MOTT MACDONALD

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

Construction Phase Monthly EM&A Report No.16 (For April 2017)

May 2017

Airport Authority Hong Kong

20/F AIA Kowloon Tower
Landmark East
100 How Ming Street
Kwun Tong
Kowloon
Hong Kong

T +852 2828 5757
F +852 2827 1823
mottmac.hk

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This Monthly EM&A Report No. 16 has been reviewed and certified by the Environmental Team Leader (ETL) in accordance with Condition 3.5 of Environmental Permit No. EP-489/2014.

Certified by:

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

Date 12 May 2017

AECOM
8/F, Grand Central Plaza, Tower 2,
138 Shatin Rural Committee Road,
Shatin, Hong Kong
香港新界沙田鄉事會路 138 號新城
市中央廣場第 2 座 8 樓
www.aecom.com

+852 3922 9000 tel
+852 2317 7609 fax

Our Ref : 60440482/C/JCHL170512

By Email

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

Attn: Mr. Lawrence Tsui, Principal Manager

12 May 2017

Dear Sir,

Contract No. 3102
3RS Independent Environmental Checker Consultancy Services

Submission of Monthly EM&A Report No.16 (April 2017)

Reference is made to the Environmental Team's submission of the Monthly EM&A Report No.16 under Condition 3.5 of the Environmental Permit No. EP-489/2014 certified by the ET Leader on 12 May 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 (the Manual).

This is the 16th Construction Phase Monthly EM&A Report for the Project which summarizes the monitoring results and audit findings of the EM&A programme during the reporting period from 1 to 30 April 2017.

Key Activities in the Reporting Period

The key activities of the Project carried out in the reporting period included five deep cement mixing (DCM) contracts, two advanced works contracts, and a reclamation contract. The DCM contracts involved DCM works and trials, site office establishment, laying of geotextile and sand blanket; the advanced works contracts involved forming of marine approach trench, articulated pipes installation, cable laying (including water jetting, launch and recovery of the burial machine) and horizontal directional drilling (HDD) works; and the reclamation contract involved site office establishment and laying of sand blanket.

EM&A Activities Conducted in the Reporting Period

The monthly EM&A programme was undertaken in accordance with Manual of the Project. During the reporting period, the ET conducted 36 sets of construction dust measurements, 20 sets of construction noise measurements, 13 events of water quality measurements, 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 and waste monitoring.

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

On the implementation of Marine Mammal Watching Plan (MMWP), silt curtains were in place by the contractors for laying of sand blanket and dolphin observers were deployed in accordance with the plan. On the implementation of Dolphin Exclusion Zone (DEZ) Plan, dolphin observers at 9 to 12 dolphin observation stations were deployed for continuous monitoring of the DEZ by all contractors for DCM and water jetting works for submarine cable diversion in accordance with the DEZ Plan. Trainings for the proposed dolphin observers were provided by the ET prior to the aforementioned works, with the training records kept by the ET. From the contractors' MMWP observation records and DEZ monitoring records, no dolphin or other marine mammals were

observed within or around the silt curtains or the DEZs in this reporting month. Audits of acoustic decoupling for construction vessels were also carried out by the ET.

On the implementation of the Marine Travel Routes and Management Plan for High Speed Ferries of SkyPier (the SkyPier Plan), the daily movements of all SkyPier high speed ferries (HSFs) in April 2017 were in the range of 90 to 97 daily movements, which are within the maximum daily cap of 125 daily movements. A total of 845 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 (8.2 to 14.3 knots), which were in compliance with the SkyPier Plan, except that one HSF travelled with an average speed of 16.9 knots. Notice regarding the exceedance of average speed within SCZ was sent to the ferry operator and the case is under investigation by ET. Four 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), the upgraded Marine Surveillance System (MSS) was launched in March 2017. The MSS automatically recorded the deviation case such as speeding, entering no entry zone, not traveling through the designated gate. ET conducted checking to ensure the MSS records all deviation cases accurately. Training has been provided for the concerned skippers to facilitate them in familiarising with the requirements of the MTRMP-CAV. ET reminded contractors that all vessels shall avoid entering the Brothers Marine Park, which has been designated since 30 December 2016. 3-month rolling programmes for construction vessel activities were also received from contractors.

Results of Impact Monitoring

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

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

Contract 3212 11kV Submarine Cable Diversion

- Articulated pipes installation; and

- Post laid burial work and concrete protection slabs installation.

DCM Works:

Contract 3201 to 3205 DCM Works

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

Reclamation Works:

Contract 3206 Main Reclamation Works

- Site office establishment; and
- Laying of sand blanket.

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

AAHK Site Office

Marine Traffic Control Centre (MTCC) in Operation in the Site Office

Water Quality Monitoring Sampling

Summary Table

The following table summarizes the key findings of the EM&A programme during the reporting period from 1 to 30 April 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 on dolphin watching arrangement was received on 24 Apr 2017.	The case is currently under investigation in accordance with the Complaint Management Plan
Notification of any summons and status of prosecutions		✓	No notifications of summons or prosecution were received.	Nil
Changes that affect the EM&A		✓	There were no changes to the construction works that may affect the EM&A	Nil

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.15.

1.2 Scope of this Report

This is the 16th Construction Phase Monthly EM&A Report for the Project which summarizes the key findings of the EM&A programme during the reporting period from 1 to 30 April 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)	Principal Manager, Environment	Lawrence Tsui	2183 2734

Party	Position	Name	Telephone
Environmental Team (ET) (Mott MacDonald Hong Kong Limited)	Environmental Team Leader	Terence Kong	2828 5919
	Deputy Environmental Team Leader	Heidi Yu	2828 5704
	Deputy Environmental Team Leader	Keith Chau	2972 1721
Independent Environmental Checker (IEC) (AECOM Asia Company Limited)	Independent Environmental Checker	Jackel Law	3922 9376
	Deputy Independent Environmental Checker	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
Contract 3212 11kV Submarine Cable Diversion	Project Director	Colman Chan	6193 4729
	Environmental Officer	Samantha Kong	3995 8141
DCM Works:			
Contract 3201 DCM (Package 1) (Penta-Ocean-China State-Dong-Ah Joint Venture)	Project Director	Tsugunari Suzuki	9178 9689
	Environmental Officer	Chan Sze Ming	9384 5494
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	Kanny Cho	9724 6254

Party	Position	Name	Telephone
Contract 3205 DCM (Package 5) (Bachy Soletanche - Sambo Joint Venture)	Deputy Project Director	Min Park	9683 0765
	Environmental Officer	Margaret Chung	9130 3696
Reclamation Works:			
Contract 3206 (ZHEC-CCCC-CDC Joint Venture)	Project Manager	Kim Chuan Lim	3693 2288
	Environmental Officer	Kwai Fung Wong	3693 2252

1.4 Summary of Construction Works

The key activities of the Project carried out in the reporting period included five DCM contracts, two advanced works contracts, and a reclamation contract. The DCM contracts involved DCM works and trials, site office establishment, laying of geotextile and sand blanket; the advanced works contract involved forming of marine approach trench, articulated pipes installation, cable laying (including water jetting, launch and recovery of the burial machine) and HDD works; and the reclamation contract involved site office establishment and laying of sand blanket.

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	Initially started in late March 2017 and currently in-progress.
Early/ Regular DCM Water Quality Monitoring	On-going

Parameters	Status
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 Plan	The revised Egretry Survey Plan was submitted and approved by EPD under EP Condition 2.14.
Ecological Monitoring	Construction works on Sheung Sha Chau Island was suspended during the ardeid's breeding season (between April and July). The ecological monitoring is therefore suspended.
Marine Ecology	
Pre-Construction Phase Coral Dive Survey	The Coral Translocation Plan was submitted and approved by EPD under EP Condition 2.12.
Coral Translocation	The coral translocation was completed.
Post-Translocation Coral Monitoring	On-going
Chinese White Dolphins (CWD)	
Vessel Survey, Land-based Theodolite Tracking and Passive Acoustic Monitoring (PAM)	
Baseline Monitoring	Baseline CWD results were reported in the CWD Baseline Monitoring Report and submitted to EPD in accordance with EP Condition 3.4.
Impact Monitoring	On-going
Landscape & Visual	
Baseline Monitoring	The baseline landscape & visual monitoring result has been reported in Baseline Monitoring Report and submitted to EPD under EP Condition 3.4.
Impact Monitoring	On-going
Environmental Auditing	
Regular site inspection	On-going
Marine Mammal Watching Plan (MMWP) implementation measures	On-going
Dolphin Exclusion Zone Plan (DEZP) implementation measures	On-going
SkyPier High Speed Ferries (HSF) implementation measures	On-going
Construction and Associated Vessels Implementation measures	On-going
Complaint Hotline and Email channel	On-going
Environmental Log Book	On-going

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

The EM&A programme also involved weekly site inspections and related auditing conducted by the ET for checking the implementation of the required environmental mitigation measures recommended in the approved EIA Report. In order to enhance environmental awareness and closely monitor the environmental performance of the contractors, environmental briefings and regular environmental management meetings were conducted.

The EM&A programme has been following the recommendations presented in the approved EIA Report and the Manual. A summary of implementation status of the environmental mitigation

measures for the construction phase of the Project during the reporting period is provided in **Appendix 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 Manual. **Table 2.1** describes the details of the monitoring stations. **Figure 2.1** shows the locations of the monitoring stations.

Table 2.1: Locations of Impact Air Quality Monitoring Stations

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

2.2 Monitoring Requirements and Schedule

In accordance with the Manual, baseline 1-hour total suspended particulate (TSP) levels at the two air quality monitoring stations were established as presented in the Baseline Monitoring Report. Impact 1-hour TSP monitoring was conducted for three times every 6 days. The Action and Limit Levels of the air quality monitoring stipulated in the EM&A programme for triggering the relevant investigation and follow-up procedures under the programme are provided in **Table 2.2**.

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

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

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

2.3 Monitoring Equipment

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

Table 2.3: Air Quality Monitoring Equipment

Equipment	Brand and Model	Last Calibration Date
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 C**.

Table 2.4: Summary of 1-hour TSP Monitoring Results

Monitoring Station	1-hr TSP Concentration Range (μg/m^3)	Action Level (μg/m^3)	Limit Level (μg/m^3)
AR1A	32 – 121	306	500
AR2	17 – 116	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 Manual. **Figure 2.1** shows the locations of the monitoring stations and these are described in **Table 3.1** below. As described in Section 4.3.3 of the Manual, monitoring at NM2 will commence when the future residential buildings in Tung Chung West Development become occupied.

Table 3.1: Locations of Impact Noise Monitoring Stations

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

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

3.2 Monitoring Requirements and Schedule

In accordance with the Manual, baseline noise levels at the noise monitoring stations were established as presented in the Baseline Monitoring Report. Impact noise monitoring was conducted once per week in the form of 30-minute measurements of L_{eq}, L_{10} and L_{90} levels recorded at each monitoring station between 0700 and 1900 on normal weekdays. The Action and Limit Levels of the noise monitoring stipulated in the EM&A programme for triggering the relevant investigation and follow-up procedures under the programme are provided in **Table 3.2**. The construction noise monitoring schedule involved in the reporting period is provided in **Appendix B**.

Table 3.2: Action and Limit Levels for Construction Noise

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

Note: (i) 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 C**.

Table 3.4: Summary of Construction Noise Monitoring Results

Monitoring Station	Noise Level Range, dB(A) $L_{eq\ (30\ mins)}$	Limit Level, dB(A) $L_{eq\ (30\ mins)}$
NM1A[(i)]	71 – 72	75
NM3A	57 – 62	75
NM4[(i)]	63 – 66	70[(ii)]
NM5[(i)]	53 – 59	75
NM6[(i)]	62 – 73	75

Note: (i) +3 dB(A) Façade correction included;
(ii) Reduced to 65 dB(A) during school examination periods at NM4.

As the construction activities were far away from the monitoring stations, major sources of noise dominating the monitoring stations observed during the construction noise impact monitoring were road traffic noise at NM1A, aircraft noise at NM3A, road traffic noise at NM4, helicopter noise at NM5, and aircraft, helicopter, and marine vessel noise at NM6 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 23 water quality monitoring stations, comprising 12 impact stations, one mobile impact station, seven sensitive receiver stations and three control stations in the vicinity of water quality sensitive receivers around the airport island in accordance with the Manual. **Table 4.1** describes the details of the monitoring stations**. Figure 3.1** shows the locations of the monitoring stations.

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

Monitoring 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	
IM13	Impact (for submarine 11 kV cable diversion)	Mobile station (500 m envelope of water jetting works)		DO, pH, Temperature, Salinity, Turbidity, SS
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 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 23 water quality monitoring stations during the reporting period.

As confirmed by Contract 3212, the 11kv submarine cable diversion and associated works were conducted from 1 to 10 April 2017, and 14 to 17 April 2017 during the reporting period. Therefore, general water quality monitoring was conducted at the mobile impact station of IM13 at mid-flood and mid-ebb tides during the construction 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 B**.

4.2.1 Action and Limit Levels for Water Quality Monitoring

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

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

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

Parameters	Action Level (AL)	Limit Level (LL)
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, IM13, 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, IM13, SR1A, SR2, SR3, SR7, SR8

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

4.3 Monitoring Equipment

Table 4.4 summarises the equipment used for monitoring of specific water quality parameters under the impact water quality monitoring programme.

Table 4.4: Water Quality Monitoring Equipment

Equipment	Brand and Model	Last Calibration Date
Multifunctional Meter (measurement of DO, pH, temperature, salinity and turbidity)	YSI ProDSS (serial no. 16J101715)	16 Mar 2017
	YSI ProDSS (serial no. 16J101716)	16 Mar 2017
	YSI 6920 V2 (serial no. 0001C6B0)	16 Mar 2017
	YSI 6920 V2 (serial no. 000109DF)	16 Mar 2017
Digital Titrator (measurement of total alkalinity)	Titrette Digital Burette 50ml Class A (serial no.10N64701)	17 Mar 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 D**.

4.4.3 Laboratory Measurement / Analysis

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

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

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

4.5 Analysis and Interpretation of Monitoring Results

4.5.1 Summary of Monitoring Results

The water quality monitoring results for DO, turbidity, and total alkalinity obtained during the reporting period were in compliance with their corresponding Action and Limit Levels stipulated in the EM&A programme for triggering the relevant investigation and follow-up procedures under the programme if being exceeded. For SS, chromium, and nickel, some of the testing results exceeded the relevant Action or Limit Levels, and the corresponding investigations were conducted accordingly. Details of the exceedances are presented in **Section 4.5.2**.

4.5.2 Summary of Findings for Investigation of Exceedances

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

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

Findings for SS Exceedances (Mid-Ebb Tide)

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

Table 4.7: 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	IM13	SR2	SR3	SR4A	SR5A	SR6	SR7	SR8
01/04/2017																				
04/04/2017																				
06/04/2017																				
08/04/2017																				
12/04/2017																				
14/04/2017																				
16/04/2017																				
18/04/2017																				
20/04/2017																				
22/04/2017																				
25/04/2017																				
27/04/2017																				
29/04/2017																				

Date	IM1	IM2	IM3	IM4	IM5	IM6	IM7	IM8	IM9	IM10	IM11	IM12	IM13	SR2	SR3	SR4A	SR5A	SR6	SR7	SR8
No. of SS Exceedances	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0

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

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

No water quality monitoring conducted at IM13 when Contract 3212 had no water jetting works

IM Stations

There was no SS exceedance recorded at IM Stations during the reporting period.

SR Stations

Exceedance of Action Level at SR2 was recorded on one monitoring day. However, during the same monitoring period, no exceedance was recorded at all downstream IM stations, which were located closer to the active works by the Project. Therefore, the exceedance was unlikely to be due to the Project. The exceedance at SR2 might be due to natural fluctuation.

Findings for SS Exceedances (Mid-Flood Tide)

Table 4.8 presents a summary of the SS compliance status at IM and SR stations during mid-flood tide for the reporting month.

Table 4.8: 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	IM13	SR2	SR3	SR4A	SR5A	SR6	SR7	SR8
01/04/2017																				
04/04/2017																				
06/04/2017																				
08/04/2017																				
12/04/2017																				
14/04/2017																				
16/04/2017																				
18/04/2017																				
20/04/2017																				
22/04/2017																				
25/04/2017																				
27/04/2017																				
29/04/2017																				
No. of SS Exceedances	0	0	0	2	0	1	0	0	0	0	0	0	0	0	0	1	0	1	0	0

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

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

No water quality monitoring conducted at IM13 when Contract 3212 had no water jetting works

IM Stations

Exceedances of Action Levels at IM stations were recorded on two monitoring days. Some exceedances occurred at monitoring stations which were located upstream of the 3RS Project during flood 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.

