MOTT MACDONALD

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

Construction Phase Monthly EM&A Report No.23 (For November 2017)

December 2017

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This Monthly EM&A Report No. 23 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 14 December 2017

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By Email

Airport Authority Hong Kong
HKIA Tower, 1 Sky Plaza Road
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Attn: Mr. Lawrence Tsui, Principal Manager

14 December 2017

Dear Sir,

Contract No. 3102
3RS Independent Environmental Checker Consultancy Services

Submission of Monthly EM&A Report No.23 (November 2017)

Reference is made to the Environmental Team's submission of the Monthly EM&A Report No.23 under Condition 3.5 of the Environmental Permit No. EP-489/2014 certified by the ET Leader on 14 December 2017.

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

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

Yours faithfully,
AECOM Asia Co. Ltd.

Jackel Law
Independent Environmental Checker

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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 23rd 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 30 November 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 36 sets of construction dust measurements, 24 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 15 to 22 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 or the DEZs

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 November 2017 were in the range of 84 to 93 daily movements, which are within the maximum daily cap of 125 daily movements. A total of 786 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 (9.2 to 14.1 knots), which were in compliance with the SkyPier Plan. One ferry movement with minor deviation from the diverted route are 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 traveling 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 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 DO, turbidity, and total alkalinity 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, chromium, and nickel, some of the testing results exceeded the relevant Action or Limit 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

- CLP cable ducting 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
- Building services installation.

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

- Removal of existing concrete.

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.

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.

Small Vessel Line-transect Survey for CWD	Chemical Spill Drill Conducted by Contractor	Sample Collection for Water Quality Monitoring Conducted by ET

Summary Table

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

	Yes	No	Details	Analysis / Recommendation / Remedial Actions
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	✓		A complaint on material dumping from construction vessel was received on 24 Nov 2017.	The complaint investigation was carried out in accordance with the Complaint Management Plan. The investigation detail is presented in S7.8.1.
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 23rd 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 30 November 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.

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
Water Quality	

Parameters	Status
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 to EPD in accordance with the Detailed Plan on DCM approved by EPD under EP Condition 2.17.
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:

- Dolphin observer trainings provided by ET: 8 and 29 Nov 2017
- Skipper trainings provided by ET: 1, 15 and 29 Nov 2017
- Environmental Management Meetings: 6, 15, 20, 22, 24, 28 and 29 Nov 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	12 – 119	306	500
AR2	14 – 276	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)]	71 – 73	75
NM3A	57 – 63	75
NM4[(i)]	60 – 66	70[(ii)]
NM5[(i)]	53 – 66	75
NM6[(i)]	68 – 73	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 were aircraft and road traffic noise at NM1A, aircraft and helicopter noise at NM3A, student activities 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	
Suspended Solids (SS) in mg/L	23	or 120% of upstream control station at the same tide of the same day, whichever is higher	37	or 130% of upstream control station at the same tide of the same day, whichever is higher
Turbidity in NTU	22.6		36.1	
Total Alkalinity in ppm	95		99	
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 6920 V2 (Serial No. 00019CB2)	12 Sep 2017	
	YSI 6920 V2 (Serial No. 000109DF)	12 Sep 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

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

Table 4.5: Other Monitoring Equipment

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

4.4 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 suspended solids (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
Suspended Solid (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, and total alkalinity 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, chromium, and nickel, some of the testing results exceeded the relevant Action or Limit 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 or Limit Levels were recorded on 5 monitoring days. Details of the exceedance cases are presented below.

Findings for SS Exceedances (Mid-Flood Tide)

Table 4.7 presents a summary of the SS compliance status at IM and SR stations during mid-flood tide for the reporting period.

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

	IM1	IM2	IM3	IM4	IM5	IM6	IM7	IM8	IM9	IM10	IM11	IM12	SR3	SR4A	SR5A	SR6	SR7	SR8
02/11/2017																		
04/11/2017																		
07/11/2017																		
09/11/2017																		
11/11/2017																		
14/11/2017																		
16/11/2017																		
18/11/2017																		
21/11/2017																		
23/11/2017																		
25/11/2017																		
28/11/2017																		
30/11/2017																		
No. of Exceedance	0	0	1	1	0	0	0	0	1	1	0	0	0	0	0	0	1	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

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
4/11/2017	DCM works Sand blanket laying	Around 500m	Silt curtain deployed	No	No	No
23/11/2017	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 IM10 on 4 November 2017 and IM9 on 23 November 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 station, and considered not due to the Project.

Findings for Chromium Exceedances (Mid-Flood Tide)

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

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

	IM1	IM2	IM3	IM4	IM5	IM6	IM7	IM8	IM9	IM10	IM11	IM12
02/11/2017												
04/11/2017												
07/11/2017												
09/11/2017												
11/11/2017												
14/11/2017												
16/11/2017												
18/11/2017												
21/11/2017												
23/11/2017												
25/11/2017												
28/11/2017												
30/11/2017												
No. of Exceedance	0	0	0	0	0	0	0	0	1	1	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 Limit Level recorded at monitoring station located downstream of the Project based on dominant tidal flow
	Upstream station with respect to the Project during the respective tide based on dominant tidal flow

Exceedances of Action or Limit Levels were recorded on one monitoring day. As the exceedances occurred at stations located downstream of the Project, which might be affected by Project's construction activities, exceedance investigation 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 day 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 Chromium Exceedances

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
25/11/2017	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 on 25 November 2017, only IM9 and IM10 were affected even though other downstream monitoring stations, including IM8, were located around 500 m from active DCM works during the same tide. The exceedances were also marginal (0.4 µg/L at IM9 and 0.3 µg/L

at IM10 compared to the Action and Limit Levels of 0.2 µg/L and 0.3 µg/L based on the results recorded at control stations).

As recommended in the Initial Intensive DCM Monitoring Report, additional information, including findings from the in-situ water quality monitoring at the DCM barges located nearest to the impact stations showing exceedance, may be considered as part of the exceedance investigation for exceedance of DCM parameters. Therefore, investigation into the water quality from the in-situ water quality monitoring at the DCM barges located nearest to IM9 and IM10 was also conducted. The in-situ water quality monitoring at the DCM barges includes ammonia, which is useful for indicating the likelihood of any leakage of contaminants from the contaminated mud pits due to DCM works.

Based on the investigation findings, no significant elevation of ammonia was observed among the monitoring points in the immediate vicinity of the DCM rigs and the ammonia concentration was well below the Action and Limit Levels specified in the Baseline Monitoring Report. This suggests that there was no leakage of contaminants from the contaminated mud pits due to DCM activities.

Based on these findings, the exceedances were considered not due to the Project and may be due to natural fluctuation or other sources not related to the Project.

Findings for Nickel Exceedances (Mid-Flood Tide)

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

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

	IM1	IM2	IM3	IM4	IM5	IM6	IM7	IM8	IM9	IM10	IM11	IM12
02/11/2017												
04/11/2017												
07/11/2017												
09/11/2017												
11/11/2017												
14/11/2017												
16/11/2017												
18/11/2017												
21/11/2017												
23/11/2017												
25/11/2017												
28/11/2017												
30/11/2017												
No. of Exceedance	0	0	0	0	0	0	0	1	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
	Upstream station with respect to the Project during the respective tide based on dominant tidal flow

An exceedance of Action Level were recorded on one monitoring day. As the exceedance occurred at a station located downstream of the Project, which might be affected by Project's construction activities, exceedance investigation focused on the event was carried out.

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

Table 4.12: Summary of Findings from Investigations of Nickel Exceedances

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
18/11/2017	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.

The exceedance at IM8 on 18 November 2017 appeared to be an isolated case with no observable temporal nor spatial trend to indicate any effect due to Project activities. Besides, no exceedance was recorded at other downstream monitoring stations, including IM9, which was also located around 500 m from active DCM works during the same tide.

Investigation was also conducted on the in-situ water quality monitoring at the DCM barges located nearest to IM8, particularly the in-situ ammonia data which is useful for indicating the likelihood of any leakage of contaminants from the contaminated mud pits due to DCM works. No significant elevation of ammonia was observed among the monitoring points in the immediate vicinity of the DCM rigs and the ammonia concentration was well below the Action and Limit Levels specified in the Baseline Monitoring Report. This suggests that there was no leakage of contaminants from the contaminated mud pits due to DCM activities.

Based on these findings, the exceedance was considered not due to the Project and may be due to natural fluctuation or other sources not related 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 November, around 17m^3 and 950m^3 of Construction and Demolition (C&D) materials was reused in the contract in September 2017 and October 2017 respectively. Also, around 53m^3 of C&D materials was disposed of as public fill and no C&D materials was reused in another contract in October 2017.

According to the Contractor's information, about 380m^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 193 tonnes of general refuse was disposed of to the designated landfill, 105kg and 3,100L of chemical waste were collected by licensed chemical waste collector in November 2017. Besides, around 48m^3 of Construction and Demolition (C&D) materials was reused in the contract and around 101m^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 November 2017, data from 1 September 2017 to 30 November 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 October 2017 (calculated by data from August 2017 to October 2017) and the running quarterly encounter rates of this month (calculated by data from September 2017 to November 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, 15th, 16th, 17th, 20th, 21st and 22nd November 2017, covering all transects in NEL, NWL, AW, WL and SWL survey areas for twice.

A total of around 455.70 km of survey effort was collected from these surveys, with around 74.05% 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**.

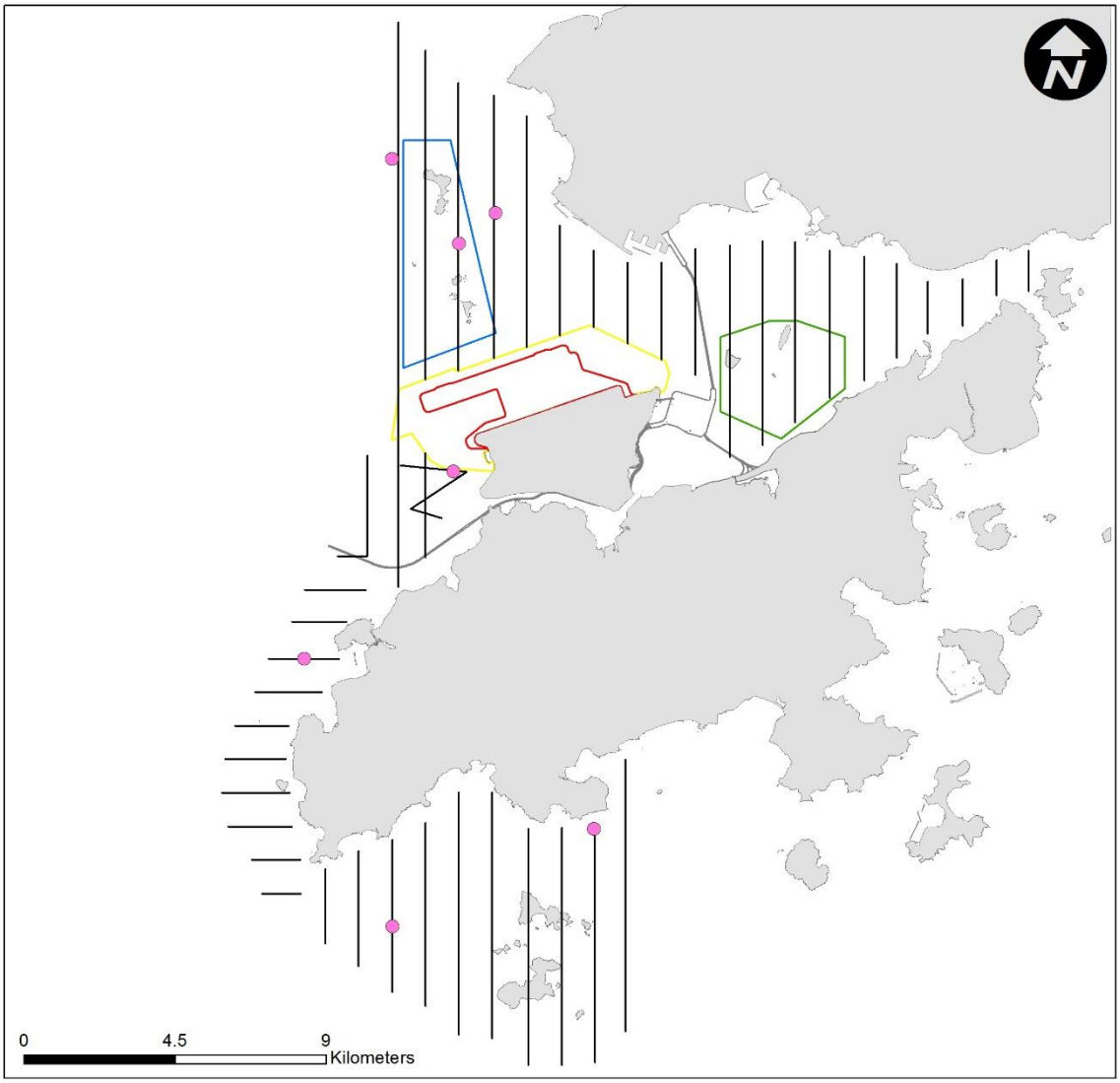
Sighting Distribution

In November 2017, seven sightings of CWDs with 23 individuals were sighted. All these sightings 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 November 2017 is illustrated in **Figure 6.3**. In NWL, three sightings of CWD were recorded within or around SCLKCMP. In WL, the only CWD sighting was recorded near Tai O. In SWL, the two CWD sightings were scattered apart. One was recorded in offshore waters in the western part of the survey area while another sighting was recorded at the coastal waters near Lo Kei Wan in the eastern side. 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

[Pink circle: Sighting locations of CWD; Black line: Vessel survey transects; Blue polygon: Sha Chau and Lung Kwu Chau Marine Park (SCLKCMP); Green polygon: Brothers Marine Park (BMP); Red polygon: 3RS land-formation footprint; Yellow line: 3RS temporary works area boundary]



Encounter Rate

Two types of dolphin encounter rates were calculated based on the data from November 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 November 2017, a total of around 337.44 km of survey effort were conducted under Beaufort Sea State 3 or below with favourable visibility, whilst a total number of seven on-effort sightings with a total number of 23 dolphins from on-effort sightings were obtained under such condition. Calculation of the encounter rates in November 2017 are shown in **Appendix C**.

For the running quarter of the reporting period (i.e., from September 2017 to November 2017), a total of around 1150.34 km of survey effort were conducted under Beaufort Sea State 3 or below with favourable visibility, whilst a total number of 47 on-effort sightings and a total number of 160 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 November 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)
November 2017	2.07	6.82
Running Quarter from September 2017 to November 2017*	4.09	13.91
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 September 2017 to November 2017, containing six sets of transect surveys for all monitoring areas.

Group Size

In November 2017, seven groups of CWDs with 23 individuals were sighted, and the average group size of CWDs was 3.29 individuals per group. Numbers of sightings with small group size (i.e. 1-2 individuals) and medium group size (i.e. 3-9 individuals) were similar. No sighting with large group size (i.e. 10 or more individuals) was recorded in this reporting period.

Activities and Association with Fishing Boats

One out of seven sightings of CWDs was recorded engaging in feeding activities in November 2017, with no observation of any association with operating fishing boat.

Mother-calf Pair

In November 2017, two sightings of CWDs were recorded with the presence of mother-and-unspotted juvenile and mother-and-spotted juvenile pairs in WL and AW respectively.

6.4.2 Photo Identification

In November 2017, a total number of 11 different CWD individuals were identified for totally 11 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
NLMM011	15/11/2017	1	NWL	NLMM054	07/11/2017	1	NWL
NLMM012	15/11/2017	1	NWL	WLMM001	21/11/2017	2	SWL
NLMM019	21/11/2017	1	AW	WLMM024	21/11/2017	1	AW
NLMM037	15/11/2017	1	NWL	WLMM065	17/11/2017	1	WL
NLMM039	15/11/2017	1	NWL	WLMM066	17/11/2017	1	WL
NLMM049	07/11/2017	1	NWL				

6.4.3 Land-based Theodolite Tracking

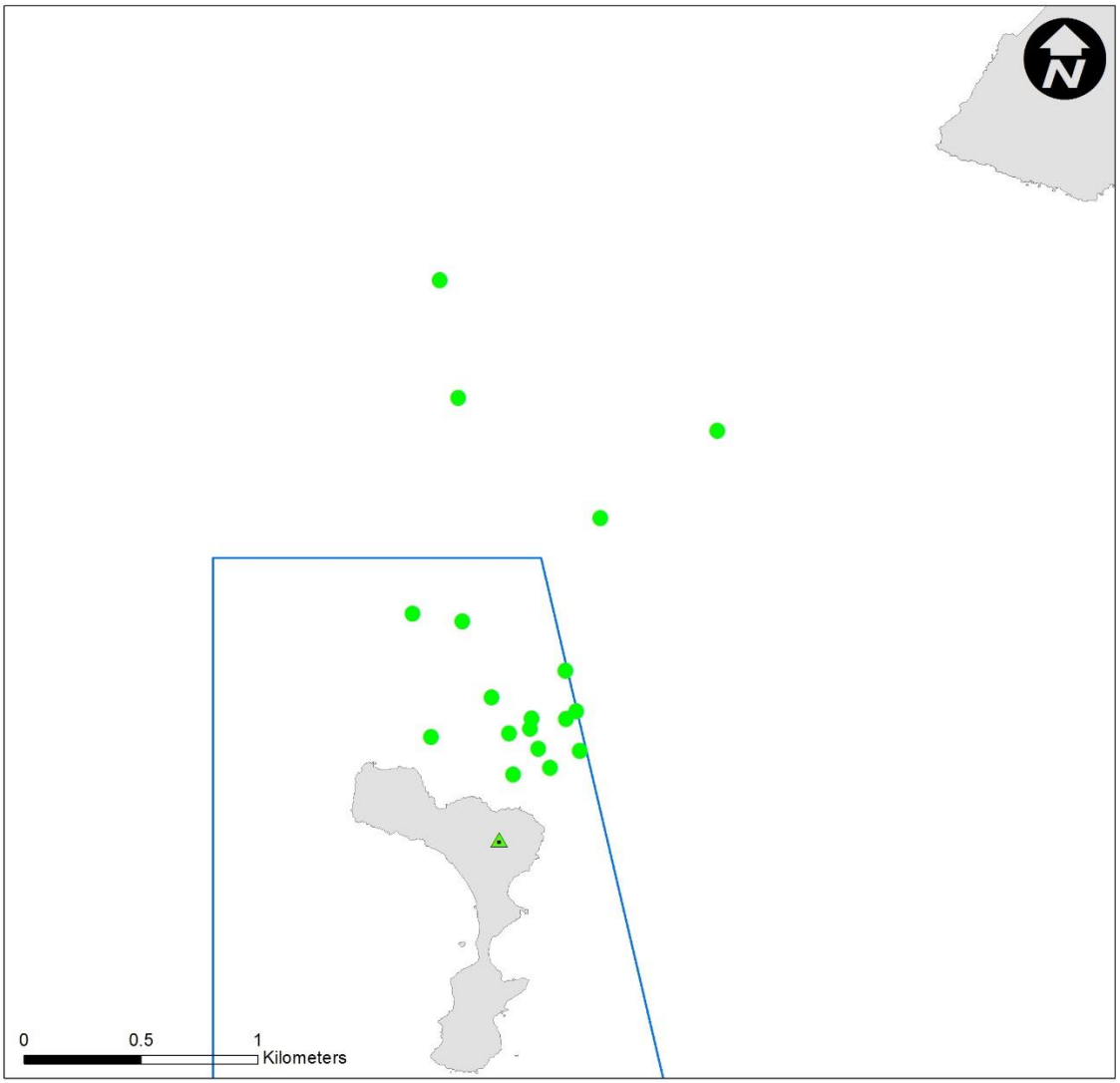
Survey Effort

Land-based theodolite tracking surveys were conducted at LKC on 2nd, 22nd and 23rd November 2017 and at SC on 9th and 16th November 2017, with a total of five days of land-based theodolite tracking survey effort accomplished in this reporting period. A total number of 18 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 November 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	18	1.0
Sha Chau	2	12:00	0	0
TOTAL	**5**	**30:00**	**18**	**0.60**

Figure 6.4: Plots of First Sightings of All CWD Groups obtained from Land-based Stations
[Green triangle: LKC station; Green circle: CWD group off LKC; Blue line: SCLKCMP boundary]



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 remained underwater and positioned at south of Sha Chau Island inside the SCLKCMP with 20% duty cycle (**Figure 6.5**). The EAR deployment is generally for 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 15 to 22 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 531 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 or the DEZs in this reporting month. 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 provision and maintenance of drip trays, proper implementation of noise mitigation, 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 display of licenses on barge, provision and maintenance of drip trays and proper chemical waste storage area, implementation of dust suppression and runoff prevention measures, implementation of silt plume mitigation and prevention measures, ensuring the effectiveness of silt curtains, segregation of recyclables from general refuse, 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 A**.

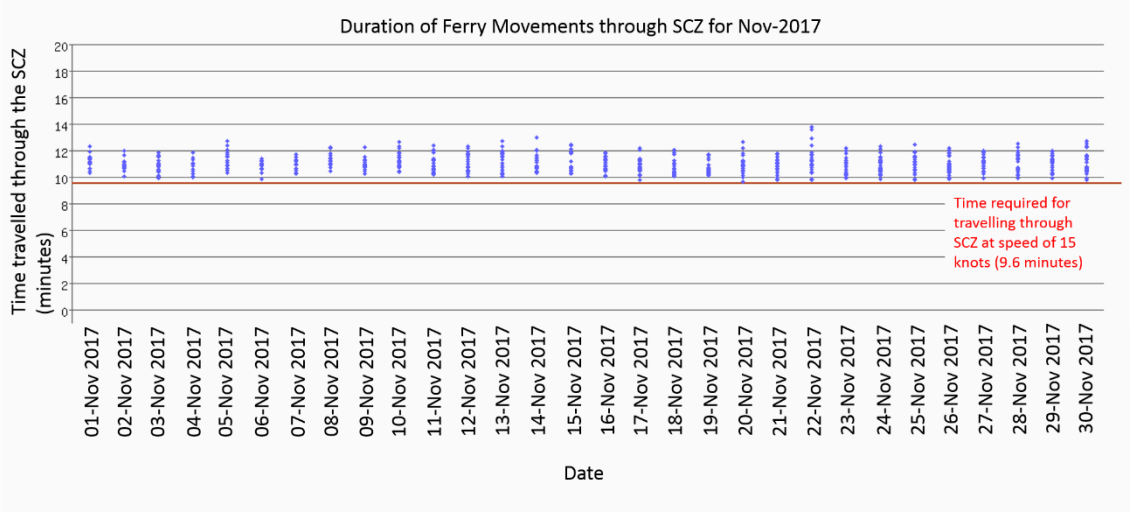
7.2 Audit of Route Diversion and Speed Control of the SkyPier High Speed Ferries

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 November 2017 (i.e., 84 to 93 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, 786 ferry movements between HKIA SkyPier and Zhuhai / Macau were recorded in November 2017 and the data are presented in **Appendix F**. The time spent by the SkyPier HSFs travelling through the SCZ in November 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 November 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 24 November 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.

Two cases of minor deviation from the diverted route on 12 and 14 September 2017, which were not recorded in the High Speed Ferry Monitoring System, were recently discovered during auditing and followed up immediately in November 2017. ET's investigation found that the minor route deviation on 12 September was due to strong tidal wave and current and another case on 14 September was due to avoiding floating objects to ensure safety. After that, the HSF had returned to the normal route following the SkyPier Plan.

Two cases of minor deviation from the diverted route recorded on 7 and 30 October 2017 were followed up after receiving information from the FO. ET's investigation found that the minor route deviation on 30 October was due to AIS error and the vessel had followed the normal route. For the case on 7 October, the captain found difficulty to follow the normal route due to AIS failure. This case is considered as non-safety related. The ferry operator was advised to investigate the reason for the AIS failure and check the AIS system to ensure that sufficient data points can be received. 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 is 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 November to 30 November 2017
Total number of ferry movements recorded and audited	786
Use diverted route and enter / leave SCZ through Gate Access Points	1 deviations, which are under investigation.
Speed control in speed control zone	The average speeds taken within the SCZ of all HSFs were within 15 knots (9.2 knots to 14.1 knots), which complied with the

Requirements in the SkyPier Plan	1 November to 30 November 2017
	SkyPier Plan. The time used by HSFs to travel through SCZ is presented in **Figure 7.1**.
Daily Cap (including all SkyPier HSFs)	84 to 93 daily movements (within the maximum daily cap - 125 daily movements).

7.3 Audit of Construction and Associated Vessels

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

ET carried out the following actions during the reporting period:

- Three skipper training sessions were held for contractors' concerned skippers of relevant construction vessels to familiarize them with the predefined routes; general education on local cetaceans; guidelines for avoiding adverse water quality impact; the required environmental practices / measures while operating construction and associated vessels under the Project; and guidelines for operating vessels safely in the presence of CWDs. The list of all trained skippers was properly recorded and maintained by ET.
- One skipper training session was held by contractor's Environmental Officer. Competency test was subsequently conducted with the trained skipper by ET.
- 28 skippers were trained by ET and 1 skipper was trained by contractor's Environmental Officer in November 2017. In total, 800 skippers were trained from August 2016 to November 2017.
- The Marine Surveillance System (MSS) automatically recorded deviation cases such as speeding, entering no entry zone, not traveling 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 has been notified that no dolphin sightings were recorded within the DEZ by the contractors. ET has checked the relevant records by the contractors to audit the implementation of DEZ. 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.

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 D**.

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

7.8.1 Complaints

During the reporting period, a complaint on material dumping from construction vessel of Contract 3205 was received on 24 November 2017. Investigation was conducted by the ET in accordance with the Manual and the CMP of the Project. The anonymous complainant did not provide any specific information (e.g. date/time) on the case or any details of the vessels and materials (e.g. name of vessels, description or characteristics of vessels, type of materials etc.). During the ET's weekly and ad-hoc site inspections, it was observed that the concerned Contractor had provided sufficient waste disposal facilities including chemical waste storage area on each barge with regular collection for disposal. No observation relating to illegal dumping was found. ET reminded the concerned Contractor and other DCM Contractors to continue implementing proper waste handling procedures and conducting relevant on-site training for all frontline staff.

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 E**.

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

- CLP cable ducting 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
- Building services installation.

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

- Removal of existing concrete.

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.

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, and total alkalinity 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, chromium, and nickel, some of the testing results exceeded the relevant Action or Limit 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 15 to 22 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 or the DEZs 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 HSFs in November 2017 were in the range of 84 to 93 daily movements, which are within the maximum daily cap of 125 daily movements. A total of 786 HSF movements under the SkyPier Plan were recorded in the reporting period. All HSFs had travelled through the SCZ with average speeds under 15 knots (9.2 to 14.1 knots), which were in compliance with the SkyPier Plan. One ferry movement with minor deviation from the diverted route are 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 traveling 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

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Mott MacDonald

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

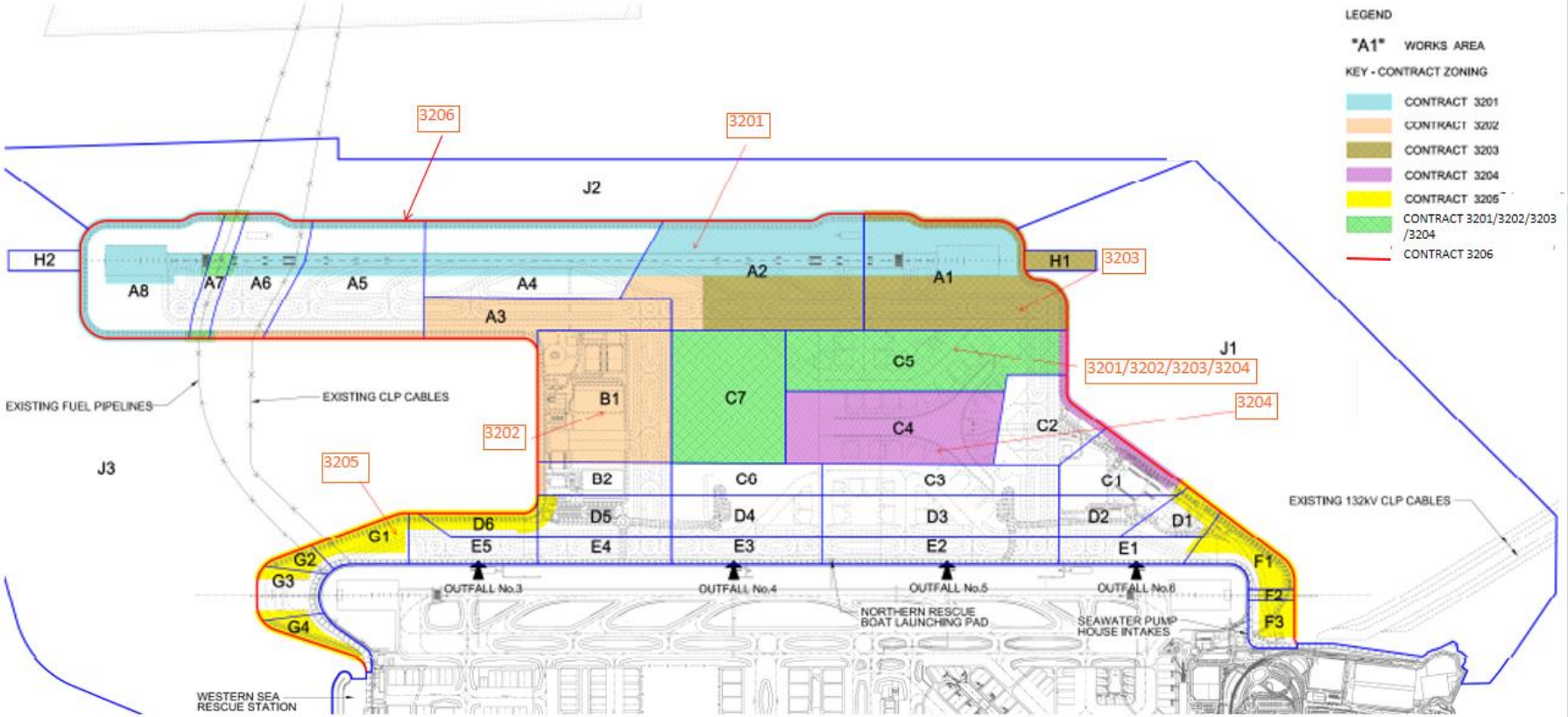
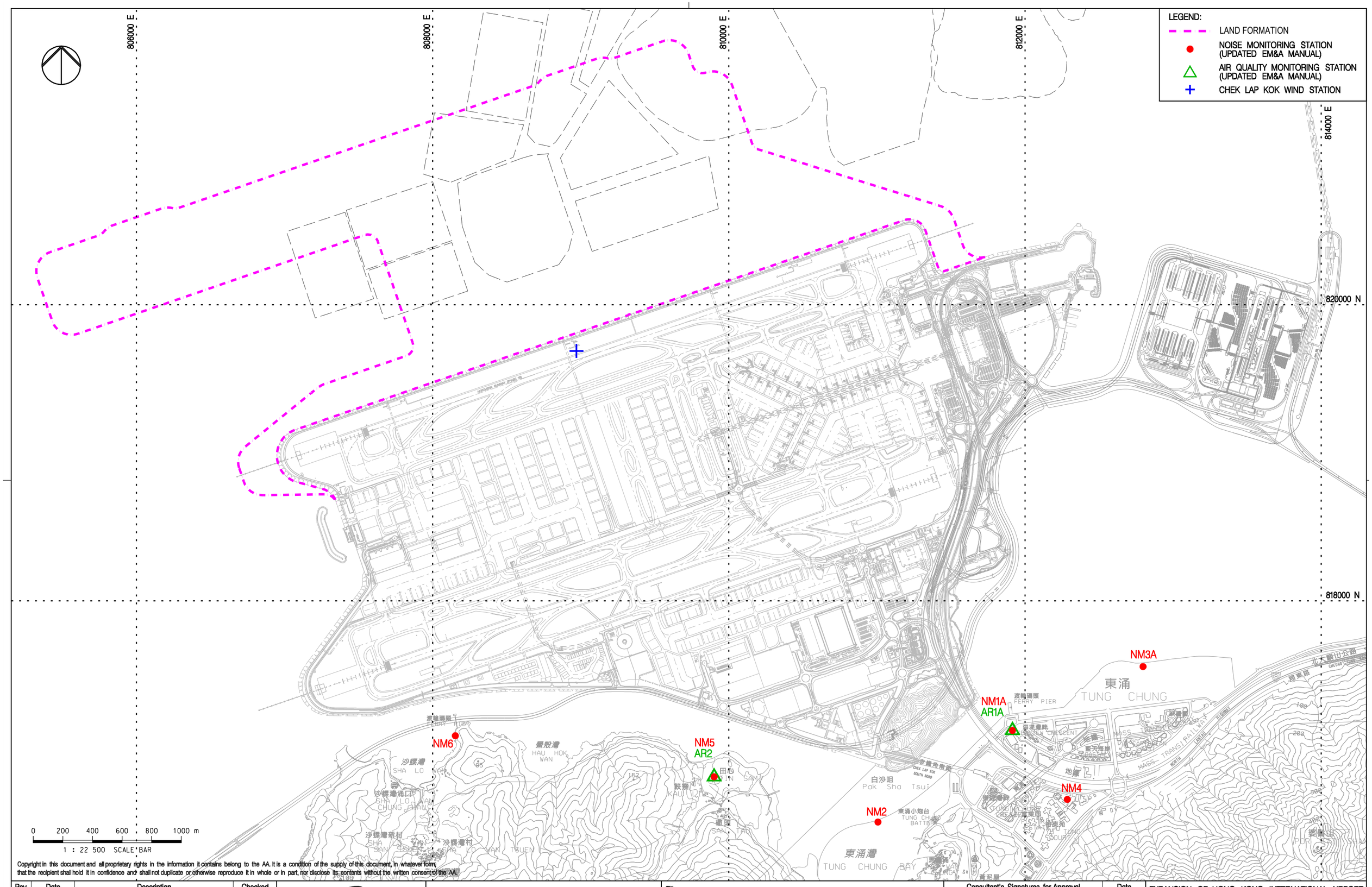


FIGURE 1.2- LOCATIONS OF RECLAMATION WORKS AREA



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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

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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

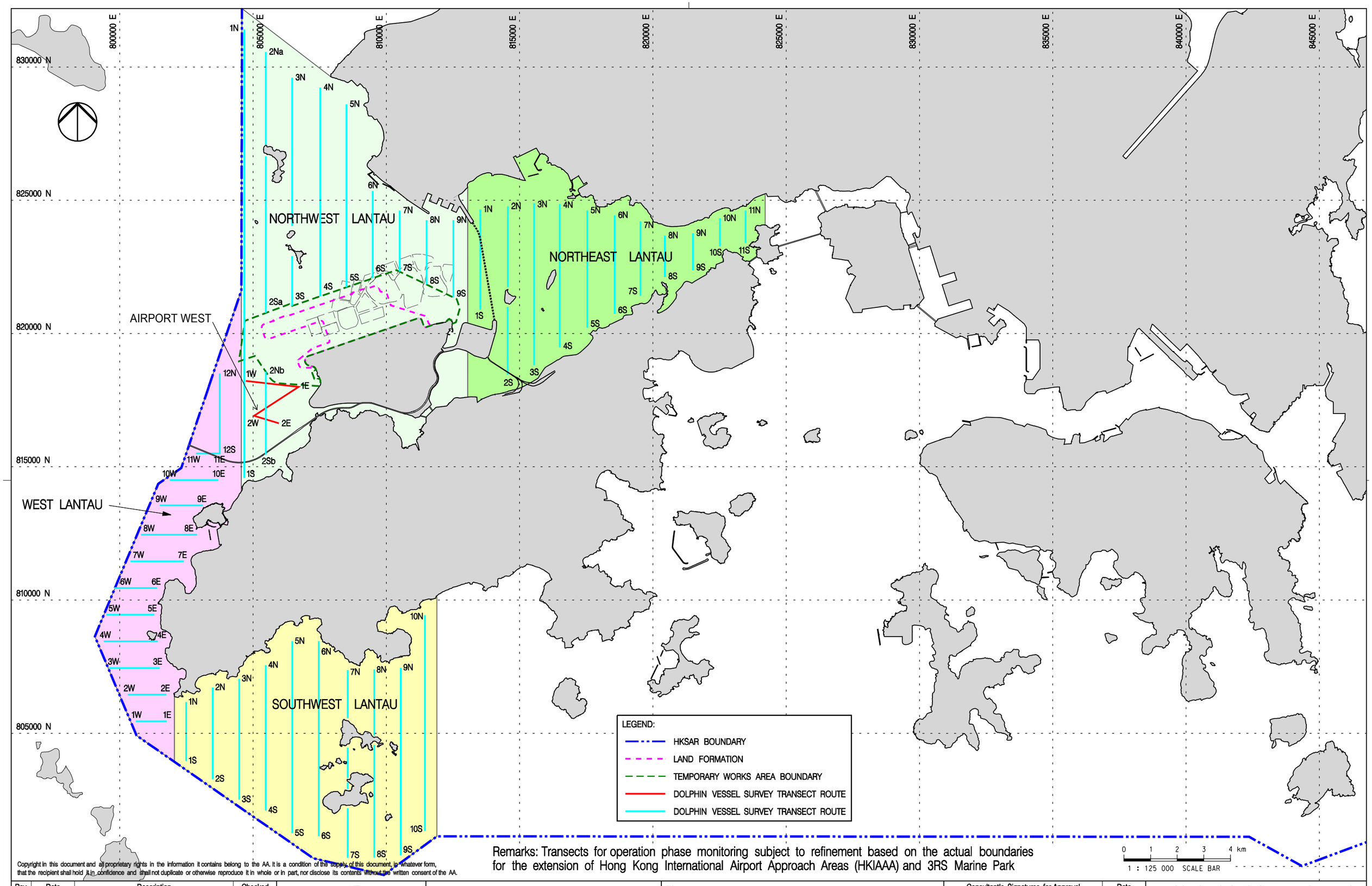
Drawing No.

FIGURE 3.1

Scale at A3 1 : 60000

Rev. D

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



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

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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

沙洲及龍鼓洲海岸公園
SHA CHAU AND LUNG KWU CHAU MARINE PARK

HKSAR BOUNDARY

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

0 500 1000 1500 2000 m
1 : 45,000 SCALE BAR

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LAND BASED DOLPHIN MONITORING IN BASELINE AND CONSTRUCTION PHASES

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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 N
822000 N
824000 N
826000 N
828000 N

URMSTON ROAD

龍鼓洲
LUNG KWU CHAU

沙洲及龍鼓洲海岸公園
SHA CHAU AND LUNG KWU CHAU MARINE PARK

沙洲
SHA CHAU

A5

HKSAR BOUNDARY

LEGEND:

LAND FORMATION

HONG KONG INTERNATIONAL AIRPORT

AUTONOMOUS PASSIVE ACOUSTIC MONITORING LOCATION

0 500 1000 1500 2000 m

1 : 45 000 SCALE BAR

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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?^
			Specific Measures to be Applied to Land Formation Activities prior to Commencement of Marine Filling Works	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 'Type III' silt curtains to be applied around the active eastern works areas prior to commencement of sand blanket laying activities. The silt curtains shall be configured to minimise SS release during ebb tides. A silt curtain efficiency test shall be conducted to validate the performance of the silt curtains;		
			§ Double layer silt curtains to enclose WSRs C7a and silt screens installed at the intake points for both WSR C7a and C8 prior to commencement of construction; and		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
			Specific Measures to be Applied to Land Formation Activities during Marine Filling Works	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 '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;		
			§ 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

Nov-17

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1 Site Inspection AR1A, AR2 NM1A, NM3A, NM4, NM5	**2** Site Inspection CWD Survey (Land-based) WQ General & Regular DCM mid-ebb: 11:20 mid-flood: 17:41	**3** Site Inspection	**4** WQ General & Regular DCM mid-ebb: 12:47 mid-flood: 06:55
5	**6** CWD Survey (Vessel)	**7** Site Inspection CWD Survey (Vessel) AR1A, AR2 NM1A, NM3A, NM4, NM5 WQ General & Regular DCM mid-ebb: 15:11 mid-flood: 09:39	**8** Site Inspection Ecological Monitoring	**9** Site Inspection CWD Survey (Land-based) NM6 WQ General & Regular DCM mid-ebb: 16:59 mid-flood: 11:43	**10** Site Inspection	**11** WQ General & Regular DCM mid-ebb: 06:10 mid-flood: 14:31
12	**13** AR1A, AR2 NM1A, NM3A, NM4, NM5	**14** Site Inspection WQ General & Regular DCM mid-ebb: 10:07 mid-flood: 16:45	**15** Site Inspection CWD Survey (Vessel)	**16** Site Inspection CWD Survey (Vessel, Land-based) NM6 WQ General & Regular DCM mid-ebb: 11:43 mid-flood: 05:49	**17** Site Inspection CWD Survey (Vessel) AR1A, AR2	**18** WQ General & Regular DCM mid-ebb: 13:01 mid-flood: 07:20
19	**20** CWD Survey (Vessel)	**21** Site Inspection CWD Survey (Vessel) NM6 WQ General & Regular DCM mid-ebb: 14:45 mid-flood: 09:20	**22** CWD Survey (Vessel, Land-based)	**23** Site Inspection CWD Survey (Land-based) AR1A, AR2 NM1A, NM3A, NM4, NM5 WQ General & Regular DCM mid-ebb: 15:57 mid-flood: 10:44	**24** Site Inspection	**25** WQ General & Regular DCM mid-ebb: 04:34 mid-flood: 16:56
26	**27** NM6	**28** Site Inspection WQ General & Regular DCM mid-ebb: 07:34 mid-flood: 15:19	**29** Site Inspection AR1A, AR2 NM1A, NM3A, NM4, NM5	**30** Site Inspection WQ General & Regular DCM mid-ebb: 09:51 mid-flood: 16:22		

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

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) Ecological Monitoring	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 AR1A, AR2 NM1A, NM3A, NM4, NM5	12 Site Inspection CWD Survey (Land-based) 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, Land-based)	19 Site Inspection CWD Survey (Land-based) NM6 WQ General & Regular DCM mid-ebb: 13:51 mid-flood: 08:36	20 Site Inspection CWD Survey (Vessel)	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 NM6 WQ General & Regular DCM mid-ebb: 07:57 mid-flood: 14:49	29 Site Inspection	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				

Appendix C. Monitoring Results

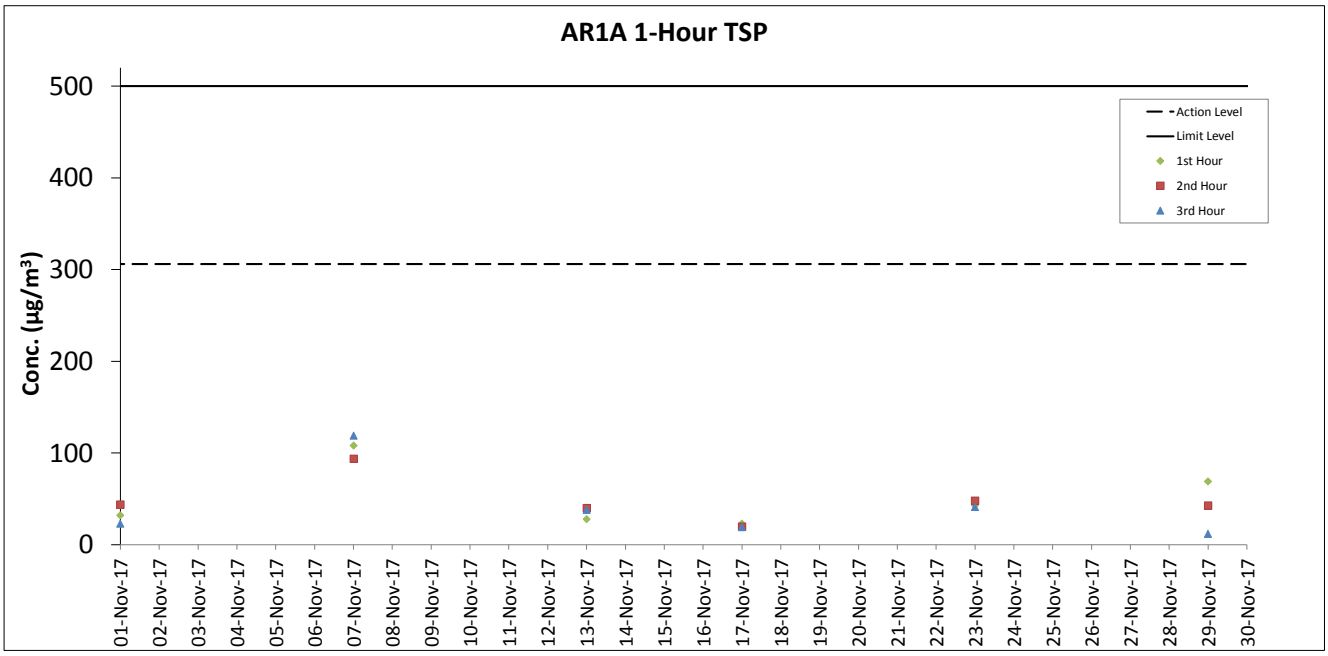
Air Quality Monitoring Results

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 ($\mu g/m^3$)
01-Nov-17	13:00	Sunny	1.6	323	32	306	500
01-Nov-17	14:00	Sunny	2.9	310	44	306	500
01-Nov-17	15:00	Sunny	4.0	286	23	306	500
07-Nov-17	14:15	Cloudy	6.2	327	108	306	500
07-Nov-17	15:15	Cloudy	6.8	323	94	306	500
07-Nov-17	16:15	Cloudy	5.6	314	119	306	500
13-Nov-17	13:00	Cloudy	3.1	360	28	306	500
13-Nov-17	14:00	Cloudy	2.0	51	40	306	500
13-Nov-17	15:00	Cloudy	1.4	37	38	306	500
17-Nov-17	13:00	Sunny	4.0	327	23	306	500
17-Nov-17	14:00	Sunny	3.2	297	20	306	500
17-Nov-17	15:00	Sunny	3.1	281	19	306	500
23-Nov-17	13:18	Sunny	5.0	352	43	306	500
23-Nov-17	14:18	Sunny	6.5	348	48	306	500
23-Nov-17	15:18	Sunny	6.0	351	41	306	500
29-Nov-17	13:04	Fine	2	334	69	306	500
29-Nov-17	14:04	Fine	1.7	282	43	306	500
29-Nov-17	15:04	Fine	4.0	81	12	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 ($\mu g/m^3$)
01-Nov-17	09:00	Sunny	3.5	57	74	298	500
01-Nov-17	10:00	Sunny	2.8	48	87	298	500
01-Nov-17	11:00	Sunny	1.6	6	175	298	500
07-Nov-17	09:00	Cloudy	3.1	359	261	298	500
07-Nov-17	10:00	Cloudy	2.9	356	276	298	500
07-Nov-17	11:00	Cloudy	3.0	350	267	298	500
13-Nov-17	08:55	Cloudy	5.1	100	32	298	500
13-Nov-17	09:55	Cloudy	5.5	86	55	298	500
13-Nov-17	10:55	Cloudy	4.1	29	85	298	500
17-Nov-17	09:00	Fine	5.3	67	135	298	500
17-Nov-17	10:00	Fine	5.2	80	114	298	500
17-Nov-17	11:00	Fine	4.8	111	122	298	500
23-Nov-17	09:00	Sunny	5.4	10	36	298	500
23-Nov-17	10:00	Sunny	5.9	10	39	298	500
23-Nov-17	11:00	Sunny	5.9	358	43	298	500
29-Nov-17	08:55	Fine	4.6	86	31	298	500
29-Nov-17	09:55	Fine	1.9	45	15	298	500
29-Nov-17	10:55	Fine	3.7	74	14	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-Nov-17
02-Nov-17
03-Nov-17
04-Nov-17
05-Nov-17
06-Nov-17
07-Nov-17
08-Nov-17
09-Nov-17
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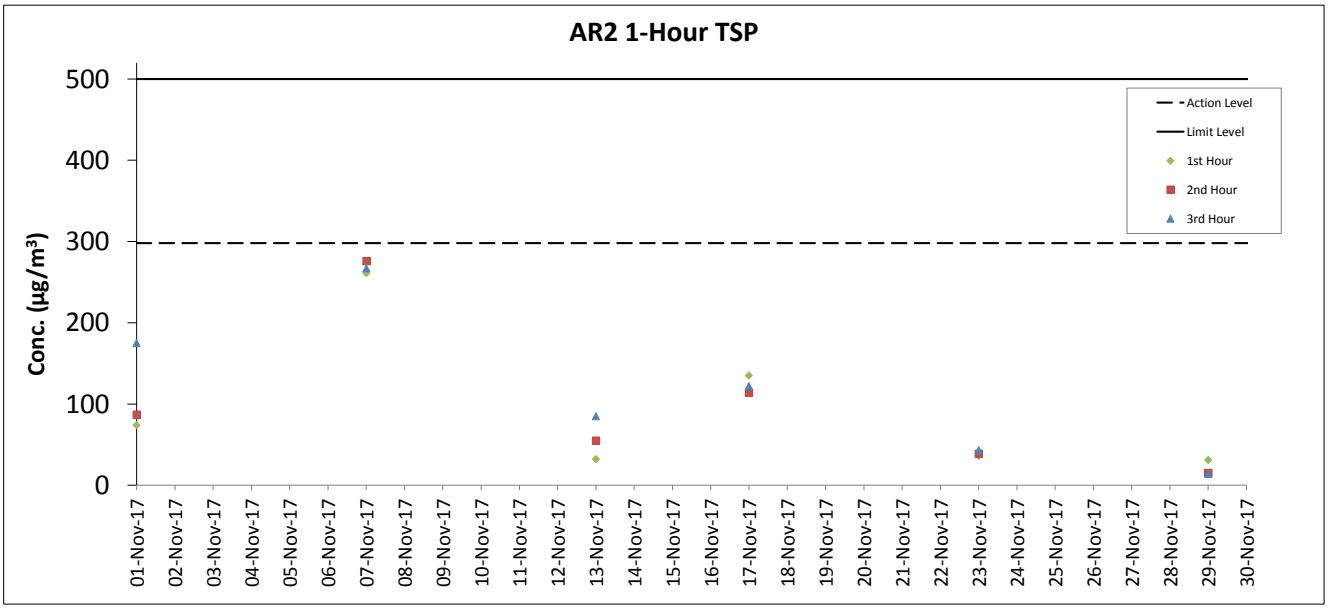
30-Nov-17


AR2 1-Hour TSP
Conc. (µg/m³)
500
400
300
200
100
0
Action Level
Limit Level
1st Hour
2nd Hour
3rd Hour
01-Nov-17
02-Nov-17
03-Nov-17
04-Nov-17
05-Nov-17
06-Nov-17
07-Nov-17
08-Nov-17
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25-Nov-17
26-Nov-17
27-Nov-17
28-Nov-17
29-Nov-17
30-Nov-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)
01-Nov-17	Sunny	13:20	72.5	58.0	73
01-Nov-17	Sunny	13:25	73.0	59.0	
01-Nov-17	Sunny	13:30	71.0	58.0	
01-Nov-17	Sunny	13:35	72.5	58.0	
01-Nov-17	Sunny	13:40	73.0	56.5	
01-Nov-17	Sunny	13:45	75.0	56.5	
07-Nov-17	Fine	14:25	71.5	57.5	71
07-Nov-17	Fine	14:30	72.5	59.0	
07-Nov-17	Fine	14:35	73.5	58.5	
07-Nov-17	Fine	14:40	70.5	57.5	
07-Nov-17	Fine	14:45	72.0	56.5	
07-Nov-17	Fine	14:50	69.5	57.0	
13-Nov-17	Cloudy	13:06	72.0	54.5	72
13-Nov-17	Cloudy	13:11	73.0	56.5	
13-Nov-17	Cloudy	13:16	72.0	55.5	
13-Nov-17	Cloudy	13:21	72.5	55.5	
13-Nov-17	Cloudy	13:26	72.5	55.0	
13-Nov-17	Cloudy	13:31	72.0	56.5	
23-Nov-17	Sunny	13:30	73.0	55.0	72
23-Nov-17	Sunny	13:35	72.5	56.5	
23-Nov-17	Sunny	13:40	72.5	58.5	
23-Nov-17	Sunny	13:45	72.0	57.5	
23-Nov-17	Sunny	13:50	71.5	56.5	
23-Nov-17	Sunny	13:55	71.5	55.0	
29-Nov-17	Fine	13:14	71.5	55.0	71
29-Nov-17	Fine	13:19	72.5	55.5	
29-Nov-17	Fine	13:24	72.0	55.5	
29-Nov-17	Fine	13:29	71.5	55.0	
29-Nov-17	Fine	13:34	71.5	56.0	
29-Nov-17	Fine	13:39	72.0	56.5	

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

Noise Measurement Results

Station: NM3A- Site Office

Date	Weather	Time	Measured L_{10} dB(A)	Measured L_{90} dB(A)	$L_{eq(30mins)}$ dB(A)
01-Nov-17	Sunny	09:05	68.0	58.5	57
01-Nov-17	Sunny	09:10	66.0	58.5	
01-Nov-17	Sunny	09:15	66.5	59.0	
01-Nov-17	Sunny	09:20	68.5	59.5	
01-Nov-17	Sunny	09:25	67.5	58.5	
01-Nov-17	Sunny	09:30	67.5	58.5	
07-Nov-17	Fine	09:24	69.0	60.0	63
07-Nov-17	Fine	09:29	69.0	59.5	
07-Nov-17	Fine	09:34	69.5	60.0	
07-Nov-17	Fine	09:39	67.0	59.5	
07-Nov-17	Fine	09:44	70.5	60.5	
07-Nov-17	Fine	09:49	69.5	60.0	
13-Nov-17	Cloudy	10:58	69.5	59.5	61
13-Nov-17	Cloudy	11:03	65.5	60.0	
13-Nov-17	Cloudy	11:08	63.0	59.0	
13-Nov-17	Cloudy	11:13	70.5	59.5	
13-Nov-17	Cloudy	11:18	67.5	59.5	
13-Nov-17	Cloudy	11:23	68.0	59.0	
23-Nov-17	Fine	09:20	68.0	60.0	61
23-Nov-17	Fine	09:25	68.5	60.0	
23-Nov-17	Fine	09:30	69.0	60.0	
23-Nov-17	Fine	09:35	68.0	60.0	
23-Nov-17	Fine	09:40	71.0	59.5	
23-Nov-17	Fine	09:45	69.5	59.5	
29-Nov-17	Fine	11:12	70.0	59.5	57
29-Nov-17	Fine	11:17	66.5	59.0	
29-Nov-17	Fine	11:22	67.0	59.0	
29-Nov-17	Fine	11:27	67.0	59.0	
29-Nov-17	Fine	11:32	66.5	59.0	
29-Nov-17	Fine	11:37	67.5	59.0	

Noise Measurement Results

Station: NM4- Ching Chung Hau Po Won Primary School

Date	Weather	Time	Measured L_{10} dB(A)	Measured L_{90} dB(A)	$L_{eq(30mins)}$ dB(A)
01-Nov-17	Sunny	14:25	64.5	60.0	65
01-Nov-17	Sunny	14:30	64.0	60.5	
01-Nov-17	Sunny	14:35	63.5	59.5	
01-Nov-17	Sunny	14:40	64.0	59.5	
01-Nov-17	Sunny	14:45	64.5	60.5	
01-Nov-17	Sunny	14:50	63.5	60.0	
07-Nov-17	Cloudy	13:50	64.5	60.5	66
07-Nov-17	Cloudy	13:55	64.0	60.0	
07-Nov-17	Cloudy	14:00	62.5	60.0	
07-Nov-17	Cloudy	14:05	65.0	60.5	
07-Nov-17	Cloudy	14:10	66.0	60.0	
07-Nov-17	Cloudy	14:15	65.5	60.5	
13-Nov-17	Cloudy	13:45	63.0	59.5	65
13-Nov-17	Cloudy	13:50	63.0	59.0	
13-Nov-17	Cloudy	13:55	62.5	58.0	
13-Nov-17	Cloudy	14:00	61.5	58.5	
13-Nov-17	Cloudy	14:05	61.5	58.0	
13-Nov-17	Cloudy	14:10	62.0	58.0	
23-Nov-17	Sunny	13:30	65.0	61.5	64
23-Nov-17	Sunny	13:35	66.5	61.5	
23-Nov-17	Sunny	13:40	66.0	61.5	
23-Nov-17	Sunny	13:45	67.0	62.5	
23-Nov-17	Sunny	13:50	66.5	62.0	
23-Nov-17	Sunny	13:55	66.5	62.0	
29-Nov-17	Fine	13:45	68.0	63.0	60
29-Nov-17	Fine	13:50	68.0	60.5	
29-Nov-17	Fine	13:55	65.0	60.0	
29-Nov-17	Fine	14:00	63.5	60.0	
29-Nov-17	Fine	14:05	63.5	60.5	
29-Nov-17	Fine	14:10	64.0	60.0	

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)
01-Nov-17	Sunny	10:00	65.0	49.0	61
01-Nov-17	Sunny	10:05	56.5	48.5	
01-Nov-17	Sunny	10:10	55.0	48.0	
01-Nov-17	Sunny	10:15	64.0	49.5	
01-Nov-17	Sunny	10:20	62.5	49.5	
01-Nov-17	Sunny	10:25	55.0	48.0	
07-Nov-17	Cloudy	09:55	63.0	49.0	59
07-Nov-17	Cloudy	10:00	56.0	48.5	
07-Nov-17	Cloudy	10:05	56.0	48.5	
07-Nov-17	Cloudy	10:10	57.5	49.0	
07-Nov-17	Cloudy	10:15	53.5	48.5	
07-Nov-17	Cloudy	10:20	58.5	49.5	
13-Nov-17	Cloudy	09:55	61.0	48.5	53
13-Nov-17	Cloudy	10:00	59.0	48.5	
13-Nov-17	Cloudy	10:05	57.0	48.5	
13-Nov-17	Cloudy	10:10	53.0	48.0	
13-Nov-17	Cloudy	10:15	57.0	48.5	
13-Nov-17	Cloudy	10:20	64.0	48.0	
23-Nov-17	Sunny	10:10	71.5	52.5	66
23-Nov-17	Sunny	10:15	59.0	51.0	
23-Nov-17	Sunny	10:20	70.0	53.0	
23-Nov-17	Sunny	10:25	60.0	53.0	
23-Nov-17	Sunny	10:30	69.5	51.5	
23-Nov-17	Sunny	10:35	65.0	54.5	
29-Nov-17	Fine	09:45	65.0	53.0	57
29-Nov-17	Fine	09:50	59.0	53.0	
29-Nov-17	Fine	09:55	61.5	52.0	
29-Nov-17	Fine	10:00	58.5	52.0	
29-Nov-17	Fine	10:05	54.5	50.0	
29-Nov-17	Fine	10:10	57.5	52.0	

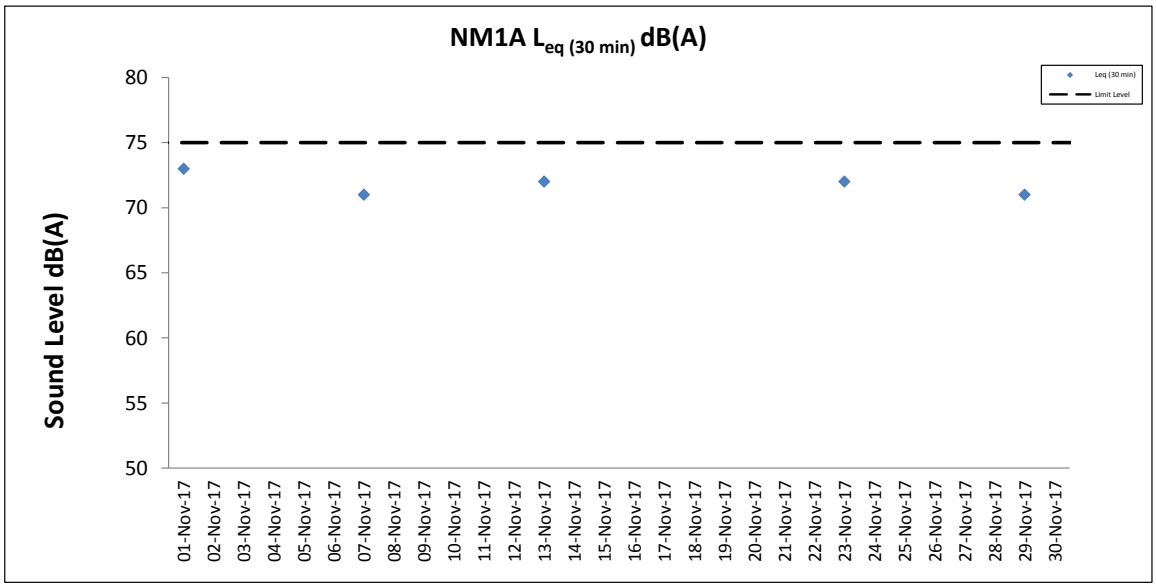
Remarks:
+3dB (A) correction was applied to free-field measurement.

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)
09-Nov-17	Sunny	09:40	77.0	57.5	73
09-Nov-17	Sunny	09:45	76.0	57.0	
09-Nov-17	Sunny	09:50	74.5	58.5	
09-Nov-17	Sunny	09:55	74.5	58.5	
09-Nov-17	Sunny	10:00	76.5	59.0	
09-Nov-17	Sunny	10:05	75.5	59.5	
16-Nov-17	Sunny	09:46	67.0	53.5	68
16-Nov-17	Sunny	09:51	65.0	52.5	
16-Nov-17	Sunny	09:56	69.5	54.5	
16-Nov-17	Sunny	10:01	68.0	52.5	
16-Nov-17	Sunny	10:06	67.5	53.5	
16-Nov-17	Sunny	10:11	72.0	59.0	
21-Nov-17	Cloudy	09:40	77.0	57.5	73
21-Nov-17	Cloudy	09:45	74.5	57.0	
21-Nov-17	Cloudy	09:50	73.5	58.0	
21-Nov-17	Cloudy	09:55	77.5	62.0	
21-Nov-17	Cloudy	10:00	74.5	60.0	
21-Nov-17	Cloudy	10:05	75.0	63.5	
27-Nov-17	Cloudy	09:42	75.0	65.5	73
27-Nov-17	Cloudy	09:47	73.5	66.0	
27-Nov-17	Cloudy	09:52	76.0	62.5	
27-Nov-17	Cloudy	09:57	72.0	60.5	
27-Nov-17	Cloudy	10:02	75.0	55.5	
27-Nov-17	Cloudy	10:07	73.5	56.0	

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


NM1A $L_{eq\ (30\ min)}$ dB(A)
Sound Level dB(A)
80
75
70
65
60
55
50
Leq (30 min)
Limit Level
01-Nov-17
02-Nov-17
03-Nov-17
04-Nov-17
05-Nov-17
06-Nov-17
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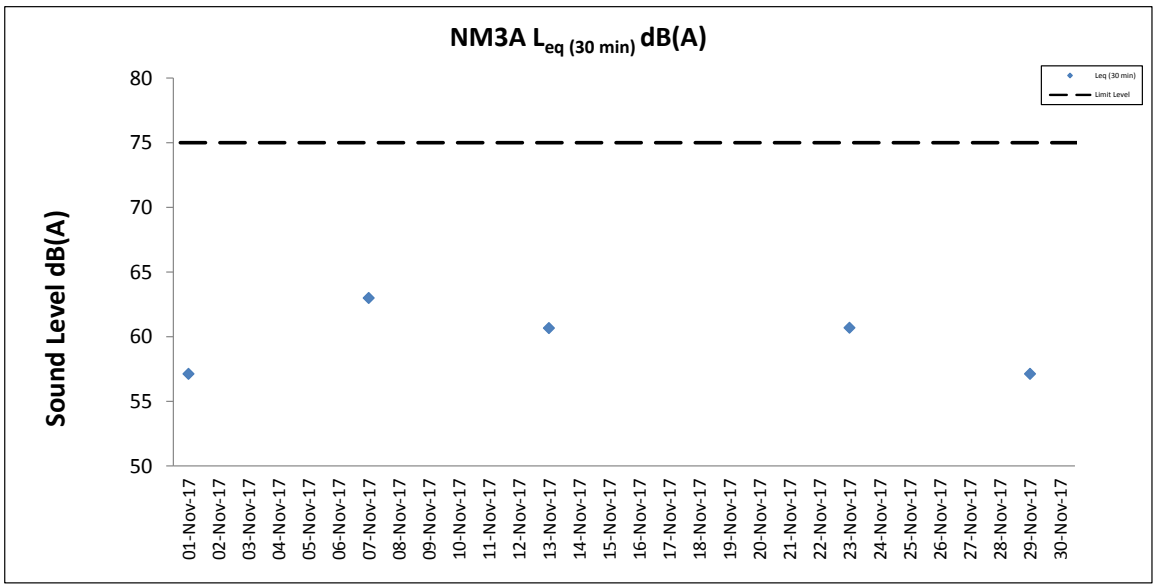
30-Nov-17


NM3A $L_{eq\ (30\ min)}$ dB(A)
Sound Level dB(A)
80
75
70
65
60
55
50
Leq (30 min)
Limit Level
01-Nov-17
02-Nov-17
03-Nov-17
04-Nov-17
05-Nov-17
06-Nov-17
07-Nov-17
08-Nov-17
09-Nov-17
10-Nov-17
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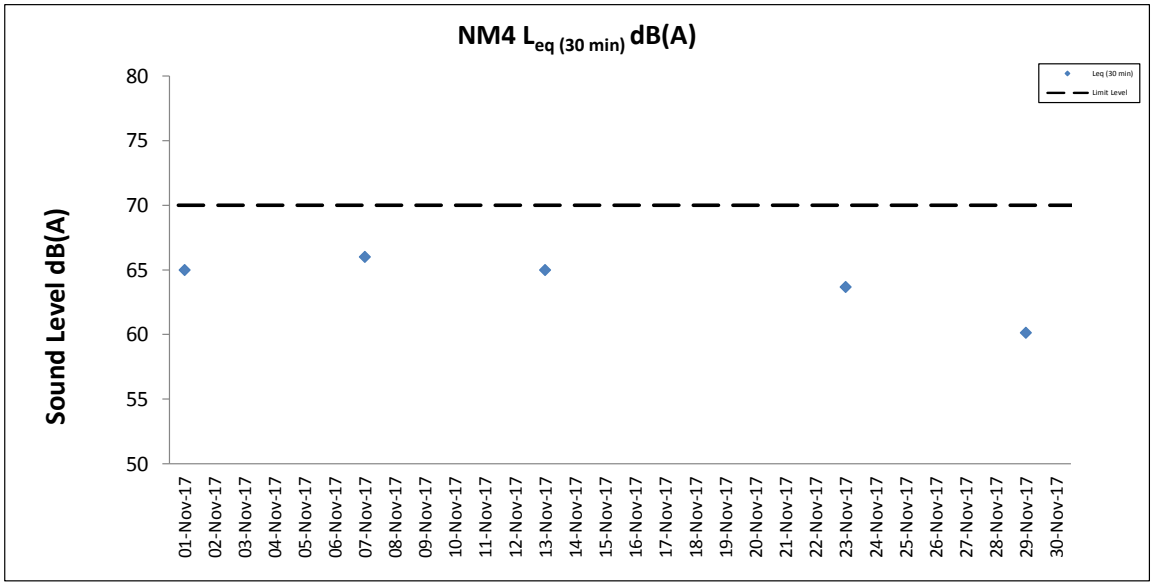
NM4 $L_{eq\ (30\ min)}$ dB(A)
Sound Level dB(A)
80
75
70
65
60
55
50
Leq (30 min)
Limit Level
01-Nov-17
02-Nov-17
03-Nov-17
04-Nov-17
05-Nov-17
06-Nov-17
07-Nov-17
08-Nov-17
09-Nov-17
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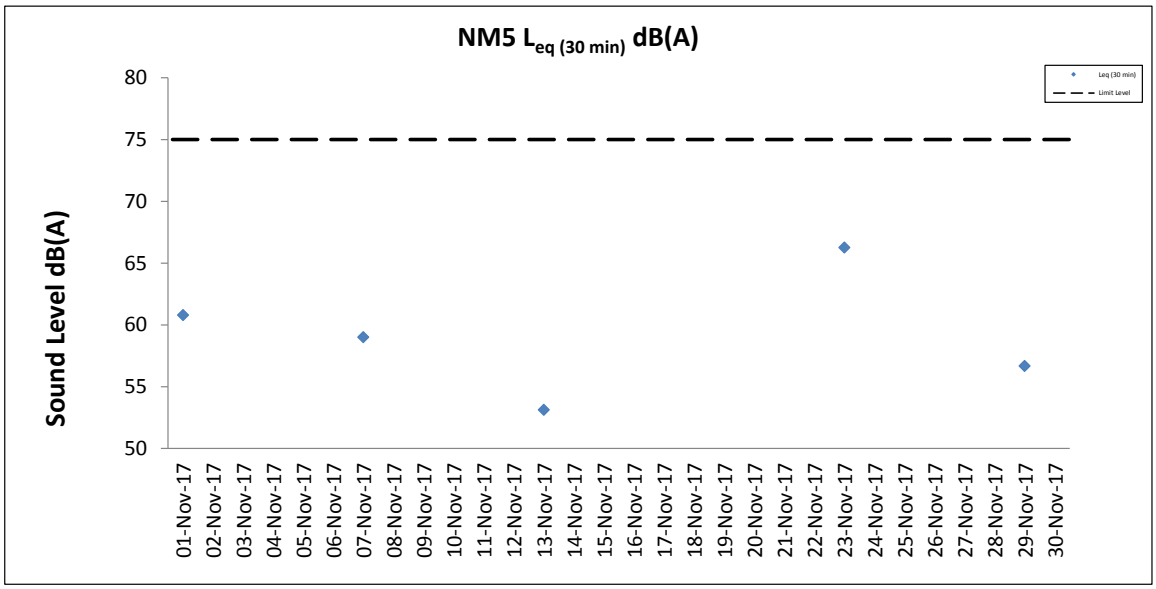
NM5 Leq (30 min) dB(A)
Sound Level dB(A)
80
75
70
65
60
55
50
Leq (30 min)
Limit Level
01-Nov-17
02-Nov-17
03-Nov-17
04-Nov-17
05-Nov-17
06-Nov-17
07-Nov-17
08-Nov-17
09-Nov-17
10-Nov-17
11-Nov-17
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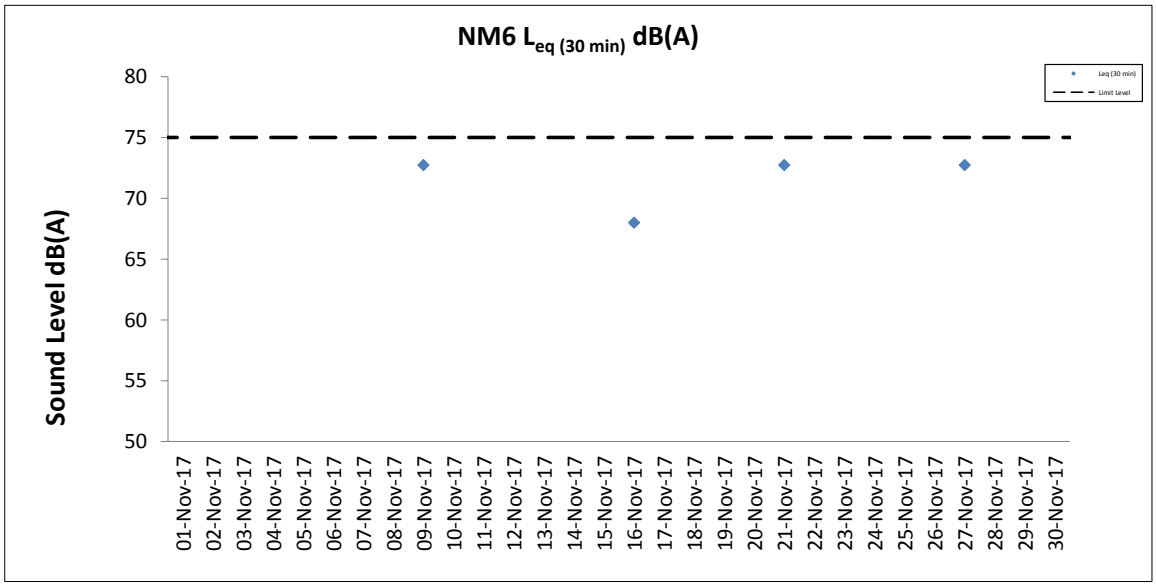
30-Nov-17


NM6 Leq (30 min) dB(A)
Sound Level dB(A)
80
75
70
65
60
55
50
Leq (30 min)
Limit Level
01-Nov-17
02-Nov-17
03-Nov-17
04-Nov-17
05-Nov-17
06-Nov-17
07-Nov-17
08-Nov-17
09-Nov-17
10-Nov-17
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29-Nov-17
30-Nov-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 November 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	11:20	8.8	Surface	1.0	0.3	206	25.3	25.3	8.0	8.0	33.0	33.0	96.6	96.6	6.6	6.6	9.2	11.9	10	11	95	95	815603	804245	<0.2	<0.2	0.5	0.4
						1.0	0.3	215	25.3		8.0		33.0		96.5		6.6		9.2		10		95				<0.2		0.5	
					Middle	4.4	0.3	212	25.0	25.0	8.0	8.0	33.0	33.0	95.1	95.2	6.5		11.4		12		92				<0.2		0.4	
						4.4	0.3	220	25.0		8.0		33.0		95.2		6.5		11.7		10		93				<0.2		0.4	
					Bottom	7.8	0.2	230	25.0	25.0	8.0	8.0	33.0	33.0	96.9	97.3	6.6	6.7	15.1		12		97				<0.2		0.4	
						7.8	0.2	244	25.0		8.0		33.0		97.6		6.7		14.9		11		97				<0.2		0.3	
C2	Sunny	Moderate	12:22	11.2	Surface	1.0	0.6	170	25.5	25.5	8.1	8.1	31.3	31.3	113.5	113.5	7.8	7.7	5.9	14.3	7	9	94	96	825669	806926	<0.2	<0.2	0.6	0.6
						1.0	0.6	176	25.5		8.1		31.3		113.5		7.8		5.9		6		94				<0.2		0.7	
					Middle	5.6	0.7	165	25.4	25.4	8.1	8.1	31.4	31.4	109.7	109.7	7.5		10.9		7		95				<0.2		0.6	
						5.6	0.7	168	25.4		8.1		31.4		109.7		7.5		10.9		7		96				<0.2		0.6	
					Bottom	10.2	0.4	164	25.3	25.3	8.0	8.0	32.0	32.0	107.1	107.1	7.3	7.3	26.1		13		97				<0.2		0.5	
						10.2	0.4	176	25.3		8.0		32.0		107.1		7.3		26.1		15		97				<0.2		0.5	
C3	Sunny	Moderate	10:14	12.1	Surface	1.0	0.3	113	26.0	26.0	7.9	7.9	32.6	32.6	90.8	90.8	6.1	6.1	5.2	7.7	7	9	96	99	822106	817809	<0.2	<0.2	0.3	0.3
						1.0	0.3	115	26.0		7.9		32.6		90.8		6.1		5.2		5		97				<0.2		0.4	
					Middle	6.1	0.3	105	25.9	25.9	7.9	7.9	32.6	32.6	89.9	90.0	6.1		6.7		9		99				<0.2		0.3	
						6.1	0.3	111	25.9		7.9		32.6		90.0		6.1		6.4		11		99				<0.2		0.4	
					Bottom	11.1	0.3	96	25.9	25.9	7.9	7.9	32.9	32.9	90.7	90.7	6.1	6.1	11.3		13		102				<0.2		0.3	
						11.1	0.3	103	25.9		7.9		32.9		90.7		6.1		11.3		11		101				<0.2		0.3	
IM1	Fine	Moderate	11:40	7.3	Surface	1.0	0.2	170	25.0	25.0	8.1	8.1	32.8	32.8	100.7	100.7	6.9	6.9	5.7	8.9	6	8	97	98	818358	806476	<0.2	<0.2	0.4	0.4
						1.0	0.3	184	25.0		8.1		32.8		100.6		6.9		5.8		8		97				<0.2		0.4	
					Middle	3.7	0.3	171	25.0	25.0	8.0	8.0	32.8	32.8	99.3	99.3	6.8		7.4		8		98				<0.2		0.4	
						3.7	0.3	179	25.0		8.0		32.8		99.3		6.8		7.4		9		99				<0.2		0.4	
					Bottom	6.3	0.3	167	24.9	24.9	8.0	8.0	32.9	32.9	97.9	98.3	6.7	6.8	13.7		8		97				<0.2		0.4	
						6.3	0.3	182	24.9		8.0		32.9		98.7		6.8		13.4		9		97				<0.2		0.4	
IM2	Fine	Moderate	11:47	8.1	Surface	1.0	0.3	182	25.1	25.1	8.0	8.0	33.0	33.0	95.9	95.9	6.6	6.6	9.7	13.9	10	11	96	97	818868	806176	<0.2	<0.2	0.4	0.4
						1.0	0.3	186	25.1		8.0		33.0		95.8		6.6		9.7		9		96				<0.2		0.4	
					Middle	4.1	0.3	177	24.9	24.9	8.0	8.0	33.0	33.0	94.7	94.7	6.5		12.2		11		96				<0.2		0.3	
						4.1	0.3	184	24.9		8.0		33.0		94.6		6.5		12.7		10		96				<0.2		0.4	
					Bottom	7.1	0.3	191	24.8	24.8	8.0	8.0	32.9	32.9	94.9	95.0	6.5	6.5	19.2		12		98				<0.2		0.4	
						7.1	0.3	195	24.8		8.0		32.9		95.1		6.5		19.6		11		98				<0.2		0.4	
IM3	Fine	Moderate	11:55	8.2	Surface	1.0	0.4	208	25.0	24.9	8.0	8.0	32.9	32.9	97.3	97.3	6.7	6.7	9.2	12.3	10	10	97	98	819397	806018	<0.2	<0.2	0.5	0.4
						1.0	0.4	224	24.9		8.0		32.9		97.2		6.7		9.4		11		97				<0.2		0.5	
					Middle	4.1	0.4	202	24.8	24.8	8.0	8.0	32.9	32.9	96.5	96.6	6.6		12.3		10		99				<0.2		0.4	
						4.1	0.4	210	24.8		8.0		32.9		96.6		6.6		12.6		10		99				<0.2		0.4	
					Bottom	7.2	0.3	204	24.8	24.8	8.0	8.0	32.9	32.9	99.1	99.2	6.8	6.8	15.1		10		99				<0.2		0.4	
						7.2	0.3	205	24.8		8.0		32.9		99.3		6.8		15.0		10		99				<0.2		0.4	
IM4	Fine	Moderate	12:03	7.6	Surface	1.0	0.5	193	25.1	25.1	8.0	8.0	32.9	32.9	100.9	100.9	6.9	6.8	8.3	14.7	7	10	96	99	819569	805048	<0.2	<0.2	0.4	0.4
						1.0	0.6	193	25.1		8.0		32.9		100.8		6.9		8.8		8		96				<0.2		0.4	
					Middle	3.8	0.5	192	24.9	24.9	8.0	8.0	32.9	32.9	97.9	97.9	6.7		18.7		8		102				<0.2		0.4	
						3.8	0.5	196	24.9		8.0		32.9		97.9		6.7		18.7		8		102				<0.2		0.4	
					Bottom	6.6	0.3	191	24.9	24.9	8.0	8.0	32.9	32.9	98.9	99.1	6.8	6.8	16.9		13		98				<0.2		0.4	
						6.6	0.3	194	24.9		8.0		32.9		99.3		6.8		16.9		13		98				<0.2		0.4	
IM5	Fine	Moderate	12:15	7.7	Surface	1.0	0.5	192	24.9	24.9	8.0	8.0	32.9	32.9	101.3	101.3	7.0	7.0	9.9	13.7	9	11	98	97	820568	804928	<0.2	<0.2	0.4	0.4
						1.0	0.6	202	24.9		8.0		32.9		101.3		7.0		9.8		9		98				<0.2		0.4	
					Middle	3.9	0.5	196	24.8	24.8	8.0	8.0	32.9	32.9	100.8	100.9	6.9		13.7		8		98				<0.2		0.4	
						3.9	0.5	209	24.8		8.0		32.9		100.9		7.0		14.1		9		98				<0.2		0.4	
					Bottom	6.7	0.3	197	24.7	24.7	8.0	8.0	32.9	32.9	102.5	102.8	7.1	7.1	17.3		14		95				<0.2		0.3	
						6.7	0.4	209	24.7		8.0		32.9		103.1		7.1		17.6		14		95				<0.2		0.3	
IM6	Fine	Moderate	12:22	6.6	Surface	1.0	0.3	180	24.9	24.8	8.0	8.0	32.9	32.9	101.4	101.5	7.0	7.0	10.0	11.9	9	10	97	97	821050	805810	<0.2	<0.2	0.3	0.4
						1.0	0.3	193	24.8		8.0		32.9		101.5		7.0		10.0		9		97				<0.2		0.4	
					Middle	3.3	0.3	180	24.9	24.8	8.0	8.0	32.9	32.9	101.2	101.2	7.0		10.2		10		96				<0.2		0.3	
						3.3	0.3	187	24.8		8.0		32.9		101.2		7.0		10.4		10		97				<0.2		0.4	
					Bottom	5.6	0.4	180	24.8	24.8	8.0	8.0	32.9	32.9	101.1	101.3	7.0	7.0	15.1		10		98				<0.2		0.3	
						5.6	0.4	188	24.8		8.0		32.9		101.5		7.0		15.4		11		98				<0.2		0.4	
IM7	Fine	Moderate	12:30	8.0	Surface	1.0	0.3	211	25.0	25.0	8.1	8.1	32.2	32.2	105.8	105.6	7.3	7.3	7.4	11.7	8	8	93	95	821350	806847	<0.2	<0.2	0.5	0.5
						1.0	0.3	219	25.0		8.1		32.2		105.4		7.3		7.7		8		93				<0.2		0.5	
					Middle	4.0	0.2	219	24.9	24.9	8.1	8.1	32.5	32.5	103.9	104.0	7.2		10.7		9		95				<0.2		0.4	
						4.0	0.2	228	24.9		8.1		32.4		104.1		7.2		10.9		8		96				<0.2		0.5	
					Bottom	7.0	0.2	188	24.8	24.8	8.0	8.0	32.9	32.9	100.8	101.0	6.9	7.0	16.6		8		97				<0.2		0.6	
						7.0	0.2	194	24.8		8.0		32.9		101.2		7.0		16.7		9		97				<0.2		0.6	
IM8	Sunny	Moderate	11:48	8.3	Surface	1.0	0.3	193	25.2	25.2	8.1	8.1	32.2	32.2	104.6	104.6	7.2	7.1	11.1	12.3	5	8	95	97	821688	807820	<0.2	<0.2	0.6	0.5
						1.0	0.3	198	25.2		8.1		32.2		104.6		7.2		11.1		4		96				<0.2		0.6	
					Middle	4.2	0.1	153	25.1	25.1	8.0	8.0	32.5	32.5	102.1	102.1	7.0		12.0		8		97				<0.2		0.5	
						4.2	0.1	165	25.1		8.0		32.5		102.1		7.0		12.0		7		97				<0.2		0.5	
					Bottom	7.3	0.1	140	25.0	25.0	8.0	8.0	32.8	32.8	101.9	101.9	7.0	7.0	13.9		10		99				<0.2		0.5	
						7.3	0.1	145	25.0		8.0		32.8		101.9		7.0		13.9		11		98				<0.2		0.5	

