MOTT MACDONALD

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

Construction Phase Monthly EM&A Report No.13 (For January 2017)

February 2017

Airport Authority Hong Kong

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This Monthly EM&A Report No. 13 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 27 February 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, Senior Manager

27 February 2017

Dear Sir,

Contract No. 3102
3RS Independent Environmental Checker Consultancy Services

Submission of Revised Monthly EM&A Report No.13 (January 2017)

Reference is made to the Environmental Team's submission of the revised Monthly EM&A Report No.13 under Condition 3.5 of the Environmental Permit No. EP-489/2014 certified by the ET Leader on 27 February 2017.

We would like to inform you that we have no adverse comment on the captioned submission. Therefore 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 our Roy Man at 3922 9365 or 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.

This is the 13th 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 January 2017.

Key Activities in the Reporting Period

The key activities of the Project carried out in the reported period included five deep cement mixing (DCM) contracts and an advanced works contract. The DCM contracts involved DCM trials, coring works, laying of geotextile and sand blanket; and the advanced works contract involved horizontal directional drilling (HDD) works including pilot hole drilling, reaming and pipeline supporting works.

EM&A Activities Conducted in the Reporting Period

The monthly EM&A programme was undertaken in accordance with the Updated EM&A Manual of the Project. During the reporting period, the ET conducted 33 sets of construction dust measurements, 20 sets of construction noise measurements, 13 events of water quality measurements, one round of terrestrial ecology monitoring on Sheung Sha Chau Island, two complete sets of small vessel line-transect surveys and five days of land-based theodolite tracking survey effort for Chinese White Dolphin (CWD) monitoring as well as landscape & visual 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, including the observations on dark smoke emission from the construction vessels and the condition of silt curtain for sand blanket laying are provided to the contractors together with the appropriate follow-up actions where necessary.

On the implementation of Marine Mammal Watching Plan, silt curtains were in place by the contractors for sand blanket laying works and dolphin observers were deployed in accordance with the Plan. On the implementation of Dolphin Exclusion Zone (DEZ) Plan, dolphin observers were deployed by the contractors for continuous monitoring of the DEZ for DCM trial 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' daily observation records and DEZ monitoring log records, no dolphin or other marine

mammals were observed within or around the DEZ and silt curtains in this reporting month. These contractors' records were also audited 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 High Speed Ferries (HSFs) in January 2017 were in the range of 83 to 91 daily movements, which are within the maximum daily cap of 125 daily movements. A total of 868 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 (7.8 to 14.3 knots), which were in compliance with the SkyPier Plan. Two ferry movements with minor deviation from the diverted route are under investigation by ET. The investigation result will be presented in the next monthly EM&A report. In summary, the ET and IEC have audited the HSF movements against the SkyPier Plan and conducted follow up investigation or actions accordingly.

On the implementation of the Marine Travel Routes and Management Plan for Construction and Associated Vessel (MTRMP-CAV), ET had conducted weekly audit of relevant information, including Automatic Identification System (AIS) data, vessel tracks and other relevant records to ensure the contractors complied with the requirements of the MTRMP-CAV. Training has been provided for the concerned skippers to facilitate them in familiarising with the requirements of the MTRMP-CAV. 3-month rolling programmes for construction vessel activities were also received from contractors. ET had reminded contractors that all vessels shall avoid entering the Brothers Marine Park, which has been designated on 30 December 2016.

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 Updated EM&A Manual.

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

The water quality monitoring results for DO, total alkalinity and chromium obtained during the reporting period were in compliance with their corresponding Action and Limit Levels. For turbidity, SS and nickel, some of the testing results had exceeded the relevant Action or Limit Levels. Investigations were carried out immediately for each of the exceedance cases. The investigation findings concluded that the exceedances were not due to the Project.

The monthly terrestrial ecology monitoring on Sheung Sha Chau observed that installation of casing was conducted on the Island 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 for the Project will include the following:

Advanced Works:

Contract P560 (R) Aviation Fuel Pipeline Diversion Works

- HDD pilot hole drilling and reaming;
- Pipeline supporting works; and
- Stockpiling of excavated materials from HDD operation.

Contract 3201 to 3205 DCM Works

- Laying of geotextile and sand blanket;
- Erection of site office;
- Coring works; and
- DCM trial works.

Contract 3206 Main Reclamation Works

- Erection of site office.

Other Works:

Contract 3213 CLP Cable Diversion Enabling Works

- Delivery of temporary power supply system

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.

Dolphin Observer Training

Land-based CWD Monitoring

Meeting with SkyPier Ferry Operator Representatives

Summary Table

The following table summarizes the key findings of the EM&A programme during the reporting period from 1 to 31 January 2017:

	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 of night time work and construction wastewater at Sheung Sha Chau was received on 19 Jan 2017.	The complaint investigation was carried out in accordance with the Complaint Management Plan. The investigation detail is presented in S7.7.1.
Notification of any summons and status of prosecutions		✓	Neither notifications of summons nor 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

Remarks: ^ only exceedance of action/ limit level related to Project works will be highlighted.

1 Introduction

1.1 Background

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

Airport Authority Hong Kong (AAHK) commissioned Mott MacDonald Hong Kong Limited (MMHK) to undertake the role of Environmental Team (ET) for carrying out the Environmental Monitoring & Audit (EM&A) works during the construction phase of the Project in accordance with the Updated EM&A Manual (the Manual) submitted under EP Condition 3.1. The Manual is available on the Project's dedicated website (accessible at: http://env.threerunwaysystem.com/en/index.html). AECOM Asia Company Limited (AECOM) was employed by AAHK as the Independent Environmental Checker (IEC) for the Project.

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

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

The updated overall phasing programme of all construction works was presented in Appendix A of the Construction Phase Monthly EM&A Report No. 7 and the contract information was presented in Appendix A of the Construction Phase Monthly EM&A Report No.10.

1.2 Scope of this Report

This is the 13th 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 January 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 month. 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)	Senior 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	Joanne Tsoi	3922 9423
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 Lau	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	Kanny Cho	9019 1962
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	Seong Jae Park	9683 8693
	Environmental Officer	Calvin Leung	9203 5820
Contract 3204 DCM (Package 4) (CRBC-SAMBO Joint Venture)	Project Manager	Kyung-Sik Yoo	9683 8697
	Environmental Officer	David Man	6421 3238
Contract 3205 DCM (Package 5) (Bachy Soletanche - Sambo Joint Venture)	Deputy Project Director	Min Park	9683 0765
	Environmental Officer	Margaret Chung	9130 3696

Party	Position	Name	Telephone
Reclamation Work:			
Contract 3206 (ZHEC-CCCC-CDC Joint Venture)	Project Manager	Kim Chuan Lim	3693 2288
	Environmental Officer	Kwai Fung Wong	3693 2252
Other Works:			
Contract 3213 CLP Cable Diversion Enabling Works (Wing Hing Construction Company)	Project Manager	Michael Kan	9206 0550
	Environmental Officer	Ivy Tam	2151 2090

1.4 Summary of Construction Works

The key activities of the Project carried out in the reporting period included five DCM contracts and an advanced works contract. The DCM contracts involved DCM trials, coring works, laying of geotextile and sand blanket; and the advanced works contract involved HDD works including stockpiling of excavated materials from HDD operation, pilot hole drilling, reaming and pipeline supporting works.

The active construction site is around 3 km and 900m away from the nearest air and noise sensitive receivers in Tung Chung and the villages in North Lantau. The locations of the works areas are presented in **Figure 1.1** to **Figure 1.2.**

1.5 Summary of EM&A Programme Requirements

The status for all environmental aspects is presented **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	To be commenced according to the detailed plan on DCM

Early/ Regular DCM Water Quality Monitoring	On-going
Waste Management	
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 Egretry Survey Plan	The revised Egretry Survey Plan was submitted and approved by EPD under EP Condition 2.14.
Ecological Monitoring	On-going
Marine Ecology	
Pre-Construction Phase Coral Dive Survey	The Coral Translocation Plan was submitted and approved by EPD under EP Condition 2.12.
Coral Translocation	The coral translocation was completed on 5 January 2017.
Post-Translocation Coral Monitoring	The first post- translocation coral monitoring was commenced on 20 January 2017.
Chinese White Dolphins (CWD)	
Vessel Survey, Land-based Theodolite Track 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 month, impact monitoring of air quality, noise, water quality, waste management, ecology, CWD and landscape & visual were carried out in the reporting month.

The EM&A programme also involved weekly site inspections and related auditings 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 Updated EM&A Manual. A summary of implementation status of the environmental

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

2 Air Quality Monitoring

2.1 Monitoring Stations

Air quality monitoring was conducted at two representative monitoring stations in the vicinity of air sensitive receivers in Tung Chung and villages in North Lantau in accordance with the Updated EM&A 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 Updated EM&A 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 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 (μg/m^3)	Limit Level (μg/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-002 (Serial No. 974350)	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. Any updates of calibration certificates will be reported in the Monthly EM&A report if necessary.

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	26 - 131	306	500
AR2	25 - 205	298	

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

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

3 Noise Monitoring

3.1 Monitoring Stations

Noise monitoring was conducted at five representative monitoring stations in the vicinity of noise sensitive receivers in Tung Chung and villages in North Lantau in accordance with the Updated EM&A 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 Updated EM&A 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 Updated EM&A 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 Updated EM&A Manual, baseline noise levels at the noise monitoring stations were established as presented in the Baseline Monitoring Report (Version 1 dated December 2015). 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 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) reduce 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)	19 Jul 2016
	B&K 2238 (Serial No. 2381580)	8 Sep 2016
Acoustic Calibrator	B&K 4231 (Serial No. 3003246)	16 May 2016
	B&K 4231 (Serial No. 3004068)	19 Jul 2016

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.8& 9 are still valid. Any updates of calibration certificates will be reported in the Monthly EM&A report if necessary.

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)]	71 - 72	75
NM3A	57 - 63	75
NM4[(i)]	63 - 66	70[(ii)]
NM5[(i)]	53 - 58	75
NM6[(i)]	62 - 73	75

Note: (i) +3 dB(A) Façade correction included;
(ii) Reduced to 65 dB(A) during school examination periods.

As the construction activities were far away from the monitoring stations, major sources of noise dominating the monitoring stations observed during the construction noise impact monitoring were aircraft noise at NM3A and NM5, aircraft noise and helicopter noise at NM6, road traffic noise at NM1A and school activities at NM4 in this reporting month.

No exceedance of the Action/ 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 stations, seven sensitive receiver stations and three control stations in the vicinity of water quality sensitive receivers around the airport island in accordance with the Updated EM&A 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 Stations	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	Seawater Intake for cooling at Hong Kong International Airport (East)	811593	820417	

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.

4.2 Monitoring Requirements and Schedule

In accordance with the Updated EM&A 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 provided in **Appendix C**.

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 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	
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 6920 V2 (serial no. 11F100014)	4 Jan 2017
	YSI 6920 V2 (serial no. 16G104518)	4 Jan 2017
	YSI 6920 V2 (serial no. 0001C6A7)	4 Jan 2017
	YSI 6920 (serial no. 000109DF)	4 Jan 2017
Digital Titrator (measurement of total alkalinity)	Titrette Digital Burette 50ml Class A (serial no.10N65665)	5 Jan 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.

The calibration certificates of the monitoring equipment used in the reporting month is updated and provided in **Appendix B**.

4.4.3 Laboratory Measurement / Analysis

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

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

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

4.5 Analysis and Interpretation of Monitoring Results

4.5.1 Summary of Monitoring Results

The water quality monitoring results for DO, total alkalinity and chromium obtained during the reporting period were in compliance with their corresponding Action and Limit Levels. For turbidity, SS, and nickel, some of the testing results had exceeded the relevant Action or Limit Levels. Details of the exceedances are presented in **Section 4.5.2**.

All the water quality monitoring results and graphical presentations are provided in **Appendix D**.

4.5.2 Summary of Findings for Investigation of Exceedances

During the reporting month, water quality monitoring was conducted at 12 impact stations (IM), seven sensitive receiver (SR) stations and three control stations in accordance with the Updated EM&A Manual. The purpose of water quality monitoring at the IM stations is to promptly capture any potential water quality impacts from the Project before the impacts could become apparent at sensitive receivers (represented by the SR stations).

During the monitoring period in January 2017, testing results exceeding the corresponding Action or Limit Levels were recorded on nine monitoring days. Details of the exceedance cases are presented below.

Findings for Turbidity Exceedances (Mid-Ebb Tide)

Table 4.7 presents a summary of the turbidity compliance status at IM and SR stations during mid-ebb tide for the reporting month. There were no turbidity exceedances at any IM and SR stations during mid-flood tide for the reporting month.

Table 4.7: Summary of Turbidity Compliance Status at IM and SR Stations (Mid-Ebb Tide)

Date	IM1	IM2	IM3	IM4	IM5	IM6	IM7	IM8	IM9	IM10	IM11	IM12	SR2	SR3	SR4A	SR5A	SR6	SR7	SR8
03/01/2017																			
05/01/2017																			
07/01/2017																			
10/01/2017																			
12/01/2017																			
14/01/2017																			
17/01/2017																			
19/01/2017																			
21/01/2017																			
24/01/2017																			
26/01/2017																			
28/01/2017																			
31/01/2017																			

Date	IM1	IM2	IM3	IM4	IM5	IM6	IM7	IM8	IM9	IM10	IM11	IM12	SR2	SR3	SR4A	SR5A	SR6	SR7	SR8
No. of Turbidity Exceedances	0	0	0	0	0	0	0	1	1	1	1	0	0	1	0	0	0	0	0

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

No exceedance of Action Level and Limit Level
Exceedance of Action Level recorded at monitoring station located downstream of the 3RS Project based on dominant tidal flow
Exceedance of Action Level recorded at monitoring station located upstream of the 3RS Project based on dominant tidal flow
Exceedance of Limit Level recorded at monitoring station located downstream of the 3RS Project based on dominant tidal flow
Exceedance of Limit Level recorded at monitoring station located upstream of the 3RS Project based on dominant tidal flow
Upstream station with respect to 3RS Project during the respective tide based on dominant tidal flow

IM Stations

As shown in **Table 4.7**, exceedances of Action or Limit Level at IM stations were recorded on 31 Jan 2017. Repeat turbidity measurement was conducted at IM8, IM9, IM10, IM11 and SR3 on 1 February 2017 during ebb tide in accordance with the Event and Action Plan of the Updated EM&A Manual. Some of the exceedances occur at monitoring stations which are located upstream of the 3RS Project during ebb tide. As such upstream stations would unlikely be affected by the Project, the investigation focused on the exceedance at IM station located downstream of the Project and hence might be affected by the Project's construction activities.

As part of the investigation on the downstream exceedance events, details of the Project's marine construction activities on this monitoring day was collected, as well as any observations during the monitoring. The findings are summarised **Table 4.8**.

Table 4.8: Summary of Findings from Investigations of Turbidity Exceedance during Mid-Ebb Tide

Date	Marine construction works nearby	Approximate distance from marine construction works*	Status of silt curtains (if applicable)	Construction vessels in the vicinity	Silt plume observed	Exceedance due to Project
31/01/2017	DCM works	Around 500 m	Deployed and maintained properly	No	No	No

Note:
*This refers to the approximate distance between the DCM works and the nearest monitoring stations with exceedance

According to the investigation findings summarized in **Table 4.8**, it was confirmed that the silt curtain was deployed and maintained properly for DCM works, and no silt plume was observed at the active DCM works area, even though silt plume occurred in the vicinity of IM11 during monitoring. This suggests that the silt plume at IM11 was unlikely generated by the construction works. Repeat turbidity measurement was conducted on 1 February 2017 at the monitoring stations recorded with exceedances on 31 January 2017 in accordance with the Event and Action Plan of the Updated EM&A Manual. No exceedance was recorded during repeated measurement.

High level of turbidity at IM11 may be contributed by similarly high turbidity levels at upstream stations (IM8 to IM10) on the same day. Given that IM8 to IM10 are located upstream of the Project during ebb tide, and high turbidity levels were apparent at these locations (which would unlikely be affected by the Project), the exceedance at IM11 was possibly due to natural fluctuation in this area. Based on these findings, the exceedance was considered not due to the Project.

SR Stations

At SR stations, exceedance was observed at SR3, however, SR3 is located upstream of the project during ebb tide, hence the exceedance at SR3 is unlikely to be due to the Project. As the repeat turbidity measurements conducted on 1 February 2017 showed no further exceedance, the single exceedance at SR3 may be due to natural fluctuation.

Findings for SS Exceedances (Mid-Ebb Tide)

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

Table 4.9: Summary of SS Compliance Status at IM and SR Stations (Mid-Ebb Tide)

Date	IM1	IM2	IM3	IM4	IM5	IM6	IM7	IM8	IM9	IM10	IM11	IM12	SR2	SR3	SR4A	SR5A	SR6	SR7	SR8
03/01/2017																			
05/01/2017																			
07/01/2017																			
10/01/2017																			
12/01/2017																			
14/01/2017																			
17/01/2017																			
19/01/2017																			
21/01/2017																			
24/01/2017																			
26/01/2017																			
28/01/2017																			
31/01/2017																			
No. of SS Exceedances	0	1	1	0	0	3	1	1	1	0	1	0	0	1	0	0	0	0	0

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

Legend:

No exceedance of Action Level and Limit Level

Exceedance of Action Level recorded at monitoring station located downstream of the 3RS Project based on dominant tidal flow

Exceedance of Action Level recorded at monitoring station located upstream of the 3RS Project based on dominant tidal flow

Upstream station with respect to 3RS Project during the respective tide based on dominant tidal flow

IM Stations

As shown in **Table 4.9**, exceedances of Action Levels at IM stations were recorded on three monitoring days. However, some of the exceedances occur at monitoring stations which are located upstream of the 3RS Project during ebb tide. As such upstream stations would unlikely be affected by the Project, the investigation focused on the exceedances at IM stations located downstream of the Project and hence might be affected by the Project's construction activities.

According to the investigation finding summarized in **Table 4.8**, the silt curtain was deployed and maintained properly for the DCM works, and no silt plume was observed at the active DCM works area. The silt plume observed in the vicinity of IM11 was thus unlikely generated by the construction works.

High levels of SS at IM2, IM3 and IM11 may be contributed by similarly high SS at upstream stations (IM6 to IM9) on the same day. Given that IM6 to IM9 are located upstream of the Project during ebb tide, and high SS levels were apparent at these locations (which would unlikely be affected by the Project), the exceedances at IM2, IM3 and IM11 were possibly due to natural

fluctuation in this area. Based on these findings, the exceedances were considered not due to the Project.

SR Stations

At SR stations, exceedance was observed at SR3, however, SR3 is located upstream of the project during ebb tide, hence the exceedance at SR3 is unlikely to be due to the Project. In addition, it is noted that similarly high SS levels were observed at this SR station during baseline monitoring, which suggested that such SS elevation is not uncommon under ambient conditions due to natural fluctuation. Given these findings, the exceedance at SR3 was considered not due to the Project.

Findings for SS Exceedances (Mid-Flood Tide)

Table 4.10 presents a summary of the SS compliance status at IM and SR stations during mid-flood tide for the reporting month.

Table 4.10: Summary of SS Compliance Status at IM and SR Stations (Mid-Flood Tide)

Date	IM1	IM2	IM3	IM4	IM5	IM6	IM7	IM8	IM9	IM10	IM11	IM12	SR2	SR3	SR4A	SR5A	SR6	SR7	SR8
03/01/2017																			
05/01/2017																			
07/01/2017																			
10/01/2017																			
12/01/2017																			
14/01/2017																			
17/01/2017																			
19/01/2017																			
21/01/2017																			
24/01/2017																			
26/01/2017																			
28/01/2017																			
31/01/2017																			
No. of SS Exceedances	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0

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

Legend:

No exceedance of Action Level and Limit Level

Exceedance of Action Level recorded at monitoring station located downstream of the 3RS Project based on dominant tidal flow

Exceedance of Action Level recorded at monitoring station located upstream of the 3RS Project based on dominant tidal flow

Exceedance of Limit Level recorded at monitoring station located downstream of the 3RS Project based on dominant tidal flow

Exceedance of Limit Level recorded at monitoring station located upstream of the 3RS Project based on dominant tidal flow

Upstream station with respect to 3RS Project during the respective tide based on dominant tidal flow

IM Stations

As shown in **Table 4.10**, exceedances of Action Level at IM stations were recorded on two monitoring days. However, all exceedances occurred at monitoring stations which are located upstream of the 3RS Project during flood tide. Such upstream stations are unlikely to be affected by the Project. Nevertheless as a prudent measure, the Project's activities on these monitoring days were investigated and it was confirmed that silt curtains were deployed and maintained properly and no silt plumes were observed.

Based on these findings and given that exceedances were only observed at monitoring stations located upstream of the Project, these exceedances were considered not due to the Project.

SR Stations

At SR stations, exceedances were recorded at SR6 during mid-flood tide for the reporting month. SR6 is located upstream of the project during flood tide, hence the exceedances at SR6 are unlikely to be due to the Project. In addition, it is noted that similarly high SS levels were observed at this SR station during baseline monitoring, which suggested that such SS elevation is not uncommon under ambient conditions due to natural fluctuation. Given these findings, the exceedances at the SR station was considered not due to the Project.

Findings for Nickel Exceedances (Mid-Ebb Tide)

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

Table 4.11: Summary of Nickel Compliance Status at IM Stations (Mid-Ebb Tide)

Date	IM1	IM2	IM3	IM4	IM5	IM6	IM7	IM8	IM9	IM10	IM11	IM12
03/01/2017												
05/01/2017												
07/01/2017												
10/01/2017												
12/01/2017												
14/01/2017												
17/01/2017												
19/01/2017												
21/01/2017												
24/01/2017												
26/01/2017												
28/01/2017												
31/01/2017												
No. of nickel Exceedances	0	0	0	0	1	0	0	0	0	0	0	0

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

- No exceedance of Action Level and Limit Level
- Exceedance of Action Level recorded at monitoring station located downstream of the 3RS Project based on dominant tidal flow
- Exceedance of Action Level recorded at monitoring station located upstream of the 3RS Project based on dominant tidal flow
- Exceedance of Limit Level recorded at monitoring station located downstream of the 3RS Project based on dominant tidal flow
- Exceedance of Limit Level recorded at monitoring station located upstream of the 3RS Project based on dominant tidal flow
- Upstream station with respect to 3RS Project during the respective tide based on dominant tidal flow

As shown in **Table 4.11**, an exceedance of Limit Level was recorded at one IM station on one monitoring day. However, the exceedance occurred at a monitoring station which is located upstream of the 3RS Project during ebb tide. Such upstream station is unlikely to be affected by the Project. This singular nickel exceedance also appeared to be an isolated case with neither temporal nor spatial trend to indicate nickel release due to Project activities.

Based on these findings and given that exceedance was only recorded at a monitoring station located upstream of the Project, the exceedance was considered not due to the Project.

Findings for Nickel Exceedances (Mid-Flood Tide)

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

Table 4.12: Summary of Nickel Compliance Status at IM Stations (Mid-Flood Tide)

Date	IM1	IM2	IM3	IM4	IM5	IM6	IM7	IM8	IM9	IM10	IM11	IM12
03/01/2017												
05/01/2017												
07/01/2017												
10/01/2017												
12/01/2017												
14/01/2017												
17/01/2017												
19/01/2017												
21/01/2017												
24/01/2017												
26/01/2017												
28/01/2017												
31/01/2017												
No. of nickel Exceedances	0	0	0	0	0	0	0	1	0	0	0	0

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

No exceedance of Action Level and Limit Level
Exceedance of Action Level recorded at monitoring station located downstream of the 3RS Project based on dominant tidal flow
Exceedance of Action Level recorded at monitoring station located upstream of the 3RS Project based on dominant tidal flow
Upstream station with respect to 3RS Project during the respective tide based on dominant tidal flow

As shown in **Table 4.12**, an exceedance of Action Level was recorded at one IM station on one monitoring day.

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

Table 4.13: Summary of Findings from Investigations of Nickel Exceedance during Mid-Flood Tide

Date	DCM works nearby	Approximate distance from DCM works*	Status of silt curtains (if applicable)	Construction vessels in the vicinity	Silt plume observed	Exceedance due to Project
07/01/2017	Yes	Around 1.5km	Deployed and maintained properly	No	No	No

Note: *This refers to the approximate distance between the DCM works and the nearest monitoring stations with exceedance

In addition to the investigation summary presented in **Table 4.13**, it is also noted from **Table 4.12** that the singular exceedance at one downstream IM station appeared to be an isolated case with neither temporal nor spatial trend to indicate nickel release due to Project activities. Moreover, no exceedance was recorded at other downstream monitoring stations that were closer to the active DCM works, which further suggests the exceedance was not due to Project's activities.

Based on these findings, the nickel exceedance at the downstream station during flood tide was 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 stations were adversely affected by the Project. All required actions under the Event and Action Plan has been followed. Exceedances appear to be due to natural fluctuation (such as naturally higher baseline SS levels at individual SR stations) or other sources not related to the Project.

Nevertheless, recognising that the IM stations represent a 'first line of defense', the non-project related exceedances identified at IM stations have been 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 the silt curtain for sand blanket laying properly as recommended in the EM&A manual.

5 Waste Management

5.1 Monitoring Requirements

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

Table 5.1: Action and Limit Levels for Construction Waste

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

5.2 Waste Management Status

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

Recommendations including provision and maintenance of spill kits, provision of chemical waste storage area for chemical waste, and proper storage of construction material were provided during monitoring. In addition, the relevant contractors were reminded to provide recycling bins for the segregation of recyclables from general refuse. The contractors had taken actions to implement the recommended measures.

Based on the Contractor's information, about 195m^3 of excavated materials were produced from the HDD launching site and Sheung Sha Chau under P560(R) in January 2017. The generated excavated materials were temporarily stored at storage and stockpiling area. The excavated material will be reused in the Project.

Around 16 tonnes of general refuse was disposed of to the WENT Landfill by advanced works contract and DCM contract in January 2017. Around 24m^3 of Construction and Demolition (C&D) material generated from DCM contract was disposed of as public fill in the reporting month. No chemical waste was disposed off-site during the reporting month.

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 Updated EM&A Manual, Chinese White Dolphin (CWD) monitoring by small vessel line-transect survey supplemented by land-based theodolite tracking should be conducted during construction phase.

The small vessel line-transect survey as proposed in the Updated EM&A Manual should be conducted at a frequency of two full survey 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 Updated EM&A Manual, supplemental theodolite tracking 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 January 2017, data from 1 November 2016 to 31 January 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 December 2016 (calculated by data from October to December 2016) and the running quarterly encounter rates of this month (calculated by data from November 2016 to January 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 conduct 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 Updated EM&A Manual, which are consistent with the Agriculture, Fisheries and Conservation Department (AFCD) long-term monitoring programme (except AW). The AW transect has not been previously surveyed in the AFCD programme due to the restrictions of HKIA Exclusion Zone, nevertheless, this transect was established during the EIA of the 3RS Project and refined in the Updated EM&A 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 densities and patterns of movements in the broader study area of the project.

For the NWL area, there was no significant demarcation of the 3RS works area by perimeter silt curtains during CWD monitoring survey in the reporting period and the transect lines within the works area could largely followed the waypoints conducted for baseline monitoring. Nevertheless, there was an increase in construction vessel traffic within the 3RS works areas in this month, incurring safety concern on the travelling routes of CWD vessel survey, therefore the transect lines for the NWL area will be revised in the next month to follow the waypoints set for construction phase monitoring. The planned vessel survey transect lines are depicted in **Figure 6.1** with the waypoint coordinates of all transect lines given in **Table 6.2**, which are subject to on-site refinement based on the actual survey conditions and constraints.

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

Waypoint	Easting	Northing	Waypoint	Easting	Northing
		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	5N	808504	828602
1N	804671	831404	6S	809490	820590
2S	805475	815457	6N	809490	825352
2N	805476	830562	7S	810499	820950
3S	806464	819550	7N	810499	824613
3N	806464	829598	8S	811508	821250
4S	807518	819900	8N	811508	824254
4N	807518	829230	9S	812516	821250
5S	808504	820250	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			

Waypoint	Easting	Northing	Waypoint	Easting	Northing
SWL					
1S	802494	803961	6S	807467	801137
1N	802494	806174	6N	807467	808458
2S	803489	803280	7S	808553	800329
2N	803489	806720	7N	808553	807377
3S	804484	802509	8S	809547	800338
3N	804484	807048	8N	809547	807396
4S	805478	802105	9S	810542	800423
4N	805478	807556	9N	810542	807462
5S	806473	801250	10S	811446	801335
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 Updated EM&A 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 month, two complete sets of small vessel line-transect surveys were conducted on the 5th, 6th, 9th, 10th, 12th, 13th, 19th and 20th January 2017, covering all transects in NEL, NWL, AW, WL and SWL survey areas for twice.

A total of 467.36 km of survey effort was collected from these surveys, with around 92.22% 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 January 2017, 25 groups of CWDs with 81 individuals were sighted. Amongst the sightings of CWD, 19 groups with 68 individuals were made 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 January 2017 is illustrated in **Figure 6.3**. In January 2017, CWDs were more frequently sighted in WL and SWL than in NWL. There were only two sightings in NWL in this reporting month, one located close to Lung Kwu Chau while another recorded at the western waters of the existing Hong Kong International Airport. In WL and SWL survey areas, the majority of the CWD sightings occurred in waters around Peaked Hill and Fan Lau. Several sightings in SWL occurred in the eastern part of the survey area, around Soko Islands and Shui Hau. The sighting near Shui Hau was the easternmost sighting in SWL since the commencement of the 3RS CWD monitoring. No sightings of CWDs were recorded in 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, White 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]

Encounter Rate

Two types of dolphin encounter rates were calculated based on the data from January 2017. They included the number of dolphin sightings per 100km survey effort (STG) and total number of dolphins per 100km 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 January 2017, a total of 431.02 km of survey effort were conducted under Beaufort Sea State 3 or below with favourable visibility, whilst a total number of 19 on-effort sightings with a total number of 68 dolphins from on-effort sightings were obtained under such condition. Calculation of the encounter rates in January 2017 are shown in **Appendix D**.

For the running quarter of the reporting month (i.e., from November 2016 to January 2017), a total of 1213.19 km of survey effort were conducted under Beaufort Sea State 3 or below with favourable visibility, whilst a total number of 48 on-effort sightings and a total number of 158 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 January 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)
January 2017	4.41	15.78
Running Quarter from November 2016 to January 2017*	3.96	13.02
Action Level	1.86	9.35

*Running quarterly encounter rates STG & ANI were calculated from data collected in the reporting month and the two preceding survey months, i.e. the data from November 2016 to January 2017, containing six sets of transect surveys for all monitoring areas.

Group Size

In January 2017, 25 groups of CWDs with 81 individuals were sighted, and the average group size of CWDs was 3.24 individuals per group. The majority of the sightings were of small group size (i.e. 1-2 individuals). Two large CWD groups, both with 11 individuals were sighted in this reporting month in WL and SWL respectively.

Activities and Association with Fishing Boats

Five out of 25 sightings of CWDs were recorded engaging in feeding activities in January 2017. Three of these sightings were recorded in association with operating fishing boats. Two of these sightings were associated with illegally operating pair trawlers in WL and SWL, close to the edge of HK border. The remaining one was associated with operating gillnetter in WL.

Mother-calf Pair

In January 2017, four sightings of CWDs were recorded with the presence of mother-and-unspotted juvenile pairs. Two of these sightings occurred in WL while the other two were sighted in NWL and SWL.

6.4.2 Photo Identification

In January 2017, a total number of 27 different CWD individuals were identified for totally 31 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
NLMM004	12/01/2017	1	NWL	WLMM007	13/01/2017	1	SWL
NLMM015	05/01/2017	1	WL			2	SWL
NLMM016	05/01/2017	1	WL	WLMM021	06/01/2017	1	SWL
NLMM017	12/01/2017	1	NWL	WLMM060	19/01/2017	3	WL
NLMM037	12/01/2017	1	NWL	WLMM063	19/01/2017	3	WL
SLMM002	05/01/2017	7	WL	WLMM064	05/01/2017	1	WL
SLMM007	05/01/2017	7	WL	WLMM065	05/01/2017	1	WL
SLMM010	05/01/2017	5	WL	WLMM066	05/01/2017	1	WL
	19/01/2017	6	SWL	WLMM067	05/01/2017	2	WL
SLMM014	05/01/2017	7	WL	WLMM068	05/01/2017	2	WL
SLMM021	19/01/2017	6	SWL		19/01/2017	3	WL
SLMM036	05/01/2017	1	WL	WLMM069	13/01/2017	2	SWL
SLMM037	19/01/2017	6	SWL	WLMM070	13/01/2017	2	SWL
SLMM052	05/01/2017	7	WL	WLMM071	19/01/2017	3	WL
WLMM001	05/01/2017	6	WL	WLMM072	19/01/2017	3	WL
	19/01/2017	8	WL				

6.4.3 Land-based Theodolite Tracking

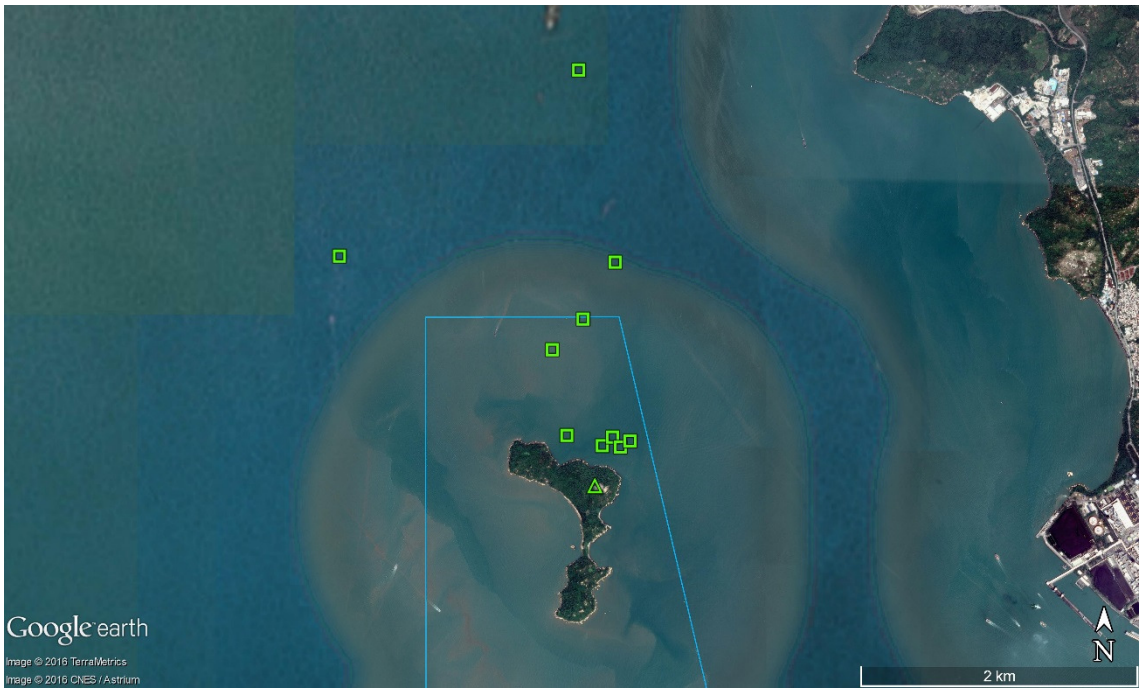
Survey Effort

Land-based theodolite tracking surveys were conducted at LKC on 18th, 24th and 25th January 2017 and at SC on 9th and 20th January 2017, with a total of 5 days of land-based theodolite tracking survey effort accomplished in this reporting month. In total, 10 CWD groups were tracked at LKC station during the surveys. Information of survey effort and CWD groups sighted during these land-based theodolite tracking surveys are presented in **Table 6.6**. Details of the survey effort and CWD groups tracked are presented in **Appendix D**. The first sighting locations of CWD groups tracked at LKC station during land-based theodolite tracking surveys in January 2017 were depicted in **Figure 6.4**. No CWD group was sighted from SC station in this reporting month.

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

Land-based Station	No. of Survey Sessions	Survey Effort (hh:mm)	No. of CWD Groups Sighted	CWD Group Sighting per Survey Hour
Lung Kwu Chau	3	18:00	10	0.56
Sha Chau	2	12:00	0	0
TOTAL	**5**	**30:00**	**10**	**0.33**

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



6.5 Progress Update on Passive Acoustic Monitoring

Underwater acoustic monitoring using Passive Acoustic Monitoring (PAM) should be undertaken during land formation related construction works. In this reporting month, the Ecological Acoustic Recorder (EAR) has been re-deployed in early January 2017 and positioned at south of Sha Chau Island 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 at least two dolphin observers were deployed by each contractor in accordance with the Marine Mammal Watching Plan. Teams of at least two dolphin observers were deployed by the contractors for continuous monitoring of the Dolphin Exclusion Zone (DEZ) for DCM trial works in accordance with the DEZ Plan. Trainings for the proposed dolphin observers were provided by the ET prior to the aforementioned works, with a cumulative total of 166 individuals being trained and the training records kept by the ET. From the contractors' daily observation records and DEZ monitoring log records, no dolphin or other marine mammals were observed within or around the DEZ and silt curtains in this reporting month. These contractors' records were also audited by the ET during site inspection.

Audits of acoustic decoupling for construction vessels were carried out during weekly site inspection and the observations are summarised in **Section 7.1**. Audits of SkyPier High Speed

Ferries route diversion and speed control and construction vessel management are presented in **Section 7.2** and **Section 7.3** respectively.

6.7 Timing of Reporting CWD Monitoring Results

Detailed analysis of CWD monitoring results collected by small vessel line-transect survey will be provided in future quarterly reports. Detailed analysis of CWD monitoring results collected by land-based theodolite tracking and PAM will be provided in future yearly 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 month did not trigger the Action Level for CWD monitoring.

7 Environmental Site Inspection and Audit

7.1 Environmental Site Inspection

Weekly site inspections of the construction works for the advanced works contract, CLP cable diversion enabling works and DCM contracts 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 proper storage of construction material, improvement of spill preventive measures and removal of oil stains at construction sites. In addition, recommendations were also provided during site inspection on barges. These included provision and maintenance of spill preventive measures and chemical waste storage area; display of Non-road Mobile Machinery (NRMM) labels for generators; provision of proper acoustic decoupling for noisy equipment; provision of recycling bins for separating recyclables from general refuse as well as proper maintenance of construction vessels to avoid dark smoke emission.

In addition, the contractors were urged to ensure careful placement of sand materials within the silt curtain and proper maintenance of the silt curtain to avoid adverse water quality impacts.

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

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

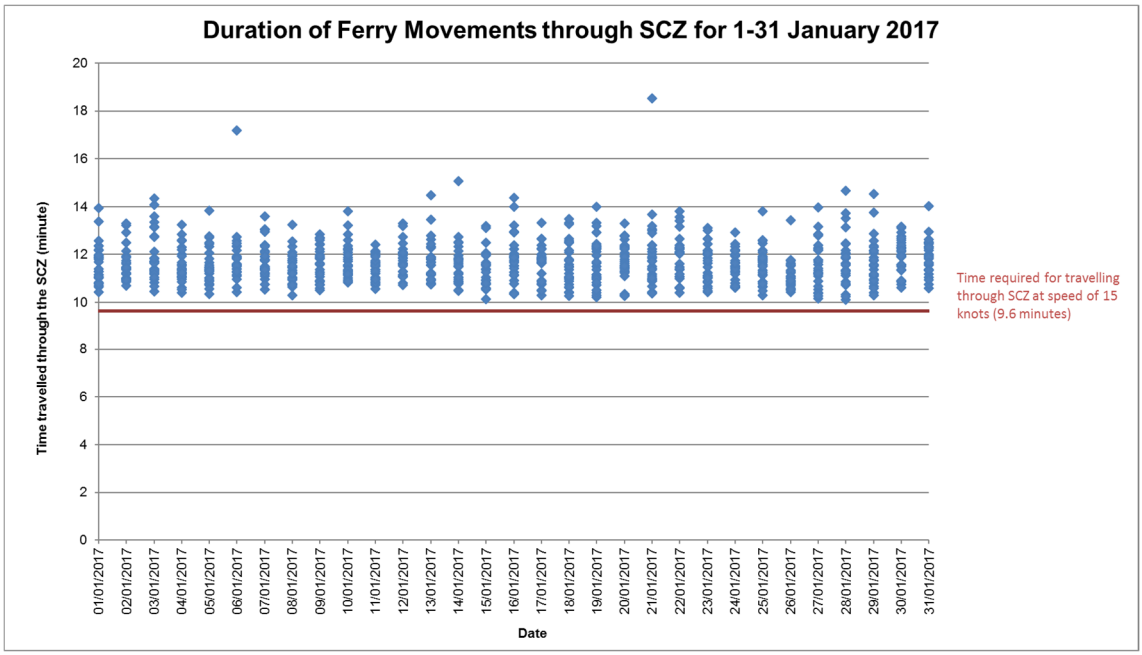
The Marine Travel Routes and Management Plan for High Speed Ferries of SkyPier (the SkyPier Plan) has been submitted to the Advisory Council on the Environment (ACE) for comment and subsequently submitted to and approved by EPD in November 2015 under EP Condition 2.10. The approved SkyPier Plan is available 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 January 2017 (i.e., 83 to 91 daily movements) were within the maximum daily cap of 125 daily movements. Status of compliance with the annual daily average of 99 movements will be further reviewed in the annual EM&A Report.

In total, 868 ferry movements between HKIA SkyPier and Zhuhai / Macau were recorded in January 2017 and the data are presented in **Appendix G**. The time spent by the SkyPier HSFs travelling through the SCZ in January 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 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 January 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.

Two ferries were recorded with minor deviation from the diverted route on 1 and 12 January 2017. Notices were accordingly sent to the ferry operator (FO) and the cases are under investigation by ET. The investigation result will be presented in the next monthly EM&A report.

The remaining cases in November and December 2016 have been followed up after receiving further information from the FOs. For the case that the HSF did not travel through the diverted route on 22 November 2016, ET's investigation found that the concerned captain decided to bypass the SCZ so as to reduce the travel time due to passenger misbehavior incident happened during passenger boarding at SkyPier. After the incident, the concerned captain has been instructed to follow the SkyPier Plan requirements. Letter has also been sent to other captains from the same FO to remind them the SkyPier Plan requirements. For the case with minor route deviation on 18 December 2016, ET's investigation found that the vessel captain had to give way to a vessel to ensure safety. After that, the HSF had returned to the normal route following the SkyPier Plan.

Two meetings were held with FO representatives on 6 and 10 January 2017 to review and discuss the deviation cases happened in the past few months as well as to share experience and recommendations to further strengthen the implementation of SkyPier Plan. For the cases of insufficient AIS data, AAHK has requested the FO to provide supplementary track records (e.g. electronic chart / radar records) within 2 working days for checking.

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

Requirements in the SkyPier Plan	1 January to 31 January 2017
Total number of ferry movements recorded and audited	868
Use diverted route and enter / leave SCZ through Gate Access Points	2 deviations, which are under investigation
Speed control in speed control zone	The average speeds taken within the SCZ of all HSFs were within 15 knots (7.8 knots to 14.3 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)	83 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 had carried out the following actions during the reporting period:

- Four skipper trainings had been held for contractors' concerned skippers of relevant construction vessels to familiarize them with the predefined routes; general education on local cetaceans; guidelines for avoiding adverse water quality impact; the required environmental practices / measures while operating construction and associated vessels under the Project; and guidelines for operating vessels safely in the presence of CWDs. The list of all trained skippers was properly recorded and maintained by ET.
- Four skipper trainings had been held by contractor's Environmental Officer. Competency test had subsequently been conducted with the trained skippers by ET.
- 52 skippers have been trained by ET / contractor's Environmental Officer in January 2017. In total, 434 skippers have been trained from August 2016 to January 2017.
- ET had conducted weekly audit of construction and associated vessel records as provided by the contractors. AIS data, vessel tracks, vessel speed and other relevant records had also been audited by ET to ensure the contractors complied with the requirements of the MTRMP-CAV and submitted sufficient records to the Marine Traffic Control Centre (MTCC) for records.
- From the weekly audit, deviations such as speeding in the works area, entry 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 weekly MTCC audit and such deviations were also reviewed during the Environmental Management Meeting in order to help the contractors prevent such deviations from happening again in future.
- 3-month rolling programmes (one month record and two 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.
- As the Brothers Marine Park was designated on 30 December 2016, ET had reminded contractors that all vessels shall avoid entering the Brothers Marine Park according to the MTRMP-CAV.

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

7.4 Ecological Monitoring

In accordance with the Updated EM&A Manual, ecological monitoring shall 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. During the reporting month, the monthly ecological monitoring on Sheung Sha Chau observed that installation of casing was conducted under the Contract P560(R) on the Island and there was no encroachment upon the egretry area nor any significant disturbance to the egrets foraging at Sheung Sha Chau by the works. A few single individuals of Black-crowned Night Heron were observed standing on trees located at the egretry area, whilst no early breeding or nesting activities were observed. The site photos and location map regarding the monthly ecological monitoring for the egretry area on Sheung Sha Chau and the HDD works are provided in **Appendix D** for reference.

7.5 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	
2.17	Detailed Plan on Deep Cement Mixing	
2.16	Spill Response Plan	
2.19	Waste Management Plan	
3.1	Updated EM&A Manual	
3.4	Baseline Monitoring Reports	

7.6 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 month are presented in **Appendix E**.

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

7.7.1 Complaints

An environmental complaint was received on 29 December 2016 regarding night time work at Sheung Sha Chau. Investigation was conducted by the ET in accordance with the Updated EM&A Manual and the Complaint Management Plan (CMP) of the Project. The contractor of Contract P560(R) Aviation Fuel Pipeline Diversion Works reported that emergency rescue works had to be carried out in view of the unexpected ground condition at Sheung Sha Chau. Such emergency rescue works were considered as crucial and vital in order to avoid building up of excessive drilling fluid pressure, which might lead to an uncontrollable spillage outside the contaminant pit, causing significant environmental impact at Sheung Sha Chau. Subsequent to the emergency rescues, the contractor has already taken immediate actions to improve the drilling fluid system as well as strengthen the control and communication measures with all relevant parties. ET will continue to closely monitor the implementation and effectiveness of the remedial measures in preventing re-occurrence of similar events.

Another environmental complaint was received on 19 January 2017 regarding night time work and construction wastewater at Sheung Sha Chau on 12 January 2017. Investigation was conducted by the ET in accordance with the Updated EM&A Manual and the CMP of the Project. Based on the investigation results, it was found that there was a small amount (around 5 litres) of drilling fluid which overflown from the containment pit on Sheung Sha Chau on 12 January 2017 due to a malfunctioning level sensor. The contractor had immediately confined and removed the leakage, and replaced the sensor with enhanced detection function. ET will continue to closely monitor the implementation and effectiveness of the preventive measures. According to the site records provided by the contractor, no night time works were carried out at Sheung Sha Chau by the contractor on 12 January 2017. It is concluded that the alleged night-time work carried out at Sheung Sha Chau on 12 January 2017 is not justified.

7.7.2 Notifications of Summons or Status of Prosecution

During the reporting period, neither notifications of summons nor prosecution were received.

7.7.3 Cumulative Statistics

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

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

8.1 Construction Programme for the Coming Reporting Period

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

Advanced Works:

Contract P560 (R) Aviation Fuel Pipeline Diversion Works

- HDD pilot hole drilling and reaming;
- Pipeline supporting works; and
- Stockpiling of excavated materials from HDD operation.

Reclamation Works:

Contract 3201 to 3205 Deep Cement Mixing Works

- Laying of geotextile and sand blanket;
- Erection of site office;
- Coring works; and
- DCM trial works.

Contract 3206 Main Reclamation Works

- Erection of site office.

Other Works:

Contract 3213 CLP Cable Diversion Enabling Works

- Delivery of temporary power supply system

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 trial works;
- 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 reported period included five DCM contracts and an advanced works contract. The DCM contracts involved DCM trials, coring works, laying of geotextile and sand blanket; and the advanced works contract involved HDD works including pilot hole drilling, reaming and pipeline supporting 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 Updated EM&A Manual.

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

The water quality monitoring results for DO, total alkalinity and chromium obtained during the reporting period were in compliance with their corresponding Action and Limit Levels. For turbidity, SS, and nickel, some of the testing results had exceeded the relevant Action and Limit Levels during the reporting period. The investigation findings concluded that the other exceedances were not due to the Project.

The monthly terrestrial ecology monitoring on Sheung Sha Chau Island observed that installation of casing was conducted on the Island 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, including the observations on dark smoke emission from the construction vessels and the condition of silt curtain for sand blanket laying are provided to the contractors together with the appropriate follow-up actions where necessary.

On the implementation of Marine Mammal Watching Plan, silt curtains were in place by the contractors for sand blanket laying works and dolphin observers were deployed in accordance with the Plan. On the implementation of Dolphin Exclusion Zone Plan, dolphin observers were deployed by the contractors for continuous monitoring of the DEZ for DCM trial 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' daily observation records and DEZ monitoring log records, no dolphin or other marine mammals were observed within or around the DEZ and silt curtains in this reporting month. These contractors' records were 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 High Speed Ferries (HSFs) in January 2017 were in the range of 83 to 91 daily movements, which are within the maximum daily cap of 125 daily movements. A total of 868 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 7.8 to 14.3 knots), which were in compliance with the SkyPier Plan. Two ferry movements with minor deviation from the diverted route are under investigation by ET. The investigation result will be presented in the next monthly EM&A report. In summary, the ET and

IEC have audited the HSF movements against the SkyPier Plan and conducted follow up investigation or actions accordingly.

On the implementation of the MTRMP-CAV, ET had conducted weekly audit of relevant information, including AIS data, vessel tracks and other relevant records to ensure the contractors complied with the requirements of the MTRMP-CAV. Training has been provided for the concerned skippers to facilitate them in familiarising with the requirements of the MTRMP-CAV. 3-month rolling programmes for construction vessel activities were also received from contractors. ET had reminded contractors that all vessels shall avoid entering the Brothers Marine Park, which has been designated on 30 December 2016.

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
- BOUNDARY OF KEY CONSTRUCTION ACTIVITIES

RECLAMATION WORKS AREA
(please refer to Figure 1.2)

Contract P560 (R)-
Launching Site

Contract 3213 Site

Contract P560 (R)-
Site Office

Contract P560 (R)-
Stockpiling Area

Contract 3213 Site Office

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

Rev.	Date	Description	Checked
A	31AUG15	FIRST ISSUE	DC

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

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

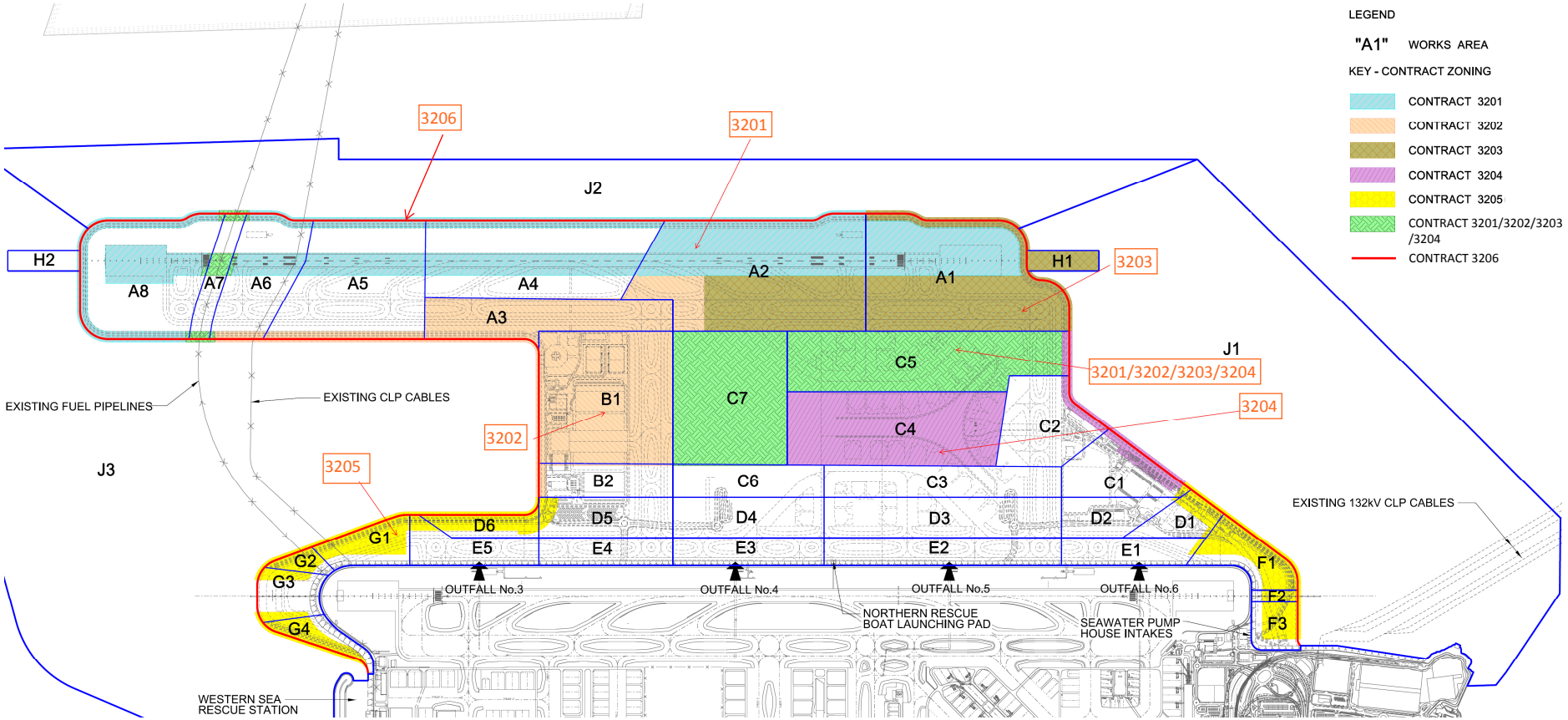

FIGURE 1.2- LOCATIONS OF RECLAMATION WORKS AREA

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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Title

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

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

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

Drawing No.

FIGURE 2.1

Scale at A3 1 : 22500

Rev. C

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

805000 E
810000 E
815000 E
820000 E
825000 N
820000 N
815000 N
HKSAR BOUNDARY
C1
C2
C3
IM1
IM2
IM3
IM4
IM5
IM6
IM7
IM8
IM9
IM10
IM11
IM12
SR2
SR3
SR4A
SR5A
SR6
SR7
SR8
LEGEND:
LAND FORMATION FOOTPRINT
500m ENVELOPE
IMPACT STATION
SENSITIVE RECEIVER
CONTROL STATION
0 500 1000 1500 2000 m
1 : 60 000 SCALE BAR

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A	02DEC15	FIRST ISSUE	DC
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C	06JUN16	GENERAL REVISION	LC

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Title

WATER QUALITY MONITORING STATIONS

Consultant's Signatures for Approval		Date
Design	DC	06JUN16
Checkers	DC / TK	06JUN16
Approver	EC	06JUN16

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

Drawing No.

FIGURE 3.1

Scale at A3 1 : 60000

Rev. C

Filename: J:\355482\REPORT\ENV\EMA\160606\MCL-P132-EMA-5-002.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
WEST LANTAU

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

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

Rev.	Date	Description	Checked
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Title
VESSEL BASED DOLPHIN MONITORING TRANSECTS IN BASELINE MONITORING

Consultant's Signatures for Approval		Date
Design	JC	02DEC15
Checkers	JC / TK	02DEC15
Approver	EC	02DEC15

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

Drawing No.
FIGURE 6.1

Scale at A3
1 : 125000

Rev.
A

Filename: J:\355482\REPORT\ENV\EMA\151202\MCL-P132-EMA-10-002.dgn

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

E
D

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

HKSAR BOUNDARY

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

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

Rev.	Date	Description	Checked
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Title

LAND BASED DOLPHIN MONITORING IN BASELINE AND CONSTRUCTION PHASES

Consultant's Signatures for Approval		Date
Design	JC	02DEC15
Checkers	JC / TK	02DEC15
Approver	EC	02DEC15

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

Drawing No.

FIGURE 6.2

Scale at A3 1 : 45000

Rev. A

Filename: J:\355482\REPORT\ENV\EMA\151202\MCL-P132-EMA-10-004.dgn

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

URMSTON ROAD

龍鼓洲
LUNG KWU CHAU

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

沙洲
SHA CHAU

A5

HKSAR BOUNDARY

小冷水
SIU LANG SHUI

PILLAR POINT POWER STATION

CASTLE PEAK BAY
TSING SHAN WAN

BUTTERFLY BEACH

GOLDEN BEACH

PEARL ISLAND

小小磨刀
SIU MO TO

大小磨刀
THE BROTHERS

大磨刀
TAI MO TO

TUNG CHUNG

大白灣
DISCOVERY BAY (TAI PAK)

LEGEND:

- LAND FORMATION FOOTPRINT
- HONG KONG INTERNATIONAL AIRPORT
- AUTONOMOUS PASSIVE ACOUSTIC MONITORING LOCATION

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

Rev.	Date	Description	Checked
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Title

LOCATIONS FOR AUTONOMOUS PASSIVE ACOUSTIC MONITORING IN BASELINE AND CONSTRUCTION PHASES

Consultant's Signatures for Approval		Date
Design	JC	02DEC15
Checkers	JC / TK	02DEC15
Approver	EC	02DEC15

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\151202\MCL-P132-EMA-10-005.dgn

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

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

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

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

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			▪ The loading, unloading, handling, transfer or storage of cement, pulverised fuel ash (PFA) and/or other equally dusty materials shall be carried in a totally enclosed system acceptable to EPD. All dust-laden air or waste gas generated by the process operations shall be properly extracted and vented to fabric filtering system to meet the required emission limit; ▪ Cement, PFA and/or other equally dusty materials shall be stored in storage silo fitted with audible high level alarms to warn of over-filling. The high-level alarm indicators shall be interlocked with the material filling line such that in the event of the silo approaching an overfilling condition, an audible alarm will operate, and after 1 minute or less the material filling line will be closed; ▪ Vents of all silos shall be fitted with fabric filtering system to meet the required emission limit; ▪ Vents of cement/PFA weighing scale shall be fitted with fabric filtering system to meet the required emission limit; and ▪ Seating of pressure relief valves of all silos shall be checked, and the valves re-seated if necessary, before each delivery.		
			Other raw materials ▪ The loading, unloading, handling, transfer or storage of other raw materials which may generate airborne dust emissions such as crushed rock, sand, stone aggregate, shall be carried out in such a manner to prevent or minimize dust emissions; ▪ The materials shall be adequately wetted prior to and during the loading, unloading and handling operations. Manual or automatic water spraying system shall be provided at all unloading areas, stock piles and material discharge points; ▪ All receiving hoppers for unloading relevant materials shall be enclosed on three sides up to 3 m above the unloading point. In no case shall these hoppers be used as the material storage devices; ▪ The belt conveyor for handling materials shall be enclosed on top and two sides with a metal board at the bottom to eliminate any dust emission due to wind-whipping effect. Other type of enclosure will also be accepted by EPD if it can be demonstrated that the proposed enclosure can achieve same performance; ▪ All conveyor transfer points shall be totally enclosed. Openings for the passage of conveyors shall be fitted with adequate flexible seals; ▪ Scrapers shall be provided at the turning points of all conveyors to remove dust adhered to the belt surface; ▪ Conveyors discharged to stockpiles of relevant materials shall be arranged to minimize free fall as far as practicable. All free falling transfer points from conveyors to stockpiles shall be enclosed with chute(s) and water sprayed; ▪ Aggregates with a nominal size less than or equal to 5 mm should be stored in totally enclosed structure such as storage bin and should not be handled in open area. Where there is sufficient buffer area	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?^
			surrounding the concrete batching 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; ▪ 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;	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 efflux velocity of gases from the main chimney shall not be less than 12 m/s at full load condition; ▪ 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; ▪ 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	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?^
			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: Crushers ▪ The outlet of all primary crushers, and both inlet and outlet of all secondary and tertiary crushers, if not	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?^
			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
			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	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?^
			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.		
			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; ▪ 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.	Within the Project site / During construction phase / Prior to commencement of operation	I
7.5.6	4.3	-	**Adoption of QPME** ▪ QPME should be adopted as far as applicable.	Within the Project site / During construction	I

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

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			▪ 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.	/ Duration of the construction phase	
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. <u>For construction of the eastern approach lights at the CMPs</u> ▪ 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 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 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	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?^
			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; ▪ 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; ▪ 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; ▪ 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; ▪ 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;		
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 ▪ 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	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?^
			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; ▪ 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; ▪ 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; ▪ 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 ▪ 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	Project Site Area / During design and 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?^
			materials, although required treatment level / detail and the specific re-use mode are under development.		
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; ▪ 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	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?^
			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 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.	Project Site Area / Construction Phase	N/A
10.5.1.19	7.1	-	Contractor should register with the EPD as a chemical waste producer and to follow the relevant guidelines.	Project Site Area /	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			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.	Construction Phase	
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. ▪ 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. ▪ 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. ▪ 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.	Project Site Area inaccessible during site reconnaissance / Prior to Construction Phase	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;	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?^
			▪ 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.		
			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
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	9.1	2.30	**Timing the Pipe Connection Works outside Ardeid's Breeding Season**	During construction	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
and 12.7.2.6			▪ 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.	phase at Sheung Sha Chau Island	
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	N/A
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; ▪ 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; ▪ Use of bored piling in short duration to form the new approach lights and marker beacons for the new runway; ▪ Avoid bored piling during CWD peak calving season (Mar to Jun); ▪ Prohibition of underwater percussive piling; and ▪ 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.	During construction phase at marine works area	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; ▪ 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	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?^
			columns and vertical sand drains); ▪ Use of bored piling in short duration to form the new approach lights and marker beacons for the new runway; and ▪ 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.		
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 to completion of construction	N/A
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	Area between the footprint and SCLKC Marine Park 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?^
			▪ The effectiveness of the CWD mitigation measures after implementation of initial six month SkyPier HSF diversion and speed restriction will be reviewed.		
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; ▪ 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 ▪ A DEZ would also be implemented during bored piling work but as a precautionary measure only.	Marine waters around land formation works area during construction phase	I
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
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	N/A
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

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			▪ 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; ▪ Use of bored piling in short duration to form the new approach lights and marker beacons for the new runway; and ▪ 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.		
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 ▪ 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
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; ▪ Alternative construction methods including use of non-dredge methods for ground improvement (e.g. Deep Cement Mixing (DCM), prefabricated vertical drains (PVD), sand compaction piles, steel cells, stone columns and vertical sand drains); ▪ Use of bored piling in short duration to form the new approach lights and marker beacons for the new runway; and ▪ 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.	All works area during the construction phase	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	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
				completion of works.	
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.	N/A
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.	N/A
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. – may be disassembled in phases	N/A
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	N/A
Table 15.6	12.3	-	**CM8 -** All existing trees shall be carefully protected during construction. Detailed Tree Protection	All existing trees to be	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			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.	retained; Upon handover and completion of works.	
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.		
			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 during site inspection

Appendix B. Calibration Certificates

專業化驗有限公司
QUALITY PRO TEST-CONSULT LIMITED
Unit 10, 14/F, Wah Wai Centre, 38-40 Au Pui Wan St., Fotan, Hong Kong
Email: info@qualityprotest.com; Website: www.qualityprotest.com
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Report of Equipment Performance Check/Calibration

Test Report No. : AG010023
Date of Issue : 06 January 2017

PART A – CUSTOMER INFORMATION

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

PART B – SAMPLE INFORMATION

Description of Samples	:	Titrette bottletop burette, 50ml
Brand Name	:	BRAND
Model Number	:	1224B90
Serial Number	:	10N65665
Equipment Number	:	--
Date of Received	:	04 Jan, 2017
Date of Calibration	:	05 Jan, 2017
Date of Next Calibration[(a)]	:	05 Apr, 2017

PART C – CALIBRATION REQUESTED

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

~ Continued On Next Page ~

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

APPROVED SIGNATORY :

FUNG Yuen-ching Aries
Laboratory Manager

專業化驗有限公司
QUALITY PRO TEST-CONSULT LIMITED
Unit 10, 14/F, Wah Wai Centre, 38-40 Au Pui Wan St., Fotan, Hong Kong
Email: info@qualityprotest.com; Website: www.qualityprotest.com
Tel: (852) 3956 8717; Fax: (852) 3956 3928

Report of Equipment Performance Check/Calibration

Test Report No. : AG010023
Date of Issue : 06 January 2017

PART D – RESULT[b],[c]

Volumetric

Trial	Nominal volume (mL) at interval				
	3	3	3	3	3
	(1-4)	(16-19)	(23-26)	(34-37)	(42-45)
1	2.9823	2.9777	2.9744	2.9804	2.9881
2	2.9863	2.9831	2.9739	2.9900	2.9829
3	2.9837	2.9848	2.9896	2.9845	2.9820
4	2.9767	2.9828	2.9836	2.9833	2.9768
5	2.9852	2.9855	2.9828	2.9850	2.9814
6	2.9835	2.9881	2.9852	2.9860	2.9887
7	2.9817	2.9835	2.9842	2.9850	2.9715
8	2.9819	2.9712	2.9894	2.9710	2.9741
9	2.9848	2.9912	2.9688	2.9747	2.9815
10	2.9796	2.9838	2.9872	2.9817	2.9800
Average	2.9826	2.9832	2.9819	2.9822	2.9807
Standard deviation	0.0028	0.0055	0.0071	0.0056	0.0055
Calculate volume (mL)	2.9933	2.9939	2.9926	2.9929	2.9914
Error (%)	-0.2231	-0.2030	-0.2452	-0.2368	-0.2856
RSD (%)	0.0948	0.1832	0.2377	0.1872	0.1832

Acceptance Criteria[d]

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

~ END OF REPORT ~

Remark(s): -

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

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

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

專業化驗有限公司
QUALITY PRO TEST-CONSULT LIMITED
Unit 10, 14/F, Wah Wai Centre, 38-40 Au Pui Wan St., Fotan, Hong Kong
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Report of Equipment Performance Check/Calibration

Report No. : AG010004
Date of Issue : 04 January 2017

PART A – CUSTOMER INFORMATION

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

PART B – DESCRIPTION

Name of Equipment	:	YSI 6920 V2 Sonde (Multi-Parameters)
Manufacturer	:	YSI (a xylem brand)
Serial Number	:	0001C6A7
Date of Received	:	04 Jan, 2017
Date of Calibration	:	04 Jan, 2017
Date of Next Calibration[a]	:	04 Apr, 2017

PART C – REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

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

PART D – CALIBRATION RESULTS[b,c]

(1) pH at 25°C

Target (pH unit)	Displayed Reading[d] (pH Unit)	Tolerance[e](pH Unit)	Results
4.00	4.02	+0.02	Satisfactory
7.42	7.39	-0.03	Satisfactory
10.01	10.06	+0.05	Satisfactory

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

(2) Temperature

Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)	Results
15.8	15.72	-0.08	Satisfactory
20.8	20.77	-0.03	Satisfactory
36.1	36.14	+0.04	Satisfactory

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

~ CONTINUED ON NEXT PAGE ~

Remark(s): -

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

APPROVED SIGNATORY : _____
FUNG Yuen-ching Aries
Laboratory Manager

專業化驗有限公司
QUALITY PRO TEST-CONSULT LIMITED
Unit 10, 14/F, Wah Wai Centre, 38-40 Au Pui Wan St., Fotan, Hong Kong
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Report of Equipment Performance Check/Calibration

Report No. : AG010004
Date of Issue : 04 January 2017

PART D – CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
0.55	0.49	-0.06	Satisfactory
5.10	5.05	-0.05	Satisfactory
8.54	8.62	+0.08	Satisfactory

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

(4) Conductivity at 25°C

Expected Reading (µS/cm)	Displayed Reading (µS/cm)	Tolerance (%)	Results
146.9	149.8	+2.0	Satisfactory
1412	1442	+2.1	Satisfactory
12890	12662	-1.8	Satisfactory
58670	57984	-1.2	Satisfactory
111900	109480	-2.2	Satisfactory

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

(5) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	9.95	-0.5	Satisfactory
20	20.09	+0.4	Satisfactory
30	29.84	-0.5	Satisfactory

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

(6) Turbidity

Expected Reading (NTU)	Displayed Reading[f] (NTU)	Tolerance[g](%)	Results
0	0	--	Satisfactory
4.14	4.2	+1.4	Satisfactory
20.3	20.4	+0.5	Satisfactory
81.8	80.7	-1.3	Satisfactory
778	801	+3.0	Satisfactory

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

~ END OF REPORT ~

Remark(s): -

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

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

專業化驗有限公司
QUALITY PRO TEST-CONSULT LIMITED
Unit 10, 14/F, Wah Wai Centre, 38-40 Au Pui Wan St., Fotan, Hong Kong
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Report of Equipment Performance Check/Calibration

Report No. : AG010005
Date of Issue : 04 January 2017

PART A – CUSTOMER INFORMATION

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

PART B – DESCRIPTION

Name of Equipment	:	YSI 6920 V2 Sonde (Multi-Parameters)
Manufacturer	:	YSI (a xylem brand)
Serial Number	:	11F100014
Date of Received	:	04 Jan, 2017
Date of Calibration	:	04 Jan, 2017
Date of Next Calibration[a]	:	04 Apr, 2017

PART C – REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

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

PART D – CALIBRATION RESULTS[b,c]

(1) pH at 25°C

Target (pH unit)	Displayed Reading[d] (pH Unit)	Tolerance[e](pH Unit)	Results
4.00	4.03	+0.03	Satisfactory
7.42	7.44	+0.02	Satisfactory
10.01	10.06	+0.05	Satisfactory

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

(2) Temperature

Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)	Results
15.8	15.89	+0.09	Satisfactory
20.8	20.84	+0.04	Satisfactory
36.1	36.01	-0.09	Satisfactory

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

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Remark(s): -

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

APPROVED SIGNATORY : _____
FUNG Yuen-ching Aries
Laboratory Manager

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QUALITY PRO TEST-CONSULT LIMITED
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Report of Equipment Performance Check/Calibration

Report No. : AG010005
Date of Issue : 04 January 2017

PART D – CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
0.55	0.51	-0.04	Satisfactory
5.10	5.02	-0.08	Satisfactory
8.54	8.47	-0.07	Satisfactory

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

(4) Conductivity at 25°C

Expected Reading (µS/cm)	Displayed Reading (µS/cm)	Tolerance (%)	Results
146.9	143.0	-2.7	Satisfactory
1412	1472	+4.2	Satisfactory
12890	12588	-2.3	Satisfactory
58670	58176	-0.8	Satisfactory
111900	110231	-1.5	Satisfactory

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

(5) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	9.93	-0.7	Satisfactory
20	20.09	+0.4	Satisfactory
30	30.16	+0.5	Satisfactory

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

(6) Turbidity

Expected Reading (NTU)	Displayed Reading[f] (NTU)	Tolerance[g](%)	Results
0	0	--	Satisfactory
4.14	4.2	+1.4	Satisfactory
20.3	20.4	+0.5	Satisfactory
81.8	82.5	+0.9	Satisfactory
778	794	+2.1	Satisfactory

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

~ END OF REPORT ~

Remark(s): -

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

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

專業化驗有限公司
QUALITY PRO TEST-CONSULT LIMITED
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Report of Equipment Performance Check/Calibration

Report No. : AG010006
Date of Issue : 04 January 2017

PART A – CUSTOMER INFORMATION

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

PART B – DESCRIPTION

Name of Equipment	:	YSI 6920 V2 Sonde (Multi-Parameters)
Manufacturer	:	YSI (a xylem brand)
Serial Number	:	16G104518
Date of Received	:	04 Jan, 2017
Date of Calibration	:	04 Jan, 2017
Date of Next Calibration[a]	:	04 Apr, 2017

PART C – REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

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

PART D – CALIBRATION RESULTS[b,c]

(1) pH at 25°C

Target (pH unit)	Displayed Reading[d] (pH Unit)	Tolerance[e](pH Unit)	Results
4.00	4.05	+0.05	Satisfactory
7.42	7.39	-0.03	Satisfactory
10.01	10.04	+0.03	Satisfactory

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

(2) Temperature

Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)	Results
15.8	15.75	-0.05	Satisfactory
20.8	20.73	-0.07	Satisfactory
36.1	36.06	-0.04	Satisfactory

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

~ CONTINUED ON NEXT PAGE ~

Remark(s): -

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

APPROVED SIGNATORY :
FUNG Yuen-ching Aries
Laboratory Manager

專業化驗有限公司
QUALITY PRO TEST-CONSULT LIMITED
Unit 10, 14/F, Wah Wai Centre, 38-40 Au Pui Wan St., Fotan, Hong Kong
Email: info@qualityprotest.com; Website: www.qualityprotest.com
Tel: (852) 3956 8717; Fax: (852) 3956 3928

Report of Equipment Performance Check/Calibration

Report No. : AG010006
Date of Issue : 04 January 2017

PART D – CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
0.55	0.51	-0.04	Satisfactory
5.10	5.17	+0.07	Satisfactory
8.54	8.59	+0.05	Satisfactory

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

(4) Conductivity at 25°C

Expected Reading (µS/cm)	Displayed Reading (µS/cm)	Tolerance (%)	Results
146.9	140.4	-4.4	Satisfactory
1412	1436	+1.7	Satisfactory
12890	12560	-2.6	Satisfactory
58670	57974	-1.2	Satisfactory
111900	109872	-1.8	Satisfactory

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

(5) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	10.08	+0.8	Satisfactory
20	20.14	+0.7	Satisfactory
30	29.8	-0.7	Satisfactory

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

(6) Turbidity

Expected Reading (NTU)	Displayed Reading[f] (NTU)	Tolerance[g](%)	Results
0	0	--	Satisfactory
4.14	4.1	-1.0	Satisfactory
20.3	20.2	-0.5	Satisfactory
81.8	80.4	-1.7	Satisfactory
778	792	+1.8	Satisfactory

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

~ END OF REPORT ~

Remark(s): -

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

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

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Report of Equipment Performance Check/Calibration

Report No. : AG010003
Date of Issue : 04 January 2017

PART A – CUSTOMER INFORMATION

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

PART B – DESCRIPTION

Name of Equipment	:	YSI 6920 Sonde (Multi-Parameters)
Manufacturer	:	YSI (a xylem brand)
Serial Number	:	000109DF
Date of Received	:	04 Jan, 2017
Date of Calibration	:	04 Jan, 2017
Date of Next Calibration[a]	:	04 Apr, 2017

PART C – REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

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

PART D – CALIBRATION RESULTS[b,c]

(1) pH at 25°C

Target (pH unit)	Displayed Reading[d] (pH Unit)	Tolerance[e](pH Unit)	Results
4.00	4.06	+0.04	Satisfactory
7.42	7.38	-0.04	Satisfactory
10.01	10.07	+0.06	Satisfactory

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

(2) Temperature

Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)	Results
15.8	15.84	+0.04	Satisfactory
20.8	20.90	+0.10	Satisfactory
36.1	35.94	-0.16	Satisfactory

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

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Remark(s): -

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

APPROVED SIGNATORY : _____
FUNG Yuen-ching Aries
Laboratory Manager

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Report of Equipment Performance Check/Calibration

Report No. : AG010003
Date of Issue : 04 January 2017

PART D – CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
0.55	0.49	-0.06	Satisfactory
5.10	5.04	-0.06	Satisfactory
8.54	8.60	+0.06	Satisfactory

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

(4) Conductivity at 25°C

Expected Reading (µS/cm)	Displayed Reading (µS/cm)	Tolerance (%)	Results
146.9	141.2	-3.9	Satisfactory
1412	1346	-4.7	Satisfactory
12890	12702	-1.5	Satisfactory
58670	59067	+0.7	Satisfactory
111900	110460	-1.3	Satisfactory

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

(5) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	9.92	-0.8	Satisfactory
20	19.88	-0.6	Satisfactory
30	29.81	-0.6	Satisfactory

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

(6) Turbidity

Expected Reading (NTU)	Displayed Reading[f] (NTU)	Tolerance[g](%)	Results
0	0	--	Satisfactory
4.14	4.2	+1.4	Satisfactory
20.3	20.4	+0.5	Satisfactory
81.8	80.9	-1.1	Satisfactory
778	803	+3.2	Satisfactory

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

~ END OF REPORT ~

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

Appendix C. Monitoring Schedule

Monitoring Schedule of This Reporting Period

JANUARY 2017

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	**2**	**3** NM5/AR2 WQ General & Regular DCM mid-ebb: 16:39 mid-flood: 11:02	**4** Site Inspection NM1A/AR1A NM4	**5** Site Inspection NM6 NM3A CWD Vessel Survey WQ General & Regular DCM mid-ebb: 18:49 mid-flood: 12:35	**6** Site Inspection CWD Vessel Survey	**7** WQ General & Regular DCM mid-ebb: 07:22 mid-flood: 14:16
8	**9** NM5/AR2 CWD Vessel Survey CWD Land-based Survey	**10** Site Inspection NM1A/AR1A NM4 NM6 CWD Vessel Survey WQ General & Regular DCM mid-ebb: 11:18 mid-flood: 16:43	**11** Site Inspection NM3A	**12** Site Inspection CWD Vessel Survey WQ General & Regular DCM mid-ebb: 13:02 mid-flood: 07:40	**13** AR2 CWD Vessel Survey	**14** WQ General & Regular DCM mid-ebb: 14:29 mid-flood: 09:07
15	**16** NM1A/AR1A NM4 NM6	**17** Site Inspection NM3A WQ General & Regular DCM mid-ebb: 16:33 mid-flood: 11:02	**18** Site Inspection CWD Land-based Survey	**19** Site Inspection NM5/AR2 CWD Vessel Survey WQ General & Regular DCM mid-ebb: 18:23 mid-flood: 12:15	**20** Site Inspection AR1A CWD Vessel Survey CWD Land-based Survey Ecological Monitoring	**21** WQ General & Regular DCM mid-ebb: 06:47 mid-flood: 13:47
22	**23** NM3A	**24** Site Inspection CWD Land-based Survey WQ General & Regular DCM mid-ebb: 11:04 mid-flood: 16:07	**25** Site Inspection NM5/AR2 CWD Land-based Survey	**26** NM1A/AR1A NM4 NM6 WQ General & Regular DCM mid-ebb: 12:23 mid-flood: 07:12	**27** AR2	**28** WQ General & Regular DCM mid-ebb: 13:34 mid-flood: 08:13
29	**30**	**31** WQ General & Regular DCM mid-ebb: 15:24 mid-flood: 09:41				

Notes:

Air quality and Noise Monitoring Station

CWD - Chinese White Dolphin
WQ - Water Quality
DCM - Deep Cemenet Mixing

* Rescheduled due to adverse weather
^ Cancelled due to adverse weather

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

Tentative Monitoring Schedule of Next Reporting Period

FEBRUARY 2017

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1 Site Inspection NM1A/AR1A NM4 NM6	**2** Site Inspection NM5/AR2 NM3A WQ General & Regular DCM mid-ebb: 16:55 mid-flood: 10:49	**3** Site Inspection	**4** WQ General & Regular DCM mid-ebb: 19:11 mid-flood: 12:22
5	**6** NM6 CWD Vessel Survey	**7** Site Inspection NM1A/AR1A NM4 CWD Vessel Survey WQ General & Regular DCM mid-ebb: 10:15 mid-flood: 15:32	**8** Site Inspection NM5/AR2 NM3A	**9** Site Inspection CWD Vessel Survey WQ General & Regular DCM mid-ebb: 12:09 mid-flood: 17:24	**10** Site Inspection CWD Vessel Survey	**11** WQ General & Regular DCM mid-ebb: 13:32 mid-flood: 08:03
12	**13** NM1A/AR1A NM4 CWD Vessel Survey CWD Land-based Survey	**14** Site Inspection NM5/AR2 NM3A CWD Vessel Survey CWD Land-based Survey WQ General & Regular DCM mid-ebb: 15:10 mid-flood: 09:31	**15** Site Inspection	**16** Site Inspection NM6 CWD Land-based Survey WQ General & Regular DCM mid-ebb: 16:22 mid-flood: 10:22	**17** Site Inspection AR1A CWD Land-based Survey Ecological Monitoring	**18** WQ General & Regular DCM mid-ebb: 18:10 mid-flood: 11:27
19	**20** NM5/AR2 NM3A NM6 CWD Vessel Survey	**21** Site Inspection CWD Vessel Survey WQ General & Regular DCM mid-ebb: 09:52 mid-flood: 14:20	**22** Site Inspection	**23** Site Inspection NM1A/AR1A NM4 CWD Land-based Survey WQ General & Regular DCM mid-ebb: 11:28 mid-flood: 16:27	**24** Site Inspection AR2	**25** WQ General & Regular DCM mid-ebb: 12:38 mid-flood: 07:11
26	**27**	**28** Site Inspection NM6 WQ General & Regular DCM mid-ebb: 14:18 mid-flood: 08:27				

Notes:

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

CWD - Chinese White Dolphin
WQ - Water Quality
DCM - Deep Cemenet Mixing

* Rescheduled due to adverse weather
^ Cancelled due to adverse weather

Appendix D. Monitoring Results

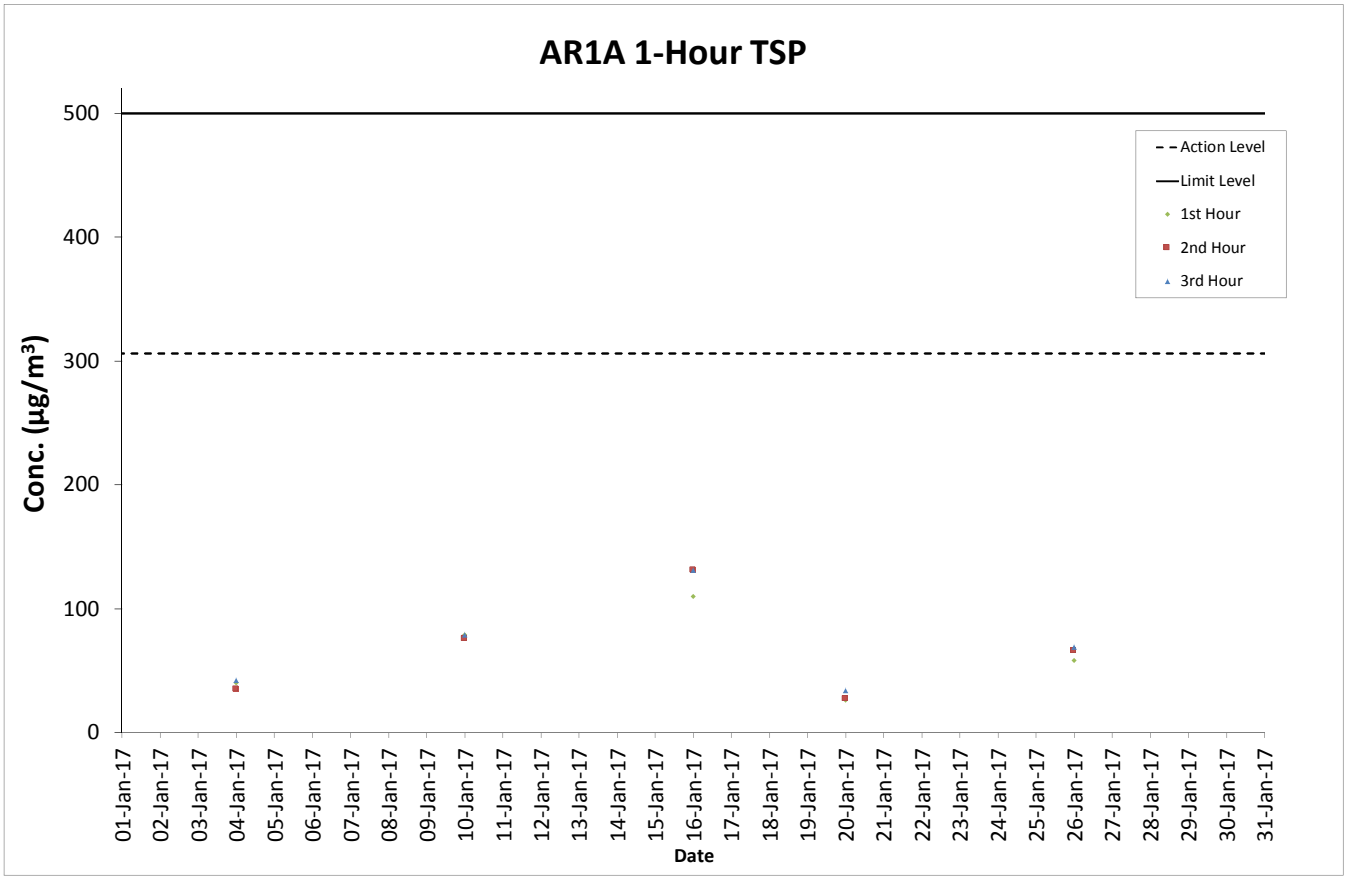
Air Quality Monitoring Results

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 ($\mu g/m^3$)
04-Jan-17	14:35	Sunny	1.6	302	40	306	500
04-Jan-17	15:35	Sunny	5.3	129	35	306	500
04-Jan-17	16:35	Sunny	5.0	138	42	306	500
10-Jan-17	14:00	Sunny	7.2	92	79	306	500
10-Jan-17	15:00	Sunny	6.4	96	76	306	500
10-Jan-17	16:00	Sunny	6.8	107	79	306	500
16-Jan-17	09:00	Rainy	3	33	110	306	500
16-Jan-17	10:00	Rainy	2.2	43	131	306	500
16-Jan-17	11:00	Rainy	1.5	74	131	306	500
20-Jan-17	09:08	Sunny	5	358	26	306	500
20-Jan-17	10:08	Sunny	5.8	358	27	306	500
20-Jan-17	11:08	Sunny	4.3	346	34	306	500
26-Jan-17	12:56	Sunny	4.3	285	58	306	500
26-Jan-17	13:56	Sunny	4.4	267	66	306	500
26-Jan-17	14:56	Sunny	4.7	253	69	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 ($\mu g/m^3$)
03-Jan-17	08:55	Fine	6.3	99	92	298	500
03-Jan-17	09:55	Fine	5.7	105	116	298	500
03-Jan-17	10:55	Fine	5.9	112	91	298	500
09-Jan-17	08:55	Fine	5.4	54	72	298	500
09-Jan-17	09:55	Fine	3.1	63	90	298	500
09-Jan-17	10:55	Fine	2.6	29	101	298	500
13-Jan-17	09:00	Cloudy	1.7	40	26	298	500
13-Jan-17	10:00	Cloudy	2.9	1	25	298	500
13-Jan-17	11:00	Cloudy	3.5	12	26	298	500
19-Jan-17	09:04	Cloudy	3.4	337	165	298	500
19-Jan-17	10:04	Cloudy	3.9	324	203	298	500
19-Jan-17	11:04	Cloudy	4.4	329	205	298	500
25-Jan-17	09:02	Sunny	1.6	5	55	298	500
25-Jan-17	10:02	Sunny	4.4	326	59	298	500
25-Jan-17	11:02	Sunny	3.7	303	57	298	500
27-Jan-17	09:00	Sunny	6.4	100	60	298	500
27-Jan-17	10:00	Sunny	5.8	99	41	298	500
27-Jan-17	11:00	Sunny	4.6	105	37	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-Jan-17
02-Jan-17
03-Jan-17
04-Jan-17
05-Jan-17
06-Jan-17
07-Jan-17
08-Jan-17
09-Jan-17
10-Jan-17
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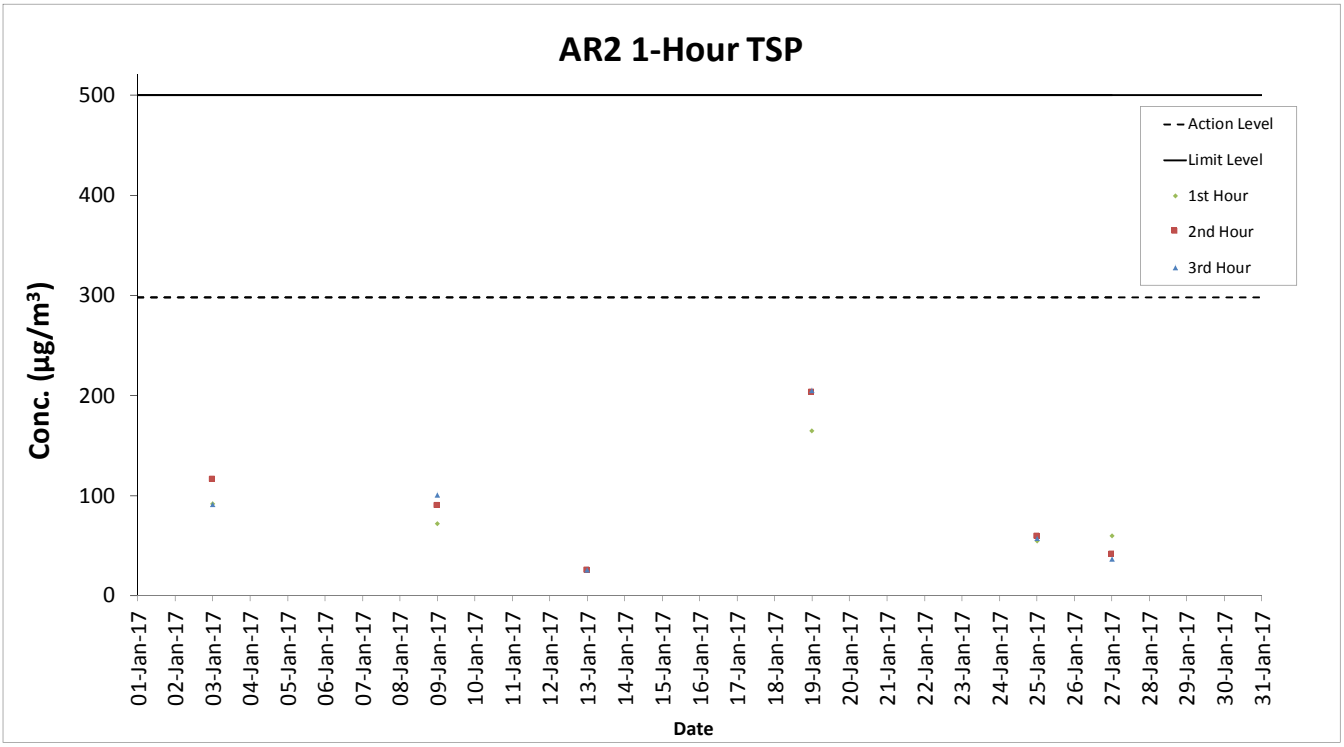
28-Jan-17
29-Jan-17
30-Jan-17
31-Jan-17
Date


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

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)
04-Jan-17	Sunny	14:49	71.0	54.5	71
04-Jan-17	Sunny	14:54	70.5	54.5	
04-Jan-17	Sunny	14:59	71.5	54.0	
04-Jan-17	Sunny	15:04	72.5	54.0	
04-Jan-17	Sunny	15:09	71.5	55.5	
04-Jan-17	Sunny	15:14	71.0	56.5	
10-Jan-17	Sunny	16:13	74.0	57.0	72
10-Jan-17	Sunny	16:18	71.0	55.5	
10-Jan-17	Sunny	16:23	71.5	55.0	
10-Jan-17	Sunny	16:28	72.0	54.5	
10-Jan-17	Sunny	16:33	70.5	55.0	
10-Jan-17	Sunny	16:38	73.5	56.5	
16-Jan-17	Cloudy	09:52	73.0	57.0	72
16-Jan-17	Cloudy	09:57	73.5	57.5	
16-Jan-17	Cloudy	10:02	72.0	55.5	
16-Jan-17	Cloudy	10:07	72.0	56.5	
16-Jan-17	Cloudy	10:12	74.5	58.5	
16-Jan-17	Cloudy	10:17	72.5	57.0	
26-Jan-17	Sunny	13:00	74.0	55.0	72
26-Jan-17	Sunny	13:05	73.0	56.0	
26-Jan-17	Sunny	13:10	72.0	55.0	
26-Jan-17	Sunny	13:15	71.5	56.0	
26-Jan-17	Sunny	13:20	71.0	56.0	
26-Jan-17	Sunny	13:25	73.0	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)
05-Jan-17	Cloudy	13:00	61.5	58.5	60
05-Jan-17	Cloudy	13:05	61.5	58.5	
05-Jan-17	Cloudy	13:10	60.5	58.5	
05-Jan-17	Cloudy	13:15	61.5	58.5	
05-Jan-17	Cloudy	13:20	62.5	59.5	
05-Jan-17	Cloudy	13:25	61.0	59.0	
11-Jan-17	Cloudy	13:09	56.5	54.5	63
11-Jan-17	Cloudy	13:14	66.0	55.0	
11-Jan-17	Cloudy	13:19	68.0	55.0	
11-Jan-17	Cloudy	13:24	67.5	55.0	
11-Jan-17	Cloudy	13:29	69.0	55.5	
11-Jan-17	Cloudy	13:34	67.5	56.0	
17-Jan-17	Cloudy	09:09	66.5	55.0	57
17-Jan-17	Cloudy	09:14	66.5	56.0	
17-Jan-17	Cloudy	09:19	69.0	57.0	
17-Jan-17	Cloudy	09:24	69.0	57.0	
17-Jan-17	Cloudy	09:29	68.5	56.0	
17-Jan-17	Cloudy	09:34	69.0	56.0	
23-Jan-17	Sunny	13:30	69.5	57.5	61
23-Jan-17	Sunny	13:35	66.5	58.5	
23-Jan-17	Sunny	13:40	69.0	58.0	
23-Jan-17	Sunny	13:45	69.5	57.0	
23-Jan-17	Sunny	13:50	69.0	58.0	
23-Jan-17	Sunny	13:55	67.0	59.5	

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)
04-Jan-17	Sunny	13:34	62.5	58.5	64
04-Jan-17	Sunny	13:39	63.5	58.5	
04-Jan-17	Sunny	13:44	65.5	59.0	
04-Jan-17	Sunny	13:49	64.0	58.0	
04-Jan-17	Sunny	13:54	62.0	58.5	
04-Jan-17	Sunny	13:59	62.0	58.0	
10-Jan-17	Sunny	13:03	66.0	61.0	66
10-Jan-17	Sunny	13:08	68.5	64.0	
10-Jan-17	Sunny	13:13	70.5	65.5	
10-Jan-17	Sunny	13:18	70.0	59.5	
10-Jan-17	Sunny	13:23	63.0	59.0	
10-Jan-17	Sunny	13:28	63.5	58.5	
16-Jan-17	Cloudy	13:44	63.0	57.5	64
16-Jan-17	Cloudy	13:49	64.0	58.0	
16-Jan-17	Cloudy	13:54	63.5	58.5	
16-Jan-17	Cloudy	13:59	62.5	59.0	
16-Jan-17	Cloudy	14:04	64.0	59.0	
16-Jan-17	Cloudy	14:09	63.5	58.5	
26-Jan-17	Sunny	14:10	61.5	57.0	63
26-Jan-17	Sunny	14:15	62.5	57.5	
26-Jan-17	Sunny	14:20	62.0	57.5	
26-Jan-17	Sunny	14:25	62.0	57.5	
26-Jan-17	Sunny	14:30	62.5	57.0	
26-Jan-17	Sunny	14:35	62.5	57.5	

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)
03-Jan-17	Fine	09:18	57.0	47.0	53
03-Jan-17	Fine	09:23	56.0	48.0	
03-Jan-17	Fine	09:28	61.0	50.5	
03-Jan-17	Fine	09:33	59.0	45.5	
03-Jan-17	Fine	09:38	55.0	45.5	
03-Jan-17	Fine	09:43	60.0	48.0	
09-Jan-17	Fine	09:06	62.0	48.0	53
09-Jan-17	Fine	09:11	57.0	48.0	
09-Jan-17	Fine	09:16	59.5	47.0	
09-Jan-17	Fine	09:21	56.0	47.5	
09-Jan-17	Fine	09:26	57.5	48.5	
09-Jan-17	Fine	09:31	62.0	49.5	
19-Jan-17	Cloudy	09:24	60.5	48.0	58
19-Jan-17	Cloudy	09:29	56.5	48.0	
19-Jan-17	Cloudy	09:34	58.0	48.0	
19-Jan-17	Cloudy	09:39	55.5	47.5	
19-Jan-17	Cloudy	09:44	56.5	47.0	
19-Jan-17	Cloudy	09:49	62.0	49.0	
25-Jan-17	Sunny	09:19	57.0	45.5	53
25-Jan-17	Sunny	09:24	55.5	49.0	
25-Jan-17	Sunny	09:29	59.5	50.0	
25-Jan-17	Sunny	09:34	63.0	50.0	
25-Jan-17	Sunny	09:39	57.5	47.5	
25-Jan-17	Sunny	09:44	52.5	45.5	

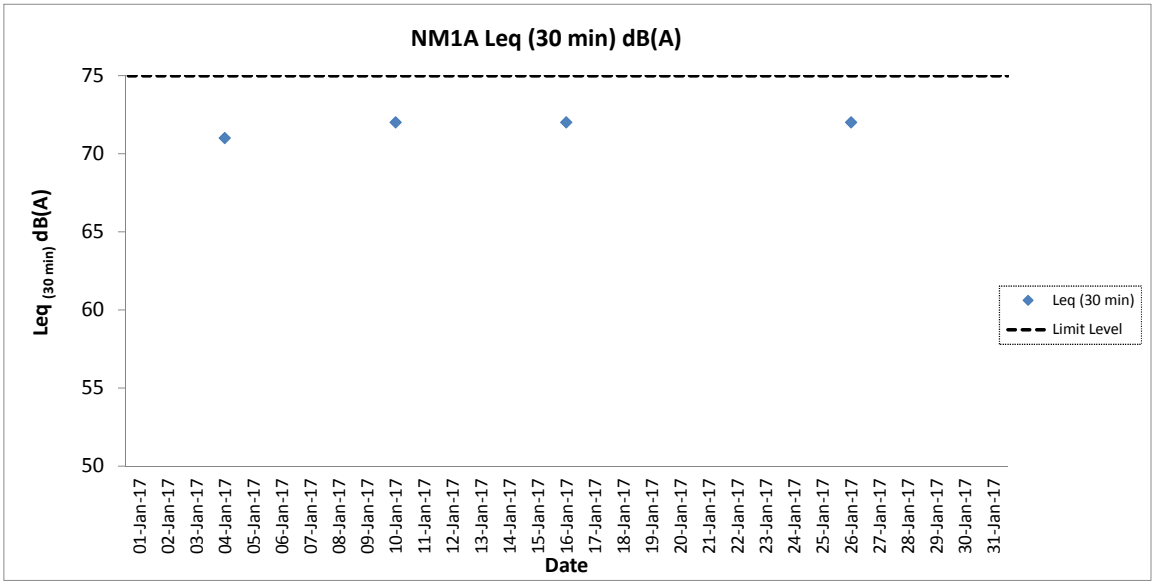
Remarks:
+3dB (A) correction was applied to free-field measurement.