As part of the investigation on the downstream exceedance event, details of the Project's marine construction activities on that monitoring day was collected, as well as any observations during the monitoring. The findings are summarised in **Table 4.9**.

Table 4.9: Summary of Findings from Investigations of SS Exceedances during Mid-Flood Tide

Date	Marine construction works nearby	Approximate distance from marine construction works*	Status of water quality measures (if applicable)	Construction vessels in the vicinity	Turbidity / Silt plume observed near the monitoring station	Exceedance due to Project
29/04/2017	DCM works Sand blanket laying Geotextile laying	Around 600m	Silt curtain deployed	No	No	No

According to the investigation findings, it was confirmed that silt curtains were deployed for sand blanket laying works and also for DCM works as additional measures. The silt curtains were maintained properly.

For the exceedance at IM6 on 29 April 2017, it is noted that the exceedance appeared to be an isolated case with no observable temporal and spatial trend to indicate any effect due to Project activities. Furthermore, no exceedance was recorded at other downstream monitoring stations, including IM5 and IM7, which were similarly close to active DCM works, sand blanket laying, and geotextile laying during the same monitoring period. Based on these findings, the exceedance was considered not due to the Project.

SR Stations

Exceedances of Action Levels at SR stations were recorded on two monitoring days. However, these exceedances occurred at stations which are located upstream of the Project during flood tide and would unlikely be affected by the Project. The exceedances at these SR stations might be due to natural fluctuation.

Findings for Chromium Exceedances (Mid-Flood Tide)

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

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

Date	IM1	IM2	IM3	IM4	IM5	IM6	IM7	IM8	IM9	IM10	IM11	IM12
01/04/2017												
04/04/2017												
06/04/2017												
08/04/2017												

Date	IM1	IM2	IM3	IM4	IM5	IM6	IM7	IM8	IM9	IM10	IM11	IM12
12/04/2017												
14/04/2017												
16/04/2017												
18/04/2017												
20/04/2017												
22/04/2017												
25/04/2017												
27/04/2017												
29/04/2017												
No. of Chromium Exceedances	0	0	0	0	0	0	1	0	0	0	0	0

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

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

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

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

Table 4.11: Summary of Findings from Investigations of Chromium Exceedances during Mid-Flood Tide

Date	Marine construction works nearby	Approximate distance from marine construction works*	Status of water quality measures (if applicable)	Construction vessels in the vicinity	Turbidity / Silt plume observed near the monitoring station	Exceedance due to Project
01/04/2017	DCM works	Around 1.5km	Silt curtain deployed	No	No	No

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

For the exceedance at IM7 on 1 April 2017, it is noted that the exceedance appeared to be an isolated case with no observable temporal and spatial trend to indicate any effect due to Project activities. Furthermore, no exceedance was recorded at other downstream monitoring stations, including IM5 and IM8, which were closer to active DCM works during the same monitoring period. Based on these findings, 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
01/04/2017												
04/04/2017												
06/04/2017												
08/04/2017												
12/04/2017												
14/04/2017												
16/04/2017												
18/04/2017												
20/04/2017												
22/04/2017												
25/04/2017												
27/04/2017												
29/04/2017												
No. of Nickel Exceedances	0	0	0	0	0	0	0	0	2	0	0	0

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

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

Exceedances of Action Levels were recorded on two monitoring days. As the exceedances occurred at a station located downstream of the Project during flood tide, which might be affected by the Project's construction activities, exceedance investigation was carried out.

As part of the investigation on the downstream exceedance events, details of the Project's marine construction activities on these monitoring days 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 Exceedances during Mid-Flood Tide

Date	Marine construction works nearby	Approximate distance from marine construction works*	Status of water quality measures (if applicable)	Construction vessels in the vicinity	Turbidity / Silt plume observed near the monitoring station	Exceedance due to Project
04/04/2017	DCM works	Around 500m	Silt curtain deployed	No	No	No
08/04/2017	DCM works	Around 500m	Silt curtain deployed	No	No	No

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

For the exceedance at IM9 on 4 April 2017 and 8 April 2017, it is noted that the exceedances appeared to be isolated cases with no observable temporal and spatial trend to indicate any effect due to Project activities. Furthermore, no exceedance was recorded at other downstream monitoring stations, including IM8, which was similarly close to active DCM works during the same

monitoring period. Based on these findings, the exceedances were considered not due to the Project.

Conclusions

Based on the findings of the exceedance investigations, it is concluded that the exceedances were not due to the Project. Hence no SR was adversely affected by the Project. All required actions under the Event and Action Plan were followed. Exceedances appeared to be due to natural fluctuation (such as naturally high 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 defence', the non-project related exceedances identified at IM stations were attended to as a precautionary measure. As part of the EM&A programme, the construction methods and mitigation measures for water quality will continue to be monitored and opportunities for further enhancement will continue to be explored and implemented where possible, to strive for better protection of water quality and the marine environment.

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

5 Waste Management

5.1 Monitoring Requirements

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

Table 5.1: Action and Limit Levels for Construction Waste

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

5.2 Waste Management Status

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

Recommendations including provision and maintenance of spill kits and drip trays, and provision of chemical waste storage area for chemical waste. The contractors had taken actions to implement the recommended measures.

Based on the Contractor's information, about 556m^3 of excavated materials were produced from the HDD launching site under P560(R) in April 2017. The generated excavated materials were temporarily stored at the stockpiling area. The excavated material will be reused in the Project.

Around 80 tonnes of general refuse was disposed of to the WENT Landfill by the advanced works contract and DCM contracts in April 2017. Around 534m^3 of Construction and Demolition (C&D) material generated from the DCM contracts for site office establishment was disposed of as public fill in the reporting month. Metals and paper were recycled, and 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 Manual, Chinese White Dolphin (CWD) monitoring by small vessel line-transect survey supplemented by land-based theodolite tracking and passive acoustic monitoring should be conducted during construction phase.

The small vessel line-transect survey as proposed in the Manual should be conducted at a frequency of two full 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 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 April 2017, data from 1 February 2017 to 30 April 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 March 2017 (calculated by data from January 2017 to March 2017) and the running quarterly encounter rates of this month (calculated by data from February 2017 to April 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 Manual, which are consistent with the Agriculture, Fisheries and Conservation Department (AFCD) long-term monitoring programme (except the addition of AW). The AW transect has not been previously surveyed in the AFCD programme due to the restrictions of HKIA Exclusion Zone, nevertheless, this transect was established during the EIA of the 3RS Project and refined in the Manual with the aim to collect project specific baseline information within the HKIA Approach Area to fill the data gap that was not covered by the AFCD programme. This provided a larger sample size for estimating the density, abundance and patterns of movements in the broader study area of the project.

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

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

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

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

6.2.2 Land-based Theodolite Tracking

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

Table 6.3: Land-based Survey Station Details

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

6.3 CWD Monitoring Methodology

6.3.1 Small Vessel Line-transect Survey

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

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

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

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

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

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

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

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

When CWDs were seen, the survey team was taken off-effort, the dolphins were approached and photographed for photo-ID information (using a Canon 7D [or similar] camera and long 300 mm+ telephoto lens), then followed until they left the study area or were lost. At that point, the boat returned (off effort) to the next survey line and began to survey on effort again.

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

6.3.2 Photo Identification

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

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

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

6.3.3 Land-based Theodolite Tracking

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

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

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

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

6.4 Monitoring Results and Observations

6.4.1 Small Vessel Line-transect Survey

Survey Effort

Within this reporting month, two complete sets of small vessel line-transect surveys were conducted on the 5th, 10th, 11th, 12th, 18th, 24th, 25th and 26th April 2017, covering all transects in NEL, NWL, AW, WL and SWL survey areas for twice.

A total of 454.75 km of survey effort was collected from these surveys, with around 89.1% of the total survey effort being conducted under favourable weather condition (i.e. Beaufort Sea State 3 or below with favourable visibility). Details of the survey effort are given in **Appendix C**.

Sighting Distribution

In April 2017, 12 groups of CWDs with 36 individuals were sighted. All of these sightings were recorded during on-effort search under favourable weather conditions (i.e. Beaufort Sea State 3 or below with favourable visibility). Details of cetacean sightings are presented in **Appendix C**.

Distribution of all CWD sightings recorded in April 2017 is illustrated in **Figure 6.3**. In April 2017, CWDs were more frequently sighted in WL and SWL than in NWL. There were two sightings in NWL in this reporting month, both located around the northwest corner of Lung Kwu Chau. In WL survey area, CWD sightings were located in waters near Tai O and Fan Lau. In SWL, CWD sightings were recorded in both coastal and off-shore waters at the western side of the survey area while one sighting was located near Shui Hau at the eastern side of the survey area. 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, Yellow line: 3RS temporary works area boundary]

Encounter Rate

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

Encounter Rate by Number of Dolphin Sightings (STG)

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

Encounter Rate by Number of Dolphins (ANI)

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

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

In April 2017, a total of 405.18 km of survey effort were conducted under Beaufort Sea State 3 or below with favourable visibility, whilst a total number of 12 on-effort sightings with a total number of 36 dolphins from on-effort sightings were obtained under such condition. Calculation of the encounter rates in April 2017 are shown in **Appendix C**.

For the running quarter of the reporting month (i.e., from February 2017 to April 2017), a total of 1119.06 km of survey effort were conducted under Beaufort Sea State 3 or below with favourable visibility, whilst a total number of 39 on-effort sightings and a total number of 138 dolphins from on-effort sightings were obtained under such condition. Calculation of the running quarterly encounter rates are shown in **Appendix C**.

The STG and ANI of CWD in the whole survey area (i.e. NEL, NWL, AW, WL and SWL) during the month of April 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)
April 2017	2.96	8.88
Running Quarter from February 2017 to April 2017*	3.49	12.33
Action Level	Running quarterly* < 1.86	Running quarterly* < 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 February 2017 to April 2017, containing six sets of transect surveys for all monitoring areas.

Group Size

In April 2017, 12 groups of CWDs with 36 individuals were sighted, and the average group size of CWDs was 3.00 individuals per group. The numbers of CWD groups with small-sized (i.e. 1-2 individuals) and medium-sized (i.e. 3-9 individuals) were identical. No large CWD group (i.e. 10 or more individuals) was recorded in this reporting month.

Activities and Association with Fishing Boats

Three out of 12 sightings of CWDs were recorded engaging in feeding activities in April 2017, with one out of these three sightings recorded having association with operating purse seiner in SWL.

Mother-calf Pair

In April 2017, two sightings of CWDs were recorded with the presence of mother-and-unspotted juvenile pairs. These two sightings were both recorded in WL.

6.4.2 Photo Identification

In April 2017, a total number of 13 different CWD individuals were identified for totally 20 times. A summary of photo identification works is presented in **Table 6.5**. Representative photos of these individuals are given in **Appendix C**.

Table 6.5: Summary of Photo Identification

Individual ID	Date of Sighting (dd/mm/yyyy)	Sighting Group No.	Area
NLMM004	05/04/2017	1	NWL
		2	NWL
NLMM016	05/04/2017	1	NWL
		2	NWL
	18/04/2017	1	WL
SLMM021	26/04/2017	1	SWL
SLMM028	18/04/2017	5	WL
SLMM054	18/04/2017	7	WL
SLMM055	26/04/2017	4	SWL
WLMM030	18/04/2017	2	WL
		3	WL
WLMM060	18/04/2017	2	WL
		3	WL
WLMM064	26/04/2017	3	SWL
WLMM068	18/04/2017	2	WL
		3	WL
WLMM071	18/04/2017	2	WL
		3	WL
WLMM072	18/04/2017	2	WL
WLMM075	18/04/2017	2	WL

6.4.3 Land-based Theodolite Tracking

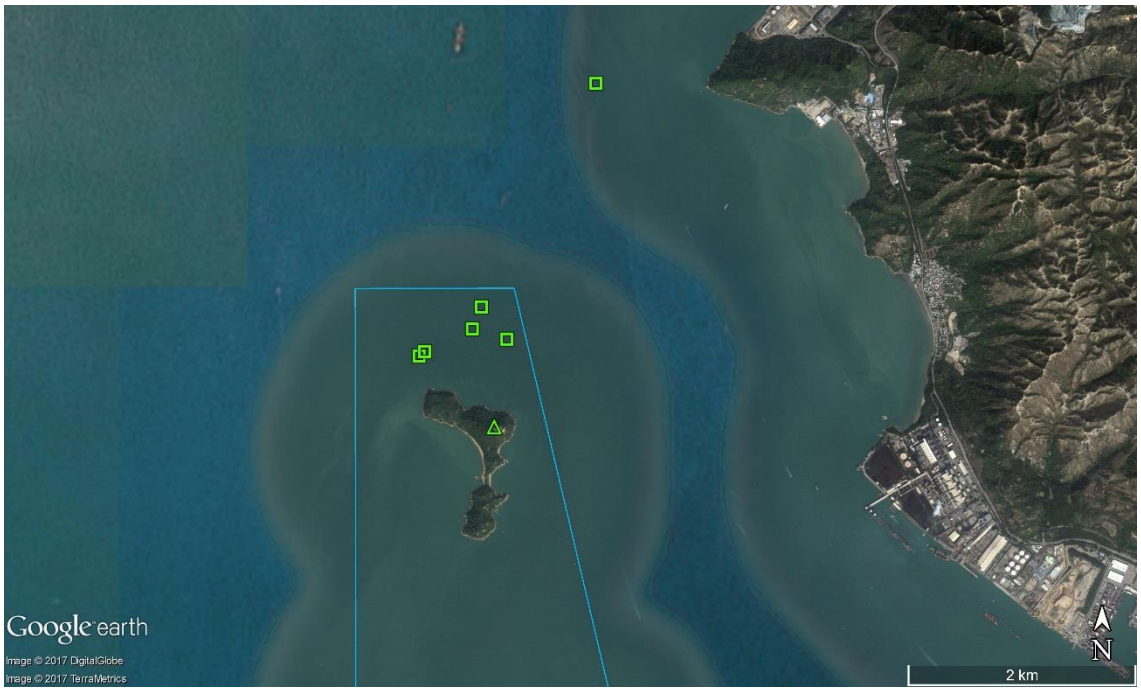
Survey Effort

Land-based theodolite tracking surveys were conducted at LKC on 7th, 20th and 25th April 2017 and at SC on 6th and 27th April 2017, with a total of 5 days of land-based theodolite tracking survey effort accomplished in this reporting month. In total, 6 CWD groups were tracked at LKC station during the surveys. Information of survey effort and CWD groups sighted during these land-based theodolite tracking surveys are presented in **Table 6.6**. Details of the survey effort and CWD groups tracked are presented in **Appendix C**. The first sighting locations of CWD groups tracked at LKC station during land-based theodolite tracking surveys in April 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	6	0.33
Sha Chau	2	12:00	0	0
TOTAL	**5**	**30:00**	**6**	**0.2**

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 on 22 March 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 dolphin observers were deployed by each contractor in accordance with the Marine Mammal Watching Plan (MMWP). Teams of at least two dolphin observers were deployed at 9 to 12 dolphin observation stations by the contractors for continuous monitoring of the Dolphin Exclusion Zone (DEZ) by all contractors for DCM and water jetting works for submarine cable diversion in accordance with the DEZ Plan. Trainings for the proposed dolphin observers on the implementation of MMWP and DEZ monitoring were provided by the ET prior to the aforementioned works, with a cumulative total of 296 individuals being trained and the training records kept by the ET. From the contractors' MMWP observation records and DEZ monitoring records, no dolphin or other marine mammals were observed within or around the silt curtains or the DEZs in this reporting month. These contractors' records were also audited by the ET during site inspection.

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

6.7 Timing of Reporting CWD Monitoring Results

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

6.8 Summary of CWD Monitoring

Monitoring of CWD was conducted with two complete sets of small vessel line-transect surveys and five days of land-based theodolite tracking survey effort as scheduled. The running quarterly encounter rates STG and ANI in the reporting 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 contracts 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 B**. Bi-weekly site inspections were also conducted by the IEC. Observations have been recorded in the site inspection checklists and provided to the contractors together with the appropriate follow-up actions where necessary.

The key observations from site inspection and associated recommendations were related to provision of sufficient spill kits, drip trays, and chemical storage area, as well as implementation of dust suppression measures. In addition, recommendations were also provided during site inspection on barges, which included display of Non-road Mobile Machinery Label (NRMM) on generators; display of valid permits and licenses on barges; provision and maintenance of drip trays and spill kits; provision of proper storage area for general refuse and chemicals; implementation of acoustic decoupling measures, proper wastewater treatment, dust suppression measures, spill and runoff preventive measures, and dark smoke preventive measures; as well as proper installation and maintenance of silt curtains.

