MOTT MACDONALD

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

Construction Phase Monthly EM&A Report No.24 (For December 2017)

January 2018

Airport Authority Hong Kong

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This Monthly EM&A Report No. 24 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: 

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

Date 12 January 2018

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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

12 January 2018

Dear Sir,

Contract No. 3102
3RS Independent Environmental Checker Consultancy Services

Submission of Monthly EM&A Report No.24 (December 2017)

Reference is made to the Environmental Team's submission of the Monthly EM&A Report No.24 under Condition 3.5 of the Environmental Permit No. EP-489/2014 certified by the ET Leader on 12 January 2018.

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

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

Yours faithfully,
AECOM Asia Co. Ltd.

Jackel Law
Independent Environmental Checker

Contents

Tables

Figures

Appendices

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 24th Construction Phase Monthly EM&A Report for the Project which summarizes the monitoring results and audit findings of the EM&A programme during the reporting period from 1 to 31 December 2017.

Key Activities in the Reporting Period

The key activities of the Project carried out in the reporting period included reclamation works and land-side works. Reclamation works included deep cement mixing (DCM) works, laying of sand blanket, seawall construction and prefabricated vertical drain (PVD) installation. Land-side works included horizontal directional drilling (HDD) works, site office establishment, cable ducting, concrete removal works, 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. During the reporting period, the ET conducted 30 sets of construction dust measurements, 20 sets of construction noise measurements, 13 events of water quality measurements, 1 round of terrestrial ecology monitoring on Sheung Sha Chau Island, 2 complete sets of small vessel line-transect surveys and 5 days of land-based theodolite tracking survey effort for Chinese White Dolphin (CWD) monitoring and waste monitoring.

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 Independent Environmental Checker (IEC). Observations have been recorded in the site inspection checklists and provided to the contractors together with the appropriate follow-up actions where necessary.

On the implementation of Marine Mammal Watching Plan (MMWP), dolphin observers were deployed by the contractors for laying of open sea silt curtain and laying of silt curtains for sand blanket works in accordance with the plan. On the implementation of Dolphin Exclusion Zone (DEZ) Plan, dolphin observers at 12 to 21 dolphin observation stations were deployed for continuous monitoring of the DEZ by all contractors for ground improvement works (DCM works and PVD installation) in accordance with the DEZ Plan. Trainings for the proposed dolphin observers were provided by the ET prior to the aforementioned works, with the training records kept by the ET. From the contractors' MMWP observation records and DEZ monitoring records, no dolphin or other marine mammals were observed within or around the silt curtains, whilst there

was one record of dolphin sighting within the DEZ of DCM works in this reporting month. Audits of acoustic decoupling for construction vessels were also carried out by the ET.

On the implementation of the Marine Travel Routes and Management Plan for High Speed Ferries of SkyPier (the SkyPier Plan), the daily movements of all SkyPier high speed ferries (HSFs) in December 2017 were in the range of 87 to 90 daily movements, which are within the maximum daily cap of 125 daily movements. A total of 857 HSF movements under the SkyPier Plan were recorded in the reporting period. All HSFs had travelled through the Speed Control Zone (SCZ) with average speeds under 15 knots (9.8 to 14.1 knots), which were in compliance with the SkyPier Plan. One ferry movement with minor deviation from the diverted route in December 2017 is under investigation by ET. The investigation result will be presented in the next monthly EM&A report. In summary, the ET and IEC have audited the HSF movements against the SkyPier Plan and conducted follow up investigation or actions accordingly.

On the implementation of the Marine Travel Routes and Management Plan for Construction and Associated Vessel (MTRMP-CAV), the Marine Surveillance System (MSS) automatically recorded the deviation case such as speeding, entering no entry zone, not travelling through the designated gate. ET conducted checking to ensure the MSS records all deviation cases accurately. Training has been provided for the concerned skippers to facilitate them in familiarising with the requirements of the MTRMP-CAV. Deviations including speeding in the works area and entry from non-designated gates were reviewed by ET. All the concerned captains were reminded by the contractor's Marine Traffic Control Centre (MTCC) representative to comply with the requirements of the MTRMP-CAV. ET also reminded contractors that all vessels shall avoid entering the no-entry zone, in particular the Brothers Marine Park. 3-month rolling programmes for construction vessel activities, which ensures the proposed vessels are necessary and minimal through good planning, were also received from contractors.

Results of Impact Monitoring

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

No exceedance of the Action or Limit Levels in relation to construction dust, construction noise, construction waste, and CWD monitoring was recorded in the reporting period.

The water quality monitoring results for dissolved oxygen (DO), turbidity, total alkalinity, chromium, and nickel obtained during the reporting period did not trigger their corresponding Action and Limit Levels stipulated in the EM&A programme for triggering the relevant investigation and follow-up procedures under the programme if being exceeded. For suspended solids (SS), some of the testing results exceeded the relevant Action Levels, and the corresponding investigations were conducted accordingly. The investigation findings concluded that the exceedances were not due to the Project.

The monthly terrestrial ecology monitoring on Sheung Sha Chau observed that HDD works were conducted at the daylighting location and there was no encroachment upon the egretry area nor any significant disturbance to the egrets foraging at Sheung Sha Chau by the works.

Summary of Upcoming Key Issues

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

Advanced Works:

Contract P560 (R) Aviation Fuel Pipeline Diversion Works

- HDD works; and

- Stockpiling of excavated materials from HDD operation.

DCM Works:

Contract 3201 to 3205 DCM Works

- DCM works; and
- Seawall construction.

Reclamation Works:

Contract 3206 Main Reclamation Works

- Laying of sand blanket; and
- PVD installation.

Airfield Works:

Contract 3301 North Runway Crossover Taxiway

- Cable ducting works;
- Subgrade works; and
- Precast of duct bank and fabrication of steel works.

Terminal 2 Expansion Works:

Contract 3501 Antenna Farm and Sewage Pumping Station

- Excavation works;
- Piling works; and
- Erection of antenna farm.

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

- Removal of existing concrete.

Contract 3503 Terminal 2 Foundation and Substructure Works

- Site establishment.

APM works:

Contract 3602 Existing APM System Modification Works

- Site office establishment.

Airport Support Infrastructure & Logistic Works:

Contract 3801 APM and BHS Tunnels on Existing Airport Island

- Erection of hoarding; and
- Demolition of footbridge.

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

		
Land-Based Theodolite Tracking Survey for CWD at Lung Kwu Chau	Dolphin Observer Training Conducted by ET	Chemical Spill Drill Conducted by Contractor

Summary Table

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

	Yes	No	Details	Analysis / Recommendation / Remedial Actions
Exceedance of Limit Level^		√	No exceedance of project-related limit level was recorded.	Nil
Exceedance of Action Level^		√	No exceedance of project-related action level was recorded.	Nil
Complaints Received		√	No construction activities-related complaint was received.	Nil
Notification of any summons and status of prosecutions		√	No notification of summon or prosecution was received.	Nil
Changes that affect the EM&A		√	There was no change to the construction works that may affect the EM&A	Nil

Remark: ^Only exceedance of Action or Limit Level related to Project works is counted as Breaches 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. The Manual is available on the Project's dedicated website (accessible at: **http://env.threerunwaysystem.com/en/index.html**). AECOM Asia Company Limited (AECOM) was employed by AAHK as the Independent Environmental Checker (IEC) for the Project.

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

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

The updated overall phasing programme of all construction works was presented in Appendix A of the Construction Phase Monthly EM&A Report No. 7 and the contract information was presented in Appendix A of the Construction Phase Monthly EM&A Report No. 22.

1.2 Scope of this Report

This is the 24th Construction Phase Monthly EM&A Report for the Project which summarizes the key findings of the EM&A programme during the reporting period from 1 to 31 December 2017.

1.3 Project Organisation

The Project's organization structure presented in Appendix B of the Construction Phase Monthly EM&A Report No.1 remained unchanged during the reporting period. Contact details of the key personnel have been updated and is presented in **Table 1.1**.

Table 1.1: Contact Information of Key Personnel

Party	Position	Name	Telephone
Project Manager's Representative (Airport Authority Hong Kong)	Principal Manager, Environment	Lawrence Tsui	2183 2734

Party	Position	Name	Telephone
Environmental Team (ET) (Mott MacDonald Hong Kong Limited)	Environmental Team Leader	Terence Kong	2828 5919
	Deputy Environmental Team Leader	Heidi Yu	2828 5704
	Deputy Environmental Team Leader	Keith Chau	2972 1721
Independent Environmental Checker (IEC) (AECOM Asia Company Limited)	Independent Environmental Checker	Jackel Law	3922 9376
	Deputy Independent Environmental Checker	Roy Man	3922 9376
Advanced Works:			
Contract P560(R) Aviation Fuel Pipeline Diversion Works (Langfang Huayuan Mechanical and Electrical Engineering Co., Ltd.)	Project Manager	Wei Shih	2117 0566
	Environmental Officer	Lyn Liu	5172 6543
Deep Cement Mixing (DCM) Works:			
Contract 3201 DCM (Package 1) (Penta-Ocean-China State-Dong-Ah Joint Venture)	Project Director	Tsugunari Suzuki	9178 9689
	Environmental Officer	Alan Tam	6119 3107
Contract 3202 DCM (Package 2) (Samsung-BuildKing Joint Venture)	Project Manager	Ilkwon Nam	9643 3117
	Environmental Officer	Dickson Mak	9525 8408
Contract 3203 DCM (Package 3) (Sambo E&C Co., Ltd)	Project Manager	Eric Kan	9014 6758
	Environmental Officer	David Hung	9765 6151
Contract 3204 DCM (Package 4) (CRBC-SAMBO Joint Venture)	Project Manager	Kyung-Sik Yoo	9683 8697
	Environmental Officer	Kanny Cho	6799 8226
Contract 3205 DCM (Package 5) (Bachy Soletanche - Sambo Joint Venture)	Deputy Project Director	Min Park	9683 0765
	Environmental Officer	Margaret Chung	9130 3696
Reclamation Works:			
Contract 3206 (ZHEC-CCCC-CDC Joint Venture)	Project Manager	Kim Chuan Lim	3693 2288
	Environmental Officer	Kwai Fung Wong	3693 2252
Airfield Works			

Party	Position	Name	Telephone
Contract 3301 North Runway Crossover Taxiway (FJT-CHEC-ZHEC Joint Venture)	Project Manager	Kin Hang Chung	9412 1386
Terminal 2 (T2) Expansion Works:			
Contract 3501 Antenna Farm and Sewage Pumping Station (Build King Construction Ltd.)	Project Manager	Osbert Sit	9079 7030
	Environmental Officer	Kelvin Cheung	9305 6081
Contract 3502 Terminal 2 APM Depot Modification Works (Build King Construction Ltd.)	Project Manager	Kivin Cheng	9380 3635
	Environmental Officer	Chun Pong Chan	9187 7118
Automated People Mover (APM) Works:			
Contract 3602 Existing APM System Modification Works (Niigata Transys Co., Ltd.)	Project Manager	Kunihiro Tatecho	9755 0351
	Environmental Officer	Arthur Wong	9170 3394
Airport Support Infrastructure and Logistic Works:			
Contract 3801 APM and BHS Tunnels on Existing Airport Island (China State Construction Engineering (Hong Kong) Ltd.)	Project Manager	Tony Wong	9642 8672
	Environmental Officer	Fredrick Wong	9842 2703

1.4 Summary of Construction Works

The key activities of the Project carried out in the reporting period included reclamation works and land-side works. Reclamation works included DCM works, laying of sand blanket, seawall construction and PVD installation. Land-side works included HDD works, site office establishment, cable ducting, concrete removal works, piling, and excavation works.

The locations of the works area are presented in **Figure 1.1** to **Figure 1.2**.

1.5 Summary of EM&A Programme Requirements

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

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

Parameters	Status
Air Quality	
Baseline Monitoring	The baseline air quality monitoring result has been reported in Baseline Monitoring Report and submitted to EPD under EP Condition 3.4.
Impact Monitoring	On-going
Noise	
Baseline Monitoring	The baseline noise monitoring result has been reported in Baseline Monitoring Report and submitted to EPD under EP Condition 3.4.
Impact Monitoring	On-going

Parameters	Status
Water Quality	
General Baseline Water Quality Monitoring for reclamation, water jetting and field joint works	The baseline water quality monitoring result has been reported in Baseline Water Quality Monitoring Report and submitted to EPD under EP Condition 3.4.
General Impact Water Quality Monitoring for reclamation, water jetting and field joint works	On-going
Initial Intensive Deep Cement Mixing (DCM) Water Quality Monitoring	The Initial Intensive DCM Monitoring Report was submitted and approved by EPD in accordance with the Detailed Plan on DCM.
Regular DCM Water Quality Monitoring	On-going
Waste Management	
Waste Monitoring	On-going
Land Contamination	
Supplementary Contamination Assessment Plan (CAP)	The Supplementary CAP was submitted and approved by EPD pursuant to EP condition 2.20.
Contamination Assessment Report (CAR) for Golf Course	The CAR for Golf Course was submitted to EPD.
Terrestrial Ecology	
Pre-construction Egretry Survey Plan	The Egretry Survey Plan was submitted and approved by EPD under EP Condition 2.14.
Ecological Monitoring	On-going
Marine Ecology	
Pre-Construction Phase Coral Dive Survey	The Coral Translocation Plan was submitted and approved by EPD under EP Condition 2.12.
Coral Translocation	The coral translocation was completed.
Post-Translocation Coral Monitoring	On-going
Chinese White Dolphins (CWD)	
Vessel Survey, Land-based Theodolite Tracking and Passive Acoustic Monitoring (PAM)	
Baseline Monitoring	Baseline CWD results were reported in the CWD Baseline Monitoring Report and submitted to EPD in accordance with EP Condition 3.4.
Impact Monitoring	On-going
Landscape & Visual	
Baseline Monitoring	The baseline landscape & visual monitoring result has been reported in Baseline Monitoring Report and submitted to EPD under EP Condition 3.4.
Impact Monitoring	On-going
Environmental Auditing	
Regular site inspection	On-going
Marine Mammal Watching Plan (MMWP) implementation measures	On-going
Dolphin Exclusion Zone Plan (DEZP) implementation measures	On-going
SkyPier High Speed Ferries (HSF) implementation measures	On-going
Construction and Associated Vessels Implementation measures	On-going
Complaint Hotline and Email channel	On-going
Environmental Log Book	On-going

Taking into account the construction works in this reporting period, impact monitoring of air quality, noise, water quality, waste management, terrestrial ecology, 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. In order to enhance environmental awareness and closely monitor the environmental performance of the contractors, environmental trainings and environmental management meetings were conducted during the reporting period, as summarised below:

- One dolphin observer training provided by ET: 19 Dec 2017
- Two skipper trainings provided by ET: 13 and 27 Dec 2017
- Three environmental briefings on EP and EM&A requirements of the 3RS provided by ET: 11, 19, and 29 Dec 2017
- One environmental briefing on Control of Marine Dumping provided by EPD: 8 Dec 2017
- Nine environmental management meetings on EM&A matters: 4, 12, 18, 19, 20, and 22 Dec 2017

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

2 Air Quality Monitoring

2.1 Monitoring Stations

Air quality monitoring was conducted at 2 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

2.2 Monitoring Requirements and Schedule

In accordance with the Manual, baseline 1-hour total suspended particulate (TSP) levels at the two air quality monitoring stations were established as presented in the Baseline Monitoring Report. Impact 1-hour TSP monitoring was conducted for three times every six days. 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**.

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

Table 2.2: Action and Limit Levels for 1-hour TSP

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

2.3 Monitoring Equipment

Portable direct reading dust meter was used to carry out the 1-hour TSP monitoring. Details of equipment are given in **Table 2.3**.

Table 2.3: Air Quality Monitoring Equipment

Equipment	Brand and Model	Last Calibration Date	Calibration Certificate Provided in
Portable direct reading dust meter (Laser dust monitor)	SIBATA LD-3B-001 (Serial No. 934393)	11 Oct 2017	Monthly EM&A Report No. 22, Appendix E
	SIBATA LD-3B-002 (Serial No. 974350)	11 Sep 2017	
	SIBATA LD-3B-003 (Serial No. 276018)	11 Sep 2017	

2.4 Monitoring Methodology

2.4.1 Measuring Procedure

The measurement procedures involved in the impact 1-hr TSP monitoring can be summarised as follows:

a. The portable direct reading dust meter was mounted on a tripod at a height of 1.2 m above the ground.
b. Prior to the measurement, the equipment was set up for 1 minute span check and 6 second background check.
c. The one hour dust measurement was started. Site conditions and dust sources at the nearby area were recorded on a record sheet.
d. When the measurement completed, the “Count” reading per hour was recorded for result calculation.

2.4.2 Maintenance and Calibration

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

2.5 Analysis and Interpretation of Monitoring Results

The monitoring results for 1-hour TSP are summarized in **Table 2.4**. Detailed impact monitoring results are presented in **Appendix C**.

Table 2.4: Summary of 1-hour TSP Monitoring Results

Monitoring Station	1-hr TSP Concentration Range (μg/m^3)	Action Level (μg/m^3)	Limit Level (μg/m^3)
AR1A	14 – 69	306	500
AR2	20 – 51	298	

No exceedance of the Action or Limit Level was recorded 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.

3 Noise Monitoring

3.1 Monitoring Stations

Noise monitoring was conducted at 5 representative monitoring stations in the vicinity of noise sensitive receivers in Tung Chung and villages in North Lantau in accordance with the Manual. **Figure 2.1** shows the locations of the monitoring stations and these are described in **Table 3.1** below. As described in Section 4.3.3 of the Manual, monitoring at NM2 will commence when the future residential buildings in Tung Chung West Development become occupied.

Table 3.1: Locations of Impact Noise Monitoring Stations

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

Note: (1) As described in Section 4.3.3 of the Manual, noise monitoring at NM2 will only commence after occupation of the future Tung Chung West Development.

3.2 Monitoring Requirements and Schedule

In accordance with the Manual, baseline noise levels at the noise monitoring stations were established as presented in the Baseline Monitoring Report. Impact noise monitoring was conducted once per week in the form of 30-minute measurements of L_{eq}, L_{10} and L_{90} levels recorded at each monitoring station between 0700 and 1900 on normal weekdays. 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**. The construction noise monitoring schedule involved in the reporting period is provided in **Appendix B**.

Table 3.2: Action and Limit Levels for Construction Noise

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

Note: (i) Reduced to 70dB(A) for school and 65dB(A) during school examination periods.

3.3 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 are given in **Table 3.3**.

Table 3.3: Noise Monitoring Equipment

Equipment	Brand and Model	Last Calibration Date	Calibration Certificate Provided in
Integrated Sound Level Meter	B&K 2238 (Serial No. 2800932)	17 Jul 2017	Monthly EM&A Report No. 19, Appendix E
	B&K 2238 (Serial No. 2808432)	30 Aug 2017	Monthly EM&A Report No. 21, Appendix E
	B&K 2238 (Serial No. 2684503)	30 Aug 2017	Monthly EM&A Report No. 21, Appendix E
Acoustic Calibrator	B&K 4231 (Serial No. 3003246)	16 May 2017	Monthly EM&A Report No. 17, Appendix D
	B&K 4231 (Serial No. 3004068)	17 Jul 2017	Monthly EM&A Report No. 19, Appendix E

3.4 Monitoring Methodology

3.4.1 Monitoring Procedure

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

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

3.4.2 Maintenance and Calibration

The maintenance and calibration procedures are summarised below:

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

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

3.5 Analysis and Interpretation of Monitoring Results

The construction noise monitoring results are summarized in **Table 3.4** and the detailed monitoring data are provided in **Appendix C**.

Table 3.4: Summary of Construction Noise Monitoring Results

Monitoring Station	Noise Level Range, dB(A) $L_{eq\ (30\ mins)}$	Limit Level, dB(A) $L_{eq\ (30\ mins)}$
NM1A[(i)]	72 – 73	75
NM3A	61 – 63	75
NM4[(i)]	60 – 66	70[(ii)]
NM5[(i)]	53 – 59	75
NM6[(i)]	68 – 71	75

Notes: (i) +3 dB(A) Façade correction included;

(ii) Reduced to 65 dB(A) during school examination periods at NM4. No examination was held in this reporting period.

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 was road traffic noise at NM1A, aircraft and helicopter noise at NM3A, student activities, aircraft and helicopter noise at NM4, aircraft and helicopter noise at NM5, and noise from aircraft, helicopter and marine vessel at NM6 in this reporting period.

No exceedance of the Action or Limit Level was recorded at all monitoring stations in the reporting period.

4 Water Quality Monitoring

4.1 Monitoring Stations

Water quality monitoring was conducted at a total of 22 water quality monitoring stations, comprising 12 impact (IM) stations, 7 sensitive receiver (SR) stations and 3 control stations in the vicinity of water quality sensitive receivers around the airport island in accordance with the Manual. **Table 4.1** describes the details of the monitoring stations**. Figure 3.1** shows the locations of the monitoring stations.

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

Monitoring Station	Description	Coordinates		Parameters
		Easting	Northing	
C1	Control	804247	815620	DO, pH, Temperature, Salinity, Turbidity, SS, Total Alkalinity, Heavy Metals[2]
C2	Control	806945	825682	
C3[3]	Control	817803	822109	
IM1	Impact	806458	818351	
IM2	Impact	806193	818852	
IM3	Impact	806019	819411	
IM4	Impact	805039	819570	
IM5	Impact	804924	820564	
IM6	Impact	805828	821060	
IM7	Impact	806835	821349	
IM8	Impact	807838	821695	
IM9	Impact	808811	822094	
IM10	Impact	809838	822240	
IM11	Impact	810545	821501	
IM12	Impact	811519	821162	
SR1[1]	Future Hong Kong-Zhuhai-Macao Bridge Hong Kong Boundary Crossing Facilities (HKBCF) Seawater Intake for cooling	812586	820069	DO, pH, Temperature, Salinity, Turbidity, SS
SR2[3]	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	
SR6	Tai Ho Bay, Near Tai Ho Stream SSSI	814663	817899	
SR7	Ma Wan Fish Culture Zone (FCZ)	823742	823636	
SR8[4]	Seawater Intake for cooling at Hong Kong International Airport (East)	811418 (from July 2017 onwards)	820246	

Notes:
[1] The seawater intakes of SR1 for the future HKBCF is not yet in operation, hence no water quality impact monitoring was conducted at this station. The future permanent location for SR1 during impact monitoring is subject to finalisation after the HKBCF seawater is commissioned.

(2) Details of selection criteria for the two heavy metals for regular DCM monitoring refer to the Detailed Plan on Deep Cement Mixing available on the dedicated 3RS website (**http://env.threerunwaysystem.com/en/ep-submissions.html**). DCM specific water quality monitoring parameters (total alkalinity and heavy metals) were only conducted at C1 to C3, SR2, and IM1 to IM12.
(3) According to the Baseline Water Quality Monitoring Report, C3 station is not adequately representative as a control station of impact/ SR stations during the flood tide. The control reference has been changed from C3 to SR2 from 1 September 2016 onwards.
(4) The monitoring location for SR8 is subject to further changes due to silt curtain arrangements and the progressive relocation of this seawater intake.

4.2 Monitoring Requirements and Schedule

In accordance with the Manual, baseline water quality levels at the abovementioned representative water quality monitoring stations were established as presented in the Baseline Water Quality Monitoring Report.

General water quality monitoring and regular DCM water quality monitoring were conducted three days per week, at mid-flood and mid-ebb tides, at the 22 water quality monitoring stations during the reporting period. The sea conditions varied from calm to rough, and the weather conditions varied from sunny to rainy during the monitoring period.

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

4.2.1 Action and Limit Levels for Water Quality Monitoring

The Action and Limit Levels for general water quality monitoring and regular DCM monitoring stipulated in the EM&A programme for triggering the relevant investigation and follow-up procedures under the programme are presented in **Table 4.2**. The control and impact stations during flood tide and ebb tide for general water quality monitoring and regular DCM monitoring are presented in **Table 4.3**.

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

Parameters	Action Level (AL)		Limit Level (LL)	
Action and Limit Levels for general water quality monitoring and regular DCM monitoring (excluding SR1& SR8)				
DO in mg/L (Surface, Middle & Bottom)	Surface and Middle 4.5 mg/L		Surface and Middle 4.1 mg/L 5 mg/L for Fish Culture Zone (SR7) only	
	Bottom 3.4 mg/L		Bottom 2.7 mg/L	
SS in mg/L	23	or 120% of upstream control station at the same tide of the same day, whichever is higher	37	or 130% of upstream control station at the same tide of the same day, whichever is higher
Turbidity in NTU	22.6		36.1	
Total Alkalinity in ppm	95		99	
Representative Heavy Metals for regular DCM monitoring (Chromium)	0.2		0.2	
Representative Heavy Metals for regular DCM monitoring (Nickel)	3.2		3.6	
Action and Limit Levels SR1				
SS (mg/l)	To be determined prior to its commissioning		To be determined prior to its commissioning	

Parameters	Action Level (AL)	Limit Level (LL)
Action and Limit Levels SR8		
SS (mg/l)	52	60

Notes:

(1) For DO measurement, non-compliance occurs when monitoring result is lower than the limits.

(2) For parameters other than DO, non-compliance of water quality results when monitoring results is higher than the limits.

(3) Depth-averaged results are used unless specified otherwise.

(4) Details of selection criteria for the two heavy metals for regular DCM monitoring refer to the Detailed Plan on Deep Cement Mixing available on the dedicated 3RS website (**http://env.threerunwaysystem.com/en/ep-submissions.html**)

(5) The Action and Limit Levels for the two representative heavy metals chosen will be the same as that for the intensive DCM monitoring.

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

Control Station	Impact Stations
Flood Tide	
C1	IM1, IM2, IM3, IM4, IM5, IM6, IM7, IM8, SR3
SR2^1	IM7, IM8, IM9, IM10, IM11, IM12, SR1A, SR3, SR4A, SR5A, SR6, SR8
Ebb Tide	
C1	SR4A, SR5A, SR6
C2	IM1, IM2, IM3, IM4, IM5, IM6, IM7, IM8, IM9, IM10, IM11, IM12, SR1A, SR2, SR3, SR7, SR8

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

4.3 Monitoring Equipment

Table 4.4 summarises the equipment used for monitoring of specific water quality parameters under the impact 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. 16J101716)	12 Sep 2017	Monthly EM&A Report No. 21, Appendix E
	YSI ProDSS (Serial No. 17E102521)	12 Sep 2017	
	YSI ProDSS (Serial No. 16H104234)	7 Dec 2017	**Appendix D**
	YSI ProDSS (Serial No. 17H105557)	7 Dec 2017	
	YSI 6920 V2 (Serial No. 00019CB2)	7 Dec 2017	
	YSI 6920 V2 (Serial No. 000109DF)	7 Dec 2017	
Digital Titrator (measurement of total alkalinity)	Titrette Digital Burette 50ml Class A (Serial No. 10N64701)	18 Sep 2017	Monthly EM&A Report No. 21, Appendix E
	Titrette Digital Burette 50ml Class A (Serial No. 10N65665)	18 Dec 2017	**Appendix D**

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

Table 4.5: Other Monitoring Equipment

Equipment	Brand and Model
Water Sampler	Van Dorn Water Sampler

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

4.4 Monitoring Methodology

4.4.1 Measuring Procedure

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

The water samples for all monitoring parameters were collected, stored, preserved and analysed according to the Standard Methods, APHA 22nd ed. and/or other methods as agreed by the EPD. In-situ measurements at monitoring locations including temperature, pH, DO, turbidity, salinity and water depth were collected by equipment listed in **Table 4.4** and **Table 4.5**. Water samples for heavy metals and SS analysis were stored in high density polythene bottles with no preservative added, packed in ice (cooled to 4 ºC without being frozen), delivered to the laboratory within 24 hours of collection.

4.4.2 Maintenance and Calibration

Calibration of In-situ Instruments

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

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

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

4.4.3 Laboratory Measurement / Analysis

Analysis of SS and heavy metals have been carried out by a HOKLAS accredited laboratory, ALS Technichem (HK) Pty Ltd (Reg. No. HOKLAS 066). Sufficient water samples were collected at all the monitoring stations for carrying out the laboratory SS and heavy metals determination. The SS and heavy metals determination works were started within 24 hours after collection of the water samples. The analysis of SS and heavy metals have followed the standard methods summarised in **Table 4.6**. The QA/QC procedures for laboratory measurement/ analysis of SS and heavy metals were presented in Appendix F of the Construction Phase Monthly EM&A Report No.8.

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

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

4.5 Analysis and Interpretation of Monitoring Results

4.5.1 Summary of Monitoring Results

The water quality monitoring results for DO, turbidity, total alkalinity, chromium, and nickel obtained during the reporting period did not trigger their corresponding Action and Limit Levels stipulated in the EM&A programme for triggering the relevant investigation and follow-up procedures under the programme if being exceeded. For SS, some of the testing results exceeded the relevant Action Levels, and the corresponding investigations were conducted accordingly. Detailed analysis of the exceedances are presented in **Section 4.5.2**.

4.5.2 Summary of Findings for Investigation of Exceedances

During the reporting period, water quality monitoring was conducted at 12 IM stations, 7 SR stations, and 3 control stations 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).

During the monitoring period, testing results exceeding the corresponding Action Levels were recorded on 5 monitoring days. Details of the exceedance cases are presented below.

Findings for SS Exceedances (Mid-Ebb Tide)

Table 4.7 presents a 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	SR2	SR3	SR4A	SR5A	SR6	SR7	SR8
02/12/2017																			
05/12/2017																			
07/12/2017																			
09/12/2017																			
12/12/2017																			
14/12/2017																			
16/12/2017																			
19/12/2017																			
21/12/2017																			
23/12/2017																			
26/12/2017																			
28/12/2017																			
30/12/2017																			
No. of Exceedance	1	1	1	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0

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

Legend:

	No exceedance of Action and Limit Level

	Exceedance of Action Level recorded at monitoring station located downstream of the Project based on dominant tidal flow
	Exceedance of Action Level recorded 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

Exceedances of Action Level were recorded on three monitoring days. As some of the exceedances occurred at stations located downstream of the Project, which might be affected by Project's construction activities, exceedance investigation focused on these events was carried out.

As part of the investigation on downstream exceedance events, details of the Project's marine construction activities on the concerned monitoring days were collected, as well as any observations during the monitoring. The findings are summarized in **Table 4.8**.

Table 4.8: Summary of Findings from Investigations of SS Exceedances (Mid-Ebb Tide)

Date	Marine construction works nearby	Approximate distance from marine construction works*	Status of water quality measures (if applicable)	Construction vessels in the vicinity	Turbidity / Silt plume observed near the monitoring station	Exceedance due to Project
9/12/2017	DCM works Sand blanket laying	Around 500m	Silt curtain deployed	No	No	No
21/12/2017	DCM works Sand blanket laying	Around 500m	Silt curtain deployed	No	No	No

* This refers to the approximate distance between the marine construction works and the nearest monitoring stations with exceedance.

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

For the exceedances at IM1, IM2, IM3, and IM4 on 9 December 2017, it was noted that exceedances were recorded in IM stations adjacent to the western side of the Project area, including those located upstream of the Project. This suggests that elevated SS was occurring over a large area with sources originating outside of the Project boundaries. There was also no site observation concerning SS release due to Project activities and all mitigation measures were carried out properly. Therefore, the exceedances were considered not due to the Project.

For the exceedance at IM4 on 21 December 2017, the exceedance appeared to be an isolated case with no observable temporal and spatial trend to indicate any effect due to Project activities. As there was no evidence of SS release due to Project activities from site observations and all mitigation measures were carried out properly, the exceedance was possibly due to natural fluctuation in the vicinity of the monitoring station, and considered not due to the Project.

Findings for SS Exceedances (Mid-Flood Tide)

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

Table 4.9: Summary of SS Compliance Status (Mid-Flood Tide)

	IM1	IM2	IM3	IM4	IM5	IM6	IM7	IM8	IM9	IM10	IM11	IM12	SR3	SR4A	SR5A	SR6	SR7	SR8
02/12/2017																		
05/12/2017																		
07/12/2017																		
09/12/2017																		
12/12/2017																		
14/12/2017																		
16/12/2017																		
19/12/2017																		
21/12/2017																		
23/12/2017																		
26/12/2017																		
28/12/2017																		
30/12/2017																		
No. of Exceedance	1	0	0	0	2	1	0	1	0	0	1	0	0	0	0	0	0	0

Note: Detailed results are presented in **Appendix C**.	
Legend:	
	No exceedance of Action and Limit Level
	Exceedance of Action Level recorded at monitoring station located downstream of the Project based on dominant tidal flow
	Exceedance of Action Level recorded 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

Exceedances of Action Level were recorded on four monitoring days. As some of the exceedances occurred at stations located downstream of the Project, which might be affected by Project's construction activities, exceedance investigation focused on these events was carried out.

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

Table 4.10: Summary of Findings from Investigations of SS Exceedances (Mid-Flood Tide)

Date	Marine construction works nearby	Approximate distance from marine construction works*	Status of water quality measures (if applicable)	Construction vessels in the vicinity	Turbidity / Silt plume observed near the monitoring station	Exceedance due to Project
7/12/2017	DCM works Sand blanket laying	Around 500m	Silt curtain deployed	No	No	No
16/12/2017	DCM works Sand blanket laying	Around 500m	Silt curtain deployed	No	No	No
23/12/2017	DCM works Sand blanket laying	Around 500m	Silt curtain deployed	No	No	No

* This refers to the approximate distance between the marine construction works and the nearest monitoring stations with exceedance.

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

For the exceedances at IM5 and IM6 on 7 December 2017, it is noted that the SS concentrations were within the baseline range at these monitoring stations during the baseline monitoring of the Project. The exceedances were also marginal (34 mg/L at IM5 and 33 mg/L at IM6 compared to Action Level of 32 mg/L based on the results recorded at control stations). Besides, no evidence of SS release due to Project activities was observed on site and all mitigation measures were carried out properly. Therefore, the exceedances were possibly due to natural fluctuation in the vicinity of the monitoring stations, and considered not due to the Project.

For the exceedances at IM5 on 16 December 2017 and IM8 on 23 December 2017, the exceedances appeared to be isolated cases with no observable temporal and spatial trend to indicate any effect due to Project activities. As there was no evidence of SS release due to Project activities from site observations and all mitigation measures were carried out properly, the exceedances were possibly due to natural fluctuation in the vicinity of the monitoring stations, and considered not due to the Project.

Conclusions

Based on the findings of the exceedance investigations, it is concluded that the exceedances were not due to the Project. Hence no SR was adversely affected by the Project. All required actions under the Event and Action Plan were followed. Exceedances appeared to be due to natural fluctuation or other sources not related to the Project.

Nevertheless, recognising that the IM stations represent a ‘first line of defence’, the non-project related exceedances identified at IM stations were attended to as a precautionary measure. As part of the EM&A programme, the construction methods and mitigation measures for water quality will continue to be monitored and opportunities for further enhancement will continue to be explored and implemented where possible, to strive for better protection of water quality and the marine environment.

In the meantime, the contractors were reminded to implement and maintain all mitigation measures during weekly site inspection and regular environmental management meetings. These include maintaining mitigation measures for DCM works and sand blanket laying works properly as recommended in the Manual.

5 Waste Management

5.1 Monitoring Requirements

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. 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 including provision and maintenance of drip trays and proper chemical waste storage area, as well as regular segregation and removal of waste. The contractors had taken actions to implement the recommended measures.

Based on the updated information provided by contractor in December 2017, around 610m^3 of Construction and Demolition (C&D) materials was reused in the Project in November 2017.

According to the Contractor's information, about 1,381m^3 of excavated materials were produced from the HDD and excavation works in the reporting period. The generated excavated materials were temporarily stored at the stockpiling area. The excavated material will be reused in the Project.

In addition, paper and plastics were recycled in the reporting month. Around 246 tonnes of general refuse was disposed of to the designated landfill, 240kg and 7,600L of chemical waste were collected by licensed chemical waste collector in December 2017. Besides, around 810m^3 of C&D materials was reused in the Project and around 269m^3 of C&D material was disposed of as public fill in the reporting period.

No exceedance of the Action or Limit Levels was recorded in the reporting period.

6 Chinese White Dolphin Monitoring

6.1 CWD Monitoring Requirements

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

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

The Action Level (AL) and Limit Level (LL) 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 AL and LL for CWD monitoring were summarized in **Table 6.1**.

Table 6.1: Derived Values of Action Level (AL) and Limit Level (LL) for Chinese White Dolphin Monitoring

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

[Notes for **Table 6.1** (referring to the baseline monitoring report):
*Action Level – running quarterly STG & ANI will be calculated from the three preceding survey months. For CWD monitoring for December 2017, data from 1 October 2017 to 31 December 2017 will be used to calculate the running quarterly encounter rates STG & ANI;

^Limit Level – two consecutive running quarters mean both the running quarterly encounter rates of the preceding month November 2017 (calculated by data from September 2017 to November 2017) and the running quarterly encounter rates of this month (calculated by data from October 2017 to December 2017).

AL and/or LL will be exceeded 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 provided a larger sample size for estimating the density, abundance and patterns of movements in the broader study area of the project.

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

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

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

Waypoint	Easting	Northing	Waypoint	Easting	Northing
2N	803489	806720	7N	808553	807377
3S	804484	802509	8S	809547	800338
3N	804484	807048	8N	809547	807396
4S	805478	802105	9S	810542	800423
4N	805478	807556	9N	810542	807462
5S	806473	801250	10S	811446	801335
5N	806473	808458	10N	811446	809436

6.2.2 Land-based Theodolite Tracking

Land-based theodolite tracking 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 Survey Station Details

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

6.3 CWD Monitoring Methodology

6.3.1 Small Vessel Line-transect Survey

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

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

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

- Primary transect lines: the parallel and zigzag transect lines as shown in **Figure 6.1**; and
- Secondary transect lines: transect lines connecting between the primary transect lines and crossing 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 pair. Only on-effort data collected under conditions of Beaufort 0-3 and visibility of approximately 1200 m or beyond were used for analysis of the CWD encounter rates.

A 15-20 m vessel with a flying bridge observation platform about 4 to 5 m above water level and unobstructed forward view, and a team of three to four observers were deployed to undertake the surveys. Two observers were on search effort at all times when following the transect lines with

a constant speed of 7 to 8 knots (i.e. 13 to 15 km per hour), one using 7X handheld binoculars and the other using unaided eyes and recording data.

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

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

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

6.3.2 Photo Identification

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

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

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

6.3.3 Land-based Theodolite Tracking

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

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

theodolite, with a position recorded each time the dolphin surfaced. In case an individual could not be positively distinguished from other members, the group was tracked by recording positions based on a central point within the group whenever the CWD surfaced. Tracking continued until animals were lost from view; moved beyond the range of reliable visibility (>1-3 km, depending on station height); or environmental conditions obstructed visibility (e.g., intense haze, Beaufort sea state >4, or sunset), at which time the research effort was terminated. In addition to the tracking of CWD, all vessels that moved within 2-3 km of the station were tracked, with effort made to obtain at least two positions for each vessel.

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

6.4 Monitoring Results and Observations

6.4.1 Small Vessel Line-transect Survey

Survey Effort

Within this reporting period, two complete sets of small vessel line-transect surveys were conducted on the 6th, 7th, 8th, 13th, 14th, 18th, 21st and 28th December 2017, covering all transects in NEL, NWL, AW, WL and SWL survey areas for twice.

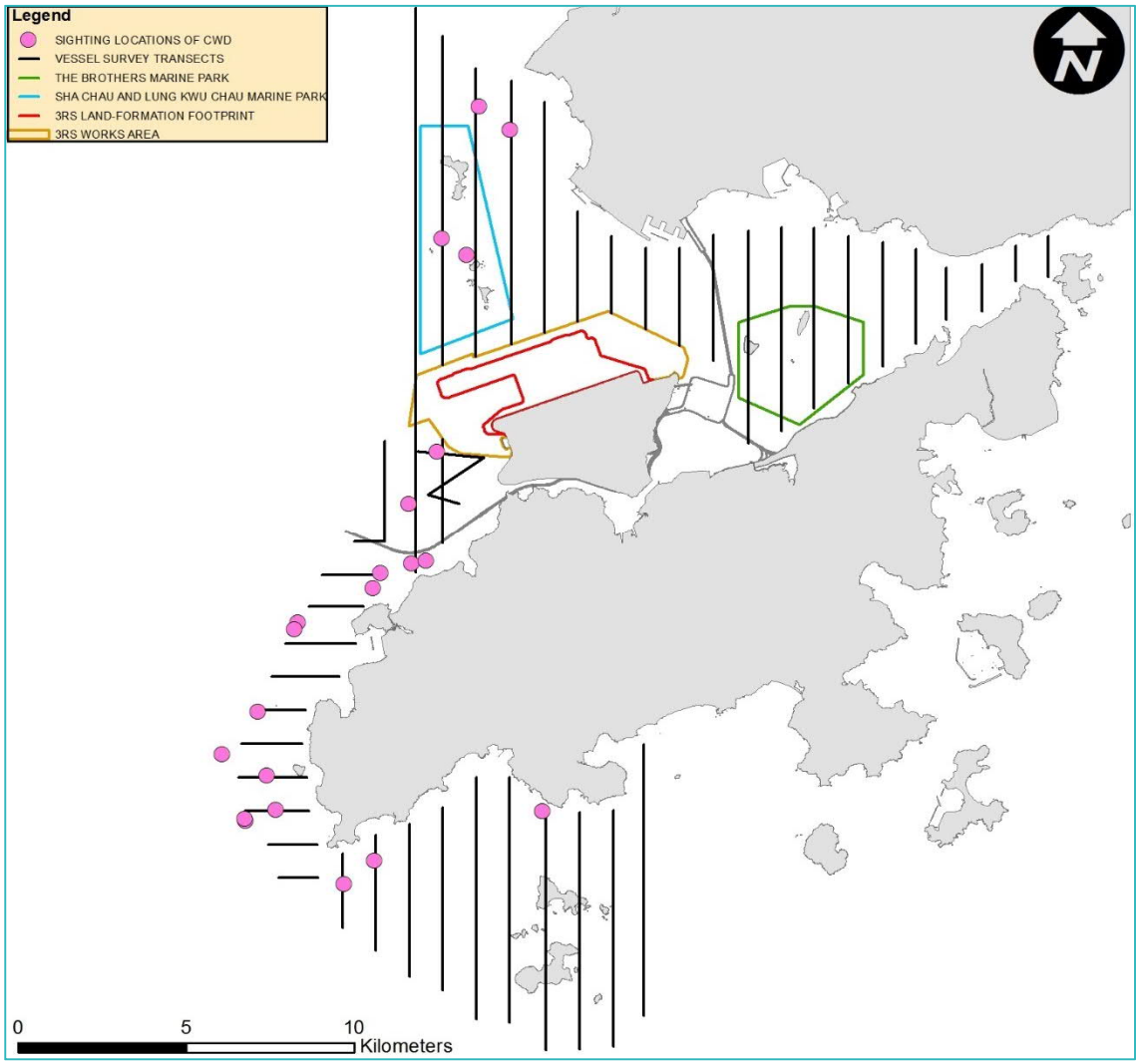
A total of around 455.72 km of survey effort was collected from these surveys, with around 78.17% of the total survey effort being conducted under favourable weather condition (i.e. Beaufort Sea State 3 or below with favourable visibility). Details of the survey effort are given in **Appendix C**.

Sighting Distribution

In December 2017, 21 sightings of CWDs with 78 individuals were sighted. Amongst them, 19 sightings with 74 individuals were recorded during on-effort search under favourable weather conditions (i.e. Beaufort Sea State 3 or below with favourable visibility). Details of cetacean sightings are presented in **Appendix C**.

Distribution of all CWD sightings recorded in December 2017 is illustrated in **Figure 6.3**. In NWL, four sightings of CWD were recorded within or around SCLKCMP, whilst another four sightings were recorded in the southwestern part of the NWL survey area with one of them located in close proximity to the 3RS Works Area. In WL, CWD sightings were recorded from Tai O to the waters off Peaked Hill. In SWL, two CWD sightings were located in the coastal waters near Fan Lau while another one was recorded in the coastal waters around Tong Wan. No sightings of CWDs were recorded in NEL and also the vicinity of or within the 3RS land-formation footprint.

Figure 6.3: Sightings Distribution of Chinese White Dolphins



Remarks: Please note that there are 21 pink circles on the map indicating the sighting locations of CWD. Some of them were very close to each other and therefore appear overlapped on this distribution map.

Encounter Rate

Two types of dolphin encounter rates were calculated based on the data from December 2017. They included the number of dolphin sightings per 100 km survey effort (STG) and total number of dolphins per 100 km survey effort (ANI) in the whole survey area (i.e. NEL, NWL, AW, WL and SWL). In the calculation of dolphin encounter rates, only survey data collected under favourable weather condition (i.e. Beaufort Sea State 3 or below with favourable visibility) were used. The formulae used for calculation of the encounter rates are shown below:

Encounter Rate by Number of Dolphin Sightings (STG)

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

Encounter Rate by Number of Dolphins (ANI)

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

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

In December 2017, a total of around 356.24 km of survey effort were conducted under Beaufort Sea State 3 or below with favourable visibility, whilst a total number of 19 on-effort sightings with a total number of 74 dolphins from on-effort sightings were obtained under such condition. Calculation of the encounter rates in December 2017 are shown in **Appendix C**.

For the running quarter of the reporting period (i.e., from October 2017 to December 2017), a total of around 1111.79 km of survey effort were conducted under Beaufort Sea State 3 or below with favourable visibility, whilst a total number of 45 on-effort sightings and a total number of 164 dolphins from on-effort sightings were obtained under such condition. Calculation of the running quarterly encounter rates are shown in **Appendix C**.

The STG and ANI of CWD in the whole survey area (i.e. NEL, NWL, AW, WL and SWL) during the month of December 2017 and during the running quarter are presented in **Table 6.4** below and compared with the Action Level. The running quarterly encounter rates STG and ANI did not trigger the Action Level (i.e., remained above the Action Level).

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

	Encounter Rate (STG)	Encounter Rate (ANI)
December 2017	5.33	20.77
Running Quarter from October 2017 to December 2017*	4.05	14.75
Action Level	Running quarterly* < 1.86	Running quarterly* < 9.35

*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 October 2017 to December 2017, containing six sets of transect surveys for all monitoring areas.

Group Size

In December 2017, 21 groups of CWDs with 78 individuals were sighted, and the average group size of CWDs was 3.71 individuals per group. Numbers of sightings with medium group size (i.e. 3-9 individuals) were dominant. One sighting with large group size (i.e. 10 or more individuals) was recorded in NWL during this reporting period.

Activities and Association with Fishing Boats

Five out of 21 sightings of CWDs were recorded engaging in feeding activities in December 2017, with no observation of any association with operating fishing boat.

Mother-calf Pair

In December 2017, one sighting of CWDs was recorded with the presence of mother-and-unspotted juvenile pair in NWL.

6.4.2 Photo Identification

In December 2017, a total number of 29 different CWD individuals were identified for totally 34 times. A summary of photo identification works is presented in **Table 6.5**. Representative photos of these individuals are given in **Appendix C**.

Table 6.5: Summary of Photo Identification

Individual ID	Date of Sighting (dd/mm/yyyy)	Sighting Group No.	Area	Individual ID	Date of Sighting (dd/mm/yyyy)	Sighting Group No.	Area
NLMM002	14-Dec-17	1	NWL	SLMM030	06-Dec-17	3	NWL
NLMM004	06-Dec-17	5	NWL		07-Dec-17	1	AW
	14-Dec-17	1	NWL	SLMM048	28-Dec-17	3	WL
NLMM005	14-Dec-17	1	NWL	SLMM049	07-Dec-17	4	WL
NLMM016	07-Dec-17	3	WL	SLMM052	28-Dec-17	8	SWL
NLMM027	14-Dec-17	2	NWL	SLMM053	06-Dec-17	2	NWL
NLMM028	14-Dec-17	2	NWL	WLMM001	07-Dec-17	2	WL
NLMM037	14-Dec-17	1	NWL	WLMM007	07-Dec-17	4	WL
NLMM055	06-Dec-17	1	NWL	WLMM026	06-Dec-17	3	NWL
NLMM056	06-Dec-17	4	NWL	WLMM027	06-Dec-17	3	NWL
NLMM057	06-Dec-17	4	NWL	WLMM049	06-Dec-17	5	NWL
NLMM058	06-Dec-17	4	NWL	WLMM063	28-Dec-17	3	WL
NLMM059	06-Dec-17	4	NWL	WLMM064	06-Dec-17	1	NWL
SLMM014	07-Dec-17	5	WL	WLMM071	06-Dec-17	1	NWL
	08-Dec-17	2	SWL	WLMM107	28-Dec-17	2	WL
SLMM018	07-Dec-17	5	WL			3	WL
SLMM028	06-Dec-17	3	NWL				
	07-Dec-17	1	AW				

6.4.3 Land-based Theodolite Tracking

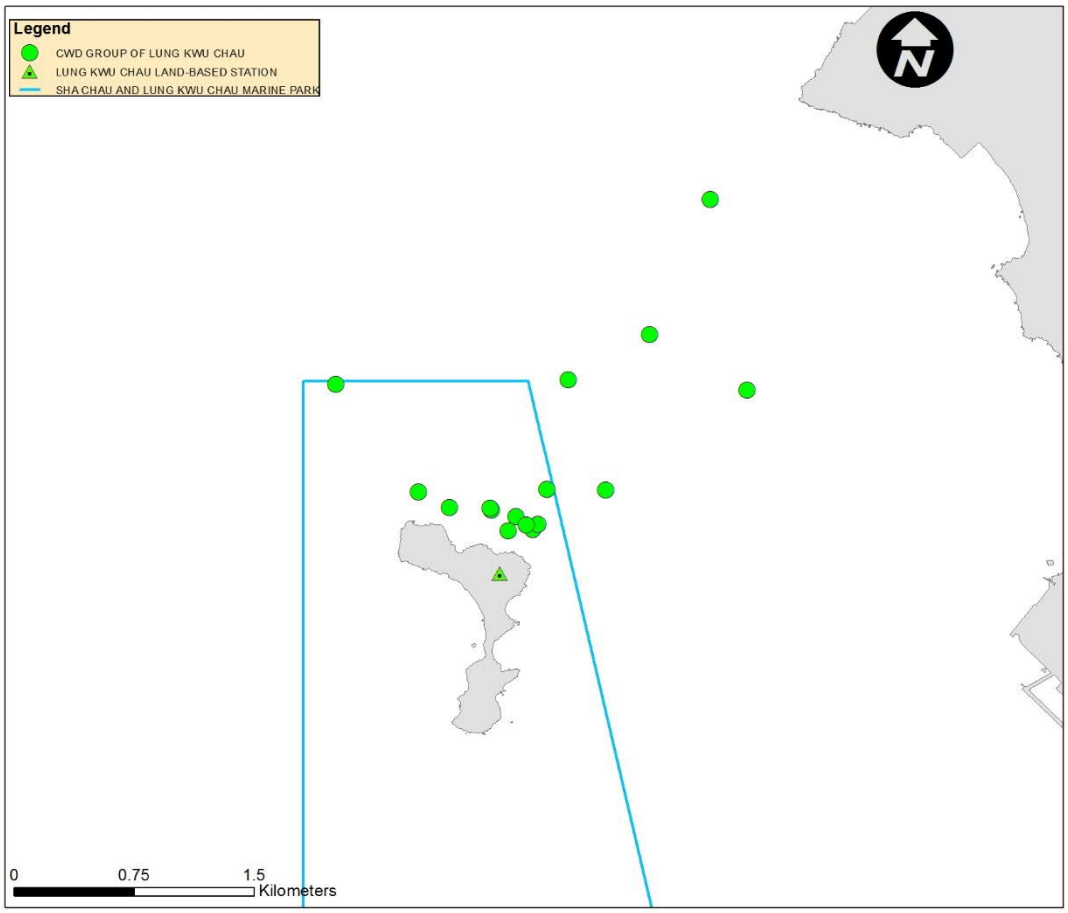
Survey Effort

Land-based theodolite tracking surveys were conducted at LKC on 11th, 15th and 29th December 2017 and at SC on 5th and 28th December 2017, with a total of five days of land-based theodolite tracking survey effort accomplished in this reporting period. A total number of 16 CWD groups were tracked at LKC station during the surveys. Information of survey effort and CWD groups sighted during these land-based theodolite tracking surveys are presented in **Table 6.6**. Details of the survey effort and CWD groups tracked are presented in **Appendix C**. The first sighting locations of CWD groups tracked at LKC station during land-based theodolite tracking surveys in December 2017 were depicted in **Figure 6.4**. No CWD group was sighted from SC station in this reporting month.

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

Land-based Station	No. of Survey Sessions	Survey Effort (hh:mm)	No. of CWD Groups Sighted	CWD Group Sighting per Survey Hour
Lung Kwu Chau	3	18:00	16	0.89
Sha Chau	2	12:00	0	0
TOTAL	**5**	**30:00**	**16**	**0.53**

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



6.5 Progress Update on Passive Acoustic Monitoring

Underwater acoustic monitoring using Passive Acoustic Monitoring (PAM) should be undertaken during land formation related construction works. In this reporting period, the Ecological Acoustic Recorder (EAR) has been retrieved and re-deployed on 15 December 2017 and positioned at south of Sha Chau Island inside the SCLKCMP with 20% duty cycle (**Figure 6.5**). The EAR deployment is generally for 4-6 weeks prior to data retrieval for analysis. Acoustic data is reviewed to give an indication of CWDs occurrence patterns and to obtain anthropogenic noise information simultaneously. Analysis (by a specialized team of acousticians) involved manually browsing through every acoustic recording and logging the occurrence of dolphin signals. All data will be re-played by computer as well as listened to by human ears for accurate assessment of dolphin group presence. As the period of data collection and analysis takes more than two months, PAM results could not be reported in monthly intervals.

6.6 Site Audit for CWD-related Mitigation Measures

During the reporting period, silt curtains were in place by the contractors for sand blanket laying works, in which dolphin observers were deployed by each contractor in accordance with the MMWP. Teams of at least two dolphin observers were deployed at 12 to 21 dolphin observation stations by the contractors for continuous monitoring of the DEZ by all contractors for ground improvement works (DCM works and PVD installation) 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 546 individuals being trained and the training records kept by the ET. Observation was recorded on DEZ monitoring in this reporting period during site inspection by the ET. The contractors had taken actions to implement the recommended measures. From the contractors' MMWP observation records and DEZ monitoring records, no dolphin or other marine mammals were observed within or around the silt curtains, whilst there was one record of dolphin sighting within the DEZ of DCM works in this reporting period. According to the contractor's site record, relevant DCM works were suspended in the dolphin sighting event until the DEZ was clear of dolphin for a continuous period of 30 minutes. Details for the implementation of DEZ during the incident of dolphin sighting within the DEZ of DCM works are mentioned in **Section 7.4**. These contractors' records were also audited by the ET during site inspection.

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

6.7 Timing of Reporting CWD Monitoring Results

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

6.8 Summary of CWD Monitoring

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

7 Environmental Site Inspection and Audit

7.1 Environmental Site Inspection

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

The key observations from site inspection and associated recommendations were related to display of appropriate licences and labels, provision and maintenance of drip trays, proper implementation of dust suppression, wastewater treatment, tree protection, and runoff prevention measures, as well as regular segregation and disposal of waste. In addition, recommendations were also provided during site inspection on barges, which included provision and maintenance of drip trays, spill kits, and proper chemical waste storage area, implementation of dust suppression, acoustic decoupling, and runoff prevention measures, proper maintenance of silt curtains, and implementation of wastewater collection and treatment.

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 C**.

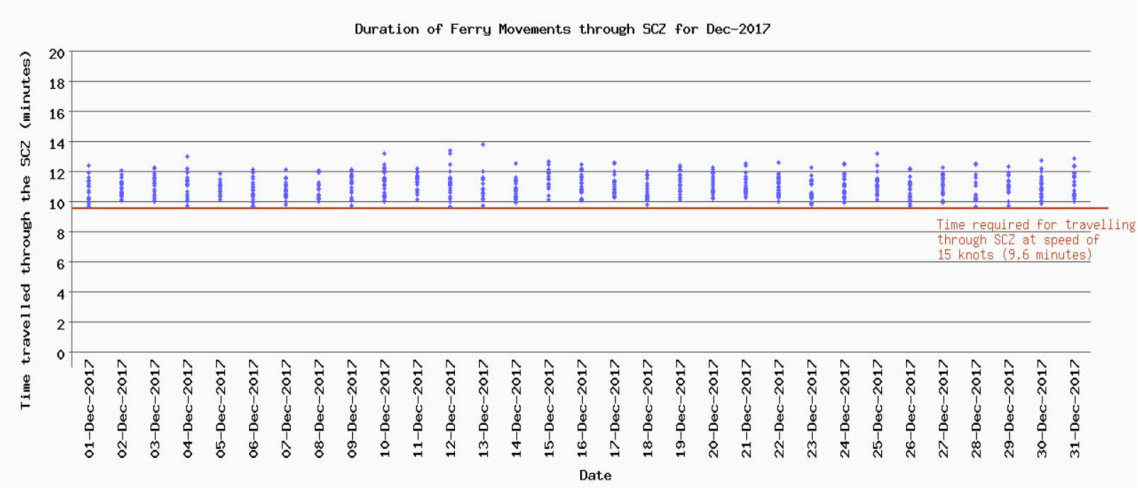
7.2 Audit of Route Diversion and Speed Control of the SkyPier High Speed Ferries

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

Key audit findings for the SkyPier HSFs travelling to/from Zhuhai and Macau against the requirements of the SkyPier Plan during the reporting period are summarized in **Table 7.1**. The daily movements of all SkyPier HSFs in December 2017 (i.e., 87 to 90 daily movements) were within the maximum daily cap of 125 daily movements. Status of compliance with the annual daily average of 99 movements will be further reviewed in the annual EM&A Report.

In total, 857 ferry movements between HKIA SkyPier and Zhuhai / Macau were recorded in December 2017 and the data are presented in **Appendix G**. The time spent by the SkyPier HSFs travelling through the SCZ in December 2017 were presented in **Figure 7.1**. It will take 9.6 minutes to travel through the SCZ when the SkyPier HSFs adopt the maximum allowable speed of 15 knots within the SCZ. **Figure 7.1** shows that all of the SkyPier HSFs spent more than 9.6 minutes to travel through the SCZ.

Figure 7.1 Duration of the SkyPier HSFs travelling through the SCZ for December 2017



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

One ferry was recorded with minor deviation from the diverted route on 29 December 2017. Notices were sent to the ferry operator (FO) and the cases are under investigation by ET. The investigation result will be presented in the next monthly EM&A report.

One case of minor deviation from the diverted route on 10 October 2017, which was not recorded in the High Speed Ferry Monitoring System, was recently discovered during auditing and followed up immediately in December 2017 as reported in the Construction Phase Monthly EM&A Report No. 23. ET's investigation found that the minor route deviation was due to giving way to other vessels to ensure safety. After that, the HSF had returned to the normal route following the SkyPier Plan.

One case of minor deviation from the diverted route on 24 November 2017 was followed up after receiving information from the FO. ET's investigation found that the minor route deviation was due to giving way to vessels at the starboard to ensure safety. After that, the HSF had returned to the normal route following the SkyPier Plan. Another two cases of minor deviation from the diverted route on 12 and 15 November 2017, which were not recorded in the High Speed Ferry Monitoring System, were recently discovered during auditing and are currently under investigation. The investigation result will be presented in the next monthly EM&A report.

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

Requirements in the SkyPier Plan	1 December to 31 December 2017
Total number of ferry movements recorded and audited	857
Use diverted route and enter / leave SCZ through Gate Access Points	1 deviation, which is under investigation.
Speed control in speed control zone	The average speeds taken within the SCZ of all HSFs were within 15 knots (9.8 knots to 14.1 knots), which complied with the SkyPier Plan. The time used by HSFs to travel through SCZ is presented in **Figure 7.1**.
Daily Cap (including all SkyPier HSFs)	87 to 90 daily movements (within the maximum daily cap - 125 daily movements).

7.3 Audit of Construction and Associated Vessels

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

ET carried out the following actions during the reporting period:

- Two skipper training sessions were held for contractors' concerned skippers of relevant construction vessels to familiarize them with the predefined routes; general education on local cetaceans; guidelines for avoiding adverse water quality impact; the required environmental practices / measures while operating construction and associated vessels under the Project; and guidelines for operating vessels safely in the presence of CWDs. The list of all trained skippers was properly recorded and maintained by ET.
- Seven skipper training sessions were held by contractor's Environmental Officer. Competency test was subsequently conducted with the trained skipper by ET.
- 10 skippers were trained by ET and 17 skippers were trained by contractor's Environmental Officer in December 2017. In total, 827 skippers were trained from August 2016 to December 2017.
- The Marine Surveillance System (MSS) automatically recorded deviation cases such as speeding, entering no entry zone and not travelling through the designated gate. ET conducted checking to ensure the MSS records deviation cases accurately.
- Deviations such as speeding in the works area and entering from non-designated gates were identified. All the concerned contractors were reminded to comply with the requirements of the MTRMP-CAV during the bi-weekly MTCC audit.
- 3-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.

The IEC of the Project had performed audit on the compliance of the requirements as part of the EM&A programme.

7.4 Implementation of Dolphin Exclusion Zone

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

During the reporting period, ET was notified on one record of dolphin sighting within the DEZ of DCM works by the contractor on 19 December 2017. The ET checked the dolphin sighting record and the contractor's site record to audit the implementation of DEZ. The sighting was recorded from a DEZ monitoring station (geographical coordinates: 22°19.349N, 113°56.224E) on a DCM barge working at Area F1 (refer to **Figure 1.2** for the location of works area), with the dolphin group being first sighted at 09:02 hours within the DEZ and last sighted at 09:25 hours. DCM installation works on DCM barges within the DEZ were ceased by the contractor, and not resumed until the DEZ was clear of dolphin for a continuous period of at least 30 minutes in accordance with the DEZ Plan.

7.5 Ecological Monitoring

In accordance with the Manual, ecological monitoring shall be undertaken monthly at the Horizontal Directional Drilling (HDD) daylighting location on Sheung Sha Chau Island during the

HDD construction works period from August to March to identify and evaluate any impacts with appropriate actions taken as required to address and minimise any adverse impact found. During the reporting period, the monthly ecological monitoring at the HDD daylighting location on Sheung Sha Chau observed that HDD works were ongoing under the Contract P560(R) at the daylighting location, and there was no encroachment of any works upon the egretry area nor any significant disturbance to the egrets on the island by the works. No signs of breeding or nursery activities were observed. At the HDD daylighting location, neither nest nor breeding activity of bird were found during the monthly ecological monitoring and weekly site inspections in the reporting period. The site photos and location map regarding the monthly ecological monitoring for the HDD works and egretry area are provided in **Appendix C** for reference.

7.6 Status of Submissions under Environmental Permits

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

Table 7.2: Status of Submissions under Environmental Permit

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

7.7 Compliance with Other Statutory Environmental Requirements

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

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

7.8.1 Complaints

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

7.8.2 Notifications of Summons or Status of Prosecution

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

7.8.3 Cumulative Statistics

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

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

8.1 Construction Programme for the Coming Reporting Period

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

Advanced Works:

Contract P560 (R) Aviation Fuel Pipeline Diversion Works

- HDD works; and
- Stockpiling of excavated materials from HDD operation.

DCM Works:

Contract 3201 to 3205 DCM Works

- DCM works; and
- Seawall construction.

Reclamation Works:

Contract 3206 Main Reclamation Works

- Laying of sand blanket; and
- PVD installation.

Airfield Works:

Contract 3301 North Runway Crossover Taxiway

- Cable ducting works;
- Subgrade works; and
- Precast of duct bank and fabrication of steel works.

Terminal 2 Expansion Works:

Contract 3501 Antenna Farm and Sewage Pumping Station

- Excavation works;
- Piling works; and
- Erection of antenna farm.

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

- Removal of existing concrete.

Contract 3503 Terminal 2 Foundation and Substructure Works

- Site establishment.

APM works:

Contract 3602 Existing APM System Modification Works

- Site office establishment.

Airport Support Infrastructure & Logistic Works:

Contract 3801 APM and BHS Tunnels on Existing Airport Island

- Erection of hoarding; and
- Demolition of footbridge.

8.2 Key Environmental Issues for the Coming Reporting Period

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

- Generation of dust from construction works and stockpiles;
- Noise from operating equipment and machinery on-site;
- Generation of site surface runoffs and wastewater from activities on-site;
- Water quality from laying of sand blankets and DCM works;
- DEZ monitoring for ground improvement works (DCM works and PVD installation); and implementation of MMWP for silt curtain deployment by the contractors' dolphin observers;
- Sorting, recycling, storage and disposal of general refuse and construction waste;
- Management of chemicals and avoidance of oil spillage on-site; and
- Acoustic decoupling measures for equipment on marine vessels.

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

8.3 Monitoring Schedule for the Coming Reporting Period

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

9 Conclusion and Recommendation

The key activities of the Project carried out in the reporting period included reclamation works and land-side works. Reclamation works included DCM works, laying of sand blanket, seawall construction and PVD installation. Land-side works included HDD works, site office establishment, cable ducting, concrete removal works, piling, and excavation works.

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

No exceedance of the Action or Limit Levels in relation to construction dust, construction noise, construction waste and CWD monitoring was recorded in the reporting period.

The water quality monitoring results for DO, turbidity, total alkalinity, chromium, and nickel obtained during the reporting period did not trigger their corresponding Action and Limit Levels stipulated in the EM&A programme for triggering the relevant investigation and follow-up procedures under the programme if being exceeded. For SS, some of the testing results exceeded the relevant Action Levels, and the corresponding investigations were conducted accordingly. The investigation findings concluded that the exceedances were not due to the Project.

The monthly terrestrial ecology monitoring on Sheung Sha Chau Island observed that HDD works were conducted at the daylighting location and there was no encroachment upon the egretry area nor any significant disturbance to the egrets at Sheung Sha Chau by the works.

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. Observations have been recorded in the site inspection checklists which have been provided to the contractors together with the appropriate follow-up actions where necessary.

On the implementation of MMWP, dolphin observers were deployed by the contractors for laying of open sea silt curtain and laying of silt curtains for sand blanket works in accordance with the plan. On the implementation of DEZ Plan, dolphin observers at 12 to 21 dolphin observation stations were deployed for continuous monitoring of the DEZ by all contractors for ground improvement works (DCM works and PVD installation) in accordance with the DEZ Plan. Trainings for the proposed dolphin observers were provided by the ET prior to the aforementioned works, with the training records kept by the ET. From the contractors' MMWP observation records and DEZ monitoring records, no dolphin or other marine mammals were observed within or around the silt curtains, whilst there was one record of dolphin sighting within the DEZ of DCM works in this reporting month. The contractor's record was checked by the ET during site inspection. Audits of acoustic decoupling for construction vessels were also carried out by the ET.

On the implementation of the SkyPier Plan, the daily movements of all SkyPier high speed ferries (HSFs) in December 2017 were in the range of 87 to 90 daily movements, which are within the maximum daily cap of 125 daily movements. A total of 857 HSF movements under the SkyPier Plan were recorded in the reporting period. All HSFs had travelled through the Speed Control Zone (SCZ) with average speeds under 15 knots (9.8 to 14.1 knots), which were in compliance

with the SkyPier Plan. One ferry movement with minor deviation from the diverted route in December 2017 is under investigation by ET. The investigation result will be presented in the next monthly EM&A report. In summary, the ET and IEC have audited the HSF movements against the SkyPier Plan and conducted follow up investigation or actions accordingly.

On the implementation of MTRMP-CAV, the MSS automatically recorded the deviation case such as speeding, entering no entry zone, not travelling through the designated gate. ET conducted checking to ensure the MSS records all deviation cases accurately. Training has been provided for the concerned skippers to facilitate them in familiarising with the requirements of the MTRMP-CAV. Deviations including speeding in the works area and entry from non-designated gates were reviewed by ET. All the concerned captains were reminded by the contractor's MTCC representative to comply with the requirements of the MTRMP-CAV. ET reminded contractors that all vessels shall avoid entering the no-entry zone, in particular the Brothers Marine Park. 3-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

824000 N
822000 N
820000 N
818000 N
804000 E
806000 E
808000 E
810000 E
812000 E
814000 E

Contract P560 (R)- Daylighting Location

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

RECLAMATION WORKS AREA (please refer to Figure 1.2)

Contract 3801 - Works Area

Contract 3501 - Works Area

Contract 3502 - Works Area

Contract 3201- 3206 and AAHK Site Offices

Contract 3301 - Works Area

Contract P560 (R)- Launching Site

Contract 3301 - Works Area

Contract 3301 - Pre-cast Area

Contract 3301 - Works Area

Contract 3602 - Site Office

Contract P560 (R) - Site Office

Contract 3501 - Stockpiling Area

Contract P560 (R) - Stockpiling Area

0 250 500 750 1000 m
1 : 30 000 SCALE BAR

Rev.	Date	Description	Checked
A	31AUG15	FIRST ISSUE	DC

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Title: LOCATIONS OF KEY CONSTRUCTION ACTIVITIES

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

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

Drawing No. FIGURE 1.1

Scale at A3 1 : 30000

Rev. A

Filename: J:\355482\REPORT\ENV\CWSLP\FIG 1.dgn

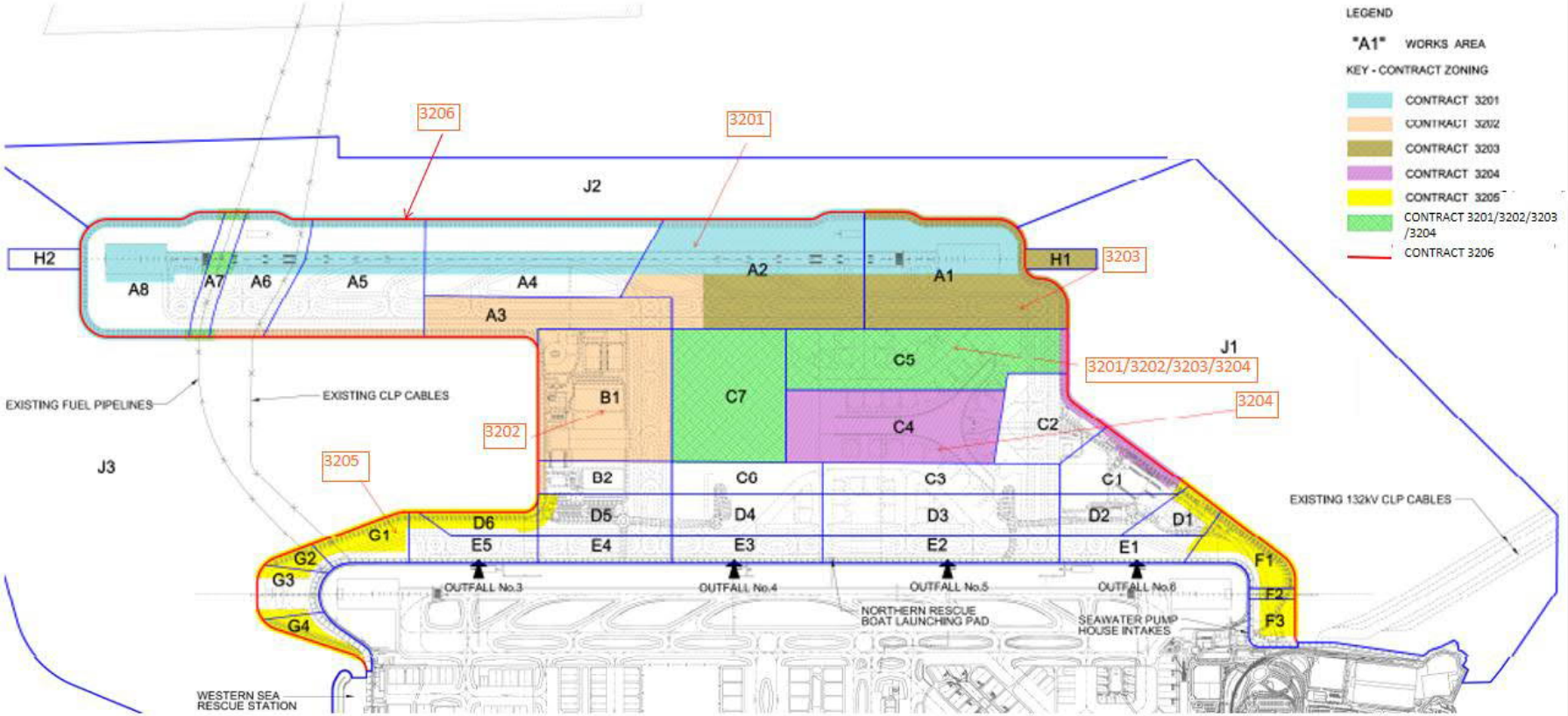

FIGURE 1.2- LOCATIONS OF RECLAMATION WORKS AREA

LEGEND:

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

806000 E
808000 E
810000 E
812000 E
814000 E
820000 N
818000 N

NM1A AR1A
NM2
NM3A
NM4
NM5 AR2
NM6

0 200 400 600 800 1000 m
1 : 22 500 SCALE BAR

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A	06JAN16	FIRST ISSUE	RO
B	29JAN16	GENERAL REVISION	RO
C	11FEB16	GENERAL REVISION	RO

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Title

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

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

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

Drawing No.

FIGURE 2.1

Scale at A3 1 : 22500

Rev. C

Filename: J:\355482\REPORT\ENV\EMA\160211\FIG 2.1.dgn

805000 E
810000 E
815000 E
820000 E
825000 N
820000 N
815000 N
HKSAR BOUNDARY
C1
C2
C3
IM1
IM2
IM3
IM4
IM5
IM6
IM7
IM8
IM9
IM10
IM11
IM12
SR2
SR3
SR4A
SR5A
SR6
SR7
SR8

LEGEND:
- LAND FORMATION
- 500m ENVELOPE
- IMPACT STATION
- SENSITIVE RECEIVER
- CONTROL STATION

0 500 1000 1500 2000 m
1 : 60 000 SCALE BAR

Rev.	Date	Description	Checked
A	02DEC15	FIRST ISSUE	DC
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C	06JUN16	GENERAL REVISION	LC
D	02AUG17	GENERAL REVISION	RO

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MOTT MACDONALD

Title

WATER QUALITY MONITORING STATIONS

Consultant's Signatures for Approval		Date
Design	DC	02AUG17
Checkers	DC / TK	02AUG17
Approver	EC	02AUG17

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

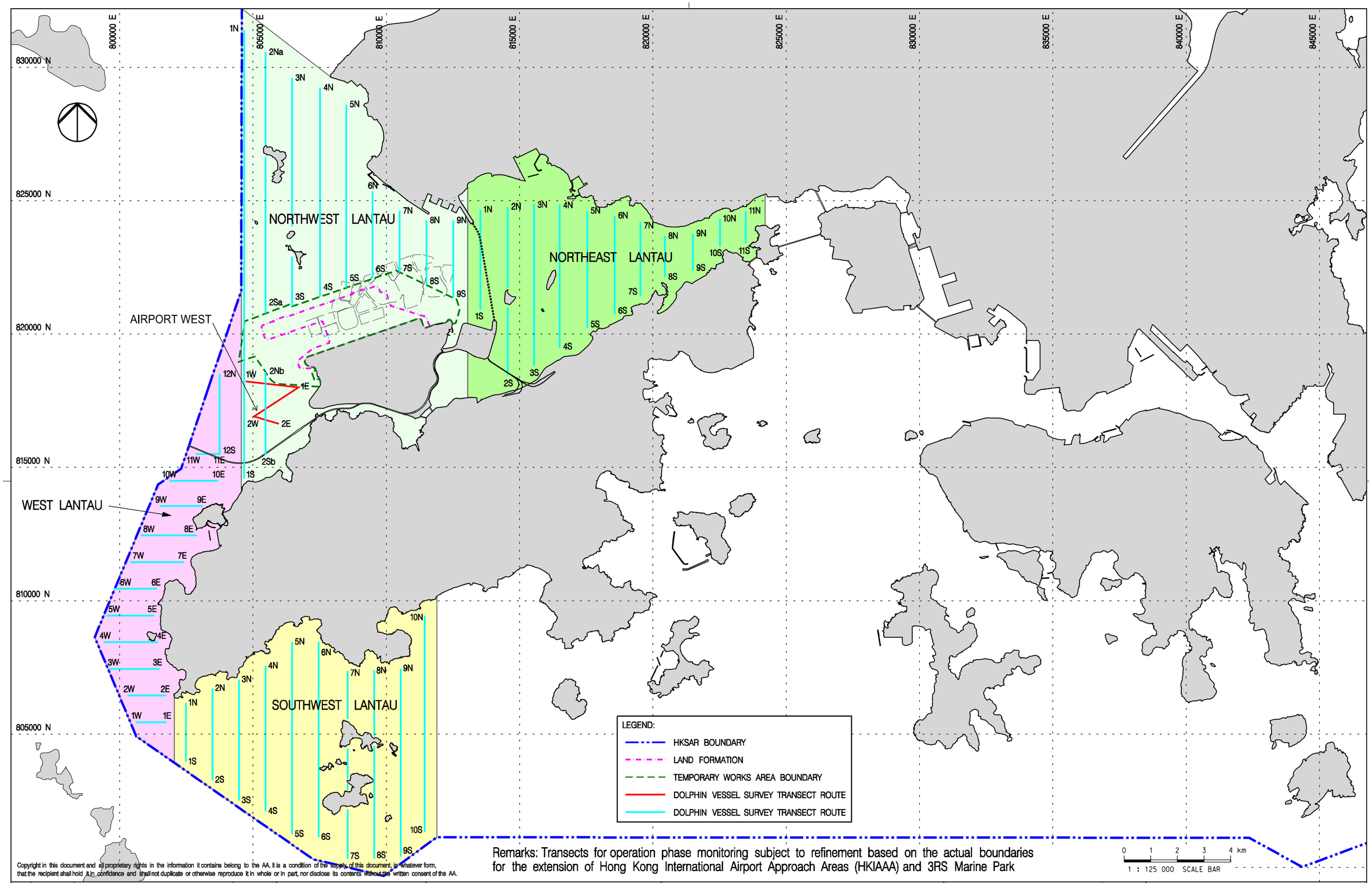
Drawing No.

FIGURE 3.1

Scale at A3 1 : 60000

Rev. D

Filename: J:\355482\REPORT\ENV\EMA\170802\FIG 3.1.dgn



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

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

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MOTT MACDONALD

Title

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

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

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

Drawing No. FIGURE 6.1

Scale at A3 1 : 125000

Rev. D

Filename: J:\355482\REPORT\ENV\EMA\170301\MCL-P132-EMA-10-003.dgn

804000 E
806000 E
808000 E
810000 E
812000 E
814000 E
816000 E
818000 E
820000 N
822000 N
824000 N
826000 N
E
D
HKSAR BOUNDARY
沙洲及龍鼓洲海岸公園
SHA CHAU AND LUNG KWU CHAU MARINE PARK
RUMSTON ROAD
LEGEND:
LAND FORMATION
HONG KONG INTERNATIONAL AIRPORT
LAND BASED SURVEY LOCATION
0 500 1000 1500 2000 m
1 : 45,000 SCALE BAR

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

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MOTT MACDONALD

Title

LAND BASED DOLPHIN MONITORING IN BASELINE AND CONSTRUCTION PHASES

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

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

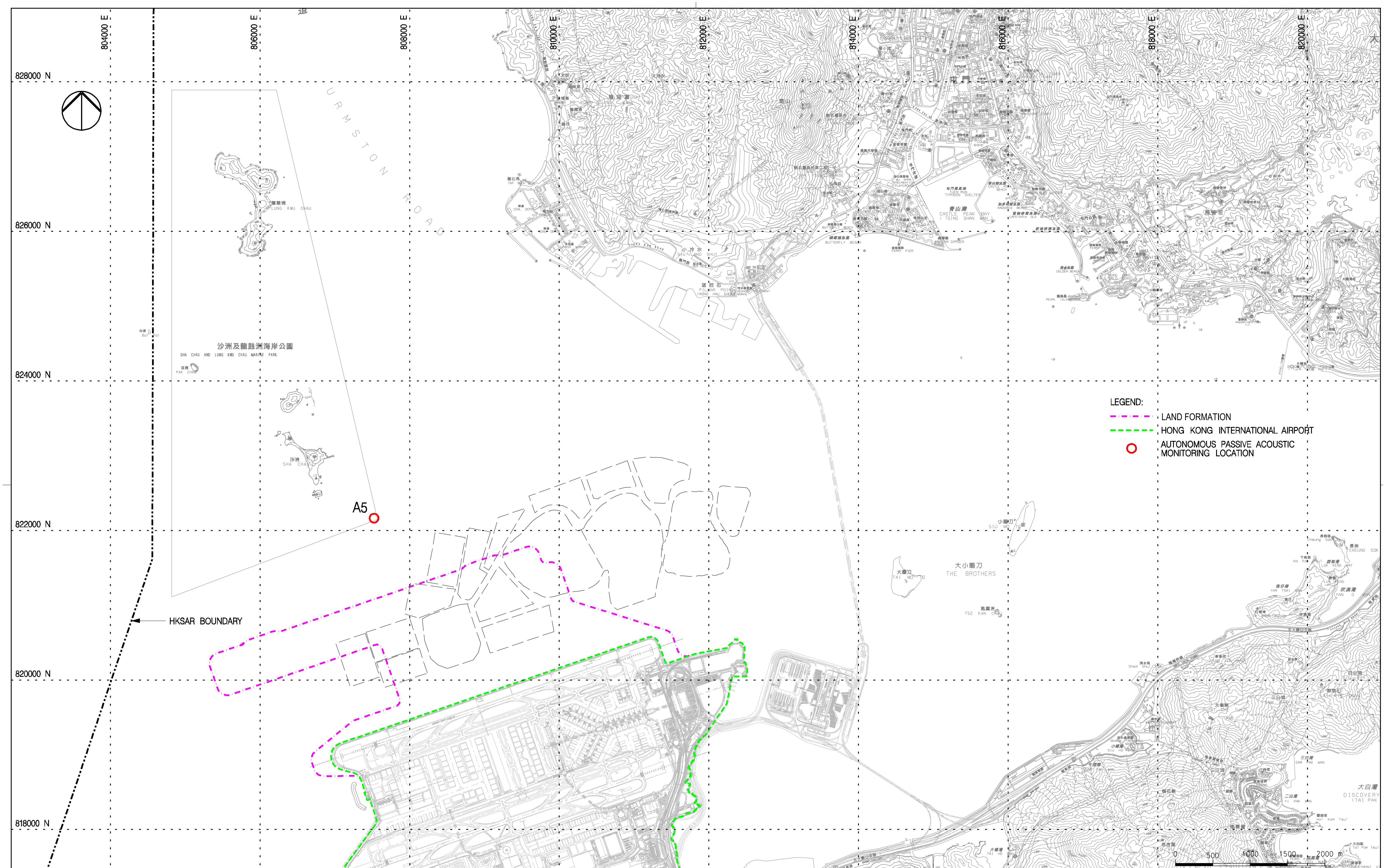
Drawing No.

FIGURE 6.2

Scale at A3 1 : 45000

Rev. B

Filename: J:\355482\REPORT\ENV\EMA\170206\MCL-P132-EMA-10-004.dgn


804000 E
806000 E
808000 E
810000 E
812000 E
814000 E
816000 E
818000 E
820000 E
828000 N
826000 N
824000 N
822000 N
820000 N
818000 N
URMSTON ROAD
沙洲及龍鼓洲海岸公園
SHA CHAU AND LUNG KWU CHAU MARINE PARK
龍鼓洲
LUNG KWU CHAU
沙洲
SHA CHAU
A5
HKSAR BOUNDARY
大小磨刀
THE BROTHERS
東涌
TUNG CHUNG
大白灣
DISCOVERY
LEGEND:
LAND FORMATION
HONG KONG INTERNATIONAL AIRPORT
AUTONOMOUS PASSIVE ACOUSTIC MONITORING LOCATION
0 500 1000 1500 2000 m
1 : 45 000 SCALE BAR

Rev.	Date	Description	Checked
A	29AUG17	FIRST ISSUE	JT

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MOTT MACDONALD

Title

LOCATION FOR AUTONOMOUS PASSIVE ACOUSTIC MONITORING

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

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

Drawing No. FIGURE 6.5

Scale at A3 1 : 45000

Rev. A

Filename: J:\355482\REPORT\ENV\EMA\170802\FIG 6.5.dgn

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

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

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

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

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

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

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

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

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

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

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

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

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

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

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			drainage system should be undertaken by the Contractors prior to the commencement of construction (for works areas located on the existing Airport island) or as soon as the new land is completed (for works areas located on the new landform);		
			▪ Sand/silt removal facilities such as sand/silt traps and sediment basins should be provided to remove sand/silt particles from runoff to meet the requirements of the TM-DSS standards under the WPCO. The design of efficient silt removal facilities should make reference to the guidelines in Appendix A1 of ProPECC Note PN 1/94. Sizes may vary depending upon the flow rate. The detailed design of the sand/silt traps should be undertaken by the Contractors prior to the commencement of construction;		I
			▪ All drainage facilities and erosion and sediment control structures should be regularly inspected and maintained to ensure proper and efficient operation at all times and particularly during rainstorms. Deposited silt and grit should be regularly removed, at the onset of and after each rainstorm to ensure that these facilities are functioning properly;		I
			▪ Measures should be taken to minimize the ingress of site drainage into excavations. If excavation of trenches in wet periods is necessary, they should be dug and backfilled in short sections wherever practicable. Water pumped out from foundation excavations should be discharged into storm drains via silt removal facilities;		N/A
			▪ In the event that contaminated groundwater is identified at excavation areas, this should be treated on-site using a suitable wastewater treatment process. The effluent should be treated according to the requirements of the TM-DSS standards under the WPCO prior to discharge to foul sewers or collected for proper disposal off-site. No direct discharge of contaminated groundwater is permitted; and		N/A
			▪ All vehicles and plant should be cleaned before leaving a construction site to ensure no earth, mud, debris and the like is deposited by them on roads. An adequately designed and sited wheel washing facility should be provided at construction site exits. Wash-water should have sand and silt settled out and removed regularly to ensure the continued efficiency of the process. The section of access road leading to, and exiting from, the wheel-wash bay to the public road should be paved with sufficient backfall toward the wheel-wash bay to prevent vehicle tracking of soil and silty water to public roads and drains. All washwater should be treated according to the requirements of the TM-DSS standards under the WPCO prior to discharge.		I
8.8.1.9	5.1	-	**Sewage Effluent from Construction Workforce** ▪ Temporary sanitary facilities, such as portable chemical toilets, should be employed on-site where necessary to handle sewage from the workforce. A licensed contractor should be employed to provide appropriate and adequate portable toilets and be responsible for appropriate disposal and maintenance.	Within construction site / During construction phase	I
8.8.1.10 8.8.1.11	5.1		**General Construction Activities** ▪ Construction solid waste, debris and refuse generated on-site should be collected, handled and disposed of properly to avoid entering any nearby storm water drain. Stockpiles of cement and other construction materials should be kept covered when not being used; and	Within construction site / During construction phase	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			▪ Oils and fuels should only be stored in designated areas which have pollution prevention facilities. To prevent spillage of fuels and solvents to any nearby storm water drain, all fuel tanks and storage areas should be provided with locks and be sited on sealed areas, within bunds of a capacity equal to 110% of the storage capacity of the largest tank. The bund should be drained of rainwater after a rain event.		
8.8.1.12 8.8.1.13	5.1	2.28	**Drilling Activities for the Submarine Aviation Fuel Pipelines** To prevent potential water quality impacts at Sha Chau, the following measures shall be applied: ▪ A 'zero-discharge' policy shall be applied for all activities to be conducted at Sha Chau; ▪ No bulk storage of chemicals shall be permitted; and ▪ A containment pit shall be constructed around the drill holes. This containment pit shall be lined with impermeable lining and bunded on the outside to prevent inflow from off-site areas.	Within construction site / During construction phase	I
			At the airport island side of the drilling works, the following measures shall be applied for treatment of wastewater: ▪ During pipe cleaning, appropriate desilting or sedimentation device should be provided on site for treatment before discharge. The Contractor should ensure discharge water from the sedimentation tank meet the WPCO/TM requirements before discharge; and ▪ Drilling fluid used in drilling activities should be reconditioned and reused as far as possible. Temporary enclosed storage locations should be provided on-site for any unused chemicals that needs to be transported away after all the related construction activities are completed. The requirements in ProPECC Note PN 1/94 should be adhered to in the handling and disposal of bentonite slurries.	Within construction site / During construction phase	I
			Waste Management Implication – Construction Phase		
10.5.1.1	7.1	-	Opportunities to minimise waste generation and maximise the reuse of waste materials generated by the project have been incorporated where possible into the planning, design and construction stages, and the following measures have been recommended: ▪ The relevant construction methods (particularly for the tunnel works) and construction programme have been carefully planned and developed to minimise the extent of excavation and to maximise the on-site reuse of inert C&D materials generated by the project as far as practicable. Temporary stockpiling areas will also be provided to facilitate on-site reuse of inert C&D materials;	Project Site Area / During design and construction phase	I
			▪ Priority should be given to collect and reuse suitable inert C&D materials generated from other concurrent projects and the Government's PFRF as fill materials for the proposed land formation works;		I
			▪ Only non-dredged ground improvement methods should be adopted in order to completely avoid the need for dredging and disposal of marine sediment for the proposed land formation work;		I
			▪ Excavation work for constructing the APM tunnels, BHS tunnels and airside tunnels will not be down to the CMPs beneath the fill materials in order to avoid excavating any sediments; and		N/A

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

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

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

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			▪ After completion of SI, the Contamination Assessment Report (CAR) will be prepared and submitted to EPD for approval prior to start of the proposed construction works at the golf course, the underground and above-ground fuel storage tank areas, emergency power generation units, airside petrol filling station and fuel tank room.		I *(CAR for golf course)
			▪ Should remediation be required, Remediation Action Plan (RAP) and Remediation Report (RR) will be prepared for EPD's approval prior to commencement of the proposed remediation and any construction works respectively.		N/A
11.8.1.2	8.1	-	If contaminated soil is identified, the following mitigation measures are for the excavation and transportation of contaminated materials (if any): ▪ To minimize the incidents of construction workers coming in contact with any contaminated materials, bulk earth-moving excavation equipment should be employed; ▪ Contact with contaminated materials can be minimised by wearing appropriate clothing and personal protective equipment such as gloves and masks (especially when working directly with contaminated material), provision of washing facilities and prohibition of smoking and eating on site; ▪ Stockpiling of contaminated excavated materials on site should be avoided as far as possible; ▪ The use of any contaminated soil for landscaping purpose should be avoided unless pre-treatment was carried out; ▪ Vehicles containing any excavated materials should be suitably covered to reduce dust emissions and/or release of contaminated wastewater; ▪ Truck bodies and tailgates should be sealed to prevent any discharge; ▪ Only licensed waste haulers should be used to collect and transport contaminated material to treatment/disposal site and should be equipped with tracking system to avoid fly tipping; ▪ Speed control for trucks carrying contaminated materials should be exercised. 8km/h is the recommended speed limit; ▪ Strictly observe all relevant regulations in relation to waste handling, such as Waste Disposal Ordinance (Cap 354), Waste Disposal (Chemical Waste) (General) Regulation (Cap 354) and obtain all necessary permits where required; and ▪ Maintain records of waste generation and disposal quantities and disposal arrangements.	Project Site Area / Construction Phase	N/A
			Terrestrial Ecological – Construction Phase		
12.10.1.1	9.2	2.14	**Pre-construction Egretry Survey** ▪ Conduct ecological survey for Sha Chau egretry to update the latest boundary of the egretry.	Breeding season (April - July) prior to commencement of HDD drilling works at HKIA	I

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

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			▪ Use of bored piling in short duration to form the new approach lights and marker beacons for the new runway;		N/A
			▪ Avoid bored piling during CWD peak calving season (Mar to Jun);		I
			▪ Prohibition of underwater percussive piling; and		I
			▪ Use of horizontal directional drilling (HDD) method and water jetting methods for placement of submarine cables and pipelines to minimise the disturbance to the CWDs and other marine ecological resources.		I
13.11.2.1 to 13.11.2.7	-	-	**Mitigation for Indirect Disturbance due to Deterioration of Water Quality** ▪ Water quality mitigation measures during construction phases include consideration of alternative construction methods, deployment of silt curtain and good site practices;	All works area during the construction phase	I
			▪ Alternative construction methods including use of non-dredge methods for ground improvement (e.g. Deep Cement Mixing (DCM), prefabricated vertical drains (PVD), sand compaction piles, steel cells, stone columns and vertical sand drains);		I
			▪ Use of bored piling in short duration to form the new approach lights and marker beacons for the new runway; and		N/A
			Use of horizontal directional drilling (HDD) method and water jetting methods for placement of undersea cables and pipelines to minimise the disturbance to the CWDs and other marine ecological resources.		I
13.11.1.12	-	-	**Strict Enforcement of No-Dumping Policy** ▪ A policy prohibiting dumping of wastes, chemicals, oil, trash, plastic, or any other substance that would potentially be harmful to dolphins and/or their habitat in the work area; ▪ Mandatory educational programme of the no-dumpling policy be made available to all construction site personnel for all project-related works; ▪ Fines for infractions should be implemented; and ▪ Unscheduled, on-site audits shall be implemented.	All works area during the construction phase	I
13.11.1.13	-	-	**Good Construction Site Practices** ▪ Regular inspection of the integrity and effectiveness of all silt curtains and monitoring of effluents to ensure that any discharge meets effluent discharge guidelines; ▪ Keep the number of working or stationary vessels present on-site to the minimum anytime; and ▪ Unscheduled, on-site audits for all good site practice restrictions should be conducted, and fines or penalties sufficient to be an effective deterrent need to be levied against violators.	All works area during the construction phase	I
13.11.1.3 to 13.11.1.6	-	-	**Minimisation of Land Formation Area** ▪ Minimise the overall size of the land formation needed for the additional facilities to minimise the overall loss of habitat for marine resources, especially the CWD population.	Land formation footprint / during detailed design phase	I

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

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

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			▪ Unscheduled, on-site audits for all good site practice restrictions should be conducted, and fines or penalties sufficient to be an effective deterrent need to be levied against violators.		
14.9.1.13 to 14.9.1.18	-		**Mitigation for Indirect Disturbance due to Deterioration of Water Quality** ▪ Water quality mitigation measures during construction phases include consideration of alternative construction methods, deployment of silt curtain and good site practices;	All works area during the construction phase	I
			▪ Alternative construction methods including use of non-dredge methods for ground improvement (e.g. Deep Cement Mixing (DCM), prefabricated vertical drains (PVD), sand compaction piles, steel cells, stone columns and vertical sand drains);		I
			▪ Use of bored piling in short duration to form the new approach lights and marker beacons for the new runway; and		N/A
			▪ Use of horizontal directional drilling (HDD) method and water jetting methods for placement of undersea cables and pipelines to minimise the disturbance to fisheries resources.		I
			Landscape and Visual Impact – Construction Phase		
Table 15.6	12.3	-	**CM1 -** The construction area and contractor's temporary works areas should be minimised to avoid impacts on adjacent landscape.	All works areas for duration of works; Upon handover and completion of works.	I
Table 15.6	12.3	-	**CM2 -** Reduction of construction period to practical minimum.	All works areas for duration of works; Upon handover and completion of works.	I
Table 15.6	12.3	-	**CM3 -** Phasing of the construction stage to reduce visual impacts during the construction phase.	All works areas for duration of works; Upon handover and completion of works.	I
Table 15.6	12.3	-	**CM4 -** Construction traffic (land and sea) including construction plants, construction vessels and barges should be kept to a practical minimum.	All works areas for duration of works; Upon handover and completion of works.	I
Table 15.6	12.3	-	**CM5 -** Erection of decorative mesh screens or construction hoardings around works areas in visually unobtrusive colours.	All works areas for duration of works; Upon handover and completion of works. –	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
				may be disassembled in phases	
Table 15.6	12.3	-	**CM6 -** Avoidance of excessive height and bulk of site buildings and structures.	New passenger concourse, terminal 2 expansion and other proposed airport related buildings and structures under the project; Upon handover and completion of works.	N/A
Table 15.6	12.3	-	**CM7** - Control of night-time lighting by hooding all lights and through minimisation of night working periods.	All works areas for duration of works; Upon handover and completion of works. – may be disassembled in phases	I
Table 15.6	12.3	-	**CM8 -** All existing trees shall be carefully protected during construction. Detailed Tree Protection Specification shall be provided in the Contract Specification. Under this specification, the Contractor shall be required to submit, for approval, a detailed working method statement for the protection of trees prior to undertaking any works adjacent to all retained trees, including trees in contractor's works areas.	All existing trees to be retained; Upon handover and completion of works.	I
Table 15.6	12.3	-	**CM9 -** Trees unavoidably affected by the works shall be transplanted where practical. A detailed Tree Transplanting Specification shall be provided in the Contract Specification, if applicable. Sufficient time for necessary tree root and crown preparation periods shall be allowed in the project programme.	All existing trees to be affected by the works; Upon handover and completion of works.	I
Table 15.6	12.3	-	**CM10 -** Land formation works shall be followed with advanced hydroseeding around taxiways and runways as soon as practical.	All affected existing grass areas around runways and verges/Duration of works; Upon handover and completion of works.	N/A
			Cultural Heritage Impact – Construction Phase		
			Not applicable.		