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)
05-Jan-17	Cloudy	09:39	69.0	55.0	62
05-Jan-17	Cloudy	09:44	72.5	60.5	
05-Jan-17	Cloudy	09:49	67.0	55.5	
05-Jan-17	Cloudy	09:54	67.5	55.0	
05-Jan-17	Cloudy	09:59	65.5	58.0	
05-Jan-17	Cloudy	10:04	65.5	57.0	
10-Jan-17	Cloudy	09:38	71.5	56.0	66
10-Jan-17	Cloudy	09:43	70.5	56.5	
10-Jan-17	Cloudy	09:48	71.5	57.5	
10-Jan-17	Cloudy	09:53	67.0	54.5	
10-Jan-17	Cloudy	09:58	69.0	55.0	
10-Jan-17	Cloudy	10:03	69.0	54.5	
16-Jan-17	Cloudy	09:38	74.0	56.0	73
16-Jan-17	Cloudy	09:43	69.5	55.5	
16-Jan-17	Cloudy	09:48	75.5	61.0	
16-Jan-17	Cloudy	09:53	78.5	59.0	
16-Jan-17	Cloudy	09:58	77.5	58.5	
16-Jan-17	Cloudy	10:03	74.0	58.0	
26-Jan-17	Fine	09:39	71.5	57.5	73
26-Jan-17	Fine	09:44	77.0	57.0	
26-Jan-17	Fine	09:49	80.0	58.0	
26-Jan-17	Fine	09:54	75.0	57.5	
26-Jan-17	Fine	09:59	73.0	57.5	
26-Jan-17	Fine	10:04	74.0	57.0	

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


NM1A Leq (30 min) dB(A)
Leq (30 min) dB(A)
75
70
65
60
55
50
01-Jan-17
02-Jan-17
03-Jan-17
04-Jan-17
05-Jan-17
06-Jan-17
07-Jan-17
08-Jan-17
09-Jan-17
10-Jan-17
11-Jan-17
12-Jan-17
13-Jan-17
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16-Jan-17
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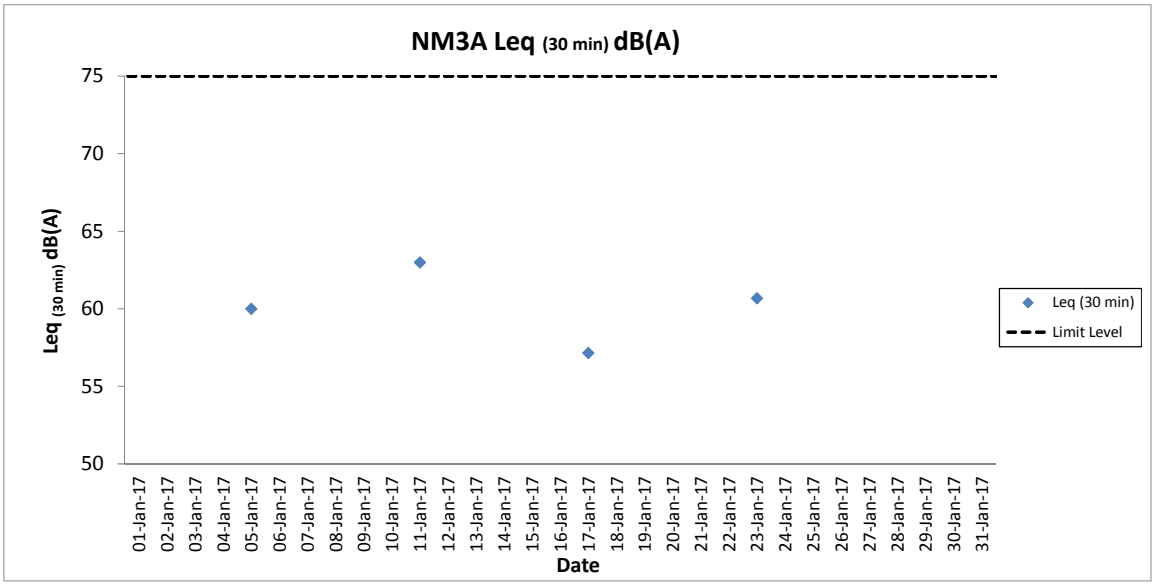
18-Jan-17
19-Jan-17
20-Jan-17
21-Jan-17
22-Jan-17
23-Jan-17
24-Jan-17
25-Jan-17
26-Jan-17
27-Jan-17
28-Jan-17
29-Jan-17
30-Jan-17
31-Jan-17
Date
Leq (30 min)
Limit Level


NM3A Leq (30 min) dB(A)
Leq (30 min) dB(A)
75
70
65
60
55
50
01-Jan-17
02-Jan-17
03-Jan-17
04-Jan-17
05-Jan-17
06-Jan-17
07-Jan-17
08-Jan-17
09-Jan-17
10-Jan-17
11-Jan-17
12-Jan-17
13-Jan-17
14-Jan-17
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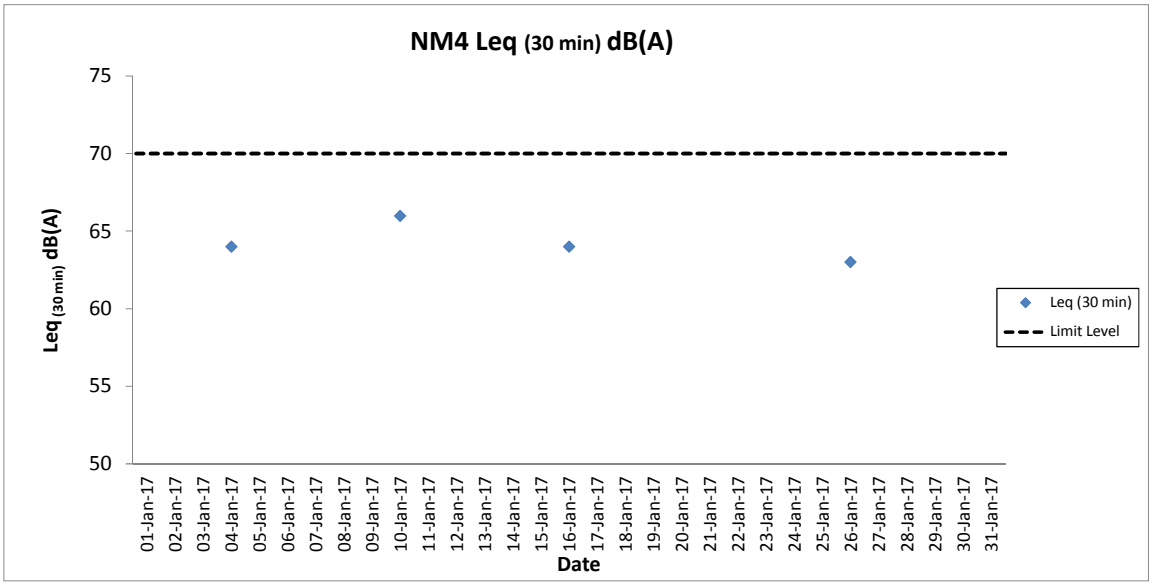
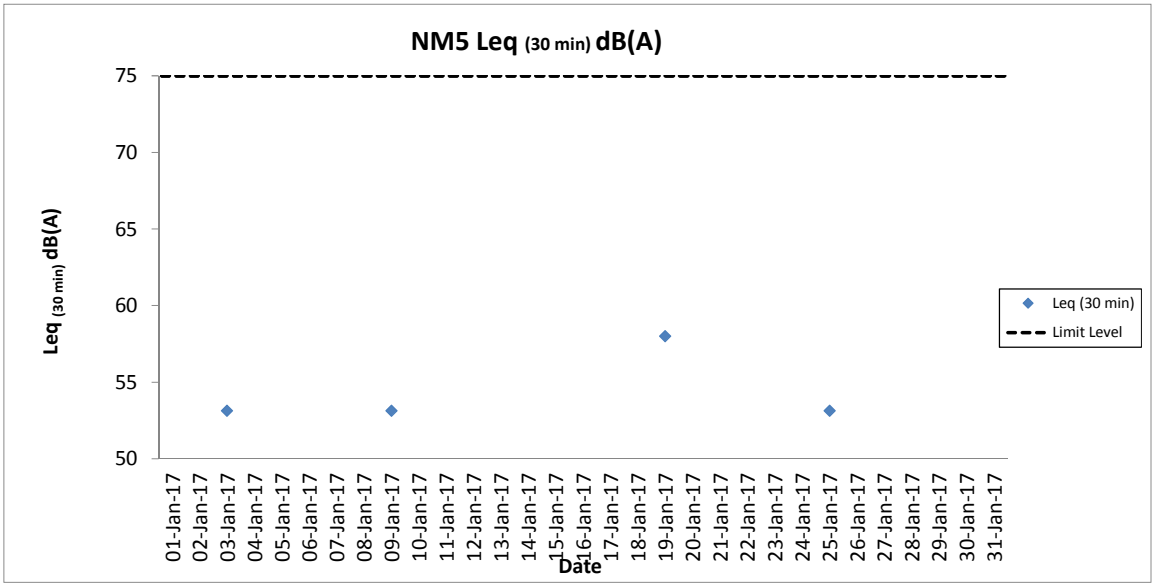
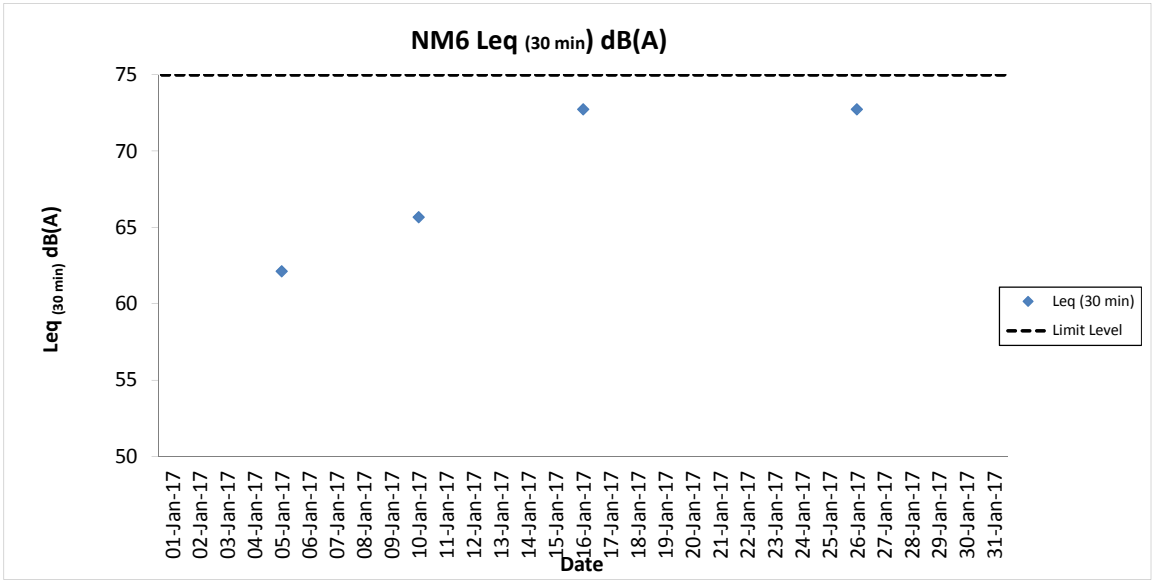
16-Jan-17
17-Jan-17
18-Jan-17
19-Jan-17
20-Jan-17
21-Jan-17
22-Jan-17
23-Jan-17
24-Jan-17
25-Jan-17
26-Jan-17
27-Jan-17
28-Jan-17
29-Jan-17
30-Jan-17
31-Jan-17
Date
Leq (30 min)
Limit Level


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


NM5 Leq (30 min) dB(A)
Leq (30 min) dB(A)
75
70
65
60
55
50
01-Jan-17
02-Jan-17
03-Jan-17
04-Jan-17
05-Jan-17
06-Jan-17
07-Jan-17
08-Jan-17
09-Jan-17
10-Jan-17
11-Jan-17
12-Jan-17
13-Jan-17
14-Jan-17
15-Jan-17
16-Jan-17
17-Jan-17
18-Jan-17
19-Jan-17
20-Jan-17
21-Jan-17
22-Jan-17
23-Jan-17
24-Jan-17
25-Jan-17
26-Jan-17
27-Jan-17
28-Jan-17
29-Jan-17
30-Jan-17
31-Jan-17
Date
Leq (30 min)
Limit Level


NM6 Leq (30 min) dB(A)
Leq (30 min) dB(A)
75
70
65
60
55
50
01-Jan-17
02-Jan-17
03-Jan-17
04-Jan-17
05-Jan-17
06-Jan-17
07-Jan-17
08-Jan-17
09-Jan-17
10-Jan-17
11-Jan-17
12-Jan-17
13-Jan-17
14-Jan-17
15-Jan-17
16-Jan-17
17-Jan-17
18-Jan-17
19-Jan-17
20-Jan-17
21-Jan-17
22-Jan-17
23-Jan-17
24-Jan-17
25-Jan-17
26-Jan-17
27-Jan-17
28-Jan-17
29-Jan-17
30-Jan-17
31-Jan-17
Date
Leq (30 min)
Limit Level

Water Quality Monitoring Results

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 03 January 17 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C) Value	Water Temperature (°C) Average	pH Value	pH Average	Salinity (ppt) Value	Salinity (ppt) Average	DO Saturation (%) Value	DO Saturation (%) Average	Dissolved Oxygen Value	Dissolved Oxygen DA	Turbidity(NTU) Value	Turbidity(NTU) DA	Suspended Solids (mg/L) Value	Suspended Solids (mg/L) DA	Total Alkalinity (ppm) Value	Total Alkalinity (ppm) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L) Value	Chromium (µg/L) DA	Nickel (µg/L) Value	Nickel (µg/L) DA
C1	Sunny	Moderate	10:22	8.4	Surface	1.0	0.7	43	19.8	19.8	8.0	8.0	29.6	29.6	110.1	110.1	8.4	8.4	6.8	10.5	16	22	92	93	815614	804258	<0.2	<0.2	1.0	1.0
						1.0	0.8	43	19.8		8.0		29.6		110.0		8.4		6.7		18		92				<0.2		1.1	
					Middle	4.2	0.7	44	19.7	19.7	8.0	8.0	29.6	29.6	108.5	108.5	8.3		14.3		19		93				<0.2		0.9	
						4.2	0.7	46	19.7		8.0		29.6		108.5		8.3		14.5		20		94				<0.2		1.0	
					Bottom	7.4	0.6	59	19.8	19.8	7.9	7.9	29.5	29.5	103.0	103.0	7.9	7.9	10.4		30		94				<0.2		1.0	
						7.4	0.6	60	19.8		7.9		29.5		102.9		7.9		10.2		29		95				<0.2		1.0	
C2	Sunny	Moderate	11:51	12.3	Surface	1.0	0.5	256	20.3	20.3	8.1	8.1	26.9	26.9	105.2	105.2	8.1	8.0	4.0	8.0	5	6	85	90	825676	806955	<0.2	<0.2	2.1	2.3
						1.0	0.6	274	20.3		8.1		26.9		105.2		8.1		4.0		5		85				<0.2		2.4	
					Middle	6.2	0.4	252	19.9	19.9	8.1	8.1	27.3	27.3	100.4	100.4	7.8		7.6		6		92				<0.2		2.3	
						6.2	0.4	261	19.9		8.1		27.3		100.4		7.8		7.6		6		92				<0.2		2.3	
					Bottom	11.3	0.3	274	19.9	19.9	8.1	8.1	28.3	28.3	99.5	99.5	7.7	7.7	12.5		7		94				<0.2		2.2	
						11.3	0.3	283	19.9		8.1		28.3		99.5		7.7		12.5		7		93				<0.2		2.3	
C3	Sunny	Moderate	09:57	12.1	Surface	1.0	0.6	265	20.0	20.0	8.2	8.2	29.6	29.6	108.4	108.4	8.3	8.2	4.5	10.7	6	7	91	93	822095	817814	<0.2	<0.2	0.9	1.0
						1.0	0.6	265	20.0		8.2		29.6		108.4		8.3		4.6		6		91				<0.2		1.0	
					Middle	6.1	0.5	258	20.0	20.0	8.2	8.2	29.7	29.7	106.5	106.5	8.1		8.6		6		93				<0.2		1.1	
						6.1	0.6	275	20.0		8.2		29.7		106.5		8.1		8.6		6		93				<0.2		1.0	
					Bottom	11.1	0.4	249	20.0	20.0	8.2	8.2	29.7	29.7	105.8	105.8	8.1	8.1	18.9		10		95				<0.2		1.1	
						11.1	0.5	265	20.0		8.2		29.7		105.8		8.1		19.1		8		94				<0.2		1.1	
IM1	Sunny	Moderate	10:42	7.3	Surface	1.0	0.6	93	20.0	20.0	8.0	8.0	29.0	29.0	111.8	111.8	8.6	8.5	5.0	6.5	15	17	89	91	818342	806451	<0.2	<0.2	1.1	1.2
						1.0	0.6	101	20.0		8.0		29.0		111.8		8.6		4.9		15		90				<0.2		1.1	
					Middle	3.7	0.6	132	20.0	20.0	8.0	8.0	28.7	28.7	109.3	109.3	8.4		5.9		18		91				<0.2		1.2	
						3.7	0.6	142	20.0		8.0		28.7		109.2		8.4		5.9		17		91				<0.2		1.2	
					Bottom	6.3	0.5	125	19.9	19.9	7.9	7.9	27.6	27.6	102.9	102.9	8.0	8.0	8.6		19		92				<0.2		1.2	
						6.3	0.5	125	19.9		7.9		27.6		102.8		8.0		8.6		18		93				<0.2		1.2	
IM2	Sunny	Moderate	10:47	8.1	Surface	1.0	0.6	86	19.9	19.9	8.0	8.0	29.1	29.1	108.5	108.5	8.3	8.3	6.2	7.4	14	17	91	93	818848	806182	<0.2	<0.2	1.3	1.2
						1.0	0.6	93	19.9		8.0		29.1		108.5		8.3		6.2		14		92				<0.2		1.2	
					Middle	4.1	0.5	97	19.9	19.9	8.0	8.0	28.9	28.9	107.0	107.0	8.2		7.6		17		92				<0.2		1.1	
						4.1	0.6	101	19.9		8.0		28.9		106.9		8.2		7.6		19		93				<0.2		1.2	
					Bottom	7.1	0.5	117	19.9	19.9	8.0	8.0	28.4	28.4	102.3	102.3	7.9	7.9	8.5		18		93				<0.2		1.2	
						7.1	0.5	126	19.9		8.0		28.4		102.3		7.9		8.5		18		94				<0.2		1.3	
IM3	Sunny	Moderate	10:55	8.3	Surface	1.0	0.6	92	19.9	19.9	8.0	8.0	29.1	29.1	107.9	107.9	8.3	8.2	7.9	9.7	16	19	92	93	819399	806019	<0.2	<0.2	1.3	1.4
						1.0	0.6	97	19.9		8.0		29.1		107.8		8.3		7.9		17		92				<0.2		1.2	
					Middle	4.2	0.5	90	19.9	19.9	8.0	8.0	28.9	28.9	106.0	106.0	8.1		9.1		16		93				<0.2		1.5	
						4.2	0.6	95	19.9		8.0		28.9		105.9		8.1		9.1		16		94				<0.2		1.5	
					Bottom	7.3	0.5	97	19.9	19.9	7.9	7.9	28.5	28.5	101.1	101.0	7.8	7.8	12.0		22		94				<0.2		1.4	
						7.3	0.5	97	19.9		7.9		28.5		100.9		7.8		12.1		24		94				<0.2		1.5	
IM4	Sunny	Moderate	11:03	7.8	Surface	1.0	0.6	117	20.1	20.1	8.1	8.1	29.0	29.0	112.2	112.2	8.6	8.5	5.1	8.2	16	19	93	94	819585	805048	<0.2	<0.2	1.0	1.0
						1.0	0.6	122	20.0		8.1		29.0		112.1		8.6		5.2		15		93				<0.2		1.1	
					Middle	3.9	0.6	109	19.9	19.9	8.0	8.0	28.8	28.8	109.3	109.3	8.4		8.9		16		94				<0.2		0.9	
						3.9	0.6	115	19.9		8.0		28.8		109.3		8.4		9.0		16		93				<0.2		0.9	
					Bottom	6.8	0.5	120	19.9	19.9	8.0	8.0	28.4	28.4	104.3	104.3	8.0	8.0	10.5		24		94				<0.2		0.9	
						6.8	0.6	120	19.9		8.0		28.4		104.2		8.0		10.4		25		95				<0.2		0.9	
IM5	Sunny	Moderate	11:11	6.7	Surface	1.0	0.6	103	19.9	19.9	8.0	8.0	28.6	28.6	105.7	105.7	8.1	8.1	8.0	10.1	16	20	92	93	820554	804924	<0.2	<0.2	1.0	1.0
						1.0	0.6	105	19.9		8.0		28.6		105.6		8.1		8.1		15		92				<0.2		1.0	
					Middle	3.4	0.5	116	19.8	19.8	8.0	8.0	28.6	28.6	104.7	104.7	8.1		10.5		20		93				<0.2		1.1	
						3.4	0.6	127	19.8		8.0		28.6		104.7		8.1		10.7		19		94				<0.2		1.1	
					Bottom	5.7	0.5	100	19.8	19.8	8.0	8.0	28.6	28.6	103.7	103.7	8.0	8.0	11.6		25		94				<0.2		1.1	
						5.7	0.6	107	19.8		8.0		28.6		103.7		8.0		11.6		24		94				<0.2		0.9	
IM6	Sunny	Moderate	11:19	6.6	Surface	1.0	0.6	91	19.9	19.9	8.0	8.0	28.8	28.8	106.9	106.9	8.2	8.2	8.0	9.3	21	22	91	92	821044	805840	<0.2	<0.2	0.9	1.0
						1.0	0.7	96	19.9		8.0		28.8		106.8		8.2		8.0		20		90				<0.2		0.8	
					Middle	3.3	0.6	78	19.9	19.9	8.0	8.0	28.8	28.8	106.2	106.2	8.2		9.6		22		92				<0.2		1.0	
						3.3	0.7	81	19.9		8.0		28.8		106.2		8.2		9.7		22		92				<0.2		1.1	
					Bottom	5.6	0.6	80	19.8	19.8	8.0	8.0	28.9	28.9	106.1	106.1	8.2	8.2	10.4		24		92				<0.2		1.1	
						5.6	0.6	80	19.8		8.0		28.9		106.1		8.2		10.3		25		93				<0.2		0.9	
IM7	Sunny	Moderate	11:30	8.4	Surface	1.0	0.8	77	20.0	20.0	8.0	8.0	28.6	28.6	107.4	107.4	8.3	8.2	3.7	3.9	8	11	92	94	821360	806839	<0.2	<0.2	1.0	0.9
						1.0	0.8	77	20.0		8.0		28.6		107.4		8.3		3.7		8		93				<0.2		1.0	
					Middle	4.2	0.7	61	19.9	19.9	8.0	8.0	28.4	28.4	105.6	105.6	8.1		4.0		12		93				<0.2		0.9	
						4.2	0.7	64	19.9		8.0		28.4		105.6		8.1		4.1		13		94				<0.2		0.9	
					Bottom	7.4	0.5	96	19.9	19.9	7.9	7.9	27.8	27.8	101.1	101.1	7.8	7.8	4.1		13		94				<0.2		0.7	
						7.4	0.5	103	19.9		7.9		27.8		101.0		7.8		3.7		14		95				<0.2		0.7	
IM8	Sunny	Moderate	11:14	7.9	Surface	1.0	0.4	138	20.1	20.1	8.1	8.1	27.0	27.0	104.0	104.0	8.1	8.1	8.5	8.8	15	15	86	90	821690	807843	<0.2	<0.2	2.1	1.7
						1.0	0.4	140	20.1		8.1		27.0		104.0		8.1		8.5		14		86				<0.2		2.3	
					Middle	4.0	0.4	148	20.0	20.0	8.1	8.1	27.1	27.1	102.7	102.7	8.0		8.9		14		92				<0.2		1.1	
						4.0	0.4	152	20.0		8.1		27.1		102.7		8.0		8.9		14		92				<0.2		1.3	
					Bottom	6.9	0.4	153	19.9	19.9	8.1	8.1	27.3	27.3	101.2	101.2	7.9	7.9	8.9		15		93				<0.2		1.8	
						6.9	0.4	162	19.9		8.1		27.3		101.2		7.9		8.9		15		93				<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 03 January 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	11:04	7.4	Surface	1.0	0.5	252	19.9	19.9	8.1	8.1	27.4	27.4	104.3	104.3	8.1	8.1	4.5	4.7	8	9	87	91	822076	808825	<0.2	<0.2	1.7	1.8
						1.0	0.5	252			8.1		27.4		104.2		8.1		4.5		8		87				<0.2		1.8	
					Middle	3.7	0.5	257	19.9	19.9	8.1	8.1	27.4	27.4	103.6	103.6	8.0		4.5		9		92				<0.2		1.9	
						3.7	0.5	272	19.9		8.1		27.4		103.6		8.0		4.5		8		92				<0.2		2.0	
					Bottom	6.4	0.5	249	19.9	19.9	8.1	8.1	27.5	27.5	102.9	102.9	8.0	8.0	5.2		10		93				<0.2		1.6	
						6.4	0.5	257	19.9		8.1		27.5		102.9		8.0		5.2		12		94				<0.2		1.7	
IM10	Sunny	Moderate	10:54	7.2	Surface	1.0	0.6	291	19.9	19.9	8.2	8.2	28.9	28.9	108.7	108.7	8.3	8.3	8.4	10.5	16	15	87	91	822225	809835	<0.2	<0.2	1.3	1.1
						1.0	0.6	315	19.9		8.2		28.9		108.7		8.3		8.4		15		88				<0.2		1.2	
					Middle	3.6	0.6	284	19.9	19.9	8.2	8.2	28.9	28.9	107.2	107.2	8.2		11.8		15		92				<0.2		1.1	
						3.6	0.6	305	19.9		8.2		28.9		107.2		8.2		11.5		16		92				<0.2		0.9	
					Bottom	6.2	0.5	296	19.9	19.9	8.2	8.2	28.9	28.9	104.8	104.8	8.1	8.1	11.3		15		93				<0.2		1.2	
						6.2	0.5	321	19.9		8.2		28.9		104.8		8.1		11.3		15		93				<0.2		1.1	
IM11	Sunny	Moderate	10:48	7.9	Surface	1.0	0.6	268	20.1	20.1	8.2	8.2	29.0	29.0	113.2	113.2	8.7	8.7	6.8	12.3	9	10	88	91	821512	810540	<0.2	<0.2	0.9	1.0
						1.0	0.6	281	20.1		8.2		29.0		113.1		8.7		7.7		10		88				<0.2		0.9	
					Middle	4.0	0.6	273	20.0	20.0	8.2	8.2	29.4	29.4	111.9	111.9	8.6		12.0		9		92				<0.2		0.9	
						4.0	0.6	289	20.0		8.2		29.4		111.9		8.6		12.2		9		93				<0.2		1.1	
					Bottom	6.9	0.6	266	19.9	19.9	8.2	8.2	29.4	29.4	111.1	111.1	8.5	8.5	17.4		12		93				<0.2		1.1	
						6.9	0.6	286	19.9		8.2		29.4		111.1		8.5		17.5		12		93				<0.2		1.1	
IM12	Sunny	Moderate	10:40	8.2	Surface	1.0	0.6	277	20.0	20.0	8.2	8.2	29.5	29.5	111.1	111.1	8.5	8.5	7.5	8.9	9	12	89	91	821171	811512	<0.2	<0.2	0.8	0.6
						1.0	0.7	299	20.0		8.2		29.5		111.1		8.5		7.5		9		89				<0.2		0.8	
					Middle	4.1	0.5	272	19.9	19.9	8.2	8.2	29.7	29.7	110.0	110.0	8.4		9.3		11		92				<0.2		0.6	
						4.1	0.6	292	19.9		8.2		29.7		110.0		8.4		9.3		13		92				<0.2		0.6	
					Bottom	7.2	0.5	279	19.9	19.9	8.2	8.2	29.7	29.7	108.6	108.6	8.3	8.3	9.9		15		93				<0.2		0.5	
						7.2	0.5	295	19.9		8.2		29.7		108.6		8.3		9.8		14		93				<0.2		0.4	
SR2	Sunny	Moderate	10:19	4.0	Surface	1.0	0.2	159	20.0	20.0	8.2	8.2	29.4	29.4	110.0	110.0	8.4	8.4	9.3	8.8	11	12	90	92	821463	814175	<0.2	<0.2	0.9	0.9
						1.0	0.2	164	20.0		8.2		29.4		110.0		8.4		9.2		10		90				<0.2		0.9	
					Middle	2.0	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.0	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	0.2	160	20.0	20.0	8.2	8.2	29.4	29.4	108.9	108.9	8.3	8.3	8.4		12		93				<0.2		0.9	
						3.0	0.2	160	20.0		8.2		29.4		108.8		8.3		8.3		14		93				<0.2		0.8	
SR3	Sunny	Moderate	11:21	8.6	Surface	1.0	0.5	231	20.0	20.0	8.1	8.1	27.0	27.0	103.7	103.7	8.0	8.0	6.0	7.3	7	13	-	-	822136	807589	-	-	-	-
						1.0	0.5	245	20.0		8.1		27.0		103.7		8.0		6.0		5		-				-		-	
					Middle	4.3	0.5	191	19.9	19.9	8.1	8.1	27.0	27.0	102.9	102.9	8.0		7.4		16		-				-		-	
						4.3	0.5	207	19.9		8.1		27.0		102.9		8.0		7.4		15		-				-		-	
					Bottom	7.6	0.5	212	19.9	19.9	8.1	8.1	27.2	27.2	100.5	100.5	7.8	7.8	8.5		16		-				-		-	
						7.6	0.5	215	19.9		8.1		27.2		100.5		7.8		8.6		17		-				-		-	
SR4A	Sunny	Moderate	10:00	8.8	Surface	1.0	0.3	188	19.9	19.9	8.0	8.0	29.6	29.6	104.7	104.7	8.0	8.0	9.3	8.2	15	17	-	-	817204	807814	-	-	-	-
						1.0	0.3	196	19.9		8.0		29.6		104.7		8.0		9.3		14		-				-		-	
					Middle	4.4	0.3	193	19.9	19.9	8.0	8.0	29.4	29.4	104.1	104.1	8.0		8.4		18		-				-		-	
						4.4	0.3	205	19.9		8.0		29.4		104.1		8.0		8.4		19		-				-		-	
					Bottom	7.8	0.3	195	19.9	19.9	8.0	8.0	29.1	29.1	102.9	102.9	7.9	7.9	6.8		19		-				-		-	
						7.8	0.3	199	19.9		8.0		29.0		102.8		7.9		6.8		19		-				-		-	
SR5A	Sunny	Moderate	09:42	3.2	Surface	1.0	0.3	272	19.8	19.8	8.0	8.0	29.9	29.9	107.7	107.7	8.2	8.2	4.4	5.0	10	11	-	-	816575	810681	-	-	-	-
						1.0	0.3	287	19.8		8.0		29.9		107.7		8.2		4.5		10		-				-		-	
					Middle	1.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						1.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.2	0.3	273	19.8	19.8	8.0	8.0	29.8	29.8	106.7	106.7	8.2	8.2	5.5		12		-				-		-	
						2.2	0.3	292	19.8		8.0		29.7		106.7		8.2		5.5		13		-				-		-	
SR6	Sunny	Moderate	09:18	3.7	Surface	1.0	0.2	220	20.0	20.0	7.9	7.9	29.1	29.1	104.5	104.5	8.0	8.0	12.4	11.3	24	26	-	-	817893	814662	-	-	-	-
						1.0	0.2	229	20.0		7.9		29.1		104.5		8.0		12.5		24		-				-		-	
					Middle	1.9	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						1.9	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.7	0.2	211	20.0	20.0	7.8	7.8	28.0	28.0	101.2	101.2	7.8	7.8	10.2		27		-				-		-	
						2.7	0.2	225	20.0		7.8		27.9		101.1		7.8		10.1		27		-				-		-	
SR7	Sunny	Moderate	09:24	16.2	Surface	1.0	0.3	53	20.0	20.0	8.2	8.2	30.0	30.0	103.8	103.8	7.9	7.9	4.4	4.5	12	13	-	-	823649	823741	-	-	-	-
						1.0	0.3	54	20.0		8.2		30.0		103.8		7.9		4.4		12		-				-		-	
					Middle	8.1	0.3	66	20.0	20.0	8.2	8.2	30.0	30.0	103.0	103.0	7.9		4.9		13		-				-		-	
						8.1	0.4	67	20.0		8.2		30.0		103.0		7.9		5.0		14		-				-		-	
					Bottom	15.2	0.3	79	20.0	20.0	8.2	8.2	30.0	30.0	102.2	102.2	7.8	7.8	4.2		14		-				-		-	
						15.2	0.3	83	20.0		8.2		30.0		102.2		7.8		4.2		13		-				-		-	
SR8	Sunny	Moderate	10:32	4.7	Surface	1.0	0.3	256	20.0	20.0	8.2	8.2	28.6	28.6	108.5	108.5	8.3	8.3	9.1	10.0	11	15	-	-	820417	811612	-	-	-	-
						1.0	0.3	265	20.0		8.2		28.6		108.5		8.3		9.1		11		-				-		-	
					Middle	2.4	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.4	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.3	250	19.9	19.9	8.2	8.2	29.3	29.3	107.7	107.7	8.3	8.3	10.7		17		-				-		-	
						3.7	0.3	270	19.9		8.2		29.3		107.6		8.3		11.0		19		-				-		-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 03 January 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	16:02	8.4	Surface	1.0	0.3	146	20.3	20.3	8.1	8.1	29.0	29.0	106.6	106.5	8.1	8.0	3.0	4.0	6	7	92	94	815611	804247	<0.2	<0.2	0.4	0.5
						1.0	0.3	148	20.3		8.1		29.0		106.4		8.1		3.1		6		93				<0.2		0.5	
					Middle	4.2	0.3	153	20.0	20.0	8.1	8.1	29.3	29.3	102.9	102.8	7.9		3.7		8		94				<0.2		0.6	
						4.2	0.3	154	20.0		8.1		29.3		102.7		7.9		3.8		7		94				<0.2		0.6	
					Bottom	7.4	0.3	157	19.8	19.8	8.0	8.0	29.1	29.1	98.7	98.7	7.6	7.6	5.0		7		94				<0.2		0.4	
						7.4	0.3	164	19.8		8.0		29.1		98.6		7.6		5.1		6		95				<0.2		0.4	
C2	Sunny	Moderate	14:57	12.2	Surface	1.0	0.2	178	20.2	20.2	8.2	8.2	27.1	27.1	108.9	108.9	8.4	8.3	4.1	6.3	5	8	84	90	825695	806963	<0.2	<0.2	2.4	1.5
						1.0	0.3	180	20.2		8.2		27.1		108.9		8.4		4.1		5		84				<0.2		2.4	
					Middle	6.1	0.2	174	20.0	20.0	8.2	8.2	28.8	28.8	105.9	105.9	8.1		6.4		8		92				<0.2		1.2	
						6.1	0.3	187	20.0		8.2		28.8		105.9		8.1		6.4		9		92				<0.2		1.3	
					Bottom	11.2	0.2	175	20.0	20.0	8.2	8.2	29.4	29.4	105.5	105.5	8.1	8.1	8.5		11		93				<0.2		0.9	
						11.2	0.2	190	20.0		8.2		29.4		105.5		8.1		8.5		11		93				<0.2		0.9	
C3	Sunny	Moderate	16:52	12.7	Surface	1.0	0.4	87	20.3	20.3	8.2	8.2	29.8	29.8	109.2	109.2	8.3	8.1	3.0	3.1	5	5	89	92	822114	817785	<0.2	<0.2	0.5	0.5
						1.0	0.4	90	20.3		8.2		29.8		109.2		8.3		3.0		6		90				<0.2		0.5	
					Middle	6.4	0.3	98	20.2	20.2	8.2	8.2	29.9	29.9	103.5	103.5	7.9		2.8		4		92				<0.2		0.5	
						6.4	0.4	102	20.2		8.2		29.9		103.5		7.9		2.8		4		92				<0.2		0.5	
					Bottom	11.7	0.3	116	20.1	20.1	8.2	8.2	30.1	30.1	99.8	99.8	7.6	7.6	3.6		5		95				<0.2		0.6	
						11.7	0.3	116	20.1		8.2		30.1		99.8		7.6		3.6		7		94				<0.2		0.5	
IM1	Sunny	Moderate	15:39	7.4	Surface	1.0	0.3	197	20.0	20.0	8.1	8.1	29.4	29.4	110.4	110.4	8.4	8.3	4.4	4.8	11	12	90	91	818364	806438	<0.2	<0.2	0.4	0.6
						1.0	0.3	204	20.0		8.1		29.4		110.3		8.4		4.4		11		90				<0.2		0.4	
					Middle	3.7	0.3	184	20.0	20.0	8.1	8.1	29.3	29.3	107.3	107.2	8.2		4.9		11		91				<0.2		0.8	
						3.7	0.3	185	20.0		8.1		29.3		107.1		8.2		4.8		13		91				<0.2		0.9	
					Bottom	6.4	0.3	161	19.9	19.9	8.1	8.1	29.1	29.1	102.0	101.9	7.8	7.8	5.1		12		92				<0.2		0.6	
						6.4	0.3	165	19.9		8.1		29.1		101.8		7.8		5.1		11		92				<0.2		0.6	
IM2	Sunny	Moderate	15:34	8.7	Surface	1.0	0.4	166	20.2	20.2	8.1	8.1	29.4	29.4	110.3	110.2	8.4	8.3	4.6	5.0	9	10	89	91	818839	806179	<0.2	<0.2	0.5	0.5
						1.0	0.4	166	20.2		8.1		29.3		110.1		8.4		4.6		8		89				<0.2		0.6	
					Middle	4.4	0.4	180	19.8	19.8	8.1	8.1	29.4	29.4	106.8	106.8	8.2		5.3		8		90				<0.2		0.6	
						4.4	0.4	191	19.8		8.1		29.4		106.7		8.2		5.4		10		92				<0.2		0.4	
					Bottom	7.7	0.4	175	19.8	19.8	8.0	8.0	29.2	29.2	102.4	102.3	7.9	7.9	5.0		11		92				<0.2		0.6	
						7.7	0.4	181	19.8		8.0		29.2		102.1		7.8		5.0		12		92				<0.2		0.5	
IM3	Sunny	Moderate	15:26	8.3	Surface	1.0	0.2	182	20.0	20.0	8.1	8.1	29.2	29.2	110.8	110.8	8.5	8.3	4.3	5.1	7	10	91	92	819392	806027	<0.2	<0.2	0.7	0.6
						1.0	0.3	194	20.0		8.1		29.2		110.7		8.5		4.3		7		92				<0.2		0.6	
					Middle	4.2	0.3	194	19.8	19.8	8.1	8.1	29.0	29.0	105.6	105.5	8.1		5.1		11		92				<0.2		0.6	
						4.2	0.3	201	19.8		8.1		29.0		105.4		8.1		5.1		11		92				<0.2		0.6	
					Bottom	7.3	0.3	165	19.8	19.8	8.0	8.0	28.5	28.5	100.4	100.3	7.8	7.8	5.9		11		93				<0.2		0.6	
						7.3	0.3	177	19.8		8.0		28.5		100.1		7.7		5.9		11		93				<0.2		0.7	
IM4	Sunny	Moderate	15:18	8.1	Surface	1.0	0.3	200	20.2	20.2	8.1	8.1	29.2	29.2	112.5	112.5	8.6	8.3	3.6	4.7	8	10	91	93	819576	805049	<0.2	<0.2	0.6	0.7
						1.0	0.3	212	20.2		8.1		29.2		112.4		8.6		3.6		8		92				<0.2		0.6	
					Middle	4.1	0.3	187	19.8	19.8	8.0	8.0	29.4	29.4	104.6	104.5	8.0		5.0		9		93				<0.2		0.8	
						4.1	0.3	193	19.8		8.0		29.4		104.4		8.0		5.0		10		93				<0.2		0.8	
					Bottom	7.1	0.3	160	19.8	19.8	8.0	8.0	29.4	29.4	100.5	100.4	7.7	7.7	5.5		10		94				<0.2		0.6	
						7.1	0.3	166	19.8		8.0		29.4		100.3		7.7		5.5		12		94				<0.2		0.5	
IM5	Sunny	Moderate	15:11	6.9	Surface	1.0	0.5	177	20.2	20.2	8.1	8.1	29.0	29.0	114.8	114.7	8.8	8.5	3.8	4.8	10	10	90	91	820562	804908	<0.2	<0.2	0.6	0.7
						1.0	0.5	188	20.2		8.1		29.0		114.6		8.8		3.9		9		90				<0.2		0.5	
					Middle	3.5	0.4	170	19.9	19.9	8.1	8.1	29.1	29.1	107.6	107.5	8.2		5.0		10		91				<0.2		0.7	
						3.5	0.4	185	19.9		8.1		29.1		107.4		8.2		5.1		10		91				<0.2		0.8	
					Bottom	5.9	0.4	172	19.8	19.8	8.0	8.0	29.3	29.3	103.2	103.2	7.9	7.9	5.5		11		92				<0.2		0.7	
						5.9	0.4	176	19.8		8.0		29.3		103.1		7.9		5.5		11		91				<0.2		0.7	
IM6	Sunny	Moderate	15:03	6.8	Surface	1.0	0.3	176	20.1	20.1	8.1	8.1	29.2	29.2	115.4	115.4	8.8	8.7	3.5	4.3	10	10	92	93	821040	805815	<0.2	<0.2	0.6	0.6
						1.0	0.3	178	20.1		8.1		29.2		115.3		8.8		3.5		10		92				<0.2		0.6	
					Middle	3.4	0.3	165	20.0	20.0	8.1	8.1	28.9	28.9	111.8	111.8	8.6		4.0		9		92				<0.2		0.6	
						3.4	0.3	170	20.0		8.1		28.9		111.8		8.6		4.0		9		93				<0.2		0.5	
					Bottom	5.8	0.3	152	20.0	20.0	8.0	8.0	28.3	28.3	103.7	103.6	8.0	8.0	5.5		11		93				<0.2		0.6	
						5.8	0.3	164	20.0		8.0		28.3		103.5		8.0		5.5		10		94				<0.2		0.7	
IM7	Sunny	Moderate	14:55	8.1	Surface	1.0	0.4	144	20.1	20.1	8.0	8.0	28.7	28.7	112.6	112.6	8.6	8.5	3.9	4.9	10	9	92	94	821348	806835	<0.2	<0.2	0.7	0.9
						1.0	0.4	146	20.1		8.0		28.7		112.5		8.6		3.9		10		93				<0.2		0.8	
					Middle	4.1	0.4	133	20.0	20.0	8.0	8.0	28.4	28.4	108.6	108.6	8.3		4.9		9		94				<0.2		1.0	
						4.1	0.4	142	20.0		8.0		28.4		108.5		8.3		5.0		8		94				<0.2		0.9	
					Bottom	7.1	0.3	141	20.0	20.0	7.9	7.9	27.8	27.8	103.8	103.7	8.0	8.0	5.7		10		94				<0.2		0.9	
						7.1	0.3	141	20.0		7.9		27.7		103.6		8.0		5.7		9		95				<0.2		0.8	
IM8	Sunny	Moderate	15:33	8.4	Surface	1.0	0.4	125	20.2	20.2	8.3	8.3	29.1	29.1	118.0	118.0	9.0	9.0	6.2	6.3	8	8	85	90	821690	807847	<0.2	<0.2	0.9	0.9
						1.0	0.4	128	20.2		8.3		29.1		118.0		9.0		6.2		8		85				<0.2		0.9	
					Middle	4.2	0.3	122	20.2	20.2	8.3	8.3	29.1	29.1	116.1	116.1	8.9		6.3		8		92				<0.2		0.9	
						4.2	0.3	132	20.2		8.3		29.1		116.1		8.9		6.3		9		92				<0.2		0.8	
					Bottom	7.4	0.3	117	20.2	20.2	8.3	8.3	29.1	29.1	109.1	109.1	8.3	8.3	6.5		8		93				<0.2		1.0	
						7.4	0.3	123	20.2		8.3		29.1		109.1		8.3		6.5		9		93				<0.2		0.8	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 03 January 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	15:42	7.8	Surface	1.0	0.3	105	20.2	20.2	8.3	8.3	29.1	29.1	117.3	117.3	9.0	9.0	10.4	12.5	6	8	85	90	822096	808815	<0.2	<0.2	1.1	1.1
						1.0	0.3	109	20.2		8.3		29.1		117.3		9.0		10.4		7		85				<0.2		1.2	
					Middle	3.9	0.4	96	20.2	20.2	8.3	8.3	29.1	29.1	116.8	116.8	8.9		12.7		8		92				<0.2		1.2	
						3.9	0.5	99	20.2		8.3		29.1		116.8		8.9		12.7		7		92				<0.2		1.2	
					Bottom	6.8	0.4	93	20.2	20.2	8.2	8.2	29.1	29.1	116.2	116.2	8.9	8.9	14.4		10		93				<0.2		1.1	
						6.8	0.4	95	20.2		8.2		29.1		116.2		8.9		14.4		11		93				<0.2		1.0	
IM10	Sunny	Moderate	15:50	7.4	Surface	1.0	0.5	114	20.3	20.3	8.3	8.3	28.6	28.6	114.4	114.4	8.7	8.6	4.9	5.7	7	8	86	91	822246	809835	<0.2	<0.2	1.2	1.2
						1.0	0.5	114	20.3		8.3		28.6		114.4		8.7		4.9		8		86				<0.2		1.2	
					Middle	3.7	0.4	123	20.1	20.1	8.2	8.2	28.9	28.9	111.1	111.1	8.5		6.1		6		92				<0.2		1.2	
						3.7	0.4	134	20.1		8.2		28.9		111.1		8.5		6.1		7		92				<0.2		1.4	
					Bottom	6.4	0.3	137	20.1	20.1	8.2	8.2	29.3	29.3	108.9	108.9	8.3	8.3	6.0		10		94				<0.2		1.1	
						6.4	0.3	144	20.1		8.2		29.3		108.9		8.3		6.0		9		93				<0.2		1.1	
IM11	Sunny	Moderate	15:58	8.2	Surface	1.0	0.4	106	20.3	20.3	8.2	8.2	28.6	28.6	114.0	114.0	8.7	8.6	5.3	5.4	6	7	87	91	821484	810536	<0.2	<0.2	1.3	1.3
						1.0	0.4	116	20.3		8.2		28.6		114.0		8.7		5.3		5		86				<0.2		1.4	
					Middle	4.1	0.4	112	20.1	20.1	8.2	8.2	29.0	29.0	111.7	111.7	8.5		5.9		7		92				<0.2		1.4	
						4.1	0.4	119	20.1		8.2		29.0		111.7		8.5		5.9		6		92				<0.2		1.4	
					Bottom	7.2	0.3	121	20.1	20.1	8.2	8.2	29.3	29.3	108.0	108.0	8.2	8.2	4.9		10		94				<0.2		1.1	
						7.2	0.4	131	20.1		8.2		29.3		108.0		8.2		4.9		9		93				<0.2		1.0	
IM12	Sunny	Moderate	16:07	8.9	Surface	1.0	0.4	109	20.3	20.3	8.3	8.3	28.4	28.4	115.4	115.3	8.8	8.7	4.6	4.8	8	8	88	91	821178	811536	<0.2	<0.2	1.6	1.4
						1.0	0.4	114	20.3		8.3		28.4		115.2		8.8		4.6		7		87				<0.2		1.6	
					Middle	4.5	0.4	113	20.1	20.1	8.3	8.3	29.5	29.5	112.9	112.9	8.6		4.2		7		92				<0.2		1.1	
						4.5	0.4	116	20.1		8.3		29.5		112.9		8.6		4.2		8		92				<0.2		1.0	
					Bottom	7.9	0.3	121	20.1	20.1	8.2	8.2	29.5	29.5	109.4	109.4	8.3	8.3	5.6		7		94				<0.2		1.4	
						7.9	0.3	132	20.1		8.2		29.5		109.4		8.3		5.6		9		93				<0.2		1.6	
SR2	Sunny	Moderate	16:30	4.5	Surface	1.0	0.3	107	20.2	20.2	8.3	8.3	29.5	29.5	110.8	110.8	8.4	8.4	4.9	5.0	5	7	89	92	821463	814181	<0.2	<0.2	1.0	1.0
						1.0	0.3	108	20.2		8.3		29.5		110.7		8.4		4.9		5		89				<0.2		0.9	
					Middle	2.3	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.3	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.3	104	20.1	20.1	8.2	8.2	29.7	29.7	105.5	105.5	8.0	8.0	4.9		9		94				<0.2		1.0	
						3.5	0.3	107	20.1		8.2		29.7		105.5		8.0		5.3		10		94				<0.2		1.2	
SR3	Sunny	Moderate	15:28	8.8	Surface	1.0	0.4	144	20.2	20.2	8.2	8.2	27.4	27.4	113.6	113.6	8.8	8.9	4.2	6.3	10	10	-	-	822164	807557	-	-	-	-
						1.0	0.4	154	20.2		8.2		27.4		113.6		8.8		4.2		9		-				-		-	
					Middle	4.4	0.3	165	20.3	20.3	8.2	8.2	28.6	28.6	117.0	117.0	8.9		6.5		10		-				-		-	
						4.4	0.3	178	20.3		8.2		28.6		117.0		8.9		6.5		10		-				-		-	
					Bottom	7.8	0.3	177	20.2	20.2	8.2	8.2	29.0	29.0	116.1	116.1	8.9	8.9	8.3		9		-				-		-	
						7.8	0.4	185	20.2		8.2		29.0		116.1		8.9		8.3		9		-				-		-	
SR4A	Sunny	Moderate	16:22	8.8	Surface	1.0	0.4	119	20.1	20.1	8.1	8.1	29.3	29.3	113.2	113.2	8.6	8.5	4.5	4.9	10	10	-	-	817190	807793	-	-	-	-
						1.0	0.4	126	20.1		8.1		29.3		113.1		8.6		4.5		9		-				-		-	
					Middle	4.4	0.4	94	20.0	20.1	8.1	8.1	29.1	29.1	110.4	110.4	8.4		4.9		10		-				-		-	
						4.4	0.4	98	20.1		8.1		29.1		110.3		8.4		5.0		10		-				-		-	
					Bottom	7.8	0.3	109	20.0	20.0	8.0	8.0	28.4	28.4	103.0	102.9	7.9	7.9	5.2		11		-				-		-	
						7.8	0.3	114	20.0		8.0		28.4		102.7		7.9		5.2		12		-				-		-	
SR5A	Sunny	Calm	16:39	5.4	Surface	1.0	0.1	183	20.9	20.9	8.1	8.1	29.1	29.1	106.5	106.4	8.0	8.0	5.2	5.4	11	12	-	-	816586	810697	-	-	-	-
						1.0	0.1	194	20.9		8.0		29.1		106.2		8.0		5.2		10		-				-		-	
					Middle	2.7	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.7	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	0.1	177	20.7	20.7	7.9	7.9	28.4	28.4	99.4	99.3	7.5	7.5	5.5		12		-				-		-	
						4.4	0.1	188	20.7		7.9		28.4		99.1		7.5		5.5		13		-				-		-	
SR6	Sunny	Moderate	17:02	4.1	Surface	1.0	0.1	121	20.7	20.7	8.0	8.0	29.1	29.1	107.8	107.7	8.1	8.1	5.0	5.4	10	9	-	-	817900	814679	-	-	-	-
						1.0	0.1	121	20.7		8.0		29.1		107.6		8.1		5.0		9		-				-		-	
					Middle	2.1	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.1	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.2	134	20.6	20.6	7.9	7.9	28.3	28.3	99.0	98.8	7.5	7.5	5.7		8		-				-		-	
						3.1	0.2	134	20.6		7.9		28.3		98.6		7.5		5.8		9		-				-		-	
SR7	Sunny	Moderate	17:22	16.2	Surface	1.0	0.3	102	20.2	20.2	8.2	8.2	30.0	30.0	104.2	104.2	7.9	7.8	2.9	3.4	3	6	-	-	823646	823742	-	-	-	-
						1.0	0.3	110	20.2		8.2		30.0		104.2		7.9		2.9		4		-				-		-	
					Middle	8.1	0.3	97	20.2	20.2	8.2	8.2	30.0	30.0	101.2	101.2	7.7		3.4		6		-				-		-	
						8.1	0.3	104	20.2		8.2		30.0		101.2		7.7		3.4		6		-				-		-	
					Bottom	15.2	0.3	118	20.2	20.2	8.2	8.2	30.1	30.1	100.0	100.0	7.6	7.6	3.7		7		-				-		-	
						15.2	0.3	119	20.2		8.2		30.1		100.0		7.6		3.8		7		-				-		-	
SR8	Sunny	Moderate	16:14	5.2	Surface	1.0	0.3	177	20.1	20.1	8.2	8.2	29.0	29.0	112.0	112.0	8.6	8.6	5.4	5.6	9	9	-	-	820420	811608	-	-	-	-
						1.0	0.3	183	20.1		8.2		29.0		112.0		8.6		5.4		8		-				-		-	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.2	172	20.0	20.0	8.2	8.2	29.4	29.4	110.4	110.4	8.4	8.4	5.8		10		-				-		-	
						4.2	0.2	189	20.0		8.2		29.4		110.4		8.4		5.8		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**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 05 January 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	11:56	8.7	Surface	1.0	0.7	49	20.1	20.1	8.1	8.1	28.2	28.2	112.5	112.5	8.6	8.5	7.1	11.0	10	25	90	91	815638	804238	<0.2	<0.2	0.8	0.8
						1.0	0.8	51	20.1		8.1		28.2		112.4		8.6		7.3		9		90				<0.2		0.8	
					Middle	4.4	0.6	54	20.0	20.0	8.0	8.0	28.4	28.4	109.5	109.5	8.4		11.9		22		91				<0.2		0.8	
						4.4	0.6	55	20.0		8.0		28.4		109.5		8.4		11.8		22		91				<0.2		0.8	
					Bottom	7.7	0.6	60	20.0	20.0	7.9	7.9	28.4	28.4	104.2	104.2	8.0	8.0	14.0		40		92				<0.2		0.6	
						7.7	0.6	63	20.0		7.9		28.4		104.1		8.0		13.9		44		92				<0.2		0.7	
C2	Cloudy	Moderate	13:15	12.6	Surface	1.0	0.4	45	20.4	20.4	8.0	8.0	25.7	25.7	106.7	106.7	8.3	8.2	6.6	9.0	5	6	86	90	825675	806934	<0.2	<0.2	3.0	2.8
						1.0	0.4	48	20.4		8.0		25.7		106.7		8.3		6.6		5		85				<0.2		3.0	
					Middle	6.3	0.4	127	20.4	20.4	8.0	8.0	26.4	26.4	103.9	103.9	8.0		10.5		6		92				<0.2		2.9	
						6.3	0.4	127	20.4		8.0		26.4		103.9		8.0		10.5		6		92				<0.2		2.5	
					Bottom	11.6	0.4	274	20.3	20.3	8.0	8.0	27.7	27.7	103.2	103.2	7.9	7.9	9.8		5		94				<0.2		2.8	
						11.6	0.4	283	20.3		8.0		27.7		103.2		7.9		9.8		6		93				<0.2		2.8	
C3	Cloudy	Moderate	11:20	11.9	Surface	1.0	0.5	266	20.4	20.4	8.1	8.1	28.3	28.3	109.4	109.4	8.4	8.2	4.3	8.6	4	7	91	93	822118	817784	<0.2	<0.2	1.1	1.0
						1.0	0.6	275	20.4		8.1		28.3		109.3		8.4		4.3		3		91				<0.2		1.1	
					Middle	6.0	0.6	265	20.2	20.2	8.0	8.0	28.8	28.8	103.9	103.9	7.9		9.0		9		93				<0.2		0.8	
						6.0	0.6	275	20.2		8.0		28.8		103.9		7.9		9.0		8		93				<0.2		0.9	
					Bottom	10.9	0.4	265	20.2	20.2	8.0	8.0	28.9	28.9	102.8	102.8	7.9	7.9	12.5		10		94				<0.2		0.9	
						10.9	0.4	272	20.2		8.0		28.9		102.8		7.9		12.5		10		94				<0.2		0.9	
IM1	Cloudy	Moderate	12:15	7.5	Surface	1.0	0.5	119	20.5	20.5	8.1	8.1	28.0	28.0	113.9	113.9	8.7	8.6	4.0	7.5	6	13	92	93	818362	806468	<0.2	<0.2	0.9	1.0
						1.0	0.6	125	20.5		8.1		28.0		113.8		8.7		4.1		5		92				<0.2		1.1	
					Middle	3.8	0.5	145	20.1	20.1	8.0	8.0	28.1	28.2	110.2	110.2	8.5		7.6		12		93				<0.2		1.1	
						3.8	0.5	156	20.1		8.0		28.2		110.1		8.5		7.7		14		93				<0.2		0.9	
					Bottom	6.5	0.5	158	20.1	20.1	8.0	8.0	28.1	28.1	105.8	105.8	8.1	8.1	10.7		20		94				<0.2		0.9	
						6.5	0.5	158	20.1		8.0		28.1		105.7		8.1		10.6		22		94				<0.2		0.9	
IM2	Cloudy	Moderate	12:27	9.1	Surface	1.0	0.5	59	20.3	20.3	8.1	8.1	27.9	27.9	110.6	110.6	8.5	8.4	4.7	5.8	10	14	89	90	818835	806197	<0.2	<0.2	1.6	1.2
						1.0	0.5	59	20.3		8.1		27.9		110.5		8.5		4.8		11		89				<0.2		1.4	
					Middle	4.6	0.4	83	20.2	20.2	8.0	8.0	28.1	28.1	106.7	106.7	8.2		6.8		16		90				<0.2		1.0	
						4.6	0.5	88	20.2		8.0		28.1		106.6		8.2		6.8		14		90				<0.2		1.0	
					Bottom	8.1	0.5	96	20.2	20.2	7.9	7.9	28.1	28.1	101.1	101.0	7.8	7.8	5.9		17		91				<0.2		1.1	
						8.1	0.5	105	20.2		7.9		28.1		100.9		7.7		5.9		18		92				<0.2		1.1	
IM3	Cloudy	Moderate	12:34	8.7	Surface	1.0	0.6	95	20.3	20.3	8.1	8.1	27.3	27.3	112.6	112.6	8.7	8.5	2.9	4.0	9	12	91	93	819421	806007	<0.2	<0.2	1.3	1.1
						1.0	0.6	99	20.3		8.1		27.3		112.5		8.6		2.7		8		92				<0.2		1.4	
					Middle	4.4	0.6	109	20.3	20.3	8.0	8.0	27.3	27.3	108.3	108.2	8.3		3.7		12		92				<0.2		1.1	
						4.4	0.6	114	20.3		8.0		27.3		108.1		8.3		3.7		13		93				<0.2		1.0	
					Bottom	7.7	0.5	71	20.2	20.2	8.0	8.0	27.7	27.7	102.7	102.6	7.9	7.9	5.5		16		93				<0.2		1.0	
						7.7	0.6	75	20.2		8.0		27.7		102.5		7.9		5.5		15		94				<0.2		1.0	
IM4	Cloudy	Moderate	12:42	8.1	Surface	1.0	0.5	110	20.3	20.3	8.1	8.1	27.5	27.5	112.0	112.0	8.6	8.4	4.8	7.0	14	17	93	94	819580	805056	<0.2	<0.2	1.1	1.0
						1.0	0.5	120	20.3		8.1		27.5		111.9		8.6		4.9		15		93				<0.2		1.1	
					Middle	4.1	0.5	121	20.1	20.1	8.0	8.0	27.6	27.6	107.0	106.9	8.3		8.0		16		94				<0.2		1.0	
						4.1	0.6	125	20.1		8.0		27.6		106.8		8.2		8.0		15		94				<0.2		0.9	
					Bottom	7.1	0.4	135	20.1	20.1	8.0	8.0	27.4	27.4	103.2	103.1	8.0	8.0	8.2		22		94				<0.2		1.0	
						7.1	0.4	146	20.1		8.0		27.4		103.0		8.0		8.2		20		95				<0.2		1.1	
IM5	Cloudy	Moderate	12:49	6.9	Surface	1.0	0.6	143	20.4	20.4	8.1	8.1	27.1	27.1	112.4	112.3	8.6	8.5	4.6	7.4	7	12	90	91	820581	804915	<0.2	<0.2	1.6	1.3
						1.0	0.7	154	20.4		8.1		27.1		112.2		8.6		4.7		6		89				<0.2		1.7	
					Middle	3.5	0.6	155	20.2	20.2	8.1	8.1	27.8	27.8	109.2	109.1	8.4		8.1		11		91				<0.2		1.2	
						3.5	0.6	163	20.2		8.1		27.8		109.0		8.4		8.2		12		91				<0.2		1.2	
					Bottom	5.9	0.5	157	20.1	20.1	8.0	8.0	27.8	27.8	105.6	105.5	8.1	8.1	9.4		18		92				<0.2		1.0	
						5.9	0.6	172	20.1		8.0		27.8		105.4		8.1		9.5		18		92				<0.2		1.2	
IM6	Cloudy	Moderate	12:56	6.8	Surface	1.0	0.6	111	20.3	20.3	8.1	8.1	27.3	27.3	110.2	110.2	8.5	8.4	6.6	10.1	9	17	90	92	821050	805825	<0.2	0	1.5	1.4
						1.0	0.6	114	20.3		8.1		27.3		110.2		8.5		6.7		11		91				<0.2		1.5	
					Middle	3.4	0.6	131	20.2	20.2	8.1	8.1	27.6	27.6	108.4	108.4	8.3		9.9		18		91				<0.2		1.4	
						3.4	0.6	139	20.2		8.1		27.6		108.3		8.3		10.1		19		92				<0.2		1.4	
					Bottom	5.8	0.6	128	20.1	20.1	8.0	8.0	27.7	27.7	103.3	103.3	8.0	8.0	13.4		21		92				<0.2		1.3	
						5.8	0.6	131	20.1		8.0		27.7		103.2		7.9		13.6		22		93				0.2		1.3	
IM7	Cloudy	Moderate	13:04	6.4	Surface	1.0	0.6	77	20.6	20.6	8.1	8.1	26.0	26.0	114.1	114.1	8.8	8.7	1.1	1.9	6	7	91	92	821361	806827	<0.2	<0.2	2.4	1.8
						1.0	0.6	77	20.6		8.1		26.0		114.0		8.8		1.1		4		92				<0.2		2.3	
					Middle	3.2	0.6	82	20.4	20.4	8.1	8.1	26.4	26.4	110.3	110.3	8.5		1.5		7		92				<0.2		1.7	
						3.2	0.6	87	20.4		8.1		26.4		110.2		8.5		1.6		7		92				<0.2		1.8	
					Bottom	5.4	0.6	74	20.2	20.2	8.0	8.0	27.5	27.5	103.0	103.0	7.9	7.9	3.1		8		92				<0.2		1.3	
						5.4	0.6	74	20.2		8.0		27.5		102.9		7.9		3.0		8		93				<0.2		1.2	
IM8	Cloudy	Moderate	12:38	7.7	Surface	1.0	0.3	178	20.5	20.5	8.0	8.0	25.3	25.3	112.0	112.0	8.7	8.6	3.2	4.9	6	6	86	91	821685	807838	<0.2	<0.2	2.9	2.7
						1.0	0.3	194	20.5		8.0		25.3		112.0		8.7		3.2		5		86				<0.2		2.8	
					Middle	3.9	0.4	122	20.4	20.4	8.0	8.0	26.0	26.0	109.5	109.5	8.5		4.7		6		92				<0.2		3.0	
						3.9	0.5	129	20.4		8.0		25.9		109.5		8.5		4.7		6		92				<0.2		2.8	
					Bottom	6.7	0.4	119	20.3	20.3	8.0	8.0	26.8	26.8	105.6	105.6	8.2	8.2	6.7		6		94				<0.2		2.4	
						6.7	0.4	127	20.3		8.0		26.8		105.6		8.2		6.7		7		94				<0.2		2.2	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 05 January 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	12:28	7.2	Surface	1.0	0.4	188	20.5	20.5	8.0	8.0	26.6	26.6	115.1	115.1	8.9	8.7	4.0	6.2	7	7	87	91	822089	808810	<0.2	<0.2	2.0	2.2
						1.0	0.4	202	20.5		8.0		26.6		115.1		8.9		4.0		7		87				<0.2		2.0	
					Middle	3.6	0.4	192	20.4	20.4	8.0	8.0	26.7	26.7	109.2	109.2	8.4		6.2		8		92				<0.2		2.1	
						3.6	0.4	202	20.4		8.0		26.7		109.2		8.4		6.2		8		92				<0.2		2.2	
					Bottom	6.2	0.3	210	20.4	20.4	8.0	8.0	26.8	26.8	104.4	104.4	8.0	8.0	8.4		7		94				<0.2		2.3	
						6.2	0.4	213	20.4		8.0		26.8		104.4		8.0		8.3		7		94				<0.2		2.4	
IM10	Cloudy	Moderate	12:20	7.5	Surface	1.0	0.5	267	20.8	20.8	8.1	8.1	27.2	27.2	116.3	116.3	8.9	8.8	4.6	8.0	5	9	88	91	822225	809821	<0.2	<0.2	2.0	1.6
						1.0	0.5	273	20.8		8.1		27.2		116.3		8.9		4.6		5		87				<0.2		2.0	
					Middle	3.8	0.4	272	20.5	20.5	8.1	8.1	27.6	27.6	112.0	112.0	8.6		7.0		6		92				<0.2		1.4	
						3.8	0.4	295	20.5		8.1		27.6		112.0		8.6		7.0		8		92				<0.2		1.4	
					Bottom	6.5	0.4	256	20.4	20.4	8.0	8.0	28.0	28.0	106.6	106.6	8.2	8.2	12.5		14		94				<0.2		1.5	
						6.5	0.4	279	20.4		8.0		28.0		106.5		8.2		12.2		14		94				<0.2		1.5	
IM11	Cloudy	Moderate	12:12	7.9	Surface	1.0	0.4	271	20.7	20.7	8.1	8.1	27.6	27.6	113.6	113.6	8.7	8.6	6.1	7.7	9	12	88	92	821500	810539	<0.2	<0.2	1.3	1.3
						1.0	0.5	285	20.7		8.1		27.6		113.6		8.7		6.1		11		88				<0.2		1.3	
					Middle	4.0	0.5	282	20.4	20.4	8.1	8.1	28.2	28.2	110.3	110.3	8.4		8.4		11		92				<0.2		1.5	
						4.0	0.5	302	20.4		8.1		28.2		110.3		8.4		8.4		10		93				<0.2		1.5	
					Bottom	6.9	0.4	272	20.4	20.4	8.1	8.1	28.3	28.3	106.3	106.3	8.1	8.1	8.7		17		94				<0.2		1.0	
						6.9	0.4	288	20.4		8.1		28.3		106.3		8.1		8.7		16		94				<0.2		1.0	
IM12	Cloudy	Moderate	12:05	8.3	Surface	1.0	0.6	281	20.3	20.3	8.1	8.1	28.4	28.4	110.9	110.9	8.5	8.4	9.0	11.8	9	12	89	92	821178	811505	<0.2	<0.2	1.1	1.1
						1.0	0.7	305	20.3		8.1		28.4		110.9		8.5		9.0		9		89				<0.2		1.1	
					Middle	4.2	0.6	274	20.3	20.3	8.1	8.1	28.4	28.4	108.9	108.9	8.3		10.1		13		92				<0.2		1.0	
						4.2	0.6	276	20.3		8.1		28.4		108.9		8.3		10.1		15		93				<0.2		1.1	
					Bottom	7.3	0.5	259	20.3	20.3	8.1	8.1	28.6	28.6	106.7	106.7	8.2	8.2	16.3		14		94				<0.2		1.0	
						7.3	0.5	268	20.3		8.1		28.6		106.7		8.2		16.3		14		94				<0.2		1.1	
SR2	Cloudy	Moderate	11:43	4.4	Surface	1.0	0.2	287	20.4	20.4	8.0	8.0	28.2	28.2	109.5	109.5	8.4	8.4	5.8	7.5	8	11	90	92	821451	814174	<0.2	0	1.2	1.3
						1.0	0.2	288	20.4		8.0		28.2		109.4		8.4		5.8		7		89				<0.2		1.3	
					Middle	2.2	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.2	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.2	275	20.3	20.3	8.0	8.0	28.2	28.2	107.8	107.8	8.3	8.3	9.2		14		94				<0.2		1.4	
						3.4	0.2	276	20.3		8.0		28.2		107.8		8.3		9.2		13		94				0.2		1.4	
SR3	Cloudy	Moderate	12:44	8.6	Surface	1.0	0.4	137	20.4	20.4	8.0	8.0	25.8	25.8	110.0	110.0	8.5	8.5	4.2	6.2	7	9	-	-	822130	807578	-	-	-	-
						1.0	0.4	142	20.4		8.0		25.8		110.0		8.5		4.2		7		-				-		-	
					Middle	4.3	0.4	164	20.4	20.4	8.0	8.0	26.0	26.0	108.2	108.2	8.4		5.9		10		-				-		-	
						4.3	0.4	171	20.4		8.0		26.0		108.2		8.4		5.9		8		-				-		-	
					Bottom	7.6	0.4	156	20.3	20.3	8.0	8.0	26.6	26.6	105.9	105.9	8.2	8.2	8.3		11		-				-		-	
						7.6	0.4	159	20.3		8.0		26.6		105.9		8.2		8.4		11		-				-		-	
SR4A	Cloudy	Moderate	11:33	8.9	Surface	1.0	0.3	146	20.3	20.3	8.0	8.0	28.4	28.4	107.8	107.8	8.2	8.2	5.0	5.1	8	11	-	-	817207	807792	-	-	-	-
						1.0	0.3	146	20.3		8.0		28.4		107.7		8.2		5.0		8		-				-		-	
					Middle	4.5	0.2	187	20.3	20.3	8.0	8.0	28.4	28.4	106.1	106.1	8.1		5.1		13		-				-		-	
						4.5	0.2	203	20.3		8.0		28.4		106.0		8.1		5.1		12		-				-		-	
					Bottom	7.9	0.3	145	20.3	20.3	7.9	7.9	28.2	28.2	103.3	103.2	7.9	7.9	5.1		11		-				-		-	
						7.9	0.3	155	20.3		7.9		28.2		103.1		7.9		5.2		11		-				-		-	
SR5A	Cloudy	Moderate	11:15	3.2	Surface	1.0	0.2	265	20.4	20.4	8.0	8.0	28.4	28.4	110.4	110.4	8.4	8.4	4.5	10.7	12	15	-	-	816600	810708	-	-	-	-
						1.0	0.2	286	20.4		8.0		28.4		110.4		8.4		4.6		12		-				-		-	
					Middle	1.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						1.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.2	0.2	259	20.4	20.4	8.0	8.0	28.2	28.2	109.3	109.3	8.4	8.4	17.1		17		-				-		-	
						2.2	0.2	268	20.4		8.0		28.1		109.3		8.4		16.5		17		-				-		-	
SR6	Cloudy	Moderate	10:51	4.2	Surface	1.0	0.2	241	20.4	20.4	7.9	7.9	27.9	27.9	107.9	107.8	8.3	8.3	5.1	5.3	15	15	-	-	817892	814659	-	-	-	-
						1.0	0.2	255	20.3		7.9		27.9		107.7		8.3		5.1		16		-				-		-	
					Middle	2.1	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.1	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.1	244	20.4	20.4	7.8	7.8	27.6	27.6	103.4	103.4	7.9	7.9	5.4		15		-				-		-	
						3.2	0.1	261	20.4		7.8		27.6		103.4		7.9		5.4		14		-				-		-	
SR7	Cloudy	Moderate	10:52	16.1	Surface	1.0	0.2	269	20.4	20.4	8.0	8.0	28.5	28.5	108.4	108.4	8.3	8.2	3.7	4.6	10	10	-	-	823644	823755	-	-	-	-
						1.0	0.2	286	20.4		8.0		28.5		108.4		8.3		3.7		8		-				-		-	
					Middle	8.1	0.2	141	20.3	20.3	8.0	8.0	28.8	28.8	104.3	104.3	8.0		4.5		10		-				-		-	
						8.1	0.2	141	20.3		8.0		28.8		104.3		8.0		4.5		11		-				-		-	
					Bottom	15.1	0.2	103	20.3	20.3	8.0	8.0	29.0	29.0	102.3	102.3	7.8	7.8	5.6		12		-				-		-	
						15.1	0.2	111	20.3		8.0		29.0		102.3		7.8		5.6		11		-				-		-	
SR8	Cloudy	Moderate	11:59	5.0	Surface	1.0	0.1	236	20.5	20.5	8.0	8.0	27.4	27.4	110.9	110.9	8.5	8.5	7.5	9.5	12	11	-	-	820406	811573	-	-	-	-
						1.0	0.1	249	20.5		8.0		27.4		110.8		8.5		7.6		11		-				-		-	
					Middle	2.5	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.5	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.1	222	20.3	20.3	8.0	8.0	28.1	28.1	108.7	108.7	8.3	8.3	11.5		10		-				-		-	
						4.0	0.1	223	20.3		8.0		28.1		108.7		8.3		11.5		11		-				-		-	

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

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

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C) Value	Water Temperature (°C) Average	pH Value	pH Average	Salinity (ppt) Value	Salinity (ppt) Average	DO Saturation (%) Value	DO Saturation (%) Average	Dissolved Oxygen Value	Dissolved Oxygen DA	Turbidity(NTU) Value	Turbidity(NTU) DA	Suspended Solids (mg/L) Value	Suspended Solids (mg/L) DA	Total Alkalinity (ppm) Value	Total Alkalinity (ppm) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L) Value	Chromium (µg/L) DA	Nickel (µg/L) Value	Nickel (µg/L) DA
C1	Cloudy	Moderate	18:17	8.8	Surface	1.0	0.5	127	20.1	20.1	8.1	8.1	27.9	27.9	107.7	107.6	8.3	8.1	2.6	3.1	5	6	92	93	815626	804264	<0.2	<0.2	1.3	1.0
						1.0	0.5	127	20.1		8.1		27.9		107.5		8.3		2.6		5		92				<0.2		1.4	
					Middle	4.4	0.3	139	20.0	20.0	8.1	8.1	28.3	28.4	103.2	103.2	7.9		3.3		7		92				<0.2		1.0	
						4.4	0.4	141	20.0		8.1		28.4		103.2		7.9		3.3		6		93				<0.2		1.0	
					Bottom	7.8	0.4	202	20.0	20.0	8.0	8.0	28.8	28.8	100.6	100.6	7.7	7.7	3.3		8		93				<0.2		0.5	
						7.8	0.4	212	20.0		8.0		28.8		100.5		7.7		3.3		7		94				<0.2		0.6	
C2	Cloudy	Moderate	17:06	12.4	Surface	1.0	0.3	100	20.5	20.5	8.0	8.0	26.1	26.1	110.8	110.8	8.6	8.4	4.9	5.2	5	6	85	90	825676	806964	<0.2	<0.2	1.6	1.1
						1.0	0.3	108	20.5		8.0		26.1		110.8		8.6		4.9		5		84				<0.2		1.7	
					Middle	6.2	0.2	168	20.3	20.3	8.0	8.0	28.0	28.0	106.3	106.3	8.2		5.4		6		92				<0.2		1.0	
						6.2	0.2	176	20.3		8.0		28.0		106.3		8.2		5.4		6		92				<0.2		0.9	
					Bottom	11.4	0.2	179	20.3	20.3	8.0	8.0	28.5	28.5	105.2	105.2	8.0	8.0	5.4		6		93				<0.2		0.8	
						11.4	0.2	183	20.3		8.0		28.5		105.2		8.0		5.4		8		93				<0.2		0.8	
C3	Cloudy	Moderate	18:51	12.7	Surface	1.0	0.4	80	20.3	20.3	8.0	8.0	28.8	28.8	105.1	105.1	8.0	8.0	4.1	3.8	3	6	89	92	822105	817788	<0.2	<0.2	0.9	0.7
						1.0	0.4	80	20.3		8.0		28.8		105.1		8.0		4.1		5		89				<0.2		0.9	
					Middle	6.4	0.3	85	20.3	20.3	8.0	8.0	28.9	28.9	103.3	103.3	7.9		3.6		6		92				<0.2		0.6	
						6.4	0.4	85	20.3		8.0		28.9		103.3		7.9		3.6		6		93				<0.2		0.6	
					Bottom	11.7	0.3	91	20.3	20.3	8.0	8.0	29.1	29.1	101.9	101.9	7.8	7.8	3.6		6		95				<0.2		0.6	
						11.7	0.4	98	20.3		8.0		29.1		101.9		7.8		3.6		7		94				<0.2		0.6	
IM1	Cloudy	Moderate	17:57	7.6	Surface	1.0	0.3	147	20.2	20.2	8.1	8.1	28.3	28.3	112.9	112.9	8.7	8.6	4.5	4.2	6	8	92	94	818349	806458	<0.2	<0.2	1.0	1.4
						1.0	0.4	153	20.2		8.1		28.3		112.9		8.7		4.5		8		93				<0.2		1.0	
					Middle	3.8	0.3	174	20.1	20.1	8.1	8.1	28.3	28.3	110.2	110.2	8.5		4.1		8		93				<0.2		1.3	
						3.8	0.3	180	20.1		8.1		28.3		110.1		8.4		4.1		9		94				<0.2		1.3	
					Bottom	6.6	0.3	192	20.2	20.2	8.1	8.1	28.3	28.3	105.2	105.1	8.1	8.1	3.8		9		94				<0.2		1.7	
						6.6	0.3	204	20.2		8.1		28.3		105.0		8.0		3.9		9		95				<0.2		1.8	
IM2	Cloudy	Moderate	17:51	8.6	Surface	1.0	0.5	141	20.3	20.3	8.2	8.2	28.3	28.3	119.1	119.1	9.1	8.9	3.3	4.0	6	7	90	91	818867	806174	<0.2	<0.2	1.6	1.4
						1.0	0.5	151	20.3		8.2		28.3		119.1		9.1		3.3		6		90				<0.2		1.6	
					Middle	4.3	0.4	159	20.2	20.2	8.2	8.2	28.3	28.3	114.0	113.9	8.7		3.9		6		91				<0.2		1.4	
						4.3	0.4	165	20.2		8.2		28.3		113.8		8.7		3.9		6		91				<0.2		1.5	
					Bottom	7.6	0.5	167	20.1	20.1	8.1	8.1	28.4	28.4	105.5	105.5	8.1	8.1	4.7		8		92				<0.2		1.2	
						7.6	0.5	180	20.1		8.1		28.4		105.4		8.1		4.7		8		92				<0.2		1.2	
IM3	Cloudy	Moderate	17:44	9.0	Surface	1.0	0.3	140	20.2	20.2	8.1	8.1	28.2	28.2	115.2	115.2	8.8	8.6	3.4	4.2	5	7	93	94	819419	806002	<0.2	<0.2	0.8	0.7
						1.0	0.3	151	20.2		8.1		28.2		115.1		8.8		3.4		6		94				<0.2		0.8	
					Middle	4.5	0.3	143	20.1	20.1	8.1	8.1	28.2	28.2	107.9	107.8	8.3		4.3		8		94				<0.2		0.6	
						4.5	0.3	146	20.1		8.1		28.2		107.7		8.3		4.4		9		94				<0.2		0.7	
					Bottom	8.0	0.3	143	20.1	20.1	8.0	8.0	28.3	28.3	103.2	103.1	7.9	7.9	4.8		8		95				<0.2		0.7	
						8.0	0.3	156	20.1		8.0		28.2		103.0		7.9		4.8		7		94				<0.2		0.7	
IM4	Cloudy	Moderate	17:38	8.2	Surface	1.0	0.3	156	20.3	20.3	8.2	8.2	28.0	28.0	116.2	116.2	8.9	8.8	3.7	4.6	7	9	92	93	819554	805036	<0.2	<0.2	0.6	0.7
						1.0	0.3	163	20.2		8.2		28.0		116.1		8.9		3.8		7		92				<0.2		0.6	
					Middle	4.1	0.3	160	20.1	20.1	8.1	8.1	28.2	28.3	112.4	112.4	8.6		4.9		10		93				<0.2		0.5	
						4.1	0.3	172	20.1		8.1		28.3		112.4		8.6		4.9		10		93				<0.2		0.5	
					Bottom	7.2	0.3	161	20.1	20.1	8.1	8.1	28.3	28.3	110.6	110.6	8.5	8.5	5.2		10		94				<0.2		1.0	
						7.2	0.4	168	20.1		8.1		28.3		110.6		8.5		5.2		11		94				<0.2		1.0	
IM5	Cloudy	Moderate	17:30	7.1	Surface	1.0	0.4	173	20.2	20.2	8.1	8.1	28.1	28.1	115.3	115.2	8.8	8.6	3.7	4.3	8	9	92	93	820582	804943	<0.2	<0.2	1.1	1.1
						1.0	0.4	181	20.2		8.1		28.1		115.1		8.8		3.7		7		92				<0.2		1.1	
					Middle	3.6	0.3	171	20.1	20.1	8.1	8.1	28.2	28.2	110.1	110.0	8.5		4.3		8		93				<0.2		1.1	
						3.6	0.3	182	20.1		8.1		28.2		109.9		8.4		4.4		9		94				<0.2		1.1	
					Bottom	6.1	0.4	175	20.1	20.1	8.0	8.0	28.3	28.3	105.3	105.2	8.1	8.1	4.7		9		94				<0.2		1.1	
						6.1	0.4	187	20.1		8.0		28.3		105.1		8.1		4.7		10		95				<0.2		1.2	
IM6	Cloudy	Moderate	17:22	6.9	Surface	1.0	0.6	118	20.2	20.2	8.1	8.1	28.0	28.0	116.4	116.4	8.9	8.8	4.7	4.6	10	10	92	94	821056	805835	<0.2	<0.2	1.3	1.3
						1.0	0.6	123	20.2		8.1		28.0		116.4		8.9		4.7		10		93				<0.2		1.3	
					Middle	3.5	0.5	155	20.2	20.2	8.1	8.1	28.0	28.0	112.4	112.3	8.6		4.5		10		93				<0.2		1.2	
						3.5	0.5	165	20.2		8.1		28.0		112.2		8.6		4.4		9		94				<0.2		1.2	
					Bottom	5.9	0.6	136	20.1	20.2	8.0	8.0	28.0	28.0	104.6	104.5	8.0	8.0	4.6		10		94				<0.2		1.2	
						5.9	0.6	137	20.2		8.0		28.0		104.4		8.0		4.6		10		95				<0.2		1.3	
IM7	Cloudy	Moderate	17:05	7.8	Surface	1.0	0.3	105	20.5	20.5	8.0	8.0	27.1	27.1	108.7	108.5	8.3	8.2	2.4	3.2	5	7	89	91	821337	806840	<0.2	<0.2	1.6	1.6
						1.0	0.4	111	20.5		8.0		27.0		108.2		8.3		2.5		5		90				<0.2		1.6	
					Middle	3.9	0.3	114	20.2	20.2	8.0	8.0	27.8	27.8	104.0	104.0	8.0		3.6		6		91				<0.2		1.5	
						3.9	0.4	122	20.2		8.0		27.8		103.9		8.0		3.7		7		91				<0.2		1.5	
					Bottom	6.8	0.3	112	20.2	20.2	7.9	7.9	27.8	27.8	100.9	100.9	7.8	7.8	3.5		9		92				<0.2		1.6	
						6.8	0.3	117	20.2		7.9		27.8		100.8		7.8		3.4		10		92				<0.2		1.5	
IM8	Cloudy	Moderate	17:38	8.4	Surface	1.0	0.3	138	20.4	20.4	8.1	8.1	26.7	26.7	118.2	118.2	9.1	9.1	5.7	7.2	6	7	85	90	821695	807856	<0.2	<0.2	2.1	2.1
						1.0	0.4	148	20.4		8.1		26.7		118.2		9.1		5.7		5		85				<0.2		2.1	
					Middle	4.2	0.3	130	20.4	20.4	8.1	8.1	27.6	27.7	116.7	116.7	9.0		7.4		7		92				0.4		2.2	
						4.2	0.4	131	20.4		8.1		27.7		116.7		9.0		7.4		9		92				<0.2		2.2	
					Bottom	7.4	0.3	131	20.3	20.3	8.1	8.1	28.0	28.0	113.5	113.5	8.7	8.7	8.9		7		93				<0.2		2.0	
						7.4	0.3	138	20.3		8.1		28.0		113.4		8.7		8.2		7		93				<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 05 January 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	17:46	7.5	Surface	1.0	0.4	111	20.5	20.5	8.1	8.1	25.7	25.7	114.2	114.2	8.8	8.7	5.2	7.0	6	13	85	90	822091	808819	<0.2	<0.2	3.0	2.2
						1.0	0.4	116			8.1		25.7		114.2		8.8		5.2		5		86				<0.2		3.0	
					Middle	3.8	0.4	96	20.3	20.3	8.1	8.1	27.7	27.7	111.2	111.2	8.5		6.9		6		92				<0.2		2.4	
						3.8	0.4	98	20.3		8.1		27.7		111.1		8.5		6.9		7		92				<0.2		2.3	
					Bottom	6.5	0.4	103	20.3	20.3	8.1	8.1	27.9	27.9	106.3	106.3	8.2	8.2	8.8		26		93				<0.2		1.1	
						6.5	0.4	107	20.3		8.1		27.9		106.3		8.2		8.8		26		94				<0.2		1.1	
IM10	Cloudy	Moderate	17:54	7.6	Surface	1.0	0.5	91	20.6	20.6	8.1	8.1	26.6	26.6	115.6	115.6	8.9	8.8	5.8	8.9	4	6	86	91	822222	809822	<0.2	<0.2	2.0	1.7
						1.0	0.5	95	20.6		8.1		26.6		115.6		8.9		5.8		5		86				<0.2		1.9	
					Middle	3.8	0.4	112	20.3	20.3	8.1	8.1	27.7	27.7	111.5	111.5	8.6		8.5		7		92				<0.2		1.7	
						3.8	0.4	121	20.3		8.1		27.7		111.4		8.6		8.6		6		92				<0.2		1.7	
					Bottom	6.6	0.3	113	20.4	20.4	8.1	8.1	27.9	27.9	106.6	106.6	8.2	8.2	12.3		8		94				<0.2		1.6	
						6.6	0.3	115	20.4		8.1		27.9		106.6		8.2		12.3		8		93				<0.2		1.5	
IM11	Cloudy	Moderate	18:02	8.6	Surface	1.0	0.5	97	20.5	20.5	8.1	8.1	27.4	27.4	108.4	108.4	8.3	8.3	8.9	8.6	5	9	87	91	821515	810530	<0.2	<0.2	1.5	1.3
						1.0	0.5	106	20.5		8.1		27.4		108.4		8.3		8.9		4		87				<0.2		1.5	
					Middle	4.3	0.4	98	20.4	20.4	8.1	8.1	27.8	27.8	108.7	108.7	8.3		8.9		12		92				<0.2		1.2	
						4.3	0.4	104	20.4		8.1		27.8		108.7		8.3		8.9		10		92				<0.2		1.1	
					Bottom	7.6	0.4	102	20.4	20.4	8.1	8.1	28.1	28.1	107.1	107.1	8.2	8.2	7.9		10		93				<0.2		1.1	
						7.6	0.4	107	20.4		8.1		28.1		107.1		8.2		7.9		11		94				<0.2		1.2	
IM12	Cloudy	Moderate	18:10	9.1	Surface	1.0	0.5	106	20.6	20.6	8.1	8.1	26.8	26.8	117.1	117.1	9.0	8.7	4.7	6.0	5	6	88	91	821159	811524	<0.2	<0.2	1.8	1.7
						1.0	0.6	113	20.6		8.1		26.8		117.0		9.0		4.7		4		88				<0.2		2.0	
					Middle	4.6	0.5	108	20.4	20.4	8.1	8.1	27.9	27.9	109.7	109.7	8.4		6.4		6		92				<0.2		1.8	
						4.6	0.5	114	20.4		8.1		27.9		109.7		8.4		6.4		5		92				<0.2		1.7	
					Bottom	8.1	0.4	121	20.3	20.3	8.0	8.0	28.2	28.2	105.4	105.4	8.1	8.1	7.0		8		94				<0.2		1.4	
						8.1	0.4	123	20.3		8.0		28.2		105.4		8.1		7.0		7		94				<0.2		1.5	
SR2	Cloudy	Moderate	18:32	4.4	Surface	1.0	0.3	88	20.5	20.5	8.1	8.1	27.1	27.1	118.2	118.2	9.1	9.1	3.9	4.0	5	5	88	91	821476	814172	<0.2	<0.2	1.8	1.7
						1.0	0.4	95	20.5		8.1		27.1		118.1		9.1		4.0		5		89				<0.2		1.7	
					Middle	2.2	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.2	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.3	90	20.5	20.5	8.1	8.1	27.7	27.7	116.3	116.3	8.9	8.9	4.1		5		94				<0.2		1.6	
						3.4	0.3	96	20.5		8.1		27.7		116.3		8.9		4.1		5		94				<0.2		1.8	
SR3	Cloudy	Moderate	17:33	9.1	Surface	1.0	0.3	156	20.3	20.3	8.0	8.0	26.8	26.8	114.6	114.7	8.8	8.9	5.8	6.9	6	7	-	-	822139	807586	-	-	-	-
						1.0	0.3	156	20.3		8.0		26.8		114.7		8.9		5.7		5		-				-		-	
					Middle	4.6	0.3	100	20.4	20.4	8.0	8.0	27.1	27.1	117.2	117.3	9.0		6.1		8		-				-		-	
						4.6	0.4	104	20.4		8.0		27.0		117.3		9.0		6.1		8		-				-		-	
					Bottom	8.1	0.3	91	20.4	20.4	8.1	8.1	28.0	28.0	120.4	120.4	9.2	9.2	8.9		7		-				-		-	
						8.1	0.4	92	20.4		8.1		28.0		120.4		9.2		8.9		8		-				-		-	
SR4A	Cloudy	Moderate	18:37	9.7	Surface	1.0	0.4	91	20.3	20.3	8.2	8.2	28.1	28.1	118.2	118.2	9.0	8.9	3.2	4.3	7	9	-	-	817180	807793	-	-	-	-
						1.0	0.4	93	20.3		8.2		28.1		118.2		9.0		3.3		8		-				-		-	
					Middle	4.9	0.4	91	20.3	20.3	8.1	8.1	28.1	28.1	115.5	115.5	8.8		4.4		6		-				-		-	
						4.9	0.4	93	20.3		8.1		28.1		115.4		8.8		4.4		7		-				-		-	
					Bottom	8.7	0.3	90	20.3	20.3	8.1	8.1	28.1	28.1	111.5	111.4	8.5	8.5	5.1		11		-				-		-	
						8.7	0.3	98	20.3		8.1		28.1		111.3		8.5		5.1		13		-				-		-	
SR5A	Cloudy	Calm	18:53	3.8	Surface	1.0	0.2	130	20.6	20.6	8.1	8.1	28.9	28.9	109.0	109.0	8.3	8.3	8.5	9.7	8	9	-	-	816602	810684	-	-	-	-
						1.0	0.2	133	20.6		8.1		28.9		108.9		8.3		8.7		10		-				-		-	
					Middle	1.9	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						1.9	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	0.1	132	20.5	20.5	8.0	8.0	28.9	28.9	102.3	102.2	7.8	7.8	11.3		8		-				-		-	
						2.8	0.1	139	20.5		8.0		28.9		102.1		7.8		10.2		9		-				-		-	
SR6	Cloudy	Calm	19:16	4.1	Surface	1.0	0.2	111	20.5	20.5	8.1	8.1	28.4	28.4	110.6	110.5	8.4	8.4	2.9	2.9	6	7	-	-	817910	814651	-	-	-	-
						1.0	0.2	120	20.5		8.1		28.4		110.4		8.4		2.9		6		-				-		-	
					Middle	2.1	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.1	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.2	111	20.6	20.6	8.0	8.0	28.8	28.8	103.9	103.7	7.9	7.9	2.9		8		-				-		-	
						3.1	0.2	118	20.6		8.0		28.8		103.5		7.8		2.9		7		-				-		-	
SR7	Cloudy	Moderate	19:19	16.5	Surface	1.0	0.5	83	20.4	20.4	8.1	8.1	28.8	28.8	110.1	110.1	8.4	8.2	3.1	3.1	3	4	-	-	823643	823743	-	-	-	-
						1.0	0.5	85	20.4		8.1		28.8		110.1		8.4		3.1		5		-				-		-	
					Middle	8.3	0.4	82	20.4	20.4	8.0	8.0	29.0	29.0	103.9	103.9	7.9		3.0		3		-				-		-	
						8.3	0.4	82	20.4		8.0		29.0		103.9		7.9		3.0		4		-				-		-	
					Bottom	15.5	0.2	81	20.3	20.3	8.0	8.0	29.2	29.2	101.2	101.2	7.7	7.7	3.2		5		-				-		-	
						15.5	0.2	87	20.3		8.0		29.2		101.2		7.7		3.2		4		-				-		-	
SR8	Cloudy	Moderate	18:18	5.1	Surface	1.0	0.3	210	20.4	20.4	8.1	8.1	27.7	27.7	112.8	112.8	8.6	8.6	4.9	4.9	4	5	-	-	820433	811585	-	-	-	-
						1.0	0.3	224	20.4		8.1		27.7		112.8		8.6		4.9		6		-				-		-	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	0.3	199	20.4	20.4	8.0	8.0	27.8	27.8	111.7	111.7	8.6	8.6	4.8		6		-				-		-	
						4.1	0.3	211	20.4		8.0		27.8		111.7		8.6		4.8		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 07 January 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	13:39	8.3	Surface	1.0	0.5	89	20.4	20.4	8.2	8.2	28.3	28.3	111.6	111.4	8.5	8.4	3.2	5.5	8	11	92	94	815623	804244	<0.2	<0.2	1.0	0.8
						1.0	0.5	90	20.4		8.2		28.3		111.2		8.5		3.3		7		93				<0.2		1.1	
					Middle	4.2	0.5	95	20.2	20.2	8.2	8.2	28.8	28.8	106.9	106.9	8.2		4.7		11		93				<0.2		0.8	
						4.2	0.5	100	20.2		8.2		28.8		106.8		8.2		4.7		10		94				<0.2		1.0	
					Bottom	7.3	0.5	94	20.1	20.1	8.1	8.1	29.0	29.0	102.7	102.7	7.8	7.8	8.6		13		94				<0.2		0.5	
						7.3	0.5	96	20.1		8.1		29.0		102.6		7.8		8.7		15		95				<0.2		0.6	
C2	Cloudy	Moderate	12:41	11.9	Surface	1.0	0.2	189	21.2	21.2	8.0	8.0	23.2	23.2	107.5	107.5	8.3	8.2	3.7	3.7	10	10	85	90	825677	806931	<0.2	<0.2	4.1	3.8
						1.0	0.2	196	21.2		8.0		23.2		107.5		8.3		3.7		9		85				<0.2		4.3	
					Middle	6.0	0.2	189	20.6	20.6	8.0	8.0	26.7	26.7	104.2	104.2	8.0		3.8		9		91				<0.2		4.5	
						6.0	0.2	195	20.6		8.0		26.7		104.2		8.0		3.8		10		91				<0.2		4.5	
					Bottom	10.9	0.3	263	20.6	20.6	8.0	8.0	27.2	27.2	103.9	103.9	8.0	8.0	3.7		10		93				<0.2		2.7	
						10.9	0.3	288	20.6		8.0		27.2		103.9		8.0		3.7		9		93				<0.2		2.5	
C3	Sunny	Moderate	14:42	12.2	Surface	1.0	0.5	259	20.7	20.7	8.1	8.1	28.4	28.4	111.8	111.8	8.5	8.2	3.1	6.7	5	8	89	92	822114	817811	<0.2	<0.2	1.1	1.1
						1.0	0.5	268	20.7		8.1		28.4		111.8		8.5		3.1		6		89				<0.2		1.2	
					Middle	6.1	0.4	260	20.5	20.5	8.0	8.0	28.7	28.7	103.9	103.9	7.9		6.9		4		93				<0.2		1.1	
						6.1	0.4	262	20.5		8.0		28.7		103.9		7.9		7.0		4		93				<0.2		1.2	
					Bottom	11.2	0.3	269	20.5	20.5	8.0	8.0	28.8	28.8	102.8	102.8	7.8	7.8	10.2		12		94				<0.2		0.8	
						11.2	0.4	295	20.5		8.0		28.8		102.8		7.8		9.8		14		95				<0.2		0.9	
IM1	Sunny	Moderate	13:16	7.2	Surface	1.0	0.4	166	20.5	20.5	8.2	8.2	27.7	27.7	115.6	115.6	8.8	8.8	2.4	3.7	6	9	90	91	818346	806448	<0.2	<0.2	1.2	1.3
						1.0	0.4	170	20.5		8.2		27.7		115.6		8.8		2.2		4		90				<0.2		1.2	
					Middle	3.6	0.4	200	20.4	20.4	8.2	8.2	28.0	28.0	113.3	113.3	8.7		3.1		10		91				<0.2		1.1	
						3.6	0.4	211	20.4		8.2		28.0		113.3		8.7		3.1		10		92				<0.2		1.0	
					Bottom	6.2	0.4	187	20.3	20.3	8.1	8.1	28.6	28.6	108.0	108.0	8.3	8.3	5.7		13		93				<0.2		1.5	
						6.2	0.4	202	20.3		8.1		28.6		107.9		8.3		5.6		12		92				<0.2		1.6	
IM2	Sunny	Moderate	13:09	8.3	Surface	1.0	0.4	176	20.6	20.6	8.2	8.2	27.9	27.9	109.4	109.3	8.3	8.1	2.1	3.8	8	10	89	90	818865	806179	<0.2	<0.2	1.1	1.1
						1.0	0.5	189	20.6		8.2		27.9		109.2		8.3		2.1		7		89				<0.2		1.2	
					Middle	4.2	0.4	195	20.3	20.3	8.1	8.1	28.1	28.2	102.9	102.8	7.9		3.8		9		90				<0.2		0.9	
						4.2	0.4	213	20.3		8.1		28.2		102.7		7.9		3.9		10		92				<0.2		0.9	
					Bottom	7.3	0.4	193	20.2	20.2	8.0	8.0	28.6	28.6	100.0	100.0	7.7	7.7	5.4		12		91				<0.2		1.1	
						7.3	0.4	206	20.2		8.0		28.6		100.0		7.7		5.2		11		91				<0.2		1.1	
IM3	Sunny	Moderate	13:02	8.1	Surface	1.0	0.4	251	20.9	20.9	8.2	8.2	25.4	25.4	114.5	114.4	8.8	8.5	1.5	2.4	6	8	90	92	819415	806004	<0.2	<0.2	1.0	1.4
						1.0	0.4	260	20.9		8.2		25.4		114.2		8.8		1.5		7		91				<0.2		1.0	
					Middle	4.1	0.4	271	20.6	20.6	8.1	8.1	27.2	27.2	106.8	106.7	8.2		2.3		9		92				<0.2		1.6	
						4.1	0.5	281	20.6		8.1		27.2		106.5		8.2		2.3		10		91				<0.2		1.5	
					Bottom	7.1	0.4	247	20.4	20.4	8.0	8.0	28.2	28.2	101.4	101.4	7.8	7.8	3.5		9		92				<0.2		1.6	
						7.1	0.4	256	20.4		8.0		28.2		101.3		7.7		3.5		8		93				<0.2		1.4	
IM4	Sunny	Moderate	12:54	7.7	Surface	1.0	0.3	252	20.7	20.7	8.1	8.1	25.7	25.7	111.1	111.0	8.6	8.3	1.6	2.1	8	10	90	92	819550	805035	<0.2	<0.2	2.5	2.0
						1.0	0.4	258	20.7		8.1		25.7		110.9		8.5		1.7		6		91				<0.2		2.5	
					Middle	3.9	0.3	227	20.5	20.5	8.1	8.1	26.9	26.9	105.4	105.3	8.1		2.2		11		92				<0.2		1.8	
						3.9	0.3	237	20.4		8.1		26.9		105.2		8.1		2.2		11		92				<0.2		1.7	
					Bottom	6.7	0.3	182	20.4	20.4	7.9	7.9	27.2	27.2	100.1	100.0	7.7	7.7	2.4		12		93				<0.2		1.7	
						6.7	0.3	182	20.4		7.9		27.2		99.8		7.7		2.4		10		93				<0.2		1.6	
IM5	Sunny	Moderate	12:45	6.4	Surface	1.0	0.5	270	20.7	20.7	8.1	8.1	25.7	25.8	109.7	109.7	8.5	8.3	1.6	2.3	9	10	90	92	820561	804928	<0.2	<0.2	2.4	2.1
						1.0	0.6	287	20.7		8.1		25.8		109.6		8.4		1.6		7		91				<0.2		2.4	
					Middle	3.2	0.4	260	20.6	20.6	8.1	8.1	26.0	26.0	106.2	106.1	8.2		2.1		7		91				<0.2		2.0	
						3.2	0.4	272	20.6		8.1		26.0		106.0		8.2		2.2		8		92				<0.2		1.8	
					Bottom	5.4	0.4	254	20.5	20.5	7.9	7.9	27.0	27.0	100.6	100.4	7.7	7.7	3.1		14		92				<0.2		1.9	
						5.4	0.4	256	20.5		7.9		27.0		100.2		7.7		3.1		12		93				<0.2		1.8	
IM6	Sunny	Moderate	12:38	6.3	Surface	1.0	0.5	283	20.7	20.7	8.1	8.1	25.7	25.8	110.6	110.6	8.5	8.5	3.0	4.2	7	10	89	91	821072	805827	<0.2	<0.2	2.5	2.2
						1.0	0.6	308	20.6		8.1		25.8		110.6		8.5		3.0		9		90				<0.2		2.5	
					Middle	3.2	0.5	281	20.5	20.5	8.1	8.1	26.3	26.3	109.4	109.4	8.4		3.7		8		90				<0.2		2.4	
						3.2	0.5	283	20.5		8.1		26.3		109.4		8.4		3.7		10		91				<0.2		2.4	
					Bottom	5.3	0.4	252	20.4	20.4	8.0	8.0	27.2	27.2	102.0	102.0	7.8	7.8	6.0		12		92				<0.2		1.5	
						5.3	0.4	259	20.4		8.0		27.2		101.9		7.8		6.0		14		92				<0.2		1.6	
IM7	Sunny	Moderate	12:31	7.4	Surface	1.0	0.3	249	20.9	20.9	8.0	8.0	24.1	24.1	107.4	107.3	8.3	8.1	1.5	1.9	5	5	91	93	821366	806837	<0.2	<0.2	3.0	2.2
						1.0	0.3	262	20.9		8.0		24.1		107.2		8.3		1.4		5		92				<0.2		3.0	
					Middle	3.7	0.3	256	20.5	20.5	8.0	8.0	26.4	26.4	103.2	103.2	7.9		2.0		5		92				<0.2		1.3	
						3.7	0.3	260	20.5		8.0		26.4		103.1		7.9		2.0		5		93				<0.2		1.5	
					Bottom	6.4	0.3	252	20.6	20.6	7.8	7.8	27.0	27.0	99.4	99.3	7.6	7.6	2.2		6		93				<0.2		2.3	
						6.4	0.3	274	20.6		7.8		27.0		99.2		7.6		2.3		5		94				<0.2		2.2	
IM8	Cloudy	Moderate	13:15	8.1	Surface	1.0	0.4	209	21.1	21.1	8.0	8.0	24.1	24.1	118.1	118.1	9.1	9.1	7.4	11.2	7	10	85	90	821675	807828	<0.2	<0.2	3.7	3.3
						1.0	0.4	217	21.1		8.0		24.1		118.0		9.1		7.6		7		86				<0.2		3.5	
					Middle	4.1	0.3	229	20.9	20.9	8.0	8.0	25.6	25.6	116.4	116.4	9.0		16.2		6		92				<0.2		3.6	
						4.1	0.4	233	20.9		8.0		25.6		116.4		9.0		16.6		6		91				<0.2		3.6	
					Bottom	7.1	0.4	228	20.8	20.8	8.0	8.0	26.4	26.4	110.8	110.8	8.5	8.5	9.8		18		94				<0.2		2.9	
						7.1	0.4	241	20.8		8.0		26.4		110.8		8.5		9.8		17		93				<0.2		2.7	