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

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

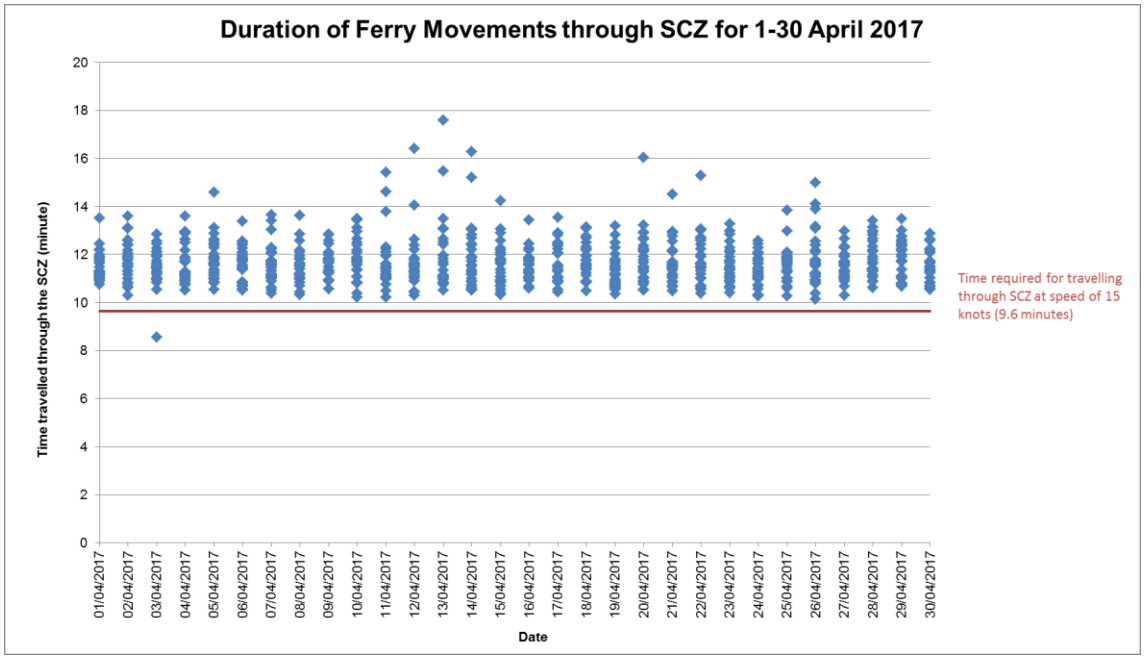
The Marine Travel Routes and Management Plan for High Speed Ferries of SkyPier (the SkyPier Plan) was submitted to the Advisory Council on the Environment (ACE) for comment and subsequently submitted to and approved by EPD in November 2015 under EP Condition 2.10. The approved SkyPier Plan is available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

Key audit findings for the SkyPier HSFs travelling to/from Zhuhai and Macau against the requirements of the SkyPier Plan during the reporting period are summarized in **Table 7.1**. The daily movements of all SkyPier HSFs in April 2017 (i.e., 90 to 97 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, 845 ferry movements between HKIA SkyPier and Zhuhai / Macau were recorded in April 2017 and the data are presented in **Appendix G**. The time spent by the SkyPier HSFs travelling through the SCZ in April 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 except one of the SkyPier HSFs spent more than 9.6 minutes to travel through the SCZ, which travelled at an average speed of 16.9 knots on 3 April 2017. A

notice was therefore sent to the ferry operator and the case is currently under investigation by ET. The investigation result will be presented in the next monthly EM&A report.

Figure 7-1 Duration of the SkyPier HSFs travelling through the SCZ for April 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.

Four ferries were recorded with minor deviation from the diverted route on 2, 8, 14 and 16 April 2017. Notices were sent to the ferry operator (FO) and the cases are under investigation by ET. The investigation result will be presented in the next monthly EM&A report.

The case of minor deviation from the diverted route recorded on 29 March 2017 was followed up after receiving information from the FO. 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**.

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

Requirements in the SkyPier Plan	1 April to 30 April 2017
Total number of ferry movements recorded and audited	845
Use diverted route and enter / leave SCZ through Gate Access Points	4 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 (8.2 knots to 14.3 knots), which complied with the SkyPier Plan, except that one HSF travelled at an average speed of 16.9 knots which is under investigation. The time used by HSFs to travel through SCZ is presented in **Figure 7-1**.
Daily Cap (including all SkyPier HSFs)	90 to 97 daily movements (within the maximum daily cap - 125 daily movements).

7.3 Audit of Construction and Associated Vessels

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

ET carried out the following actions during the reporting period:

- Four skipper training sessions were held for contractors' concerned skippers of relevant construction vessels to familiarize them with the predefined routes; general education on local cetaceans; guidelines for avoiding adverse water quality impact; the required environmental practices / measures while operating construction and associated vessels under the Project; and guidelines for operating vessels safely in the presence of CWDs. The list of all trained skippers was properly recorded and maintained by ET.
- Seven skipper training sessions were held by contractor's Environmental Officer. Competency test was subsequently conducted with the trained skippers by ET.
- 35 skippers were trained by ET and 12 skippers were trained by contractor's Environmental Officer in April 2017. In total, 612 skippers were trained from August 2016 to April 2017.
- The upgraded Marine Surveillance System (MSS) was launched in March 2017. The MSS automatically recorded deviation cases such as speeding, entering no entry zone, not traveling through the designated gate. ET conducted checking to ensure the MSS records deviation cases accurately.
- Deviations such as speeding in the works area, entering from non-designated gates and entering no-entry zones were identified. All the concerned contractors were reminded to comply with the requirements of the MTRMP-CAV during the bi-weekly MTCC audit.
- 3-month rolling programmes (one month record and 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.

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

7.4 Implementation of Dolphin Exclusion Zone

The DEZ Plan was submitted in accordance with EP Condition 3.1 (v) requirement and Section 10.3 of the Updated EM&A Manual, and approved in April 2016 by EPD. The 24-hour DEZs with a 250m radius for marine works were established and implemented by the contractors for DCM and water jetting works for submarine cable diversion in accordance with the DEZ Plan.

During the reporting period, ET has been notified that no dolphins were sighted within the DEZ by the contractors. ET has checked the relevant records to audit the implementation of DEZ.

7.5 Ecological Monitoring

In accordance with the Manual, ecological monitoring shall be undertaken monthly at the Horizontal Directional Drilling (HDD) daylighting location on Sheung Sha Chau Island during the HDD construction works period from August to March. Since the construction works on Sheung Sha Chau is suspended during the ardeid's breeding season between April to July, no ecological monitoring was carried out in this reporting period.

7.6 Status of Submissions under Environmental Permits

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

Table 7.2: Status of Submissions under Environmental Permit

EP Condition	Submission	Status
2.1	Complaint Management Plan	Accepted / approved by EPD
2.4	Management Organizations	
2.5	Construction Works Schedule and Location Plans	
2.7	Marine Park Proposal	
2.8	Marine Ecology Conservation Plan	
2.9	Marine Travel Routes and Management Plan for Construction and Associated Vessels	
2.10	Marine Travel Routes and Management Plan for High Speed Ferries of SkyPier	
2.11	Marine Mammal Watching Plan	
2.12	Coral Translocation Plan	
2.13	Fisheries Management Plan	
2.14	Egretry Survey Plan	
2.15	Silt Curtain Deployment Plan	
2.17	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	

7.7 Compliance with Other Statutory Environmental Requirements

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

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

7.8.1 Complaints

During the reporting period, a complaint was received on 24 April 2017 regarding dolphin watching arrangement. The case is currently under investigation in accordance with the Complaint Management Plan.

7.8.2 Notifications of Summons or Status of Prosecution

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

7.8.3 Cumulative Statistics

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

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

8.1 Construction Programme for the Coming Reporting Period

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

Advanced Works:

Contract P560 (R) Aviation Fuel Pipeline Diversion Works

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

Contract 3212 11kV Submarine Cable Diversion

- Articulated pipes installation; and
- Post laid burial work and concrete protection slabs installation.

DCM Works:

Contract 3201 to 3205 DCM Works

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

Reclamation Works:

Contract 3206 Main Reclamation Works

- Site office establishment; and
- Laying of sand blanket.

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, DCM works and water jetting works for submarine cable diversion;
- DEZ monitoring for DCM and water jetting works and implementation of MMWP for silt curtain deployment by the contractors' dolphin observers;
- Sorting, recycling, storage and disposal of general refuse and construction waste;
- Management of chemicals and avoidance of oil spillage on-site; and
- Acoustic decoupling measures for equipment on marine vessels.

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

8.3 Monitoring Schedule for the Coming Reporting Period

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

9 Conclusion and Recommendation

The key activities of the Project carried out in the reporting period included five DCM contracts, two advanced works contracts, and a reclamation contract. The DCM contracts involved DCM works and trials, site office establishment, laying of geotextile and sand blanket; the advanced works contract involved forming of marine approach trench, articulated pipes installation, cable laying and HDD works; and the reclamation contract involved site office establishment and laying of sand blanket.

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

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 the conditions of silt curtains, which have been 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 laying of sand blanket and dolphin observers were deployed in accordance with the plan. On the implementation of DEZ Plan, dolphin observers at 9 to 12 dolphin observation stations were deployed for continuous monitoring of the DEZ by all contractors for DCM and water jetting works for submarine cable diversion in accordance with the DEZ Plan. Trainings for the proposed dolphin observers were provided by the ET prior to the aforementioned works, with the training records kept by the ET. From the contractors' MMWP observation records and DEZ monitoring records, no dolphin or other marine mammals were observed within or around the silt curtains, and no dolphins were sighted within the DEZ. 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 April 2017 were in the range of 90 to 97 daily movements, which are within the maximum daily cap of 125 daily movements. A total of 845 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 (8.2 to 14.3 knots), which were in compliance with the

SkyPier Plan, except that one HSF travelled with an average speed of 16.9 knots. Notice regarding the exceedance of average speed within SCZ was sent to the ferry operator and the case is under investigation by ET. Four 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), the upgraded Marine Surveillance System (MSS) was launched in March 2017. The MSS automatically recorded the deviation case such as speeding, entering no entry zone, not traveling through the designated gate. ET conducted checking to ensure the MSS records all deviation cases accurately. Training has been provided for the concerned skippers to facilitate them in familiarising with the requirements of the MTRMP-CAV. ET reminded contractors that all vessels shall avoid entering the Brothers Marine Park, which has been designated since 30 December 2016. 3-month rolling programmes for construction vessel activities were also received from contractors.

Figures

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

LEGEND:

- LAND FORMATION
- TEMPORARY WORKS AREA BOUNDARY
- KEY CONSTRUCTION ACTIVITIES
- PROPOSED 11kV SUBMARINE CABLE DIVERSION

RECLAMATION WORKS AREA
(please refer to FIGURE 1.2)

Contract 3212 –
11kV Submarine Cable Diversion

Contract P560(R) –
Launching Site

Contract 3201–3206
and AAHK Site Offices

Contract P560(R) – Site Office

Contract P560(R) – Stockpiling Area

白洲 PAK CHAU

沙洲 SHA CHAU

大鼓洲 TAI MO TO

東涌 TUNG CHUNG

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

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Airport Authority Hong Kong, 1 Sky Plaza Road, Hong Kong International Airport, Lantau, Hong Kong
Tel : (852) 2188 7111 Fax : (852) 2824 0717

MOTT MACDONALD

Title

LOCATIONS OF KEY CONSTRUCTION ACTIVITIES IN THIS REPORTING PERIOD

Consultant's Signatures for Approval		Date
Design	JC	11MAY17
Checkers	JC / TK	11MAY17
Approver	EC	11MAY17

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

Drawing No. FIGURE 1.1

Scale at A3 1 : 30000

Rev. B

Filename: J:\355482\REPORT\ENV\CWSLP\FIG 1.1.dgn

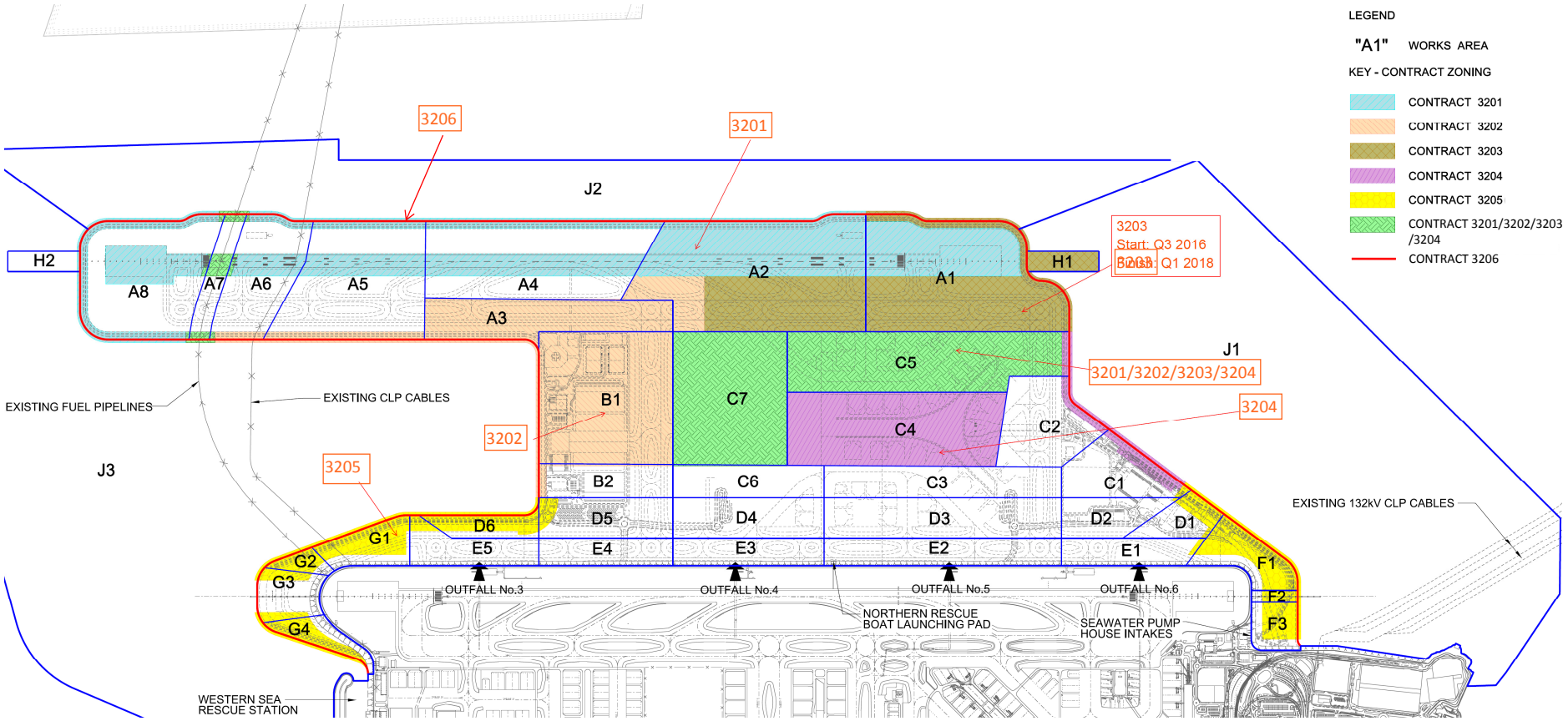

FIGURE 1.2- LOCATIONS OF RECLAMATION WORKS AREA

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

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Airport Authority HKIA Tower, 1 Sky Plaza Road, Hong Kong International Airport, Lantau, Hong Kong
Tel : (852) 2181 7111 Fax : (852) 2824 0717

Mott MacDonald

Title

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

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

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

Drawing No.

FIGURE 2.1

Scale at A3 1 : 22500

Rev. C

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

805000 E
810000 E
815000 E
820000 E
825000 N
820000 N
815000 N

HKSAR BOUNDARY

C1
C2
C3

IM1
IM2
IM3
IM4
IM5
IM6
IM7
IM8
IM9
IM10
IM11
IM12
IM13

SR2
SR3
SR4A
SR5A
SR6
SR7
SR8

LEGEND:

- LAND FORMATION FOOTPRINT
- 500m ENVELOPE
- IMPACT STATION
- SENSITIVE RECEIVER
- CONTROL STATION
- MOBILE IMPACT STATION

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

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Airport Authority HKIA Tower, 1 Sky Plaza Road, Hong Kong International Airport, Lantau, Hong Kong
Tel : (852) 2188 7111 Fax : (852) 2824 0717

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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
AIRPORT WEST
WEST LANTAU

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

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

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

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Airport Authority HKIA Tower, 1 Sky Plaza Road, Hong Kong International Airport, Lantau, Hong Kong
Tel : (852) 2188 7111 Fax : (852) 2824 0717

MOTT MACDONALD

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

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

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

Drawing No. FIGURE 6.1

Scale at A3 1 : 125000

Rev. D

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

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

E
D

RAMSTON ROAD

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

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Airport Authority HKIA Tower, 1 Sky Plaza Road, Hong Kong International Airport, Lantau, Hong Kong
Tel : (852) 2188 7111 Fax : (852) 2824 0717

MOTT MACDONALD

Title

LAND BASED DOLPHIN MONITORING IN BASELINE AND CONSTRUCTION PHASES

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

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

Drawing No.