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

Notes:

I= implemented where applicable;

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

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

Appendix B. Monitoring Schedule

Monitoring Schedule of This Reporting Period

Dec-17

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1 Site Inspection	2 WQ General & Regular DCM mid-ebb: 11:38 mid-flood: 05:57
3	4	5 Site Inspection CWD Survey (Land-based) AR1A, AR2 NM1A, NM3A, NM4, NM5 WQ General & Regular DCM mid-ebb: 14:12 mid-flood: 08:45	6 Site Inspection CWD Survey (Vessel)	7 Site Inspection CWD Survey (Vessel) NM6 WQ General & Regular DCM mid-ebb: 15:51 mid-flood: 10:33	8 Site Inspection CWD Survey (Vessel)	9 WQ General & Regular DCM mid-ebb: 17:53 mid-flood: 12:30
10	11 CWD Survey (Land-based) AR1A, AR2 NM1A, NM3A, NM4, NM5	12 Site Inspection WQ General & Regular DCM mid-ebb: 08:28 mid-flood: 15:21	13 Site Inspection CWD Survey (Vessel) NM6	14 Site Inspection CWD Survey (Vessel) WQ General & Regular DCM mid-ebb: 10:32 mid-flood: 16:29	15 Site Inspection CWD Survey (Land-based) AR1A, AR2	16 WQ General & Regular DCM mid-ebb: 12:06 mid-flood: 06:40
17	18 CWD Survey (Vessel)	19 Site Inspection NM6 WQ General & Regular DCM mid-ebb: 13:51 mid-flood: 08:36	20 Site Inspection Ecological Monitoring	21 Site Inspection CWD Survey (Vessel) AR1A, AR2 NM1A, NM3A, NM4, NM5 WQ General & Regular DCM mid-ebb: 14:58 mid-flood: 09:44	22 Site Inspection	23 WQ General & Regular DCM mid-ebb: 16:16 mid-flood: 10:58
24	25	26 WQ General & Regular DCM mid-ebb: 19:42 mid-flood: 13:25	27 Site Inspection AR1A, AR2 NM1A, NM3A, NM4, NM5	28 Site Inspection CWD Survey (Vessel, Land-based) NM6 WQ General & Regular DCM mid-ebb: 07:57 mid-flood: 14:49	29 Site Inspection CWD Survey (Land-based)	30 WQ General & Regular DCM mid-ebb: 10:21 mid-flood: 16:12
31		**Notes:** CWD - Chinese White Dolphin Air quality and Noise Monitoring Station WQ - Water Quality DCM - Deep Cemenet Mixing NM1A/AR1A - Man Tung Road Park NM3A - Site Office NM4 - Ching Chung Hau Po Woon Primary School NM5/AR2 - Village House, Tin Sum NM6 - House No. 1, Sha Lo Wan				

Tentative Monitoring Schedule of Next Reporting Period

Jan-18

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1	2 Site Inspection AR1A, AR2 NM1A, NM3A, NM4, NM5 WQ General & Regular DCM mid-ebb: 13:13 mid-flood: 07:50	3 Site Inspection NM6	4 Site Inspection Ecological Monitoring WQ General & Regular DCM mid-ebb: 14:49 mid-flood: 09:28	5 Site Inspection	6 WQ General & Regular DCM mid-ebb: 16:25 mid-flood: 11:01
7	8 Site Inspection AR1A, AR2 NM3A	9 Site Inspection CWD Survey (Vessel)	10 Site Inspection CWD Survey (Vessel) NM6 WQ General & Regular DCM mid-ebb: 07:32 mid-flood: 14:18	11 Site Inspection CWD Survey (Land-based)	12 Site Inspection CWD Survey (Vessel, Land-based) AR1A, AR2 NM1A, NM4, NM5 WQ General & Regular DCM mid-ebb: 10:10 mid-flood: 15:42	13
14 WQ General & Regular DCM mid-ebb: 11:49 mid-flood: 06:41	15 Site Inspection CWD Survey (Vessel)	16 Site Inspection CWD Survey (Vessel) NM6 WQ General & Regular DCM mid-ebb: 12:59 mid-flood: 07:49	17 Site Inspection CWD Survey (Vessel)	18 Site Inspection CWD Survey (Vessel) AR1A, AR2 NM1A, NM3A, NM4, NM5 WQ General & Regular DCM mid-ebb: 14:05 mid-flood: 08:49	19 Site Inspection CWD Survey (Land-based)	20 WQ General & Regular DCM mid-ebb: 15:11 mid-flood: 09:44
21	22 Site Inspection CWD Survey (Vessel) NM6	23 Site Inspection CWD Survey (Land-based) WQ General & Regular DCM mid-ebb: 17:23 mid-flood: 11:23	24 Site Inspection CWD Survey (Land-based) AR1A, AR2 NM1A, NM3A, NM4, NM5	25 Site Inspection WQ General & Regular DCM mid-ebb: 05:55 mid-flood: 12:51	26 Site Inspection	27 WQ General & Regular DCM mid-ebb: 08:47 mid-flood: 14:40
28	29 Site Inspection	30 Site Inspection AR1A, AR2 NM1A, NM3A, NM4, NM5 WQ General & Regular DCM mid-ebb: 12:16 mid-flood: 06:54	31 Site Inspection			

Notes:

CWD - Chinese White Dolphin

Air quality and Noise Monitoring Station

WQ - Water Quality
DCM - Deep Cemenet Mixing

NM1A/AR1A - Man Tung Road Park
NM3A - Site Office
NM4 - Ching Chung Hau Po Woon Primary School
NM5/AR2 - Village House, Tin Sum
NM6 - House No. 1, Sha Lo Wan

Appendix C. Monitoring Results

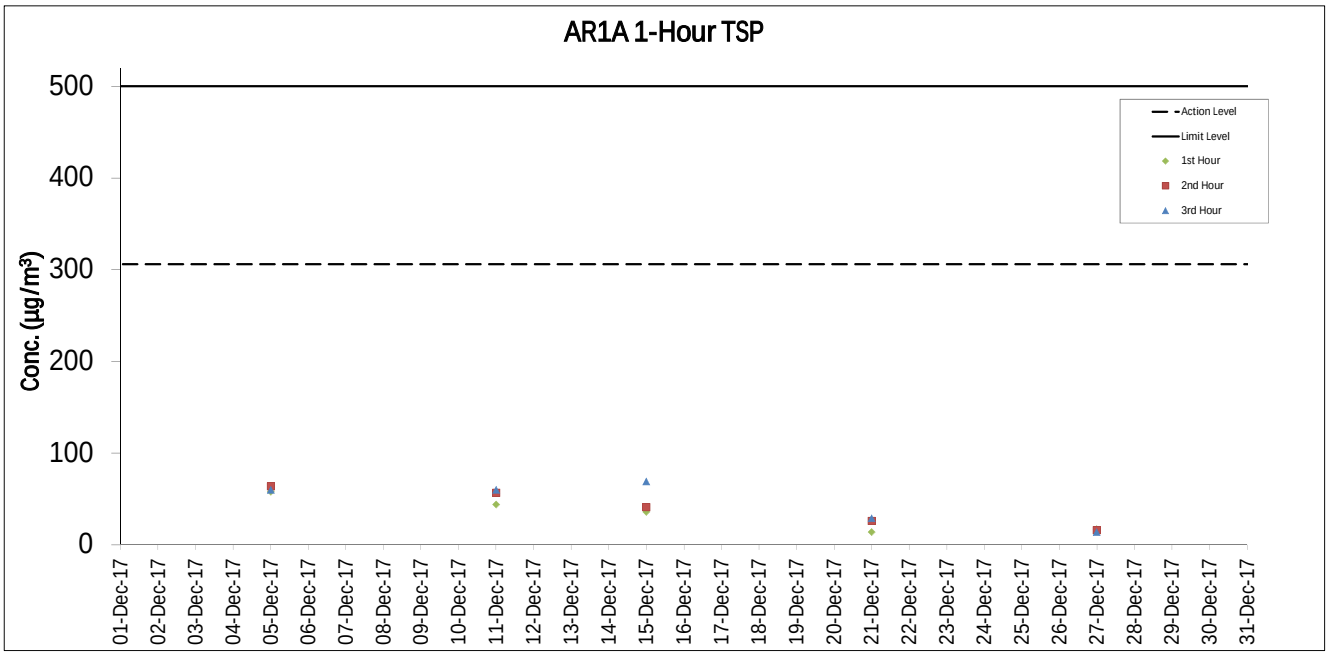
Air Quality Monitoring Results

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

Date	Time	Weather	Wind Speed (m/s)	Wind Direction (deg)	1-hr TSP ($\mu g/m^3$)	Action Level ($\mu g/m^3$)	Limit Level ($\mu g/m^3$)
05-Dec-17	13:00	Fine	4.6	2	58	306	500
05-Dec-17	14:00	Fine	3.5	57	64	306	500
05-Dec-17	15:00	Fine	2.7	63	60	306	500
11-Dec-17	13:00	Sunny	3.7	341	44	306	500
11-Dec-17	14:00	Sunny	4.2	335	57	306	500
11-Dec-17	15:00	Sunny	3.9	326	60	306	500
15-Dec-17	13:00	Fine	3.6	46	36	306	500
15-Dec-17	14:00	Fine	2.0	318	41	306	500
15-Dec-17	15:00	Fine	3.7	317	69	306	500
21-Dec-17	13:00	Sunny	3.8	347	14	306	500
21-Dec-17	14:00	Sunny	4.7	344	26	306	500
21-Dec-17	15:00	Sunny	3.7	272	29	306	500
27-Dec-17	13:00	Sunny	5.5	112	17	306	500
27-Dec-17	14:00	Sunny	5.9	112	16	306	500
27-Dec-17	15:00	Sunny	4.5	122	14	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 ($\mu g/m^3$)	Action Level ($\mu g/m^3$)	Limit Level ($\mu g/m^3$)
05-Dec-17	09:02	Cloudy	5.3	48	51	298	500
05-Dec-17	10:02	Cloudy	4.1	52	49	298	500
05-Dec-17	11:02	Cloudy	3.0	50	48	298	500
11-Dec-17	09:00	Sunny	3.9	58	37	298	500
11-Dec-17	10:00	Sunny	2.2	42	38	298	500
11-Dec-17	11:00	Sunny	4.1	352	43	298	500
15-Dec-17	09:00	Sunny	5.6	89	38	298	500
15-Dec-17	10:00	Sunny	3.8	66	31	298	500
15-Dec-17	11:00	Sunny	4.4	112	29	298	500
21-Dec-17	09:01	Sunny	3.6	56	21	298	500
21-Dec-17	10:01	Sunny	3.2	63	22	298	500
21-Dec-17	11:01	Sunny	2.3	61	20	298	500
27-Dec-17	08:54	Sunny	4.3	80	38	298	500
27-Dec-17	09:54	Sunny	6.2	95	32	298	500
27-Dec-17	10:54	Sunny	4.1	100	25	298	500


AR1A 1-Hour TSP
Conc. (µg/m³)
500
400
300
200
100
0
Action Level
Limit Level
1st Hour
2nd Hour
3rd Hour
01-Dec-17
02-Dec-17
03-Dec-17
04-Dec-17
05-Dec-17
06-Dec-17
07-Dec-17
08-Dec-17
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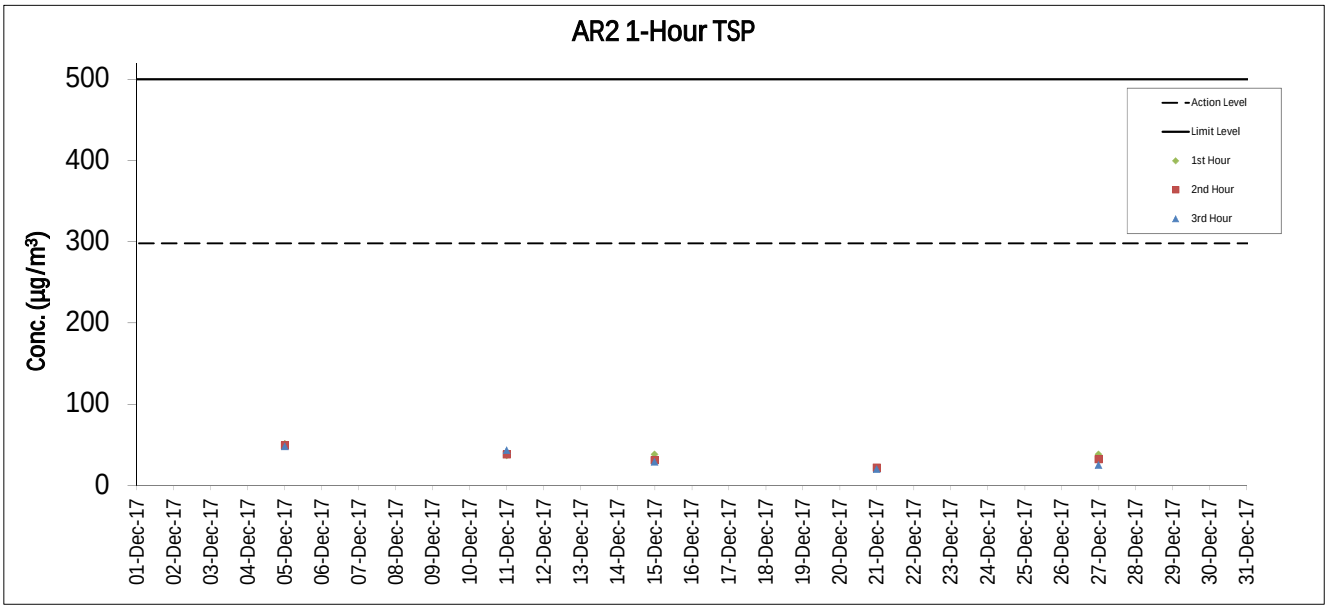
AR2 1-Hour TSP
Conc. (µg/m³)
500
400
300
200
100
0
Action Level
Limit Level
1st Hour
2nd Hour
3rd Hour
01-Dec-17
02-Dec-17
03-Dec-17
04-Dec-17
05-Dec-17
06-Dec-17
07-Dec-17
08-Dec-17
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30-Dec-17
31-Dec-17

Noise Monitoring Results

Noise Measurement Results
Station: NM1A- Man Tung Road Park

Date	Weather	Time	Measured L_{10} dB(A)	Measured L_{90} dB(A)	$L_{eq(30mins)}$ dB(A)
05-Dec-17	Fine	13:05	73.0	55.0	72
05-Dec-17	Fine	13:10	73.0	57.5	
05-Dec-17	Fine	13:15	72.0	56.5	
05-Dec-17	Fine	13:20	71.5	57.5	
05-Dec-17	Fine	13:25	71.5	56.0	
05-Dec-17	Fine	13:30	73.0	58.0	
11-Dec-17	Sunny	13:21	73.0	56.0	73
11-Dec-17	Sunny	13:26	72.0	56.0	
11-Dec-17	Sunny	13:31	72.0	55.0	
11-Dec-17	Sunny	13:36	71.5	54.5	
11-Dec-17	Sunny	13:41	73.0	56.5	
11-Dec-17	Sunny	13:46	73.5	54.5	
21-Dec-17	Sunny	13:09	72.0	55.5	72
21-Dec-17	Sunny	13:14	73.0	55.5	
21-Dec-17	Sunny	13:19	71.5	55.5	
21-Dec-17	Sunny	13:24	72.0	55.5	
21-Dec-17	Sunny	13:29	72.0	56.0	
21-Dec-17	Sunny	13:34	73.0	56.5	
27-Dec-17	Sunny	13:07	74.0	55.0	73
27-Dec-17	Sunny	13:12	72.5	55.0	
27-Dec-17	Sunny	13:17	73.0	56.0	
27-Dec-17	Sunny	13:22	72.5	55.5	
27-Dec-17	Sunny	13:27	72.5	59.0	
27-Dec-17	Sunny	13:32	73.5	57.0	

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

Noise Measurement Results
Station: NM3A- Site Office

Date	Weather	Time	Measured L_{10} dB(A)	Measured L_{90} dB(A)	$L_{eq(30mins)}$ dB(A)
05-Dec-17	Fine	09:20	69.5	60.0	61
05-Dec-17	Fine	09:25	68.0	59.0	
05-Dec-17	Fine	09:30	71.0	60.0	
05-Dec-17	Fine	09:35	70.5	60.0	
05-Dec-17	Fine	09:40	68.0	59.5	
05-Dec-17	Fine	09:45	68.5	59.5	
11-Dec-17	Sunny	09:22	67.0	57.0	63
11-Dec-17	Sunny	09:27	69.5	57.0	
11-Dec-17	Sunny	09:32	69.0	57.5	
11-Dec-17	Sunny	09:37	69.5	57.0	
11-Dec-17	Sunny	09:42	70.5	57.0	
11-Dec-17	Sunny	09:47	70.0	57.0	
21-Dec-17	Sunny	09:25	69.0	57.5	61
21-Dec-17	Sunny	09:30	67.5	57.5	
21-Dec-17	Sunny	09:35	68.5	57.5	
21-Dec-17	Sunny	09:40	71.0	57.5	
21-Dec-17	Sunny	09:45	68.0	57.0	
21-Dec-17	Sunny	09:50	69.5	57.5	
27-Dec-17	Sunny	09:25	68.0	57.5	61
27-Dec-17	Sunny	09:30	68.5	57.5	
27-Dec-17	Sunny	09:35	69.5	57.0	
27-Dec-17	Sunny	09:40	70.0	57.5	
27-Dec-17	Sunny	09:45	68.5	57.5	
27-Dec-17	Sunny	09:50	67.5	57.0	

Noise Measurement Results
Station: NM4- Ching Chung Hau Po Woon Primary School

Date	Weather	Time	Measured L_{10} dB(A)	Measured L_{90} dB(A)	$L_{eq(30mins)}$ dB(A)
05-Dec-17	Cloudy	14:00	65.5	62.2	66
05-Dec-17	Cloudy	14:05	64.0	59.5	
05-Dec-17	Cloudy	14:10	65.0	61.0	
05-Dec-17	Cloudy	14:15	65.0	61.5	
05-Dec-17	Cloudy	14:20	65.5	59.5	
05-Dec-17	Cloudy	14:25	64.5	60.0	
11-Dec-17	Sunny	13:42	65.5	60.0	66
11-Dec-17	Sunny	13:47	65.5	60.0	
11-Dec-17	Sunny	13:52	65.5	59.5	
11-Dec-17	Sunny	13:57	63.0	58.5	
11-Dec-17	Sunny	14:02	65.0	59.5	
11-Dec-17	Sunny	14:07	66.5	60.5	
21-Dec-17	Sunny	14:56	67.0	59.0	60
21-Dec-17	Sunny	15:01	67.0	59.0	
21-Dec-17	Sunny	15:06	72.0	59.0	
21-Dec-17	Sunny	15:11	63.0	58.5	
21-Dec-17	Sunny	15:16	63.0	58.0	
21-Dec-17	Sunny	15:21	62.0	57.5	
27-Dec-17	Sunny	15:02	62.5	57.5	64
27-Dec-17	Sunny	15:07	64.0	58.0	
27-Dec-17	Sunny	15:12	64.0	58.5	
27-Dec-17	Sunny	15:17	62.5	57.5	
27-Dec-17	Sunny	15:22	62.5	57.5	
27-Dec-17	Sunny	15:27	62.0	57.0	

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

Noise Measurement Results
Station: NM5- Village House, Tin Sum

Date	Weather	Time	Measured L_{10} dB(A)	Measured L_{90} dB(A)	$L_{eq(30mins)}$ dB(A)
05-Dec-17	Cloudy	09:57	60.0	50.0	58
05-Dec-17	Cloudy	10:02	58.0	49.5	
05-Dec-17	Cloudy	10:07	59.0	50.0	
05-Dec-17	Cloudy	10:12	57.0	48.0	
05-Dec-17	Cloudy	10:17	55.0	48.5	
05-Dec-17	Cloudy	10:22	56.5	49.0	
11-Dec-17	Sunny	09:30	63.5	49.0	53
11-Dec-17	Sunny	09:35	56.5	47.0	
11-Dec-17	Sunny	09:40	55.5	47.5	
11-Dec-17	Sunny	09:45	55.0	47.5	
11-Dec-17	Sunny	09:50	60.5	47.0	
11-Dec-17	Sunny	09:55	52.0	46.5	
21-Dec-17	Sunny	09:43	55.5	47.0	58
21-Dec-17	Sunny	09:48	56.5	48.5	
21-Dec-17	Sunny	09:53	56.5	50.5	
21-Dec-17	Sunny	09:58	59.5	49.0	
21-Dec-17	Sunny	10:03	57.0	48.5	
21-Dec-17	Sunny	10:08	60.0	47.5	
27-Dec-17	Sunny	09:25	60.0	49.5	59
27-Dec-17	Sunny	09:30	61.0	50.5	
27-Dec-17	Sunny	09:35	60.0	49.5	
27-Dec-17	Sunny	09:40	57.5	51.5	
27-Dec-17	Sunny	09:45	55.5	51.0	
27-Dec-17	Sunny	09:50	58.0	49.0	

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

Noise Measurement Results
Station: NM6- House No.1 Sha Lo Wan

Date	Weather	Time	Measured L_{10} dB(A)	Measured L_{90} dB(A)	$L_{eq(30mins)}$ dB(A)
07-Dec-17	Cloudy	09:42	67.0	52.5	68
07-Dec-17	Cloudy	09:47	67.5	52.5	
07-Dec-17	Cloudy	09:52	66.0	52.0	
07-Dec-17	Cloudy	09:57	68.5	57.5	
07-Dec-17	Cloudy	10:02	66.5	56.0	
07-Dec-17	Cloudy	10:07	71.0	58.0	
13-Dec-17	Cloudy	09:38	70.5	60.5	68
13-Dec-17	Cloudy	09:43	71.5	56.5	
13-Dec-17	Cloudy	09:48	67.0	56.5	
13-Dec-17	Cloudy	09:53	67.0	53.0	
13-Dec-17	Cloudy	09:58	65.5	54.0	
13-Dec-17	Cloudy	10:03	71.0	53.0	
19-Dec-17	Sunny	09:37	74.5	61.5	71
19-Dec-17	Sunny	09:42	76.0	62.5	
19-Dec-17	Sunny	09:47	74.5	62.0	
19-Dec-17	Sunny	09:52	74.5	62.0	
19-Dec-17	Sunny	09:57	75.0	62.0	
19-Dec-17	Sunny	10:02	72.0	62.0	
28-Dec-17	Fine	09:50	67.5	60.0	68
28-Dec-17	Fine	09:55	68.5	58.5	
28-Dec-17	Fine	10:00	70.0	63.0	
28-Dec-17	Fine	10:05	73.5	60.0	
28-Dec-17	Fine	10:10	72.0	62.5	
28-Dec-17	Fine	10:15	73.5	65.0	

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

NM1A Leq (30 min) dB(A)
Sound Level dB(A)
80
75
70
65
60
55
50
Leq (30 min)
Limit Level
01-Dec-17
02-Dec-17
03-Dec-17
04-Dec-17
05-Dec-17
06-Dec-17
07-Dec-17
08-Dec-17
09-Dec-17
10-Dec-17
11-Dec-17
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25-Dec-17
26-Dec-17
27-Dec-17
28-Dec-17
29-Dec-17
30-Dec-17
31-Dec-17

NM3A Leq (30 min) dB(A)
Sound Level dB(A)
80
75
70
65
60
55
50
Leq (30 min)
Limit Level
01-Dec-17
02-Dec-17
03-Dec-17
04-Dec-17
05-Dec-17
06-Dec-17
07-Dec-17
08-Dec-17
09-Dec-17
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26-Dec-17
27-Dec-17
28-Dec-17
29-Dec-17
30-Dec-17
31-Dec-17

NM4 Leq (30 min) dB(A)
Sound Level dB(A)
80
75
70
65
60
55
50
Leq (30 min)
Limit Level
01-Dec-17
02-Dec-17
03-Dec-17
04-Dec-17
05-Dec-17
06-Dec-17
07-Dec-17
08-Dec-17
09-Dec-17
10-Dec-17
11-Dec-17
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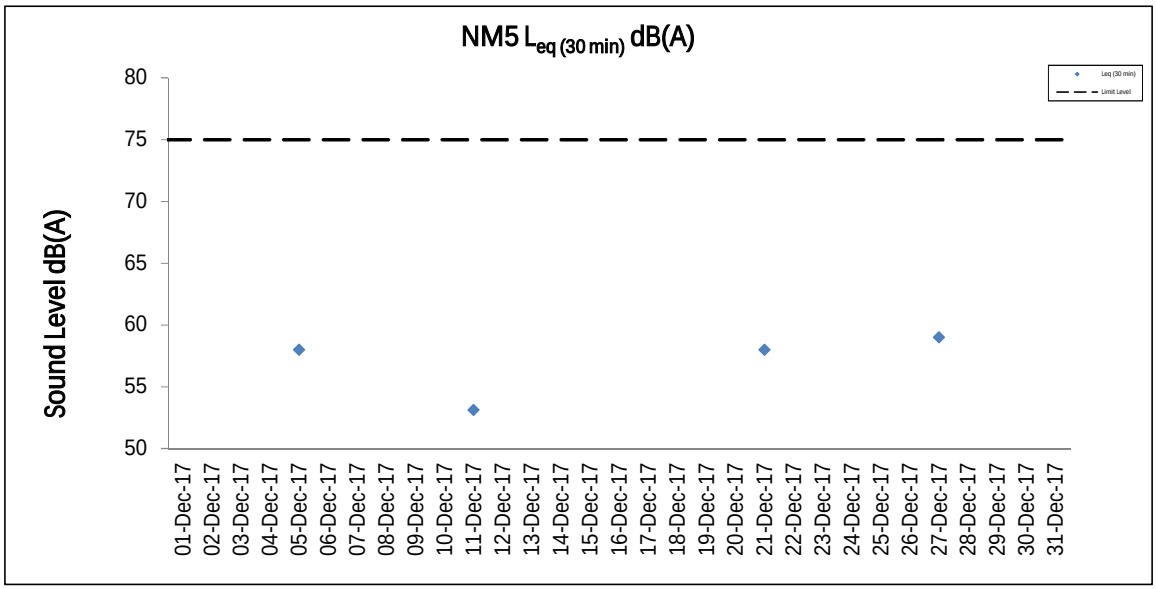
30-Dec-17
31-Dec-17


NM5 Leq (30 min) dB(A)
Sound Level dB(A)
80
75
70
65
60
55
50
Leq (30 min)
Limit Level
01-Dec-17
02-Dec-17
03-Dec-17
04-Dec-17
05-Dec-17
06-Dec-17
07-Dec-17
08-Dec-17
09-Dec-17
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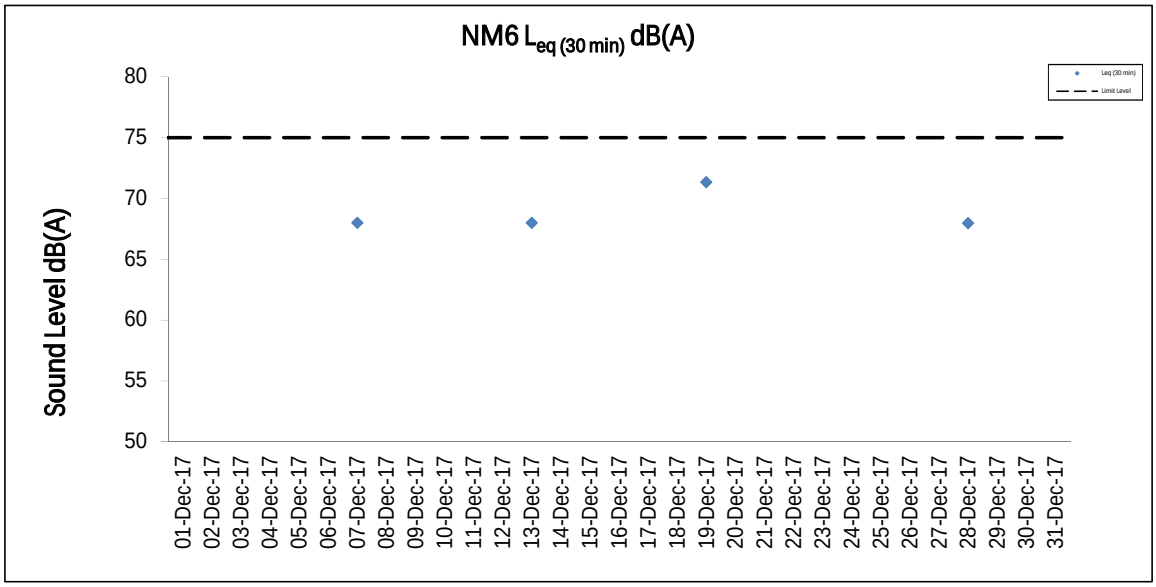
31-Dec-17


NM6 Leq (30 min) dB(A)
Sound Level dB(A)
80
75
70
65
60
55
50
Leq (30 min)
Limit Level
01-Dec-17
02-Dec-17
03-Dec-17
04-Dec-17
05-Dec-17
06-Dec-17
07-Dec-17
08-Dec-17
09-Dec-17
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30-Dec-17
31-Dec-17

Water Quality Monitoring Results

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 02 December 17 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	11:02	9.1	Surface	1.0	0.1	196	22.0	22.0	8.1	8.1	32.8	32.8	96.2	96.2	7.0	7.0	15.7	18.5	19	20	72	74	815608	804256	<0.2	<0.2	0.4	0.4
						1.0	0.1	207	22.0		8.1		32.8		96.2		7.0		15.7		19		72				<0.2		0.4	
					Middle	4.6	0.1	183	22.0	22.0	8.1	8.1	32.8	32.8	95.8	95.8	6.9		19.0		18		74				<0.2		0.4	
						4.6	0.1	188	22.0		8.1		32.8		95.8		6.9		19.0		17		74				<0.2		0.4	
					Bottom	8.1	0.0	192	22.0	22.0	8.1	8.1	32.8	32.8	96.1	96.2	7.0	7.0	20.9		23		76				<0.2		0.3	
						8.1	0.0	196	22.0		8.1		32.8		96.2		7.0		20.7		21		76				<0.2		0.4	
C2	Cloudy	Moderate	09:55	12.4	Surface	1.0	0.2	69	22.2	22.2	7.9	7.9	29.6	29.6	94.4	94.4	6.9	6.9	8.1	15.6	8	9	72	73	825688	806961	<0.2	<0.2	1.1	1.1
						1.0	0.2	71	22.2		7.9		29.6		94.3		6.9		8.1		7		72				<0.2		1.1	
					Middle	6.2	0.2	71	22.3	22.3	7.9	7.9	30.1	30.1	94.4	94.4	6.9		12.6		10		73				<0.2		1.2	
						6.2	0.2	71	22.3		7.9		30.1		94.4		6.9		12.6		8		73				<0.2		1.0	
					Bottom	11.4	0.2	344	22.3	22.3	7.9	7.9	31.1	31.1	96.3	96.3	7.0	7.0	26.2		9		75				<0.2		1.0	
						11.4	0.2	316	22.3		7.9		31.1		96.3		7.0		26.2		10		75				<0.2		0.9	
C3	Cloudy	Moderate	11:41	11.8	Surface	1.0	0.4	88	22.5	22.5	7.9	7.9	31.5	31.5	90.2	90.2	6.5	6.6	4.0	6.6	4	6	73	75	822094	817782	<0.2	<0.2	0.5	0.6
						1.0	0.4	90	22.5		7.9		31.5		90.2		6.5		4.0		5		73				<0.2		0.5	
					Middle	5.9	0.3	95	22.4	22.4	7.9	7.9	31.5	31.5	90.9	90.9	6.6		7.6		7		75				<0.2		0.6	
						5.9	0.4	98	22.4		7.9		31.5		90.9		6.6		7.6		6		75				<0.2		0.6	
					Bottom	10.8	0.3	88	22.4	22.4	7.9	7.9	31.6	31.6	93.1	93.1	6.7	6.7	8.2		7		76				<0.2		0.6	
						10.8	0.3	89	22.4		7.9		31.6		93.1		6.7		8.2		7		76				<0.2		0.7	
IM1	Cloudy	Moderate	10:44	8.0	Surface	1.0	0.1	95	21.9	21.9	8.1	8.1	32.6	32.6	96.2	96.2	7.0	7.0	18.7	22.0	16	22	72	74	818378	806475	<0.2	<0.2	0.5	0.4
						1.0	0.1	104	21.9		8.1		32.6		96.2		7.0		18.7		18		72				<0.2		0.5	
					Middle	4.0	0.1	88	21.9	21.9	8.1	8.1	32.7	32.7	95.8	95.8	6.9		20.8		21		73				<0.2		0.4	
						4.0	0.2	96	21.9		8.1		32.7		95.8		6.9		20.8		21		73				<0.2		0.4	
					Bottom	7.0	0.0	137	21.9	21.9	8.1	8.1	32.7	32.7	96.1	96.1	7.0	7.0	26.4		28		76				<0.2		0.4	
						7.0	0.0	146	21.9		8.1		32.7		96.1		7.0		26.6		28		76				<0.2		0.4	
IM2	Cloudy	Moderate	10:36	9.0	Surface	1.0	0.2	51	22.0	22.0	8.1	8.1	32.8	32.8	96.4	96.3	7.0	7.0	17.9	21.5	17	21	71	73	818841	806163	<0.2	<0.2	0.4	0.5
						1.0	0.2	52	22.0		8.1		32.8		96.2		7.0		18.2		18		71				<0.2		0.5	
					Middle	4.5	0.1	36	21.9	21.9	8.1	8.1	32.8	32.8	95.5	95.5	6.9		21.0		22		73				<0.2		0.4	
						4.5	0.1	36	21.9		8.1		32.8		95.5		6.9		21.1		21		73				<0.2		0.5	
					Bottom	8.0	0.1	52	21.9	21.9	8.1	8.1	32.8	32.8	95.6	95.7	6.9	6.9	25.5		25		74				<0.2		0.5	
						8.0	0.1	55	21.9		8.1		32.8		95.7		6.9		25.5		24		75				<0.2		0.4	
IM3	Cloudy	Moderate	10:30	8.9	Surface	1.0	0.2	121	22.0	22.0	8.1	8.1	32.6	32.6	95.9	95.9	7.0	7.0	15.9	20.3	18	21	70	73	819431	806004	<0.2	<0.2	0.5	0.5
						1.0	0.2	126	22.0		8.1		32.6		95.9		7.0		16.0		16		71				<0.2		0.5	
					Middle	4.5	0.1	83	21.9	21.9	8.1	8.1	32.7	32.7	95.6	95.6	6.9		19.4		24		73				<0.2		0.5	
						4.5	0.1	86	21.9		8.1		32.7		95.6		6.9		19.4		22		73				<0.2		0.5	
					Bottom	7.9	0.3	72	21.9	21.9	8.1	8.1	32.7	32.7	95.9	95.9	6.9	6.9	25.6		23		75				<0.2		0.4	
						7.9	0.3	74	21.9		8.1		32.7		95.9		6.9		25.6		23		75				<0.2		0.4	
IM4	Cloudy	Moderate	10:22	8.2	Surface	1.0	0.1	125	21.9	21.9	8.1	8.1	32.6	32.6	96.3	96.3	7.0	7.0	17.8	21.4	17	18	71	74	819550	805043	<0.2	<0.2	0.5	0.4
						1.0	0.1	131	21.9		8.1		32.6		96.3		7.0		17.8		18		72				<0.2		0.5	
					Middle	4.1	0.1	34	21.9	21.9	8.1	8.1	32.7	32.7	95.9	95.9	6.9		22.1		19		73				<0.2		0.4	
						4.1	0.1	35	21.9		8.1		32.7		95.9		6.9		22.1		19		74				<0.2		0.4	
					Bottom	7.2	0.1	355	21.9	21.9	8.1	8.1	32.7	32.7	96.6	96.6	7.0	7.0	24.2		18		75				<0.2		0.4	
						7.2	0.1	327	21.9		8.1		32.7		96.6		7.0		24.2		18		76				<0.2		0.4	
IM5	Cloudy	Moderate	10:13	7.7	Surface	1.0	0.2	20	21.9	21.9	8.1	8.1	32.6	32.6	96.1	96.1	7.0	7.0	16.6	21.3	20	18	72	74	820562	804952	<0.2	<0.2	0.4	0.5
						1.0	0.2	21	21.9		8.1		32.6		96.1		7.0		16.6		18		72				<0.2		0.5	
					Middle	3.9	0.1	42	21.9	21.9	8.1	8.1	32.6	32.6	96.0	96.0	7.0		23.1		19		74				<0.2		0.5	
						3.9	0.1	42	21.9		8.1		32.6		96.0		7.0		23.0		18		74				<0.2		0.5	
					Bottom	6.7	0.1	37	21.9	21.9	8.1	8.1	32.5	32.5	96.1	96.1	7.0	7.0	24.3		17		76				<0.2		0.4	
						6.7	0.1	38	21.9		8.1		32.5		96.1		7.0		24.3		18		76				<0.2		0.4	
IM6	Cloudy	Moderate	10:05	7.2	Surface	1.0	0.1	99	21.9	21.9	8.1	8.1	32.5	32.5	96.3	96.3	7.0	7.0	19.2	21.6	19	21	71	74	821061	805820	<0.2	<0.2	0.4	0.5
						1.0	0.2	108	21.9		8.1		32.5		96.3		7.0		19.2		18		72				<0.2		0.6	
					Middle	3.6	0.2	48	21.9	21.9	8.1	8.1	32.6	32.6	96.1	96.1	7.0		20.5		20		74				<0.2		0.4	
						3.6	0.2	50	21.9		8.1		32.6		96.1		7.0		20.5		18		74				<0.2		0.4	
					Bottom	6.2	0.1	96	21.9	21.9	8.1	8.1	32.6	32.6	96.4	96.4	7.0	7.0	25.2		24		76				<0.2		0.5	
						6.2	0.1	100	21.9		8.1		32.6		96.4		7.0		25.2		24		76				<0.2		0.4	
IM7	Cloudy	Moderate	09:57	8.5	Surface	1.0	0.2	59	21.9	21.9	8.1	8.1	32.5	32.5	96.1	96.1	7.0	7.0	18.3	21.3	21	23	71	73	821325	806842	<0.2	<0.2	0.5	0.5
						1.0	0.3	64	21.9		8.1		32.5		96.1		7.0		18.3		22		72				<0.2		0.5	
					Middle	4.3	0.2	53	21.9	21.9	8.1	8.1	32.5	32.5	95.8	95.8	7.0		20.6		21		72				<0.2		0.4	
						4.3	0.2	53	21.9		8.1		32.5		95.8		7.0		20.6		23		73				<0.2		0.5	
					Bottom	7.5	0.3	38	21.9	21.9	8.1	8.1	32.6	32.6	95.9	95.9	7.0	7.0	24.9		24		74				<0.2		0.4	
						7.5	0.3	38	21.9		8.1		32.6		95.9		7.0		24.9		25		75				<0.2		0.5	
IM8	Cloudy	Moderate	10:20	8.1	Surface	1.0	0.3	85	22.1	22.1	8.0	8.0	30.7	30.7	96.6	96.6	7.1	7.1	11.5	15.1	10	17	73	74	821670	807862	<0.2	<0.2	0.7	0.7
						1.0	0.3	89	22.1		8.0		30.7		96.6		7.1		11.5		10		73				<0.2		0.6	
					Middle	4.1	0.3	72	22.1	22.1	8.0	8.0	30.8	30.8	96.5	96.5	7.0		14.5		20		74				<0.2		0.7	
						4.1	0.3	78	22.1		8.0		30.8		96.5		7.0		14.5		19		74				<0.2		0.7	
					Bottom	7.1	0.3	42	22.1	22.1	8.0	8.0	31.0	31.0	97.7	97.7	7.1	7.1	19.3		21		75				<0.2		0.8	
						7.1	0.3	44	22.1		8.0		31.0		97.7		7.1		19.3		23		75				<0.2		0.8	

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 02 December 17 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	10:28	7.2	Surface	1.0	0.4	82	22.1	22.1	8.1	8.1	31.1	31.1	97.0	97.0	7.1	7.1	12.5	15.7	11	11	74	74	822104	808792	<0.2	<0.2	0.8	0.7
						1.0	0.4	86	22.1		8.1		31.1		97.0		7.1		12.5		10		73				<0.2		0.8	
					Middle	3.6	0.3	83	22.1	22.1	8.1	8.1	31.1	31.1	96.9	96.9	7.1		16.7		12		73				<0.2		0.6	
						3.6	0.3	89	22.1		8.1		31.1		96.9		7.1		16.7		11		74				<0.2		0.6	
					Bottom	6.2	0.3	91	22.1	22.1	8.1	8.1	31.2	31.2	98.0	98.0	7.1	7.1	17.9		12		75				<0.2		0.6	
						6.2	0.3	97	22.1		8.1		31.2		98.0		7.1		17.9		11		75				<0.2		0.6	
IM10	Cloudy	Moderate	10:37	7.8	Surface	1.0	0.4	93	22.2	22.2	8.0	8.0	31.0	31.0	95.6	95.6	7.0	7.0	11.7	10.4	10	12	73	74	822256	809817	<0.2	<0.2	0.6	0.6
						1.0	0.4	99	22.2		8.0		31.0		95.6		7.0		11.7		11		72				<0.2		0.6	
					Middle	3.9	0.3	102	22.2	22.2	8.0	8.0	31.1	31.1	95.8	95.8	7.0		10.2		12		74				<0.2		0.6	
						3.9	0.4	109	22.2		8.0		31.1		95.8		7.0		10.2		12		74				<0.2		0.6	
					Bottom	6.8	0.2	96	22.2	22.2	8.0	8.0	31.2	31.2	97.1	97.1	7.1	7.1	9.4		12		75				<0.2		0.7	
						6.8	0.2	103	22.2		8.0		31.2		97.1		7.1		9.4		13		75				<0.2		0.7	
IM11	Cloudy	Moderate	10:47	7.4	Surface	1.0	0.4	90	22.2	22.2	8.0	8.0	31.2	31.2	96.3	96.3	7.0	7.0	11.5	12.9	13	14	73	74	821529	810525	<0.2	<0.2	0.6	0.8
						1.0	0.5	96	22.2		8.0		31.2		96.3		7.0		11.5		13		73				<0.2		0.8	
					Middle	3.7	0.3	97	22.2	22.2	8.0	8.0	31.2	31.2	96.7	96.7	7.0		13.0		16		75				<0.2		0.7	
						3.7	0.4	99	22.2		8.0		31.2		96.7		7.0		13.0		15		74				<0.2		0.9	
					Bottom	6.4	0.3	95	22.2	22.2	8.0	8.0	31.2	31.2	97.4	97.4	7.1	7.1	14.2		15		75				<0.2		0.7	
						6.4	0.3	103	22.2		8.0		31.2		97.4		7.1		14.2		14		76				<0.2		0.8	
IM12	Cloudy	Moderate	10:53	8.4	Surface	1.0	0.3	99	22.5	22.5	7.9	7.9	31.3	31.3	95.1	95.1	6.9	7.0	4.5	5.2	6	6	72	74	821181	811492	<0.2	<0.2	0.8	0.7
						1.0	0.3	99	22.5		7.9		31.3		95.1		6.9		4.5		6		73				<0.2		0.6	
					Middle	4.2	0.4	97	22.4	22.4	7.9	7.9	31.3	31.3	96.3	96.3	7.0		5.8		6		74				<0.2		0.7	
						4.2	0.4	104	22.4		7.9		31.3		96.3		7.0		5.8		7		74				<0.2		0.6	
					Bottom	7.4	0.3	101	22.3	22.3	7.9	7.9	31.4	31.4	98.9	98.9	7.2	7.2	5.4		7		75				<0.2		0.6	
						7.4	0.3	109	22.3		7.9		31.4		98.9		7.2		5.4		6		75				<0.2		0.6	
SR2	Cloudy	Moderate	11:20	4.3	Surface	1.0	0.3	113	22.4	22.4	7.9	7.9	31.4	31.4	96.9	96.9	7.0	7.0	6.3	6.9	9	9	73	75	821472	814171	<0.2	<0.2	0.7	0.6
						1.0	0.3	119	22.4		7.9		31.4		96.9		7.0		6.3		9		73				<0.2		0.7	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.2	112	22.4	22.4	7.9	7.9	31.5	31.5	99.5	99.5	7.2	7.2	7.5		9		76				<0.2		0.6	
						3.3	0.3	116	22.4		7.9		31.5		99.5		7.2		7.5		8		76				<0.2		0.5	
SR3	Cloudy	Moderate	10:14	8.6	Surface	1.0	0.3	69	22.2	22.2	8.0	8.0	30.2	30.2	96.9	96.9	7.1	7.1	11.2	13.7	11	13	-	-	822155	807566	-	-	-	-
						1.0	0.3	69	22.2		8.0		30.2		96.9		7.1		11.2		12		-				-		-	
					Middle	4.3	0.3	53	22.1	22.1	8.0	8.0	30.3	30.3	97.0	97.1	7.1		13.7		14		-				-		-	
						4.3	0.4	56	22.1		8.0		30.3		97.1		7.1		13.7		15		-				-		-	
					Bottom	7.6	0.3	48	22.1	22.1	8.0	8.0	30.6	30.6	98.0	98.0	7.2	7.2	16.1		13		-				-		-	
						7.6	0.3	52	22.1		8.0		30.6		98.0		7.2		16.1		14		-				-		-	
SR4A	Fine	Calm	11:22	8.7	Surface	1.0	0.3	80	21.9	21.9	8.1	8.1	32.7	32.7	96.2	96.2	7.0	7.0	13.8	15.7	10	14	-	-	817192	807826	-	-	-	-
						1.0	0.4	80	21.9		8.1		32.7		96.2		7.0		13.8		9		-				-		-	
					Middle	4.4	0.4	68	21.9	21.9	8.1	8.1	32.7	32.7	96.2	96.2	7.0		15.6		15		-				-		-	
						4.4	0.4	74	21.9		8.1		32.7		96.2		7.0		15.6		13		-				-		-	
					Bottom	7.7	0.2	72	21.9	21.9	8.1	8.1	32.7	32.7	96.9	96.9	7.0	7.0	17.8		17		-				-		-	
						7.7	0.2	77	21.9		8.1		32.7		96.9		7.0		17.8		18		-				-		-	
SR5A	Fine	Calm	11:37	4.4	Surface	1.0	0.1	305	22.2	22.2	8.0	8.0	32.3	32.3	95.3	95.3	6.9	6.9	8.1	8.7	7	9	-	-	816576	810673	-	-	-	-
						1.0	0.1	328	22.2		8.0		32.3		95.3		6.9		8.1		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.1	327	22.2	22.2	8.0	8.0	32.3	32.3	96.5	96.5	7.0	7.0	9.2		10		-				-		-	
						3.4	0.1	331	22.2		8.0		32.3		96.5		7.0		9.2		12		-				-		-	
SR6	Fine	Calm	11:59	4.2	Surface	1.0	0.1	26	22.3	22.3	8.0	8.0	32.2	32.2	95.5	95.5	6.9	6.9	6.7	6.9	8	8	-	-	817915	814678	-	-	-	-
						1.0	0.1	26	22.3		8.0		32.2		95.5		6.9		6.7		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.1	316	22.2	22.2	8.0	8.0	32.2	32.2	96.6	96.6	7.0	7.0	7.1		8		-				-		-	
						3.2	0.1	345	22.2		8.0		32.2		96.6		7.0		7.1		8		-				-		-	
SR7	Cloudy	Moderate	12:07	16.8	Surface	1.0	0.4	71	22.4	22.4	7.9	7.9	30.9	30.9	88.3	88.3	6.4	6.5	4.3	6.7	6	6	-	-	823608	823744	-	-	-	-
						1.0	0.4	74	22.4		7.9		30.9		88.3		6.4		4.3		6		-				-		-	
					Middle	8.4	0.4	61	22.4	22.4	7.9	7.9	30.9	30.9	89.1	89.1	6.5		7.5		6		-				-		-	
						8.4	0.4	65	22.4		7.9		30.9		89.1		6.5		7.5		6		-				-		-	
					Bottom	15.8	0.2	40	22.4	22.4	7.9	7.9	30.8	30.8	91.0	91.0	6.6	6.6	8.3		7		-				-		-	
						15.8	0.2	42	22.4		7.9		30.8		91.0		6.6		8.3		7		-				-		-	
SR8	Cloudy	Moderate	11:03	4.6	Surface	1.0	-	-	22.3	22.3	8.0	8.0	31.3	31.3	100.0	100.0	7.3	7.3	7.2	7.4	7	9	-	-	820246	811418	-	-	-	-
						1.0	-	-	22.3		8.0		31.3		100.0		7.3		7.2		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	-	-	22.2	22.2	8.0	8.0	31.4	31.4	100.3	100.3	7.3	7.3	7.5		11		-				-		-	
						3.6	-	-	22.2		8.0		31.4		100.3		7.3		7.5		11		-				-		-	

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 December 17 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Moderate	06:00	8.6	Surface	1.0	0.5	41	22.0	22.0	8.1	8.1	32.6	32.6	95.9	95.9	6.9	6.9	17.9	22.0	22	23	72	74	815649	804265	<0.2	<0.2	0.5	0.5
						1.0	0.5	41	22.0		8.1		32.6		95.9		6.9		18.1		22		72				<0.2		0.4	
					Middle	4.3	0.4	33	22.0	22.0	8.1	8.1	32.6	32.6	95.6	95.6	6.9		21.2		22		74				<0.2		0.4	
						4.3	0.4	34	22.0		8.1		32.6		95.6		6.9		21.2		22		74				<0.2		0.4	
					Bottom	7.6	0.5	33	22.0	22.0	8.1	8.1	32.6	32.6	95.6	95.6	6.9	6.9	26.7		25		76				<0.2		0.5	
						7.6	0.5	35	22.0		8.1		32.6		95.6		6.9		26.7		24		77				<0.2		0.5	
C2	Cloudy	Moderate	06:44	11.8	Surface	1.0	0.3	328	22.3	22.3	7.9	7.9	29.8	29.8	93.8	93.8	6.9	6.9	10.3	16.2	8	8	73	74	825684	806932	<0.2	<0.2	1.0	1.2
						1.0	0.4	353	22.3		7.9		29.8		93.8		6.9		10.3		7		73				<0.2		1.1	
					Middle	5.9	0.4	345	22.4	22.4	7.9	7.9	30.2	30.2	94.7	94.7	6.9		19.4		9		73				<0.2		1.2	
						5.9	0.4	317	22.4		7.9		30.2		94.7		6.9		19.4		8		74				<0.2		1.3	
					Bottom	10.8	0.3	356	22.4	22.4	7.9	7.9	30.1	30.1	95.9	95.9	7.0	7.0	18.8		8		75				<0.2		1.3	
						10.8	0.3	328	22.4		7.9		30.1		95.9		7.0		18.8		9		75				<0.2		1.3	
C3	Cloudy	Moderate	04:54	11.3	Surface	1.0	0.3	254	22.5	22.5	7.9	7.9	30.8	30.8	93.6	93.6	6.8	6.8	6.8	6.6	7	8	73	75	822098	817814	<0.2	<0.2	0.7	0.7
						1.0	0.3	272	22.5		7.9		30.8		93.6		6.8		6.8		6		73				<0.2		0.6	
					Middle	5.7	0.3	256	22.5	22.5	7.9	7.9	31.0	31.0	93.8	93.8	6.8		6.4		6		74				<0.2		0.7	
						5.7	0.3	261	22.5		7.9		31.0		93.8		6.8		6.4		8		75				<0.2		0.8	
					Bottom	10.3	0.2	247	22.5	22.5	7.9	7.9	31.2	31.2	94.4	94.4	6.8	6.8	6.7		9		76				<0.2		0.7	
						10.3	0.2	247	22.5		7.9		31.2		94.4		6.8		6.7		9		78				<0.2		0.8	
IM1	Fine	Moderate	06:16	7.2	Surface	1.0	0.5	9	21.9	21.9	8.1	8.1	32.1	32.1	95.7	95.7	7.0	7.0	12.4	15.9	12	13	72	74	818357	806453	<0.2	<0.2	0.8	0.8
						1.0	0.5	9	21.9		8.1		32.1		95.7		7.0		12.4		12		72				<0.2		0.8	
					Middle	3.6	0.5	9	21.9	21.9	8.1	8.1	32.1	32.1	95.6	95.6	7.0		15.2		12		73				<0.2		0.8	
						3.6	0.5	9	21.9		8.1		32.1		95.6		7.0		15.2		12		74				<0.2		0.8	
					Bottom	6.2	0.4	352	21.9	21.9	8.2	8.2	32.2	32.2	95.7	95.7	7.0	7.0	20.1		13		76				<0.2		0.8	
						6.2	0.4	324	21.9		8.2		32.2		95.7		7.0		19.8		14		76				<0.2		0.8	
IM2	Fine	Moderate	06:21	8.1	Surface	1.0	0.5	21	21.9	21.9	8.1	8.1	32.0	32.0	95.5	95.5	7.0	7.0	13.6	17.3	12	15	71	74	818862	806222	<0.2	<0.2	0.8	0.8
						1.0	0.5	22	21.9		8.1		32.0		95.5		7.0		13.6		11		72				<0.2		0.9	
					Middle	4.1	0.5	23	21.9	21.9	8.1	8.1	32.0	32.0	95.4	95.4	6.9		15.9		15		74				<0.2		0.8	
						4.1	0.5	23	21.9		8.1		32.0		95.4		6.9		15.9		16		74				<0.2		0.9	
					Bottom	7.1	0.3	21	21.9	21.9	8.2	8.2	32.1	32.1	95.6	95.6	6.9	6.9	22.4		18		75				<0.2		0.8	
						7.1	0.3	22	21.9		8.2		32.1		95.6		6.9		22.4		19		75				<0.2		0.8	
IM3	Fine	Moderate	06:27	8.4	Surface	1.0	0.4	33	21.9	21.9	8.1	8.1	32.1	32.1	95.2	95.2	6.9	6.9	11.9	13.0	10	14	71	73	819392	806009	<0.2	<0.2	0.8	0.7
						1.0	0.5	34	21.9		8.1		32.1		95.2		6.9		11.9		12		71				<0.2		0.9	
					Middle	4.2	0.4	32	21.9	21.9	8.1	8.1	32.1	32.1	95.0	95.0	6.9		12.7		14		73				<0.2		0.8	
						4.2	0.4	33	21.9		8.1		32.1		95.0		6.9		12.7		15		73				<0.2		0.6	
					Bottom	7.4	0.3	30	22.0	22.0	8.1	8.1	32.5	32.5	95.2	95.2	6.9	6.9	14.4		15		75				<0.2		0.7	
						7.4	0.3	31	22.0		8.1		32.5		95.2		6.9		14.4		15		76				<0.2		0.6	
IM4	Fine	Moderate	06:34	7.7	Surface	1.0	0.4	31	22.0	22.0	8.0	8.0	32.1	32.1	93.2	93.2	6.8	6.8	14.2	19.4	11	14	72	74	819575	805025	<0.2	<0.2	0.6	0.6
						1.0	0.4	33	22.0		8.0		32.1		93.2		6.8		14.2		13		72				<0.2		0.5	
					Middle	3.9	0.3	24	22.0	22.0	8.0	8.0	32.1	32.1	93.7	93.7	6.8		17.9		12		74				<0.2		0.6	
						3.9	0.3	25	22.0		8.0		32.1		93.7		6.8		17.9		12		74				<0.2		0.6	
					Bottom	6.7	0.3	19	22.0	22.0	8.0	8.0	32.1	32.1	94.9	94.9	6.9	6.9	26.3		16		76				<0.2		0.5	
						6.7	0.3	19	22.0		8.0		32.1		94.9		6.9		26.1		18		76				<0.2		0.6	
IM5	Fine	Moderate	06:44	7.0	Surface	1.0	0.5	356	21.9	21.9	8.1	8.1	32.1	32.1	94.9	94.9	6.9	6.9	13.6	20.3	11	18	72	74	820588	804930	<0.2	<0.2	0.6	0.6
						1.0	0.5	328	21.9		8.1		32.1		94.9		6.9		13.6		10		72				<0.2		0.6	
					Middle	3.5	0.5	353	21.9	21.9	8.1	8.1	32.2	32.2	95.2	95.2	6.9		20.0		14		74				<0.2		0.5	
						3.5	0.5	353	21.9		8.1		32.2		95.2		6.9		20.0		13		74				<0.2		0.6	
					Bottom	6.0	0.4	1	21.9	21.9	8.2	8.2	32.2	32.2	95.7	95.7	7.0	7.0	27.2		30		76				<0.2		0.6	
						6.0	0.4	1	21.9		8.2		32.2		95.7		7.0		27.2		30		76				<0.2		0.8	
IM6	Fine	Moderate	06:51	6.8	Surface	1.0	0.3	355	21.9	21.9	8.1	8.1	32.5	32.5	94.7	94.7	6.9	6.9	16.5	22.0	13	18	72	74	821087	805828	<0.2	<0.2	0.9	0.7
						1.0	0.3	327	21.9		8.1		32.5		94.7		6.9		16.5		15		72				<0.2		0.8	
					Middle	3.4	0.3	356	22.0	22.0	8.1	8.1	32.5	32.5	94.6	94.6	6.9		21.8		18		74				<0.2		0.8	
						3.4	0.3	328	22.0		8.1		32.5		94.6		6.9		22.0		18		74				<0.2		0.6	
					Bottom	5.8	0.3	9	22.0	22.0	8.1	8.1	32.5	32.5	94.6	94.6	6.9	6.9	27.6		21		76				<0.2		0.7	
						5.8	0.3	9	22.0		8.1		32.5		94.6		6.9		27.6		23		76				<0.2		0.6	
IM7	Fine	Moderate	07:01	8.4	Surface	1.0	0.1	63	21.9	21.9	8.0	8.0	31.7	31.7	94.1	94.1	6.9	6.9	16.5	20.0	18	21	71	73	821370	806841	<0.2	<0.2	0.9	0.9
						1.0	0.2	65	21.9		8.0		31.7		94.1		6.9		16.5		19		72				<0.2		1.0	
					Middle	4.2	0.2	57	22.0	22.0	8.1	8.1	32.0	32.0	94.2	94.2	6.8		20.2		19		73				<0.2		0.9	
						4.2	0.2	57	22.0		8.1		32.0		94.2		6.8		20.2		21		73				<0.2		1.0	
					Bottom	7.4	0.2	35	22.0	22.0	8.1	8.1	32.3	32.3	94.5	94.5	6.9	6.9	23.3		25		75				<0.2		1.0	
						7.4	0.2	38	22.0		8.1		32.3		94.5		6.9		23.3		25		75				<0.2		0.8	
IM8	Cloudy	Moderate	06:17	8.0	Surface	1.0	0.2	310	22.4	22.4	7.9	7.9	31.0	31.0	94.0	94.0	6.8	6.9	12.8	13.2	12	11	73	74	821701	807821	<0.2	<0.2	0.8	0.9
						1.0	0.3	336	22.4		7.9		31.0		94.0		6.8		12.8		12		73				<0.2		1.0	
					Middle	4.0	0.3	315	22.4	22.4	7.9	7.9	31.0	31.0	94.5	94.5	6.9		13.8		10		74				<0.2		0.9	
						4.0	0.3	324	22.4		7.9		31.0		94.5		6.9		13.8		10		73				<0.2		1.0	
					Bottom	7.0	0.3	326	22.4	22.4	7.9	7.9	31.1	31.1	95.6	95.6	6.9	6.9	13.0		10		75				<0.2		0.9	
						7.0	0.3	341	22.4		7.9		31.1		95.6		6.9		13.0		10		76				<0.2		0.8	

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 02 December 17 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	06:10	7.0	Surface	1.0	0.5	314	22.3	22.3	7.9	7.9	31.0	31.0	94.5	94.5	6.9	6.9	12.8	13.4	17	20	73	74	822095	808816	<0.2	<0.2	1.2	1.2
						1.0	0.5	324	22.3		7.9		31.0		94.5		6.9		12.8		18		73				<0.2		1.1	
					Middle	3.5	0.5	315	22.3	22.3	7.9	7.9	31.0	31.0	95.0	95.0	6.9		13.8		17		74				<0.2		1.2	
						3.5	0.5	334	22.3		7.9		31.0		95.0		6.9		13.8		18		75				<0.2		1.5	
					Bottom	6.0	0.4	317	22.3	22.3	7.9	7.9	31.1	31.1	95.9	95.9	7.0	7.0	13.5		24		76				<0.2		1.0	
						6.0	0.4	320	22.3		7.9		31.1		95.9		7.0		13.5		24		75				<0.2		1.2	
IM10	Cloudy	Moderate	06:03	6.7	Surface	1.0	0.4	294	22.2	22.2	8.0	8.0	30.9	30.9	96.3	96.3	7.0	7.0	21.1	22.0	16	19	73	74	822268	809844	<0.2	<0.2	0.9	1.0
						1.0	0.4	299	22.2		8.0		30.9		96.3		7.0		21.1		16		73				<0.2		1.0	
					Middle	3.4	0.4	285	22.2	22.2	8.0	8.0	31.0	31.0	96.1	96.1	7.0		21.9		15		74				<0.2		1.1	
						3.4	0.4	299	22.2		8.0		31.0		96.1		7.0		21.9		15		74				<0.2		1.1	
					Bottom	5.7	0.4	287	22.2	22.2	8.0	8.0	31.0	31.0	96.5	96.5	7.0	7.0	22.9		25		75				<0.2		1.0	
						5.7	0.4	304	22.2		8.0		31.0		96.5		7.0		22.9		24		76				<0.2		1.1	
IM11	Cloudy	Moderate	05:50	7.7	Surface	1.0	0.4	286	22.2	22.2	8.0	8.0	30.9	30.9	97.4	97.4	7.1	7.2	18.5	20.2	13	19	73	74	821513	810520	<0.2	<0.2	0.9	0.8
						1.0	0.4	288	22.2		8.0		30.9		97.4		7.1		18.5		13		73				<0.2		0.7	
					Middle	3.9	0.5	287	22.2	22.2	8.0	8.0	31.0	31.0	98.7	98.7	7.2		21.6		17		74				<0.2		0.9	
						3.9	0.5	309	22.2		8.0		31.0		98.7		7.2		21.6		15		73				<0.2		0.8	
					Bottom	6.7	0.4	292	22.2	22.2	8.0	8.0	31.1	31.1	100.5	100.5	7.3	7.3	20.6		28		75				<0.2		0.8	
						6.7	0.4	292	22.2		8.0		31.1		100.5		7.3		20.6		30		75				<0.2		0.7	
IM12	Cloudy	Moderate	05:43	8.1	Surface	1.0	0.6	284	22.3	22.3	8.0	8.0	30.7	30.7	94.6	94.6	6.9	6.9	18.7	21.4	16	16	73	75	821153	811509	<0.2	<0.2	0.7	0.8
						1.0	0.7	298	22.3		8.0		30.7		94.6		6.9		18.7		16		73				<0.2		0.9	
					Middle	4.1	0.5	284	22.3	22.3	8.0	8.0	30.8	30.8	94.7	94.7	6.9		21.9		15		75				<0.2		0.8	
						4.1	0.6	304	22.3		8.0		30.8		94.7		6.9		21.9		16		75				<0.2		0.8	
					Bottom	7.1	0.4	283	22.3	22.3	8.0	8.0	30.9	30.9	94.8	94.8	6.9	6.9	23.5		16		76				<0.2		0.6	
						7.1	0.4	285	22.3		8.0		30.9		94.8		6.9		23.5		18		75				<0.2		0.7	
SR2	Cloudy	Moderate	05:16	4.2	Surface	1.0	0.3	129	22.2	22.2	7.9	7.9	30.6	30.6	95.0	95.0	6.9	6.9	14.0	14.0	13	14	74	74	821471	814173	<0.2	<0.2	0.7	0.7
						1.0	0.4	139	22.2		7.9		30.6		95.0		6.9		14.0		14		73				<0.2		0.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.2	117	22.2	22.2	7.9	7.9	31.1	31.1	94.8	94.8	6.9	6.9	13.9		14		75				<0.2		0.8	
						3.2	0.2	126	22.2		7.9		31.1		94.8		6.9		13.9		15		75				<0.2		0.7	
SR3	Cloudy	Moderate	06:24	8.8	Surface	1.0	0.2	351	22.3	22.3	7.9	7.9	30.7	30.7	97.3	97.3	7.1	7.2	7.4	7.7	8	9	-	-	822175	807563	-	-	-	-
						1.0	0.2	323	22.3		7.9		30.7		97.3		7.1		7.4		8		-				-		-	
					Middle	4.4	0.3	-	22.3	22.3	7.9	7.9	30.7	30.7	98.9	98.9	7.2		7.9		10		-				-		-	
						4.4	0.3	-	22.3		7.9		30.7		98.9		7.2		7.9		8		-				-		-	
					Bottom	7.8	0.2	348	22.3	22.3	7.9	7.9	30.8	30.8	101.4	101.4	7.4	7.4	7.9		8		-				-		-	
						7.8	0.2	320	22.3		7.9		30.8		101.4		7.4		7.9		9		-				-		-	
SR4A	Fine	Calm	05:38	8.8	Surface	1.0	0.2	246	22.2	22.2	8.0	8.0	32.2	32.2	93.8	93.8	6.8	6.8	14.8	16.6	10	15	-	-	817197	807824	-	-	-	-
						1.0	0.2	256	22.2		8.0		32.2		93.8		6.8		14.8		9		-				-		-	
					Middle	4.4	0.2	245	22.2	22.2	8.0	8.0	32.2	32.2	93.8	93.8	6.8		17.4		16		-				-		-	
						4.4	0.2	248	22.2		8.0		32.2		93.8		6.8		17.4		15		-				-		-	
					Bottom	7.8	0.2	260	22.2	22.2	8.0	8.0	32.2	32.2	94.0	94.0	6.8	6.8	17.6		18		-				-		-	
						7.8	0.2	281	22.2		8.0		32.2		94.0		6.8		17.6		20		-				-		-	
SR5A	Fine	Calm	05:23	3.8	Surface	1.0	0.3	292	22.3	22.3	8.0	8.0	32.1	32.1	98.2	98.2	7.1	7.1	11.6	13.3	10	11	-	-	816592	810688	-	-	-	-
						1.0	0.3	301	22.3		8.0		32.1		98.2		7.1		11.6		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	0.3	288	22.3	22.3	8.0	8.0	32.1	32.1	102.2	102.2	7.4	7.4	15.0		12		-				-		-	
						2.8	0.3	304	22.3		8.0		32.1		102.2		7.4		15.0		12		-				-		-	
SR6	Fine	Calm	05:00	3.6	Surface	1.0	0.2	258	21.9	21.9	7.9	7.9	30.7	30.7	94.5	94.5	6.9	6.9	6.6	7.0	10	11	-	-	817873	814684	-	-	-	-
						1.0	0.2	272	21.9		7.9		30.7		94.5		6.9		6.6		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.6	0.2	256	21.9	21.9	7.9	7.9	29.6	29.6	97.4	97.4	7.2	7.2	7.3		12		-				-		-	
						2.6	0.2	263	21.9		7.9		29.6		97.4		7.2		7.3		12		-				-		-	
SR7	Cloudy	Moderate	04:20	18.8	Surface	1.0	0.3	77	22.4	22.4	7.8	7.8	30.9	30.9	87.2	87.2	6.3	6.3	5.6	7.3	6	7	-	-	823614	823750	-	-	-	-
						1.0	0.3	82	22.4		7.8		30.9		87.2		6.3		5.6		7		-				-		-	
					Middle	9.4	0.3	51	22.4	22.4	7.8	7.8	31.1	31.1	87.5	87.5	6.3		7.7		6		-				-		-	
						9.4	0.3	54	22.4		7.8		31.1		87.5		6.3		7.7		5		-				-		-	
					Bottom	17.8	0.3	44	22.4	22.4	7.8	7.8	31.4	31.4	88.6	88.6	6.4	6.4	8.6		8		-				-		-	
						17.8	0.3	47	22.4		7.8		31.4		88.6		6.4		8.6		9		-				-		-	
SR8	Cloudy	Moderate	05:33	4.7	Surface	1.0	-	-	22.3	22.3	8.0	8.0	30.4	30.4	95.1	95.1	6.9	6.9	8.2	8.1	8	9	-	-	820246	811418	-	-	-	-
						1.0	-	-	22.3		8.0		30.4		95.1		6.9		8.2		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	-	-	22.2	22.2	8.0	8.0	30.7	30.7	94.3	94.3	6.9	6.9	7.9		10		-				-		-	
						3.7	-	-	22.2		8.0		30.7		94.3		6.9		7.9		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 05 December 17 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	13:52	8.9	Surface	1.0	0.1	131	21.7	21.7	8.1	8.1	32.7	32.7	95.6	95.6	6.9	6.9	16.5	19.0	20	22	73	75	815626	804272	<0.2	<0.2	0.7	0.6
						1.0	0.2	139	21.7		8.1		32.7		95.5		6.9		16.8		20		74				<0.2		0.6	
					Middle	4.5	0.0	114	21.7	21.7	8.1	8.1	32.7	32.7	95.3	95.4	6.9		18.8		21		75				<0.2		0.9	
						4.5	0.0	120	21.7		8.1		32.7		95.4		6.9		18.8		19		75				<0.2		0.6	
					Bottom	7.9	0.0	351	21.7	21.7	8.1	8.1	32.7	32.7	96.1	96.2	7.0	7.0	21.4		25		77				<0.2		0.4	
						7.9	0.0	323	21.7		8.1		32.7		96.3		7.0		21.6		26		77				<0.2		0.4	
C2	Cloudy	Moderate	12:39	11.8	Surface	1.0	0.3	36	21.9	21.9	7.9	7.9	29.4	29.4	93.8	93.8	6.9	6.9	19.8	22.2	19	19	72	73	825699	806943	<0.2	<0.2	0.7	0.7
						1.0	0.3	38	21.9		7.9		29.4		93.8		6.9		19.8		18		72				<0.2		0.8	
					Middle	5.9	0.2	35	21.9	21.9	7.9	7.9	29.6	29.6	93.9	93.9	6.9		22.2		21		73				<0.2		0.6	
						5.9	0.2	35	21.9		7.9		29.6		93.9		6.9		22.2		19		73				<0.2		0.7	
					Bottom	10.8	0.2	16	21.9	21.9	8.0	8.0	30.1	30.1	94.5	94.5	7.0	7.0	24.5		19		74				<0.2		0.8	
						10.8	0.2	16	21.9		8.0		30.1		94.5		7.0		24.5		20		74				<0.2		0.8	
C3	Cloudy	Moderate	14:19	11.7	Surface	1.0	0.5	106	22.2	22.2	7.9	7.9	30.5	30.5	90.4	90.4	6.6	6.6	10.4	15.3	7	10	73	75	822098	817811	<0.2	<0.2	0.4	0.4
						1.0	0.5	110	22.2		7.9		30.5		90.4		6.6		10.4		8		73				<0.2		0.4	
					Middle	5.9	0.4	90	22.2	22.2	7.9	7.9	30.5	30.5	91.0	91.0	6.6		14.4		11		75				<0.2		0.3	
						5.9	0.4	91	22.2		7.9		30.5		91.0		6.6		14.4		9		75				<0.2		0.3	
					Bottom	10.7	0.3	82	22.2	22.2	7.9	7.9	30.4	30.4	93.7	93.7	6.8	6.8	21.1		13		77				<0.2		0.6	
						10.7	0.4	84	22.2		7.9		30.4		93.7		6.8		21.1		11		76				<0.2		0.5	
IM1	Cloudy	Calm	13:34	7.6	Surface	1.0	0.1	218	21.5	21.5	8.1	8.1	32.0	32.0	94.5	94.6	6.9	6.9	19.5	21.4	19	23	74	75	818338	806455	<0.2	<0.2	0.4	0.5
						1.0	0.1	225	21.5		8.1		32.0		94.6		6.9		19.8		20		74				<0.2		0.4	
					Middle	3.8	0.1	84	21.6	21.6	8.1	8.1	32.4	32.4	94.9	94.9	6.9		20.1		21		75				<0.2		0.6	
						3.8	0.1	89	21.6		8.1		32.4		94.9		6.9		20.3		23		75				<0.2		0.6	
					Bottom	6.6	0.1	108	21.6	21.6	8.1	8.1	32.6	32.6	95.9	96.1	7.0	7.0	24.3		26		77				<0.2		0.4	
						6.6	0.1	113	21.6		8.1		32.6		96.3		7.0		24.3		26		77				<0.2		0.6	
IM2	Cloudy	Moderate	13:26	8.6	Surface	1.0	0.1	71	21.6	21.6	8.1	8.1	32.6	32.6	94.6	94.6	6.9	6.9	20.1	21.6	21	22	73	75	818878	806175	<0.2	<0.2	1.3	1.5
						1.0	0.1	71	21.6		8.1		32.6		94.6		6.9		20.4		20		74				<0.2		1.5	
					Middle	4.3	0.1	80	21.6	21.6	8.1	8.1	32.6	32.6	94.6	94.6	6.9		21.7		20		75				<0.2		1.4	
						4.3	0.1	86	21.6		8.1		32.6		94.6		6.9		21.8		20		75				<0.2		1.3	
					Bottom	7.6	0.1	97	21.6	21.6	8.1	8.1	32.6	32.6	95.0	95.1	6.9	6.9	22.7		25		76				<0.2		1.4	
						7.6	0.1	105	21.6		8.1		32.6		95.2		6.9		22.7		25		76				<0.2		1.9	
IM3	Cloudy	Moderate	13:16	8.8	Surface	1.0	0.2	121	21.6	21.6	8.1	8.1	32.6	32.6	94.6	94.6	6.9	6.9	21.6	21.0	20	21	73	75	819401	805996	<0.2	<0.2	0.5	0.8
						1.0	0.2	127	21.6		8.1		32.6		94.6		6.9		21.4		19		73				<0.2		0.5	
					Middle	4.4	0.3	77	21.6	21.6	8.1	8.1	32.6	32.6	94.8	94.9	6.9		20.1		22		75				<0.2		0.6	
						4.4	0.3	82	21.6		8.1		32.6		94.9		6.9		20.1		21		75				<0.2		0.7	
					Bottom	7.8	0.2	76	21.6	21.6	8.1	8.1	32.6	32.6	95.7	96.0	7.0	7.0	21.1		23		76				<0.2		1.4	
						7.8	0.2	82	21.6		8.1		32.6		96.2		7.0		21.5		23		77				<0.2		1.1	
IM4	Cloudy	Moderate	13:09	8.1	Surface	1.0	0.2	144	21.5	21.5	8.0	8.0	31.9	31.9	93.7	93.7	6.9	6.9	19.1	20.2	20	21	73	75	819540	805047	<0.2	<0.2	0.4	0.6
						1.0	0.2	152	21.5		8.0		31.9		93.7		6.9		19.1		20		73				<0.2		0.4	
					Middle	4.1	0.2	82	21.6	21.6	8.1	8.1	32.3	32.3	93.6	93.7	6.8		20.2		21		75				<0.2		0.5	
						4.1	0.2	87	21.6		8.1		32.3		93.7		6.9		20.2		19		75				<0.2		0.5	
					Bottom	7.1	0.1	71	21.6	21.6	8.1	8.1	32.5	32.5	94.1	94.2	6.9	6.9	21.2		22		76				<0.2		0.8	
						7.1	0.1	73	21.6		8.1		32.5		94.2		6.9		21.1		21		76				<0.2		0.9	
IM5	Cloudy	Moderate	13:00	7.1	Surface	1.0	0.2	70	21.4	21.4	8.0	8.0	32.0	32.0	94.1	94.1	6.9	6.9	20.8	23.0	15	17	72	74	820573	804907	<0.2	<0.2	1.2	1.1
						1.0	0.2	71	21.4		8.0		31.9		94.1		6.9		20.8		15		72				<0.2		1.3	
					Middle	3.6	0.2	41	21.5	21.5	8.1	8.1	32.3	32.3	94.2	94.2	6.9		22.3		14		73				<0.2		1.2	
						3.6	0.2	42	21.5		8.1		32.3		94.2		6.9		22.3		16		73				<0.2		1.3	
					Bottom	6.1	0.1	97	21.6	21.6	8.1	8.1	32.4	32.4	94.7	94.9	6.9	7.0	25.7		20		76				<0.2		0.8	
						6.1	0.1	97	21.6		8.1		32.4		95.1		7.0		25.8		22		76				<0.2		0.8	
IM6	Cloudy	Moderate	12:51	7.5	Surface	1.0	0.0	351	21.4	21.4	8.1	8.1	31.8	31.8	93.7	93.7	6.9	6.9	21.3	21.7	16	17	72	73	821083	805810	<0.2	<0.2	1.0	0.9
						1.0	0.0	323	21.4		8.1		31.9		93.7		6.9		21.3		16		72				<0.2		1.0	
					Middle	3.8	0.2	19	21.4	21.4	8.1	8.1	31.9	31.9	93.8	93.9	6.9		20.1		16		73				<0.2		0.8	
						3.8	0.2	20	21.4		8.1		31.9		93.9		6.9		20.6		18		73				<0.2		0.7	
					Bottom	6.5	0.3	51	21.5	21.5	8.1	8.1	32.3	32.3	94.8	95.0	6.9	7.0	23.5		18		75				<0.2		0.8	
						6.5	0.3	53	21.5		8.1		32.3		95.1		7.0		23.4		18		75				<0.2		0.8	
IM7	Cloudy	Rough	12:42	8.9	Surface	1.0	0.1	67	21.4	21.4	8.1	8.1	31.9	31.9	94.0	94.0	6.9	6.9	17.1	20.1	18	18	71	73	821365	806806	<0.2	<0.2	0.2	0.6
						1.0	0.2	70	21.4		8.1		31.9		94.0		6.9		17.6		17		72				<0.2		0.2	
					Middle	4.5	0.1	53	21.4	21.4	8.1	8.1	31.9	31.9	93.8	93.9	6.9		18.8		16		73				<0.2		0.6	
						4.5	0.1	53	21.4		8.1		31.9		93.9		6.9		18.9		18		73				<0.2		0.5	
					Bottom	7.9	0.1	81	21.4	21.4	8.1	8.1	31.9	31.9	94.6	94.7	7.0	7.0	24.3		18		75				<0.2		0.8	
						7.9	0.1	82	21.4		8.1		31.9		94.7		7.0		24.1		18		75				<0.2		1.0	
IM8	Cloudy	Moderate	13:04	8.3	Surface	1.0	0.3	88	21.7	21.7	7.9	7.9	30.7	30.7	95.2	95.2	7.0	7.0	18.7	23.3	11	14	73	74	821700	807854	<0.2	<0.2	0.6	0.6
						1.0	0.3	92	21.7		7.9		30.7		95.2		7.0		18.7		10		73				<0.2		0.6	
					Middle	4.2	0.3	86	21.7	21.7	7.9	7.9	30.7	30.7	95.6	95.6	7.0		22.4		10		73				<0.2		0.7	
						4.2	0.3	94	21.7		7.9		30.7		95.6		7.0		22.4		11		74				<0.2		0.6	
					Bottom	7.3	0.3	91	21.7	21.7	7.9	7.9	30.7	30.7	96.9	96.9	7.1	7.1	28.7		20		75				<0.2		0.6	
						7.3	0.3	94	21.7		7.9		30.7		96.9		7.1		28.7		21		75				<0.2		0.7	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 05 December 17 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	13:11	7.4	Surface	1.0	0.4	79	21.7	21.7	7.9	7.9	30.7	30.7	95.2	95.2	7.0	7.0	19.3	21.9	12	14	73	74	822095	808817	<0.2	<0.2	0.6	0.6
						1.0	0.4	85	21.7		7.9		30.7		95.2		7.0		19.3		11		72				<0.2		0.6	
					Middle	3.7	0.4	80	21.8	21.8	7.9	7.9	30.8	30.8	95.9	95.9	7.0		22.1		11		74				<0.2		0.7	
						3.7	0.4	85	21.8		7.9		30.8		95.9		7.0		22.1		10		73				<0.2		0.6	
					Bottom	6.4	0.3	84	21.8	21.8	7.9	7.9	30.9	30.9	97.6	97.6	7.2	7.2	24.3		19		74				<0.2		0.6	
						6.4	0.3	87	21.8		7.9		30.9		97.6		7.2		24.3		18		75				<0.2		0.7	
IM10	Cloudy	Moderate	13:18	7.4	Surface	1.0	0.4	102	22.0	22.0	8.0	8.0	30.8	30.8	94.7	94.7	6.9	7.0	11.2	15.4	9	10	73	74	822213	809859	<0.2	<0.2	0.8	0.7
						1.0	0.4	104	22.0		8.0		30.8		94.7		6.9		11.2		10		72				<0.2		0.9	
					Middle	3.7	0.4	99	21.9	21.9	8.0	8.0	30.9	30.9	95.3	95.3	7.0		14.2		10		74				<0.2		0.8	
						3.7	0.4	102	21.9		8.0		30.9		95.3		7.0		14.2		9		74				<0.2		0.6	
					Bottom	6.4	0.3	104	21.9	21.9	8.0	8.0	30.9	30.9	96.5	96.5	7.1	7.1	20.7		12		75				<0.2		0.6	
						6.4	0.3	104	21.9		8.0		30.9		96.5		7.1		20.7		10		75				<0.2		0.6	
IM11	Cloudy	Moderate	13:29	7.1	Surface	1.0	0.5	109	21.9	21.9	8.0	8.0	30.9	30.9	94.7	94.7	6.9	7.0	16.1	17.9	14	14	73	74	821505	810536	<0.2	<0.2	0.4	0.5
						1.0	0.5	113	21.9		8.0		30.9		94.7		6.9		16.1		14		73				<0.2		0.5	
					Middle	3.6	0.4	108	21.9	21.9	8.0	8.0	30.9	30.9	95.0	95.0	7.0		17.7		14		74				<0.2		0.5	
						3.6	0.4	109	21.9		8.0		30.9		95.0		7.0		17.7		12		73				<0.2		0.4	
					Bottom	6.1	0.4	107	21.9	21.9	8.0	8.0	31.0	31.0	95.9	95.9	7.0	7.0	20.0		15		75				<0.2		0.5	
						6.1	0.5	116	21.9		8.0		31.0		95.9		7.0		20.0		17		75				<0.2		0.7	
IM12	Cloudy	Moderate	13:36	9.3	Surface	1.0	0.5	113	22.0	22.0	8.0	8.0	31.0	31.0	95.1	95.1	7.0	7.0	12.6	14.6	11	14	73	74	821166	811522	<0.2	<0.2	0.6	0.6
						1.0	0.6	117	22.0		8.0		31.0		95.1		7.0		12.6		12		73				<0.2		0.5	
					Middle	4.7	0.4	116	22.0	22.0	8.0	8.0	31.1	31.1	95.6	95.6	7.0		15.3		15		74				<0.2		0.7	
						4.7	0.5	127	22.0		8.0		31.1		95.6		7.0		15.3		14		74				<0.2		0.6	
					Bottom	8.3	0.4	111	22.0	22.0	8.0	8.0	31.1	31.1	97.0	97.0	7.1	7.1	15.9		15		75				<0.2		0.5	
						8.3	0.4	112	22.0		8.0		31.1		97.0		7.1		15.9		14		75				<0.2		0.6	
SR2	Cloudy	Moderate	13:59	3.6	Surface	1.0	0.3	98	22.1	22.1	7.9	7.9	30.6	30.6	95.4	95.4	7.0	7.0	15.4	13.9	12	16	73	74	821482	814159	<0.2	<0.2	0.5	0.5
						1.0	0.4	99	22.1		7.9		30.6		95.4		7.0		15.4		14		73				<0.2		0.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.6	0.2	97	22.1	22.1	7.9	7.9	30.6	30.6	96.9	96.9	7.1	7.1	12.4		18		75				<0.2		0.5	
						2.6	0.2	102	22.1		7.9		30.6		96.9		7.1		12.4		19		75				<0.2		0.4	
SR3	Cloudy	Moderate	13:00	9.1	Surface	1.0	0.4	79	21.7	21.7	7.9	7.9	30.5	30.5	94.6	94.6	7.0	7.0	18.9	22.0	12	17	-	-	822117	807584	-	-	-	-
						1.0	0.4	83	21.7		7.9		30.5		94.6		7.0		18.9		12		-				-		-	
					Middle	4.6	0.5	73	21.7	21.7	7.9	7.9	30.6	30.6	94.7	94.7	7.0		21.4		13		-				-		-	
						4.6	0.5	79	21.7		7.9		30.6		94.7		7.0		21.4		12		-				-		-	
					Bottom	8.1	0.3	69	21.7	21.7	7.9	7.9	30.7	30.7	95.2	95.2	7.0	7.0	25.6		26		-				-		-	
						8.1	0.3	72	21.7		7.9		30.7		95.2		7.0		25.6		24		-				-		-	
SR4A	Cloudy	Moderate	14:19	9.3	Surface	1.0	0.4	77	21.5	21.5	8.1	8.1	31.8	31.8	94.9	94.9	7.0	7.0	14.3	18.7	14	17	-	-	817209	807802	-	-	-	-
						1.0	0.4	82	21.5		8.1		31.9		94.9		7.0		14.7		14		-				-		-	
					Middle	4.7	0.3	80	21.5	21.5	8.1	8.1	31.9	31.9	94.6	94.6	6.9		20.2		17		-				-		-	
						4.7	0.3	81	21.5		8.1		31.9		94.6		6.9		20.1		19		-				-		-	
					Bottom	8.3	0.3	90	21.5	21.5	8.1	8.1	32.0	32.0	96.1	96.3	7.0	7.1	21.4		19		-				-		-	
						8.3	0.3	90	21.5		8.1		32.0		96.4		7.1		21.4		20		-				-		-	
SR5A	Cloudy	Calm	14:34	3.1	Surface	1.0	0.1	330	21.8	21.8	8.1	8.1	32.2	32.2	97.6	97.7	7.1	7.1	10.1	9.9	9	12	-	-	816569	810717	-	-	-	-
						1.0	0.1	304	21.8		8.1		32.2		97.8		7.1		10.2		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.1	0.1	319	21.8	21.8	8.1	8.1	32.2	32.2	98.4	98.5	7.2	7.2	9.7		14		-				-		-	
						2.1	0.1	335	21.8		8.1		32.2		98.5		7.2		9.7		13		-				-		-	
SR6	Cloudy	Calm	14:57	4.2	Surface	1.0	0.1	54	21.9	21.9	8.1	8.1	32.2	32.2	94.5	94.5	6.9	6.9	8.2	9.8	8	8	-	-	817913	814645	-	-	-	-
						1.0	0.1	54	21.9		8.1		32.2		94.4		6.9		8.0		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.1	43	21.8	21.8	8.1	8.1	32.2	32.2	94.0	94.1	6.8	6.8	11.1		8		-				-		-	
						3.2	0.1	46	21.8		8.1		32.2		94.1		6.8		12.0		8		-				-		-	
SR7	Cloudy	Moderate	14:45	16.4	Surface	1.0	0.4	94	22.3	22.3	7.9	7.9	30.4	30.4	88.5	88.5	6.5	6.5	12.5	14.2	5	7	-	-	823661	823718	-	-	-	-
						1.0	0.4	100	22.3		7.9		30.4		88.5		6.5		12.5		6		-				-		-	
					Middle	8.2	0.3	92	22.2	22.2	7.9	7.9	30.3	30.3	89.2	89.2	6.5		15.9		5		-				-		-	
						8.2	0.4	92	22.2		7.9		30.3		89.2		6.5		15.9		6		-				-		-	
					Bottom	15.4	0.2	87	22.2	22.2	7.9	7.9	30.2	30.2	90.4	90.4	6.6	6.6	14.3		9		-				-		-	
						15.4	0.2	90	22.2		7.9		30.2		90.4		6.6		14.3		11		-				-		-	
SR8	Cloudy	Moderate	13:44	4.0	Surface	1.0	-	-	22.3	22.3	8.0	8.0	31.1	31.1	98.4	98.4	7.2	7.2	16.3	16.4	11	12	-	-	820246	811418	-	-	-	-
						1.0	-	-	22.3		8.0		31.1		98.4		7.2		16.3		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	-	-	22.0	22.0	8.0	8.0	31.1	31.1	98.7	98.7	7.2	7.2	16.5		13		-				-		-	
						3.0	-	-	22.0		8.0		31.1		98.7		7.2		16.5		15		-				-		-	

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 05 December 17 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	08:49	8.1	Surface	1.0	0.6	41	21.5	21.5	8.1	8.1	32.0	32.0	93.9	93.9	6.9	6.9	21.7	25.0	29	30	73	74	815603	804248	<0.2	<0.2	0.6	0.6
						1.0	0.6	43	21.5		8.1		32.0		93.9		6.9		21.8		29		73				<0.2		0.7	
					Middle	4.1	0.5	41	21.5	21.5	8.1	8.1	32.0	32.0	93.8	93.8	6.9		24.8		28		74				<0.2		0.5	
						4.1	0.5	44	21.5		8.1		32.0		93.8		6.9		24.8		28		74				<0.2		0.8	
					Bottom	7.1	0.6	42	21.5	21.5	8.1	8.1	32.0	32.0	94.1	94.2	6.9	6.9	28.6		32		76				<0.2		0.5	
						7.1	0.6	44	21.5		8.1		32.0		94.2		6.9		28.2		34		76				<0.2		0.6	
C2	Cloudy	Moderate	09:25	11.7	Surface	1.0	0.4	340	22.0	22.0	7.9	7.9	30.1	30.1	92.1	92.1	6.8	6.8	18.9	21.4	17	20	72	74	825667	806943	<0.2	<0.2	1.0	1.2
						1.0	0.5	354	22.0		7.9		30.1		92.1		6.8		18.9		16		73				<0.2		1.0	
					Middle	5.9	0.5	352	22.1	22.1	7.9	7.9	30.1	30.1	92.8	92.8	6.8		17.6		17		74				<0.2		1.0	
						5.9	0.5	353	22.1		7.9		30.1		92.8		6.8		17.6		18		73				<0.2		1.3	
					Bottom	10.7	0.4	2	22.1	22.1	7.9	7.9	30.2	30.2	94.0	94.0	6.9	6.9	27.8		26		74				<0.2		1.2	
						10.7	0.5	2	22.1		7.9		30.2		94.0		6.9		27.8		24		75				<0.2		1.4	
C3	Cloudy	Moderate	07:44	11.1	Surface	1.0	0.5	237	22.1	22.1	7.9	7.9	30.3	30.3	95.2	95.2	7.0	7.0	17.2	19.9	15	15	74	75	822131	817807	<0.2	<0.2	0.5	0.5
						1.0	0.5	254	22.1		7.9		30.3		95.2		7.0		17.2		14		73				<0.2		0.4	
					Middle	5.6	0.4	238	22.1	22.1	7.9	7.9	30.5	30.5	95.9	95.9	7.0		19.8		14		75				<0.2		0.6	
						5.6	0.4	248	22.1		7.9		30.5		95.9		7.0		19.8		15		75				<0.2		0.5	
					Bottom	10.1	0.4	242	22.0	22.0	7.9	7.9	30.7	30.7	98.3	98.3	7.2	7.2	22.8		16		77				<0.2		0.5	
						10.1	0.4	260	22.0		7.9		30.7		98.3		7.2		22.8		15		78				<0.2		0.5	
IM1	Cloudy	Moderate	09:06	7.1	Surface	1.0	0.5	9	21.4	21.4	8.1	8.1	31.9	31.9	94.1	94.1	6.9	6.9	19.5	22.0	19	22	72	73	818357	806473	<0.2	<0.2	0.6	0.7
						1.0	0.6	9	21.4		8.1		31.9		94.0		6.9		19.6		17		72				<0.2		0.7	
					Middle	3.6	0.6	12	21.5	21.5	8.1	8.1	31.9	31.9	93.7	93.7	6.9		21.9		21		73				<0.2		0.8	
						3.6	0.6	13	21.5		8.1		31.9		93.7		6.9		21.8		22		73				<0.2		0.7	
					Bottom	6.1	0.4	11	21.5	21.5	8.1	8.1	31.9	31.9	93.8	93.9	6.9	6.9	24.5		26		75				<0.2		0.7	
						6.1	0.5	12	21.5		8.1		31.9		94.0		6.9		24.5		24		75				<0.2		0.6	
IM2	Cloudy	Moderate	09:16	8.1	Surface	1.0	0.6	26	21.6	21.6	8.1	8.1	32.0	32.0	93.1	93.2	6.8	6.8	22.8	24.1	19	24	72	73	818868	806209	<0.2	<0.2	0.9	0.9
						1.0	0.6	26	21.6		8.1		32.0		93.2		6.8		22.6		20		72				<0.2		1.1	
					Middle	4.1	0.5	21	21.6	21.6	8.1	8.1	32.0	32.0	93.0	93.1	6.8		23.8		24		73				<0.2		0.9	
						4.1	0.6	22	21.6		8.1		32.0		93.1		6.8		23.9		23		73				<0.2		1.0	
					Bottom	7.1	0.4	20	21.6	21.6	8.1	8.1	32.0	32.0	93.3	93.4	6.8	6.8	25.6		30		75				<0.2		0.7	
						7.1	0.5	21	21.6		8.1		32.0		93.4		6.8		25.8		29		75				<0.2		0.6	
IM3	Cloudy	Moderate	09:23	8.0	Surface	1.0	0.5	16	21.6	21.6	8.1	8.1	32.0	32.0	92.7	92.7	6.8	6.8	19.3	20.7	22	28	71	73	819424	805993	<0.2	<0.2	0.9	0.8
						1.0	0.5	17	21.6		8.1		32.0		92.7		6.8		19.8		22		71				<0.2		1.1	
					Middle	4.0	0.6	27	21.7	21.7	8.1	8.1	32.0	32.0	92.6	92.6	6.8		20.4		24		73				<0.2		0.9	
						4.0	0.6	28	21.7		8.1		32.0		92.6		6.8		20.1		23		73				<0.2		0.9	
					Bottom	7.0	0.5	37	21.7	21.7	8.1	8.1	32.0	32.0	93.1	93.2	6.8	6.8	22.4		36		75				<0.2		0.4	
						7.0	0.5	38	21.7		8.1		32.0		93.3		6.8		22.2		38		75				<0.2		0.6	
IM4	Cloudy	Moderate	09:31	7.4	Surface	1.0	0.6	1	21.4	21.4	8.0	8.0	31.7	31.7	93.5	93.5	6.9	6.9	20.7	22.8	19	22	72	74	819584	805038	<0.2	<0.2	1.1	0.9
						1.0	0.6	1	21.4		8.0		31.7		93.5		6.9		20.8		18		72				<0.2		0.9	
					Middle	3.7	0.6	11	21.4	21.4	8.0	8.0	31.8	31.8	93.3	93.3	6.9		22.1		20		73				<0.2		0.9	
						3.7	0.6	11	21.4		8.0		31.8		93.3		6.9		22.1		19		73				<0.2		0.8	
					Bottom	6.4	0.5	10	21.6	21.6	8.1	8.1	32.0	32.0	92.9	93.0	6.8	6.8	25.5		27		77				<0.2		0.8	
						6.4	0.5	10	21.6		8.1		32.0		93.1		6.8		25.8		28		77				<0.2		0.8	
IM5	Cloudy	Moderate	09:41	6.7	Surface	1.0	0.6	35	21.6	21.6	8.1	8.1	32.0	32.0	93.0	93.0	6.8	6.8	18.6	22.0	18	22	72	75	820552	804911	<0.2	<0.2	1.0	1.0
						1.0	0.6	37	21.6		8.1		32.0		93.0		6.8		18.7		18		72				<0.2		0.9	
					Middle	3.4	0.6	37	21.6	21.6	8.1	8.1	32.0	32.0	92.9	92.9	6.8		22.9		17		75				<0.2		0.9	
						3.4	0.6	38	21.6		8.1		32.0		92.9		6.8		22.9		19		75				<0.2		0.9	
					Bottom	5.7	0.6	24	21.6	21.6	8.1	8.1	32.0	32.0	93.0	93.0	6.8	6.8	24.4		29		77				<0.2		1.1	
						5.7	0.6	26	21.6		8.1		32.0		93.0		6.8		24.4		28		77				<0.2		1.0	
IM6	Cloudy	Moderate	09:48	6.8	Surface	1.0	0.4	4	21.7	21.7	8.1	8.1	31.9	31.9	92.7	92.7	6.8	6.8	20.1	21.5	19	22	72	74	821041	805819	<0.2	<0.2	0.7	0.8
						1.0	0.5	4	21.7		8.1		31.9		92.7		6.8		20.9		20		72				<0.2		0.9	
					Middle	3.4	0.4	12	21.7	21.7	8.1	8.1	31.9	31.9	92.8	92.9	6.8		21.2		20		74				<0.2		0.9	
						3.4	0.4	12	21.7		8.1		31.9		92.9		6.8		21.3		18		74				<0.2		0.9	
					Bottom	5.8	0.3	22	21.7	21.7	8.1	8.1	31.9	31.9	93.7	93.9	6.9	6.9	22.4		27		76				<0.2		0.8	
						5.8	0.4	23	21.7		8.1		31.9		94.1		6.9		22.8		25		76				<0.2		0.6	
IM7	Cloudy	Moderate	09:55	8.4	Surface	1.0	0.4	13	21.6	21.6	8.1	8.1	32.0	32.0	93.1	93.1	6.8	6.8	18.4	20.6	22	23	71	73	821371	806811	<0.2	<0.2	1.0	0.8
						1.0	0.5	13	21.6		8.1		32.0		93.1		6.8		18.2		21		71				<0.2		0.8	
					Middle	4.2	0.5	16	21.6	21.6	8.1	8.1	32.0	32.0	93.1	93.1	6.8		20.1		21		73				<0.2		1.0	
						4.2	0.5	17	21.6		8.1		32.0		93.1		6.8		20.3		22		73				<0.2		0.9	
					Bottom	7.4	0.4	30	21.6	21.6	8.1	8.1	32.0	32.0	93.6	93.8	6.8	6.9	23.3		24		75				<0.2		0.6	
						7.4	0.5	30	21.6		8.1		32.0		93.9		6.9		23.3		25		75				<0.2		0.6	
IM8	Cloudy	Moderate	09:01	7.8	Surface	1.0	0.3	21	22.0	22.0	8.0	8.0	30.7	30.7	93.7	93.7	6.9	6.9	18.9	23.7	15	24	73	74	821713	807860	<0.2	<0.2	0.6	0.6
						1.0	0.4	21	22.0		8.0		30.7		93.7		6.9		18.9		16		73				<0.2		0.7	
					Middle	3.9	0.4	26	22.0	22.0	8.0	8.0	30.8	30.8	94.3	94.3	6.9		19.9		16		73				<0.2		0.5	
						3.9	0.4	27	22.0		8.0		30.8		94.3		6.9		19.9		17		74				<0.2		0.6	
					Bottom	6.8	0.3	17	22.0	22.0	8.0	8.0	30.8	30.8	95.3	95.3	7.0	7.0	32.4		40		75				<0.2		0.6	
						6.8	0.4	18	22.0		8.0		30.8		95.3		7.0		32.4		40		74				<0.2		0.8	

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 05 December 17 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	08:53	6.7	Surface	1.0	0.2	348	22.0	22.0	8.0	8.0	30.4	30.4	93.5	93.5	6.9	6.9	19.6	21.8	17	21	72	74	822096	808837	<0.2	<0.2	0.9	0.8
						1.0	0.2	320	22.0		8.0		30.4		93.5		6.9		19.6		17		73				<0.2		0.7	
					Middle	3.4	0.2	351	22.0	22.0	7.9	7.9	30.4	30.4	94.1	94.1	6.9		17.5		16		74				<0.2		0.8	
						3.4	0.2	323	22.0		7.9		30.4		94.1		6.9		17.5		18		74				<0.2		0.8	
					Bottom	5.7	0.2	352	22.0	22.0	7.9	7.9	30.5	30.5	95.3	95.3	7.0	7.0	28.3		30		75				<0.2		0.9	
						5.7	0.2	324	22.0		7.9		30.5		95.3		7.0		28.3		30		73				<0.2		0.9	
IM10	Cloudy	Moderate	08:46	6.1	Surface	1.0	0.6	322	22.0	22.0	7.9	7.9	30.8	30.8	93.7	93.7	6.9	6.9	15.4	21.1	13	20	73	74	822235	809845	<0.2	<0.2	0.7	0.7
						1.0	0.6	345	22.0		7.9		30.8		93.7		6.9		15.4		15		73				<0.2		0.8	
					Middle	3.1	0.5	322	22.0	22.0	7.9	7.9	30.8	30.8	94.4	94.4	6.9		19.6		16		74				<0.2		0.8	
						3.1	0.6	336	22.0		7.9		30.8		94.4		6.9		19.6		15		73				<0.2		0.8	
					Bottom	5.1	0.5	320	22.0	22.0	7.9	7.9	30.9	30.9	95.5	95.5	7.0	7.0	28.2		29		75				<0.2		0.6	
						5.1	0.5	340	22.0		7.9		30.9		95.5		7.0		28.2		30		76				<0.2		0.6	
IM11	Cloudy	Moderate	08:35	7.0	Surface	1.0	0.5	288	22.0	22.0	7.9	7.9	30.5	30.5	93.2	93.3	6.8	6.9	14.3	20.2	17	22	73	74	821496	810548	<0.2	<0.2	0.6	0.6
						1.0	0.5	300	22.0		7.9		30.5		93.3		6.8		14.3		19		73				<0.2		0.6	
					Middle	3.5	0.4	290	22.0	22.0	7.9	7.9	30.5	30.5	93.7	93.7	6.9		17.6		17		74				<0.2		0.6	
						3.5	0.4	310	22.0		7.9		30.5		93.7		6.9		17.6		18		74				<0.2		0.5	
					Bottom	6.0	0.4	300	22.0	22.0	7.9	7.9	30.5	30.5	94.3	94.3	6.9	6.9	28.7		30		75				<0.2		0.5	
						6.0	0.4	311	22.0		7.9		30.5		94.3		6.9		28.7		28		75				<0.2		0.5	
IM12	Cloudy	Moderate	08:28	7.8	Surface	1.0	0.7	282	22.0	22.0	7.9	7.9	30.0	30.0	94.4	94.4	6.9	6.9	18.8	22.5	19	23	73	74	821190	811526	<0.2	<0.2	0.5	0.6
						1.0	0.7	294	22.0		7.9		30.0		94.4		6.9		18.8		18		73				<0.2		0.6	
					Middle	3.9	0.6	285	22.0	22.0	7.9	7.9	30.0	30.0	94.3	94.3	6.9		20.2		22		74				<0.2		0.6	
						3.9	0.6	305	22.0		7.9		30.0		94.3		6.9		20.2		23		73				<0.2		0.6	
					Bottom	6.8	0.5	291	22.0	22.0	7.9	7.9	30.1	30.1	94.6	94.6	6.9	6.9	28.5		29		75				<0.2		0.7	
						6.8	0.5	307	22.0		7.9		30.1		94.6		6.9		28.5		28		75				<0.2		0.6	
SR2	Cloudy	Moderate	08:03	4.6	Surface	1.0	0.1	129	21.8	21.8	7.9	7.9	30.3	30.3	94.2	94.2	6.9	6.9	12.4	14.1	14	13	73	74	821490	814137	<0.2	<0.2	0.5	0.6
						1.0	0.1	141	21.8		7.9		30.3		94.2		6.9		12.4		13		74				<0.2		0.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.1	120	21.8	21.8	7.9	7.9	31.1	31.1	94.4	94.4	6.9	6.9	15.8		12		75				<0.2		0.8	
						3.6	0.1	129	21.8		7.9		31.1		94.4		6.9		15.8		12		75				<0.2		0.6	
SR3	Cloudy	Moderate	09:07	8.4	Surface	1.0	0.4	15	22.0	22.0	8.0	8.0	30.6	30.6	93.4	93.4	6.8	6.9	17.0	22.9	16	19	-	-	822146	807579	-	-	-	-
						1.0	0.4	15	22.0		8.0		30.6		93.4		6.8		17.0		15		-				-		-	
					Middle	4.2	0.4	11	22.0	22.0	8.0	8.0	30.6	30.6	93.6	93.6	6.9		21.7		16		-				-		-	
						4.2	0.5	11	22.0		8.0		30.6		93.6		6.9		21.7		16		-				-		-	
					Bottom	7.4	0.4	358	22.0	22.0	8.0	8.0	30.7	30.7	95.0	95.0	7.0	7.0	30.0		25		-				-		-	
						7.4	0.4	329	22.0		8.0		30.7		95.0		7.0		30.0		26		-				-		-	
SR4A	Cloudy	Moderate	08:26	8.7	Surface	1.0	0.3	254	21.7	21.7	8.0	8.0	32.1	32.1	93.5	93.5	6.8	6.8	14.6	15.5	15	16	-	-	817161	807783	-	-	-	-
						1.0	0.3	273	21.7		8.0		32.1		93.5		6.8		14.8		14		-				-		-	
					Middle	4.4	0.2	264	21.7	21.7	8.0	8.0	32.1	32.1	93.3	93.3	6.8		15.0		16		-				-		-	
						4.4	0.2	270	21.7		8.0		32.1		93.3		6.8		15.1		17		-				-		-	
					Bottom	7.7	0.1	257	21.7	21.7	8.0	8.0	32.1	32.1	93.3	93.4	6.8	6.8	16.9		19		-				-		-	
						7.7	0.1	282	21.7		8.0		32.1		93.4		6.8		16.7		17		-				-		-	
SR5A	Cloudy	Calm	08:09	4.4	Surface	1.0	0.3	262	21.6	21.6	8.1	8.1	32.1	32.1	93.6	93.6	6.8	6.8	10.8	11.3	13	12	-	-	816604	810757	-	-	-	-
						1.0	0.3	276	21.6		8.1		32.1		93.6		6.8		11.0		12		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.3	266	21.6	21.6	8.0	8.0	32.1	32.1	94.1	94.2	6.9	6.9	11.6		12		-				-		-	
						3.4	0.3	269	21.6		8.0		32.1		94.3		6.9		11.8		12		-				-		-	
SR6	Cloudy	Calm	07:44	3.4	Surface	1.0	0.1	260	21.7	21.7	8.0	8.0	30.9	30.8	93.0	93.1	6.8	6.9	11.3	11.6	11	13	-	-	817916	814637	-	-	-	-
						1.0	0.2	263	21.7		8.0		30.8		93.2		6.9		11.2		11		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.4	0.1	263	21.7	21.7	8.0	8.0	30.5	30.4	94.1	94.3	6.9	7.0	11.9		14		-				-		-	
						2.4	0.1	286	21.7		8.0		30.4		94.4		7.0		12.1		14		-				-		-	
SR7	Cloudy	Moderate	07:20	16.8	Surface	1.0	1.2	237	22.2	22.2	7.8	7.8	31.5	31.5	90.3	90.3	6.6	6.6	17.7	17.5	10	11	-	-	823647	823760	-	-	-	-
						1.0	1.3	260	22.2		7.8		31.5		90.3		6.6		17.7		10		-				-		-	
					Middle	8.4	1.2	244	22.2	22.2	7.8	7.8	31.7	31.7	90.4	90.4	6.6		17.5		10		-				-		-	
						8.4	1.3	251	22.2		7.8		31.7		90.4		6.6		17.5		10		-				-		-	
					Bottom	15.8	1.1	244	22.2	22.2	7.8	7.8	31.8	31.8	91.2	91.2	6.6	6.6	17.3		11		-				-		-	
						15.8	1.1	248	22.2		7.8		31.8		91.2		6.6		17.3		12		-				-		-	
SR8	Cloudy	Moderate	08:19	4.3	Surface	1.0	-	-	21.9	21.9	7.9	7.9	30.1	30.1	94.9	94.9	7.0	7.0	14.0	13.2	10	11	-	-	820246	811418	-	-	-	-
						1.0	-	-	21.9		7.9		30.1		94.9		7.0		14.0		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	-	-	22.0	22.0	7.9	7.9	30.3	30.3	95.3	95.3	7.0	7.0	12.3		11		-				-		-	
						3.3	-	-	22.0		7.9		30.3		95.3		7.0		12.3		12		-				-		-	

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**
Note: Access to SR5A was blocked by fishing net. The monitoring at SR5A was slightly shifted to the closest safe and accessible location temporarily.