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 02 November 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	11:39	7.0	Surface	1.0	0.4	123	25.2	25.2	8.1	8.1	32.4	32.4	105.1	105.1	7.2	7.2	9.5	10.9	5	7	96	97	822102	808826	<0.2	<0.2	0.4	0.5
						1.0	0.4	124	25.2		8.1		32.4		105.1		7.2		9.5		4		96				<0.2		0.5	
					Middle	3.5	0.4	117	25.1	25.1	8.1	8.1	32.5	32.5	104.1	104.1	7.1		11.5		8		97				<0.2		0.5	
						3.5	0.4	124	25.1		8.1		32.5		104.1		7.1		11.5		8		97				<0.2		0.5	
					Bottom	6.0	0.3	100	25.1	25.1	8.0	8.0	32.5	32.5	103.4	103.4	7.1	7.1	11.8		9		98				<0.2		0.5	
						6.0	0.3	102	25.1		8.0		32.5		103.4		7.1		11.8		8		98				<0.2		0.5	
IM10	Sunny	Moderate	11:30	7.1	Surface	1.0	0.5	117	25.3	25.3	8.1	8.1	32.1	32.1	105.7	105.7	7.2	7.2	11.5	20.2	6	12	96	97	822227	809850	<0.2	<0.2	0.6	0.6
						1.0	0.5	118	25.3		8.1		32.1		105.7		7.2		11.5		6		95				<0.2		0.6	
					Middle	3.6	0.4	104	25.1	25.1	8.0	8.0	32.4	32.4	102.7	102.7	7.1		18.0		9		97				<0.2		0.6	
						3.6	0.4	105	25.1		8.0		32.4		102.7		7.1		18.0		8		97				<0.2		0.7	
					Bottom	6.1	0.3	109	25.0	25.0	8.0	8.0	32.7	32.7	101.1	101.1	6.9	6.9	31.0		22		98				<0.2		0.5	
						6.1	0.3	115	25.0		8.0		32.7		101.1		6.9		31.0		20		98				<0.2		0.6	
IM11	Sunny	Moderate	11:16	8.1	Surface	1.0	0.3	93	25.1	25.1	8.1	8.1	32.8	32.8	101.7	101.7	7.0	7.0	10.2	16.7	8	12	96	97	821487	810534	<0.2	<0.2	0.4	0.4
						1.0	0.3	101	25.1		8.1		32.8		101.7		7.0		10.2		9		95				<0.2		0.4	
					Middle	4.1	0.4	92	25.0	25.0	8.1	8.1	32.8	32.8	100.3	100.3	6.9		14.7		9		98				<0.2		0.4	
						4.1	0.4	92	25.0		8.1		32.8		100.3		6.9		14.7		9		97				<0.2		0.4	
					Bottom	7.1	0.3	95	25.0	25.0	8.0	8.0	32.9	32.9	99.7	99.7	6.8	6.8	25.1		18		99				<0.2		0.4	
						7.1	0.3	102	25.0		8.0		32.9		99.7		6.8		25.1		18		98				<0.2		0.4	
IM12	Sunny	Moderate	11:06	9.1	Surface	1.0	0.5	101	25.4	25.4	8.1	8.1	32.2	32.2	110.3	110.3	7.5	7.4	7.4	19.8	6	17	96	97	821161	811512	<0.2	<0.2	0.6	0.6
						1.0	0.5	101	25.4		8.1		32.2		110.3		7.5		7.4		8		95				<0.2		0.8	
					Middle	4.6	0.5	94	25.1	25.1	8.1	8.1	32.3	32.3	106.7	106.7	7.3		13.8		6		97				<0.2		0.6	
						4.6	0.5	102	25.1		8.1		32.3		106.6		7.3		14.0		7		97				<0.2		0.4	
					Bottom	8.1	0.4	86	25.1	25.1	8.1	8.1	32.4	32.4	102.9	102.9	7.1	7.1	38.0		36		99				<0.2		0.5	
						8.1	0.4	90	25.1		8.1		32.4		102.9		7.1		38.0		38		98				<0.2		0.4	
SR2	Sunny	Moderate	10:39	4.2	Surface	1.0	0.3	64	25.3	25.3	8.1	8.1	32.2	32.2	110.2	110.2	7.6	7.6	11.9	16.6	9	12	95	97	821476	814181	<0.2	<0.2	0.4	0.4
						1.0	0.4	66	25.3		8.1		32.2		110.2		7.6		11.9		8		97				<0.2		0.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.3	49	25.3	25.3	8.1	8.1	32.4	32.4	106.7	106.7	7.3	7.3	21.2		16		98				<0.2		0.4	
						3.2	0.3	53	25.3		8.1		32.4		106.7		7.3		21.2		15		99				<0.2		0.4	
SR3	Sunny	Moderate	11:55	8.6	Surface	1.0	0.4	170	25.3	25.3	8.1	8.1	31.6	31.6	108.5	108.5	7.5	7.4	6.9	10.8	4	8	-	-	822134	807566	-	-	-	-
						1.0	0.4	181	25.3		8.1		31.6		108.5		7.5		6.9		6		-				-		-	
					Middle	4.3	0.2	185	25.1	25.1	8.1	8.1	32.0	32.0	104.6	104.6	7.2		10.1		8		-				-		-	
						4.3	0.3	190	25.1		8.1		32.0		104.6		7.2		10.1		6		-				-		-	
					Bottom	7.6	0.1	194	25.0	25.0	8.0	8.0	32.5	32.5	101.8	101.8	7.0	7.0	15.5		10		-				-		-	
						7.6	0.1	197	25.0		8.0		32.5		101.8		7.0		15.5		12		-				-		-	
SR4A	Fine	Moderate	11:01	9.0	Surface	1.0	0.3	66	24.9	24.9	8.0	8.0	32.9	32.9	95.2	95.2	6.5	6.5	10.2	11.8	10	11	-	-	817201	807816	-	-	-	-
						1.0	0.3	68	24.9		8.0		32.9		95.2		6.5		10.4		11		-				-		-	
					Middle	4.5	0.2	72	24.8	24.8	8.0	8.0	32.9	32.9	94.9	95.0	6.5		12.0		10		-				-		-	
						4.5	0.2	76	24.8		8.0		32.9		95.0		6.5		11.7		11		-				-		-	
					Bottom	8.0	0.2	78	24.8	24.8	8.0	8.0	32.9	32.9	97.0	97.1	6.7	6.7	13.3		11		-				-		-	
						8.0	0.2	84	24.8		8.0		32.9		97.2		6.7		13.3		13		-				-		-	
SR5A	Fine	Calm	10:44	3.7	Surface	1.0	0.1	16	25.1	25.1	8.1	8.1	32.0	32.0	114.3	114.1	7.9	7.9	9.5	10.6	8	9	-	-	816585	810692	-	-	-	-
						1.0	0.1	16	25.1		8.1		32.0		113.8		7.8		9.4		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.7	0.1	10	24.8	24.8	8.1	8.1	32.0	32.1	110.5	110.5	7.6	7.6	11.7		9		-				-		-	
						2.7	0.1	10	24.8		8.1		32.1		110.4		7.6		11.6		10		-				-		-	
SR6	Fine	Calm	10:19	4.5	Surface	1.0	0.1	38	25.4	25.4	8.1	8.1	31.3	31.3	118.3	118.2	8.1	8.1	6.4	7.5	7	6	-	-	817910	814671	-	-	-	-
						1.0	0.1	39	25.4		8.1		31.3		118.1		8.1		6.5		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.1	10	25.2	25.2	8.0	8.0	31.2	31.2	113.8	113.9	7.9	7.9	8.4		5		-				-		-	
						3.5	0.1	10	25.2		8.0		31.2		113.9		7.9		8.5		6		-				-		-	
SR7	Sunny	Moderate	09:39	17.2	Surface	1.0	0.5	119	25.9	25.9	7.9	7.9	32.9	32.9	91.6	91.6	6.2	6.2	8.3	11.0	7	9	-	-	823621	823729	-	-	-	-
						1.0	0.5	121	25.9		7.9		32.9		91.6		6.2		8.3		9		-				-		-	
					Middle	8.6	0.3	107	25.9	25.9	7.9	7.9	32.9	32.9	91.4	91.4	6.2		11.5		10		-				-		-	
						8.6	0.3	109	25.9		7.9		32.9		91.4		6.2		11.5		9		-				-		-	
					Bottom	16.2	0.1	121	25.9	25.9	7.9	7.9	32.9	32.9	94.3	94.3	6.4	6.4	13.3		10		-				-		-	
						16.2	0.1	130	25.9		7.9		32.9		94.3		6.4		13.3		9		-				-		-	
SR8	Sunny	Moderate	10:58	4.7	Surface	1.0	-	-	25.4	25.4	8.1	8.1	32.1	32.1	108.3	108.3	7.4	7.4	10.6	10.3	11	11	-	-	820379	811659	-	-	-	-
						1.0	-	-	25.4		8.1		32.1		108.3		7.4		10.6		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	-	-	25.1	25.1	8.1	8.1	32.2	32.2	106.4	106.4	7.3	7.3	10.0		11		-				-		-	
						3.7	-	-	25.1		8.1		32.2		106.4		7.3		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**
Note: Access to SR8 was blocked by barge. The monitoring at SR8 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 02 November 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	17:04	8.7	Surface	1.0	0.5	40	25.2	25.2	8.0	8.0	33.0	33.0	97.1	97.1	6.6	6.6	14.8	17.2	16	17	96	96	815608	804230	<0.2	<0.2	0.5	0.4
						1.0	0.5	42	25.2		8.0		33.0		97.1		6.6		14.7		17		96				<0.2		0.4	
					Middle	4.4	0.6	37	25.1	25.1	8.0	8.0	33.0	33.0	97.0	97.1	6.6		16.3		15		94				<0.2		0.4	
						4.4	0.6	37	25.1		8.0		33.0		97.1		6.6		16.3		15		94				<0.2		0.4	
					Bottom	7.7	0.5	36	25.1	25.1	8.0	8.0	33.0	33.0	100.4	100.9	6.9	6.9	20.5		20		97				<0.2		0.4	
						7.7	0.5	39	25.1		8.0		33.0		101.3		6.9		20.4		21		97				<0.2		0.3	
C2	Fine	Moderate	15:59	11.0	Surface	1.0	0.4	196	25.8	25.8	8.1	8.1	29.7	29.7	116.0	116.0	8.0	7.7	3.8	8.9	6	8	94	96	825681	806941	<0.2	<0.2	1.8	1.2
						1.0	0.4	211	25.8		8.1		29.7		116.0		8.0		3.8		6		94				<0.2		1.7	
					Middle	5.5	0.2	206	25.5	25.5	8.0	8.0	31.0	31.0	107.7	107.7	7.4		8.9		6		96				<0.2		1.1	
						5.5	0.2	223	25.5		8.0		31.0		107.7		7.4		8.9		7		95				<0.2		1.0	
					Bottom	10.0	0.2	283	25.5	25.5	8.0	8.0	31.5	31.5	107.2	107.2	7.4	7.4	14.0		10		97				<0.2		0.9	
						10.0	0.2	302	25.5		8.0		31.5		107.2		7.4		14.0		11		97				<0.2		0.9	
C3	Fine	Moderate	17:59	12.1	Surface	1.0	0.5	259	26.0	26.0	8.0	8.0	32.4	32.4	95.7	95.7	6.5	6.5	16.6	19.0	12	20	96	99	822116	817800	<0.2	<0.2	0.4	0.4
						1.0	0.6	259	26.0		8.0		32.4		95.7		6.5		16.6		12		96				<0.2		0.4	
					Middle	6.1	0.6	264	26.0	26.0	8.0	8.0	32.3	32.3	96.3	96.3	6.5		20.3		18		98				<0.2		0.6	
						6.1	0.6	278	26.0		8.0		32.3		96.3		6.5		20.3		20		99				<0.2		0.4	
					Bottom	11.1	0.5	266	26.0	26.0	8.0	8.0	32.3	32.3	97.8	97.8	6.6	6.6	20.0		31		102				<0.2		0.4	
						11.1	0.5	286	26.0		8.0		32.3		97.8		6.6		20.0		29		101				<0.2		0.4	
IM1	Fine	Moderate	16:44	7.1	Surface	1.0	0.3	28	25.2	25.2	8.1	8.1	32.5	32.5	106.5	106.5	7.3	7.3	8.6	11.6	8	9	96	99	818338	806470	<0.2	<0.2	0.6	0.5
						1.0	0.4	29	25.2		8.1		32.5		106.4		7.3		8.7		8		96				<0.2		0.6	
					Middle	3.6	0.4	26	25.1	25.1	8.1	8.1	32.5	32.5	105.3	105.3	7.2		10.6		9		100				<0.2		0.5	
						3.6	0.4	27	25.1		8.1		32.5		105.3		7.2		11.0		8		100				<0.2		0.5	
					Bottom	6.1	0.4	15	25.2	25.2	8.1	8.1	32.6	32.6	105.1	105.2	7.2	7.2	15.2		10		100				<0.2		0.5	
						6.1	0.4	15	25.2		8.1		32.6		105.3		7.2		15.2		12		101				<0.2		0.4	
IM2	Fine	Moderate	16:38	7.9	Surface	1.0	0.2	22	25.2	25.2	8.1	8.1	32.6	32.6	101.8	101.7	7.0	6.9	7.9	13.1	6	9	97	99	818851	806200	<0.2	<0.2	0.6	0.5
						1.0	0.2	23	25.2		8.1		32.6		101.6		7.0		8.2		7		97				<0.2		0.5	
					Middle	4.0	0.2	17	25.0	25.0	8.0	8.0	32.8	32.8	99.2	99.3	6.8		15.1		7		99				<0.2		0.5	
						4.0	0.2	18	25.0		8.0		32.8		99.4		6.8		15.2		8		99				<0.2		0.6	
					Bottom	6.9	0.2	12	25.0	25.0	8.0	8.0	32.8	32.8	100.9	101.2	6.9	7.0	16.0		13		99				<0.2		0.4	
						6.9	0.2	13	25.0		8.0		32.8		101.5		7.0		16.1		14		100				<0.2		0.3	
IM3	Fine	Moderate	16:32	8.2	Surface	1.0	0.1	327	25.2	25.2	8.1	8.1	32.2	32.2	110.8	110.8	7.6	7.5	7.6	10.9	7	8	97	98	819395	806029	<0.2	<0.2	0.7	0.6
						1.0	0.1	331	25.2		8.1		32.2		110.7		7.6		7.6		7		97				<0.2		0.6	
					Middle	4.1	0.2	290	25.2	25.2	8.1	8.1	32.4	32.4	108.2	108.2	7.4		9.9		8		97				<0.2		0.6	
						4.1	0.2	310	25.2		8.1		32.4		108.1		7.4		10.1		7		97				<0.2		0.6	
					Bottom	7.2	0.2	307	25.2	25.2	8.1	8.1	32.5	32.5	107.7	107.8	7.4	7.4	15.1		8		99				<0.2		0.6	
						7.2	0.2	319	25.2		8.1		32.5		107.8		7.4		15.2		8		99				<0.2		0.6	
IM4	Fine	Moderate	16:24	7.6	Surface	1.0	0.2	323	25.2	25.2	8.1	8.1	32.2	32.2	112.0	112.0	7.7	7.7	10.6	12.2	10	10	99	99	819568	805034	<0.2	<0.2	0.7	0.7
						1.0	0.3	330	25.2		8.1		32.2		112.0		7.7		10.7		9		100				<0.2		0.8	
					Middle	3.8	0.3	321	25.2	25.2	8.1	8.1	32.2	32.2	111.3	111.3	7.6		12.3		9		101				<0.2		0.7	
						3.8	0.3	351	25.2		8.1		32.2		111.3		7.6		12.3		10		101				<0.2		0.7	
					Bottom	6.6	0.3	334	25.2	25.2	8.1	8.1	32.2	32.2	111.6	111.8	7.7	7.7	13.5		12		96				<0.2		0.6	
						6.6	0.3	307	25.2		8.1		32.2		112.0		7.7		13.6		11		96				<0.2		0.6	
IM5	Fine	Moderate	16:15	6.6	Surface	1.0	0.3	312	25.3	25.3	8.1	8.1	31.7	31.7	114.8	114.7	7.9	7.9	8.6	13.0	8	10	96	98	820546	804923	<0.2	<0.2	0.8	0.8
						1.0	0.3	328	25.3		8.1		31.7		114.6		7.9		8.9		8		96				<0.2		0.8	
					Middle	3.3	0.3	329	25.2	25.2	8.1	8.1	32.0	32.0	113.2	113.2	7.8		12.6		8		98				<0.2		0.7	
						3.3	0.3	345	25.2		8.1		32.0		113.2		7.8		12.9		8		99				<0.2		0.7	
					Bottom	5.6	0.3	320	25.2	25.2	8.1	8.1	32.0	32.0	113.3	113.3	7.8	7.8	17.5		15		99				<0.2		0.8	
						5.6	0.3	323	25.2		8.1		32.0		113.3		7.8		17.4		14		99				<0.2		0.8	
IM6	Fine	Moderate	16:07	6.5	Surface	1.0	0.5	272	25.4	25.4	8.1	8.1	31.4	31.3	116.4	116.4	8.0	8.0	7.6	10.3	9	10	94	97	821076	805810	<0.2	<0.2	1.0	1.0
						1.0	0.5	276	25.4		8.1		31.3		116.4		8.0		7.4		8		94				<0.2		1.0	
					Middle	3.3	0.4	282	25.3	25.3	8.1	8.1	31.6	31.6	115.0	115.0	7.9		10.3		10		98				<0.2		1.0	
						3.3	0.4	291	25.3		8.1		31.6		115.0		7.9		10.5		10		98				<0.2		1.0	
					Bottom	5.5	0.3	283	25.3	25.3	8.1	8.1	31.6	31.6	114.5	114.6	7.9	7.9	12.9		11		99				<0.2		0.9	
						5.5	0.3	309	25.3		8.1		31.6		114.6		7.9		13.1		10		99				<0.2		1.0	
IM7	Fine	Moderate	16:00	7.7	Surface	1.0	0.4	235	25.5	25.5	8.1	8.1	31.0	31.0	117.7	117.7	8.1	8.0	6.9	9.1	9	10	97	99	821334	806835	<0.2	<0.2	1.7	1.4
						1.0	0.5	248	25.5		8.1		31.0		117.6		8.1		7.2		7		97				<0.2		1.4	
					Middle	3.9	0.4	244	25.4	25.4	8.1	8.1	31.5	31.5	115.3	115.3	7.9		8.5		9		99				<0.2		1.4	
						3.9	0.4	254	25.4		8.1		31.5		115.3		7.9		8.7		8		99				<0.2		1.3	
					Bottom	6.7	0.3	265	25.4	25.3	8.1	8.1	31.8	31.7	114.6	114.6	7.9	7.9	11.5		13		100				<0.2		1.3	
						6.7	0.3	275	25.3		8.1		31.7		114.6		7.9		11.6		12		100				<0.2		1.3	
IM8	Fine	Moderate	16:25	7.8	Surface	1.0	0.3	243	25.7	25.7	8.1	8.1	31.6	31.6	118.0	118.0	8.1	8.1	7.3	7.8	8	9	95	97	821692	807851	<0.2	<0.2	0.8	0.7
						1.0	0.4	262	25.7		8.1		31.6		118.0		8.1		7.3		9		95				<0.2		0.8	
					Middle	3.9	0.3	234	25.7	25.7	8.1	8.1	31.6	31.6	116.8	116.8	8.0		8.6		10		97				<0.2		0.8	
						3.9	0.3	245	25.7		8.1		31.6		116.8		8.0		8.6		8		97				<0.2		0.6	
					Bottom	6.8	0.3	259	25.7	25.7	8.1	8.1	31.8	31.8	114.4	114.4	7.8	7.8	7.6		9		98				<0.2		0.8	
						6.8	0.3	259	25.7		8.1		31.8		114.4		7.8		7.6		8		99				<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 02 November 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	16:33	6.8	Surface	1.0	0.3	288	25.6	25.6	8.1	8.1	32.0	32.0	113.1	113.1	7.7	7.7	8.0	9.4	9	10	96	97	822098	808829	<0.2	<0.2	0.8	0.7
						1.0	0.3	311	25.6		8.1		32.0		113.1		7.7		8.0		10		95				<0.2		0.7	
					Middle	3.4	0.3	286	25.6	25.6	8.1	8.1	32.0	32.0	112.0	112.0	7.6		9.2		10		97				<0.2		0.7	
						3.4	0.3	313	25.6		8.1		32.0		112.0		7.6		9.2		10		97				<0.2		0.7	
					Bottom	5.8	0.3	290	25.6	25.6	8.1	8.1	32.0	32.0	110.9	110.9	7.6	7.6	11.1		10		98				<0.2		0.7	
						5.8	0.3	312	25.6		8.1		32.0		110.9		7.6		11.1		11		99				<0.2		0.6	
IM10	Fine	Moderate	16:44	7.1	Surface	1.0	0.5	307	25.4	25.4	8.1	8.1	32.2	32.2	111.8	111.8	7.6	7.6	14.6	22.2	16	17	95	97	822243	809837	<0.2	<0.2	0.6	0.6
						1.0	0.5	330	25.4		8.1		32.2		111.8		7.6		14.6		16		96				<0.2		0.6	
					Middle	3.6	0.5	307	25.4	25.4	8.1	8.1	32.2	32.2	110.2	110.2	7.5		21.9		16		97				<0.2		0.5	
						3.6	0.5	320	25.4		8.1		32.2		110.2		7.5		21.9		17		97				<0.2		0.5	
					Bottom	6.1	0.4	304	25.4	25.4	8.1	8.1	32.2	32.2	109.4	109.4	7.5	7.5	30.1		17		98				<0.2		0.6	
						6.1	0.4	312	25.4		8.1		32.2		109.4		7.5		30.1		17		99				<0.2		0.6	
IM11	Fine	Moderate	16:57	7.7	Surface	1.0	0.5	289	25.4	25.4	8.1	8.1	32.3	32.3	112.5	112.5	7.7	7.6	10.6	19.9	11	12	97	97	821506	810548	<0.2	<0.2	0.7	0.6
						1.0	0.5	307	25.4		8.1		32.3		112.5		7.7		10.6		10		96				<0.2		0.6	
					Middle	3.9	0.4	291	25.4	25.4	8.1	8.1	32.4	32.4	110.2	110.2	7.5		20.2		11		97				<0.2		0.6	
						3.9	0.4	308	25.4		8.1		32.4		110.2		7.5		20.2		10		97				<0.2		0.6	
					Bottom	6.7	0.4	290	25.3	25.3	8.1	8.1	32.5	32.5	108.4	108.4	7.4	7.4	29.0		15		98				<0.2		0.6	
						6.7	0.4	316	25.3		8.1		32.5		108.4		7.4		29.0		14		99				<0.2		0.6	
IM12	Fine	Moderate	17:07	8.6	Surface	1.0	0.7	273	25.4	25.4	8.1	8.1	32.5	32.5	112.6	112.6	7.7	7.7	11.0	13.6	8	12	97	98	821143	811519	<0.2	<0.2	0.6	0.6
						1.0	0.7	290	25.4		8.1		32.5		112.6		7.7		11.0		8		96				<0.2		0.5	
					Middle	4.3	0.6	273	25.4	25.4	8.1	8.1	32.5	32.5	111.1	111.1	7.6		14.4		10		98				<0.2		0.6	
						4.3	0.7	296	25.4		8.1		32.5		111.0		7.6		14.8		10		97				<0.2		0.6	
					Bottom	7.6	0.5	277	25.4	25.4	8.1	8.1	32.5	32.5	110.2	110.2	7.5	7.5	15.2		17		99				<0.2		0.6	
						7.6	0.5	300	25.4		8.1		32.5		110.2		7.5		15.2		18		98				<0.2		0.6	
SR2	Fine	Moderate	17:32	4.7	Surface	1.0	0.4	331	25.5	25.5	8.1	8.1	32.2	32.2	111.8	111.8	7.6	7.6	18.0	19.9	12	17	96	97	821450	814166	<0.2	<0.2	0.6	0.6
						1.0	0.5	354	25.5		8.1		32.2		111.8		7.6		18.0		13		96				<0.2		0.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.3	328	25.5	25.5	8.1	8.1	32.1	32.1	110.7	110.7	7.6	7.6	21.8		23		98				<0.2		0.6	
						3.7	0.4	350	25.5		8.1		32.1		110.7		7.6		21.8		21		99				<0.2		0.5	
SR3	Fine	Moderate	16:19	8.4	Surface	1.0	0.3	224	25.8	25.8	8.1	8.1	30.4	30.4	117.9	117.9	8.1	8.0	3.5	5.9	5	8	-	-	822162	807562	-	-	-	-
						1.0	0.3	227	25.8		8.1		30.4		117.9		8.1		3.5		7		-				-		-	
					Middle	4.2	0.3	269	25.6	25.6	8.1	8.1	31.1	31.1	115.6	115.6	7.9		5.2		8		-				-		-	
						4.2	0.3	280	25.6		8.1		31.1		115.6		7.9		5.2		6		-				-		-	
					Bottom	7.4	0.3	277	25.6	25.6	8.1	8.1	31.3	31.3	114.5	114.5	7.8	7.8	9.0		11		-				-		-	
						7.4	0.3	278	25.6		8.1		31.3		114.5		7.8		9.0		10		-				-		-	
SR4A	Fine	Moderate	17:22	9.0	Surface	1.0	0.2	253	25.3	25.3	8.1	8.1	32.5	32.5	107.2	107.2	7.3	7.3	14.9	15.5	15	16	-	-	817194	807827	-	-	-	-
						1.0	0.3	256	25.3		8.1		32.5		107.2		7.3		14.8		15		-				-		-	
					Middle	4.5	0.3	242	25.2	25.2	8.1	8.1	32.5	32.5	105.7	105.7	7.2		15.4		15		-				-		-	
						4.5	0.3	266	25.2		8.1		32.5		105.7		7.2		15.3		14		-				-		-	
					Bottom	8.0	0.2	258	25.2	25.2	8.1	8.1	32.5	32.5	105.5	105.8	7.2	7.3	16.4		18		-				-		-	
						8.0	0.2	272	25.2		8.1		32.5		106.0		7.3		16.3		19		-				-		-	
SR5A	Fine	Moderate	17:40	4.1	Surface	1.0	0.2	295	25.3	25.3	8.1	8.1	32.1	32.1	116.7	116.7	8.0	8.0	16.2	16.9	17	17	-	-	816594	810678	-	-	-	-
						1.0	0.2	299	25.3		8.1		32.1		116.6		8.0		16.7		17		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.2	298	25.3	25.3	8.1	8.1	32.0	32.0	113.8	113.8	7.8	7.8	17.4		16		-				-		-	
						3.1	0.2	300	25.3		8.1		32.0		113.7		7.8		17.3		16		-				-		-	
SR6	Fine	Moderate	18:02	4.5	Surface	1.0	0.1	242	25.5	25.5	8.1	8.1	32.4	32.4	119.6	119.6	8.2	8.2	14.7	15.0	10	12	-	-	817910	814670	-	-	-	-
						1.0	0.1	243	25.5		8.1		32.4		119.5		8.1		14.9		12		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.1	256	25.5	25.5	8.1	8.1	32.4	32.4	117.5	117.1	8.0	8.0	15.3		13		-				-		-	
						3.5	0.1	274	25.5		8.1		32.4		116.7		8.0		15.1		13		-				-		-	
SR7	Fine	Moderate	18:35	17.8	Surface	1.0	0.1	105	26.0	26.0	7.9	7.9	32.4	32.4	93.3	93.4	6.3	6.3	8.9	11.3	9	15	-	-	823641	823758	-	-	-	-
						1.0	0.1	114	26.0		7.9		32.4		93.4		6.3		8.9		10		-				-		-	
					Middle	8.9	0.1	100	26.0	26.0	7.9	7.9	32.3	32.3	93.2	93.2	6.3		12.1		16		-				-		-	
						8.9	0.1	104	26.0		7.9		32.3		93.2		6.3		12.1		17		-				-		-	
					Bottom	16.8	0.1	60	26.0	26.0	7.9	7.9	32.3	32.3	93.8	93.8	6.3	6.3	12.9		18		-				-		-	
						16.8	0.1	64	26.0		7.9		32.3		93.8		6.3		12.9		17		-				-		-	
SR8	Fine	Moderate	17:15	4.8	Surface	1.0	-	-	25.8	25.8	8.1	8.1	32.0	32.0	114.1	114.1	7.8	7.8	11.3	14.6	10	11	-	-	820367	811653	-	-	-	-
						1.0	-	-	25.8		8.1		32.0		114.0		7.8		11.5		12		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	-	-	25.5	25.5	8.1	8.1	32.2	32.2	111.8	111.8	7.6	7.6	17.8		10		-				-		-	
						3.8	-	-	25.5		8.1		32.2		111.8		7.6		17.8		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**

Note: Access to SR8 was blocked by barge. The monitoring at SR8 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 04 November 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	12:18	9.1	Surface	1.0	0.4	212	24.9	24.9	8.0	8.0	33.0	33.0	94.0	94.0	6.5	6.5	18.5	20.9	16	17	94	97	815609	804257	<0.2	<0.2	0.6	0.6
						1.0	0.4	213	24.9		8.0		33.0		93.9		6.5		18.0		16		95				<0.2		0.7	
					Middle	4.6	0.3	209	24.9	24.9	8.0	8.0	33.0	33.0	93.7	93.7	6.4		21.2		16		96				<0.2		0.5	
						4.6	0.3	219	24.9		8.0		33.0		93.7		6.4		21.4		17		96				<0.2		0.6	
					Bottom	8.1	0.3	219	24.9	24.9	8.0	8.0	33.0	33.0	94.2	94.3	6.5	6.5	22.7		17		99				<0.2		0.5	
						8.1	0.3	233	24.9		8.0		33.0		94.4		6.5		23.4		18		99				<0.2		0.6	
C2	Fine	Moderate	11:02	12.2	Surface	1.0	0.1	306	25.0	25.0	8.0	8.0	31.0	31.0	101.7	101.7	7.1	7.1	13.0	20.5	10	11	94	96	825691	806962	<0.2	<0.2	1.0	1.1
						1.0	0.1	311	25.0		8.0		31.0		101.7		7.1		13.0		10		95				<0.2		1.1	
					Middle	6.1	0.3	41	24.8	24.8	8.1	8.1	31.8	31.8	100.9	100.9	7.0		18.9		9		96				<0.2		1.3	
						6.1	0.3	41	24.8		8.1		31.8		100.9		7.0		18.9		9		96				<0.2		1.2	
					Bottom	11.2	0.3	49	24.8	24.8	8.0	8.0	32.1	32.1	100.9	100.9	7.0	7.0	29.6		13		97				<0.2		1.1	
						11.2	0.3	50	24.8		8.0		32.1		100.9		7.0		29.6		13		97				<0.2		1.1	
C3	Fine	Moderate	12:53	11.7	Surface	1.0	0.5	90	25.6	25.6	8.0	8.0	32.4	32.4	96.2	96.2	6.6	6.6	13.0	18.6	14	15	97	99	822114	817804	<0.2	<0.2	0.6	0.5
						1.0	0.5	93	25.6		8.0		32.4		96.2		6.6		13.0		15		97				<0.2		0.5	
					Middle	5.9	0.5	87	25.6	25.6	8.0	8.0	32.3	32.3	95.8	95.8	6.5		18.6		15		99				<0.2		0.5	
						5.9	0.5	93	25.6		8.0		32.3		95.8		6.5		18.6		14		99				<0.2		0.5	
					Bottom	10.7	0.4	90	25.6	25.6	8.0	8.0	32.3	32.3	96.3	96.3	6.6	6.6	24.3		16		102				<0.2		0.4	
						10.7	0.4	94	25.6		8.0		32.3		96.3		6.6		24.3		16		102				<0.2		0.5	
IM1	Cloudy	Moderate	11:58	7.8	Surface	1.0	0.1	178	24.6	24.6	8.0	8.0	32.8	32.8	94.8	94.8	6.6	6.6	16.5	18.3	15	16	95	97	818367	806464	<0.2	<0.2	0.6	0.6
						1.0	0.1	194	24.6		8.0		32.8		94.8		6.6		16.8		15		95				<0.2		0.5	
					Middle	3.9	0.1	188	24.6	24.6	8.0	8.0	32.8	32.8	94.9	94.9	6.6		18.5		16		96				<0.2		0.7	
						3.9	0.1	196	24.6		8.0		32.8		94.9		6.6		18.6		16		96				<0.2		0.6	
					Bottom	6.8	0.1	202	24.6	24.6	8.0	8.0	32.8	32.8	95.6	95.8	6.6	6.6	19.7		17		99				<0.2		0.6	
						6.8	0.1	221	24.6		8.0		32.8		96.0		6.6		19.6		17		99				<0.2		0.5	
IM2	Cloudy	Moderate	11:50	8.8	Surface	1.0	0.1	33	24.8	24.8	8.0	8.0	33.0	33.0	93.7	93.7	6.4	6.4	21.9	23.2	18	19	94	96	818835	806209	<0.2	<0.2	0.4	0.6
						1.0	0.1	35	24.8		8.0		33.0		93.7		6.4		21.9		17		94				<0.2		0.5	
					Middle	4.4	0.1	39	24.8	24.8	8.0	8.0	33.0	33.0	93.6	93.6	6.4		22.3		17		96				<0.2		0.6	
						4.4	0.1	41	24.8		8.0		33.0		93.6		6.4		22.3		19		96				<0.2		0.6	
					Bottom	7.8	0.1	25	24.8	24.8	8.0	8.0	32.9	32.9	94.4	94.5	6.5	6.5	25.5		21		98				<0.2		0.6	
						7.8	0.1	25	24.8		8.0		32.9		94.5		6.5		25.4		22		98				<0.2		0.6	
IM3	Cloudy	Moderate	11:41	8.9	Surface	1.0	0.1	34	24.8	24.8	8.0	8.0	32.9	32.9	93.8	93.8	6.5	6.5	20.5	21.6	20	22	94	96	819393	806033	<0.2	<0.2	0.5	0.5
						1.0	0.2	35	24.8		8.0		32.9		93.7		6.5		20.6		20		94				<0.2		0.5	
					Middle	4.5	0.1	45	24.8	24.8	8.0	8.0	32.9	32.9	93.7	93.8	6.5		21.3		21		96				<0.2		0.6	
						4.5	0.1	49	24.8		8.0		32.9		93.8		6.5		21.4		22		96				<0.2		0.5	
					Bottom	7.9	0.2	48	24.8	24.8	8.0	8.0	32.9	32.9	94.7	94.8	6.5	6.5	22.9		24		98				<0.2		0.5	
						7.9	0.2	48	24.8		8.0		32.9		94.8		6.5		22.8		24		98				<0.2		0.6	
IM4	Cloudy	Moderate	11:33	8.4	Surface	1.0	0.1	97	24.8	24.8	8.0	8.0	32.9	32.9	94.2	94.2	6.5	6.5	19.3	23.8	22	23	94	97	819585	805032	<0.2	<0.2	0.6	0.5
						1.0	0.1	105	24.8		8.0		33.0		94.1		6.5		19.5		22		94				<0.2		0.4	
					Middle	4.2	0.2	42	24.8	24.8	8.0	8.0	32.9	32.9	94.1	94.1	6.5		21.5		22		97				<0.2		0.4	
						4.2	0.2	45	24.8		8.0		32.9		94.1		6.5		21.5		21		97				<0.2		0.4	
					Bottom	7.4	0.1	295	24.8	24.8	8.0	8.0	32.9	32.9	95.8	95.9	6.6	6.6	30.5		24		99				<0.2		0.5	
						7.4	0.1	308	24.8		8.0		32.9		95.9		6.6		30.5		24		99				<0.2		0.6	
IM5	Cloudy	Moderate	11:23	7.7	Surface	1.0	0.1	73	24.7	24.7	8.0	8.0	32.9	32.9	93.9	93.9	6.5	6.5	20.1	23.0	19	23	94	96	820577	804929	<0.2	<0.2	0.6	0.6
						1.0	0.1	74	24.7		8.0		32.9		93.9		6.5		20.2		20		94				<0.2		0.5	
					Middle	3.9	0.1	18	24.7	24.7	8.0	8.0	32.8	32.8	94.2	94.2	6.5		21.2		22		96				<0.2		0.6	
						3.9	0.1	18	24.7		8.0		32.8		94.2		6.5		21.1		22		96				<0.2		0.5	
					Bottom	6.7	0.2	35	24.7	24.7	8.0	8.0	32.8	32.8	95.7	96.0	6.6	6.6	27.5		26		98				<0.2		0.6	
						6.7	0.2	37	24.7		8.0		32.8		96.3		6.6		27.6		26		98				<0.2		0.7	
IM6	Cloudy	Moderate	11:13	7.6	Surface	1.0	0.2	31	24.7	24.7	8.0	8.0	32.8	32.8	94.0	94.0	6.5	6.5	20.4	24.1	19	21	94	96	821068	805841	<0.2	<0.2	0.6	0.6
						1.0	0.2	33	24.7		8.0		32.8		94.0		6.5		20.3		19		94				<0.2		0.7	
					Middle	3.8	0.3	52	24.7	24.7	8.0	8.0	32.8	32.8	93.6	93.7	6.5		22.5		20		96				<0.2		0.6	
						3.8	0.3	55	24.7		8.0		32.8		93.7		6.5		22.6		20		96				<0.2		0.6	
					Bottom	6.6	0.2	57	24.7	24.7	8.0	8.0	32.8	32.8	94.0	94.1	6.5	6.5	29.3		23		98				<0.2		0.6	
						6.6	0.3	59	24.7		8.0		32.8		94.2		6.5		29.4		24		98				<0.2		0.6	
IM7	Cloudy	Moderate	11:02	8.9	Surface	1.0	0.2	48	24.6	24.6	8.0	8.0	32.7	32.7	94.5	94.5	6.5	6.5	21.1	23.9	19	20	94	96	821360	806839	<0.2	<0.2	0.6	0.6
						1.0	0.2	52	24.6		8.0		32.7		94.5		6.5		21.0		19		94				<0.2		0.7	
					Middle	4.5	0.2	65	24.6	24.6	8.0	8.0	32.7	32.7	94.7	94.7	6.5		22.2		20		96				<0.2		0.5	
						4.5	0.2	66	24.6		8.0		32.7		94.7		6.5		22.1		21		96				<0.2		0.4	
					Bottom	7.9	0.2	29	24.6	24.6	8.0	8.0	32.7	32.7	96.3	96.5	6.7	6.7	28.5		22		98				<0.2		0.6	
						7.9	0.2	30	24.6		8.0		32.7		96.7		6.7		28.4		21		98				<0.2		0.6	
IM8	Fine	Moderate	11:28	8.2	Surface	1.0	0.3	94	24.8	24.8	8.0	8.0	32.5	32.5	97.8	97.8	6.7	6.8	18.7	22.5	10	16	94	97	821692	807847	<0.2	<0.2	0.6	1.0
						1.0	0.3	99	24.8		8.0		32.5		97.8		6.7		18.7		11		95				<0.2		0.7	
					Middle	4.1	0.2	65	24.8	24.8	8.0	8.0	32.5	32.5	98.1	98.1	6.8		20.0		16		97				<0.2		1.0	
						4.1	0.2	66	24.8		8.0		32.5		98.1		6.8		20.0		15		96				<0.2		1.2	
					Bottom	7.2	0.2	44	24.8	24.8	8.0	8.0	32.4	32.4	99.1	99.1	6.8	6.8	28.9		21		98				<0.2		1.2	
						7.2	0.2	44	24.8		8.0		32.4		99.1		6.8		28.9		21		99				<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 04 November 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	11:35	7.9	Surface	1.0	0.3	75	24.8	24.8	8.0	8.0	32.7	32.7	98.3	98.3	6.8	6.8	16.2	21.7	14	19	96	97	822094	808800	<0.2	<0.2	0.6	0.8
						1.0	0.3	79	24.8		8.0		32.7		98.3		6.8		16.2		14		95				<0.2		0.5	
					Middle	4.0	0.2	62	24.8	24.8	8.0	8.0	32.7	32.7	98.5	98.5	6.8		22.4		19		97				<0.2		1.1	
						4.0	0.2	65	24.8		8.0		32.7		98.5		6.8		22.4		20		97				<0.2		1.2	
					Bottom	6.9	0.3	60	24.8	24.8	8.0	8.0	32.7	32.7	99.2	99.2	6.8	6.8	26.6		23		98				<0.2		0.7	
						6.9	0.3	61	24.8		8.0		32.7		99.2		6.8		26.6		24		99				<0.2		0.8	
IM10	Fine	Moderate	11:45	7.9	Surface	1.0	0.3	88	24.9	24.9	8.1	8.1	32.1	32.1	104.0	104.0	7.2	7.2	8.0	9.2	7	10	96	97	822228	809852	<0.2	<0.2	1.1	1.1
						1.0	0.3	93	24.9		8.1		32.1		104.0		7.2		8.0		6		95				<0.2		1.1	
					Middle	4.0	0.3	99	24.9	24.9	8.1	8.1	32.1	32.1	103.2	103.2	7.1		8.6		12		97				<0.2		1.3	
						4.0	0.3	104	24.9		8.1		32.1		103.2		7.1		8.6		13		98				<0.2		1.4	
					Bottom	6.9	0.3	103	25.0	25.0	8.1	8.1	32.3	32.3	104.5	104.5	7.2	7.2	11.1		13		99				<0.2		0.8	
						6.9	0.3	105	25.0		8.1		32.3		104.5		7.2		11.1		11		99				<0.2		1.0	
IM11	Fine	Moderate	11:56	8.9	Surface	1.0	0.3	109	25.0	25.0	8.1	8.1	32.3	32.3	103.5	103.5	7.1	7.1	11.1	12.6	11	15	97	98	821487	810533	<0.2	<0.2	0.7	0.8
						1.0	0.3	119	25.0		8.1		32.3		103.5		7.1		11.1		12		96				<0.2		0.7	
					Middle	4.5	0.3	118	25.0	25.0	8.1	8.1	32.3	32.3	103.8	103.8	7.1		12.8		13		97				<0.2		0.9	
						4.5	0.3	121	25.0		8.1		32.3		103.8		7.1		12.8		14		97				<0.2		1.0	
					Bottom	7.9	0.2	127	25.0	25.0	8.1	8.1	32.3	32.3	104.5	104.5	7.2	7.2	13.9		18		99				<0.2		0.6	
						7.9	0.2	137	25.0		8.1		32.3		104.5		7.2		13.9		19		99				<0.2		0.8	
IM12	Fine	Moderate	12:02	9.2	Surface	1.0	0.3	114	25.1	25.1	8.1	8.1	32.4	32.4	102.6	102.6	7.0	7.0	6.2	8.1	9	10	96	97	821178	811538	<0.2	<0.2	0.7	0.7
						1.0	0.3	122	25.1		8.1		32.4		102.6		7.0		6.2		10		97				<0.2		0.8	
					Middle	4.6	0.3	110	25.1	25.1	8.1	8.1	32.4	32.4	102.5	102.5	7.0		8.8		9		97				<0.2		0.6	
						4.6	0.3	110	25.1		8.1		32.4		102.5		7.0		8.8		11		97				<0.2		0.6	
					Bottom	8.2	0.3	102	25.1	25.1	8.1	8.1	32.4	32.4	103.4	103.4	7.1	7.1	9.2		10		99				<0.2		0.8	
						8.2	0.3	105	25.1		8.1		32.4		103.4		7.1		9.2		10		98				<0.2		0.8	
SR2	Fine	Moderate	12:29	4.5	Surface	1.0	0.4	95	25.5	25.5	8.0	8.0	32.3	32.3	99.6	99.6	6.8	6.8	12.1	13.2	12	13	97	98	821467	814171	<0.2	<0.2	0.8	0.7
						1.0	0.4	97	25.5		8.0		32.3		99.6		6.8		12.1		13		97				<0.2		0.9	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.3	98	25.4	25.4	8.0	8.0	32.3	32.3	101.2	101.2	6.9	6.9	14.2		13		99				<0.2		0.6	
						3.5	0.3	98	25.4		8.0		32.3		101.2		6.9		14.2		14		98				<0.2		0.6	
SR3	Fine	Moderate	11:24	8.7	Surface	1.0	0.3	95	24.8	24.8	8.0	8.0	32.4	32.4	98.3	98.3	6.8	6.8	15.2	21.7	10	18	-	-	822155	807578	-	-	-	-
						1.0	0.3	99	24.8		8.0		32.4		98.3		6.8		15.2		10		-				-		-	
					Middle	4.4	0.4	73	24.8	24.8	8.0	8.0	32.4	32.4	98.2	98.2	6.8		22.3		16		-				-		-	
						4.4	0.4	79	24.8		8.0		32.4		98.2		6.8		22.3		16		-				-		-	
					Bottom	7.7	0.3	74	24.8	24.8	8.0	8.0	32.4	32.4	98.9	98.9	6.8	6.8	27.7		27		-				-		-	
						7.7	0.3	76	24.8		8.0		32.4		98.9		6.8		27.7		26		-				-		-	
SR4A	Cloudy	Moderate	12:39	8.9	Surface	1.0	0.3	83	24.5	24.5	8.0	8.0	32.8	32.8	94.0	94.0	6.5	6.5	18.3	20.9	18	18	-	-	817192	807821	-	-	-	-
						1.0	0.3	87	24.5		8.0		32.8		94.0		6.5		18.0		19		-				-		-	
					Middle	4.5	0.3	79	24.5	24.5	8.0	8.0	32.8	32.8	93.6	93.6	6.5		20.5		18		-				-		-	
						4.5	0.3	79	24.5		8.0		32.8		93.6		6.5		20.4		17		-				-		-	
					Bottom	7.9	0.3	59	24.5	24.5	8.0	8.0	32.8	32.8	94.1	94.2	6.5	6.5	24.2		18		-				-		-	
						7.9	0.3	64	24.5		8.0		32.8		94.2		6.5		24.0		17		-				-		-	
SR5A	Cloudy	Moderate	12:55	5.2	Surface	1.0	0.1	1	24.8	24.8	8.1	8.1	32.4	32.4	97.8	97.8	6.8	6.8	15.1	15.2	11	14	-	-	816589	810705	-	-	-	-
						1.0	0.1	1	24.8		8.1		32.4		97.7		6.7		14.8		11		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.1	93	24.6	24.6	8.0	8.0	32.5	32.5	96.8	96.9	6.7	6.7	15.3		16		-				-		-	
						4.2	0.1	102	24.6		8.0		32.5		97.0		6.7		15.4		16		-				-		-	
SR6	Cloudy	Moderate	13:19	4.6	Surface	1.0	0.1	62	24.9	24.9	8.1	8.1	32.3	32.3	100.2	100.2	6.9	6.9	12.7	14.2	12	14	-	-	817885	814669	-	-	-	-
						1.0	0.1	63	24.9		8.1		32.3		100.2		6.9		13.1		13		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.1	60	24.9	24.9	8.1	8.1	32.3	32.3	99.0	99.1	6.8	6.8	15.5		14		-				-		-	
						3.6	0.1	62	24.9		8.1		32.3		99.1		6.8		15.6		15		-				-		-	
SR7	Fine	Moderate	13:21	16.3	Surface	1.0	0.7	110	25.6	25.6	8.0	8.0	32.4	32.4	94.5	94.5	6.4	6.5	12.2	12.5	11	13	-	-	823617	823760	-	-	-	-
						1.0	0.7	112	25.6		8.0		32.4		94.5		6.4		12.2		12		-				-		-	
					Middle	8.2	0.7	116	25.6	25.6	8.0	8.0	32.4	32.4	95.3	95.3	6.5		12.9		13		-				-		-	
						8.2	0.8	122	25.6		8.0		32.4		95.3		6.5		12.9		11		-				-		-	
					Bottom	15.3	0.4	130	25.6	25.6	8.0	8.0	32.4	32.4	98.5	98.5	6.7	6.7	12.5		16		-				-		-	
						15.3	0.4	133	25.6		8.0		32.4		98.5		6.7		12.5		15		-				-		-	
SR8	Fine	Moderate	12:09	4.8	Surface	1.0	-	-	25.0	25.0	8.1	8.1	32.2	32.2	104.2	104.2	7.2	7.2	10.2	10.6	10	12	-	-	820246	811418	-	-	-	-
						1.0	-	-	25.0		8.1		32.2		104.2		7.2		10.2		11		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	-	-	25.0	25.0	8.1	8.1	32.2	32.2	104.5	104.5	7.2	7.2	11.0		13		-				-		-	
						3.8	-	-	25.0		8.1		32.2		104.5		7.2		11.0		14		-				-		-	

DA: Depth-Averaged

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

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 04 November 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	07:17	8.4	Surface	1.0	0.5	56	24.7	24.7	8.0	8.0	32.7	32.7	94.8	94.8	6.5	6.5	20.5	21.7	22	26	93	96	815627	804234	<0.2	<0.2	0.8	0.9
						1.0	0.5	61	24.7		8.0		32.7		94.8		6.5		20.3		24		94				<0.2		0.9	
					Middle	4.2	0.6	45	24.7	24.7	8.0	8.0	32.7	32.7	94.5	94.5	6.5		21.4		27		96				<0.2		0.9	
						4.2	0.6	45	24.7		8.0		32.7		94.5		6.5		21.3		28		96				<0.2		1.0	
					Bottom	7.4	0.5	51	24.7	24.7	8.0	8.0	32.7	32.7	95.1	95.2	6.6	6.6	23.4		29		98				<0.2		0.7	
						7.4	0.6	51	24.7		8.0		32.7		95.3		6.6		23.5		27		98				<0.2		0.8	
C2	Fine	Rough	07:53	11.8	Surface	1.0	0.4	338	25.1	25.1	8.0	8.0	30.8	30.8	101.4	101.4	7.0	7.0	10.0	15.4	8	9	96	97	825691	806946	<0.2	<0.2	1.5	1.4
						1.0	0.4	351	25.1		8.0		30.8		101.4		7.0		10.0		9		95				<0.2		1.6	
					Middle	5.9	0.5	351	25.1	25.1	8.0	8.0	30.8	30.8	100.7	100.7	7.0		13.6		8		97				<0.2		1.4	
						5.9	0.6	323	25.1		8.0		30.8		100.7		7.0		13.6		10		98				<0.2		1.3	
					Bottom	10.8	0.5	357	25.2	25.2	8.0	8.0	30.9	30.9	101.1	101.1	7.0	7.0	22.5		10		99				<0.2		1.3	
						10.8	0.5	328	25.2		8.0		30.9		101.1		7.0		22.5		11		99				<0.2		1.4	
C3	Fine	Moderate	06:00	11.4	Surface	1.0	0.6	268	25.4	25.4	8.0	8.0	32.2	32.2	99.8	99.8	6.8	6.8	14.2	17.7	11	13	96	99	822092	817802	<0.2	<0.2	0.9	1.0
						1.0	0.6	275	25.4		8.0		32.2		99.8		6.8		14.2		10		97				<0.2		1.0	
					Middle	5.7	0.5	271	25.4	25.4	8.0	8.0	32.2	32.2	99.5	99.5	6.8		19.3		12		98				<0.2		1.0	
						5.7	0.5	285	25.4		8.0		32.2		99.5		6.8		19.3		13		99				<0.2		1.0	
					Bottom	10.4	0.5	272	25.4	25.4	8.0	8.0	32.4	32.4	98.9	98.9	6.8	6.8	19.6		18		102				<0.2		1.1	
						10.4	0.5	285	25.4		8.0		32.4		98.9		6.8		19.6		16		102				<0.2		1.1	
IM1	Cloudy	Moderate	07:34	7.6	Surface	1.0	0.5	5	24.5	24.5	8.1	8.1	32.4	32.4	97.1	97.1	6.7	6.7	20.1	21.7	22	22	94	96	818362	806459	<0.2	<0.2	1.4	1.3
						1.0	0.5	5	24.5		8.1		32.4		97.1		6.7		20.2		21		94				<0.2		1.4	
					Middle	3.8	0.6	9	24.5	24.5	8.1	8.1	32.5	32.5	96.7	96.7	6.7		23.2		22		96				<0.2		1.4	
						3.8	0.6	9	24.5		8.1		32.5		96.6		6.7		23.4		20		96				<0.2		1.3	
					Bottom	6.6	0.5	9	24.5	24.5	8.1	8.1	32.5	32.5	96.6	96.6	6.7	6.7	21.5		22		97				<0.2		1.2	
						6.6	0.6	9	24.5		8.1		32.5		96.5		6.7		21.6		22		97				<0.2		1.2	
IM2	Cloudy	Moderate	07:40	8.6	Surface	1.0	0.6	20	24.5	24.5	8.1	8.1	32.4	32.4	97.2	97.2	6.7	6.7	17.2	19.2	14	17	94	96	818857	806179	<0.2	<0.2	1.3	1.1
						1.0	0.7	20	24.5		8.1		32.4		97.2		6.7		17.1		14		94				<0.2		1.1	
					Middle	4.3	0.6	20	24.5	24.5	8.1	8.1	32.4	32.4	97.1	97.1	6.7		19.9		18		96				<0.2		1.0	
						4.3	0.7	21	24.5		8.1		32.4		97.1		6.7		19.9		18		96				<0.2		1.1	
					Bottom	7.6	0.6	16	24.5	24.5	8.1	8.1	32.4	32.4	97.3	97.4	6.7	6.8	20.4		18		98				<0.2		1.1	
						7.6	0.6	17	24.5		8.1		32.4		97.4		6.8		20.6		18		98				<0.2		0.8	
IM3	Cloudy	Moderate	07:47	8.5	Surface	1.0	0.6	20	24.5	24.5	8.1	8.1	32.5	32.5	97.2	97.2	6.7	6.7	17.7	19.7	14	14	94	96	819402	806007	<0.2	<0.2	0.8	0.8
						1.0	0.7	20	24.5		8.1		32.5		97.2		6.7		17.6		15		94				<0.2		0.9	
					Middle	4.3	0.6	23	24.5	24.5	8.1	8.1	32.4	32.4	97.0	97.0	6.7		20.3		14		96				<0.2		0.7	
						4.3	0.7	25	24.5		8.1		32.4		97.0		6.7		20.2		14		96				<0.2		1.0	
					Bottom	7.5	0.6	17	24.5	24.5	8.1	8.1	32.4	32.4	96.9	97.0	6.7	6.7	21.3		14		98				<0.2		0.8	
						7.5	0.6	18	24.5		8.1		32.4		97.0		6.7		21.1		15		98				<0.2		0.7	
IM4	Cloudy	Moderate	07:55	7.5	Surface	1.0	0.7	12	24.5	24.5	8.0	8.0	32.4	32.4	97.0	97.0	6.7	6.7	17.6	19.9	12	13	93	96	819579	805040	<0.2	<0.2	1.1	1.2
						1.0	0.7	12	24.5		8.0		32.4		97.0		6.7		17.7		14		94				<0.2		1.2	
					Middle	3.8	0.6	13	24.5	24.5	8.0	8.0	32.5	32.5	96.3	96.4	6.7		19.7		12		96				<0.2		1.2	
						3.8	0.6	14	24.5		8.0		32.5		96.4		6.7		19.8		14		97				<0.2		1.2	
					Bottom	6.5	0.5	4	24.5	24.5	8.0	8.0	32.6	32.6	96.6	96.7	6.7	6.7	22.2		13		98				<0.2		1.2	
						6.5	0.6	4	24.5		8.0		32.6		96.7		6.7		22.3		13		98				<0.2		1.2	
IM5	Cloudy	Moderate	08:08	7.1	Surface	1.0	0.7	20	24.5	24.5	8.1	8.1	32.5	32.5	96.8	96.8	6.7	6.7	11.4	15.7	10	11	94	96	820784	805028	<0.2	<0.2	1.4	1.5
						1.0	0.7	21	24.5		8.1		32.5		96.8		6.7		11.5		11		94				<0.2		1.5	
					Middle	3.6	0.6	19	24.5	24.5	8.0	8.0	32.5	32.5	96.7	96.7	6.7		15.9		12		96				<0.2		1.4	
						3.6	0.6	20	24.5		8.0		32.5		96.7		6.7		15.9		11		96				<0.2		1.5	
					Bottom	6.1	0.5	13	24.5	24.5	8.0	8.0	32.5	32.5	96.7	96.8	6.7	6.7	19.7		11		99				<0.2		1.5	
						6.1	0.5	14	24.5		8.0		32.5		96.8		6.7		19.7		11		99				<0.2		1.4	
IM6	Cloudy	Moderate	08:15	7.3	Surface	1.0	0.4	32	24.7	24.7	8.1	8.1	32.1	32.1	99.1	99.1	6.9	6.9	10.6	15.0	11	11	94	96	821061	805838	<0.2	<0.2	1.2	1.3
						1.0	0.4	33	24.7		8.1		32.1		99.0		6.9		10.5		11		94				<0.2		1.3	
					Middle	3.7	0.4	28	24.7	24.7	8.1	8.1	32.1	32.1	98.9	98.9	6.8		13.8		12		96				<0.2		1.4	
						3.7	0.4	30	24.7		8.1		32.1		98.8		6.8		13.9		10		96				<0.2		1.2	
					Bottom	6.3	0.4	31	24.7	24.7	8.1	8.1	32.1	32.1	98.6	98.6	6.8	6.8	20.5		12		99				<0.2		1.2	
						6.3	0.4	31	24.7		8.1		32.1		98.6		6.8		20.5		11		99				<0.2		1.3	
IM7	Cloudy	Moderate	08:23	8.6	Surface	1.0	0.4	17	24.6	24.6	8.1	8.1	32.2	32.2	98.7	98.7	6.8	6.8	11.8	15.3	10	12	94	96	821360	806819	<0.2	<0.2	1.2	1.1
						1.0	0.5	17	24.6		8.1		32.2		98.7		6.8		11.9		12		94				<0.2		1.1	
					Middle	4.3	0.4	35	24.6	24.6	8.1	8.1	32.2	32.2	98.1	98.1	6.8		14.3		11		96				<0.2		1.1	
						4.3	0.4	35	24.6		8.1		32.2		98.1		6.8		14.4		12		97				<0.2		1.0	
					Bottom	7.6	0.4	37	24.6	24.6	8.1	8.1	32.2	32.2	98.0	98.1	6.8	6.8	19.6		13		98				<0.2		1.0	
						7.6	0.5	37	24.6		8.1		32.2		98.1		6.8		19.7		13		99				<0.2		1.0	
IM8	Fine	Moderate	07:24	8.2	Surface	1.0	0.4	9	25.0	25.0	8.1	8.1	31.8	31.8	101.0	101.0	7.0	7.0	18.8	20.7	12	14	96	97	821701	807831	<0.2	<0.2	1.3	1.3
						1.0	0.4	9	25.0		8.1		31.8		101.0		7.0		18.8		12		95				<0.2		1.4	
					Middle	4.1	0.5	10	25.0	25.0	8.1	8.1	31.8	31.8	100.7	100.7	7.0		20.2		16		97				<0.2		1.3	
						4.1	0.5	10	25.0		8.1		31.8		100.7		7.0		20.2		14		97				<0.2		1.4	
					Bottom	7.2	0.4	16	25.0	25.0	8.1	8.1	31.8	31.8	100.5	100.5	6.9	6.9	23.0		15		99				<0.2		1.2	
						7.2	0.5	17	25.0		8.1		31.8		100.5		6.9		23.0		14		98				<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**
Note: Access to IM5 was blocked by barge. The monitoring at IM5 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 04 November 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	07:16	6.8	Surface	1.0	0.3	346	25.0	25.0	8.1	8.1	31.8	31.8	101.0	101.0	7.0	7.0	16.8	19.6	13	16	96	97	822094	808821	<0.2	<0.2	1.4	1.2
						1.0	0.3	318	25.0		8.1		31.8		101.0		7.0		16.8		15		95				<0.2		1.2	
					Middle	3.4	0.3	334	25.0	25.0	8.1	8.1	31.8	31.8	100.9	100.9	7.0		20.2		16		97				<0.2		1.2	
						3.4	0.3	353	25.0		8.1		31.8		100.9		7.0		20.2		17		97				<0.2		1.3	
					Bottom	5.8	0.3	331	25.0	25.0	8.1	8.1	32.0	32.0	100.6	100.6	6.9	6.9	21.8		16		98				<0.2		1.1	
						5.8	0.3	333	25.0		8.1		32.0		100.6		6.9		21.8		16		99				<0.2		1.0	
IM10	Fine	Moderate	07:08	7.1	Surface	1.0	0.6	315	25.0	25.0	8.1	8.1	32.1	32.1	101.3	101.3	7.0	7.0	16.5	21.5	24	24	95	97	822226	809845	<0.2	<0.2	0.7	0.9
						1.0	0.7	321	25.0		8.1		32.1		101.3		7.0		16.5		24		96				<0.2		0.8	
					Middle	3.6	0.6	315	25.0	25.0	8.1	8.1	32.2	32.2	100.9	100.9	7.0		22.8		25		97				<0.2		1.3	
						3.6	0.6	330	25.0		8.1		32.2		100.9		7.0		22.8		24		97				<0.2		0.8	
					Bottom	6.1	0.5	321	25.0	25.0	8.1	8.1	32.2	32.2	100.4	100.4	6.9	6.9	25.1		24		99				<0.2		0.8	
						6.1	0.5	329	25.0		8.1		32.2		100.4		6.9		25.1		23		98				<0.2		0.8	
IM11	Fine	Moderate	06:58	8.0	Surface	1.0	0.6	297	25.1	25.1	8.1	8.1	32.3	32.3	103.9	103.9	7.1	7.1	15.6	19.3	20	20	96	98	821495	810526	<0.2	<0.2	0.8	0.7
						1.0	0.6	312	25.1		8.1		32.3		103.9		7.1		15.6		20		96				<0.2		0.7	
					Middle	4.0	0.6	296	25.1	25.1	8.1	8.1	32.3	32.3	103.7	103.7	7.1		18.6		20		97				<0.2		0.7	
						4.0	0.7	310	25.1		8.1		32.3		103.7		7.1		18.6		20		98				<0.2		0.6	
					Bottom	7.0	0.5	297	25.1	25.1	8.1	8.1	32.3	32.3	103.2	103.2	7.1	7.1	24.1		20		99				<0.2		0.8	
						7.0	0.6	313	25.1		8.1		32.3		103.2		7.1		23.2		19		100				<0.2		0.7	
IM12	Fine	Moderate	06:50	7.9	Surface	1.0	0.7	274	25.0	25.0	8.1	8.1	32.1	32.1	101.2	101.2	7.0	7.0	16.9	21.2	16	20	97	98	821151	811527	<0.2	<0.2	0.7	0.7
						1.0	0.7	281	25.0		8.1		32.1		101.2		7.0		16.9		17		96				<0.2		0.5	
					Middle	4.0	0.6	274	25.0	25.0	8.1	8.1	32.1	32.1	101.0	101.0	7.0		21.8		21		97				<0.2		0.8	
						4.0	0.7	290	25.0		8.1		32.1		101.0		7.0		21.8		21		98				<0.2		0.8	
					Bottom	6.9	0.5	275	25.0	25.0	8.1	8.1	32.1	32.1	100.5	100.5	6.9	6.9	25.0		21		99				<0.2		0.7	
						6.9	0.5	300	25.0		8.1		32.1		100.5		6.9		25.0		21		99				<0.2		0.6	
SR2	Fine	Moderate	06:22	3.5	Surface	1.0	0.1	138	25.1	25.1	8.0	8.0	32.1	32.1	100.1	100.1	6.9	6.9	21.2	21.4	16	17	96	97	821481	814160	<0.2	<0.2	0.8	0.8
						1.0	0.1	147	25.1		8.0		32.1		100.1		6.9		21.2		16		96				<0.2		0.9	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.5	0.1	153	25.1	25.1	8.0	8.0	32.1	32.1	99.9	99.9	6.9	6.9	21.5		18		98				<0.2		0.8	
						2.5	0.1	153	25.1		8.0		32.1		99.9		6.9		21.5		17		99				<0.2		0.7	
SR3	Fine	Moderate	07:30	8.3	Surface	1.0	0.4	13	25.0	25.0	8.1	8.1	31.0	31.0	101.4	101.4	7.0	7.0	16.3	22.1	13	12	-	-	822141	807574	-	-	-	-
						1.0	0.4	14	25.0		8.1		31.0		101.4		7.0		16.3		11		-				-		-	
					Middle	4.2	0.5	13	25.0	25.0	8.1	8.1	31.4	31.4	100.9	100.9	7.0		22.8		12		-				-		-	
						4.2	0.5	13	25.0		8.1		31.4		100.9		7.0		22.8		12		-				-		-	
					Bottom	7.3	0.4	9	25.0	25.0	8.1	8.1	31.4	31.4	100.9	100.9	7.0	7.0	27.3		11		-				-		-	
						7.3	0.4	9	25.0		8.1		31.4		100.9		7.0		27.3		11		-				-		-	
SR4A	Fine	Moderate	06:55	9.0	Surface	1.0	0.1	230	24.8	24.8	8.0	8.0	32.4	32.4	95.3	95.4	6.6	6.6	18.0	19.8	17	19	-	-	817205	807803	-	-	-	-
						1.0	0.2	243	24.8		8.0		32.4		95.4		6.6		18.2		18		-				-		-	
					Middle	4.5	0.1	245	24.8	24.8	8.0	8.0	32.4	32.4	95.2	95.2	6.6		19.8		17		-				-		-	
						4.5	0.1	267	24.8		8.0		32.4		95.2		6.6		19.6		18		-				-		-	
					Bottom	8.0	0.1	254	24.8	24.8	8.0	8.0	32.4	32.4	95.6	95.7	6.6	6.6	21.6		20		-				-		-	
						8.0	0.2	269	24.8		8.0		32.4		95.7		6.6		21.6		22		-				-		-	
SR5A	Fine	Moderate	06:39	4.8	Surface	1.0	0.3	307	24.8	24.8	8.1	8.1	32.4	32.4	98.8	98.9	6.8	6.8	16.7	17.3	14	18	-	-	816610	810702	-	-	-	-
						1.0	0.3	316	24.8		8.1		32.4		98.9		6.8		16.7		13		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.3	310	24.8	24.8	8.1	8.1	32.4	32.4	101.0	101.3	7.0	7.0	17.9		22		-				-		-	
						3.8	0.3	319	24.8		8.1		32.4		101.6		7.0		18.0		23		-				-		-	
SR6	Fine	Moderate	06:01	4.1	Surface	1.0	0.1	257	24.8	24.8	8.1	8.1	31.6	31.6	100.9	100.9	7.0	7.0	10.4	10.7	12	14	-	-	817898	814661	-	-	-	-
						1.0	0.1	261	24.8		8.1		31.6		100.8		7.0		10.5		14		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.1	257	24.8	24.8	8.1	8.1	31.5	31.4	100.8	101.1	7.0	7.0	10.9		14		-				-		-	
						3.1	0.1	277	24.8		8.1		31.3		101.3		7.0		10.8		14		-				-		-	
SR7	Fine	Moderate	05:29	15.1	Surface	1.0	0.4	30	25.7	25.7	8.0	8.0	32.6	32.6	95.0	95.0	6.5	6.6	21.0	22.3	20	20	-	-	823616	823729	-	-	-	-
						1.0	0.4	32	25.7		8.0		32.6		95.0		6.5		21.0		21		-				-		-	
					Middle	7.6	0.4	36	25.7	25.7	7.9	7.9	32.6	32.6	96.7	96.7	6.6		23.2		21		-				-		-	
						7.6	0.5	36	25.7		7.9		32.6		96.7		6.6		23.2		19		-				-		-	
					Bottom	14.1	0.4	35	25.7	25.7	7.9	7.9	32.7	32.7	100.4	100.4	6.8	6.8	22.8		20		-				-		-	
						14.1	0.4	35	25.7		7.9		32.7		100.4		6.8		22.8		19		-				-		-	
SR8	Fine	Moderate	06:39	3.8	Surface	1.0	-	-	25.2	25.2	8.0	8.0	31.7	31.7	101.2	101.2	7.0	7.0	13.4	14.9	12	11	-	-	820246	811418	-	-	-	-
						1.0	-	-	25.2		8.0		31.7		101.2		7.0		13.4		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	-	-	24.9	24.9	8.0	8.0	31.8	31.8	100.3	100.3	6.9	6.9	16.3		10		-				-		-	
						2.8	-	-	24.9		8.0		31.8		100.3		6.9		16.3		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 November 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	14:41	8.7	Surface	1.0	0.2	202	24.5	24.5	8.0	8.0	32.4	32.4	94.6	94.6	6.6	6.6	12.6	12.5	10	11	96	99	815601	804262	<0.2	<0.2	0.6	0.7
						1.0	0.2	205	24.5		8.0		32.4		94.5		6.6		13.0		10		96				<0.2		0.7	
					Middle	4.4	0.2	210	24.5	24.5	8.0	8.0	32.4	32.4	94.6	94.6	6.6		11.9		10		99				<0.2		0.7	
						4.4	0.3	212	24.5		8.0		32.4		94.6		6.6		12.1		11		99				<0.2		0.6	
					Bottom	7.7	0.2	188	24.5	24.5	8.0	8.0	32.4	32.4	95.0	95.2	6.6	6.6	12.7		11		101				<0.2		0.6	
						7.7	0.2	198	24.5		8.0		32.4		95.3		6.6		12.7		12		100				<0.2		0.8	
C2	Fine	Rough	13:29	12.1	Surface	1.0	0.3	65	24.6	24.6	8.0	8.0	31.5	31.5	93.3	93.3	6.5	6.5	11.2	16.6	8	15	94	96	825697	806947	<0.2	<0.2	1.2	1.2
						1.0	0.3	65	24.6		8.0		31.5		93.3		6.5		11.3		10		94				<0.2		1.3	
					Middle	6.1	0.2	44	24.6	24.6	8.0	8.0	31.5	31.5	93.0	93.0	6.5		12.7		17		96				<0.2		1.2	
						6.1	0.3	45	24.5		8.0		31.5		93.0		6.5		12.9		18		96				<0.2		1.1	
					Bottom	11.1	0.2	15	24.5	24.5	8.1	8.1	31.5	31.5	93.1	93.2	6.5	6.5	24.9		20		99				<0.2		1.2	
						11.1	0.2	16	24.5		8.1		31.5		93.3		6.5		26.4		19		98				<0.2		1.2	
C3	Fine	Moderate	15:24	12.6	Surface	1.0	0.3	70	24.8	24.8	8.0	8.0	32.2	32.2	92.1	92.1	6.4	6.3	8.1	11.1	8	9	96	99	822122	817812	<0.2	<0.2	0.9	0.7
						1.0	0.3	71	24.8		8.0		32.2		92.0		6.4		8.0		9		97				<0.2		0.7	
					Middle	6.3	0.3	83	24.8	24.8	8.0	8.0	32.2	32.2	90.4	90.3	6.2		8.2		7		100				<0.2		0.6	
						6.3	0.3	90	24.8		8.0		32.2		90.2		6.2		8.2		7		98				<0.2		0.7	
					Bottom	11.6	0.3	102	25.0	25.0	8.0	8.0	32.3	32.3	88.7	88.8	6.1	6.1	16.6		12		101				<0.2		0.7	
						11.6	0.3	103	25.0		8.0		32.3		88.8		6.1		17.3		11		102				<0.2		0.6	
IM1	Cloudy	Rough	14:23	7.2	Surface	1.0	0.2	102	24.4	24.4	8.0	8.0	32.2	32.2	94.0	94.0	6.5	6.5	12.5	15.1	11	12	97	98	818340	806448	<0.2	<0.2	0.8	0.8
						1.0	0.2	111	24.4		8.0		32.2		93.9		6.5		12.6		12		97				<0.2		0.8	
					Middle	3.6	0.2	169	24.3	24.3	8.0	8.0	32.2	32.2	93.2	93.2	6.5		14.5		12		98				<0.2		0.7	
						3.6	0.2	185	24.3		8.0		32.2		93.2		6.5		14.6		11		99				<0.2		0.7	
					Bottom	6.2	0.1	107	24.3	24.3	8.0	8.0	32.2	32.2	93.1	93.2	6.5	6.5	18.0		12		99				<0.2		0.8	
						6.2	0.1	109	24.3		8.0		32.2		93.2		6.5		18.1		13		99				<0.2		0.7	
IM2	Cloudy	Rough	14:17	8.4	Surface	1.0	0.1	105	24.4	24.4	8.0	8.0	32.2	32.2	93.8	93.8	6.5	6.5	13.7	13.9	14	13	96	98	818862	806203	<0.2	<0.2	0.6	0.7
						1.0	0.1	109	24.4		8.0		32.2		93.8		6.5		13.7		13		96				<0.2		0.8	
					Middle	4.2	0.0	72	24.4	24.4	8.0	8.0	32.2	32.2	94.0	94.1	6.5		13.7		13		98				<0.2		0.7	
						4.2	0.0	73	24.4		8.0		32.2		94.1		6.5		13.8		12		99				<0.2		0.8	
					Bottom	7.4	0.1	212	24.4	24.4	8.0	8.0	32.3	32.3	95.2	95.6	6.6	6.7	14.2		15		100				<0.2		0.7	
						7.4	0.1	226	24.4		8.0		32.3		96.0		6.7		14.3		13		101				<0.2		0.8	
IM3	Cloudy	Rough	14:08	8.5	Surface	1.0	0.2	126	24.4	24.4	8.0	8.0	32.3	32.3	93.4	93.4	6.5	6.5	15.1	17.5	14	14	97	99	819411	806017	<0.2	<0.2	0.7	0.7
						1.0	0.2	126	24.4		8.0		32.3		93.4		6.5		15.1		14		97				<0.2		0.8	
					Middle	4.3	0.2	105	24.4	24.4	8.0	8.0	32.4	32.4	93.5	93.6	6.5		17.9		14		99				<0.2		0.6	
						4.3	0.2	109	24.4		8.0		32.4		93.6		6.5		18.0		15		99				<0.2		0.7	
					Bottom	7.5	0.0	27	24.4	24.4	8.0	8.0	32.5	32.5	95.6	95.7	6.6	6.6	19.7		14		101				<0.2		0.7	
						7.5	0.0	28	24.4		8.0		32.5		95.7		6.6		19.3		13		101				<0.2		0.7	
IM4	Cloudy	Rough	13:58	8.0	Surface	1.0	0.2	122	24.4	24.4	8.0	8.0	32.4	32.4	93.0	93.1	6.5	6.5	19.0	20.9	16	19	96	97	819558	805039	<0.2	<0.2	0.6	0.8
						1.0	0.3	123	24.4		8.0		32.4		93.1		6.5		19.2		17		96				<0.2		0.7	
					Middle	4.0	0.1	83	24.4	24.4	8.0	8.0	32.4	32.4	93.2	93.2	6.5		21.2		18		97				<0.2		1.0	
						4.0	0.1	84	24.4		8.0		32.4		93.2		6.5		21.5		18		97				<0.2		0.9	
					Bottom	7.0	0.1	75	24.4	24.4	8.0	8.0	32.5	32.5	95.5	95.9	6.6	6.7	22.1		22		98				<0.2		0.8	
						7.0	0.1	76	24.4		8.0		32.5		96.3		6.7		22.1		21		96				<0.2		1.0	
IM5	Cloudy	Rough	13:49	7.2	Surface	1.0	0.1	319	24.3	24.3	8.0	8.0	32.2	32.2	92.6	92.6	6.5	6.5	18.4	18.9	19	19	96	97	820597	804966	<0.2	<0.2	0.7	0.7
						1.0	0.1	330	24.3		8.0		32.2		92.6		6.5		18.4		19		96				<0.2		0.6	
					Middle	3.6	0.0	217	24.3	24.3	8.0	8.0	32.2	32.2	92.7	92.8	6.5		17.7		20		97				<0.2		0.7	
						3.6	0.0	228	24.3		8.0		32.2		92.8		6.5		17.6		18		97				<0.2		0.7	
					Bottom	6.2	0.1	31	24.3	24.3	8.0	8.0	32.2	32.2	93.7	93.9	6.5	6.6	20.5		20		98				<0.2		0.8	
						6.2	0.1	31	24.3		8.0		32.3		94.1		6.6		20.7		20		98				<0.2		0.9	
IM6	Cloudy	Rough	13:38	6.8	Surface	1.0	0.1	60	24.2	24.2	8.0	8.0	32.0	32.0	92.7	92.7	6.5	6.5	18.4	20.5	21	21	96	97	821041	805809	<0.2	<0.2	0.8	0.9
						1.0	0.1	62	24.2		8.0		32.0		92.7		6.5		18.5		21		96				<0.2		0.9	
					Middle	3.4	0.1	29	24.2	24.2	8.0	8.0	32.0	32.0	92.7	92.7	6.5		19.6		20		97				<0.2		0.9	
						3.4	0.1	29	24.2		8.0		32.0		92.7		6.5		19.8		20		97				<0.2		0.8	
					Bottom	5.8	0.1	163	24.2	24.2	8.0	8.0	32.0	32.0	93.3	93.5	6.5	6.5	23.4		21		99				<0.2		0.9	
						5.8	0.1	178	24.2		8.0		32.0		93.6		6.5		23.0		20		99				<0.2		0.9	
IM7	Cloudy	Rough	13:26	8.5	Surface	1.0	0.2	62	24.2	24.2	8.0	8.0	32.0	32.0	92.7	92.7	6.5	6.5	20.2	22.1	20	21	96	99	821343	806840	<0.2	<0.2	0.8	0.9
						1.0	0.3	67	24.2		8.0		32.0		92.6		6.5		20.3		21		96				<0.2		0.8	
					Middle	4.3	0.2	71	24.2	24.2	8.0	8.0	32.1	32.1	92.6	92.7	6.5		21.5		20		99				<0.2		0.9	
						4.3	0.3	75	24.2		8.0		32.1		92.7		6.5		21.6		21		99				<0.2		0.9	
					Bottom	7.5	0.3	72	24.2	24.2	8.0	8.0	32.1	32.1	94.4	94.5	6.6	6.6	24.6		22		100				<0.2		0.9	
						7.5	0.3	75	24.2		8.0		32.1		94.5		6.6		24.5		21		101				<0.2		0.8	
IM8	Fine	Rough	13:54	8.8	Surface	1.0	0.2	95	24.4	24.4	8.0	8.0	31.9	31.9	93.8	93.8	6.5	6.5	10.2	12.7	15	17	95	97	821698	807825	<0.2	<0.2	0.9	0.9
						1.0	0.3	101	24.4		8.0		31.9		93.8		6.5		10.4		14		96				<0.2		0.8	
					Middle	4.4	0.2	102	24.4	24.4	8.0	8.0	31.9	31.9	93.5	93.5	6.5		11.9		15		97				<0.2		0.9	
						4.4	0.2	110	24.4		8.0		31.9		93.5		6.5		12.1		16		97				<0.2		0.9	
					Bottom	7.8	0.2	89	24.4	24.4	8.0	8.0	31.9	31.9	94.6	94.9	6.6	6.6	15.8		21		98				<0.2		0.9	
						7.8	0.2	92	24.4		8.0		31.9		95.2		6.6		15.9		20		99				<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**

Note: Access to IM5 was blocked by barge. The monitoring at IM5 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 November 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	Rough	14:05	7.3	Surface	1.0	0.4	85	24.5	24.5	8.0	8.0	31.9	31.9	93.3	93.3	6.5	6.5	14.8	17.6	12	14	96	98	822093	808830	<0.2	<0.2	1.3	1.2
						1.0	0.4	88	24.5		8.0		31.9		93.3		6.5		14.8		10		97				<0.2		1.4	
					Middle	3.7	0.3	76	24.5	24.5	8.0	8.0	31.9	31.9	93.2	93.2	6.5		15.4		12		97				<0.2		1.3	
						3.7	0.4	80	24.5		8.0		31.9		93.2		6.5		15.4		11		98				<0.2		1.2	
					Bottom	6.3	0.3	73	24.5	24.5	8.0	8.0	31.9	31.9	93.2	93.2	6.5	6.5	22.6		20		99				<0.2		1.0	
						6.3	0.4	79	24.5		8.0		31.9		93.2		6.5		22.6		19		99				<0.2		1.0	
IM10	Fine	Rough	14:15	7.8	Surface	1.0	0.6	114	24.6	24.6	8.0	8.0	31.6	31.6	93.7	93.7	6.5	6.5	8.5	17.5	9	13	95	97	822238	809840	<0.2	<0.2	1.3	1.2
						1.0	0.6	122	24.6		8.0		31.6		93.7		6.5		8.3		9		96				<0.2		1.3	
					Middle	3.9	0.5	106	24.5	24.5	8.0	8.0	31.9	31.9	92.6	92.6	6.4		15.6		8		97				<0.2		1.3	
						3.9	0.5	109	24.5		8.0		31.9		92.5		6.4		15.9		7		97				<0.2		1.4	
					Bottom	6.8	0.4	102	24.5	24.5	8.0	8.0	31.9	31.9	92.1	92.1	6.4	6.4	26.9		23		99				<0.2		1.0	
						6.8	0.4	106	24.5		8.0		31.9		92.1		6.4		29.8		23		98				<0.2		1.1	
IM11	Fine	Rough	14:26	8.1	Surface	1.0	0.5	111	24.6	24.6	8.0	8.0	31.7	31.7	93.7	93.7	6.5	6.5	9.0	13.7	12	12	95	98	821509	810553	<0.2	<0.2	0.8	1.1
						1.0	0.6	117	24.6		8.0		31.7		93.6		6.5		9.0		12		96				<0.2		0.8	
					Middle	4.1	0.5	96	24.6	24.6	8.0	8.0	31.8	31.8	93.0	93.0	6.5		11.5		11		98				<0.2		1.2	
						4.1	0.5	105	24.6		8.0		31.8		93.0		6.5		12.1		11		98				<0.2		1.1	
					Bottom	7.1	0.4	98	24.6	24.6	8.0	8.0	31.8	31.8	93.2	93.3	6.5	6.5	20.3		13		99				<0.2		1.2	
						7.1	0.4	105	24.6		8.0		31.8		93.3		6.5		20.5		14		100				<0.2		1.2	
IM12	Fine	Rough	14:33	8.9	Surface	1.0	0.6	100	24.6	24.6	8.0	8.0	31.8	31.8	93.6	93.6	6.5	6.5	5.2	6.2	13	13	96	97	821168	811526	<0.2	<0.2	1.3	1.1
						1.0	0.6	109	24.6		8.0		31.8		93.5		6.5		5.3		14		95				<0.2		1.3	
					Middle	4.5	0.5	100	24.6	24.6	8.0	8.0	31.9	31.9	92.7	92.7	6.4		6.0		14		97				<0.2		1.0	
						4.5	0.5	105	24.6		8.0		31.9		92.7		6.4		6.1		14		98				<0.2		1.1	
					Bottom	7.9	0.4	105	24.6	24.6	8.0	8.0	31.9	31.9	92.8	92.8	6.4	6.4	7.5		12		99				<0.2		1.1	
						7.9	0.4	108	24.6		8.0		31.9		92.8		6.4		7.3		13		99				<0.2		0.9	
SR2	Rainy	Moderate	15:01	4.2	Surface	1.0	0.3	74	24.6	24.6	7.9	7.9	32.1	32.1	93.0	93.0	6.4	6.4	6.3	7.3	10	11	96	98	821468	814169	<0.2	<0.2	0.9	1.0
						1.0	0.3	74	24.6		7.9		32.1		93.0		6.4		6.3		10		96				<0.2		0.9	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.2	66	24.6	24.6	7.9	7.9	32.1	32.1	94.6	94.8	6.6	6.6	8.4		11		99				<0.2		1.0	
						3.2	0.3	69	24.6		7.9		32.1		95.0		6.6		8.3		10		98				<0.2		1.0	
SR3	Fine	Rough	13:49	9.1	Surface	1.0	0.4	104	24.5	24.5	8.0	8.0	31.9	31.9	94.0	94.0	6.5	6.5	12.2	16.3	17	18	-	-	822159	807553	-	-	-	-
						1.0	0.4	105	24.5		8.0		31.9		94.0		6.5		12.1		17		-				-		-	
					Middle	4.6	0.3	82	24.4	24.4	8.0	8.0	31.9	31.9	93.6	93.6	6.5		15.9		18		-				-		-	
						4.6	0.3	87	24.4		8.0		31.9		93.6		6.5		15.9		18		-				-		-	
					Bottom	8.1	0.3	73	24.4	24.4	8.0	8.0	31.9	31.9	93.6	93.7	6.5	6.5	20.8		18		-				-		-	
						8.1	0.3	79	24.4		8.0		31.9		93.8		6.5		20.8		19		-				-		-	
SR4A	Cloudy	Moderate	15:03	8.1	Surface	1.0	0.4	71	24.3	24.3	8.0	8.0	32.2	32.2	92.5	92.5	6.5	6.4	16.8	20.2	19	19	-	-	817170	807822	-	-	-	-
						1.0	0.4	76	24.3		8.0		32.2		92.5		6.4		16.8		19		-				-		-	
					Middle	4.1	0.3	75	24.3	24.3	8.0	8.0	32.2	32.2	92.2	92.2	6.4		22.1		17		-				-		-	
						4.1	0.4	81	24.3		8.0		32.2		92.2		6.4		22.2		19		-				-		-	
					Bottom	7.1	0.3	67	24.3	24.3	8.0	8.0	32.2	32.2	92.8	93.0	6.5	6.5	21.6		19		-				-		-	
						7.1	0.3	67	24.3		8.0		32.2		93.1		6.5		21.7		20		-				-		-	
SR5A	Cloudy	Calm	15:18	3.8	Surface	1.0	0.1	324	24.3	24.3	8.0	8.0	32.3	32.3	90.7	90.8	6.3	6.3	12.3	12.8	13	13	-	-	816577	810678	-	-	-	-
						1.0	0.1	333	24.3		8.0		32.3		90.9		6.3		12.4		13		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	0.1	328	24.3	24.3	8.0	8.0	32.3	32.3	92.1	92.2	6.4	6.4	13.2		13		-				-		-	
						2.8	0.1	344	24.3		8.0		32.3		92.2		6.4		13.3		12		-				-		-	
SR6	Cloudy	Calm	15:40	4.6	Surface	1.0	0.1	31	24.4	24.4	8.0	8.0	32.3	32.3	87.1	87.2	6.1	6.1	19.9	21.0	20	21	-	-	817879	814653	-	-	-	-
						1.0	0.1	32	24.4		8.0		32.3		87.3		6.1		19.9		20		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.0	19	24.4	24.4	8.0	8.0	32.3	32.3	90.4	90.5	6.3	6.3	22.0		22		-				-		-	
						3.6	0.0	20	24.4		8.0		32.3		90.5		6.3		22.0		22		-				-		-	
SR7	Fine	Moderate	15:52	16.3	Surface	1.0	0.5	80	25.1	25.1	8.0	8.0	32.4	32.4	87.3	87.3	6.0	6.0	6.8	8.5	12	12	-	-	823627	823748	-	-	-	-
						1.0	0.5	81	25.1		8.0		32.4		87.3		6.0		7.0		12		-				-		-	
					Middle	8.2	0.5	87	25.1	25.1	8.0	8.0	32.4	32.4	87.2	87.3	6.0		8.8		13		-				-		-	
						8.2	0.5	88	25.1		8.0		32.4		87.3		6.0		8.8		13		-				-		-	
					Bottom	15.3	0.2	85	25.1	25.1	8.0	8.0	32.4	32.4	87.5	87.5	6.0	6.0	9.7		12		-				-		-	
						15.3	0.3	87	25.1		8.0		32.4		87.5		6.0		9.6		12		-				-		-	
SR8	Rainy	Rough	14:45	4.4	Surface	1.0	-	-	24.7	24.7	7.9	7.9	31.9	31.9	94.1	94.1	6.5	6.5	7.3	8.9	13	16	-	-	820246	811418	-	-	-	-
						1.0	-	-	24.7		7.9		31.9		94.1		6.5		7.9		13		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	-	-	24.7	24.7	7.9	7.9	31.9	31.9	94.1	94.1	6.5	6.5	10.1		20		-				-		-	
						3.4	-	-	24.7		7.9		31.9		94.1		6.5		10.1		19		-				-		-	

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 November 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	09:49	8.2	Surface	1.0	0.7	40	24.0	24.0	8.0	8.0	31.6	31.6	92.2	92.2	6.5	6.5	18.1	22.3	23	24	95	96	815611	804241	<0.2	<0.2	1.0	1.1
						1.0	0.8	40	24.0		8.0		31.6		92.2		6.5		18.1		23		95				<0.2		1.0	
					Middle	4.1	0.6	39	24.1	24.1	8.0	8.0	32.0	32.0	92.0	92.0	6.4		20.1		24		96				<0.2		1.0	
						4.1	0.6	41	24.1		8.0		32.0		92.0		6.4		20.1		25		96				<0.2		1.2	
					Bottom	7.2	0.6	30	24.2	24.2	8.0	8.0	32.0	32.0	92.1	92.2	6.4	6.4	28.8		24		98				<0.2		1.1	
						7.2	0.6	30	24.2		8.0		32.0		92.2		6.4		28.8		25		98				<0.2		1.1	
C2	Fine	Moderate	10:33	11.7	Surface	1.0	0.4	335	24.5	24.5	7.9	7.9	30.6	30.6	92.1	92.1	6.5	6.4	4.8	13.9	13	14	95	96	825678	806958	<0.2	<0.2	1.4	1.5
						1.0	0.4	308	24.5		7.9		30.6		92.0		6.4		5.1		11		94				<0.2		1.6	
					Middle	5.9	0.4	354	24.6	24.6	7.9	7.9	31.0	31.0	91.7	91.7	6.4		10.3		16		96				<0.2		1.5	
						5.9	0.4	326	24.6		7.9		31.1		91.7		6.4		10.3		15		97				<0.2		1.5	
					Bottom	10.7	0.4	26	24.5	24.5	7.9	7.9	31.3	31.3	91.8	91.9	6.4	6.4	26.4		15		97				<0.2		1.5	
						10.7	0.4	27	24.5		7.9		31.3		91.9		6.4		26.4		14		98				<0.2		1.5	
C3	Fine	Moderate	08:44	11.5	Surface	1.0	0.6	253	24.7	24.7	8.0	8.0	32.1	32.1	93.0	93.0	6.4	6.4	3.6	16.8	10	23	97	99	822110	817795	<0.2	<0.2	1.4	1.2
						1.0	0.7	266	24.7		8.0		32.1		93.0		6.4		3.7		9		96				<0.2		1.4	
					Middle	5.8	0.6	257	24.7	24.7	8.0	8.0	32.1	32.1	92.5	92.5	6.4		19.8		14		99				<0.2		1.0	
						5.8	0.6	261	24.7		8.0		32.1		92.5		6.4		19.9		15		99				<0.2		1.3	
					Bottom	10.5	0.5	263	24.7	24.7	8.0	8.0	32.1	32.1	92.7	92.7	6.4	6.4	26.9		43		101				<0.2		1.1	
						10.5	0.5	287	24.7		8.0		32.1		92.7		6.4		26.9		44		102				<0.2		1.2	
IM1	Cloudy	Moderate	10:05	7.4	Surface	1.0	0.6	18	24.2	24.2	8.1	8.1	32.1	32.1	92.4	92.4	6.5	6.5	19.1	21.0	25	25	94	96	818366	806446	<0.2	<0.2	1.1	1.0
						1.0	0.6	18	24.2		8.1		32.1		92.4		6.5		19.3		26		94				<0.2		1.0	
					Middle	3.7	0.5	13	24.2	24.2	8.1	8.1	32.1	32.1	92.1	92.1	6.4		20.4		24		96				<0.2		1.1	
						3.7	0.5	13	24.2		8.1		32.1		92.1		6.4		20.4		24		96				<0.2		1.0	
					Bottom	6.4	0.4	12	24.2	24.2	8.1	8.1	32.2	32.2	92.5	92.5	6.5	6.5	23.2		25		98				<0.2		1.0	
						6.4	0.4	12	24.2		8.1		32.2		92.5		6.5		23.4		25		98				<0.2		1.0	
IM2	Cloudy	Moderate	10:13	8.3	Surface	1.0	0.6	19	24.2	24.2	8.1	8.1	32.1	32.1	92.4	92.4	6.5	6.5	18.2	21.5	26	25	94	96	818843	806208	<0.2	<0.2	1.0	1.3
						1.0	0.7	19	24.2		8.1		32.1		92.4		6.5		18.3		25		95				<0.2		1.2	
					Middle	4.2	0.6	12	24.2	24.2	8.1	8.1	32.1	32.1	92.0	92.0	6.4		20.8		25		96				<0.2		1.4	
						4.2	0.6	12	24.2		8.1		32.1		92.0		6.4		20.8		25		96				<0.2		1.1	
					Bottom	7.3	0.5	16	24.2	24.2	8.1	8.1	32.1	32.1	92.8	92.9	6.5	6.5	25.5		25		98				<0.2		1.4	
						7.3	0.5	17	24.2		8.1		32.1		92.9		6.5		25.2		25		99				<0.2		1.4	
IM3	Cloudy	Moderate	10:21	8.2	Surface	1.0	0.5	23	24.3	24.3	8.0	8.0	32.1	32.1	92.3	92.3	6.4	6.4	18.3	19.8	20	21	94	96	819410	806003	<0.2	<0.2	1.6	1.4
						1.0	0.6	24	24.3		8.0		32.1		92.3		6.4		18.4		21		94				<0.2		1.6	
					Middle	4.1	0.5	25	24.3	24.3	8.0	8.0	32.1	32.1	92.1	92.1	6.4		19.8		21		96				<0.2		1.6	
						4.1	0.5	26	24.3		8.0		32.1		92.1		6.4		19.6		21		96				<0.2		1.2	
					Bottom	7.2	0.4	26	24.3	24.3	8.0	8.0	32.1	32.1	93.3	93.4	6.5	6.5	21.3		22		99				<0.2		1.3	
						7.2	0.5	27	24.3		8.0		32.1		93.4		6.5		21.3		23		99				<0.2		1.1	
IM4	Cloudy	Moderate	10:32	7.7	Surface	1.0	0.5	23	24.1	24.1	8.0	8.0	32.1	32.1	92.2	92.2	6.4	6.5	17.6	18.9	31	32	94	97	819559	805054	<0.2	<0.2	1.5	1.6
						1.0	0.5	23	24.1		8.0		32.1		92.2		6.4		17.5		30		94				<0.2		1.4	
					Middle	3.9	0.5	22	24.1	24.1	8.0	8.0	32.1	32.1	92.2	92.3	6.5		18.3		33		96				<0.2		1.9	
						3.9	0.6	22	24.1		8.0		32.1		92.3		6.5		18.2		34		97				<0.2		1.8	
					Bottom	6.7	0.4	14	24.1	24.1	8.0	8.0	32.1	32.1	93.8	93.8	6.6	6.6	20.7		33		99				<0.2		1.7	
						6.7	0.4	14	24.1		8.0		32.1		93.8		6.6		20.8		32		99				<0.2		1.5	
IM5	Cloudy	Moderate	10:44	7.0	Surface	1.0	0.6	20	24.2	24.2	8.0	8.0	32.1	32.1	92.3	92.3	6.5	6.5	14.5	18.5	18	19	94	97	820611	804966	<0.2	<0.2	1.7	1.7
						1.0	0.6	20	24.2		8.0		32.1		92.3		6.5		14.4		19		94				<0.2		1.5	
					Middle	3.5	0.6	23	24.2	24.2	8.0	8.0	32.1	32.1	92.4	92.5	6.5		19.5		19		97				<0.2		1.8	
						3.5	0.6	24	24.2		8.0		32.1		92.5		6.5		19.5		20		97				<0.2		2.0	
					Bottom	6.0	0.5	24	24.2	24.2	8.0	8.0	32.1	32.1	93.6	93.7	6.5	6.5	21.6		20		98				<0.2		1.9	
						6.0	0.6	24	24.2		8.0		32.1		93.7		6.5		21.6		19		99				<0.2		1.3	
IM6	Cloudy	Moderate	10:50	6.9	Surface	1.0	0.4	38	24.3	24.3	8.1	8.1	31.8	31.8	92.0	92.0	6.4	6.4	18.3	20.7	20	19	96	98	821049	805842	<0.2	<0.2	2.0	1.7
						1.0	0.4	39	24.3		8.1		31.8		92.0		6.4		18.8		21		96				<0.2		1.8	
					Middle	3.5	0.4	27	24.3	24.3	8.1	8.1	31.8	31.8	92.0	92.0	6.4		21.4		18		98				<0.2		1.6	
						3.5	0.4	28	24.3		8.1		31.8		92.0		6.4		21.4		19		98				<0.2		1.5	
					Bottom	5.9	0.4	35	24.3	24.3	8.1	8.1	31.8	31.8	92.6	92.8	6.5	6.5	22.0		18		100				<0.2		1.9	
						5.9	0.4	35	24.3		8.1		31.8		92.9		6.5		22.1		19		100				<0.2		1.6	
IM7	Cloudy	Moderate	10:58	8.2	Surface	1.0	0.3	23	24.3	24.3	8.1	8.1	32.1	32.1	92.0	92.0	6.4	6.4	16.1	19.2	19	18	96	99	821331	806822	<0.2	<0.2	1.8	1.8
						1.0	0.3	24	24.3		8.1		32.1		92.0		6.4		16.1		18		97				<0.2		1.7	
					Middle	4.1	0.3	31	24.3	24.3	8.1	8.1	32.1	32.1	92.1	92.1	6.4		19.1		17		99				<0.2		1.8	
						4.1	0.3	31	24.3		8.1		32.1		92.1		6.4		19.1		19		99				<0.2		2.0	
					Bottom	7.2	0.2	33	24.3	24.3	8.1	8.1	32.1	32.1	92.4	92.5	6.4	6.5	22.1		19		100				<0.2		1.5	
						7.2	0.2	36	24.3		8.1		32.1		92.5		6.5		22.7		18		101				<0.2		1.7	
IM8	Fine	Moderate	10:08	8.1	Surface	1.0	0.3	44	24.5	24.5	8.0	8.0	31.7	31.7	92.0	92.0	6.4	6.4	13.2	23.2	12	16	96	97	821711	807839	<0.2	<0.2	2.3	2.3
						1.0	0.4	45	24.5		8.0		31.7		92.0		6.4		13.2		13		95				<0.2		2.5	
					Middle	4.1	0.4	22	24.5	24.5	8.0	8.0	31.8	31.8	91.8	91.8	6.4		24.6		12		97				<0.2		2.1	
						4.1	0.4	22	24.5		8.0		31.8		91.8		6.4		24.6		13		97				<0.2		2.3	
					Bottom	7.1	0.4	19	24.5	24.5	8.0	8.0	31.9	31.9	91.7	91.7	6.4	6.4	31.7		24		98				<0.2		2.1	
						7.1	0.4	20	24.5		8.0		31.9		91.7		6.4		31.7		23		99				<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**
Note: Access to IM5 was blocked by barge. The monitoring at IM5 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 November 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	09:59	7.1	Surface	1.0	0.3	15	24.6	24.6	8.0	8.0	31.0	31.0	92.0	92.0	6.4	6.4	11.5	19.2	15	25	96	97	822086	808811	<0.2	<0.2	1.8	2.1
						1.0	0.4	15	24.6		8.0		31.0		91.9		6.4		11.5		15		95				<0.2		1.7	
					Middle	3.6	0.3	356	24.6	24.6	8.0	8.0	31.2	31.2	91.5	91.5	6.4		19.1		19		97				<0.2		2.2	
						3.6	0.3	328	24.6		8.0		31.2		91.5		6.4		19.1		18		97				<0.2		2.2	
					Bottom	6.1	0.3	357	24.6	24.6	8.0	8.0	31.2	31.2	92.0	92.1	6.4	6.4	26.9		40		99				<0.2		2.0	
						6.1	0.3	328	24.6		8.0		31.2		92.2		6.4		26.9		40		99				<0.2		2.4	
IM10	Fine	Moderate	09:50	7.2	Surface	1.0	0.6	323	24.6	24.6	8.0	8.0	32.0	32.0	92.3	92.3	6.4	6.4	15.6	22.5	22	32	95	97	822222	809845	<0.2	<0.2	1.5	1.7
						1.0	0.7	332	24.6		8.0		32.0		92.3		6.4		15.6		21		96				<0.2		1.7	
					Middle	3.6	0.6	321	24.6	24.6	8.0	8.0	32.1	32.1	92.2	92.2	6.4		22.3		38		97				<0.2		1.7	
						3.6	0.6	326	24.6		8.0		32.1		92.2		6.4		22.3		38		97				<0.2		1.8	
					Bottom	6.2	0.5	319	24.6	24.6	8.0	8.0	32.1	32.1	92.1	92.1	6.4	6.4	29.6		38		98				<0.2		1.8	
						6.2	0.6	319	24.6		8.0		32.1		92.1		6.4		29.6		37		99				<0.2		1.9	
IM11	Fine	Moderate	09:39	7.8	Surface	1.0	0.6	296	24.6	24.6	8.0	8.0	32.1	32.1	91.9	91.9	6.4	6.4	18.6	20.6	22	26	95	97	821513	810540	<0.2	<0.2	1.2	1.6
						1.0	0.6	309	24.6		8.0		32.1		91.9		6.4		18.6		22		96				<0.2		1.2	
					Middle	3.9	0.5	301	24.6	24.6	8.0	8.0	32.1	32.1	91.7	91.7	6.4		20.7		21		97				<0.2		1.5	
						3.9	0.5	319	24.6		8.0		32.1		91.7		6.4		20.7		22		97				<0.2		1.8	
					Bottom	6.8	0.4	298	24.5	24.5	8.0	8.0	32.1	32.1	91.6	91.7	6.4	6.4	22.5		34		98				<0.2		1.8	
						6.8	0.4	298	24.5		8.0		32.1		91.7		6.4		22.5		34		99				<0.2		1.8	
IM12	Fine	Moderate	09:31	6.5	Surface	1.0	0.6	281	24.5	24.5	8.0	8.0	32.0	32.0	92.2	92.2	6.4	6.4	13.2	20.1	28	31	96	97	821152	811507	<0.2	<0.2	1.7	1.7
						1.0	0.7	284	24.5		8.0		32.0		92.2		6.4		13.2		27		96				<0.2		1.7	
					Middle	3.3	0.6	282	24.5	24.5	8.0	8.0	32.0	32.0	92.0	92.0	6.4		18.8		31		97				<0.2		1.8	
						3.3	0.7	307	24.5		8.0		32.0		92.0		6.4		18.8		31		97				<0.2		1.6	
					Bottom	5.5	0.4	291	24.5	24.5	8.0	8.0	32.0	32.0	91.9	91.9	6.4	6.4	28.2		35		98				<0.2		1.7	
						5.5	0.5	291	24.5		8.0		32.0		91.9		6.4		28.2		34		99				<0.2		1.9	
SR2	Fine	Moderate	09:04	4.2	Surface	1.0	0.3	43	24.5	24.5	8.0	8.0	32.0	32.0	92.1	92.1	6.4	6.4	22.9	25.8	32	44	97	98	821452	814183	<0.2	<0.2	1.9	1.9
						1.0	0.3	45	24.5		8.0		32.0		92.1		6.4		22.9		33		96				<0.2		2.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.3	43	24.5	24.5	8.0	8.0	32.0	32.0	92.0	92.0	6.4	6.4	28.6		54		99				<0.2		1.9	
						3.2	0.3	43	24.5		8.0		32.0		92.0		6.4		28.6		57		98				<0.2		1.6	
SR3	Fine	Moderate	10:15	8.4	Surface	1.0	0.5	17	24.5	24.5	8.0	8.0	31.7	31.7	92.1	92.1	6.4	6.4	17.9	22.0	10	17	-	-	822159	807589	-	-	-	-
						1.0	0.6	17	24.5		8.0		31.7		92.1		6.4		17.9		9		-				-		-	
					Middle	4.2	0.5	8	24.5	24.5	8.0	8.0	31.8	31.8	92.0	92.0	6.4		21.8		13		-				-		-	
						4.2	0.5	8	24.5		8.0		31.8		92.0		6.4		21.8		14		-				-		-	
					Bottom	7.4	0.4	5	24.5	24.5	8.0	8.0	31.8	31.8	92.1	92.1	6.4	6.4	26.3		26		-				-		-	
						7.4	0.5	5	24.5		8.0		31.8		92.1		6.4		26.3		29		-				-		-	
SR4A	Cloudy	Moderate	09:27	8.7	Surface	1.0	0.1	230	24.2	24.2	8.0	8.0	32.2	32.2	88.1	88.1	6.1	6.2	17.4	19.6	17	21	-	-	817186	807810	-	-	-	-
						1.0	0.1	243	24.2		8.0		32.2		88.1		6.2		17.4		16		-				-		-	
					Middle	4.4	0.1	182	24.2	24.2	8.0	8.0	32.2	32.2	88.5	88.6	6.2		19.3		22		-				-		-	
						4.4	0.1	196	24.2		8.0		32.2		88.6		6.2		19.3		24		-				-		-	
					Bottom	7.7	0.0	179	24.2	24.2	8.0	8.0	32.2	32.2	90.8	91.1	6.3	6.4	22.2		22		-				-		-	
						7.7	0.0	191	24.2		8.0		32.2		91.4		6.4		22.2		24		-				-		-	
SR5A	Cloudy	Calm	09:11	4.5	Surface	1.0	0.3	288	24.3	24.3	8.0	8.0	32.2	32.2	86.8	86.8	6.1	6.1	11.8	16.7	15	17	-	-	816588	810677	-	-	-	-
						1.0	0.3	289	24.3		8.0		32.2		86.8		6.1		11.9		14		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.2	288	24.3	24.3	8.0	8.0	32.2	32.2	87.0	87.1	6.1	6.1	21.6		20		-				-		-	
						3.5	0.2	294	24.3		8.0		32.2		87.2		6.1		21.6		20		-				-		-	
SR6	Cloudy	Calm	08:46	3.7	Surface	1.0	0.2	270	24.4	24.4	7.9	7.9	31.9	31.9	89.8	89.9	6.3	6.3	12.3	16.4	20	21	-	-	817900	814649	-	-	-	-
						1.0	0.2	291	24.4		7.9		31.9		89.9		6.3		12.3		20		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.7	0.2	259	24.4	24.4	7.9	7.9	31.7	31.7	91.1	91.2	6.4	6.4	20.5		23		-				-		-	
						2.7	0.2	277	24.4		7.9		31.7		91.2		6.4		20.6		22		-				-		-	
SR7	Fine	Moderate	08:10	16.3	Surface	1.0	0.2	336	24.8	24.8	7.9	7.9	32.2	32.2	91.1	91.1	6.3	6.3	15.8	15.3	21	24	-	-	823625	823724	-	-	-	-
						1.0	0.2	339	24.8		7.9		32.2		91.1		6.3		15.8		21		-				-		-	
					Middle	8.2	0.2	326	24.8	24.8	7.9	7.9	32.2	32.2	91.0	91.0	6.3		13.3		24		-				-		-	
						8.2	0.2	354	24.8		7.9		32.2		91.0		6.3		13.3		23		-				-		-	
					Bottom	15.3	0.3	297	24.8	24.8	7.9	7.9	32.2	32.2	90.8	90.8	6.3	6.3	16.9		25		-				-		-	
						15.3	0.3	315	24.8		7.9		32.2		90.8		6.3		16.9		27		-				-		-	
SR8	Fine	Moderate	09:22	4.2	Surface	1.0	-	-	24.6	24.6	8.0	8.0	31.6	31.6	92.8	92.8	6.5	6.5	8.4	10.4	18	18	-	-	820246	811418	-	-	-	-
						1.0	-	-	24.6		8.0		31.6		92.8		6.5		8.4		17		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	-	-	24.6	24.6	8.0	8.0	31.7	31.7	94.2	94.3	6.5	6.6	12.3		18		-				-		-	
						3.2	-	-	24.6		8.0		31.7		94.4		6.6		12.5		17		-				-		-	

