MOTT MACDONALD

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

Construction Phase Monthly EM&A Report No.20 (For August 2017)

September 2017

Airport Authority Hong Kong

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This Monthly EM&A Report No. 20 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 September 2017

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By Email

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

Attn: Mr. Lawrence Tsui, Principal Manager

14 September 2017

Dear Sir,

Contract No. 3102
3RS Independent Environmental Checker Consultancy Services

Submission of Monthly EM&A Report No.20 (August 2017)

Reference is made to the Environmental Team's submission of the Monthly EM&A Report No.20 under Condition 3.5 of the Environmental Permit No. EP-489/2014 certified by the ET Leader on 14 September 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 20th Construction Phase Monthly EM&A Report for the Project which summarizes the monitoring results and audit findings of the EM&A programme during the reporting period from 1 to 31 August 2017.

Key Activities in the Reporting Period

The key activities of the Project carried out in the reporting period included deep cement mixing (DCM) works, laying of sand blanket, site office establishment, horizontal directional drilling (HDD) works, 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, 25 sets of construction noise measurements, 14 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 in accordance with the plan. On the implementation of Dolphin Exclusion Zone (DEZ) Plan, dolphin observers at 12 to 16 dolphin observation stations were deployed for continuous monitoring of the DEZ by all contractors for DCM works in accordance with the DEZ Plan. Trainings for the proposed dolphin observers were provided by the ET prior to the aforementioned works, with the training records kept by the ET. From the contractors' MMWP observation records and DEZ monitoring records, no dolphin or other marine mammals were observed within or around the silt curtains, whilst there was one record of dolphin sighting within the DEZ of DCM works in this reporting period. 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 August 2017 were in the range of 11 to 91 daily movements, which are within the maximum daily cap of 125 daily movements. A total of 744 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 (9.7 to 14.0 knots), which were in compliance with the SkyPier Plan. One ferry movement with minor deviation from the diverted route is under investigation by ET. The investigation result will be presented in the next monthly EM&A report. In summary, the ET and IEC have audited the HSF movements against the SkyPier Plan and conducted follow up investigation or actions accordingly.

On the implementation of the Marine Travel Routes and Management Plan for Construction and Associated Vessel (MTRMP-CAV), the Marine Surveillance System (MSS) automatically recorded the deviation case such as speeding, entering no entry zone, not 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, entry from non-designated gates, and entering no-entry zones 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 total alkalinity and chromium 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 DO, turbidity, SS, 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

- Laying of sand blanket and geotextile; and
- DCM works.

Reclamation Works:

Contract 3206 Main Reclamation Works

- Laying of sand blanket.

Airfield Works:

Contract 3301 North Runway Crossover Taxiway

- CLP cable ducting work.

Terminal 2 Expansion Works:

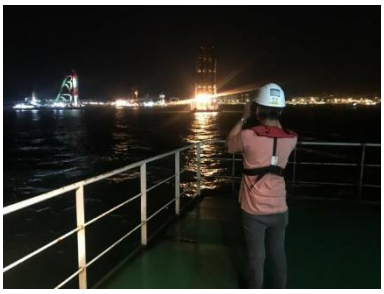
Contract 3501 Antenna Farm and Sewage Pumping Station

- Excavation and piling works.

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

- Removal of existing concrete.

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.



DEZ Monitoring for DCM Works by Contractor

Chemical Spill Drill conducted by the Contractor

Dolphin Observer Training

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 sand filling materials was received on 8 Aug 2017.	Investigation details of the complaint is presented in S7.8.1.

	Yes	No	Details	Analysis / Recommendation / Remedial Actions
Notification of any summons and status of prosecutions		✓	No notifications of summons or prosecution were received.	Nil
Changes that affect the EM&A		✓	There were no changes 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**.

1.2 Scope of this Report

This is the 20th Construction Phase Monthly EM&A Report for the Project which summarizes the key findings of the EM&A programme during the reporting period from 1 to 31 August 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
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:			

Party	Position	Name	Telephone
Contract 3206 (ZHEC-CCCC-CDC Joint Venture)	Project Manager	Kim Chuan Lim	3693 2288
	Environmental Officer	Kwai Fung Wong	3693 2252
Terminal 2 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

1.4 Summary of Construction Works

The key activities of the Project carried out in the reporting period included DCM works, laying of sand blanket, site office establishment, HDD works, 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	
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	Completed in May 2017 and data analysis in-progress.
Early/ Regular DCM Water Quality Monitoring	On-going
Waste Management	

Parameters	Status
Waste Monitoring	On-going
Land Contamination	
Supplementary Contamination Assessment Plan (CAP)	To be submitted with the relevant construction works.
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	The ecological monitoring was resumed since August 2017.
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, 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 briefings and regular environmental management meetings were conducted.

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

2 Air Quality Monitoring

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 6 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 C**.

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
Portable direct reading dust meter (Laser dust monitor)	SIBATA LD-3B-001 (Serial No. 934393)	26 Oct 2016
	SIBATA LD-3B-002 (Serial No. 974350)	26 Oct 2016
	SIBATA LD-3B-003 (Serial No. 276018)	26 Oct 2016

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 certificates of the portable direct reading dust meter and calibration record of the HVS provided in Appendix B of the Construction Phase Monthly EM&A Report No.11 are still valid. The calibration certificates for portable direct reading dust meter are updated and provided in **Appendix E**.

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 D**.

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	8 – 28	306	500
AR2	22 – 46	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 C**.

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
Integrated Sound Level Meter	B&K 2238 (Serial No. 2800932)	17 Jul 2017
	B&K 2238 (Serial No. 2381580)	8 Sep 2016
Acoustic Calibrator	B&K 4231 (Serial No. 3003246)	16 May 2017
	B&K 4231 (Serial No. 3004068)	17 Jul 2017

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 provided in Appendix B of the Construction Phase Monthly EM&A Report No. 9, Appendix D of the Construction Phase Monthly EM&A Report No. 17, and Appendix E of the Construction Phase Monthly EM&A Report No. 19 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 D**.

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)]	70 – 72	75
NM3A	61 – 63	75
NM4[(i)]	60 – 65	70[(ii)]
NM5[(i)]	53 – 61	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 school examination took place in the 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 road traffic noise at NM1A, helicopter and aircraft noise at NM3A, helicopter noise and construction noise from nearby school at NM4, aircraft, helicopter, and dog barking noise at NM5, and insect, aircraft, helicopter, and marine vessel noise 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 early 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 early 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 C**. The flood tide monitoring session on 22 August 2017 was cancelled due to hoisting Strong Wind Signal No. 3 and adverse sea condition.

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 early regular DCM monitoring (Chromium)	0.2		0.2	
Representative Heavy Metals for early 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 early 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
Multifunctional Meter (measurement of DO, pH, temperature, salinity and turbidity)	YSI ProDSS (serial no. 15M101244)	16 Jun 2017
	YSI ProDSS (serial no. 16J101716)	16 Jun 2017
	YSI 6920 V2 (serial no. 00019CB2)	16 Jun 2017
	YSI 6920 V2 (serial no. 000109DF)	16 Jun 2017
Digital Titrator (measurement of total alkalinity)	Titrette Digital Burette 50ml Class A (serial no.10N65665)	19 Jun 2017

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 monitoring period provided in Appendix D of the Construction Phase Monthly EM&A Report No.18 are still valid. Any updates of calibration certificates will be reported in the Monthly EM&A report if necessary.

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 total alkalinity and chromium 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 DO, turbidity, SS, and nickel, some of the testing results exceeded the relevant Action or Limit Levels, and the corresponding investigations were conducted accordingly. It should be noted that two typhoons, namely Typhoon Hato and Typhoon Pakhar hit Hong Kong during August 2017. The water quality monitoring results might be affected by these typhoons. 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 five monitoring days. Details of the exceedance cases are presented below.

Findings for DO Exceedances (Mid-Ebb Tide)

Table 4.7 and **Table 4.8** presents a summary of the DO compliance status at IM and SR stations during mid-ebb tide for the reporting period.

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

	IM1	IM2	IM3	IM4	IM5	IM6	IM7	IM8	IM9	IM10	IM11	IM12	SR2	SR3	SR4A	SR5A	SR6	SR7
01/08/2017																		
03/08/2017																		
05/08/2017																		
08/08/2017																		
10/08/2017																		
12/08/2017																		
15/08/2017																		
17/08/2017																		
19/08/2017																		
22/08/2017																		
24/08/2017																		
26/08/2017																		

	IM1	IM2	IM3	IM4	IM5	IM6	IM7	IM8	IM9	IM10	IM11	IM12	SR2	SR3	SR4A	SR5A	SR6	SR7
29/08/2017																		
31/08/2017																		
No. of Exceedance	2	0	0	0	0	1	1	1	1	0	0	0	0	1	2	0	0	1

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

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

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

	IM1	IM2	IM3	IM4	IM5	IM6	IM7	IM8	IM9	IM10	IM11	IM12	SR2	SR3	SR4A	SR5A	SR6	SR7
01/08/2017																		
03/08/2017																		
05/08/2017																		
08/08/2017																		
10/08/2017																		
12/08/2017																		
15/08/2017																		
17/08/2017																		
19/08/2017																		
22/08/2017																		
24/08/2017																		
26/08/2017																		
29/08/2017																		
31/08/2017																		
No. of Exceedance	1	0	0	0	0	0	1	1	1	0	0	0	0	1	1	0	0	0

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

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 or Limit Levels were recorded on 5 and 22 August 2017. Repeat in-situ measurement was conducted on 6 August 2017 as stipulated in the Manual and no exceedance was recorded during the repeat measurement. However, as Hurricane Signal No. 10 was hoisted

on 23 August 2017, the repeat in-situ measurement on 23 August 2017 was cancelled. Regular monitoring at all stations resumed on 24 August 2017. No exceedance was recorded during the repeat measurement. As some of the exceedances occurred at stations located downstream of the Project, which might be affected by Project's construction activities, exceedance investigation 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 was collected, as well as any observations during the monitoring. The findings are summarized in **Table 4.9**.

Table 4.9: Summary of Findings from Investigations of DO 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
05/08/2017	DCM works Sand blanket laying	Around 500m	Silt curtain deployed	No	No	No
22/08/2017	DCM works Sand blanket laying	Around 800m	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 as additional measures. The silt curtains were maintained properly.

For the exceedance events at downstream monitoring stations, namely IM1, SR4A and SR7 on 5 August 2017, it is noted that DO concentration at surface and middle level at the corresponding control station C2 was also lower than the Limit Level during the same tide. Exceedances also occurred at upstream stations on the same day. Besides, lower DO concentrations were recorded during baseline monitoring at these monitoring stations. Based on these findings, the exceedances were possibly due to natural fluctuation in the vicinity of these monitoring stations, and considered not due to the Project.

Stand By Signal No. 1 was hoisted when exceedances were recorded at IM1 and SR4A on 22 August 2017. Lower DO concentrations were recorded during baseline monitoring at these monitoring stations. Besides, no exceedance was recorded at other downstream monitoring stations, including IM2, which was located closer to active construction works than IM1 and SR4A. Based on these findings, the exceedances were possibly due to natural fluctuation in the vicinity of these monitoring stations, and considered not due to the Project.

Findings for Turbidity Exceedances (Mid-Ebb Tide)

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

Table 4.10: Summary of Turbidity Compliance Status (Mid-Ebb Tide)

	IM1	IM2	IM3	IM4	IM5	IM6	IM7	IM8	IM9	IM10	IM11	IM12	SR2	SR3	SR4A	SR5A	SR6	SR7
01/08/2017																		
03/08/2017																		
05/08/2017																		
08/08/2017																		
10/08/2017																		
12/08/2017																		
15/08/2017																		
17/08/2017																		
19/08/2017																		
22/08/2017																		
24/08/2017																		
26/08/2017																		
29/08/2017																		
31/08/2017																		
No. of Exceedance	0	0	0	1	0	0	1	0	0	0	0	0	0	0	1	0	0	0

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

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 one monitoring day. Stand By Signal No. 1 was hoisted when the exceedances were recorded. Due to hoisting Gale or Storm Signal No.8 SE, the repeat measurement on 27 August 2017 was rescheduled to 28 August 2017. No exceedance was recorded during the repeat measurement. As one of the exceedances occurred at a station located upstream of the Project, which would unlikely be affected by Project's construction activities, exceedance investigation focusing on downstream exceedance events was carried out.

As part of the investigation on downstream exceedance events, details of the Project's marine construction activities on concerned monitoring day were collected, as well as any observations during the monitoring. The findings are summarized in **Table 4.11**.

Table 4.11: Summary of Findings from Investigations of Turbidity 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
26/08/2017	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 as additional measures. The silt curtains were maintained properly.

For the exceedance events at downstream monitoring stations, namely IM4 and SR4A, it is noted from **Table 4.10** that the exceedances appeared to be isolated cases with no temporal trend and no clear spatial trend to indicate turbidity rising due to Project activities. The investigation results shown in **Table 4.11** also showed that no construction vessel, nor silt plume was observed in the vicinity of IM4 and SR4A on 26 August 2017. It is also noted that no exceedance was recorded at monitoring station IM3, which is located similarly downstream and close to active construction works on 26 August 2017 during ebb tide, while no exceedances were identified in the repeat turbidity measurements. Based on the above, the exceedances were considered not due to the Project, and were possibly due to natural fluctuation in vicinity of IM4 and SR4A.

Findings for Turbidity Exceedances (Mid-Flood Tide)

Table 4.12 presents a summary of the turbidity compliance status at IM stations during mid-flood tide for the reporting period.

Table 4.12: Summary of Turbidity Compliance Status (Mid-Flood Tide)

	IM1	IM2	IM3	IM4	IM5	IM6	IM7	IM8	IM9	IM10	IM11	IM12	SR3	SR4A	SR5A	SR6	SR7
01/08/2017																	
03/08/2017																	
05/08/2017																	
08/08/2017																	
10/08/2017																	
12/08/2017																	
15/08/2017																	
17/08/2017																	
19/08/2017																	
24/08/2017																	
26/08/2017																	
29/08/2017																	
31/08/2017																	
No. of Exceedance	0	0	0	0	0	1	0	0	0	1	1	1	0	0	0	0	0

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

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

As part of the investigation on downstream exceedance events, details of the Project's marine construction activities on concerned monitoring day were collected, as well as any observations during the monitoring. The findings are summarized in **Table 4.13**.

Table 4.13: Summary of Findings from Investigations of Turbidity 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
26/08/2017	DCM works Sand blanket laying	Around 500m	Silt curtain deployed	Yes^	No	No

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

^ A construction vessel was observed travelling in the vicinity when monitoring was conducted at IM6. No construction works and no leakage of construction material from the vessel was observed. No construction vessel was observed in the vicinity of IM10 during monitoring.

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

For the exceedance events at downstream monitoring stations, namely IM6 and IM10, it is noted the turbidity level at bottom levels of IM6 and IM10 were significantly higher than that at surface and middle levels. Similar observations were found at nearby upstream impact stations IM4, IM11, IM12 and nearby downstream station IM5. Besides, the investigation results shown in **Table 4.13** also found that no silt plume was observed in the vicinity of IM6 and IM10 on 26 August 2017. A construction vessel was observed travelling in the vicinity when monitoring was conducted at IM6. However, no construction works and no leakage of construction material from the vessel was observed.

The observations above suggests that the exceedances were due to high turbidity level at bottom sea level, which occurred at a broad area regardless of the location relative to active works (both at upstream and downstream stations). It is also noted that the phenomenon coincided with adverse weather conditions in the period of 22 to 27 August 2017, which included Severe Typhoon Hato (Hurricane Signal No. 10 on 23 August 2017) occurring between 22 and 23 August 2017, and Severe Tropical Storm Pakhar (Gale or Storm Signal No. 8 SE on 27 August 2017) occurring between 26 and 27 August 2017. These meteorological conditions could potentially affect the hydrodynamic and sediment transport conditions at bottom sea levels over a wide region. Based on the above, the exceedances were considered not due to the Project, and were possibly due to natural fluctuation in vicinity of IM6 and IM10.

Findings for SS Exceedances (Mid-Ebb Tide)

Table 4.14 presents a summary of the SS compliance status at IM and SR stations during mid-ebb tide for the reporting period.

Table 4.14: Summary of SS Compliance Status (Mid-Ebb Tide)

	IM1	IM2	IM3	IM4	IM5	IM6	IM7	IM8	IM9	IM10	IM11	IM12	SR2	SR3	SR4A	SR5A	SR6	SR7	SR8
01/08/2017																			
03/08/2017																			
05/08/2017																			

	IM1	IM2	IM3	IM4	IM5	IM6	IM7	IM8	IM9	IM10	IM11	IM12	SR2	SR3	SR4A	SR5A	SR6	SR7	SR8
08/08/2017																			
10/08/2017																			
12/08/2017																			
15/08/2017																			
17/08/2017																			
19/08/2017																			
22/08/2017																			
24/08/2017																			
26/08/2017																			
29/08/2017																			
31/08/2017																			
No. of Exceedance	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0

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

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 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 or Limit Levels were recorded on two monitoring days. As one of the exceedances occurred at stations located downstream of the Project, which might be affected by Project's construction activities, exceedance investigation was carried out.

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

For the exceedance at SR4A on 26 August 2017, it is noted that the exceedance appeared to be an isolated case with no observable temporal and spatial trend to indicate any effect due to Project activities. Furthermore, no exceedance was recorded at other downstream monitoring stations, which were located closer to active DCM works and sand blanket laying during the same monitoring period. Based on these findings, the exceedance was considered not due to the Project.

Findings for SS Exceedances (Mid-Flood Tide)

Table 4.15 presents a summary of the SS compliance status at IM stations during mid-flood tide for the reporting period.

Table 4.15: 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
01/08/2017																		
03/08/2017																		
05/08/2017																		

	IM1	IM2	IM3	IM4	IM5	IM6	IM7	IM8	IM9	IM10	IM11	IM12	SR3	SR4A	SR5A	SR6	SR7	SR8
08/08/2017																		
10/08/2017																		
12/08/2017																		
15/08/2017																		
17/08/2017																		
19/08/2017																		
24/08/2017																		
26/08/2017																		
29/08/2017																		
31/08/2017																		
No. of Exceedance	0	0	1	0	0	0	0	0	1	2	2	2	0	0	0	0	0	0

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

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

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 4.15**.

Table 4.16: 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
24/08/2017	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.

Exceedances of Action or Limit Levels were recorded on two 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 was carried out.

According to the investigation findings summarized in **Table 4.13** and **Table 4.16,** it was confirmed that silt curtains were deployed for DCM works as additional measures and the silt curtains were maintained properly.

For the exceedances at IM9 and IM10 on 24 August 2017, it was found that similarly high SS levels were apparent at IM11 and IM12 which are located upstream of the Project during flood tide (and would unlikely be affected by the Project), hence the exceedances at IM9 and IM10 were possibly due to natural fluctuation in this area. Furthermore, no exceedance was recorded at other downstream monitoring stations, including IM8, which was located similarly close to active construction works during the same monitoring period. Based on these findings, the exceedance was considered not due to the Project.

For the exceedance at IM10 on 26 August 2017, the SS concentration at bottom level of IM10 was significantly higher than that at surface and middle levels. Similar observation was found at upstream impact stations of IM11 and IM12. Considering the above observations, the exceedances were due to high SS level at bottom sea level, which occurred at a broad area regardless of the location relative to active works (both at upstream and downstream stations).

As stated above, it is noted that the phenomenon coincided with adverse weather conditions in the period of 22 to 27 August 2017, which included Severe Typhoon Hato and Severe Tropical Storm Pakhar, which could potentially affect the hydrodynamic and sediment transport conditions at bottom sea levels over a wide region. Based on the above, the exceedance was considered not due to the Project, and was possibly due to natural fluctuation in vicinity of IM10.

Findings for Nickel Exceedances (Mid-Ebb Tide)

Table 4.17 presents a summary of the nickel compliance status at IM and SR stations during mid-ebb tide for the reporting period.

Table 4.17: Summary of Nickel Compliance Status (Mid-Ebb Tide)

	IM1	IM2	IM3	IM4	IM5	IM6	IM7	IM8	IM9	IM10	IM11	IM12
01/08/2017												
03/08/2017												
05/08/2017												
08/08/2017												
10/08/2017												
12/08/2017												
15/08/2017												
17/08/2017												
19/08/2017												
22/08/2017												
24/08/2017												
26/08/2017												
29/08/2017												
31/08/2017												
No. of Exceedance	0	0	0	0	0	0	0	0	2	1	0	0

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

Legend:

	No exceedance of Action and Limit Level
	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 two monitoring days. However, the exceedances occurred at the monitoring stations which were located upstream of the Project during ebb tide, which would unlikely be affected by the Project. Therefore, the exceedances were considered not due to the Project.

Findings for Nickel Exceedances (Mid-Flood Tide)

Table 4.18 presents a summary of the nickel compliance status at IM stations during mid-flood tide for the reporting period.

Table 4.18: Summary of Nickel Compliance Status (Mid-Flood Tide)

	IM1	IM2	IM3	IM4	IM5	IM6	IM7	IM8	IM9	IM10	IM11	IM12
01/08/2017												
03/08/2017												
05/08/2017												
08/08/2017												
10/08/2017												
12/08/2017												
15/08/2017												
17/08/2017												
19/08/2017												
24/08/2017												
26/08/2017												
29/08/2017												
31/08/2017												
No. of Exceedance	0	0	0	0	0	0	0	1	2	1	1	0

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

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
	Exceedance of Limit 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 or Limit Levels 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 was carried out.

As part of the investigation on downstream exceedance events, details of the Project's marine construction activities on concerned monitoring days were collected, as well as any observations during the monitoring. The findings are summarized in **Table 4.19**.

Table 4.19: 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
17/08/2017	DCM works Sand blanket laying	Around 500m	Silt curtain deployed	No	No	No
19/08/2017	DCM works Sand blanket laying	Around 500m	Silt curtain deployed	No	No	No
31/08/2017	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 all construction activities were operating normally with silt curtains deployed as additional measures for DCM and sand blanket laying. The silt curtains were maintained properly.

Nickel is a representative heavy metal that indicates the potential for release of contaminants from contaminated mud pits due to the disturbance of marine sediment within it by DCM activities. Therefore, elevated nickel concentrations due to these activities should be associated with similar elevated SS levels. For the exceedances at IM9 and IM10 on 17 August 2017, it is noted that no SS exceedance was recorded in the same tide and the concentration (4 – 6 mg/L) was well below the Action and Limit Levels. The low SS levels at impact stations indicates that the active DCM works had limited or insignificant effect on downstream water quality. Besides, higher nickel concentrations were recorded during baseline monitoring at IM9 and IM10. Based on these findings, the exceedances were possibly due to natural fluctuation in the vicinity of these monitoring stations, and considered not due to the Project.

For the downstream exceedance events on 19 and 31 August 2017, it is noted that no SS exceedance was recorded in this period and the concentration (12 mg/L) was well below the Action and Limit Levels. The low SS levels at impact stations indicates that the active DCM works had limited or insignificant effect on downstream water quality. Besides, higher nickel concentrations were recorded during baseline monitoring at IM8 and IM9. Based on these findings, the exceedances were possibly due to natural fluctuation in the vicinity of these monitoring stations, and considered not due to the Project.

Conclusions

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

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

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

5 Waste Management

5.1 Monitoring Requirements

In accordance with the Manual, the waste generated from construction activities was audited once per week to determine if wastes are being managed in accordance with the Waste Management Plan (WMP) prepared for the Project, contract-specific WMP, and any statutory and contractual requirements. All aspects of waste management including waste generation, storage, transportation and disposal were assessed during the audits. The Action and Limit Levels of the construction waste are provided in **Table 5.1**.

Table 5.1: Action and Limit Levels for Construction Waste

Monitoring Stations	Action Level	Limit Level
Construction Area	When one valid documented complaint is received	Non-compliance of the WMP, contract-specific WMPs, any statutory and contractual requirements

5.2 Waste Management Status

Weekly monitoring on all works contracts were carried out by the ET to check and monitor the implementation of proper waste management practices during the construction phase.

Recommendations including provision of drip trays and proper chemical waste storage, as well as segregation of recyclables from general refuse. The contractors had taken actions to implement the recommended measures.

Based on the Contractor's information, about 496m^3 of excavated materials were produced from the HDD launching site under P560(R) in the reporting period. The generated excavated materials were temporarily stored at the stockpiling area. The excavated material will be reused in the Project.

Around 120 tonnes of general refuse was disposed of to the designated landfill, 30 kg and 3600L of chemical waste were collected by licensed chemical waste collector in August 2017. Besides, around 555 m^3 of Construction and Demolition (C&D) was reused in other contract and about 62m^3 of C&D material generated from Terminal 2 (T2) expansion works contract was sent to public fill.

No exceedances of the Action or Limit Levels were recorded in the reporting period.

6 Chinese White Dolphin Monitoring

6.1 CWD Monitoring Requirements

In accordance with the Manual, Chinese White Dolphin (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 August 2017, data from 1 June 2017 to 31 August 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 July 2017 (calculated by data from May 2017 to July 2017) and the running quarterly encounter rates of this month (calculated by data from June 2017 to August 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 left the study area or were lost. At that point, the boat returned (off effort) to the next survey line 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 4th, 8th, 9th, 14th, 15th, 21st, 22nd and 25th August 2017, covering all transects in NEL, NWL, AW, WL and SWL survey areas for twice.

A total of around 448.86 km of survey effort was collected from these surveys, with around 79.63% of the total survey effort being conducted under favourable weather condition (i.e. Beaufort Sea State 3 or below with favourable visibility). Details of the survey effort are given in **Appendix D**.

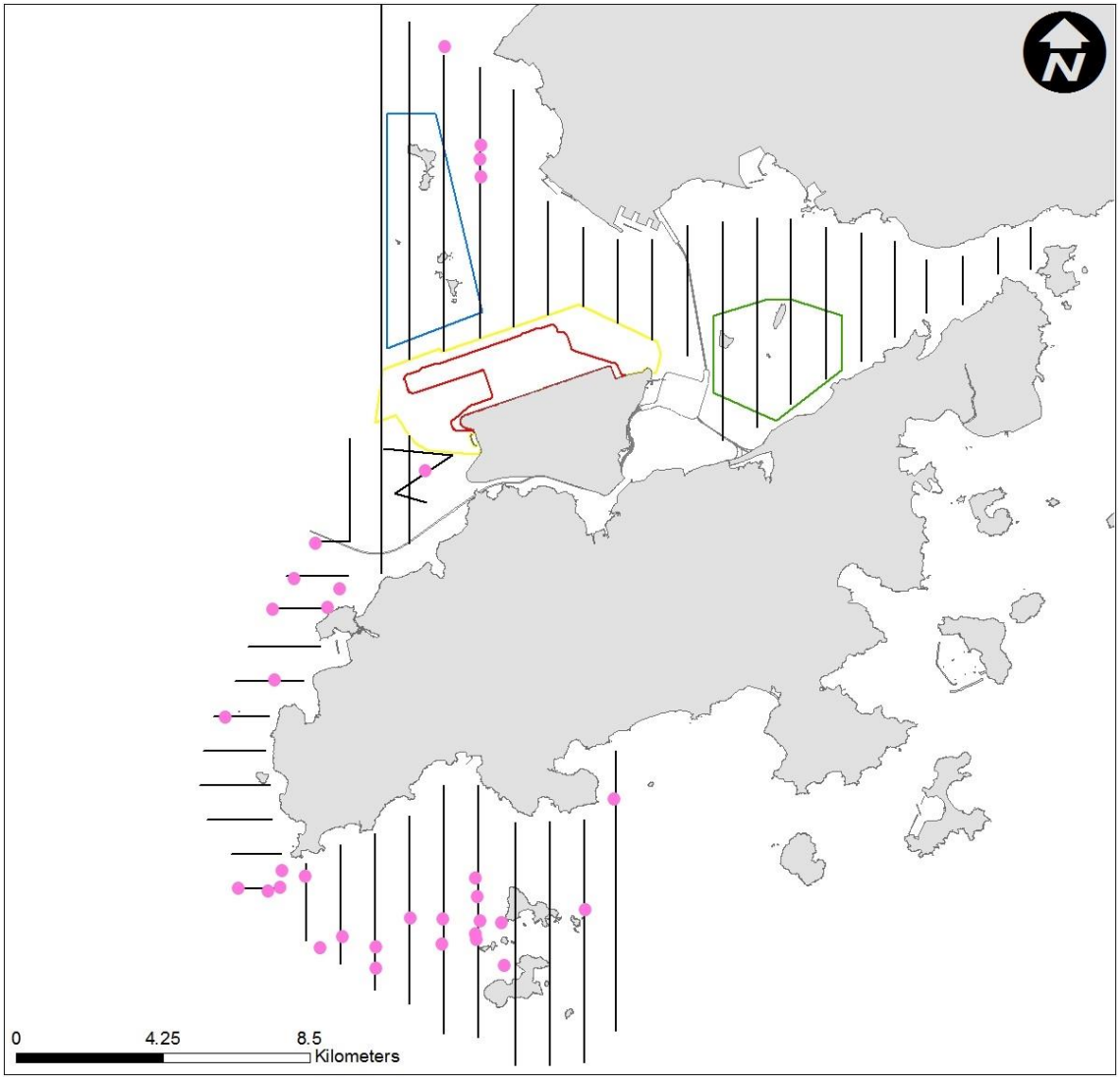
Sighting Distribution

In August 2017, 33 groups of CWDs with 95 individuals were sighted. Amongst these sightings, 29 groups of CWDs with 86 animals 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 D**.

Distribution of all CWD sightings recorded in August 2017 is illustrated in **Figure 6.3**. There were five sightings of CWDs recorded in NWL, with three located at the waters between Lung Kwu Chau and Lung Kwu Tan, one sighted at the northern boundary of NWL survey area while the remaining one recorded at the west of the existing airport on AW transect. In WL, CWDs were sighted at the waters around Tai O and also Fan Lau. In SWL, CWD sightings were mainly recorded at the western waters of Soko Islands, while there were two sightings at the coastal waters recorded near Fan Lau and Lo Kei Wan. No sightings of CWDs were recorded in NEL and also the vicinity of or within the 3RS land-formation footprint.

Figure 6.3: Sightings Distribution of Chinese White Dolphins

[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]



Remarks: Please note that there are 33 pink circles on the map indicating the sighting locations of CWD. Some of them were very close to each other and therefore appear overlapped on this distribution map.

Encounter Rate

Two types of dolphin encounter rates were calculated based on the data from August 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 August 2017, a total of around 357.43 km of survey effort were conducted under Beaufort Sea State 3 or below with favourable visibility, whilst a total number of 29 on-effort sightings with a total number of 86 dolphins from on-effort sightings were obtained under such condition. Calculation of the encounter rates in August 2017 are shown in **Appendix D**.

For the running quarter of the reporting period (i.e., from June 2017 to August 2017), a total of around 1123.03 km of survey effort were conducted under Beaufort Sea State 3 or below with favourable visibility, whilst a total number of 79 on-effort sightings and a total number of 228 dolphins from on-effort sightings were obtained under such condition. Calculation of the running quarterly encounter rates are shown in **Appendix D**.

The STG and ANI of CWD in the whole survey area (i.e. NEL, NWL, AW, WL and SWL) during the month of August 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)
August 2017	8.11	24.06
Running Quarter from June 2017 to August 2017*	7.03	20.30
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 June 2017 to August 2017, containing six sets of transect surveys for all monitoring areas.

Group Size

In August 2017, 33 groups of CWDs with 95 individuals were sighted, and the average group size of CWDs was 2.88 individuals per group. The number of sightings with small group size (i.e. 1-2 individuals) was 18 while that of medium group size (i.e. 3-9) was 15. No large CWD groups (i.e. 10 or more individuals) were recorded in this reporting period.

Activities and Association with Fishing Boats

Three out of 33 sightings of CWDs were recorded engaging in feeding activities in August 2017, whilst one of these sightings was associated with operating gillnetter in SWL.

Mother-calf Pair

In August 2017, three sightings of CWDs were recorded with the presence of mother-and-calf, mother-and-unspotted juvenile or mother-and-spotted juvenile pairs. These three sightings were recorded in NWL, WL and SWL respectively.

6.4.2 Photo Identification

In August 2017, a total number of 28 different CWD individuals were identified for totally 35 times. A summary of photo identification works is presented in **Table 6.5**. Representative photos of these individuals are given in **Appendix D**.

Table 6.5: Summary of Photo Identification

Individual ID	Date of Sighting (dd/mm/yyyy)	Sighting Group No.	Area	Individual ID	Date of Sighting (dd/mm/yyyy)	Sighting Group No.	Area
NLMM020	21/08/2017	4	SWL	SLMM060	15/08/2017	2	SWL
NLMM027	22/08/2017	7	WL	SLMM061	15/08/2017	3	SWL
NLMM028	22/08/2017	7	WL	SLMM062	15/08/2017	5	SWL
NLMM033	22/08/2017	3	WL	SLMM063	15/08/2017	7	SWL
		6	WL	SLMM064	21/08/2017	5	SWL
NLMM040	22/08/2017	6	WL	WLMM003	22/08/2017	7	WL
NLMM041	22/08/2017	6	WL	WLMM008	22/08/2017	11	SWL
NLMM051	22/08/2017	3	WL	WLMM011	22/08/2017	8	WL
		6	WL			10	SWL
SLMM014	22/08/2017	9	WL	WLMM020	15/08/2017	5	SWL
SLMM015	21/08/2017	1	SWL			7	SWL
SLMM023	21/08/2017	1	SWL	WLMM027	21/08/2017	2	SWL
	22/08/2017	9	WL		22/08/2017	1	AW
SLMM034	15/08/2017	3	SWL	WLMM046	21/08/2017	3	SWL
	21/08/2017	1	SWL	WLMM051	14/08/2017	3	WL
SLMM045	22/08/2017	2	WL	WLMM089	22/08/2017	7	WL
SLMM054	15/08/2017	1	SWL	WLMM101	22/08/2017	4	WL
SLMM057	15/08/2017	5	SWL				

6.4.3 Land-based Theodolite Tracking

Survey Effort

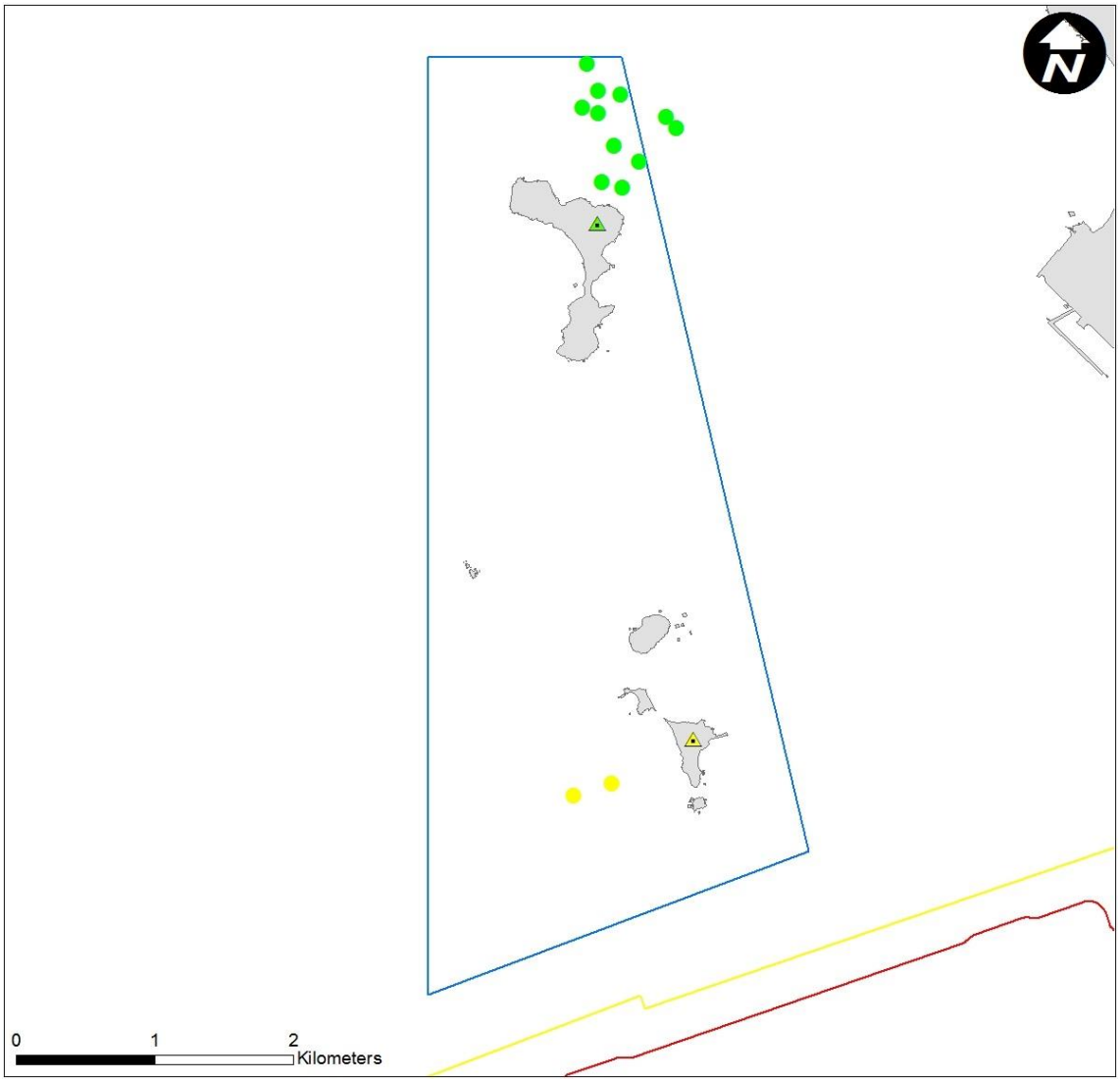
Land-based theodolite tracking surveys were conducted at LKC on 17th, 21st and 22nd August 2017 and at SC on 18th and 25th August 2017, with a total of five days of land-based theodolite tracking survey effort accomplished in this reporting period. A total number of 13 CWD groups were tracked during the surveys. Information of survey effort and CWD groups sighted during these land-based theodolite tracking surveys are presented in **Table 6.6**. Details of the survey effort and CWD groups tracked are presented in **Appendix D**. The first sighting locations of CWD groups tracked at LKC station and SC station during land-based theodolite tracking surveys in August 2017 were depicted in **Figure 6.4**.

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

Land-based Station	No. of Survey Sessions	Survey Effort (hh:mm)	No. of CWD Groups Sighted	CWD Group Sighting per Survey Hour
Lung Kwu Chau	3	18:00	11	0.61
Sha Chau	2	12:00	2	0.17
TOTAL	**5**	**30:00**	**13**	**0.43**

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; Yellow triangle: SC station; Yellow circle: CWD groups off SC; Blue line: SCLKCMP boundary; Red line: 3RS land-formation footprint, Yellow line: 3RS temporary works area 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 re-deployed on 2 August 2017 and positioned at south of Sha Chau Island inside the SCLKCMP with 20% duty cycle (**Figure 6.5**). The EAR deployment is generally for 4-6 weeks prior to data retrieval for analysis. Acoustic data is reviewed to give an indication of CWDs occurrence patterns and to obtain anthropogenic noise information simultaneously. Analysis (by a specialized team of acousticians) involved manually browsing through every acoustic recording and logging the occurrence of dolphin signals. All data will be re-played by computer as well as listened to by human ears for accurate assessment of dolphin group presence. As the period of data collection and analysis takes more than two months, PAM results could not be reported in monthly intervals.

6.6 Site Audit for CWD-related Mitigation Measures

During the reporting period, silt curtains were in place by the contractors for sand blanket laying works, in which dolphin observers were deployed by each contractor in accordance with the Marine Mammal Watching Plan (MMWP). Teams of at least two dolphin observers were deployed at 12 to 16 dolphin observation stations by the contractors for continuous monitoring of the Dolphin Exclusion Zone (DEZ) by all contractors for DCM works in accordance with the DEZ Plan. Trainings for the proposed dolphin observers on the implementation of MMWP and DEZ monitoring were provided by the ET prior to the aforementioned works, with a cumulative total of 459 individuals being trained and the training records kept by the ET. Observations were recorded on DEZ monitoring in this reporting period during site inspection by the ET and IEC. The contractors had taken actions to implement the recommended measures. From the contractors' MMWP observation records and DEZ monitoring records, no dolphin or other marine mammals were observed within or around the silt curtains, whilst there was one record of dolphin sighting within the DEZ of DCM works in this reporting period. According to the contractor's site record, relevant DCM works were suspended in the dolphin sighting event until the DEZ was clear of dolphin for a continuous period of 30 minutes. The contractor's record was also audited by the ET during site inspection. Details for the implementation of DEZ during the incident of dolphin sighting within the DEZ of DCM works are mentioned in **Section 7.4**.

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 C**. Bi-weekly site inspections were also conducted by the IEC. Observations have been recorded in the site inspection checklists and provided to the contractors together with the appropriate follow-up actions where necessary.

The key observations from site inspection and associated recommendations were related to display of licenses and permits at works area, provision and maintenance of drip trays, proper implementation of noise mitigation and surface runoff prevention measures, as well as segregation of waste for recycling. In addition, recommendations were also provided during site inspection on barges, which included provision of drip trays and chemical waste storage, implementation of dust suppression and runoff prevention measures, implementation of silt plume mitigation and prevention measures, ensuring the effectiveness of silt curtains, and proper general waste disposal as well as segregation of recyclables from general refuse.

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

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

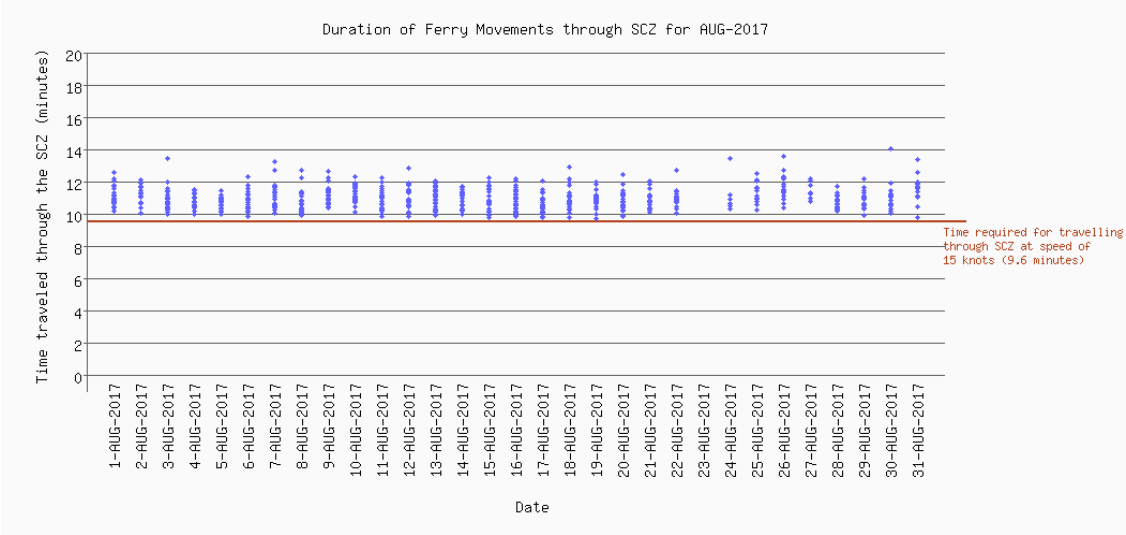
The Marine Travel Routes and Management Plan for High Speed Ferries of SkyPier (the SkyPier Plan) was submitted to the Advisory Council on the Environment (ACE) for comment and subsequently submitted to and approved by EPD in November 2015 under EP Condition 2.10. The approved SkyPier Plan is available 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 August 2017 (i.e., 11 to 91 daily movements) were within the maximum daily cap of 125 daily movements. There were no/ fewer ferry movements on 23 August 2017 (0 movement), 24 August 2017 (9 movements) and 27 August 2017 (7 movements) due to typhoon. Status of compliance with the annual daily average of 99 movements will be further reviewed in the annual EM&A Report.

In total, 744 ferry movements between HKIA SkyPier and Zhuhai / Macau were recorded in August 2017 and the data are presented in **Appendix H**. The time spent by the SkyPier HSFs travelling through the SCZ in August 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 August 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 27 August 2017. Notice was sent to the ferry operator (FO) and the case is under investigation by ET. The investigation result will be presented in the next monthly EM&A report.

One case of minor deviation from the diverted route recorded on 12 July 2017 was followed up after receiving information from the FO. ET's investigation found that the minor route deviation was due to giving way to other vessels to ensure safety. After that, the HSF had returned to the normal route following the SkyPier Plan.

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

Requirements in the SkyPier Plan	1 August to 31 August 2017
Total number of ferry movements recorded and audited	744
Use diverted route and enter / leave SCZ through Gate Access Points	1 deviation, which is under investigation
Speed control in speed control zone	The average speeds taken within the SCZ of all HSFs were within 15 knots (9.7 knots to 14.0 knots), which complied with the SkyPier Plan. The time used by HSFs to travel through SCZ is presented in **Figure 7.1**.
Daily Cap (including all SkyPier HSFs)	11 to 91 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:

- Four 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.
- Three skipper training sessions were held by contractor's Environmental Officer. Competency test was subsequently conducted with the trained skippers by ET.
- 21 skippers were trained by ET and 4 skippers were trained by contractor's Environmental Officer in August 2017. In total, 732 skippers were trained from August 2016 to August 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, entering from non-designated gates and entering no-entry zones 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 Updated EM&A 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 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 on one record of dolphin sighting within the DEZ of DCM works by the contractor. ET has checked the dolphin sighting record and the contractor's site record to audit the implementation of DEZ. Dolphin sighting within the DEZ was recorded on 28 August 2017. The sighting was recorded from a DCM barge working at Area D6 (geographical coordinates: 22°18.837N, 113°53.770E; refer to Figure 1.2 for the location of works area), with the dolphin group being first sighted at 14:12 within the DEZ and last sighted at 14:17 from the DEZ monitoring station on the barge. DCM installation works on DCM barges within the DEZ were ceased by the contractor, and not resumed until the DEZ was clear of dolphin for a continuous period of at least 30 minutes in accordance with the DEZ Plan.

7.5 Ecological Monitoring

In accordance with the Manual, ecological monitoring shall be undertaken monthly at the Horizontal Directional Drilling (HDD) daylighting location on Sheung Sha Chau Island during the HDD construction works period from August to March to identify and evaluate any impacts with appropriate actions taken as required to address and minimise any adverse impact found. During the reporting period, the monthly ecological monitoring at the HDD daylighting location on Sheung Sha Chau observed that HDD works were ongoing under the Contract P560(R) at the daylighting location, and there was no encroachment of any works upon the egretry area nor any significant disturbance to the egrets on the island by the works. Sign of nursery activities by Little Egret were observed on trees located at the previously identified egretry area where it is at the southern side of Sheung Sha Chau Island. 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 D** for reference.

7.6 Status of Submissions under Environmental Permits

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

Table 7.2: Status of Submissions under Environmental Permit

EP Condition	Submission	Status
2.1	Complaint Management Plan	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	
3.1	Updated EM&A Manual	
3.4	Baseline Monitoring Reports	

7.7 Compliance with Other Statutory Environmental Requirements

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

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

7.8.1 Complaints

During the reporting period, a complaint related to sand filling materials of Contract 3206 was received on 8 August 2017. Apart from the investigation conducted by AA under the contractual aspect, investigation on environmental aspect was also conducted by the ET in accordance with the Complaint Management Plan of the Project. According to the EP condition 2.26, a maximum of 10% fines content should be adopted for sand blanket. The ET has been conducting checking of test reports on particle size distribution of sand materials and witnessing sand sampling of the Project on a regular basis. To date, no non-compliance against the EP condition of a maximum of 10% fines content was identified. The ET also reviewed water quality monitoring results of the 3RS EM&A programme obtained 3 months preceding the complaint (i.e. May, June and July 2017) to check for any exceedance cases of suspended solids close to the location of sand blanket laying activities of Contract 3206. It was found that there were no exceedances of Action or Limit levels for suspended solids at all impact monitoring stations from May to July 2017.

7.8.2 Notifications of Summons or Status of Prosecution

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

7.8.3 Cumulative Statistics

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

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

8.1 Construction Programme for the Coming Reporting Period

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

Advanced Works:

Contract P560 (R) Aviation Fuel Pipeline Diversion Works

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

DCM Works:

Contract 3201 to 3205 DCM Works

- Laying of sand blanket and geotextile; and
- DCM works.

Reclamation Works:

Contract 3206 Main Reclamation Works

- Laying of sand blanket.

Terminal 2 Expansion Works:

Contract 3501 Antenna Farm and Sewage Pumping Station

- Excavation and piling works.

Contract 3502 Terminal 2 APM Depot Modification Works

- Removal of existing concrete.

Airfield Works Contract:

Contract 3301 North Runway Crossover Taxiway

- CLP cable ducting work.

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 DCM works 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 C**.

9 Conclusion and Recommendation

The key activities of the Project carried out in the reporting period included DCM works, laying of sand blanket, site office establishment, HDD works, 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 total alkalinity and chromium 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 DO, SS, 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 in accordance with the plan. On the implementation of DEZ Plan, dolphin observers at 12 to 16 dolphin observation stations were deployed for continuous monitoring of the DEZ by all contractors for DCM works in accordance with the DEZ Plan. Trainings for the proposed dolphin observers were provided by the ET prior to the aforementioned works, with the training records kept by the ET. From the contractors' MMWP observation records and DEZ monitoring records, no dolphin or other marine mammals were observed within or around the silt curtains, whilst there was one record of dolphin sighting within the DEZ of DCM works in this reporting period. DCM works were suspended in the dolphin sighting events until the DEZ was clear of dolphin for a continuous period of 30 minutes. 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 Marine Travel Routes and Management Plan for High Speed Ferries of SkyPier (the SkyPier Plan), the daily movements of all SkyPier HSFs in August 2017 were in the range of 11 to 91 daily movements, which are within the maximum daily cap of 125 daily movements. A total of 744 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 (9.7 to 14.0 knots), which were in compliance with the SkyPier Plan. One ferry movement with minor deviation from the diverted route is under investigation by ET. The investigation result will be presented in

the next monthly EM&A report. In summary, the ET and IEC have audited the HSF movements against the SkyPier Plan and conducted follow up investigation or actions accordingly.

On the implementation of the 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, entry from non-designated gates, and entering no-entry zones 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)- Target Daylightling Location

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

RECLAMATION WORKS AREA (please refer to Figure 1.2)

Contract 3501 - Project Site

Contract 3502 - Project Site

Contract 3201- 3206 and AAHK Site Offices

Contract P560 (R)- Launching Site

Contract P560 (R) - Site Office

Contract 3501 - Stockpiling Area

Contract P560 (R) - Stockpiling Area

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

Rev.	Date	Description	Checked
A	31AUG15	FIRST ISSUE	DC

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Title

LOCATIONS OF KEY CONSTRUCTION ACTIVITIES IN THIS REPORTING PERIOD

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

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

Drawing No. FIGURE 1.1

Scale at A3 1 : 30000

Rev. A

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

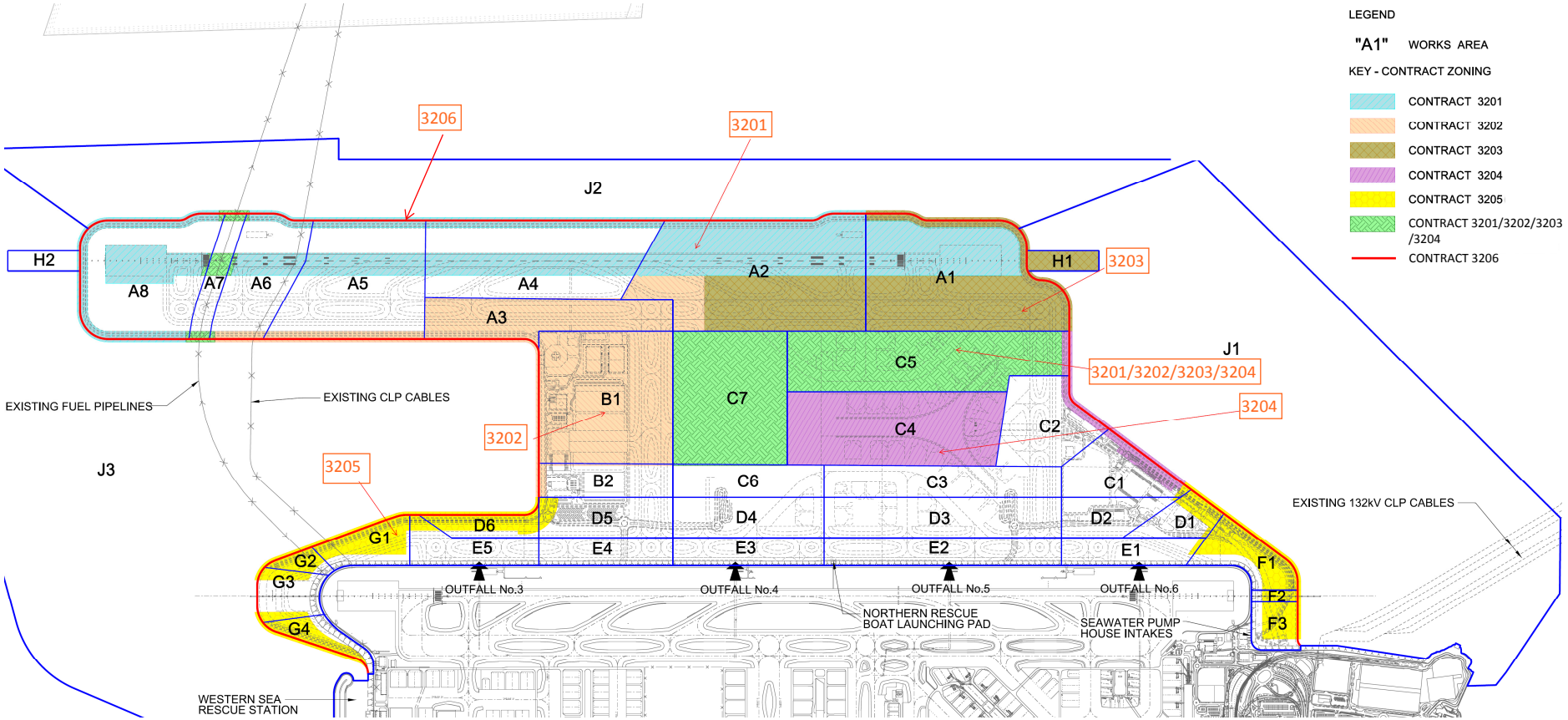

FIGURE 1.2- LOCATIONS OF RECLAMATION WORKS AREA

LEGEND:

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

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

NM1A AR1A
NM2
NM3A
NM4
NM5 AR2
NM6

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

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

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Mott MacDonald

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
SR2
SR3
SR4A
SR5A
SR6
SR7
SR8
IM1
IM2
IM3
IM4
IM5
IM6
IM7
IM8
IM9
IM10
IM11
IM12

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

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

Rev.	Date	Description	Checked
A	02DEC15	FIRST ISSUE	DC
B	04MAY16	GENERAL REVISION	RO
C	06JUN16	GENERAL REVISION	LC
D	02AUG17	GENERAL REVISION	RO

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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

800000 E
805000 E
810000 E
815000 E
820000 E
825000 E
830000 E
835000 E
840000 E
845000 E
830000 N
825000 N
820000 N
815000 N
810000 N
805000 N

NORTHWEST LANTAU
NORTHEAST LANTAU
SOUTHWEST LANTAU
AIRPORT WEST
WEST LANTAU

LEGEND:
- HKSAR BOUNDARY
- LAND FORMATION FOOTPRINT
- TEMPORARY WORKS AREA BOUNDARY
- DOLPHIN VESSEL SURVEY TRANSECT ROUTE
- DOLPHIN VESSEL SURVEY TRANSECT ROUTE

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

0 1 2 3 4 km
1 : 125 000 SCALE BAR

Rev.	Date	Description	Checked
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C	06FEB17	GENERAL REVISION	JT
D	01MAR17	GENERAL REVISION	JT

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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
HKSAR BOUNDARY
沙洲及龍鼓洲海岸公園
SHA CHAU AND LUNG KWU CHAU MARINE PARK
LEGEND:
LAND FORMATION FOOTPRINT
HONG KONG INTERNATIONAL AIRPORT
LAND BASED SURVEY LOCATION
0 500 1000 1500 2000 m
1 : 45,000 SCALE BAR

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A	02DEC15	FIRST ISSUE	JC
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Title

LAND BASED DOLPHIN MONITORING IN BASELINE AND CONSTRUCTION PHASES

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

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

Drawing No. FIGURE 6.2

Scale at A3 1 : 45000

Rev. B

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

804000 E
806000 E
808000 E
810000 E
812000 N
814000 E
816000 E
818000 E
820000 E
828000 N
826000 N
824000 N
822000 N
820000 N
818000 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:

PROPOSED LAND FORMATION FOOTPRINT

HONG KONG INTERNATIONAL AIRPORT

AUTONOMOUS PASSIVE ACOUSTIC MONITORING LOCATION

青山灣
CASTLE PEAK BAY
TSING SHAN WAN

小冷水
SIU LANG SHUI

PILLAR POINT

BUTTERFLY BEACH

GOLDEN BEACH

PEARL ISLAND

小磨刀
SIU MO TO

大小磨刀
THE BROTHERS

大磨刀
TAI MO TO

TSZ KAN CHAU

大白灣
DISCOVERY BAY
TAI PAK

東涌
TUNG CHUNG

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

Rev.	Date	Description	Checked
A	29AUG17	FIRST ISSUE	JT

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Title

LOCATION FOR AUTONOMOUS PASSIVE ACOUSTIC MONITORING

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

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

Drawing No.

FIGURE 6.5

Scale at A3 1 : 45000

Rev. A

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

Appendix A. Contract Description

Contract Description

Contract No.	Contract Title	Contractor	Key Construction Activities
P560 (R)	Aviation Fuel Pipeline Diversion Works	Langfang Huayuan Mechanical and Electrical Engineering Co., Ltd.	Diversion of the existing submarine aviation fuel pipelines will use a horizontal directional drilling (HDD) method forming two rock drill holes by drilling through bedrock from a launching site located at the west of the airport island to a daylighting point adjacent to the offshore receiving platform at Sha Chau. Two new pipelines will be installed through the drilled tunnels. The total length is approximately 5 km. Drilling works will proceed from the HDD launching site at the airport island.
3201	Deep Cement Mixing (Package 1)	Penta-Ocean-China State-Dong-Ah Joint Venture	The works covered by the Contract 3201, 3202, 3203 and 3204 comprise ground improvement of seabed using Deep Cement Mixing (DCM) method, the major construction activities including without limitation the following · Geophysical surveys; · Supply and placing of geotextile and sand blanket under seawalls; · Supply, maintenance, installation and removal of silt curtain systems; · Preliminary construction trails; · Supply and installation of DCM clusters within the works areas; and · Coring, sampling and testing of DCM treated soils and reporting works.
3202	Deep Cement Mixing (Package 2)	Samsung-BuildKing Joint Venture	
3203	Deep Cement Mixing (Package 3)	Sambo E&C Co.,Ltd	
3204	Deep Cement Mixing (Package 4)	CRBC-SAMBO Joint Venture	
3205	Deep Cement Mixing (Package 5)	Bachy Soletanche- Sambo Joint Venture	The works covered by the Contract 3205 comprise ground improvement of seabed using Deep Cement Mixing (DCM) method, the major construction activities including without limitation the following · Geophysical surveys; · Supply and placing of geotextile and sand blanket under seawalls; · Supply, maintenance, installation and removal of silt curtain systems; · Preliminary construction trails; · Supply and installation of DCM clusters within the works areas; and · Coring, sampling and testing of DCM treated soils and reporting works.

3206	Reclamation Contract	ZHEC-CCCC-CDC Joint Venture	The works covered by the Contract 3206 comprise the formation of approximately 650 hectares of land north of the existing airport island for the project, the major construction activities including without limitation the following · Site clearance and demolition; · Geotechnical and ground improvement works; · Seawall construction; · Marine and land filling works; and · Civil works.
3501	Antenna Farm and Sewage Pumping Station	Build King Construction Limited	The works covered by the Contract 3501 comprise the construction of antenna farm and sewage pumping station. The major construction activities include without limitation the following: · Civil and structural engineering works; · Building services works; · Architectural builder's works and finishes; · Trenchless excavation for sewage rising mains; and · All associated works.
3502	Terminal 2 APM Depot Modification Works	Build King Construction Limited	The works covered by the Contract 3502 comprise the modification of the existing APM Depot in the basement of T2, for the APM line running between T1 East Hall, West Hall and Midfield Concourse. The major construction activities include without limitation the following: · Removal of the existing steel guide rails; · Removal of the existing mass concrete fill and re-construction of the reinforced concrete fill; · Construction of separation walls and walkways; · Removal of re-provision of existing building services and airport systems; and · All associated testing and commissioning works.

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

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

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			Air Quality Impact – Construction Phase		
5.2.6.2	2.1	-	**Dust Control Measures** § 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	N/A
			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 § Double layer 'Type III' silt curtains to be applied around the active eastern works areas prior to commencement of sand blanket laying activities. The silt curtains shall be configured to minimise SS release during ebb tides. A silt curtain efficiency test shall be conducted to validate the performance of the silt curtains;	Within construction site / Duration of the construction phase	NA *(The arrangement of silt curtain has been modified. The details can be referred to Silt Curtain Deployment Plan)
			§ Double layer silt curtains to enclose WSRs C7a and silt screens installed at the intake points for both WSR C7a and C8 prior to commencement of construction; and		For C7a, I For C8, N/A *(The requirement of silt curtain / screen has been modified. The details can be referred to Silt Curtain Deployment Plan)
			§ The silt curtains and silt screens should be regularly checked and maintained.		I
			Specific Measures to be Applied to Land Formation Activities during Marine Filling Works § Double layer 'Type II' or 'Type III' silt curtains to be applied around the eastern openings between partially completed seawalls prior to commencement of marine filling activities. The silt curtains shall be configured to minimise SS release during ebb tides;	Within construction site / Duration of the construction phase	N/A *(The arrangement of silt curtain has been modified. The details can be referred to Silt Curtain Deployment Plan)
			§ Double layer silt curtains to be applied at the south-western opening prior to commencement of marine filling activities;		N/A *(The arrangement of silt curtain has been modified. The details can be referred to Silt Curtain Deployment Plan)
			§ Double layer silt curtain to enclose WSR C7a and silt screens installed at the intake points for both WSR C7a and C8 prior to commencement of marine filling activities; and		N/A *(The requirement of silt curtain / screen has been modified. The details can be referred to Silt Curtain Deployment Plan)
			§ The silt curtains and silt screens should be regularly checked and maintained.		N/A

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

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

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

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

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

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

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			§ After completion of SI, the Contamination Assessment Report (CAR) will be prepared and submitted to EPD for approval prior to start of the proposed construction works at the golf course, the underground and above-ground fuel storage tank areas, emergency power generation units, airside petrol filling station and fuel tank room.		N/A
			§ 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.	N/A
Table 15.6	12.3	-	**CM10 -** Land formation works shall be followed with advanced hydroseeding around taxiways and runways as soon as practical.	All affected existing grass areas around runways and verges/Duration of works; Upon handover and completion of works.	N/A
			Cultural Heritage Impact – Construction Phase		
			Not applicable.		

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

Notes:

I= implemented where applicable;

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

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

Appendix C. Monitoring Schedule

Monitoring Schedule of This Reporting Period

Aug-17

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1 Site Inspection AR1A,AR2 NM1A, NM3A,NM4, NM5 WQ General & Regular DCM mid-ebb: 08:30 mid-flood: 15:14	**2**	**3** Site Inspection NM6 WQ General & Regular DCM mid-ebb: 10:27 mid-flood: 17:42	**4** Site Inspection CWD Survey (Vessel)	**5** WQ General & Regular DCM mid-ebb: 11:45 mid-flood: 18:57
6	**7** AR1A,AR2 NM1A, NM3A,NM4, NM5	**8** Site Inspection CWD Survey (Vessel) WQ General & Regular DCM mid-ebb: 13:31 mid-flood: 20:27	**9** Site Inspection CWD Survey (Vessel)	**10** Site Inspection NM6 WQ General & Regular DCM mid-ebb: 14:39 mid-flood: 08:03	**11** Site Inspection AR1A,AR2	**12** WQ General & Regular DCM mid-ebb: 15:52 mid-flood: 09:32
13	**14** CWD Survey (Vessel)	**15** Site Inspection CWD Survey (Vessel) NM6 WQ General & Regular DCM mid-ebb: 18:33 mid-flood: 12:55	**16** Site Inspection	**17** Site Inspection CWD Survey (Land-based) AR1A, AR2 NM1A, NM3A, NM4, NM5 WQ General & Regular DCM mid-ebb: 08:58 mid-flood: 16:10	**18** Site Inspection CWD Survey (Land-based)	**19** WQ General & Regular DCM mid-ebb: 11:03 mid-flood: 18:14
20	**21** CWD Survey (Vessel, Land-based) NM6	**22** CWD Survey (Vessel, Land-based) NM3A, NM4 WQ General & Regular DCM mid-ebb: 13:26 mid-flood^: 20:14	**23**	**24** Site Inspection AR1A* NM1A WQ General & Regular DCM mid-ebb: 14:48 mid-flood: 08:13	**25** Site Inspection CWD Survey (Vessel, Land-based) AR2* NM5	**26** WQ General & Regular DCM mid-ebb: 15:57 mid-flood: 09:39
27	**28**	**29** Site Inspection AR1A, AR2 NM1A, NM3A, NM4, NM5 WQ General & Regular DCM mid-ebb: 18:21 mid-flood: 12:52	**30** Site Inspection Ecological Monitoring	**31** Site Inspection NM6 WQ General & Regular DCM mid-ebb: 08:35 mid-flood: 16:39		

Notes:

CWD - Chinese White Dolphin

Air quality and Noise Monitoring Station

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

WQ - Water Quality
DCM - Deep Cemenet Mixing
* Rescheduled due to adverse weather
^ Cancelled due to adverse weather

Tentative Monitoring Schedule of Next Reporting Period

Sep-17

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1 Site Inspection	**2** WQ General & Regular DCM mid-ebb: 10:32 mid-flood: 17:58
3	**4** AR1A, AR2 NM1A, NM3A, NM4, NM5	**5** Site Inspection NM6 WQ General & Regular DCM mid-ebb: 12:30 mid-flood: 19:20	**6** Site Inspection CWD Survey (Land-based)	**7** Site Inspection WQ General & Regular DCM mid-ebb: 13:39 mid-flood: 07:12	**8** Site Inspection AR1A, AR2	**9** WQ General & Regular DCM mid-ebb: 14:52 mid-flood: 08:40
10	**11** CWD Survey (Vessel)	**12** Site Inspection CWD Survey (Vessel) NM6 WQ General & Regular DCM mid-ebb: 17:13 mid-flood: 11:36	**13** Site Inspection CWD Survey (Vessel)	**14** Site Inspection CWD Survey (Vessel, Land-based) AR1A, AR2 NM1A, NM3A, NM4, NM5 WQ General & Regular DCM mid-ebb: 07:03 mid-flood: 14:49	**15** Site Inspection	**16** WQ General & Regular DCM mid-ebb: 09:51 mid-flood: 17:13
17	**18** CWD Survey (Vessel, Land-based) NM6	**19** Site Inspection CWD Survey (Vessel) WQ General & Regular DCM mid-ebb: 12:26 mid-flood: 19:04	**20** Site Inspection CWD Survey (Vessel) AR1A, AR2 NM1A, NM3A, NM4, NM5	**21** Site Inspection CWD Survey (Vessel) WQ General & Regular DCM mid-ebb: 13:46 mid-flood: 07:22	**22** Site Inspection CWD Survey (Land-based)	**23** WQ General & Regular DCM mid-ebb: 14:53 mid-flood: 08:45
24	**25** CWD Survey (Land-based)	**26** Site Inspection AR1A, AR2 NM1A, NM3A, NM4, NM5 WQ General & Regular DCM mid-ebb: 16:43 mid-flood: 11:06	**27** Site Inspection	**28** Site Inspection Ecological Monitoring NM6 WQ General & Regular DCM mid-ebb: 06:05 mid-flood: 18:39	**29** Site Inspection AR1A, AR2	**30** WQ General & Regular DCM mid-ebb: 08:41 mid-flood: 16:50

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 D. Monitoring Results

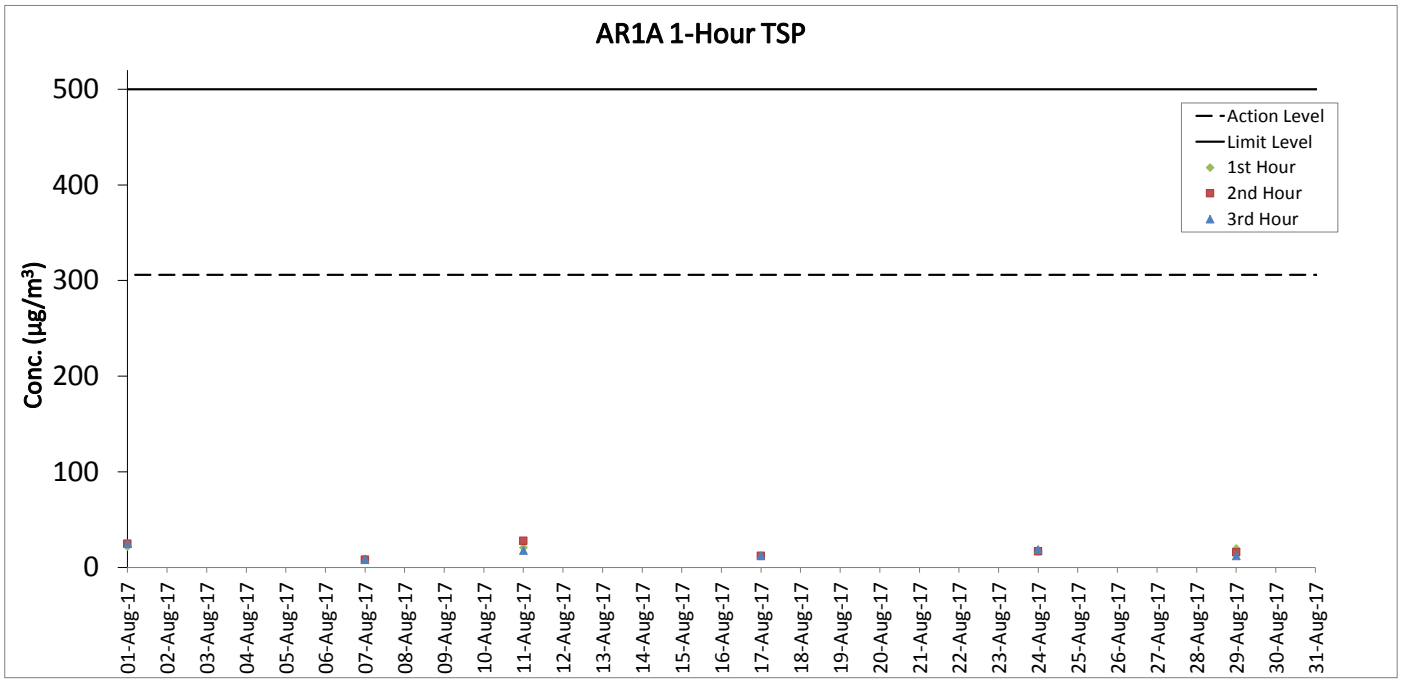
Air Quality Monitoring Results

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

Date	Time	Weather	Wind Speed (m/s)	Wind Direction (deg)	1-hr TSP ($\mu g/m^3$)	Action Level ($\mu g/m^3$)	Limit Level ($\mu g/m^3$)
01-Aug-17	13:00	Fine	7.5	228	22	306	500
01-Aug-17	14:00	Fine	5.9	236	25	306	500
01-Aug-17	15:00	Fine	5.2	226	25	306	500
07-Aug-17	13:10	Sunny	8.3	236	9	306	500
07-Aug-17	14:10	Sunny	8.3	238	8	306	500
07-Aug-17	15:10	Sunny	8.0	235	8	306	500
11-Aug-17	08:50	Sunny	4.9	202	21	306	500
11-Aug-17	09:50	Sunny	5.1	197	28	306	500
11-Aug-17	10:50	Sunny	5.7	197	18	306	500
17-Aug-17	13:00	Sunny	3.6	289	12	306	500
17-Aug-17	14:00	Sunny	3.7	286	12	306	500
17-Aug-17	15:00	Sunny	4.2	269	12	306	500
24-Aug-17	14:07	Fine	6.4	123	17	306	500
24-Aug-17	15:07	Fine	5.8	150	17	306	500
24-Aug-17	16:07	Fine	7.2	127	19	306	500
29-Aug-17	13:00	Sunny	4.2	282	20	306	500
29-Aug-17	14:00	Sunny	3.8	290	16	306	500
29-Aug-17	15:00	Sunny	3.3	279	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-Aug-17	08:50	Sunny	6.8	228	44	298	500
01-Aug-17	09:50	Sunny	7.6	233	46	298	500
01-Aug-17	10:50	Sunny	7.3	225	44	298	500
07-Aug-17	09:00	Sunny	5.1	238	22	298	500
07-Aug-17	10:00	Sunny	4.7	246	24	298	500
07-Aug-17	11:00	Sunny	4.4	244	27	298	500
11-Aug-17	08:45	Sunny	5.8	206	35	298	500
11-Aug-17	09:45	Sunny	5.4	196	37	298	500
11-Aug-17	10:45	Sunny	5.2	203	34	298	500
17-Aug-17	08:50	Sunny	1.9	324	24	298	500
17-Aug-17	09:50	Sunny	2.6	290	25	298	500
17-Aug-17	10:50	Sunny	2.7	309	26	298	500
25-Aug-17	09:15	Sunny	3.1	65	37	298	500
25-Aug-17	10:15	Sunny	4.9	57	34	298	500
25-Aug-17	11:15	Sunny	4.5	83	38	298	500
29-Aug-17	08:45	Sunny	2.3	42	26	298	500
29-Aug-17	09:45	Sunny	2.4	39	25	298	500
29-Aug-17	10:45	Sunny	3.1	311	34	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-Aug-17
02-Aug-17
03-Aug-17
04-Aug-17
05-Aug-17
06-Aug-17
07-Aug-17
08-Aug-17
09-Aug-17
10-Aug-17
11-Aug-17
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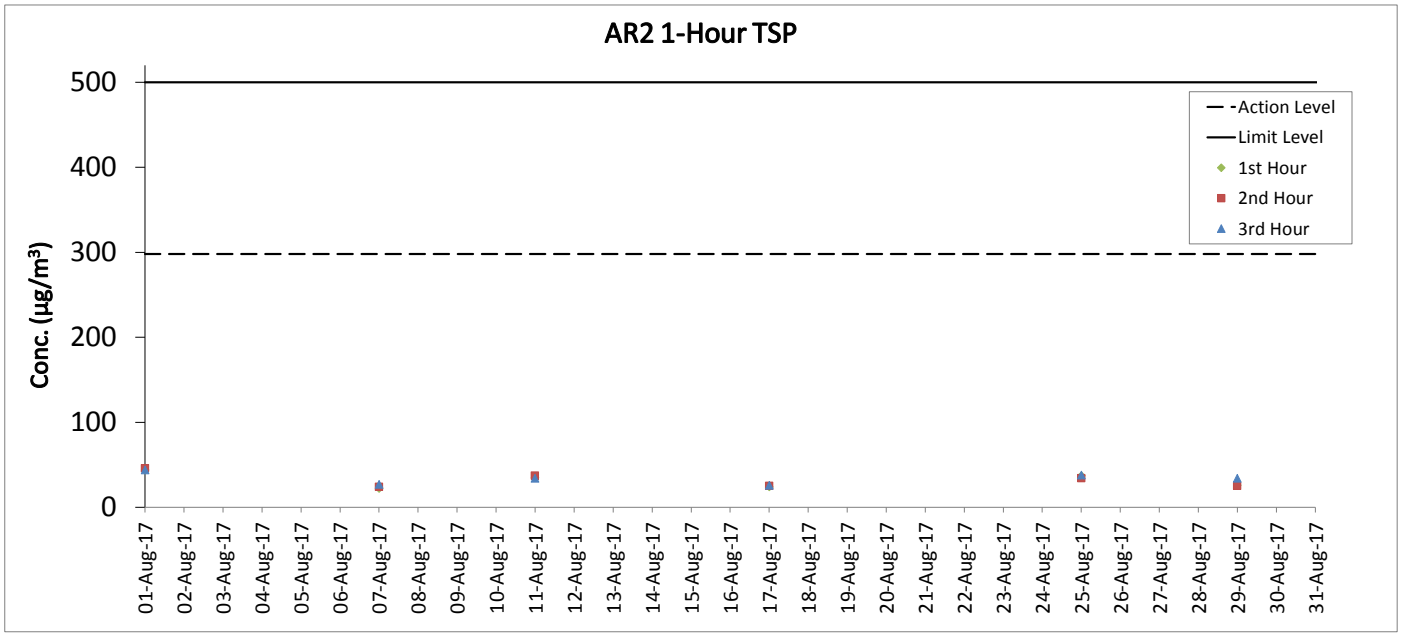
30-Aug-17
31-Aug-17


AR2 1-Hour TSP
Conc. (µg/m³)
500
400
300
200
100
0
Action Level
Limit Level
1st Hour
2nd Hour
3rd Hour
01-Aug-17
02-Aug-17
03-Aug-17
04-Aug-17
05-Aug-17
06-Aug-17
07-Aug-17
08-Aug-17
09-Aug-17
10-Aug-17
11-Aug-17
12-Aug-17
13-Aug-17
14-Aug-17
15-Aug-17
16-Aug-17
17-Aug-17
18-Aug-17
19-Aug-17
20-Aug-17
21-Aug-17
22-Aug-17
23-Aug-17
24-Aug-17
25-Aug-17
26-Aug-17
27-Aug-17
28-Aug-17
29-Aug-17
30-Aug-17
31-Aug-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-Aug-17	Fine	13:44	71.5	56.0	71
01-Aug-17	Fine	13:49	72.0	56.5	
01-Aug-17	Fine	13:54	71.0	56.0	
01-Aug-17	Fine	13:59	72.0	56.5	
01-Aug-17	Fine	14:04	71.0	56.0	
01-Aug-17	Fine	14:09	70.5	56.0	
07-Aug-17	Sunny	16:27	71.0	57.0	70
07-Aug-17	Sunny	16:32	71.5	55.5	
07-Aug-17	Sunny	16:37	70.5	56.5	
07-Aug-17	Sunny	16:42	71.0	57.0	
07-Aug-17	Sunny	16:47	70.5	56.5	
07-Aug-17	Sunny	16:52	70.0	59.0	
17-Aug-17	Sunny	13:06	71.0	53.5	72
17-Aug-17	Sunny	13:11	71.5	54.5	
17-Aug-17	Sunny	13:16	74.0	55.5	
17-Aug-17	Sunny	13:21	71.0	54.0	
17-Aug-17	Sunny	13:26	71.5	54.0	
17-Aug-17	Sunny	13:31	73.0	55.5	
24-Aug-17	Sunny	14:25	71.5	54.5	70
24-Aug-17	Sunny	14:30	71.0	55.5	
24-Aug-17	Sunny	14:35	70.5	53.5	
24-Aug-17	Sunny	14:40	71.5	55.5	
24-Aug-17	Sunny	14:45	70.0	54.0	
24-Aug-17	Sunny	14:50	71.0	54.0	
29-Aug-17	Sunny	13:08	71.0	55.0	71
29-Aug-17	Sunny	13:13	72.5	56.0	
29-Aug-17	Sunny	13:18	70.0	55.5	
29-Aug-17	Sunny	13:23	71.0	55.5	
29-Aug-17	Sunny	13:28	72.5	56.0	
29-Aug-17	Sunny	13:33	71.0	56.0	

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

Noise Measurement Results
Station: NM3A- Site Office

Date	Weather	Time	Measured L_{10} dB(A)	Measured L_{90} dB(A)	$L_{eq(30mins)}$ dB(A)
01-Aug-17	Fine	09:12	62.5	59.0	62
01-Aug-17	Fine	09:17	65.5	60.0	
01-Aug-17	Fine	09:22	62.0	60.0	
01-Aug-17	Fine	09:27	62.5	59.5	
01-Aug-17	Fine	09:32	61.0	59.5	
01-Aug-17	Fine	09:37	63.0	59.5	
07-Aug-17	Sunny	09:21	63.5	61.0	62
07-Aug-17	Sunny	09:26	63.0	61.0	
07-Aug-17	Sunny	09:31	63.5	61.0	
07-Aug-17	Sunny	09:36	63.5	61.0	
07-Aug-17	Sunny	09:41	63.5	61.0	
07-Aug-17	Sunny	09:46	62.5	61.0	
17-Aug-17	Sunny	09:08	63.0	61.0	63
17-Aug-17	Sunny	09:13	66.0	62.0	
17-Aug-17	Sunny	09:18	63.5	62.0	
17-Aug-17	Sunny	09:23	63.5	61.5	
17-Aug-17	Sunny	09:28	63.0	61.5	
17-Aug-17	Sunny	09:33	63.5	62.0	
22-Aug-17	Fine	15:25	62.5	61.5	62
22-Aug-17	Fine	15:30	63.0	61.5	
22-Aug-17	Fine	15:35	62.5	61.5	
22-Aug-17	Fine	15:40	63.5	61.5	
22-Aug-17	Fine	15:45	63.5	61.5	
22-Aug-17	Fine	15:50	63.0	61.0	
29-Aug-17	Sunny	09:24	68.5	61.0	61
29-Aug-17	Sunny	09:29	67.0	60.5	
29-Aug-17	Sunny	09:34	68.0	60.5	
29-Aug-17	Sunny	09:39	68.0	60.0	
29-Aug-17	Sunny	09:44	69.5	60.5	
29-Aug-17	Sunny	09:49	70.0	61.0	

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-Aug-17	Sunny	13:30	63.0	58.0	64
01-Aug-17	Sunny	13:35	63.5	59.5	
01-Aug-17	Sunny	13:40	63.0	59.5	
01-Aug-17	Sunny	13:45	61.5	58.0	
01-Aug-17	Sunny	13:50	63.5	60.0	
01-Aug-17	Sunny	13:55	61.5	59.0	
07-Aug-17	Sunny	14:00	63.5	61.0	60
07-Aug-17	Sunny	14:05	64.5	61.0	
07-Aug-17	Sunny	14:10	65.5	62.0	
07-Aug-17	Sunny	14:15	66.5	63.0	
07-Aug-17	Sunny	14:20	66.0	62.5	
07-Aug-17	Sunny	14:25	64.0	60.0	
17-Aug-17	Fine	14:45	67.5	61.0	65
17-Aug-17	Fine	14:50	63.0	60.0	
17-Aug-17	Fine	14:55	64.0	60.0	
17-Aug-17	Fine	15:00	62.5	60.0	
17-Aug-17	Fine	15:05	63.0	60.0	
17-Aug-17	Fine	15:10	63.0	60.0	
22-Aug-17	Fine	10:38	62.0	59.5	65
22-Aug-17	Fine	10:43	63.5	59.5	
22-Aug-17	Fine	10:48	64.0	60.0	
22-Aug-17	Fine	10:53	64.0	60.0	
22-Aug-17	Fine	10:58	63.5	60.0	
22-Aug-17	Fine	11:03	63.5	60.0	
29-Aug-17	Sunny	13:35	64.5	59.5	65
29-Aug-17	Sunny	13:40	63.5	59.5	
29-Aug-17	Sunny	13:45	63.5	59.0	
29-Aug-17	Sunny	13:50	63.5	60.5	
29-Aug-17	Sunny	13:55	64.5	60.5	
29-Aug-17	Sunny	14:00	63.0	60.5	

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

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

Date	Weather	Time	Measured L_{10} dB(A)	Measured L_{90} dB(A)	$L_{eq(30mins)}$ dB(A)
01-Aug-17	Sunny	10:00	61.5	47.5	57
01-Aug-17	Sunny	10:05	56.0	47.0	
01-Aug-17	Sunny	10:10	53.0	49.0	
01-Aug-17	Sunny	10:15	56.5	48.5	
01-Aug-17	Sunny	10:20	54.5	47.5	
01-Aug-17	Sunny	10:25	60.0	48.5	
07-Aug-17	Sunny	10:15	55.0	49.5	57
07-Aug-17	Sunny	10:20	54.0	49.0	
07-Aug-17	Sunny	10:25	57.0	47.5	
07-Aug-17	Sunny	10:30	56.0	47.5	
07-Aug-17	Sunny	10:35	56.5	48.5	
07-Aug-17	Sunny	10:40	55.5	47.0	
17-Aug-17	Sunny	09:50	68.5	47.5	61
17-Aug-17	Sunny	09:55	55.0	47.0	
17-Aug-17	Sunny	10:00	56.0	49.0	
17-Aug-17	Sunny	10:05	55.0	47.5	
17-Aug-17	Sunny	10:10	69.0	49.5	
17-Aug-17	Sunny	10:15	56.5	48.5	
25-Aug-17	Sunny	10:24	58.5	52.0	59
25-Aug-17	Sunny	10:29	62.0	52.0	
25-Aug-17	Sunny	10:34	56.5	50.0	
25-Aug-17	Sunny	10:39	56.5	46.5	
25-Aug-17	Sunny	10:44	60.0	46.0	
25-Aug-17	Sunny	10:49	60.0	48.0	
29-Aug-17	Sunny	09:50	57.0	50.0	53
29-Aug-17	Sunny	09:55	56.0	50.0	
29-Aug-17	Sunny	10:00	60.5	52.5	
29-Aug-17	Sunny	10:05	57.0	50.5	
29-Aug-17	Sunny	10:10	60.0	52.0	
29-Aug-17	Sunny	10:15	59.5	51.0	

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

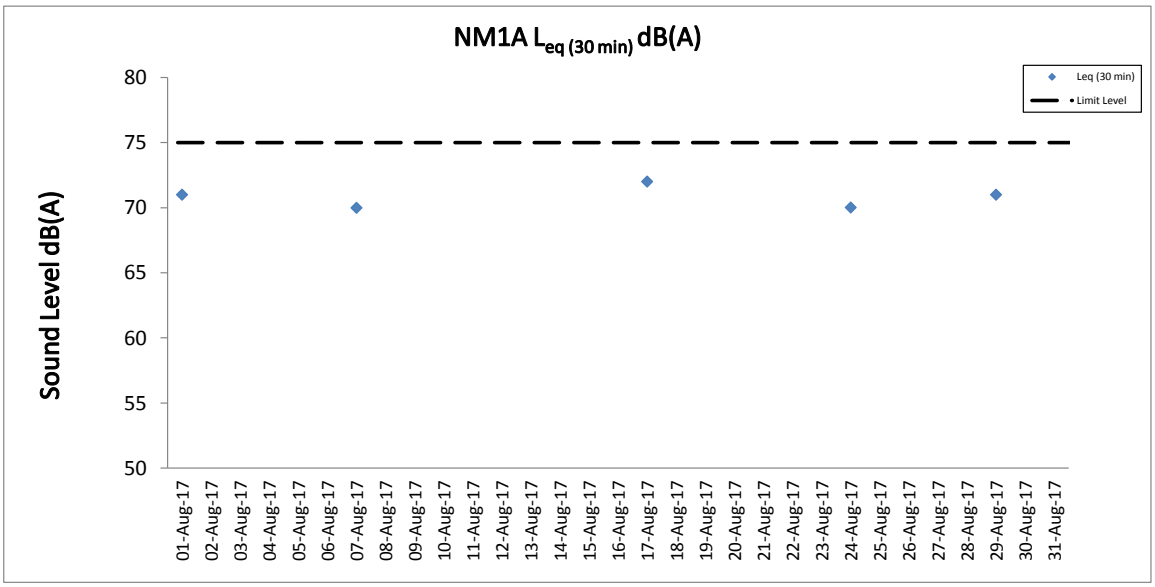
Noise Measurement Results

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)
03-Aug-17	Cloudy	09:39	71.5	60.0	68
03-Aug-17	Cloudy	09:44	72.5	55.5	
03-Aug-17	Cloudy	09:49	72.5	58.5	
03-Aug-17	Cloudy	09:54	71.0	56.0	
03-Aug-17	Cloudy	09:59	71.5	57.0	
03-Aug-17	Cloudy	10:04	75.5	57.5	
10-Aug-17	Cloudy	09:37	72.0	58.0	71
10-Aug-17	Cloudy	09:42	77.5	59.0	
10-Aug-17	Cloudy	09:47	77.5	65.5	
10-Aug-17	Cloudy	09:52	70.5	58.5	
10-Aug-17	Cloudy	09:57	66.5	59.0	
10-Aug-17	Cloudy	10:02	66.5	57.0	
15-Aug-17	Sunny	09:40	72.0	49.0	70
15-Aug-17	Sunny	09:45	75.0	49.0	
15-Aug-17	Sunny	09:50	73.0	48.5	
15-Aug-17	Sunny	09:55	73.5	56.0	
15-Aug-17	Sunny	10:00	63.5	49.5	
15-Aug-17	Sunny	10:05	72.5	50.5	
21-Aug-17	Sunny	09:41	76.0	52.5	73
21-Aug-17	Sunny	09:46	75.0	51.5	
21-Aug-17	Sunny	09:51	75.5	51.0	
21-Aug-17	Sunny	09:56	76.0	5.0	
21-Aug-17	Sunny	10:01	73.5	52.0	
21-Aug-17	Sunny	10:06	73.5	53.0	
31-Aug-17	Sunny	09:39	73.5	53.5	71
31-Aug-17	Sunny	09:44	77.5	54.0	
31-Aug-17	Sunny	09:49	72.5	52.5	
31-Aug-17	Sunny	09:54	74.0	52.5	
31-Aug-17	Sunny	09:59	76.5	54.0	
31-Aug-17	Sunny	10:04	72.0	54.0	

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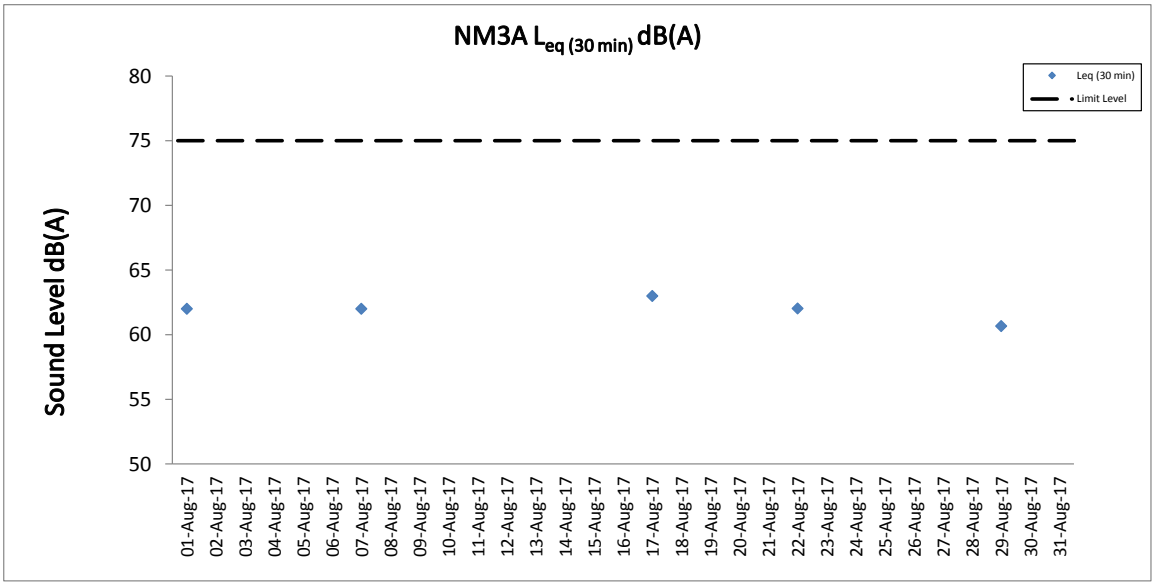
NM3A $L_{eq\ (30\ min)}$ dB(A)
Sound Level dB(A)
80
75
70
65
60
55
50
Leq (30 min)
Limit Level
01-Aug-17
02-Aug-17
03-Aug-17
04-Aug-17
05-Aug-17
06-Aug-17
07-Aug-17
08-Aug-17
09-Aug-17
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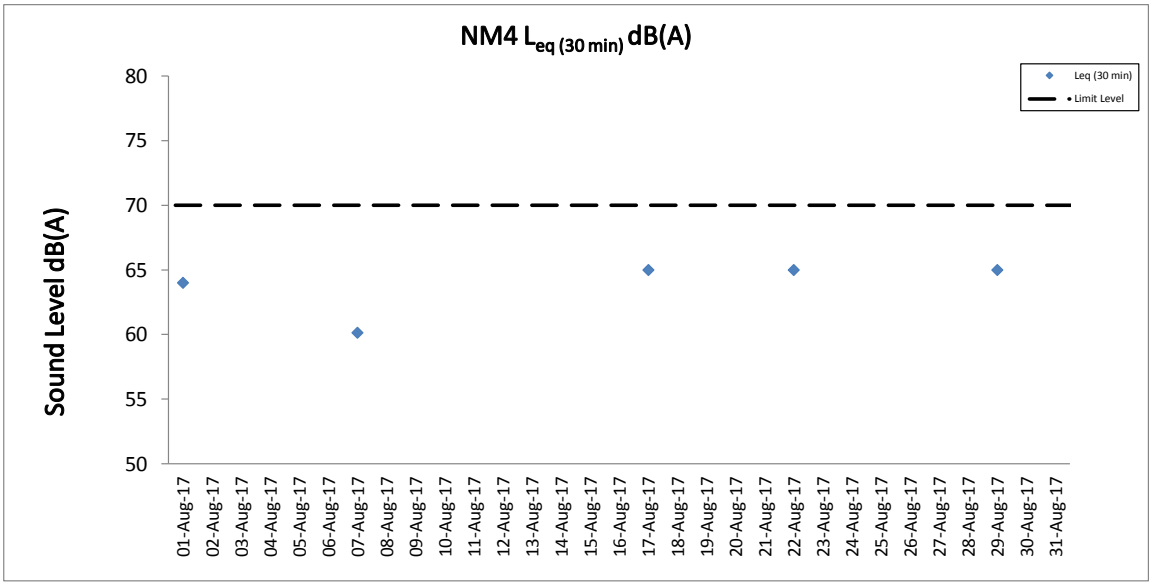
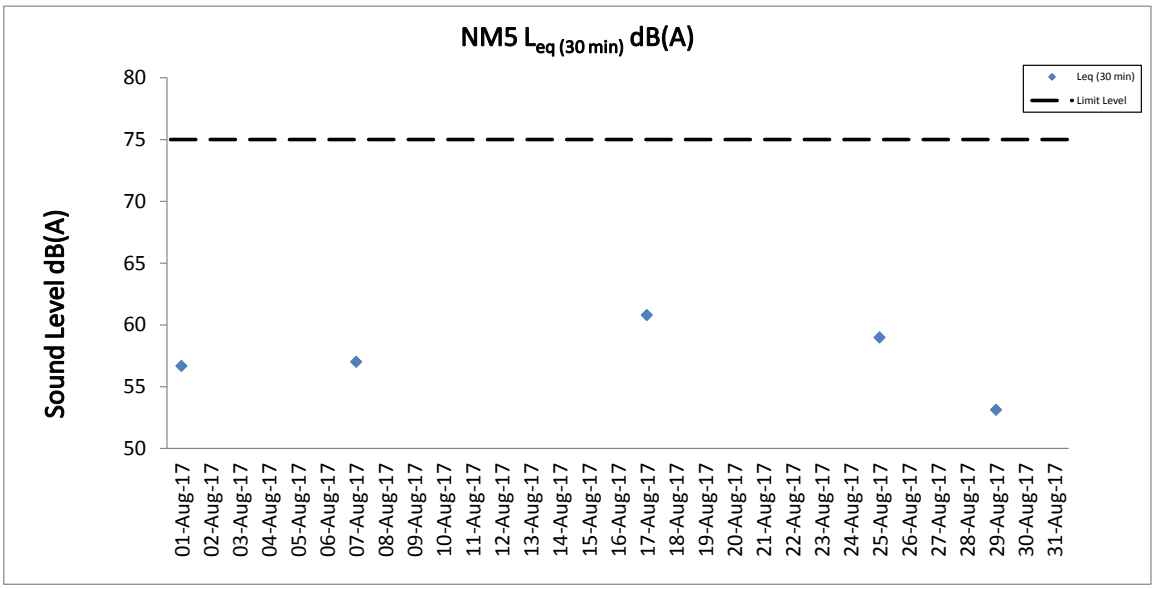
31-Aug-17


NM4 $L_{eq\ (30\ min)}$ dB(A)
Sound Level dB(A)
80
75
70
65
60
55
50
Leq (30 min)
Limit Level
01-Aug-17
02-Aug-17
03-Aug-17
04-Aug-17
05-Aug-17
06-Aug-17
07-Aug-17
08-Aug-17
09-Aug-17
10-Aug-17
11-Aug-17
12-Aug-17
13-Aug-17
14-Aug-17
15-Aug-17
16-Aug-17
17-Aug-17
18-Aug-17
19-Aug-17
20-Aug-17
21-Aug-17
22-Aug-17
23-Aug-17
24-Aug-17
25-Aug-17
26-Aug-17
27-Aug-17
28-Aug-17
29-Aug-17
30-Aug-17
31-Aug-17


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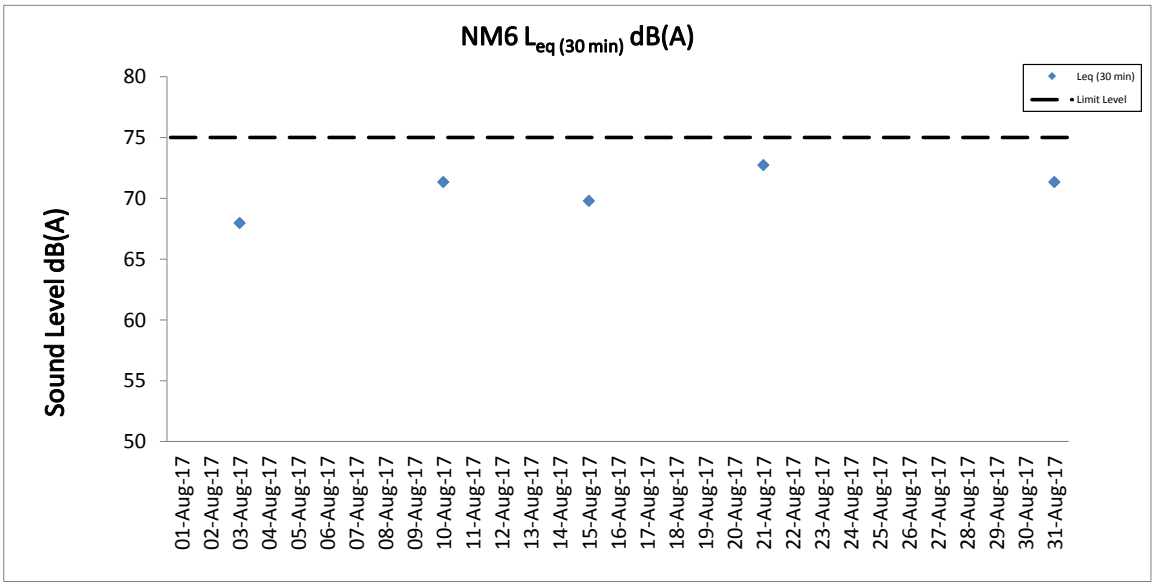
28-Aug-17
29-Aug-17
30-Aug-17
31-Aug-17


NM6 Leq (30 min) dB(A)
Sound Level dB(A)
Leq (30 min)
Limit Level
80
75
70
65
60
55
50
01-Aug-17
02-Aug-17
03-Aug-17
04-Aug-17
05-Aug-17
06-Aug-17
07-Aug-17
08-Aug-17
09-Aug-17
10-Aug-17
11-Aug-17
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22-Aug-17
23-Aug-17
24-Aug-17
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29-Aug-17
30-Aug-17
31-Aug-17