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 07 December 17 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	15:24	8.4	Surface	1.0	0.1	199	21.7	21.7	8.1	8.1	31.5	31.5	91.5	91.5	6.7	6.7	12.3	13.9	14	15	73	75	815605	804244	<0.2	<0.2	1.6	1.2
						1.0	0.1	211	21.6		8.1		31.5		91.5		6.7		12.5		13		74				<0.2		1.4	
					Middle	4.2	0.1	233	21.6	21.6	8.1	8.1	31.5	31.5	91.8	92.0	6.7		11.6		13		75				<0.2		1.2	
						4.2	0.1	236	21.6		8.1		31.5		92.1		6.8		11.5		12		75				<0.2		1.3	
					Bottom	7.4	0.1	256	21.6	21.6	8.1	8.1	32.1	32.1	91.2	91.3	6.7	6.7	17.6		18		76				<0.2		0.9	
						7.4	0.1	266	21.6		8.1		32.1		91.4		6.7		17.8		19		76				<0.2		1.0	
C2	Fine	Moderate	14:08	11.6	Surface	1.0	0.0	296	22.3	22.3	8.1	8.1	31.4	31.4	92.3	92.3	6.7	6.8	8.7	10.6	8	12	71	73	825694	806949	<0.2	<0.2	1.7	1.7
						1.0	0.0	306	22.2		8.1		31.4		92.2		6.7		9.0		8		71				<0.2		1.8	
					Middle	5.8	0.2	36	22.1	22.1	8.1	8.1	31.4	31.4	92.6	92.7	6.8		10.7		11		73				<0.2		1.5	
						5.8	0.2	37	22.1		8.1		31.4		92.8		6.8		10.9		12		73				<0.2		1.9	
					Bottom	10.6	0.3	55	22.2	22.2	8.2	8.2	31.6	31.5	94.1	94.2	6.8	6.8	12.1		16		75				<0.2		1.6	
						10.6	0.3	58	22.2		8.2		31.5		94.3		6.8		12.1		16		75				<0.2		1.5	
C3	Fine	Moderate	15:50	12.0	Surface	1.0	0.4	92	21.8	21.8	8.2	8.2	32.7	32.7	89.5	89.6	6.5	6.5	15.6	13.4	12	14	71	73	822115	817815	<0.2	<0.2	0.7	0.8
						1.0	0.4	99	21.8		8.2		32.7		89.6		6.5		17.0		13		71				<0.2		0.7	
					Middle	6.0	0.4	93	21.8	21.8	8.2	8.2	32.7	32.6	89.9	89.9	6.5		10.6		14		73				<0.2		0.8	
						6.0	0.4	93	21.8		8.2		32.6		89.9		6.5		10.9		12		73				<0.2		0.8	
					Bottom	11.0	0.4	93	21.8	21.8	8.2	8.2	32.7	32.7	91.0	91.1	6.6	6.6	13.1		16		74				<0.2		0.9	
						11.0	0.4	101	21.8		8.2		32.7		91.1		6.6		13.0		17		75				<0.2		0.8	
IM1	Cloudy	Moderate	15:05	7.3	Surface	1.0	0.2	79	21.6	21.6	8.1	8.1	31.6	31.6	91.9	91.9	6.7	6.7	12.2	14.1	14	16	73	75	818348	806428	<0.2	<0.2	1.4	1.4
						1.0	0.2	81	21.6		8.1		31.6		91.9		6.7		12.3		14		73				<0.2		1.4	
					Middle	3.7	0.1	70	21.5	21.5	8.1	8.1	31.6	31.7	91.8	91.8	6.7		13.1		16		75				<0.2		1.7	
						3.7	0.1	73	21.5		8.1		31.7		91.8		6.7		13.1		15		76				<0.2		1.4	
					Bottom	6.3	0.1	239	21.5	21.5	8.1	8.1	32.1	32.1	92.0	92.1	6.7	6.8	17.1		17		76				<0.2		1.2	
						6.3	0.1	259	21.5		8.1		32.1		92.1		6.8		17.0		18		76				<0.2		1.2	
IM2	Cloudy	Moderate	14:53	8.3	Surface	1.0	0.2	75	21.5	21.5	8.1	8.1	31.5	31.5	92.0	92.0	6.8	6.9	11.7	14.6	14	17	73	75	818879	806198	<0.2	<0.2	1.8	1.6
						1.0	0.3	76	21.5		8.1		31.5		92.0		6.8		11.6		14		73				<0.2		1.8	
					Middle	4.2	0.1	50	21.5	21.5	8.1	8.1	31.6	31.6	93.2	93.3	6.9		13.6		16		75				<0.2		1.7	
						4.2	0.1	53	21.4		8.1		31.6		93.4		6.9		13.7		15		76				<0.2		1.8	
					Bottom	7.3	0.1	333	21.4	21.4	8.1	8.1	32.1	32.1	91.4	91.6	6.7	6.7	18.6		21		76				<0.2		1.4	
						7.3	0.1	306	21.4		8.1		32.1		91.7		6.7		18.2		22		76				<0.2		1.3	
IM3	Cloudy	Moderate	14:46	8.5	Surface	1.0	0.2	118	21.5	21.5	8.1	8.1	31.6	31.6	92.3	92.3	6.8	6.8	11.4	12.5	11	13	73	75	819415	806011	<0.2	<0.2	1.4	1.8
						1.0	0.2	121	21.5		8.1		31.6		92.3		6.8		11.3		12		74				<0.2		1.4	
					Middle	4.3	0.1	18	21.5	21.5	8.1	8.1	31.6	31.6	91.8	91.8	6.7		11.3		15		75				<0.2		2.6	
						4.3	0.1	19	21.5		8.1		31.7		91.7		6.7		11.1		13		75				<0.2		2.5	
					Bottom	7.5	0.0	144	21.4	21.4	8.1	8.1	32.0	32.0	92.5	92.7	6.8	6.8	15.0		14		76				<0.2		1.5	
						7.5	0.0	147	21.3		8.1		32.0		92.8		6.8		14.8		14		76				<0.2		1.4	
IM4	Cloudy	Moderate	14:38	7.7	Surface	1.0	0.2	95	21.4	21.4	8.1	8.1	31.5	31.5	91.0	91.1	6.7	6.8	12.6	17.6	14	15	74	75	819569	805050	<0.2	<0.2	2.0	1.9
						1.0	0.2	102	21.4		8.1		31.5		91.1		6.7		12.7		13		74				<0.2		2.0	
					Middle	3.9	0.1	19	21.4	21.4	8.1	8.1	31.4	31.4	91.6	91.7	6.8		23.6		15		75				<0.2		1.9	
						3.9	0.1	19	21.4		8.1		31.4		91.7		6.8		23.5		14		75				<0.2		2.0	
					Bottom	6.7	0.1	327	21.3	21.3	8.1	8.1	31.6	31.6	91.5	91.7	6.7	6.8	16.5		18		76				<0.2		1.6	
						6.7	0.1	329	21.3		8.1		31.6		91.9		6.8		16.5		18		77				<0.2		1.7	
IM5	Cloudy	Moderate	14:29	7.0	Surface	1.0	0.1	59	21.3	21.3	8.1	8.1	31.5	31.5	91.1	91.2	6.7	6.8	15.6	19.9	17	23	73	75	820537	804926	<0.2	<0.2	1.6	1.5
						1.0	0.1	59	21.3		8.1		31.5		91.2		6.7		15.1		18		73				<0.2		1.1	
					Middle	3.5	0.1	24	21.3	21.3	8.1	8.1	31.6	31.6	92.2	92.3	6.8		16.8		19		75				<0.2		1.5	
						3.5	0.1	25	21.3		8.1		31.6		92.4		6.8		16.9		20		76				<0.2		1.5	
					Bottom	6.0	0.1	25	21.3	21.3	8.1	8.1	31.8	31.8	90.7	90.8	6.7	6.7	27.1		31		77				<0.2		1.7	
						6.0	0.1	26	21.3		8.1		31.8		90.8		6.7		27.6		30		77				<0.2		1.7	
IM6	Cloudy	Moderate	14:20	6.9	Surface	1.0	0.1	44	21.5	21.5	8.1	8.1	31.8	31.8	91.1	91.1	6.7	6.7	18.2	19.5	22	23	71	74	821058	805810	<0.2	<0.2	1.6	1.4
						1.0	0.1	48	21.5		8.1		31.8		91.0		6.7		18.0		22		72				<0.2		1.3	
					Middle	3.5	0.2	53	21.5	21.5	8.1	8.1	31.8	31.8	91.2	91.3	6.7		18.9		22		75				<0.2		1.4	
						3.5	0.2	53	21.4		8.1		31.8		91.4		6.7		19.0		22		75				<0.2		1.2	
					Bottom	5.9	0.1	45	21.4	21.4	8.1	8.1	31.8	31.8	92.4	92.5	6.8	6.8	21.5		25		76				<0.2		1.4	
						5.9	0.1	49	21.4		8.1		31.8		92.5		6.8		21.6		26		76				<0.2		1.2	
IM7	Cloudy	Rough	14:08	8.4	Surface	1.0	0.2	65	21.8	21.8	8.1	8.1	32.2	32.2	91.9	91.9	6.7	6.7	16.3	16.4	19	19	71	74	821362	806846	<0.2	<0.2	1.1	1.1
						1.0	0.2	67	21.8		8.1		32.2		91.9		6.7		16.1		19		72				<0.2		1.1	
					Middle	4.2	0.2	60	21.7	21.7	8.1	8.1	32.2	32.2	91.6	91.6	6.7		17.1		19		73				<0.2		1.1	
						4.2	0.2	65	21.7		8.1		32.2		91.6		6.7		17.2		19		73				<0.2		0.9	
					Bottom	7.4	0.2	65	21.7	21.7	8.1	8.1	32.2	32.2	91.7	91.8	6.7	6.7	15.9		20		77				<0.2		1.0	
						7.4	0.2	66	21.7		8.1		32.2		91.8		6.7		15.8		20		77				<0.2		1.4	
IM8	Fine	Moderate	14:29	8.5	Surface	1.0	0.3	105	21.7	21.7	8.2	8.2	32.2	32.2	92.3	92.3	6.7	6.8	14.8	14.6	16	16	72	73	821689	807863	<0.2	<0.2	1.2	1.1
						1.0	0.3	108	21.7		8.2		32.2		92.3		6.7		14.7		15		71				<0.2		1.0	
					Middle	4.3	0.2	84	21.7	21.7	8.2	8.2	32.2	32.2	92.7	92.8	6.8		15.5		17		73				<0.2		1.1	
						4.3	0.2	85	21.7		8.2		32.2		92.8		6.8		15.5		16		73				<0.2		1.1	
					Bottom	7.5	0.3	86	21.8	21.9	8.2	8.2	32.1	32.1	93.8	93.9	6.8	6.8	13.7		16		75				<0.2		1.1	
						7.5	0.3	89	21.9		8.2		32.1		93.9		6.8		13.4		18		75				<0.2		1.3	

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 07 December 17 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Fine	Moderate	14:37	7.3	Surface	1.0	0.3	86	21.6	21.6	8.3	8.3	32.3	32.2	92.3	92.3	6.7	6.7	12.7	16.0	15	17	72	73	822116	808818	<0.2	<0.2	1.2	1.1
						1.0	0.3	86	21.6		8.3		32.2		92.3		6.7		12.8		14		71				<0.2		1.4	
					Middle	3.7	0.2	78	21.6	21.6	8.3	8.3	32.3	32.3	92.1	92.1	6.7		12.8		14		73				<0.2		1.1	
						3.7	0.2	85	21.6		8.3		32.3		92.1		6.7		12.8		14		73				<0.2		1.0	
					Bottom	6.3	0.2	88	21.6	21.6	8.2	8.2	32.2	32.1	92.6	92.7	6.8	6.8	22.5		23		75				<0.2		1.0	
						6.3	0.2	88	21.6		8.2		32.1		92.8		6.8		22.4		23		75				<0.2		0.9	
IM10	Fine	Moderate	14:45	7.3	Surface	1.0	0.4	102	21.7	21.7	8.3	8.3	32.1	32.1	91.3	91.3	6.7	6.7	13.3	15.3	16	17	71	73	822262	809837	<0.2	<0.2	1.0	1.0
						1.0	0.4	104	21.7		8.3		32.1		91.3		6.7		13.4		16		71				<0.2		1.1	
					Middle	3.7	0.4	101	21.6	21.6	8.3	8.3	32.0	32.0	91.5	91.5	6.7		14.2		16		73				<0.2		1.0	
						3.7	0.4	108	21.6		8.3		32.0		91.5		6.7		14.2		16		74				<0.2		1.1	
					Bottom	6.3	0.3	104	21.6	21.6	8.2	8.2	32.1	32.1	92.1	92.2	6.7	6.7	17.2		18		75				<0.2		0.9	
						6.3	0.3	109	21.6		8.2		32.1		92.3		6.7		19.5		18		75				<0.2		1.0	
IM11	Fine	Moderate	14:54	8.2	Surface	1.0	0.4	98	21.7	21.7	8.2	8.2	32.0	32.0	91.0	91.0	6.6	6.6	14.4	20.5	15	23	72	73	821519	810519	<0.2	<0.2	1.1	1.2
						1.0	0.4	101	21.7		8.2		32.0		91.0		6.6		14.0		17		71				<0.2		1.1	
					Middle	4.1	0.3	90	21.7	21.7	8.2	8.2	31.9	31.9	91.0	91.0	6.6		18.0		26		73				<0.2		1.2	
						4.1	0.3	97	21.7		8.2		31.9		91.0		6.6		18.3		24		73				<0.2		1.4	
					Bottom	7.2	0.2	86	21.7	21.7	8.2	8.2	32.1	32.1	91.7	91.8	6.7	6.7	29.1		29		75				<0.2		1.2	
						7.2	0.2	92	21.7		8.2		32.1		91.8		6.7		29.2		27		75				<0.2		1.2	
IM12	Fine	Moderate	15:03	9.0	Surface	1.0	0.4	103	21.8	21.8	8.2	8.2	32.0	32.0	91.6	91.6	6.7	6.7	16.5	15.6	19	19	71	73	821190	811491	<0.2	<0.2	1.2	1.2
						1.0	0.4	112	21.8		8.2		32.0		91.6		6.7		16.4		18		71				<0.2		1.3	
					Middle	4.5	0.3	103	21.7	21.7	8.2	8.2	32.0	32.0	91.9	91.9	6.7		16.4		20		73				<0.2		1.2	
						4.5	0.3	110	21.7		8.2		32.0		91.9		6.7		16.8		19		73				<0.2		1.3	
					Bottom	8.0	0.3	105	21.7	21.7	8.2	8.2	32.2	32.2	92.7	92.8	6.8	6.8	13.7		18		75				<0.2		1.2	
						8.0	0.3	107	21.7		8.2		32.2		92.9		6.8		13.7		18		75				<0.2		1.2	
SR2	Fine	Moderate	15:27	4.0	Surface	1.0	0.3	104	21.7	21.7	8.2	8.2	32.5	32.5	91.8	91.9	6.7	6.7	9.2	12.6	12	14	71	72	821439	814145	<0.2	<0.2	1.0	0.9
						1.0	0.3	108	21.7		8.2		32.5		91.9		6.7		8.9		12		71				<0.2		1.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	0.2	116	21.6	21.6	8.2	8.2	32.4	32.4	92.5	92.7	6.8	6.8	16.1		15		73				<0.2		0.8	
						3.0	0.2	118	21.6		8.2		32.4		92.8		6.8		16.3		16		73				<0.2		0.8	
SR3	Fine	Moderate	14:24	9.4	Surface	1.0	0.3	91	21.7	21.7	8.2	8.2	32.1	32.1	91.1	91.1	6.6	6.7	15.2	16.2	17	18	-	-	822132	807582	-	-	-	-
						1.0	0.3	93	21.7		8.2		32.1		91.1		6.7		15.1		17		-				-		-	
					Middle	4.7	0.3	77	21.7	21.7	8.2	8.2	32.0	32.0	91.4	91.5	6.7		15.9		19		-				-		-	
						4.7	0.3	84	21.7		8.2		32.0		91.5		6.7		15.9		19		-				-		-	
					Bottom	8.4	0.2	64	21.8	21.8	8.2	8.2	32.1	32.1	92.4	92.5	6.7	6.8	17.4		18		-				-		-	
						8.4	0.2	67	21.8		8.2		32.1		92.6		6.8		17.4		20		-				-		-	
SR4A	Cloudy	Moderate	15:48	9.2	Surface	1.0	0.4	74	21.5	21.5	8.1	8.1	32.0	32.0	92.0	92.0	6.7	6.7	11.8	14.7	13	16	-	-	817205	807785	-	-	-	-
						1.0	0.4	80	21.5		8.1		32.0		92.0		6.7		12.2		13		-				-		-	
					Middle	4.6	0.3	68	21.6	21.6	8.1	8.1	32.1	32.1	92.1	92.1	6.7		15.1		15		-				-		-	
						4.6	0.3	69	21.6		8.1		32.1		92.1		6.7		15.3		15		-				-		-	
					Bottom	8.2	0.3	65	21.5	21.5	8.1	8.1	32.3	32.3	91.8	91.9	6.7	6.7	16.9		20		-				-		-	
						8.2	0.3	70	21.5		8.1		32.3		92.0		6.7		16.9		18		-				-		-	
SR5A	Cloudy	Calm	16:03	5.0	Surface	1.0	0.1	336	21.4	21.4	8.1	8.1	32.5	32.5	92.2	92.3	6.7	6.8	10.3	10.1	13	19	-	-	816609	810716	-	-	-	-
						1.0	0.1	353	21.4		8.1		32.5		92.3		6.8		10.4		14		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.1	332	21.5	21.5	8.2	8.2	32.5	32.5	93.0	93.2	6.8	6.8	9.7		25		-				-		-	
						4.0	0.1	354	21.5		8.2		32.5		93.4		6.8		9.8		24		-				-		-	
SR6	Cloudy	Calm	16:26	3.9	Surface	1.0	0.1	58	21.9	21.9	8.2	8.2	32.6	32.6	94.1	94.1	6.8	6.8	7.4		10		-				-		-	
						1.0	0.1	63	21.9		8.2		32.6		94.1		6.8		7.5		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.9	0.1	53	22.0	22.0	8.2	8.2	32.5	32.5	94.2	94.2	6.8	6.8	7.3		11		-				-		-	
						2.9	0.1	54	22.0		8.2		32.5		94.2		6.8		7.2		10		-				-		-	
SR7	Fine	Moderate	16:33	19.2	Surface	1.0	0.3	130	21.8	21.8	8.2	8.2	32.7	32.7	89.1	89.1	6.5	6.5	13.0	13.2	14	15	-	-	823631	823721	-	-	-	-
						1.0	0.3	139	21.8		8.2		32.7		89.1		6.5		13.5		13		-				-		-	
					Middle	9.6	0.1	143	21.8	21.8	8.2	8.2	32.8	32.8	89.3	89.3	6.5		11.5		17		-				-		-	
						9.6	0.1	144	21.8		8.2		32.8		89.2		6.5		11.5		15		-				-		-	
					Bottom	18.2	0.0	240	21.8	21.8	8.2	8.2	32.7	32.8	91.0	91.1	6.6	6.6	14.8		15		-				-		-	
						18.2	0.0	249	21.8		8.2		32.8		91.2		6.6		14.6		17		-				-		-	
SR8	Fine	Moderate	15:10	3.8	Surface	1.0	-	-	21.7	21.7	8.2	8.2	32.1	32.1	92.7	92.8	6.8	6.8	21.2	17.3	12	11	-	-	820246	811418	-	-	-	-
						1.0	-	-	21.7		8.2		32.1		92.8		6.8		21.2		11		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	-	-	21.7	21.7	8.2	8.2	32.3	32.3	93.4	93.5	6.8	6.8	13.3		10		-				-		-	
						2.8	-	-	21.7		8.2		32.3		93.5		6.8		13.5		11		-				-		-	

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 07 December 17 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	10:27	8.1	Surface	1.0	0.6	38	21.3	21.3	8.1	8.1	31.9	31.9	91.2	91.2	6.7	6.7	17.4	20.4	20	27	73	74	815623	804245	<0.2	<0.2	1.2	1.2
						1.0	0.6	41	21.2		8.1		31.9		91.2		6.7		17.4		20		73				<0.2		1.1	
					Middle	4.1	0.7	35	21.3	21.3	8.1	8.1	31.9	31.9	90.9	90.9	6.7		19.3		22		74				<0.2		1.3	
						4.1	0.8	38	21.3		8.1		31.9		90.9		6.7		19.3		24		74				<0.2		1.2	
					Bottom	7.1	0.6	33	21.3	21.3	8.1	8.1	32.1	32.1	91.2	91.4	6.7	6.7	24.3		36		76				<0.2		1.0	
						7.1	0.6	36	21.3		8.1		32.1		91.5		6.7		24.4		38		76				<0.2		1.1	
C2	Fine	Moderate	11:01	11.4	Surface	1.0	0.2	334	21.5	21.5	8.1	8.1	30.9	30.9	90.3	90.3	6.7	6.7	10.2	13.9	8	15	72	74	825675	806927	<0.2	<0.2	2.4	2.1
						1.0	0.2	355	21.5		8.1		30.9		90.2		6.7		10.2		9		72				<0.2		2.3	
					Middle	5.7	0.3	346	21.5	21.5	8.1	8.1	31.0	31.0	89.7	89.7	6.6		10.9		14		74				<0.2		2.2	
						5.7	0.3	346	21.5		8.1		31.0		89.6		6.6		10.9		14		74				<0.2		2.4	
					Bottom	10.4	0.4	8	21.5	21.5	8.2	8.2	31.2	31.2	89.6	89.7	6.6	6.6	20.5		22		76				<0.2		1.7	
						10.4	0.4	8	21.5		8.2		31.2		89.7		6.6		20.5		24		76				<0.2		1.8	
C3	Fine	Moderate	09:17	10.2	Surface	1.0	0.6	278	21.4	21.4	8.2	8.2	32.4	32.4	91.2	91.3	6.7	6.7	14.2	17.5	17	23	72	74	822104	817777	<0.2	<0.2	1.0	1.0
						1.0	0.6	287	21.4		8.2		32.4		91.3		6.7		14.5		17		72				<0.2		1.2	
					Middle	5.1	0.5	279	21.4	21.4	8.2	8.2	32.4	32.4	92.0	92.1	6.7		15.7		20		74				<0.2		1.0	
						5.1	0.5	301	21.4		8.2		32.4		92.1		6.8		15.6		20		74				<0.2		1.0	
					Bottom	9.2	0.4	281	21.3	21.3	8.2	8.2	32.5	32.5	94.7	94.9	6.9	7.0	23.2		32		76				<0.2		0.9	
						9.2	0.4	284	21.2		8.2		32.5		95.0		7.0		22.0		33		77				<0.2		1.0	
IM1	Cloudy	Moderate	10:44	7.0	Surface	1.0	0.5	11	21.4	21.4	8.3	8.3	32.3	32.3	90.6	90.6	6.6	6.6	17.8	21.8	21	27	73	75	818356	806459	<0.2	<0.2	1.2	1.1
						1.0	0.5	11	21.4		8.3		32.3		90.6		6.6		17.5		21		73				<0.2		1.0	
					Middle	3.5	0.4	9	21.4	21.4	8.3	8.3	32.3	32.3	90.7	90.7	6.7		21.3		24		75				<0.2		1.1	
						3.5	0.5	9	21.4		8.3		32.3		90.7		6.6		21.3		22		75				<0.2		1.1	
					Bottom	6.0	0.4	6	21.3	21.3	8.3	8.3	32.3	32.3	90.4	90.5	6.6	6.6	26.2		35		76				<0.2		1.1	
						6.0	0.4	6	21.3		8.3		32.3		90.5		6.6		26.6		37		77				<0.2		1.1	
IM2	Cloudy	Moderate	10:56	8.3	Surface	1.0	0.5	26	21.5	21.5	8.2	8.2	32.2	32.2	91.0	91.0	6.7	6.7	13.5	18.2	13	21	73	75	818834	806124	<0.2	<0.2	0.9	1.0
						1.0	0.5	27	21.5		8.2		32.2		91.0		6.7		13.6		15		73				<0.2		1.0	
					Middle	4.2	0.5	17	21.5	21.5	8.2	8.2	32.2	32.2	91.2	91.3	6.7		14.5		17		75				<0.2		1.0	
						4.2	0.6	18	21.5		8.2		32.2		91.3		6.7		14.3		16		75				<0.2		1.0	
					Bottom	7.3	0.4	13	21.4	21.4	8.2	8.2	32.3	32.3	91.6	91.7	6.7	6.7	26.6		34		77				<0.2		1.0	
						7.3	0.4	13	21.4		8.2		32.3		91.7		6.7		26.7		32		77				<0.2		1.0	
IM3	Cloudy	Moderate	11:03	8.1	Surface	1.0	0.5	24	21.4	21.4	8.2	8.2	32.3	32.3	91.3	91.2	6.7	6.7	14.9	21.4	20	27	73	75	819429	806036	<0.2	<0.2	0.9	0.9
						1.0	0.5	25	21.4		8.2		32.3		91.1		6.7		14.7		18		73				<0.2		0.8	
					Middle	4.1	0.5	32	21.6	21.6	8.2	8.2	32.2	32.2	90.9	91.0	6.7		22.6		24		73				<0.2		0.9	
						4.1	0.5	32	21.6		8.2		32.2		91.1		6.7		22.4		25		74				<0.2		0.8	
					Bottom	7.1	0.4	22	21.4	21.4	8.2	8.2	32.2	32.2	90.6	90.6	6.6	6.6	26.8		36		77				<0.2		0.9	
						7.1	0.4	22	21.4		8.2		32.2		90.5		6.6		26.8		36		77				<0.2		0.9	
IM4	Cloudy	Moderate	11:12	7.5	Surface	1.0	0.5	11	21.5	21.5	8.1	8.1	32.2	32.2	90.3	90.3	6.6	6.6	18.0	22.2	19	26	73	75	819590	805025	<0.2	<0.2	1.1	0.9
						1.0	0.5	11	21.5		8.1		32.2		90.3		6.6		18.0		21		73				<0.2		1.1	
					Middle	3.8	0.5	10	21.5	21.5	8.1	8.1	32.2	32.2	90.4	90.5	6.6		20.9		23		75				<0.2		0.8	
						3.8	0.5	10	21.5		8.1		32.2		90.6		6.6		20.9		23		75				<0.2		0.7	
					Bottom	6.5	0.4	9	21.4	21.4	8.1	8.1	32.1	32.2	91.6	91.7	6.7	6.7	27.7		33		76				<0.2		0.9	
						6.5	0.4	9	21.3		8.1		32.2		91.8		6.7		27.9		34		77				<0.2		1.0	
IM5	Cloudy	Moderate	11:25	6.4	Surface	1.0	0.4	20	21.6	21.6	8.1	8.1	32.1	32.1	90.3	90.4	6.6	6.6	19.8	21.8	32	34	72	74	820588	804935	<0.2	<0.2	0.9	0.9
						1.0	0.5	20	21.6		8.1		32.1		90.4		6.6		19.6		32		72				<0.2		0.9	
					Middle	3.2	0.5	28	21.6	21.6	8.1	8.1	32.1	32.1	90.2	90.2	6.6		20.3		31		73				<0.2		0.9	
						3.2	0.5	28	21.6		8.1		32.1		90.2		6.6		20.3		30		73				<0.2		1.0	
					Bottom	5.4	0.4	20	21.6	21.6	8.1	8.1	32.1	32.1	90.0	90.0	6.6	6.6	25.5		38		77				<0.2		0.9	
						5.4	0.4	21	21.6		8.1		32.1		90.0		6.6		25.4		38		77				<0.2		1.0	
IM6	Cloudy	Moderate	11:32	6.7	Surface	1.0	0.3	20	21.6	21.6	8.2	8.2	32.1	32.1	90.1	90.1	6.6	6.6	20.7	22.0	30	33	72	73	821062	805841	<0.2	<0.2	1.1	1.1
						1.0	0.4	21	21.6		8.2		32.1		90.1		6.6		20.7		28		72				<0.2		0.9	
					Middle	3.4	0.3	25	21.6	21.6	8.2	8.2	32.0	32.0	90.1	90.2	6.6		21.5		31		73				<0.2		1.2	
						3.4	0.4	27	21.6		8.2		32.0		90.2		6.6		21.5		32		73				<0.2		1.2	
					Bottom	5.7	0.3	13	21.6	21.6	8.2	8.2	32.0	32.0	90.2	90.4	6.6	6.6	23.8		37		75				<0.2		1.1	
						5.7	0.3	14	21.6		8.2		32.0		90.5		6.6		23.8		38		75				<0.2		1.0	
IM7	Cloudy	Moderate	11:41	8.3	Surface	1.0	0.5	36	21.3	21.3	8.2	8.2	32.2	32.2	91.2	91.3	6.7	6.7	17.2	22.6	16	22	72	73	821333	806828	<0.2	<0.2	1.4	1.3
						1.0	0.5	39	21.3		8.2		32.2		91.3		6.7		17.2		16		72				<0.2		1.3	
					Middle	4.2	0.5	31	21.4	21.4	8.2	8.2	32.2	32.2	90.5	90.5	6.6		24.1		25		73				<0.2		1.4	
						4.2	0.5	32	21.4		8.2		32.2		90.5		6.6		24.6		24		73				<0.2		1.3	
					Bottom	7.3	0.3	26	21.3	21.4	8.2	8.2	32.2	32.2	90.4	90.4	6.6	6.6	26.1		26		75				<0.2		1.0	
						7.3	0.3	26	21.4		8.2		32.2		90.4		6.6		26.4		26		75				<0.2		1.1	
IM8	Fine	Moderate	10:34	7.7	Surface	1.0	0.2	12	21.5	21.5	8.1	8.1	31.4	31.3	89.9	90.0	6.6	6.7	17.2	18.7	15	16	72	74	821686	807864	<0.2	<0.2	1.4	1.6
						1.0	0.3	13	21.5		8.1		31.3		90.0		6.6		15.9		14		72				<0.2		1.4	
					Middle	3.9	0.2	9	21.6	21.6	8.1	8.1	31.3	31.3	90.5	90.6	6.7		17.1		15		74				<0.2		1.8	
						3.9	0.3	9	21.6		8.1		31.3		90.6		6.7		17.1		16		74				<0.2		1.7	
					Bottom	6.7	0.3	21	21.6	21.6	8.1	8.1	31.3	31.3	92.5	92.9	6.8	6.9	22.3		17		76				<0.2		1.6	
						6.7	0.3	21	21.6		8.1		31.3		93.3		6.9		22.3		19		76				<0.2		1.6	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 07 December 17 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) Value	Water Temperature (°C) Average	pH Value	pH Average	Salinity (ppt) Value	Salinity (ppt) Average	DO Saturation (%) Value	DO Saturation (%) Average	Dissolved Oxygen Value	Dissolved Oxygen DA	Turbidity(NTU) Value	Turbidity(NTU) DA	Suspended Solids (mg/L) Value	Suspended Solids (mg/L) DA	Total Alkalinity (ppm) Value	Total Alkalinity (ppm) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L) Value	Chromium (µg/L) DA	Nickel (µg/L) Value	Nickel (µg/L) DA
IM9	Fine	Moderate	10:27	7.0	Surface	1.0	0.2	339	21.5	21.5	8.1	8.1	31.5	31.5	90.1	90.1	6.6	6.7	22.7	19.8	19	20	72	74	822069	808792	<0.2	<0.2	1.2	1.2
						1.0	0.2	351	21.5		8.1		31.5		90.1		6.6		22.7		20		72				<0.2		1.0	
					Middle	3.5	0.2	342	21.5	21.5	8.1	8.1	31.5	31.5	90.8	90.9	6.7		20.6		21		73				<0.2		1.4	
						3.5	0.2	342	21.5		8.1		31.5		91.0		6.7		20.6		21		74				<0.2		1.4	
					Bottom	6.0	0.2	1	21.5	21.5	8.2	8.2	31.5	31.5	91.9	92.0	6.8	6.8	16.8		19		76				<0.2		1.2	
						6.0	0.2	1	21.5		8.2		31.5		92.1		6.8		15.2		20		76				<0.2		1.2	
IM10	Fine	Moderate	10:20	6.5	Surface	1.0	0.5	308	21.5	21.5	8.1	8.1	31.2	31.3	90.4	90.5	6.7	6.7	20.8	20.7	17	19	72	74	822213	809865	<0.2	<0.2	1.2	1.2
						1.0	0.5	330	21.5		8.1		31.4		90.5		6.7		20.8		19		72				<0.2		1.2	
					Middle	3.3	0.5	310	21.5	21.5	8.1	8.1	31.8	31.8	91.0	91.1	6.7		19.7		18		74				<0.2		1.5	
						3.3	0.5	337	21.5		8.1		31.8		91.2		6.7		19.5		19		74				<0.2		1.3	
					Bottom	5.5	0.4	312	21.4	21.4	8.2	8.2	31.9	32.0	92.2	92.3	6.8	6.8	21.5		21		76				<0.2		1.0	
						5.5	0.4	313	21.3		8.2		32.0		92.4		6.8		22.1		22		76				<0.2		1.0	
IM11	Fine	Moderate	10:09	7.0	Surface	1.0	0.5	287	21.4	21.4	8.2	8.2	31.9	31.9	90.9	90.9	6.7	6.7	17.7	18.2	15	16	72	75	821519	810545	<0.2	<0.2	1.1	1.1
						1.0	0.5	311	21.4		8.2		31.9		90.9		6.7		17.5		15		72				<0.2		1.1	
					Middle	3.5	0.4	292	21.4	21.4	8.2	8.2	32.0	32.0	90.7	90.7	6.7		20.1		17		74				<0.2		1.1	
						3.5	0.5	292	21.4		8.2		32.0		90.7		6.7		20.1		17		74				<0.2		1.1	
					Bottom	6.0	0.3	292	21.5	21.5	8.2	8.2	32.0	32.0	90.8	90.9	6.7	6.7	16.9		16		79				<0.2		1.0	
						6.0	0.3	303	21.5		8.2		32.0		90.9		6.7		16.8		16		78				<0.2		1.0	
IM12	Fine	Moderate	10:02	7.2	Surface	1.0	0.5	282	21.4	21.4	8.2	8.2	32.2	32.2	91.2	91.3	6.7	6.7	14.0	16.4	14	18	72	74	821148	811545	<0.2	<0.2	0.9	0.9
						1.0	0.5	284	21.4		8.2		32.2		91.3		6.7		14.1		15		72				<0.2		0.8	
					Middle	3.6	0.5	281	21.4	21.4	8.2	8.2	32.2	32.2	91.9	92.0	6.7		14.5		17		73				<0.2		0.8	
						3.6	0.5	281	21.4		8.2		32.2		92.1		6.8		14.3		18		74				<0.2		0.9	
					Bottom	6.2	0.4	280	21.3	21.3	8.2	8.2	32.3	32.3	93.0	93.1	6.8	6.9	20.8		21		75				<0.2		0.9	
						6.2	0.4	281	21.2		8.2		32.3		93.2		6.9		20.6		23		76				<0.2		0.8	
SR2	Fine	Moderate	09:39	3.8	Surface	1.0	0.3	325	21.2	21.2	8.2	8.2	32.4	32.4	91.2	91.2	6.7	6.7	20.3	21.4	23	26	72	73	821466	814182	<0.2	<0.2	1.4	1.1
						1.0	0.3	332	21.2		8.2		32.4		91.2		6.7		20.4		21		72				<0.2		1.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	0.2	327	21.3	21.3	8.2	8.2	32.4	32.4	91.9	92.0	6.8	6.8	22.6		29		74				<0.2		1.0	
						2.8	0.2	333	21.3		8.2		32.4		92.0		6.8		22.2		31		74				<0.2		0.8	
SR3	Fine	Moderate	10:43	8.5	Surface	1.0	0.2	348	21.6	21.6	8.1	8.1	31.4	31.4	90.1	90.2	6.6	6.6	15.3	16.1	18	19	-	-	822117	807596	-	-	-	-
						1.0	0.2	320	21.6		8.1		31.4		90.2		6.6		15.3		20		-				-		-	
					Middle	4.3	0.3	7	21.6	21.6	8.1	8.1	31.5	31.5	90.4	90.5	6.6		16.2		18		-				-		-	
						4.3	0.3	7	21.6		8.1		31.5		90.5		6.6		16.0		19		-				-		-	
					Bottom	7.5	0.3	1	21.6	21.6	8.2	8.2	31.3	31.3	91.4	91.5	6.7	6.7	16.7		20		-				-		-	
						7.5	0.3	1	21.5		8.2		31.3		91.6		6.7		17.0		19		-				-		-	
SR4A	Cloudy	Calm	10:05	8.2	Surface	1.0	0.2	248	21.2	21.2	8.1	8.1	32.5	32.5	90.7	90.7	6.7	6.7	11.8	15.8	15	17	-	-	817167	807783	-	-	-	-
						1.0	0.2	268	21.2		8.1		32.5		90.7		6.7		11.7		14		-				-		-	
					Middle	4.1	0.1	252	21.2	21.3	8.1	8.1	32.5	32.5	91.2	91.3	6.7		17.6		16		-				-		-	
						4.1	0.1	264	21.3		8.1		32.5		91.4		6.7		17.9		16		-				-		-	
					Bottom	7.2	0.1	233	21.3	21.3	8.1	8.1	32.4	32.4	91.3	91.5	6.7	6.7	17.9		21		-				-		-	
						7.2	0.1	240	21.3		8.1		32.4		91.6		6.7		18.1		19		-				-		-	
SR5A	Cloudy	Calm	09:49	3.8	Surface	1.0	0.4	302	21.2	21.2	8.2	8.2	32.6	32.6	91.8	91.9	6.7	6.8	13.8	15.3	18	21	-	-	816589	810693	-	-	-	-
						1.0	0.4	307	21.1		8.2		32.6		91.9		6.8		13.7		18		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	0.3	306	21.1	21.1	8.2	8.2	32.4	32.4	93.5	93.6	6.9	6.9	16.9		22		-				-		-	
						2.8	0.4	332	21.1		8.2		32.4		93.7		6.9		16.9		24		-				-		-	
SR6	Cloudy	Moderate	09:25	3.5	Surface	1.0	0.2	247	21.5	21.5	8.0	8.0	32.5	32.5	89.5	89.6	6.5	6.6	15.0	18.1	23	25	-	-	817886	814641	-	-	-	-
						1.0	0.2	247	21.4		8.0		32.5		89.6		6.6		14.9		21		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.5	0.1	270	21.4	21.4	8.0	8.0	32.4	32.4	89.7	89.8	6.6	6.6	21.4		27		-				-		-	
						2.5	0.1	280	21.4		8.0		32.4		89.9		6.6		21.2		27		-				-		-	
SR7	Fine	Moderate	08:51	19.1	Surface	1.0	0.2	353	21.4	21.4	8.2	8.2	32.5	32.5	91.3	91.5	6.7	6.7	16.5	17.6	18	21	-	-	823634	823756	-	-	-	-
						1.0	0.2	325	21.4		8.2		32.5		91.6		6.7		15.9		17		-				-		-	
					Middle	9.6	0.2	12	21.4	21.4	8.2	8.2	32.5	32.5	91.1	91.2	6.7		17.4		23		-				-		-	
						9.6	0.2	13	21.4		8.2		32.5		91.2		6.7		17.5		23		-				-		-	
					Bottom	18.1	0.2	9	21.3	21.4	8.1	8.1	32.6	32.5	91.0	91.1	6.7	6.7	19.3		23		-				-		-	
						18.1	0.2	9	21.4		8.1		32.5		91.2		6.7		19.0		23		-				-		-	
SR8	Fine	Moderate	09:53	3.3	Surface	1.0	-	-	21.6	21.6	8.2	8.2	31.9	31.9	90.9	90.9	6.7	6.7	18.6	21.2	17	19	-	-	820246	811418	-	-	-	-
						1.0	-	-	21.6		8.2		31.9		90.9		6.7		19.4		17		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.3	-	-	21.5	21.5	8.2	8.2	31.9	31.9	92.0	92.1	6.7	6.7	24.2		22		-				-		-	
						2.3	-	-	21.5		8.2		31.9		92.1		6.7		22.6		20		-				-		-	

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 December 17 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Replicate	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
										Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Moderate	17:21	8.8	1st	Surface	1.0	0.1	146	20.9	20.9	8.2	8.2	32.8	32.8	96.4	96.4	7.1	7.1	14.6	15.3	13	17	73	74	815633	804247	<0.2	<0.2	0.5	0.5
					2nd		1.0	0.1	154	20.9		8.2		32.8		96.4		7.1		14.6		12		73				<0.2		0.5	
					1st	Middle	4.4	0.0	108	20.9	20.9	8.2	8.2	32.8	32.8	96.6	96.6	7.1		14.9		17		74				<0.2		0.5	
					2nd		4.4	0.0	110	20.9		8.2		32.8		96.6		7.1		14.9		17		74				<0.2		0.5	
					1st	Bottom	7.8	0.1	81	20.9	20.9	8.2	8.2	32.8	32.8	97.5	97.5	7.2	7.2	16.4		20		74				<0.2		0.5	
					2nd		7.8	0.1	88	20.9		8.2		32.8		97.5		7.2		16.4		22		75				<0.2		0.5	
C2	Misty	Moderate	16:09	11.2	1st	Surface	1.0	0.2	43	20.9	20.9	7.9	7.9	28.7	28.7	93.5	93.5	7.1	7.1	6.7	10.6	8	8	71	73	825697	806965	<0.2	<0.2	1.6	1.4
					2nd		1.0	0.2	46	20.9		7.9		28.7		93.4		7.1		6.7		6		72				<0.2		1.4	
					1st	Middle	5.6	0.2	38	20.8	20.8	7.9	7.9	28.6	28.6	92.3	92.3	7.0		7.9		9		73				<0.2		1.4	
					2nd		5.6	0.2	41	20.8		7.9		28.6		92.3		7.0		7.9		8		73				<0.2		1.4	
					1st	Bottom	10.2	0.1	65	20.9	20.9	7.9	7.9	28.7	28.7	92.1	92.1	7.0	7.0	17.2		9		76				<0.2		1.4	
					2nd		10.2	0.1	67	20.9		7.9		28.7		92.1		7.0		17.2		8		75				<0.2		1.4	
C3	Misty	Moderate	17:51	12.0	1st	Surface	1.0	0.3	90	21.4	21.4	7.9	7.9	30.3	30.3	89.4	89.5	6.6	6.6	4.5	5.3	8	8	71	73	822117	817808	<0.2	<0.2	0.6	0.6
					2nd		1.0	0.3	90	21.4		7.9		30.4		89.5		6.6		4.6		7		72				<0.2		0.8	
					1st	Middle	6.0	0.3	88	21.5	21.5	7.9	7.9	30.5	30.5	89.7	89.7	6.6		5.6		9		73				<0.2		0.6	
					2nd		6.0	0.3	94	21.5		7.9		30.5		89.7		6.6		5.4		8		73				<0.2		0.6	
					1st	Bottom	11.0	0.2	93	21.5	21.5	7.9	7.9	30.8	30.8	91.3	91.4	6.7	6.8	6.0		8		75				<0.2		0.6	
					2nd		11.0	0.3	93	21.5		7.9		30.8		91.4		6.8		5.9		8		75				<0.2		0.5	
IM1	Fine	Moderate	17:03	7.9	1st	Surface	1.0	0.1	1	20.4	20.4	8.3	8.3	32.3	32.3	94.8	94.8	7.1	7.1	18.6	22.0	23	28	73	74	818375	806451	<0.2	<0.2	0.8	0.8
					2nd		1.0	0.1	1	20.4		8.3		32.3		94.8		7.1		18.6		23		73				<0.2		0.8	
					1st	Middle	4.0	0.0	120	20.5	20.5	8.2	8.2	32.4	32.4	95.0	95.0	7.1		22.4		29		74				<0.2		0.8	
					2nd		4.0	0.0	131	20.5		8.2		32.4		95.0		7.1		22.3		28		74				<0.2		0.8	
					1st	Bottom	6.9	0.1	11	20.5	20.5	8.2	8.2	32.4	32.4	95.5	95.5	7.1	7.1	25.0		30		74				<0.2		0.7	
					2nd		6.9	0.1	11	20.5		8.2		32.4		95.5		7.1		25.0		33		75				<0.2		0.7	
IM2	Fine	Moderate	16:53	8.4	1st	Surface	1.0	0.1	343	20.5	20.5	8.3	8.3	32.4	32.4	95.2	95.2	7.1	7.1	20.2	19.5	28	27	73	74	818859	806178	<0.2	<0.2	0.8	0.8
					2nd		1.0	0.1	354	20.5		8.3		32.4		95.2		7.1		20.2		27		73				<0.2		0.8	
					1st	Middle	4.2	0.2	31	20.6	20.6	8.3	8.3	32.4	32.4	95.6	95.6	7.1		18.4		27		74				<0.2		0.7	
					2nd		4.2	0.2	32	20.6		8.3		32.4		95.6		7.1		18.4		27		74				<0.2		0.8	
					1st	Bottom	7.4	0.2	36	20.6	20.6	8.2	8.2	32.4	32.4	96.5	96.5	7.2	7.2	19.8		27		74				<0.2		0.9	
					2nd		7.4	0.2	38	20.6		8.2		32.4		96.5		7.2		19.8		28		75				<0.2		0.8	
IM3	Fine	Moderate	16:44	8.4	1st	Surface	1.0	0.1	46	20.5	20.5	8.3	8.3	32.4	32.4	94.7	94.7	7.1	7.1	19.3	20.5	25	27	72	74	819391	806033	<0.2	<0.2	1.0	0.8
					2nd		1.0	0.1	46	20.5		8.3		32.4		94.7		7.1		19.3		25		73				<0.2		0.7	
					1st	Middle	4.2	0.2	30	20.6	20.6	8.3	8.3	32.4	32.4	94.8	94.8	7.1		18.2		27		74				<0.2		0.9	
					2nd		4.2	0.2	30	20.6		8.3		32.4		94.8		7.1		18.2		28		73				<0.2		0.7	
					1st	Bottom	7.4	0.2	0	20.6	20.6	8.2	8.2	32.4	32.4	95.1	95.1	7.1	7.1	23.9		28		75				<0.2		0.8	
					2nd		7.4	0.2	0	20.6		8.2		32.4		95.1		7.1		23.9		27		75				<0.2		0.6	
IM4	Fine	Moderate	16:36	8.4	1st	Surface	1.0	0.1	23	20.6	20.6	8.3	8.3	32.4	32.4	95.3	95.3	7.1	7.1	18.3	21.2	28	27	73	74	819572	805024	<0.2	<0.2	0.7	0.8
					2nd		1.0	0.1	23	20.6		8.3		32.4		95.3		7.1		18.6		28		73				<0.2		0.8	
					1st	Middle	4.2	0.0	216	20.6	20.6	8.3	8.3	32.4	32.4	95.7	95.7	7.1		20.8		28		74				<0.2		0.8	
					2nd		4.2	0.0	231	20.6		8.3		32.4		95.7		7.1		20.8		27		74				<0.2		0.8	
					1st	Bottom	7.4	0.1	39	20.6	20.6	8.2	8.2	32.4	32.4	97.1	97.1	7.2	7.2	24.2		26		75				<0.2		0.7	
					2nd		7.4	0.1	41	20.6		8.2		32.4		97.1		7.2		24.2		27		75				<0.2		0.7	
IM5	Fine	Moderate	16:27	6.9	1st	Surface	1.0	0.2	19	20.3	20.3	8.3	8.3	32.2	32.2	94.7	94.7	7.1	7.1	20.8	22.5	27	27	73	74	820572	804908	<0.2	<0.2	0.8	0.8
					2nd		1.0	0.2	20	20.3		8.3		32.2		94.7		7.1		20.8		28		73				<0.2		0.9	
					1st	Middle	3.5	0.2	36	20.3	20.3	8.3	8.3	32.2	32.2	94.7	94.7	7.1		22.3		28		74				<0.2		0.9	
					2nd		3.5	0.2	39	20.3		8.3		32.2		94.7		7.1		22.3		29		74				<0.2		0.8	
					1st	Bottom	5.9	0.2	24	20.3	20.3	8.3	8.3	32.2	32.2	95.1	95.1	7.1	7.1	24.5		23		75				<0.2		0.8	
					2nd		5.9	0.2	24	20.3		8.3		32.2		95.1		7.1		24.5		24		74				<0.2		0.8	
IM6	Fine	Moderate	16:18	7.3	1st	Surface	1.0	0.1	27	20.2	20.2	8.2	8.2	31.8	31.8	94.3	94.3	7.1	7.1	19.8	21.5	24	26	73	74	821063	805849	<0.2	<0.2	1.1	1.2
					2nd		1.0	0.1	29	20.2		8.2		31.8		94.3		7.1		19.8		25		73				<0.2		1.2	
					1st	Middle	3.7	0.1	27	20.2	20.2	8.3	8.3	31.8	31.8	94.4	94.4	7.1		20.2		26		74				<0.2		1.2	
					2nd		3.7	0.1	27	20.2		8.3		31.8		94.4		7.1		20.2		27		73				<0.2		1.2	
					1st	Bottom	6.3	0.1	43	20.2	20.2	8.2	8.2	31.9	31.9	96.1	96.1	7.2	7.2	24.4		27		76				<0.2		1.1	
					2nd		6.3	0.1	43	20.2		8.2		31.9		96.1		7.2		24.4		26		75				<0.2		1.1	
IM7	Fine	Moderate	16:08	8.2	1st	Surface	1.0	0.2	34	20.3	20.3	8.4	8.4	31.6	31.6	94.1	94.1	7.1	7.1	20.1	21.7	28	22	72	74	821357	806825	<0.2	<0.2	1.5	1.3
					2nd		1.0	0.2	35	20.3		8.4		31.6		94.1		7.1		20.1		27		73				<0.2		1.4	
					1st	Middle	4.1	0.3	37	20.3	20.3	8.4	8.4	31.6	31.6	94.7	94.7	7.1		21.2		18		73				<0.2		1.1	
					2nd		4.1	0.3	39	20.3		8.4		31.6		94.7		7.1		21.2		19		74				<0.2		1.2	
					1st	Bottom	7.2	0.2	40	20.3	20.3	8.3	8.3	31.6	31.6	95.2	95.2	7.2	7.2	23.8		19		75				<0.2		1.1	
					2nd		7.2	0.2	41	20.3		8.3		31.6		95.2		7.2		23.8		18		75				<0.2		1.2	
IM8	Misty	Moderate	16:33	8.2	1st	Surface	1.0	0.3	67	20.4	20.4	8.0	8.0	29.4	29.4	94.1	94.1	7.1	7.1	18.8	20.6	12	13	71	73	821709	807855	<0.2	<0.2	1.0	0.9
					2nd		1.0	0.3	67	20.4		8.0		29.4		94.0		7.1		18.8		11		72				<0.2		0.9	
					1st	Middle	4.1	0.3	59	20.4	20.4	8.0	8.0	29.4	29.4	94.1	94.1	7.1		20.6		12		73				<0.2		0.9	
					2nd		4.1	0.3	64	20.4		8.0		29.4		94.1		7.1		20.6		12		74				<0.2		0.9	
					1st	Bottom	7.2	0.2	49	20.5	20.5	8.0	8.0	29.5	29.5	94.4	94.4	7.2	7.2	22.7		14		75				<0.2		0.9	
					2nd		7.2	0.2	51	20.5		8.0		29.5		94.4		7.2		22.2		16		75				<0.2		0.8	

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 December 17 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Replicate	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
										Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Misty	Moderate	16:40	7.3	1st	Surface	1.0	0.3	85	20.6	20.6	8.0	8.0	29.6	29.6	94.9	94.9	7.2	7.2	11.4	15.1	10	14	72	74	822097	808835	<0.2	<0.2	1.0	0.9
					2nd		1.0	0.3	90	20.6		8.0		29.6		94.9		7.2		11.4		11		72				<0.2		0.9	
					1st	Middle	3.7	0.2	79	20.6	20.6	8.0	8.0	29.7	29.7	94.8	94.8	7.2		13.3		14		73				<0.2		0.9	
					2nd		3.7	0.2	86	20.6		8.0		29.7		94.8		7.2		13.4		15		74				<0.2		0.9	
					1st	Bottom	6.3	0.2	82	20.7	20.7	8.1	8.1	29.8	29.8	94.8	94.8	7.1	7.1	20.5		19		76				<0.2		0.9	
					2nd		6.3	0.2	85	20.7		8.1		29.8		94.8		7.1		20.6		17		75				<0.2		0.9	
IM10	Misty	Moderate	16:49	6.8	1st	Surface	1.0	0.3	90	21.1	21.1	8.0	8.0	29.9	29.9	93.7	93.7	7.0	7.0	11.5	11.9	14	14	71	73	822243	809822	<0.2	<0.2	1.0	1.0
					2nd		1.0	0.3	90	21.1		8.0		29.9		93.7		7.0		11.5		12		71				<0.2		1.0	
					1st	Middle	3.4	0.3	89	21.1	21.1	8.0	8.0	29.9	29.9	93.7	93.8	7.0		12.2		13		73				<0.2		1.0	
					2nd		3.4	0.3	89	21.1		8.0		30.0		93.8		7.0		12.2		13		73				<0.2		1.0	
					1st	Bottom	5.8	0.2	88	21.0	21.0	8.0	8.0	30.1	30.1	94.5	94.5	7.1	7.1	11.9		14		75				<0.2		1.0	
					2nd		5.8	0.2	95	21.0		8.0		30.1		94.5		7.1		12.0		15		75				<0.2		1.0	
IM11	Misty	Moderate	16:59	8.1	1st	Surface	1.0	0.2	93	20.8	20.8	8.0	8.0	29.9	29.9	94.4	94.4	7.1	7.1	9.1	9.5	9	9	72	73	821476	810542	<0.2	<0.2	1.0	1.0
					2nd		1.0	0.2	97	20.8		8.0		29.9		94.4		7.1		9.1		8		72				<0.2		0.9	
					1st	Middle	4.1	0.2	89	20.8	20.8	8.0	8.0	30.0	30.0	94.4	94.4	7.1		9.6		8		73				<0.2		0.9	
					2nd		4.1	0.2	96	20.8		8.0		30.0		94.4		7.1		9.7		10		73				<0.2		1.1	
					1st	Bottom	7.1	0.2	90	20.8	20.8	8.0	8.0	30.1	30.1	94.7	94.8	7.1	7.1	9.8		10		75				<0.2		1.1	
					2nd		7.1	0.2	96	20.8		8.0		30.1		94.8		7.1		9.8		11		75				<0.2		0.9	
IM12	Misty	Moderate	17:05	8.8	1st	Surface	1.0	0.2	79	20.8	20.8	8.0	8.0	29.9	29.9	93.0	93.0	7.0	7.0	8.4	9.2	12	12	72	73	821143	811511	<0.2	<0.2	0.9	0.9
					2nd		1.0	0.2	84	20.8		8.0		29.9		93.0		7.0		8.2		10		71				<0.2		1.0	
					1st	Middle	4.4	0.2	86	20.8	20.8	8.0	8.0	30.0	30.0	93.0	93.0	7.0		9.1		13		74				<0.2		1.0	
					2nd		4.4	0.2	91	20.8		8.0		30.0		93.0		7.0		9.0		11		73				<0.2		0.9	
					1st	Bottom	7.8	0.2	93	20.8	20.8	8.0	8.0	30.1	30.1	93.7	93.8	7.0	7.0	10.2		12		75				<0.2		0.9	
					2nd		7.8	0.2	95	20.8		8.0		30.1		93.8		7.0		10.3		12		75				<0.2		0.8	
SR2	Misty	Moderate	17:30	4.4	1st	Surface	1.0	0.1	86	21.0	21.0	7.9	7.9	30.2	30.2	93.0	93.0	7.0	7.0	5.4	7.5	8	8	71	72	821442	814181	<0.2	<0.2	0.8	0.8
					2nd		1.0	0.1	89	21.0		7.9		30.2		93.0		7.0		5.6		6		72				<0.2		0.7	
					1st	Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
					2nd		-	-	-	-		-		-		-		-		-		-		-				-		-	
					1st	Bottom	3.4	0.1	97	21.0	21.0	7.9	7.9	30.4	30.4	94.6	94.7	7.1	7.1	9.4		8		73				<0.2		0.8	
					2nd		3.4	0.1	99	21.0		7.9		30.4		94.7		7.1		9.4		9		73				<0.2		0.9	
SR3	Misty	Moderate	16:28	9.1	1st	Surface	1.0	0.3	64	20.7	20.7	8.0	8.0	28.9	28.9	93.6	93.6	7.1	7.1	12.8	16.0	13	18	-	-	822133	807573	-	-	-	-
					2nd		1.0	0.3	64	20.7		8.0		28.9		93.6		7.1		12.9		14		-				-		-	
					1st	Middle	4.6	0.3	60	20.7	20.7	8.0	8.0	28.9	28.9	93.6	93.6	7.1		16.3		19		-				-		-	
					2nd		4.6	0.3	62	20.7		8.0		28.9		93.6		7.1		16.4		19		-				-		-	
					1st	Bottom	8.1	0.3	58	20.8	20.8	8.0	8.0	29.0	29.0	93.9	94.0	7.1	7.1	18.9		23		-				-		-	
					2nd		8.1	0.3	62	20.8		8.0		29.0		94.0		7.1		18.9		22		-				-		-	
SR4A	Fine	Calm	17:42	8.9	1st	Surface	1.0	0.2	73	20.4	20.4	8.2	8.2	32.1	32.1	95.2	95.2	7.1	7.1	17.3	18.0	19	20	-	-	817165	807834	-	-	-	-
					2nd		1.0	0.2	77	20.4		8.2		32.1		95.2		7.1		17.3		18		-				-		-	
					1st	Middle	4.5	0.2	72	20.4	20.4	8.2	8.2	32.1	32.1	95.2	95.2	7.1		17.6		21		-				-		-	
					2nd		4.5	0.2	74	20.4		8.2		32.1		95.2		7.1		17.6		19		-				-		-	
					1st	Bottom	7.9	0.2	74	20.4	20.4	8.2	8.2	32.2	32.2	95.7	95.7	7.2	7.2	19.2		21		-				-		-	
					2nd		7.9	0.2	74	20.4		8.2		32.2		95.7		7.2		19.2		21		-				-		-	
SR5A	Fine	Calm	17:57	4.7	1st	Surface	1.0	0.1	288	20.3	20.3	8.1	8.1	31.9	31.9	96.3	96.3	7.2	7.2	13.2	12.5	16	20	-	-	816566	810700	-	-	-	-
					2nd		1.0	0.1	302	20.3		8.1		31.9		96.3		7.2		13.2		18		-				-		-	
					1st	Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
					2nd		-	-	-	-		-		-		-		-		-		-		-				-		-	
					1st	Bottom	3.7	0.1	239	20.3	20.3	8.1	8.1	31.9	31.9	97.7	97.7	7.3	7.3	11.7		22		-				-		-	
					2nd		3.7	0.1	252	20.3		8.1		31.9		97.7		7.3		11.7		22		-				-		-	
SR6	Fine	Calm	18:18	4.7	1st	Surface	1.0	0.1	1	20.7	20.7	8.2	8.2	31.9	31.9	97.5	97.5	7.3	7.3	7.3	7.2	9	9	-	-	817922	814687	-	-	-	-
					2nd		1.0	0.1	1	20.7		8.2		31.9		97.5		7.3		7.3		9		-				-		-	
					1st	Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
					2nd		-	-	-	-		-		-		-		-		-		-		-				-		-	
					1st	Bottom	3.7	0.1	24	20.7	20.7	8.1	8.1	31.8	31.8	98.6	98.6	7.3	7.3	7.1		8		-				-		-	
					2nd		3.7	0.1	24	20.7		8.1		31.8		98.6		7.3		7.1		8		-				-		-	
SR7	Misty	Moderate	18:21	18.3	1st	Surface	1.0	0.2	60	21.6	21.6	7.9	7.9	29.3	29.3	88.8	88.8	6.6	6.6	4.8	5.4	6	8	-	-	823647	823737	-	-	-	-
					2nd		1.0	0.2	61	21.6		7.9		29.3		88.8		6.6		4.9		6		-				-		-	
					1st	Middle	9.2	0.2	58	21.6	21.6	7.9	7.9	29.5	29.5	88.6	88.6	6.6		5.6		7		-				-		-	
					2nd		9.2	0.2	62	21.6		7.9		29.5		88.6		6.6		5.3		6		-				-		-	
					1st	Bottom	17.3	0.1	36	21.6	21.6	7.9	7.9	29.7	29.7	90.8	90.9	6.7	6.7	6.0		11		-				-		-	
					2nd		17.3	0.1	36	21.6		7.9		29.7		90.9		6.7		5.9		10		-				-		-	
SR8	Misty	Moderate	17:15	3.6	1st	Surface	1.0	-	-	20.7	20.7	8.0	8.0	30.1	30.1	94.6	94.7	7.1	7.1	17.7	17.6	17	20	-	-	820246	811418	-	-	-	-
					2nd		1.0	-	-	20.7		8.0		30.1		94.7		7.1		17.9		18		-				-		-	
					1st	Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
					2nd		-	-	-	-		-		-		-		-		-		-		-				-		-	
					1st	Bottom	2.6	-	-	20.7	20.7	8.0	8.0	30.1	30.1	95.3	95.3	7.2	7.2	17.4		23		-				-		-	
					2nd		2.6	-	-	20.7		8.0		30.1		95.3		7.2		17.3		22		-				-		-	

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 December 17 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Replicate	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
										Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Moderate	12:13	8.2	1st	Surface	1.0	0.3	30	20.2	20.2	8.2	8.2	31.8	31.8	94.2	94.2	7.1	7.1	19.8	21.9	20	23	73	75	815605	804255	<0.2	<0.2	1.0	1.0
					2nd		1.0	0.3	31	20.2		8.2		31.8		94.2		7.1		19.8		19		73				<0.2		1.1	
					1st	Middle	4.1	0.4	36	20.2	20.2	8.2	8.2	31.8	31.8	94.0	94.0	7.1		21.0		19		74				<0.2		1.0	
					2nd		4.1	0.5	38	20.2		8.2		31.8		94.0		7.1		21.0		19		74				<0.2		1.0	
					1st	Bottom	7.2	0.4	42	20.3	20.3	8.2	8.2	32.1	32.1	94.1	94.1	7.0	7.0	25.0		30		77				<0.2		1.0	
					2nd		7.2	0.5	46	20.3		8.2		32.1		94.1		7.0		25.0		30		77				<0.2		0.9	
C2	Misty	Moderate	13:02	11.5	1st	Surface	1.0	0.3	339	20.9	20.9	7.9	7.9	28.0	28.0	92.1	92.1	7.0	7.0	7.4	14.4	7	10	72	74	825660	806934	<0.2	<0.2	1.4	1.4
					2nd		1.0	0.3	355	20.9		7.9		28.0		92.1		7.0		7.4		6		72				<0.2		1.6	
					1st	Middle	5.8	0.3	348	21.0	21.0	7.9	7.9	28.5	28.5	91.1	91.1	6.9		13.1		8		73				<0.2		1.3	
					2nd		5.8	0.3	353	21.0		7.9		28.5		91.1		6.9		13.2		9		74				<0.2		1.5	
					1st	Bottom	10.5	0.3	358	21.0	21.0	7.9	7.9	28.9	28.9	91.5	91.6	6.9	6.9	22.6		15		75				<0.2		1.4	
					2nd		10.5	0.3	329	21.0		7.9		28.9		91.6		6.9		22.7		15		76				<0.2		1.3	
C3	Misty	Moderate	11:14	11.8	1st	Surface	1.0	0.2	263	21.0	21.0	7.9	7.9	31.3	31.3	91.1	91.1	6.8	6.8	8.5	10.4	9	10	72	74	822115	817779	<0.2	<0.2	1.1	0.9
					2nd		1.0	0.2	280	21.0		7.9		31.3		91.1		6.8		8.6		8		72				<0.2		0.9	
					1st	Middle	5.9	0.2	248	21.1	21.1	7.9	7.9	31.4	31.4	90.6	90.6	6.7		9.7		10		74				<0.2		0.8	
					2nd		5.9	0.2	267	21.1		7.9		31.4		90.6		6.7		9.8		10		74				<0.2		0.9	
					1st	Bottom	10.8	0.2	256	21.1	21.1	7.9	7.9	31.4	31.4	90.8	90.8	6.7	6.7	12.8		11		76				<0.2		0.8	
					2nd		10.8	0.2	266	21.1		7.9		31.4		90.8		6.7		12.9		12		76				<0.2		0.7	
IM1	Fine	Moderate	12:30	6.9	1st	Surface	1.0	0.4	29	20.2	20.2	8.2	8.2	31.5	31.5	94.7	94.7	7.1	7.1	15.1	16.8	15	17	73	74	818333	806443	<0.2	<0.2	1.1	1.1
					2nd		1.0	0.4	29	20.2		8.2		31.5		94.7		7.1		15.1		15		73				<0.2		1.3	
					1st	Middle	3.5	0.4	29	20.2	20.2	8.2	8.2	31.5	31.5	94.7	94.7	7.1		15.9		16		74				<0.2		1.3	
					2nd		3.5	0.4	30	20.2		8.2		31.5		94.7		7.1		15.9		15		74				<0.2		1.0	
					1st	Bottom	5.9	0.4	6	20.2	20.2	8.2	8.2	31.8	31.8	95.5	95.5	7.2	7.2	19.3		18		76				<0.2		1.0	
					2nd		5.9	0.4	6	20.2		8.2		31.8		95.5		7.2		19.2		20		76				<0.2		1.0	
IM2	Fine	Moderate	12:38	8.2	1st	Surface	1.0	0.4	20	20.3	20.2	8.2	8.2	31.6	31.6	93.5	93.5	7.0	7.0	20.1	21.3	18	21	73	74	818875	806184	<0.2	<0.2	1.3	1.2
					2nd		1.0	0.4	20	20.2		8.2		31.6		93.5		7.0		20.1		19		73				<0.2		1.3	
					1st	Middle	4.1	0.3	15	20.2	20.2	8.2	8.2	31.6	31.6	93.5	93.5	7.0		18.8		18		74				<0.2		1.1	
					2nd		4.1	0.4	15	20.2		8.2		31.6		93.5		7.0		18.8		19		74				<0.2		1.0	
					1st	Bottom	7.2	0.3	8	20.2	20.2	8.1	8.1	31.6	31.6	94.6	94.6	7.1	7.1	25.0		26		76				<0.2		1.1	
					2nd		7.2	0.3	8	20.2		8.1		31.6		94.6		7.1		25.0		25		75				<0.2		1.2	
IM3	Fine	Moderate	12:45	7.5	1st	Surface	1.0	0.4	26	20.5	20.5	8.3	8.3	31.7	31.7	93.6	93.6	7.0	7.0	13.3	15.0	13	15	73	74	819389	805997	<0.2	<0.2	1.1	1.1
					2nd		1.0	0.4	26	20.5		8.3		31.7		93.6		7.0		13.3		14		73				<0.2		0.9	
					1st	Middle	3.8	0.3	32	20.5	20.5	8.2	8.2	31.7	31.7	93.8	93.8	7.0		15.3		15		74				<0.2		1.1	
					2nd		3.8	0.3	32	20.5		8.2		31.7		93.8		7.0		15.3		15		74				<0.2		1.0	
					1st	Bottom	6.5	0.3	41	20.3	20.3	8.2	8.2	31.7	31.7	94.6	94.6	7.1	7.1	16.4		18		75				<0.2		1.3	
					2nd		6.5	0.3	43	20.3		8.2		31.7		94.6		7.1		16.4		17		75				<0.2		1.2	
IM4	Fine	Moderate	12:53	7.0	1st	Surface	1.0	0.3	8	20.5	20.5	8.2	8.2	31.7	31.7	92.1	92.1	6.9	6.9	12.9	13.6	14	16	73	74	819579	805025	<0.2	<0.2	1.2	1.2
					2nd		1.0	0.4	8	20.5		8.2		31.7		92.1		6.9		12.9		14		73				<0.2		1.2	
					1st	Middle	3.5	0.2	5	20.8	20.8	8.2	8.2	31.9	31.9	92.1	92.1	6.8		13.6		17		74				<0.2		1.2	
					2nd		3.5	0.2	5	20.8		8.2		31.9		92.1		6.8		13.6		18		74				<0.2		1.2	
					1st	Bottom	6.0	0.3	7	20.8	20.8	8.2	8.2	31.9	31.9	93.6	93.6	6.9	6.9	14.3		16		75				<0.2		1.0	
					2nd		6.0	0.3	7	20.8		8.2		31.9		93.6		6.9		14.3		17		75				<0.2		1.2	
IM5	Fine	Moderate	13:05	6.4	1st	Surface	1.0	0.4	5	20.6	20.6	8.2	8.2	31.8	31.8	92.5	92.5	6.9	6.9	17.3	17.6	19	19	73	74	820551	804933	<0.2	<0.2	1.2	1.1
					2nd		1.0	0.4	5	20.6		8.2		31.8		92.5		6.9		17.3		18		74				<0.2		1.1	
					1st	Middle	3.2	0.3	9	20.6	20.6	8.2	8.2	31.8	31.8	92.8	92.8	6.9		18.7		19		74				<0.2		1.0	
					2nd		3.2	0.3	9	20.6		8.2		31.8		92.8		6.9		18.7		19		74				<0.2		1.0	
					1st	Bottom	5.4	0.3	3	20.6	20.6	8.1	8.1	31.8	31.8	95.8	95.8	7.1	7.1	16.9		17		75				<0.2		1.3	
					2nd		5.4	0.3	3	20.6		8.1		31.8		95.8		7.1		16.9		19		75				<0.2		1.2	
IM6	Fine	Moderate	13:13	6.6	1st	Surface	1.0	0.3	42	20.6	20.6	8.2	8.2	31.5	31.5	93.4	93.4	7.0	7.0	16.5	21.1	14	19	74	74	821066	805856	<0.2	<0.2	1.4	1.1
					2nd		1.0	0.3	42	20.6		8.2		31.5		93.4		7.0		16.5		14		73				<0.2		1.3	
					1st	Middle	3.3	0.3	6	20.4	20.4	8.2	8.2	31.9	31.9	93.6	93.6	7.0		22.5		18		74				<0.2		1.1	
					2nd		3.3	0.3	6	20.4		8.2		31.9		93.6		7.0		22.5		18		74				<0.2		0.9	
					1st	Bottom	5.6	0.2	346	20.4	20.4	8.2	8.2	32.0	32.0	94.2	94.2	7.0	7.0	24.3		24		75				<0.2		1.0	
					2nd		5.6	0.2	318	20.4		8.2		32.0		94.2		7.0		24.3		24		76				<0.2		1.0	
IM7	Fine	Moderate	13:25	7.9	1st	Surface	1.0	0.2	62	20.6	20.6	8.2	8.2	31.6	31.6	92.8	92.8	6.9	7.0	16.4	17.8	19	21	73	74	821329	806864	<0.2	<0.2	1.1	1.2
					2nd		1.0	0.3	65	20.6		8.2		31.6		92.8		6.9		16.4		19		73				<0.2		1.1	
					1st	Middle	4.0	0.2	31	20.6	20.6	8.3	8.3	31.8	31.8	93.3	93.4	7.0		16.2		22		74				<0.2		1.2	
					2nd		4.0	0.2	33	20.6		8.3		31.8		93.4		7.0		16.2		20		74				<0.2		1.1	
					1st	Bottom	6.9	0.2	27	20.6	20.6	8.2	8.2	31.7	31.7	94.8	94.8	7.1	7.1	20.8		22		75				<0.2		1.5	
					2nd		6.9	0.2	29	20.6		8.2		31.7		94.8		7.1		20.8		21		75				<0.2		1.2	
IM8	Misty	Moderate	12:35	8.0	1st	Surface	1.0	0.2	27	20.9	20.9	7.9	7.9	29.5	29.5	93.0	93.0	7.0	7.0	11.0	13.3	10	11	72	74	821697	807818	<0.2	<0.2	1.2	1.3
					2nd		1.0	0.2	28	20.9		7.9		29.5		93.0		7.0		10.9		12		72				<0.2		1.4	
					1st	Middle	4.0	0.3	10	21.1	21.1	8.0	8.0	30.0	30.0	92.0	92.0	6.9		13.4		10		74				<0.2		1.4	
					2nd		4.0	0.3	10	21.1		8.0		30.0		91.9		6.9		13.2		11		74				<0.2		1.4	
					1st	Bottom	7.0	0.3	11	21.1	21.1	8.0	8.0	30.2	30.2	92.4	92.5	6.9	6.9	15.7		11		76				<0.2		1.4	
					2nd		7.0	0.3	11	21.1		8.0		30.2		92.5		6.9		15.3		12		76				<0.2		1.2	

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 09 December 17 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Replicate	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
										Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Misty	Moderate	12:27	6.9	1st	Surface	1.0	0.3	337	21.0	21.0	7.9	7.9	29.8	29.8	92.4	92.4	6.9	6.9	18.9	21.3	12	14	72	74	822096	808817	<0.2	<0.2	1.4	1.4
					2nd		1.0	0.3	310	21.0		7.9		29.8		92.4		6.9		18.7		13		72				<0.2		1.4	
					1st	Middle	3.5	0.3	329	21.1	21.1	7.9	7.9	30.5	30.5	92.1	92.1	6.9		20.2		15		73				<0.2		1.4	
					2nd		3.5	0.3	346	21.1		7.9		30.5		92.1		6.9		20.6		13		74				<0.2		1.2	
					1st	Bottom	5.9	0.3	330	21.1	21.1	7.9	7.9	30.6	30.6	92.3	92.3	6.9	6.9	24.4		16		76				<0.2		1.4	
					2nd		5.9	0.3	350	21.1		7.9		30.6		92.3		6.9		24.7		15		76				<0.2		1.3	
IM10	Misty	Moderate	12:19	6.3	1st	Surface	1.0	0.5	315	21.0	21.0	7.9	7.9	30.6	30.6	91.8	91.8	6.9	6.9	11.4	14.4	12	14	71	74	822224	809829	<0.2	<0.2	1.0	1.0
					2nd		1.0	0.5	337	21.0		7.9		30.6		91.8		6.9		11.5		11		72				<0.2		1.2	
					1st	Middle	3.2	0.4	322	21.0	21.0	7.9	7.9	30.7	30.7	91.4	91.4	6.8		17.6		13		74				<0.2		1.0	
					2nd		3.2	0.5	334	21.0		7.9		30.7		91.4		6.8		18.0		11		74				<0.2		1.0	
					1st	Bottom	5.3	0.4	314	21.0	21.0	7.9	7.9	30.7	30.7	92.3	92.4	6.9	6.9	14.0		16		75				<0.2		1.0	
					2nd		5.3	0.4	331	21.0		7.9		30.7		92.4		6.9		13.7		18		76				<0.2		1.0	
IM11	Misty	Moderate	12:08	7.8	1st	Surface	1.0	0.4	292	20.6	20.6	8.0	8.0	30.4	30.4	94.0	94.0	7.1	7.1	13.2	20.8	14	20	72	74	821509	810548	<0.2	<0.2	1.0	0.9
					2nd		1.0	0.4	297	20.6		8.0		30.4		94.0		7.1		13.7		15		72				<0.2		0.9	
					1st	Middle	3.9	0.3	293	20.5	20.5	8.0	8.0	30.5	30.5	93.1	93.1	7.0		22.3		20		74				<0.2		1.0	
					2nd		3.9	0.4	300	20.5		8.0		30.5		93.1		7.0		22.4		20		74				<0.2		0.8	
					1st	Bottom	6.8	0.3	298	20.5	20.5	8.0	8.0	30.6	30.6	93.2	93.2	7.0	7.0	26.6		24		76				<0.2		0.9	
					2nd		6.8	0.3	304	20.5		8.0		30.6		93.2		7.0		26.4		24		76				<0.2		0.9	
IM12	Misty	Moderate	12:01	6.7	1st	Surface	1.0	0.5	286	20.6	20.6	8.0	8.0	30.4	30.4	94.1	94.1	7.1	7.1	9.5	18.0	8	10	72	74	821179	811520	<0.2	<0.2	0.9	1.0
					2nd		1.0	0.5	287	20.6		8.0		30.4		94.0		7.1		9.5		8		72				<0.2		0.8	
					1st	Middle	3.4	0.4	286	20.6	20.6	8.0	8.0	30.5	30.5	93.4	93.4	7.0		15.2		9		73				<0.2		1.1	
					2nd		3.4	0.5	289	20.6		8.0		30.5		93.4		7.0		15.3		9		74				<0.2		1.0	
					1st	Bottom	5.7	0.4	282	20.6	20.6	8.0	8.0	30.6	30.6	93.4	93.4	7.0	7.0	29.1		12		75				<0.2		1.0	
					2nd		5.7	0.4	305	20.6		8.0		30.6		93.4		7.0		29.2		12		76				<0.2		0.9	
SR2	Misty	Moderate	11:33	3.6	1st	Surface	1.0	0.1	299	20.9	20.9	7.9	7.9	30.7	30.7	92.2	92.2	6.9	6.9	18.9	21.1	14	15	72	73	821480	814190	<0.2	<0.2	0.9	1.0
					2nd		1.0	0.2	308	20.9		7.9		30.7		92.2		6.9		18.7		13		72				<0.2		1.1	
					1st	Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
					2nd		-	-	-	-		-		-		-		-		-		-		-				-		-	
					1st	Bottom	2.6	0.1	297	20.9	20.9	7.9	7.9	30.7	30.7	92.3	92.3	6.9	6.9	23.4		15		74				<0.2		0.9	
					2nd		2.6	0.1	308	20.9		7.9		30.7		92.3		6.9		23.4		17		74				<0.2		0.9	
SR3	Misty	Moderate	12:42	8.5	1st	Surface	1.0	0.2	347	20.8	20.8	7.9	7.9	29.3	29.3	93.3	93.3	7.0	7.0	8.8	11.1	13	15	-	-	822144	807557	-	-	-	-
					2nd		1.0	0.2	357	20.8		7.9		29.3		93.2		7.0		8.8		11		-				-		-	
					1st	Middle	4.3	0.2	345	20.8	20.8	7.9	7.9	29.5	29.5	92.8	92.8	7.0		10.9		14		-				-		-	
					2nd		4.3	0.2	355	20.8		7.9		29.5		92.7		7.0		11.0		14		-				-		-	
					1st	Bottom	7.5	0.1	330	20.8	20.8	7.9	7.9	29.7	29.7	92.9	92.9	7.0	7.0	13.7		17		-				-		-	
					2nd		7.5	0.2	304	20.8		7.9		29.7		92.9		7.0		13.4		18		-				-		-	
SR4A	Fine	Calm	11:53	8.2	1st	Surface	1.0	0.2	256	20.2	20.2	8.3	8.3	31.8	31.8	92.1	92.1	6.9	6.9	15.0	15.3	16	20	-	-	817195	807781	-	-	-	-
					2nd		1.0	0.2	274	20.2		8.3		31.8		92.1		6.9		15.0		15		-				-		-	
					1st	Middle	4.1	0.2	258	20.2	20.2	8.3	8.3	31.8	31.8	92.1	92.1	6.9		15.8		15		-				-		-	
					2nd		4.1	0.2	267	20.2		8.3		31.8		92.1		6.9		15.9		16		-				-		-	
					1st	Bottom	7.2	0.2	253	20.2	20.2	8.3	8.3	31.8	31.8	92.7	92.7	7.0	7.0	15.1		29		-				-		-	
					2nd		7.2	0.2	256	20.2		8.3		31.8		92.7		7.0		15.1		30		-				-		-	
SR5A	Fine	Calm	11:37	3.6	1st	Surface	1.0	0.2	297	20.2	20.2	8.3	8.3	31.8	31.8	93.3	93.3	7.0	7.0	15.6	17.4	16	21	-	-	816581	810719	-	-	-	-
					2nd		1.0	0.2	310	20.2		8.3		31.8		93.3		7.0		15.6		15		-				-		-	
					1st	Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
					2nd		-	-	-	-		-		-		-		-		-		-		-				-		-	
					1st	Bottom	2.6	0.2	306	20.1	20.1	8.2	8.2	31.8	31.8	94.2	94.2	7.1	7.1	19.2		27		-				-		-	
					2nd		2.6	0.2	335	20.1		8.2		31.8		94.2		7.1		19.2		27		-				-		-	
SR6	Fine	Calm	11:14	4.1	1st	Surface	1.0	0.1	255	20.2	20.2	8.1	8.1	30.6	30.6	92.9	92.9	7.0	7.0	10.3	10.5	14	14	-	-	817876	814676	-	-	-	-
					2nd		1.0	0.2	277	20.2		8.1		30.6		92.9		7.0		10.3		14		-				-		-	
					1st	Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
					2nd		-	-	-	-		-		-		-		-		-		-		-				-		-	
					1st	Bottom	3.1	0.1	259	20.2	20.2	8.0	8.0	30.4	30.4	93.1	93.1	7.1	7.1	10.6		14		-				-		-	
					2nd		3.1	0.1	276	20.2		8.0		30.4		93.1		7.1		10.6		13		-				-		-	
SR7	Misty	Moderate	10:46	17.9	1st	Surface	1.0	0.2	46	21.5	21.5	7.8	7.8	30.6	30.6	89.1	89.1	6.6	6.6	6.2	7.1	9	10	-	-	823634	823749	-	-	-	-
					2nd		1.0	0.2	48	21.5		7.8		30.6		89.1		6.6		6.3		8		-				-		-	
					1st	Middle	9.0	0.2	36	21.5	21.5	7.8	7.8	31.1	31.1	89.1	89.1	6.6		6.6		10		-				-		-	
					2nd		9.0	0.2	36	21.5		7.8		31.1		89.1		6.6		6.7		11		-				-		-	
					1st	Bottom	16.9	0.2	16	21.4	21.4	7.8	7.8	31.4	31.4	89.8	89.8	6.6	6.6	8.4		9		-				-		-	
					2nd		16.9	0.2	16	21.4		7.8		31.4		89.8		6.6		8.5		10		-				-		-	
SR8	Misty	Moderate	11:52	3.4	1st	Surface	1.0	-	-	20.7	20.7	7.9	7.9	30.2	30.2	94.1	94.1	7.1	7.1	12.7	13.3	14	13	-	-	820246	811418	-	-	-	-
					2nd		1.0	-	-	20.7		7.9		30.2		94.1		7.1		12.6		13		-				-		-	
					1st	Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
					2nd		-	-	-	-		-		-		-		-		-		-		-				-		-	
					1st	Bottom	2.4	-	-	20.6	20.6	7.9	7.9	30.3	30.3	93.4	93.4	7.0	7.0	13.9		12		-				-		-	
					2nd		2.4	-	-	20.6		7.9		30.3		93.4		7.0		14.0		13		-				-		-	

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 12 December 17 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	08:17	8.7	Surface	1.0	0.3	198	20.5	20.5	8.2	8.2	32.7	32.7	95.1	95.1	7.1	7.1	4.4	5.5	6	6	73	74	815635	804256	<0.2	<0.2	0.7	0.7
						1.0	0.3	205	20.5		8.2		32.7		95.1		7.1		4.4		6		72				<0.2		0.7	
					Middle	4.4	0.3	219	20.5	20.5	8.1	8.1	32.7	32.7	95.0	95.0	7.1		5.8		6		73				<0.2		0.7	
						4.4	0.3	226	20.5		8.1		32.7		95.0		7.1		5.8		5		73				<0.2		0.7	
					Bottom	7.7	0.2	231	20.5	20.5	8.0	8.0	32.7	32.7	95.1	95.1	7.1	7.1	6.4		5		75				<0.2		0.6	
						7.7	0.2	233	20.5		8.0		32.7		95.1		7.1		6.4		6		75				<0.2		0.7	
C2	Fine	Moderate	09:19	11.2	Surface	1.0	0.5	170	20.5	20.5	7.9	7.9	29.3	29.3	91.6	91.6	7.0	7.0	8.1	11.5	6	8	73	74	825703	806933	<0.2	<0.2	1.4	1.2
						1.0	0.6	176	20.5		7.9		29.3		91.6		7.0		8.1		7		73				<0.2		1.3	
					Middle	5.6	0.4	174	20.8	20.8	7.9	7.9	29.9	29.9	91.6	91.6	6.9		12.0		8		74				<0.2		1.2	
						5.6	0.5	186	20.8		7.9		29.9		91.6		6.9		12.0		8		74				<0.2		1.2	
					Bottom	10.2	0.3	176	20.8	20.8	7.9	7.9	30.2	30.2	91.7	91.7	6.9	6.9	14.5		10		75				<0.2		1.0	
						10.2	0.3	190	20.8		7.9		30.2		91.7		6.9		14.5		8		75				<0.2		1.0	
C3	Fine	Moderate	07:24	11.6	Surface	1.0	0.1	49	21.2	21.2	7.8	7.8	31.8	31.8	88.2	88.2	6.5	6.5	2.5	2.6	5	5	73	75	822106	817809	<0.2	<0.2	0.7	0.7
						1.0	0.1	49	21.2		7.8		31.8		88.2		6.5		2.5		5		73				<0.2		0.7	
					Middle	5.8	0.1	56	21.2	21.2	7.8	7.8	31.8	31.8	88.1	88.1	6.5		2.6		5		74				<0.2		0.7	
						5.8	0.1	56	21.2		7.8		31.8		88.1		6.5		2.6		5		75				<0.2		0.8	
					Bottom	10.6	0.1	51	21.2	21.2	7.8	7.8	31.8	31.8	88.2	88.2	6.5	6.5	2.6		5		76				<0.2		0.6	
						10.6	0.1	51	21.2		7.8		31.8		88.2		6.5		2.6		5		77				<0.2		0.6	
IM1	Cloudy	Moderate	08:35	7.3	Surface	1.0	0.2	184	20.0	20.0	8.1	8.1	32.5	32.5	95.2	95.2	7.1	7.1	5.0	6.2	6	7	72	73	818374	806433	<0.2	<0.2	0.6	0.8
						1.0	0.2	198	20.0		8.1		32.5		95.2		7.1		5.0		5		72				<0.2		0.7	
					Middle	3.7	0.2	180	20.0	20.0	8.1	8.1	32.5	32.5	94.9	94.9	7.1		6.4		6		73				<0.2		0.8	
						3.7	0.3	189	20.0		8.1		32.5		94.9		7.1		6.4		8		73				<0.2		0.9	
					Bottom	6.3	0.2	174	20.1	20.1	8.0	8.0	32.6	32.6	95.0	95.0	7.1	7.1	7.1		9		75				<0.2		0.8	
						6.3	0.2	175	20.1		8.0		32.6		95.0		7.1		7.1		9		75				<0.2		0.8	
IM2	Cloudy	Moderate	08:43	8.2	Surface	1.0	0.2	184	20.1	20.1	8.1	8.1	32.5	32.5	94.9	94.9	7.1	7.1	5.5	6.9	8	8	72	74	818854	806201	<0.2	<0.2	0.8	0.8
						1.0	0.2	197	20.1		8.1		32.5		94.9		7.1		5.5		8		72				<0.2		0.8	
					Middle	4.1	0.2	190	20.1	20.1	8.1	8.1	32.5	32.5	94.8	94.8	7.1		6.7		9		74				<0.2		0.8	
						4.1	0.2	200	20.1		8.1		32.5		94.8		7.1		6.7		8		74				<0.2		0.7	
					Bottom	7.2	0.2	184	20.1	20.1	7.9	7.9	32.5	32.5	95.2	95.2	7.1	7.1	8.6		8		75				<0.2		0.7	
						7.2	0.2	191	20.1		7.9		32.5		95.2		7.1		8.6		8		76				<0.2		0.7	
IM3	Cloudy	Moderate	08:50	8.2	Surface	1.0	0.3	192	20.1	20.1	8.2	8.2	32.5	32.5	95.2	95.2	7.1	7.1	4.4	6.8	7	8	73	74	819440	805991	<0.2	<0.2	0.7	0.8
						1.0	0.3	204	20.1		8.2		32.5		95.2		7.1		4.4		8		73				<0.2		0.7	
					Middle	4.1	0.3	204	20.1	20.1	8.1	8.1	32.5	32.5	95.1	95.1	7.1		6.9		7		73				<0.2		0.9	
						4.1	0.3	209	20.1		8.1		32.5		95.1		7.1		6.9		9		74				<0.2		0.7	
					Bottom	7.2	0.2	196	20.1	20.1	7.9	7.9	32.5	32.5	95.6	95.6	7.2	7.2	9.1		9		75				<0.2		0.8	
						7.2	0.2	206	20.1		7.9		32.5		95.6		7.2		9.1		8		75				<0.2		0.8	
IM4	Cloudy	Moderate	08:56	7.6	Surface	1.0	0.4	193	20.1	20.1	8.2	8.2	32.5	32.5	95.5	95.5	7.2	7.2	7.9	9.5	8	14	73	74	819543	805019	<0.2	<0.2	0.7	0.7
						1.0	0.4	203	20.1		8.2		32.5		95.5		7.2		7.9		10		73				<0.2		0.7	
					Middle	3.8	0.4	192	20.1	20.1	8.1	8.1	32.5	32.5	95.4	95.4	7.1		9.4		17		73				<0.2		0.7	
						3.8	0.4	208	20.1		8.1		32.5		95.4		7.1		9.4		16		73				<0.2		0.7	
					Bottom	6.6	0.4	189	20.1	20.1	8.0	8.0	32.5	32.5	95.7	95.7	7.2	7.2	11.1		16		75				<0.2		0.7	
						6.6	0.4	194	20.1		8.0		32.5		95.7		7.2		11.1		17		75				<0.2		0.7	
IM5	Cloudy	Moderate	09:06	6.4	Surface	1.0	0.3	187	19.8	19.8	8.2	8.2	32.2	32.2	95.2	95.2	7.2	7.2	6.4	8.4	8	11	72	75	820548	804908	<0.2	<0.2	1.0	1.0
						1.0	0.4	194	19.8		8.2		32.2		95.2		7.2		6.4		9		73				<0.2		1.1	
					Middle	3.2	0.3	194	19.9	19.9	8.2	8.2	32.4	32.4	95.2	95.2	7.2		8.2		10		75				<0.2		1.0	
						3.2	0.3	197	19.9		8.2		32.4		95.2		7.2		8.2		11		75				<0.2		1.0	
					Bottom	5.4	0.3	193	20.0	20.0	8.1	8.1	32.4	32.4	95.4	95.4	7.2	7.2	10.5		13		76				<0.2		0.8	
						5.4	0.3	208	20.0		8.1		32.4		95.4		7.2		10.5		13		76				<0.2		0.9	
IM6	Cloudy	Moderate	09:13	6.6	Surface	1.0	0.3	196	19.8	19.8	8.2	8.2	31.9	31.9	95.3	95.3	7.2	7.2	7.4	8.2	10	11	72	74	821061	805851	<0.2	<0.2	1.0	1.0
						1.0	0.3	204	19.8		8.2		31.9		95.3		7.2		7.4		10		73				<0.2		1.0	
					Middle	3.3	0.2	181	19.8	19.8	8.1	8.1	32.2	32.2	95.2	95.2	7.2		8.0		10		74				<0.2		1.1	
						3.3	0.3	198	19.8		8.1		32.2		95.2		7.2		7.9		10		75				<0.2		1.1	
					Bottom	5.6	0.1	204	19.9	19.9	8.0	8.0	32.3	32.3	95.7	95.7	7.2	7.2	9.1		12		76				<0.2		0.9	
						5.6	0.1	221	19.9		8.0		32.3		95.7		7.2		9.1		11		76				<0.2		0.8	
IM7	Cloudy	Moderate	09:21	8.1	Surface	1.0	0.3	198	19.8	19.8	8.2	8.2	31.7	31.7	94.6	94.6	7.2	7.2	7.6	9.8	9	10	73	74	821332	806841	<0.2	<0.2	1.6	1.6
						1.0	0.3	212	19.8		8.2		31.7		94.6		7.2		7.6		7		73				<0.2		1.7	
					Middle	4.1	0.2	175	19.8	19.8	8.2	8.2	31.9	31.9	94.4	94.4	7.1		9.7		9		73				<0.2		1.6	
						4.1	0.2	179	19.8		8.2		31.9		94.4		7.1		9.7		8		73				<0.2		1.8	
					Bottom	7.1	0.1	161	19.9	19.9	8.2	8.2	32.2	32.2	94.5	94.5	7.1	7.1	12.1		12		75				<0.2		1.4	
						7.1	0.1	171	19.9		8.2		32.2		94.5		7.1		12.1		14		76				<0.2		1.4	
IM8	Fine	Moderate	08:51	7.9	Surface	1.0	0.3	183	20.1	20.1	8.0	8.0	30.1	30.1	94.3	94.3	7.2	7.2	7.1	7.8	7	7	73	74	821672	807844	<0.2	<0.2	1.3	1.1
						1.0	0.3	184	20.1		8.0		30.1		94.3		7.2		7.1		6		73				<0.2		1.1	
					Middle	4.0	0.2	191	20.2	20.2	8.0	8.0	30.3	30.3	94.0	94.0	7.1		7.7		6		74				<0.2		1.2	
						4.0	0.2	198	20.2		8.0		30.3		94.0		7.1		7.7		8		74				<0.2		1.2	
					Bottom	6.9	0.2	178	20.3	20.3	8.0	8.0	30.7	30.7	93.7	93.7	7.1	7.1	8.5		9		75				<0.2		0.9	
						6.9	0.2	184	20.3		8.0		30.7		93.7		7.1		8.5		8		75				<0.2		0.9	

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 12 December 17 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Fine	Moderate	08:44	7.1	Surface	1.0	0.3	121	20.1	20.1	8.0	8.0	30.2	30.2	94.4	94.4	7.2	7.2	8.9	12.4	7	7	73	74	822076	808811	<0.2	<0.2	1.3	1.1
						1.0	0.3	123	20.1		8.0		30.2		94.4		7.2		8.9		8		73				<0.2		1.2	
					Middle	3.6	0.2	112	20.1	20.1	8.0	8.0	30.2	30.2	94.2	94.2	7.2		12.2		8		74				<0.2		1.0	
						3.6	0.3	117	20.1		8.0		30.2		94.2		7.2		12.2		7		74				<0.2		1.1	
					Bottom	6.1	0.2	108	20.2	20.2	8.0	8.0	30.6	30.6	93.8	93.8	7.1	7.1	16.2		7		75				<0.2		1.0	
						6.1	0.2	113	20.2		8.0		30.6		93.8		7.1		16.2		7		74				<0.2		1.0	
IM10	Fine	Moderate	08:36	7.1	Surface	1.0	0.4	113	20.1	20.1	8.0	8.0	30.3	30.3	94.5	94.5	7.2	7.2	8.1	11.1	7	8	73	74	822237	809825	<0.2	<0.2	1.0	1.1
						1.0	0.4	114	20.1		8.0		30.3		94.5		7.2		8.1		6		73				<0.2		1.1	
					Middle	3.6	0.4	104	20.1	20.1	8.0	8.0	30.3	30.3	94.3	94.3	7.2		10.3		8		74				<0.2		1.0	
						3.6	0.5	107	20.1		8.0		30.3		94.3		7.2		10.3		9		73				<0.2		1.1	
					Bottom	6.1	0.4	102	20.1	20.1	8.0	8.0	30.4	30.4	93.6	93.6	7.1	7.1	14.9		9		75				<0.2		1.0	
						6.1	0.4	111	20.1		8.0		30.4		93.6		7.1		14.9		8		74				<0.2		1.2	
IM11	Fine	Moderate	08:24	7.0	Surface	1.0	0.2	99	20.2	20.2	8.1	8.1	30.5	30.5	95.3	95.3	7.2	7.2	9.1	12.4	11	12	73	75	821528	810557	<0.2	<0.2	1.1	1.0
						1.0	0.3	105	20.2		8.1		30.5		95.3		7.2		9.1		11		73				<0.2		1.1	
					Middle	3.5	0.3	91	20.2	20.2	8.1	8.1	30.5	30.5	94.9	94.9	7.2		11.8		10		75				<0.2		1.0	
						3.5	0.3	95	20.2		8.1		30.5		94.9		7.2		11.8		10		75				<0.2		1.0	
					Bottom	6.0	0.2	100	20.2	20.2	8.2	8.2	30.6	30.6	94.5	94.5	7.2	7.2	16.3		14		76				<0.2		1.0	
						6.0	0.2	104	20.2		8.2		30.6		94.5		7.2		16.3		14		77				<0.2		1.0	
IM12	Fine	Moderate	08:15	8.8	Surface	1.0	0.3	110	20.4	20.4	8.0	8.0	31.0	31.0	93.2	93.2	7.0	7.0	6.0	6.7	5	7	73	75	821141	811523	<0.2	<0.2	1.1	1.1
						1.0	0.3	114	20.4		8.0		31.0		93.2		7.0		6.0		6		73				<0.2		1.0	
					Middle	4.4	0.3	92	20.4	20.4	8.0	8.0	31.1	31.1	92.6	92.6	7.0		7.0		7		75				<0.2		1.1	
						4.4	0.3	98	20.4		8.0		31.1		92.6		7.0		7.0		6		74				<0.2		1.1	
					Bottom	7.8	0.2	90	20.4	20.4	8.0	8.0	31.2	31.2	92.2	92.2	6.9	6.9	6.9		8		77				<0.2		1.0	
						7.8	0.2	95	20.4		8.0		31.2		92.2		6.9		7.0		10		76				<0.2		1.1	
SR2	Fine	Moderate	07:48	4.1	Surface	1.0	0.2	111	20.8	20.8	7.8	7.8	31.6	31.6	90.3	90.3	6.7	6.7	2.9	3.1	6	8	73	74	821486	814151	<0.2	<0.2	1.1	0.9
						1.0	0.2	113	20.8		7.8		31.6		90.3		6.7		2.9		6		73				<0.2		0.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.2	111	20.8	20.8	7.8	7.8	31.6	31.6	90.8	90.8	6.8	6.8	3.2		11		75				<0.2		0.8	
						3.1	0.2	117	20.8		7.8		31.6		90.8		6.8		3.2		9		75				<0.2		0.8	
SR3	Fine	Moderate	08:57	8.6	Surface	1.0	0.4	183	20.1	20.1	7.9	7.9	30.0	30.0	94.0	94.0	7.2	7.2	6.2	7.2	8	9	-	-	822144	807574	-	-	-	-
						1.0	0.4	187	20.1		7.9		30.0		94.0		7.2		6.3		6		-				-		-	
					Middle	4.3	0.2	176	20.1	20.1	7.9	7.9	30.1	30.1	93.8	93.8	7.1		7.4		8		-				-		-	
						4.3	0.2	193	20.1		7.9		30.1		93.8		7.1		7.4		10		-				-		-	
					Bottom	7.6	0.0	138	20.1	20.1	8.0	8.0	30.6	30.6	93.3	93.3	7.1	7.1	7.8		12		-				-		-	
						7.6	0.0	139	20.1		8.0		30.6		93.3		7.1		7.8		11		-				-		-	
SR4A	Cloudy	Calm	07:58	9.2	Surface	1.0	0.2	58	20.0	20.0	8.2	8.2	32.4	32.4	94.2	94.2	7.1	7.1	4.8	6.0	5	7	-	-	817192	807825	-	-	-	-
						1.0	0.2	62	20.0		8.2		32.4		94.2		7.1		4.8		6		-				-		-	
					Middle	4.6	0.2	63	20.0	20.0	8.2	8.2	32.4	32.4	94.2	94.2	7.1		6.1		9		-				-		-	
						4.6	0.3	64	20.0		8.2		32.4		94.2		7.1		6.1		8		-				-		-	
					Bottom	8.2	0.2	77	20.1	20.1	8.1	8.1	32.5	32.5	94.4	94.4	7.1	7.1	7.2		7		-				-		-	
						8.2	0.2	80	20.1		8.1		32.5		94.4		7.1		7.2		8		-				-		-	
SR5A	Cloudy	Calm	07:41	3.7	Surface	1.0	0.0	117	20.1	20.1	8.1	8.1	31.9	31.9	92.9	92.9	7.0	7.0	6.6	7.0	7	6	-	-	816588	810702	-	-	-	-
						1.0	0.0	117	20.1		8.1		31.9		92.9		7.0		6.6		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.7	0.0	111	20.1	20.1	8.1	8.1	32.0	32.0	93.6	93.6	7.0	7.0	7.4		6		-				-		-	
						2.7	0.0	112	20.1		8.1		32.0		93.6		7.0		7.4		6		-				-		-	
SR6	Cloudy	Calm	07:18	4.2	Surface	1.0	0.1	45	20.1	20.1	8.0	8.0	30.5	30.5	92.8	92.8	7.0	7.0	6.1	6.7	7	9	-	-	817923	814658	-	-	-	-
						1.0	0.1	46	20.1		8.0		30.5		92.8		7.0		6.1		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.1	90	20.2	20.2	8.0	8.0	29.9	29.9	94.5	94.5	7.2	7.2	7.2		10		-				-		-	
						3.2	0.1	95	20.2		8.0		29.9		94.5		7.2		7.2		11		-				-		-	
SR7	Fine	Moderate	06:43	16.3	Surface	1.0	0.1	64	21.3	21.3	7.8	7.8	31.9	31.9	87.5	87.5	6.4	6.4	2.0	2.4	5	5	-	-	823624	823730	-	-	-	-
						1.0	0.1	68	21.3		7.8		31.9		87.5		6.4		2.0		4		-				-		-	
					Middle	8.2	0.1	64	21.3	21.3	7.8	7.8	31.9	31.9	87.5	87.5	6.4		2.1		6		-				-		-	
						8.2	0.1	67	21.3		7.8		31.9		87.5		6.4		2.1		5		-				-		-	
					Bottom	15.3	0.1	25	21.3	21.3	7.8	7.8	31.9	31.9	88.5	88.5	6.5	6.5	3.0		6		-				-		-	
						15.3	0.1	25	21.3		7.8		31.9		88.5		6.5		3.0		4		-				-		-	
SR8	Fine	Moderate	08:06	4.3	Surface	1.0	-	-	20.3	20.3	8.0	8.0	31.3	31.3	93.0	93.0	7.0	7.0	5.1	5.0	7	7	-	-	820246	811418	-	-	-	-
						1.0	-	-	20.3		8.0		31.3		93.0		7.0		5.1		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	-	-	20.3	20.3	8.0	8.0	31.3	31.3	92.4	92.4	7.0	7.0	4.9		6		-				-		-	
						3.3	-	-	20.3		8.0		31.3		92.4		7.0		4.9		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 12 December 17 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Moderate	14:39	8.3	Surface	1.0	0.4	43	20.2	20.2	8.1	8.1	32.5	32.5	96.2	96.2	7.2	7.2	7.2	9.7	6	9	73	74	815649	804222	<0.2	<0.2	0.8	0.7
						1.0	0.4	43	20.2		8.1		32.5		96.2		7.2		7.2		7		73				<0.2		0.7	
					Middle	4.2	0.4	38	20.3	20.3	8.2	8.2	32.6	32.6	95.6	95.6	7.1		8.6		10		74				<0.2		0.7	
						4.2	0.4	41	20.3		8.2		32.6		95.6		7.1		8.6		10		74				<0.2		0.7	
					Bottom	7.3	0.4	39	20.3	20.3	8.2	8.2	32.7	32.7	96.4	96.4	7.2	7.2	13.2		10		75				<0.2		0.6	
						7.3	0.4	41	20.3		8.2		32.7		96.4		7.2		13.2		10		75				<0.2		0.7	
C2	Fine	Moderate	13:36	11.2	Surface	1.0	0.3	193	20.3	20.3	7.9	7.9	28.4	28.4	93.2	93.2	7.1	7.1	4.7	8.8	7	8	73	74	825664	806920	<0.2	<0.2	1.9	1.8
						1.0	0.3	203	20.3		7.9		28.4		93.2		7.1		4.7		6		73				<0.2		2.0	
					Middle	5.6	0.1	304	20.4	20.4	7.9	7.9	29.2	29.2	92.3	92.3	7.0		10.1		9		74				<0.2		1.7	
						5.6	0.1	323	20.4		7.9		29.2		92.3		7.0		10.1		9		73				<0.2		1.9	
					Bottom	10.2	0.2	323	20.5	20.5	7.9	7.9	30.1	30.1	92.8	92.8	7.0	7.0	11.5		10		75				<0.2		1.6	
						10.2	0.3	330	20.5		7.9		30.1		92.8		7.0		11.5		9		75				<0.2		1.4	
C3	Fine	Moderate	15:29	12.1	Surface	1.0	0.4	266	21.3	21.3	7.9	7.9	29.0	29.0	89.9	89.9	6.7	6.8	5.8	8.4	8	8	73	75	822099	817815	<0.2	<0.2	0.6	0.7
						1.0	0.4	276	21.3		7.9		29.0		89.9		6.7		5.8		7		73				<0.2		0.6	
					Middle	6.1	0.4	262	21.3	21.3	7.9	7.9	29.1	29.1	90.3	90.3	6.8		8.0		8		75				<0.2		0.6	
						6.1	0.4	272	21.3		7.9		29.1		90.3		6.8		8.0		8		75				<0.2		0.8	
					Bottom	11.1	0.4	278	21.2	21.2	7.9	7.9	29.4	29.4	92.1	92.1	6.9	6.9	11.5		8		77				<0.2		0.7	
						11.1	0.4	304	21.2		7.9		29.4		92.1		6.9		11.5		9		78				<0.2		0.6	
IM1	Fine	Moderate	14:21	7.2	Surface	1.0	0.2	19	20.1	20.1	7.9	7.9	32.1	32.1	97.5	97.5	7.3	7.3	7.3	8.5	9	9	73	74	818357	806480	<0.2	<0.2	1.0	1.0
						1.0	0.2	20	20.1		7.9		32.1		97.5		7.3		7.3		9		73				<0.2		0.9	
					Middle	3.6	0.3	1	20.1	20.1	8.0	8.0	32.3	32.3	96.8	96.8	7.3		8.4		10		73				<0.2		1.0	
						3.6	0.3	1	20.1		8.0		32.3		96.8		7.3		8.4		8		73				<0.2		1.0	
					Bottom	6.2	0.2	356	20.2	20.2	8.0	8.0	32.3	32.3	97.3	97.3	7.3	7.3	9.8		10		75				<0.2		1.0	
						6.2	0.2	328	20.2		8.0		32.3		97.3		7.3		9.8		9		75				<0.2		1.0	
IM2	Fine	Moderate	14:13	8.2	Surface	1.0	0.1	28	20.1	20.1	8.0	8.0	31.9	31.9	96.6	96.6	7.3	7.3	7.2	8.6	8	8	72	74	818823	806202	<0.2	<0.2	1.2	1.1
						1.0	0.1	28	20.1		8.0		31.9		96.6		7.3		7.2		7		73				<0.2		1.3	
					Middle	4.1	0.3	19	20.0	20.0	8.0	8.0	32.2	32.2	95.6	95.6	7.2		8.7		8		74				<0.2		1.2	
						4.1	0.3	19	20.0		8.0		32.2		95.6		7.2		8.7		8		74				<0.2		1.3	
					Bottom	7.2	0.2	26	20.0	20.0	8.1	8.1	32.3	32.3	95.7	95.7	7.2	7.2	9.9		8		76				<0.2		0.9	
						7.2	0.2	28	20.0		8.1		32.3		95.7		7.2		9.9		9		76				<0.2		0.9	
IM3	Fine	Moderate	14:06	8.2	Surface	1.0	0.0	8	20.1	20.1	8.1	8.1	31.8	31.8	96.5	96.5	7.3	7.3	7.0	9.2	6	9	73	74	819381	806031	<0.2	<0.2	1.2	1.1
						1.0	0.0	8	20.1		8.1		31.8		96.5		7.3		7.0		6		73				<0.2		1.3	
					Middle	4.1	0.1	7	20.1	20.1	8.1	8.1	32.4	32.4	95.5	95.5	7.2		9.7		9		74				<0.2		1.1	
						4.1	0.1	7	20.1		8.1		32.4		95.5		7.2		9.7		9		74				<0.2		1.2	
					Bottom	7.2	0.1	40	20.1	20.1	8.2	8.2	32.3	32.3	96.4	96.4	7.2	7.2	11.0		12		75				<0.2		0.9	
						7.2	0.1	42	20.1		8.2		32.3		96.4		7.2		11.0		13		76				<0.2		0.9	
IM4	Fine	Moderate	14:00	7.5	Surface	1.0	0.1	328	20.0	20.0	8.1	8.1	31.8	31.8	96.3	96.3	7.3	7.3	8.2	10.3	7	10	73	74	819578	805019	<0.2	<0.2	1.2	1.2
						1.0	0.2	332	20.0		8.1		31.8		96.3		7.3		8.2		9		73				<0.2		1.4	
					Middle	3.8	0.2	344	19.9	19.9	8.1	8.1	32.0	32.0	95.8	95.8	7.2		10.7		9		74				<0.2		1.1	
						3.8	0.2	348	19.9		8.1		32.0		95.8		7.2		10.7		8		74				<0.2		1.1	
					Bottom	6.5	0.2	20	20.0	20.0	8.2	8.2	32.3	32.3	96.3	96.3	7.2	7.2	12.0		14		75				<0.2		1.1	
						6.5	0.3	20	20.0		8.2		32.3		96.3		7.2		12.0		12		75				<0.2		1.1	
IM5	Fine	Moderate	13:51	6.7	Surface	1.0	0.2	6	20.0	20.0	8.1	8.1	31.9	31.9	96.3	96.3	7.3	7.3	7.9	9.4	9	10	72	75	820563	804895	<0.2	<0.2	1.1	1.1
						1.0	0.2	6	20.0		8.1		31.9		96.3		7.3		7.9		9		73				<0.2		1.2	
					Middle	3.4	0.2	345	19.9	19.9	8.1	8.1	31.9	31.9	96.3	96.3	7.3		9.3		10		75				<0.2		1.0	
						3.4	0.2	317	19.9		8.1		31.9		96.3		7.3		9.3		11		75				<0.2		1.1	
					Bottom	5.7	0.2	8	19.9	19.9	8.2	8.2	31.9	31.9	97.4	97.4	7.4	7.4	10.8		10		76				<0.2		1.1	
						5.7	0.2	8	19.9		8.2		31.9		97.4		7.4		10.9		11		77				<0.2		1.2	
IM6	Fine	Moderate	13:41	6.6	Surface	1.0	0.2	307	20.0	20.0	8.1	8.1	31.7	31.7	95.4	95.4	7.2	7.2	8.8	10.0	11	11	73	75	821075	805832	<0.2	<0.2	1.3	1.3
						1.0	0.2	313	20.0		8.1		31.7		95.4		7.2		8.8		11		73				<0.2		1.4	
					Middle	3.3	0.2	293	20.0	20.0	8.2	8.2	31.7	31.7	95.4	95.4	7.2		10.0		11		75				<0.2		1.3	
						3.3	0.2	298	20.0		8.2		31.7		95.4		7.2		10.0		11		75				<0.2		1.3	
					Bottom	5.6	0.2	342	20.0	20.0	8.2	8.2	31.7	31.7	96.0	96.0	7.2	7.2	11.1		11		76				<0.2		1.3	
						5.6	0.2	347	20.0		8.2		31.7		96.0		7.2		11.1		11		76				<0.2		1.4	
IM7	Fine	Moderate	13:37	8.0	Surface	1.0	0.2	251	20.3	20.3	8.2	8.2	31.7	31.7	94.5	94.5	7.1	7.1	9.9	12.1	11	14	73	74	821370	806841	<0.2	<0.2	1.5	1.6
						1.0	0.2	251	20.3		8.2		31.7		94.5		7.1		9.9		12		73				<0.2		1.5	
					Middle	4.0	0.2	273	20.3	20.3	8.1	8.1	31.7	31.7	94.3	94.3	7.1		12.3		14		74				<0.2		1.5	
						4.0	0.2	299	20.3		8.1		31.7		94.3		7.1		12.3		14		74				<0.2		1.9	
					Bottom	7.0	0.1	263	20.3	20.3	8.0	8.0	31.7	31.7	95.0	95.0	7.1	7.1	14.0		15		76				<0.2		1.6	
						7.0	0.1	270	20.3		8.0		31.7		95.0		7.1		14.2		16		76				<0.2		1.5	
IM8	Fine	Moderate	14:02	8.2	Surface	1.0	0.2	217	20.6	20.6	8.0	8.0	29.3	29.3	96.4	96.4	7.3	7.3	6.1	11.8	8	9	72	74	821674	807866	<0.2	<0.2	1.3	1.3
						1.0	0.2	218	20.6		8.0		29.3		96.4		7.3		6.1		7		73				<0.2		1.3	
					Middle	4.1	0.1	243	20.4	20.4	8.0	8.0	29.4	29.4	95.6	95.6	7.3		10.1		8		74				<0.2		1.4	
						4.1	0.1	247	20.4		8.0		29.4		95.6		7.3		10.1		9		74				<0.2		1.2	
					Bottom	7.2	0.1	258	20.3	20.3	8.0	8.0	29.4	29.4	95.4	95.4	7.3	7.3	19.3		11		75				<0.2		1.2	
						7.2	0.1	274	20.3		8.0		29.4		95.4		7.3		19.3		12		75				<0.2		1.3	

