.3	8.3	31.4	31.4	105.9	105.9	7.7	7.7	3.3	7.7	4			
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
					2.4	0.0	90	22.1	22.1	8.3	8.3	31.4	31.4	104.9	104.9	7.6	7.6	4.3	7.6	7				
					2.4	0.0	96	22.1	22.1	8.3	8.3	31.4	31.4	104.9	104.9	7.6	7.6	4.3	7.6	7				
SR7	Fine	Calm	17:43	16.0	Surface	1.0	0.0	182	23.4	23.4	8.0	8.0	32.7	32.7	91.5	91.5	6.5	6.5	4.1	6.5	5	6	823658	823761
						1.0	0.0	192	23.4	23.4	8.0	8.0	32.7	32.7	91.5	91.5	6.5	6.5	4.2	6.5	5			
						8.0	0.0	13	23.4	23.4	8.0	8.0	32.7	32.7	91.6	91.6	6.5	6.5	5.5	6.5	6			
					8.0	0.0	13	23.4	23.4	8.0	8.0	32.7	32.7	91.6	91.6	6.5	6.5	5.6	6.5	6				
					15.0	0.0	12	23.4	23.4	8.0	8.0	32.7	32.7	91.8	91.8	6.5	6.5	6.2	6.5	7				
					15.0	0.0	12	23.3	23.4	8.0	8.0	32.7	32.7	91.8	91.8	6.5	6.5	6.2	6.5	7				
SR8	Fine	Calm	15:38	4.6	Surface	1.0	-	-	22.8	22.8	8.1	8.1	32.1	32.1	99.4	99.3	7.1	7.1	2.5	7.1	3	5	820369	811604
						1.0	-	-	22.7	22.7	8.1	8.1	32.1	32.1	99.2	99.3	7.1	7.1	2.5	7.1	4			
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
					3.6	-	-	22.6	22.7	8.1	8.1	32.1	32.1	98.8	98.9									

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

**Water Quality Monitoring Results on 27 November 21 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)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)							
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA									
C1	Cloudy	Moderate	05:11	7.7	Surface	1.0	0.3	51	22.5	22.5	8.1	8.1	33.5	33.5	99.6	99.6	7.1	7.1	7.8	5	5	815599	804228								
						1.0	0.3	53	22.5	8.1	8.1	33.5	33.5	99.6	99.6	7.1	7.1	8.1	5												
						3.9	0.3	34	22.5	8.1	8.1	33.5	33.5	99.3	99.3	7.1	7.1	9.3	5												
					Middle	3.9	0.3	36	22.5	22.5	8.1	8.1	33.5	33.5	99.3	99.3	7.1	7.1	9.3	5											
						6.7	0.3	35	22.5	22.5	8.1	8.1	33.5	33.5	99.1	99.1	7.1	7.1	11.8	6											
						6.7	0.3	35	22.5	22.5	8.1	8.1	33.5	33.5	99.1	99.1	7.1	7.1	11.9	6											
					C2	Fine	Calm	07:16	11.6	Surface	1.0	0.6	191	22.3	22.3	7.5	7.5	29.6	29.6	95.4				95.3	7.0	7.0	2.8	3	4	825698	806955
											1.0	0.6	191	22.3	22.3	7.5	7.5	29.5	29.5	95.2				95.2	7.0	7.0	2.8	4			
											5.8	0.6	195	22.4	22.4	7.5	7.5	31.6	31.6	94.9				94.9	6.9	6.9	4.1	4			
Middle	5.8	0.6	197	22.4						22.4	7.5	7.5	31.6	31.6	94.9	94.9	6.9	6.9	4.1	4											
	10.6	0.5	193	22.3						22.3	7.5	7.6	31.6	31.6	94.9	95.0	6.9	6.9	5.2	4											
	10.6	0.5	196	22.3						22.3	7.7	7.6	31.6	31.6	95.0	95.0	6.9	6.9	5.2	5											
C3	Fine	Calm	05:01	11.0						Surface	1.0	0.3	83	22.7	22.7	7.6	7.6	32.5	32.5	91.0	91.0	6.5	6.5	3.0	3	3	822089	817823			
											1.0	0.3	87	22.7	22.7	7.6	7.6	32.5	32.5	91.0	91.0	6.5	6.5	3.1	2						
											5.5	0.2	61	22.7	22.7	7.6	7.6	32.6	32.6	91.1	91.1	6.5	6.5	4.8	3						
					Middle	5.5	0.3	62	22.6	22.6	7.6	7.6	32.6	32.6	91.1	91.1	6.5	6.5	4.9	3											
						10.0	0.2	53	22.6	22.6	7.6	7.6	32.5	32.5	91.2	91.2	6.5	6.5	5.2	3											
						10.0	0.3	53	22.6	22.6	7.6	7.6	32.6	32.6	91.2	91.2	6.5	6.5	5.1	4											
					IM1	Cloudy	Moderate	05:31	5.1	Surface	1.0	0.1	32	22.6	22.6	8.1	8.1	33.6	33.6	99.3	99.3	7.1	7.1	6.9	4				6	817947	807143
											1.0	0.1	32	22.6	22.6	8.1	8.1	33.6	33.6	99.3	99.3	7.1	7.1	6.9	4						
											-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Middle	-	-	-	-						-	-	-	-	-	-	-	-	-	-	-	-	-	-								
	4.1	0.0	63	22.6						22.6	8.1	8.1	33.6	33.6	98.9	98.9	7.0	7.0	8.9	7											
	4.1	0.0	67	22.6						22.6	8.1	8.1	33.6	33.6	98.9	98.9	7.0	7.0	9.0	7											
IM2	Cloudy	Moderate	05:38	6.8						Surface	1.0	0.2	332	22.3	22.3	8.1	8.1	33.3	33.3	99.7	99.7	7.2	7.2	7.1	7	7	818155	806178			
											1.0	0.3	305	22.3	22.3	8.1	8.1	33.3	33.3	99.7	99.7	7.2	7.2	7.1	8						
											3.4	0.2	329	22.2	22.2	8.1	8.1	33.4	33.4	99.6	99.6	7.1	7.1	7.9	7						
					Middle	3.4	0.2	359	22.2	22.2	8.1	8.1	33.4	33.4	99.6	99.6	7.1	7.1	8.2	7											
						5.8	0.2	319	22.2	22.2	8.1	8.1	33.4	33.4	100.0	100.0	7.2	7.2	9.0	7											
						5.8	0.2	339	22.2	22.2	8.1	8.1	33.4	33.4	100.0	100.0	7.2	7.2	9.0	7											
					IM3	Cloudy	Moderate	05:44	6.9	Surface	1.0	0.3	1	22.3	22.3	8.1	8.1	33.3	33.3	99.1	99.1	7.1	7.1	8.6	7				8	818806	805595
											1.0	0.3	1	22.3	22.3	8.1	8.1	33.3	33.3	99.1	99.1	7.1	7.1	8.1	7						
											3.5	0.2	354	22.2	22.2	8.1	8.1	33.3	33.3	98.8	98.8	7.1	7.1	10.9	8						
Middle	3.5	0.3	326	22.2						22.2	8.1	8.1	33.3	33.3	98.8	98.8	7.1	7.1	10.3	8											
	5.9	0.2	356	22.2						22.2	8.1	8.1	33.2	33.2	98.7	98.7	7.1	7.1	12.2	10											
	5.9	0.2	358	22.2						22.2	8.1	8.1	33.2	33.2	98.7	98.7	7.1	7.1	12.0	10											
IM4	Cloudy	Moderate	05:54	8.0						Surface	1.0	0.2	16	22.1	22.1	8.1	8.1	32.9	32.9	101.1	101.1	7.3	7.3	6.2	8	6	819730	804628			
											1.0	0.2	16	22.1	22.1	8.1	8.1	32.9	32.9	101.1	101.1	7.3	7.3	6.2	6						
											4.0	0.3	2	22.1	22.1	8.1	8.1	33.0	33.0	100.9	100.9	7.3	7.3	6.5	7						
					Middle	4.0	0.3	2	22.1	22.1	8.1	8.1	33.0	33.0	100.9	100.9	7.3	7.3	6.6	6											
						7.0	0.2	20	22.1	22.1	8.1	8.1	33.0	33.0	100.5	100.5	7.2	7.2	7.4	6											
						7.0	0.2	20	22.1	22.1	8.1	8.1	33.0	33.0	100.5	100.5	7.2	7.2	7.6	5											
					IM5	Cloudy	Moderate	06:02	7.7	Surface	1.0	0.5	351	22.1	22.1	8.1	8.1	32.8	32.8	101.2	101.2	7.3	7.3	8.2	7				6	820748	804844
											1.0	0.5	323	22.1	22.1	8.1	8.1	32.8	32.8	101.1	101.1	7.3	7.3	8.2	7						
											3.9	0.4	357	22.1	22.1	8.1	8.1	32.9	32.9	100.4	100.4	7.2	7.2	9.2	6						
Middle	3.9	0.5	357	22.1						22.1	8.1	8.1	32.9	32.9	100.4	100.4	7.2	7.2	9.4	5											
	6.7	0.4	358	22.1						22.1	8.1	8.1	32.9	32.9	100.2	100.2	7.2	7.2	10.3	5											
	6.7	0.4	329	22.1						22.1	8.1	8.1	32.9	32.9	100.2	100.2	7.2	7.2	10.4	5											
IM6	Cloudy	Moderate	06:10	7.0						Surface	1.0	0.0	21	22.0	22.0	8.1	8.1	32.2	32.2	102.2	102.2	7.4	7.4	7.0	5	5	821080	805810			
											1.0	0.0	21	22.0	22.0	8.1	8.1	32.2	32.2	102.1	102.1	7.4	7.4	7.1	5						
											3.5	0.1	357	22.0	22.0	8.1	8.1	32.3	32.3	101.7	101.7	7.4	7.4	7.9	5						
					Middle	3.5	0.1	328	22.0	22.0	8.1	8.1	32.3	32.3	101.6	101.6	7.4	7.4	8.0	4											
						6.0	0.1	342	22.0	22.0	8.1	8.1	32.3	32.3	101.5	101.5	7.4	7.4	8.3	4											
						6.0	0.1	315	22.0	22.0	8.1	8.1	32.3	32.3	101.5	101.5	7.4	7.4	8.3	4											
					IM7	Cloudy	Moderate	06:18	7.8	Surface	1.0	0.1	274	22.0	22.0	8.1	8.1	31.6	31.6	103.3	103.3	7.5	7.5	5.4	7				7	821372	806816
											1.0	0.1	295	22.0	22.0	8.1	8.1	31.7	31.7	103.2	103.2	7.5	7.5	5.6	7						
											3.9	0.1	325	22.0	22.0	8.1	8.1	32.3	32.3	102.3	102.3	7.4	7.4	8.2	7						
Middle	3.9	0.1	343	22.0						22.0	8.1	8.1	32.3	32.3	102.2	102.2	7.4	7.4	8.4	7											
	6.8	0.1	41	22.0						22.0	8.1	8.1	32.4	32.4	102.4	102.4	7.4	7.4	9.1	8											
	6.8	0.1	44	22.0						22.0	8.1	8.1	32.4	32.4	102.4	102.4	7.4	7.4	9.1	8											
IM8	Fine	Calm	06:42	7.4						Surface	1.0	0.5	169	21.9	21.9	8.0	8.0	30.7	30.7	95.7	95.7	7.0	7.0	1.9	4	3	821850	808147			
											1.0	0.6	171	21.9	21.9	8.0	8.0	30.8	30.8	95.6	95.6	6.9	6.9	1.9	4						
											3.7	0.5	176	22.0	22.0	8.0	8.0	31.3	31.3	95.3	95.3	6.9	6.9	2.6	3						
					Middle	3.7	0.5	189	22.0	22.0	8.0	8.0	31.4	31.4	95.3	95.3	6.9	6.9	2.7	3											
						6.4	0.3	232	22.1	22.1	8.0	8.0	31.5	31.5	95.7	95.7	7.0	7.0	3.5	3											
						6.4	0.3	246	22.1	22.1	8.0	8.0	31.3	31.3	95.9	95.9	7.0	7.0	3.5	2											

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

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

**Water Quality Monitoring Results on 27 November 21 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)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA		
IM9	Fine	Calm	06:35	6.8	Surface	1.0	0.1	262	22.2	22.2	8.0	8.0	32.3	32.3	94.6	94.6	6.8	6.8	1.4	3	4	822078	808794	
						1.0	0.1	263	22.2	8.0	8.0	32.3	32.3	94.5	94.5	6.8	6.8	1.5	3					
						3.4	0.1	223	22.2	8.0	8.0	32.3	32.3	94.3	94.3	6.8	6.8	2.8	4					
						3.4	0.1	243	22.2	8.0	8.0	32.3	32.3	94.3	94.3	6.8	6.8	2.8	4					
					Middle	5.8	0.1	261	22.1	22.2	8.0	8.0	32.3	32.3	94.1	94.2	6.8	6.8	3.6	6				
						5.8	0.1	285	22.2	22.2	8.0	8.0	32.3	32.3	94.2	94.2	6.8	6.8	3.6	5				
						1.0	0.3	181	22.2	22.2	7.9	7.9	32.2	32.2	94.9	94.9	6.9	6.9	1.4	4				
						1.0	0.3	183	22.2	22.2	7.9	7.9	32.2	32.2	94.8	94.8	6.9	6.9	1.5	4				
Bottom	3.8	0.3	161	22.2	22.2	7.9	7.9	32.2	32.2	94.7	94.7	6.8	6.8	2.6	4									
	3.8	0.3	163	22.2	22.2	7.9	7.9	32.2	32.2	94.7	94.7	6.8	6.8	2.7	4									
	6.6	0.2	154	22.2	22.2	7.9	7.9	32.2	32.2	94.6	94.7	6.8	6.9	3.0	3									
	6.6	0.2	159	22.2	22.2	7.9	7.9	32.2	32.2	94.7	94.7	6.9	6.9	3.1	4									
IM10	Fine	Calm	06:26	7.6	Surface	1.0	0.3	160	22.3	22.3	7.9	7.9	32.3	32.3	94.2	94.2	6.8	6.8	2.1	4	5	822080	811475	
						1.0	0.4	171	22.3	22.2	7.9	7.9	32.3	32.3	94.1	94.1	6.8	6.8	2.1	4				
						4.0	0.2	149	22.2	22.2	7.9	7.9	32.3	32.3	93.8	93.8	6.8	6.8	2.3	4				
						4.0	0.2	161	22.2	22.2	7.9	7.9	32.3	32.3	93.8	93.8	6.8	6.8	2.3	5				
					Middle	7.0	0.2	143	22.2	22.2	7.9	7.9	32.3	32.3	93.6	93.7	6.8	6.8	2.9	5				
						7.0	0.2	148	22.2	22.2	7.9	7.9	32.3	32.3	93.7	93.7	6.8	6.8	3.0	5				
						1.0	0.2	126	22.2	22.2	7.9	7.9	32.3	32.3	94.7	94.7	6.8	6.8	1.0	4				
						1.0	0.2	128	22.2	22.2	7.9	7.9	32.3	32.3	94.6	94.6	6.8	6.8	1.0	4				
Bottom	4.1	0.2	115	22.2	22.2	7.9	7.9	32.3	32.3	94.6	94.6	6.8	6.8	2.0	5									
	4.1	0.2	122	22.2	22.2	7.9	7.9	32.3	32.3	94.6	94.6	6.8	6.8	2.0	5									
	7.2	0.2	123	22.2	22.2	7.9	7.9	32.3	32.3	94.6	94.6	6.8	6.8	2.9	6									
	7.2	0.2	131	22.2	22.2	7.9	7.9	32.3	32.3	94.6	94.6	6.8	6.8	2.9	6									
IM11	Fine	Calm	06:14	8.0	Surface	1.0	0.2	126	22.2	22.2	8.2	8.2	32.0	32.0	95.6	95.6	6.9	6.9	1.3	2	5	821452	812041	
						1.0	0.2	128	22.2	22.2	8.2	8.2	32.0	32.0	95.6	95.6	6.9	6.9	1.3	2				
						2.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
						2.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
					Middle	4.0	-	-	22.2	22.2	8.2	8.2	32.0	32.0	95.6	95.6	6.9	6.9	2.3	4				
						4.0	-	-	22.2	22.2	8.2	8.2	32.0	32.0	95.6	95.6	6.9	6.9	2.3	4				
						1.0	0.3	65	22.3	22.3	7.9	7.9	32.3	32.3	92.2	92.2	6.7	6.7	4.5	3				
						1.0	0.3	67	22.3	22.3	7.9	7.9	32.3	32.3	92.2	92.2	6.7	6.7	4.3	4				
Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
	3.2	0.1	43	22.3	22.3	7.9	7.9	32.3	32.3	92.1	92.2	6.6	6.7	5.0	2									
	3.2	0.2	45	22.3	22.3	8.0	8.0	32.3	32.3	92.2	92.2	6.7	6.7	5.1	2									
IM12	Fine	Calm	06:00	8.2	Surface	1.0	0.5	232	22.3	22.3	8.0	8.0	31.9	32.0	94.7	94.7	6.8	6.8	2.5	4	4	821166	807565	
						1.0	0.5	253	22.3	22.3	8.0	8.0	32.0	32.0	94.6	94.6	6.8	6.8	2.4	4				
						4.3	0.4	244	22.2	22.2	8.0	8.0	32.3	32.3	94.3	94.3	6.8	6.8	4.0	4				
						4.3	0.4	246	22.2	22.2	8.0	8.0	32.3	32.3	94.3	94.3	6.8	6.8	3.9	4				
					Middle	7.6	0.4	265	22.2	22.2	8.0	8.0	32.3	32.3	94.4	94.4	6.8	6.8	4.8	3				
						7.6	0.4	290	22.2	22.2	8.0	8.0	32.3	32.3	94.4	94.4	6.8	6.8	4.7	3				
						1.0	0.4	221	22.5	22.5	8.1	8.1	33.4	33.4	99.7	99.7	7.1	7.1	5.1	7				
						1.0	0.4	234	22.5	22.5	8.1	8.1	33.4	33.4	99.6	99.6	7.1	7.1	5.2	7				
Bottom	4.5	0.3	234	22.6	22.6	8.1	8.1	33.5	33.5	99.2	99.2	7.1	7.1	5.5	7									
	4.5	0.3	241	22.6	22.6	8.1	8.1	33.5	33.5	99.2	99.2	7.1	7.1	5.5	6									
	8.0	0.2	210	22.5	22.5	8.1	8.1	33.5	33.5	98.8	98.8	7.0	7.0	5.8	6									
	8.0	0.2	225	22.5	22.5	8.1	8.1	33.5	33.5	98.8	98.8	7.0	7.0	5.8	6									
SR1A	Fine	Calm	05:39	5.0	Surface	1.0	0.0	342	22.2	22.2	8.1	8.1	33.0	33.0	101.0	101.0	7.3	7.3	6.0	8	3	819977	812658	
						1.0	0.0	348	22.2	22.2	8.1	8.1	33.0	33.0	101.0	101.0	7.3	7.3	6.0	9				
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
					Middle	3.6	0.0	354	22.3	22.3	8.1	8.1	33.1	33.1	101.2	101.3	7.3	7.3	6.5	8				
						3.6	0.0	359	22.3	22.3	8.1	8.1	33.1	33.1	101.3	101.3	7.3	7.3	6.5	8				
						1.0	0.1	22	22.6	22.6	8.1	8.1	32.5	32.5	105.9	105.9	7.6	7.6	9.5	7				
						1.0	0.1	23	22.6	22.6	8.1	8.1	32.5	32.5	105.9	105.9	7.6	7.6	9.5	8				
Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
	3.5	0.0	12	22.6	22.6	8.1	8.1	32.5	32.5	105.6	105.6	7.6	7.6	12.3	8									
	3.5	0.0	12	22.6	22.6	8.1	8.1	32.5	32.5	105.6	105.6	7.6	7.6	12.3	8									
SR2	Fine	Calm	05:27	4.2	Surface	1.0	0.3	65	22.3	22.3	7.9	7.9	32.3	32.3	92.2	92.2	6.7	6.7	4.5	3	3	821453	814145	
						1.0	0.3	67	22.3	22.3	7.9	7.9	32.3	32.3	92.2	92.2	6.7	6.7	4.3	4				
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
					Middle	3.2	0.1	43	22.3	22.3	7.9	7.9	32.3	32.3	92.1	92.2	6.6	6.7	5.0	2				
						3.2	0.2	45	22.3	22.3	8.0	8.0	32.3	32.3	92.2	92.2	6.7	6.7	5.1	2				
						1.0	0.4	221	22.5	22.5	8.1	8.1	33.4	33.4	99.7	99.7	7.1	7.1	5.1	7				
						1.0	0.4	234	22.5	22.5	8.1	8.1	33.4	33.4	99.6	99.6	7.1	7.1	5.2	7				
Bottom	4.5	0.3	234	22.6	22.6	8.1	8.1	33.5	33.5	99.2	99.2	7.1	7.1	5.5	7									
	4.5	0.3	241	22.6	22.6	8.1	8.1	33.5	33.5	99.2	99.2	7.1	7.1	5.5	6									
	8.0	0.2	210	22.5	22.5	8.1	8.1	33.5	33.5	98.8	98.8	7.0	7.0	5.8	6									
	8.0	0.2	225	22.5	22.5	8.1	8.1	33.5	33.5	98.8	98.8	7.0	7.0	5.8	6									
SR3	Fine	Calm	06:49	8.6	Surface	1.0	0.0	342	22.2	22.2	8.1	8.1	33.0	33.0	101.0	101.0	7.3	7.3	6.0	8	4	821193	807806	
						1.0	0.0	348	22.2	22.2	8.1	8.1	33.0	33.0	101.0	101.0	7.3	7.3	6.0	9				
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
					Middle	3.6	0.0	354	22.3	22.3	8.1	8.1	33.1	33.1	101.2	101.3	7.3	7.3	6.5	8				
						3.6	0.0	359	22.3	22.3	8.1	8.1	33.1	33.1	101.3	101.3	7.3	7.3	6.5	8				
						1.0	0.1	22	22.6	22.6	8.1	8.1	32.5	32.5	105.9	105.9	7.6	7.6	9					