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

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

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	13:24	7.2	Surface	1.0	0.4	248	20.9	20.9	8.1	8.1	26.4	26.4	120.8	120.8	9.3	9.2	3.7	4.3	6	8	86	91	822111	808816	<0.2	<0.2	2.5	2.1
						1.0	0.4	266	20.9		8.1		26.4		120.8		9.3		3.7		4		86				<0.2		2.6	
					Middle	3.6	0.5	255	20.7	20.7	8.1	8.1	26.7	26.7	118.2	118.2	9.1		4.5		10		92				<0.2		1.6	
						3.6	0.5	267	20.7		8.1		26.7		118.2		9.1		4.5		8		92				<0.2		1.8	
					Bottom	6.2	0.4	239	20.7	20.7	8.0	8.0	26.9	26.9	116.1	114.7	8.9	8.8	4.8		9		94				<0.2		1.9	
						6.2	0.5	245	20.7		8.0		26.9		113.3		8.7		4.4		8		93				<0.2		2.0	
IM10	Cloudy	Moderate	13:33	8.0	Surface	1.0	0.5	284	21.1	21.1	8.1	8.1	26.9	26.9	127.6	127.6	9.7	9.3	3.4	5.2	7	10	87	91	822253	809849	<0.2	<0.2	2.0	1.8
						1.0	0.6	298	21.1		8.1		26.9		127.6		9.7		3.4		8		87				<0.2		2.1	
					Middle	4.0	0.5	284	20.8	20.8	8.1	8.1	27.1	27.1	115.6	115.6	8.8		5.8		7		92				<0.2		1.7	
						4.0	0.5	296	20.8		8.1		27.1		115.6		8.8		5.8		8		92				<0.2		1.8	
					Bottom	7.0	0.4	251	20.6	20.6	8.0	8.0	27.2	27.2	114.0	114.0	8.7	8.7	6.4		14		94				<0.2		1.6	
						7.0	0.4	252	20.6		8.0		27.2		114.0		8.7		6.4		13		94				<0.2		1.6	
IM11	Sunny	Moderate	13:45	8.5	Surface	1.0	0.6	280	20.9	20.9	8.1	8.1	27.0	27.0	119.6	119.6	9.1	8.9	4.4	5.5	6	9	87	91	821511	810552	<0.2	<0.2	2.2	1.6
						1.0	0.6	300	20.9		8.1		27.0		119.6		9.1		4.4		8		87				<0.2		2.2	
					Middle	4.3	0.5	267	20.6	20.6	8.1	8.1	27.6	27.6	113.6	113.6	8.7		5.7		9		92				<0.2		1.2	
						4.3	0.5	277	20.6		8.1		27.6		113.6		8.7		5.7		11		92				<0.2		1.2	
					Bottom	7.5	0.4	267	20.6	20.6	8.0	8.0	27.6	27.6	111.0	111.0	8.5	8.5	6.3		9		94				<0.2		1.5	
						7.5	0.4	293	20.6		8.0		27.6		111.0		8.5		6.3		11		94				<0.2		1.5	
IM12	Sunny	Moderate	13:55	8.0	Surface	1.0	0.6	275	20.8	20.8	8.1	8.1	27.4	27.4	117.5	117.5	9.0	8.9	6.0	8.0	5	10	88	92	821169	811502	<0.2	<0.2	1.6	1.7
						1.0	0.6	277	20.8		8.1		27.4		117.5		9.0		6.0		6		88				<0.2		1.5	
					Middle	4.0	0.5	277	20.7	20.7	8.1	8.1	27.8	27.8	115.2	115.1	8.8		8.1		9		92				<0.2		2.0	
						4.0	0.6	284	20.7		8.1		27.8		114.9		8.8		8.1		9		93				<0.2		1.9	
					Bottom	7.0	0.5	280	20.6	20.6	8.1	8.1	27.8	27.8	114.0	114.0	8.7	8.7	10.0		16		94				<0.2		1.5	
						7.0	0.5	297	20.6		8.1		27.8		114.0		8.7		10.0		16		94				<0.2		1.5	
SR2	Sunny	Moderate	14:18	4.9	Surface	1.0	0.3	276	20.9	20.9	8.1	8.1	27.6	27.6	121.3	121.3	9.2	9.2	4.4	4.3	8	7	89	91	821469	814181	<0.2	<0.2	1.8	1.8
						1.0	0.3	292	20.9		8.1		27.6		121.3		9.2		4.4		7		88				<0.2		1.7	
					Middle	2.5	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.5	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	0.2	280	20.9	20.9	8.1	8.1	27.7	27.7	121.0	121.0	9.2	9.2	4.1		7		94				<0.2		1.7	
						3.9	0.3	297	20.9		8.1		27.7		121.0		9.2		4.1		6		94				<0.2		1.8	
SR3	Cloudy	Moderate	13:10	8.6	Surface	1.0	0.3	197	21.2	21.2	8.0	8.0	23.7	23.7	116.3	116.3	9.0	8.9	3.6	4.0	7	8	-	-	822129	807585	-	-	-	-
						1.0	0.3	199	21.2		8.0		23.7		116.3		9.0		3.6		6		-				-		-	
					Middle	4.3	0.3	243	20.7	20.7	8.0	8.0	25.4	25.4	113.9	113.9	8.8		3.9		7		-				-		-	
						4.3	0.3	265	20.7		8.0		25.4		113.9		8.8		3.9		8		-				-		-	
					Bottom	7.6	0.3	197	20.7	20.7	8.0	8.0	26.6	26.6	113.1	113.1	8.7	8.7	4.5		10		-				-		-	
						7.6	0.3	212	20.7		8.0		26.6		113.0		8.7		4.5		12		-				-		-	
SR4A	Sunny	Moderate	13:59	8.9	Surface	1.0	0.3	220	20.9	20.9	8.1	8.1	28.1	28.1	111.8	111.8	8.5	8.4	6.5	6.5	14	15	-	-	817185	807828	-	-	-	-
						1.0	0.3	234	20.9		8.1		28.1		111.7		8.5		6.5		14		-				-		-	
					Middle	4.5	0.3	210	20.9	20.9	8.1	8.1	28.1	28.1	108.8	108.8	8.3		6.6		14		-				-		-	
						4.5	0.3	218	20.9		8.1		28.1		108.7		8.2		6.7		15		-				-		-	
					Bottom	7.9	0.2	220	20.8	20.8	8.1	8.1	28.1	28.1	103.7	103.6	7.9	7.9	6.3		15		-				-		-	
						7.9	0.2	227	20.8		8.1		28.1		103.5		7.8		6.2		15		-				-		-	
SR5A	Sunny	Moderate	14:17	4.9	Surface	1.0	0.2	301	21.0	21.0	8.2	8.2	28.3	28.3	114.1	114.1	8.6	8.6	5.7	6.0	13	15	-	-	816579	810677	-	-	-	-
						1.0	0.2	323	21.0		8.2		28.3		114.1		8.6		5.7		14		-				-		-	
					Middle	2.5	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.5	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	0.2	306	20.9	20.9	8.1	8.1	28.3	28.3	108.2	108.1	8.2	8.2	6.2		17		-				-		-	
						3.9	0.2	309	20.9		8.1		28.3		108.0		8.2		6.2		15		-				-		-	
SR6	Sunny	Calm	14:39	4.5	Surface	1.0	0.1	218	20.9	20.9	8.1	8.1	28.0	28.0	107.7	107.6	8.2	8.2	5.7	5.4	14	15	-	-	817880	814656	-	-	-	-
						1.0	0.1	237	20.9		8.1		28.0		107.4		8.1		5.7		15		-				-		-	
					Middle	2.3	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.3	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.1	195	20.8	20.8	7.9	7.9	28.0	28.0	100.5	100.4	7.6	7.6	5.1		16		-				-		-	
						3.5	0.1	213	20.8		7.9		28.0		100.3		7.6		5.1		14		-				-		-	
SR7	Sunny	Moderate	15:17	16.3	Surface	1.0	0.2	161	20.5	20.5	8.0	8.0	29.0	29.0	101.7	101.7	7.7	7.6	4.6	4.7	8	10	-	-	823636	823758	-	-	-	-
						1.0	0.2	174	20.5		8.0		29.0		101.6		7.7		4.4		9		-				-		-	
					Middle	8.2	0.2	148	20.5	20.5	8.0	8.0	29.1	29.1	99.2	99.2	7.5		4.5		9		-				-		-	
						8.2	0.2	148	20.5		8.0		29.1		99.2		7.5		4.5		8		-				-		-	
					Bottom	15.3	0.2	141	20.5	20.5	8.0	8.0	29.1	29.1	98.6	98.6	7.5	7.5	5.1		12		-				-		-	
						15.3	0.2	153	20.5		8.0		29.1		98.6		7.5		5.1		13		-				-		-	
SR8	Sunny	Moderate	14:02	5.4	Surface	1.0	0.3	183	20.8	20.8	8.1	8.1	27.2	27.2	116.5	116.4	8.9	8.9	7.0	7.8	11	12	-	-	820426	811577	-	-	-	-
						1.0	0.3	185	20.8		8.1		27.2		116.3		8.9		7.0		10		-				-		-	
					Middle	2.7	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.7	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	0.3	200	20.6	20.6	8.1	8.1	27.8	27.8	112.2	112.2	8.6	8.6	8.7		14		-				-		-	
						4.4	0.3	201	20.6		8.1		27.8		112.1		8.6		8.5		12		-				-		-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 07 January 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	06:43	8.1	Surface	1.0	0.5	216	20.3	20.3	8.2	8.2	27.6	27.6	111.4	111.4	8.5	8.4	1.5	2.2	3	5	89	91	815631	804266	<0.2	<0.2	2.2	1.9
						1.0	0.5	233	20.3		8.2		27.6		111.3		8.5		1.6		2		90				<0.2		2.4	
					Middle	4.1	0.5	222	20.2	20.2	8.2	8.2	28.1	28.1	108.0	108.0	8.3		1.8		4		91				<0.2		1.7	
						4.1	0.5	227	20.2		8.2		28.1		108.0		8.3		1.8		6		91				<0.2		1.8	
					Bottom	7.1	0.4	218	20.1	20.1	8.1	8.1	28.9	28.9	101.2	101.2	7.7	7.7	3.2		7		92				<0.2		1.8	
						7.1	0.4	225	20.1		8.1		28.9		101.1		7.7		3.2		5		92				<0.2		1.7	
C2	Cloudy	Moderate	08:23	11.6	Surface	1.0	0.6	179	20.8	20.8	7.9	7.9	23.1	23.1	106.3	106.3	8.3	8.2	4.0	4.9	4	5	84	90	825685	806960	<0.2	<0.2	3.0	1.9
						1.0	0.6	184	20.8		7.9		23.1		106.3		8.3		4.0		4		85				<0.2		3.2	
					Middle	5.8	0.6	174	20.6	20.6	8.0	8.0	26.6	26.6	103.6	103.6	8.0		4.6		5		91				<0.2		1.5	
						5.8	0.6	186	20.6		8.0		26.6		103.6		8.0		4.6		7		91				<0.2		1.3	
					Bottom	10.6	0.3	178	20.5	20.5	8.0	8.0	27.4	27.4	103.2	103.2	7.9	7.9	6.1		5		94				<0.2		1.2	
						10.6	0.3	180	20.5		8.0		27.4		103.2		7.9		6.1		6		93				<0.2		1.1	
C3	Cloudy	Moderate	06:17	12.1	Surface	1.0	0.3	130	20.4	20.4	8.0	8.0	27.8	27.8	108.2	108.2	8.3	8.2	3.3	3.5	2	4	89	92	822128	817795	<0.2	<0.2	1.5	1.3
						1.0	0.3	136	20.4		8.0		27.8		108.1		8.3		3.3		4		90				<0.2		1.4	
					Middle	6.1	0.2	162	20.5	20.5	8.0	8.0	28.3	28.3	105.9	105.9	8.1		3.6		6		93				<0.2		1.4	
						6.1	0.2	162	20.5		8.0		28.3		105.9		8.1		3.6		4		93				<0.2		1.3	
					Bottom	11.1	0.2	152	20.5	20.5	8.0	8.0	28.7	28.7	103.0	103.0	7.8	7.8	3.7		4		94				<0.2		1.0	
						11.1	0.2	165	20.5		8.0		28.7		103.0		7.8		3.7		4		95				<0.2		1.1	
IM1	Sunny	Moderate	07:07	6.9	Surface	1.0	0.4	206	20.4	20.4	8.2	8.2	27.6	27.6	105.1	105.1	8.1	7.9	2.7	3.0	6	7	90	92	818351	806456	<0.2	<0.2	2.2	1.8
						1.0	0.5	212	20.4		8.2		27.6		105.0		8.0		2.7		6		91				<0.2		2.4	
					Middle	3.5	0.4	205	20.3	20.3	8.2	8.2	28.1	28.2	101.4	101.4	7.8		3.1		7		91				<0.2		1.5	
						3.5	0.4	221	20.2		8.2		28.2		101.3		7.8		3.1		7		92				<0.2		1.6	
					Bottom	5.9	0.3	219	20.2	20.2	8.1	8.1	28.4	28.4	99.2	99.2	7.6	7.6	3.1		7		92				<0.2		1.4	
						5.9	0.3	240	20.2		8.1		28.4		99.1		7.6		3.1		6		93				<0.2		1.5	
IM2	Sunny	Moderate	07:13	7.7	Surface	1.0	0.6	222	20.6	20.6	8.2	8.2	26.6	26.6	109.9	109.8	8.4	8.3	2.0	3.2	3	4	91	92	818846	806207	<0.2	<0.2	1.7	1.9
						1.0	0.7	226	20.6		8.2		26.6		109.7		8.4		2.1		3		91				<0.2		1.8	
					Middle	3.9	0.6	216	20.4	20.4	8.2	8.2	27.1	27.1	106.2	106.1	8.2		3.8		5		92				<0.2		1.8	
						3.9	0.6	223	20.4		8.2		27.1		106.0		8.1		3.9		3		92				<0.2		1.9	
					Bottom	6.7	0.4	207	20.3	20.3	8.1	8.1	27.4	27.4	103.1	103.1	7.9	7.9	3.8		3		93				<0.2		2.2	
						6.7	0.4	218	20.3		8.1		27.4		103.0		7.9		3.8		5		93				<0.2		2.0	
IM3	Sunny	Moderate	07:22	7.8	Surface	1.0	0.6	238	20.6	20.6	8.2	8.2	26.0	26.0	113.1	113.1	8.7	8.5	1.2	2.4	4	6	93	94	819403	806027	<0.2	<0.2	2.4	2.0
						1.0	0.6	250	20.6		8.2		26.0		113.0		8.7		1.2		4		93				<0.2		2.3	
					Middle	3.9	0.5	234	20.5	20.5	8.2	8.2	26.4	26.4	107.6	107.5	8.3		3.0		7		94				<0.2		1.5	
						3.9	0.5	241	20.5		8.2		26.4		107.4		8.3		3.0		5		93				<0.2		1.6	
					Bottom	6.8	0.4	232	20.4	20.4	8.1	8.1	27.1	27.1	103.6	103.5	8.0	8.0	2.9		7		94				<0.2		1.9	
						6.8	0.4	246	20.4		8.1		27.1		103.4		8.0		2.9		7		94				<0.2		2.0	
IM4	Sunny	Moderate	07:28	7.3	Surface	1.0	0.7	225	20.7	20.7	8.2	8.2	25.9	25.9	113.7	113.7	8.8	8.7	1.0	1.6	4	6	92	94	819568	805032	<0.2	<0.2	1.3	1.5
						1.0	0.7	244	20.7		8.2		25.9		113.6		8.8		1.0		5		93				<0.2		1.3	
					Middle	3.7	0.6	226	20.5	20.5	8.1	8.1	26.3	26.3	111.3	111.3	8.6		1.3		5		94				<0.2		2.0	
						3.7	0.6	244	20.5		8.1		26.3		111.2		8.6		1.4		6		94				<0.2		2.2	
					Bottom	6.3	0.4	213	20.4	20.4	8.1	8.1	26.9	26.9	103.7	103.4	8.0	8.0	2.5		6		94				<0.2		1.2	
						6.3	0.5	224	20.4		8.1		26.9		103.1		7.9		2.6		7		95				<0.2		1.1	
IM5	Sunny	Moderate	07:37	6.3	Surface	1.0	0.4	230	20.6	20.6	8.1	8.1	25.9	25.9	111.8	111.8	8.6	8.5	2.0	3.0	5	6	90	91	820568	804936	<0.2	<0.2	2.1	1.7
						1.0	0.4	250	20.6		8.1		25.9		111.8		8.6		2.0		4		90				<0.2		2.0	
					Middle	3.2	0.4	242	20.6	20.6	8.1	8.1	26.1	26.1	109.4	109.4	8.4		3.0		7		91				<0.2		1.4	
						3.2	0.4	261	20.6		8.1		26.1		109.3		8.4		3.0		6		92				<0.2		1.4	
					Bottom	5.3	0.3	236	20.5	20.5	8.1	8.1	26.5	26.5	105.6	105.6	8.1	8.1	4.0		7		92				<0.2		1.6	
						5.3	0.3	237	20.5		8.1		26.5		105.5		8.1		3.9		8		93				<0.2		1.6	
IM6	Sunny	Moderate	07:46	6.1	Surface	1.0	0.4	246	20.6	20.6	8.1	8.1	25.8	25.8	110.2	110.2	8.5	8.4	2.8	4.4	5	7	92	93	821049	805820	<0.2	<0.2	1.3	1.2
						1.0	0.5	249	20.6		8.1		25.8		110.1		8.5		2.8		5		92				<0.2		1.2	
					Middle	3.1	0.3	250	20.5	20.5	8.1	8.1	26.6	26.6	108.2	108.2	8.3		4.8		7		93				<0.2		1.0	
						3.1	0.4	253	20.5		8.1		26.5		108.1		8.3		4.9		8		93				<0.2		1.2	
					Bottom	5.1	0.3	228	20.4	20.4	8.1	8.1	27.3	27.3	106.5	106.6	8.2	8.2	5.5		9		94				<0.2		1.2	
						5.1	0.3	240	20.4		8.1		27.3		106.6		8.2		5.5		9		94				<0.2		1.2	
IM7	Sunny	Moderate	07:55	7.7	Surface	1.0	0.6	214	20.6	20.6	8.1	8.1	25.6	25.6	106.3	106.3	8.2	8.1	2.0	2.5	6	6	92	94	821363	806842	<0.2	<0.2	1.3	1.2
						1.0	0.6	227	20.6		8.1		25.6		106.2		8.2		2.0		5		93				<0.2		1.4	
					Middle	3.9	0.5	220	20.5	20.5	8.1	8.1	26.2	26.2	103.6	103.5	8.0		2.6		4		93				<0.2		1.4	
						3.9	0.5	221	20.5		8.1		26.2		103.4		8.0		2.6		6		94				<0.2		1.4	
					Bottom	6.7	0.4	226	20.5	20.5	8.0	8.0	26.4	26.4	100.2	100.2	7.7	7.7	2.7		8		94				<0.2		0.8	
						6.7	0.4	231	20.5		8.0		26.4		100.1		7.7		2.8		7		95				<0.2		0.9	
IM8	Cloudy	Moderate	07:41	7.5	Surface	1.0	0.5	205	20.7	20.7	8.0	8.0	25.3	25.3	115.8	115.8	9.0	8.9	4.6	4.1	4	5	85	90	821686	807853	<0.2	<0.2	2.4	2.2
						1.0	0.6	209	20.7		8.0		25.3		115.8		9.0		4.7		5		85				<0.2		2.2	
					Middle	3.8	0.6	208	20.6	20.6	8.0	8.0	25.3	25.3	113.7	113.7	8.8		3.4		5		92				<0.2		1.8	
						3.8	0.6	218	20.6		8.0		25.3		113.6		8.8		3.5		5		92				<0.2		1.9	
					Bottom	6.5	0.5	220	20.6	20.6	8.0	8.0	27.0	27.0	109.3	109.3	8.4	8.4	4.2		7		94				<0.2		2.3	
						6.5	0.5	232	20.6		8.0		27.0		109.3		8.4		4.2		6		94				<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 07 January 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	07:34	6.9	Surface	1.0	0.5	192	20.6	20.6	8.0	8.0	25.4	25.4	115.2	115.2	8.9	8.9	3.3	4.2	6	6	86	91	822076	808799	<0.2	<0.2	2.6	2.4
						1.0	0.5	203	20.6		8.0		25.4		115.2		8.9		3.3		5		85				<0.2		2.5	
					Middle	3.5	0.5	195	20.6	20.6	8.0	8.0	25.7	25.7	113.5	113.5	8.8		3.7		5		92				<0.2		2.1	
						3.5	0.5	212	20.6		8.0		25.7		113.4		8.8		3.8		7		92				<0.2		2.1	
					Bottom	5.9	0.4	195	20.6	20.6	8.0	8.0	27.1	27.1	109.8	109.8	8.4	8.4	5.5		7		94				<0.2		2.4	
						5.9	0.4	208	20.6		8.0		27.1		109.8		8.4		5.5		8		94				<0.2		2.5	
IM10	Cloudy	Moderate	07:24	7.2	Surface	1.0	0.4	173	20.7	20.7	8.0	8.0	26.0	26.0	115.0	115.0	8.9	8.7	2.9	7.3	3	5	86	91	822242	809842	<0.2	<0.2	2.2	1.8
						1.0	0.4	184	20.7		8.0		26.0		115.0		8.9		3.0		3		85				<0.2		2.2	
					Middle	3.6	0.3	177	20.7	20.7	8.0	8.0	26.7	26.7	110.0	110.0	8.4		6.8		5		92				<0.2		1.7	
						3.6	0.4	181	20.7		8.0		26.7		110.0		8.4		6.8		4		92				<0.2		1.6	
					Bottom	6.2	0.4	185	20.7	20.7	8.0	8.0	27.2	27.2	108.0	108.0	8.3	8.3	12.1		7		94				<0.2		1.4	
						6.2	0.4	189	20.7		8.0		27.2		108.0		8.3		12.3		7		94				<0.2		1.5	
IM11	Cloudy	Moderate	07:15	7.9	Surface	1.0	0.4	186	20.7	20.7	8.0	8.0	26.1	26.1	112.7	112.7	8.7	8.7	3.0	4.0	4	4	86	91	821489	810552	<0.2	<0.2	2.5	2.3
						1.0	0.4	190	20.7		8.0		26.1		112.7		8.7		3.0		5		86				<0.2		2.5	
					Middle	4.0	0.3	197	20.7	20.7	8.0	8.0	26.8	26.8	111.9	111.9	8.6		3.3		3		92				<0.2		2.4	
						4.0	0.4	205	20.7		8.0		26.8		111.9		8.6		3.3		3		92				<0.2		2.3	
					Bottom	6.9	0.3	168	20.5	20.5	8.0	8.0	27.3	27.3	109.2	109.2	8.4	8.4	5.8		3		94				<0.2		1.9	
						6.9	0.3	168	20.5		8.0		27.3		109.2		8.4		5.8		3		94				<0.2		1.9	
IM12	Cloudy	Moderate	07:06	8.4	Surface	1.0	0.4	164	20.7	20.7	8.0	8.0	26.5	26.5	114.1	114.1	8.8	8.8	2.9	4.2	4	4	86	91	821149	811502	<0.2	<0.2	1.9	1.8
						1.0	0.4	170	20.7		8.0		26.5		114.1		8.8		2.9		2		86				<0.2		2.0	
					Middle	4.2	0.4	150	20.6	20.6	8.0	8.0	26.7	26.7	113.0	113.0	8.7		3.4		3		93				<0.2		1.9	
						4.2	0.4	156	20.6		8.0		26.7		113.0		8.7		3.4		2		93				<0.2		2.0	
					Bottom	7.4	0.4	126	20.5	20.5	8.0	8.0	27.5	27.5	108.9	108.9	8.3	8.3	6.3		6		94				<0.2		1.4	
						7.4	0.5	126	20.5		8.0		27.5		108.9		8.3		6.3		5		94				<0.2		1.4	
SR2	Cloudy	Moderate	06:42	3.7	Surface	1.0	0.3	79	20.5	20.5	8.0	8.0	27.6	27.6	112.4	112.4	8.6	8.6	4.7	4.9	4	5	87	91	821466	814181	<0.2	<0.2	1.5	1.5
						1.0	0.3	81	20.5		8.0		27.6		112.4		8.6		4.7		4		87				<0.2		1.4	
					Middle	1.9	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						1.9	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.7	0.3	81	20.5	20.5	8.0	8.0	27.6	27.6	111.4	111.4	8.5	8.5	5.1		4		94				<0.2		1.4	
						2.7	0.3	83	20.5		8.0		27.6		111.4		8.5		5.1		6		94				<0.2		1.5	
SR3	Cloudy	Moderate	07:49	8.2	Surface	1.0	0.5	188	20.7	20.7	8.0	8.0	25.0	25.0	113.5	113.5	8.8	8.7	3.3	4.4	2	4	-	-	822139	807566	-	-	-	-
						1.0	0.6	203	20.7		8.0		25.0		113.5		8.8		3.3		4		-				-		-	
					Middle	4.1	0.5	182	20.6	20.6	8.0	8.0	25.5	25.5	110.3	110.3	8.5		4.7		4		-				-		-	
						4.1	0.6	190	20.6		8.0		25.5		110.3		8.5		4.7		5		-				-		-	
					Bottom	7.2	0.4	203	20.6	20.6	8.0	8.0	27.1	27.1	109.3	109.3	8.4	8.4	5.2		4		-				-		-	
						7.2	0.4	206	20.6		8.0		27.1		109.3		8.4		5.2		4		-				-		-	
SR4A	Cloudy	Calm	06:22	7.3	Surface	1.0	0.3	227	20.3	20.3	8.1	8.1	28.2	28.2	107.9	107.9	8.3	8.3	6.3	6.2	11	11	-	-	817179	807793	-	-	-	-
						1.0	0.3	242	20.3		8.1		28.2		107.9		8.3		6.3		10		-				-		-	
					Middle	3.7	0.3	209	20.3	20.3	8.1	8.1	28.2	28.2	106.9	106.9	8.2		6.1		10		-				-		-	
						3.7	0.3	227	20.3		8.1		28.2		106.9		8.2		6.1		10		-				-		-	
					Bottom	6.3	0.3	211	20.3	20.3	8.1	8.1	28.2	28.2	104.8	104.8	8.0	8.0	6.3		13		-				-		-	
						6.3	0.3	224	20.3		8.1		28.2		104.7		8.0		6.3		12		-				-		-	
SR5A	Cloudy	Calm	06:03	3.8	Surface	1.0	0.2	291	20.6	20.6	8.1	8.1	28.1	28.1	110.2	110.2	8.4	8.4	3.3	3.6	2	5	-	-	816590	810680	-	-	-	-
						1.0	0.2	312	20.6		8.1		28.1		110.2		8.4		3.3		2		-				-		-	
					Middle	1.9	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						1.9	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	0.1	295	20.5	20.5	8.1	8.1	28.1	28.1	104.0	104.0	7.9	7.9	3.8		8		-				-		-	
						2.8	0.2	312	20.5		8.1		28.1		103.9		7.9		3.8		8		-				-		-	
SR6	Cloudy	Calm	05:38	3.6	Surface	1.0	0.1	196	20.5	20.5	8.1	8.1	27.9	27.9	107.4	107.4	8.2	8.2	3.9	5.0	5	7	-	-	817885	814663	-	-	-	-
						1.0	0.1	210	20.5		8.1		27.9		107.4		8.2		4.0		6		-				-		-	
					Middle	1.8	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						1.8	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.6	0.1	139	20.7	20.7	8.0	8.0	28.2	28.2	104.4	104.4	7.9	7.9	6.1		9		-				-		-	
						2.6	0.1	144	20.7		8.0		28.2		104.4		7.9		6.0		9		-				-		-	
SR7	Cloudy	Moderate	05:39	16.5	Surface	1.0	0.4	67	20.5	20.5	8.0	8.0	28.4	28.4	104.7	104.7	8.0	7.9	2.6	2.7	<2	2	-	-	823627	823739	-	-	-	-
						1.0	0.4	68	20.5		8.0		28.4		104.6		8.0		2.6		<2		-				-		-	
					Middle	8.3	0.4	67	20.5	20.5	8.0	8.0	28.9	28.9	102.2	102.2	7.8		2.7		<2		-				-		-	
						8.3	0.4	72	20.5		8.0		28.9		102.2		7.8		2.7		2		-				-		-	
					Bottom	15.5	0.2	200	20.5	20.5	7.9	7.9	28.9	28.9	101.2	101.2	7.7	7.7	2.8		<2		-				-		-	
						15.5	0.2	205	20.5		7.9		28.9		101.2		7.7		2.8		<2		-				-		-	
SR8	Cloudy	Moderate	06:58	4.6	Surface	1.0	0.3	257	21.1	21.1	8.0	8.0	27.6	27.6	111.8	111.8	8.5	8.5	5.0	4.8	8	10	-	-	820429	811593	-	-	-	-
						1.0	0.3	277	21.0		8.0		27.6		111.8		8.5		4.9		9		-				-		-	
					Middle	2.3	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.3	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.3	216	20.6	20.6	8.0	8.0	27.6	27.6	111.0	111.0	8.5	8.5	4.6		11		-				-		-	
						3.6	0.3	220	20.6		8.0		27.6		111.0		8.5		4.6		13		-				-		-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 10 January 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	16:08	9.0	Surface	1.0	0.4	129	20.6	20.6	8.2	8.2	28.8	28.8	109.4	109.3	8.3	8.2	3.4	4.9	9	10	92	94	815603	804232	<0.2	<0.2	0.9	0.8
						1.0	0.5	129	20.6		8.2		28.8		109.2		8.3		3.4		7		93				<0.2		0.9	
					Middle	4.5	0.4	98	20.5	20.5	8.2	8.2	29.0	29.0	105.5	105.4	8.0		4.6		8		93				<0.2		0.7	
						4.5	0.4	104	20.5		8.2		29.0		105.3		8.0		4.7		8		94				<0.2		0.8	
					Bottom	8.0	0.4	117	20.3	20.3	8.1	8.1	29.4	29.4	101.1	101.1	7.7	7.7	6.6		13		94				<0.2		0.8	
						8.0	0.4	118	20.3		8.1		29.4		101.0		7.7		6.5		14		95				<0.2		0.8	
C2	Sunny	Moderate	15:01	12.1	Surface	1.0	0.6	277	21.1	21.1	8.0	8.0	25.8	25.8	116.1	116.0	8.9	8.7	5.2	7.9	6	9	84	90	825691	806926	<0.2	<0.2	2.5	2.4
						1.0	0.6	297	21.1		8.0		25.8		115.9		8.9		5.2		8		85				<0.2		2.5	
					Middle	6.1	0.6	271	21.0	21.0	8.0	8.0	26.6	26.6	109.6	109.6	8.4		7.2		9		92				<0.2		2.6	
						6.1	0.6	280	21.0		8.0		26.6		109.6		8.4		7.2		10		91				<0.2		2.7	
					Bottom	11.1	0.5	274	20.8	20.8	8.0	8.0	27.8	27.8	106.5	106.5	8.1	8.1	11.2		10		94				<0.2		2.0	
						11.1	0.5	281	20.8		8.0		27.8		106.5		8.1		11.2		9		93				<0.2		2.0	
C3	Sunny	Moderate	17:15	12.8	Surface	1.0	0.3	202	20.8	20.8	8.0	8.0	28.8	28.8	100.2	100.2	7.6	7.5	5.1	8.0	8	11	89	92	822093	817817	<0.2	<0.2	1.2	1.1
						1.0	0.3	207	20.8		8.0		28.8		100.1		7.6		5.1		6		89				<0.2		1.2	
					Middle	6.4	0.2	220	20.7	20.7	8.0	8.0	29.0	29.0	98.0	98.0	7.4		8.6		13		93				<0.2		1.1	
						6.4	0.2	224	20.7		8.0		29.0		98.0		7.4		8.8		12		93				<0.2		1.1	
					Bottom	11.8	0.3	181	20.7	20.7	8.0	8.0	29.0	29.0	97.7	97.7	7.4	7.4	10.1		15		94				<0.2		1.1	
						11.8	0.4	192	20.7		8.0		29.0		97.7		7.4		10.1		13		94				<0.2		1.0	
IM1	Sunny	Moderate	15:46	7.6	Surface	1.0	0.4	208	20.4	20.4	8.2	8.2	28.5	28.5	108.3	108.3	8.3	8.2	3.3	3.8	8	8	92	93	818348	806455	<0.2	<0.2	1.0	1.1
						1.0	0.4	213	20.4		8.2		28.5		108.3		8.3		3.4		9		93				<0.2		1.2	
					Middle	3.8	0.4	159	20.4	20.4	8.2	8.2	28.5	28.5	106.6	106.6	8.1		3.6		9		93				<0.2		1.0	
						3.8	0.4	173	20.4		8.2		28.5		106.5		8.1		3.4		8		94				<0.2		1.2	
					Bottom	6.6	0.4	132	20.3	20.3	8.1	8.1	28.7	28.7	100.7	100.6	7.7	7.7	4.6		7		94				<0.2		1.1	
						6.6	0.4	133	20.3		8.1		28.6		100.5		7.7		4.4		8		94				<0.2		1.0	
IM2	Sunny	Moderate	15:40	8.5	Surface	1.0	0.4	219	20.7	20.7	8.1	8.1	27.6	27.6	109.9	109.9	8.4	8.3	2.8	3.3	7	9	89	91	818854	806183	<0.2	<0.2	1.5	1.4
						1.0	0.4	219	20.7		8.1		27.6		109.8		8.4		2.8		9		90				<0.2		1.6	
					Middle	4.3	0.4	206	20.5	20.5	8.1	8.1	28.0	28.0	106.1	106.1	8.1		3.2		10		90				<0.2		1.5	
						4.3	0.4	214	20.5		8.1		27.9		106.0		8.1		3.2		9		91				<0.2		1.4	
					Bottom	7.5	0.4	163	20.3	20.3	8.1	8.1	28.4	28.4	101.1	101.0	7.7	7.7	3.9		8		92				<0.2		1.2	
						7.5	0.4	172	20.3		8.1		28.3		100.9		7.7		3.8		9		92				<0.2		1.2	
IM3	Sunny	Moderate	15:33	8.4	Surface	1.0	0.4	251	21.0	21.0	8.2	8.2	26.8	26.8	116.6	116.6	8.9	8.6	2.2	2.4	7	8	89	91	819396	806019	<0.2	<0.2	2.1	1.9
						1.0	0.5	275	21.0		8.2		26.7		116.5		8.9		2.2		6		90				<0.2		2.0	
					Middle	4.2	0.4	252	20.9	20.9	8.1	8.1	26.9	26.9	108.6	108.5	8.3		2.3		8		91				<0.2		1.9	
						4.2	0.4	253	20.9		8.1		26.9		108.3		8.3		2.3		6		91				<0.2		1.9	
					Bottom	7.4	0.3	192	20.5	20.5	8.1	8.1	27.9	28.0	102.6	102.2	7.8	7.8	2.6		11		92				<0.2		1.6	
						7.4	0.3	193	20.5		8.1		28.0		101.7		7.8		2.7		9		92				<0.2		1.7	
IM4	Sunny	Moderate	15:23	8.2	Surface	1.0	0.5	256	20.9	20.9	8.1	8.1	26.5	26.5	116.2	116.2	8.9	8.8	2.4	2.9	8	10	88	90	819578	805051	<0.2	<0.2	2.1	2.0
						1.0	0.5	268	20.9		8.1		26.5		116.1		8.9		2.4		7		89				<0.2		2.1	
					Middle	4.1	0.5	224	20.9	20.9	8.1	8.1	26.5	26.5	112.6	112.6	8.6		2.8		10		90				<0.2		2.0	
						4.1	0.5	229	20.9		8.1		26.5		112.5		8.6		2.8		11		90				<0.2		2.0	
					Bottom	7.2	0.5	168	20.5	20.5	8.1	8.1	27.3	27.3	106.3	106.3	8.2	8.2	3.4		11		91				<0.2		1.8	
						7.2	0.5	174	20.5		8.1		27.3		106.2		8.1		3.4		11		92				<0.2		1.8	
IM5	Sunny	Moderate	15:13	6.9	Surface	1.0	0.3	248	20.9	20.9	8.1	8.1	26.6	26.6	113.8	113.8	8.7	8.6	2.5	3.2	10	9	87	89	820568	804922	<0.2	<0.2	2.2	2.2
						1.0	0.3	248	20.9		8.1		26.6		113.7		8.7		2.6		10		88				<0.2		2.3	
					Middle	3.5	0.3	249	20.8	20.8	8.1	8.1	26.6	26.6	110.6	110.5	8.5		3.0		9		89				<0.2		2.2	
						3.5	0.3	271	20.8		8.1		26.6		110.4		8.4		3.0		9		88				<0.2		2.1	
					Bottom	5.9	0.3	200	20.4	20.4	8.1	8.1	27.7	27.7	105.6	105.6	8.1	8.1	4.2		9		90				<0.2		2.1	
						5.9	0.3	202	20.4		8.1		27.6		105.6		8.1		4.0		8		90				<0.2		2.0	
IM6	Sunny	Moderate	15:06	6.6	Surface	1.0	0.5	247	20.9	20.9	8.1	8.1	26.8	26.8	112.8	112.8	8.6	8.5	2.5	3.1	8	10	90	91	821067	805823	<0.2	<0.2	2.1	2.1
						1.0	0.6	268	20.9		8.1		26.8		112.8		8.6		2.5		7		90				<0.2		2.2	
					Middle	3.3	0.5	242	20.9	20.9	8.1	8.1	26.8	26.8	110.0	109.9	8.4		2.9		12		91				<0.2		2.2	
						3.3	0.5	255	20.8		8.1		26.8		109.8		8.4		3.0		10		91				<0.2		2.0	
					Bottom	5.6	0.6	254	20.6	20.6	8.1	8.1	27.3	27.3	105.7	105.7	8.1	8.1	3.9		13		92				<0.2		2.0	
						5.6	0.6	258	20.6		8.1		27.2		105.6		8.1		3.9		12		92				<0.2		2.0	
IM7	Sunny	Moderate	14:59	7.9	Surface	1.0	0.9	212	20.9	20.9	8.1	8.1	26.6	26.6	111.5	111.5	8.5	8.4	2.3	2.8	10	12	93	94	821351	806841	<0.2	<0.2	2.0	2.0
						1.0	1.0	221	20.9		8.1		26.6		111.4		8.5		2.2		10		93				<0.2		2.1	
					Middle	4.0	0.9	224	20.7	20.7	8.1	8.1	27.3	27.3	108.1	108.1	8.3		2.9		12		94				<0.2		2.1	
						4.0	0.9	231	20.7		8.1		27.3		108.1		8.3		2.9		12		94				<0.2		1.9	
					Bottom	6.9	0.9	195	20.5	20.5	8.1	8.1	27.7	27.7	105.0	104.9	8.0	8.0	3.3		12		94				<0.2		1.8	
						6.9	1.0	199	20.5		8.1		27.7		104.8		8.0		3.3		14		95				<0.2		1.8	
IM8	Sunny	Moderate	15:39	8.5	Surface	1.0	0.4	239	21.1	21.1	8.1	8.1	27.0	27.0	119.2	119.2	9.1	9.0	4.9	5.3	6	7	85	91	821695	807831	<0.2	<0.2	1.9	1.9
						1.0	0.4	247	21.1		8.1		27.0		119.1		9.1		4.9		8		86				<0.2		1.9	
					Middle	4.3	0.4	248	21.0	21.0	8.1	8.1	27.0	27.1	116.1	116.0	8.8		5.2		7		92				<0.2		2.1	
						4.3	0.5	269	21.0		8.1		27.1		115.9		8.8		5.3		6		92				<0.2		1.9	
					Bottom	7.5	0.4	236	20.7	20.7	8.0	8.0	27.5	27.5	111.4	111.4	8.5	8.5	5.7		7		94				<0.2		1.9	
						7.5	0.4	251	20.7		8.0		27.5		111.4		8.5		5.7		8		94				<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 10 January 17 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Sunny	Moderate	15:51	7.5	Surface	1.0	0.6	291	21.1	21.1	8.1	8.1	26.9	26.9	119.4	119.4	9.1	9.0	5.3	5.9	6	9	86	91	822081	808822	<0.2	<0.2	1.9	1.8
						1.0	0.6	306	21.1		8.1		26.9		119.4		9.1		5.3		8		86				<0.2		1.9	
					Middle	3.8	0.4	274	21.0	21.0	8.1	8.1	27.1	27.1	116.8	116.8	8.9		5.8		9		92				<0.2		1.8	
						3.8	0.5	284	21.0		8.1		27.1		116.8		8.9		5.8		8		92				<0.2		1.9	
					Bottom	6.5	0.3	251	20.6	20.6	8.1	8.1	27.7	27.7	114.3	114.3	8.7	8.7	6.7		11		94				<0.2		1.5	
						6.5	0.3	255	20.6		8.1		27.7		114.3		8.7		6.7		10		94				<0.2		1.6	
IM10	Sunny	Moderate	16:01	8.2	Surface	1.0	0.7	289	21.2	21.2	8.1	8.1	26.9	26.9	126.9	126.9	9.6	9.6	4.3	5.1	10	11	86	91	822235	809826	<0.2	<0.2	2.0	2.0
						1.0	0.7	315	21.2		8.1		26.9		126.9		9.6		4.3		8		86				<0.2		1.9	
					Middle	4.1	0.5	288	21.0	21.0	8.1	8.1	27.2	27.2	124.2	124.2	9.5		4.6		12		92				<0.2		2.0	
						4.1	0.5	296	21.0		8.1		27.2		124.2		9.5		4.6		11		92				<0.2		2.0	
					Bottom	7.2	0.4	286	20.8	20.8	8.1	8.1	27.5	27.5	118.7	118.7	9.0	9.0	6.5		12		94				<0.2		2.0	
						7.2	0.4	288	20.8		8.1		27.5		118.7		9.0		6.5		11		94				<0.2		1.9	
IM11	Sunny	Moderate	16:12	8.3	Surface	1.0	0.8	276	21.2	21.2	8.1	8.1	27.2	27.2	121.5	121.5	9.2	9.0	6.7	10.3	8	11	87	91	821520	810562	<0.2	<0.2	1.9	1.8
						1.0	0.8	300	21.2		8.1		27.2		121.5		9.2		6.7		9		87				<0.2		1.8	
					Middle	4.2	0.7	282	20.9	20.9	8.1	8.1	27.5	27.5	115.5	115.5	8.8		12.0		9		92				<0.2		1.7	
						4.2	0.7	301	20.9		8.1		27.5		115.4		8.8		12.3		11		92				<0.2		1.6	
					Bottom	7.3	0.5	279	20.9	20.9	8.1	8.1	27.5	27.5	114.2	114.2	8.7	8.7	11.9		15		94				<0.2		1.8	
						7.3	0.6	297	20.9		8.1		27.5		114.2		8.7		11.9		14		94				<0.2		1.8	
IM12	Sunny	Moderate	16:23	7.9	Surface	1.0	0.7	284	20.9	20.9	8.1	8.1	27.7	27.7	117.5	117.5	8.9	8.9	6.7	8.1	9	11	87	91	821149	811535	<0.2	<0.2	1.5	1.6
						1.0	0.7	287	20.9		8.1		27.7		117.5		8.9		6.7		11		87				<0.2		1.5	
					Middle	4.0	0.7	281	20.9	20.9	8.1	8.1	27.7	27.7	115.3	115.3	8.8		7.8		11		92				<0.2		1.6	
						4.0	0.7	288	20.9		8.1		27.7		115.3		8.8		7.9		10		93				<0.2		1.6	
					Bottom	6.9	0.6	284	20.9	20.9	8.1	8.1	27.7	27.7	111.3	111.3	8.5	8.5	9.6		14		94				<0.2		1.6	
						6.9	0.6	289	20.9		8.1		27.7		111.3		8.5		9.6		13		94				<0.2		1.6	
SR2	Sunny	Moderate	16:50	5.1	Surface	1.0	0.3	175	21.0	21.0	8.1	8.1	27.8	27.8	115.0	115.0	8.7	8.7	6.7	6.8	10	11	88	91	821450	814169	<0.2	<0.2	1.5	1.5
						1.0	0.3	183	21.0		8.1		27.8		115.0		8.7		6.7		9		89				<0.2		1.5	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	0.2	138	21.0	21.0	8.1	8.1	27.9	27.9	114.6	114.6	8.7	8.7	6.8		12		94				<0.2		1.5	
						4.1	0.2	145	21.0		8.1		27.9		114.6		8.7		6.8		11		94				<0.2		1.6	
SR3	Sunny	Moderate	15:32	9.1	Surface	1.0	0.4	260	21.3	21.3	8.1	8.1	26.4	26.4	124.0	124.0	9.4	9.3	4.2	5.0	8	11	-	-	822139	807576	-	-	-	-
						1.0	0.4	279	21.3		8.1		26.4		124.0		9.4		4.2		9		-				-		-	
					Middle	4.6	0.4	248	21.2	21.2	8.1	8.1	26.5	26.5	121.2	120.2	9.2		4.2		10		-				-		-	
						4.6	0.5	270	21.2		8.1		26.5		119.1		9.1		4.5		11		-				-		-	
					Bottom	8.1	0.4	221	20.6	20.6	8.0	8.0	28.0	28.0	110.4	110.4	8.4	8.4	6.4		12		-				-		-	
						8.1	0.4	239	20.6		8.0		28.0		110.4		8.4		6.5		14		-				-		-	
SR4A	Sunny	Moderate	16:29	9.5	Surface	1.0	0.5	225	20.9	20.9	8.2	8.2	27.6	27.6	112.8	112.8	8.6	8.5	6.7	6.8	14	15	-	-	817184	807824	-	-	-	-
						1.0	0.5	228	20.9		8.2		27.6		112.7		8.6		6.7		13		-				-		-	
					Middle	4.8	0.4	229	20.9	20.9	8.1	8.1	27.6	27.6	108.8	108.7	8.3		6.7		16		-				-		-	
						4.8	0.4	240	20.9		8.1		27.6		108.5		8.3		6.8		16		-				-		-	
					Bottom	8.5	0.5	231	20.7	20.7	8.1	8.1	27.6	27.6	103.0	102.9	7.8	7.8	6.9		16		-				-		-	
						8.5	0.5	240	20.7		8.1		27.6		102.8		7.8		6.9		16		-				-		-	
SR5A	Sunny	Calm	16:48	4.5	Surface	1.0	0.3	280	21.2	21.2	8.2	8.2	27.4	27.4	115.0	115.0	8.7	8.7	3.7	3.9	9	10	-	-	816592	810689	-	-	-	-
						1.0	0.3	296	21.2		8.2		27.4		115.0		8.7		3.8		10		-				-		-	
					Middle	2.3	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.3	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.2	254	21.2	21.2	8.1	8.1	27.4	27.4	107.2	107.1	8.1	8.1	3.9		10		-				-		-	
						3.5	0.2	268	21.2		8.1		27.4		106.9		8.1		4.0		11		-				-		-	
SR6	Sunny	Calm	17:13	4.2	Surface	1.0	0.2	186	20.8	20.8	8.1	8.1	27.7	27.7	110.8	110.8	8.4	8.4	11.4	11.6	18	20	-	-	817885	814669	-	-	-	-
						1.0	0.2	200	20.8		8.1		27.7		110.7		8.4		11.4		16		-				-		-	
					Middle	2.1	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.1	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.2	180	20.8	20.8	8.1	8.1	27.7	27.7	106.8	105.9	8.1	8.1	11.5		23		-				-		-	
						3.2	0.2	197	20.8		8.1		27.7		105.0		8.0		11.9		21		-				-		-	
SR7	Sunny	Moderate	17:52	16.2	Surface	1.0	0.2	218	20.7	20.7	8.0	8.0	29.0	29.0	97.4	97.4	7.4	7.4	4.1	4.6	6	10	-	-	823630	823722	-	-	-	-
						1.0	0.3	221	20.7		8.0		29.0		97.4		7.4		4.0		8		-				-		-	
					Middle	8.1	0.2	184	20.7	20.7	7.9	7.9	29.2	29.2	96.2	96.2	7.3		4.8		9		-				-		-	
						8.1	0.2	187	20.7		7.9		29.2		96.2		7.3		4.9		9		-				-		-	
					Bottom	15.2	0.2	134	20.7	20.7	7.9	7.9	29.2	29.2	95.8	95.8	7.2	7.2	4.8		12		-				-		-	
						15.2	0.2	146	20.7		7.9		29.2		95.8		7.2		4.8		14		-				-		-	
SR8	Sunny	Moderate	16:32	5.5	Surface	1.0	0.3	204	21.0	21.0	8.1	8.1	27.5	27.5	114.4	114.4	8.7	8.7	7.6	7.8	12	13	-	-	820430	811587	-	-	-	-
						1.0	0.4	205	21.0		8.1		27.5		114.4		8.7		7.6		14		-				-		-	
					Middle	2.8	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.8	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.5	0.3	232	21.0	21.0	8.1	8.1	27.6	27.6	113.0	113.0	8.6	8.6	7.9		13		-				-		-	
						4.5	0.3	241	21.0		8.1		27.6		112.9		8.6		8.0		14		-				-		-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 10 January 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	10:37	8.7	Surface	1.0	0.6	216	20.3	20.3	8.1	8.1	29.1	29.1	105.6	105.6	8.0	7.9	3.6	4.2	6	8	93	94	815636	804246	<0.2	<0.2	0.6	0.5
						1.0	0.6	235	20.3		8.1		29.0		105.6		8.0		3.6		6		92				<0.2		0.5	
					Middle	4.4	0.5	207	20.3	20.3	8.1	8.1	29.1	29.1	101.3	101.3	7.7		4.1		8		94				<0.2		0.5	
						4.4	0.5	217	20.2		8.1		29.1		101.2		7.7		4.2		7		94				<0.2		0.5	
					Bottom	7.7	0.5	197	20.1	20.1	8.1	8.1	29.6	29.6	98.6	98.6	7.5	7.5	4.8		8		95				<0.2		0.4	
						7.7	0.6	213	20.1		8.1		29.6		98.5		7.5		4.8		10		95				<0.2		0.4	
C2	Cloudy	Moderate	12:20	11.9	Surface	1.0	0.4	85	21.1	21.1	8.0	8.0	25.9	25.9	116.1	116.1	8.9	8.6	5.0	6.2	3	5	84	90	825697	806955	<0.2	<0.2	2.2	2.1
						1.0	0.4	86	21.1		8.0		25.9		116.0		8.9		5.0		5		84				<0.2		2.1	
					Middle	6.0	0.3	102	20.8	20.8	8.0	8.0	26.6	26.6	108.8	108.8	8.3		6.3		4		91				<0.2		2.1	
						6.0	0.3	108	20.8		8.0		26.6		108.8		8.3		6.3		5		91				<0.2		2.1	
					Bottom	10.9	0.3	100	20.8	20.8	8.0	8.0	27.9	27.9	106.8	106.8	8.1	8.1	7.3		6		94				<0.2		2.0	
						10.9	0.3	104	20.8		8.0		27.9		106.8		8.1		7.3		6		93				<0.2		2.0	
C3	Cloudy	Moderate	10:18	12.6	Surface	1.0	0.6	178	20.8	20.8	8.0	8.0	28.8	28.8	102.0	102.0	7.7	7.7	3.8	4.3	2	3	89	92	822098	817808	<0.2	<0.2	0.9	0.9
						1.0	0.7	193	20.8		8.0		28.8		101.9		7.7		3.8		3		90				<0.2		0.8	
					Middle	6.3	0.6	174	20.7	20.7	8.0	8.0	28.8	28.8	100.3	100.3	7.6		3.8		3		93				<0.2		0.9	
						6.3	0.6	177	20.7		8.0		28.8		100.3		7.6		3.8		3		93				<0.2		1.0	
					Bottom	11.6	0.4	146	20.7	20.7	8.0	8.0	28.9	28.9	98.3	98.3	7.4	7.4	5.2		5		94				<0.2		0.9	
						11.6	0.4	157	20.7		8.0		28.9		98.3		7.4		5.1		3		94				<0.2		0.8	
IM1	Sunny	Moderate	11:01	7.3	Surface	1.0	0.5	200	20.4	20.4	8.1	8.1	28.2	28.2	106.0	106.0	8.1	8.0	3.8	5.2	6	9	93	94	818368	806459	<0.2	<0.2	0.9	0.7
						1.0	0.5	202	20.4		8.1		28.2		105.9		8.1		3.8		6		93				<0.2		0.9	
					Middle	3.7	0.4	181	20.3	20.3	8.1	8.1	28.4	28.4	103.2	103.2	7.9		5.0		8		94				<0.2		0.7	
						3.7	0.4	193	20.3		8.1		28.4		103.1		7.9		5.0		8		93				<0.2		0.7	
					Bottom	6.3	0.3	181	20.1	20.1	8.1	8.1	28.8	28.8	100.2	100.2	7.7	7.7	6.8		12		94				<0.2		0.6	
						6.3	0.4	182	20.1		8.1		28.8		100.1		7.7		6.8		11		95				<0.2		0.5	
IM2	Sunny	Moderate	11:07	8.4	Surface	1.0	0.4	210	20.5	20.5	8.1	8.1	27.8	27.8	108.1	108.1	8.3	8.2	2.8	3.6	5	6	91	92	818835	806208	<0.2	<0.2	1.0	0.9
						1.0	0.5	227	20.5		8.1		27.8		108.1		8.3		2.8		4		91				<0.2		1.0	
					Middle	4.2	0.4	197	20.5	20.5	8.1	8.1	27.8	27.8	105.4	105.4	8.1		3.5		6		92				<0.2		1.0	
						4.2	0.4	203	20.5		8.1		27.8		105.3		8.0		3.5		4		93				<0.2		1.0	
					Bottom	7.4	0.3	167	20.3	20.3	8.1	8.1	28.3	28.3	101.5	101.5	7.8	7.8	4.6		8		93				<0.2		0.8	
						7.4	0.3	181	20.3		8.1		28.3		101.4		7.8		4.5		8		94				<0.2		0.8	
IM3	Sunny	Moderate	11:15	8.3	Surface	1.0	0.6	219	20.6	20.6	8.2	8.2	27.7	27.7	112.4	112.4	8.6	8.5	2.8	3.4	5	7	91	93	819394	806029	<0.2	<0.2	1.1	1.1
						1.0	0.6	235	20.6		8.2		27.7		112.4		8.6		2.8		5		92				<0.2		1.1	
					Middle	4.2	0.6	201	20.6	20.6	8.2	8.2	27.7	27.7	109.7	109.7	8.4		3.3		6		93				<0.2		1.2	
						4.2	0.7	216	20.6		8.2		27.7		109.6		8.4		3.3		8		93				<0.2		1.1	
					Bottom	7.3	0.6	173	20.3	20.3	8.1	8.1	28.4	28.4	105.0	105.0	8.0	8.0	4.1		9		94				<0.2		0.9	
						7.3	0.6	186	20.3		8.1		28.4		105.0		8.0		3.9		8		94				<0.2		1.0	
IM4	Sunny	Moderate	11:23	7.8	Surface	1.0	0.6	196	20.6	20.6	8.2	8.2	27.9	27.9	113.9	113.8	8.7	8.4	3.6	3.9	7	8	91	92	819568	805047	<0.2	<0.2	1.0	1.0
						1.0	0.7	198	20.6		8.2		27.9		113.7		8.7		3.6		8		92				<0.2		1.0	
					Middle	3.9	0.6	191	20.5	20.5	8.2	8.2	28.0	28.0	106.5	106.4	8.1		3.9		7		92				<0.2		0.9	
						3.9	0.6	206	20.5		8.2		28.0		106.3		8.1		3.9		9		93				<0.2		0.9	
					Bottom	6.8	0.4	205	20.3	20.4	8.1	8.1	28.5	28.5	102.2	101.8	7.8	7.8	4.2		7		93				<0.2		1.0	
						6.8	0.5	218	20.4		8.1		28.4		101.3		7.7		4.2		7		93				<0.2		1.0	
IM5	Sunny	Moderate	11:32	6.6	Surface	1.0	0.6	182	20.8	20.8	8.1	8.1	26.6	26.6	112.0	112.0	8.6	8.4	4.1	6.0	8	10	89	90	820559	804906	<0.2	<0.2	1.5	1.4
						1.0	0.7	195	20.8		8.1		26.6		111.9		8.6		4.1		9		89				<0.2		1.6	
					Middle	3.3	0.6	193	20.6	20.6	8.1	8.1	26.6	26.7	107.1	107.0	8.2		5.9		8		90				<0.2		1.5	
						3.3	0.7	201	20.6		8.1		26.7		106.9		8.2		5.9		8		90				<0.2		1.5	
					Bottom	5.6	0.5	184	20.3	20.3	8.1	8.1	27.1	27.1	101.9	101.9	7.8	7.8	8.0		14		91				<0.2		1.0	
						5.6	0.5	193	20.3		8.1		27.1		101.8		7.8		7.9		13		91				<0.2		1.1	
IM6	Sunny	Moderate	11:45	6.7	Surface	1.0	0.7	195	20.8	20.8	8.1	8.1	26.7	26.7	112.7	112.7	8.6	8.5	2.5	3.7	6	7	91	93	821076	805821	<0.2	<0.2	1.7	1.6
						1.0	0.7	213	20.8		8.1		26.7		112.6		8.6		2.5		6		92				<0.2		1.7	
					Middle	3.4	0.7	202	20.8	20.8	8.1	8.1	26.8	26.8	109.6	109.6	8.4		3.3		5		92				<0.2		1.8	
						3.4	0.7	212	20.8		8.1		26.8		109.5		8.4		3.3		6		96				<0.2		1.7	
					Bottom	5.7	0.6	200	20.3	20.3	8.1	8.1	28.1	28.1	104.6	104.6	8.0	8.0	5.3		10		93				<0.2		1.3	
						5.7	0.6	204	20.3		8.1		28.1		104.6		8.0		5.3		10		93				<0.2		1.3	
IM7	Sunny	Moderate	11:56	7.8	Surface	1.0	0.7	208	20.9	20.9	8.1	8.1	26.5	26.5	112.0	112.0	8.6	8.6	2.4	3.1	6	8	92	94	821332	806831	<0.2	<0.2	1.8	1.8
						1.0	0.7	210	20.9		8.1		26.4		112.0		8.6		2.4		7		93				<0.2		1.9	
					Middle	3.9	0.6	205	20.8	20.8	8.1	8.1	26.6	26.6	110.9	110.9	8.5		2.9		7		93				<0.2		1.8	
						3.9	0.6	215	20.8		8.1		26.6		110.9		8.5		2.9		9		94				<0.2		1.8	
					Bottom	6.8	0.5	182	20.5	20.5	8.1	8.1	27.8	27.8	109.7	109.7	8.4	8.4	3.9		8		94				<0.2		1.6	
						6.8	0.5	189	20.5		8.1		27.8		109.7		8.4		3.9		8		95				<0.2		1.7	
IM8	Cloudy	Moderate	11:40	8.1	Surface	1.0	0.5	171	20.9	20.9	8.0	8.0	26.7	26.7	111.2	111.2	8.5	8.4	7.3	7.7	7	11	85	90	821710	807851	<0.2	<0.2	1.9	1.7
						1.0	0.5	176	20.9		8.0		26.7		111.2		8.5		7.3		8		85				<0.2		1.9	
					Middle	4.1	0.5	177	20.7	20.7	8.1	8.1	27.3	27.3	108.5	108.5	8.3		7.8		11		91				<0.2		1.9	
						4.1	0.5	179	20.7		8.1		27.3		108.5		8.3		7.8		11		92				<0.2		2.0	
					Bottom	7.1	0.4	154	20.5	20.5	8.0	8.0	28.0	28.0	104.7	104.7	8.0	8.0	8.1		12		93				<0.2		1.3	
						7.1	0.4	168	20.5		8.0		28.0		104.7		8.0		8.1		14		93				<0.2		1.3	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 10 January 17 during Mid-Ebb tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	11:32	7.1	Surface	1.0	0.5	138	20.9	20.9	8.1	8.1	26.9	26.9	114.0	114.0	8.7	8.6	6.2	8.1	10	11	86	90	822103	808797	<0.2	<0.2	1.6	1.7
						1.0	0.6	142	20.9		8.1		26.9		114.0		8.7		6.2		9		86				<0.2		1.7	
					Middle	3.6	0.6	114	20.6	20.6	8.1	8.1	27.4	27.4	109.4	109.4	8.4		8.7		10		92				<0.2		1.7	
						3.6	0.6	119	20.6		8.1		27.4		109.4		8.4		8.7		9		91				<0.2		1.7	
					Bottom	6.1	0.6	126	20.5	20.5	8.1	8.1	28.0	28.0	107.2	107.2	8.2	8.2	9.3		14		93				<0.2		1.7	
						6.1	0.7	135	20.5		8.1		28.0		107.2		8.2		9.3		13		94				<0.2		1.6	
IM10	Cloudy	Moderate	11:24	8.2	Surface	1.0	0.5	144	20.8	20.8	8.1	8.1	27.3	27.3	116.8	116.8	8.9	8.7	5.5	6.8	10	9	87	91	822259	809831	<0.2	<0.2	1.5	1.5
						1.0	0.5	148	20.8		8.1		27.3		116.8		8.9		5.5		8		87				<0.2		1.5	
					Middle	4.1	0.5	127	20.7	20.7	8.1	8.1	27.5	27.5	109.6	109.6	8.4		7.2		8		92				<0.2		1.7	
						4.1	0.5	135	20.7		8.1		27.5		109.6		8.4		7.2		9		92				<0.2		1.6	
					Bottom	7.2	0.4	126	20.6	20.6	8.1	8.1	27.7	27.7	108.2	108.2	8.3	8.3	7.6		10		94				<0.2		1.4	
						7.2	0.4	138	20.6		8.1		27.7		108.2		8.3		7.6		9		93				<0.2		1.5	
IM11	Cloudy	Moderate	11:15	8.0	Surface	1.0	0.6	116	20.8	20.8	8.1	8.1	27.4	27.4	115.2	115.2	8.8	8.6	6.5	7.7	11	11	87	91	821511	810555	<0.2	<0.2	1.6	1.5
						1.0	0.6	118	20.8		8.1		27.4		115.2		8.8		6.5		10		87				<0.2		1.7	
					Middle	4.0	0.6	119	20.7	20.7	8.1	8.1	27.5	27.5	109.8	109.8	8.4		8.3		11		92				<0.2		1.4	
						4.0	0.6	127	20.7		8.1		27.5		109.8		8.4		8.3		11		92				<0.2		1.5	
					Bottom	7.0	0.6	120	20.7	20.7	8.0	8.0	27.6	27.6	108.0	108.0	8.2	8.2	8.3		11		94				<0.2		1.5	
						7.0	0.6	121	20.7		8.0		27.6		108.0		8.2		8.3		10		94				<0.2		1.5	
IM12	Cloudy	Moderate	11:06	9.1	Surface	1.0	0.5	116	20.9	20.9	8.1	8.1	27.3	27.3	118.4	118.4	9.0	8.7	5.5	7.6	9	9	88	92	821181	811512	<0.2	<0.2	1.6	1.5
						1.0	0.5	116	20.9		8.1		27.3		118.4		9.0		5.5		10		88				<0.2		1.6	
					Middle	4.6	0.5	119	20.7	20.7	8.1	8.1	27.6	27.6	109.1	109.1	8.3		7.9		8		92				<0.2		1.6	
						4.6	0.5	124	20.7		8.1		27.6		109.1		8.3		7.9		8		93				<0.2		1.5	
					Bottom	8.1	0.5	122	20.7	20.7	8.0	8.0	27.7	27.7	107.4	107.4	8.2	8.2	9.3		8		94				<0.2		1.3	
						8.1	0.5	128	20.7		8.0		27.7		107.4		8.2		9.3		9		94				<0.2		1.4	
SR2	Cloudy	Moderate	10:43	4.7	Surface	1.0	0.2	115	20.8	20.8	8.1	8.1	27.7	27.7	109.8	109.8	8.4	8.4	5.5	5.6	8	7	89	92	821449	814160	<0.2	<0.2	1.3	1.4
						1.0	0.3	120	20.8		8.1		27.7		109.8		8.4		5.5		7		89				<0.2		1.4	
					Middle	2.4	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.4	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.2	134	20.8	20.8	8.0	8.0	27.8	27.8	107.4	107.4	8.2	8.2	5.8		6		94				<0.2		1.5	
						3.7	0.2	146	20.8		8.0		27.8		107.4		8.2		5.4		6		94				<0.2		1.4	
SR3	Cloudy	Moderate	11:47	8.9	Surface	1.0	0.5	179	20.9	20.9	8.0	8.0	26.4	26.4	112.4	112.4	8.6	8.6	5.6	7.5	6	7	-	-	822153	807552	-	-	-	-
						1.0	0.5	190	20.9		8.0		26.4		112.4		8.6		5.6		8		-				-		-	
					Middle	4.5	0.3	197	20.8	20.8	8.0	8.0	26.6	26.6	110.8	110.8	8.5		7.2		6		-				-		-	
						4.5	0.3	215	20.8		8.0		26.6		110.8		8.5		7.2		6		-				-		-	
					Bottom	7.9	0.3	158	20.5	20.5	8.1	8.1	27.9	27.9	109.8	109.8	8.4	8.4	9.8		8		-				-		-	
						7.9	0.3	164	20.5		8.1		27.9		109.8		8.4		9.8		10		-				-		-	
SR4A	Sunny	Moderate	10:17	9.4	Surface	1.0	0.3	140	20.5	20.5	8.1	8.1	27.8	27.8	108.7	108.7	8.3	8.2	7.6	8.2	17	19	-	-	817173	807796	-	-	-	-
						1.0	0.3	147	20.5		8.1		27.8		108.6		8.3		7.7		15		-				-		-	
					Middle	4.7	0.3	109	20.4	20.4	8.1	8.1	27.8	27.8	105.7	105.7	8.1		8.8		21		-				-		-	
						4.7	0.3	113	20.4		8.1		27.8		105.6		8.1		8.7		20		-				-		-	
					Bottom	8.4	0.4	84	20.3	20.3	8.1	8.1	27.9	27.9	102.7	102.7	7.9	7.9	8.1		19		-				-		-	
						8.4	0.4	85	20.3		8.1		27.9		102.6		7.9		8.1		20		-				-		-	
SR5A	Sunny	Calm	09:59	3.4	Surface	1.0	0.2	204	21.0	21.0	8.1	8.1	27.3	27.3	111.2	111.1	8.4	8.4	2.9	2.9	8	7	-	-	816587	810696	-	-	-	-
						1.0	0.2	220	21.0		8.1		27.3		111.0		8.4		2.9		7		-				-		-	
					Middle	1.7	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						1.7	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.4	0.2	230	21.0	21.0	8.1	8.1	27.3	27.3	105.7	105.6	8.0	8.0	2.8		7		-				-		-	
						2.4	0.2	248	21.0		8.1		27.3		105.4		8.0		2.8		6		-				-		-	
SR6	Sunny	Calm	09:34	4.2	Surface	1.0	0.1	133	20.6	20.6	8.1	8.1	27.6	27.6	106.9	106.9	8.2	8.2	2.0	2.3	6	7	-	-	817891	814656	-	-	-	-
						1.0	0.1	144	20.6		8.1		27.6		106.8		8.2		2.1		6		-				-		-	
					Middle	2.1	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.1	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.2	120	20.6	20.6	8.1	8.1	27.6	27.6	102.8	102.7	7.8	7.8	2.5		7		-				-		-	
						3.2	0.2	120	20.6		8.1		27.6		102.6		7.8		2.5		7		-				-		-	
SR7	Cloudy	Moderate	09:36	16.1	Surface	1.0	0.2	145	20.7	20.7	7.9	7.9	29.1	29.1	97.9	97.9	7.4	7.4	4.2	4.4	8	9	-	-	823642	823748	-	-	-	-
						1.0	0.2	145	20.7		7.9		29.1		97.9		7.4		4.3		9		-				-		-	
					Middle	8.1	0.2	109	20.7	20.7	8.0	8.0	29.1	29.1	97.7	97.7	7.4		4.1		7		-				-		-	
						8.1	0.2	119	20.7		8.0		29.1		97.7		7.4		4.1		7		-				-		-	
					Bottom	15.1	0.3	156	20.7	20.7	7.9	7.9	29.1	29.1	97.2	97.2	7.4	7.4	4.9		12		-				-		-	
						15.1	0.3	168	20.7		7.9		29.1		97.2		7.4		4.9		10		-				-		-	
SR8	Cloudy	Moderate	10:59	5.2	Surface	1.0	0.2	209	20.9	20.9	8.0	8.0	27.7	27.7	111.2	111.2	8.5	8.5	6.2	6.3	6	8	-	-	820434	811609	-	-	-	-
						1.0	0.2	226	20.9		8.0		27.7		111.2		8.5		6.2		7		-				-		-	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.3	197	20.8	20.8	8.0	8.0	27.7	27.7	109.7	109.7	8.4	8.4	6.3		8		-				-		-	
						4.2	0.3	211	20.8		8.0		27.7		109.7		8.4		6.3		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 January 17 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	07:01	8.5	Surface	1.0	0.6	59	20.2	20.2	8.1	8.1	27.9	27.9	101.8	101.8	7.8	7.8	9.5	13.7	18	25	92	93	815635	804255	<0.2	<0.2	0.9	0.8
						1.0	0.7	59	20.2		8.1		27.9		101.8		7.8		9.6		17		92				<0.2		0.9	
					Middle	4.3	0.5	76	20.2	20.2	8.0	8.0	28.3	28.3	100.6	100.6	7.7		13.9		18		93				<0.2		0.8	
						4.3	0.5	78	20.2		8.0		28.3		100.5		7.7		14.1		20		94				<0.2		0.8	
					Bottom	7.5	0.5	70	20.2	20.2	8.0	8.0	28.8	28.8	98.9	98.9	7.6	7.6	17.6		38		94				<0.2		0.8	
						7.5	0.5	71	20.2		7.9		28.8		98.9		7.6		17.2		41		94				<0.2		0.8	
C2	Cloudy	Moderate	08:41	12.4	Surface	1.0	0.4	133	21.0	21.0	7.9	7.9	25.5	25.5	100.9	100.9	7.8	7.8	9.2	11.6	7	8	86	91	825676	806955	<0.2	<0.2	2.6	2.3
						1.0	0.4	136	21.0		7.9		25.5		100.9		7.8		9.3		6		87				<0.2		2.5	
					Middle	6.2	0.3	113	20.9	20.9	7.9	7.9	25.9	25.9	100.3	100.3	7.7		11.4		7		92				<0.2		2.6	
						6.2	0.3	122	20.9		7.9		25.9		100.3		7.7		11.5		7		92				<0.2		2.7	
					Bottom	11.4	0.2	138	20.8	20.8	7.9	7.9	26.4	26.4	99.8	99.8	7.7	7.7	14.1		10		94				<0.2		1.5	
						11.4	0.2	147	20.8		7.9		26.4		99.8		7.7		14.1		10		94				<0.2		1.6	
C3	Cloudy	Moderate	06:38	11.1	Surface	1.0	0.5	243	20.6	20.6	8.0	8.0	28.5	28.5	98.4	98.4	7.5	7.5	8.0	12.4	5	9	91	93	822113	817818	<0.2	<0.2	0.9	1.0
						1.0	0.5	243	20.6		8.0		28.5		98.4		7.5		8.0		5		91				<0.2		0.9	
					Middle	5.6	0.5	251	20.7	20.7	8.0	8.0	28.5	28.5	97.8	97.8	7.4		11.6		8		93				<0.2		1.0	
						5.6	0.5	256	20.7		8.0		28.5		97.8		7.4		11.6		10		92				<0.2		1.2	
					Bottom	10.1	0.4	249	20.7	20.7	8.0	8.0	28.6	28.6	97.5	97.5	7.4	7.4	17.5		12		94				<0.2		0.9	
						10.1	0.4	271	20.7		8.0		28.6		97.5		7.4		17.5		13		94				<0.2		1.0	
IM1	Cloudy	Moderate	07:21	7.7	Surface	1.0	0.5	119	20.3	20.3	8.0	8.0	28.1	28.1	99.5	99.5	7.6	7.6	7.5	9.6	14	17	91	92	818350	806477	<0.2	<0.2	1.0	1.0
						1.0	0.6	123	20.3		8.0		28.1		99.5		7.6		7.6		14		91				<0.2		1.1	
					Middle	3.9	0.4	135	20.3	20.3	8.0	8.0	28.1	28.1	98.8	98.8	7.6		10.7		17		92				<0.2		1.0	
						3.9	0.5	145	20.3		8.0		28.1		98.8		7.6		10.7		15		93				<0.2		0.9	
					Bottom	6.7	0.4	171	20.3	20.3	8.0	8.0	28.1	28.1	98.5	98.5	7.5	7.5	10.5		19		93				<0.2		1.0	
						6.7	0.4	179	20.3		8.0		28.1		98.5		7.5		10.3		21		93				<0.2		1.0	
IM2	Cloudy	Moderate	07:27	8.6	Surface	1.0	0.5	110	20.3	20.3	8.1	8.1	28.2	28.2	100.9	100.9	7.7	7.7	13.4	16.7	28	31	89	91	818858	806189	<0.2	<0.2	1.0	1.0
						1.0	0.5	118	20.3		8.1		28.2		100.9		7.7		13.3		29		90				<0.2		1.0	
					Middle	4.3	0.5	119	20.3	20.3	8.0	8.0	28.2	28.2	100.3	100.3	7.7		16.9		27		90				<0.2		1.0	
						4.3	0.5	127	20.3		8.0		28.2		100.2		7.7		16.9		28		91				<0.2		1.0	
					Bottom	7.6	0.5	116	20.3	20.3	8.0	8.0	28.2	28.2	99.5	99.5	7.6	7.6	19.9		36		91				<0.2		0.9	
						7.6	0.5	117	20.3		8.0		28.2		99.5		7.6		19.9		39		92				<0.2		1.0	
IM3	Cloudy	Moderate	07:35	8.8	Surface	1.0	0.6	145	20.3	20.3	8.1	8.1	28.3	28.3	100.7	100.7	7.7	7.7	16.3	18.4	24	29	91	92	819419	806001	<0.2	<0.2	0.9	0.9
						1.0	0.6	153	20.3		8.1		28.3		100.7		7.7		16.4		23		92				<0.2		0.9	
					Middle	4.4	0.5	110	20.3	20.3	8.1	8.1	28.3	28.3	100.6	100.6	7.7		18.6		30		92				<0.2		0.9	
						4.4	0.6	116	20.3		8.1		28.3		100.6		7.7		18.5		28		92				<0.2		0.9	
					Bottom	7.8	0.6	120	20.3	20.3	8.1	8.1	28.3	28.3	100.5	100.5	7.7	7.7	20.4		35		93				<0.2		0.9	
						7.8	0.6	129	20.3		8.1		28.3		100.5		7.7		20.0		32		93				<0.2		1.0	
IM4	Cloudy	Moderate	07:44	8.4	Surface	1.0	0.7	85	20.3	20.3	8.1	8.1	27.9	27.9	102.6	102.6	7.9	7.9	6.4	12.8	11	18	89	90	819554	805040	<0.2	<0.2	1.1	1.0
						1.0	0.7	88	20.3		8.1		27.9		102.5		7.9		6.5		12		89				<0.2		1.1	
					Middle	4.2	0.6	105	20.3	20.3	8.1	8.1	28.2	28.2	101.6	101.7	7.8		11.6		14		90				<0.2		1.2	
						4.2	0.7	106	20.3		8.1		28.2		101.7		7.8		11.8		16		90				<0.2		1.0	
					Bottom	7.4	0.6	133	20.3	20.3	8.1	8.1	28.4	28.4	101.7	101.7	7.8	7.8	20.5		26		91				<0.2		0.9	
						7.4	0.6	136	20.3		8.1		28.4		101.7		7.8		19.8		26		90				<0.2		0.8	
IM5	Cloudy	Moderate	07:53	7.2	Surface	1.0	0.6	88	20.4	20.4	8.1	8.1	27.6	27.6	101.4	101.4	7.8	7.8	7.7	12.0	19	21	92	94	820555	804927	<0.2	<0.2	1.0	1.1
						1.0	0.7	94	20.3		8.1		27.6		101.4		7.8		7.9		18		93				<0.2		1.1	
					Middle	3.6	0.6	87	20.3	20.3	8.1	8.1	27.9	27.9	101.1	101.1	7.8		12.8		22		93				<0.2		1.1	
						3.6	0.6	89	20.3		8.1		27.9		101.0		7.7		13.1		21		94				<0.2		1.2	
					Bottom	6.2	0.6	94	20.3	20.3	8.1	8.1	28.2	28.2	100.9	100.9	7.7	7.7	15.3		22		94				<0.2		1.1	
						6.2	0.6	97	20.3		8.1		28.2		100.9		7.7		14.9		21		95				<0.2		1.1	
IM6	Cloudy	Moderate	08:01	7.3	Surface	1.0	0.6	92	20.3	20.3	8.1	8.1	27.9	27.9	101.0	101.0	7.7	7.7	8.9	13.7	18	20	93	94	821076	805822	<0.2	<0.2	1.3	1.2
						1.0	0.7	95	20.3		8.1		27.9		101.0		7.7		9.0		20		93				<0.2		1.2	
					Middle	3.7	0.5	109	20.3	20.3	8.1	8.1	27.9	27.9	100.6	100.6	7.7		11.8		18		94				<0.2		1.1	
						3.7	0.5	116	20.3		8.1		27.9		100.6		7.7		11.8		19		93				<0.2		1.2	
					Bottom	6.3	0.6	122	20.3	20.3	8.1	8.1	28.0	28.0	100.1	100.1	7.7	7.7	20.3		20		94				<0.2		1.2	
						6.3	0.6	122	20.3		8.1		28.0		100.1		7.7		20.3		22		95				<0.2		1.0	
IM7	Cloudy	Moderate	08:07	8.8	Surface	1.0	0.6	79	20.3	20.3	8.1	8.1	27.9	27.9	101.0	101.0	7.7	7.7	11.2	13.8	20	23	93	94	821355	806817	<0.2	<0.2	1.2	1.2
						1.0	0.7	85	20.3		8.1		27.9		101.0		7.7		11.2		22		92				<0.2		1.2	
					Middle	4.4	0.6	78	20.3	20.3	8.1	8.1	27.9	27.9	100.7	100.7	7.7		14.8		25		93				<0.2		1.2	
						4.4	0.6	85	20.3		8.1		27.9		100.7		7.7		14.9		24		94				<0.2		1.1	
					Bottom	7.8	0.6	92	20.3	20.3	8.1	8.1	28.0	28.0	100.6	100.7	7.7	7.7	15.5		24		94				<0.2		1.2	
						7.8	0.6	100	20.3		8.1		28.0		100.7		7.7		15.4		24		95				<0.2		1.2	
IM8	Cloudy	Moderate	07:58	8.5	Surface	1.0	0.5	108	20.7	20.7	8.0	8.0	26.9	26.9	101.7	101.7	7.8	7.8	9.3	11.5	7	10	87	91	821714	807850	<0.2	<0.2	1.7	1.6
						1.0	0.5	110	20.7		8.0		26.9		101.7		7.8		9.3		8		86				<0.2		1.6	
					Middle	4.3	0.4	119	20.7	20.7	8.0	8.0	27.2	27.2	100.9	100.9	7.7		11.3		10		92				<0.2		1.7	
						4.3	0.4	127	20.7		8.0		27.2		100.9		7.7		11.3		12		92				<0.2		1.7	
					Bottom	7.5	0.3	136	20.6	20.6	8.0	8.0	27.6	27.6	100.4	100.4	7.7	7.7	14.0		13		94				<0.2		1.5	
						7.5	0.3	143	20.6		8.0		27.6		100.4		7.7		14.0		12		94				<0.2		1.5	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 12 January 17 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	07:48	7.3	Surface	1.0	0.4	151	20.8	20.8	8.0	8.0	26.6	26.6	102.5	102.5	7.9	7.9	10.0	13.3	12	14	87	91	822107	808814	<0.2	<0.2	1.9	1.9
						1.0	0.4	163	20.8		8.0		26.6		102.5		7.9		10.0		12		87				<0.2		1.7	
					Middle	3.7	0.3	129	20.8	20.8	8.0	8.0	26.7	26.7	101.9	101.9	7.8		12.4		15		92				<0.2		1.8	
						3.7	0.3	139	20.8		8.0		26.7		101.9		7.8		12.4		16		92				<0.2		2.0	
					Bottom	6.3	0.3	139	20.8	20.8	8.0	8.0	26.9	26.9	100.8	100.9	7.7	7.7	17.7		14		94				<0.2		2.1	
						6.3	0.3	151	20.8		8.0		26.9		100.9		7.7		17.4		13		94				<0.2		2.1	
IM10	Cloudy	Moderate	07:39	8.1	Surface	1.0	0.5	271	20.6	20.6	8.0	8.0	27.7	27.7	102.5	102.5	7.8	7.8	9.2	11.2	12	14	87	91	822256	809830	<0.2	<0.2	1.5	1.5
						1.0	0.5	291	20.6		8.0		27.7		102.5		7.8		9.1		13		88				<0.2		1.4	
					Middle	4.1	0.5	273	20.6	20.6	8.0	8.0	27.9	27.9	102.1	102.1	7.8		11.5		14		92				<0.2		1.5	
						4.1	0.5	292	20.6		8.0		27.9		102.1		7.8		11.5		15		92				<0.2		1.4	
					Bottom	7.1	0.4	233	20.6	20.6	8.0	8.0	27.9	27.9	101.1	101.1	7.7	7.7	13.0		16		94				<0.2		1.5	
						7.1	0.4	245	20.6		8.0		27.9		101.1		7.7		12.8		16		94				<0.2		1.5	
IM11	Cloudy	Moderate	07:31	8.3	Surface	1.0	0.4	251	20.6	20.6	8.0	8.0	27.7	27.7	102.1	102.1	7.8	7.8	8.8	11.0	12	13	88	91	821520	810561	<0.2	<0.2	1.6	1.6
						1.0	0.4	270	20.6		8.0		27.7		102.1		7.8		8.8		11		88				<0.2		1.5	
					Middle	4.2	0.4	244	20.6	20.6	8.0	8.0	27.8	27.8	101.6	101.6	7.8		11.5		12		92				<0.2		1.6	
						4.2	0.4	257	20.6		8.0		27.8		101.6		7.8		11.5		11		93				<0.2		1.6	
					Bottom	7.3	0.3	241	20.6	20.6	8.0	8.0	27.8	27.8	100.8	100.8	7.7	7.7	12.6		16		93				<0.2		1.6	
						7.3	0.3	250	20.6		8.0		27.8		100.8		7.7		12.6		14		94				<0.2		1.5	
IM12	Cloudy	Moderate	07:23	8.6	Surface	1.0	0.4	263	20.6	20.6	8.0	8.0	27.8	27.8	103.1	103.1	7.9	7.9	10.0	13.9	9	13	89	92	821147	811503	<0.2	<0.2	1.4	1.4
						1.0	0.5	286	20.6		8.0		27.8		103.1		7.9		10.1		8		88				<0.2		1.5	
					Middle	4.3	0.5	262	20.6	20.6	8.0	8.0	27.9	27.9	103.0	103.0	7.9		14.6		16		93				<0.2		1.3	
						4.3	0.5	282	20.6		8.0		27.9		103.0		7.9		15.0		16		92				<0.2		1.4	
					Bottom	7.6	0.4	271	20.6	20.6	8.0	8.0	27.9	27.9	102.5	102.5	7.8	7.8	16.8		16		94				<0.2		1.4	
						7.6	0.4	280	20.6		8.0		27.9		102.5		7.8		16.9		15		94				<0.2		1.5	
SR2	Cloudy	Moderate	07:00	4.5	Surface	1.0	0.2	159	20.6	20.6	8.0	8.0	27.9	27.9	101.5	101.5	7.8	7.8	8.3	8.3	12	15	90	92	821479	814154	<0.2	<0.2	1.4	1.4
						1.0	0.2	169	20.6		8.0		27.9		101.5		7.8		8.3		11		89				<0.2		1.4	
					Middle	2.3	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.3	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.2	191	20.6	20.6	8.0	8.0	27.9	27.9	101.2	101.2	7.7	7.7	8.2		17		94				<0.2		1.4	
						3.5	0.2	205	20.6		8.0		27.9		101.2		7.7		8.2		18		94				<0.2		1.4	
SR3	Cloudy	Moderate	08:05	9.1	Surface	1.0	0.6	46	20.7	20.7	8.0	8.0	26.5	26.5	102.8	102.8	7.9	7.9	9.1	10.9	12	13	-	-	822129	807553	-	-	-	-
						1.0	0.6	49	20.7		8.0		26.5		102.8		7.9		9.1		10		-				-		-	
					Middle	4.6	0.6	62	20.8	20.8	8.0	8.0	26.8	26.8	101.6	101.6	7.8		11.2		14		-				-		-	
						4.6	0.7	62	20.8		8.0		26.8		101.6		7.8		11.2		14		-				-		-	
					Bottom	8.1	0.4	105	20.6	20.6	8.0	8.0	27.5	27.5	100.8	100.8	7.7	7.7	12.4		14		-				-		-	
						8.1	0.5	108	20.6		8.0		27.5		100.7		7.7		12.5		12		-				-		-	
SR4A	Cloudy	Moderate	06:37	8.9	Surface	1.0	0.3	162	20.3	20.3	8.0	8.0	28.0	28.0	98.4	98.5	7.5	7.5	4.6	4.7	15	14	-	-	817207	807817	-	-	-	-
						1.0	0.3	177	20.3		8.0		28.0		98.5		7.5		4.6		14		-				-		-	
					Middle	4.5	0.2	135	20.3	20.3	8.0	8.0	28.0	28.0	98.2	98.2	7.5		5.2		13		-				-		-	
						4.5	0.3	142	20.3		8.0		28.0		98.2		7.5		5.2		14		-				-		-	
					Bottom	7.9	0.3	134	20.3	20.3	7.9	7.9	27.9	27.9	97.8	97.8	7.5	7.5	4.4		14		-				-		-	
						7.9	0.3	144	20.3		7.9		27.9		97.8		7.5		4.4		15		-				-		-	
SR5A	Cloudy	Moderate	06:20	4.3	Surface	1.0	0.1	299	20.4	20.4	8.0	8.0	27.5	27.5	98.6	98.6	7.6	7.6	5.2	5.0	13	14	-	-	816589	810679	-	-	-	-
						1.0	0.2	310	20.4		7.9		27.4		98.6		7.6		5.3		12		-				-		-	
					Middle	2.2	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.2	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.2	285	20.4	20.4	7.9	7.9	27.3	27.3	98.2	98.2	7.5	7.5	4.7		14		-				-		-	
						3.3	0.2	304	20.4		7.9		27.3		98.2		7.5		4.7		15		-				-		-	
SR6	Cloudy	Moderate	05:55	4.5	Surface	1.0	0.1	215	20.4	20.4	7.9	7.9	26.8	26.8	98.7	98.7	7.6	7.6	4.1	4.0	11	13	-	-	817879	814682	-	-	-	-
						1.0	0.1	224	20.4		7.9		26.8		98.7		7.6		4.1		13		-				-		-	
					Middle	2.3	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.3	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.1	211	20.4	20.4	7.9	7.9	26.3	26.3	99.3	99.3	7.7	7.7	4.0		12		-				-		-	
						3.5	0.1	212	20.4		7.8		26.3		99.3		7.7		3.9		14		-				-		-	
SR7	Cloudy	Moderate	05:57	16.2	Surface	1.0	0.2	202	20.6	20.6	8.0	8.0	28.4	28.4	97.5	97.5	7.4	7.4	5.5	6.9	10	13	-	-	823632	823737	-	-	-	-
						1.0	0.2	214	20.6		8.0		28.4		97.5		7.4		5.5		8		-				-		-	
					Middle	8.1	0.2	121	20.6	20.6	7.9	7.9	28.7	28.7	97.2	97.2	7.4		6.5		13		-				-		-	
						8.1	0.2	121	20.6		7.9		28.7		97.2		7.4		6.6		14		-				-		-	
					Bottom	15.2	0.2	95	20.6	20.6	7.9	7.9	28.8	28.8	97.4	97.4	7.4	7.4	8.6		15		-				-		-	
						15.2	0.2	100	20.6		7.9		28.8		97.4		7.4		8.5		16		-				-		-	
SR8	Cloudy	Moderate	07:14	5.1	Surface	1.0	0.3	216	20.7	20.7	8.0	8.0	27.4	27.4	102.6	102.6	7.8	7.8	7.4	8.4	11	12	-	-	820426	811588	-	-	-	-
						1.0	0.3	228	20.7		8.0		27.4		102.6		7.8		7.4		13		-				-		-	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	0.2	219	20.6	20.6	8.0	8.0	27.9	27.9	102.4	102.4	7.8	7.8	9.4		12		-				-		-	
						4.1	0.2	221	20.6		8.0		27.9		102.4		7.8		9.4		12		-				-		-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 12 January 17 during Mid-Ebb tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	12:22	8.8	Surface	1.0	0.5	188	20.2	20.2	8.1	8.1	28.4	28.4	101.0	101.0	7.7	7.7	5.0	5.3	8	8	92	94	815629	804248	<0.2	<0.2	1.0	1.8
						1.0	0.5	202	20.2		8.1		28.4		101.0		7.7		5.0		7		93				<0.2		1.0	
					Middle	4.4	0.4	179	20.2	20.2	8.1	8.1	28.6	28.6	100.0	100.0	7.7		5.5		8		93				<0.2		0.9	
						4.4	0.4	192	20.2		8.1		28.6		100.0		7.6		5.5		8		94				<0.2		1.0	
					Bottom	7.8	0.4	196	20.2	20.2	8.0	8.0	29.0	29.0	99.9	99.9	7.6	7.6	5.5		9		94				<0.2		3.4	
						7.8	0.4	201	20.2		8.0		29.0		99.9		7.6		5.5		10		95				<0.2		3.6	
C2	Cloudy	Moderate	11:19	12.3	Surface	1.0	0.3	118	20.9	20.9	7.9	7.9	25.5	25.5	100.7	100.7	7.8	7.8	9.3	15.9	9	10	86	90	825691	806928	<0.2	<0.2	3.1	2.9
						1.0	0.3	124	20.9		7.9		25.5		100.7		7.8		9.3		8		85				<0.2		2.8	
					Middle	6.2	0.3	114	20.8	20.8	7.9	7.9	26.1	26.1	100.6	100.6	7.7		12.4		10		92				<0.2		2.7	
						6.2	0.3	116	20.8		7.9		26.1		100.6		7.7		12.4		10		91				<0.2		2.7	
					Bottom	11.3	0.3	260	20.7	20.7	8.0	8.0	27.5	27.5	100.7	100.7	7.7	7.7	25.9		13		93				<0.2		2.9	
						11.3	0.3	265	20.7		8.0		27.5		100.7		7.7		25.9		12		93				<0.2		3.0	
C3	Cloudy	Moderate	13:16	12.5	Surface	1.0	0.4	77	20.6	20.6	8.0	8.0	28.2	28.2	99.6	99.6	7.6	7.5	5.7	9.3	5	8	89	92	822125	817798	<0.2	<0.2	1.0	1.0
						1.0	0.5	83	20.6		8.0		28.2		99.6		7.6		5.7		7		89				<0.2		0.9	
					Middle	6.3	0.4	86	20.6	20.6	8.0	8.0	28.4	28.4	97.0	97.0	7.4		7.5		8		93				<0.2		1.1	
						6.3	0.4	90	20.6		8.0		28.4		97.0		7.4		7.5		9		93				<0.2		1.0	
					Bottom	11.5	0.4	105	20.6	20.6	7.9	7.9	28.7	28.7	95.8	95.8	7.3	7.3	14.6		9		95				<0.2		0.9	
						11.5	0.4	107	20.6		7.9		28.7		95.8		7.3		14.6		11		94				<0.2		1.1	
IM1	Cloudy	Moderate	12:01	7.4	Surface	1.0	0.3	170	20.3	20.3	8.1	8.1	28.1	28.1	100.4	100.4	7.7	7.7	6.3	6.8	11	11	92	93	818335	806472	<0.2	<0.2	1.2	1.1
						1.0	0.3	185	20.3		8.1		28.1		100.4		7.7		6.3		10		93				<0.2		1.0	
					Middle	3.7	0.3	169	20.3	20.3	8.1	8.1	28.1	28.1	100.3	100.3	7.7		7.0		10		93				<0.2		1.1	
						3.7	0.3	169	20.3		8.1		28.1		100.3		7.7		6.9		11		94				<0.2		1.0	
					Bottom	6.4	0.3	160	20.2	20.2	8.0	8.0	28.4	28.4	99.4	99.4	7.6	7.6	7.2		11		94				<0.2		1.2	
						6.4	0.3	170	20.2		8.0		28.4		99.4		7.6		7.2		12		94				<0.2		1.1	
IM2	Cloudy	Moderate	11:56	8.5	Surface	1.0	0.5	150	20.2	20.2	8.1	8.1	28.3	28.3	102.5	102.5	7.9	7.8	5.7	6.7	9	10	89	90	818849	806189	<0.2	<0.2	1.0	1.0
						1.0	0.5	162	20.2		8.1		28.2		102.5		7.9		5.6		10		88				<0.2		0.9	
					Middle	4.3	0.5	171	20.2	20.2	8.1	8.1	28.3	28.3	101.1	101.1	7.8		6.5		10		89				<0.2		1.1	
						4.3	0.5	174	20.2		8.1		28.3		101.0		7.7		6.5		10		90				<0.2		0.9	
					Bottom	7.5	0.4	144	20.2	20.2	8.1	8.1	28.5	28.5	100.2	100.2	7.7	7.7	7.9		11		91				<0.2		1.0	
						7.5	0.5	150	20.2		8.0		28.5		100.2		7.7		7.9		11		90				<0.2		1.0	
IM3	Cloudy	Moderate	11:49	8.7	Surface	1.0	0.4	103	20.2	20.2	8.1	8.1	28.1	28.1	102.2	102.2	7.8	7.8	5.7	6.8	9	11	89	90	819430	806013	<0.2	<0.2	1.0	1.0
						1.0	0.5	108	20.2		8.1		28.1		102.1		7.8		5.8		11		89				<0.2		1.1	
					Middle	4.4	0.4	158	20.2	20.2	8.1	8.1	28.2	28.2	101.2	101.2	7.8		6.4		10		90				<0.2		1.0	
						4.4	0.4	160	20.2		8.1		28.2		101.2		7.8		6.5		12		90				<0.2		0.9	
					Bottom	7.7	0.3	157	20.2	20.2	8.1	8.1	28.6	28.6	100.0	100.0	7.6	7.6	8.3		12		91				<0.2		0.9	
						7.7	0.4	167	20.2		8.1		28.6		100.0		7.6		8.3		12		92				<0.2		1.0	
IM4	Cloudy	Moderate	11:41	8.7	Surface	1.0	0.4	115	20.3	20.3	8.1	8.1	27.7	27.7	102.8	102.8	7.9	7.9	5.5	7.3	11	10	88	90	819556	805040	<0.2	<0.2	1.1	1.1
						1.0	0.4	117	20.3		8.1		27.7		102.8		7.9		5.6		9		88				<0.2		1.2	
					Middle	4.4	0.4	121	20.3	20.3	8.1	8.1	28.0	28.0	101.4	101.4	7.8		6.5		8		89				<0.2		1.1	
						4.4	0.4	126	20.3		8.1		28.0		101.4		7.8		6.5		9		90				<0.2		1.2	
					Bottom	7.7	0.3	162	20.2	20.2	8.1	8.1	28.7	28.7	100.2	100.3	7.7	7.7	9.9		11		91				<0.2		0.8	
						7.7	0.4	167	20.2		8.1		28.7		100.3		7.7		9.6		12		91				<0.2		0.9	
IM5	Cloudy	Moderate	11:34	7.2	Surface	1.0	0.4	127	20.3	20.3	8.1	8.1	27.5	27.5	102.5	102.5	7.9	7.9	5.5	7.5	9	11	92	94	820582	804940	<0.2	<0.2	1.3	1.2
						1.0	0.4	132	20.3		8.1		27.5		102.5		7.9		5.5		8		93				<0.2		1.2	
					Middle	3.6	0.4	120	20.3	20.3	8.1	8.1	27.7	27.7	101.4	101.4	7.8		6.8		8		93				<0.2		1.3	
						3.6	0.5	130	20.3		8.1		27.7		101.4		7.8		6.9		10		94				<0.2		1.2	
					Bottom	6.2	0.4	142	20.3	20.3	8.0	8.0	28.5	28.5	100.1	100.1	7.7	7.7	10.3		14		94				<0.2		0.9	
						6.2	0.4	156	20.3		8.0		28.5		100.1		7.7		10.2		14		95				<0.2		1.0	
IM6	Cloudy	Moderate	11:26	7.2	Surface	1.0	0.4	137	20.3	20.3	8.1	8.1	27.9	27.9	102.2	102.2	7.8	7.8	6.4	9.6	10	15	94	94	821077	805829	<0.2	<0.2	1.1	1.0
						1.0	0.4	149	20.3		8.1		27.9		102.2		7.8		6.4		10		93				<0.2		1.1	
					Middle	3.6	0.3	129	20.3	20.3	8.1	8.1	28.0	28.0	101.8	101.8	7.8		7.9		16		93				<0.2		1.1	
						3.6	0.4	133	20.3		8.1		28.0		101.8		7.8		8.0		18		94				<0.2		0.9	
					Bottom	6.2	0.3	134	20.3	20.3	8.1	8.1	28.3	28.3	100.6	100.6	7.7	7.7	14.5		17		94				<0.2		0.9	
						6.2	0.3	141	20.3		8.1		28.3		100.6		7.7		14.4		19		94				<0.2		1.0	
IM7	Cloudy	Moderate	11:18	7.9	Surface	1.0	0.6	86	20.3	20.3	8.1	8.1	28.0	28.0	101.7	101.7	7.8	7.8	8.1	11.0	12	17	93	94	821368	806828	<0.2	<0.2	1.0	1.0
						1.0	0.6	88	20.3		8.1		28.0		101.7		7.8		8.1		12		93				<0.2		1.0	
					Middle	4.0	0.5	94	20.3	20.3	8.1	8.1	28.1	28.1	101.1	101.1	7.8		10.5		16		93				<0.2		1.0	
						4.0	0.5	101	20.3		8.1		28.1		101.1		7.8		10.6		18		94				<0.2		1.0	
					Bottom	6.9	0.5	89	20.3	20.3	8.0	8.0	28.2	28.2	99.6	99.6	7.6	7.6	14.4		22		94				<0.2		1.0	
						6.9	0.5	90	20.3		8.0		28.2		99.6		7.6		14.4		22		95				<0.2		1.1	
IM8	Cloudy	Moderate	11:58	8.4	Surface	1.0	0.4	103	20.4	20.4	8.0	8.0	28.1	28.1	104.3	104.3	8.0	8.0	14.3	17.4	14	17	86	90	821688	807834	<0.2	<0.2	1.0	1.0
						1.0	0.4	105	20.4		8.0		28.1		104.3		8.0		14.5		16		86				<0.2		1.1	
					Middle	4.2	0.4	108	20.4	20.4	8.0	8.0	28.1	28.1	103.9	103.9	7.9		17.2		17		92				<0.2		1.0	
						4.2	0.4	112	20.4		8.0		28.1		103.9		7.9		17.1		18		92				<0.2		0.9	
					Bottom	7.4	0.4	98	20.4	20.4	8.0	8.0	28.1	28.1	103.0	103.0	7.9	7.9	20.8		18		93				<0.2		1.1	
						7.4	0.4	101	20.4		8.0		28.1		103.0		7.9		20.7		16		93				<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 12 January 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	12:05	7.5	Surface	1.0	0.5	78	20.5	20.5	8.0	8.0	27.9	27.9	103.1	103.1	7.9	7.9	11.7	14.7	12	13	87	91	822108	808810	<0.2	<0.2	1.1	1.2
						1.0	0.5	78	20.5		8.0		27.9		103.1		7.9		11.7		11		87				<0.2		1.2	
					Middle	3.8	0.5	85	20.5	20.5	8.0	8.0	27.9	27.9	103.0	103.0	7.9		13.6		14		92				<0.2		1.2	
						3.8	0.5	90	20.5		8.0		27.9		103.0		7.9		13.7		12		92				<0.2		1.1	
					Bottom	6.5	0.5	87	20.5	20.5	8.0	8.0	28.0	28.0	103.0	103.0	7.9	7.9	18.7		14		94				<0.2		1.2	
						6.5	0.5	92	20.5		8.0		28.0		103.0		7.9		18.7		14		93				<0.2		1.2	
IM10	Cloudy	Moderate	12:14	8.0	Surface	1.0	0.5	94	20.6	20.6	8.0	8.0	27.4	27.4	101.4	101.4	7.8	7.8	10.0	11.5	6	11	87	91	822223	809842	<0.2	<0.2	1.5	1.5
						1.0	0.5	99	20.6		8.0		27.4		101.4		7.8		10.0		7		87				<0.2		1.6	
					Middle	4.0	0.4	97	20.6	20.6	8.0	8.0	27.5	27.5	101.2	101.2	7.7		11.6		9		92				<0.2		1.6	
						4.0	0.4	102	20.6		8.0		27.5		101.2		7.7		11.5		8		92				<0.2		1.5	
					Bottom	7.0	0.3	104	20.6	20.6	8.0	8.0	27.6	27.6	100.9	100.9	7.7	7.7	13.1		17		94				<0.2		1.3	
						7.0	0.3	111	20.6		8.0		27.6		100.9		7.7		13.0		19		93				<0.2		1.3	
IM11	Cloudy	Moderate	12:23	7.6	Surface	1.0	0.6	101	20.7	20.7	8.0	8.0	27.1	27.1	102.7	102.7	7.9	7.9	7.1	8.1	6	8	87	91	821503	810552	<0.2	<0.2	1.5	1.4
						1.0	0.7	104	20.7		8.0		27.1		102.7		7.9		7.2		7		87				<0.2		1.4	
					Middle	3.8	0.5	111	20.6	20.6	8.0	8.0	27.6	27.6	101.8	101.8	7.8		8.2		6		93				<0.2		1.5	
						3.8	0.5	116	20.6		8.0		27.6		101.8		7.8		8.2		8		92				<0.2		1.5	
					Bottom	6.6	0.5	118	20.6	20.6	8.0	8.0	27.8	27.8	101.0	101.0	7.7	7.7	8.9		10		94				<0.2		1.3	
						6.6	0.5	126	20.6		8.0		27.8		101.0		7.7		8.9		12		94				<0.2		1.2	
IM12	Cloudy	Moderate	12:31	9.0	Surface	1.0	0.6	95	20.7	20.7	8.0	8.0	26.9	26.9	103.1	103.1	7.9	7.9	6.4	9.2	6	7	88	92	821177	811515	<0.2	<0.2	1.6	1.5
						1.0	0.6	101	20.7		8.0		26.9		103.1		7.9		6.4		6		88				<0.2		1.6	
					Middle	4.5	0.5	99	20.6	20.6	8.0	8.0	27.6	27.6	101.4	101.4	7.8		8.6		7		93				<0.2		1.7	
						4.5	0.5	106	20.6		8.0		27.6		101.4		7.8		8.6		7		92				<0.2		1.5	
					Bottom	8.0	0.4	108	20.6	20.6	8.0	8.0	27.9	27.9	100.7	100.7	7.7	7.7	12.6		8		94				<0.2		1.3	
						8.0	0.4	112	20.6		8.0		27.9		100.7		7.7		12.6		7		94				<0.2		1.3	
SR2	Cloudy	Moderate	12:55	4.3	Surface	1.0	0.4	64	20.6	20.6	8.0	8.0	28.0	28.0	102.0	102.0	7.8	7.8	6.6	6.6	6	8	88	91	821448	814158	<0.2	<0.2	1.1	1.1
						1.0	0.5	68	20.6		8.0		28.0		102.0		7.8		6.6		8		88				<0.2		1.1	
					Middle	2.2	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.2	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.4	74	20.6	20.6	8.0	8.0	28.0	28.0	101.6	101.6	7.8	7.8	6.6		8		94				<0.2		1.2	
						3.3	0.4	75	20.6		8.0		28.0		101.6		7.8		6.7		8		94				<0.2		1.1	
SR3	Cloudy	Moderate	11:48	8.2	Surface	1.0	0.5	104	20.6	20.6	8.0	8.0	26.9	26.9	103.8	103.8	8.0	8.0	11.2	15.9	11	15	-	-	822151	807577	-	-	-	-
						1.0	0.5	113	20.6		8.0		26.9		103.8		8.0		11.3		11		-				-		-	
					Middle	4.1	0.5	77	20.5	20.5	8.0	8.0	27.8	27.8	103.3	103.3	7.9		14.6		16		-				-		-	
						4.1	0.5	80	20.5		8.0		27.8		103.3		7.9		14.7		15		-				-		-	
					Bottom	7.2	0.4	74	20.5	20.5	8.0	8.0	28.0	28.0	102.8	102.8	7.9	7.9	21.8		17		-				-		-	
						7.2	0.4	78	20.5		8.0		28.0		102.8		7.9		21.8		19		-				-		-	
SR4A	Cloudy	Moderate	12:43	9.7	Surface	1.0	0.4	85	20.3	20.3	8.1	8.1	28.0	28.0	100.6	100.6	7.7	7.7	6.6	6.7	11	13	-	-	817179	807823	-	-	-	-
						1.0	0.4	87	20.3		8.1		28.0		100.6		7.7		6.6		13		-				-		-	
					Middle	4.9	0.4	87	20.3	20.3	8.1	8.1	28.0	28.0	100.3	100.3	7.7		6.8		12		-				-		-	
						4.9	0.4	89	20.3		8.1		28.0		100.3		7.7		6.8		12		-				-		-	
					Bottom	8.7	0.3	82	20.3	20.3	8.0	8.0	28.0	28.0	100.2	100.2	7.7	7.7	6.6		15		-				-		-	
						8.7	0.3	85	20.3		8.0		28.0		100.2		7.7		6.6		13		-				-		-	
SR5A	Cloudy	Calm	12:59	4.1	Surface	1.0	0.2	97	20.4	20.4	8.0	8.0	28.1	28.1	99.4	99.4	7.6	7.6	5.1	5.3	10	10	-	-	816574	810687	-	-	-	-
						1.0	0.2	100	20.4		8.0		28.1		99.4		7.6		5.1		9		-				-		-	
					Middle	2.1	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.1	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.1	104	20.4	20.4	7.9	7.9	28.1	28.1	98.9	98.9	7.6	7.6	5.5		9		-				-		-	
						3.1	0.1	106	20.3		7.9		28.1		98.9		7.6		5.5		10		-				-		-	
SR6	Cloudy	Calm	13:20	4.6	Surface	1.0	0.1	189	20.5	20.5	8.0	8.0	28.0	28.0	98.4	98.4	7.5	7.5	3.8	4.2	7	8	-	-	817896	814660	-	-	-	-
						1.0	0.1	206	20.5		8.0		28.0		98.4		7.5		3.9		8		-				-		-	
					Middle	2.3	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.3	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.1	183	20.4	20.4	7.9	7.9	28.0	28.0	98.6	98.6	7.5	7.5	4.5		8		-				-		-	
						3.6	0.1	186	20.4		7.9		28.0		98.6		7.5		4.5		10		-				-		-	
SR7	Cloudy	Moderate	13:41	16.5	Surface	1.0	0.4	122	20.6	20.6	8.0	8.0	28.7	28.7	97.2	97.2	7.4	7.4	4.6	4.9	4	5	-	-	823631	823750	-	-	-	-
						1.0	0.4	126	20.6		8.0		28.7		97.2		7.4		4.6		5		-				-		-	
					Middle	8.3	0.3	123	20.6	20.6	8.0	8.0	28.7	28.7	96.5	96.5	7.3		5.0		4		-				-		-	
						8.3	0.3	130	20.6		8.0		28.7		96.5		7.3		5.0		5		-				-		-	
					Bottom	15.5	0.2	126	20.6	20.6	8.0	8.0	28.7	28.7	96.2	96.2	7.3	7.3	5.1		6		-				-		-	
						15.5	0.3	137	20.6		8.0		28.7		96.2		7.3		5.1		8		-				-		-	
SR8	Cloudy	Moderate	12:40	5.4	Surface	1.0	0.2	180	20.7	20.7	8.0	8.0	27.4	27.4	101.5	101.5	7.8	7.8	9.0	9.8	8	8	-	-	820411	811575	-	-	-	-
						1.0	0.2	191	20.7		8.0		27.4		101.5		7.8		9.0		7		-				-		-	
					Middle	2.7	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.7	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	0.3	186	20.6	20.6	8.0	8.0	27.8	27.8	100.7	100.7	7.7	7.7	10.5		8		-				-		-	
						4.4	0.3	203	20.6		8.0		27.8		100.7		7.7		10.5		9		-				-		-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 14 January 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	Rainy	Moderate	08:27	8.3	Surface	1.0	0.8	77	19.3	19.3	8.0	8.0	29.1	29.1	94.7	94.7	7.3	7.4	12.7	12.3	27	26	91	93	815600	804246	<0.2	<0.2	1.0	0.9
						1.0	0.8	80	19.3		8.0		29.1		94.7		7.3		12.7		25		92				<0.2		1.0	
					Middle	4.2	0.7	85	19.3	19.3	8.0	8.0	29.0	29.0	94.8	94.8	7.4		12.4		26		93				<0.2		0.8	
						4.2	0.8	92	19.3		8.0		29.0		94.8		7.4		12.5		27		93				<0.2		0.8	
					Bottom	7.3	0.8	79	19.3	19.3	8.0	8.0	29.0	29.0	95.0	95.0	7.4	7.4	11.9		26		94				<0.2		0.9	
						7.3	0.8	85	19.3		8.0		29.0		95.0		7.4		11.8		27		94				<0.2		0.8	
C2	Rainy	Moderate	10:03	12.2	Surface	1.0	0.6	293	20.0	20.0	7.9	7.9	26.5	26.5	92.5	92.5	7.2	7.2	8.4	15.2	9	11	86	91	825663	806957	<0.2	<0.2	2.0	2.0
						1.0	0.6	310	20.0		7.9		26.5		92.5		7.2		8.4		10		86				<0.2		2.2	
					Middle	6.1	0.6	250	20.0	20.0	7.9	7.9	26.8	26.8	92.1	92.1	7.2		14.8		12		92				<0.2		2.0	
						6.1	0.6	262	20.0		7.9		26.8		92.1		7.2		15.0		12		92				<0.2		2.0	
					Bottom	11.2	0.4	96	19.9	19.9	7.9	7.9	27.2	27.2	92.0	92.1	7.1	7.2	22.8		11		93				<0.2		1.8	
						11.2	0.4	97	19.9		7.9		27.2		92.1		7.2		21.9		11		94				<0.2		1.9	
C3	Rainy	Moderate	08:00	10.9	Surface	1.0	0.6	260	19.9	19.9	8.0	8.0	28.3	28.3	94.2	94.2	7.3	7.3	8.8	11.2	7	9	89	92	822103	817801	<0.2	<0.2	1.0	1.0
						1.0	0.6	268	19.9		8.0		28.3		94.2		7.3		8.8		8		90				<0.2		1.0	
					Middle	5.5	0.6	270	19.8	19.8	8.0	8.0	28.3	28.3	94.1	94.1	7.3		11.5		9		93				<0.2		1.0	
						5.5	0.6	276	19.8		8.0		28.3		94.1		7.3		11.5		8		92				<0.2		1.0	
					Bottom	9.9	0.4	264	19.8	19.8	8.0	8.0	28.3	28.3	94.0	94.0	7.3	7.3	13.3		13		94				<0.2		1.1	
						9.9	0.4	289	19.8		8.0		28.3		94.0		7.3		13.4		11		94				<0.2		1.0	
IM1	Rainy	Moderate	08:48	7.3	Surface	1.0	0.6	78	19.6	19.6	8.0	8.0	28.1	28.1	92.6	92.6	7.2	7.2	8.3	14.2	11	20	88	90	818333	806469	<0.2	<0.2	1.1	0.9
						1.0	0.6	80	19.6		8.0		28.1		92.6		7.2		8.4		10		89				<0.2		1.0	
					Middle	3.7	0.6	113	19.6	19.6	7.9	7.9	28.2	28.3	93.1	93.2	7.2		13.4		18		90				<0.2		0.9	
						3.7	0.6	121	19.6		7.9		28.3		93.2		7.2		13.4		18		91				<0.2		0.9	
					Bottom	6.3	0.6	169	19.6	19.6	7.9	7.9	28.5	28.5	95.4	95.5	7.4	7.4	20.7		33		91				<0.2		0.8	
						6.3	0.6	175	19.6		7.9		28.5		95.5		7.4		20.7		31		92				<0.2		0.8	
IM2	Rainy	Moderate	08:54	8.1	Surface	1.0	0.6	114	19.7	19.7	8.0	8.0	28.1	28.1	92.4	92.4	7.2	7.2	18.4	20.0	24	24	91	93	818859	806174	<0.2	<0.2	1.0	1.0
						1.0	0.7	118	19.7		8.0		28.1		92.4		7.2		18.5		23		92				<0.2		1.0	
					Middle	4.1	0.6	101	19.7	19.7	7.9	7.9	28.1	28.1	92.8	92.8	7.2		20.6		25		93				<0.2		1.0	
						4.1	0.6	110	19.7		7.9		28.1		92.8		7.2		20.8		23		93				<0.2		0.9	
					Bottom	7.1	0.6	99	19.7	19.7	7.9	7.9	28.1	28.1	93.5	93.5	7.3	7.3	21.0		26		93				<0.2		1.2	
						7.1	0.6	104	19.7		7.9		28.0		93.5		7.3		20.5		25		94				<0.2		1.0	
IM3	Rainy	Moderate	09:02	8.5	Surface	1.0	0.6	92	19.8	19.8	7.9	7.9	27.9	27.9	90.8	90.8	7.0	7.0	15.0	18.1	17	20	92	94	819425	806031	<0.2	<0.2	1.1	1.0
						1.0	0.7	99	19.8		7.9		27.9		90.8		7.0		15.1		19		93				<0.2		1.0	
					Middle	4.3	0.7	101	19.8	19.8	7.9	7.9	27.9	27.9	90.8	90.8	7.0		18.2		17		93				<0.2		1.0	
						4.3	0.7	108	19.8		7.9		27.9		90.8		7.0		18.2		17		94				<0.2		1.0	
					Bottom	7.5	0.6	113	19.8	19.8	7.9	7.9	27.9	27.9	90.9	90.9	7.0	7.0	21.1		24		94				<0.2		1.0	
						7.5	0.7	122	19.8		7.9		27.9		90.9		7.0		21.0		26		95				<0.2		1.1	
IM4	Rainy	Moderate	09:12	7.9	Surface	1.0	0.9	113	19.7	19.7	7.9	7.9	28.0	28.0	93.2	93.2	7.2	7.3	16.8	17.6	17	20	92	93	819571	805036	<0.2	<0.2	1.2	1.0
						1.0	0.9	115	19.7		7.9		28.0		93.2		7.2		16.9		15		92				<0.2		1.1	
					Middle	4.0	0.9	80	19.7	19.7	7.9	7.9	28.0	28.0	93.8	93.8	7.3		17.5		20		92				<0.2		0.9	
						4.0	0.9	83	19.7		7.9		28.0		93.8		7.3		17.6		21		93				<0.2		0.9	
					Bottom	6.9	0.8	119	19.7	19.7	7.9	7.9	28.0	28.0	95.4	95.4	7.4	7.4	18.3		25		93				<0.2		0.9	
						6.9	0.9	125	19.7		7.9		28.0		95.4		7.4		18.4		24		94				<0.2		1.0	
IM5	Rainy	Moderate	09:21	6.8	Surface	1.0	0.7	116	19.8	19.8	7.9	7.9	27.7	27.7	91.7	91.7	7.1	7.1	16.3	18.2	21	26	91	92	820564	804909	<0.2	<0.2	1.2	1.1
						1.0	0.7	123	19.8		7.9		27.7		91.7		7.1		16.0		20		92				<0.2		1.2	
					Middle	3.4	0.7	105	19.8	19.8	7.9	7.9	27.7	27.7	92.0	92.1	7.1		17.0		29		92				<0.2		0.9	
						3.4	0.7	105	19.8		7.9		27.7		92.1		7.1		17.0		28		93				<0.2		1.0	
					Bottom	5.8	0.7	99	19.8	19.8	7.9	7.9	27.7	27.7	92.7	92.7	7.2	7.2	21.4		31		93				<0.2		1.1	
						5.8	0.7	105	19.8		7.9		27.7		92.7		7.2		21.4		29		93				<0.2		1.2	
IM6	Rainy	Moderate	09:28	7.0	Surface	1.0	0.7	94	19.7	19.7	7.9	7.9	27.2	27.2	91.2	91.2	7.1	7.1	12.0	16.0	19	19	91	93	821058	805823	<0.2	<0.2	1.3	1.3
						1.0	0.7	102	19.7		7.9		27.2		91.2		7.1		12.0		19		92				<0.2		1.4	
					Middle	3.5	0.6	99	19.8	19.8	7.9	7.9	27.2	27.2	91.2	91.2	7.1		16.0		18		92				<0.2		1.2	
						3.5	0.6	107	19.8		7.9		27.2		91.2		7.1		16.0		18		93				<0.2		1.1	
					Bottom	6.0	0.6	101	19.8	19.8	7.9	7.9	27.3	27.3	91.9	91.9	7.1	7.1	20.0		20		94				<0.2		1.5	
						6.0	0.6	102	19.8		7.9		27.3		91.9		7.1		20.0		19		94				<0.2		1.3	
IM7	Rainy	Moderate	09:40	8.6	Surface	1.0	0.9	77	19.8	19.8	7.9	7.9	27.6	27.6	93.1	93.2	7.2	7.3	11.8	12.3	10	15	92	94	821366	806821	<0.2	<0.2	1.2	1.2
						1.0	1.0	79	19.8		7.9		27.6		93.2		7.2		11.8		10		93				<0.2		1.2	
					Middle	4.3	0.8	84	19.8	19.8	7.9	7.9	27.6	27.6	94.0	94.1	7.3		12.0		17		93				<0.2		1.3	
						4.3	0.9	92	19.7		7.9		27.6		94.1		7.3		12.1		17		94				<0.2		1.2	
					Bottom	7.6	0.8	90	19.7	19.7	7.9	7.9	28.1	28.1	96.9	97.0	7.5	7.5	13.0		18		94				<0.2		1.0	
						7.6	0.8	92	19.7		7.9		28.0		97.0		7.5		13.0		18		95				<0.2		1.2	
IM8	Rainy	Moderate	09:28	7.8	Surface	1.0	0.3	190	20.0	20.0	7.9	7.9	27.0	27.0	92.6	92.6	7.2	7.2	14.9	16.2	17	22	86	91	821706	807831	<0.2	<0.2	1.7	1.5
						1.0	0.3	206	20.0		7.9		27.0		92.6		7.2		14.9		16		87				<0.2		1.6	
					Middle	3.9	0.4	188	20.1	20.1	7.9	7.9	27.0	27.0	92.8	92.8	7.2		15.1		25		92				<0.2		1.5	
						3.9	0.4	198	20.1		7.9		27.0		92.8		7.2		15.1		26		92				<0.2		1.6	
					Bottom	6.8	0.3	170	20.1	20.1	7.9	7.9	27.0	27.0	93.4	93.4	7.2	7.2	18.5		24		94				<0.2		1.4	
						6.8	0.3	184	20.1		7.9		27.0		93.4		7.2		18.5		24		93				<0.2		1.4	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 14 January 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	Rainy	Moderate	09:12	7.5	Surface	1.0	0.4	243	19.9	19.9	7.9	7.9	27.4	27.4	93.7	93.7	7.3	7.3	11.4	12.5	11	13	87	91	822084	808829	<0.2	<0.2	1.2	1.2
						1.0	0.4	248	19.9		7.9		27.4		93.7		7.3		11.4		13		87				<0.2		1.3	
					Middle	3.8	0.4	249	19.9	19.9	7.9	7.9	27.4	27.4	94.0	94.0	7.3		12.0		13		92				<0.2		1.2	
						3.8	0.4	251	19.9		7.9		27.4		94.0		7.3		12.0		12		92				<0.2		1.3	
					Bottom	6.5	0.4	254	19.9	19.9	7.9	7.9	27.5	27.5	96.3	96.3	7.5	7.5	14.0		14		94				<0.2		1.2	
						6.5	0.4	271	19.9		7.9		27.5		96.3		7.5		14.0		15		94				<0.2		1.2	
IM10	Rainy	Moderate	09:03	7.2	Surface	1.0	0.6	296	19.9	19.9	8.0	8.0	27.8	27.8	94.0	94.0	7.3	7.3	16.2	19.3	16	17	88	91	822259	809854	<0.2	<0.2	1.1	1.0
						1.0	0.6	307	19.9		8.0		27.8		94.0		7.3		16.3		16		87				<0.2		1.0	
					Middle	3.6	0.5	297	19.9	19.9	8.0	8.0	27.8	27.8	93.7	93.7	7.3		19.0		14		92				<0.2		1.1	
						3.6	0.5	326	19.9		8.0		27.8		93.7		7.3		19.1		16		92				<0.2		1.0	
					Bottom	6.2	0.4	271	19.9	19.9	8.0	8.0	27.9	27.9	93.5	93.5	7.2	7.2	22.7		18		94				<0.2		1.0	
						6.2	0.5	280	19.9		8.0		27.9		93.5		7.2		22.7		19		93				<0.2		1.0	
IM11	Rainy	Moderate	08:56	8.1	Surface	1.0	0.5	269	19.9	19.9	8.0	8.0	27.8	27.8	93.9	93.9	7.3	7.3	15.9	18.5	14	16	88	91	821513	810553	<0.2	<0.2	1.0	1.1
						1.0	0.5	279	19.9		8.0		27.8		93.9		7.3		15.9		15		88				<0.2		1.1	
					Middle	4.1	0.5	283	19.9	19.9	8.0	8.0	27.8	27.8	93.7	93.7	7.3		19.5		15		92				<0.2		1.1	
						4.1	0.6	292	19.9		8.0		27.8		93.7		7.3		19.5		17		92				<0.2		1.0	
					Bottom	7.1	0.5	281	19.9	19.9	8.0	8.0	27.8	27.8	93.6	93.6	7.2	7.2	20.1		16		94				<0.2		1.0	
						7.1	0.6	281	19.9		8.0		27.8		93.6		7.2		20.1		18		94				<0.2		1.1	
IM12	Rainy	Moderate	08:46	8.5	Surface	1.0	0.6	271	19.9	19.9	8.0	8.0	27.8	27.8	93.9	93.9	7.3	7.3	15.1	19.5	18	18	89	92	821145	811507	<0.2	<0.2	1.1	1.1
						1.0	0.6	274	19.9		8.0		27.8		93.9		7.3		15.1		17		89				<0.2		1.1	
					Middle	4.3	0.5	268	19.9	19.9	8.0	8.0	27.8	27.8	93.7	93.7	7.3		20.1		17		93				<0.2		1.1	
						4.3	0.6	293	19.9		8.0		27.8		93.7		7.3		20.1		18		92				<0.2		1.1	
					Bottom	7.5	0.5	273	19.9	19.9	8.0	8.0	27.8	27.8	93.8	93.8	7.3	7.3	23.3		18		94				<0.2		1.1	
						7.5	0.5	280	19.9		8.0		27.8		93.8		7.3		23.3		18		94				<0.2		1.1	
SR2	Rainy	Moderate	08:22	4.0	Surface	1.0	0.2	113	19.8	19.8	8.0	8.0	28.1	28.1	93.2	93.3	7.2	7.2	18.8	21.1	18	19	89	92	821456	814177	<0.2	<0.2	1.0	1.1
						1.0	0.3	114	19.8		8.0		28.1		93.3		7.2		18.9		18		89				<0.2		1.1	
					Middle	2.0	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.0	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	0.2	119	19.8	19.8	8.0	8.0	28.1	28.1	93.7	93.9	7.2	7.3	23.9		20		94				<0.2		1.1	
						3.0	0.2	121	19.8		8.0		28.1		94.0		7.3		22.6		21		94				<0.2		1.2	
SR3	Rainy	Moderate	09:34	8.7	Surface	1.0	0.5	140	20.1	20.1	7.9	7.9	26.9	26.9	92.7	92.7	7.2	7.2	13.3	12.6	11	11	-	-	822139	807590	-	-	-	-
						1.0	0.6	151	20.1		7.9		26.9		92.7		7.2		13.3		11		-				-		-	
					Middle	4.4	0.5	199	20.0	20.0	7.9	7.9	26.9	26.9	93.0	93.0	7.2		12.3		10		-				-		-	
						4.4	0.6	211	20.0		7.9		26.9		93.0		7.2		12.3		12		-				-		-	
					Bottom	7.7	0.5	175	20.0	20.0	7.9	7.9	26.9	26.9	96.2	96.2	7.5	7.5	12.1		11		-				-		-	
						7.7	0.6	185	20.0		7.9		26.9		96.2		7.5		12.1		11		-				-		-	
SR4A	Rainy	Rough	08:02	8.6	Surface	1.0	0.3	180	19.4	19.4	7.9	7.9	28.1	28.1	90.5	90.5	7.0	7.1	8.9	9.5	14	14	-	-	817182	807804	-	-	-	-
						1.0	0.3	184	19.4		7.9		28.1		90.5		7.0		8.9		14		-				-		-	
					Middle	4.3	0.3	170	19.4	19.4	7.9	7.9	28.1	28.1	91.6	91.6	7.1		9.5		14		-				-		-	
						4.3	0.3	184	19.4		7.9		28.1		91.6		7.1		9.5		15		-				-		-	
					Bottom	7.6	0.2	192	19.3	19.3	7.8	7.8	28.1	28.1	95.7	95.8	7.5	7.5	10.2		13		-				-		-	
						7.6	0.2	208	19.3		7.8		28.1		95.8		7.5		10.2		15		-				-		-	
SR5A	Rainy	Moderate	07:46	3.8	Surface	1.0	0.2	274	19.5	19.5	7.8	7.8	27.9	27.9	92.6	92.7	7.2	7.2	7.7	7.6	14	14	-	-	816583	810701	-	-	-	-
						1.0	0.2	275	19.5		7.8		27.9		92.7		7.2		7.5		14		-				-		-	
					Middle	1.9	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						1.9	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	0.2	281	19.4	19.4	7.6	7.6	27.9	27.9	96.5	96.5	7.5	7.5	7.5		14		-				-		-	
						2.8	0.2	287	19.4		7.6		27.9		96.5		7.5		7.6		13		-				-		-	
SR6	Rainy	Moderate	07:23	3.8	Surface	1.0	0.1	201	19.8	19.8	7.8	7.8	26.9	26.9	92.6	92.7	7.2	7.2	5.3	5.6	12	13	-	-	817889	814649	-	-	-	-
						1.0	0.1	216	19.8		7.8		26.9		92.7		7.2		5.4		14		-				-		-	
					Middle	1.9	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						1.9	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	0.1	211	19.8	19.8	7.6	7.6	25.6	25.6	99.3	99.4	7.8	7.8	5.8		12		-				-		-	
						2.8	0.1	224	19.8		7.6		25.6		99.5		7.8		5.8		13		-				-		-	
SR7	Rainy	Moderate	07:27	16.2	Surface	1.0	0.3	289	20.1	20.1	8.0	8.0	28.8	28.8	91.5	91.5	7.0	7.0	10.2	11.7	8	11	-	-	823643	823745	-	-	-	-
						1.0	0.3	315	20.1		8.0		28.8		91.5		7.0		10.2		8		-				-		-	
					Middle	8.1	0.3	291	20.1	20.1	8.0	8.0	28.8	28.8	91.3	91.3	7.0		12.2		10		-				-		-	
						8.1	0.3	304	20.1		8.0		28.8		91.3		7.0		12.2		10		-				-		-	
					Bottom	15.2	0.2	255	20.1	20.1	8.0	8.0	28.8	28.8	93.5	93.5	7.2	7.2	12.7		14		-				-		-	
						15.2	0.2	270	20.1		8.0		28.8		93.5		7.2		12.7		16		-				-		-	
SR8	Rainy	Moderate	08:37	4.5	Surface	1.0	0.2	210	20.1	20.1	7.9	7.9	27.6	27.6	94.4	94.4	7.3	7.3	10.7	11.6	10	11	-	-	820398	811578	-	-	-	-
						1.0	0.2	217	20.1		7.9		27.6		94.4		7.3		10.7		10		-				-		-	
					Middle	2.3	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.3	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.3	255	20.0	20.0	7.9	7.9	27.6	27.7	94.7	94.7	7.3	7.3	12.4		11		-				-		-	
						3.5	0.3	265	20.0		7.9		27.7		94.7		7.3		12.4		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 14 January 17 during Mid-Ebb tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	13:50	8.5	Surface	1.0	0.6	193	19.4	19.4	8.0	8.0	30.1	30.1	97.1	97.1	7.5	7.5	8.5	9.3	13	14	92	94	815613	804237	<0.2	<0.2	0.3	0.3
						1.0	0.6	193	19.4		8.0		30.1		97.1		7.5		8.6		12		93				<0.2		0.3	
					Middle	4.3	0.6	178	19.4	19.4	8.0	8.0	30.1	30.1	98.2	98.3	7.5		9.5		14		94				<0.2		0.3	
						4.3	0.6	181	19.4		8.0		30.1		98.3		7.6		9.5		12		93				<0.2		0.3	
					Bottom	7.5	0.5	188	19.4	19.4	7.9	7.9	30.1	30.1	100.7	100.7	7.7	7.8	9.9		16		94				<0.2		0.2	
						7.5	0.5	199	19.4		7.9		30.1		100.7		7.8		9.8		17		95				<0.2		0.3	
C2	Cloudy	Moderate	12:47	12.4	Surface	1.0	0.2	136	19.9	19.9	7.9	7.9	26.8	26.8	92.1	92.1	7.2	7.2	12.0	13.3	11	12	85	90	825681	806944	<0.2	<0.2	1.6	1.7
						1.0	0.3	143	19.9		7.9		26.8		92.1		7.2		12.0		11		86				<0.2		1.7	
					Middle	6.2	0.2	105	20.0	20.0	7.9	7.9	26.9	26.9	92.0	92.0	7.1		13.2		12		92				<0.2		2.0	
						6.2	0.3	114	20.0		7.9		26.9		92.0		7.1		13.2		11		92				<0.2		1.8	
					Bottom	11.4	0.2	207	19.9	19.9	7.9	7.9	27.3	27.3	92.6	92.6	7.2	7.2	14.8		14		93				<0.2		1.5	
						11.4	0.3	208	19.9		7.9		27.3		92.6		7.2		14.8		12		93				<0.2		1.5	
C3	Cloudy	Moderate	14:42	12.2	Surface	1.0	0.5	97	20.0	20.0	7.9	7.9	28.9	28.9	91.1	91.1	7.0	7.0	6.6	9.9	6	7	89	92	822127	817821	<0.2	<0.2	0.9	0.9
						1.0	0.5	105	20.0		7.9		28.9		91.0		7.0		6.8		7		89				<0.2		0.9	
					Middle	6.1	0.5	89	20.0	20.0	7.9	7.9	29.0	29.0	90.7	90.7	7.0		9.7		6		93				<0.2		1.0	
						6.1	0.5	90	20.0		7.9		29.0		90.7		7.0		9.7		7		93				<0.2		1.0	
					Bottom	11.2	0.4	97	20.0	20.0	7.9	7.9	29.0	29.0	90.8	90.8	7.0	7.0	13.3		7		95				<0.2		0.9	
						11.2	0.5	101	20.0		7.9		29.0		90.8		7.0		13.3		7		94				<0.2		0.9	
IM1	Cloudy	Moderate	13:30	7.6	Surface	1.0	0.3	178	19.4	19.4	8.0	8.0	28.5	28.6	96.3	96.4	7.5	7.6	8.4	10.9	11	18	90	91	818337	806442	<0.2	<0.2	0.9	0.8
						1.0	0.3	190	19.4		8.0		28.6		96.4		7.5		8.4		12		90				<0.2		0.9	
					Middle	3.8	0.3	140	19.3	19.3	8.0	8.0	29.1	29.2	98.1	98.1	7.6		12.0		19		91				<0.2		0.6	
						3.8	0.3	150	19.3		8.0		29.2		98.1		7.6		12.2		19		91				<0.2		0.7	
					Bottom	6.6	0.4	126	19.3	19.3	7.9	7.9	29.3	29.3	99.9	100.0	7.7	7.8	12.3		24		92				<0.2		0.7	
						6.6	0.4	130	19.3		7.9		29.3		100.0		7.8		12.1		25		93				<0.2		0.7	
IM2	Cloudy	Moderate	13:23	8.6	Surface	1.0	0.5	201	19.4	19.4	8.0	8.0	28.6	28.6	96.1	96.1	7.5	7.6	7.7	10.0	9	14	93	93	818860	806177	<0.2	<0.2	0.9	0.7
						1.0	0.5	217	19.4		8.0		28.6		96.1		7.5		7.8		9		92				<0.2		0.8	
					Middle	4.3	0.5	144	19.3	19.3	8.0	8.0	29.1	29.1	97.7	97.8	7.6		10.7		10		93				<0.2		0.8	
						4.3	0.5	144	19.3		8.0		29.1		97.8		7.6		10.8		10		93				<0.2		0.6	
					Bottom	7.6	0.5	136	19.3	19.3	7.9	7.9	29.3	29.3	100.3	100.4	7.8	7.8	11.6		23		94				<0.2		0.6	
						7.6	0.5	142	19.3		7.9		29.3		100.4		7.8		11.4		23		94				<0.2		0.5	
IM3	Cloudy	Moderate	13:16	8.9	Surface	1.0	0.4	142	19.3	19.3	8.0	8.0	29.2	29.2	96.9	97.0	7.5	7.6	13.6	15.7	20	23	90	91	819416	806033	<0.2	<0.2	0.6	0.6
						1.0	0.5	149	19.3		8.0		29.2		97.0		7.5		13.8		20		90				<0.2		0.6	
					Middle	4.5	0.4	133	19.3	19.3	8.0	8.0	29.2	29.2	98.1	98.2	7.6		15.5		18		92				<0.2		0.5	
						4.5	0.4	141	19.3		8.0		29.2		98.2		7.6		15.7		20		91				<0.2		0.5	
					Bottom	7.9	0.4	149	19.3	19.3	7.9	7.9	29.2	29.2	100.3	100.3	7.8	7.8	17.6		28		92				<0.2		0.7	
						7.9	0.5	150	19.3		7.9		29.2		100.3		7.8		17.7		30		92				<0.2		0.6	
IM4	Cloudy	Moderate	13:10	8.3	Surface	1.0	0.5	133	19.3	19.3	8.0	8.0	28.7	28.7	96.4	96.4	7.5	7.6	12.8	15.5	14	19	90	92	819564	805034	<0.2	<0.2	0.8	0.7
						1.0	0.5	137	19.3		8.0		28.7		96.4		7.5		12.9		14		89				<0.2		0.8	
					Middle	4.2	0.5	145	19.4	19.4	8.0	8.0	29.0	29.0	97.5	97.6	7.6		16.8		18		92				<0.2		0.8	
						4.2	0.5	157	19.4		8.0		29.0		97.6		7.6		17.0		18		93				<0.2		0.7	
					Bottom	7.3	0.5	142	19.4	19.4	7.9	7.9	29.2	29.2	100.3	100.3	7.8	7.8	17.0		25		93				<0.2		0.6	
						7.3	0.6	143	19.4		7.9		29.2		100.3		7.8		16.5		25		93				<0.2		0.6	
IM5	Cloudy	Moderate	13:02	7.1	Surface	1.0	0.5	135	19.3	19.3	8.0	8.0	28.4	28.5	97.2	97.2	7.6	7.7	8.6	11.6	9	14	89	90	820555	804921	<0.2	<0.2	0.8	0.8
						1.0	0.5	137	19.3		8.0		28.5		97.2		7.6		8.7		9		90				<0.2		0.9	
					Middle	3.6	0.5	124	19.3	19.3	7.9	7.9	28.6	28.6	98.5	98.6	7.7		12.2		12		90				<0.2		0.8	
						3.6	0.5	135	19.3		7.9		28.6		98.6		7.7		12.4		13		91				<0.2		0.9	
					Bottom	6.1	0.4	147	19.3	19.3	7.8	7.8	28.8	28.8	100.4	100.4	7.8	7.8	13.9		19		91				<0.2		0.7	
						6.1	0.4	150	19.3		7.8		28.8		100.4		7.8		13.5		19		91				<0.2		0.7	
IM6	Cloudy	Moderate	12:55	7.2	Surface	1.0	0.5	95	19.3	19.3	8.0	8.0	28.5	28.5	95.5	95.5	7.4	7.5	9.2	14.4	24	26	89	91	821043	805815	<0.2	<0.2	0.8	0.7
						1.0	0.6	102	19.3		8.0		28.5		95.5		7.4		9.4		24		90				<0.2		0.7	
					Middle	3.6	0.5	108	19.4	19.4	8.0	8.0	28.8	28.8	96.5	96.6	7.5		15.4		22		91				<0.2		0.7	
						3.6	0.5	109	19.4		8.0		28.8		96.6		7.5		15.4		24		91				<0.2		0.7	
					Bottom	6.2	0.4	94	19.3	19.3	7.9	7.9	28.9	28.9	99.7	99.8	7.7	7.7	18.6		31		92				<0.2		0.7	
						6.2	0.4	101	19.3		7.9		28.8		99.8		7.7		18.1		31		92				<0.2		0.8	
IM7	Cloudy	Moderate	12:46	8.8	Surface	1.0	0.6	93	19.4	19.4	7.9	7.9	28.9	28.9	96.1	96.1	7.4	7.5	14.2	15.0	20	22	92	94	821359	806830	<0.2	<0.2	0.8	0.8
						1.0	0.7	98	19.4		7.9		28.9		96.1		7.4		14.2		18		93				<0.2		0.7	
					Middle	4.4	0.6	92	19.4	19.4	7.9	7.9	28.8	28.8	97.6	97.7	7.6		15.8		20		93				<0.2		0.8	
						4.4	0.7	100	19.4		7.9		28.8		97.7		7.6		15.7		22		94				<0.2		0.7	
					Bottom	7.8	0.6	104	19.4	19.4	7.8	7.8	28.8	28.8	99.6	99.7	7.7	7.7	15.1		24		94				<0.2		0.8	
						7.8	0.7	110	19.4		7.8		28.8		99.7		7.7		14.9		25		95				<0.2		0.8	
IM8	Cloudy	Moderate	13:26	8.5	Surface	1.0	0.4	127	19.6	19.6	8.0	8.0	28.7	28.7	95.3	95.3	7.4	7.4	13.2	17.1	13	16	86	90	821701	807857	<0.2	<0.2	0.9	0.9
						1.0	0.4	133	19.6		8.0		28.7		95.3		7.4		13.3		13		86				<0.2		0.8	
					Middle	4.3	0.5	109	19.6	19.6	8.0	8.0	28.7	28.7	95.1	95.1	7.4		15.4		16		92				<0.2		0.7	
						4.3	0.5	119	19.6		8.0		28.7		95.1		7.4		15.4		18		92				<0.2		0.8	
					Bottom	7.5	0.4	121	19.6	19.6	8.0	8.0	28.8	28.8	95.4	95.4	7.4	7.4	22.6		18		93				<0.2		0.9	
						7.5	0.4	121	19.6		8.0		28.8		95.4		7.4		22.6		19		93				<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 14 January 17 during Mid-Ebb tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	13:35	7.4	Surface	1.0	0.4	92	19.7	19.7	8.0	8.0	28.4	28.4	94.9	94.9	7.3	7.3	12.2	16.0	11	13	83	90	822107	808792	<0.2	<0.2	1.0	1.0
						1.0	0.5	94			8.0		28.4		94.9		7.3		12.2		12		86				<0.2		1.0	
					Middle	3.7	0.4	89	19.7	19.7	8.0	8.0	28.4	28.4	94.7	94.7	7.3		15.4		13		92				<0.2		1.1	
						3.7	0.4	97	19.7		8.0		28.4		94.7		7.3		15.4		13		92				<0.2		1.0	
					Bottom	6.4	0.4	92	19.7	19.7	8.0	8.0	28.4	28.4	94.6	94.6	7.3	7.3	20.5		14		93				<0.2		0.9	
						6.4	0.4	92	19.7		8.0		28.4		94.6		7.3		20.5		13		93				<0.2		0.9	
IM10	Cloudy	Moderate	13:43	7.9	Surface	1.0	0.5	98	19.8	19.8	8.0	8.0	28.1	28.1	94.3	94.3	7.3	7.3	12.7	15.7	13	15	87	91	822226	809836	<0.2	<0.2	1.1	1.0
						1.0	0.5	105	19.8		8.0		28.1		94.3		7.3		12.7		14		87				<0.2		1.0	
					Middle	4.0	0.4	105	19.8	19.8	8.0	8.0	28.1	28.1	94.7	94.8	7.3		16.4		16		92				<0.2		1.0	
						4.0	0.4	112	19.8		8.0		28.1		94.8		7.3		16.5		16		92				<0.2		1.0	
					Bottom	6.9	0.4	113	19.8	19.8	7.9	7.9	28.1	28.1	96.5	96.5	7.5	7.5	18.0		15		94				<0.2		1.0	
						6.9	0.4	123	19.8		7.9		28.1		96.5		7.5		18.0		17		93				<0.2		1.0	
IM11	Cloudy	Moderate	13:52	8.3	Surface	1.0	0.5	100	19.8	19.8	7.9	7.9	27.8	27.8	95.1	95.1	7.4	7.4	10.3	11.0	7	8	88	91	821513	810559	<0.2	<0.2	1.3	1.2
						1.0	0.5	105	19.8		7.9		27.8		95.1		7.4		10.3		6		87				<0.2		1.2	
					Middle	4.2	0.5	100	19.7	19.7	7.9	7.9	27.9	27.9	95.4	95.4	7.4		10.5		9		93				<0.2		1.2	
						4.2	0.5	106	19.7		7.9		27.9		95.4		7.4		10.5		10		92				<0.2		1.1	
					Bottom	7.3	0.4	109	19.7	19.7	7.9	7.9	28.2	28.2	97.3	97.3	7.5	7.5	12.1		8		94				<0.2		1.3	
						7.3	0.4	109	19.7		7.9		28.2		97.3		7.5		12.1		9		93				<0.2		1.3	
IM12	Cloudy	Moderate	13:59	8.7	Surface	1.0	0.5	96	19.8	19.8	8.0	8.0	28.0	28.0	94.8	94.8	7.3	7.3	9.6	9.9	10	11	89	92	821153	811536	<0.2	<0.2	1.1	1.1
						1.0	0.5	100	19.8		8.0		28.0		94.8		7.3		9.6		10		89				<0.2		1.1	
					Middle	4.4	0.4	99	19.8	19.8	8.0	8.0	28.2	28.2	94.9	94.9	7.3		10.0		10		93				<0.2		1.0	
						4.4	0.4	101	19.8		8.0		28.2		94.9		7.3		10.0		12		92				<0.2		1.0	
					Bottom	7.7	0.3	116	19.8	19.8	7.9	7.9	28.3	28.3	96.3	96.3	7.5	7.5	10.2		12		94				<0.2		1.2	
						7.7	0.3	120	19.8		7.9		28.3		96.3		7.5		10.2		11		94				<0.2		1.2	
SR2	Cloudy	Moderate	14:22	4.7	Surface	1.0	0.3	104	19.9	19.9	7.9	7.9	28.4	28.4	92.5	92.5	7.1	7.1	9.8	10.3	7	7	89	92	821458	814160	<0.2	<0.2	1.3	1.1
						1.0	0.3	105	19.9		7.9		28.4		92.5		7.1		9.8		8		89				<0.2		1.2	
					Middle	2.4	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.4	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.3	108	19.9	19.9	7.9	7.9	28.4	28.4	92.6	92.6	7.1	7.1	10.7		7		94				<0.2		0.9	
						3.7	0.3	111	19.9		7.9		28.4		92.6		7.1		10.7		7		94				<0.2		1.0	
SR3	Cloudy	Moderate	13:20	8.8	Surface	1.0	0.4	108	19.6	19.6	8.0	8.0	28.4	28.4	95.9	95.9	7.4	7.4	13.0	17.4	15	16	-	-	822128	807564	-	-	-	-
						1.0	0.4	113	19.6		8.0		28.4		95.9		7.4		13.1		14		-				-		-	
					Middle	4.4	0.4	83	19.6	19.6	8.0	8.0	28.7	28.7	95.5	95.5	7.4		18.8		15		-				-		-	
						4.4	0.5	87	19.6		8.0		28.7		95.5		7.4		18.8		16		-				-		-	
					Bottom	7.8	0.4	85	19.6	19.6	8.0	8.0	28.7	28.7	95.6	95.6	7.4	7.4	20.4		17		-				-		-	
						7.8	0.4	89	19.6		8.0		28.7		95.6		7.4		20.4		19		-				-		-	
SR4A	Cloudy	Moderate	14:12	8.8	Surface	1.0	0.4	86	19.4	19.4	8.0	8.0	28.7	28.7	95.5	95.5	7.4	7.5	11.2	11.5	13	16	-	-	817203	807799	-	-	-	-
						1.0	0.4	93	19.4		8.0		28.7		95.5		7.4		11.3		14		-				-		-	
					Middle	4.4	0.3	95	19.3	19.3	8.0	8.0	28.8	28.8	97.5	97.6	7.6		11.7		18		-				-		-	
						4.4	0.4	100	19.3		8.0		28.8		97.6		7.6		11.7		17		-				-		-	
					Bottom	7.8	0.3	103	19.3	19.3	7.9	7.9	28.8	28.8	100.0	100.1	7.8	7.8	11.6		18		-				-		-	
						7.8	0.3	110	19.3		7.9		28.8		100.1		7.8		11.6		17		-				-		-	
SR5A	Cloudy	Moderate	14:27	4.6	Surface	1.0	0.2	173	19.4	19.4	7.9	7.9	28.1	28.1	96.6	96.7	7.5	7.5	10.2	10.6	6	8	-	-	816599	810703	-	-	-	-
						1.0	0.2	180	19.4		7.9		28.1		96.7		7.5		10.4		6		-				-		-	
					Middle	2.3	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.3	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.2	136	19.3	19.3	7.8	7.8	28.1	28.1	100.0	100.1	7.8	7.8	10.8		10		-				-		-	
						3.6	0.2	138	19.3		7.8		28.1		100.1		7.8		10.9		8		-				-		-	
SR6	Cloudy	Moderate	14:50	4.5	Surface	1.0	0.1	133	19.6	19.6	7.8	7.8	27.9	27.9	96.1	96.2	7.5	7.5	4.3	4.4	18	17	-	-	817890	814675	-	-	-	-
						1.0	0.1	133	19.6		7.8		27.9		96.3		7.5		4.3		18		-				-		-	
					Middle	2.3	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.3	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.1	152	19.5	19.5	7.7	7.7	28.0	28.0	99.9	99.9	7.8	7.8	4.4		16		-				-		-	
						3.5	0.1	159	19.5		7.7		28.0		99.9		7.8		4.4		16		-				-		-	
SR7	Cloudy	Moderate	15:10	16.2	Surface	1.0	0.5	88	20.0	20.0	7.9	7.9	29.1	29.1	90.7	90.7	7.0	7.0	6.0	6.7	5	7	-	-	823631	823751	-	-	-	-
						1.0	0.5	96	20.0		7.9		29.1		90.7		7.0		6.1		6		-				-		-	
					Middle	8.1	0.4	88	20.0	20.0	7.9	7.9	29.1	29.1	90.6	90.6	6.9		6.5		7		-				-		-	
						8.1	0.5	91	20.0		7.9		29.1		90.6		6.9		6.5		7		-				-		-	
					Bottom	15.2	0.3	95	20.0	20.0	7.9	7.9	29.1	29.1	91.3	91.3	7.0	7.0	7.6		8		-				-		-	
						15.2	0.3	103	20.0		7.9		29.1		91.3		7.0		7.6		7		-				-		-	
SR8	Cloudy	Moderate	14:06	5.1	Surface	1.0	0.3	184.0	19.7	19.7	7.9	7.9	28.1	28.1	94.0	94.0	7.3	7.3	14.2	15.5	15	16	-	-	820413	811608	-	-	-	-
						1.0	0.3	185.0	19.7		7.9		28.1		94.0		7.3		14.2		14		-				-		-	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	0.3	174.0	19.7	19.7	7.9	7.9	28.1	28.1	96.7	96.7	7.5	7.5	16.7		19		-				-		-	
						4.1	0.3	187.0	19.7		7.9		28.1		96.7		7.5		16.7		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 17 January 17 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	10:22	8.3	Surface	1.0	0.6	88	18.8	18.8	8.0	8.0	29.6	29.6	92.6	92.6	7.2	7.2	18.0	19.3	15	17	92	93	815630	804242	<0.2	<0.2	0.8	0.9
						1.0	0.6	95	18.8		8.0		29.6		92.6		7.2		18.0		14		93				<0.2		0.8	
					Middle	4.2	0.5	82	18.8	18.8	8.0	8.0	29.6	29.6	92.7	92.7	7.2		19.0		16		93				<0.2		1.0	
						4.2	0.5	87	18.8		8.0		29.6		92.7		7.2		19.0		15		93				<0.2		1.0	
					Bottom	7.3	0.6	90	18.8	18.8	7.9	7.9	29.6	29.6	93.1	93.2	7.3	7.3	21.0		22		94				<0.2		0.9	
						7.3	0.6	96	18.8		7.9		29.6		93.2		7.3		21.0		22		95				<0.2		1.0	
C2	Cloudy	Moderate	12:15	12.6	Surface	1.0	0.5	220	19.4	19.4	7.9	7.9	27.1	27.1	89.0	89.0	7.0	7.0	8.8	12.8	5	11	87	92	825675	806931	<0.2	<0.2	1.9	1.8
						1.0	0.5	221	19.4		7.9		27.1		89.0		7.0		8.9		5		86				<0.2		2.0	
					Middle	6.3	0.4	195	19.4	19.4	7.9	7.9	27.4	27.4	88.4	88.4	6.9		13.9		13		94				<0.2		1.9	
						6.3	0.4	200	19.4		7.9		27.4		88.4		6.9		13.9		12		94				<0.2		1.7	
					Bottom	11.6	0.4	215	19.4	19.4	7.9	7.9	27.4	27.4	89.0	89.0	7.0	7.0	15.5		14		95				<0.2		1.7	
						11.6	0.4	232	19.4		7.9		27.4		89.0		7.0		15.5		15		95				<0.2		1.6	
C3	Cloudy	Moderate	10:00	12.0	Surface	1.0	0.6	272	19.3	19.3	7.9	7.9	28.9	28.9	90.3	90.3	7.0	7.0	7.4	14.5	5	9	92	93	822092	817807	<0.2	<0.2	0.8	0.9
						1.0	0.6	279	19.3		7.9		28.9		90.3		7.0		7.4		5		92				<0.2		0.9	
					Middle	6.0	0.6	281	19.3	19.3	7.9	7.9	29.0	29.0	89.4	89.4	7.0		11.5		8		93				<0.2		0.8	
						6.0	0.6	283	19.3		7.9		29.0		89.4		7.0		11.5		9		93				<0.2		0.8	
					Bottom	11.0	0.4	283	19.3	19.3	7.9	7.9	29.0	29.0	89.4	89.4	7.0	7.0	24.7		15		94				<0.2		1.0	
						11.0	0.5	284	19.3		7.9		29.0		89.4		7.0		24.7		13		94				<0.2		1.1	
IM1	Cloudy	Moderate	10:42	7.5	Surface	1.0	0.5	130	18.9	18.9	7.9	7.9	28.0	28.0	93.1	93.1	7.3	7.4	11.1	12.9	15	16	90	91	818356	806473	<0.2	<0.2	0.8	0.8
						1.0	0.5	131	18.9		7.9		28.0		93.1		7.3		11.3		16		90				<0.2		0.8	
					Middle	3.8	0.5	129	18.9	18.9	7.9	7.9	27.8	27.8	93.7	93.7	7.4		13.4		15		90				<0.2		0.8	
						3.8	0.5	135	18.9		7.9		27.8		93.7		7.4		13.4		16		91				<0.2		0.7	
					Bottom	6.5	0.4	104	18.9	18.9	7.8	7.8	27.1	27.1	95.7	95.8	7.6	7.6	14.0		18		92				<0.2		0.8	
						6.5	0.4	110	18.9		7.8		27.0		95.8		7.6		14.0		18		92				<0.2		0.7	
IM2	Cloudy	Moderate	10:51	8.5	Surface	1.0	0.5	90	18.9	18.9	7.9	7.9	28.2	28.2	92.7	92.7	7.3	7.3	12.2	12.7	22	24	91	93	818843	806176	<0.2	<0.2	0.8	0.8
						1.0	0.5	96	18.9		7.9		28.2		92.7		7.3		12.3		22		92				<0.2		0.8	
					Middle	4.3	0.5	69	18.9	18.9	7.9	7.9	28.1	28.1	93.2	93.2	7.3		13.4		26		92				<0.2		0.8	
						4.3	0.5	69	18.9		7.9		28.1		93.2		7.3		13.4		24		93				<0.2		0.8	
					Bottom	7.5	0.5	73	18.9	18.9	7.9	7.9	27.6	27.6	94.9	95.0	7.5	7.5	12.6		25		94				<0.2		0.8	
						7.5	0.5	74	18.9		7.9		27.6		95.0		7.5		12.5		26		93				<0.2		0.8	
IM3	Cloudy	Moderate	10:59	8.6	Surface	1.0	0.6	110	18.9	18.9	8.0	8.0	28.5	28.5	90.8	90.8	7.1	7.1	17.8	18.5	27	29	89	90	819407	806030	<0.2	<0.2	0.9	0.8
						1.0	0.6	113	18.9		8.0		28.5		90.8		7.1		18.1		27		89				<0.2		0.8	
					Middle	4.3	0.5	94	18.9	18.9	8.0	8.0	28.5	28.5	90.8	90.8	7.1		18.9		28		90				<0.2		0.7	
						4.3	0.5	99	18.9		8.0		28.5		90.8		7.1		19.0		27		90				<0.2		0.9	
					Bottom	7.6	0.6	74	18.9	18.9	7.9	7.9	28.4	28.4	90.7	90.8	7.1	7.1	18.4		31		91				<0.2		0.8	
						7.6	0.6	76	18.9		7.9		28.4		90.8		7.1		18.6		34		91				<0.2		0.9	
IM4	Cloudy	Moderate	11:09	8.1	Surface	1.0	0.6	75	18.8	18.8	8.0	8.0	28.5	28.5	92.1	92.1	7.2	7.2	14.0	18.9	21	22	92	93	819573	805035	<0.2	<0.2	0.8	0.8
						1.0	0.6	79	18.8		8.0		28.5		92.1		7.2		14.0		21		92				<0.2		0.8	
					Middle	4.1	0.6	61	18.8	18.8	8.0	8.0	28.5	28.5	92.2	92.2	7.2		20.9		21		93				<0.2		0.8	
						4.1	0.6	61	18.8		8.0		28.5		92.2		7.2		21.1		23		93				<0.2		0.8	
					Bottom	7.1	0.6	84	18.8	18.8	8.0	8.0	28.4	28.4	92.7	92.7	7.3	7.3	21.9		24		94				<0.2		0.7	
						7.1	0.6	86	18.8		8.0		28.4		92.7		7.3		21.4		24		93				<0.2		0.8	
IM5	Cloudy	Moderate	11:16	7.0	Surface	1.0	0.6	77	18.9	18.9	8.0	8.0	28.6	28.6	91.2	91.2	7.1	7.1	16.3	16.5	17	19	92	93	820550	804940	<0.2	<0.2	0.8	0.8
						1.0	0.6	81	18.9		8.0		28.6		91.2		7.1		16.3		15		93				<0.2		0.8	
					Middle	3.5	0.6	111	18.9	18.9	8.0	8.0	28.6	28.6	91.2	91.2	7.1		17.4		16		93				<0.2		0.9	
						3.5	0.6	119	18.9		8.0		28.6		91.2		7.1		17.5		17		93				<0.2		0.9	
					Bottom	6.0	0.8	143	18.9	18.9	8.0	8.0	28.6	28.6	91.6	91.6	7.2	7.2	15.8		25		94				<0.2		0.8	
						6.0	0.9	150	18.9		8.0		28.6		91.6		7.2		15.8		24		94				<0.2		0.7	
IM6	Cloudy	Moderate	11:24	7.0	Surface	1.0	0.7	112	19.1	19.1	7.9	7.9	27.9	27.9	91.9	91.9	7.2	7.3	8.3	10.6	13	16	92	93	821055	805808	<0.2	<0.2	1.0	0.8
						1.0	0.8	113	19.1		7.9		27.9		91.9		7.2		8.4		11		92				<0.2		1.0	
					Middle	3.5	0.7	119	19.0	19.0	7.9	7.9	27.9	27.9	92.9	93.0	7.3		11.7		15		93				<0.2		0.9	
						3.5	0.7	119	19.0		7.9		27.9		93.0		7.3		11.7		14		93				<0.2		0.9	
					Bottom	6.0	0.6	153	19.0	19.0	7.9	7.9	28.1	28.1	94.8	94.9	7.4	7.5	11.7		21		94				<0.2		0.5	
						6.0	0.6	164	19.0		7.9		28.0		94.9		7.5		11.7		22		94				<0.2		0.5	
IM7	Cloudy	Moderate	11:31	8.7	Surface	1.0	0.9	84	19.1	19.1	7.9	7.9	27.6	27.6	92.3	92.4	7.3	7.3	5.9	6.7	9	12	93	94	821349	806816	<0.2	<0.2	1.1	0.9
						1.0	0.9	89	19.1		7.9		27.6		92.4		7.3		5.9		10		93				<0.2		1.1	
					Middle	4.4	0.8	81	19.0	19.0	7.9	7.9	27.7	27.8	93.4	93.5	7.3		7.0		11		94				<0.2		1.0	
						4.4	0.8	85	19.0		7.9		27.8		93.5		7.3		7.1		10		94				<0.2		1.0	
					Bottom	7.7	0.7	80	18.9	18.9	7.9	7.9	28.1	28.1	95.0	95.1	7.5	7.5	7.3		16		94				<0.2		0.7	
						7.7	0.7	86	18.9		7.9		28.0		95.1		7.5		7.0		16		95				<0.2		0.7	
IM8	Cloudy	Moderate	11:37	8.4	Surface	1.0	0.5	148	19.3	19.3	7.9	7.9	27.6	27.6	90.8	90.8	7.1	7.1	9.0	14.0	8	12	87	92	821711	807851	<0.2	<0.2	1.7	1.7
						1.0	0.6	156	19.3		7.9		27.6		90.8		7.1		9.0		10		87				<0.2		1.7	
					Middle	4.2	0.5	124	19.3	19.3	7.9	7.9	27.7	27.7	90.2	90.2	7.1		11.1		10		94				<0.2		1.8	
						4.2	0.5	130	19.3		7.9		27.7		90.2		7.1		11.2		11		93				<0.2		1.6	
					Bottom	7.4	0.5	140	19.2	19.2	7.9	7.9	27.8	27.8	90.2	90.2	7.1	7.1	21.9		15		94				<0.2		1.5	
						7.4	0.5	140	19.2		7.9		27.8		90.2		7.1		21.8		16		94				<0.2		1.6	