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 12 December 17 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) Value	Water Temperature (°C) Average	pH Value	pH Average	Salinity (ppt) Value	Salinity (ppt) Average	DO Saturation (%) Value	DO Saturation (%) Average	Dissolved Oxygen Value	Dissolved Oxygen DA	Turbidity(NTU) Value	Turbidity(NTU) DA	Suspended Solids (mg/L) Value	Suspended Solids (mg/L) DA	Total Alkalinity (ppm) Value	Total Alkalinity (ppm) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L) Value	Chromium (µg/L) DA	Nickel (µg/L) Value	Nickel (µg/L) DA
IM9	Fine	Moderate	14:09	6.8	Surface	1.0	0.2	303	20.4	20.4	8.0	8.0	29.6	29.6	96.2	96.2	7.3	7.3	6.9	6.9	9	10	73	74	822085	808823	<0.2	<0.2	1.2	1.3
						1.0	0.2	331	20.4		8.0		29.6		96.2		7.3				10		73				<0.2		1.3	
					Middle	3.4	0.2	299	20.5	20.5	8.0	8.0	29.6	29.6	96.1	96.1	7.3		7.3		9		73				<0.2		1.3	
						3.4	0.2	317	20.5		8.0		29.6		96.1		7.3		7.3		10		74				<0.2		1.2	
					Bottom	5.8	0.2	312	20.4	20.4	8.0	8.0	29.7	29.7	96.2	96.2	7.3	7.3	6.6		11		75				<0.2		1.3	
						5.8	0.2	331	20.4		8.0		29.7		96.2		7.3		6.6		11		75				<0.2		1.4	
IM10	Fine	Moderate	14:18	6.4	Surface	1.0	0.4	304	20.3	20.3	8.0	8.0	29.9	29.9	96.5	96.5	7.3	7.3	7.8	13.0	7	10	73	74	822248	809847	<0.2	<0.2	1.4	1.4
						1.0	0.4	320	20.3		8.0		29.9		96.5		7.3		7.8		6		73				<0.2		1.3	
					Middle	3.2	0.4	305	20.2	20.2	8.0	8.0	30.0	30.0	95.9	95.9	7.3		11.6		9		74				<0.2		1.3	
						3.2	0.4	318	20.2		8.0		30.0		95.9		7.3		11.6		10		74				<0.2		1.5	
					Bottom	5.4	0.3	309	20.1	20.1	8.0	8.0	30.1	30.1	95.5	95.5	7.3	7.3	19.7		13		75				<0.2		1.4	
						5.4	0.4	326	20.1		8.0		30.1		95.5		7.3		19.7		13		75				<0.2		1.4	
IM11	Fine	Moderate	14:29	7.8	Surface	1.0	0.4	287	20.4	20.4	8.1	8.1	29.2	29.2	97.0	97.0	7.4	7.4	7.7	10.3	9	11	73	75	821511	810529	<0.2	<0.2	1.2	1.4
						1.0	0.4	292	20.4		8.1		29.2		97.0		7.4		7.7		7		73				<0.2		1.7	
					Middle	3.9	0.4	284	20.3	20.3	8.1	8.1	29.1	29.1	96.5	96.5	7.4		10.0		10		75				<0.2		1.4	
						3.9	0.4	287	20.3		8.1		29.1		96.5		7.4		10.0		11		75				<0.2		1.3	
					Bottom	6.8	0.3	274	20.2	20.2	8.0	8.0	29.2	29.2	96.3	96.3	7.4	7.4	13.3		14		76				<0.2		1.4	
						6.8	0.3	299	20.2		8.0		29.2		96.3		7.4		13.3		13		76				<0.2		1.3	
IM12	Fine	Moderate	14:37	8.8	Surface	1.0	0.5	279	20.4	20.4	8.0	8.0	30.1	30.1	95.6	95.6	7.2	7.2	6.5	8.7	7	9	73	74	821157	811518	<0.2	<0.2	1.2	1.3
						1.0	0.5	297	20.4		8.0		30.1		95.6		7.2		6.5		6		72				<0.2		1.3	
					Middle	4.4	0.4	275	20.3	20.2	8.0	8.0	30.1	30.1	95.6	95.6	7.2		9.0		9		73				<0.2		1.4	
						4.4	0.4	276	20.2		8.0		30.1		95.6		7.2		9.1		10		74				<0.2		1.2	
					Bottom	7.8	0.3	270	20.2	20.2	8.1	8.1	30.2	30.2	95.5	95.5	7.2	7.2	10.6		11		75				<0.2		1.2	
						7.8	0.3	277	20.2		8.1		30.2		95.5		7.2		10.6		10		75				<0.2		1.4	
SR2	Fine	Moderate	15:04	4.1	Surface	1.0	0.2	60	20.8	20.8	7.9	7.9	29.2	29.2	93.9	93.9	7.1	7.1	7.6	6.5	11	13	73	74	821457	814177	<0.2	<0.2	1.3	1.3
						1.0	0.2	61	20.8		7.9		29.2		93.9		7.1		7.6		11		74				<0.2		1.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.1	60	20.8	20.8	7.9	7.9	29.5	29.5	95.3	95.3	7.2	7.2	5.3		14		75				<0.2		1.4	
						3.1	0.2	63	20.8		7.9		29.5		95.3		7.2		5.3		16		75				<0.2		1.1	
SR3	Fine	Moderate	13:56	8.4	Surface	1.0	0.1	254	20.7	20.7	7.9	7.9	29.6	29.6	95.0	95.0	7.2	7.2	5.1	5.7	9	9	-	-	822154	807553	-	-	-	-
						1.0	0.1	279	20.7		7.9		29.6		95.0		7.2		5.1		9		-				-		-	
					Middle	4.2	0.2	271	20.6	20.6	7.9	7.9	30.0	30.0	94.9	94.9	7.2		5.9		9		-				-		-	
						4.2	0.2	276	20.6		7.9		30.0		94.9		7.2		5.9		8		-				-		-	
					Bottom	7.4	0.1	286	20.6	20.6	7.9	7.9	30.5	30.5	95.3	95.3	7.2	7.2	6.0		9		-				-		-	
						7.4	0.1	300	20.6		7.9		30.5		95.3		7.2		6.0		9		-				-		-	
SR4A	Fine	Calm	14:58	8.7	Surface	1.0	0.1	247	20.3	20.3	8.2	8.2	32.2	32.2	94.5	94.5	7.1	7.1	9.5	10.5	8	11	-	-	817164	807817	-	-	-	-
						1.0	0.1	261	20.3		8.2		32.2		94.5		7.1		9.5		7		-				-		-	
					Middle	4.4	0.1	242	20.2	20.2	8.2	8.2	32.2	32.2	94.0	94.0	7.0		10.5		11		-				-		-	
						4.4	0.1	249	20.2		8.2		32.2		94.0		7.0		10.5		11		-				-		-	
					Bottom	7.7	0.1	242	20.2	20.2	8.2	8.2	32.2	32.2	95.2	95.2	7.1	7.1	11.5		14		-				-		-	
						7.7	0.1	246	20.2		8.2		32.2		95.2		7.1		11.5		13		-				-		-	
SR5A	Fine	Calm	15:17	3.3	Surface	1.0	0.1	280	20.2	20.2	8.1	8.1	32.0	32.0	97.7	97.7	7.3	7.3	8.4	9.2	7	9	-	-	816580	810705	-	-	-	-
						1.0	0.1	295	20.2		8.1		32.0		97.7		7.3		8.4		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.3	0.1	284	20.2	20.2	8.1	8.1	32.0	32.0	98.3	98.3	7.4	7.4	10.0		11		-				-		-	
						2.3	0.1	304	20.2		8.1		32.0		98.3		7.4		10.0		12		-				-		-	
SR6	Fine	Calm	15:42	4.9	Surface	1.0	0.1	233	20.5	20.5	8.0	8.0	32.0	32.0	93.4	93.4	7.0	7.0	10.3	11.9	9	9	-	-	817923	814645	-	-	-	-
						1.0	0.1	241	20.5		8.0		32.0		93.4		7.0		10.3		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	0.0	228	20.5	20.5	8.0	8.0	32.0	32.0	93.7	93.7	7.0	7.0	13.5		10		-				-		-	
						3.9	0.0	232	20.5		8.0		32.0		93.7		7.0		13.6		10		-				-		-	
SR7	Fine	Moderate	16:04	16.2	Surface	1.0	0.1	26	21.4	21.4	7.9	7.9	28.9	28.9	87.7	87.7	6.6	6.6	3.9	4.0	6	6	-	-	823619	823723	-	-	-	-
						1.0	0.1	27	21.4		7.9		28.9		87.7		6.6		4.0		4		-				-		-	
					Middle	8.1	0.1	32	21.4	21.4	7.9	7.9	28.9	28.9	87.9	87.9	6.6		3.6		6		-				-		-	
						8.1	0.1	32	21.4		7.9		28.9		87.9		6.6		3.6		6		-				-		-	
					Bottom	15.2	0.1	8	21.4	21.4	7.9	7.9	29.0	29.0	88.7	88.7	6.6	6.6	4.4		8		-				-		-	
						15.2	0.1	8	21.4		7.9		29.0		88.7		6.6		4.4		7		-				-		-	
SR8	Fine	Moderate	14:47	4.2	Surface	1.0	-	-	20.5	20.5	8.0	8.0	30.4	30.4	96.7	96.7	7.3	7.3	7.6	7.4	11	10	-	-	820246	811418	-	-	-	-
						1.0	-	-	20.5		8.0		30.4		96.7		7.3		7.6		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	-	-	20.4	20.4	8.0	8.0	30.4	30.4	96.7	96.7	7.3	7.3	7.2		10		-				-		-	
						3.2	-	-	20.4		8.0		30.4		96.7		7.3		7.2		10		-				-		-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 14 December 17 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Moderate	10:31	8.7	Surface	1.0	0.3	203	20.3	20.3	8.1	8.1	32.8	32.8	95.3	95.3	7.1	7.1	5.9	6.3	10	10	71	73	815633	804244	<0.2	<0.2	1.3	1.2
						1.0	0.4	205	20.3		8.1		32.8		95.2		7.1		6.0		9		71				<0.2		1.2	
					Middle	4.4	0.3	211	20.3	20.3	8.1	8.1	32.8	32.8	94.9	94.9	7.1		6.6		12		73				<0.2		1.2	
						4.4	0.3	223	20.3		8.1		32.8		94.8		7.1		6.8		10		73				<0.2		1.0	
					Bottom	7.7	0.2	216	20.3	20.3	8.0	8.0	32.8	32.8	94.4	94.4	7.0	7.0	6.3		11		75				<0.2		1.3	
						7.7	0.2	226	20.3		7.9		32.8		94.4		7.0		6.1		10		75				<0.2		1.1	
C2	Fine	Moderate	11:24	11.4	Surface	1.0	0.6	156	20.4	20.4	8.1	8.1	27.4	27.4	93.3	93.3	7.2	7.2	4.2	7.0	9	10	73	75	825697	806936	<0.2	<0.2	1.0	1.3
						1.0	0.7	160	20.4		8.1		27.4		93.3		7.2		4.2		8		73				<0.2		1.3	
					Middle	5.7	0.5	169	20.6	20.6	8.1	8.1	28.1	28.1	92.7	92.7	7.1		7.2		11		75				<0.2		1.5	
						5.7	0.5	174	20.6		8.1		28.1		92.7		7.1		7.2		10		75				<0.2		1.3	
					Bottom	10.4	0.3	177	20.6	20.6	8.1	8.1	28.3	28.3	93.0	93.0	7.1	7.1	9.7		12		76				<0.2		1.3	
						10.4	0.4	189	20.6		8.1		28.3		93.0		7.1		9.7		11		76				<0.2		1.4	
C3	Fine	Moderate	09:23	12.1	Surface	1.0	0.0	14	21.1	21.1	8.0	8.0	30.2	30.2	86.7	86.7	6.5	6.5	2.7	3.1	8	12	73	75	822083	817826	<0.2	<0.2	1.2	1.2
						1.0	0.0	14	21.1		8.0		30.2		86.7		6.5		2.7		9		73				<0.2		1.1	
					Middle	6.1	0.0	326	21.1	21.1	8.0	8.0	30.5	30.5	87.0	87.0	6.5		3.2		15		75				<0.2		1.2	
						6.1	0.0	339	21.1		8.0		30.5		87.0		6.5		3.2		13		75				<0.2		1.3	
					Bottom	11.1	0.1	52	21.1	21.1	8.0	8.0	30.8	30.8	87.8	87.8	6.5	6.5	3.4		13		77				<0.2		1.2	
						11.1	0.1	54	21.1		8.0		30.8		87.8		6.5		3.4		13		77				<0.2		1.1	
IM1	Fine	Moderate	10:51	7.3	Surface	1.0	0.2	201	20.0	20.0	8.2	8.2	32.7	32.7	95.5	95.4	7.2	7.2	5.1	6.5	8	10	71	73	818379	806437	<0.2	<0.2	1.3	1.2
						1.0	0.2	213	20.0		8.2		32.7		95.3		7.2		5.2		9		72				<0.2		1.2	
					Middle	3.7	0.2	183	20.1	20.1	8.1	8.1	32.8	32.8	94.8	94.8	7.1		6.6		8		73				<0.2		1.1	
						3.7	0.2	194	20.1		8.1		32.8		94.8		7.1		6.7		10		73				<0.2		1.2	
					Bottom	6.3	0.1	180	20.1	20.1	8.0	8.0	32.8	32.8	94.5	94.5	7.1	7.1	7.7		12		75				<0.2		1.2	
						6.3	0.2	190	20.1		8.0		32.8		94.4		7.1		7.7		10		75				<0.2		1.4	
IM2	Fine	Moderate	11:02	8.0	Surface	1.0	0.2	186	20.0	20.0	8.1	8.1	32.7	32.7	95.8	95.8	7.2	7.2	5.2	6.6	8	9	71	73	818838	806167	<0.2	<0.2	0.5	1.0
						1.0	0.2	196	20.0		8.1		32.7		95.7		7.2		5.2		9		71				<0.2		0.7	
					Middle	4.0	0.2	187	20.2	20.2	8.1	8.1	32.8	32.8	94.8	94.8	7.1		6.9		8		73				<0.2		1.3	
						4.0	0.2	203	20.2		8.1		32.8		94.8		7.1		7.0		9		73				<0.2		1.2	
					Bottom	7.0	0.2	190	20.2	20.2	8.0	8.0	32.8	32.8	94.6	94.7	7.1	7.1	7.5		9		75				<0.2		1.0	
						7.0	0.2	197	20.2		8.0		32.8		94.7		7.1		7.5		9		75				<0.2		1.0	
IM3	Fine	Moderate	11:09	8.3	Surface	1.0	0.2	177	20.0	20.0	8.2	8.2	32.8	32.8	95.8	95.8	7.2	7.2	10.4	10.1	14	15	71	73	819412	806020	<0.2	<0.2	1.1	1.1
						1.0	0.2	191	20.0		8.1		32.8		95.8		7.2		10.4		15		72				<0.2		1.0	
					Middle	4.2	0.3	175	20.0	20.0	8.1	8.1	32.8	32.8	95.3	95.3	7.1		10.5		15		73				<0.2		0.8	
						4.2	0.3	190	20.0		8.2		32.8		95.2		7.1		10.1		15		73				<0.2		1.0	
					Bottom	7.3	0.3	201	20.0	20.0	8.1	8.1	32.8	32.8	94.9	94.9	7.1	7.1	9.6		15		75				<0.2		1.5	
						7.3	0.3	218	20.0		8.1		32.8		94.9		7.1		9.6		16		75				<0.2		1.2	
IM4	Cloudy	Moderate	11:16	7.6	Surface	1.0	0.4	194	20.1	20.1	8.1	8.1	32.8	32.8	95.6	95.6	7.2	7.2	6.6	7.4	9	10	71	73	819586	805031	<0.2	<0.2	1.2	1.1
						1.0	0.4	206	20.1		8.1		32.8		95.6		7.2		6.6		10		71				<0.2		1.2	
					Middle	3.8	0.4	190	20.1	20.1	8.2	8.1	32.8	32.8	95.3	95.3	7.1		6.9		9		73				<0.2		1.0	
						3.8	0.4	201	20.1		8.1		32.8		95.2		7.1		7.1		10		73				<0.2		1.0	
					Bottom	6.6	0.3	203	20.1	20.1	8.1	8.1	32.8	32.8	94.9	94.9	7.1	7.1	8.8		11		74				<0.2		1.2	
						6.6	0.3	207	20.1		8.1		32.8		94.9		7.1		8.3		11		75				<0.2		1.2	
IM5	Cloudy	Moderate	11:27	6.3	Surface	1.0	0.3	179	19.9	19.9	8.1	8.1	32.5	32.5	96.0	96.0	7.2	7.2	7.3	8.5	7	11	71	73	820567	804916	<0.2	<0.2	1.6	1.5
						1.0	0.4	195	19.9		8.1		32.5		95.9		7.2		7.2		9		71				<0.2		1.6	
					Middle	3.2	0.3	176	19.9	19.9	8.1	8.1	32.5	32.5	95.6	95.6	7.2		8.1		10		73				<0.2		1.4	
						3.2	0.3	193	19.9		8.1		32.5		95.5		7.2		8.2		10		73				<0.2		1.6	
					Bottom	5.3	0.3	179	19.9	19.9	8.2	8.2	32.6	32.6	95.3	95.3	7.2	7.2	10.0		14		75				<0.2		1.5	
						5.3	0.3	187	19.9		8.2		32.6		95.2		7.2		10.4		14		75				<0.2		1.5	
IM6	Cloudy	Moderate	11:34	6.6	Surface	1.0	0.2	174	19.9	19.9	8.2	8.2	32.2	32.2	96.2	96.2	7.3	7.2	7.5	10.2	9	10	72	74	821034	805821	<0.2	<0.2	1.6	1.7
						1.0	0.2	190	19.9		8.2		32.2		96.2		7.2		7.8		10		73				<0.2		1.4	
					Middle	3.3	0.2	165	19.9	19.9	8.1	8.1	32.3	32.3	95.9	95.9	7.2		9.5		9		73				<0.2		2.0	
						3.3	0.2	165	19.9		8.1		32.3		95.9		7.2		9.5		10		74				<0.2		1.9	
					Bottom	5.6	0.2	185	19.9	19.9	8.2	8.2	32.3	32.3	95.6	95.6	7.2	7.2	13.4		9		75				<0.2		1.6	
						5.6	0.2	195	19.9		8.2		32.3		95.6		7.2		13.3		10		75				<0.2		1.5	
IM7	Cloudy	Moderate	11:42	8.0	Surface	1.0	0.4	189	20.1	20.1	8.1	8.1	32.0	32.0	95.7	95.7	7.2	7.2	6.1	7.4	9	10	73	75	821372	806828	<0.2	<0.2	1.5	1.4
						1.0	0.4	203	20.1		8.1		32.0		95.7		7.2		6.3		8		73				<0.2		1.2	
					Middle	4.0	0.3	178	20.0	20.1	8.2	8.2	32.1	32.1	95.3	95.3	7.2		7.4		10		75				<0.2		1.4	
						4.0	0.3	186	20.1		8.2		32.1		95.3		7.2		7.4		9		75				<0.2		1.6	
					Bottom	7.0	0.3	176	19.9	19.9	8.1	8.1	32.3	32.3	94.9	94.9	7.1	7.1	8.6		11		76				<0.2		1.6	
						7.0	0.3	183	19.9		8.1		32.3		94.9		7.1		8.4		10		76				<0.2		1.3	
IM8	Fine	Moderate	10:54	8.2	Surface	1.0	0.2	114	20.3	20.3	8.1	8.1	30.0	30.0	96.2	96.2	7.3	7.3	5.9	6.7	7	9	73	75	821669	807865	<0.2	<0.2	1.6	1.7
						1.0	0.2	119	20.3		8.1		30.0		96.2		7.3		5.9		7		73				<0.2		1.5	
					Middle	4.1	0.1	88	20.1	20.1	8.2	8.2	30.1	30.1	95.3	95.3	7.2		6.9		8		75				<0.2		2.0	
						4.1	0.1	91	20.1		8.2		30.1		95.3		7.2		6.9		9		75				<0.2		1.9	
					Bottom	7.2	0.1	90	20.1	20.1	8.1	8.1	30.3	30.3	94.9	94.9	7.2	7.2	7.2		11		76				<0.2		1.6	
						7.2	0.1	96	20.1		8.1		30.3		94.9		7.2		7.2		13		77				<0.2		1.8	

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 14 December 17 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Fine	Moderate	10:45	7.0	Surface	1.0	0.3	112	20.2	20.2	8.2	8.2	30.0	30.0	96.4	96.4	7.3	7.3	6.1	7.6	7	10	73	75	822082	808803	<0.2	<0.2	1.9	1.7
						1.0	0.3	112	20.2		8.2		30.0		96.4		7.3		6.1		9		74				<0.2		1.7	
					Middle	3.5	0.3	101	20.2	20.2	8.2	8.2	30.0	30.0	95.3	95.3	7.2		7.5		10		75				<0.2		1.6	
						3.5	0.3	109	20.2		8.2		30.0		95.3		7.2		7.5		9		74				<0.2		1.8	
					Bottom	6.0	0.3	86	20.1	20.1	8.1	8.1	30.3	30.3	94.4	94.4	7.2	7.2	9.3		12		76				<0.2		1.6	
						6.0	0.3	94	20.1		8.1		30.3		94.4		7.2		9.3		12		77				<0.2		1.6	
IM10	Fine	Moderate	10:36	7.3	Surface	1.0	0.4	105	20.1	20.1	8.2	8.2	30.3	30.3	95.5	95.5	7.3	7.3	11.5	19.5	14	19	73	75	822219	809855	<0.2	<0.2	1.1	1.3
						1.0	0.5	109	20.1		8.2		30.3		95.5		7.3		11.5		16		74				<0.2		1.1	
					Middle	3.7	0.5	107	20.1	20.1	8.2	8.2	30.3	30.3	95.1	95.1	7.2		18.0		14		75				<0.2		1.2	
						3.7	0.5	110	20.1		8.2		30.3		95.1		7.2		18.0		14		75				<0.2		1.4	
					Bottom	6.3	0.3	99	20.1	20.1	8.2	8.2	30.4	30.4	94.3	94.3	7.2	7.2	29.0		28		76				<0.2		1.4	
						6.3	0.4	105	20.1		8.2		30.4		94.3		7.2		29.0		29		76				<0.2		1.6	
IM11	Fine	Moderate	10:24	8.2	Surface	1.0	0.2	90	20.1	20.1	8.2	8.2	30.4	30.4	96.0	96.0	7.3	7.3	11.1	13.5	13	14	73	75	821487	810554	<0.2	<0.2	1.5	1.6
						1.0	0.2	92	20.1		8.2		30.4		96.0		7.3		10.8		13		73				<0.2		1.3	
					Middle	4.1	0.3	95	20.2	20.2	8.2	8.2	30.3	30.3	95.1	95.1	7.2		11.5		13		74				<0.2		1.9	
						4.1	0.3	96	20.2		8.2		30.3		95.1		7.2		11.5		13		75				<0.2		1.8	
					Bottom	7.2	0.2	87	20.2	20.2	8.2	8.2	30.3	30.3	94.4	94.4	7.2	7.2	18.0		15		77				<0.2		1.6	
						7.2	0.2	92	20.2		8.2		30.3		94.4		7.2		18.0		15		78				<0.2		1.7	
IM12	Fine	Moderate	10:14	8.9	Surface	1.0	0.2	96	20.6	20.6	8.1	8.1	30.1	30.1	92.3	92.3	7.0	7.0	4.0	6.0	6	9	73	74	821180	811508	<0.2	<0.2	1.8	1.7
						1.0	0.2	103	20.6		8.1		30.1		92.3		7.0		4.0		6		73				<0.2		1.6	
					Middle	4.5	0.2	93	20.5	20.5	8.1	8.1	30.1	30.1	92.1	92.1	6.9		6.0		7		74				<0.2		1.7	
						4.5	0.3	93	20.5		8.1		30.1		92.1		6.9		6.0		8		74				<0.2		1.7	
					Bottom	7.9	0.2	97	20.5	20.5	8.1	8.1	30.1	30.1	92.1	92.1	7.0	7.0	7.9		14		76				<0.2		1.8	
						7.9	0.2	98	20.5		8.1		30.1		92.1		7.0		7.9		13		75				<0.2		1.6	
SR2	Fine	Moderate	09:47	4.8	Surface	1.0	0.2	37	20.6	20.6	8.0	8.0	30.3	30.3	91.8	91.8	6.9	6.9	2.7	2.3	5	7	73	74	821448	814162	<0.2	<0.2	1.8	1.9
						1.0	0.2	38	20.6		8.0		30.3		91.8		6.9		2.7		5		73				<0.2		1.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.1	40	20.6	20.6	8.0	8.0	31.1	31.1	92.2	92.2	6.9	6.9	1.9		10		75				<0.2		2.1	
						3.8	0.1	42	20.6		8.0		31.1		92.2		6.9		1.9		8		75				<0.2		1.9	
SR3	Fine	Moderate	10:59	8.9	Surface	1.0	0.4	176	20.5	20.5	8.1	8.1	29.6	29.6	95.4	95.4	7.2	7.2	3.8	5.5	6	7	-	-	822127	807571	-	-	-	-
						1.0	0.5	186	20.5		8.1		29.6		95.4		7.2		3.8		6		-				-		-	
					Middle	4.5	0.2	180	20.3	20.3	8.1	8.1	29.9	29.9	95.0	95.0	7.2		5.9		6		-				-		-	
						4.5	0.2	181	20.3		8.1		29.9		95.0		7.2		5.9		7		-				-		-	
					Bottom	7.9	0.1	37	20.2	20.2	8.2	8.2	30.2	30.2	94.4	94.4	7.2	7.2	6.7		9		-				-		-	
						7.9	0.1	39	20.2		8.2		30.2		94.4		7.2		6.7		8		-				-		-	
SR4A	Fine	Moderate	10:11	8.7	Surface	1.0	0.3	75	20.1	20.1	8.1	8.1	32.7	32.7	95.0	95.0	7.1	7.1	6.9	7.1	8	8	-	-	817162	807780	-	-	-	-
						1.0	0.3	80	20.1		8.1		32.7		94.9		7.1		6.8		9		-				-		-	
					Middle	4.4	0.3	72	20.1	20.1	8.1	8.1	32.8	32.8	94.6	94.6	7.1		6.9		8		-				-		-	
						4.4	0.3	73	20.1		8.1		32.8		94.6		7.1		6.9		9		-				-		-	
					Bottom	7.7	0.2	71	20.0	20.0	8.0	8.0	32.8	32.7	94.0	94.0	7.0	7.0	7.6		8		-				-		-	
						7.7	0.3	71	20.0		8.0		32.7		94.0		7.0		7.3		8		-				-		-	
SR5A	Cloudy	Calm	09:53	5.0	Surface	1.0	0.1	138	19.6	19.6	8.1	8.1	32.0	32.0	93.1	93.1	7.1	7.1	5.9	5.8	9	11	-	-	816603	810703	-	-	-	-
						1.0	0.1	148	19.6		8.1		32.0		93.0		7.1		5.9		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.1	133	19.6	19.6	8.0	8.0	32.0	32.0	92.8	92.8	7.0	7.0	5.7		13		-				-		-	
						4.0	0.1	139	19.6		8.0		32.0		92.8		7.0		5.7		12		-				-		-	
SR6	Cloudy	Moderate	09:30	4.3	Surface	1.0	0.1	65	20.3	20.3	8.0	8.0	31.1	31.1	90.6	90.6	6.8	6.8	5.4	6.4	8	8	-	-	817900	814634	-	-	-	-
						1.0	0.1	65	20.3		8.0		31.0		90.6		6.8		5.7		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.1	64	20.3	20.3	8.0	8.0	30.8	30.8	91.0	91.1	6.9	6.9	7.1		9		-				-		-	
						3.3	0.1	67	20.3		8.0		30.8		91.2		6.9		7.2		8		-				-		-	
SR7	Fine	Moderate	08:50	16.7	Surface	1.0	0.1	59	21.1	21.1	8.0	8.0	30.8	30.8	86.1	86.1	6.4	6.4	2.2	2.6	7	7	-	-	823623	823734	-	-	-	-
						1.0	0.1	61	21.1		8.0		30.8		86.1		6.4		2.2		7		-				-		-	
					Middle	8.4	0.1	69	21.1	21.1	8.0	8.0	31.4	31.4	86.3	86.3	6.4		2.9		7		-				-		-	
						8.4	0.2	75	21.1		8.0		31.4		86.3		6.4		2.9		6		-				-		-	
					Bottom	15.7	0.1	68	21.1	21.1	7.9	7.9	31.8	31.8	87.3	87.3	6.5	6.5	2.7		7		-				-		-	
						15.7	0.1	73	21.1		7.9		31.8		87.3		6.5		2.7		8		-				-		-	
SR8	Fine	Moderate	10:05	4.7	Surface	1.0	-	-	20.5	20.5	8.1	8.1	29.9	29.9	93.7	93.7	7.1	7.1	8.6	8.9	10	12	-	-	820246	811418	-	-	-	-
						1.0	-	-	20.5		8.1		29.9		93.7		7.1		8.6		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	-	-	20.4	20.4	8.1	8.1	30.4	30.4	93.8	93.8	7.1	7.1	9.1		15		-				-		-	
						3.7	-	-	20.4		8.1		30.4		93.8		7.1		9.1		13		-				-		-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 14 December 17 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	15:50	8.5	Surface	1.0	0.3	41	20.5	20.5	8.2	8.2	32.9	32.9	96.6	96.6	7.2	7.2	8.2	9.1	8	10	71	74	815642	804249	<0.2	<0.2	1.7	1.7
						1.0	0.4	44	20.5		8.2		32.9		96.6		7.2		7.9		9		72				<0.2		1.6	
					Middle	4.3	0.3	29	20.5	20.5	8.2	8.2	32.9	32.9	96.3	96.3	7.2		8.8		9		73				<0.2		1.7	
						4.3	0.3	31	20.5		8.2		32.9		96.3		7.2		8.7		8		73				<0.2		1.8	
					Bottom	7.5	0.4	32	20.5	20.5	8.2	8.2	32.9	32.9	96.3	96.4	7.2	7.2	10.2		11		77				<0.2		1.6	
						7.5	0.4	34	20.5		8.2		32.9		96.4		7.2		10.5		13		77				<0.2		1.5	
C2	Fine	Moderate	14:47	11.2	Surface	1.0	0.1	218	20.6	20.6	8.0	8.0	27.8	27.8	95.0	95.0	7.2	7.2	3.3	5.0	7	7	73	74	825704	806938	<0.2	<0.2	2.3	2.0
						1.0	0.1	218	20.6		8.0		27.8		95.0		7.2		3.3		7		73				<0.2		2.0	
					Middle	5.6	0.1	244	20.5	20.5	8.0	8.0	28.6	28.6	94.2	94.2	7.2		5.2		6		74				<0.2		2.0	
						5.6	0.1	247	20.5		8.0		28.6		94.2		7.2		5.2		6		74				<0.2		2.0	
					Bottom	10.2	0.2	324	20.5	20.5	8.1	8.1	28.8	28.8	94.2	94.2	7.2	7.2	6.5		8		75				<0.2		1.9	
						10.2	0.2	344	20.5		8.1		28.8		94.2		7.2		6.5		10		76				<0.2		1.9	
C3	Fine	Moderate	16:40	12.2	Surface	1.0	0.4	273	21.1	21.1	8.0	8.0	28.3	28.3	89.2	89.2	6.7	6.7	4.5	5.9	5	7	73	75	822098	817794	<0.2	<0.2	1.8	1.6
						1.0	0.4	298	21.1		8.0		28.3		89.2		6.7		4.5		5		73				<0.2		1.2	
					Middle	6.1	0.4	275	21.1	21.1	8.0	8.0	28.4	28.4	89.3	89.3	6.7		8.0		5		75				<0.2		1.5	
						6.1	0.4	298	21.1		8.0		28.4		89.3		6.7		8.0		6		75				<0.2		1.5	
					Bottom	11.2	0.3	275	21.1	21.1	8.0	8.0	28.8	28.8	91.6	91.6	6.9	6.9	5.1		10		77				<0.2		1.9	
						11.2	0.4	275	21.1		8.0		28.8		91.6		6.9		5.1		12		76				<0.2		1.9	
IM1	Cloudy	Moderate	15:30	7.4	Surface	1.0	0.2	30	20.1	20.1	8.2	8.2	32.4	32.4	97.5	97.5	7.3	7.3	5.2	7.1	6	6	71	74	818379	806459	<0.2	<0.2	2.4	2.1
						1.0	0.3	30	20.1		8.2		32.4		97.4		7.3		5.2		5		72				<0.2		2.4	
					Middle	3.7	0.3	11	20.1	20.1	8.2	8.2	32.8	32.8	96.6	96.6	7.2		7.3		6		73				<0.2		2.3	
						3.7	0.3	11	20.1		8.2		32.8		96.5		7.2		7.7		4		73				<0.2		2.0	
					Bottom	6.4	0.2	7	20.1	20.1	8.1	8.1	32.8	32.8	96.4	96.4	7.2	7.2	8.8		7		76				<0.2		1.9	
						6.4	0.3	7	20.1		8.1		32.8		96.4		7.2		8.3		6		76				<0.2		1.6	
IM2	Cloudy	Moderate	15:24	8.4	Surface	1.0	0.2	1	20.2	20.1	8.2	8.2	32.1	32.1	96.8	96.7	7.3	7.2	5.6	8.0	7	7	72	74	818853	806166	<0.2	<0.2	1.8	1.8
						1.0	0.2	1	20.1		8.2		32.2		96.6		7.2		5.8		6		72				<0.2		1.8	
					Middle	4.2	0.3	5	20.0	20.0	8.2	8.2	32.6	32.6	95.6	95.6	7.2		7.9		7		73				<0.2		2.0	
						4.2	0.3	5	20.0		8.2		32.6		95.6		7.2		8.2		7		73				<0.2		1.9	
					Bottom	7.4	0.3	29	20.0	20.0	8.2	8.2	32.7	32.7	95.6	95.7	7.2	7.2	10.3		8		76				<0.2		1.6	
						7.4	0.3	31	20.0		8.1		32.7		95.7		7.2		10.4		7		76				<0.2		1.6	
IM3	Cloudy	Moderate	15:16	8.4	Surface	1.0	0.2	340	20.2	20.2	8.2	8.2	32.0	32.0	97.1	97.0	7.3	7.3	5.0	6.7	6	7	72	73	819397	806011	<0.2	<0.2	1.9	1.8
						1.0	0.2	313	20.2		8.2		32.0		96.9		7.3		5.1		6		72				<0.2		1.9	
					Middle	4.2	0.2	358	20.0	20.0	8.2	8.2	32.5	32.5	96.1	96.1	7.2		6.7		6		73				<0.2		1.6	
						4.2	0.3	329	20.0		8.2		32.5		96.0		7.2		7.0		7		73				<0.2		1.7	
					Bottom	7.4	0.2	12	20.0	20.0	8.2	8.2	32.6	32.6	96.0	96.0	7.2	7.2	8.1		7		75				<0.2		1.9	
						7.4	0.2	12	20.0		8.2		32.6		96.0		7.2		8.0		8		75				<0.2		1.9	
IM4	Cloudy	Moderate	15:09	7.8	Surface	1.0	0.2	344	20.1	20.1	8.2	8.2	32.2	32.2	97.2	97.2	7.3	7.3	7.0	7.5	9	10	71	73	819561	805024	<0.2	<0.2	1.6	1.3
						1.0	0.2	356	20.1		8.2		32.2		97.1		7.3		7.2		8		71				<0.2		1.6	
					Middle	3.9	0.2	325	20.0	20.0	8.3	8.3	32.4	32.4	96.7	96.8	7.3		7.7		10		73				<0.2		1.9	
						3.9	0.2	338	20.0		8.3		32.4		96.8		7.3		7.5		10		73				<0.2		0.8	
					Bottom	6.8	0.2	346	20.0	20.0	8.2	8.2	32.5	32.5	96.5	96.5	7.2	7.2	7.8		12		75				<0.2		1.0	
						6.8	0.2	318	20.0		8.2		32.5		96.4		7.2		7.9		11		75				<0.2		0.6	
IM5	Cloudy	Moderate	14:59	6.8	Surface	1.0	0.2	322	20.2	20.2	8.2	8.2	31.9	31.9	97.0	97.0	7.3	7.3	5.1	5.4	6	6	73	75	820593	804945	<0.2	<0.2	0.8	0.9
						1.0	0.3	348	20.2		8.2		31.9		97.0		7.3		5.2		5		73				<0.2		0.9	
					Middle	3.4	0.2	344	20.1	20.1	8.2	8.2	32.0	32.0	96.6	96.6	7.3		5.3		6		75				<0.2		1.0	
						3.4	0.2	353	20.1		8.2		32.0		96.6		7.3		5.4		7		75				<0.2		0.8	
					Bottom	5.8	0.1	10	20.1	20.1	8.2	8.2	32.0	32.0	96.4	96.4	7.3	7.3	5.6		6		76				<0.2		1.0	
						5.8	0.1	10	20.1		8.2		32.0		96.4		7.3		5.6		6		76				<0.2		1.0	
IM6	Cloudy	Moderate	14:51	6.8	Surface	1.0	0.2	294	20.2	20.2	8.2	8.2	31.8	31.8	95.5	95.5	7.2	7.2	6.2	7.3	6	9	73	74	821061	805844	<0.2	<0.2	1.1	1.1
						1.0	0.2	296	20.2		8.2		31.8		95.5		7.2		6.4		7		73				<0.2		1.0	
					Middle	3.4	0.2	326	20.1	20.1	8.2	8.2	31.9	31.9	95.1	95.1	7.2		7.6		9		75				<0.2		1.1	
						3.4	0.2	339	20.1		8.2		31.9		95.1		7.2		7.7		10		75				<0.2		1.2	
					Bottom	5.8	0.3	329	20.1	20.1	8.1	8.1	32.0	32.0	95.2	95.3	7.2	7.2	8.2		12		75				<0.2		1.1	
						5.8	0.3	337	20.1		8.1		32.0		95.3		7.2		7.7		11		75				<0.2		1.1	
IM7	Cloudy	Moderate	14:44	8.1	Surface	1.0	0.2	257	20.3	20.3	8.2	8.2	31.7	31.7	95.3	95.3	7.2	7.1	6.9	10.1	7	9	73	75	821344	806821	<0.2	<0.2	1.3	1.2
						1.0	0.2	264	20.3		8.2		31.7		95.2		7.1		7.0		6		73				<0.2		1.2	
					Middle	4.1	0.2	270	20.2	20.2	8.1	8.1	31.8	31.8	94.2	94.2	7.1		9.4		7		75				<0.2		1.2	
						4.1	0.3	273	20.2		8.1		31.8		94.2		7.1		9.4		6		75				<0.2		1.2	
					Bottom	7.1	0.2	277	20.2	20.2	8.1	8.1	31.8	31.8	94.3	94.4	7.1	7.1	13.6		15		76				<0.2		1.1	
						7.1	0.2	288	20.2		8.1		31.8		94.4		7.1		14.0		13		76				<0.2		1.2	
IM8	Fine	Moderate	15:12	8.2	Surface	1.0	0.1	263	20.5	20.5	8.1	8.1	28.9	28.9	95.1	95.1	7.2	7.2	4.4	5.4	7	6	73	75	821680	807848	<0.2	<0.2	1.2	1.1
						1.0	0.1	274	20.5		8.1		28.9		95.1		7.2		4.4		7		73				<0.2		1.2	
					Middle	4.1	0.1	300	20.5	20.5	8.1	8.1	28.9	28.9	94.7	94.7	7.2		5.7		6		75				<0.2		1.1	
						4.1	0.1	327	20.5		8.1		28.9		94.7		7.2		5.7		5		75				<0.2		1.1	
					Bottom	7.2	0.0	296	20.4	20.4	8.1	8.1	28.8	28.8	94.6	94.6	7.2	7.2	6.0		6		76				<0.2		1.1	
						7.2	0.0	317	20.4		8.1		28.8		94.6		7.2		6.0		7		76				<0.2		1.1	

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 14 December 17 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Fine	Moderate	15:20	7.4	Surface	1.0	0.1	341	20.6	20.6	8.1	8.1	29.3	29.3	95.6	95.6	7.2	7.2	5.3	6.1	6	6	73	75	822109	808783	<0.2	<0.2	1.1	1.1
						1.0	0.1	314	20.6		8.1		29.3		95.6		7.2		5.3		6		73				<0.2		1.1	
					Middle	3.7	0.1	301	20.5	20.5	8.1	8.1	29.3	29.3	95.1	95.1	7.2		6.8		5		75				<0.2		1.0	
						3.7	0.1	311	20.5		8.1		29.3		95.1		7.2		6.8		7		75				<0.2		1.2	
					Bottom	6.4	0.1	252	20.5	20.5	8.1	8.1	29.2	29.2	94.8	94.8	7.2	7.2	6.3		6		78				<0.2		1.1	
						6.4	0.1	269	20.5		8.1		29.2		94.8		7.2		6.3		8		77				<0.2		1.0	
IM10	Fine	Moderate	15:28	7.8	Surface	1.0	0.4	294	20.6	20.6	8.1	8.1	28.3	28.3	96.2	96.2	7.3	7.3	3.2	5.3	4	6	73	75	822234	809836	<0.2	<0.2	1.2	1.2
						1.0	0.4	323	20.6		8.1		28.3		96.2		7.3		3.2		4		73				<0.2		1.1	
					Middle	3.9	0.4	308	20.4	20.4	8.1	8.1	28.4	28.4	95.6	95.6	7.3		4.7		6		75				<0.2		1.2	
						3.9	0.4	332	20.4		8.1		28.4		95.6		7.3		4.7		7		74				<0.2		1.1	
					Bottom	6.8	0.3	316	20.3	20.3	8.2	8.2	28.9	28.9	95.0	95.0	7.3	7.3	7.9		8		78				<0.2		1.2	
						6.8	0.3	336	20.3		8.2		28.9		95.0		7.3		7.9		6		76				<0.2		1.3	
IM11	Fine	Moderate	15:40	8.1	Surface	1.0	0.4	289	20.5	20.5	8.1	8.1	28.1	28.1	97.3	97.3	7.4	7.4	4.2	7.6	5	8	73	75	821518	810555	<0.2	<0.2	1.5	1.3
						1.0	0.4	308	20.5		8.1		28.1		97.3		7.4		4.2		4		73				<0.2		1.6	
					Middle	4.1	0.4	294	20.4	20.4	8.2	8.2	28.2	28.2	96.5	96.5	7.4		7.1		9		75				<0.2		1.5	
						4.1	0.4	309	20.4		8.2		28.2		96.5		7.4		7.1		7		75				<0.2		1.3	
					Bottom	7.1	0.3	294	20.3	20.3	8.2	8.2	28.4	28.4	95.7	95.7	7.3	7.3	11.4		11		77				<0.2		1.2	
						7.1	0.3	321	20.3		8.2		28.4		95.7		7.3		11.4		12		77				<0.2		0.9	
IM12	Fine	Moderate	15:48	8.9	Surface	1.0	0.4	272	20.4	20.4	8.2	8.2	29.6	29.6	95.9	95.9	7.3	7.3	7.1	11.3	3	8	73	75	821189	811542	<0.2	<0.2	1.4	1.3
						1.0	0.4	276	20.4		8.2		29.6		95.9		7.3		7.1		5		73				<0.2		1.4	
					Middle	4.5	0.5	278	20.3	20.3	8.2	8.2	29.7	29.7	95.4	95.4	7.3		9.2		7		75				<0.2		1.3	
						4.5	0.5	292	20.3		8.2		29.7		95.4		7.3		9.2		8		75				<0.2		1.4	
					Bottom	7.9	0.4	271	20.3	20.3	8.2	8.2	29.6	29.6	95.2	95.2	7.2	7.2	17.5		11		76				<0.2		1.3	
						7.9	0.4	271	20.3		8.2		29.6		95.2		7.2		17.5		12		76				<0.2		1.2	
SR2	Fine	Moderate	16:15	4.6	Surface	1.0	0.0	192	20.8	20.8	8.1	8.1	28.8	28.8	93.4	93.4	7.1	7.1	6.6	6.3	9	12	73	74	821439	814183	<0.2	<0.2	1.0	1.0
						1.0	0.0	209	20.8		8.1		28.8		93.4		7.1		6.6		11		73				<0.2		1.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.0	313	20.8	20.8	8.0	8.0	28.8	28.8	93.8	93.8	7.1	7.1	6.0		15		75				<0.2		1.1	
						3.6	0.0	316	20.8		8.0		28.8		93.8		7.1		6.0		13		75				<0.2		1.0	
SR3	Fine	Moderate	15:07	8.7	Surface	1.0	0.1	234	20.7	20.7	8.1	8.1	27.8	27.8	96.4	96.4	7.3	7.3	2.9	4.0	8	10	-	-	822172	807565	-	-	-	-
						1.0	0.1	254	20.7		8.1		27.8		96.4		7.3		2.9		9		-				-		-	
					Middle	4.4	0.2	293	20.5	20.5	8.1	8.1	28.1	28.1	95.7	95.7	7.3		4.4		11		-				-		-	
						4.4	0.2	301	20.5		8.1		28.1		95.7		7.3		4.4		10		-				-		-	
					Bottom	7.7	0.2	311	20.5	20.5	8.1	8.1	28.3	28.3	95.4	95.4	7.3	7.3	4.6		10		-				-		-	
						7.7	0.2	335	20.5		8.1		28.3		95.4		7.3		4.6		11		-				-		-	
SR4A	Cloudy	Moderate	16:10	9.5	Surface	1.0	0.2	253	19.9	19.9	8.1	8.1	32.3	32.3	95.2	95.2	7.2	7.2	9.7	9.9	10	12	-	-	817184	807792	-	-	-	-
						1.0	0.2	273	19.9		8.1		32.3		95.2		7.2		9.7		10		-				-		-	
					Middle	4.8	0.2	258	19.9	19.9	8.1	8.1	32.4	32.4	94.7	94.7	7.1		10.9		11		-				-		-	
						4.8	0.2	274	19.9		8.1		32.4		94.7		7.1		10.4		12		-				-		-	
					Bottom	8.5	0.1	272	19.9	19.9	8.0	8.0	32.5	32.5	94.8	94.9	7.1	7.1	9.1		14		-				-		-	
						8.5	0.2	273	19.9		8.0		32.5		95.0		7.1		9.3		13		-				-		-	
SR5A	Cloudy	Calm	16:27	4.8	Surface	1.0	0.2	285	19.9	19.9	8.1	8.1	32.1	32.1	95.9	95.9	7.2	7.2	7.7	8.2	12	16	-	-	816606	810684	-	-	-	-
						1.0	0.2	295	19.9		8.1		32.1		95.9		7.2		7.8		12		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.2	291	19.9	19.9	8.1	8.1	32.1	32.1	95.6	95.6	7.2	7.2	8.4		20		-				-		-	
						3.8	0.2	313	19.9		8.1		32.1		95.6		7.2		8.7		18		-				-		-	
SR6	Cloudy	Moderate	16:51	4.5	Surface	1.0	0.1	232	20.6	20.6	8.2	8.2	32.4	32.4	91.0	91.0	6.8	6.8	10.3	11.3	16	16	-	-	817891	814634	-	-	-	-
						1.0	0.1	254	20.6		8.2		32.5		91.0		6.8		10.3		14		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.1	224	20.6	20.6	8.2	8.2	32.5	32.5	91.2	91.3	6.8	6.8	12.2		16		-				-		-	
						3.5	0.1	245	20.6		8.2		32.5		91.3		6.8		12.4		16		-				-		-	
SR7	Fine	Moderate	17:15	16.8	Surface	1.0	0.1	45	21.1	21.1	8.0	8.0	28.5	28.5	86.6	86.6	6.5	6.5	2.7	2.9	10	10	-	-	823634	823743	-	-	-	-
						1.0	0.1	48	21.1		8.0		28.5		86.6		6.5		2.7		9		-				-		-	
					Middle	8.4	0.1	56	21.1	21.1	8.0	8.0	28.6	28.6	86.8	86.8	6.5		3.0		10		-				-		-	
						8.4	0.2	58	21.1		8.0		28.6		86.8		6.5		3.0		10		-				-		-	
					Bottom	15.8	0.1	37	21.1	21.1	8.0	8.0	28.8	28.8	87.7	87.7	6.6	6.6	3.1		10		-				-		-	
						15.8	0.1	39	21.1		8.0		28.8		87.7		6.6		3.1		11		-				-		-	
SR8	Fine	Moderate	15:56	4.7	Surface	1.0	-	-	20.7	20.7	8.1	8.1	28.1	28.1	97.6	97.6	7.4	7.4	3.4	3.1	9	10	-	-	820246	811418	-	-	-	-
						1.0	-	-	20.7		8.1		28.1		97.6		7.4		3.4		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	-	-	20.6	20.6	8.1	8.1	28.5	28.5	96.2	96.2	7.3	7.3	2.8		11		-				-		-	
						3.7	-	-	20.6		8.1		28.5		96.2		7.3		2.8		13		-				-		-	

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 December 17 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Rough	11:34	8.2	Surface	1.0	0.2	159	19.7	19.7	8.1	8.1	30.7	30.7	96.4	96.4	7.4	7.4	15.0	15.9	16	17	73	74	815625	804270	<0.2	<0.2	1.3	1.3
						1.0	0.3	168	19.7		8.1		30.7		96.4		7.4		15.0		16		73				<0.2		1.3	
					Middle	4.1	0.1	225	19.7	19.7	8.1	8.1	30.6	30.6	96.2	96.2	7.3		15.2		15		73				<0.2		1.2	
						4.1	0.1	226	19.7		8.1		30.6		96.2		7.3		15.2		16		74				<0.2		1.3	
					Bottom	7.2	0.3	179	19.7	19.7	8.1	8.1	30.6	30.6	96.7	96.7	7.4	7.4	17.5		18		75				<0.2		1.4	
						7.2	0.3	185	19.7		8.1		30.6		96.7		7.4		17.5		20		76				<0.2		1.3	
C2	Cloudy	Rough	10:26	11.2	Surface	1.0	0.1	271	20.2	20.2	8.1	8.1	26.3	26.3	94.2	94.2	7.3	7.3	7.8	17.0	13	13	74	75	825704	806915	<0.2	<0.2	2.0	2.0
						1.0	0.1	277	20.2		8.1		26.3		94.2		7.3		7.8		12		73				<0.2		2.1	
					Middle	5.6	0.1	23	20.3	20.3	8.1	8.1	26.8	26.8	94.6	94.6	7.3		14.5		11		75				<0.2		1.8	
						5.6	0.1	24	20.3		8.1		26.8		94.6		7.3		14.5		13		75				<0.2		2.0	
					Bottom	10.2	0.1	276	20.3	20.3	8.1	8.1	28.7	28.7	96.0	96.0	7.3	7.3	28.8		15		76				<0.2		1.9	
						10.2	0.1	286	20.3		8.1		28.7		96.0		7.3		28.8		15		75				<0.2		2.0	
C3	Cloudy	Moderate	12:25	11.4	Surface	1.0	0.2	108	20.9	20.9	8.0	8.0	27.9	27.9	88.4	88.4	6.7	6.8	1.6	2.0	12	13	73	75	822137	817814	<0.2	<0.2	0.6	0.6
						1.0	0.2	118	20.9		8.0		27.9		88.4		6.7		1.6		11		73				<0.2		0.6	
					Middle	5.7	0.1	92	20.9	20.9	8.0	8.0	28.0	28.0	90.2	90.2	6.8		2.3		14		75				<0.2		0.6	
						5.7	0.1	92	20.9		8.0		28.0		90.2		6.8		2.3		12		75				<0.2		0.6	
					Bottom	10.4	0.2	70	20.9	20.9	8.0	8.0	28.3	28.3	93.5	93.5	7.1	7.1	2.0		14		77				<0.2		0.6	
						10.4	0.2	74	20.9		8.0		28.3		93.5		7.1		2.0		12		77				<0.2		0.6	
IM1	Cloudy	Rough	11:14	7.1	Surface	1.0	0.1	277	19.8	19.8	8.0	8.0	32.0	32.0	96.0	96.0	7.3	7.3	16.9	20.9	17	18	73	74	818376	806441	<0.2	<0.2	1.2	1.3
						1.0	0.1	288	19.8		8.0		32.0		96.0		7.3		16.9		16		73				<0.2		1.3	
					Middle	3.6	0.1	203	19.8	19.8	8.0	8.0	31.9	31.9	95.8	95.8	7.2		20.6		19		74				<0.2		1.4	
						3.6	0.1	221	19.8		8.0		31.9		95.8		7.2		20.6		18		74				<0.2		1.4	
					Bottom	6.1	0.1	314	19.8	19.8	8.0	8.0	31.7	31.7	96.5	96.6	7.3	7.3	25.1		18		75				<0.2		1.3	
						6.1	0.1	335	19.8		8.0		31.7		96.6		7.3		25.1		18		76				<0.2		1.4	
IM2	Cloudy	Rough	11:06	8.2	Surface	1.0	0.1	73	19.8	19.8	8.0	8.0	31.9	31.9	96.8	96.8	7.3	7.3	14.0	15.2	17	19	73	74	818858	806210	<0.2	<0.2	0.9	0.9
						1.0	0.1	77	19.8		8.0		31.9		96.8		7.3		14.0		16		73				<0.2		0.9	
					Middle	4.1	0.1	25	19.8	19.8	8.0	8.0	31.8	31.8	96.6	96.6	7.3		14.5		19		74				<0.2		0.9	
						4.1	0.1	26	19.8		8.0		31.8		96.6		7.3		14.5		18		74				<0.2		0.8	
					Bottom	7.2	0.1	24	19.8	19.8	8.0	8.0	31.6	31.6	97.0	97.0	7.3	7.3	17.0		21		76				<0.2		0.9	
						7.2	0.1	25	19.8		8.0		31.6		97.0		7.3		17.0		21		76				<0.2		1.0	
IM3	Cloudy	Rough	10:59	8.0	Surface	1.0	0.1	97	19.8	19.8	8.1	8.1	31.7	31.7	96.9	96.9	7.3	7.3	13.4	15.1	14	15	73	74	819423	806004	<0.2	<0.2	1.0	1.1
						1.0	0.1	98	19.8		8.1		31.7		96.9		7.3		13.4		12		73				<0.2		1.1	
					Middle	4.0	0.0	38	19.8	19.8	8.1	8.1	31.7	31.7	96.5	96.5	7.3		15.2		15		74				<0.2		0.9	
						4.0	0.0	40	19.8		8.1		31.7		96.5		7.3		15.2		16		74				<0.2		1.0	
					Bottom	7.0	0.1	71	19.8	19.8	8.1	8.1	31.6	31.6	96.8	96.8	7.3	7.3	16.7		17		75				<0.2		1.2	
						7.0	0.1	73	19.8		8.1		31.6		96.8		7.3		16.7		16		76				<0.2		1.1	
IM4	Cloudy	Rough	10:51	7.6	Surface	1.0	0.2	32	19.7	19.7	8.0	8.0	31.3	31.3	96.4	96.4	7.3	7.3	16.4	19.9	16	19	72	73	819561	805024	<0.2	<0.2	1.1	1.1
						1.0	0.2	32	19.7		8.0		31.3		96.4		7.3		16.4		17		72				<0.2		1.2	
					Middle	3.8	0.1	339	19.8	19.8	8.0	8.0	31.3	31.3	96.3	96.3	7.3		18.6		17		73				<0.2		1.1	
						3.8	0.1	312	19.8		8.0		31.3		96.3		7.3		18.6		19		73				<0.2		1.1	
					Bottom	6.6	0.0	58	19.8	19.8	8.1	8.1	31.3	31.3	96.7	96.7	7.3	7.3	24.6		21		75				<0.2		1.1	
						6.6	0.0	59	19.8		8.1		31.3		96.7		7.3		24.6		21		75				<0.2		1.2	
IM5	Cloudy	Rough	10:42	6.7	Surface	1.0	0.1	190	19.8	19.8	8.1	8.1	31.5	31.5	96.9	96.9	7.4	7.4	20.2	22.5	23	24	73	74	820548	804944	<0.2	<0.2	1.1	1.0
						1.0	0.1	195	19.8		8.1		31.5		96.9		7.4		20.2		22		73				<0.2		0.9	
					Middle	3.4	0.0	158	19.8	19.8	8.1	8.1	31.4	31.4	97.0	97.0	7.4		22.5		24		74				<0.2		1.0	
						3.4	0.0	158	19.8		8.1		31.4		97.0		7.4		22.5		24		74				<0.2		1.0	
					Bottom	5.7	0.1	77	19.8	19.8	8.2	8.2	31.2	31.2	97.7	97.7	7.4	7.4	24.7		25		76				<0.2		1.0	
						5.7	0.2	81	19.8		8.2		31.2		97.7		7.4		24.7		25		76				<0.2		1.0	
IM6	Cloudy	Rough	10:33	6.7	Surface	1.0	0.0	293	19.9	19.9	8.0	8.0	31.4	31.4	95.8	95.8	7.3	7.3	17.5	20.3	19	21	73	74	821044	805824	<0.2	<0.2	1.2	1.2
						1.0	0.0	312	19.9		8.0		31.4		95.8		7.3		17.5		20		73				<0.2		1.2	
					Middle	3.4	0.1	69	19.9	19.9	8.0	8.0	31.2	31.2	96.3	96.3	7.3		19.4		21		73				<0.2		1.2	
						3.4	0.1	71	19.9		8.0		31.2		96.3		7.3		19.4		21		74				<0.2		1.1	
					Bottom	5.7	0.2	9	19.8	19.8	8.0	8.0	31.1	31.1	97.3	97.3	7.4	7.4	24.0		23		75				<0.2		1.1	
						5.7	0.2	9	19.8		8.0		31.1		97.3		7.4		24.0		22		76				<0.2		1.1	
IM7	Cloudy	Rough	10:25	8.2	Surface	1.0	0.1	141	19.9	19.9	7.9	7.9	30.8	30.8	95.0	95.0	7.2	7.2	16.2	18.2	22	23	73	74	821326	806828	<0.2	<0.2	1.9	2.1
						1.0	0.1	143	19.9		7.9		30.8		95.0		7.2		16.2		22		73				<0.2		1.9	
					Middle	4.1	0.1	155	19.9	19.9	8.0	8.0	30.7	30.7	95.2	95.2	7.2		18.3		24		73				<0.2		1.4	
						4.1	0.2	166	19.9		8.0		30.7		95.2		7.2		18.4		22		73				<0.2		1.7	
					Bottom	7.2	0.0	265	19.9	19.9	8.0	8.0	30.2	30.2	96.3	96.3	7.3	7.4	19.9		23		75				<0.2		2.7	
						7.2	0.0	278	19.9		8.0		30.2		96.3		7.4		19.9		24		75				<0.2		2.8	
IM8	Cloudy	Rough	11:00	8.5	Surface	1.0	0.1	121	20.1	20.1	8.3	8.3	28.4	28.4	96.5	96.5	7.4	7.4	15.1	18.1	18	20	73	73	821708	807864	<0.2	<0.2	1.0	1.0
						1.0	0.1	123	20.1		8.3		28.4		96.5		7.4		15.1		18		73				<0.2		1.1	
					Middle	4.3	0.1	52	20.1	20.1	8.3	8.3	28.6	28.6	97.0	97.0	7.4		17.8		21		75				<0.2		1.0	
						4.3	0.2	54	20.1		8.3		28.6		97.0		7.4		17.8		21		75				<0.2		1.1	
					Bottom	7.5	0.1	59	20.1	20.1	8.2	8.2	28.7	28.7	97.8	97.8	7.5	7.5	21.4		22		77				<0.2		1.0	
						7.5	0.1	63	20.1		8.2		28.7		97.8		7.5		21.4		22		66				<0.2		1.0	

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Water Quality Monitoring
Water Quality Monitoring Results on 16 December 17 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Rough	11:10	7.0	Surface	1.0	0.1	123	20.1	20.1	8.2	8.2	28.4	28.4	96.5	96.5	7.4	7.5	17.3	19.7	18	20	73	75	822107	808808	<0.2	<0.2	1.4	1.4
						1.0	0.1	126	20.1		8.2		28.4		96.5		7.4		17.3		18		74				<0.2		1.4	
					Middle	3.5	0.1	80	20.1	20.1	8.3	8.3	28.7	28.7	97.1	97.1	7.5		19.5		20		75				<0.2		1.4	
						3.5	0.2	85	20.1		8.3		28.7		97.1		7.5		19.5		22		75				<0.2		1.5	
					Bottom	6.0	0.2	57	20.1	20.1	8.3	8.3	29.3	29.3	98.0	98.1	7.5	7.5	22.1		20		77				<0.2		1.3	
						6.0	0.2	62	20.1		8.3		29.3		98.2		7.5		22.2		20		77				<0.2		1.3	
IM10	Cloudy	Rough	11:19	6.3	Surface	1.0	0.1	70	20.2	20.2	8.2	8.2	28.8	28.8	97.0	97.0	7.4	7.4	13.4	11.8	18	19	73	75	822235	809860	<0.2	<0.2	1.4	1.3
						1.0	0.1	75	20.2		8.2		28.8		97.0		7.4		13.4		19		73				<0.2		1.3	
					Middle	3.2	0.1	28	20.3	20.3	8.1	8.1	29.3	29.3	97.8	97.8	7.4		11.2		20		74				<0.2		1.4	
						3.2	0.1	30	20.3		8.1		29.3		97.8		7.4		11.2		20		75				<0.2		1.2	
					Bottom	5.3	0.1	31	20.3	20.3	8.1	8.1	29.8	29.8	99.7	99.7	7.6	7.6	10.8		19		76				<0.2		1.2	
						5.3	0.1	33	20.3		8.1		29.8		99.7		7.6		10.8		20		76				<0.2		1.0	
IM11	Cloudy	Rough	11:29	7.8	Surface	1.0	0.1	150	20.4	20.4	8.1	8.1	29.3	29.3	96.2	96.2	7.3	7.3	6.0	7.3	12	12	74	75	821492	810550	<0.2	<0.2	0.9	0.8
						1.0	0.1	154	20.4		8.1		29.3		96.2		7.3		6.0		12		73				<0.2		1.0	
					Middle	3.9	0.1	137	20.4	20.4	8.1	8.1	29.6	29.6	96.8	96.8	7.3		6.8		11		74				<0.2		0.9	
						3.9	0.1	137	20.4		8.1		29.6		96.8		7.3		6.8		11		75				<0.2		0.7	
					Bottom	6.8	0.0	170	20.4	20.4	8.1	8.1	29.8	29.8	98.4	98.4	7.5	7.5	9.2		12		77				<0.2		0.6	
						6.8	0.0	181	20.4		8.1		29.8		98.4		7.5		9.2		11		77				<0.2		0.5	
IM12	Cloudy	Rough	11:38	8.5	Surface	1.0	0.2	146	20.5	20.5	8.1	8.1	29.3	29.3	95.4	95.4	7.2	7.3	5.4	5.8	7	8	73	74	821144	811532	<0.2	<0.2	0.6	0.6
						1.0	0.2	159	20.5		8.1		29.3		95.4		7.2		5.4		6		73				<0.2		0.5	
					Middle	4.3	0.2	135	20.5	20.5	8.1	8.1	29.5	29.5	96.0	96.0	7.3		5.9		8		75				<0.2		0.6	
						4.3	0.2	143	20.5		8.1		29.5		96.0		7.3		5.9		8		74				<0.2		0.6	
					Bottom	7.5	0.2	151	20.5	20.5	8.1	8.1	29.8	29.8	98.5	98.5	7.5	7.5	6.0		8		76				<0.2		0.6	
						7.5	0.2	152	20.5		8.1		29.8		98.5		7.5		6.0		8		75				<0.2		0.6	
SR2	Cloudy	Moderate	12:03	3.9	Surface	1.0	0.1	131	20.5	20.5	8.1	8.1	28.6	28.6	97.3	97.3	7.4	7.4	6.7	7.9	8	9	73	74	821449	814158	<0.2	<0.2	0.6	0.6
						1.0	0.1	141	20.5		8.1		28.6		97.3		7.4		6.7		8		73				<0.2		0.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.9	0.1	150	20.5	20.5	8.1	8.1	28.9	28.9	98.9	98.9	7.5	7.5	9.0		8		75				<0.2		0.5	
						2.9	0.1	162	20.5		8.1		28.9		98.9		7.5		9.0		10		74				<0.2		0.6	
SR3	Cloudy	Rough	10:54	9.0	Surface	1.0	0.1	107	20.1	20.1	8.2	8.2	27.4	27.4	96.1	96.1	7.4	7.4	15.4	12.9	14	14	-	-	822146	807581	-	-	-	-
						1.0	0.2	114	20.1		8.2		27.4		96.1		7.4		15.4		13		-				-		-	
					Middle	4.5	0.2	81	20.1	20.1	8.2	8.2	27.7	27.7	96.4	96.4	7.4		11.2		14		-				-		-	
						4.5	0.2	83	20.1		8.2		27.7		96.4		7.4		11.2		14		-				-		-	
					Bottom	8.0	0.1	20	20.1	20.1	8.2	8.2	28.3	28.3	97.4	97.4	7.5	7.5	12.1		14		-				-		-	
						8.0	0.1	20	20.1		8.2		28.3		97.4		7.5		12.1		15		-				-		-	
SR4A	Cloudy	Moderate	12:02	8.7	Surface	1.0	0.2	72	19.7	19.7	8.1	8.1	31.8	31.8	95.4	95.4	7.2	7.2	17.9	20.9	12	15	-	-	817180	807801	-	-	-	-
						1.0	0.2	72	19.7		8.1		31.8		95.4		7.2		18.0		12		-				-		-	
					Middle	4.4	0.2	69	19.7	19.7	8.1	8.1	31.7	31.7	95.2	95.2	7.2		20.9		14		-				-		-	
						4.4	0.2	73	19.7		8.1		31.7		95.2		7.2		20.9		13		-				-		-	
					Bottom	7.7	0.2	62	19.7	19.7	8.2	8.2	31.6	31.6	95.3	95.3	7.2	7.2	23.9		19		-				-		-	
						7.7	0.2	62	19.7		8.2		31.6		95.3		7.2		23.9		17		-				-		-	
SR5A	Cloudy	Moderate	12:19	4.6	Surface	1.0	0.1	7	19.8	19.8	7.9	7.9	31.3	31.3	94.9	94.9	7.2	7.2	7.5	7.4	8	8	-	-	816563	810667	-	-	-	-
						1.0	0.1	7	19.8		7.9		31.3		94.9		7.2		7.5		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.0	304	19.8	19.8	7.9	7.9	30.9	30.9	96.9	96.9	7.4	7.4	7.3		8		-				-		-	
						3.6	0.0	320	19.8		7.9		30.9		96.9		7.4		7.3		9		-				-		-	
SR6	Cloudy	Moderate	12:44	3.9	Surface	1.0	0.1	62	19.9	19.9	7.9	7.9	31.3	31.3	94.2	94.2	7.1	7.1	8.1	8.3	9	9	-	-	817919	814653	-	-	-	-
						1.0	0.1	64	19.9		7.9		31.3		94.2		7.1		8.1		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.9	0.1	71	19.9	19.9	7.8	7.8	31.1	31.1	95.0	95.0	7.2	7.2	8.5		9		-				-		-	
						2.9	0.1	74	19.9		7.8		31.1		95.0		7.2		8.5		9		-				-		-	
SR7	Cloudy	Moderate	12:57	16.2	Surface	1.0	0.3	114	20.9	20.9	8.0	8.0	28.0	28.0	87.9	87.9	6.7	6.8	5.3	5.9	7	8	-	-	823645	823769	-	-	-	-
						1.0	0.3	123	20.9		8.0		28.0		87.9		6.7		5.3		7		-				-		-	
					Middle	8.1	0.1	117	20.9	20.9	8.0	8.0	28.1	28.1	89.6	89.6	6.8		6.0		8		-				-		-	
						8.1	0.2	117	20.9		8.0		28.1		89.6		6.8		6.0		8		-				-		-	
					Bottom	15.2	0.1	121	20.9	20.9	8.0	8.0	28.4	28.4	92.8	92.8	7.0	7.0	6.5		10		-				-		-	
						15.2	0.1	126	20.9		8.0		28.4		92.8		7.0		6.5		10		-				-		-	
SR8	Cloudy	Rough	11:46	4.0	Surface	1.0	-	-	20.3	20.3	8.2	8.2	29.7	29.7	98.4	98.4	7.5	7.5	7.8	7.6	11	13	-	-	820246	811418	-	-	-	-
						1.0	-	-	20.3		8.2		29.7		98.4		7.5		7.8		11		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	-	-	20.3	20.3	8.2	8.2	29.9	29.9	100.6	100.6	7.6	7.6	7.4		13		-				-		-	
						3.0	-	-	20.3		8.2		29.9		100.6		7.6		7.4		15		-				-		-	

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 December 17 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Rough	07:12	8.0	Surface	1.0	0.2	54	19.7	19.7	8.1	8.1	31.0	31.0	96.3	96.3	7.3	7.3	13.3	16.1	16	15	73	74	815617	804219	<0.2	<0.2	1.0	1.0
						1.0	0.2	55	19.7		8.1		31.0		96.3		7.3		13.3		15		73				<0.2		1.0	
					Middle	4.0	0.2	49	19.7	19.7	8.1	8.1	31.0	31.0	95.8	95.8	7.3		14.5		14		73				<0.2		1.0	
						4.0	0.2	50	19.7		8.1		31.0		95.8		7.3		14.5		15		73				<0.2		0.9	
					Bottom	7.0	0.1	44	19.7	19.7	8.1	8.1	31.3	31.3	95.4	95.4	7.3	7.3	20.6		14		75				<0.2		1.1	
						7.0	0.1	46	19.7		8.1		31.3		95.4		7.3		20.6		16		75				<0.2		1.1	
C2	Fine	Rough	08:10	11.2	Surface	1.0	0.2	41	20.3	20.3	8.0	8.0	26.6	26.6	94.1	94.1	7.3	7.3	4.7	5.3	8	8	73	74	825705	806940	<0.2	<0.2	1.4	1.4
						1.0	0.2	41	20.3		8.0		26.6		94.1		7.3		4.7		8		73				<0.2		1.3	
					Middle	5.6	0.1	3	20.4	20.4	8.0	8.0	26.9	26.9	94.4	94.4	7.3		5.4		8		74				<0.2		1.4	
						5.6	0.1	3	20.4		8.0		26.9		94.4		7.3		5.4		8		74				<0.2		1.4	
					Bottom	10.2	0.2	346	20.4	20.4	8.0	8.0	27.2	27.2	95.5	95.5	7.3	7.3	5.9		9		76				<0.2		1.4	
						10.2	0.2	349	20.4		8.0		27.2		95.5		7.3		5.9		9		75				<0.2		1.3	
C3	Fine	Moderate	06:17	11.1	Surface	1.0	0.5	266	20.7	20.7	8.1	8.1	28.9	28.9	94.5	94.5	7.2	7.2	5.3	8.7	9	9	74	75	822108	817786	<0.2	<0.2	0.6	0.6
						1.0	0.5	267	20.7		8.1		28.9		94.5		7.2		5.3		9		73				<0.2		0.5	
					Middle	5.6	0.4	273	20.7	20.7	8.1	8.1	29.1	29.1	95.1	95.1	7.2		8.9		9		75				<0.2		0.6	
						5.6	0.4	276	20.7		8.1		29.1		95.1		7.2		9.1		8		75				<0.2		0.6	
					Bottom	10.1	0.4	271	20.7	20.7	8.1	8.1	29.5	29.5	96.3	96.3	7.3	7.3	11.7		10		77				<0.2		0.7	
						10.1	0.4	290	20.7		8.1		29.5		96.3		7.3		11.7		9		76				<0.2		0.6	
IM1	Cloudy	Rough	07:29	7.2	Surface	1.0	0.4	9	19.9	19.9	8.2	8.2	31.2	31.2	95.4	95.4	7.2	7.2	19.4	21.9	21	21	73	74	818374	806435	<0.2	<0.2	0.8	0.9
						1.0	0.5	9	19.9		8.2		31.2		95.4		7.2		19.4		20		73				<0.2		0.8	
					Middle	3.6	0.3	7	19.9	19.9	8.2	8.2	31.0	31.0	95.4	95.4	7.2		21.5		21		73				<0.2		0.9	
						3.6	0.3	7	19.9		8.2		31.0		95.4		7.2		21.5		21		74				<0.2		0.9	
					Bottom	6.2	0.3	-	19.9	19.9	8.0	8.0	30.7	30.7	95.5	95.5	7.3	7.3	24.9		20		75				<0.2		0.8	
						6.2	0.3	-	19.9		8.0		30.7		95.5		7.3		24.9		21		75				<0.2		0.9	
IM2	Cloudy	Rough	07:38	8.3	Surface	1.0	0.4	22	20.0	20.0	8.1	8.1	31.3	31.3	94.9	94.9	7.2	7.2	19.1	21.3	19	21	73	74	818868	806212	<0.2	<0.2	1.6	1.9
						1.0	0.4	23	20.0		8.1		31.3		94.9		7.2		19.1		20		73				<0.2		1.6	
					Middle	4.2	0.4	28	20.0	20.0	8.2	8.2	31.2	31.2	94.9	94.9	7.2		20.4		20		73				<0.2		2.0	
						4.2	0.4	28	20.0		8.2		31.2		94.9		7.2		20.4		20		74				<0.2		2.4	
					Bottom	7.3	0.3	25	20.0	20.0	8.1	8.1	31.0	31.0	95.0	95.0	7.2	7.2	24.4		23		76				<0.2		2.0	
						7.3	0.3	27	20.0		8.1		31.0		95.0		7.2		24.4		25		76				<0.2		1.7	
IM3	Cloudy	Rough	07:45	7.8	Surface	1.0	0.2	19	19.9	19.9	8.2	8.2	31.0	31.0	94.8	94.8	7.2	7.2	13.5	16.9	14	17	72	74	819434	806027	<0.2	<0.2	1.8	1.8
						1.0	0.2	19	19.9		8.2		31.0		94.8		7.2		13.5		14		73				<0.2		2.0	
					Middle	3.9	0.2	352	19.9	19.9	8.2	8.2	31.1	31.1	94.7	94.7	7.2		16.1		16		73				<0.2		2.1	
						3.9	0.2	356	19.9		8.2		31.1		94.7		7.2		16.1		16		74				<0.2		1.9	
					Bottom	6.8	0.2	6	20.0	20.0	8.2	8.2	31.1	31.1	95.0	95.0	7.2	7.2	21.0		21		75				<0.2		1.5	
						6.8	0.2	6	20.0		8.2		31.1		95.0		7.2		21.0		21		75				<0.2		1.5	
IM4	Cloudy	Rough	07:53	7.3	Surface	1.0	0.3	13	19.9	19.9	8.2	8.2	31.6	31.6	95.6	95.6	7.2	7.2	17.0	21.5	15	16	72	73	819541	805028	<0.2	<0.2	2.2	2.0
						1.0	0.4	14	19.9		8.2		31.6		95.6		7.2		17.0		16		72				<0.2		2.0	
					Middle	3.7	0.3	24	20.0	20.0	8.2	8.2	31.6	31.6	95.5	95.5	7.2		22.1		16		73				<0.2		2.1	
						3.7	0.4	24	20.0		8.2		31.6		95.5		7.2		22.3		17		73				<0.2		2.0	
					Bottom	6.3	0.2	70	20.0	20.0	8.0	8.0	31.5	31.5	95.7	95.7	7.2	7.2	25.1		17		75				<0.2		1.9	
						6.3	0.2	76	20.0		8.0		31.5		95.7		7.2		25.3		17		75				<0.2		1.9	
IM5	Cloudy	Rough	08:06	6.4	Surface	1.0	0.3	12	20.0	20.0	7.9	7.9	31.5	31.5	94.6	94.6	7.2	7.2	17.8	19.9	21	24	73	74	820543	804894	<0.2	<0.2	1.4	1.2
						1.0	0.3	12	20.0		7.9		31.5		94.6		7.2		17.8		22		73				<0.2		1.2	
					Middle	3.2	0.3	8	20.0	20.0	7.8	7.8	31.3	31.3	94.5	94.5	7.2		19.2		25		74				<0.2		1.2	
						3.2	0.3	8	20.0		7.8		31.3		94.5		7.2		19.2		24		74				<0.2		1.1	
					Bottom	5.4	0.3	334	20.0	20.0	7.7	7.7	31.1	31.1	94.7	94.7	7.2	7.2	22.6		26		75				<0.2		1.3	
						5.4	0.3	307	20.0		7.7		31.1		94.7		7.2		22.7		25		76				<0.2		1.2	
IM6	Cloudy	Rough	08:14	6.7	Surface	1.0	0.3	54	19.9	19.9	8.0	8.0	31.0	31.0	94.3	94.3	7.2	7.2	15.6	18.0	20	22	72	73	821051	805806	<0.2	<0.2	1.2	1.2
						1.0	0.3	58	19.9		8.0		31.0		94.3		7.2		15.6		20		72				<0.2		1.2	
					Middle	3.4	0.3	353	19.9	19.9	8.0	8.0	31.3	31.3	94.2	94.2	7.1		18.4		22		73				<0.2		1.4	
						3.4	0.3	359	19.9		8.0		31.3		94.2		7.1		18.4		22		73				<0.2		1.2	
					Bottom	5.7	0.3	23	19.9	19.9	8.0	8.0	31.5	31.5	94.0	94.0	7.1	7.1	20.1		22		75				<0.2		1.2	
						5.7	0.3	23	19.9		8.0		31.5		94.0		7.1		20.1		23		75				<0.2		1.2	
IM7	Cloudy	Rough	08:22	8.0	Surface	1.0	0.2	58	19.9	19.9	7.8	7.8	30.9	30.9	94.4	94.4	7.2	7.2	16.4	19.1	17	18	72	74	821362	806819	<0.2	<0.2	1.4	1.4
						1.0	0.2	63	19.9		7.8		30.9		94.4		7.2		16.4		18		73				<0.2		1.6	
					Middle	4.0	0.3	36	19.9	19.9	7.9	7.9	30.9	30.9	94.3	94.3	7.2		19.0		19		73				<0.2		1.2	
						4.0	0.3	36	19.9		7.9		30.9		94.3		7.2		19.0		17		73				<0.2		1.3	
					Bottom	7.0	0.5	62	19.9	19.9	7.5	7.5	31.2	31.2	95.1	95.1	7.2	7.2	21.9		20		75				<0.2		1.5	
						7.0	0.5	65	19.9		7.5		31.2		95.1		7.2		21.9		19		75				<0.2		1.4	
IM8	Fine	Rough	07:40	7.7	Surface	1.0	0.2	27	20.1	20.1	8.2	8.2	28.5	28.5	94.8	94.8	7.3	7.3	16.8	17.5	21	20	73	74	821678	807823	<0.2	<0.2	1.4	1.4
						1.0	0.2	28	20.1		8.2		28.5		94.8		7.3		16.8		20		73				<0.2		1.5	
					Middle	3.9	0.2	32	20.2	20.2	8.2	8.2	28.6	28.6	94.6	94.6	7.3		17.7		19		74				<0.2		1.4	
						3.9	0.2	32	20.2		8.2		28.6		94.6		7.3		17.7		19		74				<0.2		1.3	
					Bottom	6.7	0.1	38	20.2	20.2	8.2	8.2	28.9	28.9	95.9	95.9	7.3	7.3	18.1		21		75				<0.2		1.4	
						6.7	0.1	41	20.2		8.2		28.9		95.9		7.3		18.1		21		75				<0.2		1.4	

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**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 16 December 17 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Fine	Rough	07:30	7.0	Surface	1.0	0.1	37	20.1	20.1	8.1	8.1	27.8	27.8	94.0	94.0	7.2	7.2	17.4	21.4	18	19	73	75	822093	808819	<0.2	<0.2	2.2	1.8
						1.0	0.1	38	20.1		8.1		27.8		94.0		7.2		17.4		18		72				<0.2		2.0	
					Middle	3.5	0.1	347	20.1	20.1	8.1	8.1	27.9	27.9	94.1	94.1	7.2		21.5		17		74				<0.2		1.5	
						3.5	0.1	352	20.1		8.1		27.9		94.1		7.2		21.5		17		75				<0.2		1.7	
					Bottom	6.0	0.1	15	20.2	20.2	8.3	8.3	28.2	28.2	95.3	95.3	7.3	7.3	25.2		22		77				<0.2		1.6	
						6.0	0.1	15	20.2		8.3		28.2		95.3		7.3		25.2		21		77				<0.2		2.0	
IM10	Fine	Rough	07:21	6.8	Surface	1.0	0.4	328	20.3	20.3	8.1	8.1	29.4	29.4	95.2	95.2	7.2	7.3	15.8	18.1	16	16	73	75	822256	809818	<0.2	<0.2	1.0	1.0
						1.0	0.4	351	20.3		8.1		29.4		95.2		7.2		15.8		14		73				<0.2		0.9	
					Middle	3.4	0.5	333	20.4	20.4	8.1	8.1	29.5	29.5	95.9	95.9	7.3		19.2		16		74				<0.2		1.0	
						3.4	0.5	306	20.4		8.1		29.5		95.9		7.3		19.2		17		75				<0.2		1.2	
					Bottom	5.8	0.4	318	20.3	20.3	8.1	8.1	29.5	29.5	96.5	96.5	7.3	7.3	19.2		17		77				<0.2		1.1	
						5.8	0.4	334	20.3		8.1		29.5		96.5		7.3		19.2		18		76				<0.2		1.0	
IM11	Fine	Rough	07:10	7.2	Surface	1.0	0.5	302	20.4	20.4	8.1	8.1	29.1	29.1	94.8	94.8	7.2	7.2	18.9	21.0	23	24	73	75	821478	810521	<0.2	<0.2	1.0	1.0
						1.0	0.5	322	20.4		8.1		29.1		94.8		7.2		18.9		24		73				<0.2		0.8	
					Middle	3.6	0.5	295	20.4	20.4	8.1	8.1	29.3	29.3	95.1	95.1	7.2		20.2		24		75				<0.2		1.0	
						3.6	0.5	313	20.4		8.1		29.3		95.1		7.2		20.2		25		75				<0.2		1.0	
					Bottom	6.2	0.3	308	20.4	20.4	8.1	8.1	29.3	29.3	96.1	96.1	7.3	7.3	24.0		25		76				<0.2		0.9	
						6.2	0.3	333	20.4		8.1		29.3		96.1		7.3		24.0		25		77				<0.2		1.0	
IM12	Fine	Rough	07:02	7.3	Surface	1.0	0.6	272	20.4	20.4	8.1	8.1	28.3	28.3	95.0	95.0	7.3	7.3	18.4	20.6	17	16	73	75	821184	811534	<0.2	<0.2	1.1	1.1
						1.0	0.6	293	20.4		8.1		28.3		95.0		7.3		18.4		16		73				<0.2		0.9	
					Middle	3.7	0.6	284	20.4	20.4	8.1	8.1	28.5	28.5	95.2	95.2	7.3		20.8		15		75				<0.2		1.0	
						3.7	0.6	297	20.4		8.1		28.5		95.2		7.3		20.8		17		75				<0.2		1.3	
					Bottom	6.3	0.5	284	20.5	20.5	8.1	8.1	29.0	29.0	96.0	96.0	7.3	7.3	22.6		15		76				<0.2		1.3	
						6.3	0.5	290	20.5		8.1		29.0		96.0		7.3		22.6		15		75				<0.2		1.2	
SR2	Fine	Moderate	06:36	4.3	Surface	1.0	0.4	350	20.5	20.5	8.1	8.1	29.5	29.5	101.6	101.6	7.7	7.7	20.4	20.8	18	18	74	74	821488	814148	<0.2	<0.2	0.9	1.0
						1.0	0.4	357	20.5		8.1		29.5		101.6		7.7		20.4		18		73				<0.2		0.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.3	352	20.5	20.5	8.1	8.1	29.9	29.9	103.3	103.3	7.8	7.8	21.1		20		75				<0.2		1.2	
						3.3	0.3	324	20.5		8.1		29.9		103.3		7.8		21.1		18		75				<0.2		1.0	
SR3	Fine	Rough	07:48	8.2	Surface	1.0	0.2	25	20.3	20.3	8.1	8.1	27.8	27.8	94.3	94.3	7.2	7.3	11.2	15.9	11	11	-	-	822166	807560	-	-	-	-
						1.0	0.3	25	20.3		8.1		27.8		94.3		7.2		11.2		10		-				-		-	
					Middle	4.1	0.4	18	20.2	20.2	8.1	8.1	28.3	28.3	94.7	94.7	7.3		16.9		10		-				-		-	
						4.1	0.4	19	20.2		8.1		28.3		94.7		7.3		16.9		10		-				-		-	
					Bottom	7.2	0.3	9	20.2	20.2	8.2	8.2	28.8	28.8	95.5	95.5	7.3	7.3	19.7		12		-				-		-	
						7.2	0.3	9	20.2		8.2		28.8		95.5		7.3		19.7		11		-				-		-	
SR4A	Cloudy	Moderate	06:53	8.4	Surface	1.0	0.0	219	19.7	19.7	8.0	8.0	31.9	31.9	95.3	95.3	7.2	7.2	10.1	15.4	9	10	-	-	817187	807815	-	-	-	-
						1.0	0.0	238	19.7		8.0		31.9		95.3		7.2		10.1		10		-				-		-	
					Middle	4.2	0.2	76	19.7	19.7	8.0	8.0	31.9	31.9	95.1	95.1	7.2		15.6		8		-				-		-	
						4.2	0.2	76	19.7		8.0		31.9		95.1		7.2		15.6		10		-				-		-	
					Bottom	7.4	0.1	82	19.7	19.7	8.0	8.0	31.9	31.9	94.9	94.9	7.2	7.2	20.4		10		-				-		-	
						7.4	0.2	88	19.7		8.0		31.9		94.9		7.2		20.4		11		-				-		-	
SR5A	Cloudy	Moderate	06:39	4.2	Surface	1.0	0.0	172	19.9	19.9	7.9	7.9	30.5	30.5	93.9	93.9	7.1	7.1	11.8	10.4	9	10	-	-	816580	810678	-	-	-	-
						1.0	0.0	181	19.9		7.9		30.5		93.9		7.1		11.8		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.0	147	19.9	19.9	7.9	7.9	28.8	28.8	96.4	96.4	7.4	7.4	8.9		11		-				-		-	
						3.2	0.0	148	19.9		7.9		28.8		96.4		7.4		8.9		11		-				-		-	
SR6	Cloudy	Moderate	06:17	4.0	Surface	1.0	0.1	28	20.1	20.1	7.9	7.9	30.6	30.6	92.4	92.4	7.0	7.0	11.6	13.5	10	12	-	-	817926	814675	-	-	-	-
						1.0	0.1	29	20.1		7.9		30.6		92.4		7.0		11.6		12		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	0.0	8	20.1	20.1	7.9	7.9	29.8	29.8	93.2	93.2	7.1	7.1	15.3		13		-				-		-	
						3.0	0.0	8	20.1		7.9		29.8		93.2		7.1		15.3		12		-				-		-	
SR7	Fine	Moderate	05:39	16.6	Surface	1.0	0.3	39	20.9	20.9	8.0	8.0	29.9	29.9	88.2	88.2	6.6	6.6	6.1	6.3	8	8	-	-	823615	823723	-	-	-	-
						1.0	0.3	41	20.9		8.0		29.9		88.2		6.6		6.1		7		-				-		-	
					Middle	8.3	0.3	38	20.9	20.9	8.0	8.0	30.2	30.2	88.0	88.0	6.6		6.5		10		-				-		-	
						8.3	0.3	39	20.9		8.0		30.2		88.0		6.6		6.5		8		-				-		-	
					Bottom	15.6	0.3	28	21.0	21.0	8.0	8.0	30.7	30.7	88.6	88.6	6.6	6.6	6.4		8		-				-		-	
						15.6	0.3	30	21.0		8.0		30.7		88.6		6.6		6.4		9		-				-		-	
SR8	Fine	Moderate	06:54	4.2	Surface	1.0	-	-	20.4	20.4	8.1	8.1	29.0	29.0	96.3	96.3	7.3	7.3	9.6	9.7	12	12	-	-	820246	811418	-	-	-	-
						1.0	-	-	20.4		8.1		29.0		96.3		7.3		9.6		11		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	-	-	20.3	20.3	8.1	8.1	29.5	29.5	96.7	96.7	7.3	7.3	9.8		11		-				-		-	
						3.2	-	-	20.3		8.1		29.5		96.7		7.3		9.8		12		-				-		-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 19 December 17 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Rough	13:25	8.5	Surface	1.0	0.2	151	17.5	17.5	8.1	8.1	32.4	32.4	99.3	99.3	7.8	7.8	17.1	15.9	16	18	73	73	815609	804244	<0.2	<0.2	1.0	1.1
						1.0	0.2	160	17.5		8.1		32.4		99.2		7.8		16.1		18		73				<0.2		1.2	
					Middle	4.3	0.1	180	17.6	17.6	8.0	8.0	32.6	32.7	99.5	99.5	7.8		15.3		19		72				<0.2		1.1	
						4.3	0.1	182	17.6		8.0		32.7		99.5		7.8		15.5		17		72				<0.2		1.1	
					Bottom	7.5	0.1	124	17.5	17.5	8.0	8.0	32.2	32.2	100.1	100.3	7.9	7.9	15.9		18		75				<0.2		1.2	
						7.5	0.1	134	17.5		8.0		32.2		100.4		7.9		15.6		17		75				<0.2		1.0	
C2	Sunny	Rough	12:08	11.8	Surface	1.0	0.1	357	17.5	17.5	8.1	8.1	32.4	32.4	96.0	96.1	7.6	7.6	7.0	7.5	10	12	71	73	825662	806927	<0.2	<0.2	1.0	1.2
						1.0	0.1	328	17.5		8.1		32.4		96.1		7.6		7.0		8		71				<0.2		1.0	
					Middle	5.9	0.1	32	17.5	17.5	8.1	8.1	32.4	32.4	96.5	96.6	7.6		7.3		9		73				<0.2		1.2	
						5.9	0.2	33	17.5		8.1		32.4		96.6		7.6		7.4		10		73				<0.2		1.1	
					Bottom	10.8	0.2	353	17.5	17.5	8.1	8.1	32.4	32.4	98.5	98.8	7.8	7.8	8.2		16		75				<0.2		1.2	
						10.8	0.2	355	17.5		8.1		32.4		99.0		7.8		8.1		17		75				<0.2		1.5	
C3	Sunny	Moderate	14:00	11.3	Surface	1.0	0.2	117	19.1	19.1	8.1	8.1	32.7	32.7	97.3	97.4	7.4	7.6	2.1	3.1	6	8	72	73	822111	817807	<0.2	<0.2	0.9	0.8
						1.0	0.2	122	19.1		8.1		32.7		97.4		7.4		2.1		7		71				<0.2		0.8	
					Middle	5.7	0.2	112	19.0	19.0	8.1	8.1	32.6	32.6	100.6	100.8	7.7		4.1		7		73				<0.2		0.7	
						5.7	0.2	113	19.0		8.1		32.6		101.0		7.7		4.2		8		73				<0.2		0.9	
					Bottom	10.3	0.1	95	19.2	19.2	8.1	8.1	32.7	32.7	101.2	101.4	7.7	7.7	2.8		9		75				<0.2		0.6	
						10.3	0.1	95	19.2		8.1		32.7		101.6		7.7		3.0		9		75				<0.2		0.8	
IM1	Fine	Rough	13:05	7.2	Surface	1.0	0.2	85	17.6	17.6	8.1	8.1	32.6	32.6	99.1	99.1	7.8	7.8	18.8	18.8	18	20	73	75	818330	806442	<0.2	<0.2	1.0	1.1
						1.0	0.2	89	17.6		8.1		32.6		99.1		7.8		18.7		17		73				<0.2		1.2	
					Middle	3.6	0.2	74	17.5	17.5	8.0	8.0	32.7	32.7	99.6	99.6	7.8		18.7		20		75				<0.2		0.9	
						3.6	0.2	80	17.4		8.0		32.7		99.6		7.8		18.6		21		76				<0.2		1.2	
					Bottom	6.2	0.1	160	17.3	17.3	8.0	8.0	31.9	31.9	99.9	100.2	7.9	8.0	18.9		22		77				<0.2		1.2	
						6.2	0.1	170	17.3		8.0		31.9		100.5		8.0		19.0		21		77				<0.2		1.0	
IM2	Fine	Rough	12:55	8.5	Surface	1.0	0.1	67	16.8	16.8	8.1	8.1	30.8	30.8	99.6	99.6	8.1	8.1	19.4	21.2	20	22	71	74	818833	806199	<0.2	<0.2	1.2	1.1
						1.0	0.1	68	16.8		8.1		30.9		99.5		8.1		19.4		20		72				<0.2		1.0	
					Middle	4.3	0.1	76	17.0	17.0	8.1	8.1	30.5	30.5	99.5	99.5	8.1		20.7		23		73				<0.2		1.2	
						4.3	0.1	81	17.0		8.1		30.6		99.4		8.0		20.5		22		73				<0.2		1.2	
					Bottom	7.5	0.1	121	17.4	17.4	8.0	8.0	32.0	32.0	99.0	99.2	7.8	7.9	23.6		24		77				<0.2		1.0	
						7.5	0.1	129	17.4		8.0		32.0		99.4		7.9		23.8		23		77				<0.2		1.2	
IM3	Fine	Rough	12:48	8.1	Surface	1.0	0.2	80	17.2	17.2	8.1	8.1	29.6	29.6	98.4	98.4	8.0	8.0	19.3	21.0	19	20	71	73	819391	806017	<0.2	<0.2	1.0	1.0
						1.0	0.2	86	17.2		8.1		29.6		98.4		8.0		19.5		17		71				<0.2		1.1	
					Middle	4.1	0.1	74	17.5	17.5	8.1	8.1	31.7	31.7	99.6	99.7	7.9		21.0		22		73				<0.2		1.2	
						4.1	0.1	78	17.4		8.1		31.8		99.8		7.9		20.9		21		73				<0.2		1.0	
					Bottom	7.1	0.0	267	16.9	17.0	8.0	8.0	31.0	31.0	100.0	100.2	8.0	8.1	22.8		20		76				<0.2		0.9	
						7.1	0.0	278	17.0		8.0		31.0		100.4		8.1		22.6		20		76				<0.2		1.0	
IM4	Fine	Rough	12:40	7.8	Surface	1.0	0.2	57	16.3	16.3	8.2	8.2	30.6	30.6	97.4	97.4	8.4	8.3	15.7	20.1	15	21	73	75	819565	805056	<0.2	<0.2	1.1	1.2
						1.0	0.2	57	16.3		8.3		30.5		97.4		8.4		15.6		17		73				<0.2		1.2	
					Middle	3.9	0.2	37	17.0	17.0	8.2	8.2	30.0	30.1	98.4	98.4	8.1		19.3		20		75				<0.2		1.1	
						3.9	0.2	39	17.0		8.2		30.1		98.4		8.1		19.1		19		75				<0.2		1.2	
					Bottom	6.8	0.1	37	16.9	16.9	8.0	8.0	31.0	31.0	99.4	99.5	8.0	8.0	25.3		28		76				<0.2		1.2	
						6.8	0.1	39	16.9		8.0		31.0		99.5		8.0		25.3		28		77				<0.2		1.3	
IM5	Fine	Rough	12:29	6.9	Surface	1.0	0.2	36	15.9	15.9	8.2	8.2	30.7	30.7	99.2	99.1	8.3	8.2	19.6	22.5	19	21	72	74	820568	804944	<0.2	<0.2	1.1	1.2
						1.0	0.2	39	15.9		8.2		30.7		99.0		8.3		19.7		17		72				<0.2		1.0	
					Middle	3.5	0.1	358	16.4	16.4	8.2	8.1	30.3	30.3	98.8	98.8	8.1		22.4		22		75				<0.2		1.2	
						3.5	0.1	329	16.4		8.1		30.3		98.8		8.1		22.6		21		75				<0.2		1.2	
					Bottom	5.9	0.0	342	16.3	16.3	8.1	8.1	31.4	31.4	98.6	98.6	8.0	8.0	25.2		24		75				<0.2		1.0	
						5.9	0.0	348	16.3		8.1		31.4		98.6		8.0		25.3		22		75				<0.2		1.4	
IM6	Fine	Rough	12:18	7.0	Surface	1.0	0.1	30	15.0	15.0	8.2	8.2	30.5	30.5	100.3	100.3	8.9	8.5	14.8	19.9	15	21	71	75	821062	805853	<0.2	<0.2	1.2	1.2
						1.0	0.1	32	15.0		8.2		30.5		100.3		8.9		15.1		16		72				<0.2		1.2	
					Middle	3.5	0.2	27	16.6	16.6	8.2	8.2	29.4	29.4	98.8	98.7	8.1		21.6		24		75				<0.2		1.1	
						3.5	0.2	27	16.6		8.2		29.4		98.6		8.1		21.5		23		75				<0.2		1.2	
					Bottom	6.0	0.1	52	16.8	16.8	8.1	8.1	31.9	31.8	98.5	98.5	7.9	7.9	23.4		24		77				<0.2		1.2	
						6.0	0.1	53	16.8		8.1		31.8		98.5		7.9		23.0		24		77				<0.2		1.2	
IM7	Fine	Rough	12:09	8.3	Surface	1.0	0.2	77	17.5	17.5	8.1	8.1	32.2	32.2	98.5	98.6	7.8	7.8	14.0	16.7	16	18	73	75	821363	806847	<0.2	<0.2	1.1	1.2
						1.0	0.2	84	17.5		8.1		32.2		98.6		7.8		14.5		17		73				<0.2		1.2	
					Middle	4.2	0.1	53	17.4	17.4	8.1	8.1	32.1	32.1	99.0	99.1	7.8		17.0		19		75				<0.2		1.2	
						4.2	0.1	55	17.4		8.1		32.1		99.1		7.8		17.3		17		75				<0.2		1.3	
					Bottom	7.3	0.1	95	17.4	17.4	8.1	8.1	30.1	30.1	100.2	100.4	8.0	8.1	18.5		19		76				<0.2		1.0	
						7.3	0.1	98	17.3		8.1		30.0		100.5		8.1		18.7		17		77				<0.2		1.2	
IM8	Sunny	Rough	12:36	7.9	Surface	1.0	0.2	81	17.3	17.4	8.2	8.2	32.5	32.5	98.3	98.4	7.8	7.8	18.2	19.1	21	22	72	73	821691	807825	<0.2	<0.2	1.2	1.3
						1.0	0.2	87	17.4		8.2		32.5		98.5		7.8		18.6		22		71				<0.2		1.3	
					Middle	4.0	0.1	86	17.4	17.4	8.2	8.2	32.6	32.6	98.6	98.6	7.8		18.3		22		73				<0.2		1.3	
						4.0	0.1	90	17.3		8.2		32.7		98.6		7.8		17.4		21		73				<0.2		1.4	
					Bottom	6.9	0.2	95	17.5	17.5	8.2	8.2	32.5	32.5	98.9	99.0	7.8	7.8	21.1		23		75				<0.2		1.3	
						6.9	0.2	98	17.5		8.2		32.5		99.0		7.8		20.8		23		75				<0.2		1.3	