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

**Water Quality Monitoring Results on 27 November 21 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)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA		
C1	Cloudy	Moderate	17:23	8.5	Surface	1.0	0.9	312	22.5	22.5	8.1	8.1	33.5	33.5	100.2	100.2	7.2	7.1	7.6	8.5	8	8	815610	804263
						1.0	0.9	329	22.5		8.1	8.1	33.5	33.5	100.1	100.1	7.1		7.8					
						4.3	0.6	321	22.4		8.1	8.1	33.6	33.6	99.7	99.7	7.1		9.0					
					Middle	4.3	0.7	352	22.4	8.1	8.1	33.6	33.6	99.8	99.8	7.1	9.7							
						7.5	0.7	318	22.4	8.1	8.1	33.5	33.5	99.9	99.9	7.1	9.0							
						7.5	0.8	331	22.4	8.1	8.1	33.5	33.5	100.0	100.0	7.1	8.0							
C2	Fine	Calm	16:26	11.4	Surface	1.0	0.6	50	22.3	22.3	8.0	8.0	31.2	31.3	95.6	95.6	6.9	6.9	1.0	1.7	3	3	825683	806940
						1.0	0.6	54	22.3		8.0	8.0	31.3	31.3	95.5	95.5	6.9		1.0					
						5.7	0.5	46	22.4		7.9	7.9	31.7	31.7	94.9	94.9	6.9		1.5					
					Middle	5.7	0.5	49	22.4	7.9	7.9	31.7	31.7	94.9	94.9	6.9	1.5							
						10.4	0.3	39	22.4	7.9	7.9	31.7	31.7	95.0	95.0	6.9	2.6							
						10.4	0.3	39	22.4	8.0	8.0	31.7	31.7	95.2	95.2	6.9	2.7							
C3	Fine	Calm	18:34	12.0	Surface	1.0	0.3	253	23.0	23.0	8.2	8.2	32.4	32.4	93.7	93.7	6.7	6.7	1.5	2.6	4	4	822122	817789
						1.0	0.3	275	23.0		8.2	8.2	32.4	32.4	93.7	93.7	6.7		1.5					
						6.0	0.3	250	23.0		8.2	8.2	32.4	32.4	94.1	94.1	6.7		2.8					
					Middle	6.0	0.3	252	23.0	8.2	8.2	32.4	32.4	94.2	94.2	6.7	2.7							
						11.0	0.3	249	23.0	8.2	8.2	32.4	32.4	95.2	95.2	6.8	3.5							
						11.0	0.3	258	22.9	8.2	8.2	32.4	32.4	95.6	95.6	6.8	3.5							
IM1	Cloudy	Moderate	17:03	5.0	Surface	1.0	0.2	352	22.7	22.7	8.1	8.1	33.5	33.5	103.2	103.1	7.3	7.3	6.7	7.6	4	5	817932	807138
						1.0	0.2	324	22.7		8.1	8.1	33.5	33.5	102.9	102.9	7.3		7.0					
						-	-	-	-		-	-	-	-	-	-	-		-					
					Middle	4.0	0.1	346	22.7	8.1	8.1	33.4	33.4	101.6	101.7	7.2	8.2							
						4.0	0.1	318	22.7	8.1	8.1	33.4	33.4	101.7	101.7	7.2	8.4							
						-	-	-	-	-	-	-	-	-	-	-	-							
IM2	Cloudy	Moderate	16:56	6.2	Surface	1.0	1.1	300	22.5	22.5	8.1	8.1	33.4	33.4	102.0	102.0	7.3	7.3	7.2	7.9	6	7	818169	806146
						1.0	1.2	327	22.5		8.1	8.1	33.4	33.4	102.0	102.0	7.3		7.2					
						3.1	1.1	317	22.4		8.1	8.1	33.3	33.3	101.7	101.7	7.3		7.9					
					Middle	3.1	1.1	324	22.3	8.1	8.1	33.3	33.3	101.6	101.6	7.3	8.4							
						5.2	0.9	295	22.3	8.1	8.1	33.3	33.3	101.5	101.5	7.3	8.6							
						5.2	1.0	309	22.3	8.1	8.1	33.3	33.3	101.6	101.6	7.3	8.1							
IM3	Cloudy	Moderate	16:50	7.4	Surface	1.0	1.2	169	22.3	22.3	8.1	8.1	33.2	33.2	100.8	100.8	7.2	7.2	5.7	20.2	4	5	818771	805573
						1.0	1.3	171	22.3		8.1	8.1	33.2	33.2	100.7	100.7	7.2		5.8					
						3.7	1.1	171	22.3		8.1	8.1	33.2	33.2	100.1	100.1	7.2		8.2					
					Middle	3.7	1.2	180	22.3	8.1	8.1	33.2	33.2	100.1	100.1	7.2	9.4							
						6.4	1.2	162	22.2	8.1	8.1	33.2	33.2	100.3	100.3	7.2	46.1							
						6.4	1.2	173	22.2	8.1	8.1	33.2	33.2	100.3	100.3	7.2	46.1							
IM4	Cloudy	Moderate	16:42	8.1	Surface	1.0	1.5	327	22.3	22.3	8.2	8.2	32.8	32.8	104.5	104.5	7.5	7.5	6.5	7.6	5	5	819729	804617
						1.0	1.6	333	22.3		8.2	8.2	32.9	32.9	104.5	104.5	7.5		6.6					
						4.1	1.7	312	22.4		8.1	8.1	33.2	33.2	104.1	104.1	7.5		7.7					
					Middle	4.1	1.7	315	22.4	8.1	8.1	33.2	33.2	104.0	104.0	7.5	7.8							
						7.1	1.6	336	22.4	8.1	8.1	33.3	33.3	103.3	103.3	7.4	8.6							
						7.1	1.7	357	22.4	8.1	8.1	33.3	33.3	103.3	103.3	7.4	8.7							
IM5	Cloudy	Moderate	16:36	7.5	Surface	1.0	0.7	143	22.0	22.0	8.1	8.1	31.8	31.8	103.6	103.6	7.5	7.5	5.1	5.3	6	5	820721	804868
						1.0	0.7	145	22.0		8.1	8.1	31.8	31.8	103.6	103.6	7.5		5.1					
						3.8	0.7	152	22.0		8.1	8.1	31.8	31.8	102.8	102.8	7.5		5.2					
					Middle	3.8	0.8	158	22.0	8.1	8.1	31.8	31.8	102.7	102.7	7.5	5.3							
						6.5	0.6	149	22.0	8.1	8.1	31.9	31.9	102.3	102.3	7.4	5.4							
						6.5	0.7	152	22.0	8.1	8.1	31.8	31.8	102.3	102.3	7.4	5.5							
IM6	Cloudy	Moderate	16:30	7.4	Surface	1.0	0.8	336	22.0	22.0	8.1	8.1	31.5	31.5	104.7	104.7	7.6	7.6	5.2	5.6	3	4	821071	805850
						1.0	0.8	347	22.0		8.1	8.1	31.5	31.5	104.6	104.6	7.6		5.3					
						3.7	0.8	340	22.0		8.1	8.1	31.5	31.5	104.0	104.0	7.6		5.6					
					Middle	3.7	0.9	351	22.0	8.1	8.1	31.5	31.5	104.0	104.0	7.6	5.7							
						6.4	0.8	324	22.0	8.1	8.1	31.5	31.5	103.8	103.8	7.6	6.0							
						6.4	0.9	336	22.0	8.1	8.1	31.5	31.5	103.8	103.8	7.6	6.0							
IM7	Cloudy	Moderate	16:26	7.5	Surface	1.0	0.7	313	22.1	22.1	8.1	8.1	31.3	31.3	106.2	106.2	7.7	7.7	4.6	5.2	4	4	821342	806847
						1.0	0.8	313	22.1		8.1	8.1	31.3	31.3	106.1	106.1	7.7		4.7					
						3.8	0.8	320	22.0		8.2	8.2	31.4	31.4	105.4	105.4	7.7		5.4					
					Middle	3.8	0.8	348	22.0	8.2	8.2	31.4	31.4	105.3	105.3	7.7	5.5							
						6.5	0.6	314	22.0	8.2	8.2	31.4	31.4	105.2	105.2	7.7	5.5							
						6.5	0.7	327	22.0	8.2	8.2	31.4	31.4	105.2	105.2	7.7	5.4							
IM8	Fine	Calm	16:50	7.4	Surface	1.0	0.4	258	22.4	22.4	8.2	8.2	31.5	31.5	98.2	98.2	7.1	7.1	3.0	4.1	3	3	821843	808158
						1.0	0.4	264	22.4		8.2	8.2	31.5	31.5	98.1	98.1	7.1		3.1					
						3.7	0.3	261	22.4		8.2	8.2	31.6	31.6	97.8	97.8	7.1		4.2					
					Middle	3.7	0.3	280	22.3	8.2	8.2	31.6	31.6	97.8	97.8	7.1	4.1							
						6.4	0.3	271	22.4	8.2	8.2	31.6	31.6	97.7	97.7	7.1	5.1							
						6.4	0.3	273	22.4	8.2	8.2	31.5	31.5	97.8	97.8	7.1	5.1							

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



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

Water Quality Monitoring

Water Quality Monitoring Results on 30 November 21 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)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA			
C1	Misty	Moderate	08:47	7.4	Surface	1.0	0.2	192	22.8	22.8	8.1	8.1	33.8	33.8	100.8	100.8	7.1	7.1	5.6	5.6	5	815607	804268		
						1.0	0.3	197	22.8	8.1	8.1	33.8	33.8	100.8	100.8	7.1	7.1	5.7	5.7						
					Middle	3.7	0.3	182	22.8	22.8	8.1	8.1	33.8	33.8	100.6	100.6	7.1	7.1	6.6	6.6				5	5
						3.7	0.3	197	22.8	22.8	8.1	8.1	33.8	33.8	100.6	100.6	7.1	7.1	6.6	6.6				5	5
					Bottom	6.4	0.2	212	22.8	22.8	8.1	8.1	33.8	33.8	100.8	100.8	7.1	7.1	7.1	7.1				6	6
						6.4	0.3	232	22.8	22.8	8.1	8.1	33.8	33.8	100.8	100.8	7.1	7.1	7.0	7.0				6	6
C2	Fine	Moderate	10:40	11.2	Surface	1.0	0.6	151	22.0	22.0	8.2	8.2	31.7	31.7	103.0	103.0	7.5	7.5	8.8	8.8	4	825665	806932		
						1.0	0.7	160	22.0	22.0	8.2	8.2	31.7	31.7	102.9	102.9	7.5	7.5	8.8	8.8					
					Middle	5.6	0.4	155	22.1	22.1	8.2	8.2	32.0	32.0	97.3	97.3	7.1	7.1	9.3	9.3				4	4
						5.6	0.4	157	22.1	22.1	8.2	8.2	32.0	32.0	97.2	97.2	7.0	7.0	9.4	9.4				4	4
					Bottom	10.2	0.4	161	22.1	22.1	8.2	8.2	31.9	31.9	97.2	97.2	7.1	7.1	9.3	9.3				4	4
						10.2	0.4	165	22.1	22.1	8.2	8.2	31.9	31.9	97.2	97.2	7.1	7.1	9.2	9.2				5	5
C3	Fine	Moderate	08:05	11.9	Surface	1.0	0.1	69	22.3	22.3	8.2	8.2	32.5	32.5	89.9	89.9	6.5	6.5	8.3	8.3	3	822117	817822		
						1.0	0.2	70	22.3	22.3	8.2	8.2	32.5	32.5	89.9	89.9	6.5	6.5	8.3	8.3					
					Middle	6.0	0.2	59	22.3	22.3	8.2	8.2	32.5	32.5	90.1	90.2	6.5	6.5	8.3	8.3				3	3
						6.0	0.2	62	22.3	22.3	8.2	8.2	32.5	32.5	90.2	90.2	6.5	6.5	8.2	8.2				3	3
					Bottom	10.9	0.2	62	22.3	22.3	8.2	8.2	32.5	32.5	91.2	91.3	6.6	6.6	8.3	8.3				3	3
						10.9	0.2	66	22.3	22.3	8.2	8.2	32.5	32.5	91.3	91.3	6.6	6.6	8.3	8.3				4	4
IM1	Misty	Moderate	09:07	4.8	Surface	1.0	0.1	193	22.6	22.6	8.1	8.1	33.3	33.3	107.2	107.2	7.6	7.6	5.2	5.2	6	817961	807114		
						1.0	0.1	203	22.6	22.6	8.1	8.1	33.3	33.3	107.1	107.1	7.6	7.6	5.2	5.2					
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-
					Bottom	3.8	0.1	191	22.6	22.6	8.1	8.1	33.3	33.3	106.8	106.8	7.6	7.6	6.1	6.1				7	7
						3.8	0.1	198	22.6	22.6	8.1	8.1	33.3	33.3	106.7	106.7	7.6	7.6	6.1	6.1				7	7
IM2	Misty	Moderate	09:14	6.6	Surface	1.0	0.1	174	22.5	22.5	8.1	8.1	33.3	33.3	107.1	107.1	7.7	7.7	4.2	4.2	7	818153	806166		
						1.0	0.1	190	22.5	22.5	8.1	8.1	33.3	33.3	107.0	107.1	7.6	7.6	4.2	4.2					
					Middle	3.3	0.1	173	22.5	22.5	8.1	8.1	33.3	33.3	106.6	106.6	7.6	7.6	5.4	5.4				7	7
						3.3	0.1	173	22.5	22.5	8.1	8.1	33.3	33.3	106.5	106.5	7.6	7.6	5.5	5.5				7	7
					Bottom	5.6	0.1	172	22.5	22.5	8.1	8.1	33.2	33.2	105.9	105.9	7.6	7.6	6.5	6.5				7	7
						5.6	0.1	185	22.5	22.5	8.1	8.1	33.2	33.2	105.8	105.8	7.6	7.6	6.4	6.4				7	7
IM3	Misty	Moderate	09:20	6.6	Surface	1.0	0.2	156	22.5	22.5	8.1	8.1	33.2	33.2	106.8	106.8	7.6	7.6	2.7	2.7	8	818780	805601		
						1.0	0.2	162	22.5	22.5	8.1	8.1	33.2	33.2	106.8	106.8	7.6	7.6	2.6	2.6					
					Middle	3.3	0.2	153	22.5	22.5	8.1	8.1	33.2	33.2	106.5	106.5	7.6	7.6	3.7	3.7				8	8
						3.3	0.2	156	22.5	22.5	8.1	8.1	33.2	33.2	106.4	106.4	7.6	7.6	3.6	3.6				8	8
					Bottom	5.6	0.1	156	22.5	22.5	8.1	8.1	33.2	33.2	106.1	106.1	7.6	7.6	4.8	4.8				10	10
						5.6	0.1	156	22.5	22.5	8.1	8.1	33.2	33.2	106.0	106.0	7.6	7.6	4.9	4.9				10	10
IM4	Misty	Moderate	09:31	8.2	Surface	1.0	0.7	183	22.4	22.4	8.1	8.1	32.3	32.3	105.6	105.6	7.6	7.6	5.2	5.2	6	819729	804589		
						1.0	0.7	200	22.4	22.4	8.1	8.1	32.3	32.3	105.5	105.5	7.6	7.6	5.3	5.3					
					Middle	4.1	0.6	185	22.4	22.4	8.1	8.1	32.4	32.4	104.9	104.9	7.6	7.6	6.2	6.2				7	7
						4.1	0.6	185	22.4	22.4	8.1	8.1	32.4	32.4	104.9	104.9	7.6	7.6	6.2	6.2				6	6
					Bottom	7.2	0.5	185	22.4	22.4	8.1	8.1	32.4	32.4	104.8	104.8	7.5	7.5	7.0	7.0				6	6
						7.2	0.5	193	22.4	22.4	8.1	8.1	32.4	32.4	104.8	104.8	7.5	7.5	7.1	7.1				5	5
IM5	Misty	Moderate	09:40	8.0	Surface	1.0	0.6	191	22.3	22.3	8.1	8.1	32.3	32.3	108.4	108.4	7.8	7.8	6.9	6.9	6	820757	804887		
						1.0	0.7	201	22.3	22.3	8.1	8.1	32.3	32.3	108.3	108.3	7.8	7.8	6.9	6.9					
					Middle	4.0	0.5	199	22.4	22.4	8.1	8.1	32.6	32.6	103.9	103.8	7.5	7.5	8.2	8.2				6	6
						4.0	0.5	202	22.4	22.4	8.1	8.1	32.6	32.6	103.6	103.6	7.4	7.4	8.2	8.2				5	5
					Bottom	7.0	0.6	221	22.4	22.4	8.1	8.1	32.8	32.8	103.5	103.6	7.4	7.4	9.1	9.1				5	5
						7.0	0.7	230	22.4	22.4	8.1	8.1	32.8	32.8	103.7	103.7	7.4	7.4	9.1	9.1				5	5
IM6	Misty	Moderate	09:54	7.0	Surface	1.0	0.3	224	22.3	22.3	8.2	8.2	32.3	32.3	108.5	108.5	7.8	7.8	2.3	2.3	5	821036	805834		
						1.0	0.4	238	22.3	22.3	8.2	8.2	32.3	32.3	108.5	108.5	7.8	7.8	2.4	2.4					
					Middle	3.5	0.4	240	22.3	22.3	8.2	8.2	32.3	32.3	108.6	108.6	7.8	7.8	3.4	3.4				5	5
						3.5	0.4	250	22.3	22.3	8.2	8.2	32.3	32.3	108.6	108.6	7.8	7.8	3.4	3.4				4	4
					Bottom	6.0	0.4	213	22.3	22.3	8.2	8.2	32.3	32.2	108.8	108.8	7.9	7.9	4.3	4.3				4	4
						6.0	0.4	229	22.3	22.3	8.2	8.2	32.2	32.2	108.8	108.8	7.9	7.9	4.2	4.2				4	4
IM7	Misty	Moderate	09:58	8.2	Surface	1.0	0.3	215	22.2	22.2	8.2	8.2	31.9	31.9	110.8	110.7	8.0	8.0	1.9	1.9	7	821363	806852		
						1.0	0.3	223	22.2	22.2	8.2	8.2	31.9	31.9	110.6	110.6	8.0	8.0	1.8	1.8					
					Middle	4.1	0.4	226	22.3	22.3	8.1	8.1	32.0	32.0	107.7	107.6	7.8	7.8	3.0	3.0				7	7
						4.1	0.5	246	22.3	22.3	8.1	8.1	32.1	32.1	107.5	107.5	7.8	7.8	3.0	3.0				7	7
					Bottom	7.2	0.3	232	22.3	22.3	8.1	8.1	32.1	32.0	108.0	108.0	7.8	7.8	3.7	3.7				8	8
						7.2	0.3	234	22.3	22.3	8.1	8.1	31.9	32.0	107.9	108.0	7.8	7.8	3.7	3.7				8	8
IM8	Fine	Moderate	10:06	7.0	Surface	1.0	0.2	149	21.7	21.7	8.3	8.3	31.2	31.2	103.6	103.6	7.6	7.6	8.8	8.8	3	821845	808156		
						1.0	0.2	158	21.7	21.7	8.3	8.3	31.2	31.2	103.5	103.5	7.6	7.6	8.7	8.7					
					Middle	3.5	0.1	166	21.7	21.7	8.3	8.3	31.3	31.3	101.1	101.0	7.4	7.4	9.9	9.9				3	3
						3.5	0.1	168	21.7	21.7	8.3	8.3	31.3	31.3	100.9	100.9	7.4	7.4	10.2	10.2				3	3
					Bottom	6.0	0.0	152	21.8	21.8	8.2	8.2	31.5	31.5	100.3	100.4	7.3	7.3	11.6	11.6				3	3
						6.0	0.0	155	21.8	21.8	8.2	8.2	31.5	31.5	100.4	100.4	7.3	7.3	11.8						