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 09 November 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	Sunny	Moderate	16:24	8.4	1st	Surface	1.0	0.1	40	24.9	24.9	8.0	8.0	31.0	31.0	96.3	96.2	6.7	6.7	7.7	10.0	7	10	99	99	815598	804257	<0.2	<0.2	0.9	0.8
					2nd		1.0	0.1	40	24.9		8.0		31.0		96.1		6.7		8.1		8		99				<0.2		0.8	
					1st	Middle	4.2	0.1	158	24.8	24.8	8.0	8.0	31.6	31.6	95.3	95.3	6.6		10.8		10		99				<0.2		0.6	
					2nd		4.2	0.1	163	24.8		8.0		31.6		95.2		6.6		11.1		10		99				<0.2		0.7	
					1st	Bottom	7.4	0.1	239	24.8	24.8	8.0	8.0	31.8	31.8	95.4	95.5	6.6	6.6	11.4		12		100				<0.2		0.7	
					2nd		7.4	0.1	250	24.8		8.0		31.8		95.5		6.6		11.0		12		100				<0.2		0.9	
C2	Sunny	Moderate	15:14	12.0	1st	Surface	1.0	0.2	68	24.4	24.4	7.9	7.9	29.4	29.4	90.5	90.5	6.4	6.4	9.8	18.2	7	12	95	97	825705	806926	<0.2	<0.2	1.7	1.6
					2nd		1.0	0.2	74	24.4		7.9		29.4		90.5		6.4		9.8		6		96				<0.2		1.5	
					1st	Middle	6.0	0.1	90	24.4	24.4	7.9	7.9	29.7	29.7	90.1	90.1	6.4		20.6		11		97				<0.2		1.6	
					2nd		6.0	0.1	92	24.4		7.9		29.7		90.1		6.4		20.6		10		97				<0.2		1.6	
					1st	Bottom	11.0	0.1	282	24.3	24.3	7.8	7.8	29.6	29.6	90.7	90.7	6.4	6.4	24.2		18		98				<0.2		1.7	
					2nd		11.0	0.1	290	24.3		7.8		29.6		90.7		6.4		24.2		18		99				<0.2		1.7	
C3	Sunny	Moderate	17:02	11.9	1st	Surface	1.0	0.4	104	24.7	24.7	7.9	7.9	32.1	32.1	87.6	87.6	6.1	6.1	7.5	14.2	9	10	97	100	822079	817795	<0.2	<0.2	1.2	1.3
					2nd		1.0	0.4	107	24.7		7.9		32.1		87.6		6.1		7.5		9		97				<0.2		1.2	
					1st	Middle	6.0	0.4	99	24.7	24.7	7.9	7.9	32.1	32.1	87.4	87.4	6.1		12.3		8		99				<0.2		1.3	
					2nd		6.0	0.4	99	24.7		7.9		32.1		87.4		6.1		12.4		9		100				<0.2		1.3	
					1st	Bottom	10.9	0.4	89	24.7	24.7	7.9	7.9	32.1	32.1	88.4	88.4	6.1	6.1	22.8		10		102				<0.2		1.4	
					2nd		10.9	0.4	91	24.7		7.9		32.1		88.4		6.1		22.8		12		102				<0.2		1.4	
IM1	Sunny	Moderate	16:04	7.6	1st	Surface	1.0	0.2	68	24.8	24.8	8.0	8.0	31.1	31.1	95.6	95.6	6.7	6.6	10.3	11.6	8	9	97	99	818326	806443	<0.2	<0.2	1.0	0.9
					2nd		1.0	0.3	74	24.8		8.0		31.1		95.6		6.6		10.6		9		97				<0.2		1.0	
					1st	Middle	3.8	0.2	85	24.8	24.8	8.0	8.0	31.6	31.6	95.3	95.4	6.6		12.0		7		99				<0.2		1.0	
					2nd		3.8	0.2	85	24.8		8.0		31.6		95.4		6.6		12.4		7		99				<0.2		1.0	
					1st	Bottom	6.6	0.1	87	24.8	24.8	8.0	8.0	31.6	31.6	95.6	95.6	6.6	6.6	12.8		11		101				<0.2		0.8	
					2nd		6.6	0.1	91	24.8		8.0		31.6		95.5		6.6		11.5		12		101				<0.2		0.8	
IM2	Sunny	Moderate	15:58	8.7	1st	Surface	1.0	0.2	54	24.9	24.9	8.0	8.0	31.0	31.0	95.5	95.5	6.6	6.6	12.1	16.9	6	8	96	98	818878	806221	<0.2	<0.2	1.0	0.9
					2nd		1.0	0.2	59	24.9		8.0		31.0		95.4		6.6		12.4		7		97				<0.2		0.9	
					1st	Middle	4.4	0.1	58	24.6	24.6	8.0	8.0	31.6	31.6	94.2	94.2	6.6		20.4		10		98				<0.2		0.9	
					2nd		4.4	0.1	63	24.6		8.0		31.6		94.2		6.6		20.2		9		98				<0.2		0.8	
					1st	Bottom	7.7	0.1	289	24.6	24.6	8.0	8.0	31.7	31.7	94.9	95.0	6.6	6.6	18.4		8		99				<0.2		1.0	
					2nd		7.7	0.1	317	24.6		8.0		31.7		95.0		6.6		18.1		9		100				<0.2		1.0	
IM3	Sunny	Moderate	15:51	8.8	1st	Surface	1.0	0.2	48	24.7	24.7	8.0	8.0	31.4	31.4	94.8	94.8	6.6	6.6	13.4	19.3	9	14	97	99	819397	806010	<0.2	<0.2	0.9	0.9
					2nd		1.0	0.2	50	24.7		8.0		31.4		94.7		6.6		13.4		8		97				<0.2		1.0	
					1st	Middle	4.4	0.1	36	24.6	24.6	8.0	8.0	31.5	31.5	93.7	93.7	6.5		20.1		17		99				<0.2		0.7	
					2nd		4.4	0.1	38	24.6		8.0		31.5		93.7		6.5		20.2		15		99				<0.2		0.7	
					1st	Bottom	7.8	0.1	0	24.5	24.5	8.0	8.0	31.5	31.5	94.1	94.2	6.6	6.6	24.1		17		100				<0.2		0.9	
					2nd		7.8	0.1	0	24.6		8.0		31.5		94.2		6.6		24.3		17		101				<0.2		0.9	
IM4	Sunny	Moderate	15:44	8.1	1st	Surface	1.0	0.2	18	24.9	24.9	8.0	8.0	31.4	31.4	95.2	95.2	6.6	6.6	11.7	21.3	7	14	97	99	819556	805063	<0.2	<0.2	1.0	0.8
					2nd		1.0	0.2	19	24.9		8.0		31.4		95.2		6.6		11.6		6		97				<0.2		1.0	
					1st	Middle	4.1	0.1	317	24.6	24.6	8.0	8.0	31.7	31.7	93.4	93.4	6.5		21.7		10		99				<0.2		0.8	
					2nd		4.1	0.1	341	24.6		8.0		31.7		93.4		6.5		21.6		11		100				<0.2		0.6	
					1st	Bottom	7.1	0.1	326	24.6	24.6	8.0	8.0	31.7	31.7	93.6	93.8	6.5	6.5	30.4		23		101				<0.2		0.7	
					2nd		7.1	0.1	329	24.6		8.0		31.6		93.9		6.5		30.6		24		101				<0.2		0.8	
IM5	Sunny	Moderate	15:33	7.2	1st	Surface	1.0	0.2	31	24.6	24.6	8.0	8.0	30.6	30.6	94.0	94.0	6.6	6.6	11.7	21.8	9	13	97	99	820588	804897	<0.2	<0.2	1.4	1.2
					2nd		1.0	0.2	32	24.6		8.0		30.6		93.9		6.6		11.7		8		97				<0.2		1.4	
					1st	Middle	3.6	0.2	23	24.5	24.5	8.0	8.0	31.5	31.5	93.1	93.1	6.5		22.3		11		99				<0.2		1.2	
					2nd		3.6	0.2	23	24.5		8.0		31.5		93.1		6.5		22.4		11		99				<0.2		1.3	
					1st	Bottom	6.2	0.1	41	24.5	24.5	8.0	8.0	31.4	31.4	93.8	93.9	6.5	6.6	31.5		20		100				<0.2		0.9	
					2nd		6.2	0.1	43	24.5		8.0		31.4		94.0		6.6		31.4		20		100				<0.2		0.9	
IM6	Sunny	Moderate	15:24	6.8	1st	Surface	1.0	0.2	21	24.8	24.8	8.0	8.0	30.7	30.7	95.0	95.0	6.6	6.6	9.1	13.9	10	12	97	99	821078	805851	<0.2	<0.2	1.2	1.1
					2nd		1.0	0.2	22	24.8		8.0		30.7		94.9		6.6		9.4		9		97				<0.2		1.0	
					1st	Middle	3.4	0.2	18	24.6	24.6	8.0	8.0	31.1	31.1	94.3	94.3	6.6		15.5		12		99				<0.2		1.1	
					2nd		3.4	0.2	19	24.6		8.0		31.1		94.3		6.6		15.3		10		99				<0.2		1.1	
					1st	Bottom	5.8	0.1	69	24.6	24.6	8.0	8.0	31.2	31.2	94.4	94.5	6.6	6.6	17.0		16		101				<0.2		0.9	
					2nd		5.8	0.1	70	24.6		8.0		31.2		94.5		6.6		17.1		14		101				<0.2		1.0	
IM7	Sunny	Moderate	15:14	8.2	1st	Surface	1.0	0.2	89	24.7	24.7	8.0	8.0	31.2	31.2	92.8	92.8	6.5	6.5	11.8	18.4	11	14	97	99	821351	806809	<0.2	<0.2	1.3	1.2
					2nd		1.0	0.2	90	24.7		8.0		31.2		92.8		6.5		11.9		11		97				<0.2		1.2	
					1st	Middle	4.1	0.2	72	24.7	24.7	8.0	8.0	31.3	31.3	92.3	92.3	6.4		15.3		15		99				<0.2		1.2	
					2nd		4.1	0.2	77	24.7		8.0		31.3		92.3		6.4		15.3		15		99				<0.2		1.2	
					1st	Bottom	7.2	0.1	66	24.5	24.5	8.0	8.0	31.4	31.4	92.7	92.8	6.5	6.5	28.0		17		100				<0.2		1.0	
					2nd		7.2	0.2	69	24.5		8.0		31.4		92.8		6.5		27.9		16		100				<0.2		1.0	
IM8	Sunny	Moderate	15:43	8.4	1st	Surface	1.0	0.3	90	24.5	24.5	8.0	8.0	31.2	31.2	95.1	95.1	6.6	6.6	7.7	10.0	9	11	96	98	821688	807859	<0.2	<0.2	1.0	1.2
					2nd		1.0	0.3	91	24.5		8.0		31.2		95.1		6.6		7.7		11		96				<0.2		1.1	
					1st	Middle	4.2	0.2	79	24.4	24.4	8.0	8.0	31.3	31.3	94.4	94.4	6.6		10.2		11		98				<0.2		1.2	
					2nd		4.2	0.3	81	24.4		8.0		31.3		94.4		6.6		10.2		11		98				<0.2		1.2	
					1st	Bottom	7.4	0.2	68	24.3	24.3	8.0	8.0	31.3	31.3	94.9	94.9	6.6	6.6	12.1		11		99				<0.2		1.2	
					2nd		7.4	0.3	73	24.3		8.0		31.3		94.9		6.6		12.1		12		99				<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 09 November 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	Sunny	Moderate	15:51	7.5	1st	Surface	1.0	0.3	76	24.3	24.3	8.1	8.1	31.3	31.3	94.3	94.3	6.6	6.6	11.1	13.4	13	13	95	97	822081	808796	<0.2	<0.2	0.8	1.1
					2nd		1.0	0.3	81	24.3		8.1		31.3		94.3		6.6		11.1		14		96				<0.2		1.0	
					1st	Middle	3.8	0.3	74	24.3	24.3	8.1	8.1	31.4	31.4	94.3	94.3	6.6		13.4		12		97				<0.2		0.9	
					2nd		3.8	0.4	79	24.3		8.1		31.4		94.3		6.6		13.4		12		97				<0.2		1.0	
					1st	Bottom	6.5	0.2	80	24.3	24.3	8.1	8.1	31.4	31.4	95.0	95.0	6.7	6.7	15.6		14		99				<0.2		1.4	
					2nd		6.5	0.3	85	24.3		8.1		31.4		95.0		6.7		15.6		14		99				<0.2		1.4	
IM10	Sunny	Moderate	15:59	6.9	1st	Surface	1.0	0.4	98	24.5	24.5	8.0	8.0	31.2	31.2	94.0	94.0	6.6	6.6	9.7	11.1	13	12	96	98	822269	809834	<0.2	<0.2	1.0	1.0
					2nd		1.0	0.4	100	24.5		8.0		31.2		94.0		6.6		9.7		12		96				<0.2		1.0	
					1st	Middle	3.5	0.3	93	24.5	24.5	8.0	8.0	31.3	31.3	93.9	93.9	6.6		11.3		12		98				<0.2		1.2	
					2nd		3.5	0.3	102	24.5		8.0		31.3		93.9		6.6		11.3		12		99				<0.2		1.1	
					1st	Bottom	5.9	0.2	107	24.4	24.4	8.0	8.0	31.5	31.5	94.8	94.9	6.6	6.6	12.4		12		99				<0.2		0.8	
					2nd		5.9	0.3	113	24.4		8.0		31.5		94.9		6.6		12.4		13		99				<0.2		1.0	
IM11	Sunny	Moderate	16:09	8.4	1st	Surface	1.0	0.4	93	24.5	24.5	8.0	8.0	30.9	30.9	93.1	93.1	6.5	6.5	15.4	14.7	13	13	97	99	821471	810532	<0.2	<0.2	1.2	1.2
					2nd		1.0	0.4	102	24.5		8.0		30.9		93.1		6.5		15.4		13		96				<0.2		1.3	
					1st	Middle	4.2	0.4	92	24.5	24.5	8.0	8.0	31.1	31.1	92.8	92.8	6.5		14.5		13		98				<0.2		1.4	
					2nd		4.2	0.4	97	24.5		8.0		31.1		92.8		6.5		14.5		14		99				<0.2		1.2	
					1st	Bottom	7.4	0.3	80	24.4	24.4	8.0	8.0	31.5	31.5	93.1	93.1	6.5	6.5	14.2		13		100				<0.2		1.0	
					2nd		7.4	0.3	87	24.4		8.0		31.5		93.1		6.5		14.2		13		101				<0.2		1.1	
IM12	Sunny	Moderate	16:15	9.0	1st	Surface	1.0	0.4	87	24.5	24.5	8.0	8.0	30.7	30.7	94.8	94.8	6.6	6.6	4.1	4.8	8	9	96	99	821189	811533	<0.2	<0.2	1.3	1.3
					2nd		1.0	0.5	87	24.5		8.0		30.7		94.8		6.6		4.1		10		96				<0.2		1.4	
					1st	Middle	4.5	0.3	86	24.6	24.6	8.0	8.0	31.3	31.3	94.8	94.8	6.6		4.4		8		99				<0.2		1.2	
					2nd		4.5	0.3	92	24.6		8.0		31.3		94.8		6.6		4.4		9		98				<0.2		1.3	
					1st	Bottom	8.0	0.3	98	24.4	24.4	8.0	8.0	31.6	31.6	95.3	95.3	6.6	6.6	6.0		10		101				<0.2		1.3	
					2nd		8.0	0.3	105	24.4		8.0		31.6		95.3		6.6		6.0		10		101				<0.2		1.2	
SR2	Sunny	Moderate	16:41	4.6	1st	Surface	1.0	0.2	86	24.5	24.5	8.0	8.0	31.7	31.7	94.1	94.1	6.6	6.6	6.2	7.0	8	8	97	98	821480	814171	<0.2	<0.2	0.7	0.7
					2nd		1.0	0.2	93	24.5		8.0		31.7		94.1		6.6		6.2		8		97				<0.2		0.7	
					1st	Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
					2nd		-	-	-	-		-		-		-		-		-		-		-				-		-	
					1st	Bottom	3.6	0.2	81	24.4	24.4	8.0	8.0	31.7	31.7	95.3	95.3	6.6	6.6	7.7		7		99				<0.2		0.8	
					2nd		3.6	0.2	85	24.4		8.0		31.7		95.3		6.6		7.7		7		100				<0.2		0.7	
SR3	Sunny	Moderate	15:38	9.1	1st	Surface	1.0	0.3	73	24.4	24.4	8.0	8.0	31.2	31.2	93.6	93.6	6.5	6.5	10.2	12.6	13	13	-	-	822151	807555	-	-	-	-
					2nd		1.0	0.3	78	24.4		8.0		31.2		93.6		6.5		10.2		12		-				-		-	
					1st	Middle	4.6	0.3	59	24.4	24.4	8.0	8.0	31.2	31.2	93.3	93.3	6.5		13.2		13		-	-			-		-	
					2nd		4.6	0.3	60	24.4		8.0		31.2		93.3		6.5		13.2		15		-				-		-	
					1st	Bottom	8.1	0.2	67	24.4	24.4	8.0	8.0	31.3	31.3	94.1	94.1	6.6	6.6	14.4		12		-				-		-	
					2nd		8.1	0.2	73	24.4		8.0		31.3		94.1		6.6		14.4		13		-				-		-	
SR4A	Sunny	Moderate	16:42	8.6	1st	Surface	1.0	0.4	87	25.0	25.0	8.0	8.0	31.1	31.1	97.6	97.6	6.8	6.8	10.1	13.4	12	12	-	-	817182	807792	-	-	-	-
					2nd		1.0	0.4	92	25.0		8.0		31.1		97.5		6.8		10.0		12		-				-		-	
					1st	Middle	4.3	0.4	78	25.0	25.0	8.0	8.0	31.1	31.1	97.1	97.1	6.7		10.9		12		-				-		-	
					2nd		4.3	0.4	83	25.0		8.0		31.1		97.1		6.7		11.0		12		-				-		-	
					1st	Bottom	7.6	0.3	65	24.9	24.9	8.0	8.0	31.3	31.3	96.2	96.3	6.7	6.7	19.6		13		-				-		-	
					2nd		7.6	0.3	71	24.9		8.0		31.3		96.3		6.7		19.0		13		-				-		-	
SR5A	Sunny	Moderate	16:58	4.0	1st	Surface	1.0	0.1	356	25.2	25.2	8.0	8.0	31.9	31.9	92.8	92.8	6.4	6.4	10.4	13.6	9	10	-	-	816583	810704	-	-	-	-
					2nd		1.0	0.1	328	25.2		8.0		31.9		92.8		6.4		10.5		8		-				-		-	
					1st	Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
					2nd		-	-	-	-		-		-		-		-		-		-		-				-		-	
					1st	Bottom	3.0	0.1	341	25.0	25.0	8.0	8.0	31.9	31.9	91.5	91.5	6.3	6.3	16.7		12		-				-		-	
					2nd		3.0	0.1	345	25.0		8.0		31.9		91.5		6.3		16.7		11		-				-		-	
SR6	Sunny	Moderate	17:20	4.0	1st	Surface	1.0	0.1	58	25.2	25.2	8.0	8.0	31.8	31.8	90.2	90.2	6.2	6.2	12.8	17.6	12	13	-	-	817925	814688	-	-	-	-
					2nd		1.0	0.1	63	25.2		8.0		31.8		90.2		6.2		12.9		11		-				-		-	
					1st	Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
					2nd		-	-	-	-		-		-		-		-		-		-		-				-		-	
					1st	Bottom	3.0	0.1	67	24.7	24.7	7.9	7.9	31.8	31.8	91.0	91.1	6.3	6.3	22.4		14		-				-		-	
					2nd		3.0	0.1	71	24.7		7.9		31.8		91.2		6.3		22.3		13		-				-		-	
SR7	Sunny	Moderate	17:31	16.8	1st	Surface	1.0	0.3	102	24.8	24.8	7.9	7.9	32.2	32.2	87.7	87.7	6.1	6.1	6.0	6.3	11	12	-	-	823659	823761	-	-	-	-
					2nd		1.0	0.3	109	24.8		7.9		32.2		87.7		6.1		6.0		12		-				-		-	
					1st	Middle	8.4	0.2	100	24.8	24.8	7.9	7.9	32.2	32.2	87.8	87.8	6.1		6.5		11		-				-		-	
					2nd		8.4	0.2	100	24.8		7.9		32.2		87.8		6.1		6.5		11		-				-		-	
					1st	Bottom	15.8	0.1	48	24.8	24.8	7.9	7.9	32.2	32.2	89.1	89.1	6.2	6.2	6.4		11		-				-		-	
					2nd		15.8	0.1	51	24.8		7.9		32.2		89.1		6.2		6.4		13		-				-		-	
SR8	Sunny	Moderate	16:25	4.2	1st	Surface	1.0	-	-	24.8	24.8	8.0	8.0	31.4	31.4	95.7	95.7	6.6	6.6	3.9	4.5	10	13	-	-	820246	811418	-	-	-	-
					2nd		1.0	-	-	24.8		8.0		31.4		95.7		6.6		3.9		12		-				-		-	
					1st	Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
					2nd		-	-	-	-		-		-		-		-		-		-		-				-		-	
					1st	Bottom	3.2	-	-	24.6	24.6	8.0	8.0	31.5	31.5	95.6	95.6	6.7	6.7	5.0		16		-				-		-	
					2nd		3.2	-	-	24.6		8.0		31.5		95.6		6.7		5.0		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 09 November 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	Sunny	Moderate	11:30	8.3	1st	Surface	1.0	0.4	28	24.5	24.5	8.0	8.0	31.7	31.7	93.8	93.8	6.5	6.5	17.2	19.7	8	13	100	101	815620	804265	<0.2	<0.2	1.1	1.0
					2nd		1.0	0.5	28	24.5		8.0		31.7		93.8		6.5		17.2		10		100				<0.2		0.8	
					1st	Middle	4.2	0.4	31	24.5	24.5	8.0	8.0	31.7	31.7	93.6	93.6	6.5		19.9		14		99				<0.2		1.0	
					2nd		4.2	0.5	31	24.5		8.0		31.7		93.5		6.5		19.8		14		99				<0.2		0.9	
					1st	Bottom	7.3	0.4	26	24.5	24.5	8.0	8.0	31.8	31.8	93.5	93.5	6.5		22.1		16		103				<0.2		0.9	
					2nd		7.3	0.4	27	24.5		8.0		31.8		93.5		6.5		22.1		14		103				<0.2		1.0	
C2	Sunny	Moderate	12:24	11.6	1st	Surface	1.0	0.3	345	24.6	24.6	8.0	8.0	30.1	30.1	91.3	91.3	6.4	6.4	6.1	13.9	7	8	95	98	825695	806942	<0.2	<0.2	1.5	1.4
					2nd		1.0	0.3	347	24.6		8.0		30.1		91.2		6.4		6.2		6		96				<0.2		1.4	
					1st	Middle	5.8	0.3	348	24.4	24.4	8.0	8.0	30.8	30.8	89.5	89.5	6.3		10.2		8		97				<0.2		1.4	
					2nd		5.8	0.3	320	24.4		8.0		30.8		89.5		6.3		10.2		7		97				<0.2		1.3	
					1st	Bottom	10.6	0.3	345	24.4	24.4	8.0	8.0	31.0	31.0	90.6	90.6	6.3	6.3	25.3		10		102				<0.2		1.3	
					2nd		10.6	0.3	359	24.4		8.0		31.0		90.6		6.3		25.3		9		101				<0.2		1.2	
C3	Sunny	Moderate	10:30	11.3	1st	Surface	1.0	0.3	251	24.7	24.7	8.0	8.0	31.8	31.8	91.6	91.6	6.4	6.4	6.7	12.0	7	10	99	101	822079	817774	<0.2	<0.2	0.8	0.8
					2nd		1.0	0.4	263	24.7		8.0		31.8		91.6		6.4		6.7		9		98				<0.2		0.7	
					1st	Middle	5.7	0.3	253	24.4	24.4	8.0	8.0	31.8	31.8	90.7	90.7	6.3		9.3		10		100				<0.2		0.9	
					2nd		5.7	0.4	268	24.4		8.0		31.8		90.7		6.3		9.3		10		101				<0.2		0.8	
					1st	Bottom	10.3	0.3	275	24.2	24.2	8.0	8.0	32.0	32.0	91.4	91.4	6.4	6.4	20.1		10		103				<0.2		0.8	
					2nd		10.3	0.3	289	24.2		8.0		32.0		91.4		6.4		20.1		12		103				<0.2		0.8	
IM1	Sunny	Moderate	11:47	7.4	1st	Surface	1.0	0.5	17	24.8	24.8	8.1	8.1	31.3	31.3	94.5	94.5	6.6	6.6	8.1	17.4	12	12	101	100	818339	806469	<0.2	<0.2	1.0	0.9
					2nd		1.0	0.5	17	24.8		8.1		31.3		94.5		6.6		8.4		12		101				<0.2		0.9	
					1st	Middle	3.7	0.5	10	24.6	24.6	8.1	8.1	31.3	31.3	93.8	93.8	6.5		11.8		11		96				<0.2		0.8	
					2nd		3.7	0.5	10	24.6		8.1		31.3		93.8		6.5		11.8		11		96				<0.2		0.9	
					1st	Bottom	6.4	0.4	5	24.4	24.4	8.1	8.1	31.4	31.4	93.0	93.0	6.5	6.5	32.1		12		102				<0.2		1.0	
					2nd		6.4	0.4	5	24.4		8.1		31.4		93.0		6.5		32.1		14		102				<0.2		0.9	
IM2	Sunny	Moderate	11:55	8.1	1st	Surface	1.0	0.5	34	24.8	24.8	8.1	8.1	31.2	31.2	93.7	93.7	6.5	6.5	8.7	18.9	8	10	95	100	818840	806204	<0.2	<0.2	1.0	1.0
					2nd		1.0	0.5	34	24.8		8.1		31.2		93.7		6.5		8.7		10		95				<0.2		1.0	
					1st	Middle	4.1	0.4	26	24.5	24.5	8.1	8.1	31.3	31.3	92.3	92.4	6.4		19.8		11		102				<0.2		1.0	
					2nd		4.1	0.5	26	24.5		8.1		31.3		92.4		6.4		19.8		10		102				<0.2		1.0	
					1st	Bottom	7.1	0.4	20	24.4	24.4	8.1	8.1	31.3	31.3	92.4	92.5	6.5	6.5	28.2		10		104				<0.2		1.1	
					2nd		7.1	0.4	20	24.4		8.1		31.3		92.5		6.5		28.2		10		104				<0.2		1.1	
IM3	Sunny	Moderate	12:02	8.2	1st	Surface	1.0	0.4	23	24.6	24.6	8.0	8.0	31.0	31.0	93.0	93.1	6.5	6.5	10.5	16.3	11	11	95	99	819409	806028	<0.2	<0.2	1.3	1.3
					2nd		1.0	0.4	24	24.6		8.0		31.0		93.1		6.5		10.5		10		95				<0.2		1.3	
					1st	Middle	4.1	0.4	23	24.5	24.5	8.1	8.1	31.2	31.2	91.8	91.8	6.4		16.7		11		101				<0.2		1.3	
					2nd		4.1	0.4	24	24.5		8.1		31.2		91.8		6.4		16.7		10		101				<0.2		1.2	
					1st	Bottom	7.2	0.3	23	24.5	24.5	8.0	8.0	31.5	31.5	92.0	92.1	6.4	6.4	21.8		12		101				<0.2		1.3	
					2nd		7.2	0.3	24	24.5		8.0		31.5		92.1		6.4		21.3		12		102				<0.2		1.2	
IM4	Sunny	Moderate	12:09	7.6	1st	Surface	1.0	0.5	4	24.7	24.7	8.0	8.0	31.0	31.0	91.8	91.8	6.4	6.4	10.3	16.3	10	15	98	101	819548	805014	<0.2	<0.2	1.4	1.2
					2nd		1.0	0.5	4	24.7		8.0		31.0		91.7		6.4		10.4		9		99				<0.2		1.4	
					1st	Middle	3.8	0.5	15	24.5	24.5	8.0	8.0	31.3	31.3	90.8	90.8	6.3		18.2		15		102				<0.2		0.9	
					2nd		3.8	0.5	15	24.5		8.0		31.3		90.8		6.3		18.2		14		102				<0.2		1.1	
					1st	Bottom	6.6	0.4	20	24.5	24.5	8.0	8.0	31.3	31.2	91.4	91.5	6.4	6.4	20.4		21		102				<0.2		1.1	
					2nd		6.6	0.4	20	24.5		8.0		31.2		91.5		6.4		20.5		19		103				<0.2		1.1	
IM5	Sunny	Moderate	12:20	6.8	1st	Surface	1.0	0.4	13	24.7	24.7	8.0	8.0	30.9	30.9	92.1	92.1	6.4	6.4	15.1	22.2	14	16	100	100	820573	804931	<0.2	<0.2	1.3	1.2
					2nd		1.0	0.4	13	24.7		8.0		30.9		92.1		6.4		15.2		14		100				<0.2		1.2	
					1st	Middle	3.4	0.4	10	24.6	24.6	8.0	8.0	31.0	31.0	91.7	91.7	6.4		21.2		16		101				<0.2		1.2	
					2nd		3.4	0.4	10	24.6		8.0		31.0		91.7		6.4		21.5		17		101				<0.2		1.1	
					1st	Bottom	5.8	0.4	23	24.5	24.5	8.0	8.0	31.1	31.1	91.5	91.5	6.4	6.4	30.2		17		97				<0.2		1.2	
					2nd		5.8	0.4	25	24.5		8.0		31.1		91.5		6.4		30.1		19		98				<0.2		1.2	
IM6	Sunny	Moderate	12:28	6.6	1st	Surface	1.0	0.3	28	24.7	24.7	8.0	8.0	31.0	31.0	92.4	92.4	6.4	6.4	11.8	16.2	9	12	97	99	821057	805844	<0.2	<0.2	1.4	1.2
					2nd		1.0	0.3	30	24.7		8.0		31.0		92.4		6.4		11.7		9		97				<0.2		1.2	
					1st	Middle	3.3	0.3	15	24.5	24.5	8.0	8.0	31.2	31.2	92.0	92.1	6.4		15.5		12		99				<0.2		1.2	
					2nd		3.3	0.3	16	24.5		8.0		31.2		92.1		6.4		15.5		12		99				<0.2		1.3	
					1st	Bottom	5.6	0.3	0	24.5	24.5	8.0	8.0	31.5	31.5	92.5	92.5	6.4	6.4	21.4		16		100				<0.2		0.9	
					2nd		5.6	0.3	0	24.5		8.0		31.5		92.5		6.4		21.5		16		101				<0.2		1.1	
IM7	Sunny	Moderate	12:36	8.2	1st	Surface	1.0	0.1	60	24.9	24.9	8.0	8.0	30.1	30.1	93.1	93.1	6.5	6.5	8.4	21.0	5	12	76	91	821375	806832	<0.2	<0.2	1.6	1.5
					2nd		1.0	0.1	64	24.9		8.0		30.1		93.1		6.5		8.8		4		76				<0.2		1.8	
					1st	Middle	4.1	0.3	35	24.7	24.7	8.0	8.0	31.4	31.4	92.6	92.7	6.4		23.8		8		97				<0.2		1.7	
					2nd		4.1	0.3	35	24.7		8.0		31.4		92.7		6.4		23.7		7		98				<0.2		1.6	
					1st	Bottom	7.2	0.3	35	24.7	24.7	8.0	8.0	31.6	31.6	92.9	92.9	6.5	6.5	30.5		24		100				<0.2		1.0	
					2nd		7.2	0.3	36	24.7		8.0		31.6		92.8		6.5		30.5		24		100				<0.2		1.0	
IM8	Sunny	Moderate	11:58	7.9	1st	Surface	1.0	0.2	29	24.7	24.7	8.0	8.0	29.8	29.8	92.8	92.8	6.5	6.5	8.7	16.8	8	13	97	99	821685	807837	<0.2	<0.2	1.6	1.5
					2nd		1.0	0.2	29	24.7		8.0		29.8		92.8		6.5		8.7		6		96				<0.2		1.6	
					1st	Middle	4.0	0.3	23	24.4	24.4	8.0	8.0	30.4	30.4	91.8	91.8	6.5		17.7		8		99				<0.2		1.4	
					2nd		4.0	0.3	23	24.4		8.0		30.4		91.8		6.5		17.7		10		98				<0.2		1.5	
					1st	Bottom	6.9	0.3	12	24.4	24.4	8.0	8.0	30.5	30.5	93.7	93.7	6.6	6.6	23.9		21		101				<0.2		1.4	
					2nd		6.9	0.3	13	24.4		8.0		30.5		93.7		6.6		23.9		22		101				<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 09 November 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	Sunny	Moderate	11:49	7.0	1st	Surface	1.0	0.3	2	24.7	24.7	8.0	8.0	30.0	30.0	92.1	92.1	6.5	6.5	11.8	12.3	9	10	97	99	822091	808839	<0.2	<0.2	1.6	1.6
					2nd		1.0	0.3	2	24.7		8.0		30.0		92.1		6.5		11.8		10		96				<0.2		1.5	
					1st	Middle	3.5	0.3	2	24.4	24.4	8.0	8.0	30.0	30.0	91.8	91.8	6.5		13.1		10		98				<0.2		1.5	
					2nd		3.5	0.3	2	24.4		8.0		30.0		91.8		6.5		13.1		9		99				<0.2		1.5	
					1st	Bottom	6.0	0.2	341	24.4	24.4	8.0	8.0	30.0	30.0	93.1	93.1	6.6	6.6	11.9		12		100				<0.2		1.7	
					2nd		6.0	0.2	314	24.4		8.0		30.0		93.1		6.6		11.9		12		101				<0.2		1.6	
IM10	Sunny	Moderate	11:42	7.5	1st	Surface	1.0	0.4	322	24.5	24.5	8.0	8.0	30.5	30.5	92.0	92.0	6.5	6.5	8.9	16.3	5	8	95	98	822264	809856	<0.2	<0.2	1.4	1.4
					2nd		1.0	0.4	331	24.5		8.0		30.5		92.0		6.5		8.9		4		96				<0.2		1.4	
					1st	Middle	3.8	0.5	317	24.3	24.3	8.0	8.0	31.0	31.0	91.6	91.6	6.4		14.7		6		97				<0.2		1.3	
					2nd		3.8	0.5	324	24.3		8.0		31.0		91.6		6.4		14.7		7		98				<0.2		1.4	
					1st	Bottom	6.5	0.4	307	24.3	24.3	8.0	8.0	31.4	31.4	92.1	92.1	6.5	6.5	25.3		13		99				<0.2		1.4	
					2nd		6.5	0.4	337	24.3		8.0		31.4		92.1		6.5		25.3		15		100				<0.2		1.4	
IM11	Sunny	Moderate	11:29	7.2	1st	Surface	1.0	0.4	306	24.7	24.7	8.0	8.0	30.8	30.8	93.0	93.0	6.5	6.5	7.1	21.6	7	15	96	97	821472	810547	<0.2	<0.2	1.3	1.2
					2nd		1.0	0.4	317	24.7		8.0		30.8		93.0		6.5		7.1		7		95				<0.2		1.3	
					1st	Middle	3.6	0.3	289	24.2	24.2	8.0	8.0	31.5	31.5	91.7	91.7	6.4		25.5		7		97				<0.2		1.2	
					2nd		3.6	0.3	305	24.2		8.0		31.5		91.7		6.4		25.5		8		97				<0.2		1.2	
					1st	Bottom	6.2	0.3	294	24.1	24.1	8.0	8.0	31.6	31.6	92.4	92.4	6.5	6.5	32.3		29		99				<0.2		1.1	
					2nd		6.2	0.3	307	24.1		8.0		31.6		92.4		6.5		32.3		30		99				<0.2		0.9	
IM12	Sunny	Moderate	11:21	8.0	1st	Surface	1.0	0.5	282	24.4	24.4	8.0	8.0	31.3	31.3	93.8	93.8	6.6	6.5	8.2	20.8	5	7	96	98	821185	811498	<0.2	<0.2	1.1	1.0
					2nd		1.0	0.5	295	24.4		8.0		31.3		93.8		6.6		8.2		4		96				<0.2		1.0	
					1st	Middle	4.0	0.5	279	24.2	24.2	8.0	8.0	32.0	32.0	91.7	91.7	6.4		23.1		9		98				<0.2		0.9	
					2nd		4.0	0.5	279	24.2		8.0		32.0		91.7		6.4		23.1		7		98				<0.2		0.9	
					1st	Bottom	7.0	0.4	280	24.2	24.2	8.0	8.0	32.1	32.1	95.6	95.6	6.7	6.7	31.2		8		101				<0.2		0.9	
					2nd		7.0	0.5	296	24.2		8.0		32.1		95.6		6.7		31.2		9		101				<0.2		1.0	
SR2	Sunny	Moderate	10:50	4.5	1st	Surface	1.0	0.2	122	24.3	24.3	8.0	8.0	31.9	31.9	93.1	93.1	6.5	6.5	17.0	21.6	19	24	101	100	821472	814136	<0.2	<0.2	0.8	0.8
					2nd		1.0	0.2	131	24.3		8.0		31.9		93.1		6.5		17.0		19		100				<0.2		0.6	
					1st	Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
					2nd		-	-	-	-		-		-		-		-		-		-		-				-		-	
					1st	Bottom	3.5	0.2	127	24.3	24.3	8.0	8.0	32.0	32.0	93.0	93.0	6.5	6.5	26.2		28		102				<0.2		0.8	
					2nd		3.5	0.2	129	24.3		8.0		32.0		93.0		6.5		26.2		30		98				<0.2		0.8	
SR3	Sunny	Moderate	12:04	8.7	1st	Surface	1.0	0.2	352	24.7	24.7	8.0	8.0	29.7	29.7	91.9	91.9	6.5	6.4	7.5	10.6	10	11	-	-	822146	807554	-	-	-	-
					2nd		1.0	0.2	324	24.7		8.0		29.7		91.8		6.4		8.0		11		-				-		-	
					1st	Middle	4.4	0.3	7	24.4	24.4	8.0	8.0	30.0	30.0	90.9	90.9	6.4		10.7		9		-				-		-	
					2nd		4.4	0.3	7	24.4		8.0		30.0		90.9		6.4		10.7		9		-				-		-	
					1st	Bottom	7.7	0.2	355	24.4	24.4	8.0	8.0	30.0	30.0	92.2	92.2	6.5	6.5	13.3		14		-				-		-	
					2nd		7.7	0.2	327	24.4		8.0		30.0		92.2		6.5		13.3		12		-				-		-	
SR4A	Sunny	Moderate	11:07	8.4	1st	Surface	1.0	0.2	225	24.6	24.6	7.9	7.9	32.0	32.0	89.2	89.2	6.2	6.2	16.3	19.4	14	18	-	-	817212	807805	-	-	-	-
					2nd		1.0	0.2	227	24.6		7.9		32.0		89.2		6.2		16.5		13		-				-		-	
					1st	Middle	4.2	0.2	235	24.6	24.6	7.9	7.9	32.0	32.0	89.7	89.7	6.2		20.0		20		-				-		-	
					2nd		4.2	0.2	240	24.6		7.9		32.0		89.7		6.2		20.0		19		-				-		-	
					1st	Bottom	7.4	0.2	235	24.5	24.5	7.9	7.9	32.1	32.1	90.2	90.4	6.3	6.3	22.3		21		-				-		-	
					2nd		7.4	0.2	251	24.5		7.9		32.1		90.5		6.3		21.5		21		-				-		-	
SR5A	Sunny	Calm	10:48	4.6	1st	Surface	1.0	0.3	286	24.5	24.5	7.9	7.9	32.3	32.3	89.4	89.5	6.2	6.2	22.1	23.6	17	19	-	-	816575	810692	-	-	-	-
					2nd		1.0	0.3	311	24.5		7.9		32.3		89.5		6.2		22.1		19		-				-		-	
					1st	Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
					2nd		-	-	-	-		-		-		-		-		-		-		-				-		-	
					1st	Bottom	3.6	0.2	288	24.5	24.5	7.9	7.9	32.3	32.3	91.1	91.3	6.3	6.4	24.5		20		-				-		-	
					2nd		3.6	0.3	291	24.5		7.9		32.3		91.5		6.4		25.5		18		-				-		-	
SR6	Sunny	Calm	10:22	3.6	1st	Surface	1.0	0.1	265	24.7	24.7	8.0	8.0	32.3	32.3	91.8	91.9	6.4	6.4	19.5	21.5	20	20	-	-	817914	814675	-	-	-	-
					2nd		1.0	0.2	273	24.7		8.0		32.3		91.9		6.4		19.8		20		-				-		-	
					1st	Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
					2nd		-	-	-	-		-		-		-		-		-		-		-				-		-	
					1st	Bottom	2.6	0.1	267	24.5	24.5	7.9	7.9	32.3	32.3	93.5	93.6	6.5	6.5	23.4		20		-				-		-	
					2nd		2.6	0.1	279	24.5		7.9		32.3		93.7		6.5		23.4		19		-				-		-	
SR7	Sunny	Moderate	09:59	17.1	1st	Surface	1.0	0.3	17	24.5	24.5	8.0	8.0	31.5	31.5	91.3	91.3	6.4	6.4	7.6	12.5	8	13	-	-	823616	823742	-	-	-	-
					2nd		1.0	0.3	17	24.5		8.0		31.5		91.3		6.4		7.6		9		-				-		-	
					1st	Middle	8.6	0.3	35	24.5	24.5	8.0	8.0	31.4	31.4	92.2	92.2	6.4		14.5		14		-				-		-	
					2nd		8.6	0.3	37	24.5		8.0		31.4		92.2		6.4		14.5		14		-				-		-	
					1st	Bottom	16.1	0.2	30	24.5	24.5	8.0	8.0	31.0	31.0	94.6	94.6	6.6	6.6	15.5		18		-				-		-	
					2nd		16.1	0.2	31	24.5		8.0		31.0		94.6		6.6		15.5		16		-				-		-	
SR8	Sunny	Moderate	11:11	4.1	1st	Surface	1.0	-	-	24.7	24.7	8.0	8.0	30.7	30.7	95.5	95.5	6.7	6.7	10.9	12.5	12	13	-	-	820246	811418	-	-	-	-
					2nd		1.0	-	-	24.7		8.0		30.7		95.5		6.7		10.9		14		-				-		-	
					1st	Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
					2nd		-	-	-	-		-		-		-		-		-		-		-				-		-	
					1st	Bottom	3.1	-	-	24.7	24.7	8.0	8.0	30.7	30.7	96.5	96.5	6.7	6.7	14.1		12		-				-		-	
					2nd		3.1	-	-	24.7		8.0		30.7		96.5		6.7		14.1		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 11 November 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	06:32	8.5	Surface	1.0	0.6	203	24.3	24.3	7.9	7.9	29.0	29.0	93.9	93.9	6.7	6.7	4.6	7.8	4	7	91	95	815597	804230	<0.2	<0.2	1.4	1.2
						1.0	0.6	205	24.3		7.9		29.0		93.9		6.7		4.6		5		92						1.3	
					Middle	4.3	0.5	218	24.5	24.5	8.0	8.0	30.4	30.4	93.4	93.4	6.6		6.1		5		95				<0.2		1.3	
						4.3	0.5	232	24.5		8.0		30.4		93.4		6.6		6.2		6		95						1.2	
					Bottom	7.5	0.3	220	24.5	24.5	8.0	8.0	31.3	31.3	94.5	94.5	6.6	6.6	12.7		10		98				<0.2		1.0	
						7.5	0.3	229	24.5		8.0		31.3		94.5		6.6		12.8		10		98				<0.2		0.8	
C2	Cloudy	Moderate	07:18	11.2	Surface	1.0	0.8	171	24.9	24.9	7.9	7.9	28.8	28.8	90.7	90.7	6.4	6.3	8.6	18.0	6	10	92	94	825666	806939	<0.2	<0.2	2.3	2.2
						1.0	0.9	179	24.9		7.9		28.8		90.6		6.4		8.9		6		92				<0.2		2.2	
					Middle	5.6	0.6	171	24.9	24.9	7.9	7.9	30.4	30.5	88.5	88.5	6.2		22.5		11		94				<0.2		2.2	
						5.6	0.6	175	24.9		7.9		30.5		88.5		6.2		22.5		9		94				<0.2		2.2	
					Bottom	10.2	0.3	170	24.8	24.8	8.0	8.0	31.3	31.3	90.5	90.6	6.3	6.3	22.7		15		96				<0.2		2.1	
						10.2	0.3	178	24.8		8.0		31.3		90.6		6.3		22.8		15		96				<0.2		2.3	
C3	Cloudy	Moderate	05:08	12.4	Surface	1.0	0.4	57	24.7	24.7	8.0	8.0	30.8	30.8	89.6	89.6	6.3	6.2	4.1	5.0	5	7	91	94	822117	817778	<0.2	<0.2	1.4	1.7
						1.0	0.4	62	24.7		8.0		30.8		89.6		6.3		4.2		7		92				<0.2		1.4	
					Middle	6.2	0.2	81	24.9	24.9	8.0	8.0	31.6	31.6	87.0	87.0	6.0		4.6		7		94				<0.2		1.8	
						6.2	0.2	81	24.9		8.0		31.6		87.0		6.0		4.5		8		95				<0.2		1.8	
					Bottom	11.4	0.2	104	25.0	25.0	7.9	7.9	32.0	32.0	86.5	86.6	6.0	6.0	6.1		8		97				<0.2		1.8	
						11.4	0.2	104	25.0		7.9		32.0		86.6		6.0		6.2		8		97				<0.2		1.8	
IM1	Cloudy	Calm	06:54	7.3	Surface	1.0	0.5	191	24.5	24.5	8.0	8.0	30.2	30.2	93.3	93.3	6.6	6.6	6.0	8.4	7	9	92	95	818369	806470	<0.2	<0.2	1.5	1.2
						1.0	0.5	200	24.5		8.0		30.2		93.3		6.6		6.0		6		92				<0.2		1.5	
					Middle	3.7	0.4	189	24.6	24.6	8.0	8.0	30.5	30.5	93.0	93.0	6.5		7.6		6		95				<0.2		1.3	
						3.7	0.5	206	24.6		8.0		30.5		93.0		6.5		7.7		8		95				<0.2		1.2	
					Bottom	6.3	0.3	186	24.6	24.6	8.0	8.0	30.9	30.9	93.5	93.5	6.5	6.5	11.4		12		99				<0.2		0.9	
						6.3	0.3	186	24.6		8.0		30.9		93.5		6.5		11.4		12		99				<0.2		1.0	
IM2	Cloudy	Calm	06:59	8.1	Surface	1.0	0.5	199	24.3	24.3	8.0	8.0	30.0	30.0	93.6	93.6	6.6	6.6	6.7	10.8	8	11	91	95	818851	806170	<0.2	<0.2	1.2	1.2
						1.0	0.5	205	24.3		8.0		30.0		93.6		6.6		6.8		6		91				<0.2		1.2	
					Middle	4.1	0.4	211	24.5	24.5	8.0	8.0	30.3	30.3	93.0	93.0	6.5		10.2		9		95				<0.2		1.2	
						4.1	0.5	224	24.5		8.0		30.3		93.0		6.5		10.2		8		96				<0.2		1.3	
					Bottom	7.1	0.3	214	24.5	24.5	8.0	8.0	30.7	30.7	93.7	93.8	6.6	6.6	15.4		18		98				<0.2		1.1	
						7.1	0.3	232	24.5		8.0		30.7		93.8		6.6		15.5		17		97				<0.2		1.1	
IM3	Cloudy	Calm	07:06	8.2	Surface	1.0	0.5	202	24.3	24.3	8.0	8.0	30.0	30.0	93.5	93.5	6.6	6.6	6.9	9.6	6	10	92	95	819402	806016	<0.2	<0.2	1.4	1.3
						1.0	0.5	210	24.3		8.0		30.0		93.5		6.6		6.9		6		92				<0.2		1.3	
					Middle	4.1	0.3	207	24.4	24.4	8.0	8.0	30.3	30.3	93.2	93.2	6.6		10.1		10		94				<0.2		1.2	
						4.1	0.3	215	24.4		8.0		30.3		93.2		6.6		10.2		8		94				<0.2		1.3	
					Bottom	7.2	0.3	204	24.4	24.4	8.0	8.0	30.7	30.7	94.5	94.6	6.6	6.6	11.8		13		98				<0.2		1.2	
						7.2	0.4	209	24.4		8.0		30.7		94.6		6.6		11.8		14		98				<0.2		1.1	
IM4	Cloudy	Calm	07:13	7.6	Surface	1.0	0.6	197	24.2	24.2	7.9	7.9	29.2	29.2	93.8	93.8	6.7	6.7	6.1	12.0	8	12	91	94	819573	805031	<0.2	<0.2	1.4	1.4
						1.0	0.6	198	24.2		7.9		29.2		93.8		6.7		6.1		8		90				<0.2		1.5	
					Middle	3.8	0.6	200	24.3	24.3	7.9	7.9	29.3	29.3	93.1	93.1	6.6		9.0		8		93				<0.2		1.5	
						3.8	0.7	209	24.3		7.9		29.4		93.0		6.6		9.2		10		94				<0.2		1.4	
					Bottom	6.6	0.4	197	24.4	24.4	8.0	8.0	30.6	30.6	93.5	93.6	6.6	6.6	20.7		20		98				<0.2		1.1	
						6.6	0.5	202	24.4		8.0		30.6		93.6		6.6		20.7		20		98				<0.2		1.6	
IM5	Cloudy	Calm	07:25	6.4	Surface	1.0	0.7	195	24.2	24.2	7.9	7.9	28.3	28.3	92.0	92.0	6.6	6.5	7.7	12.6	8	10	92	94	820550	804947	<0.2	<0.2	2.4	2.0
						1.0	0.7	197	24.2		7.9		28.3		92.0		6.6		7.7		7		92				<0.2		2.4	
					Middle	3.2	0.5	208	24.3	24.3	7.9	7.9	30.0	30.0	90.8	90.8	6.4		13.0		11		94				<0.2		2.3	
						3.2	0.6	218	24.3		7.9		30.0		90.8		6.4		13.0		9		94				<0.2		2.0	
					Bottom	5.4	0.4	210	24.3	24.3	7.9	7.9	30.3	30.3	91.0	91.0	6.4	6.4	17.2		13		97				<0.2		1.7	
						5.4	0.4	222	24.3		7.9		30.3		91.0		6.4		17.2		14		96				<0.2		1.2	
IM6	Cloudy	Calm	07:33	6.5	Surface	1.0	0.5	201	24.2	24.2	7.9	7.9	28.7	28.7	91.9	91.9	6.5	6.5	7.2	10.1	7	11	91	95	821054	805823	<0.2	<0.2	2.0	1.7
						1.0	0.5	219	24.2		7.9		28.7		91.9		6.5		7.2		9		91				<0.2		1.9	
					Middle	3.3	0.4	216	24.4	24.4	7.9	7.9	30.2	30.2	90.9	90.9	6.4		10.8		10		95				<0.2		1.6	
						3.3	0.4	226	24.4		7.9		30.2		90.8		6.4		11.0		12		95				<0.2		1.6	
					Bottom	5.5	0.3	230	24.4	24.4	8.0	8.0	30.4	30.4	91.8	91.9	6.5	6.5	12.1		13		98				<0.2		1.4	
						5.5	0.3	245	24.4		8.0		30.4		91.9		6.5		12.0		14		98				<0.2		1.4	
IM7	Cloudy	Calm	07:41	8.0	Surface	1.0	0.3	216	24.4	24.4	7.9	7.9	29.3	29.3	92.4	92.4	6.5	6.5	6.6	8.5	9	12	90	95	821368	806833	<0.2	<0.2	1.8	1.6
						1.0	0.4	229	24.4		7.9		29.3		92.4		6.5		6.6		10		91				<0.2		1.8	
					Middle	4.0	0.3	225	24.5	24.5	8.0	8.0	30.3	30.3	92.3	92.3	6.5		9.1		8		96				<0.2		1.6	
						4.0	0.3	246	24.5		8.0		30.3		92.3		6.5		9.2		10		96				<0.2		1.4	
					Bottom	7.0	0.3	223	24.5	24.5	8.0	8.0	30.4	30.4	93.6	93.7	6.6	6.6	9.8		16		98				<0.2		1.5	
						7.0	0.3	238	24.5		8.0		30.4		93.7		6.6		9.9		17		98				<0.2		1.5	
IM8	Cloudy	Moderate	06:48	8.1	Surface	1.0	0.3	195	24.7	24.7	8.0	8.0	30.0	30.0	92.3	92.3	6.5	6.5	6.7	7.9	7	9	92	94	821695	807822	<0.2	<0.2	2.8	3.1
						1.0	0.3	201	24.7		8.0		30.0		92.3		6.5		6.8		5		91				<0.2		3.1	
					Middle	4.1	0.3	191	24.8	24.8	8.0	8.0	30.5	30.5	92.3	92.3	6.4		8.5		8		94				<0.2		3.5	
						4.1	0.3	204	24.8		8.0		30.5		92.3		6.4		8.5		10		94				<0.2		3.3	
					Bottom	7.1	0.2	209	24.8	24.8	8.0	8.0	30.8	30.8	93.4	93.4	6.5	6.5	8.5		12		96				<0.2		2.9	
						7.1	0.2	212	24.8		8.0		30.8		93.4		6.5		8.6		10		96				<0.2		3.0	

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 11 November 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	06:40	7.2	Surface	1.0	0.3	132	24.6	24.6	7.9	7.9	29.7	29.7	92.1	92.1	6.5	6.5	5.2	7.3	8	9	91	94	822109	808796	<0.2	<0.2	2.7	2.7
						1.0	0.3	137	24.6		7.9		29.8		92.1		6.5		5.2		6		92				<0.2		2.7	
					Middle	3.6	0.3	127	24.7	24.7	8.0	8.0	30.4	30.4	92.3	92.3	6.5		8.1		9		94				<0.2		2.7	
						3.6	0.3	135	24.7		8.0		30.4		92.3		6.5		8.1		9		94				<0.2		3.0	
					Bottom	6.2	0.2	135	24.7	24.7	8.0	8.0	30.6	30.6	92.9	92.9	6.5	6.5	8.5		10		97				<0.2		2.7	
						6.2	0.2	148	24.7		8.0		30.6		92.9		6.5		8.6		11		96				<0.2		2.5	
IM10	Cloudy	Moderate	06:31	7.0	Surface	1.0	0.5	118	24.8	24.8	8.0	8.0	30.1	30.1	93.0	93.0	6.5	6.5	5.7	6.8	6	9	92	94	822250	809829	<0.2	<0.2	2.0	2.1
						1.0	0.6	128	24.8		8.0		30.1		92.9		6.5		5.7		6		92				<0.2		1.9	
					Middle	3.5	0.4	117	24.8	24.8	8.0	8.0	30.5	30.5	92.9	93.0	6.5		6.3		8		94				<0.2		2.2	
						3.5	0.4	122	24.8		8.0		30.5		93.0		6.5		6.3		9		94				<0.2		2.2	
					Bottom	6.0	0.4	107	24.8	24.8	8.0	8.0	30.6	30.6	94.2	94.3	6.6	6.6	8.5		11		96				<0.2		2.2	
						6.0	0.4	107	24.8		8.0		30.6		94.3		6.6		8.4		12		96				<0.2		2.0	
IM11	Cloudy	Moderate	06:18	8.0	Surface	1.0	0.5	109	24.8	24.8	8.0	8.0	30.2	30.2	94.0	94.0	6.6	6.6	6.6	11.5	5	7	92	94	821530	810519	<0.2	<0.2	1.8	1.9
						1.0	0.5	110	24.8		8.0		30.2		94.0		6.6		6.6		7		91				<0.2		1.6	
					Middle	4.0	0.4	97	24.8	24.8	8.0	8.0	30.7	30.7	93.9	93.9	6.5		10.2		7		94				<0.2		1.7	
						4.0	0.4	102	24.8		8.0		30.7		93.9		6.5		10.4		7		94				<0.2		2.1	
					Bottom	7.0	0.3	94	24.8	24.8	8.0	8.0	30.8	30.8	94.5	94.5	6.6	6.6	17.5		6		96				<0.2		1.9	
						7.0	0.3	100	24.8		8.0		30.8		94.5		6.6		17.5		7		96				<0.2		2.0	
IM12	Cloudy	Moderate	06:09	8.9	Surface	1.0	0.4	100	24.8	24.8	8.0	8.0	30.3	30.3	93.8	93.8	6.5	6.5	6.6	11.3	5	6	91	94	821154	811530	<0.2	<0.2	1.4	1.4
						1.0	0.4	103	24.8		8.0		30.3		93.8		6.5		6.7		5		92				<0.2		1.5	
					Middle	4.5	0.4	99	24.9	24.9	8.0	8.0	30.7	30.7	93.8	93.8	6.5		11.5		6		94				<0.2		1.3	
						4.5	0.4	100	24.9		8.0		30.7		93.7		6.5		11.6		6		94				<0.2		1.5	
					Bottom	7.9	0.3	86	24.9	24.9	8.0	8.0	30.8	30.8	94.3	94.3	6.6	6.6	15.5		8		97				<0.2		1.3	
						7.9	0.3	91	24.9		8.0		30.8		94.3		6.6		15.6		7		97				<0.2		1.2	
SR2	Cloudy	Moderate	05:36	3.9	Surface	1.0	0.4	88	25.0	25.0	8.0	8.0	30.8	30.8	92.3	92.3	6.4	6.4	4.4	4.9	7	7	91	93	821475	814159	<0.2	<0.2	1.6	1.5
						1.0	0.4	93	25.0		8.0		30.8		92.3		6.4		4.5		7		92				<0.2		1.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.9	0.2	84	25.0	25.0	8.0	8.0	31.0	31.0	93.1	93.1	6.5	6.5	5.3		8		94				<0.2		1.3	
						2.9	0.2	87	25.0		8.0		31.0		93.1		6.5		5.4		7		94				<0.2		1.2	
SR3	Cloudy	Moderate	06:54	8.9	Surface	1.0	0.4	181	24.7	24.6	7.9	7.9	29.8	29.8	92.1	92.1	6.5	6.5	5.4	12.2	6	6	-	-	822145	807582	-	-	-	-
						1.0	0.4	195	24.6		7.9		29.8		92.1		6.5		5.5		4		-				-		-	
					Middle	4.5	0.3	175	24.7	24.7	8.0	8.0	30.1	30.1	91.3	91.3	6.4		10.1		5		-				-		-	
						4.5	0.3	182	24.7		8.0		30.1		91.3		6.4		10.1		6		-				-		-	
					Bottom	7.9	0.2	162	24.7	24.7	8.0	8.0	30.8	30.8	91.0	91.0	6.4	6.4	20.9		8		-				-		-	
						7.9	0.2	168	24.7		8.0		30.8		91.0		6.4		20.9		6		-				-		-	
SR4A	Cloudy	Calm	06:14	9.0	Surface	1.0	0.2	63	24.7	24.7	7.9	7.9	30.5	30.5	92.4	92.4	6.5	6.5	5.6	9.6	7	9	-	-	817168	807834	-	-	-	-
						1.0	0.2	64	24.7		7.9		30.5		92.4		6.5		5.6		6		-				-		-	
					Middle	4.5	0.2	58	24.7	24.7	7.9	7.9	30.7	30.7	92.3	92.3	6.4		8.0		9		-				-		-	
						4.5	0.2	60	24.7		7.9		30.7		92.3		6.4		8.1		9		-				-		-	
					Bottom	8.0	0.1	68	24.7	24.7	7.9	7.9	30.8	30.8	91.9	91.9	6.4	6.4	15.1		12		-				-		-	
						8.0	0.1	68	24.7		7.9		30.8		91.9		6.4		15.1		11		-				-		-	
SR5A	Cloudy	Calm	05:43	3.4	Surface	1.0	0.1	354	24.7	24.7	7.9	7.9	30.3	30.3	94.2	94.3	6.6	6.6	5.5	5.4	7	7	-	-	816583	810693	-	-	-	-
						1.0	0.1	356	24.7		7.9		30.3		94.3		6.6		5.5		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.4	0.1	22	24.7	24.7	7.9	7.9	30.3	30.3	97.5	97.6	6.8	6.8	5.2		7		-				-		-	
						2.4	0.1	22	24.7		7.9		30.3		97.6		6.8		5.2		7		-				-		-	
SR6	Cloudy	Calm	05:17	4.8	Surface	1.0	0.1	65	24.7	24.7	7.9	7.9	30.7	30.7	92.0	92.0	6.4	6.4	6.8	10.2	7	9	-	-	817872	814661	-	-	-	-
						1.0	0.1	66	24.7		7.9		30.7		92.0		6.4		6.8		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.1	59	24.9	24.9	7.9	7.9	31.3	31.3	91.5	91.5	6.3	6.3	13.6		10		-				-		-	
						3.8	0.1	61	24.9		7.9		31.3		91.5		6.3		13.6		11		-				-		-	
SR7	Cloudy	Moderate	04:29	18.2	Surface	1.0	0.3	76	25.0	25.0	7.9	7.9	31.9	31.9	85.9	85.9	5.9	5.9	2.7	3.2	4	8	-	-	823611	823728	-	-	-	-
						1.0	0.3	83	25.0		7.9		31.9		85.8		5.9		2.7		5		-				-		-	
					Middle	9.1	0.1	34	25.0	25.0	7.9	7.9	32.1	32.1	84.8	84.8	5.8		3.0		5		-				-		-	
						9.1	0.2	34	25.0		7.9		32.1		84.8		5.8		2.9		6		-				-		-	
					Bottom	17.2	0.2	352	25.1	25.1	7.8	7.8	32.3	32.3	85.1	85.2	5.9	5.9	3.9		14		-				-		-	
						17.2	0.2	352	25.1		7.8		32.3		85.2		5.9		3.8		15		-				-		-	
SR8	Cloudy	Moderate	05:58	3.5	Surface	1.0	-	-	25.3	25.2	8.0	8.0	30.4	30.4	93.2	93.2	6.5	6.5	4.1	4.3	7	6	-	-	820246	811418	-	-	-	-
						1.0	-	-	25.2		8.0		30.4		93.2		6.5		4.1		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.5	-	-	25.2	25.2	8.0	8.0	30.5	30.5	93.6	93.7	6.5	6.5	4.4		6		-				-		-	
						2.5	-	-	25.2		8.0		30.5		93.7		6.5		4.4		6		-				-		-	

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 11 November 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	14:02	8.3	Surface	1.0	0.4	51	24.7	24.7	8.0	8.0	30.1	30.1	93.7	93.7	6.6	6.6	8.7	14.3	9	15	92	96	815611	804229	<0.2	<0.2	1.2	1.3
						1.0	0.5	51	24.7		8.0		30.1		93.7		6.6		8.7		7		92				<0.2		1.4	
					Middle	4.2	0.5	42	24.6	24.6	8.0	8.0	30.3	30.3	92.6	92.6	6.5		12.3		12		96				<0.2		1.3	
						4.2	0.5	44	24.6		8.0		30.3		92.6		6.5		12.4		12		97				<0.2		1.4	
					Bottom	7.3	0.4	37	24.6	24.6	8.0	8.0	30.6	30.6	92.1	92.1	6.4	6.4	21.8		25		100				<0.2		1.1	
						7.3	0.5	38	24.6		8.0		30.6		92.1		6.4		21.8		26		100				<0.2		1.2	
C2	Cloudy	Moderate	12:46	10.9	Surface	1.0	0.1	226	25.0	25.0	7.9	7.9	27.6	27.5	88.1	88.1	6.2	6.2	4.8	10.9	6	7	92	95	825667	806945	<0.2	<0.2	3.9	3.5
						1.0	0.1	239	25.0		7.9		27.5		88.1		6.2		4.8		7		93				<0.2		3.8	
					Middle	5.5	0.2	309	25.0	25.0	7.9	7.9	29.6	29.6	88.1	88.1	6.2		8.8		8		94				<0.2		3.5	
						5.5	0.3	315	25.0		7.9		29.7		88.1		6.2		9.1		8		95				<0.2		3.8	
					Bottom	9.9	0.3	341	25.0	25.0	7.9	7.9	30.1	30.1	89.1	89.1	6.2	6.2	18.8		8		97				<0.2		3.0	
						9.9	0.3	314	25.0		7.9		30.1		89.1		6.2		18.8		7		97				<0.2		2.7	
C3	Cloudy	Moderate	14:46	11.8	Surface	1.0	0.3	255	25.1	25.1	8.0	8.0	31.4	31.4	89.9	89.9	6.2	6.2	7.6	14.7	4	6	92	94	822116	817809	<0.2	<0.2	1.3	1.5
						1.0	0.4	267	25.1		8.0		31.4		89.9		6.2		7.7		6		92				<0.2		1.6	
					Middle	5.9	0.3	254	25.0	25.0	8.0	8.0	31.7	31.7	88.2	88.2	6.1		17.5		5		94				<0.2		1.5	
						5.9	0.3	269	25.0		8.0		31.7		88.2		6.1		17.6		6		94				<0.2		1.9	
					Bottom	10.8	0.3	254	25.0	25.0	8.0	8.0	31.7	31.7	89.3	89.3	6.2	6.2	18.9		7		96				<0.2		1.4	
						10.8	0.3	268	25.0		8.0		31.7		89.3		6.2		18.9		7		97				<0.2		1.3	
IM1	Cloudy	Moderate	13:42	7.1	Surface	1.0	0.3	18	24.8	24.8	8.1	8.1	29.4	29.4	93.8	93.8	6.6	6.6	9.4	19.5	8	17	92	96	818354	806470	<0.2	<0.2	2.1	1.6
						1.0	0.3	19	24.8		8.1		29.4		93.8		6.6		9.5		8		92				<0.2		1.6	
					Middle	3.6	0.3	9	24.7	24.6	8.1	8.1	29.7	29.7	92.0	92.0	6.5		20.6		19		97				<0.2		1.5	
						3.6	0.4	9	24.6		8.1		29.7		92.0		6.5		20.9		19		97				<0.2		1.4	
					Bottom	6.1	0.3	357	24.7	24.7	8.1	8.1	29.7	29.7	92.1	92.1	6.5	6.5	28.2		25		100				<0.2		1.3	
						6.1	0.4	328	24.7		8.1		29.7		92.1		6.5		28.4		22		100				<0.2		1.6	
IM2	Cloudy	Moderate	13:36	8.0	Surface	1.0	0.4	44	24.8	24.8	8.0	8.0	29.3	29.3	93.3	93.3	6.6	6.6	6.5	7.8	6	8	91	95	818853	806172	<0.2	<0.2	1.4	1.7
						1.0	0.4	47	24.8		8.0		29.3		93.2		6.6		6.6		7		92				<0.2		1.8	
					Middle	4.0	0.4	40	24.7	24.7	8.0	8.0	29.4	29.4	91.9	91.9	6.5		7.9		7		96				<0.2		2.0	
						4.0	0.4	43	24.7		8.0		29.4		91.9		6.5		7.8		7		96				<0.2		1.8	
					Bottom	7.0	0.3	29	24.7	24.7	8.0	8.0	30.3	30.3	91.3	91.3	6.4	6.4	8.8		9		98				<0.2		1.6	
						7.0	0.3	30	24.7		8.0		30.3		91.3		6.4		8.9		11		99				<0.2		1.8	
IM3	Cloudy	Moderate	13:28	8.0	Surface	1.0	0.2	352	24.9	24.9	8.0	8.0	28.1	28.1	93.3	93.3	6.6	6.5	6.2	8.4	5	8	92	96	819385	805989	<0.2	<0.2	2.3	2.0
						1.0	0.2	324	24.9		8.0		28.1		93.3		6.6		6.3		6		92				<0.2		2.3	
					Middle	4.0	0.2	19	24.8	24.8	8.0	8.0	30.4	30.4	92.3	92.3	6.5		9.1		6		95				<0.2		2.3	
						4.0	0.2	19	24.8		8.0		30.4		92.3		6.4		9.1		6		95				<0.2		2.0	
					Bottom	7.0	0.1	8	24.8	24.8	8.0	8.0	30.5	30.5	92.2	92.2	6.4	6.4	9.7		12		100				<0.2		1.5	
						7.0	0.2	8	24.8		8.0		30.5		92.2		6.4		9.7		13		100				<0.2		1.5	
IM4	Cloudy	Moderate	13:20	7.3	Surface	1.0	0.3	351	24.8	24.8	8.0	8.0	28.8	28.8	92.0	92.0	6.5	6.5	7.5	15.0	4	8	91	95	819599	805024	<0.2	<0.2	2.6	2.4
						1.0	0.3	323	24.8		8.0		28.8		91.9		6.5		7.6		5		92				<0.2		2.3	
					Middle	3.7	0.3	6	24.6	24.6	8.0	8.0	29.5	29.5	91.2	91.2	6.4		14.0		8		94				<0.2		2.4	
						3.7	0.3	6	24.6		8.0		29.5		91.2		6.4		13.7		7		95				<0.2		2.7	
					Bottom	6.3	0.2	8	24.6	24.6	8.0	8.0	29.6	29.6	91.0	91.0	6.4	6.4	23.5		14		99				<0.2		2.0	
						6.3	0.3	8	24.6		8.0		29.6		91.0		6.4		23.5		12		100				<0.2		2.2	
IM5	Cloudy	Moderate	13:06	6.2	Surface	1.0	0.4	359	24.8	24.8	7.9	7.9	28.5	28.5	91.4	91.5	6.5	6.5	7.6	9.3	8	10	92	95	820554	804912	<0.2	<0.2	2.4	2.5
						1.0	0.4	330	24.8		7.9		28.5		91.5		6.5		7.6		7		92				<0.2		2.2	
					Middle	3.1	0.4	7	24.7	24.7	7.9	7.9	29.0	29.0	91.0	91.0	6.4		9.4		9		95				<0.2		2.7	
						3.1	0.4	7	24.7		7.9		29.0		91.0		6.4		9.5		10		95				<0.2		2.2	
					Bottom	5.2	0.4	10	24.7	24.6	7.9	7.9	29.3	29.3	90.9	90.9	6.4	6.4	10.8		15		98				<0.2		2.8	
						5.2	0.4	10	24.6		7.9		29.3		90.9		6.4		10.7		13		98				<0.2		2.6	
IM6	Cloudy	Moderate	12:57	6.2	Surface	1.0	0.2	325	25.0	25.0	7.9	7.9	27.4	27.4	90.8	90.8	6.4	6.4	6.1	8.9	5	9	92	96	821057	805803	<0.2	<0.2	3.4	3.1
						1.0	0.3	338	25.0		7.9		27.4		90.8		6.4		6.2		7		92				<0.2		3.1	
					Middle	3.1	0.2	355	24.8	24.8	7.9	7.9	27.9	27.9	90.3	90.3	6.4		9.5		9		96				<0.2		2.9	
						3.1	0.2	327	24.8		7.9		27.9		90.3		6.4		9.5		7		96				<0.2		3.1	
					Bottom	5.2	0.2	3	24.8	24.8	7.9	7.9	28.0	28.0	91.1	91.1	6.4	6.4	11.1		15		99				<0.2		3.1	
						5.2	0.3	3	24.8		7.9		28.0		91.1		6.4		11.1		12		99				<0.2		2.7	
IM7	Cloudy	Moderate	12:47	7.6	Surface	1.0	0.2	264	24.9	24.9	7.9	7.9	27.2	27.2	90.3	90.3	6.4	6.4	4.1	5.3	6	8	92	96	821338	806864	<0.2	<0.2	3.9	3.6
						1.0	0.2	284	24.9		7.9		27.2		90.3		6.4		4.1		5		92				<0.2		3.9	
					Middle	3.8	0.2	297	24.8	24.8	7.9	7.9	27.9	27.9	90.2	90.2	6.4		5.8		8		96				<0.2		3.7	
						3.8	0.2	322	24.8		7.9		27.9		90.2		6.4		5.9		9		97				<0.2		3.2	
					Bottom	6.6	0.2	311	24.8	24.8	7.9	7.9	28.0	28.0	90.6	90.7	6.4	6.4	5.9		8		99				<0.2		3.7	
						6.6	0.2	334	24.8		7.9		28.0		90.7		6.4		5.9		9		100				<0.2		3.0	
IM8	Cloudy	Moderate	13:12	7.7	Surface	1.0	0.1	215	25.2	25.2	7.9	7.9	27.1	27.1	92.1	92.1	6.5	6.5	2.8	3.1	4	6	93	96	821715	807818	<0.2	<0.2	2.9	2.7
						1.0	0.1	232	25.2		7.9		27.1		92.1		6.5		2.8		6		93				<0.2		2.5	
					Middle	3.9	0.1	311	25.1	25.1	7.9	7.9	27.6	27.6	91.8	91.8	6.5		2.7		6		95				<0.2		2.6	
						3.9	0.1	318	25.1		7.9		27.6		91.8		6.5		2.8		4		96				<0.2		2.7	
					Bottom	6.7	0.1	334	25.1	25.1	7.9	7.9	27.8	27.8	92.9	92.9	6.5	6.5	3.8		6		98				<0.2		2.6	
						6.7	0.1	351	25.1		7.9		27.9		92.9		6.5		3.9		7		98				<0.2		2.7	