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 19 December 17 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Sunny	Rough	12:44	7.0	Surface	1.0	0.1	105	17.9	17.9	8.3	8.3	32.6	32.6	98.6	98.7	7.7	7.7	13.9	15.0	18	20	71	73	822111	808820	<0.2	<0.2	1.1	1.1
						1.0	0.1	105	17.9		8.3		32.6		98.7		7.7		14.1		17		72				<0.2		1.2	
					Middle	3.5	0.1	85	17.8	17.8	8.3	8.3	32.6	32.6	99.1	99.1	7.7		15.1		19		72				<0.2		1.1	
						3.5	0.1	89	17.8		8.3		32.6		99.1		7.8		15.2		19		73				<0.2		1.0	
					Bottom	6.0	0.1	84	17.7	17.7	8.3	8.3	32.6	32.6	100.6	100.9	7.9	7.9	15.9		25		75				<0.2		1.0	
						6.0	0.1	89	17.7		8.3		32.6		101.1		7.9		15.8		23		74				<0.2		1.1	
IM10	Sunny	Rough	12:53	6.7	Surface	1.0	0.1	329	18.3	18.3	8.1	8.1	32.7	32.7	100.4	100.5	7.8	7.8	5.1	5.8	12	12	71	73	822252	809852	<0.2	<0.2	1.0	1.0
						1.0	0.2	335	18.3		8.1		32.7		100.6		7.8		5.0		12		71				<0.2		0.9	
					Middle	3.4	0.2	356	18.3	18.3	8.1	8.1	32.7	32.7	101.2	101.4	7.8		6.6		10		73				<0.2		1.0	
						3.4	0.2	328	18.3		8.1		32.7		101.5		7.9		6.8		11		73				<0.2		0.9	
					Bottom	5.7	0.1	358	18.3	18.3	8.1	8.1	32.7	32.7	101.4	101.7	7.9	7.9	5.5		12		75				<0.2		1.1	
						5.7	0.1	329	18.3		8.1		32.6		101.9		7.9		5.6		14		75				<0.2		1.0	
IM11	Sunny	Rough	13:05	8.1	Surface	1.0	0.0	115	18.3	18.3	8.1	8.1	32.5	32.5	99.1	99.2	7.7	7.7	3.2	4.2	11	12	71	73	821526	810528	<0.2	<0.2	0.8	1.1
						1.0	0.0	123	18.3		8.1		32.5		99.2		7.7		3.3		10		71				<0.2		1.1	
					Middle	4.1	0.0	-	18.5	18.5	8.1	8.1	32.7	32.7	98.1	98.2	7.6		4.0		11		73				<0.2		1.0	
						4.1	0.0	-	18.5		8.1		32.7		98.2		7.6		4.2		13		73				<0.2		1.6	
					Bottom	7.1	0.1	102	18.4	18.4	8.1	8.1	32.7	32.7	100.2	100.4	7.7	7.8	4.9		15		75				<0.2		1.2	
						7.1	0.1	104	18.4		8.1		32.7		100.6		7.8		5.4		13		75				<0.2		1.1	
IM12	Sunny	Rough	13:13	8.7	Surface	1.0	0.1	210	18.8	18.8	8.1	8.1	32.7	32.7	98.3	98.4	7.5	7.5	8.9	7.0	11	11	71	73	821136	811538	<0.2	<0.2	0.9	1.0
						1.0	0.1	216	18.8		8.1		32.7		98.4		7.5		8.8		9		71				<0.2		0.8	
					Middle	4.4	0.1	205	18.9	18.9	8.1	8.1	32.7	32.7	98.0	98.0	7.5		5.6		9		74				<0.2		0.9	
						4.4	0.1	217	18.9		8.1		32.7		98.0		7.5		6.1		10		73				<0.2		1.1	
					Bottom	7.7	0.0	107	18.7	18.7	8.1	8.1	32.7	32.7	100.1	100.5	7.7	7.8	6.2		13		75				<0.2		1.3	
						7.7	0.0	116	18.7		8.1		32.7		100.9		7.8		6.3		11		75				<0.2		1.1	
SR2	Sunny	Moderate	13:38	4.4	Surface	1.0	0.1	13	19.1	19.1	8.1	8.1	32.7	32.7	97.6	97.7	7.5	7.5	1.9	2.2	8	8	71	72	821443	814185	<0.2	<0.2	0.8	0.8
						1.0	0.1	13	19.1		8.1		32.7		97.8		7.5		1.9		7		71				<0.2		0.7	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.1	16	18.9	18.9	8.1	8.1	32.7	32.7	101.8	102.0	7.8	7.8	2.5		7		73				<0.2		0.9	
						3.4	0.1	17	18.9		8.1		32.7		102.2		7.8		2.5		8		73				<0.2		0.9	
SR3	Sunny	Rough	12:30	8.7	Surface	1.0	0.2	71	17.8	17.8	8.2	8.2	32.5	32.5	99.2	99.2	7.8	7.8	9.7	10.3	13	17	-	-	822142	807555	-	-	-	-
						1.0	0.2	71	17.8		8.2		32.5		99.2		7.8		9.9		14		-				-		-	
					Middle	4.4	0.1	68	17.8	17.8	8.2	8.2	32.5	32.5	99.4	99.5	7.8		10.0		18		-				-		-	
						4.4	0.1	70	17.7		8.2		32.5		99.5		7.8		10.1		17		-				-		-	
					Bottom	7.7	0.1	80	17.7	17.7	8.2	8.2	32.5	32.5	101.5	101.8	8.0	8.0	10.9		20		-				-		-	
						7.7	0.1	87	17.7		8.2		32.5		102.0		8.0		11.0		18		-				-		-	
SR4A	Fine	Calm	13:47	8.7	Surface	1.0	0.2	74	17.0	17.0	8.1	8.1	32.5	32.5	99.0	99.0	7.9	7.9	9.4	10.3	11	12	-	-	817199	807785	-	-	-	-
						1.0	0.2	79	17.0		8.1		32.5		98.9		7.9		9.3		11		-				-		-	
					Middle	4.4	0.2	79	17.3	17.3	8.0	8.0	32.3	32.3	99.3	99.4	7.9		10.8		12		-				-		-	
						4.4	0.2	86	17.3		8.0		32.3		99.4		7.9		10.9		10		-				-		-	
					Bottom	7.7	0.2	76	16.7	16.7	8.0	8.0	32.0	32.0	99.9	100.0	8.0	8.0	10.7		13		-				-		-	
						7.7	0.2	83	16.7		8.0		31.9		100.1		8.0		10.4		13		-				-		-	
SR5A	Fine	Calm	14:03	4.1	Surface	1.0	0.1	141	17.4	17.4	8.0	8.0	32.4	32.4	98.9	98.9	7.8	7.8	5.3	5.5	9	8	-	-	816581	810721	-	-	-	-
						1.0	0.1	143	17.4		8.0		32.4		98.9		7.8		5.5		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.1	133	17.4	17.4	8.0	8.0	31.8	31.8	99.0	99.1	7.9	7.9	5.6		8		-				-		-	
						3.1	0.1	144	17.3		8.0		31.8		99.2		7.9		5.6		8		-				-		-	
SR6	Fine	Calm	14:26	3.9	Surface	1.0	0.1	77	18.3	18.3	8.0	8.0	32.4	32.4	99.0	99.0	7.7	7.7	5.1	5.8	8	8	-	-	817905	814661	-	-	-	-
						1.0	0.1	80	18.3		8.0		32.4		99.0		7.7		5.1		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.9	0.1	83	18.3	18.3	8.0	8.0	31.7	31.7	100.0	100.2	7.8	7.8	6.6		9		-				-		-	
						2.9	0.1	90	18.3		8.0		31.7		100.4		7.8		6.3		7		-				-		-	
SR7	Sunny	Moderate	14:32	17.9	Surface	1.0	0.2	138	19.1	19.1	8.1	8.1	32.7	32.7	96.0	96.1	7.3	7.4	1.8	4.2	5	6	-	-	823650	823736	-	-	-	-
						1.0	0.2	148	19.1		8.1		32.7		96.1		7.3		1.8		5		-				-		-	
					Middle	9.0	0.1	119	19.1	19.1	8.1	8.1	32.7	32.7	98.8	99.0	7.5		3.6		4		-				-		-	
						9.0	0.1	130	19.1		8.1		32.7		99.1		7.6		3.5		6		-				-		-	
					Bottom	16.9	0.1	138	19.1	19.1	8.1	8.1	32.6	32.6	100.4	100.5	7.7	7.7	7.1		6		-				-		-	
						16.9	0.1	145	19.1		8.1		32.6		100.6		7.7		7.2		7		-				-		-	
SR8	Sunny	Moderate	13:21	3.5	Surface	1.0	-	-	18.3	18.3	8.1	8.1	32.7	32.7	98.8	98.9	7.7	7.7	7.6	7.4	12	12	-	-	820246	811418	-	-	-	-
						1.0	-	-	18.2		8.1		32.8		98.9		7.7		7.6		11		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.5	-	-	18.2	18.2	8.1	8.1	32.7	32.7	100.2	100.5	7.8	7.8	7.2		12		-				-		-	
						2.5	-	-	18.2		8.1		32.7		100.7		7.8		7.2		12		-				-		-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 19 December 17 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Moderate	08:32	8.1	Surface	1.0	0.5	47	13.6	13.6	8.2	8.2	30.8	30.8	96.1	96.0	8.5	8.3	15.2	20.7	21	26	72	74	815600	804261	<0.2	<0.2	1.2	1.2
						1.0	0.5	50	13.6		8.2		30.8		95.8		8.5		15.0		21		72				<0.2		1.3	
					Middle	4.1	0.4	41	14.7	14.7	8.1	8.1	30.8	30.8	96.5	96.5	8.1		20.5		26		73				<0.2		1.1	
						4.1	0.4	42	14.7		8.1		30.8		96.5		8.1		20.4		26		73				<0.2		1.0	
					Bottom	7.1	0.4	58	15.4	15.4	8.1	8.1	30.1	30.1	97.8	97.8	8.3	8.3	26.4		33		77				<0.2		1.2	
						7.1	0.5	59	15.4		8.1		30.1		97.8		8.3		26.5		31		77				<0.2		1.2	
C2	Sunny	Rough	09:34	11.7	Surface	1.0	0.1	223	17.5	17.5	8.1	8.1	32.4	32.4	95.8	95.8	7.5	7.6	9.6	8.7	16	23	72	74	825696	806964	<0.2	<0.2	1.1	1.2
						1.0	0.1	226	17.5		8.1		32.4		95.8		7.5		9.6		17		72				<0.2		1.2	
					Middle	5.9	0.1	298	16.3	16.3	8.1	8.1	32.5	32.5	94.4	94.4	7.6		7.8		18		74				<0.2		1.3	
						5.9	0.1	300	16.3		8.1		32.5		94.4		7.6		7.9		18		74				<0.2		1.1	
					Bottom	10.7	0.2	321	17.6	17.6	8.1	8.1	32.3	32.3	96.1	96.2	7.6	7.6	8.6		32		75				<0.2		1.3	
						10.7	0.2	322	17.6		8.1		32.3		96.2		7.6		8.7		34		76				<0.2		0.9	
C3	Sunny	Moderate	07:39	11.9	Surface	1.0	0.3	273	18.1	18.1	8.1	8.1	32.8	32.8	94.2	94.2	7.3	7.3	3.6	3.9	10	10	72	74	822084	817806	<0.2	<0.2	0.8	0.9
						1.0	0.3	293	18.1		8.1		32.8		94.1		7.3		3.6		9		72				<0.2		0.9	
					Middle	6.0	0.3	276	18.3	18.3	8.1	8.1	32.7	32.7	94.2	94.2	7.3		4.0		10		73				<0.2		0.8	
						6.0	0.3	277	18.3		8.1		32.7		94.2		7.3		4.0		10		73				<0.2		0.8	
					Bottom	10.9	0.3	270	18.4	18.4	8.1	8.1	32.7	32.7	94.7	94.8	7.3	7.3	4.0		10		76				<0.2		1.2	
						10.9	0.3	296	18.4		8.1		32.7		94.8		7.3		4.0		12		76				<0.2		1.0	
IM1	Fine	Moderate	08:51	7.0	Surface	1.0	0.4	13	12.7	12.7	8.2	8.2	31.2	31.2	96.5	96.5	8.9	8.9	17.6	16.6	19	21	72	73	818343	806455	<0.2	<0.2	1.0	1.1
						1.0	0.4	13	12.7		8.2		31.2		96.5		8.9		17.7		19		72				<0.2		1.2	
					Middle	3.5	0.4	6	13.2	13.2	8.2	8.2	30.5	30.5	96.6	96.5	8.9		13.8		19		73				<0.2		1.0	
						3.5	0.4	6	13.2		8.2		30.5		96.4		8.9		13.7		17		73				<0.2		1.1	
					Bottom	6.0	0.4	13	14.4	14.4	8.1	8.1	29.0	29.0	97.6	97.6	8.4	8.4	18.3		26		75				<0.2		1.0	
						6.0	0.4	13	14.4		8.1		29.0		97.6		8.4		18.5		26		75				<0.2		1.0	
IM2	Fine	Moderate	08:59	8.3	Surface	1.0	0.2	55	15.5	15.5	8.2	8.2	30.7	30.7	97.1	97.1	8.1	8.1	17.6	19.2	24	25	73	74	818832	806203	<0.2	<0.2	0.7	0.9
						1.0	0.3	55	15.5		8.2		30.7		97.1		8.1		17.6		25		73				<0.2		1.0	
					Middle	4.2	0.4	31	15.5	15.5	8.1	8.1	30.9	30.9	96.7	96.7	8.1		19.8		24		73				<0.2		0.9	
						4.2	0.4	34	15.5		8.1		30.9		96.7		8.1		20.1		26		74				<0.2		0.9	
					Bottom	7.3	0.3	35	16.6	16.6	7.9	7.9	30.3	30.3	98.4	98.6	8.0	8.0	20.0		25		75				<0.2		1.0	
						7.3	0.3	38	16.6		7.9		30.3		98.7		8.0		20.1		24		75				<0.2		1.0	
IM3	Fine	Moderate	09:07	8.1	Surface	1.0	0.3	21	16.5	16.5	8.1	8.1	31.4	31.4	96.2	96.1	7.8	7.8	15.0	15.7	22	21	73	75	819420	806046	<0.2	<0.2	1.0	1.1
						1.0	0.4	22	16.5		8.1		31.4		96.0		7.8		14.8		21		73				<0.2		1.0	
					Middle	4.1	0.3	32	17.2	17.2	8.1	8.1	31.8	31.8	96.5	96.6	7.7		16.0		22		75				<0.2		1.0	
						4.1	0.4	33	17.2		8.1		31.9		96.7		7.7		16.1		20		75				<0.2		1.2	
					Bottom	7.1	0.3	30	16.8	16.8	8.0	8.0	30.6	30.5	96.6	96.8	7.8	7.8	16.1		20		76				<0.2		1.0	
						7.1	0.3	31	16.8		8.0		30.4		96.9		7.8		16.3		22		76				<0.2		1.1	
IM4	Fine	Moderate	09:16	7.5	Surface	1.0	0.4	4	16.7	16.8	8.1	8.1	32.3	32.2	96.4	96.4	7.7	7.7	15.5	14.8	22	22	74	75	819564	805037	<0.2	<0.2	1.1	1.1
						1.0	0.5	4	16.8		8.1		32.2		96.4		7.7		15.2		20		74				<0.2		1.1	
					Middle	3.8	0.5	3	17.1	17.1	8.1	8.1	32.2	32.2	97.0	97.1	7.7		14.8		23		75				<0.2		0.9	
						3.8	0.5	3	17.1		8.1		32.2		97.1		7.7		14.7		21		75				<0.2		1.0	
					Bottom	6.5	0.3	24	16.9	16.9	8.0	8.0	31.8	31.8	97.9	98.0	7.8	7.9	14.2		22		76				<0.2		1.1	
						6.5	0.3	24	16.8		8.0		31.7		98.1		7.9		14.2		21		76				<0.2		1.2	
IM5	Fine	Moderate	09:26	6.4	Surface	1.0	0.3	38	16.9	16.9	8.1	8.1	32.1	32.1	96.1	96.1	7.7	7.7	20.7	22.4	23	28	72	74	820567	804907	<0.2	<0.2	1.0	1.1
						1.0	0.3	40	16.9		8.1		32.1		96.1		7.7		20.6		21		72				<0.2		1.0	
					Middle	3.2	0.4	43	16.8	16.8	8.1	8.1	32.1	32.1	95.7	95.8	7.7		22.7		30		73				<0.2		1.0	
						3.2	0.4	46	16.8		8.1		32.1		95.9		7.7		22.7		28		73				<0.2		1.2	
					Bottom	5.4	0.3	2	16.4	16.4	8.0	8.0	31.7	31.6	96.3	96.4	7.8	7.8	23.5		34		76				<0.2		1.1	
						5.4	0.3	2	16.4		8.0		31.6		96.5		7.8		24.0		32		77				<0.2		1.1	
IM6	Fine	Moderate	09:36	6.7	Surface	1.0	0.2	19	17.5	17.5	8.1	8.1	32.2	32.2	96.2	96.3	7.6	7.7	11.9	15.6	16	19	72	74	821081	805823	<0.2	<0.2	1.1	1.1
						1.0	0.2	19	17.5		8.1		32.2		96.4		7.6		12.1		17		72				<0.2		1.1	
					Middle	3.4	0.2	22	17.2	17.3	8.0	8.0	32.0	32.0	97.0	97.1	7.7		14.9		18		73				<0.2		1.0	
						3.4	0.2	23	17.3		8.0		32.0		97.1		7.7		14.8		20		73				<0.2		1.0	
					Bottom	5.7	0.3	40	15.3	15.3	8.0	8.0	31.5	31.5	97.2	97.4	8.0	8.1	19.8		22		75				<0.2		1.2	
						5.7	0.3	40	15.3		7.9		31.5		97.5		8.1		20.0		23		76				<0.2		1.0	
IM7	Fine	Moderate	09:43	8.3	Surface	1.0	0.2	49	17.1	17.1	8.1	8.1	32.3	32.3	96.7	96.7	7.7	7.7	17.3	17.0	20	21	72	74	821338	806844	<0.2	<0.2	1.3	1.2
						1.0	0.3	52	17.1		8.1		32.3		96.7		7.7		17.4		18		72				<0.2		1.2	
					Middle	4.2	0.3	16	17.1	17.2	8.0	8.0	32.1	32.1	96.7	96.8	7.7		16.3		24		73				<0.2		1.0	
						4.2	0.3	16	17.2		8.0		32.2		96.8		7.7		16.2		22		73				<0.2		1.2	
					Bottom	7.3	0.2	31	16.7	16.7	7.9	7.9	31.3	31.3	98.4	98.6	7.9	8.0	17.3		22		75				<0.2		1.1	
						7.3	0.2	31	16.7		7.9		31.3		98.7		8.0		17.2		22		76				<0.2		1.1	
IM8	Sunny	Rough	09:04	7.7	Surface	1.0	0.1	189	17.4	17.4	8.2	8.2	32.6	32.6	94.3	94.3	7.3	7.5	12.4	18.7	12	21	72	74	821667	807830	<0.2	<0.2	1.5	1.3
						1.0	0.1	205	17.4		8.2		32.6		94.3		7.3		12.6		13		72				<0.2		1.2	
					Middle	3.9	0.1	338	17.4	17.4	8.2	8.2	32.6	32.6	96.7	96.8	7.6		20.0		18		74				<0.2		1.2	
						3.9	0.1	350	17.4		8.2		32.6		96.8		7.6		20.0		17		74				<0.2		1.0	
					Bottom	6.7	0.1	338	17.3	17.3	8.2	8.2	32.5	32.5	97.3	97.4	7.7	7.7	23.6		34		76				<0.2		1.4	
						6.7	0.1	311	17.3		8.2		32.5		97.4		7.7		23.8		32		76				<0.2		1.4	

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**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 19 December 17 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Sunny	Rough	08:54	7.1	Surface	1.0	0.1	312	18.2	18.2	8.2	8.2	32.6	32.6	97.3	97.3	7.6	7.6	12.2	12.7	19	21	72	74	822118	808802	<0.2	<0.2	1.0	1.2
						1.0	0.1	324	18.2		8.2		32.6		97.3		7.6		11.4		19		72				<0.2		1.3	
					Middle	3.6	0.2	314	18.1	18.1	8.1	8.1	32.6	32.6	97.9	98.1	7.6		12.0		21		74				<0.2		1.2	
						3.6	0.2	331	18.1		8.1		32.6		98.3		7.6		12.1		21		74				<0.2		1.4	
					Bottom	6.1	0.2	334	18.1	18.1	8.2	8.1	32.6	32.6	98.6	98.9	7.7	7.7	14.1		22		76				<0.2		1.1	
						6.1	0.2	307	18.1		8.1		32.6		99.1		7.7		14.6		23		76				<0.2		1.2	
IM10	Sunny	Rough	08:45	6.5	Surface	1.0	0.4	307	17.5	17.5	8.1	8.1	32.7	32.7	96.2	96.3	7.6	7.6	14.7	17.9	26	28	72	74	822258	809865	<0.2	<0.2	1.4	1.5
						1.0	0.4	314	17.5		8.1		32.7		96.3		7.6		14.8		25		72				<0.2		1.6	
					Middle	3.3	0.3	313	17.8	17.8	8.1	8.1	32.7	32.7	96.6	96.6	7.5		18.4		27		73				<0.2		1.3	
						3.3	0.4	338	17.8		8.1		32.7		96.6		7.6		17.7		29		74				<0.2		1.5	
					Bottom	5.5	0.2	297	17.8	17.8	8.1	8.1	32.7	32.7	96.6	96.6	7.6	7.6	21.4		31		76				<0.2		1.5	
						5.5	0.2	325	17.7		8.1		32.7		96.5		7.6		20.6		31		76				<0.2		1.8	
IM11	Sunny	Rough	08:35	7.8	Surface	1.0	0.3	273	18.0	18.0	8.1	8.1	32.7	32.7	96.9	97.0	7.6	7.6	20.1	20.6	26	25	72	74	821497	810568	<0.2	<0.2	1.6	1.6
						1.0	0.3	281	18.0		8.1		32.7		97.0		7.6		20.3		26		72				<0.2		1.7	
					Middle	3.9	0.3	287	17.9	17.9	8.1	8.1	32.7	32.7	96.8	96.8	7.6		24.1		26		73				<0.2		1.5	
						3.9	0.3	300	17.9		8.1		32.7		96.8		7.6		24.3		24		74				<0.2		1.8	
					Bottom	6.8	0.2	275	17.7	17.7	8.1	8.1	32.7	32.7	97.4	97.5	7.6	7.6	17.4		25		75				<0.2		1.5	
						6.8	0.2	278	17.7		8.1		32.7		97.6		7.6		17.6		24		76				<0.2		1.4	
IM12	Sunny	Rough	08:29	8.0	Surface	1.0	0.4	270	17.5	17.5	8.1	8.1	32.7	32.7	96.2	96.2	7.6	7.6	18.0	17.7	19	23	72	74	821153	811543	<0.2	<0.2	0.8	1.0
						1.0	0.4	290	17.5		8.1		32.7		96.2		7.6		17.9		19		72				<0.2		1.1	
					Middle	4.0	0.3	285	17.4	17.4	8.1	8.1	32.7	32.7	96.3	96.3	7.6		19.5		25		74				<0.2		0.8	
						4.0	0.3	312	17.4		8.1		32.7		96.3		7.6		19.6		25		74				<0.2		0.9	
					Bottom	7.0	0.2	278	17.3	17.3	8.1	8.1	32.7	32.7	96.0	96.0	7.6	7.6	15.6		24		77				<0.2		1.0	
						7.0	0.2	281	17.3		8.1		32.7		96.0		7.6		15.5		23		77				<0.2		1.2	
SR2	Sunny	Moderate	08:04	3.7	Surface	1.0	0.2	45	17.8	17.8	8.2	8.2	32.7	32.7	96.8	96.8	7.6	7.6	18.9	18.8	23	24	72	73	821442	814185	<0.2	<0.2	1.0	1.0
						1.0	0.2	47	17.7		8.2		32.8		96.8		7.6		17.7		24		72				<0.2		0.9	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.7	0.1	50	17.8	17.8	8.1	8.1	32.7	32.8	96.9	97.0	7.6	7.6	19.7		25		73				<0.2		1.0	
						2.7	0.2	52	17.7		8.1		32.8		97.0		7.6		18.7		25		74				<0.2		1.1	
SR3	Sunny	Rough	09:12	8.5	Surface	1.0	0.2	187	18.1	18.1	8.1	8.1	32.6	32.7	96.6	96.7	7.5	7.5	8.1	9.2	11	17	-	-	822137	807598	-	-	-	-
						1.0	0.2	199	18.0		8.1		32.7		96.7		7.5		8.3		12		-				-		-	
					Middle	4.3	0.2	279	18.0	18.1	8.1	8.1	32.5	32.5	96.7	96.7	7.5		10.1		17		-				-		-	
						4.3	0.2	298	18.1		8.1		32.5		96.7		7.5		10.3		19		-				-		-	
					Bottom	7.5	0.2	324	18.0	18.0	8.1	8.1	32.6	32.6	97.7	98.0	7.6	7.7	9.0		22		-				-		-	
						7.5	0.2	351	18.0		8.1		32.6		98.2		7.7		9.2		20		-				-		-	
SR4A	Cloudy	Moderate	08:08	8.2	Surface	1.0	0.2	256	15.8	15.8	8.1	8.1	32.4	32.4	95.8	95.9	7.8	7.8	6.3	6.3	9	10	-	-	817206	807792	-	-	-	-
						1.0	0.2	271	15.8		8.1		32.4		95.9		7.8		6.3		10		-				-		-	
					Middle	4.1	0.2	264	15.6	15.6	8.0	8.0	32.4	32.3	95.4	95.5	7.8		6.8		11		-				-		-	
						4.1	0.2	270	15.6		8.0		32.3		95.5		7.8		6.6		11		-				-		-	
					Bottom	7.2	0.2	243	14.9	14.9	8.0	8.0	32.1	32.1	94.3	94.3	7.8	7.8	5.9		9		-				-		-	
						7.2	0.2	251	14.9		8.0		32.1		94.3		7.8		6.0		9		-				-		-	
SR5A	Cloudy	Moderate	07:52	3.8	Surface	1.0	0.2	284	16.4	16.4	8.0	8.0	32.2	32.2	95.3	95.3	7.7	7.7	6.7	6.0	9	9	-	-	816575	810714	-	-	-	-
						1.0	0.2	304	16.4		8.0		32.2		95.3		7.7		6.6		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	0.2	283	15.9	15.9	8.0	8.0	31.9	31.9	95.1	95.2	7.7	7.8	5.3		9		-				-		-	
						2.8	0.2	297	15.9		8.0		32.0		95.2		7.8		5.4		10		-				-		-	
SR6	Cloudy	Moderate	07:27	3.5	Surface	1.0	0.2	262	17.7	17.7	8.1	8.1	32.4	32.4	96.3	96.6	7.6	7.6	6.1	7.2	10	12	-	-	817892	814656	-	-	-	-
						1.0	0.2	280	17.7		8.1		32.4		96.8		7.6		6.1		11		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.5	0.1	250	16.4	16.4	8.1	8.1	31.9	31.8	98.0	98.2	7.9	7.9	8.2		15		-				-		-	
						2.5	0.1	258	16.4		8.1		31.8		98.3		7.9		8.2		13		-				-		-	
SR7	Sunny	Moderate	07:00	18.1	Surface	1.0	0.2	51	17.5	17.5	8.1	8.1	32.8	32.8	93.2	93.3	7.3	7.3	4.6	3.8	11	11	-	-	823634	823718	-	-	-	-
						1.0	0.2	55	17.5		8.1		32.8		93.3		7.3		4.4		10		-				-		-	
					Middle	9.1	0.2	38	18.0	18.1	8.1	8.1	32.8	32.8	94.0	94.1	7.3		3.5		10		-				-		-	
						9.1	0.2	38	18.1		8.1		32.8		94.2		7.3		3.3		11		-				-		-	
					Bottom	17.1	0.1	46	18.0	18.0	8.1	8.1	32.7	32.7	94.3	94.3	7.3	7.3	3.5		11		-				-		-	
						17.1	0.1	47	18.0		8.1		32.7		94.3		7.3		3.4		11		-				-		-	
SR8	Sunny	Moderate	08:20	3.6	Surface	1.0	-	-	17.6	17.6	8.1	8.1	32.5	32.5	96.8	96.9	7.6	7.6	6.5	6.0	10	11	-	-	820246	811418	-	-	-	-
						1.0	-	-	17.5		8.1		32.6		96.9		7.6		6.5		12		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.6	-	-	17.4	17.4	8.1	8.1	32.5	32.5	97.6	97.8	7.7	7.7	5.5		11		-				-		-	
						2.6	-	-	17.4		8.1		32.5		98.0		7.7		5.6		11		-				-		-	

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 21 December 17 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Sunny	Moderate	14:31	8.5	Surface	1.0	0.2	131	17.5	17.5	8.1	8.1	32.1	32.1	99.0	99.0	7.8	7.8	11.1	14.0	14	14	73	75	815646	804238	<0.2	<0.2	0.6	0.6
						1.0	0.2	142	17.5		8.1		32.1		99.0		7.8		11.1		14		73				<0.2		0.6	
					Middle	4.3	0.2	117	17.4	17.4	8.1	8.1	32.2	32.2	98.3	98.3	7.8		14.1		14		75				<0.2		0.6	
						4.3	0.2	128	17.4		8.1		32.2		98.3		7.8		14.1		14		76				<0.2		0.6	
					Bottom	7.5	0.1	143	17.3	17.3	8.1	8.1	32.2	32.2	98.3	98.3	7.8	7.8	16.7		16		76				<0.2		0.5	
						7.5	0.1	154	17.3		8.1		32.2		98.3		7.8		16.8		14		77				<0.2		0.6	
C2	Sunny	Moderate	13:16	12.1	Surface	1.0	0.2	36	18.3	18.3	8.1	8.1	30.6	30.6	97.3	97.3	7.6	7.6	10.0	12.2	10	13	71	73	825661	806950	<0.2	<0.2	0.7	0.7
						1.0	0.2	39	18.3		8.1		30.6		97.3		7.6		10.1		9		71				<0.2		0.6	
					Middle	6.1	0.2	40	18.2	18.2	8.1	8.1	30.3	30.3	97.0	97.0	7.6		12.4		15		73				<0.2		0.7	
						6.1	0.2	41	18.2		8.1		30.3		97.0		7.6		12.6		14		73				<0.2		0.7	
					Bottom	11.1	0.2	41	18.1	18.1	8.1	8.1	30.4	30.5	97.6	97.7	7.7	7.7	14.1		15		74				<0.2		0.6	
						11.1	0.2	42	18.1		8.1		30.5		97.7		7.7		14.0		13		75				<0.2		0.8	
C3	Sunny	Moderate	15:03	11.8	Surface	1.0	0.2	74	18.8	18.8	8.1	8.1	32.8	32.8	95.3	95.3	7.3	7.3	3.0	3.3	7	7	72	73	822083	817784	<0.2	<0.2	0.7	0.7
						1.0	0.2	75	18.8		8.1		32.8		95.3		7.3		3.0		5		71				<0.2		0.7	
					Middle	5.9	0.2	85	18.8	18.8	8.1	8.1	32.8	32.8	95.2	95.3	7.3		3.0		9		73				<0.2		0.6	
						5.9	0.3	87	18.8		8.1		32.8		95.3		7.3		3.0		7		73				<0.2		0.7	
					Bottom	10.8	0.2	87	18.8	18.8	8.1	8.1	32.9	32.9	96.1	96.1	7.4	7.4	3.9		8		75				<0.2		0.7	
						10.8	0.2	95	18.8		8.1		32.9		96.1		7.4		3.9		7		74				<0.2		0.6	
IM1	Sunny	Moderate	14:11	7.4	Surface	1.0	0.2	61	17.5	17.5	8.1	8.1	32.2	32.2	98.7	98.8	7.8	7.8	14.7	15.6	17	18	73	75	818343	806454	<0.2	<0.2	0.7	0.8
						1.0	0.2	62	17.5		8.1		32.2		98.8		7.8		14.8		16		73				<0.2		0.9	
					Middle	3.7	0.2	37	17.3	17.3	8.1	8.1	32.2	32.2	98.1	98.1	7.8		15.9		18		75				<0.2		0.8	
						3.7	0.2	37	17.3		8.1		32.2		98.1		7.8		15.9		18		75				<0.2		0.8	
					Bottom	6.4	0.1	3	17.1	17.1	8.1	8.1	32.2	32.2	98.1	98.1	7.8	7.8	16.0		19		76				<0.2		0.7	
						6.4	0.1	3	17.1		8.1		32.2		98.1		7.8		16.0		17		76				<0.2		0.6	
IM2	Sunny	Moderate	14:01	8.6	Surface	1.0	0.2	29	17.4	17.4	8.1	8.1	32.2	32.2	98.7	98.7	7.8	7.8	16.6	20.3	20	20	74	75	818825	806211	<0.2	<0.2	0.7	0.9
						1.0	0.2	30	17.4		8.1		32.2		98.7		7.8		16.7		19		74				<0.2		0.8	
					Middle	4.3	0.2	10	17.4	17.4	8.1	8.1	32.1	32.1	98.4	98.4	7.8		18.9		19		75				<0.2		0.9	
						4.3	0.2	10	17.4		8.1		32.2		98.4		7.8		19.2		18		75				<0.2		1.2	
					Bottom	7.6	0.1	8	17.2	17.2	8.1	8.1	32.2	32.2	98.5	98.6	7.8	7.8	25.3		24		77				<0.2		0.8	
						7.6	0.1	8	17.3		8.1		32.2		98.7		7.8		25.1		22		77				<0.2		0.7	
IM3	Fine	Moderate	13:53	8.9	Surface	1.0	0.3	53	17.4	17.4	8.1	8.1	32.1	32.1	98.5	98.6	7.8	7.8	18.4	21.9	18	19	73	74	819386	806030	<0.2	<0.2	0.7	0.7
						1.0	0.3	56	17.4		8.1		32.1		98.6		7.8		18.4		18		73				<0.2		0.7	
					Middle	4.5	0.1	47	17.3	17.3	8.1	8.1	32.1	32.1	98.2	98.3	7.8		20.8		17		74				<0.2		0.8	
						4.5	0.1	50	17.3		8.1		32.1		98.3		7.8		20.8		17		74				<0.2		0.8	
					Bottom	7.9	0.1	35	17.3	17.3	8.1	8.1	32.2	32.2	98.8	98.8	7.8	7.8	26.4		20		76				<0.2		0.7	
						7.9	0.1	35	17.3		8.1		32.2		98.8		7.8		26.5		21		76				<0.2		0.7	
IM4	Fine	Moderate	13:46	8.0	Surface	1.0	0.2	70	17.4	17.4	8.1	8.1	32.1	32.1	98.5	98.5	7.8	7.8	19.8	22.0	23	25	73	75	819543	805055	<0.2	<0.2	0.7	0.8
						1.0	0.2	74	17.4		8.1		32.1		98.4		7.8		19.9		22		73				<0.2		0.8	
					Middle	4.0	0.2	66	17.3	17.3	8.1	8.1	32.1	32.1	98.0	98.0	7.8		21.4		23		75				<0.2		0.9	
						4.0	0.2	71	17.3		8.1		32.1		98.0		7.8		21.2		25		75				<0.2		0.9	
					Bottom	7.0	0.2	31	17.3	17.3	8.1	8.1	32.1	32.1	98.2	98.3	7.8	7.8	24.9		28		77				<0.2		0.8	
						7.0	0.2	31	17.3		8.1		32.1		98.3		7.8		24.8		28		77				<0.2		0.7	
IM5	Fine	Moderate	13:37	7.2	Surface	1.0	0.2	3	17.4	17.4	8.1	8.1	32.2	32.2	98.6	98.6	7.8	7.8	15.6	19.9	17	20	74	75	820565	804933	<0.2	<0.2	0.7	0.8
						1.0	0.2	3	17.4		8.1		32.2		98.6		7.8		15.5		19		74				<0.2		0.7	
					Middle	3.6	0.2	18	17.3	17.3	8.1	8.1	32.2	32.2	98.2	98.2	7.8		18.9		22		75				<0.2		0.7	
						3.6	0.2	18	17.3		8.1		32.2		98.1		7.8		18.9		20		75				<0.2		0.8	
					Bottom	6.2	0.1	10	17.2	17.2	8.1	8.1	32.2	32.2	97.8	97.9	7.8	7.8	25.1		20		76				<0.2		0.8	
						6.2	0.1	10	17.2		8.1		32.2		97.9		7.8		25.2		21		76				<0.2		0.8	
IM6	Fine	Moderate	13:26	7.1	Surface	1.0	0.1	38	17.3	17.3	8.1	8.1	32.2	32.2	98.8	98.8	7.8	7.8	17.6	21.1	19	23	74	75	821080	805823	<0.2	<0.2	1.0	1.0
						1.0	0.1	38	17.3		8.1		32.2		98.7		7.8		17.8		20		74				<0.2		0.9	
					Middle	3.6	0.1	23	17.2	17.2	8.1	8.1	32.2	32.2	98.2	98.2	7.8		21.1		22		75				<0.2		0.9	
						3.6	0.1	24	17.2		8.1		32.2		98.2		7.8		21.1		20		75				<0.2		0.9	
					Bottom	6.1	0.1	97	17.2	17.2	8.1	8.1	32.2	32.2	98.4	98.5	7.8	7.8	24.4		29		77				<0.2		1.1	
						6.1	0.1	101	17.2		8.1		32.2		98.5		7.8		24.6		29		77				<0.2		1.0	
IM7	Fine	Moderate	13:17	8.7	Surface	1.0	0.2	72	17.5	17.5	8.1	8.1	32.2	32.2	97.8	97.9	7.7	7.7	16.0	20.0	18	19	73	75	821337	806849	<0.2	<0.2	0.9	0.8
						1.0	0.2	74	17.5		8.1		32.2		97.9		7.7		16.2		18		73				<0.2		0.8	
					Middle	4.4	0.2	62	17.4	17.4	8.1	8.1	32.2	32.2	97.6	97.7	7.7		19.1		19		75				<0.2		0.8	
						4.4	0.2	63	17.4		8.1		32.2		97.7		7.7		19.1		19		75				<0.2		0.8	
					Bottom	7.7	0.2	57	17.3	17.3	8.1	8.1	32.2	32.2	98.0	98.0	7.8	7.8	24.7		18		77				<0.2		0.9	
						7.7	0.2	57	17.3		8.1		32.2		98.0		7.8		24.8		19		77				<0.2		0.8	
IM8	Sunny	Moderate	13:42	8.3	Surface	1.0	0.3	80	18.1	18.1	8.1	8.1	32.6	32.6	98.1	98.1	7.6	7.7	13.9	18.8	14	16	71	73	821674	807859	<0.2	<0.2	0.8	0.7
						1.0	0.3	84	18.1		8.1		32.6		98.1		7.6		14.0		14		71				<0.2		0.8	
					Middle	4.2	0.2	69	17.8	17.8	8.1	8.1	32.6	32.6	98.3	98.3	7.7		16.9		15		73				<0.2		0.7	
						4.2	0.2	75	17.8		8.1		32.6		98.2		7.7		16.9		15		73				<0.2		0.7	
					Bottom	7.3	0.2	56	17.7	17.7	8.1	8.1	32.5	32.5	98.5	98.5	7.7	7.7	25.6		18		75				<0.2		0.7	
						7.3	0.3	59	17.7		8.1		32.5		98.5		7.7		25.5		19		75				<0.2		0.6	

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 21 December 17 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Sunny	Moderate	13:50	7.4	Surface	1.0	0.2	64	17.6	17.6	8.2	8.2	32.7	32.7	98.2	98.2	7.7	7.7	17.6	20.3	19	20	71	73	822118	808822	<0.2	<0.2	0.6	0.7
						1.0	0.2	65	17.6		8.2		32.7		98.1		7.7		17.7		18		71				<0.2		0.6	
					Middle	3.7	0.2	71	17.6	17.6	8.2	8.2	32.7	32.7	98.1	98.2	7.7		20.5		20		73				<0.2		0.7	
						3.7	0.2	76	17.6		8.2		32.7		98.2		7.7		20.4		19		73				<0.2		0.7	
					Bottom	6.4	0.1	75	17.6	17.6	8.2	8.2	32.6	32.6	98.5	98.5	7.7	7.7	22.7		23		75				<0.2		0.6	
						6.4	0.2	81	17.6		8.2		32.6		98.5		7.7		22.7		22		75				<0.2		0.7	
IM10	Sunny	Moderate	13:57	7.1	Surface	1.0	0.2	99	18.2	18.2	8.2	8.2	32.7	32.7	98.5	98.5	7.6	7.7	9.7	9.0	11	12	71	73	822221	809857	<0.2	<0.2	0.6	0.7
						1.0	0.2	107	18.2		8.2		32.7		98.5		7.6		9.6		12		72				<0.2		0.8	
					Middle	3.6	0.2	86	18.1	18.1	8.2	8.2	32.6	32.6	98.5	98.5	7.7		9.2		10		73				<0.2		0.7	
						3.6	0.2	91	18.1		8.2		32.6		98.5		7.7		9.2		12		74				<0.2		0.7	
					Bottom	6.1	0.2	93	18.0	18.0	8.1	8.1	32.6	32.6	99.4	99.5	7.8	7.8	8.2		13		75				<0.2		0.6	
						6.1	0.2	101	18.0		8.1		32.6		99.5		7.8		8.2		15		75				<0.2		0.7	
IM11	Sunny	Moderate	14:08	8.0	Surface	1.0	0.3	80	18.2	18.2	8.1	8.1	32.8	32.8	98.5	98.5	7.6	7.6	6.2	7.2	7	9	71	73	821513	810552	<0.2	<0.2	0.6	0.6
						1.0	0.3	85	18.2		8.1		32.8		98.5		7.6		6.3		7		71				<0.2		0.7	
					Middle	4.0	0.3	67	18.0	18.0	8.2	8.2	32.7	32.7	97.8	97.8	7.6		7.7		9		73				<0.2		0.6	
						4.0	0.3	71	18.0		8.2		32.7		97.8		7.6		7.7		7		73				<0.2		0.6	
					Bottom	7.0	0.2	82	17.9	17.9	8.1	8.1	32.7	32.7	98.5	98.5	7.7	7.7	7.8		12		75				<0.2		0.6	
						7.0	0.2	84	17.9		8.1		32.7		98.5		7.7		7.7		10		75				<0.2		0.6	
IM12	Sunny	Moderate	14:16	8.9	Surface	1.0	0.1	103	18.2	18.2	8.1	8.1	32.8	32.8	97.8	97.8	7.6	7.6	4.9	6.0	8	7	71	73	821167	811490	<0.2	<0.2	0.6	0.6
						1.0	0.1	111	18.2		8.1		32.8		97.8		7.6		5.0		6		71				<0.2		0.6	
					Middle	4.5	0.2	99	18.1	18.1	8.1	8.1	32.8	32.8	97.5	97.6	7.6		5.5		7		73				<0.2		0.6	
						4.5	0.2	100	18.1		8.1		32.8		97.6		7.6		5.6		6		73				<0.2		0.6	
					Bottom	7.9	0.2	90	17.9	17.9	8.1	8.1	32.7	32.7	97.9	97.9	7.6	7.6	7.5		9		75				<0.2		0.7	
						7.9	0.2	95	17.9		8.1		32.7		97.9		7.6		7.5		8		75				<0.2		0.6	
SR2	Sunny	Moderate	14:42	4.0	Surface	1.0	0.2	27	18.3	18.3	8.1	8.1	32.9	32.9	98.1	98.1	7.6	7.6	4.0	4.4	10	9	71	72	821477	814188	<0.2	<0.2	0.6	0.6
						1.0	0.2	28	18.3		8.1		32.9		98.1		7.6		4.1		8		71				<0.2		0.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	0.2	32	18.0	18.0	8.1	8.1	32.9	32.9	98.8	98.8	7.7	7.7	4.7		8		73				<0.2		0.6	
						3.0	0.2	32	18.0		8.1		32.9		98.8		7.7		4.8		8		73				<0.2		0.7	
SR3	Sunny	Moderate	13:36	9.0	Surface	1.0	0.2	85	18.2	18.2	8.2	8.2	32.5	32.5	96.1	96.2	7.5	7.5	13.9	16.9	17	18	-	-	822170	807569	-	-	-	-
						1.0	0.3	86	18.2		8.2		32.5		96.2		7.5		13.8		17		-				-		-	
					Middle	4.5	0.2	84	18.0	18.0	8.2	8.2	32.4	32.4	95.8	95.8	7.5		18.5		17		-				-		-	
						4.5	0.2	88	18.0		8.2		32.4		95.8		7.5		18.7		17		-				-		-	
					Bottom	8.0	0.2	81	18.0	18.0	8.1	8.1	32.3	32.3	97.4	97.4	7.6	7.6	18.3		20		-				-		-	
						8.0	0.2	81	18.0		8.1		32.3		97.4		7.6		18.2		22		-				-		-	
SR4A	Sunny	Moderate	14:51	8.7	Surface	1.0	0.3	77	17.2	17.2	8.1	8.1	32.2	32.2	98.7	98.7	7.8	7.8	13.8	17.7	9	17	-	-	817177	807792	-	-	-	-
						1.0	0.3	81	17.2		8.1		32.2		98.7		7.8		13.9		9		-				-		-	
					Middle	4.4	0.2	72	17.1	17.1	8.1	8.1	32.2	32.2	98.4	98.4	7.8		17.2		19		-				-		-	
						4.4	0.2	78	17.1		8.1		32.2		98.4		7.8		17.7		20		-				-		-	
					Bottom	7.7	0.2	75	17.1	17.1	8.1	8.1	32.2	32.2	98.8	98.8	7.8	7.8	21.8		24		-				-		-	
						7.7	0.2	81	17.1		8.1		32.2		98.8		7.8		21.8		23		-				-		-	
SR5A	Sunny	Calm	15:06	4.3	Surface	1.0	0.1	330	17.6	17.6	8.1	8.1	32.1	32.1	100.1	100.1	7.9	7.9	5.8	7.8	8	8	-	-	816584	810683	-	-	-	-
						1.0	0.1	343	17.6		8.1		32.1		100.0		7.9		6.0		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.1	326	17.1	17.1	8.0	8.0	32.1	32.1	99.2	99.2	7.9	7.9	9.7		7		-				-		-	
						3.3	0.1	347	17.1		8.0		32.1		99.2		7.9		9.7		9		-				-		-	
SR6	Sunny	Calm	15:27	4.7	Surface	1.0	0.1	68	17.8	17.8	8.1	8.1	32.1	32.1	101.1	101.1	7.9	7.9	7.3	7.6	12	11	-	-	817902	814659	-	-	-	-
						1.0	0.1	70	17.8		8.1		32.1		101.1		7.9		7.3		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.1	58	17.7	17.7	8.1	8.1	32.1	32.1	100.9	100.9	7.9	7.9	7.8		11		-				-		-	
						3.7	0.1	63	17.7		8.1		32.1		100.9		7.9		7.9		11		-				-		-	
SR7	Sunny	Moderate	15:36	18.5	Surface	1.0	0.1	58	18.8	18.8	8.1	8.1	31.7	31.7	94.3	94.3	7.3	7.3	3.0	4.6	8	11	-	-	823633	823719	-	-	-	-
						1.0	0.1	60	18.8		8.1		31.7		94.3		7.3		3.1		9		-				-		-	
					Middle	9.3	0.2	84	18.8	18.8	8.1	8.1	31.5	31.5	94.2	94.3	7.3		4.2		11		-				-		-	
						9.3	0.2	88	18.8		8.1		31.5		94.3		7.3		4.2		9		-				-		-	
					Bottom	17.5	0.2	59	18.8	18.8	8.1	8.1	31.3	31.3	95.0	95.1	7.4	7.4	6.6		13		-				-		-	
						17.5	0.2	64	18.8		8.1		31.3		95.1		7.4		6.7		14		-				-		-	
SR8	Sunny	Moderate	14:26	3.9	Surface	1.0	-	-	18.2	18.2	8.1	8.1	32.8	32.8	99.5	99.5	7.7	7.7	5.1	5.5	11	12	-	-	820246	811418	-	-	-	-
						1.0	-	-	18.2		8.1		32.8		99.4		7.7		5.1		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.9	-	-	18.1	18.1	8.2	8.2	32.8	32.8	99.7	99.8	7.7	7.8	5.9		15		-				-		-	
						2.9	-	-	18.1		8.2		32.8		99.8		7.8		6.0		13		-				-		-	

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 21 December 17 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Moderate	09:55	8.0	Surface	1.0	0.6	54	17.0	17.0	8.1	8.1	30.8	30.8	97.8	97.9	7.9	7.9	19.8	21.2	20	21	75	76	815592	804245	<0.2	<0.2	0.5	0.6
						1.0	0.6	55	17.0		8.1		30.8		97.9		7.9		19.6		21		75				<0.2		0.5	
					Middle	4.0	0.5	49	17.0	17.0	8.1	8.1	30.8	30.8	98.1	98.1	7.9		20.2		20		75				<0.2		0.5	
						4.0	0.5	53	17.0		8.1		30.8		98.1		7.9		20.3		21		75				<0.2		0.6	
					Bottom	7.0	0.5	56	16.9	16.9	8.1	8.1	30.1	30.1	98.7	98.9	8.0	8.0	23.7		21		77				<0.2		0.6	
						7.0	0.5	59	16.9		8.1		30.1		99.0		8.0		23.8		23		77				<0.2		0.6	
C2	Sunny	Moderate	10:34	12.0	Surface	1.0	0.3	345	18.1	18.1	8.1	8.1	31.3	31.3	95.3	95.4	7.5	7.5	9.5	13.2	16	15	72	74	825683	806943	<0.2	<0.2	0.9	0.9
						1.0	0.4	359	18.1		8.1		31.3		95.4		7.5		9.6		15		72				<0.2		0.8	
					Middle	6.0	0.4	351	18.1	18.1	8.1	8.1	31.3	31.3	95.6	95.6	7.5		13.0		14		73				<0.2		1.1	
						6.0	0.4	323	18.1		8.1		31.3		95.6		7.5		13.1		15		74				<0.2		1.0	
					Bottom	11.0	0.3	344	18.2	18.2	8.1	8.1	31.2	31.2	95.7	95.7	7.5	7.5	17.1		14		75				<0.2		0.8	
						11.0	0.4	359	18.2		8.1		31.2		95.7		7.5		17.1		15		76				<0.2		0.8	
C3	Sunny	Moderate	08:43	11.1	Surface	1.0	0.6	259	18.4	18.4	8.1	8.1	29.5	29.5	95.0	95.0	7.5	7.5	7.0	12.4	11	12	72	74	822111	817817	<0.2	<0.2	1.0	0.7
						1.0	0.7	281	18.4		8.1		29.5		95.0		7.5		6.9		9		72				<0.2		0.7	
					Middle	5.6	0.5	264	18.3	18.3	8.1	8.1	29.3	29.3	95.0	95.0	7.5		13.6		11		73				<0.2		0.5	
						5.6	0.5	271	18.3		8.1		29.3		95.0		7.5		13.6		10		74				<0.2		0.7	
					Bottom	10.1	0.4	272	18.3	18.3	8.1	8.1	29.4	29.4	94.9	94.9	7.5	7.5	17.0		14		76				<0.2		0.8	
						10.1	0.4	297	18.3		8.1		29.4		94.9		7.5		16.5		14		76				<0.2		0.7	
IM1	Fine	Moderate	10:12	7.1	Surface	1.0	0.5	16	17.3	17.3	8.2	8.2	31.2	31.2	97.8	97.8	7.8	7.8	11.9	18.9	11	28	73	75	818370	806484	<0.2	<0.2	0.6	0.6
						1.0	0.5	17	17.3		8.2		31.2		97.8		7.8		11.9		13		73				<0.2		0.7	
					Middle	3.6	0.4	7	17.1	17.1	8.2	8.2	30.4	30.4	97.6	97.6	7.8		19.8		27		75				<0.2		0.5	
						3.6	0.5	7	17.1		8.2		30.4		97.6		7.8		19.7		28		75				<0.2		0.6	
					Bottom	6.1	0.3	359	17.0	17.0	8.2	8.2	29.2	29.2	99.9	100.2	8.1	8.1	25.1		44		77				<0.2		0.6	
						6.1	0.3	330	17.0		8.2		29.2		100.4		8.1		25.1		45		77				<0.2		0.6	
IM2	Fine	Moderate	10:20	8.0	Surface	1.0	0.5	11	17.6	17.6	8.1	8.1	30.6	30.6	96.6	96.7	7.7	7.7	15.4	17.9	15	23	73	76	818876	806182	<0.2	<0.2	0.6	0.7
						1.0	0.5	11	17.6		8.1		30.6		96.7		7.7		14.7		13		74				<0.2		0.7	
					Middle	4.0	0.4	25	17.6	17.6	8.1	8.1	30.8	30.8	97.0	97.0	7.7		14.2		19		76				<0.2		0.6	
						4.0	0.5	27	17.6		8.1		30.8		97.0		7.7		14.3		19		77				<0.2		0.8	
					Bottom	7.0	0.3	20	17.4	17.4	8.1	8.1	30.3	30.3	100.3	100.4	8.0	8.0	24.4		35		79				<0.2		0.6	
						7.0	0.3	20	17.4		8.1		30.3		100.4		8.0		24.4		35		79				<0.2		0.6	
IM3	Fine	Moderate	10:27	8.3	Surface	1.0	0.4	34	17.9	17.9	8.1	8.1	31.4	31.4	95.3	95.4	7.5	7.5	16.1	20.5	20	23	73	75	819412	806020	<0.2	<0.2	0.7	0.7
						1.0	0.4	37	17.9		8.1		31.4		95.4		7.5		16.2		20		73				<0.2		0.7	
					Middle	4.2	0.4	29	17.8	17.8	8.1	8.1	31.8	31.8	95.1	95.2	7.5		21.7		23		75				<0.2		0.6	
						4.2	0.4	30	17.8		8.1		31.8		95.3		7.5		21.7		22		75				<0.2		0.5	
					Bottom	7.3	0.4	14	17.8	17.8	8.1	8.1	30.4	30.4	96.8	96.8	7.7	7.7	23.6		26		76				<0.2		0.7	
						7.3	0.4	14	17.8		8.1		30.4		96.8		7.7		23.9		26		77				<0.2		0.7	
IM4	Sunny	Moderate	10:35	7.7	Surface	1.0	0.5	12	17.3	17.3	8.1	8.1	32.2	32.2	97.7	97.7	7.7	7.7	13.8	19.4	17	17	73	75	819595	805057	<0.2	<0.2	0.7	0.6
						1.0	0.6	13	17.3		8.1		32.2		97.7		7.7		13.9		16		73				<0.2		0.7	
					Middle	3.9	0.5	14	17.1	17.1	8.1	8.1	32.2	32.2	97.3	97.3	7.7		20.1		17		75				<0.2		0.7	
						3.9	0.5	14	17.1		8.1		32.2		97.2		7.7		20.1		16		75				<0.2		0.5	
					Bottom	6.7	0.4	12	17.1	17.1	8.1	8.1	31.7	31.7	98.7	98.9	7.9	7.9	24.3		18		76				<0.2		0.6	
						6.7	0.4	12	17.1		8.1		31.7		99.1		7.9		24.4		17		76				<0.2		0.6	
IM5	Sunny	Moderate	10:46	6.9	Surface	1.0	0.5	8	17.5	17.5	8.1	8.1	32.1	32.1	96.8	96.8	7.6	7.7	21.7	22.8	18	22	71	74	820546	804931	<0.2	<0.2	0.7	0.7
						1.0	0.5	8	17.5		8.1		32.1		96.8		7.6		21.8		18		71				<0.2		0.6	
					Middle	3.5	0.4	15	17.5	17.5	8.1	8.1	32.1	32.1	97.3	97.3	7.7		21.7		18		73				<0.2		0.7	
						3.5	0.5	15	17.5		8.1		32.1		97.3		7.7		21.8		20		73				<0.2		0.7	
					Bottom	5.9	0.4	14	17.5	17.5	8.1	8.1	31.6	31.6	99.7	99.7	7.9	7.9	24.9		28		77				<0.2		0.7	
						5.9	0.4	14	17.5		8.1		31.6		99.7		7.9		24.9		28		77				<0.2		0.8	
IM6	Sunny	Moderate	10:54	6.8	Surface	1.0	0.4	37	17.7	17.7	8.1	8.1	32.2	32.1	96.5	96.5	7.6	7.6	14.4	18.6	18	20	73	76	821080	805849	<0.2	<0.2	0.7	0.8
						1.0	0.4	38	17.7		8.1		32.0		96.4		7.6		14.4		17		73				<0.2		0.7	
					Middle	3.4	0.3	41	17.6	17.6	8.1	8.1	32.1	32.0	96.6	96.7	7.6		19.1		18		75				<0.2		0.8	
						3.4	0.3	42	17.6		8.1		32.0		96.7		7.6		19.1		18		75				<0.2		0.8	
					Bottom	5.8	0.2	34	17.5	17.5	8.1	8.1	31.5	31.5	98.1	98.1	7.8	7.8	22.2		26		77				<0.2		0.7	
						5.8	0.2	34	17.5		8.1		31.5		98.1		7.8		22.1		24		83				<0.2		0.8	
IM7	Sunny	Moderate	11:04	8.3	Surface	1.0	0.3	37	17.3	17.3	8.1	8.1	32.3	32.3	96.8	96.8	7.6	7.7	16.2	17.9	24	24	73	75	821359	806852	<0.2	<0.2	0.7	0.7
						1.0	0.4	37	17.3		8.1		32.3		96.8		7.7		16.3		24		73				<0.2		0.7	
					Middle	4.2	0.3	41	17.2	17.2	8.1	8.1	32.1	32.1	96.8	96.8	7.7		17.8		25		75				<0.2		0.7	
						4.2	0.3	44	17.2		8.1		32.1		96.8		7.7		17.8		23		75				<0.2		0.6	
					Bottom	7.3	0.2	37	17.1	17.1	8.1	8.1	31.3	31.3	96.9	97.0	7.7	7.7	19.5		24		76				<0.2		0.7	
						7.3	0.3	37	17.1		8.1		31.3		97.0		7.7		19.5		25		77				<0.2		0.8	
IM8	Sunny	Moderate	10:08	8.0	Surface	1.0	0.2	32	17.9	17.9	8.2	8.2	32.4	32.4	95.7	95.7	7.5	7.5	10.0	15.7	10	15	72	74	821673	807845	<0.2	<0.2	1.0	1.0
						1.0	0.3	32	17.9		8.2		32.4		95.7		7.5		10.1		10		72				<0.2		1.0	
					Middle	4.0	0.2	42	17.9	17.9	8.2	8.2	32.5	32.5	95.7	95.7	7.5		13.6		11		74				<0.2		1.2	
						4.0	0.3	42	17.9		8.2		32.5		95.7		7.5		13.5		10		74				<0.2		1.0	
					Bottom	7.0	0.3	27	17.9	17.9	8.2	8.2	32.5	32.5	95.5	95.5	7.5	7.5	23.4		23		75				<0.2		0.8	
						7.0	0.3	29	17.9		8.2		32.6		95.5		7.5		23.4		23		76				<0.2		0.9	

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 21 December 17 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Sunny	Moderate	09:59	6.9	Surface	1.0	0.2	351	18.0	18.0	8.2	8.2	32.4	32.4	96.2	96.2	7.5	7.5	15.3	19.3	18	22	72	74	822115	808814	<0.2	<0.2	0.9	0.7
						1.0	0.2	323	18.0		8.2		32.4		96.2		7.5		15.3		18		72				<0.2		0.7	
					Middle	3.5	0.2	346	18.0	18.0	8.2	8.2	32.5	32.5	96.3	96.3	7.5		19.6		19		74				<0.2		0.7	
						3.5	0.2	318	18.0		8.2		32.5		96.3		7.5		19.7		20		74				<0.2		0.7	
					Bottom	5.9	0.1	342	18.0	18.0	8.2	8.2	32.5	32.5	96.9	97.0	7.6	7.6	22.9		26		76				<0.2		0.7	
						5.9	0.1	315	18.0		8.2		32.5		97.0		7.6		23.1		28		76				<0.2		0.7	
IM10	Sunny	Moderate	09:51	7.0	Surface	1.0	0.5	320	17.7	17.7	8.2	8.2	32.4	32.4	96.1	96.1	7.5	7.6	15.2	17.6	14	18	72	74	822255	809839	<0.2	<0.2	0.7	0.7
						1.0	0.5	339	17.7		8.2		32.4		96.1		7.5		15.3		14		72				<0.2		0.8	
					Middle	3.5	0.5	319	17.7	17.7	8.2	8.2	32.4	32.4	96.3	96.3	7.6		18.7		20		73				<0.2		0.7	
						3.5	0.5	325	17.7		8.2		32.4		96.3		7.6		18.9		19		74				<0.2		0.6	
					Bottom	6.0	0.4	325	17.7	17.7	8.1	8.1	32.5	32.5	96.6	96.6	7.6	7.6	18.7		19		76				<0.2		0.8	
						6.0	0.5	350	17.7		8.2		32.5		96.6		7.6		18.7		19		76				<0.2		0.8	
IM11	Sunny	Moderate	09:37	7.6	Surface	1.0	0.4	294	17.7	17.7	8.1	8.1	32.0	32.0	96.5	96.5	7.6	7.6	13.2	15.4	12	16	71	74	821513	810539	<0.2	<0.2	0.7	0.8
						1.0	0.4	304	17.7		8.1		32.0		96.5		7.6		13.3		13		72				<0.2		0.8	
					Middle	3.8	0.4	292	17.7	17.7	8.1	8.1	31.9	31.9	96.4	96.5	7.6		15.2		13		73				<0.2		0.8	
						3.8	0.4	305	17.7		8.1		31.9		96.5		7.6		15.1		15		74				<0.2		0.8	
					Bottom	6.6	0.3	296	17.7	17.7	8.1	8.1	31.9	31.9	96.6	96.6	7.6	7.6	17.8		20		76				<0.2		0.7	
						6.6	0.3	314	17.7		8.1		31.9		96.6		7.6		17.7		22		76				<0.2		0.7	
IM12	Sunny	Moderate	09:29	7.2	Surface	1.0	0.5	268	17.7	17.7	8.1	8.1	31.7	31.7	96.2	96.2	7.6	7.6	14.5	16.4	15	16	72	74	821154	811523	<0.2	<0.2	0.8	0.8
						1.0	0.5	278	17.7		8.1		31.7		96.1		7.6		14.5		14		72				<0.2		0.8	
					Middle	3.6	0.5	270	17.7	17.7	8.1	8.1	31.7	31.7	96.1	96.1	7.6		16.2		17		74				<0.2		0.7	
						3.6	0.5	274	17.7		8.1		31.7		96.1		7.6		16.1		16		74				<0.2		0.8	
					Bottom	6.2	0.4	269	17.6	17.6	8.2	8.2	31.8	31.8	96.3	96.3	7.6	7.6	18.6		18		78				<0.2		0.8	
						6.2	0.4	269	17.6		8.2		31.8		96.2		7.6		18.6		18		76				<0.2		0.9	
SR2	Sunny	Moderate	09:03	4.2	Surface	1.0	0.1	43	17.7	17.7	8.2	8.2	32.2	32.2	96.4	96.4	7.6	7.6	20.7	22.1	25	24	72	73	821437	814137	<0.2	<0.2	0.8	0.7
						1.0	0.2	45	17.7		8.2		32.2		96.4		7.6		20.8		24		71				<0.2		0.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.2	33	17.6	17.6	8.2	8.2	32.2	32.2	96.7	96.7	7.6	7.6	23.4		24		74				<0.2		0.6	
						3.2	0.2	33	17.6		8.2		32.2		96.7		7.6		23.4		24		73				<0.2		0.7	
SR3	Sunny	Moderate	10:14	8.7	Surface	1.0	0.4	15	18.0	18.0	8.2	8.2	32.4	32.4	96.1	96.1	7.5	7.5	9.8	15.4	12	22	-	-	822122	807577	-	-	-	-
						1.0	0.4	15	18.0		8.2		32.4		96.1		7.5		9.8		13		-				-		-	
					Middle	4.4	0.4	18	17.9	17.9	8.2	8.2	32.5	32.5	95.6	95.6	7.5		13.6		22		-				-		-	
						4.4	0.4	18	17.9		8.2		32.5		95.6		7.5		13.7		20		-				-		-	
					Bottom	7.7	0.3	17	17.9	17.9	8.2	8.2	32.5	32.5	95.8	95.8	7.5	7.5	22.6		33		-				-		-	
						7.7	0.3	18	17.9		8.2		32.5		95.8		7.5		22.7		30		-				-		-	
SR4A	Fine	Calm	09:33	8.8	Surface	1.0	0.1	232	16.9	16.9	8.1	8.1	32.4	32.4	96.4	96.4	7.7	7.7	8.1	9.2	16	16	-	-	817218	807817	-	-	-	-
						1.0	0.1	253	16.9		8.1		32.4		96.4		7.7		8.1		14		-				-		-	
					Middle	4.4	0.1	256	16.8	16.8	8.0	8.0	32.3	32.3	96.7	96.7	7.7		9.4		16		-				-		-	
						4.4	0.1	259	16.8		8.0		32.3		96.7		7.7		9.6		16		-				-		-	
					Bottom	7.8	0.1	226	16.7	16.7	8.0	8.0	32.2	32.2	97.7	97.7	7.8	7.8	10.1		15		-				-		-	
						7.8	0.1	238	16.7		8.0		32.2		97.7		7.8		10.1		17		-				-		-	
SR5A	Fine	Calm	09:17	4.0	Surface	1.0	0.2	302	17.0	17.0	8.0	8.0	32.2	32.2	97.5	97.5	7.8	7.8	8.1	8.4	14	13	-	-	816586	810677	-	-	-	-
						1.0	0.2	328	17.0		8.0		32.2		97.5		7.8		8.0		12		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	0.2	310	17.0	17.0	8.0	8.0	31.9	31.9	98.5	98.7	7.9	7.9	8.6		13		-				-		-	
						3.0	0.2	331	17.0		8.0		31.9		98.8		7.9		8.8		13		-				-		-	
SR6	Fine	Calm	08:55	3.9	Surface	1.0	0.1	246	17.8	17.8	8.0	8.0	32.4	32.3	95.6	95.6	7.5	7.5	5.6	5.7	9	10	-	-	817874	814657	-	-	-	-
						1.0	0.2	260	17.8		8.0		32.3		95.6		7.5		5.6		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.9	0.1	254	17.8	17.8	8.0	8.0	31.8	31.8	96.2	96.2	7.6	7.6	5.7		12		-				-		-	
						2.9	0.1	275	17.8		8.0		31.8		96.2		7.6		5.7		11		-				-		-	
SR7	Sunny	Moderate	08:14	17.8	Surface	1.0	0.2	82	18.7	18.7	8.1	8.1	30.5	30.5	94.5	94.5	7.4	7.4	5.3	5.6	9	13	-	-	823610	823719	-	-	-	-
						1.0	0.2	87	18.7		8.1		30.5		94.5		7.4		5.2		10		-				-		-	
					Middle	8.9	0.1	57	18.7	18.7	8.1	8.1	30.4	30.4	94.7	94.8	7.4		5.2		10		-				-		-	
						8.9	0.1	59	18.7		8.1		30.4		94.8		7.4		5.3		10		-				-		-	
					Bottom	16.8	0.1	38	18.7	18.7	8.1	8.1	30.2	30.2	96.5	96.5	7.5	7.5	6.3		18		-				-		-	
						16.8	0.1	40	18.7		8.1		30.2		96.5		7.5		6.3		19		-				-		-	
SR8	Sunny	Moderate	09:20	3.7	Surface	1.0	-	-	18.2	18.2	8.1	8.1	32.1	32.1	97.7	97.7	7.6	7.6	8.7	9.7	13	13	-	-	820246	811418	-	-	-	-
						1.0	-	-	18.2		8.1		32.1		97.7		7.6		8.8		12		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.7	-	-	17.6	17.6	8.1	8.1	32.0	32.0	97.3	97.4	7.7	7.7	10.5		12		-				-		-	
						2.7	-	-	17.6		8.1		32.0		97.4		7.7		10.6		13		-				-		-	

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 December 17 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Calm	15:45	8.4	Surface	1.0	0.2	125	17.7	17.7	8.1	8.1	31.6	31.6	99.3	99.3	7.8	7.8	8.5	12.4	8	8	73	75	815606	804261	<0.2	<0.2	1.1	1.1
						1.0	0.2	131	17.7		8.1		31.6		99.3		7.8		8.9		6		73				<0.2		1.1	
					Middle	4.2	0.2	161	17.6	17.6	8.1	8.1	31.8	31.8	98.2	98.2	7.7		12.5		9		75				<0.2		1.1	
						4.2	0.2	174	17.6		8.1		31.9		98.1		7.7		12.5		9		76				<0.2		1.1	
					Bottom	7.4	0.1	217	17.5	17.5	8.1	8.1	32.0	32.0	98.3	98.4	7.8	7.8	16.1		7		76				<0.2		1.0	
						7.4	0.1	235	17.5		8.1		32.0		98.5		7.8		16.1		7		76				<0.2		1.0	
C2	Misty	Moderate	14:31	11.9	Surface	1.0	0.0	88	18.2	18.2	8.1	8.1	31.1	31.1	98.9	98.9	7.8	7.7	6.1	8.2	7	10	71	73	825707	806931	<0.2	<0.2	1.4	1.4
						1.0	0.0	88	18.2		8.1		31.1		98.9		7.7		5.9		5		71				<0.2		1.6	
					Middle	6.0	0.1	55	18.2	18.2	8.1	8.1	31.4	31.4	99.1	99.2	7.7		9.1		12		73				<0.2		1.5	
						6.0	0.1	59	18.2		8.1		31.4		99.2		7.7		9.1		12		73				<0.2		1.4	
					Bottom	10.9	0.2	59	18.2	18.2	8.1	8.1	31.7	31.7	99.5	99.5	7.8	7.8	9.4		10		75				<0.2		1.1	
						10.9	0.2	62	18.2		8.1		31.7		99.5		7.8		9.6		11		74				<0.2		1.2	
C3	Misty	Moderate	16:16	12.0	Surface	1.0	0.1	101	18.5	18.5	8.1	8.1	30.4	30.4	95.1	95.2	7.4	7.4	2.3	2.6	5	7	71	73	822080	817814	<0.2	<0.2	1.0	0.8
						1.0	0.1	102	18.5		8.1		30.4		95.2		7.4		2.3		6		71				<0.2		0.8	
					Middle	6.0	0.2	97	18.4	18.4	8.1	8.1	30.3	30.3	94.8	94.8	7.4		2.9		6		73				<0.2		0.9	
						6.0	0.2	103	18.4		8.1		30.3		94.8		7.4		2.9		7		73				<0.2		0.7	
					Bottom	11.0	0.2	71	18.4	18.4	8.1	8.1	30.2	30.2	95.1	95.2	7.5	7.5	2.5		8		75				<0.2		0.8	
						11.0	0.2	75	18.4		8.1		30.2		95.2		7.5		2.6		10		75				<0.2		0.8	
IM1	Cloudy	Calm	15:25	7.4	Surface	1.0	0.2	76	17.6	17.6	8.1	8.1	31.4	31.4	99.6	99.5	7.9	7.9	7.6	9.6	6	8	72	74	818372	806481	<0.2	<0.2	1.3	1.1
						1.0	0.2	81	17.6		8.1		31.4		99.3		7.9		7.7		7		72				<0.2		1.1	
					Middle	3.7	0.1	77	17.5	17.5	8.1	8.1	32.0	32.0	98.5	98.5	7.8		10.0		8		73				<0.2		0.9	
						3.7	0.1	82	17.5		8.1		32.0		98.5		7.8		10.1		9		74				<0.2		0.8	
					Bottom	6.4	0.0	42	17.5	17.5	8.1	8.1	32.1	32.1	98.4	98.4	7.8	7.8	11.2		8		75				<0.2		1.2	
						6.4	0.0	44	17.5		8.1		32.1		98.4		7.8		11.2		9		75				<0.2		1.2	
IM2	Cloudy	Calm	15:18	8.0	Surface	1.0	0.1	49	17.5	17.5	8.1	8.1	31.6	31.6	98.7	98.7	7.8	7.8	8.5	11.7	8	12	71	73	818853	806175	<0.2	<0.2	1.4	1.1
						1.0	0.1	49	17.5		8.1		31.6		98.6		7.8		8.7		7		71				<0.2		1.2	
					Middle	4.0	0.1	308	17.5	17.5	8.1	8.1	32.1	32.1	97.9	97.9	7.7		12.7		14		73				<0.2		1.0	
						4.0	0.1	318	17.5		8.1		32.1		97.9		7.7		12.8		13		73				<0.2		0.8	
					Bottom	7.0	0.0	268	17.5	17.5	8.1	8.1	32.1	32.1	97.9	98.0	7.7	7.7	13.6		15		75				<0.2		0.9	
						7.0	0.0	282	17.5		8.1		32.1		98.0		7.7		13.6		15		76				<0.2		1.1	
IM3	Cloudy	Calm	15:12	8.3	Surface	1.0	0.1	47	17.5	17.5	8.1	8.1	31.8	31.8	99.1	99.1	7.8	7.8	9.1	11.7	6	11	72	74	819425	806001	<0.2	<0.2	1.2	1.1
						1.0	0.1	49	17.5		8.1		31.8		99.1		7.8		9.2		8		72				<0.2		1.2	
					Middle	4.2	0.2	56	17.5	17.5	8.1	8.1	32.0	32.0	98.0	98.0	7.7		12.5		12		73				<0.2		1.3	
						4.2	0.2	57	17.5		8.1		32.0		98.0		7.7		12.5		13		74				<0.2		1.2	
					Bottom	7.3	0.1	59	17.5	17.5	8.1	8.1	32.0	32.0	98.1	98.1	7.7	7.7	13.5		13		75				<0.2		1.0	
						7.3	0.1	63	17.5		8.1		32.0		98.1		7.7		13.4		14		75				<0.2		0.9	
IM4	Cloudy	Calm	15:05	7.5	Surface	1.0	0.1	47	17.6	17.6	8.1	8.1	31.8	31.8	99.1	99.1	7.8	7.8	8.4	10.1	9	13	73	74	819572	805065	<0.2	<0.2	1.0	1.0
						1.0	0.1	47	17.6		8.1		31.8		99.0		7.8		8.6		9		73				<0.2		1.2	
					Middle	3.8	0.1	-	17.5	17.5	8.1	8.1	32.0	32.0	98.3	98.3	7.8		10.6		14		74				<0.2		1.0	
						3.8	0.1	-	17.5		8.1		32.0		98.3		7.8		10.6		13		74				<0.2		0.8	
					Bottom	6.5	0.1	261	17.5	17.5	8.1	8.1	32.1	32.1	98.5	98.5	7.8	7.8	11.1		17		75				<0.2		1.0	
						6.5	0.1	274	17.5		8.1		32.1		98.5		7.8		11.2		15		75				<0.2		1.2	
IM5	Cloudy	Calm	14:57	6.6	Surface	1.0	0.1	25	17.6	17.6	8.1	8.1	31.9	31.9	99.5	99.5	7.8	7.8	9.8	13.7	8	11	73	74	820557	804909	<0.2	<0.2	1.2	1.2
						1.0	0.1	27	17.6		8.1		31.9		99.5		7.8		9.8		8		73				<0.2		1.2	
					Middle	3.3	0.1	24	17.4	17.4	8.1	8.1	32.0	32.0	98.0	98.0	7.8		14.0		14		73				<0.2		1.2	
						3.3	0.2	25	17.4		8.1		32.0		98.0		7.8		14.2		13		73				<0.2		1.0	
					Bottom	5.6	0.1	67	17.4	17.4	8.1	8.1	32.0	32.0	98.1	98.2	7.8	7.8	17.3		12		75				<0.2		1.1	
						5.6	0.1	68	17.4		8.1		32.0		98.2		7.8		17.1		12		76				<0.2		1.4	
IM6	Cloudy	Calm	14:49	6.7	Surface	1.0	0.2	62	17.6	17.6	8.1	8.1	32.0	32.0	99.2	99.2	7.8	7.8	11.1	14.7	13	16	72	74	821073	805801	<0.2	<0.2	1.1	1.1
						1.0	0.2	64	17.6		8.1		32.0		99.2		7.8		11.2		15		72				<0.2		1.1	
					Middle	3.4	0.1	64	17.4	17.4	8.1	8.1	32.0	32.0	98.4	98.4	7.8		13.9		16		73				<0.2		1.3	
						3.4	0.1	65	17.4		8.1		32.0		98.4		7.8		13.8		15		73				<0.2		1.3	
					Bottom	5.7	0.1	68	17.4	17.4	8.1	8.1	32.0	32.0	98.3	98.3	7.8	7.8	18.8		18		75				<0.2		1.0	
						5.7	0.1	72	17.4		8.1		32.0		98.3		7.8		19.3		19		76				<0.2		0.9	
IM7	Cloudy	Moderate	14:39	8.4	Surface	1.0	0.1	57	17.5	17.5	8.1	8.1	32.0	32.0	98.6	98.6	7.8	7.8	13.0	13.8	18	17	72	73	821347	806861	<0.2	<0.2	1.0	1.1
						1.0	0.1	58	17.5		8.1		32.0		98.6		7.8		13.4		17		71				<0.2		1.2	
					Middle	4.2	0.1	58	17.5	17.5	8.1	8.1	32.0	32.0	98.4	98.4	7.8		13.6		17		73				<0.2		1.1	
						4.2	0.1	59	17.5		8.1		32.0		98.3		7.8		13.7		16		73				<0.2		1.1	
					Bottom	7.4	0.1	73	17.5	17.5	8.1	8.1	32.0	32.0	98.3	98.3	7.8	7.8	14.4		18		75				<0.2		1.3	
						7.4	0.1	79	17.5		8.1		32.0		98.3		7.8		14.4		18		75				<0.2		1.1	
IM8	Misty	Moderate	14:57	8.1	Surface	1.0	0.2	97	18.1	18.1	8.1	8.1	31.7	31.7	98.8	98.8	7.7	7.8	6.8	7.8	8	13	71	73	821713	807840	<0.2	<0.2	0.8	1.0
						1.0	0.2	103	18.1		8.1		31.7		98.8		7.7		6.8		10		71				<0.2		1.2	
					Middle	4.1	0.2	82	18.0	18.0	8.2	8.2	31.2	31.2	98.7	98.7	7.8		8.1		13		73				<0.2		1.0	
						4.1	0.2	89	18.0		8.2		31.2		98.6		7.8		8.1		15		73				<0.2		0.9	
					Bottom	7.1	0.1	92	18.0	18.0	8.2	8.2	31.1	31.1	98.6	98.6	7.8	7.8	8.6		14		75				<0.2		0.9	
						7.1	0.1	100	18.0		8.2		31.1		98.6		7.8		8.6		15		74				<0.2		1.0	

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **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 December 17 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Misty	Moderate	15:04	7.1	Surface	1.0	0.3	76	17.9	17.9	8.2	8.2	30.5	30.5	99.6	99.6	7.9	7.9	9.1	11.9	8	13	71	73	822104	808839	<0.2	<0.2	1.0	1.0
						1.0	0.3	83	17.9		8.2		30.5		99.5		7.9		9.3		9		71				<0.2		0.8	
					Middle	3.6	0.3	75	17.8	17.8	8.2	8.2	30.6	30.6	99.0	99.1	7.8		13.2		13		73				<0.2		1.0	
						3.6	0.3	79	17.8		8.2		30.6		99.1		7.8		13.4		13		73				<0.2		1.1	
					Bottom	6.1	0.2	63	17.8	17.8	8.2	8.2	30.7	30.7	99.4	99.4	7.9	7.9	13.2		17		75				<0.2		1.0	
						6.1	0.2	63	17.8		8.2		30.7		99.4		7.9		13.1		18		75				<0.2		1.0	
IM10	Misty	Moderate	15:12	6.8	Surface	1.0	0.2	103	18.2	18.2	8.2	8.2	30.5	30.5	98.8	98.8	7.8	7.8	8.4	10.9	12	14	71	73	822221	809844	<0.2	<0.2	1.1	1.1
						1.0	0.2	112	18.2		8.2		30.5		98.8		7.8		8.4		11		71				<0.2		1.2	
					Middle	3.4	0.2	104	18.0	18.0	8.2	8.2	30.4	30.4	98.3	98.4	7.8		10.8		13		73				<0.2		1.0	
						3.4	0.2	106	18.0		8.2		30.4		98.4		7.8		10.9		12		73				<0.2		1.0	
					Bottom	5.8	0.2	99	18.0	18.0	8.2	8.2	30.3	30.3	98.4	98.4	7.8	7.8	13.4		16		75				<0.2		1.3	
						5.8	0.2	103	18.0		8.2		30.3		98.4		7.8		13.5		17		75				<0.2		1.2	
IM11	Misty	Moderate	15:23	7.1	Surface	1.0	0.3	98	18.3	18.3	8.2	8.2	30.7	30.7	99.0	99.0	7.8	7.8	8.8	9.7	12	13	71	73	821485	810569	<0.2	<0.2	1.1	1.2
						1.0	0.3	101	18.3		8.2		30.7		99.0		7.8		8.9		11		71				<0.2		1.2	
					Middle	3.6	0.2	103	18.2	18.2	8.2	8.2	30.7	30.7	98.7	98.8	7.8		9.9		11		73				<0.2		1.1	
						3.6	0.2	112	18.2		8.2		30.7		98.8		7.8		9.8		12		73				<0.2		1.0	
					Bottom	6.1	0.2	91	18.1	18.1	8.2	8.2	30.6	30.6	99.2	99.2	7.8	7.8	10.3		15		75				<0.2		1.4	
						6.1	0.2	91	18.1		8.2		30.6		99.2		7.8		10.3		14		75				<0.2		1.4	
IM12	Misty	Moderate	15:30	8.7	Surface	1.0	0.4	111	18.1	18.1	8.2	8.2	30.9	30.9	99.2	99.2	7.8	7.8	6.8	7.1	8	9	71	73	821151	811496	<0.2	<0.2	1.0	1.1
						1.0	0.4	118	18.1		8.2		30.9		99.2		7.8		6.8		8		71				<0.2		1.2	
					Middle	4.4	0.3	108	18.0	18.0	8.2	8.2	30.9	30.9	98.4	98.4	7.8		6.9		10		73				<0.2		1.1	
						4.4	0.3	109	18.0		8.2		30.9		98.4		7.8		6.8		9		73				<0.2		1.1	
					Bottom	7.7	0.2	108	17.9	17.9	8.2	8.2	30.8	30.8	98.5	98.5	7.8	7.8	7.6		9		75				<0.2		1.0	
						7.7	0.2	111	17.9		8.2		30.8		98.5		7.8		7.7		10		75				<0.2		1.0	
SR2	Misty	Moderate	15:55	4.5	Surface	1.0	0.3	43	17.9	17.9	8.2	8.2	31.0	31.0	99.3	99.3	7.8	7.8	5.2	5.4	11	11	71	72	821465	814181	<0.2	<0.2	0.9	1.0
						1.0	0.3	45	17.9		8.2		31.0		99.2		7.8		5.2		10		71				<0.2		1.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.3	48	17.9	17.9	8.2	8.2	31.0	31.0	99.4	99.4	7.8	7.8	5.5		10		73				<0.2		1.0	
						3.5	0.3	52	17.9		8.2		31.0		99.4		7.8		5.5		11		73				<0.2		0.9	
SR3	Misty	Moderate	14:52	9.2	Surface	1.0	0.2	106	18.2	18.2	8.1	8.1	31.3	31.3	99.2	99.3	7.8	7.8	9.4	17.0	11	13	-	-	822165	807541	-	-	-	-
						1.0	0.2	115	18.2		8.1		31.3		99.3		7.8		9.6		11		-				-		-	
					Middle	4.6	0.2	76	18.1	18.1	8.2	8.2	31.5	31.5	99.3	99.3	7.8		15.9		9		-				-		-	
						4.6	0.3	77	18.1		8.2		31.5		99.3		7.8		16.2		10		-				-		-	
					Bottom	8.2	0.3	85	17.8	17.8	8.1	8.1	31.4	31.4	99.1	99.1	7.8	7.8	25.3		18		-				-		-	
						8.2	0.3	85	17.8		8.1		31.4		99.1		7.8		25.5		18		-				-		-	
SR4A	Cloudy	Calm	16:03	8.2	Surface	1.0	0.3	79	17.7	17.7	8.1	8.1	32.0	32.0	99.8	99.7	7.8	7.8	7.9	8.6	9	10	-	-	817209	807814	-	-	-	-
						1.0	0.4	84	17.7		8.1		32.0		99.6		7.8		8.1		10		-				-		-	
					Middle	4.1	0.3	72	17.7	17.7	8.1	8.1	32.1	32.1	99.1	99.1	7.8		8.6		12		-				-		-	
						4.1	0.3	77	17.7		8.1		32.1		99.1		7.8		8.7		10		-				-		-	
					Bottom	7.2	0.2	61	17.7	17.7	8.1	8.1	32.1	32.1	99.0	99.0	7.8	7.8	9.2		10		-				-		-	
						7.2	0.2	63	17.7		8.1		32.1		99.0		7.8		9.2		11		-				-		-	
SR5A	Cloudy	Calm	16:19	3.5	Surface	1.0	0.1	357	17.7	17.7	8.1	8.1	32.1	32.1	99.8	99.8	7.8	7.8	7.9	8.7	8	8	-	-	816602	810678	-	-	-	-
						1.0	0.1	328	17.7		8.1		32.1		99.8		7.8		8.0		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.5	0.1	27	17.7	17.7	8.1	8.1	32.1	32.1	99.3	99.3	7.8	7.8	9.4		8		-				-		-	
						2.5	0.1	29	17.7		8.1		32.1		99.3		7.8		9.4		10		-				-		-	
SR6	Cloudy	Calm	16:42	4.1	Surface	1.0	0.0	76	18.2	18.2	8.1	8.1	32.1	32.1	102.7	102.7	8.0	8.0	4.9	5.8	6	6	-	-	817907	814653	-	-	-	-
						1.0	0.0	82	18.2		8.1		32.1		102.6		8.0		5.0		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.1	85	18.1	18.1	8.1	8.1	32.1	32.1	101.5	101.5	7.9	7.9	6.3		5		-				-		-	
						3.1	0.1	87	18.1		8.1		32.1		101.4		7.9		6.8		5		-				-		-	
SR7	Misty	Moderate	16:49	19.6	Surface	1.0	0.2	76	18.5	18.5	8.1	8.1	30.2	30.2	93.5	93.5	7.3	7.3	4.5	6.8	6	7	-	-	823659	823720	-	-	-	-
						1.0	0.2	83	18.5		8.1		30.2		93.5		7.3		4.7		7		-				-		-	
					Middle	9.8	0.2	71	18.4	18.4	8.1	8.1	30.1	30.1	93.1	93.1	7.3		5.6		8		-				-		-	
						9.8	0.2	77	18.4		8.1		30.1		93.1		7.3		5.6		7		-				-		-	
					Bottom	18.6	0.2	46	18.4	18.4	8.1	8.1	29.9	29.9	92.9	93.0	7.3	7.3	10.1		7		-				-		-	
						18.6	0.2	50	18.4		8.1		29.9		93.0		7.3		10.5		7		-				-		-	
SR8	Misty	Moderate	15:39	3.7	Surface	1.0	-	-	18.1	18.1	8.2	8.2	30.9	30.9	100.0	100.0	7.9	7.9	8.2	9.1	11	11	-	-	820246	811418	-	-	-	-
						1.0	-	-	18.1		8.2		30.9		100.0		7.9		8.3		11		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.7	-	-	18.0	18.0	8.2	8.2	30.9	30.9	99.8	99.8	7.8	7.9	10.0		11		-				-		-	
						2.7	-	-	18.0		8.2		30.9		99.8		7.9		10.0		11		-				-		-	

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 December 17 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Calm	10:57	8.3	Surface	1.0	0.6	46	17.5	17.5	8.1	8.1	32.1	32.1	97.9	97.9	7.7	7.7	13.5	18.5	10	10	73	74	815596	804250	<0.2	<0.2	1.1	1.1
						1.0	0.6	50	17.5		8.1		32.1		97.9		7.7		13.4		8		73				<0.2		1.0	
					Middle	4.2	0.6	48	17.5	17.5	8.1	8.1	32.1	32.1	97.5	97.5	7.7		19.6		10		73				<0.2		1.0	
						4.2	0.6	52	17.5		8.1		32.1		97.5		7.7		19.6		10		74				<0.2		1.2	
					Bottom	7.3	0.5	44	17.5	17.5	8.1	8.1	32.1	32.1	97.3	97.3	7.7	7.7	22.4		11		76				<0.2		1.2	
						7.3	0.5	45	17.5		8.1		32.1		97.3		7.7		22.4		12		76				<0.2		1.1	
C2	Cloudy	Moderate	11:43	11.4	Surface	1.0	0.5	279	18.2	18.2	8.1	8.1	29.5	29.5	96.2	96.2	7.6	7.6	5.9	12.2	9	9	71	74	825689	806928	<0.2	<0.2	1.3	1.4
						1.0	0.5	289	18.2		8.1		29.5		96.2		7.6		5.9		9		72				<0.2		1.2	
					Middle	5.7	0.5	274	18.1	18.1	8.1	8.1	29.7	29.7	95.9	95.9	7.6		9.9		8		74				<0.2		1.4	
						5.7	0.5	287	18.1		8.1		29.7		95.9		7.6		10.0		7		74				<0.2		1.5	
					Bottom	10.4	0.4	278	18.0	18.0	8.1	8.1	29.7	29.7	96.3	96.3	7.6	7.6	20.6		8		76				<0.2		1.5	
						10.4	0.5	293	18.0		8.1		29.7		96.2		7.6		20.7		10		75				<0.2		1.3	
C3	Cloudy	Moderate	09:56	11.0	Surface	1.0	0.5	291	18.0	18.0	8.1	8.1	29.6	29.6	98.3	98.3	7.8	7.8	5.2	8.8	9	9	71	74	822093	817828	<0.2	<0.2	0.8	0.8
						1.0	0.5	316	18.0		8.1		29.6		98.3		7.8		5.3		8		72				<0.2		0.7	
					Middle	5.5	0.4	296	18.0	18.0	8.1	8.1	29.6	29.6	98.5	98.6	7.8		9.0		7		73				<0.2		0.7	
						5.5	0.4	318	18.0		8.1		29.6		98.6		7.8		8.9		9		74				<0.2		0.7	
					Bottom	10.0	0.3	299	17.9	17.9	8.1	8.1	30.0	30.0	99.7	99.8	7.9	7.9	12.2		11		75				<0.2		0.8	
						10.0	0.3	316	17.9		8.1		30.0		99.8		7.9		12.2		11		76				<0.2		0.8	
IM1	Cloudy	Calm	11:14	7.2	Surface	1.0	0.5	10	17.5	17.5	8.1	8.1	32.0	32.0	99.2	99.2	7.8	7.8	11.7	18.2	9	9	73	75	818365	806463	<0.2	<0.2	1.0	1.0
						1.0	0.5	10	17.5		8.1		32.0		99.1		7.8		12.1		9		73				<0.2		1.0	
					Middle	3.6	0.4	7	17.3	17.3	8.1	8.1	32.0	32.0	98.2	98.2	7.8		20.3		8		74				<0.2		0.9	
						3.6	0.5	7	17.3		8.1		32.0		98.2		7.8		20.3		9		74				<0.2		1.0	
					Bottom	6.2	0.4	2	17.3	17.3	8.1	8.1	32.0	32.0	97.6	97.6	7.7	7.7	22.5		10		76				<0.2		0.9	
						6.2	0.4	2	17.3		8.1		32.0		97.6		7.7		22.5		9		77				<0.2		0.9	
IM2	Cloudy	Calm	11:25	7.9	Surface	1.0	0.6	25	17.4	17.4	8.1	8.1	32.0	32.0	98.4	98.4	7.8	7.8	16.7	20.0	14	13	73	74	818859	806190	<0.2	<0.2	0.9	1.0
						1.0	0.7	26	17.4		8.1		32.0		98.4		7.8		16.4		13		72				<0.2		1.0	
					Middle	4.0	0.5	16	17.4	17.4	8.1	8.1	32.0	32.0	98.0	98.0	7.8		18.0		13		73				<0.2		1.0	
						4.0	0.5	17	17.4		8.1		32.0		98.0		7.8		18.2		13		73				<0.2		1.1	
					Bottom	6.9	0.4	23	17.4	17.4	8.1	8.1	32.0	32.0	97.5	97.6	7.7	7.7	25.5		14		76				<0.2		1.0	
						6.9	0.4	23	17.4		8.1		32.0		97.6		7.7		25.2		13		76				<0.2		1.0	
IM3	Cloudy	Calm	11:32	8.1	Surface	1.0	0.4	27	17.8	17.8	8.1	8.1	32.0	32.0	97.7	97.8	7.7	7.7	9.3	16.1	12	12	72	73	819400	806006	<0.2	<0.2	1.0	0.9
						1.0	0.4	29	17.8		8.1		32.0		97.8		7.7		9.4		12		72				<0.2		0.9	
					Middle	4.1	0.4	24	17.7	17.7	8.1	8.1	32.0	32.0	97.2	97.3	7.6		16.3		11		73				<0.2		0.8	
						4.1	0.4	25	17.7		8.1		32.0		97.3		7.7		16.7		12		73				<0.2		0.9	
					Bottom	7.1	0.4	24	17.7	17.7	8.1	8.1	32.0	32.0	97.4	97.5	7.7	7.7	22.2		13		75				<0.2		0.8	
						7.1	0.4	25	17.7		8.1		32.0		97.5		7.7		22.6		12		75				<0.2		0.8	
IM4	Cloudy	Calm	11:39	7.5	Surface	1.0	0.5	22	17.4	17.4	8.1	8.1	31.8	31.8	99.6	99.6	7.9	7.9	9.7	19.2	11	11	73	75	819557	805031	<0.2	<0.2	1.2	1.1
						1.0	0.5	22	17.4		8.1		31.8		99.6		7.9		9.8		8		73				<0.2		1.2	
					Middle	3.8	0.5	17	17.4	17.4	8.1	8.1	32.0	32.0	98.3	98.3	7.8		15.8		10		74				<0.2		1.0	
						3.8	0.5	17	17.4		8.1		32.0		98.3		7.8		15.6		9		75				<0.2		1.1	
					Bottom	6.5	0.4	16	17.4	17.4	8.1	8.1	32.0	32.0	98.0	98.0	7.8	7.8	32.4		16		76				<0.2		1.0	
						6.5	0.4	17	17.4		8.1		32.0		98.0		7.8		32.1		15		76				<0.2		1.0	
IM5	Cloudy	Calm	11:47	6.6	Surface	1.0	0.5	8	17.9	17.9	8.1	8.1	32.0	32.0	99.3	99.3	7.8	7.8	8.7	16.1	16	16	73	75	820585	804907	<0.2	<0.2	1.0	1.0
						1.0	0.5	8	17.9		8.1		32.0		99.2		7.8		8.8		10		73				<0.2		1.0	
					Middle	3.3	0.5	9	17.6	17.6	8.1	8.1	32.0	32.0	97.9	97.9	7.7		17.4		15		74				<0.2		0.9	
						3.3	0.5	9	17.6		8.1		32.0		97.9		7.7		17.3		14		74				<0.2		0.9	
					Bottom	5.6	0.4	6	17.5	17.5	8.1	8.1	32.0	32.0	97.6	97.6	7.7	7.7	22.0		24		77				<0.2		1.2	
						5.6	0.4	6	17.5		8.1		32.0		97.6		7.7		22.1		23		77				<0.2		0.9	
IM6	Cloudy	Calm	11:53	6.6	Surface	1.0	0.3	48	17.9	17.9	8.1	8.1	31.9	31.9	97.1	97.2	7.6	7.6	11.4	13.9	10	12	73	74	821056	805834	<0.2	<0.2	1.0	0.9
						1.0	0.3	50	17.9		8.1		31.9		97.2		7.6		11.4		10		73				<0.2		1.0	
					Middle	3.3	0.3	41	17.7	17.7	8.2	8.2	32.0	32.0	97.2	97.2	7.6		15.0		13		74				<0.2		0.8	
						3.3	0.3	43	17.7		8.2		32.0		97.2		7.6		15.1		12		74				<0.2		1.0	
					Bottom	5.6	0.3	30	17.7	17.7	8.2	8.2	32.0	32.0	97.4	97.5	7.7	7.7	15.2		14		76				<0.2		0.8	
						5.6	0.3	31	17.7		8.2		32.0		97.5		7.7		15.2		15		76				<0.2		0.9	
IM7	Cloudy	Calm	12:00	8.1	Surface	1.0	0.3	35	17.6	17.6	8.1	8.1	32.0	32.0	97.3	97.4	7.7	7.7	15.1	19.8	15	15	73	74	821331	806849	<0.2	<0.2	0.8	0.9
						1.0	0.3	36	17.6		8.1		32.0		97.4		7.7		15.2		15		73				<0.2		0.8	
					Middle	4.1	0.3	29	17.6	17.6	8.1	8.1	32.0	32.0	97.3	97.3	7.7		19.3		15		73				<0.2		0.8	
						4.1	0.3	29	17.6		8.1		32.0		97.3		7.7		19.7		15		74				<0.2		0.9	
					Bottom	7.1	0.2	16	17.6	17.6	8.2	8.2	32.0	32.0	97.5	97.5	7.7	7.7	24.7		15		76				<0.2		1.1	
						7.1	0.3	16	17.6		8.2		32.0		97.5		7.7		24.9		15		75				<0.2		0.9	
IM8	Cloudy	Moderate	11:17	7.9	Surface	1.0	0.2	354	18.0	18.0	8.2	8.2	30.9	30.9	97.6	97.6	7.7	7.7	19.5	20.5	18	25	72	74	821720	807814	<0.2	<0.2	1.0	1.0
						1.0	0.2	358	18.0		8.2		30.9		97.6		7.7		19.3		16		72				<0.2		0.8	
					Middle	4.0	0.2	353	18.0	18.0	8.2	8.2	30.9	30.9	97.8	97.8	7.7		20.1		28		74				<0.2		1.0	
						4.0	0.2	325	18.0		8.2		30.9		97.8		7.7		20.0		30		74				<0.2		0.9	
					Bottom	6.9	0.2	358	18.0	18.0	8.2	8.2	30.9	30.9	98.1	98.1	7.7	7.7	22.1		28		75				<0.2		1.0	
						6.9	0.2	329	18.0		8.2		30.9		98.1		7.7		22.0		28		76				<0.2		1.0	