FIGURE 6.2

Scale at A3 1 : 45000

Rev. B

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

804000 E
806000 E
808000 E
810000 E
812000 E
814000 E
816000 E
818000 E
820000 E

828000 N
826000 N
824000 N
822000 N
820000 N
818000 N

URMSTON ROAD

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
MONG HAU

CASTLE PEAK BAY
TSING SHAN WAN

BUTTERFLY BEACH

GOLDEN BEACH

PEARL ISLAND

小磨刀
SIU MO TO

大磨刀
TAI MO TO

大小磨刀
THE BROTHERS

TSZ KAN CHAU

東涌
TUNG CHUNG

大白灣
DISCOVERY (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

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Airport Authority HKIA Tower, 1 Sky Plaza Road, Hong Kong International Airport, Lantau, Hong Kong
Tel : (852) 2181 7111 Fax : (852) 2824 0717

MOTT MACDONALD

Title

LOCATIONS FOR AUTONOMOUS PASSIVE ACOUSTIC MONITORING IN BASELINE AND CONSTRUCTION PHASES

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

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

Drawing No. FIGURE 6.5

Scale at A3 1 : 45000

Rev. B

Filename: J:\355482\REPORT\ENV\EMA\170206\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 surrounding the concrete batching plant, ground stockpiling may be used;	Within Concrete Batching Plant / Duration of the construction phase	N/A

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Notes:

I= implemented where applicable;

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

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

Appendix B. Monitoring Schedule

Monitoring Schedule of This Reporting Period

Apr-17

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1 WQ General & Regular DCM mid-ebb: 16:04 mid-flood: 09:23
2	**3** NM1A/AR1A NM4	**4** WQ General & Regular DCM mid-ebb: 06:55 mid-flood: 11:58	**5** Site Inspection CWD Vessel Survey NM5/AR2 NM3A	**6** Site Inspection CWD Land-based Survey NM6 WQ General & Regular DCM mid-ebb: 10:19 mid-flood: 15:26	**7** Site Inspection CWD Land-based Survey AR1A	**8** WQ General & Regular DCM mid-ebb: 11:47 mid-flood: 17:24
9	**10** Site Inspection CWD Vessel Survey NM5/AR2 NM3A	**11** Site Inspection CWD Vessel Survey NM6	**12** Site Inspection CWD Vessel Survey NM1A/AR1A NM4 WQ General & Regular DCM mid-ebb: 13:43 mid-flood: 07:31	**13** Site Inspection AR2	**14** Site Inspection WQ General & Regular DCM mid-ebb: 14:45 mid-flood: 08:21	**15**
16 WQ General & Regular DCM mid-ebb: 15:57 mid-flood: 09:14	**17** Site Inspection	**18** Site Inspection CWD Vessel Survey NM1A/AR1A NM4 NM6 WQ General & Regular DCM mid-ebb: 17:31 mid-flood: 10:11	**19** Site Inspection NM5/AR2 NM3A	**20** Site Inspection CWD Land-based Survey WQ General & Regular DCM mid-ebb: 19:56 mid-flood: 12:58	**21** Site Inspection	**22** WQ General & Regular DCM mid-ebb: 10:34 mid-flood: 15:43
23	**24** CWD Vessel Survey NM1A/AR1A NM4 NM6	**25** Site Inspection CWD Vessel Survey CWD Land-based Survey NM5/AR2 WQ General & Regular DCM mid-ebb: 12:17 mid-flood: 18:24	**26** CWD Vessel Survey	**27** Site Inspection CWD Land-based Survey AR1A WQ General & Regular DCM mid-ebb: 13:34 mid-flood: 07:07	**28** Site Inspection AR2 NM3A	**29** WQ General & Regular DCM mid-ebb: 15:02 mid-flood: 08:18
30		**Notes:** Air quality and Noise Monitoring Station CWD - Chinese White Dolphin WQ - Water Quality DCM - Deep Cemenet Mixing	NM1A/AR1A - Man Tung Road Park NM3A - Site Office NM4 - Ching Chung Hau Po Woon Primary School NM5/AR2 - Village House, Tin Sum NM6 - House No. 1, Sha Lo Wan			

Tentative Monitoring Schedule of Next Reporting Period

May-17

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1	**2** Site Inspection NM1A/AR1A NM4 NM6 WQ General & Initial Intensive DCM mid-ebb: 17:44 mid-flood: 10:30	**3**	**4** Site Inspection CWD Vessel Survey NM5/AR2 NM3A WQ General & Regular DCM mid-ebb: 08:48 mid-flood: 13:47	**5** Site Inspection CWD Vessel Survey CWD Land-based Survey	**6** WQ General & Regular DCM mid-ebb: 10:45 mid-flood: 16:20
7	**8** CWD Vessel Survey NM1A/AR1A NM4 NM6	**9** Site Inspection CWD Vessel Survey CWD Land-based Survey WQ General & Regular DCM mid-ebb: 12:20 mid-flood: 18:45	**10** NM5/AR2 NM3A	**11** Site Inspection CWD Vessel Survey WQ General & Regular DCM mid-ebb: 13:23 mid-flood: 06:51	**12** Site Inspection AR1A	**13** WQ General & Regular DCM mid-ebb: 14:25 mid-flood: 07:44
14	**15** CWD Vessel Survey CWD Land-based Survey NM5/AR2 NM3A	**16** Site Inspection CWD Vessel Survey NM1A/AR1A NM4 WQ General & Regular DCM mid-ebb: 16:16 mid-flood: 09:15	**17** CWD Vessel Survey	**18** Site Inspection CWD Land-based Survey NM6 WQ General & Regular DCM mid-ebb: 17:56 mid-flood: 10:45	**19** Site Inspection CWD Land-based Survey AR2	**20** WQ General & Regular DCM mid-ebb: 09:05 mid-flood: 13:57
21	**22** NM1A/AR1A NM4	**23** Site Inspection NM6 WQ General & Regular DCM mid-ebb: 11:12 mid-flood: 17:19	**24**	**25** Site Inspection NM5/AR2 NM3A WQ General & Regular DCM mid-ebb: 12:33 mid-flood: 19:12	**26** Site Inspection AR1A	**27** WQ General & Regular DCM mid-ebb: 14:04 mid-flood: 07:14
28	**29** Site Inspection NM6	**30** WQ General & Regular DCM mid-ebb: 16:32 mid-flood: 09:27	**31** Site Inspection NM5/AR2 NM3A			

Notes:

Air quality and Noise Monitoring Station

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

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

Appendix C. Monitoring Results

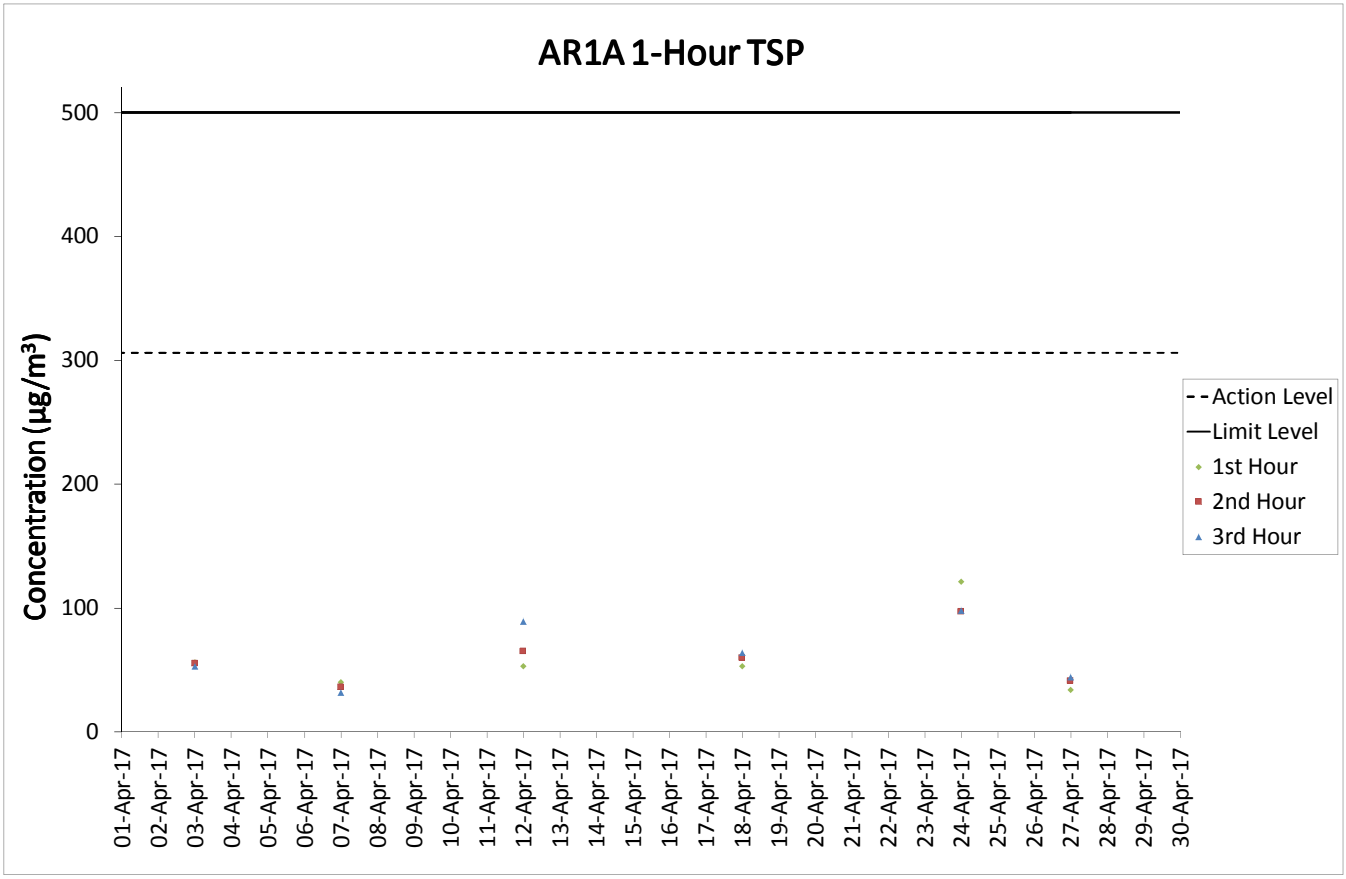
Air Quality Monitoring Results

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

Date	Time	Weather	Wind Speed (m/s)	Wind Direction (deg)	1-hr TSP ($\mu g/m^3$)	Action Level ($\mu g/m^3$)	Limit Level ($\mu g/m^3$)
03-Apr-17	14:05	Fine	6.6	109	56	306	500
03-Apr-17	15:05	Fine	8.0	108	55	306	500
03-Apr-17	16:05	Fine	8.0	101	53	306	500
07-Apr-17	13:30	Fine	2.6	282	40	306	500
07-Apr-17	14:30	Fine	2.3	357	36	306	500
07-Apr-17	15:30	Fine	2.6	356	32	306	500
12-Apr-17	14:30	Cloudy	9	307	53	306	500
12-Apr-17	15:30	Cloudy	7.9	354	65	306	500
12-Apr-17	16:30	Cloudy	7.7	86	89	306	500
18-Apr-17	13:45	Sunny	3	278	53	306	500
18-Apr-17	14:45	Sunny	4.7	264	60	306	500
18-Apr-17	15:45	Sunny	5.1	262	64	306	500
24-Apr-17	14:00	Cloudy	7.1	94	121	306	500
24-Apr-17	15:00	Cloudy	6.4	92	97	306	500
24-Apr-17	16:00	Cloudy	6.2	94	98	306	500
27-Apr-17	13:15	Cloudy	6.1	2	34	306	500
27-Apr-17	14:15	Cloudy	4.0	11	41	306	500
27-Apr-17	15:15	Cloudy	4.1	5	44	306	500

1-hour TSP Results
Station: AR2- Village House, Tin Sum

Date	Time	Weather	Wind Speed (m/s)	Wind Direction (deg)	1-hr TSP ($\mu g/m^3$)	Action Level ($\mu g/m^3$)	Limit Level ($\mu g/m^3$)
05-Apr-17	08:56	Fine	4.8	85	54	298	500
05-Apr-17	09:56	Fine	4.8	83	48	298	500
05-Apr-17	10:56	Fine	3.4	236	45	298	500
10-Apr-17	08:52	Sunny	6.6	200	29	298	500
10-Apr-17	09:52	Sunny	8.2	194	25	298	500
10-Apr-17	10:52	Sunny	8.1	191	23	298	500
13-Apr-17	09:09	Cloudy	3.1	41	65	298	500
13-Apr-17	10:09	Cloudy	2.4	34	69	298	500
13-Apr-17	11:09	Cloudy	2.8	27	69	298	500
19-Apr-17	08:55	Sunny	4.8	222	32	298	500
19-Apr-17	09:55	Sunny	7.3	247	24	298	500
19-Apr-17	10:55	Sunny	7.2	243	17	298	500
25-Apr-17	09:00	Cloudy	7.7	96	112	298	500
25-Apr-17	10:00	Cloudy	8.1	88	116	298	500
25-Apr-17	11:00	Cloudy	5.8	76	98	298	500
28-Apr-17	09:00	Sunny	3.6	47	41	298	500
28-Apr-17	10:00	Sunny	2.4	63	32	298	500
28-Apr-17	11:00	Sunny	2.2	354	29	298	500


AR1A 1-Hour TSP
Concentration (µg/m³)
500
400
300
200
100
0
01-Apr-17
02-Apr-17
03-Apr-17
04-Apr-17
05-Apr-17
06-Apr-17
07-Apr-17
08-Apr-17
09-Apr-17
10-Apr-17
11-Apr-17
12-Apr-17
13-Apr-17
14-Apr-17
15-Apr-17
16-Apr-17
17-Apr-17
18-Apr-17
19-Apr-17
20-Apr-17
21-Apr-17
22-Apr-17
23-Apr-17
24-Apr-17
25-Apr-17
26-Apr-17
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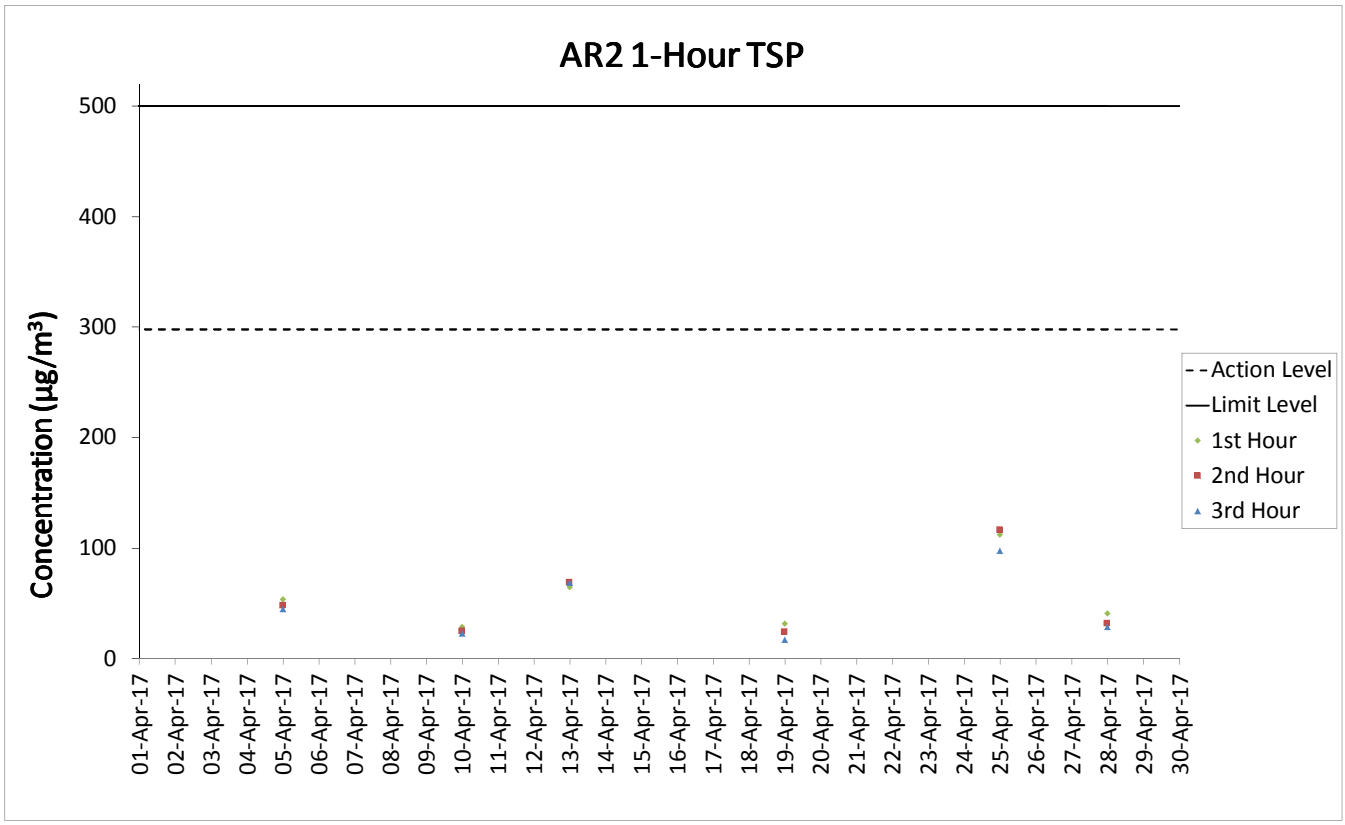
28-Apr-17
29-Apr-17
30-Apr-17
Action Level
Limit Level
1st Hour
2nd Hour
3rd Hour