Water Quality Monitoring Results

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

Water Quality Monitoring

Water Quality Monitoring Results on 01 August 17 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Rough	08:53	8.8	Surface	1.0	0.2	220	29.7	29.7	8.1	8.1	12.8	12.8	94.3	94.2	6.7	5.9	5.4	7.4	5	8	69	73	815603	804262	<0.2	<0.2	1.8	1.8
						1.0	0.2	222	29.7		8.1		12.8		94.0		6.7		5.5		7		70				<0.2		2.0	
					Middle	4.4	0.5	211	29.3	29.3	8.0	8.0	17.3	17.2	73.0	72.7	5.1		7.0		7		73				<0.2		1.9	
						4.4	0.5	217	29.3		8.0		17.0		72.4		5.0		7.2		9		73				<0.2		2.0	
					Bottom	7.8	0.4	233	28.4	28.3	8.0	8.0	23.8	24.6	73.4	74.5	5.0	5.1	9.5		9		75				<0.2		1.5	
						7.8	0.4	237	28.2		7.9		25.3		75.5		5.1		9.5		11		75				<0.2		1.6	
C2	Cloudy	Moderate	09:47	11.3	Surface	1.0	0.7	164	29.8	29.8	8.2	8.2	13.4	13.4	84.4	84.4	6.0	5.3	7.6	9.9	8	10	68	70	825699	806938	<0.2	<0.2	2.6	2.4
						1.0	0.8	176	29.8		8.2		13.4		84.3		5.9		7.6		10		68				<0.2		2.6	
					Middle	5.7	0.7	136	29.4	29.4	8.0	8.0	18.3	18.3	66.8	66.8	4.6		10.7		9		69				<0.2		2.4	
						5.7	0.7	137	29.4		8.0		18.3		66.8		4.6		10.7		10		70				<0.2		2.3	
					Bottom	10.3	1.0	86	28.2	28.2	8.0	8.0	24.6	24.6	50.3	50.3	3.4	3.4	11.4		10		71				<0.2		2.4	
						10.3	1.0	90	28.2		8.0		24.6		50.3		3.4		11.5		10		71				<0.2		2.2	
C3	Cloudy	Moderate	06:48	13.8	Surface	1.0	0.3	67	29.6	29.6	8.1	8.1	17.0	17.0	86.1	86.1	6.0	5.5	4.8	4.5	5	8	69	71	822104	817803	<0.2	<0.2	2.6	2.0
						1.0	0.3	67	29.6		8.1		17.0		86.1		6.0		4.8		6		69				<0.2		1.7	
					Middle	6.9	0.1	314	28.8	28.8	8.0	8.0	22.2	22.2	72.0	72.0	4.9		4.1		9		71				<0.2		1.7	
						6.9	0.1	339	28.8		8.0		22.2		72.0		4.9		4.1		9		71				<0.2		1.7	
					Bottom	12.8	1.0	286	27.4	27.4	8.0	8.0	28.4	28.4	54.1	54.2	3.7	3.7	4.5		9		74				<0.2		1.9	
						12.8	1.0	307	27.4		8.0		28.4		54.2		3.7		4.4		8		73				<0.2		2.1	
IM1	Cloudy	Rough	09:14	7.0	Surface	1.0	0.4	188	29.7	29.7	8.1	8.1	13.4	13.4	84.9	84.0	6.0	5.1	7.1	9.9	4	8	69	71	818352	806450	<0.2	<0.2	1.6	1.3
						1.0	0.4	193	29.7		8.1		13.4		83.1		5.9		7.2		4		69				<0.2		1.4	
					Middle	3.5	0.3	177	28.9	28.9	8.0	8.0	21.5	20.6	62.6	62.6	4.3		10.4		7		71				<0.2		1.7	
						3.5	0.4	192	28.8		8.0		19.6		62.6		4.3		11.1		7		71				<0.2		1.8	
					Bottom	6.0	0.0	27	28.1	28.2	8.0	8.0	28.9	28.8	71.8	74.0	4.8	5.0	11.4		15		73				<0.2		0.6	
						6.0	0.0	29	28.2		8.0		28.7		76.1		5.1		11.9		13		73				<0.2		0.6	
IM2	Cloudy	Rough	09:21	8.1	Surface	1.0	0.4	176	29.6	29.6	8.1	8.1	13.6	13.6	87.8	87.5	6.2	5.6	6.3	9.9	8	10	69	71	818847	806178	<0.2	<0.2	1.9	1.6
						1.0	0.4	188	29.6		8.1		13.6		87.1		6.2		6.4		7		69				<0.2		1.9	
					Middle	4.1	0.4	184	29.4	29.4	8.0	8.0	15.5	15.5	72.8	72.0	5.1		9.5		10		71				<0.2		1.9	
						4.1	0.4	188	29.4		8.0		15.4		71.2		5.0		9.7		8		71				<0.2		1.9	
					Bottom	7.1	0.2	166	28.3	28.3	8.0	8.0	27.9	27.9	59.7	59.8	4.0	4.0	13.5		13		72				<0.2		1.1	
						7.1	0.2	179	28.3		8.0		27.9		59.9		4.0		13.7		11		72				<0.2		0.9	
IM3	Cloudy	Rough	09:29	8.2	Surface	1.0	0.2	199	29.7	29.7	8.1	8.1	13.4	13.4	90.0	89.8	6.4	5.7	5.4	8.3	7	8	69	71	819419	806013	<0.2	<0.2	2.0	2.0
						1.0	0.2	212	29.7		8.1		13.4		89.5		6.3		5.5		8		70				<0.2		1.9	
					Middle	4.1	0.4	201	29.3	29.3	8.0	8.0	15.6	15.8	71.6	70.7	5.0		8.1		8		71				<0.2		1.9	
						4.1	0.4	220	29.3		8.0		16.0		69.8		4.9		8.4		7		71				<0.2		2.3	
					Bottom	7.2	0.2	211	28.5	28.5	8.0	8.0	26.3	26.1	60.5	60.7	4.1	4.1	11.1		9		73				<0.2		1.9	
						7.2	0.2	218	28.5		8.0		25.9		60.8		4.1		11.3		9		73				<0.2		1.8	
IM4	Cloudy	Rough	09:39	7.7	Surface	1.0	0.3	183	29.7	29.7	8.1	8.1	13.2	13.2	91.0	90.7	6.4	5.9	5.9	9.2	8	9	68	71	819561	805049	<0.2	<0.2	2.0	1.9
						1.0	0.3	183	29.7		8.1		13.2		90.3		6.4		5.9		8		68				<0.2		2.0	
					Middle	3.9	0.2	199	29.5	29.5	8.1	8.1	13.3	13.3	74.8	74.6	5.3		8.7		7		71				<0.2		1.9	
						3.9	0.2	211	29.5		8.1		13.3		74.3		5.3		8.8		8		71				<0.2		1.8	
					Bottom	6.7	0.1	163	28.7	28.7	8.0	8.0	22.4	22.6	65.7	66.4	4.5	4.6	13.1		10		73				<0.2		1.8	
						6.7	0.1	163	28.7		8.0		22.7		67.1		4.6		12.9		12		73				<0.2		1.6	
IM5	Cloudy	Rough	09:51	6.6	Surface	1.0	0.3	190	29.7	29.7	8.1	8.1	13.2	13.2	91.5	91.3	6.5	5.5	6.1	9.4	5	7	68	72	820575	804912	<0.2	<0.2	1.9	1.9
						1.0	0.3	195	29.7		8.1		13.2		91.0		6.4		6.4		4		68				<0.2		1.9	
					Middle	3.3	0.4	217	29.2	29.2	7.9	7.9	18.0	18.0	66.6	66.1	4.6		9.8		8		73				<0.2		1.7	
						3.3	0.4	231	29.2		7.9		18.0		65.5		4.6		9.6		6		73				<0.2		1.9	
					Bottom	5.6	0.2	246	28.7	28.7	7.9	7.9	22.0	22.0	60.3	60.6	4.1	4.2	12.1		11		75				<0.2		2.0	
						5.6	0.2	266	28.7		7.9		22.0		60.8		4.2		12.3		10		75				<0.2		1.8	
IM6	Cloudy	Rough	10:00	6.4	Surface	1.0	0.3	194	29.7	29.7	8.1	8.1	13.6	13.6	89.0	88.8	6.3	5.7	6.5	11.3	6	9	69	72	821062	805811	<0.2	<0.2	1.9	1.8
						1.0	0.4	198	29.7		8.1		13.5		88.6		6.3		6.5		5		69				<0.2		1.8	
					Middle	3.2	0.3	208	29.3	29.3	8.0	8.0	18.0	17.8	73.8	73.5	5.1		9.7		8		73				<0.2		1.6	
						3.2	0.4	216	29.3		8.0		17.5		73.2		5.1		9.9		8		73				<0.2		1.6	
					Bottom	5.4	0.2	244	28.8	28.8	7.9	7.9	21.7	21.7	66.4	66.5	4.5	4.6	17.7		11		75				<0.2		1.9	
						5.4	0.2	245	28.8		7.9		21.7		66.6		4.6		17.6		13		75				<0.2		2.0	
IM7	Cloudy	Moderate	09:13	7.7	Surface	1.0	0.3	198	29.9	29.9	8.2	8.2	12.9	12.9	89.8	89.8	6.3	5.7	6.3	9.2	4	8	69	72	821329	806834	<0.2	<0.2	2.0	2.0
						1.0	0.3	205	29.9		8.2		12.9		89.8		6.3		6.3		6		69				<0.2		2.0	
					Middle	3.9	0.2	174	29.5	29.5	8.1	8.1	17.3	17.3	73.9	73.8	5.1		6.7		8		73				<0.2		2.2	
						3.9	0.2	182	29.5		8.1		17.3		73.7		5.1		6.7		8		73				<0.2		2.0	
					Bottom	6.7	0.1	167	28.8	28.8	8.0	8.0	21.9	21.9	56.3	56.3	3.9	3.9	14.5		9		75				<0.2		2.0	
						6.7	0.1	181	28.8		8.0		21.9		56.3		3.9		14.6		11		75				<0.2		2.0	
IM8	Cloudy	Moderate	08:58	8.1	Surface	1.0	0.2	165	29.8	29.8	8.2	8.2	13.6	13.6	85.7	85.7	6.0	5.4	7.7	9.5	6	7	67	71	821703	807826	<0.2	<0.2	1.9	2.0
						1.0	0.2	169	29.8		8.2		13.6		85.6		6.0		7.7		6		68				<0.2		2.1	
					Middle	4.1	0.4	132	29.3	29.3	8.1	8.1	19.3	19.3	67.9	67.9	4.7		7.3		6		72				<0.2		2.0	
						4.1	0.4	133	29.3		8.1		19.3		67.9		4.7		7.3		7		71				<0.2		2.2	
					Bottom	7.1	0.3	97	28.8	28.8	8.0	8.0	21.8	21.8	58.1	58.1	4.0	4.0	13.4		9		73				<0.2		2.0	
						7.1	0.3	104	28.8		8.0		21.8		58.1		4.0		13.4		9		72				<0.2		2.0	

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 01 August 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	08:45	7.1	Surface	1.0	0.4	132	29.7	29.7	8.1	8.1	14.2	14.2	83.8	83.7	5.9	5.6	6.2	9.2	6	7	68	70	822108	808823	<0.2	<0.2	1.8	1.9
						1.0	0.4	133	29.7		8.1		14.2		83.6		5.9		6.2		6		67				<0.2		2.0	
					Middle	3.6	0.3	143	29.5	29.5	8.1	8.1	15.6	15.6	75.4	75.4	5.3		7.3		6		70				<0.2		1.9	
						3.6	0.3	148	29.5		8.1		15.6		75.4		5.3		7.3		5		70				<0.2		1.9	
					Bottom	6.1	0.3	124	28.9	28.9	8.0	8.0	21.5	21.6	58.6	58.1	4.0	4.0	13.3		8		71				<0.2		1.8	
						6.1	0.3	128	28.8		8.0		21.7		57.6		3.9		15.1		8		71				<0.2		2.0	
IM10	Cloudy	Moderate	08:36	6.8	Surface	1.0	0.4	120	29.7	29.7	8.1	8.1	13.9	13.9	86.5	86.5	6.1	6.0	6.3	7.0	4	5	64	68	822221	809818	<0.2	<0.2	2.5	2.5
						1.0	0.4	130	29.7		8.1		13.9		86.5		6.1		6.3		6		65				<0.2		2.4	
					Middle	3.4	0.3	129	29.7	29.7	8.1	8.1	15.1	15.1	84.7	84.7	5.9		6.1		4		68				<0.2		2.4	
						3.4	0.4	138	29.7		8.1		15.1		84.7		5.9		6.1		6		69				<0.2		2.3	
					Bottom	5.8	0.3	94	29.2	29.2	8.1	8.1	19.6	19.6	66.4	66.4	4.6	4.6	8.5		4		71				<0.2		2.6	
						5.8	0.4	102	29.2		8.1		19.6		66.4		4.6		8.5		6		71				<0.2		2.5	
IM11	Cloudy	Moderate	08:23	7.9	Surface	1.0	0.4	96	29.8	29.8	8.2	8.2	13.6	13.6	88.8	88.8	6.3	6.1	7.1	7.6	6	6	69	71	821515	810563	<0.2	<0.2	2.6	2.5
						1.0	0.4	101	29.8		8.2		13.6		88.8		6.3		7.1		7		70				<0.2		2.7	
					Middle	4.0	0.4	104	29.7	29.7	8.1	8.1	16.1	16.2	84.1	84.1	5.9		6.8		5		71				<0.2		2.3	
						4.0	0.4	113	29.7		8.1		16.2		84.0		5.9		6.8		6		71				<0.2		2.5	
					Bottom	6.9	0.5	95	29.2	29.2	8.1	8.1	20.2	20.2	71.2	71.2	4.9	4.9	8.9		6		73				<0.2		2.2	
						6.9	0.5	95	29.2		8.1		20.2		71.2		4.9		8.9		8		73				<0.2		2.4	
IM12	Cloudy	Moderate	08:13	8.3	Surface	1.0	0.4	81	29.9	29.9	8.2	8.2	13.0	13.0	89.5	89.5	6.3	6.1	9.4	8.1	9	10	70	72	821153	811512	<0.2	<0.2	2.0	1.9
						1.0	0.4	89	29.9		8.2		13.0		89.5		6.3		9.4		10		70				<0.2		2.1	
					Middle	4.2	0.5	111	29.8	29.8	8.1	8.1	15.2	15.2	84.7	84.7	5.9		7.0		9		72				<0.2		2.0	
						4.2	0.5	112	29.8		8.1		15.2		84.7		5.9		7.0		11		71				<0.2		1.8	
					Bottom	7.3	0.4	134	29.2	29.2	8.0	8.0	19.9	19.9	67.9	67.8	4.7	4.7	7.9		10		73				<0.2		1.8	
						7.3	0.4	138	29.2		8.0		19.9		67.7		4.7		8.0		9		73				<0.2		1.9	
SR2	Cloudy	Moderate	07:18	4.7	Surface	1.0	0.6	89	29.8	29.8	8.1	8.1	13.3	13.3	90.4	90.4	6.4	6.4	7.8	7.8	3	6	68	70	821459	814168	<0.2	<0.2	2.0	2.1
						1.0	0.6	89	29.8		8.1		13.3		90.4		6.4		7.8		4		68				<0.2		2.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.6	84	29.8	29.8	8.1	8.1	14.3	14.3	88.7	88.7	6.2	6.2	7.8		9		71				<0.2		2.2	
						3.7	0.7	91	29.8		8.1		14.3		88.7		6.2		7.8		8		72				<0.2		2.0	
SR3	Cloudy	Moderate	09:04	8.5	Surface	1.0	0.3	147	29.8	29.8	8.2	8.2	14.0	14.0	86.0	86.0	6.0	5.4	5.8	10.2	8	8	-	-	822159	807559	-	-	-	-
						1.0	0.3	155	29.8		8.2		14.0		85.9		6.0		5.8		7		-				-		-	
					Middle	4.3	0.6	134	29.4	29.4	8.1	8.1	19.3	19.3	70.1	70.1	4.8		6.3		8		-				-		-	
						4.3	0.6	144	29.4		8.1		19.3		70.0		4.8		6.4		8		-				-		-	
					Bottom	7.5	0.4	122	28.5	28.5	8.0	8.0	23.6	23.6	53.6	53.7	3.7	3.7	18.4		7		-				-		-	
						7.5	0.4	133	28.5		8.0		23.6		53.7		3.7		18.4		7		-				-		-	
SR4A	Cloudy	Moderate	08:31	9.5	Surface	1.0	0.2	217	29.8	29.8	8.2	8.2	14.9	15.0	95.6	95.5	6.7	6.0	8.0	12.5	6	14	-	-	817177	807826	-	-	-	-
						1.0	0.2	224	29.8		8.2		15.0		95.3		6.7		8.0		7		-				-		-	
					Middle	4.8	0.1	236	29.2	29.3	8.0	8.0	21.7	21.7	76.3	76.2	5.2		11.2		13		-				-		-	
						4.8	0.1	238	29.3		8.0		21.7		76.1		5.2		11.1		14		-				-		-	
					Bottom	8.5	0.1	83	28.2	28.2	8.0	8.0	28.3	28.3	61.8	62.1	4.1	4.2	18.1		22		-				-		-	
						8.5	0.1	87	28.2		8.0		28.3		62.4		4.2		18.7		21		-				-		-	
SR5A	Cloudy	Moderate	08:14	5.2	Surface	1.0	0.1	296	29.7	29.7	8.2	8.2	15.7	15.7	109.0	109.1	7.6	7.6	6.5	8.1	8	9	-	-	816600	810700	-	-	-	-
						1.0	0.1	308	29.7		8.2		15.7		109.2		7.6		6.6		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.1	357	29.8	29.8	8.2	8.2	18.7	18.6	112.4	112.4	7.7	7.7	9.4		10		-				-		-	
						4.2	0.1	328	29.8		8.2		18.4		112.4		7.7		9.7		9		-				-		-	
SR6	Cloudy	Moderate	07:49	4.2	Surface	1.0	0.1	320	29.5	29.5	8.0	8.0	16.8	16.8	95.0	95.1	6.6	6.6	5.1	6.9	5	7	-	-	817897	814644	-	-	-	-
						1.0	0.1	345	29.5		8.0		16.8		95.1		6.6		5.2		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.0	112	29.7	29.7	8.1	8.1	18.1	18.1	101.7	101.4	7.0	7.0	8.4		9		-				-		-	
						3.2	0.0	113	29.7		8.1		18.1		101.0		7.0		8.7		8		-				-		-	
SR7	Cloudy	Calm	06:45	17.7	Surface	1.0	0.2	120	29.0	29.1	7.9	7.9	18.7	18.6	82.7	82.8	5.7	5.5	2.6	3.1	4	6	-	-	823643	823751	-	-	-	-
						1.0	0.2	126	29.1		7.9		18.5		82.9		5.8		2.6		2		-				-		-	
					Middle	8.9	0.0	99	28.8	28.8	7.8	7.8	20.3	20.3	75.9	75.9	5.2		2.7		6		-				-		-	
						8.9	0.0	99	28.8		7.8		20.2		75.8		5.2		2.7		8		-				-		-	
					Bottom	16.7	0.0	4	26.0	26.0	7.7	7.7	30.5	30.4	56.2	59.7	3.8	4.1	4.0		7		-				-		-	
						16.7	0.0	4	26.0		7.7		30.3		63.1		4.3		3.7		6		-				-		-	
SR8	Cloudy	Moderate	07:53	5.5	Surface	1.0	-	-	29.8	29.8	8.1	8.1	14.0	14.0	89.1	89.1	6.3	6.3	7.3	7.3	8	7	-	-	820246	811418	-	-	-	-
						1.0	-	-	29.8		8.1		14.0		89.0		6.3		7.3		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.5	-	-	29.8	29.8	8.1	8.1	14.5	14.5	88.0	88.0	6.2	6.2	7.2		6		-				-		-	
						4.5	-	-	29.8		8.1		14.5		88.0		6.2		7.2		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 01 August 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	14:45	8.2	Surface	1.0	0.3	42	30.0	30.0	8.2	8.2	13.9	13.9	104.2	103.7	7.3	6.9	5.5	8.3	6	7	68	71	815610	804246	<0.2	<0.2	1.8	1.7
						1.0	0.3	43	30.0		8.2		13.9		103.2		7.2		5.7		6		68				<0.2		1.8	
					Middle	4.1	0.2	36	29.6	29.6	8.1	8.1	14.4	14.4	92.6	92.6	6.5		8.7		6		70				<0.2		1.7	
						4.1	0.2	38	29.6		8.1		14.4		92.5		6.5		8.9		7		70				<0.2		1.8	
					Bottom	7.2	0.3	41	28.2	28.2	7.9	7.9	27.9	27.9	59.9	60.4	4.0	4.1	10.5		6		74				<0.2		1.6	
						7.2	0.4	42	28.2		7.9		27.9		60.9		4.1		10.4		8		74				<0.2		1.5	
C2	Cloudy	Moderate	13:50	11.1	Surface	1.0	0.3	56	30.1	30.1	8.2	8.2	13.5	13.5	94.9	94.9	6.7	5.7	8.1	8.6	10	9	68	71	825674	806928	<0.2	<0.2	1.9	1.7
						1.0	0.3	58	30.1		8.2		13.5		94.8		6.6		8.1		8		68				<0.2		1.9	
					Middle	5.6	0.1	338	29.3	29.3	8.0	8.0	18.3	18.3	68.2	68.2	4.7		9.1		8		70				<0.2		1.6	
						5.6	0.1	356	29.3		8.0		18.3		68.2		4.7		9.1		8		70				<0.2		1.6	
					Bottom	10.1	0.3	305	28.4	28.4	7.9	7.9	24.2	24.2	57.6	57.6	3.9	3.9	8.6		8		74				<0.2		1.4	
						10.1	0.3	334	28.4		7.9		24.2		57.6		3.9		8.7		9		73				<0.2		1.5	
C3	Cloudy	Moderate	16:30	13.1	Surface	1.0	0.1	333	30.5	30.5	8.3	8.3	14.6	14.6	98.9	98.9	6.8	5.6	4.8	5.0	6	6	70	71	822112	817811	<0.2	<0.2	2.7	2.4
						1.0	0.1	351	30.5		8.3		14.6		98.9		6.8		4.8		5		69				<0.2		2.6	
					Middle	6.6	0.2	227	28.5	28.5	8.0	8.0	23.4	23.4	63.9	63.9	4.4		4.1		5		71				<0.2		2.2	
						6.6	0.2	243	28.5		8.0		23.4		63.9		4.4		4.1		5		71				<0.2		2.3	
					Bottom	12.1	0.3	296	27.4	27.4	8.0	8.0	26.7	26.7	50.5	50.6	3.5	3.5	6.0		8		73				<0.2		2.4	
						12.1	0.3	305	27.4		8.0		26.7		50.7		3.5		6.0		7		74				<0.2		2.4	
IM1	Cloudy	Rough	14:22	7.1	Surface	1.0	0.5	22	30.2	30.2	8.2	8.2	13.8	13.8	110.6	110.4	7.7	7.4	5.3	7.6	6	7	67	70	818357	806459	<0.2	<0.2	1.4	1.5
						1.0	0.5	22	30.2		8.2		13.8		110.2		7.7		5.3		8		67				<0.2		1.5	
					Middle	3.6	0.4	12	29.9	29.9	8.2	8.2	14.7	14.7	100.8	100.7	7.1		7.4		6		69				<0.2		1.4	
						3.6	0.4	12	29.9		8.2		14.7		100.6		7.0		7.5		7		70				<0.2		1.6	
					Bottom	6.1	0.4	4	29.7	29.7	8.2	8.2	15.3	15.4	95.9	95.7	6.7	6.7	9.8		8		74				<0.2		1.6	
						6.1	0.5	4	29.6		8.1		15.5		95.4		6.7		10.5		9		74				<0.2		1.6	
IM2	Cloudy	Rough	14:15	8.1	Surface	1.0	0.4	327	30.2	30.2	8.3	8.3	13.4	13.4	113.0	112.5	7.9	6.8	5.4	11.6	6	7	68	71	818840	806201	<0.2	<0.2	1.6	1.4
						1.0	0.4	332	30.2		8.3		13.4		112.0		7.8		5.6		6		68				<0.2		1.5	
					Middle	4.1	0.3	313	29.5	29.5	8.1	8.1	17.3	17.3	83.0	82.9	5.8		10.9		5		70				<0.2		1.4	
						4.1	0.3	340	29.5		8.1		17.3		82.7		5.7		10.9		5		70				<0.2		1.4	
					Bottom	7.1	0.3	338	28.2	28.2	8.0	8.0	28.7	28.7	67.9	69.7	4.5	4.7	18.5		9		74				<0.2		1.2	
						7.1	0.3	355	28.2		8.0		28.7		71.4		4.8		18.0		11		74				<0.2		1.5	
IM3	Cloudy	Rough	14:06	8.0	Surface	1.0	0.3	323	30.0	30.0	8.2	8.2	14.0	14.0	107.6	107.4	7.5	6.6	6.4	9.8	10	11	68	71	819408	806012	<0.2	<0.2	1.6	1.6
						1.0	0.4	344	30.0		8.2		14.0		107.2		7.5		6.5		10		68				<0.2		1.5	
					Middle	4.0	0.3	280	29.5	29.5	8.0	8.0	15.9	15.9	81.8	81.7	5.7		10.7		10		71				<0.2		1.4	
						4.0	0.3	285	29.5		8.0		15.9		81.5		5.7		10.7		10		71				<0.2		1.6	
					Bottom	7.0	0.1	343	28.6	28.6	8.0	8.0	26.1	26.1	60.6	60.6	4.1	4.1	12.1		12		73				<0.2		1.5	
						7.0	0.1	354	28.6		8.0		26.1		60.6		4.1		12.2		11		73				<0.2		1.9	
IM4	Cloudy	Rough	13:56	7.5	Surface	1.0	0.2	342	29.9	29.9	8.1	8.1	14.9	14.9	96.9	96.8	6.8	5.9	7.6	12.5	8	8	67	70	819588	805039	<0.2	<0.2	2.0	1.8
						1.0	0.2	354	29.9		8.1		14.9		96.6		6.7		7.6		8		68				<0.2		1.8	
					Middle	3.8	0.1	340	28.9	28.9	8.0	8.0	20.4	20.2	72.0	72.1	5.0		13.4		8		72				<0.2		1.7	
						3.8	0.1	340	28.9		8.0		19.9		72.2		5.0		13.5		7		72				<0.2		1.6	
					Bottom	6.5	0.1	355	28.7	28.7	8.0	8.0	23.3	22.6	68.4	68.5	4.6	4.7	16.4		8		70				<0.2		1.7	
						6.5	0.1	327	28.7		8.0		21.8		68.5		4.7		16.5		7		70				<0.2		1.8	
IM5	Cloudy	Rough	13:44	6.3	Surface	1.0	0.1	359	29.9	29.9	8.1	8.1	15.1	15.1	94.7	94.7	6.6	6.4	6.4	9.5	8	10	69	71	820558	804936	<0.2	<0.2	1.5	1.5
						1.0	0.2	330	29.9		8.1		15.1		94.7		6.6		6.4		8		69				<0.2		1.4	
					Middle	3.2	0.3	300	29.6	29.6	8.0	8.0	15.9	15.9	87.7	87.8	6.1		7.3		9		71				<0.2		1.6	
						3.2	0.3	309	29.6		8.0		15.9		87.9		6.1		7.3		8		72				<0.2		1.5	
					Bottom	5.3	0.1	272	29.0	29.0	7.9	7.9	19.6	19.6	73.3	73.8	5.1	5.1	15.1		15		73				<0.2		1.6	
						5.3	0.1	288	29.0		7.9		19.6		74.3		5.1		14.7		14		73				<0.2		1.5	
IM6	Cloudy	Rough	13:34	6.2	Surface	1.0	0.4	325	29.8	29.8	8.0	8.0	15.2	15.2	92.6	92.5	6.5	5.7	5.6	11.7	8	14	69	73	821076	805847	<0.2	<0.2	1.6	1.6
						1.0	0.4	340	29.8		8.0		15.2		92.4		6.4		5.6		8		70				<0.2		1.8	
					Middle	3.1	0.4	288	29.2	29.2	7.9	7.9	18.8	18.8	71.8	71.7	5.0		11.2		8		73				<0.2		1.6	
						3.1	0.4	296	29.2		7.9		18.8		71.6		5.0		11.1		7		73				<0.2		1.5	
					Bottom	5.2	0.3	270	29.0	29.0	7.8	7.8	20.7	20.7	72.2	72.8	5.0	5.0	18.1		27		75				<0.2		1.6	
						5.2	0.3	288	29.0		7.8		20.6		73.4		5.0		18.8		27		75				<0.2		1.7	
IM7	Cloudy	Rough	14:27	7.6	Surface	1.0	0.3	300	30.2	30.2	8.2	8.2	14.2	14.2	97.9	97.9	6.8	6.4	6.9	8.8	8	8	70	72	821348	806817	<0.2	<0.2	2.0	1.9
						1.0	0.3	311	30.2		8.2		14.2		97.9		6.8		6.9		7		70				<0.2		2.0	
					Middle	3.8	0.2	302	29.9	29.9	8.1	8.1	15.0	15.0	84.8	84.8	5.9		6.9		8		71				<0.2		1.9	
						3.8	0.2	315	29.9		8.1		15.0		84.8		5.9		6.8		8		71				<0.2		1.9	
					Bottom	6.6	0.1	36	29.1	29.1	8.0	8.0	20.0	20.0	56.3	56.3	3.9	3.9	12.6		7		74				<0.2		1.7	
						6.6	0.1	39	29.1		8.0		20.0		56.3		3.9		12.5		8		74				<0.2		1.8	
IM8	Cloudy	Moderate	14:43	7.9	Surface	1.0	0.1	258	30.3	30.3	8.2	8.2	13.9	13.9	92.3	92.3	6.4	6.0	7.2	9.4	7	8	67	69	821698	807857	<0.2	<0.2	1.6	1.8
						1.0	0.1	264	30.3		8.2		13.9		92.2		6.4		7.2		7		67				<0.2		1.7	
					Middle	4.0	0.2	234	29.8	29.9	8.1	8.1	14.9	14.9	80.3	80.3	5.6		8.5		9		69				<0.2		1.7	
						4.0	0.2	252	29.9		8.1		14.9		80.2		5.6		8.5		10		69				<0.2		1.8	
					Bottom	6.9	0.0	253	29.0	29.0	8.0	8.0	20.2	20.1	56.0	56.0	3.9	3.9	12.4		8		70				<0.2		1.8	
						6.9	0.0	278	28.9		8.0		19.9		56.0		3.9		12.5		9		71				<0.2		2.0	

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 01 August 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	14:56	6.9	Surface	1.0	0.1	158	30.2	30.2	8.2	8.2	13.6	13.6	95.6	95.6	6.7	6.5	7.9	7.7	8	10	68	70	822080	808818	<0.2	<0.2	2.1	2.0
						1.0	0.1	171	30.2		8.2		13.6		95.6		6.7		7.9		10		67				<0.2		2.0	
					Middle	3.5	0.1	220	30.0	30.0	8.2	8.2	13.7	13.7	88.2	88.1	6.2		7.8		11		69				<0.2		2.0	
						3.5	0.1	232	30.0		8.2		13.7		87.9		6.2		7.8		10		70				<0.2		2.1	
					Bottom	5.9	0.2	292	29.5	29.5	8.0	8.0	17.1	17.1	74.9	74.9	5.2	5.2	7.4		11		72				<0.2		2.0	
						5.9	0.2	304	29.5		8.0		17.1		74.9		5.2		7.4		10		72				<0.2		2.0	
IM10	Cloudy	Moderate	15:03	6.9	Surface	1.0	0.0	26	30.3	30.3	8.2	8.2	13.5	13.5	99.2	99.2	6.9	6.4	7.4	8.3	8	9	68	71	822233	809830	<0.2	<0.2	2.2	2.1
						1.0	0.0	27	30.3		8.2		13.5		99.1		6.9		7.4		8		68				<0.2		2.5	
					Middle	3.5	0.2	309	29.8	29.8	8.1	8.1	15.3	15.3	82.5	82.5	5.8		7.8		10		71				<0.2		1.9	
						3.5	0.2	317	29.8		8.1		15.3		82.5		5.8		7.8		8		71				<0.2		2.0	
					Bottom	5.9	0.2	322	29.4	29.4	8.0	8.0	18.2	18.2	71.4	71.4	4.9	4.9	9.6		10		73				<0.2		2.1	
						5.9	0.2	327	29.4		8.0		18.2		71.4		4.9		9.6		10		73				<0.2		2.0	
IM11	Cloudy	Moderate	15:14	7.4	Surface	1.0	0.0	231	30.2	30.2	8.2	8.2	14.0	14.0	98.1	98.0	6.9	6.4	6.8	6.7	9	8	68	70	821492	810556	<0.2	<0.2	1.9	2.0
						1.0	0.0	232	30.2		8.2		14.0		97.9		6.8		6.8		8		67				<0.2		2.0	
					Middle	3.7	0.2	300	29.9	29.9	8.2	8.2	15.0	15.0	85.5	85.5	6.0		5.9		7		69				<0.2		1.9	
						3.7	0.3	321	29.9		8.2		15.0		85.5		6.0		5.9		7		69				<0.2		2.0	
					Bottom	6.4	0.2	299	29.1	29.1	8.1	8.1	20.1	20.1	71.8	71.8	4.9	4.9	7.2		7		73				<0.2		2.1	
						6.4	0.3	311	29.1		8.1		20.1		71.8		4.9		7.3		8		73				<0.2		2.2	
IM12	Cloudy	Moderate	15:21	7.0	Surface	1.0	0.1	302	30.4	30.4	8.3	8.3	13.9	13.9	105.7	105.7	7.4	7.0	6.5	6.7	5	8	70	71	821174	811537	<0.2	<0.2	2.3	1.7
						1.0	0.1	307	30.4		8.3		13.9		105.7		7.4		6.4		6		69				<0.2		1.8	
					Middle	3.5	0.3	295	29.9	29.9	8.2	8.2	15.0	15.0	92.8	92.7	6.5		6.2		8		70				<0.2		1.7	
						3.5	0.3	323	29.9		8.2		15.0		92.5		6.5		6.2		9		71				<0.2		1.4	
					Bottom	6.0	0.3	311	29.4	29.4	8.1	8.1	20.9	20.9	78.7	78.7	5.4	5.4	7.3		9		73				<0.2		1.7	
						6.0	0.3	317	29.4		8.1		20.9		78.7		5.4		7.3		9		73				<0.2		1.5	
SR2	Cloudy	Moderate	16:07	4.4	Surface	1.0	0.1	228	30.1	30.1	8.3	8.3	15.3	15.3	102.6	102.5	7.1	7.1	6.1	7.0	9	8	69	71	821458	814148	<0.2	<0.2	1.7	1.7
						1.0	0.1	235	30.1		8.3		15.3		102.4		7.1		6.1		7		69				<0.2		1.7	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.1	308	29.6	29.6	8.2	8.2	16.8	16.8	89.1	89.1	6.2	6.2	7.9		7		72				<0.2		1.5	
						3.4	0.1	312	29.6		8.2		16.8		89.1		6.2		7.9		8		73				<0.2		1.7	
SR3	Cloudy	Moderate	14:37	8.4	Surface	1.0	0.1	191	30.2	30.2	8.2	8.2	14.5	14.5	94.6	94.6	6.6	5.9	6.8	8.4	9	9	-	-	822144	807574	-	-	-	-
						1.0	0.1	204	30.2		8.2		14.5		94.6		6.6		6.8		8		-				-		-	
					Middle	4.2	0.1	252	29.5	29.5	8.0	8.0	16.8	16.9	73.2	73.2	5.1		8.0		9		-				-		-	
						4.2	0.1	266	29.5		8.0		16.9		73.2		5.1		8.0		9		-				-		-	
					Bottom	7.4	0.1	51	28.9	28.9	8.0	8.0	21.2	21.2	60.4	60.4	4.1	4.1	10.5		8		-				-		-	
						7.4	0.1	51	28.9		8.0		21.2		60.4		4.1		10.5		9		-				-		-	
SR4A	Cloudy	Moderate	15:04	8.7	Surface	1.0	0.1	265	30.6	30.6	8.4	8.4	14.0	14.0	140.0	139.6	9.7	9.0	11.4	13.8	13	15	-	-	817193	807812	-	-	-	-
						1.0	0.1	272	30.6		8.4		14.0		139.2		9.6		11.4		14		-				-		-	
					Middle	4.4	0.3	238	30.0	30.0	8.3	8.3	16.8	16.8	122.4	121.7	8.4		10.7		17		-				-		-	
						4.4	0.3	261	30.0		8.3		16.8		120.9		8.3		11.1		16		-				-		-	
					Bottom	7.7	0.3	241	29.4	29.4	8.1	8.1	20.9	21.0	87.2	87.1	5.9	5.9	18.7		16		-				-		-	
						7.7	0.3	254	29.3		8.1		21.1		86.9		5.9		19.5		16		-				-		-	
SR5A	Cloudy	Moderate	15:22	4.5	Surface	1.0	0.2	311	30.3	30.3	8.5	8.5	17.4	17.4	151.8	151.2	10.4	10.4	8.4	10.2	10	11	-	-	816585	810685	-	-	-	-
						1.0	0.2	331	30.3		8.5		17.4		150.5		10.3		8.5		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.2	317	29.9	29.9	8.3	8.3	18.3	18.3	121.8	121.3	8.4	8.4	11.8		12		-				-		-	
						3.5	0.2	330	29.9		8.3		18.3		120.8		8.3		11.9		12		-				-		-	
SR6	Cloudy	Moderate	15:47	3.8	Surface	1.0	0.1	275	30.0	30.0	8.2	8.2	15.9	15.9	106.8	106.8	7.4	7.4	12.8	15.8	6	9	-	-	817910	814646	-	-	-	-
						1.0	0.1	292	30.0		8.2		15.9		106.7		7.4		12.7		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	0.1	315	29.8	29.8	8.1	8.1	16.2	16.2	98.8	98.9	6.9	6.9	18.6		11		-				-		-	
						2.8	0.1	328	29.8		8.1		16.2		98.9		6.9		19.0		12		-				-		-	
SR7	Cloudy	Calm	16:45	16.5	Surface	1.0	0.0	216	29.0	29.0	8.0	8.0	19.8	19.8	79.4	79.3	5.5	5.1	2.8	3.7	5	7	-	-	823623	823740	-	-	-	-
						1.0	0.0	217	29.0		8.0		19.8		79.1		5.5		2.9		4		-				-		-	
					Middle	8.3	0.0	315	27.5	27.5	7.9	7.9	26.6	26.6	58.1	58.1	4.6		4.0		8		-				-		-	
						8.3	0.0	320	27.4		7.9		26.5		58.1		4.6		4.0		9		-				-		-	
					Bottom	15.5	0.1	353	27.1	27.1	7.8	7.8	28.3	28.3	63.0	65.1	4.3	4.5	4.4		8		-				-		-	
						15.5	0.1	325	27.1		7.8		28.3		67.1		4.6		4.1		8		-				-		-	
SR8	Cloudy	Moderate	15:44	5.1	Surface	1.0	0.0	0	31.1	31.1	8.1	8.1	15.0	15.0	98.7	98.8	6.7	6.8	8.8	8.4	8	9	-	-	820246	811418	-	-	-	-
						1.0	0.0	0	31.1		8.1		15.0		98.8		6.8		8.8		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	0.0	0	30.1	30.1	8.2	8.2	15.1	15.1	98.8	98.8	6.9	6.9	7.9		8		-				-		-	
						4.1	0.0	0	30.1		8.2		15.1		98.7		6.9		7.9		10		-				-		-	

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 03 August 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	10:51	8.6	Surface	1.0	0.6	176	29.1	29.1	8.0	8.0	15.2	15.2	85.6	85.4	6.1	5.3	5.9	9.8	5	7	83	84	815621	804243	<0.2	<0.2	1.9	1.5
						1.0	0.6	184	29.1		8.0		15.2		85.2		6.0		5.9		7		84				<0.2		2.0	
					Middle	4.3	0.3	223	28.6	28.6	8.0	8.0	22.9	22.9	67.4	67.3	4.6		5.0		7		79				<0.2		1.8	
						4.3	0.3	227	28.6		8.0		22.9		67.2		4.6		5.2		9		78				<0.2		1.7	
					Bottom	7.6	0.5	217	27.3	27.3	7.9	7.9	30.5	30.5	60.1	61.9	4.0	4.2	18.5		8		91				<0.2		0.7	
						7.6	0.5	220	27.3		7.9		30.5		63.7		4.3		18.2		8		91				<0.2		0.7	
C2	Cloudy	Moderate	11:33	10.9	Surface	1.0	1.0	168	29.5	29.5	8.0	8.0	12.6	12.6	83.1	83.0	5.9	4.7	11.7	12.7	10	11	83	86	825682	806938	<0.2	<0.2	2.7	2.5
						1.0	1.1	180	29.5		8.0		12.6		82.9		5.9		11.7		9		84				<0.2		2.4	
					Middle	5.5	0.8	164	28.5	28.5	8.0	8.0	23.2	23.2	50.4	50.4	3.4		10.4		11		85				<0.2		2.6	
						5.5	0.8	166	28.5		8.0		23.2		50.4		3.4		10.4		10		85				<0.2		2.5	
					Bottom	9.9	0.2	144	27.5	27.5	7.9	7.9	27.2	27.2	46.3	46.3	3.2	3.3	16.0		12		89				<0.2		2.6	
						9.9	0.2	146	27.5		7.9		27.2		46.2		3.3		16.0		11		89				<0.2		2.4	
C3	Cloudy	Moderate	08:44	12.3	Surface	1.0	0.3	64	29.1	29.1	8.2	8.2	15.6	15.6	91.6	91.6	6.5	5.7	5.8	5.3	6	6	83	86	822099	817786	<0.2	<0.2	2.0	1.8
						1.0	0.3	68	29.1		8.2		15.6		91.6		6.5		5.9		6		83				<0.2		1.8	
					Middle	6.2	0.4	119	28.3	28.3	8.1	8.1	23.1	23.1	70.0	70.0	4.8		4.4		6		86				<0.2		1.9	
						6.2	0.4	123	28.3		8.1		23.1		69.9		4.8		4.4		5		86				<0.2		1.7	
					Bottom	11.3	1.5	150	26.6	26.6	8.0	8.0	30.0	30.0	51.2	51.3	3.5	3.5	5.7		7		87				<0.2		1.8	
						11.3	1.6	159	26.6		8.0		30.0		51.3		3.5		5.7		7		88				<0.2		1.8	
IM1	Fine	Moderate	11:15	7.1	Surface	1.0	0.6	204	28.6	28.6	8.0	8.0	21.7	21.8	65.9	66.1	4.5	4.5	7.0	9.1	7	10	86	88	818348	806472	<0.2	<0.2	1.6	1.0
						1.0	0.6	209	28.6		8.0		21.9		66.2		4.5		7.0		7		86				<0.2		1.6	
					Middle	3.6	0.3	206	27.5	27.5	7.9	7.9	30.0	30.0	65.5	65.3	4.5		8.0		7		87				<0.2		1.0	
						3.6	0.3	212	27.5		7.9		30.0		65.0		4.5		8.1		8		88				<0.2		1.0	
					Bottom	6.1	0.1	204	27.4	27.4	7.9	7.9	30.3	30.4	49.1	48.9	3.4	3.4	12.0		13		89				<0.2		0.5	
						6.1	0.1	218	27.4		7.9		30.4		48.7		3.4		12.5		15		90				<0.2		0.5	
IM2	Fine	Moderate	11:24	8.4	Surface	1.0	0.6	191	29.0	29.0	8.0	8.0	18.0	18.4	74.2	74.0	5.2	4.8	6.0	6.2	5	6	85	90	818843	806177	<0.2	<0.2	1.8	1.2
						1.0	0.6	199	29.0		8.0		18.8		73.8		5.1		6.0		7		86				<0.2		1.8	
					Middle	4.2	0.3	200	27.6	27.7	7.9	7.9	28.9	28.9	65.1	65.2	4.5		5.1		6		92				<0.2		1.2	
						4.2	0.4	213	27.7		7.9		28.8		65.3		4.5		5.4		6		92				<0.2		1.1	
					Bottom	7.4	0.2	193	27.4	27.4	7.9	7.9	30.3	30.3	55.0	56.1	3.7	3.8	7.3		5		91				<0.2		0.8	
						7.4	0.2	206	27.4		7.9		30.3		57.1		3.8		7.5		6		92				<0.2		0.7	
IM3	Fine	Moderate	11:34	8.1	Surface	1.0	0.6	208	29.2	29.2	8.0	8.0	17.3	17.3	81.0	80.9	5.6	4.7	5.5	7.5	6	7	79	85	819404	806011	<0.2	<0.2	1.8	1.5
						1.0	0.6	226	29.2		8.0		17.3		80.8		5.6		5.6		5		78				<0.2		1.9	
					Middle	4.1	0.4	192	28.1	28.2	7.9	7.9	26.2	26.0	54.3	54.4	3.7		7.1		6		83				<0.2		1.8	
						4.1	0.4	199	28.2		7.9		25.8		54.5		3.7		7.2		7		84				<0.2		1.8	
					Bottom	7.1	0.2	213	27.4	27.4	7.9	7.9	30.0	30.0	57.9	58.1	3.9	3.9	9.8		8		92				<0.2		0.7	
						7.1	0.2	232	27.4		7.9		30.0		58.3		3.9		9.6		8		92				<0.2		0.7	
IM4	Fine	Moderate	11:43	7.5	Surface	1.0	0.6	192	29.4	29.4	8.0	8.0	16.4	16.4	83.1	83.0	5.8	4.9	5.6	9.4	5	7	88	90	819564	805049	<0.2	<0.2	2.0	1.5
						1.0	0.7	197	29.4		8.0		16.4		82.9		5.8		5.6		5		88				<0.2		2.0	
					Middle	3.8	0.4	202	28.3	28.3	8.0	8.0	24.2	24.2	58.1	58.0	4.0		8.9		6		87				<0.2		1.9	
						3.8	0.4	219	28.3		8.0		24.2		57.9		3.9		9.1		7		87				<0.2		1.8	
					Bottom	6.5	0.3	200	27.5	27.5	7.9	7.9	29.5	29.4	54.7	55.6	3.7	3.8	13.7		11		95				<0.2		0.7	
						6.5	0.3	211	27.5		7.9		29.2		56.5		3.8		13.4		10		95				<0.2		0.8	
IM5	Fine	Moderate	11:57	6.4	Surface	1.0	0.7	184	29.5	29.5	7.9	7.9	14.5	14.5	84.6	84.4	6.0	5.2	6.5	10.4	5	12	86	88	820548	804939	<0.2	<0.2	2.3	1.8
						1.0	0.8	190	29.5		7.9		14.5		84.1		5.9		6.5		6		86				<0.2		2.4	
					Middle	3.2	0.6	181	29.1	29.1	7.9	7.9	17.1	17.1	65.0	64.4	4.5		10.8		10		86				<0.2		2.2	
						3.2	0.7	187	29.1		7.9		17.1		63.8		4.5		11.7		8		86				<0.2		2.1	
					Bottom	5.4	0.4	201	27.5	27.5	7.9	7.9	29.2	29.2	54.4	54.5	3.7	3.7	13.6		22		91				<0.2		0.8	
						5.4	0.4	210	27.5		7.9		29.2		54.6		3.7		13.4		22		91				<0.2		0.7	
IM6	Fine	Moderate	12:08	6.4	Surface	1.0	0.4	255	29.3	29.3	8.0	8.0	16.3	16.3	84.2	84.2	5.9	5.4	5.5	6.8	4	5	90	91	821040	805820	<0.2	<0.2	1.9	1.9
						1.0	0.4	273	29.3		8.0		16.3		84.1		5.9		5.5		4		90				<0.2		1.9	
					Middle	3.2	0.3	223	28.9	28.9	7.9	7.9	19.2	19.2	69.1	69.2	4.8		6.3		5		90				<0.2		2.0	
						3.2	0.3	224	28.9		7.9		19.2		69.2		4.8		6.3		5		90				<0.2		1.8	
					Bottom	5.4	0.2	211	28.0	28.0	7.9	7.9	26.2	26.2	59.3	59.5	4.0	4.0	8.5		5		92				<0.2		1.7	
						5.4	0.2	213	28.0		7.9		26.2		59.6		4.0		8.5		6		92				<0.2		1.9	
IM7	Fine	Moderate	10:58	6.9	Surface	1.0	0.4	223	29.5	29.5	8.1	8.1	14.7	14.7	82.0	81.8	5.8	5.0	7.1	8.3	6	7	85	88	821352	806841	<0.2	<0.2	2.1	2.0
						1.0	0.4	236	29.5		8.1		14.7		81.6		5.7		7.1		5		86				<0.2		2.1	
					Middle	3.5	0.2	252	29.1	29.1	8.0	8.0	19.3	19.4	60.3	60.2	4.2		8.1		6		88				<0.2		2.0	
						3.5	0.2	275	29.1		8.0		19.4		60.1		4.2		8.1		8		89				<0.2		1.9	
					Bottom	5.9	0.1	306	28.7	28.7	8.0	8.0	22.2	22.2	50.6	50.6	3.5	3.5	9.6		8		90				<0.2		2.0	
						5.9	0.1	309	28.6		8.0		22.2		50.5		3.5		9.7		9		90				<0.2		1.9	
IM8	Cloudy	Moderate	10:43	7.9	Surface	1.0	0.5	184	29.4	29.4	8.1	8.1	15.0	15.0	86.1	86.0	6.1	4.9	7.6	9.4	7	7	85	88	821685	807848	<0.2	<0.2	2.1	2.0
						1.0	0.5	190	29.4		8.1		15.0		85.9		6.0		7.5		6		86				<0.2		2.0	
					Middle	4.0	0.2	279	28.7	28.7	8.0	8.0	22.7	22.7	53.8	53.8	3.7		9.0		6		89				<0.2		2.0	
						4.0	0.2	298	28.7		8.0		22.7		53.8		3.7		9.0		6		88				<0.2		1.9	
					Bottom	6.9	0.1	336	28.0	28.0	8.0	8.0	27.6	27.6	51.7	51.8	3.5	3.5	11.7		8		91				<0.2		1.9	
						6.9	0.1	344	28.0		8.0		27.6		51.9		3.5		11.7		8		91				<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 03 August 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	10:30	7.0	Surface	1.0	0.4	151	29.3	29.3	8.1	8.1	14.9	14.9	89.9	89.9	6.3	5.7	7.2	8.4	6	5	83	86	822088	808829	<0.2	<0.2	2.4	2.4
						1.0	0.4	157	29.3		8.1		14.9		89.9		6.3		7.2		5		84				<0.2		2.6	
					Middle	3.5	0.6	148	29.5	29.5	8.1	8.1	17.5	17.5	71.7	71.7	5.0		7.2		5		87				<0.2		2.2	
						3.5	0.6	152	29.5		8.1		17.5		71.6		5.0		7.1		5		87				<0.2		2.2	
					Bottom	6.0	0.2	20	28.3	28.3	8.0	8.0	24.4	24.4	50.7	50.8	3.5	3.5	10.8		6		88				<0.2		2.4	
						6.0	0.2	21	28.3		8.0		24.4		50.8		3.5		10.9		5		89				<0.2		2.4	
IM10	Cloudy	Moderate	10:23	7.1	Surface	1.0	0.4	167	29.4	29.4	8.1	8.1	15.6	15.6	81.8	81.7	5.7	5.0	7.2	9.2	5	4	87	89	822242	809843	<0.2	<0.2	2.4	2.1
						1.0	0.4	183	29.4		8.1		15.6		81.5		5.7		7.2		5		86				<0.2		2.1	
					Middle	3.6	0.4	157	29.2	29.2	8.0	8.0	19.3	19.3	61.8	61.8	4.3		7.9		4		88				<0.2		2.1	
						3.6	0.5	172	29.2		8.0		19.2		61.8		4.3		7.9		4		89				<0.2		1.9	
					Bottom	6.1	0.2	342	28.2	28.2	8.1	8.1	26.3	26.3	48.5	48.3	3.4	3.4	12.4		4		91				<0.2		2.0	
						6.1	0.2	315	28.2		8.1		26.3		48.1		3.4		12.4		4		91				<0.2		2.0	
IM11	Cloudy	Moderate	10:15	7.6	Surface	1.0	0.3	116	29.4	29.4	8.1	8.1	16.0	16.0	77.6	77.4	5.4	4.9	7.1	9.2	5	6	83	89	821502	810546	<0.2	<0.2	2.1	1.9
						1.0	0.3	126	29.4		8.1		16.0		77.2		5.4		7.1		5		84				<0.2		2.0	
					Middle	3.8	0.3	134	29.0	29.0	8.0	8.0	19.8	19.9	62.2	62.1	4.3		7.2		6		90				<0.2		1.8	
						3.8	0.3	137	29.0		8.0		19.9		62.0		4.3		7.3		6		91				<0.2		1.7	
					Bottom	6.6	0.1	76	28.2	28.2	8.0	8.0	26.3	26.3	48.2	48.1	3.5	3.5	13.3		7		93				<0.2		1.8	
						6.6	0.1	77	28.2		8.0		26.3		48.0		3.4		13.2		6		92				<0.2		1.7	
IM12	Cloudy	Moderate	10:01	7.8	Surface	1.0	0.3	82	29.3	29.3	8.1	8.1	16.9	16.9	75.5	75.5	5.3	4.6	9.7	14.4	7	7	87	89	821143	811507	<0.2	<0.2	1.7	1.7
						1.0	0.3	88	29.3		8.1		16.9		75.4		5.3		9.7		8		87				<0.2		1.7	
					Middle	3.9	0.4	97	28.7	28.7	8.1	8.1	22.4	22.4	56.1	56.1	3.8		10.5		7		89				<0.2		1.6	
						3.9	0.4	98	28.7		8.1		22.4		56.1		3.8		10.5		8		88				<0.2		1.7	
					Bottom	6.8	0.3	92	28.4	28.4	8.1	8.1	25.2	25.2	48.8	48.8	3.5	3.5	22.9		7		91				<0.2		1.6	
						6.8	0.3	95	28.4		8.1		25.2		48.7		3.5		22.9		7		90				<0.2		1.6	
SR2	Cloudy	Moderate	09:10	4.6	Surface	1.0	0.2	79	29.2	29.2	8.2	8.2	16.2	16.2	88.2	88.2	6.2	6.2	6.5	8.5	4	4	83	87	821444	814167	<0.2	<0.2	1.9	1.8
						1.0	0.2	82	29.2		8.2		16.2		88.1		6.2		6.6		5		84				<0.2		1.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.1	57	28.7	28.7	8.0	8.0	21.3	21.3	69.7	69.8	4.8	4.8	10.3		4		91				<0.2		1.8	
						3.6	0.1	62	28.7		8.0		21.3		69.8		4.8		10.4		4		90				<0.2		1.8	
SR3	Cloudy	Moderate	10:50	8.5	Surface	1.0	0.7	183	29.4	29.4	8.1	8.1	14.6	14.6	87.1	87.0	6.1	4.9	7.2	10.1	4	6	-	-	822154	807565	-	-	-	-
						1.0	0.7	184	29.4		8.1		14.6		86.9		6.1		7.2		5		-				-		-	
					Middle	4.3	0.2	171	28.7	28.7	8.0	8.0	22.2	22.2	53.5	53.5	3.7		10.2		6		-				-		-	
						4.3	0.2	176	28.7		8.0		22.2		53.5		3.7		10.2		6		-				-		-	
					Bottom	7.5	0.1	6	28.0	28.0	8.0	8.0	29.4	29.4	53.1	53.1	3.5	3.5	12.9		8		-				-		-	
						7.5	0.1	6	28.0		8.0		29.4		53.1		3.5		12.9		7		-				-		-	
SR4A	Cloudy	Moderate	10:30	8.9	Surface	1.0	0.1	266	29.0	29.0	8.1	8.1	18.5	18.5	87.5	87.4	6.1	4.8	4.9	9.4	4	9	-	-	817202	807825	-	-	-	-
						1.0	0.1	275	29.0		8.1		18.5		87.3		6.1		5.0		5		-				-		-	
					Middle	4.5	0.0	206	27.8	27.8	7.9	7.9	27.9	27.9	50.0	50.0	3.4		8.1		5		-				-		-	
						4.5	0.0	209	27.8		7.9		27.9		49.9		3.4		8.1		5		-				-		-	
					Bottom	7.9	0.0	67	27.6	27.6	7.9	7.9	29.7	29.7	52.5	53.1	3.5	3.6	14.9		16		-				-		-	
						7.9	0.0	69	27.6		7.9		29.7		53.7		3.6		15.1		16		-				-		-	
SR5A	Cloudy	Moderate	10:14	5.3	Surface	1.0	0.1	179	29.4	29.4	8.2	8.2	16.7	16.7	107.0	106.5	7.5	7.5	6.7	10.3	8	9	-	-	816592	810705	-	-	-	-
						1.0	0.1	195	29.4		8.2		16.7		106.0		7.4		6.9		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	0.1	333	28.4	28.4	7.9	7.9	25.7	25.7	59.6	60.3	4.0	4.1	13.6		10		-				-		-	
						4.3	0.1	344	28.4		7.9		25.7		61.0		4.1		13.9		10		-				-		-	
SR6	Rainy	Moderate	09:48	4.7	Surface	1.0	0.1	61	29.5	29.5	8.1	8.1	16.8	16.8	95.0	95.0	6.6	6.6	7.8	11.2	8	13	-	-	817904	814667	-	-	-	-
						1.0	0.1	63	29.5		8.1		16.8		94.9		6.6		7.8		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.0	310	29.4	29.4	7.9	7.9	18.1	18.1	78.8	80.0	5.5	5.6	14.8		17		-				-		-	
						3.7	0.0	313	29.4		7.9		18.1		81.1		5.6		14.4		19		-				-		-	
SR7	Cloudy	Moderate	08:43	17.3	Surface	1.0	0.2	79	28.6	28.6	7.9	7.9	19.3	19.3	84.9	84.7	5.9	5.6	2.2	2.5	3	4	-	-	823643	823761	-	-	-	-
						1.0	0.2	81	28.6		7.9		19.3		84.5		5.9		2.2		3		-				-		-	
					Middle	8.7	0.1	225	28.2	28.2	7.9	7.9	22.5	22.5	76.0	76.1	5.2		2.3		4		-				-		-	
						8.7	0.1	232	28.2		7.9		22.4		76.1		5.2		2.3		6		-				-		-	
					Bottom	16.3	0.1	32	28.1	27.1	7.8	7.8	30.1	30.2	54.0	54.8	3.7	3.8	2.8		5		-				-		-	
						16.3	0.1	32	26.1		7.7		30.2		55.5		3.8		2.9		5		-				-		-	
SR8	Cloudy	Moderate	09:37	4.4	Surface	1.0	-	-	29.8	29.8	8.1	8.1	16.1	16.1	89.9	90.0	6.2	6.3	9.1	9.8	6	6	-	-	820246	811418	-	-	-	-
						1.0	-	-	29.8		8.1		16.1		90.0		6.3		9.1		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	-	-	29.9	29.9	8.1	8.1	16.2	16.2	89.3	89.3	6.2	6.2	10.4		6		-				-		-	
						3.4	-	-	29.9		8.1		16.2		89.3		6.2		10.4		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 03 August 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	17:15	8.3	Surface	1.0	0.4	83	29.5	29.5	7.9	8.0	15.1	14.9	85.0	85.0	6.0	5.8	6.4	7.9	5	8	84	85	815627	804229	<0.2	<0.2	2.2	1.8
						1.0	0.4	87	29.5		8.0		14.7		85.0		6.0		6.4		4		84				<0.2		2.2	
					Middle	4.2	0.3	56	29.4	29.4	8.0	8.0	17.2	17.2	80.5	80.3	5.6		6.4		6		79				<0.2		2.0	
						4.2	0.3	57	29.4		8.0		17.2		80.0		5.6		6.7		6		79				<0.2		1.9	
					Bottom	7.3	0.3	51	27.6	27.6	7.9	7.9	28.9	28.9	57.9	58.1	3.9	3.9	10.7		15		91				<0.2		1.2	
						7.3	0.3	54	27.6		7.9		28.9		58.2		3.9		10.7		13		91				<0.2		1.3	
C2	Cloudy	Moderate	16:19	11.1	Surface	1.0	0.5	196	30.1	30.1	7.8	7.8	9.6	9.6	71.2	71.2	5.1	4.2	12.8	14.1	9	10	84	86	825682	806946	<0.2	<0.2	3.4	3.5
						1.0	0.6	200	30.1		7.8		9.5		71.2		5.1		12.8		9		84				<0.2		3.5	
					Middle	5.6	0.3	268	28.5	28.5	7.9	7.9	21.5	21.5	47.7	47.7	3.3		15.0		11		85				<0.2		3.3	
						5.6	0.3	292	28.5		7.9		21.5		47.7		3.3		15.1		10		85				<0.2		3.2	
					Bottom	10.1	0.2	6	28.2	28.2	7.9	7.9	23.7	23.8	44.8	44.8	3.1	3.1	14.4		10		89				<0.2		3.7	
						10.1	0.2	6	28.1		7.9		23.8		44.8		3.1		14.4		10		89				<0.2		3.6	
C3	Cloudy	Moderate	19:00	11.8	Surface	1.0	0.2	232	28.9	28.9	8.1	8.1	19.9	19.9	79.7	79.7	5.5	4.6	4.7	6.0	4	6	85	88	822094	817797	<0.2	<0.2	1.6	1.6
						1.0	0.2	247	28.9		8.1		19.9		79.6		5.5		4.8		3		86				<0.2		1.6	
					Middle	5.9	0.2	229	27.3	27.4	8.0	8.0	27.4	27.4	52.7	52.8	3.6		5.3		8		88				<0.2		1.5	
						5.9	0.2	235	27.4		8.0		27.4		52.8		3.6		5.3		6		89				<0.2		1.7	
					Bottom	10.8	0.1	266	26.6	26.6	8.0	8.0	29.7	29.7	48.0	48.0	3.3	3.3	7.8		6		91				<0.2		1.5	
						10.8	0.2	280	26.6		8.0		29.7		48.0		3.3		7.8		7		91				<0.2		1.5	
IM1	Cloudy	Moderate	16:53	6.8	Surface	1.0	0.6	349	29.5	29.5	8.0	8.0	18.3	18.3	85.1	85.2	5.9	6.0	8.5	8.9	8	10	85	87	818342	806462	<0.2	<0.2	1.9	1.6
						1.0	0.7	321	29.5		8.0		18.3		85.2		5.9		8.6		7		86				<0.2		1.7	
					Middle	3.4	0.6	335	29.6	29.6	8.1	8.1	19.0	19.0	88.5	88.5	6.1		8.5		9		87				<0.2		1.6	
						3.4	0.6	338	29.6		8.1		19.0		88.5		6.1		8.6		11		87				<0.2		1.6	
					Bottom	5.8	0.3	336	28.0	28.0	7.9	7.9	26.6	27.1	60.6	61.5	4.1	4.2	9.3		11		89				<0.2		1.5	
						5.8	0.3	343	28.0		7.9		27.5		62.3		4.2		9.6		12		89				<0.2		1.4	
IM2	Cloudy	Moderate	16:45	8.0	Surface	1.0	0.5	338	29.7	29.7	8.2	8.2	18.5	18.6	99.7	99.6	6.8	6.2	8.0	9.2	7	8	85	90	818867	806201	<0.2	<0.2	1.4	1.4
						1.0	0.5	356	29.7		8.2		18.6		99.4		6.8		8.0		7		86				<0.2		1.5	
					Middle	4.0	0.4	340	29.3	29.3	8.0	8.0	19.3	19.3	79.7	79.6	5.5		9.0		8		91				<0.2		1.6	
						4.0	0.4	345	29.3		8.0		19.3		79.4		5.5		9.0		7		91				<0.2		1.4	
					Bottom	7.0	0.3	336	28.6	28.6	8.0	8.0	24.0	24.0	74.8	76.1	5.1	5.2	10.5		10		92				<0.2		1.2	
						7.0	0.3	343	28.6		8.0		24.0		77.3		5.2		10.4		9		92				<0.2		1.2	
IM3	Cloudy	Moderate	16:37	8.1	Surface	1.0	0.3	279	29.6	29.6	7.9	8.0	15.8	15.8	82.2	82.2	5.7	5.5	9.0	9.4	7	8	81	86	819395	806025	<0.2	<0.2	2.4	1.8
						1.0	0.3	299	29.6		8.0		15.8		82.2		5.7		9.1		7		82				<0.2		2.2	
					Middle	4.1	0.6	330	29.3	29.3	8.0	8.0	20.2	20.2	75.8	75.7	5.2		8.7		8		84				<0.2		1.8	
						4.1	0.6	334	29.3		8.0		20.2		75.5		5.2		8.8		9		84				<0.2		1.9	
					Bottom	7.1	0.2	7	27.7	27.8	7.9	7.9	28.2	28.1	55.4	56.3	3.7	3.8	10.5		10		92				<0.2		1.4	
						7.1	0.2	7	27.8		7.9		27.9		57.2		3.9		10.2		8		92				<0.2		1.3	
IM4	Cloudy	Moderate	16:28	7.3	Surface	1.0	0.6	260	29.6	29.6	8.0	8.0	14.8	14.8	84.7	84.5	5.9	5.0	7.4	8.9	7	10	88	90	819564	805045	<0.2	<0.2	2.2	1.9
						1.0	0.6	274	29.6		8.0		14.8		84.3		5.9		7.3		8		88				<0.2		2.4	
					Middle	3.7	0.4	285	28.6	28.6	8.0	8.0	22.3	22.3	59.9	59.8	4.1		9.1		9		87				<0.2		2.1	
						3.7	0.4	285	28.6		8.0		22.3		59.7		4.1		9.2		10		87				<0.2		2.2	
					Bottom	6.3	0.3	343	27.7	27.7	7.9	7.9	27.9	28.0	53.1	53.8	3.6	3.7	10.2		13		94				<0.2		1.3	
						6.3	0.3	353	27.6		7.9		28.1		54.5		3.7		10.4		14		94				<0.2		1.3	
IM5	Cloudy	Moderate	16:14	6.2	Surface	1.0	0.3	307	29.7	29.7	8.0	8.0	13.2	13.3	82.2	82.1	5.8	5.5	7.9	9.0	7	13	86	88	820563	804932	<0.2	<0.2	2.4	1.9
						1.0	0.3	307	29.7		8.0		13.3		81.9		5.8		7.9		9		86				<0.2		2.4	
					Middle	3.1	0.3	347	29.1	29.2	8.0	8.0	18.4	18.1	73.5	73.4	5.1		8.8		10		86				<0.2		2.0	
						3.1	0.3	319	29.2		8.0		17.7		73.2		5.1		8.5		11		86				<0.2		2.1	
					Bottom	5.2	0.3	353	28.3	28.3	7.9	7.9	24.0	24.0	57.9	58.0	4.0	4.0	10.4		21		91				<0.2		1.1	
						5.2	0.3	325	28.3		7.9		24.0		58.0		4.0		10.3		20		91				<0.2		1.2	
IM6	Cloudy	Moderate	16:00	6.0	Surface	1.0	0.6	302	29.2	29.2	7.8	7.8	15.5	15.5	71.7	71.6	5.0	4.8	8.3	9.1	8	10	89	91	821066	805813	<0.2	<0.2	2.1	2.0
						1.0	0.6	320	29.2		7.8		15.5		71.5		5.0		8.5		9		90				<0.2		2.3	
					Middle	3.0	0.6	301	28.9	28.9	7.9	7.9	18.1	18.1	65.2	65.0	4.5		8.6		9		90				<0.2		2.1	
						3.0	0.6	303	28.9		7.9		18.0		64.8		4.5		8.9		10		91				<0.2		2.0	
					Bottom	5.0	0.3	322	28.3	28.3	7.9	7.9	23.7	23.7	57.7	57.9	3.9	4.0	10.2		12		91				<0.2		1.8	
						5.0	0.3	329	28.3		7.9		23.7		58.1		4.0		10.3		14		92				<0.2		1.8	
IM7	Cloudy	Moderate	16:51	8.9	Surface	1.0	0.3	259	29.4	29.4	7.9	7.9	15.1	15.1	65.0	65.0	4.6	4.5	9.7	11.0	9	9	87	89	821363	806842	<0.2	<0.2	2.3	2.3
						1.0	0.3	263	29.4		7.9		15.1		65.0		4.6		9.8		8		86				<0.2		2.4	
					Middle	4.5	0.3	267	29.3	29.3	7.9	7.9	15.7	15.7	62.1	62.1	4.4		10.4		8		89				<0.2		2.6	
						4.5	0.3	290	29.3		7.9		15.7		62.1		4.4		10.3		8		89				<0.2		2.3	
					Bottom	7.9	0.1	173	28.7	28.7	8.0	8.0	21.7	21.7	55.8	55.8	3.8	3.8	12.8		9		92				<0.2		2.2	
						7.9	0.1	184	28.7		8.0		21.7		55.8		3.8		12.8		9		93				<0.2		2.2	
IM8	Cloudy	Moderate	17:08	7.8	Surface	1.0	0.3	206	29.6	29.6	7.9	7.9	12.6	12.6	69.0	69.0	4.9	4.8	11.0	11.8	8	9	85	89	821696	807831	<0.2	<0.2	2.3	2.5
						1.0	0.4	221	29.6		7.9		12.6		69.0		4.9		11.0		8		86				<0.2		2.6	
					Middle	3.9	0.2	231	29.5	29.5	7.9	7.9	15.8	15.8	67.9	67.9	4.8		11.1		9		89				<0.2		2.4	
						3.9	0.2	232	29.5		7.9		15.8		67.8		4.7		11.1		8		90				<0.2		2.5	
					Bottom	6.8	0.1	183	29.1	29.1	7.9	7.9	18.2	18.2	56.8	56.8	4.0	4.0	13.2		9		91				<0.2		2.5	
						6.8	0.1	201	29.1		7.9		18.2		56.8		4.0		13.2		11		92				<0.2		2.5	

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 03 August 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	17:21	6.8	Surface	1.0	0.0	359	29.8	29.8	8.0	8.0	13.6	13.6	75.8	75.8	5.3	5.0	9.6	12.4	9	9	84	88	822091	808802	<0.2	<0.2	2.4	2.4
						1.0	0.0	330	29.8		8.0		13.6		75.8		5.3		9.6		8		84				<0.2		2.3	
					Middle	3.4	0.0	266	29.4	29.4	8.0	8.0	16.7	16.7	66.1	66.1	4.6		12.4		9		89				<0.2		2.5	
						3.4	0.0	285	29.4		8.0		16.7		66.0		4.6		12.5		9		89				<0.2		2.5	
					Bottom	5.8	0.1	223	29.0	29.0	8.0	8.0	19.4	19.4	59.5	59.5	4.1	4.1	15.2		9		91				<0.2		2.4	
						5.8	0.1	236	29.0		8.0		19.4		59.5		4.1		15.2		10		92				<0.2		2.3	
IM10	Cloudy	Moderate	17:29	6.6	Surface	1.0	0.2	321	30.1	30.1	8.1	8.1	13.2	13.3	92.7	92.7	6.5	5.8	9.1	11.1	8	9	86	89	822241	809818	<0.2	<0.2	2.1	2.2
						1.0	0.2	327	30.1		8.1		13.3		92.6		6.5		9.0		8		86				<0.2		2.2	
					Middle	3.3	0.3	320	29.6	29.6	8.0	8.0	16.6	16.6	74.1	74.1	5.1		9.7		10		90				<0.2		2.1	
						3.3	0.4	348	29.6		8.0		16.6		74.1		5.1		9.7		8		89				<0.2		2.1	
					Bottom	5.6	0.3	325	28.7	28.7	8.1	8.1	22.0	22.0	55.0	55.0	3.8	3.8	14.5		9		93				<0.2		2.2	
						5.6	0.3	348	28.7		8.1		22.0		55.0		3.8		14.5		10		92				<0.2		2.2	
IM11	Cloudy	Moderate	17:40	8.1	Surface	1.0	0.2	327	30.0	30.0	8.1	8.1	13.8	13.8	88.2	88.2	6.2	5.6	8.3	9.1	6	7	86	90	821510	810550	<0.2	<0.2	1.7	1.5
						1.0	0.2	329	30.0		8.1		13.8		88.2		6.2		8.4		7		86				<0.2		1.6	
					Middle	4.1	0.4	301	29.6	29.6	8.1	8.1	17.5	17.5	72.9	72.8	5.0		8.2		7		90				<0.2		1.7	
						4.1	0.5	328	29.6		8.1		17.5		72.6		5.0		8.2		7		90				<0.2		1.4	
					Bottom	7.1	0.1	299	28.6	28.6	8.0	8.0	22.8	22.8	55.8	55.9	3.8	3.8	10.6		7		93				<0.2		1.4	
						7.1	0.2	325	28.6		8.0		22.8		55.9		3.8		10.6		7		93				<0.2		1.4	
IM12	Cloudy	Moderate	17:48	7.5	Surface	1.0	0.2	276	29.9	29.9	8.1	8.1	15.8	15.8	86.4	86.4	6.0	5.9	7.8	9.3	5	5	90	92	821169	811501	<0.2	<0.2	1.6	1.6
						1.0	0.2	283	29.9		8.1		15.8		86.4		6.0		7.8		6		89				<0.2		1.6	
					Middle	3.8	0.4	290	29.5	29.5	8.2	8.2	18.6	18.6	82.2	82.2	5.7		7.8		6		91				<0.2		1.6	
						3.8	0.4	305	29.5		8.2		18.6		82.2		5.7		7.8		5		92				<0.2		1.6	
					Bottom	6.5	0.2	298	28.3	28.3	8.0	8.0	23.6	23.6	54.5	54.5	3.7	3.7	12.4		5		93				<0.2		1.6	
						6.5	0.2	303	28.3		8.0		23.6		54.5		3.7		12.4		4		94				<0.2		1.6	
SR2	Cloudy	Moderate	18:35	4.1	Surface	1.0	0.1	292	29.3	29.3	8.2	8.2	18.8	18.8	76.3	76.1	5.3	5.3	8.6	11.4	4	5	84	88	821473	814159	<0.2	<0.2	1.7	1.6
						1.0	0.1	312	29.3		8.2		18.8		75.9		5.2		8.7		3		84				<0.2		1.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.0	220	28.3	28.3	8.0	8.0	23.4	23.5	54.5	54.6	3.7	3.7	14.0		6		91				<0.2		1.5	
						3.1	0.0	241	28.3		8.0		23.5		54.6		3.7		14.1		7		91				<0.2		1.6	
SR3	Cloudy	Moderate	17:00	8.2	Surface	1.0	0.5	189	29.3	29.3	7.9	7.9	15.3	15.3	70.8	70.8	5.2	5.0	9.8	12.4	4	7	-	-	822143	807588	-	-	-	-
						1.0	0.5	190	29.3		7.9		15.3		70.8		5.2		9.8		5		-				-		-	
					Middle	4.1	0.1	212	29.0	29.0	7.9	7.9	18.7	18.7	63.7	63.7	4.7		11.6		7		-				-		-	
						4.1	0.1	226	29.0		7.9		18.7		63.7		4.7		11.6		6		-				-		-	
					Bottom	7.2	0.0	168	28.5	28.5	8.0	8.0	23.9	23.9	51.7	51.7	3.5	3.5	15.7		8		-				-		-	
						7.2	0.0	171	28.5		8.0		23.9		51.7		3.5		15.7		9		-				-		-	
SR4A	Cloudy	Moderate	17:37	8.0	Surface	1.0	0.1	177	29.8	29.8	8.3	8.3	18.3	18.3	110.5	110.4	7.6	7.2	9.7	13.2	8	10	-	-	817179	807794	-	-	-	-
						1.0	0.1	183	29.8		8.3		18.3		110.3		7.6		9.7		9		-				-		-	
					Middle	4.0	0.1	61	29.5	29.5	8.2	8.2	19.7	19.7	98.5	98.1	6.7		14.6		9		-				-		-	
						4.0	0.1	66	29.5		8.2		19.7		97.7		6.7		14.6		11		-				-		-	
					Bottom	7.0	0.0	303	27.9	27.9	7.9	7.9	27.9	27.9	57.1	58.2	3.8	3.9	15.5		12		-				-		-	
						7.0	0.0	329	27.9		7.9		27.8		59.3		4.0		15.3		12		-				-		-	
SR5A	Cloudy	Moderate	17:54	4.5	Surface	1.0	0.1	341	29.7	29.7	8.3	8.3	17.9	17.9	112.3	112.2	7.7	7.7	9.5	10.5	7	8	-	-	816605	810696	-	-	-	-
						1.0	0.1	314	29.7		8.3		17.9		112.1		7.7		9.5		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.0	42	29.6	29.6	8.2	8.2	18.6	18.7	101.2	100.9	7.0	7.0	11.2		10		-				-		-	
						3.5	0.0	45	29.5		8.2		18.8		100.6		6.9		11.6		10		-				-		-	
SR6	Cloudy	Moderate	18:19	3.9	Surface	1.0	0.0	299	29.2	29.2	8.1	8.1	19.0	19.0	89.0	89.0	6.1	6.1	7.7	9.9	8	9	-	-	817900	814664	-	-	-	-
						1.0	0.0	322	29.2		8.1		19.0		89.0		6.1		7.9		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.9	0.0	68	29.3	29.3	8.0	8.0	19.4	19.5	87.5	87.9	6.0	6.1	11.5		11		-				-		-	
						2.9	0.0	72	29.2		8.0		19.6		88.2		6.1		12.4		10		-				-		-	
SR7	Cloudy	Moderate	19:13	16.0	Surface	1.0	0.0	349	27.8	27.8	8.0	8.0	25.0	25.1	80.8	80.8	5.1	5.0	2.6	4.1	4	5	-	-	823653	823742	-	-	-	-
						1.0	0.0	359	27.8		8.0		25.1		80.7		5.1		2.7		3		-				-		-	
					Middle	8.0	0.1	314	27.1	27.2	7.9	7.9	28.4	28.3	77.0	77.3	4.9		4.5		6		-				-		-	
						8.0	0.1	342	27.3		7.9		28.2		77.5		4.9		4.1		5		-				-		-	
					Bottom	15.0	0.1	236	25.8	25.8	7.9	7.9	31.7	31.7	54.5	54.5	3.7	3.7	5.4		6		-				-		-	
						15.0	0.1	255	25.8		7.9		31.7		54.5		3.7		5.4		6		-				-		-	
SR8	Cloudy	Moderate	18:07	4.6	Surface	1.0	0.0	0	30.3	30.3	8.1	8.1	16.5	16.5	77.6	77.4	5.3	5.3	9.6	11.3	7	7	-	-	820246	811418	-	-	-	-
						1.0	0.0	0	30.3		8.1		16.5		77.1		5.3		9.7		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.0	0	29.3	29.3	8.1	8.1	19.5	19.6	69.8	69.8	4.8	4.8	13.1		6		-				-		-	
						3.6	0.0	0	29.3		8.1		19.6		69.8		4.8		12.9		6		-				-		-	

DA: Depth-Averaged

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

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

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

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Sunny	Moderate	12:12	8.6	Surface	1.0	0.8	200	30.0	30.0	7.9	7.9	14.9	14.9	82.7	82.6	5.8	5.2	4.4	5.5	3	4	84	87	815637	804266	<0.2	<0.2	2.6	2.2
						1.0	0.8	208	30.0		7.9		14.8		82.4		5.7		4.4		3		85				<0.2		2.6	
					Middle	4.3	0.6	227	28.7	28.7	7.9	7.9	20.5	20.5	67.7	67.5	4.7		5.2		4		86				<0.2		2.0	
						4.3	0.6	236	28.7		7.9		20.4		67.3		4.7		5.3		4		87				<0.2		2.2	
					Bottom	7.6	0.5	242	28.0	28.0	7.9	7.9	24.6	24.7	54.5	54.4	3.7	3.7	6.9		4		89				<0.2		1.9	
						7.6	0.6	250	27.9		7.8		24.7		54.2		3.7		6.9		5		90				<0.2		2.0	
C2	Sunny	Moderate	13:10	11.0	Surface	1.0	1.1	166	29.9	29.9	7.8	7.8	13.5	13.5	58.6	58.6	4.1	3.6	10.6	14.0	4	6	83	87	825688	806964	<0.2	<0.2	3.0	2.9
						1.0	1.1	171	29.9		7.8		13.5		58.6		4.1		10.6		4		84				<0.2		3.0	
					Middle	5.5	0.8	176	28.0	28.0	7.9	7.9	23.8	23.8	44.7	44.7	3.1		13.6		6		87				<0.2		2.8	
						5.5	0.8	179	28.0		7.9		23.8		44.7		3.1		13.6		6		87				<0.2		2.8	
					Bottom	10.0	0.3	160	27.3	27.3	7.9	7.9	27.1	27.1	43.8	43.8	3.0	3.0	17.8		7		90				<0.2		3.1	
						10.0	0.3	162	27.3		7.9		27.1		43.8		3.0		17.8		6		89				<0.2		2.9	
C3	Sunny	Moderate	10:00	13.8	Surface	1.0	0.6	79	29.1	29.1	8.0	8.0	20.8	20.8	73.4	73.4	5.0	4.7	4.6	4.6	<2	3	84	86	822099	817791	<0.2	<0.2	2.5	2.2
						1.0	0.6	85	29.1		8.0		20.8		73.3		5.0		4.6		<2		85				<0.2		2.5	
					Middle	6.9	0.5	86	27.7	27.7	8.0	8.0	24.8	24.8	63.3	63.3	4.4		4.2		3		88				<0.2		1.9	
						6.9	0.6	90	27.7		8.0		24.8		63.3		4.3		4.3		4		88				<0.2		1.8	
					Bottom	12.8	0.1	99	26.4	26.4	7.9	7.9	29.5	29.5	51.7	51.7	3.5	3.5	5.0		3		90				<0.2		2.0	
						12.8	0.1	105	26.4		7.9		29.5		51.7		3.5		4.9		4		83				<0.2		2.2	
IM1	Sunny	Moderate	12:37	7.1	Surface	1.0	0.7	195	28.8	28.8	7.9	7.9	19.3	19.3	67.7	67.8	4.7	4.2	7.7	8.5	11	12	91	92	818333	806449	<0.2	<0.2	1.5	1.3
						1.0	0.7	214	28.8		7.9		19.3		67.8		4.7		7.9		10		91				<0.2		1.7	
					Middle	3.6	0.3	191	27.6	27.6	7.9	7.9	27.2	27.3	54.0	55.2	3.7		8.2		11		92				<0.2		1.1	
						3.6	0.3	193	27.6		7.9		27.3		56.4		3.8		8.2		10		92				<0.2		1.2	
					Bottom	6.1	0.1	181	27.3	27.3	7.8	7.8	28.5	28.6	53.3	54.4	3.6	3.7	9.4		13		93				<0.2		1.0	
						6.1	0.1	187	27.3		7.8		28.6		55.4		3.7		9.5		15		91				<0.2		1.0	
IM2	Sunny	Moderate	12:47	8.0	Surface	1.0	0.9	220	29.2	29.2	7.9	7.9	17.4	17.4	76.4	76.3	5.3	4.5	5.3	9.3	5	9	95	93	818853	806181	<0.2	<0.2	2.5	2.1
						1.0	1.0	241	29.2		7.9		17.4		76.1		5.3		5.4		3		95				<0.2		2.6	
					Middle	4.0	0.6	217	28.1	28.1	7.8	7.8	24.1	24.1	51.9	52.1	3.6		11.8		7		88				<0.2		2.6	
						4.0	0.6	228	28.1		7.8		24.1		52.2		3.6		11.6		5		88				<0.2		2.3	
					Bottom	7.0	0.3	217	27.9	27.9	7.9	7.9	25.3	25.3	53.1	53.2	3.6	3.6	10.8		16		95				<0.2		1.2	
						7.0	0.3	225	27.9		7.9		25.2		53.2		3.6		10.8		17		96				<0.2		1.3	
IM3	Sunny	Moderate	12:55	7.8	Surface	1.0	0.6	222	29.7	29.7	7.9	7.9	16.2	16.2	77.1	77.0	5.4	5.2	4.8	6.2	2	7	87	93	819429	806029	<0.2	<0.2	2.5	2.2
						1.0	0.6	236	29.6		7.9		16.2		76.8		5.3		4.9		4		88				<0.2		2.6	
					Middle	3.9	0.6	229	29.3	29.3	7.9	7.9	17.7	17.8	72.6	72.5	5.0		5.3		7		96				<0.2		2.1	
						3.9	0.6	240	29.3		7.9		17.8		72.3		5.0		5.3		8		96				<0.2		2.1	
					Bottom	6.8	0.4	201	28.0	28.0	7.9	7.9	24.4	24.4	57.1	57.6	3.9	4.0	8.6		9		94				<0.2		1.8	
						6.8	0.4	215	28.0		7.9		24.4		58.1		4.0		8.5		9		94				<0.2		1.8	
IM4	Sunny	Moderate	13:02	7.4	Surface	1.0	0.7	196	30.2	30.2	7.9	7.9	14.8	14.8	80.0	79.9	5.6	4.8	4.5	9.6	4	8	87	91	819553	805029	<0.2	<0.2	2.4	1.9
						1.0	0.7	198	30.2		7.9		14.8		79.7		5.5		4.5		3		87				<0.2		2.3	
					Middle	3.7	0.3	223	28.2	28.2	7.9	7.9	23.4	23.4	57.9	57.9	4.0		12.1		4		91				<0.2		2.1	
						3.7	0.4	234	28.2		7.9		23.4		57.9		4.0		12.0		6		91				<0.2		2.1	
					Bottom	6.4	0.3	211	27.9	27.9	7.9	7.9	25.4	25.4	57.3	58.0	3.9	4.0	12.2		14		94				<0.2		1.4	
						6.4	0.3	231	27.9		7.9		25.3		58.6		4.0		12.3		15		94				<0.2		1.3	
IM5	Sunny	Moderate	13:17	6.2	Surface	1.0	0.9	201	29.9	29.9	7.8	7.8	14.3	14.3	74.3	74.1	5.2	4.8	5.2	7.6	4	3	87	90	820570	804929	<0.2	<0.2	3.3	2.9
						1.0	0.9	203	29.8		7.8		14.3		73.9		5.2		5.2		3		87				<0.2		3.3	
					Middle	3.1	0.7	225	28.8	28.8	7.8	7.8	20.4	20.4	64.0	64.0	4.4		7.0		3		91				<0.2		2.7	
						3.1	0.7	241	28.8		7.8		20.3		63.9		4.4		7.1		2		91				<0.2		3.0	
					Bottom	5.2	0.5	225	28.1	28.1	7.8	7.8	24.6	24.7	59.4	60.6	4.1	4.2	10.7		3		93				<0.2		2.6	
						5.2	0.6	240	28.1		7.8		24.7		61.8		4.2		10.4		3		93				<0.2		2.5	
IM6	Sunny	Moderate	13:28	6.0	Surface	1.0	0.5	208	29.4	29.4	7.8	7.8	17.6	17.6	68.5	68.4	4.8	4.3	5.5	8.7	2	6	95	94	821069	805836	<0.2	<0.2	2.8	2.1
						1.0	0.5	224	29.4		7.8		17.6		68.3		4.7		5.5		3		95				<0.2		2.7	
					Middle	3.0	0.5	252	28.3	28.3	7.8	7.8	23.0	23.1	56.5	56.9	3.9		8.1		5		95				<0.2		2.0	
						3.0	0.6	260	28.2		7.8		23.2		57.2		3.9		8.1		6		95				<0.2		2.1	
					Bottom	5.0	0.4	248	27.9	27.9	7.8	7.8	24.9	24.9	53.1	53.7	3.6	3.7	12.4		9		91				<0.2		1.4	
						5.0	0.4	260	27.9		7.8		24.9		54.2		3.7		12.3		11		91				<0.2		1.4	
IM7	Sunny	Moderate	12:32	7.6	Surface	1.0	0.3	212	28.9	28.9	8.0	8.0	19.8	19.8	62.2	62.1	4.3	**4.0**	7.5	9.5	<2	2	86	88	821337	806830	<0.2	<0.2	2.5	2.6
						1.0	0.4	216	28.9		8.0		19.8		62.0		4.3		7.5		<2		86				<0.2		2.5	
					Middle	3.8	0.4	275	28.5	28.5	8.0	8.0	21.6	21.6	54.6	54.7	3.7		9.2		2		88				<0.2		2.4	
						3.8	0.4	294	28.5		8.0		21.6		54.8		3.7		9.3		3		89				<0.2		2.4	
					Bottom	6.6	0.2	311	28.0	28.0	8.0	8.0	25.7	25.7	46.2	46.2	3.1	3.1	11.6		2		90				<0.2		2.6	
						6.6	0.2	331	28.0		8.0		25.7		46.2		3.1		11.6		2		91				<0.2		2.9	
IM8	Sunny	Moderate	12:17	7.8	Surface	1.0	0.7	186	29.1	29.1	8.0	8.0	18.5	18.5	67.0	67.0	4.6	4.2	6.4	10.1	<2	3	87	89	821698	807852	<0.2	<0.2	2.4	2.3
						1.0	0.7	197	29.1		8.0		18.5		66.9		4.6		6.4		<2		86				<0.2		2.2	
					Middle	3.9	0.2	184	28.3	28.3	8.0	8.0	23.0	23.0	56.1	56.1	3.8		12.0		<2		90				<0.2		2.3	
						3.9	0.2	184	28.3		8.0		23.0		56.1		3.8		12.0		<2		89				<0.2		2.3	
					Bottom	6.8	0.3	119	28.1	28.1	8.0	8.0	24.3	24.3	46.2	46.2	3.2	3.2	11.9		4		91				<0.2		2.3	
						6.8	0.3	122	28.1		8.0		24.3		46.2		3.2		11.9		3		91				<0.2		2.4	