**Expansion of Hong Kong International Airport into a Three-Runway System**  
**Water Quality Monitoring**  
**Water Quality Monitoring Results on 30 November 21 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)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)				
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA						
IM9	Fine	Moderate	09:59	6.7	Surface	1.0	0.2	119	21.8	21.8	8.3	8.3	31.5	31.5	105.0	105.0	7.7	7.4	7.6	7.6	8.4	3	4	822098	808833			
						1.0	0.2	125	21.8	21.8	8.3	8.3	31.5	31.5	105.0	105.0	7.7	7.4	7.6	7.6	8.4	3						
					Middle	3.4	0.3	114	21.8	21.8	8.3	8.3	31.5	31.5	102.8	102.8	7.5	7.4	7.5	7.4	7.5	11.5				4		
						3.4	0.3	114	21.8	21.8	8.3	8.3	31.5	31.5	102.6	102.6	7.5	7.4	7.5	7.4	7.5	11.6				4		
					Bottom	5.7	0.2	99	21.8	21.8	8.2	8.2	31.5	31.5	101.9	101.9	7.4	7.4	7.4	7.4	7.4	14.5				6		
						5.7	0.2	101	21.8	21.8	8.2	8.2	31.5	31.5	101.8	101.8	7.4	7.4	7.4	7.4	7.4	14.9				5		
IM10	Fine	Moderate	09:49	7.3	Surface	1.0	0.5	109	21.8	21.8	8.2	8.2	31.8	31.8	100.5	100.4	7.3	7.3	7.3	7.3	9.4	4	4	822385	809812			
						1.0	0.6	114	21.8	21.8	8.2	8.2	31.8	31.8	100.2	99.0	7.3	7.2	7.3	7.2	9.6	4						
					Middle	3.7	0.5	112	21.9	21.9	8.2	8.2	31.8	31.8	99.0	99.0	7.2	7.2	7.2	7.2	10.4	4						
						3.7	0.5	118	21.9	21.9	8.2	8.2	31.8	31.8	98.9	98.9	7.2	7.2	7.2	7.2	10.6	4						
					Bottom	6.3	0.5	102	21.9	21.9	8.2	8.2	31.9	31.9	99.2	99.3	7.2	7.2	7.2	7.2	11.5	3						
						6.3	0.5	105	21.9	21.9	8.2	8.2	31.9	31.9	99.4	99.3	7.2	7.2	7.2	7.2	11.4	4						
IM11	Fine	Moderate	09:34	8.3	Surface	1.0	0.3	102	22.0	22.0	8.2	8.2	32.0	32.0	99.3	99.3	7.2	7.2	7.2	7.2	9.2	4	5	822039	811444			
						1.0	0.3	109	22.0	22.0	8.2	8.2	32.0	32.0	99.3	99.3	7.2	7.2	7.2	7.2	9.2	4						
					Middle	4.2	0.4	112	22.0	22.0	8.2	8.2	32.0	32.0	97.9	97.9	7.1	7.1	7.1	7.1	12.5	4						
						4.2	0.4	118	22.0	22.0	8.2	8.2	32.0	32.0	97.8	97.9	7.1	7.1	7.1	7.1	12.5	5						
					Bottom	7.3	0.3	125	22.0	22.0	8.2	8.2	32.0	32.0	97.6	97.6	7.1	7.1	7.1	7.1	12.9	5						
						7.3	0.3	128	22.0	22.0	8.2	8.2	32.0	32.0	97.6	97.6	7.1	7.1	7.1	7.1	12.6	5						
IM12	Fine	Moderate	09:25	8.9	Surface	1.0	0.5	110	21.9	21.9	8.3	8.3	31.9	31.9	101.4	101.4	7.4	7.4	7.4	7.4	9.0	4	5	821447	812024			
						1.0	0.6	119	21.9	21.9	8.3	8.3	31.9	31.9	101.3	101.4	7.4	7.4	7.4	7.4	9.1	4						
					Middle	4.5	0.4	99	21.9	21.9	8.3	8.3	32.0	32.0	100.1	100.1	7.3	7.3	7.3	7.3	10.6	5						
						4.5	0.4	100	21.9	21.9	8.3	8.3	32.0	32.0	100.0	100.1	7.3	7.3	7.3	7.3	10.6	5						
					Bottom	7.9	0.2	93	21.9	21.9	8.3	8.2	32.0	32.0	99.5	99.5	7.2	7.2	7.2	7.2	11.2	6						
						7.9	0.2	102	21.9	21.9	8.2	8.2	32.0	32.0	99.4	99.5	7.2	7.2	7.2	7.2	11.3	6						
SR1A	Fine	Moderate	08:50	5.2	Surface	1.0	-	-	22.1	22.1	8.3	8.3	32.1	32.1	104.2	104.2	7.6	7.6	7.6	7.6	9.1	2	3	819970	812656			
						1.0	-	-	22.1	22.1	8.3	8.3	32.1	32.1	104.2	104.2	7.6	7.6	7.6	7.6	9.2	2						
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-
						2.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-
					Bottom	4.2	-	-	22.0	22.0	8.3	8.2	32.1	32.1	102.5	102.5	7.4	7.4	7.4	7.4	10.3	4						
						4.2	-	-	22.0	22.0	8.2	8.2	32.1	32.1	102.4	102.4	7.4	7.4	7.4	7.4	10.4	4						
SR2	Fine	Moderate	08:31	5.0	Surface	1.0	0.2	122	22.1	22.1	8.2	8.2	32.3	32.3	97.1	97.1	7.0	7.0	7.0	7.0	8.7	3	3	821460	814177			
						1.0	0.2	133	22.1	22.1	8.2	8.2	32.3	32.3	97.1	97.1	7.0	7.0	7.0	7.0	8.7	4						
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-
					Bottom	4.0	0.2	120	22.1	22.1	8.2	8.2	32.2	32.2	97.0	97.0	7.0	7.0	7.0	7.0	9.9	2						
						4.0	0.2	120	22.1	22.1	8.2	8.2	32.2	32.2	97.0	97.0	7.0	7.0	7.0	7.0	9.9	2						
SR3	Fine	Moderate	10:14	8.5	Surface	1.0	0.4	160	21.8	21.8	8.3	8.3	31.0	31.0	104.5	104.4	7.7	7.6	7.5	7.5	8.5	4	4	822150	807572			
						1.0	0.4	175	21.8	21.8	8.3	8.3	31.1	31.0	104.2	104.4	7.6	7.6	7.5	7.5	8.5	4						
					Middle	4.3	0.4	176	21.8	21.8	8.2	8.2	31.4	31.5	99.7	99.6	7.3	7.3	7.3	7.3	9.5	4						
						4.3	0.4	182	21.8	21.8	8.2	8.2	31.5	31.5	99.4	99.6	7.3	7.3	7.3	7.3	9.6	4						
					Bottom	7.5	0.3	199	21.9	21.9	8.2	8.2	31.7	31.7	97.3	97.2	7.1	7.1	7.1	7.1	11.0	3						
						7.5	0.3	216	21.9	21.9	8.2	8.2	31.7	31.7	97.1	97.2	7.1	7.1	7.1	7.1	11.2	3						
SR4A	Misty	Moderate	08:27	9.4	Surface	1.0	0.1	49	22.6	22.6	8.1	8.1	33.3	33.3	107.1	107.1	7.6	7.6	7.6	7.6	4.2	7	7	817188	807789			
						1.0	0.1	51	22.6	22.6	8.1	8.1	33.3	33.3	107.0	107.0	7.6	7.6	7.6	7.6	4.2	7						
					Middle	4.7	0.1	45	22.6	22.6	8.1	8.1	33.2	33.2	106.2	106.2	7.6	7.6	7.6	7.6	5.3	7						
						4.7	0.1	47	22.6	22.6	8.1	8.1	33.2	33.2	106.2	106.2	7.6	7.6	7.6	7.6	5.3	6						
					Bottom	8.4	0.1	9	22.6	22.6	8.1	8.1	33.2	33.2	105.4	105.4	7.5	7.5	7.5	7.5	6.9	6						
						8.4	0.1	9	22.6	22.6	8.1	8.1	33.2	33.2	105.3	105.4	7.5	7.5	7.5	7.5	6.9	6						
SR5A	Misty	Moderate	08:11	5.2	Surface	1.0	0.1	102	22.7	22.7	8.1	8.1	33.3	33.3	104.2	104.2	7.4	7.4	7.4	7.4	4.3	8	8	816579	810714			
						1.0	0.1	103	22.7	22.7	8.1	8.1	33.3	33.3	104.2	104.2	7.4	7.4	7.4	7.4	4.2	9						
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-
					Bottom	4.2	0.1	80	22.6	22.6	8.1	8.1	33.3	33.3	103.8	103.8	7.4	7.4	7.4	7.4	5.2	8						
						4.2	0.1	82	22.6	22.6	8.1	8.1	33.3	33.3	103.8	103.8	7.4	7.4	7.4	7.4	5.3	8						
SR6A	Misty	Moderate	07:33	4.8	Surface	1.0	0.1	9	22.6	22.6	8.0	8.0	32.8	32.8	110.5	110.5	7.9	7.9	7.9	7.9	4.1	7	8	817973	814749			
						1.0	0.1	9	22.6	22.6	8.0	8.0	32.8	32.8	110.5	110.5	7.9	7.9	7.9	7.9	4.1	8						
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-
					Bottom	3.8	0.0	42	22.5	22.5	8.0	8.0	32.8	32.8	109.5	109.5	7.8	7.8	7.8	7.8	5.0	8						
						3.8	0.0	46	22.5	22.5	8.0	8.0	32.8	32.8	109.4	109.4	7.8	7.8	7.8	7.8	5.1	8						
SR7	Fine	Moderate	07:33	15.8	Surface	1.0	0.2	75	22.6	22.6	8.1	8.1	32.6	32.6	84.0	84.0	6.0	6.0	6.0	6.0	8.3	4	4	823640	823724			
						1.0	0.2	79	22.6	22.6	8.1	8.1	32.6	32.6	84.0	84.0	6.0	6.0	6.0	6.0	8.4	4						
					Middle	7.9	0.2	65	22.6	22.6	8.1	8.1	32.6	32.6	83.8	83.8	6.0	6.0	6.0	6.0	8.5	4						
						7.9	0.2	65	22.6	22.6	8.1	8.1	32.6	32.6	83.8	83.8	6.0	6.0	6.0	6.0	8.5	4						
					Bottom	14.8	0.1	77	22.6	22.6	8.1	8.1	32.6	32.6	83.7	83.7	6.0	6.0	6.0									