DA: Depth-Averaged

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

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 11 November 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	13:21	6.8	Surface	1.0	0.3	329	25.3	25.3	7.9	7.9	28.0	28.0	93.2	93.2	6.5	6.5	2.7	3.9	5	7	92	95	822118	808784	<0.2	<0.2	2.8	2.7
						1.0	0.3	344	25.3		7.9		28.0		93.2		6.5		2.6		5		93				<0.2		2.4	
					Middle	3.4	0.2	326	25.2	25.2	7.9	7.9	28.1	28.1	92.5	92.5	6.5		4.4		7		95				<0.2		3.1	
						3.4	0.2	330	25.2		7.9		28.1		92.5		6.5		4.4		6		94				<0.2		2.9	
					Bottom	5.8	0.3	317	25.1	25.1	7.9	7.9	28.5	28.4	93.5	93.5	6.6	6.6	4.6		9		97				<0.2		2.5	
						5.8	0.3	317	25.1		7.9		28.4		93.5		6.6		4.6		11		97				<0.2		2.5	
IM10	Cloudy	Moderate	13:30	7.8	Surface	1.0	0.5	313	25.3	25.3	7.9	7.9	29.2	29.2	94.7	94.7	6.6	6.6	3.8	7.7	4	6	91	94	822248	809867	<0.2	<0.2	3.2	3.1
						1.0	0.5	338	25.3		7.9		29.2		94.7		6.6		3.8		4		92				<0.2		3.1	
					Middle	3.9	0.4	313	25.1	25.1	8.0	8.0	29.9	29.9	93.5	93.5	6.5		8.0		6		94				<0.2		3.3	
						3.9	0.4	330	25.1		8.0		29.9		93.5		6.5		8.0		7		94				<0.2		2.9	
					Bottom	6.8	0.3	305	25.1	25.1	8.0	8.0	30.0	30.0	94.1	94.2	6.6	6.6	11.1		6		97				<0.2		3.1	
						6.8	0.3	317	25.1		8.0		30.0		94.2		6.6		11.2		8		96				<0.2		2.9	
IM11	Cloudy	Moderate	13:42	7.3	Surface	1.0	0.5	292	25.4	25.4	8.0	8.0	30.0	30.0	95.5	95.5	6.6	6.6	7.0	13.5	5	6	92	95	821500	810572	<0.2	<0.2	2.5	2.8
						1.0	0.5	298	25.4		8.0		30.0		95.5		6.6		7.1		5		92				<0.2		2.5	
					Middle	3.7	0.4	294	24.9	24.9	8.0	8.0	30.5	30.5	92.8	92.9	6.5		13.6		4		94				<0.2		2.8	
						3.7	0.4	294	24.9		8.0		30.5		92.9		6.5		13.6		4		95				<0.2		2.8	
					Bottom	6.3	0.3	304	24.9	24.9	8.0	8.0	30.6	30.6	92.9	92.9	6.5	6.5	19.8		10		97				<0.2		2.7	
						6.3	0.3	308	24.9		8.0		30.6		92.9		6.5		19.8		8		98				<0.2		3.3	
IM12	Cloudy	Moderate	13:51	8.6	Surface	1.0	0.5	274	25.0	25.0	8.0	8.0	31.0	31.0	93.0	93.0	6.4	6.4	9.9	12.7	8	11	92	95	821134	811526	<0.2	<0.2	3.2	3.3
						1.0	0.5	299	25.0		8.0		31.0		93.0		6.4		9.9		9		92				<0.2		2.9	
					Middle	4.3	0.4	278	25.0	25.0	8.0	8.0	31.2	31.2	92.8	92.9	6.4		12.5		11		94				<0.2		3.4	
						4.3	0.4	284	25.0		8.0		31.2		92.9		6.4		12.5		13		95				<0.2		3.3	
					Bottom	7.6	0.3	274	25.0	25.0	8.0	8.0	31.2	31.2	93.6	93.6	6.5	6.5	15.7		13		97				<0.2		3.5	
						7.6	0.3	278	25.0		8.0		31.2		93.6		6.5		15.9		12		97				<0.2		3.2	
SR2	Cloudy	Moderate	14:21	4.4	Surface	1.0	0.2	323	25.1	25.1	8.0	8.0	30.9	30.9	94.6	94.6	6.6	6.6	11.0	11.4	10	12	92	93	821448	814195	<0.2	<0.2	3.8	3.8
						1.0	0.2	345	25.1		8.0		30.9		94.6		6.6		10.8		9		92				<0.2		3.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.1	327	25.1	25.1	8.0	8.0	30.9	30.9	95.7	95.8	6.6	6.6	11.8		14		94				<0.2		3.8	
						3.4	0.1	353	25.1		8.0		30.9		95.8		6.6		11.9		14		95				<0.2		3.8	
SR3	Cloudy	Moderate	13:06	8.4	Surface	1.0	0.2	226	25.1	25.1	7.9	7.9	27.3	27.3	90.4	90.4	6.4	6.4	3.3	4.1	5	7	-	-	822155	807580	-	-	-	-
						1.0	0.2	235	25.1		7.9		27.3		90.4		6.4		3.4		6		-				-		-	
					Middle	4.2	0.1	288	25.0	25.0	7.9	7.9	28.2	28.2	90.0	90.0	6.3		4.6		8		-				-		-	
						4.2	0.1	295	25.0		7.9		28.2		90.0		6.3		4.6		8		-				-		-	
					Bottom	7.4	0.1	337	25.0	25.0	7.9	7.9	28.5	28.5	90.6	90.7	6.4	6.4	4.4		8		-				-		-	
						7.4	0.1	358	25.0		7.9		28.5		90.7		6.4		4.5		8		-				-		-	
SR4A	Cloudy	Calm	14:21	8.7	Surface	1.0	0.0	218	25.2	25.2	7.9	7.9	30.6	30.6	92.0	92.0	6.4	6.4	12.6	13.2	16	16	-	-	817161	807783	-	-	-	-
						1.0	0.0	234	25.2		7.9		30.6		92.0		6.4		12.5		16		-				-		-	
					Middle	4.4	0.1	243	25.2	25.2	7.9	7.9	30.7	30.7	90.8	90.8	6.3		13.3		16		-				-		-	
						4.4	0.1	257	25.2		7.9		30.7		90.8		6.3		13.3		15		-				-		-	
					Bottom	7.7	0.1	243	25.1	25.1	7.9	7.9	30.7	30.7	90.4	90.5	6.3	6.3	14.1		17		-				-		-	
						7.7	0.1	247	25.1		7.9		30.7		90.5		6.3		13.6		16		-				-		-	
SR5A	Cloudy	Calm	14:38	4.6	Surface	1.0	0.2	304	25.2	25.2	7.9	7.9	30.8	30.8	91.9	91.9	6.4	6.4	14.5	17.4	16	17	-	-	816568	810668	-	-	-	-
						1.0	0.2	328	25.2		7.9		30.8		91.9		6.4		14.6		14		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.2	315	25.1	25.1	7.9	7.9	30.9	30.9	91.3	91.4	6.3	6.3	20.1		19		-				-		-	
						3.6	0.2	339	25.1		7.9		30.9		91.4		6.3		20.2		20		-				-		-	
SR6	Cloudy	Calm	15:06	4.3	Surface	1.0	0.1	218	25.0	25.0	8.0	8.0	30.4	30.4	98.1	98.1	6.8	6.8	10.6	13.7	9	10	-	-	817882	814637	-	-	-	-
						1.0	0.1	226	25.0		8.0		30.4		98.0		6.8		10.7		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.1	184	25.0	25.0	8.0	8.0	30.4	30.4	93.8	93.8	6.5	6.5	16.7		12		-				-		-	
						3.3	0.1	187	25.0		8.0		30.4		93.8		6.5		16.7		12		-				-		-	
SR7	Cloudy	Moderate	15:20	18.0	Surface	1.0	0.1	75	25.1	25.1	8.0	8.0	31.8	31.8	87.0	87.0	6.0	6.0	6.3	10.8	7	9	-	-	823662	823734	-	-	-	-
						1.0	0.1	75	25.1		8.0		31.8		87.0		6.0		6.5		8		-				-		-	
					Middle	9.0	0.2	98	25.1	25.1	8.0	8.0	32.0	32.0	85.7	85.7	5.9		11.4		10		-				-		-	
						9.0	0.2	101	25.1		8.0		32.0		85.7		5.9		11.4		9		-				-		-	
					Bottom	17.0	0.1	105	25.1	25.1	7.9	7.9	32.0	32.0	86.1	86.2	5.9	5.9	14.6		10		-				-		-	
						17.0	0.1	111	25.1		7.9		32.0		86.2		5.9		14.7		11		-				-		-	
SR8	Cloudy	Moderate	14:02	3.7	Surface	1.0	-	-	25.4	25.4	8.0	8.0	29.7	29.7	95.5	95.5	6.6	6.6	11.4	11.9	11	12	-	-	820246	811418	-	-	-	-
						1.0	-	-	25.4		8.0		29.7		95.5		6.6		11.4		12		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.7	-	-	25.3	25.3	8.0	8.0	29.9	29.9	96.0	96.1	6.7	6.7	12.3		13		-				-		-	
						2.7	-	-	25.3		8.0		29.9		96.1		6.7		12.4		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 14 November 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	09:59	8.6	Surface	1.0	0.2	203	24.5	24.5	8.0	8.0	31.2	31.2	93.6	93.6	6.5	6.5	4.0	7.8	5	7	90	95	815604	804241	<0.2	<0.2	1.0	0.9
						1.0	0.2	204	24.5		8.0		31.2		93.6		6.5		4.0		6		91				<0.2		1.0	
					Middle	4.3	0.2	226	24.4	24.4	8.0	8.0	31.5	31.5	92.6	92.6	6.5		5.7		5		95				<0.2		1.0	
						4.3	0.3	246	24.4		8.0		31.5		92.6		6.5		5.8		6		95				<0.2		1.0	
					Bottom	7.6	0.3	220	24.4	24.4	8.0	8.0	31.7	31.7	92.0	92.0	6.4	6.4	13.5		10		98				<0.2		0.8	
						7.6	0.3	237	24.4		8.0		31.7		92.0		6.4		13.5		8		98				<0.2		0.8	
C2	Cloudy	Moderate	11:02	11.2	Surface	1.0	0.8	168	24.8	24.8	7.9	7.9	28.4	28.4	88.4	88.3	6.2	6.1	5.1	8.6	5	10	91	94	825696	806925	<0.2	<0.2	2.2	2.0
						1.0	0.8	169	24.8		7.9		28.4		88.2		6.2		5.1		5		92				<0.2		2.1	
					Middle	5.6	0.5	169	24.8	24.8	7.9	7.9	30.5	30.5	86.1	86.1	6.0		7.9		11		94				<0.2		2.0	
						5.6	0.5	175	24.8		7.9		30.5		86.1		6.0		8.0		10		94				<0.2		2.3	
					Bottom	10.2	0.2	144	24.8	24.8	7.9	7.9	30.6	30.6	87.9	88.2	6.1	6.2	12.8		13		97				<0.2		1.6	
						10.2	0.3	157	24.8		7.9		30.6		88.4		6.2		12.6		13		97				<0.2		1.8	
C3	Cloudy	Moderate	08:56	12.1	Surface	1.0	0.3	62	24.5	24.5	8.0	8.0	30.0	30.0	87.6	87.5	6.2	6.1	2.9	2.4	6	6	91	94	822125	817805	<0.2	<0.2	1.3	1.4
						1.0	0.3	66	24.5		8.0		30.0		87.4		6.1		2.9		5		91				<0.2		1.3	
					Middle	6.1	0.2	90	24.8	24.8	7.9	7.9	30.8	30.8	85.9	85.9	6.0		2.0		6		94				<0.2		1.5	
						6.1	0.2	90	24.8		7.9		30.8		85.9		6.0		2.1		6		94				<0.2		1.4	
					Bottom	11.1	0.2	69	24.8	24.8	7.9	7.9	31.0	31.0	87.2	87.3	6.1	6.1	2.1		5		96				<0.2		1.4	
						11.1	0.2	72	24.8		7.9		31.0		87.4		6.1		2.1		6		96				<0.2		1.4	
IM1	Fine	Moderate	10:19	7.3	Surface	1.0	0.3	186	24.4	24.4	8.0	8.0	31.0	31.0	92.6	92.6	6.5	6.5	6.0	11.5	8	12	91	94	818378	806429	<0.2	<0.2	0.9	0.9
						1.0	0.3	189	24.4		8.0		31.0		92.6		6.5		6.0		8		92				<0.2		0.9	
					Middle	3.7	0.2	175	24.4	24.4	8.0	8.0	31.5	31.5	91.8	91.8	6.4		10.8		9		93				<0.2		1.0	
						3.7	0.3	183	24.4		8.0		31.5		91.8		6.4		10.8		9		93				<0.2		0.9	
					Bottom	6.3	0.3	182	24.4	24.4	8.0	8.0	31.6	31.6	92.2	92.2	6.4	6.4	17.6		18		96				<0.2		0.7	
						6.3	0.3	189	24.4		8.0		31.6		92.2		6.4		17.6		19		96				<0.2		0.7	
IM2	Fine	Moderate	10:25	8.0	Surface	1.0	0.3	200	24.4	24.4	8.0	8.0	30.7	30.7	92.6	92.6	6.5	6.5	6.7	9.2	9	11	91	95	818863	806211	<0.2	<0.2	1.0	1.0
						1.0	0.3	214	24.4		8.0		30.7		92.6		6.5		6.8		8		91				<0.2		1.0	
					Middle	4.0	0.3	178	24.3	24.3	8.0	8.0	31.1	31.1	91.8	91.8	6.4		10.0		8		95				<0.2		1.1	
						4.0	0.4	191	24.3		8.0		31.1		91.8		6.4		10.0		10		96				<0.2		1.0	
					Bottom	7.0	0.3	180	24.4	24.4	8.0	8.0	31.6	31.6	91.9	92.0	6.4	6.4	10.9		13		98				<0.2		0.8	
						7.0	0.3	196	24.4		8.0		31.6		92.0		6.4		11.0		15		98				<0.2		0.8	
IM3	Fine	Moderate	10:33	8.3	Surface	1.0	0.4	204	24.5	24.5	8.0	8.0	30.8	30.8	93.1	93.1	6.5	6.5	12.8	17.9	14	18	91	94	819397	806026	<0.2	<0.2	0.9	1.0
						1.0	0.4	217	24.5		8.0		30.8		93.1		6.5		12.9		13		91				<0.2		0.9	
					Middle	4.2	0.3	200	24.4	24.4	8.0	8.0	31.1	31.1	92.1	92.1	6.5		18.8		16		93				<0.2		1.0	
						4.2	0.3	202	24.4		8.0		31.1		92.1		6.5		18.9		16		93				<0.2		1.2	
					Bottom	7.3	0.3	192	24.4	24.4	8.0	8.0	31.3	31.3	92.5	92.5	6.5	6.5	22.1		26		98				<0.2		0.8	
						7.3	0.4	199	24.4		8.0		31.3		92.5		6.5		22.1		25		98				<0.2		1.0	
IM4	Fine	Moderate	10:40	7.6	Surface	1.0	0.5	196	24.4	24.4	8.0	8.0	30.2	30.2	93.6	93.6	6.6	6.6	5.4	9.0	8	9	92	94	819558	805028	<0.2	<0.2	1.1	1.0
						1.0	0.5	215	24.4		8.0		30.2		93.6		6.6		5.5		6		92				<0.2		1.1	
					Middle	3.8	0.4	193	24.3	24.3	8.0	8.0	30.7	30.7	92.1	92.1	6.5		8.5		7		94				<0.2		1.2	
						3.8	0.5	201	24.3		8.0		30.7		92.1		6.5		8.6		7		93				<0.2		1.1	
					Bottom	6.6	0.3	205	24.4	24.4	8.0	8.0	31.4	31.4	91.5	91.6	6.4	6.4	12.8		13		97				<0.2		0.8	
						6.6	0.3	216	24.4		8.0		31.4		91.6		6.4		12.9		13		97				<0.2		0.9	
IM5	Fine	Moderate	10:51	6.6	Surface	1.0	0.4	194	24.5	24.5	7.9	7.9	29.3	29.3	93.2	93.2	6.6	6.6	4.7	7.9	5	8	91	95	820558	804918	<0.2	<0.2	1.8	1.4
						1.0	0.5	206	24.5		7.9		29.3		93.2		6.6		4.7		6		92				<0.2		1.7	
					Middle	3.3	0.4	187	24.2	24.2	8.0	8.0	30.0	30.0	92.0	92.0	6.5		7.2		9		93				<0.2		1.4	
						3.3	0.4	204	24.2		8.0		30.0		92.0		6.5		7.2		9		95				<0.2		1.4	
					Bottom	5.6	0.3	182	24.4	24.4	8.0	8.0	30.9	30.9	91.9	91.9	6.4	6.4	11.7		10		98				<0.2		1.0	
						5.6	0.3	199	24.4		8.0		30.9		91.9		6.4		11.8		10		99				<0.2		1.0	
IM6	Cloudy	Moderate	10:59	6.6	Surface	1.0	0.4	191	24.5	24.5	7.9	7.9	29.3	29.3	92.7	92.7	6.5	6.5	4.8	8.6	4	6	92	95	821065	805826	<0.2	<0.2	1.6	1.5
						1.0	0.4	194	24.5		7.9		29.3		92.7		6.5		4.8		4		92				<0.2		1.4	
					Middle	3.3	0.4	179	24.3	24.3	8.0	8.0	29.9	29.9	92.2	92.2	6.5		7.5		6		94				<0.2		1.6	
						3.3	0.4	191	24.3		8.0		29.9		92.2		6.5		7.5		5		95				<0.2		1.6	
					Bottom	5.6	0.3	185	24.4	24.4	8.0	8.0	30.8	30.8	92.6	92.6	6.5	6.5	13.3		8		97				<0.2		1.2	
						5.6	0.3	193	24.4		8.0		30.8		92.6		6.5		13.4		9		97				<0.2		1.4	
IM7	Cloudy	Moderate	11:08	8.0	Surface	1.0	0.5	218	24.7	24.7	7.9	7.9	28.1	28.1	90.7	90.7	6.4	6.4	3.7	7.3	4	5	91	95	821371	806854	<0.2	<0.2	2.2	1.8
						1.0	0.5	235	24.7		7.9		28.1		90.7		6.4		3.8		3		91				<0.2		2.1	
					Middle	4.0	0.2	191	24.3	24.3	7.9	7.9	29.7	29.7	90.6	90.6	6.4		8.1		4		95				<0.2		2.0	
						4.0	0.3	208	24.3		7.9		29.7		90.6		6.4		8.1		3		95				<0.2		2.0	
					Bottom	7.0	0.2	166	24.3	24.3	8.0	8.0	30.7	30.7	91.0	91.0	6.4	6.4	10.1		9		97				<0.2		1.3	
						7.0	0.2	179	24.3		8.0		30.7		91.0		6.4		10.1		8		98				<0.2		1.2	
IM8	Cloudy	Moderate	10:31	8.1	Surface	1.0	0.3	183	24.9	24.9	7.9	7.9	28.6	28.6	90.1	90.1	6.3	6.3	4.1	8.3	3	5	91	94	821680	807816	<0.2	<0.2	1.4	2.0
						1.0	0.3	184	24.9		7.9		28.6		90.1		6.3		4.2		4		92				<0.2		1.6	
					Middle	4.1	0.2	146	24.6	24.6	8.0	8.0	30.2	30.2	90.1	90.2	6.3		8.3		3		93				<0.2		2.3	
						4.1	0.2	150	24.6		8.0		30.2		90.2		6.3		8.3		5		94				<0.2		2.3	
					Bottom	7.1	0.1	98	24.6	24.6	8.0	8.0	31.2	31.2	90.4	90.4	6.3	6.3	12.5		9		96				<0.2		2.0	
						7.1	0.1	99	24.6		8.0		31.2		90.4		6.3		12.6		8		96				<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 14 November 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	10:21	7.4	Surface	1.0	0.3	149	24.8	24.8	7.9	7.9	29.5	29.5	90.5	90.6	6.4	6.4	4.2	6.5	7	8	93	96	822113	808821	<0.2	<0.2	1.5	1.6
						1.0	0.3	153	24.8		7.9		29.5		90.6		6.4		4.0		7		94				<0.2		1.7	
					Middle	3.7	0.3	124	24.6	24.6	8.0	8.0	30.0	30.0	90.4	90.5	6.3		5.4		9		96				<0.2		1.8	
						3.7	0.3	126	24.6		8.0		30.0		90.5		6.4		5.4		8		96				<0.2		1.7	
					Bottom	6.4	0.2	95	24.6	24.6	8.0	8.0	31.1	31.1	91.3	91.4	6.4	6.4	10.0		7		98				<0.2		1.4	
						6.4	0.2	97	24.6		8.0		31.1		91.5		6.4		10.2		8		98				<0.2		1.5	
IM10	Cloudy	Moderate	10:13	6.2	Surface	1.0	0.5	128	24.8	24.8	7.9	7.9	29.0	29.0	90.8	90.8	6.4	6.4	3.5	7.7	4	6	92	95	822254	809808	<0.2	<0.2	2.1	1.9
						1.0	0.5	140	24.8		7.9		29.0		90.7		6.4		3.4		4		92				<0.2		2.2	
					Middle	3.1	0.4	116	24.7	24.7	8.0	8.0	29.6	29.6	90.3	90.3	6.3		5.2		5		96				<0.2		1.9	
						3.1	0.5	123	24.7		8.0		29.6		90.3		6.3		5.6		5		96				<0.2		1.9	
					Bottom	5.2	0.4	94	24.6	24.6	8.0	8.0	30.2	30.2	90.8	90.8	6.4	6.4	14.2		8		98				<0.2		1.8	
						5.2	0.4	94	24.6		8.0		30.2		90.8		6.4		14.5		9		98				<0.2		1.7	
IM11	Cloudy	Moderate	10:00	7.9	Surface	1.0	0.3	108	24.6	24.6	8.0	8.0	29.6	29.6	90.5	90.5	6.4	6.4	7.3	11.2	7	8	91	94	821502	810574	<0.2	<0.2	2.0	2.2
						1.0	0.4	111	24.6		8.0		29.6		90.5		6.4		7.1		8		92				<0.2		2.0	
					Middle	4.0	0.4	108	24.6	24.6	8.0	8.0	29.6	29.6	90.4	90.4	6.4		8.1		9		93				<0.2		2.0	
						4.0	0.4	112	24.6		8.0		29.6		90.4		6.4		8.1		8		93				<0.2		2.3	
					Bottom	6.9	0.3	101	24.6	24.6	8.0	8.0	30.6	30.6	92.7	93.0	6.5	6.5	18.3		10		96				<0.2		2.5	
						6.9	0.3	102	24.6		8.0		30.6		93.2		6.5		18.4		8		96				<0.2		2.5	
IM12	Cloudy	Moderate	09:50	8.9	Surface	1.0	0.5	111	24.6	24.6	8.0	8.0	29.0	29.0	90.2	90.2	6.4	6.4	5.8	11.4	7	8	91	94	821185	811542	<0.2	<0.2	2.2	2.2
						1.0	0.5	119	24.6		8.0		29.0		90.2		6.4		5.8		7		91				<0.2		2.1	
					Middle	4.5	0.5	103	24.6	24.6	8.0	8.0	29.2	29.2	89.1	89.2	6.3		8.1		7		94				<0.2		2.8	
						4.5	0.5	109	24.6		8.0		29.2		89.2		6.3		8.3		7		94				<0.2		2.8	
					Bottom	7.9	0.3	106	24.6	24.6	8.0	8.0	29.7	29.7	89.4	89.4	6.3	6.3	20.1		10		96				<0.2		1.6	
						7.9	0.3	109	24.6		8.0		29.7		89.4		6.3		20.1		8		96				<0.2		1.6	
SR2	Cloudy	Moderate	09:21	4.2	Surface	1.0	0.3	85	24.6	24.6	7.9	7.9	29.8	29.8	88.0	87.9	6.2	6.2	4.1	4.8	6	6	91	93	821434	814184	<0.2	<0.2	1.3	1.4
						1.0	0.3	87	24.6		7.9		29.8		87.8		6.2		4.2		7		91				<0.2		1.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.2	66	24.7	24.7	7.9	7.9	30.2	30.2	88.0	88.2	6.2	6.2	5.5		6		94				<0.2		1.4	
						3.2	0.2	70	24.7		7.9		30.2		88.3		6.2		5.5		6		94				<0.2		1.5	
SR3	Cloudy	Moderate	10:38	9.0	Surface	1.0	0.4	191	25.0	25.0	7.9	7.9	28.7	28.7	89.7	89.7	6.3	6.3	3.0	6.3	4	5	-	-	822155	807558	-	-	-	-
						1.0	0.5	206	25.0		7.9		28.7		89.7		6.3		3.3		4		-				-		-	
					Middle	4.5	0.4	194	24.6	24.6	8.0	8.0	30.2	30.2	89.5	89.6	6.3		6.1		5		-				-		-	
						4.5	0.4	202	24.6		8.0		30.2		89.6		6.3		6.4		6		-				-		-	
					Bottom	8.0	0.0	195	24.6	24.6	8.0	8.0	30.7	30.7	90.3	90.3	6.3	6.3	9.5		6		-				-		-	
						8.0	0.0	212	24.6		8.0		30.7		90.3		6.3		9.4		6		-				-		-	
SR4A	Cloudy	Calm	09:40	9.4	Surface	1.0	0.2	70	24.3	24.3	8.0	8.0	31.3	31.3	92.1	92.1	6.5	6.5	7.8	8.6	8	9	-	-	817166	807801	-	-	-	-
						1.0	0.3	71	24.3		8.0		31.3		92.1		6.5		7.8		10		-				-		-	
					Middle	4.7	0.2	73	24.3	24.3	8.0	8.0	31.3	31.3	91.9	92.0	6.4		8.6		9		-				-		-	
						4.7	0.3	78	24.3		8.0		31.3		92.0		6.4		8.7		8		-				-		-	
					Bottom	8.4	0.2	74	24.3	24.3	8.0	8.0	31.3	31.3	92.3	92.3	6.5	6.5	9.3		10		-				-		-	
						8.4	0.2	74	24.3		8.0		31.3		92.3		6.5		9.3		10		-				-		-	
SR5A	Cloudy	Calm	09:20	4.3	Surface	1.0	0.0	35	24.2	24.2	7.9	7.9	30.4	30.4	88.9	88.9	6.3	6.3	5.8	6.0	8	10	-	-	816568	810709	-	-	-	-
						1.0	0.0	38	24.2		7.9		30.4		88.9		6.3		5.9		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.0	49	24.1	24.1	7.9	7.9	30.5	30.5	90.8	90.8	6.4	6.4	6.2		12		-				-		-	
						3.3	0.0	52	24.1		7.9		30.5		90.8		6.4		6.2		13		-				-		-	
SR6	Cloudy	Calm	08:56	4.4	Surface	1.0	0.1	72	24.3	24.3	7.9	7.9	29.3	29.3	88.5	88.5	6.3	6.3	5.1	9.5	7	8	-	-	817883	814651	-	-	-	-
						1.0	0.1	72	24.3		7.9		29.3		88.5		6.3		5.1		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.1	62	24.3	24.3	7.9	7.9	29.4	29.4	90.5	90.5	6.4	6.4	13.8		9		-				-		-	
						3.4	0.1	66	24.3		7.9		29.4		90.5		6.4		13.8		10		-				-		-	
SR7	Cloudy	Moderate	08:23	22.0	Surface	1.0	0.1	88	24.9	24.9	7.9	7.9	31.4	31.4	83.0	83.1	5.8	5.8	2.8	3.2	5	7	-	-	823654	823749	-	-	-	-
						1.0	0.1	91	24.9		7.9		31.4		83.1		5.8		2.9		5		-				-		-	
					Middle	11.0	0.1	90	24.8	24.8	7.9	7.9	31.6	31.6	83.4	83.4	5.8		2.4		6		-				-		-	
						11.0	0.1	96	24.8		7.9		31.6		83.4		5.8		2.5		5		-				-		-	
					Bottom	21.0	0.0	73	24.9	24.9	7.9	7.9	31.8	31.8	83.5	83.6	5.8	5.8	4.1		11		-				-		-	
						21.0	0.0	74	24.9		7.9		31.8		83.6		5.8		4.2		12		-				-		-	
SR8	Cloudy	Moderate	09:39	3.5	Surface	1.0	-	-	24.8	24.8	8.0	8.0	29.4	29.4	90.1	90.1	6.3	6.3	6.5	6.5	9	8	-	-	820246	811418	-	-	-	-
						1.0	-	-	24.8		8.0		29.4		90.0		6.3		6.4		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.5	-	-	24.7	24.8	8.0	8.0	29.4	29.4	90.6	90.7	6.4	6.4	6.6		8		-				-		-	
						2.5	-	-	24.8		8.0		29.4		90.7		6.4		6.5		7		-				-		-	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 14 November 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	16:09	8.2	Surface	1.0	0.6	36	24.7	24.7	8.0	8.0	30.3	30.3	93.8	93.8	6.6	6.6	9.0	21.2	5	17	91	95	815600	804221	<0.2	<0.2	1.4	1.0
						1.0	0.7	39	24.7		8.0		30.3		93.8		6.6		9.0		5		91				<0.2		1.3	
					Middle	4.1	0.6	31	24.5	24.5	8.0	8.0	31.4	31.4	92.8	92.8	6.5		24.4		8		96				<0.2		0.9	
						4.1	0.6	31	24.5		8.0		31.4		92.8		6.5		24.5		7		96				<0.2		0.8	
					Bottom	7.2	0.5	32	24.5	24.5	8.0	8.0	31.4	31.4	93.0	93.0	6.5	6.5	30.1		37		98				<0.2		0.7	
						7.2	0.5	32	24.5		8.0		31.4		93.0		6.5		30.1		38		99				<0.2		0.7	
C2	Cloudy	Moderate	15:01	10.3	Surface	1.0	0.5	189	24.9	24.9	7.8	7.8	25.5	25.5	85.0	85.0	6.1	6.1	5.0	8.5	6	5	91	94	825664	806933	<0.2	<0.2	3.4	3.3
						1.0	0.5	205	24.9		7.8		25.6		85.0		6.1		5.1		6		91				<0.2		3.4	
					Middle	5.2	0.3	184	24.9	24.9	7.9	7.9	28.3	28.3	85.8	85.9	6.1		7.2		5		93				<0.2		3.4	
						5.2	0.3	193	24.9		7.9		28.3		85.9		6.1		7.5		6		94				<0.2		3.4	
					Bottom	9.3	0.1	288	24.8	24.8	7.9	7.9	29.1	29.1	87.5	87.7	6.1	6.2	13.1		5		96				<0.2		3.3	
						9.3	0.1	303	24.8		7.9		29.2		87.9		6.2		13.2		4		96				<0.2		2.9	
C3	Cloudy	Moderate	17:05	12.0	Surface	1.0	0.6	261	24.8	24.8	8.0	8.0	30.6	30.6	89.2	89.2	6.2	6.2	5.7	9.0	6	6	92	94	822096	817822	<0.2	<0.2	1.3	1.3
						1.0	0.6	284	24.8		8.0		30.6		89.1		6.2		5.7		6		92				<0.2		1.4	
					Middle	6.0	0.5	261	24.8	24.8	7.9	7.9	31.0	31.0	87.2	87.3	6.1		7.4		5		94				<0.2		1.3	
						6.0	0.5	282	24.8		7.9		31.0		87.3		6.1		7.6		5		94				<0.2		1.2	
					Bottom	11.0	0.4	264	24.8	24.8	7.9	7.9	30.9	30.9	91.4	91.8	6.4	6.4	13.7		6		97				<0.2		1.5	
						11.0	0.4	276	24.8		7.9		30.9		92.2		6.4		13.6		6		97				<0.2		1.3	
IM1	Cloudy	Moderate	15:48	7.1	Surface	1.0	0.4	27	24.7	24.7	8.0	8.0	29.9	29.9	92.0	92.0	6.5	6.5	10.4	13.0	14	14	92	95	818341	806442	<0.2	<0.2	1.6	1.3
						1.0	0.4	27	24.7		8.0		29.9		92.0		6.5		10.4		14		92				<0.2		1.3	
					Middle	3.6	0.3	17	24.7	24.7	8.0	8.0	30.4	30.4	92.3	92.3	6.5		11.2		13		94				<0.2		1.3	
						3.6	0.4	17	24.7		8.0		30.4		92.3		6.5		11.2		13		94				<0.2		1.4	
					Bottom	6.1	0.4	354	24.8	24.8	8.0	8.0	31.3	31.3	92.8	92.8	6.5	6.5	17.4		14		98				<0.2		1.2	
						6.1	0.4	326	24.8		8.0		31.3		92.8		6.5		17.4		15		99				<0.2		1.0	
IM2	Cloudy	Moderate	15:43	8.1	Surface	1.0	0.2	31	24.8	24.8	8.0	8.0	30.0	30.0	92.0	92.0	6.4	6.4	8.6	9.0	9	11	92	95	818879	806167	<0.2	<0.2	1.3	1.4
						1.0	0.2	31	24.8		8.0		30.0		92.0		6.4		8.6		9		92				<0.2		1.3	
					Middle	4.1	0.3	21	24.7	24.7	8.0	8.0	30.3	30.3	91.6	91.6	6.4		9.2		12		96				<0.2		1.5	
						4.1	0.3	21	24.7		8.0		30.3		91.6		6.4		9.2		13		96				<0.2		1.4	
					Bottom	7.1	0.2	23	24.7	24.7	8.0	8.0	30.7	30.7	91.7	91.7	6.4	6.4	9.2		13		98				<0.2		1.5	
						7.1	0.2	24	24.7		8.0		30.7		91.7		6.4		9.2		13		98				<0.2		1.6	
IM3	Cloudy	Moderate	15:35	8.1	Surface	1.0	0.2	302	24.7	24.7	8.0	8.0	28.8	28.8	91.7	91.7	6.5	6.5	9.1	15.1	10	16	91	94	819406	806044	<0.2	<0.2	2.1	1.8
						1.0	0.2	305	24.7		8.0		28.8		91.7		6.5		9.1		11		91				<0.2		2.1	
					Middle	4.1	0.3	323	24.7	24.7	8.0	8.0	30.2	30.2	91.4	91.4	6.4		13.0		15		93				<0.2		2.0	
						4.1	0.3	333	24.7		8.0		30.2		91.4		6.4		13.0		15		93				<0.2		2.2	
					Bottom	7.1	0.3	335	24.6	24.6	8.0	8.0	31.1	31.1	91.4	91.4	6.4	6.4	23.2		22		98				<0.2		1.1	
						7.1	0.3	308	24.6		8.0		31.1		91.4		6.4		23.2		22		98				<0.2		1.1	
IM4	Cloudy	Moderate	15:28	7.3	Surface	1.0	0.3	282	24.7	24.7	7.9	7.9	28.7	28.7	91.2	91.2	6.4	6.4	6.9	9.1	8	9	92	95	819582	805042	<0.2	<0.2	2.3	2.2
						1.0	0.4	284	24.7		7.9		28.7		91.2		6.4		6.9		7		92				<0.2		2.1	
					Middle	3.7	0.3	288	24.7	24.7	7.9	7.9	28.8	28.8	91.2	91.2	6.4		8.3		8		94				<0.2		2.3	
						3.7	0.3	314	24.7		7.9		28.8		91.2		6.4		8.5		10		94				<0.2		2.1	
					Bottom	6.3	0.2	339	24.6	24.6	8.0	8.0	29.2	29.2	91.4	91.4	6.5	6.5	12.0		11		98				<0.2		2.1	
						6.3	0.2	312	24.6		8.0		29.2		91.4		6.5		12.0		11		98				<0.2		2.0	
IM5	Cloudy	Moderate	15:19	6.5	Surface	1.0	0.3	306	24.6	24.6	7.9	7.9	27.9	27.9	90.4	90.4	6.4	6.4	6.9	10.3	5	8	92	95	820572	804933	<0.2	<0.2	3.0	2.5
						1.0	0.3	318	24.6		7.9		27.9		90.4		6.4		7.0		5		92				<0.2		2.8	
					Middle	3.3	0.3	327	24.6	24.6	7.9	7.9	28.5	28.5	90.6	90.6	6.4		10.1		5		95				<0.2		2.5	
						3.3	0.3	330	24.6		7.9		28.5		90.6		6.4		10.1		6		95				<0.2		2.6	
					Bottom	5.5	0.3	355	24.6	24.6	7.9	7.9	28.8	28.9	90.7	91.1	6.4	6.5	13.8		12		98				<0.2		1.9	
						5.5	0.3	356	24.6		7.9		28.9		91.4		6.5		14.1		13		99				<0.2		2.0	
IM6	Cloudy	Moderate	15:11	6.3	Surface	1.0	0.5	288	24.6	24.6	7.9	7.9	28.1	28.1	88.7	88.7	6.3	6.3	6.8	7.8	4	7	92	95	821057	805853	<0.2	<0.2	2.7	2.4
						1.0	0.5	313	24.6		7.9		28.1		88.7		6.3		6.8		5		92				<0.2		2.6	
					Middle	3.2	0.4	299	24.6	24.6	7.9	7.9	28.3	28.3	88.8	88.8	6.3		7.3		7		94				<0.2		2.2	
						3.2	0.5	315	24.6		7.9		28.3		88.8		6.3		7.4		7		95				<0.2		2.4	
					Bottom	5.3	0.3	301	24.6	24.6	7.9	7.9	28.6	28.6	89.3	89.3	6.3	6.3	9.3		8		97				<0.2		2.2	
						5.3	0.3	322	24.6		7.9		28.6		89.3		6.3		9.3		8		100				<0.2		2.1	
IM7	Cloudy	Moderate	15:01	7.4	Surface	1.0	0.4	243	24.6	24.6	7.8	7.8	27.2	27.2	87.7	87.7	6.3	6.3	6.1	8.0	5	7	91	95	821373	806855	<0.2	<0.2	2.8	2.4
						1.0	0.4	244	24.6		7.8		27.2		87.7		6.3		6.1		5		92				<0.2		2.5	
					Middle	3.7	0.4	259	24.6	24.6	7.9	7.9	28.1	28.1	88.5	88.5	6.3		8.4		6		95				<0.2		2.6	
						3.7	0.4	263	24.6		7.9		28.1		88.5		6.3		8.4		7		95				<0.2		2.4	
					Bottom	6.4	0.3	283	24.6	24.6	7.9	7.9	28.7	28.7	89.3	89.4	6.3	6.3	9.5		9		98				<0.2		2.2	
						6.4	0.3	286	24.6		7.9		28.7		89.4		6.3		9.6		11		98				<0.2		2.1	
IM8	Cloudy	Moderate	15:24	7.8	Surface	1.0	0.3	230	24.9	24.9	7.9	7.9	27.3	27.3	88.3	88.4	6.3	6.4	3.9	6.4	4	6	92	95	821671	807821	<0.2	<0.2	2.9	3.0
						1.0	0.3	242	24.9		7.9		27.3		88.4		6.3		3.9		4		92				<0.2		3.0	
					Middle	3.9	0.3	244	24.9	24.9	7.9	7.9	27.6	27.6	89.7	89.8	6.4		6.2		7		94				<0.2		2.7	
						3.9	0.3	252	24.9		7.9		27.6		89.9		6.4		6.3		5		94				<0.2		3.0	
					Bottom	6.8	0.3	287	24.9	24.9	7.9	7.9	28.7	28.7	91.9	92.1	6.5	6.5	8.9		8		98				<0.2		3.2	
						6.8	0.3	295	24.9		7.9		28.7		92.3		6.5		8.9		9		98				<0.2		3.2	

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 14 November 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	15:33	6.7	Surface	1.0	0.3	276	24.9	24.9	7.9	7.9	27.0	27.0	89.5	89.6	6.4	6.4	2.8	4.6	10	11	91	94	822091	808824	<0.2	<0.2	2.8	2.6
						1.0	0.3	278	24.9		7.9		27.0		89.7		6.4		3.0		9		91				<0.2		2.8	
					Middle	3.4	0.3	289	24.9	24.9	7.9	7.9	28.0	28.0	90.1	90.2	6.4		3.8		11		94				<0.2		2.3	
						3.4	0.3	315	24.9		7.9		28.0		90.2		6.4		4.0		12		94				<0.2		2.4	
					Bottom	5.7	0.3	298	24.9	24.9	7.9	7.9	29.1	29.1	91.5	91.7	6.4	6.5	7.0		14		96				<0.2		2.6	
						5.7	0.3	301	24.9		7.9		29.1		91.9		6.5		6.7		12		97				<0.2		2.7	
IM10	Cloudy	Moderate	15:43	6.4	Surface	1.0	0.8	296	25.1	25.1	7.9	7.9	29.2	29.2	92.3	92.3	6.5	6.4	3.6	6.3	3	5	92	94	822252	809846	<0.2	<0.2	2.1	2.0
						1.0	0.9	321	25.1		7.9		29.2		92.2		6.4		3.8		4		92				<0.2		2.1	
					Middle	3.2	0.7	301	25.0	24.9	7.9	7.9	29.4	29.4	92.0	92.1	6.4		6.1		5		94				<0.2		2.0	
						3.2	0.7	313	24.9		7.9		29.4		92.1		6.4		6.6		5		94				<0.2		1.9	
					Bottom	5.4	0.5	308	24.8	24.8	7.9	7.9	29.6	29.6	92.8	93.1	6.5	6.5	8.8		5		96				<0.2		1.9	
						5.4	0.5	323	24.8		7.9		29.6		93.3		6.5		8.8		7		96				<0.2		2.1	
IM11	Cloudy	Moderate	15:57	6.8	Surface	1.0	0.6	295	25.0	25.0	7.9	7.9	29.2	29.2	92.3	92.3	6.5	6.5	9.1	13.9	4	8	92	94	821500	810535	<0.2	<0.2	1.9	1.7
						1.0	0.7	305	25.0		8.0		29.2		92.3		6.5		9.1		5		92				<0.2		1.7	
					Middle	3.4	0.5	289	24.9	24.9	8.0	8.0	29.4	29.4	92.3	92.3	6.5		14.0		10		94				<0.2		1.7	
						3.4	0.5	306	24.9		8.0		29.4		92.3		6.5		14.2		9		94				<0.2		1.5	
					Bottom	5.8	0.4	287	24.8	24.8	8.0	8.0	29.5	29.5	93.4	93.7	6.6	6.6	18.4		10		96				<0.2		1.7	
						5.8	0.4	305	24.8		8.0		29.6		94.0		6.6		18.4		10		96				<0.2		1.7	
IM12	Cloudy	Moderate	16:07	8.5	Surface	1.0	0.7	281	25.0	25.0	8.0	8.0	29.3	29.3	92.6	92.5	6.5	6.5	5.5	14.0	6	8	92	95	821141	811543	<0.2	<0.2	1.5	1.5
						1.0	0.7	287	25.0		8.0		29.3		92.4		6.5		5.4		6		92				<0.2		1.7	
					Middle	4.3	0.6	278	24.8	24.8	8.0	8.0	30.0	30.0	90.9	90.9	6.4		16.3		9		93				<0.2		1.5	
						4.3	0.7	293	24.8		8.0		30.0		90.9		6.4		16.4		7		94				<0.2		1.4	
					Bottom	7.5	0.5	277	24.8	24.8	8.0	8.0	30.0	30.0	91.1	91.1	6.4	6.4	20.1		9		98				<0.2		1.4	
						7.5	0.6	280	24.8		8.0		30.0		91.1		6.4		20.2		8		98				<0.2		1.6	
SR2	Cloudy	Moderate	16:39	4.5	Surface	1.0	0.2	11	24.8	24.8	8.0	8.0	30.0	30.0	91.3	91.4	6.4	6.4	11.4	14.4	12	11	91	92	821457	814165	<0.2	<0.2	1.6	1.5
						1.0	0.3	11	24.8		8.0		30.0		91.4		6.4		11.3		10		91				<0.2		1.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.2	34	24.8	24.8	8.0	8.0	30.1	30.0	93.6	93.9	6.5	6.6	17.3		12		93				<0.2		1.3	
						3.5	0.2	35	24.8		8.0		30.0		94.2		6.6		17.4		11		94				<0.2		1.4	
SR3	Cloudy	Moderate	15:19	8.5	Surface	1.0	0.3	210	24.9	24.9	7.8	7.8	26.5	26.5	87.6	87.6	6.2	6.2	2.4	4.2	4	5	-	-	822153	807572	-	-	-	-
						1.0	0.4	211	24.9		7.8		26.5		87.6		6.2		2.4		4		-				-		-	
					Middle	4.3	0.2	252	24.8	24.8	7.9	7.9	28.0	28.0	88.0	88.1	6.2		4.1		5		-				-		-	
						4.3	0.2	256	24.8		7.9		28.0		88.1		6.2		4.2		5		-				-		-	
					Bottom	7.5	0.3	279	24.8	24.8	7.9	7.9	28.2	28.2	90.2	90.3	6.4	6.4	6.1		5		-				-		-	
						7.5	0.3	282	24.8		7.9		28.2		90.3		6.4		6.1		4		-				-		-	
SR4A	Cloudy	Calm	16:28	8.2	Surface	1.0	0.2	252	24.6	24.6	7.9	7.9	30.8	30.8	89.9	89.9	6.3	6.3	10.7	12.6	10	13	-	-	817171	807780	-	-	-	-
						1.0	0.3	267	24.6		7.9		30.8		89.9		6.3		10.8		10		-				-		-	
					Middle	4.1	0.2	238	24.6	24.6	7.9	7.9	30.8	30.8	90.1	90.1	6.3		12.2		13		-				-		-	
						4.1	0.2	239	24.6		7.9		30.8		90.1		6.3		12.2		13		-				-		-	
					Bottom	7.2	0.2	258	24.6	24.6	7.9	7.9	30.8	30.8	91.1	91.2	6.4	6.4	14.9		15		-				-		-	
						7.2	0.2	259	24.6		7.9		30.8		91.2		6.4		15.0		17		-				-		-	
SR5A	Cloudy	Calm	16:46	5.0	Surface	1.0	0.2	293	24.6	24.6	7.9	7.9	30.4	30.4	90.6	90.6	6.3	6.3	13.0	14.1	12	12	-	-	816588	810696	-	-	-	-
						1.0	0.2	297	24.6		7.9		30.4		90.6		6.3		13.0		11		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.2	295	24.6	24.6	7.9	7.9	30.5	30.5	90.9	90.9	6.4	6.4	15.1		13		-				-		-	
						4.0	0.2	303	24.6		7.9		30.5		90.9		6.4		15.1		13		-				-		-	
SR6	Cloudy	Moderate	17:12	4.6	Surface	1.0	0.0	242	24.6	24.6	8.0	8.0	30.0	30.0	89.9	89.9	6.3	6.3	14.9	14.7	17	17	-	-	817953	814611	-	-	-	-
						1.0	0.0	254	24.6		8.0		30.0		89.9		6.3		15.0		16		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.0	357	24.6	24.6	8.0	8.0	30.0	30.0	90.5	90.7	6.4	6.4	14.4		17		-				-		-	
						3.6	0.0	358	24.6		8.0		30.0		90.8		6.4		14.5		17		-				-		-	
SR7	Cloudy	Moderate	17:40	17.2	Surface	1.0	0.2	343	24.9	24.9	7.9	7.9	31.3	31.3	85.0	85.0	5.9	5.9	6.3	11.1	6	8	-	-	823643	823727	-	-	-	-
						1.0	0.2	359	24.9		7.9		31.3		84.9		5.9		6.6		7		-				-		-	
					Middle	8.6	0.2	57	24.9	24.9	7.9	7.9	31.5	31.5	84.3	84.4	5.8		12.3		8		-				-		-	
						8.6	0.2	60	24.9		7.9		31.5		84.4		5.8		12.0		8		-				-		-	
					Bottom	16.2	0.2	61	24.9	24.9	7.9	7.9	31.5	31.5	85.4	85.6	5.9	5.9	14.7		10		-				-		-	
						16.2	0.2	62	24.9		7.9		31.5		85.8		5.9		14.6		8		-				-		-	
SR8	Cloudy	Moderate	16:19	3.4	Surface	1.0	-	-	25.1	25.1	8.0	8.0	29.2	29.1	93.7	93.8	6.6	6.6	13.1	13.2	10	11	-	-	820246	811418	-	-	-	-
						1.0	-	-	25.1		8.0		29.1		93.8		6.6		13.3		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.4	-	-	25.0	25.0	8.0	8.0	29.2	29.2	96.9	97.0	6.8	6.8	13.3		12		-				-		-	
						2.4	-	-	25.0		8.0		29.2		97.0		6.8		13.2		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**

Note: Access to SR6 was blocked by barge. The monitoring at SR6 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 16 November 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	11:03	8.6	Surface	1.0	0.3	203	24.4	24.4	8.0	8.0	31.8	31.8	93.8	93.8	6.5	6.5	8.8	11.1	8	8	92	95	815593	804273	<0.2	<0.2	0.5	0.5
						1.0	0.3	218	24.4		8.0		31.8		93.8		6.5		8.9		7		92				<0.2		0.6	
					Middle	4.3	0.1	206	24.2	24.2	8.0	8.0	32.1	32.1	92.9	92.9	6.5		11.6		7		96				<0.2		0.6	
						4.3	0.1	213	24.2		8.0		32.1		92.9		6.5		11.7		8		96				<0.2		0.4	
					Bottom	7.6	0.1	226	24.2	24.2	8.0	8.0	32.2	32.2	93.5	93.6	6.5	6.5	12.9		9		98				<0.2		0.4	
						7.6	0.1	240	24.2		8.0		32.2		93.6		6.5		12.9		8		98				<0.2		0.5	
C2	Sunny	Moderate	09:58	12.1	Surface	1.0	0.1	306	24.7	24.7	7.9	7.9	28.1	28.1	88.1	88.1	6.2	6.2	8.8	13.5	4	7	94	95	825676	806965	<0.2	<0.2	2.1	2.0
						1.0	0.1	307	24.7		7.9		28.1		88.1		6.2		8.8		5		93				<0.2		2.0	
					Middle	6.1	0.3	41	24.7	24.7	8.0	8.0	29.9	29.9	88.2	88.2	6.2		14.5		7		95				<0.2		2.0	
						6.1	0.4	41	24.7		8.0		29.9		88.2		6.2		14.5		8		96				<0.2		2.0	
					Bottom	11.1	0.3	49	24.7	24.7	8.0	8.0	30.4	30.4	88.1	88.1	6.2	6.2	17.1		8		97				<0.2		2.0	
						11.1	0.3	52	24.7		8.0		30.4		88.1		6.2		17.1		8		97				<0.2		1.9	
C3	Sunny	Moderate	11:48	11.8	Surface	1.0	0.4	59	24.8	24.8	7.9	7.9	30.8	30.8	86.3	86.3	6.0	6.0	3.8	5.0	7	11	97	99	822093	817802	<0.2	<0.2	1.3	1.3
						1.0	0.5	62	24.8		7.9		30.8		86.3		6.0		3.8		8		96				<0.2		1.2	
					Middle	5.9	0.3	80	24.7	24.7	7.9	7.9	31.1	31.1	86.0	86.0	6.0		5.3		12		99				<0.2		1.3	
						5.9	0.3	86	24.7		7.9		31.1		86.0		6.0		5.3		12		98				<0.2		1.3	
					Bottom	10.8	0.3	91	24.7	24.7	7.9	7.9	31.5	31.5	89.4	89.4	6.2	6.2	5.8		12		102				<0.2		1.3	
						10.8	0.3	96	24.7		7.9		31.5		89.4		6.2		5.8		12		101				<0.2		1.2	
IM1	Fine	Moderate	10:46	7.8	Surface	1.0	0.0	216	24.3	24.3	8.0	8.0	31.7	31.7	93.5	93.5	6.5	6.5	9.4	11.8	10	11	91	94	818358	806452	<0.2	<0.2	0.7	0.7
						1.0	0.0	231	24.3		8.0		31.7		93.5		6.5		9.5		10		92				<0.2		0.7	
					Middle	3.9	0.0	78	24.2	24.2	8.0	8.0	31.8	31.8	92.7	92.7	6.5		11.2		11		93				<0.2		0.8	
						3.9	0.0	82	24.2		8.0		31.8		92.6		6.5		11.4		11		94				<0.2		0.8	
					Bottom	6.8	0.0	131	24.2	24.2	8.0	8.0	31.8	31.8	93.2	93.3	6.5	6.5	14.7		13		96				<0.2		0.6	
						6.8	0.0	136	24.2		8.0		31.8		93.3		6.5		14.8		11		96				<0.2		0.7	
IM2	Fine	Moderate	10:39	8.4	Surface	1.0	0.1	121	24.3	24.3	8.0	8.0	31.8	31.8	93.1	93.1	6.5	6.5	11.3	13.6	7	9	91	94	818831	806201	<0.2	<0.2	0.7	0.6
						1.0	0.1	130	24.3		8.0		31.8		93.1		6.5		11.3		5		91				<0.2		0.6	
					Middle	4.2	0.1	67	24.2	24.2	8.0	8.0	31.8	31.8	91.8	91.8	6.4		15.0		8		94				<0.2		0.6	
						4.2	0.1	69	24.2		8.0		31.8		91.8		6.4		15.0		9		94				<0.2		0.6	
					Bottom	7.4	0.0	98	24.2	24.2	8.0	8.0	31.8	31.8	92.3	92.4	6.5	6.5	14.4		11		96				<0.2		0.6	
						7.4	0.0	102	24.2		8.0		31.8		92.5		6.5		14.5		13		96				<0.2		0.6	
IM3	Fine	Moderate	10:31	8.9	Surface	1.0	0.0	23	24.3	24.3	8.0	8.0	31.7	31.7	93.1	93.1	6.5	6.5	11.7	13.2	12	12	92	94	819434	806024	<0.2	<0.2	0.6	0.6
						1.0	0.0	24	24.3		8.0		31.7		93.0		6.5		12.0		12		92				<0.2		0.6	
					Middle	4.5	0.1	82	24.2	24.2	8.0	8.0	31.7	31.7	92.1	92.1	6.4		13.7		12		94				<0.2		0.7	
						4.5	0.1	85	24.2		8.0		31.7		92.1		6.4		12.9		12		94				<0.2		0.6	
					Bottom	7.9	0.0	126	24.2	24.2	8.0	8.0	31.7	31.7	91.7	91.8	6.4	6.4	14.3		12		96				<0.2		0.6	
						7.9	0.0	138	24.2		8.0		31.7		91.8		6.4		14.3		12		96				<0.2		0.6	
IM4	Fine	Moderate	10:24	7.9	Surface	1.0	0.1	285	24.3	24.3	8.0	8.0	31.6	31.6	93.1	93.1	6.5	6.5	13.4	14.4	13	14	91	93	819578	805048	<0.2	<0.2	0.6	0.7
						1.0	0.1	285	24.3		8.0		31.6		93.1		6.5		13.4		13		91				<0.2		0.7	
					Middle	4.0	0.0	291	24.2	24.2	8.0	8.0	31.7	31.7	92.7	92.8	6.5		13.9		13		93				<0.2		0.7	
						4.0	0.0	318	24.2		8.0		31.7		92.8		6.5		14.0		15		93				<0.2		0.7	
					Bottom	6.9	0.0	58	24.2	24.2	8.0	8.0	31.7	31.7	93.3	93.5	6.5	6.5	15.9		16		96				<0.2		0.8	
						6.9	0.0	60	24.2		8.0		31.7		93.6		6.5		15.9		15		96				<0.2		0.7	
IM5	Fine	Moderate	10:14	7.5	Surface	1.0	0.1	90	24.2	24.2	8.0	8.0	31.5	31.5	93.5	93.5	6.6	6.6	12.8	14.0	8	9	91	94	820539	804942	<0.2	<0.2	0.9	0.8
						1.0	0.1	96	24.2		8.0		31.5		93.5		6.6		12.9		8		91				<0.2		0.9	
					Middle	3.8	0.1	102	24.2	24.2	8.0	8.0	31.5	31.5	93.4	93.4	6.5		14.4		10		93				<0.2		0.9	
						3.8	0.1	110	24.2		8.0		31.5		93.4		6.5		14.3		10		94				<0.2		0.8	
					Bottom	6.5	0.1	57	24.2	24.2	8.0	8.0	31.6	31.6	94.4	94.6	6.6	6.6	14.9		10		96				<0.2		0.7	
						6.5	0.1	57	24.2		8.0		31.6		94.8		6.6		14.7		9		96				<0.2		0.8	
IM6	Fine	Moderate	10:05	7.6	Surface	1.0	0.0	125	24.2	24.2	8.0	8.0	31.1	31.1	93.0	93.1	6.5	6.5	14.1	16.8	7	10	91	94	821056	805836	<0.2	<0.2	1.8	1.6
						1.0	0.0	133	24.2		8.0		31.1		93.1		6.5		14.3		8		91				<0.2		2.0	
					Middle	3.8	0.1	114	24.2	24.2	8.0	8.0	31.4	31.4	92.9	93.0	6.5		15.6		10		94				<0.2		1.4	
						3.8	0.1	117	24.2		8.0		31.4		93.0		6.5		15.6		10		94				<0.2		1.6	
					Bottom	6.6	0.1	123	24.2	24.2	8.0	8.0	31.5	31.4	93.9	93.9	6.6	6.6	20.6		11		96				<0.2		1.3	
						6.6	0.1	130	24.2		8.0		31.4		93.9		6.6		20.7		12		96				<0.2		1.6	
IM7	Fine	Moderate	09:59	8.4	Surface	1.0	0.1	136	24.3	24.3	7.9	7.9	29.1	29.1	91.9	92.0	6.5	6.5	8.9	16.3	8	9	91	94	821366	806862	<0.2	<0.2	1.7	1.5
						1.0	0.1	146	24.3		7.9		29.1		92.0		6.5		9.0		9		91				<0.2		1.7	
					Middle	4.2	0.2	112	24.2	24.2	8.0	8.0	30.9	30.9	92.0	92.0	6.5		22.3		10		94				<0.2		1.5	
						4.2	0.2	118	24.2		8.0		30.9		92.0		6.5		22.4		8		94				<0.2		1.8	
					Bottom	7.4	0.2	101	24.2	24.2	8.0	8.0	31.0	31.0	92.6	92.7	6.5	6.5	17.9		10		96				<0.2		1.2	
						7.4	0.3	109	24.2		8.0		31.0		92.7		6.5		17.4		11		96				<0.2		1.1	
IM8	Sunny	Moderate	10:26	8.6	Surface	1.0	0.2	107	24.6	24.6	8.0	8.0	30.0	30.0	93.1	93.1	6.5	6.5	10.5	14.7	8	9	93	96	821712	807862	<0.2	<0.2	1.3	1.4
						1.0	0.2	114	24.6		8.0		30.0		93.1		6.5		10.5		9		94				<0.2		1.5	
					Middle	4.3	0.1	52	24.5	24.5	8.0	8.0	31.4	31.4	93.7	93.7	6.5		17.7		10		97				<0.2		1.5	
						4.3	0.2	53	24.5		8.0		31.4		93.7		6.5		17.7		8		97				<0.2		1.5	
					Bottom	7.6	0.1	47	24.5	24.5	8.0	8.0	31.7	31.7	95.7	95.7	6.7	6.7	16.0		9		98				<0.2		1.1	
						7.6	0.1	49	24.5		8.0		31.7		95.7		6.7		16.0		10		99				<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 16 November 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	10:37	7.4	Surface	1.0	0.2	107	24.7	24.7	8.0	8.0	30.0	30.0	93.4	93.4	6.5	6.6	12.0	16.5	4	10	94	96	822089	808802	<0.2	<0.2	1.5	1.5
						1.0	0.2	110	24.7		8.0		30.0		93.4		6.5		12.0		5		93				<0.2		1.6	
					Middle	3.7	0.2	83	24.6	24.6	8.0	8.0	30.7	30.7	94.0	94.0	6.6		17.0		10		97				<0.2		1.7	
						3.7	0.2	83	24.6		8.0		30.7		94.0		6.6		17.0		12		97				<0.2		1.6	
					Bottom	6.4	0.3	55	24.5	24.5	8.0	8.0	31.6	31.6	96.0	96.0	6.7	6.7	20.5		13		99				<0.2		1.2	
						6.4	0.3	57	24.5		8.0		31.6		96.0		6.7		20.5		14		98				<0.2		1.2	
IM10	Sunny	Moderate	10:47	7.3	Surface	1.0	0.2	124	24.7	24.7	8.0	8.0	30.2	30.2	91.5	91.5	6.4	6.4	10.2	14.6	9	9	93	96	822252	809826	<0.2	<0.2	1.5	1.7
						1.0	0.2	131	24.7		8.0		30.2		91.5		6.4		10.2		9		94				<0.2		1.5	
					Middle	3.7	0.2	97	24.5	24.5	8.0	8.0	30.4	30.4	91.2	91.2	6.4		15.2		9		97				<0.2		2.1	
						3.7	0.2	97	24.5		8.0		30.4		91.2		6.4		15.2		8		96				<0.2		1.8	
					Bottom	6.3	0.3	94	24.5	24.5	8.0	8.0	31.4	31.4	91.8	91.8	6.4	6.4	18.4		8		98				<0.2		1.7	
						6.3	0.3	95	24.5		8.0		31.4		91.8		6.4		18.4		9		98				<0.2		1.4	
IM11	Sunny	Moderate	10:57	8.6	Surface	1.0	0.2	108	24.7	24.7	8.0	8.0	30.0	30.0	90.6	90.6	6.4	6.4	11.1	15.3	8	9	94	97	821496	810561	<0.2	<0.2	1.7	1.6
						1.0	0.2	109	24.7		8.0		30.0		90.6		6.4		11.1		9		94				<0.2		1.5	
					Middle	4.3	0.2	119	24.5	24.5	8.0	8.0	30.6	30.6	90.6	90.6	6.4		15.7		7		97				<0.2		1.6	
						4.3	0.3	130	24.5		8.0		30.6		90.6		6.4		15.7		9		97				<0.2		1.6	
					Bottom	7.6	0.2	119	24.5	24.5	8.0	8.0	30.6	30.6	93.4	93.4	6.5	6.5	19.0		10		98				<0.2		1.7	
						7.6	0.2	129	24.5		8.0		30.6		93.4		6.5		19.0		12		99				<0.2		1.7	
IM12	Sunny	Moderate	11:04	9.0	Surface	1.0	0.4	106	24.7	24.7	8.0	8.0	29.8	29.8	90.8	90.8	6.4	6.4	6.4	7.5	6	7	93	97	821172	811525	<0.2	<0.2	1.6	1.7
						1.0	0.4	109	24.7		8.0		29.8		90.8		6.4		6.4		7		94				<0.2		1.5	
					Middle	4.5	0.3	109	24.6	24.6	8.0	8.0	30.1	30.1	90.1	90.1	6.3		8.1		7		98				<0.2		2.0	
						4.5	0.3	118	24.6		8.0		30.1		90.1		6.3		8.1		7		98				<0.2		1.6	
					Bottom	8.0	0.3	104	24.6	24.6	8.0	8.0	30.5	30.5	91.0	91.0	6.4	6.4	8.0		7		99				<0.2		1.5	
						8.0	0.3	114	24.6		8.0		30.5		91.0		6.4		8.0		8		99				<0.2		1.8	
SR2	Sunny	Moderate	11:28	4.0	Surface	1.0	0.3	96	24.7	24.7	8.0	8.0	30.5	30.5	90.6	90.6	6.3	6.3	8.3	8.3	6	7	96	98	821451	814147	<0.2	<0.2	1.6	1.5
						1.0	0.4	102	24.7		8.0		30.5		90.6		6.3		8.3		6		97				<0.2		1.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	0.2	99	24.7	24.7	8.0	8.0	30.4	30.4	91.8	91.8	6.4	6.4	8.2		7		99				<0.2		1.6	
						3.0	0.2	108	24.7		8.0		30.4		91.8		6.4		8.2		7		98				<0.2		1.4	
SR3	Sunny	Moderate	10:16	8.9	Surface	1.0	0.2	152	24.6	24.6	8.0	8.0	28.9	28.9	92.0	92.0	6.5	6.5	7.6	14.4	7	7	-	-	822142	807586	-	-	-	-
						1.0	0.2	154	24.6		8.0		28.9		92.0		6.5		7.6		6		-				-		-	
					Middle	4.5	0.2	38	24.5	24.5	8.0	8.0	30.8	30.8	93.0	93.0	6.5		14.7		7		-				-		-	
						4.5	0.2	38	24.5		8.0		30.8		93.0		6.5		14.7		7		-				-		-	
					Bottom	7.9	0.2	16	24.5	24.5	8.0	8.0	31.1	31.1	94.5	94.5	6.6	6.6	20.9		8		-				-		-	
						7.9	0.2	17	24.5		8.0		31.1		94.5		6.6		20.9		7		-				-		-	
SR4A	Fine	Moderate	11:24	9.1	Surface	1.0	0.2	79	24.3	24.3	8.0	8.0	31.7	31.7	93.3	93.3	6.5	6.5	11.6	13.2	11	12	-	-	817162	807828	-	-	-	-
						1.0	0.3	80	24.3		8.0		31.7		93.2		6.5		11.7		11		-				-		-	
					Middle	4.6	0.2	77	24.3	24.3	8.0	8.0	31.8	31.8	92.9	92.9	6.5		12.4		12		-				-		-	
						4.6	0.2	83	24.3		8.0		31.8		92.9		6.5		12.4		12		-				-		-	
					Bottom	8.1	0.2	75	24.2	24.2	8.0	8.0	31.8	31.8	93.5	93.6	6.5	6.6	15.6		12		-				-		-	
						8.1	0.2	80	24.2		8.0		31.8		93.6		6.6		15.4		14		-				-		-	
SR5A	Fine	Moderate	11:40	3.4	Surface	1.0	0.1	8	24.4	24.4	7.9	7.9	30.6	30.6	91.9	92.0	6.5	6.5	9.5	9.8	9	9	-	-	816589	810716	-	-	-	-
						1.0	0.1	8	24.4		7.9		30.6		92.0		6.5		9.6		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.4	0.1	35	24.3	24.3	7.9	7.9	30.6	30.6	93.5	93.6	6.6	6.6	10.0		9		-				-		-	
						2.4	0.1	36	24.3		7.9		30.6		93.6		6.6		10.0		10		-				-		-	
SR6	Fine	Moderate	12:03	4.0	Surface	1.0	0.1	56	24.5	24.5	7.9	7.9	30.1	30.1	90.8	90.8	6.4	6.4	7.3	10.3	6	7	-	-	817901	814691	-	-	-	-
						1.0	0.1	56	24.5		7.9		30.1		90.7		6.4		7.6		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	0.1	37	24.2	24.2	7.9	7.9	30.3	30.3	92.0	92.1	6.5	6.5	13.1		6		-				-		-	
						3.0	0.1	40	24.2		7.9		30.3		92.2		6.5		13.1		6		-				-		-	
SR7	Sunny	Moderate	12:15	16.4	Surface	1.0	0.4	73	24.8	24.8	7.9	7.9	31.3	31.3	86.2	86.2	6.0	6.0	2.8	3.8	4	4	-	-	823660	823733	-	-	-	-
						1.0	0.4	75	24.8		7.9		31.3		86.2		6.0		2.8		5		-				-		-	
					Middle	8.2	0.2	48	24.8	24.8	7.9	7.9	31.3	31.3	86.2	86.2	6.0		3.9		4		-				-		-	
						8.2	0.3	51	24.8		7.9		31.3		86.2		6.0		3.9		4		-				-		-	
					Bottom	15.4	0.2	352	24.8	24.8	7.9	7.9	31.3	31.3	88.1	88.1	6.1	6.1	4.7		4		-				-		-	
						15.4	0.2	324	24.8		7.9		31.3		88.1		6.1		4.7		4		-				-		-	
SR8	Sunny	Moderate	11:13	4.3	Surface	1.0	-	-	25.3	25.3	8.0	8.0	30.2	30.2	92.5	92.5	6.4	6.4	13.3	16.5	8	10	-	-	820246	811418	-	-	-	-
						1.0	-	-	25.3		8.0		30.2		92.5		6.4		13.3		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	-	-	24.6	24.6	8.0	8.0	30.5	30.5	93.5	93.5	6.5	6.5	19.7		12		-				-		-	
						3.3	-	-	24.6		8.0		30.5		93.5		6.5		19.7		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 16 November 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	06:16	8.7	Surface	1.0	0.5	41	24.2	24.2	8.0	8.0	31.5	31.5	92.6	92.6	6.5	6.5	9.4	15.2	10	9	94	96	815638	804254	<0.2	<0.2	0.8	0.8
						1.0	0.6	41	24.2		8.0		31.5		92.6		6.5		9.6		9		91				<0.2		0.7	
					Middle	4.4	0.5	33	24.2	24.2	8.0	8.0	31.6	31.6	92.4	92.4	6.5		14.2		8		96				<0.2		0.8	
						4.4	0.6	34	24.2		8.0		31.6		92.4		6.5		14.3		8		96				<0.2		0.7	
					Bottom	7.7	0.4	26	24.2	24.2	8.0	8.0	31.7	31.7	93.0	93.1	6.5	6.5	21.9		8		98				<0.2		0.8	
						7.7	0.4	26	24.2		8.0		31.7		93.2		6.5		21.9		10		98				<0.2		0.8	
C2	Fine	Moderate	06:43	11.7	Surface	1.0	0.3	349	24.7	24.7	7.8	7.8	27.9	27.9	85.4	85.4	6.1	6.1	9.5	15.5	6	6	94	96	825710	806973	<0.2	<0.2	2.8	2.6
						1.0	0.3	353	24.7		7.8		27.9		85.4		6.1		9.5		5		95				<0.2		2.7	
					Middle	5.9	0.3	353	24.8	24.8	7.9	7.9	28.8	28.8	86.2	86.2	6.1		17.7		6		96				<0.2		2.7	
						5.9	0.3	325	24.8		7.9		28.8		86.2		6.1		17.7		6		96				<0.2		2.9	
					Bottom	10.7	0.2	329	24.8	24.8	7.9	7.9	29.1	29.1	87.7	87.7	6.2	6.2	19.4		6		99				<0.2		2.4	
						10.7	0.2	331	24.8		7.9		29.1		87.7		6.2		19.4		6		98				<0.2		2.3	
C3	Fine	Moderate	04:57	12.2	Surface	1.0	0.5	263	24.6	24.6	7.9	7.9	30.1	30.1	86.6	86.6	6.1	6.1	5.3	13.4	6	7	96	99	822138	817791	<0.2	<0.2	1.6	1.8
						1.0	0.5	270	24.6		7.9		30.1		86.6		6.1		5.3		5		97				<0.2		1.8	
					Middle	6.1	0.6	264	24.7	24.7	7.9	7.9	30.7	30.7	85.9	85.9	6.0		7.0		8		99				<0.2		1.9	
						6.1	0.6	274	24.7		7.9		30.7		85.9		6.0		7.0		7		99				<0.2		2.1	
					Bottom	11.2	0.4	264	24.8	24.8	7.9	7.9	31.0	31.0	88.8	88.8	6.2	6.2	28.0		7		102				<0.2		1.6	
						11.2	0.4	277	24.8		7.9		31.0		88.8		6.2		28.0		6		102				<0.2		1.8	
IM1	Fine	Moderate	06:32	7.4	Surface	1.0	0.5	354	24.1	24.1	8.0	8.0	31.1	31.1	92.0	92.0	6.5	6.5	9.1	15.8	9	10	92	94	818324	806470	<0.2	<0.2	1.2	1.2
						1.0	0.5	326	24.1		8.0		31.1		92.0		6.5		9.2		8		92				<0.2		1.3	
					Middle	3.7	0.5	357	24.2	24.2	8.0	8.0	31.3	31.3	91.8	91.9	6.5		11.7		7		94				<0.2		1.1	
						3.7	0.5	328	24.2		8.0		31.3		91.9		6.5		12.0		9		94				<0.2		1.4	
					Bottom	6.4	0.3	4	24.2	24.2	8.0	8.0	31.6	31.6	94.4	94.5	6.6	6.6	26.3		12		96				<0.2		1.1	
						6.4	0.3	4	24.2		8.0		31.6		94.5		6.6		26.2		14		96				<0.2		1.0	
IM2	Cloudy	Moderate	06:37	8.7	Surface	1.0	0.2	13	24.0	24.0	8.0	8.0	30.6	30.6	92.1	92.1	6.5	6.5	9.4	16.0	8	8	91	94	818848	806204	<0.2	<0.2	1.5	1.5
						1.0	0.3	13	24.0		8.0		30.6		92.1		6.5		9.3		8		91				<0.2		1.3	
					Middle	4.4	0.3	23	24.2	24.2	8.0	8.0	30.9	30.9	91.9	91.9	6.5		15.1		9		93				<0.2		1.6	
						4.4	0.4	24	24.2		8.0		30.9		91.9		6.5		15.2		9		94				<0.2		1.7	
					Bottom	7.7	0.3	31	24.3	24.3	8.0	8.0	31.6	31.6	92.4	92.6	6.5	6.5	23.4		8		96				<0.2		1.5	
						7.7	0.3	33	24.3		8.0		31.6		92.8		6.5		23.4		8		96				<0.2		1.5	
IM3	Cloudy	Moderate	06:46	8.3	Surface	1.0	0.2	7	24.1	24.1	8.0	8.0	30.2	30.2	91.4	91.4	6.5	6.5	10.4	15.4	8	9	91	94	819434	806023	<0.2	<0.2	2.0	1.8
						1.0	0.2	7	24.1		8.0		30.2		91.4		6.5		10.6		8		92				<0.2		1.9	
					Middle	4.2	0.3	27	24.2	24.2	8.0	8.0	30.4	30.4	91.3	91.3	6.4		13.2		9		93				<0.2		1.8	
						4.2	0.3	27	24.2		8.0		30.4		91.3		6.4		13.3		10		93				<0.2		1.7	
					Bottom	7.3	0.4	46	24.3	24.3	8.0	8.0	31.4	31.3	91.9	92.0	6.4	6.4	22.5		9		96				<0.2		1.8	
						7.3	0.4	50	24.3		8.0		31.3		92.0		6.4		22.6		8		96				<0.2		1.6	
IM4	Cloudy	Moderate	06:55	8.0	Surface	1.0	0.3	12	24.1	24.1	8.0	8.0	30.1	30.1	91.8	91.8	6.5	6.5	9.8	15.3	8	11	91	94	819580	805039	<0.2	<0.2	2.1	1.8
						1.0	0.3	12	24.1		8.0		30.1		91.8		6.5		9.8		10		92				<0.2		1.8	
					Middle	4.0	0.4	42	24.2	24.2	8.0	8.0	30.7	30.7	92.0	92.0	6.5		11.4		12		93				<0.2		1.8	
						4.0	0.5	46	24.2		8.0		30.7		92.0		6.5		11.4		11		94				<0.2		1.7	
					Bottom	7.0	0.4	45	24.2	24.2	8.0	8.0	31.1	31.1	93.8	94.0	6.6	6.6	24.6		11		96				<0.2		1.9	
						7.0	0.4	48	24.2		8.0		31.1		94.1		6.6		24.5		12		96				<0.2		1.7	
IM5	Cloudy	Moderate	07:04	7.0	Surface	1.0	0.4	1	24.2	24.2	8.0	8.0	30.0	30.0	91.2	91.2	6.4	6.4	10.8	15.2	10	12	91	94	820583	804909	<0.2	<0.2	2.0	2.0
						1.0	0.4	1	24.2		8.0		30.0		91.2		6.4		10.8		10		91				<0.2		2.1	
					Middle	3.5	0.4	359	24.2	24.2	8.0	8.0	30.1	30.1	91.1	91.1	6.4		13.2		10		94				<0.2		2.0	
						3.5	0.4	330	24.2		8.0		30.1		91.1		6.4		13.4		12		94				<0.2		2.0	
					Bottom	6.0	0.3	5	24.2	24.2	8.0	8.0	30.6	30.6	92.1	92.2	6.5	6.5	21.4		16		98				<0.2		1.8	
						6.0	0.4	5	24.2		8.0		30.6		92.3		6.5		21.3		16		98				<0.2		2.1	
IM6	Cloudy	Moderate	07:11	7.0	Surface	1.0	0.3	42	24.2	24.2	8.0	8.0	30.0	30.0	90.5	90.5	6.4	6.4	9.6	15.8	14	16	91	95	821073	805845	<0.2	<0.2	2.2	1.9
						1.0	0.3	42	24.2		8.0		30.0		90.5		6.4		9.6		14		92				<0.2		1.8	
					Middle	3.5	0.3	51	24.2	24.2	8.0	8.0	30.3	30.3	90.5	90.5	6.4		13.3		14		94				<0.2		2.2	
						3.5	0.3	51	24.2		8.0		30.3		90.5		6.4		13.3		15		94				<0.2		1.8	
					Bottom	6.0	0.3	32	24.2	24.2	8.0	8.0	30.9	30.9	92.4	92.7	6.5	6.5	24.4		18		98				<0.2		1.8	
						6.0	0.3	32	24.2		8.0		30.9		92.9		6.5		24.4		20		98				<0.2		1.6	
IM7	Cloudy	Moderate	07:19	8.5	Surface	1.0	0.1	82	24.2	24.2	7.9	7.9	28.5	28.5	89.0	89.1	6.3	6.4	9.5	17.5	10	12	92	94	821361	806834	<0.2	<0.2	2.8	2.4
						1.0	0.1	88	24.2		7.9		28.5		89.1		6.3		9.5		9		92				<0.2		3.1	
					Middle	4.3	0.4	55	24.2	24.2	8.0	8.0	30.4	30.4	90.6	90.7	6.4		15.6		12		93				<0.2		2.7	
						4.3	0.5	59	24.2		8.0		30.4		90.7		6.4		15.6		11		94				<0.2		2.4	
					Bottom	7.5	0.3	63	24.2	24.2	8.0	8.0	31.1	31.1	92.3	92.5	6.5	6.5	27.3		14		96				<0.2		1.8	
						7.5	0.3	68	24.2		8.0		31.1		92.6		6.5		27.3		14		96				<0.2		1.6	
IM8	Fine	Moderate	06:18	8.2	Surface	1.0	0.1	1	24.6	24.6	7.9	7.9	28.7	28.7	88.8	88.8	6.3	6.4	15.3	18.9	13	14	93	97	821688	807861	<0.2	<0.2	3.0	3.0
						1.0	0.1	1	24.6		7.9		28.7		88.8		6.3		15.3		12		94				<0.2		3.0	
					Middle	4.1	0.2	14	24.6	24.6	7.9	7.9	29.0	29.0	90.6	90.7	6.4		17.0		14		97				<0.2		2.9	
						4.1	0.2	14	24.6		7.9		29.0		90.7		6.4		17.0		13		98				<0.2		3.2	
					Bottom	7.2	0.3	8	24.6	24.6	8.0	8.0	29.5	29.5	93.1	93.2	6.6	6.6	24.3		15		99				<0.2		2.8	
						7.2	0.3	8	24.6		8.0		29.5		93.2		6.6		24.3		14		98				<0.2		2.9	

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 16 November 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	06:10	7.3	Surface	1.0	0.3	310	24.7	24.7	7.9	7.9	29.6	29.6	90.2	90.2	6.3	6.4	11.0	14.4	8	11	93	96	822064	808834	<0.2	<0.2	2.4	2.5
						1.0	0.3	323	24.7		7.9		29.6		90.2		6.3		11.0		8		93				<0.2		2.5	
					Middle	3.7	0.3	312	24.6	24.6	7.9	7.9	29.6	29.6	91.1	91.1	6.4		16.1		10		97				<0.2		2.5	
						3.7	0.3	324	24.6		7.9		29.6		91.1		6.4		16.1		10		97				<0.2		2.6	
					Bottom	6.3	0.3	312	24.6	24.6	7.9	7.9	29.7	29.7	92.7	92.7	6.5	6.5	16.2		15		99				<0.2		2.7	
						6.3	0.3	325	24.6		7.9		29.7		92.7		6.5		16.2		15		98				<0.2		2.4	
IM10	Fine	Moderate	06:03	6.8	Surface	1.0	0.6	301	24.5	24.5	8.0	8.0	29.7	29.7	91.6	91.6	6.5	6.5	8.1	11.8	4	7	94	96	822233	809840	<0.2	<0.2	2.2	2.3
						1.0	0.6	311	24.5		8.0		29.7		91.6		6.5		8.1		5		93				<0.2		2.4	
					Middle	3.4	0.6	304	24.6	24.6	8.0	8.0	30.1	30.1	93.1	93.1	6.5		13.4		8		97				<0.2		2.5	
						3.4	0.6	330	24.6		8.0		30.1		93.1		6.5		13.4		8		97				<0.2		2.3	
					Bottom	5.8	0.5	313	24.6	24.6	8.0	8.0	30.3	30.3	94.9	94.9	6.7	6.7	13.9		8		99				<0.2		2.1	
						5.8	0.5	327	24.6		8.0		30.3		94.9		6.7		13.9		9		98				<0.2		2.2	
IM11	Fine	Moderate	05:51	7.6	Surface	1.0	0.6	289	24.5	24.5	7.9	7.9	29.6	29.6	91.0	91.0	6.4	6.4	9.0	16.6	7	10	94	97	821498	810574	<0.2	<0.2	2.1	2.3
						1.0	0.6	313	24.5		7.9		29.6		91.0		6.4		9.0		6		95				<0.2		2.5	
					Middle	3.8	0.4	293	24.5	24.5	8.0	8.0	30.4	30.4	91.8	91.8	6.4		15.6		6		98				<0.2		2.4	
						3.8	0.4	297	24.5		8.0		30.4		91.8		6.4		15.6		5		99				<0.2		2.4	
					Bottom	6.6	0.3	291	24.5	24.5	8.0	8.0	30.5	30.5	93.7	93.7	6.6	6.6	25.1		17		98				<0.2		2.2	
						6.6	0.3	308	24.5		8.0		30.5		93.7		6.6		25.1		17		98				<0.2		2.0	
IM12	Fine	Moderate	05:44	7.0	Surface	1.0	0.6	280	24.5	24.5	8.0	8.0	30.0	30.0	89.4	89.4	6.3	6.3	12.5	18.4	8	10	95	97	821151	811533	<0.2	<0.2	2.0	2.1
						1.0	0.6	296	24.5		8.0		30.0		89.4		6.3		12.5		8		94				<0.2		2.1	
					Middle	3.5	0.4	284	24.6	24.6	8.0	8.0	30.2	30.2	89.5	89.5	6.3		18.0		8		97				<0.2		1.9	
						3.5	0.5	311	24.6		8.0		30.2		89.5		6.3		18.0		8		97				<0.2		2.3	
					Bottom	6.0	0.3	285	24.6	24.6	8.0	8.0	30.2	30.2	89.8	89.8	6.3	6.3	24.6		14		99				<0.2		2.2	
						6.0	0.4	306	24.6		8.0		30.2		89.8		6.3		24.6		14		99				<0.2		2.1	
SR2	Fine	Moderate	05:17	4.6	Surface	1.0	0.2	76	24.6	24.6	7.9	7.9	30.0	30.0	89.9	89.9	6.3	6.3	16.9	14.8	15	15	96	98	821459	814165	<0.2	<0.2	2.2	2.3
						1.0	0.3	76	24.6		7.9		30.0		89.9		6.3		16.9		15		97				<0.2		1.9	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.2	62	24.6	24.6	8.0	8.0	30.1	30.1	91.4	91.4	6.4	6.4	12.6		15		99				<0.2		2.6	
						3.6	0.2	65	24.6		8.0		30.1		91.4		6.4		12.6		14		98				<0.2		2.3	
SR3	Fine	Moderate	06:24	9.0	Surface	1.0	0.1	296	24.5	24.5	7.8	7.8	27.9	27.9	87.2	87.2	6.2	6.3	9.5	15.3	8	9	-	-	822171	807553	-	-	-	-
						1.0	0.1	310	24.5		7.8		27.9		87.2		6.2		9.5		9		-				-		-	
					Middle	4.5	0.2	21	24.6	24.6	7.9	7.9	28.9	28.9	88.7	88.7	6.3		16.7		7		-				-		-	
						4.5	0.2	22	24.6		7.9		28.9		88.7		6.3		16.9		7		-				-		-	
					Bottom	8.0	0.3	3	24.7	24.7	7.9	7.9	29.0	29.0	90.0	90.0	6.4	6.4	19.6		10		-				-		-	
						8.0	0.3	3	24.7		7.9		29.0		90.0		6.4		19.6		10		-				-		-	
SR4A	Fine	Moderate	05:56	9.0	Surface	1.0	0.2	249	24.2	24.2	7.9	7.9	30.9	30.9	89.7	89.8	6.3	6.4	11.5	14.0	11	14	-	-	817180	807833	-	-	-	-
						1.0	0.2	271	24.2		7.9		30.9		89.8		6.3		11.5		12		-				-		-	
					Middle	4.5	0.1	256	24.2	24.2	7.9	7.9	31.0	31.0	90.5	90.6	6.4		14.9		15		-				-		-	
						4.5	0.1	263	24.2		7.9		31.0		90.6		6.4		14.9		14		-				-		-	
					Bottom	8.0	0.0	315	24.1	24.1	7.9	7.9	31.1	31.1	92.5	92.9	6.5	6.6	15.5		16		-				-		-	
						8.0	0.0	333	24.1		7.9		31.1		93.2		6.6		15.6		17		-				-		-	
SR5A	Fine	Calm	05:40	5.2	Surface	1.0	0.3	284	24.1	24.1	7.9	7.9	30.5	30.5	91.6	91.7	6.5	6.5	10.4	10.6	12	13	-	-	816585	810718	-	-	-	-
						1.0	0.3	298	24.1		7.9		30.5		91.8		6.5		10.3		11		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.2	290	24.1	24.1	7.9	7.9	30.5	30.5	96.7	96.8	6.8	6.8	10.8		13		-				-		-	
						4.2	0.3	311	24.1		7.9		30.5		96.9		6.8		10.8		15		-				-		-	
SR6	Fine	Calm	05:12	3.9	Surface	1.0	0.2	291	24.2	24.2	7.9	7.9	29.6	29.6	88.9	89.0	6.3	6.3	8.2	8.4	9	10	-	-	817918	814657	-	-	-	-
						1.0	0.2	296	24.2		7.9		29.6		89.0		6.3		8.2		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.9	0.1	282	24.2	24.2	7.9	7.9	29.5	29.4	90.4	91.7	6.4	6.5	8.7		10		-				-		-	
						2.9	0.1	297	24.2		7.9		29.4		92.9		6.6		8.6		10		-				-		-	
SR7	Fine	Moderate	04:27	16.8	Surface	1.0	0.3	44	24.7	24.7	7.9	7.9	30.8	30.8	86.7	86.7	6.1	6.1	4.1	4.4	6	8	-	-	823657	823738	-	-	-	-
						1.0	0.3	45	24.7		7.9		30.8		86.7		6.1		4.1		8		-				-		-	
					Middle	8.4	0.3	43	24.7	24.7	7.9	7.9	30.8	30.8	86.5	86.5	6.0		5.2		7		-				-		-	
						8.4	0.3	45	24.7		7.9		30.8		86.5		6.0		5.2		9		-				-		-	
					Bottom	15.8	0.3	47	24.7	24.7	7.9	7.9	30.9	30.9	88.0	88.0	6.1	6.1	4.0		9		-				-		-	
						15.8	0.3	50	24.7		7.9		30.9		88.0		6.1		4.0		8		-				-		-	
SR8	Fine	Moderate	05:34	4.6	Surface	1.0	-	-	24.6	24.6	7.9	7.9	29.2	29.2	95.1	95.1	6.7	6.7	9.7	10.4	9	11	-	-	820246	811418	-	-	-	-
						1.0	-	-	24.6		7.9		29.2		95.1		6.7		9.7		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	-	-	24.4	24.4	7.9	7.9	29.5	29.5	99.2	99.2	7.0	7.0	11.0		12		-				-		-	
						3.6	-	-	24.4		7.9		29.5		99.2		7.0		11.0		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 18 November 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	Misty	Moderate	12:22	8.4	Surface	1.0	0.1	168	24.7	24.7	7.9	7.9	28.0	28.0	92.0	92.0	6.5	6.5	7.9	15.7	7	7	91	93	815595	804228	<0.2	<0.2	1.8	1.6
						1.0	0.1	168	24.7		7.9		28.0		92.0		6.5		7.9		6		91				<0.2		2.2	
					Middle	4.2	0.2	228	24.5	24.5	7.9	7.9	29.9	29.9	91.2	91.2	6.4		15.0		5		93				<0.2		1.4	
						4.2	0.2	235	24.5		7.9		29.9		91.2		6.4		15.0		5		94				<0.2		1.6	
					Bottom	7.4	0.2	224	24.5	24.5	7.9	7.9	30.2	30.2	91.1	91.1	6.4	6.4	24.3		10		95				<0.2		1.3	
						7.4	0.2	239	24.5		7.9		30.2		91.1		6.4		24.3		10		96				<0.2		1.5	
C2	Cloudy	Moderate	11:15	11.9	Surface	1.0	0.3	93	25.1	25.1	7.8	7.8	26.2	26.2	84.3	84.3	6.0	6.0	10.4	17.5	6	13	92	94	825697	806922	<0.2	<0.2	3.2	2.9
						1.0	0.3	94	25.1		7.8		26.2		84.3		6.0		10.5		6		92				<0.2		3.5	
					Middle	6.0	0.1	275	25.0	25.0	7.9	7.9	28.7	28.7	85.6	85.6	6.0		14.2		12		94				<0.2		2.9	
						6.0	0.1	293	25.0		7.9		28.7		85.6		6.0		14.2		12		94				<0.2		2.8	
					Bottom	10.9	0.1	226	25.0	25.0	7.9	7.9	29.6	29.6	86.5	86.5	6.0	6.0	27.7		20		96				<0.2		2.6	
						10.9	0.1	229	25.0		7.9		29.6		86.5		6.0		27.9		20		97				<0.2		2.2	
C3	Cloudy	Moderate	13:01	12.0	Surface	1.0	0.5	63	25.0	25.0	8.0	8.0	30.2	30.2	87.5	87.5	6.1	6.0	5.2	6.5	6	7	92	94	822123	817825	<0.2	<0.2	1.5	1.3
						1.0	0.5	63	25.0		8.0		30.2		87.5		6.1		5.2		5		92				<0.2		1.6	
					Middle	6.0	0.3	92	24.9	24.9	7.9	7.9	30.9	30.9	85.4	85.4	5.9		6.3		8		94				<0.2		1.2	
						6.0	0.3	98	24.9		7.9		30.9		85.4		5.9		6.3		8		94				<0.2		1.2	
					Bottom	11.0	0.3	95	24.9	24.9	7.9	7.9	31.2	31.2	86.0	86.1	6.0	6.0	7.8		8		96				<0.2		1.3	
						11.0	0.3	97	24.9		7.9		31.2		86.1		6.0		7.9		7		97				<0.2		1.1	
IM1	Misty	Moderate	12:05	7.4	Surface	1.0	0.1	113	24.9	24.9	7.9	7.9	28.7	28.7	93.3	93.3	6.6	6.6	8.8	11.1	6	7	91	94	818322	806444	<0.2	<0.2	1.6	1.8
						1.0	0.1	119	24.9		7.9		28.7		93.3		6.6		8.8		5		91				<0.2		1.9	
					Middle	3.7	0.0	116	24.7	24.7	7.9	7.9	28.9	28.9	92.1	92.1	6.5		11.7		7		94				<0.2		1.7	
						3.7	0.0	127	24.7		7.9		28.9		92.1		6.5		11.7		7		94				<0.2		1.7	
					Bottom	6.4	0.1	163	24.8	24.8	7.8	7.8	28.8	28.8	92.2	92.2	6.5	6.5	12.7		9		97				<0.2		1.7	
						6.4	0.1	173	24.8		7.8		28.8		92.2		6.5		12.7		7		97				<0.2		2.2	
IM2	Misty	Moderate	12:00	8.3	Surface	1.0	0.1	91	24.9	24.9	7.9	7.9	28.7	28.7	93.3	93.3	6.6	6.6	9.8	13.0	5	8	89	94	818878	806215	<0.2	<0.2	1.8	1.5
						1.0	0.1	98	24.9		7.9		28.7		93.3		6.6		9.8		4		91				<0.2		1.7	
					Middle	4.2	0.0	104	24.7	24.7	7.9	7.9	29.1	29.1	91.9	91.9	6.5		13.6		7		94				<0.2		1.3	
						4.2	0.0	108	24.7		7.9		29.1		91.9		6.5		13.6		8		95				<0.2		1.4	
					Bottom	7.3	0.0	81	24.7	24.7	7.9	7.9	29.1	29.1	92.0	92.0	6.5	6.5	15.7		12		97				<0.2		1.3	
						7.3	0.0	81	24.7		7.9		29.1		92.0		6.5		15.7		11		97				<0.2		1.3	
IM3	Misty	Moderate	11:53	8.6	Surface	1.0	0.0	148	25.0	25.0	7.9	7.9	29.0	29.0	92.7	92.7	6.5	6.5	13.2	18.6	8	10	91	95	819415	806021	<0.2	<0.2	1.6	1.4
						1.0	0.0	153	25.0		7.9		29.0		92.7		6.5		13.2		6		91				<0.2		1.3	
					Middle	4.3	0.0	56	24.7	24.7	7.9	7.9	29.1	29.1	91.5	91.5	6.4		19.7		11		96				<0.2		1.3	
						4.3	0.0	57	24.7		7.9		29.1		91.5		6.4		19.7		11		95				<0.2		1.2	
					Bottom	7.6	0.0	358	24.7	24.7	7.9	7.9	29.0	29.0	91.5	91.5	6.5	6.5	22.9		11		98				<0.2		1.4	
						7.6	0.0	329	24.7		7.9		29.0		91.5		6.5		22.9		12		98				<0.2		1.3	
IM4	Misty	Moderate	11:46	7.9	Surface	1.0	0.1	120	24.7	24.7	7.9	7.9	28.7	28.7	91.6	91.6	6.5	6.5	14.2	16.9	7	13	91	95	819556	805013	<0.2	<0.2	1.8	1.6
						1.0	0.1	127	24.7		7.9		28.7		91.6		6.5		14.2		9		92				<0.2		1.8	
					Middle	4.0	0.0	260	24.7	24.7	7.9	7.9	29.0	29.0	91.4	91.4	6.4		17.9		14		95				<0.2		1.4	
						4.0	0.0	271	24.7		7.9		29.0		91.4		6.4		17.9		12		96				<0.2		1.4	
					Bottom	6.9	0.1	252	24.7	24.7	7.9	7.9	28.8	28.8	91.4	91.4	6.5	6.5	18.6		18		99				<0.2		1.6	
						6.9	0.1	270	24.7		7.9		28.8		91.4		6.5		18.6		16		95				<0.2		1.5	
IM5	Misty	Moderate	11:38	6.8	Surface	1.0	0.1	102	24.9	24.9	7.9	7.9	28.6	28.6	91.9	91.9	6.5	6.5	12.4	15.7	11	11	91	95	820539	804947	<0.2	<0.2	1.6	1.7
						1.0	0.1	109	24.9		7.9		28.6		91.9		6.5		12.4		10		91				<0.2		1.7	
					Middle	3.4	0.1	30	24.7	24.7	7.9	7.9	28.7	28.7	91.0	91.0	6.4		16.8		10		95				<0.2		2.0	
						3.4	0.1	30	24.7		7.9		28.7		91.0		6.4		16.8		10		95				<0.2		1.8	
					Bottom	5.8	0.1	8	24.7	24.7	7.9	7.9	28.6	28.6	90.9	90.9	6.4	6.4	17.9		12		98				<0.2		1.6	
						5.8	0.1	8	24.7		7.9		28.6		90.9		6.4		17.9		12		98				<0.2		1.7	
IM6	Cloudy	Moderate	11:29	7.0	Surface	1.0	0.1	80	24.9	24.9	7.9	7.9	28.4	28.4	91.6	91.6	6.5	6.5	14.9	18.5	12	12	91	94	821065	805814	<0.2	<0.2	1.9	1.8
						1.0	0.1	80	24.9		7.9		28.4		91.6		6.5		14.9		12		91				<0.2		1.8	
					Middle	3.5	0.2	80	24.8	24.8	7.9	7.9	28.6	28.6	91.3	91.3	6.4		19.1		13		94				<0.2		1.8	
						3.5	0.2	80	24.8		7.9		28.6		91.3		6.4		19.1		11		94				<0.2		1.8	
					Bottom	6.0	0.1	64	24.7	24.7	7.8	7.8	28.5	28.5	91.4	91.4	6.5	6.5	21.6		10		97				<0.2		1.8	
						6.0	0.2	67	24.7		7.8		28.5		91.4		6.5		21.6		11		97				<0.2		1.7	
IM7	Cloudy	Moderate	11:19	8.5	Surface	1.0	0.2	89	24.8	24.8	7.9	7.9	28.2	28.2	89.9	89.9	6.4	6.4	17.7	21.9	12	12	91	95	821321	806806	<0.2	<0.2	1.6	1.9
						1.0	0.2	90	24.8		7.9		28.2		89.9		6.4		17.7		10		91				<0.2		2.0	
					Middle	4.3	0.2	68	24.8	24.8	7.9	7.9	28.1	28.1	89.6	89.6	6.3		20.5		12		95				<0.2		1.8	
						4.3	0.2	72	24.8		7.9		28.1		89.6		6.3		20.5		10		96				<0.2		2.0	
					Bottom	7.5	0.2	59	24.8	24.8	7.8	7.8	27.8	27.8	90.1	90.1	6.4	6.4	27.6		13		98				<0.2		2.1	
						7.5	0.2	62	24.8		7.8		27.8		90.1		6.4		27.6		15		98				<0.2		1.8	
IM8	Cloudy	Moderate	11:40	8.2	Surface	1.0	0.3	102	25.1	25.1	7.9	7.9	28.6	28.6	89.6	89.6	6.3	6.3	10.7	15.9	8	15	91	94	821705	807830	<0.2	<0.2	2.7	2.3
						1.0	0.3	109	25.1		7.9		28.6		89.5		6.3		10.8		8		92				<0.2		2.9	
					Middle	4.1	0.2	70	25.0	25.0	7.9	7.9	29.1	29.1	90.0	90.0	6.3		14.7		15		94				<0.2		2.2	
						4.1	0.2	73	25.0		7.9		29.1		90.0		6.3		14.8		13		95				<0.2		2.0	
					Bottom	7.2	0.2	54	25.0	25.0	8.0	8.0	29.5	29.5	91.1	91.1	6.4	6.4	22.3		23		97				<0.2		1.9	
						7.2	0.2	56	25.0		8.0		29.5		91.0		6.4		22.3		22		96				<0.2		2.1	