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 05 August 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	12:03	7.0	Surface	1.0	0.5	154	29.8	29.8	8.0	8.0	16.3	16.3	68.9	68.9	4.8	4.1	6.0	9.6	2	3	85	87	822102	808826	<0.2	<0.2	2.5	2.5
						1.0	0.6	165	29.8		8.0		16.3		68.8		4.8		6.0		3		85				<0.2		2.4	
					Middle	3.5	0.4	144	28.2	28.2	8.0	8.0	23.1	23.1	50.5	50.5	3.4		10.0		4		87				<0.2		2.4	
						3.5	0.4	157	28.2		8.0		23.1		50.5		3.4		10.0		3		87				<0.2		2.4	
					Bottom	6.0	0.1	150	28.0	28.0	8.0	8.0	24.5	24.5	46.7	46.7	3.2	3.2	12.7		4		90				<0.2		2.6	
						6.0	0.1	158	28.0		8.0		24.5		46.7		3.2		12.7		3		90				<0.2		2.5	
IM10	Sunny	Moderate	11:54	6.8	Surface	1.0	0.8	130	30.2	30.2	8.0	8.0	15.8	15.8	75.5	75.4	5.2	4.7	5.3	8.3	2	3	87	89	822234	809830	<0.2	<0.2	2.5	2.5
						1.0	0.8	138	30.2		8.0		15.8		75.3		5.2		5.3		2		86				<0.2		2.5	
					Middle	3.4	0.5	117	29.0	29.0	8.0	8.0	18.5	18.5	61.1	61.1	4.3		6.8		3		88				<0.2		2.4	
						3.4	0.5	123	29.0		8.0		18.5		61.1		4.2		6.8		3		89				<0.2		2.5	
					Bottom	5.8	0.4	94	28.1	28.1	8.0	8.0	24.1	24.1	51.5	51.6	3.5	3.5	12.7		3		91				<0.2		2.5	
						5.8	0.4	94	28.0		8.0		24.1		51.7		3.5		12.7		5		90				<0.2		2.5	
IM11	Sunny	Moderate	11:38	7.9	Surface	1.0	0.5	115	29.5	29.5	8.0	8.0	17.5	17.5	71.4	71.4	5.0	4.5	5.9	9.0	3	4	87	88	821516	810556	<0.2	<0.2	2.1	2.2
						1.0	0.5	125	29.5		8.0		17.5		71.4		5.0		5.9		4		86				<0.2		2.2	
					Middle	4.0	0.3	101	28.7	28.7	8.1	8.1	20.6	20.6	57.6	57.6	4.0		9.3		3		88				<0.2		2.3	
						4.0	0.3	105	28.7		8.1		20.6		57.6		4.0		9.3		5		88				<0.2		2.4	
					Bottom	6.9	0.2	94	28.4	28.4	8.1	8.1	22.7	22.7	55.2	55.3	3.8	3.8	11.8		4		91				<0.2		2.3	
						6.9	0.2	99	28.4		8.1		22.7		55.3		3.8		11.8		3		90				<0.2		2.1	
IM12	Sunny	Moderate	11:29	8.0	Surface	1.0	0.4	100	29.3	29.3	8.0	8.0	17.3	17.3	68.7	68.7	4.8	4.6	6.3	8.7	2	3	85	87	821146	811521	<0.2	<0.2	2.2	2.5
						1.0	0.4	101	29.3		8.0		17.3		68.6		4.8		6.3		4		85				<0.2		2.2	
					Middle	4.0	0.3	318	28.8	28.8	8.1	8.1	19.1	19.1	62.6	62.6	4.4		8.2		4		87				<0.2		2.7	
						4.0	0.3	324	28.8		8.1		19.1		62.5		4.3		8.1		4		86				<0.2		2.7	
					Bottom	7.0	0.2	16	28.5	28.5	8.1	8.1	21.4	21.4	55.7	55.7	3.8	3.8	11.6		2		88				<0.2		2.5	
						7.0	0.2	17	28.5		8.1		21.4		55.7		3.8		11.6		3		88				<0.2		2.4	
SR2	Sunny	Moderate	10:30	4.7	Surface	1.0	0.4	72	29.1	29.1	8.0	8.0	17.4	17.4	69.3	69.4	4.8	4.8	7.4	7.9	2	5	86	88	821480	814161	<0.2	<0.2	3.0	2.8
						1.0	0.4	73	29.1		8.0		17.3		69.4		4.8		7.4		3		87				<0.2		3.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.4	79	28.6	28.6	7.9	7.9	20.3	20.3	63.9	63.9	4.4	4.4	8.4		6		89				<0.2		2.6	
						3.7	0.5	84	28.6		7.9		20.3		63.9		4.4		8.4		7		89				<0.2		2.6	
SR3	Sunny	Moderate	12:24	8.3	Surface	1.0	0.6	183	29.1	29.1	8.0	8.0	19.1	19.1	66.9	66.9	4.6	4.3	6.7	11.5	6	5	-	-	822131	807585	-	-	-	-
						1.0	0.6	199	29.1		8.0		19.1		66.9		4.6		6.8		5		-				-		-	
					Middle	4.2	0.4	215	28.3	28.3	8.0	8.0	22.9	23.0	57.6	57.8	3.9		12.6		4		-				-		-	
						4.2	0.4	221	28.3		8.0		23.0		57.9		4.0		12.6		4		-				-		-	
					Bottom	7.3	0.5	256	27.9	27.9	8.0	8.0	25.2	25.2	45.3	45.4	3.1	3.1	15.1		4		-				-		-	
						7.3	0.5	276	27.9		8.0		25.2		45.4		3.1		15.2		5		-				-		-	
SR4A	Sunny	Moderate	11:51	8.5	Surface	1.0	0.0	253	28.9	28.9	7.9	7.9	20.2	20.2	68.4	68.4	4.7	**4.0**	6.2	9.3	6	10	-	-	817180	807790	-	-	-	-
						1.0	0.0	262	28.9		7.9		20.1		68.3		4.7		6.2		5		-				-		-	
					Middle	4.3	0.1	68	27.4	27.4	7.8	7.8	27.9	27.9	49.2	49.3	3.3		9.1		8		-				-		-	
						4.3	0.1	68	27.4		7.8		27.9		49.3		3.3		9.3		9		-				-		-	
					Bottom	7.5	0.1	74	27.3	27.3	7.8	7.8	28.3	28.3	54.1	54.8	3.7	3.8	12.5		17		-				-		-	
						7.5	0.1	75	27.3		7.8		28.3		55.5		3.8		12.7		17		-				-		-	
SR5A	Sunny	Moderate	11:33	5.0	Surface	1.0	0.1	118	29.2	29.2	7.9	7.9	18.9	18.9	76.2	76.2	5.3	5.3	8.2	9.1	11	12	-	-	816580	810688	-	-	-	-
						1.0	0.1	127	29.2		7.9		18.9		76.1		5.3		8.1		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.1	300	27.9	27.9	7.8	7.8	26.1	26.1	60.2	60.1	4.1	4.1	10.1		12		-				-		-	
						4.0	0.1	323	27.9		7.8		26.1		60.0		4.1		10.0		14		-				-		-	
SR6	Sunny	Moderate	11:02	4.5	Surface	1.0	0.1	46	29.2	29.2	7.9	7.9	18.8	18.8	82.1	81.9	5.7	5.7	5.0	6.2	6	5	-	-	817895	814665	-	-	-	-
						1.0	0.1	49	29.2		7.9		18.8		81.7		5.6		5.1		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.1	41	29.0	29.0	7.9	7.9	20.6	20.5	73.6	74.8	5.1	5.2	7.6		5		-				-		-	
						3.5	0.1	44	29.0		7.9		20.4		76.0		5.2		7.0		5		-				-		-	
SR7	Sunny	Moderate	10:01	18.6	Surface	1.0	0.6	73	28.2	28.2	7.8	7.8	22.4	22.4	74.7	74.7	5.2	4.9	2.5	3.0	5	5	-	-	823623	823743	-	-	-	-
						1.0	0.6	78	28.2		7.8		22.4		74.6		5.1		2.5		6		-				-		-	
					Middle	9.3	0.1	107	27.5	27.5	7.8	7.8	24.7	24.7	66.1	66.2	4.6		3.0		4		-				-		-	
						9.3	0.1	115	27.5		7.8		24.6		66.2		4.6		3.0		5		-				-		-	
					Bottom	17.6	0.2	57	26.4	26.5	7.8	7.8	28.7	28.6	54.1	54.3	3.7	3.7	3.5		5		-				-		-	
						17.6	-	-	26.5		7.8		28.4		54.5		3.7		3.6		4		-				-		-	
SR8	Sunny	Moderate	11:08	4.7	Surface	1.0	-	-	29.3	29.3	8.1	8.1	17.4	17.4	78.1	78.1	5.4	5.4	7.0	7.1	6	6	-	-	820246	811418	-	-	-	-
						1.0	-	-	29.3		8.1		17.4		78.1		5.4		7.0		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	-	-	29.2	29.2	8.0	8.0	17.7	17.7	77.9	78.0	5.4	5.4	7.1		6		-				-		-	
						3.7	-	-	29.2		8.0		17.7		78.0		5.4		7.1		7		-				-		-	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 05 August 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	18:13	8.2	Surface	1.0	0.2	65	30.0	30.0	7.9	7.9	16.7	16.7	75.3	75.4	5.2	5.0	8.8	11.6	11	15	86	89	815615	804243	<0.2	<0.2	2.7	2.3
						1.0	0.2	65	30.0		7.9		16.7		75.4		5.2		8.9		12		86				<0.2		2.6	
					Middle	4.1	0.4	52	29.0	29.0	7.9	7.9	19.5	19.5	69.0	69.2	4.7		11.6		16		89				<0.2		2.3	
						4.1	0.4	54	29.0		7.9		19.4		69.4		4.8		11.7		16		90				<0.2		2.6	
					Bottom	7.2	0.4	40	27.9	28.0	7.9	7.9	25.3	25.1	58.9	60.1	4.0	4.1	14.2		17		91				<0.2		1.8	
						7.2	0.4	41	28.0		7.9		24.9		61.2		4.2		14.2		18		92				<0.2		2.0	
C2	Fine	Moderate	17:31	10.9	Surface	1.0	0.6	199	29.5	29.5	7.7	7.7	14.1	14.1	69.1	69.1	4.8	4.7	9.7	11.6	27	28	84	88	825668	806956	<0.2	<0.2	1.7	1.8
						1.0	0.6	212	29.5		7.7		14.1		69.0		4.8		9.7		27		84				<0.2		1.5	
					Middle	5.5	0.1	179	28.4	28.4	7.8	7.8	22.2	22.2	65.2	65.2	4.5		8.6		25		88				<0.2		1.5	
						5.5	0.1	195	28.4		7.8		22.2		65.1		4.5		8.6		25		88				<0.2		1.7	
					Bottom	9.9	0.2	336	27.9	27.9	7.8	7.8	24.1	24.1	52.0	52.0	3.7	3.7	16.5		31		91				<0.2		2.2	
						9.9	0.2	356	27.9		7.8		24.1		52.0		3.7		16.5		31		91				<0.2		2.0	
C3	Fine	Moderate	20:02	12.1	Surface	1.0	0.4	242	28.5	28.5	8.1	8.1	22.9	22.9	64.8	64.8	4.4	4.1	5.1	6.5	10	10	87	89	822097	817785	<0.2	<0.2	3.0	2.8
						1.0	0.4	243	28.5		8.1		22.9		64.8		4.4		5.1		10		86				<0.2		2.9	
					Middle	6.1	0.5	241	27.2	27.2	8.1	8.1	27.9	27.9	55.3	55.3	3.8		6.3		10		88				<0.2		3.0	
						6.1	0.5	261	27.2		8.1		27.9		55.3		3.8		6.3		11		89				<0.2		2.7	
					Bottom	11.1	0.5	239	26.7	26.7	8.0	8.0	29.0	29.0	52.3	52.3	3.6	3.6	8.2		10		91				<0.2		2.8	
						11.1	0.6	250	26.7		8.0		29.0		52.3		3.6		8.2		10		91				<0.2		2.6	
IM1	Fine	Moderate	17:54	6.9	Surface	1.0	0.2	359	29.8	29.8	7.9	7.9	17.7	17.3	76.8	76.8	5.3	5.3	7.3	12.5	10	9	87	88	818367	806449	<0.2	<0.2	2.2	1.9
						1.0	0.2	330	29.8		7.9		16.9		76.8		5.3		7.3		8		87				<0.2		2.2	
					Middle	3.5	0.4	359	29.7	29.7	8.0	8.0	20.2	20.2	76.2	76.0	5.2		11.7		9		89				<0.2		1.9	
						3.5	0.4	330	29.7		8.0		20.2		75.8		5.2		11.7		9		89				<0.2		1.8	
					Bottom	5.9	0.4	352	29.1	29.2	7.9	7.9	22.2	22.5	75.6	76.5	5.1	5.2	18.6		9		87				<0.2		1.4	
						5.9	0.4	357	29.2		7.9		22.7		77.3		5.2		18.6		8		87				<0.2		1.6	
IM2	Fine	Moderate	17:49	7.6	Surface	1.0	0.2	255	29.9	29.9	7.9	7.9	15.1	15.1	74.0	74.0	5.2	5.1	9.7	11.6	11	11	88	90	818867	806186	<0.2	<0.2	2.3	1.9
						1.0	0.3	266	29.8		7.9		15.1		73.9		5.2		9.8		9		88				<0.2		2.4	
					Middle	3.8	0.2	309	29.6	29.6	7.9	7.9	20.3	20.3	71.8	71.4	4.9		11.1		12		95				<0.2		1.8	
						3.8	0.3	313	29.5		7.9		20.3		71.0		4.9		11.0		10		95				<0.2		1.7	
					Bottom	6.6	0.3	351	28.4	28.5	7.9	7.9	24.5	24.5	78.3	78.7	5.3	5.4	13.8		10		86				<0.2		1.5	
						6.6	0.3	352	28.5		7.9		24.5		79.0		5.4		13.9		11		86				<0.2		1.4	
IM3	Fine	Moderate	17:41	7.8	Surface	1.0	0.3	266	29.6	29.6	7.8	7.8	14.9	14.9	67.7	67.7	4.8	4.6	9.9	11.3	11	15	87	92	819419	806035	<0.2	<0.2	2.4	2.2
						1.0	0.3	291	29.6		7.8		14.9		67.6		4.7		9.8		12		87				<0.2		2.3	
					Middle	3.9	0.2	334	29.5	29.5	7.8	7.8	16.3	16.3	65.1	64.9	4.5		11.7		17		95				<0.2		2.4	
						3.9	0.2	352	29.5		7.8		16.3		64.7		4.5		11.5		17		96				<0.2		2.4	
					Bottom	6.8	0.3	9	28.6	28.7	7.9	7.9	22.8	22.9	66.5	67.7	4.5	4.6	12.6		16		94				<0.2		1.8	
						6.8	0.3	9	28.7		7.8		22.9		68.8		4.7		12.4		17		94				<0.2		1.8	
IM4	Fine	Moderate	17:31	7.0	Surface	1.0	0.4	284	29.3	29.3	7.7	7.7	16.0	16.0	61.8	61.8	4.3	4.8	10.4	13.1	15	19	87	91	819572	805022	<0.2	<0.2	2.4	2.3
						1.0	0.4	291	29.3		7.7		16.0		61.7		4.3		10.5		14		87				<0.2		2.5	
					Middle	3.5	0.1	358	28.8	28.8	7.9	7.9	19.7	19.8	75.8	75.8	5.3		12.2		20		91				<0.2		2.2	
						3.5	0.1	329	28.8		7.9		19.8		75.8		5.3		12.2		20		91				<0.2		2.4	
					Bottom	6.0	0.2	16	28.3	28.5	7.9	7.9	23.9	23.9	76.4	77.1	5.3	5.4	16.7		23		93				<0.2		2.2	
						6.0	0.2	17	28.6		7.9		23.8		77.8		5.4		16.8		24		94				<0.2		2.2	
IM5	Fine	Moderate	17:20	6.1	Surface	1.0	0.5	276	29.3	29.3	7.7	7.7	16.3	16.3	62.6	62.6	4.4	4.6	9.8	11.4	13	16	87	90	820564	804925	<0.2	<0.2	2.4	2.4
						1.0	0.5	295	29.3		7.7		16.2		62.6		4.4		9.9		12		87				<0.2		2.6	
					Middle	3.1	0.4	263	29.2	29.2	7.7	7.7	19.5	19.5	68.8	68.9	4.7		8.8		12		91				<0.2		2.7	
						3.1	0.4	274	29.2		7.7		19.4		68.9		4.7		8.9		13		91				<0.2		2.6	
					Bottom	5.1	0.3	263	28.8	28.8	7.7	7.7	19.5	19.5	73.3	73.2	5.1	5.1	15.5		22		93				<0.2		2.0	
						5.1	0.3	287	28.7		7.7		19.5		73.1		5.1		15.4		24		93				<0.2		2.0	
IM6	Fine	Moderate	17:12	6.0	Surface	1.0	0.5	281	28.9	28.9	7.9	7.9	24.8	24.9	61.9	61.5	4.2	4.5	8.4	10.8	13	16	91	92	821071	805808	<0.2	<0.2	2.7	2.4
						1.0	0.5	292	28.9		7.9		25.0		61.1		4.2		8.5		14		92				<0.2		2.5	
					Middle	3.0	0.3	288	28.5	28.5	7.9	7.9	20.3	20.3	71.0	71.1	4.8		11.0		18		94				<0.2		2.2	
						3.0	0.3	297	28.5		7.9		20.2		71.2		4.9		11.0		18		94				<0.2		2.3	
					Bottom	5.0	0.2	273	28.3	28.3	7.7	7.7	20.6	20.6	56.2	56.3	3.9	3.9	12.8		17		91				<0.2		2.4	
						5.0	0.2	276	28.3		7.7		20.5		56.4		3.9		12.8		17		91				<0.2		2.2	
IM7	Fine	Moderate	18:02	7.3	Surface	1.0	0.3	254	29.5	29.5	7.8	7.8	13.7	13.7	66.3	66.3	4.9	4.6	11.8	15.8	12	13	87	89	821368	806846	<0.2	<0.2	2.8	2.8
						1.0	0.3	262	29.5		7.8		13.7		66.3		4.9		11.8		10		87				<0.2		2.9	
					Middle	3.7	0.3	273	29.1	29.1	7.8	7.8	17.2	17.2	59.1	59.1	4.2		14.5		13		89				<0.2		2.7	
						3.7	0.3	299	29.1		7.8		17.2		59.0		4.2		14.5		14		89				<0.2		2.9	
					Bottom	6.3	0.2	262	28.9	28.9	7.9	7.9	18.2	18.2	54.8	54.8	3.8	3.8	21.0		13		91				<0.2		2.9	
						6.3	0.2	286	28.9		7.9		18.2		54.8		3.8		21.0		13		91				<0.2		2.8	
IM8	Fine	Moderate	18:16	7.7	Surface	1.0	0.2	226	30.3	30.3	7.9	7.9	14.6	14.6	72.6	72.5	5.0	4.7	10.2	12.0	9	10	86	89	821703	807819	<0.2	<0.2	3.0	3.0
						1.0	0.2	246	30.3		7.9		14.6		72.4		5.0		10.3		8		87				<0.2		3.1	
					Middle	3.9	0.1	279	29.5	29.5	7.9	7.9	16.6	16.6	63.4	63.4	4.4		12.0		8		89				<0.2		3.0	
						3.9	0.1	286	29.5		7.9		16.6		63.4		4.4		12.0		10		89				<0.2		2.9	
					Bottom	6.7	0.1	226	29.2	29.2	7.9	7.9	17.3	17.3	52.3	52.3	3.6	3.6	13.7		13		91				<0.2		2.8	
						6.7	0.1	245	29.2		7.9		17.3		52.3		3.6		13.7		11		91				<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 05 August 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	18:29	6.6	Surface	1.0	0.2	304	30.4	30.4	8.0	8.0	13.5	13.5	73.8	73.8	5.2	4.8	10.4	14.4	8	9	87	89	822084	808798	<0.2	<0.2	2.8	2.6
						1.0	0.2	325	30.4		8.0		13.5		73.8		5.2		10.4		7		86				<0.2		2.5	
					Middle	3.3	0.1	336	29.6	29.6	7.9	7.9	16.7	16.7	63.3	63.3	4.4		14.1		8		89				<0.2		2.5	
						3.3	0.1	351	29.6		7.9		16.7		63.2		4.4		14.0		9		89				<0.2		2.6	
					Bottom	5.6	0.1	260	28.7	28.7	7.9	7.9	19.7	19.7	56.4	56.5	3.9	3.9	18.8		11		91				<0.2		2.5	
						5.6	0.1	264	28.7		7.9		19.7		56.6		3.9		18.7		12		91				<0.2		2.7	
IM10	Fine	Moderate	18:37	6.8	Surface	1.0	0.3	351	30.5	30.5	8.0	8.0	13.8	13.8	80.2	80.2	5.6	5.2	8.6	12.5	8	8	84	87	822259	809828	<0.2	<0.2	2.6	2.5
						1.0	0.3	323	30.5		8.0		13.8		80.2		5.6		8.6		7		85				<0.2		2.5	
					Middle	3.4	0.4	327	30.0	30.0	8.0	8.0	16.3	16.3	67.6	67.5	4.7		11.6		9		87				<0.2		2.5	
						3.4	0.4	343	30.0		8.0		16.3		67.4		4.7		11.7		7		87				<0.2		2.6	
					Bottom	5.8	0.4	312	28.7	28.7	8.0	8.0	20.4	20.4	55.3	55.3	3.8	3.8	17.0		9		91				<0.2		2.4	
						5.8	0.4	313	28.6		8.0		20.4		55.3		3.8		17.2		10		90				<0.2		2.5	
IM11	Fine	Moderate	18:47	7.8	Surface	1.0	0.3	324	29.9	29.9	8.0	8.0	16.5	16.5	72.9	72.9	5.1	4.8	9.8	15.8	11	11	87	89	821486	810535	<0.2	<0.2	2.2	2.2
						1.0	0.3	341	29.9		8.0		16.5		72.9		5.0		9.7		10		87				<0.2		2.3	
					Middle	3.9	0.4	309	29.3	29.3	8.0	8.0	18.8	18.8	65.4	65.4	4.5		11.2		10		89				<0.2		2.2	
						3.9	0.4	323	29.3		8.0		18.8		65.4		4.5		11.2		9		89				<0.2		2.1	
					Bottom	6.8	0.3	307	28.3	28.3	8.0	8.0	22.9	22.9	56.1	56.1	3.8	3.8	26.4		12		91				<0.2		2.2	
						6.8	0.3	330	28.3		8.0		22.9		56.1		3.8		26.4		13		91				<0.2		2.3	
IM12	Fine	Moderate	18:56	8.0	Surface	1.0	0.5	267	30.5	30.5	8.0	8.0	15.1	15.1	75.4	75.4	5.2	4.8	8.3	14.0	9	9	86	88	821161	811523	<0.2	<0.2	2.4	2.4
						1.0	0.5	280	30.5		8.0		15.1		75.4		5.2		8.3		8		86				<0.2		2.4	
					Middle	4.0	0.5	284	28.8	28.8	8.1	8.1	21.8	21.8	62.5	62.5	4.3		10.2		8		87				<0.2		2.5	
						4.0	0.5	305	28.8		8.1		21.8		62.5		4.3		10.2		8		88				<0.2		2.3	
					Bottom	7.0	0.3	294	27.8	27.8	8.0	8.0	25.3	25.3	51.1	51.2	3.5	3.5	23.4		10		89				<0.2		2.4	
						7.0	0.3	301	27.8		8.0		25.3		51.3		3.5		23.4		10		89				<0.2		2.4	
SR2	Fine	Moderate	19:39	3.1	Surface	1.0	0.1	213	28.8	28.9	8.1	8.1	21.6	21.6	63.5	63.5	4.6	4.6	13.6	15.2	8	9	86	88	821460	814181	<0.2	<0.2	1.6	1.7
						1.0	0.1	224	28.9		8.1		21.6		63.5		4.6		13.5		9		87				<0.2		1.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.1	0.0	152	27.9	27.9	8.1	8.1	24.7	24.7	54.1	54.3	3.7	3.7	16.8		8		89				<0.2		1.8	
						2.1	0.0	162	27.9		8.1		24.7		54.5		3.7		17.0		9		90				<0.2		1.9	
SR3	Fine	Moderate	18:11	8.1	Surface	1.0	0.4	210	30.2	30.2	7.9	7.9	13.4	13.4	69.1	69.1	4.8	4.6	11.0	13.0	9	8	-	-	822161	807575	-	-	-	-
						1.0	0.4	224	30.2		7.9		13.4		69.1		4.8		11.0		8		-				-		-	
					Middle	4.1	0.2	211	28.7	28.7	7.8	7.8	18.5	18.6	62.4	62.4	4.3		13.8		7		-				-		-	
						4.1	0.2	227	28.7		7.8		18.6		62.4		4.3		13.8		8		-				-		-	
					Bottom	7.1	0.2	224	28.6	28.6	7.9	7.9	20.4	20.5	55.3	55.3	3.8	3.8	14.2		9		-				-		-	
						7.1	0.3	241	28.6		7.9		20.5		55.3		3.8		14.2		9		-				-		-	
SR4A	Fine	Moderate	18:32	8.7	Surface	1.0	0.2	275	29.6	29.6	8.0	8.0	21.5	21.5	80.0	79.6	5.4	5.2	12.2	14.1	14	16	-	-	817179	807793	-	-	-	-
						1.0	0.2	279	29.6		8.0		21.5		79.2		5.4		12.4		12		-				-		-	
					Middle	4.4	0.2	265	29.2	29.2	8.0	8.0	22.2	22.2	72.1	72.1	4.9		13.3		17		-				-		-	
						4.4	0.2	291	29.2		8.0		22.2		72.1		4.9		13.3		17		-				-		-	
					Bottom	7.7	0.0	285	28.5	28.5	7.9	7.9	24.6	24.6	76.1	76.6	5.2	5.2	16.6		17		-				-		-	
						7.7	0.0	301	28.5		7.9		24.6		77.0		5.2		16.5		18		-				-		-	
SR5A	Fine	Moderate	18:50	4.5	Surface	1.0	0.3	291	29.7	29.7	8.1	8.1	21.1	21.1	91.6	91.5	6.2	6.2	11.9	12.2	10	11	-	-	816597	810681	-	-	-	-
						1.0	0.3	293	29.6		8.1		21.1		91.3		6.2		11.8		12		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.2	316	29.4	29.4	8.0	8.0	21.5	21.6	89.7	90.3	6.1	6.2	12.5		10		-				-		-	
						3.5	0.3	335	29.4		8.0		21.6		90.9		6.2		12.7		10		-				-		-	
SR6	Fine	Moderate	19:17	3.8	Surface	1.0	0.1	236	28.9	28.9	7.9	7.9	20.2	20.2	70.9	70.9	4.9	4.9	8.2	9.8	7	8	-	-	817881	814676	-	-	-	-
						1.0	0.1	246	28.9		7.9		20.2		70.9		4.9		8.3		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	0.0	268	28.8	28.8	7.9	7.9	20.7	20.7	71.2	71.7	4.9	5.0	11.3		7		-				-		-	
						2.8	0.0	294	28.8		7.9		20.7		72.1		5.0		11.2		8		-				-		-	
SR7	Fine	Moderate	20:20	19.4	Surface	1.0	0.0	64	27.6	27.6	7.9	7.9	26.4	26.4	78.1	78.2	5.4	5.0	4.3	5.5	6	7	-	-	823638	823728	-	-	-	-
						1.0	0.0	65	27.6		7.9		26.4		78.3		5.4		4.0		4		-				-		-	
					Middle	9.7	0.1	17	26.9	26.9	7.9	7.9	28.4	28.4	66.9	66.9	4.6		6.1		6		-				-		-	
						9.7	0.1	17	26.8		7.9		28.4		66.8		4.6		6.3		5		-				-		-	
					Bottom	18.4	0.0	24	26.5	26.6	7.8	7.8	29.6	29.5	62.0	63.7	4.2	4.3	6.6		10		-				-		-	
						18.4	0.0	25	26.7		7.8		29.3		65.4		4.4		5.8		8		-				-		-	
SR8	Fine	Moderate	19:19	5.1	Surface	1.0	0.0	0	29.9	29.9	8.1	8.1	18.1	18.1	73.5	73.5	5.0	5.0	9.5	12.2	10	10	-	-	820246	811418	-	-	-	-
						1.0	0.0	0	29.9		8.1		18.1		73.5		5.0		9.5		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	0.0	0	28.6	28.6	8.0	8.0	22.7	22.5	62.1	62.2	4.2	4.3	14.8		10		-				-		-	
						4.1	0.0	0	28.6		8.0		22.3		62.3		4.3		14.8		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 08 August 17 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Sunny	Rough	12:50	7.5	Surface	1.0	0.9	211	29.5	29.5	7.7	7.7	19.5	19.5	73.6	73.4	5.0	4.8	16.7	20.4	15	17	78	83	815610	804256	<0.2	<0.2	1.7	1.6
						1.0	0.9	214	29.5		7.7		19.5		73.1		5.0		16.8		16		78				<0.2		1.6	
					Middle	3.8	0.7	210	28.5	28.5	7.7	7.7	22.4	22.4	65.6	65.7	4.5		23.3		16		84				<0.2		1.7	
						3.8	0.7	227	28.5		7.7		22.4		65.7		4.5		23.3		17		84				<0.2		1.6	
					Bottom	6.5	0.7	222	28.4	28.5	7.7	7.7	23.5	23.5	73.3	73.8	5.0	5.1	21.3		18		88				<0.2		1.6	
						6.5	0.8	235	28.5		7.7		23.4		74.2		5.1		21.1		18		88				<0.2		1.6	
C2	Sunny	Moderate	14:52	9.9	Surface	1.0	1.2	160	30.7	30.7	7.7	7.7	13.0	13.0	78.9	78.6	5.5	4.8	10.3	14.5	6	13	87	91	825687	806955	<0.2	<0.2	2.8	3.0
						1.0	1.2	162	30.7		7.7		13.0		78.2		5.4		10.2		5		86				<0.2		2.8	
					Middle	5.0	0.7	155	29.4	29.4	7.7	7.7	18.5	18.5	59.2	59.2	4.1		13.8		11		91				<0.2		3.1	
						5.0	0.7	160	29.4		7.7		18.4		59.2		4.1		13.7		12		92				<0.2		2.9	
					Bottom	8.9	0.4	152	28.6	28.6	7.7	7.7	22.3	22.4	55.4	56.1	3.8	3.9	19.5		20		93				<0.2		3.1	
						8.9	0.4	156	28.6		7.7		22.4		56.7		3.9		19.4		22		94				<0.2		3.2	
C3	Sunny	Moderate	12:28	11.7	Surface	1.0	0.2	319	29.6	29.6	7.9	7.9	21.1	21.1	79.2	79.2	5.4	4.8	4.4	6.4	4	7	89	92	822094	817794	<0.2	<0.2	1.4	1.6
						1.0	0.2	335	29.6		7.9		21.1		79.2		5.4		4.4		6		89				<0.2		1.5	
					Middle	5.9	0.2	290	28.1	28.1	7.8	7.8	24.4	24.4	59.8	59.7	4.1		7.5		8		93				<0.2		1.7	
						5.9	0.2	307	28.1		7.8		24.4		59.6		4.1		7.5		7		93				<0.2		1.5	
					Bottom	10.7	0.2	107	26.7	26.7	7.8	7.8	29.2	29.2	56.2	56.4	3.8	3.8	7.3		8		94				<0.2		1.5	
						10.7	0.2	108	26.7		7.8		29.2		56.5		3.8		7.3		7		93				<0.2		1.7	
IM1	Sunny	Rough	13:16	6.4	Surface	1.0	0.8	204	29.6	29.6	7.8	7.8	18.9	18.9	78.1	78.1	5.4	5.2	14.7	18.8	19	23	81	86	818370	806447	<0.2	<0.2	2.0	1.8
						1.0	0.8	213	29.6		7.8		18.9		78.0		5.4		15.1		17		81				<0.2		1.7	
					Middle	3.2	0.7	208	29.5	29.5	7.8	7.8	19.0	19.0	72.8	72.8	5.0		18.7		23		87				<0.2		1.9	
						3.2	0.7	217	29.5		7.8		19.0		72.7		5.0		19.6		24		87				<0.2		1.8	
					Bottom	5.4	0.7	192	28.5	28.9	7.7	7.8	24.0	23.9	85.0	85.0	5.8	5.8	22.3		25		89				<0.2		1.7	
						5.4	0.7	195	29.2		7.8		23.8		84.9		5.7		22.6		27		90				<0.2		1.8	
IM2	Sunny	Rough	13:28	7.1	Surface	1.0	0.7	212	29.7	29.7	7.7	7.7	18.4	18.4	81.6	81.7	5.6	5.7	17.3	17.0	11	10	80	85	818838	806189	<0.2	<0.2	2.8	3.1
						1.0	0.7	218	29.7		7.7		18.4		81.7		5.6		17.4		11		80				<0.2		3.1	
					Middle	3.6	0.8	212	29.7	29.7	7.7	7.7	18.5	18.6	83.6	84.0	5.7		15.2		11		85				<0.2		2.9	
						3.6	0.9	220	29.7		7.7		18.6		84.4		5.8		15.9		9		85				<0.2		3.1	
					Bottom	6.1	0.6	213	29.7	29.7	7.7	7.7	18.6	18.6	90.1	90.4	6.2	6.2	18.3		9		91				<0.2		3.6	
						6.1	0.7	232	29.7		7.7		18.5		90.6		6.2		18.0		11		91				<0.2		3.3	
IM3	Sunny	Rough	13:37	7.2	Surface	1.0	0.6	230	29.5	29.5	7.7	7.7	19.0	19.0	73.5	73.6	5.1	5.2	17.9	21.6	10	9	79	84	819404	806004	<0.2	<0.2	3.0	3.1
						1.0	0.7	245	29.5		7.7		19.0		73.6		5.1		17.9		9		79				<0.2		3.2	
					Middle	3.6	0.8	241	29.5	29.5	7.7	7.7	19.0	19.1	75.0	75.1	5.2		20.5		9		85				<0.2		2.9	
						3.6	0.8	241	29.5		7.7		19.1		75.1		5.2		20.7		9		85				<0.2		3.4	
					Bottom	6.2	0.6	216	29.5	29.5	7.7	7.7	19.1	19.1	77.8	77.9	5.4	5.4	26.5		10		88				<0.2		3.2	
						6.2	0.6	230	29.5		7.7		19.1		78.0		5.4		26.3		9		89				<0.2		2.9	
IM4	Sunny	Rough	13:45	6.9	Surface	1.0	0.3	324	29.4	29.4	7.7	7.7	19.7	19.7	75.4	75.5	5.2	5.3	12.9	16.4	10	10	78	84	819577	805027	<0.2	<0.2	3.1	3.0
						1.0	0.3	353	29.4		7.7		19.7		75.5		5.2		12.9		10		79				<0.2		3.0	
					Middle	3.5	0.3	276	29.3	29.3	7.7	7.7	19.7	19.7	76.8	76.9	5.3		17.9		9		84				<0.2		3.0	
						3.5	0.3	283	29.3		7.7		19.7		76.9		5.3		18.1		8		85				<0.2		3.0	
					Bottom	5.9	0.3	262	29.3	29.3	7.7	7.7	19.8	19.8	80.9	81.1	5.6	5.6	18.6		11		90				<0.2		2.8	
						5.9	0.3	270	29.3		7.7		19.8		81.2		5.6		18.1		11		90				<0.2		3.2	
IM5	Sunny	Rough	14:00	6.0	Surface	1.0	0.7	246	29.4	29.4	7.7	7.7	19.1	19.1	73.5	73.5	5.1	5.2	13.4	16.3	10	10	80	86	820560	804933	<0.2	<0.2	3.2	3.0
						1.0	0.7	267	29.4		7.7		19.1		73.5		5.1		14.6		10		81				<0.2		3.0	
					Middle	3.0	0.5	253	29.3	29.3	7.7	7.7	19.2	19.2	75.6	75.7	5.2		15.8		11		87				<0.2		2.9	
						3.0	0.5	254	29.3		7.7		19.2		75.8		5.2		15.5		9		87				<0.2		2.9	
					Bottom	5.0	0.6	239	29.3	29.3	7.7	7.7	19.4	19.4	83.1	83.4	5.7	5.8	19.2		9		89				<0.2		2.9	
						5.0	0.6	239	29.3		7.7		19.4		83.6		5.8		19.4		10		89				<0.2		2.9	
IM6	Sunny	Rough	14:12	6.0	Surface	1.0	0.6	251	29.4	29.4	7.6	7.6	18.7	18.7	71.3	71.3	4.9	5.0	11.1	13.9	7	9	77	82	821053	805843	<0.2	<0.2	3.1	3.1
						1.0	0.6	273	29.4		7.6		18.7		71.3		4.9		11.3		9		78				<0.2		3.1	
					Middle	3.0	0.7	254	29.4	29.4	7.7	7.7	18.8	18.8	74.7	74.8	5.1		11.9		9		82				<0.2		3.3	
						3.0	0.7	263	29.4		7.7		18.8		74.9		5.2		13.4		11		83				<0.2		2.9	
					Bottom	5.0	0.7	240	29.4	29.4	7.7	7.7	18.8	18.8	80.2	80.5	5.5	5.6	17.2		9		86				<0.2		3.3	
						5.0	0.8	255	29.4		7.7		18.8		80.7		5.6		18.3		10		87				<0.2		3.0	
IM7	Sunny	Rough	14:22	6.8	Surface	1.0	0.8	217	29.9	29.9	7.7	7.7	17.3	17.2	73.5	73.4	5.1	5.0	11.6	16.7	9	10	81	85	821350	806832	<0.2	<0.2	3.1	3.1
						1.0	0.9	222	29.9		7.7		17.1		73.3		5.1		11.8		9		81				<0.2		2.9	
					Middle	3.4	0.7	231	29.4	29.4	7.6	7.6	18.7	18.7	71.1	71.2	4.9		16.9		10		85				<0.2		3.2	
						3.4	0.8	250	29.4		7.6		18.7		71.2		4.9		14.9		10		85				<0.2		2.9	
					Bottom	5.8	0.7	234	29.4	29.4	7.6	7.6	18.8	18.8	74.1	74.1	5.1	5.1	22.7		11		90				<0.2		3.5	
						5.8	0.8	245	29.4		7.6		18.8		74.1		5.1		22.3		10		90				<0.2		3.2	
IM8	Sunny	Moderate	14:14	7.1	Surface	1.0	0.8	199	30.4	30.4	7.7	7.7	16.1	16.1	76.5	76.5	5.3	5.0	10.7	15.9	14	15	87	90	821698	807832	<0.2	<0.2	2.8	2.7
						1.0	0.8	211	30.4		7.7		16.0		76.4		5.3		10.8		14		87				<0.2		2.9	
					Middle	3.6	0.6	215	29.7	29.7	7.7	7.7	18.6	18.6	67.8	67.8	4.7		15.4		12		89				<0.2		2.9	
						3.6	0.7	220	29.7		7.7		18.6		67.8		4.7		15.6		13		89				<0.2		2.5	
					Bottom	6.1	0.5	220	29.5	29.5	7.7	7.7	19.2	19.2	68.8	69.4	4.7	4.8	21.5		17		93				<0.2		2.6	
						6.1	0.5	238	29.5		7.7		19.2		69.9		4.8		21.2		17		92				<0.2		2.6	

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 08 August 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	14:06	6.2	Surface	1.0	0.8	177	30.0	30.0	7.7	7.7	18.8	18.1	71.8	72.0	4.9	4.7	11.4	17.5	17	18	88	89	822090	808814	<0.2	<0.2	2.4	2.5
						1.0	0.8	180	30.0		7.7		17.3		72.2		5.0		11.2		17		87				<0.2		2.4	
					Middle	3.1	0.4	182	29.5	29.5	7.7	7.7	19.2	19.3	65.6	65.6	4.5		15.0		15		89				<0.2		2.4	
						3.1	0.4	186	29.5		7.7		19.3		65.6		4.5		15.0		16		89				<0.2		2.7	
					Bottom	5.2	0.5	177	29.3	29.3	7.7	7.7	20.1	20.1	68.1	68.2	4.7	4.7	26.1		19		91				<0.2		2.6	
						5.2	0.5	187	29.3		7.7		20.1		68.3		4.7		26.1		21		92				<0.2		2.5	
IM10	Sunny	Moderate	13:56	6.0	Surface	1.0	0.7	142	29.9	29.9	7.7	7.7	18.2	18.3	70.6	70.6	4.8	4.8	17.3	21.3	18	18	88	89	822255	809834	<0.2	<0.2	2.1	2.3
						1.0	0.8	147	29.8		7.7		18.3		70.5		4.8		17.5		19		87				<0.2		2.4	
					Middle	3.0	0.7	141	29.8	29.8	7.7	7.7	18.6	18.6	69.6	69.6	4.8		19.6		18		89				<0.2		2.3	
						3.0	0.7	148	29.8		7.7		18.6		69.5		4.8		20.2		18		89				<0.2		2.1	
					Bottom	5.0	0.5	155	29.6	29.6	7.7	7.7	19.1	19.2	69.0	69.1	4.7	4.7	26.3		18		91				<0.2		2.4	
						5.0	0.5	160	29.6		7.7		19.2		69.2		4.7		26.8		17		92				<0.2		2.3	
IM11	Sunny	Moderate	13:43	6.6	Surface	1.0	0.8	133	30.3	30.4	7.7	7.7	16.5	16.9	75.4	75.5	5.2	5.0	14.7	17.7	12	13	86	89	821494	810549	<0.2	<0.2	2.3	2.5
						1.0	0.8	138	30.4		7.7		17.2		75.5		5.2		15.6		10		87				<0.2		2.3	
					Middle	3.3	0.6	120	29.7	29.7	7.7	7.7	18.7	18.7	68.7	68.6	4.7		16.3		13		89				<0.2		2.7	
						3.3	0.6	129	29.7		7.7		18.6		68.5		4.7		16.7		10		89				<0.2		2.4	
					Bottom	5.6	0.4	94	29.3	29.3	7.7	7.7	20.0	20.1	68.2	68.6	4.7	4.7	21.3		16		91				<0.2		2.4	
						5.6	0.5	96	29.3		7.7		20.1		68.9		4.7		21.6		18		91				<0.2		2.8	
IM12	Sunny	Moderate	13:33	7.6	Surface	1.0	0.8	115	30.3	30.3	7.7	7.7	16.5	16.5	75.3	75.3	5.2	5.0	10.3	15.7	10	11	86	90	821165	811530	<0.2	<0.2	2.2	2.2
						1.0	0.8	122	30.3		7.7		16.5		75.2		5.2		10.3		8		87				<0.2		2.3	
					Middle	3.8	0.6	89	29.6	29.6	7.7	7.7	19.2	19.2	69.1	69.1	4.7		15.8		11		90				<0.2		2.0	
						3.8	0.6	93	29.6		7.7		19.2		69.1		4.7		15.7		10		89				<0.2		2.2	
					Bottom	6.6	0.4	71	29.3	29.3	7.7	7.7	20.3	20.3	72.5	73.5	5.0	5.1	20.9		12		94				<0.2		2.2	
						6.6	0.4	72	29.3		7.7		20.3		74.5		5.1		21.1		12		93				<0.2		2.4	
SR2	Sunny	Moderate	12:58	3.7	Surface	1.0	0.4	73	29.8	29.8	7.8	7.8	18.5	18.5	75.8	75.9	5.2	5.2	11.3	11.5	10	11	88	89	821446	814169	<0.2	<0.2	1.8	1.8
						1.0	0.5	78	29.8		7.8		18.5		75.9		5.2		11.2		11		87				<0.2		1.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.7	0.3	73	29.8	29.8	7.7	7.7	18.5	18.5	77.7	78.2	5.3	5.4	11.7		11		90				<0.2		1.7	
						2.7	0.3	75	29.8		7.7		18.5		78.7		5.4		11.6		12		91				<0.2		1.7	
SR3	Sunny	Moderate	14:21	7.5	Surface	1.0	1.0	190	30.5	30.5	7.8	7.8	15.5	15.5	78.8	78.7	5.4	4.9	10.7	15.1	9	10	-	-	822157	807590	-	-	-	-
						1.0	1.0	191	30.5		7.8		15.5		78.5		5.4		10.6		9		-				-		-	
					Middle	3.8	0.8	200	29.5	29.5	7.7	7.7	19.1	19.1	62.9	62.9	4.3		14.2		9		-				-		-	
						3.8	0.8	219	29.5		7.7		19.1		62.9		4.3		14.2		9		-				-		-	
					Bottom	6.5	0.5	221	29.4	29.4	7.7	7.7	19.5	19.5	63.3	63.5	4.3	4.4	20.6		11		-				-		-	
						6.5	0.5	226	29.4		7.7		19.4		63.7		4.4		20.4		10		-				-		-	
SR4A	Sunny	Calm	12:30	7.2	Surface	1.0	0.5	269	29.8	29.8	7.8	7.8	20.0	20.1	85.6	85.2	5.8	5.7	18.2	19.9	17	19	-	-	817201	807811	-	-	-	-
						1.0	0.5	284	29.8		7.8		20.1		84.8		5.8		18.9		16		-				-		-	
					Middle	3.6	0.5	270	29.6	29.6	7.8	7.8	20.3	20.3	81.3	80.9	5.5		20.6		19		-				-		-	
						3.6	0.6	287	29.5		7.8		20.3		80.5		5.5		21.2		18		-				-		-	
					Bottom	6.2	0.6	269	28.9	28.9	7.7	7.7	22.9	22.9	82.6	82.8	5.6	5.6	20.4		21		-				-		-	
						6.2	0.7	275	28.9		7.7		22.9		83.0		5.6		20.3		20		-				-		-	
SR5A	Sunny	Calm	12:12	4.5	Surface	1.0	0.3	303	29.4	29.4	7.8	7.8	21.0	21.0	85.4	85.4	5.8	5.8	11.7	11.0	9	9	-	-	816611	810715	-	-	-	-
						1.0	0.3	321	29.4		7.8		21.0		85.4		5.8		11.8		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.3	310	29.3	29.3	7.8	7.8	22.4	22.4	97.3	97.7	6.6	6.6	10.5		9		-				-		-	
						3.5	0.4	335	29.3		7.8		22.4		98.1		6.6		10.1		10		-				-		-	
SR6	Sunny	Calm	11:48	3.8	Surface	1.0	0.1	295	30.0	30.0	7.8	7.8	20.3	20.4	93.6	93.1	6.3	6.3	15.4	15.3	10	11	-	-	817901	814644	-	-	-	-
						1.0	0.1	311	29.9		7.8		20.5		92.6		6.3		15.3		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	0.0	38	29.8	29.8	7.8	7.8	21.0	21.0	92.7	92.8	6.3	6.3	15.2		12		-				-		-	
						2.8	0.0	41	29.8		7.8		20.9		92.8		6.3		15.2		11		-				-		-	
SR7	Sunny	Moderate	11:46	20.1	Surface	1.0	0.7	84	29.7	29.8	7.8	7.8	19.6	19.6	79.8	79.8	5.4	5.3	3.8	3.9	4	5	-	-	823624	823727	-	-	-	-
						1.0	0.7	88	29.8		7.8		19.5		79.8		5.4		3.8		6		-				-		-	
					Middle	10.1	0.4	48	29.4	29.4	7.8	7.8	20.3	20.4	76.1	76.1	5.2		3.9		5		-				-		-	
						10.1	0.4	49	29.4		7.8		20.4		76.1		5.2		3.9		5		-				-		-	
					Bottom	19.1	1.5	38	29.4	29.4	7.8	7.8	20.4	20.5	76.1	76.1	5.2	5.2	4.0		6		-				-		-	
						19.1	1.5	38	29.4		7.8		20.5		76.0		5.2		3.9		6		-				-		-	
SR8	Sunny	Moderate	13:23	3.8	Surface	1.0	-	-	30.0	30.0	7.8	7.8	18.3	18.3	80.7	80.7	5.5	5.5	8.6	10.0	11	11	-	-	820246	811418	-	-	-	-
						1.0	-	-	30.0		7.8		18.3		80.6		5.5		8.7		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	-	-	29.9	29.9	7.8	7.8	18.6	18.6	80.8	81.0	5.5	5.6	11.2		11		-				-		-	
						2.8	-	-	29.9		7.8		18.6		81.2		5.6		11.4		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 08 August 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	20:08	8.1	Surface	1.0	0.5	34	29.4	29.4	7.8	7.8	19.3	19.3	74.9	74.9	5.1	5.0	12.7	16.9	13	16	77	81	815612	804242	<0.2	<0.2	1.7	1.6
						1.0	0.5	35	29.4		7.8		19.3		74.8		5.1		12.8		12		77				<0.2		1.5	
					Middle	4.1	0.4	24	29.3	29.3	7.7	7.8	19.8	19.8	70.9	70.7	4.9		16.3		13		80				<0.2		1.7	
						4.1	0.5	24	29.3		7.8		19.7		70.5		4.8		17.0		15		80				<0.2		1.5	
					Bottom	7.1	0.5	45	28.7	28.7	7.7	7.7	22.7	22.7	72.7	72.9	5.0	5.0	21.6		20		85				<0.2		1.3	
						7.1	0.5	47	28.7		7.7		22.7		73.1		5.0		21.0		21		85				<0.2		1.6	
C2	Fine	Rough	18:47	10.6	Surface	1.0	0.6	187	30.3	30.4	7.7	7.7	14.4	14.7	73.1	73.4	5.1	4.6	12.4	16.2	10	11	89	92	825669	806952	<0.2	<0.2	2.8	3.0
						1.0	0.6	196	30.4		7.7		15.0		73.7		5.1		12.3		11		90				<0.2		2.8	
					Middle	5.3	0.4	184	29.5	29.6	7.7	7.7	18.2	18.2	58.2	58.2	4.0		15.6		10		91				<0.2		3.3	
						5.3	0.4	186	29.6		7.7		18.1		58.2		4.0		15.9		12		91				<0.2		2.9	
					Bottom	9.6	0.2	24	28.7	28.7	7.7	7.7	22.1	22.1	49.1	49.2	3.4	3.4	20.4		11		94				<0.2		3.2	
						9.6	0.2	24	28.7		7.7		22.1		49.2		3.4		20.6		10		94				<0.2		2.8	
C3	Fine	Moderate	20:42	11.8	Surface	1.0	0.5	245	29.2	29.2	7.9	7.9	21.2	21.2	69.3	69.2	4.7	4.3	4.9	6.5	6	8	87	91	822112	817804	<0.2	<0.2	1.7	1.7
						1.0	0.5	252	29.1		7.9		21.2		69.1		4.7		5.0		8		87				<0.2		1.6	
					Middle	5.9	0.6	248	28.0	28.0	7.9	7.9	25.1	25.1	56.4	56.3	3.8		5.8		6		92				<0.2		1.6	
						5.9	0.7	255	28.0		7.8		25.1		56.2		3.8		5.9		8		91				<0.2		1.7	
					Bottom	10.8	0.4	284	27.2	27.3	7.8	7.8	27.6	27.6	57.7	57.9	3.9	3.9	8.7		9		94				<0.2		1.6	
						10.8	0.4	297	27.3		7.8		27.6		58.0		3.9		8.6		8		93				<0.2		1.8	
IM1	Fine	Moderate	19:43	7.2	Surface	1.0	0.7	357	29.6	29.6	7.9	7.9	20.2	20.2	84.3	84.2	5.8	5.7	11.9	17.6	10	19	78	82	818355	806461	<0.2	<0.2	1.6	1.5
						1.0	0.7	328	29.5		7.9		20.2		84.1		5.7		12.0		9		78				<0.2		1.5	
					Middle	3.6	0.6	346	29.5	29.5	7.8	7.8	22.1	22.1	83.4	83.4	5.6		15.6		13		81				<0.2		1.4	
						3.6	0.6	318	29.5		7.8		22.1		83.3		5.6		15.7		12		82				<0.2		1.6	
					Bottom	6.2	0.4	346	29.0	29.0	7.8	7.8	23.0	23.0	84.9	85.1	5.8	5.8	25.6		34		86				<0.2		1.3	
						6.2	0.5	347	29.0		7.8		23.0		85.2		5.8		24.5		36		86				<0.2		1.4	
IM2	Fine	Moderate	19:33	7.7	Surface	1.0	0.2	312	29.7	29.7	7.8	7.8	18.5	18.5	82.1	82.2	5.6	5.7	14.4	12.4	16	17	81	85	818842	806185	<0.2	<0.2	2.3	2.2
						1.0	0.2	330	29.7		7.8		18.5		82.2		5.7		14.4		16		81				<0.2		2.1	
					Middle	3.9	0.3	2	29.6	29.6	7.8	7.8	19.9	19.9	83.2	83.2	5.7		10.0		18		87				<0.2		2.3	
						3.9	0.3	2	29.5		7.8		19.9		83.1		5.7		10.4		17		87				<0.2		1.9	
					Bottom	6.7	0.4	357	29.3	29.4	7.8	7.8	21.8	21.8	83.8	84.3	5.7	5.7	12.7		17		88				<0.2		2.2	
						6.7	0.4	328	29.4		7.8		21.7		84.7		5.7		12.2		16		88				<0.2		2.2	
IM3	Fine	Moderate	19:24	7.8	Surface	1.0	0.2	257	29.9	29.9	7.7	7.7	17.0	17.0	78.6	78.6	5.4	5.4	10.9	11.3	17	17	80	83	819394	806031	<0.2	<0.2	2.1	2.2
						1.0	0.2	273	29.9		7.7		17.0		78.6		5.4		10.9		16		80				<0.2		2.1	
					Middle	3.9	0.3	280	29.8	29.8	7.7	7.7	17.5	17.5	78.9	79.0	5.4		10.3		16		84				<0.2		2.2	
						3.9	0.3	303	29.8		7.7		17.5		79.0		5.4		10.4		18		85				<0.2		2.0	
					Bottom	6.8	0.2	296	29.7	29.7	7.7	7.7	18.8	18.8	80.8	80.9	5.5	5.6	12.6		16		86				<0.2		2.3	
						6.8	0.2	303	29.7		7.7		18.7		80.9		5.6		12.4		17		85				<0.2		2.3	
IM4	Fine	Moderate	19:15	7.1	Surface	1.0	0.5	299	29.7	29.7	7.7	7.7	17.6	17.7	75.8	75.8	5.2	5.2	12.8	16.5	15	14	78	83	819577	805057	<0.2	<0.2	2.1	2.2
						1.0	0.5	325	29.7		7.7		17.7		75.8		5.2		12.1		13		79				<0.2		2.2	
					Middle	3.6	0.3	312	29.5	29.5	7.7	7.7	18.5	18.5	76.1	76.2	5.2		14.3		14		83				<0.2		2.3	
						3.6	0.3	331	29.5		7.7		18.5		76.2		5.2		14.5		13		83				<0.2		2.2	
					Bottom	6.1	0.2	3	29.5	29.5	7.7	7.7	19.1	19.1	80.2	80.3	5.5	5.5	22.5		16		89				<0.2		2.1	
						6.1	0.2	3	29.5		7.7		19.1		80.4		5.5		22.9		14		88				<0.2		2.1	
IM5	Fine	Moderate	19:03	6.1	Surface	1.0	0.4	297	29.7	29.7	7.6	7.6	17.4	17.4	75.1	75.2	5.2	5.3	17.8	18.4	13	13	82	85	820570	804909	<0.2	<0.2	2.2	2.0
						1.0	0.4	300	29.7		7.6		17.4		75.2		5.2		17.8		13		81				<0.2		2.0	
					Middle	3.1	0.3	308	29.7	29.7	7.7	7.7	17.4	17.4	76.5	76.6	5.3		18.7		14		85				<0.2		2.0	
						3.1	0.3	328	29.7		7.7		17.4		76.6		5.3		18.7		12		85				<0.2		2.0	
					Bottom	5.1	0.4	298	29.7	29.7	7.7	7.7	17.5	17.5	79.8	80.0	5.5	5.5	18.7		14		88				<0.2		2.0	
						5.1	0.5	321	29.7		7.7		17.5		80.1		5.5		18.5		14		89				<0.2		2.0	
IM6	Fine	Moderate	18:57	6.2	Surface	1.0	0.5	285	29.6	29.6	7.6	7.6	17.6	17.6	72.4	72.5	5.0	5.1	10.0	12.8	13	13	80	83	821042	805838	<0.2	<0.2	1.8	2.0
						1.0	0.6	290	29.6		7.6		17.6		72.5		5.0		10.2		11		79				<0.2		1.8	
					Middle	3.1	0.4	289	29.6	29.6	7.6	7.6	17.7	17.7	74.0	74.1	5.1		11.6		14		83				<0.2		2.0	
						3.1	0.5	313	29.6		7.6		17.7		74.1		5.1		11.8		12		84				<0.2		2.1	
					Bottom	5.2	0.4	279	29.6	29.6	7.6	7.6	17.7	17.7	77.7	77.9	5.4	5.4	17.0		13		87				<0.2		2.1	
						5.2	0.4	291	29.6		7.6		17.7		78.0		5.4		16.4		15		87				<0.2		1.9	
IM7	Fine	Moderate	18:50	7.2	Surface	1.0	0.5	205	30.0	30.0	7.6	7.6	15.1	15.1	77.5	77.5	5.4	5.4	15.5	19.0	8	9	77	82	821332	806848	<0.2	<0.2	2.6	2.8
						1.0	0.5	216	30.0		7.6		15.1		77.4		5.4		15.8		9		78				<0.2		2.7	
					Middle	3.6	0.4	237	29.8	29.8	7.6	7.6	16.9	16.9	77.2	77.3	5.3		20.4		10		81				<0.2		2.5	
						3.6	0.4	249	29.8		7.6		16.9		77.3		5.4		20.7		9		81				<0.2		2.8	
					Bottom	6.2	0.4	247	29.7	29.7	7.7	7.7	17.7	17.7	87.3	87.6	6.0	6.1	21.2		9		86				<0.2		3.2	
						6.2	0.4	248	29.7		7.7		17.7		87.9		6.1		20.6		9		87				<0.2		2.9	
IM8	Fine	Rough	19:10	7.3	Surface	1.0	0.4	193	30.5	30.5	7.8	7.8	13.7	13.7	79.1	79.0	5.5	5.1	11.5	16.7	9	11	87	90	821709	807838	<0.2	<0.2	2.7	2.8
						1.0	0.4	204	30.5		7.8		13.7		78.8		5.5		11.5		9		88				<0.2		2.8	
					Middle	3.7	0.3	221	29.9	29.9	7.7	7.7	17.2	17.2	66.2	66.3	4.6		16.4		11		89				<0.2		2.8	
						3.7	0.3	221	29.9		7.7		17.2		66.3		4.6		16.2		11		90				<0.2		2.8	
					Bottom	6.3	0.2	276	29.8	29.8	7.7	7.7	17.4	17.4	66.8	67.1	4.6	4.6	22.3		13		93				<0.2		2.8	
						6.3	0.3	302	29.8		7.7		17.4		67.3		4.6		22.4		11		93				<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 08 August 17 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Fine	Rough	19:18	6.2	Surface	1.0	0.3	186	30.5	30.5	7.8	7.8	14.0	14.1	75.8	75.4	5.3	4.9	13.2	17.3	11	10	87	90	822111	808802	<0.2	<0.2	2.7	2.7
						1.0	0.3	200	30.5		7.8		14.1		75.0		5.2		13.8		9		87				<0.2		2.5	
					Middle	3.1	0.2	224	29.9	29.9	7.7	7.7	17.2	17.2	65.4	65.4	4.5		15.8		12		89				<0.2		2.8	
						3.1	0.2	232	29.9		7.7		17.1		65.4		4.5		15.8		9		90				<0.2		2.6	
					Bottom	5.2	0.2	283	29.7	29.7	7.7	7.7	17.9	18.0	64.2	64.3	4.4	4.4	22.7		10		93				<0.2		2.8	
						5.2	0.2	302	29.7		7.7		18.0		64.4		4.4		22.7		9		94				<0.2		2.7	
IM10	Fine	Moderate	19:26	6.1	Surface	1.0	0.1	218	30.4	30.4	7.7	7.7	15.4	15.4	73.2	73.2	5.1	4.8	10.5	14.0	10	11	87	91	822223	809838	<0.2	<0.2	2.4	2.7
						1.0	0.1	228	30.4		7.7		15.4		73.1		5.0		10.6		9		88				<0.2		2.8	
					Middle	3.1	0.2	2	29.9	29.9	7.7	7.7	17.5	17.5	66.4	66.4	4.6		12.8		12		91				<0.2		2.8	
						3.1	0.2	2	29.9		7.7		17.5		66.4		4.6		13.0		10		92				<0.2		2.6	
					Bottom	5.1	0.2	331	29.5	29.6	7.7	7.7	19.0	19.0	63.1	63.4	4.3	4.4	18.5		12		94				<0.2		2.5	
						5.1	0.2	348	29.6		7.7		18.9		63.6		4.4		18.6		11		94				<0.2		2.9	
IM11	Fine	Moderate	19:37	7.8	Surface	1.0	0.3	325	30.3	30.3	7.7	7.7	16.3	16.3	75.5	75.5	5.2	5.0	11.4	14.9	11	11	89	91	821493	810526	<0.2	<0.2	2.7	2.7
						1.0	0.3	331	30.3		7.7		16.2		75.4		5.2		11.3		10		89				<0.2		2.6	
					Middle	3.9	0.4	317	29.9	29.9	7.8	7.8	18.3	18.3	70.6	70.7	4.8		15.9		11		91				<0.2		2.7	
						3.9	0.5	342	29.9		7.8		18.2		70.8		4.9		15.9		10		91				<0.2		2.7	
					Bottom	6.8	0.4	310	29.8	29.8	7.8	7.8	18.6	18.6	71.9	72.0	4.9	4.9	16.9		10		94				<0.2		2.7	
						6.8	0.5	324	29.8		7.8		18.6		72.0		4.9		17.7		12		94				<0.2		2.5	
IM12	Fine	Moderate	19:46	6.9	Surface	1.0	0.4	299	30.1	30.1	7.8	7.8	17.3	17.3	76.6	76.6	5.3	5.3	9.0	10.0	10	10	87	91	821159	811502	<0.2	<0.2	2.1	2.4
						1.0	0.4	315	30.1		7.8		17.2		76.5		5.3		8.8		9		87				<0.2		2.5	
					Middle	3.5	0.5	289	29.9	29.9	7.8	7.8	18.5	18.5	76.2	76.4	5.2		8.6		10		91				<0.2		2.2	
						3.5	0.5	310	29.9		7.8		18.5		76.5		5.2		8.7		10		91				<0.2		2.2	
					Bottom	5.9	0.5	290	29.8	29.8	7.9	7.9	19.2	19.2	82.1	82.1	5.6	5.6	12.3		11		94				<0.2		2.8	
						5.9	0.5	311	29.7		7.9		19.2		82.1		5.6		12.5		10		93				<0.2		2.6	
SR2	Fine	Moderate	20:16	4.2	Surface	1.0	0.2	299	29.7	29.7	7.8	7.8	19.3	19.4	75.0	75.0	5.1	5.1	12.2	13.7	12	13	91	92	821449	814154	<0.2	<0.2	1.7	1.9
						1.0	0.2	310	29.6		7.8		19.4		74.9		5.1		12.6		12		90				<0.2		1.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.2	291	29.5	29.5	7.8	7.8	19.8	19.9	74.7	74.9	5.1	5.1	14.9		13		93				<0.2		2.0	
						3.2	0.2	303	29.5		7.8		19.9		75.1		5.1		15.2		14		93				<0.2		2.0	
SR3	Fine	Rough	19:04	7.6	Surface	1.0	0.5	187	30.2	30.2	7.7	7.7	15.8	15.9	72.4	72.5	5.0	4.7	12.2	16.9	11	13	-	-	822135	807568	-	-	-	-
						1.0	0.6	201	30.2		7.7		15.9		72.6		5.0		12.3		12		-				-		-	
					Middle	3.8	0.4	204	29.7	29.7	7.7	7.7	17.7	17.8	64.3	64.4	4.4		17.2		12		-				-		-	
						3.8	0.4	213	29.7		7.7		17.8		64.4		4.4		17.3		13		-				-		-	
					Bottom	6.6	0.2	276	29.7	29.7	7.7	7.7	18.1	18.1	65.5	66.1	4.5	4.6	21.1		16		-				-		-	
						6.6	0.2	287	29.7		7.7		18.1		66.6		4.6		21.4		15		-				-		-	
SR4A	Fine	Calm	20:28	7.8	Surface	1.0	0.2	314	29.6	29.6	7.9	7.9	21.6	21.6	92.4	92.4	6.2	6.2	18.9	21.0	20	21	-	-	817194	807822	-	-	-	-
						1.0	0.2	340	29.6		7.9		21.6		92.3		6.2		19.5		20		-				-		-	
					Middle	3.9	0.1	295	29.6	29.6	7.9	7.9	21.6	21.6	92.1	92.1	6.2		21.1		21		-				-		-	
						3.9	0.1	298	29.6		7.9		21.6		92.0		6.2		21.3		20		-				-		-	
					Bottom	6.8	0.1	284	29.6	29.6	7.9	7.9	21.7	21.7	92.5	92.6	6.3	6.3	22.7		22		-				-		-	
						6.8	0.1	285	29.6		7.9		21.7		92.6		6.3		22.4		23		-				-		-	
SR5A	Fine	Calm	20:47	4.8	Surface	1.0	0.2	310	29.7	29.7	7.9	7.9	21.3	21.3	97.3	97.3	6.6	6.6	12.4	12.2	8	12	-	-	816599	810712	-	-	-	-
						1.0	0.2	321	29.7		7.9		21.3		97.3		6.6		12.4		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.2	315	29.6	29.6	7.9	8.0	21.3	21.3	98.9	99.0	6.7	6.7	11.9		17		-				-		-	
						3.8	0.2	337	29.6		8.0		21.3		99.0		6.7		12.0		15		-				-		-	
SR6	Fine	Calm	21:13	4.4	Surface	1.0	0.0	213	29.7	29.7	7.9	7.9	19.2	19.2	90.9	91.0	6.2	6.2	10.2	10.8	7	9	-	-	817903	814672	-	-	-	-
						1.0	0.0	233	29.7		7.9		19.2		91.0		6.2		10.2		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.0	325	29.7	29.7	7.9	7.9	19.3	19.3	95.1	95.3	6.5	6.5	11.4		10		-				-		-	
						3.4	0.0	331	29.7		7.9		19.3		95.4		6.5		11.4		10		-				-		-	
SR7	Fine	Moderate	21:19	18.2	Surface	1.0	0.0	209	28.3	28.3	7.9	7.9	24.4	24.4	69.1	69.5	5.0	5.0	3.9	6.5	6	9	-	-	823651	823741	-	-	-	-
						1.0	0.0	217	28.3		7.9		24.4		69.9		5.0		3.7		8		-				-		-	
					Middle	9.1	0.1	143	27.5	27.5	7.9	7.9	26.7	26.7	54.9	54.9	5.0		6.9		7		-				-		-	
						9.1	0.1	145	27.5		7.9		26.7		54.9		5.0		6.8		8		-				-		-	
					Bottom	17.2	0.1	71	26.7	26.7	7.9	7.9	29.3	29.3	54.5	55.1	3.7	3.8	9.1		12		-				-		-	
						17.2	0.1	77	26.7		7.9		29.3		55.7		3.8		8.8		11		-				-		-	
SR8	Fine	Moderate	20:00	3.4	Surface	1.0	0.0	0	30.0	30.0	7.8	7.8	18.0	18.0	78.8	79.0	5.4	5.4	10.8	13.9	12	11	-	-	820246	811418	-	-	-	-
						1.0	0.0	0	30.0		7.8		18.0		79.1		5.4		10.8		11		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.4	0.0	0	29.8	29.8	7.9	7.9	19.5	19.5	83.1	83.7	5.7	5.7	16.4		10		-				-		-	
						2.4	0.0	0	29.8		7.9		19.5		84.2		5.7		17.6		11		-				-		-	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 10 August 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	14:12	8.8	Surface	1.0	0.9	32	28.6	28.6	7.8	7.8	21.6	21.6	80.3	80.3	5.5	4.8	3.8	11.3	4	8	87	89	815600	804239	<0.2	<0.2	1.1	1.2
						1.0	1.0	34	28.6		7.8		21.6		80.3		5.5		3.8		5		86				<0.2		1.0	
					Middle	4.4	0.7	35	27.7	27.7	7.7	7.7	25.5	25.5	59.2	59.2	4.0		11.5		6		88				<0.2		1.2	
						4.4	0.7	36	27.7		7.7		25.5		59.2		4.0		11.6		5		89				<0.2		1.3	
					Bottom	7.8	0.7	23	26.5	26.5	7.7	7.7	30.1	30.1	52.6	52.7	3.6	3.6	18.7		12		92				<0.2		1.4	
						7.8	0.7	23	26.5		7.7		30.1		52.7		3.6		18.2		13		91				<0.2		1.4	
C2	Rainy	Rough	12:54	12.4	Surface	1.0	0.3	336	29.5	29.5	7.8	7.8	17.9	17.9	74.1	74.0	5.1	4.8	10.8	13.9	12	13	88	90	825666	806936	<0.2	<0.2	2.2	2.1
						1.0	0.3	354	29.5		7.8		17.9		73.9		5.1		11.0		11		88				<0.2		2.2	
					Middle	6.2	0.4	316	28.8	28.8	7.8	7.8	21.4	21.4	64.2	64.1	4.4		11.6		14		92				<0.2		2.0	
						6.2	0.4	337	28.8		7.8		21.4		64.0		4.4		12.6		14		92				<0.2		1.9	
					Bottom	11.4	0.7	290	28.7	28.7	7.7	7.7	22.2	22.2	64.4	64.5	4.4	4.4	18.5		14		91				<0.2		2.0	
						11.4	0.7	291	28.7		7.7		22.2		64.6		4.4		18.6		13		91				<0.2		2.0	
C3	Cloudy	Moderate	14:41	11.4	Surface	1.0	0.7	266	28.5	28.5	7.8	7.8	22.4	22.4	68.5	68.5	4.7	4.7	6.4	6.9	5	8	90	88	822089	817786	<0.2	<0.2	1.3	1.3
						1.0	0.7	275	28.5		7.8		22.4		68.4		4.7		6.5		7		90				<0.2		1.3	
					Middle	5.7	0.7	263	28.4	28.4	7.8	7.8	22.9	22.9	67.0	67.0	4.6		7.0		8		83				<0.2		1.2	
						5.7	0.8	274	28.4		7.8		22.9		67.0		4.6		6.8		8		84				<0.2		1.4	
					Bottom	10.4	1.1	272	28.3	28.3	7.8	7.8	23.2	23.2	67.2	67.2	4.6	4.6	7.4		9		90				<0.2		1.3	
						10.4	1.2	283	28.3		7.8		23.2		67.2		4.6		7.5		8		91				<0.2		1.2	
IM1	Cloudy	Moderate	13:54	7.4	Surface	1.0	0.7	14	28.8	28.8	7.8	7.8	21.1	21.1	74.2	74.1	5.1	4.8	5.8	9.4	8	8	86	89	818344	806469	<0.2	<0.2	1.4	1.3
						1.0	0.7	14	28.8		7.8		21.1		73.9		5.1		5.8		8		87				<0.2		1.3	
					Middle	3.7	0.6	11	28.0	28.0	7.7	7.7	24.1	24.1	64.9	64.9	4.5		6.6		7		89				<0.2		1.1	
						3.7	0.6	11	28.0		7.7		24.1		64.9		4.5		6.6		6		89				<0.2		1.4	
					Bottom	6.4	0.6	355	26.8	26.8	7.7	7.7	29.1	29.1	51.3	51.3	3.5	3.5	15.8		8		91				<0.2		1.2	
						6.4	0.6	327	26.8		7.7		29.1		51.3		3.5		15.8		9		91				<0.2		1.3	
IM2	Cloudy	Moderate	13:48	8.6	Surface	1.0	0.7	23	28.8	28.8	7.8	7.8	20.7	20.7	79.7	79.7	5.5	4.9	5.0	11.9	5	8	86	89	818864	806210	<0.2	<0.2	1.6	1.4
						1.0	0.7	23	28.8		7.8		20.7		79.7		5.5		5.0		7		86				<0.2		1.6	
					Middle	4.3	0.6	22	28.0	28.0	7.7	7.7	24.4	24.4	63.0	63.0	4.3		13.2		7		88				<0.2		1.6	
						4.3	0.7	23	28.0		7.7		24.4		63.0		4.3		13.2		7		89				<0.2		1.4	
					Bottom	7.6	0.5	2	26.8	26.8	7.7	7.7	29.0	29.0	51.1	51.2	3.5	3.5	17.5		12		91				<0.2		1.2	
						7.6	0.5	2	26.8		7.7		29.0		51.2		3.5		17.6		10		92				<0.2		1.1	
IM3	Cloudy	Moderate	13:40	8.8	Surface	1.0	0.8	15	28.6	28.6	7.8	7.8	20.9	20.9	81.0	81.0	5.6	5.2	3.9	9.3	5	6	87	89	819393	806011	<0.2	<0.2	1.4	1.3
						1.0	0.8	16	28.6		7.8		20.9		81.0		5.6		3.9		5		87				<0.2		1.3	
					Middle	4.4	0.7	15	28.4	28.4	7.7	7.7	22.7	22.7	68.6	68.6	4.7		9.3		4		89				<0.2		1.4	
						4.4	0.7	16	28.4		7.7		22.7		68.6		4.7		9.3		5		89				<0.2		1.3	
					Bottom	7.8	0.5	15	27.3	27.3	7.7	7.7	27.4	27.4	54.3	54.4	3.7	3.7	14.8		8		92				<0.2		1.2	
						7.8	0.5	15	27.3		7.7		27.4		54.5		3.7		14.5		9		91				<0.2		1.2	
IM4	Cloudy	Moderate	13:31	8.3	Surface	1.0	0.7	8	28.4	28.4	7.7	7.7	22.8	22.8	72.2	72.2	4.9	4.7	7.7	14.0	8	9	86	89	819567	805038	<0.2	<0.2	1.2	1.2
						1.0	0.7	8	28.4		7.7		22.8		72.1		4.9		7.8		9		86				<0.2		1.2	
					Middle	4.2	0.6	6	28.1	28.1	7.7	7.7	23.9	23.9	64.0	64.0	4.4		15.4		7		89				<0.2		1.3	
						4.2	0.7	6	28.1		7.7		23.9		63.9		4.4		15.6		7		89				<0.2		1.2	
					Bottom	7.3	0.4	355	27.4	27.4	7.7	7.7	26.9	26.9	55.8	55.9	3.8	3.8	18.6		10		91				<0.2		1.2	
						7.3	0.4	327	27.4		7.7		26.9		55.9		3.8		18.7		12		92				<0.2		1.3	
IM5	Cloudy	Moderate	13:20	7.3	Surface	1.0	0.9	9	28.5	28.5	7.7	7.7	22.3	22.3	73.9	73.9	5.1	4.7	7.2	12.1	11	11	87	89	820561	804929	<0.2	<0.2	1.4	1.4
						1.0	0.9	9	28.5		7.7		22.3		73.9		5.1		7.2		12		86				<0.2		1.4	
					Middle	3.7	0.8	2	27.9	27.9	7.7	7.7	24.3	24.3	61.5	61.5	4.2		11.6		10		89				<0.2		1.5	
						3.7	0.8	2	27.9		7.7		24.3		61.5		4.2		11.5		10		89				<0.2		1.5	
					Bottom	6.3	0.4	22	27.3	27.3	7.6	7.6	27.2	27.2	55.1	55.2	3.8	3.8	17.6		12		92				<0.2		1.3	
						6.3	0.4	23	27.3		7.6		27.2		55.2		3.8		17.6		11		91				<0.2		1.3	
IM6	Cloudy	Moderate	13:12	7.5	Surface	1.0	0.5	27	28.8	28.8	7.7	7.7	21.4	21.4	81.3	81.3	5.6	5.4	5.1	9.4	7	9	86	89	821069	805833	<0.2	<0.2	1.6	1.5
						1.0	0.5	29	28.8		7.7		21.4		81.3		5.6		5.1		6		87				<0.2		1.4	
					Middle	3.8	0.4	23	28.6	28.6	7.7	7.7	21.6	21.6	74.1	74.0	5.1		8.2		8		89				<0.2		1.6	
						3.8	0.5	25	28.6		7.7		21.6		73.9		5.1		8.4		10		90				<0.2		1.6	
					Bottom	6.5	0.2	13	28.2	28.2	7.7	7.7	23.4	23.4	67.7	67.7	4.6	4.6	14.8		10		92				<0.2		1.3	
						6.5	0.2	13	28.2		7.7		23.4		67.7		4.6		14.8		12		91				<0.2		1.3	
IM7	Cloudy	Moderate	13:03	9.1	Surface	1.0	0.6	28	29.1	29.1	7.7	7.7	19.7	19.7	79.3	79.3	5.5	5.4	6.8	9.4	8	9	85	89	821350	806818	<0.2	<0.2	1.6	1.8
						1.0	0.6	28	29.1		7.7		19.7		79.2		5.5		6.7		10		86				<0.2		1.7	
					Middle	4.6	0.4	24	28.7	28.7	7.7	7.7	21.4	21.4	75.3	75.3	5.2		7.5		10		89				<0.2		1.8	
						4.6	0.4	25	28.7		7.7		21.4		75.3		5.2		7.5		9		89				<0.2		1.8	
					Bottom	8.1	0.3	31	28.3	28.3	7.6	7.6	23.0	23.0	71.4	71.4	4.9	4.9	13.8		9		91				<0.2		1.8	
						8.1	0.3	31	28.3		7.6		23.0		71.4		4.9		13.9		9		92				<0.2		1.8	
IM8	Rainy	Moderate	13:21	8.6	Surface	1.0	0.4	18	29.4	29.4	7.8	7.8	19.1	19.1	77.7	77.7	5.4	5.3	7.0	8.8	8	8	92	93	821688	807849	<0.2	<0.2	1.7	1.9
						1.0	0.4	18	29.4		7.8		19.1		77.6		5.3		7.0		8		92				<0.2		2.1	
					Middle	4.3	0.4	11	29.0	29.0	7.9	7.9	20.4	20.4	75.1	75.0	5.2		7.7		8		92				<0.2		2.2	
						4.3	0.4	11	29.0		7.9		20.4		74.9		5.2		7.7		7		92				<0.2		1.8	
					Bottom	7.6	0.2	15	28.7	28.7	7.8	7.8	21.9	21.9	70.7	70.8	4.9	4.9	11.6		7		93				<0.2		1.6	
						7.6	0.2	15	28.7		7.8		21.9		70.8		4.9		11.6		8		94				<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 10 August 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	Rainy	Moderate	13:29	7.4	Surface	1.0	0.3	340	29.4	29.4	7.8	7.8	18.8	18.8	78.1	78.1	5.4	5.3	8.4	9.9	7	9	91	93	822088	808810	<0.2	<0.2	1.9	1.9
						1.0	0.3	356	29.4		7.8		18.8		78.1		5.4		8.9		8		91				<0.2		1.9	
					Middle	3.7	0.3	329	29.1	29.1	7.8	7.8	20.1	20.1	74.9	74.9	5.1		8.8		7		93				<0.2		1.8	
						3.7	0.3	338	29.1		7.8		20.1		74.9		5.2		8.8		7		94				<0.2		1.8	
					Bottom	6.4	0.1	340	29.1	29.1	7.8	7.8	20.2	20.2	75.2	75.2	5.2	5.2	12.4		13		95				<0.2		2.0	
						6.4	0.2	340	29.1		7.8		20.2		75.2		5.2		12.3		13		95				<0.2		2.2	
IM10	Cloudy	Moderate	13:37	6.4	Surface	1.0	0.6	309	29.4	29.4	7.9	7.9	19.0	19.0	81.6	81.6	5.6	5.4	7.9	10.8	6	9	91	93	822254	809833	<0.2	<0.2	2.1	1.9
						1.0	0.6	327	29.4		7.9		19.0		81.5		5.6		7.8		7		92				<0.2		2.1	
					Middle	3.2	0.6	308	29.1	29.1	7.8	7.8	19.9	19.9	75.0	75.1	5.2		11.1		9		91				<0.2		2.0	
						3.2	0.6	332	29.1		7.8		19.9		75.1		5.2		11.3		8		92				<0.2		1.9	
					Bottom	5.4	0.3	310	29.1	29.1	7.8	7.8	20.2	20.2	75.6	75.7	5.2	5.2	13.5		12		95				<0.2		1.7	
						5.4	0.3	319	29.1		7.8		20.2		75.7		5.2		13.4		11		95				<0.2		1.8	
IM11	Cloudy	Moderate	13:47	8.2	Surface	1.0	0.6	292	29.2	29.2	7.9	7.9	19.7	19.7	77.1	77.1	5.3	5.3	11.3	13.5	7	13	87	88	821482	810553	<0.2	<0.2	1.9	2.0
						1.0	0.6	316	29.2		7.9		19.7		77.0		5.3		11.6		7		87				<0.2		2.0	
					Middle	4.1	0.6	285	29.1	29.1	7.9	7.9	20.0	20.0	75.1	75.1	5.2		13.5		10		86				<0.2		2.2	
						4.1	0.6	306	29.1		7.9		20.0		75.1		5.2		13.6		10		87				<0.2		2.0	
					Bottom	7.2	0.4	290	29.1	29.1	7.9	7.9	20.2	20.2	75.0	75.0	5.2	5.2	15.8		24		90				<0.2		1.9	
						7.2	0.5	306	29.1		7.9		20.2		75.0		5.2		15.1		22		91				<0.2		1.9	
IM12	Cloudy	Moderate	13:54	8.0	Surface	1.0	0.7	277	29.3	29.3	7.9	7.9	19.6	19.6	78.1	78.0	5.4	5.3	8.3	14.4	9	10	88	91	821180	811514	<0.2	<0.2	2.0	2.0
						1.0	0.7	285	29.3		7.9		19.6		77.9		5.4		8.5		9		89				<0.2		1.8	
					Middle	4.0	0.9	278	29.2	29.2	7.9	7.9	19.7	19.7	76.2	76.3	5.2		16.2		10		91				<0.2		2.2	
						4.0	0.9	289	29.2		7.9		19.7		76.3		5.3		16.1		9		91				<0.2		1.8	
					Bottom	7.0	0.4	280	29.2	29.2	7.9	7.9	19.7	19.7	77.1	77.3	5.3	5.3	18.6		10		93				<0.2		1.9	
						7.0	0.4	287	29.2		7.9		19.7		77.4		5.3		18.7		11		94				<0.2		2.1	
SR2	Cloudy	Moderate	14:22	4.6	Surface	1.0	0.3	194	29.2	29.2	7.9	7.9	19.8	19.8	75.7	75.7	5.2	5.2	13.4	14.6	9	10	84	88	821455	814158	<0.2	<0.2	2.1	2.1
						1.0	0.3	201	29.2		7.9		19.8		75.7		5.2		13.5		9		84				<0.2		2.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.3	195	29.1	29.1	7.9	7.9	20.0	20.0	76.3	76.4	5.2	5.3	15.9		10		92				<0.2		2.1	
						3.6	0.4	198	29.1		7.9		20.0		76.4		5.3		15.7		10		92				<0.2		2.0	
SR3	Rainy	Rough	13:15	9.1	Surface	1.0	0.4	351	29.3	29.3	7.8	7.8	19.4	19.4	76.2	76.2	5.2	5.2	9.3	13.3	7	12	-	-	822142	807565	-	-	-	-
						1.0	0.4	323	29.3		7.8		19.4		76.1		5.2		9.4		6		-				-		-	
					Middle	4.6	0.3	355	29.0	29.0	7.9	7.9	20.4	20.4	73.5	73.5	5.1		15.1		14		-				-		-	
						4.6	0.4	327	29.0		7.9		20.4		73.5		5.1		15.1		14		-				-		-	
					Bottom	8.1	0.3	5	28.8	28.8	7.8	7.8	21.4	21.4	74.1	74.4	5.1	5.1	15.4		15		-				-		-	
						8.1	0.3	5	28.8		7.8		21.4		74.6		5.1		15.4		16		-				-		-	
SR4A	Cloudy	Moderate	14:36	9.3	Surface	1.0	0.4	248	28.6	28.6	7.7	7.7	22.0	22.0	74.8	74.8	5.1	4.6	7.2	11.7	10	10	-	-	817185	807801	-	-	-	-
						1.0	0.4	265	28.6		7.7		22.0		74.8		5.1		7.2		9		-				-		-	
					Middle	4.7	0.3	240	27.3	27.3	7.7	7.7	27.3	27.3	58.7	58.7	4.0		11.7		10		-				-		-	
						4.7	0.3	263	27.3		7.7		27.3		58.7		4.0		11.8		8		-				-		-	
					Bottom	8.3	0.0	238	26.9	26.9	7.6	7.6	28.8	28.8	52.7	52.7	3.6	3.6	16.0		10		-				-		-	
						8.3	0.0	243	26.9		7.6		28.8		52.7		3.6		16.1		12		-				-		-	
SR5A	Cloudy	Moderate	14:54	3.4	Surface	1.0	0.4	293	29.2	29.2	7.8	7.8	20.9	20.9	87.7	87.7	6.0	6.0	13.1	14.9	14	16	-	-	816596	810697	-	-	-	-
						1.0	0.4	316	29.2		7.8		20.9		87.7		6.0		13.2		14		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.4	0.3	302	29.2	29.2	7.8	7.8	21.0	21.0	88.5	88.5	6.0	6.0	16.5		17		-				-		-	
						2.4	0.3	326	29.2		7.8		21.0		88.5		6.0		16.8		17		-				-		-	
SR6	Cloudy	Moderate	15:18	4.1	Surface	1.0	0.3	275	29.5	29.5	7.7	7.7	18.8	18.8	88.1	88.1	6.1	6.1	11.4	10.2	12	13	-	-	817914	814648	-	-	-	-
						1.0	0.3	277	29.5		7.7		18.8		88.1		6.1		11.5		12		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.2	292	29.5	29.5	7.7	7.7	19.7	19.7	87.0	87.0	6.0	6.0	9.0		13		-				-		-	
						3.1	0.2	293	29.5		7.7		19.7		87.0		6.0		9.0		14		-				-		-	
SR7	Cloudy	Moderate	15:09	17.9	Surface	1.0	0.0	166	29.5	29.5	7.8	7.8	19.7	19.6	76.1	76.0	5.2	5.0	5.1	5.4	4	5	-	-	823653	823761	-	-	-	-
						1.0	0.0	173	29.4		7.8		19.5		75.9		5.2		5.0		3		-				-		-	
					Middle	9.0	0.3	205	28.9	28.9	7.8	7.8	21.3	21.3	70.4	70.5	4.8		5.8		5		-				-		-	
						9.0	0.3	222	28.9		7.8		21.3		70.5		4.8		5.8		5		-				-		-	
					Bottom	16.9	0.2	240	28.9	28.9	7.8	7.8	21.3	21.3	70.6	70.7	4.8	4.8	5.3		7		-				-		-	
						16.9	0.3	240	28.9		7.8		21.3		70.7		4.8		5.3		6		-				-		-	
SR8	Cloudy	Moderate	14:08	4.3	Surface	1.0	-	-	29.2	29.2	7.8	7.8	20.0	20.0	73.3	73.3	5.0	5.0	8.9	9.5	8	9	-	-	820246	811418	-	-	-	-
						1.0	-	-	29.2		7.8		20.0		73.3		5.0		8.7		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	-	-	29.2	29.2	7.8	7.8	20.3	20.3	73.8	74.1	5.1	5.1	10.4		10		-				-		-	
						3.3	-	-	29.2		7.8		20.3		74.3		5.1		10.1		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 10 August 17 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	08:26	8.5	Surface	1.0	0.5	227	28.8	28.8	7.7	7.7	19.6	19.6	74.0	73.9	5.1	4.8	9.8	13.7	9	11	86	89	815607	804229	<0.2	<0.2	2.3	2.1
						1.0	0.6	248	28.8		7.7		19.6		73.7		5.1		9.8		9		86				<0.2		2.4	
					Middle	4.3	0.6	203	28.1	28.1	7.7	7.7	23.4	23.4	64.4	64.4	4.4		12.2		11		89				<0.2		2.1	
						4.3	0.7	206	28.1		7.7		23.4		64.4		4.4		12.3		9		89				<0.2		2.1	
					Bottom	7.5	0.4	223	27.3	27.3	7.7	7.7	27.5	27.5	53.8	53.8	3.7	3.7	19.1		14		91				<0.2		2.0	
						7.5	0.4	241	27.3		7.7		27.5		53.8		3.7		19.1		14		90				<0.2		1.8	
C2	Cloudy	Moderate	08:58	12.5	Surface	1.0	0.5	171	29.6	29.6	7.7	7.7	15.5	16.2	73.2	73.3	5.1	4.8	9.9	11.5	8	7	83	87	825663	806949	<0.2	<0.2	2.2	2.2
						1.0	0.5	179	29.6		7.7		16.9		73.4		5.1		9.9		6		84				<0.2		2.3	
					Middle	6.3	0.3	180	29.4	29.4	7.7	7.7	19.6	19.6	64.8	64.8	4.5		9.3		8		86				<0.2		2.1	
						6.3	0.3	195	29.3		7.7		19.6		64.8		4.5		9.5		7		86				<0.2		2.2	
					Bottom	11.5	0.2	141	29.1	29.1	7.7	7.7	20.7	20.7	64.3	64.3	4.4	4.4	15.3		7		90				<0.2		2.2	
						11.5	0.2	142	29.1		7.7		20.7		64.3		4.4		15.3		8		90				<0.2		2.1	
C3	Rainy	Moderate	07:00	12.1	Surface	1.0	0.3	126	29.2	29.3	7.8	7.8	19.5	19.5	71.8	71.8	4.9	4.7	5.2	6.9	3	4	90	87	822124	817815	<0.2	<0.2	2.1	1.7
						1.0	0.3	126	29.3		7.8		19.5		71.8		4.9		5.3		3		85				<0.2		1.9	
					Middle	6.1	0.0	113	28.8	28.8	7.8	7.8	21.7	21.7	65.1	65.1	4.5		6.4		3		83				<0.2		2.0	
						6.1	0.0	121	28.8		7.8		21.7		65.0		4.5		6.9		4		84				<0.2		1.8	
					Bottom	11.1	0.3	357	28.3	28.3	7.8	7.8	23.8	23.8	65.7	65.8	4.5	4.5	8.7		5		90				<0.2		1.4	
						11.1	0.3	359	28.3		7.8		23.7		65.9		4.5		8.6		6		91				<0.2		1.2	
IM1	Cloudy	Moderate	08:42	7.8	Surface	1.0	0.6	186	29.0	29.0	7.7	7.7	19.4	19.4	82.7	82.7	5.7	5.6	5.8	10.7	6	6	86	88	818354	806455	<0.2	<0.2	1.8	1.9
						1.0	0.6	193	29.0		7.7		19.4		82.7		5.7		5.8		5		85				<0.2		2.2	
					Middle	3.9	0.5	171	29.0	29.0	7.7	7.7	19.6	19.6	79.1	79.1	5.5		6.6		7		89				<0.2		1.8	
						3.9	0.5	177	29.0		7.7		19.6		79.1		5.5		6.6		6		88				<0.2		2.0	
					Bottom	6.8	0.3	164	28.7	28.7	7.7	7.7	21.3	21.3	74.6	74.6	5.1	5.1	19.6		5		90				<0.2		1.8	
						6.8	0.3	166	28.7		7.7		21.3		74.6		5.1		19.6		5		90				<0.2		1.7	
IM2	Cloudy	Moderate	08:48	8.8	Surface	1.0	0.5	203	29.0	29.0	7.7	7.7	19.2	19.2	79.9	79.9	5.5	5.3	5.4	10.2	6	7	85	88	818835	806178	<0.2	<0.2	2.2	2.0
						1.0	0.6	212	29.0		7.7		19.2		79.9		5.5		5.4		6		85				<0.2		2.3	
					Middle	4.4	0.6	188	28.9	28.9	7.8	7.8	20.4	20.4	75.5	74.9	5.2		7.9		6		88				<0.2		1.8	
						4.4	0.6	193	28.9		7.8		20.4		74.2		5.1		7.9		5		88				<0.2		1.9	
					Bottom	7.8	0.2	155	28.4	28.4	7.7	7.7	22.9	22.9	66.8	66.8	4.6	4.6	17.2		9		90				<0.2		1.8	
						7.8	0.2	161	28.4		7.7		22.9		66.8		4.6		17.3		9		91				<0.2		1.7	
IM3	Cloudy	Moderate	08:56	9.1	Surface	1.0	0.3	211	29.0	29.0	7.7	7.7	19.1	19.1	80.8	80.8	5.6	5.3	5.6	9.6	6	7	87	89	819404	806008	<0.2	<0.2	1.8	1.7
						1.0	0.3	221	29.0		7.7		19.1		80.8		5.6		5.6		4		86				<0.2		1.8	
					Middle	4.6	0.5	194	29.0	29.0	7.8	7.8	20.2	20.2	72.4	72.3	5.0		7.5		5		89				<0.2		1.8	
						4.6	0.5	206	29.0		7.8		20.2		72.2		5.0		7.5		5		88				<0.2		1.8	
					Bottom	8.1	0.3	203	27.9	27.9	7.7	7.7	25.2	25.2	58.7	58.7	4.0	4.0	15.5		12		91				<0.2		1.5	
						8.1	0.3	220	27.9		7.7		25.2		58.7		4.0		15.6		11		90				<0.2		1.4	
IM4	Cloudy	Moderate	09:04	8.5	Surface	1.0	0.3	202	29.0	29.0	7.7	7.7	19.4	19.4	82.7	82.7	5.7	5.7	5.5	8.8	5	6	86	88	819585	805025	<0.2	<0.2	1.8	1.7
						1.0	0.3	214	29.0		7.7		19.4		82.7		5.7		5.5		4		85				<0.2		1.8	
					Middle	4.3	0.5	195	28.9	28.9	7.7	7.7	19.4	19.4	80.4	80.4	5.6		7.1		4		88				<0.2		1.8	
						4.3	0.5	209	28.9		7.7		19.4		80.4		5.6		7.1		4		88				<0.2		1.9	
					Bottom	7.5	0.4	173	27.8	27.8	7.7	7.7	25.6	25.6	56.5	56.5	3.9	3.9	14.0		11		90				<0.2		1.4	
						7.5	0.4	177	27.8		7.7		25.6		56.5		3.9		13.6		10		90				<0.2		1.6	
IM5	Cloudy	Moderate	09:15	7.5	Surface	1.0	0.5	202	29.0	29.0	7.7	7.7	18.9	18.9	82.6	82.6	5.7	5.4	5.7	10.3	5	12	86	89	820582	804906	<0.2	<0.2	1.9	1.7
						1.0	0.5	202	29.0		7.7		18.9		82.6		5.7		5.7		6		86				<0.2		2.2	
					Middle	3.8	0.5	190	29.0	29.0	7.7	7.7	20.0	20.0	74.1	74.1	5.1		10.2		8		89				<0.2		1.7	
						3.8	0.5	207	29.0		7.7		19.9		74.0		5.1		10.4		8		89				<0.2		1.6	
					Bottom	6.5	0.4	171	27.9	27.9	7.7	7.7	24.8	24.8	62.9	63.0	4.3	4.3	14.8		23		91				<0.2		1.5	
						6.5	0.4	178	27.9		7.7		24.8		63.1		4.3		14.9		23		91				<0.2		1.5	
IM6	Cloudy	Moderate	09:23	7.4	Surface	1.0	0.3	195	29.0	29.0	7.7	7.7	19.7	19.7	75.5	75.5	5.2	5.1	8.3	11.9	8	10	85	88	821049	805835	<0.2	<0.2	1.8	1.9
						1.0	0.3	204	29.0		7.7		19.7		75.5		5.2		8.3		7		85				<0.2		1.9	
					Middle	3.7	0.4	180	28.8	28.8	7.7	7.7	20.4	20.4	71.6	71.2	4.9		9.7		10		88				<0.2		1.9	
						3.7	0.4	188	28.8		7.7		20.4		70.7		4.9		10.5		8		89				<0.2		2.2	
					Bottom	6.4	0.3	169	28.5	28.5	7.7	7.7	22.3	22.3	66.3	66.3	4.6	4.6	17.2		12		91				<0.2		1.7	
						6.4	0.3	175	28.5		7.7		22.3		66.3		4.6		17.2		12		91				<0.2		1.7	
IM7	Cloudy	Calm	09:31	9.0	Surface	1.0	0.2	196	29.0	29.0	7.8	7.8	19.8	19.8	76.2	76.2	5.3	5.1	10.3	12.7	5	8	85	88	821362	806842	<0.2	<0.2	1.9	1.8
						1.0	0.2	203	29.0		7.8		19.8		76.2		5.3		10.3		6		86				<0.2		1.8	
					Middle	4.5	0.1	143	28.7	28.7	7.8	7.8	21.4	21.4	71.4	71.4	4.9		12.7		7		88				<0.2		1.9	
						4.5	0.1	148	28.7		7.8		21.4		71.4		4.9		12.6		6		89				<0.2		1.9	
					Bottom	8.0	0.2	130	28.6	28.6	7.8	7.8	22.0	22.0	70.2	70.2	4.8	4.8	15.1		13		90				<0.2		1.5	
						8.0	0.2	140	28.6		7.8		22.0		70.2		4.8		15.1		12		90				<0.2		1.5	
IM8	Cloudy	Moderate	08:33	8.6	Surface	1.0	0.3	185	29.6	29.6	7.8	7.8	16.5	16.5	78.7	78.7	5.5	5.4	8.8	11.1	8	8	85	85	821691	807823	<0.2	<0.2	2.2	2.3
						1.0	0.3	195	29.6		7.8		16.5		78.6		5.5		8.9		7		85				<0.2		2.3	
					Middle	4.3	0.2	134	29.5	29.5	7.8	7.8	17.4	17.4	76.0	76.0	5.3		11.7		7		84				<0.2		2.2	
						4.3	0.2	141	29.5		7.8		17.4		76.0		5.3		11.7		8		84				<0.2		2.3	
					Bottom	7.6	0.2	121	29.5	29.5	7.8	7.8	17.5	17.5	76.5	76.7	5.3	5.3	12.7		9		86				<0.2		2.3	
						7.6	0.2	122	29.5		7.8		17.5		76.9		5.3		12.7		10		86				<0.2		2.3	

DA: Depth-Averaged

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

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 10 August 17 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	08:23	7.5	Surface	1.0	0.6	131	29.6	29.6	7.8	7.8	17.0	17.0	75.4	75.4	5.2	5.2	8.4	10.1	8	9	87	88	822083	808817	<0.2	<0.2	2.1	2.0
						1.0	0.6	132	29.6		7.8		17.0		75.3		5.2		8.5		6		87				<0.2		1.9	
					Middle	3.8	0.4	139	29.6	29.6	7.8	7.8	17.4	17.4	73.3	73.3	5.1		9.4		9		83				<0.2		2.0	
						3.8	0.5	149	29.6		7.8		17.4		73.2		5.1		9.5		8		85				<0.2		2.1	
					Bottom	6.5	0.3	145	29.5	29.5	7.8	7.8	17.8	17.8	72.1	72.3	5.0	5.0	12.2		11		92				<0.2		2.0	
						6.5	0.3	145	29.5		7.8		17.8		72.4		5.0		12.6		11		92				<0.2		2.0	
IM10	Cloudy	Moderate	08:14	7.5	Surface	1.0	0.8	121	29.6	29.6	7.8	7.8	17.1	17.1	75.3	75.2	5.2	5.2	6.7	8.0	6	9	85	88	822233	809820	<0.2	<0.2	2.0	2.0
						1.0	0.8	127	29.6		7.8		17.1		75.0		5.2		6.8		6		85				<0.2		1.9	
					Middle	3.8	0.6	114	29.5	29.5	7.8	7.8	18.2	18.2	73.6	73.6	5.1		8.0		6		86				<0.2		1.9	
						3.8	0.6	124	29.5		7.8		18.2		73.6		5.1		8.0		6		87				<0.2		2.1	
					Bottom	6.5	0.4	115	29.2	29.2	7.8	7.8	20.0	20.0	69.6	69.8	4.8	4.8	9.4		15		91				<0.2		2.0	
						6.5	0.4	119	29.2		7.8		20.0		69.9		4.8		9.3		15		92				<0.2		1.9	
IM11	Rainy	Moderate	08:01	8.1	Surface	1.0	0.6	119	29.4	29.4	7.8	7.8	17.6	17.6	74.0	74.0	5.1	5.1	6.6	8.0	6	6	81	84	821511	810531	<0.2	<0.2	2.2	2.2
						1.0	0.6	128	29.4		7.8		17.6		73.9		5.1		6.7		5		86				<0.2		2.2	
					Middle	4.1	0.5	111	29.4	29.4	7.8	7.8	18.8	18.8	73.3	73.3	5.1		7.6		6		81				<0.2		2.4	
						4.1	0.5	117	29.4		7.8		18.8		73.2		5.0		8.0		6		84				<0.2		1.9	
					Bottom	7.1	0.3	105	29.0	29.0	7.8	7.8	21.0	21.0	68.1	68.1	4.7	4.7	9.4		7		85				<0.2		2.3	
						7.1	0.4	115	29.0		7.8		21.0		68.1		4.7		9.5		7		86				<0.2		2.2	
IM12	Rainy	Moderate	07:51	8.0	Surface	1.0	0.8	103	29.4	29.4	7.8	7.8	17.9	17.9	73.8	73.8	5.1	5.1	6.8	8.6	5	6	83	86	821171	811506	<0.2	<0.2	2.2	2.2
						1.0	0.8	110	29.4		7.8		17.9		73.7		5.1		6.8		6		87				<0.2		2.2	
					Middle	4.0	0.7	98	29.3	29.3	7.8	7.8	19.6	19.6	72.6	72.6	5.0		7.7		5		84				<0.2		2.1	
						4.0	0.7	101	29.3		7.8		19.6		72.5		5.0		8.2		4		86				<0.2		2.2	
					Bottom	7.0	0.5	94	28.7	28.7	7.8	7.8	22.4	22.4	64.1	64.3	4.4	4.4	10.9		8		88				<0.2		2.2	
						7.0	0.5	97	28.7		7.8		22.4		64.4		4.4		10.9		7		90				<0.2		2.0	
SR2	Cloudy	Moderate	07:21	4.5	Surface	1.0	0.6	88	29.2	29.2	7.8	7.8	18.8	18.8	71.0	71.0	4.9	4.9	10.0	12.8	7	9	80	85	821451	814169	<0.2	<0.2	2.1	2.0
						1.0	0.6	88	29.2		7.8		18.8		70.9		4.9		10.0		7		81				<0.2		1.9	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.5	89	29.0	29.1	7.8	7.8	20.8	20.8	68.7	69.0	4.7	4.7	15.6		12		88				<0.2		2.0	
						3.5	0.5	92	29.1		7.8		20.7		69.2		4.7		15.6		11		92				<0.2		2.0	
SR3	Cloudy	Moderate	08:39	9.0	Surface	1.0	0.2	191	29.6	29.6	7.8	7.8	15.8	15.8	81.2	81.2	5.7	5.5	7.2	11.0	6	10	-	-	822154	807588	-	-	-	-
						1.0	0.2	194	29.6		7.8		15.8		81.1		5.7		7.1		6		-				-		-	
					Middle	4.5	0.2	187	29.6	29.6	7.8	7.8	16.8	16.8	76.0	76.0	5.3		12.6		8		-				-		-	
						4.5	0.2	201	29.6		7.8		16.8		76.0		5.3		12.4		8		-				-		-	
					Bottom	8.0	0.1	67	29.5	29.5	7.8	7.8	17.7	17.7	74.5	74.6	5.2	5.2	13.4		16		-				-		-	
						8.0	0.1	68	29.5		7.8		17.7		74.7		5.2		13.3		16		-				-		-	
SR4A	Cloudy	Moderate	08:03	9.3	Surface	1.0	0.1	82	28.9	28.9	7.7	7.7	20.7	20.7	79.5	79.5	5.5	5.4	10.4	15.2	15	17	-	-	817196	807824	-	-	-	-
						1.0	0.1	90	28.9		7.7		20.7		79.5		5.5		10.3		16		-				-		-	
					Middle	4.7	0.2	65	29.0	29.0	7.7	7.7	21.1	21.1	75.7	75.7	5.2		14.1		16		-				-		-	
						4.7	0.3	69	29.0		7.7		21.1		75.7		5.2		14.1		15		-				-		-	
					Bottom	8.3	0.3	75	28.6	28.6	7.7	7.7	22.6	22.6	68.8	68.8	4.7	4.7	21.2		19		-				-		-	
						8.3	0.3	76	28.6		7.7		22.6		68.8		4.7		21.1		19		-				-		-	
SR5A	Cloudy	Moderate	07:41	3.6	Surface	1.0	0.1	336	29.2	29.2	7.7	7.7	21.1	21.1	84.0	84.0	5.7	5.7	14.5	16.5	16	18	-	-	816581	810710	-	-	-	-
						1.0	0.1	341	29.2		7.7		21.1		84.0		5.7		14.5		15		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.6	0.0	329	29.2	29.2	7.7	7.7	21.1	21.1	84.1	84.1	5.7	5.7	18.4		20		-				-		-	
						2.6	0.0	346	29.2		7.7		21.1		84.1		5.7		18.4		19		-				-		-	
SR6	Cloudy	Moderate	07:12	4.2	Surface	1.0	0.1	343	29.1	29.1	7.6	7.6	19.4	19.4	75.6	75.6	5.2	5.2	7.4	8.0	8	8	-	-	817881	814658	-	-	-	-
						1.0	0.1	359	29.1		7.6		19.4		75.6		5.2		7.4		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.2	68	29.1	29.1	7.6	7.6	20.4	20.4	74.3	74.3	5.1	5.1	8.6		9		-				-		-	
						3.2	0.2	70	29.1		7.6		20.4		74.3		5.1		8.6		8		-				-		-	
SR7	Rainy	Moderate	06:25	19.8	Surface	1.0	0.6	81	29.3	29.3	7.8	7.8	18.7	18.8	74.4	74.5	5.1	5.0	5.5	4.5	4	5	-	-	823640	823736	-	-	-	-
						1.0	0.6	86	29.3		7.8		18.8		74.5		5.1		5.5		5		-				-		-	
					Middle	9.9	0.2	28	28.8	28.8	7.8	7.8	21.7	21.7	69.9	69.9	4.8		3.8		5		-				-		-	
						9.9	0.2	30	28.8		7.8		21.7		69.8		4.8		3.8		5		-				-		-	
					Bottom	18.8	0.6	6	26.8	26.8	7.8	7.8	21.7	21.7	67.7	67.7	4.3	4.3	4.3		4		-				-		-	
						18.8	0.6	6	26.8		7.8		21.7		67.7		4.3		4.3		5		-				-		-	
SR8	Rainy	Moderate	07:42	4.8	Surface	1.0	0.0	0	29.4	29.4	7.8	7.8	18.0	18.0	74.3	74.3	5.1	5.1	7.6	8.9	6	8	-	-	820246	811418	-	-	-	-
						1.0	0.0	0	29.4		7.8		18.0		74.2		5.1		7.8		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.0	0	29.3	29.3	7.8	7.8	18.8	18.8	72.9	72.9	5.0	5.0	10.0		9		-				-		-	
						3.8	0.0	0	29.3		7.8		18.8		72.8		5.0		10.3		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 12 August 17 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Sunny	Moderate	15:24	8.9	Surface	1.0	0.5	250	29.6	29.6	7.8	7.8	19.5	19.5	80.1	80.1	5.5	4.7	5.3	12.0	4	5	87	89	815634	804227	<0.2	<0.2	1.8	1.9
						1.0	0.5	266	29.6		7.8		19.5		80.1		5.5		5.3		5		86				<0.2		1.9	
					Middle	4.5	0.7	200	27.3	27.3	7.7	7.7	27.5	27.5	57.7	57.7	3.9		13.5		5		88				<0.2		1.9	
						4.5	0.7	207	27.3		7.7		27.4		57.7		3.9		13.5		6		87				<0.2		1.9	
					Bottom	7.9	0.4	219	26.1	26.1	7.7	7.7	31.3	31.3	51.8	51.8	3.5	3.5	17.2		4		92				<0.2		2.0	
						7.9	0.5	226	26.1		7.7		31.3		51.8		3.5		17.3		5		92				<0.2		1.9	
C2	Fine	Rough	14:09	12.5	Surface	1.0	0.3	138	29.8	29.8	7.7	7.7	17.4	17.4	73.5	73.5	5.1	4.9	7.6	11.8	8	10	90	90	825671	806961	<0.2	<0.2	2.5	2.3
						1.0	0.4	146	29.8		7.7		17.4		73.4		5.1		7.7		7		90				<0.2		2.6	
					Middle	6.3	0.3	163	29.2	29.2	7.7	7.7	19.2	19.2	66.1	66.1	4.6		9.5		8		90				<0.2		2.2	
						6.3	0.4	177	29.2		7.7		19.2		66.1		4.6		9.4		8		91				<0.2		2.2	
					Bottom	11.5	0.4	146	27.9	28.0	7.7	7.7	24.7	24.7	65.1	65.1	4.5	4.5	18.2		14		89				<0.2		2.2	
						11.5	0.5	157	28.0		7.7		24.7		65.1		4.4		18.2		14		89				<0.2		2.0	
C3	Fine	Moderate	15:58	12.1	Surface	1.0	0.6	116	29.3	29.3	7.8	7.8	20.7	20.7	74.9	74.8	5.1	4.9	6.0	7.2	8	8	89	92	822102	817788	<0.2	<0.2	1.8	1.9
						1.0	0.6	121	29.3		7.8		20.7		74.6		5.1		6.2		7		89				<0.2		1.9	
					Middle	6.1	0.0	154	28.6	28.6	7.8	7.8	22.8	22.8	67.6	67.5	4.6		6.0		9		93				<0.2		1.8	
						6.1	0.0	161	28.6		7.8		22.8		67.3		4.6		6.1		10		94				<0.2		1.9	
					Bottom	11.1	0.4	26	28.2	28.2	7.8	7.8	23.9	23.9	64.0	64.0	4.4	4.4	9.3		8		94				<0.2		2.1	
						11.1	0.4	28	28.2		7.8		23.9		63.9		4.4		9.3		8		94				<0.2		1.9	
IM1	Sunny	Moderate	15:05	7.6	Surface	1.0	0.4	194	29.6	29.6	7.8	7.8	19.1	19.1	83.0	83.0	5.7	5.2	4.1	10.1	4	4	86	88	818344	806475	<0.2	<0.2	2.0	1.8
						1.0	0.4	205	29.6		7.8		19.1		83.0		5.7		4.1		3		86				<0.2		2.1	
					Middle	3.8	0.4	200	28.1	28.1	7.7	7.7	24.1	24.1	66.6	66.6	4.6		9.4		4		87				<0.2		1.8	
						3.8	0.4	203	28.1		7.7		24.1		66.6		4.6		9.4		6		87				<0.2		1.6	
					Bottom	6.6	0.2	159	26.9	26.9	7.7	7.7	28.6	28.6	59.1	59.2	4.0	4.0	16.8		5		90				<0.2		1.7	
						6.6	0.2	173	26.9		7.7		28.5		59.2		4.0		16.8		4		90				<0.2		1.6	
IM2	Sunny	Moderate	14:59	8.7	Surface	1.0	0.4	208	29.3	29.3	7.8	7.8	19.8	19.8	82.0	81.9	5.6	5.2	4.3	9.8	3	5	86	88	818844	806180	<0.2	<0.2	1.9	1.9
						1.0	0.4	211	29.3		7.8		19.8		81.8		5.6		4.4		4		85				<0.2		1.9	
					Middle	4.4	0.3	205	28.3	28.3	7.7	7.7	23.3	23.3	68.0	68.0	4.7		10.1		3		89				<0.2		1.8	
						4.4	0.3	215	28.3		7.7		23.3		68.0		4.7		10.1		5		88				<0.2		2.1	
					Bottom	7.7	0.3	172	27.3	27.3	7.7	7.7	27.4	27.4	61.1	61.2	4.2	4.2	14.9		6		91				<0.2		1.6	
						7.7	0.3	183	27.3		7.7		27.4		61.3		4.2		14.9		7		91				<0.2		1.8	
IM3	Sunny	Moderate	14:51	8.7	Surface	1.0	0.3	191	29.1	29.1	7.8	7.8	20.7	20.7	82.8	82.8	5.7	5.4	5.4	11.2	6	6	87	89	819391	806006	<0.2	<0.2	2.0	1.9
						1.0	0.3	191	29.1		7.8		20.7		82.7		5.7		5.4		5		86				<0.2		1.9	
					Middle	4.4	0.4	186	28.5	28.5	7.8	7.8	22.7	22.7	74.2	74.2	5.1		12.8		5		90				<0.2		1.9	
						4.4	0.4	203	28.5		7.8		22.7		74.2		5.1		12.8		6		89				<0.2		2.0	
					Bottom	7.7	0.2	186	27.7	27.7	7.7	7.7	26.0	26.0	64.5	64.6	4.4	4.4	15.5		7		91				<0.2		1.7	
						7.7	0.2	195	27.7		7.7		26.0		64.6		4.4		15.4		9		91				<0.2		2.0	
IM4	Sunny	Moderate	14:44	8.2	Surface	1.0	0.2	217	29.6	29.6	7.8	7.8	19.6	19.6	87.8	87.8	6.0	5.6	3.1	8.4	3	5	87	90	819571	805036	<0.2	<0.2	2.0	2.0
						1.0	0.2	230	29.6		7.8		19.6		87.8		6.0		3.1		4		87				<0.2		2.0	
					Middle	4.1	0.5	189	28.7	28.7	7.7	7.7	22.7	22.7	74.6	74.6	5.1		8.7		3		90				<0.2		2.0	
						4.1	0.5	189	28.7		7.7		22.7		74.6		5.1		8.8		3		90				<0.2		2.0	
					Bottom	7.2	0.4	171	27.7	27.7	7.7	7.7	25.9	25.9	64.4	64.4	4.4	4.4	13.4		9		93				<0.2		1.7	
						7.2	0.4	174	27.7		7.7		25.9		64.4		4.4		13.4		9		92				<0.2		2.0	
IM5	Sunny	Moderate	14:33	7.4	Surface	1.0	0.3	196	29.9	29.9	7.7	7.7	18.2	18.2	79.8	79.6	5.5	5.0	7.7	14.0	4	5	87	89	820545	804918	<0.2	<0.2	2.3	2.2
						1.0	0.4	206	29.9		7.7		18.2		79.3		5.4		8.0		6		86				<0.2		2.4	
					Middle	3.7	0.4	180	28.2	28.2	7.7	7.7	23.7	23.7	66.4	66.4	4.5		14.2		4		89				<0.2		2.3	
						3.7	0.5	196	28.2		7.7		23.7		66.4		4.5		14.2		4		88				<0.2		2.1	
					Bottom	6.4	0.2	164	27.7	27.7	7.7	7.7	25.9	25.9	62.1	62.1	4.2	4.2	19.9		5		91				<0.2		1.9	
						6.4	0.2	169	27.7		7.7		25.9		62.1		4.2		19.9		5		92				<0.2		2.0	
IM6	Sunny	Moderate	14:25	7.3	Surface	1.0	0.3	185	30.0	30.0	7.7	7.7	17.8	17.8	84.7	84.7	5.8	5.5	3.7	8.5	4	4	85	89	821070	805819	<0.2	<0.2	2.2	2.1
						1.0	0.3	200	30.0		7.7		17.8		84.7		5.8		3.7		3		86				<0.2		2.1	
					Middle	3.7	0.2	144	28.5	28.5	7.7	7.7	22.8	22.8	74.1	74.1	5.1		7.0		4		90				<0.2		2.2	
						3.7	0.2	145	28.5		7.7		22.8		74.1		5.1		7.0		4		90				<0.2		2.1	
					Bottom	6.3	0.2	154	27.9	27.9	7.7	7.7	24.9	24.9	66.4	66.4	4.5	4.5	14.8		4		92				<0.2		2.0	
						6.3	0.2	154	27.9		7.7		24.9		66.4		4.5		14.9		6		92				<0.2		2.0	
IM7	Sunny	Moderate	14:16	8.8	Surface	1.0	0.3	123	30.0	30.0	7.7	7.7	18.0	18.0	87.9	87.9	6.0	5.6	3.3	7.8	4	4	86	89	821332	806851	<0.2	<0.2	2.7	2.7
						1.0	0.4	135	30.0		7.7		18.0		87.9		6.0		3.3		4		86				<0.2		2.8	
					Middle	4.4	0.2	113	28.9	28.9	7.6	7.6	21.6	21.6	76.5	76.5	5.2		6.5		3		90				<0.2		2.9	
						4.4	0.2	113	28.9		7.6		21.6		76.5		5.2		6.5		3		90				<0.2		2.8	
					Bottom	7.8	0.2	50	28.0	28.0	7.6	7.6	24.9	24.9	66.1	66.1	4.5	4.5	13.7		4		92				<0.2		2.5	
						7.8	0.3	51	28.0		7.6		24.9		66.1		4.5		13.7		4		91				<0.2		2.3	
IM8	Fine	Rough	14:36	8.6	Surface	1.0	0.3	146	30.0	30.0	7.8	7.8	17.9	17.9	83.9	83.8	5.8	5.1	4.7	7.1	6	7	84	87	821707	807835	<0.2	<0.2	2.2	2.1
						1.0	0.4	146	30.0		7.8		17.9		83.6		5.7		4.7		5		84				<0.2		1.9	
					Middle	4.3	0.2	151	29.0	29.0	7.8	7.8	20.5	20.5	66.1	66.1	4.5		7.9		6		86				<0.2		2.1	
						4.3	0.2	158	29.0		7.8		20.5		66.1		4.5		7.9		5		86				<0.2		2.2	
					Bottom	7.6	0.2	66	28.4	28.4	7.8	7.8	23.4	23.4	67.5	67.6	4.6	4.6	8.6		9		90				<0.2		1.9	
						7.6	0.2	69	28.4		7.8		23.4		67.7		4.6		8.7		10		90				<0.2		2.0	