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

Water Quality Monitoring Results on 30 November 21 during Mid-Flood Tide

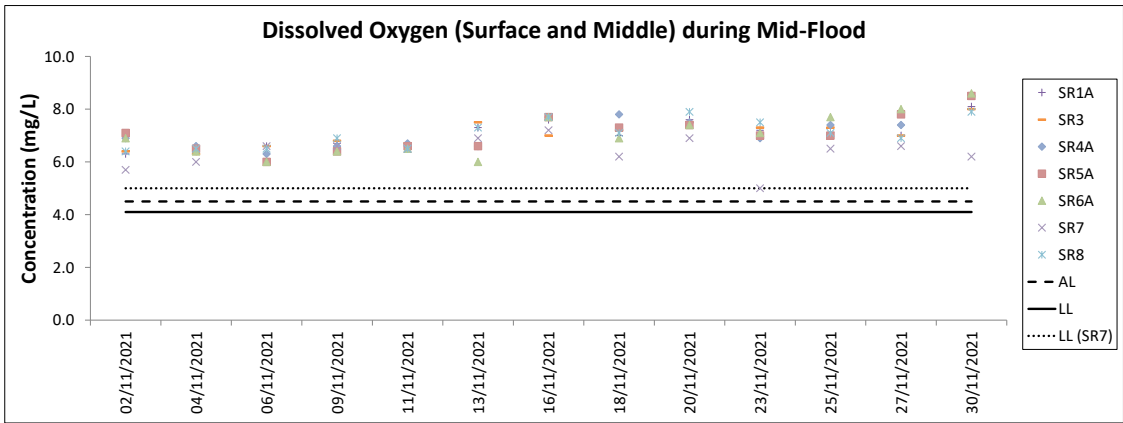
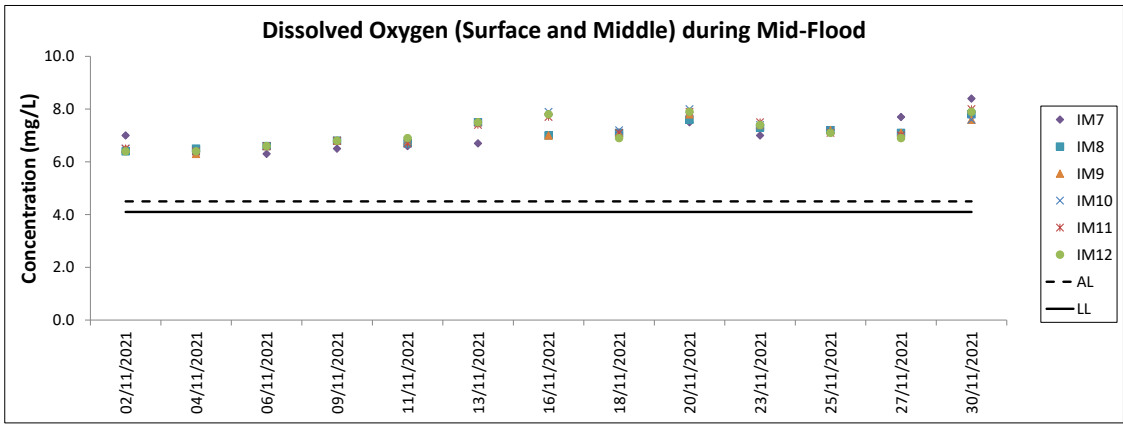
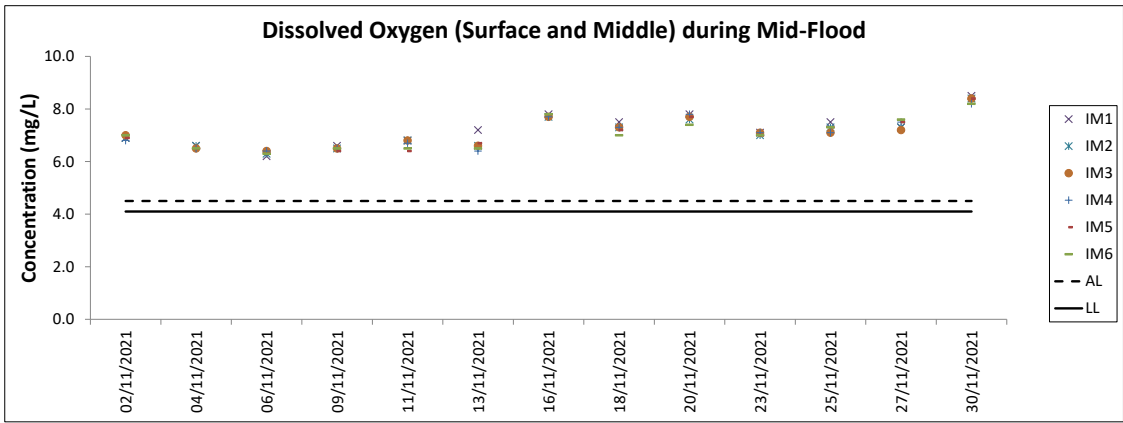
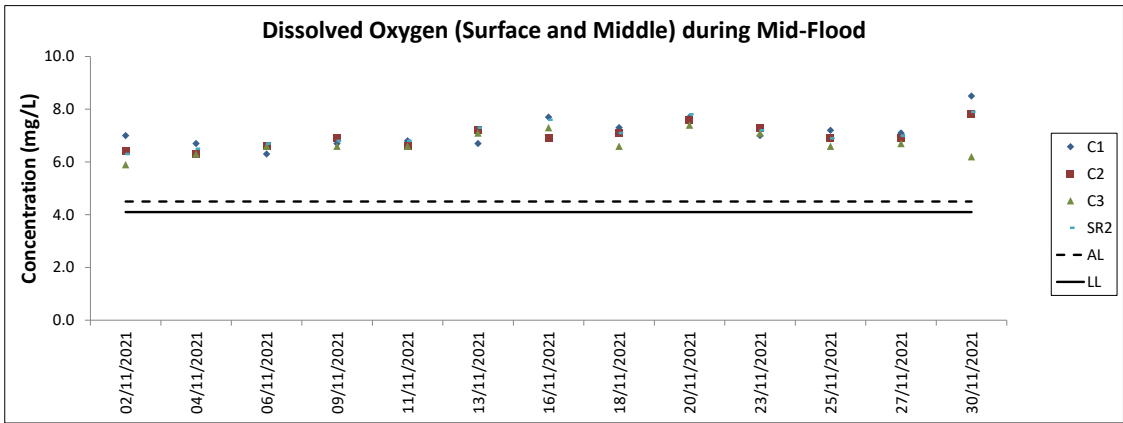
Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity (NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)		
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA				
C1	Misty	Moderate	15:18	8.2	Surface	1.0	0.4	37	22.6	22.6	8.2	8.2	32.4	32.4	117.9	117.9	8.5	8.5	5.9	8.5	8	8	8	815635	804224	
						1.0	0.4	39	22.6	8.2	8.2	32.4	32.4	117.9	117.9	8.5	8.5	5.9	8.5	8	8					
						4.1	0.5	39	22.5	22.5	8.2	8.2	32.3	32.3	117.9	117.9	8.5	8.5	6.9	8.5	8	8				
					Middle	4.1	0.5	40	22.5	22.5	8.2	8.2	32.3	32.3	117.9	117.9	8.5	8.5	6.8	8.5	8	8				
						7.2	0.5	44	22.5	22.5	8.2	8.2	32.4	32.4	117.8	117.8	8.5	8.5	7.1	8.5	8	8				
						7.2	0.5	45	22.5	22.5	8.2	8.2	32.4	32.4	117.8	117.8	8.5	8.5	7.0	8.5	8	8				
C2	Cloudy	Rough	14:18	11.6	Surface	1.0	0.1	144	22.0	22.0	8.3	8.3	31.4	31.4	108.3	108.1	7.9	7.9	9.5	7.9	3	3	3	825666	806929	
						1.0	0.1	148	22.0	22.0	8.3	8.3	31.4	31.4	107.8	107.8	7.9	7.9	9.6	7.9	4	4				
						5.8	0.0	21	22.1	22.1	8.2	8.2	31.5	31.5	104.1	104.1	7.6	7.6	9.4	7.6	2	2				
					Middle	5.8	0.0	21	22.1	22.1	8.2	8.2	31.5	31.5	104.1	104.1	7.6	7.6	9.4	7.6	3	3				
						10.6	0.2	301	22.1	22.1	8.3	8.3	31.5	31.5	103.3	103.3	7.5	7.5	9.4	7.5	3	3				
						10.6	0.3	314	22.1	22.1	8.3	8.3	31.6	31.6	103.2	103.2	7.5	7.5	9.4	7.5	2	2				
C3	Cloudy	Moderate	16:36	11.5	Surface	1.0	0.3	224	22.6	22.6	8.2	8.2	32.5	32.5	85.9	85.9	6.2	6.2	5.1	6.2	4	4	4	822130	817815	
						1.0	0.3	232	22.6	22.6	8.2	8.2	32.5	32.5	85.9	85.9	6.2	6.2	5.1	6.2	4	4				
						5.8	0.3	232	22.6	22.6	8.2	8.2	32.5	32.5	86.4	86.5	6.2	6.2	6.3	6.2	4	4				
					Middle	5.8	0.4	250	22.6	22.6	8.2	8.2	32.5	32.5	86.5	86.5	6.2	6.2	6.6	6.2	4	4				
						10.5	0.3	227	22.6	22.6	8.2	8.2	32.5	32.5	87.4	87.5	6.3	6.3	7.3	6.3	4	4				
						10.5	0.3	247	22.6	22.6	8.2	8.2	32.5	32.5	87.6	87.5	6.3	6.3	7.5	6.3	3	3				
IM1	Misty	Moderate	15:06	5.4	Surface	1.0	0.3	35	22.5	22.5	8.2	8.2	32.4	32.4	117.7	117.7	8.5	8.4	4.8	8.5	4	4	5	817947	807142	
						1.0	0.3	37	22.5	22.5	8.2	8.2	32.4	32.4	117.7	117.7	8.4	8.4	4.8	8.4	4	4				
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-
					Middle	4.4	0.2	29	22.5	22.5	8.2	8.2	32.4	32.4	117.7	117.7	8.4	8.4	5.8	8.4	6	6				
						4.4	0.2	29	22.5	22.5	8.2	8.2	32.4	32.4	117.6	117.6	8.4	8.4	5.8	8.4	6	6				
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-
IM2	Misty	Moderate	15:00	6.4	Surface	1.0	0.2	35	22.6	22.6	8.2	8.2	32.5	32.5	117.0	117.0	8.4	8.4	4.6	8.4	6	6	7	818158	806170	
						1.0	0.2	37	22.6	22.6	8.2	8.2	32.5	32.5	116.9	117.0	8.4	8.4	4.6	8.4	7	7				
						3.2	0.2	41	22.6	22.6	8.2	8.2	32.5	32.5	117.0	117.0	8.4	8.4	5.6	8.4	7	7				
					Middle	3.2	0.2	42	22.6	22.6	8.2	8.2	32.5	32.5	117.0	117.0	8.4	8.4	5.6	8.4	7	7				
						5.4	0.3	37	22.6	22.6	8.2	8.2	32.4	32.4	116.9	116.9	8.4	8.4	6.5	8.4	7	7				
						5.4	0.3	39	22.6	22.6	8.2	8.2	32.4	32.4	116.8	116.8	8.4	8.4	6.5	8.4	7	7				
IM3	Misty	Moderate	14:53	7.0	Surface	1.0	0.3	33	22.6	22.6	8.2	8.2	32.5	32.5	116.8	116.8	8.4	8.4	4.6	8.4	4	4	5	818769	805591	
						1.0	0.3	34	22.6	22.6	8.2	8.2	32.5	32.5	116.8	116.8	8.4	8.4	4.6	8.4	4	4				
						3.5	0.3	38	22.6	22.6	8.2	8.2	32.4	32.4	117.0	117.0	8.4	8.4	5.6	8.4	5	5				
					Middle	3.5	0.3	40	22.6	22.6	8.2	8.2	32.4	32.4	117.0	117.0	8.4	8.4	5.6	8.4	5	5				
						6.0	0.3	46	22.5	22.5	8.2	8.2	32.4	32.3	117.2	117.2	8.4	8.4	6.2	8.4	5	5				
						6.0	0.3	46	22.5	22.5	8.2	8.2	32.3	32.3	117.1	117.1	8.4	8.4	6.1	8.4	6	6				
IM4	Misty	Moderate	14:44	7.2	Surface	1.0	0.3	35	22.6	22.6	8.2	8.2	32.4	32.4	115.1	115.0	8.3	8.2	4.9	8.3	5	5	5	819745	804592	
						1.0	0.3	35	22.6	22.6	8.2	8.2	32.4	32.4	114.9	114.9	8.2	8.2	4.9	8.2	4	4				
						3.6	0.3	39	22.4	22.4	8.2	8.2	32.6	32.7	114.0	114.0	8.2	8.2	5.1	8.2	5	5				
					Middle	3.6	0.3	42	22.4	22.4	8.2	8.2	32.7	32.7	113.9	113.9	8.2	8.2	5.2	8.2	5	5				
						6.2	0.3	38	22.3	22.3	8.2	8.2	32.8	32.8	113.7	113.8	8.2	8.2	6.3	8.2	4	4				
						6.2	0.3	41	22.2	22.2	8.2	8.2	32.7	32.7	113.8	113.8	8.2	8.2	6.4	8.2	4	4				
IM5	Misty	Moderate	14:40	8.4	Surface	1.0	0.3	9	22.5	22.5	8.2	8.2	32.3	32.3	116.2	116.2	8.4	8.4	3.7	8.4	6	6	5	820751	804843	
						1.0	0.3	9	22.5	22.5	8.2	8.2	32.3	32.3	116.2	116.2	8.4	8.4	3.7	8.4	5	5				
						4.2	0.3	8	22.5	22.5	8.2	8.2	32.3	32.3	115.7	115.7	8.3	8.3	4.2	8.3	4	4				
					Middle	4.2	0.3	8	22.5	22.5	8.2	8.2	32.3	32.3	115.7	115.7	8.3	8.3	4.2	8.3	4	4				
						7.4	0.3	344	22.5	22.5	8.2	8.2	32.3	32.3	115.7	115.6	8.3	8.3	5.1	8.3	4	4				
						7.4	0.3	345	22.5	22.5	8.2	8.2	32.4	32.4	115.4	115.4	8.3	8.3	5.1	8.3	4	4				
IM6	Misty	Moderate	14:31	6.4	Surface	1.0	0.2	341	22.6	22.6	8.2	8.2	32.4	32.4	114.9	114.9	8.2	8.2	2.7	8.2	3	3	4	821077	805827	
						1.0	0.2	314	22.6	22.6	8.2	8.2	32.4	32.4	114.9	114.7	8.2	8.2	2.6	8.2	3	3				
						3.2	0.2	326	22.6	22.6	8.2	8.2	32.4	32.4	114.7	114.7	8.2	8.2	3.7	8.2	4	4				
					Middle	3.2	0.2	332	22.6	22.6	8.2	8.2	32.4	32.4	114.7	114.7	8.2	8.2	3.7	8.2	4	4				
						5.4	0.3	305	22.6	22.6	8.2	8.2	32.4	32.4	113.4	113.4	8.1	8.1	4.9	8.1	5	5				
						5.4	0.3	310	22.6	22.6	8.2	8.2	32.5	32.5	113.3	113.3	8.1	8.1	4.9	8.1	5	5				
IM7	Misty	Moderate	14:18	8.2	Surface	1.0	0.4	350	22.7	22.7	8.2	8.2	32.7	32.7	118.2	118.2	8.4	8.4	2.8	8.4	4	4	4	821333	806823	
						1.0	0.4	322	22.7	22.7	8.2	8.2	32.7	32.7	118.1	118.1	8.4	8.4	2.7	8.4	4	4				
						4.1	0.4	353	22.7	22.7	8.2	8.2	32.7	32.7	117.5	117.5	8.4	8.4	3.8	8.4	4	4				
					Middle	4.1	0.5	325	22.7	22.7	8.2	8.2	32.7	32.7	117.4	117.4	8.4	8.4	3.7	8.4	4	4				
						7.2	0.4	341	22.7	22.7	8.2	8.2	32.7	32.7	116.9	116.9	8.4	8.4	4.8	8.4	4	4				
						7.2	0.4	314	22.7	22.7	8.2	8.2	32.7	32.7	116.8	116.8	8.3	8.3	4.8	8.3	4	4				
IM8	Cloudy	Rough	14:41	6.9	Surface	1.0	0.3	194	22.0	22.0	8.3	8.3	31.7	31.7	106.9	106.9	7.8	7.8	9.9	7.8	3	3	3	821853	808123	
						1.0	0.3	205	22.0	22.0	8.3	8.3	31.7	31.7	106.9	106.9	7.8	7.8	9.9	7.8	3	3				
						3.5	0.1	214	22.0	22.0	8.3	8.3	31.7	31.7	106.2	106.2	7.7	7.7	10.1	7.7	3	3				
					Middle	3.5	0.1	216	22.0	22.0	8.3	8.3	31.7	31.7	106.1	106.1	7.7	7.7	10.2	7.7	3	3				
						5.9	0.2	225	22.0	22.0	8.3	8.3	31.7	31.7	105.8	105.8	7.7	7.7	10.8	7.7	2	2				
						5.9	0.3	242	22.0	22.0	8.3	8.3	31.7	31.7	105.8	105.8	7.7	7.7	10.9	7.7	2	2				

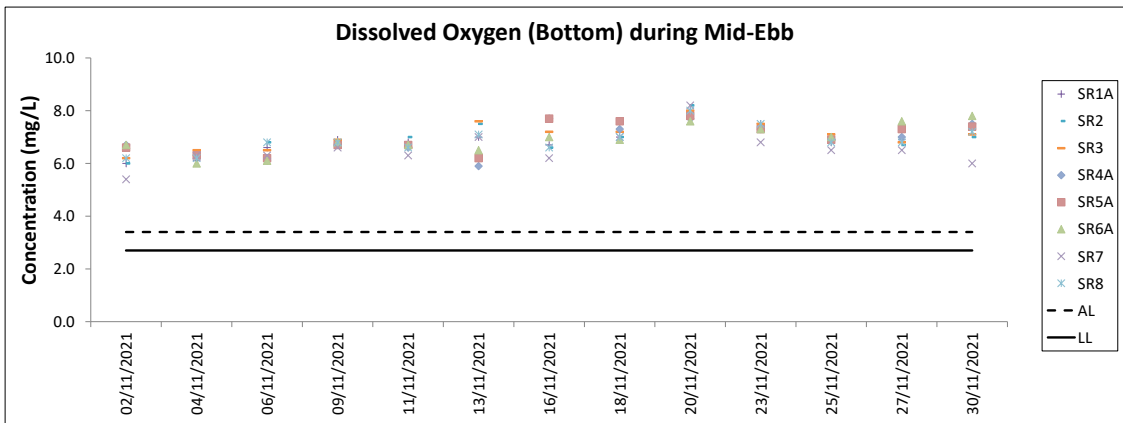
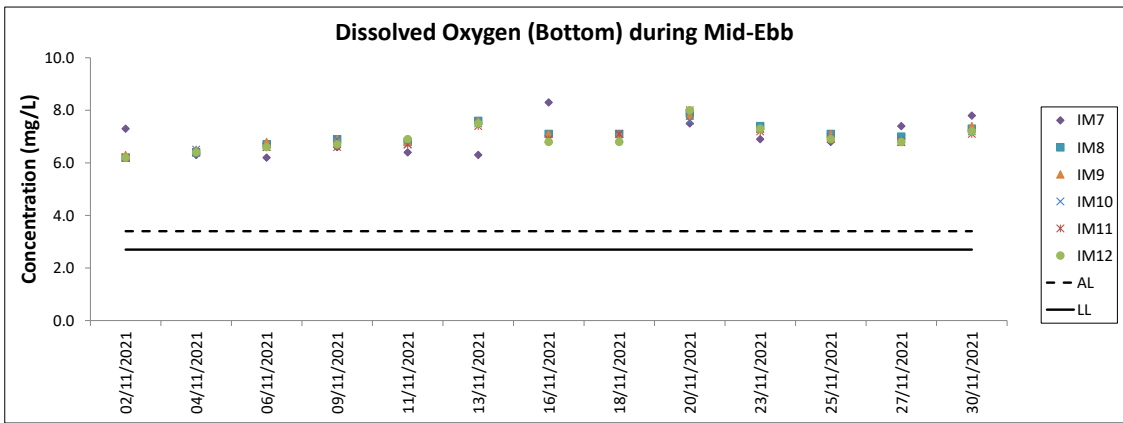
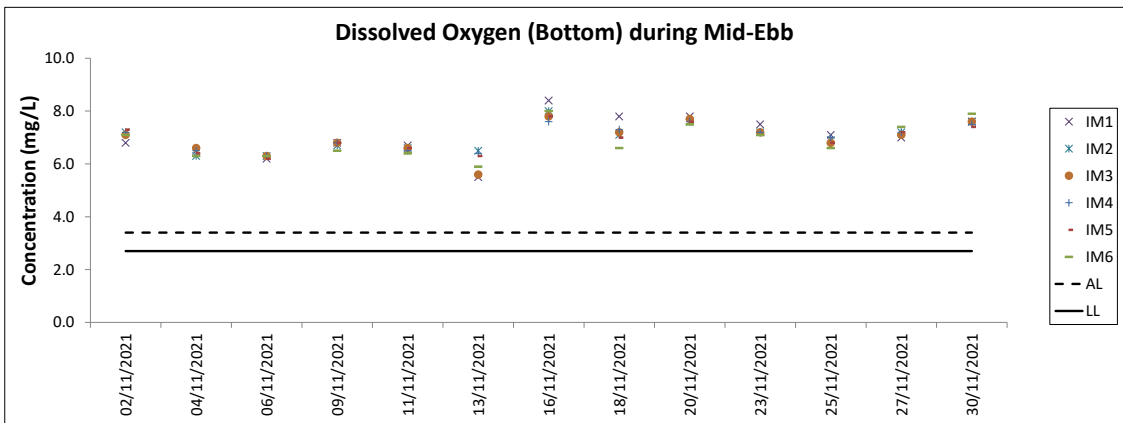
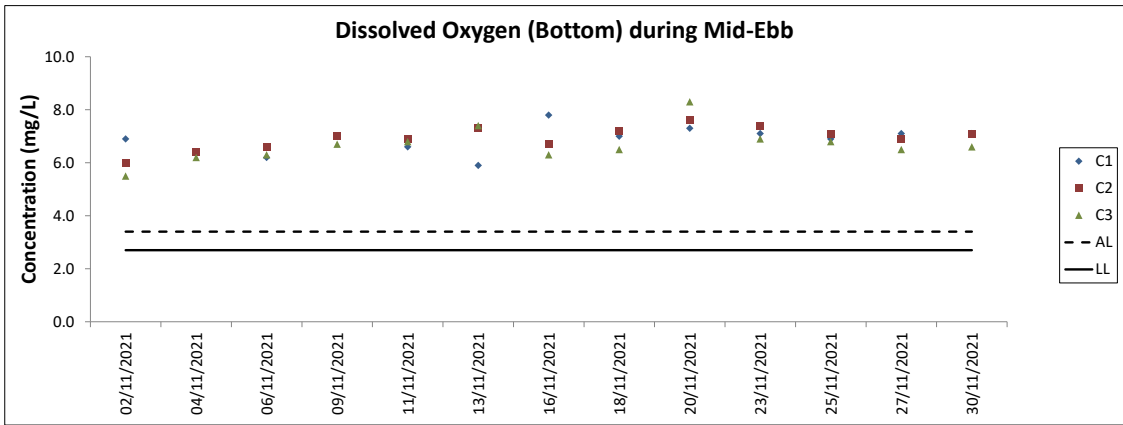
DA: Depth-Averaged  
Calm: Small or no wave; Moderate: Between calm and rough; Rough: White capped or rougher  
Value exceeding Action Level is underlined; Value exceeding Limit Level is bolded and underlined

**Expansion of Hong Kong International Airport into a Three-Runway System**  
**Water Quality Monitoring**  
**Water Quality Monitoring Results on 30 November 21 during Mid-Flood Tide**