DA: Depth-Averaged

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

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 18 November 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	11:47	7.2	Surface	1.0	0.5	92	25.1	25.1	7.9	7.9	27.7	27.7	88.4	88.4	6.2	6.2	11.9	14.7	8	12	92	95	822107	808796	<0.2	<0.2	3.2	2.4
						1.0	0.5	96	25.1		7.9		27.7		88.4		6.2		12.1		8		92				<0.2		2.8	
					Middle	3.6	0.4	80	25.0	25.0	8.0	8.0	29.1	29.1	88.8	88.9	6.2		14.3		12		95				<0.2		2.2	
						3.6	0.5	84	25.0		8.0		29.1		88.9		6.2		14.2		11		94				<0.2		2.5	
					Bottom	6.2	0.3	71	25.0	25.0	8.0	8.0	29.3	29.3	89.7	89.7	6.3	6.3	17.8		16		97				<0.2		1.8	
						6.2	0.3	75	25.0		8.0		29.3		89.7		6.3		17.9		15		97				<0.2		2.0	
IM10	Cloudy	Moderate	11:55	6.7	Surface	1.0	0.4	101	25.2	25.2	7.9	7.9	27.3	27.3	89.1	89.1	6.3	6.3	8.3	15.7	6	7	91	94	822264	809840	<0.2	<0.2	2.7	2.5
						1.0	0.4	108	25.2		7.9		27.3		89.1		6.3		8.5		6		92				<0.2		2.6	
					Middle	3.4	0.4	83	25.1	25.1	8.0	8.0	29.1	29.1	89.3	89.3	6.2		13.0		7		94				<0.2		2.4	
						3.4	0.4	85	25.1		8.0		29.1		89.3		6.2		13.2		6		94				<0.2		2.6	
					Bottom	5.7	0.3	88	25.0	25.0	8.0	8.0	29.3	29.3	89.8	89.8	6.3	6.3	25.6		8		97				<0.2		2.5	
						5.7	0.3	92	25.0		8.0		29.3		89.8		6.3		25.7		9		97				<0.2		2.2	
IM11	Cloudy	Moderate	12:04	8.1	Surface	1.0	0.3	84	25.1	25.1	8.0	8.0	28.2	28.2	87.3	87.3	6.1	6.2	12.3	14.8	12	14	92	94	821526	810528	<0.2	<0.2	1.9	2.0
						1.0	0.3	90	25.1		8.0		28.2		87.3		6.1		12.3		10		92				<0.2		2.1	
					Middle	4.1	0.3	105	25.0	25.0	8.0	8.0	29.1	29.1	87.8	87.8	6.2		14.0		14		94				<0.2		2.1	
						4.1	0.3	115	25.0		8.0		29.1		87.8		6.2		14.0		16		95				<0.2		2.0	
					Bottom	7.1	0.2	101	25.0	25.0	7.9	7.9	29.6	29.6	90.0	90.1	6.3	6.3	17.9		16		96				<0.2		1.8	
						7.1	0.2	107	25.0		7.9		29.6		90.1		6.3		18.0		17		97				<0.2		1.8	
IM12	Cloudy	Moderate	12:12	9.1	Surface	1.0	0.5	86	25.1	25.1	8.0	8.0	28.2	28.2	86.9	86.9	6.1	6.1	15.6	19.6	14	20	92	95	821159	811544	<0.2	<0.2	2.2	2.2
						1.0	0.5	87	25.1		8.0		28.2		86.9		6.1		15.7		14		93				<0.2		2.2	
					Middle	4.6	0.4	103	25.0	25.0	8.0	8.0	29.1	29.1	87.8	87.8	6.1		18.7		21		94				<0.2		2.5	
						4.6	0.5	105	25.0		8.0		29.1		87.7		6.1		18.7		22		94				<0.2		2.6	
					Bottom	8.1	0.1	81	25.0	25.0	8.0	8.0	29.9	29.9	88.8	88.8	6.2	6.2	24.3		24		97				<0.2		1.8	
						8.1	0.2	85	25.0		8.0		29.9		88.8		6.2		24.4		25		97				<0.2		2.1	
SR2	Cloudy	Moderate	12:40	4.7	Surface	1.0	0.4	92	25.1	25.1	7.9	7.9	28.4	28.4	89.5	89.6	6.3	6.3	6.7	7.4	8	8	92	93	821485	814143	<0.2	<0.2	2.2	2.2
						1.0	0.5	96	25.1		7.9		28.5		89.6		6.3		6.8		6		92				<0.2		2.3	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.4	106	25.1	25.1	7.9	7.9	29.5	29.5	91.6	91.6	6.4	6.4	8.0		8		94				<0.2		2.2	
						3.7	0.4	110	25.1		7.9		29.5		91.6		6.4		8.0		8		95				<0.2		2.2	
SR3	Cloudy	Moderate	11:35	8.8	Surface	1.0	0.2	131	25.1	25.1	7.8	7.8	26.9	26.9	86.2	86.3	6.1	6.2	13.5	17.4	6	11	-	-	822152	807541	-	-	-	-
						1.0	0.3	134	25.1		7.8		26.9		86.3		6.1		13.5		4		-				-		-	
					Middle	4.4	0.3	71	25.1	25.1	7.9	7.9	28.4	28.4	88.6	88.6	6.2		16.0		14		-				-		-	
						4.4	0.3	71	25.1		7.9		28.4		88.6		6.2		16.0		15		-				-		-	
					Bottom	7.8	0.3	72	25.0	25.0	7.9	7.9	28.8	28.8	89.0	89.0	6.3	6.3	22.8		13		-				-		-	
						7.8	0.3	75	25.0		7.9		28.8		89.0		6.3		22.8		15		-				-		-	
SR4A	Cloudy	Calm	12:43	8.3	Surface	1.0	0.2	66	24.7	24.7	7.9	7.9	28.9	28.9	91.1	91.1	6.4	6.4	10.8	12.8	10	11	-	-	817165	807829	-	-	-	-
						1.0	0.2	67	24.7		7.9		28.9		91.1		6.4		10.8		8		-				-		-	
					Middle	4.2	0.2	74	24.7	24.7	7.9	7.9	28.9	28.9	90.7	90.7	6.4		13.6		11		-				-		-	
						4.2	0.2	74	24.7		7.9		28.9		90.7		6.4		13.6		12		-				-		-	
					Bottom	7.3	0.2	78	24.7	24.7	7.9	7.9	28.8	28.8	91.0	91.0	6.4	6.4	13.9		12		-				-		-	
						7.3	0.2	81	24.7		7.9		28.8		91.0		6.4		13.9		12		-				-		-	
SR5A	Cloudy	Calm	12:59	4.9	Surface	1.0	0.1	122	24.8	24.8	7.9	7.9	29.0	29.0	91.3	91.3	6.4	6.4	9.8	9.9	11	11	-	-	816616	810714	-	-	-	-
						1.0	0.2	129	24.8		7.9		29.0		91.3		6.4		9.8		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	0.1	54	24.8	24.8	7.8	7.8	28.8	28.8	91.4	91.4	6.4	6.4	10.0		10		-				-		-	
						3.9	0.1	56	24.8		7.8		28.8		91.4		6.4		10.0		12		-				-		-	
SR6	Cloudy	Calm	13:21	3.8	Surface	1.0	0.1	54	24.7	24.7	7.8	7.8	29.1	29.1	87.3	87.3	6.2	6.2	11.4	12.4	7	8	-	-	817905	814673	-	-	-	-
						1.0	0.1	57	24.7		7.8		29.1		87.3		6.2		11.4		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	0.1	70	24.7	24.7	7.8	7.8	29.2	29.2	88.0	88.0	6.2	6.2	13.4		11		-				-		-	
						2.8	0.1	75	24.7		7.8		29.2		88.0		6.2		13.4		10		-				-		-	
SR7	Cloudy	Moderate	13:28	19.1	Surface	1.0	0.4	59	24.9	24.9	7.9	7.9	31.0	31.0	86.0	86.0	6.0	6.0	5.3	7.6	5	6	-	-	823652	823752	-	-	-	-
						1.0	0.4	61	24.9		7.9		31.0		86.0		6.0		5.4		4		-				-		-	
					Middle	9.6	0.3	31	24.9	24.9	7.9	7.9	31.1	31.1	85.3	85.3	5.9		6.9		6		-				-		-	
						9.6	0.4	32	24.9		7.9		31.1		85.3		5.9		7.0		5		-				-		-	
					Bottom	18.1	0.2	23	24.9	24.9	7.9	7.9	31.1	31.1	85.5	85.6	5.9	5.9	10.6		7		-				-		-	
						18.1	0.3	23	24.9		7.9		31.1		85.6		5.9		10.4		7		-				-		-	
SR8	Cloudy	Moderate	12:21	3.6	Surface	1.0	-	-	25.9	25.9	7.9	7.9	29.1	29.1	91.3	91.3	6.3	6.3	8.8	9.1	11	11	-	-	820246	811418	-	-	-	-
						1.0	-	-	25.9		7.9		29.1		91.3		6.3		8.9		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.6	-	-	25.7	25.7	8.0	8.0	29.2	29.2	92.7	92.7	6.4	6.4	9.2		12		-				-		-	
						2.6	-	-	25.7		8.0		29.2		92.7		6.4		9.3		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 18 November 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	07:14	8.4	Surface	1.0	0.4	45	24.7	24.7	7.9	7.9	28.8	28.8	91.4	91.4	6.5	6.5	17.7	20.6	16	15	91	95	815646	804248	<0.2	<0.2	1.8	1.9
						1.0	0.4	45	24.7		7.9		28.8		91.4		6.5		17.5		15		92				<0.2		1.7	
					Middle	4.2	0.4	52	24.7	24.7	7.9	7.9	29.2	29.2	91.8	91.8	6.5		20.8		15		95				<0.2		1.9	
						4.2	0.5	52	24.7		7.9		29.2		91.8		6.5		20.8		14		95				<0.2		1.9	
					Bottom	7.4	0.5	42	24.7	24.7	7.9	7.9	29.2	29.2	91.4	91.4	6.4	6.4	23.4		15		97				<0.2		1.8	
						7.4	0.5	42	24.7		7.9		29.2		91.4		6.4		23.6		16		97				<0.2		2.2	
C2	Cloudy	Moderate	07:54	11.7	Surface	1.0	0.5	348	25.1	25.1	7.8	7.8	25.4	25.4	81.7	81.7	5.8	5.8	9.3	17.1	7	8	93	95	825654	806960	<0.2	<0.2	3.8	3.6
						1.0	0.5	320	25.1		7.8		25.4		81.7		5.8		9.4		8		94				<0.2		3.5	
					Middle	5.9	0.5	350	25.2	25.2	7.8	7.8	27.6	27.6	81.6	81.8	5.8		14.2		7		95				<0.2		3.4	
						5.9	0.5	322	25.2		7.8		27.7		81.9		5.8		16.3		9		95				<0.2		3.4	
					Bottom	10.7	0.2	318	25.1	25.1	7.9	7.9	29.2	29.2	84.2	84.2	5.9	5.9	26.8		10		98				<0.2		3.6	
						10.7	0.2	327	25.1		7.9		29.2		84.2		5.9		26.4		9		97				<0.2		3.6	
C3	Cloudy	Moderate	06:04	11.2	Surface	1.0	0.5	276	25.0	25.0	7.9	7.9	29.6	29.6	88.6	88.6	6.2	6.2	7.8	14.0	6	15	93	96	822130	817829	<0.2	<0.2	1.8	1.6
						1.0	0.5	285	25.0		7.9		29.6		88.5		6.2		7.8		5		93				<0.2		1.8	
					Middle	5.6	0.5	271	25.0	25.0	7.9	7.9	30.3	30.3	88.1	88.1	6.1		14.4		15		96				<0.2		1.5	
						5.6	0.5	284	25.0		7.9		30.3		88.1		6.1		14.4		16		95				<0.2		1.4	
					Bottom	10.2	0.4	267	25.0	25.0	7.9	7.9	30.3	30.3	88.8	88.9	6.2	6.2	19.7		24		98				<0.2		1.6	
						10.2	0.4	287	25.0		7.9		30.3		88.9		6.2		20.1		24		98				<0.2		1.3	
IM1	Cloudy	Moderate	07:30	7.2	Surface	1.0	0.4	31	24.7	24.7	7.9	7.9	28.0	28.0	87.5	87.5	6.2	6.3	14.6	20.1	9	10	91	96	818323	806465	<0.2	<0.2	2.1	2.3
						1.0	0.5	32	24.7		7.9		28.0		87.5		6.2		14.6		8		91				<0.2		2.4	
					Middle	3.6	0.4	22	24.7	24.7	7.9	7.9	28.3	28.3	88.4	88.4	6.3		20.0		9		96				<0.2		2.4	
						3.6	0.5	22	24.7		7.9		28.3		88.4		6.3		20.0		8		97				<0.2		2.2	
					Bottom	6.2	0.4	348	24.8	24.8	7.9	7.9	29.0	29.0	88.5	88.5	6.2	6.2	25.6		13		99				<0.2		2.2	
						6.2	0.5	320	24.8		7.9		29.0		88.5		6.2		25.6		12		99				<0.2		2.4	
IM2	Cloudy	Moderate	07:36	8.1	Surface	1.0	0.5	29	24.7	24.7	7.9	7.9	27.7	27.7	86.1	86.1	6.1	6.2	16.2	19.2	9	11	92	96	818842	806173	<0.2	<0.2	2.4	2.3
						1.0	0.6	29	24.7		7.9		27.7		86.1		6.1		16.2		8		92				<0.2		2.4	
					Middle	4.1	0.5	15	24.8	24.8	7.9	7.9	28.5	28.5	87.6	87.6	6.2		19.0		8		95				<0.2		2.6	
						4.1	0.5	16	24.8		7.9		28.5		87.6		6.2		19.1		10		96				<0.2		2.2	
					Bottom	7.1	0.3	10	24.8	24.8	7.9	7.9	28.7	28.7	87.6	87.6	6.2	6.2	22.4		16		99				<0.2		2.1	
						7.1	0.3	10	24.8		7.9		28.7		87.6		6.2		22.4		15		99				<0.2		2.0	
IM3	Cloudy	Moderate	07:42	8.3	Surface	1.0	0.5	37	24.7	24.7	7.8	7.8	27.3	27.3	85.6	85.6	6.1	6.2	14.5	19.2	9	12	92	96	819436	806025	<0.2	<0.2	2.4	2.3
						1.0	0.5	37	24.7		7.8		27.3		85.6		6.1		14.5		8		92				<0.2		2.3	
					Middle	4.2	0.5	24	24.7	24.7	7.9	7.9	28.1	28.1	87.4	87.5	6.2		19.4		8		96				<0.2		2.2	
						4.2	0.6	24	24.7		7.9		28.1		87.5		6.2		19.4		7		96				<0.2		2.4	
					Bottom	7.3	0.3	29	24.8	24.8	7.9	7.9	28.9	28.9	88.1	88.1	6.2	6.2	23.6		20		99				<0.2		2.2	
						7.3	0.4	31	24.8		7.9		28.9		88.1		6.2		23.5		19		98				<0.2		2.3	
IM4	Cloudy	Moderate	07:49	7.6	Surface	1.0	0.6	8	24.7	24.7	7.8	7.8	27.6	27.6	86.6	86.6	6.2	6.2	11.9	18.2	9	9	92	97	819577	805018	<0.2	<0.2	2.6	2.6
						1.0	0.6	8	24.7		7.8		27.6		86.6		6.2		11.9		9		95				<0.2		2.4	
					Middle	3.8	0.6	17	24.7	24.7	7.8	7.8	28.1	28.1	87.4	87.4	6.2		18.9		8		97				<0.2		2.8	
						3.8	0.6	18	24.7		7.8		28.1		87.4		6.2		18.9		7		97				<0.2		2.7	
					Bottom	6.6	0.4	20	24.7	24.7	7.8	7.8	28.3	28.3	88.4	88.4	6.3	6.3	23.8		10		100				<0.2		2.4	
						6.6	0.5	21	24.7		7.8		28.3		88.4		6.3		24.0		9		101				<0.2		2.4	
IM5	Misty	Moderate	08:01	6.7	Surface	1.0	0.6	16	24.7	24.7	7.8	7.8	27.8	27.8	85.0	85.0	6.0	6.0	15.2	18.9	16	18	92	96	820576	804950	<0.2	<0.2	2.3	2.3
						1.0	0.6	17	24.7		7.8		27.8		85.0		6.0		15.1		17		92				<0.2		2.1	
					Middle	3.4	0.5	16	24.7	24.7	7.8	7.8	28.3	28.3	85.2	85.2	6.0		18.6		18		96				<0.2		2.4	
						3.4	0.5	16	24.7		7.8		28.3		85.2		6.0		18.6		19		97				<0.2		2.4	
					Bottom	5.7	0.4	15	24.7	24.7	7.8	7.8	28.2	28.2	85.1	85.1	6.0	6.0	22.8		18		99				<0.2		2.1	
						5.7	0.4	16	24.7		7.8		28.2		85.1		6.0		22.9		17		99				<0.2		2.4	
IM6	Misty	Moderate	08:10	6.8	Surface	1.0	0.3	24	24.8	24.8	7.9	7.9	27.8	27.8	87.0	87.0	6.2	6.2	17.9	20.6	12	14	92	96	821064	805811	<0.2	<0.2	2.3	2.5
						1.0	0.3	25	24.8		7.9		27.8		87.0		6.2		17.9		13		100				<0.2		2.7	
					Middle	3.4	0.4	30	24.8	24.8	7.9	7.9	28.4	28.4	87.5	87.5	6.2		20.5		16		95				<0.2		2.6	
						3.4	0.4	31	24.8		7.9		28.4		87.5		6.2		20.4		15		95				<0.2		2.7	
					Bottom	5.8	0.3	28	24.8	24.8	7.9	7.9	28.6	28.6	88.0	88.0	6.2	6.2	23.6		14		98				<0.2		2.4	
						5.8	0.3	28	24.8		7.9		28.6		88.0		6.2		23.4		14		98				<0.2		2.5	
IM7	Misty	Moderate	08:17	8.1	Surface	1.0	0.3	50	24.8	24.8	7.9	7.9	28.6	28.6	88.8	88.8	6.3	6.4	13.5	17.9	10	11	92	96	821335	806827	<0.2	<0.2	2.9	2.8
						1.0	0.3	50	24.8		7.9		28.6		88.8		6.3		13.4		11		92				<0.2		2.9	
					Middle	4.1	0.4	47	24.8	24.8	7.9	7.9	29.0	29.0	90.8	90.8	6.4		18.3		12		96				<0.2		2.6	
						4.1	0.4	51	24.8		7.9		29.0		90.8		6.4		18.3		11		97				<0.2		2.7	
					Bottom	7.1	0.4	26	24.8	24.8	7.9	7.9	29.1	29.1	90.5	90.5	6.4	6.4	21.9		12		99				<0.2		2.7	
						7.1	0.4	26	24.8		7.9		29.1		90.5		6.4		21.8		11		100				<0.2		2.9	
IM8	Cloudy	Moderate	07:28	8.0	Surface	1.0	0.2	40	25.0	25.0	7.8	7.8	25.3	25.3	82.2	82.3	5.9	5.9	9.7	17.8	8	10	93	96	821685	807836	<0.2	<0.2	3.6	<u>3.4</u>
						1.0	0.2	40	25.0		7.8		25.3		82.3		5.9		9.8		7		93				<0.2		3.8	
					Middle	4.0	0.4	21	25.0	25.0	7.8	7.8	26.2	26.2	82.7	82.8	5.9		18.3		8		95				<0.2		3.6	
						4.0	0.4	22	25.0		7.8		26.2		82.8		5.9		18.5		8		96				<0.2		3.6	
					Bottom	7.0	0.3	355	25.0	25.0	7.9	7.9	27.1	27.1	84.3	84.4	6.0	6.0	25.2		15		98				<0.2		3.1	
						7.0	0.3	356	25.0		7.9		27.1		84.4		6.0		25.2		16		98				<0.2		2.9	

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 18 November 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	07:20	7.0	Surface	1.0	0.3	1	25.0	25.0	7.8	7.8	26.0	26.0	82.3	82.3	5.9	5.9	10.7	15.2	12	12	93	96	822118	808815	<0.2	<0.2	3.4	3.2
						1.0	0.3	1	25.0		7.8		26.0		82.3		5.9		10.8		12		93				<0.2		3.4	
					Middle	3.5	0.3	342	25.0	25.0	7.9	7.9	26.7	26.7	82.9	82.9	5.9		14.2		11		96				<0.2		3.3	
						3.5	0.3	315	25.0		7.9		26.7		82.9		5.9		14.0		11		96				<0.2		3.0	
					Bottom	6.0	0.3	338	25.0	25.0	7.9	7.9	26.7	26.7	83.9	83.9	6.0	6.0	20.8		13		99				<0.2		3.3	
						6.0	0.3	345	25.0		7.9		26.7		83.9		6.0		20.5		15		98				<0.2		3.0	
IM10	Cloudy	Moderate	07:11	7.4	Surface	1.0	0.6	320	25.0	25.0	7.8	7.8	27.4	27.4	85.0	85.0	6.0	6.0	8.8	15.2	6	9	93	96	822240	809856	<0.2	<0.2	2.8	2.6
						1.0	0.6	326	25.0		7.8		27.4		85.0		6.0		9.0		8		93				<0.2		2.7	
					Middle	3.7	0.7	316	25.1	25.1	7.8	7.8	28.0	28.0	85.7	85.7	6.0		12.3		9		96				<0.2		2.4	
						3.7	0.7	328	25.1		7.8		28.0		85.7		6.0		12.5		9		96				<0.2		2.5	
					Bottom	6.4	0.5	315	25.1	25.1	7.9	7.9	28.6	28.6	87.6	87.6	6.1	6.1	24.3		10		98				<0.2		2.5	
						6.4	0.6	326	25.1		7.9		28.6		87.6		6.1		24.1		9		98				<0.2		2.6	
IM11	Cloudy	Moderate	06:58	7.5	Surface	1.0	0.4	286	25.0	25.0	7.8	7.8	27.6	27.6	85.4	85.4	6.0	6.1	8.9	16.9	7	9	94	96	821484	810549	<0.2	<0.2	2.9	2.9
						1.0	0.4	301	25.0		7.8		27.6		85.4		6.0		9.1		5		93				<0.2		2.9	
					Middle	3.8	0.5	287	25.1	25.1	7.9	7.9	29.1	29.1	87.0	87.0	6.1		17.2		6		96				<0.2		3.0	
						3.8	0.5	308	25.1		7.9		29.1		87.0		6.1		17.2		8		95				<0.2		3.0	
					Bottom	6.5	0.4	292	25.0	25.0	7.9	7.9	29.3	29.3	87.8	87.9	6.1	6.2	24.4		14		99				<0.2		3.0	
						6.5	0.5	293	25.0		7.9		29.3		87.9		6.2		24.4		12		98				<0.2		2.8	
IM12	Cloudy	Moderate	06:51	7.6	Surface	1.0	0.7	281	25.0	25.0	7.9	7.9	28.7	28.7	88.0	88.0	6.2	6.2	9.8	15.4	7	9	93	96	821166	811541	<0.2	<0.2	2.5	2.1
						1.0	0.7	289	25.0		7.9		28.7		88.0		6.2		9.8		8		94				<0.2		2.7	
					Middle	3.8	0.6	280	25.0	25.0	7.9	7.9	29.9	29.9	89.4	89.4	6.2		13.9		9		95				<0.2		2.0	
						3.8	0.7	303	25.0		7.9		29.9		89.4		6.2		13.9		7		96				<0.2		2.0	
					Bottom	6.6	0.5	281	24.9	24.9	7.9	7.9	30.1	30.1	90.1	90.1	6.3	6.3	22.6		12		98				<0.2		1.9	
						6.6	0.5	284	24.9		7.9		30.1		90.1		6.3		22.6		13		98				<0.2		1.7	
SR2	Cloudy	Moderate	06:26	3.4	Surface	1.0	0.1	47	25.0	25.0	7.9	7.9	29.0	29.0	88.3	88.4	6.2	6.2	9.5	10.6	10	11	93	95	821436	814141	<0.2	<0.2	2.3	2.1
						1.0	0.1	49	25.0		7.9		29.0		88.4		6.2		9.2		10		93				<0.2		2.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.4	0.1	32	25.0	25.0	7.9	7.9	29.3	29.3	90.0	90.1	6.3	6.3	11.9		11		97				<0.2		2.1	
						2.4	0.1	34	25.0		7.9		29.3		90.1		6.3		11.9		13		96				<0.2		1.9	
SR3	Cloudy	Moderate	07:34	8.6	Surface	1.0	0.2	340	25.0	25.0	7.8	7.8	25.2	25.2	81.7	81.7	5.9	5.9	10.5	15.9	8	14	-	-	822130	807555	-	-	-	-
						1.0	0.2	357	25.0		7.8		25.2		81.7		5.9		10.6		8		-				-		-	
					Middle	4.3	0.4	9	25.1	25.1	7.8	7.8	26.1	26.1	81.4	81.4	5.8		16.9		14		-				-		-	
						4.3	0.4	9	25.1		7.8		26.1		81.4		5.8		17.0		12		-				-		-	
					Bottom	7.6	0.3	13	25.1	25.1	7.8	7.8	26.3	26.3	82.6	82.7	5.9	5.9	20.0		19		-				-		-	
						7.6	0.3	13	25.1		7.8		26.3		82.7		5.9		20.1		20		-				-		-	
SR4A	Fine	Calm	06:52	8.6	Surface	1.0	0.2	249	24.8	24.8	7.8	7.8	29.5	29.5	90.8	90.8	6.4	6.4	12.4	14.3	12	13	-	-	817217	807802	-	-	-	-
						1.0	0.2	257	24.8		7.8		29.5		90.8		6.4		12.4		11		-				-		-	
					Middle	4.3	0.2	250	24.8	24.8	7.8	7.8	29.3	29.3	90.8	90.8	6.4		14.6		12		-				-		-	
						4.3	0.2	261	24.8		7.8		29.3		90.8		6.4		14.6		13		-				-		-	
					Bottom	7.6	0.2	227	24.8	24.8	7.8	7.8	29.0	29.0	91.4	91.4	6.4	6.4	15.8		15		-				-		-	
						7.6	0.2	236	24.8		7.8		29.0		91.4		6.4		15.8		13		-				-		-	
SR5A	Fine	Calm	06:35	4.4	Surface	1.0	0.2	301	24.7	24.7	7.8	7.8	30.1	30.1	90.7	90.7	6.4	6.4	12.0	12.4	10	12	-	-	816585	810675	-	-	-	-
						1.0	0.2	330	24.7		7.8		30.1		90.7		6.4		12.0		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.2	303	24.7	24.7	7.7	7.7	30.1	30.1	91.9	91.9	6.4	6.4	12.7		15		-				-		-	
						3.4	0.2	328	24.7		7.7		30.1		91.9		6.4		12.7		15		-				-		-	
SR6	Fine	Calm	06:13	3.6	Surface	1.0	0.2	257	24.6	24.6	7.8	7.8	28.7	28.7	87.9	87.9	6.2	6.2	12.3	13.9	13	13	-	-	817895	814644	-	-	-	-
						1.0	0.2	263	24.6		7.8		28.7		87.9		6.2		12.4		13		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.6	0.2	256	24.6	24.6	7.8	7.8	27.7	27.7	89.6	89.6	6.4	6.4	15.4		12		-				-		-	
						2.6	0.2	279	24.6		7.8		27.7		89.6		6.4		15.4		12		-				-		-	
SR7	Cloudy	Moderate	05:35	17.1	Surface	1.0	0.1	162	25.0	25.0	7.9	7.9	29.8	29.8	88.6	88.6	6.2	6.2	6.0	6.7	8	9	-	-	823616	823712	-	-	-	-
						1.0	0.1	166	25.0		7.9		29.8		88.5		6.2		6.1		6		-				-		-	
					Middle	8.6	0.1	194	25.0	25.0	7.9	7.9	29.8	29.8	87.8	87.8	6.1		6.7		8		-				-		-	
						8.6	0.1	202	25.0		7.9		29.8		87.8		6.1		6.6		9		-				-		-	
					Bottom	16.1	0.1	191	25.0	25.0	7.9	7.9	30.0	30.0	87.5	87.5	6.1	6.1	7.4		12		-				-		-	
						16.1	0.1	194	25.0		7.9		30.0		87.5		6.1		7.4		11		-				-		-	
SR8	Cloudy	Moderate	06:42	3.3	Surface	1.0	-	-	25.2	25.2	7.8	7.8	27.5	27.5	85.6	85.6	6.0	6.0	10.7	11.2	11	10	-	-	820246	811418	-	-	-	-
						1.0	-	-	25.2		7.8		27.5		85.6		6.0		10.7		11		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.3	-	-	25.1	25.1	7.8	7.8	27.5	27.5	86.3	86.3	6.1	6.1	11.6		9		-				-		-	
						2.3	-	-	25.1		7.8		27.5		86.3		6.1		11.8		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 November 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	14:15	8.5	Surface	1.0	0.1	131	23.2	23.2	8.0	8.0	31.4	31.4	95.4	95.4	6.8	6.8	9.7	11.8	9	9	92	94	815625	804267	<0.2	<0.2	0.8	0.9
						1.0	0.2	138	23.2		8.0		31.4		95.3		6.8		9.9		8		92				<0.2		0.8	
					Middle	4.3	0.0	114	23.2	23.2	8.0	8.0	31.5	31.5	95.0	95.1	6.8		10.9		9		93				<0.2		0.9	
						4.3	0.0	116	23.2		8.0		31.5		95.1		6.8		10.9		10		94				<0.2		1.0	
					Bottom	7.5	0.0	351	23.2	23.2	8.0	8.0	32.0	32.0	96.9	97.2	6.9	6.9	14.9		10		96				<0.2		0.8	
						7.5	0.0	354	23.2		8.0		32.0		97.5		6.9		14.7		8		97				<0.2		0.9	
C2	Cloudy	Moderate	13:01	11.7	Surface	1.0	0.2	63	23.7	23.7	7.9	7.9	28.7	28.7	89.6	89.6	6.4	6.5	8.8	15.1	6	6	91	95	825667	806935	<0.2	<0.2	1.7	1.8
						1.0	0.2	66	23.7		7.9		28.7		89.6		6.4		8.9		5		92				<0.2		2.0	
					Middle	5.9	0.1	48	23.7	23.7	7.9	7.9	29.0	29.0	90.4	90.4	6.5		15.8		5		95				<0.2		1.8	
						5.9	0.2	50	23.7		7.9		29.0		90.4		6.5		15.8		4		96				<0.2		1.8	
					Bottom	10.7	0.2	321	23.5	23.5	8.0	8.0	29.9	29.9	91.9	91.9	6.6	6.6	20.7		9		98				<0.2		1.6	
						10.7	0.2	351	23.5		8.0		29.9		91.9		6.6		20.7		9		98				<0.2		1.8	
C3	Cloudy	Moderate	14:43	12.2	Surface	1.0	0.5	79	24.2	24.2	7.9	7.9	31.5	31.5	86.0	86.0	6.0	6.0	3.8	4.7	4	4	91	93	822125	817819	<0.2	<0.2	0.8	0.9
						1.0	0.5	80	24.2		7.9		31.5		86.0		6.0		3.8		3		91				<0.2		0.8	
					Middle	6.1	0.5	84	24.1	24.1	7.9	7.9	31.6	31.6	85.9	85.9	6.0		4.6		3		93				<0.2		0.9	
						6.1	0.5	86	24.1		7.9		31.6		85.9		6.0		4.6		4		93				<0.2		0.9	
					Bottom	11.2	0.4	80	24.1	24.1	7.9	7.9	31.6	31.6	88.3	88.3	6.2	6.2	5.7		5		95				<0.2		1.0	
						11.2	0.4	80	24.1		7.9		31.6		88.3		6.2		5.7		6		96				<0.2		0.8	
IM1	Cloudy	Moderate	13:56	7.6	Surface	1.0	0.1	218	23.0	23.0	8.0	8.0	31.1	31.1	95.0	95.0	6.8	6.8	10.2	13.4	8	9	91	94	818369	806464	<0.2	<0.2	0.9	1.0
						1.0	0.1	227	23.0		8.0		31.1		94.9		6.8		10.4		9		92				<0.2		0.8	
					Middle	3.8	0.1	84	23.0	23.0	8.0	8.0	31.3	31.3	94.3	94.3	6.8		13.1		10		93				<0.2		0.9	
						3.8	0.1	87	23.0		8.0		31.3		94.3		6.8		13.5		9		94				<0.2		1.2	
					Bottom	6.6	0.1	108	23.0	23.0	8.0	8.0	31.6	31.6	94.9	95.0	6.8	6.8	16.7		8		96				<0.2		1.1	
						6.6	0.1	110	23.0		8.0		31.6		95.1		6.8		16.7		9		97				<0.2		1.0	
IM2	Cloudy	Moderate	13:50	8.2	Surface	1.0	0.2	70	23.1	23.1	8.0	8.0	31.4	31.4	95.6	95.6	6.8	6.8	9.4	10.3	8	8	91	94	818823	806171	<0.2	<0.2	0.9	0.9
						1.0	0.2	73	23.1		8.0		31.4		95.5		6.8		9.6		8		91				<0.2		1.1	
					Middle	4.1	0.0	62	23.1	23.1	8.0	8.0	31.6	31.6	95.5	95.6	6.8		10.3		8		94				<0.2		0.9	
						4.1	0.0	65	23.1		8.0		31.6		95.6		6.8		10.4		8		94				<0.2		0.8	
					Bottom	7.2	0.1	23	23.1	23.1	8.0	8.0	31.6	31.6	96.0	96.1	6.9	6.9	11.1		7		97				<0.2		0.9	
						7.2	0.1	24	23.1		8.0		31.6		96.2		6.9		11.1		6		97				<0.2		0.9	
IM3	Cloudy	Moderate	13:43	8.7	Surface	1.0	0.1	43	23.1	23.1	8.0	8.0	31.5	31.5	95.7	95.7	6.8	6.8	9.2	14.8	8	8	92	94	819393	806041	<0.2	<0.2	0.8	0.8
						1.0	0.1	43	23.1		8.0		31.5		95.6		6.8		9.3		8		92				<0.2		0.8	
					Middle	4.4	0.2	50	23.2	23.2	8.0	8.0	31.9	31.9	94.3	94.3	6.7		14.7		8		94				<0.2		0.8	
						4.4	0.2	52	23.2		8.0		31.9		94.3		6.7		14.7		9		94				<0.2		0.8	
					Bottom	7.7	0.2	25	23.1	23.1	8.0	8.0	31.9	31.9	96.1	96.3	6.8	6.9	20.6		8		96				<0.2		0.8	
						7.7	0.2	27	23.1		8.0		31.9		96.5		6.9		20.5		8		96				<0.2		0.8	
IM4	Cloudy	Moderate	13:36	7.9	Surface	1.0	0.2	63	23.1	23.1	8.0	8.0	31.5	31.5	94.7	94.7	6.8	6.8	11.6	17.1	9	10	91	94	819589	805046	<0.2	<0.2	1.0	1.0
						1.0	0.2	66	23.1		8.0		31.5		94.6		6.8		11.6		9		91				<0.2		1.0	
					Middle	4.0	0.2	59	23.1	23.1	8.0	8.0	31.8	31.8	94.0	94.0	6.7		16.7		10		94				<0.2		1.0	
						4.0	0.2	59	23.1		8.0		31.8		94.0		6.7		16.7		12		94				<0.2		1.0	
					Bottom	6.9	0.1	37	23.1	23.1	8.0	8.0	31.9	31.9	95.0	95.2	6.8	6.8	23.1		11		96				<0.2		0.9	
						6.9	0.1	38	23.1		8.0		31.9		95.4		6.8		23.1		10		97				<0.2		1.0	
IM5	Cloudy	Moderate	13:25	7.2	Surface	1.0	0.1	3	23.0	23.0	8.0	8.0	31.5	31.5	94.2	94.2	6.7	6.7	18.1	21.4	11	11	91	94	820563	804912	<0.2	<0.2	0.9	0.9
						1.0	0.2	3	23.0		8.0		31.5		94.2		6.7		18.3		10		91				<0.2		1.0	
					Middle	3.6	0.2	340	23.0	23.0	8.0	8.0	31.5	31.5	94.2	94.2	6.7		21.9		11		94				<0.2		0.8	
						3.6	0.2	349	23.0		8.0		31.5		94.2		6.7		21.9		11		94				<0.2		1.0	
					Bottom	6.2	0.2	3	23.0	23.0	8.0	8.0	31.5	31.5	95.7	96.1	6.9	6.9	24.1		10		96				<0.2		0.8	
						6.2	0.2	3	23.0		8.0		31.5		96.4		6.9		24.1		11		97				<0.2		1.0	
IM6	Cloudy	Moderate	13:13	7.0	Surface	1.0	0.2	31	22.9	22.9	8.0	8.0	31.0	31.0	92.9	92.9	6.7	6.7	20.8	21.6	16	17	91	94	821031	805813	<0.2	<0.2	1.2	1.2
						1.0	0.2	33	22.9		8.0		31.0		92.9		6.7		20.8		16		92				<0.2		1.2	
					Middle	3.5	0.3	52	22.9	22.9	8.0	8.0	31.1	31.1	93.4	93.5	6.7		21.3		16		93				<0.2		1.3	
						3.5	0.3	54	22.9		8.0		31.1		93.5		6.7		21.5		16		94				<0.2		1.2	
					Bottom	6.0	0.2	57	22.9	22.9	8.0	8.0	31.2	31.2	95.0	95.1	6.8	6.8	22.5		18		96				<0.2		1.2	
						6.0	0.3	60	22.9		8.0		31.2		95.1		6.8		22.6		19		97				<0.2		1.3	
IM7	Cloudy	Moderate	13:03	8.4	Surface	1.0	0.2	44	23.0	23.0	8.0	8.0	30.9	30.9	92.7	92.7	6.7	6.7	21.3	21.8	16	15	92	94	821369	806844	<0.2	<0.2	1.4	1.4
						1.0	0.2	44	23.0		8.0		30.9		92.7		6.7		21.4		15		92				<0.2		1.4	
					Middle	4.2	0.3	55	23.0	23.0	8.0	8.0	31.0	31.0	92.9	93.0	6.7		20.5		14		93				<0.2		1.4	
						4.2	0.3	55	23.0		8.0		31.0		93.0		6.7		20.4		14		94				<0.2		1.4	
					Bottom	7.4	0.3	62	23.0	23.0	8.0	8.0	31.1	31.1	94.1	94.1	6.8	6.8	23.5		17		96				<0.2		1.5	
						7.4	0.3	67	23.0		8.0		31.1		94.1		6.8		23.6		15		96				<0.2		1.5	
IM8	Cloudy	Moderate	13:27	8.5	Surface	1.0	0.2	86	23.3	23.3	8.0	8.0	30.5	30.5	93.4	93.4	6.7	6.7	17.1	19.8	12	14	91	94	821713	807809	<0.2	<0.2	1.4	1.4
						1.0	0.2	86	23.3		8.0		30.5		93.4		6.7		17.1		12		92				<0.2		1.4	
					Middle	4.3	0.3	40	23.3	23.3	8.0	8.0	30.7	30.7	93.9	93.9	6.7		19.1		14		94				<0.2		1.5	
						4.3	0.3	41	23.3		8.0		30.7		93.9		6.7		19.1		14		95				<0.2		1.4	
					Bottom	7.5	0.3	30	23.3	23.3	8.0	8.0	31.0	31.0	95.6	95.6	6.8	6.8	23.3		14		97				<0.2		1.4	
						7.5	0.3	31	23.3		8.0		31.0		95.6		6.8		23.3		16		97				<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 21 November 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	13:34	7.2	Surface	1.0	0.2	92	23.6	23.6	8.1	8.1	29.9	29.9	92.4	92.4	6.6	6.7	11.6	13.3	10	11	92	95	822066	808787	<0.2	<0.2	1.7	1.5
						1.0	0.2	93	23.6		8.1		29.9		92.4		6.6		11.6		12		92				<0.2		1.4	
					Middle	3.6	0.3	74	23.4	23.4	8.0	8.0	30.4	30.4	93.3	93.3	6.7		13.5		11		95				<0.2		1.4	
						3.6	0.3	77	23.4		8.1		30.4		93.3		6.7		13.6		11		96				<0.2		1.6	
					Bottom	6.2	0.2	77	23.3	23.3	8.1	8.1	30.4	30.4	94.7	94.7	6.8	6.8	14.8		10		98				<0.2		1.4	
						6.2	0.2	77	23.3		8.1		30.4		94.7		6.8		14.8		10		98				<0.2		1.5	
IM10	Cloudy	Moderate	13:41	7.1	Surface	1.0	0.3	87	23.6	23.6	8.1	8.1	29.8	29.8	91.4	91.4	6.5	6.6	9.6	10.8	11	11	92	94	822256	809838	<0.2	<0.2	1.5	1.4
						1.0	0.3	93	23.6		8.1		29.8		91.4		6.5		9.6		10		92				<0.2		1.5	
					Middle	3.6	0.3	74	23.6	23.6	8.0	8.0	30.0	30.0	92.1	92.1	6.6		11.3		11		94				<0.2		1.4	
						3.6	0.3	75	23.6		8.0		30.0		92.1		6.6		11.3		11		94				<0.2		1.3	
					Bottom	6.1	0.1	60	23.4	23.4	8.0	8.0	30.4	30.4	94.2	94.3	6.7	6.7	11.6		11		97				<0.2		1.4	
						6.1	0.1	60	23.4		8.0		30.4		94.3		6.7		11.6		11		97				<0.2		1.4	
IM11	Cloudy	Moderate	13:51	8.3	Surface	1.0	0.3	89	23.6	23.6	8.0	8.0	30.2	30.2	91.8	91.8	6.5	6.6	11.7	10.9	9	10	91	94	821496	810559	<0.2	<0.2	1.4	1.5
						1.0	0.3	91	23.6		8.0		30.2		91.7		6.5		11.7		11		91				<0.2		1.4	
					Middle	4.2	0.2	92	23.5	23.5	8.0	8.0	30.4	30.4	91.8	91.8	6.6		12.3		10		93				<0.2		1.5	
						4.2	0.2	99	23.5		8.0		30.4		91.8		6.6		12.3		9		93				<0.2		1.7	
					Bottom	7.3	0.2	98	23.4	23.4	8.0	8.0	30.5	30.5	93.8	93.8	6.7	6.7	8.7		11		96				<0.2		1.5	
						7.3	0.2	105	23.4		8.0		30.5		93.8		6.7		8.7		12		97				<0.2		1.5	
IM12	Cloudy	Moderate	13:58	9.0	Surface	1.0	0.2	99	23.6	23.6	8.0	8.0	30.7	30.6	90.6	90.6	6.5	6.5	5.7	7.9	8	10	92	94	821176	811515	<0.2	<0.2	1.4	1.3
						1.0	0.2	107	23.6		8.0		30.6		90.6		6.5		5.7		10		92				<0.2		1.4	
					Middle	4.5	0.3	96	23.6	23.6	8.0	8.0	30.6	30.6	90.6	90.6	6.5		6.7		9		94				<0.2		1.3	
						4.5	0.3	98	23.6		8.0		30.6		90.6		6.4		6.8		10		94				<0.2		1.4	
					Bottom	8.0	0.3	109	23.5	23.5	8.0	8.0	30.6	30.6	90.8	90.8	6.5	6.5	11.0		10		97				<0.2		1.3	
						8.0	0.3	115	23.5		8.0		30.6		90.8		6.5		11.2		11		97				<0.2		1.2	
SR2	Cloudy	Moderate	14:23	4.5	Surface	1.0	0.3	74	23.7	23.7	8.0	8.0	30.6	30.6	90.9	90.9	6.5	6.5	7.4	9.4	5	5	92	94	821492	814193	<0.2	<0.2	1.4	1.3
						1.0	0.3	77	23.7		8.0		30.6		90.9		6.5		7.5		4		93				<0.2		1.3	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.2	77	23.9	23.9	7.9	7.9	30.7	30.7	95.6	95.6	6.8	6.8	11.3		5		95				<0.2		1.2	
						3.5	0.2	82	23.9		7.9		30.7		95.6		6.8		11.3		4		96				<0.2		1.2	
SR3	Cloudy	Moderate	13:23	9.0	Surface	1.0	0.2	64	23.4	23.4	8.0	8.0	30.3	30.3	92.5	92.5	6.6	6.6	15.9	22.2	6	11	-	-	822119	807585	-	-	-	-
						1.0	0.2	64	23.4		8.0		30.3		92.5		6.6		16.0		7		-				-		-	
					Middle	4.5	0.2	50	23.3	23.3	8.0	8.0	30.4	30.4	92.7	92.7	6.6		22.9		10		-				-		-	
						4.5	0.2	52	23.3		8.0		30.4		92.6		6.6		23.1		11		-				-		-	
					Bottom	8.0	0.2	29	23.2	23.2	8.0	8.0	30.4	30.4	94.1	94.1	6.8	6.8	27.8		15		-				-		-	
						8.0	0.2	31	23.2		8.0		30.4		94.1		6.8		27.6		16		-				-		-	
SR4A	Cloudy	Moderate	14:35	8.4	Surface	1.0	0.3	75	22.9	22.9	8.0	8.0	31.2	31.2	94.4	94.4	6.8	6.8	12.1	14.7	10	11	-	-	817174	807817	-	-	-	-
						1.0	0.3	77	22.9		8.0		31.2		94.4		6.8		12.4		10		-				-		-	
					Middle	4.2	0.3	75	22.9	22.9	8.0	8.0	31.3	31.3	94.4	94.5	6.8		15.3		10		-				-		-	
						4.2	0.3	78	22.9		8.0		31.3		94.5		6.8		14.6		12		-				-		-	
					Bottom	7.4	0.3	70	22.9	22.9	8.0	8.0	31.3	31.3	96.0	96.3	6.9	6.9	17.3		12		-				-		-	
						7.4	0.3	76	22.9		8.0		31.3		96.5		6.9		16.3		12		-				-		-	
SR5A	Cloudy	Moderate	14:52	3.8	Surface	1.0	0.1	329	22.9	22.9	7.9	7.9	29.9	29.9	91.5	91.6	6.6	6.6	7.9	8.7	8	8	-	-	816597	810697	-	-	-	-
						1.0	0.1	332	22.9		7.9		29.9		91.7		6.6		8.4		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	0.1	335	22.8	22.8	7.9	7.9	29.9	29.9	93.1	93.4	6.7	6.8	9.1		8		-				-		-	
						2.8	0.1	347	22.8		7.9		29.9		93.7		6.8		9.3		8		-				-		-	
SR6	Cloudy	Moderate	15:15	4.0	Surface	1.0	0.1	60	23.1	23.1	7.9	7.9	29.6	29.6	91.0	91.1	6.6	6.6	7.1	7.8	7	7	-	-	817914	814690	-	-	-	-
						1.0	0.1	64	23.1		7.9		29.6		91.2		6.6		7.3		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	0.1	41	23.1	23.1	7.9	7.9	29.7	29.7	93.6	94.1	6.8	6.8	8.3		7		-				-		-	
						3.0	0.1	44	23.1		7.9		29.7		94.6		6.8		8.4		8		-				-		-	
SR7	Cloudy	Moderate	15:11	18.5	Surface	1.0	0.5	69	24.1	24.1	7.9	7.9	31.6	31.6	85.6	85.6	6.0	6.0	3.0	3.5	5	6	-	-	823610	823757	-	-	-	-
						1.0	0.5	70	24.1		7.9		31.6		85.6		6.0		3.1		5		-				-		-	
					Middle	9.3	0.3	43	24.0	24.0	7.9	7.9	31.7	31.7	85.6	85.7	6.0		3.7		5		-				-		-	
						9.3	0.3	47	24.0		7.9		31.7		85.7		6.0		3.7		6		-				-		-	
					Bottom	17.5	0.2	23	24.0	24.0	7.9	7.9	31.7	31.7	86.5	86.5	6.1	6.1	3.6		7		-				-		-	
						17.5	0.3	23	24.0		7.9		31.7		86.5		6.1		3.6		9		-				-		-	
SR8	Cloudy	Moderate	14:07	4.1	Surface	1.0	-	-	23.5	23.5	8.0	8.0	30.6	30.6	92.6	92.6	6.6	6.6	9.4	9.7	8	9	-	-	820246	811418	-	-	-	-
						1.0	-	-	23.5		8.0		30.6		92.6		6.6		9.4		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	-	-	23.5	23.5	8.0	8.0	30.6	30.6	95.4	95.5	6.8	6.8	10.0		9		-				-		-	
						3.1	-	-	23.5		8.0		30.6		95.5		6.8		10.0		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 November 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	09:34	8.0	Surface	1.0	0.5	67	23.0	23.0	8.0	8.0	31.5	31.5	93.6	93.6	6.7	6.7	19.7	20.6	23	26	91	94	815621	804268	<0.2	<0.2	1.8	1.7
						1.0	0.5	71	23.0		8.0		31.6		93.6		6.7		19.8		24		91				<0.2		1.7	
					Middle	4.0	0.4	51	22.9	22.9	8.0	8.0	31.5	31.5	93.4	93.4	6.7		20.3		27		96				<0.2		1.6	
						4.0	0.4	51	22.9		8.0		31.5		93.4		6.7		20.3		28		96				<0.2		1.5	
					Bottom	7.0	0.5	53	23.0	23.0	8.0	8.0	31.6	31.6	94.4	94.5	6.8	6.8	21.8		28		96				<0.2		1.7	
						7.0	0.5	53	23.0		8.0		31.6		94.5		6.8		21.8		27		96				<0.2		1.6	
C2	Cloudy	Moderate	10:03	11.4	Surface	1.0	0.3	330	23.7	23.7	7.9	7.9	29.3	29.3	88.1	88.1	6.3	6.3	10.7	14.5	10	11	93	96	825672	806937	<0.2	<0.2	1.7	1.7
						1.0	0.4	350	23.7		7.9		29.3		88.1		6.3		10.7		10		93				<0.2		1.8	
					Middle	5.7	0.3	347	23.8	23.8	7.9	7.9	29.3	29.3	88.2	88.2	6.3		11.6		11		96				<0.2		1.9	
						5.7	0.3	354	23.8		7.9		29.3		88.2		6.3		11.6		10		97				<0.2		1.9	
					Bottom	10.4	0.3	357	23.9	23.9	7.9	7.9	29.4	29.4	90.2	90.2	6.4	6.4	21.2		12		99				<0.2		1.6	
						10.4	0.3	328	23.9		7.9		29.4		90.2		6.4		21.2		11		99				<0.2		1.5	
C3	Cloudy	Moderate	08:15	11.1	Surface	1.0	0.6	268	23.7	23.7	7.9	7.9	30.2	30.2	87.6	87.6	6.2	6.2	6.6	12.7	7	8	91	94	822088	817775	<0.2	<0.2	1.4	1.3
						1.0	0.6	268	23.7		7.9		30.2		87.6		6.2		6.6		6		92				<0.2		1.2	
					Middle	5.6	0.5	271	23.8	23.8	7.9	7.9	30.3	30.3	86.7	86.7	6.2		11.7		6		94				<0.2		1.2	
						5.6	0.6	283	23.8		7.9		30.3		86.7		6.2		11.7		8		95				<0.2		1.2	
					Bottom	10.1	0.5	272	24.0	24.0	7.9	7.9	30.6	30.6	86.1	86.1	6.1	6.1	19.8		10		97				<0.2		1.4	
						10.1	0.5	279	24.0		7.9		30.6		86.1		6.1		20.0		9		97				<0.2		1.2	
IM1	Cloudy	Moderate	09:51	7.2	Surface	1.0	0.5	27	23.0	23.0	8.0	8.0	30.3	30.3	91.3	91.3	6.6	6.6	21.4	21.0	21	23	91	94	818343	806443	<0.2	<0.2	1.2	1.4
						1.0	0.5	27	23.0		8.0		30.3		91.3		6.6		21.3		22		92				<0.2		1.5	
					Middle	3.6	0.3	22	23.0	23.0	8.0	8.0	30.4	30.3	91.3	91.3	6.6		20.3		24		93				<0.2		1.4	
						3.6	0.3	22	23.0		8.0		30.3		91.3		6.6		20.3		25		94				<0.2		1.4	
					Bottom	6.2	0.3	6	23.0	23.0	8.0	8.0	30.3	30.3	92.9	92.9	6.7	6.7	21.3		23		96				<0.2		1.3	
						6.2	0.3	6	23.0		8.0		30.3		92.9		6.7		21.2		23		96				<0.2		1.4	
IM2	Cloudy	Moderate	09:56	8.1	Surface	1.0	0.5	17	23.0	23.0	8.0	8.0	30.3	30.3	91.7	91.7	6.6	6.6	14.8	19.5	22	23	91	94	818867	806165	<0.2	<0.2	1.4	1.3
						1.0	0.5	17	23.0		8.0		30.3		91.6		6.6		14.8		20		92				<0.2		1.4	
					Middle	4.1	0.4	17	23.0	23.0	8.0	8.0	30.3	30.3	91.4	91.4	6.6		20.5		24		93				<0.2		1.2	
						4.1	0.5	18	23.0		8.0		30.3		91.4		6.6		20.5		25		94				<0.2		1.3	
					Bottom	7.1	0.4	15	23.0	23.0	8.0	8.0	30.2	30.2	92.1	92.3	6.6	6.7	23.2		24		96				<0.2		1.4	
						7.1	0.4	16	23.0		8.0		30.2		92.5		6.7		23.3		23		96				<0.2		1.3	
IM3	Cloudy	Moderate	10:03	8.2	Surface	1.0	0.4	25	23.1	23.1	8.0	8.0	30.0	30.0	90.7	90.7	6.5	6.5	12.7	17.1	13	15	91	95	819394	806040	<0.2	<0.2	1.3	1.2
						1.0	0.4	27	23.1		8.0		30.0		90.7		6.5		12.6		12		91				<0.2		1.1	
					Middle	4.1	0.4	18	23.1	23.1	8.0	8.0	30.1	30.1	90.6	90.6	6.5		16.6		15		96				<0.2		1.2	
						4.1	0.4	19	23.1		8.0		30.1		90.6		6.5		16.6		15		96				<0.2		1.3	
					Bottom	7.2	0.4	20	23.1	23.1	8.0	8.0	30.2	30.2	92.3	92.5	6.6	6.7	22.2		17		98				<0.2		1.1	
						7.2	0.4	21	23.1		8.0		30.2		92.6		6.7		22.1		16		98				<0.2		1.1	
IM4	Cloudy	Moderate	10:10	7.5	Surface	1.0	0.5	3	23.1	23.1	8.0	8.0	30.2	30.2	91.5	91.5	6.6	6.6	12.2	14.7	12	13	92	94	819573	805047	<0.2	<0.2	1.3	1.2
						1.0	0.5	3	23.1		8.0		30.2		91.5		6.6		12.2		13		92				<0.2		1.1	
					Middle	3.8	0.5	10	23.0	23.0	8.0	8.0	30.3	30.3	91.4	91.4	6.6		14.0		12		93				<0.2		1.2	
						3.8	0.5	10	23.0		8.0		30.3		91.4		6.6		14.4		13		94				<0.2		1.2	
					Bottom	6.5	0.4	11	23.1	23.1	8.0	8.0	30.4	30.4	92.9	93.1	6.7	6.7	17.6		12		96				<0.2		1.1	
						6.5	0.4	11	23.1		8.0		30.4		93.2		6.7		17.9		14		96				<0.2		1.2	
IM5	Cloudy	Moderate	10:21	6.7	Surface	1.0	0.4	8	23.2	23.2	7.9	7.9	29.7	29.7	89.8	89.8	6.5	6.5	13.2	19.2	14	14	92	94	820546	804926	<0.2	<0.2	1.0	1.1
						1.0	0.4	8	23.2		7.9		29.7		89.8		6.5		13.2		14		91				<0.2		1.0	
					Middle	3.4	0.4	11	23.2	23.2	7.9	7.9	29.8	29.8	89.6	89.6	6.5		21.0		14		94				<0.2		1.1	
						3.4	0.4	11	23.2		7.9		29.8		89.6		6.5		21.4		15		94				<0.2		1.0	
					Bottom	5.7	0.4	24	23.3	23.3	7.9	7.9	30.1	30.1	92.3	92.4	6.6	6.6	23.2		14		96				<0.2		1.2	
						5.7	0.4	24	23.3		7.9		30.1		92.4		6.6		23.4		14		96				<0.2		1.3	
IM6	Cloudy	Moderate	10:29	6.8	Surface	1.0	0.3	25	23.1	23.1	8.0	8.0	29.8	29.8	90.8	90.8	6.6	6.6	14.4	17.8	14	15	91	94	821046	805837	<0.2	<0.2	1.1	1.1
						1.0	0.3	27	23.1		8.0		29.8		90.8		6.6		14.5		14		91				<0.2		1.2	
					Middle	3.4	0.3	5	23.0	23.0	8.0	8.0	30.6	30.6	91.5	91.6	6.6		18.4		16		94				<0.2		1.1	
						3.4	0.4	5	23.0		8.0		30.6		91.6		6.6		18.5		17		94				<0.2		1.2	
					Bottom	5.8	0.3	2	22.9	22.9	8.0	8.0	30.8	30.8	94.2	94.4	6.8	6.8	20.5		15		96				<0.2		1.1	
						5.8	0.3	2	22.9		8.0		30.7		94.6		6.8		20.4		15		97				<0.2		1.0	
IM7	Cloudy	Moderate	10:37	8.3	Surface	1.0	0.1	93	23.2	23.2	8.0	8.0	29.4	29.4	90.5	90.5	6.5	6.6	17.1	20.1	16	17	92	94	821358	806838	<0.2	<0.2	0.9	0.9
						1.0	0.1	94	23.2		8.0		29.4		90.5		6.5		17.3		16		92				<0.2		0.9	
					Middle	4.2	0.1	78	23.1	23.1	8.0	8.0	30.0	30.0	91.0	91.1	6.6		21.8		18		94				<0.2		1.0	
						4.2	0.1	84	23.1		8.0		30.0		91.1		6.6		22.0		18		94				<0.2		1.1	
					Bottom	7.3	0.1	47	22.9	22.9	8.0	8.0	30.7	30.7	92.5	92.7	6.7	6.7	21.2		16		96				<0.2		0.7	
						7.3	0.2	48	22.9		8.0		30.7		92.8		6.7		21.2		17		96				<0.2		0.8	
IM8	Cloudy	Moderate	09:37	8.0	Surface	1.0	0.3	12	23.5	23.5	8.0	8.0	29.4	29.4	89.2	89.2	6.4	6.4	15.4	22.0	17	17	92	96	821699	807866	<0.2	<0.2	1.9	1.8
						1.0	0.3	12	23.5		8.0		29.4		89.1		6.4		15.4		17		93				<0.2		1.7	
					Middle	4.0	0.3	23	23.5	23.5	8.0	8.0	29.4	29.4	89.5	89.5	6.4		21.8		18		96				<0.2		1.7	
						4.0	0.3	24	23.5		8.0		29.4		89.5		6.4		22.0		18		96				<0.2		1.9	
					Bottom	7.0	0.3	27	23.5	23.5	8.0	8.0	29.5	29.5	89.8	89.8	6.4	6.4	28.8		16		98				<0.2		1.8	
						7.0	0.3	29	23.5		8.0		29.5		89.8		6.4		28.8		16		98				<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 21 November 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	09:29	6.7	Surface	1.0	0.2	13	23.5	23.5	7.9	7.9	29.2	29.2	88.5	88.5	6.4	6.4	11.5	12.9	16	17	93	96	822065	808834	<0.2	<0.2	1.7	1.9
						1.0	0.2	13	23.5		7.9		29.2		88.5		6.4		11.5		17		93				<0.2		1.6	
					Middle	3.4	0.2	347	23.6	23.6	7.9	7.9	29.3	29.3	88.9	88.9	6.4		13.1		17		95				<0.2		1.9	
						3.4	0.2	319	23.6		7.9		29.3		88.9		6.4		13.1		17		96				<0.2		2.2	
					Bottom	5.7	0.2	309	23.6	23.6	7.9	7.9	29.7	29.7	89.1	89.1	6.4	6.4	14.0		16		98				<0.2		2.0	
						5.7	0.2	310	23.6		7.9		29.7		89.1		6.4		14.0		18		98				<0.2		2.2	
IM10	Cloudy	Moderate	09:21	6.1	Surface	1.0	0.5	314	23.4	23.4	8.0	8.0	30.4	30.4	90.7	90.7	6.5	6.5	16.9	21.8	15	16	93	96	822237	809827	<0.2	<0.2	2.1	1.9
						1.0	0.5	317	23.4		8.0		30.4		90.7		6.5		16.8		15		93				<0.2		2.0	
					Middle	3.1	0.5	316	23.4	23.4	8.0	8.0	30.4	30.4	90.8	90.8	6.5		20.7		14		96				<0.2		1.9	
						3.1	0.5	322	23.4		8.0		30.4		90.8		6.5		20.7		14		96				<0.2		1.8	
					Bottom	5.1	0.4	316	23.4	23.4	8.0	8.0	30.4	30.4	91.3	91.3	6.5	6.5	27.9		19		98				<0.2		2.0	
						5.1	0.4	321	23.4		8.0		30.4		91.3		6.5		27.9		20		98				<0.2		1.7	
IM11	Cloudy	Moderate	09:09	7.5	Surface	1.0	0.5	290	23.4	23.4	8.0	8.0	30.3	30.3	90.0	90.0	6.4	6.5	17.5	21.5	14	16	92	94	821493	810530	<0.2	<0.2	1.4	1.5
						1.0	0.5	296	23.4		8.0		30.3		90.0		6.4		17.5		15		92				<0.2		1.4	
					Middle	3.8	0.5	289	23.4	23.4	8.0	8.0	30.3	30.3	90.7	90.7	6.5		21.3		14		94				<0.2		1.4	
						3.8	0.5	294	23.4		8.0		30.3		90.7		6.5		21.3		14		94				<0.2		1.5	
					Bottom	6.5	0.4	288	23.4	23.4	8.0	8.0	30.3	30.3	92.0	92.0	6.6	6.6	25.6		20		97				<0.2		1.6	
						6.5	0.5	294	23.4		8.0		30.3		92.0		6.6		25.6		19		97				<0.2		1.6	
IM12	Cloudy	Moderate	09:03	6.9	Surface	1.0	0.6	281	23.4	23.4	8.0	8.0	30.4	30.4	89.1	89.1	6.4	6.4	15.7	21.5	21	21	93	96	821186	811494	<0.2	<0.2	1.4	1.3
						1.0	0.6	294	23.4		8.0		30.4		89.1		6.4		15.7		21		93				<0.2		1.3	
					Middle	3.5	0.5	275	23.4	23.4	8.0	8.0	30.4	30.4	89.7	89.7	6.4		21.3		22		96				<0.2		1.3	
						3.5	0.6	276	23.4		8.0		30.4		89.7		6.4		21.1		22		96				<0.2		1.4	
					Bottom	5.9	0.4	282	23.4	23.4	8.0	8.0	30.4	30.4	90.3	90.3	6.5	6.5	27.5		20		98				<0.2		1.2	
						5.9	0.4	303	23.4		8.0		30.4		90.3		6.5		27.6		21		99				<0.2		1.3	
SR2	Cloudy	Moderate	08:36	4.3	Surface	1.0	0.4	44	23.4	23.4	8.0	8.0	30.4	30.4	90.5	90.5	6.5	6.5	19.6	21.6	17	16	94	95	821487	814139	<0.2	<0.2	1.2	1.2
						1.0	0.4	47	23.4		8.0		30.4		90.5		6.5		19.6		16		93				<0.2		1.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.3	42	23.4	23.4	8.0	8.0	30.9	30.9	91.4	91.4	6.5	6.5	23.4		16		96				<0.2		1.2	
						3.3	0.3	45	23.4		8.0		30.9		91.4		6.5		23.6		16		96				<0.2		1.1	
SR3	Cloudy	Moderate	09:43	8.6	Surface	1.0	0.2	19	23.6	23.6	7.9	7.9	29.1	29.1	88.3	88.3	6.3	6.4	15.8	19.9	11	11	-	-	822123	807569	-	-	-	-
						1.0	0.2	19	23.6		7.9		29.1		88.3		6.3		15.8		11		-				-		-	
					Middle	4.3	0.2	17	23.6	23.6	7.9	7.9	29.1	29.1	88.5	88.5	6.4		18.9		11		-				-		-	
						4.3	0.2	18	23.6		7.9		29.1		88.5		6.4		18.9		10		-				-		-	
					Bottom	7.6	0.3	11	23.5	23.5	8.0	8.0	29.3	29.3	90.3	90.3	6.5	6.5	25.1		11		-				-		-	
						7.6	0.3	11	23.5		8.0		29.4		90.3		6.5		25.1		12		-				-		-	
SR4A	Rainy	Moderate	09:11	8.6	Surface	1.0	0.1	239	22.8	22.8	7.9	7.9	30.0	30.0	88.3	88.3	6.4	6.4	12.4	14.9	11	13	-	-	817189	807839	-	-	-	-
						1.0	0.2	247	22.8		7.9		30.0		88.3		6.4		12.5		12		-				-		-	
					Middle	4.3	0.1	264	22.8	22.8	7.9	7.9	30.2	30.2	88.2	88.2	6.4		14.9		11		-				-		-	
						4.3	0.1	273	22.8		7.9		30.2		88.2		6.4		14.8		11		-				-		-	
					Bottom	7.6	0.1	233	22.8	22.8	7.9	7.9	30.2	30.2	89.4	89.6	6.5	6.5	17.4		15		-				-		-	
						7.6	0.1	246	22.8		7.9		30.2		89.8		6.5		17.3		15		-				-		-	
SR5A	Cloudy	Moderate	08:54	3.2	Surface	1.0	0.2	293	22.8	22.8	7.9	7.9	29.7	29.7	94.0	94.4	6.8	6.9	10.3	10.2	12	12	-	-	816576	810698	-	-	-	-
						1.0	0.2	303	22.8		7.9		29.7		94.8		6.9		10.2		12		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.2	0.1	303	22.8	22.8	7.9	7.9	29.7	29.7	100.0	100.8	7.3	7.4	10.1		12		-				-		-	
						2.2	0.1	325	22.8		7.9		29.7		101.5		7.4		10.3		11		-				-		-	
SR6	Cloudy	Moderate	08:31	3.5	Surface	1.0	0.1	272	22.8	22.8	7.9	7.9	28.8	28.8	87.9	88.0	6.4	6.4	8.6	10.4	8	9	-	-	817882	814664	-	-	-	-
						1.0	0.1	276	22.8		7.9		28.8		88.0		6.4		8.8		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.5	0.1	264	22.9	22.9	7.9	7.8	28.5	28.5	90.2	90.4	6.6	6.6	12.1		10		-				-		-	
						2.5	0.1	276	22.9		7.8		28.4		90.6		6.6		12.0		8		-				-		-	
SR7	Cloudy	Moderate	07:46	17.1	Surface	1.0	0.2	93	24.0	24.0	7.9	7.9	30.7	30.7	85.5	85.5	6.0	6.0	7.8	11.0	8	11	-	-	823615	823729	-	-	-	-
						1.0	0.2	100	24.0		7.9		30.7		85.5		6.0		7.8		8		-				-		-	
					Middle	8.6	0.2	56	24.0	24.0	7.9	7.9	30.9	30.9	84.7	84.8	6.0		10.2		12		-				-		-	
						8.6	0.2	59	24.0		7.9		30.9		84.8		6.0		10.4		12		-				-		-	
					Bottom	16.1	0.2	49	24.1	24.1	7.9	7.9	31.2	31.2	84.8	84.8	5.8	5.8	15.0		14		-				-		-	
						16.1	0.2	51	24.1		7.9		31.2		84.8		5.8		14.8		14		-				-		-	
SR8	Cloudy	Moderate	08:53	3.9	Surface	1.0	-	-	23.6	23.6	7.9	7.9	30.0	30.0	91.1	91.1	6.5	6.5	13.0	14.8	19	19	-	-	820246	811418	-	-	-	-
						1.0	-	-	23.6		7.9		30.0		91.1		6.5		13.1		18		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.9	-	-	23.6	23.6	7.9	7.9	30.0	30.0	92.0	92.0	6.6	6.6	16.6		19		-				-		-	
						2.9	-	-	23.6		7.9		30.0		92.0		6.6		16.6		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 23 November 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) 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
C1	Cloudy	Moderate	15:22	8.6	Surface	1.0	0.2	81	22.3	22.3	8.0	8.0	32.6	32.6	94.8	94.8	6.8	6.8	15.9	17.8	18	18	97	99	815597	804245	<0.2	<0.2	0.6	0.6
						1.0	0.2	82	22.3		8.0		32.6		94.8		6.8		16.2		16		97				<0.2		0.7	
					Middle	4.3	0.2	124	22.3	22.3	8.0	8.0	32.6	32.6	95.0	95.1	6.8		18.6		19		99				<0.2		0.6	
						4.3	0.2	127	22.3		8.0		32.6		95.1		6.9		18.8		19		99				<0.2		0.6	
					Bottom	7.6	0.1	170	22.3	22.3	8.0	8.0	32.6	32.6	96.2	96.3	6.9	6.9	18.6		18		102				<0.2		0.5	
						7.6	0.2	181	22.3		8.0		32.6		96.3		6.9		18.5		20		102				<0.2		0.6	
C2	Fine	Moderate	14:14	12.3	Surface	1.0	0.1	50	22.7	22.7	8.0	8.0	30.5	30.5	92.3	92.3	6.7	6.7	7.4	11.1	7	7	94	96	825676	806923	<0.2	<0.2	1.5	1.6
						1.0	0.1	51	22.7		8.0		30.5		92.2		6.7		7.4		6		95				<0.2		1.6	
					Middle	6.2	0.2	359	22.8	22.8	8.0	8.0	30.9	31.0	92.5	92.7	6.7		10.0		6		96				<0.2		1.7	
						6.2	0.3	330	22.7		8.0		31.0		92.9		6.7		10.0		6		96				<0.2		1.6	
					Bottom	11.3	0.3	329	22.3	22.3	8.1	8.1	31.3	31.3	93.2	93.2	6.8	6.8	16.0		8		99				<0.2		1.4	
						11.3	0.3	341	22.3		8.1		31.3		93.1		6.8		16.0		8		98				<0.2		1.6	
C3	Fine	Moderate	15:59	12.0	Surface	1.0	0.1	31	23.2	23.2	8.0	8.0	32.4	32.4	89.0	89.0	6.3	6.3	3.8	6.4	2	3	96	99	822102	817825	<0.2	<0.2	0.7	0.7
						1.0	0.1	31	23.2		8.0		32.4		89.0		6.3		3.9		4		97				<0.2		0.9	
					Middle	6.0	0.1	85	23.2	23.2	8.0	8.0	32.4	32.4	89.1	89.1	6.3		9.7		3		99				<0.2		0.8	
						6.0	0.1	89	23.2		8.0		32.4		89.1		6.3		9.7		2		99				<0.2		0.6	
					Bottom	11.0	0.1	78	23.2	23.2	8.0	8.0	32.4	32.4	89.7	89.8	6.4	6.4	5.4		4		102				<0.2		0.6	
						11.0	0.1	79	23.2		8.0		32.4		89.8		6.4		5.6		5		102				<0.2		0.7	
IM1	Cloudy	Moderate	15:02	7.3	Surface	1.0	0.1	123	22.0	22.0	8.0	8.0	32.2	32.2	95.4	95.4	6.9	6.9	14.9	17.5	15	16	97	101	818345	806486	<0.2	<0.2	0.6	0.7
						1.0	0.1	125	22.0		8.0		32.2		95.4		6.9		15.0		16		97				<0.2		0.6	
					Middle	3.7	0.1	105	22.0	22.0	8.0	8.0	32.2	32.2	95.4	95.5	6.9		16.0		16		101				<0.2		0.8	
						3.7	0.1	111	22.0		8.0		32.2		95.5		6.9		16.3		15		102				<0.2		0.8	
					Bottom	6.3	0.1	89	22.0	22.0	8.0	8.0	32.2	32.2	96.2	96.3	7.0	7.0	21.6		15		103				<0.2		0.8	
						6.3	0.1	97	22.0		8.0		32.2		96.4		7.0		21.3		16		104				<0.2		0.7	
IM2	Cloudy	Moderate	14:56	8.2	Surface	1.0	0.1	290	21.9	21.9	8.0	8.0	32.2	32.2	95.1	95.1	6.9	6.9	18.0	17.6	15	17	98	101	818866	806214	<0.2	<0.2	0.7	0.8
						1.0	0.1	316	21.9		8.0		32.2		95.1		6.9		18.0		15		99				<0.2		0.8	
					Middle	4.1	0.2	35	22.0	22.0	8.0	8.0	32.3	32.3	95.2	95.3	6.9		17.7		18		101				<0.2		0.7	
						4.1	0.2	35	22.0		8.0		32.3		95.3		6.9		17.7		19		101				<0.2		0.8	
					Bottom	7.2	0.3	44	22.1	22.1	8.0	8.0	32.3	32.3	96.0	96.1	7.0	7.0	17.2		17		103				<0.2		0.9	
						7.2	0.3	48	22.1		8.0		32.3		96.2		7.0		16.8		18		104				<0.2		0.9	
IM3	Cloudy	Moderate	14:49	8.3	Surface	1.0	0.2	41	22.0	22.0	8.0	8.0	32.3	32.3	95.3	95.4	6.9	6.9	15.4	16.5	16	17	97	99	819400	805992	<0.2	<0.2	0.8	0.8
						1.0	0.2	44	22.0		8.0		32.3		95.4		6.9		15.4		15		97				<0.2		0.8	
					Middle	4.2	0.2	31	22.1	22.1	8.0	8.0	32.3	32.3	95.6	95.7	6.9		15.6		16		99				<0.2		0.8	
						4.2	0.2	31	22.1		8.0		32.3		95.7		6.9		15.8		18		99				<0.2		0.8	
					Bottom	7.3	0.1	0	22.0	22.0	8.0	8.0	32.3	32.3	96.1	96.3	7.0	7.0	18.4		18		101				<0.2		0.8	
						7.3	0.1	0	22.0		8.0		32.3		96.4		7.0		18.4		17		101				<0.2		0.9	
IM4	Cloudy	Rough	14:41	7.8	Surface	1.0	0.1	75	22.1	22.1	8.0	8.0	32.3	32.3	95.1	95.1	6.9	6.9	18.4	20.3	12	15	96	99	819597	805046	<0.2	<0.2	0.8	0.8
						1.0	0.1	81	22.1		8.0		32.3		95.1		6.9		18.4		11		96				<0.2		0.8	
					Middle	3.9	0.2	54	22.0	22.0	8.0	8.0	32.3	32.3	94.6	94.6	6.9		21.9		16		98				<0.2		0.8	
						3.9	0.2	59	22.0		8.0		32.3		94.6		6.9		21.8		17		99				<0.2		1.0	
					Bottom	6.8	0.1	263	22.0	22.0	8.0	8.0	32.2	32.2	95.1	95.2	6.9	6.9	20.6		18		101				<0.2		0.7	
						6.8	0.1	273	22.0		8.0		32.2		95.3		6.9		20.6		18		101				<0.2		0.7	
IM5	Cloudy	Moderate	14:29	6.9	Surface	1.0	0.3	16	22.1	22.1	8.0	8.0	32.2	32.2	95.2	95.2	6.9	6.9	19.5	21.1	15	18	96	98	820555	804914	<0.2	<0.2	0.7	0.8
						1.0	0.3	16	22.1		8.0		32.2		95.2		6.9		19.5		17		96				<0.2		0.7	
					Middle	3.5	0.2	12	22.1	22.1	8.0	8.0	32.2	32.2	94.9	95.0	6.9		21.4		16		98				<0.2		0.7	
						3.5	0.2	12	22.1		8.0		32.2		95.0		6.9		21.5		15		99				<0.2		0.8	
					Bottom	5.9	0.2	27	22.1	22.1	8.0	8.0	32.2	32.2	95.2	95.3	6.9	6.9	22.5		23		99				<0.2		0.8	
						5.9	0.2	28	22.1		8.0		32.2		95.3		6.9		22.4		23		99				<0.2		1.0	
IM6	Cloudy	Rough	14:20	6.6	Surface	1.0	0.2	15	22.0	22.0	8.0	8.0	31.5	31.5	96.2	96.2	7.0	7.0	11.0	15.1	10	11	95	97	821075	805856	<0.2	<0.2	1.2	1.1
						1.0	0.2	16	22.0		8.0		31.5		96.1		7.0		11.3		10		95				<0.2		1.0	
					Middle	3.3	0.2	4	22.0	22.0	8.0	8.0	31.5	31.5	95.7	95.8	7.0		12.9		10		96				<0.2		1.0	
						3.3	0.2	4	22.0		8.0		31.6		95.8		7.0		12.8		8		96				<0.2		1.1	
					Bottom	5.6	0.2	0	22.0	22.0	8.0	8.0	31.6	31.6	96.7	96.8	7.0	7.1	21.1		16		98				<0.2		1.0	
						5.6	0.2	0	22.0		8.0		31.6		96.8		7.1		21.3		14		99				<0.2		1.2	
IM7	Cloudy	Rough	14:13	8.5	Surface	1.0	0.1	57	22.2	22.2	8.0	8.0	31.3	31.3	94.1	94.1	6.8	6.8	12.3	15.4	10	12	96	98	821372	806854	<0.2	<0.2	1.6	1.4
						1.0	0.1	58	22.2		8.0		31.3		94.1		6.8		12.2		11		96				<0.2		1.4	
					Middle	4.3	0.1	355	22.2	22.2	8.0	8.0	31.3	31.3	93.8	93.8	6.8		15.6		14		98				<0.2		1.6	
						4.3	0.1	327	22.2		8.0		31.3		93.8		6.8		15.4		14		98				<0.2		1.5	
					Bottom	7.5	0.2	56	22.1	22.1	8.0	8.0	31.4	31.4	94.5	94.5	6.9	6.9	18.3		12		99				<0.2		1.3	
						7.5	0.2	58	22.1		8.0		31.4		94.5		6.9		18.3		12		99				<0.2		1.2	
IM8	Fine	Moderate	14:40	8.1	Surface	1.0	0.2	55	22.2	22.2	8.1	8.1	31.4	31.4	95.0	95.0	6.9	6.9	13.6	14.1	11	13	96	97	821704	807816	<0.2	<0.2	1.3	1.2
						1.0	0.2	57	22.2		8.1		31.4		95.0		6.9		13.8		12		95				<0.2		1.5	
					Middle	4.1	0.1	47	22.2	22.2	8.1	8.1	31.4	31.4	95.0	95.0	6.9		15.4		12		97				<0.2		1.2	
						4.1	0.1	47	22.2		8.1		31.4		95.0		6.9		15.1		12		97				<0.2		1.0	
					Bottom	7.1	0.1	20	22.2	22.2	8.1	8.1	31.4	31.4	95.9	96.0	7.0	7.0	13.4		15		99				<0.2		1.1	
						7.1	0.1	20	22.2		8.1		31.4		96.1		7.0		13.5		17		99				<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 23 November 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) 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	14:47	7.2	Surface	1.0	0.1	52	22.3	22.3	8.1	8.1	31.3	31.3	95.9	95.9	7.0	7.0	16.2	14.5	18	20	96	97	822071	808791	<0.2	<0.2	1.3	1.2
						1.0	0.1	55	22.3		8.1		31.3		95.9		7.0		15.7		18		95				<0.2		1.2	
					Middle	3.6	0.1	71	22.3	22.3	8.1	8.1	31.4	31.4	95.9	95.9	7.0		14.3		20		97				<0.2		1.3	
						3.6	0.1	71	22.3		8.1		31.3		95.9		7.0		14.5		21		97				<0.2		1.2	
					Bottom	6.2	0.1	66	22.2	22.2	8.1	8.1	31.5	31.5	97.6	97.7	7.1	7.1	12.9		21		98				<0.2		1.0	
						6.2	0.1	69	22.2		8.1		31.5		97.8		7.1		13.1		19		99				<0.2		1.3	
IM10	Fine	Moderate	14:55	7.6	Surface	1.0	0.1	44	22.7	22.7	8.1	8.1	31.6	31.6	93.0	93.0	6.7	6.7	8.2	8.9	11	11	95	98	822240	809837	<0.2	<0.2	1.3	1.1
						1.0	0.1	47	22.7		8.1		31.6		93.0		6.7		8.2		10		96				<0.2		1.0	
					Middle	3.8	0.2	30	22.7	22.7	8.1	8.1	31.6	31.6	93.1	93.2	6.7		8.5		10		98				<0.2		1.1	
						3.8	0.2	32	22.7		8.1		31.6		93.2		6.7		8.5		10		97				<0.2		1.1	
					Bottom	6.6	0.0	325	22.6	22.6	8.1	8.1	31.6	31.6	93.4	93.4	6.7	6.7	9.8		11		99				<0.2		0.9	
						6.6	0.0	347	22.6		8.1		31.6		93.4		6.7		10.1		11		100				<0.2		1.2	
IM11	Fine	Moderate	15:06	8.1	Surface	1.0	0.1	293	22.9	22.9	8.0	8.0	31.7	31.7	92.0	92.0	6.6	6.6	7.1	7.9	14	13	97	99	821522	810560	<0.2	<0.2	1.1	1.0
						1.0	0.1	296	22.9		8.0		31.7		92.0		6.6		7.0		13		96				<0.2		1.2	
					Middle	4.1	0.1	320	22.9	22.9	8.0	8.0	31.7	31.7	92.0	92.0	6.6		7.1		13		98				<0.2		0.9	
						4.1	0.1	320	22.9		8.0		31.7		92.0		6.6		7.1		12		99				<0.2		0.8	
					Bottom	7.1	0.0	35	22.8	22.8	8.0	8.0	31.7	31.7	92.2	92.2	6.6	6.6	9.2		13		101				<0.2		0.8	
						7.1	0.0	37	22.8		8.0		31.7		92.2		6.6		10.0		15		100				<0.2		1.0	
IM12	Fine	Moderate	15:13	8.6	Surface	1.0	0.1	171	22.7	22.7	8.0	8.0	31.6	31.6	91.5	91.4	6.6	6.6	6.8	8.3	11	12	96	99	821139	811493	<0.2	<0.2	0.9	1.1
						1.0	0.1	181	22.7		8.0		31.6		91.3		6.6		6.8		11		96				<0.2		1.0	
					Middle	4.3	0.2	215	22.9	22.9	8.0	8.0	31.7	31.7	90.2	90.2	6.5		8.0		11		98				<0.2		1.2	
						4.3	0.2	215	22.9		8.0		31.7		90.2		6.5		8.0		11		98				<0.2		1.2	
					Bottom	7.6	0.1	201	23.0	23.0	8.0	8.0	31.9	31.8	91.5	91.7	6.5	6.6	10.2		13		102				<0.2		1.0	
						7.6	0.1	202	23.0		8.0		31.8		91.8		6.6		10.1		15		101				<0.2		1.0	
SR2	Fine	Moderate	15:37	4.5	Surface	1.0	0.1	342	23.1	23.1	8.0	8.0	32.0	32.0	90.9	90.9	6.5	6.5	6.2	6.7	10	11	97	98	821465	814166	<0.2	<0.2	1.0	1.0
						1.0	0.1	359	23.1		8.0		32.0		90.8		6.5		6.3		11		97				<0.2		1.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.1	352	23.2	23.2	8.0	8.0	32.1	32.1	90.9	91.2	6.5	6.5	7.1		11		99				<0.2		0.8	
						3.5	0.1	324	23.2		8.0		32.1		91.5		6.5		7.2		11		99				<0.2		1.0	
SR3	Fine	Moderate	14:35	8.7	Surface	1.0	0.2	76	22.3	22.3	8.1	8.1	31.4	31.4	95.5	95.5	6.9	6.9	11.8	11.8	11	13	-	-	822121	807559	-	-	-	-
						1.0	0.2	77	22.3		8.1		31.4		95.5		6.9		11.7		13		-				-		-	
					Middle	4.4	0.1	53	22.2	22.2	8.1	8.1	31.4	31.4	95.0	95.0	6.9		10.8		13		-				-		-	
						4.4	0.1	56	22.2		8.1		31.4		95.0		6.9		11.1		14		-				-		-	
					Bottom	7.7	0.1	21	22.2	22.2	8.1	8.1	31.4	31.4	95.1	95.2	6.9	6.9	12.7		14		-				-		-	
						7.7	0.1	21	22.2		8.1		31.4		95.3		6.9		12.5		13		-				-		-	
SR4A	Cloudy	Moderate	15:43	8.4	Surface	1.0	0.0	98	22.1	22.1	8.0	8.0	31.2	31.2	95.2	95.3	6.9	6.9	11.3	14.6	10	11	-	-	817217	807807	-	-	-	-
						1.0	0.0	99	22.1		8.0		31.2		95.3		6.9		11.5		8		-				-		-	
					Middle	4.2	0.2	85	21.9	21.9	8.0	8.0	32.1	32.1	95.5	95.5	6.9		15.7		10		-				-		-	
						4.2	0.2	89	21.9		8.0		32.1		95.5		6.9		15.9		10		-				-		-	
					Bottom	7.4	0.1	61	21.9	21.9	8.0	8.0	32.1	32.1	95.9	96.0	7.0	7.0	16.6		12		-				-		-	
						7.4	0.2	63	21.9		8.0		32.1		96.1		7.0		16.7		14		-				-		-	
SR5A	Cloudy	Calm	16:00	3.3	Surface	1.0	0.1	147	22.4	22.4	8.0	8.0	30.9	30.9	97.5	97.5	7.1	7.1	11.6	13.4	11	12	-	-	816599	810709	-	-	-	-
						1.0	0.1	156	22.4		8.0		30.9		97.5		7.1		11.7		12		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.3	0.0	154	22.4	22.4	8.0	8.0	31.0	31.0	98.4	98.4	7.1	7.1	15.2		12		-				-		-	
						2.3	0.0	158	22.4		8.0		31.0		98.4		7.1		15.2		12		-				-		-	
SR6	Cloudy	Moderate	16:23	4.3	Surface	1.0	0.1	133	22.3	22.3	8.0	8.0	30.6	30.6	95.7	95.6	7.0	7.0	9.7	11.3	10	11	-	-	817915	814639	-	-	-	-
						1.0	0.1	140	22.3		8.0		30.6		95.4		6.9		9.9		11		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.0	172	22.5	22.5	8.0	8.0	31.1	31.1	93.7	93.8	6.8	6.8	12.6		11		-				-		-	
						3.3	0.0	184	22.5		8.0		31.1		93.8		6.8		12.8		11		-				-		-	
SR7	Fine	Moderate	16:31	16.2	Surface	1.0	0.1	84	23.2	23.2	8.0	8.0	32.4	32.4	89.4	89.5	6.3	6.4	4.0	4.4	6	7	-	-	823612	823732	-	-	-	-
						1.0	0.1	91	23.2		8.0		32.4		89.5		6.4		4.0		7		-				-		-	
					Middle	8.1	0.1	82	23.2	23.2	8.0	8.0	32.5	32.5	90.0	90.1	6.4		4.2		7		-				-		-	
						8.1	0.2	90	23.2		8.0		32.5		90.1		6.4		4.2		6		-				-		-	
					Bottom	15.2	0.1	33	23.2	23.2	8.0	8.0	32.5	32.5	91.1	91.2	6.5	6.5	4.8		7		-				-		-	
						15.2	0.1	34	23.2		8.0		32.5		91.3		6.5		4.9		6		-				-		-	
SR8	Fine	Moderate	15:21	4.2	Surface	1.0	-	-	22.5	22.5	8.1	8.1	31.5	31.5	95.9	96.0	6.9	6.9	10.4	10.4	11	10	-	-	820246	811418	-	-	-	-
						1.0	-	-	22.5		8.1		31.5		96.1		6.9		10.5		11		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	-	-	22.4	22.4	8.1	8.1	31.5	31.5	97.9	98.1	7.1	7.1	10.4		10		-				-		-	
						3.2	-	-	22.4		8.1		31.5		98.2		7.1		10.3		9		-				-		-	

DA: Depth-Averaged

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

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 23 November 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	10:48	7.8	Surface	1.0	0.4	75	21.9	21.9	8.0	8.0	32.0	32.0	94.7	94.7	6.9	6.9	12.2	16.6	15	18	95	96	815617	804258	<0.2	<0.2	0.8	0.9
						1.0	0.4	75	21.9		8.0		32.0		94.7		6.9		12.2		16		95				<0.2		0.9	
					Middle	3.9	0.3	51	21.9	21.9	8.0	8.0	32.0	32.0	94.3	94.3	6.9		17.2		14		96				<0.2		1.0	
						3.9	0.3	52	21.9		8.0		32.0		94.3		6.9		17.3		16		96				<0.2		0.9	
					Bottom	6.8	0.4	33	21.7	21.7	8.0	8.0	32.1	32.1	94.1	94.2	6.9	6.9	20.4		24		96				<0.2		0.8	
						6.8	0.4	33	21.7		8.0		32.1		94.3		6.9		20.4		22		97				<0.2		0.9	
C2	Fine	Moderate	11:25	11.3	Surface	1.0	0.2	330	22.8	22.8	8.0	8.0	30.8	30.8	91.3	91.3	6.6	6.6	7.4	13.6	10	10	95	97	825703	806923	<0.2	<0.2	1.3	1.3
						1.0	0.2	342	22.8		8.0		30.8		91.3		6.6		7.7		9		94				<0.2		1.4	
					Middle	5.7	0.3	343	22.8	22.8	8.0	8.0	30.9	30.9	91.0	91.0	6.6		9.2		9		97				<0.2		1.2	
						5.7	0.3	346	22.8		8.0		30.9		91.0		6.6		10.1		9		97				<0.2		1.2	
					Bottom	10.3	0.3	340	22.8	22.8	8.0	8.0	30.9	30.9	92.1	92.3	6.6	6.7	24.3		12		99				<0.2		1.3	
						10.3	0.4	349	22.8		8.0		30.9		92.5		6.7		22.8		11		98				<0.2		1.3	
C3	Fine	Moderate	09:41	11.3	Surface	1.0	0.5	257	23.2	23.2	8.0	8.0	32.0	32.0	88.0	88.0	6.3	6.3	4.5	6.1	7	6	97	99	822112	817828	<0.2	<0.2	0.8	0.9
						1.0	0.5	257	23.2		8.0		32.0		88.0		6.3		4.6		5		96				<0.2		0.8	
					Middle	5.7	0.4	261	23.2	23.2	8.0	8.0	32.0	32.0	87.8	87.8	6.2		5.8		5		99				<0.2		0.7	
						5.7	0.4	286	23.2		8.0		32.0		87.8		6.2		6.2		7		99				<0.2		0.9	
					Bottom	10.3	0.3	266	23.3	23.3	8.0	8.0	32.0	32.0	89.0	89.2	6.3	6.3	7.8		7		101				<0.2		0.9	
						10.3	0.3	277	23.3		8.0		32.0		89.4		6.3		7.6		6		102				<0.2		1.0	
IM1	Cloudy	Rough	11:11	7.2	Surface	1.0	0.2	43	22.0	22.0	8.0	8.0	31.3	31.3	93.8	93.8	6.8	6.8	15.2	18.6	17	20	97	101	818376	806487	<0.2	<0.2	1.1	1.2
						1.0	0.2	46	22.0		8.0		31.3		93.7		6.8		15.4		17		97				<0.2		1.1	
					Middle	3.6	0.2	9	22.0	22.0	8.0	8.0	31.3	31.3	93.5	93.5	6.8		19.0		20		100				<0.2		1.3	
						3.6	0.3	9	22.0		8.0		31.3		93.5		6.8		18.9		20		101				<0.2		1.2	
					Bottom	6.2	0.3	2	22.0	22.0	8.0	8.0	31.3	31.3	94.2	94.3	6.9	6.9	21.7		22		104				<0.2		1.4	
						6.2	0.3	2	22.0		8.0		31.3		94.4		6.9		21.6		24		104				<0.2		1.2	
IM2	Cloudy	Rough	11:16	7.8	Surface	1.0	0.3	36	22.0	22.0	8.0	8.0	31.2	31.2	94.1	94.1	6.9	6.9	14.4	17.4	14	14	93	97	818843	806212	<0.2	<0.2	1.4	1.2
						1.0	0.3	38	22.0		8.0		31.2		94.1		6.9		14.3		13		93				<0.2		1.2	
					Middle	3.9	0.3	22	22.0	22.0	8.0	8.0	31.2	31.2	93.9	93.9	6.9		18.7		12		102				<0.2		1.1	
						3.9	0.3	22	22.0		8.0		31.2		93.9		6.9		18.6		14		102				<0.2		1.0	
					Bottom	6.8	0.3	43	22.0	22.0	8.0	8.0	31.2	31.2	94.2	94.4	6.9	6.9	19.2		16		97				<0.2		1.2	
						6.8	0.3	44	22.0		8.0		31.2		94.5		6.9		19.2		15		97				<0.2		1.1	
IM3	Cloudy	Rough	11:23	7.9	Surface	1.0	0.3	31	22.1	22.1	8.0	8.0	31.1	31.1	92.8	92.8	6.8	6.8	20.0	20.9	17	28	102	101	819400	806031	<0.2	<0.2	1.3	1.3
						1.0	0.3	32	22.1		8.0		31.1		92.8		6.8		20.1		19		102				<0.2		1.1	
					Middle	4.0	0.3	14	22.0	22.0	8.0	8.0	31.1	31.1	92.6	92.6	6.8		19.5		29		99				<0.2		1.2	
						4.0	0.3	14	22.0		8.0		31.1		92.6		6.8		19.4		30		99				<0.2		1.5	
					Bottom	6.9	0.3	28	22.0	22.0	8.0	8.0	31.2	31.2	92.9	93.0	6.8	6.8	23.1		38		101				<0.2		1.3	
						6.9	0.4	29	22.0		8.0		31.2		93.1		6.8		23.1		36		102				<0.2		1.4	
IM4	Cloudy	Rough	11:33	7.3	Surface	1.0	0.4	20	21.9	21.9	8.0	8.0	31.3	31.3	95.1	95.1	7.0	7.0	10.4	12.8	10	11	101	104	819569	805030	<0.2	<0.2	1.3	1.3
						1.0	0.4	20	21.9		8.0		31.3		95.1		7.0		10.5		10		101				<0.2		1.2	
					Middle	3.7	0.3	36	21.9	21.9	8.0	8.0	31.3	31.3	95.0	95.0	6.9		11.6		9		106				<0.2		1.4	
						3.7	0.3	36	21.9		8.0		31.3		95.0		6.9		11.6		10		106				<0.2		1.2	
					Bottom	6.3	0.3	27	21.9	21.9	8.0	8.0	31.4	31.4	95.3	95.4	7.0	7.0	16.3		12		104				<0.2		1.4	
						6.3	0.3	29	21.9		8.0		31.4		95.5		7.0		16.4		13		104				<0.2		1.3	
IM5	Cloudy	Rough	11:44	6.5	Surface	1.0	0.3	4	22.1	22.1	8.0	8.0	31.2	31.2	93.6	93.6	6.8	6.8	14.2	18.0	16	16	98	100	820556	804912	<0.2	<0.2	1.4	1.2
						1.0	0.4	4	22.2		8.0		31.2		93.6		6.8		14.2		15		98				<0.2		1.1	
					Middle	3.3	0.3	8	22.1	22.1	8.0	8.0	31.3	31.3	93.5	93.6	6.8		18.4		16		98				<0.2		1.2	
						3.3	0.4	8	22.1		8.0		31.3		93.6		6.8		18.4		16		98				<0.2		1.2	
					Bottom	5.5	0.4	18	22.1	22.1	8.0	8.0	31.3	31.3	94.3	94.4	6.9	6.9	21.4		18		103				<0.2		1.2	
						5.5	0.4	19	22.1		8.0		31.3		94.5		6.9		21.1		16		104				<0.2		1.1	
IM6	Cloudy	Moderate	11:52	6.6	Surface	1.0	0.2	46	22.6	22.6	8.0	8.0	31.1	31.1	91.8	91.9	6.6	6.7	9.7	12.7	13	13	96	99	821034	805856	<0.2	<0.2	1.2	1.2
						1.0	0.2	46	22.6		8.0		31.1		91.9		6.6		10.0		13		96				<0.2		1.1	
					Middle	3.3	0.3	44	22.4	22.4	8.0	8.0	31.3	31.3	92.5	92.6	6.7		12.9		12		99				<0.2		1.2	
						3.3	0.3	45	22.4		8.0		31.3		92.6		6.7		13.0		14		99				<0.2		1.2	
					Bottom	5.6	0.3	11	22.2	22.2	8.0	8.0	31.4	31.4	93.1	93.2	6.8	6.8	15.4		15		101				<0.2		1.2	
						5.6	0.3	11	22.2		8.0		31.4		93.3		6.8		15.3		13		102				<0.2		1.2	
IM7	Cloudy	Moderate	12:00	8.1	Surface	1.0	0.1	83	22.6	22.6	8.0	8.0	31.2	31.2	92.2	92.2	6.7	6.7	10.1	15.5	9	17	101	102	821350	806848	<0.2	<0.2	2.2	2.9
						1.0	0.1	84	22.6		8.0		31.2		92.2		6.7		10.3		10		101				<0.2		2.3	
					Middle	4.1	0.2	29	22.3	22.3	8.0	8.0	31.5	31.5	92.7	92.7	6.7		13.9		19		104				<0.2		3.1	
						4.1	0.3	30	22.3		8.0		31.5		92.7		6.7		14.0		19		105				<0.2		2.9	
					Bottom	7.1	0.2	32	22.1	22.2	8.0	8.0	31.6	31.6	94.6	94.9	6.9	6.9	22.3		22		99				<0.2		3.4	
						7.1	0.2	34	22.2		8.0		31.6		95.1		6.9		22.1		21		99				<0.2		3.4	
IM8	Fine	Moderate	11:01	7.8	Surface	1.0	0.2	21	22.6	22.6	8.1	8.1	31.2	31.2	92.4	92.4	6.7	6.7	13.6	16.3	20	19	96	97	821723	807851	<0.2	<0.2	1.1	1.1
						1.0	0.2	22	22.6		8.1		31.2		92.4		6.7		13.5		20		95				<0.2		1.0	
					Middle	3.9	0.2	26	22.6	22.6	8.1	8.1	31.2	31.2	92.5	92.5	6.7		14.9		18		97				<0.2		1.0	
						3.9	0.2	28	22.6		8.1		31.2		92.5		6.7		15.2		20		98				<0.2		1.3	
					Bottom	6.8	0.2	12	22.5	22.5	8.0	8.0	31.2	31.2	94.4	94.6	6.8	6.8	20.2		19		99				<0.2		1.3	
						6.8	0.2	12	22.5		8.0		31.2		94.7		6.8		20.3		19		99				<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**