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 12 August 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	14:44	7.5	Surface	1.0	0.5	131	30.0	30.0	7.8	7.8	17.6	17.6	77.0	76.9	5.3	5.0	5.5	9.3	6	9	89	92	822084	808798	<0.2	<0.2	2.4	2.1
						1.0	0.5	133	30.0		7.8		17.6		76.7		5.3		5.6		6		89				<0.2		2.3	
					Middle	3.8	0.4	142	29.0	29.0	7.7	7.7	20.0	20.0	66.8	66.9	4.6		10.7		6		92				<0.2		2.2	
						3.8	0.5	155	29.0		7.7		20.0		66.9		4.6		10.8		7		92				<0.2		2.2	
					Bottom	6.5	0.4	88	28.7	28.7	7.8	7.8	22.2	22.2	69.0	69.3	4.7	4.8	11.6		14		94				<0.2		1.7	
						6.5	0.4	95	28.7		7.8		22.1		69.6		4.8		11.6		13		95				<0.2		2.0	
IM10	Fine	Moderate	14:52	7.2	Surface	1.0	0.7	131	30.0	30.0	7.8	7.8	17.7	17.7	81.6	81.6	5.6	5.5	4.3	7.2	4	7	87	91	822242	809841	<0.2	<0.2	2.3	2.2
						1.0	0.7	131	30.0		7.8		17.7		81.6		5.6		4.4		6		87				<0.2		2.3	
					Middle	3.6	0.4	117	29.8	29.8	7.8	7.8	17.9	17.9	77.0	77.0	5.3		4.8		5		91				<0.2		2.3	
						3.6	0.5	122	29.7		7.8		17.9		76.9		5.3		4.9		7		92				<0.2		2.2	
					Bottom	6.2	0.3	96	28.9	28.9	7.8	7.8	21.0	21.0	70.5	71.0	4.8	4.9	12.3		10		93				<0.2		2.0	
						6.2	0.3	100	28.9		7.8		21.0		71.4		4.9		12.3		12		94				<0.2		2.0	
IM11	Fine	Moderate	15:02	8.0	Surface	1.0	0.6	110	29.9	29.9	7.8	7.8	17.5	17.5	75.3	75.3	5.2	5.1	5.8	9.3	4	8	89	92	821493	810556	<0.2	<0.2	2.5	2.2
						1.0	0.7	115	29.9		7.8		17.5		75.2		5.2		5.8		5		89				<0.2		2.2	
					Middle	4.0	0.5	101	29.3	29.3	7.8	7.8	19.9	19.9	73.1	73.1	5.0		10.9		8		93				<0.2		2.3	
						4.0	0.5	101	29.3		7.8		19.9		73.1		5.0		11.0		6		94				<0.2		2.3	
					Bottom	7.0	0.3	100	29.3	29.3	8.0	8.0	20.3	20.3	76.5	76.6	5.2	5.3	11.1		13		92				<0.2		2.1	
						7.0	0.3	109	29.3		8.0		20.3		76.7		5.3		11.2		14		92				<0.2		2.0	
IM12	Fine	Moderate	15:10	7.7	Surface	1.0	0.8	111	30.0	30.0	7.8	7.8	17.6	17.6	78.2	78.2	5.4	5.5	6.6	10.1	8	13	85	90	821146	811524	<0.2	<0.2	2.4	2.2
						1.0	0.9	114	30.0		7.8		17.6		78.2		5.4		6.9		8		85				<0.2		2.3	
					Middle	3.9	0.6	101	29.6	29.6	7.9	7.9	19.0	19.1	79.9	80.0	5.5		11.2		6		91				<0.2		2.2	
						3.9	0.6	102	29.6		7.9		19.2		80.0		5.5		11.2		7		92				<0.2		2.1	
					Bottom	6.7	0.4	83	29.4	29.4	7.9	7.9	20.2	20.2	80.9	81.0	5.5	5.5	12.2		24		92				<0.2		2.1	
						6.7	0.5	85	29.4		7.9		20.2		81.0		5.5		12.3		25		93				<0.2		1.9	
SR2	Fine	Moderate	15:38	3.8	Surface	1.0	0.7	78	30.1	30.1	7.8	7.8	17.3	17.4	79.7	79.6	5.5	5.5	6.4	9.8	7	7	86	90	821446	814183	<0.2	<0.2	2.3	2.3
						1.0	0.7	82	30.0		7.8		17.4		79.5		5.5		6.4		7		86				<0.2		2.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	0.5	67	29.4	29.4	7.8	7.8	19.9	19.9	81.4	81.5	5.6	5.6	13.2		7		93				<0.2		2.3	
						2.8	0.5	67	29.4		7.8		19.9		81.5		5.6		13.1		7		94				<0.2		2.5	
SR3	Fine	Rough	14:30	8.9	Surface	1.0	0.2	145	29.8	29.8	7.8	7.8	18.1	18.1	76.2	76.1	5.2	4.9	5.8	8.3	6	10	-	-	822139	807567	-	-	-	-
						1.0	0.2	147	29.8		7.8		18.1		75.9		5.2		5.8		7		-				-		-	
					Middle	4.5	0.2	188	28.9	28.9	7.8	7.8	21.2	21.2	65.2	65.2	4.5		8.8		7		-				-		-	
						4.5	0.2	201	28.9		7.8		21.1		65.1		4.5		8.8		7		-				-		-	
					Bottom	7.9	0.1	63	28.6	28.6	7.8	7.8	22.5	22.5	70.1	69.8	4.8	4.8	10.3		16		-				-		-	
						7.9	0.1	65	28.6		7.8		22.5		69.5		4.8		10.3		15		-				-		-	
SR4A	Sunny	Moderate	15:46	9.1	Surface	1.0	0.1	351	29.4	29.4	7.8	7.8	20.2	20.2	80.8	80.8	5.5	4.8	9.0	14.3	6	7	-	-	817171	807797	-	-	-	-
						1.0	0.1	323	29.4		7.8		20.2		80.8		5.5		9.0		7		-				-		-	
					Middle	4.6	0.4	60	27.1	27.1	7.7	7.7	28.0	28.0	58.4	58.4	4.0		13.7		7		-				-		-	
						4.6	0.4	65	27.1		7.7		28.0		58.4		4.0		13.6		6		-				-		-	
					Bottom	8.1	0.2	49	26.9	26.9	7.7	7.7	28.7	28.7	59.4	59.4	4.0	4.0	20.2		6		-				-		-	
						8.1	0.2	51	26.9		7.7		28.7		59.4		4.0		20.3		7		-				-		-	
SR5A	Sunny	Moderate	16:03	4.4	Surface	1.0	0.1	348	29.9	29.9	7.8	7.8	21.5	21.5	87.5	87.5	5.9	5.9	9.6	10.5	11	12	-	-	816583	810703	-	-	-	-
						1.0	0.1	320	29.8		7.8		21.5		87.4		5.9		9.6		12		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.1	23	29.6	29.6	7.8	7.8	21.5	21.5	87.3	87.3	5.9	5.9	11.3		12		-				-		-	
						3.4	0.1	23	29.6		7.8		21.5		87.3		5.9		11.4		11		-				-		-	
SR6	Sunny	Moderate	16:27	4.2	Surface	1.0	0.1	138	30.0	30.0	7.7	7.7	20.2	20.2	89.4	89.4	6.1	6.1	6.1	8.0	7	7	-	-	817879	814658	-	-	-	-
						1.0	0.1	143	30.0		7.7		20.2		89.3		6.0		6.1		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.1	103	29.1	29.1	7.6	7.6	21.5	21.5	77.9	77.9	5.3	5.3	9.9		8		-				-		-	
						3.2	0.1	108	29.1		7.6		21.5		77.9		5.3		9.9		6		-				-		-	
SR7	Fine	Moderate	16:29	19.6	Surface	1.0	0.6	93	29.6	29.6	7.8	7.8	19.7	19.7	78.4	78.3	5.4	5.2	3.4	5.6	4	5	-	-	823643	823751	-	-	-	-
						1.0	0.7	96	29.5		7.8		19.7		78.2		5.3		3.5		4		-				-		-	
					Middle	9.8	0.3	94	29.2	29.2	7.8	7.8	21.3	21.3	75.3	75.3	5.1		5.1		4		-				-		-	
						9.8	0.3	97	29.2		7.8		21.3		75.2		5.1		5.3		4		-				-		-	
					Bottom	18.6	0.6	157	29.2	29.2	7.8	7.8	21.6	21.6	74.6	74.6	5.1	5.1	8.2		7		-				-		-	
						18.6	0.6	164	29.2		7.8		21.6		74.6		5.1		8.3		6		-				-		-	
SR8	Fine	Moderate	15:24	4.1	Surface	1.0	-	-	29.8	29.8	7.8	7.8	20.4	20.4	76.3	76.2	5.2	5.2	7.1	7.9	9	9	-	-	820246	811418	-	-	-	-
						1.0	-	-	29.8		7.8		20.4		76.1		5.2		7.2		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	-	-	29.1	29.1	7.8	7.8	20.8	20.8	79.3	79.2	5.5	5.5	8.7		8		-				-		-	
						3.1	-	-	29.1		7.8		20.8		79.1		5.4		8.7		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 12 August 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	Sunny	Moderate	09:41	9.0	Surface	1.0	0.5	23	29.1	29.1	7.7	7.7	19.0	19.0	80.1	80.1	5.5	5.3	4.7	8.8	5	6	87	90	815635	804258	<0.2	<0.2	2.2	2.1
						1.0	0.5	24	29.1		7.7		19.0		80.1		5.5		4.7		5		87				<0.2		2.0	
					Middle	4.5	0.4	25	28.6	28.6	7.7	7.7	21.1	21.1	73.9	73.9	5.1		7.0		6		89				<0.2		2.1	
						4.5	0.5	26	28.6		7.7		21.1		73.9		5.1		7.0		7		89				<0.2		2.0	
					Bottom	8.0	0.3	23	27.2	27.2	7.7	7.7	27.9	27.9	59.0	59.1	4.0	4.0	14.7		6		93				<0.2		2.0	
						8.0	0.3	23	27.2		7.7		27.9		59.1		4.0		14.9		6		92				<0.2		2.0	
C2	Sunny	Moderate	10:46	12.3	Surface	1.0	0.5	27	29.8	29.8	7.7	7.7	15.5	15.5	74.0	74.0	5.2	4.7	7.3	12.4	8	9	89	90	825665	806940	<0.2	<0.2	2.1	2.2
						1.0	0.6	28	29.8		7.7		15.5		73.9		5.1		7.4		6		90				<0.2		2.2	
					Middle	6.2	0.6	69	29.0	29.0	7.7	7.7	20.3	20.4	62.5	62.4	4.3		7.7		7		90				<0.2		2.1	
						6.2	0.6	75	29.0		7.7		20.4		62.3		4.3		8.4		8		91				<0.2		2.2	
					Bottom	11.3	1.1	95	28.7	28.7	7.7	7.7	21.7	21.8	58.5	58.6	4.0	4.0	21.9		12		89				<0.2		2.4	
						11.3	1.1	100	28.6		7.7		21.8		58.6		4.0		21.7		10		90				<0.2		2.4	
C3	Cloudy	Moderate	08:45	11.9	Surface	1.0	0.5	263	29.2	29.2	7.8	7.8	19.2	19.2	70.6	70.6	4.9	4.7	4.4	8.0	6	10	88	92	822117	817788	<0.2	<0.2	2.0	1.6
						1.0	0.5	284	29.2		7.8		19.2		70.5		4.9		4.5		7		89				<0.2		2.0	
					Middle	6.0	0.4	210	28.7	28.7	7.8	7.8	21.5	21.5	65.3	65.3	4.5		5.7		6		93				<0.2		1.6	
						6.0	0.4	210	28.7		7.8		21.5		65.2		4.5		5.7		7		93				<0.2		1.6	
					Bottom	10.9	0.3	222	27.7	27.7	7.8	7.8	25.3	25.3	61.8	62.3	4.2	4.3	14.3		17		94				<0.2		1.2	
						10.9	0.3	237	27.7		7.8		25.3		62.7		4.3		13.5		18		95				<0.2		1.3	
IM1	Sunny	Moderate	09:57	7.8	Surface	1.0	0.6	16	29.1	29.1	7.7	7.7	19.4	19.4	75.4	75.4	5.2	5.1	5.0	11.5	6	7	87	89	818368	806440	<0.2	<0.2	1.9	2.0
						1.0	0.7	16	29.1		7.7		19.4		75.4		5.2		5.0		8		87				<0.2		2.1	
					Middle	3.9	0.6	14	28.8	28.8	7.7	7.7	20.7	20.7	72.2	72.2	5.0		11.1		7		88				<0.2		2.0	
						3.9	0.6	14	28.8		7.7		20.7		72.1		5.0		11.3		6		88				<0.2		1.8	
					Bottom	6.8	0.5	353	28.4	28.4	7.7	7.7	22.7	22.7	70.8	70.8	4.9	4.9	18.3		7		91				<0.2		2.0	
						6.8	0.5	325	28.4		7.7		22.7		70.8		4.9		18.2		7		92				<0.2		1.9	
IM2	Sunny	Moderate	10:02	8.8	Surface	1.0	0.6	39	29.1	29.1	7.7	7.7	19.2	19.2	75.4	75.4	5.2	5.0	5.1	12.2	5	7	86	89	818840	806189	<0.2	<0.2	2.1	2.0
						1.0	0.6	42	29.1		7.7		19.2		75.4		5.2		5.1		6		86				<0.2		1.9	
					Middle	4.4	0.6	30	28.6	28.6	7.7	7.7	21.9	21.9	69.6	69.6	4.8		12.8		7		90				<0.2		2.0	
						4.4	0.6	31	28.6		7.7		21.9		69.6		4.8		12.8		8		89				<0.2		2.0	
					Bottom	7.8	0.5	22	28.2	28.2	7.7	7.7	23.9	23.9	66.6	66.7	4.6	4.6	18.7		7		91				<0.2		1.8	
						7.8	0.5	24	28.2		7.7		23.8		66.7		4.6		18.6		6		92				<0.2		1.9	
IM3	Sunny	Moderate	10:09	9.0	Surface	1.0	0.6	19	29.5	29.5	7.7	7.7	18.4	18.4	78.2	78.2	5.4	5.0	5.1	10.0	4	4	88	90	819421	806025	<0.2	<0.2	2.2	2.1
						1.0	0.6	20	29.5		7.7		18.4		78.2		5.4		5.1		3		87				<0.2		2.1	
					Middle	4.5	0.7	17	28.4	28.4	7.7	7.7	22.6	22.6	67.6	67.6	4.6		9.4		5		90				<0.2		2.1	
						4.5	0.7	17	28.4		7.7		22.6		67.6		4.6		9.4		4		90				<0.2		2.2	
					Bottom	8.0	0.5	18	27.6	27.6	7.7	7.7	26.3	26.3	60.8	60.8	4.1	4.1	15.4		4		92				<0.2		2.0	
						8.0	0.5	19	27.6		7.7		26.3		60.8		4.1		15.8		3		93				<0.2		2.1	
IM4	Sunny	Moderate	10:17	8.3	Surface	1.0	0.5	17	29.5	29.5	7.7	7.7	17.3	17.3	80.9	80.9	5.6	5.3	5.0	9.3	5	4	88	91	819564	805028	<0.2	<0.2	2.6	2.3
						1.0	0.6	18	29.5		7.7		17.3		80.9		5.6		5.0		4		87				<0.2		2.4	
					Middle	4.2	0.7	18	28.6	28.6	7.7	7.7	21.0	21.0	71.3	71.2	4.9		9.0		4		91				<0.2		2.1	
						4.2	0.7	19	28.6		7.7		21.0		71.1		4.9		9.2		5		91				<0.2		2.4	
					Bottom	7.3	0.5	356	27.5	27.5	7.7	7.7	26.7	26.7	59.3	59.3	4.0	4.0	13.7		4		94				<0.2		2.1	
						7.3	0.5	328	27.5		7.7		26.7		59.3		4.0		13.7		4		93				<0.2		2.2	
IM5	Sunny	Moderate	10:27	7.3	Surface	1.0	0.6	15	29.5	29.5	7.7	7.7	18.1	18.1	80.7	80.7	5.6	5.3	4.5	12.2	5	4	87	90	820544	804927	<0.2	<0.2	2.4	2.3
						1.0	0.6	16	29.5		7.7		18.1		80.7		5.6		4.5		4		87				<0.2		2.4	
					Middle	3.7	0.6	6	28.9	28.9	7.7	7.7	19.9	19.9	70.3	70.3	4.9		14.4		4		90				<0.2		2.3	
						3.7	0.6	6	28.9		7.7		19.9		70.3		4.9		14.4		4		90				<0.2		2.4	
					Bottom	6.3	0.4	7	27.5	27.5	7.7	7.7	26.6	26.6	62.0	62.1	4.2	4.2	17.9		3		93				<0.2		2.2	
						6.3	0.5	7	27.5		7.7		26.6		62.1		4.2		17.5		4		93				<0.2		2.0	
IM6	Sunny	Moderate	10:34	7.4	Surface	1.0	0.4	17	29.2	29.2	7.7	7.8	19.4	19.4	76.4	76.4	5.3	5.1	6.9	11.2	6	6	87	89	821050	805834	<0.2	<0.2	1.8	1.7
						1.0	0.4	18	29.2		7.8		19.4		76.3		5.3		6.9		6		86				<0.2		1.7	
					Middle	3.7	0.5	20	28.7	28.7	7.7	7.7	21.2	21.2	70.0	70.0	4.8		8.9		6		89				<0.2		1.6	
						3.7	0.5	21	28.7		7.7		21.2		70.0		4.8		8.9		6		90				<0.2		1.7	
					Bottom	6.4	0.2	48	27.8	27.8	7.7	7.7	25.4	25.4	63.1	63.2	4.3	4.3	17.8		6		91				<0.2		1.6	
						6.4	0.2	48	27.8		7.7		25.4		63.2		4.3		17.9		6		92				<0.2		1.9	
IM7	Sunny	Moderate	10:43	8.5	Surface	1.0	0.5	62	29.3	29.3	7.7	7.7	18.8	18.8	78.0	78.0	5.4	5.2	6.8	11.3	6	7	86	90	821364	806837	<0.2	<0.2	1.9	1.9
						1.0	0.5	63	29.3		7.7		18.8		78.0		5.4		6.8		7		87				<0.2		1.8	
					Middle	4.3	0.4	39	28.8	28.8	7.7	7.7	21.8	21.8	73.6	73.6	5.0		9.8		7		91				<0.2		2.0	
						4.3	0.5	42	28.8		7.7		21.8		73.6		5.0		9.8		6		91				<0.2		1.9	
					Bottom	7.5	0.3	31	28.5	28.5	7.8	7.8	22.8	22.8	72.2	72.2	4.9	4.9	17.4		6		94				<0.2		1.9	
						7.5	0.4	32	28.5		7.8		22.8		72.2		4.9		17.3		7		93				<0.2		1.9	
IM8	Sunny	Moderate	10:19	8.5	Surface	1.0	0.2	28	29.8	29.8	7.8	7.8	14.9	14.9	78.4	78.2	5.5	5.3	8.3	13.4	7	14	84	87	821689	807822	<0.2	<0.2	2.0	2.0
						1.0	0.3	28	29.8		7.8		14.9		78.0		5.5		8.3		7		84				<0.2		2.0	
					Middle	4.3	0.4	37	29.3	29.3	7.8	7.8	18.2	18.2	71.8	71.8	5.0		11.2		8		86				<0.2		2.3	
						4.3	0.4	39	29.3		7.8		18.1		71.7		5.0		11.4		8		87				<0.2		2.1	
					Bottom	7.5	0.4	24	29.1	29.1	7.9	7.9	19.4	19.4	70.4	70.6	4.9	4.9	20.6		27		90				<0.2		1.9	
						7.5	0.5	25	29.1		7.8		19.4		70.7		4.9		20.7		28		91				<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 12 August 17 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Sunny	Moderate	10:09	7.6	Surface	1.0	0.4	23	29.7	29.7	7.8	7.8	15.0	15.0	78.2	78.1	5.5	5.3	8.3	12.9	6	8	89	93	822106	808819	<0.2	<0.2	2.2	2.3
						1.0	0.4	24	29.7		7.8		14.9		78.0		5.5		8.3		4		89				<0.2		2.6	
					Middle	3.8	0.3	10	29.5	29.5	7.8	7.8	17.0	17.0	72.4	72.4	5.0		9.9		6		92				<0.2		2.6	
						3.8	0.3	10	29.5		7.8		17.0		72.4		5.0		9.9		8		93				<0.2		2.4	
					Bottom	6.6	0.2	338	29.3	29.3	7.8	7.8	18.3	18.3	75.4	75.5	5.2	5.2	20.4		12		97				<0.2		2.3	
						6.6	0.2	350	29.3		7.8		18.3		75.6		5.2		20.6		11		97				<0.2		1.9	
IM10	Sunny	Moderate	09:56	8.4	Surface	1.0	0.5	329	29.6	29.7	7.8	7.8	16.8	16.8	78.2	78.2	5.4	5.2	5.8	11.6	4	9	87	91	822257	809847	<0.2	<0.2	2.2	2.0
						1.0	0.5	344	29.7		7.8		16.7		78.2		5.4		6.0		3		87				<0.2		2.5	
					Middle	4.2	0.5	309	29.3	29.3	7.8	7.8	18.6	18.6	72.4	72.4	5.0		9.8		7		92				<0.2		1.9	
						4.2	0.5	316	29.3		7.8		18.6		72.4		5.0		9.8		8		92				<0.2		2.0	
					Bottom	7.4	0.4	325	28.8	28.8	7.8	7.8	20.9	20.9	69.2	69.7	4.8	4.8	19.1		17		94				<0.2		1.8	
						7.4	0.4	355	28.8		7.8		20.9		70.1		4.8		19.3		16		94				<0.2		1.8	
IM11	Sunny	Moderate	09:46	8.4	Surface	1.0	0.6	292	29.5	29.6	7.8	7.8	17.5	17.5	76.1	76.0	5.3	4.9	5.3	9.1	4	8	89	91	821499	810552	<0.2	<0.2	2.9	2.5
						1.0	0.6	296	29.6		7.8		17.5		75.9		5.3		5.3		6		89				<0.2		2.5	
					Middle	4.2	0.5	296	28.6	28.6	7.8	7.8	22.0	22.0	65.0	65.0	4.5		10.5		6		93				<0.2		2.6	
						4.2	0.6	307	28.6		7.8		22.0		65.0		4.5		10.4		4		94				<0.2		2.8	
					Bottom	7.4	0.3	311	28.5	28.5	7.8	7.8	22.4	22.4	64.2	64.4	4.4	4.4	11.6		16		91				<0.2		1.9	
						7.4	0.3	317	28.5		7.8		22.4		64.5		4.4		11.7		14		92				<0.2		2.0	
IM12	Sunny	Moderate	09:34	8.2	Surface	1.0	0.7	277	29.5	29.5	7.8	7.8	17.6	17.6	75.1	75.1	5.2	5.0	5.1	11.6	6	9	85	90	821164	811536	<0.2	<0.2	2.9	2.1
						1.0	0.7	294	29.5		7.8		17.6		75.1		5.2		5.1		4		85				<0.2		2.8	
					Middle	4.1	0.6	283	28.9	28.9	7.8	7.8	20.4	20.5	70.3	70.5	4.8		8.8		5		91				<0.2		2.2	
						4.1	0.7	286	28.9		7.8		20.5		70.6		4.9		8.7		7		92				<0.2		1.8	
					Bottom	7.2	0.3	293	28.4	28.4	7.8	7.8	22.8	22.8	68.2	68.3	4.7	4.7	20.8		15		92				<0.2		1.4	
						7.2	0.3	304	28.4		7.8		22.8		68.4		4.7		21.0		16		92				<0.2		1.4	
SR2	Cloudy	Moderate	09:06	4.6	Surface	1.0	0.1	185	29.4	29.4	7.8	7.8	18.0	18.0	73.8	73.8	5.1	5.1	5.6	8.1	4	5	86	90	821450	814162	<0.2	<0.2	1.8	2.2
						1.0	0.1	190	29.4		7.8		18.0		73.7		5.1		5.8		4		86				<0.2		2.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.2	271	28.8	28.8	7.8	7.8	20.6	20.6	72.0	72.1	5.0	5.0	10.5		7		93				<0.2		2.5	
						3.6	0.3	272	28.8		7.8		20.6		72.1		5.0		10.6		6		94				<0.2		2.3	
SR3	Sunny	Moderate	10:26	9.2	Surface	1.0	0.4	33	29.8	29.8	7.7	7.7	14.8	14.8	76.7	76.5	5.4	5.2	7.4	14.4	8	11	-	-	822149	807557	-	-	-	-
						1.0	0.4	33	29.7		7.7		14.8		76.3		5.3		7.6		6		-				-		-	
					Middle	4.6	0.5	27	29.4	29.4	7.8	7.8	17.4	17.4	72.0	72.0	5.0		15.9		10		-				-		-	
						4.6	0.5	29	29.4		7.8		17.4		72.0		5.0		15.5		9		-				-		-	
					Bottom	8.2	0.5	83	29.2	29.2	7.7	7.7	19.3	19.3	70.8	71.7	4.9	5.0	19.8		17		-				-		-	
						8.2	0.5	89	29.2		7.7		19.3		72.6		5.0		20.3		18		-				-		-	
SR4A	Sunny	Moderate	09:17	8.9	Surface	1.0	0.4	245	28.8	28.8	7.6	7.6	21.8	21.8	73.9	73.9	5.1	5.0	11.3	15.3	12	13	-	-	817186	807809	-	-	-	-
						1.0	0.4	256	28.8		7.6		21.8		73.9		5.1		11.3		13		-				-		-	
					Middle	4.5	0.3	243	28.6	28.6	7.6	7.6	22.4	22.4	69.4	69.4	4.8		17.2		13		-				-		-	
						4.5	0.3	249	28.6		7.6		22.4		69.3		4.8		17.1		12		-				-		-	
					Bottom	7.9	0.2	244	27.9	27.9	7.6	7.6	25.1	25.2	64.2	64.2	4.4	4.4	17.5		12		-				-		-	
						7.9	0.2	244	27.9		7.6		25.2		64.2		4.4		17.4		14		-				-		-	
SR5A	Sunny	Moderate	09:02	4.3	Surface	1.0	0.3	309	28.8	28.8	7.6	7.6	21.6	21.6	75.4	75.4	5.2	5.2	9.8	11.8	12	12	-	-	816577	810705	-	-	-	-
						1.0	0.3	318	28.8		7.6		21.6		75.4		5.2		9.9		12		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.3	318	28.8	28.8	7.6	7.6	21.7	21.7	75.3	75.3	5.2	5.2	13.7		11		-				-		-	
						3.3	0.3	337	28.8		7.6		21.7		75.3		5.2		13.6		12		-				-		-	
SR6	Sunny	Moderate	08:37	4.1	Surface	1.0	0.3	250	29.0	29.0	7.5	7.5	19.1	19.1	76.8	76.8	5.3	5.3	9.7	10.9	10	12	-	-	817908	814654	-	-	-	-
						1.0	0.3	270	29.0		7.5		19.1		76.8		5.3		9.7		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.1	239	28.8	28.8	7.5	7.5	20.3	20.3	74.4	74.4	5.1	5.1	12.2		15		-				-		-	
						3.1	0.1	244	28.8		7.5		20.2		74.4		5.1		12.1		14		-				-		-	
SR7	Cloudy	Moderate	08:12	20.8	Surface	1.0	0.2	213	29.3	29.3	7.8	7.8	19.2	19.2	73.8	73.9	5.1	5.0	3.9	4.1	5	5	-	-	823623	823748	-	-	-	-
						1.0	0.2	219	29.3		7.8		19.1		73.9		5.1		4.0		4		-				-		-	
					Middle	10.4	0.3	200	29.2	29.2	7.8	7.8	22.3	22.3	70.4	70.5	4.9		3.5		5		-				-		-	
						10.4	0.3	213	29.2		7.8		22.3		70.5		4.9		3.5		6		-				-		-	
					Bottom	19.8	0.8	175	26.6	26.6	7.8	7.8	29.5	29.3	54.8	54.7	3.7	3.7	4.7		6		-				-		-	
						19.8	0.8	184	26.6		7.8		29.1		54.6		3.7		4.7		4		-				-		-	
SR8	Sunny	Calm	09:26	4.8	Surface	1.0	0.0	0	29.5	29.5	7.8	7.8	17.4	17.4	75.0	75.0	5.2	5.2	6.3	8.1	3	6	-	-	820246	811418	-	-	-	-
						1.0	0.0	0	29.5		7.8		17.4		74.9		5.2		6.4		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.0	0	29.0	29.0	7.8	7.8	20.3	20.3	70.5	70.6	4.9	4.9	9.7		7		-				-		-	
						3.8	0.0	0	29.0		7.8		20.3		70.6		4.9		9.8		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 15 August 17 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Sunny	Moderate	18:06	8.5	Surface	1.0	0.4	42	30.1	30.1	8.1	8.1	15.9	15.9	96.9	96.5	6.7	5.4	2.0	6.9	3	4	88	90	815610	804228	<0.2	<0.2	2.1	2.0
						1.0	0.4	44	30.1		8.1		15.9		96.1		6.7		2.0		3		87				<0.2		2.0	
					Middle	4.3	0.5	43	26.6	26.6	7.8	7.8	30.2	30.2	61.0	61.0	4.1		4.7		5		91				<0.2		2.2	
						4.3	0.5	44	26.6		7.8		30.2		61.0		4.1		4.7		3		90				<0.2		2.2	
					Bottom	7.5	0.3	34	25.4	25.4	7.7	7.7	34.4	34.4	54.9	54.9	3.7	3.7	14.0		4		92				<0.2		1.8	
						7.5	0.3	34	25.4		7.7		34.4		54.9		3.7		14.0		4		92				<0.2		1.9	
C2	Cloudy	Moderate	16:53	11.8	Surface	1.0	0.1	328	30.2	30.2	7.9	7.9	15.2	15.2	84.8	84.8	5.9	5.1	3.8	9.8	5	7	90	92	825664	806964	<0.2	<0.2	2.5	2.1
						1.0	0.1	353	30.2		7.9		15.2		84.8		5.9		3.8		3		89				<0.2		2.3	
					Middle	5.9	0.3	334	27.9	27.9	7.8	7.8	21.4	21.4	59.9	59.9	4.2		7.1		4		93				<0.2		2.2	
						5.9	0.3	346	27.9		7.8		21.4		59.9		4.2		7.1		5		92				<0.2		2.3	
					Bottom	10.8	0.7	52	26.8	26.8	7.8	7.8	28.0	28.0	52.5	52.5	3.6	3.6	18.6		12		94				<0.2		1.5	
						10.8	0.7	56	26.8		7.8		28.0		52.5		3.6		18.6		11		93				<0.2		1.6	
C3	Cloudy	Moderate	18:46	11.4	Surface	1.0	0.4	249	29.8	29.8	8.0	8.0	18.1	18.1	94.3	94.3	6.5	6.3	2.2	4.9	4	9	91	93	822100	817818	<0.2	<0.2	1.9	1.7
						1.0	0.4	260	29.8		8.0		18.1		94.3		6.5		2.2		5		91				<0.2		2.3	
					Middle	5.7	0.3	256	29.7	29.7	8.0	8.0	18.2	18.2	88.3	88.3	6.1		3.4		8		92				<0.2		2.2	
						5.7	0.3	280	29.7		8.0		18.2		88.3		6.1		3.4		9		92				<0.2		2.1	
					Bottom	10.4	0.8	329	26.5	26.5	7.9	7.9	29.1	29.1	70.5	70.5	4.8	4.8	9.2		14		96				<0.2		0.9	
						10.4	0.8	347	26.5		7.9		29.1		70.5		4.8		9.2		15		95				<0.2		0.9	
IM1	Sunny	Moderate	17:48	7.2	Surface	1.0	0.5	20	30.1	30.1	8.0	8.0	16.0	16.0	99.2	99.0	6.9	5.5	2.3	8.0	4	3	88	91	818365	806474	<0.2	<0.2	2.1	2.2
						1.0	0.6	20	30.1		8.0		16.0		98.8		6.8		2.3		3		88				<0.2		2.0	
					Middle	3.6	0.5	358	27.2	27.2	7.8	7.8	28.2	28.2	60.4	60.4	4.1		7.8		2		91				<0.2		2.3	
						3.6	0.5	329	27.2		7.8		28.2		60.4		4.1		7.8		3		91				<0.2		2.3	
					Bottom	6.2	0.3	342	26.0	26.0	7.7	7.7	32.4	32.4	55.9	56.0	3.8	3.8	13.9		3		93				<0.2		2.0	
						6.2	0.4	356	26.0		7.7		32.4		56.0		3.8		14.0		2		93				<0.2		2.2	
IM2	Sunny	Moderate	17:42	8.4	Surface	1.0	0.7	16	30.2	30.2	8.1	8.1	15.8	15.8	96.2	96.2	6.7	5.4	2.3	9.8	<2	2	87	89	818832	806193	<0.2	<0.2	2.2	2.3
						1.0	0.7	17	30.2		8.1		15.8		96.2		6.7		2.3		<2		87				<0.2		2.3	
					Middle	4.2	0.7	2	27.1	27.1	7.8	7.8	28.7	28.7	59.9	60.0	4.1		8.0		<2		89				<0.2		2.6	
						4.2	0.7	2	27.1		7.8		28.7		60.0		4.1		8.2		2		89				<0.2		2.4	
					Bottom	7.4	0.5	30	26.1	26.1	7.7	7.7	32.1	32.1	56.0	56.0	3.8	3.8	18.9		<2		92				<0.2		2.1	
						7.4	0.6	32	26.1		7.7		32.1		56.0		3.8		19.1		2		91				<0.2		2.2	
IM3	Sunny	Moderate	17:34	8.5	Surface	1.0	0.7	353	30.3	30.3	8.0	8.0	15.6	15.6	97.0	97.0	6.7	5.5	1.9	7.1	2	2	88	91	819411	806015	<0.2	<0.2	2.6	2.5
						1.0	0.8	325	30.3		8.0		15.6		97.0		6.7		1.9		2		87				<0.2		2.6	
					Middle	4.3	0.7	2	27.3	27.3	7.8	7.8	27.0	27.1	61.6	61.5	4.2		6.0		2		92				<0.2		2.4	
						4.3	0.7	2	27.3		7.8		27.1		61.4		4.2		6.1		<2		91				<0.2		2.5	
					Bottom	7.5	0.4	36	26.3	26.3	7.7	7.7	31.6	31.6	55.5	55.6	3.8	3.8	13.6		<2		93				<0.2		2.2	
						7.5	0.5	37	26.3		7.7		31.6		55.7		3.8		13.3		2		93				<0.2		2.4	
IM4	Sunny	Moderate	17:25	7.7	Surface	1.0	0.2	315	30.3	30.3	8.0	8.0	16.1	16.1	98.9	98.8	6.8	5.8	1.9	7.6	2	3	89	91	819576	805052	<0.2	<0.2	2.2	2.3
						1.0	0.2	342	30.3		8.0		16.0		98.6		6.8		1.9		<2		88				<0.2		2.3	
					Middle	3.9	0.2	316	27.6	27.6	7.8	7.8	25.9	26.5	69.6	71.7	4.7		5.1		3		91				<0.2		2.2	
						3.9	0.2	329	27.6		7.8		27.1		73.7		5.0		5.0		2		90				<0.2		2.5	
					Bottom	6.7	0.1	279	26.3	26.3	7.7	7.7	31.7	31.7	54.1	54.2	3.7	3.7	15.9		3		94				<0.2		2.1	
						6.7	0.1	287	26.3		7.7		31.7		54.2		3.7		15.9		3		93				<0.2		2.3	
IM5	Sunny	Moderate	17:14	6.7	Surface	1.0	0.2	19	30.4	30.4	8.0	8.0	14.6	14.6	103.1	103.1	7.2	6.5	1.5	4.6	<2	3	89	91	820545	804910	<0.2	<0.2	2.6	2.5
						1.0	0.2	19	30.4		8.0		14.5		103.0		7.1		1.5		2		89				<0.2		2.5	
					Middle	3.4	0.2	28	29.7	29.7	7.9	7.9	18.1	18.1	85.8	85.8	5.9		3.8		<2		91				<0.2		2.4	
						3.4	0.3	28	29.7		7.9		18.1		85.8		5.9		3.8		<2		91				<0.2		2.6	
					Bottom	5.7	0.3	28	26.6	26.6	7.7	7.7	30.8	30.8	55.5	55.5	3.8	3.8	8.5		3		93				<0.2		2.5	
						5.7	0.3	30	26.6		7.7		30.8		55.5		3.8		8.5		4		93				<0.2		2.5	
IM6	Sunny	Moderate	17:06	6.8	Surface	1.0	0.5	355	30.5	30.5	8.0	8.0	14.4	14.4	101.4	101.4	7.0	6.6	1.7	4.4	2	3	88	90	821057	805825	<0.2	<0.2	2.5	2.5
						1.0	0.5	327	30.5		8.0		14.4		101.4		7.0		1.7		3		88				<0.2		2.5	
					Middle	3.4	0.5	5	29.7	29.7	7.9	7.9	18.5	18.5	89.1	89.1	6.1		3.1		4		90				<0.2		2.5	
						3.4	0.5	5	29.7		7.9		18.5		89.1		6.1		3.1		4		90				<0.2		2.8	
					Bottom	5.8	0.3	10	27.0	27.0	7.7	7.7	29.2	29.2	61.9	61.9	4.2	4.2	8.3		4		92				<0.2		2.5	
						5.8	0.4	10	27.0		7.7		29.2		61.9		4.2		8.3		3		91				<0.2		2.4	
IM7	Sunny	Moderate	16:57	8.2	Surface	1.0	0.1	31	30.1	30.1	7.8	7.8	16.6	16.6	97.8	97.8	6.7	5.9	1.6	4.3	3	3	89	91	821337	806817	<0.2	<0.2	2.5	2.5
						1.0	0.1	32	30.1		7.8		16.6		97.8		6.7		1.6		2		88				<0.2		2.6	
					Middle	4.1	0.3	23	28.8	28.8	7.6	7.6	20.7	20.7	74.6	74.6	5.1		4.6		3		91				<0.2		2.7	
						4.1	0.3	23	28.8		7.6		20.7		74.6		5.1		4.6		2		91				<0.2		2.6	
					Bottom	7.2	0.3	33	28.4	28.4	7.6	7.6	22.8	22.8	76.4	76.4	5.2	5.2	6.7		4		93				<0.2		2.4	
						7.2	0.3	35	28.4		7.6		22.8		76.4		5.2		6.7		4		93				<0.2		2.0	
IM8	Cloudy	Moderate	17:26	7.9	Surface	1.0	0.2	48	30.2	30.2	8.1	8.1	15.1	15.1	93.3	93.0	6.5	5.7	3.3	5.9	4	4	89	91	821695	807833	<0.2	<0.2	1.9	2.0
						1.0	0.2	48	30.2		8.1		15.1		92.6		6.4		3.3		3		89				<0.2		2.1	
					Middle	4.0	0.1	335	29.4	29.4	7.8	7.8	16.8	16.8	72.2	72.2	5.0		5.5		3		91				<0.2		2.0	
						4.0	0.2	343	29.4		7.8		16.8		72.2		5.0		5.5		4		90				<0.2		2.1	
					Bottom	6.9	0.5	309	28.9	28.9	7.8	7.8	20.0	20.0	69.9	69.9	4.8	4.8	8.9		5		93				<0.2		2.0	
						6.9	0.6	329	28.9		7.8		20.0		69.9		4.8		8.9		3		92				<0.2		2.0	

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 15 August 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	17:35	7.1	Surface	1.0	0.2	46	29.9	29.9	7.9	7.9	14.7	14.7	83.2	83.2	5.8	5.6	3.5	7.0	4	4	89	90	822082	808822	<0.2	<0.2	2.3	2.3
						1.0	0.2	46	29.9		7.9		14.7		83.2		5.8		3.5		4		88				<0.2		2.2	
					Middle	3.6	0.2	28	29.4	29.4	7.8	7.8	17.6	17.6	75.8	75.8	5.3		4.3		3		90				<0.2		2.5	
						3.6	0.3	30	29.4		7.8		17.6		75.8		5.3		4.3		4		90				<0.2		2.5	
					Bottom	6.1	0.2	315	28.9	28.9	7.8	7.8	20.2	20.2	71.4	71.4	4.9	4.9	13.1		4		92				<0.2		2.3	
						6.1	0.2	322	28.9		7.8		20.2		71.4		4.9		13.1		4		93				<0.2		2.1	
IM10	Cloudy	Moderate	17:42	6.1	Surface	1.0	0.2	358	30.3	30.3	8.0	8.0	14.0	14.0	94.1	94.1	6.6	6.4	3.6	3.8	5	5	89	90	822249	809822	<0.2	<0.2	2.9	2.9
						1.0	0.2	329	30.3		8.0		14.0		94.1		6.6		3.6		4		88				<0.2		2.8	
					Middle	3.1	0.4	324	30.0	30.0	7.9	7.9	14.9	14.9	86.9	86.9	6.1		3.4		4		89				<0.2		3.1	
						3.1	0.4	346	30.0		7.9		14.9		86.9		6.1		3.4		4		89				<0.2		3.1	
					Bottom	5.1	0.3	324	29.4	29.4	7.9	7.9	18.7	18.7	79.5	79.5	5.5	5.5	4.3		5		91				<0.2		2.9	
						5.1	0.3	335	29.4		7.9		18.7		79.5		5.5		4.3		5		92				<0.2		2.7	
IM11	Cloudy	Moderate	17:52	7.8	Surface	1.0	0.2	331	30.1	30.1	8.0	8.0	15.0	15.0	94.6	94.6	6.6	6.1	3.2	4.1	5	5	88	90	821481	810526	<0.2	<0.2	2.8	2.2
						1.0	0.2	334	30.1		8.0		15.0		94.6		6.6		3.2		3		89				<0.2		2.8	
					Middle	3.9	0.3	301	29.6	29.6	8.0	8.0	16.6	16.6	80.6	80.6	5.6		4.1		4		90				<0.2		2.2	
						3.9	0.3	301	29.6		8.0		16.6		80.6		5.6		4.1		5		89				<0.2		2.1	
					Bottom	6.8	0.2	328	28.7	28.7	7.9	7.9	21.3	21.3	76.0	76.0	5.2	5.2	4.9		5		93				<0.2		1.6	
						6.8	0.2	350	28.7		7.9		21.3		76.0		5.2		4.9		7		92				<0.2		1.9	
IM12	Cloudy	Moderate	18:02	8.9	Surface	1.0	0.4	285	30.1	30.1	8.0	8.0	14.3	14.3	87.7	87.7	6.1	5.7	4.9	9.6	4	5	89	91	821156	811525	<0.2	<0.2	2.5	2.3
						1.0	0.4	311	30.1		8.0		14.3		87.7		6.1		4.9		5		88				<0.2		2.3	
					Middle	4.5	0.7	286	29.8	29.8	8.0	8.0	16.3	16.3	76.9	76.9	5.3		7.7		3		91				<0.2		2.3	
						4.5	0.7	292	29.8		8.0		16.3		76.9		5.3		7.7		5		90				<0.2		2.5	
					Bottom	7.9	0.2	330	28.0	28.0	7.8	7.8	23.8	23.8	70.0	70.0	4.8	4.8	16.1		7		92				<0.2		1.9	
						7.9	0.2	359	28.0		7.8		23.8		70.0		4.8		16.1		7		93				<0.2		2.0	
SR2	Cloudy	Moderate	18:27	4.7	Surface	1.0	0.4	53	30.2	30.2	8.0	8.0	13.3	13.3	93.7	93.7	6.6	6.6	3.0	2.9	5	5	89	90	821447	814163	<0.2	<0.2	2.8	2.8
						1.0	0.4	53	30.2		8.0		13.3		93.7		6.6		3.0		4		88				<0.2		2.7	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.3	66	29.9	29.9	7.9	7.9	16.5	16.5	91.9	91.9	6.4	6.4	2.8		4		91				<0.2		2.9	
						3.7	0.3	72	29.9		7.9		16.5		91.9		6.4		2.8		5		91				<0.2		2.8	
SR3	Cloudy	Moderate	17:15	8.7	Surface	1.0	0.2	20	30.1	30.1	8.0	8.0	15.7	15.7	92.3	92.3	6.4	5.6	2.5	7.3	4	5	-	-	822146	807587	-	-	-	-
						1.0	0.2	20	30.1		8.0		15.7		92.3		6.4		2.5		4		-				-		-	
					Middle	4.4	0.2	330	29.1	29.1	7.8	7.8	18.7	18.7	68.0	68.0	4.7		4.5		4		-				-		-	
						4.4	0.2	355	29.1		7.8		18.7		68.0		4.7		4.5		3		-				-		-	
					Bottom	7.7	0.8	314	28.7	28.7	7.8	7.8	21.2	21.2	64.0	64.0	4.4	4.4	14.9		6		-				-		-	
						7.7	0.8	318	28.7		7.8		21.2		64.0		4.4		14.9		6		-				-		-	
SR4A	Fine	Moderate	18:28	8.6	Surface	1.0	0.1	254	29.8	29.8	8.0	8.0	18.1	18.1	92.5	92.2	6.4	5.1	5.7	9.9	6	6	-	-	817174	807827	-	-	-	-
						1.0	0.1	278	29.8		8.0		18.1		91.9		6.3		5.8		6		-				-		-	
					Middle	4.3	0.1	284	27.0	27.0	7.8	7.8	29.3	29.3	57.7	57.7	3.9		9.5		4		-				-		-	
						4.3	0.1	305	27.0		7.8		29.3		57.7		3.9		9.4		6		-				-		-	
					Bottom	7.6	0.2	254	26.4	26.4	7.8	7.8	31.2	31.2	57.2	57.2	3.9	3.9	14.3		5		-				-		-	
						7.6	0.2	273	26.4		7.8		31.2		57.2		3.9		14.4		6		-				-		-	
SR5A	Fine	Moderate	18:45	3.3	Surface	1.0	0.2	311	30.5	30.5	8.0	8.0	21.2	21.2	116.8	116.8	7.8	7.8	16.6	17.3	6	8	-	-	816580	810713	-	-	-	-
						1.0	0.2	311	30.5		8.0		21.2		116.8		7.8		16.7		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.3	0.2	317	30.5	30.5	8.0	8.0	21.3	21.3	114.4	114.4	7.6	7.6	18.0		8		-				-		-	
						2.3	0.2	328	30.5		8.0		21.3		114.4		7.6		18.0		9		-				-		-	
SR6	Fine	Moderate	19:08	4.2	Surface	1.0	0.2	259	30.0	30.0	8.0	8.0	19.5	19.5	107.3	107.3	7.3	7.3	6.3	7.8	8	7	-	-	817882	814666	-	-	-	-
						1.0	0.2	282	30.0		8.0		19.5		107.2		7.3		6.4		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.0	215	29.9	29.9	7.9	7.9	20.5	20.5	94.8	94.8	6.4	6.4	9.3		6		-				-		-	
						3.2	0.0	225	29.9		7.9		20.5		94.8		6.4		9.3		6		-				-		-	
SR7	Cloudy	Moderate	19:17	16.2	Surface	1.0	0.2	202	30.1	30.1	8.0	8.0	17.9	17.9	94.9	94.9	6.5	6.1	2.1	3.1	5	6	-	-	823655	823748	-	-	-	-
						1.0	0.2	212	30.1		8.0		17.9		94.9		6.5		2.1		4		-				-		-	
					Middle	8.1	0.4	91	29.1	29.1	8.0	8.0	20.9	20.9	81.8	81.8	5.6		2.9		5		-				-		-	
						8.1	0.4	93	29.1		8.0		20.9		81.8		5.6		2.9		5		-				-		-	
					Bottom	15.2	1.1	100	26.1	26.1	7.9	7.9	30.3	30.3	70.2	70.2	4.8	4.8	4.2		8		-				-		-	
						15.2	1.2	102	26.1		7.9		30.3		70.2		4.8		4.2		7		-				-		-	
SR8	Cloudy	Moderate	18:15	4.6	Surface	1.0	-	-	30.1	30.1	8.0	8.0	15.0	15.0	96.5	96.5	6.7	6.7	2.7	2.7	6	6	-	-	820246	811418	-	-	-	-
						1.0	-	-	30.1		8.0		15.0		96.5		6.7		2.7		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	-	-	30.2	30.2	8.0	8.0	15.9	15.9	96.3	96.3	6.7	6.7	2.6		5		-				-		-	
						3.6	-	-	30.2		8.0		15.9		96.3		6.7		2.6		6		-				-		-	

DA: Depth-Averaged

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

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 15 August 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	Sunny	Moderate	12:57	8.3	Surface	1.0	0.4	42	29.9	29.9	7.9	7.9	15.9	15.9	91.0	91.0	6.3	5.6	2.8	7.9	5	5	88	91	815608	804230	<0.2	<0.2	2.0	2.3
						1.0	0.4	44	29.9		7.9		15.9		91.0		6.3		2.8		5		88				<0.2		2.2	
					Middle	4.2	0.5	43	28.1	28.1	7.8	7.8	19.9	20.0	68.5	68.4	4.8		8.2		5		91				<0.2		2.3	
						4.2	0.5	44	28.0		7.8		20.0		68.2		4.8		8.3		5		91				<0.2		2.4	
					Bottom	7.3	0.3	34	26.1	26.1	7.7	7.7	32.3	32.3	54.5	54.5	3.7	3.7	12.8		4		93				<0.2		2.3	
						7.3	0.3	34	26.1		7.7		32.3		54.5		3.7		12.5		6		92				<0.2		2.4	
C2	Sunny	Moderate	14:09	12.1	Surface	1.0	0.1	328	30.0	30.0	7.8	7.8	13.9	13.9	82.0	82.0	5.7	5.4	3.5	3.3	4	6	88	91	825688	806955	<0.2	<0.2	2.3	2.1
						1.0	0.1	353	30.0		7.8		13.9		82.0		5.7		3.5		5		89				<0.2		2.4	
					Middle	6.1	0.3	334	29.1	29.1	7.8	7.8	19.5	19.5	73.2	73.2	5.1		3.0		6		92				<0.2		2.0	
						6.1	0.3	346	29.1		7.8		19.5		73.2		5.1		3.0		5		91				<0.2		1.9	
					Bottom	11.1	0.7	52	28.9	28.9	7.8	7.8	20.5	20.5	72.1	72.1	5.0	5.0	3.5		7		92				<0.2		2.0	
						11.1	0.7	56	28.9		7.8		20.5		72.1		5.0		3.5		8		92				<0.2		1.8	
C3	Sunny	Moderate	12:09	12.0	Surface	1.0	0.4	249	29.3	29.3	7.9	7.9	18.7	18.7	76.8	76.8	5.3	4.9	2.3	7.3	4	8	90	93	822094	817815	<0.2	<0.2	1.9	1.5
						1.0	0.4	260	29.3		7.9		18.7		76.8		5.3		2.3		4		91				<0.2		2.0	
					Middle	6.0	0.3	256	28.0	28.0	7.8	7.8	23.7	23.7	64.5	64.5	4.4		3.5		6		92				<0.2		1.8	
						6.0	0.3	280	28.0		7.8		23.7		64.5		4.4		3.5		7		93				<0.2		1.7	
					Bottom	11.0	0.8	329	26.0	26.0	7.8	7.8	30.4	30.4	55.2	55.2	3.8	3.8	16.0		11		96				<0.2		0.8	
						11.0	0.8	347	26.0		7.8		30.4		55.2		3.8		16.0		13		95				<0.2		0.8	
IM1	Sunny	Moderate	13:13	7.2	Surface	1.0	0.5	20	30.1	30.1	7.8	7.8	15.6	15.6	97.7	97.7	6.8	6.7	1.4	5.3	5	5	87	90	818357	806453	<0.2	<0.2	2.2	1.9
						1.0	0.6	20	30.1		7.8		15.6		97.7		6.8		1.4		5		88				<0.2		1.8	
					Middle	3.6	0.5	358	29.5	29.5	7.8	7.8	17.3	17.3	95.2	95.2	6.6		3.7		5		90				<0.2		2.0	
						3.6	0.5	329	29.5		7.8		17.3		95.2		6.6		3.7		6		90				<0.2		2.0	
					Bottom	6.2	0.3	342	28.9	28.9	7.7	7.7	21.2	21.2	87.2	87.2	6.0	6.0	10.9		4		92				<0.2		1.8	
						6.2	0.4	356	28.9		7.7		21.2		87.2		6.0		10.9		6		92				<0.2		1.8	
IM2	Sunny	Moderate	13:19	8.1	Surface	1.0	0.7	16	30.2	30.2	7.8	7.8	15.5	15.5	93.0	93.0	6.4	6.2	1.9	3.8	2	3	88	91	818853	806191	<0.2	<0.2	2.0	2.2
						1.0	0.7	17	30.2		7.8		15.5		92.9		6.4		1.8		3		89				<0.2		2.2	
					Middle	4.1	0.7	2	29.2	29.2	7.8	7.8	18.9	18.9	85.7	85.7	5.9		2.4		3		92				<0.2		2.1	
						4.1	0.7	2	29.2		7.8		18.9		85.7		5.9		2.4		2		91				<0.2		2.2	
					Bottom	7.1	0.5	30	28.1	28.1	7.8	7.8	23.9	23.9	72.6	72.6	5.0	5.0	7.3		3		94				<0.2		2.3	
						7.1	0.6	32	28.1		7.8		23.9		72.6		5.0		7.2		2		94				<0.2		2.2	
IM3	Sunny	Moderate	13:26	8.5	Surface	1.0	0.7	353	29.7	29.7	7.9	7.9	18.5	18.5	90.3	90.2	6.2	5.8	2.4	4.2	3	4	89	92	819391	806032	<0.2	<0.2	1.9	2.1
						1.0	0.8	325	29.7		7.9		18.5		90.1		6.2		2.4		3		90				<0.2		2.0	
					Middle	4.3	0.7	2	28.7	28.7	7.8	7.8	21.6	21.6	78.6	78.6	5.4		3.2		4		91				<0.2		2.0	
						4.3	0.7	2	28.7		7.8		21.6		78.6		5.4		3.2		5		92				<0.2		2.2	
					Bottom	7.5	0.4	36	26.9	26.9	7.7	7.7	29.3	29.3	61.9	61.9	4.2	4.2	7.1		4		94				<0.2		2.1	
						7.5	0.5	37	26.9		7.7		29.3		61.9		4.2		7.1		2		95				<0.2		2.2	
IM4	Sunny	Moderate	13:35	7.8	Surface	1.0	0.2	315	29.7	29.7	7.9	7.9	19.4	19.4	91.7	91.7	6.3	5.9	2.0	4.1	3	3	89	92	819580	805022	<0.2	<0.2	1.9	1.9
						1.0	0.2	342	29.7		7.9		19.4		91.7		6.3		2.0		3		89				<0.2		2.0	
					Middle	3.9	0.2	316	29.1	29.1	7.9	7.9	21.4	21.4	78.4	78.4	5.4		3.8		2		92				<0.2		1.9	
						3.9	0.2	329	29.1		7.9		21.4		78.4		5.4		3.8		3		92				<0.2		2.0	
					Bottom	6.8	0.1	279	27.0	27.0	7.7	7.7	28.9	28.9	62.8	62.8	4.3	4.3	6.5		2		94				<0.2		2.0	
						6.8	0.1	287	27.0		7.7		28.9		62.8		4.3		6.5		2		94				<0.2		1.8	
IM5	Sunny	Moderate	13:46	6.8	Surface	1.0	0.2	19	29.6	29.6	7.9	7.9	17.6	17.6	91.4	91.4	6.3	6.0	2.2	3.9	4	4	88	92	820581	804939	<0.2	<0.2	2.1	2.0
						1.0	0.2	19	29.6		7.9		17.6		91.4		6.3		2.2		2		89				<0.2		2.1	
					Middle	3.4	0.2	28	29.4	29.4	7.9	7.9	19.3	19.3	83.0	83.0	5.7		3.3		4		92				<0.2		2.1	
						3.4	0.3	28	29.4		7.9		19.3		83.0		5.7		3.3		3		92				<0.2		2.2	
					Bottom	5.8	0.3	28	26.8	26.8	7.7	7.7	29.8	29.8	57.5	57.6	3.9	3.9	6.3		4		96				<0.2		1.6	
						5.8	0.3	30	26.8		7.7		29.8		57.6		3.9		6.3		5		95				<0.2		1.9	
IM6	Sunny	Moderate	13:53	6.7	Surface	1.0	0.5	355	29.8	29.8	7.9	7.9	18.3	18.3	94.0	94.0	6.5	6.4	2.4	3.3	5	4	89	91	821040	805817	<0.2	<0.2	2.3	2.2
						1.0	0.5	327	29.8		7.9		18.3		94.0		6.5		2.4		4		90				<0.2		2.3	
					Middle	3.4	0.5	5	29.4	29.4	7.9	7.9	19.0	19.0	90.8	90.8	6.3		3.0		3		90				<0.2		2.1	
						3.4	0.5	5	29.4		7.9		19.0		90.8		6.3		3.0		3		91				<0.2		2.0	
					Bottom	5.7	0.3	10	28.1	28.1	7.8	7.8	23.3	23.3	71.8	71.8	4.9	4.9	4.5		3		93				<0.2		2.2	
						5.7	0.4	10	28.1		7.8		23.3		71.8		4.9		4.5		4		93				<0.2		2.0	
IM7	Sunny	Moderate	14:01	7.4	Surface	1.0	0.1	31	30.4	30.4	7.9	7.9	13.8	13.8	96.7	96.7	6.7	6.7	3.0	2.8	3	3	88	91	821332	806826	<0.2	<0.2	2.6	2.5
						1.0	0.1	32	30.4		7.9		13.8		96.7		6.7		3.0		3		89				<0.2		2.4	
					Middle	3.7	0.3	23	29.8	29.8	7.9	7.9	16.8	16.8	95.1	95.1	6.6		2.0		3		92				<0.2		2.5	
						3.7	0.3	23	29.8		7.9		16.8		95.1		6.6		2.0		4		91				<0.2		2.4	
					Bottom	6.4	0.3	33	29.4	29.4	7.9	7.9	18.5	18.5	91.7	91.7	6.3	6.3	3.3		3		93				<0.2		2.5	
						6.4	0.3	35	29.4		7.9		18.5		91.7		6.3		3.3		3		94				<0.2		2.7	
IM8	Sunny	Moderate	13:41	8.3	Surface	1.0	0.2	48	30.5	30.5	7.9	7.9	11.1	11.1	88.5	88.5	6.2	5.8	3.9	4.8	3	4	87	90	821703	807851	<0.2	<0.2	2.7	2.4
						1.0	0.2	48	30.5		7.9		11.1		88.5		6.2		3.9		4		88				<0.2		2.8	
					Middle	4.2	0.1	335	29.5	29.5	7.8	7.8	15.2	15.2	77.2	77.2	5.4		3.7		4		90				<0.2		2.4	
						4.2	0.2	343	29.5		7.8		15.2		77.2		5.4		3.7		4		89				<0.2		2.5	
					Bottom	7.3	0.5	309	28.9	28.9	7.8	7.8	20.6	20.6	67.6	67.6	4.7	4.7	6.9		4		92				<0.2		2.2	
						7.3	0.6	329	28.9		7.8		20.6		67.6		4.7		6.9		6		93				<0.2		1.7	

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 15 August 17 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Sunny	Moderate	13:33	7.2	Surface	1.0	0.2	46	30.5	30.5	7.9	7.9	11.1	11.1	89.2	89.2	6.3	6.0	4.1	7.6	3	4	87	89	822110	808828	<0.2	<0.2	2.5	2.3
						1.0	0.2	46	30.5		7.9		11.1		89.2		6.3		4.1		4		87				<0.2		2.2	
					Middle	3.6	0.2	28	29.6	29.6	7.8	7.8	14.6	14.6	80.4	80.4	5.6		5.5		2		88				<0.2		2.5	
						3.6	0.3	30	29.6		7.8		14.6		80.4		5.6		5.5		3		89				<0.2		2.4	
					Bottom	6.2	0.2	315	29.2	29.2	7.9	7.9	18.7	18.7	75.4	75.4	5.2	5.2	13.1		7		92				<0.2		2.3	
						6.2	0.2	322	29.2		7.9		18.7		75.4		5.2		13.1		7		92				<0.2		2.0	
IM10	Sunny	Moderate	13:23	7.0	Surface	1.0	0.2	358	30.5	30.5	7.9	7.9	12.0	12.0	91.1	91.1	6.4	6.2	3.7	5.8	2	3	88	90	822231	809846	<0.2	<0.2	2.2	2.2
						1.0	0.2	329	30.5		7.9		12.0		91.1		6.4		3.7		3		88				<0.2		2.2	
					Middle	3.5	0.4	324	29.9	29.9	7.9	7.9	15.4	15.4	86.1	86.1	6.0		4.4		3		90				<0.2		2.2	
						3.5	0.4	346	29.9		7.9		15.4		86.1		6.0		4.4		4		91				<0.2		2.2	
					Bottom	6.0	0.3	324	29.0	29.0	7.9	7.9	20.0	20.0	77.8	77.8	5.4	5.4	9.4		2		93				<0.2		2.0	
						6.0	0.3	335	29.0		7.9		20.0		77.8		5.4		9.4		2		92				<0.2		2.1	
IM11	Sunny	Moderate	13:11	7.8	Surface	1.0	0.2	331	29.9	29.9	7.9	7.9	15.9	15.9	90.6	90.6	6.3	5.9	3.2	6.1	3	4	90	91	821491	810548	<0.2	<0.2	1.8	1.8
						1.0	0.2	334	29.9		7.9		15.9		90.6		6.3		3.2		3		89				<0.2		1.9	
					Middle	3.9	0.3	301	29.3	29.3	7.9	7.9	19.1	19.1	79.8	79.8	5.5		6.0		4		92				<0.2		1.9	
						3.9	0.3	301	29.3		7.9		19.1		79.8		5.5		6.0		3		92				<0.2		1.9	
					Bottom	6.8	0.2	328	28.8	28.8	7.9	7.9	20.8	20.8	74.9	74.9	5.2	5.2	9.2		6		93				<0.2		1.5	
						6.8	0.2	350	28.8		7.9		20.8		74.9		5.2		9.2		6		92				<0.2		1.5	
IM12	Sunny	Moderate	13:03	7.9	Surface	1.0	0.4	285	30.1	30.1	7.9	7.9	14.9	14.9	89.3	89.3	6.2	5.9	2.7	6.0	4	4	88	91	821174	811506	<0.2	<0.2	2.2	2.0
						1.0	0.4	311	30.1		7.9		14.9		89.3		6.2		2.7		3		89				<0.2		2.1	
					Middle	4.0	0.7	286	29.3	29.3	7.9	7.9	19.1	19.1	81.7	81.7	5.6		4.2		4		91				<0.2		1.9	
						4.0	0.7	292	29.3		7.9		19.1		81.7		5.6		4.2		5		92				<0.2		2.2	
					Bottom	6.9	0.2	330	27.9	27.9	7.8	7.8	24.6	24.6	63.2	63.2	4.3	4.3	11.1		5		93				<0.2		1.7	
						6.9	0.2	359	27.9		7.8		24.6		63.2		4.3		11.1		5		92				<0.2		1.7	
SR2	Sunny	Moderate	12:33	4.2	Surface	1.0	0.4	53	30.0	30.0	7.9	7.9	16.0	16.0	89.0	89.0	6.2	6.2	2.5	3.7	3	3	89	90	821475	814171	<0.2	<0.2	2.0	2.1
						1.0	0.4	53	30.0		7.9		16.0		89.0		6.2		2.5		2		90				<0.2		2.1	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.3	66	29.0	29.0	7.8	7.8	19.5	19.5	81.4	81.4	5.6	5.6	4.9		3		91				<0.2		2.2	
						3.2	0.3	72	29.0		7.8		19.5		81.4		5.6		4.9		4		91				<0.2		2.2	
SR3	Sunny	Moderate	13:47	8.9	Surface	1.0	0.2	20	30.6	30.6	7.9	7.9	11.1	11.1	88.4	88.4	6.2	5.8	4.3	5.7	4	4	-	-	822145	807589	-	-	-	-
						1.0	0.2	20	30.6		7.9		11.1		88.4		6.2		4.3		5		-				-		-	
					Middle	4.5	0.2	330	29.5	29.5	7.8	7.8	15.2	15.2	75.6	75.6	5.3		4.5		4		-				-		-	
						4.5	0.2	355	29.5		7.8		15.2		75.6		5.3		4.5		4		-				-		-	
					Bottom	7.9	0.8	314	28.8	28.8	7.8	7.8	21.1	21.1	65.2	65.2	4.5	4.5	8.2		4		-				-		-	
						7.9	0.8	318	28.8		7.8		21.1		65.2		4.5		8.2		3		-				-		-	
SR4A	Sunny	Moderate	12:34	8.8	Surface	1.0	0.1	254	29.8	29.8	7.8	7.8	19.0	19.0	95.4	95.4	6.5	6.1	5.3	8.2	4	4	-	-	817175	807823	-	-	-	-
						1.0	0.1	278	29.8		7.8		19.0		95.3		6.5		5.3		5		-				-		-	
					Middle	4.4	0.1	284	29.4	29.4	7.7	7.7	22.4	22.4	82.7	82.7	5.6		8.1		4		-				-		-	
						4.4	0.1	305	29.4		7.7		22.4		82.6		5.6		8.2		5		-				-		-	
					Bottom	7.8	0.2	254	27.9	27.9	7.6	7.6	26.9	26.9	68.3	68.4	4.6	4.6	11.1		4		-				-		-	
						7.8	0.2	273	27.9		7.6		26.9		68.4		4.6		11.1		4		-				-		-	
SR5A	Sunny	Moderate	12:18	3.6	Surface	1.0	0.2	311	29.9	29.9	7.8	7.8	20.8	20.8	98.8	98.8	6.7	6.7	4.7	5.9	5	5	-	-	816610	810679	-	-	-	-
						1.0	0.2	311	29.8		7.8		20.8		98.7		6.7		4.7		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.6	0.2	317	29.6	29.6	7.8	7.8	21.3	21.3	94.2	94.3	6.4	6.4	7.4		5		-				-		-	
						2.6	0.2	328	29.6		7.8		21.3		94.3		6.4		6.9		5		-				-		-	
SR6	Sunny	Moderate	11:45	4.2	Surface	1.0	0.2	259	29.6	29.6	7.6	7.6	18.1	18.1	91.5	91.5	6.3	6.3	4.3	4.8	4	5	-	-	817880	814682	-	-	-	-
						1.0	0.2	282	29.6		7.6		18.1		91.5		6.3		4.4		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.0	215	29.4	29.4	7.5	7.5	18.9	18.9	88.3	88.3	6.1	6.1	5.2		4		-				-		-	
						3.2	0.0	225	29.4		7.5		18.9		88.3		6.1		5.2		4		-				-		-	
SR7	Sunny	Moderate	11:34	15.2	Surface	1.0	0.2	202	29.5	29.5	7.9	7.9	17.9	17.9	81.8	81.8	5.7	5.2	2.5	5.2	2	4	-	-	823649	823724	-	-	-	-
						1.0	0.2	212	29.5		7.9		17.9		81.8		5.7		2.5		3		-				-		-	
					Middle	7.6	0.4	91	28.1	28.1	7.9	7.9	23.5	23.5	69.0	69.0	4.7		2.6		5		-				-		-	
						7.6	0.4	93	28.1		7.9		23.5		69.0		4.7		2.6		4		-				-		-	
					Bottom	14.2	1.1	100	26.4	26.4	7.8	7.8	29.0	29.0	57.0	57.0	3.9	3.9	10.4		5		-				-		-	
						14.2	1.2	102	26.4		7.8		29.0		57.0		3.9		10.4		6		-				-		-	
SR8	Sunny	Moderate	12:54	5.2	Surface	1.0	0.0	0	30.3	30.3	7.8	7.8	14.3	14.3	87.4	87.4	6.1	6.1	4.5	6.1	4	4	-	-	820246	811418	-	-	-	-
						1.0	0.0	0	30.3		7.8		14.3		87.4		6.1		4.5		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.0	0	29.4	29.4	7.8	7.8	17.7	17.7	82.8	82.8	5.7	5.7	7.6		5		-				-		-	
						4.2	0.0	0	29.4		7.8		17.7		82.8		5.7		7.6		4		-				-		-	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 17 August 17 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Sunny	Calm	09:04	8.3	Surface	1.0	0.6	204	29.1	29.1	7.6	7.6	12.6	12.6	96.0	95.9	6.9	6.0	1.5	6.7	2	3	86	90	815621	804241	<0.2	<0.2	3.1	2.4
						1.0	0.6	212	29.1		7.6		12.6		95.8		6.9		1.5		4		87				<0.2		2.9	
					Middle	4.2	0.5	223	27.5	27.5	7.6	7.6	23.3	23.4	73.0	73.0	5.1		2.6		3		91				<0.2		2.5	
						4.2	0.5	234	27.5		7.6		23.4		72.9		5.1		2.6		3		92				<0.2		2.9	
					Bottom	7.3	0.6	215	25.2	25.2	7.6	7.6	32.1	32.1	54.8	55.0	3.8	3.8	16.0		3		93				<0.2		1.7	
						7.3	0.6	224	25.2		7.6		32.1		55.1		3.8		15.9		5		93				<0.2		1.5	
C2	Sunny	Moderate	10:13	11.5	Surface	1.0	1.2	164	30.3	30.3	7.6	7.6	8.5	8.5	79.0	79.0	5.7	4.7	5.2	6.2	5	5	86	91	825669	806955	<0.2	<0.2	3.2	3.1
						1.0	1.3	164	30.3		7.6		8.5		79.0		5.7		5.2		6		86				<0.2		3.3	
					Middle	5.8	0.8	158	27.3	27.3	7.6	7.6	26.6	26.6	54.7	54.7	3.7		3.8		4		93				<0.2		2.9	
						5.8	0.8	159	27.3		7.6		26.6		54.7		3.7		3.8		5		94				<0.2		3.3	
					Bottom	10.5	0.5	151	26.1	26.1	7.6	7.6	30.0	30.0	50.7	50.7	3.5	3.5	9.6		4		95				<0.2		3.0	
						10.5	0.5	154	26.1		7.6		30.0		50.7		3.5		9.6		4		94				<0.2		3.0	
C3	Sunny	Moderate	08:00	11.2	Surface	1.0	0.0	266	28.9	28.9	7.8	7.8	18.2	18.2	85.5	85.5	6.0	5.8	1.4	2.4	2	3	91	94	822098	817819	<0.2	<0.2	2.5	2.2
						1.0	0.0	282	28.9		7.8		18.2		85.5		6.0		1.4		4		91				<0.2		2.2	
					Middle	5.6	0.2	21	28.3	28.3	7.8	7.8	22.3	22.3	81.5	81.5	5.6		1.6		3		94				<0.2		2.1	
						5.6	0.2	21	28.3		7.8		22.3		81.5		5.6		1.6		3		94				<0.2		2.4	
					Bottom	10.2	0.3	92	25.9	25.9	7.7	7.7	30.6	30.6	65.0	65.0	4.5	4.5	4.2		3		95				<0.2		2.1	
						10.2	0.3	98	25.9		7.7		30.6		65.0		4.5		4.2		3		96				<0.2		2.0	
IM1	Sunny	Calm	09:29	7.0	Surface	1.0	0.8	192	27.8	28.0	7.7	7.7	19.2	19.5	69.9	69.3	4.9	4.6	2.6	6.3	4	5	86	88	818366	806445	<0.2	<0.2	1.6	1.7
						1.0	0.8	192	28.2		7.7		19.8		68.7		4.8		2.8		6		86				<0.2		1.4	
					Middle	3.5	0.4	194	26.7	26.7	7.6	7.6	26.5	26.5	62.6	62.6	4.3		6.9		5		88				<0.2		1.6	
						3.5	0.5	207	26.7		7.6		26.5		62.5		4.2		7.0		4		88				<0.2		1.9	
					Bottom	6.0	0.1	223	25.3	25.3	7.6	7.6	31.7	31.7	51.7	51.8	3.6	3.6	9.0		6		90				<0.2		1.8	
						6.0	0.1	223	25.2		7.6		31.7		51.9		3.6		9.2		6		91				<0.2		1.9	
IM2	Sunny	Calm	09:39	8.1	Surface	1.0	0.7	210	28.6	28.6	7.7	7.7	18.3	18.4	77.7	77.7	5.4	4.8	1.7	5.3	3	4	86	90	818840	806198	<0.2	<0.2	1.8	2.0
						1.0	0.8	220	28.6		7.7		18.5		77.6		5.4		1.8		5		86				<0.2		2.0	
					Middle	4.1	0.5	212	26.8	26.8	7.7	7.7	26.3	26.3	61.2	61.3	4.2		5.1		4		91				<0.2		2.1	
						4.1	0.5	228	26.8		7.7		26.3		61.4		4.2		4.9		4		91				<0.2		1.8	
					Bottom	7.1	0.1	188	25.4	25.4	7.6	7.6	31.2	31.3	54.7	54.8	3.8	3.8	9.2		4		91				<0.2		1.9	
						7.1	0.1	205	25.4		7.6		31.3		54.9		3.8		9.3		4		92				<0.2		2.1	
IM3	Sunny	Calm	09:50	8.2	Surface	1.0	0.8	224	29.6	29.6	7.8	7.8	13.8	13.8	88.9	88.8	6.3	5.6	2.0	5.3	3	3	86	90	819401	806029	<0.2	<0.2	1.9	2.1
						1.0	0.8	238	29.6		7.8		13.8		88.7		6.3		2.0		2		86				<0.2		1.9	
					Middle	4.1	0.5	224	27.7	27.8	7.8	7.8	22.9	22.8	69.3	69.7	4.8		2.6		4		91				<0.2		2.2	
						4.1	0.5	232	27.9		7.8		22.7		70.0		4.8		2.6		3		91				<0.2		2.1	
					Bottom	7.2	0.2	212	25.6	25.6	7.7	7.7	30.4	30.4	52.9	53.0	3.6	3.7	11.2		3		92				<0.2		2.3	
						7.2	0.3	230	25.6		7.7		30.4		53.0		3.7		11.2		4		92				<0.2		2.4	
IM4	Sunny	Calm	09:59	7.4	Surface	1.0	0.8	196	29.5	29.5	7.8	7.8	12.3	12.3	90.2	90.2	6.4	5.9	2.2	7.1	2	3	86	90	819576	805019	<0.2	<0.2	2.1	2.3
						1.0	0.8	215	29.5		7.8		12.3		90.2		6.4		2.2		2		86				<0.2		2.1	
					Middle	3.7	0.4	207	28.3	28.3	7.8	7.8	19.1	19.1	76.7	76.7	5.4		2.8		2		91				<0.2		2.3	
						3.7	0.4	212	28.3		7.8		19.1		76.6		5.4		2.8		2		92				<0.2		2.3	
					Bottom	6.4	0.3	190	25.9	25.9	7.6	7.6	29.6	29.7	54.0	54.3	3.7	3.8	16.4		3		93				<0.2		2.7	
						6.4	0.3	196	25.9		7.6		29.7		54.6		3.8		16.3		4		93				<0.2		2.5	
IM5	Sunny	Moderate	10:16	6.4	Surface	1.0	0.9	193	29.5	29.5	7.7	7.7	10.9	10.8	88.4	88.4	6.4	5.5	3.0	3.1	5	5	88	91	820577	804932	<0.2	<0.2	2.1	2.6
						1.0	0.9	207	29.5		7.7		10.6		88.4		6.4		3.0		5		88				<0.2		2.3	
					Middle	3.2	0.6	211	27.9	27.9	7.8	7.8	22.6	22.7	66.9	67.2	4.6		1.9		4		92				<0.2		2.8	
						3.2	0.7	211	27.9		7.8		22.7		67.4		4.7		1.8		4		91				<0.2		2.7	
					Bottom	5.4	0.4	228	27.1	27.0	7.6	7.6	25.4	25.6	58.0	58.3	4.0	4.1	4.3		8		93				<0.2		2.8	
						5.4	0.5	230	26.9		7.6		25.7		58.6		4.1		4.7		6		94				<0.2		2.6	
IM6	Sunny	Moderate	10:28	6.3	Surface	1.0	0.6	214	29.9	29.9	7.8	7.8	9.9	9.8	88.2	88.2	6.3	5.5	3.1	5.5	5	5	91	94	821047	805824	<0.2	<0.2	1.9	2.4
						1.0	0.7	231	29.9		7.8		9.7		88.1		6.3		3.1		4		92				<0.2		2.0	
					Middle	3.2	0.4	244	28.3	28.2	7.7	7.7	18.7	20.1	68.0	67.9	4.8		1.8		4		94				<0.2		2.4	
						3.2	0.4	251	28.0		7.7		21.5		67.7		4.7		2.0		4		94				<0.2		2.4	
					Bottom	5.3	0.4	247	26.3	26.3	7.6	7.6	28.6	28.6	52.9	53.0	3.6	3.6	11.4		6		95				<0.2		3.0	
						5.3	0.4	257	26.3		7.6		28.6		53.0		3.6		11.5		6		95				<0.2		2.8	
IM7	Sunny	Moderate	10:43	7.8	Surface	1.0	0.5	232	28.5	28.5	7.7	7.7	18.1	18.2	73.6	73.5	5.2	4.8	2.5	3.4	3	5	88	92	821338	806815	<0.2	<0.2	1.4	1.8
						1.0	0.5	236	28.5		7.7		18.2		73.3		5.1		2.5		5		89				<0.2		1.4	
					Middle	3.9	0.5	256	27.8	27.8	7.8	7.8	23.3	23.3	64.2	64.1	4.4		2.0		6		92				<0.2		1.9	
						3.9	0.5	256	27.8		7.8		23.3		64.0		4.4		2.0		5		92				<0.2		1.8	
					Bottom	6.8	0.3	199	26.4	26.4	7.6	7.6	28.0	28.1	53.4	53.5	3.7	3.7	5.8		5		94				<0.2		2.1	
						6.8	0.3	199	26.4		7.6		28.1		53.5		3.7		5.8		5		94				<0.2		2.2	
IM8	Sunny	Moderate	09:35	7.6	Surface	1.0	0.7	186	29.6	29.6	7.7	7.7	12.7	12.7	69.7	69.4	4.9	4.6	2.8	3.1	3	3	87	91	821685	807844	<0.2	<0.2	2.7	2.8
						1.0	0.7	203	29.6		7.7		12.7		69.1		4.9		2.8		2		87				<0.2		3.0	
					Middle	3.8	0.2	226	28.1	28.1	7.6	7.6	22.2	22.3	60.8	60.7	4.2		3.6		3		92				<0.2		2.8	
						3.8	0.2	233	28.1		7.6		22.3		60.6		4.2		3.6		3		93				<0.2		3.0	
					Bottom	6.6	0.2	307	27.5	27.5	7.6	7.6	25.1	25.1	59.5	59.5	4.1	4.1	2.9		3		94				<0.2		2.5	
						6.6	0.2	321	27.5		7.6		25.1		59.5		4.1		2.9		3		94				<0.2		2.6	