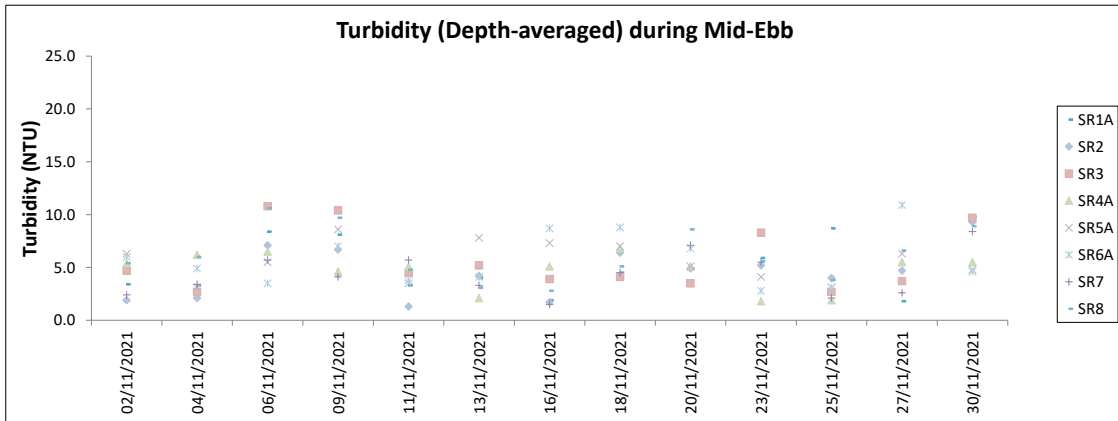
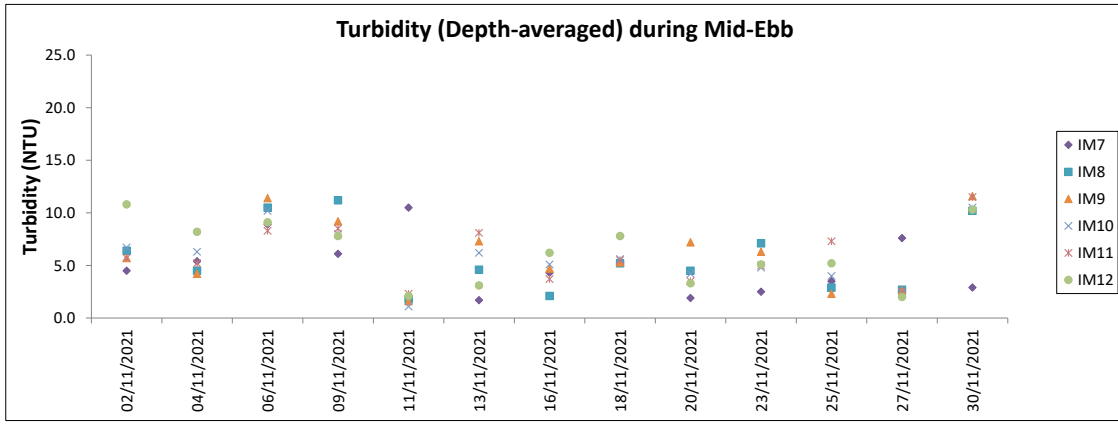
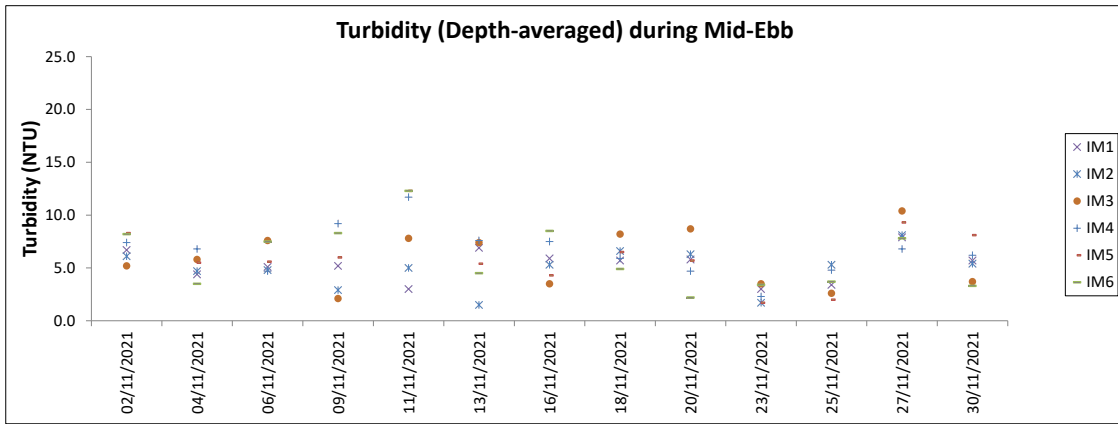
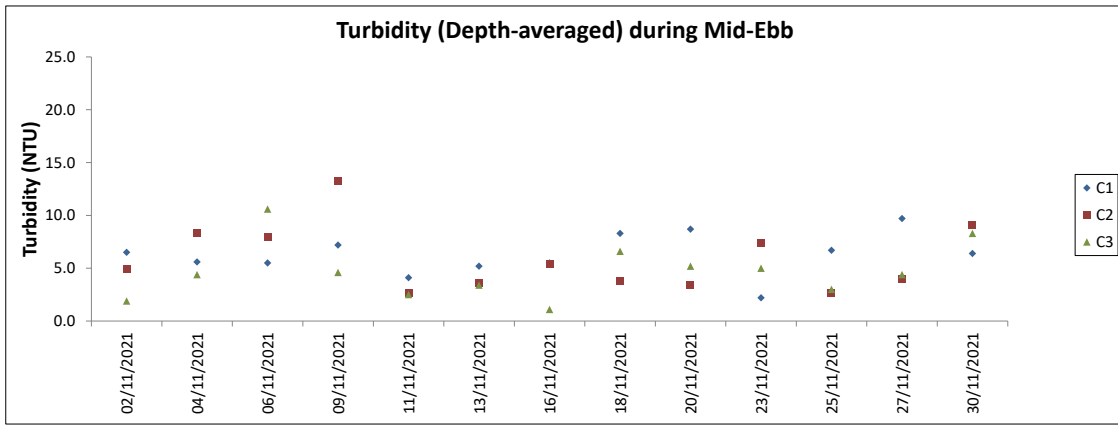
Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity (NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)					
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA							
IM9	Cloudy	Rough	14:49	6.8	Surface	1.0	0.3	258	22.0	22.0	8.3	8.3	31.6	31.6	103.8	103.8	7.6	7.6	7.7	7.7	2	2	3	822086	808789				
						1.0	0.3	282	22.0	22.0	8.3	8.3	31.6	31.6	103.8	103.8	7.6	7.6	7.8	7.8	2	2							
					Middle	3.4	0.3	247	22.0	22.0	8.3	8.3	31.6	31.6	103.7	103.7	7.6	7.6	7.9	7.9	2	2							
						3.4	0.4	263	22.0	22.0	8.3	8.3	31.6	31.6	103.6	103.6	7.5	7.5	8.0	8.0	2	2							
					Bottom	5.8	0.2	243	22.0	22.0	8.3	8.3	31.6	31.6	103.5	103.5	7.5	7.5	11.2	11.2	3	3							
						5.8	0.2	260	22.0	22.0	8.3	8.3	31.6	31.6	103.4	103.4	7.5	7.5	11.2	11.2	4	4							
IM10	Cloudy	Rough	14:58	7.0	Surface	1.0	0.5	309	22.0	22.0	8.3	8.3	31.8	31.8	104.9	104.9	7.6	7.6	7.6	7.6	3	3	3	822371	809770				
						1.0	0.5	317	22.0	22.0	8.3	8.3	31.8	31.8	104.9	104.9	7.6	7.6	7.8	7.8	3	3							
					Middle	3.5	0.4	295	22.0	22.0	8.3	8.3	31.8	31.8	104.4	104.4	7.6	7.6	9.1	9.1	3	3							
						3.5	0.5	296	22.0	22.0	8.3	8.3	31.8	31.8	104.4	104.4	7.6	7.6	9.3	9.3	3	3							
					Bottom	6.0	0.5	302	22.0	22.0	8.3	8.3	31.8	31.8	103.8	103.8	7.5	7.5	10.1	10.1	3	3							
						6.0	0.5	312	22.0	22.0	8.3	8.3	31.8	31.8	103.7	103.7	7.5	7.5	9.9	9.9	2	2							
IM11	Cloudy	Rough	15:11	7.0	Surface	1.0	0.5	276	22.2	22.2	8.3	8.3	32.0	32.0	111.4	111.3	8.1	8.1	9.0	9.0	4	4	3	822049	811437				
						1.0	0.6	287	22.2	22.2	8.3	8.3	32.0	32.0	111.1	111.3	8.0	8.0	9.1	9.1	4	4							
					Middle	3.5	0.6	284	22.2	22.2	8.3	8.2	32.0	32.0	109.6	109.5	7.9	7.9	10.0	10.0	3	3							
						3.5	0.6	284	22.2	22.2	8.2	8.2	32.0	32.0	109.4	109.5	7.9	7.9	10.4	10.4	3	3							
					Bottom	6.0	0.5	270	22.2	22.2	8.2	8.2	32.0	32.0	108.7	108.6	7.9	7.9	11.1	11.1	2	2							
						6.0	0.5	276	22.2	22.2	8.2	8.2	32.0	32.0	108.4	108.6	7.9	7.9	10.6	10.6	2	2							
IM12	Cloudy	Rough	15:20	8.6	Surface	1.0	0.6	265	22.1	22.1	8.3	8.3	32.0	32.0	110.1	110.0	8.0	8.0	8.2	8.2	4	4	3	821473	812057				
						1.0	0.6	272	22.1	22.1	8.3	8.3	32.0	32.0	109.9	110.0	8.0	8.0	8.5	8.5	4	4							
					Middle	4.3	0.5	262	22.1	22.1	8.3	8.3	32.0	32.0	108.2	108.1	7.8	7.8	10.6	10.6	3	3							
						4.3	0.5	281	22.1	22.1	8.3	8.3	32.0	32.0	108.0	108.1	7.8	7.8	10.8	10.8	3	3							
					Bottom	7.6	0.4	269	22.2	22.2	8.3	8.3	32.0	32.0	107.4	107.3	7.8	7.8	11.1	11.1	3	3							
						7.6	0.5	289	22.2	22.2	8.3	8.3	32.0	32.0	107.2	107.3	7.8	7.8	11.2	11.2	3	3							
SR1A	Cloudy	Moderate	15:53	5.5	Surface	1.0	-	-	22.4	22.4	8.3	8.3	32.1	32.1	112.3	112.2	8.1	8.1	7.6	7.6	3	3	3	819971	812664				
						1.0	-	-	22.4	22.4	8.3	8.3	32.1	32.1	112.0	112.2	8.1	8.1	7.7	7.7	2	2							
					Middle	2.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	3	3
						2.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	3	3
					Bottom	4.5	-	-	22.4	22.4	8.3	8.3	32.0	32.0	110.4	110.3	8.0	8.0	8.3	8.3	4	4							
						4.5	-	-	22.4	22.4	8.3	8.3	32.0	32.0	110.1	110.3	7.9	7.9	8.2	8.2	4	4							
SR2	Cloudy	Moderate	16:08	4.7	Surface	1.0	0.2	317	22.2	22.2	8.3	8.3	32.2	32.1	108.8	108.7	7.9	7.9	5.3	5.3	3	3	4	821478	814152				
						1.0	0.2	332	22.2	22.2	8.3	8.3	32.1	32.1	108.5	108.7	7.8	7.8	5.3	5.3	3	3							
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	4	4
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	4	4
					Bottom	3.7	0.1	304	22.2	22.2	8.3	8.3	32.1	32.1	107.9	107.8	7.8	7.8	5.3	5.3	4	4							
						3.7	0.2	311	22.2	22.2	8.3	8.3	32.1	32.1	107.7	107.8	7.8	7.8	5.4	5.4	4	4							
SR3	Cloudy	Rough	14:35	8.3	Surface	1.0	0.2	186	22.1	22.1	8.3	8.3	31.8	31.8	110.6	110.6	8.0	8.0	9.0	9.0	4	4	3	822166	807577				
						1.0	0.2	195	22.1	22.1	8.3	8.3	31.8	31.8	110.6	110.6	8.0	8.0	9.0	9.0	3	3							
					Middle	4.2	0.2	201	22.1	22.1	8.3	8.3	31.8	31.8	109.3	109.3	7.9	7.9	9.3	9.3	3	3							
						4.2	0.2	212	22.1	22.1	8.3	8.3	31.8	31.8	109.2	109.3	7.9	7.9	9.4	9.4	3	3							
					Bottom	7.3	0.1	208	22.1	22.1	8.3	8.3	31.8	31.8	106.8	106.7	7.8	7.8	11.4	11.4	3	3							
						7.3	0.1	217	22.1	22.1	8.3	8.3	31.8	31.8	106.6	106.7	7.7	7.7	11.9	11.9	3	3							
SR4A	Misty	Moderate	15:38	8.4	Surface	1.0	0.3	222	22.6	22.6	8.2	8.2	32.4	32.4	118.1	118.1	8.5	8.5	4.2	4.2	4	4	4	817192	807800				
						1.0	0.3	222	22.5	22.5	8.2	8.2	32.4	32.4	118.1	118.1	8.5	8.5	4.2	4.2	4	4							
					Middle	4.2	0.4	210	22.5	22.5	8.2	8.2	32.3	32.3	118.1	118.1	8.5	8.5	5.9	5.9	4	4							
						4.2	0.4	221	22.5	22.5	8.2	8.2	32.3	32.3	118.0	118.1	8.5	8.5	6.0	6.0	4	4							
					Bottom	7.4	0.4	222	22.6	22.6	8.2	8.2	32.4	32.4	117.8	117.8	8.5	8.5	6.0	6.0	4	4							
						7.4	0.4	222	22.6	22.6	8.2	8.2	32.4	32.4	117.8	117.8	8.5	8.5	6.1	6.1	4	4							
SR5A	Misty	Moderate	15:49	5.4	Surface	1.0	0.2	235	22.8	22.7	8.2	8.2	33.4	33.5	120.1	119.4	8.5	8.5	6.8	6.8	5	5	5	816586	810709				
						1.0	0.2	235	22.6	22.7	8.2	8.2	33.6	33.5	118.6	118.6	8.5	8.5	6.9	6.9	6	6							
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	5	5
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	5	5
					Bottom	4.4	0.3	199	22.3	22.3	8.2	8.2	33.8	33.8	115.3	115.5	8.3	8.3	7.7	7.7	5	5							
						4.4	0.3	208	22.3	22.3	8.2	8.2	33.8	33.8	115.7	115.5	8.3	8.3	7.7	7.7	5	5							
SR6A	Misty	Moderate	16:07	4.2	Surface	1.0	0.2	216	23.1	23.1	8.2	8.2	33.2	33.2	122.1	122.1	8.6	8.6	6.5	6.5	5	5	6	817959	814718				
						1.0	0.2	224	23.1	23.1	8.2	8.2	33.2	33.2	122.1	122.1	8.6	8.6	6.5	6.5	4	4							
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	6	6
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	6	6
					Bottom	3.2	0.3	218	23.1	23.1	8.2	8.2	33.2	33.2	121.1	121.1	8.6	8.6	7.9	7.9	7	7							
						3.2	0.3	218	23.1	23.1	8.2	8.2	33.2	33.2	121.0	121.1	8.6	8.6	7.9	7.9	8	8							
SR7	Cloudy	Moderate	17:12	16.8	Surface	1.0	0.1	20	22.6	22.6	8.2	8.2	32.5	32.5	86.1	86.1	6.2	6.2	4.7	4.7	2	2	3	823633	823725				
						1.0	0.1	20	22.6	22.6	8.2	8.2	32.5	32.5	86.0	86.0	6.2	6.2	4.6	4.6	2	2							
					Middle	8.4	0.2	46	22.6	22.6	8.2	8.2	32.5	32.5	85.9	86.0	6.2	6.2	6.2	6.2	2	2							
						8.4	0.2	47	22.6	22.6	8.2	8.2	32.5	32.5	86.0	86.0	6.2	6.2	6.2	6.2	3	3							
					Bottom	15.8	0.3	9	22.6	22.6	8.2	8.2	32.5	32.5	87.8	87.9	6.3	6.3	6.2	6.2	3								





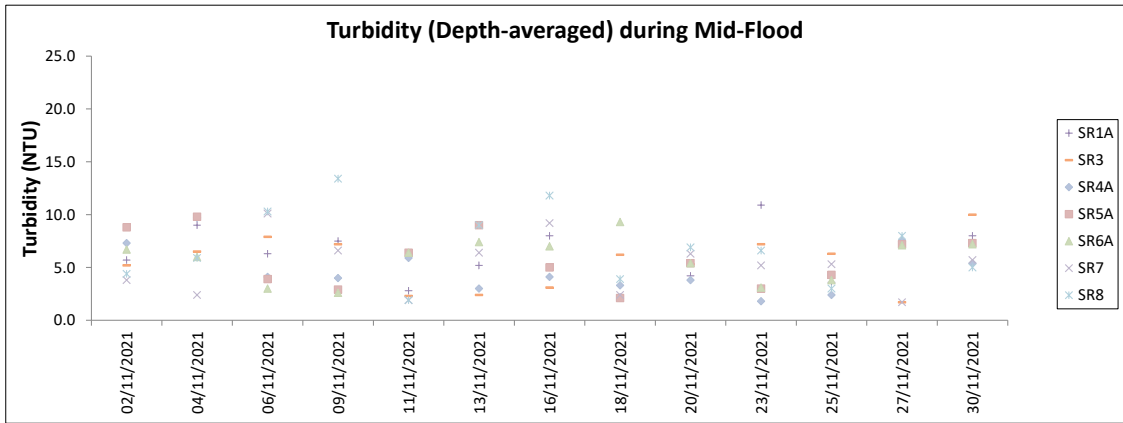
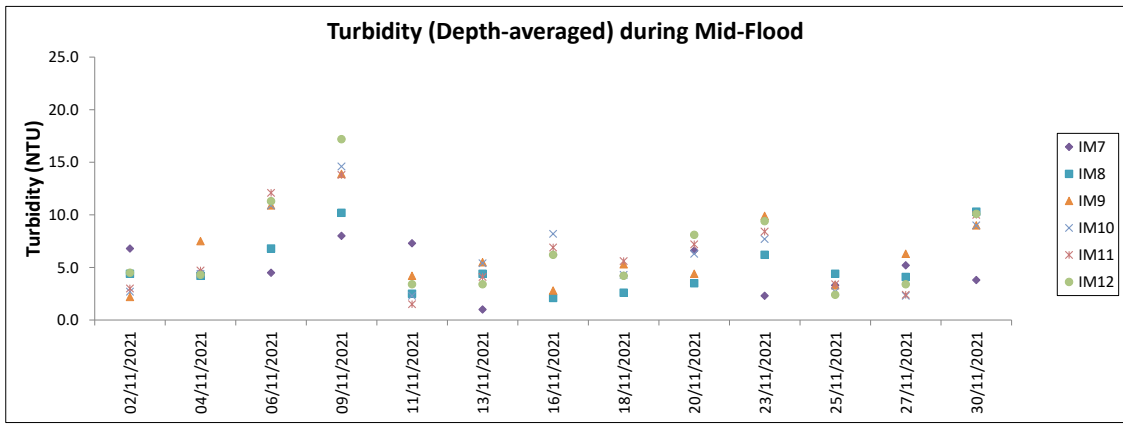
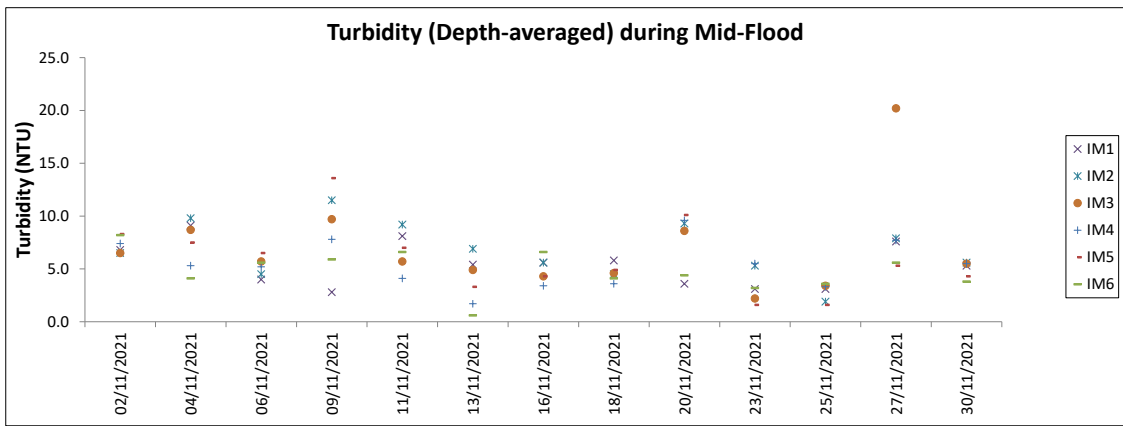
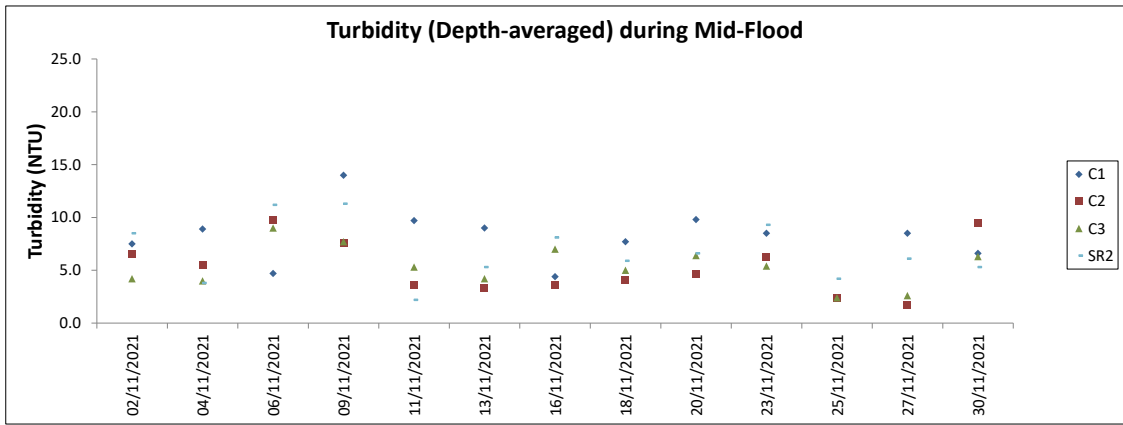