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **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 December 17 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	11:08	6.8	Surface	1.0	0.4	3	18.0	18.0	8.1	8.1	30.6	30.6	97.3	97.3	7.7	7.7	13.3	14.3	8	13	72	74	822113	808785	<0.2	<0.2	1.3	1.3
						1.0	0.4	3	18.0		8.1		30.6		97.3		7.7		13.2		10		72				<0.2		1.5	
					Middle	3.4	0.3	17	18.0	18.0	8.1	8.1	30.6	30.6	97.7	97.7	7.7		14.6		14		73				<0.2		1.2	
						3.4	0.3	17	18.0		8.1		30.6		97.7		7.7		14.7		15		74				<0.2		1.0	
					Bottom	5.8	0.3	12	18.0	18.0	8.1	8.1	30.6	30.6	98.2	98.2	7.7	7.7	15.1		16		75				<0.2		1.3	
						5.8	0.3	12	18.0		8.1		30.6		98.2		7.7		15.1		16		76				<0.2		1.4	
IM10	Cloudy	Moderate	11:00	7.3	Surface	1.0	0.3	21	17.9	17.9	8.2	8.2	30.9	30.9	98.3	98.4	7.8	7.8	16.9	18.6	14	18	72	74	822261	809814	<0.2	<0.2	1.0	0.8
						1.0	0.3	21	17.9		8.2		30.9		98.4		7.8		17.0		14		72				<0.2		0.8	
					Middle	3.7	0.3	17	17.9	17.9	8.2	8.2	30.9	30.9	98.6	98.6	7.8		18.5		16		74				<0.2		0.8	
						3.7	0.3	17	17.9		8.2		30.9		98.6		7.8		18.6		16		74				<0.2		0.8	
					Bottom	6.3	0.2	25	17.9	17.9	8.2	8.2	30.9	30.9	99.3	99.3	7.8	7.8	20.3		24		75				<0.2		0.7	
						6.3	0.2	25	17.9		8.2		30.9		99.3		7.8		20.3		26		76				<0.2		0.7	
IM11	Cloudy	Moderate	10:50	7.4	Surface	1.0	0.2	5	17.8	17.8	8.1	8.1	31.0	31.0	99.6	99.6	7.9	7.9	16.7	21.5	17	19	72	74	821475	810534	<0.2	<0.2	0.7	0.9
						1.0	0.2	5	17.8		8.1		31.0		99.6		7.9		17.4		16		72				<0.2		0.8	
					Middle	3.7	0.2	354	17.8	17.8	8.1	8.1	31.0	31.0	99.8	99.8	7.9		22.1		16		74				<0.2		1.0	
						3.7	0.2	326	17.8		8.1		31.0		99.8		7.9		22.2		17		74				<0.2		0.9	
					Bottom	6.4	0.2	21	17.8	17.8	8.1	8.1	31.0	31.0	100.0	100.0	7.9	7.9	25.2		22		76				<0.2		0.8	
						6.4	0.2	23	17.8		8.1		31.0		100.0		7.9		25.2		23		76				<0.2		0.9	
IM12	Cloudy	Moderate	10:43	7.9	Surface	1.0	0.3	253	17.7	17.7	8.1	8.1	31.0	31.0	98.0	98.1	7.8	7.8	18.0	20.0	20	21	72	74	821152	811529	<0.2	<0.2	0.9	0.8
						1.0	0.3	263	17.7		8.1		31.0		98.1		7.8		18.4		20		72				<0.2		0.8	
					Middle	4.0	0.3	254	17.7	17.7	8.1	8.1	31.0	31.0	98.0	98.0	7.8		20.1		20		74				<0.2		0.7	
						4.0	0.3	255	17.7		8.1		31.0		98.0		7.8		20.2		19		74				<0.2		0.8	
					Bottom	6.9	0.3	257	17.7	17.7	8.1	8.1	30.9	30.9	98.5	98.6	7.8	7.8	21.5		22		76				<0.2		0.8	
						6.9	0.3	276	17.7		8.1		30.9		98.6		7.8		21.8		24		76				<0.2		0.8	
SR2	Cloudy	Moderate	10:17	3.9	Surface	1.0	0.4	322	17.7	17.7	8.1	8.1	30.7	30.7	99.2	99.2	7.9	7.9	10.7	12.5	14	15	72	73	821456	814141	<0.2	<0.2	0.8	0.9
						1.0	0.4	333	17.7		8.1		30.7		99.2		7.9		10.8		12		72				<0.2		0.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.9	0.3	321	17.7	17.7	8.1	8.1	30.7	30.7	100.0	100.1	7.9	7.9	14.2		16		73				<0.2		1.1	
						2.9	0.4	342	17.7		8.1		30.7		100.1		7.9		14.2		16		74				<0.2		0.9	
SR3	Cloudy	Moderate	11:22	8.5	Surface	1.0	0.3	340	18.1	18.1	8.2	8.2	30.8	30.8	97.8	97.8	7.7	7.7	14.2	16.8	16	19	-	-	822157	807557	-	-	-	-
						1.0	0.3	356	18.1		8.2		30.8		97.8		7.7		14.2		15		-				-		-	
					Middle	4.3	0.4	357	18.1	18.1	8.2	8.2	30.8	30.8	97.9	97.9	7.7		17.1		18		-				-		-	
						4.3	0.4	328	18.1		8.2		30.8		97.9		7.7		17.2		19		-				-		-	
					Bottom	7.5	0.4	5	18.1	18.1	8.2	8.2	30.9	30.9	98.6	98.7	7.8	7.8	19.0		24		-				-		-	
						7.5	0.4	5	18.1		8.2		30.9		98.7		7.8		19.0		22		-				-		-	
SR4A	Cloudy	Calm	10:36	8.3	Surface	1.0	0.2	248	17.5	17.5	8.0	8.0	32.0	32.0	97.9	97.9	7.7	7.7	7.2	7.8	9	10	-	-	817213	807793	-	-	-	-
						1.0	0.2	251	17.5		8.0		32.0		97.9		7.7		7.3		8		-				-		-	
					Middle	4.2	0.2	250	17.5	17.5	8.0	8.0	32.0	32.0	97.6	97.6	7.7		7.8		9		-				-		-	
						4.2	0.2	271	17.5		8.0		32.0		97.6		7.7		7.8		7		-				-		-	
					Bottom	7.3	0.1	233	17.5	17.5	8.0	8.0	32.0	32.0	97.4	97.5	7.7	7.7	8.5		15		-				-		-	
						7.3	0.1	237	17.5		8.0		32.0		97.5		7.7		8.3		13		-				-		-	
SR5A	Cloudy	Calm	10:20	3.3	Surface	1.0	0.2	293	17.5	17.5	8.0	8.0	32.0	32.0	97.9	97.9	7.7	7.7	8.4	8.3	11	11	-	-	816621	810721	-	-	-	-
						1.0	0.2	304	17.5		8.0		32.0		97.9		7.7		8.5		11		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.3	0.2	297	17.5	17.5	8.0	8.0	32.0	32.0	97.8	97.8	7.7	7.7	8.4		12		-				-		-	
						2.3	0.2	314	17.5		8.0		32.0		97.8		7.7		7.8		11		-				-		-	
SR6	Cloudy	Calm	09:58	3.6	Surface	1.0	0.2	233	17.8	17.8	8.0	8.0	31.0	31.0	96.0	96.0	7.6	7.6	7.6	7.7	12	18	-	-	817914	814670	-	-	-	-
						1.0	0.2	249	17.8		8.0		31.0		95.9		7.6		7.5		12		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.6	0.1	235	17.8	17.8	8.0	8.0	30.9	30.8	95.4	95.3	7.5	7.5	7.9		23		-				-		-	
						2.6	0.1	244	17.8		8.0		30.8		95.2		7.5		7.9		25		-				-		-	
SR7	Cloudy	Moderate	09:26	18.8	Surface	1.0	0.2	45	18.2	18.2	8.1	8.1	30.2	30.2	96.8	96.8	7.6	7.6	9.2	8.8	12	12	-	-	823622	823726	-	-	-	-
						1.0	0.2	45	18.2		8.1		30.2		96.8		7.6		9.3		12		-				-		-	
					Middle	9.4	0.2	43	18.2	18.2	8.1	8.1	30.4	30.5	96.3	96.3	7.6		9.8		12		-				-		-	
						9.4	0.2	44	18.2		8.1		30.5		96.3		7.6		9.9		12		-				-		-	
					Bottom	17.8	0.3	34	18.2	18.2	8.1	8.1	30.6	30.6	96.3	96.3	7.6	7.6	7.4		12		-				-		-	
						17.8	0.3	36	18.2		8.1		30.6		96.3		7.6		7.3		11		-				-		-	
SR8	Cloudy	Moderate	10:34	3.6	Surface	1.0	-	-	18.1	18.1	8.2	8.2	30.8	30.8	100.1	100.1	7.9	7.9	9.3	10.2	10	11	-	-	820246	811418	-	-	-	-
						1.0	-	-	18.1		8.2		30.8		100.1		7.9		9.3		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.6	-	-	18.0	18.0	8.2	8.2	30.8	30.8	101.1	101.1	8.0	8.0	11.1		11		-				-		-	
						2.6	-	-	18.0		8.2		30.8		101.1		8.0		11.1		11		-				-		-	

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 26 December 17 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Moderate	19:08	8.6	Surface	1.0	0.1	193	18.0	18.0	8.1	8.1	32.2	32.2	99.2	99.2	7.7	7.7	9.2	9.3	7	7	71	73	815639	804237	<0.2	<0.2	0.7	0.7
						1.0	0.1	200	18.0		8.1		32.2		99.2		7.7		9.2		6		71				<0.2		0.6	
					Middle	4.3	0.1	199	18.0	18.0	8.1	8.1	32.2	32.2	99.2	99.2	7.7		9.3		7		73				<0.2		0.7	
						4.3	0.1	217	18.0		8.1		32.2		99.2		7.7		9.4		8		75				<0.2		0.6	
					Bottom	7.6	0.1	201	18.0	18.0	8.1	8.1	32.2	32.2	99.1	99.1	7.7	7.7	9.4		7		75				<0.2		0.8	
						7.6	0.1	214	18.0		8.1		32.2		99.1		7.7		9.4		7		75				<0.2		0.7	
C2	Cloudy	Moderate	17:58	11.9	Surface	1.0	0.1	77	18.2	18.2	8.1	8.1	30.9	30.9	100.0	100.0	7.8	7.8	3.1	3.5	5	6	71	73	825654	806953	<0.2	<0.2	2.2	1.9
						1.0	0.2	82	18.2		8.1		30.9		99.9		7.8		3.1		6		71				<0.2		2.0	
					Middle	6.0	0.1	85	18.2	18.2	8.1	8.1	30.8	30.8	99.6	99.6	7.8		3.3		5		73				<0.2		2.2	
						6.0	0.1	93	18.2		8.2		30.8		99.5		7.8		3.5		4		73				<0.2		1.8	
					Bottom	10.9	0.1	189	18.3	18.3	8.2	8.2	31.2	31.2	99.1	99.1	7.7	7.7	3.9		7		75				<0.2		1.7	
						10.9	0.1	195	18.3		8.2		31.2		99.0		7.7		3.9		8		75				<0.2		1.7	
C3	Cloudy	Moderate	19:48	12.0	Surface	1.0	0.3	73	17.6	17.6	8.2	8.2	32.2	32.2	98.2	98.2	7.7	7.7	2.1	3.0	5	5	71	73	822125	817823	<0.2	<0.2	1.0	1.0
						1.0	0.3	76	17.6		8.2		32.2		98.1		7.7		2.2		4		71				<0.2		1.0	
					Middle	6.0	0.3	94	17.7	17.7	8.2	8.2	31.8	31.8	97.3	97.4	7.7		3.8		4		73				<0.2		1.0	
						6.0	0.3	95	17.7		8.2		31.8		97.4		7.7		3.9		5		73				<0.2		1.1	
					Bottom	11.0	0.2	95	17.9	17.9	8.2	8.2	32.1	32.1	97.5	97.5	7.6	7.6	2.8		7		74				<0.2		1.0	
						11.0	0.3	101	17.9		8.2		32.1		97.5		7.6		2.9		6		75				<0.2		1.0	
IM1	Fine	Moderate	18:50	7.4	Surface	1.0	0.1	106	18.0	18.0	8.1	8.1	32.1	32.1	98.9	98.9	7.7	7.7	10.1	9.9	12	12	71	73	818370	806480	<0.2	<0.2	0.7	0.7
						1.0	0.1	108	18.0		8.1		32.1		98.9		7.7		10.1		12		71				<0.2		0.7	
					Middle	3.7	0.1	149	18.0	18.0	8.1	8.1	32.0	32.0	98.8	98.8	7.7		10.7		11		73				<0.2		0.6	
						3.7	0.1	156	18.0		8.1		32.0		98.8		7.7		10.5		11		73				<0.2		0.7	
					Bottom	6.4	0.1	163	18.0	18.0	8.1	8.1	32.1	32.1	98.8	98.8	7.7	7.7	8.8		12		75				<0.2		0.7	
						6.4	0.2	174	18.0		8.1		32.1		98.8		7.7		8.9		12		75				<0.2		0.7	
IM2	Fine	Moderate	18:41	8.3	Surface	1.0	0.1	128	17.9	17.9	8.1	8.1	32.0	32.0	98.1	98.1	7.7	7.7	9.5	10.1	8	8	72	73	818872	806187	<0.2	<0.2	0.7	0.7
						1.0	0.1	134	17.9		8.1		32.0		98.1		7.7		9.5		5		71				<0.2		0.8	
					Middle	4.2	0.1	133	17.9	17.9	8.1	8.1	32.0	32.0	98.1	98.1	7.7		9.6		9		73				<0.2		0.7	
						4.2	0.1	136	17.9		8.1		32.0		98.1		7.7		9.5		9		73				<0.2		0.7	
					Bottom	7.3	0.1	146	18.0	18.0	8.1	8.1	32.1	32.1	98.2	98.2	7.7	7.7	11.2		10		75				<0.2		0.7	
						7.3	0.1	160	18.0		8.1		32.1		98.2		7.7		11.1		8		75				<0.2		0.7	
IM3	Fine	Moderate	18:32	8.6	Surface	1.0	0.0	51	17.9	17.9	8.1	8.1	32.0	32.0	97.9	97.9	7.7	7.7	9.4	9.8	9	9	72	74	819412	806028	<0.2	<0.2	0.9	0.8
						1.0	0.0	54	17.9		8.1		32.0		97.9		7.7		9.4		7		72				<0.2		0.7	
					Middle	4.3	0.0	64	17.9	17.9	8.1	8.1	32.0	32.0	97.9	97.9	7.7		10.0		10		74				<0.2		0.9	
						4.3	0.0	65	17.9		8.1		32.0		97.9		7.7		10.1		8		73				<0.2		0.8	
					Bottom	7.6	0.1	61	17.9	17.9	8.1	8.1	32.0	32.0	98.2	98.2	7.7	7.7	9.8		11		75				<0.2		0.8	
						7.6	0.1	64	17.9		8.1		32.0		98.2		7.7		9.8		12		75				<0.2		0.7	
IM4	Fine	Moderate	18:25	7.9	Surface	1.0	0.1	84	17.9	17.9	8.1	8.1	32.0	32.0	97.9	98.0	7.7	7.7	8.4	8.8	8	8	71	73	819582	805059	<0.2	<0.2	0.8	0.8
						1.0	0.1	84	17.9		8.1		32.0		98.0		7.7		8.4		6		71				<0.2		0.8	
					Middle	4.0	0.0	104	17.9	17.9	8.1	8.1	32.0	32.0	97.8	97.8	7.7		8.6		9		73				<0.2		0.7	
						4.0	0.0	105	17.9		8.1		32.0		97.8		7.7		8.6		9		73				<0.2		0.9	
					Bottom	6.9	0.1	157	17.8	17.8	8.2	8.2	32.0	32.0	97.7	97.7	7.7	7.7	9.3		9		75				<0.2		0.7	
						6.9	0.1	165	17.8		8.2		32.0		97.7		7.7		9.3		10		75				<0.2		0.7	
IM5	Fine	Moderate	18:16	7.0	Surface	1.0	0.1	95	17.9	17.9	8.2	8.2	31.9	31.9	98.9	98.9	7.8	7.8	6.5	7.3	5	6	72	73	820572	804913	<0.2	<0.2	0.8	0.8
						1.0	0.1	99	17.9		8.2		31.9		98.9		7.8		6.4		5		71				<0.2		0.8	
					Middle	3.5	0.1	51	17.9	17.9	8.2	8.2	31.9	31.9	98.2	98.2	7.7		7.4		6		73				<0.2		0.9	
						3.5	0.1	53	17.9		8.2		31.9		98.2		7.7		7.4		5		73				<0.2		0.8	
					Bottom	6.0	0.0	28	17.9	17.9	8.2	8.2	31.9	31.9	98.3	98.3	7.7	7.7	8.0		7		75				<0.2		0.8	
						6.0	0.0	28	17.9		8.2		31.9		98.3		7.7		8.3		8		75				<0.2		0.8	
IM6	Fine	Moderate	18:09	6.9	Surface	1.0	0.0	351	17.9	17.9	8.2	8.2	31.9	31.9	99.0	99.0	7.8	7.8	9.6	12.2	10	11	71	73	821080	805816	<0.2	<0.2	0.9	0.9
						1.0	0.0	323	17.9		8.2		31.9		99.0		7.8		9.5		8		71				<0.2		0.8	
					Middle	3.5	0.2	19	17.9	17.9	8.2	8.2	31.9	31.9	99.1	99.1	7.8		11.0		8		73				<0.2		0.9	
						3.5	0.2	20	17.9		8.2		31.9		99.1		7.8		11.0		8		74				<0.2		0.8	
					Bottom	5.9	0.3	51	17.9	17.9	8.2	8.2	31.9	31.9	99.2	99.2	7.8	7.8	15.8		16		75				<0.2		0.9	
						5.9	0.3	55	17.9		8.2		31.9		99.2		7.8		16.0		17		75				<0.2		0.9	
IM7	Fine	Moderate	18:00	8.4	Surface	1.0	0.1	83	17.8	17.8	8.2	8.2	31.6	31.6	99.1	99.1	7.8	7.8	6.6	7.8	6	9	71	73	821337	806835	<0.2	<0.2	0.9	1.0
						1.0	0.1	86	17.8		8.2		31.6		99.1		7.8		6.6		8		71				<0.2		1.0	
					Middle	4.2	0.1	72	17.8	17.8	8.2	8.2	31.7	31.7	98.8	98.8	7.8		7.7		10		73				<0.2		1.0	
						4.2	0.1	73	17.8		8.2		31.7		98.7		7.8		7.7		9		74				<0.2		1.0	
					Bottom	7.4	0.2	74	17.8	17.8	8.2	8.2	31.7	31.7	98.5	98.6	7.7	7.7	9.2		12		75				<0.2		1.0	
						7.4	0.2	78	17.8		8.2		31.7		98.6		7.7		9.0		10		75				<0.2		0.9	
IM8	Cloudy	Moderate	18:24	8.3	Surface	1.0	0.2	103	17.7	17.7	8.2	8.2	31.5	31.5	98.7	98.7	7.8	7.8	4.6	5.4	6	7	72	73	821701	807846	<0.2	<0.2	1.5	1.5
						1.0	0.3	111	17.7		8.2		31.5		98.6		7.8		4.7		5		71				<0.2		1.4	
					Middle	4.2	0.2	88	17.7	17.7	8.1	8.1	31.7	31.7	97.7	97.7	7.7		5.7		6		73				<0.2		1.4	
						4.2	0.2	93	17.7		8.1		31.7		97.6		7.7		5.6		7		73				<0.2		1.6	
					Bottom	7.3	0.1	72	17.7	17.7	8.2	8.2	31.7	31.7	97.3	97.3	7.7	7.7	6.0		8		75				<0.2		1.5	
						7.3	0.2	78	17.7		8.2		31.7		97.2		7.7		5.8		9		75				<0.2		1.5	

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 26 December 17 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	18:33	7.4	Surface	1.0	0.1	149	17.6	17.7	8.2	8.2	31.6	31.5	98.9	98.9	7.8	7.8	4.6	6.0	4	7	71	73	822115	808782	<0.2	<0.2	1.6	1.3
						1.0	0.1	152	17.7		8.2		31.5		98.8		7.8		4.8		4		72				<0.2		1.3	
					Middle	3.7	0.2	99	17.7	17.7	8.2	8.2	31.6	31.6	98.0	98.0	7.7		6.1		6		73				<0.2		1.2	
						3.7	0.2	99	17.7		8.2		31.6		98.0		7.7		6.2		7		73				<0.2		1.3	
					Bottom	6.4	0.2	91	17.7	17.7	8.2	8.2	31.7	31.7	97.3	97.3	7.7	7.7	7.3		11		75				<0.2		1.3	
						6.4	0.2	93	17.7		8.2		31.7		97.2		7.7		7.1		10		75				<0.2		1.3	
IM10	Cloudy	Moderate	18:41	8.0	Surface	1.0	0.3	98	17.7	17.7	8.2	8.2	31.6	31.6	99.1	99.1	7.8	7.8	6.7	7.8	7	10	72	73	822262	809857	<0.2	<0.2	1.2	1.2
						1.0	0.4	101	17.7		8.2		31.6		99.1		7.8		6.7		5		71				<0.2		1.1	
					Middle	4.0	0.3	106	17.7	17.7	8.2	8.2	31.6	31.6	98.9	98.9	7.8		7.6		8		73				<0.2		1.2	
						4.0	0.3	111	17.7		8.2		31.6		98.8		7.8		7.7		7		73				<0.2		1.3	
					Bottom	7.0	0.3	101	17.8	17.8	8.2	8.2	31.7	31.7	97.6	97.6	7.7	7.7	9.0		16		75				<0.2		1.1	
						7.0	0.3	104	17.8		8.2		31.7		97.5		7.7		9.0		14		75				<0.2		1.1	
IM11	Cloudy	Moderate	18:50	7.9	Surface	1.0	0.3	112	17.7	17.7	8.3	8.3	31.6	31.6	99.2	99.2	7.8	7.8	8.1	8.2	10	10	72	73	821512	810557	<0.2	<0.2	1.4	1.3
						1.0	0.3	118	17.7		8.3		31.6		99.2		7.8		8.0		10		71				<0.2		1.2	
					Middle	4.0	0.3	101	17.7	17.7	8.3	8.3	31.6	31.6	98.8	98.8	7.8		8.1		10		73				<0.2		1.4	
						4.0	0.3	101	17.7		8.3		31.6		98.7		7.8		8.1		11		73				<0.2		1.4	
					Bottom	6.9	0.2	104	17.8	17.8	8.3	8.3	31.6	31.6	98.1	98.1	7.7	7.7	8.3		10		75				<0.2		1.3	
						6.9	0.3	109	17.8		8.3		31.6		98.0		7.7		8.4		9		75				<0.2		1.3	
IM12	Cloudy	Moderate	18:58	8.8	Surface	1.0	0.4	82	17.8	17.8	8.2	8.2	31.5	31.5	99.3	99.3	7.8	7.8	8.3	8.5	12	13	71	73	821147	811514	<0.2	<0.2	1.3	1.4
						1.0	0.4	84	17.8		8.2		31.5		99.3		7.8		8.3		12		71				<0.2		1.4	
					Middle	4.4	0.4	94	17.8	17.8	8.2	8.2	31.6	31.6	98.8	98.8	7.8		8.6		12		73				<0.2		1.3	
						4.4	0.4	101	17.8		8.2		31.6		98.7		7.8		8.4		10		73				<0.2		1.4	
					Bottom	7.8	0.2	94	17.9	17.9	8.2	8.2	31.6	31.6	97.8	97.8	7.7	7.7	8.7		17		75				<0.2		1.4	
						7.8	0.3	102	17.9		8.2		31.6		97.7		7.7		8.7		17		75				<0.2		1.3	
SR2	Cloudy	Moderate	19:27	4.7	Surface	1.0	0.2	97	17.7	17.7	8.2	8.2	31.9	31.9	98.9	98.9	7.8	7.8	2.7	3.3	6	5	71	72	821443	814166	<0.2	<0.2	1.2	1.1
						1.0	0.3	103	17.7		8.2		31.9		98.8		7.8		2.7		4		71				<0.2		1.1	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.2	95	17.7	17.7	8.2	8.2	31.9	31.9	98.0	98.0	7.7	7.7	3.8		5		73				<0.2		1.0	
						3.7	0.3	95	17.7		8.2		31.9		97.9		7.7		3.8		5		73				<0.2		1.1	
SR3	Cloudy	Moderate	18:15	9.0	Surface	1.0	0.4	79	17.9	17.9	8.1	8.1	31.1	31.1	99.1	99.1	7.8	7.8	4.0	5.7	4	7	-	-	822175	807557	-	-	-	-
						1.0	0.5	84	17.9		8.1		31.1		99.1		7.8		4.2		6		-				-		-	
					Middle	4.5	0.5	73	17.9	17.9	8.1	8.1	31.3	31.3	98.2	98.2	7.7		5.4		6		-				-		-	
						4.5	0.5	73	17.9		8.1		31.3		98.1		7.7		5.2		6		-				-		-	
					Bottom	8.0	0.3	69	17.8	17.8	8.1	8.1	31.6	31.6	97.6	97.6	7.7	7.7	8.0		11		-				-		-	
						8.0	0.4	71	17.8		8.1		31.6		97.5		7.7		7.6		10		-				-		-	
SR4A	Fine	Calm	19:29	8.3	Surface	1.0	0.2	64	18.0	18.0	8.1	8.1	31.9	31.9	98.9	98.9	7.7	7.7	6.8	6.7	8	9	-	-	817180	807792	-	-	-	-
						1.0	0.2	67	18.0		8.1		31.9		98.9		7.7		6.8		9		-				-		-	
					Middle	4.2	0.2	64	18.0	18.0	8.1	8.1	31.9	31.9	98.8	98.8	7.7		6.8		10		-				-		-	
						4.2	0.2	69	18.0		8.1		31.9		98.8		7.7		6.7		10		-				-		-	
					Bottom	7.3	0.2	50	18.0	18.0	8.1	8.1	31.9	31.9	98.7	98.7	7.7	7.7	6.6		9		-				-		-	
						7.3	0.2	53	18.0		8.1		31.9		98.7		7.7		6.7		10		-				-		-	
SR5A	Fine	Calm	19:46	4.3	Surface	1.0	0.0	177	18.3	18.3	8.1	8.1	31.6	31.6	101.6	101.5	7.9	7.9	6.3	6.5	7	8	-	-	816591	810723	-	-	-	-
						1.0	0.0	186	18.3		8.1		31.6		101.4		7.9		6.3		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.0	137	18.1	18.1	8.1	8.1	31.8	31.8	100.3	100.3	7.8	7.8	6.7		8		-				-		-	
						3.3	0.0	150	18.1		8.1		31.8		100.3		7.8		6.7		8		-				-		-	
SR6	Fine	Calm	20:11	4.0	Surface	1.0	0.0	52	18.3	18.3	8.1	8.1	32.0	32.0	103.5	103.5	8.0	8.0	2.7	3.5	6	7	-	-	817916	814640	-	-	-	-
						1.0	0.0	54	18.3		8.1		32.0		103.5		8.0		2.7		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	0.0	46	18.4	18.4	8.1	8.1	32.0	32.0	103.8	103.8	8.1	8.1	4.2		8		-				-		-	
						3.0	0.0	47	18.4		8.1		32.0		103.7		8.1		4.2		7		-				-		-	
SR7	Cloudy	Moderate	20:18	16.1	Surface	1.0	0.1	66	18.1	18.1	8.1	8.1	32.5	32.5	96.1	96.1	7.5	7.5	2.5	3.5	5	6	-	-	823662	823763	-	-	-	-
						1.0	0.2	68	18.1		8.1		32.5		96.1		7.5		2.7		4		-				-		-	
					Middle	8.1	0.1	50	18.0	18.1	8.1	8.1	32.4	32.4	95.9	95.9	7.5		3.2		6		-				-		-	
						8.1	0.1	52	18.1		8.1		32.4		95.9		7.5		3.1		8		-				-		-	
					Bottom	15.1	0.1	309	18.2	18.2	8.2	8.2	32.5	32.5	95.5	95.5	7.4	7.4	4.7		7		-				-		-	
						15.1	0.1	331	18.2		8.2		32.5		95.4		7.4		4.6		8		-				-		-	
SR8	Cloudy	Moderate	19:08	3.6	Surface	1.0	-	-	18.0	18.0	8.2	8.2	31.7	31.7	99.2	99.2	7.8	7.8	4.1	4.5	6	9	-	-	820246	811418	-	-	-	-
						1.0	-	-	18.0		8.2		31.7		99.1		7.8		4.2		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.6	-	-	18.0	18.0	8.2	8.2	31.7	31.7	97.9	97.9	7.7	7.7	4.9		11		-				-		-	
						2.6	-	-	18.0		8.2		31.7		97.8		7.7		4.9		10		-				-		-	

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 26 December 17 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Moderate	13:11	8.6	Surface	1.0	0.1	357	17.9	17.9	8.1	8.1	31.9	31.9	99.1	99.1	7.8	7.8	5.9	10.4	13	17	71	74	815624	804268	<0.2	<0.2	0.7	0.8
						1.0	0.1	328	17.9		8.1		31.9		99.1		7.8		5.8		14		72				<0.2		0.8	
					Middle	4.3	0.7	11	17.8	17.8	8.1	8.1	31.9	31.9	98.2	98.2	7.7		11.3		15		74				<0.2		0.8	
						4.3	0.7	11	17.8		8.1		31.9		98.1		7.7		11.3		16		74				<0.2		0.8	
					Bottom	7.6	0.1	12	17.8	17.8	8.1	8.1	31.9	31.9	98.1	98.2	7.7	7.7	13.6		22		76				<0.2		0.7	
						7.6	0.1	12	17.8		8.1		31.9		98.2		7.7		14.2		20		76				<0.2		0.8	
C2	Fine	Moderate	14:05	12.1	Surface	1.0	0.2	1	18.9	18.9	8.1	8.1	31.0	31.0	100.6	100.6	7.8	7.8	1.5	2.2	6	8	72	74	825672	806971	<0.2	<0.2	1.9	1.7
						1.0	0.2	1	18.9		8.1		31.0		100.6		7.8		1.6		7		72				<0.2		1.8	
					Middle	6.1	0.3	3	18.8	18.8	8.2	8.2	31.2	31.2	100.0	100.0	7.7		2.3		6		73				<0.2		1.7	
						6.1	0.3	3	18.8		8.2		31.2		99.9		7.7		2.3		8		74				<0.2		1.6	
					Bottom	11.1	0.2	329	18.8	18.8	8.2	8.2	31.3	31.3	99.4	99.4	7.7	7.7	2.8		10		75				<0.2		1.7	
						11.1	0.2	331	18.8		8.2		31.3		99.3		7.7		2.7		9		76				<0.2		1.7	
C3	Fine	Moderate	12:16	11.3	Surface	1.0	0.3	278	18.5	18.5	8.2	8.2	32.1	32.1	97.6	97.7	7.6	7.6	2.0	3.4	7	8	71	74	822127	817780	<0.2	<0.2	1.5	1.5
						1.0	0.4	284	18.5		8.2		32.1		97.8		7.6		2.1		6		72				<0.2		1.5	
					Middle	5.7	0.4	276	19.0	19.0	8.1	8.1	32.3	32.3	98.7	98.7	7.6		5.3		8		74				<0.2		1.6	
						5.7	0.4	297	19.0		8.1		32.3		98.7		7.6		5.2		8		74				<0.2		1.4	
					Bottom	10.3	0.3	274	18.4	18.4	8.2	8.2	32.2	32.2	97.7	97.8	7.6	7.6	2.8		10		75				<0.2		1.5	
						10.3	0.3	297	18.4		8.2		32.2		97.8		7.6		2.9		10		76				<0.2		1.4	
IM1	Fine	Moderate	13:30	7.0	Surface	1.0	0.0	76	17.9	17.9	8.1	8.1	31.4	31.4	100.2	100.2	7.9	7.8	4.9	9.0	10	12	72	75	818335	806430	<0.2	<0.2	1.2	1.1
						1.0	0.0	80	17.9		8.1		31.4		100.1		7.9		4.9		10		72				<0.2		1.1	
					Middle	3.5	0.1	80	17.7	17.7	8.1	8.1	31.6	31.6	98.1	98.1	7.7		9.9		10		76				<0.2		1.1	
						3.5	0.1	85	17.7		8.1		31.6		98.1		7.7		10.1		10		76				<0.2		1.1	
					Bottom	6.0	0.1	87	17.7	17.7	8.1	8.1	31.6	31.6	97.8	97.9	7.7	7.7	12.5		16		77				<0.2		0.9	
						6.0	0.1	87	17.7		8.1		31.6		97.9		7.7		11.9		14		77				<0.2		1.0	
IM2	Fine	Moderate	13:44	8.5	Surface	1.0	0.5	36	18.0	18.0	8.1	8.1	31.4	31.4	100.3	100.3	7.9	7.8	4.9	12.9	10	12	72	74	818877	806201	<0.2	<0.2	1.2	1.1
						1.0	0.5	39	18.0		8.1		31.4		100.2		7.9		4.9		8		72				<0.2		1.1	
					Middle	4.3	0.4	32	17.6	17.6	8.1	8.1	31.6	31.6	97.7	97.7	7.7		15.2		9		74				<0.2		1.1	
						4.3	0.4	32	17.6		8.1		31.6		97.7		7.7		16.1		8		74				<0.2		1.0	
					Bottom	7.5	0.4	23	17.6	17.6	8.1	8.1	31.6	31.6	97.6	97.7	7.7	7.7	17.9		19		76				<0.2		1.0	
						7.5	0.5	23	17.6		8.1		31.6		97.7		7.7		18.3		20		76				<0.2		0.9	
IM3	Fine	Moderate	13:50	8.4	Surface	1.0	0.3	7	18.0	18.0	8.1	8.1	31.4	31.4	100.5	100.5	7.9	7.8	8.2	13.8	8	12	72	74	819420	806026	<0.2	<0.2	1.2	1.1
						1.0	0.4	7	18.0		8.1		31.4		100.4		7.9		8.2		8		72				<0.2		1.2	
					Middle	4.2	0.3	-	17.6	17.6	8.1	8.1	31.5	31.5	98.1	98.1	7.7		14.0		11		74				<0.2		1.1	
						4.2	0.3	-	17.6		8.1		31.5		98.1		7.7		14.1		13		74				<0.2		1.1	
					Bottom	7.4	0.3	356	17.6	17.6	8.1	8.1	31.5	31.5	97.7	97.7	7.7	7.7	18.9		18		76				<0.2		1.0	
						7.4	0.4	328	17.6		8.1		31.5		97.7		7.7		19.2		16		76				<0.2		1.0	
IM4	Fine	Moderate	13:59	7.7	Surface	1.0	0.4	16	17.9	17.9	8.1	8.1	31.5	31.5	100.6	100.6	7.9	7.8	7.2	15.7	5	13	72	74	819580	805068	<0.2	<0.2	1.3	1.1
						1.0	0.4	17	17.9		8.1		31.5		100.5		7.9		7.3		6		72				<0.2		1.2	
					Middle	3.9	0.4	21	17.7	17.7	8.1	8.1	31.6	31.6	98.1	98.1	7.7		12.7		8		74				<0.2		1.2	
						3.9	0.4	21	17.7		8.1		31.6		98.1		7.7		12.9		9		74				<0.2		1.1	
					Bottom	6.7	0.4	20	17.7	17.7	8.1	8.1	31.6	31.6	97.8	97.8	7.7	7.7	27.0		23		76				<0.2		1.0	
						6.7	0.4	20	17.7		8.1		31.6		97.8		7.7		27.3		24		76				<0.2		0.9	
IM5	Fine	Moderate	14:07	6.9	Surface	1.0	0.4	19	17.9	17.9	8.1	8.1	31.3	31.3	100.3	100.3	7.9	7.8	9.4	17.9	10	17	72	74	820585	804904	<0.2	<0.2	1.2	1.2
						1.0	0.4	19	17.9		8.1		31.3		100.3		7.9		9.4		11		72				<0.2		1.4	
					Middle	3.5	0.3	23	17.6	17.6	8.1	8.1	31.5	31.5	98.0	98.0	7.7		16.8		19		74				<0.2		1.1	
						3.5	0.3	25	17.6		8.1		31.5		98.0		7.7		16.5		19		74				<0.2		1.1	
					Bottom	5.9	0.3	25	17.6	17.6	8.1	8.1	31.5	31.5	97.9	98.0	7.7	7.7	26.5		20		76				<0.2		1.0	
						5.9	0.3	26	17.6		8.1		31.5		98.0		7.7		28.5		21		76				<0.2		1.1	
IM6	Fine	Moderate	14:15	6.9	Surface	1.0	0.4	18	17.9	17.9	8.2	8.2	31.4	31.4	99.2	99.2	7.8	7.8	8.7	9.7	12	12	72	74	821060	805857	<0.2	<0.2	1.2	1.1
						1.0	0.4	19	17.9		8.2		31.4		99.2		7.8		8.7		11		72				<0.2		1.2	
					Middle	3.5	0.4	20	17.9	17.9	8.2	8.2	31.5	31.5	98.3	98.3	7.7		9.1		12		74				<0.2		1.1	
						3.5	0.4	21	17.9		8.2		31.5		98.2		7.7		9.3		12		74				<0.2		1.1	
					Bottom	5.9	0.3	17	17.9	17.9	8.2	8.2	31.6	31.6	98.0	98.0	7.7	7.7	11.0		12		76				<0.2		1.1	
						5.9	0.3	17	17.9		8.2		31.6		98.0		7.7		11.1		12		76				<0.2		1.0	
IM7	Fine	Moderate	14:22	8.4	Surface	1.0	0.4	8	18.0	18.0	8.1	8.1	31.6	31.6	99.0	99.0	7.8	7.8	7.2	7.3	11	12	72	74	821348	806820	<0.2	<0.2	1.3	1.1
						1.0	0.5	8	18.0		8.1		31.6		99.0		7.8		7.1		10		72				<0.2		1.3	
					Middle	4.2	0.4	8	18.0	18.0	8.1	8.1	31.6	31.6	99.0	99.0	7.8		7.1		12		74				<0.2		1.0	
						4.2	0.4	8	18.0		8.1		31.6		99.0		7.8		7.1		13		74				<0.2		1.0	
					Bottom	7.4	0.4	12	18.0	18.0	8.1	8.1	31.7	31.7	98.2	98.2	7.7	7.7	7.6		13		76				<0.2		0.9	
						7.4	0.4	12	18.0		8.1		31.7		98.2		7.7		7.5		14		77				<0.2		0.9	
IM8	Fine	Moderate	13:38	8.1	Surface	1.0	0.2	37	18.1	18.1	8.3	8.3	31.5	31.5	99.3	99.3	7.8	7.8	4.9	5.1	14	14	72	74	821681	807808	<0.2	<0.2	1.4	1.5
						1.0	0.2	40	18.1		8.3		31.5		99.3		7.8		4.9		14		72				<0.2		1.5	
					Middle	4.1	0.2	41	18.2	18.2	8.3	8.3	31.5	31.5	99.5	99.5	7.8		5.2		12		74				<0.2		1.4	
						4.1	0.2	41	18.2		8.3		31.5		99.5		7.8		5.2		14		74				<0.2		1.4	
					Bottom	7.1	0.2	46	18.2	18.2	8.3	8.3	31.5	31.5	98.8	98.8	7.7	7.7	5.2		15		76				<0.2		1.5	
						7.1	0.2	47	18.2		8.3		31.5		98.7		7.7		5.2		17		76				<0.2		1.7	

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 26 December 17 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Fine	Moderate	13:29	7.1	Surface	1.0	0.1	353	18.3	18.3	8.2	8.2	31.5	31.5	99.9	99.9	7.8	7.8	5.0	5.9	12	14	72	74	822091	808800	<0.2	<0.2	1.4	1.5
						1.0	0.1	325	18.3		8.2		31.5		99.9		7.8		5.0		12		72				<0.2		1.4	
					Middle	3.6	0.1	358	18.3	18.3	8.2	8.2	31.6	31.5	99.7	99.7	7.8		5.3		13		74				<0.2		1.4	
						3.6	0.1	329	18.3		8.2		31.5		99.6		7.8		5.5		15		74				<0.2		1.5	
					Bottom	6.1	0.1	11	18.4	18.4	8.2	8.2	31.6	31.6	98.9	98.9	7.7	7.7	7.4		15		75				<0.2		1.5	
						6.1	0.1	11	18.4		8.2		31.6		98.9		7.7		7.3		17		76				<0.2		1.5	
IM10	Fine	Moderate	13:21	6.5	Surface	1.0	0.4	322	18.2	18.2	8.2	8.2	31.6	31.6	99.9	99.9	7.8	7.8	2.2	3.3	11	11	72	74	822252	809842	<0.2	<0.2	1.2	1.2
						1.0	0.5	353	18.2		8.2		31.6		99.9		7.8		2.4		11		72				<0.2		1.1	
					Middle	3.3	0.4	324	18.3	18.3	8.2	8.2	31.7	31.7	99.5	99.5	7.8		3.7		9		74				<0.2		1.1	
						3.3	0.4	355	18.3		8.2		31.7		99.5		7.8		3.9		9		74				<0.2		1.2	
					Bottom	5.5	0.3	319	18.0	18.0	8.2	8.2	31.6	31.6	98.8	98.8	7.7	7.7	3.9		14		75				<0.2		1.1	
						5.5	0.4	337	18.0		8.2		31.6		98.7		7.7		3.9		12		76				<0.2		1.2	
IM11	Fine	Moderate	13:09	8.2	Surface	1.0	0.4	301	18.7	18.7	8.2	8.2	31.6	31.6	101.1	101.1	7.8	7.8	1.3	2.1	7	10	72	74	821481	810562	<0.2	<0.2	1.2	1.2
						1.0	0.4	325	18.7		8.2		31.6		101.0		7.8		1.4		8		72				<0.2		1.3	
					Middle	4.1	0.3	298	18.8	18.8	8.2	8.2	31.8	31.8	100.2	100.2	7.7		2.3		9		73				<0.2		1.1	
						4.1	0.4	327	18.8		8.2		31.8		100.1		7.7		2.2		10		74				<0.2		1.1	
					Bottom	7.2	0.2	299	18.4	18.4	8.2	8.2	31.7	31.7	99.7	99.7	7.8	7.8	2.7		12		76				<0.2		1.3	
						7.2	0.3	311	18.4		8.2		31.7		99.6		7.8		2.6		14		76				<0.2		1.3	
IM12	Fine	Moderate	13:02	8.7	Surface	1.0	0.4	284	18.4	18.4	8.2	8.2	31.8	31.8	99.8	99.8	7.8	7.7	1.8	2.3	8	8	72	74	821144	811548	<0.2	<0.2	1.1	1.2
						1.0	0.4	309	18.4		8.2		31.8		99.8		7.7		1.9		7		72				<0.2		1.0	
					Middle	4.4	0.3	282	18.7	18.7	8.2	8.2	31.8	31.8	100.0	100.0	7.7		2.3		8		74				<0.2		1.0	
						4.4	0.3	288	18.7		8.2		31.8		99.9		7.7		2.1		7		74				<0.2		1.3	
					Bottom	7.7	0.2	278	18.3	18.3	8.2	8.2	31.9	31.9	99.6	99.6	7.7	7.7	2.7		8		76				<0.2		1.2	
						7.7	0.2	283	18.3		8.2		31.9		99.5		7.7		2.7		8		76				<0.2		1.3	
SR2	Fine	Moderate	12:38	4.5	Surface	1.0	0.2	123	18.4	18.4	8.2	8.2	31.9	31.9	99.8	99.8	7.8	7.8	1.9	2.5	9	10	72	73	821466	814179	<0.2	<0.2	1.2	1.3
						1.0	0.2	123	18.4		8.2		31.9		99.8		7.8		1.8		11		72				<0.2		1.1	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.2	120	18.3	18.3	8.2	8.2	31.9	31.9	99.0	99.0	7.7	7.7	3.3		10		74				<0.2		1.5	
						3.5	0.2	121	18.3		8.2		31.9		99.0		7.7		3.1		11		74				<0.2		1.4	
SR3	Fine	Moderate	13:44	9.0	Surface	1.0	0.3	23	18.4	18.4	8.2	8.2	31.3	31.3	99.9	99.9	7.8	7.8	3.6	6.6	11	13	-	-	822157	807596	-	-	-	-
						1.0	0.3	24	18.4		8.2		31.3		99.9		7.8		3.8		11		-				-		-	
					Middle	4.5	0.3	16	18.4	18.4	8.2	8.2	31.4	31.4	99.2	99.2	7.7		3.8		11		-				-		-	
						4.5	0.3	17	18.4		8.2		31.4		99.1		7.7		3.8		12		-				-		-	
					Bottom	8.0	0.3	12	18.2	18.2	8.2	8.2	31.5	31.5	97.9	97.9	7.7	7.7	12.3		16		-				-		-	
						8.0	0.3	12	18.2		8.2		31.5		97.9		7.7		12.1		15		-				-		-	
SR4A	Fine	Calm	12:49	9.0	Surface	1.0	0.1	253	18.0	18.0	8.1	8.1	31.6	31.6	98.2	98.2	7.7	7.7	7.8	8.6	8	11	-	-	817166	807791	-	-	-	-
						1.0	0.1	265	18.0		8.1		31.6		98.2		7.7		7.8		10		-				-		-	
					Middle	4.5	0.1	257	17.9	17.9	8.1	8.1	31.7	31.7	97.4	97.4	7.7		9.0		11		-				-		-	
						4.5	0.1	267	17.9		8.1		31.7		97.4		7.7		8.8		9		-				-		-	
					Bottom	8.0	0.0	255	17.9	17.9	8.1	8.1	31.7	31.7	97.4	97.4	7.6	7.6	9.2		13		-				-		-	
						8.0	0.0	268	17.9		8.1		31.7		97.4		7.6		9.2		12		-				-		-	
SR5A	Fine	Calm	12:32	3.4	Surface	1.0	0.1	274	18.0	18.0	8.1	8.1	31.9	31.9	99.8	99.8	7.8	7.8	4.9	5.5	9	9	-	-	816612	810671	-	-	-	-
						1.0	0.1	296	18.0		8.1		31.9		99.8		7.8		4.8		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.4	0.1	257	18.0	18.0	8.1	8.1	31.9	31.9	99.8	99.8	7.8	7.8	6.1		8		-				-		-	
						2.4	0.1	275	18.0		8.1		31.9		99.8		7.8		6.2		9		-				-		-	
SR6	Fine	Calm	12:00	3.8	Surface	1.0	0.1	232	18.2	18.2	8.2	8.2	32.0	32.0	99.3	99.3	7.7	7.7	8.0	8.1	8	9	-	-	817894	814677	-	-	-	-
						1.0	0.1	249	18.2		8.2		32.0		99.3		7.7		8.0		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	0.0	252	18.2	18.2	8.2	8.2	32.0	32.0	99.3	99.3	7.7	7.7	8.1		8		-				-		-	
						2.8	0.0	256	18.2		8.2		32.0		99.3		7.7		8.1		10		-				-		-	
SR7	Fine	Moderate	11:42	17.9	Surface	1.0	1.2	237	19.3	19.3	8.1	8.1	32.3	32.4	99.1	99.1	7.6	7.5	2.8	8.5	7	6	-	-	823620	823731	-	-	-	-
						1.0	1.2	237	19.2		8.1		32.4		99.0		7.5		3.0		7		-				-		-	
					Middle	9.0	1.2	244	19.2	19.2	8.1	8.1	32.3	32.3	98.6	98.6	7.5		4.7		5		-				-		-	
						9.0	1.3	254	19.2		8.1		32.3		98.6		7.5		4.9		5		-				-		-	
					Bottom	16.9	1.1	244	19.4	19.4	8.1	8.1	32.2	32.2	99.1	99.2	7.5	7.5	17.7		6		-				-		-	
						16.9	1.1	253	19.4		8.1		32.2		99.3		7.5		17.7		5		-				-		-	
SR8	Fine	Moderate	12:54	3.6	Surface	1.0	-	-	18.6	18.6	8.2	8.2	31.6	31.6	100.6	100.6	7.8	7.8	2.4	3.8	6	6	-	-	820246	811418	-	-	-	-
						1.0	-	-	18.6		8.2		31.6		100.5		7.8		2.6		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.6	-	-	18.4	18.4	8.1	8.1	31.5	31.5	99.2	99.2	7.7	7.7	5.1		6		-				-		-	
						2.6	-	-	18.4		8.1		31.5		99.1		7.7		4.9		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 28 December 17 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Moderate	07:29	8.5	Surface	1.0	0.3	203	17.7	17.7	8.1	8.1	30.8	30.8	99.3	99.3	7.9	7.9	3.5	4.0	6	7	71	73	815607	804262	<0.2	<0.2	1.2	1.5
						1.0	0.4	217	17.7		8.1		30.9		99.2		7.9		3.5		7		72				<0.2		1.3	
					Middle	4.3	0.3	211	17.8	17.8	8.1	8.1	31.0	31.0	98.9	98.9	7.8		3.8		8		73				<0.2		1.6	
						4.3	0.3	215	17.8		8.1		31.0		98.9		7.8		3.9		7		73				<0.2		1.6	
					Bottom	7.5	0.2	216	17.9	17.9	8.1	8.1	31.3	31.3	99.3	99.3	7.8	7.8	4.5		7		75				<0.2		1.8	
						7.5	0.3	219	17.9		8.1		31.3		99.3		7.8		4.5		7		75				<0.2		1.6	
C2	Cloudy	Moderate	09:08	11.3	Surface	1.0	0.7	161	18.1	18.1	8.1	8.1	27.9	27.9	96.6	96.6	7.7	7.7	3.7	3.1	5	8	71	73	825704	806936	<0.2	<0.2	3.2	2.6
						1.0	0.7	167	18.1		8.1		27.9		96.5		7.7		3.7		7		72				<0.2		3.3	
					Middle	5.7	0.4	165	18.3	18.3	8.1	8.1	29.9	29.9	96.3	96.3	7.6		2.7		6		73				<0.2		2.4	
						5.7	0.5	170	18.3		8.1		29.9		96.3		7.6		2.7		6		73				<0.2		2.5	
					Bottom	10.3	0.2	151	18.3	18.3	8.1	8.1	30.1	30.1	96.8	96.8	7.6	7.6	2.9		10		75				<0.2		2.1	
						10.3	0.2	161	18.3		8.1		30.1		96.8		7.6		2.9		11		75				<0.2		2.3	
C3	Cloudy	Moderate	06:56	11.8	Surface	1.0	0.2	95	18.2	18.1	8.1	8.1	30.0	30.0	96.5	96.5	7.6	7.6	0.7	1.4	4	4	72	74	822105	817813	<0.2	<0.2	1.1	1.0
						1.0	0.2	98	18.1		8.1		30.0		96.5		7.6		0.8		3		71				<0.2		1.0	
					Middle	5.9	0.2	77	18.1	18.1	8.1	8.1	29.9	29.9	95.8	95.8	7.6		1.3		4		73				<0.2		1.0	
						5.9	0.2	77	18.1		8.1		29.9		95.8		7.6		1.3		3		74				<0.2		1.1	
					Bottom	10.8	0.2	66	18.2	18.2	8.1	8.1	30.0	29.9	96.2	96.2	7.6	7.6	2.0		4		75				<0.2		1.0	
						10.8	0.2	67	18.2		8.1		29.9		96.2		7.6		2.0		4		76				<0.2		1.0	
IM1	Fine	Moderate	07:47	7.3	Surface	1.0	0.2	201	17.8	17.8	8.1	8.1	31.5	31.5	98.8	98.8	7.8	7.8	4.0	4.4	6	6	71	73	818364	806462	<0.2	<0.2	1.7	1.7
						1.0	0.2	204	17.8		8.1		31.5		98.8		7.8		4.1		6		72				<0.2		1.6	
					Middle	3.7	0.2	183	17.8	17.8	8.1	8.1	31.5	31.5	98.7	98.7	7.8		4.2		6		73				<0.2		1.7	
						3.7	0.2	184	17.8		8.1		31.6		98.7		7.8		4.4		6		73				<0.2		1.6	
					Bottom	6.3	0.1	180	17.8	17.8	8.1	8.1	31.6	31.6	99.1	99.2	7.8	7.8	4.9		5		75				<0.2		1.8	
						6.3	0.2	196	17.8		8.1		31.6		99.2		7.8		4.9		6		75				<0.2		1.7	
IM2	Fine	Moderate	07:53	6.8	Surface	1.0	0.2	186	17.7	17.7	8.1	8.1	31.6	31.6	98.9	98.9	7.8	7.8	3.9	4.2	4	5	72	74	818866	806208	<0.2	<0.2	1.8	1.8
						1.0	0.2	192	17.7		8.1		31.6		98.9		7.8		3.9		4		72				<0.2		1.6	
					Middle	3.4	0.2	187	17.7	17.7	8.1	8.1	31.6	31.6	98.9	98.9	7.8		3.9		4		73				<0.2		1.8	
						3.4	0.2	194	17.7		8.1		31.6		98.9		7.8		4.0		4		74				<0.2		1.8	
					Bottom	5.8	0.2	190	17.7	17.7	8.1	8.1	31.6	31.6	99.2	99.2	7.8	7.8	4.5		6		75				<0.2		1.8	
						5.8	0.2	200	17.7		8.1		31.6		99.2		7.8		4.7		6		75				<0.2		1.7	
IM3	Fine	Moderate	07:59	7.2	Surface	1.0	0.2	177	17.7	17.7	8.1	8.1	31.6	31.6	98.7	98.7	7.8	7.8	5.2	5.3	9	9	71	73	819400	805997	<0.2	<0.2	1.8	1.8
						1.0	0.2	194	17.7		8.1		31.6		98.7		7.8		5.3		7		72				<0.2		1.6	
					Middle	3.6	0.3	175	17.7	17.7	8.1	8.1	31.6	31.6	98.7	98.7	7.8		5.2		8		73				<0.2		1.8	
						3.6	0.3	189	17.7		8.1		31.6		98.7		7.8		5.2		9		73				<0.2		2.0	
					Bottom	6.2	0.3	201	17.7	17.7	8.1	8.1	31.6	31.6	98.8	98.9	7.8	7.8	5.4		10		75				<0.2		1.9	
						6.2	0.3	219	17.7		8.1		31.6		98.9		7.8		5.5		9		75				<0.2		1.9	
IM4	Fine	Moderate	08:05	7.3	Surface	1.0	0.4	186	17.7	17.7	8.1	8.1	31.6	31.6	98.7	98.8	7.8	7.8	4.7	5.1	6	7	71	73	819595	805065	<0.2	<0.2	1.6	1.7
						1.0	0.4	193	17.7		8.1		31.7		98.8		7.8		4.7		6		71				<0.2		1.8	
					Middle	3.7	0.3	171	17.7	17.7	8.1	8.1	31.6	31.6	98.7	98.8	7.8		4.9		7		73				<0.2		1.8	
						3.7	0.3	180	17.7		8.1		31.7		98.8		7.8		4.9		5		73				<0.2		1.8	
					Bottom	6.3	0.2	165	17.7	17.7	8.1	8.1	31.6	31.6	98.8	98.9	7.8	7.8	5.5		10		75				<0.2		1.7	
						6.3	0.2	172	17.7		8.1		31.6		98.9		7.8		5.6		10		75				<0.2		1.7	
IM5	Fine	Moderate	08:12	7.0	Surface	1.0	0.4	191	17.7	17.7	8.1	8.1	31.4	31.4	98.7	98.7	7.8	7.8	6.6	8.2	8	9	71	74	820547	804951	<0.2	<0.2	1.7	1.7
						1.0	0.4	201	17.7		8.1		31.4		98.7		7.8		6.8		8		72				<0.2		1.8	
					Middle	3.5	0.4	187	17.7	17.7	8.1	8.1	31.4	31.4	98.5	98.5	7.8		7.5		9		74				<0.2		1.7	
						3.5	0.4	190	17.7		8.1		31.4		98.5		7.8		7.5		10		74				<0.2		1.6	
					Bottom	6.0	0.2	177	17.7	17.7	8.1	8.1	31.6	31.6	98.5	98.6	7.8	7.8	9.8		9		75				<0.2		1.8	
						6.0	0.2	190	17.7		8.1		31.6		98.6		7.8		10.9		9		76				<0.2		1.6	
IM6	Fine	Moderate	08:20	7.4	Surface	1.0	0.5	244	17.7	17.7	8.1	8.1	30.9	30.9	98.8	98.8	7.8	7.8	4.7	6.5	6	7	73	75	821059	805803	<0.2	<0.2	1.9	1.8
						1.0	0.5	251	17.7		8.1		30.9		98.8		7.8		4.9		7		73				<0.2		1.8	
					Middle	3.7	0.3	234	17.7	17.7	8.1	8.1	31.3	31.3	98.6	98.7	7.8		7.6		6		75				<0.2		1.7	
						3.7	0.3	256	17.7		8.1		31.3		98.7		7.8		6.9		7		75				<0.2		1.9	
					Bottom	6.4	0.3	226	17.7	17.7	8.1	8.1	31.6	31.5	99.1	99.1	7.8	7.8	7.3		6		76				<0.2		1.6	
						6.4	0.3	228	17.7		8.1		31.5		99.1		7.8		7.3		7		76				<0.2		1.7	
IM7	Fine	Moderate	08:27	7.8	Surface	1.0	0.4	234	17.8	17.8	8.1	8.1	30.7	30.7	98.3	98.3	7.8	7.8	3.4	4.4	6	6	71	73	821334	806851	<0.2	<0.2	1.8	1.7
						1.0	0.4	244	17.8		8.1		30.7		98.3		7.8		3.5		4		72				<0.2		1.8	
					Middle	3.9	0.3	239	17.8	17.8	8.1	8.1	30.9	30.9	98.4	98.4	7.8		4.1		6		73				<0.2		1.6	
						3.9	0.3	257	17.8		8.1		30.9		98.4		7.8		4.3		5		73				<0.2		1.5	
					Bottom	6.8	0.3	250	17.8	17.8	8.1	8.1	31.5	31.5	98.8	98.9	7.8	7.8	5.4		7		75				<0.2		1.8	
						6.8	0.3	266	17.8		8.1		31.5		98.9		7.8		5.6		8		75				<0.2		1.6	
IM8	Cloudy	Moderate	08:39	7.7	Surface	1.0	0.2	193	18.1	18.1	8.1	8.1	29.4	29.4	98.9	98.9	7.8	7.8	1.9	3.5	7	8	71	74	821713	807809	<0.2	<0.2	1.9	1.6
						1.0	0.2	210	18.1		8.1		29.4		98.8		7.8		1.9		7		72				<0.2		1.7	
					Middle	3.9	0.2	176	18.1	18.1	8.1	8.1	29.5	29.5	98.6	98.7	7.8		2.9		6		74				<0.2		1.6	
						3.9	0.2	180	18.1		8.1		29.5		98.7		7.8		2.9		6		74				<0.2		1.8	
					Bottom	6.7	0.0	60	18.0	18.0	8.2	8.2	29.9	29.9	98.6	98.6	7.8	7.8	5.5		10		76				<0.2		1.4	
						6.7	0.0	63	18.0		8.2		29.9		98.6		7.8		5.6		10		75				<0.2		1.3	

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 28 December 17 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	08:32	7.0	Surface	1.0	0.3	125	18.1	18.1	8.1	8.1	29.5	29.5	98.6	98.6	7.8	7.8	2.8	4.3	6	6	72	74	822076	808820	<0.2	<0.2	1.6	1.5
						1.0	0.3	137	18.1		8.1		29.5		98.6		7.8		2.8		6		72				<0.2		1.7	
					Middle	3.5	0.3	132	18.1	18.1	8.1	8.1	29.5	29.5	98.6	98.6	7.8		4.5		6		74				<0.2		1.5	
						3.5	0.3	136	18.1		8.1		29.5		98.6		7.8		4.5		4		74				<0.2		1.6	
					Bottom	6.0	0.2	110	18.0	18.0	8.2	8.2	29.9	29.9	98.3	98.3	7.8	7.8	5.6		8		76				<0.2		1.4	
						6.0	0.2	113	18.0		8.2		29.9		98.3		7.8		5.6		6		76				<0.2		1.4	
IM10	Cloudy	Moderate	08:15	6.9	Surface	1.0	0.4	109	18.1	18.1	8.1	8.1	29.6	29.6	97.7	97.7	7.7	7.7	3.1	3.5	4	7	72	74	822239	809829	<0.2	<0.2	1.5	1.4
						1.0	0.4	114	18.1		8.1		29.6		97.7		7.7		3.1		6		72				<0.2		1.5	
					Middle	3.5	0.3	113	18.1	18.1	8.1	8.1	29.8	29.8	97.3	97.3	7.7		3.6		5		74				<0.2		1.4	
						3.5	0.4	122	18.1		8.1		29.8		97.3		7.7		3.6		6		74				<0.2		1.4	
					Bottom	5.9	0.3	103	18.1	18.1	8.1	8.1	29.8	29.8	97.6	97.6	7.7	7.7	3.8		9		76				<0.2		1.3	
						5.9	0.3	105	18.1		8.1		29.8		97.6		7.7		3.8		10		76				<0.2		1.3	
IM11	Cloudy	Moderate	08:04	8.0	Surface	1.0	0.3	111	18.1	18.1	8.2	8.2	29.6	29.6	99.0	99.0	7.8	7.8	3.2	3.4	5	5	72	74	821492	810573	<0.2	<0.2	1.6	1.5
						1.0	0.3	116	18.1		8.2		29.6		99.0		7.8		3.2		5		72				<0.2		1.5	
					Middle	4.0	0.3	101	18.1	18.1	8.2	8.2	29.7	29.7	98.8	98.8	7.8		3.6		5		74				<0.2		1.6	
						4.0	0.3	107	18.1		8.2		29.7		98.8		7.8		3.4		4		74				<0.2		1.5	
					Bottom	7.0	0.2	101	18.1	18.1	8.2	8.2	29.8	29.8	98.6	98.6	7.8	7.8	3.4		4		75				<0.2		1.4	
						7.0	0.2	104	18.1		8.2		29.8		98.6		7.8		3.4		5		76				<0.2		1.4	
IM12	Cloudy	Moderate	07:55	8.5	Surface	1.0	0.3	102	18.0	18.0	8.2	8.2	29.7	29.7	98.6	98.6	7.8	7.8	4.7	4.2	8	8	71	74	821133	811533	<0.2	<0.2	1.4	1.4
						1.0	0.4	106	18.0		8.2		29.7		98.6		7.8		4.7		7		72				<0.2		1.4	
					Middle	4.3	0.3	115	18.1	18.1	8.2	8.2	29.8	29.8	98.1	98.1	7.8		3.9		8		73				<0.2		1.4	
						4.3	0.3	115	18.1		8.2		29.8		98.1		7.8		3.7		7		74				<0.2		1.4	
					Bottom	7.5	0.2	103	18.1	18.1	8.2	8.2	30.0	30.0	98.0	98.0	7.7	7.7	4.2		7		76				<0.2		1.2	
						7.5	0.3	107	18.1		8.2		30.0		98.0		7.7		4.1		8		76				<0.2		1.3	
SR2	Cloudy	Moderate	07:27	3.5	Surface	1.0	0.2	107	18.1	18.1	8.1	8.1	29.0	29.0	97.8	97.8	7.8	7.8	1.4	2.0	4	5	72	73	821433	814177	<0.2	<0.2	2.0	1.6
						1.0	0.2	107	18.1		8.1		29.0		97.8		7.8		1.4		4		72				<0.2		2.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.5	0.2	103	18.1	18.1	8.1	8.1	29.6	29.8	97.8	97.8	7.7	7.7	2.5		6		74				<0.2		1.3	
						2.5	0.2	107	18.1		8.1		30.0		97.8		7.7		2.7		5		74				<0.2		1.2	
SR3	Cloudy	Moderate	08:45	8.7	Surface	1.0	0.3	180	18.2	18.2	8.1	8.1	29.3	29.3	98.8	98.8	7.8	7.8	2.1	3.6	3	4	-	-	822145	807546	-	-	-	-
						1.0	0.3	187	18.2		8.1		29.3		98.7		7.8		2.0		4		-				-		-	
					Middle	4.4	0.2	185	18.1	18.1	8.1	8.1	29.7	29.7	98.3	98.3	7.8		3.0		4		-				-		-	
						4.4	0.2	191	18.1		8.1		29.7		98.3		7.8		3.1		5		-				-		-	
					Bottom	7.7	0.1	196	18.0	18.0	8.2	8.2	30.1	30.1	98.3	98.3	7.8	7.8	5.8		4		-				-		-	
						7.7	0.1	197	18.0		8.2		30.1		98.3		7.8		5.8		4		-				-		-	
SR4A	Fine	Calm	07:10	8.3	Surface	1.0	0.3	75	17.7	17.7	8.1	8.1	31.3	31.3	98.7	98.7	7.8	7.8	4.2	4.7	5	6	-	-	817177	807790	-	-	-	-
						1.0	0.3	78	17.7		8.1		31.3		98.7		7.8		4.3		4		-				-		-	
					Middle	4.2	0.3	72	17.8	17.8	8.1	8.1	31.4	31.4	98.9	99.0	7.8		5.0		4		-				-		-	
						4.2	0.3	75	17.8		8.1		31.4		99.0		7.8		5.2		4		-				-		-	
					Bottom	7.3	0.2	71	17.8	17.8	8.1	8.1	31.5	31.5	100.6	100.8	7.9	7.9	4.6		8		-				-		-	
						7.3	0.3	73	17.8		8.1		31.5		100.9		7.9		4.6		8		-				-		-	
SR5A	Fine	Calm	06:54	4.2	Surface	1.0	0.1	25	18.0	18.0	8.1	8.1	31.1	31.1	100.2	100.3	7.9	7.9	7.1	7.5	9	8	-	-	816597	810715	-	-	-	-
						1.0	0.1	26	18.0		8.1		31.1		100.3		7.9		7.6		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.0	349	18.0	18.0	8.1	8.1	31.1	31.1	100.2	100.3	7.9	7.9	7.6		8		-				-		-	
						3.2	0.0	321	18.0		8.1		31.1		100.3		7.9		7.7		7		-				-		-	
SR6	Fine	Moderate	06:29	3.7	Surface	1.0	0.1	90	17.8	17.8	8.0	8.0	30.7	30.7	97.5	97.5	7.7	7.7	9.2	6.4	6	6	-	-	817902	814660	-	-	-	-
						1.0	0.1	92	17.8		8.0		30.7		97.5		7.7		9.4		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.7	0.1	105	17.8	17.8	8.0	8.0	30.6	30.6	97.0	97.0	7.7	7.7	3.4		6		-				-		-	
						2.7	0.1	110	17.8		8.0		30.6		96.9		7.7		3.7		5		-				-		-	
SR7	Cloudy	Moderate	06:16	19.2	Surface	1.0	0.0	156	18.4	18.4	8.0	8.0	30.0	30.0	92.3	92.3	7.2	7.2	1.0	1.1	2	3	-	-	823617	823721	-	-	-	-
						1.0	0.0	164	18.4		8.0		30.1		92.3		7.2		1.1		3		-				-		-	
					Middle	9.6	0.1	195	18.5	18.5	8.0	8.0	30.3	30.3	92.3	92.3	7.2		1.2		2		-				-		-	
						9.6	0.1	202	18.5		8.0		30.4		92.3		7.2		1.2		4		-				-		-	
					Bottom	18.2	0.0	146	18.5	18.5	8.0	8.0	31.5	31.5	92.6	92.6	7.2	7.2	1.0		4		-				-		-	
						18.2	0.0	157	18.5		8.0		31.5		92.6		7.2		1.1		4		-				-		-	
SR8	Cloudy	Moderate	07:46	4.0	Surface	1.0	-	-	18.1	18.1	8.2	8.2	29.8	29.8	98.8	98.8	7.8	7.8	3.0	3.1	4	5	-	-	820246	811418	-	-	-	-
						1.0	-	-	18.1		8.2		29.8		98.8		7.8		3.0		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	-	-	18.1	18.1	8.2	8.2	29.8	29.8	98.6	98.6	7.8	7.8	3.1		4		-				-		-	
						3.0	-	-	18.1		8.2		29.8		98.5		7.8		3.1		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 28 December 17 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Calm	14:12	8.3	Surface	1.0	0.3	66	17.9	17.9	8.1	8.1	31.5	31.5	99.6	99.6	7.8	7.8	6.3	7.1	6	6	71	73	815620	804220	<0.2	<0.2	1.3	1.5
						1.0	0.3	71	17.9		8.1		31.5		99.6		7.8		6.3		5		72				<0.2		1.4	
					Middle	4.2	0.3	57	17.9	17.9	8.1	8.1	31.5	31.5	99.2	99.2	7.8		7.0		4		73				<0.2		1.5	
						4.2	0.3	57	17.9		8.1		31.5		99.2		7.8		7.1		6		73				<0.2		1.6	
					Bottom	7.3	0.3	50	17.9	17.9	8.1	8.1	31.6	31.6	99.1	99.2	7.8	7.8	8.4		6		75				<0.2		1.6	
						7.3	0.3	53	17.9		8.1		31.6		99.2		7.8		7.7		7		75				<0.2		1.5	
C2	Cloudy	Moderate	13:04	10.8	Surface	1.0	0.2	183	18.3	18.3	8.1	8.1	26.3	26.3	98.2	98.2	7.9	7.9	2.2	3.0	3	4	71	73	825676	806947	<0.2	<0.2	3.9	2.7
						1.0	0.3	186	18.3		8.1		26.3		98.1		7.9		2.1		4		71				<0.2		3.8	
					Middle	5.4	0.1	210	18.2	18.2	8.1	8.1	27.5	27.5	97.0	97.0	7.8		2.5		4		73				<0.2		2.3	
						5.4	0.1	210	18.2		8.1		27.5		96.9		7.8		2.5		4		73				<0.2		2.4	
					Bottom	9.8	0.2	344	18.3	18.3	8.1	8.1	28.1	28.1	96.5	96.5	7.7	7.7	4.3		6		75				<0.2		1.8	
						9.8	0.2	316	18.3		8.1		28.1		96.5		7.7		4.3		5		75				<0.2		1.7	
C3	Cloudy	Moderate	14:57	12.1	Surface	1.0	0.4	279	18.3	18.3	8.1	8.1	30.4	30.4	97.3	97.3	7.6	7.6	1.3	1.9	4	4	71	73	822103	817796	<0.2	<0.2	1.0	0.9
						1.0	0.4	287	18.3		8.1		30.4		97.3		7.6		1.4		3		71				<0.2		0.9	
					Middle	6.1	0.3	274	18.2	18.2	8.1	8.1	30.4	30.4	96.4	96.4	7.6		2.1		3		73				<0.2		0.7	
						6.1	0.4	280	18.2		8.1		30.4		96.4		7.6		2.0		3		73				<0.2		0.9	
					Bottom	11.1	0.3	278	18.2	18.2	8.1	8.1	30.4	30.4	96.8	96.9	7.6	7.6	2.2		5		75				<0.2		0.9	
						11.1	0.3	299	18.2		8.1		30.4		96.9		7.6		2.2		6		75				<0.2		0.9	
IM1	Cloudy	Calm	13:54	7.0	Surface	1.0	0.2	22	18.0	18.0	8.2	8.2	31.1	31.1	100.3	100.3	7.9	7.9	4.4	4.9	6	6	71	73	818346	806485	<0.2	<0.2	1.7	1.7
						1.0	0.2	23	18.0		8.2		31.1		100.2		7.9		4.3		6		71				<0.2		1.7	
					Middle	3.5	0.3	16	17.8	17.8	8.1	8.1	31.5	31.5	99.5	99.5	7.8		4.7		5		73				<0.2		1.7	
						3.5	0.3	16	17.8		8.1		31.5		99.4		7.8		4.8		7		73				<0.2		1.8	
					Bottom	6.0	0.3	17	17.8	17.8	8.1	8.1	31.6	31.6	99.4	99.4	7.8	7.8	5.7		6		75				<0.2		1.8	
						6.0	0.3	17	17.8		8.1		31.6		99.4		7.8		5.7		8		76				<0.2		1.7	
IM2	Cloudy	Calm	13:47	7.9	Surface	1.0	0.1	12	18.1	18.0	8.2	8.2	30.8	30.8	100.2	100.2	7.9	7.9	5.3	6.1	8	9	71	73	818832	806193	<0.2	<0.2	1.8	1.8
						1.0	0.1	13	18.0		8.2		30.8		100.1		7.9		5.4		8		71				<0.2		1.8	
					Middle	4.0	0.2	40	17.8	17.8	8.2	8.2	31.3	31.3	99.0	99.0	7.8		6.1		9		73				<0.2		1.8	
						4.0	0.2	41	17.8		8.2		31.3		99.0		7.8		6.1		8		73				<0.2		1.8	
					Bottom	6.9	0.2	35	17.8	17.8	8.2	8.2	31.4	31.4	99.1	99.2	7.8	7.8	7.0		9		75				<0.2		1.8	
						6.9	0.2	35	17.8		8.2		31.4		99.2		7.8		6.7		9		75				<0.2		1.7	
IM3	Cloudy	Calm	13:40	8.1	Surface	1.0	0.0	305	18.1	18.1	8.1	8.1	30.3	30.3	100.2	100.1	7.9	7.9	4.3	4.9	6	6	72	74	819427	806038	<0.2	<0.2	1.6	1.7
						1.0	0.0	305	18.1		8.1		30.3		100.0		7.9		4.2		5		72				<0.2		1.6	
					Middle	4.1	0.2	312	17.9	17.9	8.2	8.2	31.3	31.3	99.1	99.1	7.8		5.6		6		73				<0.2		1.8	
						4.1	0.2	318	17.9		8.2		31.3		99.1		7.8		5.4		5		73				<0.2		1.7	
					Bottom	7.1	0.1	315	18.0	18.0	8.2	8.2	31.4	31.4	99.4	99.5	7.8	7.8	5.0		7		75				<0.2		1.8	
						7.1	0.1	320	18.0		8.2		31.4		99.5		7.8		5.0		6		76				<0.2		1.8	
IM4	Cloudy	Calm	13:33	7.2	Surface	1.0	0.3	297	18.1	18.1	8.1	8.1	30.6	30.6	99.9	99.9	7.9	7.9	3.8	6.1	5	7	71	73	819552	805028	<0.2	<0.2	1.6	1.8
						1.0	0.3	320	18.1		8.1		30.6		99.8		7.9		4.0		4		71				<0.2		1.7	
					Middle	3.6	0.2	322	17.8	17.8	8.1	8.1	31.4	31.4	98.7	98.7	7.8		6.2		4		73				<0.2		2.0	
						3.6	0.2	348	17.8		8.1		31.4		98.7		7.8		6.5		6		73				<0.2		1.9	
					Bottom	6.2	0.2	347	17.8	17.8	8.1	8.1	31.4	31.4	98.7	98.8	7.8	7.8	8.0		9		75				<0.2		1.9	
						6.2	0.3	319	17.8		8.1		31.4		98.8		7.8		8.3		11		75				<0.2		1.8	
IM5	Cloudy	Calm	13:21	6.4	Surface	1.0	0.1	323	18.1	18.1	8.1	8.1	30.4	30.4	100.2	100.2	7.9	7.9	4.4	5.3	4	5	73	75	820590	804935	<0.2	<0.2	1.8	1.9
						1.0	0.2	326	18.1		8.1		30.4		100.2		7.9		4.4		6		74				<0.2		1.9	
					Middle	3.2	0.2	345	18.0	18.0	8.1	8.1	30.6	30.6	99.7	99.7	7.9		5.4		5		75				<0.2		1.9	
						3.2	0.2	317	18.0		8.1		30.6		99.6		7.9		5.4		6		75				<0.2		1.8	
					Bottom	5.4	0.2	351	18.0	18.0	8.1	8.1	30.8	30.8	99.6	99.7	7.9	7.9	6.0		5		76				<0.2		1.9	
						5.4	0.2	323	18.0		8.1		30.8		99.7		7.9		6.0		5		76				<0.2		2.1	
IM6	Cloudy	Moderate	13:14	6.5	Surface	1.0	0.3	304	18.0	18.0	8.1	8.1	29.6	29.6	99.2	99.2	7.9	7.9	3.8	4.2	5	7	73	75	821041	805842	<0.2	<0.2	2.6	2.7
						1.0	0.3	330	18.0		8.1		29.6		99.2		7.9		3.8		6		73				<0.2		2.6	
					Middle	3.3	0.3	321	18.0	18.0	8.1	8.1	29.8	29.8	98.9	98.9	7.8		4.5		7		75				<0.2		2.7	
						3.3	0.3	343	18.0		8.1		29.8		98.9		7.8		4.6		8		75				<0.2		2.6	
					Bottom	5.5	0.2	339	18.0	18.0	8.1	8.1	30.0	30.0	99.0	99.1	7.8	7.8	4.4		7		76				<0.2		2.5	
						5.5	0.2	312	18.0		8.1		30.0		99.1		7.8		4.2		8		76				<0.2		2.9	
IM7	Cloudy	Moderate	13:07	7.8	Surface	1.0	0.3	248	18.0	18.0	8.0	8.0	29.5	29.5	99.2	99.2	7.9	7.9	3.2	3.4	5	5	71	73	821378	806825	<0.2	<0.2	2.5	2.6
						1.0	0.4	251	18.0		8.0		29.5		99.2		7.9		3.2		4		71				<0.2		2.5	
					Middle	3.9	0.2	245	18.0	18.0	8.0	8.0	29.6	29.6	99.2	99.2	7.9		3.4		4		73				<0.2		2.5	
						3.9	0.2	268	18.0		8.0		29.6		99.2		7.9		3.4		4		73				<0.2		2.6	
					Bottom	6.8	0.3	248	18.0	18.0	8.0	8.0	29.7	29.7	99.3	99.3	7.9	7.9	3.6		5		75				<0.2		2.6	
						6.8	0.4	250	18.0		8.0		29.7		99.3		7.9		3.6		7		75				<0.2		2.6	
IM8	Cloudy	Moderate	13:30	7.7	Surface	1.0	0.2	223	18.4	18.4	8.1	8.1	27.7	27.7	101.1	101.1	8.1	8.1	2.4	2.4	4	5	71	73	821717	807866	<0.2	<0.2	2.9	2.6
						1.0	0.2	228	18.4		8.1		27.7		101.1		8.1		2.3		5		71				<0.2		2.9	
					Middle	3.9	0.2	236	18.4	18.4	8.1	8.1	28.2	28.6	100.6	100.6	8.0		2.1		4		74				<0.2		2.8	
						3.9	0.2	253	18.4		8.1		29.0		100.6		8.0		2.1		6		73				<0.2		2.9	
					Bottom	6.7	0.1	277	18.4	18.4	8.1	8.1	28.6	28.6	100.2	100.2	7.9	7.9	2.7		5		75				<0.2		2.0	
						6.7	0.1	284	18.4		8.1		28.6		100.1		7.9		2.7		6		75				<0.2		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 28 December 17 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	13:39	7.0	Surface	1.0	0.2	252	18.5	18.5	8.1	8.1	28.1	28.1	102.2	102.2	8.1	8.1	1.3	1.9	5	4	72	74	822083	808829	<0.2	<0.2	3.0	2.7
						1.0	0.2	257	18.5		8.1		28.1		102.2		8.1		1.2		3		71				<0.2		3.0	
					Middle	3.5	0.2	280	18.6	18.6	8.1	8.1	28.6	28.6	101.8	101.8	8.0		1.6		4		74				<0.2		2.5	
						3.5	0.3	307	18.6		8.1		28.7		101.7		8.0		1.6		4		73				<0.2		2.5	
					Bottom	6.0	0.2	297	18.4	18.4	8.1	8.1	28.8	28.8	100.8	100.8	8.0	8.0	2.9		4		76				<0.2		2.6	
						6.0	0.3	316	18.4		8.1		28.8		100.8		8.0		2.6		5		75				<0.2		2.4	
IM10	Cloudy	Moderate	13:47	6.8	Surface	1.0	0.3	301	18.5	18.5	8.1	8.1	29.2	29.2	101.8	101.8	8.0	8.0	1.1	2.3	4	5	72	73	822239	809824	<0.2	<0.2	1.6	1.7
						1.0	0.3	305	18.5		8.1		29.2		101.7		8.0		1.2		4		71				<0.2		1.7	
					Middle	3.4	0.3	305	18.5	18.5	8.1	8.1	29.3	29.3	100.8	100.9	7.9		1.8		6		74				<0.2		1.8	
						3.4	0.3	309	18.5		8.1		29.3		100.9		7.9		1.9		6		73				<0.2		1.8	
					Bottom	5.8	0.3	308	18.2	18.2	8.2	8.2	29.5	29.5	99.9	99.9	7.9	7.9	4.0		6		75				<0.2		1.7	
						5.8	0.3	320	18.2		8.2		29.5		99.9		7.9		4.0		5		75				<0.2		1.7	
IM11	Cloudy	Moderate	13:58	7.9	Surface	1.0	0.4	292	18.5	18.5	8.1	8.1	29.3	29.3	101.4	101.4	8.0	8.0	2.7	4.5	5	6	72	74	821529	810539	<0.2	<0.2	1.6	1.5
						1.0	0.4	303	18.5		8.1		29.3		101.3		8.0		2.8		5		71				<0.2		1.7	
					Middle	4.0	0.3	288	18.2	18.2	8.2	8.2	29.6	29.6	100.3	100.4	7.9		4.2		5		73				<0.2		1.6	
						4.0	0.3	299	18.2		8.2		29.6		100.4		7.9		4.2		4		74				<0.2		1.6	
					Bottom	6.9	0.2	297	18.2	18.2	8.2	8.2	29.7	29.7	100.0	100.0	7.9	7.9	6.7		7		75				<0.2		1.3	
						6.9	0.2	324	18.2		8.2		29.7		100.0		7.9		6.6		7		76				<0.2		1.2	
IM12	Cloudy	Moderate	14:06	8.7	Surface	1.0	0.4	285	18.5	18.5	8.1	8.1	29.5	29.5	100.7	100.8	7.9	7.9	2.8	7.4	4	10	71	73	821149	811524	<0.2	<0.2	1.7	1.3
						1.0	0.4	306	18.5		8.1		29.5		100.8		7.9		2.9		4		71				<0.2		1.6	
					Middle	4.4	0.4	287	18.1	18.1	8.2	8.2	29.9	29.9	99.4	99.4	7.8		8.2		6		73				<0.2		1.0	
						4.4	0.4	292	18.1		8.2		29.9		99.3		7.8		8.3		6		73				<0.2		1.1	
					Bottom	7.7	0.3	279	18.1	18.1	8.2	8.2	29.9	29.9	99.3	99.3	7.8	7.8	11.1		20		75				<0.2		1.1	
						7.7	0.3	291	18.1		8.2		29.9		99.3		7.8		11.2		18		75				<0.2		1.1	
SR2	Cloudy	Moderate	14:34	4.4	Surface	1.0	0.2	336	18.3	18.3	8.2	8.2	29.4	29.4	100.4	100.4	7.9	7.9	2.9	2.5	8	7	71	72	821444	814193	<0.2	<0.2	1.2	1.1
						1.0	0.2	309	18.3		8.2		29.4		100.4		7.9		3.0		6		72				<0.2		1.1	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.1	354	18.3	18.3	8.2	8.2	29.3	29.3	100.2	100.2	7.9	7.9	2.1		7		73				<0.2		1.1	
						3.4	0.1	326	18.3		8.2		29.3		100.2		7.9		1.9		7		73				<0.2		1.0	
SR3	Cloudy	Moderate	13:25	8.3	Surface	1.0	0.2	195	18.3	18.3	8.1	8.1	27.0	27.0	99.8	99.8	8.0	8.0	2.5	3.5	7	7	-	-	822174	807556	-	-	-	-
						1.0	0.2	201	18.3		8.1		27.0		99.8		8.0		2.5		5		-				-		-	
					Middle	4.2	0.2	225	18.3	18.3	8.1	8.1	28.4	28.4	98.9	98.9	7.9		3.7		6		-				-		-	
						4.2	0.2	237	18.3		8.1		28.4		98.9		7.9		3.7		5		-				-		-	
					Bottom	7.3	0.1	254	18.3	18.3	8.1	8.1	28.5	28.5	98.7	98.7	7.8	7.8	4.1		8		-				-		-	
						7.3	0.1	257	18.3		8.1		28.5		98.7		7.8		4.2		8		-				-		-	
SR4A	Cloudy	Calm	14:31	8.5	Surface	1.0	0.1	226	18.2	18.2	8.1	8.1	31.5	31.5	100.5	100.5	7.9	7.9	6.3	6.8	8	9	-	-	817164	807822	-	-	-	-
						1.0	0.2	236	18.2		8.1		31.5		100.5		7.9		6.4		6		-				-		-	
					Middle	4.3	0.1	238	18.1	18.1	8.1	8.1	31.5	31.5	99.9	99.9	7.8		6.9		8		-				-		-	
						4.3	0.1	253	18.1		8.1		31.5		99.8		7.8		6.8		9		-				-		-	
					Bottom	7.5	0.1	210	18.1	18.1	8.1	8.1	31.5	31.5	99.8	99.8	7.8	7.8	7.2		11		-				-		-	
						7.5	0.1	230	18.1		8.1		31.5		99.8		7.8		7.4		11		-				-		-	
SR5A	Rainy	Calm	14:48	4.0	Surface	1.0	0.2	289	18.2	18.2	8.1	8.1	31.5	31.5	102.0	101.9	8.0	8.0	5.2	5.5	9	10	-	-	816612	810667	-	-	-	-
						1.0	0.2	315	18.2		8.1		31.5		101.8		8.0		5.2		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	0.2	283	18.2	18.2	8.1	8.1	31.5	31.5	100.8	100.8	7.9	7.9	5.7		11		-				-		-	
						3.0	0.2	293	18.2		8.1		31.5		100.8		7.9		5.8		13		-				-		-	
SR6	Rainy	Calm	15:14	4.1	Surface	1.0	0.1	225	18.1	18.1	8.2	8.2	31.3	31.3	101.5	101.5	8.0	8.0	4.6	4.7	8	9	-	-	817879	814641	-	-	-	-
						1.0	0.1	237	18.1		8.2		31.3		101.5		8.0		4.6		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.1	220	18.1	18.1	8.2	8.2	31.3	31.3	100.7	100.7	7.9	7.9	4.6		9		-				-		-	
						3.1	0.1	220	18.1		8.2		31.4		100.6		7.9		4.9		10		-				-		-	
SR7	Cloudy	Moderate	15:31	17.3	Surface	1.0	0.1	347	18.5	18.5	8.1	8.1	29.8	29.8	95.8	95.8	7.5	7.5	0.8	1.0	4	7	-	-	823627	823727	-	-	-	-
						1.0	0.1	319	18.5		8.1		29.8		95.7		7.5		0.8		5		-				-		-	
					Middle	8.7	0.1	55	18.4	18.4	8.1	8.1	29.7	29.7	94.1	94.1	7.4		1.0		9		-				-		-	
						8.7	0.1	56	18.4		8.1		29.7		94.1		7.4		1.1		8		-				-		-	
					Bottom	16.3	0.1	51	18.5	18.5	8.1	8.1	29.4	29.4	94.3	94.3	7.4	7.4	1.2		8		-				-		-	
						16.3	0.1	54	18.5		8.1		29.4		94.3		7.4		1.2		7		-				-		-	
SR8	Cloudy	Moderate	14:15	3.5	Surface	1.0	-	-	18.6	18.6	8.1	8.1	29.2	29.2	101.8	101.8	8.0	8.0	3.0	3.5	5	7	-	-	820246	811418	-	-	-	-
						1.0	-	-	18.6		8.1		29.2		101.8		8.0		3.1		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.5	-	-	18.4	18.4	8.1	8.1	29.2	29.2	101.2	101.2	8.0	8.0	3.8		8		-				-		-	
						2.5	-	-	18.4		8.1		29.2		101.2		8.0		3.9		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 30 December 17 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Sunny	Moderate	10:11	8.6	Surface	1.0	0.3	220	18.0	18.0	8.1	8.1	31.3	31.3	98.1	98.1	7.7	7.7	8.7	10.2	8	10	73	75	815633	804248	<0.2	<0.2	0.8	0.8
						1.0	0.3	229	18.0		8.1		31.3		98.1		7.7		8.7		9		73				<0.2		0.8	
					Middle	4.3	0.2	218	17.9	17.9	8.1	8.1	31.3	31.3	97.5	97.5	7.7		10.5		10		75				<0.2		0.7	
						4.3	0.2	231	17.9		8.1		31.3		97.5		7.7		10.5		9		75				<0.2		0.9	
					Bottom	7.6	0.3	226	17.9	17.9	8.1	8.1	31.3	31.3	97.4	97.4	7.7	7.7	11.5		12		77				<0.2		0.7	
						7.6	0.3	239	17.9		8.1		31.3		97.4		7.7		11.5		11		77				<0.2		0.7	
C2	Fine	Calm	11:13	12.7	Surface	1.0	0.5	165	18.5	18.5	8.1	8.1	27.0	27.0	97.6	97.6	7.8	7.8	4.8	4.7	6	6	73	75	825658	806959	<0.2	<0.2	2.2	2.0
						1.0	0.6	180	18.5		8.1		27.0		97.5		7.8		4.7		5		73				<0.2		2.7	
					Middle	6.4	0.3	164	18.6	18.6	8.1	8.1	28.7	28.7	97.3	97.3	7.7		4.3		6		74				<0.2		2.0	
						6.4	0.3	174	18.6		8.1		28.7		97.3		7.7		4.3		4		75				<0.2		1.9	
					Bottom	11.7	0.2	160	18.6	18.6	8.1	8.1	28.8	28.8	97.0	97.0	7.7	7.7	4.9		6		76				<0.2		1.8	
						11.7	0.2	167	18.6		8.1		28.8		97.0		7.7		4.9		8		76				<0.2		1.5	
C3	Fine	Calm	09:15	11.4	Surface	1.0	0.3	85	18.5	18.5	8.1	8.1	29.3	29.3	93.2	93.2	7.3	7.3	3.4	3.4	5	7	72	74	822117	817813	<0.2	<0.2	1.1	1.0
						1.0	0.3	85	18.5		8.1		29.3		93.2		7.3		3.4		7		72				<0.2		1.2	
					Middle	5.7	0.2	92	18.6	18.6	8.0	8.0	29.7	29.7	92.9	92.9	7.3		4.0		6		75				<0.2		0.8	
						5.7	0.2	95	18.6		8.0		29.7		92.9		7.3		4.0		6		75				<0.2		0.8	
					Bottom	10.4	0.2	98	18.6	18.6	8.0	8.0	30.0	30.0	93.8	93.8	7.3	7.3	2.7		10		76				<0.2		1.0	
						10.4	0.2	99	18.6		8.0		30.0		93.8		7.3		2.7		8		76				<0.2		0.9	
IM1	Sunny	Moderate	10:32	7.2	Surface	1.0	-	73	18.1	18.1	8.1	8.1	31.1	31.1	99.3	99.3	7.8	7.8	6.9	7.5	6	8	73	75	818341	806477	<0.2	<0.2	0.8	0.8
						1.0	-	73	18.1		8.1		31.1		99.3		7.8		6.9		6		73				<0.2		0.8	
					Middle	3.6	0.1	174	18.1	18.1	8.1	8.1	31.1	31.1	98.7	98.7	7.8		7.3		8		75				<0.2		0.9	
						3.6	0.2	189	18.1		8.1		31.1		98.7		7.8		7.3		9		75				<0.2		0.9	
					Bottom	6.2	0.1	145	18.0	18.0	8.1	8.1	31.1	31.1	98.5	98.6	7.8	7.8	8.3		10		77				<0.2		0.8	
						6.2	0.1	154	18.0		8.1		31.1		98.6		7.8		8.2		9		77				<0.2		0.8	
IM2	Sunny	Moderate	10:38	8.6	Surface	1.0	0.2	167	18.1	18.1	8.1	8.1	31.1	31.1	98.7	98.8	7.8	7.8	8.0	9.1	8	8	73	75	818842	806170	<0.2	<0.2	0.8	0.9
						1.0	0.2	174	18.1		8.1		31.1		98.8		7.8		8.0		9		73				<0.2		0.9	
					Middle	4.3	0.2	175	17.9	17.9	8.1	8.1	31.1	31.1	97.8	97.8	7.7		9.2		8		75				<0.2		0.8	
						4.3	0.2	189	17.9		8.1		31.1		97.8		7.7		8.8		8		75				<0.2		0.8	
					Bottom	7.6	0.2	188	17.9	17.9	8.1	8.1	31.1	31.1	97.8	97.8	7.7	7.7	10.3		8		77				<0.2		1.0	
						7.6	0.2	190	17.9		8.1		31.1		97.8		7.7		10.3		9		77				<0.2		0.8	
IM3	Sunny	Moderate	10:45	8.0	Surface	1.0	0.2	171	18.1	18.1	8.2	8.2	30.8	30.8	99.4	99.4	7.8	7.8	7.6	7.7	6	8	73	75	819384	806046	<0.2	<0.2	1.2	1.0
						1.0	0.2	187	18.1		8.2		30.8		99.4		7.8		7.6		8		73				<0.2		1.3	
					Middle	4.0	0.1	186	18.0	18.0	8.1	8.1	31.1	31.1	98.3	98.3	7.7		7.4		7		75				<0.2		1.0	
						4.0	0.1	196	18.0		8.1		31.1		98.3		7.7		7.4		8		75				<0.2		1.0	
					Bottom	7.0	0.1	167	18.0	18.0	8.1	8.1	31.1	31.1	98.2	98.2	7.7	7.7	8.0		11		77				<0.2		0.8	
						7.0	0.1	180	18.0		8.1		31.1		98.2		7.7		7.9		9		77				<0.2		0.8	
IM4	Sunny	Moderate	10:55	7.4	Surface	1.0	0.3	170	18.2	18.2	8.1	8.1	30.9	30.9	100.2	100.2	7.9	7.9	5.9	6.7	6	7	73	75	819558	805014	<0.2	<0.2	1.0	1.0
						1.0	0.3	183	18.2		8.1		30.9		100.1		7.9		5.9		6		73				<0.2		1.1	
					Middle	3.7	0.2	166	18.1	18.1	8.1	8.1	31.0	31.0	99.2	99.2	7.8		6.7		8		75				<0.2		1.0	
						3.7	0.2	181	18.1		8.1		31.0		99.2		7.8		6.7		6		75				<0.2		1.1	
					Bottom	6.4	0.2	159	17.9	17.9	8.1	8.1	31.1	31.1	98.6	98.7	7.8	7.8	7.5		8		77				<0.2		0.9	
						6.4	0.2	171	17.9		8.1		31.1		98.7		7.8		7.5		7		77				<0.2		1.0	
IM5	Sunny	Moderate	11:03	6.4	Surface	1.0	0.3	185	18.2	18.2	8.1	8.1	30.6	30.6	100.6	100.6	7.9	7.9	6.4	7.5	6	8	74	75	820560	804914	<0.2	<0.2	1.4	1.3
						1.0	0.3	187	18.2		8.1		30.6		100.6		7.9		5.7		6		73				<0.2		1.6	
					Middle	3.2	0.2	192	18.0	18.0	8.1	8.1	30.8	30.8	99.6	99.6	7.8		6.9		8		75				<0.2		1.3	
						3.2	0.3	196	18.0		8.1		30.8		99.6		7.8		6.9		9		75				<0.2		1.2	
					Bottom	5.4	0.2	194	18.0	18.0	8.1	8.1	30.9	30.9	99.3	99.3	7.8	7.8	9.4		9		77				<0.2		1.2	
						5.4	0.2	203	18.0		8.1		30.9		99.3		7.8		9.4		9		77				<0.2		1.2	
IM6	Sunny	Moderate	11:11	6.5	Surface	1.0	0.3	165	18.4	18.4	8.1	8.1	29.9	29.9	101.1	101.1	7.9	7.9	4.8	5.7	4	6	73	75	821054	805812	<0.2	<0.2	1.9	1.8
						1.0	0.3	166	18.4		8.1		29.9		101.1		7.9		4.9		5		73				<0.2		2.0	
					Middle	3.3	0.2	167	18.2	18.2	8.1	8.1	30.4	30.4	100.1	100.1	7.9		5.9		5		75				<0.2		1.9	
						3.3	0.2	169	18.2		8.1		30.4		100.1		7.9		5.9		4		75				<0.2		1.9	
					Bottom	5.5	0.2	165	18.1	18.1	8.1	8.1	30.7	30.7	99.6	99.6	7.8	7.8	6.3		8		77				<0.2		1.5	
						5.5	0.2	167	18.1		8.1		30.7		99.6		7.8		6.3		7		77				<0.2		1.5	
IM7	Sunny	Moderate	11:19	7.9	Surface	1.0	0.2	175	18.4	18.4	8.1	8.1	29.1	29.1	99.7	99.7	7.9	7.9	5.1	5.8	6	7	73	75	821373	806838	<0.2	<0.2	2.5	2.1
						1.0	0.2	176	18.4		8.1		29.1		99.7		7.9		5.1		4		73				<0.2		2.5	
					Middle	4.0	0.1	121	18.2	18.2	8.1	8.1	30.3	30.3	99.2	99.2	7.8		6.1		5		75				<0.2		2.4	
						4.0	0.1	127	18.2		8.1		30.3		99.2		7.8		6.1		6		75				<0.2		2.3	
					Bottom	6.9	0.1	74	18.1	18.1	8.2	8.2	30.6	30.6	99.0	99.0	7.8	7.8	6.1		10		77				<0.2		1.6	
						6.9	0.1	74	18.1		8.2		30.6		99.0		7.8		6.1		12		77				<0.2		1.5	
IM8	Fine	Calm	10:39	7.9	Surface	1.0	0.3	147	18.6	18.6	8.1	8.1	27.4	27.4	99.0	99.0	7.9	7.9	5.5	5.7	5	6	73	74	821671	807830	<0.2	<0.2	2.4	2.4
						1.0	0.3	155	18.6		8.1		27.4		99.0		7.9		5.5		6		73				<0.2		2.4	
					Middle	4.0	0.1	119	18.4	18.4	8.1	8.1	28.0	28.0	98.4	98.4	7.8		6.0		6		74				<0.2		2.5	
						4.0	0.1	119	18.4		8.1		28.0		98.4		7.8		6.0		6		74				<0.2		2.3	
					Bottom	6.9	0.2	89	18.4	18.4	8.2	8.2	28.7	28.7	97.5	97.5	7.7	7.7	5.6		6		76				<0.2		2.3	
						6.9	0.2	96	18.4		8.2		28.7		97.5		7.7		5.6		6		76				<0.2		2.4	

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**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 30 December 17 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Fine	Calm	10:31	7.8	Surface	1.0	0.3	115	18.5	18.5	8.1	8.1	28.1	28.1	98.9	98.9	7.8	7.8	5.8	6.7	6	6	73	75	822067	808793	<0.2	<0.2	2.4	2.4
						1.0	0.3	121	18.5		8.1		28.1		98.9		7.8		5.8		7		73				<0.2		2.4	
					Middle	3.9	0.3	103	18.4	18.4	8.1	8.1	28.4	28.4	98.3	98.3	7.8		7.2		5		74				<0.2		2.4	
						3.9	0.3	104	18.4		8.1		28.4		98.3		7.8		7.2		6		75				<0.2		2.4	
					Bottom	6.8	0.2	89	18.4	18.4	8.2	8.2	29.3	29.3	97.3	97.3	7.7	7.7	7.1		7		76				<0.2		2.4	
						6.8	0.2	96	18.4		8.2		29.3		97.3		7.7		7.1		6		76				<0.2		2.6	
IM10	Fine	Calm	10:23	7.3	Surface	1.0	0.4	103	18.5	18.5	8.2	8.2	28.6	28.6	98.7	98.7	7.8	7.8	9.5	10.6	7	8	73	74	822241	809845	<0.2	<0.2	1.9	1.7
						1.0	0.4	103	18.5		8.2		28.6		98.7		7.8		9.5		5		73				<0.2		2.0	
					Middle	3.7	0.3	107	18.3	18.3	8.2	8.2	29.4	29.4	97.9	97.9	7.7		11.2		8		74				<0.2		1.7	
						3.7	0.4	115	18.3		8.2		29.4		97.9		7.7		11.2		7		74				<0.2		1.4	
					Bottom	6.3	0.3	96	18.3	18.3	8.2	8.2	29.4	29.4	97.2	97.2	7.7	7.7	11.0		10		76				<0.2		1.7	
						6.3	0.3	103	18.3		8.2		29.4		97.2		7.7		11.0		8		76				<0.2		1.6	
IM11	Fine	Calm	10:14	7.8	Surface	1.0	0.3	96	18.6	18.6	8.2	8.2	27.8	27.8	99.0	99.0	7.8	7.8	6.2	6.0	7	7	73	75	821512	810526	<0.2	<0.2	1.8	1.7
						1.0	0.3	105	18.6		8.2		27.8		99.0		7.8		6.2		6		73				<0.2		1.9	
					Middle	3.9	0.3	98	18.5	18.5	8.2	8.2	28.0	28.0	98.0	98.0	7.8		6.2		7		75				<0.2		1.7	
						3.9	0.3	99	18.5		8.2		28.0		98.0		7.8		6.2		8		75				<0.2		1.4	
					Bottom	6.8	0.2	96	18.4	18.4	8.1	8.1	28.4	28.4	97.5	97.5	7.7	7.7	5.7		6		76				<0.2		1.6	
						6.8	0.2	100	18.4		8.1		28.4		97.5		7.7		5.7		6		76				<0.2		1.6	
IM12	Fine	Calm	10:07	8.9	Surface	1.0	0.5	101	18.5	18.5	8.1	8.1	28.0	28.0	98.6	98.6	7.8	7.8	6.9	5.8	7	7	73	74	821161	811492	<0.2	<0.2	1.7	1.6
						1.0	0.5	102	18.5		8.1		28.0		98.6		7.8		6.9		8		73				<0.2		1.6	
					Middle	4.5	0.4	103	18.4	18.4	8.1	8.1	28.2	28.2	98.0	98.0	7.8		5.5		7		74				<0.2		1.5	
						4.5	0.4	104	18.4		8.1		28.2		98.0		7.8		5.5		8		74				<0.2		1.6	
					Bottom	7.9	0.2	92	18.4	18.4	8.1	8.1	28.5	28.5	97.6	97.6	7.7	7.7	5.1		7		75				<0.2		1.7	
						7.9	0.2	98	18.4		8.1		28.5		97.6		7.7		5.1		6		76				<0.2		1.5	
SR2	Fine	Calm	09:39	3.7	Surface	1.0	0.3	40	18.5	18.5	8.1	8.1	28.8	28.8	98.1	98.1	7.7	7.7	6.1	6.4	3	4	73	74	821486	814153	<0.2	<0.2	1.1	1.2
						1.0	0.4	40	18.5		8.1		28.8		98.1		7.7		6.1		4		73				<0.2		1.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.7	0.3	41	18.5	18.5	8.1	8.1	29.1	29.1	97.1	97.1	7.7	7.7	6.7		4		75				<0.2		1.2	
						2.7	0.3	41	18.5		8.1		29.1		97.1		7.7		6.7		4		75				<0.2		1.3	
SR3	Fine	Calm	10:44	8.7	Surface	1.0	0.3	190	18.7	18.7	8.1	8.1	27.4	27.4	98.6	98.6	7.8	7.8	6.3	7.1	2	5	-	-	822136	807557	-	-	-	-
						1.0	0.3	197	18.7		8.1		27.4		98.6		7.8		6.3		4		-				-		-	
					Middle	4.4	0.2	171	18.4	18.4	8.1	8.1	28.5	28.5	97.9	97.9	7.8		7.1		5		-				-		-	
						4.4	0.2	182	18.4		8.1		28.5		97.9		7.8		7.1		5		-				-		-	
					Bottom	7.7	0.1	109	18.4	18.4	8.2	8.2	29.0	29.0	97.6	97.6	7.7	7.7	8.0		7		-				-		-	
						7.7	0.1	109	18.4		8.2		29.0		97.6		7.7		8.0		8		-				-		-	
SR4A	Sunny	Calm	09:51	9.3	Surface	1.0	0.3	79	18.0	18.0	8.1	8.1	31.0	31.0	98.6	98.6	7.8	7.8	6.6	7.5	6	7	-	-	817193	807812	-	-	-	-
						1.0	0.3	85	18.0		8.1		31.0		98.6		7.8		6.6		6		-				-		-	
					Middle	4.7	0.3	76	18.0	18.0	8.1	8.1	31.0	31.0	98.1	98.1	7.7		7.8		7		-				-		-	
						4.7	0.3	81	18.0		8.1		31.0		98.1		7.7		7.8		6		-				-		-	
					Bottom	8.3	0.2	70	18.0	18.0	8.1	8.1	31.0	31.0	98.2	98.2	7.7	7.7	8.0		7		-				-		-	
						8.3	0.2	71	18.0		8.1		31.0		98.2		7.7		8.0		9		-				-		-	
SR5A	Sunny	Calm	09:33	4.9	Surface	1.0	0.2	130	18.3	18.3	8.1	8.1	31.2	31.2	99.3	99.3	7.8	7.8	6.4	6.5	7	8	-	-	816615	810720	-	-	-	-
						1.0	0.2	131	18.3		8.1		31.2		99.3		7.8		6.5		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	0.2	127	18.3	18.3	8.1	8.1	31.2	31.2	99.3	99.4	7.8	7.8	6.5		8		-				-		-	
						3.9	0.2	130	18.3		8.1		31.2		99.4		7.8		6.6		9		-				-		-	
SR6	Sunny	Calm	09:09	4.0	Surface	1.0	0.1	41	18.1	18.1	8.1	8.1	30.2	30.2	98.8	98.8	7.8	7.8	3.4	3.5	7	6	-	-	817897	814673	-	-	-	-
						1.0	0.1	42	18.1		8.1		30.2		98.8		7.8		3.4		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	0.1	36	18.1	18.1	8.1	8.1	30.1	30.1	98.8	98.8	7.8	7.8	3.5		5		-				-		-	
						3.0	0.1	39	18.1		8.1		30.1		98.8		7.8		3.5		6		-				-		-	
SR7	Fine	Calm	08:37	17.7	Surface	1.0	0.1	64	18.6	18.6	8.0	8.0	29.7	29.7	91.9	91.9	7.2	7.2	4.1	3.7	4	6	-	-	823607	823729	-	-	-	-
						1.0	0.1	68	18.6		8.0		29.7		91.8		7.2		4.0		3		-				-		-	
					Middle	8.9	0.1	39	18.6	18.6	8.0	8.0	29.8	29.8	91.6	91.6	7.2		3.1		6		-				-		-	
						8.9	0.1	40	18.6		8.0		29.8		91.6		7.2		3.1		4		-				-		-	
					Bottom	16.7	0.1	28	18.6	18.6	8.0	8.0	30.0	30.0	92.3	92.3	7.2	7.2	3.9		8		-				-		-	
						16.7	0.1	29	18.6		8.0		30.0		92.3		7.2		3.7		8		-				-		-	
SR8	Fine	Calm	09:56	4.8	Surface	1.0	-	-	18.6	18.6	8.2	8.2	28.4	28.4	98.2	98.2	7.8	7.8	8.4	8.2	6	7	-	-	820246	811418	-	-	-	-
						1.0	-	-	18.6		8.2		28.4		98.2		7.8		8.4		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	-	-	18.5	18.5	8.1	8.1	28.6	28.6	97.3	97.3	7.7	7.7	8.0		9		-				-		-	
						3.8	-	-	18.5		8.1		28.6		97.3		7.7		8.0		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 30 December 17 during Mid-Flood Tide