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 17 August 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	09:26	6.9	Surface	1.0	0.5	160	30.1	30.1	7.7	7.7	11.7	11.7	81.9	81.9	5.8	5.2	3.1	3.3	3	4	87	91	822079	808824	<0.2	<0.2	3.0	2.9
						1.0	0.5	172	30.1		7.7		11.7		81.9		5.8		3.1		5		86				<0.2		3.0	
					Middle	3.5	0.3	152	28.8	28.8	7.7	7.7	20.2	20.2	65.6	65.6	4.5		2.5		3		93				<0.2		3.0	
						3.5	0.4	156	28.8		7.7		20.2		65.6		4.5		2.5		4		92				<0.2		2.8	
					Bottom	5.9	0.1	73	27.5	27.5	7.6	7.6	25.4	25.4	59.0	59.0	4.1	4.1	4.2		4		95				<0.2		2.7	
						5.9	0.1	79	27.5		7.6		25.4		59.0		4.1		4.2		4		94				<0.2		2.6	
IM10	Sunny	Moderate	09:17	6.0	Surface	1.0	0.6	130	29.8	29.8	7.7	7.7	13.5	13.5	79.3	79.3	5.6	5.2	2.8	2.8	4	4	87	91	822231	809837	<0.2	<0.2	2.7	2.7
						1.0	0.7	132	29.8		7.7		13.5		79.3		5.6		2.8		3		87				<0.2		2.8	
					Middle	3.0	0.5	127	28.7	28.7	7.7	7.7	20.9	20.9	69.9	69.9	4.8		2.4		5		93				<0.2		2.7	
						3.0	0.6	137	28.7		7.7		20.9		69.9		4.8		2.4		3		93				<0.2		2.9	
					Bottom	5.0	0.2	104	27.8	27.8	7.6	7.6	23.9	23.9	69.8	69.8	4.8	4.8	3.3		4		94				<0.2		2.6	
						5.0	0.2	113	27.8		7.6		23.9		69.8		4.8		3.3		4		93				<0.2		2.6	
IM11	Sunny	Moderate	09:04	8.1	Surface	1.0	0.3	116	29.5	29.5	7.7	7.7	15.4	15.4	79.5	79.5	5.6	5.0	3.3	6.6	3	5	89	92	821510	810542	<0.2	<0.2	2.6	2.4
						1.0	0.3	124	29.5		7.7		15.4		79.5		5.6		3.3		4		88				<0.2		2.4	
					Middle	4.1	0.3	134	28.1	28.1	7.7	7.7	22.6	22.6	62.2	62.2	4.3		5.3		4		93				<0.2		2.4	
						4.1	0.3	136	28.1		7.7		22.6		62.2		4.3		5.3		4		92				<0.2		2.4	
					Bottom	7.1	0.1	76	27.6	27.6	7.6	7.6	24.9	24.9	59.7	59.7	4.1	4.1	11.1		6		95				<0.2		2.4	
						7.1	0.1	78	27.6		7.6		24.9		59.7		4.1		11.1		7		95				<0.2		2.4	
IM12	Sunny	Moderate	08:54	8.9	Surface	1.0	0.3	108	29.8	29.8	7.7	7.7	13.9	13.9	80.8	80.8	5.7	5.2	3.2	8.6	3	3	88	92	821152	811518	<0.2	<0.2	2.3	2.5
						1.0	0.4	114	29.8		7.7		13.9		80.8		5.7		3.2		4		87				<0.2		2.2	
					Middle	4.5	0.5	92	28.6	28.6	7.7	7.7	21.6	21.6	67.6	67.6	4.7		6.3		3		93				<0.2		2.6	
						4.5	0.5	97	28.6		7.7		21.6		67.6		4.7		6.3		3		94				<0.2		2.6	
					Bottom	7.9	0.3	105	27.5	27.5	7.7	7.7	25.2	25.2	57.3	57.3	3.9	3.9	16.2		3		95				<0.2		2.7	
						7.9	0.3	108	27.5		7.7		25.2		57.3		3.9		16.2		4		96				<0.2		2.5	
SR2	Sunny	Moderate	08:26	5.2	Surface	1.0	0.4	65	29.7	29.7	7.7	7.7	14.9	14.9	81.6	81.6	5.7	5.7	2.4	2.5	4	6	88	90	821480	814185	<0.2	<0.2	2.5	2.6
						1.0	0.4	66	29.7		7.7		14.9		81.6		5.7		2.4		3		89				<0.2		2.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.3	41	28.1	28.1	7.6	7.6	22.2	22.2	75.2	75.2	5.2	5.2	2.6		8		91				<0.2		2.5	
						4.2	0.3	43	28.1		7.6		22.2		75.2		5.2		2.6		7		92				<0.2		2.7	
SR3	Sunny	Moderate	09:42	8.6	Surface	1.0	0.6	171	29.8	29.8	7.8	7.8	12.0	12.0	80.3	80.3	5.7	4.8	2.9	3.9	4	4	-	-	822145	807573	-	-	-	-
						1.0	0.6	173	29.8		7.8		12.0		80.3		5.7		2.9		3		-				-		-	
					Middle	4.3	0.1	234	27.5	27.5	7.6	7.6	25.3	25.3	54.9	54.9	3.8		3.8		4		-				-		-	
						4.3	0.1	235	27.5		7.6		25.3		54.9		3.8		3.8		3		-				-		-	
					Bottom	7.6	0.1	38	26.7	26.7	7.6	7.6	28.8	28.8	52.0	52.0	3.5	3.5	5.0		3		-				-		-	
						7.6	0.1	39	26.7		7.6		28.8		52.0		3.5		5.0		4		-				-		-	
SR4A	Sunny	Calm	08:43	9.2	Surface	1.0	0.1	250	28.6	28.6	7.6	7.6	17.8	17.8	86.7	86.7	6.1	5.1	2.1	7.0	5	7	-	-	817174	807792	-	-	-	-
						1.0	0.1	256	28.6		7.6		17.7		86.6		6.1		2.1		5		-				-		-	
					Middle	4.6	0.2	62	25.4	25.4	7.5	7.5	31.3	31.3	59.2	59.4	4.1		7.1		5		-				-		-	
						4.6	0.2	67	25.4		7.5		31.3		59.5		4.1		7.1		6		-				-		-	
					Bottom	8.2	0.1	66	25.2	25.2	7.5	7.5	31.7	31.7	56.1	56.2	3.9	3.9	11.7		9		-				-		-	
						8.2	0.2	67	25.2		7.5		31.7		56.3		3.9		11.7		11		-				-		-	
SR5A	Sunny	Calm	08:12	3.8	Surface	1.0	0.1	117	29.3	29.3	7.7	7.7	18.2	18.2	100.0	100.1	6.9	6.9	3.1	4.1	5	5	-	-	816607	810678	-	-	-	-
						1.0	0.1	125	29.3		7.7		18.2		100.1		6.9		3.1		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	0.1	268	28.9	28.9	7.4	7.4	20.1	20.1	91.6	91.9	6.3	6.4	5.0		5		-				-		-	
						2.8	0.1	280	28.9		7.4		20.1		92.2		6.4		5.1		6		-				-		-	
SR6	Sunny	Calm	07:46	4.5	Surface	1.0	0.1	76	29.3	29.3	7.7	7.7	16.6	16.6	97.0	96.9	6.8	6.8	3.2	11.0	6	5	-	-	817880	814643	-	-	-	-
						1.0	0.1	81	29.3		7.7		16.6		96.8		6.8		3.4		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.1	76	28.9	28.9	7.7	7.7	19.1	19.1	75.0	75.1	5.2	5.2	18.6		5		-				-		-	
						3.5	0.1	77	28.9		7.7		19.1		75.1		5.2		18.8		4		-				-		-	
SR7	Sunny	Moderate	07:16	16.3	Surface	1.0	0.4	64	28.8	28.8	7.8	7.8	18.7	18.7	90.0	90.0	6.3	5.7	1.3	3.2	4	3	-	-	823638	823759	-	-	-	-
						1.0	0.4	64	28.8		7.8		18.7		90.0		6.3		1.3		4		-				-		-	
					Middle	8.2	0.1	58	27.8	27.8	7.8	7.8	23.1	23.1	72.6	72.6	5.0		3.9		3		-				-		-	
						8.2	0.1	58	27.8		7.8		23.1		72.6		5.0		3.9		3		-				-		-	
					Bottom	15.3	0.4	77	24.8	24.8	7.6	7.6	33.2	33.2	56.6	56.6	3.9	3.9	4.4		3		-				-		-	
						15.3	0.4	81	24.8		7.6		33.2		56.6		3.9		4.4		3		-				-		-	
SR8	Sunny	Moderate	08:47	4.6	Surface	1.0	-	-	29.6	29.6	7.7	7.7	15.5	15.5	79.0	79.0	5.5	5.5	2.8	2.9	4	4	-	-	820246	811418	-	-	-	-
						1.0	-	-	29.6		7.7		15.5		79.0		5.5		2.8		3		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	-	-	28.4	28.4	7.6	7.6	21.3	21.3	70.5	70.5	4.9	4.9	2.9		4		-				-		-	
						3.6	-	-	28.4		7.6		21.3		70.5		4.9		2.9		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 17 August 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	Sunny	Calm	16:00	8.0	Surface	1.0	0.3	50	30.0	30.0	7.7	7.7	13.9	14.0	88.3	88.1	6.2	5.2	3.2	10.4	4	5	89	92	815608	804262	<0.2	<0.2	1.5	1.6
						1.0	0.3	51	29.9		7.7		14.1		87.8		6.2		3.2		3		89				<0.2		1.4	
					Middle	4.0	0.5	37	26.3	26.3	7.7	7.7	28.1	28.0	58.9	58.9	4.1		9.1		4		92				<0.2		2.2	
						4.0	0.5	37	26.3		7.7		27.9		58.9		4.1		9.5		4		92				<0.2		2.1	
					Bottom	7.0	0.3	22	25.8	25.8	7.7	7.7	29.7	29.7	60.3	60.4	4.2	4.2	18.5		7		96				<0.2		1.4	
						7.0	0.3	22	25.8		7.7		29.6		60.5		4.2		18.6		9		96				<0.2		1.2	
C2	Sunny	Moderate	14:27	11.2	Surface	1.0	0.6	188	31.0	31.0	7.6	7.6	7.8	7.8	75.6	75.6	5.4	4.7	10.3	11.8	7	7	86	91	825692	806938	<0.2	<0.2	3.5	3.3
						1.0	0.6	203	31.0		7.6		7.8		75.6		5.4		10.3		7		85				<0.2		3.4	
					Middle	5.6	0.1	155	27.9	27.9	7.5	7.5	21.1	21.1	56.1	56.1	3.9		5.3		8		93				<0.2		3.2	
						5.6	0.1	165	27.9		7.5		21.1		56.1		3.9		5.3		6		92				<0.2		3.1	
					Bottom	10.2	0.5	330	26.7	26.7	7.5	7.5	27.7	27.7	50.2	50.2	3.4	3.4	19.8		6		94				<0.2		3.3	
						10.2	0.5	337	26.7		7.5		27.7		50.2		3.4		19.8		7		95				<0.2		3.2	
C3	Sunny	Moderate	16:18	11.9	Surface	1.0	0.3	238	29.0	29.0	7.8	7.8	20.3	20.3	97.0	97.0	6.7	5.4	2.3	5.5	3	4	92	94	822110	817796	<0.2	<0.2	1.9	2.1
						1.0	0.3	238	29.0		7.8		20.3		97.0		6.7		2.3		3		91				<0.2		1.8	
					Middle	6.0	0.4	242	26.3	26.3	7.7	7.7	28.7	28.7	60.2	60.2	4.1		4.9		3		94				<0.2		2.4	
						6.0	0.4	260	26.3		7.7		28.7		60.2		4.1		4.9		4		94				<0.2		2.4	
					Bottom	10.9	0.3	285	25.3	25.3	7.6	7.6	31.8	31.8	59.9	59.9	4.1	4.1	9.3		4		96				<0.2		1.8	
						10.9	0.3	307	25.3		7.6		31.8		59.9		4.1		9.3		6		96				<0.2		2.0	
IM1	Sunny	Moderate	15:37	7.0	Surface	1.0	0.7	346	28.9	28.9	7.6	7.6	18.2	18.2	86.6	86.5	6.0	5.6	3.2	7.8	3	5	87	91	818366	806471	<0.2	<0.2	1.5	1.7
						1.0	0.8	356	28.9		7.6		18.2		86.4		6.0		3.3		5		87				<0.2		1.8	
					Middle	3.5	0.7	344	28.0	28.0	7.7	7.7	21.4	21.4	74.6	74.4	5.2		5.7		4		91				<0.2		1.7	
						3.5	0.7	316	28.0		7.7		21.4		74.1		5.2		6.0		4		91				<0.2		1.8	
					Bottom	6.0	0.3	351	26.5	26.5	7.6	7.6	27.9	27.9	63.3	63.4	4.4	4.4	14.2		5		94				<0.2		1.9	
						6.0	0.3	323	26.5		7.6		27.9		63.4		4.4		14.2		7		95				<0.2		1.7	
IM2	Sunny	Moderate	15:28	7.3	Surface	1.0	0.6	334	29.9	29.9	7.9	7.9	16.2	16.3	95.6	95.6	6.6	6.5	3.2	6.9	4	5	89	92	818845	806210	<0.2	<0.2	1.7	1.8
						1.0	0.6	339	29.9		7.9		16.3		95.6		6.6		3.5		6		90				<0.2		1.8	
					Middle	3.7	0.6	348	29.3	29.1	7.7	7.7	17.1	18.1	93.0	90.4	6.5		5.7		5		91				<0.2		1.8	
						3.7	0.6	359	28.9		7.7		19.0		87.8		6.1		6.2		4		91				<0.2		1.9	
					Bottom	6.3	0.3	18	26.1	26.1	7.9	7.9	29.2	29.3	56.7	57.0	3.9	3.9	11.3		6		94				<0.2		1.7	
						6.3	0.3	18	26.0		7.8		29.3		57.2		3.9		11.2		5		95				<0.2		1.7	
IM3	Sunny	Moderate	15:19	7.7	Surface	1.0	0.5	328	30.2	30.2	7.9	7.9	13.5	13.5	96.0	96.2	6.7	6.8	3.4	5.6	4	5	91	94	819403	806033	<0.2	<0.2	2.1	2.1
						1.0	0.5	344	30.2		7.9		13.5		96.4		6.7		3.4		4		92				<0.2		2.1	
					Middle	3.9	0.5	344	29.3	29.3	7.9	7.9	18.1	18.1	99.0	98.9	6.9		4.7		5		94				<0.2		2.0	
						3.9	0.6	349	29.3		7.9		18.0		98.8		6.8		4.7		5		94				<0.2		2.3	
					Bottom	6.7	0.4	53	26.5	26.5	7.8	7.8	27.4	27.6	65.3	65.9	4.5	4.6	8.4		6		96				<0.2		2.2	
						6.7	0.4	54	26.4		7.8		27.8		66.5		4.6		8.8		6		96				<0.2		2.0	
IM4	Sunny	Moderate	15:08	7.1	Surface	1.0	0.5	290	29.4	29.4	8.0	8.0	16.4	16.4	92.3	92.2	6.4	5.8	4.4	11.7	6	8	90	92	819570	805039	<0.2	<0.2	1.7	1.8
						1.0	0.5	296	29.4		8.0		16.4		92.1		6.4		4.4		6		90				<0.2		1.7	
					Middle	3.6	0.4	319	28.0	28.0	7.8	7.8	21.8	21.8	74.3	74.0	5.2		8.7		6		91				<0.2		1.7	
						3.6	0.4	348	28.0		7.8		21.8		73.7		5.1		9.6		5		91				<0.2		1.7	
					Bottom	6.1	0.2	356	27.0	27.0	7.9	7.9	25.6	25.6	63.9	64.0	4.4	4.4	21.5		12		94				<0.2		1.9	
						6.1	0.2	328	27.0		7.9		25.6		64.0		4.4		21.5		12		94				<0.2		2.1	
IM5	Sunny	Moderate	14:54	6.1	Surface	1.0	0.3	332	29.6	29.6	7.9	7.9	13.5	13.5	82.3	82.2	5.8	5.4	5.4	9.2	8	7	91	94	820571	804921	<0.2	<0.2	2.2	2.0
						1.0	0.3	344	29.6		7.9		13.5		82.0		5.8		5.5		7		91				<0.2		2.1	
					Middle	3.1	0.4	4	28.3	28.4	7.8	7.8	20.0	19.9	70.8	70.9	4.9		3.7		6		93				<0.2		2.1	
						3.1	0.4	4	28.4		7.8		19.8		70.9		4.9		3.8		8		94				<0.2		2.2	
					Bottom	5.1	0.2	2	26.4	26.4	7.8	7.8	28.1	28.2	54.4	54.6	3.7	3.8	18.6		6		96				<0.2		1.7	
						5.1	0.3	2	26.4		7.8		28.2		54.8		3.8		18.1		6		96				<0.2		1.6	
IM6	Sunny	Moderate	14:46	6.2	Surface	1.0	0.6	294	30.0	30.0	7.7	7.7	11.1	11.1	85.5	85.4	6.1	5.9	5.0	7.1	6	6	89	91	821065	805834	<0.2	<0.2	2.6	2.4
						1.0	0.6	320	30.0		7.7		11.1		85.3		6.1		5.1		5		89				<0.2		2.5	
					Middle	3.1	0.4	314	29.4	29.4	7.8	7.8	14.0	14.0	79.4	79.4	5.6		5.3		5		91				<0.2		2.2	
						3.1	0.4	315	29.4		7.8		14.0		79.3		5.6		5.4		6		91				<0.2		2.1	
					Bottom	5.2	0.2	9	28.2	28.2	7.5	7.5	20.3	20.4	68.4	68.5	4.8	4.8	10.5		5		93				<0.2		2.4	
						5.2	0.2	9	28.2		7.5		20.4		68.6		4.8		11.5		6		93				<0.2		2.3	
IM7	Sunny	Moderate	14:37	7.5	Surface	1.0	0.5	257	29.9	29.9	7.8	7.8	11.1	11.1	84.6	84.6	6.0	6.0	5.4	6.7	6	6	89	91	821341	806824	<0.2	<0.2	2.3	2.3
						1.0	0.6	271	29.9		7.8		11.1		84.6		6.0		5.2		5		90				<0.2		2.2	
					Middle	3.8	0.6	267	29.9	29.9	7.8	7.8	11.9	12.0	84.6	84.6	6.0		4.5		6		91				<0.2		2.6	
						3.8	0.6	270	29.9		7.8		12.0		84.5		6.0		4.6		7		91				<0.2		2.5	
					Bottom	6.5	0.1	261	28.7	28.7	7.7	7.7	17.9	17.9	73.4	73.5	5.1	5.1	10.2		6		93				<0.2		2.2	
						6.5	0.2	267	28.7		7.7		17.9		73.5		5.1		10.4		5		93				<0.2		2.1	
IM8	Sunny	Moderate	14:51	7.4	Surface	1.0	0.3	207	30.8	30.8	7.7	7.7	8.9	8.9	89.5	89.5	6.4	6.1	5.5	6.1	7	7	86	88	821705	807845	<0.2	<0.2	3.1	2.8
						1.0	0.3	207	30.8		7.7		8.9		89.5		6.4		5.5		7		85				<0.2		2.8	
					Middle	3.7	0.1	267	30.1	30.1	7.6	7.6	11.7	11.7	80.0	80.0	5.7		5.4		6		86				<0.2		2.7	
						3.7	0.1	284	30.1		7.6		11.7		80.0		5.7		5.4		8		87				<0.2		2.8	
					Bottom	6.4	0.2	218	29.5	29.5	7.6	7.6	17.1	17.1	72.3	72.3	5.0	5.0	7.3		8		91				<0.2		2.6	
						6.4	0.2	234	29.5		7.6		17.1		72.3		5.0		7.3		8		90				<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 17 August 17 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Sunny	Moderate	14:59	6.5	Surface	1.0	0.1	195	30.9	30.9	7.7	7.7	9.0	9.0	91.0	91.0	6.4	6.1	5.7	6.7	7	6	86	88	822107	808805	<0.2	<0.2	4.0	**3.9**
						1.0	0.1	198	30.9		7.7		9.0		90.9		6.4		5.6		6		85				<0.2		3.8	
					Middle	3.3	0.1	251	30.4	30.4	7.7	7.7	10.5	10.5	80.8	80.8	5.7		6.4		5		87				<0.2		4.3	
						3.3	0.1	261	30.4		7.7		10.5		80.8		5.7		6.4		6		87				<0.2		4.0	
					Bottom	5.5	0.1	226	28.8	28.8	7.6	7.6	19.0	19.0	68.8	68.8	4.8	4.8	7.9		6		91				<0.2		3.6	
						5.5	0.1	231	28.8		7.6		19.0		68.8		4.8		7.9		7		91				<0.2		3.6	
IM10	Sunny	Moderate	15:07	6.2	Surface	1.0	0.2	16	30.8	30.8	7.8	7.8	9.7	9.7	86.9	86.9	6.1	5.8	5.8	7.5	4	4	86	89	822250	809857	<0.2	<0.2	3.5	3.5
						1.0	0.2	16	30.8		7.8		9.7		86.9		6.1		5.8		5		87				<0.2		3.3	
					Middle	3.1	0.4	322	29.9	29.9	7.7	7.7	12.5	12.5	77.5	77.5	5.5		4.9		4		87				<0.2		3.7	
						3.1	0.4	327	29.9		7.7		12.5		77.5		5.5		4.9		4		87				<0.2		3.5	
					Bottom	5.2	0.2	291	28.2	28.2	7.6	7.6	22.2	22.2	65.9	65.9	4.6	4.6	11.7		5		93				<0.2		3.5	
						5.2	0.2	309	28.2		7.6		22.2		65.9		4.6		11.7		4		93				<0.2		3.4	
IM11	Sunny	Moderate	15:18	7.6	Surface	1.0	0.2	317	31.0	31.0	7.8	7.8	9.8	9.8	94.1	94.1	6.6	6.3	4.2	5.2	3	3	86	87	821484	810556	<0.2	<0.2	4.4	**4.1**
						1.0	0.2	318	31.0		7.8		9.8		94.1		6.6		4.2		3		86				<0.2		4.2	
					Middle	3.8	0.4	297	29.2	29.2	7.8	7.8	16.8	16.8	84.9	84.9	5.9		4.2		3		88				<0.2		4.0	
						3.8	0.5	299	29.2		7.8		16.8		84.9		5.9		4.2		4		89				<0.2		3.8	
					Bottom	6.6	0.2	307	28.2	28.2	7.7	7.7	22.6	22.6	74.8	74.8	5.2	5.2	7.1		3		87				<0.2		4.0	
						6.6	0.3	328	28.2		7.7		22.6		74.8		5.2		7.1		4		86				<0.2		3.9	
IM12	Sunny	Moderate	15:26	7.5	Surface	1.0	0.3	282	30.5	30.5	7.8	7.8	10.9	10.9	97.0	97.0	6.9	6.4	3.1	5.3	3	3	86	90	821181	811529	<0.2	<0.2	3.6	2.9
						1.0	0.3	283	30.5		7.8		10.9		97.0		6.9		3.1		2		86				<0.2		3.6	
					Middle	3.8	0.7	275	29.4	29.4	7.9	7.9	18.1	18.1	84.0	84.0	5.8		4.6		2		91				<0.2		2.6	
						3.8	0.7	281	29.4		7.9		18.1		84.0		5.8		4.6		2		91				<0.2		2.5	
					Bottom	6.5	0.1	279	27.0	27.0	7.6	7.6	27.0	27.0	62.4	62.4	4.3	4.3	8.2		4		94				<0.2		2.6	
						6.5	0.2	306	27.0		7.6		27.0		62.4		4.3		8.2		3		93				<0.2		2.4	
SR2	Sunny	Moderate	15:55	4.5	Surface	1.0	0.1	292	30.1	30.1	8.0	8.0	16.7	16.7	99.3	99.3	6.8	6.8	5.0	6.1	3	3	89	91	821448	814158	<0.2	<0.2	2.3	2.5
						1.0	0.1	306	30.1		8.0		16.7		99.3		6.8		5.0		4		88				<0.2		2.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.0	220	28.6	28.6	7.7	7.7	20.6	20.6	78.4	78.4	5.4	5.4	7.1		3		93				<0.2		2.5	
						3.5	0.0	240	28.6		7.7		20.6		78.4		5.4		7.1		3		93				<0.2		2.6	
SR3	Sunny	Moderate	14:46	8.1	Surface	1.0	0.5	181	30.6	30.6	7.6	7.6	8.5	8.5	81.6	81.6	5.8	5.4	5.6	5.3	7	7	-	-	822131	807552	-	-	-	-
						1.0	0.5	182	30.6		7.6		8.5		81.6		5.8		5.6		6		-				-		-	
					Middle	4.1	0.2	263	29.3	29.3	7.5	7.5	15.7	15.7	69.2	69.2	4.9		5.0		7		-				-		-	
						4.1	0.2	283	29.3		7.5		15.7		69.2		4.9		5.0		6		-				-		-	
					Bottom	7.1	0.1	179	28.2	28.2	7.5	7.5	20.5	20.5	61.3	61.3	4.3	4.3	5.4		7		-				-		-	
						7.1	0.1	184	28.2		7.5		20.5		61.3		4.3		5.4		7		-				-		-	
SR4A	Sunny	Moderate	16:20	8.1	Surface	1.0	0.0	295	30.0	30.0	8.1	8.1	16.3	16.3	114.8	115.0	7.9	8.2	5.3	7.0	6	7	-	-	817183	807796	-	-	-	-
						1.0	0.0	297	30.0		8.1		16.3		115.1		8.0		5.4		6		-				-		-	
					Middle	4.1	0.2	259	30.0	30.0	7.8	7.8	18.8	18.9	124.4	124.2	8.5		8.5		5		-				-		-	
						4.1	0.2	269	30.0		7.8		18.9		123.9		8.4		8.7		7		-				-		-	
					Bottom	7.1	0.2	248	28.2	28.1	7.8	7.8	22.1	22.3	83.8	83.4	5.8	5.8	6.8		7		-				-		-	
						7.1	0.2	251	28.0		7.8		22.4		82.9		5.7		7.0		8		-				-		-	
SR5A	Sunny	Calm	16:38	4.0	Surface	1.0	0.1	196	29.8	29.8	8.2	8.2	18.4	18.4	126.1	126.0	8.6	8.6	5.6	5.9	6	6	-	-	816592	810688	-	-	-	-
						1.0	0.1	199	29.8		8.2		18.4		125.8		8.6		5.8		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	0.1	320	29.5	29.5	8.1	8.1	19.2	19.3	116.7	116.6	8.0	8.0	6.1		7		-				-		-	
						3.0	0.1	334	29.5		8.1		19.3		116.4		8.0		6.0		7		-				-		-	
SR6	Sunny	Calm	17:03	3.9	Surface	1.0	0.1	167	29.6	29.6	8.0	8.0	17.2	17.2	109.8	109.8	7.6	7.6	14.8	14.5	6	7	-	-	817893	814671	-	-	-	-
						1.0	0.2	167	29.6		8.0		17.2		109.7		7.6		14.4		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.9	0.1	80	29.3	29.3	8.0	8.0	19.0	19.1	100.0	100.4	6.9	6.9	14.6		8		-				-		-	
						2.9	0.1	80	29.2		8.0		19.1		100.7		6.9		14.3		8		-				-		-	
SR7	Sunny	Moderate	16:52	16.5	Surface	1.0	0.1	197	27.4	27.4	7.8	7.8	25.5	25.5	78.7	78.7	5.4	5.1	2.9	7.0	3	5	-	-	823651	823732	-	-	-	-
						1.0	0.1	209	27.4		7.8		25.5		78.7		5.4		2.9		4		-				-		-	
					Middle	8.3	0.0	200	26.4	26.4	7.8	7.8	28.5	28.5	63.9	63.9	4.7		6.8		5		-				-		-	
						8.3	0.0	212	26.4		7.8		28.5		63.9		4.7		6.8		4		-				-		-	
					Bottom	15.5	0.0	215	24.9	24.9	7.7	7.7	32.8	32.8	54.5	54.5	3.7	3.7	11.2		5		-				-		-	
						15.5	0.0	222	24.9		7.7		32.8		54.5		3.7		11.2		6		-				-		-	
SR8	Sunny	Moderate	15:41	5.1	Surface	1.0	0.0	0	31.1	31.1	7.7	7.7	11.7	11.7	86.9	86.9	6.1	6.1	6.0	6.7	4	4	-	-	820246	811418	-	-	-	-
						1.0	0.0	0	31.1		7.7		11.7		86.9		6.1		6.0		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	0.0	0	28.6	28.6	7.7	7.7	21.0	21.0	72.7	72.7	5.0	5.0	7.3		3		-				-		-	
						4.1	0.0	0	28.6		7.7		21.0		72.7		5.0		7.3		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 19 August 17 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Sunny	Moderate	10:59	8.9	Surface	1.0	0.9	203	29.1	29.1	7.8	7.8	15.9	15.9	88.4	88.2	6.2	5.7	3.1	6.6	6	5	82	87	815632	804264	<0.2	<0.2	2.2	1.6
						1.0	0.9	213	29.1		7.8		15.9		87.9		6.2		3.1		4		82				<0.2		2.0	
					Middle	4.5	0.6	225	27.1	27.1	7.7	7.7	25.7	25.7	73.3	73.3	5.1		5.2		5		89				<0.2		1.6	
						4.5	0.6	230	27.1		7.7		25.7		73.3		5.1		5.2		4		88				<0.2		1.7	
					Bottom	7.9	0.6	218	25.5	25.5	7.6	7.6	30.5	30.5	56.3	56.3	3.9	3.9	11.6		6		91				<0.2		0.9	
						7.9	0.7	223	25.5		7.6		30.5		56.3		3.9		11.6		7		91				<0.2		0.9	
C2	Sunny	Moderate	12:44	10.8	Surface	1.0	1.5	167	30.5	30.5	7.7	7.7	12.5	12.5	91.3	91.3	6.4	5.3	5.1	11.3	6	6	84	90	825681	806925	<0.2	<0.2	2.4	2.3
						1.0	1.5	173	30.5		7.7		12.5		91.3		6.4		5.1		7		84				<0.2		2.3	
					Middle	5.4	0.8	174	27.2	27.2	7.6	7.6	25.2	25.2	59.3	59.3	4.1		12.2		6		91				<0.2		2.4	
						5.4	0.8	186	27.2		7.6		25.2		59.3		4.1		12.2		6		92				<0.2		2.2	
					Bottom	9.8	0.2	141	26.6	26.6	7.6	7.6	27.9	27.9	59.2	59.2	4.1	4.1	16.6		6		94				<0.2		2.2	
						9.8	0.3	146	26.6		7.6		27.9		59.2		4.1		16.6		7		95				<0.2		2.3	
C3	Sunny	Moderate	10:07	12.6	Surface	1.0	0.4	100	28.5	28.5	7.9	7.9	21.8	21.8	104.3	104.3	7.2	6.4	3.0	5.6	4	5	91	93	822111	817783	<0.2	<0.2	2.2	2.1
						1.0	0.4	104	28.5		7.9		21.8		104.3		7.2		3.0		5		92				<0.2		2.5	
					Middle	6.3	0.3	45	27.3	27.3	7.8	7.8	25.9	25.9	80.6	80.6	5.5		4.5		5		93				<0.2		2.2	
						6.3	0.3	45	27.3		7.8		25.9		80.6		5.5		4.5		6		93				<0.2		2.0	
					Bottom	11.6	0.2	63	25.4	25.4	7.7	7.7	31.3	31.3	69.9	69.9	4.8	4.8	9.4		6		95				<0.2		2.0	
						11.6	0.2	63	25.4		7.7		31.3		69.9		4.8		9.4		5		96				<0.2		1.7	
IM1	Sunny	Moderate	11:28	7.1	Surface	1.0	0.8	186	27.7	27.7	7.7	7.7	22.3	22.4	70.9	70.9	4.9	4.6	6.2	9.1	3	7	82	88	818357	806450	<0.2	<0.2	2.3	1.7
						1.0	0.9	193	27.7		7.7		22.4		70.8		4.9		6.2		2		82				<0.2		2.5	
					Middle	3.6	0.5	179	26.0	26.0	7.6	7.6	29.0	29.0	62.1	62.1	4.2		8.8		5		90				<0.2		1.9	
						3.6	0.5	186	26.0		7.6		29.0		62.1		4.2		8.9		7		89				<0.2		1.8	
					Bottom	6.1	0.2	198	25.5	25.5	7.6	7.6	30.5	30.5	55.8	55.8	3.8	3.8	12.2		13		93				<0.2		0.8	
						6.1	0.2	199	25.5		7.6		30.5		55.8		3.8		12.2		12		92				<0.2		0.8	
IM2	Sunny	Moderate	11:36	8.0	Surface	1.0	1.0	198	29.7	29.7	7.8	7.8	15.4	15.4	89.4	89.4	6.2	5.5	4.6	13.3	4	9	81	88	818837	806178	<0.2	<0.2	2.3	1.7
						1.0	1.1	212	29.7		7.8		15.4		89.4		6.2		4.6		5		82				<0.2		2.3	
					Middle	4.0	0.8	199	27.6	27.6	7.7	7.7	23.2	23.2	68.3	68.3	4.7		8.9		7		88				<0.2		2.0	
						4.0	0.9	218	27.6		7.7		23.2		68.3		4.7		8.9		6		88				<0.2		1.6	
					Bottom	7.0	0.5	184	26.2	26.2	7.7	7.7	28.2	28.2	60.3	60.4	4.2	4.2	26.5		16		93				<0.2		0.9	
						7.0	0.5	195	26.2		7.7		28.2		60.4		4.2		26.4		16		93				<0.2		0.9	
IM3	Sunny	Moderate	11:46	8.1	Surface	1.0	0.8	198	30.0	30.0	7.8	7.8	15.0	15.0	94.7	94.7	6.6	6.4	4.2	10.3	5	5	84	88	819398	806030	<0.2	<0.2	2.2	2.0
						1.0	0.8	202	30.0		7.8		15.0		94.7		6.6		4.1		4		84				<0.2		2.3	
					Middle	4.1	0.8	207	29.0	29.0	7.8	7.8	17.8	17.8	86.7	86.7	6.1		5.3		4		87				<0.2		2.1	
						4.1	0.8	212	29.0		7.8		17.8		86.7		6.1		5.3		5		87				<0.2		2.1	
					Bottom	7.1	0.6	192	26.3	26.3	7.7	7.7	27.6	27.6	60.7	60.8	4.2	4.2	21.7		6		92				<0.2		1.5	
						7.1	0.7	199	26.3		7.7		27.6		60.8		4.2		21.4		6		93				<0.2		1.6	
IM4	Sunny	Moderate	11:55	7.4	Surface	1.0	0.8	172	29.3	29.4	7.7	7.7	15.6	15.6	87.1	87.1	6.1	5.8	7.1	9.1	8	9	85	89	819575	805058	<0.2	<0.2	2.2	2.0
						1.0	0.8	184	29.4		7.7		15.5		87.0		6.1		7.0		7		85				<0.2		2.2	
					Middle	3.7	0.5	184	28.4	28.4	7.7	7.7	19.8	19.8	79.5	79.5	5.5		9.2		6		90				<0.2		1.7	
						3.7	0.5	201	28.4		7.7		19.8		79.5		5.5		9.2		6		89				<0.2		1.7	
					Bottom	6.4	0.3	206	26.7	26.7	7.7	7.7	26.2	26.2	64.7	64.7	4.5	4.5	11.1		14		93				<0.2		2.1	
						6.4	0.3	224	26.7		7.7		26.2		64.7		4.5		11.1		12		92				<0.2		1.8	
IM5	Sunny	Moderate	12:06	6.7	Surface	1.0	0.6	212	29.7	29.7	7.7	7.7	14.4	14.4	82.4	82.4	5.8	5.6	4.9	9.9	4	5	84	88	820549	804925	<0.2	<0.2	2.2	2.1
						1.0	0.6	214	29.7		7.7		14.4		82.4		5.8		4.9		6		83				<0.2		2.4	
					Middle	3.4	0.6	249	29.0	29.0	7.7	7.7	17.5	17.5	77.4	77.4	5.4		6.1		6		87				<0.2		2.2	
						3.4	0.6	252	29.0		7.7		17.5		77.4		5.4		6.1		5		88				<0.2		2.1	
					Bottom	5.7	0.5	266	26.8	26.8	7.6	7.6	26.1	26.1	62.3	62.4	4.3	4.3	18.8		5		92				<0.2		1.6	
						5.7	0.5	284	26.8		7.6		26.1		62.4		4.3		18.7		6		92				<0.2		2.1	
IM6	Sunny	Moderate	12:26	6.4	Surface	1.0	0.5	236	29.5	29.5	7.7	7.7	15.7	15.7	79.4	79.4	5.6	5.4	5.6	10.1	6	6	83	88	821072	805823	<0.2	<0.2	1.9	2.0
						1.0	0.5	248	29.5		7.7		15.7		79.3		5.6		5.7		6		84				<0.2		2.3	
					Middle	3.2	0.7	257	28.6	28.6	7.7	7.7	18.8	18.8	74.3	74.3	5.2		8.6		6		88				<0.2		2.1	
						3.2	0.7	282	28.6		7.7		18.8		74.3		5.2		8.6		6		87				<0.2		1.9	
					Bottom	5.4	0.5	275	26.9	26.9	7.6	7.6	25.6	25.6	62.9	62.9	4.4	4.4	16.0		6		92				<0.2		2.0	
						5.4	0.5	301	26.9		7.6		25.5		62.9		4.4		16.1		7		91				<0.2		2.0	
IM7	Sunny	Moderate	12:35	7.6	Surface	1.0	0.9	249	29.9	29.9	7.6	7.6	13.6	13.6	80.1	80.2	5.6	5.1	4.9	10.3	3	9	84	89	821336	806833	<0.2	<0.2	2.3	1.6
						1.0	0.9	266	29.9		7.6		13.6		80.2		5.6		4.9		4		84				<0.2		2.3	
					Middle	3.8	0.8	269	27.3	27.3	7.6	7.6	24.3	24.3	64.5	64.5	4.5		8.6		11		91				<0.2		1.3	
						3.8	0.9	269	27.3		7.6		24.3		64.5		4.5		8.6		10		90				<0.2		1.3	
					Bottom	6.6	0.5	255	26.4	26.4	7.6	7.6	27.4	27.4	59.0	59.0	4.1	4.1	17.3		12		93				<0.2		1.3	
						6.6	0.6	271	26.4		7.6		27.4		59.0		4.1		17.3		14		93				<0.2		1.3	
IM8	Sunny	Moderate	12:01	7.7	Surface	1.0	0.8	191	29.5	29.5	7.7	7.7	16.8	16.8	75.4	75.4	5.2	4.9	5.7	9.1	5	5	88	92	821689	807834	<0.2	<0.2	2.7	2.7
						1.0	0.8	198	29.5		7.7		16.8		75.4		5.2		5.7		3		88				<0.2		2.6	
					Middle	3.9	0.5	213	27.6	27.6	7.7	7.7	23.8	23.8	64.8	64.8	4.5		10.4		4		93				<0.2		2.7	
						3.9	0.5	218	27.6		7.7		23.8		64.8		4.5		10.4		6		92				<0.2		2.5	
					Bottom	6.7	0.4	228	27.5	27.5	7.7	7.7	24.1	24.1	65.4	65.4	4.5	4.5	11.3		4		95				<0.2		2.9	
						6.7	0.4	236	27.5		7.7		24.1		65.4		4.5		11.3		5		94				<0.2		2.8	

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 19 August 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	11:52	7.1	Surface	1.0	0.6	158	29.8	29.8	7.8	7.8	13.3	13.3	83.2	83.2	5.9	5.2	3.5	4.8	3	4	86	89	822109	808830	<0.2	<0.2	2.8	2.7
						1.0	0.6	171	29.8		7.8		13.3		83.2		5.9		3.5		4		87				<0.2		2.7	
					Middle	3.6	0.5	155	28.3	28.3	7.7	7.7	20.7	20.7	64.7	64.7	4.5		4.0		2		89				<0.2		2.7	
						3.6	0.5	159	28.3		7.7		20.7		64.7		4.5		4.0		2		89				<0.2		2.6	
					Bottom	6.1	0.2	145	27.5	27.5	7.7	7.7	24.5	24.5	62.1	62.1	4.3	4.3	7.0		5		93				<0.2		2.5	
						6.1	0.2	158	27.5		7.7		24.5		62.1		4.3		7.0		5		92				<0.2		2.6	
IM10	Sunny	Moderate	11:41	6.6	Surface	1.0	0.8	131	29.8	29.8	7.8	7.8	16.3	16.3	84.4	84.4	5.9	5.2	4.0	7.1	2	3	88	90	822254	809827	<0.2	<0.2	2.2	2.2
						1.0	0.8	131	29.8		7.8		16.3		84.4		5.9		4.0		3		88				<0.2		2.2	
					Middle	3.3	0.5	117	28.2	28.2	7.7	7.7	21.5	21.5	63.5	63.5	4.4		6.6		3		88				<0.2		2.2	
						3.3	0.6	121	28.2		7.7		21.5		63.5		4.4		6.6		3		89				<0.2		2.1	
					Bottom	5.6	0.3	92	27.3	27.3	7.7	7.7	25.3	25.3	61.6	61.6	4.2	4.2	10.7		5		92				<0.2		2.0	
						5.6	0.3	95	27.3		7.7		25.3		61.6		4.2		10.7		4		93				<0.2		2.2	
IM11	Sunny	Moderate	11:26	7.5	Surface	1.0	0.7	117	29.7	29.7	7.8	7.8	15.3	15.3	93.3	93.3	6.5	6.1	3.4	5.3	<2	3	88	90	821481	810547	<0.2	<0.2	1.7	1.8
						1.0	0.8	123	29.7		7.8		15.3		93.3		6.5		3.4		<2		88				<0.2		1.8	
					Middle	3.8	0.4	100	28.7	28.7	7.8	7.8	19.9	19.9	80.5	80.5	5.6		4.1		2		90				<0.2		1.9	
						3.8	0.5	101	28.7		7.8		19.9		80.5		5.6		4.1		2		89				<0.2		1.7	
					Bottom	6.5	0.3	93	27.5	27.5	7.7	7.7	24.3	24.3	64.3	64.3	4.4	4.4	8.3		4		93				<0.2		1.8	
						6.5	0.3	99	27.5		7.7		24.3		64.3		4.4		8.3		6		93				<0.2		1.7	
IM12	Sunny	Moderate	11:12	8.8	Surface	1.0	0.6	100	29.7	29.7	7.9	7.9	16.6	16.6	93.0	93.0	6.5	6.1	3.4	6.1	3	4	88	90	821163	811501	<0.2	<0.2	1.8	2.1
						1.0	0.7	100	29.7		7.9		16.6		93.0		6.5		3.4		3		87				<0.2		1.9	
					Middle	4.4	0.5	74	28.9	28.9	7.8	7.8	18.2	18.2	81.4	81.4	5.7		4.7		3		89				<0.2		1.9	
						4.4	0.5	79	28.9		7.8		18.2		81.4		5.7		4.7		5		89				<0.2		2.0	
					Bottom	7.8	0.3	88	27.5	27.5	7.7	7.7	24.3	24.3	63.9	63.9	4.4	4.4	10.1		3		93				<0.2		2.6	
						7.8	0.3	88	27.5		7.7		24.3		63.9		4.4		10.1		4		93				<0.2		2.6	
SR2	Sunny	Moderate	10:39	4.8	Surface	1.0	0.6	59	29.3	29.3	7.8	7.8	17.4	17.4	89.0	89.0	6.2	6.2	3.3	4.0	<2	3	88	90	821471	814156	<0.2	<0.2	2.0	2.1
						1.0	0.6	64	29.3		7.8		17.4		89.0		6.2		3.3		<2		89				<0.2		2.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.3	63	27.9	27.9	7.7	7.7	22.8	22.8	74.6	74.6	5.2	5.2	4.6		4		92				<0.2		2.1	
						3.8	0.3	65	27.9		7.7		22.8		74.6		5.2		4.6		3		92				<0.2		2.1	
SR3	Sunny	Moderate	12:09	8.5	Surface	1.0	0.8	178	29.9	29.9	7.7	7.7	12.4	12.4	79.2	79.2	5.6	4.9	4.4	9.0	<2	4	-	-	822159	807576	-	-	-	-
						1.0	0.9	187	29.9		7.7		12.4		79.2		5.6		4.4		<2		-				-		-	
					Middle	4.3	0.4	193	27.3	27.3	7.7	7.7	25.4	25.4	60.2	60.2	4.1		10.4		6		-				-		-	
						4.3	0.5	194	27.3		7.7		25.4		60.2		4.1		10.4		4		-				-		-	
					Bottom	7.5	0.3	213	26.8	26.8	7.7	7.7	26.9	26.9	59.3	59.3	4.1	4.1	12.2		5		-				-		-	
						7.5	0.3	216	26.8		7.7		26.9		59.3		4.1		12.2		5		-				-		-	
SR4A	Sunny	Moderate	10:39	8.8	Surface	1.0	0.0	225	28.3	28.3	7.7	7.7	19.9	19.9	78.9	78.8	5.5	4.7	4.4	10.0	<2	5	-	-	817173	807822	-	-	-	-
						1.0	0.0	233	28.3		7.7		19.9		78.7		5.5		4.5		<2		-				-		-	
					Middle	4.4	0.2	104	25.7	25.7	7.6	7.6	29.8	29.8	56.7	56.7	3.9		10.8		5		-				-		-	
						4.4	0.2	109	25.7		7.6		29.8		56.7		3.9		10.8		6		-				-		-	
					Bottom	7.8	0.2	105	25.5	25.5	7.6	7.6	30.5	30.5	57.0	57.1	3.9	3.9	14.8		6		-				-		-	
						7.8	0.2	110	25.5		7.6		30.5		57.1		3.9		14.9		6		-				-		-	
SR5A	Sunny	Moderate	10:21	4.9	Surface	1.0	0.1	51	29.8	29.8	8.1	8.1	19.1	19.1	134.6	134.6	9.2	9.2	4.5	6.6	5	8	-	-	816611	810702	-	-	-	-
						1.0	0.1	53	29.8		8.1		19.1		134.5		9.2		4.5		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	0.1	81	28.0	28.0	7.7	7.7	22.9	22.9	80.5	80.5	5.6	5.6	8.7		11		-				-		-	
						3.9	0.1	85	28.0		7.7		22.9		80.5		5.6		8.7		11		-				-		-	
SR6	Sunny	Moderate	09:50	4.8	Surface	1.0	0.1	41	30.0	30.0	8.1	8.1	17.9	17.9	130.9	130.6	9.0	9.0	3.7	5.6	6	6	-	-	817890	814675	-	-	-	-
						1.0	0.1	44	30.0		8.1		17.9		130.3		8.9		3.7		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.1	18	28.0	28.0	7.6	7.6	22.4	22.4	77.8	77.8	5.4	5.4	7.4		6		-				-		-	
						3.8	0.1	19	28.0		7.6		22.4		77.8		5.4		7.4		6		-				-		-	
SR7	Sunny	Moderate	09:22	16.1	Surface	1.0	0.5	68	28.6	28.6	7.9	7.9	21.0	21.0	115.7	115.7	8.0	7.1	2.0	3.4	4	5	-	-	823635	823722	-	-	-	-
						1.0	0.5	72	28.6		7.9		21.0		115.7		8.0		2.0		2		-				-		-	
					Middle	8.1	0.2	65	27.6	27.6	7.8	7.8	24.1	24.1	88.9	88.9	6.1		3.2		6		-				-		-	
						8.1	0.2	70	27.6		7.8		24.1		88.9		6.1		3.2		4		-				-		-	
					Bottom	15.1	0.4	47	25.4	25.4	7.7	7.7	31.5	31.5	69.7	69.7	4.8	4.8	5.0		6		-				-		-	
						15.1	0.5	50	25.4		7.7		31.5		69.7		4.8		5.0		6		-				-		-	
SR8	Sunny	Moderate	11:01	4.1	Surface	1.0	-	-	29.8	29.8	7.8	7.8	17.6	17.6	97.4	97.4	6.7	6.7	10.3	12.4	7	6	-	-	820246	811418	-	-	-	-
						1.0	-	-	29.8		7.8		17.6		97.4		6.7		10.3		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	-	-	29.3	29.3	7.8	7.8	18.2	18.2	89.5	89.5	6.2	6.2	14.4		6		-				-		-	
						3.1	-	-	29.3		7.8		18.2		89.5		6.2		14.4		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 19 August 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	Sunny	Moderate	17:44	8.2	Surface	1.0	0.5	6	29.7	29.7	7.8	7.8	16.6	16.6	87.7	87.6	6.1	5.5	7.8	12.2	8	10	84	89	815611	804240	<0.2	<0.2	2.1	1.9
						1.0	0.5	6	29.7		7.8		16.6		87.4		6.1		7.9		8		85				<0.2		2.0	
					Middle	4.1	0.5	19	27.6	27.6	7.7	7.7	21.6	21.6	68.8	68.8	4.8		13.1		11		89				<0.2		1.8	
						4.1	0.5	19	27.6		7.7		21.6		68.8		4.8		13.1		11		90				<0.2		1.9	
					Bottom	7.2	0.4	23	26.7	26.7	7.7	7.7	26.2	26.2	66.8	66.8	4.6	4.6	15.6		11		92				<0.2		1.8	
						7.2	0.4	25	26.7		7.7		26.2		66.8		4.6		15.7		11		92				<0.2		2.0	
C2	Sunny	Moderate	16:31	10.9	Surface	1.0	0.7	198	30.0	30.0	7.5	7.5	12.0	12.0	73.1	73.1	5.2	4.7	11.6	13.6	9	11	86	90	825696	806937	<0.2	<0.2	2.9	2.8
						1.0	0.7	212	30.0		7.5		12.0		73.1		5.2		11.6		10		86				<0.2		2.8	
					Middle	5.5	0.1	142	28.4	28.4	7.5	7.5	19.0	19.0	58.1	58.1	4.1		12.3		10		91				<0.2		2.9	
						5.5	0.2	142	28.4		7.5		19.0		58.1		4.1		12.3		10		91				<0.2		3.0	
					Bottom	9.9	0.3	329	27.3	27.3	7.5	7.5	26.2	26.3	54.7	54.8	3.8	3.8	16.9		13		94				<0.2		2.7	
						9.9	0.3	331	27.3		7.5		26.4		54.8		3.8		16.9		14		94				<0.2		2.7	
C3	Sunny	Moderate	18:26	11.5	Surface	1.0	0.5	240	28.3	28.3	8.0	8.0	22.9	22.9	103.3	103.3	7.1	6.3	4.1	9.6	6	8	91	93	822101	817817	<0.2	<0.2	1.6	1.7
						1.0	0.5	252	28.3		8.0		22.9		103.3		7.1		4.1		7		92				<0.2		1.7	
					Middle	5.8	0.5	247	26.7	26.7	7.9	7.9	28.0	28.0	79.0	79.0	5.4		9.2		6		93				<0.2		1.7	
						5.8	0.5	248	26.7		7.9		28.0		79.0		5.4		9.2		7		92				<0.2		1.6	
					Bottom	10.5	0.3	267	26.0	26.0	7.8	7.8	29.7	29.7	64.4	64.4	4.4	4.4	15.4		12		94				<0.2		1.7	
						10.5	0.3	277	26.0		7.8		29.7		64.4		4.4		15.4		11		94				<0.2		1.6	
IM1	Sunny	Moderate	17:23	6.8	Surface	1.0	0.2	7	29.9	29.9	7.8	7.8	15.3	15.3	102.5	102.5	7.1	7.1	5.8	10.2	5	7	84	89	818355	806442	<0.2	<0.2	1.9	1.7
						1.0	0.2	7	29.9		7.8		15.3		102.5		7.1		5.9		4		84				<0.2		1.8	
					Middle	3.4	0.4	355	29.4	29.4	7.9	7.9	19.2	19.2	102.9	102.9	7.1		10.0		7		90				<0.2		1.8	
						3.4	0.4	327	29.4		7.9		19.2		102.9		7.1		10.0		5		91				<0.2		1.7	
					Bottom	5.8	0.4	349	28.3	28.3	7.8	7.8	22.5	22.5	92.7	92.7	6.4	6.4	14.8		11		93				<0.2		1.4	
						5.8	0.4	321	28.3		7.8		22.5		92.7		6.4		14.8		10		93				<0.2		1.4	
IM2	Sunny	Moderate	17:17	7.7	Surface	1.0	0.2	347	30.0	30.0	7.8	7.8	14.0	14.2	101.8	101.8	7.0	6.9	6.4	9.6	5	5	84	89	818860	806178	<0.2	<0.2	2.1	2.0
						1.0	0.2	348	30.0		7.8		14.3		101.8		7.0		6.4		5		84				<0.2		2.2	
					Middle	3.9	0.3	7	29.4	29.4	7.8	7.8	18.7	18.7	97.3	97.4	6.8		8.7		4		89				<0.2		2.3	
						3.9	0.3	7	29.4		7.8		18.7		97.4		6.8		8.7		6		90				<0.2		2.3	
					Bottom	6.7	0.5	19	28.5	28.5	7.9	7.9	22.8	22.8	97.7	97.7	6.7	6.7	13.6		6		93				<0.2		1.5	
						6.7	0.5	19	28.5		7.9		22.8		97.7		6.7		13.7		5		93				<0.2		1.6	
IM3	Sunny	Moderate	17:10	8.0	Surface	1.0	0.2	302	29.9	29.9	7.8	7.8	13.2	13.2	88.1	88.0	6.2	5.8	7.8	13.6	4	8	85	89	819402	806002	<0.2	<0.2	2.5	2.2
						1.0	0.2	312	29.9		7.8		13.2		87.9		6.2		7.8		6		85				<0.2		2.5	
					Middle	4.0	0.4	16	28.6	28.6	7.7	7.7	19.2	19.2	77.3	77.3	5.4		14.6		6		88				<0.2		2.3	
						4.0	0.4	17	28.6		7.7		19.2		77.3		5.4		14.6		7		89				<0.2		2.4	
					Bottom	7.0	0.4	34	27.6	27.6	7.7	7.7	23.0	23.0	71.7	71.7	5.0	5.0	18.2		10		93				<0.2		1.5	
						7.0	0.4	36	27.6		7.7		23.0		71.7		5.0		18.4		12		93				<0.2		1.7	
IM4	Sunny	Moderate	17:02	7.1	Surface	1.0	0.3	314	29.3	29.3	7.7	7.7	15.3	15.3	76.9	76.9	5.4	5.2	10.1	13.6	8	9	85	90	819585	805036	<0.2	<0.2	2.6	2.2
						1.0	0.3	344	29.3		7.7		15.3		76.9		5.4		10.1		7		86				<0.2		2.4	
					Middle	3.6	0.4	1	28.4	28.4	7.7	7.7	19.5	19.5	70.8	70.8	4.9		13.6		8		91				<0.2		2.6	
						3.6	0.4	1	28.4		7.7		19.5		70.8		4.9		13.6		9		91				<0.2		2.4	
					Bottom	6.1	0.5	23	27.2	27.2	7.7	7.7	24.5	24.5	65.3	65.3	4.5	4.5	17.0		10		93				<0.2		1.6	
						6.1	0.5	23	27.2		7.7		24.5		65.3		4.5		17.0		12		94				<0.2		1.6	
IM5	Sunny	Moderate	16:50	6.1	Surface	1.0	0.4	335	29.5	29.5	7.6	7.6	14.3	14.3	77.5	77.5	5.5	5.5	8.7	13.4	11	11	84	90	820551	804929	<0.2	<0.2	2.6	2.4
						1.0	0.5	359	29.5		7.6		14.3		77.5		5.5		8.7		10		85				<0.2		2.5	
					Middle	3.1	0.5	357	29.2	29.2	7.6	7.6	15.6	15.6	77.0	77.0	5.4		9.4		11		90				<0.2		2.4	
						3.1	0.5	359	29.2		7.6		15.6		77.0		5.4		9.5		12		91				<0.2		2.5	
					Bottom	5.1	0.4	2	28.7	28.7	7.6	7.6	17.9	17.9	75.5	75.5	5.3	5.3	22.1		11		93				<0.2		2.3	
						5.1	0.4	2	28.7		7.6		17.9		75.5		5.3		22.1		11		94				<0.2		2.2	
IM6	Sunny	Moderate	16:42	6.0	Surface	1.0	0.7	304	30.1	30.1	7.5	7.5	11.7	11.7	75.9	75.9	5.4	5.3	12.4	13.9	10	12	83	88	821063	805836	<0.2	<0.2	2.6	2.5
						1.0	0.7	310	30.1		7.5		11.7		75.9		5.4		12.4		12		84				<0.2		2.5	
					Middle	3.0	0.7	308	29.6	29.6	7.5	7.5	13.3	13.3	72.7	72.7	5.1		13.8		12		88				<0.2		2.5	
						3.0	0.7	338	29.6		7.5		13.3		72.7		5.1		13.8		13		89				<0.2		2.4	
					Bottom	5.0	0.4	319	28.9	28.9	7.5	7.5	15.9	15.9	71.1	71.2	5.0	5.0	15.4		11		92				<0.2		2.5	
						5.0	0.4	349	28.9		7.5		15.9		71.2		5.0		15.4		12		93				<0.2		2.2	
IM7	Sunny	Moderate	16:35	7.4	Surface	1.0	0.5	268	29.7	29.7	7.5	7.5	12.1	12.1	71.9	71.9	5.1	5.1	12.3	13.8	10	14	84	90	821351	806840	<0.2	<0.2	2.8	2.6
						1.0	0.5	274	29.7		7.5		12.1		71.9		5.1		12.4		11		84				<0.2		2.6	
					Middle	3.7	0.4	281	29.3	29.3	7.5	7.5	14.0	14.0	71.8	71.8	5.1		13.1		14		91				<0.2		2.5	
						3.7	0.4	304	29.3		7.5		14.0		71.8		5.1		13.0		13		92				<0.2		2.6	
					Bottom	6.4	0.3	297	29.1	29.1	7.5	7.5	15.4	15.4	73.1	73.1	5.2	5.2	16.0		17		94				<0.2		2.4	
						6.4	0.3	321	29.1		7.5		15.4		73.1		5.2		16.0		16		94				<0.2		2.4	
IM8	Sunny	Moderate	16:55	7.7	Surface	1.0	0.4	189	30.3	30.3	7.6	7.6	11.3	11.3	79.2	79.2	5.6	5.6	13.6	11.5	11	12	85	87	821702	807820	<0.2	<0.2	3.2	3.3
						1.0	0.4	204	30.3		7.6		11.3		79.2		5.6		13.6		11		86				<0.2		3.2	
					Middle	3.9	0.4	198	30.0	30.0	7.6	7.6	12.2	12.2	77.8	77.8	5.5		10.5		11		87				<0.2		3.3	
						3.9	0.4	210	30.0		7.6		12.2		77.8		5.5		10.5		11		87				<0.2		3.4	
					Bottom	6.7	0.1	243	29.7	29.7	7.6	7.6	13.8	13.8	77.2	77.2	5.4	5.4	10.4		14		89				<0.2		3.2	
						6.7	0.1	257	29.7		7.6		13.8		77.2		5.4		10.4		12		89				<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 19 August 17 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Sunny	Moderate	17:04	6.6	Surface	1.0	0.1	150	30.6	30.6	7.7	7.7	11.4	11.4	91.7	91.7	6.4	6.3	8.7	9.9	12	11	85	86	822079	808821	<0.2	<0.2	3.1	3.0
						1.0	0.1	150	30.6		7.7		11.4		91.7		6.4		8.7		11		84				<0.2		3.2	
					Middle	3.3	0.0	140	30.4	30.4	7.7	7.7	12.4	12.4	88.9	88.9	6.2		9.8		11		87				<0.2		2.9	
						3.3	0.0	147	30.4		7.7		12.4		88.9		6.2		9.8		12		86				<0.2		3.0	
					Bottom	5.6	0.1	309	30.3	30.3	7.7	7.7	12.8	12.8	86.1	86.1	6.0	6.0	11.1		10		87				<0.2		3.0	
						5.6	0.1	318	30.3		7.7		12.8		86.1		6.0		11.1		11		87				<0.2		2.8	
IM10	Sunny	Moderate	17:11	6.1	Surface	1.0	0.4	6	30.6	30.6	7.8	7.8	12.3	12.3	94.4	94.4	6.6	6.6	7.1	7.2	6	8	84	86	822246	809847	<0.2	<0.2	2.7	2.9
						1.0	0.4	6	30.6		7.8		12.3		94.4		6.6		7.1		5		85				<0.2		3.0	
					Middle	3.1	0.4	5	30.6	30.6	7.8	7.8	12.4	12.4	92.8	92.8	6.5		6.9		8		86				<0.2		3.0	
						3.1	0.4	5	30.6		7.8		12.4		92.8		6.5		6.9		6		86				<0.2		2.9	
					Bottom	5.1	0.3	351	30.4	30.4	7.7	7.7	12.7	12.7	89.5	89.5	6.3	6.3	7.5		11		87				<0.2		3.0	
						5.1	0.4	323	30.4		7.7		12.7		89.5		6.3		7.5		11		87				<0.2		2.8	
IM11	Sunny	Moderate	17:23	7.6	Surface	1.0	0.1	351	30.7	30.7	7.8	7.8	11.8	11.8	95.3	95.3	6.7	6.5	7.0	10.8	7	7	84	88	821518	810529	<0.2	<0.2	2.8	2.8
						1.0	0.2	323	30.7		7.8		11.8		95.3		6.7		7.0		5		84				<0.2		2.8	
					Middle	3.8	0.3	300	29.9	29.9	7.8	7.8	16.0	16.0	88.7	88.7	6.2		10.9		6		87				<0.2		2.8	
						3.8	0.3	325	29.9		7.8		16.0		88.7		6.2		10.9		8		87				<0.2		2.9	
					Bottom	6.6	0.4	292	28.1	28.1	7.8	7.8	22.8	22.8	83.3	83.3	5.7	5.7	14.6		7		91				<0.2		2.7	
						6.6	0.4	319	28.1		7.8		22.8		83.3		5.7		14.6		6		92				<0.2		2.7	
IM12	Sunny	Moderate	17:31	7.8	Surface	1.0	0.5	289	30.7	30.7	7.9	7.9	12.5	12.5	105.9	105.9	7.4	6.8	6.2	11.2	6	8	85	89	821154	811504	<0.2	<0.2	2.4	2.7
						1.0	0.5	308	30.7		7.9		12.5		105.9		7.4		6.2		8		85				<0.2		2.4	
					Middle	3.9	0.7	273	28.7	28.7	7.9	7.9	21.6	21.6	88.4	88.4	6.1		10.8		7		89				<0.2		2.8	
						3.9	0.7	283	28.7		7.9		21.6		88.4		6.1		10.8		6		90				<0.2		3.1	
					Bottom	6.8	0.3	271	27.5	27.5	7.8	7.8	25.6	25.6	78.5	78.5	5.4	5.4	16.5		10		92				<0.2		2.8	
						6.8	0.3	273	27.5		7.8		25.6		78.5		5.4		16.5		8		91				<0.2		2.8	
SR2	Sunny	Moderate	18:00	4.1	Surface	1.0	0.1	104	29.1	29.1	7.9	7.9	20.2	20.2	105.5	105.5	7.3	7.3	9.5	12.8	12	12	88	90	821468	814173	<0.2	<0.2	1.9	1.8
						1.0	0.1	112	29.1		7.9		20.2		105.5		7.3		9.5		11		88				<0.2		1.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.1	94	27.8	27.8	7.7	7.7	24.0	24.0	85.2	85.2	5.9	5.9	16.1		13		93				<0.2		1.7	
						3.1	0.1	101	27.8		7.7		24.0		85.2		5.9		16.1		13		92				<0.2		1.6	
SR3	Sunny	Moderate	16:50	7.9	Surface	1.0	0.6	180	30.4	30.4	7.6	7.6	9.7	9.7	76.5	76.5	5.5	5.2	10.6	10.2	12	13	-	-	822151	807551	-	-	-	-
						1.0	0.6	183	30.4		7.6		9.7		76.5		5.5		10.6		13		-				-		-	
					Middle	4.0	0.2	203	29.4	29.4	7.5	7.5	14.9	14.9	70.2	70.2	4.9		10.1		13		-				-		-	
						4.0	0.2	208	29.4		7.5		14.9		70.2		4.9		10.1		14		-				-		-	
					Bottom	6.9	0.1	260	29.2	29.2	7.5	7.5	16.2	16.2	69.9	69.9	4.9	4.9	9.8		13		-				-		-	
						6.9	0.1	278	29.2		7.5		16.2		69.9		4.9		9.8		13		-				-		-	
SR4A	Sunny	Moderate	18:04	9.1	Surface	1.0	0.1	85	29.7	29.7	8.0	8.0	20.5	20.5	131.9	131.9	9.0	8.9	11.3	12.5	10	14	-	-	817205	807804	-	-	-	-
						1.0	0.1	92	29.7		8.0		20.5		131.9		9.0		11.3		10		-				-		-	
					Middle	4.6	0.0	345	29.6	29.6	8.0	8.0	21.3	21.3	129.9	129.9	8.8		13.0		13		-				-		-	
						4.6	0.0	317	29.6		8.0		21.3		129.8		8.8		13.0		14		-				-		-	
					Bottom	8.1	0.1	134	28.4	28.4	7.8	7.8	23.3	23.3	101.8	101.9	7.0	7.0	13.3		17		-				-		-	
						8.1	0.1	135	28.4		7.8		23.3		101.9		7.0		13.2		19		-				-		-	
SR5A	Sunny	Moderate	18:21	4.8	Surface	1.0	0.1	348	29.6	29.6	8.1	8.1	21.1	21.1	141.8	141.8	9.6	9.6	12.3	13.5	13	14	-	-	816583	810696	-	-	-	-
						1.0	0.1	320	29.6		8.1		21.1		141.7		9.6		12.4		12		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.1	353	29.3	29.3	8.0	8.0	21.4	21.4	133.5	133.4	9.1	9.1	14.5		16		-				-		-	
						3.8	0.1	325	29.3		8.0		21.4		133.3		9.1		14.6		14		-				-		-	
SR6	Sunny	Moderate	18:47	4.1	Surface	1.0	0.0	250	29.8	29.8	8.0	8.0	16.9	16.9	125.7	125.7	8.7	8.7	7.7	9.6	9	9	-	-	817899	814652	-	-	-	-
						1.0	0.0	260	29.8		8.0		16.9		125.7		8.7		7.7		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.1	109	29.5	29.5	8.0	8.0	18.5	18.5	123.8	123.8	8.5	8.5	11.4		8		-				-		-	
						3.1	0.1	117	29.5		8.0		18.5		123.8		8.5		11.4		10		-				-		-	
SR7	Sunny	Moderate	18:59	16.2	Surface	1.0	0.0	174	27.0	27.0	7.9	7.9	27.2	27.2	88.5	88.5	6.1	5.5	5.3	9.7	9	10	-	-	823616	823754	-	-	-	-
						1.0	0.0	184	27.0		7.9		27.2		88.5		6.1		5.3		10		-				-		-	
					Middle	8.1	0.1	280	26.1	26.1	7.8	7.8	29.4	29.4	71.2	71.2	4.9		10.8		8		-				-		-	
						8.1	0.1	280	26.1		7.8		29.4		71.2		4.9		10.8		8		-				-		-	
					Bottom	15.2	0.1	88	25.3	25.3	7.8	7.8	31.5	31.5	67.2	67.2	4.6	4.6	13.0		12		-				-		-	
						15.2	0.1	88	25.3		7.8		31.5		67.2		4.6		13.0		11		-				-		-	
SR8	Sunny	Moderate	17:47	4.5	Surface	1.0	0.0	0	30.7	30.7	7.9	7.9	12.8	12.8	96.7	96.7	6.7	6.7	7.5	11.2	5	8	-	-	820246	811418	-	-	-	-
						1.0	0.0	0	30.7		7.9		12.8		96.7		6.7		7.5		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.0	0	27.7	27.7	7.8	7.8	24.6	24.6	82.5	82.5	5.7	5.7	14.9		10		-				-		-	
						3.5	0.0	0	27.7		7.8		24.6		82.5		5.7		14.9		10		-				-		-	

DA: Depth-Averaged

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

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 22 August 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		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	13:12	8.5	Surface	1.0	0.8	220	28.2	28.2	7.7	7.7	23.6	23.6	75.2	75.2	5.2	4.8	3.9	7.2	5	6	90	93	815617	804250	<0.2	<0.2	2.3	2.3
						1.0	0.8	241	28.2		7.7		23.6		75.2		5.2		3.9		7		90				<0.2		2.6	
					Middle	4.3	0.8	210	27.3	27.3	7.7	7.7	25.9	25.9	62.5	62.5	4.3		4.8		6		92				<0.2		2.6	
						4.3	0.9	230	27.3		7.7		25.9		62.5		4.3		4.8		5		92				<0.2		2.1	
					Bottom	7.5	0.6	218	25.1	25.1	7.6	7.6	31.6	31.6	50.7	50.7	3.5	3.5	13.0		6		96				<0.2		2.1	
						7.5	0.7	224	25.1		7.6		31.6		50.7		3.5		13.0		6		95				<0.2		2.2	
C2	Misty	Moderate	15:50	9.2	Surface	1.0	1.3	178	30.4	30.4	7.8	7.8	14.2	14.3	83.8	83.8	5.8	5.3	12.9	36.1	6	12	87	89	825674	806925	<0.2	<0.2	2.7	2.7
						1.0	1.4	192	30.4		7.8		14.3		83.8		5.8		12.9		8		86				<0.2		2.9	
					Middle	4.6	1.0	181	28.3	28.3	7.8	7.8	21.3	21.3	68.3	68.3	4.7		45.1		14		89				<0.2		2.9	
						4.6	1.0	191	28.3		7.8		21.3		68.3		4.7		45.1		12		91				<0.2		2.7	
					Bottom	8.2	0.4	193	27.2	27.2	7.9	7.9	26.3	26.3	65.8	65.8	4.5	4.5	50.4		15		92				<0.2		2.5	
						8.2	0.4	201	27.2		7.9		26.3		65.8		4.5		50.4		14		91				<0.2		2.5	
C3	Misty	Moderate	12:44	12.5	Surface	1.0	0.6	105	27.7	27.7	8.0	8.0	25.6	25.6	86.2	86.2	5.9	5.6	12.3	17.4	9	11	87	89	822116	817798	<0.2	<0.2	1.6	0.9
						1.0	0.6	114	27.7		8.0		25.6		86.2		5.9		12.3		10		88				<0.2		1.3	
					Middle	6.3	0.2	71	26.7	26.7	8.0	8.0	28.4	28.4	76.7	76.7	5.2		13.3		12		89				<0.2		0.7	
						6.3	0.3	75	26.7		8.0		28.4		76.7		5.2		13.3		11		89				<0.2		0.6	
					Bottom	11.5	0.4	41	25.7	25.7	7.9	7.9	31.1	31.1	68.3	68.3	4.7	4.7	26.5		12		92				<0.2		0.5	
						11.5	0.4	43	25.7		7.9		31.1		68.3		4.7		26.6		13		91				<0.2		0.6	
IM1	Misty	Moderate	13:39	7.3	Surface	1.0	0.8	190	27.8	27.8	7.7	7.7	24.5	24.5	67.5	67.5	4.6	**3.9**	6.8	10.1	5	8	91	94	818363	806452	<0.2	<0.2	1.6	1.8
						1.0	0.8	199	27.8		7.7		24.5		67.5		4.6		6.8		6		92				<0.2		1.8	
					Middle	3.7	0.5	190	26.0	26.0	7.6	7.6	29.3	29.3	47.0	47.0	3.2		8.9		8		95				<0.2		2.0	
						3.7	0.6	203	26.0		7.6		29.3		46.9		3.2		8.9		7		94				<0.2		2.4	
					Bottom	6.3	0.2	191	25.4	25.4	7.6	7.6	30.9	30.9	44.4	44.4	3.1	3.1	14.6		11		95				<0.2		1.5	
						6.3	0.2	196	25.4		7.6		30.9		44.4		3.1		14.6		9		95				<0.2		1.4	
IM2	Misty	Moderate	13:48	8.4	Surface	1.0	0.8	215	29.4	29.4	7.8	7.8	20.2	20.2	80.4	80.4	5.5	5.2	4.7	7.9	5	7	91	92	818859	806205	<0.2	<0.2	1.8	1.9
						1.0	0.9	220	29.4		7.8		20.2		80.4		5.5		4.7		6		90				<0.2		1.7	
					Middle	4.2	0.8	209	28.7	28.7	7.7	7.7	23.0	23.0	71.3	71.3	4.9		6.7		8		91				<0.2		1.9	
						4.2	0.9	224	28.7		7.7		23.0		71.3		4.9		6.7		9		91				<0.2		1.9	
					Bottom	7.4	0.6	192	26.3	26.3	7.6	7.6	28.2	28.2	52.3	52.3	3.6	3.6	12.2		8		94				<0.2		2.1	
						7.4	0.7	204	26.3		7.6		28.2		52.3		3.6		12.2		8		93				<0.2		1.9	
IM3	Misty	Moderate	13:59	8.2	Surface	1.0	0.9	210	29.9	29.9	7.8	7.8	19.5	19.5	83.5	83.5	5.7	5.2	5.0	11.0	4	8	89	91	819394	806006	<0.2	<0.2	2.0	2.1
						1.0	0.9	218	29.9		7.8		19.5		83.5		5.7		5.0		6		89				<0.2		2.3	
					Middle	4.1	0.7	208	28.0	28.0	7.7	7.7	23.8	23.8	67.0	67.0	4.6		11.5		10		91				<0.2		2.0	
						4.1	0.7	211	28.0		7.7		23.8		67.0		4.6		11.5		8		92				<0.2		2.0	
					Bottom	7.2	0.6	216	26.2	26.2	7.7	7.7	28.5	28.5	50.1	50.1	3.5	3.5	16.4		9		93				<0.2		2.1	
						7.2	0.6	233	26.2		7.7		28.5		50.1		3.5		16.4		9		93				<0.2		2.0	
IM4	Misty	Moderate	14:09	7.5	Surface	1.0	0.8	199	29.8	29.8	7.8	7.8	17.9	17.9	80.0	80.0	5.5	5.1	13.2	11.7	4	8	89	91	819577	805022	<0.2	<0.2	1.5	1.4
						1.0	0.8	216	29.8		7.8		17.9		80.0		5.5		13.2		7		89				<0.2		1.3	
					Middle	3.8	0.6	218	28.1	28.1	7.8	7.8	23.5	23.5	66.8	66.8	4.6		10.2		8		91				<0.2		1.4	
						3.8	0.6	230	28.1		7.8		23.5		66.8		4.6		10.2		10		90				<0.2		1.4	
					Bottom	6.5	0.5	239	26.5	26.5	7.7	7.7	28.2	28.2	54.7	54.7	3.8	3.8	11.7		8		93				<0.2		1.3	
						6.5	0.5	240	26.5		7.7		28.2		54.7		3.8		11.7		10		94				<0.2		1.4	
IM5	Misty	Moderate	14:29	6.7	Surface	1.0	1.1	203	29.8	29.8	7.8	7.8	17.7	17.7	80.8	80.8	5.6	5.0	6.8	11.6	6	8	88	91	820550	804931	<0.2	<0.2	1.7	1.6
						1.0	1.2	207	29.8		7.8		17.7		80.8		5.6		6.8		7		89				<0.2		1.6	
					Middle	3.4	0.9	223	27.8	27.8	7.7	7.7	23.6	23.6	62.4	62.4	4.3		11.3		6		91				<0.2		1.5	
						3.4	1.0	236	27.8		7.7		23.6		62.4		4.3		11.3		8		91				<0.2		1.4	
					Bottom	5.7	0.7	221	26.4	26.4	7.7	7.7	27.8	27.8	54.3	54.3	3.7	3.7	16.8		9		92				<0.2		1.8	
						5.7	0.7	233	26.4		7.7		27.8		54.3		3.7		16.8		11		93				<0.2		1.7	
IM6	Misty	Moderate	14:38	6.8	Surface	1.0	0.8	206	29.6	29.6	7.8	7.8	18.7	18.7	76.0	76.0	5.2	4.7	8.6	11.8	6	6	89	91	821043	805819	<0.2	<0.2	1.7	1.6
						1.0	0.9	208	29.6		7.8		18.7		76.0		5.2		8.6		6		90				<0.2		1.7	
					Middle	3.4	0.8	225	27.6	27.6	7.7	7.7	25.1	25.1	61.3	61.3	4.2		12.6		7		91				<0.2		1.5	
						3.4	0.8	235	27.6		7.7		25.1		61.3		4.2		12.6		6		92				<0.2		1.6	
					Bottom	5.8	0.4	231	27.5	27.5	7.7	7.7	25.9	25.9	65.6	65.6	4.5	4.5	14.3		6		91				<0.2		1.5	
						5.8	0.4	251	27.5		7.7		25.9		65.6		4.5		14.3		7		92				<0.2		1.5	
IM7	Misty	Moderate	14:48	6.9	Surface	1.0	0.9	215	29.7	29.7	7.8	7.8	18.9	18.9	79.9	79.9	5.5	5.0	8.8	12.7	7	9	89	91	821340	806844	<0.2	<0.2	1.6	1.4
						1.0	1.0	226	29.7		7.8		18.9		79.9		5.5		8.8		8		90				<0.2		1.4	
					Middle	3.5	0.8	233	28.2	28.2	7.7	7.7	22.3	22.3	65.2	65.2	4.5		12.8		8		91				<0.2		1.5	
						3.5	0.9	237	28.2		7.7		22.3		65.2		4.5		12.8		10		91				<0.2		1.4	
					Bottom	5.9	0.3	232	27.1	27.1	7.7	7.7	26.0	26.0	58.8	58.8	4.1	4.1	16.6		10		92				<0.2		1.5	
						5.9	0.3	245	27.1		7.7		26.0		58.8		4.1		16.6		11		92				<0.2		1.2	
IM8	Misty	Moderate	15:05	7.2	Surface	1.0	1.1	186	29.9	29.9	7.6	7.6	12.5	12.5	74.6	74.6	5.3	5.1	7.0	11.9	9	9	86	88	821710	807856	<0.2	<0.2	2.6	2.5
						1.0	1.2	189	29.9		7.6		12.5		74.6		5.3		7.0		10		85				<0.2		2.3	
					Middle	3.6	0.8	199	28.6	28.6	7.6	7.6	20.8	20.8	69.2	69.2	4.8		13.0		8		89				<0.2		2.4	
						3.6	0.9	205	28.6		7.6		20.8		69.2		4.8		13.0		9		89				<0.2		2.7	
					Bottom	6.2	0.5	224	28.2	28.2	7.6	7.6	22.0	22.0	70.3	70.4	4.9	4.9	15.7		8		90				<0.2		2.5	
						6.2	0.6	237	28.2		7.6		22.0		70.4		4.9		15.7		8		91				<0.2		2.5	

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**
Note: The ebb tide monitoring at C2 was slightly beyond the tidal window due to strong tidal current during typhoon.

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 22 August 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 Value	Total Alkalinity 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	Misty	Moderate	15:04	6.6	Surface	1.0	0.9	164	30.4	30.4	7.8	7.8	13.8	13.8	79.4	79.4	5.5	5.4	12.8	16.5	6	10	86	90	822109	808827	<0.2	<0.2	2.9	2.1
						1.0	0.9	170	30.4		7.8		13.8		79.4		5.5		12.8		8		88				<0.2		2.8	
					Middle	3.3	0.5	156	28.3	28.3	7.9	7.9	22.3	22.3	75.1	75.1	5.2		16.5		7		91				<0.2		2.1	
						3.3	0.5	159	28.3		7.9		22.3		75.1		5.2		16.5		8		88				<0.2		2.0	
					Bottom	5.6	0.3	156	27.9	27.9	7.9	7.9	23.6	23.6	73.3	73.3	5.0	5.0	20.2		14		93				<0.2		1.4	
						5.6	0.3	167	27.9		7.9		23.6		73.3		5.0		20.2		15		92				<0.2		1.3	
IM10	Misty	Moderate	14:47	7.7	Surface	1.0	1.1	133	29.8	29.8	7.9	7.9	18.6	18.7	81.3	81.3	5.6	5.4	16.3	23.8	5	12	86	89	822257	809826	<0.2	<0.2	2.1	1.7
						1.0	1.1	134	29.8		7.9		18.8		81.2		5.6		16.5		7		87				<0.2		1.8	
					Middle	3.9	0.8	121	28.0	28.0	7.9	7.9	23.5	23.5	75.7	75.7	5.2		24.2		9		88				<0.2		1.8	
						3.9	0.8	129	28.0		7.9		23.5		75.7		5.2		24.2		8		89				<0.2		2.0	
					Bottom	6.7	0.6	103	27.9	27.9	7.9	7.9	23.6	23.6	72.4	72.4	5.0	5.0	30.8		22		90				<0.2		1.1	
						6.7	0.6	108	27.9		7.9		23.6		72.4		5.0		30.8		20		91				<0.2		1.4	
IM11	Misty	Moderate	14:15	8.1	Surface	1.0	0.7	112	28.9	28.9	7.9	7.9	20.8	20.8	81.3	81.3	5.6	5.2	12.6	20.0	7	10	87	91	821482	810538	<0.2	<0.2	1.6	1.3
						1.0	0.8	116	28.9		7.9		20.8		81.3		5.6		12.6		8		88				<0.2		1.5	
					Middle	4.1	0.5	101	27.8	27.8	7.9	7.9	24.0	24.0	68.9	68.9	4.7		19.4		8		90				<0.2		1.5	
						4.1	0.5	103	27.8		7.9		24.0		68.9		4.7		19.4		9		92				<0.2		1.2	
					Bottom	7.1	0.3	92	27.7	27.7	7.9	7.9	24.6	24.6	68.2	68.2	4.7	4.7	27.9		15		93				<0.2		1.0	
						7.1	0.4	100	27.7		7.9		24.6		68.2		4.7		27.9		13		93				<0.2		0.8	
IM12	Misty	Moderate	13:59	8.4	Surface	1.0	0.8	107	29.4	29.4	8.0	8.0	20.3	20.3	88.5	88.5	6.1	5.7	12.6	18.1	6	8	86	90	821148	811507	<0.2	<0.2	1.4	1.3
						1.0	0.8	109	29.4		8.0		20.3		88.5		6.1		12.6		4		87				<0.2		1.5	
					Middle	4.2	0.7	86	28.4	28.4	7.9	7.9	22.6	22.7	76.6	76.5	5.3		17.7		7		91				<0.2		1.6	
						4.2	0.7	87	28.3		7.9		22.7		76.4		5.3		17.8		5		92				<0.2		1.3	
					Bottom	7.4	0.5	94	28.1	28.1	7.9	7.9	23.4	23.4	74.2	74.2	5.1	5.1	24.0		14		93				<0.2		1.0	
						7.4	0.5	97	28.1		7.9		23.4		74.2		5.1		24.0		12		93				<0.2		0.9	
SR2	Misty	Moderate	13:18	4.7	Surface	1.0	0.7	85	28.0	28.0	7.9	7.9	23.9	23.9	74.8	74.8	5.1	5.1	16.5	18.5	6	8	90	91	821473	814181	<0.2	<0.2	0.9	1.1
						1.0	0.7	93	28.0		7.9		23.9		74.8		5.1		16.5		6		89				<0.2		0.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.6	89	27.6	27.6	7.9	7.9	25.0	25.0	71.0	71.0	4.9	4.9	20.5		10		93				<0.2		1.5	
						3.7	0.7	96	27.6		7.9		25.0		71.0		4.9		20.4		11		91				<0.2		1.2	
SR3	Misty	Moderate	15:15	7.5	Surface	1.0	1.3	186	30.6	30.6	7.6	7.6	13.0	13.0	74.0	74.0	5.2	5.0	6.7	9.6	7	6	-	-	822134	807585	-	-	-	-
						1.0	1.4	191	30.6		7.6		13.0		74.0		5.2		6.7		5		-				-		-	
					Middle	3.8	0.8	198	28.4	28.4	7.7	7.7	21.3	21.3	68.6	68.6	4.7		10.2		5		-				-		-	
						3.8	0.8	210	28.4		7.7		21.3		68.6		4.7		10.2		5		-				-		-	
					Bottom	6.5	0.5	221	28.0	28.0	7.7	7.7	22.7	22.7	68.4	68.4	4.7	4.7	12.0		5		-				-		-	
						6.5	0.5	239	28.0		7.7		22.7		68.4		4.7		12.0		6		-				-		-	
SR4A	Misty	Calm	12:51	9.2	Surface	1.0	0.3	93	27.9	27.9	7.7	7.7	25.0	25.0	62.0	62.0	4.2	**3.7**	8.1	11.2	9	10	-	-	817196	807824	-	-	-	-
						1.0	0.3	97	27.9		7.7		25.0		62.0		4.2		8.1		8		-				-		-	
					Middle	4.6	0.3	80	25.6	25.6	7.6	7.6	30.5	30.5	46.1	46.1	3.2		10.3		10		-				-		-	
						4.6	0.3	86	25.6		7.6		30.5		46.1		3.2		10.3		10		-				-		-	
					Bottom	8.2	0.3	70	25.5	25.5	7.6	7.6	30.8	30.8	47.1	47.1	3.2	3.2	15.2		11		-				-		-	
						8.2	0.3	70	25.5		7.6		30.8		47.1		3.2		15.2		13		-				-		-	
SR5A	Misty	Calm	12:32	5.8	Surface	1.0	0.1	29	29.5	29.5	7.8	7.8	21.4	21.4	96.5	96.5	6.5	6.5	7.9	9.1	9	9	-	-	816579	810715	-	-	-	-
						1.0	0.1	29	29.5		7.8		21.4		96.5		6.5		7.9		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.8	0.1	106	27.2	27.2	7.6	7.6	25.9	25.9	60.5	60.5	4.2	4.2	10.2		9		-				-		-	
						4.8	0.1	106	27.2		7.6		25.9		60.5		4.2		10.2		9		-				-		-	
SR6	Misty	Calm	11:59	5.4	Surface	1.0	0.2	42	30.4	30.4	7.9	7.9	19.7	19.7	110.6	110.6	7.5	7.5	5.5	8.9	6	6	-	-	817886	814646	-	-	-	-
						1.0	0.2	45	30.4		7.9		19.7		110.6		7.5		5.6		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	0.1	39	29.3	29.3	7.7	7.7	21.0	21.0	81.7	81.7	5.6	5.6	12.3		7		-				-		-	
						4.4	0.1	41	29.3		7.7		21.0		81.7		5.6		12.3		6		-				-		-	
SR7	Misty	Moderate	11:53	18.2	Surface	1.0	0.1	11	27.8	27.8	8.0	8.0	25.7	25.7	96.1	96.1	6.5	6.4	10.5	9.6	6	8	-	-	823655	823745	-	-	-	-
						1.0	0.1	11	27.8		8.0		25.7		96.0		6.5		10.6		5		-				-		-	
					Middle	9.1	0.1	28	27.4	27.4	8.0	8.0	26.7	26.8	91.3	91.3	6.2		10.5		7		-				-		-	
						9.1	0.1	28	27.4		8.0		26.8		91.3		6.2		10.5		7		-				-		-	
					Bottom	17.2	0.3	16	25.4	25.4	7.9	7.9	32.1	32.1	73.4	73.4	5.0	5.0	7.6		11		-				-		-	
						17.2	0.4	17	25.4		7.9		32.1		73.4		5.0		7.6		9		-				-		-	
SR8	Misty	Moderate	13:44	5.4	Surface	1.0	-	-	29.6	29.6	8.0	8.0	22.2	22.2	89.9	89.8	6.1	6.1	18.2	35.2	7	8	-	-	820246	811418	-	-	-	-
						1.0	-	-	29.6		8.0		22.2		89.7		6.1		18.5		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	-	-	27.4	27.4	7.9	7.9	25.9	25.9	66.6	66.7	4.6	4.6	52.0		9		-				-		-	
						4.4	-	-	27.4		7.9		25.9		66.7		4.6		52.0		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**
Note 1: The ebb tide monitoring at SR3 was slightly beyond the tidal window due to strong tidal current during typhoon.
Note 2: The flood tide monitoring session on 22 August 2017 was cancelled due to typhoon.

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

Water Quality Monitoring

Water Quality Monitoring Results on 24 August 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	14:19	8.8	Surface	1.0	0.6	206	26.7	26.7	7.8	7.8	28.0	28.0	81.5	81.5	5.6	5.3	16.8	66.0	9	28	93	95	815633	804266	<0.2	<0.2	0.9	0.7
						1.0	0.6	221	26.7		7.8		28.0		81.5		5.6		16.8		10		93				<0.2		0.7	
					Middle	4.4	0.7	178	25.4	25.4	7.8	7.8	30.7	30.7	71.5	71.5	4.9		46.0		11		95				<0.2		0.8	
						4.4	0.7	194	25.4		7.8		30.7		71.5		4.9		46.0		9		95				<0.2		0.8	
					Bottom	7.8	0.5	177	25.4	25.4	7.8	7.8	30.8	30.8	72.4	72.4	5.0	5.0	135.6		65		98				<0.2		0.5	
						7.8	0.5	182	25.4		7.8		30.8		72.4		5.0		134.5		65		97				<0.2		0.4	
C2	Cloudy	Rough	13:17	12.2	Surface	1.0	0.6	147	27.7	27.7	7.5	7.5	23.3	23.3	75.0	75.0	5.2	5.1	26.8	59.8	27	37	88	92	825664	806957	<0.2	<0.2	1.5	1.4
						1.0	0.6	161	27.7		7.5		23.3		75.0		5.2		26.8		28		89				<0.2		1.5	
					Middle	6.1	0.4	138	27.0	27.0	7.5	7.5	25.1	25.1	70.6	70.6	4.9		47.9		27		92				<0.2		1.5	
						6.1	0.4	138	27.0		7.5		25.1		70.6		4.9		47.9		26		91				<0.2		1.4	
					Bottom	11.2	0.4	95	26.6	26.6	7.5	7.5	27.0	27.0	71.6	71.6	4.9	4.9	104.6		56		95				<0.2		1.2	
						11.2	0.4	97	26.6		7.5		27.0		71.6		4.9		104.6		57		95				<0.2		1.2	
C3	Cloudy	Moderate	15:06	12.3	Surface	1.0	0.2	120	27.0	27.0	7.7	7.7	26.4	26.5	75.0	74.9	5.2	5.1	15.8	22.2	18	19	94	97	822089	817812	<0.2	<0.2	0.5	0.6
						1.0	0.2	128	27.0		7.7		26.5		74.8		5.1		16.9		16		94				<0.2		0.5	
					Middle	6.2	0.1	50	26.8	26.8	7.7	7.7	27.2	27.2	74.0	74.0	5.1		22.8		20		97				<0.2		0.6	
						6.2	0.1	52	26.8		7.7		27.2		74.0		5.1		22.8		22		97				<0.2		0.6	
					Bottom	11.3	0.1	345	26.6	26.6	7.7	7.7	27.7	27.7	78.7	78.7	5.4	5.4	27.3		20		99				<0.2		0.5	
						11.3	0.1	317	26.6		7.7		27.7		78.7		5.4		27.3		20		99				<0.2		0.6	
IM1	Fine	Moderate	14:01	7.8	Surface	1.0	0.4	162	26.8	26.8	7.9	7.9	27.9	27.9	82.3	82.3	5.6	5.5	12.2	17.1	11	11	93	95	818357	806460	<0.2	<0.2	0.6	0.9
						1.0	0.5	174	26.8		7.9		27.9		82.3		5.6		12.2		11		93				<0.2		0.7	
					Middle	3.9	0.4	167	26.0	26.0	7.9	7.9	28.8	28.8	78.3	78.3	5.4		13.6		10		94				<0.2		1.0	
						3.9	0.4	182	26.0		7.9		28.8		78.3		5.4		13.6		9		95				<0.2		1.0	
					Bottom	6.8	0.4	173	25.5	25.5	7.8	7.8	30.2	30.2	74.4	74.5	5.1	5.1	25.4		12		97				<0.2		1.0	
						6.8	0.4	180	25.5		7.8		30.2		74.5		5.1		25.3		10		96				<0.2		1.0	
IM2	Fine	Moderate	13:55	8.8	Surface	1.0	0.5	197	27.2	27.2	7.9	7.9	26.6	26.6	84.5	84.5	5.8	5.6	14.9	26.7	10	17	93	95	818836	806189	<0.2	<0.2	1.1	0.9
						1.0	0.6	210	27.2		7.9		26.6		84.5		5.8		14.9		9		93				<0.2		1.1	
					Middle	4.4	0.4	188	25.8	25.8	7.8	7.8	29.3	29.3	76.1	76.1	5.3		28.9		10		96				<0.2		1.0	
						4.4	0.4	205	25.8		7.8		29.3		76.1		5.3		28.9		10		95				<0.2		0.9	
					Bottom	7.8	0.3	189	25.6	25.6	7.8	7.8	30.0	30.0	74.8	74.8	5.2	5.2	36.2		30		97				<0.2		0.8	
						7.8	0.3	190	25.6		7.8		30.0		74.8		5.2		36.1		33		97				<0.2		0.7	
IM3	Fine	Moderate	13:47	8.8	Surface	1.0	0.5	228	27.3	27.3	7.8	7.8	26.3	26.3	85.4	85.4	5.8	5.6	15.3	41.5	10	17	93	96	819412	806010	<0.2	<0.2	1.0	1.0
						1.0	0.5	236	27.3		7.8		26.3		85.4		5.8		15.3		12		93				<0.2		0.9	
					Middle	4.4	0.6	212	26.0	26.0	7.8	7.8	28.5	28.5	77.0	77.0	5.3		27.8		16		96				<0.2		1.0	
						4.4	0.6	233	26.0		7.8		28.5		77.0		5.3		27.8		18		96				<0.2		1.1	
					Bottom	7.8	0.4	216	25.7	25.7	7.8	7.8	29.7	29.7	75.5	75.5	5.2	5.2	81.7		22		99				<0.2		1.0	
						7.8	0.4	230	25.7		7.8		29.7		75.5		5.2		81.3		21		98				<0.2		1.0	
IM4	Fine	Moderate	13:38	8.5	Surface	1.0	0.6	191	27.2	27.2	7.8	7.8	26.7	26.7	83.4	83.4	5.7	5.6	16.9	42.6	13	18	94	96	819573	805049	<0.2	<0.2	1.0	0.9
						1.0	0.6	209	27.2		7.8		26.7		83.4		5.7		16.9		13		93				<0.2		0.8	
					Middle	4.3	0.6	168	26.2	26.2	7.8	7.8	28.7	28.7	77.7	77.7	5.4		20.0		16		97				<0.2		0.9	
						4.3	0.7	170	26.2		7.8		28.7		77.7		5.4		20.1		15		96				<0.2		0.8	
					Bottom	7.5	0.5	159	25.6	25.6	7.8	7.8	30.1	30.1	73.2	73.2	5.1	5.1	90.9		25		99				<0.2		0.9	
						7.5	0.5	172	25.6		7.8		30.1		73.2		5.1		90.8		23		99				<0.2		0.9	
IM5	Fine	Moderate	13:25	7.5	Surface	1.0	0.4	219	27.4	27.4	7.8	7.8	27.0	27.0	85.0	85.0	5.8	5.6	14.5	24.7	10	13	93	96	820551	804943	<0.2	<0.2	1.0	1.0
						1.0	0.5	235	27.4		7.8		27.0		85.0		5.8		14.5		11		93				<0.2		1.0	
					Middle	3.8	0.4	204	26.4	26.4	7.8	7.8	28.1	28.1	78.4	78.4	5.4		18.7		12		96				<0.2		1.1	
						3.8	0.4	210	26.4		7.8		28.1		78.4		5.4		18.7		12		95				<0.2		1.0	
					Bottom	6.5	0.3	196	25.6	25.6	7.8	7.8	30.0	30.0	74.1	74.2	5.1	5.1	40.9		16		99				<0.2		1.0	
						6.5	0.3	213	25.6		7.8		30.0		74.2		5.1		40.9		15		98				<0.2		1.0	
IM6	Fine	Moderate	13:18	7.7	Surface	1.0	0.4	204	27.1	27.1	7.8	7.8	26.9	26.9	83.1	83.1	5.7	5.5	21.8	46.6	14	18	94	96	821058	805827	<0.2	<0.2	1.1	1.0
						1.0	0.4	219	27.1		7.8		26.9		83.1		5.7		22.0		12		93				<0.2		1.0	
					Middle	3.9	0.5	186	26.0	26.0	7.8	7.8	28.7	28.7	76.6	76.6	5.3		35.9		18		96				<0.2		1.0	
						3.9	0.5	198	26.0		7.8		28.7		76.6		5.3		35.9		16		95				<0.2		1.0	
					Bottom	6.7	0.2	155	25.7	25.7	7.8	7.8	29.6	29.6	75.7	75.7	5.2	5.2	82.0		22		99				<0.2		0.9	
						6.7	0.2	156	25.7		7.8		29.5		75.7		5.2		81.9		25		99				<0.2		0.8	
IM7	Fine	Moderate	13:09	9.1	Surface	1.0	0.1	262	27.6	27.6	7.8	7.8	26.0	26.0	87.9	87.8	6.0	5.9	14.9	32.8	8	16	93	94	821351	806854	<0.2	<0.2	1.0	1.0
						1.0	0.1	274	27.6		7.8		26.0		87.7		6.0		15.0		8		92				<0.2		1.2	
					Middle	4.6	0.3	176	27.1	27.1	7.8	7.8	26.9	26.9	84.5	84.5	5.8		19.7		12		95				<0.2		1.2	
						4.6	0.3	191	27.1		7.8		26.9		84.5		5.8		19.7		10		94				<0.2		0.9	
					Bottom	8.1	0.2	110	25.6	25.6	7.8	7.8	30.0	30.0	75.0	75.0	5.2	5.2	63.6		28		96				<0.2		1.0	
						8.1	0.2	117	25.6		7.8		30.0		75.0		5.2		63.6		31		96				<0.2		0.8	
IM8	Cloudy	Rough	13:43	8.9	Surface	1.0	0.4	176	27.7	27.7	7.6	7.6	24.0	24.0	79.4	79.4	5.5	5.5	11.1	15.5	13	17	86	90	821710	807818	<0.2	<0.2	1.0	1.1
						1.0	0.4	187	27.7		7.6		24.0		79.4		5.5		11.1		13		86				<0.2		1.1	
					Middle	4.5	0.1	155	27.1	27.1	7.6	7.6	25.3	25.3	78.0	78.0	5.4		14.7		17		89				<0.2		1.1	
						4.5	0.2	161	27.1		7.6		25.3		78.0		5.4		14.7		18		89				<0.2		1.0	
					Bottom	7.9	0.2	10	26.1	26.1	7.6	7.6	28.0	28.0	77.0	77.0	5.3	5.3	20.8		22		93				<0.2		1.2	
						7.9	0.2	10	26.1		7.6		28.0		77.0		5.3		20.8		20		94				<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 24 August 17 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Rough	13:52	7.7	Surface	1.0	0.7	144	28.0	28.0	7.7	7.7	23.7	23.7	81.5	81.5	5.6	5.4	16.8	45.2	12	**54**	86	90	822087	808814	<0.2	<0.2	1.4	1.2
						1.0	0.7	149	28.0		7.7		23.7		81.5		5.6		16.8		13		87				<0.2		1.1	
					Middle	3.9	0.4	134	26.8	26.8	7.6	7.6	25.7	25.7	75.7	75.7	5.2		40.6		42		89				<0.2		1.2	
						3.9	0.4	136	26.8		7.6		25.7		75.7		5.2		40.6		43		88				<0.2		1.2	
					Bottom	6.7	0.2	78	26.4	26.4	7.6	7.6	27.1	27.1	77.7	77.7	5.4	5.4	78.3		110		94				<0.2		1.3	
						6.7	0.2	84	26.4		7.6		27.1		77.7		5.4		78.3		103		93				<0.2		1.2	
IM10	Cloudy	Rough	14:00	6.5	Surface	1.0	0.7	122	27.9	27.9	7.6	7.6	23.3	23.3	75.6	75.6	5.2	5.1	19.3	32.4	11	18	87	91	822259	809820	<0.2	<0.2	1.2	1.2
						1.0	0.8	127	27.9		7.6		23.3		75.6		5.2		19.3		11		87				<0.2		1.1	
					Middle	3.3	0.7	104	27.1	27.1	7.6	7.6	24.4	24.4	72.4	72.5	5.0		37.7		17		90				<0.2		1.2	
						3.3	0.7	113	27.1		7.6		24.4		72.5		5.0		37.8		15		89				<0.2		1.2	
					Bottom	5.5	0.5	96	26.8	26.8	7.7	7.7	25.5	25.5	76.5	76.5	5.3	5.3	40.2		25		96				<0.2		1.3	
						5.5	0.6	96	26.8		7.7		25.5		76.5		5.3		40.2		27		95				<0.2		1.1	
IM11	Cloudy	Rough	14:11	7.8	Surface	1.0	0.7	116	28.0	28.0	7.7	7.7	23.7	23.7	80.0	80.0	5.5	5.4	16.2	41.1	13	33	91	94	821518	810538	<0.2	<0.2	0.9	1.0
						1.0	0.8	126	28.0		7.7		23.7		80.0		5.5		16.2		12		91				<0.2		0.9	
					Middle	3.9	0.6	103	26.9	26.9	7.7	7.7	25.3	25.3	76.3	76.3	5.3		43.3		22		94				<0.2		1.1	
						3.9	0.6	108	26.9		7.7		25.3		76.3		5.3		43.3		23		94				<0.2		1.0	
					Bottom	6.8	0.4	94	26.9	26.9	7.7	7.7	25.6	25.6	78.3	78.3	5.4	5.4	63.8		64		96				<0.2		1.0	
						6.8	0.5	103	26.9		7.7		25.6		78.3		5.4		63.8		61		96				<0.2		1.1	
IM12	Cloudy	Rough	14:19	8.1	Surface	1.0	0.7	111	28.1	28.1	7.7	7.7	23.1	23.1	80.2	80.2	5.5	5.4	10.3	28.5	12	19	91	94	821176	811501	<0.2	<0.2	1.0	1.2
						1.0	0.8	111	28.1		7.7		23.1		80.2		5.5		10.3		12		92				<0.2		0.9	
					Middle	4.1	0.6	91	26.9	26.9	7.7	7.7	25.7	25.7	76.9	76.9	5.3		32.0		16		93				<0.2		1.3	
						4.1	0.7	91	26.9		7.7		25.7		76.9		5.3		32.0		14		94				<0.2		1.2	
					Bottom	7.1	0.4	84	26.9	26.9	7.7	7.7	25.9	25.9	78.2	78.2	5.4	5.4	43.1		30		95				<0.2		1.4	
						7.1	0.4	91	26.9		7.7		25.9		78.2		5.4		43.1		31		96				<0.2		1.3	
SR2	Cloudy	Moderate	14:46	4.5	Surface	1.0	0.5	72	26.9	26.9	7.7	7.7	25.9	25.9	75.2	75.2	5.2	5.2	40.6	46.5	14	18	92	93	821478	814158	<0.2	<0.2	1.0	1.1
						1.0	0.5	74	26.9		7.7		25.9		75.2		5.2		40.6		12		92				<0.2		1.1	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.4	57	26.6	26.6	7.6	7.6	26.9	26.9	75.2	75.2	5.2	5.2	52.4		22		94				<0.2		0.9	
						3.5	0.4	58	26.6		7.6		26.9		75.2		5.2		52.4		23		94				<0.2		1.2	
SR3	Cloudy	Rough	13:38	9.2	Surface	1.0	0.3	203	27.3	27.3	7.6	7.6	24.6	24.6	76.3	76.3	5.3	5.3	17.6	31.4	17	30	-	-	822146	807561	-	-	-	-
						1.0	0.3	217	27.3		7.6		24.6		76.3		5.3		17.6		17		-				-		-	
					Middle	4.6	0.2	214	26.8	26.8	7.6	7.6	25.6	25.6	75.4	75.4	5.2		33.8		30		-				-		-	
						4.6	0.2	218	26.8		7.6		25.6		75.4		5.2		33.8		31		-				-		-	
					Bottom	8.2	0.1	352	26.2	26.2	7.5	7.5	27.8	27.8	76.5	76.5	5.3	5.3	42.9		45		-				-		-	
						8.2	0.1	324	26.2		7.5		27.8		76.5		5.3		42.9		41		-				-		-	
SR4A	Fine	Moderate	14:42	8.4	Surface	1.0	0.1	68	27.1	27.1	7.8	7.8	27.4	27.4	76.5	76.6	5.2	5.2	14.0	31.6	9	19	-	-	817199	807821	-	-	-	-
						1.0	0.1	73	27.1		7.8		27.4		76.6		5.2		14.1		8		-				-		-	
					Middle	4.2	0.1	47	26.0	26.0	7.8	7.8	29.1	29.1	75.7	75.7	5.2		28.3		11		-				-		-	
						4.2	0.1	50	26.0		7.8		29.1		75.7		5.2		28.4		9		-				-		-	
					Bottom	7.4	0.1	61	25.7	25.7	7.8	7.8	29.8	29.8	74.3	74.3	5.1	5.1	52.5		36		-				-		-	
						7.4	0.2	61	25.7		7.8		29.8		74.3		5.1		52.5		39		-				-		-	
SR5A	Fine	Moderate	14:59	5.0	Surface	1.0	0.1	306	27.2	27.2	7.9	7.9	27.3	27.3	78.8	78.8	5.4	5.4	18.8	23.7	12	13	-	-	816581	810690	-	-	-	-
						1.0	0.1	306	27.2		7.9		27.3		78.8		5.4		18.8		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.1	356	26.6	26.6	7.9	7.9	28.0	28.0	79.0	79.0	5.4	5.4	28.6		14		-				-		-	
						4.0	0.1	328	26.6		7.9		28.0		79.0		5.4		28.6		15		-				-		-	
SR6	Fine	Moderate	15:22	4.4	Surface	1.0	0.1	113	27.0	27.0	7.9	7.9	27.3	27.3	81.5	81.5	5.6	5.6	12.8	23.5	10	10	-	-	817908	814659	-	-	-	-
						1.0	0.1	116	27.0		7.9		27.3		81.5		5.6		12.8		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.1	101	26.4	26.4	7.9	7.9	27.9	27.9	73.7	73.8	5.1	5.1	34.2		11		-				-		-	
						3.4	0.1	103	26.4		7.9		27.9		73.8		5.1		34.2		11		-				-		-	
SR7	Cloudy	Moderate	15:33	16.3	Surface	1.0	0.9	72	27.5	27.5	7.7	7.7	26.0	26.0	77.1	77.1	5.3	5.2	7.0	9.9	9	10	-	-	823654	823756	-	-	-	-
						1.0	0.9	76	27.5		7.7		26.0		77.1		5.3		7.0		9		-				-		-	
					Middle	8.2	0.5	56	26.6	26.6	7.7	7.7	27.5	27.5	72.1	72.1	5.0		11.1		12		-				-		-	
						8.2	0.5	59	26.6		7.7		27.5		72.1		5.0		11.1		11		-				-		-	
					Bottom	15.3	0.4	21	26.5	26.5	7.7	7.7	27.8	27.8	75.6	75.7	5.2	5.2	11.5		10		-				-		-	
						15.3	0.4	21	26.5		7.7		27.8		75.7		5.2		11.4		10		-				-		-	
SR8	Cloudy	Moderate	14:33	4.3	Surface	1.0	-	-	27.8	27.8	7.7	7.7	24.6	24.6	80.5	80.5	5.5	5.5	15.1	16.3	12	15	-	-	820246	811418	-	-	-	-
						1.0	-	-	27.8		7.7		24.6		80.5		5.5		15.1		12		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	-	-	27.7	27.7	7.7	7.7	24.9	24.9	82.8	82.8	5.7	5.7	17.5		17		-				-		-	
						3.3	-	-	27.7		7.7		24.9		82.8		5.7		17.5		18		-				-		-	