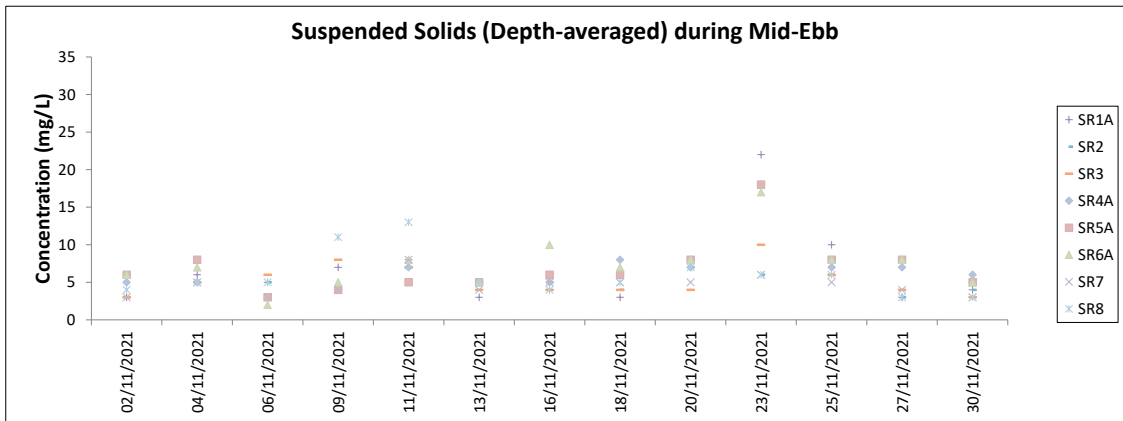
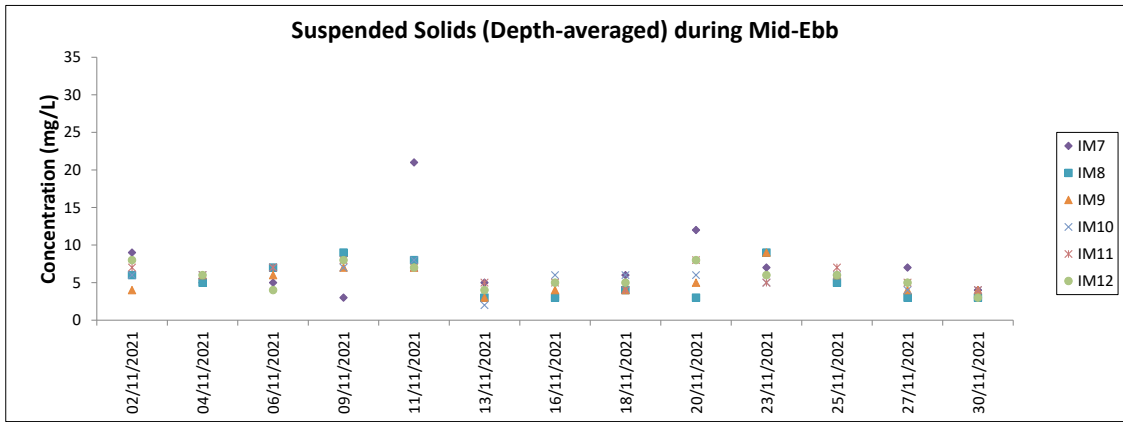
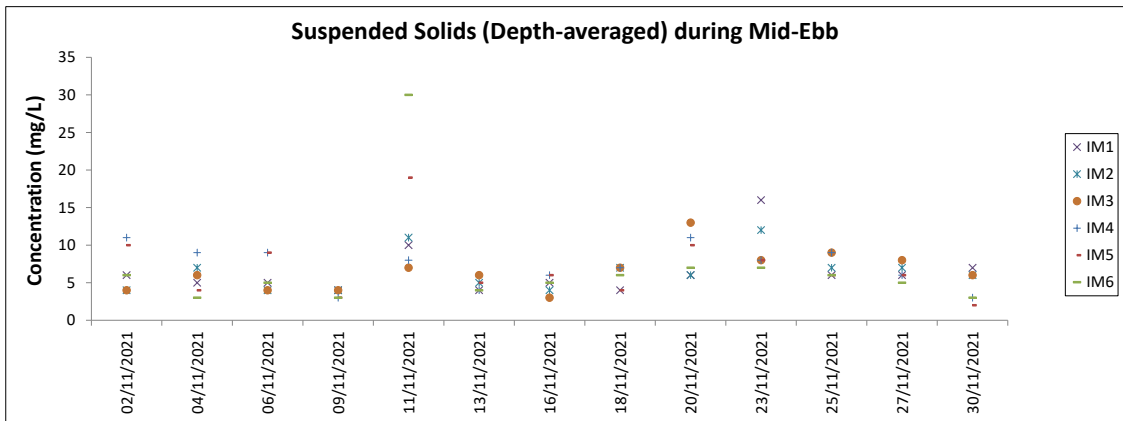
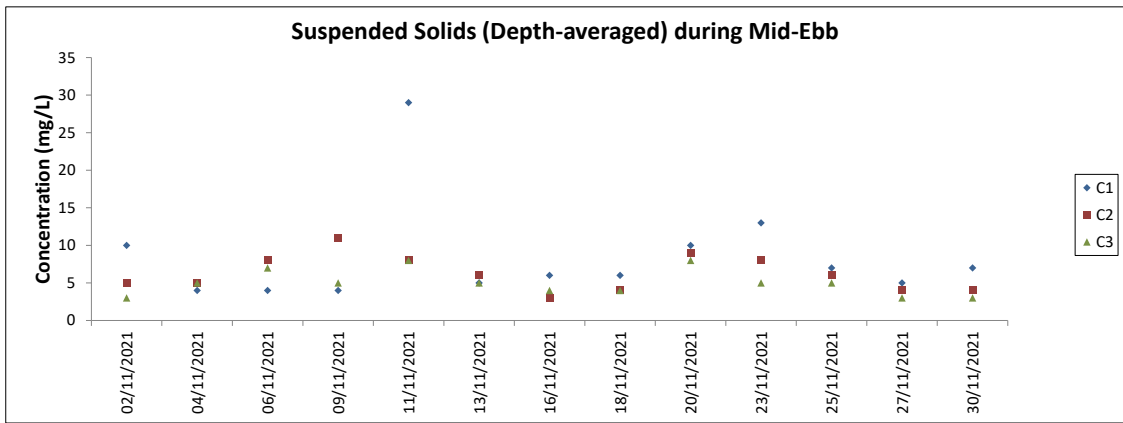


Note: The Action and Limit Level of turbidity can be referred to Table 4.2 of the monthly EM&A report.

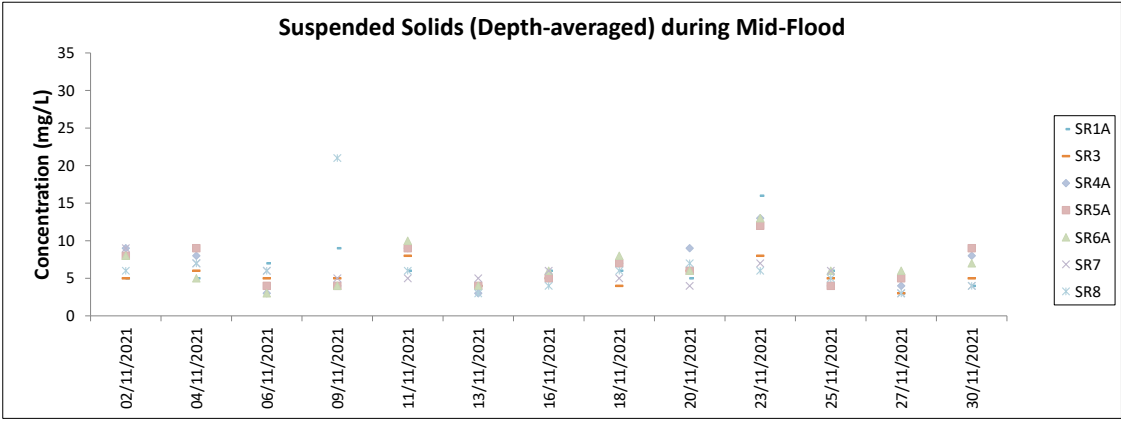
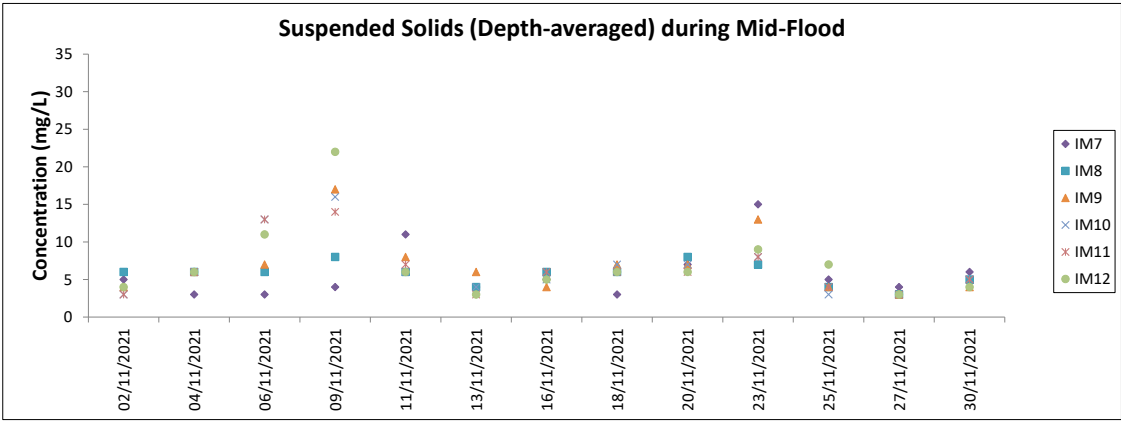
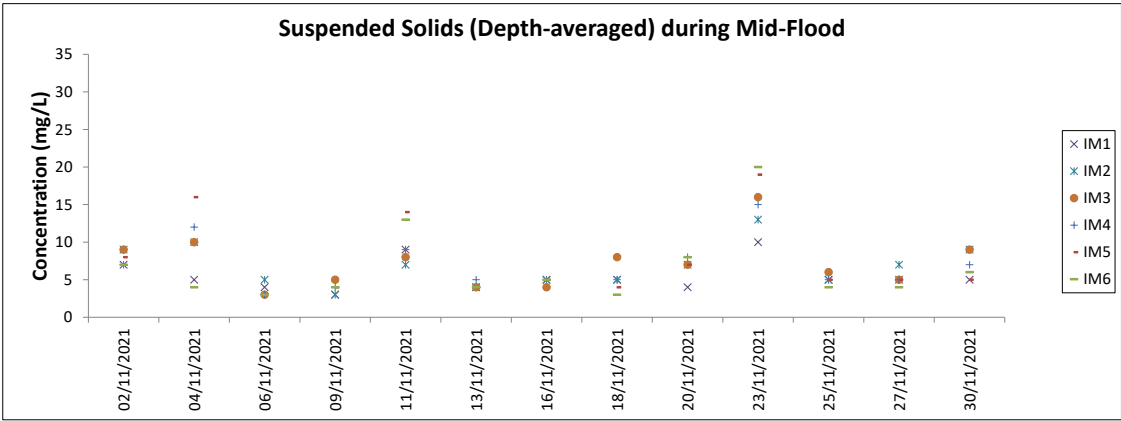
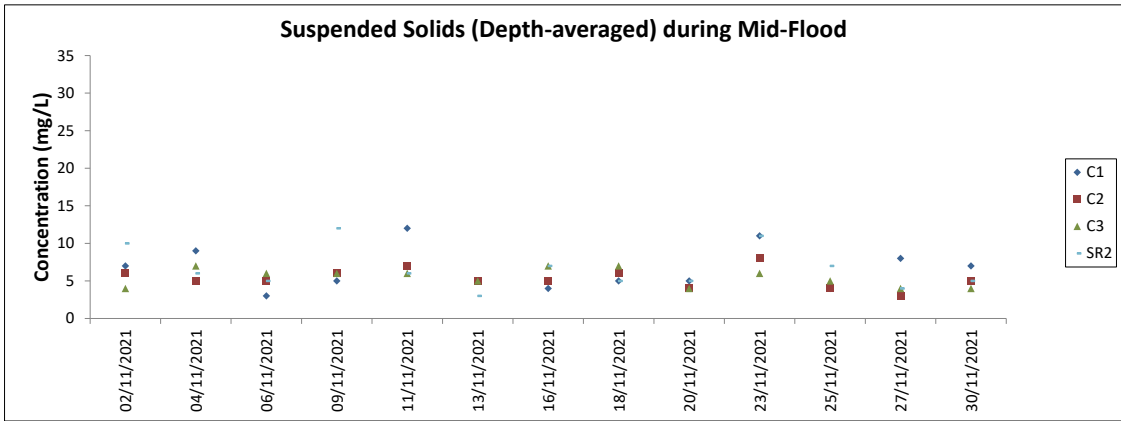




Note: The Action and Limit Level of turbidity can be referred to Table 4.2 of the monthly EM&A report.



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.  
Major site activities carried out during the reporting period are summarized in Section 1.4 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	P/S
6-Sep-21	NEL	2	36.750	AUTUMN	32166	3RS ET	P
6-Sep-21	NEL	2	8.950	AUTUMN	32166	3RS ET	S
6-Sep-21	NEL	3	1.200	AUTUMN	32166	3RS ET	S
7-Sep-21	NWL	2	19.780	AUTUMN	32166	3RS ET	P
7-Sep-21	NWL	3	37.420	AUTUMN	32166	3RS ET	P
7-Sep-21	NWL	4	6.000	AUTUMN	32166	3RS ET	P
7-Sep-21	NWL	2	5.300	AUTUMN	32166	3RS ET	S
7-Sep-21	NWL	3	6.000	AUTUMN	32166	3RS ET	S
7-Sep-21	NWL	4	1.100	AUTUMN	32166	3RS ET	S
8-Sep-21	SWL	2	28.388	AUTUMN	32166	3RS ET	P
8-Sep-21	SWL	3	23.140	AUTUMN	32166	3RS ET	P
8-Sep-21	SWL	2	10.386	AUTUMN	32166	3RS ET	S
8-Sep-21	SWL	3	4.150	AUTUMN	32166	3RS ET	S
10-Sep-21	NEL	2	7.300	AUTUMN	32166	3RS ET	P
10-Sep-21	NEL	3	26.580	AUTUMN	32166	3RS ET	P
10-Sep-21	NEL	4	3.200	AUTUMN	32166	3RS ET	P
10-Sep-21	NEL	2	2.820	AUTUMN	32166	3RS ET	S
10-Sep-21	NEL	3	7.300	AUTUMN	32166	3RS ET	S
14-Sep-21	SWL	2	29.785	AUTUMN	32166	3RS ET	P
14-Sep-21	SWL	3	20.800	AUTUMN	32166	3RS ET	P
14-Sep-21	SWL	4	2.450	AUTUMN	32166	3RS ET	P
14-Sep-21	SWL	2	9.852	AUTUMN	32166	3RS ET	S
14-Sep-21	SWL	3	7.200	AUTUMN	32166	3RS ET	S
16-Sep-21	AW	2	4.860	AUTUMN	32166	3RS ET	P
16-Sep-21	WL	2	9.094	AUTUMN	32166	3RS ET	P
16-Sep-21	WL	3	5.730	AUTUMN	32166	3RS ET	P
16-Sep-21	WL	2	3.753	AUTUMN	32166	3RS ET	S
16-Sep-21	WL	3	4.210	AUTUMN	32166	3RS ET	S
20-Sep-21	NWL	2	57.280	AUTUMN	32166	3RS ET	P
20-Sep-21	NWL	3	6.990	AUTUMN	32166	3RS ET	P
20-Sep-21	NWL	2	9.500	AUTUMN	32166	3RS ET	S
20-Sep-21	NWL	3	1.630	AUTUMN	32166	3RS ET	S
23-Sep-21	AW	2	1.200	AUTUMN	32166	3RS ET	P
23-Sep-21	AW	3	3.820	AUTUMN	32166	3RS ET	P
23-Sep-21	WL	2	6.040	AUTUMN	32166	3RS ET	P
23-Sep-21	WL	3	7.319	AUTUMN	32166	3RS ET	P
23-Sep-21	WL	4	4.400	AUTUMN	32166	3RS ET	P
23-Sep-21	WL	2	5.350	AUTUMN	32166	3RS ET	S
23-Sep-21	WL	3	3.161	AUTUMN	32166	3RS ET	S
23-Sep-21	WL	4	2.090	AUTUMN	32166	3RS ET	S
6-Oct-21	AW	3	1.940	AUTUMN	32166	3RS ET	P
6-Oct-21	AW	4	3.010	AUTUMN	32166	3RS ET	P
6-Oct-21	WL	3	9.820	AUTUMN	32166	3RS ET	P
6-Oct-21	WL	4	7.360	AUTUMN	32166	3RS ET	P
6-Oct-21	WL	3	7.509	AUTUMN	32166	3RS ET	S
6-Oct-21	WL	4	2.190	AUTUMN	32166	3RS ET	S
7-Oct-21	NWL	3	39.660	AUTUMN	32166	3RS ET	P

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
7-Oct-21	NWL	4	24.540	AUTUMN	32166	3RS ET	P
7-Oct-21	NWL	3	6.400	AUTUMN	32166	3RS ET	S
7-Oct-21	NWL	4	4.900	AUTUMN	32166	3RS ET	S
11-Oct-21	NWL	3	52.100	AUTUMN	32166	3RS ET	P
11-Oct-21	NWL	4	12.000	AUTUMN	32166	3RS ET	P
11-Oct-21	NWL	3	8.300	AUTUMN	32166	3RS ET	S
11-Oct-21	NWL	4	3.000	AUTUMN	32166	3RS ET	S
15-Oct-21	NEL	2	32.840	AUTUMN	32166	3RS ET	P
15-Oct-21	NEL	3	3.730	AUTUMN	32166	3RS ET	P
15-Oct-21	NEL	2	8.100	AUTUMN	32166	3RS ET	S
15-Oct-21	NEL	3	1.930	AUTUMN	32166	3RS ET	S
18-Oct-21	NEL	2	26.460	AUTUMN	32166	3RS ET	P
18-Oct-21	NEL	3	10.780	AUTUMN	32166	3RS ET	P
18-Oct-21	NEL	2	6.840	AUTUMN	32166	3RS ET	S
18-Oct-21	NEL	3	3.220	AUTUMN	32166	3RS ET	S
19-Oct-21	AW	2	1.870	AUTUMN	32166	3RS ET	P
19-Oct-21	AW	3	2.940	AUTUMN	32166	3RS ET	P
19-Oct-21	WL	2	12.638	AUTUMN	32166	3RS ET	P
19-Oct-21	WL	3	5.821	AUTUMN	32166	3RS ET	P
19-Oct-21	WL	2	5.544	AUTUMN	32166	3RS ET	S
19-Oct-21	WL	3	3.723	AUTUMN	32166	3RS ET	S
20-Oct-21	SWL	3	19.450	AUTUMN	32166	3RS ET	P
20-Oct-21	SWL	4	33.040	AUTUMN	32166	3RS ET	P
20-Oct-21	SWL	5	3.800	AUTUMN	32166	3RS ET	P
20-Oct-21	SWL	3	8.320	AUTUMN	32166	3RS ET	S
20-Oct-21	SWL	4	4.890	AUTUMN	32166	3RS ET	S
20-Oct-21	SWL	5	0.900	AUTUMN	32166	3RS ET	S
27-Oct-21	SWL	2	13.470	AUTUMN	32166	3RS ET	P
27-Oct-21	SWL	3	39.770	AUTUMN	32166	3RS ET	P
27-Oct-21	SWL	2	5.020	AUTUMN	32166	3RS ET	S
27-Oct-21	SWL	3	12.150	AUTUMN	32166	3RS ET	S
2-Nov-21	NEL	2	3.500	AUTUMN	32166	3RS ET	P
2-Nov-21	NEL	3	25.180	AUTUMN	32166	3RS ET	P
2-Nov-21	NEL	4	8.390	AUTUMN	32166	3RS ET	P
2-Nov-21	NEL	2	2.700	AUTUMN	32166	3RS ET	S
2-Nov-21	NEL	3	6.030	AUTUMN	32166	3RS ET	S
2-Nov-21	NEL	4	0.900	AUTUMN	32166	3RS ET	S
3-Nov-21	AW	2	2.830	AUTUMN	32166	3RS ET	P
3-Nov-21	AW	3	1.910	AUTUMN	32166	3RS ET	P
3-Nov-21	WL	2	13.015	AUTUMN	32166	3RS ET	P
3-Nov-21	WL	3	4.635	AUTUMN	32166	3RS ET	P
3-Nov-21	WL	4	2.430	AUTUMN	32166	3RS ET	P
3-Nov-21	WL	2	5.150	AUTUMN	32166	3RS ET	S
3-Nov-21	WL	3	3.530	AUTUMN	32166	3RS ET	S
3-Nov-21	WL	4	2.100	AUTUMN	32166	3RS ET	S
4-Nov-21	AW	2	4.780	AUTUMN	32166	3RS ET	P
4-Nov-21	WL	2	15.006	AUTUMN	32166	3RS ET	P
4-Nov-21	WL	4	4.543	AUTUMN	32166	3RS ET	P
4-Nov-21	WL	2	6.324	AUTUMN	32166	3RS ET	S