AR2 1-Hour TSP
Concentration (µg/m³)
500
400
300
200
100
0
01-Apr-17
02-Apr-17
03-Apr-17
04-Apr-17
05-Apr-17
06-Apr-17
07-Apr-17
08-Apr-17
09-Apr-17
10-Apr-17
11-Apr-17
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22-Apr-17
23-Apr-17
24-Apr-17
25-Apr-17
26-Apr-17
27-Apr-17
28-Apr-17
29-Apr-17
30-Apr-17
Action Level
Limit Level
1st Hour
2nd Hour
3rd Hour

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)
03-Apr-17	Fine	14:15	71.0	53.5	71
03-Apr-17	Fine	14:20	71.5	54.5	
03-Apr-17	Fine	14:25	69.5	54.0	
03-Apr-17	Fine	14:30	72.5	55.5	
03-Apr-17	Fine	14:35	71.5	55.5	
03-Apr-17	Fine	14:40	73.0	56.0	
12-Apr-17	Cloudy	14:50	72.0	57.0	71
12-Apr-17	Cloudy	14:55	70.5	55.0	
12-Apr-17	Cloudy	15:00	69.5	54.5	
12-Apr-17	Cloudy	15:05	71.5	56.0	
12-Apr-17	Cloudy	15:10	73.0	56.5	
12-Apr-17	Cloudy	15:15	70.5	56.5	
18-Apr-17	Sunny	14:08	73.0	54.5	72
18-Apr-17	Sunny	14:13	72.5	55.0	
18-Apr-17	Sunny	14:18	74.0	55.5	
18-Apr-17	Sunny	14:23	71.0	56.0	
18-Apr-17	Sunny	14:28	71.0	55.0	
18-Apr-17	Sunny	14:33	71.5	55.5	
24-Apr-17	Cloudy	15:40	74.5	58.5	72
24-Apr-17	Cloudy	15:45	74.0	55.0	
24-Apr-17	Cloudy	15:50	71.5	55.5	
24-Apr-17	Cloudy	15:55	72.5	55.5	
24-Apr-17	Cloudy	16:00	72.5	55.0	
24-Apr-17	Cloudy	16:05	72.0	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-Apr-17	Fine	14:23	67.5	58.5	57
05-Apr-17	Fine	14:28	68.5	58.0	
05-Apr-17	Fine	14:33	68.5	57.5	
05-Apr-17	Fine	14:38	69.0	59.0	
05-Apr-17	Fine	14:43	67.0	58.0	
05-Apr-17	Fine	14:48	65.5	59.5	
10-Apr-17	Fine	13:15	61.5	59.0	61
10-Apr-17	Fine	13:20	62.0	59.0	
10-Apr-17	Fine	13:25	61.5	59.0	
10-Apr-17	Fine	13:30	62.5	59.0	
10-Apr-17	Fine	13:35	63.5	59.0	
10-Apr-17	Fine	13:40	62.5	59.0	
19-Apr-17	Sunny	14:10	61.0	59.5	60
19-Apr-17	Sunny	14:15	60.5	58.5	
19-Apr-17	Sunny	14:20	61.0	59.5	
19-Apr-17	Sunny	14:25	60.0	59.0	
19-Apr-17	Sunny	14:30	61.0	59.5	
19-Apr-17	Sunny	14:35	62.0	59.5	
28-Apr-17	Sunny	15:20	64.0	60.0	62
28-Apr-17	Sunny	15:25	63.0	59.0	
28-Apr-17	Sunny	15:30	63.0	59.0	
28-Apr-17	Sunny	15:35	65.0	60.0	
28-Apr-17	Sunny	15:40	59.5	58.5	
28-Apr-17	Sunny	15:45	63.5	58.5	

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)
03-Apr-17	Fine	13:20	67.0	60.0	66
03-Apr-17	Fine	13:25	63.0	59.0	
03-Apr-17	Fine	13:30	65.5	59.0	
03-Apr-17	Fine	13:35	64.0	59.0	
03-Apr-17	Fine	13:40	65.0	61.0	
03-Apr-17	Fine	13:45	64.0	58.5	
12-Apr-17	Cloudy	13:45	64.5	59.5	65
12-Apr-17	Cloudy	13:50	62.5	59.5	
12-Apr-17	Cloudy	13:55	63.5	58.5	
12-Apr-17	Cloudy	14:00	63.0	58.5	
12-Apr-17	Cloudy	14:05	62.5	59.0	
12-Apr-17	Cloudy	14:10	63.0	59.5	
18-Apr-17	Fine	10:58	62.0	56.5	63
18-Apr-17	Fine	11:03	62.5	56.5	
18-Apr-17	Fine	11:08	61.5	56.5	
18-Apr-17	Fine	11:13	62.0	57.0	
18-Apr-17	Fine	11:18	62.0	58.0	
18-Apr-17	Fine	11:23	61.5	58.0	
24-Apr-17	Cloudy	10:57	67.5	61.5	64
24-Apr-17	Cloudy	11:02	64.5	60.5	
24-Apr-17	Cloudy	11:07	66.5	61.5	
24-Apr-17	Cloudy	11:12	67.0	61.5	
24-Apr-17	Cloudy	11:17	69.0	60.0	
24-Apr-17	Cloudy	11:22	65.0	60.5	

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

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

Date	Weather	Time	Measured L_{10} dB(A)	Measured L_{90} dB(A)	$L_{eq(30mins)}$ dB(A)
05-Apr-17	Fine	09:32	59.5	51.5	53
05-Apr-17	Fine	09:37	58.5	50.0	
05-Apr-17	Fine	09:42	60.0	50.0	
05-Apr-17	Fine	09:47	58.0	49.0	
05-Apr-17	Fine	09:52	61.5	48.5	
05-Apr-17	Fine	09:57	59.0	47.5	
10-Apr-17	Sunny	09:35	56.0	50.0	53
10-Apr-17	Sunny	09:40	56.0	49.5	
10-Apr-17	Sunny	09:45	58.5	49.5	
10-Apr-17	Sunny	09:50	57.0	49.5	
10-Apr-17	Sunny	09:55	61.5	51.0	
10-Apr-17	Sunny	10:00	57.5	49.5	
19-Apr-17	Sunny	09:32	58.5	50.5	57
19-Apr-17	Sunny	09:37	58.0	50.5	
19-Apr-17	Sunny	09:42	57.5	50.5	
19-Apr-17	Sunny	09:47	55.5	48.0	
19-Apr-17	Sunny	09:52	55.0	47.5	
19-Apr-17	Sunny	09:57	54.0	48.0	
25-Apr-17	Cloudy	09:50	56.5	49.5	59
25-Apr-17	Cloudy	09:55	61.5	50.0	
25-Apr-17	Cloudy	10:00	59.0	49.0	
25-Apr-17	Cloudy	10:05	58.5	47.0	
25-Apr-17	Cloudy	10:10	57.0	46.5	
25-Apr-17	Cloudy	10:15	60.5	47.0	

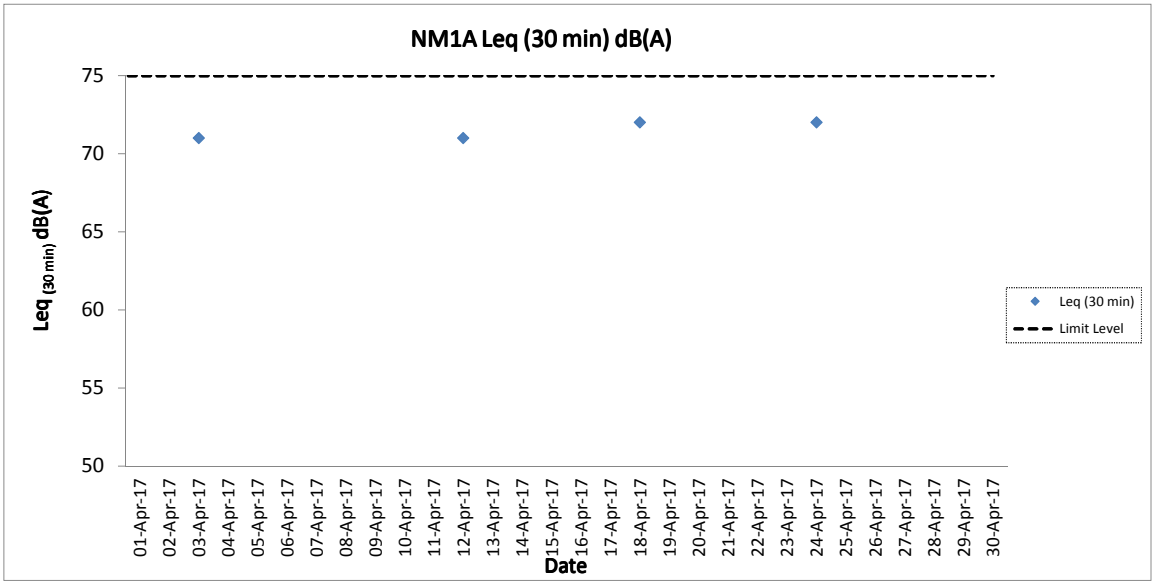
Remarks:
+3dB (A) correction was applied to free-field measurement.

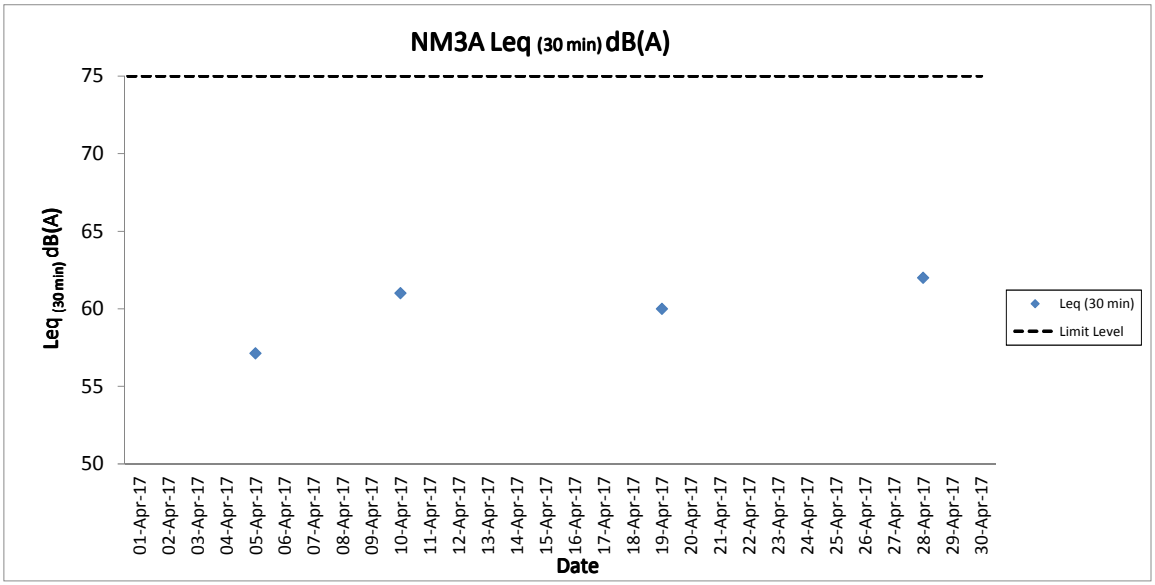
Noise Measurement Results

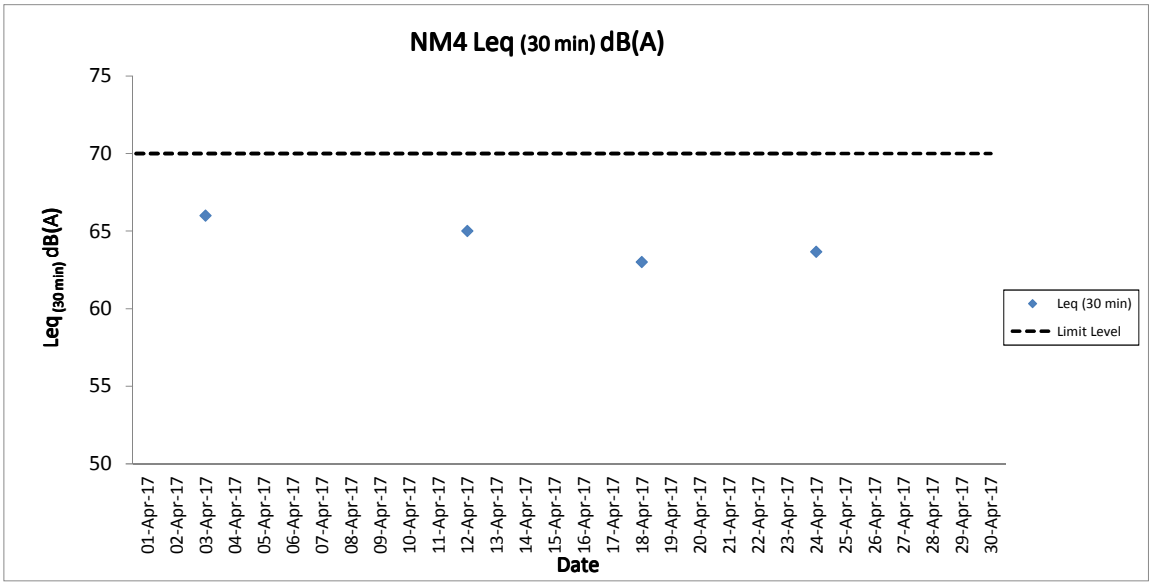
Station: NM6- House No.1 Sha Lo Wan

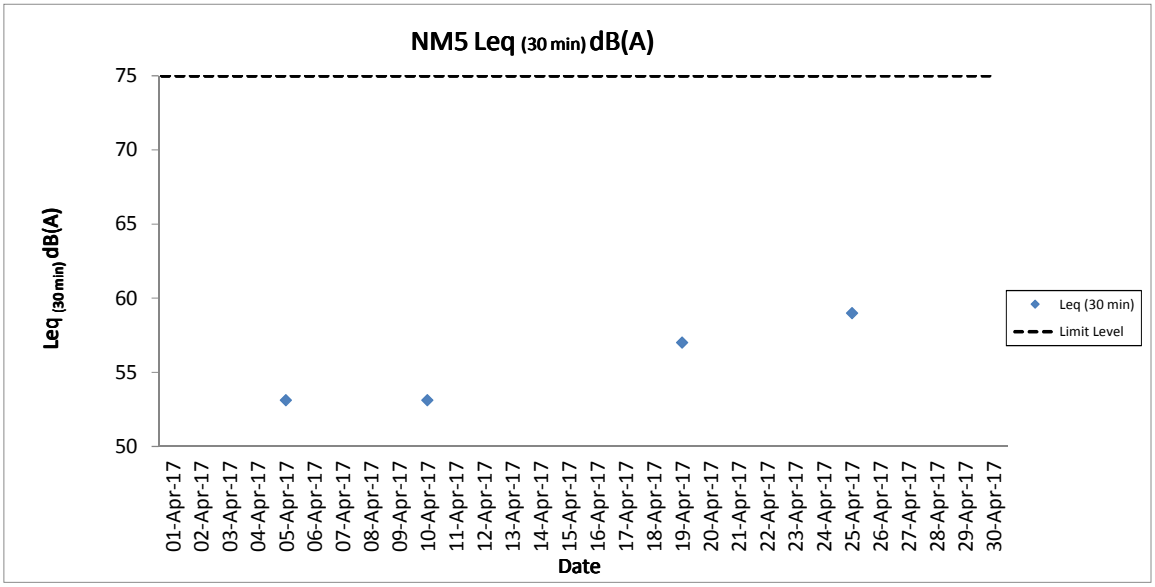
Date	Weather	Time	Measured L_{10} dB(A)	Measured L_{90} dB(A)	$L_{eq(30mins)}$ dB(A)
06-Apr-17	Cloudy	09:41	69.0	58.5	67
06-Apr-17	Cloudy	09:46	69.0	53.0	
06-Apr-17	Cloudy	09:51	67.0	55.0	
06-Apr-17	Cloudy	09:56	66.0	51.5	
06-Apr-17	Cloudy	10:01	67.5	51.5	
06-Apr-17	Cloudy	10:06	66.5	52.5	
11-Apr-17	Cloudy	09:37	69.0	53.0	62
11-Apr-17	Cloudy	09:42	70.0	56.5	
11-Apr-17	Cloudy	09:47	72.0	57.0	
11-Apr-17	Cloudy	09:52	70.0	56.5	
11-Apr-17	Cloudy	09:57	69.5	55.0	
11-Apr-17	Cloudy	10:02	67.0	54.5	
18-Apr-17	Fine	09:41	76.5	55.5	73
18-Apr-17	Fine	09:46	78.0	57.0	
18-Apr-17	Fine	09:51	74.5	54.0	
18-Apr-17	Fine	09:56	77.5	52.5	
18-Apr-17	Fine	10:01	75.0	51.5	
18-Apr-17	Fine	10:06	74.5	52.0	
24-Apr-17	Cloudy	09:38	71.0	56.0	68
24-Apr-17	Cloudy	09:43	74.0	60.0	
24-Apr-17	Cloudy	09:48	70.0	59.5	
24-Apr-17	Cloudy	09:53	72.0	54.0	
24-Apr-17	Cloudy	09:58	72.0	55.5	
24-Apr-17	Cloudy	10:03	70.0	55.0	