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 24 August 17 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	08:09	8.8	Surface	1.0	0.5	20	26.3	26.3	7.9	7.9	27.7	27.7	78.9	78.9	5.5	5.3	24.7	191.3	18	312	91	99	815603	804249	<0.2	<0.2	1.0	0.9
						1.0	0.5	21	26.3		7.9		27.7		78.9		5.5		24.8		18		92				<0.2		0.8	
					Middle	4.4	0.7	28	25.5	25.5	7.8	7.8	30.3	30.3	73.8	73.8	5.1		55.2		20		95				<0.2		0.9	
						4.4	0.7	30	25.5		7.8		30.3		73.8		5.1		55.2		21		96				<0.2		0.9	
					Bottom	7.8	0.7	30	25.2	25.2	7.8	7.8	31.4	31.4	72.6	72.7	5.0	5.0	493.3		922		111				<0.2		0.9	
						7.8	0.8	31	25.2		7.8		31.4		72.7		5.0		494.3		870		110				<0.2		0.8	
C2	Sunny	Moderate	09:07	11.9	Surface	1.0	0.1	328	27.6	27.6	7.6	7.6	21.7	21.7	72.1	72.1	5.0	5.0	17.9	30.9	13	28	96	100	825689	806942	<0.2	<0.2	1.2	1.3
						1.0	0.1	352	27.6		7.6		21.7		72.0		5.0		17.9		13		94				<0.2		1.0	
					Middle	6.0	0.3	334	27.2	27.2	7.6	7.6	23.1	23.1	71.3	71.3	5.0		29.3		13		95				<0.2		1.4	
						6.0	0.3	343	27.2		7.6		23.1		71.3		5.0		29.3		14		98				<0.2		1.4	
					Bottom	10.9	0.7	52	27.1	27.1	7.6	7.6	23.8	23.8	74.1	74.1	5.2	5.2	45.6		60		105				<0.2		1.5	
						10.9	0.7	54	27.1		7.6		23.8		74.1		5.2		45.6		57		110				<0.2		1.2	
C3	Cloudy	Moderate	07:08	12.1	Surface	1.0	0.7	262	26.8	26.8	7.7	7.7	25.8	25.8	74.2	74.2	5.1	5.0	9.8	14.7	16	15	95	99	822091	817797	<0.2	<0.2	1.0	0.9
						1.0	0.7	270	26.8		7.7		25.8		74.2		5.1		9.8		14		96				<0.2		1.0	
					Middle	6.1	0.6	254	26.4	26.4	7.7	7.7	27.4	27.4	69.6	69.6	4.8		13.3		15		98				<0.2		0.8	
						6.1	0.6	260	26.4		7.7		27.4		69.6		4.8		13.3		16		99				<0.2		1.0	
					Bottom	11.1	0.5	267	26.2	26.2	7.7	7.7	28.5	28.5	68.8	68.8	4.7	4.7	20.9		15		102				<0.2		0.9	
						11.1	0.5	293	26.2		7.7		28.5		68.8		4.7		20.9		16		101				<0.2		0.9	
IM1	Cloudy	Moderate	08:26	8.1	Surface	1.0	0.6	349	26.4	26.4	7.9	7.9	27.0	27.0	78.4	78.4	5.4	5.3	22.4	69.9	19	19	94	96	818351	806439	<0.2	<0.2	0.8	0.8
						1.0	0.6	321	26.4		7.9		27.0		78.4		5.4		22.4		20		94				<0.2		0.8	
					Middle	4.1	0.7	359	26.2	26.2	7.9	7.9	27.8	27.8	74.2	74.2	5.1		38.8		20		96				<0.2		1.0	
						4.1	0.7	330	26.2		7.9		27.8		74.1		5.1		39.4		20		96				<0.2		0.8	
					Bottom	7.1	0.5	334	25.5	25.5	7.8	7.8	30.5	30.5	72.5	72.5	5.0	5.0	148.3		18		98				<0.2		0.7	
						7.1	0.5	307	25.5		7.8		30.5		72.5		5.0		148.3		18		98				<0.2		0.7	
IM2	Cloudy	Moderate	08:34	9.1	Surface	1.0	0.6	41	26.5	26.5	7.9	7.9	26.9	26.9	78.3	78.3	5.4	5.2	24.8	181.2	20	41	94	97	818850	806196	<0.2	<0.2	0.8	0.9
						1.0	0.7	43	26.5		7.9		26.9		78.2		5.4		25.0		21		94				<0.2		0.8	
					Middle	4.6	0.7	43	25.7	25.7	7.8	7.8	29.5	29.5	72.8	72.8	5.0		72.1		20		97				<0.2		1.1	
						4.6	0.7	45	25.7		7.8		29.5		72.8		5.0		72.4		19		98				<0.2		1.0	
					Bottom	8.1	0.4	28	25.6	25.6	7.8	7.8	30.1	30.1	72.2	72.2	5.0	5.0	446.9		82		100				<0.2		1.0	
						8.1	0.5	29	25.6		7.8		30.1		72.2		5.0		446.2		82		101				<0.2		0.9	
IM3	Cloudy	Moderate	08:41	9.2	Surface	1.0	0.6	29	26.5	26.5	7.9	7.9	26.6	26.6	79.0	79.0	5.5	5.3	20.4	140.3	14	73	93	97	819399	806027	<0.2	<0.2	1.1	0.8
						1.0	0.6	31	26.5		7.9		26.6		79.0		5.5		20.4		14		94				<0.2		1.0	
					Middle	4.6	0.6	38	26.3	26.3	7.9	7.9	27.2	27.2	73.8	73.8	5.1		37.3		15		95				<0.2		1.0	
						4.6	0.6	40	26.3		7.9		27.2		73.8		5.1		37.3		16		96				<0.2		0.8	
					Bottom	8.2	0.4	30	25.6	25.6	7.8	7.8	30.0	30.0	72.1	72.1	5.0	5.0	363.1		195		101				<0.2		0.5	
						8.2	0.4	30	25.6		7.8		30.0		72.1		5.0		363.1		183		100				<0.2		0.6	
IM4	Cloudy	Moderate	08:51	8.6	Surface	1.0	0.4	6	26.7	26.7	7.9	7.9	25.7	25.7	81.2	81.2	5.6	5.5	18.7	159.5	12	19	94	98	819574	805046	<0.2	<0.2	0.8	0.8
						1.0	0.4	6	26.7		7.9		25.7		81.2		5.6		18.7		12		95				<0.2		0.9	
					Middle	4.3	0.6	43	26.3	26.3	7.9	7.9	27.1	27.1	77.4	77.4	5.4		24.9		17		97				<0.2		0.6	
						4.3	0.6	45	26.3		7.9		27.1		77.4		5.4		24.9		17		97				<0.2		0.8	
					Bottom	7.6	0.7	43	25.6	25.6	7.8	7.8	29.8	29.8	73.3	73.3	5.1	5.1	435.0		30		101				<0.2		0.7	
						7.6	0.8	46	25.6		7.8		29.8		73.3		5.1		435.0		28		101				<0.2		0.7	
IM5	Cloudy	Moderate	09:01	7.7	Surface	1.0	0.7	22	26.8	26.8	7.9	7.9	25.4	25.4	80.1	80.1	5.6	5.6	28.8	115.0	16	50	95	97	820550	804912	<0.2	<0.2	0.9	0.9
						1.0	0.7	22	26.8		7.9		25.4		80.1		5.6		28.8		16		95				<0.2		0.8	
					Middle	3.9	0.6	37	26.7	26.7	7.9	7.9	25.8	25.8	78.7	78.7	5.5		102.6		60		96				<0.2		0.8	
						3.9	0.6	40	26.7		7.9		25.8		78.7		5.5		102.5		55		96				<0.2		1.0	
					Bottom	6.7	0.4	40	26.6	26.6	7.9	7.9	26.3	26.3	79.0	79.0	5.5	5.5	213.5		78		101				<0.2		1.1	
						6.7	0.4	42	26.6		7.9		26.3		79.0		5.5		213.5		75		100				<0.2		0.8	
IM6	Cloudy	Moderate	09:12	7.5	Surface	1.0	0.4	81	26.7	26.7	7.9	7.9	25.6	25.6	78.2	78.2	5.4	5.3	41.0	65.5	16	32	95	97	821069	805830	<0.2	<0.2	0.8	0.8
						1.0	0.5	88	26.7		7.9		25.6		78.2		5.4		41.0		15		96				<0.2		0.8	
					Middle	3.8	0.3	64	26.4	26.4	7.9	7.9	26.9	26.9	75.5	75.5	5.2		88.6		24		95				<0.2		0.7	
						3.8	0.4	67	26.4		7.9		26.9		75.4		5.2		88.6		24		96				<0.2		0.7	
					Bottom	6.5	0.3	33	25.9	25.9	7.9	7.9	29.1	29.1	73.6	73.7	5.1	5.1	67.0		59		99				<0.2		0.8	
						6.5	0.3	33	25.9		7.9		29.1		73.7		5.1		66.8		55		99				<0.2		0.7	
IM7	Cloudy	Moderate	09:20	9.1	Surface	1.0	0.8	57	26.6	26.6	7.9	7.9	26.8	26.8	79.5	79.5	5.5	5.4	17.4	41.9	12	37	94	97	821359	806829	<0.2	<0.2	0.8	0.5
						1.0	0.8	58	26.6		7.9		26.8		79.5		5.5		17.4		12		95				<0.2		0.5	
					Middle	4.6	0.6	57	26.1	26.1	7.9	7.9	28.1	28.1	76.2	76.2	5.3		43.5		29		96				<0.2		0.4	
						4.6	0.6	61	26.1		7.9		28.1		76.1		5.3		43.8		30		96				<0.2		0.4	
					Bottom	8.1	0.4	61	26.0	26.0	7.9	7.9	28.4	28.4	76.2	76.2	5.3	5.3	64.6		71		99				<0.2		0.4	
						8.1	0.4	64	26.0		7.9		28.4		76.2		5.3		64.6		67		99				<0.2		0.7	
IM8	Sunny	Moderate	08:39	8.7	Surface	1.0	0.2	347	27.6	27.6	7.6	7.6	21.5	21.5	76.7	76.7	5.4	5.3	11.0	20.9	14	14	88	91	821679	807832	<0.2	<0.2	1.2	1.2
						1.0	0.2	358	27.6		7.6		21.5		76.7		5.4		11.0		13		87				<0.2		1.1	
					Middle	4.4	0.3	21	27.4	27.4	7.6	7.6	22.3	22.3	74.6	74.6	5.2		17.4		15		87				<0.2		1.0	
						4.4	0.3	21	27.4		7.6		22.3		74.6		5.2		17.4		14		87				<0.2		1.3	
					Bottom	7.7	0.4	14	27.1	27.1	7.7	7.7	23.7	23.7	76.1	76.1	5.3	5.3	34.3		15		97				<0.2		1.3	
						7.7	0.4	14	27.1		7.7		23.7		76.1		5.3		34.3		15		97				<0.2		1.0	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 24 August 17 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Sunny	Moderate	08:31	7.7	Surface	1.0	0.5	314	27.2	27.2	7.7	7.7	23.8	23.8	75.9	75.9	5.3	5.3	22.7	27.8	27	32	87	90	822089	808817	<0.2	<0.2	1.1	1.0
						1.0	0.5	344	27.2		7.7		23.8		75.9		5.3		22.7		28		86				<0.2		1.3	
					Middle	3.9	0.5	319	27.2	27.2	7.7	7.7	23.8	23.8	75.0	75.0	5.2		27.7		32		88				<0.2		0.9	
						3.9	0.5	323	27.2		7.7		23.8		75.0		5.2		27.7		30		89				<0.2		1.0	
					Bottom	6.7	0.3	331	27.1	27.1	7.7	7.7	24.0	24.0	75.2	75.2	5.2	5.2	33.1		36		94				<0.2		0.8	
						6.7	0.3	354	27.1		7.7		24.0		75.2		5.2		33.1		36		95				<0.2		1.1	
IM10	Sunny	Moderate	08:22	6.5	Surface	1.0	0.8	304	27.2	27.2	7.7	7.7	23.5	23.5	76.4	76.4	5.3	5.3	15.3	31.9	12	**44**	86	90	822221	809852	<0.2	<0.2	1.0	1.0
						1.0	0.8	315	27.2		7.7		23.5		76.4		5.3		15.3		10		87				<0.2		1.0	
					Middle	3.3	0.6	310	27.0	27.0	7.7	7.7	24.6	24.6	74.5	74.5	5.2		37.5		22		88				<0.2		1.0	
						3.3	0.7	339	27.0		7.7		24.6		74.5		5.2		37.5		21		89				<0.2		0.9	
					Bottom	5.5	0.4	308	26.9	26.9	7.7	7.7	24.9	24.9	75.0	75.0	5.2	5.2	43.0		102		95				<0.2		1.0	
						5.5	0.4	321	26.9		7.7		24.9		75.0		5.2		43.0		95		94				<0.2		1.1	
IM11	Sunny	Moderate	08:08	8.7	Surface	1.0	0.7	288	27.3	27.3	7.7	7.7	23.1	23.1	77.7	77.7	5.4	5.4	10.6	24.8	11	**43**	91	93	821498	810531	<0.2	<0.2	1.3	1.2
						1.0	0.7	298	27.3		7.7		23.1		77.7		5.4		10.6		11		91				<0.2		1.4	
					Middle	4.4	0.6	287	27.0	27.0	7.7	7.7	24.4	24.4	76.8	76.8	5.3		14.7		12		93				<0.2		1.1	
						4.4	0.6	297	27.0		7.7		24.4		76.8		5.3		14.7		13		92				<0.2		1.3	
					Bottom	7.7	0.4	280	26.9	26.9	7.7	7.7	25.6	25.6	86.9	86.9	6.0	6.0	49.2		103		95				<0.2		1.1	
						7.7	0.4	283	26.9		7.7		25.6		86.9		6.0		49.2		107		95				<0.2		1.1	
IM12	Cloudy	Moderate	07:58	8.2	Surface	1.0	0.9	278	27.3	27.3	7.7	7.7	23.6	23.7	78.0	78.0	5.4	5.4	7.2	16.8	8	33	91	94	821160	811515	<0.2	<0.2	1.4	1.3
						1.0	0.9	300	27.3		7.7		23.7		78.0		5.4		7.2		10		92				<0.2		1.5	
					Middle	4.1	0.9	276	27.0	27.0	7.7	7.7	24.8	24.8	77.4	77.4	5.4		7.5		11		93				<0.2		1.4	
						4.1	1.0	299	27.0		7.7		24.8		77.4		5.4		7.5		10		94				<0.2		1.3	
					Bottom	7.2	0.6	280	26.8	26.8	7.7	7.7	26.4	26.4	75.6	75.6	5.2	5.2	35.7		82		95				<0.2		1.1	
						7.2	0.6	301	26.8		7.7		26.4		75.6		5.2		35.7		75		96				<0.2		1.1	
SR2	Cloudy	Moderate	07:31	4.5	Surface	1.0	0.2	54	26.7	26.7	7.7	7.7	25.8	25.8	73.4	73.4	5.1	5.1	23.9	33.7	22	22	95	97	821473	814180	<0.2	<0.2	0.9	0.9
						1.0	0.2	57	26.7		7.7		25.8		73.4		5.1		23.9		23		94				<0.2		0.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.1	107	26.5	26.5	7.7	7.7	26.9	26.9	72.9	72.9	5.0	5.0	43.4		22		98				<0.2		1.0	
						3.5	0.1	112	26.5		7.7		26.9		72.9		5.0		43.4		22		99				<0.2		1.0	
SR3	Sunny	Moderate	08:45	9.4	Surface	1.0	0.3	351	27.6	27.6	7.6	7.6	21.3	21.3	75.2	75.2	5.3	5.2	10.6	19.2	9	12	-	-	822157	807558	-	-	-	-
						1.0	0.4	323	27.6		7.6		21.3		75.2		5.3		10.6		9		-				-		-	
					Middle	4.7	0.4	7	27.4	27.4	7.6	7.6	22.7	22.7	71.9	71.9	5.0		16.2		11		-				-		-	
						4.7	0.4	7	27.4		7.6		22.7		71.9		5.0		16.2		12		-				-		-	
					Bottom	8.4	0.3	14	27.3	27.3	7.6	7.6	23.1	23.1	74.2	74.2	5.2	5.2	30.8		14		-				-		-	
						8.4	0.3	14	27.3		7.6		23.1		74.2		5.2		30.8		14		-				-		-	
SR4A	Cloudy	Moderate	07:46	8.9	Surface	1.0	0.4	265	26.4	26.4	7.8	7.8	27.2	27.2	75.6	75.6	5.2	5.2	24.8	30.1	18	19	-	-	817203	807820	-	-	-	-
						1.0	0.5	276	26.4		7.8		27.2		75.6		5.2		24.8		19		-				-		-	
					Middle	4.5	0.4	269	26.3	26.3	7.8	7.8	27.4	27.4	75.0	75.0	5.2		26.7		18		-				-		-	
						4.5	0.4	292	26.3		7.8		27.4		75.0		5.2		26.7		18		-				-		-	
					Bottom	7.9	0.3	272	26.0	26.0	7.8	7.8	28.7	28.7	73.1	73.1	5.0	5.1	38.8		18		-				-		-	
						7.9	0.3	277	26.0		7.8		28.7		73.1		5.1		38.8		20		-				-		-	
SR5A	Cloudy	Moderate	07:31	4.9	Surface	1.0	0.5	319	26.4	26.4	7.8	7.8	27.2	27.2	77.0	77.1	5.3	5.3	20.6	23.3	18	17	-	-	816604	810707	-	-	-	-
						1.0	0.5	324	26.4		7.8		27.2		77.1		5.3		20.7		16		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	0.4	337	26.4	26.4	7.8	7.8	27.3	27.3	77.0	77.0	5.3	5.3	25.9		17		-				-		-	
						3.9	0.4	346	26.4		7.8		27.3		77.0		5.3		25.9		16		-				-		-	
SR6	Cloudy	Moderate	07:09	4.0	Surface	1.0	0.3	255	26.3	26.3	7.8	7.8	27.1	27.1	78.2	78.3	5.4	5.4	15.3	14.9	12	15	-	-	817884	814655	-	-	-	-
						1.0	0.3	273	26.3		7.8		27.1		78.3		5.4		15.3		13		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	0.2	272	26.2	26.2	7.8	7.8	27.4	27.4	78.2	78.2	5.4	5.4	14.5		17		-				-		-	
						3.0	0.2	276	26.2		7.8		27.4		78.2		5.4		14.5		16		-				-		-	
SR7	Cloudy	Moderate	06:36	16.6	Surface	1.0	0.3	259	26.6	26.6	7.6	7.6	26.4	26.4	73.1	73.1	5.1	5.0	10.4	10.6	8	8	-	-	823639	823731	-	-	-	-
						1.0	0.4	276	26.6		7.6		26.4		73.1		5.1		10.4		6		-				-		-	
					Middle	8.3	0.3	244	26.2	26.2	7.6	7.6	28.2	28.2	70.4	70.4	4.9		11.2		8		-				-		-	
						8.3	0.3	262	26.2		7.6		28.2		70.4		4.9		11.2		7		-				-		-	
					Bottom	15.6	0.8	-	26.0	26.0	7.6	7.6	28.9	28.9	70.7	70.7	4.9	4.9	10.2		8		-				-		-	
						15.6	0.9	-	26.0		7.6		28.9		70.7		4.9		10.2		9		-				-		-	
SR8	Cloudy	Moderate	07:47	4.2	Surface	1.0	0.0	0	27.4	27.4	7.7	7.7	23.3	23.3	79.3	79.3	5.5	5.5	16.3	25.3	10	14	-	-	820246	811418	-	-	-	-
						1.0	0.0	0	27.4		7.7		23.3		79.3		5.5		16.3		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.0	0	27.2	27.2	7.6	7.6	23.7	23.7	80.0	80.0	5.6	5.6	34.2		18		-				-		-	
						3.2	0.0	0	27.2		7.6		23.7		80.0		5.6		34.2		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 26 August 17 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Sunny	Moderate	15:22	9.2	Surface	1.0	0.3	187	27.0	27.0	7.6	7.6	26.5	26.5	73.7	73.7	5.1	5.0	5.0	15.0	4	10	88	90	815616	804246	<0.2	<0.2	1.2	0.9
						1.0	0.3	195	27.0		7.6		26.5		73.7		5.1		5.0		4		88				<0.2		1.4	
					Middle	4.6	0.5	189	25.5	25.5	7.6	7.6	30.9	30.9	70.3	70.4	4.8		14.8		4		91				<0.2		0.9	
						4.6	0.5	206	25.5		7.6		30.9		70.4		4.8		14.8		4		91				<0.2		0.9	
					Bottom	8.2	0.4	201	25.2	25.2	7.7	7.7	32.1	32.1	68.4	68.4	4.7	4.7	25.1		21		92				<0.2		0.5	
						8.2	0.4	209	25.2		7.7		32.1		68.4		4.7		25.0		20		91				<0.2		0.5	
C2	Sunny	Moderate	14:15	12.5	Surface	1.0	0.4	174	28.9	28.9	7.5	7.5	19.6	19.6	71.3	71.3	4.9	4.8	10.1	23.9	11	10	94	96	825667	806938	<0.2	<0.2	1.5	1.5
						1.0	0.5	182	28.9		7.5		19.6		71.3		4.9		10.1		10		94				<0.2		1.7	
					Middle	6.3	0.5	167	27.5	27.5	7.5	7.5	23.1	23.1	66.9	66.9	4.6		19.3		10		96				<0.2		1.4	
						6.3	0.5	167	27.5		7.5		23.1		66.9		4.6		19.3		10		96				<0.2		1.4	
					Bottom	11.5	0.3	119	26.9	26.9	7.5	7.5	26.5	26.5	68.1	68.1	4.7	4.7	42.4		9		96				<0.2		1.5	
						11.5	0.3	123	26.9		7.5		26.5		68.1		4.7		42.4		10		97				<0.2		1.5	
C3	Sunny	Moderate	15:59	11.9	Surface	1.0	0.0	113	27.7	27.7	7.7	7.7	25.2	25.2	70.5	70.5	4.8	4.7	7.5	9.9	8	8	91	94	822102	817808	<0.2	<0.2	1.0	1.1
						1.0	0.0	122	27.7		7.7		25.2		70.5		4.8		7.5		7		91				<0.2		1.1	
					Middle	6.0	0.1	44	27.0	27.0	7.7	7.7	26.8	26.8	67.7	67.7	4.6		9.5		8		93				<0.2		1.1	
						6.0	0.1	46	27.0		7.7		26.8		67.7		4.6		9.5		7		94				<0.2		1.1	
					Bottom	10.9	0.2	31	26.7	26.7	7.6	7.6	27.5	27.5	69.1	69.1	4.7	4.7	12.8		9		97				<0.2		1.1	
						10.9	0.2	33	26.7		7.6		27.5		69.1		4.7		12.8		8		98				<0.2		1.3	
IM1	Sunny	Moderate	14:57	7.8	Surface	1.0	0.2	182	27.6	27.6	7.6	7.6	26.0	26.0	74.3	74.2	5.1	5.0	7.0	11.6	5	8	89	91	818368	806477	<0.2	<0.2	1.4	1.0
						1.0	0.2	196	27.6		7.6		26.0		74.1		5.1		7.1		5		88				<0.2		1.2	
					Middle	3.9	0.2	191	25.6	25.6	7.6	7.6	30.4	30.4	71.1	71.1	4.9		12.5		5		91				<0.2		1.0	
						3.9	0.2	203	25.6		7.6		30.4		71.1		4.9		12.5		5		90				<0.2		1.1	
					Bottom	6.8	0.1	202	25.6	25.6	7.6	7.6	30.7	30.7	69.3	69.3	4.8	4.8	15.1		14		94				<0.2		0.7	
						6.8	0.1	205	25.6		7.6		30.7		69.3		4.8		15.1		12		94				<0.2		0.8	
IM2	Sunny	Moderate	14:53	8.8	Surface	1.0	0.1	224	27.4	27.4	7.6	7.6	25.6	25.6	74.2	74.2	5.1	5.0	6.5	14.8	6	8	89	91	818840	806182	<0.2	<0.2	1.4	1.1
						1.0	0.1	230	27.4		7.6		25.6		74.2		5.1		6.5		5		89				<0.2		1.2	
					Middle	4.4	0.3	198	25.6	25.6	7.6	7.6	30.3	30.3	69.9	69.9	4.8		15.4		9		91				<0.2		0.8	
						4.4	0.4	198	25.6		7.6		30.3		69.9		4.8		15.4		8		91				<0.2		0.9	
					Bottom	7.8	0.2	204	25.6	25.6	7.6	7.6	30.5	30.5	68.6	68.6	4.7	4.7	22.5		10		94				<0.2		1.1	
						7.8	0.2	221	25.6		7.6		30.5		68.6		4.7		22.5		10		93				<0.2		1.3	
IM3	Sunny	Moderate	14:45	8.9	Surface	1.0	0.2	213	27.8	27.8	7.6	7.6	25.0	25.0	75.5	75.5	5.2	5.0	7.1	17.0	5	10	88	91	819424	806023	<0.2	<0.2	1.3	1.2
						1.0	0.2	228	27.8		7.6		25.0		75.5		5.2		7.1		4		88				<0.2		1.3	
					Middle	4.5	0.2	174	26.0	26.0	7.6	7.6	29.0	29.0	69.9	69.9	4.8		15.2		7		91				<0.2		1.2	
						4.5	0.2	186	26.0		7.6		29.0		69.9		4.8		15.2		9		91				<0.2		1.2	
					Bottom	7.9	0.1	267	25.6	25.6	7.6	7.6	30.3	30.3	69.1	69.1	4.8	4.8	28.7		18		94				<0.2		1.2	
						7.9	0.1	274	25.6		7.6		30.3		69.1		4.8		28.7		19		93				<0.2		1.2	
IM4	Sunny	Moderate	14:37	8.1	Surface	1.0	0.2	169	27.0	27.0	7.6	7.6	26.3	26.3	73.2	73.2	5.0	4.9	9.2	35.9	6	15	89	92	819560	805039	<0.2	<0.2	1.2	1.1
						1.0	0.3	176	27.0		7.6		26.3		73.1		5.0		9.3		6		89				<0.2		1.1	
					Middle	4.1	0.3	156	25.9	25.9	7.6	7.6	29.5	29.5	68.3	68.3	4.7		21.5		11		92				<0.2		1.0	
						4.1	0.4	164	25.9		7.6		29.5		68.3		4.7		21.5		12		91				<0.2		1.0	
					Bottom	7.1	0.3	152	25.6	25.6	7.6	7.6	30.4	30.4	67.0	67.0	4.6	4.6	76.8		26		95				<0.2		1.1	
						7.1	0.3	157	25.6		7.6		30.4		67.0		4.6		77.3		28		94				<0.2		0.9	
IM5	Sunny	Moderate	14:27	7.5	Surface	1.0	0.1	227	27.4	27.4	7.6	7.6	25.4	25.4	75.1	75.1	5.2	5.0	8.5	19.2	6	12	89	91	820566	804926	<0.2	<0.2	1.3	1.0
						1.0	0.1	238	27.4		7.6		25.4		75.1		5.2		8.5		8		88				<0.2		1.3	
					Middle	3.8	0.2	207	26.0	26.0	7.6	7.6	29.1	29.1	69.8	69.8	4.8		17.1		14		92				<0.2		0.9	
						3.8	0.2	215	26.0		7.6		29.1		69.8		4.8		17.1		14		92				<0.2		0.9	
					Bottom	6.5	0.2	159	25.5	25.5	7.6	7.6	30.8	30.8	69.2	69.2	4.8	4.8	31.9		15		94				<0.2		0.8	
						6.5	0.2	162	25.5		7.6		30.8		69.2		4.8		31.9		16		93				<0.2		0.8	
IM6	Sunny	Moderate	14:19	7.5	Surface	1.0	0.2	139	26.8	26.8	7.6	7.6	27.1	27.1	73.1	73.1	5.0	5.0	16.4	24.6	6	12	89	91	821057	805820	<0.2	<0.2	1.2	1.1
						1.0	0.2	145	26.8		7.6		27.1		73.1		5.0		16.4		5		88				<0.2		1.2	
					Middle	3.8	0.2	131	26.1	26.1	7.6	7.6	28.5	28.5	72.8	72.9	5.0		23.9		16		91				<0.2		1.1	
						3.8	0.2	134	26.1		7.6		28.5		72.9		5.0		23.9		15		91				<0.2		0.9	
					Bottom	6.5	0.2	144	26.1	26.1	7.6	7.6	28.8	28.8	69.5	69.5	4.8	4.8	33.6		16		94				<0.2		1.2	
						6.5	0.2	157	26.1		7.6		28.8		69.5		4.8		33.5		16		93				<0.2		1.2	
IM7	Sunny	Moderate	14:12	9.1	Surface	1.0	0.2	102	27.3	27.3	7.6	7.6	25.5	25.5	75.1	75.1	5.2	5.1	8.8	30.6	6	14	87	90	821362	806847	<0.2	<0.2	1.2	1.1
						1.0	0.2	111	27.3		7.6		25.5		75.1		5.2		8.8		5		86				<0.2		1.2	
					Middle	4.6	0.3	115	26.3	26.3	7.6	7.6	28.1	28.1	72.4	72.4	5.0		21.7		18		89				<0.2		0.9	
						4.6	0.3	124	26.3		7.6		28.1		72.4		5.0		21.7		18		89				<0.2		0.9	
					Bottom	8.1	0.2	118	26.1	26.1	7.6	7.6	28.6	28.6	70.4	70.4	4.9	4.9	61.2		17		93				<0.2		1.0	
						8.1	0.2	128	26.1		7.6		28.6		70.4		4.9		61.2		17		93				<0.2		1.3	
IM8	Sunny	Moderate	14:41	9.1	Surface	1.0	0.3	166	27.8	27.8	7.6	7.6	21.4	21.4	68.6	68.6	4.8	4.7	10.4	14.3	7	9	91	93	821705	807819	<0.2	<0.2	1.7	1.7
						1.0	0.3	177	27.8		7.6		21.4		68.6		4.8		10.4		8		90				<0.2		1.7	
					Middle	4.6	0.2	92	27.0	27.0	7.6	7.6	25.1	25.1	66.8	66.8	4.6		13.7		8		93				<0.2		1.7	
						4.6	0.2	96	27.0		7.6		25.1		66.8		4.6		13.7		9		94				<0.2		1.8	
					Bottom	8.1	0.3	55	27.0	27.0	7.6	7.6	26.8	26.8	67.2	67.2	4.6	4.6	18.9		9		96				<0.2		1.7	
						8.1	0.3	56	27.0		7.6		26.8		67.2		4.6		18.9		10		96				<0.2		1.7	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 26 August 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	14:48	7.3	Surface	1.0	0.4	130	28.0	28.0	7.6	7.6	21.4	21.4	68.5	68.5	4.8	4.8	11.6	23.0	7	8	90	93	822074	808807	<0.2	<0.2	1.8	2.0
						1.0	0.5	131	28.0		7.6		21.4		68.5		4.8		11.6		7		89				<0.2		1.8	
					Middle	3.7	0.4	117	27.4	27.4	7.6	7.6	23.6	23.6	67.9	67.9	4.7		19.9		7		93				<0.2		2.2	
						3.7	0.4	117	27.4		7.6		23.6		67.9		4.7		19.9		8		93				<0.2		2.2	
					Bottom	6.3	0.4	66	26.6	26.6	7.6	7.6	26.6	26.6	70.0	70.0	4.8	4.8	37.4		8		97				<0.2		2.1	
						6.3	0.4	70	26.6		7.6		26.6		70.0		4.8		37.4		8		96				<0.2		1.8	
IM10	Sunny	Moderate	14:57	7.8	Surface	1.0	0.6	132	28.6	28.7	7.6	7.6	20.5	20.7	68.7	68.6	4.7	4.7	12.2	16.8	6	9	90	93	822223	809828	<0.2	<0.2	2.0	2.4
						1.0	0.6	133	28.7		7.6		20.8		68.5		4.7		12.5		6		89				<0.2		1.8	
					Middle	3.9	0.4	126	27.3	27.3	7.6	7.6	23.9	23.9	67.0	67.0	4.7		16.8		5		94				<0.2		2.1	
						3.9	0.5	136	27.3		7.6		23.9		67.0		4.7		16.8		6		93				<0.2		2.3	
					Bottom	6.8	0.3	96	27.4	27.4	7.6	7.6	25.6	25.6	69.3	69.3	4.8	4.8	21.1		15		96				<0.2		3.3	
						6.8	0.4	98	27.4		7.6		25.6		69.3		4.8		21.1		16		96				<0.2		3.1	
IM11	Sunny	Moderate	15:06	8.2	Surface	1.0	0.6	104	27.9	27.9	7.6	7.6	21.5	21.5	69.0	69.0	4.8	4.9	11.2	24.3	6	7	90	94	821499	810559	<0.2	<0.2	3.2	3.2
						1.0	0.7	110	27.9		7.6		21.5		69.0		4.8		11.2		7		91				<0.2		3.2	
					Middle	4.1	0.4	102	27.4	27.4	7.7	7.7	24.5	24.5	70.3	70.3	4.9		18.5		8		95				<0.2		3.9	
						4.1	0.4	106	27.4		7.7		24.5		70.3		4.9		18.5		7		94				<0.2		4.1	
					Bottom	7.2	0.3	105	27.1	27.1	7.7	7.7	25.3	25.3	70.9	70.9	4.9	4.9	43.2		9		96				<0.2		2.5	
						7.2	0.3	111	27.1		7.7		25.3		70.9		4.9		43.2		7		96				<0.2		2.3	
IM12	Sunny	Moderate	15:13	8.8	Surface	1.0	0.5	95	28.2	28.2	7.7	7.7	22.3	22.3	72.9	72.9	5.0	4.9	11.6	19.3	6	11	91	93	821173	811535	<0.2	<0.2	2.7	2.9
						1.0	0.6	102	28.2		7.7		22.3		72.9		5.0		11.6		7		91				<0.2		2.6	
					Middle	4.4	0.3	77	27.4	27.4	7.6	7.6	24.3	24.3	69.9	69.9	4.8		21.9		14		92				<0.2		3.0	
						4.4	0.3	77	27.4		7.6		24.3		69.9		4.8		21.9		14		93				<0.2		3.0	
					Bottom	7.8	0.3	85	27.4	27.4	7.6	7.6	24.6	24.6	80.9	80.9	5.6	5.6	24.5		13		97				<0.2		2.8	
						7.8	0.3	91	27.4		7.6		24.6		80.9		5.6		24.5		14		96				<0.2		3.1	
SR2	Sunny	Moderate	15:38	5.2	Surface	1.0	0.6	105	28.5	28.5	7.6	7.6	21.6	21.6	75.3	75.3	5.2	5.2	8.1	12.0	6	6	91	93	821450	814177	<0.2	<0.2	2.4	2.1
						1.0	0.7	114	28.5		7.6		21.6		75.3		5.2		8.1		6		91				<0.2		2.3	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.3	108	27.4	27.4	7.6	7.6	24.4	24.4	76.0	76.0	5.2	5.2	15.9		7		96				<0.2		1.9	
						4.2	0.3	109	27.4		7.6		24.4		76.0		5.2		15.9		6		95				<0.2		1.7	
SR3	Sunny	Moderate	14:35	9.2	Surface	1.0	0.4	152	28.0	28.0	7.5	7.5	20.3	20.3	68.6	68.6	4.8	4.8	10.7	16.3	7	8	-	-	822138	807551	-	-	-	-
						1.0	0.5	164	28.0		7.5		20.3		68.6		4.8		10.7		8		-				-		-	
					Middle	4.6	0.2	133	27.4	27.4	7.6	7.6	23.7	23.7	67.9	67.9	4.7		14.3		6		-				-		-	
						4.6	0.2	135	27.4		7.6		23.7		67.9		4.7		14.3		7		-				-		-	
					Bottom	8.2	0.2	40	26.7	26.7	7.6	7.6	26.6	26.6	68.8	68.8	4.8	4.8	23.8		8		-				-		-	
						8.2	0.3	40	26.7		7.6		26.6		68.8		4.8		23.8		9		-				-		-	
SR4A	Sunny	Moderate	15:43	9.4	Surface	1.0	0.4	51	26.5	26.5	7.6	7.6	28.1	28.1	70.3	70.3	4.8	4.8	14.9	30.5	12	25	-	-	817203	807809	-	-	-	-
						1.0	0.4	51	26.5		7.6		28.1		70.3		4.8		14.9		12		-				-		-	
					Middle	4.7	0.4	55	25.8	25.8	7.6	7.6	29.7	29.7	68.3	68.3	4.7		25.3		19		-				-		-	
						4.7	0.4	56	25.8		7.6		29.7		68.3		4.7		25.3		20		-				-		-	
					Bottom	8.4	0.3	53	25.8	25.8	7.6	7.6	30.0	30.0	69.1	69.2	4.8	4.8	51.1		41		-				-		-	
						8.4	0.3	56	25.8		7.6		30.0		69.2		4.8		51.4		43		-				-		-	
SR5A	Sunny	Moderate	15:59	5.0	Surface	1.0	0.1	313	28.2	28.2	7.6	7.6	25.0	25.0	78.2	78.2	5.3	5.3	11.2	11.5	8	11	-	-	816595	810715	-	-	-	-
						1.0	0.1	327	28.2		7.6		25.0		78.2		5.3		11.2		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.0	280	27.9	27.9	7.6	7.6	25.3	25.3	78.3	78.3	5.3	5.3	11.7		14		-				-		-	
						4.0	0.0	282	27.9		7.6		25.3		78.3		5.3		11.7		13		-				-		-	
SR6	Sunny	Moderate	16:21	4.6	Surface	1.0	0.0	333	28.6	28.6	7.6	7.6	23.7	23.7	83.4	83.4	5.7	5.7	5.2	9.4	9	8	-	-	817888	814674	-	-	-	-
						1.0	0.0	334	28.6		7.6		23.7		83.3		5.7		5.3		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.1	109	27.7	27.7	7.6	7.6	24.9	24.9	77.4	77.5	5.3	5.3	13.6		8		-				-		-	
						3.6	0.1	110	27.7		7.6		24.9		77.5		5.3		13.6		9		-				-		-	
SR7	Sunny	Moderate	16:29	15.5	Surface	1.0	0.5	81	28.0	28.0	7.7	7.7	25.0	25.0	75.5	75.5	5.1	5.0	5.0	5.6	7	8	-	-	823647	823726	-	-	-	-
						1.0	0.6	86	28.0		7.7		25.0		75.5		5.1		5.0		5		-				-		-	
					Middle	7.8	0.2	53	27.4	27.4	7.7	7.7	26.4	26.4	71.0	71.0	4.8		5.6		6		-				-		-	
						7.8	0.2	53	27.4		7.7		26.4		71.0		4.8		5.6		7		-				-		-	
					Bottom	14.5	0.1	339	27.4	27.4	7.7	7.7	26.6	26.6	72.6	72.6	5.0	5.0	6.2		11		-				-		-	
						14.5	0.1	348	27.4		7.7		26.6		72.6		5.0		6.2		9		-				-		-	
SR8	Sunny	Moderate	15:25	4.6	Surface	1.0	-	-	28.5	28.5	7.6	7.6	22.8	22.8	75.5	75.5	5.2	5.2	7.5	8.5	12	13	-	-	820246	811418	-	-	-	-
						1.0	-	-	28.5		7.6		22.8		75.5		5.2		7.5		11		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	-	-	27.9	27.9	7.6	7.6	23.6	23.6	76.5	76.5	5.3	5.3	9.4		14		-				-		-	
						3.6	-	-	27.9		7.6		23.6		76.5		5.3		9.4		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 26 August 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	Sunny	Moderate	09:39	8.9	Surface	1.0	0.5	51	27.4	27.4	7.6	7.6	23.1	23.1	74.3	74.3	5.2	5.0	6.0	57.6	6	8	89	91	815620	804229	<0.2	<0.2	1.7	1.7
						1.0	0.5	52	27.4		7.6		23.1		74.3		5.2		6.0		8		89				<0.2		1.7	
					Middle	4.5	0.9	51	26.1	26.1	7.6	7.6	28.6	28.6	69.4	69.4	4.8		21.5		7		92				<0.2		1.6	
						4.5	0.9	51	26.1		7.6		28.6		69.4		4.8		21.5		9		91				<0.2		1.6	
					Bottom	7.9	0.7	55	25.8	25.8	7.6	7.6	30.1	30.1	68.3	68.3	4.7	4.7	146.4		9		93				<0.2		1.6	
						7.9	0.8	57	25.8		7.6		30.1		68.3		4.7		144.0		9		93				<0.2		1.9	
C2	Sunny	Rough	10:37	12.2	Surface	1.0	0.5	355	28.1	28.1	7.5	7.5	19.7	19.7	67.1	67.1	4.7	4.7	9.6	31.7	4	7	95	96	825682	806934	<0.2	<0.2	3.1	3.0
						1.0	0.5	327	28.1		7.5		19.7		67.1		4.7		9.6		5		95				<0.2		3.0	
					Middle	6.1	0.5	339	27.6	27.6	7.6	7.6	22.9	22.9	67.1	67.1	4.7		22.2		8		96				<0.2		2.9	
						6.1	0.5	312	27.6		7.6		22.9		67.1		4.7		22.2		9		96				<0.2		2.9	
					Bottom	11.2	0.7	158	27.5	27.5	7.5	7.5	24.1	24.1	75.1	75.1	5.2	5.2	63.2		7		97				<0.2		3.1	
						11.2	0.7	161	27.5		7.5		24.1		75.1		5.2		63.2		8		97				<0.2		2.8	
C3	Sunny	Moderate	08:43	11.3	Surface	1.0	0.6	264	27.7	27.7	7.6	7.6	22.4	22.4	71.7	71.7	5.0	4.9	5.7	15.2	8	9	87	92	822112	817822	<0.2	<0.2	2.0	2.1
						1.0	0.7	286	27.7		7.6		22.4		71.7		5.0		5.7		9		87				<0.2		2.0	
					Middle	5.7	0.8	256	27.2	27.2	7.6	7.6	24.7	24.7	70.0	70.0	4.8		11.1		9		88				<0.2		2.3	
						5.7	0.8	275	27.2		7.6		24.7		70.0		4.8		11.1		8		89				<0.2		2.1	
					Bottom	10.3	0.4	280	26.7	26.7	7.6	7.6	27.2	27.2	71.2	71.2	4.9	4.9	28.7		9		100				<0.2		2.1	
						10.3	0.4	293	26.7		7.6		27.2		71.2		4.9		28.7		9		101				<0.2		1.8	
IM1	Sunny	Moderate	09:57	7.8	Surface	1.0	0.7	339	27.3	27.3	7.6	7.6	25.2	25.2	75.8	75.8	5.2	5.2	3.8	18.8	9	9	89	92	818333	806454	<0.2	<0.2	1.5	1.6
						1.0	0.7	312	27.3		7.6		25.2		75.8		5.2		3.8		9		90				<0.2		1.6	
					Middle	3.9	0.6	1	27.1	27.1	7.6	7.6	25.4	25.4	74.1	74.0	5.1		4.8		7		91				<0.2		1.7	
						3.9	0.7	1	27.1		7.6		25.4		73.9		5.1		5.4		8		92				<0.2		1.7	
					Bottom	6.8	0.5	329	26.2	26.2	7.6	7.6	28.6	28.6	69.8	69.9	4.8	4.8	47.6		12		95				<0.2		1.5	
						6.8	0.6	354	26.2		7.6		28.6		69.9		4.8		47.4		11		95				<0.2		1.5	
IM2	Sunny	Moderate	10:04	8.9	Surface	1.0	0.7	354	27.2	27.2	7.6	7.6	25.5	25.5	75.3	75.3	5.2	5.1	4.3	17.1	6	6	89	92	818833	806210	<0.2	<0.2	1.6	1.7
						1.0	0.7	326	27.2		7.6		25.5		75.2		5.2		4.3		5		89				<0.2		1.6	
					Middle	4.5	0.6	358	26.9	26.9	7.6	7.6	26.0	26.0	72.4	72.4	5.0		10.2		5		92				<0.2		1.6	
						4.5	0.6	329	26.9		7.6		26.0		72.3		5.0		10.4		4		91				<0.2		1.8	
					Bottom	7.9	0.4	349	26.2	26.2	7.6	7.6	28.8	28.8	70.2	70.2	4.8	4.8	36.6		7		94				<0.2		1.7	
						7.9	0.5	354	26.2		7.6		28.8		70.2		4.8		36.6		7		95				<0.2		1.7	
IM3	Sunny	Moderate	10:09	8.7	Surface	1.0	0.5	34	27.1	27.1	7.6	7.6	25.0	25.0	72.8	72.8	5.0	5.0	6.7	34.8	7	25	89	92	819400	806009	<0.2	<0.2	1.8	1.6
						1.0	0.6	36	27.1		7.6		25.0		72.8		5.0		6.7		7		89				<0.2		1.9	
					Middle	4.4	0.5	33	26.7	26.7	7.6	7.6	26.4	26.4	70.4	70.5	4.9		17.2		9		92				<0.2		1.8	
						4.4	0.6	34	26.7		7.6		26.4		70.5		4.9		17.2		8		91				<0.2		1.5	
					Bottom	7.7	0.4	30	26.1	26.1	7.6	7.6	28.9	28.9	69.1	69.1	4.8	4.8	80.4		62		94				<0.2		1.2	
						7.7	0.4	31	26.1		7.6		28.9		69.1		4.8		80.4		57		95				<0.2		1.2	
IM4	Sunny	Moderate	10:17	8.2	Surface	1.0	0.5	21	27.7	27.7	7.6	7.6	22.3	22.3	74.2	74.2	5.2	5.0	7.7	63.3	7	15	90	93	819564	805029	<0.2	<0.2	2.3	2.1
						1.0	0.6	21	27.7		7.6		22.3		74.2		5.2		7.8		8		89				<0.2		2.1	
					Middle	4.1	0.6	30	26.3	26.3	7.6	7.6	28.3	28.3	69.0	69.0	4.8		30.7		6		92				<0.2		2.1	
						4.1	0.6	32	26.3		7.6		28.3		69.0		4.8		30.7		6		93				<0.2		2.2	
					Bottom	7.2	0.4	22	26.0	26.0	7.6	7.6	29.0	29.0	68.4	68.4	4.7	4.7	151.3		31		96				<0.2		1.9	
						7.2	0.4	23	26.0		7.6		29.0		68.4		4.7		151.5		32		95				<0.2		1.7	
IM5	Sunny	Moderate	10:28	7.3	Surface	1.0	0.7	31	27.4	27.4	7.6	7.6	23.5	23.5	72.7	72.7	5.1	4.9	9.9	54.2	7	11	89	93	820582	804930	<0.2	<0.2	1.8	1.7
						1.0	0.8	31	27.4		7.6		23.5		72.7		5.1		9.9		6		89				<0.2		1.8	
					Middle	3.7	0.7	32	26.1	26.1	7.6	7.6	28.7	28.7	68.7	68.7	4.7		58.3		6		93				<0.2		1.8	
						3.7	0.7	34	26.1		7.6		28.7		68.7		4.7		58.3		7		93				<0.2		2.0	
					Bottom	6.3	0.5	21	26.0	26.0	7.6	7.6	29.0	29.0	69.7	69.7	4.8	4.8	94.5		21		95				<0.2		1.6	
						6.3	0.5	21	26.0		7.6		29.0		69.7		4.8		94.4		19		96				<0.2		1.4	
IM6	Sunny	Moderate	10:37	6.9	Surface	1.0	0.5	26	27.7	27.7	7.6	7.6	22.6	22.6	75.0	75.0	5.2	5.0	4.7	71.1	8	11	89	92	821045	805815	<0.2	<0.2	2.1	1.9
						1.0	0.5	28	27.7		7.6		22.6		75.0		5.2		4.7		7		89				<0.2		2.0	
					Middle	3.5	0.3	36	26.7	26.7	7.6	7.6	26.2	26.2	69.5	69.5	4.8		57.8		10		91				<0.2		1.9	
						3.5	0.4	39	26.7		7.6		26.2		69.5		4.8		60.4		8		91				<0.2		1.9	
					Bottom	5.9	0.3	74	26.3	26.3	7.6	7.6	27.7	27.7	69.2	69.2	4.8	4.8	149.6		17		94				<0.2		1.6	
						5.9	0.3	75	26.3		7.6		27.7		69.2		4.8		149.6		17		95				<0.2		1.6	
IM7	Sunny	Moderate	10:50	8.9	Surface	1.0	0.3	43	28.0	28.0	7.6	7.6	20.7	20.7	75.3	75.3	5.3	5.2	7.9	49.3	7	11	87	91	821358	806854	<0.2	<0.2	2.2	1.9
						1.0	0.4	45	28.0		7.6		20.7		75.3		5.3		7.9		5		88				<0.2		2.1	
					Middle	4.5	0.6	38	27.1	27.1	7.6	7.6	25.4	25.4	73.1	73.1	5.1		25.7		6		90				<0.2		2.2	
						4.5	0.6	38	27.1		7.6		25.4		73.1		5.1		25.7		7		91				<0.2		2.4	
					Bottom	7.9	0.5	57	26.6	26.6	7.6	7.6	27.3	27.3	71.9	71.9	5.0	5.0	115.1		19		94				<0.2		1.4	
						7.9	0.5	62	26.6		7.6		27.3		71.9		5.0		113.5		20		94				<0.2		1.3	
IM8	Sunny	Rough	10:10	8.8	Surface	1.0	0.3	34	28.5	28.5	7.5	7.5	16.2	16.2	71.2	71.2	5.1	5.0	7.9	12.5	7	9	91	94	821701	807839	<0.2	<0.2	2.0	2.1
						1.0	0.3	34	28.5		7.5		16.2		71.2		5.1		7.9		8		91				<0.2		2.0	
					Middle	4.4	0.3	35	28.1	28.1	7.5	7.5	19.0	19.0	68.5	68.5	4.8		14.1		9		94				<0.2		2.2	
						4.4	0.4	38	28.1		7.5		19.0		68.5		4.8		14.1		7		93				<0.2		2.2	
					Bottom	7.8	0.2	56	27.9	27.9	7.5	7.5	21.4	21.4	70.1	70.1	4.9	4.9	15.5		10		99				<0.2		2.0	
						7.8	0.2	58	27.9		7.5		21.4		70.1		4.9		15.5		12		98				<0.2		2.3	

DA: Depth-Averaged

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

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

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Water Quality Monitoring

Water Quality Monitoring Results on 26 August 17 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Sunny	Moderate	10:01	7.7	Surface	1.0	0.3	351	28.4	28.4	7.6	7.6	17.7	17.7	72.5	72.5	5.1	5.1	11.2	18.1	8	20	90	94	822086	808799	<0.2	<0.2	2.8	2.6
						1.0	0.3	323	28.4		7.6		17.7		72.5		5.1		11.2		10		90				<0.2		2.8	
					Middle	3.9	0.4	327	28.2	28.2	7.6	7.6	19.6	19.6	72.1	72.1	5.0		14.0		13		93				<0.2		2.6	
						3.9	0.4	347	28.2		7.6		19.6		72.1		5.0		14.0		12		94				<0.2		2.7	
					Bottom	6.7	0.4	316	28.0	28.0	7.6	7.6	20.3	20.3	73.1	73.2	5.1	5.1	29.1		40		98				<0.2		2.4	
						6.7	0.4	317	28.0		7.6		20.3		73.2		5.1		28.9		37		98				<0.2		2.3	
IM10	Sunny	Moderate	09:53	6.6	Surface	1.0	0.7	302	28.0	28.0	7.6	7.6	20.8	20.8	70.4	70.4	4.9	4.9	11.4	28.7	8	**46**	91	95	822228	809853	<0.2	<0.2	2.2	2.1
						1.0	0.8	319	28.0		7.6		20.8		70.4		4.9		11.4		7		92				<0.2		2.2	
					Middle	3.3	0.4	301	27.8	27.8	7.6	7.6	21.6	21.6	70.0	70.0	4.9		16.5		7		94				<0.2		2.4	
						3.3	0.5	322	27.8		7.6		21.6		70.0		4.9		16.5		7		95				<0.2		1.9	
					Bottom	5.6	0.3	291	27.4	27.4	7.6	7.6	23.6	23.6	68.6	68.6	4.8	4.8	58.1		118		98				<0.2		1.9	
						5.6	0.3	297	27.4		7.6		23.6		68.6		4.8		58.1		127		99				<0.2		2.0	
IM11	Sunny	Moderate	09:40	8.0	Surface	1.0	0.6	279	28.3	28.3	7.6	7.6	20.3	20.3	72.7	72.7	5.1	5.0	10.6	28.5	7	**40**	89	94	821496	810534	<0.2	<0.2	2.3	2.1
						1.0	0.7	289	28.3		7.6		20.3		72.7		5.1		10.6		6		90				<0.2		2.3	
					Middle	4.0	0.5	288	27.8	27.8	7.6	7.6	23.8	23.8	70.8	70.8	4.9		19.1		6		93				<0.2		2.2	
						4.0	0.5	290	27.8		7.6		23.8		70.8		4.9		19.1		6		94				<0.2		2.3	
					Bottom	7.0	0.4	297	27.4	27.4	7.6	7.6	24.4	24.4	73.1	73.1	5.0	5.0	55.7		108		99				<0.2		1.6	
						7.0	0.4	321	27.4		7.6		24.4		73.1		5.0		55.7		109		98				<0.2		1.6	
IM12	Sunny	Moderate	09:33	7.1	Surface	1.0	0.8	270	28.0	28.0	7.6	7.6	21.5	21.5	71.7	71.7	5.0	4.9	9.3	32.4	8	**43**	86	93	821161	811537	<0.2	<0.2	2.6	2.3
						1.0	0.9	280	28.0		7.6		21.5		71.7		5.0		9.3		8		87				<0.2		2.6	
					Middle	3.6	0.6	276	27.5	27.5	7.6	7.6	23.8	23.8	69.3	69.3	4.8		27.1		11		92				<0.2		2.4	
						3.6	0.7	284	27.5		7.6		23.8		69.3		4.8		27.1		10		92				<0.2		2.1	
					Bottom	6.1	0.3	279	27.4	27.4	7.6	7.6	24.4	24.4	68.2	68.2	4.7	4.7	60.9		116		100				<0.2		1.8	
						6.1	0.3	291	27.4		7.6		24.4		68.2		4.7		60.9		107		99				<0.2		2.0	
SR2	Sunny	Moderate	09:04	4.5	Surface	1.0	0.1	179	27.8	27.8	7.6	7.6	22.1	22.1	72.3	72.3	5.0	5.0	10.0	14.0	11	13	90	93	821482	814173	<0.2	<0.2	2.5	2.3
						1.0	0.1	190	27.8		7.6		22.1		72.3		5.0		10.0		13		91				<0.2		2.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.2	184	27.4	27.4	7.6	7.6	24.0	24.0	72.7	72.7	5.0	5.0	18.0		15		95				<0.2		2.0	
						3.5	0.2	189	27.4		7.6		24.0		72.7		5.0		18.0		14		96				<0.2		2.1	
SR3	Sunny	Rough	10:16	9.2	Surface	1.0	0.3	7	28.6	28.6	7.5	7.5	16.4	16.4	71.0	71.0	5.0	4.9	8.4	13.3	9	12	-	-	822146	807580	-	-	-	-
						1.0	0.3	7	28.6		7.5		16.4		71.0		5.0		8.4		8		-				-		-	
					Middle	4.6	0.3	6	28.0	28.0	7.6	7.6	19.7	19.7	68.2	68.2	4.8		14.0		11		-				-		-	
						4.6	0.3	6	28.0		7.6		19.7		68.2		4.8		14.0		12		-				-		-	
					Bottom	8.2	0.2	54	27.5	27.5	7.6	7.6	22.3	22.3	68.5	68.5	4.8	4.8	17.4		15		-				-		-	
						8.2	0.3	59	27.5		7.6		22.3		68.5		4.8		17.4		15		-				-		-	
SR4A	Sunny	Moderate	09:18	9.3	Surface	1.0	0.5	276	27.3	27.3	7.6	7.6	25.2	25.2	73.2	73.2	5.0	5.0	10.8	14.2	13	14	-	-	817188	807829	-	-	-	-
						1.0	0.5	278	27.3		7.6		25.2		73.2		5.0		10.9		13		-				-		-	
					Middle	4.7	0.4	272	27.1	27.1	7.6	7.6	25.4	25.4	72.1	72.1	5.0		12.9		13		-				-		-	
						4.7	0.4	288	27.1		7.6		25.4		72.0		5.0		12.9		13		-				-		-	
					Bottom	8.3	0.3	277	26.4	26.4	7.6	7.6	28.0	28.0	69.2	69.2	4.8	4.8	18.8		16		-				-		-	
						8.3	0.4	304	26.4		7.6		28.0		69.2		4.8		18.7		15		-				-		-	
SR5A	Sunny	Moderate	09:01	5.4	Surface	1.0	0.2	313	27.4	27.4	7.6	7.6	24.5	24.5	74.9	74.9	5.2	5.2	14.4	18.5	15	16	-	-	816575	810698	-	-	-	-
						1.0	0.2	339	27.4		7.6		24.5		74.9		5.2		14.5		17		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	0.1	336	27.4	27.4	7.5	7.5	24.6	24.6	75.4	75.5	5.2	5.2	22.3		16		-				-		-	
						4.4	0.1	309	27.4		7.5		24.6		75.5		5.2		22.6		16		-				-		-	
SR6	Sunny	Moderate	08:33	3.9	Surface	1.0	0.3	263	27.5	27.5	7.5	7.5	22.6	22.6	75.2	75.2	5.2	5.2	11.6	14.6	8	10	-	-	817904	814665	-	-	-	-
						1.0	0.4	265	27.5		7.5		22.6		75.2		5.2		10.1		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.9	0.2	258	27.4	27.4	7.5	7.5	24.0	24.0	73.0	73.1	5.1	5.1	18.2		12		-				-		-	
						2.9	0.2	275	27.4		7.5		24.0		73.1		5.1		18.3		12		-				-		-	
SR7	Sunny	Moderate	07:57	16.5	Surface	1.0	0.2	221	27.5	27.5	7.6	7.6	22.9	22.9	72.7	72.7	5.1	5.0	4.0	4.2	6	6	-	-	823637	823759	-	-	-	-
						1.0	0.2	241	27.5		7.6		22.9		72.7		5.1		4.0		6		-				-		-	
					Middle	8.3	0.1	120	27.1	27.1	7.6	7.6	25.3	25.3	69.1	69.1	4.8		4.3		4		-				-		-	
						8.3	0.1	127	27.1		7.6		25.3		69.1		4.8		4.3		6		-				-		-	
					Bottom	15.5	0.3	117	26.9	26.9	7.6	7.6	26.6	26.6	68.8	68.8	4.7	4.7	4.2		6		-				-		-	
						15.5	0.3	128	26.9		7.6		26.6		68.8		4.7		4.2		7		-				-		-	
SR8	Sunny	Moderate	09:20	4.2	Surface	1.0	0.0	0	28.4	28.4	7.5	7.5	19.9	19.9	74.0	74.0	5.2	5.2	13.9	18.4	10	16	-	-	820246	811418	-	-	-	-
						1.0	0.0	0	28.4		7.5		19.9		74.0		5.2		13.9		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.0	0	27.9	27.9	7.5	7.5	20.6	20.6	73.9	73.9	5.2	5.2	22.8		24		-				-		-	
						3.2	0.0	0	27.9		7.5		20.6		73.9		5.2		22.8		23		-				-		-	

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 29 August 17 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Sunny	Moderate	17:42	8.7	Surface	1.0	0.2	229	28.2	28.2	7.5	7.5	12.9	12.9	80.2	80.3	5.8	5.7	8.7	26.7	4	4	87	89	815607	804237	<0.2	<0.2	2.7	1.9
						1.0	0.3	230	28.2		7.5		12.9		80.3		5.8		8.7		4		86				<0.2		2.7	
					Middle	4.4	0.1	61	26.6	26.6	7.6	7.6	22.8	22.8	79.4	79.4	5.6		12.7		4		89				<0.2		2.3	
						4.4	0.1	61	26.6		7.6		22.8		79.4		5.6		12.7		4		88				<0.2		2.3	
					Bottom	7.7	0.0	34	25.9	25.9	7.7	7.7	30.0	30.0	77.8	77.8	5.3	5.3	58.6		5		92				<0.2		0.6	
						7.7	0.0	36	25.9		7.7		30.0		77.8		5.3		58.6		4		91				<0.2		0.8	
C2	Sunny	Moderate	16:40	12.0	Surface	1.0	0.1	200	28.6	28.6	7.5	7.5	13.3	13.3	79.4	79.4	5.7	5.6	9.6	9.3	6	5	87	90	825673	806952	<0.2	<0.2	2.7	2.7
						1.0	0.1	216	28.6		7.5		13.3		79.4		5.7		9.6		5		86				<0.2		2.8	
					Middle	6.0	0.1	149	26.9	26.9	7.6	7.6	23.4	23.4	78.2	78.2	5.5		8.7		6		90				<0.2		2.6	
						6.0	0.1	152	26.9		7.6		23.4		78.2		5.5		8.7		5		90				<0.2		3.0	
					Bottom	11.0	0.3	183	26.7	26.7	7.6	7.6	24.3	24.3	77.8	77.8	5.4	5.4	9.5		5		92				<0.2		2.6	
						11.0	0.3	200	26.7		7.6		24.3		77.8		5.4		9.5		4		92				<0.2		2.4	
C3	Sunny	Moderate	18:26	12.4	Surface	1.0	0.1	4	27.1	27.1	7.6	7.6	21.0	21.0	79.9	79.9	5.7	5.6	8.3	13.0	5	4	89	92	822102	817801	<0.2	<0.2	2.5	2.6
						1.0	0.1	4	27.1		7.6		21.0		79.9		5.7		8.3		4		90				<0.2		2.4	
					Middle	6.2	0.1	222	26.5	26.5	7.6	7.6	24.5	24.5	78.3	78.3	5.5		10.4		4		91				<0.2		2.6	
						6.2	0.1	238	26.5		7.6		24.5		78.3		5.5		10.4		4		91				<0.2		2.9	
					Bottom	11.4	0.0	200	26.2	26.2	7.6	7.6	28.5	28.5	77.0	77.0	5.3	5.3	20.3		4		95				<0.2		2.7	
						11.4	0.0	212	26.2		7.6		28.5		77.0		5.3		20.3		3		95				<0.2		2.5	
IM1	Sunny	Moderate	17:24	7.4	Surface	1.0	0.3	142	27.8	27.8	7.6	7.6	17.4	17.4	81.9	81.9	5.8	5.8	6.7	11.6	6	6	87	90	818349	806440	<0.2	<0.2	2.7	2.1
						1.0	0.3	154	27.8		7.6		17.4		81.9		5.8		6.7		6		87				<0.2		2.5	
					Middle	3.7	0.1	137	26.9	26.9	7.6	7.6	21.8	21.8	80.2	80.2	5.7		7.4		5		89				<0.2		1.7	
						3.7	0.2	138	26.9		7.6		21.8		80.2		5.7		7.4		6		90				<0.2		1.6	
					Bottom	6.4	0.1	93	26.3	26.3	7.6	7.6	27.0	27.0	77.4	77.4	5.4	5.4	20.6		6		92				<0.2		2.0	
						6.4	0.1	94	26.3		7.6		26.9		77.4		5.4		20.6		8		93				<0.2		1.8	
IM2	Sunny	Moderate	17:19	8.3	Surface	1.0	0.4	231	27.8	27.8	7.6	7.6	17.6	17.6	81.9	81.9	5.8	5.8	6.2	6.8	5	6	87	90	818837	806196	<0.2	<0.2	2.6	2.0
						1.0	0.5	253	27.8		7.6		17.6		81.9		5.8		6.2		7		88				<0.2		2.3	
					Middle	4.2	0.2	230	26.8	26.8	7.7	7.7	23.0	23.0	80.4	80.4	5.7		6.9		5		89				<0.2		1.8	
						4.2	0.2	238	26.8		7.7		23.0		80.4		5.7		6.9		6		90				<0.2		1.7	
					Bottom	7.3	0.0	341	26.3	26.3	7.7	7.7	27.1	27.1	79.9	79.9	5.5	5.5	7.2		6		93				<0.2		1.8	
						7.3	0.0	314	26.3		7.7		27.1		79.9		5.5		7.2		8		93				<0.2		1.9	
IM3	Sunny	Moderate	17:11	8.5	Surface	1.0	0.3	205	28.0	28.0	7.6	7.6	18.0	18.0	82.1	82.1	5.8	5.7	6.0	8.4	7	7	87	90	819423	806007	<0.2	<0.2	2.5	1.9
						1.0	0.3	214	28.0		7.6		18.0		82.1		5.8		6.0		5		86				<0.2		2.6	
					Middle	4.3	0.1	172	26.8	26.8	7.7	7.7	23.1	23.1	80.0	80.0	5.6		6.6		6		91				<0.2		2.3	
						4.3	0.1	183	26.8		7.7		23.1		80.0		5.6		6.7		5		91				<0.2		2.4	
					Bottom	7.5	0.1	16	26.0	26.0	7.7	7.7	29.7	29.7	77.1	77.1	5.3	5.3	12.4		9		93				<0.2		0.8	
						7.5	0.1	16	26.0		7.7		29.7		77.1		5.3		12.4		8		93				<0.2		1.0	
IM4	Sunny	Moderate	17:03	7.9	Surface	1.0	0.2	215	28.3	28.3	7.7	7.7	18.8	18.8	85.0	85.0	6.0	5.9	6.0	6.1	4	8	87	90	819568	805049	<0.2	<0.2	2.3	1.8
						1.0	0.2	232	28.3		7.6		18.8		85.0		6.0		6.0		6		86				<0.2		2.4	
					Middle	4.0	0.1	159	26.7	26.7	7.7	7.7	25.1	25.1	81.2	81.2	5.7		5.7		5		89				<0.2		2.0	
						4.0	0.1	170	26.7		7.7		25.1		81.2		5.7		5.6		5		90				<0.2		2.1	
					Bottom	6.9	0.0	176	26.3	26.3	7.7	7.7	27.4	27.4	80.3	80.3	5.6	5.6	6.6		13		93				<0.2		0.9	
						6.9	0.0	187	26.3		7.7		27.4		80.3		5.6		6.7		13		92				<0.2		0.9	
IM5	Sunny	Moderate	16:52	7.0	Surface	1.0	0.3	228	28.9	28.9	7.6	7.6	11.6	11.6	81.8	81.8	5.9	5.9	8.7	12.0	6	6	86	90	820546	804917	<0.2	<0.2	2.6	2.2
						1.0	0.3	235	28.9		7.6		11.6		81.8		5.9		8.8		6		87				<0.2		2.7	
					Middle	3.5	0.2	240	27.6	27.6	7.6	7.6	18.6	18.6	81.3	81.3	5.8		9.4		6		90				<0.2		2.3	
						3.5	0.2	256	27.6		7.6		18.6		81.3		5.8		9.5		6		89				<0.2		2.6	
					Bottom	6.0	0.0	193	26.0	26.0	7.7	7.7	29.9	29.9	77.2	77.3	5.3	5.3	17.7		6		93				<0.2		1.6	
						6.0	0.0	202	26.0		7.7		29.9		77.3		5.3		18.0		6		94				<0.2		1.5	
IM6	Sunny	Moderate	16:44	6.8	Surface	1.0	0.1	238	28.3	28.3	7.5	7.5	11.6	11.6	79.9	79.9	5.8	5.8	9.5	11.6	4	12	86	90	821054	805837	<0.2	<0.2	2.3	2.1
						1.0	0.1	245	28.3		7.5		11.6		79.9		5.8		9.5		5		87				<0.2		2.5	
					Middle	3.4	0.1	292	27.6	27.6	7.7	7.7	19.2	19.2	81.4	81.4	5.8		10.1		10		91				<0.2		2.6	
						3.4	0.1	296	27.6		7.7		19.2		81.4		5.8		10.1		9		91				<0.2		2.6	
					Bottom	5.8	0.1	133	26.1	26.1	7.7	7.7	29.3	29.3	78.2	78.3	5.4	5.4	15.3		21		94				<0.2		1.2	
						5.8	0.1	139	26.1		7.7		29.3		78.3		5.4		15.3		23		93				<0.2		1.4	
IM7	Sunny	Moderate	16:36	8.3	Surface	1.0	0.2	209	28.3	28.3	7.5	7.5	13.4	13.4	78.0	78.0	5.7	5.7	9.4	14.0	4	13	87	91	821331	806838	<0.2	<0.2	2.6	2.0
						1.0	0.2	220	28.3		7.5		13.4		78.0		5.7		9.5		6		87				<0.2		2.4	
					Middle	4.2	0.2	233	27.4	27.4	7.6	7.6	18.0	18.1	77.8	77.9	5.6		12.0		7		91				<0.2		2.1	
						4.2	0.3	239	27.4		7.6		18.1		77.9		5.6		12.1		7		92				<0.2		2.1	
					Bottom	7.3	0.1	74	26.5	26.5	7.7	7.7	25.7	25.7	78.8	78.8	5.5	5.5	20.4		25		93				<0.2		1.3	
						7.3	0.1	76	26.5		7.7		25.7		78.8		5.5		20.4		26		93				<0.2		1.5	
IM8	Sunny	Moderate	17:04	8.1	Surface	1.0	0.2	182	28.1	28.1	7.5	7.5	12.8	12.8	76.6	76.6	5.6	5.5	10.3	13.3	6	5	86	89	821706	807853	<0.2	<0.2	2.8	2.9
						1.0	0.3	193	28.1		7.5		12.8		76.6		5.6		10.3		4		86				<0.2		2.7	
					Middle	4.1	0.1	171	27.1	27.1	7.5	7.5	20.0	20.0	75.6	75.6	5.4		10.7		4		89				<0.2		3.1	
						4.1	0.1	179	27.1		7.5		20.0		75.6		5.4		10.7		5		90				<0.2		3.0	
					Bottom	7.1	0.0	162	26.6	26.6	7.6	7.6	24.4	24.4	80.9	80.9	5.7	5.7	18.8		4		91				<0.2		3.0	
						7.1	0.0	175	26.6		7.6		24.4		80.9		5.7		18.8		6		91				<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 29 August 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	17:12	7.1	Surface	1.0	0.1	136	28.3	28.3	7.5	7.5	12.2	12.2	79.7	79.7	5.8	5.7	12.8	21.7	4	5	87	90	822083	808800	<0.2	<0.2	3.6	3.4
						1.0	0.2	141	28.3		7.5		12.2		79.7		5.8		12.8		5		87				<0.2		3.6	
					Middle	3.6	0.2	107	27.7	27.7	7.5	7.5	18.7	18.7	77.6	77.6	5.5		17.8		4		91				<0.2		3.3	
						3.6	0.2	112	27.7		7.5		18.7		77.6		5.5		17.8		5		90				<0.2		3.3	
					Bottom	6.1	0.2	80	26.7	26.7	7.6	7.6	23.7	23.7	75.7	75.7	5.3	5.3	34.4		6		91				<0.2		3.3	
						6.1	0.2	83	26.7		7.6		23.7		75.7		5.3		34.4		5		92				<0.2		3.0	
IM10	Sunny	Moderate	17:19	7.0	Surface	1.0	0.3	111	28.2	28.2	7.5	7.5	13.1	13.1	80.7	80.7	5.9	5.8	10.4	12.1	5	6	88	90	822249	809822	<0.2	<0.2	3.5	3.3
						1.0	0.3	119	28.2		7.5		13.1		80.7		5.9		10.4		7		88				<0.2		3.2	
					Middle	3.5	0.3	96	27.1	27.1	7.6	7.6	19.4	19.4	78.7	78.7	5.6		9.4		5		90				<0.2		3.3	
						3.5	0.3	96	27.1		7.6		19.4		78.7		5.6		9.4		5		91				<0.2		3.2	
					Bottom	6.0	0.2	86	26.6	26.6	7.6	7.6	24.2	24.2	77.2	77.2	5.4	5.4	16.4		5		92				<0.2		3.4	
						6.0	0.2	93	26.6		7.6		24.2		77.2		5.4		16.4		7		93				<0.2		3.2	
IM11	Sunny	Moderate	17:33	8.8	Surface	1.0	0.2	96	28.0	28.0	7.5	7.5	14.4	14.4	80.8	80.8	5.8	5.7	9.4	13.1	4	5	88	91	821492	810541	<0.2	<0.2	3.1	2.4
						1.0	0.3	104	28.0		7.5		14.4		80.8		5.8		9.4		5		87				<0.2		3.1	
					Middle	4.4	0.3	101	26.6	26.6	7.6	7.6	23.3	23.3	77.7	77.7	5.5		12.2		5		91				<0.2		2.0	
						4.4	0.3	105	26.6		7.6		23.3		77.7		5.5		12.2		5		91				<0.2		2.0	
					Bottom	7.8	0.1	27	26.4	26.4	7.6	7.6	26.0	26.0	77.0	77.0	5.4	5.4	17.8		5		93				<0.2		1.9	
						7.8	0.1	28	26.4		7.6		26.0		77.0		5.4		17.8		7		94				<0.2		2.2	
IM12	Sunny	Moderate	17:39	8.7	Surface	1.0	0.3	99	27.9	27.9	7.5	7.5	15.0	15.0	81.9	81.9	5.9	5.7	8.6	12.0	4	6	88	91	821148	811508	<0.2	<0.2	2.1	2.3
						1.0	0.3	100	27.9		7.5		15.0		81.9		5.9		8.6		6		89				<0.2		1.8	
					Middle	4.4	0.2	117	26.7	26.7	7.6	7.6	23.7	23.7	76.9	76.9	5.4		10.2		6		92				<0.2		2.2	
						4.4	0.2	128	26.7		7.6		23.7		76.9		5.4		10.2		7		91				<0.2		2.4	
					Bottom	7.7	0.1	354	26.3	26.3	7.6	7.6	27.5	27.5	72.7	72.7	5.0	5.0	17.2		5		93				<0.2		2.5	
						7.7	0.1	357	26.3		7.6		27.5		72.7		5.0		17.2		5		93				<0.2		2.6	
SR2	Sunny	Moderate	18:04	4.5	Surface	1.0	0.3	77	27.6	27.6	7.6	7.6	19.0	19.0	83.8	83.8	6.0	6.0	8.2	8.6	6	7	88	90	821445	814173	<0.2	<0.2	2.4	2.4
						1.0	0.3	84	27.6		7.6		19.0		83.8		6.0		8.2		8		89				<0.2		2.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.3	77	27.3	27.3	7.6	7.6	20.7	20.7	85.2	85.3	6.0	6.0	9.0		6		91				<0.2		2.4	
						3.5	0.3	81	27.3		7.6		20.7		85.3		6.0		8.9		6		91				<0.2		2.3	
SR3	Sunny	Moderate	16:59	8.6	Surface	1.0	0.2	173	27.6	27.6	7.5	7.5	14.0	14.0	76.5	76.5	5.6	5.5	10.4	11.2	5	6	-	-	822162	807557	-	-	-	-
						1.0	0.2	186	27.6		7.5		14.0		76.5		5.6		10.4		6		-				-		-	
					Middle	4.3	0.3	164	26.9	26.9	7.5	7.5	21.9	21.9	76.8	76.8	5.4		11.4		6		-				-		-	
						4.3	0.3	166	26.9		7.5		21.9		76.8		5.4		11.4		7		-				-		-	
					Bottom	7.6	0.1	25	26.9	26.9	7.5	7.5	24.4	24.4	84.0	84.0	5.9	5.9	11.9		5		-				-		-	
						7.6	0.1	26	26.9		7.5		24.4		84.0		5.9		11.9		5		-				-		-	
SR4A	Sunny	Moderate	18:11	8.4	Surface	1.0	0.2	240	27.9	27.9	7.6	7.6	19.8	19.8	85.2	85.2	6.0	5.9	9.6	14.6	5	9	-	-	817175	807821	-	-	-	-
						1.0	0.2	253	27.8		7.6		19.8		85.1		6.0		9.7		5		-				-		-	
					Middle	4.2	0.1	46	26.9	26.9	7.6	7.6	22.6	22.6	81.2	81.2	5.7		14.2		5		-				-		-	
						4.2	0.1	50	26.9		7.6		22.6		81.2		5.7		14.2		6		-				-		-	
					Bottom	7.4	0.2	37	26.1	26.1	7.6	7.6	28.0	28.0	77.1	77.1	5.3	5.3	20.0		17		-				-		-	
						7.4	0.2	38	26.1		7.6		28.0		77.1		5.3		20.1		16		-				-		-	
SR5A	Sunny	Moderate	18:27	4.6	Surface	1.0	0.0	324	27.3	27.3	7.6	7.6	21.7	21.7	81.4	81.4	5.7	5.7	9.2	10.4	9	10	-	-	816609	810693	-	-	-	-
						1.0	0.0	355	27.3		7.6		21.7		81.3		5.7		9.3		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.0	247	26.7	26.7	7.5	7.5	23.2	23.2	78.9	79.0	5.6	5.6	11.5		11		-				-		-	
						3.6	0.0	262	26.7		7.5		23.2		79.0		5.6		11.5		12		-				-		-	
SR6	Sunny	Moderate	18:52	4.0	Surface	1.0	0.2	252	27.7	27.7	7.5	7.5	17.8	17.8	81.8	81.8	5.8	5.8	9.8	12.8	4	5	-	-	817918	814679	-	-	-	-
						1.0	0.2	253	27.7		7.5		17.8		81.8		5.8		9.8		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	0.1	256	27.2	27.2	7.5	7.5	20.3	20.3	78.2	78.3	5.5	5.6	16.0		5		-				-		-	
						3.0	0.1	272	27.2		7.5		20.3		78.3		5.6		15.5		6		-				-		-	
SR7	Sunny	Moderate	18:56	17.2	Surface	1.0	0.4	88	27.5	27.5	7.5	7.5	20.2	20.2	83.7	83.7	5.9	5.7	6.8	8.9	4	5	-	-	823621	823738	-	-	-	-
						1.0	0.4	92	27.5		7.5		20.2		83.7		5.9		6.8		4		-				-		-	
					Middle	8.6	0.1	165	26.4	26.4	7.6	7.6	25.8	25.8	77.5	77.5	5.4		7.4		6		-				-		-	
						8.6	0.1	169	26.4		7.6		25.8		77.5		5.4		7.4		4		-				-		-	
					Bottom	16.2	0.0	330	25.9	25.9	7.6	7.6	29.9	29.9	74.9	74.9	5.2	5.2	12.6		5		-				-		-	
						16.2	0.0	340	25.9		7.6		29.9		74.9		5.2		12.6		4		-				-		-	
SR8	Sunny	Moderate	17:49	4.2	Surface	1.0	-	-	28.0	28.0	7.5	7.5	16.5	16.5	82.0	82.0	5.9	5.9	13.5	16.8	6	7	-	-	820246	811418	-	-	-	-
						1.0	-	-	28.0		7.5		16.5		82.0		5.9		13.5		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	-	-	26.8	26.8	7.6	7.6	21.7	21.7	84.3	84.3	6.0	6.0	20.1		7		-				-		-	
						3.2	-	-	26.8		7.6		21.7		84.3		6.0		20.1		7		-				-		-	

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 29 August 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	Sunny	Moderate	12:33	8.7	Surface	1.0	0.1	28	29.0	29.0	7.6	7.6	13.6	13.6	86.0	86.0	6.1	5.9	6.5	8.0	5	17	86	89	815607	804237	<0.2	<0.2	1.7	1.5
						1.0	0.1	29	29.0		7.6		13.6		86.0		6.1		6.5		6		87				<0.2		1.6	
					Middle	4.4	0.4	30	26.1	26.1	7.7	7.7	28.7	28.7	81.3	81.3	5.6		5.5		5		88				<0.2		1.2	
						4.4	0.4	31	26.1		7.7		28.7		81.2		5.6		5.5		5		89				<0.2		1.6	
					Bottom	7.7	0.3	26	25.8	25.8	7.7	7.7	31.0	31.0	78.6	78.6	5.4	5.4	11.8		41		91				<0.2		1.5	
						7.7	0.3	27	25.8		7.7		31.0		78.6		5.4		11.9		39		92				<0.2		1.3	
C2	Sunny	Moderate	14:00	10.5	Surface	1.0	0.1	18	28.0	28.0	7.5	7.5	15.0	14.9	77.6	77.6	5.6	5.5	9.0	12.8	6	6	86	89	825673	806952	<0.2	<0.2	2.2	2.7
						1.0	0.1	19	27.9		7.5		14.7		77.6		5.6		8.9		6		86				<0.2		1.9	
					Middle	5.3	0.3	309	26.9	26.9	7.5	7.5	22.8	22.8	75.4	75.4	5.3		10.5		6		90				<0.2		3.2	
						5.3	0.3	338	26.9		7.5		22.8		75.4		5.3		10.5		6		89				<0.2		3.1	
					Bottom	9.5	0.3	337	26.4	26.4	7.5	7.5	27.4	27.4	72.1	72.1	5.0	5.0	18.8		5		91				<0.2		2.8	
						9.5	0.3	350	26.4		7.5		27.4		72.1		5.0		18.8		7		91				<0.2		3.1	
C3	Sunny	Moderate	11:39	13.2	Surface	1.0	0.2	241	27.7	27.7	7.6	7.6	19.7	19.7	82.2	82.2	5.8	5.7	7.1	7.6	5	6	90	93	822102	817801	<0.2	<0.2	2.6	2.2
						1.0	0.2	256	27.7		7.6		19.7		82.2		5.8		7.1		5		89				<0.2		2.6	
					Middle	6.6	0.4	264	26.6	26.6	7.6	7.6	26.0	26.0	78.6	78.6	5.5		6.8		5		93				<0.2		2.4	
						6.6	0.4	273	26.6		7.6		26.0		78.6		5.5		6.8		5		92				<0.2		2.7	
					Bottom	12.2	0.2	273	25.8	25.8	7.6	7.6	30.4	30.4	77.2	77.2	5.3	5.3	8.9		7		96				<0.2		1.4	
						12.2	0.2	294	25.8		7.6		30.4		77.2		5.3		8.9		7		96				<0.2		1.5	
IM1	Sunny	Moderate	12:56	7.3	Surface	1.0	0.6	21	27.3	27.3	7.7	7.7	20.0	20.0	80.3	80.3	5.7	5.6	6.7	9.7	6	6	86	88	818349	806440	<0.2	<0.2	2.8	2.3
						1.0	0.6	22	27.3		7.7		20.0		80.3		5.7		6.8		4		86				<0.2		2.5	
					Middle	3.7	0.5	13	26.4	26.4	7.7	7.7	26.8	26.8	78.9	78.9	5.5		8.1		5		88				<0.2		2.4	
						3.7	0.5	13	26.4		7.7		26.7		78.9		5.5		8.2		6		88				<0.2		2.3	
					Bottom	6.3	0.4	7	26.1	26.1	7.7	7.7	29.1	29.1	77.3	77.3	5.3	5.3	14.2		9		91				<0.2		1.9	
						6.3	0.4	7	26.1		7.7		29.1		77.3		5.3		14.2		7		91				<0.2		1.8	
IM2	Sunny	Moderate	13:00	8.3	Surface	1.0	0.7	17	28.7	28.7	7.6	7.6	14.4	14.5	82.7	82.7	5.9	5.7	7.4	8.2	4	5	86	89	818837	806196	<0.2	<0.2	2.5	2.0
						1.0	0.7	17	28.7		7.6		14.6		82.7		5.9		7.3		5		87				<0.2		2.5	
					Middle	4.2	0.5	17	26.4	26.4	7.7	7.7	26.3	26.3	78.3	78.3	5.4		6.9		4		89				<0.2		2.5	
						4.2	0.5	18	26.4		7.7		26.3		78.3		5.4		7.0		4		89				<0.2		2.4	
					Bottom	7.3	0.3	14	26.1	26.1	7.7	7.7	28.9	28.9	76.5	76.5	5.3	5.3	10.3		5		92				<0.2		1.1	
						7.3	0.3	14	26.1		7.7		28.9		76.5		5.3		10.3		5		91				<0.2		1.2	
IM3	Sunny	Moderate	13:09	8.4	Surface	1.0	0.5	3	28.5	28.5	7.6	7.6	15.1	15.1	84.2	84.2	6.0	5.8	6.4	8.7	6	6	87	90	819423	806007	<0.2	<0.2	2.6	2.0
						1.0	0.5	3	28.5		7.6		15.1		84.2		6.0		6.4		4		87				<0.2		2.6	
					Middle	4.2	0.4	354	27.1	27.1	7.6	7.6	21.4	21.4	79.9	79.9	5.6		7.3		7		91				<0.2		2.6	
						4.2	0.4	359	27.1		7.6		21.4		79.9		5.6		7.3		5		90				<0.2		2.3	
					Bottom	7.4	0.2	6	26.1	26.1	7.7	7.7	29.1	29.1	75.8	75.8	5.2	5.2	12.5		9		93				<0.2		0.9	
						7.4	0.3	6	26.1		7.7		29.1		75.8		5.2		12.5		7		92				<0.2		1.0	
IM4	Sunny	Moderate	13:16	7.8	Surface	1.0	0.2	323	28.5	28.5	7.6	7.6	15.3	15.3	84.3	84.3	6.0	5.8	6.4	10.9	5	5	86	89	819568	805049	<0.2	<0.2	2.6	1.9
						1.0	0.2	340	28.5		7.6		15.3		84.2		6.0		6.4		5		86				<0.2		2.9	
					Middle	3.9	0.2	354	26.4	26.4	7.6	7.6	26.5	26.5	78.6	78.6	5.5		7.2		4		88				<0.2		1.9	
						3.9	0.3	326	26.4		7.6		26.5		78.6		5.5		7.2		4		89				<0.2		1.9	
					Bottom	6.8	0.2	343	26.0	26.0	7.7	7.7	29.5	29.5	76.7	76.7	5.3	5.3	18.8		4		92				<0.2		1.0	
						6.8	0.2	316	26.0		7.7		29.5		76.7		5.3		19.2		5		92				<0.2		0.9	
IM5	Sunny	Moderate	13:27	6.9	Surface	1.0	0.1	296	29.0	29.0	7.6	7.6	12.6	12.5	83.0	83.0	6.0	5.8	8.1	8.0	5	7	86	90	820546	804917	<0.2	<0.2	3.2	2.4
						1.0	0.1	305	29.0		7.6		12.4		83.0		6.0		8.1		6		86				<0.2		3.1	
					Middle	3.5	0.3	317	27.0	27.0	7.6	7.6	23.0	23.1	80.3	80.3	5.6		8.0		8		91				<0.2		3.1	
						3.5	0.3	346	27.0		7.6		23.1		80.3		5.6		8.0		8		91				<0.2		2.8	
					Bottom	5.9	0.2	336	26.3	26.3	7.6	7.6	27.6	27.6	79.2	79.2	5.5	5.5	7.8		8		92				<0.2		0.9	
						5.9	0.2	344	26.3		7.6		27.6		79.2		5.5		7.8		8		93				<0.2		1.1	
IM6	Sunny	Moderate	13:35	6.8	Surface	1.0	0.3	298	29.3	29.3	7.5	7.5	12.2	12.2	82.2	82.2	5.9	5.8	8.5	13.3	6	6	86	89	821054	805837	<0.2	<0.2	3.3	2.9
						1.0	0.3	303	29.3		7.5		12.2		82.2		5.9		8.5		6		86				<0.2		3.2	
					Middle	3.4	0.6	328	27.1	27.1	7.6	7.6	21.5	21.5	78.6	78.6	5.6		13.9		6		89				<0.2		3.5	
						3.4	0.7	342	27.1		7.6		21.5		78.6		5.6		13.8		6		89				<0.2		3.6	
					Bottom	5.8	0.2	356	26.3	26.3	7.6	7.6	27.9	27.9	78.8	78.8	5.4	5.4	17.5		7		91				<0.2		1.8	
						5.8	0.2	328	26.3		7.6		27.9		78.8		5.4		17.5		6		91				<0.2		1.7	
IM7	Sunny	Moderate	13:45	8.4	Surface	1.0	0.2	261	28.7	28.7	7.5	7.5	15.0	15.0	79.2	79.2	5.6	5.5	8.7	14.7	7	8	86	89	821331	806838	<0.2	<0.2	2.3	1.8
						1.0	0.2	268	28.7		7.5		15.0		79.2		5.6		8.7		5		86				<0.2		2.3	
					Middle	4.2	0.0	134	27.1	27.1	7.5	7.5	22.5	22.5	77.4	77.4	5.4		15.5		7		89				<0.2		2.0	
						4.2	0.0	144	27.1		7.5		22.5		77.4		5.4		15.5		6		89				<0.2		2.0	
					Bottom	7.4	0.3	54	26.5	26.5	7.6	7.6	26.5	26.5	75.7	75.7	5.3	5.3	19.8		12		92				<0.2		1.1	
						7.4	0.3	57	26.5		7.6		26.5		75.7		5.3		19.8		12		91				<0.2		1.1	
IM8	Sunny	Moderate	13:27	8.2	Surface	1.0	0.1	188	28.3	28.3	7.5	7.5	15.8	15.8	78.5	78.5	5.6	5.5	8.7	10.2	9	8	87	89	821706	807853	<0.2	<0.2	2.4	2.4
						1.0	0.1	197	28.3		7.5		15.8		78.5		5.6		8.7		8		87				<0.2		2.2	
					Middle	4.1	0.1	80	27.1	27.1	7.5	7.5	19.7	19.7	75.8	75.8	5.4		9.5		8		89				<0.2		2.2	
						4.1	0.1	86	27.1		7.5		19.7		75.8		5.4		9.5		7		90				<0.2		2.2	
					Bottom	7.2	0.2	54	26.7	26.7	7.5	7.5	24.2	24.2	77.2	77.2	5.4	5.4	12.3		7		92				<0.2		2.6	
						7.2	0.2	59	26.7		7.5		24.2		77.2		5.4		12.3		8		91				<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 29 August 17 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Sunny	Moderate	13:18	6.9	Surface	1.0	0.1	81	28.8	28.8	7.5	7.5	14.5	14.5	79.9	79.9	5.7	5.6	9.3	10.4	6	16	86	89	822083	808800	<0.2	<0.2	2.5	2.8
						1.0	0.1	88	28.8		7.5		14.5		79.9		5.7		9.3		6		87				<0.2		2.7	
					Middle	3.5	0.1	48	27.2	27.2	7.5	7.5	20.3	20.3	76.4	76.4	5.4		10.9		7		89				<0.2		2.7	
						3.5	0.2	49	27.2		7.5		20.3		76.4		5.4		10.9		8		89				<0.2		2.8	
					Bottom	5.9	0.1	281	26.8	26.8	7.5	7.5	23.2	23.2	77.9	77.9	5.5	5.5	10.9		34		91				<0.2		3.0	
						5.9	0.1	287	26.8		7.5		23.2		77.9		5.5		10.9		32		92				<0.2		3.1	
IM10	Sunny	Moderate	13:04	6.5	Surface	1.0	0.2	30	28.3	28.3	7.5	7.5	14.2	14.2	78.8	78.8	5.7	5.6	10.0	11.8	7	7	87	89	822249	809822	<0.2	<0.2	3.0	2.7
						1.0	0.2	30	28.3		7.5		14.2		78.8		5.7		10.0		6		87				<0.2		2.7	
					Middle	3.3	0.4	325	27.0	27.0	7.5	7.5	21.2	21.2	76.2	76.2	5.4		13.0		7		89				<0.2		2.3	
						3.3	0.4	351	27.0		7.5		21.2		76.2		5.4		13.0		7		89				<0.2		2.3	
					Bottom	5.5	0.2	314	26.9	26.9	7.5	7.5	22.1	22.1	77.5	77.5	5.5	5.5	12.4		7		91				<0.2		3.1	
						5.5	0.2	333	26.9		7.5		22.1		77.5		5.5		12.4		5		91				<0.2		2.9	
IM11	Sunny	Moderate	12:46	8.7	Surface	1.0	0.2	323	29.0	29.0	7.5	7.5	13.8	13.8	79.3	79.3	5.7	5.6	8.9	9.6	5	6	88	90	821492	810541	<0.2	<0.2	2.5	2.8
						1.0	0.2	328	29.0		7.5		13.8		79.3		5.7		8.9		5		87				<0.2		2.5	
					Middle	4.4	0.4	293	27.1	27.1	7.5	7.5	19.9	19.9	76.0	76.0	5.4		9.5		5		89				<0.2		3.0	
						4.4	0.5	307	27.1		7.5		19.9		76.0		5.4		9.5		7		90				<0.2		2.9	
					Bottom	7.7	0.2	339	26.6	26.6	7.6	7.6	25.0	25.0	77.1	77.1	5.4	5.4	10.5		6		91				<0.2		2.9	
						7.7	0.2	357	26.6		7.6		25.0		77.1		5.4		10.5		6		92				<0.2		3.0	
IM12	Sunny	Moderate	12:32	7.4	Surface	1.0	0.2	272	29.1	29.1	7.5	7.5	13.7	13.7	83.0	83.0	5.9	5.7	8.7	9.3	4	5	88	90	821148	811508	<0.2	<0.2	2.6	2.2
						1.0	0.3	288	29.1		7.5		13.7		83.0		5.9		8.7		5		89				<0.2		2.5	
					Middle	3.7	0.6	272	27.0	27.0	7.6	7.6	21.7	21.7	77.5	77.5	5.5		9.2		6		91				<0.2		2.1	
						3.7	0.6	275	27.0		7.6		21.7		77.5		5.5		9.2		5		90				<0.2		2.3	
					Bottom	6.4	0.1	294	26.5	26.5	7.6	7.6	25.3	25.3	77.8	77.8	5.4	5.4	9.9		6		92				<0.2		1.9	
						6.4	0.1	310	26.5		7.6		25.3		77.8		5.4		9.9		6		92				<0.2		1.7	
SR2	Sunny	Moderate	12:04	4.8	Surface	1.0	0.2	319	28.6	28.6	7.6	7.6	14.3	14.3	85.3	85.3	6.1	6.1	9.5	10.1	6	6	88	90	821445	814173	<0.2	<0.2	1.8	2.1
						1.0	0.2	342	28.6		7.6		14.3		85.3		6.1		9.5		4		88				<0.2		1.9	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.3	307	27.9	27.9	7.6	7.6	17.3	17.3	86.7	86.8	6.2	6.2	10.6		7		91				<0.2		2.2	
						3.8	0.3	312	27.9		7.6		17.3		86.8		6.2		10.6		6		91				<0.2		2.5	
SR3	Sunny	Moderate	13:37	8.6	Surface	1.0	0.0	136	27.8	27.8	7.5	7.5	16.6	16.6	77.0	77.0	5.5	5.4	8.9	11.0	7	5	-	-	822162	807557	-	-	-	-
						1.0	0.0	144	27.8		7.5		16.6		77.0		5.5		8.9		4		-				-		-	
					Middle	4.3	0.1	62	27.0	27.0	7.5	7.5	21.4	21.4	75.4	75.4	5.3		9.6		5		-				-		-	
						4.3	0.2	66	27.0		7.5		21.4		75.4		5.3		9.6		5		-				-		-	
					Bottom	7.6	0.1	25	26.6	26.6	7.5	7.5	24.8	24.8	77.5	77.5	5.4	5.4	14.6		5		-				-		-	
						7.6	0.1	25	26.6		7.5		24.8		77.5		5.4		14.6		5		-				-		-	
SR4A	Sunny	Moderate	12:09	9.2	Surface	1.0	0.2	217	29.0	29.0	7.6	7.6	15.9	15.9	85.6	85.6	6.0	5.6	9.6	15.0	7	8	-	-	817175	807821	-	-	-	-
						1.0	0.2	236	29.0		7.6		15.9		85.5		6.0		9.7		8		-				-		-	
					Middle	4.6	0.3	232	26.3	26.3	7.6	7.6	27.3	27.3	75.2	75.2	5.2		14.5		7		-				-		-	
						4.6	0.3	241	26.3		7.6		27.3		75.2		5.2		14.5		6		-				-		-	
					Bottom	8.2	0.2	230	26.2	26.2	7.6	7.6	28.1	28.1	76.3	76.3	5.3	5.3	20.9		11		-				-		-	
						8.2	0.2	252	26.2		7.6		28.1		76.3		5.3		20.9		10		-				-		-	
SR5A	Sunny	Moderate	11:53	4.9	Surface	1.0	0.4	332	29.1	29.1	7.7	7.7	20.4	20.4	93.9	93.9	6.4	6.4	11.9	13.4	6	10	-	-	816609	810693	-	-	-	-
						1.0	0.4	346	29.1		7.7		20.4		93.8		6.4		11.9		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	0.2	329	27.2	27.2	7.6	7.6	22.3	22.3	82.7	82.8	5.8	5.8	14.8		12		-				-		-	
						3.9	0.3	351	27.2		7.6		22.3		82.8		5.8		14.9		13		-				-		-	
SR6	Sunny	Moderate	11:22	4.4	Surface	1.0	0.3	253	29.1	29.1	7.6	7.6	17.8	17.8	88.3	88.3	6.2	6.2	7.6	10.5	4	6	-	-	817918	814679	-	-	-	-
						1.0	0.3	273	29.1		7.6		17.8		88.2		6.2		7.6		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.1	232	27.2	27.2	7.5	7.5	21.7	21.7	74.0	74.1	5.2	5.2	13.3		9		-				-		-	
						3.4	0.1	238	27.2		7.5		21.7		74.1		5.2		13.4		8		-				-		-	
SR7	Sunny	Moderate	11:08	16.5	Surface	1.0	0.2	200	28.1	28.1	7.6	7.6	20.9	20.9	87.3	87.3	6.1	5.9	6.5	6.8	5	5	-	-	823621	823738	-	-	-	-
						1.0	0.2	215	28.1		7.6		20.9		87.3		6.1		6.5		4		-				-		-	
					Middle	8.3	0.1	177	27.3	27.3	7.6	7.6	23.8	23.8	80.4	80.4	5.6		6.7		4		-				-		-	
						8.3	0.1	192	27.3		7.6		23.8		80.4		5.6		6.7		5		-				-		-	
					Bottom	15.5	0.2	342	25.6	25.6	7.7	7.7	32.1	32.1	76.2	76.2	5.2	5.2	7.1		5		-				-		-	
						15.5	0.2	315	25.6		7.7		32.1		76.2		5.2		7.1		4		-				-		-	
SR8	Sunny	Moderate	12:21	4.5	Surface	1.0	0.0	0	28.8	28.8	7.6	7.6	13.6	13.6	88.1	88.1	6.3	6.3	11.7	10.8	5	6	-	-	820246	811418	-	-	-	-
						1.0	0.0	0	28.8		7.6		13.6		88.1		6.3		11.7		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.0	0	28.6	28.6	7.5	7.5	18.9	18.9	93.3	93.3	6.5	6.5	9.8		5		-				-		-	
						3.5	0.0	0	28.6		7.5		18.9		93.3		6.5		9.8		5		-				-		-	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 31 August 17 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	08:53	9.0	Surface	1.0	0.5	176	28.6	28.6	7.5	7.5	7.1	7.1	83.8	83.8	6.2	6.0	7.5	14.2	6	5	79	83	815610	804229	<0.2	<0.2	2.4	2.1
						1.0	0.5	188	28.6		7.5		7.1		83.7		6.2		7.3		6		80				<0.2		2.6	
					Middle	4.5	0.4	213	28.4	28.5	7.6	7.6	15.1	15.5	81.6	81.7	5.8		5.9		6		81				<0.2		2.5	
						4.5	0.4	228	28.5		7.6		15.8		81.7		5.8		6.0		5		81				<0.2		2.5	
					Bottom	8.0	0.5	209	25.8	25.8	7.6	7.6	30.7	30.7	75.1	75.4	5.1	5.2	29.6		4		89				<0.2		1.3	
						8.0	0.5	218	25.8		7.6		30.7		75.7		5.2		29.0		4		89				<0.2		1.4	
C2	Cloudy	Moderate	09:55	11.1	Surface	1.0	0.9	165	28.6	28.6	7.5	7.5	10.0	10.0	73.5	73.5	5.4	5.1	12.3	9.1	9	8	86	91	825682	806957	<0.2	<0.2	3.1	3.0
						1.0	0.9	167	28.6		7.5		10.0		73.5		5.4		12.3		8		86				<0.2		2.9	
					Middle	5.6	0.5	151	26.3	26.3	7.6	7.6	27.8	27.8	69.6	69.7	4.8		8.3		8		93				<0.2		3.1	
						5.6	0.5	159	26.3		7.6		27.8		69.7		4.8		8.2		8		92				<0.2		2.9	
					Bottom	10.1	0.3	157	26.2	26.2	7.6	7.6	29.6	29.6	70.7	70.7	4.8	4.8	6.8		8		94				<0.2		3.0	
						10.1	0.3	171	26.2		7.6		29.6		70.7		4.8		6.8		9		94				<0.2		2.8	
C3	Cloudy	Moderate	07:33	12.7	Surface	1.0	0.2	120	27.7	27.7	7.6	7.6	20.6	20.6	81.1	81.1	5.7	5.6	5.4	6.4	4	4	90	92	822111	817792	<0.2	<0.2	2.5	2.3
						1.0	0.2	124	27.7		7.6		20.6		81.1		5.7		5.4		3		89				<0.2		2.4	
					Middle	6.4	0.1	57	27.2	27.2	7.6	7.6	24.1	24.1	79.4	79.4	5.5		5.6		4		92				<0.2		2.6	
						6.4	0.1	57	27.2		7.6		24.1		79.4		5.5		5.6		3		91				<0.2		1.9	
					Bottom	11.7	0.1	108	26.1	26.1	7.7	7.7	30.8	30.8	78.3	78.3	5.3	5.3	8.1		4		94				<0.2		2.1	
						11.7	0.1	117	26.1		7.7		30.8		78.3		5.3		8.1		3		95				<0.2		2.1	
IM1	Cloudy	Moderate	09:17	7.4	Surface	1.0	0.6	184	28.5	28.5	7.6	7.6	10.5	10.5	84.9	84.8	6.2	5.6	7.4	7.4	6	5	79	86	818355	806475	<0.2	<0.2	3.0	1.9
						1.0	0.6	193	28.5		7.6		10.5		84.7		6.2		7.2		5		79				<0.2		3.0	
					Middle	3.7	0.3	178	26.1	26.1	7.7	7.7	29.0	29.1	71.5	71.3	4.9		6.4		4		86				<0.2		2.0	
						3.7	0.4	192	26.1		7.7		29.2		71.1		4.9		6.3		4		86				<0.2		2.1	
					Bottom	6.4	0.1	159	25.8	25.8	7.7	7.7	30.6	30.6	71.0	71.0	4.9	4.9	8.6		5		93				<0.2		0.6	
						6.4	0.1	165	25.8		7.7		30.6		71.0		4.9		8.7		4		93				<0.2		0.7	
IM2	Cloudy	Moderate	09:26	8.6	Surface	1.0	0.8	193	28.6	28.6	7.5	7.5	9.1	9.0	79.9	80.1	5.9	5.5	7.9	7.5	5	4	75	83	818855	806189	<0.2	<0.2	3.0	2.1
						1.0	0.8	204	28.6		7.5		8.8		80.2		5.9		7.9		5		78				<0.2		2.7	
					Middle	4.3	0.3	194	26.1	26.1	7.7	7.7	29.3	29.4	72.5	72.6	5.0		6.3		4		82				<0.2		2.6	
						4.3	0.3	197	26.1		7.7		29.4		72.6		5.0		6.3		5		82				<0.2		2.5	
					Bottom	7.6	0.1	163	25.9	25.9	7.7	7.7	30.3	30.4	72.1	72.2	4.9	4.9	8.0		3		90				<0.2		0.7	
						7.6	0.1	177	25.9		7.7		30.4		72.2		4.9		8.5		4		90				<0.2		0.8	
IM3	Cloudy	Moderate	09:37	8.4	Surface	1.0	0.7	194	28.5	28.5	7.5	7.5	10.8	10.9	80.2	80.2	5.9	5.5	8.0	8.1	5	4	79	86	819404	806020	<0.2	<0.2	2.6	2.4
						1.0	0.7	207	28.5		7.5		10.9		80.2		5.9		7.9		5		79				<0.2		2.5	
					Middle	4.2	0.4	209	27.0	27.0	7.7	7.7	23.9	23.8	72.2	72.2	5.0		6.8		3		92				<0.2		2.6	
						4.2	0.5	212	27.0		7.7		23.7		72.2		5.0		7.0		4		92				<0.2		2.6	
					Bottom	7.4	0.1	187	25.8	25.8	7.7	7.7	30.5	30.6	70.8	70.9	4.9	4.9	9.4		4		86				<0.2		2.2	
						7.4	0.1	192	25.8		7.7		30.6		71.0		4.9		9.5		4		87				<0.2		2.1	
IM4	Cloudy	Moderate	09:46	7.8	Surface	1.0	0.5	176	28.6	28.6	7.5	7.5	7.8	7.6	79.2	79.0	5.9	5.6	9.1	11.1	6	6	75	86	819563	805053	<0.2	<0.2	2.7	2.3
						1.0	0.6	189	28.6		7.5		7.3		78.8		5.9		9.2		6		76				<0.2		2.7	
					Middle	3.9	0.3	209	27.5	27.5	7.6	7.6	18.5	19.0	74.2	74.0	5.3		10.0		7		85				<0.2		2.5	
						3.9	0.4	220	27.5		7.6		19.4		73.8		5.2		10.0		6		85				<0.2		2.5	
					Bottom	6.8	0.4	171	25.9	25.9	7.7	7.7	30.3	30.3	69.5	69.6	4.8	4.8	13.8		6		97				<0.2		1.6	
						6.8	0.4	184	25.9		7.7		30.3		69.6		4.8		14.2		5		97				<0.2		1.6	
IM5	Cloudy	Moderate	10:00	6.8	Surface	1.0	0.7	193	28.3	28.3	7.4	7.4	10.7	10.8	70.3	70.4	5.2	5.3	9.2	11.2	4	5	75	80	820558	804924	<0.2	<0.2	3.0	2.7
						1.0	0.7	194	28.3		7.4		10.8		70.5		5.2		9.2		5		75				<0.2		3.2	
					Middle	3.4	0.5	216	28.0	28.0	7.6	7.6	18.2	18.3	75.1	74.7	5.3		8.8		6		83				<0.2		2.4	
						3.4	0.5	225	27.9		7.6		18.3		74.3		5.3		8.6		4		84				<0.2		2.5	
					Bottom	5.8	0.4	202	26.2	26.2	7.6	7.6	28.6	28.7	72.3	72.5	5.0	5.0	15.4		4		80				<0.2		2.6	
						5.8	0.4	203	26.1		7.6		28.8		72.7		5.0		15.7		6		80				<0.2		2.7	
IM6	Cloudy	Moderate	10:10	6.7	Surface	1.0	0.4	177	28.6	28.6	7.5	7.5	9.9	9.9	75.2	75.1	5.5	5.6	8.6	6.8	6	6	76	81	821056	805832	<0.2	<0.2	3.5	3.2
						1.0	0.4	181	28.6		7.5		9.9		74.9		5.5		8.5		6		76				<0.2		3.5	
					Middle	3.4	0.2	225	28.2	28.2	7.5	7.5	15.5	15.5	77.8	77.7	5.6		6.3		6		86				<0.2		2.7	
						3.4	0.2	230	28.2		7.5		15.4		77.6		5.6		6.3		6		86				<0.2		2.7	
					Bottom	5.7	0.2	196	26.8	26.8	7.6	7.6	24.6	25.2	72.3	72.5	5.0	5.0	5.5		6		80				<0.2		3.4	
						5.7	0.2	206	26.7		7.6		25.7		72.7		5.0		5.7		5		81				<0.2		3.2	
IM7	Cloudy	Moderate	10:19	7.5	Surface	1.0	0.1	328	28.6	28.6	7.5	7.5	12.0	12.0	79.7	79.5	5.8	5.4	6.8	7.3	5	5	78	89	821354	806849	<0.2	<0.2	2.5	2.1
						1.0	0.1	344	28.6		7.5		12.0		79.3		5.8		6.8		5		79				<0.2		2.6	
					Middle	3.8	0.2	258	27.1	27.1	7.6	7.6	23.7	23.7	71.1	71.2	5.0		5.6		6		92				<0.2		2.1	
						3.8	0.2	281	27.1		7.6		23.7		71.3		5.0		5.9		5		92				<0.2		2.1	
					Bottom	6.5	0.1	191	26.4	26.4	7.6	7.6	27.6	27.6	71.2	71.4	4.9	4.9	9.3		5		97				<0.2		1.7	
						6.5	0.1	207	26.4		7.6		27.6		71.5		4.9		9.2		4		97				<0.2		1.5	
IM8	Cloudy	Moderate	09:19	8.2	Surface	1.0	0.4	193	28.1	28.1	7.5	7.5	13.1	13.1	74.5	74.5	5.4	5.2	8.4	7.5	6	5	86	91	821675	807852	<0.2	<0.2	3.5	3.6
						1.0	0.4	193	28.1		7.5		13.0		74.5		5.4		8.3		5		86				<0.2		3.4	
					Middle	4.1	0.1	206	26.7	26.7	7.6	7.6	25.1	25.1	71.6	71.6	5.0		6.4		6		91				<0.2		3.4	
						4.1	0.1	212	26.7		7.6		25.1		71.6		5.0		6.4		5		91				<0.2		3.5	
					Bottom	7.2	0.1	143	26.0	26.0	7.7	7.7	30.4	30.4	71.9	71.9	4.9	4.9	7.8		4		94				<0.2		3.9	
						7.2	0.1	149	26.0		7.7		30.4		71.9		4.9		7.8		5		95				<0.2		3.7	