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
4-Nov-21	WL	4	2.097	AUTUMN	32166	3RS ET	S
5-Nov-21	SWL	3	48.320	AUTUMN	32166	3RS ET	P
5-Nov-21	SWL	4	6.250	AUTUMN	32166	3RS ET	P
5-Nov-21	SWL	3	15.130	AUTUMN	32166	3RS ET	S
5-Nov-21	SWL	4	1.000	AUTUMN	32166	3RS ET	S
8-Nov-21	NEL	3	15.680	AUTUMN	32166	3RS ET	P
8-Nov-21	NEL	4	21.020	AUTUMN	32166	3RS ET	P
8-Nov-21	NEL	3	5.800	AUTUMN	32166	3RS ET	S
8-Nov-21	NEL	4	4.300	AUTUMN	32166	3RS ET	S
10-Nov-21	NWL	3	47.000	AUTUMN	32166	3RS ET	P
10-Nov-21	NWL	4	16.600	AUTUMN	32166	3RS ET	P
10-Nov-21	NWL	3	11.200	AUTUMN	32166	3RS ET	S
10-Nov-21	NWL	4	1.200	AUTUMN	32166	3RS ET	S
11-Nov-21	SWL	2	45.610	AUTUMN	32166	3RS ET	P
11-Nov-21	SWL	3	8.300	AUTUMN	32166	3RS ET	P
11-Nov-21	SWL	2	15.490	AUTUMN	32166	3RS ET	S
11-Nov-21	SWL	3	0.500	AUTUMN	32166	3RS ET	S
12-Nov-21	NWL	3	53.300	AUTUMN	32166	3RS ET	P
12-Nov-21	NWL	4	10.400	AUTUMN	32166	3RS ET	P
12-Nov-21	NWL	3	9.700	AUTUMN	32166	3RS ET	S
12-Nov-21	NWL	4	1.900	AUTUMN	32166	3RS ET	S

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

## CWD Small Vessel Line-transect Survey

## Sighting Data

DATE	STG #	TIME	CWD/FP	GP SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.	P/S
8-Sep-21	1	1312	FP	4	SWL	2	119	ON	3RS ET	22.1520	113.8973	AUTUMN	NONE	P
8-Sep-21	2	1350	CWD	1	SWL	2	141	ON	3RS ET	22.2059	113.8879	AUTUMN	NONE	P
8-Sep-21	3	1436	CWD	1	SWL	3	133	ON	3RS ET	22.1733	113.8687	AUTUMN	NONE	P
8-Sep-21	4	1502	CWD	3	SWL	2	95	ON	3RS ET	22.1946	113.8587	AUTUMN	NONE	P
8-Sep-21	5	1537	CWD	6	SWL	3	729	ON	3RS ET	22.1754	113.8499	AUTUMN	NONE	P
14-Sep-21	1	1037	FP	3	SWL	2	157	ON	3RS ET	22.1819	113.9359	AUTUMN	NONE	P
14-Sep-21	2	1048	FP	1	SWL	2	170	ON	3RS ET	22.1602	113.9368	AUTUMN	NONE	P
14-Sep-21	3	1050	FP	4	SWL	2	35	ON	3RS ET	22.1577	113.9368	AUTUMN	NONE	P
14-Sep-21	4	1108	FP	2	SWL	2	179	ON	3RS ET	22.1582	113.9277	AUTUMN	NONE	P
14-Sep-21	5	1114	FP	5	SWL	2	234	ON	3RS ET	22.1666	113.9280	AUTUMN	NONE	P
14-Sep-21	6	1123	FP	2	SWL	2	63	ON	3RS ET	22.1830	113.9276	AUTUMN	NONE	P
16-Sep-21	1	1044	CWD	1	WL	3	154	ON	3RS ET	22.2606	113.8501	AUTUMN	NONE	P
16-Sep-21	2	1123	CWD	3	WL	3	170	ON	3RS ET	22.2410	113.8409	AUTUMN	NONE	P
16-Sep-21	3	1151	CWD	9	WL	2	67	ON	3RS ET	22.2255	113.8318	AUTUMN	NONE	P
16-Sep-21	4	1221	CWD	2	WL	2	215	ON	3RS ET	22.2051	113.8324	AUTUMN	NONE	P
16-Sep-21	5	1236	CWD	3	WL	2	141	ON	3RS ET	22.2012	113.8245	AUTUMN	NONE	S
16-Sep-21	6	1250	CWD	10	WL	2	208	ON	3RS ET	22.1961	113.8416	AUTUMN	NONE	P
16-Sep-21	7	1308	CWD	1	WL	2	31	ON	3RS ET	22.1926	113.8425	AUTUMN	NONE	S
20-Sep-21	1	1201	CWD	3	NWL	2	7	ON	3RS ET	22.3859	113.8781	AUTUMN	NONE	P
23-Sep-21	1	1046	CWD	1	WL	2	71	ON	3RS ET	22.2608	113.8454	AUTUMN	NONE	P
23-Sep-21	2	1110	CWD	2	WL	2	1497	ON	3RS ET	22.2444	113.8491	AUTUMN	NONE	S
23-Sep-21	3	1203	CWD	6	WL	3	22	ON	3RS ET	22.2139	113.8312	AUTUMN	NONE	P
6-Oct-21	1	1049	CWD	1	WL	3	47	ON	3RS ET	22.2604	113.8535	AUTUMN	NONE	S
6-Oct-21	2	1107	CWD	3	WL	3	32	ON	3RS ET	22.2607	113.8427	AUTUMN	NONE	P
6-Oct-21	3	1137	CWD	1	WL	3	94	ON	3RS ET	22.2413	113.8391	AUTUMN	NONE	P
6-Oct-21	4	1153	CWD	13	WL	3	162	ON	3RS ET	22.2318	113.8280	AUTUMN	NONE	P
6-Oct-21	5	1220	CWD	1	WL	3	15	ON	3RS ET	22.2317	113.8341	AUTUMN	NONE	P
6-Oct-21	6	1246	CWD	8	WL	3	100	ON	3RS ET	22.2140	113.8308	AUTUMN	NONE	P
19-Oct-21	1	1023	CWD	4	WL	2	192	ON	3RS ET	22.2706	113.8447	AUTUMN	NONE	P
19-Oct-21	2	1037	CWD	2	WL	2	201	ON	3RS ET	22.2689	113.8501	AUTUMN	NONE	P
19-Oct-21	3	1054	CWD	1	WL	2	355	ON	3RS ET	22.2651	113.8587	AUTUMN	NONE	S
19-Oct-21	4	1134	CWD	3	WL	3	93	ON	3RS ET	22.2342	113.8244	AUTUMN	NONE	S



DATE	STG #	TIME	CWD/FP	GP SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.	P/S
19-Oct-21	5	1159	CWD	1	WL	2	282	ON	3RS ET	22.2242	113.8232	AUTUMN	NONE	P
19-Oct-21	6	1204	CWD	1	WL	3	54	ON	3RS ET	22.2225	113.8214	AUTUMN	SHRIMP TRAWLER	P
27-Oct-21	1	1100	FP	4	SWL	3	47	ON	3RS ET	22.1431	113.9276	AUTUMN	NONE	S
27-Oct-21	2	1111	FP	3	SWL	3	398	ON	3RS ET	22.1629	113.9275	AUTUMN	NONE	P
27-Oct-21	3	1240	CWD	1	SWL	2	218	ON	3RS ET	22.2046	113.9073	AUTUMN	NONE	P
3-Nov-21	1	1102	CWD	1	WL	2	63	ON	3RS ET	22.2610	113.8531	AUTUMN	NONE	S
3-Nov-21	2	1140	CWD	2	WL	2	229	ON	3RS ET	22.2414	113.8311	AUTUMN	NONE	P
3-Nov-21	3	1248	CWD	1	WL	4	75	ON	3RS ET	22.1869	113.8395	AUTUMN	NONE	P
4-Nov-21	1	1038	CWD	3	WL	2	87	ON	3RS ET	22.2664	113.8593	AUTUMN	NONE	S
4-Nov-21	2	1101	CWD	7	WL	2	296	ON	3RS ET	22.2603	113.8428	AUTUMN	NONE	P
4-Nov-21	3	1154	CWD	6	WL	2	286	ON	3RS ET	22.2244	113.8372	AUTUMN	NONE	S
4-Nov-21	4	1224	CWD	1	WL	2	171	ON	3RS ET	22.2240	113.8236	AUTUMN	NONE	P
4-Nov-21	5	1242	CWD	5	WL	2	32	ON	3RS ET	22.2142	113.8315	AUTUMN	NONE	P
5-Nov-21	1	1306	FP	2	SWL	3	95	ON	3RS ET	22.1643	113.8970	AUTUMN	NONE	P
11-Nov-21	1	1456	CWD	7	SWL	3	375	ON	3RS ET	22.1853	113.8486	AUTUMN	NONE	P

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

Notes:

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

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

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

A total of 370.620 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 32 dolphins from on-effort sightings were collected under such condition. Calculation of the encounter rates in November 2021 are shown as below:

Encounter Rate by Number of Dolphin Sightings (STG) in November 2021

$$STG = \frac{8}{370.620} \times 100 = 2.16$$

Encounter Rate by Number of Dolphins (ANI) in November 2021

$$ANI = \frac{32}{370.620} \times 100 = 8.63$$

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

A total of 1144.003 km of survey effort was collected under Beaufort Sea State 3 or below with favourable visibility; total no. of 36 on-effort sightings and total number of 124 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)









$$STG = \frac{36}{1144.003} \times 100 = 3.15$$

Running Quarterly Encounter Rate by Number of Dolphins (ANI)

$$ANI = \frac{124}{1144.003} \times 100 = 10.84$$

CWD Small Vessel Line-transect Survey

Photo Identification

	
WLMM043_20211103_1_1	WLMM003_20211104_1_1
	
WLMM043_20211104_1_4	SLMM058_20211104_2_5
	
WLMM071_20211104_2_2	WLMM149_20211104_2_4
	
SLMM003_20211104_3_1	SLMM010_20211104_3_3



SLMM037\_20211104\_3\_2



WLMM079\_20211104\_3\_2



WLMM114\_20211104\_3\_3



SLMM066\_20211104\_4\_1



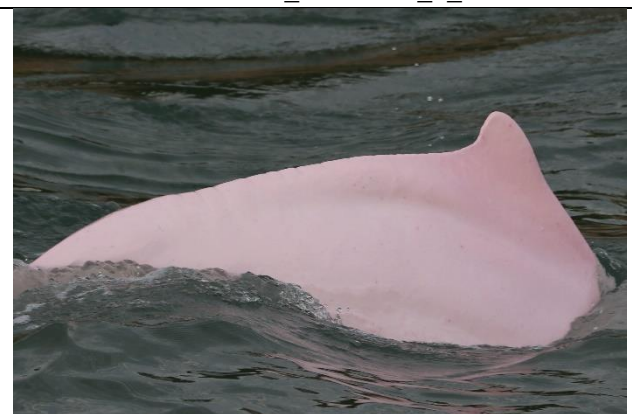
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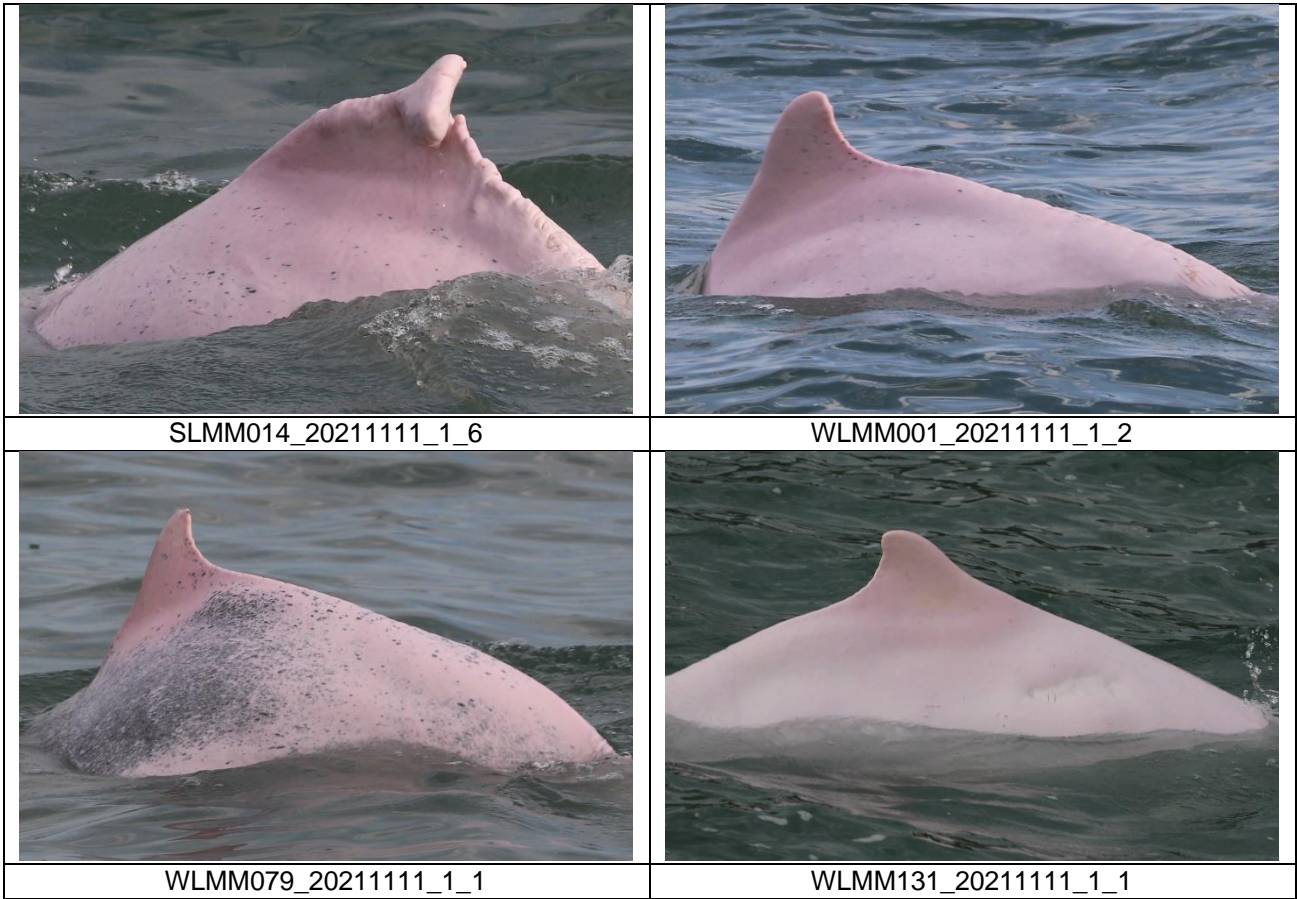
SLMM027\_20211104\_5\_8



SLMM037\_20211104\_5\_6



SLMM003\_20211111\_1\_1



**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>
8/Nov/21	Sha Chau	10:41	16:41	6:00	2-3	2	0	0
29/Nov/21	Lung Kwu Chau	8:45	14:45	6:00	2-3	2-3	2	2-3

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

## **Appendix E. Calibration Certificates**



專業化驗有限公司

QUALITY PRO TEST-CONSULT LIMITED

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

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

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

## REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : R-BA110050  
Date of Issue : 29 November 2021  
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 : 16H104233  
Date of Received : Nov 26, 2021  
Date of Calibration : Nov 26, 2021  
Date of Next Calibration<sup>(a)</sup> : Feb 25, 2022

### 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	4.09	0.09	Satisfactory
7.42	7.48	0.06	Satisfactory
10.01	10.06	0.05	Satisfactory

Tolerance of pH should be less than  $\pm 0.20$  (pH unit)

#### (2) Temperature


Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)	Results
10	10.0	0.0	Satisfactory
24	21.9	-0.1	Satisfactory
45	45.0	0.0	Satisfactory

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

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#### 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 Quality Pro Test-Consult Ltd. or quoted from relevant international standards..

  
LEE Chun-ning  
Senior Chemist





## REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

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

#### (3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
8.40	8.60	0.20	Satisfactory
5.34	5.22	-0.12	Satisfactory
2.63	2.47	-0.16	Satisfactory
0.16	0.35	0.19	Satisfactory

Tolerance limit of dissolved oxygen should be less than  $\pm 0.50$  (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	151.0	2.79	Satisfactory
0.01	1412	1309	-7.29	Satisfactory
0.1	12890	12758	-1.02	Satisfactory
0.5	58670	59133	0.79	Satisfactory
1.0	111900	112965	0.95	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	9.95	-0.50	Satisfactory
20	19.93	-0.35	Satisfactory
30	29.88	-0.40	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	0.05	--	Satisfactory
10	9.83	-1.7	Satisfactory
20	19.84	-0.8	Satisfactory
100	97.8	-2.2	Satisfactory
800	796.2	-0.5	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. : R-BA110051  
Date of Issue : 29 November 2021  
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### PART A – CUSTOMER INFORMATION

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

### PART B – DESCRIPTION

Name of Equipment : YSI ProDSS (Multi-Parameters)  
Manufacturer : YSI (a xylem brand)  
Serial Number : 16H104234  
Date of Received : Nov 26, 2021  
Date of Calibration : Nov 26, 2021  
Date of Next Calibration<sup>(a)</sup> : Feb 25, 2022

### 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 2510B
Salinity	APHA 21e 2520B
Turbidity	APHA 21e 2130B
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	4.08	0.08	Satisfactory
7.42	7.46	0.04	Satisfactory
10.01	10.10	0.09	Satisfactory

Tolerance of pH should be less than  $\pm 0.20$  (pH unit)

#### (2) Temperature

Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)	Results
10	10.0	0.0	Satisfactory
24	21.9	-0.1	Satisfactory
45	45.0	0.0	Satisfactory

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

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#### Remark(s): -

- <sup>(a)</sup> The "Date of Next Calibration" is recommended according to best practice principals as practiced by QPT or quoted form 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 Quality Pro Test-Consult Ltd. or quoted form relevant international standards..