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Water Quality Monitoring
Water Quality Monitoring Results on 23 November 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	10:53	6.7	Surface	1.0	0.2	329	22.3	22.3	8.0	8.0	31.2	31.2	94.1	94.1	6.8	6.8	23.8	22.2	34	34	96	97	822101	808838	<0.2	<0.2	1.5	1.6
						1.0	0.2	354	22.3		8.0		31.2		94.1		6.8		23.7		32		95				<0.2		1.4	
					Middle	3.4	0.2	329	22.4	22.4	8.0	8.0	31.2	31.2	94.1	94.2	6.8		20.0		34		97				<0.2		1.4	
						3.4	0.2	333	22.4		8.0		31.2		94.2		6.8		19.8		32		97				<0.2		1.4	
					Bottom	5.7	0.2	348	22.2	22.2	8.0	8.0	31.2	31.2	94.6	94.6	6.9	6.9	22.8		36		99				<0.2		1.8	
						5.7	0.2	348	22.2		8.0		31.2		94.6		6.9		22.8		37		98				<0.2		1.8	
IM10	Fine	Moderate	10:45	7.1	Surface	1.0	0.5	308	22.3	22.3	8.0	8.0	31.4	31.4	93.5	93.5	6.8	6.8	16.2	20.7	20	22	96	99	822229	809847	<0.2	<0.2	1.4	1.4
						1.0	0.5	315	22.3		8.0		31.4		93.5		6.8		16.5		18		95				<0.2		1.5	
					Middle	3.6	0.5	310	22.3	22.3	8.0	8.0	31.4	31.4	93.7	93.8	6.8		19.2		20		98				<0.2		1.2	
						3.6	0.6	321	22.3		8.0		31.4		93.8		6.8		19.2		22		99				<0.2		1.3	
					Bottom	6.1	0.4	312	22.3	22.3	8.0	8.0	31.4	31.4	94.5	94.7	6.9	6.9	26.8		24		102				<0.2		1.4	
						6.1	0.4	335	22.3		8.0		31.4		94.8		6.9		26.1		26		101				<0.2		1.3	
IM11	Fine	Moderate	10:34	7.5	Surface	1.0	0.5	291	22.4	22.4	8.0	8.0	31.4	31.4	93.0	93.0	6.7	6.7	13.9	16.1	17	18	97	98	821495	810526	<0.2	<0.2	1.2	1.3
						1.0	0.6	293	22.4		8.0		31.4		93.0		6.7		14.1		17		96				<0.2		1.1	
					Middle	3.8	0.4	300	22.3	22.3	8.0	8.0	31.5	31.5	93.1	93.1	6.7		16.5		17		98				<0.2		1.1	
						3.8	0.4	322	22.3		8.0		31.5		93.1		6.7		16.7		15		98				<0.2		1.1	
					Bottom	6.5	0.3	295	22.3	22.3	8.0	8.0	31.5	31.5	93.6	93.7	6.8	6.8	17.6		20		100				<0.2		1.8	
						6.5	0.4	302	22.3		8.0		31.5		93.8		6.8		17.5		22		100				<0.2		1.6	
IM12	Fine	Moderate	10:27	8.1	Surface	1.0	0.6	273	22.4	22.4	8.0	8.0	31.4	31.4	92.6	92.6	6.7	6.7	13.5	18.6	12	18	97	99	821169	811502	<0.2	<0.2	1.6	1.4
						1.0	0.6	283	22.4		8.0		31.4		92.6		6.7		13.7		14		97				<0.2		1.5	
					Middle	4.1	0.5	271	22.4	22.4	8.0	8.0	31.5	31.5	92.3	92.4	6.7		18.6		17		98				<0.2		1.4	
						4.1	0.5	293	22.4		8.0		31.5		92.4		6.7		18.5		18		99				<0.2		1.5	
					Bottom	7.1	0.4	279	22.4	22.4	8.0	8.0	31.5	31.5	94.2	94.3	6.8	6.8	23.8		21		101				<0.2		1.2	
						7.1	0.4	292	22.4		8.0		31.5		94.4		6.8		23.7		23		101				<0.2		1.2	
SR2	Fine	Moderate	10:02	4.0	Surface	1.0	0.3	301	22.4	22.4	8.1	8.1	31.8	31.8	92.9	92.9	6.7	6.7	13.8	16.5	17	18	97	98	821476	814172	<0.2	<0.2	1.1	1.3
						1.0	0.3	319	22.4		8.1		31.8		92.9		6.7		14.4		17		96				<0.2		1.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	0.2	308	22.4	22.4	8.1	8.1	31.8	31.8	93.6	93.7	6.8	6.8	18.8		19		99				<0.2		1.5	
						3.0	0.3	324	22.4		8.1		31.8		93.8		6.8		19.1		19		100				<0.2		1.4	
SR3	Fine	Moderate	11:06	8.3	Surface	1.0	0.2	46	22.8	22.8	8.0	8.0	31.0	31.0	91.9	91.9	6.6	6.6	8.5	17.8	14	15	-	-	822155	807559	-	-	-	-
						1.0	0.2	47	22.8		8.0		31.0		91.9		6.6		8.4		13		-				-		-	
					Middle	4.2	0.3	8	22.7	22.7	8.1	8.1	31.2	31.2	91.4	91.5	6.6		20.1		16		-				-		-	
						4.2	0.3	8	22.7		8.1		31.2		91.5		6.6		21.0		17		-				-		-	
					Bottom	7.3	0.2	11	22.7	22.7	8.0	8.0	31.2	31.2	91.8	91.9	6.6	6.6	24.5		16		-				-		-	
						7.3	0.2	11	22.7		8.0		31.2		91.9		6.6		24.4		15		-				-		-	
SR4A	Cloudy	Moderate	10:26	8.7	Surface	1.0	0.2	239	22.1	22.1	7.9	7.9	31.1	31.1	90.7	90.7	6.6	6.6	12.9	13.7	18	18	-	-	817178	807799	-	-	-	-
						1.0	0.2	256	22.1		7.9		31.1		90.6		6.6		12.9		18		-				-		-	
					Middle	4.4	0.1	245	22.0	22.0	7.9	7.9	31.2	31.2	91.0	91.0	6.6		14.4		18		-				-		-	
						4.4	0.1	255	22.0		7.9		31.2		91.0		6.7		14.0		18		-				-		-	
					Bottom	7.7	0.1	269	21.9	21.9	7.9	7.9	31.2	31.2	91.8	92.0	6.7	6.7	14.0		17		-				-		-	
						7.7	0.1	290	21.9		7.9		31.2		92.1		6.7		14.2		17		-				-		-	
SR5A	Cloudy	Moderate	10:10	3.0	Surface	1.0	0.2	291	22.0	22.0	7.9	7.9	30.8	30.8	90.9	90.9	6.6	6.7	11.8	12.6	14	19	-	-	816587	810703	-	-	-	-
						1.0	0.2	293	22.0		7.9		30.8		90.9		6.7		11.8		15		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.0	0.1	285	22.0	22.0	7.9	7.9	30.8	30.8	91.4	91.5	6.7	6.7	13.3		25		-				-		-	
						2.0	0.1	310	22.0		7.9		30.8		91.6		6.7		13.4		23		-				-		-	
SR6	Cloudy	Moderate	09:47	4.1	Surface	1.0	0.1	261	22.0	22.0	7.8	7.8	29.3	29.3	91.7	91.7	6.8	6.8	19.7	20.7	23	23	-	-	817902	814664	-	-	-	-
						1.0	0.1	261	22.0		7.8		29.3		91.7		6.8		19.7		22		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.0	236	22.0	22.0	7.8	7.7	28.8	28.4	93.1	94.3	6.9	7.0	21.7		23		-				-		-	
						3.1	0.0	258	22.0		7.7		28.0		95.4		7.1		21.7		22		-				-		-	
SR7	Fine	Moderate	09:10	16.8	Surface	1.0	0.2	76	23.2	23.2	8.0	8.0	32.2	32.2	87.8	87.9	6.2	6.3	5.5	5.8	8	16	-	-	823624	823746	-	-	-	-
						1.0	0.2	77	23.2		8.0		32.2		87.9		6.2		5.4		9		-				-		-	
					Middle	8.4	0.2	57	23.2	23.2	8.0	8.0	32.3	32.2	88.4	88.5	6.3		6.1		14		-				-		-	
						8.4	0.2	58	23.2		8.0		32.2		88.5		6.3		6.3		13		-				-		-	
					Bottom	15.8	0.1	56	23.2	23.2	7.9	7.9	32.3	32.3	89.3	89.4	6.3	6.4	5.9		24		-				-		-	
						15.8	0.1	57	23.2		7.9		32.3		89.5		6.4		5.8		25		-				-		-	
SR8	Fine	Moderate	10:19	4.2	Surface	1.0	-	-	22.3	22.3	8.0	8.0	31.3	31.3	94.9	94.9	6.9	6.9	13.5	13.8	15	18	-	-	820246	811418	-	-	-	-
						1.0	-	-	22.3		8.0		31.3		94.9		6.9		13.6		16		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	-	-	22.2	22.2	8.0	8.0	31.4	31.4	95.0	95.1	6.9	6.9	14.0		19		-				-		-	
						3.2	-	-	22.2		8.0		31.4		95.1		6.9		14.0		21		-				-		-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 25 November 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	04:20	8.9	Surface	1.0	0.3	221	21.8	21.8	7.9	7.9	33.8	33.8	95.5	95.5	6.9	6.9	5.2	5.5	7	6	70	72	815640	804227	<0.2	<0.2	0.8	0.7
						1.0	0.4	238	21.8		7.9		33.8		95.5		6.9		5.2		6		70				<0.2		0.8	
					Middle	4.5	0.3	213	21.8	21.8	7.8	7.8	33.8	33.8	95.6	95.6	6.9		5.7		6		71				<0.2		0.5	
						4.5	0.3	230	21.8		7.8		33.8		95.6		6.9		5.7		6		71				<0.2		0.6	
					Bottom	7.9	0.2	217	21.9	21.9	7.8	7.8	33.8	33.8	96.2	96.2	6.9	6.9	5.7		6		73				<0.2		0.6	
						7.9	0.3	219	21.9		7.8		33.8		96.2		6.9		5.7		7		74				<0.2		0.7	
C2	Cloudy	Moderate	05:21	11.3	Surface	1.0	0.6	164	20.2	20.2	8.1	8.1	32.3	32.3	96.0	95.9	7.2	7.2	8.2	6.8	7	8	72	73	825683	806966	<0.2	<0.2	0.9	0.9
						1.0	0.6	168	20.1		8.1		32.3		95.7		7.2		9.2		8		72				<0.2		1.0	
					Middle	5.7	0.5	165	20.2	20.2	8.1	8.1	32.1	32.0	95.6	95.7	7.2		6.4		8		73				<0.2		0.9	
						5.7	0.5	170	20.2		8.1		32.0		95.7		7.2		6.4		9		73				<0.2		0.9	
					Bottom	10.3	0.4	169	20.3	20.3	8.1	8.1	32.0	32.0	96.1	96.1	7.2	7.2	5.4		8		74				<0.2		0.8	
						10.3	0.4	169	20.3		8.1		32.0		96.1		7.2		5.4		7		75				<0.2		0.8	
C3	Cloudy	Moderate	03:23	12.2	Surface	1.0	0.1	118	22.1	22.1	8.0	8.0	32.7	32.7	94.3	94.4	6.8	6.9	4.4	5.5	3	4	73	75	822130	817798	<0.2	<0.2	0.7	0.6
						1.0	0.2	125	22.1		8.0		32.7		94.5		6.8		4.4		3		73				<0.2		0.5	
					Middle	6.1	0.2	80	22.1	22.1	8.0	8.0	32.7	32.7	94.9	95.0	6.9		5.8		3		75				<0.2		0.6	
						6.1	0.2	85	22.1		8.0		32.7		95.0		6.9		5.8		4		75				<0.2		0.6	
					Bottom	11.2	0.2	82	22.0	22.0	8.0	8.0	32.7	32.7	96.2	96.5	7.0	7.0	6.2		4		78				<0.2		0.6	
						11.2	0.2	89	22.0		8.0		32.7		96.7		7.0		6.2		4		77				<0.2		0.6	
IM1	Fine	Moderate	04:40	7.5	Surface	1.0	0.2	174	21.8	21.8	7.9	7.9	33.8	33.8	94.8	94.8	6.8	6.9	5.0	6.1	7	7	70	72	818335	806431	<0.2	<0.2	1.6	1.2
						1.0	0.3	188	21.8		7.9		33.8		94.8		6.8		5.0		5		70				<0.2		1.3	
					Middle	3.8	0.2	174	21.9	21.9	7.9	7.9	33.8	33.8	95.0	95.0	6.9		6.4		7		71				<0.2		1.4	
						3.8	0.3	181	21.9		7.9		33.8		95.0		6.9		6.4		6		72				<0.2		1.6	
					Bottom	6.5	0.2	173	21.9	21.9	7.8	7.8	33.8	33.8	96.1	96.1	6.9	6.9	6.8		9		73				<0.2		0.6	
						6.5	0.2	188	21.9		7.8		33.8		96.1		6.9		6.9		10		74				<0.2		0.6	
IM2	Fine	Moderate	04:47	8.4	Surface	1.0	0.2	170	21.7	21.7	7.9	7.9	32.7	32.7	94.8	94.9	6.9	6.9	6.8	7.2	7	8	69	71	818869	806201	<0.2	<0.2	0.5	0.6
						1.0	0.2	172	21.7		7.9		32.7		94.9		6.9		6.9		8		70				<0.2		0.5	
					Middle	4.2	0.2	186	21.7	21.7	7.9	7.9	32.9	32.9	94.9	94.9	6.9		7.3		6		71				<0.2		0.5	
						4.2	0.3	192	21.7		7.9		32.9		94.9		6.9		7.2		7		71				<0.2		0.6	
					Bottom	7.4	0.2	185	21.7	21.7	7.9	7.9	33.6	33.6	95.4	95.5	6.9	6.9	7.5		9		73				<0.2		0.7	
						7.4	0.2	193	21.7		7.9		33.6		95.6		6.9		7.5		10		73				<0.2		0.5	
IM3	Fine	Moderate	04:54	8.5	Surface	1.0	0.4	212	21.6	21.6	7.9	7.9	33.2	33.3	95.2	95.2	6.9	6.9	14.9	21.2	12	14	70	72	819417	806003	<0.2	<0.2	0.6	0.7
						1.0	0.4	218	21.6		7.9		33.3		95.2		6.9		14.9		12		70				<0.2		0.9	
					Middle	4.3	0.4	209	21.6	21.6	7.9	7.9	33.5	33.5	95.0	95.0	6.9		17.8		14		71				<0.2		0.7	
						4.3	0.4	219	21.6		7.9		33.5		95.0		6.9		17.9		14		72				<0.2		0.6	
					Bottom	7.5	0.3	210	21.6	21.6	7.9	7.9	32.8	32.8	95.7	95.8	7.0	7.0	30.9		15		74				<0.2		0.7	
						7.5	0.3	224	21.6		7.9		32.8		95.8		7.0		30.9		14		74				<0.2		0.6	
IM4	Fine	Moderate	05:01	7.8	Surface	1.0	0.3	183	21.6	21.6	7.9	7.9	32.4	32.4	95.2	95.2	7.0	7.0	9.9	11.7	8	8	70	72	819589	805058	<0.2	<0.2	0.6	0.7
						1.0	0.3	197	21.6		7.9		32.4		95.1		7.0		9.3		7		70				<0.2		0.7	
					Middle	3.9	0.3	173	21.6	21.6	7.9	7.9	32.5	32.5	95.3	95.3	7.0		11.5		8		72				<0.2		0.7	
						3.9	0.3	184	21.6		7.9		32.5		95.3		7.0		11.6		8		72				<0.2		0.8	
					Bottom	6.8	0.3	182	21.6	21.6	7.9	7.9	32.8	32.8	96.0	96.1	7.0	7.0	14.1		10		73				<0.2		0.7	
						6.8	0.3	184	21.6		7.9		32.8		96.1		7.0		13.9		9		74				<0.2		0.7	
IM5	Fine	Moderate	05:13	6.8	Surface	1.0	0.4	191	21.5	21.5	7.9	7.9	32.3	32.3	95.3	95.3	7.0	7.0	8.9	9.2	9	9	70	72	820575	804952	<0.2	<0.2	0.5	0.5
						1.0	0.4	196	21.5		7.9		32.3		95.3		7.0		8.9		8		70				<0.2		0.5	
					Middle	3.4	0.4	186	21.5	21.5	7.9	7.9	32.4	32.4	95.3	95.3	7.0		9.7		8		72				<0.2		0.4	
						3.4	0.4	203	21.5		7.9		32.4		95.3		7.0		9.7		7		72				<0.2		0.4	
					Bottom	5.8	0.3	193	21.5	21.5	7.9	7.9	33.0	33.0	96.7	96.7	7.0	7.0	9.1		9		74				<0.2		0.5	
						5.8	0.3	195	21.5		7.9		33.0		96.7		7.0		9.1		11		73				<0.2		0.5	
IM6	Fine	Moderate	05:21	6.8	Surface	1.0	0.3	194	21.5	21.5	7.9	7.9	32.3	32.3	95.5	95.5	7.0	7.0	9.3	11.6	11	11	70	72	821054	805803	<0.2	<0.2	0.5	0.5
						1.0	0.3	205	21.5		7.9		32.3		95.5		7.0		9.4		9		70				<0.2		0.5	
					Middle	3.4	0.3	176	21.5	21.5	7.9	7.9	32.4	32.4	95.7	95.8	7.0		11.9		9		72				<0.2		0.4	
						3.4	0.3	180	21.5		7.9		32.4		95.8		7.0		11.7		10		72				<0.2		0.5	
					Bottom	5.8	0.3	175	21.5	21.5	7.9	7.9	32.6	32.6	96.9	96.9	7.1	7.1	13.7		13		74				<0.2		0.5	
						5.8	0.3	176	21.5		7.9		32.6		96.9		7.1		13.7		14		74				<0.2		0.5	
IM7	Fine	Moderate	05:29	8.2	Surface	1.0	0.3	163	21.6	21.6	7.9	7.9	32.3	32.3	95.2	95.2	7.0	7.0	11.2	12.7	12	11	69	71	821360	806863	<0.2	<0.2	0.5	0.5
						1.0	0.3	173	21.6		7.9		32.3		95.2		7.0		11.2		10		69				<0.2		0.6	
					Middle	4.1	0.3	172	21.6	21.6	7.9	7.9	32.4	32.4	95.5	95.5	7.0		12.6		10		71				<0.2		0.4	
						4.1	0.3	175	21.6		7.9		32.4		95.5		7.0		12.6		11		71				<0.2		0.5	
					Bottom	7.2	0.3	181	21.6	21.6	7.9	7.9	32.6	32.6	96.8	96.8	7.1	7.1	14.2		12		73				<0.2		0.4	
						7.2	0.3	182	21.6		7.9		32.6		96.8		7.1		14.2		12		73				<0.2		0.6	
IM8	Cloudy	Moderate	04:52	8.0	Surface	1.0	0.3	156	20.9	20.9	8.1	8.1	32.5	32.5	97.4	97.4	7.2	7.2	9.3	12.2	7	9	73	74	821703	807842	<0.2	<0.2	0.5	0.6
						1.0	0.3	160	20.9		8.1		32.5		97.4		7.2		9.9		8		72				<0.2		0.6	
					Middle	4.0	0.2	138	20.8	20.8	8.1	8.1	32.5	32.5	97.4	97.4	7.2		12.9		9		74				<0.2		0.5	
						4.0	0.2	148	20.8		8.1		32.5		97.4		7.2		12.0		8		74				<0.2		0.6	
					Bottom	7.0	0.1	119	20.6	20.6	8.1	8.1	32.5	32.5	97.2	97.3	7.2	7.2	14.4		9		75				<0.2		0.6	
						7.0	0.1	128	20.6		8.1		32.5		97.3		7.2		14.4		10		75				<0.2		0.5	

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 25 November 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	04:44	7.4	Surface	1.0	0.3	131	20.8	20.8	8.1	8.1	32.5	32.5	97.2	97.3	7.2	7.2	6.8	8.6	8	9	72	74	822110	808831	<0.2	<0.2	0.6	0.6
						1.0	0.3	143	20.8		8.1		32.5		97.3		7.2		6.8		9		73				<0.2		0.5	
					Middle	3.7	0.3	112	20.6	20.6	8.1	8.1	32.6	32.6	97.6	97.6	7.2		7.5		9		74				<0.2		0.6	
						3.7	0.3	113	20.6		8.1		32.6		97.6		7.3		7.5		10		74				<0.2		0.6	
					Bottom	6.4	0.2	78	20.5	20.5	8.1	8.1	32.4	32.4	97.8	97.9	7.3	7.3	11.0		10		75				<0.2		0.5	
						6.4	0.2	84	20.5		8.1		32.4		98.0		7.3		11.9		10		75				<0.2		0.5	
IM10	Cloudy	Moderate	04:35	7.4	Surface	1.0	0.4	95	20.8	20.8	8.1	8.1	32.5	32.5	97.5	97.5	7.2	7.2	14.8	14.2	9	11	73	74	822260	809857	<0.2	<0.2	0.6	0.7
						1.0	0.5	96	20.8		8.1		32.5		97.5		7.2		15.1		9		73				<0.2		0.6	
					Middle	3.7	0.4	93	20.8	20.8	8.1	8.1	32.5	32.5	97.5	97.6	7.2		17.2		9		74				<0.2		0.7	
						3.7	0.4	95	20.8		8.1		32.5		97.6		7.2		18.1		9		74				<0.2		0.6	
					Bottom	6.4	0.3	84	20.6	20.6	8.1	8.1	32.6	32.6	97.6	97.7	7.2	7.3	9.8		14		76				<0.2		0.8	
						6.4	0.4	84	20.6		8.1		32.6		97.8		7.3		10.0		14		75				<0.2		1.0	
IM11	Cloudy	Moderate	04:24	8.4	Surface	1.0	0.3	114	21.0	21.0	8.1	8.1	32.2	32.2	97.4	97.4	7.2	7.2	8.5	12.8	9	9	73	74	821517	810531	<0.2	<0.2	0.7	0.7
						1.0	0.3	123	21.0		8.1		32.2		97.4		7.2		9.0		7		73				<0.2		0.6	
					Middle	4.2	0.3	97	21.1	21.1	8.1	8.1	32.2	32.2	98.2	98.2	7.2		13.9		9		74				<0.2		0.7	
						4.2	0.3	100	21.0		8.1		32.3		98.2		7.3		13.6		8		74				<0.2		0.7	
					Bottom	7.4	0.2	88	20.7	20.7	8.1	8.1	32.2	32.2	98.5	98.5	7.3	7.3	15.8		9		75				<0.2		0.7	
						7.4	0.3	95	20.7		8.1		32.2		98.5		7.3		15.8		9		75				<0.2		0.6	
IM12	Cloudy	Moderate	04:15	7.9	Surface	1.0	0.3	105	21.3	21.3	8.1	8.1	32.0	32.0	96.0	96.1	7.1	7.1	9.4	10.4	6	10	73	74	821190	811541	<0.2	<0.2	0.6	0.7
						1.0	0.3	106	21.3		8.1		32.0		96.1		7.1		9.4		7		73				<0.2		0.7	
					Middle	4.0	0.3	99	21.5	21.5	8.1	8.1	32.1	32.1	96.5	96.6	7.1		7.3		9		74				<0.2		0.7	
						4.0	0.3	99	21.5		8.1		32.1		96.7		7.1		7.7		10		74				<0.2		0.7	
					Bottom	6.9	0.3	96	21.2	21.2	8.1	8.1	32.1	32.1	96.5	96.6	7.1	7.1	14.3		13		75				<0.2		0.8	
						6.9	0.3	100	21.2		8.1		32.1		96.6		7.1		14.3		14		75				<0.2		0.7	
SR2	Cloudy	Moderate	03:48	3.8	Surface	1.0	0.2	105	22.0	22.0	8.0	8.0	32.5	32.5	96.2	96.3	7.0	7.0	7.8	7.3	4	7	74	74	821478	814167	<0.2	<0.2	0.6	0.7
						1.0	0.2	112	22.0		8.0		32.5		96.4		7.0		7.8		4		73				<0.2		0.7	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	0.2	105	22.0	22.0	8.0	8.0	32.5	32.5	95.5	95.6	6.9	6.9	6.8		10		75				<0.2		0.6	
						2.8	0.2	105	22.0		8.0		32.5		95.7		6.9		6.8		11		75				<0.2		0.8	
SR3	Cloudy	Moderate	04:58	8.1	Surface	1.0	0.2	181	20.6	20.6	8.1	8.1	32.5	32.5	97.3	97.3	7.2	7.2	6.3	10.4	6	8	-	-	822151	807550	-	-	-	-
						1.0	0.2	184	20.5		8.1		32.5		97.3		7.2		6.2		7		-				-		-	
					Middle	4.1	0.2	178	20.4	20.4	8.1	8.1	32.6	32.6	97.4	97.4	7.3		10.1		6		-				-		-	
						4.1	0.2	188	20.4		8.1		32.6		97.3		7.2		10.2		8		-				-		-	
					Bottom	7.1	0.1	167	20.7	20.7	8.1	8.1	32.5	32.5	97.4	97.5	7.2	7.2	14.7		8		-				-		-	
						7.1	0.1	175	20.7		8.1		32.5		97.5		7.2		14.9		10		-				-		-	
SR4A	Fine	Calm	04:00	9.2	Surface	1.0	0.1	70	21.2	21.2	7.8	7.8	33.2	33.2	94.0	94.0	6.9	6.9	6.5	7.2	6	6	-	-	817215	807803	-	-	-	-
						1.0	0.1	76	21.2		7.8		33.2		94.0		6.9		6.5		7		-				-		-	
					Middle	4.6	0.1	70	21.5	21.5	7.8	7.8	33.6	33.6	94.7	94.7	6.9		7.1		5		-				-		-	
						4.6	0.1	70	21.5		7.8		33.6		94.7		6.9		7.1		6		-				-		-	
					Bottom	8.2	0.1	68	21.6	21.6	7.8	7.8	33.7	33.7	95.1	95.1	6.9	6.9	8.1		6		-				-		-	
						8.2	0.1	74	21.6		7.8		33.7		95.1		6.9		8.1		5		-				-		-	
SR5A	Fine	Calm	03:44	3.7	Surface	1.0	0.0	258	21.6	21.6	7.7	7.7	32.0	32.0	92.4	92.4	6.8	6.8	5.8	10.8	5	5	-	-	816596	810714	-	-	-	-
						1.0	0.0	271	21.6		7.7		32.0		92.4		6.8		5.8		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.7	0.0	136	21.6	21.6	7.7	7.7	32.1	32.1	94.0	94.0	6.9	6.9	15.8		5		-				-		-	
						2.7	0.0	144	21.6		7.7		32.1		94.0		6.9		15.8		4		-				-		-	
SR6	Fine	Calm	03:19	5.1	Surface	1.0	0.1	51	21.6	21.6	7.7	7.7	31.8	31.8	90.2	90.3	6.6	6.6	4.2	4.7	6	7	-	-	817902	814656	-	-	-	-
						1.0	0.1	52	21.6		7.7		31.8		90.3		6.6		4.2		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	0.1	65	22.0	22.0	7.7	7.7	32.2	32.2	91.8	91.8	6.7	6.7	5.1		8		-				-		-	
						4.1	0.2	67	22.0		7.7		32.2		91.8		6.7		5.1		8		-				-		-	
SR7	Cloudy	Moderate	02:49	16.8	Surface	1.0	0.2	64	21.9	21.9	8.0	8.0	32.9	32.9	94.5	94.4	6.8	6.9	5.0	4.6	4	5	-	-	823664	823765	-	-	-	-
						1.0	0.2	69	21.9		8.0		32.9		94.3		6.8		5.4		4		-				-		-	
					Middle	8.4	0.3	40	22.1	22.1	8.0	8.0	32.8	32.7	94.9	95.0	6.9		3.1		5		-				-		-	
						8.4	0.3	41	22.1		8.0		32.7		95.1		6.9		3.1		5		-				-		-	
					Bottom	15.8	0.2	34	22.1	22.1	7.9	7.9	32.6	32.6	97.9	98.2	7.1	7.1	5.4		5		-				-		-	
						15.8	0.2	36	22.1		7.9		32.6		98.4		7.1		5.4		6		-				-		-	
SR8	Cloudy	Moderate	04:06	4.0	Surface	1.0	-	-	21.7	21.7	8.0	8.0	32.0	32.0	95.2	95.3	7.0	7.0	12.2	13.2	4	4	-	-	820246	811418	-	-	-	-
						1.0	-	-	21.7		8.0		32.0		95.4		7.0		12.2		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	-	-	21.9	21.9	8.0	8.0	31.9	31.9	97.5	97.9	7.1	7.2	14.0		4		-				-		-	
						3.0	-	-	21.9		8.0		31.9		98.2		7.2		14.3		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 25 November 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	16:19	8.7	Surface	1.0	0.2	54	21.7	21.7	7.9	7.9	32.2	32.2	96.0	96.0	7.0	7.0	12.6	13.4	9	12	70	73	815603	804250	<0.2	<0.2	0.4	0.5
						1.0	0.2	58	21.7		7.9		32.2		96.0		7.0		12.6		10		70				<0.2		0.4	
					Middle	4.4	0.2	49	21.7	21.7	7.9	7.9	32.3	32.3	96.2	96.2	7.0		13.8		14		73				<0.2		0.4	
						4.4	0.2	53	21.7		7.9		32.3		96.2		7.0		13.8		14		73				<0.2		0.4	
					Bottom	7.7	0.1	44	21.7	21.7	7.8	7.8	32.4	32.4	97.4	97.4	7.1	7.1	13.9		12		76				<0.2		0.5	
						7.7	0.1	45	21.7		7.8		32.4		97.4		7.1		13.9		12		76				<0.2		0.6	
C2	Cloudy	Moderate	15:11	11.7	Surface	1.0	0.2	28	20.9	20.9	8.0	8.0	31.8	31.8	97.6	97.7	7.2	7.3	3.4	6.4	4	5	71	73	825667	806931	<0.2	<0.2	1.1	1.1
						1.0	0.2	30	20.9		8.0		31.8		97.8		7.3		3.4		4		72				<0.2		1.0	
					Middle	5.9	0.2	355	20.3	20.3	8.0	8.0	32.1	32.1	97.0	97.0	7.3		7.1		6		73				<0.2		1.0	
						5.9	0.2	327	20.3		8.0		32.1		96.9		7.3		6.9		7		73				<0.2		1.4	
					Bottom	10.7	0.2	332	21.5	21.5	8.0	8.0	31.7	31.7	97.3	97.3	7.2	7.2	8.8		6		74				<0.2		1.1	
						10.7	0.2	348	21.5		8.0		31.7		97.3		7.2		8.8		5		74				<0.2		1.1	
C3	Cloudy	Moderate	16:59	12.3	Surface	1.0	0.1	334	21.7	21.7	8.0	8.0	32.6	32.7	94.1	94.2	6.8	6.8	6.3	10.4	5	5	73	75	822092	817818	<0.2	<0.2	0.4	0.4
						1.0	0.1	351	21.7		8.0		32.7		94.2		6.9		6.3		4		73				<0.2		0.5	
					Middle	6.2	0.0	298	21.7	21.8	8.0	8.0	32.5	32.4	93.8	93.8	6.8		8.9		6		75				<0.2		0.5	
						6.2	0.0	309	21.8		8.0		32.4		93.8		6.8		8.9		5		75				<0.2		0.4	
					Bottom	11.3	0.1	311	22.1	22.1	8.0	8.0	32.8	32.8	97.7	97.9	7.1	7.1	16.0		3		77				<0.2		0.4	
						11.3	0.1	316	22.1		8.0		32.8		98.1		7.1		16.0		4		77				<0.2		0.4	
IM1	Cloudy	Moderate	15:59	7.4	Surface	1.0	0.1	9	21.4	21.4	7.9	7.9	32.0	32.0	96.3	96.3	7.1	7.1	6.1	7.3	6	7	70	72	818357	806436	<0.2	<0.2	0.8	0.6
						1.0	0.1	9	21.4		7.9		32.0		96.3		7.1		6.1		7		70				<0.2		0.6	
					Middle	3.7	0.1	15	21.5	21.5	7.9	7.9	32.1	32.1	96.4	96.4	7.1		6.8		7		71				<0.2		0.5	
						3.7	0.1	15	21.5		7.9		32.1		96.4		7.1		6.8		7		72				<0.2		0.5	
					Bottom	6.4	0.1	41	21.6	21.6	7.8	7.8	32.4	32.4	97.4	97.4	7.1	7.1	9.1		8		74				<0.2		0.6	
						6.4	0.2	43	21.6		7.8		32.4		97.4		7.1		9.1		7		74				<0.2		0.5	
IM2	Cloudy	Moderate	15:54	8.4	Surface	1.0	0.2	16	21.5	21.5	7.9	7.9	32.2	32.2	95.9	95.9	7.0	7.0	10.6	12.7	10	11	70	72	818849	806170	<0.2	<0.2	0.5	0.5
						1.0	0.2	16	21.5		7.9		32.2		95.9		7.0		10.6		11		70				<0.2		0.5	
					Middle	4.2	0.2	13	21.5	21.5	7.9	7.9	32.2	32.2	96.0	96.0	7.0		12.9		11		71				<0.2		0.5	
						4.2	0.2	14	21.5		7.9		32.2		96.0		7.0		12.9		11		72				<0.2		0.5	
					Bottom	7.4	0.2	14	21.5	21.5	7.8	7.8	32.3	32.3	96.4	96.4	7.1	7.1	14.5		11		73				<0.2		0.4	
						7.4	0.2	15	21.5		7.8		32.3		96.4		7.1		14.5		12		74				<0.2		0.5	
IM3	Cloudy	Moderate	15:46	8.6	Surface	1.0	0.2	36	21.5	21.5	7.9	7.9	32.3	32.3	96.4	96.4	7.1	7.1	9.1	9.7	11	11	70	72	819409	805997	<0.2	<0.2	0.5	0.7
						1.0	0.2	37	21.5		7.9		32.3		96.4		7.1		9.1		13		70				<0.2		0.6	
					Middle	4.3	0.2	25	21.5	21.5	7.8	7.8	32.4	32.4	96.5	96.5	7.1		9.8		12		72				<0.2		0.8	
						4.3	0.2	27	21.5		7.8		32.4		96.5		7.1		9.8		11		72				<0.2		0.7	
					Bottom	7.6	0.2	27	21.5	21.5	7.8	7.8	32.5	32.5	97.5	97.5	7.1	7.1	10.1		10		74				<0.2		0.7	
						7.6	0.2	29	21.5		7.8		32.5		97.5		7.1		10.1		10		74				<0.2		0.6	
IM4	Cloudy	Moderate	15:38	7.8	Surface	1.0	0.2	14	21.4	21.4	7.8	7.8	32.6	32.6	96.0	96.0	7.0	7.0	12.3	13.1	12	12	70	72	819590	805036	<0.2	<0.2	0.6	0.5
						1.0	0.2	14	21.4		7.8		32.6		96.0		7.0		12.3		11		70				<0.2		0.6	
					Middle	3.9	0.2	30	21.4	21.4	7.8	7.8	32.5	32.5	96.1	96.1	7.0		13.4		12		72				<0.2		0.4	
						3.9	0.2	30	21.4		7.8		32.5		96.1		7.0		13.4		14		73				<0.2		0.5	
					Bottom	6.8	0.2	23	21.4	21.4	7.8	7.8	32.7	32.7	96.8	96.8	7.1	7.1	13.5		13		74				<0.2		0.5	
						6.8	0.2	23	21.4		7.8		32.7		96.8		7.1		13.5		12		75				<0.2		0.6	
IM5	Cloudy	Moderate	15:27	6.9	Surface	1.0	0.2	31	21.4	21.4	7.8	7.8	32.4	32.4	96.2	96.2	7.1	7.1	12.8	13.1	14	12	70	72	820566	804899	<0.2	<0.2	0.6	0.7
						1.0	0.2	32	21.4		7.8		32.4		96.2		7.1		12.8		13		70				<0.2		0.6	
					Middle	3.5	0.2	14	21.4	21.4	7.8	7.8	32.6	32.6	96.6	96.6	7.1		12.8		14		72				<0.2		0.7	
						3.5	0.2	14	21.4		7.8		32.6		96.6		7.1		12.8		13		72				<0.2		0.7	
					Bottom	5.9	0.2	15	21.3	21.3	7.8	7.8	32.9	32.9	97.7	97.7	7.1	7.1	13.8		10		75				<0.2		0.7	
						5.9	0.2	16	21.3		7.8		32.9		97.7		7.1		13.8		10		75				<0.2		0.7	
IM6	Cloudy	Moderate	15:18	6.8	Surface	1.0	0.2	14	21.4	21.4	7.9	7.9	32.5	32.5	96.0	96.0	7.0	7.0	8.0	9.8	10	12	70	74	821087	805857	<0.2	<0.2	0.7	0.8
						1.0	0.2	14	21.4		7.9		32.5		96.0		7.0		8.0		11		70				<0.2		0.8	
					Middle	3.4	0.2	16	21.4	21.4	7.9	7.9	32.6	32.6	96.0	96.0	7.0		8.7		10		74				<0.2		0.9	
						3.4	0.2	17	21.4		7.9		32.6		96.0		7.0		8.7		11		74				<0.2		1.0	
					Bottom	5.8	0.2	12	21.4	21.4	7.8	7.8	33.0	33.0	97.0	97.1	7.1	7.1	12.5		15		77				<0.2		0.8	
						5.8	0.2	12	21.4		7.8		33.0		97.1		7.1		12.6		15		77				<0.2		0.8	
IM7	Cloudy	Moderate	15:12	8.3	Surface	1.0	0.1	46	21.4	21.4	7.9	7.9	32.7	32.7	95.9	95.9	7.0	7.0	10.6	11.7	14	13	69	72	821357	806846	<0.2	<0.2	0.7	0.7
						1.0	0.1	46	21.4		7.9		32.7		95.9		7.0		10.6		16		70				<0.2		0.8	
					Middle	4.2	0.2	28	21.4	21.4	7.9	7.9	33.0	33.0	95.8	95.8	7.0		11.4		15		71				<0.2		0.6	
						4.2	0.2	30	21.4		7.9		33.0		95.8		7.0		11.4		16		71				<0.2		0.6	
					Bottom	7.3	0.2	41	21.4	21.4	7.9	7.9	33.3	33.3	96.2	96.2	7.0	7.0	13.0		8		74				<0.2		0.9	
						7.3	0.2	43	21.4		7.9		33.3		96.2		7.0		13.0		8		74				<0.2		0.8	
IM8	Cloudy	Moderate	15:38	8.2	Surface	1.0	0.2	27	21.0	21.0	8.1	8.1	32.5	32.5	98.4	98.5	7.3	7.3	11.3	15.1	7	7	72	73	821679	807816	<0.2	<0.2	0.5	0.6
						1.0	0.2	28	21.0		8.1		32.5		98.5		7.3		11.3		8		72				<0.2		0.5	
					Middle	4.1	0.2	32	21.0	21.0	8.1	8.1	32.5	32.5	98.9	98.9	7.3		15.2		6		73				<0.2		0.5	
						4.1	0.2	33	21.0		8.1		32.5		98.9		7.3		15.2		8		73				<0.2		0.5	
					Bottom	7.2	0.1	38	21.0	21.0	8.1	8.1	32.4	32.4	100.1	100.2	7.4	7.4	18.8		7		75				<0.2		0.5	
						7.2	0.1	38	21.0		8.1		32.4		100.3		7.4		18.8		8		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 25 November 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	15:46	7.1	Surface	1.0	0.1	50	21.4	21.4	8.3	8.3	32.3	32.3	97.2	97.3	7.1	7.2	10.7	11.9	12	11	73	74	822117	808792	0.3	**0.4**	0.7	0.7
						1.0	0.1	54	21.4		8.3		32.3		97.3		7.1		10.6		12		72				0.3		0.6	
					Middle	3.6	0.1	55	21.4	21.4	8.2	8.2	32.3	32.3	98.1	98.1	7.2		12.6		12		74				0.4		0.8	
						3.6	0.1	58	21.4		8.2		32.3		98.1		7.2		12.7		11		74				0.4		0.8	
					Bottom	6.1	0.1	9	21.3	21.3	8.2	8.2	32.3	32.3	100.0	100.2	7.3	7.4	12.4		10		75				0.4		0.7	
						6.1	0.1	9	21.3		8.2		32.3		100.3		7.4		12.4		10		75				0.3		0.7	
IM10	Cloudy	Moderate	15:53	7.2	Surface	1.0	0.3	323	21.5	21.5	8.1	8.1	32.3	32.3	97.0	97.1	7.1	7.1	8.9	12.1	10	11	72	74	822259	809853	0.3	0.3	0.6	0.7
						1.0	0.3	339	21.5		8.1		32.3		97.1		7.1		9.2		10		73				0.3		0.6	
					Middle	3.6	0.2	325	21.5	21.5	8.1	8.1	32.3	32.3	97.5	97.6	7.1		13.0		13		74				0.4		0.7	
						3.6	0.3	329	21.5		8.1		32.3		97.6		7.1		13.0		12		73				0.4		0.8	
					Bottom	6.2	0.2	325	21.6	21.6	8.1	8.1	32.3	32.3	100.0	100.3	7.3	7.3	14.4		11		75				0.3		0.7	
						6.2	0.2	326	21.6		8.1		32.3		100.6		7.3		14.1		12		75				0.2		0.6	
IM11	Cloudy	Moderate	16:05	8.8	Surface	1.0	0.2	249	21.6	21.6	8.1	8.1	32.4	32.4	95.9	96.0	7.0	7.0	4.1	5.9	6	7	73	75	821530	810562	<0.2	0.2	0.6	0.7
						1.0	0.2	269	21.6		8.1		32.4		96.0		7.0		4.2		5		72				<0.2		0.7	
					Middle	4.4	0.3	246	21.6	21.6	8.1	8.1	32.3	32.3	96.4	96.4	7.0		6.5		6		75				<0.2		0.7	
						4.4	0.3	253	21.6		8.1		32.3		96.4		7.0		6.6		6		75				<0.2		0.7	
					Bottom	7.8	0.1	232	21.7	21.7	8.0	8.0	32.3	32.3	98.3	98.5	7.2	7.2	6.9		9		76				0.3		0.7	
						7.8	0.1	240	21.7		8.0		32.3		98.6		7.2		6.9		9		76				0.3		0.8	
IM12	Cloudy	Moderate	16:12	8.3	Surface	1.0	0.7	273	21.8	21.8	8.0	8.0	32.4	32.4	96.1	96.2	7.0	7.1	6.0	11.8	7	8	74	75	821155	811522	<0.2	<0.2	0.7	0.6
						1.0	0.7	285	21.8		8.0		32.4		96.3		7.0		6.0		7		73				<0.2		0.6	
					Middle	4.2	0.6	273	21.7	21.7	8.0	8.0	32.3	32.3	97.4	97.5	7.1		13.0		7		73				<0.2		0.6	
						4.2	0.6	274	21.6		8.0		32.4		97.6		7.1		13.0		8		74				<0.2		0.6	
					Bottom	7.3	0.5	277	21.8	21.8	8.0	8.0	32.2	32.2	98.1	98.1	7.1	7.1	16.3		8		76				<0.2		0.6	
						7.3	0.5	286	21.8		8.0		32.2		98.1		7.1		16.3		8		77				<0.2		0.6	
SR2	Cloudy	Moderate	16:37	4.6	Surface	1.0	0.1	336	21.4	21.5	8.0	8.0	32.5	32.5	94.1	94.2	6.9	6.9	8.8	12.1	5	6	74	75	821439	814160	<0.2	<0.2	0.6	0.6
						1.0	0.1	339	21.5		8.0		32.4		94.2		6.9		8.8		6		73				<0.2		0.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.0	307	21.9	21.9	8.0	8.0	32.4	32.4	97.5	97.9	7.1	7.1	15.4		6		75				<0.2		0.5	
						3.6	0.0	332	21.9		8.0		32.4		98.2		7.1		15.4		6		76				<0.2		0.5	
SR3	Cloudy	Moderate	15:32	8.6	Surface	1.0	0.2	21	21.2	21.2	8.1	8.1	32.5	32.5	98.2	98.3	7.2	7.3	8.9	8.6	10	11	-	-	822170	807582	-	-	-	-
						1.0	0.2	21	21.2		8.1		32.5		98.3		7.2		9.0		9		-				-		-	
					Middle	4.3	0.2	355	21.1	21.1	8.1	8.1	32.4	32.4	98.5	98.6	7.3		9.2		10		-				-		-	
						4.3	0.2	358	21.1		8.1		32.4		98.6		7.3		9.3		11		-				-		-	
					Bottom	7.6	0.1	17	21.1	21.1	8.1	8.1	32.3	32.3	100.1	100.2	7.4	7.4	7.2		11		-				-		-	
						7.6	0.1	17	21.1		8.1		32.3		100.3		7.4		8.0		12		-				-		-	
SR4A	Cloudy	Calm	16:38	8.5	Surface	1.0	0.0	219	21.4	21.4	7.8	7.8	31.1	31.1	94.8	94.8	7.0	7.0	7.8	11.0	10	11	-	-	817163	807783	-	-	-	-
						1.0	0.0	234	21.4		7.8		31.1		94.8		7.0		7.8		9		-				-		-	
					Middle	4.3	0.2	76	21.4	21.4	7.8	7.8	31.6	31.6	95.4	95.4	7.0		10.6		11		-				-		-	
						4.3	0.2	83	21.4		7.8		31.6		95.4		7.0		10.6		12		-				-		-	
					Bottom	7.5	0.1	82	21.3	21.3	7.8	7.8	32.1	32.1	96.5	96.5	7.1	7.1	14.6		12		-				-		-	
						7.5	0.2	82	21.3		7.8		32.1		96.5		7.1		14.6		11		-				-		-	
SR5A	Cloudy	Calm	16:54	3.7	Surface	1.0	0.0	172	21.6	21.6	7.8	7.8	30.6	30.6	94.1	94.1	7.0	7.0	6.5	5.8	8	9	-	-	816582	810706	-	-	-	-
						1.0	0.0	175	21.6		7.8		30.6		94.1		7.0		6.5		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.7	0.0	147	21.6	21.6	7.7	7.7	31.1	31.1	97.6	97.6	7.2	7.2	5.0		9		-				-		-	
						2.7	0.0	151	21.6		7.7		31.1		97.6		7.2		5.0		10		-				-		-	
SR6	Cloudy	Calm	17:16	4.5	Surface	1.0	0.1	28	22.1	22.1	7.8	7.8	31.2	31.2	91.5	91.6	6.7	6.7	13.0	14.6	13	15	-	-	817892	814678	-	-	-	-
						1.0	0.1	30	22.1		7.8		31.2		91.6		6.7		13.1		12		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.0	8	22.2	22.2	7.8	7.8	31.6	31.6	93.8	93.8	6.8	6.8	16.2		17		-				-		-	
						3.5	0.0	8	22.2		7.8		31.6		93.8		6.8		16.2		18		-				-		-	
SR7	Cloudy	Moderate	17:34	16.4	Surface	1.0	0.1	139	22.0	22.0	8.0	8.0	32.8	32.8	94.7	94.8	6.8	6.9	5.0	7.1	8	9	-	-	823662	823752	-	-	-	-
						1.0	0.1	144	22.0		8.0		32.8		94.9		6.9		5.0		9		-				-		-	
					Middle	8.2	0.1	99	22.1	22.1	8.0	8.0	32.8	32.8	96.1	96.2	6.9		7.3		10		-				-		-	
						8.2	0.1	104	22.0		8.0		32.8		96.2		7.0		7.3		10		-				-		-	
					Bottom	15.4	0.1	49	22.3	22.3	8.0	8.0	32.7	32.7	97.7	97.9	7.0	7.1	8.9		10		-				-		-	
						15.4	0.1	53	22.3		8.0		32.7		98.0		7.1		8.9		9		-				-		-	
SR8	Cloudy	Moderate	16:20	4.2	Surface	1.0	-	-	21.5	21.5	8.1	8.1	32.4	32.4	98.9	99.3	7.2	7.3	4.9	5.8	6	7	-	-	820246	811418	-	-	-	-
						1.0	-	-	21.5		8.1		32.4		99.6		7.3		5.1		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	-	-	21.5	21.5	8.1	8.1	32.3	32.3	100.8	101.1	7.4	7.4	6.2		7		-				-		-	
						3.2	-	-	21.5		8.1		32.3		101.4		7.4		6.9		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 November 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	07:40	8.4	Surface	1.0	0.3	227	21.6	21.6	8.0	8.0	32.8	32.8	94.0	94.0	6.8	6.8	5.7	6.5	7	7	72	73	815615	804229	<0.2	<0.2	0.4	0.5
						1.0	0.3	230	21.6		8.0		32.8		94.0		6.8		5.7		8		72				<0.2		0.6	
					Middle	4.2	0.3	221	21.6	21.6	8.0	8.0	32.8	32.8	93.8	93.8	6.8		6.4		6		73				<0.2		0.4	
						4.2	0.3	230	21.6		8.0		32.8		93.8		6.8		6.4		7		73				<0.2		0.5	
					Bottom	7.4	0.3	227	21.6	21.6	8.0	8.0	32.8	32.8	93.8	93.8	6.8	6.8	7.5		7		74				<0.2		0.4	
						7.4	0.3	244	21.6		8.0		32.8		93.8		6.8		7.5		7		73				<0.2		0.4	
C2	Cloudy	Moderate	08:40	11.4	Surface	1.0	0.4	170	22.1	22.1	7.9	7.9	31.5	31.5	92.8	92.8	6.7	6.7	2.0	7.1	4	5	71	73	825698	806948	<0.2	<0.2	1.0	0.9
						1.0	0.4	182	22.1		7.9		31.5		92.8		6.7		2.0		3		71				<0.2		1.0	
					Middle	5.7	0.5	169	22.1	22.1	7.9	7.9	31.5	31.5	92.5	92.5	6.7		5.6		4		73				<0.2		0.7	
						5.7	0.5	181	22.1		7.9		31.5		92.5		6.7		5.6		3		73				<0.2		0.8	
					Bottom	10.4	0.4	163	22.0	22.0	7.9	7.9	31.4	31.4	92.2	92.2	6.7	6.7	13.4		10		75				<0.2		0.7	
						10.4	0.4	172	22.0		7.9		31.4		92.2		6.7		13.7		8		76				<0.2		0.9	
C3	Cloudy	Moderate	06:38	12.1	Surface	1.0	0.2	97	22.4	22.4	7.8	7.8	32.5	32.5	88.0	88.0	6.3	6.3	3.0	5.4	4	4	71	74	822125	817809	<0.2	<0.2	0.5	0.7
						1.0	0.2	106	22.4		7.8		32.5		88.0		6.3		3.0		3		71				<0.2		0.5	
					Middle	6.1	0.2	97	22.4	22.4	7.8	7.8	32.6	32.6	87.8	87.8	6.3		5.7		4		74				<0.2		0.6	
						6.1	0.2	105	22.4		7.8		32.6		87.8		6.3		5.7		4		74				<0.2		0.6	
					Bottom	11.1	0.2	87	22.4	22.4	7.8	7.8	32.9	32.9	88.0	88.0	6.3	6.3	7.4		4		76				<0.2		0.8	
						11.1	0.2	91	22.4		7.8		32.9		88.0		6.3		7.4		5		76				<0.2		0.9	
IM1	Cloudy	Moderate	08:00	7.3	Surface	1.0	0.2	157	21.5	21.5	8.0	8.0	32.8	32.8	93.9	93.9	6.9	6.9	6.2	6.6	6	7	73	75	818375	806481	<0.2	<0.2	0.4	0.5
						1.0	0.3	167	21.5		8.0		32.8		93.9		6.9		6.2		5		74				<0.2		0.5	
					Middle	3.7	0.3	157	21.5	21.5	8.0	8.0	32.8	32.8	93.7	93.7	6.8		6.5		8		73				<0.2		0.5	
						3.7	0.3	167	21.5		8.0		32.8		93.7		6.8		6.5		7		74				<0.2		0.6	
					Bottom	6.3	0.3	160	21.5	21.5	8.0	8.0	32.8	32.8	93.6	93.6	6.8	6.8	7.0		7		77				<0.2		0.5	
						6.3	0.3	170	21.5		8.0		32.8		93.6		6.8		7.0		7		77				<0.2		0.5	
IM2	Cloudy	Moderate	08:06	8.9	Surface	1.0	0.2	180	21.3	21.3	8.0	8.0	32.8	32.8	94.6	94.6	6.9	6.9	9.9	11.8	10	11	73	75	818850	806193	<0.2	<0.2	0.5	0.5
						1.0	0.2	194	21.3		8.0		32.8		94.6		6.9		9.9		10		73				<0.2		0.6	
					Middle	4.5	0.2	203	21.3	21.3	8.0	8.0	32.8	32.8	94.4	94.4	6.9		11.0		11		75				<0.2		0.5	
						4.5	0.2	203	21.3		8.0		32.8		94.4		6.9		11.0		11		75				<0.2		0.6	
					Bottom	7.9	0.2	192	21.3	21.3	8.0	8.0	32.8	32.8	94.2	94.2	6.9	6.9	14.6		11		75				<0.2		0.5	
						7.9	0.2	201	21.3		8.0		32.8		94.2		6.9		14.6		11		76				<0.2		0.5	
IM3	Cloudy	Moderate	08:12	8.2	Surface	1.0	0.2	195	21.4	21.4	8.0	8.0	32.8	32.8	94.5	94.5	6.9	6.9	7.0	7.2	7	8	74	74	819403	805999	<0.2	<0.2	0.5	0.5
						1.0	0.2	209	21.4		8.0		32.8		94.5		6.9		7.0		8		74				<0.2		0.4	
					Middle	4.1	0.2	192	21.4	21.4	8.0	8.0	32.8	32.8	94.2	94.2	6.9		7.1		10		73				<0.2		0.5	
						4.1	0.2	207	21.4		8.0		32.8		94.2		6.9		7.1		8		73				<0.2		0.4	
					Bottom	7.2	0.2	184	21.4	21.4	8.0	8.0	32.8	32.8	94.1	94.1	6.9	6.9	7.4		9		75				<0.2		0.5	
						7.2	0.2	184	21.4		8.0		32.8		94.1		6.9		7.4		8		76				<0.2		0.6	
IM4	Cloudy	Moderate	08:18	7.5	Surface	1.0	0.3	182	21.4	21.4	8.0	8.0	32.8	32.8	94.5	94.5	6.9	6.9	7.8	8.7	7	8	73	75	819587	805035	<0.2	<0.2	0.5	0.5
						1.0	0.3	197	21.4		8.0		32.8		94.5		6.9		7.8		8		73				<0.2		0.4	
					Middle	3.8	0.3	180	21.4	21.4	8.0	8.0	32.8	32.8	94.2	94.2	6.9		8.8		8		75				<0.2		0.4	
						3.8	0.3	185	21.4		8.0		32.8		94.2		6.9		8.8		8		75				<0.2		0.5	
					Bottom	6.5	0.2	191	21.4	21.4	8.0	8.0	32.8	32.8	94.2	94.2	6.9	6.9	9.6		9		76				<0.2		0.4	
						6.5	0.2	200	21.4		8.0		32.8		94.2		6.9		9.6		9		76				<0.2		0.5	
IM5	Cloudy	Moderate	08:28	6.5	Surface	1.0	0.3	168	21.6	21.6	8.0	8.0	32.9	32.9	94.7	94.7	6.9	6.9	10.6	13.1	8	7	72	74	820553	804899	<0.2	<0.2	0.5	0.5
						1.0	0.3	173	21.6		8.0		32.9		94.7		6.9		10.8		8		72				<0.2		0.5	
					Middle	3.3	0.2	164	21.6	21.6	8.0	8.0	32.9	32.9	94.6	94.6	6.9		19.2		7		73				<0.2		0.5	
						3.3	0.2	172	21.6		8.0		32.9		94.6		6.9		19.2		6		73				<0.2		0.6	
					Bottom	5.5	0.3	166	21.6	21.6	8.0	8.0	32.9	32.9	94.8	94.8	6.9	6.9	9.3		6		77				<0.2		0.4	
						5.5	0.3	168	21.6		8.0		32.9		94.8		6.9		9.3		8		76				<0.2		0.5	
IM6	Cloudy	Moderate	08:35	6.5	Surface	1.0	0.3	166	21.5	21.5	8.0	8.0	32.9	32.9	94.7	94.7	6.9	6.9	7.2	7.3	7	7	73	74	821041	805812	<0.2	<0.2	0.5	0.5
						1.0	0.3	178	21.5		8.0		32.9		94.7		6.9		7.2		7		73				<0.2		0.4	
					Middle	3.3	0.3	161	21.5	21.5	8.0	8.0	32.9	32.9	94.6	94.6	6.9		7.4		7		73				<0.2		0.5	
						3.3	0.3	172	21.5		8.0		32.9		94.6		6.9		7.4		8		74				<0.2		0.5	
					Bottom	5.5	0.2	163	21.5	21.5	8.0	8.0	32.9	32.9	94.7	94.7	6.9	6.9	7.3		7		75				<0.2		0.5	
						5.5	0.2	163	21.5		8.0		32.9		94.7		6.9		7.3		8		75				<0.2		0.4	
IM7	Cloudy	Moderate	08:42	7.8	Surface	1.0	0.2	185	21.2	21.2	8.0	8.0	32.7	32.7	95.1	95.1	7.0	7.0	4.8	5.6	4	5	73	75	821349	806809	<0.2	<0.2	0.5	0.8
						1.0	0.2	194	21.2		8.0		32.7		95.1		7.0		4.8		5		73				<0.2		0.5	
					Middle	3.9	0.2	180	21.2	21.2	8.0	8.0	32.7	32.7	94.8	94.8	7.0		5.3		6		75				<0.2		1.1	
						3.9	0.2	182	21.2		8.0		32.7		94.8		7.0		5.3		6		76				<0.2		1.2	
					Bottom	6.8	0.2	176	21.1	21.1	8.0	8.0	32.7	32.7	94.6	94.6	6.9	6.9	6.6		5		75				<0.2		0.6	
						6.8	0.2	185	21.1		8.0		32.7		94.6		6.9		6.6		6		76				<0.2		0.9	
IM8	Cloudy	Moderate	08:11	7.9	Surface	1.0	0.3	159	21.5	21.5	7.9	7.9	31.6	31.6	94.8	94.8	7.0	7.0	4.7	5.6	6	6	70	72	821687	807825	<0.2	<0.2	1.0	0.8
						1.0	0.3	170	21.5		7.9		31.6		94.8		7.0		4.7		7		70				<0.2		1.0	
					Middle	4.0	0.3	149	21.5	21.5	7.9	7.9	31.6	31.6	94.6	94.6	7.0		5.8		5		72				<0.2		0.7	
						4.0	0.3	159	21.5		7.9		31.6		94.6		7.0		5.8		7		72				<0.2		0.6	
					Bottom	6.9	0.3	165	21.5	21.5	7.9	7.9	31.6	31.6	94.4	94.4	6.9	6.9	6.2		6		74				<0.2		0.7	
						6.9	0.3	170	21.5		7.9		31.6		94.4		6.9		6.4		6		74				<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 28 November 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	08:02	7.0	Surface	1.0	0.2	117	21.5	21.5	7.9	7.9	31.7	31.7	95.1	95.1	7.0	7.0	7.0	7.0	9	10	70	72	822077	808811	<0.2	<0.2	0.8	1.0
						1.0	0.2	127	21.5		7.9		31.7		95.1		7.0		7.0		8		70				<0.2		0.8	
					Middle	3.5	0.2	116	21.5	21.5	7.9	7.9	31.6	31.6	94.8	94.8	7.0		7.1		8		71				<0.2		1.0	
						3.5	0.2	125	21.5		7.9		31.6		94.8		7.0		6.8		9		72				<0.2		0.9	
					Bottom	6.0	0.2	92	21.5	21.5	7.9	7.9	31.6	31.6	94.8	94.8	7.0	7.0	7.1		12		74				<0.2		1.2	
						6.0	0.2	92	21.5		7.9		31.6		94.8		7.0		7.1		12		74				<0.2		1.2	
IM10	Cloudy	Moderate	07:53	7.6	Surface	1.0	0.4	111	21.5	21.5	7.9	7.9	31.6	31.6	95.2	95.2	7.0	7.0	4.8	6.1	6	6	70	73	822243	809810	<0.2	<0.2	0.9	1.0
						1.0	0.4	118	21.5		7.9		31.6		95.2		7.0		4.8		6		71				<0.2		0.9	
					Middle	3.8	0.3	113	21.5	21.5	7.9	7.9	31.6	31.6	94.9	94.9	7.0		5.7		7		74				<0.2		1.4	
						3.8	0.4	123	21.5		7.9		31.6		94.9		7.0		5.7		6		74				<0.2		1.2	
					Bottom	6.6	0.3	97	21.4	21.4	7.9	7.9	31.6	31.6	94.4	94.4	6.9	6.9	7.7		7		75				<0.2		0.8	
						6.6	0.3	98	21.4		7.9		31.6		94.4		6.9		7.7		6		76				<0.2		0.9	
IM11	Cloudy	Moderate	07:41	8.1	Surface	1.0	0.3	98	21.4	21.4	8.0	8.0	31.7	31.7	94.8	94.8	7.0	7.0	14.9	16.4	16	16	71	74	821499	810527	<0.2	<0.2	0.8	1.0
						1.0	0.3	107	21.4		8.0		31.7		94.8		7.0		14.9		16		71				<0.2		0.8	
					Middle	4.1	0.3	101	21.4	21.4	8.0	8.0	31.7	31.7	94.5	94.5	7.0		16.3		16		74				<0.2		1.1	
						4.1	0.3	101	21.4		8.0		31.7		94.5		7.0		16.3		15		74				<0.2		1.1	
					Bottom	7.1	0.2	91	21.4	21.4	8.0	8.0	31.6	31.6	93.9	93.9	6.9	6.9	18.1		18		77				<0.2		1.1	
						7.1	0.2	96	21.4		8.0		31.6		93.9		6.9		18.1		17		78				<0.2		0.9	
IM12	Cloudy	Moderate	07:31	8.7	Surface	1.0	0.3	96	21.4	21.4	7.9	7.9	31.8	31.8	95.2	95.2	7.0	7.0	16.2	18.0	18	19	71	74	821188	811513	<0.2	<0.2	0.7	0.9
						1.0	0.3	99	21.4		7.9		31.8		95.2		7.0		16.2		18		72				<0.2		0.8	
					Middle	4.4	0.3	98	21.4	21.4	7.9	7.9	31.8	31.8	95.0	95.0	7.0		17.7		18		73				<0.2		1.0	
						4.4	0.3	106	21.4		7.9		31.8		95.0		7.0		17.7		19		74				<0.2		0.8	
					Bottom	7.7	0.3	102	21.4	21.4	7.9	7.9	31.8	31.8	94.4	94.4	6.9	6.9	20.2		20		75				<0.2		1.0	
						7.7	0.3	102	21.4		7.9		31.8		94.4		6.9		20.2		19		76				<0.2		0.9	
SR2	Cloudy	Moderate	07:03	4.1	Surface	1.0	0.2	92	22.2	22.2	7.9	7.9	32.1	32.1	90.5	90.6	6.6	6.6	3.0	3.6	8	8	71	74	821490	814145	<0.2	<0.2	0.6	0.6
						1.0	0.2	101	22.2		7.9		32.1		90.6		6.6		2.9		7		71				<0.2		0.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.2	88	22.3	22.3	7.9	7.9	32.4	32.4	90.8	90.8	6.5	6.5	4.3		8		76				<0.2		0.6	
						3.1	0.2	95	22.3		7.9		32.4		90.8		6.5		4.3		9		76				<0.2		0.6	
SR3	Cloudy	Moderate	08:18	8.6	Surface	1.0	0.3	194	21.6	21.6	7.9	7.9	31.8	31.8	95.2	95.2	7.0	7.0	3.9	5.7	8	7	-	-	822137	807571	-	-	-	-
						1.0	0.3	201	21.6		7.9		31.8		95.2		7.0		3.9		7		-				-		-	
					Middle	4.3	0.3	203	21.6	21.6	7.9	7.9	31.9	31.9	94.9	94.9	6.9		6.0		7		-				-		-	
						4.3	0.3	214	21.6		7.9		31.9		94.9		6.9		6.0		7		-				-		-	
					Bottom	7.6	0.2	205	21.5	21.5	7.9	7.9	31.9	31.9	94.7	94.7	6.9	6.9	7.2		8		-				-		-	
						7.6	0.2	211	21.5		7.9		31.9		94.7		6.9		7.2		7		-				-		-	
SR4A	Cloudy	Calm	07:21	9.4	Surface	1.0	0.2	80	21.2	21.2	8.0	8.0	32.7	32.7	93.3	93.3	6.9	6.9	5.2	5.4	6	6	-	-	817187	807799	-	-	-	-
						1.0	0.2	80	21.2		8.0		32.7		93.3		6.9		5.2		5		-				-		-	
					Middle	4.7	0.2	90	21.2	21.2	8.0	8.0	32.7	32.7	93.0	93.0	6.8		5.6		5		-				-		-	
						4.7	0.2	97	21.2		8.0		32.7		93.0		6.8		5.6		6		-				-		-	
					Bottom	8.4	0.2	95	21.2	21.2	8.0	8.0	32.7	32.7	92.9	92.9	6.8	6.8	5.5		7		-				-		-	
						8.4	0.2	98	21.2		8.0		32.7		92.9		6.8		5.5		7		-				-		-	
SR5A	Cloudy	Calm	07:04	3.4	Surface	1.0	0.0	135	21.1	21.1	7.9	7.9	32.1	32.1	91.6	91.6	6.8	6.8	6.3	7.4	8	7	-	-	816618	810674	-	-	-	-
						1.0	0.0	141	21.1		7.9		32.1		91.6		6.8		6.3		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.4	0.0	341	21.2	21.2	7.9	7.9	32.4	32.4	92.8	92.8	6.8	6.8	8.5		8		-				-		-	
						2.4	0.0	344	21.2		7.9		32.4		92.8		6.8		8.5		6		-				-		-	
SR6	Cloudy	Calm	06:41	4.5	Surface	1.0	0.1	58	21.7	21.7	7.9	7.9	30.1	30.1	88.7	88.7	6.5	6.5	5.8	6.4	7	7	-	-	817911	814654	-	-	-	-
						1.0	0.1	60	21.7		7.9		30.1		88.7		6.5		5.8		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.1	67	22.0	22.0	7.8	7.8	30.3	30.3	90.7	90.7	6.7	6.7	7.0		8		-				-		-	
						3.5	0.1	72	22.0		7.8		30.3		90.7		6.7		7.0		6		-				-		-	
SR7	Cloudy	Moderate	06:01	19.2	Surface	1.0	0.2	46	22.4	22.4	7.8	7.8	33.7	33.7	89.2	89.2	6.4	6.4	1.8	4.4	4	5	-	-	823648	823739	-	-	-	-
						1.0	0.2	49	22.4		7.8		33.7		89.2		6.4		1.8		3		-				-		-	
					Middle	9.6	0.2	35	22.4	22.4	7.8	7.8	33.7	33.7	89.1	89.1	6.4		4.7		5		-				-		-	
						9.6	0.2	37	22.4		7.8		33.7		89.1		6.4		4.7		6		-				-		-	
					Bottom	18.2	0.2	13	22.4	22.4	7.8	7.8	33.7	33.7	89.4	89.4	6.4	6.4	6.8		5		-				-		-	
						18.2	0.2	14	22.4		7.8		33.7		89.4		6.4		6.8		5		-				-		-	
SR8	Cloudy	Moderate	07:21	3.8	Surface	1.0	-	-	21.9	21.9	7.9	7.9	31.9	31.9	93.6	93.6	6.8	6.8	2.8	3.1	5	5	-	-	820246	811418	-	-	-	-
						1.0	-	-	21.9		7.9		31.9		93.6		6.8		2.8		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	-	-	21.6	21.6	7.9	7.9	32.0	32.0	94.0	94.0	6.9	6.9	3.4		4		-				-		-	
						2.8	-	-	21.6		7.9		32.0		94.0		6.9		3.4		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 November 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	15:03	8.4	Surface	1.0	0.4	34	21.9	21.9	8.0	8.0	32.6	32.6	96.7	96.7	7.0	7.0	5.9	8.0	5	5	74	75	815630	804254	<0.2	<0.2	0.5	0.5
						1.0	0.4	36	21.9		8.0		32.6		96.7		7.0		6.0		5		74				<0.2		0.4	
					Middle	4.2	0.3	4	21.8	21.8	8.0	8.0	32.6	32.6	94.9	94.9	6.9		8.1		5		75				<0.2		0.4	
						4.2	0.3	4	21.8		8.0		32.6		94.9		6.9		8.1		4		75				<0.2		0.5	
					Bottom	7.4	0.3	27	21.5	21.5	8.0	8.0	32.6	32.6	93.6	93.6	6.8	6.8	9.8		5		75				<0.2		0.5	
						7.4	0.3	29	21.5		8.0		32.6		93.6		6.8		9.8		5		75				<0.2		0.5	
C2	Cloudy	Moderate	13:37	11.2	Surface	1.0	0.1	223	22.2	22.2	7.8	7.8	31.4	31.4	93.4	93.4	6.8	6.8	2.3	3.1	3	4	71	73	825668	806974	<0.2	<0.2	1.4	1.3
						1.0	0.1	224	22.2		7.8		31.4		93.4		6.8		2.3		3		71				<0.2		1.6	
					Middle	5.6	0.1	298	22.1	22.1	7.9	7.9	32.3	32.3	92.1	92.1	6.7		2.9		6		73				<0.2		1.5	
						5.6	0.1	324	22.1		7.9		32.3		92.1		6.7		2.9		4		73				<0.2		1.2	
					Bottom	10.2	0.2	321	22.1	22.1	7.9	7.9	32.6	32.6	92.3	92.3	6.7	6.7	4.0		4		76				<0.2		1.0	
						10.2	0.2	345	22.1		7.9		32.6		92.3		6.7		4.0		4		76				<0.2		1.1	
C3	Cloudy	Moderate	15:39	11.9	Surface	1.0	0.3	273	22.5	22.5	7.9	7.9	31.5	31.5	90.4	90.4	6.5	6.5	1.7	3.7	4	5	70	73	822122	817825	<0.2	<0.2	0.8	0.7
						1.0	0.4	273	22.5		7.9		31.5		90.4		6.5		1.7		4		70				<0.2		0.7	
					Middle	6.0	0.3	276	22.4	22.4	7.9	7.9	31.4	31.4	90.0	90.0	6.5		4.3		4		74				<0.2		0.7	
						6.0	0.4	278	22.4		7.9		31.4		90.0		6.5		4.3		4		74				<0.2		0.6	
					Bottom	10.9	0.3	270	22.4	22.4	7.9	7.9	31.3	31.3	90.7	90.7	6.6	6.6	5.2		6		76				<0.2		0.6	
						10.9	0.3	288	22.4		7.9		31.3		90.7		6.6		5.2		7		76				<0.2		0.6	
IM1	Fine	Moderate	14:42	8.8	Surface	1.0	0.2	7	21.7	21.7	8.0	8.0	32.5	32.5	96.4	96.4	7.0	7.0	5.6	6.6	6	8	74	74	818359	806451	<0.2	<0.2	0.5	0.5
						1.0	0.2	7	21.7		8.0		32.5		96.4		7.0		5.7		6		73				<0.2		0.5	
					Middle	4.4	0.3	21	21.7	21.7	8.0	8.0	32.6	32.6	95.6	95.6	7.0		5.9		8		73				<0.2		0.4	
						4.4	0.3	22	21.7		8.0		32.6		95.6		7.0		5.9		7		73				<0.2		0.5	
					Bottom	7.8	0.3	15	21.5	21.5	8.0	8.0	32.6	32.6	93.9	93.9	6.9	6.9	8.2		9		75				<0.2		0.5	
						7.8	0.3	16	21.5		8.0		32.6		93.9		6.9		8.2		10		75				<0.2		0.5	
IM2	Fine	Moderate	14:33	7.2	Surface	1.0	0.2	29	21.7	21.7	8.1	8.1	32.5	32.5	96.3	96.3	7.0	7.0	6.6	7.2	6	8	73	74	818851	806195	<0.2	<0.2	0.6	0.5
						1.0	0.2	30	21.7		8.1		32.5		96.3		7.0		6.6		5		73				<0.2		0.5	
					Middle	3.6	0.2	24	21.4	21.4	8.0	8.0	32.6	32.6	94.4	94.4	6.9		7.6		8		75				<0.2		0.5	
						3.6	0.3	25	21.4		8.0		32.6		94.4		6.9		7.6		8		75				<0.2		0.4	
					Bottom	6.2	0.2	17	21.4	21.4	8.0	8.0	32.6	32.6	93.2	93.2	6.8	6.8	7.4		9		74				<0.2		0.4	
						6.2	0.2	17	21.4		8.0		32.6		93.2		6.8		7.3		9		75				<0.2		0.4	
IM3	Fine	Moderate	14:25	8.1	Surface	1.0	0.1	3	21.6	21.6	8.1	8.1	32.5	32.5	95.9	95.9	7.0	7.0	10.9	11.2	4	7	74	74	819407	806014	<0.2	<0.2	0.6	0.5
						1.0	0.1	3	21.6		8.1		32.5		95.9		7.0		10.9		3		74				<0.2		0.5	
					Middle	4.1	0.2	6	21.4	21.4	8.0	8.0	32.5	32.5	94.8	94.8	6.9		8.8		8		73				<0.2		0.4	
						4.1	0.2	6	21.4		8.0		32.5		94.8		6.9		8.8		6		73				<0.2		0.5	
					Bottom	7.1	0.2	11	21.4	21.4	8.0	8.0	32.6	32.6	92.8	92.8	6.8	6.8	13.8		9		75				<0.2		0.5	
						7.1	0.2	11	21.4		8.0		32.6		92.8		6.8		13.8		10		75				<0.2		0.6	
IM4	Fine	Moderate	14:15	7.9	Surface	1.0	0.2	359	21.8	21.8	8.0	8.0	32.5	32.5	97.2	97.2	7.1	7.1	5.5	6.5	5	14	73	74	819586	805044	<0.2	<0.2	0.5	0.5
						1.0	0.2	330	21.8		8.0		32.5		97.2		7.1		5.5		4		73				<0.2		0.5	
					Middle	4.0	0.2	10	21.7	21.7	8.0	8.0	32.6	32.6	95.8	95.8	7.0		6.8		10		74				<0.2		0.5	
						4.0	0.2	10	21.7		8.0		32.6		95.8		7.0		6.8		11		75				<0.2		0.5	
					Bottom	6.9	0.2	12	21.5	21.5	8.0	8.0	32.6	32.6	94.9	94.9	6.9	6.9	7.3		28		74				<0.2		0.5	
						6.9	0.3	13	21.5		8.0		32.6		94.9		6.9		7.3		28		75				<0.2		0.5	
IM5	Fine	Moderate	13:53	7.5	Surface	1.0	0.2	6	21.6	21.6	8.0	8.0	32.6	32.6	96.2	96.2	7.0	7.0	5.5	6.4	6	8	73	75	820585	804945	<0.2	<0.2	0.5	0.6
						1.0	0.2	6	21.6		8.0		32.6		96.2		7.0		5.5		6		73				<0.2		0.4	
					Middle	3.8	0.3	12	21.5	21.5	8.0	8.0	32.6	32.6	95.2	95.2	7.0		6.4		8		75				<0.2		0.5	
						3.8	0.3	13	21.5		8.0		32.6		95.2		7.0		6.4		9		75				<0.2		0.9	
					Bottom	6.5	0.3	6	21.5	21.5	8.0	8.0	32.6	32.6	94.2	94.2	6.9	6.9	7.2		8		76				<0.2		0.6	
						6.5	0.3	6	21.5		8.0		32.6		94.2		6.9		7.2		9		76				<0.2		0.5	
IM6	Fine	Moderate	13:45	6.8	Surface	1.0	0.2	314	21.9	21.9	8.0	8.0	32.1	32.1	95.9	95.9	7.0	7.0	3.8	4.7	3	4	72	73	821050	805818	<0.2	<0.2	0.9	0.8
						1.0	0.3	319	21.9		8.0		32.1		95.9		7.0		3.8		3		73				<0.2		0.8	
					Middle	3.4	0.2	332	21.8	21.8	8.0	8.0	32.2	32.2	95.4	95.4	6.9		4.6		3		73				<0.2		0.9	
						3.4	0.3	344	21.8		8.0		32.2		95.4		6.9		4.6		4		73				<0.2		0.8	
					Bottom	5.8	0.2	351	21.7	21.7	8.0	8.0	32.5	32.5	94.7	94.7	6.9	6.9	5.8		5		74				<0.2		0.7	
						5.8	0.2	323	21.7		8.0		32.5		94.7		6.9		5.8		5		74				<0.2		0.8	
IM7	Fine	Moderate	13:34	8.3	Surface	1.0	0.2	184	21.9	21.9	8.0	8.0	31.8	31.8	95.3	95.3	6.9	6.9	4.1	4.7	4	7	73	74	821343	806827	<0.2	<0.2	1.2	0.9
						1.0	0.2	197	21.9		8.0		31.8		95.3		6.9		4.1		5		73				<0.2		1.0	
					Middle	4.2	0.1	217	21.7	21.7	8.0	8.0	32.5	32.5	94.5	94.5	6.9		5.1		7		74				<0.2		0.8	
						4.2	0.1	232	21.7		8.0		32.5		94.5		6.9		5.1		6		75				<0.2		0.8	
					Bottom	7.3	0.2	292	21.7	21.7	8.0	8.0	32.7	32.7	93.6	93.6	6.8	6.8	5.0		10		75				<0.2		0.9	
						7.3	0.2	304	21.7		8.0		32.7		93.6		6.8		5.0		10		75				<0.2		0.8	
IM8	Cloudy	Moderate	14:07	7.8	Surface	1.0	0.1	189	22.3	22.3	7.9	7.9	31.5	31.5	97.2	97.2	7.1	7.1	4.7	7.6	7	9	70	72	821718	807848	<0.2	<0.2	0.8	0.8
						1.0	0.1	203	22.3		7.9		31.5		97.2		7.1		4.7		8		70				<0.2		0.7	
					Middle	3.9	0.1	338	22.1	22.1	7.9	7.9	32.4	32.4	97.1	97.1	7.0		7.1		10		72				<0.2		0.8	
						3.9	0.1	346	22.1		7.9		32.5		97.1		7.0		7.1		9		72				<0.2		1.0	
					Bottom	6.8	0.1	338	22.0	22.0	7.9	7.9	32.0	32.0	96.7	96.7	7.0	7.0	11.0		9		75				<0.2		0.8	
						6.8	0.1	311	22.0		7.9		32.0		96.7		7.0		11.2		10		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**

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Water Quality Monitoring

Water Quality Monitoring Results on 28 November 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	14:17	6.8	Surface	1.0	0.1	312	22.1	22.1	7.9	7.9	32.0	32.0	98.0	98.0	7.1	7.1	2.6	3.2	4	5	70	72	822106	808802	<0.2	<0.2	1.2	0.8
						1.0	0.1	337	22.1		7.9		32.0		98.0		7.1		2.6		5		70				<0.2		1.0	
					Middle	3.4	0.2	314	22.0	22.0	7.9	7.9	31.8	31.8	97.3	97.3	7.1		3.2		5		71				<0.2		0.6	
						3.4	0.2	316	22.0		7.9		31.8		97.3		7.1		3.2		6		72				<0.2		0.7	
					Bottom	5.8	0.2	334	21.9	21.9	7.9	7.9	31.7	31.7	96.9	96.9	7.1	7.1	3.8		6		74				<0.2		0.8	
						5.8	0.2	307	21.9		7.9		31.7		96.9		7.1		3.8		6		74				<0.2		0.7	
IM10	Cloudy	Moderate	14:26	7.5	Surface	1.0	0.4	307	22.0	22.0	7.9	7.9	32.1	32.1	96.6	96.6	7.0	7.0	4.7	6.1	6	9	70	73	822224	809820	<0.2	<0.2	0.7	0.7
						1.0	0.4	330	22.0		7.9		32.1		96.6		7.0		4.7		6		70				<0.2		0.8	
					Middle	3.8	0.3	313	21.6	21.6	7.9	7.9	32.0	32.0	95.5	95.5	7.0		6.6		8		74				<0.2		0.7	
						3.8	0.4	329	21.6		7.9		32.0		95.5		7.0		6.6		7		74				<0.2		0.7	
					Bottom	6.5	0.2	297	21.5	21.5	7.9	7.9	31.7	31.7	95.3	95.3	7.0	7.0	7.1		13		76				<0.2		0.8	
						6.5	0.3	316	21.5		7.9		31.7		95.3		7.0		7.1		12		76				<0.2		0.7	
IM11	Cloudy	Moderate	14:38	7.3	Surface	1.0	0.3	273	22.3	22.3	7.9	7.9	31.5	31.5	95.4	95.4	6.9	7.0	3.7	5.3	8	8	71	74	821481	810552	<0.2	<0.2	1.0	0.8
						1.0	0.3	276	22.3		7.9		31.5		95.4		6.9		3.7		7		72				<0.2		1.2	
					Middle	3.7	0.3	287	21.9	21.9	7.9	7.9	31.4	31.4	95.4	95.4	7.0		5.4		7		74				<0.2		0.8	
						3.7	0.3	307	21.9		7.9		31.4		95.4		7.0		5.4		9		74				<0.2		0.7	
					Bottom	6.3	0.2	275	21.7	21.7	7.9	7.9	31.4	31.4	95.5	95.5	7.0	7.0	6.9		9		77				<0.2		0.6	
						6.3	0.3	286	21.7		7.9		31.4		95.5		7.0		6.9		9		78				<0.2		0.7	
IM12	Cloudy	Moderate	14:47	8.6	Surface	1.0	0.4	270	22.0	22.0	7.9	7.9	31.8	31.8	94.6	94.6	6.9	6.9	6.2	7.6	10	10	70	73	821135	811531	<0.2	<0.2	0.6	0.7
						1.0	0.5	295	22.0		7.9		31.8		94.6		6.9		6.2		11		70				<0.2		0.6	
					Middle	4.3	0.3	285	21.8	21.8	7.9	7.9	31.7	31.7	94.7	94.7	6.9		7.5		10		73				<0.2		0.8	
						4.3	0.4	297	21.8		7.9		31.7		94.7		6.9		7.5		10		73				<0.2		0.7	
					Bottom	7.6	0.2	278	21.6	21.6	7.9	7.9	31.5	31.5	94.7	94.7	7.0	7.0	9.2		9		76				<0.2		0.7	
						7.6	0.2	296	21.6		7.9		31.5		94.7		7.0		9.2		9		76				<0.2		0.7	
SR2	Cloudy	Moderate	15:15	4.2	Surface	1.0	0.2	45	22.4	22.4	7.9	7.9	31.2	31.2	94.8	94.8	6.9	6.9	4.1	4.5	8	8	71	74	821491	814137	<0.2	<0.2	0.6	0.6
						1.0	0.2	46	22.4		7.9		31.2		94.8		6.9		4.1		8		71				<0.2		0.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.1	50	22.4	22.4	7.9	7.9	31.4	31.4	95.4	95.4	6.9	6.9	4.9		8		76				<0.2		0.6	
						3.2	0.1	52	22.4		7.9		31.4		95.4		6.9		4.9		8		76				<0.2		0.6	
SR3	Cloudy	Moderate	14:02	8.4	Surface	1.0	0.2	187	22.2	22.2	7.8	7.8	31.1	31.1	96.4	96.4	7.0	7.0	2.6	5.1	5	5	-	-	822117	807557	-	-	-	-
						1.0	0.2	201	22.2		7.8		31.1		96.4		7.0		2.6		4		-				-		-	
					Middle	4.2	0.2	279	22.2	22.2	7.9	7.9	32.1	32.1	96.3	96.3	7.0		4.8		6		-				-		-	
						4.2	0.2	290	22.2		7.9		32.1		96.3		7.0		4.8		4		-				-		-	
					Bottom	7.4	0.2	324	22.0	22.0	7.9	7.9	32.6	32.6	96.2	96.2	7.0	7.0	7.9		6		-				-		-	
						7.4	0.2	332	22.0		7.9		32.6		96.2		7.0		7.9		5		-				-		-	
SR4A	Fine	Calm	15:23	9.0	Surface	1.0	0.1	238	21.6	21.5	8.0	8.0	32.2	32.2	94.4	94.4	6.9	6.9	7.2	7.2	10	9	-	-	817191	807807	-	-	-	-
						1.0	0.1	254	21.5		8.0		32.2		94.4		6.9		7.2		10		-				-		-	
					Middle	4.5	0.1	254	21.5	21.5	8.0	8.0	32.2	32.2	93.5	93.5	6.8		7.2		10		-				-		-	
						4.5	0.1	265	21.5		8.0		32.2		93.5		6.8		7.2		8		-				-		-	
					Bottom	8.0	0.1	249	21.3	21.3	8.0	8.0	32.3	32.3	92.2	92.2	6.8	6.8	7.3		9		-				-		-	
						8.0	0.1	254	21.3		8.0		32.3		92.2		6.8		7.3		9		-				-		-	
SR5A	Fine	Calm	15:42	3.2	Surface	1.0	0.1	288	21.8	21.8	8.0	8.0	32.0	32.0	95.3	95.3	7.0	7.0	8.3	9.4	7	8	-	-	816591	810692	-	-	-	-
						1.0	0.1	311	21.8		8.0		32.0		95.3		7.0		8.4		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.2	0.1	298	21.8	21.8	8.0	8.0	32.0	32.0	93.7	93.7	6.8	6.8	10.4		8		-				-		-	
						2.2	0.1	313	21.8		8.0		32.0		93.7		6.8		10.4		9		-				-		-	
SR6	Fine	Calm	16:05	3.8	Surface	1.0	0.1	263	22.4	22.4	8.0	8.0	32.3	32.3	91.3	91.3	6.6	6.6	11.7	12.5	10	11	-	-	817905	814668	-	-	-	-
						1.0	0.1	272	22.4		8.0		32.3		91.2		6.6		11.7		11		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	0.1	248	22.3	22.3	8.0	8.0	32.3	32.3	90.5	90.5	6.5	6.5	13.6		10		-				-		-	
						2.8	0.1	262	22.3		8.0		32.3		90.5		6.5		12.9		11		-				-		-	
SR7	Cloudy	Moderate	16:13	19.1	Surface	1.0	0.2	51	22.5	22.5	7.9	7.9	31.9	31.9	89.5	89.5	6.5	6.5	3.4	3.2	7	8	-	-	823610	823714	-	-	-	-
						1.0	0.2	53	22.5		7.9		31.9		89.5		6.5		3.4		7		-				-		-	
					Middle	9.6	0.2	38	22.5	22.5	7.9	7.9	31.7	31.7	89.3	89.3	6.4		2.9		8		-				-		-	
						9.6	0.2	40	22.5		7.9		31.7		89.3		6.4		2.9		7		-				-		-	
					Bottom	18.1	0.1	46	22.5	22.5	7.9	7.9	31.5	31.5	89.4	89.4	6.5	6.5	3.2		8		-				-		-	
						18.1	0.1	48	22.5		7.9		31.5		89.4		6.5		3.2		8		-				-		-	
SR8	Cloudy	Moderate	14:56	3.8	Surface	1.0	-	-	22.2	22.2	7.9	7.9	31.2	31.2	96.9	96.9	7.0	7.0	6.5	6.0	10	10	-	-	820246	811418	-	-	-	-
						1.0	-	-	22.2		7.9		31.2		96.9		7.0		6.5		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	-	-	21.9	21.9	7.9	7.9	31.2	31.2	96.5	96.5	7.1	7.1	5.4		9		-				-		-	
						2.8	-	-	21.9		7.9		31.2		96.5		7.1		5.4		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 30 November 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	10:19	8.4	Surface	1.0	0.2	203	22.5	22.4	8.1	8.1	32.5	32.5	98.5	98.2	7.1	7.0	7.0	11.5	5	9	71	73	815596	804255	<0.2	<0.2	1.3	1.1
						1.0	0.2	216	22.4		8.1		32.5		97.9		7.0		8.0		5		71				<0.2		1.4	
					Middle	4.2	0.2	226	22.2	22.2	8.1	8.1	32.7	32.7	96.3	96.3	6.9		11.8		9		73				<0.2		1.2	
						4.2	0.3	242	22.2		8.1		32.7		96.2		6.9		11.6		8		73				<0.2		1.2	
					Bottom	7.4	0.3	220	22.1	22.1	8.1	8.1	32.7	32.7	96.0	96.1	6.9	7.0	15.5		11		75				<0.2		0.6	
						7.4	0.3	238	22.1		8.1		32.7		96.2		7.0		15.0		13		75				<0.2		0.7	
C2	Cloudy	Moderate	11:02	11.3	Surface	1.0	0.6	156	22.3	22.3	7.8	7.8	29.1	29.1	93.3	93.3	6.9	6.9	4.0	7.0	6	7	72	74	825657	806939	<0.2	<0.2	1.3	1.4
						1.0	0.6	166	22.3		7.8		29.1		93.3		6.9		4.0		5		73				<0.2		1.3	
					Middle	5.7	0.5	151	22.3	22.3	7.9	7.9	31.2	31.2	93.1	93.1	6.8		6.2		5		74				<0.2		1.4	
						5.7	0.5	162	22.3		7.9		31.2		93.1		6.8		6.2		7		74				<0.2		1.5	
					Bottom	10.3	0.3	143	22.3	22.3	7.9	7.9	31.6	31.6	93.4	93.4	6.8	6.8	10.7		8		75				<0.2		1.4	
						10.3	0.3	156	22.3		7.9		31.6		93.4		6.8		10.7		9		75				<0.2		1.6	
C3	Cloudy	Moderate	09:10	12.3	Surface	1.0	0.2	37	22.4	22.4	7.9	7.9	33.4	33.4	93.0	93.0	6.6	6.6	2.0	2.0	3	5	74	75	822129	817776	<0.2	<0.2	0.4	0.5
						1.0	0.2	37	22.4		7.9		33.4		93.0		6.6		2.0		4		73				<0.2		0.5	
					Middle	6.2	0.2	52	22.4	22.4	7.8	7.8	33.5	33.5	91.4	91.4	6.5		2.0		6		75				<0.2		0.6	
						6.2	0.2	55	22.4		7.8		33.5		91.4		6.5		2.0		4		75				<0.2		0.6	
					Bottom	11.3	0.2	59	22.4	22.4	7.8	7.8	33.6	33.6	90.9	90.9	6.5	6.5	2.0		6		78				<0.2		0.6	
						11.3	0.2	63	22.4		7.8		33.6		90.9		6.5		2.0		4		77				<0.2		0.4	
IM1	Cloudy	Moderate	10:43	7.3	Surface	1.0	0.3	186	22.0	22.0	8.0	8.0	32.1	32.1	95.6	95.6	6.9	6.9	6.5	7.2	13	18	71	73	818376	806479	<0.2	<0.2	1.2	1.2
						1.0	0.3	203	22.0		8.0		32.1		95.5		6.9		6.5		13		71				<0.2		1.1	
					Middle	3.7	0.2	175	21.9	21.9	8.0	8.0	32.3	32.3	95.0	95.0	6.9		7.1		17		73				<0.2		1.5	
						3.7	0.2	180	21.9		8.0		32.3		94.9		6.9		7.3		17		73				<0.2		1.5	
					Bottom	6.3	0.3	182	21.9	21.9	8.0	8.0	32.4	32.4	94.9	95.0	6.9	6.9	7.9		24		75				<0.2		0.8	
						6.3	0.3	187	21.9		8.0		32.4		95.1		6.9		7.8		23		75				<0.2		0.8	
IM2	Cloudy	Moderate	10:51	7.0	Surface	1.0	0.3	200	22.1	22.1	8.0	8.0	31.6	31.6	96.7	96.6	7.0	7.0	5.8	6.8	7	7	73	74	818849	806165	<0.2	<0.2	1.2	1.1
						1.0	0.4	200	22.1		8.0		31.6		96.5		7.0		5.9		5		73				<0.2		1.3	
					Middle	3.5	0.3	178	21.9	21.9	8.0	8.0	32.3	32.3	95.0	95.0	6.9		7.0		6		74				<0.2		1.3	
						3.5	0.4	189	21.9		8.0		32.3		94.9		6.9		7.3		7		74				<0.2		1.2	
					Bottom	6.0	0.3	180	21.9	21.9	8.0	8.0	32.4	32.4	95.0	95.1	6.9	6.9	7.5		7		75				<0.2		0.8	
						6.0	0.3	181	21.9		8.0		32.4		95.1		6.9		7.4		7		75				<0.2		0.8	
IM3	Fine	Moderate	10:57	6.8	Surface	1.0	0.4	204	22.1	22.1	8.0	8.0	31.7	31.7	96.9	96.9	7.0	7.0	5.8	6.4	6	8	72	73	819405	806033	<0.2	<0.2	0.7	0.8
						1.0	0.4	214	22.1		8.0		31.7		96.8		7.0		5.8		6		72				<0.2		0.8	
					Middle	3.4	0.3	200	22.0	22.0	8.0	8.0	32.1	32.1	95.8	95.8	7.0		6.4		5		73				<0.2		0.8	
						3.4	0.4	219	22.0		8.0		32.1		95.7		7.0		6.5		7		73				<0.2		0.8	
					Bottom	5.8	0.3	192	21.9	21.9	8.0	8.0	32.3	32.3	95.7	95.9	7.0	7.0	7.0		11		75				<0.2		0.8	
						5.8	0.4	195	21.9		8.0		32.3		96.1		7.0		6.7		12		75				<0.2		0.8	
IM4	Fine	Moderate	11:05	7.4	Surface	1.0	0.4	186	22.1	22.1	8.0	8.0	31.6	31.6	96.7	96.7	7.0	7.0	6.2	7.5	9	9	72	74	819553	805024	<0.2	<0.2	0.7	0.7
						1.0	0.4	203	22.1		8.0		31.6		96.6		7.0		6.2		7		72				<0.2		0.7	
					Middle	3.7	0.3	171	21.9	21.9	8.0	8.0	32.2	32.2	95.0	95.0	6.9		7.9		7		73				<0.2		0.7	
						3.7	0.3	173	21.9		8.0		32.2		95.0		6.9		7.9		9		73				<0.2		0.6	
					Bottom	6.4	0.2	165	21.9	21.9	8.0	8.0	32.4	32.4	94.9	94.9	6.9	6.9	8.3		9		75				<0.2		0.9	
						6.4	0.2	179	21.9		8.0		32.4		94.9		6.9		8.5		11		76				<0.2		0.8	
IM5	Fine	Moderate	11:15	6.4	Surface	1.0	0.4	191	22.1	22.1	8.0	8.0	31.7	31.7	96.9	96.8	7.0	7.0	5.9	7.0	7	6	72	73	820557	804928	<0.2	<0.2	1.3	1.3
						1.0	0.4	196	22.1		8.0		31.7		96.7		7.0		6.0		6		72				<0.2		1.2	
					Middle	3.2	0.4	187	22.0	22.0	8.0	8.0	31.8	31.8	95.9	95.9	7.0		7.0		5		73				<0.2		1.2	
						3.2	0.4	204	22.0		8.0		31.8		95.9		7.0		7.0		6		73				<0.2		1.2	
					Bottom	5.4	0.2	177	21.9	21.9	8.0	8.0	32.0	32.0	95.9	96.1	7.0	7.0	8.0		6		75				<0.2		1.6	
						5.4	0.3	178	21.9		8.0		32.0		96.2		7.0		8.0		7		75				<0.2		1.4	
IM6	Fine	Moderate	11:21	6.4	Surface	1.0	0.5	244	22.1	22.1	8.0	8.0	31.3	31.3	96.2	96.2	7.0	7.0	6.3	7.7	5	6	71	73	821081	805832	<0.2	<0.2	1.3	1.2
						1.0	0.5	247	22.1		8.0		31.2		96.2		7.0		6.3		6		72				<0.2		1.3	
					Middle	3.2	0.3	234	22.1	22.1	8.0	8.0	31.3	31.3	96.2	96.3	7.0		7.0		6		73				<0.2		1.2	
						3.2	0.3	255	22.1		8.0		31.4		96.3		7.0		7.1		6		73				<0.2		1.3	
					Bottom	5.4	0.3	226	22.0	22.0	8.0	8.0	31.7	31.7	96.4	96.5	7.0	7.0	9.5		6		75				<0.2		1.1	
						5.4	0.3	241	22.0		8.0		31.7		96.5		7.0		9.8		6		76				<0.2		1.0	
IM7	Fine	Moderate	11:28	7.7	Surface	1.0	0.4	234	22.1	22.1	8.0	8.0	31.0	31.0	95.4	95.4	7.0	7.0	4.1	6.0	4	5	71	73	821342	806854	<0.2	<0.2	1.3	1.3
						1.0	0.4	257	22.1		8.0		31.0		95.3		7.0		4.2		3		71				<0.2		1.3	
					Middle	3.9	0.3	239	22.0	22.0	8.0	8.0	31.6	31.5	95.2	95.3	6.9		5.9		6		73				<0.2		1.3	
						3.9	0.3	253	22.0		8.0		31.5		95.3		6.9		6.1		4		73				<0.2		1.5	
					Bottom	6.7	0.3	250	21.9	21.9	8.0	8.0	31.8	31.8	96.2	96.4	7.0	7.0	7.9		5		75				<0.2		1.3	
						6.7	0.3	271	21.9		8.0		31.8		96.6		7.0		7.9		5		75				<0.2		1.1	
IM8	Cloudy	Moderate	10:35	7.8	Surface	1.0	0.2	198	22.4	22.4	7.9	7.9	31.6	31.6	95.0	95.0	6.9	6.9	3.8	4.9	5	5	73	75	821720	807829	<0.2	<0.2	1.1	1.2
						1.0	0.2	207	22.4		7.9		31.6		95.0		6.9		3.8		5		73				<0.2		1.2	
					Middle	3.9	0.2	169	22.3	22.3	7.9	7.9	32.0	32.0	94.5	94.5	6.8		5.2		4		75				<0.2		1.2	
						3.9	0.2	185	22.3		7.9		32.0		94.5		6.8		5.3		5		75				<0.2		1.2	
					Bottom	6.8	0.1	148	22.2	22.2	7.9	7.9	32.2	32.2	94.2	94.2	6.8	6.8	5.5		5		75				<0.2		1.3	
						6.8	0.1	150	22.2		7.9		32.2		94.2		6.8		5.5		5		76				<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 30 November 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	6.9	Surface	1.0	0.2	141	22.5	22.5	7.9	7.9	31.5	31.5	95.4	95.4	6.9	6.9	3.1	4.1	3	4	73	74	822123	808825	<0.2	<0.2	1.1	1.2
						1.0	0.2	145	22.5		7.9		31.5		95.4		6.9		3.1		4		73				<0.2		1.3	
					Middle	3.5	0.2	128	22.3	22.3	7.9	7.9	32.0	32.0	94.7	94.7	6.8		3.5		4		74				<0.2		1.2	
						3.5	0.3	137	22.3		7.9		32.0		94.7		6.8		3.5		5		74				<0.2		1.1	
					Bottom	5.9	0.2	100	22.3	22.3	7.9	7.9	32.6	32.6	94.4	94.4	6.8	6.8	5.7		4		76				<0.2		1.0	
						5.9	0.2	106	22.3		7.9		32.6		94.3		6.8		5.8		4		75				<0.2		1.2	
IM10	Cloudy	Moderate	10:20	7.0	Surface	1.0	0.2	120	22.5	22.5	7.9	7.9	30.9	30.9	95.8	95.8	6.9	6.9	3.6	5.3	4	4	73	75	822256	809810	<0.2	<0.2	1.5	1.5
						1.0	0.2	129	22.5		7.9		30.9		95.8		6.9		3.6		3		73				<0.2		1.7	
					Middle	3.5	0.3	102	22.3	22.3	7.9	7.9	32.0	32.0	94.7	94.7	6.8		5.8		4		74				<0.2		1.3	
						3.5	0.3	102	22.3		7.9		32.0		94.7		6.8		5.8		4		75				<0.2		1.4	
					Bottom	6.0	0.3	94	22.3	22.3	7.9	7.9	32.2	32.2	94.3	94.3	6.8	6.8	6.6		3		76				<0.2		1.5	
						6.0	0.3	95	22.3		7.9		32.2		94.3		6.8		6.5		4		77				<0.2		1.3	
IM11	Cloudy	Moderate	10:09	8.0	Surface	1.0	0.1	101	22.4	22.4	8.0	8.0	31.5	31.5	96.2	96.2	7.0	7.0	6.4	7.5	6	6	73	74	821492	810566	<0.2	<0.2	1.1	1.3
						1.0	0.2	103	22.4		8.0		31.5		96.2		7.0		6.4		6		73				<0.2		1.2	
					Middle	4.0	0.1	84	22.3	22.3	8.0	8.0	31.8	31.8	95.5	95.5	6.9		8.1		7		74				<0.2		1.6	
						4.0	0.2	89	22.3		8.0		31.8		95.5		6.9		8.1		5		74				<0.2		1.3	
					Bottom	7.0	0.2	79	22.4	22.4	8.0	8.0	31.9	31.9	94.7	94.7	6.8	6.8	8.0		6		75				<0.2		1.4	
						7.0	0.2	85	22.4		8.0		31.9		94.7		6.8		8.0		6		75				<0.2		1.3	
IM12	Cloudy	Moderate	10:00	8.4	Surface	1.0	0.2	95	22.3	22.3	7.9	7.9	31.9	31.9	96.4	96.4	7.0	7.0	3.2	3.6	5	6	73	75	821184	811530	<0.2	<0.2	1.1	1.2
						1.0	0.2	101	22.3		7.9		31.9		96.4		7.0		3.2		4		73				<0.2		1.2	
					Middle	4.2	0.4	83	22.3	22.3	7.9	7.9	31.8	31.8	95.2	95.2	6.9		4.5		6		75				<0.2		1.2	
						4.2	0.4	85	22.3		7.9		31.8		95.2		6.9		4.5		6		74				<0.2		1.0	
					Bottom	7.4	0.3	88	22.3	22.3	7.9	7.9	32.3	32.3	94.9	94.9	6.8	6.8	3.1		8		76				<0.2		1.1	
						7.4	0.3	91	22.3		7.9		32.3		94.9		6.8		3.1		9		76				<0.2		1.4	
SR2	Cloudy	Moderate	09:34	4.1	Surface	1.0	0.3	88	22.4	22.4	7.9	7.9	32.3	32.3	93.9	93.9	6.8	6.8	3.3	3.3	3	5	74	75	821437	814182	<0.2	<0.2	0.8	0.9
						1.0	0.3	94	22.4		7.9		32.3		93.9		6.8		3.3		4		73				<0.2		0.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.2	94	22.3	22.3	7.9	7.9	32.8	32.8	93.5	93.5	6.7	6.7	3.3		7		75				<0.2		1.1	
						3.1	0.2	101	22.3		7.9		32.8		93.5		6.7		3.3		5		76				<0.2		0.9	
SR3	Cloudy	Moderate	10:40	8.4	Surface	1.0	0.3	181	22.5	22.5	7.9	7.9	30.8	30.8	95.4	95.4	6.9	6.9	2.2	2.8	7	7	-	-	822152	807565	-	-	-	-
						1.0	0.3	195	22.5		7.9		30.8		95.4		6.9		2.2		6		-				-		-	
					Middle	4.2	0.3	187	22.5	22.5	7.9	7.9	30.9	30.9	94.8	94.8	6.9		2.6		6		-				-		-	
						4.2	0.4	196	22.5		7.9		30.9		94.8		6.9		2.6		5		-				-		-	
					Bottom	7.4	0.2	219	22.3	22.3	7.9	7.9	32.0	32.0	94.2	94.2	6.8	6.8	3.7		8		-				-		-	
						7.4	0.2	237	22.3		7.9		32.0		94.2		6.8		3.7		7		-				-		-	
SR4A	Fine	Calm	10:01	8.6	Surface	1.0	0.2	70	22.5	22.5	8.0	8.0	32.4	32.4	95.7	95.7	6.9	6.9	11.1	12.9	7	8	-	-	817196	807823	-	-	-	-
						1.0	0.2	72	22.5		8.0		32.4		95.7		6.9		11.6		7		-				-		-	
					Middle	4.3	0.2	73	22.5	22.5	8.0	8.0	32.4	32.4	95.5	95.5	6.9		12.7		6		-				-		-	
						4.3	0.3	76	22.5		8.0		32.4		95.5		6.9		13.4		6		-				-		-	
					Bottom	7.6	0.2	74	22.5	22.5	8.0	8.0	32.4	32.4	95.1	95.1	6.8	6.8	14.3		11		-				-		-	
						7.6	0.2	79	22.5		8.0		32.4		95.1		6.8		14.2		11		-				-		-	
SR5A	Fine	Calm	09:41	3.9	Surface	1.0	0.1	25	22.4	22.3	7.9	7.9	32.2	32.2	95.2	95.3	6.9	6.9	5.0	5.7	5	6	-	-	816612	810722	-	-	-	-
						1.0	0.1	25	22.3		7.9		32.2		95.3		6.9		5.2		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.9	0.0	349	22.3	22.3	7.9	7.9	32.2	32.2	95.8	96.0	6.9	6.9	6.4		7		-				-		-	
						2.9	0.0	321	22.3		7.9		32.2		96.1		6.9		6.2		8		-				-		-	
SR6	Fine	Calm	09:17	4.1	Surface	1.0	0.1	90	22.3	22.3	7.8	7.8	30.6	30.6	93.0	93.1	6.8	6.8	6.5	6.8	4	4	-	-	817916	814683	-	-	-	-
						1.0	0.1	97	22.3		7.8		30.6		93.1		6.8		6.8		3		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.1	97	22.2	22.2	7.8	7.8	30.5	30.1	94.1	95.0	6.9	7.0	6.9		4		-				-		-	
						3.1	0.1	98	22.2		7.7		29.6		95.8		7.0		6.8		4		-				-		-	
SR7	Cloudy	Moderate	08:35	15.8	Surface	1.0	0.2	58	22.5	22.5	7.8	7.8	33.7	33.7	90.0	90.0	6.4	6.5	3.0	3.5	5	5	-	-	823606	823755	-	-	-	-
						1.0	0.2	58	22.5		7.8		33.7		90.0		6.4		3.0		6		-				-		-	
					Middle	7.9	0.3	54	22.5	22.5	7.8	7.8	33.7	33.7	91.2	91.2	6.5		3.6		4		-				-		-	
						7.9	0.3	54	22.5		7.8		33.7		91.2		6.5		3.6		4		-				-		-	
					Bottom	14.8	0.2	59	22.5	22.5	7.8	7.8	33.7	33.7	92.8	92.8	6.6	6.6	4.0		5		-				-		-	
						14.8	0.3	64	22.5		7.8		33.7		92.8		6.6		4.0		5		-				-		-	
SR8	Cloudy	Moderate	09:53	4.0	Surface	1.0	-	-	22.5	22.5	8.0	8.0	31.9	31.9	94.9	94.9	6.8	6.8	11.9	12.1	10	12	-	-	820246	811418	-	-	-	-
						1.0	-	-	22.5		8.0		31.9		94.9		6.8		11.9		11		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	-	-	22.5	22.5	8.0	8.0	32.3	32.3	94.7	94.7	6.8	6.8	12.4		13		-				-		-	
						3.0	-	-	22.5		8.0		32.3		94.7		6.8		12.3		14		-				-		-	