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 31 August 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	09:10	7.2	Surface	1.0	0.4	149	28.2	28.2	7.5	7.5	13.8	13.8	76.5	76.5	5.5	5.5	8.8	8.3	7	6	87	90	822081	808801	<0.2	<0.2	3.7	3.7
						1.0	0.4	157	28.2		7.5		13.8		76.5		5.5		8.8		6		87				<0.2		3.6	
					Middle	3.6	0.1	119	28.0	28.0	7.5	7.5	17.8	17.8	76.7	76.7	5.4		7.4		6		90				<0.2		3.7	
						3.6	0.1	123	28.0		7.5		17.8		76.7		5.4		7.4		6		90				<0.2		3.5	
					Bottom	6.2	0.2	126	26.3	26.3	7.6	7.6	27.6	27.6	72.2	72.3	5.0	5.0	8.6		6		94				<0.2		3.9	
						6.2	0.2	134	26.3		7.6		27.6		72.3		5.0		8.6		6		93				<0.2		3.7	
IM10	Cloudy	Moderate	09:01	6.9	Surface	1.0	0.4	129	28.1	28.1	7.5	7.5	15.2	15.2	78.9	78.9	5.7	5.7	8.0	7.4	5	6	88	90	822255	809824	<0.2	<0.2	2.6	2.7
						1.0	0.5	134	28.1		7.5		15.2		78.9		5.7		8.0		6		87				<0.2		2.7	
					Middle	3.5	0.3	88	28.0	28.0	7.6	7.6	19.1	19.1	78.7	78.7	5.6		7.5		6		90				<0.2		2.6	
						3.5	0.3	93	28.0		7.6		19.1		78.7		5.6		7.5		5		90				<0.2		2.7	
					Bottom	5.9	0.3	111	27.7	27.7	7.6	7.6	21.3	21.3	78.6	78.6	5.5	5.5	6.7		6		94				<0.2		2.8	
						5.9	0.3	111	27.7		7.6		21.3		78.6		5.5		6.7		5		93				<0.2		2.8	
IM11	Cloudy	Moderate	08:46	8.2	Surface	1.0	0.5	107	28.2	28.2	7.5	7.5	11.9	11.9	76.5	76.5	5.6	5.4	9.4	9.4	7	6	88	91	821489	810549	<0.2	<0.2	2.7	2.9
						1.0	0.5	112	28.2		7.5		11.9		76.5		5.6		9.4		6		88				<0.2		2.9	
					Middle	4.1	0.2	89	27.8	27.8	7.6	7.6	17.3	17.3	73.5	73.5	5.2		9.5		7		91				<0.2		3.2	
						4.1	0.3	93	27.8		7.6		17.3		73.5		5.2		9.5		5		91				<0.2		2.8	
					Bottom	7.2	0.1	114	26.3	26.3	7.6	7.6	27.4	27.4	70.0	70.0	4.8	4.8	9.4		7		94				<0.2		3.0	
						7.2	0.1	122	26.3		7.6		27.4		70.0		4.8		9.4		6		93				<0.2		3.0	
IM12	Cloudy	Moderate	08:36	8.7	Surface	1.0	0.5	82	28.2	28.2	7.5	7.5	10.5	10.5	79.5	79.5	5.9	5.7	8.9	8.7	7	6	89	91	821166	811501	<0.2	<0.2	3.8	3.4
						1.0	0.5	88	28.2		7.5		10.5		79.5		5.9		8.9		6		88				<0.2		3.9	
					Middle	4.4	0.3	77	27.9	27.9	7.6	7.6	19.9	19.9	77.8	77.8	5.5		7.8		7		92				<0.2		3.3	
						4.4	0.3	80	27.9		7.6		19.9		77.8		5.5		7.8		6		91				<0.2		3.1	
					Bottom	7.7	0.2	122	26.3	26.3	7.6	7.6	27.6	27.6	70.9	70.9	4.9	4.9	9.3		5		93				<0.2		3.4	
						7.7	0.2	124	26.3		7.6		27.6		70.9		4.9		9.3		6		94				<0.2		3.0	
SR2	Cloudy	Moderate	08:02	4.7	Surface	1.0	0.4	84	28.1	28.1	7.6	7.6	15.9	15.9	82.5	82.5	5.9	5.9	6.5	6.1	4	5	88	90	821444	814178	<0.2	<0.2	2.4	2.5
						1.0	0.4	87	28.1		7.6		15.9		82.5		5.9		6.5		5		89				<0.2		2.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.4	82	27.4	27.4	7.6	7.6	22.2	22.2	80.9	80.9	5.7	5.7	5.7		4		91				<0.2		2.5	
						3.7	0.4	89	27.4		7.6		22.2		80.9		5.7		5.7		6		91				<0.2		2.5	
SR3	Cloudy	Moderate	09:26	8.6	Surface	1.0	0.5	174	28.1	28.1	7.4	7.4	11.5	11.5	73.6	73.6	5.4	5.4	8.9	7.8	7	6	-	-	822137	807555	-	-	-	-
						1.0	0.5	177	28.1		7.4		11.5		73.6		5.4		8.9		7		-				-		-	
					Middle	4.3	0.2	182	27.5	27.5	7.6	7.6	21.6	21.6	75.5	75.5	5.3		6.5		6		-				-		-	
						4.3	0.3	187	27.5		7.6		21.6		75.5		5.3		6.5		7		-				-		-	
					Bottom	7.6	0.0	315	26.2	26.2	7.6	7.6	28.4	28.4	73.7	73.7	5.1	5.1	8.0		5		-				-		-	
						7.6	0.0	326	26.2		7.6		28.4		73.7		5.1		8.0		5		-				-		-	
SR4A	Cloudy	Moderate	08:32	9.7	Surface	1.0	0.1	87	28.5	28.5	7.6	7.6	11.1	11.1	83.4	83.3	6.1	5.5	6.3	9.7	5	7	-	-	817183	807815	-	-	-	-
						1.0	0.1	94	28.5		7.6		11.1		83.1		6.1		6.4		4		-				-		-	
					Middle	4.9	0.1	59	26.0	26.0	7.6	7.6	30.0	30.0	69.7	69.7	4.8		9.4		5		-				-		-	
						4.9	0.1	61	26.0		7.6		30.0		69.7		4.8		9.5		5		-				-		-	
					Bottom	8.7	0.1	62	25.9	25.9	7.6	7.6	30.2	30.2	70.4	70.6	4.8	4.8	13.3		11		-				-		-	
						8.7	0.1	64	25.9		7.6		30.2		70.7		4.8		13.4		9		-				-		-	
SR5A	Cloudy	Calm	08:13	4.8	Surface	1.0	0.0	355	28.7	28.7	7.6	7.6	16.9	16.9	90.5	90.4	6.4	6.4	4.8	8.9	4	6	-	-	816577	810700	-	-	-	-
						1.0	0.0	327	28.7		7.6		16.9		90.3		6.4		4.9		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.0	280	27.0	27.0	7.5	7.5	25.2	25.3	68.9	68.9	4.8	4.8	12.9		7		-				-		-	
						3.8	0.0	291	26.9		7.5		25.4		68.9		4.8		13.1		8		-				-		-	
SR6	Cloudy	Calm	07:48	4.5	Surface	1.0	0.1	59	28.4	28.4	7.5	7.5	18.5	18.5	85.4	85.6	6.0	6.0	5.6	5.4	3	4	-	-	817896	814643	-	-	-	-
						1.0	0.1	61	28.4		7.5		18.5		85.8		6.0		5.6		3		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.1	53	27.2	27.2	7.4	7.4	23.7	23.7	69.6	69.4	4.9	4.9	5.2		4		-				-		-	
						3.5	0.1	53	27.1		7.4		23.6		69.2		4.8		5.3		4		-				-		-	
SR7	Cloudy	Moderate	06:55	16.3	Surface	1.0	0.4	85	27.6	27.6	7.6	7.6	21.3	21.3	84.8	84.8	5.9	5.8	5.1	6.1	3	3	-	-	823633	823726	-	-	-	-
						1.0	0.4	87	27.6		7.6		21.3		84.8		5.9		5.1		3		-				-		-	
					Middle	8.2	0.3	77	27.1	27.1	7.6	7.6	24.9	24.9	80.9	80.9	5.6		5.4		3		-				-		-	
						8.2	0.3	78	27.1		7.6		24.9		80.9		5.6		5.4		3		-				-		-	
					Bottom	15.3	0.1	70	25.7	25.7	7.7	7.7	33.4	33.4	76.6	76.6	5.2	5.2	7.8		3		-				-		-	
						15.3	0.1	73	25.7		7.7		33.4		76.6		5.2		7.8		2		-				-		-	
SR8	Cloudy	Moderate	08:28	4.3	Surface	1.0	-	-	28.1	28.1	7.5	7.5	12.7	12.7	83.5	83.5	6.1	6.1	7.6	7.2	4	5	-	-	820246	811418	-	-	-	-
						1.0	-	-	28.1		7.5		12.7		83.5		6.1		7.6		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	-	-	28.1	28.1	7.6	7.6	15.6	15.6	85.6	85.6	6.1	6.1	6.8		6		-				-		-	
						3.3	-	-	28.1		7.6		15.6		85.6		6.1		6.8		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 31 August 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	16:12	8.7	Surface	1.0	0.2	86	29.9	29.9	7.7	7.7	8.9	8.9	92.1	91.8	6.6	5.8	9.4	16.8	6	12	80	85	815636	804261	<0.2	<0.2	2.5	1.8
						1.0	0.2	86	29.9		7.7		8.8		91.4		6.6		9.4		7		81				<0.2		2.5	
					Middle	4.4	0.3	13	26.0	26.0	7.7	7.7	29.8	29.7	71.8	71.9	4.9		12.2		6		84				<0.2		2.4	
						4.4	0.3	13	26.0		7.7		29.6		71.9		4.9		12.0		5		84				<0.2		2.5	
					Bottom	7.7	0.2	24	25.7	25.7	7.7	7.7	31.4	31.4	74.9	75.3	5.1	5.2	29.6		25		89				<0.2		0.5	
						7.7	0.2	25	25.7		7.6		31.4		75.7		5.2		28.1		24		89				<0.2		0.5	
C2	Cloudy	Moderate	14:59	12.7	Surface	1.0	0.2	145	29.8	29.8	7.6	7.6	10.8	10.8	76.3	75.6	5.5	5.1	10.4	9.3	6	7	86	89	825666	806931	<0.2	<0.2	3.1	3.3
						1.0	0.2	152	29.8		7.6		10.8		74.8		5.4		10.5		7		86				<0.2		2.8	
					Middle	6.4	0.4	308	26.7	26.7	7.6	7.6	26.2	26.2	69.2	69.2	4.8		9.8		6		88				<0.2		3.2	
						6.4	0.4	328	26.7		7.6		26.2		69.2		4.8		9.8		8		89				<0.2		3.6	
					Bottom	11.7	0.2	19	26.3	26.3	7.6	7.6	28.6	28.6	71.6	71.6	4.9	4.9	7.5		8		91				<0.2		3.3	
						11.7	0.3	19	26.3		7.6		28.6		71.6		4.9		7.5		7		91				<0.2		3.6	
C3	Cloudy	Moderate	16:54	11.5	Surface	1.0	0.2	243	28.7	28.7	7.8	7.8	17.9	17.9	88.3	88.3	6.2	5.7	6.6	7.7	4	5	91	94	822091	817808	<0.2	<0.2	2.2	2.4
						1.0	0.2	247	28.7		7.8		17.9		88.3		6.2		6.6		4		91				<0.2		2.3	
					Middle	5.8	0.3	237	26.2	26.2	7.7	7.7	30.0	30.0	74.0	74.0	5.1		7.3		4		94				<0.2		2.4	
						5.8	0.3	253	26.2		7.7		30.0		74.0		5.1		7.3		4		94				<0.2		2.3	
					Bottom	10.5	0.3	283	25.9	25.9	7.7	7.7	32.7	32.7	79.2	79.2	5.4	5.4	9.1		6		96				<0.2		2.5	
						10.5	0.3	300	25.9		7.7		32.7		79.2		5.4		9.1		5		97				<0.2		2.5	
IM1	Cloudy	Moderate	15:51	7.2	Surface	1.0	0.5	344	29.2	29.2	7.7	7.7	10.3	10.3	86.6	86.5	6.3	5.8	9.0	14.0	5	10	79	84	818334	806447	<0.2	<0.2	2.7	2.3
						1.0	0.5	316	29.2		7.7		10.3		86.4		6.3		8.9		6		79				<0.2		3.0	
					Middle	3.6	0.5	14	27.2	27.2	7.7	7.7	22.1	22.1	74.4	74.4	5.2		10.3		8		83				<0.2		2.8	
						3.6	0.5	14	27.2		7.7		22.1		74.4		5.2		10.3		8		84				<0.2		2.6	
					Bottom	6.2	0.2	22	25.9	25.9	7.7	7.7	30.6	30.6	68.8	68.8	4.7	4.7	22.8		18		89				<0.2		1.1	
						6.2	0.2	22	25.9		7.7		30.6		68.8		4.7		22.8		17		89				<0.2		1.3	
IM2	Cloudy	Moderate	15:44	8.4	Surface	1.0	0.5	317	29.0	29.0	7.7	7.7	10.4	10.4	89.1	89.0	6.5	5.8	9.6	8.6	6	6	78	85	818851	806177	<0.2	<0.2	2.9	2.2
						1.0	0.5	319	29.0		7.7		10.3		88.9		6.5		9.6		5		78				<0.2		2.6	
					Middle	4.2	0.3	348	27.0	27.1	7.6	7.6	25.6	24.9	72.8	72.9	5.0		7.7		7		92				<0.2		2.8	
						4.2	0.3	320	27.1		7.6		24.2		73.0		5.1		7.9		7		92				<0.2		2.7	
					Bottom	7.4	0.1	24	26.2	26.2	7.6	7.6	28.8	28.9	73.4	73.8	5.1	5.1	8.4		5		86				<0.2		0.9	
						7.4	0.1	24	26.2		7.6		28.9		74.1		5.1		8.4		5		86				<0.2		1.1	
IM3	Cloudy	Moderate	15:35	8.4	Surface	1.0	0.4	315	29.2	29.2	7.7	7.7	9.9	9.9	90.4	90.3	6.6	6.4	8.5	13.5	6	5	79	85	819402	806036	<0.2	<0.2	2.8	2.4
						1.0	0.5	330	29.2		7.7		9.9		90.2		6.6		8.2		5		79				<0.2		2.9	
					Middle	4.2	0.1	300	28.6	28.6	7.7	7.7	12.0	12.1	85.8	85.6	6.2		8.2		5		90				<0.2		2.7	
						4.2	0.2	313	28.6		7.7		12.1		85.4		6.2		8.1		5		90				<0.2		2.8	
					Bottom	7.4	0.2	-	25.8	25.8	7.7	7.7	30.6	30.6	68.3	68.3	4.7	4.7	24.0		5		86				<0.2		1.5	
						7.4	0.2	-	25.8		7.7		30.6		68.3		4.7		24.1		4		87				<0.2		1.6	
IM4	Cloudy	Moderate	15:26	7.6	Surface	1.0	0.5	297	29.0	29.0	7.7	7.7	10.8	10.8	90.1	90.1	6.5	6.5	8.8	11.9	5	6	78	87	819576	805022	<0.2	<0.2	2.8	2.4
						1.0	0.5	304	29.0		7.7		10.8		90.1		6.5		8.9		4		78				<0.2		3.0	
					Middle	3.8	0.5	304	28.8	28.8	7.7	7.7	10.9	10.9	89.0	89.0	6.5		8.6		6		84				<0.2		2.8	
						3.8	0.5	311	28.8		7.7		10.9		88.9		6.5		8.4		6		85				<0.2		2.5	
					Bottom	6.6	0.2	1	25.9	25.9	7.6	7.6	30.6	30.6	74.0	74.6	5.1	5.1	18.6		7		97				<0.2		1.7	
						6.6	0.2	1	25.9		7.6		30.6		75.1		5.1		18.3		8		97				<0.2		1.7	
IM5	Cloudy	Moderate	15:13	6.4	Surface	1.0	0.2	7	29.9	29.9	7.6	7.6	9.9	9.9	86.9	86.8	6.2	5.9	10.2	12.4	6	7	75	80	820545	804931	<0.2	<0.2	2.6	2.8
						1.0	0.2	7	29.9		7.6		9.9		86.6		6.2		10.1		7		76				<0.2		2.7	
					Middle	3.2	0.1	331	28.7	28.7	7.5	7.5	12.8	12.8	78.2	78.2	5.6		11.3		6		84				<0.2		2.7	
						3.2	0.1	353	28.7		7.5		12.8		78.2		5.6		11.3		7		84				<0.2		2.7	
					Bottom	5.4	0.1	33	25.9	25.9	7.6	7.6	30.3	30.3	69.5	69.8	4.8	4.8	15.8		8		80				<0.2		2.9	
						5.4	0.1	35	25.9		7.6		30.3		70.1		4.8		15.7		7		80				<0.2		3.0	
IM6	Cloudy	Moderate	15:05	6.5	Surface	1.0	0.4	350	28.9	28.9	7.5	7.5	11.8	11.8	80.0	79.9	5.8	5.6	11.0	11.7	8	8	79	85	821066	805814	<0.2	<0.2	3.3	3.2
						1.0	0.4	322	28.9		7.5		11.8		79.8		5.8		11.0		7		79				<0.2		3.6	
					Middle	3.3	0.3	341	28.1	28.1	7.5	7.5	17.2	17.2	73.9	74.0	5.3		9.2		9		86				<0.2		3.2	
						3.3	0.3	353	28.1		7.5		17.1		74.0		5.3		9.4		9		86				<0.2		3.5	
					Bottom	5.5	0.1	315	26.6	26.6	7.6	7.6	27.1	27.1	70.1	70.1	4.8	4.8	14.6		9		89				<0.2		3.0	
						5.5	0.1	326	26.6		7.6		27.1		70.1		4.8		14.7		8		89				<0.2		2.8	
IM7	Cloudy	Moderate	14:57	7.9	Surface	1.0	0.3	287	29.0	29.0	7.5	7.5	13.3	13.7	80.4	80.3	5.8	5.4	9.0	7.0	8	8	81	88	821362	806829	<0.2	<0.2	2.2	2.7
						1.0	0.4	296	29.0		7.5		14.1		80.2		5.7		8.3		6		81				<0.2		2.3	
					Middle	4.0	0.2	303	27.8	27.8	7.5	7.5	19.6	19.6	72.8	72.8	5.1		7.1		7		89				<0.2		3.2	
						4.0	0.2	308	27.8		7.5		19.6		72.8		5.1		7.1		7		89				<0.2		3.0	
					Bottom	6.9	0.1	157	27.2	27.2	7.5	7.5	23.7	23.9	72.7	72.7	5.1	5.1	5.2		9		94				<0.2		2.8	
						6.9	0.1	171	27.2		7.5		24.0		72.7		5.1		5.2		8		95				<0.2		2.8	
IM8	Cloudy	Moderate	15:27	8.0	Surface	1.0	0.1	221	28.6	28.6	7.5	7.5	11.9	11.9	75.6	75.6	5.5	5.4	10.7	10.2	9	11	87	89	821675	807825	<0.2	<0.2	3.4	3.4
						1.0	0.1	226	28.6		7.5		11.9		75.6		5.5		10.7		8		86				<0.2		3.3	
					Middle	4.0	0.1	171	27.8	27.8	7.5	7.5	18.1	18.1	73.1	73.1	5.2		9.8		13		88				<0.2		3.4	
						4.0	0.1	180	27.8		7.5		18.1		73.1		5.2		9.8		12		89				<0.2		3.2	
					Bottom	7.0	0.1	104	26.2	26.2	7.6	7.6	28.8	28.8	75.9	75.9	5.2	5.2	10.2		11		92				<0.2		3.4	
						7.0	0.1	107	26.2		7.6		28.8		75.9		5.2		10.2		12		91				<0.2		3.6	

DA: Depth-Averaged

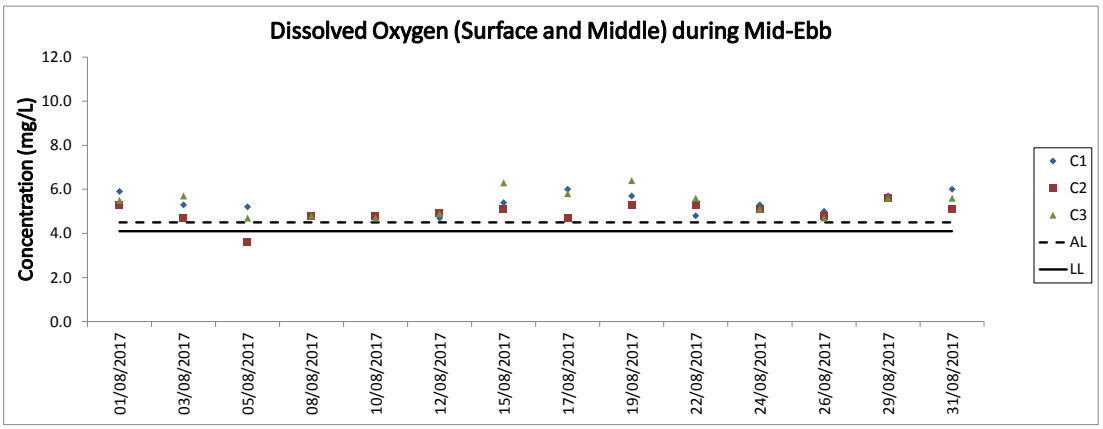
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher

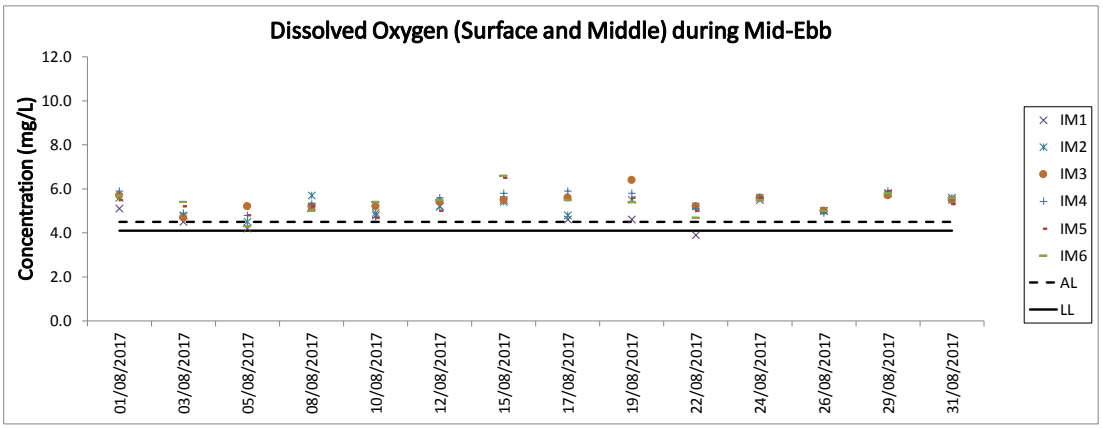
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 31 August 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	15:34	6.9	Surface	1.0	0.1	281	29.6	29.6	7.5	7.5	10.6	10.6	85.6	85.6	6.2	5.7	11.6	10.9	13	12	87	89	822086	808803	<0.2	<0.2	3.7	3.6
						1.0	0.1	302	29.6		7.5		10.6		85.6		6.2		11.6		12		86				<0.2		3.3	
					Middle	3.5	0.1	331	27.7	27.7	7.5	7.5	18.8	18.8	73.5	73.5	5.2		10.5		12		89				<0.2		3.4	
						3.5	0.1	352	27.7		7.5		18.8		73.5		5.2		10.5		11		89				<0.2		3.7	
					Bottom	5.9	0.3	289	27.0	27.0	7.6	7.6	26.9	26.9	76.8	76.8	5.3	5.3	10.6		12		91				<0.2		3.4	
						5.9	0.3	304	27.0		7.6		26.9		76.8		5.3		10.6		12		91				<0.2		3.8	
IM10	Cloudy	Moderate	15:43	6.0	Surface	1.0	0.1	66	29.5	29.5	7.5	7.5	11.4	11.4	82.6	82.6	5.9	5.7	11.1	9.9	13	12	86	89	822254	809834	<0.2	<0.2	3.8	3.5
						1.0	0.1	71	29.5		7.5		11.4		82.6		5.9		11.1		12		87				<0.2		3.7	
					Middle	3.0	0.4	321	28.4	28.4	7.5	7.5	13.9	13.9	75.5	75.5	5.4		9.6		12		89				<0.2		3.4	
						3.0	0.4	343	28.4		7.5		13.9		75.5		5.4		9.6		12		89				<0.2		3.3	
					Bottom	5.0	0.4	320	26.8	26.8	7.6	7.6	25.6	25.6	72.0	72.0	5.0	5.0	9.1		12		91				<0.2		3.3	
						5.0	0.4	337	26.8		7.6		25.6		72.0		5.0		9.1		12		92				<0.2		3.4	
IM11	Cloudy	Moderate	15:55	8.4	Surface	1.0	0.1	315	29.2	29.2	7.7	7.7	10.7	10.7	82.3	82.3	6.0	5.8	9.7	9.1	12	12	87	90	821492	810528	<0.2	<0.2	3.5	3.2
						1.0	0.1	342	29.2		7.7		10.7		82.3		6.0		9.7		13		87				<0.2		3.1	
					Middle	4.2	0.5	285	27.7	27.7	7.6	7.6	20.3	20.3	77.6	77.6	5.5		7.6		13		89				<0.2		3.2	
						4.2	0.5	305	27.7		7.6		20.3		77.6		5.5		7.6		12		89				<0.2		2.8	
					Bottom	7.4	0.2	319	26.5	26.5	7.6	7.6	27.2	27.2	71.1	71.1	4.9	4.9	9.9		12		92				<0.2		3.3	
						7.4	0.2	333	26.5		7.6		27.2		71.1		4.9		9.9		12		93				<0.2		3.4	
IM12	Cloudy	Moderate	16:03	8.4	Surface	1.0	0.2	266	28.9	28.9	7.6	7.6	12.1	12.1	84.0	84.0	6.1	5.6	9.4	9.0	8	8	88	91	821173	811514	<0.2	<0.2	3.0	3.0
						1.0	0.2	270	28.9		7.6		12.1		84.0		6.1		9.4		8		89				<0.2		3.0	
					Middle	4.2	0.6	269	27.1	27.1	7.6	7.6	23.7	23.7	72.2	72.2	5.0		7.5		8		90				<0.2		2.9	
						4.2	0.6	284	27.1		7.6		23.7		72.2		5.0		7.5		7		91				<0.2		2.9	
					Bottom	7.4	0.1	282	26.5	26.5	7.6	7.6	29.0	29.0	73.3	73.3	5.0	5.0	10.1		7		94				<0.2		3.2	
						7.4	0.1	290	26.5		7.6		29.0		73.3		5.0		10.1		8		94				<0.2		3.2	
SR2	Cloudy	Moderate	16:32	4.4	Surface	1.0	0.1	302	28.9	28.9	7.7	7.7	12.0	12.0	91.6	91.6	6.6	6.6	7.7	7.3	7	9	89	90	821452	814154	<0.2	<0.2	2.8	2.9
						1.0	0.2	331	28.9		7.7		12.0		91.6		6.6		7.7		8		88				<0.2		3.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.4	314	27.7	27.7	7.6	7.6	21.4	21.4	90.1	90.1	6.3	6.3	6.9		10		91				<0.2		2.7	
						3.4	0.4	334	27.7		7.6		21.4		90.1		6.3		6.9		10		91				<0.2		3.1	
SR3	Cloudy	Moderate	15:22	8.4	Surface	1.0	0.2	164	28.9	28.9	7.5	7.5	11.5	11.5	77.8	77.8	5.6	5.3	11.6	9.3	10	10	-	-	822153	807571	-	-	-	-
						1.0	0.3	170	28.9		7.5		11.5		77.8		5.6		11.6		10		-				-		-	
					Middle	4.2	0.1	260	27.7	27.7	7.5	7.5	21.2	21.2	70.0	70.0	4.9		8.8		9		-				-		-	
						4.2	0.1	266	27.7		7.5		21.2		70.0		4.9		8.8		9		-				-		-	
					Bottom	7.4	0.1	63	26.4	26.4	7.6	7.6	28.0	28.0	68.6	68.6	4.7	4.7	7.6		12		-				-		-	
						7.4	0.1	64	26.4		7.6		28.0		68.6		4.7		7.6		10		-				-		-	
SR4A	Cloudy	Moderate	16:32	9.3	Surface	1.0	0.1	64	29.2	29.2	7.7	7.7	10.6	10.7	96.2	96.0	7.0	6.4	17.5	16.2	15	14	-	-	817184	807805	-	-	-	-
						1.0	0.1	68	29.2		7.7		10.7		95.8		6.9		17.6		15		-				-		-	
					Middle	4.7	0.2	251	28.4	28.4	7.7	7.7	20.1	20.1	85.4	85.0	5.9		13.3		18		-				-		-	
						4.7	0.2	270	28.4		7.7		20.1		84.5		5.9		12.9		16		-				-		-	
					Bottom	8.3	0.1	13	26.3	26.3	7.6	7.6	28.8	28.8	71.0	71.6	4.9	5.0	18.1		10		-				-		-	
						8.3	0.1	13	26.3		7.6		28.8		72.2		5.0		18.0		9		-				-		-	
SR5A	Cloudy	Moderate	16:49	4.7	Surface	1.0	0.1	302	29.9	29.9	8.1	8.1	16.3	16.3	148.4	148.2	10.3	10.3	7.5	7.5	9	9	-	-	816579	810714	-	-	-	-
						1.0	0.1	329	29.9		8.1		16.3		147.9		10.2		7.5		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.2	285	28.5	28.5	7.7	7.7	20.0	20.0	99.5	99.8	6.9	7.0	7.4		8		-				-		-	
						3.7	0.2	304	28.5		7.7		20.0		100.0		7.0		7.5		8		-				-		-	
SR6	Cloudy	Moderate	17:15	4.5	Surface	1.0	0.1	117	29.5	29.5	7.9	7.9	14.8	14.8	107.6	107.6	7.6	7.6	9.5	9.0	8	9	-	-	817910	814672	-	-	-	-
						1.0	0.1	128	29.5		7.9		14.8		107.5		7.6		9.4		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.0	92	29.7	29.7	7.9	7.9	14.3	14.3	106.9	106.9	7.5	7.5	8.5		9		-				-		-	
						3.5	0.0	92	29.7		7.9		14.3		106.9		7.5		8.4		9		-				-		-	
SR7	Cloudy	Moderate	17:28	17.2	Surface	1.0	0.0	351	27.0	27.0	7.7	7.7	26.4	26.4	80.0	80.0	5.5	5.4	5.7	7.1	9	9	-	-	823631	823736	-	-	-	-
						1.0	0.0	323	27.0		7.7		26.4		80.0		5.5		5.7		9		-				-		-	
					Middle	8.6	0.1	206	26.3	26.3	7.7	7.7	30.2	30.2	76.2	76.2	5.2		7.4		9		-				-		-	
						8.6	0.1	220	26.3		7.7		30.2		76.2		5.2		7.4		9		-				-		-	
					Bottom	16.2	0.1	93	25.8	25.8	7.7	7.7	33.5	33.5	76.8	76.8	5.2	5.2	8.3		8		-				-		-	
						16.2	0.1	95	25.8		7.7		33.5		76.8		5.2		8.3		8		-				-		-	
SR8	Cloudy	Moderate	16:11	4.8	Surface	1.0	0.0	0	29.5	29.5	7.7	7.7	9.2	9.2	85.8	85.8	6.2	6.2	11.6	12.0	9	8	-	-	820246	811418	-	-	-	-
						1.0	0.0	0	29.5		7.7		9.2		85.8		6.2		11.6		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.0	0	28.5	28.5	7.5	7.5	23.0	23.0	89.7	89.7	6.1	6.1	12.3		7		-				-		-	
						3.8	0.0	0	28.5		7.5		23.0		89.7		6.1		12.3		8		-				-		-	

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


Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
12.0
10.0
8.0
6.0
4.0
2.0
0.0
01/08/2017
03/08/2017
05/08/2017
08/08/2017
10/08/2017
12/08/2017
15/08/2017
17/08/2017
19/08/2017
22/08/2017
24/08/2017
26/08/2017
29/08/2017
31/08/2017
C1
C2
C3
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
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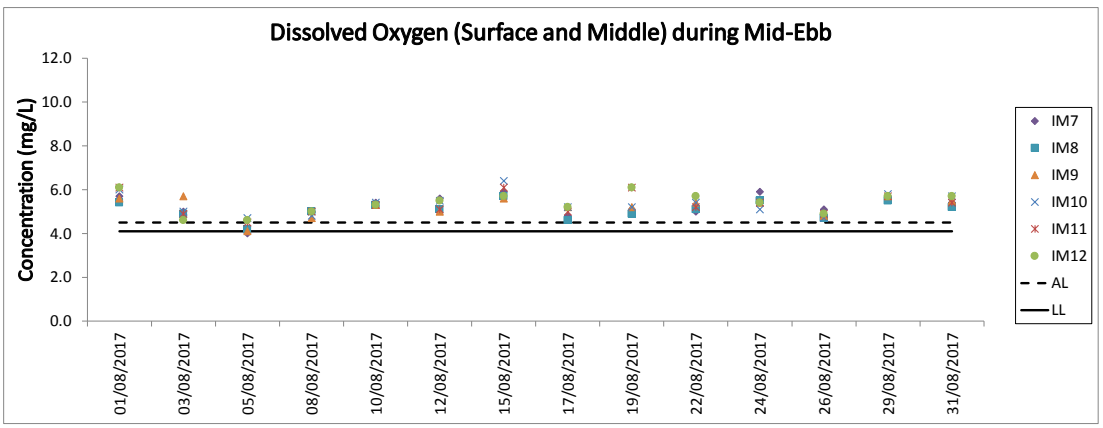
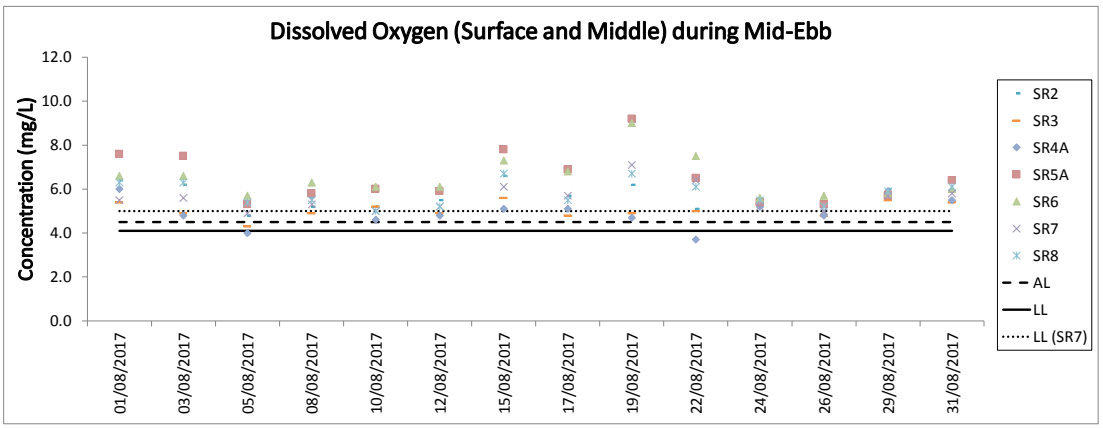
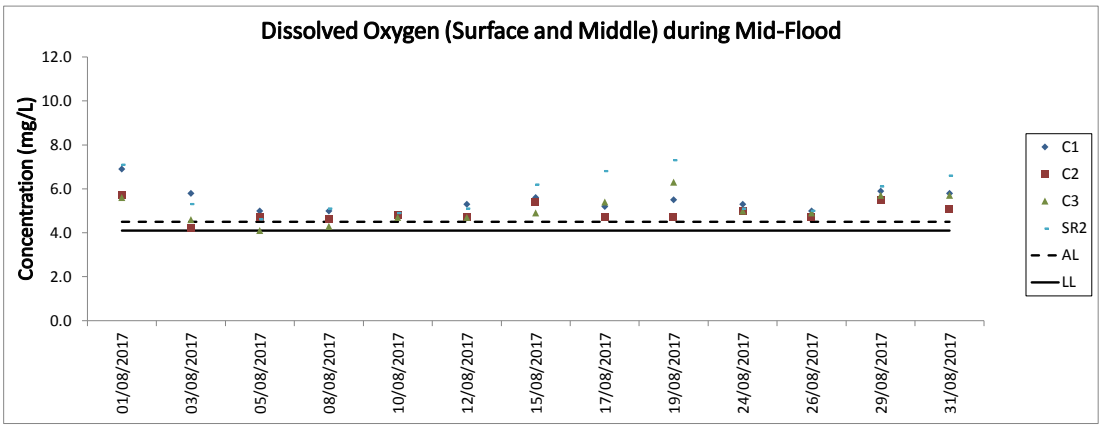
10.0
8.0
6.0
4.0
2.0
0.0
01/08/2017
03/08/2017
05/08/2017
08/08/2017
10/08/2017
12/08/2017
15/08/2017
17/08/2017
19/08/2017
22/08/2017
24/08/2017
26/08/2017
29/08/2017
31/08/2017
IM1
IM2
IM3
IM4
IM5
IM6
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
12.0
10.0
8.0
6.0
4.0
2.0
0.0
01/08/2017
03/08/2017
05/08/2017
08/08/2017
10/08/2017
12/08/2017
15/08/2017
17/08/2017
19/08/2017
22/08/2017
24/08/2017
26/08/2017
29/08/2017
31/08/2017
IM7
IM8
IM9
IM10
IM11
IM12
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
12.0
10.0
8.0
6.0
4.0
2.0
0.0
01/08/2017
03/08/2017
05/08/2017
08/08/2017
10/08/2017
12/08/2017
15/08/2017
17/08/2017
19/08/2017
22/08/2017
24/08/2017
26/08/2017
29/08/2017
31/08/2017
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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10.0
8.0
6.0
4.0
2.0
0.0
01/08/2017
03/08/2017
05/08/2017
08/08/2017
10/08/2017
12/08/2017
15/08/2017
17/08/2017
19/08/2017
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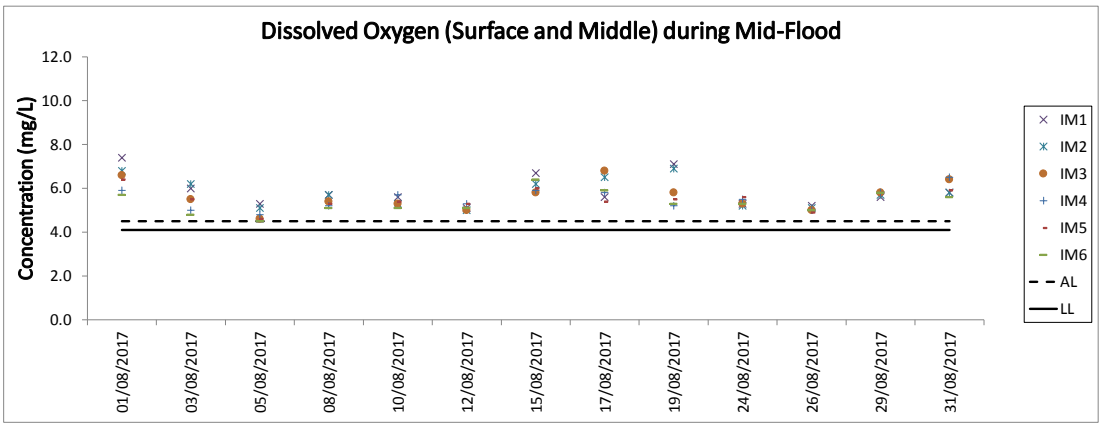
26/08/2017
29/08/2017
31/08/2017
C1
C2
C3
SR2
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
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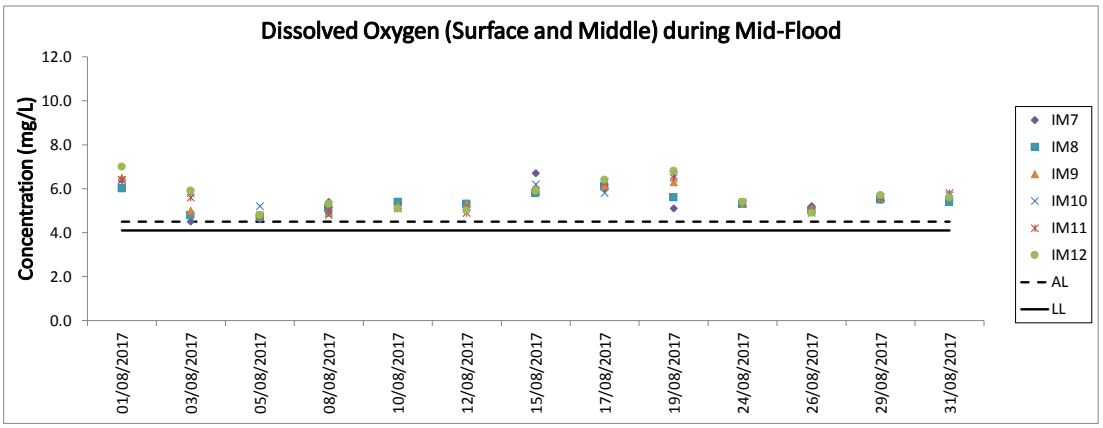
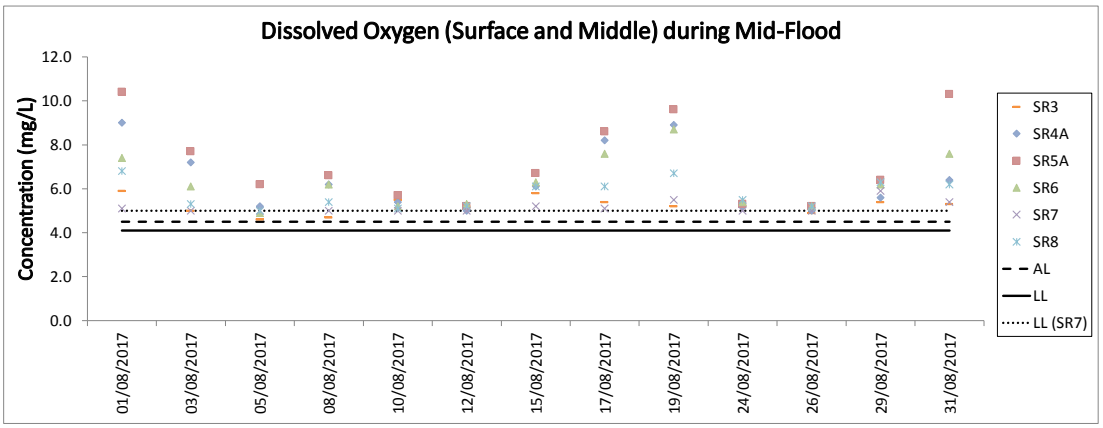
10.0
8.0
6.0
4.0
2.0
0.0
01/08/2017
03/08/2017
05/08/2017
08/08/2017
10/08/2017
12/08/2017
15/08/2017
17/08/2017
19/08/2017
24/08/2017
26/08/2017
29/08/2017
31/08/2017
IM1
IM2
IM3
IM4
IM5
IM6
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
12.0
10.0
8.0
6.0
4.0
2.0
0.0
01/08/2017
03/08/2017
05/08/2017
08/08/2017
10/08/2017
12/08/2017
15/08/2017
17/08/2017
19/08/2017
24/08/2017
26/08/2017
29/08/2017
31/08/2017
IM7
IM8
IM9
IM10
IM11
IM12
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
12.0
10.0
8.0
6.0
4.0
2.0
0.0
01/08/2017
03/08/2017
05/08/2017
08/08/2017
10/08/2017
12/08/2017
15/08/2017
17/08/2017
19/08/2017
24/08/2017
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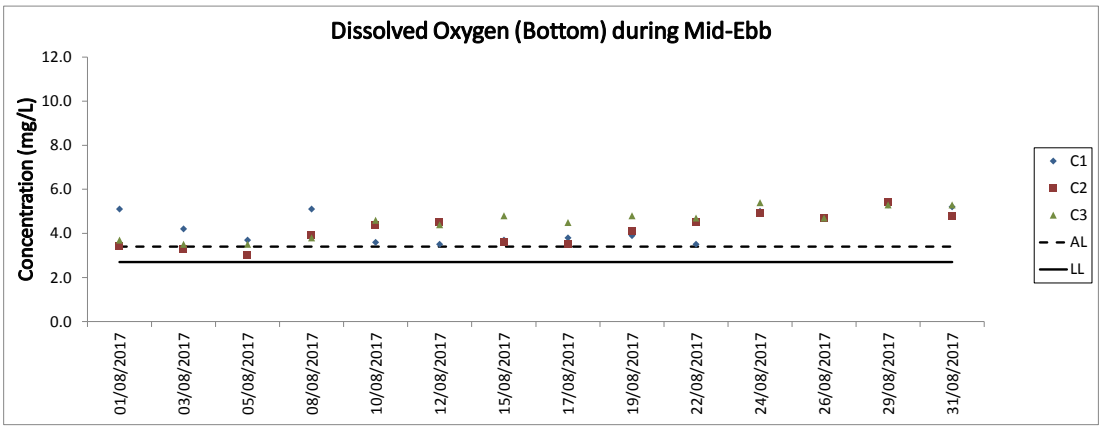
31/08/2017
SR3
SR4A
SR5A
SR6
SR7
SR8
AL
LL
LL (SR7)


Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
12.0
10.0
8.0
6.0
4.0
2.0
0.0
01/08/2017
03/08/2017
05/08/2017
08/08/2017
10/08/2017
12/08/2017
15/08/2017
17/08/2017
19/08/2017
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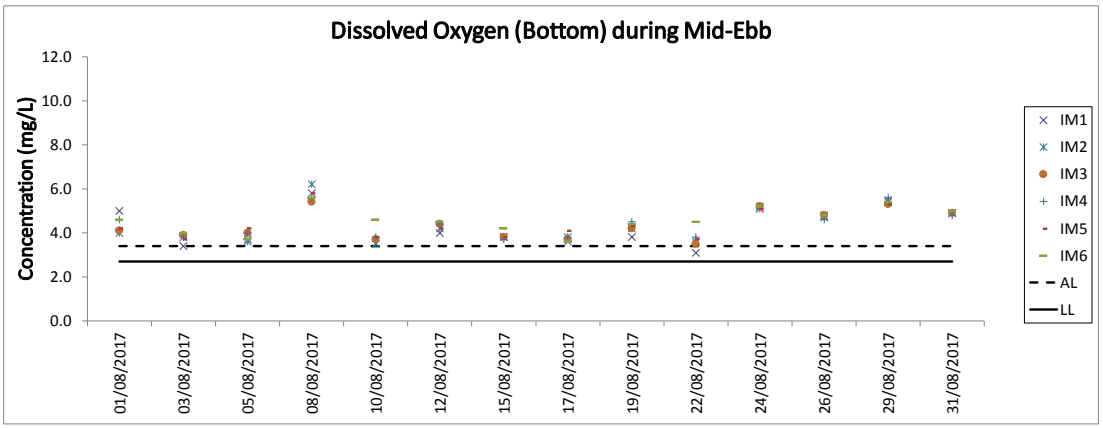
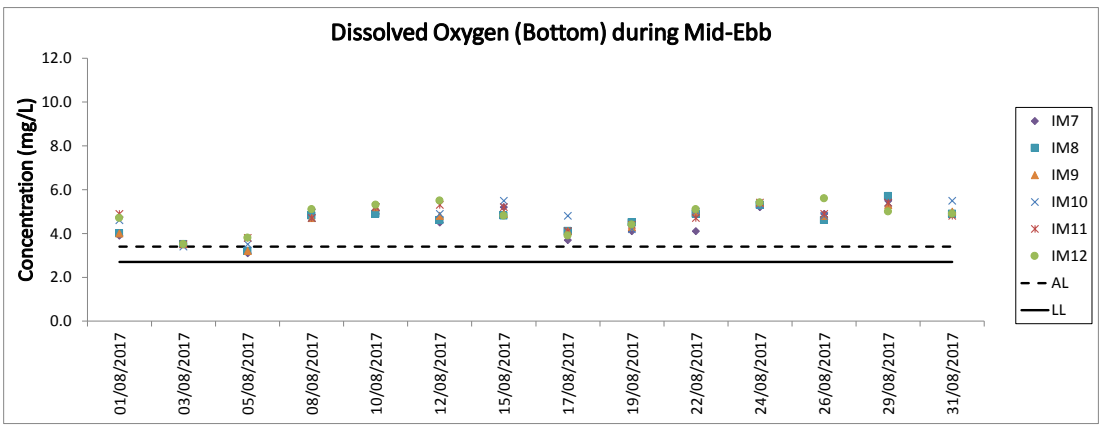
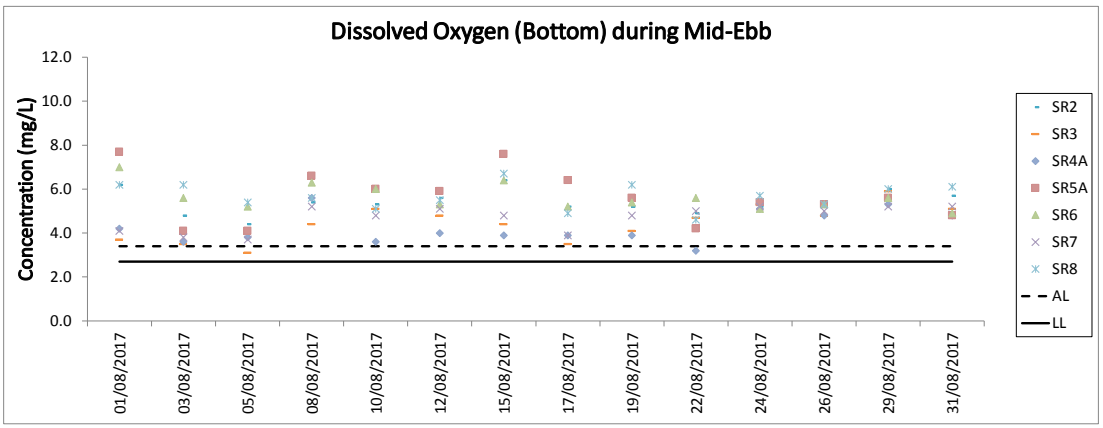
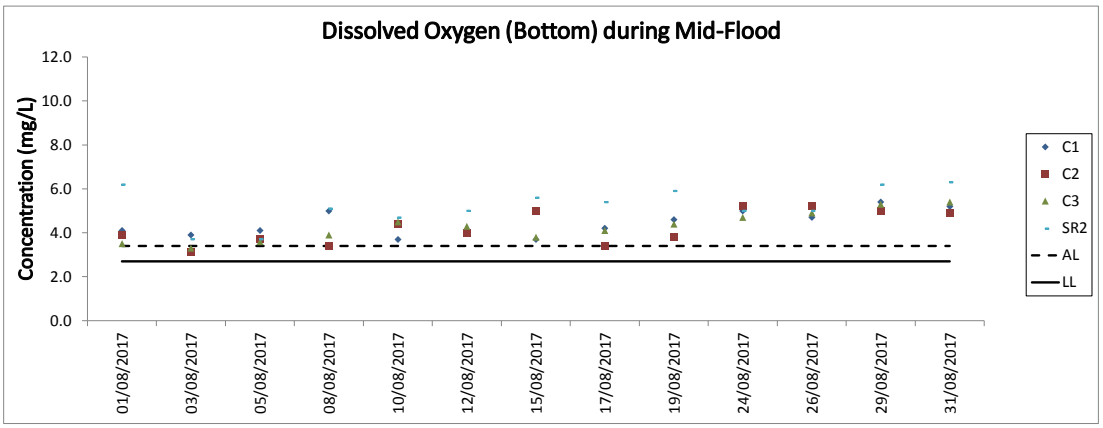
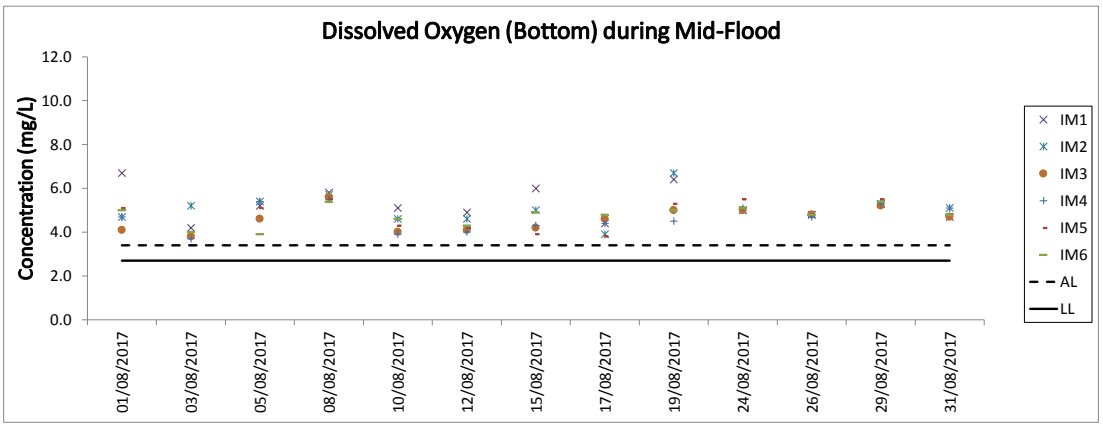
29/08/2017
31/08/2017
C1
C2
C3
AL
LL


Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
12.0
10.0
8.0
6.0
4.0
2.0
0.0
01/08/2017
03/08/2017
05/08/2017
08/08/2017
10/08/2017
12/08/2017
15/08/2017
17/08/2017
19/08/2017
22/08/2017
24/08/2017
26/08/2017
29/08/2017
31/08/2017
IM1
IM2
IM3
IM4
IM5
IM6
AL
LL


Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
12.0
10.0
8.0
6.0
4.0
2.0
0.0
01/08/2017
03/08/2017
05/08/2017
08/08/2017
10/08/2017
12/08/2017
15/08/2017
17/08/2017
19/08/2017
22/08/2017
24/08/2017
26/08/2017
29/08/2017
31/08/2017
IM7
IM8
IM9
IM10
IM11
IM12
AL
LL


Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
12.0
10.0
8.0
6.0
4.0
2.0
0.0
01/08/2017
03/08/2017
05/08/2017
08/08/2017
10/08/2017
12/08/2017
15/08/2017
17/08/2017
19/08/2017
22/08/2017
24/08/2017
26/08/2017
29/08/2017
31/08/2017
SR2
SR3
SR4A
SR5A
SR6
SR7
SR8
AL
LL


Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
12.0
10.0
8.0
6.0
4.0
2.0
0.0
01/08/2017
03/08/2017
05/08/2017
08/08/2017
10/08/2017
12/08/2017
15/08/2017
17/08/2017
19/08/2017
24/08/2017
26/08/2017
29/08/2017
31/08/2017
C1
C2
C3
SR2
AL
LL


Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
12.0
10.0
8.0
6.0
4.0
2.0
0.0
01/08/2017
03/08/2017
05/08/2017
08/08/2017
10/08/2017
12/08/2017
15/08/2017
17/08/2017
19/08/2017
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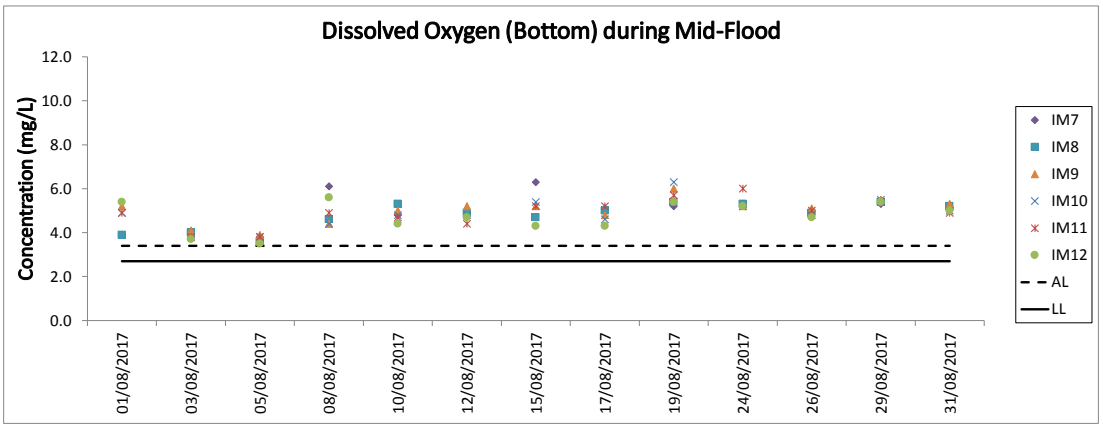
29/08/2017
31/08/2017
IM1
IM2
IM3
IM4
IM5
IM6
AL
LL


Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
12.0
10.0
8.0
6.0
4.0
2.0
0.0
01/08/2017
03/08/2017
05/08/2017
08/08/2017
10/08/2017
12/08/2017
15/08/2017
17/08/2017
19/08/2017
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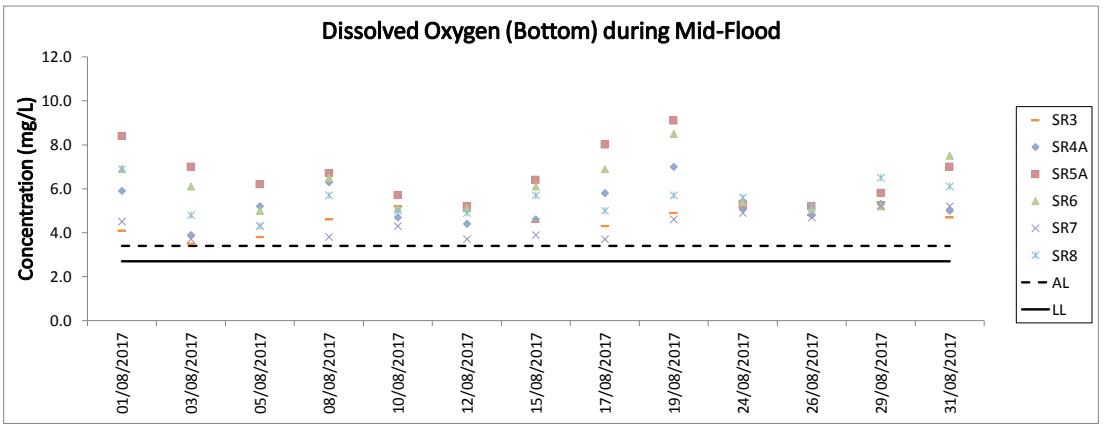
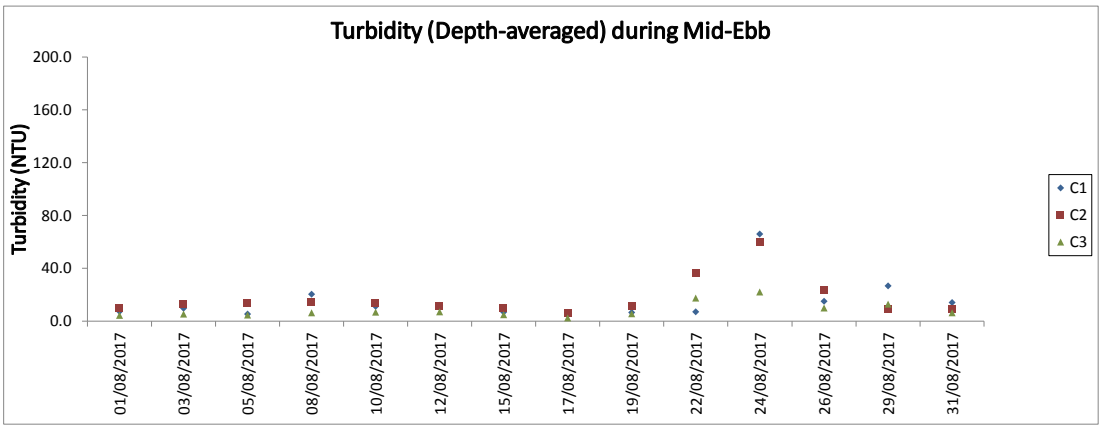
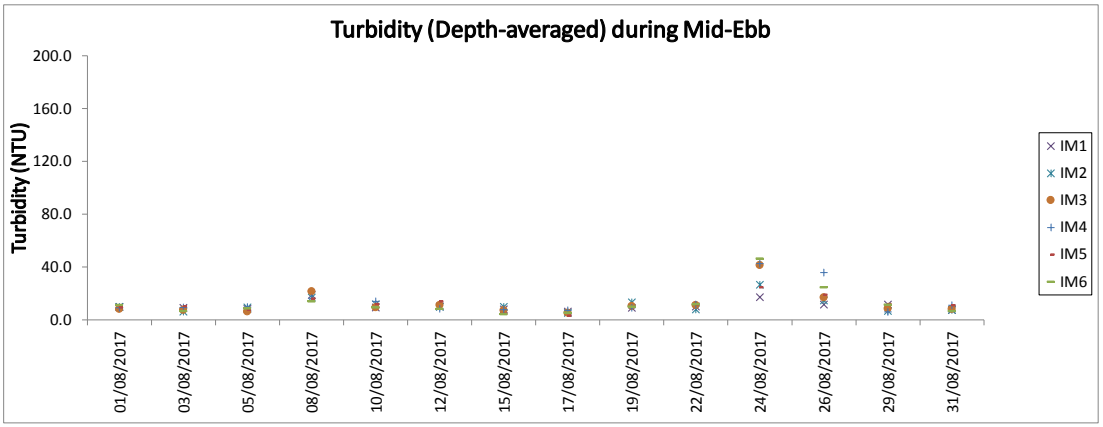
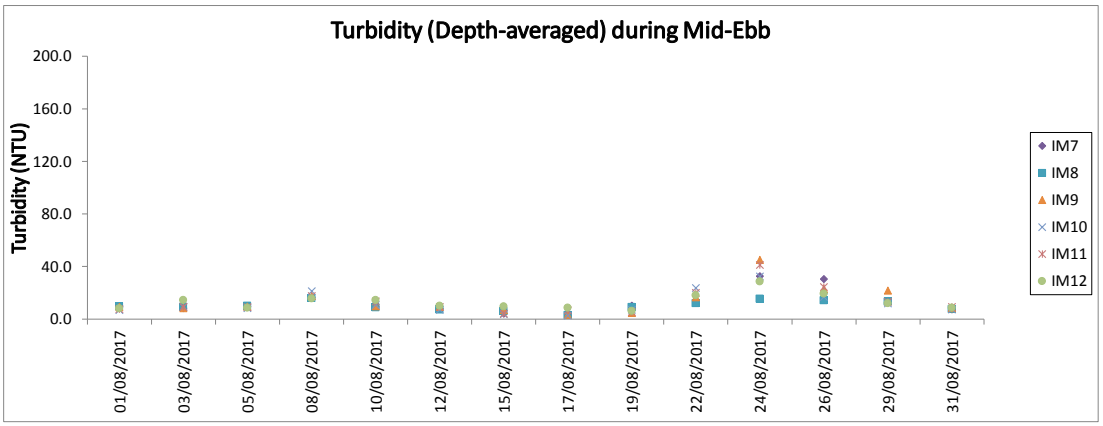
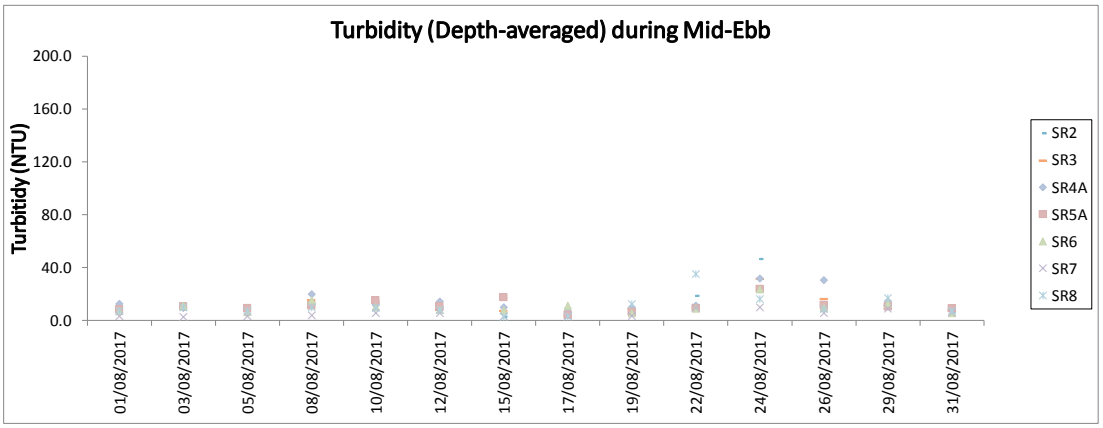
IM7
IM8
IM9
IM10
IM11
IM12
AL
LL


Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
12.0
10.0
8.0
6.0
4.0
2.0
0.0
01/08/2017
03/08/2017
05/08/2017
08/08/2017
10/08/2017
12/08/2017
15/08/2017
17/08/2017
19/08/2017
24/08/2017
26/08/2017
29/08/2017
31/08/2017
SR3
SR4A
SR5A
SR6
SR7
SR8
AL
LL

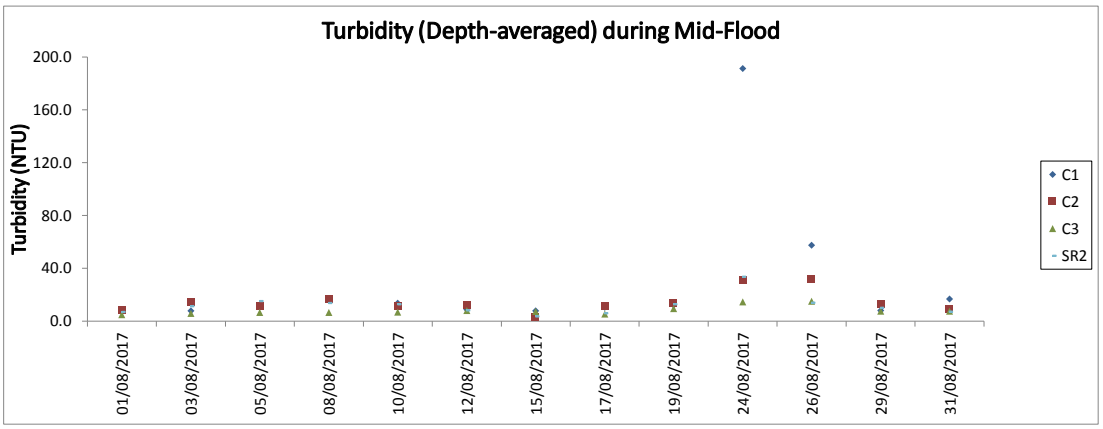


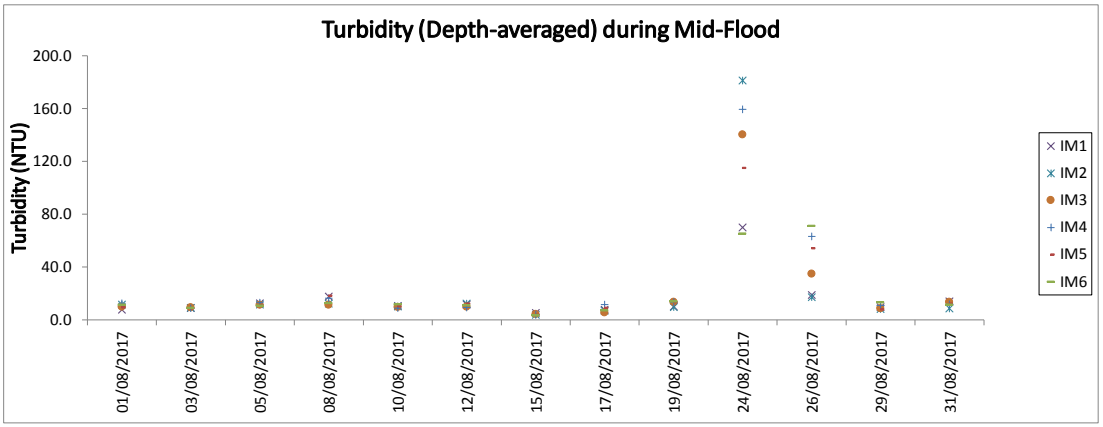


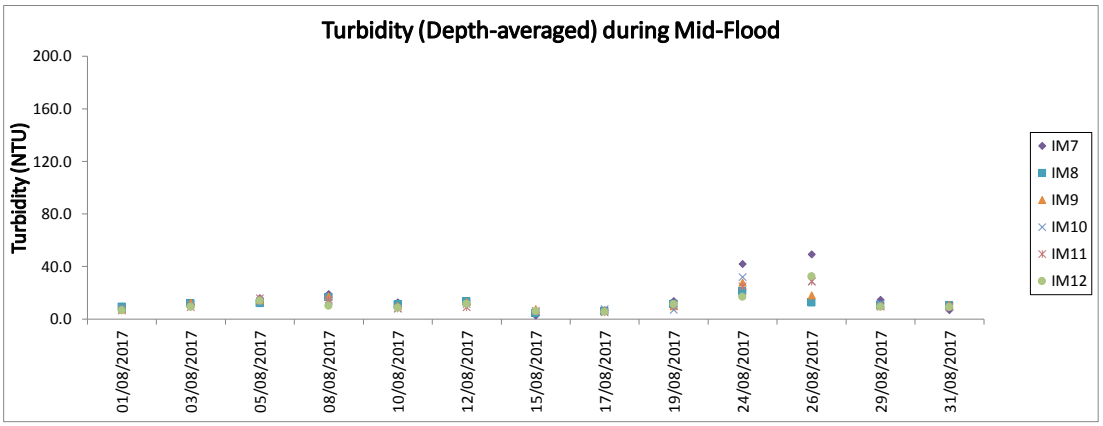


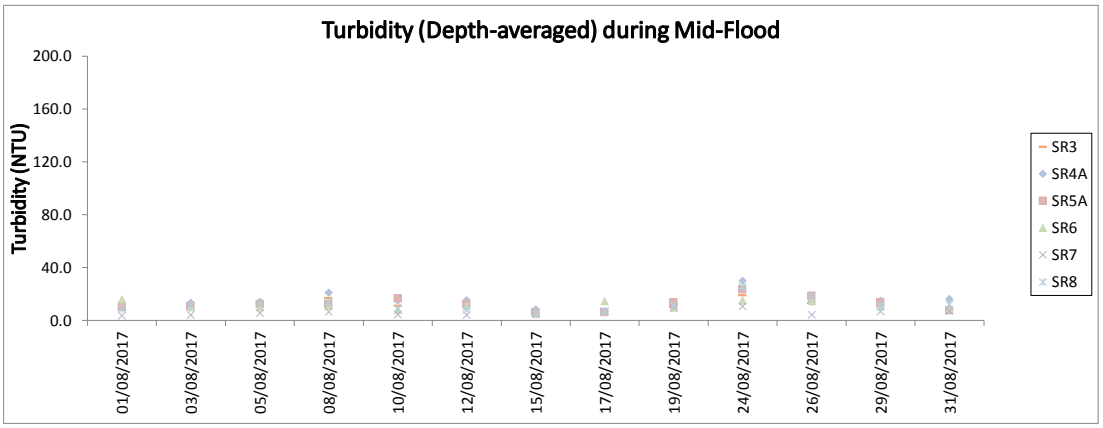


Note: The Action and Limit Level of turbidity can be referred to Table 4.2 of the monthly EM&A report.

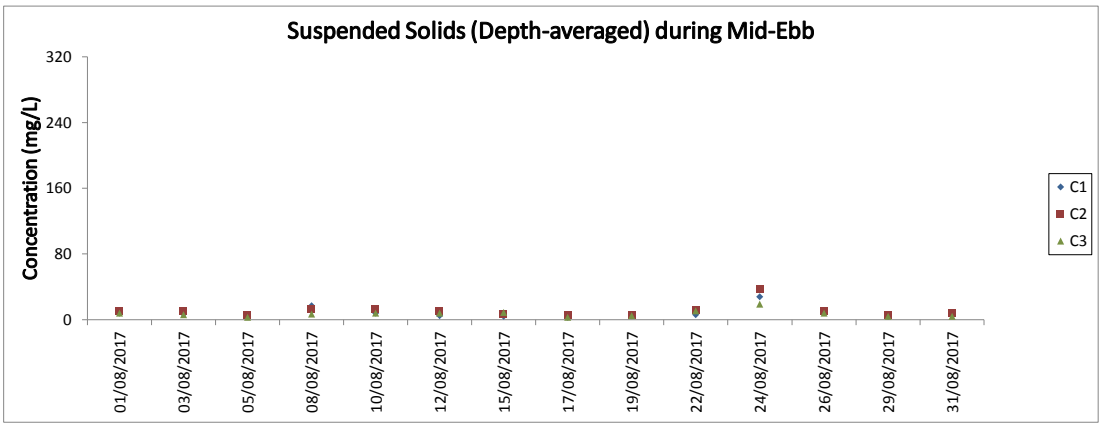


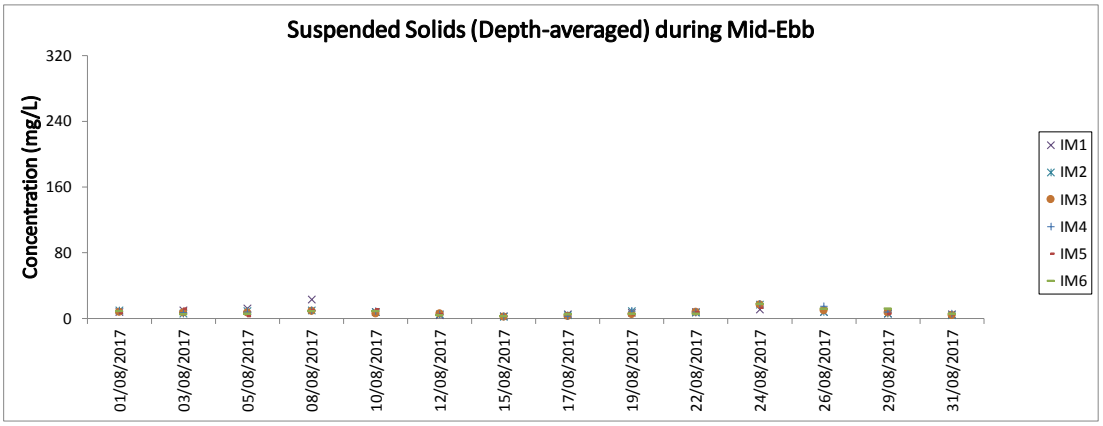


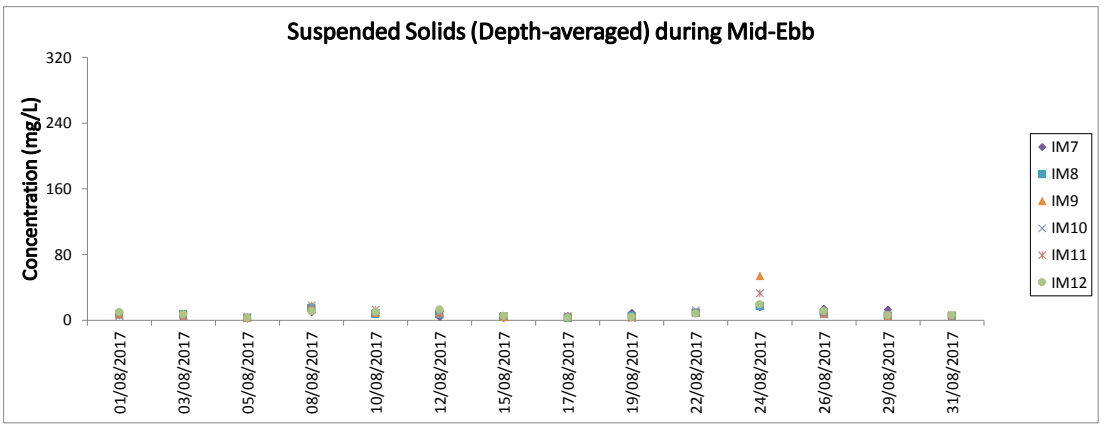


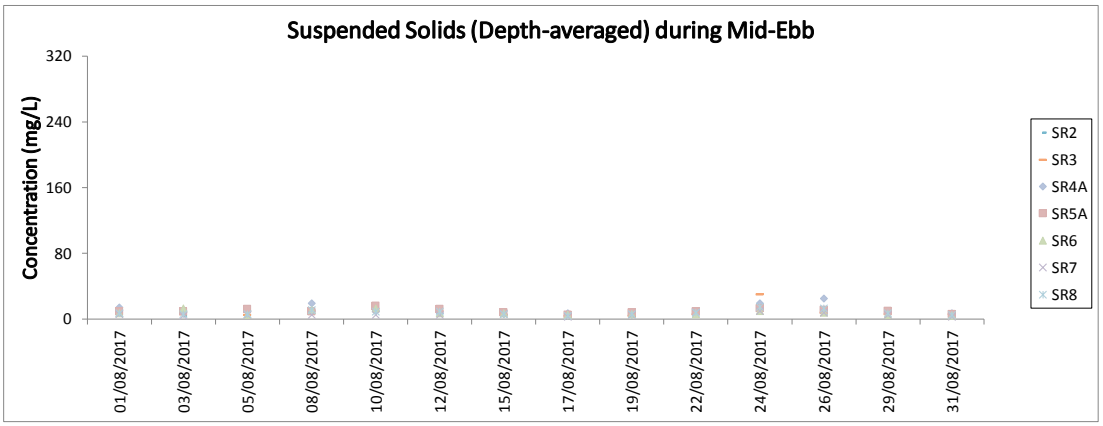


Note: The Action and Limit Level of turbidity can be referred to Table 4.2 of the monthly EM&A report.

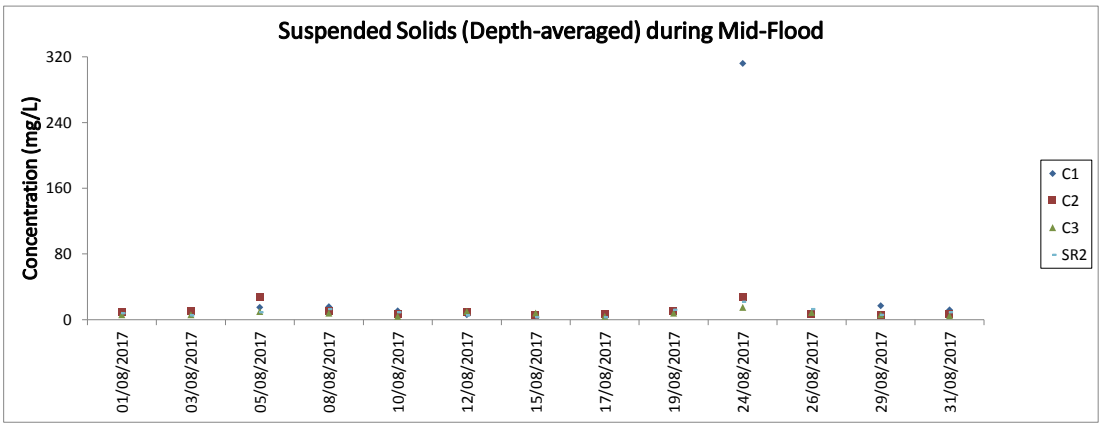


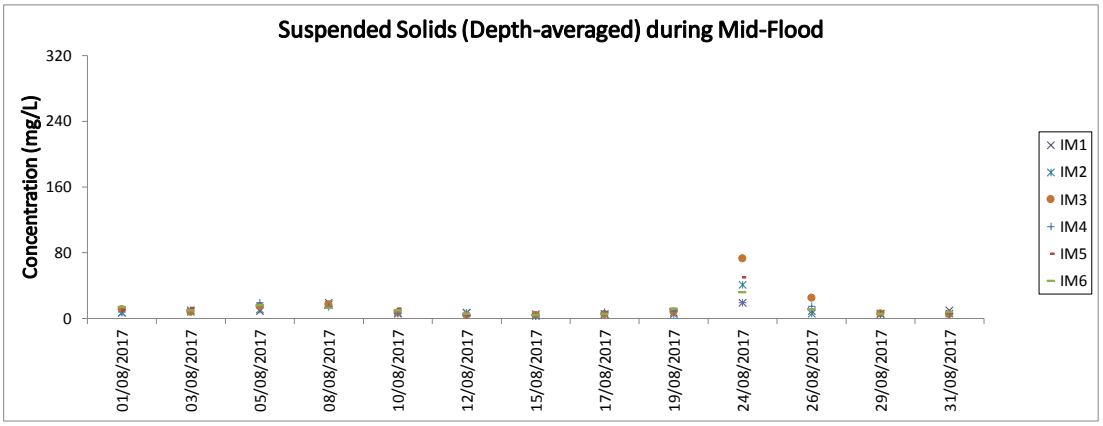


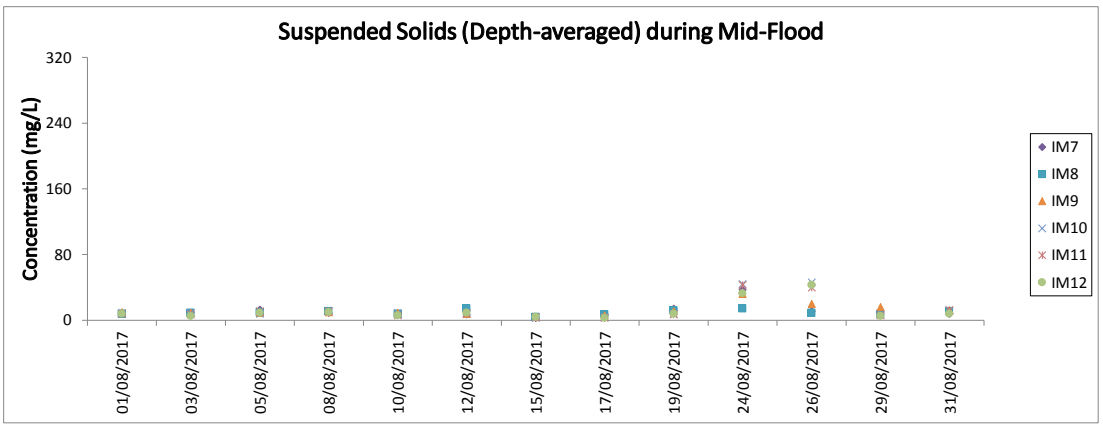


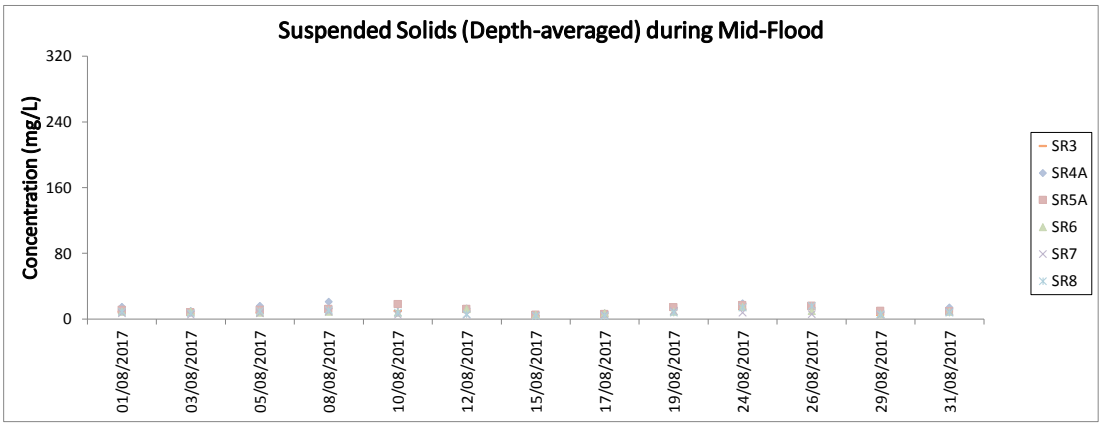


Note: The Action and Limit Level of suspended solids can be referred to Table 4.2 of the monthly EM&A report.

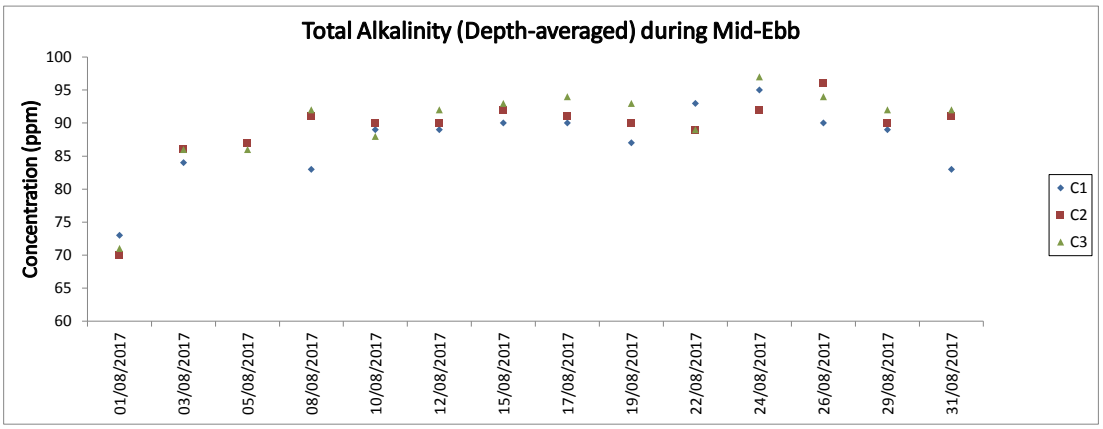


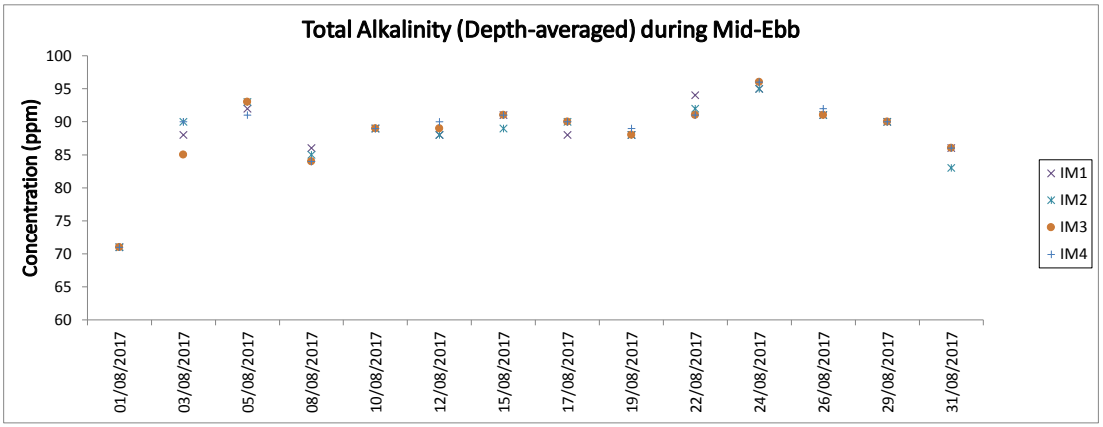


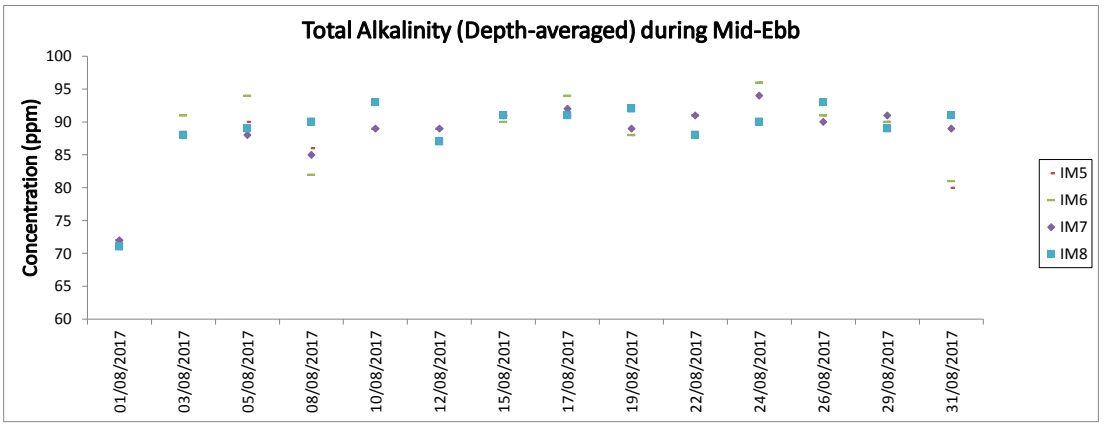


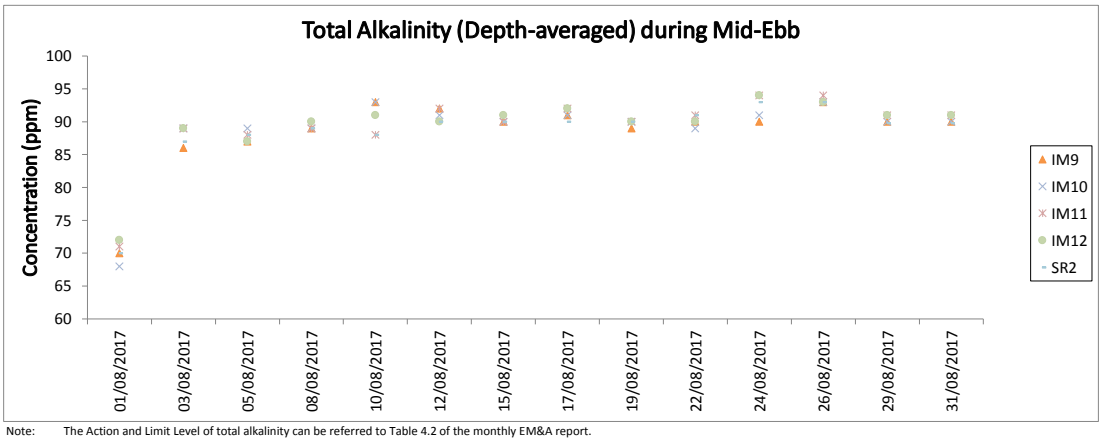


Note: The Action and Limit Level of suspended solids can be referred to Table 4.2 of the monthly EM&A report.

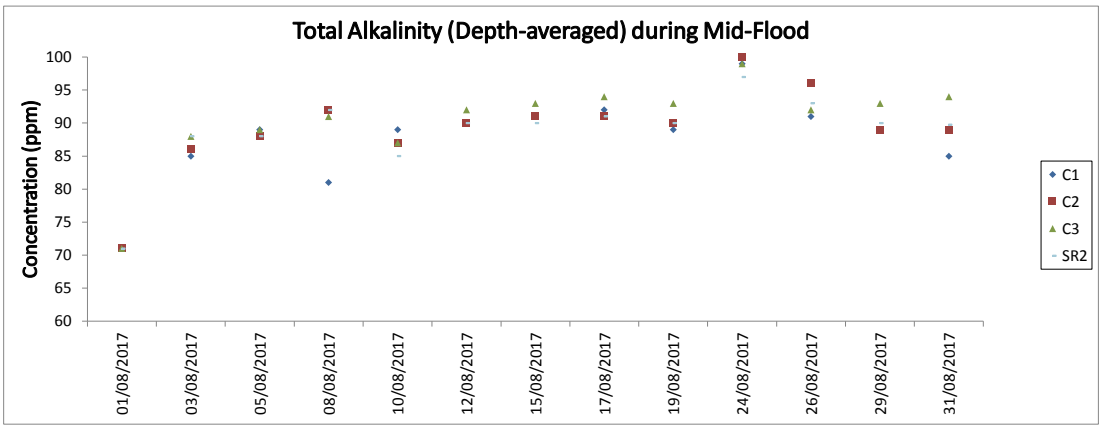


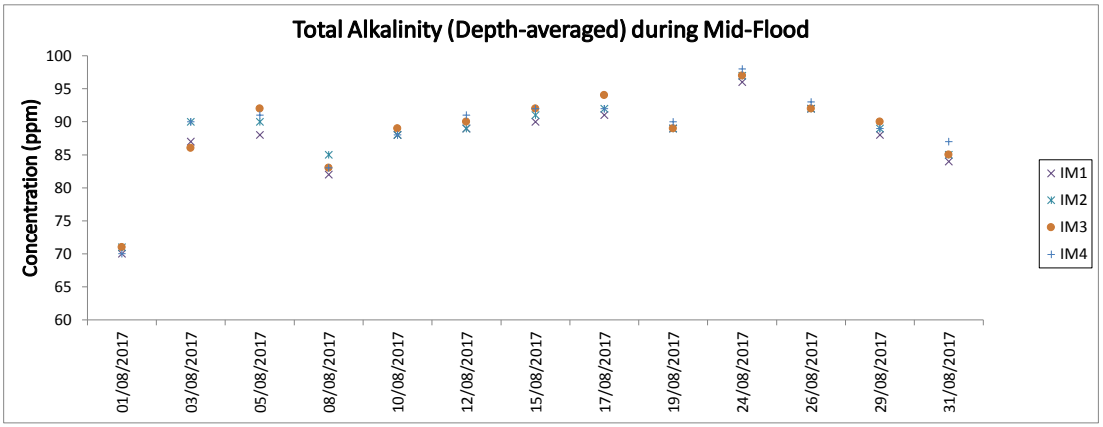


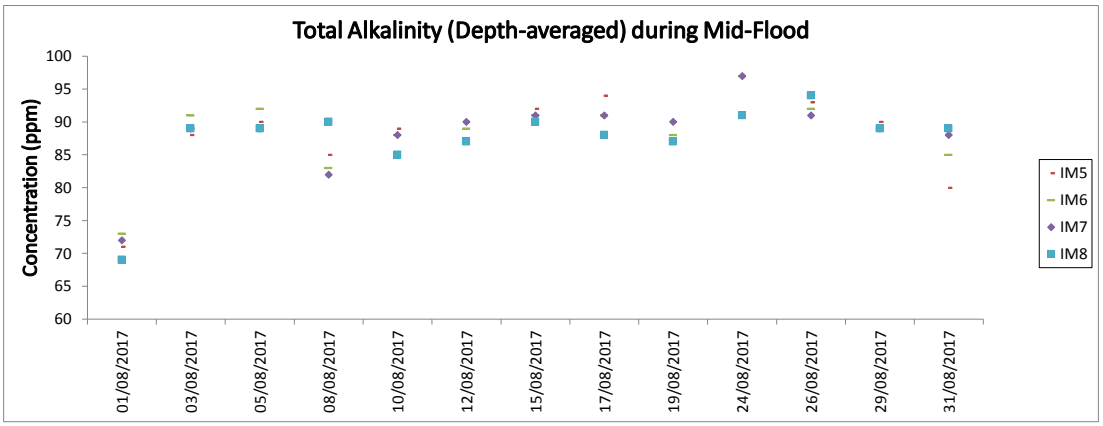


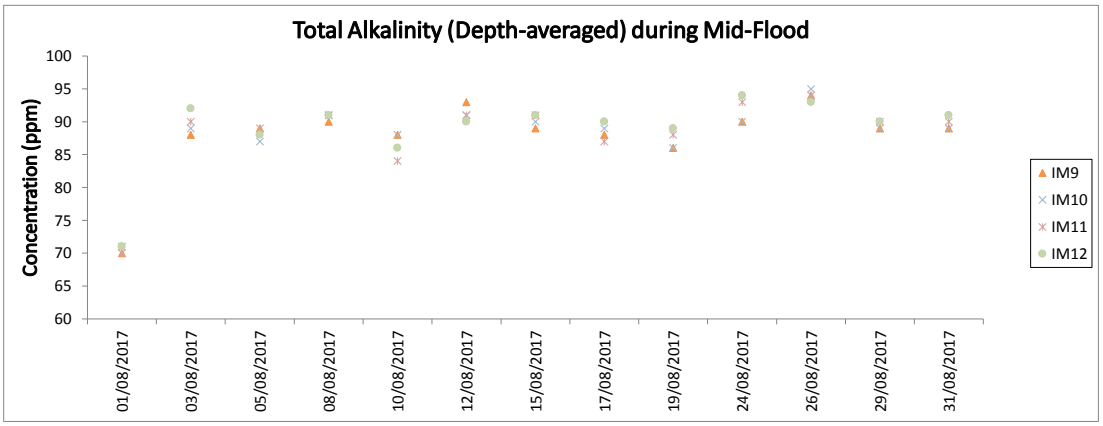


Note: The Action and Limit Level of total alkalinity can be referred to Table 4.2 of the monthly EM&A report.

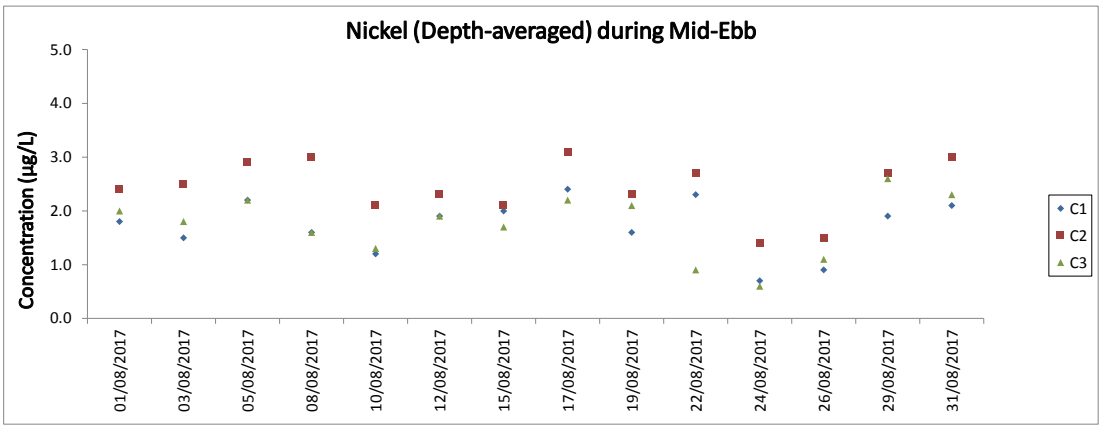


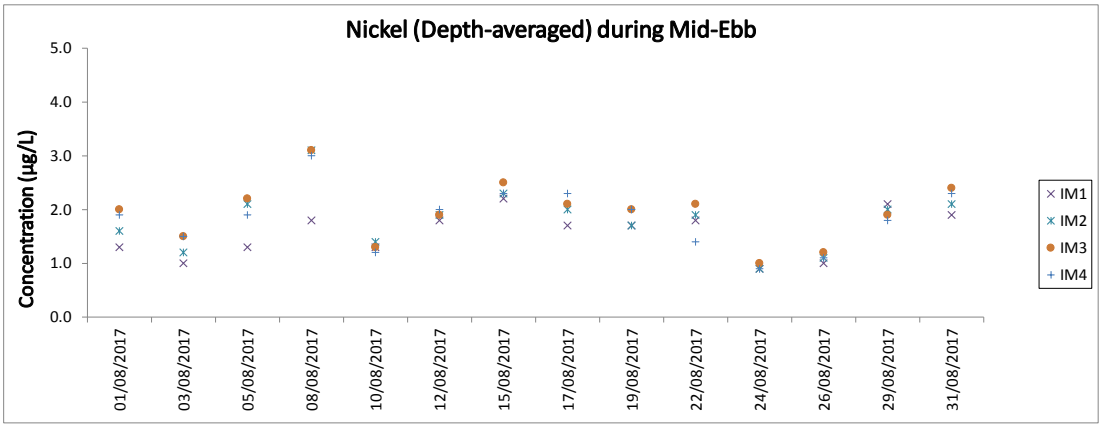


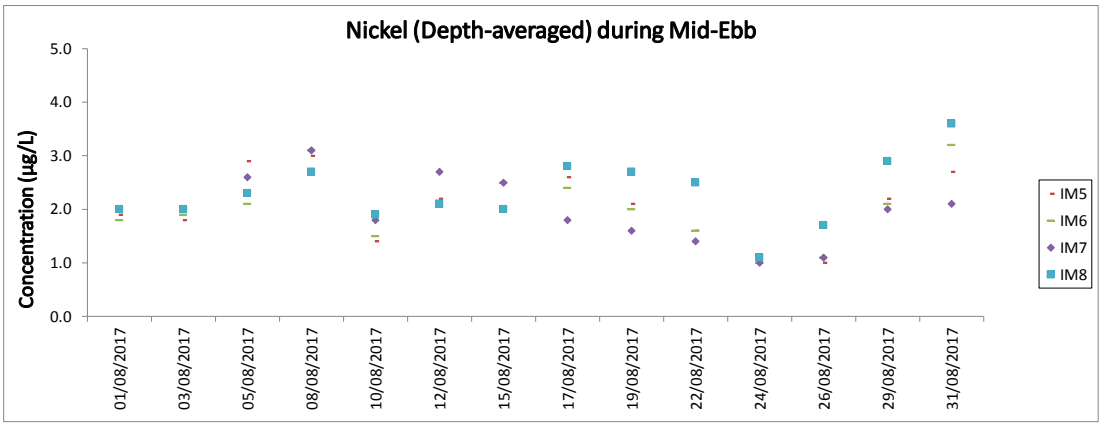


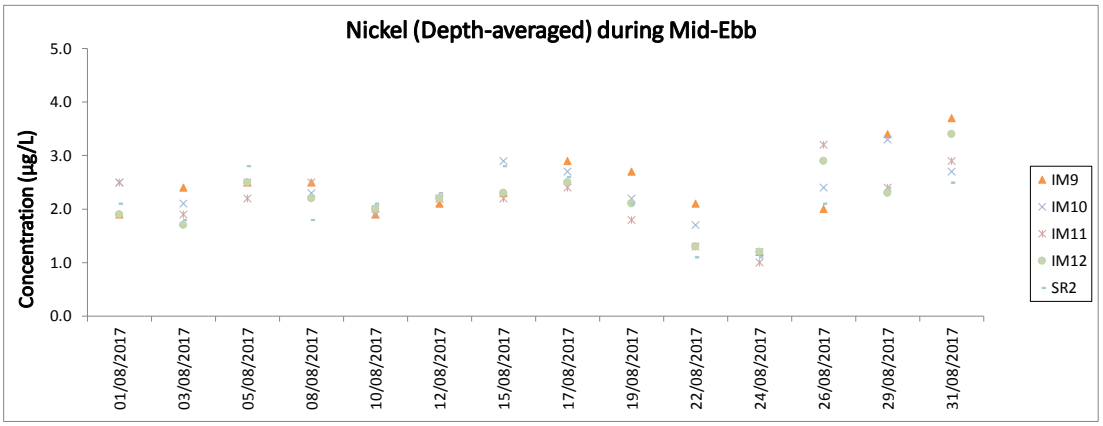


Note: The Action and Limit Level of total alkalinity can be referred to Table 4.2 of the monthly EM&A report.