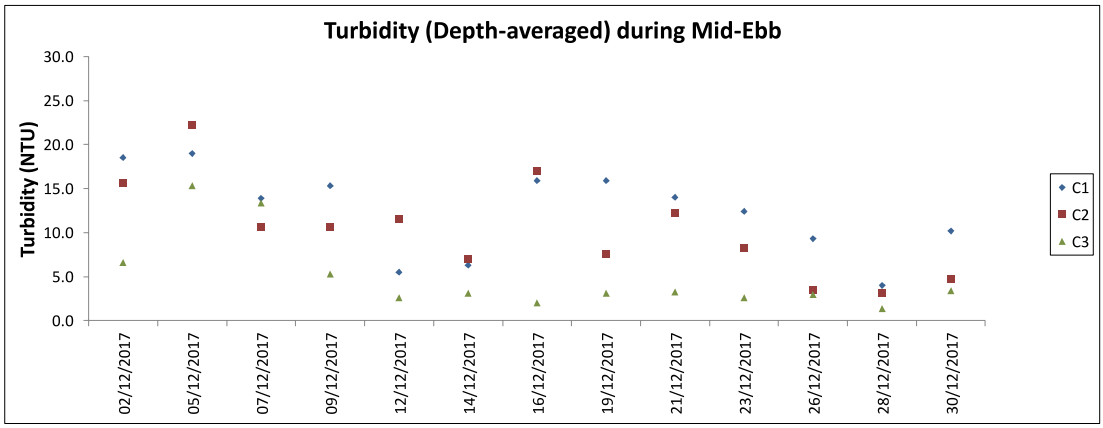
Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Misty	Moderate	15:30	8.6	Surface	1.0	0.4	21	18.4	18.4	8.1	8.1	31.2	31.2	100.3	100.3	7.8	7.8	6.8	14.6	5	9	73	75	815592	804220	<0.2	<0.2	1.0	0.9
						1.0	0.4	21	18.4		8.1		31.2		100.3		7.8		6.9		4		73				<0.2		0.9	
					Middle	4.3	0.4	19	18.2	18.2	8.1	8.1	31.3	31.3	99.2	99.2	7.8		11.3		9		75				<0.2		0.8	
						4.3	0.4	20	18.2		8.1		31.3		99.2		7.8		11.4		10		75				<0.2		0.9	
					Bottom	7.6	0.4	25	18.1	18.1	8.1	8.1	31.3	31.3	98.6	98.6	7.7	7.7	25.5		13		77				<0.2		0.9	
						7.6	0.4	27	18.1		8.1		31.3		98.6		7.7		25.6		15		77				<0.2		0.8	
C2	Sunny	Moderate	14:32	11.1	Surface	1.0	0.1	183	19.2	19.2	8.1	8.1	25.3	25.3	101.4	101.4	8.1	8.0	6.4	7.2	6	7	73	75	825708	806954	<0.2	<0.2	3.5	2.1
						1.0	0.2	194	19.2		8.1		25.3		101.4		8.1		6.4		4		73				<0.2		3.4	
					Middle	5.6	0.1	273	18.6	18.6	8.1	8.1	27.8	27.8	97.9	97.9	7.8		6.3		6		75				<0.2		1.2	
						5.6	0.1	277	18.6		8.1		27.8		97.9		7.8		6.3		7		75				<0.2		1.3	
					Bottom	10.1	0.4	339	18.6	18.6	8.1	8.1	28.5	28.5	98.2	98.2	7.8	7.8	9.0		8		76				<0.2		1.8	
						10.1	0.4	312	18.6		8.1		28.5		98.2		7.8		9.0		8		77				<0.2		1.6	
C3	Sunny	Moderate	16:19	12.1	Surface	1.0	0.5	269	18.7	18.7	8.1	8.1	28.9	28.9	97.0	97.0	7.6	7.6	3.1	4.6	3	6	72	75	822101	817821	<0.2	<0.2	1.1	1.1
						1.0	0.5	286	18.7		8.1		28.9		97.0		7.6		3.1		4		73				<0.2		1.1	
					Middle	6.1	0.5	271	18.6	18.6	8.1	8.1	28.8	28.8	95.8	95.8	7.5		4.3		4		75				<0.2		1.0	
						6.1	0.5	282	18.6		8.1		28.8		95.8		7.5		4.3		6		75				<0.2		1.1	
					Bottom	11.1	0.3	272	18.6	18.6	8.1	8.1	28.8	28.8	96.6	96.6	7.6	7.6	6.3		8		77				<0.2		1.1	
						11.1	0.4	285	18.6		8.1		28.8		96.6		7.6		6.3		8		77				<0.2		1.1	
IM1	Misty	Moderate	15:11	7.3	Surface	1.0	0.1	134	18.6	18.6	8.2	8.2	30.1	30.1	102.5	102.5	8.0	8.0	4.6	6.9	4	7	73	75	818362	806478	<0.2	<0.2	1.8	1.5
						1.0	0.1	146	18.6		8.2		30.1		102.5		8.0		4.6		6		73				<0.2		1.9	
					Middle	3.7	0.1	93	18.4	18.4	8.2	8.2	30.5	30.5	100.8	100.8	7.9		6.0		5		76				<0.2		1.6	
						3.7	0.1	102	18.4		8.2		30.5		100.7		7.9		6.1		5		76				<0.2		1.6	
					Bottom	6.3	0.1	95	18.1	18.1	8.1	8.1	31.1	31.1	99.2	99.3	7.8	7.8	10.0		12		77				<0.2		1.0	
						6.3	0.1	97	18.1		8.1		31.1		99.3		7.8		10.0		12		77				<0.2		0.9	
IM2	Misty	Moderate	15:06	8.1	Surface	1.0	0.1	104	18.7	18.7	8.2	8.2	29.8	29.8	101.7	101.7	8.0	7.9	4.7	6.6	4	6	74	76	818832	806174	<0.2	<0.2	2.0	2.1
						1.0	0.1	110	18.7		8.2		29.8		101.6		8.0		4.7		5		73				<0.2		2.2	
					Middle	4.1	0.1	-	18.1	18.1	8.1	8.1	30.8	30.8	99.2	99.2	7.8		6.5		5		76				<0.2		1.4	
						4.1	0.1	-	18.1		8.1		30.8		99.1		7.8		6.6		4		75				<0.2		1.3	
					Bottom	7.1	0.2	-	18.0	18.0	8.1	8.1	31.1	31.1	98.5	98.5	7.7	7.7	8.6		7		78				<0.2		3.0	
						7.1	0.2	-	18.0		8.1		31.1		98.5		7.7		8.7		8		77				<0.2		2.9	
IM3	Misty	Moderate	14:59	8.2	Surface	1.0	0.1	305	18.7	18.7	8.1	8.1	29.7	29.7	102.3	102.3	8.0	8.0	4.1	5.1	4	6	73	76	819381	806001	<0.2	<0.2	2.1	1.9
						1.0	0.1	313	18.7		8.1		29.7		102.2		8.0		4.1		4		74				<0.2		2.2	
					Middle	4.1	0.2	356	18.3	18.3	8.2	8.2	30.5	30.5	100.3	100.3	7.9		5.3		5		76				<0.2		2.1	
						4.1	0.2	328	18.3		8.2		30.5		100.3		7.9		5.4		7		75				<0.2		2.0	
					Bottom	7.2	0.2	7	18.1	18.1	8.1	8.1	30.8	30.8	99.9	99.9	7.9	7.9	5.8		6		78				<0.2		1.5	
						7.2	0.2	7	18.1		8.1		30.8		99.9		7.9		5.8		7		77				<0.2		1.6	
IM4	Misty	Moderate	14:52	7.5	Surface	1.0	0.1	350	18.7	18.7	8.2	8.2	30.1	30.1	103.0	103.0	8.0	8.0	5.3	6.7	5	8	73	76	819570	805034	<0.2	<0.2	1.9	1.5
						1.0	0.1	322	18.7		8.2		30.1		102.9		8.0		5.3		7		74				<0.2		1.7	
					Middle	3.8	0.3	343	18.3	18.3	8.2	8.2	30.8	30.8	101.0	101.0	7.9		7.8		11		75				<0.2		1.5	
						3.8	0.3	316	18.3		8.2		30.8		101.0		7.9		7.8		9		76				<0.2		1.5	
					Bottom	6.5	0.2	343	18.1	18.1	8.1	8.1	31.0	31.0	99.9	99.9	7.8	7.8	7.0		9		77				<0.2		1.2	
						6.5	0.2	316	18.1		8.1		31.0		99.9		7.8		7.0		9		78				<0.2		1.3	
IM5	Misty	Moderate	14:43	6.7	Surface	1.0	0.2	329	18.7	18.7	8.1	8.1	29.3	29.3	102.9	102.9	8.1	8.1	4.5	4.4	8	10	74	76	820583	804940	<0.2	<0.2	2.7	2.4
						1.0	0.2	341	18.7		8.1		29.3		102.9		8.1		4.5		7		74				<0.2		2.4	
					Middle	3.4	0.2	342	18.4	18.4	8.1	8.1	30.0	30.0	101.9	101.9	8.0		4.3		8		76				<0.2		2.2	
						3.4	0.2	315	18.4		8.1		30.0		101.8		8.0		4.3		6		75				<0.2		2.4	
					Bottom	5.7	0.2	338	18.3	18.3	8.1	8.1	30.3	30.3	101.2	101.2	8.0	8.0	4.4		14		77				<0.2		2.5	
						5.7	0.3	358	18.3		8.1		30.3		101.2		8.0		4.4		14		77				<0.2		2.4	
IM6	Misty	Moderate	14:35	6.6	Surface	1.0	0.3	305	18.8	18.8	8.1	8.1	29.5	29.5	102.9	102.9	8.0	8.0	4.4	4.3	6	7	74	76	821057	805855	<0.2	<0.2	2.4	2.3
						1.0	0.3	313	18.8		8.1		29.5		102.9		8.0		4.4		7		73				<0.2		2.4	
					Middle	3.3	0.3	309	18.8	18.8	8.1	8.1	29.5	29.5	102.2	102.2	8.0		4.1		7		76				<0.2		2.3	
						3.3	0.3	322	18.8		8.1		29.5		102.2		8.0		4.2		7		75				<0.2		2.2	
					Bottom	5.6	0.2	304	18.5	18.5	8.1	8.1	29.8	29.8	101.2	101.2	7.9	7.9	4.4		7		78				<0.2		2.3	
						5.6	0.2	315	18.5		8.1		29.9		101.2		7.9		4.5		7		77				<0.2		2.4	
IM7	Misty	Moderate	14:27	8.1	Surface	1.0	0.2	258	18.8	18.8	8.1	8.1	29.0	29.0	101.6	101.6	8.0	8.0	4.2	4.9	5	7	74	75	821341	806849	<0.2	<0.2	2.9	2.5
						1.0	0.2	259	18.8		8.1		29.0		101.5		8.0		4.3		5		73				<0.2		2.7	
					Middle	4.1	0.2	290	18.3	18.3	8.1	8.1	29.6	29.6	99.7	99.7	7.9		5.1		6		76				<0.2		2.6	
						4.1	0.2	314	18.3		8.1		29.6		99.7		7.9		5.1		5		75				<0.2		2.6	
					Bottom	7.1	0.2	295	18.2	18.2	8.1	8.1	30.0	30.0	99.5	99.5	7.8	7.8	5.3		11		77				<0.2		2.2	
						7.1	0.2	299	18.2		8.1		30.0		99.5		7.8		5.3		12		77				<0.2		2.2	
IM8	Sunny	Moderate	14:55	8.2	Surface	1.0	0.1	211	18.9	18.9	8.1	8.1	27.9	27.9	102.2	102.2	8.0	8.0	4.1	4.3	6	8	73	74	821683	807834	<0.2	<0.2	2.4	2.4
						1.0	0.1	230	18.9		8.1		27.9		102.2		8.0		4.1		7		73				<0.2		2.5	
					Middle	4.1	0.1	251	18.8	18.8	8.1	8.1	27.9	27.9	101.4	101.4	8.0		4.6		6		74				<0.2		2.4	
						4.1	0.1	268	18.8		8.1		27.9		101.4		8.0		4.6		7		74				<0.2		2.5	
					Bottom	7.2	0.1	229	18.7	18.7	8.1	8.1	27.9	27.9	100.7	100.7	8.0	8.0	4.2		12		76				<0.2		2.3	
						7.2	0.1	245	18.7		8.1		27.9		100.7		8.0		4.2		10		76				<0.2		2.3	

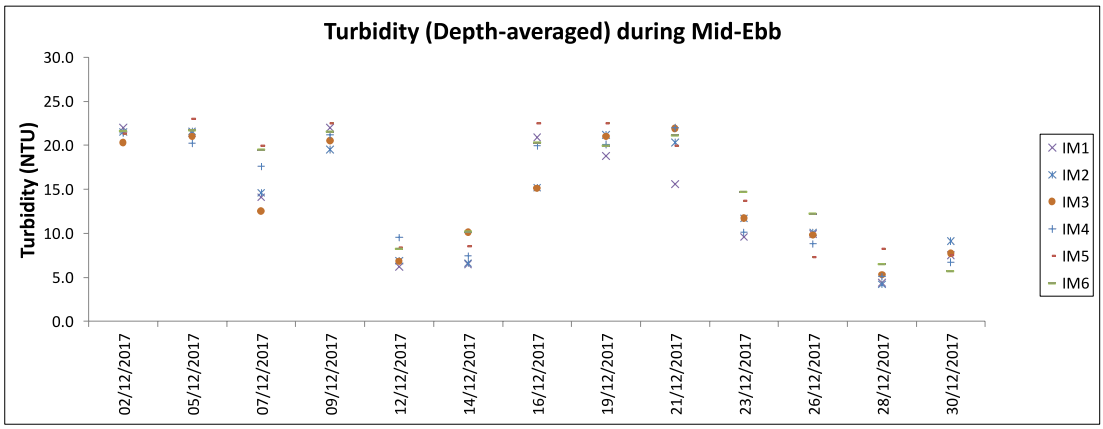
DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

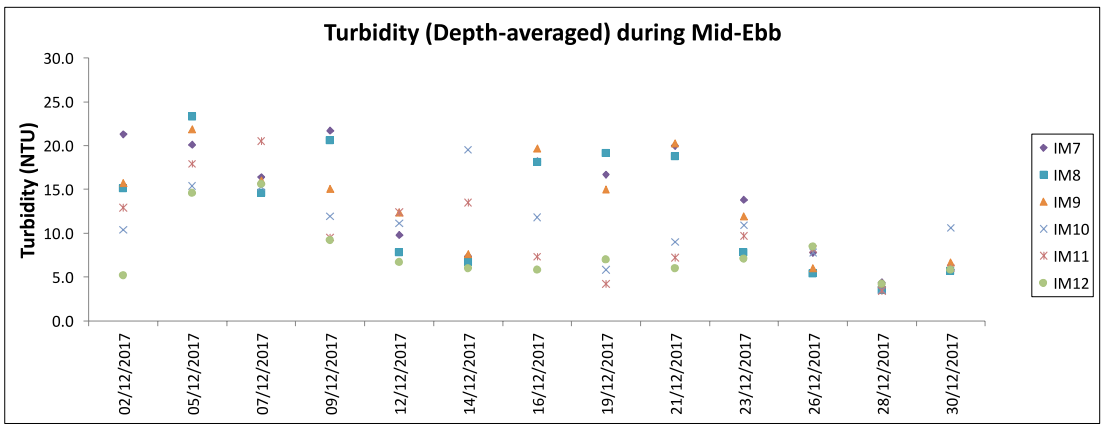
Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 30 December 17 during Mid-Flood Tide

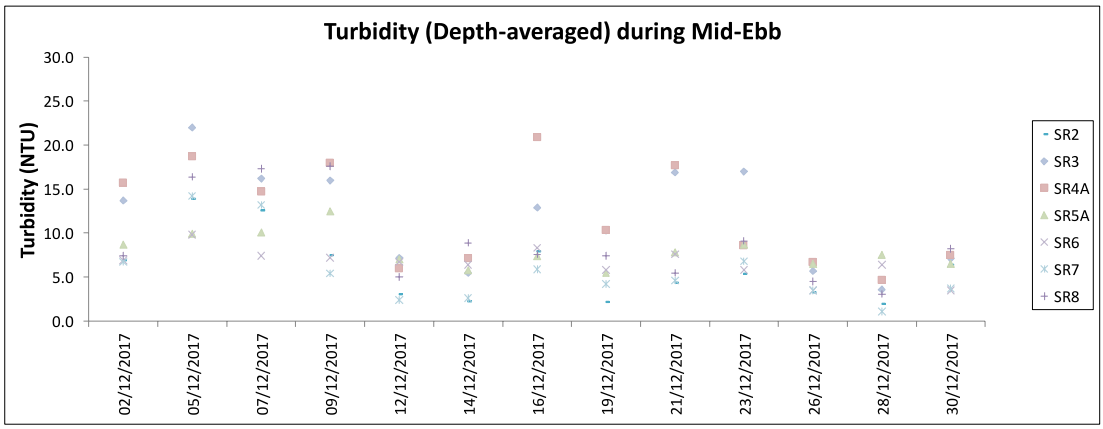
Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Sunny	Moderate	15:03	7.0	Surface	1.0	0.2	307	18.9	18.9	8.1	8.1	27.6	27.6	102.3	102.3	8.1	8.1	5.8	6.4	7	8	73	75	822089	808815	<0.2	<0.2	2.5	2.4
						1.0	0.2	311	18.9		8.1		27.6		102.3		8.1		5.8		7		73				<0.2		2.6	
					Middle	3.5	0.2	306	18.8	18.8	8.1	8.1	27.5	27.5	101.7	101.7	8.0		7.5		8		75				<0.2		2.3	
						3.5	0.2	316	18.8		8.1		27.5		101.7		8.0		7.5		9		75				<0.2		2.5	
					Bottom	6.0	0.1	301	18.8	18.8	8.1	8.1	27.4	27.4	101.1	101.1	8.0	8.0	5.9		7		76				<0.2		2.3	
						6.0	0.1	306	18.8		8.1		27.4		101.1		8.0		5.9		8		76				<0.2		2.4	
IM10	Sunny	Moderate	15:11	7.6	Surface	1.0	0.4	304	18.8	18.8	8.1	8.1	27.9	27.9	101.1	101.1	8.0	8.0	4.9	6.5	7	8	73	75	822218	809822	<0.2	<0.2	2.0	2.0
						1.0	0.4	318	18.8		8.1		27.9		101.1		8.0		4.9		8		73				<0.2		2.0	
					Middle	3.8	0.4	305	18.5	18.5	8.2	8.2	27.9	27.9	99.6	99.6	7.9		6.8		7		75				<0.2		2.0	
						3.8	0.4	310	18.5		8.2		27.9		99.6		7.9		6.8		6		75				<0.2		2.1	
					Bottom	6.6	0.3	309	18.5	18.5	8.2	8.2	27.9	27.9	99.4	99.4	7.9	7.9	7.9		9		76				<0.2		2.0	
						6.6	0.4	324	18.5		8.2		27.9		99.4		7.9		7.9		8		76				<0.2		2.1	
IM11	Sunny	Moderate	15:20	7.4	Surface	1.0	0.3	284	19.0	19.0	8.1	8.1	27.9	27.9	102.3	102.3	8.0	8.0	6.2	9.3	10	11	73	75	821512	810533	<0.2	<0.2	2.2	2.1
						1.0	0.3	310	19.0		8.1		27.9		102.3		8.0		6.2		11		74				<0.2		2.3	
					Middle	3.7	0.3	284	18.8	18.8	8.2	8.2	28.3	28.3	100.8	100.8	7.9		9.3		11		76				<0.2		2.1	
						3.7	0.3	294	18.8		8.2		28.3		100.8		7.9		9.3		10		76				<0.2		2.1	
					Bottom	6.4	0.3	282	18.8	18.8	8.2	8.2	28.2	28.2	100.4	100.4	7.9	7.9	12.3		11		76				<0.2		2.1	
						6.4	0.3	309	18.8		8.2		28.2		100.4		7.9		12.3		10		76				<0.2		1.8	
IM12	Sunny	Moderate	15:29	8.4	Surface	1.0	0.4	284	18.8	18.8	8.2	8.2	27.9	27.9	101.3	101.3	8.0	8.0	5.5	7.4	8	10	73	74	821165	811548	<0.2	<0.2	2.3	2.0
						1.0	0.4	308	18.8		8.2		27.9		101.3		8.0		5.5		8		73				<0.2		2.1	
					Middle	4.2	0.5	281	18.6	18.6	8.2	8.2	28.3	28.3	100.1	100.1	7.9		7.2		10		74				<0.2		2.2	
						4.2	0.5	291	18.6		8.2		28.3		100.1		7.9		7.2		10		74				<0.2		2.2	
					Bottom	7.4	0.4	282	18.5	18.5	8.2	8.2	28.6	28.6	99.5	99.5	7.9	7.9	9.4		10		76				<0.2		1.7	
						7.4	0.5	291	18.5		8.2		28.6		99.5		7.9		9.4		12		76				<0.2		1.6	
SR2	Sunny	Moderate	15:55	4.1	Surface	1.0	0.1	10	18.8	18.8	8.2	8.2	28.3	28.3	101.2	101.2	8.0	8.0	5.7	6.9	6	7	73	74	821479	814161	<0.2	<0.2	1.3	1.4
						1.0	0.1	10	18.8		8.2		28.3		101.2		8.0		5.7		8		73				<0.2		1.3	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.1	31	18.8	18.8	8.1	8.1	28.4	28.4	100.1	100.1	7.9	7.9	8.0		7		75				<0.2		1.4	
						3.1	0.1	33	18.8		8.1		28.4		100.1		7.9		8.0		8		76				<0.2		1.4	
SR3	Sunny	Moderate	14:51	9.0	Surface	1.0	0.1	185	19.0	19.0	8.1	8.1	26.8	26.8	101.4	101.4	8.0	8.0	3.5	3.9	3	6	-	-	822140	807558	-	-	-	-
						1.0	0.1	186	19.0		8.1		26.8		101.4		8.0		3.5		5		-				-		-	
					Middle	4.5	0.1	196	18.7	18.7	8.1	8.1	27.1	27.1	100.3	100.3	8.0		3.8		6		-				-		-	
						4.5	0.1	197	18.7		8.1		27.1		100.3		8.0		3.8		5		-				-		-	
					Bottom	8.0	0.1	252	18.6	18.6	8.1	8.1	27.4	27.4	99.8	99.8	7.9	7.9	4.4		7		-				-		-	
						8.0	0.1	256	18.6		8.1		27.4		99.8		7.9		4.4		8		-				-		-	
SR4A	Misty	Moderate	15:49	9.1	Surface	1.0	0.2	275	18.6	18.6	8.1	8.1	31.1	31.1	101.0	101.0	7.9	7.8	6.4	6.1	9	10	-	-	817180	807833	-	-	-	-
						1.0	0.2	286	18.6		8.1		31.1		101.0		7.8		6.4		9		-				-		-	
					Middle	4.6	0.2	240	18.3	18.3	8.1	8.1	31.1	31.1	99.5	99.5	7.8		5.6		10		-				-		-	
						4.6	0.2	250	18.3		8.1		31.1		99.5		7.8		5.6		12		-				-		-	
					Bottom	8.1	0.2	245	18.3	18.3	8.1	8.1	31.1	31.1	99.1	99.1	7.8	7.8	6.3		10		-				-		-	
						8.1	0.2	253	18.3		8.1		31.1		99.1		7.8		6.4		10		-				-		-	
SR5A	Misty	Moderate	16:06	5.6	Surface	1.0	0.3	279	18.8	18.8	8.1	8.1	31.3	31.3	103.5	103.5	8.0	8.0	6.5	6.7	7	9	-	-	816588	810705	-	-	-	-
						1.0	0.3	290	18.8		8.1		31.3		103.5		8.0		6.5		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.6	0.2	279	18.8	18.8	8.1	8.1	31.3	31.3	101.4	101.4	7.8	7.8	6.9		11		-				-		-	
						4.6	0.2	282	18.8		8.1		31.3		101.4		7.8		7.0		9		-				-		-	
SR6	Misty	Moderate	16:29	4.4	Surface	1.0	0.1	228	18.7	18.7	8.2	8.2	31.0	31.0	104.4	104.4	8.1	8.1	5.6	5.5	9	8	-	-	817882	814679	-	-	-	-
						1.0	0.1	243	18.7		8.2		31.0		104.4		8.1		5.7		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.1	236	18.8	18.8	8.2	8.2	31.0	31.0	102.7	102.7	8.0	8.0	5.4		8		-				-		-	
						3.4	0.1	251	18.8		8.2		31.0		102.6		8.0		5.4		7		-				-		-	
SR7	Sunny	Moderate	16:54	17.6	Surface	1.0	0.1	275	18.7	18.7	8.1	8.1	29.0	29.0	93.2	93.2	7.3	7.3	3.0	3.3	4	6	-	-	823623	823734	-	-	-	-
						1.0	0.1	279	18.7		8.1		29.0		93.2		7.3		3.0		4		-				-		-	
					Middle	8.8	0.1	34	18.7	18.7	8.1	8.1	29.0	29.0	92.9	92.9	7.3		3.4		5		-				-		-	
						8.8	0.1	36	18.7		8.1		29.0		92.9		7.3		3.4		6		-				-		-	
					Bottom	16.6	0.1	56	18.7	18.7	8.1	8.1	28.9	28.9	93.5	93.5	7.4	7.4	3.6		10		-				-		-	
						16.6	0.1	60	18.7		8.1		28.9		93.5		7.4		3.6		8		-				-		-	
SR8	Sunny	Moderate	15:37	3.5	Surface	1.0	-	-	19.2	19.2	8.1	8.1	27.4	27.4	103.1	103.1	8.1	8.1	5.8	6.2	7	6	-	-	820246	811418	-	-	-	-
						1.0	-	-	19.2		8.1		27.4		103.1		8.1		5.9		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.5	-	-	19.2	19.2	8.1	8.1	27.0	27.0	101.2	101.2	8.0	8.0	6.6		6		-				-		-	
						2.5	-	-	19.2		8.1		27.0		101.2		8.0		6.6		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**

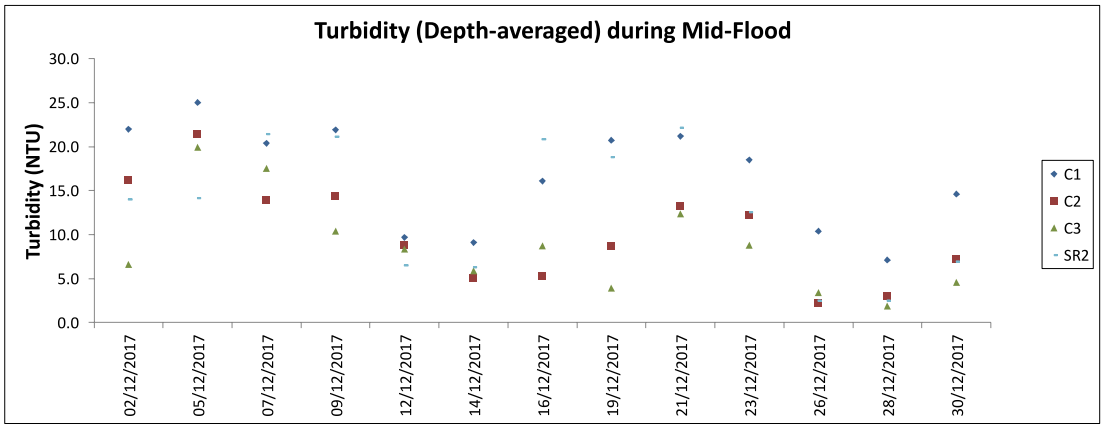


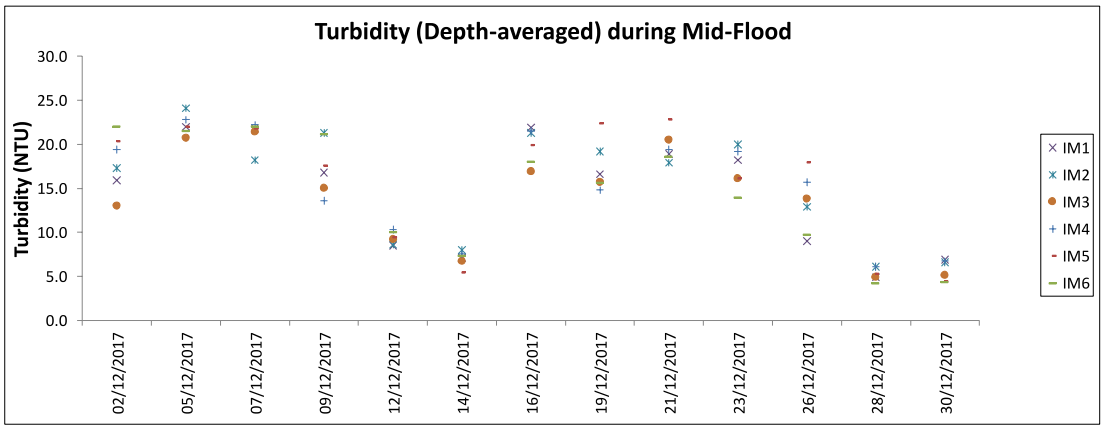


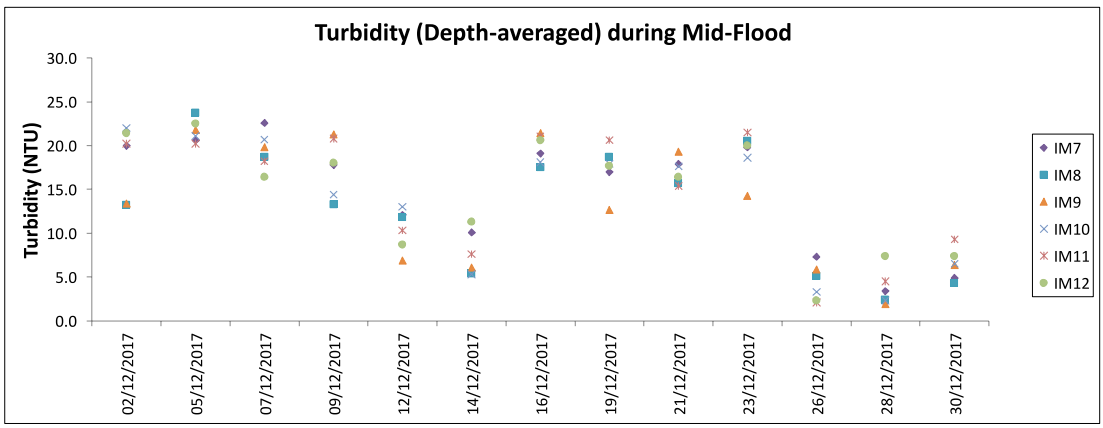


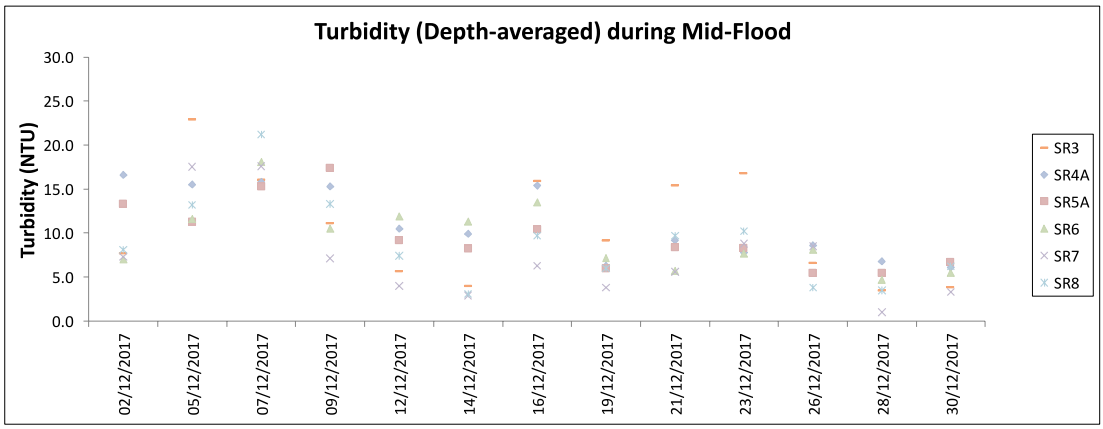


Note: The Action and Limit Level of turbidity can be referred to Table 4.2 of the monthly EM&A report.

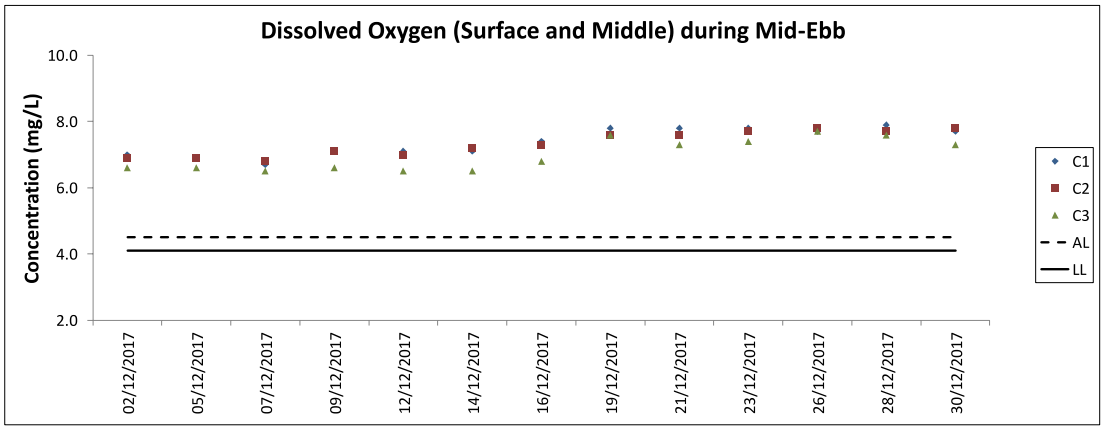








Note: The Action and Limit Level of turbidity can be referred to Table 4.2 of the monthly EM&A report.


Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
02/12/2017
05/12/2017
07/12/2017
09/12/2017
12/12/2017
14/12/2017
16/12/2017
19/12/2017
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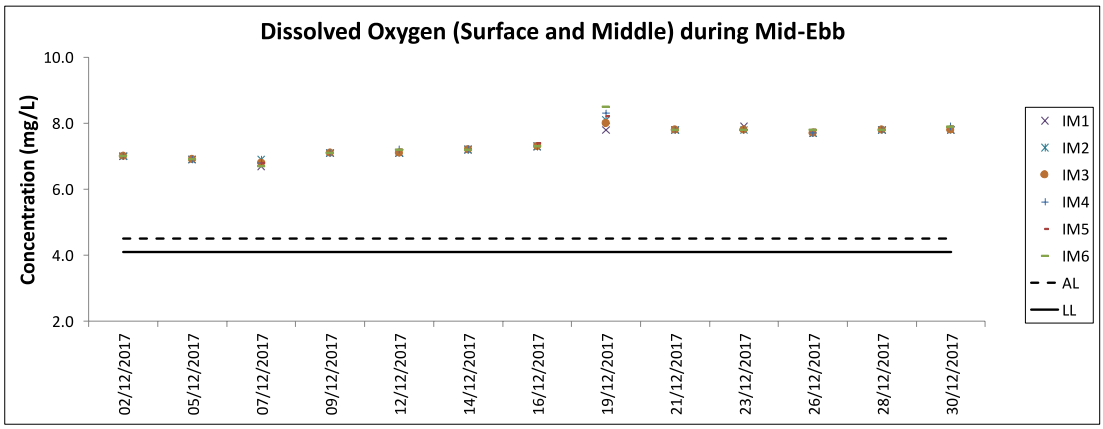
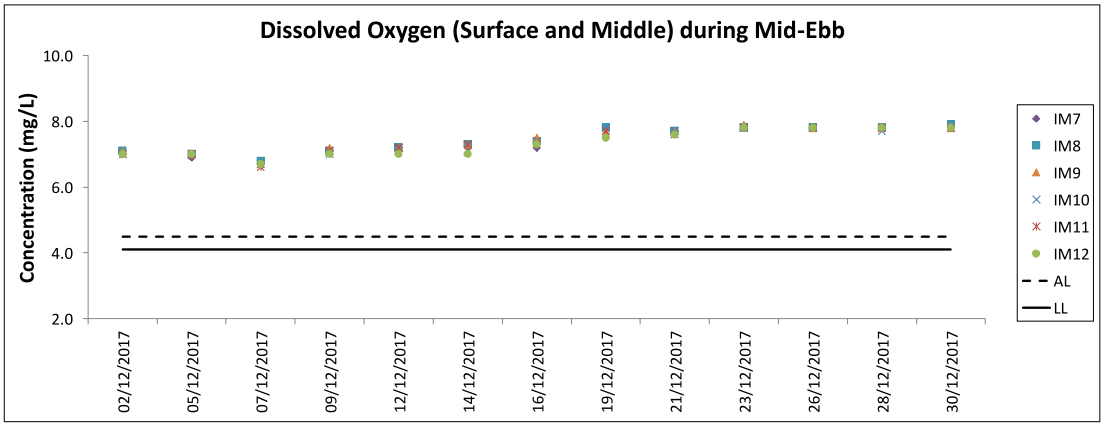
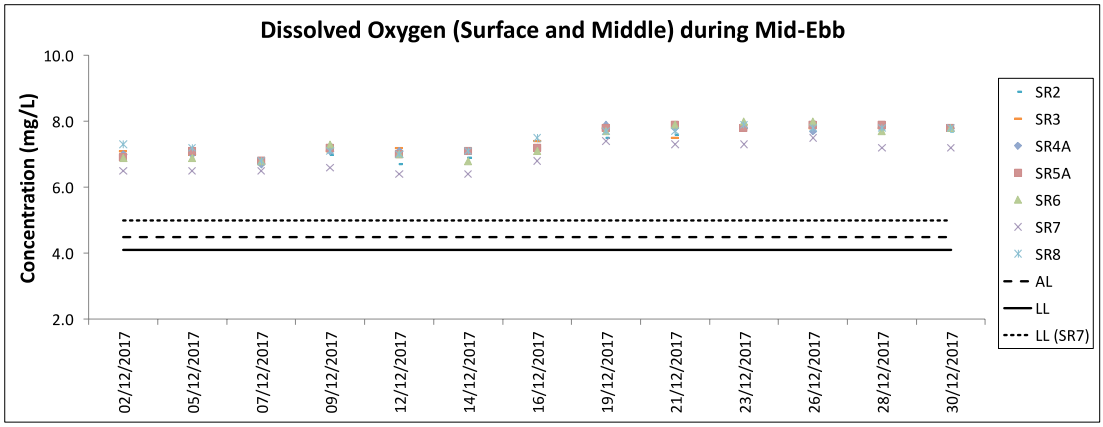
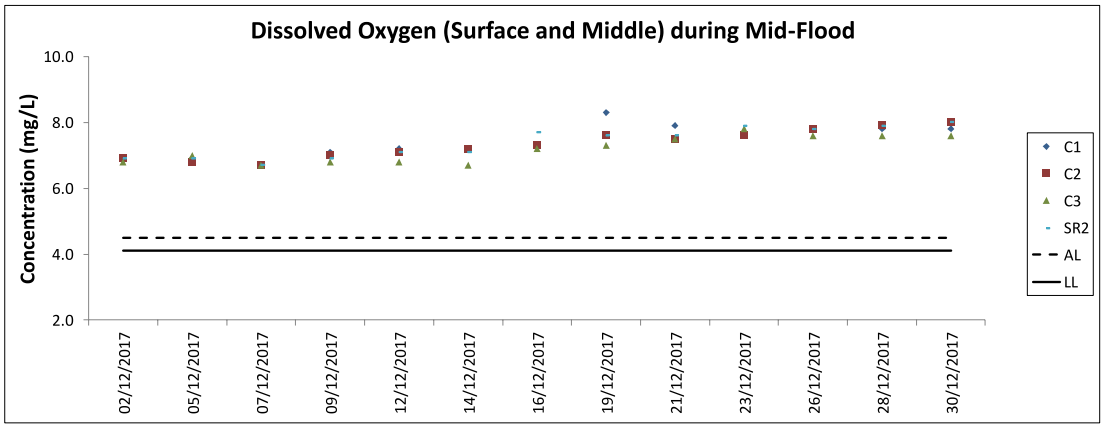
23/12/2017
26/12/2017
28/12/2017
30/12/2017
C1
C2
C3
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
02/12/2017
05/12/2017
07/12/2017
09/12/2017
12/12/2017
14/12/2017
16/12/2017
19/12/2017
21/12/2017
23/12/2017
26/12/2017
28/12/2017
30/12/2017
IM1
IM2
IM3
IM4
IM5
IM6
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
02/12/2017
05/12/2017
07/12/2017
09/12/2017
12/12/2017
14/12/2017
16/12/2017
19/12/2017
21/12/2017
23/12/2017
26/12/2017
28/12/2017
30/12/2017
IM7
IM8
IM9
IM10
IM11
IM12
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
02/12/2017
05/12/2017
07/12/2017
09/12/2017
12/12/2017
14/12/2017
16/12/2017
19/12/2017
21/12/2017
23/12/2017
26/12/2017
28/12/2017
30/12/2017
SR2
SR3
SR4A
SR5A
SR6
SR7
SR8
AL
LL
LL (SR7)


Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
02/12/2017
05/12/2017
07/12/2017
09/12/2017
12/12/2017
14/12/2017
16/12/2017
19/12/2017
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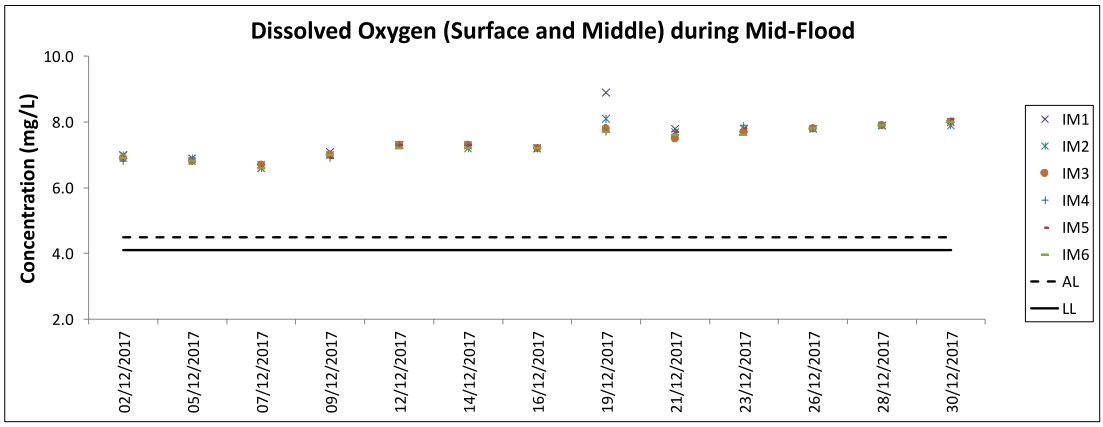
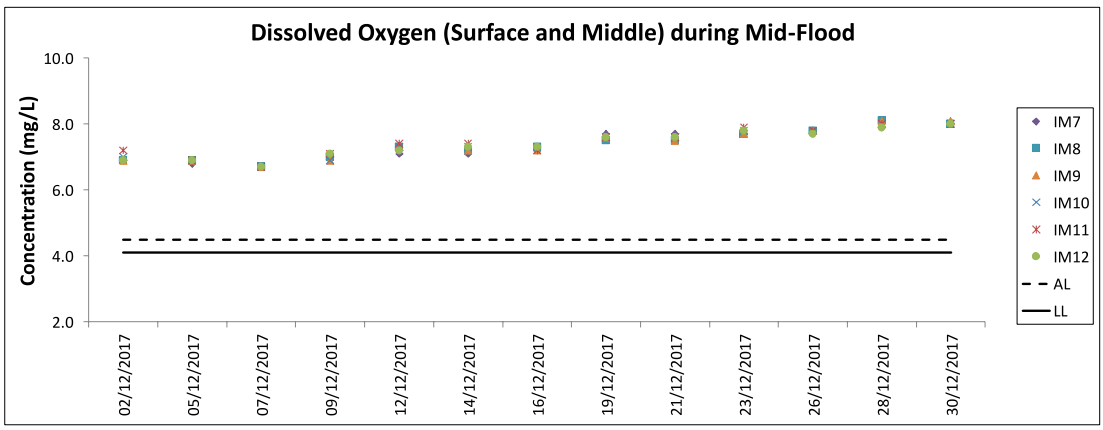
C1
C2
C3
SR2
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
02/12/2017
05/12/2017
07/12/2017
09/12/2017
12/12/2017
14/12/2017
16/12/2017
19/12/2017
21/12/2017
23/12/2017
26/12/2017
28/12/2017
30/12/2017
IM1
IM2
IM3
IM4
IM5
IM6
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
02/12/2017
05/12/2017
07/12/2017
09/12/2017
12/12/2017
14/12/2017
16/12/2017
19/12/2017
21/12/2017
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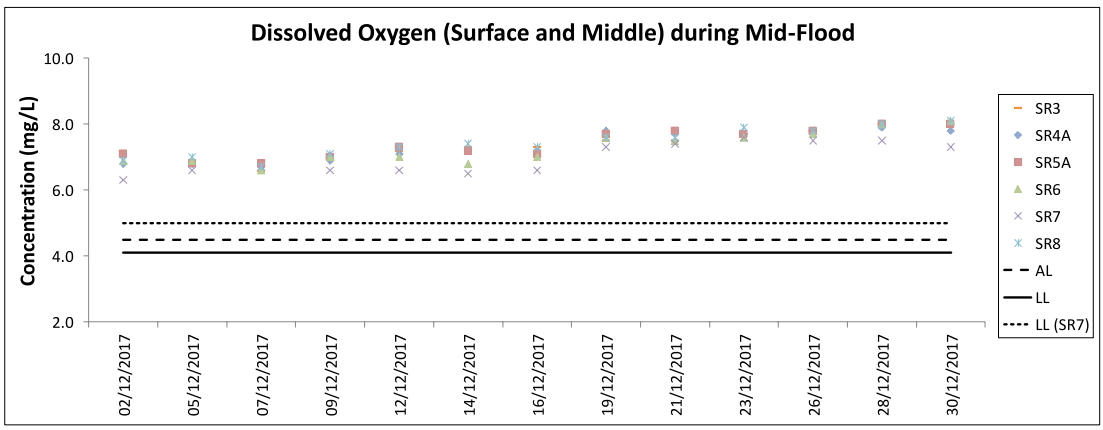
28/12/2017
30/12/2017
IM7
IM8
IM9
IM10
IM11
IM12
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
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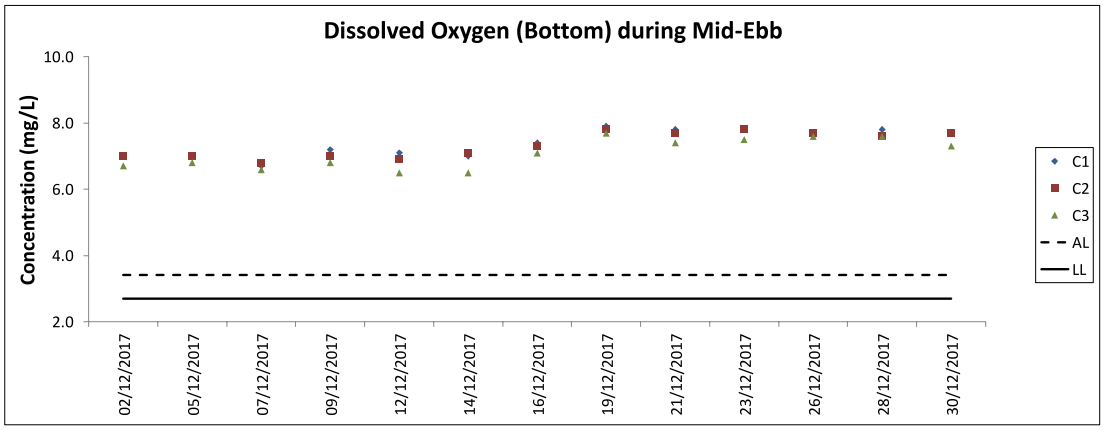
8.0
6.0
4.0
2.0
02/12/2017
05/12/2017
07/12/2017
09/12/2017
12/12/2017
14/12/2017
16/12/2017
19/12/2017
21/12/2017
23/12/2017
26/12/2017
28/12/2017
30/12/2017
SR3
SR4A
SR5A
SR6
SR7
SR8
AL
LL
LL (SR7)


Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
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6.0
4.0
2.0
02/12/2017
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16/12/2017
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23/12/2017
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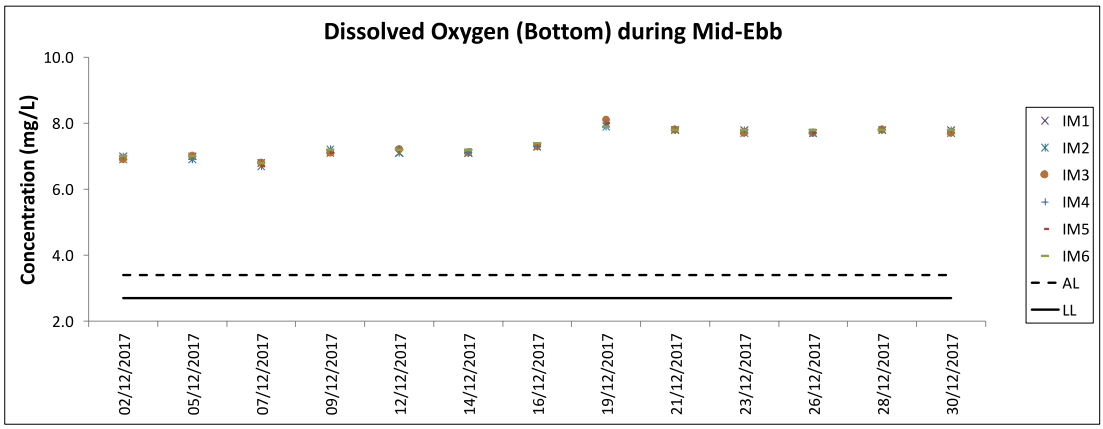
28/12/2017
30/12/2017
C1
C2
C3
AL
LL


Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
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6.0
4.0
2.0
02/12/2017
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07/12/2017
09/12/2017
12/12/2017
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16/12/2017
19/12/2017
21/12/2017
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IM1
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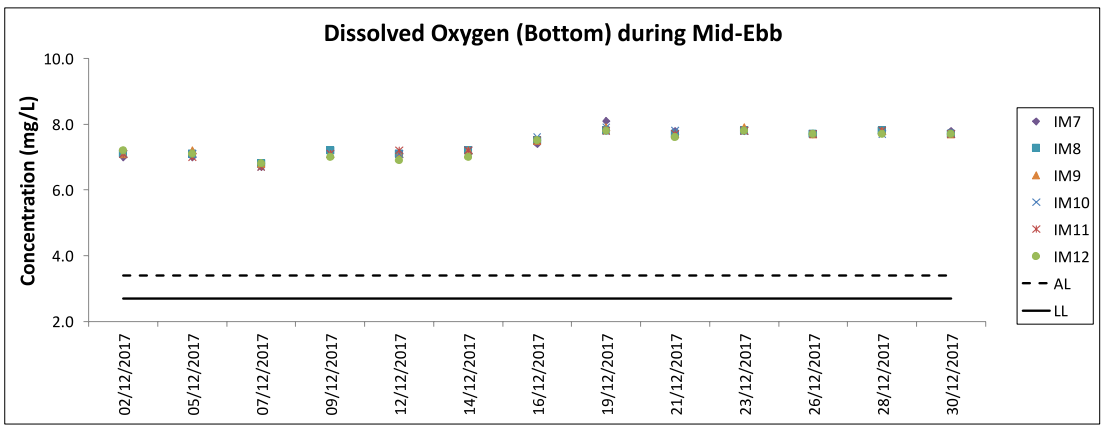
IM3
IM4
IM5
IM6
AL
LL


Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
10.0
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6.0
4.0
2.0
02/12/2017
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07/12/2017
09/12/2017
12/12/2017
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21/12/2017
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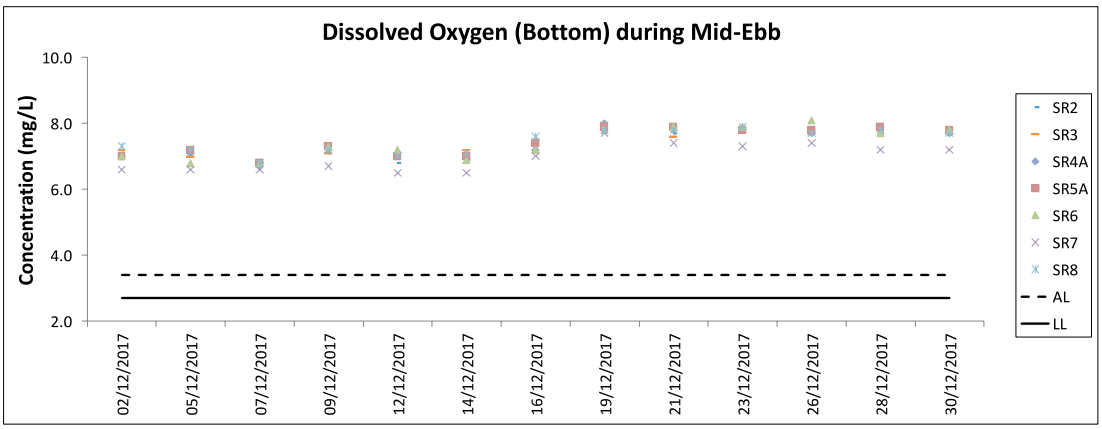
IM7
IM8
IM9
IM10
IM11
IM12
AL
LL


Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
02/12/2017
05/12/2017
07/12/2017
09/12/2017
12/12/2017
14/12/2017
16/12/2017
19/12/2017
21/12/2017
23/12/2017
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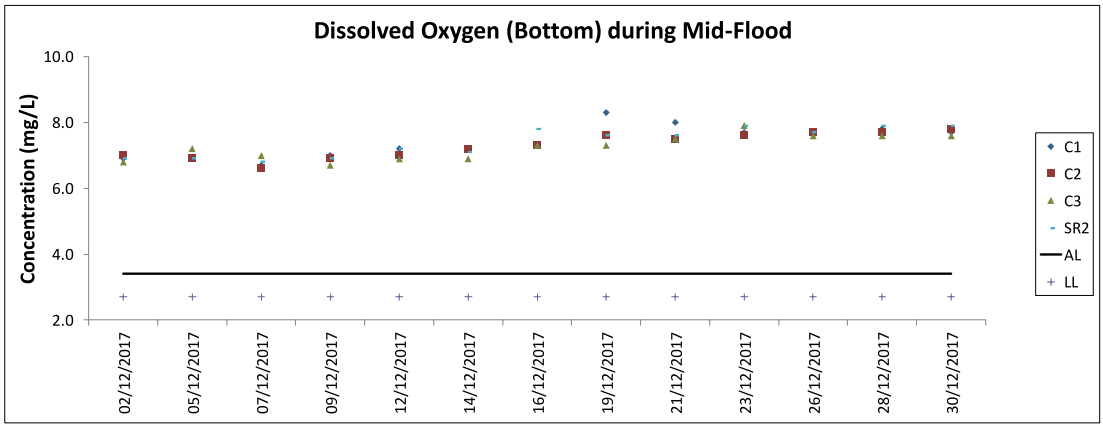
SR2
SR3
SR4A
SR5A
SR6
SR7
SR8
AL
LL


Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
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6.0
4.0
2.0
02/12/2017
05/12/2017
07/12/2017
09/12/2017
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16/12/2017
19/12/2017
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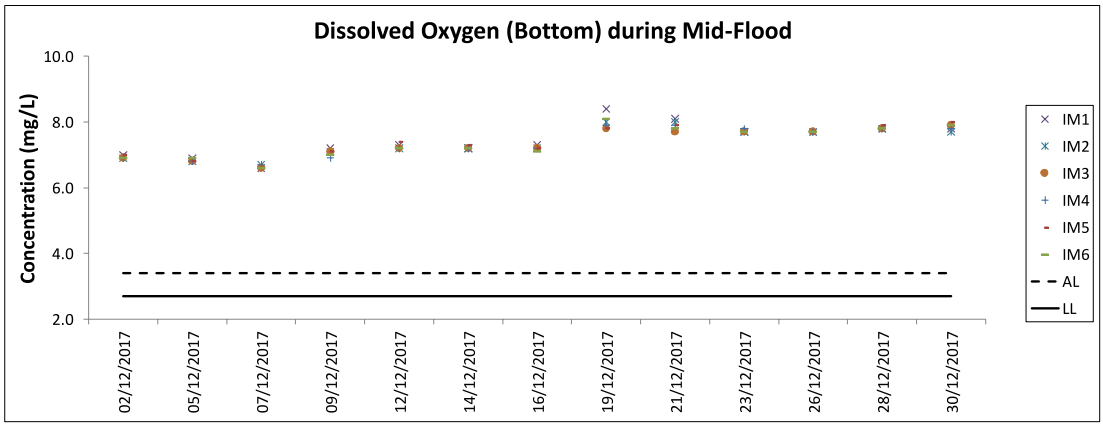
C1
C2
C3
SR2
AL
LL


Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
02/12/2017
05/12/2017
07/12/2017
09/12/2017
12/12/2017
14/12/2017
16/12/2017
19/12/2017
21/12/2017
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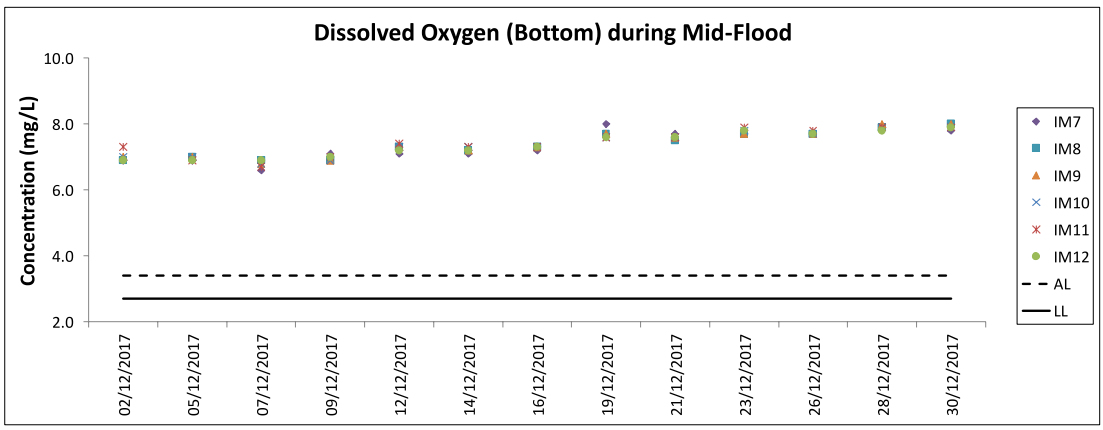
28/12/2017
30/12/2017
IM1
IM2
IM3
IM4
IM5
IM6
AL
LL


Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
02/12/2017
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07/12/2017
09/12/2017
12/12/2017
14/12/2017
16/12/2017
19/12/2017
21/12/2017
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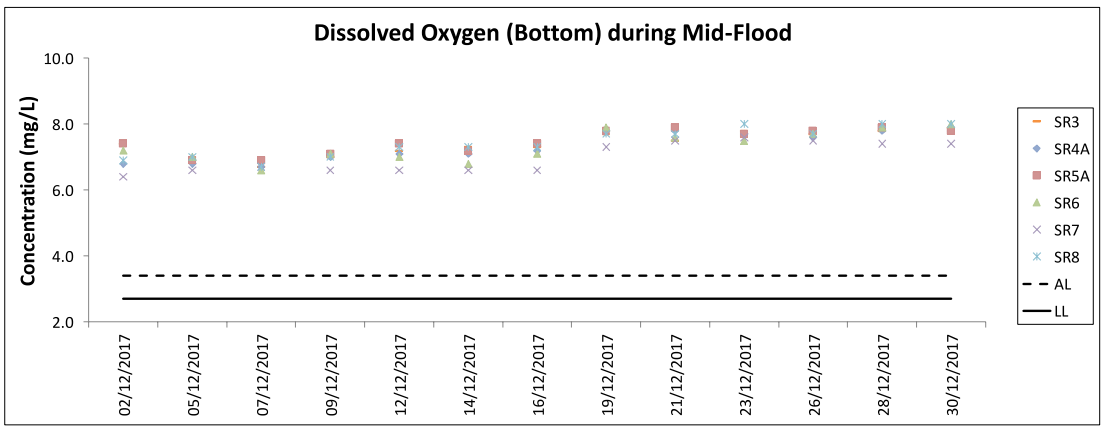
IM10
IM11
IM12
AL
LL


Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
02/12/2017
05/12/2017
07/12/2017
09/12/2017
12/12/2017
14/12/2017
16/12/2017
19/12/2017
21/12/2017
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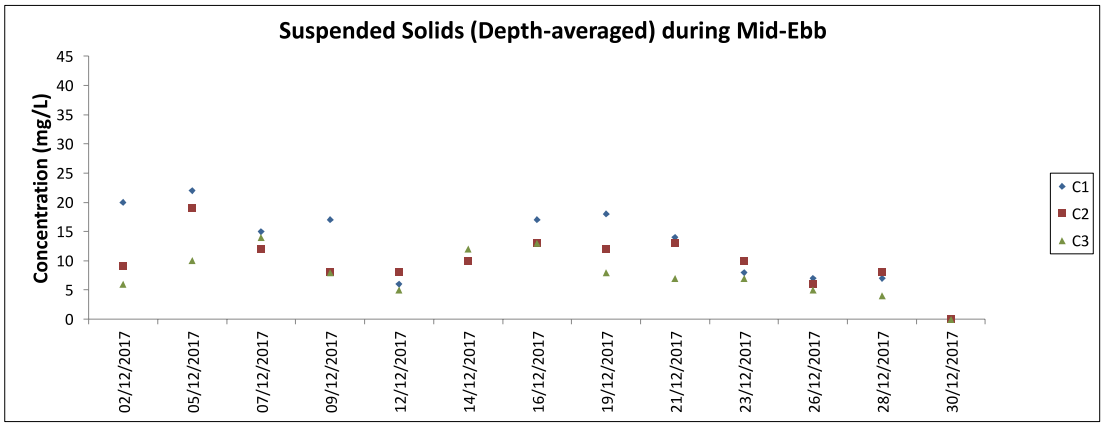
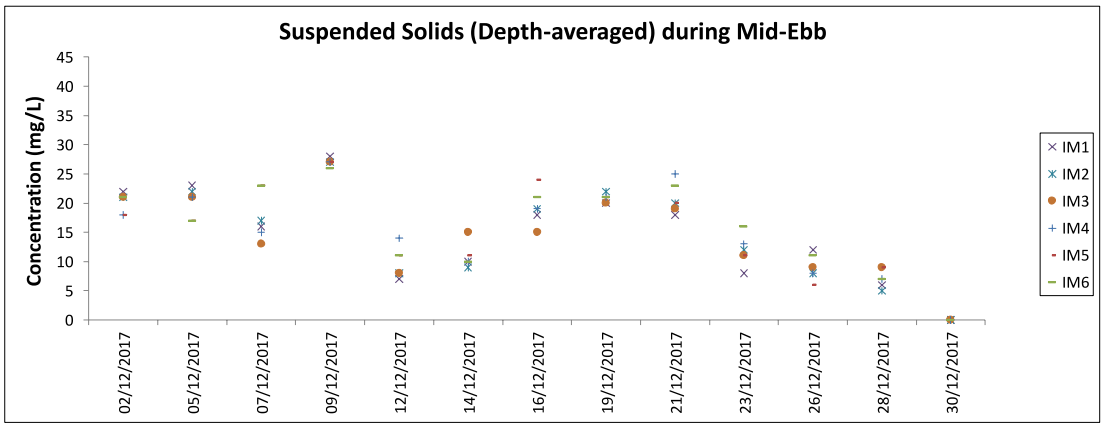
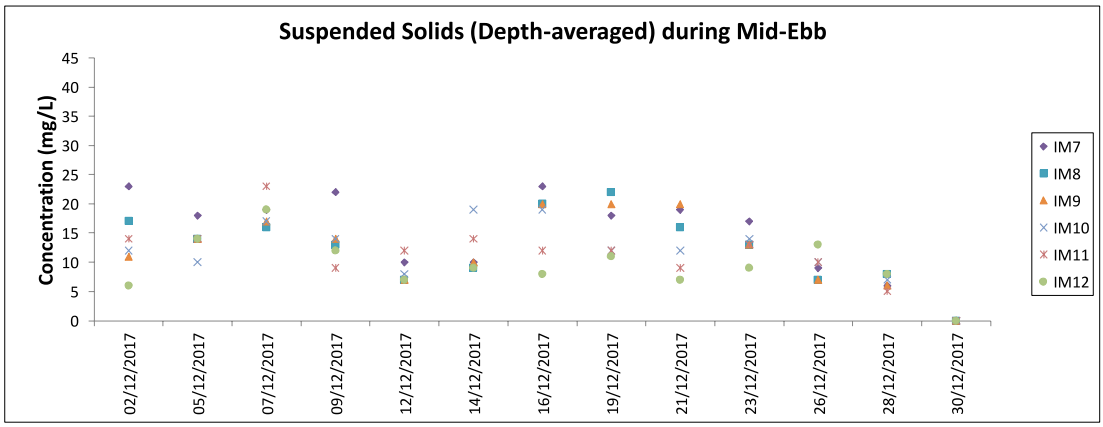
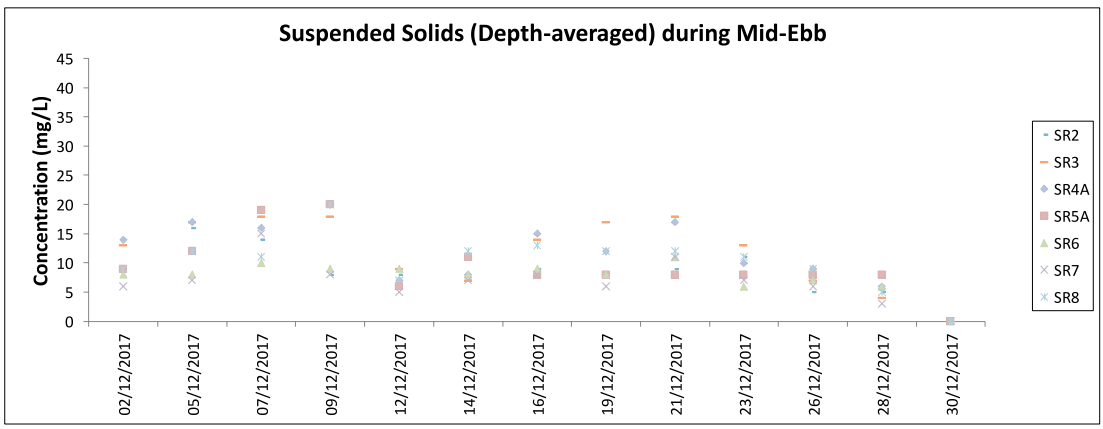
SR5A
SR6
SR7
SR8
AL
LL

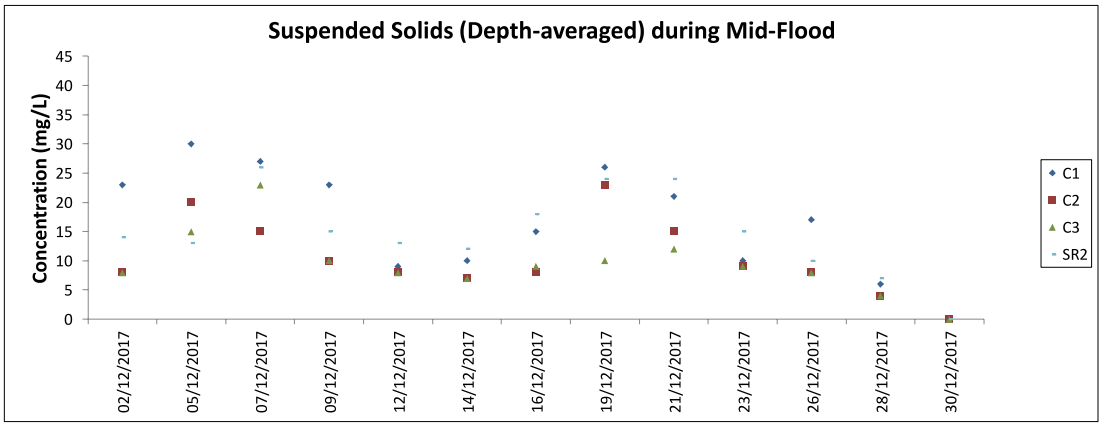


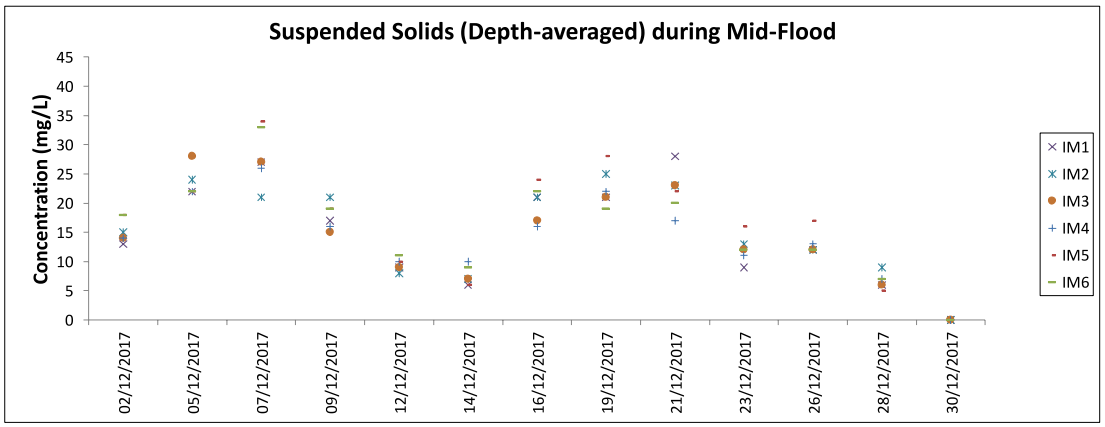


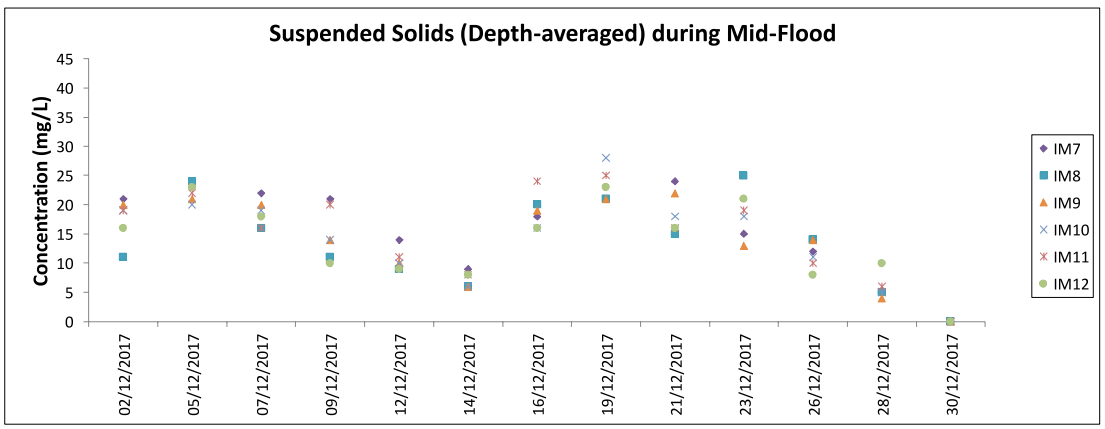


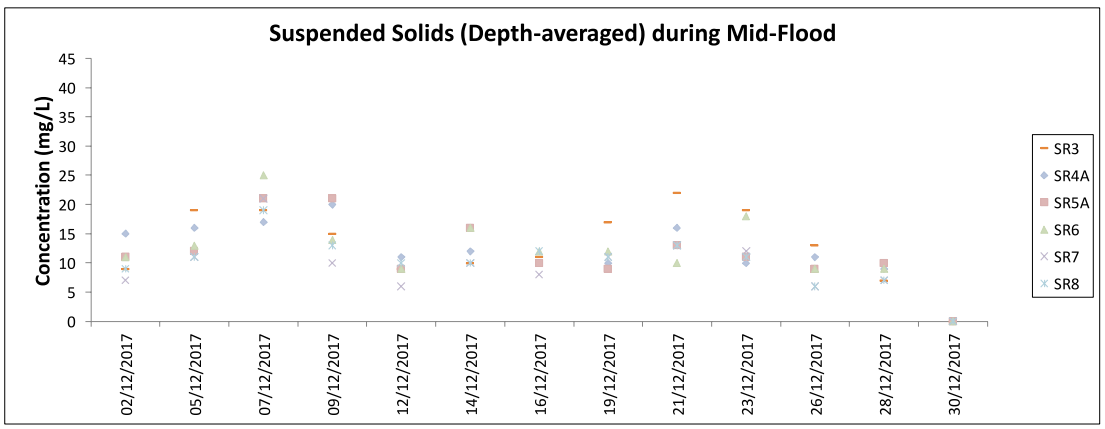


Note: The Action and Limit Level of suspended solids can be referred to Table 4.2 of the monthly EM&A report.

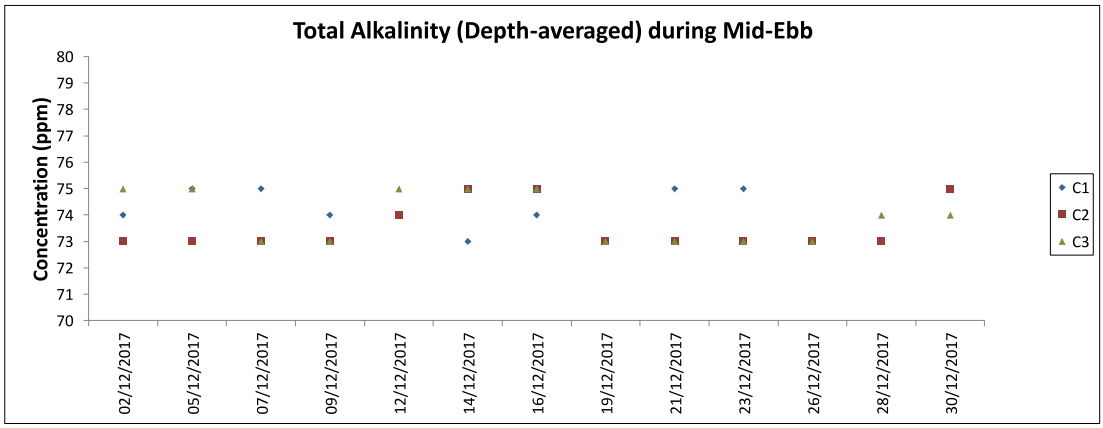


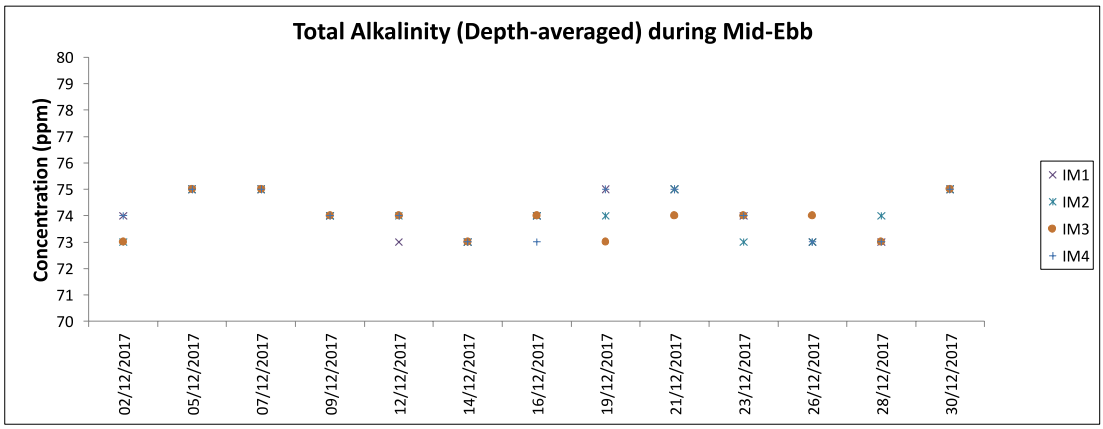


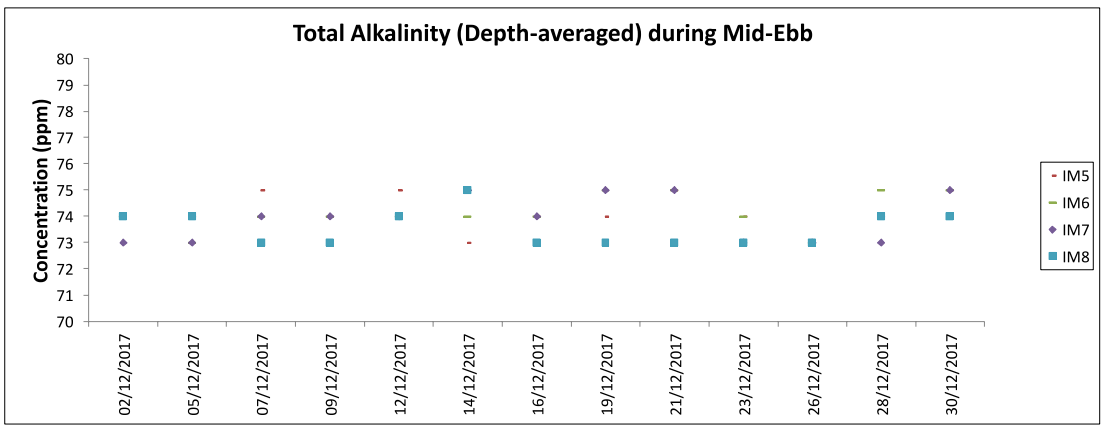


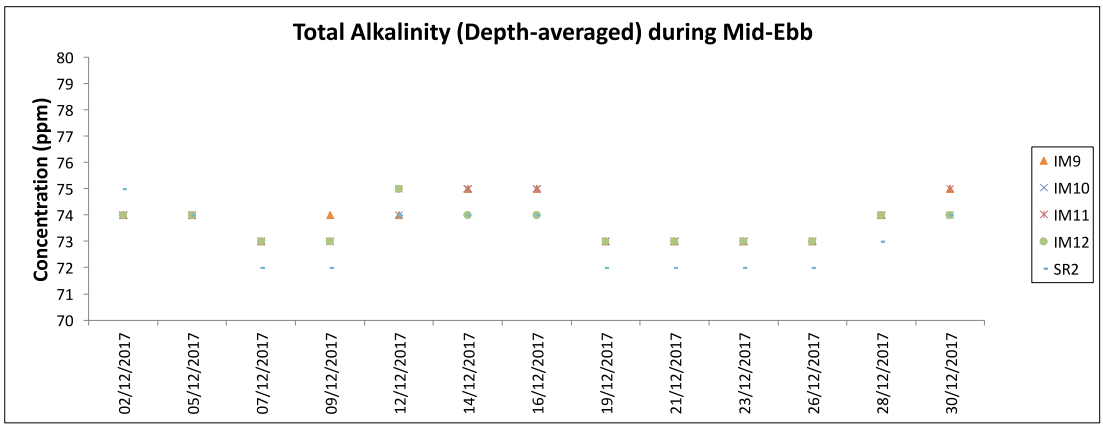


Note: The Action and Limit Level of suspended solids can be referred to Table 4.2 of the monthly EM&A report.

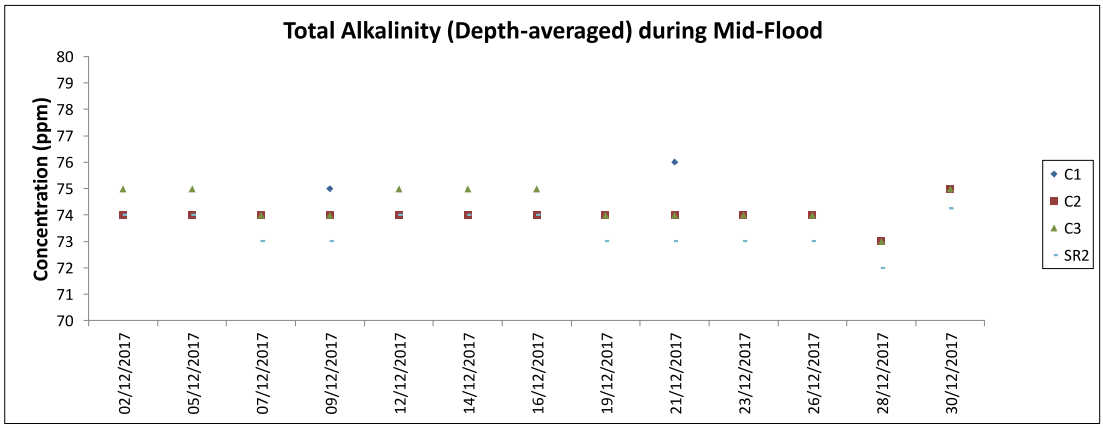


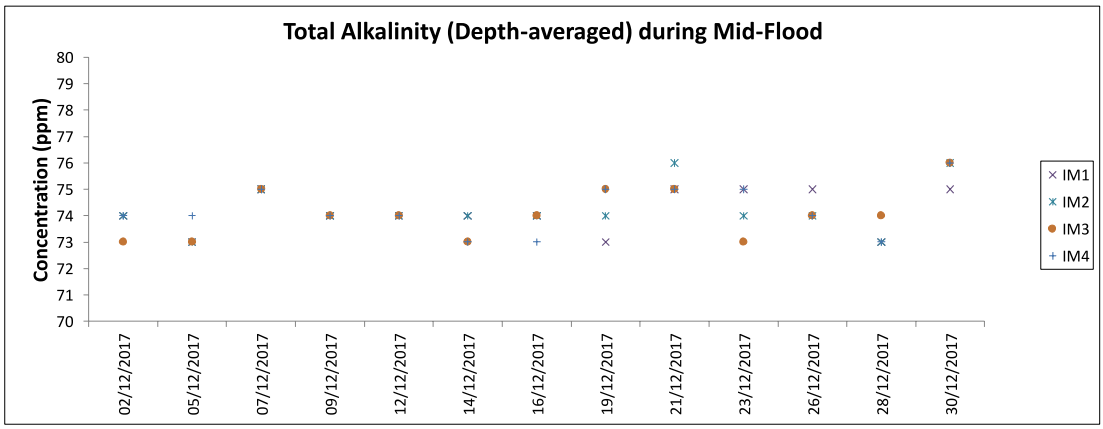


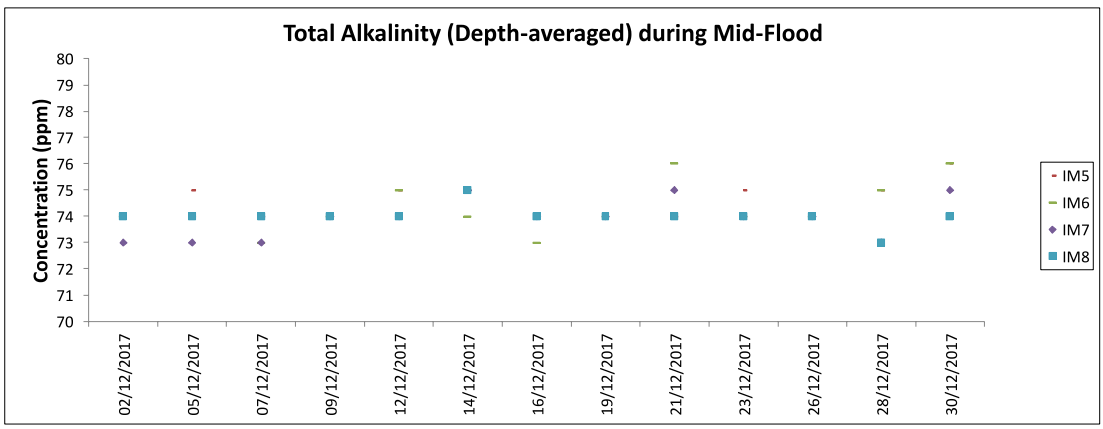


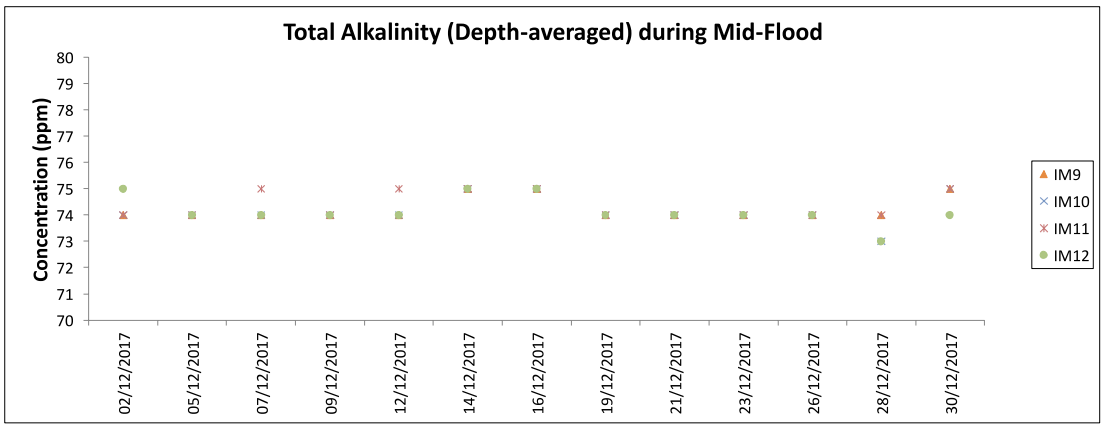


Note: The Action and Limit Level of total alkalinity can be referred to Table 4.2 of the monthly EM&A report.

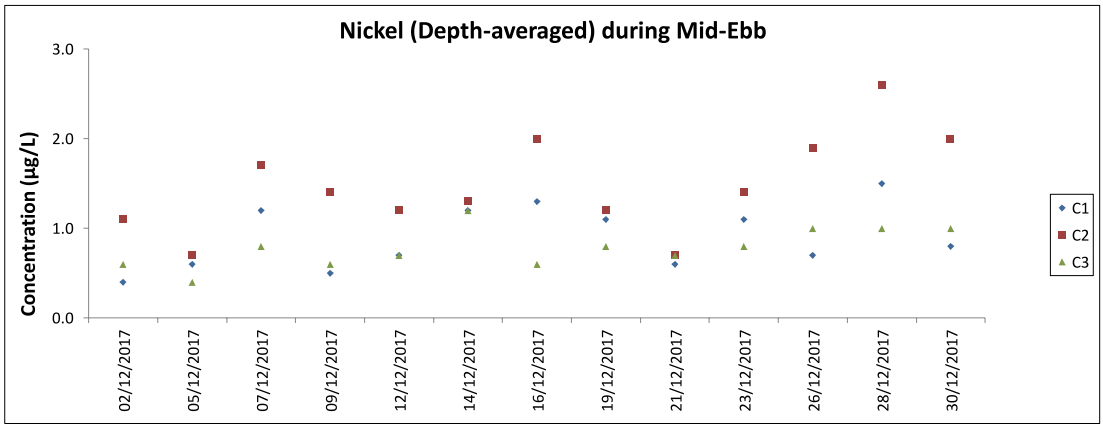


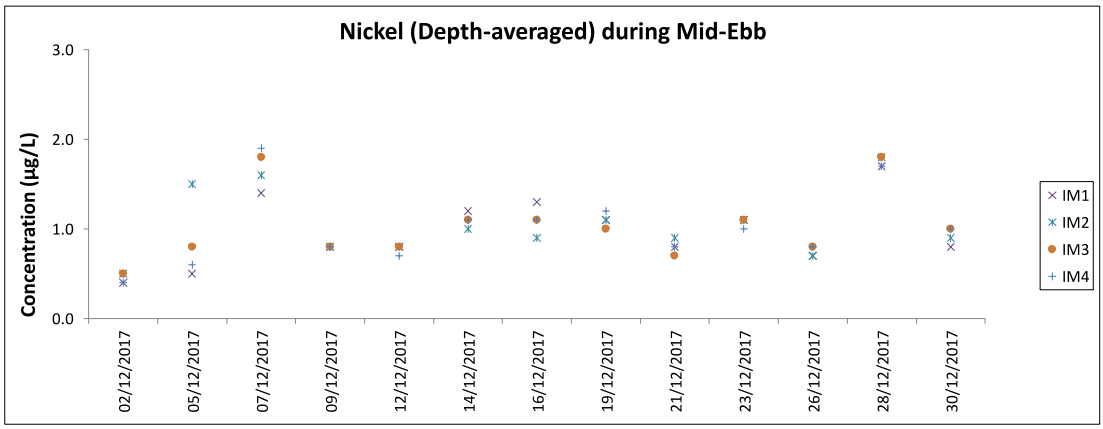


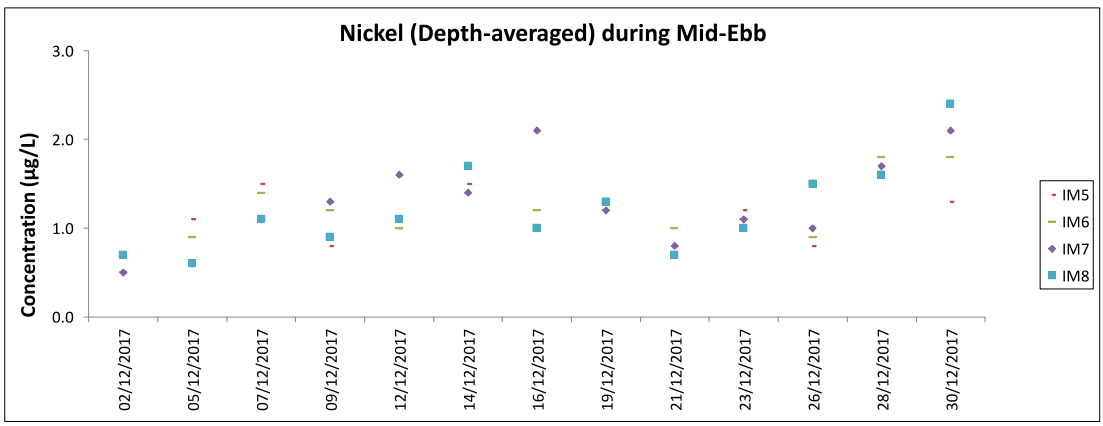


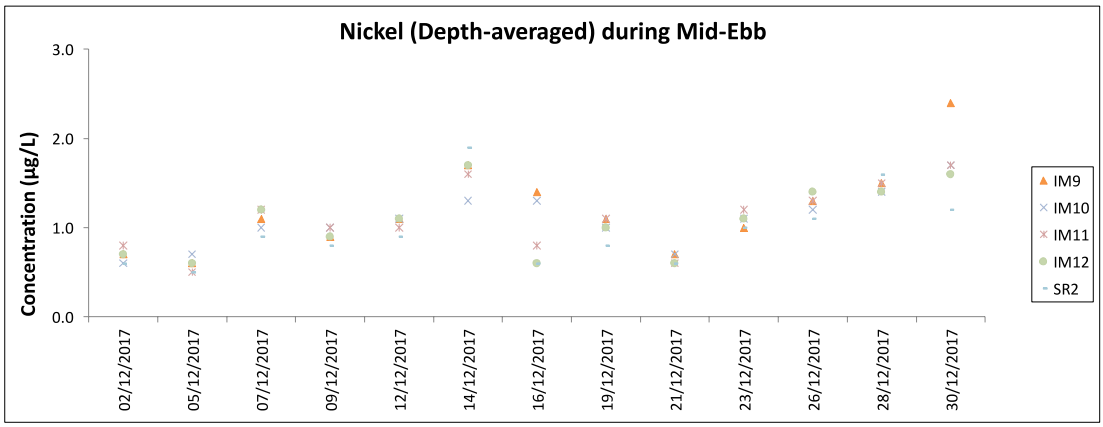


Note: The Action and Limit Level of total alkalinity can be referred to Table 4.2 of the monthly EM&A report.

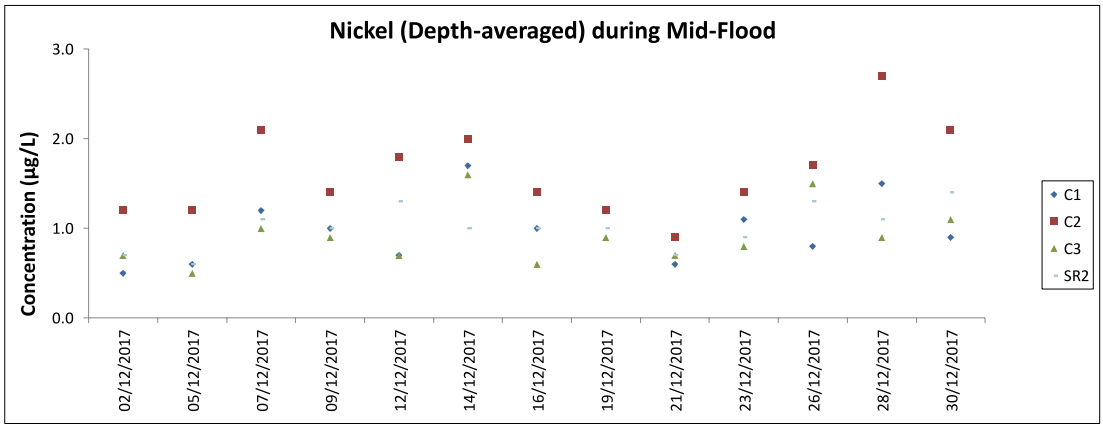


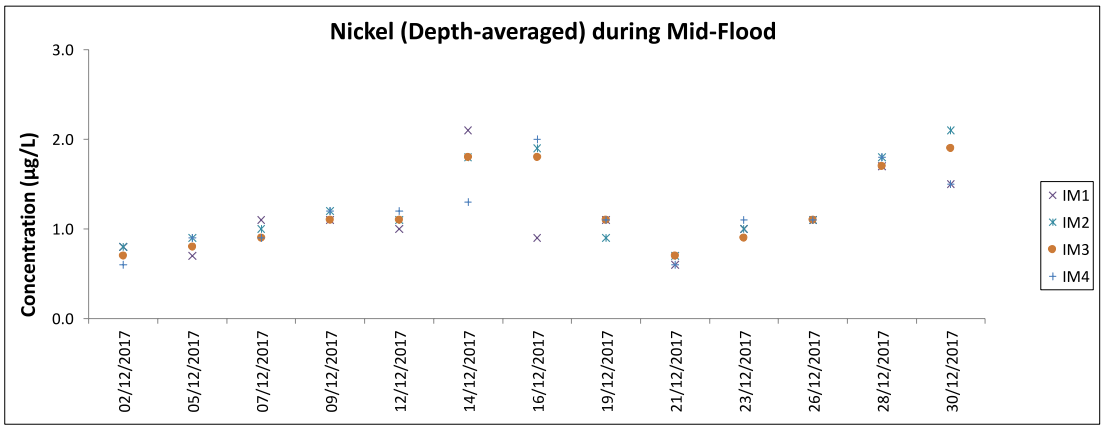


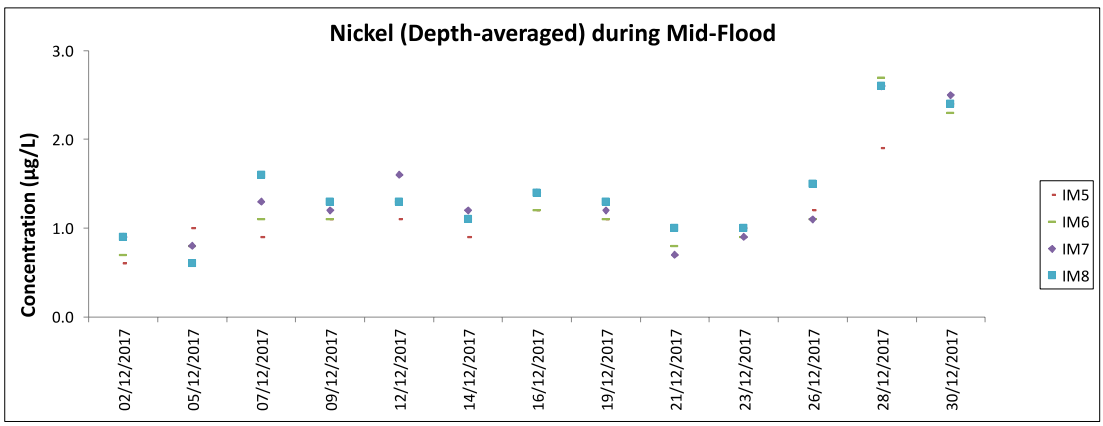


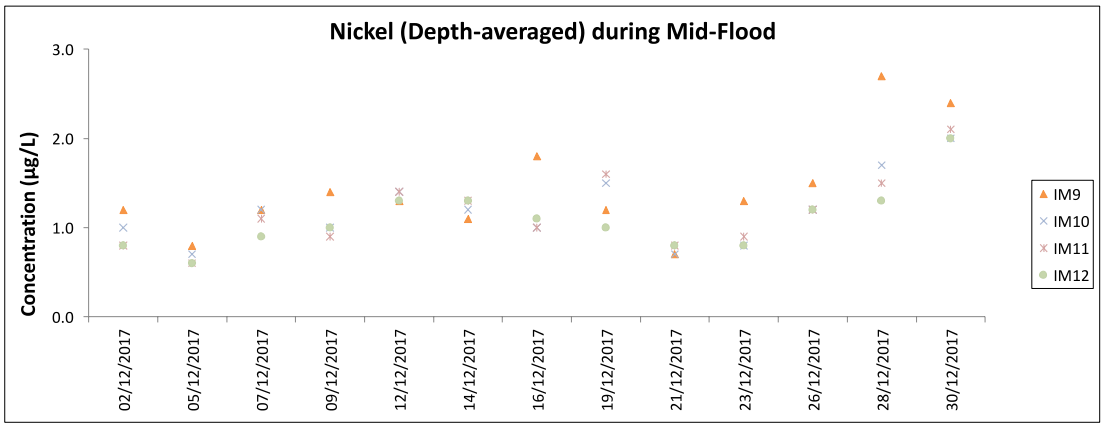


Note: The Action and Limit Level of nickel can be referred to Table 4.2 of the monthly EM&A report.
All chromium results in the reporting period were below the reporting limit 0.2 µg/L.