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

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

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	11:29	7.3	Surface	1.0	0.5	175	19.3	19.3	7.9	7.9	28.3	28.3	91.1	91.1	7.1	7.1	10.6	13.4	11	14	90	93	822102	808828	<0.2	<0.2	1.2	1.1
						1.0	0.5	179	19.3		7.9		28.3		91.1		7.1		10.6		11		91				<0.2		1.0	
					Middle	3.7	0.5	176	19.2	19.2	7.9	7.9	28.6	28.6	91.4	91.4	7.1		13.1		13		93				<0.2		1.1	
						3.7	0.5	177	19.2		7.9		28.6		91.4		7.1		13.1		13		93				<0.2		1.1	
					Bottom	6.3	0.5	196	19.2	19.2	7.9	7.9	28.6	28.6	91.6	91.6	7.1	7.1	16.5		16		94				<0.2		1.0	
						6.3	0.5	199	19.2		7.9		28.6		91.6		7.1		16.5		17		94				<0.2		0.9	
IM10	Cloudy	Moderate	11:21	7.4	Surface	1.0	0.8	266	19.1	19.1	8.0	8.0	28.9	28.9	92.5	92.5	7.2	7.2	12.1	14.5	15	17	89	92	822258	809852	<0.2	<0.2	0.8	0.8
						1.0	0.9	288	19.1		8.0		28.9		92.5		7.2		12.1		15		88				<0.2		0.8	
					Middle	3.7	0.7	243	19.1	19.1	8.0	8.0	29.0	29.0	92.2	92.2	7.2		13.3		15		93				<0.2		0.7	
						3.7	0.8	245	19.1		8.0		29.0		92.2		7.2		13.3		16		93				<0.2		0.8	
					Bottom	6.4	0.7	233	19.0	19.0	8.0	8.0	29.0	29.0	92.4	92.4	7.2	7.2	18.2		19		94				<0.2		0.7	
						6.4	0.7	249	19.0		8.0		29.0		92.4		7.2		18.2		20		93				<0.2		0.7	
IM11	Cloudy	Moderate	11:13	8.3	Surface	1.0	0.5	272	19.1	19.1	8.0	8.0	29.1	29.1	91.9	91.9	7.2	7.2	14.6	19.7	19	19	87	91	821486	810526	<0.2	<0.2	0.6	0.8
						1.0	0.5	294	19.1		8.0		29.1		91.9		7.2		15.1		17		88				<0.2		0.7	
					Middle	4.2	0.5	283	19.1	19.1	8.0	8.0	29.1	29.1	91.3	91.3	7.1		19.3		18		92				<0.2		1.0	
						4.2	0.5	302	19.1		8.0		29.1		91.3		7.1		19.3		19		93				<0.2		0.9	
					Bottom	7.3	0.6	258	19.1	19.1	7.9	7.9	29.1	29.1	90.4	90.4	7.1	7.1	24.8		22		94				<0.2		0.8	
						7.3	0.6	277	19.1		7.9		29.1		90.4		7.1		24.8		21		94				<0.2		0.8	
IM12	Cloudy	Moderate	11:05	7.9	Surface	1.0	0.8	276	19.2	19.2	8.0	8.0	29.0	29.0	92.2	92.2	7.2	7.2	12.3	14.3	13	15	89	91	821175	811527	<0.2	<0.2	0.8	0.9
						1.0	0.8	280	19.2		8.0		29.0		92.2		7.2		12.3		11		89				<0.2		0.8	
					Middle	4.0	0.7	271	19.1	19.1	8.0	8.0	29.0	29.0	92.1	92.1	7.2		14.3		16		90				<0.2		0.9	
						4.0	0.8	296	19.1		8.0		29.0		92.1		7.2		14.3		17		90				<0.2		1.0	
					Bottom	6.9	0.7	274	19.1	19.1	8.0	8.0	29.1	29.1	92.6	92.6	7.2	7.2	16.2		16		94				<0.2		0.9	
						6.9	0.7	279	19.1		8.0		29.1		92.6		7.2		16.2		15		94				<0.2		1.0	
SR2	Cloudy	Moderate	10:21	3.5	Surface	1.0	0.4	72	19.2	19.2	7.9	7.9	29.0	29.0	91.1	91.1	7.1	7.1	13.7	13.9	20	20	88	89	821475	814148	<0.2	<0.2	0.9	0.9
						1.0	0.4	78	19.2		7.9		29.0		91.1		7.1		13.7		20		90				<0.2		0.8	
					Middle	1.8	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						1.8	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.5	0.4	80	19.2	19.2	7.9	7.9	29.0	29.0	91.6	91.6	7.1	7.1	14.0		19		88				<0.2		0.9	
						2.5	0.4	87	19.2		7.9		29.0		91.6		7.1		14.0		20		91				<0.2		0.9	
SR3	Cloudy	Moderate	11:44	9.9	Surface	1.0	0.6	160	19.4	19.4	7.9	7.9	27.3	27.3	91.1	91.1	7.1	7.1	7.6	14.1	12	17	-	-	822163	807573	-	-	-	-
						1.0	0.7	161	19.4		7.9		27.3		91.1		7.1		7.6		11		-				-		-	
					Middle	5.0	0.7	135	19.2	19.2	7.9	7.9	27.6	27.6	89.9	89.9	7.1		15.0		18		-				-		-	
						5.0	0.8	135	19.2		7.9		27.6		89.9		7.1		15.0		18		-				-		-	
					Bottom	8.9	0.6	150	19.2	19.2	7.9	7.9	27.7	27.7	89.7	89.7	7.0	7.0	19.6		21		-				-		-	
						8.9	0.7	152	19.2		7.9		27.7		89.7		7.0		19.6		19		-				-		-	
SR4A	Sunny	Moderate	09:59	8.2	Surface	1.0	0.3	204	18.7	18.7	7.9	7.9	28.7	28.7	89.6	89.6	7.0	7.1	12.3	12.7	18	23	-	-	817181	807813	-	-	-	-
						1.0	0.3	216	18.7		7.9		28.7		89.6		7.0		12.4		18		-				-		-	
					Middle	4.1	0.3	206	18.7	18.7	7.9	7.9	28.6	28.6	90.2	90.2	7.1		12.5		23		-				-		-	
						4.1	0.3	216	18.7		7.9		28.6		90.2		7.1		12.5		23		-				-		-	
					Bottom	7.2	0.2	175	18.7	18.7	7.8	7.8	28.6	28.6	91.5	91.5	7.2	7.2	13.4		26		-				-		-	
						7.2	0.3	181	18.7		7.8		28.6		91.5		7.2		13.3		27		-				-		-	
SR5A	Sunny	Calm	09:42	4.3	Surface	1.0	0.2	288	18.6	18.6	7.8	7.8	27.0	27.0	90.7	90.8	7.2	7.2	7.8	8.1	16	17	-	-	816604	810677	-	-	-	-
						1.0	0.3	314	18.6		7.8		27.0		90.8		7.2		7.8		16		-				-		-	
					Middle	2.2	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.2	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.2	272	18.6	18.6	7.6	7.6	25.7	25.7	95.0	95.1	7.6	7.6	8.4		17		-				-		-	
						3.3	0.3	299	18.6		7.6		25.6		95.2		7.6		8.4		18		-				-		-	
SR6	Sunny	Moderate	09:18	3.9	Surface	1.0	0.2	250	18.8	18.8	7.8	7.8	27.5	27.5	87.2	87.3	6.9	6.9	16.5	17.7	32	**39**	-	-	817906	814667	-	-	-	-
						1.0	0.2	253	18.8		7.8		27.5		87.3		6.9		16.5		29		-				-		-	
					Middle	2.0	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.0	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.9	0.2	247	18.8	18.8	7.7	7.7	26.9	26.9	89.4	89.4	7.1	7.1	18.9		48		-				-		-	
						2.9	0.2	261	18.8		7.7		26.8		89.4		7.1		18.9		45		-				-		-	
SR7	Cloudy	Moderate	09:24	16.4	Surface	1.0	0.4	113	19.5	19.5	7.9	7.9	29.3	29.3	88.5	88.5	6.8	6.8	8.0	7.9	7	11	-	-	823647	823747	-	-	-	-
						1.0	0.4	116	19.5		7.9		29.3		88.5		6.8		8.0		7		-				-		-	
					Middle	8.2	0.5	91	19.5	19.5	7.9	7.9	29.3	29.3	88.4	88.4	6.8		8.7		11		-				-		-	
						8.2	0.5	94	19.5		7.9		29.3		88.4		6.8		8.7		11		-				-		-	
					Bottom	15.4	0.5	98	19.5	19.5	7.9	7.9	29.3	29.3	89.4	89.4	6.9	6.9	7.1		14		-				-		-	
						15.4	0.5	100	19.5		7.9		29.3		89.4		6.9		7.1		16		-				-		-	
SR8	Cloudy	Moderate	10:39	5.1	Surface	1.0	0.5	222	19.3	19.3	7.9	7.9	28.7	28.7	92.3	92.3	7.2	7.2	10.3	11.6	13	14	-	-	820426	811591	-	-	-	-
						1.0	0.6	236	19.3		7.9		28.7		92.3		7.2		10.3		14		-				-		-	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	0.5	208	19.1	19.1	7.9	7.9	28.8	28.8	91.6	91.6	7.2	7.2	12.8		14		-				-		-	
						4.1	0.6	226	19.1		7.9		28.8		91.6		7.2		12.8		16		-				-		-	