DA: Depth-Averaged

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

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

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

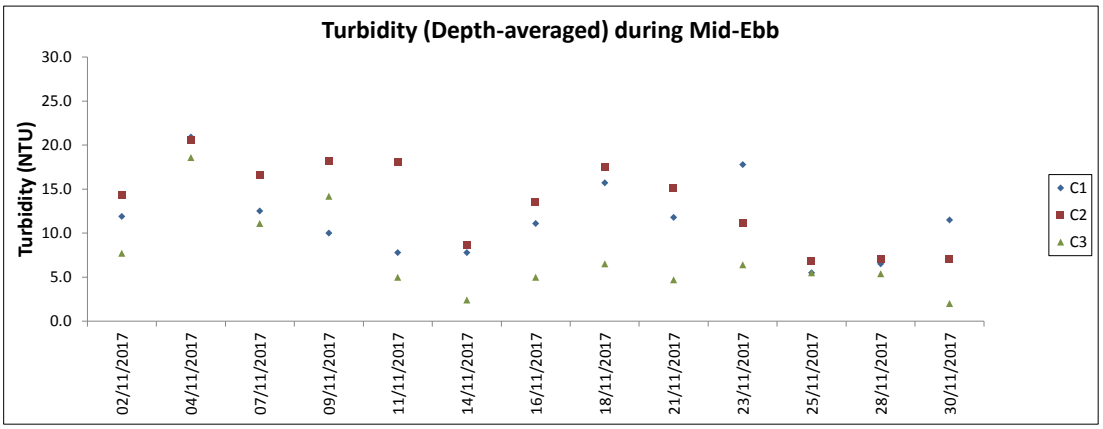
Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (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	15:42	8.5	Surface	1.0	0.4	27	22.4	22.4	8.1	8.1	32.6	32.6	97.9	97.6	7.0	7.0	7.5	12.4	3	4	73	75	815634	804235	<0.2	<0.2	0.7	0.8
						1.0	0.5	28	22.4		8.1		32.6		97.3		7.0		7.6		3		73				<0.2		0.8	
					Middle	4.3	0.4	33	22.1	22.1	8.1	8.0	32.7	32.7	95.8	95.7	6.9		13.2		4		75				<0.2		0.7	
						4.3	0.4	35	22.1		8.0		32.7		95.5		6.9		13.1		5		75				<0.2		0.7	
					Bottom	7.5	0.3	33	22.1	22.1	8.0	8.0	32.7	32.7	95.5	95.6	6.9	6.9	16.3		4		77				<0.2		0.8	
						7.5	0.3	33	22.1		8.0		32.7		95.7		6.9		16.6		5		77				<0.2		0.8	
C2	Cloudy	Moderate	14:39	10.2	Surface	1.0	0.3	172	22.3	22.3	7.8	7.8	28.2	28.2	92.2	92.2	6.8	6.8	4.9	7.4	3	3	72	73	825693	806965	<0.2	<0.2	3.2	3.2
						1.0	0.3	181	22.3		7.8		28.3		92.2		6.8		4.8		3		72				<0.2		3.2	
					Middle	5.1	0.1	211	22.5	22.5	7.8	7.8	30.2	30.2	92.4	92.4	6.7		8.2		3		73				<0.2		3.1	
						5.1	0.1	212	22.5		7.8		30.2		92.4		6.7		8.2		2		73				<0.2		2.9	
					Bottom	9.2	0.2	309	22.3	22.3	7.9	7.9	30.9	30.9	92.3	92.3	6.7	6.7	9.1		3		74				<0.2		3.3	
						9.2	0.2	311	22.3		7.9		30.9		92.3		6.7		9.1		3		74				<0.2		3.4	
C3	Cloudy	Moderate	16:34	12.1	Surface	1.0	0.5	269	22.6	22.6	7.9	7.9	31.2	31.2	91.0	91.0	6.6	6.6	4.6	9.6	3	3	73	75	822093	817813	<0.2	<0.2	0.7	0.9
						1.0	0.5	276	22.6		7.9		31.2		90.9		6.6		4.6		4		73				<0.2		0.8	
					Middle	6.1	0.5	267	22.5	22.5	7.9	7.9	31.4	31.4	90.0	90.0	6.5		9.7		2		75				<0.2		0.9	
						6.1	0.5	290	22.5		7.9		31.4		90.0		6.5		9.7		2		75				<0.2		0.7	
					Bottom	11.1	0.4	269	22.5	22.5	7.9	7.9	31.5	31.5	90.8	90.8	6.6	6.6	14.4		2		76				<0.2		1.1	
						11.1	0.4	271	22.5		7.9		31.5		90.8		6.6		14.4		4		77				<0.2		1.1	
IM1	Cloudy	Moderate	15:23	7.1	Surface	1.0	0.3	4	22.2	22.2	8.1	8.1	32.0	32.0	97.2	97.2	7.0	7.0	7.4	11.4	7	7	72	74	818348	806446	<0.2	<0.2	1.5	1.0
						1.0	0.3	4	22.3		8.1		32.0		97.1		7.0		7.9		7		72				<0.2		0.9	
					Middle	3.6	0.3	347	22.3	22.3	8.1	8.1	32.3	32.3	96.6	96.6	7.0		10.3		6		75				<0.2		1.0	
						3.6	0.4	319	22.3		8.1		32.3		96.6		7.0		10.3		7		75				<0.2		0.8	
					Bottom	6.1	0.4	338	22.3	22.3	8.0	8.0	32.5	32.5	95.3	95.5	6.9	6.9	16.3		6		76				<0.2		0.8	
						6.1	0.4	356	22.3		8.0		32.5		95.6		6.9		16.3		8		76				<0.2		0.9	
IM2	Cloudy	Moderate	15:18	8.0	Surface	1.0	0.0	20	22.4	22.4	8.1	8.1	31.4	31.4	97.7	97.6	7.1	7.1	6.6	7.0	5	7	72	75	818864	806171	<0.2	<0.2	1.3	1.4
						1.0	0.0	21	22.4		8.1		31.5		97.5		7.1		6.5		6		72				<0.2		1.2	
					Middle	4.0	0.2	27	22.3	22.3	8.1	8.1	32.1	32.1	96.3	96.3	7.0		7.1		7		75				<0.2		1.6	
						4.0	0.2	28	22.3		8.1		32.1		96.2		7.0		7.2		7		75				<0.2		1.3	
					Bottom	7.0	0.2	22	22.2	22.2	8.1	8.1	32.2	32.2	95.7	95.7	6.9	6.9	7.1		8		78				<0.2		1.3	
						7.0	0.2	24	22.2		8.1		32.2		95.7		6.9		7.2		9		78				<0.2		1.4	
IM3	Cloudy	Moderate	15:11	8.1	Surface	1.0	0.1	220	22.2	22.2	8.1	8.1	31.1	31.1	97.3	97.3	7.1	7.1	6.6	8.6	5	7	73	75	819387	806025	<0.2	<0.2	2.0	1.5
						1.0	0.1	238	22.2		8.1		31.1		97.2		7.1		6.7		6		74				<0.2		1.7	
					Middle	4.1	0.0	285	22.2	22.2	8.1	8.1	31.7	31.7	96.5	96.5	7.0		8.7		7		75				<0.2		1.6	
						4.1	0.0	305	22.2		8.1		31.7		96.4		7.0		9.0		7		75				<0.2		1.2	
					Bottom	7.1	0.1	257	22.2	22.2	8.1	8.1	32.1	32.1	95.9	95.9	6.9	6.9	10.2		8		77				<0.2		1.4	
						7.1	0.1	282	22.2		8.1		32.1		95.9		6.9		10.5		7		77				<0.2		1.3	
IM4	Cloudy	Moderate	15:04	7.4	Surface	1.0	0.2	293	22.2	22.2	8.0	8.0	31.1	31.1	96.5	96.4	7.0	7.0	6.3	9.0	4	6	73	75	819549	805032	<0.2	<0.2	1.6	1.4
						1.0	0.2	296	22.2		8.0		31.1		96.3		7.0		6.5		3		73				<0.2		1.5	
					Middle	3.7	0.2	317	22.0	22.0	8.0	8.0	31.5	31.5	95.1	95.1	6.9		9.4		6		75				<0.2		1.3	
						3.7	0.2	330	22.0		8.0		31.5		95.1		6.9		9.4		7		75				<0.2		1.2	
					Bottom	6.4	0.3	345	22.0	22.0	8.0	8.0	31.8	31.8	94.9	95.0	6.9	6.9	11.1		7		77				<0.2		1.5	
						6.4	0.3	351	22.0		8.0		31.8		95.0		6.9		11.3		9		77				<0.2		1.5	
IM5	Cloudy	Moderate	14:55	6.5	Surface	1.0	0.4	308	22.4	22.4	8.0	8.0	30.4	30.4	97.2	97.2	7.1	7.1	3.9	5.9	2	3	73	75	820540	804924	<0.2	<0.2	2.2	2.0
						1.0	0.5	332	22.4		8.0		30.4		97.1		7.1		4.0		2		73				<0.2		2.1	
					Middle	3.3	0.4	314	22.3	22.3	8.0	8.0	30.6	30.6	96.4	96.4	7.0		5.5		3		75				<0.2		2.0	
						3.3	0.4	320	22.3		8.0		30.6		96.3		7.0		5.7		4		75				<0.2		1.9	
					Bottom	5.5	0.3	330	22.2	22.2	8.0	8.0	30.9	30.9	95.7	95.8	7.0	7.0	7.9		5		76				<0.2		2.1	
						5.5	0.3	339	22.2		8.0		30.9		95.8		7.0		8.1		4		76				<0.2		1.9	
IM6	Cloudy	Moderate	14:47	6.3	Surface	1.0	0.4	285	22.3	22.3	8.0	8.0	30.3	30.4	96.1	96.1	7.0	7.0	4.6	12.5	4	6	71	74	821082	805804	<0.2	<0.2	2.1	2.0
						1.0	0.4	311	22.3		8.0		30.4		96.0		7.0		4.8		2		71				<0.2		1.9	
					Middle	3.2	0.3	303	22.1	22.1	8.0	8.0	31.2	31.1	94.5	94.5	6.9		13.3		7		73				<0.2		2.1	
						3.2	0.3	331	22.1		8.0		31.1		94.5		6.9		13.4		5		74				<0.2		2.3	
					Bottom	5.3	0.3	324	22.1	22.1	8.0	8.0	31.3	31.3	94.5	94.5	6.9	6.9	19.3		10		77				<0.2		1.6	
						5.3	0.3	341	22.1		8.0		31.3		94.5		6.9		19.3		9		77				<0.2		1.8	
IM7	Cloudy	Moderate	14:37	7.7	Surface	1.0	0.4	217	22.4	22.4	8.0	8.0	29.9	29.9	95.8	95.7	7.0	7.0	4.1	5.7	3	4	72	74	821357	806810	<0.2	<0.2	2.4	2.3
						1.0	0.5	228	22.4		8.0		29.9		95.5		7.0		4.0		2		72				<0.2		2.3	
					Middle	3.9	0.4	227	22.1	22.1	8.0	8.0	31.0	31.0	94.1	94.1	6.9		5.4		5		73				<0.2		2.2	
						3.9	0.4	239	22.1		8.0		31.0		94.1		6.9		5.6		4		73				<0.2		2.4	
					Bottom	6.7	0.3	255	22.1	22.1	8.0	8.0	31.7	31.6	94.4	94.5	6.9	6.9	8.0		4		76				<0.2		2.1	
						6.7	0.3	256	22.1		8.0		31.6		94.6		6.9		7.3		4		77				<0.2		2.2	
IM8	Cloudy	Moderate	15:05	7.9	Surface	1.0	0.2	234	22.8	22.8	7.9	7.9	30.4	30.4	98.9	98.9	7.2	7.2	1.2	1.5	3	3	73	74	821682	807856	<0.2	<0.2	1.7	2.1
						1.0	0.2	240	22.8		7.9		30.4		98.9		7.2		1.2		2		73				<0.2		2.1	
					Middle	4.0	0.3	226	22.8	22.8	7.9	7.9	30.3	30.3	98.2	98.2	7.1		1.5		3		74				<0.2		2.3	
						4.0	0.3	233	22.8		7.9		30.3		98.2		7.1		1.5		4		74				<0.2		2.2	
					Bottom	6.9	0.3	232	22.6	22.6	7.9	7.9	30.5	30.4	97.3	97.3	7.1	7.1	1.8		2		75				<0.2		2.1	
						6.9	0.3	242	22.6		7.9		30.4		97.3		7.1		1.9		2		75				<0.2		1.9	

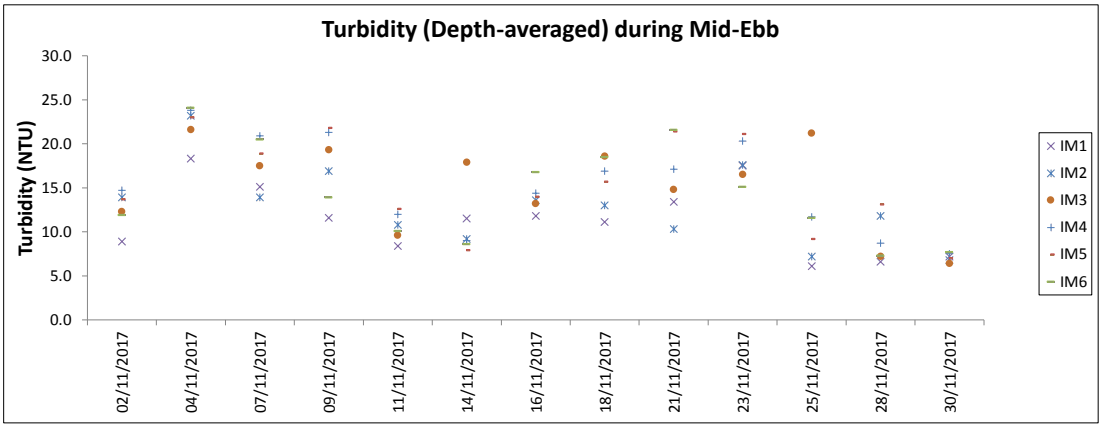
DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

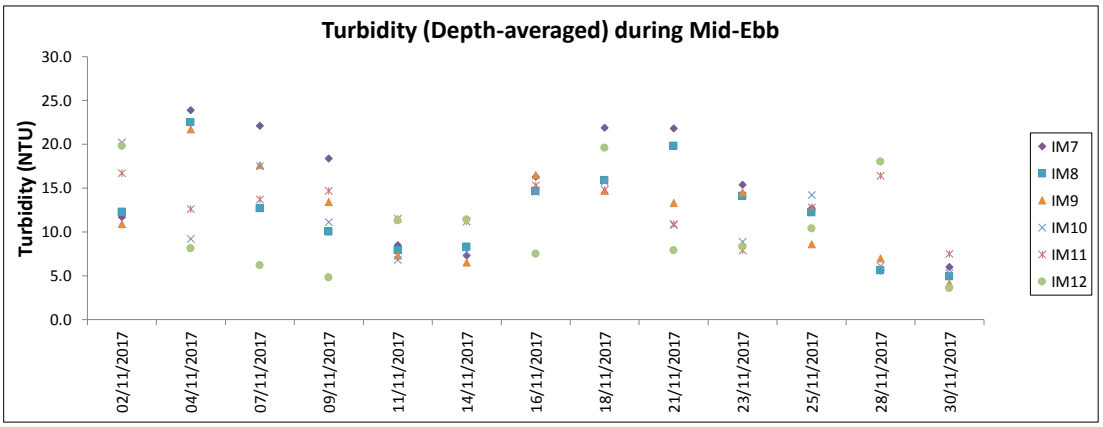
Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 30 November 17 during Mid-Flood Tide

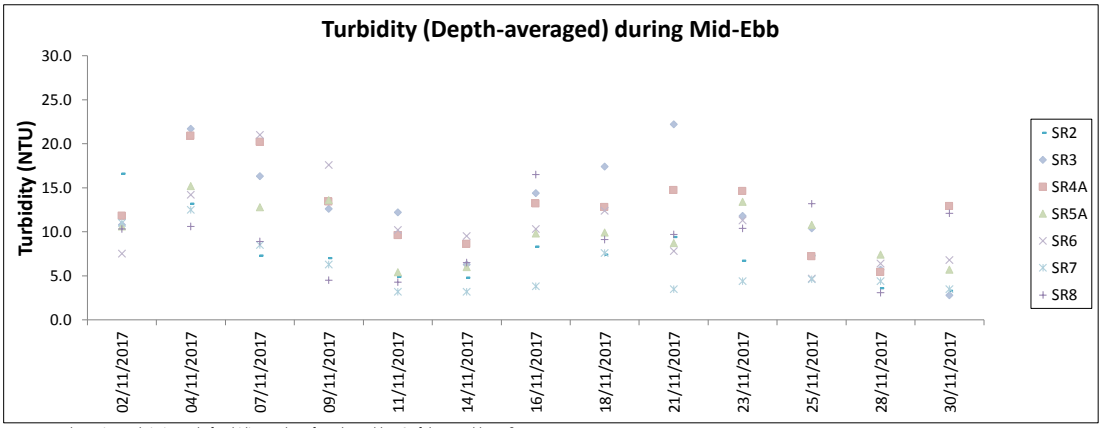
Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (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	15:13	6.9	Surface	1.0	0.3	272	22.6	22.6	7.9	7.9	31.2	31.2	96.5	96.5	7.0	7.0	1.7	3.1	3	4	73	74	822111	808781	<0.2	<0.2	1.4	1.4
						1.0	0.4	293	22.6		7.9		31.2		96.5		7.0		1.7		3		73				<0.2		1.2	
					Middle	3.5	0.2	260	22.5	22.5	7.9	7.9	31.3	31.3	95.9	95.9	6.9		3.3		4		73				<0.2		1.5	
						3.5	0.3	284	22.5		7.9		31.3		95.9		6.9		3.3		3		74				<0.2		1.3	
					Bottom	5.9	0.2	278	22.4	22.4	7.9	7.9	31.4	31.4	95.8	95.8	6.9	6.9	4.2		4		75				<0.2		1.5	
						5.9	0.2	298	22.4		7.9		31.4		95.8		6.9		4.2		4		75				<0.2		1.5	
IM10	Cloudy	Moderate	15:22	6.3	Surface	1.0	0.6	292	22.6	22.6	7.9	7.9	31.5	31.5	96.5	96.5	7.0	7.0	2.6	4.6	4	5	73	75	822256	809860	<0.2	<0.2	1.4	1.4
						1.0	0.6	301	22.6		7.9		31.5		96.5		7.0		2.6		3		73				<0.2		1.6	
					Middle	3.2	0.4	292	22.4	22.4	7.9	7.9	31.6	31.6	96.0	96.0	6.9		4.5		4		75				<0.2		1.4	
						3.2	0.4	304	22.4		7.9		31.6		96.0		6.9		4.5		5		75				<0.2		1.6	
					Bottom	5.3	0.4	287	22.4	22.4	7.9	7.9	31.7	31.7	96.1	96.1	6.9	6.9	6.8		6		76				<0.2		1.4	
						5.3	0.4	300	22.4		7.9		31.7		96.1		6.9		6.8		6		76				<0.2		1.2	
IM11	Cloudy	Moderate	15:34	7.7	Surface	1.0	0.5	264	22.5	22.5	8.0	8.0	31.5	31.5	97.2	97.2	7.0	7.0	8.4	12.3	4	5	73	75	821501	810563	<0.2	<0.2	1.9	1.9
						1.0	0.5	268	22.5		8.0		31.5		97.2		7.0		8.4		5		73				<0.2		2.0	
					Middle	3.9	0.5	268	22.4	22.4	8.0	8.0	31.7	31.7	96.7	96.7	7.0		13.9		4		74				<0.2		1.9	
						3.9	0.5	271	22.4		8.0		31.7		96.7		7.0		13.9		4		75				<0.2		1.9	
					Bottom	6.7	0.3	272	22.4	22.4	8.0	8.0	31.8	31.8	96.4	96.4	7.0	7.0	14.6		6		76				<0.2		1.9	
						6.7	0.4	297	22.4		8.0		31.8		96.4		7.0		14.6		7		77				<0.2		1.8	
IM12	Cloudy	Moderate	15:43	8.5	Surface	1.0	0.5	253	22.7	22.7	8.0	8.0	31.5	31.5	99.3	99.3	7.1	7.0	3.0	6.8	4	5	73	74	821145	811528	<0.2	<0.2	1.6	1.8
						1.0	0.5	269	22.7		8.0		31.5		99.2		7.1		3.0		5		73				<0.2		1.6	
					Middle	4.3	0.5	256	22.4	22.4	8.0	8.0	31.9	31.9	96.1	96.1	6.9		8.4		5		75				<0.2		1.8	
						4.3	0.5	264	22.4		8.0		31.9		96.1		6.9		8.4		4		74				<0.2		2.0	
					Bottom	7.5	0.4	261	22.5	22.5	7.9	7.9	32.1	32.1	96.8	96.8	7.0	7.0	9.0		6		75				<0.2		2.1	
						7.5	0.4	286	22.5		7.9		32.1		96.8		7.0		9.0		6		76				<0.2		1.9	
SR2	Cloudy	Moderate	16:09	4.4	Surface	1.0	0.1	86	22.5	22.5	7.9	7.9	31.2	31.2	96.6	96.6	7.0	7.0	5.0	5.6	6	7	74	75	821477	814145	<0.2	<0.2	1.2	1.3
						1.0	0.1	92	22.5		7.9		31.2		96.6		7.0		5.0		6		74				<0.2		1.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.1	101	22.5	22.5	7.9	7.9	31.5	31.5	96.3	96.3	7.0	7.0	6.2		9		76				<0.2		1.4	
						3.4	0.1	102	22.5		7.9		31.5		96.3		7.0		6.2		7		76				<0.2		1.4	
SR3	Cloudy	Moderate	14:59	8.2	Surface	1.0	0.2	228	22.7	22.7	7.9	7.9	29.4	29.4	95.2	95.2	6.9	6.9	5.0	10.3	4	6	-	-	822126	807551	-	-	-	-
						1.0	0.2	231	22.7		7.9		29.4		95.2		6.9		5.0		4		-				-		-	
					Middle	4.1	0.2	245	22.4	22.4	7.9	7.9	30.3	30.3	94.4	94.4	6.9		9.9		5		-				-		-	
						4.1	0.2	252	22.4		7.9		30.3		94.4		6.9		9.9		4		-				-		-	
					Bottom	7.2	0.1	276	22.3	22.3	7.9	7.9	31.1	31.1	94.6	94.6	6.9	6.9	16.0		10		-				-		-	
						7.2	0.2	292	22.3		7.9		31.1		94.6		6.9		16.0		8		-				-		-	
SR4A	Cloudy	Calm	16:02	8.8	Surface	1.0	0.2	253	22.5	22.5	8.0	8.0	32.4	32.4	95.8	95.8	6.9	6.9	10.0	11.6	12	13	-	-	817180	807812	-	-	-	-
						1.0	0.2	269	22.5		8.0		32.4		95.7		6.9		9.9		13		-				-		-	
					Middle	4.4	0.2	267	22.5	22.5	8.0	8.0	32.4	32.4	95.5	95.5	6.9		11.5		13		-				-		-	
						4.4	0.2	274	22.5		8.0		32.4		95.5		6.9		11.8		14		-				-		-	
					Bottom	7.8	0.1	271	22.5	22.5	8.0	8.0	32.4	32.4	95.4	95.4	6.9	6.9	13.3		12		-				-		-	
						7.8	0.2	285	22.5		8.0		32.4		95.4		6.9		13.2		12		-				-		-	
SR5A	Cloudy	Calm	16:20	3.9	Surface	1.0	0.2	276	22.6	22.6	8.0	8.0	32.2	32.2	97.1	97.1	7.0	7.0	8.5	8.1	9	9	-	-	816580	810677	-	-	-	-
						1.0	0.2	278	22.6		8.0		32.2		97.0		7.0		8.8		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.9	0.2	282	22.6	22.6	8.0	8.0	32.2	32.2	96.7	96.6	6.9	6.9	7.6		9		-				-		-	
						2.9	0.2	286	22.6		8.0		32.2		96.5		6.9		7.5		9		-				-		-	
SR6	Cloudy	Calm	16:45	3.8	Surface	1.0	0.1	234	22.3	22.3	8.1	8.1	32.1	32.1	96.1	96.1	6.9	6.9	8.7	9.4	8	9	-	-	817924	814671	-	-	-	-
						1.0	0.1	234	22.3		8.1		32.1		96.0		6.9		8.8		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	0.1	230	22.3	22.3	8.0	8.0	32.2	32.2	95.8	95.8	6.9	6.9	10.1		10		-				-		-	
						2.8	0.1	248	22.3		8.0		32.2		95.8		6.9		9.9		8		-				-		-	
SR7	Cloudy	Moderate	17:09	16.4	Surface	1.0	0.0	9	22.6	22.6	7.9	7.9	33.6	33.6	91.0	91.0	6.5	6.5	4.4	4.5	6	6	-	-	823663	823755	-	-	-	-
						1.0	0.0	9	22.6		7.9		33.6		90.9		6.5		4.4		6		-				-		-	
					Middle	8.2	0.2	73	22.6	22.6	7.9	7.9	33.6	33.6	90.0	90.0	6.4		5.0		6		-				-		-	
						8.2	0.2	74	22.6		7.9		33.6		90.0		6.4		5.0		6		-				-		-	
					Bottom	15.4	0.1	56	22.6	22.6	7.9	7.9	33.6	33.6	90.8	90.8	6.5	6.5	4.2		5		-				-		-	
						15.4	0.1	58	22.6		7.9		33.6		90.8		6.5		4.2		6		-				-		-	
SR8	Cloudy	Moderate	15:51	4.3	Surface	1.0	-	-	22.7	22.7	7.9	7.9	31.2	31.2	98.5	98.5	7.1	7.1	5.7	5.6	6	7	-	-	820246	811418	-	-	-	-
						1.0	-	-	22.7		7.9		31.2		98.4		7.1		5.7		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	-	-	22.9	22.9	7.9	7.9	31.3	31.3	97.2	97.2	7.0	7.0	5.4		7		-				-		-	
						3.3	-	-	22.9		7.9		31.3		97.2		7.0		5.4		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**

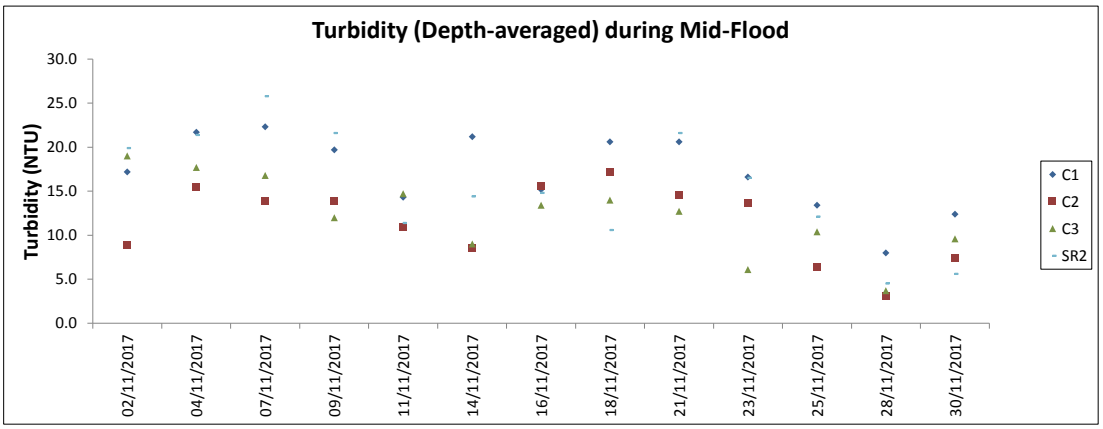


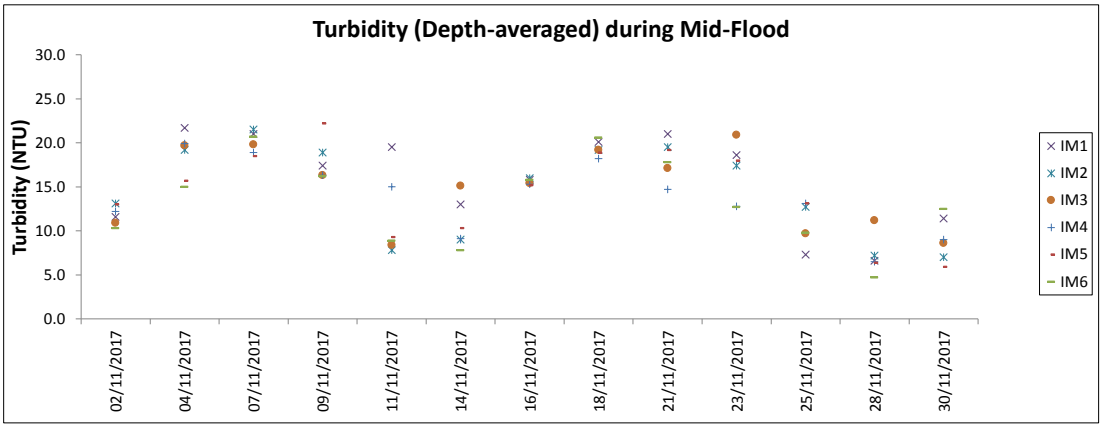


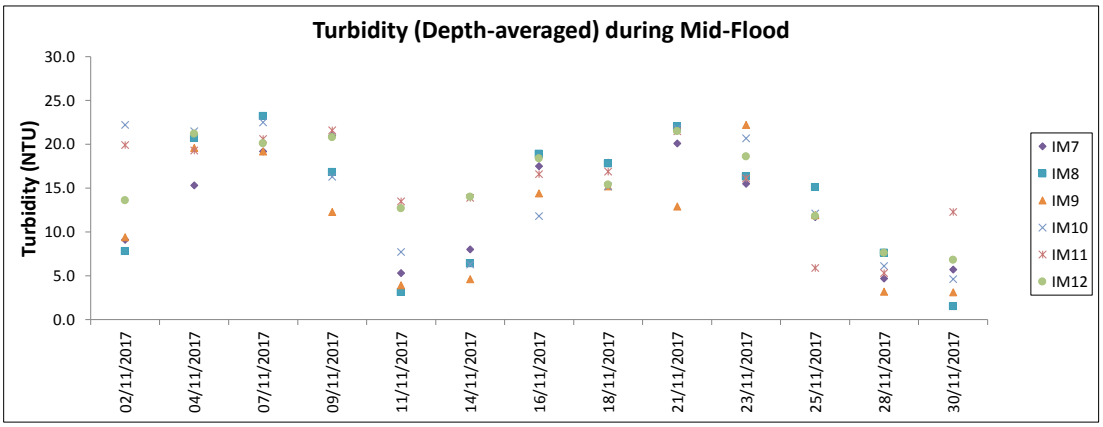


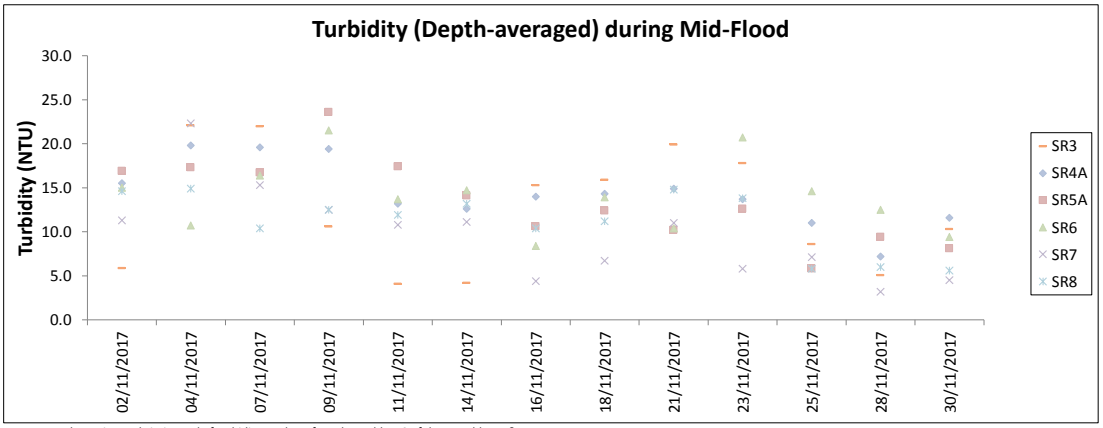


Note: The Action and Limit Level of turbidity can be referred to Table 4.2 of the monthly EM&A report.

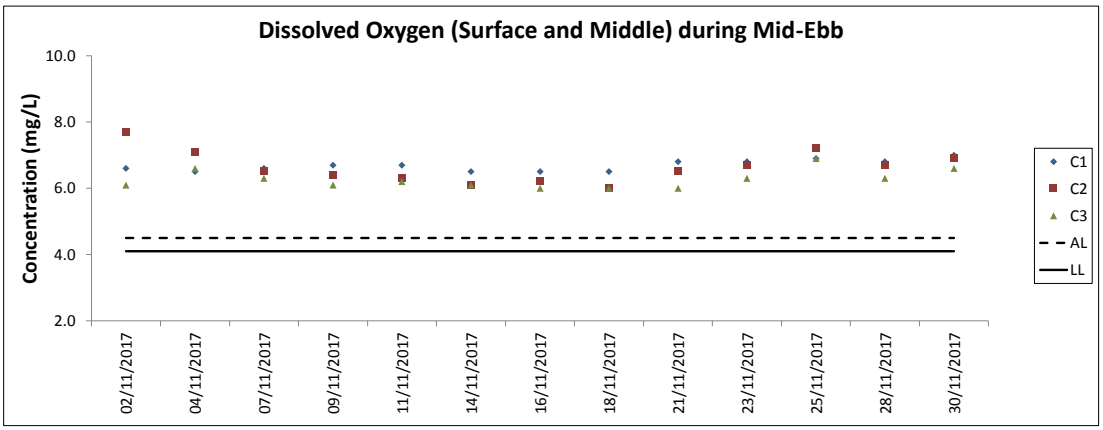


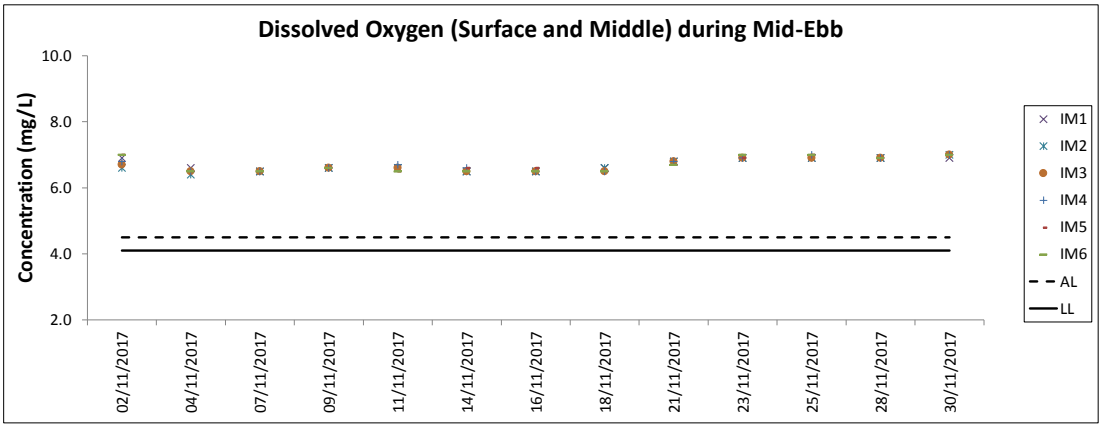


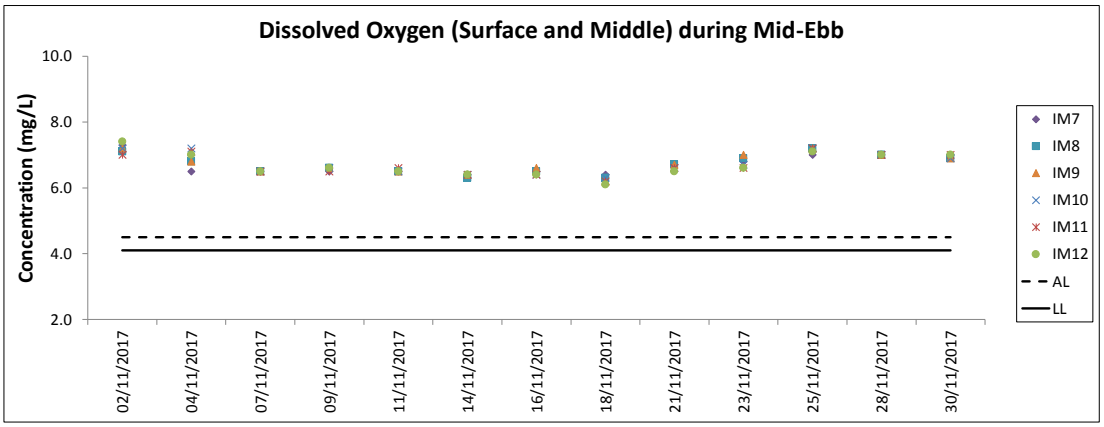




Note: The Action and Limit Level of turbidity can be referred to Table 4.2 of the monthly EM&A report.


Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
02/11/2017
04/11/2017
07/11/2017
09/11/2017
11/11/2017
14/11/2017
16/11/2017
18/11/2017
21/11/2017
23/11/2017
25/11/2017
28/11/2017
30/11/2017
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
02/11/2017
04/11/2017
07/11/2017
09/11/2017
11/11/2017
14/11/2017
16/11/2017
18/11/2017
21/11/2017
23/11/2017
25/11/2017
28/11/2017
30/11/2017
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
02/11/2017
04/11/2017
07/11/2017
09/11/2017
11/11/2017
14/11/2017
16/11/2017
18/11/2017
21/11/2017
23/11/2017
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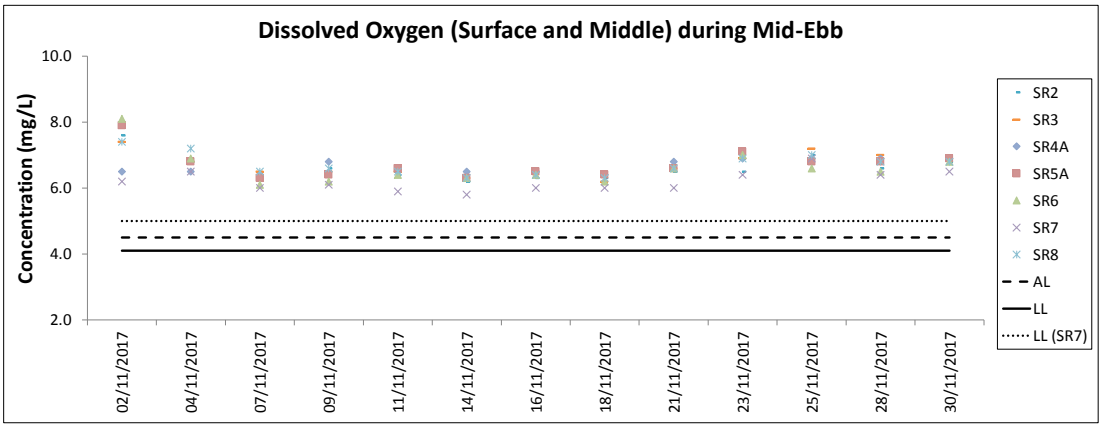
28/11/2017
30/11/2017
IM7
IM8
IM9
IM10
IM11
IM12
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
02/11/2017
04/11/2017
07/11/2017
09/11/2017
11/11/2017
14/11/2017
16/11/2017
18/11/2017
21/11/2017
23/11/2017
25/11/2017
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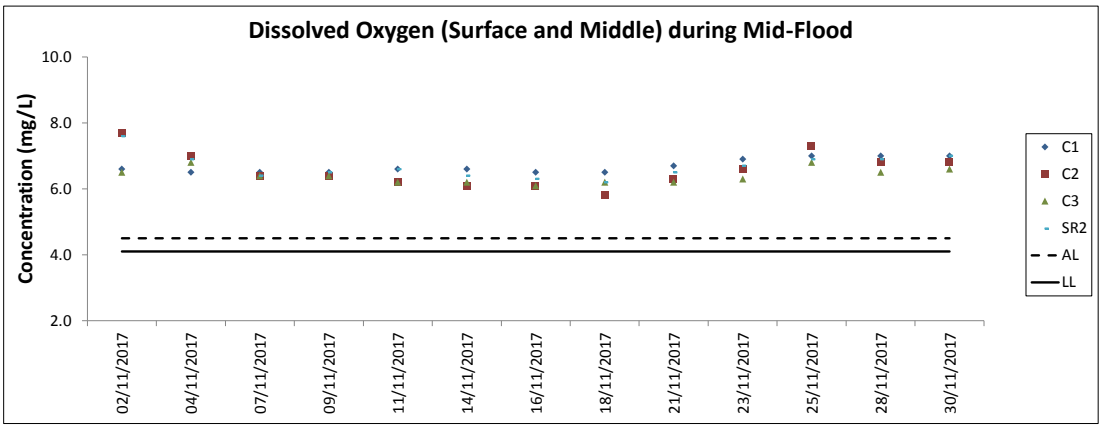
SR2
SR3
SR4A
SR5A
SR6
SR7
SR8
AL
LL
LL (SR7)


Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
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6.0
4.0
2.0
02/11/2017
04/11/2017
07/11/2017
09/11/2017
11/11/2017
14/11/2017
16/11/2017
18/11/2017
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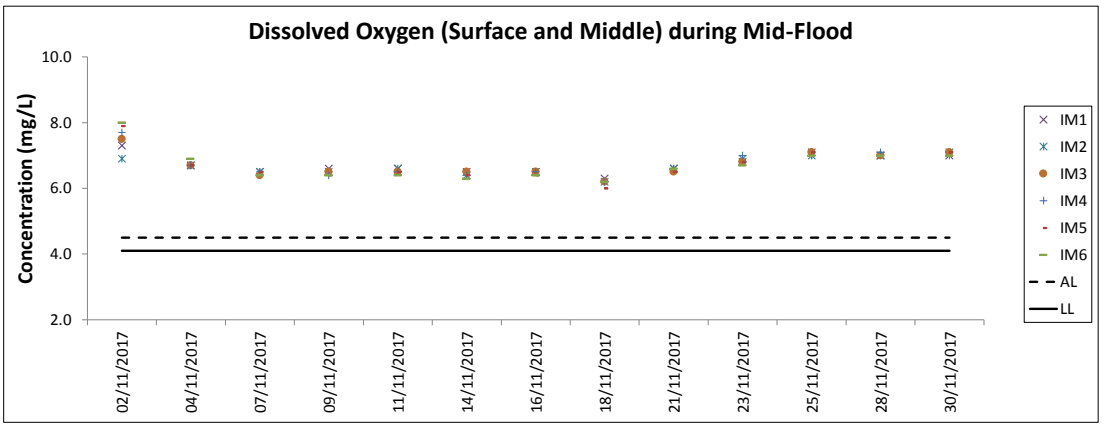
C1
C2
C3
SR2
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
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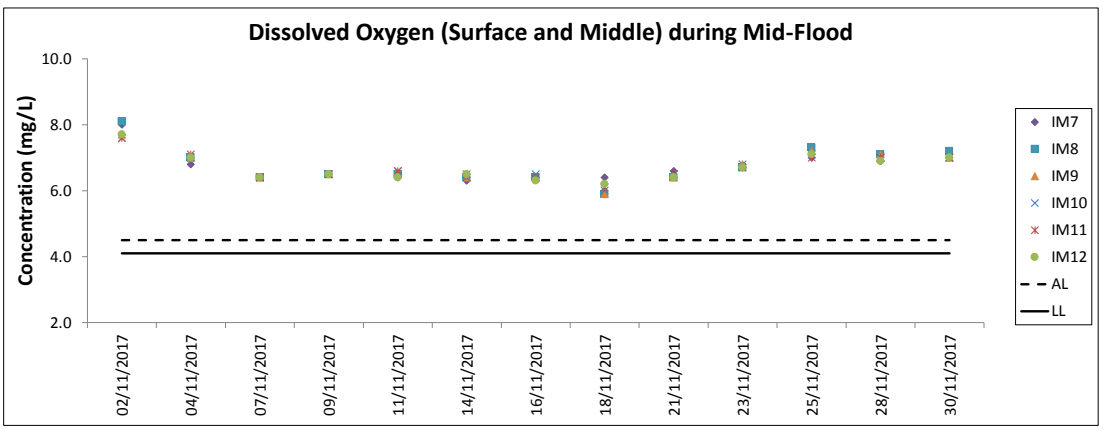
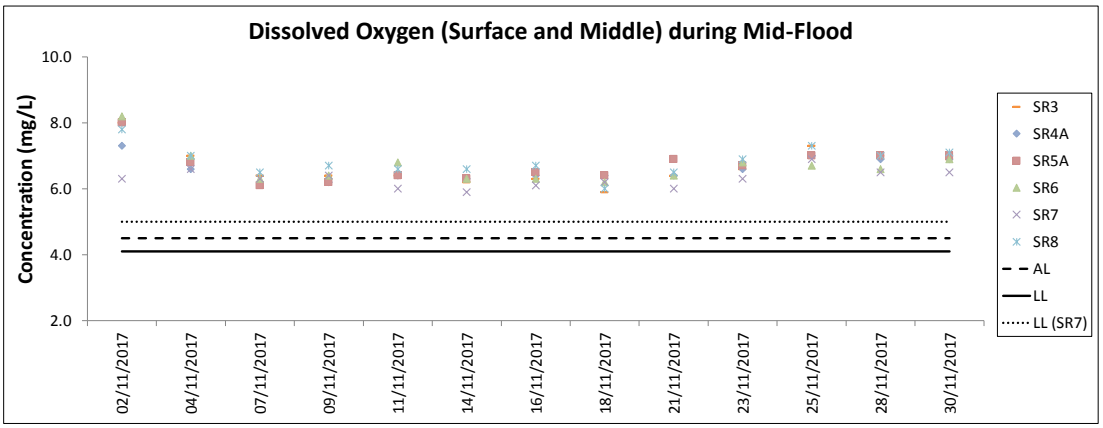
8.0
6.0
4.0
2.0
02/11/2017
04/11/2017
07/11/2017
09/11/2017
11/11/2017
14/11/2017
16/11/2017
18/11/2017
21/11/2017
23/11/2017
25/11/2017
28/11/2017
30/11/2017
IM1
IM2
IM3
IM4
IM5
IM6
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
02/11/2017
04/11/2017
07/11/2017
09/11/2017
11/11/2017
14/11/2017
16/11/2017
18/11/2017
21/11/2017
23/11/2017
25/11/2017
28/11/2017
30/11/2017
IM7
IM8
IM9
IM10
IM11
IM12
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
02/11/2017
04/11/2017
07/11/2017
09/11/2017
11/11/2017
14/11/2017
16/11/2017
18/11/2017
21/11/2017
23/11/2017
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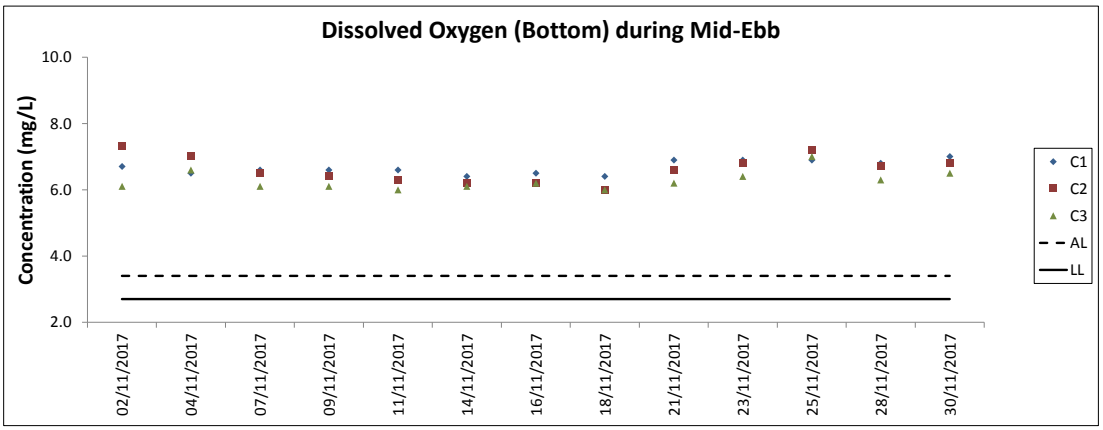
SR4A
SR5A
SR6
SR7
SR8
AL
LL
LL (SR7)


Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
02/11/2017
04/11/2017
07/11/2017
09/11/2017
11/11/2017
14/11/2017
16/11/2017
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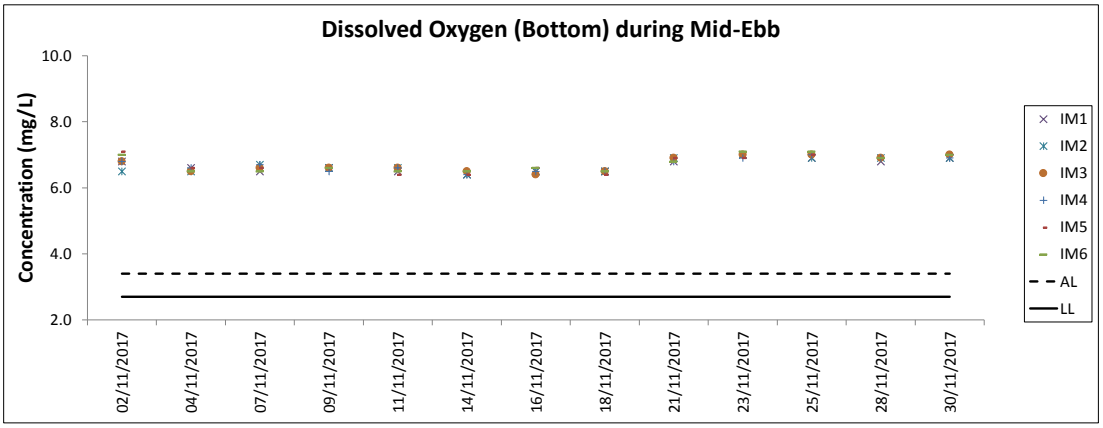
C1
C2
C3
AL
LL


Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
02/11/2017
04/11/2017
07/11/2017
09/11/2017
11/11/2017
14/11/2017
16/11/2017
18/11/2017
21/11/2017
23/11/2017
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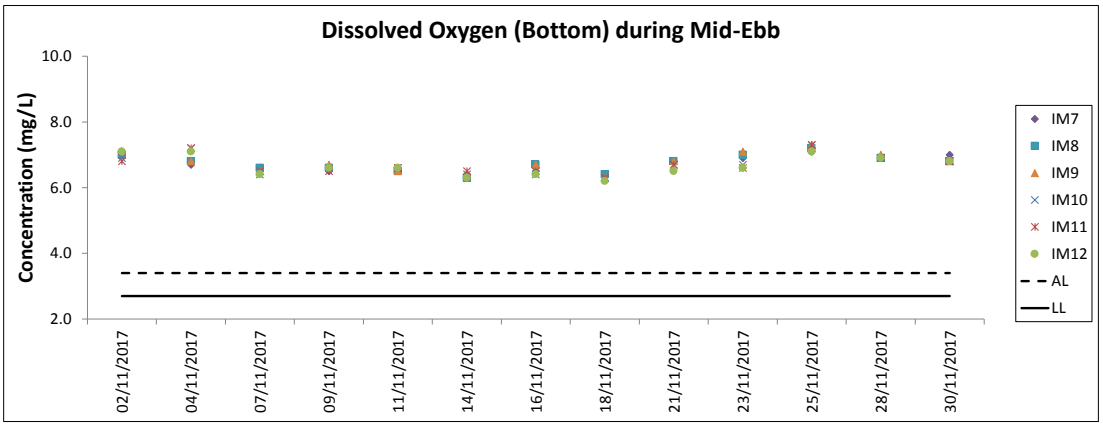
28/11/2017
30/11/2017
IM1
IM2
IM3
IM4
IM5
IM6
AL
LL


Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
02/11/2017
04/11/2017
07/11/2017
09/11/2017
11/11/2017
14/11/2017
16/11/2017
18/11/2017
21/11/2017
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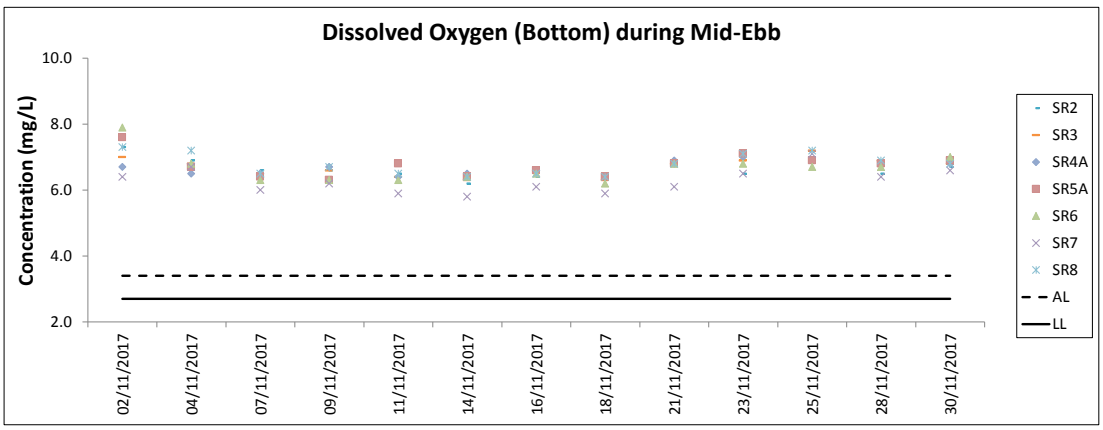
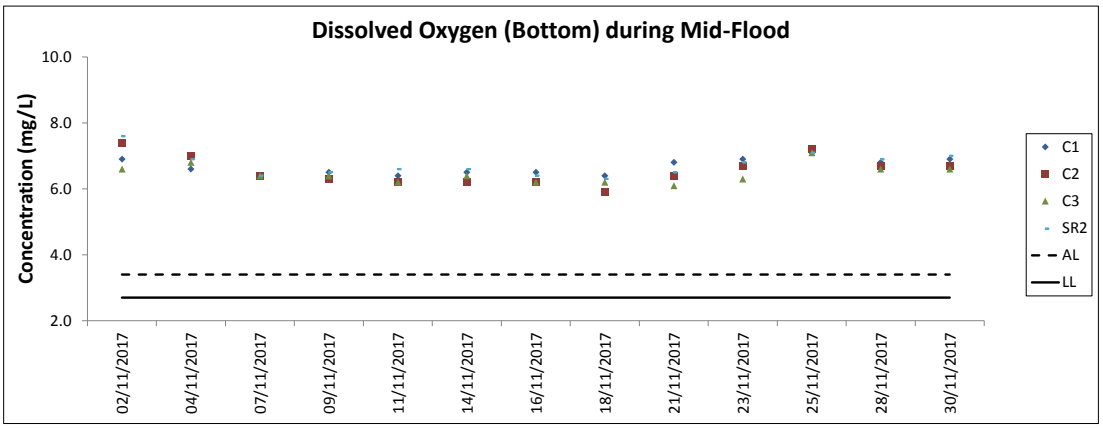
30/11/2017
IM7
IM8
IM9
IM10
IM11
IM12
AL
LL


Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
02/11/2017
04/11/2017
07/11/2017
09/11/2017
11/11/2017
14/11/2017
16/11/2017
18/11/2017
21/11/2017
23/11/2017
25/11/2017
28/11/2017
30/11/2017
SR2
SR3
SR4A
SR5A
SR6
SR7
SR8
AL
LL


Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
02/11/2017
04/11/2017
07/11/2017
09/11/2017
11/11/2017
14/11/2017
16/11/2017
18/11/2017
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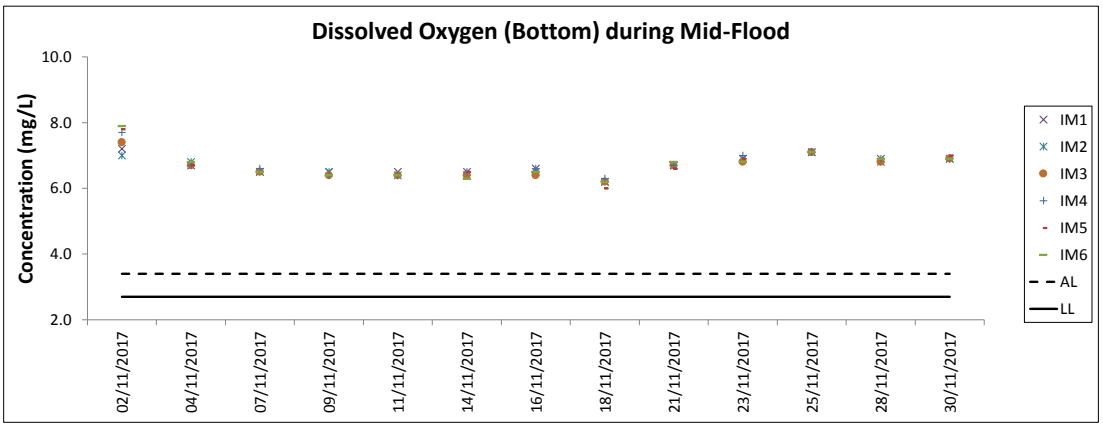
28/11/2017
30/11/2017
C1
C2
C3
SR2
AL
LL


Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
02/11/2017
04/11/2017
07/11/2017
09/11/2017
11/11/2017
14/11/2017
16/11/2017
18/11/2017
21/11/2017
23/11/2017
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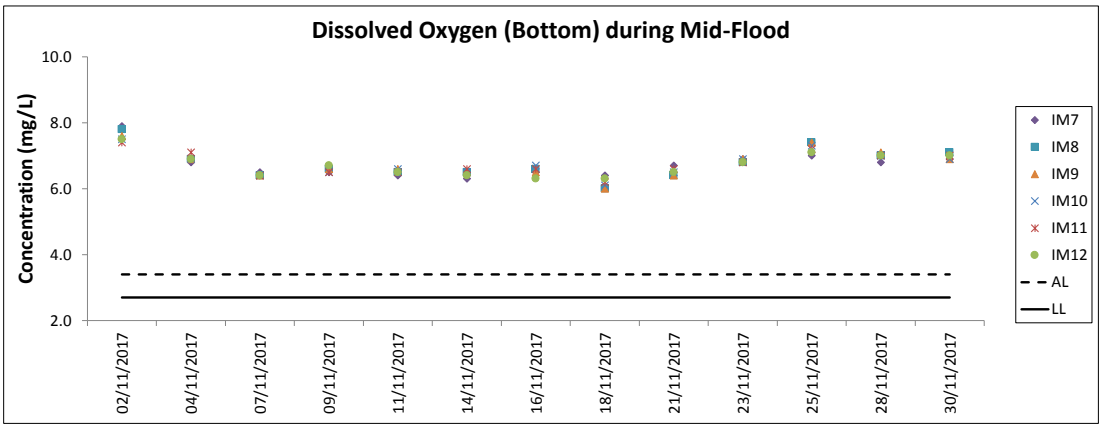
28/11/2017
30/11/2017
IM1
IM2
IM3
IM4
IM5
IM6
AL
LL


Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
02/11/2017
04/11/2017
07/11/2017
09/11/2017
11/11/2017
14/11/2017
16/11/2017
18/11/2017
21/11/2017
23/11/2017
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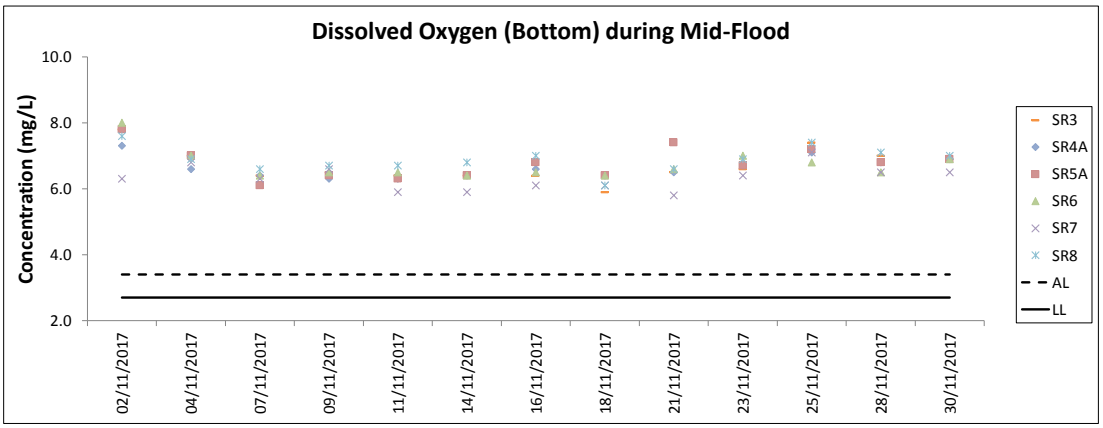
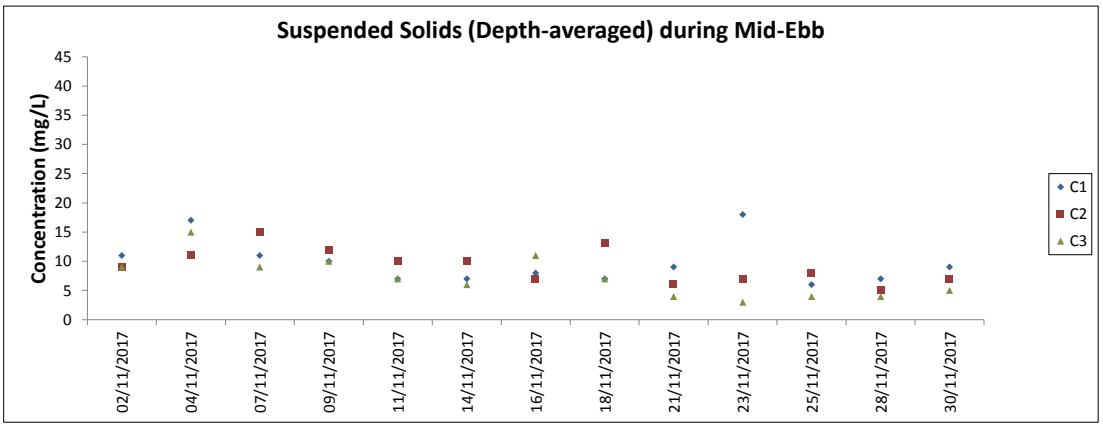
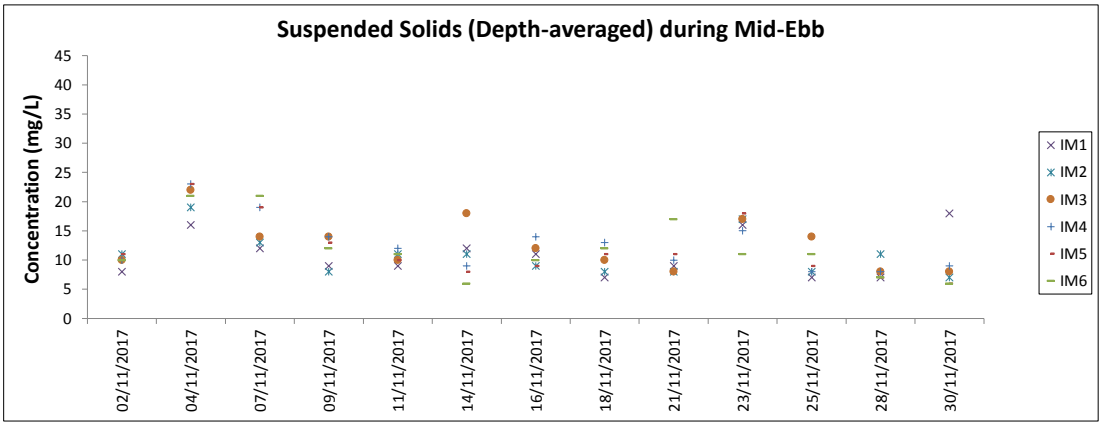
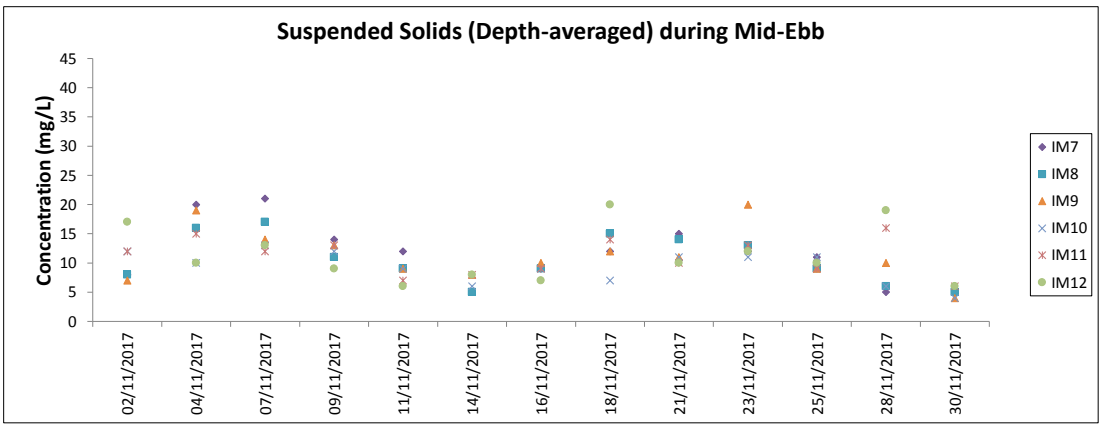
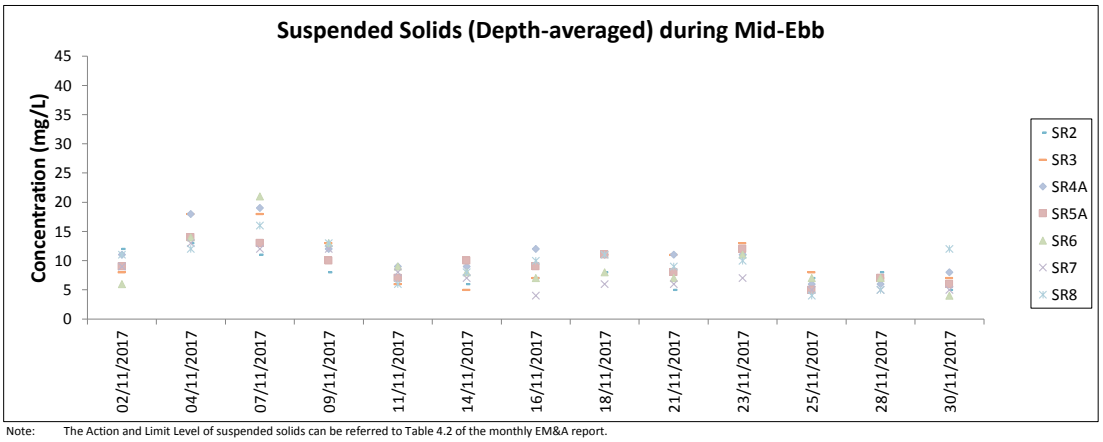
28/11/2017
30/11/2017
IM7
IM8
IM9
IM10
IM11
IM12
AL
LL


Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
02/11/2017
04/11/2017
07/11/2017
09/11/2017
11/11/2017
14/11/2017
16/11/2017
18/11/2017
21/11/2017
23/11/2017
25/11/2017
28/11/2017
30/11/2017
SR3
SR4A
SR5A
SR6
SR7
SR8
AL
LL

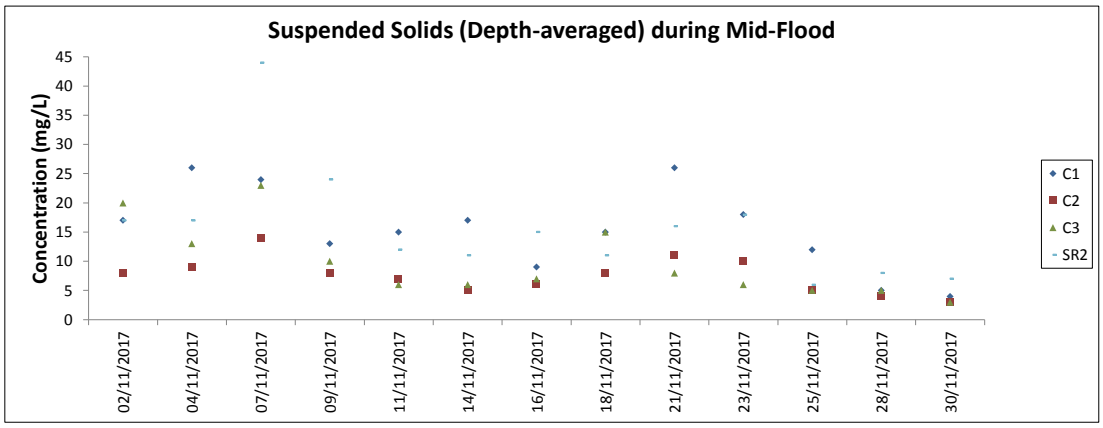


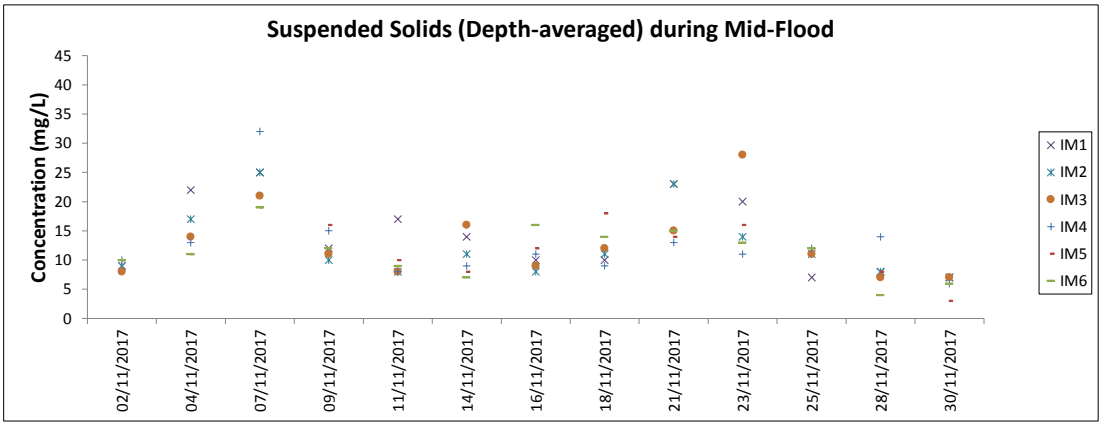


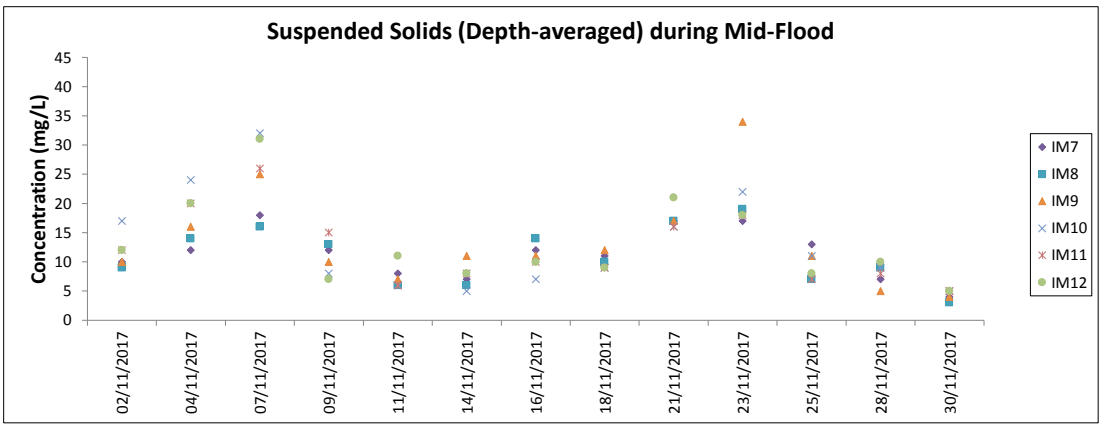


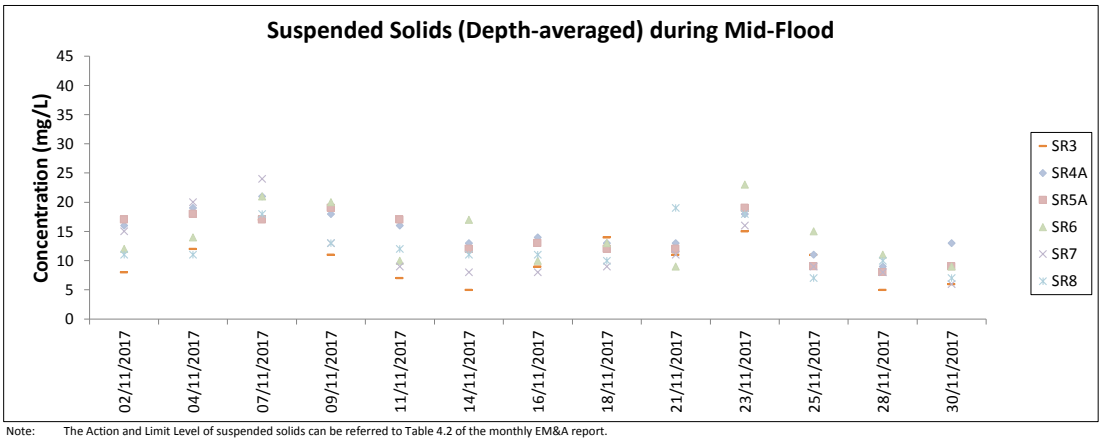


Note: The Action and Limit Level of suspended solids can be referred to Table 4.2 of the monthly EM&A report.

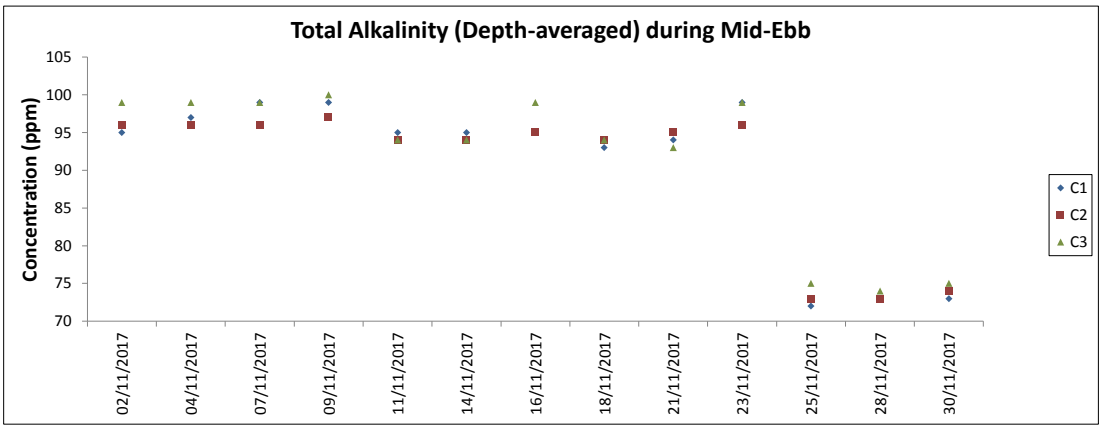


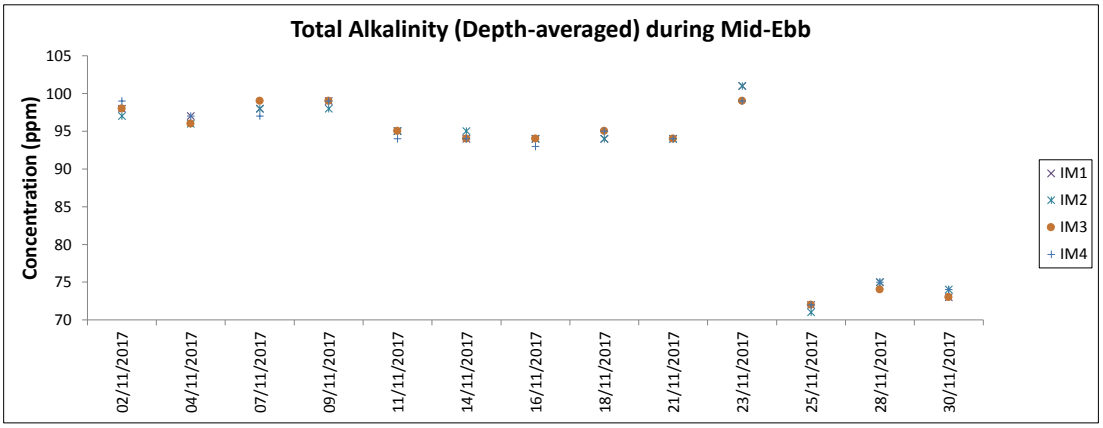


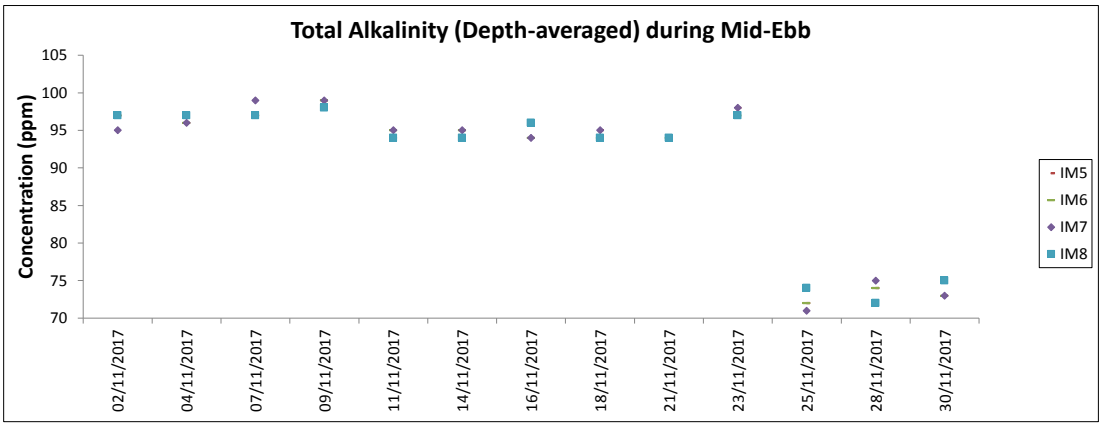


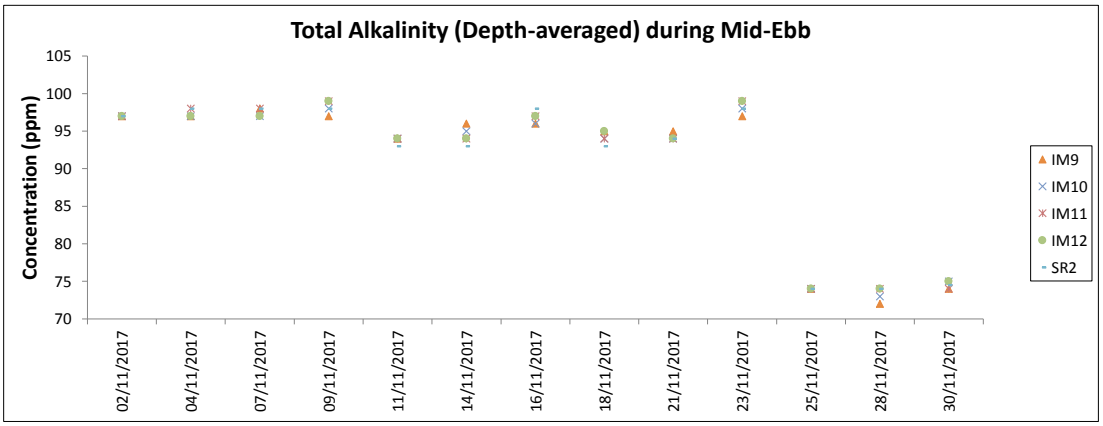


Note: The Action and Limit Level of suspended solids can be referred to Table 4.2 of the monthly EM&A report.