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

Chinese White Dolphin Monitoring Results

CWD Small Vessel Line-transect Survey — Survey Effort Data

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE
09-Oct-17	NEL	2	12.420	AUTUMN	32166	3RS ET
09-Oct-17	NEL	3	30.880	AUTUMN	32166	3RS ET
09-Oct-17	NEL	4	3.500	AUTUMN	32166	3RS ET
18-Oct-17	NEL	2	43.800	AUTUMN	32166	3RS ET
18-Oct-17	NEL	3	3.000	AUTUMN	32166	3RS ET
19-Oct-17	SWL	2	3.260	AUTUMN	32166	3RS ET
19-Oct-17	SWL	3	32.800	AUTUMN	32166	3RS ET
19-Oct-17	SWL	4	26.700	AUTUMN	32166	3RS ET
23-Oct-17	SWL	2	19.370	AUTUMN	32166	3RS ET
23-Oct-17	SWL	3	41.060	AUTUMN	32166	3RS ET
23-Oct-17	SWL	4	2.300	AUTUMN	32166	3RS ET
24-Oct-17	NWL	2	35.250	AUTUMN	32166	3RS ET
24-Oct-17	NWL	3	39.850	AUTUMN	32166	3RS ET
25-Oct-17	NWL	1	2.320	AUTUMN	32166	3RS ET
25-Oct-17	NWL	2	48.270	AUTUMN	32166	3RS ET
25-Oct-17	NWL	3	23.420	AUTUMN	32166	3RS ET
26-Oct-17	AW	2	4.880	AUTUMN	32166	3RS ET
26-Oct-17	WL	2	25.367	AUTUMN	32166	3RS ET
26-Oct-17	WL	3	7.387	AUTUMN	32166	3RS ET
26-Oct-17	SWL	2	6.890	AUTUMN	32166	3RS ET
27-Oct-17	SWL	2	3.450	AUTUMN	32166	3RS ET
27-Oct-17	SWL	3	3.360	AUTUMN	32166	3RS ET
27-Oct-17	WL	2	5.730	AUTUMN	32166	3RS ET
27-Oct-17	WL	3	20.457	AUTUMN	32166	3RS ET
27-Oct-17	WL	4	7.333	AUTUMN	32166	3RS ET
27-Oct-17	AW	2	4.890	AUTUMN	32166	3RS ET
06-Nov-17	NEL	2	37.700	AUTUMN	32166	3RS ET
06-Nov-17	NEL	3	9.600	AUTUMN	32166	3RS ET
07-Nov-17	NWL	2	5.860	AUTUMN	32166	3RS ET
07-Nov-17	NWL	3	53.860	AUTUMN	32166	3RS ET
07-Nov-17	NWL	4	14.980	AUTUMN	32166	3RS ET
15-Nov-17	NWL	2	13.220	AUTUMN	32166	3RS ET
15-Nov-17	NWL	3	55.550	AUTUMN	32166	3RS ET
15-Nov-17	NWL	4	5.100	AUTUMN	32166	3RS ET
16-Nov-17	NEL	2	12.810	AUTUMN	32166	3RS ET
16-Nov-17	NEL	3	31.090	AUTUMN	32166	3RS ET
16-Nov-17	NEL	4	2.100	AUTUMN	32166	3RS ET
17-Nov-17	AW	2	2.920	AUTUMN	32166	3RS ET
17-Nov-17	AW	3	1.800	AUTUMN	32166	3RS ET
17-Nov-17	WL	1	1.082	AUTUMN	32166	3RS ET
17-Nov-17	WL	2	18.218	AUTUMN	32166	3RS ET
17-Nov-17	WL	3	1.660	AUTUMN	32166	3RS ET
17-Nov-17	WL	4	12.240	AUTUMN	32166	3RS ET
17-Nov-17	SWL	3	16.340	AUTUMN	32166	3RS ET
17-Nov-17	SWL	4	2.360	AUTUMN	32166	3RS ET
20-Nov-17	SWL	2	3.100	AUTUMN	32166	3RS ET
20-Nov-17	SWL	3	24.410	AUTUMN	32166	3RS ET

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE
20-Nov-17	SWL	4	22.590	AUTUMN	32166	3RS ET
21-Nov-17	AW	3	4.660	AUTUMN	32166	3RS ET
21-Nov-17	WL	2	1.000	AUTUMN	32166	3RS ET
21-Nov-17	WL	3	22.000	AUTUMN	32166	3RS ET
21-Nov-17	WL	4	10.500	AUTUMN	32166	3RS ET
21-Nov-17	SWL	2	3.860	AUTUMN	32166	3RS ET
21-Nov-17	SWL	3	12.600	AUTUMN	32166	3RS ET
21-Nov-17	SWL	4	2.190	AUTUMN	32166	3RS ET
22-Nov-17	SWL	3	4.100	AUTUMN	32166	3RS ET
22-Nov-17	SWL	4	18.741	AUTUMN	32166	3RS ET
22-Nov-17	SWL	5	27.459	AUTUMN	32166	3RS ET
06-Dec-17	NWL	2	38.557	WINTER	32166	3RS ET
06-Dec-17	NWL	3	33.211	WINTER	32166	3RS ET
07-Dec-17	AW	2	4.662	WINTER	32166	3RS ET
07-Dec-17	WL	2	8.193	WINTER	32166	3RS ET
07-Dec-17	WL	3	25.630	WINTER	32166	3RS ET
07-Dec-17	SWL	2	1.930	WINTER	32166	3RS ET
07-Dec-17	SWL	3	4.795	WINTER	32166	3RS ET
08-Dec-17	SWL	3	27.200	WINTER	32166	3RS ET
08-Dec-17	SWL	4	23.990	WINTER	32166	3RS ET
08-Dec-17	SWL	5	11.760	WINTER	32166	3RS ET
13-Dec-17	NEL	2	46.600	WINTER	32166	3RS ET
14-Dec-17	NWL	2	63.690	WINTER	32166	3RS ET
14-Dec-17	NWL	3	11.210	WINTER	32166	3RS ET
18-Dec-17	SWL	3	10.240	WINTER	32166	3RS ET
18-Dec-17	SWL	4	35.830	WINTER	32166	3RS ET
18-Dec-17	SWL	5	17.000	WINTER	32166	3RS ET
21-Dec-17	NEL	2	10.490	WINTER	32166	3RS ET
21-Dec-17	NEL	3	25.110	WINTER	32166	3RS ET
21-Dec-17	NEL	4	10.900	WINTER	32166	3RS ET
28-Dec-17	AW	2	4.810	WINTER	32166	3RS ET
28-Dec-17	WL	2	32.373	WINTER	32166	3RS ET
28-Dec-17	WL	3	0.910	WINTER	32166	3RS ET
28-Dec-17	SWL	2	5.346	WINTER	32166	3RS ET
28-Dec-17	SWL	3	1.280	WINTER	32166	3RS ET

Notes:

CWD monitoring survey data of the two preceding survey months (i.e. October and November 2017) 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.
19-Oct-17	1	1228	CWD	3	SWL	3	420	ON	3RS ET	22.2031	113.9085	AUTUMN	NONE
19-Oct-17	2	1351	CWD	4	SWL	3	176	ON	3RS ET	22.2053	113.9197	AUTUMN	GILLNET
19-Oct-17	3	1436	FP	1	SWL	3	11	ON	3RS ET	22.1671	113.9271	AUTUMN	NONE
23-Oct-17	1	1110	FP	2	SWL	3	105	ON	3RS ET	22.1654	113.9271	AUTUMN	NONE
23-Oct-17	2	1133	CWD	1	SWL	2	18	ON	3RS ET	22.2050	113.9222	AUTUMN	NONE
24-Oct-17	1	1114	CWD	3	NWL	2	1096	ON	3RS ET	22.3346	113.8782	AUTUMN	NONE
25-Oct-17	1	1126	CWD	5	NWL	2	178	ON	3RS ET	22.3628	113.8779	AUTUMN	NONE
25-Oct-17	2	1158	CWD	4	NWL	2	459	ON	3RS ET	22.3878	113.8775	AUTUMN	NONE
26-Oct-17	1	1024	CWD	6	WL	2	174	ON	3RS ET	22.2689	113.8519	AUTUMN	NONE
26-Oct-17	2	1052	CWD	5	WL	3	84	ON	3RS ET	22.2605	113.8508	AUTUMN	NONE
26-Oct-17	3	1116	CWD	2	WL	2	814	ON	3RS ET	22.2507	113.8338	AUTUMN	GILLNET
26-Oct-17	4	1142	CWD	2	WL	3	396	ON	3RS ET	22.2413	113.8383	AUTUMN	NONE
26-Oct-17	5	1206	CWD	3	WL	3	427	ON	3RS ET	22.2410	113.8320	AUTUMN	NONE
26-Oct-17	6	1233	CWD	3	WL	3	199	ON	3RS ET	22.2323	113.8309	AUTUMN	NONE
26-Oct-17	7	1301	CWD	6	WL	2	916	ON	3RS ET	22.2237	113.8239	AUTUMN	SHRIMP TRAWLER
26-Oct-17	8	1326	CWD	4	WL	2	67	ON	3RS ET	22.2140	113.8143	AUTUMN	NONE
26-Oct-17	9	1410	CWD	4	WL	2	57	ON	3RS ET	22.1962	113.8343	AUTUMN	NONE
26-Oct-17	10	1511	CWD	2	SWL	2	143	ON	3RS ET	22.1987	113.8593	AUTUMN	NONE
27-Oct-17	1	1236	CWD	5	WL	3	35	ON	3RS ET	22.2415	113.8334	AUTUMN	NONE
27-Oct-17	2	1304	CWD	4	WL	3	257	ON	3RS ET	22.2508	113.8474	AUTUMN	NONE
27-Oct-17	3	1402	CWD	1	WL	2	320	ON	3RS ET	22.2886	113.8613	AUTUMN	NONE
07-Nov-17	1	1211	CWD	3	NWL	3	5	ON	3RS ET	22.3622	113.8877	AUTUMN	NONE
15-Nov-17	1	0946	CWD	6	NWL	2	594	ON	3RS ET	22.3850	113.8683	AUTUMN	NONE
15-Nov-17	2	1314	CWD	1	NWL	3	4	ON	3RS ET	22.3705	113.8983	AUTUMN	NONE
17-Nov-17	1	1053	CWD	4	WL	2	668	ON	3RS ET	22.2504	113.8432	AUTUMN	NONE
20-Nov-17	1	1154	FP	2	SWL	3	122	ON	3RS ET	22.1564	113.9180	AUTUMN	NONE
21-Nov-17	1	0936	CWD	5	AW	3	46	ON	3RS ET	22.3009	113.8862	AUTUMN	NONE
21-Nov-17	2	1324	CWD	2	SWL	3	142	ON	3RS ET	22.1785	113.8689	AUTUMN	NONE
22-Nov-17	1	1121	CWD	2	SWL	3	21	ON	3RS ET	22.2048	113.9271	AUTUMN	NONE
06-Dec-17	1	1031	CWD	12	NWL	3	630	ON	3RS ET	22.2881	113.8684	WINTER	NONE

DATE	STG #	TIME	CWD/FP	GP SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.
06-Dec-17	2	1113	CWD	4	NWL	3	100	ON	3RS ET	22.2719	113.8692	WINTER	NONE
06-Dec-17	3	1132	CWD	7	NWL	2	137	ON	3RS ET	22.2727	113.8733	WINTER	NONE
06-Dec-17	4	1236	CWD	5	NWL	3	494	ON	3RS ET	22.3596	113.8777	WINTER	NONE
06-Dec-17	5	1350	CWD	3	NWL	2	13	ON	3RS ET	22.3551	113.8848	WINTER	NONE
07-Dec-17	1	0929	CWD	5	AW	2	145	ON	3RS ET	22.3023	113.8765	WINTER	NONE
07-Dec-17	2	1058	CWD	3	WL	2	146	ON	3RS ET	22.2694	113.8601	WINTER	NONE
07-Dec-17	3	1126	CWD	1	WL	2	46	ON	3RS ET	22.2653	113.8580	WINTER	NONE
07-Dec-17	4	1238	CWD	3	WL	3	194	ON	3RS ET	22.2204	113.8146	WINTER	NONE
07-Dec-17	5	1407	CWD	2	WL	3	530	ON	3RS ET	22.1855	113.8498	WINTER	NONE
08-Dec-17	1	1213	FP	1	SWL	3	61	ON	3RS ET	22.1481	113.9173	WINTER	NONE
08-Dec-17	2	1258	CWD	1	SWL	5	343	ON	3RS ET	22.2053	113.9070	WINTER	NONE
14-Dec-17	1	1204	CWD	7	NWL	2	765	ON	3RS ET	22.3952	113.8884	WINTER	NONE
14-Dec-17	2	1327	CWD	2	NWL	3	127	ON	3RS ET	22.3888	113.8974	WINTER	NONE
18-Dec-17	1	1056	FP	2	SWL	4	135	ON	3RS ET	22.1511	113.9358	WINTER	NONE
28-Dec-17	1	1044	CWD	1	WL	3	216	ON	3RS ET	22.2559	113.8364	WINTER	NONE
28-Dec-17	2	1102	CWD	3	WL	2	34	ON	3RS ET	22.2541	113.8354	WINTER	NONE
28-Dec-17	3	1146	CWD	4	WL	2	82	ON	3RS ET	22.2318	113.8249	WINTER	NONE
28-Dec-17	4	1244	CWD	4	WL	2	106	ON	3RS ET	22.2146	113.8276	WINTER	NONE
28-Dec-17	5	1303	CWD	3	WL	2	100	ON	3RS ET	22.2055	113.8302	WINTER	NONE
28-Dec-17	6	1322	CWD	2	WL	2	306	ON	3RS ET	22.2024	113.8215	WINTER	NONE
28-Dec-17	7	1332	CWD	3	WL	2	N/A	OFF	3RS ET	22.2030	113.8213	WINTER	NONE
28-Dec-17	8	1428	CWD	3	SWL	2	1182	ON	3RS ET	22.1918	113.8586	WINTER	NONE

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

Notes:

CWD monitoring survey data of the two preceding survey months (i.e. October and November 2017) are presented for reference only. No relevant figure or text will be mentioned in the monthly EM&A report.

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

Calculation of the December 2017 encounter rates STG and ANI in the whole survey area (NEL, NWL, AW, WL, SWL):

A total of 356.237 km of survey effort was collected under Beaufort Sea State 3 or below with favourable visibility; total no. of 19 on-effort sightings and total number of 74 dolphins from on-effort sightings were collected under such condition. Calculation of the encounter rates in December 2017 are shown as below:

Encounter Rate by Number of Dolphin Sightings (STG) in December 2017

$$STG = \frac{19}{356.237}\ x\ 100 = 5.33$$

Encounter Rate by Number of Dolphins (ANI) in December 2017

$$ANI = \frac{74}{356.237}\ x\ 100 = 20.77$$

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

A total of 1111.788 km of survey effort was collected under Beaufort Sea State 3 or below with favourable visibility; total no. of 45 on-effort sightings and total number of 164 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)

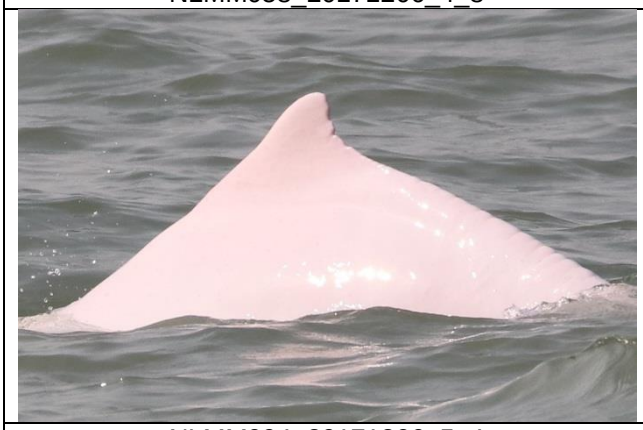
$$STG = \frac{45}{1111.788}\ x\ 100 = 4.05$$

Running Quarterly Encounter Rate by Number of Dolphins (ANI)

$$ANI = \frac{164}{1111.788}\ x\ 100 = 14.75$$

CWD Small Vessel Line-transect Survey **Photo Identification**

	
NLMM055_20171206_1_2	WLMM064_20171206_1_2
	
WLMM071_20171206_1_4	SLMM053_20171206_2_3
	
SLMM028_20171206_3_3	SLMM030_20171206_3_2
	
WLMM026_20171206_3_2	WLMM027_20171206_3_2

	
NLMM056_20171206_4_5	NLMM057_20171206_4_10
	
NLMM058_20171206_4_8	NLMM059_20171206_4_11
	
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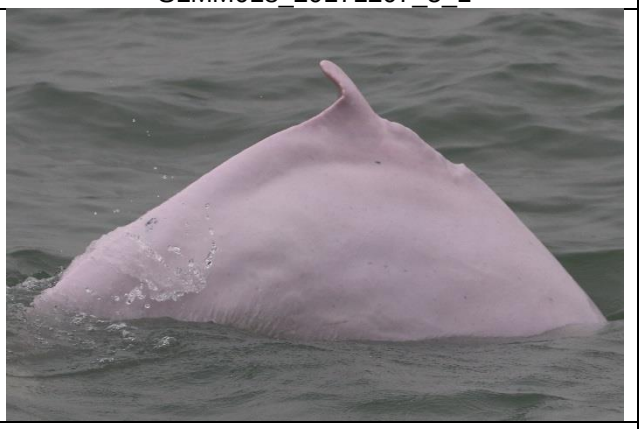
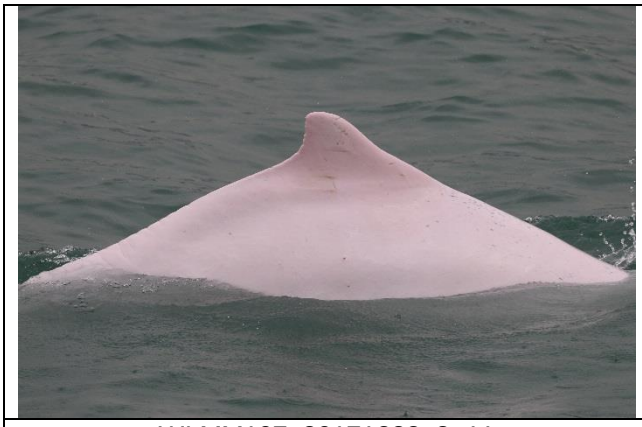
SLMM028_20171207_1_7	SLMM030_20171207_1_1

	
WLMM001_20171207_2_7	NLMM016_20171207_3_2
	
SLMM049_20171207_4_3	WLMM007_20171207_4_1
	
SLMM014_20171207_5_8	SLMM018_20171207_5_1
	
SLMM014_20171208_2_2	NLMM002_20171214_1_3

	
NLMM004_20171214_1_1	NLMM005_20171214_1_1
	
NLMM037_20171214_1_8	NLMM027_20171214_2_1
	
NLMM028_20171214_2_8	WLMM107_20171228_2_3
	
SLMM048_20171228_3_4	WLMM063_20171228_3_5

	
WLMM107_20171228_3_11	SLMM052_20171228_8_7

CWD Land-based Theodolite Tracking

CWD Groups by Survey Date

Date	Station	Start Time	End Time	Duration	Beaufort Range	Visibility	No. of Focal Follow Dolphin Groups Tracked	Dolphin Group Size Range
5/Dec/17	Sha Chau	8:38	14:38	6:00	2-3	3	0	N/A
11/Dec/17	Lung Kwu Chau	8:41	14:41	6:00	2-4	3	6	1-5
15/Dec/17	Lung Kwu Chau	8:40	14:40	6:00	2-3	2-3	6	2-4
28/Dec/17	Sha Chau	9:01	15:01	6:00	2	2-3	0	N/A
29/Dec/17	Lung Kwu Chau	9:09	15:09	6:00	2-3	3	4	1-3

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

Ecological Monitoring

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

Photo record of View 1

Photo record of View 2

Appendix D. 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. : AG120027
Date of Issue : 11 December 2017

PART A – CUSTOMER INFORMATION

Enovative Environmental Service Ltd.
Rm 811, Hin Pui House,
Hin Keng Estate, Tai Wai
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	:	Dec 07, 2017
Date of Calibration	:	Dec 07, 2017 to Dec 07, 2017
Date of Next Calibration[a]	:	Mar 07, 2018

PART C – REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

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

PART D – CALIBRATION RESULTS[b,c]

(1) pH at 25°C

Target (pH unit)	Displayed Reading[d] (pH Unit)	Tolerance[e](pH Unit)	Results
4	4.03	+0.03	Satisfactory
6.86	6.86	+0.00	Satisfactory
7.42	7.46	+0.04	Satisfactory
10.01	9.94	-0.07	Satisfactory

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

(2) Temperature

Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)	Results
16	16.30	+0.3	Satisfactory
20	20.30	+0.3	Satisfactory
38	37.80	-0.2	Satisfactory

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

~ CONTINUED ON NEXT PAGE ~

Remark(s): -

[a] *The "Date of Next Calibration" is recommended according to best practice principals as practiced by QPT or quoted form relevant international standards.*
[b] *The results relate only to the calibrated equipment as received*
[c] *The performance of the equipment stated in this report is checked with independent reference material and results compared against a calibrated secondary source.*
[d] *"Displayed Reading" denotes the figure shown on item under calibration/ checking regardless of equipment precision or significant figures.*
[e] *The "Tolerance Limit" mentioned is the acceptance criteria applicable for similar equipment used by QPT or quoted form relevant international standards.*

APPROVED SIGNATORY : _____
FUNG Yuen-ching Aries
Laboratory Manager

專業化驗有限公司
QUALITY PRO TEST-CONSULT LIMITED
Unit 10, 14/F, Wah Wai Centre, 38-40 Au Pui Wan St., Fotan, Hong Kong
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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AG120027
Date of Issue : 11 December 2017

PART D – CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
0	0.07	+0.07	Satisfactory
3.54	3.62	+0.08	Satisfactory
8.70	8.62	-0.08	Satisfactory

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

(4) Conductivity at 25°C

Conc. of KCl (M)	Expected Reading (µS/cm)	Displayed Reading (µS/cm)	Tolerance (%)	Results
0.001	146.9	142.8	-2.8	Satisfactory
0.01	1412	1476	+4.5	Satisfactory
0.1	12890	12774	-0.9	Satisfactory
0.5	58670	54732	-6.7	Satisfactory
1.0	111900	111148	-0.7	Satisfactory

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

(5) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	9.87	-1.3	Satisfactory
20	19.76	-1.2	Satisfactory
30	29.9	-0.3	Satisfactory

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

(6) Turbidity

Expected Reading (NTU)	Displayed Reading[f] (NTU)	Tolerance[g] (%)	Results
0	0.2	--	--
4	4.1	2.5	Satisfactory
20	20.2	1.0	Satisfactory
100	106.8	6.8	Satisfactory
800	862.3	7.8	Satisfactory

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

~ END OF REPORT ~

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

專業化驗有限公司
QUALITY PRO TEST-CONSULT LIMITED
Unit 10, 14/F, Wah Wai Centre, 38-40 Au Pui Wan St., Fotan, Hong Kong
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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AG120026
Date of Issue : 11 December 2017

PART A – CUSTOMER INFORMATION

Enovative Environmental Service Ltd.
Rm 811, Hin Pui House,
Hin Keng Estate, Tai Wai
New Territories, Hong Kong
Attn: Mr. Thomas WONG

PART B – DESCRIPTION

Name of Equipment	:	YSI ProDSS (Multi-Parameters)
Manufacturer	:	YSI (a xylem brand)
Serial Number	:	17H105557
Date of Received	:	Dec 07, 2017
Date of Calibration	:	Dec 07, 2017 to Dec 07, 2017
Date of Next Calibration[a]	:	Mar 07, 2018

PART C – REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

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

PART D – CALIBRATION RESULTS[b,c]

(1) pH at 25°C

Target (pH unit)	Displayed Reading[d] (pH Unit)	Tolerance[e](pH Unit)	Results
4	4.04	+0.04	Satisfactory
6.86	6.86	+0.00	Satisfactory
7.42	7.48	+0.06	Satisfactory
10.01	9.94	-0.07	Satisfactory

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

(2) Temperature

Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)	Results
16	16.40	+0.4	Satisfactory
20	20.20	+0.2	Satisfactory
35	33.40	-1.6	Satisfactory

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

~ CONTINUED ON NEXT PAGE ~

Remark(s): -

[a] The "Date of Next Calibration" is recommended according to best practice principals as practiced by QPT or quoted form relevant international standards.
[b] The results relate only to the calibrated equipment as received
[c] The performance of the equipment stated in this report is checked with independent reference material and results compared against a calibrated secondary source.
[d] "Displayed Reading" denotes the figure shown on item under calibration/ checking regardless of equipment precision or significant figures.
[e] The "Tolerance Limit" mentioned is the acceptance criteria applicable for similar equipment used by QPT or quoted form relevant international standards.

APPROVED SIGNATORY : _____
FUNG Yuen-ching Aries
Laboratory Manager

專業化驗有限公司
QUALITY PRO TEST-CONSULT LIMITED
Unit 10, 14/F, Wah Wai Centre, 38-40 Au Pui Wan St., Fotan, Hong Kong
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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AG120026
Date of Issue : 11 December 2017

PART D – CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
0	0.06	+0.06	Satisfactory
3.54	3.66	+0.12	Satisfactory
8.7	8.68	-0.02	Satisfactory

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

(4) Conductivity at 25°C

Conc. of KCl (M)	Expected Reading (µS/cm)	Displayed Reading (µS/cm)	Tolerance (%)	Results
0.001	146.9	137	-6.7	Satisfactory
0.01	1412	1386	-1.8	Satisfactory
0.1	12890	12248	-5.0	Satisfactory
0.5	58670	55482	-5.4	Satisfactory
1.0	111900	111072	-0.7	Satisfactory

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

(5) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	9.88	-1.2	Satisfactory
20	19.6	-2.0	Satisfactory
30	30.0	+0.0	Satisfactory

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

(6) Turbidity

Expected Reading (NTU)	Displayed Reading[f] (NTU)	Tolerance[g] (%)	Results
0	0.1	--	--
4	4.2	+5.0	Satisfactory
20	20.3	+1.5	Satisfactory
100	104.7	+4.7	Satisfactory
800	844.2	+5.5	Satisfactory

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

~ END OF REPORT ~

Remark(s): -

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

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

專業化驗有限公司
QUALITY PRO TEST-CONSULT LIMITED
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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AG120029
Date of Issue : 11 December 2017

PART A – CUSTOMER INFORMATION

Enovative Environmental Service Ltd.
Rm 811, Hin Pui House,
Hin Keng Estate, Tai Wai
New Territories, Hong Kong
Attn: Mr. Thomas WONG

PART B – DESCRIPTION

Name of Equipment	:	YSI 6920 (Multi-Parameters)
Manufacturer	:	YSI (a xylem brand)
Serial Number	:	000109DF
Date of Received	:	Dec 07, 2017
Date of Calibration	:	Dec 07, 2017 to Dec 07, 2017
Date of Next Calibration[a]	:	Mar 07, 2018

PART C – REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

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

PART D – CALIBRATION RESULTS[b,c]

(1) pH at 25°C

Target (pH unit)	Displayed Reading[d] (pH Unit)	Tolerance[e](pH Unit)	Results
4.00	4.03	+0.03	Satisfactory
6.86	6.86	+0.00	Satisfactory
7.42	7.41	-0.01	Satisfactory
10.01	10.05	+0.04	Satisfactory

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

(2) Temperature

Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)	Results
15	15.30	+0.30	Satisfactory
20	20.13	+0.13	Satisfactory
37	36.20	-0.80	Satisfactory

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

~ CONTINUED ON NEXT PAGE ~

Remark(s): -

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

APPROVED SIGNATORY : _____
FUNG Yuen-ching Aries
Laboratory Manager

專業化驗有限公司
QUALITY PRO TEST-CONSULT LIMITED
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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

PART D – CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
0	0.06	+0.06	Satisfactory
3.54	3.38	-0.16	Satisfactory
8.7	8.66	-0.04	Satisfactory

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

(4) Conductivity at 25°C

Conc. of KCl (M)	Expected Reading (µS/cm)	Displayed Reading (µS/cm)	Tolerance (%)	Results
0.001	146.9	152.8	+4.0	Satisfactory
0.01	1412	1489	+5.5	Satisfactory
0.1	12890	12672	-1.7	Satisfactory
0.5	58670	54482	-7.1	Satisfactory
1.0	111900	111086	-0.7	Satisfactory

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

(5) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	9.66	-3.4	Satisfactory
20	18.78	-6.1	Satisfactory
30	28.73	-4.2	Satisfactory

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

(6) Turbidity

Expected Reading (NTU)	Displayed Reading[f] (NTU)	Tolerance[g] (%)	Results
0	0.3	--	--
4	3.8	-5.0	Satisfactory
20	21.2	+6.0	Satisfactory
100	102.8	+2.8	Satisfactory
800	846.4	+5.8	Satisfactory

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

~ END OF REPORT ~

Remark(s): -

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

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

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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AG120028
Date of Issue : 11 December 2017

PART A – CUSTOMER INFORMATION

Enovative Environmental Service Ltd.
Rm 811, Hin Pui House,
Hin Keng Estate, Tai Wai
New Territories, Hong Kong
Attn: Mr. Thomas WONG

PART B – DESCRIPTION

Name of Equipment	:	YSI 6920V2 (Multi-Parameters)
Manufacturer	:	YSI (a xylem brand)
Serial Number	:	00019CB2
Date of Received	:	Dec 07, 2017
Date of Calibration	:	Dec 07, 2017 to Dec 07, 2017
Date of Next Calibration[a]	:	Mar 07, 2018

PART C – REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

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

PART D – CALIBRATION RESULTS[b,c]

(1) pH at 25°C

Target (pH unit)	Displayed Reading[d] (pH Unit)	Tolerance[e](pH Unit)	Results
4	4.02	+0.02	Satisfactory
6.86	6.86	+0.00	Satisfactory
7.42	7.38	-0.04	Satisfactory
10.01	10.03	+0.02	Satisfactory

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

(2) Temperature

Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)	Results
15	15.70	+0.70	Satisfactory
20	20.12	+0.12	Satisfactory
37	35.80	-1.20	Satisfactory

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

~ CONTINUED ON NEXT PAGE ~

Remark(s): -

[a] The "Date of Next Calibration" is recommended according to best practice principals as practiced by QPT or quoted form relevant international standards.
[b] The results relate only to the calibrated equipment as received
[c] The performance of the equipment stated in this report is checked with independent reference material and results compared against a calibrated secondary source.
[d] "Displayed Reading" denotes the figure shown on item under calibration/ checking regardless of equipment precision or significant figures.
[e] The "Tolerance Limit" mentioned is the acceptance criteria applicable for similar equipment used by QPT or quoted form relevant international standards.

APPROVED SIGNATORY : _____
FUNG Yuen-ching Aries
Laboratory Manager

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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

PART D – CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
0	0.02	+0.02	Satisfactory
3.54	3.40	-0.14	Satisfactory
8.7	8.73	+0.03	Satisfactory

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

(4) Conductivity at 25°C

Conc. of KCl (M)	Expected Reading (µS/cm)	Displayed Reading (µS/cm)	Tolerance (%)	Results
0.001	146.9	152.3	+3.7	Satisfactory
0.01	1412	1515	+7.3	Satisfactory
0.1	12890	13408	+4.0	Satisfactory
0.5	58670	56872	-3.1	Satisfactory
1.0	111900	111144	-0.7	Satisfactory

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

(5) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	9.68	-3.2	Satisfactory
20	18.98	-5.1	Satisfactory
30	28.88	-3.7	Satisfactory

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

(6) Turbidity

Expected Reading (NTU)	Displayed Reading[f] (NTU)	Tolerance[g] (%)	Results
0	0.4	--	--
4	3.8	-5.0	Satisfactory
20	19.8	-1.0	Satisfactory
100	102.4	+2.4	Satisfactory
800	828.4	+3.6	Satisfactory

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

~ END OF REPORT ~

Remark(s): -

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

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

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CALIBRATION REPORT

Test Report No. : AG120137
Date of Issue : 02 January, 2018

PART A – CUSTOMER INFORMATION

Enovative Environmental Service Ltd.
Rm 811, Hin Pui House,
Hin Keng Estate, Tai Wai
New Territories, Hong Kong
Attn: Mr. Thomas Wong

PART B – SAMPLE INFORMATION

Description of Samples	:	Titrette® bottle-top burette, 50mL
Brand Name	:	BRAND
Model Number	:	6761161
Manufacturer number	:	4760161
Serial Number	:	10N65665
Date of Received	:	Dec 18, 2017
Date of Calibration	:	Dec 18, 2017
Date of Next Calibration[(a)]	:	Mar 18, 2018

PART C – CALIBRATION REQUESTED

Parameter	Reference Method
Accuracy Test	In-house Method (Gravimetric Method)

~ Continued On Next Page ~

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

APPROVED SIGNATORY : _____
FUNG Yuen-ching Aries
Laboratory Manager

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CALIBRATION REPORT

Test Report No. : AG120137
Date of Issue : 02 January, 2018

PART D – RESULT[(b),(c)]

Water temperature: 19.5 ℃
Relative humidity: 54%
z-Factor: 1.0028

Trial	Nominal volume (mL) at interval				
	3	3	3	3	3
	Range: (1-4)	Range: (16-19)	Range: (23-26)	Range: (34-37)	Range: (42-45)
1	2.9851	2.9795	2.9918	2.9725	2.9892
2	2.9788	2.9811	2.9843	2.9868	2.9792
3	2.9844	2.9803	2.9763	2.9835	2.9742
4	2.9792	2.9801	2.9767	2.9861	2.9831
5	2.9780	2.9776	2.9903	2.9904	2.9875
6	2.9941	2.9822	2.9908	2.9880	2.9828
7	2.9845	2.9799	2.9851	2.9847	2.9859
8	2.9811	2.9890	2.9869	2.9928	2.9879
9	2.9892	2.9848	2.9796	2.9856	2.9863
10	2.9905	2.9854	2.9855	2.9880	2.9896
Average	2.9845	2.9820	2.9847	2.9858	2.9846
Standard deviation	0.0054	0.0034	0.0056	0.0054	0.0049
Calculated volume (mL)	2.9928	2.9903	2.9931	2.9942	2.9929
Error (%)	-0.2384	-0.3220	-0.2304	-0.1933	-0.2358
RSD (%)	0.1813	0.1146	0.1881	0.1810	0.1625

Acceptance Criteria [(d)]

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

~ END OF REPORT ~

Remark(s): -

(b) *The results relate only to the tested sample as received*

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

(d) *The "acceptance criteria" is applicable for similar equipment used by QPT or quoted form relevant international standards.*

Appendix E. Status of Environmental Permits and Licences

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

Contract No.	Description	Location	Permit/ Reference No.	Status
P560 (R)	Notification of Construction Work under APCO	Launching Site	423880	Receipt acknowledged by EPD on 1 Dec 2017
		Site Office	397151	Receipt acknowledged by EPD on 15 Jan 2016
		Stockpiling Area	398015	Receipt acknowledged by EPD on 18 Jan 2016
		Sheung Sha Chau	405860	Receipt acknowledged by EPD on 5 Aug 2016
	Construction Noise Permit (General Works)	Launching Site	GW-RS1006-17	Valid until 13 May 2018
		Sheung Sha Chau	GW-RW0533-17	Valid until 8 Apr 2018
		Stockpiling Area	GW-RS0719-17	Valid until 13 Feb 2018
	Discharge License under WPCO	Launching Site	WT00024249-2016	Approved on 25 Apr 2016
		Stockpiling Area	WT00024250-2016	Approved on 25 Apr 2016
	Registration as Chemical Waste Producer	Launching Site	WPN 5213-951-L2902-01	Registration was updated on 29 Sep 2017
		Sheung Sha Chau	WPN 5111-434-L2902-03	Registration was updated on 6 Oct 2017
		Stockpiling Area	WPN 5213-951-L2902-02	Registration was updated on 3 Oct 2016
	Bill Account for disposal		A/C 7023982	Approval granted from EPD on 14 Dec 2015
3201	Notification of Construction Work under APCO	Works area of 3201	406004	Receipt acknowledged by EPD on 10 Aug 2016
	Construction Noise Permit (General Works)	Works area of 3201	GW-RS1041-17	Superseded by GW-RS1059-17 on 5 Dec 2017
		Works area of 3201	GW-RS1059-17	Superseded by GW-RS1119-17 on 20 Dec 2017
		Works area of 3201	GW-RS1119-17	Valid until 13 June 2018
	Registration as Chemical Waste Producer	Works area of 3201	WPN 5213-951-P3231-01	Completion of Registration on 9 Sep 2016

Contract No.	Description	Location	Permit/ Reference No.	Status
	Bill Account for disposal		A/C 7025760	Approval granted from EPD on 31 Aug 2016
3202	Notification of Construction Work under APCO	Works area of 3202	407624	Receipt acknowledged by EPD on 15 Sep 2016
	Construction Noise Permit (General Works)	Works area of 3202	GW-RS0939-17	Superseded by GW-RS1060-17 on 5 Dec 2017
		Works area of 3202	GW-RS1060-17	Superseded by GW-RS1120-17 on 20 Dec 2017
		Works area of 3202	GW-RS1120-17	Valid until 13 Jun 2018
	Registration as Chemical Waste Producer	Works area of 3202	WPN 5213-951-S3967-01	Registration was updated on 23 May 2017
	Discharge License	Works area of 3202	WT00028293-2017	Valid from 12 Jun 2017 to 30 Jun 2022
	Bill Account for disposal		A/C 7025739	Approval granted from EPD on 31 August 2016
3203	Notification of Construction Work under APCO	Works area of 3203	407053	Receipt acknowledged by EPD on 2 Sep 2016
	Construction Noise Permit (General Works)	Works area of 3203	GW-RS0940-17	Superseded by GW-RS1061-17 on 5 Dec 2017
		Works area of 3203	GW-RS1061-17	Superseded by GW-RS1121-17 on 20 Dec 2017
		Works area of 3203	GW-RS1121-17	Valid until 13 Jun 2018
	Registration as Chemical Waste Producer	Works area of 3203	WPN 5213-951-S3954-01	Registration was updated on 12 Dec 2016
	Discharge License	Works area of 3203	WT00028251-2017	Valid from 9 Jun 2017 to 30 Jun 2022
	Bill Account for disposal		A/C 7025846	Approval granted from EPD on 9 Sep 2016
3204	Notification of Construction Work under APCO	Works area of 3204	406446	Receipt acknowledged by EPD on 19 Aug 2016
	Construction Noise Permit (General Works)	Works Area of 3204	GW-RS1001-17	Superseded by GW-RS1062-17 on 5 Dec 2017
		Works Area of 3204	GW-RS1062-17	Valid until 29 May 2018
	Registration as Chemical Waste Producer	Works Area of 3204	WPN 5213-951-C4102-01	Completion of Registration on 15 Sep 2016
		Site Office of 3204	WPN 5213-951-C4102-02	Completion of Registration on 17 Mar 2017
	Discharge License	Works area of 3204	WT00028245-2017	Valid from 5 Jun 2017 to 30 Jun 2022
	Bill Account for disposal		A/C 7025969	Approval granted from EPD on 21 Sep 2016
3205	Notification of Construction Work under APCO	Works area of 3205	409041	Receipt acknowledged by EPD on 19 Oct 2016

Contract No.	Description	Location	Permit/ Reference No.	Status
	Registration as Chemical Waste Producer	Works Area of 3205	WPN 5213-951-B2502-01	Registration was updated on 25 Sep 2017
		Works Area of 3205	WPN 5111-421-B2509-01	Registration was updated on 25 Sep 2017
	Construction Noise Permit (General Works)	Works Area of 3205	GW-RS1002-17	Valid until 13 May 2018
	Discharge License	Works area of 3205	WT00028370-2017	Valid from 21 Jun 2017 to 30 Jun 2022
	Bill Account for disposal	Works area of 3205	A/C 7026295	Approval granted from EPD on 9 Nov 2016
3206	Notification of Construction Work under APCO	Works area of 3206	409237	Receipt acknowledged by EPD on 25 Oct 2016
	Registration as Chemical Waste Producer	Site office of 3206	WPN 5213-951-Z4035-01	Completion of Registration on 18 Nov 2016
		Works area of 3206	WPN 5213-951-Z4035-02	Completion of Registration on 18 Nov 2016
	Construction Noise Permit (General Works)	Works Area of 3206	GW-RS1003-17	Superseded by GW-RS1063-17 on 5 Dec 2017
		Works Area of 3206	GW-RS1063-17	Superseded by GW-RS1122-17 on 20 Dec 2017
		Works Area of 3206	GW-RS1122-17	Valid until 30 May 2018
		Works Area of 3206 (PVD works)	GW-RS0860-17	Valid until 8 Dec 2017
	Bill Account for disposal	Works area of 3206	A/C 7026398	Approval granted from EPD on 16 Nov 2016
3301	Notification of Construction Work under APCO	Works area of 3301	415821	Receipt acknowledged by EPD on 19 Apr 2017
	Registration as Chemical Waste Producer	Works area of 3301	WPN 5213-951-F2718-02	Completion of Registration on 9 Jun 2017
	Bill Account for disposal	Works area of 3301	A/C 7027728	Approval granted from EPD on 8 May 2017
	Construction Noise Permit (General Works)	Works area of 3301 (Cable ducting works)	GW-RS0991-17	Valid until 14 May 2018
		Works area of 3301	GW-RS0712-17	Valid until 23 Feb 2018
3501	Notification of Construction Work under APCO	Works area of 3501	417903	Receipt acknowledged by EPD on 13 Jun 2017
	Registration as Chemical Waste Producer	Works area of 3501	WPN 5213-951-B2520-02	Completion of Registration on 25 Jul 2017
	Bill Account for disposal	Works area of 3501	A/C 7028144	Approval granted from EPD on 23 Jun 2017

Contract No.	Description	Location	Permit/ Reference No.	Status
	Construction Noise Permit (General Works)	Works area of 3501	GW-RS0667-17	Valid until 17 Feb 2018
			GW-RS1069-17	Valid until 31 Jan 2018
3502	Notification of Construction Work under APCO	Works area of 3502	417511	Receipt acknowledged by EPD on 2 Jun 2017
	Registration as Chemical Waste Producer	Works area of 3502	WPN 5213-951-B2520-01	Completion of Registration on 3 Jul 2017
	Bill Account for disposal	Works area of 3502	A/C 7028050	Approval granted from EPD on 21 Jun 2017
	Construction Noise Permit (General Works)	Works area of 3502	GW-RS0784-17	Valid until 10 Mar 2018
3602	Notification of Construction Work under APCO	Works area of 3602	421278	Receipt acknowledged by EPD on 18 Sep 2017
	Registration as Chemical Waste Producer	Works area of 3602	WPN 5296-951-N2673-01	Completion of Registration on 9 Oct 2017
		Site office of 3602	WPN 5296-951-N2673-02	Completion of Registration on 11 Dec 2017
	Bill Account for disposal	Works area of 3602	A/C 7028942	Approval granted from EPD on 6 Oct 2017
3801	Notification of Construction Work under APCO	Works area of 3801	418345	Receipt acknowledged by EPD on 26 Jun 2017
	Registration as Chemical Waste Producer	Works area of 3801	WPN 5296-951-C1169-51	Completion of Registration on 4 Aug 2017
	Discharge License	Works area of 3801	WT00029535-2017	Valid from 24 Nov 2017 to 30 Nov 2022
	Bill Account for disposal	Works area of 3801	A/C 7028254	Approval granted from EPD on 3 Jul 2017
	Construction Noise Permit (General Works)	Works area of 3801	GW-RS1045-17	Superseded by GW-RS1133-17 on 21 Dec 2017
			GW-RS1095-17	Valid until 10 Jun 2018
			GW-RS1133-17	Valid until 18 Jun 2018

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

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

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

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

Statistics for Complaints, Notifications of Summons and Prosecution

Reporting Period	Cumulative Statistics		
	Complaints	Notifications of Summons	Prosecutions
This reporting period	0	0	0
From 28 December 2015 to end of the reporting period	8	1	0

Appendix G. Data of SkyPier HSF Movements to/from Zhuhai and Macau (between 1 and 31 December 2017)

Data of SkyPier HSF Movements to/from Zhuhai and Macau (between 1 and 31 December 2017)

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
01-Dec	08:19	3A061	YFT	Arrival	12.2	-	-
01-Dec	08:21	8S210	XZM	Arrival	13.3	-	-
01-Dec	09:49	3A062	YFT	Arrival	12	-	-
01-Dec	10:39	8S212	XZM	Arrival	11	-	-
01-Dec	10:50	3A081	ZUI	Arrival	13.4	-	-
01-Dec	11:05	8S121	XZM	Departure	12.6	-	-
01-Dec	11:13	3A063	YFT	Arrival	12.3	-	-
01-Dec	12:12	3A181	ZUI	Departure	12.7	-	-
01-Dec	12:18	3A168	YFT	Departure	12.4	-	-
01-Dec	12:46	8S215	XZM	Arrival	13.7	-	-
01-Dec	12:55	3A064	YFT	Arrival	11.9	-	-
01-Dec	13:18	8S123	XZM	Departure	13.3	-	-
01-Dec	13:51	3A082	ZUI	Arrival	12.7	-	-
01-Dec	14:25	3A164	YFT	Departure	12.4	-	-
01-Dec	14:26	3A182	ZUI	Departure	13	-	-
01-Dec	15:00	3A065	YFT	Arrival	11.4	-	-
01-Dec	16:12	3A167	YFT	Departure	12.4	-	-
01-Dec	16:41	3A083	ZUI	Arrival	13.3	-	-
01-Dec	16:42	8S218	XZM	Arrival	10.3	-	-
01-Dec	16:57	3A067	YFT	Arrival	11.7	-	-
01-Dec	17:05	3A183	ZUI	Departure	13.4	-	-
01-Dec	17:07	8S126	XZM	Departure	12	-	-
01-Dec	19:01	3A166	YFT	Departure	14.1	-	-
01-Dec	19:47	3A084	ZUI	Arrival	13.9	-	-
01-Dec	20:15	3A185	ZUI	Departure	12.8	-	-
01-Dec	20:56	8S2113	XZM	Arrival	12.8	-	-
01-Dec	21:04	3A169	YFT	Departure	12.3	-	-
02-Dec	08:19	8S210	XZM	Arrival	11.7	-	-
02-Dec	08:20	3A061	YFT	Arrival	12.1	-	-
02-Dec	09:50	3A062	YFT	Arrival	12.3	-	-
02-Dec	10:32	8S212	XZM	Arrival	12.4	-	-
02-Dec	10:49	3A081	ZUI	Arrival	13.5	-	-
02-Dec	11:01	8S121	XZM	Departure	11.3	-	-
02-Dec	11:20	3A063	YFT	Arrival	12	-	-
02-Dec	12:18	3A181	ZUI	Departure	12.9	-	-
02-Dec	12:23	3A168	YFT	Departure	12.8	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
02-Dec	12:49	8S215	XZM	Arrival	12.5	-	-
02-Dec	12:55	3A064	YFT	Arrival	12.8	-	-
02-Dec	13:20	8S123	XZM	Departure	12	-	-
02-Dec	13:37	3A082	ZUI	Arrival	12.8	-	-
02-Dec	14:14	3A182	ZUI	Departure	12.9	-	-
02-Dec	14:14	3A164	YFT	Departure	13	-	-
02-Dec	15:01	3A065	YFT	Arrival	12.2	-	-
02-Dec	16:20	3A167	YFT	Departure	12.8	-	-
02-Dec	16:40	8S218	XZM	Arrival	11.5	-	-
02-Dec	16:42	3A083	ZUI	Arrival	13.1	-	-
02-Dec	16:53	3A067	YFT	Arrival	12.8	-	-
02-Dec	17:08	3A183	ZUI	Departure	13.6	-	-
02-Dec	17:11	8S126	XZM	Departure	12.1	-	-
02-Dec	19:14	3A166	YFT	Departure	12.4	-	-
02-Dec	19:48	3A084	ZUI	Arrival	13.4	-	-
02-Dec	20:18	3A185	ZUI	Departure	13.5	-	-
02-Dec	20:58	3A169	YFT	Departure	13.4	-	-
02-Dec	21:16	8S2113	XZM	Arrival	13	-	-
02-Dec	21:56	8S522	XZM	Departure	13.2	-	-
03-Dec	08:23	3A061	YFT	Arrival	13.2	-	-
03-Dec	08:23	8S210	XZM	Arrival	12.3	-	-
03-Dec	09:49	3A062	YFT	Arrival	11.6	-	-
03-Dec	10:36	8S212	XZM	Arrival	12	-	-
03-Dec	10:39	3A081	ZUI	Arrival	12.9	-	-
03-Dec	11:15	3A063	YFT	Arrival	11.7	-	-
03-Dec	11:15	8S121	XZM	Departure	12.1	-	-
03-Dec	12:12	3A181	ZUI	Departure	13.1	-	-
03-Dec	12:21	3A168	YFT	Departure	11.1	-	-
03-Dec	12:39	8S215	XZM	Arrival	11.9	-	-
03-Dec	12:54	3A064	YFT	Arrival	13.3	-	-
03-Dec	13:17	8S123	XZM	Departure	12.3	-	-
03-Dec	13:42	3A082	ZUI	Arrival	12.2	-	-
03-Dec	14:25	3A164	YFT	Departure	13.5	-	-
03-Dec	14:27	3A182	ZUI	Departure	13.3	-	-
03-Dec	14:57	3A065	YFT	Arrival	11.8	-	-
03-Dec	16:20	3A167	YFT	Departure	11.5	-	-
03-Dec	17:02	8S218	XZM	Arrival	11.2	-	-
03-Dec	17:03	3A067	YFT	Arrival	13.1	-	-
03-Dec	17:03	3A083	ZUI	Arrival	13.6	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
03-Dec	17:18	3A183	ZUI	Departure	13.4	-	-
03-Dec	17:35	8S126	XZM	Departure	12.6	-	-
03-Dec	19:03	3A166	YFT	Departure	12.1	-	-
03-Dec	19:45	3A084	ZUI	Arrival	13	-	-
03-Dec	20:12	3A185	ZUI	Departure	12.7	-	-
03-Dec	20:59	8S2113	XZM	Arrival	12.7	-	-
03-Dec	21:05	3A169	YFT	Departure	11.9	-	-
04-Dec	08:15	3A061	YFT	Arrival	11.3	-	-
04-Dec	08:20	8S210	XZM	Arrival	10.5	-	-
04-Dec	09:46	3A062	YFT	Arrival	12.1	-	-
04-Dec	10:40	8S212	XZM	Arrival	12.3	-	-
04-Dec	10:45	3A081	ZUI	Arrival	13.9	-	-
04-Dec	11:03	8S121	XZM	Departure	12.1	-	-
04-Dec	11:19	3A063	YFT	Arrival	12.3	-	-
04-Dec	12:15	3A181	ZUI	Departure	13.2	-	-
04-Dec	12:21	3A168	YFT	Departure	11.7	-	-
04-Dec	12:45	8S215	XZM	Arrival	12	-	-
04-Dec	12:59	3A064	YFT	Arrival	11.8	-	-
04-Dec	13:15	8S123	XZM	Departure	13.1	-	-
04-Dec	13:40	3A082	ZUI	Arrival	11.4	<= 5	< 1min
04-Dec	14:25	3A164	YFT	Departure	12.2	-	-
04-Dec	14:31	3A182	ZUI	Departure	12.8	-	-
04-Dec	14:59	3A065	YFT	Arrival	11.1	-	-
04-Dec	16:25	3A167	YFT	Departure	12	-	-
04-Dec	16:45	3A083	ZUI	Arrival	13.6	-	-
04-Dec	16:45	8S218	XZM	Arrival	11.1	-	-
04-Dec	17:00	3A067	YFT	Arrival	12	-	-
04-Dec	17:19	3A183	ZUI	Departure	13.2	-	-
04-Dec	17:28	8S126	XZM	Departure	13.5	-	-
04-Dec	19:11	3A166	YFT	Departure	11.9	-	-
04-Dec	19:51	3A084	ZUI	Arrival	13.1	-	-
04-Dec	20:13	3A185	ZUI	Departure	13.2	-	-
04-Dec	20:51	8S2113	XZM	Arrival	13.3	-	-
04-Dec	21:04	3A169	YFT	Departure	13	-	-
05-Dec	08:12	3A061	YFT	Arrival	11.4	-	-
05-Dec	08:21	8S210	XZM	Arrival	12.1	-	-
05-Dec	09:41	3A062	YFT	Arrival	12.8	-	-
05-Dec	10:35	8S212	XZM	Arrival	12.4	-	-
05-Dec	10:42	3A081	ZUI	Arrival	12.9	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
05-Dec	11:01	8S121	XZM	Departure	12.3	-	-
05-Dec	11:19	3A063	YFT	Arrival	12.7	-	-
05-Dec	12:13	3A168	YFT	Departure	12.5	-	-
05-Dec	12:16	3A181	ZUI	Departure	12.7	-	-
05-Dec	12:51	8S215	XZM	Arrival	12.2	-	-
05-Dec	12:58	3A064	YFT	Arrival	13.1	-	-
05-Dec	13:18	8S123	XZM	Departure	12.5	-	-
05-Dec	13:50	3A082	ZUI	Arrival	13.4	-	-
05-Dec	14:14	3A164	YFT	Departure	12.3	-	-
05-Dec	14:15	3A182	ZUI	Departure	12.5	-	-
05-Dec	15:03	3A065	YFT	Arrival	11.5	-	-
05-Dec	16:17	3A167	YFT	Departure	11.9	-	-
05-Dec	16:40	3A083	ZUI	Arrival	13.2	-	-
05-Dec	16:44	8S218	XZM	Arrival	12.4	-	-
05-Dec	16:54	3A067	YFT	Arrival	12.3	-	-
05-Dec	16:59	3A183	ZUI	Departure	12.2	-	-
05-Dec	17:07	8S126	XZM	Departure	12.3	-	-
05-Dec	19:00	3A166	YFT	Departure	13.2	-	-
05-Dec	19:48	3A084	ZUI	Arrival	13	-	-
05-Dec	20:16	3A185	ZUI	Departure	12.2	-	-
05-Dec	20:50	8S2113	XZM	Arrival	12.8	-	-
05-Dec	21:05	3A169	YFT	Departure	13.4	-	-
06-Dec	08:21	3A061	YFT	Arrival	11.8	-	-
06-Dec	08:35	8S210	XZM	Arrival	11.2	-	-
06-Dec	09:46	3A062	YFT	Arrival	13.2	-	-
06-Dec	10:44	8S212	XZM	Arrival	10.9	-	-
06-Dec	10:57	3A081	ZUI	Arrival	13.4	-	-
06-Dec	11:07	8S121	XZM	Departure	12	-	-
06-Dec	11:16	3A063	YFT	Arrival	12.1	-	-
06-Dec	12:18	3A168	YFT	Departure	11.6	-	-
06-Dec	12:22	3A181	ZUI	Departure	13.5	-	-
06-Dec	12:49	8S215	XZM	Arrival	12.4	-	-
06-Dec	13:02	3A064	YFT	Arrival	12.2	-	-
06-Dec	13:17	8S123	XZM	Departure	12.7	-	-
06-Dec	13:53	3A082	ZUI	Arrival	13.7	-	-
06-Dec	14:21	3A164	YFT	Departure	12.1	-	-
06-Dec	14:22	3A182	ZUI	Departure	11.6	-	-
06-Dec	14:57	3A065	YFT	Arrival	12.3	-	-
06-Dec	16:17	3A167	YFT	Departure	11.4	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
06-Dec	16:44	3A083	ZUI	Arrival	13.1	-	-
06-Dec	16:50	8S218	XZM	Arrival	13.1	-	-
06-Dec	16:58	3A067	YFT	Arrival	12.4	-	-
06-Dec	17:09	8S126	XZM	Departure	12.1	-	-
06-Dec	17:13	3A183	ZUI	Departure	14.1	-	-
06-Dec	18:59	3A166	YFT	Departure	12.6	-	-
06-Dec	19:44	3A084	ZUI	Arrival	12.9	-	-
06-Dec	20:10	3A185	ZUI	Departure	13	-	-
06-Dec	21:00	8S2113	XZM	Arrival	11.2	-	-
06-Dec	21:09	3A169	YFT	Departure	14	-	-
07-Dec	08:19	3A061	YFT	Arrival	11.7	-	-
07-Dec	08:32	8S210	XZM	Arrival	12.3	-	-
07-Dec	09:55	3A062	YFT	Arrival	11.8	-	-
07-Dec	10:36	8S212	XZM	Arrival	12.7	-	-
07-Dec	10:47	3A081	ZUI	Arrival	13.3	-	-
07-Dec	11:04	8S121	XZM	Departure	13.3	-	-
07-Dec	11:15	3A063	YFT	Arrival	12.7	-	-
07-Dec	12:10	3A181	ZUI	Departure	13.8	-	-
07-Dec	12:16	3A168	YFT	Departure	13	-	-
07-Dec	12:48	8S215	XZM	Arrival	12.4	-	-
07-Dec	13:11	3A064	YFT	Arrival	12.1	-	-
07-Dec	13:13	8S123	XZM	Departure	12.7	-	-
07-Dec	13:49	3A082	ZUI	Arrival	12.8	<= 5	< 1min
07-Dec	14:22	3A182	ZUI	Departure	12.5	-	-
07-Dec	14:23	3A164	YFT	Departure	11.8	-	-
07-Dec	14:54	3A065	YFT	Arrival	12.9	-	-
07-Dec	16:22	3A167	YFT	Departure	13.1	-	-
07-Dec	16:31	8S218	XZM	Arrival	11.2	-	-
07-Dec	16:41	3A083	ZUI	Arrival	12.6	-	-
07-Dec	16:57	3A067	YFT	Arrival	12.2	-	-
07-Dec	16:58	8S126	XZM	Departure	13.1	-	-
07-Dec	17:02	3A183	ZUI	Departure	13.6	-	-
07-Dec	19:07	3A166	YFT	Departure	13	-	-
07-Dec	19:47	3A084	ZUI	Arrival	13.1	-	-
07-Dec	20:10	3A185	ZUI	Departure	12.7	-	-
07-Dec	21:03	8S2113	XZM	Arrival	11.7	-	-
07-Dec	21:19	3A169	YFT	Departure	13.2	-	-
08-Dec	08:22	3A061	YFT	Arrival	13.1	-	-
08-Dec	08:39	8S210	XZM	Arrival	12.6	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
08-Dec	09:50	3A062	YFT	Arrival	12.1	<= 5	< 1min
08-Dec	10:43	8S212	XZM	Arrival	10.9	-	-
08-Dec	10:58	3A081	ZUI	Arrival	12.3	-	-
08-Dec	11:01	8S121	XZM	Departure	11.4	-	-
08-Dec	11:16	3A063	YFT	Arrival	13	-	-
08-Dec	12:14	3A168	YFT	Departure	13.6	-	-
08-Dec	12:19	3A181	ZUI	Departure	13.1	-	-
08-Dec	12:53	8S215	XZM	Arrival	12.2	-	-
08-Dec	12:55	3A064	YFT	Arrival	13.3	-	-
08-Dec	13:16	8S123	XZM	Departure	12.5	-	-
08-Dec	13:45	3A082	ZUI	Arrival	11	-	-
08-Dec	14:13	3A182	ZUI	Departure	11.3	-	-
08-Dec	14:15	3A164	YFT	Departure	13.6	-	-
08-Dec	14:55	3A065	YFT	Arrival	13.4	-	-
08-Dec	16:13	3A167	YFT	Departure	13.6	-	-
08-Dec	16:34	8S218	XZM	Arrival	11.3	-	-
08-Dec	16:41	3A083	ZUI	Arrival	13.3	-	-
08-Dec	16:54	3A067	YFT	Arrival	13.2	-	-
08-Dec	17:01	3A183	ZUI	Departure	13	-	-
08-Dec	17:18	8S126	XZM	Departure	12.3	-	-
08-Dec	19:05	3A166	YFT	Departure	11.4	-	-
08-Dec	19:47	3A084	ZUI	Arrival	13.4	-	-
08-Dec	20:10	3A185	ZUI	Departure	13.1	-	-
08-Dec	21:01	8S2113	XZM	Arrival	12.9	-	-
08-Dec	21:02	3A169	YFT	Departure	12.1	-	-
09-Dec	08:19	3A061	YFT	Arrival	11.9	-	-
09-Dec	08:36	8S210	XZM	Arrival	12.6	-	-
09-Dec	09:49	3A062	YFT	Arrival	11.6	-	-
09-Dec	10:42	8S212	XZM	Arrival	11.3	-	-
09-Dec	10:48	3A081	ZUI	Arrival	13.5	-	-
09-Dec	11:05	8S121	XZM	Departure	11.5	-	-
09-Dec	11:18	3A063	YFT	Arrival	11.5	-	-
09-Dec	12:18	3A168	YFT	Departure	12	-	-
09-Dec	12:19	3A181	ZUI	Departure	13.3	-	-
09-Dec	12:44	8S215	XZM	Arrival	11.2	-	-
09-Dec	13:03	3A064	YFT	Arrival	11.6	-	-
09-Dec	13:25	8S123	XZM	Departure	12.5	-	-
09-Dec	13:47	3A082	ZUI	Arrival	12.2	-	-
09-Dec	14:14	3A182	ZUI	Departure	11.3	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
09-Dec	14:16	3A164	YFT	Departure	12.1	-	-
09-Dec	14:56	3A065	YFT	Arrival	11.7	-	-
09-Dec	16:13	3A167	YFT	Departure	11.7	-	-
09-Dec	16:40	8S218	XZM	Arrival	11.3	-	-
09-Dec	16:42	3A083	ZUI	Arrival	13.4	-	-
09-Dec	17:02	3A067	YFT	Arrival	11.7	-	-
09-Dec	17:04	8S126	XZM	Departure	12	-	-
09-Dec	17:08	3A183	ZUI	Departure	13.4	-	-
09-Dec	19:05	3A166	YFT	Departure	12.1	-	-
09-Dec	19:45	3A084	ZUI	Arrival	14	-	-
09-Dec	20:11	3A185	ZUI	Departure	12.8	-	-
09-Dec	20:57	8S2113	XZM	Arrival	11.7	-	-
09-Dec	21:16	3A169	YFT	Departure	12	-	-
10-Dec	08:19	3A061	YFT	Arrival	11.1	-	-
10-Dec	08:27	8S210	XZM	Arrival	11.4	-	-
10-Dec	09:44	3A062	YFT	Arrival	12	-	-
10-Dec	10:40	8S212	XZM	Arrival	12.3	-	-
10-Dec	10:42	3A081	ZUI	Arrival	13.6	-	-
10-Dec	11:12	8S121	XZM	Departure	12.5	-	-
10-Dec	11:19	3A063	YFT	Arrival	11.7	-	-
10-Dec	12:10	3A168	YFT	Departure	12.8	-	-
10-Dec	12:14	3A181	ZUI	Departure	13.3	-	-
10-Dec	12:44	8S215	XZM	Arrival	11.9	-	-
10-Dec	12:58	3A064	YFT	Arrival	10.3	-	-
10-Dec	13:11	8S123	XZM	Departure	13	-	-
10-Dec	13:47	3A082	ZUI	Arrival	10.9	-	-
10-Dec	14:26	3A182	ZUI	Departure	11.8	-	-
10-Dec	14:27	3A164	YFT	Departure	11.8	-	-
10-Dec	14:56	3A065	YFT	Arrival	12.3	-	-
10-Dec	16:22	3A167	YFT	Departure	13.2	-	-
10-Dec	16:47	8S218	XZM	Arrival	12.2	-	-
10-Dec	16:47	3A083	ZUI	Arrival	13.2	-	-
10-Dec	17:04	3A067	YFT	Arrival	11.1	-	-
10-Dec	17:12	8S126	XZM	Departure	13	-	-
10-Dec	17:16	3A183	ZUI	Departure	12.8	-	-
10-Dec	19:11	3A166	YFT	Departure	11.3	-	-
10-Dec	19:53	3A084	ZUI	Arrival	13	-	-
10-Dec	20:17	3A185	ZUI	Departure	13.6	-	-
10-Dec	21:00	8S2113	XZM	Arrival	12.5	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
10-Dec	21:07	3A169	YFT	Departure	13.5	-	-
11-Dec	08:18	3A061	YFT	Arrival	11.8	-	-
11-Dec	08:31	8S210	XZM	Arrival	13	-	-
11-Dec	10:03	3A062	YFT	Arrival	12.6	-	-
11-Dec	10:42	8S212	XZM	Arrival	11.6	-	-
11-Dec	10:53	3A081	ZUI	Arrival	12.8	-	-
11-Dec	11:08	8S121	XZM	Departure	11.4	-	-
11-Dec	11:20	3A063	YFT	Arrival	12	-	-
11-Dec	12:14	3A168	YFT	Departure	12.2	-	-
11-Dec	12:18	3A181	ZUI	Departure	13.4	-	-
11-Dec	12:48	8S215	XZM	Arrival	11.3	-	-
11-Dec	13:00	3A064	YFT	Arrival	11.6	-	-
11-Dec	13:16	8S123	XZM	Departure	11.7	-	-
11-Dec	13:48	3A082	ZUI	Arrival	11.9	-	-
11-Dec	14:17	3A164	YFT	Departure	11.1	-	-
11-Dec	14:19	3A182	ZUI	Departure	12.1	-	-
11-Dec	14:59	3A065	YFT	Arrival	11.8	-	-
11-Dec	16:12	3A167	YFT	Departure	12.6	-	-
11-Dec	16:44	8S218	XZM	Arrival	11.6	-	-
11-Dec	16:53	3A083	ZUI	Arrival	11.7	-	-
11-Dec	17:13	3A183	ZUI	Departure	11.9	-	-
11-Dec	17:13	3A067	YFT	Arrival	12	-	-
11-Dec	17:16	8S126	XZM	Departure	11.3	-	-
11-Dec	19:14	3A166	YFT	Departure	12.1	-	-
11-Dec	19:44	3A084	ZUI	Arrival	12.4	-	-
11-Dec	20:07	3A185	ZUI	Departure	11.9	-	-
11-Dec	20:50	8S2113	XZM	Arrival	12.8	-	-
11-Dec	21:19	3A169	YFT	Departure	12	-	-
12-Dec	08:18	3A061	YFT	Arrival	12.3	-	-
12-Dec	08:28	8S210	XZM	Arrival	12.3	-	-
12-Dec	10:01	3A062	YFT	Arrival	12	-	-
12-Dec	10:36	8S212	XZM	Arrival	11.9	-	-
12-Dec	10:48	3A081	ZUI	Arrival	12.1	-	-
12-Dec	11:00	8S121	XZM	Departure	12.7	-	-
12-Dec	11:15	3A063	YFT	Arrival	12.2	-	-
12-Dec	12:19	3A181	ZUI	Departure	13.3	-	-
12-Dec	12:25	3A168	YFT	Departure	12.2	-	-
12-Dec	12:48	8S215	XZM	Arrival	11.3	-	-
12-Dec	12:56	3A064	YFT	Arrival	12.1	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
12-Dec	13:21	8S123	XZM	Departure	10.1	-	-
12-Dec	13:44	3A082	ZUI	Arrival	13.1	-	-
12-Dec	14:19	3A164	YFT	Departure	12.7	-	-
12-Dec	14:20	3A182	ZUI	Departure	11.8	-	-
12-Dec	14:51	3A065	YFT	Arrival	12	-	-
12-Dec	16:12	3A167	YFT	Departure	12.2	-	-
12-Dec	16:41	3A083	ZUI	Arrival	12.7	-	-
12-Dec	16:42	8S218	XZM	Arrival	10.3	-	-
12-Dec	16:54	3A067	YFT	Arrival	12.5	-	-
12-Dec	17:07	3A183	ZUI	Departure	14	-	-
12-Dec	17:10	8S126	XZM	Departure	10.9	-	-
12-Dec	19:05	3A166	YFT	Departure	12.9	-	-
12-Dec	19:50	3A084	ZUI	Arrival	12.8	-	-
12-Dec	20:08	3A185	ZUI	Departure	13.8	-	-
12-Dec	21:06	8S2113	XZM	Arrival	11.7	-	-
12-Dec	21:06	3A169	YFT	Departure	13.6	-	-
13-Dec	08:16	3A061	YFT	Arrival	11.7	-	-
13-Dec	08:27	8S210	XZM	Arrival	11.4	-	-
13-Dec	09:58	3A062	YFT	Arrival	11.8	-	-
13-Dec	10:43	8S212	XZM	Arrival	12	-	-
13-Dec	10:47	3A081	ZUI	Arrival	13.1	-	-
13-Dec	11:08	8S121	XZM	Departure	13.1	-	-
13-Dec	11:17	3A063	YFT	Arrival	13.4	-	-
13-Dec	12:14	3A181	ZUI	Departure	12.9	-	-
13-Dec	12:43	3A168	YFT	Departure	13.4	-	-
13-Dec	12:48	8S215	XZM	Arrival	12.3	-	-
13-Dec	13:00	3A064	YFT	Arrival	11.9	-	-
13-Dec	13:22	8S123	XZM	Departure	12.9	-	-
13-Dec	13:47	3A082	ZUI	Arrival	12.3	-	-
13-Dec	14:14	3A164	YFT	Departure	11.3	-	-
13-Dec	14:17	3A182	ZUI	Departure	12.7	-	-
13-Dec	15:07	3A065	YFT	Arrival	12.6	-	-
13-Dec	16:19	3A167	YFT	Departure	13.9	-	-
13-Dec	16:40	8S218	XZM	Arrival	9.8	-	-
13-Dec	16:43	3A083	ZUI	Arrival	12.4	-	-
13-Dec	16:56	3A067	YFT	Arrival	11.3	-	-
13-Dec	17:00	8S126	XZM	Departure	12.8	-	-
13-Dec	17:02	3A183	ZUI	Departure	13.2	-	-
13-Dec	19:04	3A166	YFT	Departure	11.7	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
13-Dec	19:48	3A084	ZUI	Arrival	13.3	-	-
13-Dec	20:04	3A185	ZUI	Departure	12.6	-	-
13-Dec	20:52	8S2113	XZM	Arrival	12.5	-	-
13-Dec	20:55	3A169	YFT	Departure	12.1	-	-
14-Dec	08:20	3A061	YFT	Arrival	10.9	-	-
14-Dec	08:36	8S210	XZM	Arrival	13.3	-	-
14-Dec	10:00	3A062	YFT	Arrival	12.5	-	-
14-Dec	10:41	8S212	XZM	Arrival	11.8	-	-
14-Dec	10:46	3A081	ZUI	Arrival	13.4	-	-
14-Dec	11:05	8S121	XZM	Departure	12.4	-	-
14-Dec	11:17	3A063	YFT	Arrival	13.2	-	-
14-Dec	12:18	3A168	YFT	Departure	12.8	-	-
14-Dec	12:25	3A181	ZUI	Departure	13.7	-	-
14-Dec	12:44	8S215	XZM	Arrival	11.9	-	-
14-Dec	12:58	3A064	YFT	Arrival	12	-	-
14-Dec	13:17	8S123	XZM	Departure	12.6	-	-
14-Dec	13:46	3A082	ZUI	Arrival	13.3	-	-
14-Dec	14:21	3A164	YFT	Departure	12.6	-	-
14-Dec	14:23	3A182	ZUI	Departure	11.7	-	-
14-Dec	14:56	3A065	YFT	Arrival	13	-	-
14-Dec	16:24	3A167	YFT	Departure	12.7	-	-
14-Dec	16:50	8S218	XZM	Arrival	11.7	-	-
14-Dec	16:54	3A083	ZUI	Arrival	11.4	-	-
14-Dec	16:55	3A067	YFT	Arrival	12.1	-	-
14-Dec	17:07	3A183	ZUI	Departure	13.2	-	-
14-Dec	17:26	8S126	XZM	Departure	12.4	-	-
14-Dec	19:14	3A166	YFT	Departure	13.2	-	-
14-Dec	19:46	3A084	ZUI	Arrival	12.9	-	-
14-Dec	20:12	3A185	ZUI	Departure	12.9	-	-
14-Dec	20:52	8S2113	XZM	Arrival	13.1	-	-
14-Dec	21:05	3A169	YFT	Departure	12.7	-	-
15-Dec	08:22	3A061	YFT	Arrival	11.4	-	-
15-Dec	08:31	8S210	XZM	Arrival	12.6	-	-
15-Dec	09:50	3A062	YFT	Arrival	13.2	-	-
15-Dec	10:38	8S212	XZM	Arrival	11.8	-	-
15-Dec	10:42	3A081	ZUI	Arrival	13.5	-	-
15-Dec	11:04	8S121	XZM	Departure	12.5	-	-
15-Dec	11:17	3A063	YFT	Arrival	11	-	-
15-Dec	12:14	3A181	ZUI	Departure	11.3	<= 5	< 1min

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
15-Dec	12:19	3A168	YFT	Departure	11.5	-	-
15-Dec	12:47	8S215	XZM	Arrival	11.4	-	-
15-Dec	13:00	3A064	YFT	Arrival	11.7	-	-
15-Dec	13:16	8S123	XZM	Departure	10.7	-	-
15-Dec	13:52	3A082	ZUI	Arrival	12.2	-	-
15-Dec	14:15	3A164	YFT	Departure	11.4	-	-
15-Dec	14:17	3A182	ZUI	Departure	12.1	-	-
15-Dec	15:02	3A065	YFT	Arrival	11.8	-	-
15-Dec	16:17	3A167	YFT	Departure	10.9	-	-
15-Dec	16:43	8S218	XZM	Arrival	10.9	-	-
15-Dec	16:49	3A083	ZUI	Arrival	13.5	-	-
15-Dec	17:00	3A067	YFT	Arrival	11.9	-	-
15-Dec	17:11	3A183	ZUI	Departure	12.2	-	-
15-Dec	17:14	8S126	XZM	Departure	11.5	-	-
15-Dec	19:18	3A166	YFT	Departure	11.7	-	-
15-Dec	19:48	3A084	ZUI	Arrival	12.4	-	-
15-Dec	20:06	3A185	ZUI	Departure	13.4	-	-
15-Dec	21:01	8S2113	XZM	Arrival	13.1	-	-
15-Dec	21:07	3A169	YFT	Departure	11.2	-	-
16-Dec	08:22	3A061	YFT	Arrival	11.5	-	-
16-Dec	08:30	8S210	XZM	Arrival	11.3	-	-
16-Dec	09:59	3A062	YFT	Arrival	11.7	-	-
16-Dec	10:37	8S212	XZM	Arrival	11.9	-	-
16-Dec	10:53	3A081	ZUI	Arrival	12.5	-	-
16-Dec	11:06	8S121	XZM	Departure	12.8	-	-
16-Dec	11:20	3A063	YFT	Arrival	11.9	-	-
16-Dec	12:14	3A168	YFT	Departure	12	-	-
16-Dec	12:16	3A181	ZUI	Departure	13.4	-	-
16-Dec	12:58	8S215	XZM	Arrival	11.2	-	-
16-Dec	13:03	3A064	YFT	Arrival	11.2	-	-
16-Dec	13:16	8S123	XZM	Departure	12.8	-	-
16-Dec	13:50	3A082	ZUI	Arrival	13.4	-	-
16-Dec	14:13	3A164	YFT	Departure	12.1	-	-
16-Dec	14:19	3A182	ZUI	Departure	10.9	-	-
16-Dec	14:58	3A065	YFT	Arrival	11.6	-	-
16-Dec	16:15	3A167	YFT	Departure	12.4	-	-
16-Dec	16:41	3A083	ZUI	Arrival	12.6	-	-
16-Dec	16:46	8S218	XZM	Arrival	12.8	-	-
16-Dec	17:00	3A067	YFT	Arrival	11.2	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
16-Dec	17:12	8S126	XZM	Departure	12.2	-	-
16-Dec	17:14	3A183	ZUI	Departure	12.8	-	-
16-Dec	19:03	3A166	YFT	Departure	12	-	-
16-Dec	19:56	3A084	ZUI	Arrival	12.8	-	-
16-Dec	20:16	3A185	ZUI	Departure	13.5	-	-
16-Dec	21:04	3A169	YFT	Departure	12.7	-	-
16-Dec	21:21	8S2113	XZM	Arrival	12.6	-	-
17-Dec	08:20	3A061	YFT	Arrival	12.2	-	-
17-Dec	08:24	8S210	XZM	Arrival	12.6	-	-
17-Dec	09:53	3A062	YFT	Arrival	12.2	-	-
17-Dec	10:39	8S212	XZM	Arrival	11.9	-	-
17-Dec	10:48	3A081	ZUI	Arrival	12.1	-	-
17-Dec	11:04	8S121	XZM	Departure	12.9	-	-
17-Dec	11:16	3A063	YFT	Arrival	12.5	-	-
17-Dec	12:23	3A168	YFT	Departure	12.6	-	-
17-Dec	12:25	3A181	ZUI	Departure	13.2	-	-
17-Dec	12:53	8S215	XZM	Arrival	10.8	-	-
17-Dec	12:55	3A064	YFT	Arrival	13.1	-	-
17-Dec	13:19	8S123	XZM	Departure	10.8	-	-
17-Dec	13:51	3A082	ZUI	Arrival	12.2	-	-
17-Dec	14:19	3A164	YFT	Departure	13.1	-	-
17-Dec	14:23	3A182	ZUI	Departure	12.2	-	-
17-Dec	14:59	3A065	YFT	Arrival	11.9	-	-
17-Dec	16:20	3A167	YFT	Departure	12.9	-	-
17-Dec	16:45	8S218	XZM	Arrival	11.5	-	-
17-Dec	16:48	3A083	ZUI	Arrival	12.5	-	-
17-Dec	16:56	3A067	YFT	Arrival	12.7	-	-
17-Dec	17:17	8S126	XZM	Departure	11.3	-	-
17-Dec	17:21	3A183	ZUI	Departure	12.9	-	-
17-Dec	19:19	3A166	YFT	Departure	12.4	-	-
17-Dec	19:56	3A084	ZUI	Arrival	13.2	-	-
17-Dec	20:12	3A185	ZUI	Departure	12.9	-	-
17-Dec	20:54	8S2113	XZM	Arrival	12.6	-	-
17-Dec	21:06	3A169	YFT	Departure	12	-	-
18-Dec	08:18	3A061	YFT	Arrival	13.3	-	-
18-Dec	08:41	8S210	XZM	Arrival	12.8	-	-
18-Dec	10:00	3A062	YFT	Arrival	11.5	<= 5	< 1min
18-Dec	10:51	3A081	ZUI	Arrival	12.5	-	-
18-Dec	10:56	8S212	XZM	Arrival	11.8	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
18-Dec	11:30	8S121	XZM	Departure	12.7	-	-
18-Dec	11:39	3A063	YFT	Arrival	11.8	-	-
18-Dec	12:25	3A181	ZUI	Departure	13.1	-	-
18-Dec	12:26	3A168	YFT	Departure	11.6	-	-
18-Dec	12:55	8S215	XZM	Arrival	11.3	-	-
18-Dec	12:58	3A064	YFT	Arrival	13.4	-	-
18-Dec	13:19	8S123	XZM	Departure	13	-	-
18-Dec	13:44	3A082	ZUI	Arrival	12.2	-	-
18-Dec	14:16	3A182	ZUI	Departure	12.9	-	-
18-Dec	14:20	3A164	YFT	Departure	13.9	-	-
18-Dec	15:11	3A065	YFT	Arrival	11.8	-	-
18-Dec	16:27	3A167	YFT	Departure	11.5	-	-
18-Dec	16:44	3A083	ZUI	Arrival	12.9	-	-
18-Dec	16:46	8S218	XZM	Arrival	10.9	-	-
18-Dec	16:55	3A067	YFT	Arrival	13.3	-	-
18-Dec	17:10	3A183	ZUI	Departure	13.5	-	-
18-Dec	17:21	8S126	XZM	Departure	11.8	-	-
18-Dec	19:08	3A166	YFT	Departure	13.3	-	-
18-Dec	19:46	3A084	ZUI	Arrival	13.1	-	-
18-Dec	20:21	3A185	ZUI	Departure	13.1	-	-
18-Dec	21:05	3A169	YFT	Departure	12.3	-	-
18-Dec	21:15	8S2113	XZM	Arrival	11.6	-	-
19-Dec	08:23	3A061	YFT	Arrival	11.1	-	-
19-Dec	08:50	8S210	XZM	Arrival	12.5	-	-
19-Dec	09:54	3A062	YFT	Arrival	12.8	-	-
19-Dec	10:56	8S212	XZM	Arrival	11.2	-	-
19-Dec	11:05	3A081	ZUI	Arrival	12.3	-	-
19-Dec	11:25	3A063	YFT	Arrival	11	-	-
19-Dec	11:34	8S121	XZM	Departure	11.6	-	-
19-Dec	12:13	3A181	ZUI	Departure	13.2	-	-
19-Dec	12:13	3A168	YFT	Departure	11.7	-	-
19-Dec	12:56	8S215	XZM	Arrival	12.7	-	-
19-Dec	12:57	3A064	YFT	Arrival	11.3	-	-
19-Dec	13:28	8S123	XZM	Departure	13	-	-
19-Dec	13:49	3A082	ZUI	Arrival	12.8	-	-
19-Dec	14:13	3A164	YFT	Departure	11.3	-	-
19-Dec	14:14	3A182	ZUI	Departure	12.4	-	-
19-Dec	15:08	3A065	YFT	Arrival	11.7	-	-
19-Dec	16:18	3A167	YFT	Departure	12	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
19-Dec	16:43	8S218	XZM	Arrival	11.9	-	-
19-Dec	16:47	3A083	ZUI	Arrival	12.2	-	-
19-Dec	17:03	3A183	ZUI	Departure	13.3	-	-
19-Dec	17:10	8S126	XZM	Departure	13.2	-	-
19-Dec	17:29	3A067	YFT	Arrival	11.5	-	-
19-Dec	19:02	3A166	YFT	Departure	12	-	-
19-Dec	19:49	3A084	ZUI	Arrival	12.8	-	-
19-Dec	20:15	3A185	ZUI	Departure	12.9	-	-
19-Dec	21:02	8S2113	XZM	Arrival	12.4	-	-
19-Dec	21:08	3A169	YFT	Departure	13.4	-	-
20-Dec	08:30	3A061	YFT	Arrival	12.2	-	-
20-Dec	08:47	8S210	XZM	Arrival	11.9	-	-
20-Dec	09:26	8S2123	XZM	Arrival	12.6	-	-
20-Dec	10:04	3A062	YFT	Arrival	12.9	-	-
20-Dec	10:43	8S212	XZM	Arrival	11.5	-	-
20-Dec	10:49	3A081	ZUI	Arrival	13	-	-
20-Dec	11:18	8S121	XZM	Departure	11.4	-	-
20-Dec	11:28	3A063	YFT	Arrival	11.2	-	-
20-Dec	12:17	3A181	ZUI	Departure	12.5	-	-
20-Dec	12:25	3A168	YFT	Departure	11.4	-	-
20-Dec	12:59	8S215	XZM	Arrival	12.1	-	-
20-Dec	13:03	3A064	YFT	Arrival	12.6	-	-
20-Dec	13:31	8S123	XZM	Departure	12.8	-	-
20-Dec	13:49	3A082	ZUI	Arrival	11.4	-	-
20-Dec	14:22	3A164	YFT	Departure	13.3	-	-
20-Dec	14:24	3A182	ZUI	Departure	12.4	-	-
20-Dec	15:21	3A065	YFT	Arrival	11.7	-	-
20-Dec	16:21	3A167	YFT	Departure	11.1	-	-
20-Dec	16:42	3A083	ZUI	Arrival	12.1	-	-
20-Dec	16:49	8S218	XZM	Arrival	11.8	-	-
20-Dec	16:58	3A183	ZUI	Departure	13.3	-	-
20-Dec	17:06	3A067	YFT	Arrival	12.7	-	-
20-Dec	17:19	8S126	XZM	Departure	12.8	-	-
20-Dec	19:11	3A166	YFT	Departure	13	-	-
20-Dec	19:47	3A084	ZUI	Arrival	12.6	-	-
20-Dec	20:09	3A185	ZUI	Departure	13.5	-	-
20-Dec	21:05	8S2113	XZM	Arrival	11.6	-	-
20-Dec	21:05	3A169	YFT	Departure	11.9	-	-
21-Dec	08:18	3A061	YFT	Arrival	12.6	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
21-Dec	08:44	8S210	XZM	Arrival	11.4	-	-
21-Dec	10:08	3A062	YFT	Arrival	13.1	-	-
21-Dec	10:38	3A081	ZUI	Arrival	12.9	-	-
21-Dec	10:43	8S212	XZM	Arrival	11.9	-	-
21-Dec	11:06	8S121	XZM	Departure	11.8	-	-
21-Dec	11:18	3A063	YFT	Arrival	11.8	-	-
21-Dec	12:20	3A181	ZUI	Departure	12.7	-	-
21-Dec	12:22	3A168	YFT	Departure	12.3	-	-
21-Dec	12:46	8S215	XZM	Arrival	10.9	-	-
21-Dec	12:59	3A064	YFT	Arrival	12.7	-	-
21-Dec	13:19	8S123	XZM	Departure	12.8	-	-
21-Dec	13:50	3A082	ZUI	Arrival	10.7	-	-
21-Dec	14:16	3A164	YFT	Departure	12.7	-	-
21-Dec	14:17	3A182	ZUI	Departure	12.7	-	-
21-Dec	14:55	3A065	YFT	Arrival	12.3	-	-
21-Dec	16:22	3A167	YFT	Departure	12.5	-	-
21-Dec	16:37	8S218	XZM	Arrival	10.9	-	-
21-Dec	16:41	3A083	ZUI	Arrival	13	-	-
21-Dec	16:59	8S126	XZM	Departure	12.9	-	-
21-Dec	17:00	3A067	YFT	Arrival	12.4	-	-
21-Dec	17:02	3A183	ZUI	Departure	12.8	-	-
21-Dec	19:03	3A166	YFT	Departure	13.2	-	-
21-Dec	19:47	3A084	ZUI	Arrival	13	-	-
21-Dec	20:06	3A185	ZUI	Departure	12.9	-	-
21-Dec	21:04	8S2113	XZM	Arrival	11.7	-	-
21-Dec	21:10	3A169	YFT	Departure	12.1	-	-
22-Dec	08:18	3A061	YFT	Arrival	11.6	-	-
22-Dec	08:38	8S210	XZM	Arrival	11.4	-	-
22-Dec	09:59	3A062	YFT	Arrival	10.8	-	-
22-Dec	10:16	3A163	YFT	Departure	11.5	-	-
22-Dec	10:36	3A081	ZUI	Arrival	12.1	-	-
22-Dec	10:40	8S212	XZM	Arrival	12.7	-	-
22-Dec	11:12	8S121	XZM	Departure	13.2	-	-
22-Dec	11:21	3A063	YFT	Arrival	13	-	-
22-Dec	12:16	3A181	ZUI	Departure	11.8	-	-
22-Dec	12:17	3A168	YFT	Departure	13.6	-	-
22-Dec	12:41	8S215	XZM	Arrival	12.6	-	-
22-Dec	12:53	3A064	YFT	Arrival	12	-	-
22-Dec	13:13	8S123	XZM	Departure	12.9	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
22-Dec	13:49	3A082	ZUI	Arrival	11.9	-	-
22-Dec	14:11	3A182	ZUI	Departure	12.4	-	-
22-Dec	14:25	3A164	YFT	Departure	12	-	-
22-Dec	14:52	3A065	YFT	Arrival	13.2	-	-
22-Dec	16:16	3A167	YFT	Departure	12.9	-	-
22-Dec	16:39	3A083	ZUI	Arrival	12.8	-	-
22-Dec	16:44	8S218	XZM	Arrival	13.2	-	-
22-Dec	16:58	3A067	YFT	Arrival	12.4	-	-
22-Dec	17:04	3A183	ZUI	Departure	13	-	-
22-Dec	17:04	8S126	XZM	Departure	13.1	-	-
22-Dec	19:03	3A166	YFT	Departure	12.6	-	-
22-Dec	19:44	3A084	ZUI	Arrival	13.1	-	-
22-Dec	20:17	3A185	ZUI	Departure	13.1	-	-
22-Dec	20:50	8S2113	XZM	Arrival	11.7	-	-
22-Dec	21:09	3A169	YFT	Departure	12.6	<= 5	< 1min
23-Dec	08:16	3A061	YFT	Arrival	13.9	-	-
23-Dec	08:24	8S210	XZM	Arrival	12.8	-	-
23-Dec	09:47	3A062	YFT	Arrival	12.1	<= 5	< 1min
23-Dec	10:30	3A163	YFT	Departure	13	-	-
23-Dec	10:34	8S212	XZM	Arrival	12.2	-	-
23-Dec	10:40	3A081	ZUI	Arrival	12.1	-	-
23-Dec	10:59	8S121	XZM	Departure	13	-	-
23-Dec	11:40	3A063	YFT	Arrival	13.3	-	-
23-Dec	12:11	3A181	ZUI	Departure	12	-	-
23-Dec	12:13	3A168	YFT	Departure	13.8	-	-
23-Dec	12:48	8S215	XZM	Arrival	11.6	-	-
23-Dec	12:53	3A064	YFT	Arrival	11.9	-	-
23-Dec	13:25	8S123	XZM	Departure	11.1	-	-
23-Dec	13:42	3A082	ZUI	Arrival	11.9	-	-
23-Dec	14:25	3A164	YFT	Departure	13.1	-	-
23-Dec	14:25	3A182	ZUI	Departure	12.2	-	-
23-Dec	14:53	3A065	YFT	Arrival	13.2	-	-
23-Dec	16:22	3A167	YFT	Departure	13.8	-	-
23-Dec	16:42	8S218	XZM	Arrival	11.9	-	-
23-Dec	16:44	3A083	ZUI	Arrival	13.7	-	-
23-Dec	16:47	3A067	YFT	Arrival	13	-	-
23-Dec	17:14	3A183	ZUI	Departure	12.8	-	-
23-Dec	17:20	8S126	XZM	Departure	12	-	-
23-Dec	19:06	3A166	YFT	Departure	12.1	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
23-Dec	19:45	3A084	ZUI	Arrival	12.9	-	-
23-Dec	20:07	3A185	ZUI	Departure	13.3	-	-
23-Dec	20:49	8S2113	XZM	Arrival	12	-	-
23-Dec	21:07	3A169	YFT	Departure	12.8	-	-
23-Dec	22:18	8S522	XZM	Departure	13.2	-	-
24-Dec	08:15	3A061	YFT	Arrival	12.1	-	-
24-Dec	08:35	8S210	XZM	Arrival	11.5	-	-
24-Dec	10:09	3A062	YFT	Arrival	12.2	-	-
24-Dec	10:27	3A163	YFT	Departure	12.7	-	-
24-Dec	10:37	8S212	XZM	Arrival	11.7	-	-
24-Dec	10:43	3A081	ZUI	Arrival	12.7	-	-
24-Dec	11:04	8S121	XZM	Departure	12.1	-	-
24-Dec	11:12	3A063	YFT	Arrival	11.5	-	-
24-Dec	12:13	3A181	ZUI	Departure	12.3	-	-
24-Dec	12:30	3A168	YFT	Departure	10.9	-	-
24-Dec	12:49	8S215	XZM	Arrival	11.2	-	-
24-Dec	12:59	3A064	YFT	Arrival	12.2	-	-
24-Dec	13:30	8S123	XZM	Departure	12.3	-	-
24-Dec	13:39	3A082	ZUI	Arrival	11.9	-	-
24-Dec	14:21	3A164	YFT	Departure	12.8	-	-
24-Dec	14:22	3A182	ZUI	Departure	12.3	-	-
24-Dec	14:58	3A065	YFT	Arrival	11.8	-	-
24-Dec	16:17	3A167	YFT	Departure	11.9	-	-
24-Dec	16:34	8S218	XZM	Arrival	10.8	-	-
24-Dec	16:39	3A083	ZUI	Arrival	13.2	-	-
24-Dec	17:06	3A067	YFT	Arrival	12.3	-	-
24-Dec	17:07	8S126	XZM	Departure	12.9	-	-
24-Dec	17:08	3A183	ZUI	Departure	13.7	-	-
24-Dec	19:14	3A166	YFT	Departure	11.9	-	-
24-Dec	19:47	3A084	ZUI	Arrival	12.4	-	-
24-Dec	20:08	3A185	ZUI	Departure	13.6	-	-
24-Dec	20:47	8S2113	XZM	Arrival	13.4	-	-
24-Dec	21:01	3A169	YFT	Departure	11.9	-	-
24-Dec	22:06	8S522	XZM	Departure	13.2	-	-
25-Dec	08:17	3A061	YFT	Arrival	11	-	-
25-Dec	08:28	8S210	XZM	Arrival	12	-	-
25-Dec	10:00	3A062	YFT	Arrival	11.8	-	-
25-Dec	10:19	3A163	YFT	Departure	12.3	-	-
25-Dec	10:41	8S212	XZM	Arrival	11.3	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
25-Dec	10:44	3A081	ZUI	Arrival	13.2	-	-
25-Dec	11:08	8S121	XZM	Departure	12	-	-
25-Dec	11:12	3A063	YFT	Arrival	12.6	-	-
25-Dec	12:11	3A181	ZUI	Departure	12.9	-	-
25-Dec	12:25	3A168	YFT	Departure	12.6	-	-
25-Dec	12:56	3A064	YFT	Arrival	12.2	-	-
25-Dec	12:59	8S215	XZM	Arrival	12.2	-	-
25-Dec	13:21	8S123	XZM	Departure	12.4	-	-
25-Dec	13:44	3A082	ZUI	Arrival	12.3	-	-
25-Dec	14:18	3A182	ZUI	Departure	11.9	-	-
25-Dec	14:21	3A164	YFT	Departure	12.4	-	-
25-Dec	15:06	3A065	YFT	Arrival	12.9	-	-
25-Dec	16:24	3A167	YFT	Departure	12.7	-	-
25-Dec	16:38	8S218	XZM	Arrival	10.3	-	-
25-Dec	16:41	3A083	ZUI	Arrival	13	-	-
25-Dec	17:13	3A067	YFT	Arrival	12.1	-	-
25-Dec	17:20	3A183	ZUI	Departure	13.4	-	-
25-Dec	17:23	8S126	XZM	Departure	12.7	-	-
25-Dec	19:18	3A166	YFT	Departure	11.9	-	-
25-Dec	19:49	3A084	ZUI	Arrival	13.5	-	-
25-Dec	20:10	3A185	ZUI	Departure	12.9	<= 5	< 1min
25-Dec	20:52	8S2113	XZM	Arrival	12.4	-	-
25-Dec	21:20	3A169	YFT	Departure	13.1	-	-
25-Dec	22:07	8S522	XZM	Departure	12	-	-
26-Dec	08:12	3A061	YFT	Arrival	12	-	-
26-Dec	08:26	8S210	XZM	Arrival	11.6	-	-
26-Dec	09:48	3A062	YFT	Arrival	13.1	-	-
26-Dec	10:36	3A163	YFT	Departure	13.8	-	-
26-Dec	10:36	8S212	XZM	Arrival	12.3	-	-
26-Dec	10:45	3A081	ZUI	Arrival	13.2	-	-
26-Dec	11:17	8S121	XZM	Departure	11.2	-	-
26-Dec	11:27	3A063	YFT	Arrival	12.5	-	-
26-Dec	12:20	3A181	ZUI	Departure	13.5	-	-
26-Dec	12:21	3A168	YFT	Departure	13.3	-	-
26-Dec	12:49	8S215	XZM	Arrival	12.2	-	-
26-Dec	13:05	3A064	YFT	Arrival	13.1	<= 5	< 1min
26-Dec	13:23	8S123	XZM	Departure	13.1	-	-
26-Dec	13:49	3A082	ZUI	Arrival	12.8	-	-
26-Dec	14:25	3A164	YFT	Departure	13.9	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
26-Dec	14:28	3A182	ZUI	Departure	12.1	-	-
26-Dec	15:00	3A065	YFT	Arrival	12.6	-	-
26-Dec	16:21	3A167	YFT	Departure	13.1	-	-
26-Dec	16:40	8S218	XZM	Arrival	11.1	-	-
26-Dec	16:43	3A083	ZUI	Arrival	12.2	-	-
26-Dec	17:05	3A183	ZUI	Departure	12.9	-	-
26-Dec	17:13	8S126	XZM	Departure	13.2	-	-
26-Dec	17:17	3A067	YFT	Arrival	13.2	-	-
26-Dec	19:09	3A166	YFT	Departure	13.4	-	-
26-Dec	19:45	3A084	ZUI	Arrival	13.6	-	-
26-Dec	20:11	3A185	ZUI	Departure	13.1	-	-
26-Dec	20:52	8S2113	XZM	Arrival	13.2	-	-
26-Dec	21:19	3A169	YFT	Departure	13.6	-	-
26-Dec	22:04	8S522	XZM	Departure	13.1	-	-
27-Dec	08:17	3A061	YFT	Arrival	12.2	-	-
27-Dec	08:29	8S210	XZM	Arrival	12.5	-	-
27-Dec	09:59	3A062	YFT	Arrival	12.1	-	-
27-Dec	10:20	3A163	YFT	Departure	11.9	-	-
27-Dec	10:37	8S212	XZM	Arrival	11.7	-	-
27-Dec	10:47	3A081	ZUI	Arrival	12.9	-	-
27-Dec	11:05	8S121	XZM	Departure	11.6	-	-
27-Dec	11:22	3A063	YFT	Arrival	12.5	-	-
27-Dec	12:13	3A181	ZUI	Departure	13.5	-	-
27-Dec	12:16	3A168	YFT	Departure	11.8	-	-
27-Dec	12:49	8S215	XZM	Arrival	11.1	-	-
27-Dec	13:06	3A064	YFT	Arrival	12.3	-	-
27-Dec	13:15	8S123	XZM	Departure	10.6	-	-
27-Dec	13:47	3A082	ZUI	Arrival	12	-	-
27-Dec	14:12	3A182	ZUI	Departure	12.3	-	-
27-Dec	14:17	3A164	YFT	Departure	12.8	-	-
27-Dec	15:08	3A065	YFT	Arrival	11.8	-	-
27-Dec	16:20	3A167	YFT	Departure	12.7	-	-
27-Dec	16:41	8S218	XZM	Arrival	11.4	-	-
27-Dec	16:45	3A083	ZUI	Arrival	11.5	-	-
27-Dec	16:57	3A067	YFT	Arrival	11.4	-	-
27-Dec	17:03	8S126	XZM	Departure	11.3	-	-
27-Dec	17:07	3A183	ZUI	Departure	12.6	-	-
27-Dec	19:16	3A166	YFT	Departure	12	-	-
27-Dec	19:39	3A084	ZUI	Arrival	12.8	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
27-Dec	20:09	3A185	ZUI	Departure	12.8	-	-
27-Dec	20:50	8S2113	XZM	Arrival	13	-	-
27-Dec	21:16	3A169	YFT	Departure	13.7	-	-
27-Dec	21:57	8S522	XZM	Departure	12.7	-	-
28-Dec	08:18	3A061	YFT	Arrival	11.5	-	-
28-Dec	08:26	8S210	XZM	Arrival	12.3	-	-
28-Dec	09:54	3A062	YFT	Arrival	10.9	-	-
28-Dec	10:17	3A163	YFT	Departure	11.2	-	-
28-Dec	10:42	8S212	XZM	Arrival	12.1	-	-
28-Dec	10:51	3A081	ZUI	Arrival	12.6	-	-
28-Dec	11:11	8S121	XZM	Departure	13.3	-	-
28-Dec	11:16	3A063	YFT	Arrival	13	-	-
28-Dec	12:10	3A181	ZUI	Departure	12.9	-	-
28-Dec	12:23	3A168	YFT	Departure	13.6	-	-
28-Dec	12:44	8S215	XZM	Arrival	12.9	-	-
28-Dec	12:58	3A064	YFT	Arrival	11.5	-	-
28-Dec	13:20	8S123	XZM	Departure	13	-	-
28-Dec	13:45	3A082	ZUI	Arrival	12.6	-	-
28-Dec	14:19	3A164	YFT	Departure	10.8	-	-
28-Dec	14:21	3A182	ZUI	Departure	12.3	-	-
28-Dec	14:57	3A065	YFT	Arrival	13.3	-	-
28-Dec	16:21	3A167	YFT	Departure	14	-	-
28-Dec	16:42	3A083	ZUI	Arrival	13.4	-	-
28-Dec	16:44	8S218	XZM	Arrival	13.1	-	-
28-Dec	17:02	3A067	YFT	Arrival	11.5	-	-
28-Dec	17:05	3A183	ZUI	Departure	13.5	-	-
28-Dec	17:14	8S126	XZM	Departure	13.3	-	-
28-Dec	19:14	3A166	YFT	Departure	12.3	-	-
28-Dec	19:49	3A084	ZUI	Arrival	13.3	-	-
28-Dec	20:10	3A185	ZUI	Departure	13.8	-	-
28-Dec	21:01	3A169	YFT	Departure	11.7	-	-
28-Dec	21:02	8S2113	XZM	Arrival	12	-	-
29-Dec	08:18	3A061	YFT	Arrival	12.2	-	-
29-Dec	08:25	8S210	XZM	Arrival	13.6	-	-
29-Dec	09:52	3A062	YFT	Arrival	12.2	-	-
29-Dec	10:26	3A163	YFT	Departure	11.5	-	-
29-Dec	10:51	3A081	ZUI	Arrival	13.4	-	-
29-Dec	10:52	8S212	XZM	Arrival	12	-	-
29-Dec	11:05	8S121	XZM	Departure	11	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
29-Dec	11:22	3A063	YFT	Arrival	12.3	-	-
29-Dec	12:20	3A181	ZUI	Departure	12.4	-	-
29-Dec	12:20	3A168	YFT	Departure	12.3	-	-
29-Dec	12:51	8S215	XZM	Arrival	11.4	-	-
29-Dec	13:07	3A064	YFT	Arrival	11.9	-	-
29-Dec	13:23	8S123	XZM	Departure	12	-	-
29-Dec	13:42	3A082	ZUI	Arrival	13.2	-	-
29-Dec	14:20	3A164	YFT	Departure	12.4	-	-
29-Dec	14:24	3A182	ZUI	Departure	11.8	-	-
29-Dec	15:03	3A065	YFT	Arrival	12.4	-	-
29-Dec	16:24	3A167	YFT	Departure	12.3	-	-
29-Dec	16:39	8S218	XZM	Arrival	11.4	-	-
29-Dec	16:43	3A083	ZUI	Arrival	12.8	-	-
29-Dec	17:11	3A183	ZUI	Departure	13.7	-	-
29-Dec	17:13	3A067	YFT	Arrival	11.6	-	-
29-Dec	17:18	8S126	XZM	Departure	11.6	-	-
29-Dec	19:14	3A166	YFT	Departure	12	-	-
29-Dec	19:51	3A084	ZUI	Arrival	11.8	-	-
29-Dec	20:09	3A185	ZUI	Departure	14	-	-
29-Dec	20:54	8S2113	XZM	Arrival	12.8	-	-
29-Dec	21:01	3A169	YFT	Departure	12.4	-	-
29-Dec	21:57	8S522	XZM	Departure	12.6	-	-
30-Dec	08:20	3A061	YFT	Arrival	12	-	-
30-Dec	08:32	8S210	XZM	Arrival	11.7	-	-
30-Dec	09:47	3A062	YFT	Arrival	12.6	-	-
30-Dec	10:27	3A163	YFT	Departure	13.2	-	-
30-Dec	10:40	8S212	XZM	Arrival	12.2	-	-
30-Dec	10:50	3A081	ZUI	Arrival	12.9	-	-
30-Dec	11:11	8S121	XZM	Departure	13	-	-
30-Dec	11:20	3A063	YFT	Arrival	11.2	-	-
30-Dec	12:10	3A181	ZUI	Departure	12.5	-	-
30-Dec	12:15	3A168	YFT	Departure	10.7	-	-
30-Dec	12:42	8S215	XZM	Arrival	11.7	-	-
30-Dec	12:58	3A064	YFT	Arrival	12.4	-	-
30-Dec	13:23	8S123	XZM	Departure	13.1	-	-
30-Dec	13:48	3A082	ZUI	Arrival	12.5	-	-
30-Dec	14:26	3A182	ZUI	Departure	13.5	-	-
30-Dec	14:28	3A164	YFT	Departure	12.6	-	-
30-Dec	15:02	3A065	YFT	Arrival	11.1	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
30-Dec	16:23	3A167	YFT	Departure	11.6	-	-
30-Dec	16:35	3A083	ZUI	Arrival	12.7	-	-
30-Dec	16:44	8S218	XZM	Arrival	11.1	-	-
30-Dec	16:57	3A183	ZUI	Departure	13.8	-	-
30-Dec	17:14	3A067	YFT	Arrival	12.2	-	-
30-Dec	17:24	8S126	XZM	Departure	13.3	-	-
30-Dec	19:12	3A166	YFT	Departure	12.1	-	-
30-Dec	19:52	3A084	ZUI	Arrival	12.6	-	-
30-Dec	20:11	3A185	ZUI	Departure	13.2	-	-
30-Dec	21:08	8S2113	XZM	Arrival	11.8	-	-
30-Dec	21:10	3A169	YFT	Departure	11.3	-	-
30-Dec	22:07	8S522	XZM	Departure	11.8	-	-
31-Dec	08:18	3A061	YFT	Arrival	11.4	-	-
31-Dec	08:24	8S210	XZM	Arrival	11.8	-	-
31-Dec	09:44	3A062	YFT	Arrival	11.5	-	-
31-Dec	10:26	3A163	YFT	Departure	11	-	-
31-Dec	10:33	8S212	XZM	Arrival	12.2	-	-
31-Dec	10:50	3A081	ZUI	Arrival	13	-	-
31-Dec	11:07	8S121	XZM	Departure	12	-	-
31-Dec	11:18	3A063	YFT	Arrival	11.7	-	-
31-Dec	12:09	3A181	ZUI	Departure	12.7	-	-
31-Dec	12:17	3A168	YFT	Departure	11.7	-	-
31-Dec	12:50	8S215	XZM	Arrival	11.7	-	-
31-Dec	12:55	3A064	YFT	Arrival	11.7	-	-
31-Dec	13:21	8S123	XZM	Departure	13	-	-
31-Dec	13:49	3A082	ZUI	Arrival	12.4	-	-
31-Dec	14:13	3A182	ZUI	Departure	12.7	-	-
31-Dec	14:19	3A164	YFT	Departure	11.7	-	-
31-Dec	14:59	3A065	YFT	Arrival	11.4	-	-
31-Dec	16:40	8S218	XZM	Arrival	10.5	-	-
31-Dec	16:46	3A083	ZUI	Arrival	13.2	-	-
31-Dec	17:05	3A183	ZUI	Departure	13.3	-	-
31-Dec	17:10	3A167	YFT	Departure	12.3	-	-
31-Dec	17:12	8S126	XZM	Departure	13.1	-	-
31-Dec	17:16	3A067	YFT	Arrival	11.6	-	-
31-Dec	19:15	3A166	YFT	Departure	11	-	-
31-Dec	19:48	3A084	ZUI	Arrival	13.1	-	-
31-Dec	20:05	3A185	ZUI	Departure	13.3	-	-
31-Dec	20:46	8S2113	XZM	Arrival	13.1	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
31-Dec	21:06	3A169	YFT	Departure	13.6	-	-
31-Dec	22:06	8S522	XZM	Departure	13.3	-	-

Follow-up on instantaneous speeding

Referring to the data of SkyPier HSF movements in December 2017, instantaneous speeding (i.e. a sudden change in speed at over 15 knots for a short period of time) within the SCZ was recorded from 9 HSF movements of which the duration of all instantaneous speeding cases was less than one minute. The AIS data and ferry operators' responses showed the cases were due to local strong water currents. The captain had reduced speed and maintained the speed at less than 15 knots after the incidents.

Three HSF movements with no AIS data and five HSFs with insufficient transmission of AIS data were received in December 2017. Another HSF with insufficient transmission of AIS data on 17 November 2017, which was not recorded in the High Speed Ferry Monitoring System, was recently discovered during auditing. Vessel captain was requested to provide the AIS plots to indicate the vessel entered the SCZ though the gate access point with no speeding in the SCZ.