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 January 17 during Mid-Ebb tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	15:58	8.9	Surface	1.0	0.4	223	19.0	19.0	8.0	8.0	29.6	29.6	92.6	92.6	7.2	7.2	18.0	19.3	11	11	90	92	815625	804235	<0.2	<0.2	0.2	0.2
						1.0	0.5	244	19.0		8.0		29.6		92.6		7.2		18.0		11		91				<0.2		0.2	
					Middle	4.5	0.4	210	19.1	19.1	8.0	8.0	29.6	29.6	92.7	92.7	7.2		19.0		12		92				<0.2		0.2	
						4.5	0.4	215	19.0		8.0		29.6		92.7		7.2		19.0		10		92				<0.2		0.2	
					Bottom	7.9	0.4	206	19.0	19.0	7.9	7.9	29.6	29.6	93.1	93.2	7.3	7.3	21.0		12		93				<0.2		0.2	
						7.9	0.4	215	19.0		7.9		29.6		93.2		7.3		21.0		12		93				<0.2		0.2	
C2	Cloudy	Moderate	14:49	13.0	Surface	1.0	0.3	119	19.4	19.4	7.9	7.9	27.1	27.1	89.0	89.0	7.0	7.0	8.8	12.8	5	11	87	90	825672	806950	<0.2	<0.2	1.7	1.5
						1.0	0.3	120	19.4		7.9		27.1		89.0		7.0		8.9		5		87				<0.2		1.7	
					Middle	6.5	0.3	124	19.2	19.2	7.9	7.9	27.4	27.4	88.4	88.4	6.9		13.9		14		89				<0.2		1.5	
						6.5	0.3	127	19.2		7.9		27.4		88.4		6.9		13.9		14		90				<0.2		1.5	
					Bottom	12.0	0.2	196	19.2	19.2	7.9	7.9	27.4	27.4	89.0	89.0	7.0	7.0	15.5		15		92				<0.2		1.2	
						12.0	0.3	208	19.2		7.9		27.4		89.0		7.0		15.5		15		92				<0.2		1.2	
C3	Cloudy	Moderate	16:52	12.5	Surface	1.0	0.4	72	19.4	19.4	7.9	7.9	28.9	28.9	90.3	90.3	7.0	7.0	7.4	14.5	7	7	90	93	822111	817797	<0.2	<0.2	0.6	0.7
						1.0	0.5	73	19.4		7.9		28.9		90.3		7.0		7.4		5		90				<0.2		0.7	
					Middle	6.3	0.4	79	19.5	19.5	7.9	7.9	29.0	29.0	89.4	89.4	7.0		11.5		7		94				<0.2		0.7	
						6.3	0.5	82	19.5		7.9		29.0		89.4		7.0		11.5		8		93				<0.2		0.7	
					Bottom	11.5	0.5	101	19.5	19.5	7.9	7.9	29.0	29.0	89.4	89.4	7.0	7.0	24.7		7		95				<0.2		0.7	
						11.5	0.5	108	19.5		7.9		29.0		89.4		7.0		24.7		7		94				<0.2		0.6	
IM1	Cloudy	Moderate	15:36	7.9	Surface	1.0	0.3	190	18.9	18.9	7.9	7.9	28.0	28.0	93.1	93.1	7.3	7.4	11.1	12.9	9	11	89	90	818351	806469	<0.2	<0.2	0.4	0.4
						1.0	0.3	197	18.9		7.9		28.0		93.1		7.3		11.3		9		89				<0.2		0.4	
					Middle	4.0	0.3	157	18.9	18.9	7.9	7.9	27.8	27.8	93.7	93.7	7.4		13.4		9		90				<0.2		0.4	
						4.0	0.3	163	18.9		7.9		27.8		93.7		7.4		13.4		10		90				<0.2		0.4	
					Bottom	6.9	0.3	188	19.0	19.0	7.8	7.8	27.1	27.1	95.7	95.8	7.6	7.6	14.0		14		91				<0.2		0.4	
						6.9	0.3	202	19.0		7.8		27.0		95.8		7.6		14.0		16		91				<0.2		0.4	
IM2	Cloudy	Moderate	15:31	8.8	Surface	1.0	0.5	213	18.9	18.9	7.9	7.9	28.2	28.2	92.7	92.7	7.3	7.3	12.2	12.7	11	13	90	91	818867	806192	<0.2	<0.2	0.4	0.4
						1.0	0.5	224	18.9		7.9		28.2		92.7		7.3		12.3		12		90				<0.2		0.4	
					Middle	4.4	0.4	194	18.9	18.9	7.9	7.9	28.1	28.1	93.2	93.2	7.3		13.4		13		91				<0.2		0.4	
						4.4	0.4	210	18.9		7.9		28.1		93.2		7.3		13.4		12		91				<0.2		0.4	
					Bottom	7.8	0.4	197	19.0	19.0	7.9	7.9	27.6	27.6	94.9	95.0	7.5	7.5	12.6		15		92				<0.2		0.4	
						7.8	0.4	215	19.0		7.9		27.6		95.0		7.5		12.5		17		93				<0.2		0.3	
IM3	Cloudy	Moderate	15:24	9.1	Surface	1.0	0.6	138	18.9	18.9	8.0	8.0	28.5	28.5	90.8	90.8	7.1	7.1	17.8	18.5	15	16	92	93	819421	806029	<0.2	<0.2	0.4	0.3
						1.0	0.6	144	18.9		8.0		28.5		90.8		7.1		18.1		14		92				<0.2		0.3	
					Middle	4.6	0.5	134	18.9	18.9	8.0	8.0	28.5	28.5	90.8	90.8	7.1		18.9		16		93				<0.2		0.2	
						4.6	0.6	135	18.9		8.0		28.5		90.8		7.1		19.0		15		93				<0.2		0.3	
					Bottom	8.1	0.6	143	18.9	18.9	7.9	7.9	28.4	28.4	90.7	90.8	7.1	7.1	18.4		20		94				<0.2		0.2	
						8.1	0.6	149	18.9		7.9		28.4		90.8		7.1		18.6		18		94				<0.2		0.3	
IM4	Cloudy	Moderate	15:16	8.3	Surface	1.0	0.3	139	19.0	19.0	8.0	8.0	28.5	28.5	92.1	92.1	7.2	7.2	14.0	18.9	15	17	90	91	819571	805040	<0.2	<0.2	0.3	0.3
						1.0	0.4	145	19.0		8.0		28.5		92.1		7.2		14.0		15		90				<0.2		0.3	
					Middle	4.2	0.3	162	19.0	19.0	8.0	8.0	28.5	28.5	92.2	92.2	7.2		20.9		13		91				<0.2		0.2	
						4.2	0.3	172	19.0		8.0		28.5		92.2		7.2		21.1		15		91				<0.2		0.2	
					Bottom	7.3	0.3	160	19.0	19.0	8.0	8.0	28.4	28.4	92.7	92.7	7.3	7.3	21.9		21		92				<0.2		0.2	
						7.3	0.3	163	19.0		8.0		28.4		92.7		7.3		21.4		22		92				<0.2		0.3	
IM5	Cloudy	Moderate	15:05	7.3	Surface	1.0	0.4	167	18.9	18.9	8.0	8.0	28.6	28.6	91.2	91.2	7.1	7.1	16.3	16.5	10	11	92	93	820544	804920	<0.2	<0.2	0.5	0.4
						1.0	0.4	177	18.9		8.0		28.6		91.2		7.1		16.3		10		92				<0.2		0.5	
					Middle	3.7	0.4	172	18.9	18.9	8.0	8.0	28.6	28.6	91.2	91.2	7.1		17.4		12		93				<0.2		0.4	
						3.7	0.4	177	18.9		8.0		28.6		91.2		7.1		17.5		11		93				<0.2		0.4	
					Bottom	6.3	0.4	168	18.9	18.9	8.0	8.0	28.6	28.6	91.6	91.6	7.2	7.2	15.8		11		94				<0.2		0.4	
						6.3	0.4	172	18.9		8.0		28.6		91.6		7.2		15.8		12		94				<0.2		0.4	
IM6	Cloudy	Moderate	14:56	7.2	Surface	1.0	0.3	149	18.9	18.9	7.9	7.9	27.9	27.9	91.9	91.9	7.2	7.3	8.3	10.6	25	28	93	94	821076	805817	<0.2	<0.2	0.6	0.5
						1.0	0.3	160	18.9		7.9		27.9		91.9		7.2		8.4		26		93				<0.2		0.6	
					Middle	3.6	0.3	147	18.9	18.9	7.9	7.9	27.9	27.9	92.9	93.0	7.3		11.7		28		94				<0.2		0.5	
						3.6	0.4	155	18.9		7.9		27.9		93.0		7.3		11.7		26		94				<0.2		0.5	
					Bottom	6.2	0.3	144	18.9	18.9	7.9	7.9	28.1	28.1	94.8	94.9	7.4	7.5	11.7		31		94				<0.2		0.5	
						6.2	0.3	156	18.9		7.9		28.0		94.9		7.5		11.7		32		95				<0.2		0.5	
IM7	Cloudy	Moderate	14:49	8.6	Surface	1.0	0.3	118	18.9	18.9	7.9	7.9	27.6	27.6	92.3	92.4	7.3	7.3	5.9	6.7	10	13	92	93	821341	806844	<0.2	<0.2	0.4	0.4
						1.0	0.3	127	18.9		7.9		27.6		92.4		7.3		5.9		11		93				<0.2		0.5	
					Middle	4.3	0.3	105	18.9	18.9	7.9	7.9	27.7	27.8	93.4	93.5	7.3		7.0		11		93				<0.2		0.4	
						4.3	0.3	112	18.9		7.9		27.8		93.5		7.3		7.1		10		93				<0.2		0.4	
					Bottom	7.6	0.3	117	18.9	18.9	7.9	7.9	28.1	28.1	95.0	95.1	7.5	7.5	7.3		17		94				<0.2		0.4	
						7.6	0.3	120	18.9		7.9		28.0		95.1		7.5		7.0		16		94				<0.2		0.4	
IM8	Cloudy	Moderate	15:21	9.6	Surface	1.0	0.6	131	19.0	19.0	7.9	7.9	27.6	27.6	90.8	90.8	7.1	7.1	9.0	14.0	15	21	86	89	821706	807836	<0.2	<0.2	0.8	0.7
						1.0	0.7	135	19.0		7.9		27.6		90.8		7.1		9.0		16		86				<0.2		0.8	
					Middle	4.8	0.6	108	19.0	19.0	7.9	7.9	27.7	27.7	90.2	90.2	7.1		11.1		22		88				<0.2		0.8	
						4.8	0.6	112	19.0		7.9		27.7		90.2		7.1		11.2		23		88				<0.2		0.7	
					Bottom	8.6	0.6	116	19.0	19.0	7.9	7.9	27.8	27.8	90.2	90.2	7.1	7.1	21.9		24		94				<0.2		0.6	
						8.6	0.7	127	19.0		7.9		27.8		90.2		7.1		21.8		24		94				<0.2		0.6	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 17 January 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	15:34	8.6	Surface	1.0	0.4	116	19.0	19.0	7.9	7.9	28.3	28.3	91.1	91.1	7.1	7.1	10.6	13.4	13	18	86	91	822078	808829	<0.2	<0.2	0.7	0.6
						1.0	0.4	120	19.0		7.9		28.3		91.1		7.1		10.6		14		87				<0.2		0.6	
					Middle	4.3	0.4	99	19.0	19.0	7.9	7.9	28.6	28.6	91.4	91.4	7.1		13.1		16		91				<0.2		0.7	
						4.3	0.4	106	19.0		7.9		28.6		91.4		7.1		13.1		18		92				<0.2		0.7	
					Bottom	7.6	0.4	103	19.0	19.0	7.9	7.9	28.6	28.6	91.6	91.6	7.1	7.1	16.5		25		93				<0.2		0.6	
						7.6	0.4	104	19.0		7.9		28.6		91.6		7.1		16.5		24		94				<0.2		0.5	
IM10	Cloudy	Moderate	15:45	7.3	Surface	1.0	0.7	108	19.1	19.1	8.0	8.0	28.9	28.9	92.5	92.5	7.2	7.2	12.1	14.5	12	15	87	91	822222	809845	<0.2	<0.2	0.7	0.7
						1.0	0.7	110	19.1		8.0		28.9		92.5		7.2		12.1		12		87				<0.2		0.7	
					Middle	3.7	0.7	100	19.1	19.1	8.0	8.0	29.0	29.0	92.2	92.2	7.2		13.3		16		91				<0.2		0.8	
						3.7	0.7	108	19.1		8.0		29.0		92.2		7.2		13.3		16		92				<0.2		0.7	
					Bottom	6.3	0.7	112	19.0	19.0	8.0	8.0	29.0	29.0	92.4	92.4	7.2	7.2	18.2		15		93				<0.2		0.7	
						6.3	0.7	121	19.0		8.0		29.0		92.4		7.2		18.2		17		93				<0.2		0.8	
IM11	Cloudy	Moderate	15:53	7.7	Surface	1.0	0.5	114	19.2	19.2	8.0	8.0	29.1	29.1	91.9	91.9	7.2	7.2	14.6	19.7	9	10	89	91	821487	810557	<0.2	<0.2	0.9	0.8
						1.0	0.5	124	19.2		8.0		29.1		91.9		7.2		15.1		7		88				<0.2		0.9	
					Middle	3.9	0.5	110	19.1	19.1	8.0	8.0	29.1	29.1	91.3	91.3	7.1		19.3		10		91				<0.2		0.8	
						3.9	0.5	119	19.1		8.0		29.1		91.3		7.1		19.3		10		92				<0.2		0.8	
					Bottom	6.7	0.5	102	19.1	19.1	7.9	7.9	29.1	29.1	90.4	90.4	7.1	7.1	24.8		12		93				<0.2		0.8	
						6.7	0.5	107	19.1		7.9		29.1		90.4		7.1		24.8		11		93				<0.2		0.8	
IM12	Cloudy	Moderate	16:00	8.6	Surface	1.0	0.5	123	19.2	19.2	8.0	8.0	29.0	29.0	92.2	92.2	7.2	7.2	12.3	14.3	7	9	86	90	821181	811529	<0.2	<0.2	0.8	0.8
						1.0	0.5	123	19.2		8.0		29.0		92.2		7.2		12.3		7		86				<0.2		0.8	
					Middle	4.3	0.5	126	19.2	19.2	8.0	8.0	29.0	29.0	92.1	92.1	7.2		14.3		7		92				<0.2		0.9	
						4.3	0.6	134	19.2		8.0		29.0		92.1		7.2		14.3		8		92				<0.2		0.8	
					Bottom	7.6	0.5	136	19.2	19.2	8.0	8.0	29.1	29.1	92.6	92.6	7.2	7.2	16.2		12		93				<0.2		0.8	
						7.6	0.5	142	19.2		8.0		29.1		92.6		7.2		16.2		11		93				<0.2		0.8	
SR2	Cloudy	Moderate	16:31	4.5	Surface	1.0	0.3	85	19.3	19.3	7.9	7.9	29.0	29.0	91.1	91.1	7.1	7.1	13.7	13.9	10	10	88	91	821461	814166	<0.2	<0.2	0.8	0.8
						1.0	0.4	92	19.3		7.9		29.0		91.1		7.1		13.7		10		89				<0.2		0.8	
					Middle	2.3	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.3	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.3	81	19.3	19.3	7.9	7.9	29.0	29.0	91.6	91.6	7.1	7.1	14.0		11		94				<0.2		0.8	
						3.5	0.3	83	19.3		7.9		29.0		91.6		7.1		14.0		10		94				<0.2		0.8	
SR3	Cloudy	Moderate	15:09	9.5	Surface	1.0	0.5	133	19.3	19.3	7.9	7.9	27.3	27.3	91.1	91.1	7.1	7.1	7.6	14.1	6	7	-	-	822128	807570	-	-	-	-
						1.0	0.5	140	19.3		7.9		27.3		91.1		7.1		7.6		6		-				-		-	
					Middle	4.8	0.4	121	19.3	19.3	7.9	7.9	27.6	27.6	89.9	89.9	7.1		15.0		8		-				-		-	
						4.8	0.4	125	19.3		7.9		27.6		89.9		7.1		15.0		7		-				-		-	
					Bottom	8.5	0.5	141	19.3	19.3	7.9	7.9	27.7	27.7	89.7	89.7	7.0	7.0	19.6		8		-				-		-	
						8.5	0.5	141	19.3		7.9		27.7		89.7		7.0		19.6		8		-				-		-	
SR4A	Cloudy	Moderate	16:19	8.3	Surface	1.0	0.4	99	18.9	18.9	7.9	7.9	28.7	28.7	89.6	89.6	7.0	7.1	12.3	12.7	11	12	-	-	817190	807829	-	-	-	-
						1.0	0.4	102	18.9		7.9		28.7		89.6		7.0		12.4		12		-				-		-	
					Middle	4.2	0.4	85	18.9	18.9	7.9	7.9	28.6	28.6	90.2	90.2	7.1		12.5		11		-				-		-	
						4.2	0.4	92	18.9		7.9		28.6		90.2		7.1		12.5		12		-				-		-	
					Bottom	7.3	0.4	86	18.9	18.9	7.8	7.8	28.6	28.6	91.5	91.5	7.2	7.2	13.4		13		-				-		-	
						7.3	0.4	94	18.9		7.8		28.6		91.5		7.2		13.3		14		-				-		-	
SR5A	Cloudy	Calm	16:35	4.4	Surface	1.0	0.1	186	18.7	18.7	7.8	7.8	27.0	27.0	90.7	90.8	7.2	7.2	7.8	8.1	10	10	-	-	816592	810683	-	-	-	-
						1.0	0.1	192	18.7		7.8		27.0		90.8		7.2		7.8		9		-				-		-	
					Middle	2.2	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.2	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.1	178	18.7	18.7	7.6	7.6	25.7	25.7	95.0	95.1	7.6	7.6	8.4		9		-				-		-	
						3.4	0.1	193	18.7		7.6		25.6		95.2		7.6		8.4		10		-				-		-	
SR6	Cloudy	Calm	16:57	4.3	Surface	1.0	0.3	63	18.8	18.8	7.8	7.8	27.5	27.5	87.2	87.3	6.9	6.9	16.5	17.7	8	9	-	-	817880	814676	-	-	-	-
						1.0	0.3	63	18.8		7.8		27.5		87.3		6.9		16.5		8		-				-		-	
					Middle	2.2	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.2	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.3	82	18.7	18.7	7.7	7.7	26.9	26.9	89.4	89.4	7.1	7.1	18.9		10		-				-		-	
						3.3	0.3	87	18.7		7.7		26.8		89.4		7.1		18.9		10		-				-		-	
SR7	Cloudy	Moderate	17:19	16.2	Surface	1.0	0.3	77	19.6	19.6	7.9	7.9	29.3	29.3	88.5	88.5	6.8	6.8	8.0	7.9	3	6	-	-	823643	823722	-	-	-	-
						1.0	0.3	83	19.6		7.9		29.3		88.5		6.8		8.0		4		-				-		-	
					Middle	8.1	0.2	102	19.6	19.6	7.9	7.9	29.3	29.3	88.4	88.4	6.8		8.7		7		-				-		-	
						8.1	0.3	110	19.6		7.9		29.3		88.4		6.8		8.7		7		-				-		-	
					Bottom	15.2	0.2	124	19.6	19.6	7.9	7.9	29.3	29.3	89.4	89.4	6.9	6.9	7.1		6		-				-		-	
						15.2	0.2	129	19.6		7.9		29.3		89.4		6.9		7.1		8		-				-		-	
SR8	Cloudy	Moderate	16:17	5.5	Surface	1.0	0.3	204.0	19.2	19.2	7.9	7.9	28.7	28.7	92.3	92.3	7.2	7.2	10.3	11.6	11	14	-	-	820417	811611	-	-	-	-
						1.0	0.3	223.0	19.2		7.9		28.7		92.3		7.2		10.3		12		-				-		-	
					Middle	2.8	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.8	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.5	0.3	153.0	19.1	19.2	7.9	7.9	28.8	28.8	91.6	91.6	7.2	7.2	12.8		15		-				-		-	
						4.5	0.3	167.0	19.2		7.9		28.8		91.6		7.2		12.8		16		-				-		-	