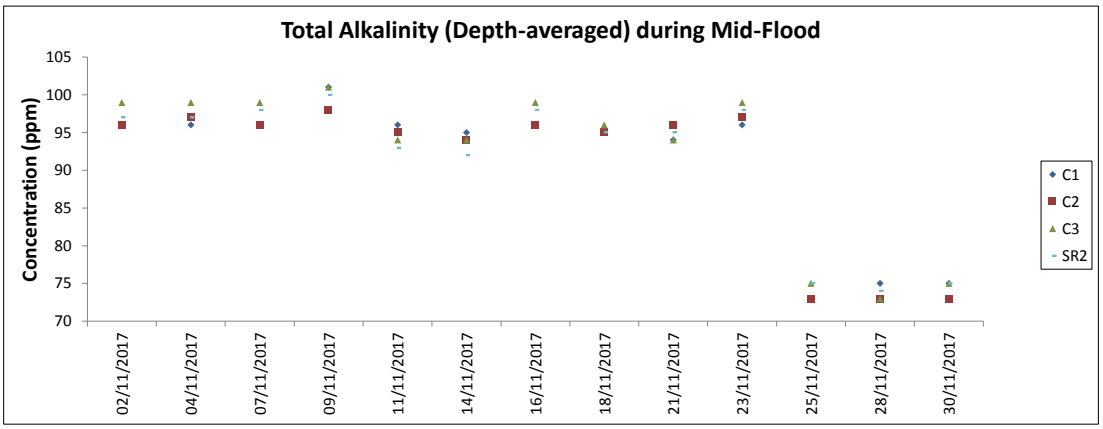


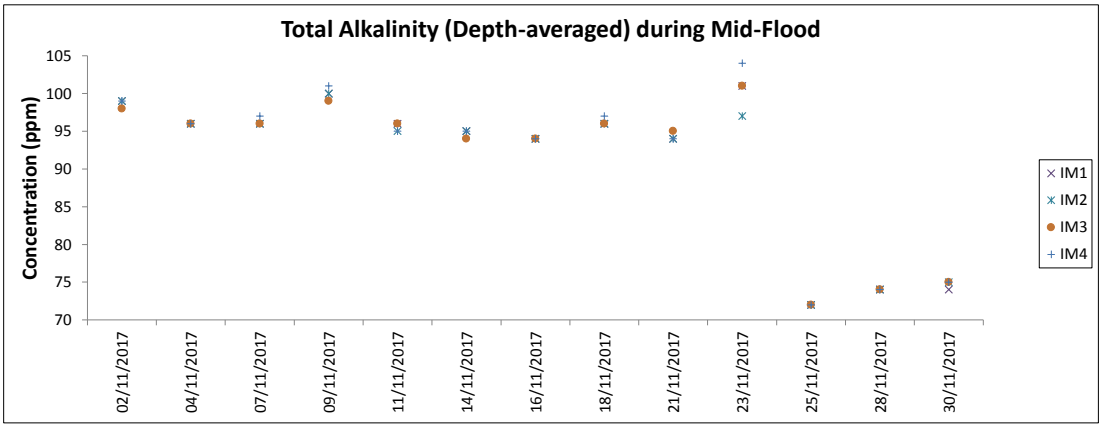


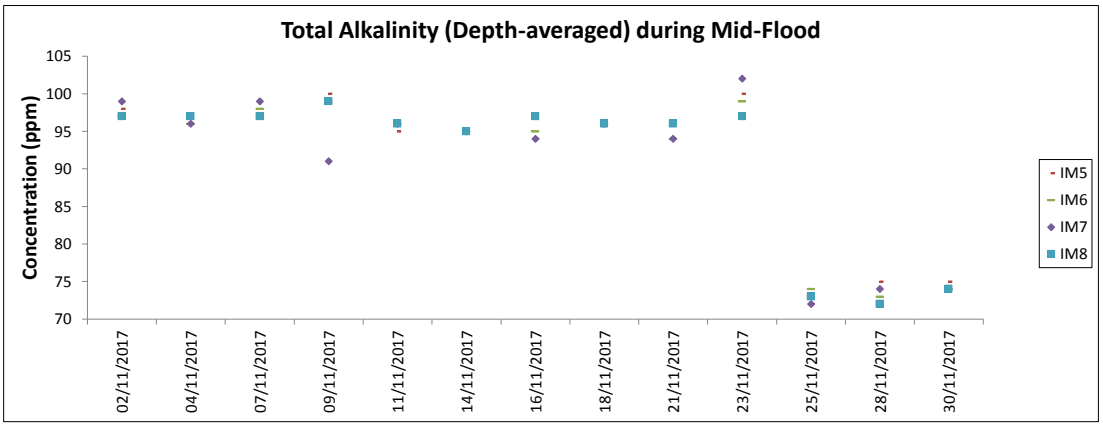


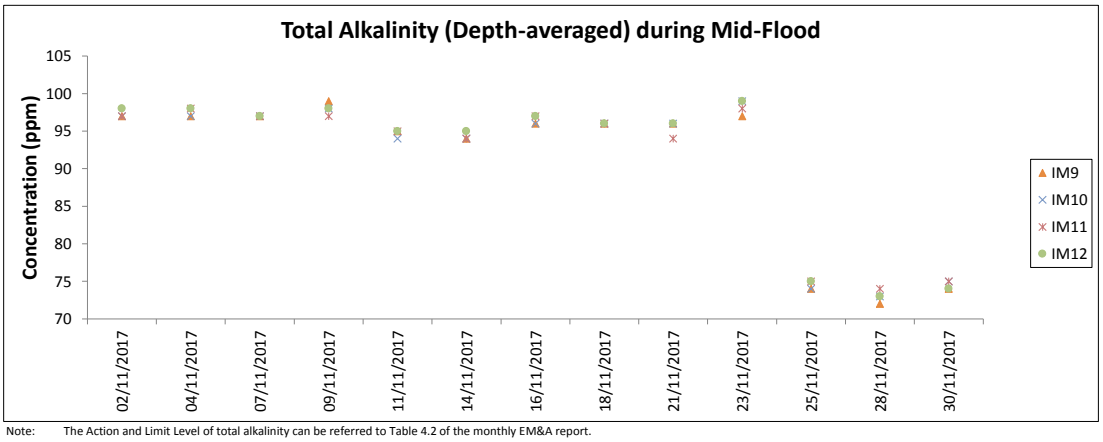


Note: The Action and Limit Level of total alkalinity can be referred to Table 4.2 of the monthly EM&A report.

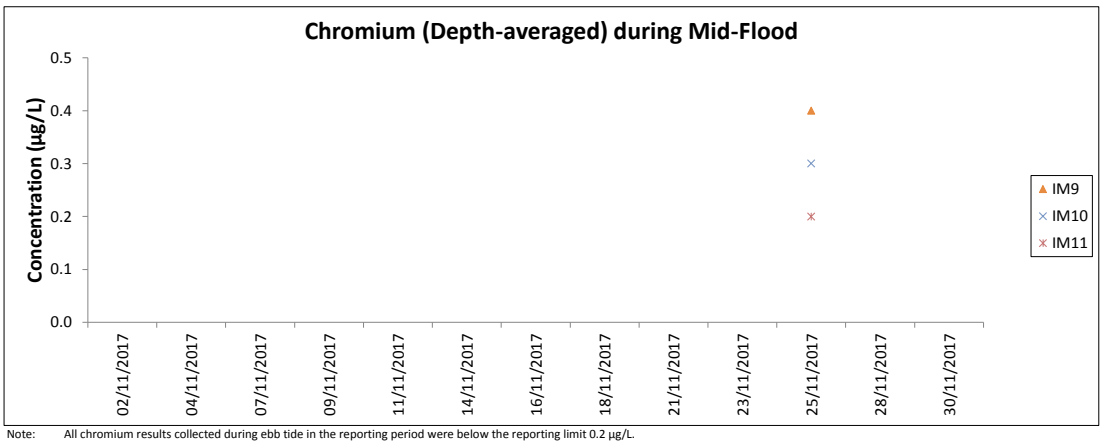




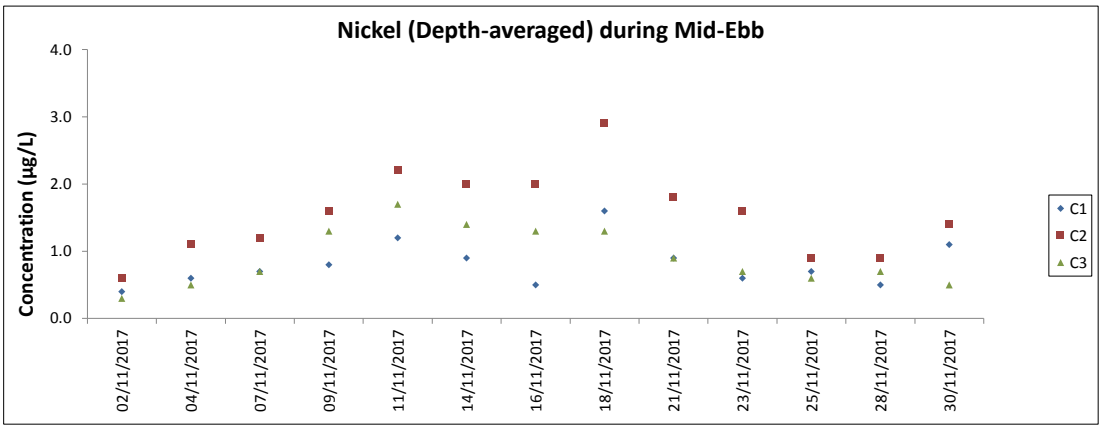


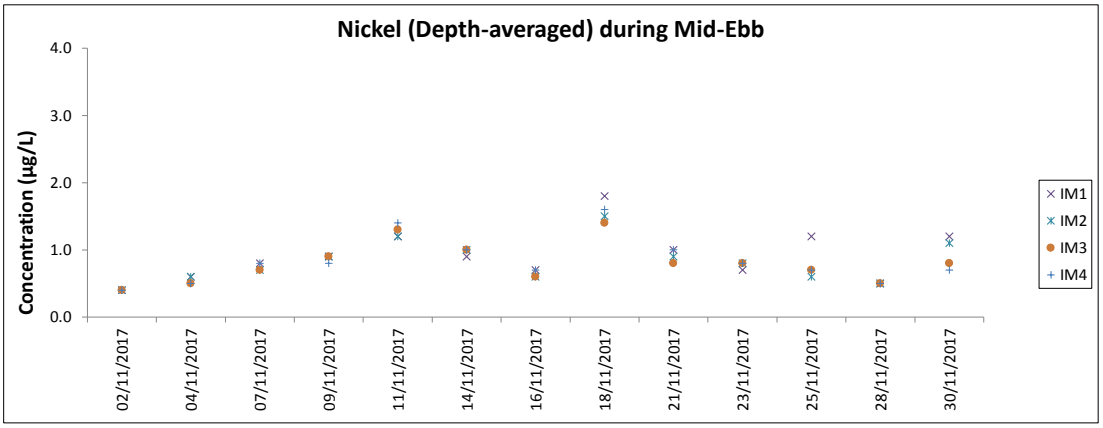


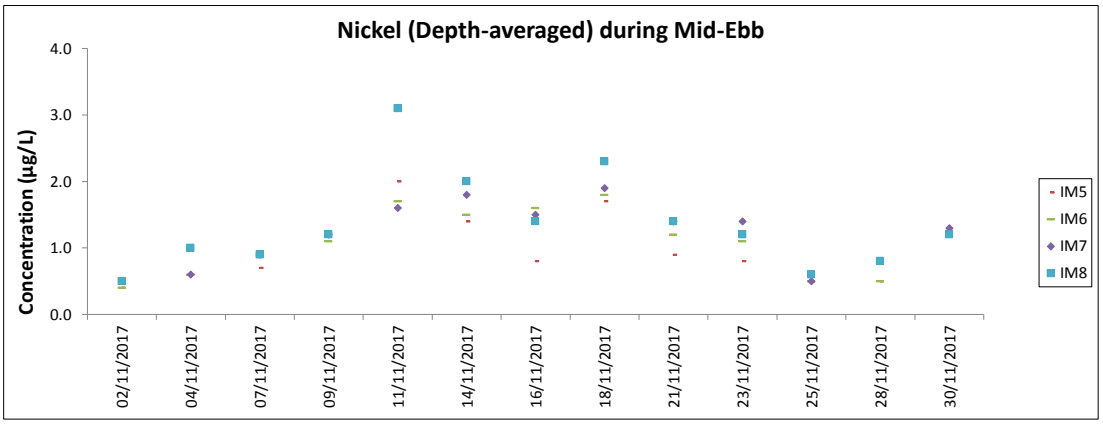
Note: The Action and Limit Level of total alkalinity can be referred to Table 4.2 of the monthly EM&A report.

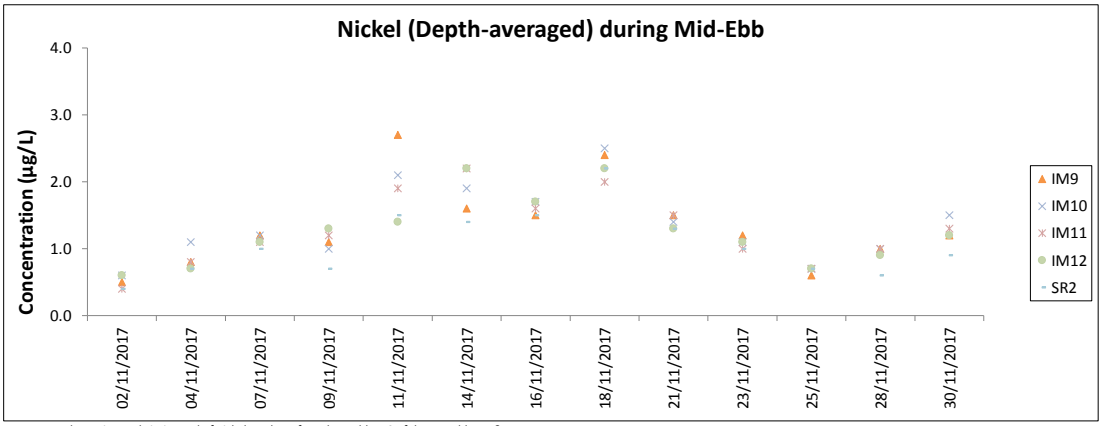


Note: All chromium results collected during ebb tide in the reporting period were below the reporting limit 0.2 µg/L.

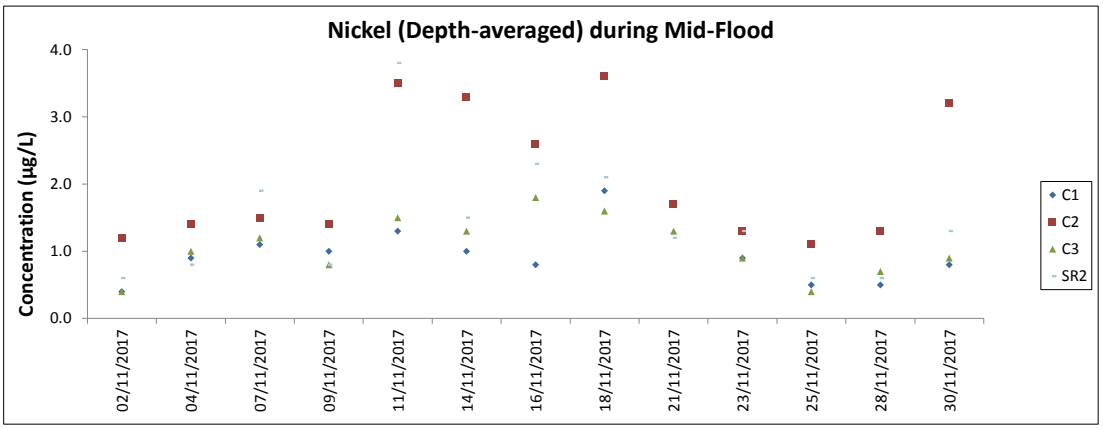


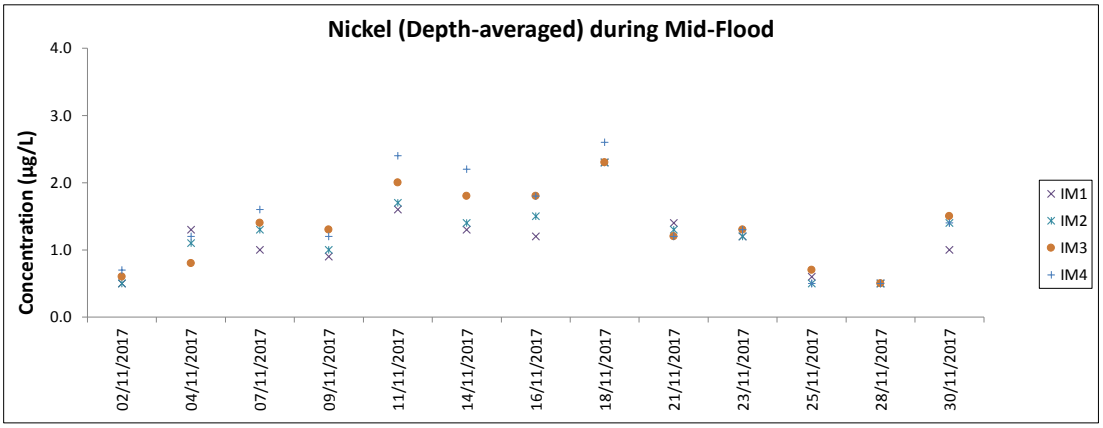


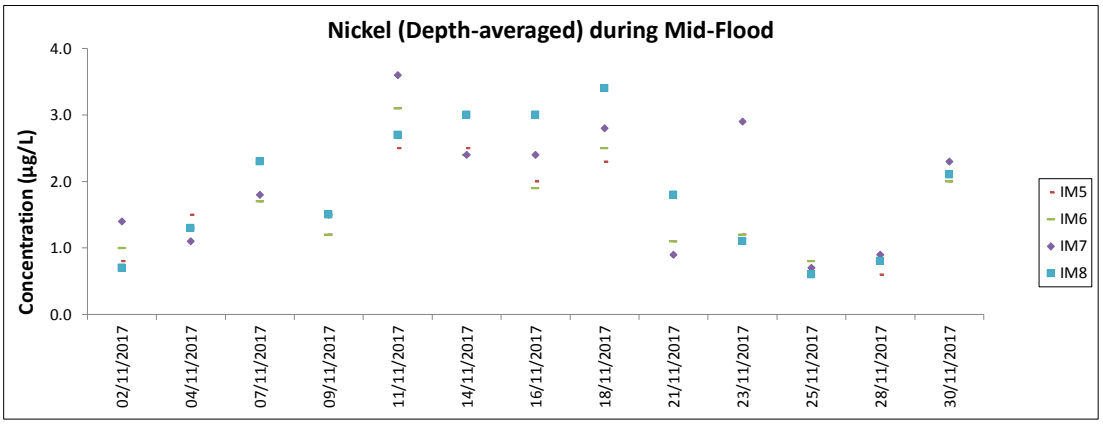


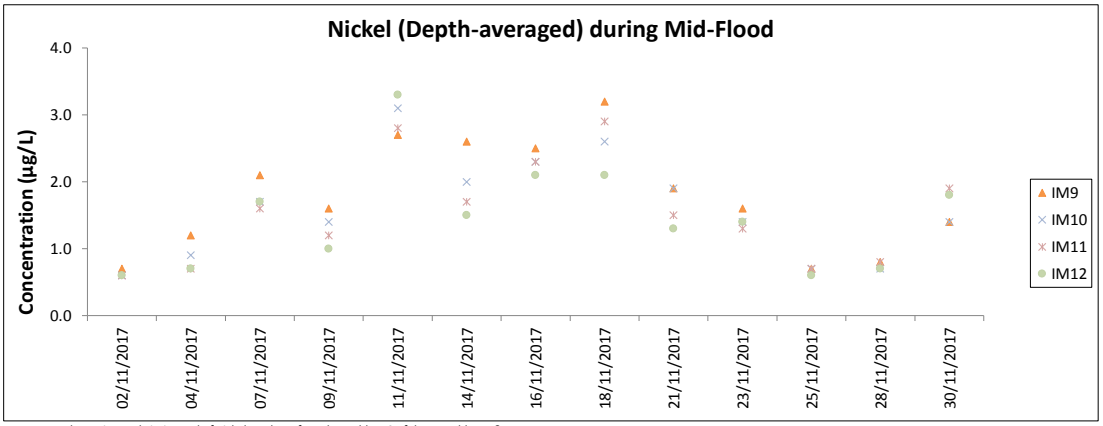


Note: The Action and Limit Level of nickel can be referred to Table 4.2 of the monthly EM&A report.









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

Chinese White Dolphin Monitoring Results

CWD Small Vessel Line-transect Survey — Survey Effort Data

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE
11-Sep-17	SWL	1	9.330	AUTUMN	32166	3RS ET
11-Sep-17	SWL	2	51.970	AUTUMN	32166	3RS ET
12-Sep-17	SWL	3	5.564	AUTUMN	32166	3RS ET
12-Sep-17	SWL	4	1.334	AUTUMN	32166	3RS ET
12-Sep-17	WL	2	23.366	AUTUMN	32166	3RS ET
12-Sep-17	WL	3	8.530	AUTUMN	32166	3RS ET
12-Sep-17	WL	4	0.590	AUTUMN	32166	3RS ET
12-Sep-17	AW	2	4.850	AUTUMN	32166	3RS ET
13-Sep-17	NEL	1	5.293	AUTUMN	32166	3RS ET
13-Sep-17	NEL	2	41.007	AUTUMN	32166	3RS ET
13-Sep-17	NEL	3	1.200	AUTUMN	32166	3RS ET
14-Sep-17	NEL	2	21.130	AUTUMN	32166	3RS ET
14-Sep-17	NEL	3	24.570	AUTUMN	32166	3RS ET
14-Sep-17	NEL	4	1.500	AUTUMN	32166	3RS ET
18-Sep-17	NWL	1	1.020	AUTUMN	32166	3RS ET
18-Sep-17	NWL	2	26.330	AUTUMN	32166	3RS ET
18-Sep-17	NWL	3	19.210	AUTUMN	32166	3RS ET
18-Sep-17	NWL	4	22.550	AUTUMN	32166	3RS ET
19-Sep-17	AW	2	2.890	AUTUMN	32166	3RS ET
19-Sep-17	AW	3	1.840	AUTUMN	32166	3RS ET
19-Sep-17	WL	1	3.460	AUTUMN	32166	3RS ET
19-Sep-17	WL	2	4.998	AUTUMN	32166	3RS ET
19-Sep-17	WL	3	7.760	AUTUMN	32166	3RS ET
19-Sep-17	WL	4	13.081	AUTUMN	32166	3RS ET
19-Sep-17	SWL	2	3.010	AUTUMN	32166	3RS ET
19-Sep-17	SWL	3	3.250	AUTUMN	32166	3RS ET
19-Sep-17	SWL	4	5.750	AUTUMN	32166	3RS ET
20-Sep-17	SWL	2	13.420	AUTUMN	32166	3RS ET
20-Sep-17	SWL	3	38.810	AUTUMN	32166	3RS ET
20-Sep-17	SWL	4	4.360	AUTUMN	32166	3RS ET
21-Sep-17	NWL	1	4.500	AUTUMN	32166	3RS ET
21-Sep-17	NWL	2	67.480	AUTUMN	32166	3RS ET
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

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE
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
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

Notes:

CWD monitoring survey data of the two preceding survey months (i.e. September and October 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.
11-Sep-17	1	1131	CWD	1	SWL	2	83	ON	3RS ET	22.2054	113.9212	AUTUMN	NONE
11-Sep-17	2	1344	CWD	4	SWL	1	780	ON	3RS ET	22.1795	113.8881	AUTUMN	NONE
12-Sep-17	1	1045	CWD	1	SWL	4	93	ON	3RS ET	22.1932	113.8584	AUTUMN	NONE
12-Sep-17	2	1110	CWD	3	SWL	3	N/A	OFF	3RS ET	22.1814	113.8492	AUTUMN	NONE
12-Sep-17	3	1211	CWD	4	WL	2	53	ON	3RS ET	22.2150	113.8309	AUTUMN	NONE
12-Sep-17	4	1347	CWD	3	WL	2	60	ON	3RS ET	22.2608	113.8471	AUTUMN	NONE
12-Sep-17	5	1358	CWD	3	WL	2	107	ON	3RS ET	22.2640	113.8582	AUTUMN	NONE
18-Sep-17	1	1009	CWD	15	NWL	2	248	ON	3RS ET	22.3365	113.8679	AUTUMN	NONE
18-Sep-17	2	1211	CWD	2	NWL	2	151	ON	3RS ET	22.4006	113.8778	AUTUMN	NONE
18-Sep-17	3	1345	CWD	1	NWL	3	65	ON	3RS ET	22.4003	113.8976	AUTUMN	NONE
19-Sep-17	1	1020	CWD	6	WL	1	860	ON	3RS ET	22.2745	113.8488	AUTUMN	NONE
19-Sep-17	2	1106	CWD	4	WL	2	57	ON	3RS ET	22.2652	113.8578	AUTUMN	NONE
19-Sep-17	3	1126	CWD	2	WL	2	428	ON	3RS ET	22.2603	113.8454	AUTUMN	NONE
19-Sep-17	4	1134	CWD	1	WL	3	30	ON	3RS ET	22.2573	113.8371	AUTUMN	NONE
19-Sep-17	5	1145	CWD	1	WL	3	18	ON	3RS ET	22.2497	113.8429	AUTUMN	NONE
19-Sep-17	6	1202	CWD	3	WL	3	73	ON	3RS ET	22.2408	113.8386	AUTUMN	NONE
19-Sep-17	7	1258	CWD	1	WL	4	113	ON	3RS ET	22.2053	113.8363	AUTUMN	NONE
19-Sep-17	8	1420	CWD	1	SWL	2	261	ON	3RS ET	22.2004	113.8659	AUTUMN	NONE
20-Sep-17	1	1215	CWD	7	SWL	2	305	ON	3RS ET	22.1643	113.9011	AUTUMN	NONE
20-Sep-17	2	1332	CWD	5	SWL	3	90	ON	3RS ET	22.1576	113.8969	AUTUMN	NONE
20-Sep-17	3	1434	CWD	3	SWL	2	496	ON	3RS ET	22.2053	113.8777	AUTUMN	NONE
20-Sep-17	4	1534	CWD	3	SWL	3	N/A	OFF	3RS ET	22.1931	113.8450	AUTUMN	NONE
21-Sep-17	1	0952	CWD	1	NWL	2	1308	ON	3RS ET	22.3786	113.8681	AUTUMN	NONE
21-Sep-17	2	1005	CWD	1	NWL	2	N/A	OFF	3RS ET	22.3685	113.8679	AUTUMN	NONE
21-Sep-17	3	1148	CWD	1	NWL	2	284	ON	3RS ET	22.3730	113.8773	AUTUMN	NONE
21-Sep-17	4	1204	CWD	2	NWL	2	124	ON	3RS ET	22.3901	113.8784	AUTUMN	NONE
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

DATE	STG #	TIME	CWD/FP	GP SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.
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

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. September and October 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 November 2017 encounter rates STG and ANI in the whole survey area (NEL, NWL, AW, WL, SWL):

A total of 337.440 km of survey effort was collected under Beaufort Sea State 3 or below with favourable visibility; total no. of 7 on-effort sightings and total number of 23 dolphins from on-effort sightings were collected under such condition. Calculation of the encounter rates in November 2017 are shown as below:

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

$$STG = \frac{7}{337.440}\ x\ 100 = 2.07$$

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

$$ANI = \frac{23}{337.440}\ x\ 100 = 6.82$$

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

A total of 1150.339 km of survey effort was collected under Beaufort Sea State 3 or below with favourable visibility; total no. of 47 on-effort sightings and total number of 160 dolphins from on-effort sightings were collected under such condition. Calculation of the running quarterly encounter rates are shown as below:

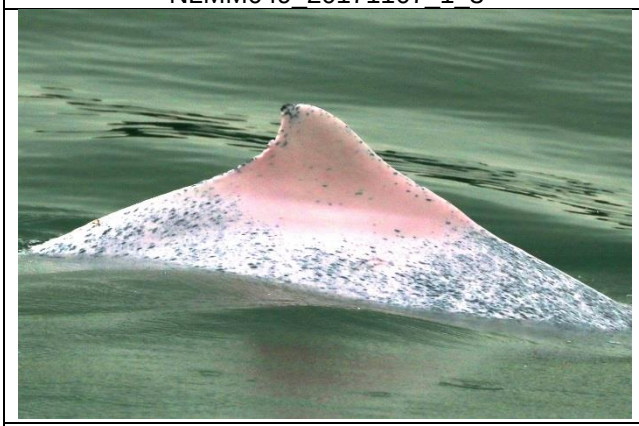
Running Quarterly Encounter Rate by Number of Dolphin Sightings (STG)

$$STG = \frac{47}{1150.339}\ x\ 100 = 4.09$$

Running Quarterly Encounter Rate by Number of Dolphins (ANI)

$$ANI = \frac{160}{1150.339}\ x\ 100 = 13.91$$

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

NLMM049_20171107_1_3	NLMM054_20171107_1_2
	
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	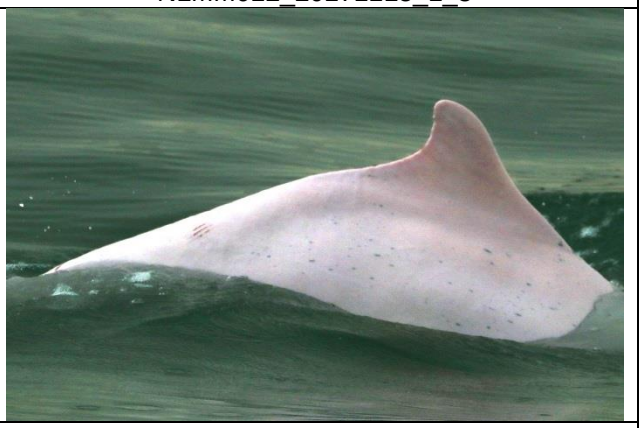
NLMM037_20171115_1_1	NLMM039_20171115_1_3
WLMM065_20171117_1_1_Left	WLMM066_20171117_1_1_Upper

NLMM019_20171121_1_1	WLMM024_20171121_1_5
WLMM001_20171121_2_2	

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
2/Nov/17	Lung Kwu Chau	8:52	14:52	6:00	3	3	7	2-6
9/Nov/17	Sha Chau	8:40	14:40	6:00	2	2-3	0	N/A
16/Nov/17	Sha Chau	8:36	14:36	6:00	2-3	1-2	0	N/A
22/Nov/17	Lung Kwu Chau	8:48	14:48	6:00	4	2	4	3-11
23/Nov/17	Lung Kwu Chau	8:37	14:37	6:00	3-4	3	7	1-6

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. 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	397150	Receipt acknowledged by EPD on 15 Jan 2016
		Site Office	397151	
		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-RS0720-17	Superseded by GW-RS1006-17 on 17 Nov 2017
			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-RS0863-17	Superseded by GW-RS0938-17 on 1 Nov 2017
		Works area of 3201	GW-RS0938-17	Superseded by GW-RS1041-17 on 20 Nov 2017
		Works area of 3201	GW-RS1041-17	Valid until 16 May 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-RS0864-17	Superseded by GW-RS0939-17 on 1 Nov 2017
		Works area of 3202	GW-RS0939-17	Valid until 26 Apr 2018
		Site Office of 3202	GW-RS0469-17	Valid until 29 Nov 2017
	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-RS0865-17	Superseded by GW-RS0940-17 on 1 Nov 2017
		Works area of 3203	GW-RS0940-17	Valid until 26 Apr 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-RS0866-17	Superseded by GW-RS0941-17 on 1 Nov 2017
		Works Area of 3204	GW-RS0941-17	Superseded by GW-RS1001-17 on 20 Nov 2017
		Works Area of 3204	GW-RS1001-17	Valid until 13 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-RS0867-17	Superseded by GW-RS0942-17 on 1 Nov 2017
		Works Area of 3205	GW-RS0942-17	Superseded by GW-RS1002-17 on 20 Nov 2017
		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-RS0868-17	Superseded by GW-RS0943-17 on 1 Nov 2017
		Works Area of 3206	GW-RS0943-17	Superseded by GW-RS1003-17 on 20 Nov 2017
		Works Area of 3206	GW-RS1003-17	Valid until 13 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	GW-RS0651-17	Superseded by GW-RS0991-17 on 16 Nov 2017
		(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

Contract No.	Description	Location	Permit/ Reference No.	Status
	Bill Account for disposal	Works area of 3501	A/C 7028144	Approval granted from EPD on 23 Jun 2017
	Construction Noise Permit (General Works)	Works area of 3501	GW-RS0667-17	Valid until 17 Feb 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
	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-RS0875-17	Superseded by GW-RS1045-17 on 23 Nov 2017
			GW-RS1045-17	Valid until 22 May 2018

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

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

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

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

Statistics for Complaints, Notifications of Summons and Prosecution

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

Appendix F. Data of SkyPier HSF Movements to/from Zhuhai and Macau (between 1 and 30 November 2017)

Data of SkyPier HSF Movements to/from Zhuhai and Macau (between 1 and 30 November 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-Nov	08:21	3A061	YFT	Arrival	11.9	-	-
01-Nov	08:23	8S210	XZM	Arrival	12.8	-	-
01-Nov	09:54	3A062	YFT	Arrival	12	-	-
01-Nov	10:41	8S212	XZM	Arrival	12.4	-	-
01-Nov	10:49	3A081	ZUI	Arrival	13	-	-
01-Nov	11:07	8S121	XZM	Departure	12	-	-
01-Nov	11:22	3A063	YFT	Arrival	12	-	-
01-Nov	12:15	3A168	YFT	Departure	11.1	-	-
01-Nov	12:17	3A181	ZUI	Departure	13.1	-	-
01-Nov	12:55	8S215	XZM	Arrival	12.2	-	-
01-Nov	13:03	3A064	YFT	Arrival	12.2	-	-
01-Nov	13:15	8S123	XZM	Departure	11.9	-	-
01-Nov	14:14	3A164	YFT	Departure	12.2	-	-
01-Nov	15:02	3A065	YFT	Arrival	11.9	-	-
01-Nov	16:19	3A167	YFT	Departure	12.3	> 15	< 1min
01-Nov	16:43	8S218	XZM	Arrival	11.8	-	-
01-Nov	16:51	3A083	ZUI	Arrival	11.8	-	-
01-Nov	17:08	3A183	ZUI	Departure	13	-	-
01-Nov	17:08	3A067	YFT	Arrival	12.3	-	-
01-Nov	17:10	8S126	XZM	Departure	11.8	-	-
01-Nov	19:01	3A166	YFT	Departure	11.8	-	-
01-Nov	20:59	8S2113	XZM	Arrival	11.4	-	-
01-Nov	21:07	3A169	YFT	Departure	13.2	-	-
02-Nov	08:21	3A061	YFT	Arrival	12.8	-	-
02-Nov	08:40	8S210	XZM	Arrival	12.2	-	-
02-Nov	09:59	3A062	YFT	Arrival	12.7	-	-
02-Nov	10:42	3A081	ZUI	Arrival	13.7	-	-
02-Nov	10:50	8S212	XZM	Arrival	12.2	-	-
02-Nov	11:06	8S121	XZM	Departure	12.7	-	-
02-Nov	11:18	3A063	YFT	Arrival	11.6	-	-
02-Nov	12:10	3A168	YFT	Departure	12.1	-	-
02-Nov	12:12	3A181	ZUI	Departure	12.6	-	-
02-Nov	12:46	8S215	XZM	Arrival	12.1	-	-
02-Nov	12:59	3A064	YFT	Arrival	12	<= 5	< 1min
02-Nov	13:23	8S123	XZM	Departure	12.5	-	-
02-Nov	14:17	3A164	YFT	Departure	12.2	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
02-Nov	14:57	3A065	YFT	Arrival	11.4	-	-
02-Nov	16:10	3A167	YFT	Departure	12.5	-	-
02-Nov	16:41	3A083	ZUI	Arrival	12.6	-	-
02-Nov	16:46	8S218	XZM	Arrival	12.4	-	-
02-Nov	16:57	3A067	YFT	Arrival	12.4	-	-
02-Nov	17:07	3A183	ZUI	Departure	13.5	-	-
02-Nov	17:10	8S126	XZM	Departure	13	-	-
02-Nov	19:12	3A166	YFT	Departure	12.8	-	-
02-Nov	20:53	8S2113	XZM	Arrival	13.3	-	-
02-Nov	20:56	3A169	YFT	Departure	12.4	-	-
03-Nov	08:23	3A061	YFT	Arrival	12.1	-	-
03-Nov	08:29	8S210	XZM	Arrival	12.5	-	-
03-Nov	09:48	3A062	YFT	Arrival	13	-	-
03-Nov	10:40	8S212	XZM	Arrival	11.6	-	-
03-Nov	10:52	3A081	ZUI	Arrival	13.5	-	-
03-Nov	11:03	8S121	XZM	Departure	11.4	-	-
03-Nov	11:18	3A063	YFT	Arrival	12.8	-	-
03-Nov	12:13	3A181	ZUI	Departure	13.1	-	-
03-Nov	12:19	3A168	YFT	Departure	12.9	-	-
03-Nov	12:48	8S215	XZM	Arrival	12.3	-	-
03-Nov	13:11	8S123	XZM	Departure	13.5	-	-
03-Nov	13:12	3A064	YFT	Arrival	12.1	-	-
03-Nov	14:17	3A164	YFT	Departure	11.8	-	-
03-Nov	14:58	3A065	YFT	Arrival	12.6	-	-
03-Nov	16:17	3A167	YFT	Departure	13	-	-
03-Nov	16:40	3A083	ZUI	Arrival	12.4	-	-
03-Nov	16:44	8S218	XZM	Arrival	12.5	-	-
03-Nov	16:56	3A067	YFT	Arrival	11.8	-	-
03-Nov	17:07	3A183	ZUI	Departure	13.4	-	-
03-Nov	17:13	8S126	XZM	Departure	13.7	-	-
03-Nov	19:06	3A166	YFT	Departure	12.8	-	-
03-Nov	20:43	8S2113	XZM	Arrival	12.5	-	-
03-Nov	21:09	3A169	YFT	Departure	12.1	-	-
04-Nov	08:19	3A061	YFT	Arrival	12.8	-	-
04-Nov	08:28	8S210	XZM	Arrival	12.8	-	-
04-Nov	09:52	3A062	YFT	Arrival	11.9	-	-
04-Nov	10:37	8S212	XZM	Arrival	12.3	-	-
04-Nov	10:48	3A081	ZUI	Arrival	13.5	-	-
04-Nov	11:00	8S121	XZM	Departure	12.2	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
04-Nov	11:15	3A063	YFT	Arrival	12.3	-	-
04-Nov	12:16	3A181	ZUI	Departure	12.8	-	-
04-Nov	12:18	3A168	YFT	Departure	11.5	-	-
04-Nov	12:59	8S215	XZM	Arrival	12.4	-	-
04-Nov	13:02	3A064	YFT	Arrival	12.8	-	-
04-Nov	13:21	8S123	XZM	Departure	12	-	-
04-Nov	14:20	3A164	YFT	Departure	13.6	-	-
04-Nov	15:01	3A065	YFT	Arrival	13	-	-
04-Nov	16:19	3A167	YFT	Departure	12.1	-	-
04-Nov	16:39	3A083	ZUI	Arrival	13.3	<= 5	< 1min
04-Nov	16:39	8S218	XZM	Arrival	12.5	-	-
04-Nov	16:57	3A067	YFT	Arrival	13.4	-	-
04-Nov	16:59	3A183	ZUI	Departure	12.6	-	-
04-Nov	17:01	8S126	XZM	Departure	12	-	-
04-Nov	19:02	3A166	YFT	Departure	11.6	-	-
04-Nov	20:50	8S2113	XZM	Arrival	12.4	-	-
04-Nov	21:08	3A169	YFT	Departure	12.3	-	-
04-Nov	22:00	8S522	XZM	Departure	12	-	-
05-Nov	08:21	3A061	YFT	Arrival	11.3	-	-
05-Nov	08:23	8S210	XZM	Arrival	11.5	-	-
05-Nov	09:50	3A062	YFT	Arrival	12.5	-	-
05-Nov	10:37	8S212	XZM	Arrival	11.4	-	-
05-Nov	10:44	3A081	ZUI	Arrival	12.6	-	-
05-Nov	11:06	8S121	XZM	Departure	12.8	-	-
05-Nov	11:15	3A063	YFT	Arrival	11.8	-	-
05-Nov	12:08	3A181	ZUI	Departure	13.3	-	-
05-Nov	12:18	3A168	YFT	Departure	11.6	-	-
05-Nov	12:57	8S215	XZM	Arrival	12.1	-	-
05-Nov	13:03	3A064	YFT	Arrival	11.4	-	-
05-Nov	13:25	8S123	XZM	Departure	13.2	-	-
05-Nov	14:24	3A164	YFT	Departure	10.9	-	-
05-Nov	14:58	3A065	YFT	Arrival	11.8	-	-
05-Nov	16:22	3A167	YFT	Departure	10.7	-	-
05-Nov	16:49	3A083	ZUI	Arrival	13	-	-
05-Nov	16:53	8S218	XZM	Arrival	12.2	<= 5	< 1min
05-Nov	17:01	3A067	YFT	Arrival	11.6	-	-
05-Nov	17:08	3A183	ZUI	Departure	12	-	-
05-Nov	17:16	8S126	XZM	Departure	12.2	-	-
05-Nov	19:06	3A166	YFT	Departure	12.5	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
05-Nov	20:55	8S2113	XZM	Arrival	12.1	-	-
05-Nov	21:05	3A169	YFT	Departure	12.5	-	-
06-Nov	08:19	3A061	YFT	Arrival	12.3	-	-
06-Nov	08:36	8S210	XZM	Arrival	13.2	-	-
06-Nov	09:40	3A062	YFT	Arrival	12.4	-	-
06-Nov	10:34	8S212	XZM	Arrival	12.6	-	-
06-Nov	10:46	3A081	ZUI	Arrival	12.2	-	-
06-Nov	11:06	8S121	XZM	Departure	12.6	-	-
06-Nov	11:15	3A063	YFT	Arrival	12.3	-	-
06-Nov	12:15	3A168	YFT	Departure	12.5	-	-
06-Nov	12:15	3A181	ZUI	Departure	12.8	-	-
06-Nov	12:48	8S215	XZM	Arrival	12.6	-	-
06-Nov	13:06	3A064	YFT	Arrival	12.4	-	-
06-Nov	13:17	8S123	XZM	Departure	12.8	-	-
06-Nov	14:23	3A164	YFT	Departure	12.9	-	-
06-Nov	14:55	3A065	YFT	Arrival	12.4	-	-
06-Nov	16:13	3A167	YFT	Departure	12.2	-	-
06-Nov	16:40	8S218	XZM	Arrival	12.2	-	-
06-Nov	16:47	3A083	ZUI	Arrival	11.9	-	-
06-Nov	16:59	3A067	YFT	Arrival	12.7	-	-
06-Nov	17:04	3A183	ZUI	Departure	13	-	-
06-Nov	17:06	8S126	XZM	Departure	13.8	-	-
06-Nov	19:23	3A166	YFT	Departure	12.1	-	-
06-Nov	20:56	3A169	YFT	Departure	12	-	-
06-Nov	20:58	8S2113	XZM	Arrival	12.2	-	-
07-Nov	08:19	3A061	YFT	Arrival	11.6	-	-
07-Nov	08:25	8S210	XZM	Arrival	12.4	-	-
07-Nov	09:52	3A062	YFT	Arrival	13.2	-	-
07-Nov	10:40	8S212	XZM	Arrival	12	-	-
07-Nov	10:48	3A081	ZUI	Arrival	12.1	-	-
07-Nov	11:00	8S121	XZM	Departure	13.3	-	-
07-Nov	11:18	3A063	YFT	Arrival	12.1	-	-
07-Nov	12:14	3A181	ZUI	Departure	12.8	-	-
07-Nov	12:16	3A168	YFT	Departure	11.8	-	-
07-Nov	12:44	8S215	XZM	Arrival	12.1	-	-
07-Nov	13:00	3A064	YFT	Arrival	12.5	-	-
07-Nov	13:11	8S123	XZM	Departure	13.2	-	-
07-Nov	14:15	3A164	YFT	Departure	12.2	-	-
07-Nov	14:59	3A065	YFT	Arrival	12.6	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
07-Nov	16:14	3A167	YFT	Departure	12	-	-
07-Nov	16:39	8S218	XZM	Arrival	12.2	-	-
07-Nov	16:54	3A083	ZUI	Arrival	12.4	-	-
07-Nov	17:00	3A067	YFT	Arrival	12.4	-	-
07-Nov	17:13	8S126	XZM	Departure	12.9	-	-
07-Nov	17:18	3A183	ZUI	Departure	12	-	-
07-Nov	19:05	3A166	YFT	Departure	12.3	-	-
07-Nov	20:56	8S2113	XZM	Arrival	12.5	-	-
07-Nov	21:06	3A169	YFT	Departure	13.3	-	-
08-Nov	08:22	3A061	YFT	Arrival	11.6	-	-
08-Nov	08:25	8S210	XZM	Arrival	11.8	-	-
08-Nov	09:40	3A062	YFT	Arrival	12.1	-	-
08-Nov	10:43	8S212	XZM	Arrival	11	-	-
08-Nov	10:47	3A081	ZUI	Arrival	11.5	-	-
08-Nov	11:18	8S121	XZM	Departure	11.8	-	-
08-Nov	11:22	3A063	YFT	Arrival	11.1	-	-
08-Nov	12:12	3A181	ZUI	Departure	12.1	-	-
08-Nov	12:22	3A168	YFT	Departure	11.5	-	-
08-Nov	12:42	8S215	XZM	Arrival	13	-	-
08-Nov	12:57	3A064	YFT	Arrival	12.5	-	-
08-Nov	13:14	8S123	XZM	Departure	12.7	-	-
08-Nov	14:13	3A164	YFT	Departure	12	-	-
08-Nov	15:02	3A065	YFT	Arrival	12.2	-	-
08-Nov	16:17	3A167	YFT	Departure	11.2	-	-
08-Nov	16:42	8S218	XZM	Arrival	12.9	-	-
08-Nov	16:45	3A083	ZUI	Arrival	12.3	-	-
08-Nov	16:58	3A183	ZUI	Departure	11.2	-	-
08-Nov	16:59	3A067	YFT	Arrival	12.4	-	-
08-Nov	17:08	8S126	XZM	Departure	12.6	-	-
08-Nov	18:56	3A166	YFT	Departure	13	-	-
08-Nov	20:54	8S2113	XZM	Arrival	12.4	-	-
08-Nov	21:11	3A169	YFT	Departure	12.1	-	-
09-Nov	08:13	3A061	YFT	Arrival	12.4	-	-
09-Nov	08:31	8S210	XZM	Arrival	12.1	-	-
09-Nov	09:47	3A062	YFT	Arrival	12.2	-	-
09-Nov	10:36	8S212	XZM	Arrival	12.4	-	-
09-Nov	10:49	3A081	ZUI	Arrival	12.2	-	-
09-Nov	10:58	8S121	XZM	Departure	12.4	-	-
09-Nov	11:19	3A063	YFT	Arrival	12.7	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
09-Nov	12:16	3A181	ZUI	Departure	12.6	-	-
09-Nov	12:23	3A168	YFT	Departure	13	-	-
09-Nov	12:46	8S215	XZM	Arrival	12.4	-	-
09-Nov	12:54	3A064	YFT	Arrival	12	-	-
09-Nov	13:24	8S123	XZM	Departure	12.6	-	-
09-Nov	14:18	3A164	YFT	Departure	12.8	-	-
09-Nov	14:57	3A065	YFT	Arrival	12.5	-	-
09-Nov	16:17	3A167	YFT	Departure	13.2	-	-
09-Nov	16:42	3A083	ZUI	Arrival	12.7	-	-
09-Nov	16:44	8S218	XZM	Arrival	12.9	-	-
09-Nov	16:51	3A067	YFT	Arrival	12.6	-	-
09-Nov	17:03	3A183	ZUI	Departure	12.5	-	-
09-Nov	17:16	8S126	XZM	Departure	12.7	-	-
09-Nov	19:03	3A166	YFT	Departure	12.2	-	-
09-Nov	21:07	8S2113	XZM	Arrival	11.1	-	-
09-Nov	21:11	3A169	YFT	Departure	11.8	-	-
10-Nov	08:17	3A061	YFT	Arrival	12.1	-	-
10-Nov	08:25	8S210	XZM	Arrival	13.1	-	-
10-Nov	09:48	3A062	YFT	Arrival	11.5	-	-
10-Nov	10:43	8S212	XZM	Arrival	11.5	-	-
10-Nov	10:46	3A081	ZUI	Arrival	12.7	-	-
10-Nov	11:05	8S121	XZM	Departure	11.5	-	-
10-Nov	11:13	3A063	YFT	Arrival	11.9	-	-
10-Nov	12:18	3A168	YFT	Departure	12.6	-	-
10-Nov	12:20	3A181	ZUI	Departure	12.3	-	-
10-Nov	12:52	8S215	XZM	Arrival	11	-	-
10-Nov	12:57	3A064	YFT	Arrival	11.6	<= 5	< 1min
10-Nov	13:16	8S123	XZM	Departure	11.2	-	-
10-Nov	14:24	3A164	YFT	Departure	11.8	-	-
10-Nov	14:54	3A065	YFT	Arrival	12.1	-	-
10-Nov	16:22	3A167	YFT	Departure	11.9	-	-
10-Nov	16:40	3A083	ZUI	Arrival	13	-	-
10-Nov	16:44	8S218	XZM	Arrival	12.2	-	-
10-Nov	16:54	3A067	YFT	Arrival	12.5	-	-
10-Nov	17:06	3A183	ZUI	Departure	12.7	-	-
10-Nov	17:09	8S126	XZM	Departure	13.1	-	-
10-Nov	19:01	3A166	YFT	Departure	12.5	-	-
10-Nov	21:01	8S2113	XZM	Arrival	10.7	-	-
10-Nov	21:19	3A169	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)
11-Nov	08:17	3A061	YFT	Arrival	12.1	-	-
11-Nov	08:25	8S210	XZM	Arrival	12.4	-	-
11-Nov	10:05	3A062	YFT	Arrival	11.1	-	-
11-Nov	10:40	8S212	XZM	Arrival	12.6	-	-
11-Nov	10:52	3A081	ZUI	Arrival	12.8	-	-
11-Nov	11:04	8S121	XZM	Departure	12	-	-
11-Nov	11:19	3A063	YFT	Arrival	12.6	-	-
11-Nov	12:12	3A181	ZUI	Departure	13.1	-	-
11-Nov	12:14	3A168	YFT	Departure	12.9	-	-
11-Nov	12:46	8S215	XZM	Arrival	11.9	-	-
11-Nov	13:00	3A064	YFT	Arrival	11.3	-	-
11-Nov	13:17	8S123	XZM	Departure	12.1	-	-
11-Nov	13:43	3A082	ZUI	Arrival	13.3	-	-
11-Nov	14:22	3A164	YFT	Departure	12.3	-	-
11-Nov	14:25	3A182	ZUI	Departure	13.1	-	-
11-Nov	14:58	3A065	YFT	Arrival	12.1	-	-
11-Nov	16:23	3A167	YFT	Departure	12.3	-	-
11-Nov	16:38	8S218	XZM	Arrival	11	-	-
11-Nov	16:42	3A083	ZUI	Arrival	13.2	-	-
11-Nov	17:00	3A183	ZUI	Departure	13.5	-	-
11-Nov	17:01	3A067	YFT	Arrival	11.5	-	-
11-Nov	17:03	8S126	XZM	Departure	13.3	-	-
11-Nov	19:07	3A166	YFT	Departure	12.5	-	-
11-Nov	19:49	3A084	ZUI	Arrival	13.3	-	-
11-Nov	20:13	3A185	ZUI	Departure	13.3	-	-
11-Nov	20:53	8S2113	XZM	Arrival	12.7	-	-
11-Nov	21:04	3A169	YFT	Departure	11.3	-	-
11-Nov	22:05	8S522	XZM	Departure	13.4	-	-
12-Nov	08:16	3A061	YFT	Arrival	11.7	-	-
12-Nov	08:20	8S210	XZM	Arrival	12.1	-	-
12-Nov	09:43	3A062	YFT	Arrival	12.1	-	-
12-Nov	10:35	8S212	XZM	Arrival	12.9	-	-
12-Nov	10:49	3A081	ZUI	Arrival	12.3	-	-
12-Nov	11:03	8S121	XZM	Departure	12.6	-	-
12-Nov	11:18	3A063	YFT	Arrival	11.8	-	-
12-Nov	12:25	3A168	YFT	Departure	12.6	-	-
12-Nov	12:27	3A181	ZUI	Departure	13.1	-	-
12-Nov	12:47	8S215	XZM	Arrival	11.5	-	-
12-Nov	12:53	3A064	YFT	Arrival	11.6	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
12-Nov	13:22	8S123	XZM	Departure	12.6	-	-
12-Nov	13:45	3A082	ZUI	Arrival	12.9	-	-
12-Nov	14:16	3A182	ZUI	Departure	13.1	-	-
12-Nov	14:18	3A164	YFT	Departure	12.4	-	-
12-Nov	14:57	3A065	YFT	Arrival	12.1	-	-
12-Nov	16:22	3A167	YFT	Departure	12.6	-	-
12-Nov	17:03	8S218	XZM	Arrival	11.1	<= 10	< 1min
12-Nov	17:04	3A083	ZUI	Arrival	12	-	-
12-Nov	17:05	3A067	YFT	Arrival	11	-	-
12-Nov	17:27	3A183	ZUI	Departure	13.5	-	-
12-Nov	17:36	8S126	XZM	Departure	13	-	-
12-Nov	19:31	3A166	YFT	Departure	12.9	-	-
12-Nov	19:54	3A084	ZUI	Arrival	13.2	-	-
12-Nov	20:14	3A185	ZUI	Departure	12.9	-	-
12-Nov	20:58	8S2113	XZM	Arrival	12.2	-	-
12-Nov	21:15	3A169	YFT	Departure	12.3	-	-
12-Nov	21:59	8S522	XZM	Departure	11.4	-	-
13-Nov	08:18	3A061	YFT	Arrival	11.4	-	-
13-Nov	08:19	8S210	XZM	Arrival	13.3	-	-
13-Nov	09:47	3A062	YFT	Arrival	11.5	-	-
13-Nov	10:43	8S212	XZM	Arrival	12.3	-	-
13-Nov	10:46	3A081	ZUI	Arrival	12.5	-	-
13-Nov	11:16	8S121	XZM	Departure	11.5	-	-
13-Nov	11:23	3A063	YFT	Arrival	11.8	-	-
13-Nov	12:16	3A181	ZUI	Departure	13.4	-	-
13-Nov	12:19	3A168	YFT	Departure	11.4	-	-
13-Nov	12:50	8S215	XZM	Arrival	11.5	-	-
13-Nov	12:58	3A064	YFT	Arrival	11.4	-	-
13-Nov	13:19	8S123	XZM	Departure	12	-	-
13-Nov	13:47	3A082	ZUI	Arrival	13.1	-	-
13-Nov	14:19	3A164	YFT	Departure	11.6	-	-
13-Nov	14:20	3A182	ZUI	Departure	13.2	-	-
13-Nov	15:18	3A065	YFT	Arrival	11.8	-	-
13-Nov	16:16	3A167	YFT	Departure	12.7	-	-
13-Nov	16:32	8S218	XZM	Arrival	10.7	-	-
13-Nov	16:51	3A083	ZUI	Arrival	12.9	-	-
13-Nov	17:04	3A067	YFT	Arrival	11.7	-	-
13-Nov	17:06	3A183	ZUI	Departure	13	-	-
13-Nov	17:12	8S126	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)
13-Nov	19:08	3A166	YFT	Departure	12	-	-
13-Nov	19:56	3A084	ZUI	Arrival	13.2	-	-
13-Nov	20:06	3A185	ZUI	Departure	13.6	-	-
13-Nov	21:03	8S2113	XZM	Arrival	12.9	-	-
13-Nov	21:04	3A169	YFT	Departure	13.2	-	-
14-Nov	08:22	3A061	YFT	Arrival	12.6	-	-
14-Nov	08:25	8S210	XZM	Arrival	11.7	-	-
14-Nov	08:58	3A161	YFT	Departure	13.2	-	-
14-Nov	10:10	3A062	YFT	Arrival	12.2	-	-
14-Nov	10:39	8S212	XZM	Arrival	12.7	-	-
14-Nov	10:46	3A081	ZUI	Arrival	12.6	-	-
14-Nov	11:11	3A063	YFT	Arrival	12.6	-	-
14-Nov	11:15	8S121	XZM	Departure	13	-	-
14-Nov	12:11	3A168	YFT	Departure	11.6	-	-
14-Nov	12:17	3A181	ZUI	Departure	13	-	-
14-Nov	12:54	8S215	XZM	Arrival	11.3	-	-
14-Nov	13:03	3A064	YFT	Arrival	12.8	-	-
14-Nov	13:16	8S123	XZM	Departure	11.8	-	-
14-Nov	13:50	3A082	ZUI	Arrival	12.9	-	-
14-Nov	14:17	3A164	YFT	Departure	12.6	-	-
14-Nov	14:18	3A182	ZUI	Departure	13.1	-	-
14-Nov	14:53	3A065	YFT	Arrival	12.5	-	-
14-Nov	15:20	3A162	YFT	Departure	13.2	-	-
14-Nov	16:01	8S191	YFT	Departure	12.5	-	-
14-Nov	16:06	8S192	YFT	Departure	12	-	-
14-Nov	16:20	3A167	YFT	Departure	12.8	-	-
14-Nov	16:47	3A083	ZUI	Arrival	12.4	-	-
14-Nov	16:49	8S218	XZM	Arrival	10.4	-	-
14-Nov	17:04	3A067	YFT	Arrival	12.1	-	-
14-Nov	17:12	3A183	ZUI	Departure	11.5	-	-
14-Nov	17:13	8S126	XZM	Departure	10.4	-	-
14-Nov	19:16	3A166	YFT	Departure	11.3	-	-
14-Nov	19:46	3A084	ZUI	Arrival	11.5	-	-
14-Nov	20:05	3A185	ZUI	Departure	13	-	-
14-Nov	21:04	3A169	YFT	Departure	12.7	-	-
14-Nov	21:15	8S2113	XZM	Arrival	12.6	-	-
14-Nov	21:59	8S522	XZM	Departure	12.9	-	-
15-Nov	08:16	3A061	YFT	Arrival	11.8	-	-
15-Nov	08:21	8S210	XZM	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)
15-Nov	09:46	3A062	YFT	Arrival	11.4	-	-
15-Nov	10:39	8S212	XZM	Arrival	12.6	-	-
15-Nov	10:43	3A081	ZUI	Arrival	12.7	-	-
15-Nov	11:06	8S121	XZM	Departure	12.6	-	-
15-Nov	11:15	3A063	YFT	Arrival	11.2	-	-
15-Nov	12:24	3A181	ZUI	Departure	13.1	-	-
15-Nov	12:29	3A168	YFT	Departure	11	-	-
15-Nov	12:52	8S215	XZM	Arrival	11.5	-	-
15-Nov	13:02	3A064	YFT	Arrival	12.6	-	-
15-Nov	13:23	8S123	XZM	Departure	11.2	-	-
15-Nov	13:50	3A082	ZUI	Arrival	12.1	-	-
15-Nov	14:15	3A182	ZUI	Departure	12.3	-	-
15-Nov	14:17	3A164	YFT	Departure	12.2	-	-
15-Nov	14:57	3A065	YFT	Arrival	10.9	-	-
15-Nov	16:24	3A167	YFT	Departure	13	-	-
15-Nov	16:47	3A083	ZUI	Arrival	12.6	-	-
15-Nov	16:52	8S218	XZM	Arrival	11.4	-	-
15-Nov	16:58	3A067	YFT	Arrival	11.5	-	-
15-Nov	17:07	3A183	ZUI	Departure	12.9	-	-
15-Nov	17:13	8S126	XZM	Departure	11.4	-	-
15-Nov	19:15	3A166	YFT	Departure	13.3	-	-
15-Nov	19:46	3A084	ZUI	Arrival	13	-	-
15-Nov	20:09	3A185	ZUI	Departure	13.4	-	-
15-Nov	21:02	3A169	YFT	Departure	13	-	-
15-Nov	21:02	8S2113	XZM	Arrival	11.2	-	-
16-Nov	08:15	3A061	YFT	Arrival	11.8	-	-
16-Nov	08:38	8S210	XZM	Arrival	11.6	-	-
16-Nov	09:56	3A062	YFT	Arrival	10.3	-	-
16-Nov	10:39	8S212	XZM	Arrival	11.8	-	-
16-Nov	10:49	3A081	ZUI	Arrival	13.4	-	-
16-Nov	11:04	8S121	XZM	Departure	12.5	-	-
16-Nov	11:17	3A063	YFT	Arrival	12	-	-
16-Nov	12:14	3A181	ZUI	Departure	13	-	-
16-Nov	12:18	3A168	YFT	Departure	12.5	-	-
16-Nov	12:40	8S215	XZM	Arrival	11.5	-	-
16-Nov	13:00	3A064	YFT	Arrival	12	-	-
16-Nov	13:17	8S123	XZM	Departure	11.7	-	-
16-Nov	13:59	3A082	ZUI	Arrival	13.3	-	-
16-Nov	14:17	3A182	ZUI	Departure	12.2	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
16-Nov	14:21	3A164	YFT	Departure	12.1	-	-
16-Nov	14:48	8S912	YFT	Arrival	11.9	-	-
16-Nov	15:10	3A065	YFT	Arrival	11.6	-	-
16-Nov	16:16	3A167	YFT	Departure	12.4	-	-
16-Nov	16:47	3A083	ZUI	Arrival	12.9	-	-
16-Nov	16:48	8S218	XZM	Arrival	12.6	-	-
16-Nov	17:05	3A067	YFT	Arrival	11.4	-	-
16-Nov	17:05	3A183	ZUI	Departure	12.8	-	-
16-Nov	17:14	8S126	XZM	Departure	12.7	-	-
16-Nov	18:00	8S913	YFT	Arrival	12.5	-	-
16-Nov	19:16	3A166	YFT	Departure	12.8	-	-
16-Nov	19:44	3A084	ZUI	Arrival	13	-	-
16-Nov	20:09	3A185	ZUI	Departure	13.5	-	-
16-Nov	21:06	8S2113	XZM	Arrival	12.8	-	-
16-Nov	21:06	3A169	YFT	Departure	12.2	-	-
17-Nov	08:21	3A061	YFT	Arrival	12.1	-	-
17-Nov	08:26	8S210	XZM	Arrival	11.2	-	-
17-Nov	09:52	3A062	YFT	Arrival	12	-	-
17-Nov	10:41	8S212	XZM	Arrival	11.9	-	-
17-Nov	10:44	3A081	ZUI	Arrival	12.7	-	-
17-Nov	11:03	8S121	XZM	Departure	11.3	-	-
17-Nov	11:15	3A063	YFT	Arrival	11.3	-	-
17-Nov	12:19	3A168	YFT	Departure	12	-	-
17-Nov	12:23	3A181	ZUI	Departure	12.9	-	-
17-Nov	12:44	8S215	XZM	Arrival	12.7	-	-
17-Nov	13:04	3A064	YFT	Arrival	12.5	-	-
17-Nov	13:16	8S123	XZM	Departure	12.6	-	-
17-Nov	13:55	3A082	ZUI	Arrival	13.4	-	-
17-Nov	14:13	8S911	YFT	Arrival	12.2	-	-
17-Nov	14:20	3A164	YFT	Departure	12	-	-
17-Nov	14:22	3A182	ZUI	Departure	12.1	-	-
17-Nov	15:03	3A065	YFT	Arrival	12	-	-
17-Nov	16:18	3A167	YFT	Departure	12	-	-
17-Nov	16:38	8S218	XZM	Arrival	11.9	-	-
17-Nov	16:42	3A083	ZUI	Arrival	12.8	-	-
17-Nov	17:01	3A067	YFT	Arrival	12.3	-	-
17-Nov	17:04	8S126	XZM	Departure	13.4	-	-
17-Nov	17:06	3A183	ZUI	Departure	13	-	-
17-Nov	19:06	3A166	YFT	Departure	12.4	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
17-Nov	19:45	3A084	ZUI	Arrival	12.7	-	-
17-Nov	20:04	3A185	ZUI	Departure	13.9	-	-
17-Nov	20:56	8S2113	XZM	Arrival	12.4	-	-
17-Nov	21:04	3A169	YFT	Departure	12.7	-	-
18-Nov	08:12	3A061	YFT	Arrival	12.9	-	-
18-Nov	08:28	8S210	XZM	Arrival	13.2	-	-
18-Nov	09:47	3A062	YFT	Arrival	12.6	-	-
18-Nov	10:40	8S212	XZM	Arrival	13.2	-	-
18-Nov	10:47	3A081	ZUI	Arrival	13.5	-	-
18-Nov	11:06	8S121	XZM	Departure	12.1	-	-
18-Nov	11:17	3A063	YFT	Arrival	12.6	-	-
18-Nov	12:13	3A168	YFT	Departure	11.5	-	-
18-Nov	12:14	3A181	ZUI	Departure	13.3	-	-
18-Nov	12:48	8S215	XZM	Arrival	12.1	-	-
18-Nov	12:58	3A064	YFT	Arrival	13.5	-	-
18-Nov	13:22	8S123	XZM	Departure	12.7	-	-
18-Nov	13:48	3A082	ZUI	Arrival	13.3	-	-
18-Nov	14:21	3A164	YFT	Departure	13.5	-	-
18-Nov	14:22	3A182	ZUI	Departure	13.3	-	-
18-Nov	14:54	3A065	YFT	Arrival	13	<= 5	< 1min
18-Nov	16:14	3A167	YFT	Departure	11.3	-	-
18-Nov	16:33	8S218	XZM	Arrival	11.6	-	-
18-Nov	16:37	3A083	ZUI	Arrival	12.1	-	-
18-Nov	16:57	3A067	YFT	Arrival	13.2	-	-
18-Nov	16:58	3A183	ZUI	Departure	13.5	-	-
18-Nov	17:00	8S126	XZM	Departure	12.6	-	-
18-Nov	19:04	3A166	YFT	Departure	12.4	-	-
18-Nov	19:48	3A084	ZUI	Arrival	13.1	-	-
18-Nov	20:08	3A185	ZUI	Departure	13.5	-	-
18-Nov	20:46	8S2113	XZM	Arrival	12.7	-	-
18-Nov	21:00	3A169	YFT	Departure	12.3	-	-
18-Nov	21:53	8S522	XZM	Departure	12.3	-	-
19-Nov	08:19	3A061	YFT	Arrival	12.9	-	-
19-Nov	08:27	8S210	XZM	Arrival	11.6	-	-
19-Nov	10:05	3A062	YFT	Arrival	11.6	-	-
19-Nov	10:38	8S212	XZM	Arrival	11.4	-	-
19-Nov	10:48	3A081	ZUI	Arrival	12.7	-	-
19-Nov	11:05	8S121	XZM	Departure	11.9	-	-
19-Nov	11:19	3A063	YFT	Arrival	12.7	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
19-Nov	12:16	3A168	YFT	Departure	13	-	-
19-Nov	12:18	3A181	ZUI	Departure	12.4	-	-
19-Nov	12:52	8S215	XZM	Arrival	11.6	-	-
19-Nov	13:00	3A064	YFT	Arrival	13.4	-	-
19-Nov	13:20	8S123	XZM	Departure	12.9	-	-
19-Nov	13:56	3A082	ZUI	Arrival	13.2	-	-
19-Nov	14:19	3A164	YFT	Departure	13	-	-
19-Nov	14:24	3A182	ZUI	Departure	12.6	-	-
19-Nov	15:00	3A065	YFT	Arrival	12.9	<= 5	< 1min
19-Nov	16:21	3A167	YFT	Departure	12	-	-
19-Nov	16:42	3A083	ZUI	Arrival	13.4	-	-
19-Nov	16:55	8S218	XZM	Arrival	12.6	-	-
19-Nov	16:59	3A067	YFT	Arrival	12.9	-	-
19-Nov	17:15	8S126	XZM	Departure	13.2	-	-
19-Nov	17:18	3A183	ZUI	Departure	13.5	-	-
19-Nov	19:08	3A166	YFT	Departure	12.3	-	-
19-Nov	19:48	3A084	ZUI	Arrival	13.3	-	-
19-Nov	20:05	3A185	ZUI	Departure	13.1	-	-
19-Nov	21:00	3A169	YFT	Departure	13.3	-	-
19-Nov	21:08	8S2113	XZM	Arrival	13.1	-	-
19-Nov	22:07	8S522	XZM	Departure	12.8	-	-
20-Nov	08:15	3A061	YFT	Arrival	12.1	-	-
20-Nov	08:38	8S210	XZM	Arrival	12	-	-
20-Nov	09:45	3A062	YFT	Arrival	12.4	-	-
20-Nov	10:44	3A081	ZUI	Arrival	13.2	-	-
20-Nov	10:51	8S212	XZM	Arrival	10.7	-	-
20-Nov	11:10	8S121	XZM	Departure	11.2	-	-
20-Nov	11:15	3A063	YFT	Arrival	11.5	-	-
20-Nov	12:18	3A181	ZUI	Departure	12.6	-	-
20-Nov	12:20	3A168	YFT	Departure	12.2	-	-
20-Nov	13:02	3A064	YFT	Arrival	12.9	-	-
20-Nov	13:05	8S215	XZM	Arrival	12.5	-	-
20-Nov	13:36	8S123	XZM	Departure	13.5	-	-
20-Nov	13:50	3A082	ZUI	Arrival	12	-	-
20-Nov	14:14	3A164	YFT	Departure	12.7	-	-
20-Nov	14:15	3A182	ZUI	Departure	13	-	-
20-Nov	15:03	3A065	YFT	Arrival	12.1	-	-
20-Nov	16:16	3A167	YFT	Departure	11.7	-	-
20-Nov	16:36	8S218	XZM	Arrival	12.4	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
20-Nov	16:42	3A083	ZUI	Arrival	12.4	-	-
20-Nov	17:03	3A067	YFT	Arrival	12.6	-	-
20-Nov	17:15	3A183	ZUI	Departure	13.4	-	-
20-Nov	17:26	8S126	XZM	Departure	12.6	-	-
20-Nov	19:04	3A166	YFT	Departure	13	-	-
20-Nov	19:52	3A084	ZUI	Arrival	12.6	-	-
20-Nov	20:13	3A185	ZUI	Departure	14.1	-	-
20-Nov	21:10	8S2113	XZM	Arrival	12.7	-	-
20-Nov	21:10	3A169	YFT	Departure	13.6	-	-
21-Nov	08:18	3A061	YFT	Arrival	12.5	-	-
21-Nov	08:20	8S210	XZM	Arrival	11.8	-	-
21-Nov	09:48	3A062	YFT	Arrival	13.2	-	-
21-Nov	10:35	8S212	XZM	Arrival	12.5	-	-
21-Nov	10:46	3A081	ZUI	Arrival	13.2	-	-
21-Nov	11:06	8S121	XZM	Departure	12.7	-	-
21-Nov	11:21	3A063	YFT	Arrival	12	-	-
21-Nov	12:12	3A181	ZUI	Departure	13.9	-	-
21-Nov	12:17	3A168	YFT	Departure	12.5	-	-
21-Nov	12:39	8S215	XZM	Arrival	12.8	-	-
21-Nov	13:02	3A064	YFT	Arrival	12	-	-
21-Nov	13:18	8S123	XZM	Departure	13.4	-	-
21-Nov	13:57	3A082	ZUI	Arrival	12.5	-	-
21-Nov	14:15	3A164	YFT	Departure	11.6	-	-
21-Nov	14:24	3A182	ZUI	Departure	12.3	-	-
21-Nov	14:58	3A065	YFT	Arrival	12.2	-	-
21-Nov	16:18	3A167	YFT	Departure	12.4	-	-
21-Nov	16:43	3A083	ZUI	Arrival	12.1	-	-
21-Nov	16:43	8S218	XZM	Arrival	12.6	-	-
21-Nov	17:00	3A067	YFT	Arrival	11.6	-	-
21-Nov	17:04	8S126	XZM	Departure	13.6	-	-
21-Nov	17:04	3A183	ZUI	Departure	13.8	-	-
21-Nov	19:02	3A166	YFT	Departure	12.3	-	-
21-Nov	19:49	3A084	ZUI	Arrival	12.9	-	-
21-Nov	20:08	3A185	ZUI	Departure	13.6	-	-
21-Nov	20:55	8S2113	XZM	Arrival	12	-	-
21-Nov	20:58	3A169	YFT	Departure	13	-	-
22-Nov	08:20	3A061	YFT	Arrival	12	-	-
22-Nov	08:21	8S210	XZM	Arrival	13.2	-	-
22-Nov	10:09	3A062	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)
22-Nov	10:38	8S212	XZM	Arrival	12.2	-	-
22-Nov	10:53	3A081	ZUI	Arrival	13.1	-	-
22-Nov	11:02	8S121	XZM	Departure	12.9	-	-
22-Nov	11:17	3A063	YFT	Arrival	12.7	<= 5	< 1min
22-Nov	12:14	3A181	ZUI	Departure	13.8	-	-
22-Nov	12:20	3A168	YFT	Departure	12.4	-	-
22-Nov	12:57	8S215	XZM	Arrival	11	-	-
22-Nov	13:02	3A064	YFT	Arrival	11.8	-	-
22-Nov	13:21	8S123	XZM	Departure	10	-	-
22-Nov	13:50	3A082	ZUI	Arrival	12	-	-
22-Nov	14:18	3A182	ZUI	Departure	12.9	-	-
22-Nov	14:22	3A164	YFT	Departure	12.1	-	-
22-Nov	14:59	3A065	YFT	Arrival	12.5	-	-
22-Nov	16:16	3A167	YFT	Departure	12.5	-	-
22-Nov	16:45	8S218	XZM	Arrival	10.5	-	-
22-Nov	16:49	3A083	ZUI	Arrival	12.7	-	-
22-Nov	16:55	3A067	YFT	Arrival	12.3	-	-
22-Nov	17:05	3A183	ZUI	Departure	13.8	-	-
22-Nov	17:30	8S126	XZM	Departure	9.8	-	-
22-Nov	18:59	3A166	YFT	Departure	11.6	-	-
22-Nov	19:50	3A084	ZUI	Arrival	12.7	-	-
22-Nov	20:11	3A185	ZUI	Departure	13.8	-	-
22-Nov	21:06	8S2113	XZM	Arrival	11.5	-	-
22-Nov	21:07	3A169	YFT	Departure	12.5	-	-
22-Nov	21:59	8S522	XZM	Departure	11.6	-	-
23-Nov	08:17	3A061	YFT	Arrival	12.1	-	-
23-Nov	08:38	8S210	XZM	Arrival	11.1	-	-
23-Nov	09:40	3A062	YFT	Arrival	12.3	-	-
23-Nov	10:39	8S212	XZM	Arrival	11.3	-	-
23-Nov	10:44	3A081	ZUI	Arrival	12.5	-	-
23-Nov	11:06	8S121	XZM	Departure	13.4	-	-
23-Nov	11:12	3A063	YFT	Arrival	13.3	-	-
23-Nov	12:13	3A168	YFT	Departure	13.3	-	-
23-Nov	12:15	3A181	ZUI	Departure	12.8	-	-
23-Nov	12:51	8S215	XZM	Arrival	13	-	-
23-Nov	12:55	3A064	YFT	Arrival	12.2	-	-
23-Nov	13:27	8S123	XZM	Departure	12.1	-	-
23-Nov	13:49	3A082	ZUI	Arrival	10.9	-	-
23-Nov	14:16	3A182	ZUI	Departure	12.2	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
23-Nov	14:25	3A164	YFT	Departure	11.8	-	-
23-Nov	14:56	3A065	YFT	Arrival	13.3	-	-
23-Nov	16:15	3A167	YFT	Departure	13.6	-	-
23-Nov	16:40	8S218	XZM	Arrival	11.5	-	-
23-Nov	16:41	3A083	ZUI	Arrival	13.4	-	-
23-Nov	16:52	3A067	YFT	Arrival	12.4	-	-
23-Nov	17:00	3A183	ZUI	Departure	13.7	-	-
23-Nov	17:15	8S126	XZM	Departure	13.1	-	-
23-Nov	19:14	3A166	YFT	Departure	12.3	-	-
23-Nov	19:47	3A084	ZUI	Arrival	13.2	-	-
23-Nov	20:10	3A185	ZUI	Departure	13.7	-	-
23-Nov	20:50	8S2113	XZM	Arrival	12.6	-	-
23-Nov	21:00	3A169	YFT	Departure	12.3	-	-
24-Nov	08:13	3A061	YFT	Arrival	11.8	-	-
24-Nov	08:24	8S210	XZM	Arrival	12.3	-	-
24-Nov	09:52	3A062	YFT	Arrival	12	-	-
24-Nov	10:35	8S212	XZM	Arrival	12.2	-	-
24-Nov	10:46	3A081	ZUI	Arrival	12.7	-	-
24-Nov	11:03	8S121	XZM	Departure	13.2	-	-
24-Nov	11:20	3A063	YFT	Arrival	12.9	-	-
24-Nov	12:12	3A181	ZUI	Departure	12.2	-	-
24-Nov	12:14	3A168	YFT	Departure	13.3	-	-
24-Nov	12:41	8S215	XZM	Arrival	13.1	-	-
24-Nov	12:58	3A064	YFT	Arrival	11.2	-	-
24-Nov	13:11	8S123	XZM	Departure	13	-	-
24-Nov	13:50	3A082	ZUI	Arrival	12.8	-	-
24-Nov	14:10	3A182	ZUI	Departure	12.1	-	-
24-Nov	14:18	3A164	YFT	Departure	12	-	-
24-Nov	15:00	3A065	YFT	Arrival	12.1	-	-
24-Nov	16:16	3A167	YFT	Departure	13.3	-	-
24-Nov	16:27	8S218	XZM	Arrival	11	-	-
24-Nov	16:37	3A083	ZUI	Arrival	13	-	-
24-Nov	16:55	3A067	YFT	Arrival	12.3	-	-
24-Nov	17:01	3A183	ZUI	Departure	12.7	-	-
24-Nov	17:06	8S126	XZM	Departure	13.4	-	-
24-Nov	19:02	3A166	YFT	Departure	12.5	-	-
24-Nov	19:49	3A084	ZUI	Arrival	12.8	-	-
24-Nov	20:12	3A185	ZUI	Departure	13.8	-	-
24-Nov	20:56	8S2113	XZM	Arrival	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)
24-Nov	21:02	3A169	YFT	Departure	11.9	-	-
25-Nov	08:21	8S210	XZM	Arrival	12.4	-	-
25-Nov	08:21	3A061	YFT	Arrival	11.7	-	-
25-Nov	09:45	3A062	YFT	Arrival	12.2	-	-
25-Nov	10:45	3A081	ZUI	Arrival	13.2	-	-
25-Nov	10:49	8S212	XZM	Arrival	11.5	-	-
25-Nov	11:06	8S121	XZM	Departure	12.2	-	-
25-Nov	11:14	3A063	YFT	Arrival	12	-	-
25-Nov	12:12	3A181	ZUI	Departure	11.5	-	-
25-Nov	12:16	3A168	YFT	Departure	12.7	-	-
25-Nov	12:46	8S215	XZM	Arrival	10.9	-	-
25-Nov	12:58	3A064	YFT	Arrival	11.5	-	-
25-Nov	13:17	8S123	XZM	Departure	12.7	-	-
25-Nov	13:49	3A082	ZUI	Arrival	10.5	-	-
25-Nov	14:10	3A164	YFT	Departure	12.8	-	-
25-Nov	14:12	3A182	ZUI	Departure	11.9	-	-
25-Nov	14:54	3A065	YFT	Arrival	12.4	-	-
25-Nov	16:19	3A167	YFT	Departure	12.7	-	-
25-Nov	16:38	3A083	ZUI	Arrival	13.4	-	-
25-Nov	16:46	8S218	XZM	Arrival	11.8	-	-
25-Nov	16:54	3A067	YFT	Arrival	11.4	-	-
25-Nov	17:02	3A183	ZUI	Departure	13.9	-	-
25-Nov	17:06	8S126	XZM	Departure	12.9	-	-
25-Nov	18:58	3A166	YFT	Departure	12.2	-	-
25-Nov	19:46	3A084	ZUI	Arrival	13.5	-	-
25-Nov	20:06	3A185	ZUI	Departure	13.8	-	-
25-Nov	20:52	8S2113	XZM	Arrival	11.9	-	-
25-Nov	20:59	3A169	YFT	Departure	12.5	-	-
25-Nov	21:55	8S522	XZM	Departure	12	-	-
26-Nov	08:26	8S210	XZM	Arrival	12.8	-	-
26-Nov	08:31	3A061	YFT	Arrival	11.7	-	-
26-Nov	09:46	3A062	YFT	Arrival	11.5	-	-
26-Nov	10:32	8S212	XZM	Arrival	12.5	-	-
26-Nov	10:48	3A081	ZUI	Arrival	13	-	-
26-Nov	11:20	8S121	XZM	Departure	12.8	-	-
26-Nov	11:25	3A063	YFT	Arrival	11.3	-	-
26-Nov	12:11	3A181	ZUI	Departure	13.4	-	-
26-Nov	12:12	3A168	YFT	Departure	12.3	-	-
26-Nov	12:51	8S215	XZM	Arrival	12.2	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
26-Nov	13:07	3A064	YFT	Arrival	11.4	-	-
26-Nov	13:19	8S123	XZM	Departure	12.9	-	-
26-Nov	13:49	3A082	ZUI	Arrival	11.1	-	-
26-Nov	14:13	3A182	ZUI	Departure	12.5	-	-
26-Nov	14:17	3A164	YFT	Departure	11.7	-	-
26-Nov	14:58	3A065	YFT	Arrival	12.1	-	-
26-Nov	16:29	3A167	YFT	Departure	12.4	-	-
26-Nov	16:53	8S218	XZM	Arrival	12.5	-	-
26-Nov	16:55	3A083	ZUI	Arrival	12.5	-	-
26-Nov	17:01	3A067	YFT	Arrival	11.5	-	-
26-Nov	17:10	3A183	ZUI	Departure	13.8	-	-
26-Nov	17:23	8S126	XZM	Departure	12.9	-	-
26-Nov	19:02	3A166	YFT	Departure	12.6	-	-
26-Nov	19:49	3A084	ZUI	Arrival	12.7	-	-
26-Nov	20:05	3A185	ZUI	Departure	13.7	-	-
26-Nov	20:59	8S2113	XZM	Arrival	13.1	-	-
26-Nov	21:00	3A169	YFT	Departure	13.1	-	-
26-Nov	22:02	8S522	XZM	Departure	13.6	-	-
27-Nov	08:19	3A061	YFT	Arrival	11.6	-	-
27-Nov	08:42	8S210	XZM	Arrival	12.3	-	-
27-Nov	09:58	3A062	YFT	Arrival	12.2	-	-
27-Nov	10:41	8S212	XZM	Arrival	12.3	-	-
27-Nov	10:42	3A081	ZUI	Arrival	11.7	-	-
27-Nov	11:05	8S121	XZM	Departure	12.8	-	-
27-Nov	11:19	3A063	YFT	Arrival	12.3	-	-
27-Nov	12:15	3A168	YFT	Departure	12.4	-	-
27-Nov	12:16	3A181	ZUI	Departure	12.1	-	-
27-Nov	12:49	8S215	XZM	Arrival	12.4	-	-
27-Nov	12:59	3A064	YFT	Arrival	11.5	-	-
27-Nov	13:18	8S123	XZM	Departure	12.6	-	-
27-Nov	13:44	3A082	ZUI	Arrival	12.4	-	-
27-Nov	14:15	3A164	YFT	Departure	12.3	-	-
27-Nov	14:16	3A182	ZUI	Departure	11.8	-	-
27-Nov	14:56	3A065	YFT	Arrival	12.1	-	-
27-Nov	16:18	3A167	YFT	Departure	12.6	-	-
27-Nov	16:46	3A083	ZUI	Arrival	12.8	-	-
27-Nov	16:51	8S218	XZM	Arrival	13.1	-	-
27-Nov	16:53	3A067	YFT	Arrival	11.8	-	-
27-Nov	17:03	3A183	ZUI	Departure	13.7	-	-

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)
27-Nov	17:10	8S126	XZM	Departure	13.3	-	-
27-Nov	19:05	3A166	YFT	Departure	11.9	-	-
27-Nov	19:49	3A084	ZUI	Arrival	13	-	-
27-Nov	20:06	3A185	ZUI	Departure	13.7	-	-
27-Nov	20:58	3A169	YFT	Departure	11.3	-	-
27-Nov	21:14	8S2113	XZM	Arrival	11.4	-	-
28-Nov	08:14	3A061	YFT	Arrival	11.6	-	-
28-Nov	08:20	8S210	XZM	Arrival	13.7	-	-
28-Nov	09:56	3A062	YFT	Arrival	12	-	-
28-Nov	10:35	8S212	XZM	Arrival	12.4	-	-
28-Nov	10:44	3A081	ZUI	Arrival	13.4	-	-
28-Nov	11:02	8S121	XZM	Departure	12.7	-	-
28-Nov	11:15	3A063	YFT	Arrival	11.7	-	-
28-Nov	12:08	3A181	ZUI	Departure	12.9	-	-
28-Nov	12:16	3A168	YFT	Departure	11.6	-	-
28-Nov	12:41	8S215	XZM	Arrival	13.4	-	-
28-Nov	13:00	3A064	YFT	Arrival	11.6	-	-
28-Nov	13:14	8S123	XZM	Departure	12.7	-	-
28-Nov	13:49	3A082	ZUI	Arrival	13	-	-
28-Nov	14:12	3A164	YFT	Departure	11.5	-	-
28-Nov	14:14	3A182	ZUI	Departure	12	-	-
28-Nov	14:56	3A065	YFT	Arrival	11.1	-	-
28-Nov	16:18	3A167	YFT	Departure	10.9	-	-
28-Nov	16:40	3A083	ZUI	Arrival	12.7	-	-
28-Nov	16:41	8S218	XZM	Arrival	11.4	-	-
28-Nov	16:51	3A067	YFT	Arrival	11.9	-	-
28-Nov	17:00	3A183	ZUI	Departure	12.9	-	-
28-Nov	17:02	8S126	XZM	Departure	11.4	-	-
28-Nov	19:02	3A166	YFT	Departure	12.9	-	-
28-Nov	19:45	3A084	ZUI	Arrival	12.8	-	-
28-Nov	20:05	3A185	ZUI	Departure	13.1	-	-
28-Nov	20:59	3A169	YFT	Departure	12.1	<= 5	< 1min
28-Nov	20:59	8S2113	XZM	Arrival	12	-	-
29-Nov	08:17	8S210	XZM	Arrival	12	-	-
29-Nov	08:22	3A061	YFT	Arrival	12.1	-	-
29-Nov	09:54	3A062	YFT	Arrival	12.2	-	-
29-Nov	10:35	8S212	XZM	Arrival	12.2	-	-
29-Nov	10:47	3A081	ZUI	Arrival	13.2	-	-
29-Nov	11:06	8S121	XZM	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)
29-Nov	11:13	3A063	YFT	Arrival	12.5	-	-
29-Nov	12:16	3A168	YFT	Departure	11.9	-	-
29-Nov	12:18	3A181	ZUI	Departure	12.6	-	-
29-Nov	12:50	8S215	XZM	Arrival	11.7	-	-
29-Nov	12:59	3A064	YFT	Arrival	12.3	-	-
29-Nov	13:19	8S123	XZM	Departure	11.4	-	-
29-Nov	13:49	3A082	ZUI	Arrival	12.6	-	-
29-Nov	14:28	3A182	ZUI	Departure	11.1	-	-
29-Nov	14:30	3A164	YFT	Departure	12.3	-	-
29-Nov	14:55	3A065	YFT	Arrival	11.5	-	-
29-Nov	16:22	3A167	YFT	Departure	13.2	-	-
29-Nov	16:40	8S218	XZM	Arrival	11.3	-	-
29-Nov	16:42	3A083	ZUI	Arrival	13.3	-	-
29-Nov	16:56	3A067	YFT	Arrival	12.2	-	-
29-Nov	16:58	3A183	ZUI	Departure	13.7	-	-
29-Nov	17:05	8S126	XZM	Departure	12	-	-
29-Nov	19:02	3A166	YFT	Departure	12.9	<= 5	< 1min
29-Nov	19:43	3A084	ZUI	Arrival	13.3	-	-
29-Nov	20:05	3A185	ZUI	Departure	12.5	-	-
29-Nov	20:57	8S2113	XZM	Arrival	12.1	-	-
29-Nov	21:13	3A169	YFT	Departure	12.1	-	-
30-Nov	08:15	3A061	YFT	Arrival	11.9	-	-
30-Nov	08:28	8S210	XZM	Arrival	11.4	-	-
30-Nov	09:52	3A062	YFT	Arrival	11.7	-	-
30-Nov	10:37	8S212	XZM	Arrival	11.1	-	-
30-Nov	10:47	3A081	ZUI	Arrival	12.7	-	-
30-Nov	11:02	8S121	XZM	Departure	12.2	-	-
30-Nov	11:16	3A063	YFT	Arrival	11	-	-
30-Nov	12:09	3A181	ZUI	Departure	12.8	-	-
30-Nov	12:14	3A168	YFT	Departure	10.7	-	-
30-Nov	12:38	8S215	XZM	Arrival	13.7	-	-
30-Nov	12:59	3A064	YFT	Arrival	12.2	-	-
30-Nov	13:13	8S123	XZM	Departure	12.9	-	-
30-Nov	13:47	3A082	ZUI	Arrival	12.6	-	-
30-Nov	14:18	3A164	YFT	Departure	11.7	-	-
30-Nov	14:20	3A182	ZUI	Departure	12.6	-	-
30-Nov	14:55	3A065	YFT	Arrival	10.9	-	-
30-Nov	16:14	3A167	YFT	Departure	12	-	-
30-Nov	16:37	8S218	XZM	Arrival	13	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
30-Nov	16:40	3A083	ZUI	Arrival	11.9	-	-
30-Nov	16:55	3A067	YFT	Arrival	11.8	-	-
30-Nov	17:04	3A183	ZUI	Departure	12.7	-	-
30-Nov	17:14	8S126	XZM	Departure	13.8	-	-
30-Nov	19:06	3A166	YFT	Departure	13.1	-	-
30-Nov	19:45	3A084	ZUI	Arrival	12.8	-	-
30-Nov	20:11	3A185	ZUI	Departure	13.2	-	-
30-Nov	20:59	8S2113	XZM	Arrival	11.9	-	-
30-Nov	21:03	3A169	YFT	Departure	11.7	-	-

Follow-up on instantaneous speeding

Referring to the data of SkyPier HSF movements in November 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 11 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.