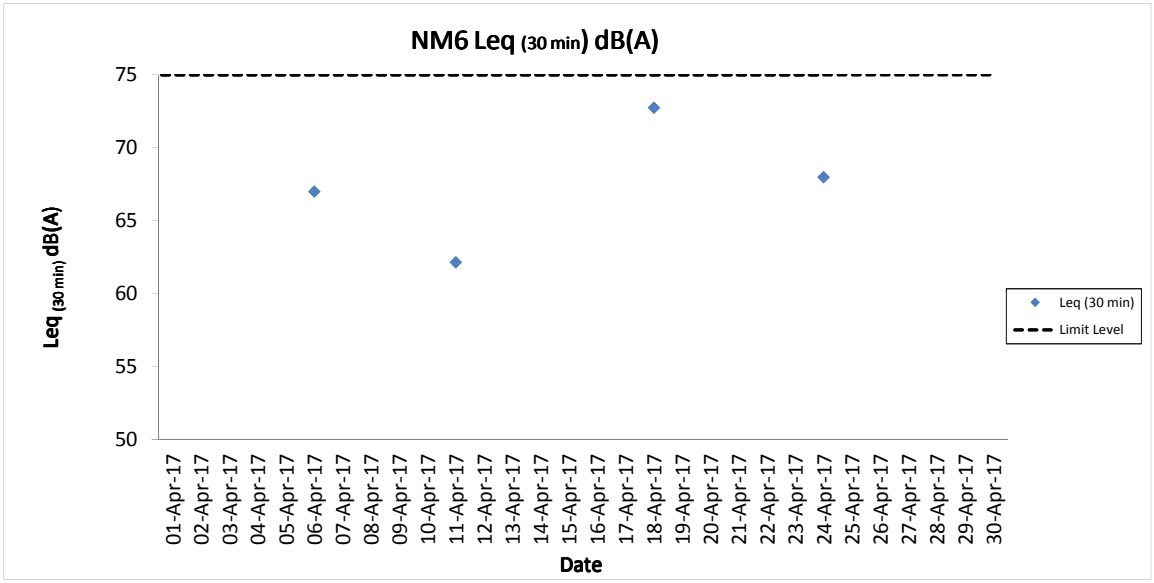
Remarks:
+3dB (A) correction was applied to free-field measurement.