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 January 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	11:58	8.6	Surface	1.0	0.7	96	19.1	19.1	8.0	8.0	28.0	28.0	93.8	93.8	7.3	7.3	4.9	13.1	5	17	91	91	815633	804262	<0.2	<0.2	1.8	1.3
						1.0	0.7	96	19.1		8.0		28.0		93.8		7.3		5.0		5		90				<0.2		1.7	
					Middle	4.3	0.7	86	19.0	19.0	8.0	8.0	29.1	29.1	93.0	93.0	7.3		13.4		18		91				<0.2		1.2	
						4.3	0.8	92	19.0		8.0		29.1		92.9		7.3		13.5		19		91				<0.2		1.2	
					Bottom	7.6	0.7	81	19.0	19.0	8.1	8.1	29.5	29.5	92.5	92.5	7.2	7.2	20.8		26		93				<0.2		1.0	
						7.6	0.8	85	19.0		8.1		29.5		92.5		7.2		20.8		26		92				<0.2		1.0	
C2	Cloudy	Moderate	13:18	12.7	Surface	1.0	0.5	240	19.7	19.7	7.8	7.8	25.5	25.5	91.7	91.7	7.2	7.1	4.7	8.8	7	8	87	92	825680	806959	<0.2	<0.2	2.4	1.9
						1.0	0.6	245	19.7		7.8		25.5		91.7		7.2		4.7		6		87				<0.2		2.3	
					Middle	6.4	0.6	244	19.3	19.3	7.8	7.8	27.7	27.7	90.0	90.0	7.0		7.4		7		93				<0.2		2.1	
						6.4	0.6	260	19.3		7.8		27.7		90.0		7.0		7.4		6		94				<0.2		2.2	
					Bottom	11.7	0.6	239	19.3	19.3	7.9	7.9	28.0	28.0	89.7	89.7	7.0	7.0	14.4		9		94				<0.2		1.2	
						11.7	0.6	254	19.3		7.9		28.0		89.7		7.0		14.3		10		95				<0.2		1.3	
C3	Cloudy	Moderate	11:14	11.7	Surface	1.0	0.5	252	19.4	19.4	7.9	7.9	28.6	28.6	89.0	89.0	6.9	6.9	5.2	7.9	5	7	90	92	822105	817816	<0.2	<0.2	0.9	0.9
						1.0	0.5	274	19.4		7.9		28.6		89.0		6.9		5.2		7		90				<0.2		1.0	
					Middle	5.9	0.5	284	19.4	19.4	7.9	7.9	29.0	29.0	87.4	87.4	6.8		7.2		8		90				<0.2		0.8	
						5.9	0.5	285	19.4		7.9		29.0		87.4		6.8		7.2		6		91				<0.2		0.8	
					Bottom	10.7	0.4	227	19.4	19.4	7.8	7.8	29.2	29.2	87.5	87.5	6.8	6.8	11.4		9		95				<0.2		0.8	
						10.7	0.4	240	19.4		7.8		29.2		87.5		6.8		11.4		8		96				<0.2		0.8	
IM1	Cloudy	Moderate	12:22	7.5	Surface	1.0	0.7	105	19.1	19.1	8.0	8.0	28.6	28.6	92.8	92.8	7.3	7.3	6.1	11.6	5	13	90	93	818368	806475	<0.2	<0.2	0.9	0.8
						1.0	0.7	107	19.1		8.0		28.6		92.8		7.3		6.2		5		91				<0.2		1.1	
					Middle	3.8	0.6	143	18.9	18.9	8.0	8.0	29.2	29.2	92.1	92.1	7.2		12.5		15		94				<0.2		0.9	
						3.8	0.6	152	18.9		8.0		29.2		92.1		7.2		12.7		14		93				<0.2		0.7	
					Bottom	6.5	0.5	144	18.9	18.9	8.0	8.0	29.2	29.2	91.9	91.9	7.2	7.2	16.2		19		94				<0.2		0.7	
						6.5	0.5	155	18.9		8.0		29.2		91.9		7.2		16.1		19		95				<0.2		0.7	
IM2	Cloudy	Moderate	12:35	8.5	Surface	1.0	0.8	113	19.3	19.3	8.0	8.0	28.2	28.2	93.8	93.8	7.3	7.3	2.5	6.1	5	9	90	91	818855	806204	<0.2	<0.2	1.1	1.0
						1.0	0.9	124	19.3		8.0		28.2		93.7		7.3		2.5		3		90				<0.2		1.3	
					Middle	4.3	0.7	130	19.0	19.0	8.0	8.0	28.8	28.8	92.6	92.6	7.2		5.8		7		91				<0.2		1.0	
						4.3	0.7	133	19.0		8.0		28.8		92.6		7.2		5.8		7		91				<0.2		1.0	
					Bottom	7.5	0.8	161	19.0	19.0	8.0	8.0	29.2	29.2	92.1	92.1	7.2	7.2	9.9		15		92				<0.2		0.8	
						7.5	0.8	163	19.0		8.0		29.2		92.1		7.2		9.9		15		92				<0.2		0.8	
IM3	Cloudy	Moderate	12:48	8.8	Surface	1.0	0.5	81	19.3	19.3	8.0	8.0	28.2	28.2	93.6	93.6	7.3	7.3	2.0	5.2	4	7	90	91	819424	805999	<0.2	<0.2	1.2	1.1
						1.0	0.6	87	19.3		8.0		28.2		93.6		7.3		2.0		4		89				<0.2		1.2	
					Middle	4.4	0.5	108	19.2	19.2	8.0	8.0	28.2	28.2	92.9	93.0	7.3		3.1		7		91				<0.2		1.2	
						4.4	0.5	110	19.2		8.0		28.2		93.0		7.3		3.2		6		91				<0.2		1.2	
					Bottom	7.8	0.4	155	19.0	19.0	8.1	8.1	29.3	29.3	92.2	92.2	7.2	7.2	10.3		9		91				<0.2		1.0	
						7.8	0.5	161	19.0		8.1		29.3		92.2		7.2		10.3		11		92				<0.2		1.0	
IM4	Cloudy	Moderate	13:03	8.2	Surface	1.0	0.6	110	19.3	19.3	8.0	8.0	27.9	27.9	93.8	93.8	7.3	7.3	1.8	6.2	6	10	89	91	819577	805056	<0.2	<0.2	1.2	1.1
						1.0	0.6	110	19.3		8.0		27.9		93.8		7.3		1.8		7		89				<0.2		1.2	
					Middle	4.1	0.6	83	19.1	19.1	8.0	8.0	27.9	27.9	92.8	92.8	7.3		3.1		6		91				<0.2		1.2	
						4.1	0.6	83	19.1		8.0		27.9		92.7		7.3		3.1		7		90				<0.2		1.0	
					Bottom	7.2	0.6	126	19.0	19.0	8.1	8.1	29.1	29.1	92.0	92.0	7.2	7.2	13.7		16		93				<0.2		0.9	
						7.2	0.6	128	19.0		8.1		29.1		92.0		7.2		13.8		17		93				<0.2		0.9	
IM5	Cloudy	Moderate	13:17	7.0	Surface	1.0	0.7	118	19.5	19.5	8.0	8.0	27.6	27.6	93.3	93.3	7.3	7.3	2.1	7.0	3	6	93	94	820567	804910	<0.2	<0.2	1.4	1.4
						1.0	0.8	118	19.5		8.0		27.6		93.3		7.3		2.2		2		93				<0.2		1.4	
					Middle	3.5	0.7	108	19.2	19.2	8.0	8.0	27.9	27.9	92.7	92.7	7.3		3.3		5		93				<0.2		1.4	
						3.5	0.8	117	19.2		8.0		27.9		92.7		7.3		3.3		4		94				<0.2		1.5	
					Bottom	6.0	0.7	157	19.0	19.0	8.1	8.1	29.1	29.1	91.9	91.9	7.2	7.2	15.6		11		94				<0.2		1.3	
						6.0	0.7	162	19.0		8.1		29.1		91.9		7.2		15.6		11		95				<0.2		1.4	
IM6	Cloudy	Moderate	13:32	7.1	Surface	1.0	0.8	110	19.4	19.4	8.0	8.0	27.8	27.8	92.8	92.8	7.2	7.2	3.2	7.1	6	10	91	92	821079	805829	<0.2	<0.2	1.4	1.1
						1.0	0.8	114	19.4		8.0		27.8		92.8		7.2		3.3		7		91				<0.2		1.4	
					Middle	3.6	0.8	124	19.0	19.0	8.0	8.0	28.7	28.7	91.7	91.7	7.2		8.2		11		92				<0.2		1.0	
						3.6	0.9	125	19.0		8.0		28.7		91.7		7.2		8.1		11		93				<0.2		1.0	
					Bottom	6.1	0.7	133	19.0	19.0	8.0	8.0	28.8	28.8	92.5	92.5	7.2	7.2	9.8		12		93				<0.2		1.0	
						6.1	0.8	136	19.0		8.0		28.8		92.5		7.2		9.7		13		94				<0.2		0.9	
IM7	Cloudy	Moderate	13:47	8.5	Surface	1.0	0.5	148	19.6	19.6	8.0	8.0	26.6	26.6	93.4	93.4	7.3	7.3	2.7	4.2	7	9	92	93	821333	806850	<0.2	<0.2	2.2	1.8
						1.0	0.5	149	19.6		8.0		26.6		93.4		7.3		2.7		6		92				<0.2		2.2	
					Middle	4.3	0.6	104	19.4	19.4	8.0	8.0	27.8	27.8	92.9	92.9	7.3		3.5		7		93				<0.2		1.8	
						4.3	0.7	111	19.4		8.0		27.8		92.9		7.3		3.6		7		93				<0.2		1.9	
					Bottom	7.5	0.6	109	19.0	19.0	8.1	8.1	29.1	29.1	92.4	92.4	7.2	7.2	6.3		13		94				<0.2		1.4	
						7.5	0.6	109	19.0		8.1		29.1		92.4		7.2		6.2		11		94				<0.2		1.4	
IM8	Cloudy	Moderate	12:41	8.2	Surface	1.0	0.4	176	19.6	19.6	7.8	7.8	26.2	26.2	92.7	92.7	7.3	7.3	5.9	8.4	8	9	86	90	821694	807829	<0.2	<0.2	2.5	2.3
						1.0	0.5	189	19.6		7.8		26.2		92.7		7.3		5.9		7		87				<0.2		2.5	
					Middle	4.1	0.4	173	19.5	19.5	7.8	7.8	27.0	27.0	92.7	92.7	7.3		8.3		10		88				<0.2		2.0	
						4.1	0.5	185	19.5		7.8		27.0		92.7		7.3		8.3		9		88				<0.2		2.1	
					Bottom	7.2	0.5	186	19.4	19.4	7.8	7.8	27.7	27.7	92.8	92.8	7.3	7.3	11.1		9		94				<0.2		2.4	
						7.2	0.5	194	19.4		7.8		27.7		92.8		7.3		11.1		10		94				<0.2		2.2	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 19 January 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	12:30	7.4	Surface	1.0	0.4	209	19.8	19.8	7.8	7.8	27.1	27.1	93.9	93.9	7.3	7.3	7.3	12.6	10	13	87	91	822085	808828	<0.2	<0.2	1.9	1.8
						1.0	0.4	216	19.8		7.8		27.1		93.9		7.3		7.3		11		88				<0.2		2.0	
					Middle	3.7	0.5	243	19.5	19.5	7.9	7.9	27.7	27.7	93.0	93.0	7.3		14.2		13		92				<0.2		1.7	
						3.7	0.5	252	19.5		7.9		27.7		93.0		7.3		14.2		13		93				<0.2		1.8	
					Bottom	6.4	0.5	252	19.5	19.5	7.8	7.8	27.8	27.8	93.7	94.0	7.3	7.3	16.9		14		94				<0.2		1.7	
						6.4	0.5	263	19.5		7.8		27.8		94.2		7.3		15.9		14		94				<0.2		1.7	
IM10	Cloudy	Moderate	12:21	7.7	Surface	1.0	0.7	262	19.4	19.4	7.9	7.9	28.0	28.0	93.6	93.6	7.3	7.3	6.9	11.9	8	14	88	92	822249	809847	<0.2	<0.2	1.7	1.5
						1.0	0.8	266	19.4		7.9		28.0		93.6		7.3		6.9		8		87				<0.2		1.7	
					Middle	3.9	0.7	269	19.2	19.2	7.9	7.9	28.3	28.3	92.3	92.3	7.2		11.1		9		93				<0.2		1.4	
						3.9	0.7	289	19.2		7.9		28.3		92.3		7.2		11.1		8		93				<0.2		1.4	
					Bottom	6.7	0.6	256	19.2	19.2	7.9	7.9	28.4	28.4	92.8	92.8	7.3	7.3	17.7		24		94				<0.2		1.3	
						6.7	0.7	264	19.2		7.9		28.4		92.8		7.3		17.7		26		94				<0.2		1.3	
IM11	Cloudy	Moderate	12:12	8.3	Surface	1.0	0.6	266	19.5	19.5	7.9	7.9	28.0	28.0	92.6	92.6	7.2	7.1	7.5	16.4	8	15	88	92	821481	810538	<0.2	<0.2	1.6	1.4
						1.0	0.6	276	19.5		7.9		28.0		92.6		7.2		7.6		8		87				<0.2		1.6	
					Middle	4.2	0.5	268	19.2	19.2	7.9	7.9	28.5	28.5	90.0	90.0	7.0		16.5		13		93				<0.2		1.4	
						4.2	0.6	286	19.2		7.9		28.5		90.0		7.0		16.5		12		93				<0.2		1.4	
					Bottom	7.3	0.5	252	19.2	19.2	7.9	7.9	28.5	28.5	89.7	89.7	7.0	7.0	25.0		24		94				<0.2		1.0	
						7.3	0.5	262	19.2		7.9		28.5		89.7		7.0		25.0		25		94				<0.2		1.1	
IM12	Cloudy	Moderate	12:01	9.0	Surface	1.0	0.6	284	19.3	19.3	7.9	7.9	28.4	28.4	90.3	90.3	7.0	7.0	11.9	15.9	14	18	91	93	821180	811525	<0.2	<0.2	1.1	1.1
						1.0	0.6	304	19.3		7.9		28.4		90.3		7.0		11.9		12		90				<0.2		1.1	
					Middle	4.5	0.5	287	19.2	19.2	7.9	7.9	28.5	28.5	89.2	89.2	7.0		15.8		20		93				<0.2		1.1	
						4.5	0.5	295	19.2		7.9		28.5		89.2		7.0		15.8		20		93				<0.2		1.0	
					Bottom	8.0	0.4	283	19.2	19.2	7.8	7.8	28.6	28.6	89.1	89.1	6.9	6.9	19.9		20		94				<0.2		1.2	
						8.0	0.5	308	19.2		7.8		28.6		89.0		6.9		19.8		19		94				<0.2		1.1	
SR2	Cloudy	Moderate	11:38	4.1	Surface	1.0	0.3	100	19.4	19.4	7.8	7.8	28.4	28.4	91.9	91.9	7.1	7.1	9.3	9.7	10	11	86	89	821463	814185	<0.2	<0.2	1.2	1.2
						1.0	0.4	101	19.4		7.8		28.4		91.9		7.1		9.3		10		88				<0.2		1.3	
					Middle	2.1	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.1	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.3	104	19.3	19.3	7.8	7.8	28.5	28.5	93.4	93.4	7.3	7.3	10.0		10		91				<0.2		1.2	
						3.1	0.4	112	19.3		7.8		28.5		93.4		7.3		10.0		12		92				<0.2		1.2	
SR3	Cloudy	Moderate	12:47	9.3	Surface	1.0	0.5	187	19.5	19.5	7.8	7.8	26.0	26.0	92.4	92.5	7.3	7.3	6.6	12.1	6	16	-	-	822139	807588	-	-	-	-
						1.0	0.6	201	19.5		7.8		26.0		92.5		7.3		6.6		5		-				-		-	
					Middle	4.7	0.6	226	19.4	19.4	7.9	7.9	27.7	27.7	92.0	92.0	7.2		10.9		10		-				-		-	
						4.7	0.6	228	19.4		7.9		27.7		92.0		7.2		10.9		11		-				-		-	
					Bottom	8.3	0.6	193	19.3	19.3	7.9	7.9	27.9	27.9	92.0	92.0	7.2	7.2	18.8		30		-				-		-	
						8.3	0.6	204	19.3		7.9		27.9		92.0		7.2		18.8		33		-				-		-	
SR4A	Cloudy	Moderate	11:26	8.2	Surface	1.0	0.3	229	19.0	19.0	8.0	8.0	29.2	29.2	89.3	89.3	7.0	7.0	11.5	12.5	19	22	-	-	817185	807796	-	-	-	-
						1.0	0.4	249	19.0		8.0		29.2		89.3		7.0		11.5		20		-				-		-	
					Middle	4.1	0.3	215	19.0	19.0	8.0	8.0	29.2	29.2	89.2	89.2	6.9		11.8		21		-				-		-	
						4.1	0.3	221	19.0		8.0		29.2		89.1		6.9		11.7		21		-				-		-	
					Bottom	7.2	0.3	215	19.0	19.0	8.0	8.0	29.2	29.2	89.1	89.1	6.9	6.9	14.2		26		-				-		-	
						7.2	0.3	223	19.0		8.0		29.2		89.1		6.9		14.2		25		-				-		-	
SR5A	Cloudy	Calm	11:01	3.9	Surface	1.0	0.3	226	19.0	19.0	7.9	7.9	28.9	28.9	88.5	88.5	6.9	6.9	8.7	12.4	15	15	-	-	816579	810708	-	-	-	-
						1.0	0.3	234	19.0		7.9		28.9		88.5		6.9		8.8		13		-				-		-	
					Middle	2.0	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.0	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.9	0.2	223	19.0	19.0	7.9	7.9	28.9	28.9	88.7	88.7	6.9	6.9	16.1		15		-				-		-	
						2.9	0.3	238	19.0		7.9		28.9		88.7		6.9		15.8		16		-				-		-	
SR6	Cloudy	Moderate	10:30	4.8	Surface	1.0	0.2	223	19.3	19.3	7.9	7.9	28.5	28.5	87.8	87.8	6.8	6.8	14.2	15.8	33	35	-	-	817897	814654	-	-	-	-
						1.0	0.2	233	19.3		7.9		28.5		87.7		6.8		14.4		32		-				-		-	
					Middle	2.4	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.4	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.1	223	19.2	19.3	7.9	7.9	28.4	28.4	88.2	88.2	6.9	6.9	17.3		36		-				-		-	
						3.8	0.1	245	19.3		7.9		28.4		88.2		6.9		17.2		37		-				-		-	
SR7	Cloudy	Moderate	10:34	16.2	Surface	1.0	0.3	124	19.4	19.4	7.8	7.8	29.1	29.1	87.6	87.6	6.8	6.8	4.6	4.6	6	8	-	-	823647	823752	-	-	-	-
						1.0	0.3	127	19.4		7.8		29.1		87.6		6.8		4.6		7		-				-		-	
					Middle	8.1	0.3	65	19.4	19.4	7.8	7.8	29.2	29.2	87.0	87.0	6.7		4.6		9		-				-		-	
						8.1	0.3	68	19.4		7.8		29.2		87.0		6.7		4.6		10		-				-		-	
					Bottom	15.2	0.3	149	19.5	19.5	7.8	7.8	29.3	29.3	87.1	87.1	6.7	6.7	4.7		9		-				-		-	
						15.2	0.3	152	19.5		7.8		29.3		87.1		6.7		4.7		9		-				-		-	
SR8	Cloudy	Moderate	11:54	4.2	Surface	1.0	0.2	171	19.6	19.6	7.8	7.8	27.5	27.5	92.8	92.8	7.2	7.2	10.7	15.3	10	12	-	-	820409	811578	-	-	-	-
						1.0	0.2	182	19.6		7.8		27.5		92.8		7.2		10.7		11		-				-		-	
					Middle	2.1	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.1	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.2	229	19.2	19.2	7.8	7.8	28.3	28.3	91.2	91.2	7.1	7.1	19.9		13		-				-		-	
						3.2	0.3	248	19.2		7.8		28.3		91.2		7.1		19.9		13		-				-		-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 19 January 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	17:14	9.1	Surface	1.0	0.4	170	19.3	19.3	8.1	8.1	29.0	29.0	95.1	95.1	7.4	7.4	3.5	4.8	4	7	92	94	815621	804229	<0.2	<0.2	1.3	0.9
						1.0	0.4	174	19.3		8.1		29.0		95.1		7.4		3.6		3		93				<0.2		1.2	
					Middle	4.6	0.4	160	19.1	19.1	8.1	8.1	29.8	29.8	93.9	93.9	7.3		5.4		7		94				<0.2		0.9	
						4.6	0.4	165	19.1		8.1		29.8		93.9		7.3		5.4		8		94				<0.2		0.9	
					Bottom	8.1	0.4	175	19.1	19.1	8.1	8.1	29.9	29.9	94.8	94.9	7.3	7.3	5.5		11		94				<0.2		0.6	
						8.1	0.5	191	19.1		8.1		29.9		94.9		7.3		5.4		9		95				<0.2		0.7	
C2	Cloudy	Moderate	16:46	11.7	Surface	1.0	0.6	91	19.6	19.6	7.8	7.8	26.7	26.7	93.1	93.1	7.3	7.2	5.7	10.0	4	7	87	90	825694	806955	<0.2	<0.2	2.3	1.9
						1.0	0.7	97	19.6		7.8		26.7		93.1		7.3		5.7		3		86				<0.2		2.2	
					Middle	5.9	0.3	102	19.4	19.4	7.8	7.8	27.5	27.5	91.3	91.3	7.1		9.8		6		90				<0.2		1.9	
						5.9	0.3	105	19.4		7.8		27.5		91.3		7.1		9.8		6		90				<0.2		1.8	
					Bottom	10.7	0.2	79	19.3	19.3	7.9	7.9	28.1	28.1	91.1	91.1	7.1	7.1	14.5		11		92				<0.2		1.6	
						10.7	0.2	84	19.3		7.9		28.1		91.1		7.1		14.5		12		93				<0.2		1.8	
C3	Cloudy	Moderate	19:27	12.1	Surface	1.0	0.3	107	19.4	19.4	8.0	8.0	28.8	28.8	87.5	87.5	6.8	6.8	2.3	2.0	4	4	90	93	822117	817812	<0.2	<0.2	1.2	2.0
						1.0	0.3	107	19.4		8.0		28.8		87.4		6.8		2.3		4		90				<0.2		1.4	
					Middle	6.1	0.3	133	19.4	19.4	8.0	8.0	29.2	29.2	86.7	86.7	6.7		1.8		4		94				<0.2		3.6	
						6.1	0.3	144	19.4		8.0		29.2		86.7		6.7		1.8		4		94				<0.2		3.5	
					Bottom	11.1	0.3	206	19.4	19.4	8.0	8.0	29.4	29.4	87.2	87.2	6.7	6.7	1.8		4		95				<0.2		1.1	
						11.1	0.3	210	19.4		8.0		29.4		87.2		6.7		1.8		4		95				<0.2		1.2	
IM1	Sunny	Moderate	17:23	7.5	Surface	1.0	0.4	144	19.3	19.3	8.1	8.1	28.6	28.6	95.5	95.5	7.4	7.4	3.3	4.6	4	7	92	91	818365	806438	<0.2	<0.2	1.4	1.2
						1.0	0.4	148	19.3		8.1		28.6		95.4		7.4		3.3		5		90				<0.2		1.3	
					Middle	3.8	0.4	161	19.1	19.1	8.1	8.1	28.9	28.9	94.0	94.0	7.3		4.3		8		91				<0.2		1.2	
						3.8	0.4	165	19.1		8.1		28.9		94.0		7.3		4.3		7		91				<0.2		1.3	
					Bottom	6.5	0.4	160	19.0	19.0	8.1	8.1	29.1	29.1	94.6	94.6	7.4	7.4	6.0		9		92				<0.2		1.0	
						6.5	0.4	172	19.0		8.1		29.1		94.6		7.4		6.1		7		92				<0.2		1.1	
IM2	Sunny	Moderate	17:32	8.5	Surface	1.0	0.4	155	19.4	19.4	8.1	8.1	28.5	28.6	95.5	95.5	7.4	7.4	3.0	4.1	4	5	89	91	818838	806193	<0.2	<0.2	1.0	1.2
						1.0	0.5	163	19.4		8.1		28.6		95.4		7.4		3.1		4		90				<0.2		1.1	
					Middle	4.3	0.4	173	19.0	19.0	8.1	8.1	29.1	29.1	93.9	93.9	7.3		4.5		5		91				<0.2		1.0	
						4.3	0.5	183	19.0		8.1		29.1		93.8		7.3		4.5		6		91				<0.2		1.1	
					Bottom	7.5	0.4	147	19.0	19.0	8.1	8.1	29.2	29.2	94.6	94.7	7.4	7.4	4.9		6		92				<0.2		1.4	
						7.5	0.4	156	19.0		8.1		29.2		94.7		7.4		4.8		6		92				<0.2		1.3	
IM3	Sunny	Moderate	17:47	8.7	Surface	1.0	0.5	163	19.6	19.6	8.1	8.1	27.7	27.7	95.7	95.7	7.4	7.4	2.6	4.9	2	6	90	92	819429	806038	<0.2	<0.2	1.1	1.3
						1.0	0.5	172	19.6		8.1		27.7		95.6		7.4		2.7		3		91				<0.2		1.0	
					Middle	4.4	0.5	161	19.0	19.0	8.1	8.1	29.2	29.2	93.6	93.7	7.3		5.6		6		92				<0.2		1.2	
						4.4	0.6	175	19.0		8.1		29.2		93.7		7.3		5.6		7		92				<0.2		1.2	
					Bottom	7.7	0.7	162	19.0	19.0	8.1	8.1	29.3	29.3	94.1	94.1	7.3	7.3	6.4		9		93				<0.2		1.6	
						7.7	0.7	174	19.0		8.1		29.3		94.1		7.3		6.2		9		92				<0.2		1.6	
IM4	Cloudy	Moderate	18:04	8.3	Surface	1.0	0.4	168	19.3	19.3	8.1	8.1	28.3	28.3	95.0	95.0	7.4	7.4	3.2	4.7	5	6	90	91	819558	805058	<0.2	<0.2	1.0	1.3
						1.0	0.5	171	19.3		8.1		28.3		94.9		7.4		3.2		5		90				<0.2		1.0	
					Middle	4.2	0.4	164	19.1	19.1	8.1	8.1	28.8	28.8	94.2	94.2	7.3		4.6		6		91				<0.2		1.3	
						4.2	0.4	165	19.1		8.1		28.8		94.2		7.3		4.7		4		91				<0.2		1.4	
					Bottom	7.3	0.5	156	19.0	19.0	8.1	8.1	29.4	29.4	94.4	94.5	7.3	7.4	6.1		7		92				<0.2		1.5	
						7.3	0.5	162	19.0		8.1		29.4		94.5		7.4		6.1		7		91				<0.2		1.4	
IM5	Cloudy	Moderate	18:13	7.1	Surface	1.0	0.4	134	19.4	19.4	8.1	8.1	27.7	27.7	95.4	95.4	7.4	7.4	3.5	5.2	4	6	93	94	820558	804911	<0.2	<0.2	1.6	1.6
						1.0	0.4	135	19.4		8.1		27.7		95.4		7.4		3.5		5		94				<0.2		1.6	
					Middle	3.6	0.4	149	19.2	19.2	8.1	8.1	28.4	28.4	94.1	94.1	7.3		5.6		6		94				<0.2		1.5	
						3.6	0.4	150	19.2		8.1		28.4		94.1		7.3		5.7		6		94				<0.2		1.4	
					Bottom	6.1	0.4	152	19.0	19.0	8.1	8.1	29.2	29.2	94.1	94.2	7.3	7.3	6.5		6		95				<0.2		1.8	
						6.1	0.4	162	19.0		8.1		29.2		94.2		7.3		6.4		6		95				<0.2		1.7	
IM6	Cloudy	Moderate	18:23	7.0	Surface	1.0	0.4	152	19.5	19.5	8.1	8.1	27.9	27.9	95.0	95.0	7.4	7.4	6.8	10.3	8	9	93	94	821061	805842	<0.2	<0.2	1.6	1.5
						1.0	0.4	160	19.5		8.1		27.9		95.0		7.4		6.9		6		93				<0.2		1.6	
					Middle	3.5	0.4	159	19.2	19.2	8.1	8.1	28.5	28.5	94.0	94.0	7.3		11.0		9		94				<0.2		1.5	
						3.5	0.4	165	19.2		8.1		28.5		94.0		7.3		11.2		10		94				<0.2		1.4	
					Bottom	6.0	0.4	158	19.0	19.0	8.1	8.1	29.1	29.1	94.3	94.4	7.4	7.4	13.1		11		94				<0.2		1.3	
						6.0	0.4	160	19.0		8.1		29.1		94.4		7.4		12.6		10		95				<0.2		1.3	
IM7	Cloudy	Moderate	18:31	8.4	Surface	1.0	0.5	148	19.6	19.6	8.1	8.1	27.5	27.5	94.6	94.6	7.4	7.4	4.9	7.9	5	9	90	92	821348	806842	<0.2	<0.2	2.2	1.7
						1.0	0.6	151	19.6		8.1		27.5		94.6		7.4		5.0		5		91				<0.2		2.1	
					Middle	4.2	0.4	142	19.3	19.3	8.1	8.1	28.4	28.4	93.5	93.5	7.3		8.0		6		92				<0.2		1.9	
						4.2	0.5	145	19.3		8.1		28.3		93.5		7.3		7.9		5		92				<0.2		1.8	
					Bottom	7.4	0.4	148	19.0	19.0	8.1	8.1	29.0	29.0	93.4	93.4	7.3	7.3	10.8		15		93				<0.2		1.2	
						7.4	0.4	159	19.0		8.1		29.0		93.4		7.3		10.9		16		93				<0.2		1.1	
IM8	Cloudy	Moderate	18:06	8.6	Surface	1.0	0.5	119	19.8	19.8	7.9	7.9	27.7	27.7	97.7	97.7	7.6	7.6	5.4	6.1	4	6	87	90	821684	807836	<0.2	<0.2	1.7	1.5
						1.0	0.5	119	19.8		7.9		27.7		97.7		7.6		5.4		4		86				<0.2		1.7	
					Middle	4.3	0.4	106	19.6	19.6	7.9	7.9	27.9	28.0	96.8	96.8	7.5		6.1		5		88				<0.2		1.7	
						4.3	0.4	113	19.6		7.9		28.0		96.7		7.5		6.2		6		89				<0.2		1.6	
					Bottom	7.6	0.4	101	19.3	19.3	7.9	7.9	28.8	28.8	96.6	96.6	7.5	7.5	6.7		8		94				<0.2		1.1	
						7.6	0.4	104	19.3		7.9		28.8		96.6		7.5		6.7		7		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 19 January 17 during Mid-Ebb tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C) Value	Water Temperature (°C) Average	pH Value	pH Average	Salinity (ppt) Value	Salinity (ppt) Average	DO Saturation (%) Value	DO Saturation (%) Average	Dissolved Oxygen Value	Dissolved Oxygen DA	Turbidity(NTU) Value	Turbidity(NTU) DA	Suspended Solids (mg/L) Value	Suspended Solids (mg/L) DA	Total Alkalinity (ppm) Value	Total Alkalinity (ppm) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L) Value	Chromium (µg/L) DA	Nickel (µg/L) Value	Nickel (µg/L) DA
IM9	Cloudy	Moderate	17:57	7.6	Surface	1.0	0.6	127	19.9	19.9	7.9	7.9	27.0	27.0	97.7	97.7	7.6	7.6	5.0	6.5	3	4	86	91	822109	808825	<0.2	<0.2	2.3	2.1
						1.0	0.6	138	19.9		7.9		27.0		97.7		7.6		5.1		3		87				<0.2		2.3	
					Middle	3.8	0.6	98	19.8	19.8	7.9	7.9	27.4	27.4	96.9	96.9	7.5		6.3		5		92				<0.2		2.0	
						3.8	0.6	105	19.8		7.9		27.4		96.9		7.5		6.3		5		93				<0.2		2.0	
					Bottom	6.6	0.8	135	19.3	19.3	7.9	7.9	28.8	28.8	96.0	96.0	7.5	7.5	8.2		4		94				<0.2		2.0	
						6.6	0.8	137	19.3		7.9		28.8		96.0		7.5		8.2		6		94				<0.2		2.1	
IM10	Cloudy	Moderate	17:49	8.0	Surface	1.0	0.4	137	19.5	19.5	7.9	7.9	27.8	27.8	93.4	93.4	7.3	7.3	9.0	11.2	4	8	88	92	822252	809818	<0.2	<0.2	1.9	1.7
						1.0	0.4	146	19.5		7.9		27.8		93.4		7.3		9.0		4		88				<0.2		1.9	
					Middle	4.0	0.4	144	19.4	19.4	7.9	7.9	28.0	28.0	92.2	92.2	7.2		12.5		10		93				<0.2		1.6	
						4.0	0.4	156	19.4		7.9		28.0		92.2		7.2		12.5		11		93				<0.2		1.5	
					Bottom	7.0	0.3	142	19.4	19.4	7.8	7.8	28.4	28.4	93.3	93.3	7.3	7.3	12.1		10		94				<0.2		1.4	
						7.0	0.3	154	19.4		7.8		28.4		93.3		7.3		12.1		11		94				<0.2		1.7	
IM11	Cloudy	Moderate	17:40	8.4	Surface	1.0	0.5	124	19.6	19.6	7.9	7.9	27.8	27.8	93.4	93.4	7.3	7.3	9.7	10.6	9	11	89	92	821507	810555	<0.2	<0.2	1.5	1.5
						1.0	0.5	135	19.6		7.9		27.8		93.4		7.3		9.7		10		89				<0.2		1.5	
					Middle	4.2	0.4	136	19.6	19.6	7.9	7.9	28.2	28.2	92.2	92.2	7.2		10.1		10		94				<0.2		1.4	
						4.2	0.4	138	19.6		7.9		28.2		92.2		7.2		10.1		11		93				<0.2		1.5	
					Bottom	7.4	0.4	141	19.4	19.4	7.9	7.9	28.4	28.4	92.0	92.0	7.1	7.1	12.0		12		94				<0.2		1.6	
						7.4	0.4	146	19.4		7.9		28.4		92.0		7.1		12.0		12		94				<0.2		1.7	
IM12	Cloudy	Moderate	17:30	9.1	Surface	1.0	0.4	109	19.6	19.6	7.9	7.9	28.2	28.2	92.9	92.9	7.2	7.2	7.6	7.7	5	7	87	91	821157	811525	<0.2	<0.2	1.7	1.5
						1.0	0.4	114	19.6		7.9		28.2		92.9		7.2		7.6		6		87				<0.2		1.7	
					Middle	4.6	0.3	115	19.6	19.6	7.9	7.9	28.3	28.3	92.2	92.2	7.1		7.7		8		93				<0.2		1.5	
						4.6	0.4	117	19.6		7.9		28.3		92.2		7.1		7.7		8		92				<0.2		1.5	
					Bottom	8.1	0.3	144	19.5	19.5	7.9	7.9	28.5	28.5	92.6	92.6	7.2	7.2	7.8		8		94				<0.2		1.2	
						8.1	0.3	144	19.5		7.9		28.5		92.6		7.2		7.8		9		94				<0.2		1.4	
SR2	Cloudy	Moderate	19:00	4.2	Surface	1.0	0.3	108	19.5	19.5	8.0	8.0	27.9	27.9	92.6	92.6	7.2	7.2	3.4	4.2	4	6	89	92	821468	814147	<0.2	<0.2	1.4	1.4
						1.0	0.3	117	19.5		8.0		27.9		92.6		7.2		3.4		4		88				<0.2		1.3	
					Middle	2.1	-	-	-	-	-	-	-	-	-	-	-		-		-		-						-		-	
						2.1	-	-	-		-		-		-		-		-		-		-						-		-	
					Bottom	3.2	0.2	137	19.5	19.5	8.0	8.0	27.9	27.9	93.1	94.1	7.3	7.4	4.7		7		95				<0.2		1.4	
						3.2	0.2	137	19.5		8.0		27.9		95.0		7.4		5.2		7		95				<0.2		1.3	
SR3	Cloudy	Moderate	18:13	9.1	Surface	1.0	0.6	148	19.8	19.8	7.9	7.9	26.2	26.2	95.8	95.8	7.5	7.4	5.8	9.5	5	7	-	-	822142	807566	-	-	-	-
						1.0	0.6	155	19.8		7.9		26.2		95.8		7.5		5.8		4		-				-		-	
					Middle	4.6	0.6	126	19.3	19.3	7.9	7.9	28.5	28.5	94.2	94.2	7.3		8.4		6		-				-		-	
						4.6	0.6	136	19.3		7.9		28.5		94.2		7.3		8.4		6		-				-		-	
					Bottom	8.1	0.6	125	19.2	19.2	7.9	7.9	29.0	29.0	93.5	93.5	7.3	7.3	14.3		10		-				-		-	
						8.1	0.7	126	19.2		7.9		29.0		93.5		7.3		14.3		11		-				-		-	
SR4A	Cloudy	Calm	17:06	8.1	Surface	1.0	0.5	103	19.2	19.2	8.1	8.1	28.4	28.4	95.9	95.9	7.5	7.5	3.6	3.8	6	7	-	-	817179	807793	-	-	-	-
						1.0	0.6	110	19.2		8.1		28.4		95.9		7.5		3.7		7		-				-		-	
					Middle	4.1	0.6	104	19.2	19.2	8.1	8.1	28.4	28.4	95.6	95.6	7.5		3.8		6		-				-		-	
						4.1	0.6	112	19.2		8.1		28.4		95.6		7.5		3.8		7		-				-		-	
					Bottom	7.1	0.6	108	19.2	19.2	8.1	8.1	28.4	28.4	95.6	95.6	7.5	7.5	3.9		8		-				-		-	
						7.1	0.6	117	19.2		8.1		28.4		95.6		7.5		3.9		8		-				-		-	
SR5A	Cloudy	Moderate	17:01	4.2	Surface	1.0	0.1	123	19.2	19.2	8.0	8.0	29.0	29.0	92.3	92.4	7.2	7.2	5.3	5.9	8	9	-	-	816605	810706	-	-	-	-
						1.0	0.1	132	19.2		8.0		29.0		92.4		7.2		5.3		8		-				-		-	
					Middle	2.1	-	-	-	-	-	-	-	-	-	-	-		-		-		-						-		-	
						2.1	-	-	-		-		-		-		-		-		-		-						-		-	
					Bottom	3.2	0.1	188	19.2	19.2	8.0	8.0	29.2	29.2	94.2	94.2	7.3	7.3	6.5		11		-				-		-	
						3.2	0.1	199	19.2		8.0		29.2		94.2		7.3		6.5		9		-				-		-	
SR6	Cloudy	Moderate	16:40	4.0	Surface	1.0	0.2	157	19.8	19.8	8.0	8.0	28.7	28.7	94.8	94.8	7.3	7.3	5.5	5.6	16	16	-	-	817914	814675	-	-	-	-
						1.0	0.2	165	19.8		8.0		28.7		94.8		7.3		5.5		15		-				-		-	
					Middle	2.0	-	-	-	-	-	-	-	-	-	-	-		-		-		-						-		-	
						2.0	-	-	-		-		-		-		-		-		-		-						-		-	
					Bottom	3.0	0.2	156	19.8	19.8	8.0	8.0	28.7	28.7	95.5	95.5	7.4	7.4	5.7		16		-				-		-	
						3.0	0.2	169	19.8		8.0		28.7		95.5		7.4		5.8		18		-				-		-	
SR7	Cloudy	Moderate	20:00	16.2	Surface	1.0	0.4	94	19.4	19.4	8.0	8.0	29.1	29.1	87.3	87.3	6.8	6.8	2.1	2.1	7	7	-	-	823632	823733	-	-	-	-
						1.0	0.4	94	19.4		8.0		29.1		87.3		6.8		2.1		6		-				-		-	
					Middle	8.1	0.3	113	19.5	19.5	8.0	8.0	29.2	29.2	86.4	86.4	6.7		2.2		7		-				-		-	
						8.1	0.3	121	19.5		8.0		29.2		86.4		6.7		2.2		8		-				-		-	
					Bottom	15.2	0.2	162	19.5	19.5	8.0	8.0	29.3	29.3	86.4	86.4	6.7	6.7	2.0		6		-				-		-	
						15.2	0.2	170	19.5		8.0		29.3		86.4		6.7		2.0		6		-				-		-	
SR8	Cloudy	Moderate	17:23	5.3	Surface	1.0	0.3	187	19.6	19.6	7.8	7.8	28.3	28.3	92.0	92.0	7.1	7.1	9.5	10.7	8	13	-	-	820418	811594	-	-	-	-
						1.0	0.3	199	19.6		7.8		28.3		92.0		7.1		9.5		9		-				-		-	
					Middle	2.7	-	-	-	-	-	-	-	-	-	-	-		-		-		-						-		-	
						2.7	-	-	-		-		-		-		-		-		-		-						-		-	
					Bottom	4.3	0.3	169	19.4	19.4	7.8	7.8	28.3	28.3	91.2	91.2	7.1	7.1	11.9		17		-				-		-	
						4.3	0.3	178	19.4		7.8		28.3		91.2		7.1		11.9		19		-				-		-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 21 January 17 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Moderate	13:21	8.8	Surface	1.0	0.6	130	19.0	19.0	8.0	8.0	28.9	28.9	95.8	95.8	7.5	7.5	3.8	3.9	4	5	90	92	815627	804258	<0.2	<0.2	0.6	0.4
						1.0	0.6	138	19.0		8.0		28.9		95.7		7.5		3.9		3		90				<0.2		0.6	
					Middle	4.4	0.6	103	19.1	19.1	8.0	8.0	29.6	29.6	94.9	94.9	7.4		3.7		5		92				<0.2		0.3	
						4.4	0.6	112	19.1		8.0		29.6		94.9		7.4		3.7		4		93				<0.2		0.3	
					Bottom	7.8	0.6	118	19.1	19.1	8.0	8.0	29.5	29.5	95.1	95.1	7.4	7.4	4.2		5		94				<0.2		0.2	
						7.8	0.6	125	19.1		8.0		29.5		95.1		7.4		4.2		6		95				<0.2		0.3	
C2	Sunny	moderate	12:11	12.1	Surface	1.0	0.2	157	19.3	19.3	8.0	8.0	28.1	28.1	96.6	96.6	7.5	7.4	4.5	4.7	2	4	84	90	825664	806939	<0.2	<0.2	1.3	1.2
						1.0	0.2	162	19.3		8.0		28.1		96.6		7.5		4.5		3		85				<0.2		1.4	
					Middle	6.1	0.2	214	19.4	19.4	8.0	8.0	28.6	28.6	93.1	93.1	7.2		4.7		4		90				<0.2		1.2	
						6.1	0.2	219	19.4		8.0		28.6		93.1		7.2		4.7		4		91				<0.2		1.2	
					Bottom	11.1	0.2	254	19.5	19.5	8.0	8.0	29.2	29.2	94.4	94.4	7.3	7.3	5.0		4		94				<0.2		0.8	
						11.1	0.2	255	19.5		8.0		29.2		94.4		7.3		5.0		4		94				<0.2		1.0	
C3	Sunny	moderate	14:05	12.1	Surface	1.0	0.3	228	19.6	19.6	8.0	8.0	29.9	29.9	88.6	88.6	6.8	6.8	3.3	4.1	2	4	90	92	822105	817800	<0.2	<0.2	0.4	0.4
						1.0	0.3	237	19.6		8.0		29.9		88.6		6.8		3.3		2		89				<0.2		0.3	
					Middle	6.1	0.3	256	19.5	19.5	8.0	8.0	30.0	30.0	87.4	87.4	6.7		3.8		2		91				<0.2		0.4	
						6.1	0.3	281	19.5		8.0		30.0		87.4		6.7		3.8		3		92				<0.2		0.4	
					Bottom	11.1	0.3	252	19.5	19.5	7.9	7.9	30.0	30.0	89.2	89.2	6.9	6.9	5.3		6		95				<0.2		0.3	
						11.1	0.3	266	19.5		7.9		30.0		89.2		6.9		5.3		7		95				<0.2		0.3	
IM1	Fine	Moderate	12:56	7.6	Surface	1.0	0.5	139	19.3	19.3	8.0	8.0	28.5	28.5	96.0	96.0	7.5	7.5	3.5	3.8	6	8	88	91	818369	806439	<0.2	<0.2	0.5	0.5
						1.0	0.6	151	19.3		8.0		28.5		96.0		7.5		3.5		7		90				<0.2		0.4	
					Middle	3.8	0.6	143	19.1	19.1	8.0	8.0	28.8	28.8	95.4	95.4	7.5		3.5		8		91				<0.2		0.6	
						3.8	0.6	152	19.1		8.0		28.8		95.4		7.5		3.6		8		90				<0.2		0.6	
					Bottom	6.6	0.5	163	19.1	19.1	8.0	8.0	29.2	29.2	96.1	96.1	7.5	7.5	4.3		8		93				<0.2		0.3	
						6.6	0.5	163	19.1		8.0		29.2		96.1		7.5		4.3		8		94				<0.2		0.4	
IM2	Fine	Moderate	12:49	8.4	Surface	1.0	0.4	157	19.3	19.3	8.0	8.0	28.5	28.5	96.1	96.1	7.5	7.5	2.3	3.3	4	4	90	92	818864	806192	<0.2	<0.2	0.8	0.6
						1.0	0.4	169	19.3		8.0		28.5		96.1		7.5		2.3		3		89				<0.2		0.8	
					Middle	4.2	0.4	125	19.1	19.1	8.0	8.0	29.0	29.0	95.4	95.4	7.4		3.4		2		92				<0.2		0.5	
						4.2	0.5	126	19.1		8.0		29.0		95.4		7.4		3.4		3		91				<0.2		0.6	
					Bottom	7.4	0.4	127	19.1	19.1	8.0	8.0	29.0	29.0	96.0	96.1	7.5	7.5	4.1		6		94				<0.2		0.4	
						7.4	0.4	132	19.1		8.0		29.0		96.1		7.5		4.2		6		94				<0.2		0.4	
IM3	Fine	Moderate	12:42	8.5	Surface	1.0	0.6	160	19.2	19.2	8.0	8.0	27.6	27.6	96.6	96.6	7.6	7.6	2.4	3.6	3	4	91	93	819422	806019	<0.2	<0.2	1.0	0.7
						1.0	0.6	162	19.2		8.0		27.6		96.5		7.6		2.5		3		90				<0.2		0.9	
					Middle	4.3	0.5	126	19.1	19.1	8.0	8.0	28.8	28.8	95.8	95.8	7.5		3.7		4		93				<0.2		0.8	
						4.3	0.6	136	19.1		8.0		28.8		95.8		7.5		3.7		4		94				<0.2		0.8	
					Bottom	7.5	0.5	158	19.1	19.1	8.0	8.0	29.0	29.0	96.4	96.5	7.5	7.5	4.7		6		94				<0.2		0.4	
						7.5	0.6	159	19.1		8.0		29.0		96.5		7.5		4.7		6		93				<0.2		0.4	
IM4	Fine	Moderate	12:34	8.1	Surface	1.0	0.4	163	19.0	19.0	8.0	8.0	27.3	27.3	97.1	97.1	7.7	7.6	2.5	3.1	5	5	89	92	819574	805020	<0.2	<0.2	1.1	1.0
						1.0	0.4	163	19.0		8.0		27.3		97.0		7.7		2.5		5		90				<0.2		1.2	
					Middle	4.1	0.4	115	19.0	19.0	8.0	8.0	28.5	28.5	95.9	96.0	7.5		3.4		3		92				<0.2		1.0	
						4.1	0.4	115	19.0		8.0		28.5		96.0		7.5		3.3		4		92				<0.2		1.1	
					Bottom	7.1	0.4	133	19.1	19.1	8.0	8.0	29.0	29.0	96.8	96.8	7.6	7.6	3.4		5		94				<0.2		0.7	
						7.1	0.5	145	19.1		8.0		29.0		96.8		7.6		3.4		6		94				<0.2		0.7	
IM5	Fine	Moderate	12:25	6.8	Surface	1.0	0.4	206	18.9	18.9	8.0	8.0	27.4	27.4	98.0	98.0	7.8	7.7	2.4	3.3	4	4	90	92	820577	804932	<0.2	<0.2	0.9	1.0
						1.0	0.4	218	18.9		8.0		27.4		98.0		7.7		2.4		4		89				<0.2		1.0	
					Middle	3.4	0.4	198	18.8	18.8	8.0	8.0	27.4	27.4	96.0	96.0	7.6		3.2		3		91				<0.2		1.1	
						3.4	0.4	204	18.8		8.0		27.4		96.0		7.6		3.2		5		91				<0.2		1.2	
					Bottom	5.8	0.4	164	19.1	19.1	8.0	8.0	28.6	28.6	97.3	97.4	7.6	7.6	4.3		3		94				<0.2		1.0	
						5.8	0.4	164	19.1		8.0		28.6		97.4		7.6		4.4		3		94				<0.2		1.0	
IM6	Fine	Moderate	12:15	6.8	Surface	1.0	0.3	211	18.9	18.9	8.0	8.0	27.2	27.2	96.1	96.1	7.6	7.6	3.4	4.5	4	5	89	91	821069	805836	<0.2	<0.2	1.4	1.3
						1.0	0.4	215	18.9		8.0		27.2		96.0		7.6		3.4		5		88				<0.2		1.6	
					Middle	3.4	0.3	158	18.9	18.9	8.0	8.0	27.5	27.5	94.7	94.7	7.5		4.6		4		92				<0.2		1.2	
						3.4	0.4	170	18.9		8.0		27.5		94.7		7.5		4.6		6		90				<0.2		1.2	
					Bottom	5.8	0.3	161	19.0	19.0	8.0	8.0	28.4	28.4	95.6	95.7	7.5	7.5	5.4		6		93				<0.2		1.1	
						5.8	0.3	169	19.0		8.0		28.4		95.7		7.5		5.4		6		94				<0.2		1.0	
IM7	Fine	Moderate	12:04	8.3	Surface	1.0	0.3	234	19.0	19.0	8.0	8.0	26.8	26.8	97.0	97.0	7.7	7.7	2.8	3.7	4	9	88	92	821333	806828	<0.2	<0.2	1.6	1.4
						1.0	0.3	242	19.0		8.0		26.8		97.0		7.7		2.8		3		90				<0.2		1.5	
					Middle	4.2	0.3	185	18.9	18.9	7.9	7.9	26.7	26.7	96.0	96.0	7.6		3.9		6		92				<0.2		1.6	
						4.2	0.3	197	18.9		7.9		26.7		95.9		7.6		4.0		7		91				<0.2		1.6	
					Bottom	7.3	0.3	119	19.0	19.0	7.9	7.9	27.6	27.6	97.3	97.4	7.7	7.7	4.5		16		94				<0.2		1.0	
						7.3	0.3	122	19.0		7.9		27.5		97.4		7.7		4.4		18		94				<0.2		1.1	
IM8	Sunny	moderate	12:47	8.4	Surface	1.0	0.3	166	19.2	19.2	8.0	8.0	27.8	27.8	100.1	100.1	7.8	7.8	6.1	7.2	6	6	83	89	821708	807823	<0.2	<0.2	1.5	1.4
						1.0	0.4	170	19.2		8.0		27.8		100.0		7.8		6.1		5		84				<0.2		1.4	
					Middle	4.2	0.3	167	19.2	19.2	8.0	8.0	27.8	27.8	98.1	98.1	7.7		6.9		6		89				<0.2		1.3	
						4.2	0.3	180	19.2		8.0		27.8		98.1		7.7		6.9		6		90				<0.2		1.3	
					Bottom	7.4	0.3	184	19.2	19.2	8.0	8.0	29.2	29.2	99.0	99.0	7.7	7.7	8.7		5		93				<0.2		1.3	
						7.4	0.3	191	19.2		8.0		29.2		99.0		7.7		8.7		6		94				<0.2		1.4	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 21 January 17 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C) Value	Water Temperature (°C) Average			Salinity (ppt) Value	Salinity (ppt) Average			DO Saturation (%) Value	DO Saturation (%) Average			Dissolved Oxygen Value	Dissolved Oxygen DA	Turbidity(NTU) Value	Turbidity(NTU) DA	Suspended Solids (mg/L) Value	Suspended Solids (mg/L) DA	Total Alkalinity (ppm) Value	Total Alkalinity (ppm) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L) Value	Chromium (µg/L) DA	Nickel (µg/L) Value	Nickel (µg/L) DA
IM9	Sunny	moderate	12:55	7.4	Surface	1.0	0.3	184	19.4	19.4			28.0	28.0			97.2	97.2			7.6	7.5	5.5	7.5	3	5	84	89	822083	808823	<0.2	<0.2	1.4	1.4
						1.0	0.3	190	19.4		8.0	8.0	28.0				97.2				7.6		5.5		3		84				<0.2		1.3	
					Middle	3.7	0.3	228	19.4	19.4			28.2	28.2			95.0	95.0			7.4		7.2		3		89				<0.2		1.4	
						3.7	0.4	237	19.4		8.0	8.0	28.2				95.0				7.4		7.2		3		90				<0.2		1.4	
					Bottom	6.4	0.3	213	19.3	19.3			28.7	28.7			95.2	95.2			7.4	7.4	9.9		9		93				<0.2		1.5	
						6.4	0.3	233	19.3		8.0	8.0	28.7				95.2				7.4		9.9		8		94				<0.2		1.4	
IM10	Sunny	moderate	13:03	7.4	Surface	1.0	0.4	230	19.3	19.3			28.3	28.3			95.0	95.0			7.4	7.3	4.9	6.7	3	4	85	89	822229	809840	<0.2	<0.2	1.6	1.5
						1.0	0.4	235	19.3		8.0	8.0	28.3				95.0				7.4		4.9		3		85				<0.2		1.6	
					Middle	3.7	0.4	250	19.3	19.3			28.6	28.6			93.2	93.2			7.2		5.8		4		88				<0.2		1.6	
						3.7	0.4	261	19.3		7.9	7.9	28.6				93.1				7.2		5.8		3		88				<0.2		1.6	
					Bottom	6.4	0.4	232	19.5	19.5			29.1	29.1			96.0	96.0			7.4	7.4	9.3		6		93				<0.2		1.2	
						6.4	0.4	253	19.5		7.9	7.9	29.1				96.0				7.4		9.3		7		94				<0.2		1.3	
IM11	Sunny	moderate	13:12	8.2	Surface	1.0	0.4	218	19.5	19.5			28.3	28.3			95.6	95.6			7.4	7.3	4.8	6.1	3	4	85	90	821508	810553	<0.2	<0.2	1.1	1.2
						1.0	0.4	231	19.5		7.9	7.9	28.3				95.6				7.4		4.8		3		86				<0.2		1.0	
					Middle	4.1	0.4	220	19.5	19.5			28.4	28.4			92.8	92.8			7.2		5.3		3		91				<0.2		1.6	
						4.1	0.4	223	19.5		7.9	7.9	28.4				92.8				7.2		5.3		2		91				<0.2		1.4	
					Bottom	7.2	0.4	235	19.6	19.6			29.4	29.4			90.6	90.6			7.0	7.0	8.2		7		93				<0.2		1.0	
						7.2	0.5	239	19.6		7.9	7.9	29.4				90.6				7.0		8.2		7		94				<0.2		1.0	
IM12	Sunny	moderate	13:21	9.0	Surface	1.0	0.3	215	19.5	19.5			28.5	28.5			91.7	91.6			7.1	7.0	4.8	6.8	3	4	89	92	821180	811510	<0.2	<0.2	1.0	1.0
						1.0	0.4	230	19.5		7.9	7.9	28.5				91.5				7.1		4.8		4		89				<0.2		1.1	
					Middle	4.5	0.4	222	19.5	19.5			29.3	29.3			87.9	87.9			6.8		6.3		2		92				<0.2		1.0	
						4.5	0.4	240	19.5		7.9	7.9	29.3				87.9				6.8		6.3		3		92				<0.2		1.0	
					Bottom	8.0	0.4	213	19.6	19.6			29.5	29.5			90.4	90.4			7.0	7.0	9.2		6		94				<0.2		1.0	
						8.0	0.4	220	19.6		7.9	7.9	29.5				90.4				7.0		9.2		8		94				<0.2		0.9	
SR2	Sunny	moderate	13:42	4.7	Surface	1.0	0.2	181	19.6	19.6			28.9	28.9			93.6	93.6			7.2	7.2	5.0	4.9	3	4	85	90	821480	814178	<0.2	<0.2	1.1	1.1
						1.0	0.2	196	19.6		7.9	7.9	28.9				93.6				7.2		5.0		4		85				<0.2		1.1	
					Middle	2.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						2.4	-	-	-		-		-				-				-		-		-		-				-		-	
					Bottom	3.7	0.2	168	19.6	19.6			29.2	29.2			95.7	95.7			7.4	7.4	4.8		4		95				<0.2		1.2	
						3.7	0.2	175	19.6		7.9	7.9	29.2				95.7				7.4		4.8		5		95				<0.2		1.1	
SR3	Sunny	moderate	12:40	9.2	Surface	1.0	0.3	207	19.2	19.2			27.8	27.8			99.7	99.7			7.8	7.8	5.1	6.8	3	4	-	-	822143	807580	-	-	-	-
						1.0	0.4	225	19.2		8.0	8.0	27.8				99.7				7.8		5.1		2		-				-		-	
					Middle	4.6	0.4	167	18.9	18.9			28.2	28.2			97.4	97.4			7.7		6.4		5		-				-		-	
						4.6	0.4	177	18.9		8.0	8.0	28.2				97.4				7.7		6.4		5		-				-		-	
					Bottom	8.2	0.3	176	19.1	19.1			29.2	29.2			98.6	98.6			7.7	7.7	8.9		5		-				-		-	
						8.2	0.3	179	19.1		8.0	8.0	29.2				98.6				7.7		8.9		6		-				-		-	
SR4A	Fine	Cloudy	13:43	9.2	Surface	1.0	0.3	197	19.4	19.4			27.8	27.8			93.3	93.3			7.3	7.3	6.3	6.7	10	11	-	-	817181	807791	-	-	-	-
						1.0	0.3	203	19.4		8.0	8.0	27.8				93.3				7.3		6.3		10		-				-		-	
					Middle	4.6	0.2	199	19.2	19.2			28.1	28.1			92.5	92.5			7.2		6.9		10		-				-		-	
						4.6	0.3	202	19.2		8.0	8.0	28.1				92.5				7.2		6.9		11		-				-		-	
					Bottom	8.2	0.3	147	19.1	19.1			28.4	28.4			93.3	93.3			7.3	7.3	7.0		12		-				-		-	
						8.2	0.3	158	19.1		8.0	8.0	28.4				93.3				7.3		7.0		11		-				-		-	
SR5A	Fine	Cloudy	14:02	3.6	Surface	1.0	0.1	202	19.6	19.6			27.3	27.3			95.7	95.7			7.5	7.5	4.3	4.7	5	6	-	-	816599	810680	-	-	-	-
						1.0	0.1	219	19.5		7.9	7.9	27.3				95.6				7.5		4.4		5		-				-		-	
					Middle	1.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						1.8	-	-	-		-		-				-				-		-		-		-				-		-	
					Bottom	2.6	0.1	186	19.3	19.3			27.5	27.5			95.4	95.5			7.5	7.5	5.1		6		-				-		-	
						2.6	0.2	201	19.3		7.9	7.9	27.4				95.5				7.5		5.0		6		-				-		-	
SR6	Fine	Cloudy	14:31	4.5	Surface	1.0	0.1	196	19.3	19.3			27.3	27.3			97.5	97.5			7.7	7.7	2.0	2.5	2	4	-	-	817912	814649	-	-	-	-
						1.0	0.1	202	19.3		7.9	7.9	27.3				97.5				7.7		2.0		2		-				-		-	
					Middle	2.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						2.3	-	-	-		-		-				-				-		-		-		-				-		-	
					Bottom	3.5	0.1	195	19.2	19.2			26.8	26.8			98.0	98.0			7.7	7.7	2.9		5		-				-		-	
						3.5	0.1	195	19.2		7.9	7.9	26.8				98.0				7.7		2.9		6		-				-		-	
SR7	Sunny	moderate	14:38	16.5	Surface	1.0	0.3	198	19.6	19.6			29.9	29.9			87.9	87.9			6.8	6.8	3.4	3.9	3	3	-	-	823619	823738	-	-	-	-
						1.0	0.3	216	19.6		7.9	7.9	29.9				87.9				6.8		3.4		3		-				-		-	
					Middle	8.3	0.2	191	19.5	19.5			30.0	30.0			89.0	89.0			6.8		4.0		3		-				-		-	
						8.3	0.3	200	19.5		8.0	8.0	30.0				89.0				6.8		4.0		3		-				-		-	
					Bottom	15.5	0.2	180	19.5	19.5			30.1	30.1			91.4	91.4			7.0	7.0	4.2		3		-				-		-	
						15.5	0.2	188	19.5		8.0	8.0	30.1				91.4				7.0		4.2		3		-				-		-	
SR8	Sunny	moderate	13:27	5.2	Surface	1.0	0.3	211	19.7	19.7			28.1	28.1			93.1	93.1			7.2	7.2	7.4	8.8	3	6	-	-	820408	811591	-	-	-	-
						1.0	0.3	214	19.7		7.9	7.9	28.1				93.1				7.2		7.4		3		-				-		-	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						2.6	-	-	-		-		-				-				-		-		-		-				-		-	
					Bottom	4.2	0.3	239	19.6	19.6			29.2	29.2			93.2	93.2			7.2	7.2	10.2		8		-				-		-	
						4.2	0.3	246	19.6		7.9	7.9	29.2				93.2				7.2		10.2		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 21 January 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	06:42	8.6	Surface	1.0	0.4	205	18.8	18.8	8.0	8.0	28.4	28.4	95.3	95.3	7.5	7.5	2.3	3.2	4	4	91	92	815627	804265	<0.2	<0.2	0.7	0.5
						1.0	0.4	210	18.8		8.0		28.4		95.3		7.5		2.3		4		89				<0.2		0.7	
					Middle	4.3	0.4	180	18.9	18.9	8.0	8.0	28.8	28.8	94.8	94.9	7.4		2.6		4		93				<0.2		0.6	
						4.3	0.4	193	18.9		8.0		28.8		94.9		7.4		2.7		5		92				<0.2		0.6	
					Bottom	7.6	0.4	182	19.1	19.1	8.0	8.0	29.1	29.1	95.0	95.0	7.4	7.4	4.5		5		94				<0.2		0.3	
						7.6	0.4	197	19.1		8.0		29.1		95.0		7.4		4.5		4		94				<0.2		0.2	
C2	Cloudy	Moderate	07:48	11.7	Surface	1.0	0.2	234	19.3	19.3	7.9	7.9	28.4	28.4	92.6	92.6	7.2	7.1	4.5	5.0	3	3	92	93	825683	806957	<0.2	<0.2	1.0	1.0
						1.0	0.2	241	19.3		7.9		28.4		92.6		7.2		4.5		3		90				<0.2		1.1	
					Middle	5.9	0.2	250	19.4	19.4	7.9	7.9	28.6	28.6	90.6	90.6	7.0		4.7		4		91				<0.2		1.0	
						5.9	0.2	250	19.4		7.9		28.6		90.6		7.0		4.7		3		92				<0.2		1.1	
					Bottom	10.7	0.2	179	19.6	19.6	7.9	7.9	29.5	29.5	90.3	90.3	7.0	7.0	5.8		3		96				<0.2		1.0	
						10.7	0.2	196	19.6		7.9		29.5		90.3		7.0		5.8		4		95				<0.2		1.0	
C3	Cloudy	Moderate	05:51	11.9	Surface	1.0	0.2	130	19.1	19.1	7.9	7.9	29.3	29.3	90.3	90.3	7.0	6.9	3.8	4.0	5	5	88	91	822123	817813	<0.2	<0.2	0.6	0.6
						1.0	0.2	136	19.1		7.9		29.3		90.3		7.0		3.8		5		88				<0.2		0.7	
					Middle	6.0	0.2	119	19.3	19.3	7.9	7.9	29.6	29.6	88.0	88.1	6.8		3.9		5		91				<0.2		0.5	
						6.0	0.2	124	19.3		7.9		29.6		88.1		6.8		3.9		6		91				<0.2		0.5	
					Bottom	10.9	0.2	154	19.4	19.4	7.9	7.9	29.8	29.8	88.5	88.5	6.8	6.8	4.3		4		94				<0.2		0.5	
						10.9	0.2	168	19.4		7.9		29.8		88.5		6.8		4.3		6		94				<0.2		0.6	
IM1	Cloudy	Moderate	07:04	7.3	Surface	1.0	0.2	186	19.1	19.1	7.9	8.0	27.8	27.8	93.8	93.8	7.4	7.4	2.6	3.3	4	6	89	92	818368	806474	<0.2	<0.2	1.0	0.6
						1.0	0.3	200	19.1		8.0		27.8		93.8		7.4		2.6		5		90				<0.2		1.0	
					Middle	3.7	0.3	160	19.1	19.1	7.9	7.9	28.9	28.9	93.9	94.0	7.3		3.5		6		92				<0.2		0.4	
						3.7	0.3	162	19.1		7.9		28.9		94.0		7.3		3.6		6		94				<0.2		0.3	
					Bottom	6.3	0.3	184	19.1	19.1	7.9	7.9	28.6	28.6	94.7	94.8	7.4	7.4	3.8		6		94				<0.2		0.3	
						6.3	0.3	188	19.1		7.9		28.5		94.8		7.4		3.7		8		95				<0.2		0.3	
IM2	Cloudy	Moderate	07:11	8.2	Surface	1.0	0.3	208	18.9	18.9	8.0	8.0	27.3	27.3	93.9	93.9	7.4	7.4	2.3	3.3	5	6	91	92	818865	806196	<0.2	<0.2	1.2	0.9
						1.0	0.3	228	18.9		8.0		27.3		93.8		7.4		2.3		4		90				<0.2		1.2	
					Middle	4.1	0.3	167	19.1	19.1	8.0	8.0	29.2	29.2	93.6	93.6	7.3		3.4		7		92				<0.2		0.9	
						4.1	0.3	180	19.1		8.0		29.2		93.5		7.3		3.4		6		92				<0.2		1.0	
					Bottom	7.2	0.3	168	19.1	19.1	8.0	8.0	29.0	29.0	94.4	94.4	7.4	7.4	4.1		8		93				<0.2		0.4	
						7.2	0.3	169	19.1		8.0		29.0		94.4		7.4		4.2		6		94				<0.2		0.4	
IM3	Cloudy	Moderate	07:18	8.6	Surface	1.0	0.5	211	18.9	18.9	8.0	8.0	27.6	27.6	94.2	94.2	7.4	7.4	2.8	3.5	4	5	90	92	819400	806012	<0.2	<0.2	1.4	1.0
						1.0	0.5	227	18.9		8.0		27.6		94.2		7.4		2.8		4		89				<0.2		1.2	
					Middle	4.3	0.4	217	19.0	19.0	8.0	8.0	28.7	28.7	94.4	94.5	7.4		3.6		4		91				<0.2		1.3	
						4.3	0.4	217	19.0		8.0		28.7		94.5		7.4		3.6		6		93				<0.2		1.3	
					Bottom	7.6	0.4	209	19.1	19.1	7.9	7.9	28.7	28.7	95.9	95.9	7.5	7.5	4.0		8		94				<0.2		0.4	
						7.6	0.5	213	19.1		7.9		28.7		95.9		7.5		4.0		6		95				<0.2		0.4	
IM4	Cloudy	Moderate	07:26	7.8	Surface	1.0	0.4	223	18.7	18.7	8.0	8.0	27.3	27.3	96.3	96.3	7.6	7.6	2.3	3.0	4	5	89	92	819554	805047	<0.2	<0.2	1.3	1.1
						1.0	0.4	242	18.7		8.0		27.3		96.2		7.6		2.3		4		90				<0.2		1.4	
					Middle	3.9	0.4	192	18.7	18.7	8.0	8.0	27.6	27.6	95.3	95.3	7.6		2.7		6		93				<0.2		1.3	
						3.9	0.4	194	18.7		8.0		27.6		95.2		7.5		2.8		5		93				<0.2		1.2	
					Bottom	6.8	0.4	171	19.0	19.0	7.9	7.9	28.7	28.7	96.1	96.1	7.5	7.5	3.9		7		94				<0.2		0.5	
						6.8	0.4	180	19.0		7.9		28.7		96.1		7.5		3.9		6		94				<0.2		0.6	
IM5	Cloudy	Moderate	07:35	6.9	Surface	1.0	0.3	221	18.7	18.7	8.0	8.0	27.5	27.5	97.0	97.0	7.7	7.7	1.9	2.5	5	5	89	92	820548	804913	<0.2	<0.2	8.9	**6.9**
						1.0	0.4	228	18.7		8.0		27.5		97.0		7.7		1.9		5		90				<0.2		8.3	
					Middle	3.5	0.3	221	18.6	18.6	8.0	8.0	27.8	27.8	95.5	95.5	7.6		2.5		4		91				<0.2		7.4	
						3.5	0.4	222	18.6		8.0		27.8		95.5		7.6		2.5		5		91				<0.2		7.2	
					Bottom	5.9	0.3	197	18.9	18.9	8.0	8.0	29.3	29.3	96.3	96.3	7.5	7.5	3.0		6		94				<0.2		4.5	
						5.9	0.3	197	18.8		8.0		29.3		96.3		7.5		2.9		6		95				<0.2		4.8	
IM6	Cloudy	Moderate	07:50	6.9	Surface	1.0	0.3	220	18.8	18.8	8.0	8.0	27.5	27.5	96.4	96.4	7.6	7.6	2.3	2.7	6	6	89	91	821046	805833	<0.2	<0.2	2.9	2.5
						1.0	0.3	240	18.8		8.0		27.5		96.4		7.6		2.3		5		88				<0.2		2.6	
					Middle	3.5	0.3	237	18.8	18.8	8.0	8.0	27.3	27.3	95.5	95.5	7.6		2.6		5		91				<0.2		2.5	
						3.5	0.3	258	18.8		8.0		27.3		95.5		7.6		2.6		5		92				<0.2		2.4	
					Bottom	5.9	0.3	180	18.9	18.9	8.0	8.0	28.7	28.7	95.9	95.9	7.5	7.5	3.1		8		94				<0.2		2.1	
						5.9	0.3	184	18.9		8.0		28.7		95.9		7.5		3.1		9		94				<0.2		2.2	
IM7	Cloudy	Moderate	08:00	8.1	Surface	1.0	0.3	230	18.9	18.9	8.0	8.0	27.2	27.2	95.7	95.7	7.6	7.6	2.8	3.9	5	6	91	92	821334	806853	<0.2	<0.2	1.9	1.6
						1.0	0.3	241	18.9		8.0		27.2		95.7		7.6		2.8		4		90				<0.2		1.9	
					Middle	4.1	0.3	216	18.8	18.8	8.0	8.0	27.4	27.4	94.2	94.2	7.5		4.2		6		93				<0.2		1.8	
						4.1	0.3	227	18.8		8.0		27.4		94.1		7.5		4.2		5		92				<0.2		1.8	
					Bottom	7.1	0.3	142	19.0	19.0	8.0	8.0	28.6	28.6	95.1	95.1	7.4	7.4	4.6		7		94				<0.2		1.1	
						7.1	0.3	146	19.0		8.0		28.6		95.1		7.4		4.6		6		94				<0.2		1.0	
IM8	Sunny	Moderate	07:15	8.1	Surface	1.0	0.3	215	18.9	18.9	8.0	8.0	27.7	27.7	98.2	98.2	7.7	7.7	5.6	6.6	4	4	87	93	821680	807831	<0.2	<0.2	1.3	1.1
						1.0	0.3	223	18.9		8.0		27.7		98.2		7.7		5.7		3		86				<0.2		1.3	
					Middle	4.1	0.3	201	18.9	18.9	8.0	8.0	27.8	27.8	98.1	98.1	7.7		6.7		4		90				<0.2		0.9	
						4.1	0.3	207	18.9		8.0		27.8		98.1		7.7		6.7		5		95				<0.2		0.8	
					Bottom	7.1	0.3	193	19.1	19.1	8.0	8.0	29.4	29.4	100.2	100.2	7.8	7.8	7.3		5		103				<0.2		1.3	
						7.1	0.3	204	19.1		8.0		29.4		100.2		7.8		7.3		4		94				<0.2		1.2	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 21 January 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	07:07	7.0	Surface	1.0	0.3	191	19.0	19.0	8.0	8.0	27.7	27.7	97.5	97.5	7.7	7.7	5.8	7.0	5	6	89	92	822085	808811	<0.2	<0.2	1.6	1.3
						1.0	0.4	197	19.0		8.0		27.7		97.5		7.7		5.8		3		89				<0.2		1.5	
					Middle	3.5	0.3	182	19.0	19.0	8.0	8.0	27.9	27.9	97.4	97.4	7.7		6.6		4		92				<0.2		1.2	
						3.5	0.4	185	19.0		8.0		27.9		97.4		7.7		6.6		4		92				<0.2		1.0	
					Bottom	6.0	0.3	186	19.1	19.1	8.0	8.0	28.8	28.8	98.8	99.4	7.7	7.8	8.6		9		94				<0.2		1.2	
						6.0	0.3	192	19.1		8.0		28.8		100.0		7.8		8.7		8		94				<0.2		1.1	
IM10	Sunny	Moderate	06:59	7.0	Surface	1.0	0.3	197	18.9	18.9	8.0	8.0	27.7	27.7	96.9	96.9	7.6	7.6	4.6	5.6	4	4	86	90	822251	809856	<0.2	<0.2	1.7	1.7
						1.0	0.3	209	18.9		8.0		27.7		96.9		7.6		4.6		3		86				<0.2		1.7	
					Middle	3.5	0.3	182	19.1	19.1	8.0	8.0	27.8	27.8	95.2	95.2	7.5		5.7		3		92				<0.2		1.7	
						3.5	0.3	192	19.1		8.0		27.8		95.2		7.5		5.7		4		91				<0.2		1.7	
					Bottom	6.0	0.3	188	19.4	19.4	7.9	7.9	28.8	28.8	99.7	99.7	7.7	7.7	6.4		5		92				<0.2		1.5	
						6.0	0.3	196	19.4		7.9		28.8		99.7		7.7		6.4		4		92				<0.2		1.6	
IM11	Sunny	Moderate	06:52	7.7	Surface	1.0	0.3	171	19.1	19.1	8.0	8.0	27.9	27.9	93.9	93.9	7.4	7.3	6.1	6.8	5	6	84	90	821488	810553	<0.2	<0.2	1.4	1.2
						1.0	0.3	183	19.1		8.0		27.9		93.9		7.4		6.2		4		85				<0.2		1.3	
					Middle	3.9	0.3	192	19.3	19.3	7.9	7.9	28.4	28.4	92.7	92.7	7.2		6.8		8		92				<0.2		0.9	
						3.9	0.3	203	19.3		7.9		28.4		92.7		7.2		6.8		7		91				<0.2		1.0	
					Bottom	6.7	0.3	199	19.4	19.4	8.0	8.0	28.8	28.8	96.5	96.5	7.5	7.5	7.4		7		94				<0.2		1.4	
						6.7	0.3	203	19.4		8.0		28.8		96.5		7.5		7.4		7		94				<0.2		1.4	
IM12	Sunny	Moderate	06:44	8.3	Surface	1.0	0.3	192	18.9	18.9	7.9	7.9	28.2	28.2	93.1	93.1	7.3	7.2	5.1	6.0	3	3	89	91	821174	811519	<0.2	<0.2	1.3	1.1
						1.0	0.3	200	18.9		7.9		28.2		93.0		7.3		5.0		3		89				<0.2		1.3	
					Middle	4.2	0.3	186	19.1	19.1	7.9	7.9	28.5	28.5	90.4	90.4	7.1		5.9		3		91				<0.2		0.8	
						4.2	0.3	202	19.1		7.9		28.5		90.4		7.1		5.9		3		91				<0.2		0.9	
					Bottom	7.3	0.3	165	19.5	19.5	7.9	7.9	29.2	29.2	91.8	91.8	7.1	7.1	7.0		3		94				<0.2		1.1	
						7.3	0.3	174	19.5		7.9		29.2		91.8		7.1		7.0		3		94				<0.2		1.2	
SR2	Cloudy	Moderate	06:14	3.9	Surface	1.0	0.2	208	19.0	19.0	7.9	7.9	28.0	28.0	94.9	94.9	7.5	7.5	6.3	6.9	4	4	93	93	821475	814176	<0.2	<0.2	1.3	1.2
						1.0	0.2	210	19.0		7.9		28.0		94.9		7.5		6.3		3		90				<0.2		1.2	
					Middle	2.0	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.0	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.9	0.2	216	19.0	19.0	7.9	7.9	28.4	28.4	97.3	97.3	7.6	7.6	7.4		4		95				<0.2		1.2	
						2.9	0.2	216	19.0		7.9		28.4		97.3		7.6		7.4		6		95				<0.2		1.1	
SR3	Sunny	Moderate	07:19	9.2	Surface	1.0	0.3	202	19.0	19.0	8.0	8.0	27.7	27.7	98.2	98.2	7.7	7.7	5.4	6.1	3	4	-	-	822141	807586	-	-	-	-
						1.0	0.3	204	19.0		8.0		27.7		98.2		7.7		5.4		4		-				-		-	
					Middle	4.6	0.3	202	18.9	18.9	8.0	8.0	27.8	27.8	97.3	97.3	7.7		5.8		4		-				-		-	
						4.6	0.3	214	18.9		8.0		27.8		97.3		7.7		5.8		4		-				-		-	
					Bottom	8.2	0.2	188	19.1	19.1	8.0	8.0	29.3	29.3	98.5	98.5	7.7	7.7	7.1		5		-				-		-	
						8.2	0.3	205	19.1		8.0		29.3		98.5		7.7		7.1		5		-				-		-	
SR4A	Cloudy	Calm	06:20	8.5	Surface	1.0	0.3	222	19.0	19.0	7.9	7.9	27.8	27.8	92.3	92.3	7.3	7.3	4.6	5.2	7	8	-	-	817204	807815	-	-	-	-
						1.0	0.3	242	19.0		7.9		27.8		92.2		7.3		4.6		8		-				-		-	
					Middle	4.3	0.2	197	19.0	19.0	7.9	7.9	28.1	28.1	92.5	92.5	7.3		5.0		7		-				-		-	
						4.3	0.3	204	19.0		7.9		28.1		92.5		7.3		5.0		6		-				-		-	
					Bottom	7.5	0.2	170	19.1	19.1	7.9	7.9	28.6	28.6	93.1	93.3	7.3	7.3	5.8		8		-				-		-	
						7.5	0.2	180	19.1		7.9		28.6		93.4		7.3		5.9		9		-				-		-	
SR5A	Cloudy	Calm	06:02	3.9	Surface	1.0	0.0	240	18.9	18.9	7.9	7.9	27.5	27.5	91.2	91.2	7.2	7.2	7.6	9.8	6	16	-	-	816609	810683	-	-	-	-
						1.0	0.0	254	18.9		7.9		27.5		91.2		7.2		7.7		7		-				-		-	
					Middle	2.0	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.0	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.9	0.0	223	19.2	19.2	7.9	7.9	27.6	27.6	91.0	91.0	7.1	7.1	12.1		25		-				-		-	
						2.9	0.0	243	19.1		7.9		27.6		91.0		7.1		11.6		26		-				-		-	
SR6	Cloudy	Calm	05:37	4.5	Surface	1.0	0.2	189	19.0	19.0	7.8	7.8	27.9	27.9	92.3	92.4	7.3	7.3	4.7	4.6	6	6	-	-	817902	814664	-	-	-	-
						1.0	0.2	193	19.0		7.8		27.9		92.4		7.3		4.7		5		-				-		-	
					Middle	2.3	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.3	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.1	168	18.8	18.8	7.8	7.8	27.9	27.9	92.9	92.9	7.3	7.3	4.5		5		-				-		-	
						3.5	0.2	171	18.8		7.8		27.9		92.9		7.3		4.6		6		-				-		-	
SR7	Cloudy	Moderate	05:10	17.6	Surface	1.0	0.2	208	19.4	19.4	7.9	7.9	30.0	30.0	88.2	88.2	6.8	6.8	3.6	3.6	2	3	-	-	823646	823749	-	-	-	-
						1.0	0.2	215	19.4		7.9		30.0		88.2		6.8		3.6		3		-				-		-	
					Middle	8.8	0.2	191	19.4	19.4	7.9	7.9	30.0	30.0	87.9	87.9	6.8		3.7		2		-				-		-	
						8.8	0.2	199	19.4		7.9		30.0		87.9		6.8		3.7		4		-				-		-	
					Bottom	16.6	0.2	179	19.4	19.4	7.9	7.9	30.0	30.0	90.3	90.3	7.0	7.0	3.5		4		-				-		-	
						16.6	0.2	183	19.4		7.9		30.0		90.3		7.0		3.5		5		-				-		-	
SR8	Sunny	Moderate	06:31	4.9	Surface	1.0	0.2	238	19.3	19.3	7.9	7.9	27.8	27.8	92.1	92.1	7.2	7.2	6.0	7.7	3	4	-	-	820413	811601	-	-	-	-
						1.0	0.2	254	19.3		7.9		27.8		92.1		7.2		6.0		3		-				-		-	
					Middle	2.5	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.5	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	0.2	217	19.5	19.5	7.9	7.9	28.9	28.9	84.1	84.1	6.5	6.5	9.4		4		-				-		-	
						3.9	0.2	229	19.5		7.9		28.9		84.1		6.5		9.4		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 24 January 17 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	15:31	9.1	Surface	1.0	0.4	130	19.2	19.2	8.2	8.2	30.5	30.5	104.8	104.8	8.1	8.0	2.4	2.8	4	5	92	94	815621	804247	<0.2	<0.2	0.4	0.6
						1.0	0.4	135	19.2		8.2		30.5		104.7		8.1		2.4		6		93				<0.2		0.5	
					Middle	4.6	0.5	114	19.1	19.1	8.2	8.2	30.5	30.5	102.9	102.9	8.0		2.7		4		93				<0.2		0.6	
						4.6	0.5	125	19.1		8.2		30.5		102.9		7.9		2.6		5		94				<0.2		0.6	
					Bottom	8.1	0.5	132	18.8	18.8	8.2	8.2	30.5	30.5	102.1	102.1	7.9	7.9	3.4		5		94				<0.2		0.7	
						8.1	0.5	145	18.8		8.2		30.5		102.1		7.9		3.3		6		95				<0.2		0.8	
C2	Cloudy	Moderate	14:29	12.4	Surface	1.0	0.3	212	19.3	19.3	8.3	8.3	30.3	30.3	96.4	96.4	7.4	7.3	3.5	4.1	2	3	85	90	825687	806939	<0.2	<0.2	3.1	2.5
						1.0	0.4	232	19.3		8.3		30.3		96.4		7.4		3.5		2		85				<0.2		2.9	
					Middle	6.2	0.3	203	19.2	19.2	8.3	8.3	31.5	31.5	93.2	93.2	7.2		4.0		3		91				<0.2		2.4	
						6.2	0.3	215	19.2		8.3		31.5		93.2		7.2		4.0		3		91				<0.2		2.5	
					Bottom	11.4	0.3	123	19.2	19.2	8.2	8.2	31.9	31.9	92.7	92.7	7.1	7.1	4.8		3		94				<0.2		2.2	
						11.4	0.4	132	19.2		8.2		31.9		92.7		7.1		4.8		5		94				<0.2		2.1	
C3	Cloudy	Moderate	16:31	12.1	Surface	1.0	0.4	273	19.4	19.4	8.2	8.2	32.2	32.2	89.6	89.6	6.8	6.8	3.1	3.3	3	5	88	92	822112	817797	<0.2	<0.2	1.5	1.4
						1.0	0.4	299	19.4		8.2		32.2		89.5		6.8		3.1		3		89				<0.2		1.6	
					Middle	6.1	0.3	275	19.3	19.3	8.2	8.2	32.2	32.2	87.9	87.9	6.7		3.3		7		92				<0.2		1.3	
						6.1	0.3	288	19.3		8.2		32.2		87.9		6.7		3.3		6		91				<0.2		1.2	
					Bottom	11.1	0.3	280	19.3	19.3	8.2	8.2	32.2	32.2	89.1	89.1	6.8	6.8	3.6		5		95				<0.2		1.4	
						11.1	0.3	290	19.3		8.2		32.2		89.1		6.8		3.6		7		95				<0.2		1.3	
IM1	Cloudy	Moderate	15:07	7.6	Surface	1.0	0.4	180	19.1	19.1	8.2	8.2	30.3	30.3	107.0	107.0	8.3	8.2	1.9	2.4	8	9	93	94	818340	806459	<0.2	<0.2	1.0	0.7
						1.0	0.4	188	19.1		8.2		30.3		107.0		8.3		1.9		8		93				<0.2		0.9	
					Middle	3.8	0.4	156	18.8	18.8	8.2	8.2	30.5	30.5	104.9	104.9	8.1		2.4		7		94				<0.2		0.5	
						3.8	0.4	157	18.8		8.2		30.5		104.9		8.1		2.4		9		94				<0.2		0.5	
					Bottom	6.6	0.4	160	18.8	18.8	8.2	8.2	30.4	30.4	105.8	105.9	8.2	8.2	2.9		10		95				<0.2		0.6	
						6.6	0.4	163	18.8		8.2		30.4		105.9		8.2		2.9		11		95				<0.2		0.6	
IM2	Cloudy	Moderate	15:02	8.6	Surface	1.0	0.4	198	19.0	19.0	8.2	8.2	30.2	30.2	108.7	108.7	8.4	8.3	1.7	2.2	7	8	91	92	818836	806180	<0.2	<0.2	0.3	0.3
						1.0	0.5	203	19.0		8.2		30.2		108.7		8.4		1.7		6		90				<0.2		0.3	
					Middle	4.3	0.5	187	18.9	18.9	8.2	8.2	30.4	30.4	106.1	106.1	8.2		2.3		8		91				<0.2		0.2	
						4.3	0.6	191	18.9		8.2		30.4		106.0		8.2		2.4		8		92				<0.2		0.3	
					Bottom	7.6	0.5	205	18.7	18.7	8.2	8.2	30.4	30.4	105.7	105.8	8.2	8.2	2.5		10		92				<0.2		0.3	
						7.6	0.5	217	18.7		8.2		30.4		105.8		8.2		2.5		8		93				<0.2		0.3	
IM3	Cloudy	Moderate	14:54	8.8	Surface	1.0	0.4	158	19.3	19.3	8.2	8.2	29.4	29.4	109.8	109.8	8.5	8.5	1.6	1.7	6	5	89	90	819429	806021	<0.2	<0.2	0.6	0.5
						1.0	0.4	158	19.3		8.2		29.4		109.8		8.5		1.6		4		89				<0.2		0.4	
					Middle	4.4	0.3	191	19.1	19.1	8.2	8.2	29.8	29.8	109.5	109.5	8.5		1.7		6		90				<0.2		0.4	
						4.4	0.4	199	19.1		8.2		29.8		109.5		8.5		1.7		4		91				<0.2		0.4	
					Bottom	7.8	0.4	174	18.8	18.8	8.2	8.2	30.2	30.2	107.7	107.7	8.4	8.4	1.9		6		91				<0.2		0.4	
						7.8	0.4	182	18.8		8.2		30.2		107.7		8.4		1.9		5		92				<0.2		0.5	
IM4	Cloudy	Moderate	14:47	8.2	Surface	1.0	0.4	141	19.4	19.4	8.1	8.1	29.2	29.2	107.4	107.5	8.3	8.3	1.6	2.0	8	8	90	91	819578	805021	<0.2	<0.2	0.5	0.5
						1.0	0.4	151	19.4		8.1		29.2		107.5		8.3		1.6		7		90				<0.2		0.6	
					Middle	4.1	0.4	148	18.8	18.8	8.2	8.2	30.0	30.0	106.6	106.6	8.3		2.2		8		91				<0.2		0.6	
						4.1	0.4	149	18.8		8.2		30.0		106.5		8.3		2.2		7		92				<0.2		0.5	
					Bottom	7.2	0.4	156	18.8	18.8	8.2	8.2	30.4	30.4	105.9	105.9	8.2	8.2	2.3		8		92				<0.2		0.3	
						7.2	0.5	169	18.8		8.2		30.4		105.9		8.2		2.3		7		93				<0.2		0.3	
IM5	Cloudy	Moderate	14:38	7.1	Surface	1.0	0.3	188	19.2	19.2	8.1	8.1	29.2	29.2	104.4	104.4	8.1	8.1	2.0	3.0	6	9	92	93	820578	804924	<0.2	<0.2	0.6	0.5
						1.0	0.3	199	19.2		8.1		29.2		104.4		8.1		2.0		7		92				<0.2		0.7	
					Middle	3.6	0.3	182	18.8	18.8	8.2	8.2	29.7	29.7	103.7	103.7	8.1		3.0		7		92				<0.2		0.7	
						3.6	0.3	194	18.8		8.2		29.7		103.6		8.1		3.0		7		93				<0.2		0.6	
					Bottom	6.1	0.4	188	18.6	18.6	8.1	8.1	30.2	30.2	104.5	104.6	8.2	8.2	3.9		14		93				<0.2		0.3	
						6.1	0.4	203	18.6		8.1		30.1		104.6		8.2		3.8		13		94				<0.2		0.3	
IM6	Cloudy	Moderate	14:30	7.1	Surface	1.0	0.3	209	19.3	19.3	8.1	8.1	28.6	28.6	103.0	103.0	8.0	8.0	2.1	4.7	8	9	90	91	821076	805830	<0.2	<0.2	0.9	0.6
						1.0	0.3	214	19.3		8.1		28.6		103.0		8.0		2.2		6		90				<0.2		0.9	
					Middle	3.6	0.3	164	18.8	18.8	8.1	8.1	29.7	29.7	101.9	101.9	7.9		4.9		7		91				<0.2		0.5	
						3.6	0.3	176	18.8		8.1		29.7		101.9		7.9		5.0		8		91				<0.2		0.4	
					Bottom	6.1	0.3	166	18.6	18.6	8.1	8.1	30.2	30.2	102.5	102.6	8.0	8.0	7.0		14		92				<0.2		0.4	
						6.1	0.3	175	18.6		8.1		30.2		102.6		8.0		6.9		13		92				<0.2		0.3	
IM7	Cloudy	Moderate	14:22	8.3	Surface	1.0	0.3	180	19.4	19.4	8.1	8.1	28.9	29.0	102.6	102.6	8.0	8.0	2.1	2.8	7	8	90	92	821340	806834	<0.2	<0.2	0.6	0.5
						1.0	0.3	196	19.3		8.1		29.0		102.6		8.0		2.1		5		91				<0.2		0.6	
					Middle	4.2	0.3	143	19.0	19.0	8.1	8.1	29.4	29.5	102.7	102.8	8.0		2.9		9		91				<0.2		0.6	
						4.2	0.3	148	18.9		8.1		29.5		102.8		8.0		3.0		8		92				<0.2		0.6	
					Bottom	7.3	0.3	154	18.8	18.8	8.1	8.1	29.8	29.8	103.9	104.0	8.1	8.1	3.4		9		92				<0.2		0.4	
						7.3	0.3	168	18.8		8.1		29.8		104.0		8.1		3.4		9		93				<0.2		0.4	
IM8	Cloudy	Moderate	15:10	8.5	Surface	1.0	0.4	186	19.3	19.3	8.3	8.3	30.6	30.6	105.2	105.2	8.1	8.0	4.8	5.4	4	7	84	89	821707	807835	<0.2	<0.2	1.2	0.9
						1.0	0.4	202	19.3		8.3		30.6		105.2		8.1		4.7		4		84				<0.2		1.2	
					Middle	4.3	0.3	177	19.0	19.0	8.3	8.3	31.4	31.4	102.4	102.4	7.9		5.3		8		90				<0.2		0.8	
						4.3	0.3	184	19.0		8.3		31.4		102.4		7.9		5.3		7		89				<0.2		0.7	
					Bottom	7.5	0.4	172	18.7	18.7	8.3	8.3	32.2	32.2	100.2	100.2	7.7	7.7	6.1		8		93				<0.2		0.8	
						7.5	0.4	174	18.7		8.3		32.2		100.2		7.7		6.1		8		94				<0.2		0.8	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 24 January 17 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C) Value	Water Temperature (°C) Average	pH Value	pH Average	Salinity (ppt) Value	Salinity (ppt) Average	DO Saturation (%) Value	DO Saturation (%) Average	Dissolved Oxygen Value	Dissolved Oxygen DA	Turbidity(NTU) Value	Turbidity(NTU) DA	Suspended Solids (mg/L) Value	Suspended Solids (mg/L) DA	Total Alkalinity (ppm) Value	Total Alkalinity (ppm) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L) Value	Chromium (µg/L) DA	Nickel (µg/L) Value	Nickel (µg/L) DA
IM9	Cloudy	Moderate	15:17	7.5	Surface	1.0	0.4	229	19.4	19.4	8.3	8.3	30.6	30.6	106.0	106.0	8.1	8.1	4.4	4.8	4	5	86	90	822108	808827	<0.2	<0.2	1.0	0.9
						1.0	0.4	248	19.4		8.3		30.6		106.0		8.1		4.3		5		86				<0.2		1.1	
					Middle	3.8	0.4	225	19.2	19.2	8.3	8.3	31.1	31.1	104.9	104.9	8.1		4.8		5		89				<0.2		1.0	
						3.8	0.5	242	19.2		8.3		31.1		104.9		8.1		4.7		3		90				<0.2		1.0	
					Bottom	6.5	0.4	198	18.9	18.9	8.3	8.3	31.9	31.9	103.2	103.2	7.9	7.9	5.2		5		93				<0.2		0.7	
						6.5	0.5	212	18.9		8.3		31.9		103.2		7.9		5.2		7		94				<0.2		0.8	
IM10	Cloudy	Moderate	15:25	7.9	Surface	1.0	0.3	224	19.5	19.5	8.3	8.3	30.9	30.9	104.5	104.5	8.0	8.0	4.0	4.4	6	7	87	90	822240	809818	<0.2	<0.2	1.1	1.2
						1.0	0.4	233	19.5		8.3		30.9		104.5		8.0		4.0		5		86				<0.2		0.8	
					Middle	4.0	0.4	238	19.4	19.4	8.3	8.3	31.0	31.0	103.0	103.0	7.9		4.9		5		89				<0.2		1.2	
						4.0	0.4	252	19.4		8.3		31.0		103.0		7.9		4.9		6		90				<0.2		1.3	
					Bottom	6.9	0.3	217	18.8	18.8	8.3	8.3	31.9	31.9	100.3	100.3	7.7	7.7	4.3		9		94				<0.2		1.3	
						6.9	0.4	230	18.8		8.3		31.9		100.3		7.7		4.3		9		94				<0.2		1.3	
IM11	Cloudy	Moderate	15:34	8.4	Surface	1.0	0.3	238	19.3	19.3	8.3	8.3	31.7	31.7	106.3	106.3	8.1	8.0	4.0	4.9	7	9	88	91	821517	810561	<0.2	<0.2	0.7	0.7
						1.0	0.3	253	19.3		8.3		31.7		106.2		8.1		4.1		6		88				<0.2		0.8	
					Middle	4.2	0.3	239	19.1	19.1	8.3	8.3	31.8	31.8	102.1	102.1	7.8		4.7		8		92				<0.2		0.7	
						4.2	0.4	247	19.1		8.3		31.8		102.1		7.8		4.7		10		91				<0.2		0.8	
					Bottom	7.4	0.3	238	19.0	19.0	8.3	8.3	31.9	31.9	99.6	99.6	7.7	7.7	5.8		10		94				<0.2		0.6	
						7.4	0.3	248	19.0		8.3		31.9		99.6		7.7		5.8		10		94				<0.2		0.5	
IM12	Cloudy	Moderate	15:42	9.1	Surface	1.0	0.4	261	19.3	19.3	8.3	8.3	31.8	31.8	97.4	97.4	7.4	7.4	4.0	4.3	4	6	89	91	821173	811523	<0.2	<0.2	0.6	0.6
						1.0	0.5	286	19.3		8.3		31.8		97.3		7.4		4.0		4		89				<0.2		0.5	
					Middle	4.6	0.4	246	19.2	19.2	8.3	8.3	31.8	31.8	95.3	95.3	7.3		4.4		7		91				<0.2		0.6	
						4.6	0.4	246	19.2		8.3		31.8		95.3		7.3		4.4		8		91				<0.2		0.6	
					Bottom	8.1	0.4	220	19.1	19.1	8.3	8.3	31.9	31.9	94.8	94.8	7.3	7.3	4.5		7		93				<0.2		0.8	
						8.1	0.4	222	19.1		8.3		31.9		94.8		7.3		4.5		7		94				<0.2		0.7	
SR2	Cloudy	Moderate	16:06	5.2	Surface	1.0	0.2	216	19.4	19.4	8.2	8.2	32.0	32.0	93.3	93.3	7.1	7.1	4.7	5.4	8	7	87	91	821466	814170	<0.2	<0.2	0.5	0.6
						1.0	0.2	225	19.4		8.2		32.0		93.3		7.1		4.7		7		88				<0.2		0.6	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.2	199	19.4	19.4	8.2	8.2	32.0	32.0	93.6	93.6	7.1	7.1	6.0		6		95				<0.2		0.6	
						4.2	0.2	211	19.4		8.2		32.0		93.6		7.1		6.0		8		94				<0.2		0.6	
SR3	Cloudy	Moderate	15:05	9.1	Surface	1.0	0.4	184	19.2	19.2	8.3	8.3	30.8	30.8	103.7	103.7	8.0	8.0	4.1	5.5	5	7	-	-	822143	807552	-	-	-	-
						1.0	0.4	194	19.2		8.3		30.8		103.7		8.0		4.0		6		-				-		-	
					Middle	4.6	0.4	186	19.0	19.0	8.3	8.3	31.4	31.4	102.1	102.1	7.9		5.0		5		-				-		-	
						4.6	0.4	203	19.0		8.3		31.4		102.1		7.9		5.0		7		-				-		-	
					Bottom	8.1	0.3	196	18.8	18.8	8.3	8.3	32.1	32.1	100.4	100.4	7.7	7.7	7.1		10		-				-		-	
						8.1	0.4	201	18.8		8.3		32.0		100.4		7.7		8.0		9		-				-		-	
SR4A	Cloudy	Moderate	15:52	9.3	Surface	1.0	0.3	114	19.0	19.0	8.2	8.2	30.4	30.4	104.0	104.0	8.1	8.0	4.2	4.5	11	11	-	-	817194	807798	-	-	-	-
						1.0	0.3	118	19.0		8.2		30.4		104.0		8.0		4.2		9		-				-		-	
					Middle	4.7	0.2	139	18.9	18.9	8.2	8.2	30.4	30.4	103.7	103.7	8.0		4.7		10		-				-		-	
						4.7	0.2	152	18.8		8.2		30.4		103.7		8.0		4.7		10		-				-		-	
					Bottom	8.3	0.3	155	18.8	18.8	8.2	8.2	30.4	30.4	104.7	104.7	8.1	8.1	4.6		14		-				-		-	
						8.3	0.3	160	18.8		8.2		30.4		104.7		8.1		4.5		13		-				-		-	
SR5A	Cloudy	Calm	16:09	5.0	Surface	1.0	0.3	185	19.1	19.1	8.1	8.1	29.3	29.3	101.3	101.3	7.9	7.9	4.3	4.5	10	10	-	-	816588	810692	-	-	-	-
						1.0	0.3	200	19.1		8.1		29.3		101.3		7.9		4.3		8		-				-		-	
					Middle	2.5	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.5	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.2	183	19.1	19.1	8.1	8.1	29.4	29.4	103.7	103.8	8.1	8.1	4.7		11		-				-		-	
						4.0	0.2	187	19.1		8.1		29.4		103.8		8.1		4.8		10		-				-		-	
SR6	Cloudy	Moderate	16:44	4.9	Surface	1.0	0.2	190	19.3	19.4	8.1	8.1	29.7	29.7	94.3	94.3	7.3	7.3	21.0	21.3	28	31	-	-	817913	814669	-	-	-	-
						1.0	0.2	190	19.4		8.1		29.7		94.3		7.3		21.0		29		-				-		-	
					Middle	2.5	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.5	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	0.2	188	19.3	19.3	8.1	8.1	29.7	29.7	96.4	96.5	7.4	7.4	21.7		32		-				-		-	
						3.9	0.2	191	19.3		8.1		29.7		96.5		7.4		21.6		34		-				-		-	
SR7	Cloudy	Moderate	17:08	16.5	Surface	1.0	0.2	194	19.3	19.3	8.2	8.2	32.2	32.2	88.8	88.8	6.8	6.8	3.9	4.0	6	8	-	-	823631	823759	-	-	-	-
						1.0	0.2	202	19.3		8.2		32.2		88.8		6.8		3.8		5		-				-		-	
					Middle	8.3	0.2	144	19.3	19.3	8.2	8.2	32.2	32.2	88.5	88.5	6.7		4.0		8		-				-		-	
						8.3	0.2	155	19.3		8.2		32.2		88.5		6.7		4.0		9		-				-		-	
					Bottom	15.5	0.2	119	19.3	19.3	8.2	8.2	32.2	32.2	89.0	89.1	6.8	6.8	4.1		9		-				-		-	
						15.5	0.2	126	19.3		8.2		32.2		89.1		6.8		4.2		10		-				-		-	
SR8	Cloudy	Moderate	15:49	5.5	Surface	1.0	0.3	240	19.2	19.2	8.3	8.3	31.8	31.8	102.4	102.4	7.8	7.8	5.1	5.5	7	8	-	-	820409	811584	-	-	-	-
						1.0	0.3	257	19.2		8.3		31.8		102.3		7.8		5.2		7		-				-		-	
					Middle	2.8	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.8	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.5	0.3	208	19.0	19.0	8.3	8.3	31.8	31.8	100.4	100.4	7.7	7.7	6.0		8		-				-		-	
						4.5	0.3	213	19.0		8.3		31.8		100.3		7.7		5.6		8		-				-		-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 24 January 17 during Mid-Ebb tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	11:05	8.8	Surface	1.0	0.4	186	18.9	18.9	8.2	8.2	30.4	30.4	101.6	101.6	7.9	7.9	3.6	3.9	5	6	92	93	815605	804249	<0.2	<0.2	0.6	0.5
						1.0	0.4	189			8.2		30.4		101.6		7.9		3.6		6		93				<0.2		0.5	
					Middle	4.4	0.5	173	18.8	18.8	8.2	8.2	30.4	30.4	101.3	101.3	7.9		3.9		6		93				<0.2		0.4	
						4.4	0.5	182	18.8		8.2		30.4		101.3		7.9		4.0		6		93				<0.2		0.5	
					Bottom	7.8	0.5	196	18.8	18.8	8.1	8.1	30.4	30.4	101.8	101.9	7.9	7.9	4.1		5		94				<0.2		0.4	
						7.8	0.5	205	18.8		8.1		30.4		101.9		7.9		4.1		7		95				<0.2		0.5	
C2	Cloudy	Moderate	12:10	12.2	Surface	1.0	0.4	148	19.2	19.2	8.3	8.3	31.1	31.1	93.4	93.4	7.2	7.1	4.3	5.0	3	4	88	91	825680	806954	<0.2	<0.2	1.6	1.1
						1.0	0.5	158	19.2		8.3		31.1		93.4		7.2		4.3		4		88				<0.2		1.5	
					Middle	6.1	0.2	176	19.2	19.2	8.3	8.3	31.8	31.8	90.5	90.5	6.9		5.0		6		91				<0.2		0.8	
						6.1	0.2	183	19.2		8.2		31.8		90.5		6.9		5.0		4		92				<0.2		1.0	
					Bottom	11.2	0.2	177	19.2	19.2	8.2	8.2	31.9	31.9	90.4	90.4	6.9	6.9	5.7		4		95				<0.2		0.8	
						11.2	0.2	181	19.2		8.2		31.9		90.4		6.9		5.7		4		94				<0.2		0.8	
C3	Cloudy	Moderate	10:11	12.4	Surface	1.0	0.3	179	19.3	19.3	8.2	8.2	32.2	32.2	87.9	87.9	6.7	6.7	3.4	3.6	2	3	88	91	822122	817822	<0.2	<0.2	0.6	0.6
						1.0	0.3	184	19.3		8.2		32.2		87.9		6.7		3.4		3		89				<0.2		0.6	
					Middle	6.2	0.2	158	19.3	19.3	8.2	8.2	32.2	32.2	87.4	87.4	6.7		3.7		2		92				<0.2		0.6	
						6.2	0.3	168	19.3		8.2		32.2		87.4		6.7		3.7		5		91				<0.2		0.6	
					Bottom	11.4	0.3	131	19.3	19.3	8.2	8.2	32.2	32.2	87.4	87.4	6.7	6.7	3.8		3		94				<0.2		0.6	
						11.4	0.3	139	19.3		8.2		32.2		87.4		6.7		3.8		3		94				<0.2		0.6	
IM1	Cloudy	Moderate	11:28	7.5	Surface	1.0	0.3	200	18.9	18.9	8.2	8.2	30.1	30.1	104.1	104.1	8.1	8.1	2.4	2.8	4	5	91	92	818349	806440	<0.2	<0.2	0.7	0.7
						1.0	0.4	202	18.9		8.2		30.1		104.1		8.1		2.4		4		90				<0.2		0.6	
					Middle	3.8	0.4	177	18.8	18.8	8.2	8.2	30.2	30.2	103.1	103.1	8.0		2.7		5		91				<0.2		0.6	
						3.8	0.4	187	18.8		8.2		30.2		103.1		8.0		2.8		3		92				<0.2		0.8	
					Bottom	6.5	0.3	162	18.7	18.7	8.1	8.1	30.4	30.4	103.6	103.7	8.1	8.1	3.3		6		92				<0.2		0.8	
						6.5	0.3	170	18.7		8.1		30.4		103.7		8.1		3.3		6		93				<0.2		0.9	
IM2	Cloudy	Moderate	11:34	8.3	Surface	1.0	0.4	196	18.8	18.8	8.2	8.2	30.1	30.1	104.3	104.3	8.1	8.1	2.0	2.3	4	6	90	91	818859	806184	<0.2	<0.2	1.0	0.7
						1.0	0.4	212	18.8		8.2		30.1		104.3		8.1		2.0		5		90				<0.2		0.8	
					Middle	4.2	0.4	209	18.8	18.8	8.2	8.2	30.0	30.0	103.8	103.8	8.1		2.2		6		91				<0.2		0.6	
						4.2	0.4	210	18.8		8.2		30.0		103.8		8.1		2.2		5		91				<0.2		0.6	
					Bottom	7.3	0.4	207	18.6	18.6	8.1	8.1	30.4	30.4	104.0	104.1	8.1	8.1	2.7		8		92				<0.2		0.4	
						7.3	0.4	222	18.6		8.1		30.4		104.1		8.1		2.7		6		92				<0.2		0.5	
IM3	Cloudy	Moderate	11:41	8.4	Surface	1.0	0.4	202	18.9	18.9	8.2	8.2	30.0	30.0	104.9	104.9	8.1	8.1	1.7	2.0	4	5	91	93	819414	806033	<0.2	<0.2	0.7	0.7
						1.0	0.5	206	18.9		8.2		30.0		104.9		8.2		1.7		5		92				<0.2		0.8	
					Middle	4.2	0.5	186	18.8	18.8	8.2	8.2	30.0	30.0	104.4	104.4	8.1		2.0		5		93				<0.2		0.8	
						4.2	0.6	191	18.8		8.2		30.0		104.4		8.1		2.0		3		93				<0.2		0.8	
					Bottom	7.4	0.6	201	18.7	18.7	8.1	8.1	30.3	30.3	104.3	104.3	8.1	8.1	2.4		7		93				<0.2		0.6	
						7.4	0.6	215	18.7		8.1		30.3		104.3		8.1		2.4		5		94				<0.2		0.6	
IM4	Cloudy	Moderate	11:49	8.0	Surface	1.0	0.4	173	18.9	18.9	8.2	8.2	29.9	29.9	105.5	105.5	8.2	8.2	2.1	2.3	4	4	92	93	819571	805049	<0.2	<0.2	0.8	0.9
						1.0	0.4	174	18.9		8.2		29.9		105.5		8.2		2.1		5		92				<0.2		0.8	
					Middle	4.0	0.3	183	18.7	18.7	8.2	8.2	30.2	30.2	104.3	104.3	8.1		2.4		3		93				<0.2		1.0	
						4.0	0.4	187	18.7		8.2		30.2		104.2		8.1		2.4		5		93				<0.2		1.2	
					Bottom	7.0	0.3	192	18.7	18.7	8.2	8.2	30.4	30.4	104.7	104.7	8.2	8.2	2.5		3		94				<0.2		0.6	
						7.0	0.4	202	18.6		8.2		30.4		104.7		8.2		2.5		3		95				<0.2		0.7	
IM5	Cloudy	Moderate	11:57	6.9	Surface	1.0	0.3	168	19.1	19.1	8.1	8.1	29.6	29.6	103.2	103.2	8.0	8.0	2.5	3.1	4	6	93	94	820554	804912	<0.2	<0.2	0.9	0.9
						1.0	0.4	177	19.1		8.1		29.6		103.2		8.0		2.5		4		93				<0.2		0.9	
					Middle	3.5	0.3	170	18.9	18.9	8.1	8.1	29.7	29.7	103.1	103.1	8.0		3.3		4		94				<0.2		0.6	
						3.5	0.3	181	18.9		8.1		29.7		103.1		8.0		3.3		6		94				<0.2		0.6	
					Bottom	5.9	0.3	169	18.6	18.6	8.1	8.1	29.9	29.9	103.7	103.7	8.1	8.1	3.6		9		94				<0.2		1.1	
						5.9	0.3	174	18.6		8.1		29.9		103.7		8.1		3.6		8		95				<0.2		1.1	
IM6	Cloudy	Moderate	12:04	6.8	Surface	1.0	0.4	167	19.1	19.1	8.1	8.1	29.1	29.1	100.9	101.0	7.9	7.9	1.7	2.3	3	4	90	91	821055	805820	<0.2	<0.2	1.1	1.0
						1.0	0.4	174	19.1		8.1		29.1		101.0		7.9		1.7		2		90				<0.2		1.3	
					Middle	3.4	0.4	154	18.9	18.9	8.1	8.1	29.5	29.5	101.3	101.4	7.9		2.6		5		91				<0.2		1.0	
						3.4	0.4	158	18.9		8.1		29.5		101.4		7.9		2.6		4		91				<0.2		1.0	
					Bottom	5.8	0.4	149	18.8	18.8	8.1	8.1	29.7	29.7	102.6	102.6	8.0	8.0	2.5		4		92				<0.2		0.8	
						5.8	0.4	152	18.8		8.1		29.7		102.6		8.0		2.4		5		92				<0.2		0.9	
IM7	Cloudy	Moderate	12:12	8.3	Surface	1.0	0.4	157	19.2	19.2	8.1	8.1	29.0	29.0	101.4	101.4	7.9	7.9	1.9	2.3	2	2	89	91	821354	806850	<0.2	<0.2	0.9	0.8
						1.0	0.4	160	19.2		8.1		29.0		101.4		7.9		1.9		2		90				<0.2		0.7	
					Middle	4.2	0.4	155	18.9	18.9	8.1	8.1	29.5	29.5	101.9	101.9	7.9		2.5		3		91				<0.2		0.7	
						4.2	0.4	161	18.9		8.1		29.5		101.9		7.9		2.5		2		91				<0.2		0.9	
					Bottom	7.3	0.3	163	18.7	18.7	8.1	8.1	29.8	29.8	102.4	102.4	8.0	8.0	2.6		2		92				<0.2		0.9	
						7.3	0.3	164	18.7		8.1		29.8		102.4		8.0		2.6		3		92				<0.2		0.9	
IM8	Cloudy	Moderate	11:31	8.2	Surface	1.0	0.5	150	18.8	18.8	8.3	8.3	31.9	31.9	104.5	104.5	8.1	8.0	4.2	4.9	4	4	86	90	821690	807837	<0.2	<0.2	0.8	0.8
						1.0	0.5	157	18.8		8.3		31.9		104.5		8.1		4.2		3		86				<0.2		0.8	
					Middle	4.1	0.5	156	18.7	18.7	8.3	8.3	31.9	32.0	101.2	101.2	7.8		5.6		4		91				<0.2		0.8	
						4.1	0.6	165	18.7		8.3		32.0		101.1		7.8		5.7		2		92				<0.2		0.8	
					Bottom	7.2	0.5	158	18.7	18.7	8.3	8.3	32.2	32.2	98.8	98.8	7.6	7.6	4.8		5		94				<0.2		0.7	
						7.2	0.5	170	18.7		8.3		32.2		98.8		7.6		4.8		6		93				<0.2		0.8	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 24 January 17 during Mid-Ebb tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	11:23	7.6	Surface	1.0	0.5	183	18.9	18.9	8.3	8.3	31.7	31.7	102.0	102.0	7.9	7.9	4.1	3.9	4	5	86	90	822092	808819	<0.2	<0.2	0.9	0.9
						1.0	0.5	190	18.9		8.3		31.7		102.0		7.9		4.1		5		86				<0.2		0.9	
					Middle	3.8	0.4	167	18.8	18.8	8.3	8.3	31.8	31.8	100.6	100.6	7.8		4.4		5		91				<0.2		0.8	
						3.8	0.5	181	18.8		8.3		31.8		100.6		7.8		4.4		6		91				<0.2		0.8	
					Bottom	6.6	0.5	168	18.7	18.7	8.3	8.3	32.0	32.0	99.4	99.4	7.7	7.7	3.3		6		94				<0.2		1.0	
						6.6	0.5	175	18.7		8.3		32.0		99.4		7.7		3.3		6		94				<0.2		0.9	
IM10	Cloudy	Moderate	11:15	7.4	Surface	1.0	0.5	148	18.9	18.9	8.3	8.3	31.7	31.7	101.2	101.2	7.8	7.8	4.3	5.3	6	6	87	90	822228	809832	<0.2	<0.2	0.8	0.8
						1.0	0.5	161	18.9		8.3		31.7		101.2		7.8		4.3		5		86				<0.2		0.9	
					Middle	3.7	0.5	163	18.8	18.8	8.3	8.3	31.7	31.7	99.5	99.5	7.7		4.6		7		91				<0.2		0.9	
						3.7	0.6	167	18.8		8.3		31.7		99.5		7.7		4.6		6		91				<0.2		0.8	
					Bottom	6.4	0.5	159	18.9	18.9	8.3	8.3	31.8	31.8	98.1	98.1	7.6	7.6	7.0		7		93				<0.2		0.8	
						6.4	0.5	172	18.9		8.3		31.8		98.1		7.6		7.0		7		93				<0.2		0.8	
IM11	Cloudy	Moderate	11:07	8.2	Surface	1.0	0.4	162	19.2	19.2	8.3	8.3	31.9	31.9	93.8	93.8	7.2	7.2	5.4	6.6	6	8	86	91	821489	810540	<0.2	<0.2	0.9	0.9
						1.0	0.4	170	19.2		8.3		31.9		93.8		7.2		5.4		8		87				<0.2		0.8	
					Middle	4.1	0.4	154	19.1	19.1	8.3	8.3	31.9	31.9	93.1	93.1	7.1		6.9		9		91				<0.2		1.0	
						4.1	0.4	162	19.1		8.3		31.9		93.1		7.1		6.9		8		92				<0.2		0.9	
					Bottom	7.2	0.4	164	19.0	19.0	8.3	8.3	31.9	31.9	93.1	93.2	7.2	7.2	7.5		8		94				<0.2		0.8	
						7.2	0.4	174	19.0		8.2		31.9		93.2		7.2		7.6		8		94				<0.2		0.8	
IM12	Cloudy	Moderate	10:58	9.2	Surface	1.0	0.5	179	19.1	19.1	8.3	8.3	31.8	31.8	93.1	93.1	7.1	7.1	5.6	5.3	7	7	89	91	821179	811502	<0.2	<0.2	0.7	0.8
						1.0	0.6	187	19.1		8.3		31.8		93.1		7.1		5.7		6		88				<0.2		0.6	
					Middle	4.6	0.6	155	19.1	19.1	8.3	8.3	31.8	31.8	92.4	92.4	7.1		4.4		5		91				<0.2		0.8	
						4.6	0.6	155	19.1		8.3		31.8		92.4		7.1		4.4		5		91				<0.2		0.9	
					Bottom	8.2	0.5	146	19.0	19.0	8.2	8.2	31.9	31.9	91.9	91.9	7.1	7.1	5.7		10		94				<0.2		0.7	
						8.2	0.6	157	19.0		8.2		31.9		91.9		7.1		5.7		9		94				<0.2		0.8	
SR2	Cloudy	Moderate	10:36	4.0	Surface	1.0	0.2	131	19.1	19.1	8.2	8.2	31.9	31.9	88.8	88.8	6.8	6.8	5.0	6.0	6	7	90	93	821473	814166	<0.2	<0.2	0.6	0.7
						1.0	0.2	137	19.1		8.2		31.9		88.8		6.8		5.0		6		90				<0.2		0.8	
					Middle	2.0	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.0	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	0.2	111	19.2	19.2	8.2	8.2	32.0	32.0	88.8	88.9	6.8	6.8	7.0		8		95				<0.2		0.7	
						3.0	0.2	115	19.2		8.2		32.0		88.9		6.8		7.0		6		95				<0.2		0.7	
SR3	Cloudy	Moderate	11:37	9.0	Surface	1.0	0.3	185	19.0	19.0	8.3	8.3	31.3	31.3	101.4	101.4	7.8	7.8	4.5	5.8	6	5	-	-	822138	807566	-	-	-	-
						1.0	0.3	194	19.0		8.3		31.3		101.4		7.8		4.5		5		-				-		-	
					Middle	4.5	0.3	175	18.8	18.8	8.3	8.3	31.8	31.8	100.0	100.0	7.7		5.2		5		-				-		-	
						4.5	0.3	187	18.8		8.3		31.8		100.0		7.7		5.2		5		-				-		-	
					Bottom	8.0	0.3	182	18.7	18.7	8.3	8.3	32.1	32.1	98.4	98.4	7.6	7.6	7.8		5		-				-		-	
						8.0	0.3	191	18.7		8.3		32.1		98.4		7.6		7.8		6		-				-		-	
SR4A	Cloudy	Moderate	10:44	8.6	Surface	1.0	0.3	115	18.8	18.8	8.1	8.1	30.1	30.1	102.2	102.2	7.9	7.9	5.3	5.6	7	9	-	-	817173	807818	-	-	-	-
						1.0	0.3	122	18.8		8.1		30.1		102.2		7.9		5.3		8		-				-		-	
					Middle	4.3	0.3	111	18.8	18.8	8.1	8.1	30.3	30.3	102.1	102.1	7.9		5.4		10		-				-		-	
						4.3	0.3	118	18.8		8.1		30.3		102.1		7.9		5.4		9		-				-		-	
					Bottom	7.6	0.3	123	18.8	18.8	8.1	8.1	30.4	30.4	102.5	102.6	8.0	8.0	6.0		10		-				-		-	
						7.6	0.3	126	18.8		8.1		30.3		102.6		8.0		6.0		10		-				-		-	
SR5A	Cloudy	Moderate	10:25	4.9	Surface	1.0	0.1	170	18.8	18.8	8.0	8.0	29.2	29.2	98.2	98.3	7.7	7.7	4.3	4.5	6	7	-	-	816575	810710	-	-	-	-
						1.0	0.1	180	18.8		8.0		29.2		98.4		7.7		4.3		7		-				-		-	
					Middle	2.5	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.5	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	0.1	179	18.8	18.8	8.0	8.0	29.2	29.2	101.6	101.6	8.0	8.0	4.7		8		-				-		-	
						3.9	0.1	190	18.8		8.0		29.2		101.6		8.0		4.8		8		-				-		-	
SR6	Cloudy	Moderate	10:01	4.3	Surface	1.0	0.1	119	19.3	19.3	8.0	8.0	29.7	29.7	92.9	93.0	7.2	7.2	3.8	3.6	8	8	-	-	817910	814664	-	-	-	-
						1.0	0.1	127	19.3		8.0		29.7		93.0		7.2		3.8		7		-				-		-	
					Middle	2.2	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.2	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.1	129	19.1	19.1	8.0	8.0	29.7	29.7	99.6	99.7	7.7	7.7	3.3		8		-				-		-	
						3.3	0.2	140	19.1		8.0		29.7		99.8		7.7		3.3		7		-				-		-	
SR7	Cloudy	Moderate	09:36	16.8	Surface	1.0	0.2	146	19.2	19.2	8.2	8.2	32.3	32.3	87.4	87.4	6.7	6.7	3.7	4.2	2	6	-	-	823638	823741	-	-	-	-
						1.0	0.2	150	19.2		8.2		32.3		87.4		6.7		3.8		3		-				-		-	
					Middle	8.4	0.1	136	19.2	19.2	8.2	8.2	32.3	32.3	86.9	86.9	6.6		4.4		8		-				-		-	
						8.4	0.1	137	19.2		8.2		32.3		86.9		6.6		4.4		7		-				-		-	
					Bottom	15.8	0.2	115	19.2	19.2	8.2	8.2	32.3	32.3	86.7	86.7	6.6	6.6	4.3		7		-				-		-	
						15.8	0.2	116	19.2		8.2		32.3		86.7		6.6		4.3		8		-				-		-	
SR8	Cloudy	Moderate	10:52	5.3	Surface	1.0	0.2	198	19.5	19.5	8.3	8.3	31.8	31.8	97.7	97.7	7.4	7.4	5.9	6.3	6	7	-	-	820406	811587	-	-	-	-
						1.0	0.2	204	19.5		8.3		31.8		97.7		7.4		5.9		8		-				-		-	
					Middle	2.7	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.7	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	0.2	184	19.0	19.0	8.3	8.3	31.8	31.8	96.2	96.2	7.4	7.4	6.7		7		-				-		-	
						4.3	0.2	199	19.0		8.3		31.8		96.2		7.4		6.7		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 28 January 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	08:05	8.2	Surface	1.0	0.5	73	19.0	19.0	8.0	8.0	28.8	28.8	97.2	97.2	7.6	7.6	10.0	14.8	25	33	92	94	815619	804262	<0.2	<0.2	1.4	1.3
						1.0	0.5	76	19.0		8.0		28.8		97.2		7.6		10.0		27		93				<0.2		1.2	
					Middle	4.1	0.4	73	18.9	18.9	8.0	8.0	28.6	28.6	97.2	97.2	7.6		15.2		34		94				<0.2		1.0	
						4.1	0.5	73	18.9		8.0		28.6		97.2		7.6		15.2		36		94				<0.2		1.1	
					Bottom	7.2	0.4	95	18.9	18.9	8.0	8.0	28.1	28.1	98.1	98.1	7.7	7.7	19.5		36		94				<0.2		1.5	
						7.2	0.4	97	18.9		8.0		28.0		98.1		7.7		19.0		37		94				<0.2		1.7	
C2	Cloudy	Moderate	09:04	12.2	Surface	1.0	0.6	248	19.3	19.3	8.0	8.0	27.0	27.0	97.5	97.5	7.7	7.6	5.7	8.5	7	10	86	91	825667	806958	<0.2	<0.2	1.9	1.9
						1.0	0.6	254	19.3		8.0		27.0		97.5		7.7		5.7		8		86				<0.2		2.1	
					Middle	6.1	0.6	254	19.2	19.2	8.0	8.0	27.5	27.5	95.9	95.9	7.5		8.2		10		91				<0.2		2.0	
						6.1	0.6	270	19.2		8.0		27.5		95.9		7.5		8.2		11		92				<0.2		1.6	
					Bottom	11.2	0.5	258	19.1	19.1	8.0	8.0	28.1	28.1	96.2	96.2	7.5	7.5	11.5		11		94				<0.2		1.8	
						11.2	0.5	264	19.1		8.0		28.1		96.2		7.5		11.5		10		94				<0.2		1.8	
C3	Cloudy	Moderate	07:03	11.3	Surface	1.0	0.3	192	19.3	19.3	8.0	8.0	29.9	29.9	93.9	93.9	7.3	7.3	10.0	13.6	9	14	90	92	822122	817811	<0.2	<0.2	0.8	0.9
						1.0	0.3	210	19.3		8.0		29.9		93.9		7.3		10.4		8		90				<0.2		1.0	
					Middle	5.7	0.3	133	19.3	19.3	8.0	8.0	29.9	29.9	94.3	94.3	7.3		14.0		15		91				<0.2		0.9	
						5.7	0.3	144	19.3		8.0		29.9		94.3		7.3		14.0		15		91				<0.2		1.0	
					Bottom	10.3	0.2	124	19.3	19.3	8.0	8.0	29.9	29.9	95.5	95.5	7.4	7.4	16.5		18		95				<0.2		0.7	
						10.3	0.2	132	19.3		8.0		29.9		95.5		7.4		16.5		19		95				<0.2		0.7	
IM1	Sunny	Moderate	08:32	7.6	Surface	1.0	0.5	150	18.9	18.9	8.0	8.0	29.1	29.1	98.0	98.0	7.6	7.7	13.2	17.3	12	13	89	90	818360	806450	<0.2	<0.2	1.0	1.0
						1.0	0.5	156	18.9		8.0		29.1		98.0		7.6		13.2		11		89				<0.2		1.0	
					Middle	3.8	0.4	126	18.9	18.9	8.0	8.0	29.0	29.0	98.0	98.0	7.7		19.1		13		90				<0.2		1.0	
						3.8	0.5	126	18.9		8.0		29.0		98.0		7.7		19.3		11		90				<0.2		0.9	
					Bottom	6.6	0.4	120	18.9	18.9	8.0	8.0	28.7	28.7	98.8	98.8	7.7	7.7	19.6		16		91				<0.2		1.0	
						6.6	0.4	127	18.9		8.0		28.7		98.8		7.7		19.5		15		91				<0.2		0.9	
IM2	Sunny	Moderate	08:38	8.1	Surface	1.0	0.5	115	19.0	19.0	8.1	8.1	29.3	29.3	97.9	97.9	7.6	7.6	12.9	16.0	15	23	91	92	818849	806205	<0.2	<0.2	0.8	1.0
						1.0	0.5	115	19.0		8.1		29.3		97.9		7.6		13.0		15		92				<0.2		0.9	
					Middle	4.1	0.4	111	18.9	18.9	8.1	8.1	29.3	29.3	97.7	97.7	7.6		15.9		26		92				<0.2		0.9	
						4.1	0.5	118	18.9		8.1		29.3		97.7		7.6		16.0		24		92				<0.2		0.8	
					Bottom	7.1	0.4	112	18.9	18.9	8.1	8.1	29.3	29.3	97.5	97.5	7.6	7.6	19.2		28		93				<0.2		1.4	
						7.1	0.4	117	18.9		8.1		29.3		97.5		7.6		19.0		29		93				<0.2		1.3	
IM3	Sunny	Moderate	08:46	8.4	Surface	1.0	0.4	147	18.9	18.9	8.0	8.0	28.7	28.7	99.1	99.1	7.8	7.8	10.0	12.7	11	18	89	90	819400	806020	<0.2	<0.2	0.9	0.9
						1.0	0.5	154	18.9		8.0		28.7		99.0		7.8		10.2		10		89				<0.2		1.0	
					Middle	4.2	0.4	135	18.9	18.9	8.0	8.0	28.6	28.6	99.0	99.1	7.8		13.7		14		90				<0.2		1.0	
						4.2	0.5	146	18.9		8.0		28.6		99.1		7.8		13.8		14		91				<0.2		0.8	
					Bottom	7.4	0.4	154	18.9	18.9	8.0	8.0	28.3	28.3	99.7	99.7	7.8	7.8	14.5		31		91				<0.2		0.8	
						7.4	0.5	162	18.9		8.0		28.3		99.7		7.8		14.1		29		92				<0.2		0.9	
IM4	Sunny	Moderate	08:53	8.1	Surface	1.0	0.5	96	19.0	19.0	8.1	8.1	29.2	29.2	99.1	99.1	7.7	7.7	7.6	13.3	8	9	93	94	819581	805041	<0.2	<0.2	0.9	0.9
						1.0	0.6	97	19.0		8.1		29.2		99.1		7.7		7.8		8		93				<0.2		0.9	
					Middle	4.1	0.5	127	18.9	18.9	8.1	8.1	29.2	29.2	98.0	98.0	7.7		12.3		8		93				<0.2		0.8	
						4.1	0.5	130	18.9		8.1		29.2		98.0		7.7		12.4		10		94				<0.2		1.0	
					Bottom	7.1	0.5	138	18.9	18.9	8.1	8.1	29.2	29.2	97.7	97.7	7.6	7.6	19.9		12		94				<0.2		1.0	
						7.1	0.5	147	18.9		8.1		29.2		97.7		7.6		19.8		10		95				<0.2		0.8	
IM5	Sunny	Moderate	09:03	7.0	Surface	1.0	0.5	142	19.0	19.0	8.0	8.0	28.7	28.7	98.3	98.3	7.7	7.7	14.7	17.0	17	21	92	93	820578	804910	<0.2	<0.2	0.9	1.2
						1.0	0.5	151	19.0		8.0		28.7		98.2		7.7		14.7		18		92				<0.2		1.1	
					Middle	3.5	0.4	148	18.9	18.9	8.0	8.0	28.5	28.5	98.4	98.4	7.7		18.4		19		93				<0.2		0.8	
						3.5	0.4	152	18.9		8.0		28.5		98.4		7.7		18.3		17		93				<0.2		0.9	
					Bottom	6.0	0.4	145	18.9	18.9	8.0	8.0	27.9	27.9	99.6	99.7	7.8	7.9	17.9		27		94				<0.2		1.7	
						6.0	0.4	149	18.9		8.0		27.9		99.7		7.9		17.7		26		94				<0.2		1.7	
IM6	Sunny	Moderate	09:13	6.9	Surface	1.0	0.5	117	19.0	19.0	8.0	8.0	28.7	28.7	97.0	97.0	7.6	7.6	8.8	13.4	12	17	90	92	821060	805843	<0.2	<0.2	1.1	1.1
						1.0	0.5	121	19.0		8.0		28.7		97.0		7.6		8.9		13		91				<0.2		1.0	
					Middle	3.5	0.4	110	19.0	19.0	8.0	8.0	28.5	28.5	96.8	96.8	7.6		12.7		15		91				<0.2		1.1	
						3.5	0.5	118	19.0		8.0		28.5		96.8		7.6		12.9		14		92				<0.2		1.1	
					Bottom	5.9	0.5	123	18.9	18.9	8.0	8.0	28.4	28.4	97.2	97.2	7.6	7.6	18.5		24		92				<0.2		1.0	
						5.9	0.5	127	18.9		8.0		28.4		97.2		7.6		18.3		26		93				<0.2		1.2	
IM7	Sunny	Moderate	09:24	8.2	Surface	1.0	0.5	102	19.0	19.0	8.0	8.0	28.3	28.3	95.7	95.7	7.5	7.5	9.4	11.9	16	18	92	93	821345	806852	<0.2	<0.2	1.2	1.1
						1.0	0.5	105	19.0		8.0		28.3		95.7		7.5		9.4		14		93				<0.2		1.0	
					Middle	4.1	0.5	104	19.0	19.0	8.0	8.0	28.1	28.1	96.1	96.1	7.5		11.9		18		93				<0.2		1.0	
						4.1	0.5	109	19.0		8.0		28.1		96.1		7.5		11.8		18		94				<0.2		1.1	
					Bottom	7.2	0.4	111	19.0	19.0	7.9	7.9	27.6	27.6	98.3	98.4	7.7	7.8	14.7		20		94				<0.2		1.2	
						7.2	0.5	121	19.0		7.9		27.5		98.4		7.8		14.3		19		94				<0.2		1.0	
IM8	Cloudy	Moderate	08:26	8.2	Surface	1.0	0.5	81	19.2	19.2	8.0	8.0	28.6	28.6	98.2	98.2	7.7	7.7	9.2	13.8	11	12	86	90	821689	807819	<0.2	<0.2	1.1	1.3
						1.0	0.5	84	19.2		8.0		28.6		98.2		7.7		9.2		10		86				<0.2		1.3	
					Middle	4.1	0.4	98	19.1	19.1	8.0	8.0	28.7	28.7	97.8	97.9	7.6		12.0		10		92				<0.2		1.3	
						4.1	0.4	105	19.1		8.0		28.7		97.9		7.6		12.1		11		91				<0.2		1.2	
					Bottom	7.2	0.4	104	19.1	19.1	8.0	8.0	29.1	29.1	98.2	98.2	7.7	7.7	20.2		15		94				<0.2		1.3	
						7.2	0.4	110	19.1		8.0		29.1		98.2		7.7		20.2		14		93				<0.2		1.4	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 28 January 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	08:18	7.5	Surface	1.0	0.4	172	19.2	19.2	8.0	8.0	28.1	28.1	97.6	97.6	7.6	7.6	7.6	9.5	10	12	86	91	822102	808825	<0.2	<0.2	1.7	1.6
						1.0	0.4	183	19.2		8.0		28.1		97.6		7.6		7.7		11		87				<0.2		1.6	
					Middle	3.8	0.4	200	19.2	19.2	8.0	8.0	28.1	28.1	97.4	97.4	7.6	7.6	8.5		9		91				<0.2		1.5	
						3.8	0.4	204	19.2		8.0		28.1		97.4		7.6		8.7		11		92				<0.2		1.5	
					Bottom	6.5	0.4	206	19.2	19.2	8.0	8.0	28.6	28.6	97.4	97.4	7.6	7.6	12.0		15		93				<0.2		1.5	
						6.5	0.4	223	19.2		8.0		28.6		97.4		7.6		12.2		17		94				<0.2		1.6	
IM10	Cloudy	Moderate	08:09	7.4	Surface	1.0	0.5	272	19.2	19.2	8.0	8.0	29.5	29.5	99.4	99.4	7.7	7.7	16.0	17.8	19	22	87	91	822222	809832	<0.2	<0.2	1.1	1.1
						1.0	0.6	284	19.2		8.0		29.5		99.4		7.7		15.9		19		89				<0.2		1.0	
					Middle	3.7	0.4	254	19.2	19.2	8.0	8.0	29.5	29.5	99.2	99.2	7.7		16.9		24		91				<0.2		1.0	
						3.7	0.4	266	19.2		8.0		29.5		99.2		7.7		16.9		24		91				<0.2		1.2	
					Bottom	6.4	0.4	214	19.2	19.2	8.0	8.0	29.5	29.5	99.2	99.2	7.7	7.7	20.6		23		94				<0.2		1.1	
						6.4	0.4	225	19.2		8.0		29.5		99.2		7.7		20.7		23		94				<0.2		1.2	
IM11	Cloudy	Moderate	07:59	8.3	Surface	1.0	0.5	290	19.2	19.2	8.0	8.0	29.5	29.5	99.6	99.6	7.7	7.7	16.6	18.9	20	21	88	91	821508	810535	<0.2	<0.2	1.0	1.1
						1.0	0.5	301	19.2		8.0		29.5		99.6		7.7		16.7		19		89				<0.2		1.0	
					Middle	4.2	0.4	268	19.2	19.2	8.0	8.0	29.5	29.5	99.4	99.4	7.7		18.7		21		91				<0.2		1.1	
						4.2	0.5	269	19.2		8.0		29.5		99.4		7.7		18.7		21		91				<0.2		1.2	
					Bottom	7.3	0.4	251	19.2	19.2	8.0	8.0	29.5	29.5	100.2	100.2	7.8	7.8	21.4		21		94				<0.2		1.1	
						7.3	0.4	256	19.2		8.0		29.5		100.2		7.8		21.4		22		94				<0.2		1.1	
IM12	Cloudy	Moderate	07:47	8.2	Surface	1.0	0.6	271	19.2	19.2	8.0	8.0	29.3	29.3	97.8	97.8	7.6	7.6	13.0	15.5	16	18	89	91	821179	811513	<0.2	<0.2	1.0	1.1
						1.0	0.6	284	19.2		8.0		29.3		97.8		7.6		13.1		15		88				<0.2		1.2	
					Middle	4.1	0.4	256	19.2	19.2	8.0	8.0	29.3	29.3	97.6	97.6	7.6		15.6		19		91				<0.2		1.1	
						4.1	0.4	277	19.2		8.0		29.3		97.6		7.6		15.5		19		90				<0.2		1.2	
					Bottom	7.2	0.3	231	19.2	19.2	8.0	8.0	29.4	29.4	97.6	97.6	7.6	7.6	17.8		19		94				<0.2		1.1	
						7.2	0.4	240	19.2		8.0		29.4		97.6		7.6		17.8		18		93				<0.2		1.2	
SR2	Cloudy	Moderate	07:24	4.2	Surface	1.0	0.2	209	19.1	19.1	8.0	8.0	29.4	29.4	100.0	100.0	7.8	7.8	12.0	12.2	17	17	90	92	821475	814182	<0.2	<0.2	1.1	1.2
						1.0	0.2	213	19.1		8.0		29.4		100.0		7.8		12.0		16		89				<0.2		1.2	
					Middle	2.1	-	-	-	-	-	-	-	-	-	-	-	-	-		-		-				-		-	
						2.1	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.2	212	19.1	19.1	8.0	8.0	29.4	29.4	102.5	102.5	8.0	8.0	12.3		18		95				<0.2		1.1	
						3.2	0.2	221	19.1		8.0		29.4		102.5		8.0		12.3		17		95				<0.2		1.3	
SR3	Cloudy	Moderate	08:33	9.0	Surface	1.0	0.7	81	19.2	19.2	8.0	8.0	28.2	28.2	98.1	98.1	7.7	7.7	9.3	15.8	9	11	-	-	822132	807582	-	-	-	-
						1.0	0.7	82	19.2		8.0		28.2		98.1		7.7		9.3		9		-				-		-	
					Middle	4.5	0.5	128	19.1	19.1	8.0	8.0	29.0	29.0	98.0	98.0	7.6		16.1		12		-				-		-	
						4.5	0.6	140	19.1		8.0		29.0		98.0		7.6		16.2		11		-				-		-	
					Bottom	8.0	0.5	151	19.1	19.1	8.0	8.0	29.1	29.1	98.0	98.0	7.6	7.6	22.1		12		-				-		-	
						8.0	0.5	158	19.1		8.0		29.1		98.0		7.6		22.0		12		-				-		-	
SR4A	Cloudy	Moderate	07:42	8.8	Surface	1.0	0.4	104	18.8	18.8	8.0	8.0	28.5	28.5	97.8	97.8	7.7	7.8	10.3	8.7	15	16	-	-	817188	807804	-	-	-	-
						1.0	0.4	104	18.8		8.0		28.5		97.8		7.7		10.3		15		-				-		-	
					Middle	4.4	0.3	111	18.8	18.8	8.0	8.0	27.9	27.9	98.7	98.7	7.8		9.1		17		-				-		-	
						4.4	0.3	121	18.8		8.0		27.9		98.7		7.8		9.0		18		-				-		-	
					Bottom	7.8	0.3	143	19.0	19.0	7.9	7.9	27.1	27.1	99.7	99.7	7.9	7.9	6.8		17		-				-		-	
						7.8	0.3	157	19.0		7.9		27.0		99.7		7.9		6.7		16		-				-		-	
SR5A	Cloudy	Calm	07:24	4.9	Surface	1.0	0.1	207	18.9	18.9	7.9	7.9	27.4	27.4	100.3	100.3	7.9	7.9	6.3	6.9	13	13	-	-	816611	810687	-	-	-	-
						1.0	0.1	210	18.9		7.9		27.3		100.3		7.9		6.4		12		-				-		-	
					Middle	2.5	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.5	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	0.1	236	18.9	18.9	7.8	7.8	26.3	26.3	100.4	100.4	8.0	8.0	7.3		13		-				-		-	
						3.9	0.1	247	18.9		7.8		26.3		100.4		8.0		7.4		15		-				-		-	
SR6	Cloudy	Moderate	07:00	3.9	Surface	1.0	0.1	213	19.0	19.0	8.0	8.0	27.5	27.5	98.6	98.6	7.8	7.8	5.1	5.2	10	10	-	-	817916	814660	-	-	-	-
						1.0	0.2	217	19.0		8.0		27.4		98.6		7.8		5.1		9		-				-		-	
					Middle	2.0	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.0	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.9	0.1	205	19.0	19.0	7.9	7.9	26.0	26.0	99.6	99.7	7.9	7.9	5.4		9		-				-		-	
						2.9	0.1	220	19.0		7.9		26.0		99.7		7.9		5.1		11		-				-		-	
SR7	Cloudy	Moderate	06:31	16.8	Surface	1.0	0.3	100	19.3	19.3	7.9	7.9	29.9	29.9	92.0	92.0	7.1	7.1	7.5	9.4	8	10	-	-	823616	823738	-	-	-	-
						1.0	0.3	107	19.3		7.9		29.9		92.0		7.1		7.4		10		-				-		-	
					Middle	8.4	0.3	95	19.3	19.3	7.9	7.9	30.0	30.0	91.0	91.0	7.0		8.9		10		-				-		-	
						8.4	0.3	95	19.3		7.9		30.0		91.0		7.0		8.9		9		-				-		-	
					Bottom	15.8	0.3	93	19.3	19.3	7.9	7.9	30.1	30.1	90.6	90.6	7.0	7.0	11.8		12		-				-		-	
						15.8	0.3	96	19.3		7.9		30.1		90.6		7.0		11.8		12		-				-		-	
SR8	Cloudy	Moderate	07:40	5.1	Surface	1.0	0.2	176	19.2	19.2	8.0	8.0	29.3	29.3	101.1	101.1	7.9	7.9	11.7	12.5	8	12	-	-	820415	811584	-	-	-	-
						1.0	0.2	181	19.2		8.0		29.3		101.1		7.9		11.7		8		-				-		-	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	0.2	170	19.2	19.2	8.0	8.0	29.5	29.5	101.7	101.7	7.9	7.9	13.3		16		-				-		-	
						4.1	0.2	173	19.2		8.0		29.5		101.7		7.9		13.3		15		-				-		-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 28 January 17 during Mid-Ebb tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	13:05	8.4	Surface	1.0	0.3	150	18.9	18.9	8.1	8.1	29.1	29.1	98.8	98.8	7.7	7.7	7.8	9.6	7	12	93	94	815601	804262	<0.2	<0.2	0.6	0.6
						1.0	0.3	151	18.9		8.1		29.1		98.7		7.7		7.9		8		93				<0.2		0.6	
					Middle	4.2	0.2	175	18.8	18.8	8.1	8.1	29.2	29.2	97.7	97.7	7.6		9.5		10		94				<0.2		0.7	
						4.2	0.2	188	18.8		8.1		29.2		97.6		7.6		9.6		8		94				<0.2		0.5	
					Bottom	7.4	0.2	186	18.7	18.7	8.0	8.0	28.9	28.9	98.2	98.3	7.7	7.7	11.3		19		95				<0.2		0.6	
						7.4	0.2	192	18.7		8.0		28.9		98.3		7.7		11.2		20		95				<0.2		0.5	
C2	Cloudy	Moderate	11:51	12.4	Surface	1.0	0.4	125	19.3	19.3	8.0	8.0	27.4	27.4	97.7	97.7	7.7	7.7	6.5	11.8	5	9	85	90	825698	806950	<0.2	<0.2	1.6	1.7
						1.0	0.4	125	19.3		8.0		27.4		97.7		7.7		6.5		3		85				<0.2		1.8	
					Middle	6.2	0.4	117	19.2	19.2	8.0	8.0	27.7	27.7	96.6	96.6	7.6		10.0		6		91				<0.2		1.8	
						6.2	0.4	125	19.2		8.0		27.7		96.6		7.6		10.1		6		91				<0.2		1.8	
					Bottom	11.4	0.3	100	19.2	19.2	8.0	8.0	28.7	28.7	97.1	97.1	7.6	7.6	18.7		16		94				<0.2		1.8	
						11.4	0.3	107	19.2		8.0		28.7		97.1		7.6		18.7		16		93				<0.2		1.5	
C3	Cloudy	Moderate	13:51	12.1	Surface	1.0	0.4	141	19.3	19.3	8.0	8.0	29.9	29.9	93.6	93.6	7.2	7.2	5.5	5.2	5	6	88	92	822120	817804	<0.2	<0.2	0.7	0.7
						1.0	0.4	148	19.3		8.0		29.9		93.6		7.2		5.5		6		89				<0.2		0.8	
					Middle	6.1	0.3	113	19.3	19.3	8.0	8.0	29.9	29.9	93.3	93.3	7.2		5.5		6		92				<0.2		0.7	
						6.1	0.4	124	19.3		8.0		29.9		93.3		7.2		5.5		6		92				<0.2		0.6	
					Bottom	11.1	0.3	204	19.4	19.4	8.0	8.0	30.1	30.1	94.1	94.2	7.3	7.3	4.7		7		95				<0.2		0.7	
						11.1	0.4	204	19.4		8.0		30.1		94.2		7.3		4.6		7		95				<0.2		0.8	
IM1	Cloudy	Moderate	12:41	7.6	Surface	1.0	0.3	156	19.5	19.5	8.1	8.1	29.0	29.0	101.8	101.8	7.9	7.9	5.6	6.9	10	11	91	92	818350	806461	<0.2	<0.2	0.8	0.8
						1.0	0.4	164	19.5		8.1		29.0		101.8		7.9		5.6		10		91				<0.2		0.9	
					Middle	3.8	0.3	149	19.0	19.0	8.1	8.1	29.0	29.0	100.5	100.5	7.8		7.3		10		92				<0.2		0.8	
						3.8	0.3	160	19.0		8.1		29.0		100.5		7.8		7.2		12		92				<0.2		0.8	
					Bottom	6.6	0.3	152	18.9	18.9	8.1	8.1	28.9	28.9	100.4	100.5	7.9	7.9	7.8		13		93				<0.2		0.7	
						6.6	0.3	165	18.9		8.1		28.9		100.5		7.9		7.8		13		93				<0.2		0.8	
IM2	Cloudy	Moderate	12:35	8.3	Surface	1.0	0.3	164	19.3	19.3	8.1	8.1	28.9	28.9	101.0	101.0	7.8	7.8	5.9	9.1	15	18	90	91	818854	806175	<0.2	<0.2	0.8	0.8
						1.0	0.3	169	19.3		8.1		28.9		101.0		7.8		5.9		14		90				<0.2		0.8	
					Middle	4.2	0.3	166	18.9	18.9	8.1	8.1	29.0	29.0	99.2	99.2	7.8		10.4		18		91				<0.2		0.9	
						4.2	0.4	178	18.9		8.1		28.9		99.1		7.8		10.4		19		91				<0.2		0.8	
					Bottom	7.3	0.3	190	18.9	18.9	8.0	8.0	28.7	28.7	99.4	99.4	7.8	7.8	11.0		20		92				<0.2		0.8	
						7.3	0.3	206	18.9		8.0		28.6		99.4		7.8		11.1		22		92				<0.2		0.8	
IM3	Cloudy	Moderate	12:25	8.5	Surface	1.0	0.4	145	19.2	19.2	8.1	8.1	28.7	28.7	100.5	100.5	7.8	7.8	7.6	9.4	8	15	91	92	819417	806022	<0.2	<0.2	1.0	0.9
						1.0	0.4	151	19.2		8.1		28.7		100.5		7.8		7.6		10		91				<0.2		0.9	
					Middle	4.3	0.4	142	18.9	18.9	8.1	8.1	28.8	28.8	99.6	99.6	7.8		9.9		17		92				<0.2		0.8	
						4.3	0.4	149	18.9		8.1		28.8		99.6		7.8		10.1		17		92				<0.2		0.8	
					Bottom	7.5	0.4	175	18.9	18.9	8.0	8.0	28.4	28.4	100.0	100.1	7.8	7.8	10.6		19		93				<0.2		0.8	
						7.5	0.4	181	18.9		8.0		28.4		100.1		7.8		10.6		20		93				<0.2		0.8	
IM4	Cloudy	Moderate	12:16	8.1	Surface	1.0	0.4	149	19.1	19.1	8.1	8.1	28.8	28.8	101.5	101.5	7.9	7.9	6.3	8.9	7	14	92	93	819567	805024	<0.2	<0.2	0.9	0.9
						1.0	0.4	150	19.1		8.1		28.8		101.5		7.9		6.3		7		91				<0.2		0.9	
					Middle	4.1	0.3	147	19.1	19.1	8.1	8.1	28.8	28.8	100.6	100.6	7.8		7.9		11		93				<0.2		0.8	
						4.1	0.3	154	19.1		8.1		28.7		100.6		7.8		8.0		11		93				<0.2		0.8	
					Bottom	7.1	0.3	174	18.9	18.9	8.0	8.0	28.4	28.4	99.9	99.9	7.8	7.8	12.3		22		94				<0.2		0.9	
						7.1	0.3	179	18.9		8.0		28.4		99.9		7.8		12.4		23		94				<0.2		0.8	
IM5	Cloudy	Moderate	12:08	6.9	Surface	1.0	0.4	168	19.1	19.1	8.0	8.0	28.4	28.4	99.6	99.6	7.8	7.8	4.6	7.7	8	14	90	91	820569	804910	<0.2	<0.2	1.2	1.1
						1.0	0.4	179	19.1		8.0		28.4		99.6		7.8		4.6		10		90				<0.2		1.1	
					Middle	3.5	0.4	162	19.1	19.1	8.0	8.0	28.1	28.1	99.6	99.6	7.8		7.4		10		90				<0.2		1.1	
						3.5	0.5	162	19.1		8.0		28.1		99.6		7.8		7.5		11		91				<0.2		1.0	
					Bottom	5.9	0.4	171	19.0	19.0	8.0	8.0	27.9	27.9	100.2	100.3	7.9	7.9	11.1		21		91				<0.2		1.0	
						5.9	0.4	181	19.0		8.0		27.9		100.3		7.9		11.0		23		91				<0.2		0.9	
IM6	Cloudy	Moderate	11:59	6.8	Surface	1.0	0.4	167	19.1	19.1	8.1	8.1	28.8	28.8	99.9	99.9	7.8	7.8	8.2	10.5	13	16	91	93	821071	805847	<0.2	<0.2	1.0	0.9
						1.0	0.4	173	19.1		8.1		28.8		99.8		7.8		8.2		15		92				<0.2		1.0	
					Middle	3.4	0.4	175	19.0	19.0	8.0	8.0	28.6	28.6	99.7	99.7	7.8		9.6		12		93				<0.2		1.0	
						3.4	0.4	183	19.0		8.0		28.6		99.7		7.8		9.7		14		93				<0.2		0.8	
					Bottom	5.8	0.4	159	19.0	19.0	8.0	8.0	28.1	28.1	99.9	100.0	7.8	7.8	13.6		19		94				<0.2		1.0	
						5.8	0.4	166	19.0		8.0		28.0		100.0		7.8		13.5		20		94				<0.2		0.8	
IM7	Cloudy	Moderate	11:50	8.3	Surface	1.0	0.5	111	19.1	19.1	8.0	8.0	28.2	28.2	97.6	97.6	7.6	7.7	7.6	7.8	12	14	89	91	821341	806833	<0.2	<0.2	1.2	1.1
						1.0	0.5	116	19.1		8.0		28.2		97.6		7.6		7.6		12		90				<0.2		1.2	
					Middle	4.2	0.5	91	19.1	19.1	8.0	8.0	28.0	28.0	98.0	98.0	7.7		7.8		13		91				<0.2		1.1	
						4.2	0.5	99	19.1		8.0		28.0		97.9		7.7		7.9		15		91				<0.2		1.1	
					Bottom	7.3	0.5	110	19.1	19.1	8.0	8.0	27.6	27.6	99.1	99.2	7.8	7.8	8.0		14		92				<0.2		1.0	
						7.3	0.5	116	19.1		8.0		27.5		99.2		7.8		8.0		15		92				<0.2		1.1	
IM8	Cloudy	Moderate	12:29	8.2	Surface	1.0	0.4	138	19.2	19.2	8.0	8.0	29.1	29.1	97.6	97.6	7.6	7.6	10.6	14.7	12	15	85	90	821676	807850	<0.2	<0.2	1.4	1.2
						1.0	0.4	145	19.2		8.0		29.1		97.6		7.6		10.7		11		85				<0.2		1.3	
					Middle	4.1	0.3	114	19.2	19.2	8.0	8.0	29.1	29.1	97.0	97.0	7.6		14.8		16		91				<0.2		1.1	
						4.1	0.3	116	19.2		8.0		29.1		97.0		7.6		14.8		16		91				<0.2		1.4	
					Bottom	7.2	0.4	117	19.2	19.2	8.0	8.0	29.1	29.1	97.5	97.5	7.6	7.6	18.7		16		94				<0.2		1.2	
						7.2	0.4	125	19.2		8.0		29.1		97.5		7.6		18.7		16		94				<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 28 January 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	12:37	7.4	Surface	1.0	0.4	127	19.2	19.2	8.0	8.0	29.0	29.0	97.6	97.6	7.6	7.6	9.9	10.6	8	12	86	91	822111	808799	<0.2	<0.2	1.3	1.2
						1.0	0.5	137	19.2		8.0		29.0		97.6		7.6		10.0		10		87				<0.2		1.1	
					Middle	3.7	0.4	114	19.1	19.1	8.0	8.0	29.0	29.0	97.4	97.4	7.6		10.8		13		91				<0.2		1.1	
						3.7	0.5	121	19.1		8.0		29.0		97.4		7.6		10.8		14		92				<0.2		1.1	
					Bottom	6.4	0.4	126	19.1	19.1	8.0	8.0	29.2	29.2	98.1	98.1	7.6	7.6	11.1		14		93				<0.2		1.1	
						6.4	0.4	136	19.1		8.0		29.2		98.1		7.6		11.1		13		94				<0.2		1.2	
IM10	Cloudy	Moderate	12:46	7.8	Surface	1.0	0.3	101	19.3	19.3	8.0	8.0	28.8	28.8	100.8	100.8	7.8	7.8	6.4	7.3	8	9	87	91	822232	809821	<0.2	<0.2	1.2	1.2
						1.0	0.3	107	19.3		8.0		28.8		100.7		7.8		6.4		9		87				<0.2		1.4	
					Middle	3.9	0.3	120	19.3	19.3	8.0	8.0	29.1	29.1	99.5	99.5	7.7		7.4		8		92				<0.2		1.2	
						3.9	0.3	123	19.3		8.0		29.1		99.5		7.7		7.4		9		91				<0.2		1.2	
					Bottom	6.8	0.3	139	19.3	19.3	8.0	8.0	29.3	29.3	99.5	99.5	7.7	7.7	8.0		8		94				<0.2		1.2	
						6.8	0.3	147	19.3		8.0		29.3		99.5		7.7		8.0		9		94				<0.2		1.1	
IM11	Cloudy	Moderate	12:56	8.3	Surface	1.0	0.5	152	19.3	19.3	8.0	8.0	28.4	28.4	100.7	100.7	7.8	7.8	6.4	7.8	7	7	88	91	821495	810539	<0.2	<0.2	1.7	1.4
						1.0	0.5	166	19.3		8.0		28.4		100.7		7.8		6.4		5		89				<0.2		1.6	
					Middle	4.2	0.5	160	19.3	19.3	8.0	8.0	29.0	29.0	99.0	99.0	7.7		7.5		8		91				<0.2		1.3	
						4.2	0.6	171	19.3		8.0		29.0		99.0		7.7		7.5		7		92				<0.2		1.5	
					Bottom	7.3	0.6	170	19.2	19.2	8.0	8.0	29.4	29.4	98.5	98.5	7.6	7.6	9.4		7		94				<0.2		1.1	
						7.3	0.6	172	19.2		8.0		29.4		98.5		7.6		9.4		8		94				<0.2		1.2	
IM12	Cloudy	Moderate	13:04	9.2	Surface	1.0	0.4	120	19.3	19.3	8.0	8.0	28.3	28.3	99.7	99.7	7.8	7.8	7.1	8.6	6	8	87	91	821145	811535	<0.2	<0.2	1.5	1.5
						1.0	0.4	122	19.3		8.0		28.3		99.7		7.8		7.1		7		88				<0.2		1.6	
					Middle	4.6	0.3	122	19.3	19.3	8.0	8.0	29.4	29.4	98.7	98.7	7.7		8.8		6		92				<0.2		1.6	
						4.6	0.4	130	19.3		8.0		29.4		98.7		7.7		8.8		6		91				<0.2		1.6	
					Bottom	8.2	0.3	137	19.2	19.2	8.0	8.0	29.5	29.5	97.9	97.9	7.6	7.6	9.9		10		94				<0.2		1.3	
						8.2	0.4	140	19.2		8.0		29.5		97.9		7.6		9.9		10		94				<0.2		1.2	
SR2	Cloudy	Moderate	13:28	4.5	Surface	1.0	0.3	106	19.3	19.3	8.0	8.0	29.5	29.5	100.9	100.9	7.8	7.8	6.8	6.6	6	7	88	92	821447	814167	<0.2	<0.2	1.1	1.1
						1.0	0.3	110	19.3		8.0		29.5		100.8		7.8		6.8		6		89				<0.2		1.2	
					Middle	2.3	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.3	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.2	91	19.3	19.3	8.0	8.0	29.5	29.5	101.0	101.0	7.8	7.8	6.3		7		95				<0.2		1.1	
						3.5	0.2	96	19.3		8.0		29.5		101.0		7.8		6.3		7		95				<0.2		1.1	
SR3	Cloudy	Moderate	12:24	9.2	Surface	1.0	0.5	132	19.2	19.2	8.0	8.0	29.1	29.1	97.4	97.4	7.6	7.6	12.2	16.7	15	16	-	-	822161	807553	-	-	-	-
						1.0	0.5	135	19.2		8.0		29.1		97.4		7.6		12.2		13		-				-		-	
					Middle	4.6	0.5	119	19.2	19.2	8.0	8.0	29.1	29.1	96.9	96.9	7.5		16.1		14		-				-		-	
						4.6	0.5	129	19.2		8.0		29.1		96.9		7.5		16.1		13		-				-		-	
					Bottom	8.2	0.4	110	19.2	19.2	8.0	8.0	29.1	29.1	97.3	97.3	7.6	7.6	21.7		20		-				-		-	
						8.2	0.5	114	19.2		8.0		29.1		97.3		7.6		21.7		18		-				-		-	
SR4A	Cloudy	Moderate	13:27	8.7	Surface	1.0	0.5	89	19.3	19.3	8.1	8.1	28.8	28.8	100.9	100.9	7.8	7.8	5.4	6.3	10	10	-	-	817208	807810	-	-	-	-
						1.0	0.5	90	19.2		8.1		28.8		100.9		7.8		5.5		9		-				-		-	
					Middle	4.4	0.5	104	19.2	19.2	8.0	8.0	28.5	28.5	100.2	100.2	7.8		6.4		9		-				-		-	
						4.4	0.5	112	19.2		8.0		28.5		100.1		7.8		6.2		11		-				-		-	
					Bottom	7.7	0.5	95	19.0	19.0	8.0	8.0	28.0	28.0	100.2	100.3	7.9	7.9	7.0		10		-				-		-	
						7.7	0.5	95	19.0		8.0		27.9		100.3		7.9		7.0		12		-				-		-	
SR5A	Cloudy	Moderate	13:44	4.6	Surface	1.0	0.1	144	19.1	19.1	8.0	8.0	28.6	28.6	104.2	104.2	8.1	8.1	4.9	4.9	12	11	-	-	816602	810711	-	-	-	-
						1.0	0.1	148	19.1		8.0		28.6		104.1		8.1		5.0		11		-				-		-	
					Middle	2.3	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.3	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.1	182	19.1	19.1	8.0	8.0	28.0	28.0	102.4	102.4	8.0	8.0	4.8		11		-				-		-	
						3.6	0.1	192	19.1		8.0		28.0		102.3		8.0		4.8		11		-				-		-	
SR6	Cloudy	Moderate	14:10	4.2	Surface	1.0	0.2	132	19.3	19.3	8.0	8.0	28.8	28.8	103.0	103.0	8.0	8.0	5.6	8.0	16	22	-	-	817918	814647	-	-	-	-
						1.0	0.2	135	19.3		8.0		28.8		103.0		8.0		5.6		16		-				-		-	
					Middle	2.1	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.1	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.1	182	19.2	19.2	8.0	8.0	28.6	28.6	101.7	101.7	7.9	7.9	10.3		29		-				-		-	
						3.2	0.1	195	19.2		8.0		28.6		101.7		7.9		10.3		27		-				-		-	
SR7	Cloudy	Moderate	14:23	17.1	Surface	1.0	0.6	79	19.3	19.3	8.0	8.0	29.9	29.9	91.8	91.8	7.1	7.1	5.2	5.7	6	8	-	-	823640	823753	-	-	-	-
						1.0	0.6	79	19.3		8.0		29.9		91.8		7.1		5.2		6		-				-		-	
					Middle	8.6	0.4	78	19.3	19.3	8.0	8.0	30.0	30.0	91.4	91.4	7.1		5.9		8		-				-		-	
						8.6	0.4	78	19.3		8.0		30.0		91.4		7.1		5.9		8		-				-		-	
					Bottom	16.1	0.2	135	19.3	19.3	8.0	8.0	30.0	30.0	92.6	92.7	7.2	7.2	6.0		10		-				-		-	
						16.1	0.2	144	19.3		8.0		30.0		92.7		7.2		6.0		9		-				-		-	
SR8	Cloudy	Moderate	13:13	5.4	Surface	1.0	0.3	153	19.2	19.2	8.0	8.0	29.2	29.2	99.8	99.8	7.8	7.8	8.8	12.2	9	11	-	-	820417	811601	-	-	-	-
						1.0	0.4	166	19.2		8.0		29.2		99.8		7.8		8.8		8		-				-		-	
					Middle	2.7	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.7	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	0.3	167	19.2	19.2	8.0	8.0	29.4	29.4	100.2	100.2	7.8	7.8	15.5		15		-				-		-	
						4.4	0.3	167	19.2		8.0		29.4		100.2		7.8		15.5		13		-				-		-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 31 January 17 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	09:16	8.4	Surface	1.0	0.7	52	18.8	18.8	7.9	7.9	28.9	28.9	92.8	92.8	7.3	7.3	17.0	18.8	29	32	86	89	815638	804262	<0.2	<0.2	0.8	0.7
						1.0	0.7	53	18.8		7.9		28.9		92.8		7.3		17.1		27		86				<0.2		0.8	
					Middle	4.2	0.6	61	18.8	18.8	7.9	7.9	28.8	28.8	92.5	92.5	7.3		19.0		30		89				<0.2		0.5	
						4.2	0.6	62	18.8		7.9		28.8		92.5		7.3		18.9		32		89				<0.2		0.6	
					Bottom	7.4	0.5	60	18.8	18.8	7.9	7.9	28.3	28.3	92.6	92.6	7.3	7.3	20.4		35		93				<0.2		0.6	
						7.4	0.5	62	18.8		7.9		28.3		92.6		7.3		20.4		37		93				<0.2		0.6	
C2	Cloudy	Moderate	10:11	12.3	Surface	1.0	0.6	260	19.4	19.4	7.9	7.9	27.0	27.0	89.2	89.3	7.0	7.0	10.9	17.7	7	20	105	88	825680	806958	<0.2	<0.2	1.9	2.0
						1.0	0.6	277	19.4		7.9		27.0		89.3		7.0		11.0		6		102				<0.2		1.6	
					Middle	6.2	0.5	210	19.4	19.4	7.9	7.9	27.2	27.2	89.3	89.3	7.0		13.0		21		72				<0.2		2.6	
						6.2	0.5	216	19.4		7.9		27.2		89.3		7.0		12.8		20		73				<0.2		2.5	
					Bottom	11.3	0.4	139	19.4	19.4	7.9	7.9	27.5	27.5	90.7	90.7	7.1	7.1	29.1		32		88				<0.2		1.8	
						11.3	0.4	139	19.4		7.9		27.5		90.7		7.1		29.1		32		90				<0.2		1.8	
C3	Cloudy	Moderate	08:24	12.1	Surface	1.0	0.5	258	19.3	19.3	8.0	8.0	28.8	28.8	91.1	91.1	7.1	7.0	8.9	18.4	8	11	89	93	822104	817810	<0.2	<0.2	1.5	1.3
						1.0	0.5	258	19.3		8.0		28.8		91.1		7.1		8.9		6		86				<0.2		1.6	
					Middle	6.1	0.6	261	19.4	19.4	7.9	7.9	29.1	29.1	89.3	89.3	6.9		11.9		8		93				<0.2		1.0	
						6.1	0.6	280	19.4		7.9		29.1		89.3		6.9		11.9		7		95				<0.2		1.2	
					Bottom	11.1	0.5	262	19.3	19.3	7.9	7.9	29.3	29.3	89.5	89.5	6.9	6.9	34.3		19		97				<0.2		1.4	
						11.1	0.5	275	19.3		7.9		29.3		89.5		6.9		34.3		19		100				<0.2		1.3	
IM1	Cloudy	Moderate	09:39	7.6	Surface	1.0	0.5	151	19.1	19.1	7.9	7.9	27.9	27.9	90.8	90.8	7.1	7.1	15.2	18.8	28	32	88	90	818349	806461	<0.2	<0.2	1.2	1.2
						1.0	0.5	153	19.1		7.9		27.9		90.8		7.1		15.2		29		87				<0.2		1.0	
					Middle	3.8	0.5	133	19.1	19.1	7.9	7.9	27.7	27.7	90.8	90.8	7.1		19.4		34		90				<0.2		1.4	
						3.8	0.5	137	19.1		7.9		27.7		90.8		7.1		19.4		34		89				<0.2		1.2	
					Bottom	6.6	0.4	118	19.1	19.1	7.9	7.9	27.5	27.5	91.0	91.0	7.2	7.2	21.7		33		93				<0.2		1.1	
						6.6	0.5	128	19.1		7.9		27.5		90.9		7.2		21.8		33		94				<0.2		1.0	
IM2	Cloudy	Moderate	09:47	8.4	Surface	1.0	0.5	110	19.1	19.2	7.9	7.9	27.9	27.9	90.0	90.1	7.1	7.1	19.0	20.5	17	20	86	91	818862	806174	<0.2	<0.2	2.3	2.3
						1.0	0.6	114	19.2		7.9		27.9		90.1		7.1		19.0		16		87				<0.2		2.3	
					Middle	4.2	0.6	95	19.1	19.1	7.9	7.9	27.7	27.7	90.6	90.6	7.1		21.2		20		93				<0.2		1.9	
						4.2	0.6	96	19.1		7.9		27.7		90.6		7.1		21.3		21		91				<0.2		2.1	
					Bottom	7.4	0.5	101	19.1	19.1	7.9	7.9	27.7	27.7	90.7	90.8	7.1	7.1	21.3		23		93				<0.2		2.8	
						7.4	0.5	101	19.1		7.9		27.7		90.8		7.1		21.3		23		93				<0.2		2.6	
IM3	Cloudy	Moderate	9;54	8.8	Surface	1.0	0.6	67	19.1	19.1	7.9	7.9	27.9	27.9	90.2	90.3	7.1	7.1	17.1	20.4	28	30	88	90	819427	806003	<0.2	<0.2	1.9	1.9
						1.0	0.6	73	19.1		7.9		27.9		90.3		7.1		17.2		27		87				<0.2		1.8	
					Middle	4.4	0.5	69	19.1	19.1	7.9	7.9	27.8	27.8	90.5	90.5	7.1		21.2		32		91				<0.2		1.7	
						4.4	0.6	70	19.1		7.9		27.8		90.5		7.1		21.2		30		88				<0.2		1.8	
					Bottom	7.8	0.5	76	19.2	19.2	7.9	7.9	27.4	27.4	93.2	93.2	7.3	7.3	22.8		30		93				<0.2		2.1	
						7.8	0.5	78	19.2		7.9		27.3		93.2		7.3		22.8		30		94				<0.2		1.9	
IM4	Cloudy	Moderate	10:03	8.3	Surface	1.0	0.7	45	19.0	19.0	7.9	7.9	28.1	28.1	91.4	91.4	7.2	7.2	18.4	19.2	25	29	89	91	819589	805057	<0.2	<0.2	2.3	2.4
						1.0	0.7	48	19.0		7.9		28.1		91.4		7.2		18.4		25		88				<0.2		2.2	
					Middle	4.2	0.6	71	19.1	19.1	7.9	7.9	28.1	28.1	91.4	91.4	7.2		19.1		26		90				<0.2		2.5	
						4.2	0.6	76	19.1		7.9		28.1		91.4		7.2		19.1		27		90				<0.2		2.4	
					Bottom	7.3	0.6	70	19.1	19.1	7.9	7.9	28.0	28.0	91.7	91.7	7.2	7.2	20.3		35		92				<0.2		2.3	
						7.3	0.6	70	19.1		7.9		28.0		91.7		7.2		20.0		33		94				<0.2		2.6	
IM5	Cloudy	Moderate	10:10	7.0	Surface	1.0	0.6	76	19.2	19.2	7.9	7.9	27.9	27.9	89.6	89.6	7.0	7.0	18.8	19.6	22	25	87	90	820572	804937	<0.2	<0.2	2.1	2.5
						1.0	0.7	81	19.2		7.9		27.9		89.6		7.0		18.8		22		85				<0.2		2.3	
					Middle	3.5	0.6	92	19.2	19.2	7.9	7.9	27.8	27.8	89.9	89.9	7.0		19.7		24		89				<0.2		2.5	
						3.5	0.6	94	19.2		7.9		27.8		89.9		7.0		19.7		24		91				<0.2		2.4	
					Bottom	6.0	0.5	107	19.2	19.2	7.9	7.9	27.6	27.6	91.3	91.3	7.2	7.2	20.3		27		92				<0.2		2.5	
						6.0	0.5	115	19.2		7.9		27.6		91.3		7.2		20.3		28		93				<0.2		2.9	
IM6	Cloudy	Moderate	10:17	7.1	Surface	1.0	0.7	83	19.2	19.2	7.9	7.9	27.7	27.7	89.6	89.6	7.0	7.1	16.7	19.9	24	26	88	90	821079	805823	<0.2	<0.2	1.9	2.4
						1.0	0.8	86	19.2		7.9		27.7		89.6		7.0		16.7		22		87				<0.2		2.0	
					Middle	3.6	0.8	72	19.1	19.1	7.9	7.9	27.7	27.7	90.2	90.2	7.1		20.2		28		90				<0.2		2.9	
						3.6	0.8	72	19.1		7.9		27.7		90.2		7.1		20.2		27		90				<0.2		3.1	
					Bottom	6.1	0.6	119	19.1	19.1	7.9	7.9	27.7	27.7	90.7	90.7	7.1	7.1	22.9		28		92				<0.2		2.3	
						6.1	0.6	125	19.1		7.9		27.7		90.7		7.1		22.9		27		94				<0.2		2.1	
IM7	Cloudy	Moderate	10:25	8.5	Surface	1.0	0.8	57	19.2	19.2	7.9	7.9	27.5	27.5	90.1	90.2	7.1	7.2	8.4	10.5	11	17	86	90	821359	806853	<0.2	<0.2	1.4	1.2
						1.0	0.8	60	19.2		7.9		27.5		90.2		7.1		8.4		12		86				<0.2		1.3	
					Middle	4.3	0.5	62	19.1	19.1	7.9	7.9	27.6	27.6	91.0	91.0	7.2		10.9		15		90				<0.2		1.1	
						4.3	0.6	63	19.1		7.9		27.6		91.0		7.2		11.0		16		90				<0.2		1.2	
					Bottom	7.5	0.4	89	19.0	19.0	7.9	7.9	27.7	27.7	92.1	92.1	7.3	7.3	12.2		23		94				<0.2		1.1	
						7.5	0.4	95	19.0		7.9		27.7		92.1		7.3		12.3		22		93				<0.2		1.3	
IM8	Cloudy	Moderate	09:48	8.3	Surface	1.0	0.5	179	19.4	19.4	7.9	7.9	27.6	27.6	90.8	90.8	7.1	7.1	11.5	12.5	10	11	96	93	821708	807853	<0.2	<0.2	1.4	1.6
						1.0	0.5	187	19.4		7.9		27.6		90.8		7.1		11.5		10		95				<0.2		1.5	
					Middle	4.2	0.5	219	19.4	19.4	7.9	7.9	27.6	27.6	91.0	91.0	7.1		13.1		10		88				<0.2		1.7	
						4.2	0.5	222	19.4		7.9		27.6		91.0		7.1		13.1		9		90				<0.2		1.8	
					Bottom	7.3	0.4	186	19.4	19.4	7.9	7.9	27.6	27.6	92.1	92.1	7.2	7.2	12.9		12		94				<0.2		1.5	
						7.3	0.4	194	19.4		7.9		27.6		92.1		7.2		12.9		12		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 31 January 17 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	09:40	7.3	Surface	1.0	0.4	249	19.4	19.4	7.9	7.9	28.1	28.1	91.5	91.5	7.1	7.2	15.3	16.7	16	19	86	83	822108	808823	<0.2	<0.2	1.5	1.6
						1.0	0.4	271	19.4		7.9		28.1		91.5		7.1		15.3		17		86				<0.2		1.4	
					Middle	3.7	0.3	260	19.4	19.4	7.9	7.9	28.1	28.1	92.7	92.7	7.2		16.2		17		80				<0.2		1.7	
						3.7	0.4	260	19.4		7.9		28.1		92.7		7.2		16.2		18		78				<0.2		1.6	
					Bottom	6.3	0.4	256	19.4	19.4	8.0	8.0	28.1	28.1	100.5	100.5	7.8	7.8	18.7		22		87				<0.2		1.6	
						6.3	0.4	264	19.4		8.0		28.1		100.5		7.8		18.7		24		83				<0.2		1.5	
IM10	Cloudy	Moderate	09:32	7.1	Surface	1.0	0.7	297	19.0	19.0	8.0	8.0	28.4	28.4	95.0	95.0	7.4	7.5	18.1	21.0	20	24	93	92	822250	809819	<0.2	<0.2	1.4	1.5
						1.0	0.7	320	19.0		8.0		28.4		95.0		7.4		18.1		20		95				<0.2		1.4	
					Middle	3.6	0.6	289	19.1	19.1	8.0	8.0	28.4	28.4	95.2	95.2	7.5		21.4		23		95				<0.2		1.5	
						3.6	0.6	294	19.1		8.0		28.4		95.2		7.5		21.4		22		95				<0.2		1.6	
					Bottom	6.1	0.5	292	19.0	19.0	8.0	8.0	28.4	28.4	95.9	95.9	7.5	7.5	23.4		29		87				<0.2		1.7	
						6.1	0.5	304	19.0		8.0		28.4		95.9		7.5		23.4		28		86				<0.2		1.6	
IM11	Cloudy	Moderate	09:21	7.8	Surface	1.0	0.8	265	19.3	19.3	8.0	8.0	28.4	28.4	92.1	92.1	7.2	7.2	18.4	20.1	22	23	90	85	821512	810556	<0.2	<0.2	1.4	1.5
						1.0	0.8	281	19.3		8.0		28.4		92.1		7.2		18.4		21		87				<0.2		1.6	
					Middle	3.9	0.8	260	19.3	19.3	8.0	8.0	28.4	28.4	91.9	91.9	7.2		19.9		24		81				<0.2		1.4	
						3.9	0.8	260	19.3		8.0		28.4		91.9		7.2		19.9		22		82				<0.2		1.3	
					Bottom	6.8	1.0	261	19.3	19.3	8.0	8.0	28.4	28.4	91.7	91.7	7.1	7.1	22.0		23		87				<0.2		1.7	
						6.8	1.0	278	19.3		8.0		28.4		91.7		7.1		22.0		23		83				<0.2		1.6	
IM12	Cloudy	Moderate	09:10	7.2	Surface	1.0	0.6	270	19.3	19.3	8.0	8.0	28.9	28.9	92.9	92.9	7.2	7.2	16.3	19.9	18	23	91	85	821145	811531	<0.2	<0.2	1.2	1.4
						1.0	0.6	287	19.3		8.0		28.9		92.9		7.2		16.3		19		93				<0.2		1.2	
					Middle	3.6	0.6	272	19.3	19.3	8.0	8.0	28.9	28.9	92.8	92.8	7.2		19.2		24		81				<0.2		1.6	
						3.6	0.7	295	19.3		8.0		28.9		92.8		7.2		19.2		25		82				<0.2		1.7	
					Bottom	6.2	0.5	270	19.3	19.3	8.0	8.0	28.9	28.9	92.6	92.6	7.2	7.2	24.1		25		83				<0.2		1.5	
						6.2	0.5	294	19.3		8.0		28.9		92.6		7.2		24.1		27		82				<0.2		1.4	
SR2	Cloudy	Moderate	08:46	4.2	Surface	1.0	0.4	164	19.2	19.2	8.0	8.0	28.7	28.7	92.7	92.7	7.2	7.2	19.1	21.5	20	21	80	83	821470	814157	<0.2	<0.2	1.2	1.4
						1.0	0.4	166	19.2		8.0		28.7		92.7		7.2		19.1		19		83				<0.2		1.4	
					Middle	2.1	-	-	-	-	-	-	-	-	-	-	-		-		-		-				<0.2		-	
						2.1	-	-	-		-		-		-		-		-		-		-				<0.2		-	
					Bottom	3.2	0.3	153	19.2	19.2	8.0	8.0	28.7	28.7	93.9	93.9	7.3	7.3	23.8		22		86				<0.2		1.6	
						3.2	0.3	166	19.2		8.0		28.7		93.9		7.3		23.8		22		83				<0.2		1.4	
SR3	Cloudy	Moderate	09:54	8.9	Surface	1.0	0.4	216	19.4	19.4	7.9	7.9	27.5	27.5	97.7	97.7	7.6	7.4	11.8	15.4	10	13	-	-	822165	807565	-	-	-	-
						1.0	0.4	220	19.4		7.9		27.5		97.7		7.6		11.8		10		-				-		-	
					Middle	4.5	0.4	191	19.4	19.4	7.9	7.9	27.5	27.5	91.2	91.2	7.1		13.9		9		-				-		-	
						4.5	0.4	191	19.4		7.9		27.5		91.2		7.1		13.9		10		-				-		-	
					Bottom	7.9	0.4	169	19.4	19.4	7.9	7.9	27.6	27.6	93.1	93.1	7.3	7.3	20.4		21		-				-		-	
						7.9	0.4	174	19.4		7.9		27.6		93.1		7.3		20.4		20		-				-		-	
SR4A	Cloudy	Calm	08:52	8.2	Surface	1.0	0.4	214	19.1	19.1	7.8	7.8	28.0	28.0	90.8	90.8	7.1	7.2	7.9	9.0	11	14	-	-	817176	807800	-	-	-	-
						1.0	0.4	223	19.1		7.8		28.0		90.7		7.1		7.9		11		-				-		-	
					Middle	4.1	0.4	225	19.1	19.1	7.8	7.8	27.7	27.7	91.2	91.2	7.2		9.1		16		-				-		-	
						4.1	0.4	237	19.1		7.8		27.7		91.2		7.2		9.1		15		-				-		-	
					Bottom	7.2	0.3	222	19.0	19.0	7.8	7.8	27.1	27.1	92.1	92.2	7.3	7.3	10.0		16		-				-		-	
						7.2	0.3	242	19.0		7.8		27.1		92.2		7.3		10.0		17		-				-		-	
SR5A	Cloudy	Calm	08:35	4.1	Surface	1.0	0.3	314	19.1	19.1	7.8	7.8	28.2	28.2	90.5	90.5	7.1	7.1	13.7	16.9	11	11	-	-	816608	810694	-	-	-	-
						1.0	0.4	339	19.1		7.8		28.2		90.5		7.1		13.7		11		-				-		-	
					Middle	2.1	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.1	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.3	298	19.1	19.1	7.8	7.8	27.9	27.9	90.3	90.3	7.1	7.1	20.0		10		-				-		-	
						3.1	0.3	312	19.1		7.8		27.9		90.2		7.1		20.0		12		-				-		-	
SR6	Cloudy	Calm	08:11	4.0	Surface	1.0	0.2	210	19.2	19.2	7.8	7.8	26.9	26.9	91.4	91.4	7.2	7.2	4.9	4.6	8	9	-	-	817906	814677	-	-	-	-
						1.0	0.2	220	19.2		7.8		26.9		91.4		7.2		4.9		10		-				-		-	
					Middle	2.0	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.0	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	0.2	217	19.3	19.3	7.6	7.6	25.5	25.5	94.6	94.6	7.5	7.5	4.2		9		-				-		-	
						3.0	0.2	233	19.3		7.6		25.5		94.6		7.5		4.2		10		-				-		-	
SR7	Cloudy	Moderate	07:57	18.2	Surface	1.0	0.6	287	19.3	19.3	7.9	7.9	29.2	29.2	89.2	89.2	6.9	6.9	7.8	9.9	7	10	-	-	823650	823735	-	-	-	-
						1.0	0.6	307	19.3		7.9		29.2		89.2		6.9		7.8		8		-				-		-	
					Middle	9.1	0.6	269	19.3	19.3	7.9	7.9	29.3	29.3	88.7	88.7	6.9		7.9		8		-				-		-	
						9.1	0.6	273	19.3		7.9		29.3		88.7		6.9		7.9		8		-				-		-	
					Bottom	17.2	0.7	279	19.3	19.3	7.9	7.9	29.4	29.4	88.2	88.2	6.8	6.8	13.9		16		-				-		-	
						17.2	0.7	297	19.3		7.9		29.4		88.2		6.8		13.9		14		-				-		-	
SR8	Cloudy	Moderate	09:03	4.7	Surface	1.0	0.4	274	19.4	19.4	7.9	7.9	28.4	28.4	93.5	93.5	7.3	7.3	12.8	12.5	12	12	-	-	820415	811609	-	-	-	-
						1.0	0.4	291	19.4		7.9		28.4		93.5		7.3		12.8		11		-				-		-	
					Middle	2.4	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.4	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.2	269	19.4	19.4	7.9	7.9	28.4	28.4	95.5	95.5	7.4	7.4	12.2		13		-				-		-	
						3.7	0.2	277	19.4		7.9		28.4		95.5		7.4		12.2		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 31 January 17 during Mid-Ebb tide