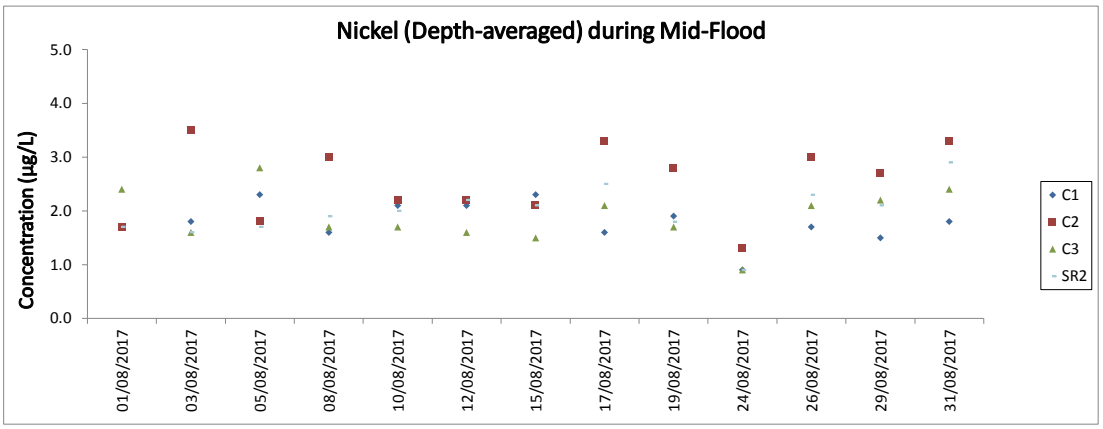


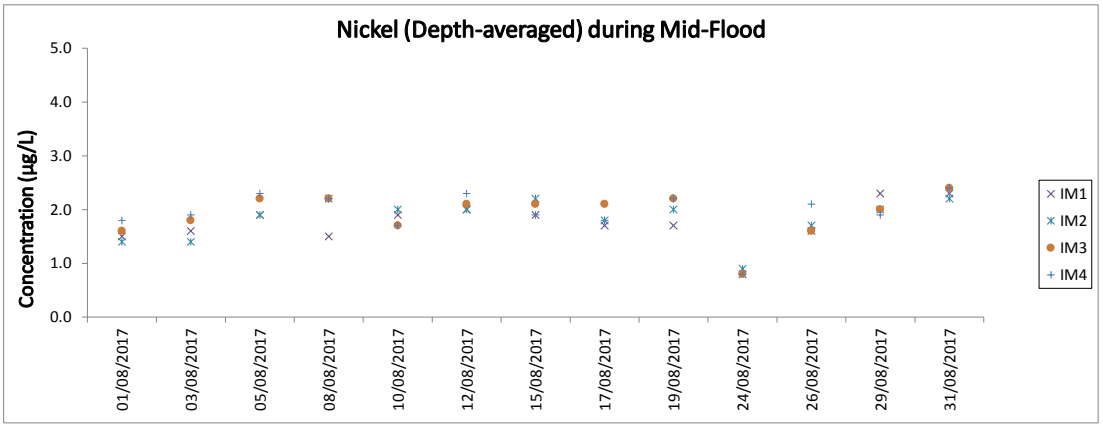


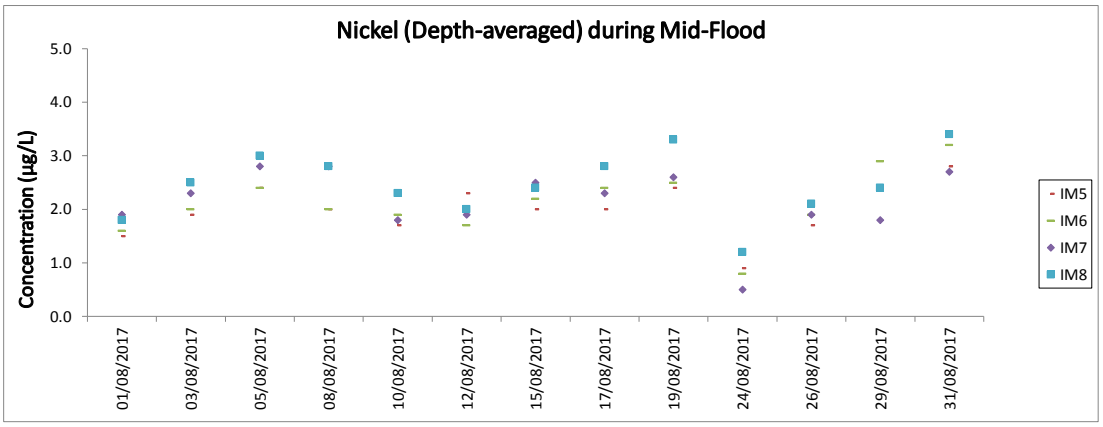


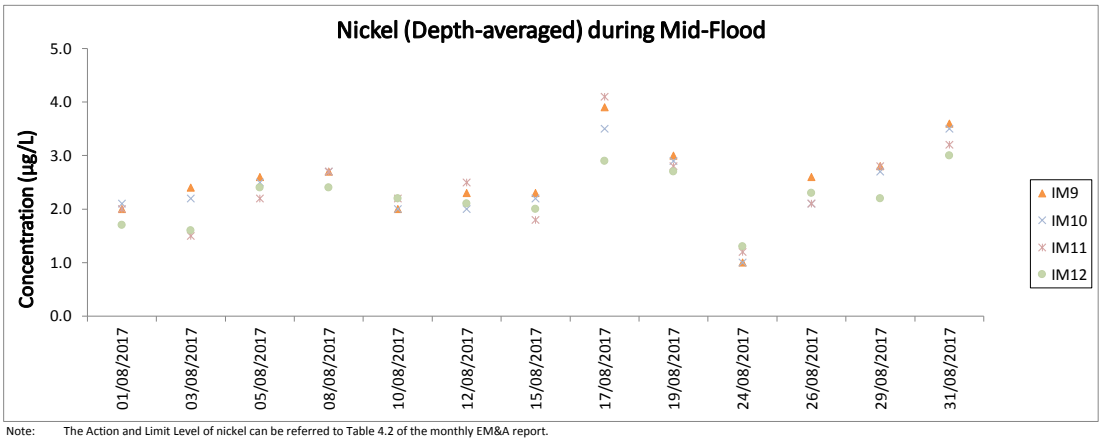


Note: The Action and Limit Level of nickel can be referred to Table 4.2 of the monthly EM&A report.
All chromium results in the reporting period was below the reporting limit 0.2 µg/L.









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

Chinese White Dolphin Monitoring Results

CWD Small Vessel Line-transect Survey — Survey Effort Data

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE
07-Jun-17	SWL	2	33.230	SUMMER	32166	3RS ET
07-Jun-17	SWL	3	27.200	SUMMER	32166	3RS ET
07-Jun-17	SWL	4	1.900	SUMMER	32166	3RS ET
08-Jun-17	NWL	2	29.074	SUMMER	32166	3RS ET
08-Jun-17	NWL	3	26.566	SUMMER	32166	3RS ET
08-Jun-17	NWL	4	18.660	SUMMER	32166	3RS ET
08-Jun-17	NWL	5	1.100	SUMMER	32166	3RS ET
09-Jun-17	AW	1	1.040	SUMMER	32166	3RS ET
09-Jun-17	AW	2	3.900	SUMMER	32166	3RS ET
09-Jun-17	WL	1	2.850	SUMMER	32166	3RS ET
09-Jun-17	WL	2	5.782	SUMMER	32166	3RS ET
09-Jun-17	WL	3	13.859	SUMMER	32166	3RS ET
09-Jun-17	WL	4	8.589	SUMMER	32166	3RS ET
09-Jun-17	WL	5	0.920	SUMMER	32166	3RS ET
09-Jun-17	SWL	2	0.521	SUMMER	32166	3RS ET
09-Jun-17	SWL	3	1.399	SUMMER	32166	3RS ET
09-Jun-17	SWL	4	4.060	SUMMER	32166	3RS ET
12-Jun-17	NEL	2	1.100	SUMMER	32166	3RS ET
12-Jun-17	NEL	3	28.890	SUMMER	32166	3RS ET
12-Jun-17	NEL	4	7.910	SUMMER	32166	3RS ET
15-Jun-17	NEL	1	4.600	SUMMER	32166	3RS ET
15-Jun-17	NEL	2	37.200	SUMMER	32166	3RS ET
22-Jun-17	SWL	2	25.837	SUMMER	32166	3RS ET
22-Jun-17	SWL	3	29.935	SUMMER	32166	3RS ET
22-Jun-17	SWL	4	2.840	SUMMER	32166	3RS ET
23-Jun-17	NWL	2	37.550	SUMMER	32166	3RS ET
23-Jun-17	NWL	3	31.360	SUMMER	32166	3RS ET
23-Jun-17	NWL	4	4.790	SUMMER	32166	3RS ET
23-Jun-17	NEL	2	4.930	SUMMER	32166	3RS ET
23-Jun-17	NEL	3	2.930	SUMMER	32166	3RS ET
28-Jun-17	AW	2	4.750	SUMMER	32166	3RS ET
28-Jun-17	WL	2	4.697	SUMMER	32166	3RS ET
28-Jun-17	WL	3	16.707	SUMMER	32166	3RS ET
28-Jun-17	WL	4	8.280	SUMMER	32166	3RS ET
28-Jun-17	SWL	3	4.960	SUMMER	32166	3RS ET
11-Jul-17	AW	2	4.860	SUMMER	32166	3RS ET
11-Jul-17	WL	2	12.725	SUMMER	32166	3RS ET
11-Jul-17	WL	3	13.429	SUMMER	32166	3RS ET
11-Jul-17	WL	4	2.400	SUMMER	32166	3RS ET
11-Jul-17	SWL	2	1.616	SUMMER	32166	3RS ET
11-Jul-17	SWL	3	3.150	SUMMER	32166	3RS ET
12-Jul-17	NWL	1	16.730	SUMMER	32166	3RS ET
12-Jul-17	NWL	2	27.170	SUMMER	32166	3RS ET
12-Jul-17	NWL	3	30.520	SUMMER	32166	3RS ET
12-Jul-17	NWL	4	0.700	SUMMER	32166	3RS ET
13-Jul-17	NEL	2	4.253	SUMMER	32166	3RS ET

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE
13-Jul-17	NEL	3	27.477	SUMMER	32166	3RS ET
13-Jul-17	NEL	4	14.770	SUMMER	32166	3RS ET
14-Jul-17	NWL	2	29.960	SUMMER	32166	3RS ET
14-Jul-17	NWL	3	33.840	SUMMER	32166	3RS ET
14-Jul-17	NWL	4	9.330	SUMMER	32166	3RS ET
20-Jul-17	SWL	2	9.500	SUMMER	32166	3RS ET
20-Jul-17	SWL	3	39.350	SUMMER	32166	3RS ET
20-Jul-17	SWL	4	12.780	SUMMER	32166	3RS ET
20-Jul-17	SWL	5	1.030	SUMMER	32166	3RS ET
21-Jul-17	AW	2	3.510	SUMMER	32166	3RS ET
21-Jul-17	AW	3	1.320	SUMMER	32166	3RS ET
21-Jul-17	WL	2	13.854	SUMMER	32166	3RS ET
21-Jul-17	WL	3	10.040	SUMMER	32166	3RS ET
21-Jul-17	WL	4	7.050	SUMMER	32166	3RS ET
21-Jul-17	SWL	3	1.970	SUMMER	32166	3RS ET
21-Jul-17	SWL	4	4.660	SUMMER	32166	3RS ET
25-Jul-17	NEL	2	31.060	SUMMER	32166	3RS ET
25-Jul-17	NEL	3	15.740	SUMMER	32166	3RS ET
26-Jul-17	SWL	2	41.124	SUMMER	32166	3RS ET
26-Jul-17	SWL	3	11.530	SUMMER	32166	3RS ET
26-Jul-17	SWL	4	9.430	SUMMER	32166	3RS ET
04-Aug-17	NWL	1	11.000	SUMMER	32166	3RS ET
04-Aug-17	NWL	2	20.300	SUMMER	32166	3RS ET
04-Aug-17	NWL	3	42.293	SUMMER	32166	3RS ET
04-Aug-17	NWL	4	0.300	SUMMER	32166	3RS ET
08-Aug-17	NWL	3	16.760	SUMMER	32166	3RS ET
08-Aug-17	NWL	4	57.140	SUMMER	32166	3RS ET
08-Aug-17	NWL	5	0.800	SUMMER	32166	3RS ET
09-Aug-17	NEL	2	29.120	SUMMER	32166	3RS ET
09-Aug-17	NEL	3	11.010	SUMMER	32166	3RS ET
09-Aug-17	NEL	4	4.470	SUMMER	32166	3RS ET
09-Aug-17	NEL	5	2.600	SUMMER	32166	3RS ET
14-Aug-17	AW	3	1.820	SUMMER	32166	3RS ET
14-Aug-17	AW	4	2.840	SUMMER	32166	3RS ET
14-Aug-17	WL	3	12.390	SUMMER	32166	3RS ET
14-Aug-17	WL	4	20.110	SUMMER	32166	3RS ET
14-Aug-17	SWL	3	12.400	SUMMER	32166	3RS ET
15-Aug-17	SWL	2	24.510	SUMMER	32166	3RS ET
15-Aug-17	SWL	3	29.836	SUMMER	32166	3RS ET
15-Aug-17	SWL	4	0.740	SUMMER	32166	3RS ET
21-Aug-17	SWL	1	2.600	SUMMER	32166	3RS ET
21-Aug-17	SWL	2	48.228	SUMMER	32166	3RS ET
21-Aug-17	SWL	3	7.160	SUMMER	32166	3RS ET
21-Aug-17	SWL	4	1.530	SUMMER	32166	3RS ET
22-Aug-17	AW	0	1.880	SUMMER	32166	3RS ET
22-Aug-17	AW	1	2.410	SUMMER	32166	3RS ET
22-Aug-17	WL	1	9.997	SUMMER	32166	3RS ET

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE
22-Aug-17	WL	2	9.174	SUMMER	32166	3RS ET
22-Aug-17	WL	3	12.400	SUMMER	32166	3RS ET
22-Aug-17	WL	4	0.900	SUMMER	32166	3RS ET
22-Aug-17	SWL	1	1.940	SUMMER	32166	3RS ET
22-Aug-17	SWL	2	0.252	SUMMER	32166	3RS ET
22-Aug-17	SWL	3	3.154	SUMMER	32166	3RS ET
25-Aug-17	NEL	1	1.900	SUMMER	32166	3RS ET
25-Aug-17	NEL	2	34.960	SUMMER	32166	3RS ET
25-Aug-17	NEL	3	9.940	SUMMER	32166	3RS ET

Notes:

CWD monitoring survey data of the two preceding survey months (i.e. June and July 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.
07-Jun-17	1	1224	CWD	1	SWL	2	N/A	OFF	3RS ET	22.1766	113.9070	SUMMER	NONE
07-Jun-17	2	1249	CWD	6	SWL	2	125	ON	3RS ET	22.2030	113.9079	SUMMER	NONE
07-Jun-17	3	1507	CWD	2	SWL	2	116	ON	3RS ET	22.2007	113.8684	SUMMER	NONE
08-Jun-17	1	1202	CWD	2	NWL	3	362	ON	3RS ET	22.3993	113.8889	SUMMER	NONE
09-Jun-17	1	1106	CWD	5	WL	2	846	ON	3RS ET	22.2413	113.8450	SUMMER	NONE
09-Jun-17	2	1207	CWD	2	WL	4	138	ON	3RS ET	22.2311	113.8382	SUMMER	NONE
09-Jun-17	3	1240	CWD	3	WL	3	44	ON	3RS ET	22.2120	113.8372	SUMMER	NONE
09-Jun-17	4	1358	CWD	5	SWL	3	6	ON	3RS ET	22.1915	113.8592	SUMMER	NONE
22-Jun-17	1	1026	CWD	9	SWL	2	620	ON	3RS ET	22.2094	113.9364	SUMMER	NONE
22-Jun-17	2	1200	CWD	3	SWL	3	11	ON	3RS ET	22.2054	113.9266	SUMMER	NONE
22-Jun-17	3	1212	CWD	1	SWL	3	67	ON	3RS ET	22.2055	113.9258	SUMMER	NONE
22-Jun-17	4	1222	CWD	1	SWL	3	25	ON	3RS ET	22.2053	113.9191	SUMMER	NONE
22-Jun-17	5	1230	CWD	2	SWL	2	64	ON	3RS ET	22.2026	113.9178	SUMMER	NONE
22-Jun-17	6	1248	CWD	1	SWL	2	720	ON	3RS ET	22.1941	113.9184	SUMMER	NONE
22-Jun-17	7	1354	CWD	2	SWL	2	28	ON	3RS ET	22.1916	113.9083	SUMMER	NONE
22-Jun-17	8	1406	CWD	3	SWL	2	5	ON	3RS ET	22.2063	113.9061	SUMMER	NONE
23-Jun-17	1	1001	CWD	1	NWL	2	72	ON	3RS ET	22.3476	113.8690	SUMMER	NONE
23-Jun-17	2	1212	CWD	2	NWL	3	17	ON	3RS ET	22.4073	113.8882	SUMMER	NONE
28-Jun-17	1	1028	CWD	3	WL	3	869	ON	3RS ET	22.2694	113.8568	SUMMER	NONE
28-Jun-17	2	1047	CWD	3	WL	2	65	ON	3RS ET	22.2649	113.8580	SUMMER	NONE
28-Jun-17	3	1119	CWD	5	WL	3	49	ON	3RS ET	22.2480	113.8515	SUMMER	NONE
28-Jun-17	4	1141	CWD	2	WL	3	250	ON	3RS ET	22.2411	113.8454	SUMMER	NONE
28-Jun-17	5	1201	CWD	2	WL	3	4	ON	3RS ET	22.2321	113.8296	SUMMER	NONE
28-Jun-17	6	1214	CWD	5	WL	4	482	ON	3RS ET	22.2232	113.8342	SUMMER	NONE
28-Jun-17	7	1250	CWD	2	WL	3	441	ON	3RS ET	22.2144	113.8268	SUMMER	NONE
28-Jun-17	8	1330	CWD	5	WL	3	224	ON	3RS ET	22.1953	113.8375	SUMMER	NONE
28-Jun-17	9	1428	CWD	1	SWL	3	1164	ON	3RS ET	22.1831	113.8593	SUMMER	NONE
11-Jul-17	1	1038	CWD	2	WL	2	82	ON	3RS ET	22.2668	113.8592	SUMMER	NONE
11-Jul-17	2	1055	CWD	8	WL	2	19	ON	3RS ET	22.2608	113.8536	SUMMER	NONE
11-Jul-17	3	1133	CWD	2	WL	3	351	ON	3RS ET	22.2498	113.8403	SUMMER	NONE
11-Jul-17	4	1144	CWD	1	WL	2	8	ON	3RS ET	22.2500	113.8500	SUMMER	NONE

DATE	STG #	TIME	CWD/FP	GP SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.
11-Jul-17	5	1159	CWD	4	WL	2	726	ON	3RS ET	22.2432	113.8488	SUMMER	NONE
11-Jul-17	6	1216	CWD	1	WL	2	17	ON	3RS ET	22.2414	113.8463	SUMMER	NONE
11-Jul-17	7	1242	CWD	2	WL	3	11	ON	3RS ET	22.2279	113.8378	SUMMER	NONE
11-Jul-17	8	1259	CWD	2	WL	3	196	ON	3RS ET	22.2185	113.8137	SUMMER	NONE
11-Jul-17	9	1318	CWD	2	WL	3	16	ON	3RS ET	22.2143	113.8333	SUMMER	NONE
11-Jul-17	10	1350	CWD	7	WL	4	324	ON	3RS ET	22.1969	113.8397	SUMMER	NONE
11-Jul-17	11	1414	CWD	3	WL	4	157	ON	3RS ET	22.1864	113.8401	SUMMER	NONE
11-Jul-17	12	1435	CWD	4	SWL	2	118	ON	3RS ET	22.1903	113.8499	SUMMER	NONE
11-Jul-17	13	1506	CWD	4	SWL	2	299	ON	3RS ET	22.1883	113.8593	SUMMER	NONE
12-Jul-17	1	0950	CWD	2	NWL	1	70	ON	3RS ET	22.3715	113.8673	SUMMER	NONE
12-Jul-17	2	1316	CWD	1	NWL	3	102	ON	3RS ET	22.3998	113.8983	SUMMER	NONE
14-Jul-17	1	0953	CWD	1	NWL	3	351	ON	3RS ET	22.3615	113.8666	SUMMER	NONE
14-Jul-17	2	1048	CWD	2	NWL	2	890	ON	3RS ET	22.2773	113.8689	SUMMER	NONE
14-Jul-17	3	1210	CWD	1	NWL	2	169	ON	3RS ET	22.3909	113.8780	SUMMER	NONE
20-Jul-17	1	1412	CWD	2	SWL	3	319	ON	3RS ET	22.1776	113.8785	SUMMER	NONE
20-Jul-17	2	1457	CWD	1	SWL	3	2226	ON	3RS ET	22.1900	113.8678	SUMMER	NONE
20-Jul-17	3	1524	CWD	3	WL	2	N/A	OFF	3RS ET	22.2178	113.8339	SUMMER	NONE
21-Jul-17	1	1032	CWD	5	WL	2	20	ON	3RS ET	22.2649	113.8585	SUMMER	NONE
21-Jul-17	2	1131	CWD	2	WL	3	65	ON	3RS ET	22.2318	113.8372	SUMMER	NONE
21-Jul-17	3	1151	CWD	2	WL	2	17	ON	3RS ET	22.2288	113.8383	SUMMER	NONE
21-Jul-17	4	1208	CWD	2	WL	3	190	ON	3RS ET	22.2182	113.8138	SUMMER	NONE
21-Jul-17	5	1223	CWD	2	WL	4	27	ON	3RS ET	22.2139	113.8322	SUMMER	NONE
21-Jul-17	6	1243	CWD	1	WL	4	62	ON	3RS ET	22.2048	113.8383	SUMMER	NONE
21-Jul-17	7	1310	CWD	6	WL	3	27	ON	3RS ET	22.1956	113.8425	SUMMER	NONE
26-Jul-17	1	1026	CWD	1	WL	2	N/A	OFF	3RS ET	22.2362	113.8409	SUMMER	NONE
26-Jul-17	2	1033	CWD	2	WL	2	N/A	OFF	3RS ET	22.2183	113.8339	SUMMER	NONE
26-Jul-17	3	1045	CWD	2	SWL	2	N/A	OFF	3RS ET	22.1948	113.8509	SUMMER	NONE
26-Jul-17	4	1056	CWD	3	SWL	2	252	ON	3RS ET	22.1999	113.8684	SUMMER	NONE
26-Jul-17	5	1301	CWD	7	SWL	2	234	ON	3RS ET	22.2036	113.9083	SUMMER	NONE
26-Jul-17	6	1411	FP	2	SWL	3	87	ON	3RS ET	22.1534	113.9183	SUMMER	NONE
26-Jul-17	7	1437	CWD	2	SWL	3	711	ON	3RS ET	22.2040	113.9181	SUMMER	GILLNET
04-Aug-17	1	1202	CWD	2	NWL	3	41	ON	3RS ET	22.4075	113.8878	SUMMER	NONE

DATE	STG #	TIME	CWD/FP	GP SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.
04-Aug-17	2	1322	CWD	3	NWL	3	42	ON	3RS ET	22.3735	113.8980	SUMMER	NONE
04-Aug-17	3	1339	CWD	3	NWL	1	3	ON	3RS ET	22.3782	113.8978	SUMMER	NONE
08-Aug-17	1	1305	CWD	2	NWL	4	N/A	OFF	3RS ET	22.3817	113.8981	SUMMER	NONE
14-Aug-17	1	1121	CWD	1	WL	3	98	ON	3RS ET	22.2321	113.8264	SUMMER	NONE
14-Aug-17	2	1242	CWD	2	WL	4	149	ON	3RS ET	22.1874	113.8301	SUMMER	NONE
14-Aug-17	3	1252	CWD	4	WL	4	N/A	OFF	3RS ET	22.1920	113.8425	SUMMER	NONE
14-Aug-17	4	1316	CWD	1	SWL	3	N/A	OFF	3RS ET	22.1906	113.8491	SUMMER	NONE
15-Aug-17	1	1029	CWD	1	SWL	2	303	ON	3RS ET	22.2108	113.9358	SUMMER	NONE
15-Aug-17	2	1131	CWD	1	SWL	3	182	ON	3RS ET	22.1818	113.9276	SUMMER	NONE
15-Aug-17	3	1255	CWD	5	SWL	2	146	ON	3RS ET	22.1784	113.9041	SUMMER	NONE
15-Aug-17	4	1338	CWD	1	SWL	3	1090	ON	3RS ET	22.1901	113.8967	SUMMER	NONE
15-Aug-17	5	1343	CWD	8	SWL	3	477	ON	3RS ET	22.1853	113.8973	SUMMER	NONE
15-Aug-17	6	1407	CWD	1	SWL	2	783	ON	3RS ET	22.1756	113.8969	SUMMER	NONE
15-Aug-17	7	1455	CWD	3	SWL	2	11	ON	3RS ET	22.1794	113.8876	SUMMER	NONE
21-Aug-17	1	1232	CWD	3	SWL	3	156	ON	3RS ET	22.1673	113.9050	SUMMER	GILLNET
21-Aug-17	2	1333	CWD	2	SWL	2	29	ON	3RS ET	22.1789	113.8982	SUMMER	NONE
21-Aug-17	3	1344	CWD	8	SWL	2	713	ON	3RS ET	22.1741	113.8972	SUMMER	NONE
21-Aug-17	4	1431	CWD	8	SWL	2	174	ON	3RS ET	22.1729	113.8875	SUMMER	NONE
21-Aug-17	5	1516	CWD	3	SWL	2	15	ON	3RS ET	22.1796	113.8786	SUMMER	NONE
21-Aug-17	6	1539	CWD	2	SWL	2	126	ON	3RS ET	22.1665	113.8688	SUMMER	NONE
21-Aug-17	7	1549	CWD	2	SWL	2	28	ON	3RS ET	22.1720	113.8690	SUMMER	NONE
22-Aug-17	1	0943	CWD	1	AW	1	87	ON	3RS ET	22.2965	113.8825	SUMMER	NONE
22-Aug-17	2	1031	CWD	1	WL	1	37	ON	3RS ET	22.2776	113.8518	SUMMER	NONE
22-Aug-17	3	1043	CWD	2	WL	1	6	ON	3RS ET	22.2684	113.8457	SUMMER	NONE
22-Aug-17	4	1059	CWD	2	WL	1	140	ON	3RS ET	22.2656	113.8585	SUMMER	NONE
22-Aug-17	5	1112	CWD	1	WL	1	189	ON	3RS ET	22.2609	113.8550	SUMMER	NONE
22-Aug-17	6	1127	CWD	6	WL	1	84	ON	3RS ET	22.2602	113.8396	SUMMER	NONE
22-Aug-17	7	1202	CWD	4	WL	2	149	ON	3RS ET	22.2419	113.8404	SUMMER	NONE
22-Aug-17	8	1326	CWD	1	WL	3	31	ON	3RS ET	22.1875	113.8419	SUMMER	NONE
22-Aug-17	9	1335	CWD	4	WL	2	376	ON	3RS ET	22.1865	113.8386	SUMMER	NONE
22-Aug-17	10	1408	CWD	3	SWL	3	182	ON	3RS ET	22.1718	113.8533	SUMMER	NONE
22-Aug-17	11	1432	CWD	4	SWL	2	210	ON	3RS ET	22.1748	113.8594	SUMMER	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. June and July 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 August 2017 encounter rates STG and ANI in the whole survey area (NEL, NWL, AW, WL, SWL):

A total of 357.434 km of survey effort was collected under Beaufort Sea State 3 or below with favourable visibility; total no. of 29 on-effort sightings and total number of 86 dolphins from on-effort sightings were collected under such condition. Calculation of the encounter rates in August 2017 are shown as below:

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

$$STG = \frac{29}{357.434}\ x\ 100 = 8.11$$

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

$$ANI = \frac{86}{357.434}\ x\ 100 = 24.06$$

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

A total of 1123.029 km of survey effort was collected under Beaufort Sea State 3 or below with favourable visibility; total no. of 79 on-effort sightings and total number of 228 dolphins from on-effort sightings were collected under such condition. Calculation of the running quarterly encounter rates are shown as below:

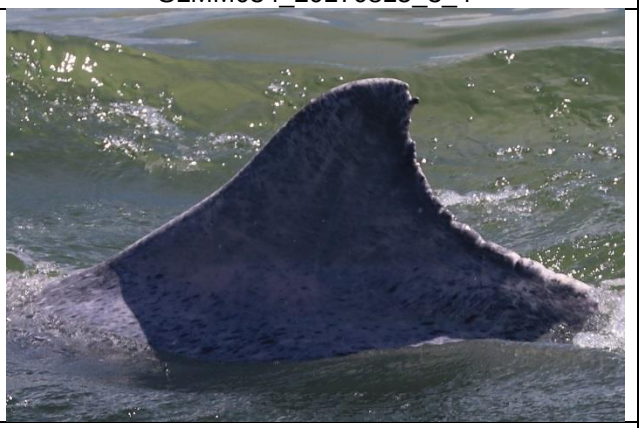
Running Quarterly Encounter Rate by Number of Dolphin Sightings (STG)

$$STG = \frac{79}{1123.029}\ x\ 100 = 7.03$$

Running Quarterly Encounter Rate by Number of Dolphins (ANI)

$$ANI = \frac{228}{1123.029}\ x\ 100 = 20.30$$

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

	
WLMM051_20170814_3_3	SLMM054_20170815_1_8
	
SLMM060_20170815_2_9	SLMM034_20170815_3_4
	
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SLMM063_20170815_7_6	WLMM020_20170815_7_4
	
SLMM015_20170821_1_5	SLMM023_20170821_1_2
	
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	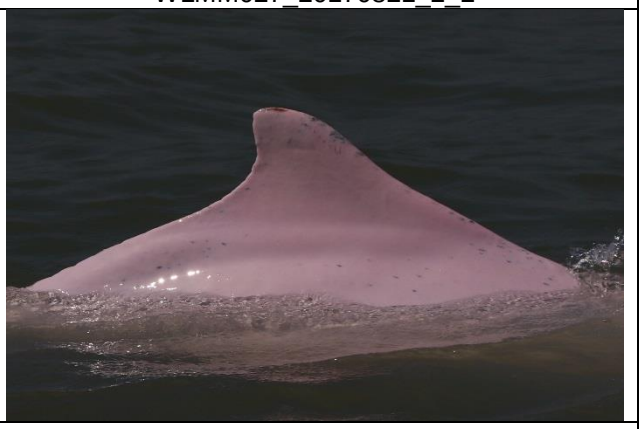
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	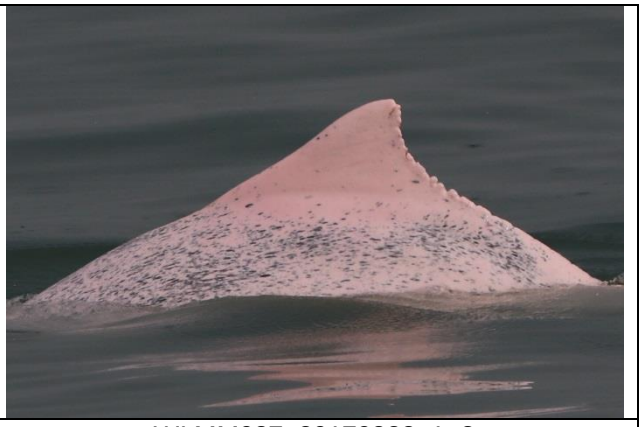
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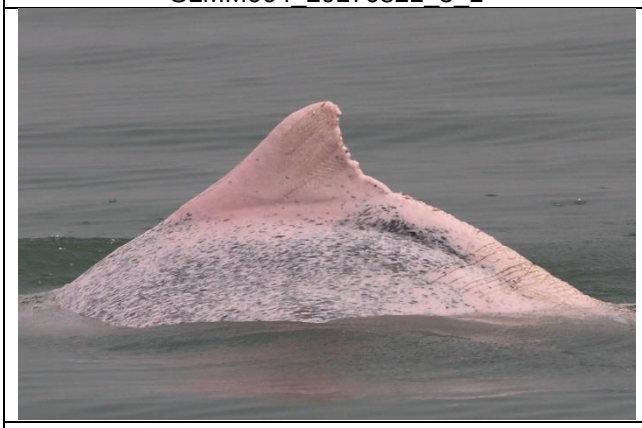	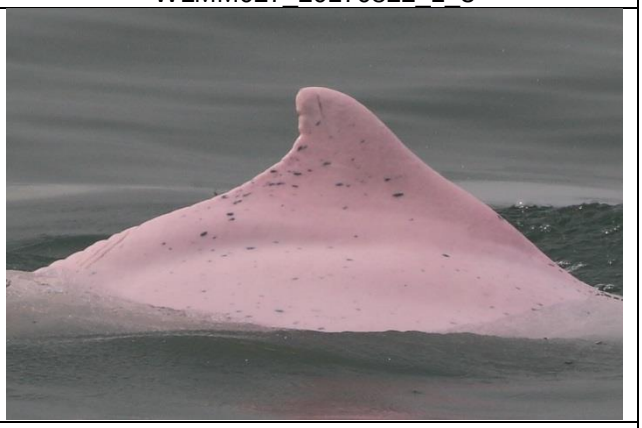
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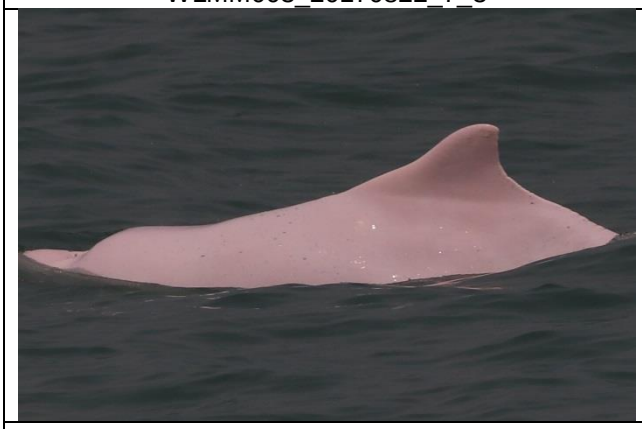
NLMM051_20170822_3_11	WLMM101_20170822_4_8
	
NLMM033_20170822_6_7	NLMM040_20170822_6_4

	
NLMM041_20170822_6_3	NLMM051_20170822_3_10
	
NLMM027_20170822_7_2_Lower	NLMM028_20170822_7_1_Upper
	
WLMM003_20170822_7_3	WLMM089_20170822_7_4
	
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	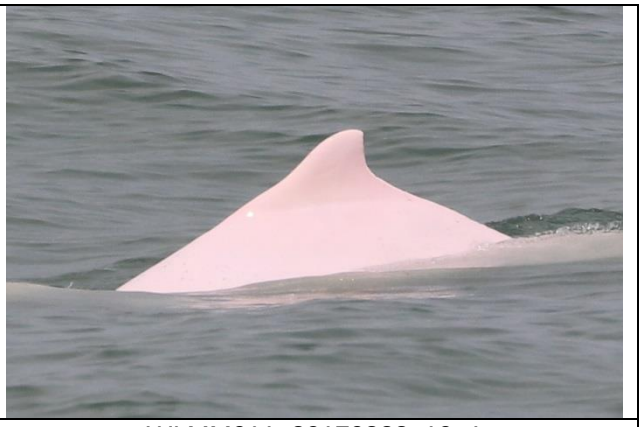
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WLMM008_20170822_11_3	

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
17/Aug/17	Lung Kwu Chau	8:39	14:39	6:00	2	2	2	2-4
18/Aug/17	Sha Chau	8:49	14:49	6:00	1-2	2	0	N/A
21/Aug/17	Lung Kwu Chau	9:10	15:10	6:00	2	2-3	6	1-6
22/Aug/17	Lung Kwu Chau	8:43	14:43	6:00	2-4	4	3	2-5
25/Aug/17	Sha Chau	8:46	14:46	6:00	2	2	2	1-2

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 E. Calibration Certificates

EQUIPMENT CALIBRATION RECORD

Type :	Laser Dust Monitor
Manufacturer / Brand :	SIBATA
Model No.:	LD-3B
Equipment No.:	LD-3B-001
Serial No.:	934393
Sensitivity Adjustment Scale Setting :	640 CPM

Standard Equipment

Equipment :	MFC High Volume Air Sampler
Venue :	Tung Chung Pier
Model No.:	TE-5170 Total Suspended Particulate
Serial No.:	S/N3641
Previous Calibration Date	29/09/2016

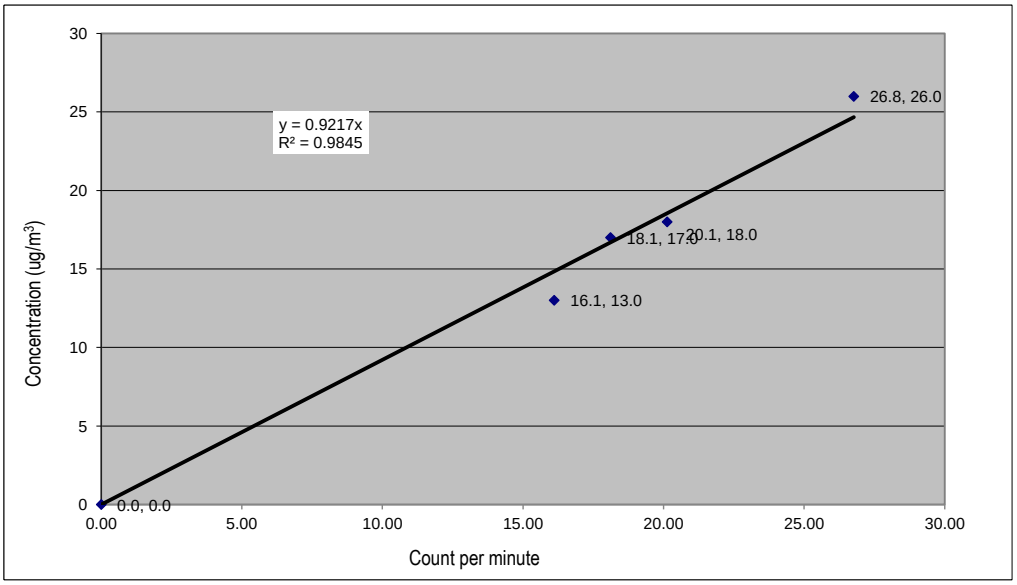
Calibration Result

Sensitivity Adjustment Scale Setting (Before Calibration) :	640 CPM
Sensitivity Adjustment Scale Setting (After Calibration) :	640 CPM

Hour	Date (dd-mmm-yy)	Time		Ambient Condition		Concentration (ug/m^3) Y-axis	Total Count	Count/Minute X-axis
				Temp (^oC)	R.H. (%)			
1	26/10/2016	13:59	14:59	30.7	64%	18	1208	20.13
2	26/10/2016	15:12	16:12	30.9	59%	13	967	16.12
3	26/10/2016	16:21	17:21	30.9	61%	17	1087	18.12
4	26/10/2016	17:30	18:30	30.9	61%	26	1606	26.77

Be Linear Regression of Y or X
Slope (K-factor): 0.9217
Correlation coefficient (R): 0.993

Remark:



Recorded by: Ray Cheng Signature: Date: 25/11/2016

Checked by: Ketih Chau Signature: Date: 25/11/2016

EQUIPMENT CALIBRATION RECORD

Type :	Laser Dust Monitor
Manufacturer / Brand :	SIBATA
Model No.:	LD-3B
Equipment No.:	LD-3B-003
Serial No.:	276018
Sensitivity Adjustment Scale Setting :	799 CPM

Standard Equipment

Equipment :	MFC High Volume Air Sampler
Venue :	Tung Chung Pier
Model No.:	TE-5170 Total Suspended Particulate
Serial No.:	S/N3641

Previous Calibration Date 29/09/2016

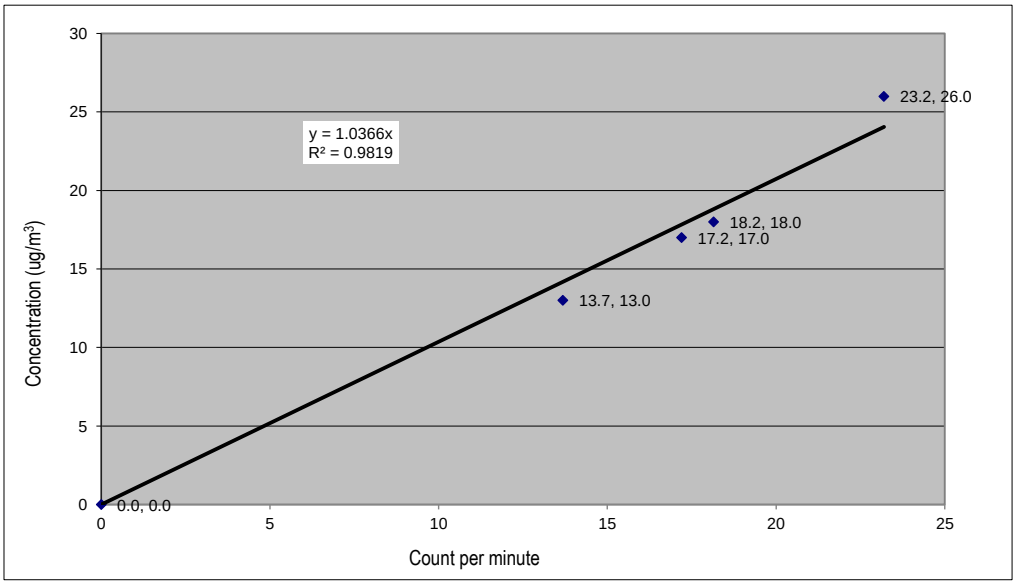
Calibration Result

Sensitivity Adjustment Scale Setting (Before Calibration) : 799 CPM
Sensitivity Adjustment Scale Setting (After Calibration) : 799 CPM

Hour	Date (dd-mmm-yy)	Time		Ambient Condition		Concentration (ug/m^3) Y-axis	Total Count	Count/Minute X-axis
				Temp (^oC)	R.H. (%)			
1	26/10/2016	13:59	14:59	30.7	64%	18	1089	18.15
2	26/10/2016	15:12	16:12	30.9	59%	13	821	13.68
3	26/10/2016	16:21	17:21	30.9	61%	17	1032	17.20
4	26/10/2016	17:30	18:30	30.9	61%	26	1392	23.20

Be Linear Regression of Y or X
Slope (K-factor): 1.0415
Correlation coefficient : 0.9919

Remark:



Recorded by: Ray Cheng Signature: Date: 25/11/2016

Checked by: Ketih Chau Signature: Date: 25/11/2016

Appendix F. Status of Environmental Permits and Licences

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

Contract No.	Description	Location	Permit/ Reference No.	Status
P560 (R)	Notification of Construction Work under APCO	Launching Site	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-RS0243-17	Valid from 21 Mar 2017 to 20 Sep 2017 (Superseded by GW-RS0720-17 on 23 Aug 2017)
		Launching Site	GW-RS0720-17	Valid from 23 Aug 2017 to 13 Feb 2018
		Sheung Sha Chau	GW-RS0345-17	Valid from 6 Aug 2017 to 29 Oct 2017
		Stockpiling Area	GW-RS0242-17	Valid from 23 Mar 2017 to 22 Sep 2017 (Superseded by GW-RS0719-17 on 23 Aug 2017)
		Stockpiling Area	GW-RS0719-17	Valid from 23 Aug 2017 to 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	Update the Registration on 27 Jul 2017
		Stockpiling Area	WPN 5213-951-L2902-02	Update the Registration 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-RS0398-17	Valid from 28 Apr 2017 to 27 Oct 2017 (Superseded by GW-RS0666-17 on 7 Aug 2017)
			GW-RS0666-17	Valid from 7 Aug 2017 to 4 Feb 2017

Contract No.	Description	Location	Permit/ Reference No.	Status
	Registration as Chemical Waste Producer	Works area of 3201	WPN 5213-951-P3231-01	Completion of Registration on 9 Sep 2016
	Bill Account for disposal		A/C 7025760	Approval granted from EPD on 31 Aug 2016
3202	Notification of Construction Work under APCO	Works area of 3202	407624	Receipt acknowledged by EPD on 15 Sep 2016
	Construction Noise Permit (General Works)	Works area of 3202	GW-RS0613-17	Valid from 19 Jul 2017 to 16 Jan 2018
		Site Office of 3202	GW-RS0469-17	Valid from 2 Jun 2017 to 29 Nov 2017
	Registration as Chemical Waste Producer	Works area of 3202	WPN 5213-951-S3967-01	Completion of Registration on 24 Oct 2016
	Discharge License	Works area of 3202	WT00028293-2017	Valid from 12 Jun 2017 to 30 June 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-RS0323-17	Valid from 19 Apr 2017 to 18 Oct 2017
	Registration as Chemical Waste Producer	Works area of 3203	WPN 5213-951-S3954-01	Update the Registration on 12 Dec 2016
	Discharge License	Works area of 3203	WT00028251-2017	Valid from 9 Jun 2017 to 30 June 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)	Site Office of 3204	GW-RS0136-17	Valid from 17 Feb 2017 to 16 Aug 2017
		Works Area of 3204	GW-RS0629-17	Valid from 21 Jul 2017 to 20 Jan 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 June 2022
	Bill Account for disposal		A/C 7025969	Approval granted from EPD on 21 Sep 2016
3205	Notification of Construction Work under APCO	Works area of 3205	409041	Receipt acknowledged by EPD on 19 Oct 2016
	Registration as Chemical Waste Producer	Works Area of 3205	WPN 5213-951-B2502-01	Completion of Registration on 13 Jan 2017
		Works Area of 3205	WPN 5111-421-B2509-01	Completion of Registration on 22 Feb 2017

Contract No.	Description	Location	Permit/ Reference No.	Status
	Construction Noise Permit (General Works)	Works Area of 3205	GW-RS0434-17	Valid from 15 May 2017 to 11 Nov 2017
	Discharge License	Works area of 3205	WT00028370-2017	Valid from 21 Jun 2017 to 30 June 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)	Site Office of 3206	GW-RS0511-17	Valid from 14 Jun 2017 to 15 Sep 2017
		Works Area of 3206	GW-RS0589-17	Valid from 12 Jul 2017 to 12 Dec 2017
		Works Area of 3206	GW-RS0430-17	Valid from 20 May 2017 to 19 Nov 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	Valid from 3 Aug 2017 to 31 Jan 2018
		Works area of 3301	GW-RS0712-17	Valid from 24 Aug 2017 to 23 Feb 2018
3501	Notification of Construction Work under APCO	Works area of 3501	417903	Receipt acknowledged by EPD on 13 Jun 2017
	Registration as Chemical Waste Producer	Works area of 3501	WPN 5213-951-B2520-02	Completion of Registration on 25 Jul 2017
	Bill Account for disposal	Works area of 3501	A/C 7028144	Approval granted from EPD on 23 Jun 2017
	Construction Noise Permit (General Works)	Works area of 3501	GW-RS0667-17	Valid from 21 Aug 2017 to 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-RS0686-17	Valid from 21 Aug 2017 to 20 Feb 2018

Contract No.	Description	Location	Permit/ Reference No.	Status
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
	Bill Account for disposal	Works area of 3801	A/C 7028254	Approval granted from EPD on 3 Jul 2017

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

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

		Total no. recorded in the reporting month	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 month	1	0	0
From 28 December 2015 to end of the reporting month	6	1	0

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

Data of SkyPier HSF Movements to/from Zhuhai and Macau (between 1 and 31 August 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-Aug	08:22	3A061	YFT	Arrival	12	-	-
01-Aug	08:34	8S210	XZM	Arrival	12.6	-	-
01-Aug	10:09	3A071	XZM	Arrival	12.5	-	-
01-Aug	10:48	8S212	XZM	Arrival	12.1	-	-
01-Aug	10:56	3A081	ZUI	Arrival	12.2	-	-
01-Aug	11:14	8S121	XZM	Departure	11.1	-	-
01-Aug	11:18	3A063	YFT	Arrival	12.7	-	-
01-Aug	12:17	3A181	ZUI	Departure	13	-	-
01-Aug	12:19	3A168	YFT	Departure	12.6	-	-
01-Aug	12:56	8S215	XZM	Arrival	11.1	-	-
01-Aug	13:02	3A064	YFT	Arrival	11.3	-	-
01-Aug	13:26	8S123	XZM	Departure	10.8	-	-
01-Aug	13:58	3A082	ZUI	Arrival	12.9	-	-
01-Aug	14:18	3A182	ZUI	Departure	13.1	-	-
01-Aug	14:21	3A164	YFT	Departure	12	-	-
01-Aug	14:53	3A065	YFT	Arrival	12.6	-	-
01-Aug	16:23	3A167	YFT	Departure	13.1	-	-
01-Aug	16:40	3A083	ZUI	Arrival	12.8	-	-
01-Aug	16:45	8S218	XZM	Arrival	10.8	-	-
01-Aug	17:03	3A067	YFT	Arrival	11.6	-	-
01-Aug	17:14	3A183	ZUI	Departure	12.5	-	-
01-Aug	17:30	8S126	XZM	Departure	10.8	-	-
01-Aug	19:11	3A166	YFT	Departure	11.7	-	-
01-Aug	19:54	3A084	ZUI	Arrival	12.4	-	-
01-Aug	20:15	3A185	ZUI	Departure	13.4	-	-
01-Aug	21:01	8S2113	XZM	Arrival	12	-	-
01-Aug	21:07	3A169	YFT	Departure	11.5	-	-
02-Aug	08:24	3A061	YFT	Arrival	12.3	-	-
02-Aug	08:32	8S210	XZM	Arrival	12	-	-
02-Aug	10:00	3A071	XZM	Arrival	12.7	-	-
02-Aug	10:36	8S212	XZM	Arrival	13	-	-
02-Aug	10:54	3A081	ZUI	Arrival	12.8	-	-
02-Aug	11:01	8S121	XZM	Departure	12.5	-	-
02-Aug	11:22	3A063	YFT	Arrival	12.3	-	-
02-Aug	12:22	3A181	ZUI	Departure	12.7	-	-
02-Aug	12:22	3A168	YFT	Departure	10.8	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
02-Aug	13:06	8S215	XZM	Arrival	11.6	-	-
02-Aug	13:11	3A064	YFT	Arrival	12.8	-	-
02-Aug	13:27	8S123	XZM	Departure	12	-	-
02-Aug	13:56	3A082	ZUI	Arrival	13.3	-	-
02-Aug	14:17	3A182	ZUI	Departure	13.2	-	-
02-Aug	14:21	3A164	YFT	Departure	11.4	-	-
02-Aug	15:02	3A065	YFT	Arrival	11.7	-	-
02-Aug	16:25	3A167	YFT	Departure	11.2	-	-
02-Aug	16:50	8S218	XZM	Arrival	11.6	-	-
02-Aug	16:51	3A083	ZUI	Arrival	13	-	-
02-Aug	17:05	3A067	YFT	Arrival	12	-	-
02-Aug	17:13	8S126	XZM	Departure	12.1	-	-
02-Aug	17:17	3A183	ZUI	Departure	13.5	-	-
02-Aug	19:12	3A166	YFT	Departure	12.2	-	-
02-Aug	19:52	3A084	ZUI	Arrival	11.8	-	-
02-Aug	20:15	3A185	ZUI	Departure	-	-	
02-Aug	20:57	3A169	YFT	Departure	-	-	
02-Aug	21:00	8S2113	XZM	Arrival	-	-	
02-Aug	22:04	8S522	XZM	Departure	11.7	-	-
03-Aug	08:21	3A061	YFT	Arrival	11.7	-	-
03-Aug	08:38	8S210	XZM	Arrival	11.8	-	-
03-Aug	10:09	3A071	XZM	Arrival	11.9	-	-
03-Aug	10:43	8S212	XZM	Arrival	12.4	-	-
03-Aug	10:46	3A081	ZUI	Arrival	12.6	-	-
03-Aug	11:07	8S121	XZM	Departure	12.7	-	-
03-Aug	11:19	3A063	YFT	Arrival	11.8	-	-
03-Aug	12:17	3A168	YFT	Departure	12.3	-	-
03-Aug	12:20	3A181	ZUI	Departure	13	-	-
03-Aug	12:49	8S215	XZM	Arrival	11.9	-	-
03-Aug	13:00	3A064	YFT	Arrival	12.4	> 5 and <= 15	< 1min
03-Aug	13:22	8S123	XZM	Departure	13.1	-	-
03-Aug	13:48	3A082	ZUI	Arrival	12.3	-	-
03-Aug	14:26	3A164	YFT	Departure	12.9	-	-
03-Aug	14:28	3A182	ZUI	Departure	13.1	-	-
03-Aug	15:01	3A065	YFT	Arrival	11.3	-	-
03-Aug	16:16	3A167	YFT	Departure	12.4	-	-
03-Aug	16:45	8S218	XZM	Arrival	9.7	-	-
03-Aug	16:45	3A083	ZUI	Arrival	12.8	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
03-Aug	17:01	3A067	YFT	Arrival	11.9	> 5 and <= 15	< 1min
03-Aug	17:13	8S126	XZM	Departure	12.8	-	-
03-Aug	17:16	3A183	ZUI	Departure	13.4	-	-
03-Aug	19:05	3A166	YFT	Departure	12.2	-	-
03-Aug	19:48	3A084	ZUI	Arrival	12.3	-	-
03-Aug	20:14	3A185	ZUI	Departure	13.6	-	-
03-Aug	20:57	8S2113	XZM	Arrival	13.3	-	-
03-Aug	21:06	3A169	YFT	Departure	12.6	-	-
03-Aug	22:00	8S522	XZM	Departure	13	-	-
04-Aug	08:24	3A061	YFT	Arrival	12.2	-	-
04-Aug	08:27	8S210	XZM	Arrival	12.9	-	-
04-Aug	09:57	3A071	XZM	Arrival	12.6	-	-
04-Aug	10:39	8S212	XZM	Arrival	13.1	-	-
04-Aug	10:57	3A081	ZUI	Arrival	13	-	-
04-Aug	11:08	8S121	XZM	Departure	12.7	-	-
04-Aug	11:17	3A063	YFT	Arrival	13	-	-
04-Aug	12:26	3A168	YFT	Departure	13.6	-	-
04-Aug	12:26	3A181	ZUI	Departure	13	-	-
04-Aug	12:55	8S215	XZM	Arrival	12.1	-	-
04-Aug	13:03	3A064	YFT	Arrival	12	-	-
04-Aug	13:22	8S123	XZM	Departure	12.1	-	-
04-Aug	13:43	3A082	ZUI	Arrival	11.6	-	-
04-Aug	14:22	3A164	YFT	Departure	12.3	-	-
04-Aug	14:23	3A182	ZUI	Departure	11.8	-	-
04-Aug	15:00	3A065	YFT	Arrival	13	-	-
04-Aug	16:18	3A167	YFT	Departure	13	-	-
04-Aug	16:43	3A083	ZUI	Arrival	12.4	-	-
04-Aug	16:44	8S218	XZM	Arrival	12.2	-	-
04-Aug	17:03	3A183	ZUI	Departure	13.4	-	-
04-Aug	17:03	3A067	YFT	Arrival	11.9	-	-
04-Aug	17:04	8S126	XZM	Departure	12.6	-	-
04-Aug	19:04	3A166	YFT	Departure	12.9	-	-
04-Aug	19:48	3A084	ZUI	Arrival	13	-	-
04-Aug	20:11	3A185	ZUI	Departure	13.3	-	-
04-Aug	21:06	3A169	YFT	Departure	12.7	-	-
04-Aug	21:28	8S2113	XZM	Arrival	12.7	-	-
04-Aug	22:08	8S522	XZM	Departure	12.6	-	-
05-Aug	08:14	3A061	YFT	Arrival	12.3	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
05-Aug	08:37	8S210	XZM	Arrival	12.6	-	-
05-Aug	09:58	3A071	XZM	Arrival	12.6	-	-
05-Aug	10:38	8S212	XZM	Arrival	12.6	-	-
05-Aug	10:44	3A081	ZUI	Arrival	13.3	-	-
05-Aug	11:10	8S121	XZM	Departure	12.6	-	-
05-Aug	11:18	3A063	YFT	Arrival	11.8	-	-
05-Aug	12:16	3A181	ZUI	Departure	13.1	-	-
05-Aug	12:18	3A168	YFT	Departure	12.5	-	-
05-Aug	12:43	8S215	XZM	Arrival	13.2	-	-
05-Aug	13:00	3A064	YFT	Arrival	12.8	-	-
05-Aug	13:17	8S123	XZM	Departure	12.3	-	-
05-Aug	13:53	3A082	ZUI	Arrival	12.2	-	-
05-Aug	14:15	3A182	ZUI	Departure	12.4	-	-
05-Aug	14:16	3A164	YFT	Departure	12.5	-	-
05-Aug	15:05	3A065	YFT	Arrival	12.2	-	-
05-Aug	16:18	3A167	YFT	Departure	12.3	-	-
05-Aug	16:35	8S218	XZM	Arrival	12.3	-	-
05-Aug	16:41	3A083	ZUI	Arrival	12.9	-	-
05-Aug	16:59	3A067	YFT	Arrival	12.4	-	-
05-Aug	17:11	3A183	ZUI	Departure	13	-	-
05-Aug	17:17	8S126	XZM	Departure	13.6	-	-
05-Aug	19:06	3A166	YFT	Departure	12.4	-	-
05-Aug	19:55	3A084	ZUI	Arrival	12.4	-	-
05-Aug	20:11	3A185	ZUI	Departure	13.4	-	-
05-Aug	21:04	8S2113	XZM	Arrival	12.8	-	-
05-Aug	21:05	3A169	YFT	Departure	12.6	-	-
05-Aug	22:09	8S522	XZM	Departure	12.7	-	-
06-Aug	08:17	3A061	YFT	Arrival	11.7	-	-
06-Aug	08:33	8S210	XZM	Arrival	12.9	-	-
06-Aug	10:00	3A071	XZM	Arrival	12.6	-	-
06-Aug	10:41	3A081	ZUI	Arrival	13	-	-
06-Aug	10:45	8S212	XZM	Arrival	12.3	-	-
06-Aug	11:09	8S121	XZM	Departure	12	-	-
06-Aug	11:19	3A063	YFT	Arrival	12.7	-	-
06-Aug	12:26	3A181	ZUI	Departure	12.8	-	-
06-Aug	12:28	3A168	YFT	Departure	12.1	-	-
06-Aug	12:46	8S215	XZM	Arrival	13.3	-	-
06-Aug	13:02	3A064	YFT	Arrival	11.5	-	-
06-Aug	13:13	8S123	XZM	Departure	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)
06-Aug	13:44	3A082	ZUI	Arrival	11.7	<= 5	< 1min
06-Aug	14:22	3A164	YFT	Departure	12.1	-	-
06-Aug	14:28	3A182	ZUI	Departure	12.2	-	-
06-Aug	15:07	3A065	YFT	Arrival	12.4	-	-
06-Aug	16:19	3A167	YFT	Departure	12.5	-	-
06-Aug	16:42	8S218	XZM	Arrival	13	-	-
06-Aug	16:49	3A083	ZUI	Arrival	12.5	-	-
06-Aug	16:57	3A067	YFT	Arrival	11	-	-
06-Aug	17:15	8S126	XZM	Departure	13.1	-	-
06-Aug	17:18	3A183	ZUI	Departure	13.1	-	-
06-Aug	19:12	3A166	YFT	Departure	13.8	-	-
06-Aug	19:57	3A084	ZUI	Arrival	12	-	-
06-Aug	20:16	3A185	ZUI	Departure	13.4	-	-
06-Aug	21:00	8S2113	XZM	Arrival	12.7	-	-
06-Aug	21:15	3A169	YFT	Departure	12.3	-	-
06-Aug	22:04	8S522	XZM	Departure	13.1	-	-
07-Aug	08:13	3A061	YFT	Arrival	12	-	-
07-Aug	08:31	8S210	XZM	Arrival	13.1	-	-
07-Aug	09:54	3A071	XZM	Arrival	13	-	-
07-Aug	10:39	8S212	XZM	Arrival	12	-	-
07-Aug	10:41	3A081	ZUI	Arrival	13.3	-	-
07-Aug	11:08	8S121	XZM	Departure	11.9	-	-
07-Aug	11:18	3A063	YFT	Arrival	11.8	-	-
07-Aug	12:25	3A168	YFT	Departure	10.4	-	-
07-Aug	12:25	3A181	ZUI	Departure	13.5	-	-
07-Aug	12:50	8S215	XZM	Arrival	11.7	-	-
07-Aug	12:56	3A064	YFT	Arrival	12.5	-	-
07-Aug	13:17	8S123	XZM	Departure	12.4	-	-
07-Aug	13:46	3A082	ZUI	Arrival	12.9	-	-
07-Aug	14:18	3A182	ZUI	Departure	13	-	-
07-Aug	14:21	3A164	YFT	Departure	13	-	-
07-Aug	15:00	3A065	YFT	Arrival	11.5	-	-
07-Aug	16:23	3A167	YFT	Departure	10.2	-	-
07-Aug	16:49	3A083	ZUI	Arrival	12.7	-	-
07-Aug	16:52	8S218	XZM	Arrival	11.8	-	-
07-Aug	16:58	3A067	YFT	Arrival	12.3	-	-
07-Aug	17:08	3A183	ZUI	Departure	12.9	-	-
07-Aug	17:14	8S126	XZM	Departure	12.5	-	-
07-Aug	19:19	3A166	YFT	Departure	12.9	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
07-Aug	19:48	3A084	ZUI	Arrival	12.1	-	-
07-Aug	20:09	3A185	ZUI	Departure	13.3	-	-
07-Aug	21:04	8S2113	XZM	Arrival	11.6	-	-
07-Aug	21:05	3A169	YFT	Departure	13	-	-
07-Aug	22:04	8S522	XZM	Departure	11.9	-	-
08-Aug	08:17	3A061	YFT	Arrival	13.1	-	-
08-Aug	08:32	8S210	XZM	Arrival	10.7	-	-
08-Aug	09:49	3A062	YFT	Arrival	10.7	-	-
08-Aug	10:40	8S212	XZM	Arrival	12.1	-	-
08-Aug	10:46	3A081	ZUI	Arrival	13.4	-	-
08-Aug	11:16	8S121	XZM	Departure	12.2	-	-
08-Aug	11:26	3A063	YFT	Arrival	12.3	-	-
08-Aug	12:24	3A181	ZUI	Departure	13.3	-	-
08-Aug	12:27	3A168	YFT	Departure	12.5	-	-
08-Aug	12:54	8S215	XZM	Arrival	12.1	-	-
08-Aug	12:57	3A064	YFT	Arrival	13.5	-	-
08-Aug	13:23	8S123	XZM	Departure	11.9	-	-
08-Aug	13:45	3A082	ZUI	Arrival	13.6	-	-
08-Aug	14:20	3A182	ZUI	Departure	11	-	-
08-Aug	14:22	3A164	YFT	Departure	13.7	-	-
08-Aug	15:06	3A065	YFT	Arrival	13.1	-	-
08-Aug	16:21	3A167	YFT	Departure	12.2	-	-
08-Aug	16:50	8S218	XZM	Arrival	12	-	-
08-Aug	17:02	3A067	YFT	Arrival	13.5	-	-
08-Aug	17:04	3A083	ZUI	Arrival	12.7	-	-
08-Aug	17:13	8S126	XZM	Departure	12	-	-
08-Aug	17:23	3A183	ZUI	Departure	12.8	-	-
08-Aug	19:15	3A166	YFT	Departure	13.3	-	-
08-Aug	20:05	3A084	ZUI	Arrival	12.5	-	-
08-Aug	20:29	3A185	ZUI	Departure	13.2	-	-
08-Aug	20:57	8S2113	XZM	Arrival	12.5	-	-
08-Aug	21:05	3A169	YFT	Departure	12.6	-	-
09-Aug	08:19	3A061	YFT	Arrival	11.8	-	-
09-Aug	08:38	8S210	XZM	Arrival	10.7	-	-
09-Aug	09:48	3A062	YFT	Arrival	11.3	-	-
09-Aug	10:42	8S212	XZM	Arrival	11.8	-	-
09-Aug	10:57	3A081	ZUI	Arrival	12.5	-	-
09-Aug	11:17	8S121	XZM	Departure	11.8	-	-
09-Aug	11:25	3A063	YFT	Arrival	11.9	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
09-Aug	12:19	3A168	YFT	Departure	11.6	-	-
09-Aug	12:20	3A181	ZUI	Departure	13	-	-
09-Aug	12:46	8S215	XZM	Arrival	13.1	-	-
09-Aug	12:58	3A064	YFT	Arrival	12.1	-	-
09-Aug	13:21	8S123	XZM	Departure	12.6	-	-
09-Aug	13:59	3A082	ZUI	Arrival	13.4	-	-
09-Aug	14:20	3A164	YFT	Departure	12.2	-	-
09-Aug	14:22	3A182	ZUI	Departure	12.8	-	-
09-Aug	15:09	3A065	YFT	Arrival	11.9	-	-
09-Aug	16:16	3A167	YFT	Departure	10.7	-	-
09-Aug	16:44	3A083	ZUI	Arrival	12.5	-	-
09-Aug	16:51	8S218	XZM	Arrival	12.8	-	-
09-Aug	17:07	3A183	ZUI	Departure	12.5	-	-
09-Aug	17:10	3A067	YFT	Arrival	11.9	-	-
09-Aug	17:20	8S126	XZM	Departure	12.5	-	-
09-Aug	19:12	3A166	YFT	Departure	11.1	-	-
09-Aug	19:59	3A084	ZUI	Arrival	12	-	-
09-Aug	20:25	3A185	ZUI	Departure	13.1	-	-
09-Aug	21:00	8S2113	XZM	Arrival	12.4	-	-
09-Aug	21:21	3A169	YFT	Departure	12	-	-
10-Aug	08:20	3A061	YFT	Arrival	11.6	-	-
10-Aug	08:27	8S210	XZM	Arrival	12.4	-	-
10-Aug	09:54	3A062	YFT	Arrival	12.2	-	-
10-Aug	10:42	8S212	XZM	Arrival	11.5	-	-
10-Aug	10:49	3A081	ZUI	Arrival	12.1	-	-
10-Aug	11:14	8S121	XZM	Departure	12.3	-	-
10-Aug	11:20	3A063	YFT	Arrival	12.1	-	-
10-Aug	12:16	3A168	YFT	Departure	11.7	-	-
10-Aug	12:19	3A181	ZUI	Departure	13.4	-	-
10-Aug	12:57	8S215	XZM	Arrival	12.4	-	-
10-Aug	12:58	3A064	YFT	Arrival	12.5	-	-
10-Aug	13:19	8S123	XZM	Departure	12.6	-	-
10-Aug	13:45	3A082	ZUI	Arrival	12.8	-	-
10-Aug	14:18	3A182	ZUI	Departure	12.7	-	-
10-Aug	14:21	3A164	YFT	Departure	12.5	-	-
10-Aug	15:03	3A065	YFT	Arrival	11.6	<= 5	< 1min
10-Aug	16:17	3A167	YFT	Departure	11.2	-	-
10-Aug	16:44	3A083	ZUI	Arrival	13	-	-
10-Aug	16:48	8S218	XZM	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)
10-Aug	17:02	3A067	YFT	Arrival	10.8	-	-
10-Aug	17:10	3A183	ZUI	Departure	12.7	-	-
10-Aug	17:10	8S126	XZM	Departure	12.3	-	-
10-Aug	19:12	3A166	YFT	Departure	12.7	-	-
10-Aug	19:52	3A084	ZUI	Arrival	11.9	-	-
10-Aug	20:07	3A185	ZUI	Departure	13.4	-	-
10-Aug	21:04	8S2113	XZM	Arrival	11.6	<= 5	< 1min
10-Aug	21:07	3A169	YFT	Departure	11.4	-	-
10-Aug	22:04	8S522	XZM	Departure	11	-	-
11-Aug	08:19	3A061	YFT	Arrival	11.8	-	-
11-Aug	08:40	8S210	XZM	Arrival	11.6	-	-
11-Aug	09:55	3A062	YFT	Arrival	11.9	-	-
11-Aug	10:42	8S212	XZM	Arrival	10.2	-	-
11-Aug	10:52	3A081	ZUI	Arrival	12	-	-
11-Aug	11:09	8S121	XZM	Departure	11.7	-	-
11-Aug	11:17	3A063	YFT	Arrival	11.8	-	-
11-Aug	12:17	3A168	YFT	Departure	11.3	-	-
11-Aug	12:18	3A181	ZUI	Departure	13.7	-	-
11-Aug	12:42	8S215	XZM	Arrival	12.9	-	-
11-Aug	12:55	3A064	YFT	Arrival	12.3	-	-
11-Aug	13:21	8S123	XZM	Departure	12.7	-	-
11-Aug	13:48	3A082	ZUI	Arrival	13.6	-	-
11-Aug	14:19	3A164	YFT	Departure	11	-	-
11-Aug	14:19	3A182	ZUI	Departure	12	-	-
11-Aug	15:08	3A065	YFT	Arrival	11.9	-	-
11-Aug	16:16	3A167	YFT	Departure	11.6	-	-
11-Aug	16:40	3A083	ZUI	Arrival	13.1	-	-
11-Aug	16:41	8S218	XZM	Arrival	12.1	-	-
11-Aug	17:04	3A067	YFT	Arrival	12.4	-	-
11-Aug	17:08	8S126	XZM	Departure	13.4	-	-
11-Aug	17:12	3A183	ZUI	Departure	13.3	-	-
11-Aug	19:14	3A166	YFT	Departure	12.2	-	-
11-Aug	19:56	3A084	ZUI	Arrival	12.6	-	-
11-Aug	20:14	3A185	ZUI	Departure	13.6	-	-
11-Aug	21:00	8S2113	XZM	Arrival	12.2	-	-
11-Aug	21:07	3A169	YFT	Departure	12.6	-	-
11-Aug	22:17	8S522	XZM	Departure	13.1	-	-
12-Aug	08:19	3A061	YFT	Arrival	12.5	-	-
12-Aug	08:32	8S210	XZM	Arrival	12.5	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
12-Aug	09:52	3A062	YFT	Arrival	12.4	<= 5	< 1min
12-Aug	10:38	8S212	XZM	Arrival	10.6	-	-
12-Aug	10:46	3A081	ZUI	Arrival	11.8	-	-
12-Aug	11:11	8S121	XZM	Departure	11.9	-	-
12-Aug	11:22	3A063	YFT	Arrival	11.4	-	-
12-Aug	12:26	3A181	ZUI	Departure	13.8	-	-
12-Aug	12:30	3A168	YFT	Departure	12	-	-
12-Aug	12:48	8S215	XZM	Arrival	12	-	-
12-Aug	13:01	3A064	YFT	Arrival	12.5	-	-
12-Aug	13:20	8S123	XZM	Departure	13.4	-	-
12-Aug	13:43	3A082	ZUI	Arrival	12.8	-	-
12-Aug	14:13	3A182	ZUI	Departure	12.7	-	-
12-Aug	14:18	3A164	YFT	Departure	12.8	-	-
12-Aug	14:59	3A065	YFT	Arrival	11.9	-	-
12-Aug	16:20	3A167	YFT	Departure	11.5	-	-
12-Aug	16:44	3A083	ZUI	Arrival	12.6	-	-
12-Aug	16:47	8S218	XZM	Arrival	13.5	-	-
12-Aug	17:01	3A067	YFT	Arrival	13	-	-
12-Aug	17:04	3A183	ZUI	Departure	13.4	-	-
12-Aug	17:18	8S126	XZM	Departure	13.4	-	-
12-Aug	19:18	3A166	YFT	Departure	12.6	-	-
12-Aug	19:49	3A084	ZUI	Arrival	12.9	-	-
12-Aug	20:15	3A185	ZUI	Departure	13.5	-	-
12-Aug	21:06	8S2113	XZM	Arrival	11.5	-	-
12-Aug	21:17	3A169	YFT	Departure	11.8	-	-
12-Aug	22:07	8S522	XZM	Departure	11.5	-	-
13-Aug	08:19	3A061	YFT	Arrival	11.8	-	-
13-Aug	08:32	8S210	XZM	Arrival	12.7	-	-
13-Aug	09:59	3A062	YFT	Arrival	11.9	-	-
13-Aug	10:43	3A081	ZUI	Arrival	12.8	-	-
13-Aug	10:48	8S212	XZM	Arrival	11.2	-	-
13-Aug	11:15	8S121	XZM	Departure	11.5	-	-
13-Aug	11:22	3A063	YFT	Arrival	11.6	-	-
13-Aug	12:23	3A168	YFT	Departure	12.3	-	-
13-Aug	12:24	3A181	ZUI	Departure	13.3	-	-
13-Aug	12:48	8S215	XZM	Arrival	11.3	-	-
13-Aug	12:58	3A064	YFT	Arrival	11.9	-	-
13-Aug	13:19	8S123	XZM	Departure	11.5	-	-
13-Aug	13:47	3A082	ZUI	Arrival	12.5	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
13-Aug	14:20	3A182	ZUI	Departure	13.4	-	-
13-Aug	14:24	3A164	YFT	Departure	12.3	-	-
13-Aug	15:06	3A065	YFT	Arrival	12.4	-	-
13-Aug	16:14	3A167	YFT	Departure	12.3	-	-
13-Aug	16:46	8S218	XZM	Arrival	11.9	-	-
13-Aug	16:46	3A083	ZUI	Arrival	13.2	-	-
13-Aug	16:59	3A067	YFT	Arrival	12	-	-
13-Aug	17:11	3A183	ZUI	Departure	13.7	-	-
13-Aug	17:18	8S126	XZM	Departure	11.7	-	-
13-Aug	19:11	3A166	YFT	Departure	11.7	-	-
13-Aug	19:52	3A084	ZUI	Arrival	13	-	-
13-Aug	20:13	3A185	ZUI	Departure	13.3	-	-
13-Aug	21:02	8S2113	XZM	Arrival	11.4	-	-
13-Aug	21:22	3A169	YFT	Departure	12.5	-	-
13-Aug	22:17	8S522	XZM	Departure	11.6	-	-
14-Aug	08:19	3A061	YFT	Arrival	12.1	-	-
14-Aug	08:37	8S210	XZM	Arrival	11.9	-	-
14-Aug	09:48	3A062	YFT	Arrival	12.6	-	-
14-Aug	10:38	8S212	XZM	Arrival	12.2	-	-
14-Aug	10:43	3A081	ZUI	Arrival	13.1	-	-
14-Aug	11:10	8S121	XZM	Departure	12.2	-	-
14-Aug	11:14	3A063	YFT	Arrival	12	-	-
14-Aug	12:23	3A168	YFT	Departure	12.4	-	-
14-Aug	12:25	3A181	ZUI	Departure	13.6	-	-
14-Aug	12:49	8S215	XZM	Arrival	11.3	-	-
14-Aug	13:01	3A064	YFT	Arrival	12.4	-	-
14-Aug	13:16	8S123	XZM	Departure	11.6	-	-
14-Aug	13:40	3A082	ZUI	Arrival	12.8	-	-
14-Aug	14:29	3A164	YFT	Departure	11.6	-	-
14-Aug	14:29	3A182	ZUI	Departure	13.3	-	-
14-Aug	14:53	3A065	YFT	Arrival	12.3	-	-
14-Aug	16:15	3A167	YFT	Departure	12.9	-	-
14-Aug	16:37	3A083	ZUI	Arrival	13.3	-	-
14-Aug	16:44	8S218	XZM	Arrival	12.2	-	-
14-Aug	16:58	3A067	YFT	Arrival	11.9	-	-
14-Aug	17:10	3A183	ZUI	Departure	13.6	-	-
14-Aug	17:13	8S126	XZM	Departure	11.4	-	-
14-Aug	19:23	3A166	YFT	Departure	12.4	-	-
14-Aug	19:54	3A084	ZUI	Arrival	13.1	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
14-Aug	20:19	3A185	ZUI	Departure	12.9	-	-
14-Aug	20:58	8S2113	XZM	Arrival	11.9	-	-
14-Aug	21:13	3A169	YFT	Departure	12.1	-	-
14-Aug	22:10	8S522	XZM	Departure	11.6	-	-
15-Aug	08:19	3A061	YFT	Arrival	11.6	-	-
15-Aug	08:48	8S210	XZM	Arrival	11.9	-	-
15-Aug	09:50	3A062	YFT	Arrival	11.5	-	-
15-Aug	10:46	3A081	ZUI	Arrival	12.7	-	-
15-Aug	10:51	8S212	XZM	Arrival	11.6	-	-
15-Aug	11:22	8S121	XZM	Departure	11.8	-	-
15-Aug	11:28	3A063	YFT	Arrival	12.6	-	-
15-Aug	12:25	3A168	YFT	Departure	12.5	-	-
15-Aug	12:28	3A181	ZUI	Departure	13.9	-	-
15-Aug	12:52	8S215	XZM	Arrival	13.1	-	-
15-Aug	13:00	3A064	YFT	Arrival	11.3	-	-
15-Aug	13:32	8S123	XZM	Departure	12.7	-	-
15-Aug	13:51	3A082	ZUI	Arrival	11.7	-	-
15-Aug	14:24	3A164	YFT	Departure	11	-	-
15-Aug	14:27	3A182	ZUI	Departure	12.6	-	-
15-Aug	15:04	3A065	YFT	Arrival	12.2	-	-
15-Aug	16:27	3A167	YFT	Departure	12.2	-	-
15-Aug	16:43	8S218	XZM	Arrival	11.9	-	-
15-Aug	16:56	3A083	ZUI	Arrival	13.2	-	-
15-Aug	16:58	3A067	YFT	Arrival	11.7	-	-
15-Aug	17:15	3A183	ZUI	Departure	13.7	-	-
15-Aug	17:18	8S126	XZM	Departure	12.5	-	-
15-Aug	19:24	3A166	YFT	Departure	12.9	-	-
15-Aug	19:54	3A084	ZUI	Arrival	13.4	-	-
15-Aug	20:23	3A185	ZUI	Departure	13.4	-	-
15-Aug	20:54	8S2113	XZM	Arrival	12.5	-	-
15-Aug	21:30	3A169	YFT	Departure	13.7	-	-
16-Aug	08:22	3A061	YFT	Arrival	11.7	-	-
16-Aug	08:31	8S210	XZM	Arrival	13.1	-	-
16-Aug	10:08	3A062	YFT	Arrival	12.6	-	-
16-Aug	10:41	8S212	XZM	Arrival	13.1	-	-
16-Aug	10:51	3A081	ZUI	Arrival	12.6	-	-
16-Aug	11:06	8S121	XZM	Departure	13.4	-	-
16-Aug	11:17	3A063	YFT	Arrival	11.2	-	-
16-Aug	12:16	3A168	YFT	Departure	11.1	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
16-Aug	12:18	3A181	ZUI	Departure	13.7	-	-
16-Aug	13:00	8S215	XZM	Arrival	12.2	-	-
16-Aug	13:03	3A064	YFT	Arrival	12	-	-
16-Aug	13:26	8S123	XZM	Departure	12.8	-	-
16-Aug	13:43	3A082	ZUI	Arrival	12.3	-	-
16-Aug	14:26	3A164	YFT	Departure	12	-	-
16-Aug	14:32	3A182	ZUI	Departure	12.9	-	-
16-Aug	15:04	3A065	YFT	Arrival	11.5	-	-
16-Aug	16:18	3A167	YFT	Departure	12.1	-	-
16-Aug	16:45	3A083	ZUI	Arrival	12.8	-	-
16-Aug	16:48	8S218	XZM	Arrival	12.5	-	-
16-Aug	17:04	3A067	YFT	Arrival	12.3	-	-
16-Aug	17:10	3A183	ZUI	Departure	13.8	-	-
16-Aug	17:15	8S126	XZM	Departure	12.6	-	-
16-Aug	19:33	3A166	YFT	Departure	11.9	-	-
16-Aug	19:49	3A084	ZUI	Arrival	13.5	-	-
16-Aug	20:15	3A185	ZUI	Departure	13.3	-	-
16-Aug	20:58	8S2113	XZM	Arrival	11.5	-	-
16-Aug	21:14	3A169	YFT	Departure	13.2	-	-
16-Aug	22:20	8S522	XZM	Departure	11.8	-	-
17-Aug	08:21	3A061	YFT	Arrival	13.2	-	-
17-Aug	08:40	8S210	XZM	Arrival	12.4	-	-
17-Aug	09:45	3A062	YFT	Arrival	11.8	-	-
17-Aug	10:36	8S212	XZM	Arrival	12.6	-	-
17-Aug	10:41	3A081	ZUI	Arrival	12.9	-	-
17-Aug	11:10	8S121	XZM	Departure	12.3	-	-
17-Aug	11:21	3A063	YFT	Arrival	11.9	-	-
17-Aug	12:29	3A181	ZUI	Departure	13.5	-	-
17-Aug	12:30	3A168	YFT	Departure	11.8	-	-
17-Aug	12:47	8S215	XZM	Arrival	13	-	-
17-Aug	12:58	3A064	YFT	Arrival	12.8	-	-
17-Aug	13:19	8S123	XZM	Departure	13	-	-
17-Aug	13:51	3A082	ZUI	Arrival	12.5	-	-
17-Aug	14:14	3A182	ZUI	Departure	13.1	-	-
17-Aug	14:18	3A164	YFT	Departure	13.6	-	-
17-Aug	15:17	3A065	YFT	Arrival	11.3	-	-
17-Aug	16:23	3A167	YFT	Departure	12	-	-
17-Aug	16:47	3A083	ZUI	Arrival	12.6	-	-
17-Aug	16:48	8S218	XZM	Arrival	10.9	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
17-Aug	16:59	3A067	YFT	Arrival	12.8	-	-
17-Aug	17:14	3A183	ZUI	Departure	13.9	-	-
17-Aug	17:17	8S126	XZM	Departure	13.8	-	-
17-Aug	19:10	3A166	YFT	Departure	11.9	-	-
17-Aug	19:51	3A084	ZUI	Arrival	13.3	-	-
17-Aug	20:16	3A185	ZUI	Departure	13.4	-	-
17-Aug	21:04	8S2113	XZM	Arrival	12.7	-	-
17-Aug	21:11	3A169	YFT	Departure	12.9	-	-
17-Aug	22:08	8S522	XZM	Departure	13.1	-	-
18-Aug	08:15	3A061	YFT	Arrival	12.8	-	-
18-Aug	08:30	8S210	XZM	Arrival	12.9	-	-
18-Aug	09:54	3A062	YFT	Arrival	13	-	-
18-Aug	10:38	8S212	XZM	Arrival	10.3	-	-
18-Aug	10:51	3A081	ZUI	Arrival	13.1	-	-
18-Aug	11:06	8S121	XZM	Departure	12	-	-
18-Aug	11:21	3A063	YFT	Arrival	10.2	-	-
18-Aug	12:23	3A168	YFT	Departure	12.3	-	-
18-Aug	12:26	3A181	ZUI	Departure	13.4	-	-
18-Aug	12:47	8S215	XZM	Arrival	13.4	-	-
18-Aug	12:57	3A064	YFT	Arrival	12.5	-	-
18-Aug	13:20	8S123	XZM	Departure	12.5	-	-
18-Aug	13:53	3A082	ZUI	Arrival	12.6	-	-
18-Aug	14:16	3A164	YFT	Departure	12.7	-	-
18-Aug	14:22	3A182	ZUI	Departure	12.8	-	-
18-Aug	15:01	3A065	YFT	Arrival	11.5	-	-
18-Aug	16:19	3A167	YFT	Departure	12.2	-	-
18-Aug	16:45	3A083	ZUI	Arrival	12.5	-	-
18-Aug	16:46	8S218	XZM	Arrival	12.4	-	-
18-Aug	16:53	3A067	YFT	Arrival	12.1	-	-
18-Aug	17:12	3A183	ZUI	Departure	13.9	-	-
18-Aug	17:14	8S126	XZM	Departure	12.5	-	-
18-Aug	19:29	3A166	YFT	Departure	11.3	-	-
18-Aug	19:53	3A084	ZUI	Arrival	13.3	-	-
18-Aug	20:12	3A185	ZUI	Departure	13.4	-	-
18-Aug	21:01	8S2113	XZM	Arrival	12.9	-	-
18-Aug	21:16	3A169	YFT	Departure	11.2	-	-
19-Aug	08:19	3A061	YFT	Arrival	12.3	-	-
19-Aug	08:26	8S210	XZM	Arrival	11.3	-	-
19-Aug	10:16	3A062	YFT	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)
19-Aug	10:34	3A161	YFT	Departure	12.1	-	-
19-Aug	10:44	8S212	XZM	Arrival	13.3	-	-
19-Aug	10:56	3A081	ZUI	Arrival	12.7	-	-
19-Aug	11:23	8S121	XZM	Departure	12.5	-	-
19-Aug	11:29	3A063	YFT	Arrival	12.6	-	-
19-Aug	12:13	3A181	ZUI	Departure	13.6	-	-
19-Aug	12:19	3A168	YFT	Departure	13	-	-
19-Aug	12:55	8S215	XZM	Arrival	12.2	-	-
19-Aug	13:00	3A064	YFT	Arrival	12.4	-	-
19-Aug	13:23	8S123	XZM	Departure	12.2	-	-
19-Aug	13:45	3A082	ZUI	Arrival	12.5	<= 5	< 1min
19-Aug	13:47	3A162	YFT	Departure	12.4	-	-
19-Aug	14:24	3A182	ZUI	Departure	12.7	-	-
19-Aug	14:30	3A164	YFT	Departure	12.3	-	-
19-Aug	15:16	3A065	YFT	Arrival	12	-	-
19-Aug	16:21	3A167	YFT	Departure	12.2	-	-
19-Aug	16:41	3A083	ZUI	Arrival	12.6	-	-
19-Aug	16:43	8S218	XZM	Arrival	11	-	-
19-Aug	17:12	3A183	ZUI	Departure	14	-	-
19-Aug	17:12	3A067	YFT	Arrival	11.8	-	-
19-Aug	17:13	8S126	XZM	Departure	12.7	-	-
19-Aug	19:16	3A166	YFT	Departure	12.6	-	-
19-Aug	19:49	3A084	ZUI	Arrival	13.2	-	-
19-Aug	20:08	3A185	ZUI	Departure	13.6	-	-
19-Aug	20:56	3A169	YFT	Departure	12.7	-	-
19-Aug	21:06	8S2113	XZM	Arrival	11.8	-	-
19-Aug	22:12	8S522	XZM	Departure	12.2	-	-
20-Aug	08:17	3A061	YFT	Arrival	12.7	-	-
20-Aug	08:24	8S210	XZM	Arrival	12.4	-	-
20-Aug	09:58	3A062	YFT	Arrival	12.8	-	-
20-Aug	10:42	8S212	XZM	Arrival	12.2	-	-
20-Aug	10:51	3A081	ZUI	Arrival	13.1	-	-
20-Aug	11:11	8S121	XZM	Departure	10.9	-	-
20-Aug	11:18	3A063	YFT	Arrival	12.6	-	-
20-Aug	12:24	3A168	YFT	Departure	12	-	-
20-Aug	12:25	3A181	ZUI	Departure	13.3	-	-
20-Aug	12:53	8S215	XZM	Arrival	12.1	-	-
20-Aug	13:07	3A064	YFT	Arrival	12.6	-	-
20-Aug	13:20	8S123	XZM	Departure	12.2	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
20-Aug	13:52	3A082	ZUI	Arrival	12.2	-	-
20-Aug	14:17	3A164	YFT	Departure	11.9	-	-
20-Aug	14:19	3A182	ZUI	Departure	11.8	-	-
20-Aug	14:57	3A065	YFT	Arrival	12.1	-	-
20-Aug	16:23	3A167	YFT	Departure	12.1	-	-
20-Aug	16:43	3A083	ZUI	Arrival	12.6	-	-
20-Aug	16:45	8S218	XZM	Arrival	12.1	-	-
20-Aug	16:53	3A067	YFT	Arrival	12.1	<= 5	< 1min
20-Aug	17:02	3A183	ZUI	Departure	13.8	-	-
20-Aug	17:05	8S126	XZM	Departure	12.2	-	-
20-Aug	19:19	3A166	YFT	Departure	11.4	-	-
20-Aug	19:47	3A084	ZUI	Arrival	13.3	-	-
20-Aug	20:14	3A185	ZUI	Departure	13.7	-	-
20-Aug	20:59	8S2113	XZM	Arrival	13	-	-
20-Aug	21:18	3A169	YFT	Departure	12.1	-	-
20-Aug	22:17	8S522	XZM	Departure	12.9	-	-
21-Aug	08:20	3A061	YFT	Arrival	11.7	-	-
21-Aug	08:38	8S210	XZM	Arrival	12.5	-	-
21-Aug	09:51	3A062	YFT	Arrival	12.1	-	-
21-Aug	10:38	8S212	XZM	Arrival	12.6	-	-
21-Aug	10:47	3A081	ZUI	Arrival	13.5	-	-
21-Aug	11:03	8S121	XZM	Departure	12.2	-	-
21-Aug	11:15	3A063	YFT	Arrival	13.2	-	-
21-Aug	12:26	3A181	ZUI	Departure	12.3	-	-
21-Aug	12:28	3A168	YFT	Departure	12.6	-	-
21-Aug	12:48	8S215	XZM	Arrival	12.8	-	-
21-Aug	12:59	3A064	YFT	Arrival	11.7	-	-
21-Aug	13:12	8S123	XZM	Departure	12.5	-	-
21-Aug	13:54	3A082	ZUI	Arrival	12.6	-	-
21-Aug	14:20	3A164	YFT	Departure	11.3	-	-
21-Aug	14:22	3A182	ZUI	Departure	11.4	-	-
21-Aug	14:59	3A065	YFT	Arrival	13.2	-	-
21-Aug	16:25	3A167	YFT	Departure	13.4	-	-
21-Aug	16:44	3A083	ZUI	Arrival	12.9	-	-
21-Aug	16:57	8S218	XZM	Arrival	12.1	-	-
21-Aug	17:00	3A067	YFT	Arrival	11.5	-	-
21-Aug	17:12	8S126	XZM	Departure	13.2	-	-
21-Aug	17:13	3A183	ZUI	Departure	12.8	-	-
21-Aug	19:05	3A166	YFT	Departure	11.8	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
21-Aug	19:58	3A084	ZUI	Arrival	13.1	-	-
21-Aug	20:13	3A185	ZUI	Departure	13.2	-	-
21-Aug	20:52	8S2113	XZM	Arrival	12.5	-	-
21-Aug	21:22	3A169	YFT	Departure	12.5	-	-
22-Aug	08:20	3A061	YFT	Arrival	11.8	-	-
22-Aug	08:29	8S210	XZM	Arrival	12.7	-	-
22-Aug	09:46	3A062	YFT	Arrival	12.5	-	-
22-Aug	10:47	8S212	XZM	Arrival	12.3	-	-
22-Aug	10:48	3A081	ZUI	Arrival	13.5	-	-
22-Aug	11:09	8S121	XZM	Departure	12.6	-	-
22-Aug	11:19	3A063	YFT	Arrival	12.2	-	-
22-Aug	12:22	3A168	YFT	Departure	10.4	-	-
22-Aug	12:24	3A181	ZUI	Departure	12.6	-	-
22-Aug	12:51	8S215	XZM	Arrival	12.4	-	-
22-Aug	13:04	3A064	YFT	Arrival	12.3	-	-
22-Aug	13:17	8S123	XZM	Departure	12.4	-	-
22-Aug	13:50	3A082	ZUI	Arrival	11.9	-	-
22-Aug	14:23	3A164	YFT	Departure	12.5	-	-
22-Aug	14:27	3A182	ZUI	Departure	13.1	-	-
22-Aug	15:06	3A065	YFT	Arrival	12.1	-	-
22-Aug	16:48	3A167	YFT	Departure	11.8	-	-
22-Aug	16:56	8S218	XZM	Arrival	12.4	-	-
22-Aug	17:00	3A067	YFT	Arrival	11.9	-	-
22-Aug	17:02	3A083	ZUI	Arrival	12.2	-	-
22-Aug	17:18	8S126	XZM	Departure	13	-	-
22-Aug	17:22	3A183	ZUI	Departure	12.6	-	-
22-Aug	19:15	3A166	YFT	Departure	12.6	-	-
22-Aug	20:59	8S2113	XZM	Arrival	11.4	-	-
22-Aug	21:17	3A169	YFT	Departure	12.1	-	-
24-Aug	11:40	3A063	YFT	Arrival	12.2	-	-
24-Aug	12:20	3A168	YFT	Departure	13.2	-	-
24-Aug	13:16	3A064	YFT	Arrival	12.2	-	-
24-Aug	14:29	3A164	YFT	Departure	12.9	-	-
24-Aug	15:33	3A065	YFT	Arrival	12.8	-	-
24-Aug	16:29	3A167	YFT	Departure	10.1	-	-
24-Aug	17:15	3A067	YFT	Arrival	12.7	-	-
24-Aug	19:56	3A166	YFT	Departure	12.9	-	-
24-Aug	21:36	3A169	YFT	Departure	12.4	-	-
25-Aug	08:24	8S210	XZM	Arrival	12.3	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
25-Aug	08:28	3A061	YFT	Arrival	12.6	<= 5	< 1min
25-Aug	10:23	3A062	YFT	Arrival	11.6	-	-
25-Aug	10:47	8S212	XZM	Arrival	11.7	-	-
25-Aug	11:18	8S121	XZM	Departure	12.4	-	-
25-Aug	11:49	3A063	YFT	Arrival	12.3	-	-
25-Aug	12:24	3A168	YFT	Departure	12.2	-	-
25-Aug	12:42	8S215	XZM	Arrival	11.3	-	-
25-Aug	13:18	8S123	XZM	Departure	12.6	-	-
25-Aug	13:21	3A064	YFT	Arrival	12.4	-	-
25-Aug	14:26	3A164	YFT	Departure	10.8	-	-
25-Aug	15:02	3A065	YFT	Arrival	11.8	-	-
25-Aug	16:19	3A167	YFT	Departure	No AIS Data		
25-Aug	17:16	8S218	XZM	Arrival	12.1	-	-
25-Aug	17:18	3A067	YFT	Arrival	12.9	-	-
25-Aug	17:54	8S126	XZM	Departure	12.8	-	-
25-Aug	19:23	3A166	YFT	Departure	13.3	-	-
25-Aug	21:12	8S2113	XZM	Arrival	11.2	-	-
25-Aug	21:14	3A169	YFT	Departure	12.3	-	-
25-Aug	22:08	8S522	XZM	Departure	11.7	-	-
26-Aug	08:17	3A061	YFT	Arrival	11.9	-	-
26-Aug	08:22	8S210	XZM	Arrival	12	-	-
26-Aug	10:03	3A062	YFT	Arrival	13.1	-	-
26-Aug	10:42	8S212	XZM	Arrival	12.1	-	-
26-Aug	11:18	3A063	YFT	Arrival	10	-	-
26-Aug	12:17	3A168	YFT	Departure	10.7	-	-
26-Aug	12:50	8S215	XZM	Arrival	12.5	-	-
26-Aug	13:02	3A064	YFT	Arrival	11.2	-	-
26-Aug	13:18	8S123	XZM	Departure	11.8	-	-
26-Aug	14:27	3A164	YFT	Departure	11.4	-	-
26-Aug	15:02	3A065	YFT	Arrival	11	-	-
26-Aug	16:21	3A167	YFT	Departure	10.7	-	-
26-Aug	16:51	8S218	XZM	Arrival	12.3	-	-
26-Aug	17:02	3A067	YFT	Arrival	11.6	-	-
26-Aug	17:18	8S126	XZM	Departure	12.8	-	-
26-Aug	19:16	3A166	YFT	Departure	11.8	-	-
26-Aug	21:03	8S2113	XZM	Arrival	11.8	-	-
26-Aug	21:09	3A169	YFT	Departure	11.9	-	-
26-Aug	22:01	8S522	XZM	Departure	12.4	-	-
27-Aug	15:02	3A164	YFT	Departure	12.1	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUH - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
27-Aug	16:25	3A167	YFT	Departure	12	-	-
27-Aug	17:04	3A067	YFT	Arrival	11.1	-	-
27-Aug	19:20	3A166	YFT	Departure	12.4	-	-
27-Aug	21:15	3A169	YFT	Departure	12.6	<= 5	< 1min
27-Aug	21:35	8S2113	XZM	Arrival	11.2	-	-
27-Aug	22:03	8S522	XZM	Departure	11.5	-	-
28-Aug	08:21	3A061	YFT	Arrival	12.3	-	-
28-Aug	08:24	8S210	XZM	Arrival	12.8	-	-
28-Aug	10:22	3A062	YFT	Arrival	11.6	-	-
28-Aug	10:52	8S212	XZM	Arrival	11.3	-	-
28-Aug	11:14	8S121	XZM	Departure	12.1	-	-
28-Aug	11:22	3A063	YFT	Arrival	13.1	-	-
28-Aug	12:23	3A168	YFT	Departure	13.3	-	-
28-Aug	12:45	8S215	XZM	Arrival	12.1	-	-
28-Aug	13:01	3A064	YFT	Arrival	12.4	-	-
28-Aug	13:25	8S123	XZM	Departure	12.5	-	-
28-Aug	14:20	3A164	YFT	Departure	12.5	-	-
28-Aug	14:59	3A065	YFT	Arrival	13	-	-
28-Aug	16:32	3A167	YFT	Departure	13	-	-
28-Aug	16:52	8S218	XZM	Arrival	12	-	-
28-Aug	17:03	3A067	YFT	Arrival	12.2	-	-
28-Aug	17:23	8S126	XZM	Departure	12.8	-	-
28-Aug	19:09	3A166	YFT	Departure	12.8	-	-
28-Aug	21:04	3A169	YFT	Departure	12.7	-	-
28-Aug	21:18	8S2113	XZM	Arrival	12.5	-	-
28-Aug	22:20	8S522	XZM	Departure	13.2	-	-
29-Aug	08:17	3A061	YFT	Arrival	12.9	-	-
29-Aug	08:34	8S210	XZM	Arrival	11.9	-	-
29-Aug	10:01	3A062	YFT	Arrival	11.1	-	-
29-Aug	10:48	8S212	XZM	Arrival	11.9	-	-
29-Aug	11:12	3A063	YFT	Arrival	11.6	-	-
29-Aug	11:13	8S121	XZM	Departure	12	-	-
29-Aug	12:21	3A168	YFT	Departure	12.3	-	-
29-Aug	12:56	3A064	YFT	Arrival	12.2	-	-
29-Aug	12:58	8S215	XZM	Arrival	12.9	-	-
29-Aug	13:17	8S123	XZM	Departure	13.1	-	-
29-Aug	14:24	3A164	YFT	Departure	12.2	-	-
29-Aug	14:58	3A065	YFT	Arrival	12.2	-	-
29-Aug	16:24	3A167	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)
29-Aug	16:40	8S218	XZM	Arrival	12.3	-	-
29-Aug	17:00	3A067	YFT	Arrival	12.4	-	-
29-Aug	17:24	8S126	XZM	Departure	13.7	-	-
29-Aug	19:11	3A166	YFT	Departure	12.3	-	-
29-Aug	21:01	8S2113	XZM	Arrival	12.8	-	-
29-Aug	21:11	3A169	YFT	Departure	12.9	-	-
29-Aug	22:11	8S522	XZM	Departure	13	-	-
30-Aug	08:17	3A061	YFT	Arrival	12.2	-	-
30-Aug	08:22	8S210	XZM	Arrival	13.3	-	-
30-Aug	10:01	3A062	YFT	Arrival	12.5	-	-
30-Aug	10:48	8S212	XZM	Arrival	12.9	-	-
30-Aug	11:09	8S121	XZM	Departure	12.1	-	-
30-Aug	11:23	3A063	YFT	Arrival	12.1	-	-
30-Aug	12:28	3A168	YFT	Departure	11.4	-	-
30-Aug	12:52	8S215	XZM	Arrival	11.4	-	-
30-Aug	12:59	3A064	YFT	Arrival	12.7	-	-
30-Aug	13:23	8S123	XZM	Departure	13.1	-	-
30-Aug	14:22	3A164	YFT	Departure	13.3	-	-
30-Aug	15:01	3A065	YFT	Arrival	12.1	-	-
30-Aug	16:16	3A167	YFT	Departure	12.3	-	-
30-Aug	16:44	8S218	XZM	Arrival	9.7	-	-
30-Aug	16:57	3A067	YFT	Arrival	12.8	-	-
30-Aug	17:05	8S126	XZM	Departure	13.5	-	-
30-Aug	19:03	3A166	YFT	Departure	12.5	-	-
30-Aug	21:03	3A169	YFT	Departure	12.7	-	-
30-Aug	21:03	8S2113	XZM	Arrival	13	-	-
30-Aug	21:58	8S522	XZM	Departure	13.7	<= 5	< 1min
31-Aug	08:15	3A061	YFT	Arrival	11.7	-	-
31-Aug	08:27	8S210	XZM	Arrival	13	-	-
31-Aug	09:50	3A062	YFT	Arrival	11.7	-	-
31-Aug	10:35	8S212	XZM	Arrival	12.2	-	-
31-Aug	11:01	8S121	XZM	Departure	11.7	-	-
31-Aug	11:15	3A063	YFT	Arrival	11.3	-	-
31-Aug	12:19	3A168	YFT	Departure	9.9	-	-
31-Aug	12:51	8S215	XZM	Arrival	11.4	-	-
31-Aug	13:04	3A064	YFT	Arrival	11.8	-	-
31-Aug	13:18	8S123	XZM	Departure	10.1	-	-
31-Aug	14:17	3A164	YFT	Departure	11.6	-	-
31-Aug	14:54	3A065	YFT	Arrival	11.5	-	-

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)
31-Aug	16:19	3A167	YFT	Departure	10.8	-	-
31-Aug	16:41	8S218	XZM	Arrival	11.7	-	-
31-Aug	17:05	8S126	XZM	Departure	11.6	-	-
31-Aug	17:13	3A067	YFT	Arrival	10.7	-	-
31-Aug	20:01	3A166	YFT	Departure	13.9	-	-
31-Aug	21:06	3A169	YFT	Departure	12.3	-	-
31-Aug	21:16	8S2113	XZM	Arrival	12	-	-
31-Aug	22:01	8S522	XZM	Departure	11.5	-	-

Follow-up on instantaneous speeding

Referring to the data of SkyPier HSF movements in August 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. The duration of instantaneous speeding of all 11 HSF movements were 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.

One HSF movement with no AIS data and one HSF with insufficient transmission of AIS data were received in August 2017. Vessel captain was also requested to provide the AIS plots to indicate the vessel entered the SCZ though the gate access point with no speeding in the SCZ.