NM1A Leq (30 min) dB(A)
Leq (30 min) dB(A)
75
70
65
60
55
50
01-Apr-17
02-Apr-17
03-Apr-17
04-Apr-17
05-Apr-17
06-Apr-17
07-Apr-17
08-Apr-17
09-Apr-17
10-Apr-17
11-Apr-17
12-Apr-17
13-Apr-17
14-Apr-17
15-Apr-17
16-Apr-17
17-Apr-17
18-Apr-17
19-Apr-17
20-Apr-17
21-Apr-17
22-Apr-17
23-Apr-17
24-Apr-17
25-Apr-17
26-Apr-17
27-Apr-17
28-Apr-17
29-Apr-17
30-Apr-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-Apr-17
02-Apr-17
03-Apr-17
04-Apr-17
05-Apr-17
06-Apr-17
07-Apr-17
08-Apr-17
09-Apr-17
10-Apr-17
11-Apr-17
12-Apr-17
13-Apr-17
14-Apr-17
15-Apr-17
16-Apr-17
17-Apr-17
18-Apr-17
19-Apr-17
20-Apr-17
21-Apr-17
22-Apr-17
23-Apr-17
24-Apr-17
25-Apr-17
26-Apr-17
27-Apr-17
28-Apr-17
29-Apr-17
30-Apr-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-Apr-17
02-Apr-17
03-Apr-17
04-Apr-17
05-Apr-17
06-Apr-17
07-Apr-17
08-Apr-17
09-Apr-17
10-Apr-17
11-Apr-17
12-Apr-17
13-Apr-17
14-Apr-17
15-Apr-17
16-Apr-17
17-Apr-17
18-Apr-17
19-Apr-17
20-Apr-17
21-Apr-17
22-Apr-17
23-Apr-17
24-Apr-17
25-Apr-17
26-Apr-17
27-Apr-17
28-Apr-17
29-Apr-17
30-Apr-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-Apr-17
02-Apr-17
03-Apr-17
04-Apr-17
05-Apr-17
06-Apr-17
07-Apr-17
08-Apr-17
09-Apr-17
10-Apr-17
11-Apr-17
12-Apr-17
13-Apr-17
14-Apr-17
15-Apr-17
16-Apr-17
17-Apr-17
18-Apr-17
19-Apr-17
20-Apr-17
21-Apr-17
22-Apr-17
23-Apr-17
24-Apr-17
25-Apr-17
26-Apr-17
27-Apr-17
28-Apr-17
29-Apr-17
30-Apr-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-Apr-17
02-Apr-17
03-Apr-17
04-Apr-17
05-Apr-17
06-Apr-17
07-Apr-17
08-Apr-17
09-Apr-17
10-Apr-17
11-Apr-17
12-Apr-17
13-Apr-17
14-Apr-17
15-Apr-17
16-Apr-17
17-Apr-17
18-Apr-17
19-Apr-17
20-Apr-17
21-Apr-17
22-Apr-17
23-Apr-17
24-Apr-17
25-Apr-17
26-Apr-17
27-Apr-17
28-Apr-17
29-Apr-17
30-Apr-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 01 April 17 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Sunny	Moderate	09:28	8.8	Surface	1.0	0.9	86	16.4	16.4	7.8	7.8	29.1	29.1	99.0	99.0	8.1	8.1	9.6	21.0	28	25	74	75	804238	815620	<0.2	<0.2	0.9	1.0
						1.0	1.0	86	16.4		7.8		29.1		99.0		8.1		9.6		25		74				<0.2		1.0	
					Middle	4.4	0.8	84	16.2	16.2	7.8	7.8	30.2	30.2	98.6	98.6	8.1		21.1		30		76				<0.2		1.0	
						4.4	0.8	84	16.2		7.8		30.2		98.6		8.1		21.1		32		74				<0.2		0.8	
					Bottom	7.8	0.8	84	16.1	16.1	7.8	7.8	30.6	30.6	99.1	99.1	8.1	8.1	32.4		17		77				<0.2		1.1	
						7.8	0.8	90	16.1		7.8		30.6		99.1		8.1		32.4		19		77				<0.2		1.1	
C2	Fine	Moderate	10:33	14.2	Surface	1.0	0.4	156	20.3	20.3	7.9	7.9	24.7	24.7	93.2	93.2	7.3	7.2	4.2	14.1	7	9	75	77	806956	825682	<0.2	<0.2	2.1	2.3
						1.0	0.5	166	20.3		7.9		24.7		93.1		7.3		4.3		9		74				<0.2		2.1	
					Middle	7.1	0.6	149	20.2	20.2	7.9	7.9	25.4	25.4	91.3	91.3	7.1		17.3		8		78				<0.2		2.3	
						7.1	0.6	156	20.2		7.9		25.4		91.3		7.1		17.4		10		78				<0.2		2.4	
					Bottom	13.2	0.6	276	20.2	20.2	7.9	7.9	25.7	25.7	91.3	91.3	7.1	7.1	20.6		8		77				<0.2		2.5	
						13.2	0.6	289	20.2		7.9		25.7		91.3		7.1		20.6		10		78				<0.2		2.4	
C3	Fine	Moderate	08:12	10.5	Surface	1.0	0.7	238	20.0	20.0	8.0	8.0	28.1	28.1	92.4	92.4	7.1	7.1	3.7	5.0	6	8	73	74	817821	822109	<0.2	<0.2	1.6	1.6
						1.0	0.7	259	20.0		8.0		28.1		92.4		7.1		3.7		7		73				<0.2		1.6	
					Middle	5.3	0.8	251	19.9	19.9	8.0	8.0	29.8	29.8	91.8	91.8	7.0		4.4		9		74				<0.2		1.4	
						5.3	0.8	258	19.9		8.0		29.8		91.8		7.0		4.4		11		74				<0.2		1.6	
					Bottom	9.5	0.5	253	19.9	19.9	8.0	8.0	30.1	30.1	92.9	92.9	7.1	7.1	6.8		7		76				<0.2		1.6	
						9.5	0.5	265	19.9		8.0		30.1		92.9		7.1		6.9		9		76				<0.2		1.5	
IM1	Sunny	Moderate	10:02	8.9	Surface	1.0	0.6	207	16.6	16.6	7.7	7.7	27.9	27.9	96.5	96.5	7.9	7.9	12.4	20.1	48	26	74	75	806438	818351	<0.2	<0.2	1.5	1.5
						1.0	0.6	209	16.6		7.7		27.9		96.5		7.9		12.5		47		72				<0.2		1.4	
					Middle	4.5	0.6	143	16.4	16.5	7.7	7.7	27.9	27.9	96.3	96.3	7.9		19.7		13		74				<0.2		1.4	
						4.5	0.6	149	16.5		7.7		27.9		96.3		7.9		19.9		15		73				<0.2		1.7	
					Bottom	7.9	0.5	103	16.4	16.4	7.7	7.7	27.9	27.9	96.9	97.0	8.0	8.0	28.2		14		78				<0.2		1.4	
						7.9	0.6	108	16.4		7.7		27.8		97.0		8.0		28.1		16		77				<0.2		1.3	
IM2	Sunny	Moderate	10:16	9.2	Surface	1.0	0.7	105	16.6	16.6	7.7	7.7	28.4	28.4	98.8	98.9	8.1	8.1	8.6	12.4	10	30	75	78	806207	818852	<0.2	<0.2	1.8	1.5
						1.0	0.8	105	16.6		7.7		28.4		98.9		8.1		8.6		10		76				<0.2		1.5	
					Middle	4.6	0.7	73	16.4	16.4	7.7	7.7	28.6	28.6	98.3	98.3	8.1		10.7		38		77				<0.2		1.5	
						4.6	0.7	77	16.4		7.7		28.6		98.3		8.1		10.7		37		78				<0.2		1.3	
					Bottom	8.2	0.6	81	16.3	16.3	7.8	7.8	29.4	29.4	98.2	98.2	8.0	8.1	17.9		42		79				<0.2		1.5	
						8.2	0.6	88	16.3		7.8		29.4		98.2		8.1		17.7		44		80				<0.2		1.4	
IM3	Sunny	Moderate	10:24	9.3	Surface	1.0	0.7	83	16.7	16.7	7.8	7.8	28.3	28.3	98.7	98.8	8.1	8.1	7.5	13.5	11	25	73	76	806013	819411	<0.2	<0.2	1.8	1.5
						1.0	0.8	84	16.7		7.8		28.3		98.8		8.1		7.5		9		74				<0.2		1.6	
					Middle	4.7	0.6	65	16.5	16.5	7.7	7.7	28.5	28.5	98.3	98.3	8.1		9.9		16		76				<0.2		1.3	
						4.7	0.7	67	16.5		7.7		28.5		98.3		8.1		9.9		14		77				<0.2		1.4	
					Bottom	8.3	0.6	81	16.4	16.4	7.8	7.8	29.4	29.4	98.1	98.1	8.0	8.0	22.9		52		78				<0.2		1.4	
						8.3	0.6	83	16.4		7.8		29.4		98.1		8.0		23.0		46		78				<0.2		1.4	
IM4	Sunny	Moderate	10:35	8.6	Surface	1.0	0.7	77	16.7	16.7	7.8	7.8	28.7	28.8	99.4	99.4	8.1	8.1	10.5	13.9	9	31	73	76	805023	819570	<0.2	<0.2	1.6	1.4
						1.0	0.7	83	16.7		7.8		28.8		99.4		8.1		10.7		7		75				<0.2		1.2	
					Middle	4.3	0.6	106	16.6	16.6	7.8	7.8	28.9	28.9	99.0	99.0	8.1		14.7		24		75				<0.2		1.6	
						4.3	0.6	110	16.6		7.8		28.9		99.0		8.1		15.0		21		77				<0.2		1.5	
					Bottom	7.6	0.6	125	16.6	16.6	7.8	7.8	30.0	30.0	99.1	99.1	8.0	8.0	16.9		60		78				<0.2		1.2	
						7.6	0.7	133	16.6		7.8		29.9		99.1		8.0		15.4		64		80				<0.2		1.4	
IM5	Sunny	Moderate	10:42	8.4	Surface	1.0	0.7	91	16.8	16.8	7.8	7.8	28.0	28.0	98.5	98.5	8.1	8.1	9.2	11.9	10	16	74	76	804914	820564	<0.2	<0.2	1.7	1.5
						1.0	0.7	91	16.8		7.8		28.0		98.5		8.1		9.3		8		73				<0.2		1.8	
					Middle	4.2	0.7	81	16.6	16.6	7.8	7.8	28.0	28.0	98.4	98.4	8.1		13.9		14		75				<0.2		1.4	
						4.2	0.7	84	16.6		7.8		28.0		98.4		8.1		14.2		13		76				<0.2		1.4	
					Bottom	7.4	0.6	94	16.6	16.7	7.8	7.8	29.8	29.8	98.3	98.4	8.0	8.0	12.6		25		78				<0.2		1.4	
						7.4	0.7	101	16.7		7.8		29.8		98.4		8.0		12.3		27		77				<0.2		1.2	
IM6	Sunny	Moderate	10:51	7.8	Surface	1.0	0.6	85	16.8	16.8	7.8	7.8	27.9	27.9	97.5	97.5	8.0	8.0	15.1	19.9	23	27	75	78	805813	821060	<0.2	<0.2	1.5	1.4
						1.0	0.6	90	16.8		7.8		27.9		97.4		8.0		15.1		23		76				<0.2		1.7	
					Middle	3.9	0.5	98	16.7	16.7	7.8	7.8	28.0	28.0	96.9	96.9	8.0		18.6		30		77				<0.2		1.4	
						3.9	0.5	102	16.7		7.8		28.0		96.9		8.0		18.6		27		78				<0.2		1.4	
					Bottom	6.8	0.5	82	16.5	16.5	7.8	7.8	28.5	28.5	97.2	97.2	8.0	8.0	25.9		30		80				<0.2		1.2	
						6.8	0.5	86	16.5		7.8		28.5		97.2		8.0		25.9		28		80				<0.2		1.3	
IM7	Sunny	Moderate	11:02	9.3	Surface	1.0	0.7	77	16.9	16.9	7.8	7.8	27.7	27.7	98.4	98.4	8.0	8.0	8.1	21.8	10	12	76	78	806830	821349	0.4	<0.2	1.8	1.5
						1.0	0.7	77	16.9		7.8		27.7		98.4		8.0		8.1		12		77				0.3		2.0	
					Middle	4.7	0.6	64	16.9	16.9	7.8	7.8	27.8	27.8	97.4	97.4	8.0		18.1		13		77				<0.2	0.3	1.4	
						4.7	0.7	70	16.9		7.8		27.8		97.3		8.0		18.6		11		78				<0.2		1.3	
					Bottom	8.3	0.5	74	16.5	16.5	7.8	7.8	28.6	28.6	96.1	96.1	7.9	7.9	38.9		12		80				<0.2		1.2	
						8.3	0.6	77	16.5		7.8		28.6		96.1		7.9		39.1		12		80				<0.2		1.1	
IM8	Fine	Moderate	09:59	9.9	Surface	1.0	0.5	172	20.1	20.1	8.0	8.0	25.3	25.3	93.3	93.4	7.3	7.3	8.2	11.3	12	11	73	76	807821	821695	<0.2	<0.2	2.4	2.3
						1.0	0.5	188	20.1		8.0		25.3		93.4		7.3		8.1		15		74				<0.2		2.2	
					Middle	5.0	0.7	106	20.1	20.1	8.0	8.0	26.0	26.0	93.5	93.6	7.3		9.3		11		76				<0.2		2.5	
						5.0	0.7	106	20.1		8.0		26.0		93.6		7.3		9.3		8		76				<0.2		2.3	
					Bottom	8.9	0.7	70	20.1	20.1	8.0	8.0	27.6	27.6	94.7	94.7	7.3	7.3	16.8		9		77				<0.2		2.1	
						8.9	0.7	73	20.1		8.0		27.6		94.7		7.3		16.3		10		78				<0.2		2.0	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 01 April 17 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Fine	Moderate	09:49	8.8	Surface	1.0	0.6	187	20.1	20.1	8.0	8.0	25.2	25.2	92.0	92.0	7.2	7.2	13.1	16.9	15	15	74	76	808811	822094	<0.2	<0.2	2.1	2.0
						1.0	0.6	194	20.1		8.0		25.2		92.0		7.2		13.2		16		75				<0.2		2.2	
					Middle	4.4	0.6	158	20.0	20.0	8.0	8.0	25.3	25.3	91.9	91.9	7.2		18.5		13		76				<0.2		1.9	
						4.4	0.6	171	20.0		8.0		25.3		91.9		7.2		18.6		14		76				<0.2		2.0	
					Bottom	7.8	0.6	212	20.0	20.0	8.0	8.0	25.6	25.6	93.4	93.5	7.3	7.3	18.8		13		77				<0.2		1.9	
						7.8	0.6	229	20.0		8.0		25.6		93.5		7.3		19.0		16		78				<0.2		1.8	
IM10	Fine	Moderate	09:40	9.5	Surface	1.0	0.6	284	20.3	20.3	8.0	8.0	27.3	27.3	94.2	94.2	7.3	7.4	9.7	14.4	15	12	73	75	809839	822240	<0.2	<0.2	2.0	1.7
						1.0	0.6	284	20.3		8.0		27.3		94.2		7.3		9.8		11		73				<0.2		1.9	
					Middle	4.8	0.6	292	20.2	20.2	8.0	8.0	27.6	27.6	95.4	95.5	7.4		16.0		12		75				<0.2		1.6	
						4.8	0.7	297	20.2		8.0		27.6		95.5		7.4		16.2		12		77				<0.2		1.7	
					Bottom	8.5	0.5	280	20.1	20.2	8.0	8.0	27.6	27.6	98.5	98.6	7.6	7.6	17.5		12		75				<0.2		1.6	
						8.5	0.5	299	20.2		8.0		27.6		98.6		7.6		17.3		12		77				<0.2		1.4	
IM11	Fine	Moderate	09:32	9.4	Surface	1.0	0.7	257	20.1	20.1	8.0	8.0	27.5	27.5	92.4	92.4	7.1	7.1	10.7	16.8	15	15	73	75	810533	821501	<0.2	<0.2	1.2	1.3
						1.0	0.8	281	20.1		8.0		27.5		92.3		7.1		10.7		15		73				<0.2		1.2	
					Middle	4.7	0.7	270	20.1	20.1	8.0	8.0	27.7	27.7	91.7	91.7	7.1		18.3		17		75				<0.2		1.2	
						4.7	0.7	279	20.1		8.0		27.7		91.7		7.1		18.5		14		75				<0.2		1.5	
					Bottom	8.4	0.5	253	20.1	20.1	8.0	8.0	27.8	27.8	91.7	91.7	7.1	7.1	21.1		17		77				<0.2		1.3	
						8.4	0.5	264	20.1		8.0		27.8		91.6		7.1		21.2		14		77				<0.2		1.3	
IM12	Fine	Moderate	09:18	10.1	Surface	1.0	0.8	264	20.1	20.1	8.0	8.0	27.0	27.0	93.4	93.4	7.2	7.2	8.4	11.8	13	13	73	75	811522	821162	<0.2	<0.2	1.4	1.7
						1.0	0.8	274	20.1		8.0		27.0		93.4		7.2		8.5		11		73				<0.2		1.5	
					Middle	5.1	0.6	262	20.1	20.1	8.0	8.0	27.5	27.5	93.2	93.2	7.2		11.5		14		75				<0.2		1.6	
						5.1	0.7	264	20.1		8.0		27.5		93.2		7.2		11.7		11		76				<0.2		1.5	
					Bottom	9.1	0.4	258	20.1	20.1	8.0	8.0	27.6	27.6	95.2	95.3	7.4	7.4	15.1		12		78				<0.2		2.0	
						9.1	0.4	274	20.1		8.0		27.6		95.4		7.4		15.5		16		77				<0.2		1.9	
IM13	Sunny	Moderate	10:09	6.0	Surface	1.0	0.6	157	16.7	16.7	7.7	7.7	27.9	27.9	97.6	97.6	8.0	8.0	9.4	19.2	24	27		-	811582	820085	-	-	-	-
						1.0	0.6	167	16.7		7.7		27.9		97.6		8.0		9.5		23						-		-	
					Middle	3.0	0.6	102	16.4	16.4	7.7	7.7	28.6	28.6	96.9	96.9	8.0		23.2		29						-		-	
						3.0	0.6	108	16.4		7.7		28.6		96.9		8.0		23.0		24						-		-	
					Bottom	5.0	0.5	120	16.3	16.3	7.7	7.7	29.1	29.1	97.0	97.0	8.0	8.0	25.1		30						-		-	
						5.0	0.6	122	16.3		7.7		29.1		97.0		8.0		25.0		32						-		-	
SR2	Fine	Moderate	08:45	5.4	Surface	1.0	0.3	109	20.1	20.1	8.0	8.0	27.7	27.7	93.1	93.1	7.2	7.2	12.7	13.8	15	17	73	75	814165	821463	<0.2	<0.2	1.8	1.8
						1.0	0.4	117	20.1		8.0		27.7		93.1		7.2		12.7		19		73				<0.2		1.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-						-		-	
						-	-	-	-		-		-		-		-		-		-						-		-	
					Bottom	4.4	0.3	210	20.1	20.1	8.0	8.0	27.9	27.9	93.5	93.6	7.2	7.2	14.9		16		76				<0.2		1.9	
						4.4	0.3	214	20.1		8.0		27.9		93.6		7.2		15.0		19		76				<0.2		1.7	
SR3	Fine	Moderate	10:08	10.8	Surface	1.0	0.5	145	20.3	20.3	8.0	8.0	25.2	25.2	94.1	94.1	7.3	7.3	6.8	10.4	9	9		-	807563	822147	-	-	-	-
						1.0	0.5	145	20.3		8.0		25.2		94.1		7.3		7.2		10						-		-	
					Middle	5.4	0.7	52	20.1	20.1	8.0	8.0	26.4	26.4	94.5	94.5	7.3		8.0		11						-		-	
						5.4	0.7	55	20.1		8.0		26.4		94.5		7.3		8.0		9						-		-	
					Bottom	9.8	0.6	75	20.1	20.1	8.0	8.0	27.4	27.4	95.2	95.2	7.4	7.4	16.3		8						-		-	
						9.8	0.6	75	20.1		8.0		27.3		95.2		7.4		16.1		8						-		-	
SR4A	Sunny	Calm	09:03	9.3	Surface	1.0	0.2	208	16.6	16.6	7.7	7.7	27.3	27.3	95.0	95.0	7.8	7.9	13.7	14.3	16	19		-	807804	817189	-	-	-	-
						1.0	0.2	222	16.6		7.7		27.3		94.9		7.8		13.6		16						-		-	
					Middle	4.7	0.2	209	16.6	16.6	7.6	7.6	27.3	27.3	96.0	96.0	7.9		14.6		21						-		-	
						4.7	0.2	228	16.6		7.6		27.3		96.0		7.9		14.7		18						-		-	
					Bottom	8.3	0.2	208	16.5	16.5	7.6	7.6	27.3	27.3	99.5	99.6	8.2	8.2	14.6		20						-		-	
						8.3	0.3	226	16.5		7.6		27.3		99.7		8.2		14.6		20						-		-	
SR5A	Sunny	Calm	08:45	4.9	Surface	1.0	0.2	275	16.5	16.5	7.6	7.6	27.0	27.0	101.1	101.1	8.4	8.4	11.8	11.8	14	15		-	810710	816593	-	-	-	-
						1.0	0.2	298	16.5		7.6		27.0		101.1		8.4		11.9		13						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-						-		-	
						-	-	-	-		-		-		-		-		-		-						-		-	
					Bottom	3.9	0.2	259	16.4	16.4	7.6	7.6	27.0	27.0	104.5	104.6	8.7	8.7	11.8		15						-		-	
						3.9	0.2	276	16.4		7.6		27.0		104.7		8.7		11.8		16						-		-	
SR6	Sunny	Calm	08:19	4.6	Surface	1.0	0.2	211	16.5	16.5	7.6	7.6	23.2	23.2	100.0	100.1	8.5	8.5	15.5	15.6	22	24		-	814668	817899	-	-	-	-
						1.0	0.2	231	16.5		7.6		23.2		100.1		8.5		15.5		19						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-						-		-	
						-	-	-	-		-		-		-		-		-		-						-		-	
					Bottom	3.6	0.2	242	16.4	16.4	7.5	7.5	22.1	22.1	105.5	105.5	9.0	9.0	15.6		28						-		-	
						3.6	0.2	255	16.4		7.5		22.1		105.5		9.0		15.7		27						-		-	