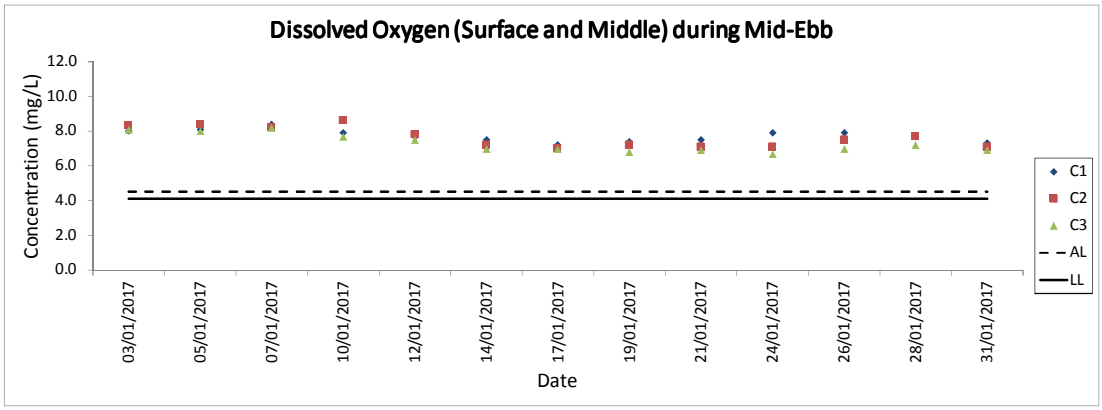
Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C) Value	Water Temperature (°C) Average	pH Value	pH Average	Salinity (ppt) Value	Salinity (ppt) Average	DO Saturation (%) Value	DO Saturation (%) Average	Dissolved Oxygen Value	Dissolved Oxygen DA	Turbidity(NTU) Value	Turbidity(NTU) DA	Suspended Solids (mg/L) Value	Suspended Solids (mg/L) DA	Total Alkalinity (ppm) Value	Total Alkalinity (ppm) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L) Value	Chromium (µg/L) DA	Nickel (µg/L) Value	Nickel (µg/L) DA
C1	Cloudy	Moderate	14:56	9.1	Surface	1.0	0.3	178	18.7	18.7	8.0	8.0	29.7	29.7	93.9	93.9	7.3	7.3	22.4	24.2	22	22	86	90	815631	804231	<0.2	<0.2	1.5	1.6
						1.0	0.3	191	18.7		8.0		29.7		93.9		7.3		22.4		21		87				<0.2		1.2	
					Middle	4.6	0.3	172	18.7	18.7	8.0	8.0	29.6	29.6	93.9	93.9	7.3		23.3		22		90				<0.2		1.6	
						4.6	0.3	185	18.7		8.0		29.6		93.9		7.3		23.3		21		88				<0.2		1.4	
					Bottom	8.1	0.3	173	18.7	18.7	8.0	8.0	29.0	29.0	95.1	95.1	7.5	7.5	26.8		22		94				<0.2		2.0	
						8.1	0.3	182	18.7		8.0		29.0		95.1		7.5		26.8		22		94				<0.2		2.0	
C2	Cloudy	Moderate	13:47	12.8	Surface	1.0	0.3	148	19.4	19.4	7.9	7.9	27.5	27.5	90.4	90.4	7.1	7.1	11.0	20.2	11	19	80	86	825676	806960	<0.2	<0.2	1.7	1.5
						1.0	0.3	161	19.4		7.9		27.5		90.4		7.1		11.0		12		78				<0.2		1.4	
					Middle	6.4	0.3	121	19.3	19.3	7.9	7.9	28.0	28.0	90.3	90.3	7.1		19.9		15		88				<0.2		1.5	
						6.4	0.3	122	19.3		7.9		28.0		90.3		7.1		19.9		16		87				<0.2		1.7	
					Bottom	11.8	0.3	157	19.2	19.2	7.9	7.9	28.3	28.3	90.3	90.3	7.1	7.1	29.8		29		91				<0.2		1.3	
						11.8	0.3	170	19.2		7.9		28.3		90.3		7.1		29.8		28		90				<0.2		1.5	
C3	Cloudy	Moderate	16:09	12.2	Surface	1.0	0.4	68	19.4	19.4	7.9	7.9	29.2	29.2	88.4	88.4	6.9	6.9	15.5	14.5	17	17	78	88	822114	817807	<0.2	<0.2	0.8	0.8
						1.0	0.4	73	19.4		7.9		29.2		88.4		6.9		15.5		18		78				<0.2		0.8	
					Middle	6.1	0.4	73	19.3	19.3	7.9	7.9	29.4	29.4	87.9	87.9	6.8		13.0		17		91				<0.2		0.8	
						6.1	0.4	80	19.3		7.9		29.4		87.9		6.8		13.0		16		90				<0.2		0.9	
					Bottom	11.2	0.4	112	19.3	19.3	7.9	7.9	29.7	29.7	88.9	88.9	6.9	6.9	15.1		16		96				<0.2		0.9	
						11.2	0.4	114	19.3		7.9		29.7		88.9		6.9		15.1		17		95				<0.2		0.8	
IM1	Cloudy	Moderate	14:36	7.9	Surface	1.0	0.3	209	18.9	18.9	8.0	8.0	28.4	28.4	93.5	93.5	7.3	7.3	12.7	16.6	15	20	85	90	818348	806446	<0.2	<0.2	0.8	0.8
						1.0	0.3	220	18.9		8.0		28.4		93.5		7.3		12.7		15		87				<0.2		0.8	
					Middle	4.0	0.3	128	18.8	18.8	8.0	8.0	28.7	28.7	93.5	93.5	7.3		15.2		22		90				<0.2		0.7	
						4.0	0.3	132	18.8		8.0		28.7		93.5		7.3		15.2		23		91				<0.2		0.8	
					Bottom	6.9	0.3	122	18.7	18.7	7.9	7.9	28.3	28.3	95.8	95.9	7.6	7.6	22.1		21		92				<0.2		0.9	
						6.9	0.3	124	18.7		7.9		28.3		95.9		7.6		21.7		22		93				<0.2		0.9	
IM2	Cloudy	Moderate	14:31	9.0	Surface	1.0	0.4	146	18.8	18.8	8.0	8.0	29.1	29.1	93.5	93.5	7.3	7.3	12.5	16.0	26	29	88	92	818848	806182	<0.2	<0.2	0.7	0.7
						1.0	0.4	150	18.8		8.0		29.1		93.5		7.3		12.6		24		90				<0.2		0.7	
					Middle	4.5	0.3	126	18.8	18.8	8.0	8.0	29.0	29.0	93.4	93.4	7.3		14.4		30		92				<0.2		0.8	
						4.5	0.3	128	18.8		8.0		29.0		93.4		7.3		14.5		29		93				<0.2		0.7	
					Bottom	8.0	0.4	109	18.7	18.7	8.0	8.0	28.7	28.7	94.2	94.3	7.4	7.4	21.0		31		94				<0.2		0.8	
						8.0	0.4	111	18.7		8.0		28.7		94.3		7.4		20.9		33		93				<0.2		0.7	
IM3	Cloudy	Moderate	14:23	9.2	Surface	1.0	0.4	117	18.8	18.8	8.0	8.0	29.1	29.1	93.1	93.1	7.3	7.3	16.6	19.3	27	30	90	92	819412	806001	<0.2	<0.2	0.8	0.8
						1.0	0.4	121	18.8		8.0		29.1		93.1		7.3		16.7		26		88				<0.2		0.7	
					Middle	4.6	0.4	96	18.7	18.7	8.0	8.0	29.0	29.0	93.2	93.2	7.3		20.3		31		93				<0.2		0.9	
						4.6	0.4	100	18.7		8.0		29.0		93.2		7.3		20.4		33		93				<0.2		1.0	
					Bottom	8.2	0.3	148	18.7	18.7	8.0	8.0	28.8	28.8	94.0	94.0	7.4	7.4	21.1		30		94				<0.2		0.8	
						8.2	0.3	155	18.7		8.0		28.8		94.0		7.4		20.8		32		93				<0.2		0.8	
IM4	Cloudy	Moderate	14:16	8.7	Surface	1.0	0.6	116	18.9	18.9	8.0	8.0	28.5	28.5	92.9	92.9	7.3	7.4	16.8	22.4	23	23	87	91	819554	805043	<0.2	<0.2	1.0	1.0
						1.0	0.6	116	18.9		8.0		28.5		92.9		7.3		16.8		22		87				<0.2		0.9	
					Middle	4.4	0.6	114	18.7	18.7	8.0	8.0	28.7	28.7	93.8	93.8	7.4		22.6		22		91				<0.2		1.2	
						4.4	0.6	117	18.7		7.9		28.7		93.8		7.4		22.6		25		92				<0.2		1.0	
					Bottom	7.7	0.6	135	18.7	18.7	7.9	7.9	28.4	28.4	95.0	95.0	7.5	7.5	27.8		23		93				<0.2		0.8	
						7.7	0.6	136	18.7		7.9		28.4		95.0		7.5		27.8		22		93				<0.2		1.0	
IM5	Cloudy	Moderate	14:09	7.4	Surface	1.0	0.4	96	18.9	18.9	8.0	8.0	28.4	28.4	93.0	93.0	7.3	7.3	14.7	20.8	20	19	88	91	820567	804926	<0.2	<0.2	1.4	1.7
						1.0	0.4	99	18.9		8.0		28.4		93.0		7.3		14.7		18		87				<0.2		1.4	
					Middle	3.7	0.3	126	18.8	18.8	7.9	7.9	28.4	28.4	93.3	93.3	7.3		20.4		18		93				<0.2		2.2	
						3.7	0.4	133	18.8		7.9		28.4		93.3		7.3		20.4		18		91				<0.2		1.9	
					Bottom	6.4	0.3	153	18.8	18.8	7.9	7.9	28.0	28.0	95.0	95.0	7.5	7.5	27.2		20		93				<0.2		1.6	
						6.4	0.3	154	18.8		7.9		28.0		95.0		7.5		27.2		20		94				<0.2		1.4	
IM6	Cloudy	Moderate	14:00	7.2	Surface	1.0	0.4	93	18.8	18.8	7.9	7.9	28.5	28.5	93.2	93.2	7.3	7.4	17.0	20.7	28	31	89	91	821045	805843	<0.2	<0.2	2.0	2.1
						1.0	0.5	101	18.8		7.9		28.5		93.2		7.3		17.0		29		91				<0.2		1.8	
					Middle	3.6	0.3	84	18.8	18.8	7.9	7.9	28.1	28.1	94.2	94.2	7.4		21.9		32		90				<0.2		2.4	
						3.6	0.3	86	18.8		7.9		28.1		94.2		7.4		21.9		33		91				<0.2		2.2	
					Bottom	6.2	0.3	119	18.8	18.8	7.8	7.8	27.4	27.4	96.3	96.3	7.6	7.6	23.3		30		94				<0.2		1.9	
						6.2	0.4	127	18.8		7.8		27.4		96.3		7.6		23.3		31		93				<0.2		2.0	
IM7	Cloudy	Moderate	13:51	8.6	Surface	1.0	0.5	78	18.9	18.9	7.9	7.9	28.6	28.6	92.3	92.3	7.2	7.3	16.5	19.5	28	31	88	91	821366	806834	<0.2	<0.2	2.6	2.4
						1.0	0.5	80	18.9		7.9		28.6		92.3		7.2		16.5		28		87				<0.2		2.8	
					Middle	4.3	0.5	81	18.8	18.8	7.9	7.9	28.3	28.3	92.6	92.7	7.3		17.7		29		91				<0.2		2.2	
						4.3	0.5	86	18.8		7.9		28.3		92.7		7.3		17.7		27		90				<0.2		2.3	
					Bottom	7.6	0.5	74	18.8	18.8	7.8	7.8	28.0	28.0	93.4	93.4	7.4	7.4	24.2		36		94				<0.2		2.1	
						7.6	0.5	76	18.8		7.8		28.0		93.4		7.4		24.2		35		94				<0.2		2.2	
IM8	Cloudy	Moderate	14:28	8.3	Surface	1.0	0.6	87	19.0	19.0	8.0	8.0	29.3	29.3	94.7	94.7	7.4	7.4	17.2	35.6	17	30	82	85	821702	807839	<0.2	<0.2	0.7	0.7
						1.0	0.6	93	19.0		8.0		29.3		94.7		7.4		17.2		17		82				<0.2		0.8	
					Middle	4.2	0.5	86	19.0	19.0	8.0	8.0	29.3	29.3	93.9	93.9	7.3		31.8		24		87				<0.2		0.6	
						4.2	0.6	87	19.0		8.0		29.3		93.9		7.3		31.8		24		86				<0.2		0.6	
					Bottom	7.3	0.5	92	19.0	19.0	8.0	8.0	29.3	29.3	93.6	93.6	7.3	7.3	57.8		46		88				<0.2		0.7	
						7.3	0.5	96	19.0		8.0		29.3		93.6		7.3		57.8		50		87				<0.2		0.6	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 31 January 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	14:42	7.7	Surface	1.0	0.5	84	19.2	19.2	8.0	8.0	28.8	28.8	94.6	94.6	7.4	7.4	16.7	27.1	17	24	77	84	822076	808813	<0.2	<0.2	0.5	0.7
						1.0	0.6	90	19.2		8.0		28.8		94.6		7.4		16.7		16		77				<0.2		0.6	
					Middle	3.9	0.5	82	19.0	19.0	8.0	8.0	29.2	29.2	94.1	94.1	7.3		22.8		18		86				<0.2		0.7	
						3.9	0.5	88	19.0		8.0		29.2		94.1		7.3		22.8		18		86				<0.2		0.6	
					Bottom	6.7	0.5	81	19.0	19.0	8.0	8.0	29.2	29.2	93.5	93.5	7.3	7.3	41.8		38		89				<0.2		1.0	
						6.7	0.5	86	19.0		8.0		29.2		93.5		7.3		41.8		38		87				<0.2		0.9	
IM10	Cloudy	Moderate	14:53	7.6	Surface	1.0	0.5	97	19.3	19.3	8.0	8.0	28.6	28.6	93.8	93.8	7.3	7.3	13.8		12		84				<0.2		1.1	
						1.0	0.6	106	19.3		8.0		28.6		93.7		7.3		14.1		13		85				<0.2		1.0	
					Middle	3.8	0.6	97	19.2	19.2	8.0	8.0	28.7	28.7	93.3	93.3	7.3		21.5		15		86				<0.2		0.9	
						3.8	0.6	100	19.2		8.0		28.7		93.3		7.3		21.5		14		87				<0.2		1.1	
					Bottom	6.6	0.5	106	19.1	19.1	8.0	8.0	28.8	28.8	92.7	92.7	7.2	7.2	60.2		39		87				<0.2		1.6	
						6.6	0.5	108	19.1		8.0		28.8		92.7		7.2		60.2		38		84				<0.2		1.5	
IM11	Cloudy	Moderate	15:09	7.7	Surface	1.0	0.5	106	19.2	19.2	8.0	8.0	28.6	28.6	92.5	92.5	7.2	7.2	14.6	**37.0**	13	34	74	78	821496	810551	<0.2	<0.2	1.1	1.0
						1.0	0.5	111	19.2		8.0		28.6		92.5		7.2		14.6		13		75				<0.2		1.0	
					Middle	3.9	0.5	98	19.1	19.1	8.0	8.0	28.7	28.7	92.4	92.4	7.2		39.4		41		75				<0.2		1.0	
						3.9	0.6	99	19.1		8.0		28.7		92.4		7.2		39.2		42		75				<0.2		0.9	
					Bottom	6.7	0.5	90	19.1	19.1	8.0	8.0	28.8	28.8	92.2	92.2	7.2	7.2	57.0		47		85				<0.2		0.9	
						6.7	0.5	92	19.1		8.0		28.8		92.2		7.2		57.0		49		83				<0.2		1.0	
IM12	Cloudy	Moderate	15:28	9.6	Surface	1.0	0.6	97	19.3	19.3	8.0	8.0	28.6	28.6	92.2	92.2	7.2	7.2	13.0	18.1	14	19	78	83	821149	811526	<0.2	<0.2	1.0	1.5
						1.0	0.7	101	19.3		8.0		28.6		92.2		7.2		13.0		16		79				<0.2		1.2	
					Middle	4.8	0.6	99	19.3	19.3	8.0	8.0	28.7	28.7	91.7	91.7	7.1		18.3		16		82				<0.2		1.3	
						4.8	0.7	102	19.3		8.0		28.7		91.7		7.1		18.3		15		82				<0.2		1.2	
					Bottom	8.6	0.5	102	19.2	19.2	8.0	8.0	28.7	28.7	91.5	91.5	7.1	7.1	23.1		28		89				<0.2		2.3	
						8.6	0.5	103	19.2		8.0		28.7		91.5		7.1		23.1		25		89				<0.2		2.2	
SR2	Cloudy	Moderate	15:50	4.5	Surface	1.0	0.5	62	19.4	19.4	7.9	7.9	28.7	28.7	92.1	92.1	7.2	7.2	12.3	12.9	14	13	76	82	821462	814160	<0.2	<0.2	1.2	1.1
						1.0	0.5	62	19.4		7.9		28.7		92.1		7.2		12.3		13		77				<0.2		1.0	
					Middle	2.3	-	-	-	-	-	-	-	-	-	-	-		-		-		-				<0.2		-	
						2.3	-	-	-		-		-		-		-		-		-		-				<0.2		-	
					Bottom	3.5	0.3	63	19.4	19.4	7.9	7.9	28.7	28.7	93.6	93.6	7.3	7.3	13.4		13		87				<0.2		1.0	
						3.5	0.4	65	19.4		7.9		28.7		93.6		7.3		13.4		12		87				<0.2		1.0	
SR3	Cloudy	Moderate	14:12	9.2	Surface	1.0	0.4	100	19.2	19.2	8.0	8.0	28.9	28.9	96.9	96.8	7.6	7.5	20.7	31.7	24	35	-	-	822159	807559	-	-	-	-
						1.0	0.4	104	19.2		8.0		28.9		96.7		7.5		21.5		23		-				-		-	
					Middle	4.6	0.4	103	19.1	19.1	8.0	8.0	29.1	29.1	96.5	96.5	7.5		26.1		28		-				-		-	
						4.6	0.5	104	19.1		8.0		29.1		96.5		7.5		26.1		28		-				-		-	
					Bottom	8.2	0.4	83	19.1	19.1	8.0	8.0	29.1	29.1	96.4	96.4	7.5	7.5	47.9		52		-				-		-	
						8.2	0.4	85	19.1		8.0		29.1		96.4		7.5		47.9		54		-				-		-	
SR4A	Cloudy	Calm	15:17	8.4	Surface	1.0	0.5	100	18.9	18.9	8.0	8.0	28.2	28.2	92.8	92.8	7.3	7.3	10.2	12.7	15	16	-	-	817177	807821	-	-	-	-
						1.0	0.5	104	18.9		8.0		28.2		92.8		7.3		10.3		16		-				-		-	
					Middle	4.2	0.5	93	18.9	18.9	7.9	7.9	28.1	28.1	93.3	93.3	7.3		13.7		14		-				-		-	
						4.2	0.5	97	18.9		7.9		28.1		93.3		7.3		13.8		16		-				-		-	
					Bottom	7.4	0.4	108	18.9	18.9	7.9	7.9	27.8	27.8	94.6	94.6	7.5	7.5	14.2		19		-				-		-	
						7.4	0.4	112	18.9		7.9		27.8		94.6		7.5		14.2		18		-				-		-	
SR5A	Cloudy	Calm	15:35	4.0	Surface	1.0	0.1	121	19.2	19.2	7.9	7.9	28.3	28.3	91.3	91.3	7.1	7.1	11.5	11.2	9	9	-	-	816594	810697	-	-	-	-
						1.0	0.1	130	19.2		7.9		28.3		91.3		7.1		11.8		8		-				-		-	
					Middle	2.0	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.0	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	0.1	87	19.2	19.2	7.9	7.9	28.2	28.2	91.8	91.8	7.2	7.2	10.7		9		-				-		-	
						3.0	0.1	88	19.2		7.9		28.2		91.8		7.2		10.7		9		-				-		-	
SR6	Cloudy	Calm	15:57	3.9	Surface	1.0	0.2	124	19.2	19.2	7.9	7.9	27.8	27.8	90.7	90.7	7.1	7.1	7.1	9.0	7	7	-	-	817897	814657	-	-	-	-
						1.0	0.2	133	19.2		7.9		27.8		90.7		7.1		7.2		7		-				-		-	
					Middle	2.0	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.0	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.9	0.2	104	19.2	19.2	7.9	7.9	27.8	27.8	91.9	92.0	7.2	7.2	10.7		7		-				-		-	
						2.9	0.2	105	19.2		7.9		27.8		92.0		7.2		11.0		7		-				-		-	
SR7	Cloudy	Moderate	16:36	18.2	Surface	1.0	0.5	79	19.3	19.3	7.9	7.9	29.4	29.4	88.6	88.6	6.9	6.9	6.6	7.1	5	6	-	-	823635	823747	-	-	-	-
						1.0	0.5	86	19.3		7.9		29.4		88.6		6.9		6.6		6		-				-		-	
					Middle	9.1	0.4	88	19.3	19.3	7.9	7.9	29.5	29.5	88.1	88.1	6.8		7.2		7		-				-		-	
						9.1	0.4	88	19.3		7.9		29.5		88.1		6.8		7.2		6		-				-		-	
					Bottom	17.2	0.3	126	19.3	19.3	7.9	7.9	29.5	29.5	88.0	88.0	6.8	6.8	7.6		6		-				-		-	
						17.2	0.3	129	19.3		7.9		29.5		88.0		6.8		7.6		6		-				-		-	
SR8	Cloudy	Moderate	15:35	5.2	Surface	1.0	0.3	180	19.6	19.6	7.9	7.9	28.7	28.7	93.1	93.1	7.2	7.2	14.7	15.2	18	17	-	-	820404	811586	-	-	-	-
						1.0	0.3	186	19.6		7.9		28.7		93.1		7.2		14.7		18		-				-		-	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.3	188	19.4	19.4	7.9	7.9	28.6	28.6	92.5	92.5	7.2	7.2	15.7		16		-				-		-	
						4.2	0.3	200	19.4		7.9		28.6		92.5		7.2		15.7		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**


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
03/01/2017
05/01/2017
07/01/2017
10/01/2017
12/01/2017
14/01/2017
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19/01/2017
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24/01/2017
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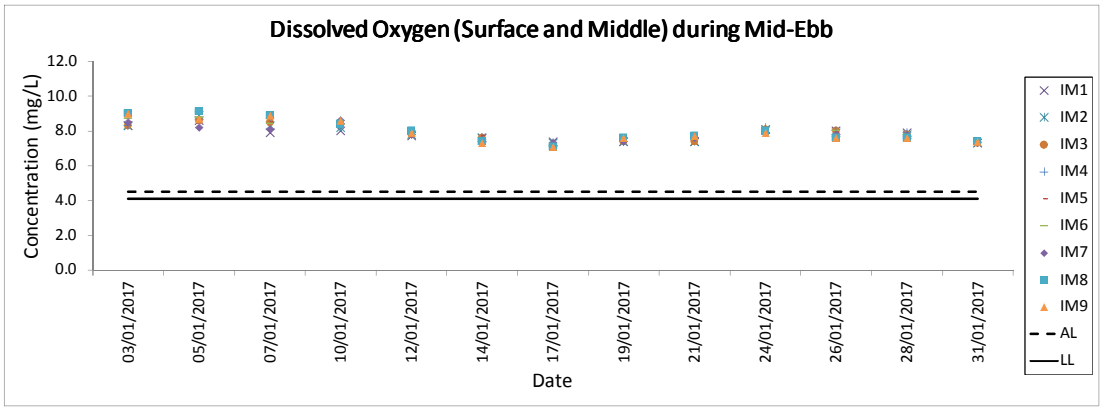
28/01/2017
31/01/2017
Date
C1
C2
C3
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
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2.0
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03/01/2017
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Date
IM1
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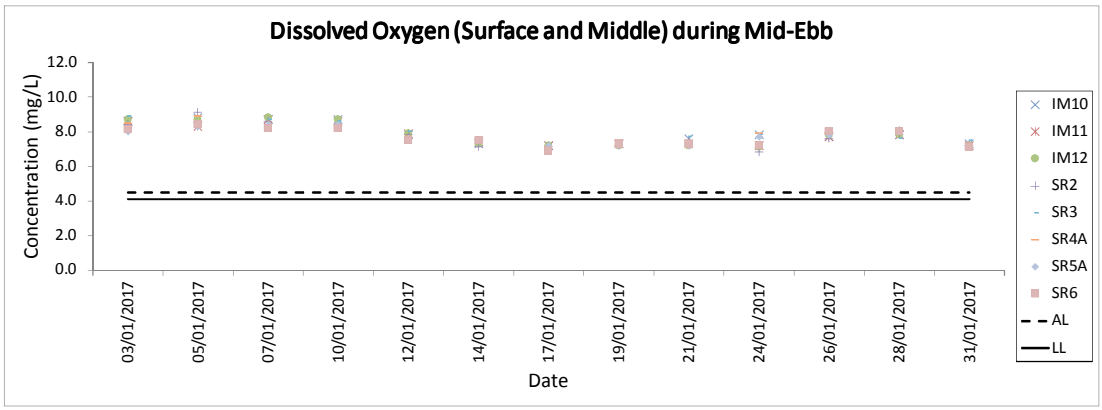
Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
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4.0
2.0
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24/01/2017
26/01/2017
28/01/2017
31/01/2017
Date
IM10
IM11
IM12
SR2
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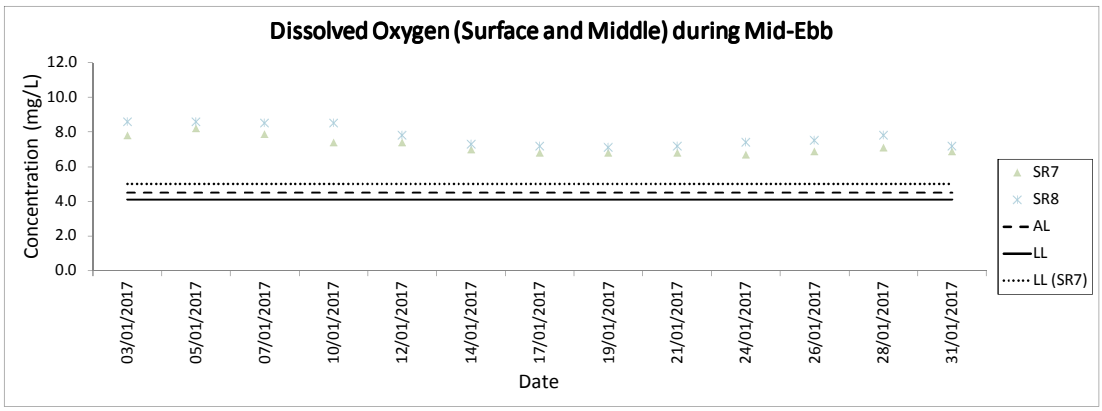
SR4A
SR5A
SR6
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
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8.0
6.0
4.0
2.0
0.0
03/01/2017
05/01/2017
07/01/2017
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19/01/2017
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31/01/2017
Date
SR7
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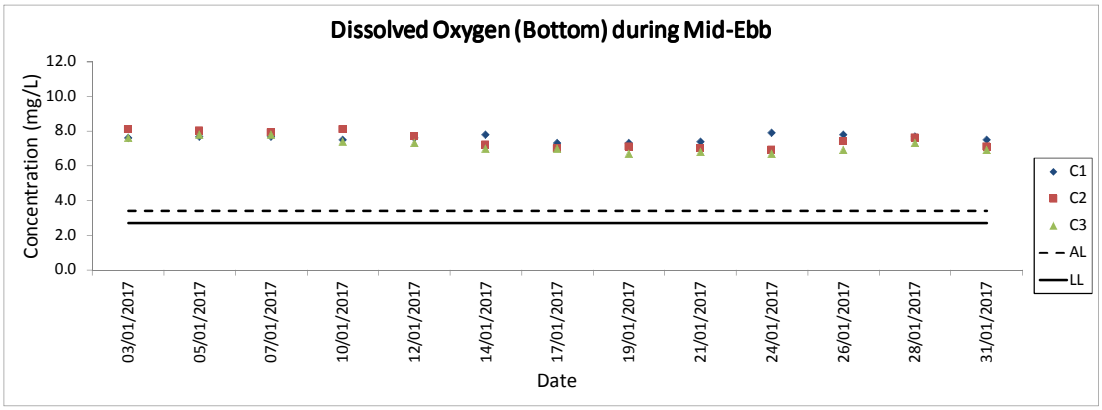
LL (SR7)


Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
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4.0
2.0
0.0
03/01/2017
05/01/2017
07/01/2017
10/01/2017
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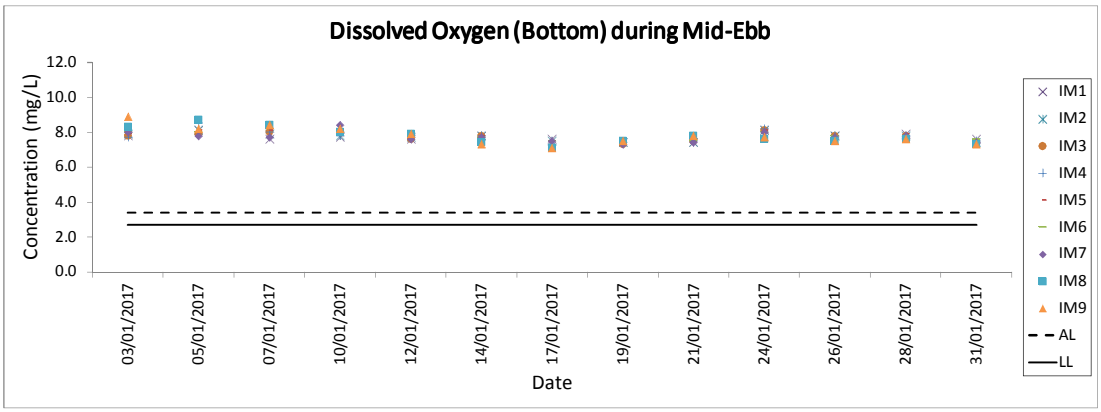
28/01/2017
31/01/2017
Date
C1
C2
C3
AL
LL


Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
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6.0
4.0
2.0
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05/01/2017
07/01/2017
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19/01/2017
21/01/2017
24/01/2017
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31/01/2017
Date
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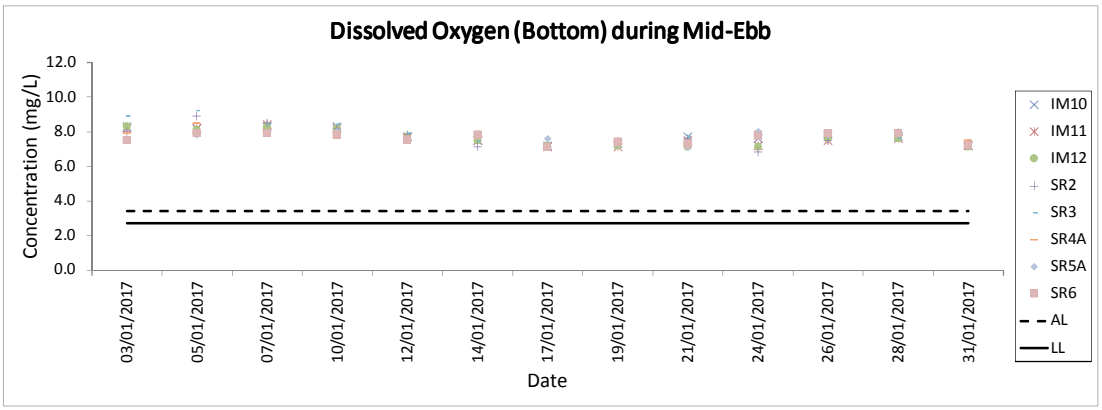
IM9
AL
LL


Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
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4.0
2.0
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05/01/2017
07/01/2017
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24/01/2017
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Date
IM10
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IM12
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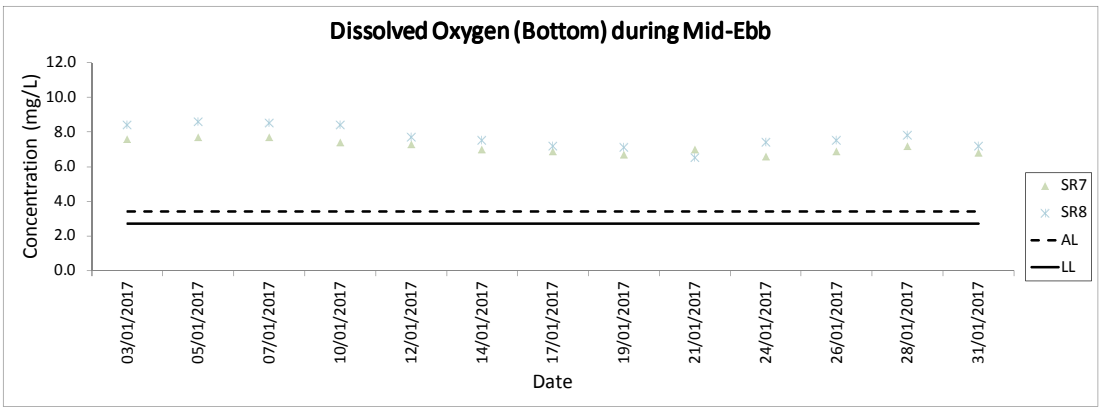
SR3
SR4A
SR5A
SR6
AL
LL


Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
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4.0
2.0
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31/01/2017
Date
SR7
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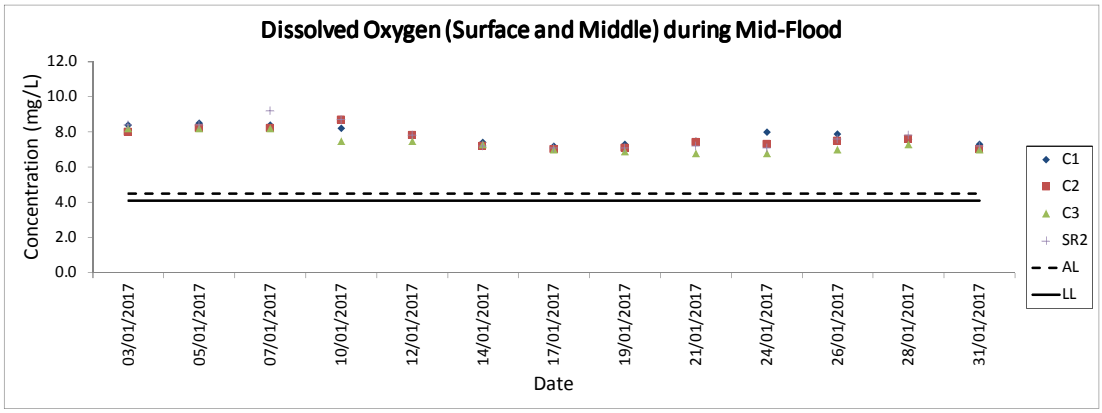
Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
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03/01/2017
05/01/2017
07/01/2017
10/01/2017
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Date
C1
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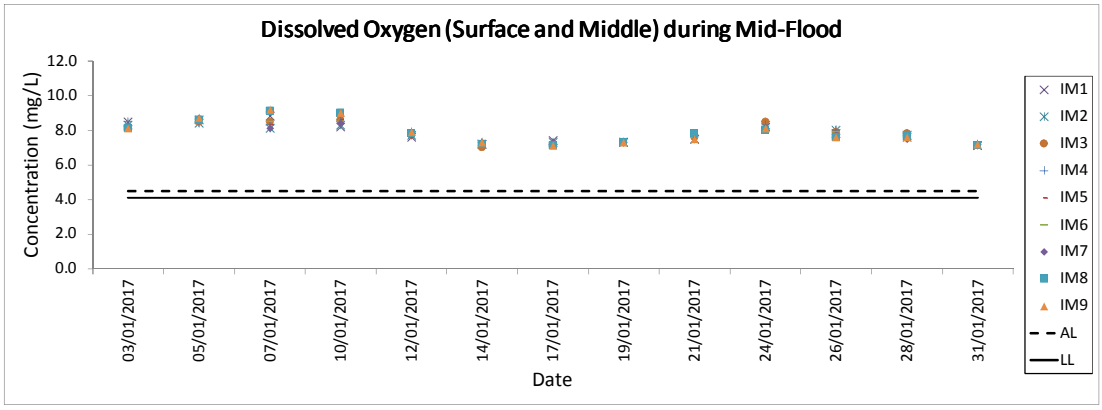
Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
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4.0
2.0
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Date
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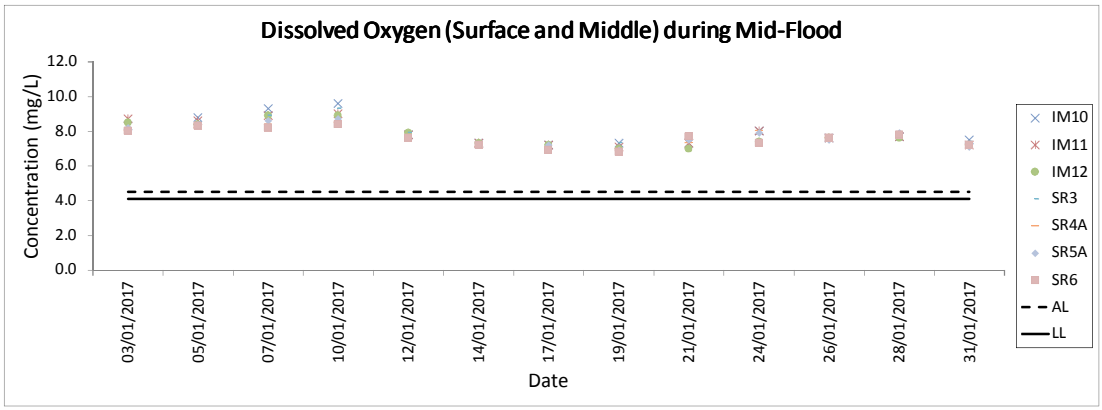
Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
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6.0
4.0
2.0
0.0
03/01/2017
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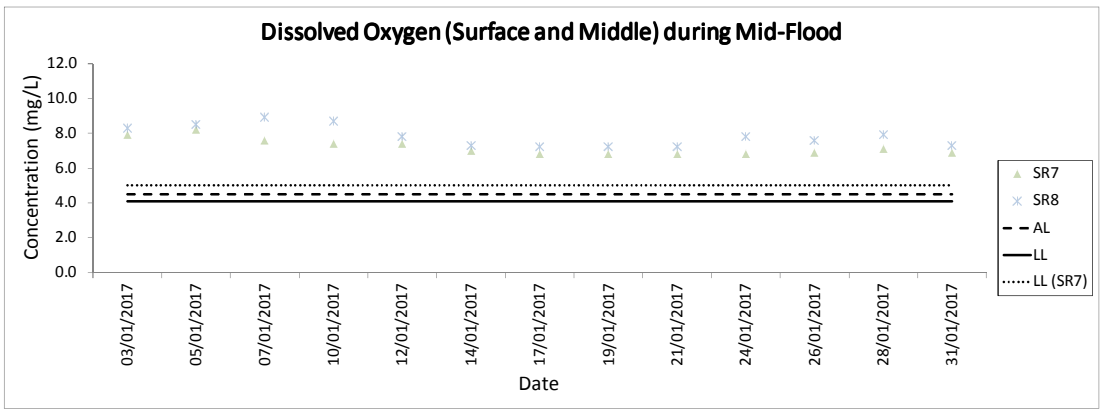
Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
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4.0
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SR7
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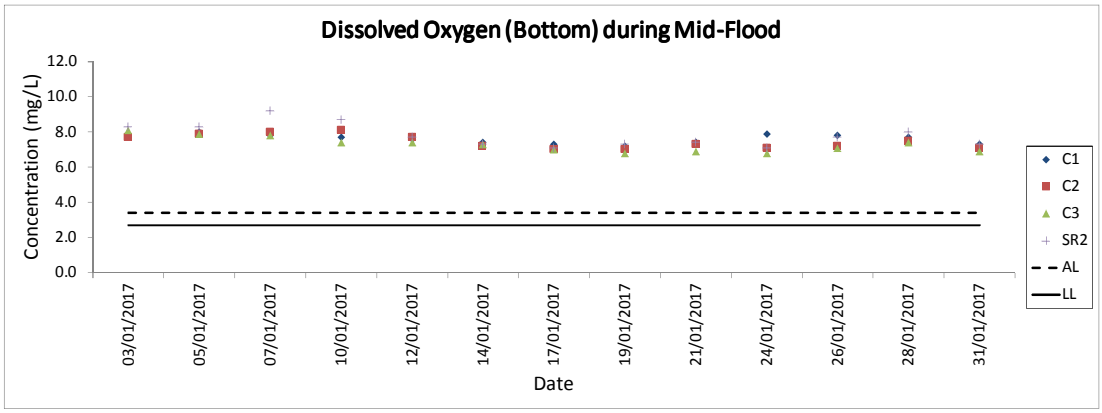
LL (SR7)


Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
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8.0
6.0
4.0
2.0
0.0
03/01/2017
05/01/2017
07/01/2017
10/01/2017
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31/01/2017
Date
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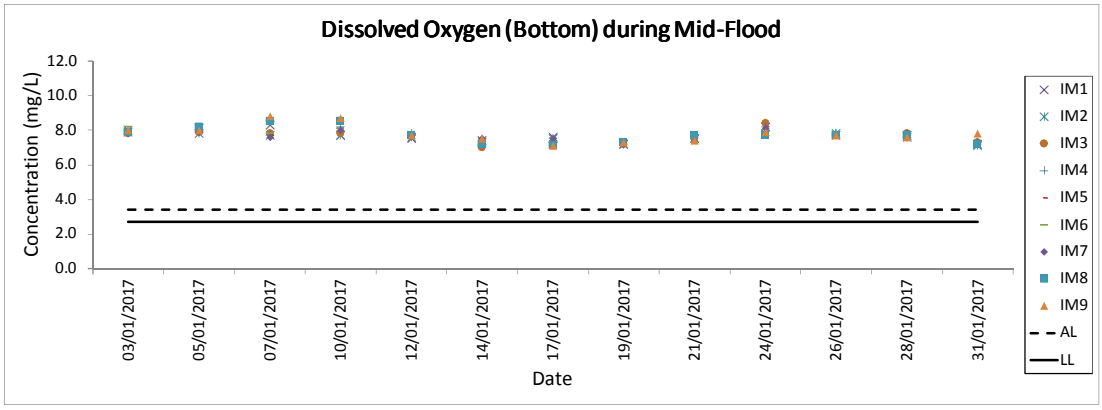
C2
C3
SR2
AL
LL


Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
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31/01/2017
Date
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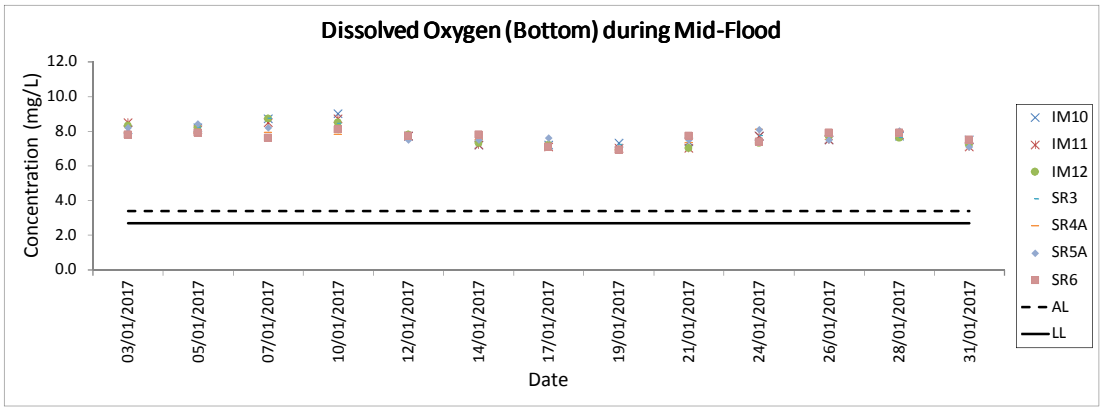
Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
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8.0
6.0
4.0
2.0
0.0
03/01/2017
05/01/2017
07/01/2017
10/01/2017
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IM10
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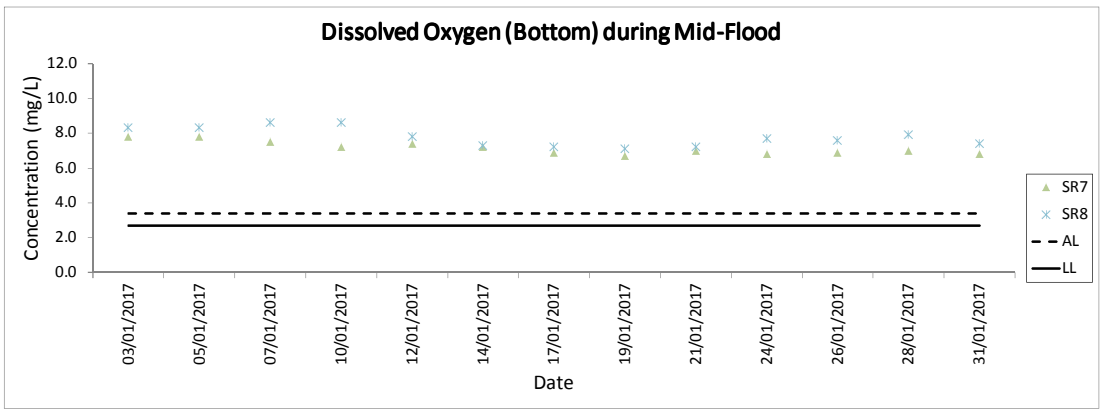
Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
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4.0
2.0
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03/01/2017
05/01/2017
07/01/2017
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Date
SR7
SR8
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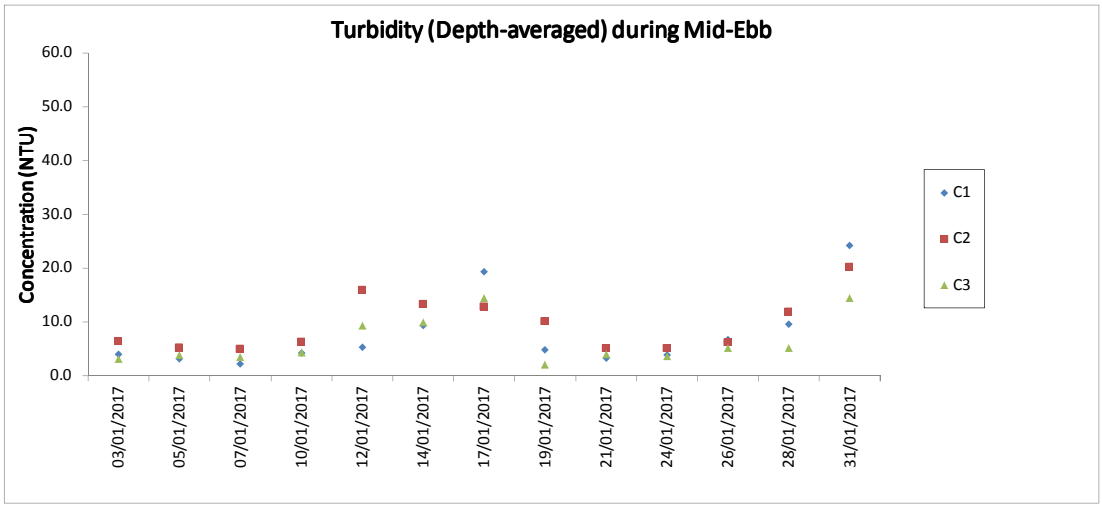
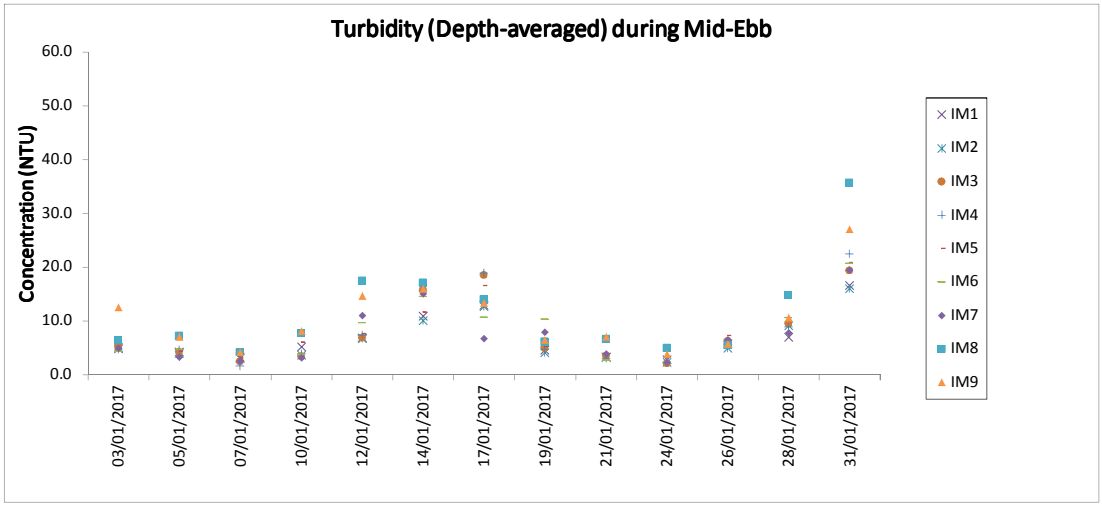
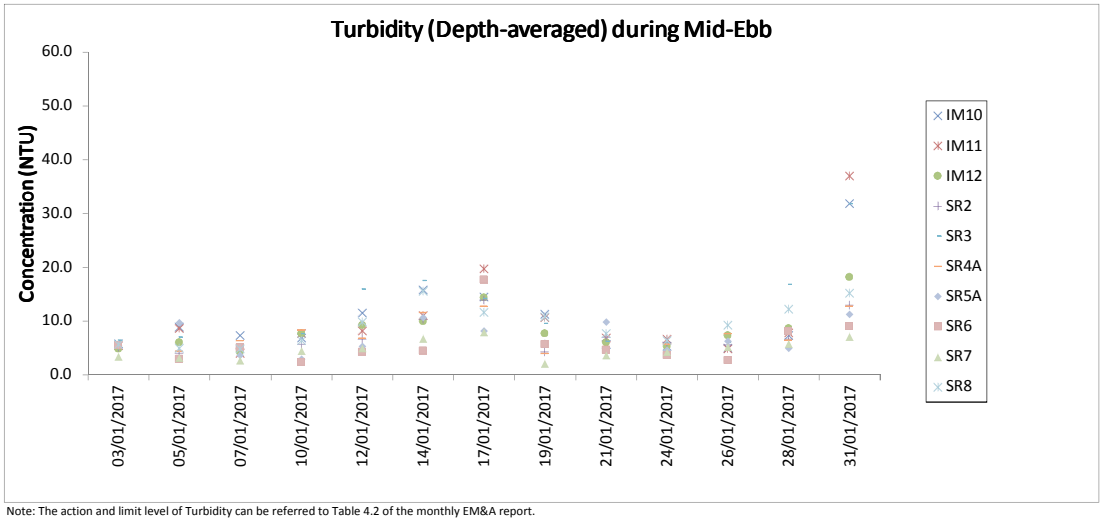
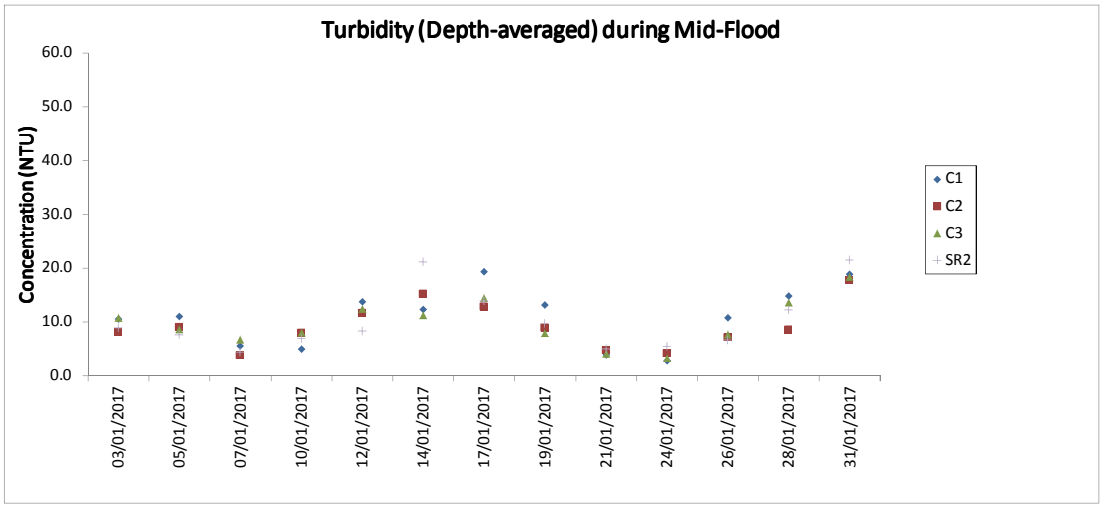
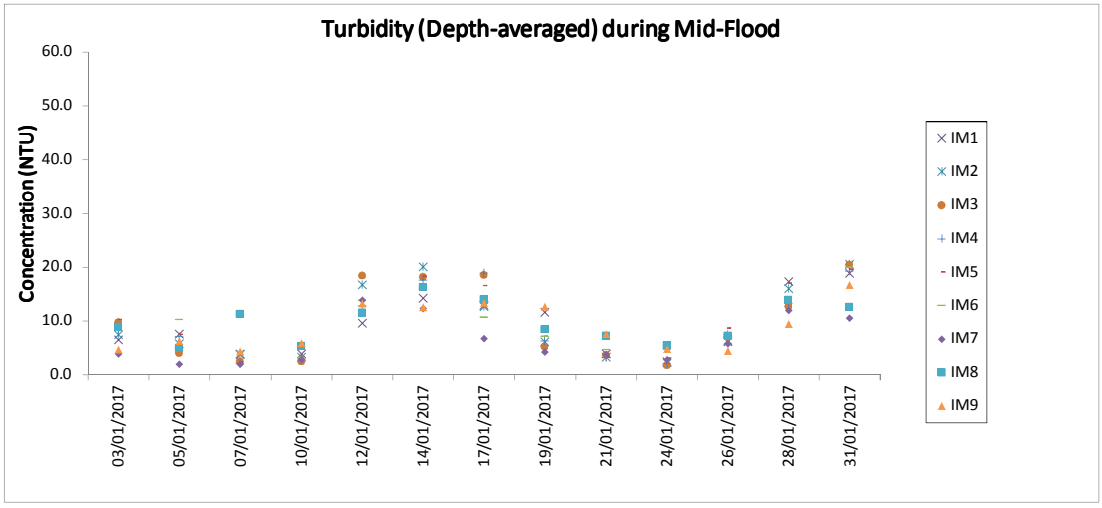


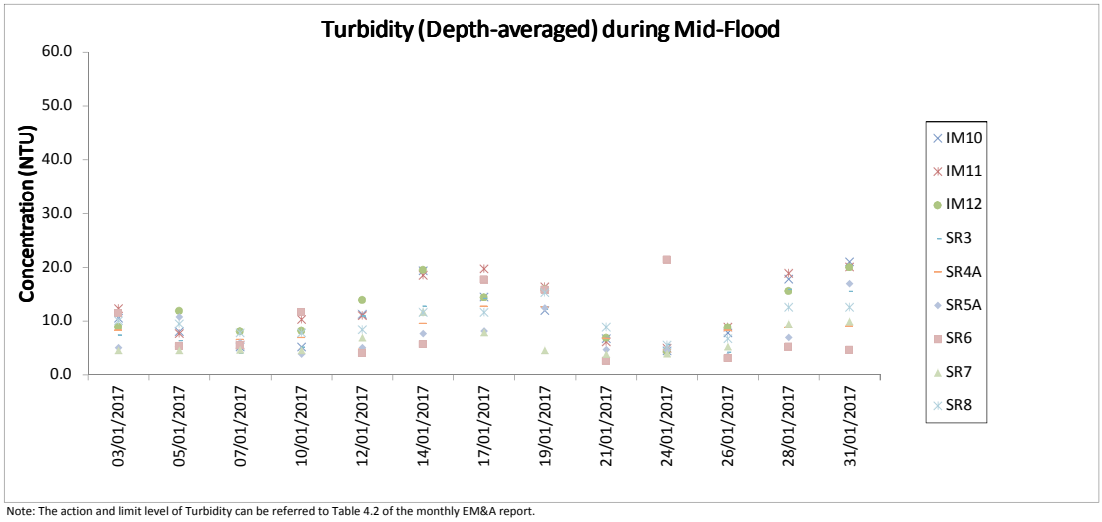




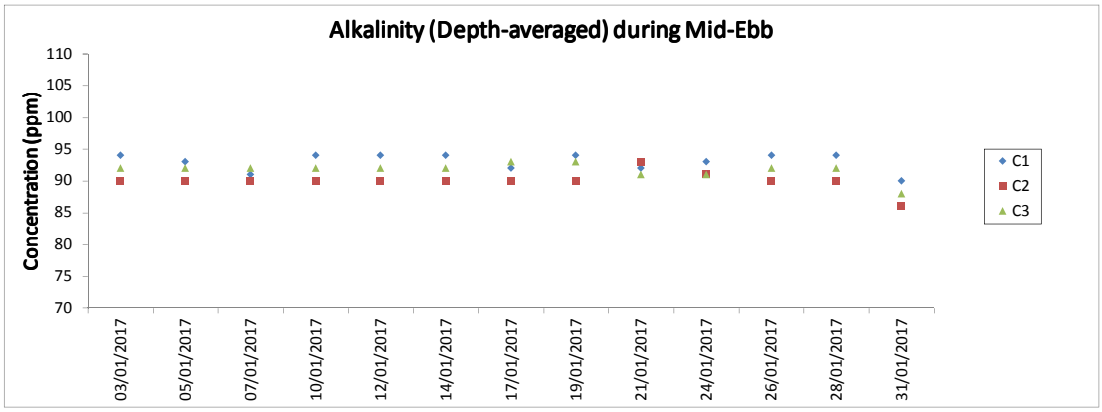
Note: The action and limit level of Turbidity can be referred to Table 4.2 of the monthly EM&A report.

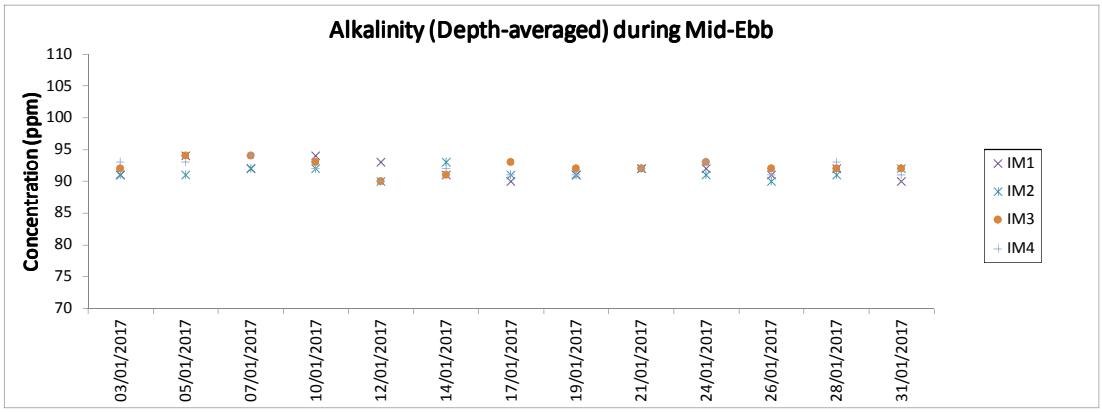


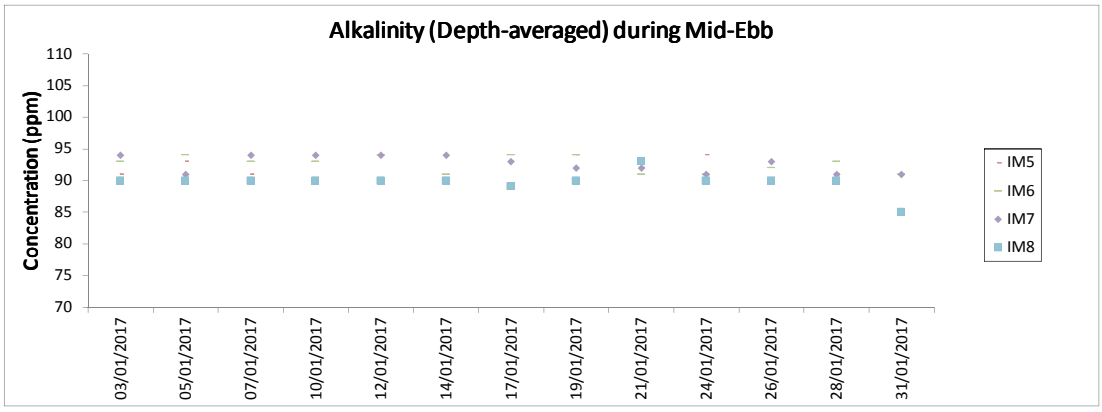


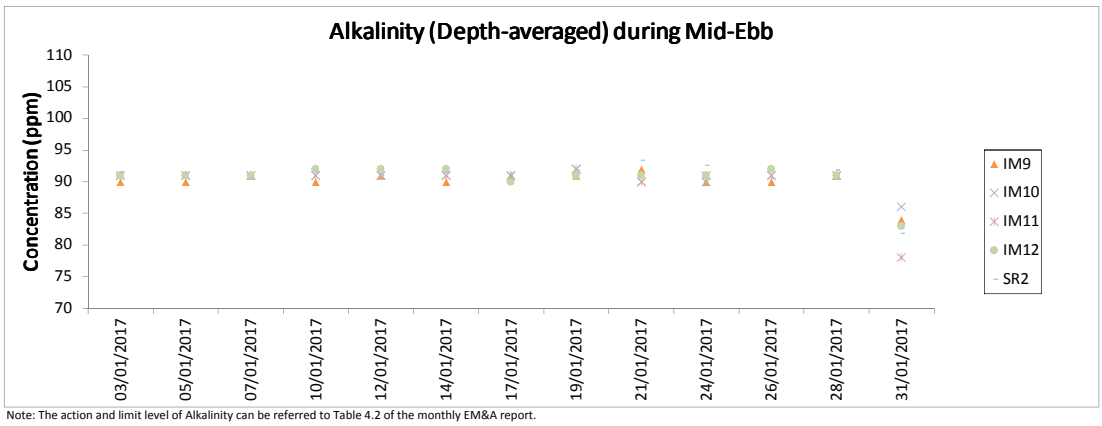


Note: The action and limit level of Turbidity can be referred to Table 4.2 of the monthly EM&A report.

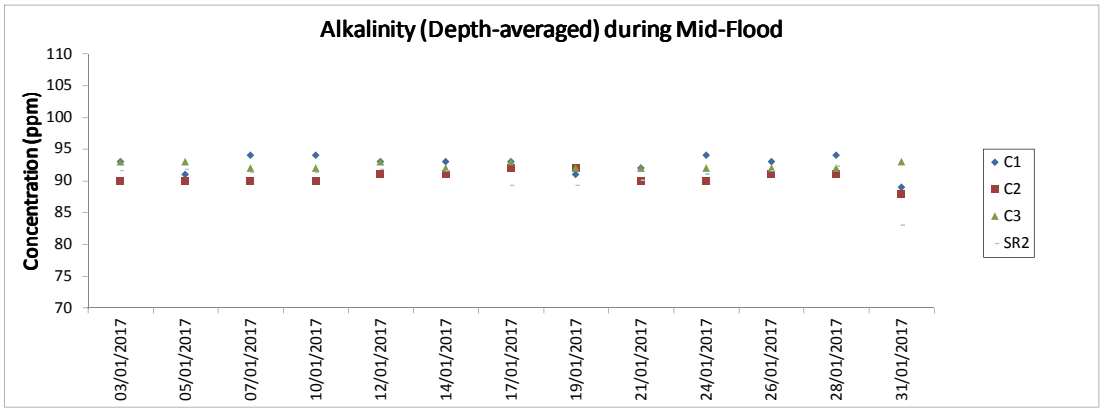


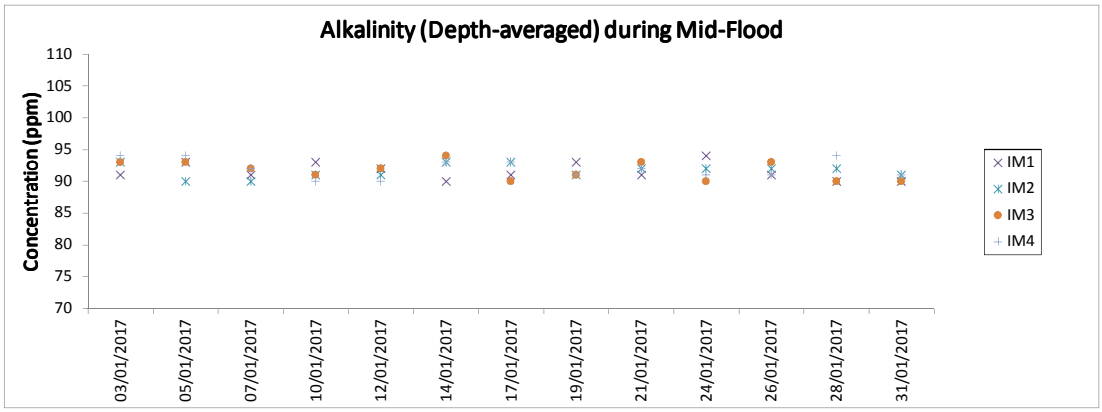


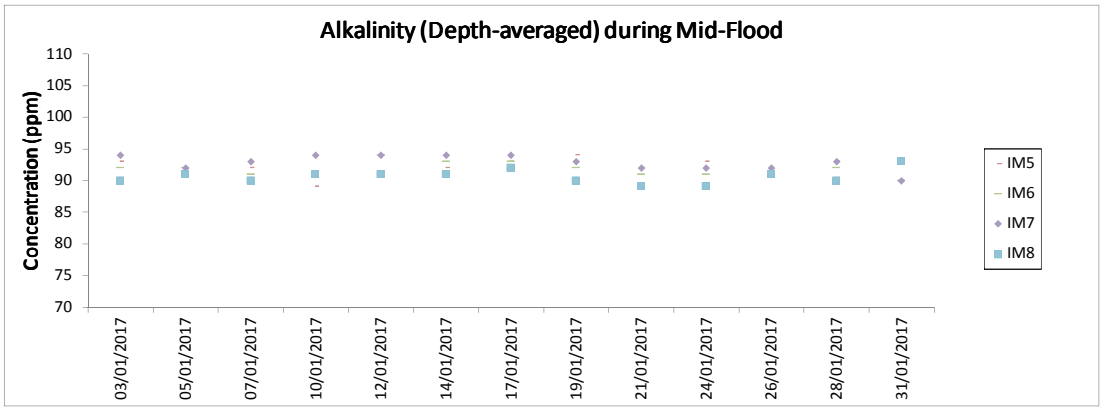


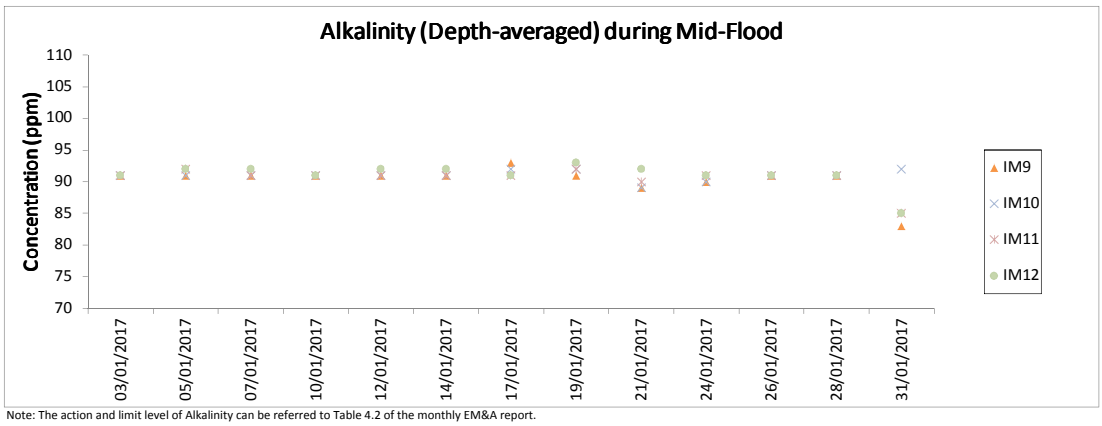


Note: The action and limit level of Alkalinity can be referred to Table 4.2 of the monthly EM&A report.

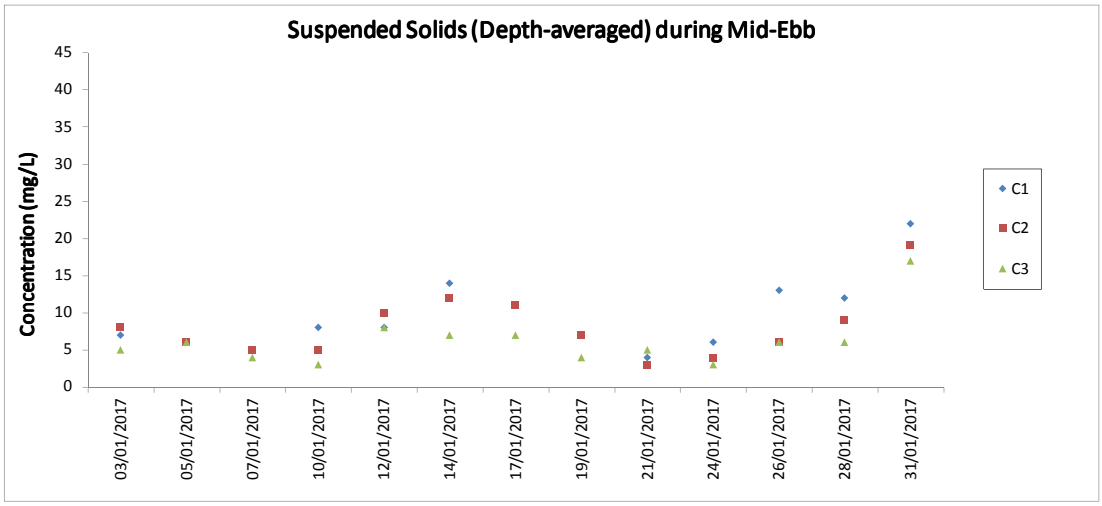


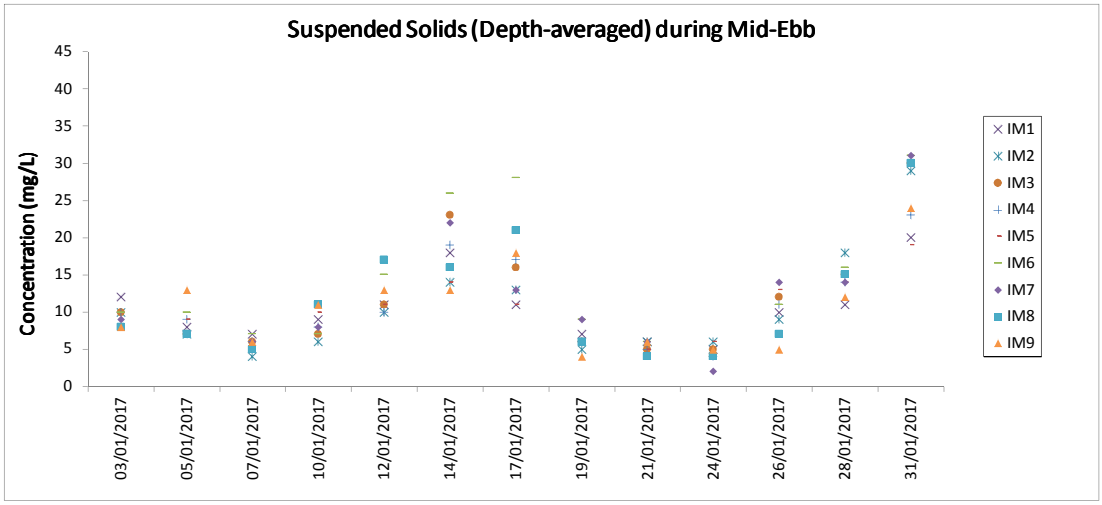


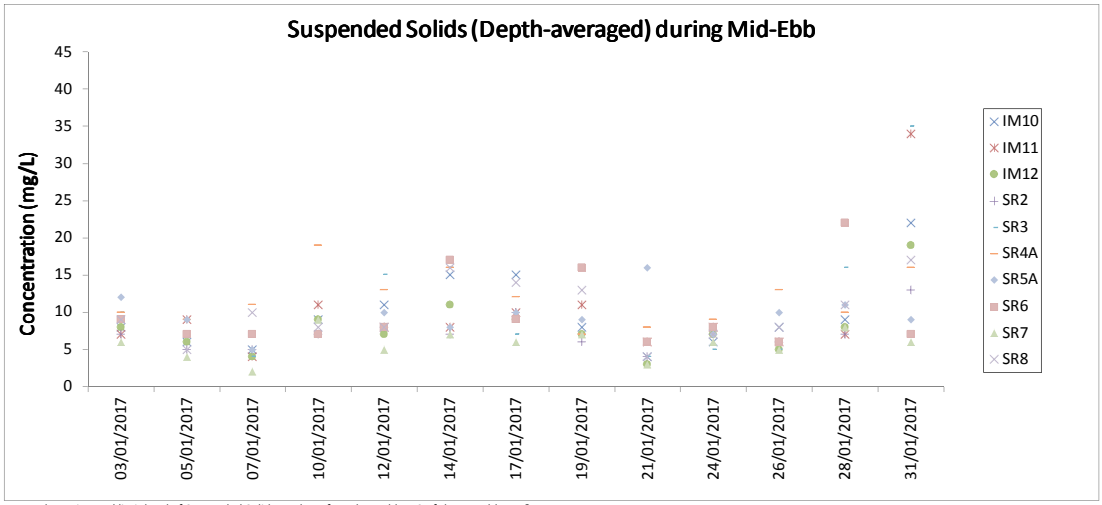




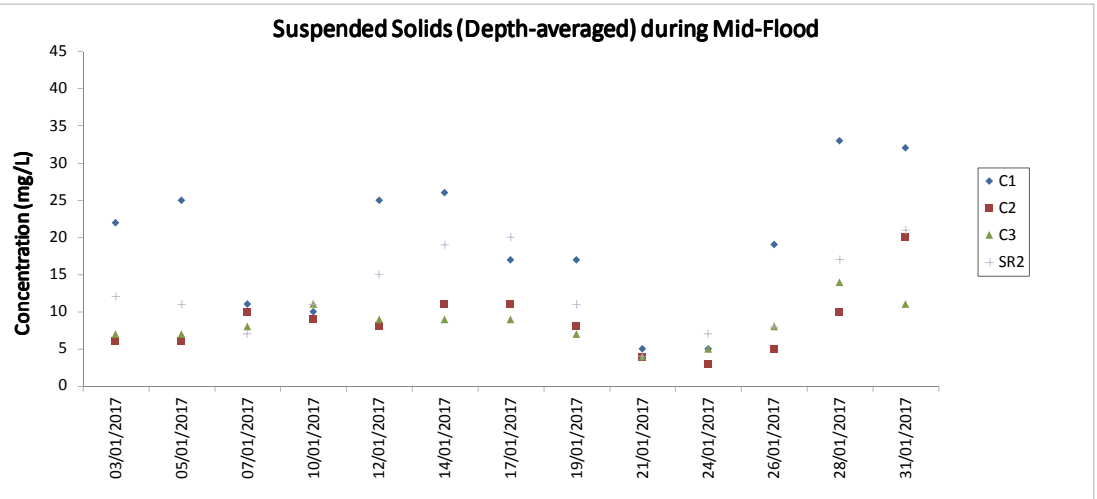
Note: The action and limit level of Alkalinity can be referred to Table 4.2 of the monthly EM&A report.

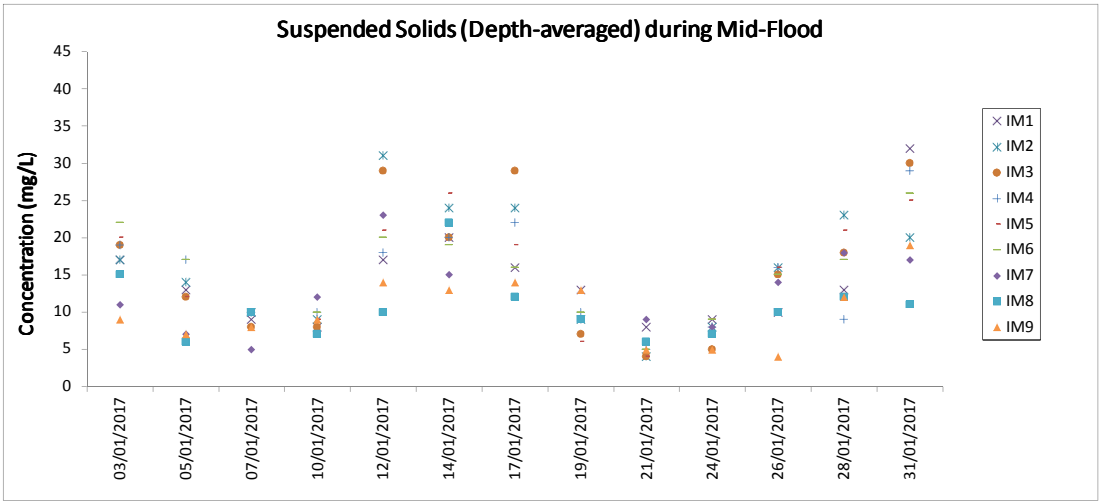


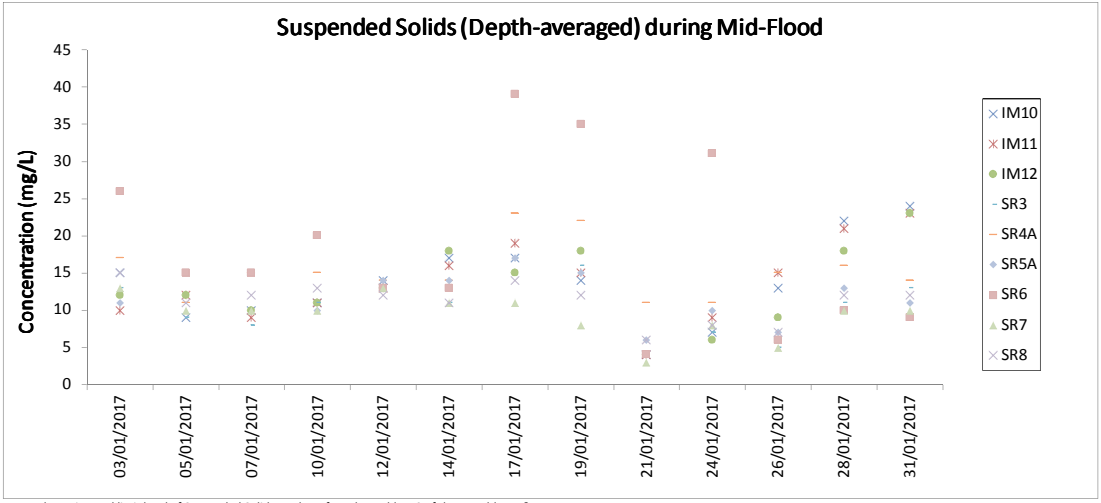




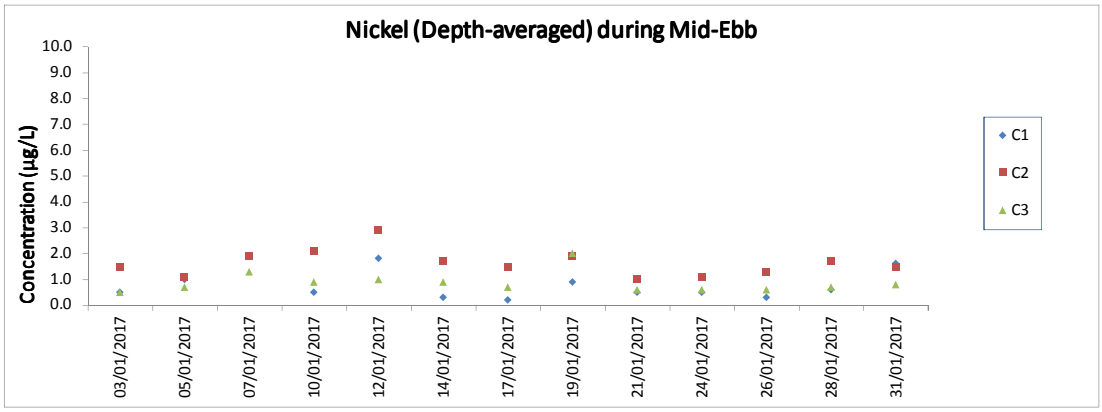
Note: The action and limit level of Suspended Solids can be referred to Table 4.2 of the monthly EM&A report.

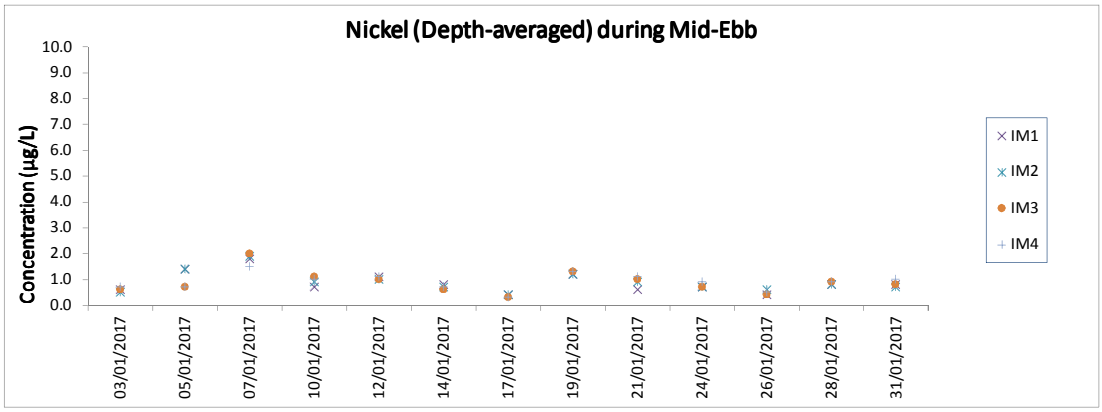


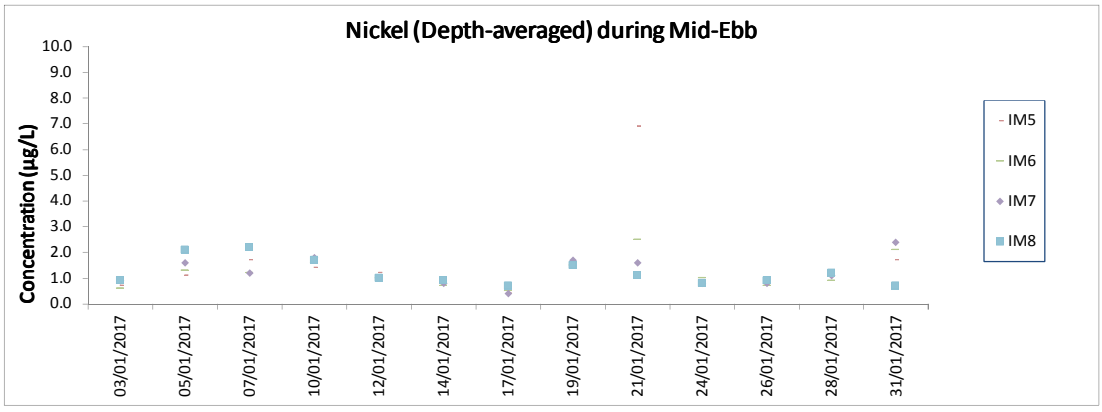


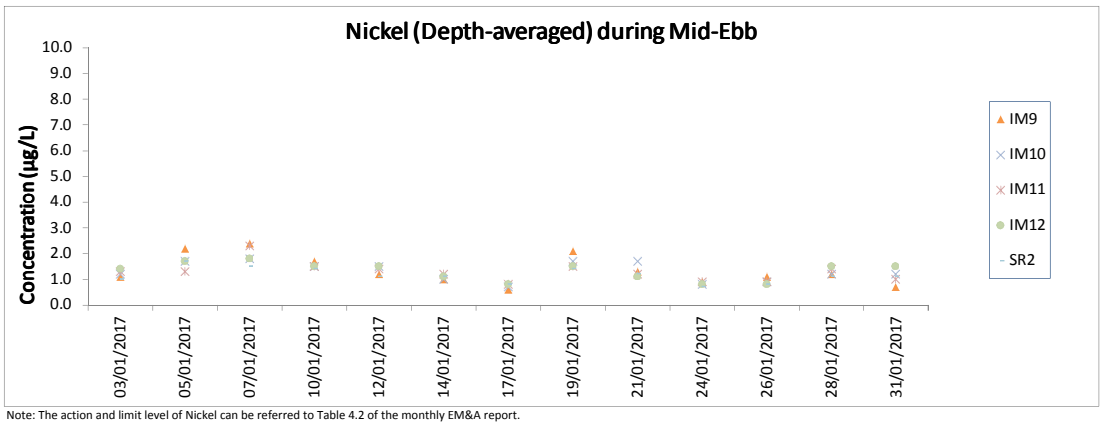


Note: The action and limit level of Suspended Solids can be referred to Table 4.2 of the monthly EM&A report.