  
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## REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

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

#### (3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
8.40	8.58	0.18	Satisfactory
5.34	5.16	-0.18	Satisfactory
2.63	2.50	-0.13	Satisfactory
0.16	0.51	0.35	Satisfactory

Tolerance limit of dissolved oxygen should be less than  $\pm 0.50$  (mg/L)

#### (4) Conductivity at 25°C

Conc. of KCl (M)	Expected Reading ( $\mu\text{S/cm}$ )	Displayed Reading ( $\mu\text{S/cm}$ )	Tolerance (%)	Results
0.001	146.9	152.0	3.47	Satisfactory
0.01	1412	1326	-6.09	Satisfactory
0.1	12890	12793	-0.75	Satisfactory
0.5	58670	59086	0.71	Satisfactory
1.0	111900	112741	0.75	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	10.08	0.80	Satisfactory
20	20.17	0.85	Satisfactory
30	30.21	0.70	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	0.05	--	Satisfactory
10	9.88	-1.2	Satisfactory
20	20.09	0.4	Satisfactory
100	98.8	-1.2	Satisfactory
800	812.3	1.5	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 F. Status of Environmental Permits and Licenses

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

Contract No.	Description	Location	Permit/ Reference No.	Status
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-RS0505-21	Superseded by GW-RS0757-21
			GW-RS0757-21	Valid from 6 Oct 2021 to 2 Apr 2022
	Bill Account for disposal	Works area of 3206	A/C 7026398	Approval granted from EPD on 16 Nov 2016
3301	Notification of Construction Work under APCO	Works area of 3301	415821	Receipt acknowledged by EPD on 19 Apr 2017
	Registration as Chemical Waste Producer	Works area of 3301	WPN 5213-951-F2718-02	Completion of Registration on 9 Jun 2017
	Discharge License under WPCO	Works area of 3301	WT00029286-2017	Valid from 20 Sep 2017 to 30 Sep 2022
	Bill Account for disposal	Works area of 3301	A/C 7027728	Approval granted from EPD on 8 May 2017
	Construction Noise Permit (General Works)	Works area of 3301	GW-RS0631-21	Valid from 22 Aug 2021 to 21 Feb 2022
		Works area of 3301 (Cable ducting works) (Special Case)	GW-RS0744-21	Valid from 2 Oct 2021 to 29 Mar 2022
3302	Notification of Construction Work under APCO	Works area of 3302	440222	Receipt acknowledged by EPD on 10 Dec 2018
		Staging area of 3302	2018CES1	Receipt acknowledged by EPD on 21 Dec 2018
			454882	Receipt acknowledged by EPD on 2 Apr 2020
	Registration as Chemical Waste Producer	Works area of 3302	5296-951-C4331-01	Completion of Registration on 4 Jan 2019

Contract No.	Description	Location	Permit/ Reference No.	Status
	Discharge License under WPCO	Works area of 3302	WT00034539-2019	Valid from 11 Mar 2020 to 31 Mar 2025
		Works area of 3302	WT00034541-2019	Valid from 14 Oct 2019 to 31 Oct 2024
	Bill Account for disposal	Works area of 3302	A/C 7032881	Approval granted from EPD on 8 Jan 2019
	Construction Noise Permit (General Works)	Works area of 3302	GW-RS0497-21	Superseded by GW-RS0842-21
			GW-RS0842-21	Valid from 10 Nov 2021 to 8 May 2022
			GW-RS0501-21	Valid from 7 July 2021 to 6 Jan 2022
			PP-RS0005-21	Valid from 3 May 2021 to 1 Nov 2021
3303	Notification of Construction Work under APCO	Works area of 3303	445611	Receipt acknowledged by EPD on 27 May 2019
	Specified Process license under APCO	Works area of 3303	L-15-040 (1)	Valid from 29 Mar 2021 to 28 Mar 2025
	Registration as Chemical Waste Producer	Works area of 3303	5213-951-S4174-01	Completion of Registration on 17 Jun 2019
	Discharge License under WPCO	Works area of 3303	WT00035689-2020	Valid from 11 May 2020 to 31 May 2025
		Works area of 3303	WT00036734-2020	Valid from 1 Dec 2020 to 31 Dec 2025
	Bill Account for disposal	Works area of 3303	A/C 7034272	Approval granted from EPD on 10 Jun 2019
	Construction Noise Permit (General Works)	Works area of 3303 (Existing airport)	GW-RS0823-21	Valid from 16 Nov 2021 to 15 May 2022
		Works area of 3303 (Reclamation area)	GW-RS0803-21	Valid from 29 Oct 2021 to 26 Apr 2022
3305	Notification of Construction Work under APCO	Works area of 3305	460857	Receipt acknowledged by EPD on 12 Oct 2020
	Registration as Chemical Waste Producer	Works area of 3305	5213-951-A3024-01	Completion of Registration on 13 Nov 2020
	Bill Account for disposal	Works area of 3305	A/C 7035360	Approval granted from EPD on 9 Oct 2019
3306	Registration as Chemical Waste Producer	Works area of 3306	8335-951-C4434-01	Completion of Registration on 1 Apr 2020
	Bill Account for disposal	Works area of 3306	A/C 7035868	Approval granted from EPD on 27 Nov 2019
3307	Notification of Construction Work under APCO	Works area of 3307	454964	Receipt acknowledged by EPD on 6 Apr 2020
	Registration as Chemical Waste Producer	Works area of 3307	5211-951-P3379-01	Completion of Registration on 8 Jun 2020
	Discharge License under WPCO	Works area of 3307	WT00036926-2020	Valid from 31 Dec 2020 to 31 Dec 2025
	Bill Account for disposal	Works area of 3307	A/C 7037129	Approval granted from EPD on 5 May 2020

Contract No.	Description	Location	Permit/ Reference No.	Status
	Construction Noise Permit (General Works)	Works area of 3307	GW-RS0562-21	Valid from 6 Aug 2021 to 5 Feb 2022
3308	Bill Account for disposal	Works area of 3308	A/C 7038988	Approval granted from EPD on 24 Nov 2020
	Construction Noise Permit (General Works)	Works area of 3308	GW-RS0655-21	Valid from 2 Sep 2021 to 28 Feb 2022
3310	Notification of Construction Work under APCO	Works area of 3310	469170	Receipt acknowledged by EPD on 6 Jul 2021
	Registration as Chemical Waste Producer	Works area of 3310	5213-951-C4620-01	Approval granted from EPD on 26 Jul 2021
	Bill Account for disposal	Works area of 3310	A/C 7040969	Approval granted from EPD on 8 Jul 2021
	Construction Noise Permit (General Works)	Works area of 3310	GW-RS0768-21	Superseded by GW-RS0902-21
			GW-RS0902-21	Valid from 18 Nov 2021 to 14 May 2022
3402	Notification of Construction Work under APCO	Works area of 3402	464622	Receipt acknowledged by EPD on 18 Feb 2021
	Bill Account for disposal	Works area of 3402	A/C 7032577	Approval granted from EPD on 27 Nov 2018
3403	Notification of Construction Work under APCO	Works area of 3403	450860	Receipt acknowledged by EPD on 11 Nov 2019
		Works area of 3403 (with Area 17 and Area 15)	453912	Receipt acknowledged by EPD on 3 Mar 2020
	Registration as Chemical Waste Producer	Works area of 3403	WPN 5213-951-S4218-01	Completion of Registration on 9 Jan 2020
	Discharge License under WPCO	Works area of 3403	WT00035841-2020	Valid from 5 Jun 2020 to 30 Jun 2025
	Bill Account for disposal	Works area of 3403	A/C 7035267	Approval granted from EPD on 30 Sep 2019
	Construction Noise Permit (General Works)	Works area of 3403	GW-RS0653-21	Valid from 4 Sep 2021 to 28 Feb 2022
	Construction Noise Permit (Special Case)	Works area of 3403	GW-RS0338-21	Valid from 1 June 2021 to 30 Nov 2021
3404	Bill Account for disposal	Works area of 3404	A/C 7035158	Approval granted from EPD on 12 Sep 2019
3405	Notification of Construction Work under APCO	Works area of 3405	453447	Receipt acknowledged by EPD on 18 Feb 2020
	Registration as Chemical Waste Producer	Works area of 3405	WPN 5218-951-C4431-01	Completion of Registration on 12 Mar 2020
	Discharge License under WPCO	Works area of 3405	WT00037084-2020	Valid from 17 Mar 2021 to 31 Mar 2026
	Bill Account for disposal	Works area of 3405	A/C 7036796	Approval granted from EPD on 20 Mar 2020

Contract No.	Description	Location	Permit/ Reference No.	Status
	Construction Noise Permit (General Works)	Works area of 3405	GW-RS0807-21	Valid from 29 Oct 2021 to 26 Apr 2022
3408	Notification of Construction Work under APCO	Works area of 3408	461958	Receipt acknowledged by EPD on 17 Nov 2020
	Registration as Chemical Waste Producer	Works area of 3408	WPN 5218-951-B2621-01	Completion of Registration on 16 Jul 2021
	Discharge License under WPCO	Works area of 3408	WT00038836-2021	Valid from 27 Sep 2021 to 30 Sep 2026
	Bill Account for disposal	Works area of 3408	A/C 7039063	Approval granted from EPD on 2 Dec 2020
	Construction Noise Permit (General Works)	Works area of 3408	GW-RS0818-21	Valid from 29 Oct 2021 to 31 Mar 2022
3503	Notification of Construction Work under APCO	Works area of 3503	459394	Receipt acknowledged by EPD on 28 Aug 2020
		Stockpiling area of 3503	459392	Receipt acknowledged by EPD on 28 Aug 2020
	Registration as Chemical Waste Producer	Works area of 3503	WPN 5113-951-L2845-02	Completion of Registration on 3 Sep 2019
		Stockpiling area of 3503	WPN 5113-951-L2845-04	Completion of Registration on 19 Jun 2020
	Discharge License under WPCO	Works area of 3503	WT00031258-2018	Valid from 6 Aug 2019 to 30 Jun 2023
			WT00036551-2020	Valid from 17 Sep 2020 to 30 Sep 2025
			WT00036697-2020	Valid from 2 Nov 2020 to 30 Nov 2025
	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-RS0695-21	Superseded by GW-RS0758-21
		Works area of 3503	GW-RS0758-21	Valid from 9 Oct 2021 to 4 Mar 2022
		Stockpiling area of 3503	GW-RS0215-21	Superseded by GW-RS0785-21
		Stockpiling area of 3503	GW-RS0785-21	Valid from 20 Oct 2021 to 18 Apr 2022
	3508	Notification of Construction Work under APCO	Works area of 3508	459017
			459469	Receipt acknowledged by EPD on 4 Sep 2020
Works area of 3508 (Area J)			467132	Receipt acknowledged by EPD on 3 May 2021
Registration as Chemical Waste Producer		Works area of 3508	WPN-5218-951-G2898-01	Completion of Registration on 28 Sep 2020
Discharge License under WPCO		Works area of 3508	WT00037209-2020	Valid from 11 Mar 2021 to 31 Mar 2026
			WT00037523-2021	Valid from 1 Apr 2021 to 30 Apr 2026
			WT00037225-2020	Valid from 1 Apr 2021 to 30 Apr 2026

Contract No.	Description	Location	Permit/ Reference No.	Status
			WT00037549-2021	Valid from 1 Apr 2021 to 30 Apr 2026
	Bill Account for disposal	Works area of 3508	7038224	Approval granted from EPD on 8 Sep 2020
	Construction Noise Permit (General Works)	Works area of 3508	GW-RS0710-21	Superseded by GW-RS0886-21
			GW-RS0886-21	Valid from 19 Nov 2021 to 16 May 2022
		Works area of 3508	GW-RS0778-21	Valid from 15 Oct 2021 to 12 Apr 2022
		Works area of 3508 (Area 10)	GW-RS0493-21	Valid from 27 Jun 2021 to 24 Dec 2021
		Works area of 3508 (Special Case)	GW-RS0414-21	Valid from 30 May 2021 to 25 Nov 2021
		Works area of 3508 (Special Case)	GW-RS0315-21	Valid from 12 May 2021 to 9 Nov 2021
		Works area of 3508 (Area 13)	GW-RS0711-21	Valid from 17 Sep 2021 to 30 Nov 2021
3601	Notification of Construction Work under APCO	Works area of 3601	451762	Receipt acknowledged by EPD on 10 Dec 2019
	Registration as Chemical Waste Producer	Works area of 3601	WPN 7119-951-C4421-01	Completion of Registration on 9 Jan 2020
	Bill Account for disposal	Works area of 3601	A/C 7029991	Approval granted from EPD on 1 Feb 2018
	Construction Noise Permit (General Works)	Works area of 3601	GW-RS0407-21	Valid from 3 June 2021 to 30 Nov 2021
3602	Notification of Construction Work under APCO	Works area of 3602	421278	Receipt acknowledged by EPD on 18 Sep 2017
	Registration as Chemical Waste Producer	Works area of 3602	WPN 5296-951-N2673-01	Completion of Registration on 9 Oct 2017
		Site office of 3602	WPN 5296-951-N2673-02	Completion of Registration on 11 Dec 2017
	Bill Account for disposal	Works area of 3602	A/C 7028942	Approval granted from EPD on 6 Oct 2017
	Construction Noise Permit (General Works)	Works area of 3602	GW-RS0650-21	Valid from 1 Oct 2021 to 1 Mar 2022
3603	Notification of Construction Work under APCO	Site office of 3603	433604	Receipt acknowledged by EPD on 16 May 2018
	Registration as Chemical Waste Producer	Site office of 3603	5296-951-S4069-01	Completion of Registration on 22 Jan 2018
		Test Loop Site of 3603	8334-512-S4273-01	Completion of Registration on 17 Sep 2020
	Bill Account for disposal	Works area of 3603	A/C 7030002	Approval granted from EPD on 1 Feb 2018
	Construction Noise Permit (General Works)	Works area of 3603	GW-RS0367-21	Superseded by GW-RS0878-21



Contract No.	Description	Location	Permit/ Reference No.	Status
			GW-RS0878-21	Valid from 24 Nov 2021 to 23 May 2022
3721	Notification of Construction Work under APCO	Works area of 3721	448657	Receipt acknowledged by EPD on 02 Sep 2019
	Registration as Chemical Waste Producer	Works area of 3721	WPN 5218-951-C4412-01	Completion of Registration on 9 Dec 2019
	Bill Account for disposal	Works area of 3721	A/C 7035234	Approval granted from EPD on 25 Sep 2019
	Construction Noise Permit (General Works)	Works area of 3721	GW-RS0748-21	Valid from 6 Oct 2021 to 6 Mar 2022
3722	Notification of Construction Work under APCO	Works area of 3722A	465843	Receipt acknowledged by EPD on 14 Aug 2020
		Works area of 3722B	465845	Receipt acknowledged by EPD on 14 Aug 2020
		Works area of 3722C	465842	Receipt acknowledged by EPD on 14 Aug 2020
		Works area of 3722D	465846	Receipt acknowledged by EPD on 14 Aug 2020
	Registration as Chemical Waste Producer	Works area of 3722A	WPN 5218-951-T3863-01	Completion of Registration on 18 Mar 2020
		Works area of 3722B	WPN 5218-951-T3864-01	Completion of Registration on 18 Mar 2020
		Works area of 3722C	WPN 5218-951-T3862-01	Completion of Registration on 18 Mar 2020
		Works area of 3722D	WPN 5218-951-T3865-01	Completion of Registration on 18 Mar 2020
	Discharge License under WPCO	Sewage Treatment Facility of 3722D	WT00037491-2021	Valid from 30 Mar 2021 to 31 Mar 2026
	Bill Account for disposal	Works area of 3722A	A/C 7036752	Approval granted from EPD on 11 Mar 2020
		Works area of 3722B	A/C 7036966	Approval granted from EPD on 6 Apr 2020
		Works area of 3722C	A/C 7036967	Approval granted from EPD on 6 Apr 2020
		Works area of 3722D	A/C 7036795	Approval granted from EPD on 20 Mar 2020
	3723	Notification of Construction Work under APCO	3723A	464440
3723B			464444	Receipt acknowledged by EPD on 9 Feb 2021
Registration as Chemical Waste Producer		3723A	WPN 5218-951-T3920-01	Completion of Registration on 9 Feb 2021
		3723B	WPN 5218-951-T3921-01	Completion of Registration on 9 Feb 2021
Discharge License under WPCO		Works area of 3723A & 3723B	WT00039451-2021	Valid from 28 Oct 2021 to 31 Oct 2023
Bill Account for disposal		Works area of 3723A	A/C 7039755	Approval granted from EPD on 24 Feb 2021
		Works area of 3723B	A/C 7039754	Approval granted from EPD on 24 Feb 2021

Contract No.	Description	Location	Permit/ Reference No.	Status
	Construction Noise Permit (General Works)	Works area of 3723A & 3723B	GW-RS0697-21	Valid from 16 Sep 2021 to 13 Mar 2022
3728	Registration as Chemical Waste Producer	Works area of 3728	WPN 5111-951-S3467-03	Completion of Registration on 7 May 2021
	Discharge License under WPCO	Works area of 3728	WT00037809-2021	Valid from 27 Jul 2021 to 31 Jul 2026
	Bill Account for disposal	Works area of 3728	A/C 7039409	Approval granted from EPD on 22 Jan 2021
3733	Notification of Construction Work under APCO	Works area of 3733	472772	Receipt acknowledged by EPD on 18 Oct 2021
	Bill Account for disposal	Works area of 3733	7041945	Approval granted from EPD on 21 Oct 2021
3801	Notification of Construction Work under APCO	Works area of 3801	430372	Receipt acknowledged by EPD on 2 Feb 2018
			435652	Receipt acknowledged by EPD on 16 Jul 2018
			451991	Receipt acknowledged by EPD on 18 Dec 2019
		Stockpiling area of 3801	450940	Receipt acknowledged by EPD on 13 Nov 2019
	Registration as Chemical Waste Producer	Works area of 3801	WPN 5296-951-C1169-53	Completion of Registration on 14 Aug 2018
	Discharge License under WPCO	Works and stockpiling area of 3801	WT00029535-2017	Valid from 30 Jul 2019 to 30 Nov 2022
		Stockpiling area of 3801	WT00037354-2021	Valid from 8 Mar 2021 to 31 Mar 2026
	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 area of 3801	GW-RS0634-21	Valid from 27 Aug 2021 to 26 Feb 2022
3802	Notification of Construction Work under APCO	Works area of 3802	458122	Receipt acknowledged by EPD on 14 Jul 2020
	Registration as Chemical Waste Producer	Works area of 3802	WPN 5218-951-G2895-01	Completion of Registration on 28 Aug 2020
		Works area of 3802	WPN 5218-951-G2945-01	Completion of Registration on 29 Sep 2020
	Discharge License under WPCO	Works area of 3802	WT00037032-2020	Valid from 25 May 2021 to 31 May 2026
		Works area of 3802	WT00039092-2021	Valid from 30 Nov 2021 to 31 Nov 2026
	Bill Account for disposal	Works area of 3802	A/C 7037575	Approval granted from EPD on 15 Jun 2020
	Construction Noise Permit (General Works)	Works area of 3802	GW-RS0808-21	Valid from 29 Oct 2021 to 24 Apr 2022
		Works area of 3802	GW-RS0734-21	Superseded by GW-RS0888-21 on 29 Nov 2021
		Works area of 3802	GW-RS0888-21	Valid from 29 Nov 2021 to 19 May 2022

Contract No.	Description	Location	Permit/ Reference No.	Status
3901A	Notification of Construction Work under APCO	Works area of 3901A	466883	Receipt acknowledged by EPD on 26 Apr 2021
	Specified Process license under APCO	Works area of 3901A	L-3-261(1)	Valid from 14 Sep 2020 to 13 Sep 2024 Varied on 29 Nov 2021
	Registration as Chemical Waste Producer	Works area of 3901A	WPN 5218-951-K3400-01	Completion of Registration on 17 Jul 2020
	Landfill disposal of waste concrete from batching plant	Works area of 3901A	EP195/01/18	Valid from 5 May 2021 to 2 Feb 2022
	Bill Account for disposal	Works area of 3901A	A/C 7037889	Approval granted from EPD on 20 Jul 2020
	Construction Noise Permit (General Works)	Works area of 3901A	GW-RS0597-21	Valid from 7 Aug 2021 to 4 Feb 2022
3901B	Notification of Construction Work under APCO	Works area of 3901B	466885	Receipt acknowledged by EPD on 26 Apr 2021
	Air Pollution Control (Furnaces, Ovens and Chimneys) (Installation and Alteration) Regulations	Works area of 3901B	EP/RS/0000438 488	Approval granted on 26 Jun 2020
	Specified Process license under APCO	Works area of 3901B	L-3-262(1)	Valid from 17 Nov 2020 to 16 Nov 2024 Varied on 29 Nov 2021
	Registration as Chemical Waste Producer	Works area of 3901B	WPN 5218-951-G2880-01	Completion of Registration on 17 Jan 2020
	Bill Account for disposal	Works area of 3901B	A/C 7032417	Approval granted from EPD on 13 Nov 2018
	Construction Noise Permit (General Works)	Works area of 3901B	GW-RS0702-21	Valid from 16 Sep 2021 to 13 Mar 2022

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

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

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

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

### Statistics for Complaints, Notifications of Summons and Prosecutions

Reporting Period	Cumulative Statistics		
	Complaints	Notifications of Summons	Prosecutions
This reporting period	3	0	0
From 28 December 2015 to end of the reporting period	45	2	2