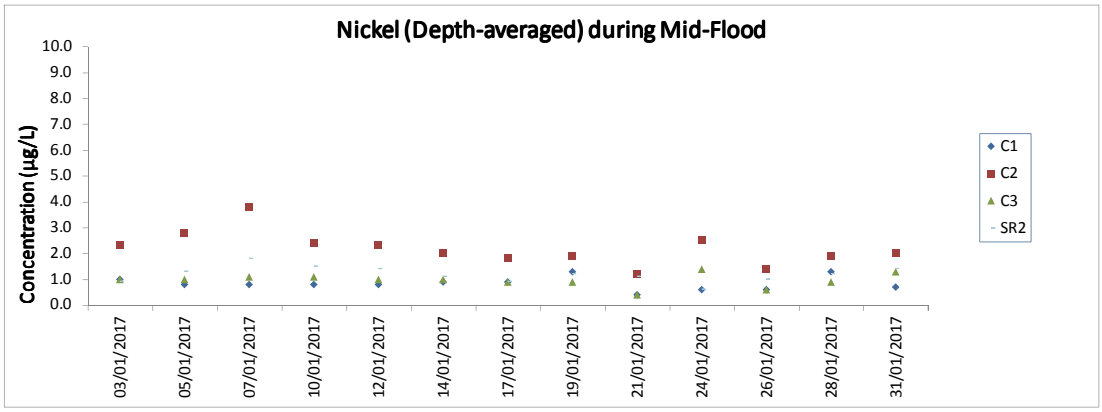


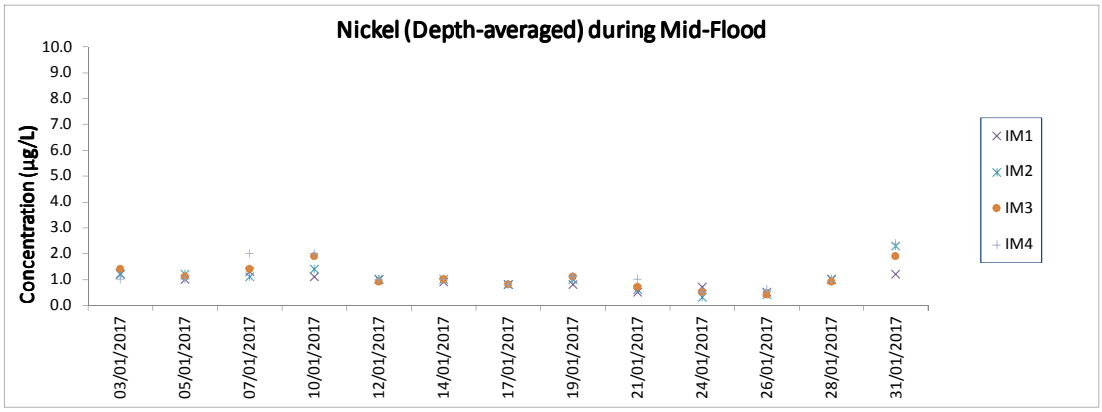


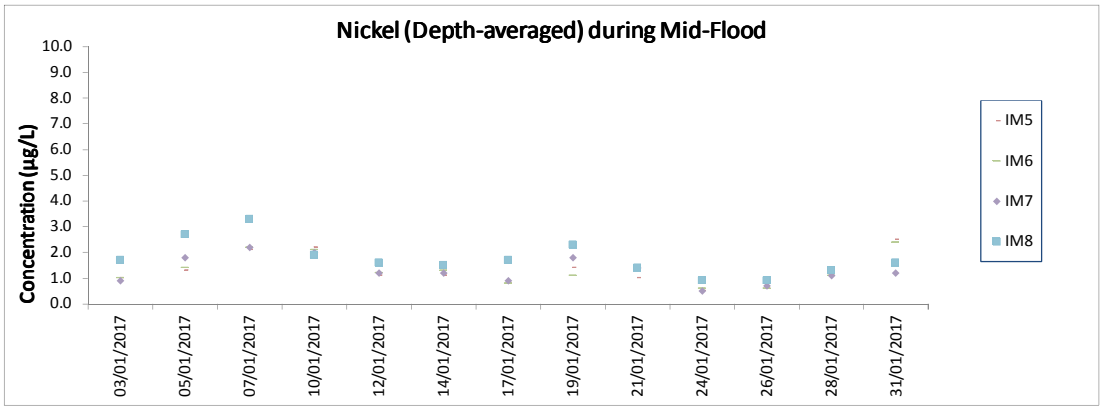


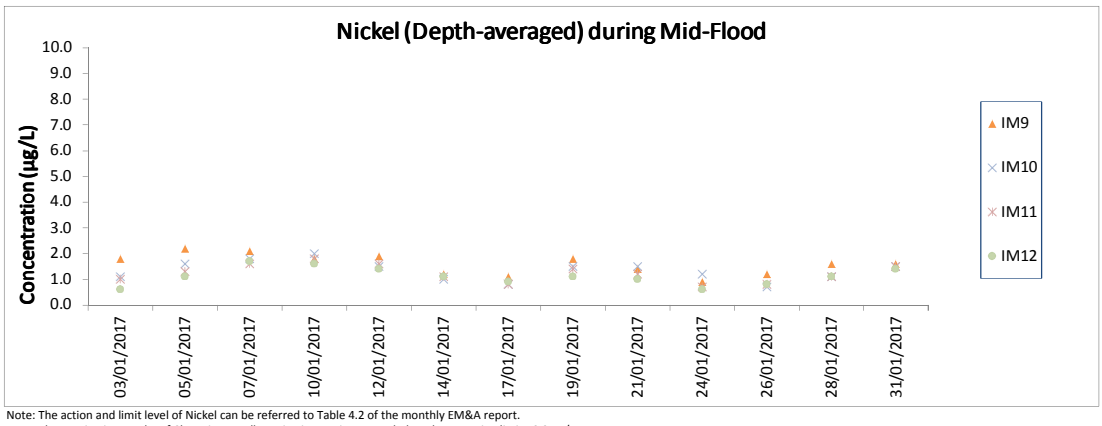


Note: The action and limit level of Nickel can be referred to Table 4.2 of the monthly EM&A report.









Note: The action and limit level of Nickel can be referred to Table 4.2 of the monthly EM&A report.
The monitoring results of Chromium at all monitoring stations were below the reporting limit <0.2 µg/L,
the impact monitoring results of Chromium at all monitoring stations can be referred to Appendix E. of the monthly EM&A report.

Chinese White Dolphin Monitoring Results

CWD Small Vessel Line-transect Survey — Survey Effort Data

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE
04-Nov-16	NWL	2	22.59	AUTUMN	32166	3RS ET
04-Nov-16	NWL	3	60.71	AUTUMN	32166	3RS ET
11-Nov-16	NEL	1	15.31	AUTUMN	32166	3RS ET
11-Nov-16	NEL	2	31.79	AUTUMN	32166	3RS ET
14-Nov-16	SWL	2	62.10	AUTUMN	32166	3RS ET
14-Nov-16	SWL	3	0.90	AUTUMN	32166	3RS ET
16-Nov-16	NEL	2	1.90	AUTUMN	32166	3RS ET
16-Nov-16	NEL	3	41.92	AUTUMN	32166	3RS ET
16-Nov-16	NEL	4	3.28	AUTUMN	32166	3RS ET
17-Nov-16	SWL	2	1.15	AUTUMN	32166	3RS ET
17-Nov-16	SWL	3	5.59	AUTUMN	32166	3RS ET
17-Nov-16	WL	2	13.18	AUTUMN	32166	3RS ET
17-Nov-16	WL	3	17.84	AUTUMN	32166	3RS ET
17-Nov-16	AW	2	4.91	AUTUMN	32166	3RS ET
18-Nov-16	AW	2	1.43	AUTUMN	32166	3RS ET
18-Nov-16	AW	3	3.25	AUTUMN	32166	3RS ET
18-Nov-16	WL	2	18.03	AUTUMN	32166	3RS ET
18-Nov-16	WL	3	11.86	AUTUMN	32166	3RS ET
18-Nov-16	WL	4	2.45	AUTUMN	32166	3RS ET
18-Nov-16	SWL	3	6.84	AUTUMN	32166	3RS ET
21-Nov-16	NWL	2	3.82	AUTUMN	32166	3RS ET
21-Nov-16	NWL	3	26.42	AUTUMN	32166	3RS ET
21-Nov-16	NWL	4	43.55	AUTUMN	32166	3RS ET
21-Nov-16	NWL	5	7.91	AUTUMN	32166	3RS ET
28-Nov-16	SWL	2	7.14	AUTUMN	32166	3RS ET
28-Nov-16	SWL	3	35.02	AUTUMN	32166	3RS ET
28-Nov-16	SWL	4	16.84	AUTUMN	32166	3RS ET
28-Nov-16	SWL	5	1.39	AUTUMN	32166	3RS ET
02-Dec-16	NWL	2	24.31	WINTER	32166	3RS ET
02-Dec-16	NWL	3	54.34	WINTER	32166	3RS ET
02-Dec-16	NWL	4	3.20	WINTER	32166	3RS ET
05-Dec-16	AW	2	4.86	WINTER	32166	3RS ET
05-Dec-16	WL	2	9.23	WINTER	32166	3RS ET
05-Dec-16	WL	3	23.91	WINTER	32166	3RS ET
05-Dec-16	SWL	2	5.52	WINTER	32166	3RS ET
05-Dec-16	SWL	3	1.31	WINTER	32166	3RS ET
13-Dec-16	SWL	2	52.96	WINTER	32166	3RS ET
13-Dec-16	SWL	3	7.50	WINTER	32166	3RS ET
14-Dec-16	AW	3	1.96	WINTER	32166	3RS ET
14-Dec-16	AW	4	2.96	WINTER	32166	3RS ET
14-Dec-16	WL	3	13.26	WINTER	32166	3RS ET
14-Dec-16	WL	4	18.34	WINTER	32166	3RS ET
14-Dec-16	WL	5	2.20	WINTER	32166	3RS ET
14-Dec-16	SWL	3	2.29	WINTER	32166	3RS ET
14-Dec-16	SWL	4	4.41	WINTER	32166	3RS ET
19-Dec-16	NWL	2	39.79	WINTER	32166	3RS ET
19-Dec-16	NWL	3	22.34	WINTER	32166	3RS ET

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE
19-Dec-16	NWL	4	3.20	WINTER	32166	3RS ET
20-Dec-16	NWL	2	7.59	WINTER	32166	3RS ET
20-Dec-16	NEL	1	3.67	WINTER	32166	3RS ET
20-Dec-16	NEL	2	17.41	WINTER	32166	3RS ET
20-Dec-16	NEL	3	22.32	WINTER	32166	3RS ET
20-Dec-16	NEL	4	3.00	WINTER	32166	3RS ET
22-Dec-16	SWL	2	0.90	WINTER	32166	3RS ET
22-Dec-16	SWL	3	25.80	WINTER	32166	3RS ET
22-Dec-16	SWL	4	23.20	WINTER	32166	3RS ET
22-Dec-16	SWL	5	13.20	WINTER	32166	3RS ET
23-Dec-16	NEL	1	7.40	WINTER	32166	3RS ET
23-Dec-16	NEL	2	27.00	WINTER	32166	3RS ET
23-Dec-16	NEL	3	12.80	WINTER	32166	3RS ET
05-Jan-17	AW	2	4.86	WINTER	32166	3RS ET
05-Jan-17	WL	1	12.53	WINTER	32166	3RS ET
05-Jan-17	WL	2	14.38	WINTER	32166	3RS ET
05-Jan-17	SWL	2	6.01	WINTER	32166	3RS ET
06-Jan-17	SWL	1	1.30	WINTER	32166	3RS ET
06-Jan-17	SWL	2	61.20	WINTER	32166	3RS ET
06-Jan-17	SWL	3	1.80	WINTER	32166	3RS ET
09-Jan-17	NWL	1	6.90	WINTER	32166	3RS ET
09-Jan-17	NWL	2	60.46	WINTER	32166	3RS ET
09-Jan-17	NWL	3	15.64	WINTER	32166	3RS ET
10-Jan-17	NEL	2	2.10	WINTER	32166	3RS ET
10-Jan-17	NEL	3	29.22	WINTER	32166	3RS ET
10-Jan-17	NEL	4	16.68	WINTER	32166	3RS ET
12-Jan-17	NWL	2	20.09	WINTER	32166	3RS ET
12-Jan-17	NWL	3	61.01	WINTER	32166	3RS ET
12-Jan-17	NWL	4	0.70	WINTER	32166	3RS ET
13-Jan-17	SWL	2	27.52	WINTER	32166	3RS ET
13-Jan-17	SWL	3	28.90	WINTER	32166	3RS ET
13-Jan-17	SWL	4	5.33	WINTER	32166	3RS ET
19-Jan-17	AW	1	4.59	WINTER	32166	3RS ET
19-Jan-17	WL	2	7.20	WINTER	32166	3RS ET
19-Jan-17	WL	3	14.13	WINTER	32166	3RS ET
19-Jan-17	WL	4	11.03	WINTER	32166	3RS ET
19-Jan-17	SWL	3	5.88	WINTER	32166	3RS ET
19-Jan-17	SWL	4	1.00	WINTER	32166	3RS ET
20-Jan-17	NEL	2	23.30	WINTER	32166	3RS ET
20-Jan-17	NEL	3	22.00	WINTER	32166	3RS ET
20-Jan-17	NEL	4	1.60	WINTER	32166	3RS ET

Notes:

CWD monitoring survey data of the two preceding survey months (i.e. November and December 2016) 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.
04-Nov-16	1	1041	CWD	4	NWL	3	330	ON	3RS ET	22.2788	113.8779	AUTUMN	NONE
04-Nov-16	2	1221	CWD	3	NWL	3	149	ON	3RS ET	22.3807	113.8890	AUTUMN	NONE
14-Nov-16	1	1406	CWD	1	SWL	2	19	ON	3RS ET	22.2076	113.8796	AUTUMN	NONE
17-Nov-16	1	1226	CWD	4	WL	3	1	ON	3RS ET	22.2311	113.8389	AUTUMN	NONE
17-Nov-16	2	1308	CWD	3	WL	2	390	ON	3RS ET	22.2452	113.8508	AUTUMN	NONE
17-Nov-16	3	1415	CWD	2	WL	2	11	ON	3RS ET	22.2900	113.8614	AUTUMN	NONE
18-Nov-16	1	1041	CWD	1	WL	3	243	ON	3RS ET	22.2571	113.8373	AUTUMN	NONE
21-Nov-16	1	1035	CWD	5	NWL	3	9	ON	3RS ET	22.2844	113.8683	AUTUMN	NONE
28-Nov-16	1	1048	FP	1	SWL	3	52	ON	3RS ET	22.1579	113.9360	AUTUMN	NONE
28-Nov-16	2	1112	FP	1	SWL	4	125	ON	3RS ET	22.1689	113.9277	AUTUMN	NONE
28-Nov-16	3	1116	FP	1	SWL	4	183	ON	3RS ET	22.1703	113.9273	AUTUMN	NONE
28-Nov-16	4	1139	CWD	4	SWL	3	86	ON	3RS ET	22.2050	113.9178	AUTUMN	NONE
28-Nov-16	5	1430	CWD	1	SWL	3	125	ON	3RS ET	22.1967	113.8778	AUTUMN	NONE
28-Nov-16	6	1514	CWD	5	SWL	4	148	ON	3RS ET	22.1979	113.8683	AUTUMN	NONE
02-Dec-16	1	1129	CWD	2	NWL	3	172	ON	3RS ET	22.3780	113.8768	WINTER	NONE
02-Dec-16	2	1234	CWD	2	NWL	3	187	ON	3RS ET	22.3664	113.8876	WINTER	NONE
05-Dec-16	1	1028	CWD	2	WL	2	34	ON	3RS ET	22.2683	113.8608	WINTER	NONE
05-Dec-16	2	1045	CWD	1	WL	3	100	ON	3RS ET	22.2606	113.8480	WINTER	NONE
05-Dec-16	3	1110	CWD	5	WL	3	171	ON	3RS ET	22.2506	113.8363	WINTER	NONE
05-Dec-16	4	1154	CWD	1	WL	3	42	ON	3RS ET	22.2412	113.8365	WINTER	NONE
05-Dec-16	5	1250	CWD	11	WL	2	276	ON	3RS ET	22.2056	113.8398	WINTER	NONE
13-Dec-16	4	1239	CWD	2	SWL	2	611	ON	3RS ET	22.1771	113.9056	WINTER	NONE
13-Dec-16	5	1350	CWD	5	SWL	3	87	ON	3RS ET	22.1480	113.8884	WINTER	PAIR TRAWLER
13-Dec-16	6	1413	CWD	1	SWL	3	297	ON	3RS ET	22.1691	113.8878	WINTER	NONE
13-Dec-16	7	1436	CWD	1	SWL	2	72	ON	3RS ET	22.1998	113.8876	WINTER	NONE
13-Dec-16	8	1452	CWD	1	SWL	2	280	ON	3RS ET	22.2039	113.8779	WINTER	PURSE SEINE
13-Dec-16	9	1544	CWD	2	SWL	2	90	ON	3RS ET	22.1956	113.8685	WINTER	NONE
19-Dec-16	2	0943	CWD	6	NWL	3	687	ON	3RS ET	22.4160	113.8686	WINTER	NONE
19-Dec-16	3	1026	CWD	2	NWL	2	358	ON	3RS ET	22.3696	113.8679	WINTER	NONE
19-Dec-16	4	1036	CWD	4	NWL	2	460	ON	3RS ET	22.3689	113.8685	WINTER	NONE
19-Dec-16	5	1224	CWD	1	NWL	2	50	ON	3RS ET	22.3817	113.8760	WINTER	NONE

DATE	STG #	TIME	CWD/FP	GP SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.
19-Dec-16	6	1234	CWD	4	NWL	2	497	ON	3RS ET	22.3893	113.8778	WINTER	NONE
19-Dec-16	7	1255	CWD	9	NWL	2	119	ON	3RS ET	22.3903	113.8888	WINTER	PURSE SEINE
05-Jan-17	1	1010	CWD	9	WL	2	822	ON	3RS ET	22.2934	113.8612	WINTER	NONE
05-Jan-17	2	1051	CWD	2	WL	2	1361	ON	3RS ET	22.2738	113.8482	WINTER	NONE
05-Jan-17	3	1118	CWD	2	WL	2	118	ON	3RS ET	22.2584	113.8381	WINTER	NONE
05-Jan-17	4	1150	CWD	1	WL	2	65	ON	3RS ET	22.2413	113.8339	WINTER	NONE
05-Jan-17	5	1208	CWD	1	WL	2	86	ON	3RS ET	22.2321	113.8316	WINTER	NONE
05-Jan-17	6	1223	CWD	1	WL	1	115	ON	3RS ET	22.2248	113.8374	WINTER	NONE
05-Jan-17	7	1315	CWD	11	WL	1	84	ON	3RS ET	22.2049	113.8249	WINTER	PAIR TRAWLER
05-Jan-17	8	1347	CWD	1	WL	1	49	ON	3RS ET	22.1961	113.8317	WINTER	NONE
05-Jan-17	9	1356	CWD	1	WL	1	59	ON	3RS ET	22.1960	113.8416	WINTER	NONE
05-Jan-17	10	1436	CWD	5	SWL	2	190	ON	3RS ET	22.1726	113.8527	WINTER	PAIR TRAWLER
06-Jan-17	1	1006	CWD	2	SWL	2	N/A	OFF	3RS ET	22.1938	113.8471	WINTER	NONE
06-Jan-17	2	1453	CWD	1	SWL	1	N/A	OFF	3RS ET	22.2230	113.9451	WINTER	NONE
12-Jan-17	1	1121	CWD	5	NWL	2	260	ON	3RS ET	22.3739	113.8775	WINTER	NONE
13-Jan-17	1	1016	CWD	3	SWL	3	N/A	OFF	3RS ET	22.1948	113.8538	WINTER	NONE
13-Jan-17	2	1036	CWD	11	SWL	3	435	ON	3RS ET	22.1998	113.8688	WINTER	NONE
13-Jan-17	3	1334	CWD	2	SWL	2	41	ON	3RS ET	22.1547	113.9030	WINTER	NONE
13-Jan-17	4	1434	CWD	1	SWL	3	44	ON	3RS ET	22.1847	113.9278	WINTER	NONE
19-Jan-17	1	0926	CWD	3	AW	1	23	ON	3RS ET	22.3010	113.8864	WINTER	NONE
19-Jan-17	2	1022	CWD	1	WL	3	383	ON	3RS ET	22.2791	113.8613	WINTER	NONE
19-Jan-17	3	1107	CWD	6	WL	2	690	ON	3RS ET	22.2594	113.8430	WINTER	GILLNET
19-Jan-17	4	1131	CWD	1	WL	3	950	ON	3RS ET	22.2504	113.8413	WINTER	NONE
19-Jan-17	5	1217	CWD	2	WL	3	N/A	OFF	3RS ET	22.2234	113.8320	WINTER	NONE
19-Jan-17	6	1403	CWD	4	SWL	3	69	ON	3RS ET	22.1951	113.8587	WINTER	NONE
19-Jan-17	7	1436	CWD	2	WL	3	N/A	OFF	3RS ET	22.2198	113.8341	WINTER	NONE
19-Jan-17	8	1439	CWD	3	WL	3	N/A	OFF	3RS ET	22.2218	113.8351	WINTER	NONE

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

Notes:

CWD monitoring survey data of the two preceding survey months (i.e. November and December 2016) 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 January 2017 encounter rates STG and ANI in the whole survey area (NEL, NWL, AW, WL, SWL):

A total of 431.02 km of survey effort was collected under Beaufort Sea State 3 or below with favourable visibility; total no. of 19 on-effort sightings and total number of 68 dolphins from on-effort sightings were collected under such condition. Calculation of the encounter rates in January 2017 are shown as below:

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

$$STG = \frac{19}{431.02}\ x\ 100 = 4.41$$

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

$$ANI = \frac{68}{431.02}\ x\ 100 = 15.78$$

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

A total of 1213.19 km of survey effort was collected under Beaufort Sea State 3 or below with favourable visibility; total no. of 48 on-effort sightings and total number of 158 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)

$$STG = \frac{48}{1213.19}\ x\ 100 = 3.96$$

Running Quarterly Encounter Rate by Number of Dolphins (ANI)

$$ANI = \frac{158}{1213.19}\ x\ 100 = 13.02$$

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

NLMM015_20170105_1_1

NLMM016_20170105_1_11

SLMM036_20170105_1_3

WLMM064_20170105_1_2

WLMM065_20170105_1_2

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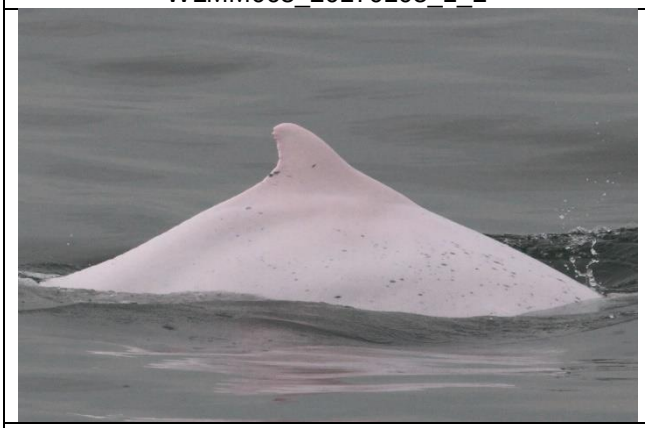
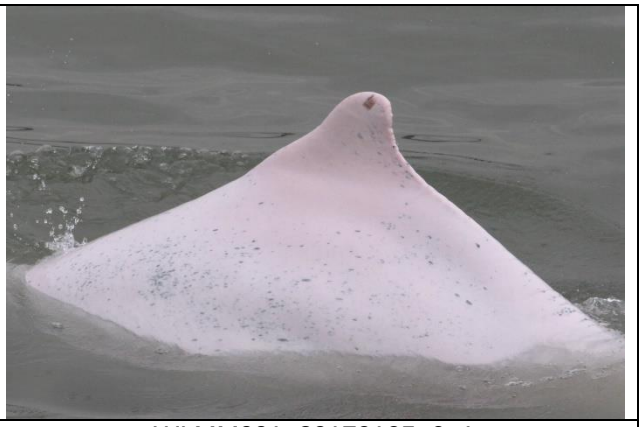


WLMM067_20170105_2_7

WLMM068_20170105_2_3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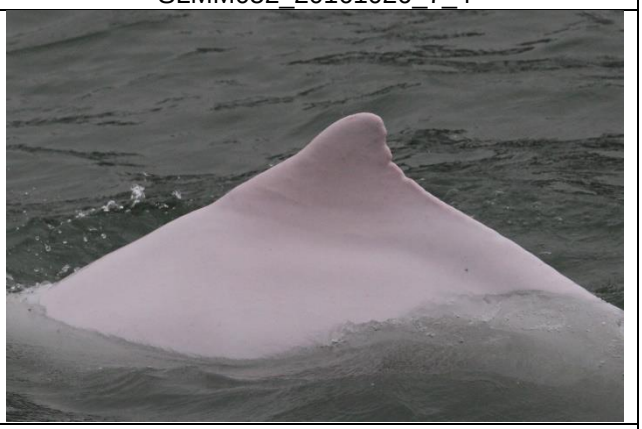
SLMM002_20170105_7_2	SLMM007_20170105_7_3
	
SLMM014_20170105_7_1	SLMM052_20161026_7_4
	
WLMM021_20170106_1_3	NLMM004_20170112_1_3

	
NLMM017_20170112_1_1	NLMM037_20170112_1_5
	
WLMM007_20170113_1_4	WLMM007_20170113_2_3
	
WLMM069_20170113_2_2	WLMM070_20170113_2_1
	
WLMM060_20170119_3_2_Right	WLMM063_20170119_3_3

	
WLMM068_20170119_3_3	WLMM071_20170119_3_2_Left
	
WLMM072_20170119_3_2	SLMM010_20170119_6_6
	
SLMM021_20170119_6_4	SLMM037_20170119_6_1
	
WLMM001_20170119_8_1	

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
9/Jan/17	Sha Chau	8:40	14:40	6:00	2	3	0	0
18/Jan/17	Lung Kwu Chau	8:40	14:40	6:00	2-3	3-4	3	1-5
20/Jan/17	Sha Chau	8:45	14:45	6:00	3	2	0	0
24/Jan/17	Lung Kwu Chau	8:33	14:33	6:00	2-3	3	1	4
25/Jan/17	Lung Kwu Chau	8:36	14:36	6:00	2-3	3	6	1-3

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

Ecological Monitoring

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

Appendix E. Status of Environmental Permits and Licences

Statutory Reference	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-RS0968-16	Valid from 21 Sep 2016 to 20 Mar 2017
		Stockpiling Area	GW-RS0974-16	Valid from 23 Sep 2016 to 22 Mar 2017
		Sheung Sha Chau	GW-RW0642-16	Valid from 13 Nov 2016 to 26 Mar 2017
	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 3 Oct 2016
		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-RS1276-16	Valid from 14 Dec 2016 to 13 Jun 2017

Statutory Reference	Description		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-RS1330-16	Valid from 28 Oct 2016 to 27 Jun 2017
	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-RS1019-16	Valid from 7 Oct 2016 to 6 Apr 2017 (Superseded by GW-RS1198-16 on 7 Dec 2016)
	Construction Noise Permit (General Works)	Works area of 3203	GW-RS1198-16	Valid from 7 Dec 2016 to 6 May 2017
	Construction Noise Permit (General Works)	Works area of 3203	GW-RS0014-17	Valid from 12 Jan 2017 to 11 Jun 2017
	Registration as Chemical Waste Producer	Works area of 3203	WPN 5213-951-S3954-01	Update the Registration on 12 Dec 2016
	Bill Account for disposal		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
		Site Office of 3204	407726	Receipt acknowledged by EPD on 19 Sep 2016
	Construction Noise Permit (General Works)	Works Area of 3204	GW-RS1294-16	Valid from 16 Dec 2016 to 15 Jun 2017 (Superseded by GW-RS1365-16 on 4 January 2017)
	Construction Noise Permit (General Works)	Works Area of 3204	GW-RS1365-16	Valid from 4 Jan 2017 to 3 Jul 2017
	Registration as Chemical Waste Producer	Works Area of 3204	WPN 5213-951-C4102-01	Completion of Registration on 15 Sep 2016

Statutory Reference	Description		Permit/ Reference No.	Status
	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
	Construction Noise Permit (General Works)	Works Area of 3205	GW-RS1191-16	Valid from 25 Nov 2016 to 24 May 2017 (Superseded by GW-RS1298-16 on 20 Dec 2016)
	Construction Noise Permit (General Works)	Works Area of 3205	GW-RS1298-16	Valid from 20 Dec 2016 to 19 Jun 2017 (Superseded by GW-RS0076-17 on 26 Jan 2017)
	Construction Noise Permit (General Works)	Works Area of 3205	GW-RS0076-17	Valid from 26 Jan 2017 to 25 Jul 2017
	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	Works area of 3206	WPN 5213-951-Z4035-01	Completion of Registration on 18 Nov 2016
	Registration as Chemical Waste Producer	Works area of 3206	WPN 5213-951-Z4035-02	Completion of Registration on 18 Nov 2016
	Construction Noise Permit (General Works)	Works Area of 3206	GW-RS1280-16	Valid from 14 Dec 2016 to 13 Mar 2017
	Bill Account for disposal	Works area of 3206	7026398	Approval granted from EPD on 16 Nov 2016
3213	Registration as Chemical Waste Producer	Works area of 3213	WPN 5213-951-W3376-04	Completion of Registration on 18 Nov 2016
	Bill Account for disposal		A/C 7025860	Approval granted from EPD on 12 Sep 2016

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

Statistics for Exceedances for 1-hour TSP, Noise and Waste 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
Waste	Action	0	0
	Limit	0	0
Water	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	2	0	0

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

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

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [MFM - 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-Jan	07:59	3A061	YFT	Arrival	11.7	-	-
01-Jan	08:32	8S210	MFM	Arrival	11.9	-	-
01-Jan	10:02	3A071	MFM	Arrival	11.9	-	-
01-Jan	10:40	3A081	ZUI	Arrival	13.1	-	-
01-Jan	10:40	8S212	MFM	Arrival	10.4	-	-
01-Jan	11:15	8S121	MFM	Departure	10.8	-	-
01-Jan	11:18	3A063	YFT	Arrival	11.7	-	-
01-Jan	12:24	3A181	ZUI	Departure	13.1	-	-
01-Jan	12:27	3A168	YFT	Departure	12.2	-	-
01-Jan	12:55	8S215	MFM	Arrival	12.8	-	-
01-Jan	13:04	3A064	YFT	Arrival	12.2	-	-
01-Jan	13:27	8S123	MFM	Departure	12.2	-	-
01-Jan	13:53	3A082	ZUI	Arrival	13.0	-	-
01-Jan	14:17	3A182	ZUI	Departure	13.0	-	-
01-Jan	14:18	3A164	YFT	Departure	13.4	-	-
01-Jan	14:58	3A065	YFT	Arrival	12.1	-	-
01-Jan	16:13	3A167	YFT	Departure	12.1	-	-
01-Jan	16:34	3A083	ZUI	Arrival	13.6	-	-
01-Jan	16:38	8S218	MFM	Arrival	12.8	-	-
01-Jan	17:02	3A183	ZUI	Departure	13.3	-	-
01-Jan	17:07	3A067	YFT	Arrival	12.4	-	-
01-Jan	17:09	8S126	MFM	Departure	13.5	-	-
01-Jan	19:04	3A166	YFT	Departure	12.7	-	-
01-Jan	19:40	3A084	ZUI	Arrival	13.8	-	-
01-Jan	20:05	3A185	ZUI	Departure	13.4	-	-
01-Jan	21:04	8S2113	MFM	Arrival	11.5	-	-
01-Jan	21:12	3A169	YFT	Departure	13.0	-	-
01-Jan	22:07	8S522	MFM	Departure	12.1	-	-
02-Jan	08:18	3A061	YFT	Arrival	11.2	-	-
02-Jan	08:28	8S210	MFM	Arrival	12.9	-	-
02-Jan	09:55	3A071	MFM	Arrival	11.9	-	-
02-Jan	10:40	8S212	MFM	Arrival	11.6	-	-
02-Jan	10:51	3A081	ZUI	Arrival	12.1	-	-
02-Jan	11:09	8S121	MFM	Departure	10.9	-	-
02-Jan	11:26	3A063	YFT	Arrival	12.9	-	-
02-Jan	12:14	3A181	ZUI	Departure	12.5	-	-
02-Jan	12:19	3A168	YFT	Departure	13.1	-	-
02-Jan	12:44	3A064	YFT	Arrival	12.3	-	-
02-Jan	12:50	8S215	MFM	Arrival	12.7	-	-
02-Jan	13:36	8S123	MFM	Departure	12.6	-	-
02-Jan	13:53	3A082	ZUI	Arrival	12.9	-	-
02-Jan	14:18	3A164	YFT	Departure	13.1	-	-
02-Jan	14:19	3A182	ZUI	Departure	13.2	-	-
02-Jan	15:02	3A065	YFT	Arrival	13.2	-	-
02-Jan	16:18	3A167	YFT	Departure	13.3	-	-
02-Jan	16:33	3A083	ZUI	Arrival	12.7	-	-
02-Jan	16:47	8S218	MFM	Arrival	12.6	-	-
02-Jan	16:51	3A067	YFT	Arrival	12.4	-	-
02-Jan	16:57	3A183	ZUI	Departure	13.1	-	-
02-Jan	17:17	8S126	MFM	Departure	13.5	-	-
02-Jan	19:13	3A166	YFT	Departure	12.7	-	-
02-Jan	19:46	3A084	ZUI	Arrival	12.2	-	-
02-Jan	20:08	3A185	ZUI	Departure	13.1	-	-
02-Jan	21:04	3A169	YFT	Departure	13.2	-	-
02-Jan	21:05	8S2113	MFM	Arrival	10.9	-	-
02-Jan	22:05	8S522	MFM	Departure	12.6	-	-
03-Jan	08:19	3A061	YFT	Arrival	12.7	-	-
03-Jan	08:29	8S210	MFM	Arrival	12.9	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [MFM - 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-Jan	09:52	3A071	MFM	Arrival	11.3	-	-
03-Jan	10:37	3A081	ZUI	Arrival	12.7	-	-
03-Jan	10:50	8S212	MFM	Arrival	10.3	-	-
03-Jan	11:17	8S121	MFM	Departure	11.0	-	-
03-Jan	11:22	3A063	YFT	Arrival	12.3	-	-
03-Jan	12:20	3A168	YFT	Departure	12.7	-	-
03-Jan	12:24	3A181	ZUI	Departure	13.3	-	-
03-Jan	13:00	8S215	MFM	Arrival	10.1	-	-
03-Jan	13:09	3A064	YFT	Arrival	11.4	-	-
03-Jan	13:45	8S123	MFM	Departure	10.8	-	-
03-Jan	13:46	3A082	ZUI	Arrival	13.8	-	-
03-Jan	14:20	3A182	ZUI	Departure	12.8	-	-
03-Jan	14:23	3A164	YFT	Departure	12.3	-	-
03-Jan	15:00	3A065	YFT	Arrival	12.8	-	-
03-Jan	16:16	3A167	YFT	Departure	12.4	-	-
03-Jan	16:34	3A083	ZUI	Arrival	12.4	-	-
03-Jan	16:51	8S218	MFM	Arrival	11.0	-	-
03-Jan	17:00	3A067	YFT	Arrival	11.9	-	-
03-Jan	17:02	3A183	ZUI	Departure	13.5	-	-
03-Jan	17:32	8S126	MFM	Departure	10.6	-	-
03-Jan	19:19	3A166	YFT	Departure	13.2	-	-
03-Jan	19:41	3A084	ZUI	Arrival	12.9	-	-
03-Jan	20:20	3A185	ZUI	Departure	13.1	-	-
03-Jan	21:08	8S2113	MFM	Arrival	12.4	-	-
03-Jan	21:08	3A169	YFT	Departure	12.2	-	-
03-Jan	22:00	8S522	MFM	Departure	12.2	-	-
04-Jan	08:18	3A061	YFT	Arrival	11.5	-	-
04-Jan	08:34	8S210	MFM	Arrival	11.3	-	-
04-Jan	09:46	3A071	MFM	Arrival	11.7	-	-
04-Jan	10:39	8S212	MFM	Arrival	10.9	-	-
04-Jan	10:43	3A081	ZUI	Arrival	13.2	-	-
04-Jan	11:15	8S121	MFM	Departure	12.0	-	-
04-Jan	11:21	3A063	YFT	Arrival	12.7	-	-
04-Jan	12:23	3A168	YFT	Departure	12.8	-	-
04-Jan	12:24	3A181	ZUI	Departure	12.5	-	-
04-Jan	12:48	8S215	MFM	Arrival	12.7	-	-
04-Jan	13:08	3A064	YFT	Arrival	12.1	-	-
04-Jan	13:21	8S123	MFM	Departure	13.6	-	-
04-Jan	13:47	3A082	ZUI	Arrival	13.9	-	-
04-Jan	14:16	3A182	ZUI	Departure	12.8	-	-
04-Jan	14:30	3A164	YFT	Departure	13.1	-	-
04-Jan	14:55	3A065	YFT	Arrival	12.8	-	-
04-Jan	16:21	3A167	YFT	Departure	13.0	-	-
04-Jan	16:34	3A083	ZUI	Arrival	13.1	-	-
04-Jan	16:46	8S218	MFM	Arrival	12.9	-	-
04-Jan	17:01	3A183	ZUI	Departure	13.0	-	-
04-Jan	17:08	3A067	YFT	Arrival	12.5	-	-
04-Jan	17:23	8S126	MFM	Departure	13.3	-	-
04-Jan	18:03	3A165	YFT	Departure	12.7	-	-
04-Jan	19:22	3A166	YFT	Departure	12.4	-	-
04-Jan	19:47	3A084	ZUI	Arrival	12.9	-	-
04-Jan	20:09	3A185	ZUI	Departure	13.7	-	-
04-Jan	21:02	8S2113	MFM	Arrival	11.5	-	-
04-Jan	21:30	3A169	YFT	Departure	12.9	≤5	<1
04-Jan	22:10	8S522	MFM	Departure	11.9	-	-
05-Jan	08:12	3A061	YFT	Arrival	12.9	-	-
05-Jan	08:20	8S210	MFM	Arrival	13.2	-	-
05-Jan	09:51	3A071	MFM	Arrival	11.4	-	-
05-Jan	10:35	8S212	MFM	Arrival	13.4	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [MFM - 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-Jan	10:43	3A081	ZUI	Arrival	12.0	-	-
05-Jan	11:15	8S121	MFM	Departure	12.6	-	-
05-Jan	11:19	3A063	YFT	Arrival	10.4	-	-
05-Jan	12:30	3A181	ZUI	Departure	13.4	-	-
05-Jan	12:32	3A168	YFT	Departure	12.7	-	-
05-Jan	12:52	8S215	MFM	Arrival	11.7	-	-
05-Jan	13:07	3A064	YFT	Arrival	12.7	-	-
05-Jan	13:15	8S123	MFM	Departure	11.6	-	-
05-Jan	13:47	3A082	ZUI	Arrival	13.5	-	-
05-Jan	14:23	3A164	YFT	Departure	13.3	-	-
05-Jan	14:25	3A182	ZUI	Departure	12.6	-	-
05-Jan	15:08	3A065	YFT	Arrival	11.3	-	-
05-Jan	16:19	3A167	YFT	Departure	11.6	-	-
05-Jan	16:34	3A083	ZUI	Arrival	13.1	-	-
05-Jan	16:52	8S218	MFM	Arrival	12.4	-	-
05-Jan	17:02	3A067	YFT	Arrival	12.7	-	-
05-Jan	17:26	3A183	ZUI	Departure	13.7	-	-
05-Jan	17:49	8S126	MFM	Departure	12.8	-	-
05-Jan	19:13	3A166	YFT	Departure	12.5	-	-
05-Jan	19:46	3A084	ZUI	Arrival	13.1	-	-
05-Jan	20:13	3A185	ZUI	Departure	14.0	-	-
05-Jan	20:52	8S2113	MFM	Arrival	12.6	-	-
05-Jan	21:12	3A169	YFT	Departure	12.8	-	-
05-Jan	22:08	8S522	MFM	Departure	12.2	-	-
06-Jan	08:03	3A061	YFT	Arrival	11.5	≤5	<1
06-Jan	08:28	8S210	MFM	Arrival	11.9	-	-
06-Jan	09:55	3A071	MFM	Arrival	12.7	-	-
06-Jan	10:37	8S212	MFM	Arrival	13.0	-	-
06-Jan	10:41	3A081	ZUI	Arrival	12.1	-	-
06-Jan	11:07	8S121	MFM	Departure	12.6	-	-
06-Jan	11:21	3A063	YFT	Arrival	11.3	-	-
06-Jan	12:22	3A168	YFT	Departure	12.5	-	-
06-Jan	12:24	3A181	ZUI	Departure	13.0	-	-
06-Jan	12:52	8S215	MFM	Arrival	8.4	-	-
06-Jan	13:03	3A064	YFT	Arrival	11.7	-	-
06-Jan	13:16	8S123	MFM	Departure	12.4	-	-
06-Jan	13:52	3A082	ZUI	Arrival	13.8	-	-
06-Jan	14:16	3A182	ZUI	Departure	13.2	-	-
06-Jan	14:16	3A164	YFT	Departure	12.5	-	-
06-Jan	15:02	3A065	YFT	Arrival	12.2	-	-
06-Jan	16:15	3A167	YFT	Departure	12.2	-	-
06-Jan	16:33	3A083	ZUI	Arrival	12.7	-	-
06-Jan	16:41	8S218	MFM	Arrival	12.2	-	-
06-Jan	17:01	3A183	ZUI	Departure	13.6	-	-
06-Jan	17:04	8S126	MFM	Departure	11.7	-	-
06-Jan	17:07	3A067	YFT	Arrival	12.2	-	-
06-Jan	19:07	3A166	YFT	Departure	12.5	-	-
06-Jan	19:42	3A084	ZUI	Arrival	12.8	-	-
06-Jan	20:07	3A185	ZUI	Departure	12.5	-	-
06-Jan	20:56	8S2113	MFM	Arrival	12.5	-	-
06-Jan	21:08	3A169	YFT	Departure	12.8	-	-
06-Jan	21:57	8S522	MFM	Departure	11.6	-	-
07-Jan	08:20	3A061	YFT	Arrival	12.7	-	-
07-Jan	08:31	8S210	MFM	Arrival	11.1	-	-
07-Jan	09:53	3A071	MFM	Arrival	12.6	-	-
07-Jan	10:41	3A081	ZUI	Arrival	12.3	-	-
07-Jan	10:45	8S212	MFM	Arrival	11.1	-	-
07-Jan	11:09	8S121	MFM	Departure	10.6	-	-
07-Jan	11:20	3A063	YFT	Arrival	11.9	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [MFM - 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-Jan	12:16	3A168	YFT	Departure	12.3	-	-
07-Jan	12:18	3A181	ZUI	Departure	13.2	-	-
07-Jan	12:59	3A064	YFT	Arrival	11.7	-	-
07-Jan	13:22	8S215	MFM	Arrival	11.7	-	-
07-Jan	13:42	8S123	MFM	Departure	12.1	-	-
07-Jan	13:47	3A082	ZUI	Arrival	13.0	-	-
07-Jan	14:13	3A182	ZUI	Departure	11.9	-	-
07-Jan	14:18	3A164	YFT	Departure	11.7	-	-
07-Jan	14:54	3A065	YFT	Arrival	12.3	-	-
07-Jan	16:18	3A167	YFT	Departure	12.7	-	-
07-Jan	16:36	3A083	ZUI	Arrival	12.7	-	-
07-Jan	16:41	8S218	MFM	Arrival	12.1	-	-
07-Jan	16:57	3A067	YFT	Arrival	11.2	-	-
07-Jan	17:08	3A183	ZUI	Departure	13.7	-	-
07-Jan	17:09	8S126	MFM	Departure	12.9	-	-
07-Jan	19:09	3A166	YFT	Departure	12.5	-	-
07-Jan	19:44	3A084	ZUI	Arrival	12.8	-	-
07-Jan	20:08	3A185	ZUI	Departure	13.4	-	-
07-Jan	20:52	8S2113	MFM	Arrival	12.6	-	-
07-Jan	21:05	3A169	YFT	Departure	12.7	-	-
07-Jan	21:59	8S522	MFM	Departure	12.7	-	-
08-Jan	08:16	3A061	YFT	Arrival	12.1	-	-
08-Jan	08:29	8S210	MFM	Arrival	12.0	-	-
08-Jan	10:01	3A071	MFM	Arrival	12.2	-	-
08-Jan	10:39	8S212	MFM	Arrival	12.6	-	-
08-Jan	10:43	3A081	ZUI	Arrival	13.5	-	-
08-Jan	11:12	8S121	MFM	Departure	12.8	-	-
08-Jan	11:19	3A063	YFT	Arrival	12.1	-	-
08-Jan	12:10	3A181	ZUI	Departure	12.9	-	-
08-Jan	12:23	3A168	YFT	Departure	12.8	-	-
08-Jan	12:43	8S215	MFM	Arrival	12.3	-	-
08-Jan	13:09	3A064	YFT	Arrival	11.7	-	-
08-Jan	13:24	8S123	MFM	Departure	11.5	-	-
08-Jan	13:46	3A082	ZUI	Arrival	12.9	-	-
08-Jan	14:18	3A164	YFT	Departure	13.2	-	-
08-Jan	14:22	3A182	ZUI	Departure	13.1	-	-
08-Jan	15:00	3A065	YFT	Arrival	12.3	-	-
08-Jan	16:20	3A167	YFT	Departure	12.6	-	-
08-Jan	16:34	3A083	ZUI	Arrival	13.6	-	-
08-Jan	16:44	8S218	MFM	Arrival	12.6	-	-
08-Jan	16:59	3A067	YFT	Arrival	12.4	-	-
08-Jan	17:16	3A183	ZUI	Departure	13.4	-	-
08-Jan	17:21	8S126	MFM	Departure	13.1	-	-
08-Jan	19:08	3A166	YFT	Departure	10.9	-	-
08-Jan	19:46	3A084	ZUI	Arrival	14.0	-	-
08-Jan	20:09	3A185	ZUI	Departure	13.5	-	-
08-Jan	21:00	3A169	YFT	Departure	12.9	-	-
08-Jan	21:03	8S2113	MFM	Arrival	12.5	-	-
09-Jan	08:19	3A061	YFT	Arrival	12.8	-	-
09-Jan	08:33	8S210	MFM	Arrival	13.0	-	-
09-Jan	09:58	3A071	MFM	Arrival	11.2	-	-
09-Jan	10:42	8S212	MFM	Arrival	12.4	-	-
09-Jan	10:44	3A081	ZUI	Arrival	13.4	-	-
09-Jan	11:07	8S121	MFM	Departure	12.5	-	-
09-Jan	11:19	3A063	YFT	Arrival	11.6	-	-
09-Jan	12:19	3A168	YFT	Departure	11.6	-	-
09-Jan	12:19	3A181	ZUI	Departure	13.8	-	-
09-Jan	12:51	8S215	MFM	Arrival	12.1	-	-
09-Jan	13:03	3A064	YFT	Arrival	11.5	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [MFM - 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-Jan	13:14	8S123	MFM	Departure	12.2	-	-
09-Jan	13:50	3A082	ZUI	Arrival	13.3	-	-
09-Jan	14:16	3A164	YFT	Departure	13.2	-	-
09-Jan	14:18	3A182	ZUI	Departure	13.3	-	-
09-Jan	14:57	3A065	YFT	Arrival	11.4	-	-
09-Jan	16:21	3A167	YFT	Departure	11.9	-	-
09-Jan	16:41	3A083	ZUI	Arrival	12.2	-	-
09-Jan	16:46	8S218	MFM	Arrival	12.5	-	-
09-Jan	17:05	8S126	MFM	Departure	12.2	-	-
09-Jan	17:06	3A067	YFT	Arrival	12.7	-	-
09-Jan	17:08	3A183	ZUI	Departure	13.6	-	-
09-Jan	19:10	3A166	YFT	Departure	12.1	-	-
09-Jan	19:43	3A084	ZUI	Arrival	12.9	-	-
09-Jan	20:10	3A185	ZUI	Departure	13.5	-	-
09-Jan	20:58	8S2113	MFM	Arrival	11.8	-	-
09-Jan	21:11	3A169	YFT	Departure	11.4	-	-
09-Jan	21:59	8S522	MFM	Departure	11.4	-	-
10-Jan	08:19	3A061	YFT	Arrival	11.7	-	-
10-Jan	08:35	8S210	MFM	Arrival	11.5	-	-
10-Jan	10:05	3A071	MFM	Arrival	12.3	-	-
10-Jan	10:35	8S212	MFM	Arrival	13.1	-	-
10-Jan	10:39	3A081	ZUI	Arrival	11.3	-	-
10-Jan	11:13	8S121	MFM	Departure	13.2	-	-
10-Jan	11:23	3A063	YFT	Arrival	12.8	-	-
10-Jan	12:11	3A181	ZUI	Departure	12.6	-	-
10-Jan	12:21	3A168	YFT	Departure	12.8	-	-
10-Jan	12:54	8S215	MFM	Arrival	10.9	-	-
10-Jan	13:02	3A064	YFT	Arrival	12.3	-	-
10-Jan	13:39	8S123	MFM	Departure	11.8	-	-
10-Jan	13:50	3A082	ZUI	Arrival	12.8	-	-
10-Jan	14:14	3A164	YFT	Departure	12.5	-	-
10-Jan	14:20	3A182	ZUI	Departure	12.5	-	-
10-Jan	15:01	3A065	YFT	Arrival	12.2	-	-
10-Jan	16:26	3A167	YFT	Departure	13.3	-	-
10-Jan	16:39	3A083	ZUI	Arrival	12.9	-	-
10-Jan	16:43	8S218	MFM	Arrival	10.5	-	-
10-Jan	17:00	3A067	YFT	Arrival	11.9	-	-
10-Jan	17:07	8S126	MFM	Departure	11.9	-	-
10-Jan	17:13	3A183	ZUI	Departure	12.9	-	-
10-Jan	19:01	3A166	YFT	Departure	12.0	-	-
10-Jan	19:48	3A084	ZUI	Arrival	12.7	-	-
10-Jan	20:12	3A185	ZUI	Departure	13.0	-	-
10-Jan	20:47	8S2113	MFM	Arrival	12.9	-	-
10-Jan	20:59	3A169	YFT	Departure	12.1	-	-
10-Jan	22:01	8S522	MFM	Departure	13.3	-	-
11-Jan	08:20	3A061	YFT	Arrival	12.6	-	-
11-Jan	08:33	8S210	MFM	Arrival	11.6	-	-
11-Jan	09:51	3A071	MFM	Arrival	12.5	-	-
11-Jan	10:34	8S212	MFM	Arrival	12.5	-	-
11-Jan	10:40	3A081	ZUI	Arrival	13.2	-	-
11-Jan	11:07	8S121	MFM	Departure	13.3	-	-
11-Jan	11:16	3A063	YFT	Arrival	12.4	-	-
11-Jan	12:15	3A181	ZUI	Departure	12.9	-	-
11-Jan	12:16	3A168	YFT	Departure	12.7	-	-
11-Jan	12:50	8S215	MFM	Arrival	11.9	-	-
11-Jan	13:01	3A064	YFT	Arrival	11.9	-	-
11-Jan	13:19	8S123	MFM	Departure	12.4	-	-
11-Jan	13:56	3A082	ZUI	Arrival	13.4	-	-
11-Jan	14:16	3A182	ZUI	Departure	13.5	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [MFM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
11-Jan	14:17	3A164	YFT	Departure	12.7	-	-
11-Jan	14:55	3A065	YFT	Arrival	12.5	-	-
11-Jan	16:29	3A167	YFT	Departure	13.1	-	-
11-Jan	16:41	3A083	ZUI	Arrival	12.8	-	-
11-Jan	16:47	8S218	MFM	Arrival	12.1	-	-
11-Jan	17:01	3A067	YFT	Arrival	12.0	-	-
11-Jan	17:02	8S126	MFM	Departure	12.1	-	-
11-Jan	17:05	3A183	ZUI	Departure	13.2	-	-
11-Jan	19:02	3A166	YFT	Departure	13.7	-	-
11-Jan	19:43	3A084	ZUI	Arrival	13.1	-	-
11-Jan	20:05	3A185	ZUI	Departure	13.4	-	-
11-Jan	20:52	8S2113	MFM	Arrival	12.3	-	-
11-Jan	21:07	3A169	YFT	Departure	12.1	-	-
11-Jan	21:56	8S522	MFM	Departure	13.2	-	-
12-Jan	08:12	3A061	YFT	Arrival	12.5	-	-
12-Jan	08:34	8S210	MFM	Arrival	12.1	-	-
12-Jan	09:58	3A071	MFM	Arrival	12.8	-	-
12-Jan	10:39	8S212	MFM	Arrival	12.3	-	-
12-Jan	10:54	3A081	ZUI	Arrival	12.2	-	-
12-Jan	11:05	8S121	MFM	Departure	11.8	-	-
12-Jan	11:19	3A063	YFT	Arrival	12.4	-	-
12-Jan	12:13	3A181	ZUI	Departure	13.4	-	-
12-Jan	12:19	3A168	YFT	Departure	13.0	-	-
12-Jan	12:48	8S215	MFM	Arrival	12.2	-	-
12-Jan	12:54	3A064	YFT	Arrival	11.9	-	-
12-Jan	13:27	8S123	MFM	Departure	12.0	-	-
12-Jan	13:54	3A082	ZUI	Arrival	13.0	-	-
12-Jan	14:23	3A164	YFT	Departure	10.9	-	-
12-Jan	14:27	3A182	ZUI	Departure	13.5	-	-
12-Jan	14:41	3A065	YFT	Arrival	12.2	-	-
12-Jan	16:09	3A167	YFT	Departure	12.5	-	-
12-Jan	16:40	3A083	ZUI	Arrival	13.0	-	-
12-Jan	16:44	8S218	MFM	Arrival	11.6	-	-
12-Jan	16:54	3A067	YFT	Arrival	11.3	-	-
12-Jan	17:04	8S126	MFM	Departure	11.0	-	-
12-Jan	17:06	3A183	ZUI	Departure	12.5	-	-
12-Jan	19:03	3A166	YFT	Departure	12.0	-	-
12-Jan	19:51	3A084	ZUI	Arrival	13.1	-	-
12-Jan	20:07	3A185	ZUI	Departure	12.8	-	-
12-Jan	21:00	8S2113	MFM	Arrival	12.0	-	-
12-Jan	21:00	3A169	YFT	Departure	12.0	-	-
12-Jan	21:54	8S522	MFM	Departure	12.0	-	-
13-Jan	08:20	3A061	YFT	Arrival	11.4	-	-
13-Jan	08:27	8S210	MFM	Arrival	11.8	-	-
13-Jan	09:58	3A071	MFM	Arrival	12.5	-	-
13-Jan	10:42	8S212	MFM	Arrival	10.0	-	-
13-Jan	10:43	3A081	ZUI	Arrival	12.3	-	-
13-Jan	11:06	8S121	MFM	Departure	11.3	-	-
13-Jan	11:20	3A063	YFT	Arrival	13.4	-	-
13-Jan	12:17	3A168	YFT	Departure	13.0	-	-
13-Jan	12:21	3A181	ZUI	Departure	12.9	-	-
13-Jan	12:40	3A064	YFT	Arrival	12.9	-	-
13-Jan	12:48	8S215	MFM	Arrival	10.7	-	-
13-Jan	13:19	8S123	MFM	Departure	12.1	-	-
13-Jan	13:45	3A082	ZUI	Arrival	12.4	-	-
13-Jan	14:16	3A164	YFT	Departure	13.4	-	-
13-Jan	14:19	3A182	ZUI	Departure	12.5	-	-
13-Jan	15:09	3A065	YFT	Arrival	13.2	-	-
13-Jan	16:11	3A167	YFT	Departure	13.4	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [MFM - 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-Jan	16:35	8S218	MFM	Arrival	12.3	-	-
13-Jan	16:38	3A083	ZUI	Arrival	12.9	-	-
13-Jan	16:53	3A067	YFT	Arrival	13.0	-	-
13-Jan	16:57	3A183	ZUI	Departure	12.9	-	-
13-Jan	16:57	8S126	MFM	Departure	13.2	-	-
13-Jan	18:59	3A166	YFT	Departure	12.4	-	-
13-Jan	19:47	3A084	ZUI	Arrival	12.2	-	-
13-Jan	20:15	3A185	ZUI	Departure	13.2	-	-
13-Jan	20:54	8S2113	MFM	Arrival	11.7	-	-
13-Jan	21:03	3A169	YFT	Departure	11.6	-	-
13-Jan	22:00	8S522	MFM	Departure	12.2	-	-
14-Jan	08:23	3A061	YFT	Arrival	12.5	-	-
14-Jan	08:41	8S210	MFM	Arrival	12.9	-	-
14-Jan	09:52	3A071	MFM	Arrival	12.3	-	-
14-Jan	10:37	8S212	MFM	Arrival	12.4	-	-
14-Jan	10:55	3A081	ZUI	Arrival	12.6	-	-
14-Jan	11:01	8S121	MFM	Departure	12.5	-	-
14-Jan	11:20	3A063	YFT	Arrival	11.7	-	-
14-Jan	12:12	3A181	ZUI	Departure	13.3	-	-
14-Jan	12:15	3A168	YFT	Departure	11.3	-	-
14-Jan	12:48	8S215	MFM	Arrival	12.9	-	-
14-Jan	12:59	3A064	YFT	Arrival	12.2	-	-
14-Jan	13:16	8S123	MFM	Departure	13.3	-	-
14-Jan	13:54	3A082	ZUI	Arrival	13.8	-	-
14-Jan	14:11	3A164	YFT	Departure	12.6	-	-
14-Jan	14:17	3A182	ZUI	Departure	13.8	-	-
14-Jan	15:04	3A065	YFT	Arrival	13.1	-	-
14-Jan	16:15	3A167	YFT	Departure	11.9	-	-
14-Jan	16:38	8S218	MFM	Arrival	13.4	-	-
14-Jan	16:41	3A083	ZUI	Arrival	12.1	-	-
14-Jan	17:01	3A067	YFT	Arrival	12.2	-	-
14-Jan	17:02	8S126	MFM	Departure	13.3	-	-
14-Jan	17:04	3A183	ZUI	Departure	12.6	-	-
14-Jan	19:10	3A166	YFT	Departure	13.2	-	-
14-Jan	19:47	3A084	ZUI	Arrival	12.3	-	-
14-Jan	20:08	3A185	ZUI	Departure	13.1	-	-
14-Jan	21:04	8S2113	MFM	Arrival	9.6	-	-
14-Jan	21:04	3A169	YFT	Departure	11.5	-	-
14-Jan	21:53	8S522	MFM	Departure	11.6	-	-
15-Jan	08:20	3A061	YFT	Arrival	11.0	-	-
15-Jan	08:44	8S210	MFM	Arrival	12.0	-	-
15-Jan	10:01	3A071	MFM	Arrival	11.0	-	-
15-Jan	10:36	8S212	MFM	Arrival	12.5	-	-
15-Jan	10:52	3A081	ZUI	Arrival	11.6	-	-
15-Jan	10:53	3A063	YFT	Arrival	13.4	≤5	<1
15-Jan	11:10	8S121	MFM	Departure	13.2	-	-
15-Jan	12:11	3A168	YFT	Departure	13.4	-	-
15-Jan	12:13	3A181	ZUI	Departure	13.6	-	-
15-Jan	12:50	8S215	MFM	Arrival	12.4	-	-
15-Jan	13:04	3A064	YFT	Arrival	13.1	-	-
15-Jan	13:13	8S123	MFM	Departure	12.5	-	-
15-Jan	13:51	3A082	ZUI	Arrival	13.4	-	-
15-Jan	14:22	3A182	ZUI	Departure	13.7	-	-
15-Jan	14:23	3A164	YFT	Departure	13.2	-	-
15-Jan	14:52	3A065	YFT	Arrival	13.4	-	-
15-Jan	16:13	3A167	YFT	Departure	12.7	-	-
15-Jan	16:43	3A083	ZUI	Arrival	12.5	-	-
15-Jan	16:44	3A067	YFT	Arrival	13.4	≤5	<1
15-Jan	16:47	8S218	MFM	Arrival	12.0	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [MFM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
15-Jan	17:20	3A183	ZUI	Departure	14.3	-	-
15-Jan	17:20	8S126	MFM	Departure	12.7	-	-
15-Jan	19:07	3A166	YFT	Departure	12.8	-	-
15-Jan	19:52	3A084	ZUI	Arrival	13.7	-	-
15-Jan	20:16	3A185	ZUI	Departure	12.5	-	-
15-Jan	20:51	8S2113	MFM	Arrival	12.5	-	-
15-Jan	21:09	3A169	YFT	Departure	13.4	-	-
15-Jan	22:16	8S522	MFM	Departure	12.1	-	-
16-Jan	08:21	3A061	YFT	Arrival	12.5	-	-
16-Jan	08:35	8S210	MFM	Arrival	11.8	-	-
16-Jan	09:53	3A071	MFM	Arrival	11.2	-	-
16-Jan	10:41	8S212	MFM	Arrival	12.3	-	-
16-Jan	10:49	3A081	ZUI	Arrival	12.5	-	-
16-Jan	11:07	8S121	MFM	Departure	12.3	-	-
16-Jan	11:13	3A063	YFT	Arrival	12.2	-	-
16-Jan	12:19	3A181	ZUI	Departure	13.9	-	-
16-Jan	12:26	3A168	YFT	Departure	10.1	-	-
16-Jan	12:50	8S215	MFM	Arrival	10.3	-	-
16-Jan	12:58	3A064	YFT	Arrival	12.8	-	-
16-Jan	13:19	8S123	MFM	Departure	11.2	-	-
16-Jan	13:44	3A082	ZUI	Arrival	12.0	-	-
16-Jan	14:22	3A164	YFT	Departure	13.3	-	-
16-Jan	14:23	3A182	ZUI	Departure	12.7	-	-
16-Jan	15:01	3A065	YFT	Arrival	12.1	-	-
16-Jan	16:21	3A167	YFT	Departure	12.2	-	-
16-Jan	16:38	3A083	ZUI	Arrival	13.4	-	-
16-Jan	16:45	8S218	MFM	Arrival	10.9	-	-
16-Jan	16:58	3A067	YFT	Arrival	13.0	-	-
16-Jan	17:21	3A183	ZUI	Departure	14.0	-	-
16-Jan	17:21	8S126	MFM	Departure	12.4	-	-
16-Jan	19:31	3A166	YFT	Departure	12.1	≤5	<1
16-Jan	19:54	3A084	ZUI	Arrival	12.9	-	-
16-Jan	20:14	3A185	ZUI	Departure	14.0	-	-
16-Jan	20:59	8S2113	MFM	Arrival	11.2	-	-
16-Jan	21:08	3A169	YFT	Departure	11.7	-	-
16-Jan	22:14	8S522	MFM	Departure	12.2	-	-
17-Jan	08:19	3A061	YFT	Arrival	11.4	-	-
17-Jan	08:26	8S210	MFM	Arrival	10.9	-	-
17-Jan	10:03	3A071	MFM	Arrival	12.4	-	-
17-Jan	10:37	8S212	MFM	Arrival	12.4	-	-
17-Jan	10:48	3A081	ZUI	Arrival	12.2	-	-
17-Jan	11:08	8S121	MFM	Departure	12.1	-	-
17-Jan	11:27	3A063	YFT	Arrival	12.4	-	-
17-Jan	12:08	3A181	ZUI	Departure	13.8	-	-
17-Jan	12:17	3A168	YFT	Departure	13.2	-	-
17-Jan	12:49	8S215	MFM	Arrival	12.3	-	-
17-Jan	13:05	3A064	YFT	Arrival	12.2	-	-
17-Jan	13:17	8S123	MFM	Departure	12.0	-	-
17-Jan	13:56	3A082	ZUI	Arrival	11.8	-	-
17-Jan	14:19	3A182	ZUI	Departure	13.4	-	-
17-Jan	14:28	3A164	YFT	Departure	12.2	-	-
17-Jan	15:07	3A065	YFT	Arrival	12.2	-	-
17-Jan	16:14	3A167	YFT	Departure	12.1	-	-
17-Jan	16:36	3A083	ZUI	Arrival	13.4	-	-
17-Jan	16:48	8S218	MFM	Arrival	12.3	-	-
17-Jan	17:05	3A067	YFT	Arrival	12.4	-	-
17-Jan	17:08	3A183	ZUI	Departure	14.0	-	-
17-Jan	17:11	8S126	MFM	Departure	12.3	-	-
17-Jan	19:01	3A166	YFT	Departure	11.7	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [MFM - 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-Jan	19:45	3A084	ZUI	Arrival	13.3	-	-
17-Jan	20:08	3A185	ZUI	Departure	13.8	-	-
17-Jan	20:52	8S2113	MFM	Arrival	11.4	-	-
17-Jan	20:57	3A169	YFT	Departure	12.9	-	-
17-Jan	21:57	8S522	MFM	Departure	11.8	-	-
18-Jan	08:20	3A061	YFT	Arrival	12.2	-	-
18-Jan	08:35	8S210	MFM	Arrival	11.6	-	-
18-Jan	10:01	3A071	MFM	Arrival	11.4	-	-
18-Jan	10:43	8S212	MFM	Arrival	11.5	-	-
18-Jan	10:50	3A081	ZUI	Arrival	13.3	-	-
18-Jan	11:05	8S121	MFM	Departure	12.0	-	-
18-Jan	11:16	3A063	YFT	Arrival	12.9	-	-
18-Jan	12:10	3A181	ZUI	Departure	13.1	-	-
18-Jan	12:18	3A168	YFT	Departure	12.5	-	-
18-Jan	12:36	8S215	MFM	Arrival	11.5	-	-
18-Jan	13:08	3A064	YFT	Arrival	12.3	-	-
18-Jan	13:13	8S123	MFM	Departure	10.8	-	-
18-Jan	13:50	3A082	ZUI	Arrival	13.1	-	-
18-Jan	14:13	3A182	ZUI	Departure	13.9	-	-
18-Jan	14:17	3A164	YFT	Departure	12.6	-	-
18-Jan	14:57	3A065	YFT	Arrival	12.7	-	-
18-Jan	16:12	3A167	YFT	Departure	13.2	-	-
18-Jan	16:39	3A083	ZUI	Arrival	13.9	-	-
18-Jan	16:40	8S218	MFM	Arrival	12.6	-	-
18-Jan	17:10	3A067	YFT	Arrival	12.3	-	-
18-Jan	17:13	8S126	MFM	Departure	10.9	-	-
18-Jan	17:14	3A183	ZUI	Departure	13.6	-	-
18-Jan	19:13	3A166	YFT	Departure	10.7	-	-
18-Jan	19:50	3A084	ZUI	Arrival	14.1	-	-
18-Jan	20:09	3A185	ZUI	Departure	13.4	-	-
18-Jan	20:48	8S2113	MFM	Arrival	11.9	-	-
18-Jan	20:58	3A169	YFT	Departure	13.1	-	-
18-Jan	21:57	8S522	MFM	Departure	13.6	-	-
19-Jan	08:15	3A061	YFT	Arrival	13.1	-	-
19-Jan	08:22	8S210	MFM	Arrival	12.6	-	-
19-Jan	09:59	3A071	MFM	Arrival	12.7	-	-
19-Jan	10:43	8S212	MFM	Arrival	10.8	-	-
19-Jan	10:50	3A081	ZUI	Arrival	12.4	-	-
19-Jan	11:13	8S121	MFM	Departure	10.9	-	-
19-Jan	11:21	3A063	YFT	Arrival	11.6	-	-
19-Jan	12:18	3A168	YFT	Departure	11.8	-	-
19-Jan	12:20	3A181	ZUI	Departure	14.1	-	-
19-Jan	12:53	8S215	MFM	Arrival	10.3	-	-
19-Jan	13:00	3A064	YFT	Arrival	12.9	-	-
19-Jan	13:24	8S123	MFM	Departure	11.9	-	-
19-Jan	13:47	3A082	ZUI	Arrival	12.1	-	-
19-Jan	14:18	3A182	ZUI	Departure	11.8	-	-
19-Jan	14:25	3A164	YFT	Departure	13.5	-	-
19-Jan	14:52	3A065	YFT	Arrival	11.7	-	-
19-Jan	16:16	3A167	YFT	Departure	11.8	-	-
19-Jan	16:36	3A083	ZUI	Arrival	13.0	-	-
19-Jan	16:55	8S218	MFM	Arrival	11.2	-	-
19-Jan	17:06	3A067	YFT	Arrival	13.1	-	-
19-Jan	17:17	3A183	ZUI	Departure	14.0	-	-
19-Jan	17:17	8S126	MFM	Departure	11.7	-	-
19-Jan	19:01	3A166	YFT	Departure	13.1	-	-
19-Jan	19:54	3A084	ZUI	Arrival	13.2	-	-
19-Jan	20:13	3A185	ZUI	Departure	13.9	-	-
19-Jan	20:45	8S2113	MFM	Arrival	13.7	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [MFM - 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-Jan	20:58	3A169	YFT	Departure	12.4	-	-
19-Jan	21:56	8S522	MFM	Departure	13.3	-	-
20-Jan	08:20	3A061	YFT	Arrival	11.7	-	-
20-Jan	08:39	8S210	MFM	Arrival	11.3	-	-
20-Jan	10:12	3A071	MFM	Arrival	12.2	-	-
20-Jan	10:40	8S212	MFM	Arrival	12.3	-	-
20-Jan	10:55	3A081	ZUI	Arrival	11.7	-	-
20-Jan	11:07	8S121	MFM	Departure	12.8	-	-
20-Jan	11:30	3A063	YFT	Arrival	10.9	-	-
20-Jan	12:13	3A168	YFT	Departure	11.3	-	-
20-Jan	12:15	3A181	ZUI	Departure	14.0	-	-
20-Jan	12:44	8S215	MFM	Arrival	12.0	-	-
20-Jan	13:03	3A064	YFT	Arrival	11.8	-	-
20-Jan	13:16	8S123	MFM	Departure	12.1	-	-
20-Jan	13:54	3A082	ZUI	Arrival	12.5	-	-
20-Jan	14:18	3A164	YFT	Departure	11.4	-	-
20-Jan	14:20	3A182	ZUI	Departure	12.6	-	-
20-Jan	15:02	3A065	YFT	Arrival	12.1	-	-
20-Jan	16:17	3A167	YFT	Departure	12.8	-	-
20-Jan	16:45	3A083	ZUI	Arrival	12.9	-	-
20-Jan	16:52	8S218	MFM	Arrival	11.7	-	-
20-Jan	17:02	3A067	YFT	Arrival	11.8	-	-
20-Jan	17:08	8S126	MFM	Departure	11.3	-	-
20-Jan	17:09	3A183	ZUI	Departure	14.0	-	-
20-Jan	19:15	3A166	YFT	Departure	12.6	-	-
20-Jan	19:50	3A084	ZUI	Arrival	12.7	-	-
20-Jan	20:12	3A185	ZUI	Departure	14.1	-	-
20-Jan	20:56	8S2113	MFM	Arrival	12.4	-	-
20-Jan	20:59	3A169	YFT	Departure	13.0	-	-
20-Jan	22:04	8S522	MFM	Departure	12.5	-	-
21-Jan	08:20	3A061	YFT	Arrival	11.1	-	-
21-Jan	08:36	8S210	MFM	Arrival	12.2	-	-
21-Jan	10:02	3A071	MFM	Arrival	12.9	-	-
21-Jan	10:46	3A081	ZUI	Arrival	12.7	-	-
21-Jan	10:50	8S212	MFM	Arrival	10.6	-	-
21-Jan	11:20	8S121	MFM	Departure	11.9	-	-
21-Jan	11:24	3A063	YFT	Arrival	12.2	-	-
21-Jan	12:11	3A181	ZUI	Departure	13.8	-	-
21-Jan	12:12	3A168	YFT	Departure	12.6	-	-
21-Jan	12:55	8S215	MFM	Arrival	11.7	-	-
21-Jan	13:04	3A064	YFT	Arrival	11.1	-	-
21-Jan	13:19	8S123	MFM	Departure	11.2	-	-
21-Jan	13:57	3A082	ZUI	Arrival	12.0	-	-
21-Jan	14:10	3A164	YFT	Departure	11.8	-	-
21-Jan	14:14	3A182	ZUI	Departure	13.5	-	-
21-Jan	15:02	3A065	YFT	Arrival	12.3	-	-
21-Jan	16:17	3A167	YFT	Departure	12.3	-	-
21-Jan	16:43	3A083	ZUI	Arrival	13.2	-	-
21-Jan	16:50	8S218	MFM	Arrival	7.8	-	-
21-Jan	17:02	3A067	YFT	Arrival	11.7	-	-
21-Jan	17:10	8S126	MFM	Departure	11.0	-	-
21-Jan	17:17	3A183	ZUI	Departure	13.9	-	-
21-Jan	19:04	3A166	YFT	Departure	12.7	-	-
21-Jan	20:05	3A084	ZUI	Arrival	13.3	-	-
21-Jan	20:24	3A185	ZUI	Departure	13.9	-	-
21-Jan	20:52	8S2113	MFM	Arrival	13.2	-	-
21-Jan	20:55	3A169	YFT	Departure	13.0	-	-
21-Jan	21:57	8S522	MFM	Departure	13.1	-	-
22-Jan	08:37	3A061	YFT	Arrival	11.8	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [MFM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
22-Jan	08:40	8S210	MFM	Arrival	11.9	-	-
22-Jan	10:08	3A071	MFM	Arrival	12.0	-	-
22-Jan	10:38	8S212	MFM	Arrival	12.6	-	-
22-Jan	10:46	3A081	ZUI	Arrival	12.7	-	-
22-Jan	11:04	8S121	MFM	Departure	13.6	-	-
22-Jan	11:33	3A063	YFT	Arrival	11.9	-	-
22-Jan	12:08	3A181	ZUI	Departure	13.6	-	-
22-Jan	12:15	3A168	YFT	Departure	12.4	-	-
22-Jan	12:54	8S215	MFM	Arrival	10.7	-	-
22-Jan	13:04	3A064	YFT	Arrival	12.7	-	-
22-Jan	13:16	8S123	MFM	Departure	10.8	-	-
22-Jan	13:52	3A082	ZUI	Arrival	11.7	-	-
22-Jan	14:21	3A164	YFT	Departure	13.0	-	-
22-Jan	14:25	3A182	ZUI	Departure	12.0	-	-
22-Jan	14:58	3A065	YFT	Arrival	11.8	-	-
22-Jan	16:23	3A167	YFT	Departure	12.0	-	-
22-Jan	16:51	8S218	MFM	Arrival	10.5	-	-
22-Jan	17:04	3A083	ZUI	Arrival	13.1	-	-
22-Jan	17:04	3A067	YFT	Arrival	11.4	-	-
22-Jan	17:21	8S126	MFM	Departure	11.0	-	-
22-Jan	17:23	3A183	ZUI	Departure	13.9	-	-
22-Jan	19:08	3A166	YFT	Departure	13.1	-	-
22-Jan	20:02	3A084	ZUI	Arrival	12.9	-	-
22-Jan	20:25	3A185	ZUI	Departure	13.6	-	-
22-Jan	20:54	8S2113	MFM	Arrival	11.8	-	-
22-Jan	21:05	3A169	YFT	Departure	11.7	-	-
22-Jan	22:04	8S522	MFM	Departure	12.0	-	-
23-Jan	08:17	3A061	YFT	Arrival	12.0	-	-
23-Jan	08:30	8S210	MFM	Arrival	11.6	-	-
23-Jan	10:05	3A071	MFM	Arrival	11.4	-	-
23-Jan	10:42	3A081	ZUI	Arrival	13.7	-	-
23-Jan	10:50	8S212	MFM	Arrival	13.0	-	-
23-Jan	11:20	8S121	MFM	Departure	11.4	-	-
23-Jan	11:22	3A063	YFT	Arrival	12.4	-	-
23-Jan	12:11	3A181	ZUI	Departure	12.9	-	-
23-Jan	12:16	3A168	YFT	Departure	13.1	-	-
23-Jan	12:50	8S215	MFM	Arrival	12.2	-	-
23-Jan	13:01	3A064	YFT	Arrival	11.9	-	-
23-Jan	13:21	8S123	MFM	Departure	12.0	-	-
23-Jan	14:10	3A082	ZUI	Arrival	12.6	-	-
23-Jan	14:18	3A164	YFT	Departure	12.0	-	-
23-Jan	14:24	3A182	ZUI	Departure	13.1	-	-
23-Jan	15:01	3A065	YFT	Arrival	13.0	-	-
23-Jan	16:12	3A167	YFT	Departure	13.3	-	-
23-Jan	16:39	3A083	ZUI	Arrival	13.5	-	-
23-Jan	16:43	8S218	MFM	Arrival	11.0	-	-
23-Jan	16:53	3A067	YFT	Arrival	12.3	-	-
23-Jan	17:06	8S126	MFM	Departure	11.9	-	-
23-Jan	17:18	3A183	ZUI	Departure	13.8	-	-
23-Jan	19:13	3A166	YFT	Departure	11.1	-	-
23-Jan	19:58	3A084	ZUI	Arrival	13.8	-	-
23-Jan	20:17	3A185	ZUI	Departure	13.3	-	-
23-Jan	20:47	8S2113	MFM	Arrival	13.3	-	-
23-Jan	21:12	3A169	YFT	Departure	12.0	-	-
23-Jan	21:57	8S522	MFM	Departure	13.1	-	-
24-Jan	08:18	3A061	YFT	Arrival	12.6	-	-
24-Jan	08:35	8S210	MFM	Arrival	11.9	-	-
24-Jan	10:00	3A071	MFM	Arrival	12.4	-	-
24-Jan	10:36	8S212	MFM	Arrival	12.6	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [MFM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
24-Jan	10:49	3A081	ZUI	Arrival	13.6	-	-
24-Jan	11:04	8S121	MFM	Departure	11.2	-	-
24-Jan	11:19	3A063	YFT	Arrival	11.6	-	-
24-Jan	12:18	3A181	ZUI	Departure	13.2	-	-
24-Jan	12:19	3A168	YFT	Departure	12.1	-	-
24-Jan	12:42	8S215	MFM	Arrival	12.1	-	-
24-Jan	12:59	3A064	YFT	Arrival	12.8	-	-
24-Jan	13:19	8S123	MFM	Departure	11.8	-	-
24-Jan	14:00	3A082	ZUI	Arrival	12.5	-	-
24-Jan	14:26	3A182	ZUI	Departure	13.4	-	-
24-Jan	14:34	3A164	YFT	Departure	12.1	≤5	<1
24-Jan	14:56	3A065	YFT	Arrival	11.9	-	-
24-Jan	16:16	3A167	YFT	Departure	11.7	-	-
24-Jan	16:45	3A083	ZUI	Arrival	13.6	-	-
24-Jan	16:52	8S218	MFM	Arrival	12.3	-	-
24-Jan	17:06	3A067	YFT	Arrival	12.8	-	-
24-Jan	17:22	8S126	MFM	Departure	12.0	-	-
24-Jan	17:40	3A183	ZUI	Departure	13.5	≤5	<1
24-Jan	19:06	3A166	YFT	Departure	12.9	-	-
24-Jan	19:47	3A084	ZUI	Arrival	12.7	-	-
24-Jan	20:46	3A185	ZUI	Departure	13.6	-	-
24-Jan	20:55	8S2113	MFM	Arrival	11.9	-	-
24-Jan	20:59	3A169	YFT	Departure	13.6	-	-
24-Jan	21:58	8S522	MFM	Departure	12.4	-	-
25-Jan	08:19	3A061	YFT	Arrival	11.9	-	-
25-Jan	08:23	8S210	MFM	Arrival	12.9	-	-
25-Jan	10:17	3A071	MFM	Arrival	11.5	-	-
25-Jan	10:41	3A081	ZUI	Arrival	12.5	-	-
25-Jan	10:43	8S212	MFM	Arrival	10.5	-	-
25-Jan	11:12	8S121	MFM	Departure	12.1	-	-
25-Jan	11:21	3A063	YFT	Arrival	12.8	-	-
25-Jan	12:14	3A181	ZUI	Departure	14.0	-	-
25-Jan	12:15	3A168	YFT	Departure	13.5	-	-
25-Jan	12:48	8S215	MFM	Arrival	13.0	-	-
25-Jan	13:03	3A064	YFT	Arrival	12.3	-	-
25-Jan	13:19	8S123	MFM	Departure	12.3	-	-
25-Jan	13:45	3A082	ZUI	Arrival	12.4	-	-
25-Jan	14:17	3A182	ZUI	Departure	12.3	-	-
25-Jan	14:22	3A164	YFT	Departure	11.6	-	-
25-Jan	15:01	3A065	YFT	Arrival	12.8	-	-
25-Jan	16:14	3A167	YFT	Departure	13.6	-	-
25-Jan	16:42	3A083	ZUI	Arrival	12.2	-	-
25-Jan	16:54	8S218	MFM	Arrival	12.0	-	-
25-Jan	16:57	3A067	YFT	Arrival	12.2	-	-
25-Jan	17:15	8S126	MFM	Departure	13.3	-	-
25-Jan	17:24	3A183	ZUI	Departure	13.8	-	-
25-Jan	19:01	3A166	YFT	Departure	12.5	-	-
25-Jan	19:44	3A084	ZUI	Arrival	13.3	-	-
25-Jan	20:23	3A185	ZUI	Departure	12.6	-	-
25-Jan	20:58	8S2113	MFM	Arrival	11.5	-	-
25-Jan	21:15	3A169	YFT	Departure	13.4	-	-
25-Jan	22:19	8S522	MFM	Departure	12.2	-	-
26-Jan	08:21	3A061	YFT	Arrival	12.9	-	-
26-Jan	08:42	8S210	MFM	Arrival	13.1	-	-
26-Jan	09:58	3A071	MFM	Arrival	12.4	-	-
26-Jan	10:39	8S212	MFM	Arrival	12.5	-	-
26-Jan	10:51	3A081	ZUI	Arrival	13.8	-	-
26-Jan	11:15	8S121	MFM	Departure	12.3	-	-
26-Jan	11:18	3A063	YFT	Arrival	12.5	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [MFM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
26-Jan	12:10	3A181	ZUI	Departure	12.5	-	-
26-Jan	12:16	3A168	YFT	Departure	13.0	-	-
26-Jan	12:43	8S215	MFM	Arrival	13.3	-	-
26-Jan	13:02	3A064	YFT	Arrival	13.3	-	-
26-Jan	13:20	8S123	MFM	Departure	13.4	-	-
26-Jan	13:43	3A082	ZUI	Arrival	13.5	-	-
26-Jan	14:15	3A182	ZUI	Departure	12.8	-	-
26-Jan	14:16	3A164	YFT	Departure	13.7	-	-
26-Jan	14:58	3A065	YFT	Arrival	12.8	-	-
26-Jan	16:17	3A167	YFT	Departure	13.1	-	-
26-Jan	16:40	8S218	MFM	Arrival	12.3	-	-
26-Jan	16:43	3A083	ZUI	Arrival	13.8	-	-
26-Jan	17:01	3A067	YFT	Arrival	13.0	-	-
26-Jan	17:23	8S126	MFM	Departure	13.4	-	-
26-Jan	17:26	3A183	ZUI	Departure	13.7	-	-
26-Jan	19:18	3A166	YFT	Departure	13.4	-	-
26-Jan	19:57	3A084	ZUI	Arrival	13.7	-	-
26-Jan	20:20	3A185	ZUI	Departure	13.2	-	-
26-Jan	20:57	8S2113	MFM	Arrival	10.8	-	-
26-Jan	21:12	3A169	YFT	Departure	12.3	-	-
26-Jan	22:16	8S522	MFM	Departure	13.7	-	-
27-Jan	08:14	3A061	YFT	Arrival	12.8	-	-
27-Jan	08:30	8S210	MFM	Arrival	12.3	-	-
27-Jan	10:00	3A071	MFM	Arrival	11.2	-	-
27-Jan	10:39	8S212	MFM	Arrival	11.8	-	-
27-Jan	10:40	3A081	ZUI	Arrival	13.7	-	-
27-Jan	11:08	8S121	MFM	Departure	11.8	-	-
27-Jan	11:18	3A063	YFT	Arrival	11.3	-	-
27-Jan	12:18	3A168	YFT	Departure	13.0	-	-
27-Jan	12:18	3A181	ZUI	Departure	13.9	-	-
27-Jan	12:48	8S215	MFM	Arrival	11.0	-	-
27-Jan	12:54	3A064	YFT	Arrival	12.9	-	-
27-Jan	13:19	8S123	MFM	Departure	11.8	-	-
27-Jan	13:50	3A082	ZUI	Arrival	13.5	-	-
27-Jan	14:10	3A182	ZUI	Departure	12.9	-	-
27-Jan	14:15	3A164	YFT	Departure	12.7	-	-
27-Jan	14:56	3A065	YFT	Arrival	12.4	-	-
27-Jan	16:13	3A167	YFT	Departure	12.5	-	-
27-Jan	16:32	3A083	ZUI	Arrival	13.3	-	-
27-Jan	16:45	8S218	MFM	Arrival	11.3	-	-
27-Jan	16:55	3A067	YFT	Arrival	12.7	-	-
27-Jan	17:02	3A183	ZUI	Departure	14.2	-	-
27-Jan	17:09	8S126	MFM	Departure	10.3	-	-
27-Jan	19:02	3A166	YFT	Departure	11.7	-	-
27-Jan	19:43	3A084	ZUI	Arrival	13.9	-	-
27-Jan	20:08	3A185	ZUI	Departure	14.1	-	-
27-Jan	20:56	8S2113	MFM	Arrival	11.9	-	-
27-Jan	21:00	3A169	YFT	Departure	12.9	-	-
27-Jan	21:57	8S522	MFM	Departure	12.3	-	-
28-Jan	08:16	3A061	YFT	Arrival	12.4	-	-
28-Jan	08:37	8S210	MFM	Arrival	11.0	-	-
28-Jan	09:54	3A071	MFM	Arrival	12.9	-	-
28-Jan	10:39	8S212	MFM	Arrival	10.7	-	-
28-Jan	10:42	3A081	ZUI	Arrival	14.0	-	-
28-Jan	11:10	8S121	MFM	Departure	11.9	-	-
28-Jan	11:17	3A063	YFT	Arrival	12.0	-	-
28-Jan	12:11	3A181	ZUI	Departure	14.3	-	-
28-Jan	12:13	3A168	YFT	Departure	12.2	-	-
28-Jan	12:47	8S215	MFM	Arrival	10.5	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [MFM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
28-Jan	12:57	3A064	YFT	Arrival	12.2	-	-
28-Jan	13:24	8S123	MFM	Departure	12.0	-	-
28-Jan	13:51	3A082	ZUI	Arrival	12.7	-	-
28-Jan	14:25	3A164	YFT	Departure	13.0	-	-
28-Jan	14:28	3A182	ZUI	Departure	13.5	-	-
28-Jan	14:56	3A065	YFT	Arrival	12.0	-	-
28-Jan	16:13	3A167	YFT	Departure	12.4	-	-
28-Jan	16:34	3A083	ZUI	Arrival	12.5	-	-
28-Jan	16:34	8S218	MFM	Arrival	9.9	-	-
28-Jan	16:56	8S126	MFM	Departure	12.8	-	-
28-Jan	16:57	3A067	YFT	Arrival	12.2	-	-
28-Jan	16:58	3A183	ZUI	Departure	14.1	-	-
28-Jan	19:02	3A166	YFT	Departure	13.3	-	-
28-Jan	19:45	3A084	ZUI	Arrival	13.4	-	-
28-Jan	20:01	3A185	ZUI	Departure	12.8	-	-
28-Jan	20:56	3A169	YFT	Departure	12.1	-	-
28-Jan	20:57	8S2113	MFM	Arrival	11.6	-	-
28-Jan	21:59	8S522	MFM	Departure	11.6	-	-
29-Jan	08:15	3A061	YFT	Arrival	11.7	-	-
29-Jan	08:32	8S210	MFM	Arrival	9.9	-	-
29-Jan	09:54	3A071	MFM	Arrival	12.5	-	-
29-Jan	10:42	3A081	ZUI	Arrival	13.9	-	-
29-Jan	10:42	8S212	MFM	Arrival	13.6	-	-
29-Jan	11:04	8S121	MFM	Departure	13.4	-	-
29-Jan	11:22	3A063	YFT	Arrival	12.7	-	-
29-Jan	12:11	3A168	YFT	Departure	11.9	-	-
29-Jan	12:16	3A181	ZUI	Departure	14.1	-	-
29-Jan	12:57	3A064	YFT	Arrival	12.5	-	-
29-Jan	12:58	8S215	MFM	Arrival	12.3	-	-
29-Jan	13:19	8S123	MFM	Departure	12.0	-	-
29-Jan	13:59	3A082	ZUI	Arrival	12.9	-	-
29-Jan	14:18	3A182	ZUI	Departure	11.7	-	-
29-Jan	14:19	3A164	YFT	Departure	11.2	-	-
29-Jan	14:40	3A065	YFT	Arrival	13.0	-	-
29-Jan	16:17	3A167	YFT	Departure	11.9	-	-
29-Jan	16:34	8S218	MFM	Arrival	12.3	-	-
29-Jan	16:35	3A083	ZUI	Arrival	13.2	-	-
29-Jan	17:01	3A067	YFT	Arrival	12.2	-	-
29-Jan	17:01	8S126	MFM	Departure	12.5	-	-
29-Jan	17:04	3A183	ZUI	Departure	13.6	-	-
29-Jan	19:03	3A166	YFT	Departure	13.0	-	-
29-Jan	19:48	3A084	ZUI	Arrival	13.3	-	-
29-Jan	20:12	3A185	ZUI	Departure	12.9	-	-
29-Jan	20:54	8S2113	MFM	Arrival	12.3	-	-
29-Jan	20:58	3A169	YFT	Departure	11.5	-	-
29-Jan	21:54	8S522	MFM	Departure	10.5	-	-
30-Jan	08:19	3A061	YFT	Arrival	11.8	-	-
30-Jan	08:29	8S210	MFM	Arrival	11.7	-	-
30-Jan	09:52	3A071	MFM	Arrival	12.0	-	-
30-Jan	10:45	8S212	MFM	Arrival	11.2	-	-
30-Jan	10:46	3A081	ZUI	Arrival	12.5	-	-
30-Jan	11:17	8S121	MFM	Departure	11.3	-	-
30-Jan	11:31	3A063	YFT	Arrival	11.5	-	-
30-Jan	12:14	3A168	YFT	Departure	11.6	-	-
30-Jan	12:19	3A181	ZUI	Departure	12.6	-	-
30-Jan	12:41	8S215	MFM	Arrival	11.8	-	-
30-Jan	13:05	3A064	YFT	Arrival	11.9	-	-
30-Jan	13:17	8S123	MFM	Departure	11.0	-	-
30-Jan	13:50	3A082	ZUI	Arrival	13.5	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [MFM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
30-Jan	14:08	3A182	ZUI	Departure	12.7	-	-
30-Jan	14:19	3A164	YFT	Departure	12.0	-	-
30-Jan	14:58	3A065	YFT	Arrival	11.7	-	-
30-Jan	16:19	3A167	YFT	Departure	12.2	-	-
30-Jan	16:37	3A083	ZUI	Arrival	13.2	-	-
30-Jan	16:38	8S218	MFM	Arrival	11.9	-	-
30-Jan	16:58	3A067	YFT	Arrival	12.5	-	-
30-Jan	17:01	3A183	ZUI	Departure	13.3	-	-
30-Jan	17:02	8S126	MFM	Departure	12.1	-	-
30-Jan	18:58	3A166	YFT	Departure	12.1	-	-
30-Jan	19:48	3A084	ZUI	Arrival	12.7	-	-
30-Jan	20:06	3A185	ZUI	Departure	13.6	-	-
30-Jan	20:50	8S2113	MFM	Arrival	11.4	-	-
30-Jan	20:55	3A169	YFT	Departure	13.3	-	-
30-Jan	21:55	8S522	MFM	Departure	11.0	-	-
31-Jan	08:17	3A061	YFT	Arrival	11.8	-	-
31-Jan	08:30	8S210	MFM	Arrival	11.9	-	-
31-Jan	09:58	3A071	MFM	Arrival	11.6	-	-
31-Jan	10:45	8S212	MFM	Arrival	12.5	-	-
31-Jan	10:50	3A081	ZUI	Arrival	12.7	-	-
31-Jan	11:04	8S121	MFM	Departure	12.4	-	-
31-Jan	11:17	3A063	YFT	Arrival	11.6	-	-
31-Jan	12:11	3A168	YFT	Departure	11.2	-	-
31-Jan	12:12	3A181	ZUI	Departure	13.6	-	-
31-Jan	12:50	8S215	MFM	Arrival	10.3	-	-
31-Jan	13:00	3A064	YFT	Arrival	11.7	-	-
31-Jan	13:17	8S123	MFM	Departure	11.6	-	-
31-Jan	13:51	3A082	ZUI	Arrival	13.4	-	-
31-Jan	14:14	3A164	YFT	Departure	12.0	-	-
31-Jan	14:16	3A182	ZUI	Departure	12.7	-	-
31-Jan	14:57	3A065	YFT	Arrival	12.1	-	-
31-Jan	16:15	3A167	YFT	Departure	11.5	-	-
31-Jan	16:38	3A083	ZUI	Arrival	12.9	-	-
31-Jan	16:45	8S218	MFM	Arrival	11.4	-	-
31-Jan	17:01	3A067	YFT	Arrival	12.2	-	-
31-Jan	17:12	3A183	ZUI	Departure	12.7	-	-
31-Jan	17:14	8S126	MFM	Departure	12.1	-	-
31-Jan	19:03	3A166	YFT	Departure	13.1	-	-
31-Jan	19:56	3A084	ZUI	Arrival	12.2	-	-
31-Jan	20:23	3A185	ZUI	Departure	13.2	-	-
31-Jan	20:55	8S2113	MFM	Arrival	12.4	-	-
31-Jan	20:55	3A169	YFT	Departure	11.7	-	-
31-Jan	21:57	8S522	MFM	Departure	12.7	-	-

Follow-up on instantaneous speeding

Referring to the data of SkyPier HSF movements in January 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 7 HSF movements. The duration of instantaneous speeding of all the movements were less than one minute. After investigation, the AIS data and ferry operators' responses showed the cases were due to local strong water currents / giving way to other vessels, which are public safety / emergency reasons. The captain had reduced speed and maintained the speed at less than 15 knots after the public safety / emergency incidents.

Seven HSF movements with insufficient transmission of AIS data received in January 2017. AIS data was retrieved from other sources such as Marine Traffic Data and Shipxy. Vessel captain was also requested to provide the radar track photos which indicated the vessel entered the SCZ though the gate access point and no speeding in the SCZ.