SR7	Fine	Moderate	07:40	17.9	Surface	1.0	0.2	220	19.8	19.8	7.9	7.9	29.4	29.4	91.1	91.1	7.0	7.0	4.2	5.4	6	6		-	823736	823636	-	-	-	-
						1.0	0.3	229	19.8		7.9		29.4		91.0		7.0		4.3		7						-		-	
					Middle	9.0	0.3	108	19.8	19.8	7.9	7.9	30.2	30.2	90.5	90.5	6.9	7.0	6.2		5						-		-	
						9.0	0.3	111	19.8		7.9		30.2		90.5		6.9		6.0		7						-		-	
					Bottom	16.9	0.3	68	19.8	19.8	7.9	7.9	30.3	30.3	92.2	92.4	7.0	7.1	6.0		7						-		-	
						16.9	0.3	69	19.8		7.9		30.3		92.6		7.1		5.5		5						-		-	
SR8	Fine	Moderate	09:02	6.8	Surface	1.0	0.3	123	20.0	20.0	8.0	8.0	25.0	25.0	95.4	95.5	7.5	7.5	11.2	12.1	12	12		-	811582	820417	-	-	-	-
						1.0	0.3	130	20.0		8.0		25.0		95.5		7.5		11.0		12						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-						-		-	
						-	-	-	-		-		-		-		-		-		-						-		-	
					Bottom	5.8	0.3	213	20.1	20.1	8.0	8.0	27.9	27.9	101.6	101.7	7.8	7.8	13.1		12						-		-	
						5.8	0.3	220	20.1		8.0		27.9		101.8		7.8		13.1		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 01 April 17 during Mid-Ebb tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Sunny	Moderate	15:47	8.6	Surface	1.0	0.8	205	16.8	16.8	7.8	7.8	31.3	31.3	102.2	102.2	8.2	8.2	5.6	6.1	12	10	74	75	804258	815620	<0.2	<0.2	0.6	0.7
						1.0	0.8	206	16.8		7.8		31.3		102.2		8.2		5.6		10		73				<0.2		0.7	
					Middle	4.3	0.7	219	16.6	16.6	7.8	7.8	31.8	31.8	101.4	101.4	8.2		5.0		9		75				<0.2		0.7	
						4.3	0.7	230	16.6		7.8		31.7		101.3		8.1		5.3		10		75				<0.2		0.6	
					Bottom	7.6	0.6	235	16.4	16.4	7.8	7.8	32.4	32.4	100.4	100.3	8.1	8.1	7.6		8		75				<0.2		0.6	
						7.6	0.7	240	16.4		7.8		32.3		100.1		8.0		7.7		8		76				<0.2		0.7	
C2	Fine	Moderate	14:19	14.5	Surface	1.0	0.5	133	20.9	20.9	8.0	8.0	25.2	25.2	95.1	95.1	7.3	7.2	7.8	12.9	10	11	73	76	806955	825682	<0.2	<0.2	2.6	2.6
						1.0	0.5	144	20.9		8.0		25.2		95.1		7.3		7.7		11		74				<0.2		2.4	
					Middle	7.3	0.3	141	20.1	20.1	8.1	8.1	28.3	28.3	90.6	90.6	7.0		16.5		11		76				<0.2		2.6	
						7.3	0.4	147	20.1		8.1		28.3		90.6		7.0		16.4		11		76				<0.2		2.5	
					Bottom	13.5	0.3	185	19.9	19.9	8.1	8.1	29.4	29.4	91.6	91.7	7.0	7.0	14.5		12		77				<0.2		2.7	
						13.5	0.3	191	19.9		8.1		29.4		91.7		7.0		14.7		10		77				<0.2		2.5	
C3	Fine	Moderate	17:13	13.5	Surface	1.0	0.8	114	20.4	20.4	8.0	8.0	27.9	27.9	95.6	95.6	7.3	7.3	10.2	9.5	14	15	71	75	817795	822109	<0.2	<0.2	1.6	1.7
						1.0	0.8	124	20.4		8.0		27.9		95.5		7.3		10.3		16		73				<0.2		1.9	
					Middle	6.8	0.5	103	20.3	20.3	8.0	8.0	28.4	28.4	95.8	95.8	7.3		9.1		16		75				<0.2		1.6	
						6.8	0.5	109	20.3		8.0		28.4		95.8		7.3		9.2		17		76				<0.2		1.7	
					Bottom	12.5	0.4	75	20.3	20.3	8.0	8.0	28.5	28.5	97.5	97.5	7.5	7.5	9.0		15		77				<0.2		1.7	
						12.5	0.4	79	20.3		8.0		28.5		97.5		7.5		9.0		14		78				<0.2		1.6	
IM1	Sunny	Moderate	15:14	8.9	Surface	1.0	0.5	184	17.2	17.2	7.8	7.8	28.1	28.1	101.2	101.2	8.2	8.2	6.7	6.5	9	9	74	75	806477	818351	<0.2	<0.2	0.9	1.3
						1.0	0.5	194	17.2		7.8		28.1		101.2		8.2		6.8		7		74				<0.2		0.8	
					Middle	4.5	0.4	178	16.6	16.6	7.8	7.8	30.6	30.6	100.4	100.4	8.1		6.7		10		75				<0.2		1.4	
						4.5	0.4	178	16.6		7.8		30.6		100.4		8.1		6.6		8		75				<0.2		1.4	
					Bottom	7.9	0.4	160	16.5	16.5	7.8	7.8	31.9	31.9	99.6	99.6	8.0	8.0	6.0		10		77				<0.2		1.6	
						7.9	0.5	173	16.5		7.8		31.9		99.6		8.0		6.0		9		77				<0.2		1.4	
IM2	Sunny	Moderate	15:08	9.1	Surface	1.0	0.4	192	17.5	17.5	7.8	7.8	27.1	27.1	100.9	101.0	8.2	8.2	5.4	6.1	8	8	75	78	806201	818852	<0.2	<0.2	0.9	1.3
						1.0	0.4	201	17.5		7.8		27.1		101.1		8.2		5.4		8		76				<0.2		0.9	
					Middle	4.6	0.4	172	16.8	16.8	7.8	7.8	31.0	31.0	100.8	100.8	8.1		5.9		9		78				<0.2		1.2	
						4.6	0.4	174	16.8		7.8		30.9		100.8		8.1		6.0		8		79				<0.2		1.5	
					Bottom	8.1	0.4	180	16.4	16.5	7.8	7.8	31.9	31.9	99.3	99.3	8.0	8.0	6.8		7		80				<0.2		1.6	
						8.1	0.4	184	16.5		7.8		31.9		99.6		8.0		6.8		7		80				<0.2		1.4	
IM3	Sunny	Moderate	14:58	8.6	Surface	1.0	0.4	197	17.0	17.0	7.8	7.8	29.4	29.5	100.7	100.7	8.1	8.1	7.4	7.6	12	10	75	76	806012	819411	<0.2	<0.2	1.0	0.9
						1.0	0.4	200	17.0		7.8		29.5		100.7		8.1		7.5		10		75				<0.2		0.9	
					Middle	4.3	0.5	183	16.8	16.8	7.8	7.8	30.5	30.5	100.6	100.7	8.1		8.2		8		75				<0.2		0.9	
						4.3	0.5	195	16.8		7.8		30.5		100.8		8.1		7.8		9		76				<0.2		1.0	
					Bottom	7.6	0.4	178	16.4	16.4	7.8	7.8	31.8	31.8	99.9	99.9	8.1	8.1	7.1		11		78				<0.2		0.9	
						7.6	0.4	181	16.4		7.8		31.8		99.9		8.1		7.6		9		76				<0.2		0.9	
IM4	Sunny	Moderate	14:49	7.6	Surface	1.0	0.4	148	16.7	16.7	7.8	7.8	31.3	31.3	100.0	100.0	8.1	8.0	9.0	9.0	10	10	76	77	805031	819570	<0.2	<0.2	0.6	0.6
						1.0	0.4	154	16.6		7.8		31.3		99.9		8.0		9.0		12		75				<0.2		0.4	
					Middle	3.8	0.3	160	16.4	16.4	7.8	7.8	31.5	31.5	99.3	99.4	8.0		9.2		9		77				<0.2		0.6	
						3.8	0.4	171	16.4		7.8		31.5		99.4		8.0		9.1		11		78				<0.2		0.4	
					Bottom	6.6	0.3	190	16.3	16.3	7.8	7.8	31.9	31.9	99.1	99.2	8.0	8.0	8.7		9		79				<0.2		0.8	
						6.6	0.3	191	16.3		7.8		31.8		99.2		8.0		8.7		9		79				<0.2		0.6	
IM5	Sunny	Moderate	14:40	8.3	Surface	1.0	0.5	138	16.6	16.6	7.8	7.8	31.2	31.3	99.4	99.2	8.0	8.0	9.6	12.6	10	12	73	75	804915	820564	<0.2	<0.2	0.7	0.6
						1.0	0.5	151	16.6		7.8		31.3		99.0		8.0		10.2		10		74				<0.2		0.5	
					Middle	4.2	0.5	150	16.3	16.3	7.8	7.8	31.6	31.6	98.2	98.2	7.9		13.0		11		75				<0.2		0.5	
						4.2	0.6	153	16.3		7.8		31.6		98.1		7.9		13.1		11		75				<0.2		0.6	
					Bottom	7.3	0.4	159	16.2	16.2	7.8	7.8	31.9	31.9	98.3	98.3	7.9	7.9	14.8		13		77				<0.2		0.5	
						7.3	0.5	174	16.2		7.8		31.9		98.3		7.9		14.7		14		78				<0.2		0.6	
IM6	Sunny	Moderate	14:31	9.4	Surface	1.0	0.6	114	17.3	17.3	7.8	7.8	29.7	29.8	100.3	100.3	8.0	8.0	7.5	10.9	8	10	74	76	805826	821060	<0.2	<0.2	0.5	0.7
						1.0	0.6	119	17.3		7.8		29.8		100.2		8.0		8.0		7		75				<0.2		0.8	
					Middle	4.7	0.4	132	16.4	16.5	7.8	7.8	31.1	31.1	98.7	98.7	8.0		10.7		9		76				<0.2		0.6	
						4.7	0.4	137	16.5		7.8		31.1		98.7		8.0		10.7		10		76				<0.2		0.8	
					Bottom	8.4	0.4	126	16.3	16.3	7.8	7.8	32.0	32.0	98.4	98.4	7.9	7.9	14.5		13		78				<0.2		0.8	
						8.4	0.4	128	16.3		7.8		32.0		98.4		7.9		14.2		12		77				<0.2		0.7	
IM7	Sunny	Moderate	14:19	5.1	Surface	1.0	0.5	87	17.3	17.3	7.8	7.8	29.6	29.6	101.2	101.2	8.1	8.1	6.4	7.1	8	9	74	76	806823	821349	<0.2	<0.2	0.9	0.9
						1.0	0.5	92	17.2		7.8		29.6		101.1		8.1		6.4		8		73				<0.2		0.9	
					Middle	2.6	0.5	89	17.0	17.0	7.8	7.8	30.0	30.1	100.6	100.5	8.1		6.6		9		75				<0.2		0.9	
						2.6	0.5	92	17.0		7.8		30.1		100.4		8.1		7.1		9		75				<0.2		1.0	
					Bottom	4.1	0.4	112	16.9	16.9	7.8	7.8	30.9	30.9	99.8	99.8	8.0	8.0	8.0		9		78				<0.2		1.0	
						4.1	0.4	115	16.9		7.8		30.9		99.8		8.0		8.0		10		78				<0.2		0.9	
IM8	Fine	Moderate	14:49	9.6	Surface	1.0	0.6	136	20.7	20.7	8.0	8.0	26.4	26.4	98.8	98.9	7.6	7.6	5.6	8.5	8	10	73	76	807851	821695	<0.2	<0.2	1.8	1.8
						1.0	0.7	148	20.7		8.0		26.4		98.9		7.6		5.7		8		74				<0.2		2.0	
					Middle	4.8	0.6	102	20.8	20.8	8.1	8.1	28.5	28.5	99.8	99.8	7.6		7.4		10		76				<0.2		1.8	
						4.8	0.6	108	20.8		8.1		28.5		99.8		7.6		7.4		12		76				<0.2		1.9	
					Bottom	8.6	0.6	95	20.1	20.1	8.1	8.1	30.4	30.4	98.7	98.7	7.5	7.5	12.3		9		77				<0.2		1.7	
						8.6	0.6	95	20.1		8.1		30.4		98.7		7.5		12.5		11		77				<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 01 April 17 during Mid-Ebb tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Fine	Moderate	15:06	8.4	Surface	1.0	0.8	140	20.7	20.7	8.0	8.0	25.7	25.7	97.3	97.3	7.5	7.5	6.1	9.8	8	9	73	75	808797	822094	<0.2	<0.2	2.0	1.9
						1.0	0.8	149	20.7		8.0		25.7		97.3		7.5		5.9		8		74				<0.2		2.0	
					Middle	4.2	0.7	109	20.5	20.5	8.0	8.0	27.5	27.5	97.4	97.5	7.5		8.4		10		75				<0.2		1.9	
						4.2	0.7	113	20.5		8.0		27.5		97.5		7.5		8.4		8		74				<0.2		1.9	
					Bottom	7.4	0.7	97	20.3	20.4	8.0	8.0	29.9	29.9	97.8	97.9	7.4	7.4	15.7		10		76				<0.2		1.9	
						7.4	0.7	102	20.4		8.0		29.9		97.9		7.4		14.2		8		76				<0.2		1.8	
IM10	Fine	Moderate	15:19	9.5	Surface	1.0	1.0	130	20.8	20.8	8.0	8.0	26.3	26.3	97.6	97.6	7.5	7.5	6.9	13.2	8	7	74	76	809844	822240	<0.2	<0.2	2.0	2.0
						1.0	1.1	134	20.8		8.0		26.3		97.6		7.5		7.0		7		74				<0.2		2.2	
					Middle	4.8	0.8	109	20.4	20.4	8.0	8.0	28.0	28.0	97.0	97.0	7.4		13.7		7		75				<0.2		1.7	
						4.8	0.8	111	20.4		8.0		28.0		97.0		7.4		13.8		9		75				<0.2		1.9	
					Bottom	8.5	0.6	98	20.2	20.2	8.0	8.0	29.7	29.7	96.7	96.7	7.4	7.4	19.4		6		78				<0.2		2.1	
						8.5	0.6	106	20.2		8.0		29.7		96.7		7.4		18.1		6		78				<0.2		2.3	
IM11	Fine	Moderate	15:30	9.4	Surface	1.0	0.9	120	20.8	20.8	8.0	8.0	26.4	26.4	97.4	97.4	7.5	7.5	6.6	12.8	12	11	74	76	810527	821501	<0.2	<0.2	1.4	1.4
						1.0	1.0	123	20.8		8.0		26.4		97.4		7.5		6.7		12		74				<0.2		1.5	
					Middle	4.7	0.7	104	20.6	20.6	8.1	8.1	26.8	26.8	96.8	96.8	7.4		11.2		8		76				<0.2		1.3	
						4.7	0.7	109	20.6		8.1		26.8		96.8		7.4		11.3		10		78				<0.2		1.4	
					Bottom	8.4	0.6	83	20.3	20.3	8.1	8.1	27.9	27.9	96.0	96.0	7.4	7.4	20.4		11		77				<0.2		1.5	
						8.4	0.6	91	20.3		8.1		27.9		96.0		7.4		20.6		11		77				<0.2		1.4	
IM12	Fine	Moderate	15:41	10.7	Surface	1.0	1.0	110	20.8	20.8	8.1	8.1	26.5	26.5	96.6	96.6	7.4	7.4	6.9	14.1	9	10	73	75	811515	821162	<0.2	<0.2	1.5	1.4
						1.0	1.0	115	20.8		8.1		26.5		96.6		7.4		6.7		10		74				<0.2		1.4	
					Middle	5.4	0.7	94	20.2	20.2	8.0	8.0	27.5	27.5	94.7	94.7	7.3		16.9		12		75				<0.2		1.3	
						5.4	0.8	96	20.2		8.0		27.5		94.7		7.3		16.9		10		75				<0.2		1.5	
					Bottom	9.7	0.6	99	20.2	20.2	8.0	8.0	27.7	27.7	94.8	94.8	7.3	7.3	18.7		11		77				<0.2		1.2	
						9.7	0.7	101	20.2		8.0		27.7		94.8		7.3		18.7		10		78				<0.2		1.2	
IM13	Sunny	Moderate	15:25	4.3	Surface	1.0	0.3	209	17.0	17.0	7.8	7.8	29.7	29.7	99.4	99.4	8.0	8.0	13.7	14.8	17	17		-	810527	820085	-	-	-	-
						1.0	0.3	209	17.0		7.8		29.7		99.4		8.0		13.7		18						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-						-		-	
						-	-	-	-		-		-		-		-		-		-						-		-	
					Bottom	3.3	0.4	201	16.3	16.3	7.8	7.8	31.6	31.6	98.4	98.4	8.0	8.0	16.5		17						-		-	
						3.3	0.4	206	16.3		7.8		31.5		98.3		8.0		15.3		16						-		-	
SR2	Fine	Moderate	16:52	5.4	Surface	1.0	0.7	80	20.3	20.3	8.0	8.0	27.5	27.5	94.4	94.4	7.3	7.3	21.0	20.8	24	28	73	75	814172	821463	<0.2	<0.2	1.2	1.2
						1.0	0.8	80	20.3		8.0		27.5		94.4		7.3		21.0		24		74				<0.2		1.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-						-		-	
						-	-	-	-		-		-		-		-		-		-						-		-	
					Bottom	4.4	0.5	69	20.3	20.3	8.0	8.0	27.6	27.6	94.4	94.4	7.3	7.3	20.7		30		77				<0.2		1.0	
						4.4	0.5	70	20.3		8.0		27.6		94.4		7.3		20.6		33		77				<0.2		1.2	
SR3	Fine	Moderate	14:42	10.6	Surface	1.0	0.7	168	20.6	20.6	8.1	8.1	25.8	25.8	98.0	98.1	7.6	7.6	5.8	10.3	7	8		-	807559	822147	-	-	-	-
						1.0	0.7	183	20.6		8.1		25.8		98.1		7.6		5.9		9						-		-	
					Middle	5.3	0.6	97	20.7	20.7	8.1	8.1	29.0	29.0	99.6	99.6	7.5		7.3		9						-		-	
						5.3	0.6	98	20.7		8.1		29.0		99.6		7.5		7.5		8						-		-	
					Bottom	9.6	0.7	168	20.1	20.1	8.0	8.0	30.3	30.3	97.8	97.8	7.4	7.4	17.7		7						-		-	
						9.6	0.7	170	20.1		8.0		30.3		97.8		7.4		17.7		8						-		-	
SR4A	Sunny	Calm	16:16	9.5	Surface	1.0	0.5	82	16.6	16.6	7.8	7.8	31.2	31.2	100.0	100.0	8.1	8.1	13.1	15.5	19	19		-	807791	817189	-	-	-	-
						1.0	0.6	85	16.6		7.8		31.2		100.0		8.1		13.3		17						-		-	
					Middle	4.8	0.4	92	16.5	16.5	7.8	7.8	31.5	31.5	99.7	99.7	8.0		17.4		20						-		-	
						4.8	0.4	99	16.5		7.8		31.5		99.7		8.0		17.5		22						-		-	
					Bottom	8.5	0.3	108	16.4	16.4	7.8	7.8	31.7	31.7	99.3	99.3	8.0	8.0	15.9		20						-		-	
						8.5	0.3	109	16.4		7.8		31.7		99.3		8.0		15.8		17						-		-	
SR5A	Sunny	Calm	16:39	9.4	Surface	1.0	0.2	162	17.3	17.3	7.8	7.8	28.8	28.8	99.7	99.7	8.0	8.0	12.1	13.2	10	10		-	810703	816593	-	-	-	-
						1.0	0.2	163	17.3		7.8		28.8		99.7		8.0		12.3		9						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-						-		-	
						-	-	-	-		-		-		-		-		-		-						-		-	
					Bottom	8.4	0.2	157	17.3	17.3	7.8	7.8	28.7	28.7	100.1	100.1	8.1	8.1	14.2		10						-		-	
						8.4	0.2	158	17.3		7.8		28.7		100.1		8.1		14.3		10						-		-	
SR6	Sunny	Calm	17:00	5.1	Surface	1.0	0.2	88	17.8	17.8	7.8	7.8	27.6	27.6	100.0	100.0	8.1	8.1	6.0	6.2	7	8		-	814669	817899	-	-	-	-
						1.0	0.3	96	17.8		7.8		27.6		100.0		8.1		6.0		8						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-						-		-	
						-	-	-	-		-		-		-		-		-		-						-		-	
					Bottom	4.1	0.2	96	17.6	17.6	7.8	7.8	27.6	27.6	101.0	101.0	8.2	8.2	6.3		8						-		-	
						4.1	0.2	96	17.5		7.8		27.6		101.0		8.2		6.4		9						-		-	
SR7	Fine	Moderate	17:42	16.8	Surface	1.0	0.8	66	20.5	20.5	8.0	8.0	27.6	27.6	94.8	94.8	7.3	7.2	4.4	4.7	6	7		-	823755	823636	-	-	-	-
						1.0	0.9	71	20.5		8.0		27.6		94.8		7.3		4.5		5						-		-	
					Middle	8.4	0.4	99	20.5	20.5	8.0	8.0	28.2	28.2	93.5	93.5	7.1		4.9		7						-		-	
						8.4	0.4	99	20.5		8.0		28.2		93.5		7.1		4.9		6						-		-	
					Bottom	15.8	0.4	209	20.3	20.3	8.0	8.0	28.9	28.9	93.4	93.5	7.1	7.1	4.8		7						-		-	
						15.8	0.5	229	20.3		8.0		28.8		93.5		7.1		4.8		8						-		-	
SR8	Fine	Moderate	16:37	6.4	Surface	1.0	0.3	195	20.6	20.6	8.1	8.1	26.4	26.4	97.7	97.7	7.5	7.5	8.6	7.1	32	32		-	811576	820417	-	-	-	-
						1.0	0.3	207	20.6		8.1		26.4		97.7		7.5		8.8		35						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-						-		-	
						-	-	-	-		-		-		-		-		-		-						-		-	
					Bottom	5.4	0.3	184	20.7	20.7	8.2	8.2	27.9	27.9	97.2	97.2	7.4	7.4	5.7		28						-		-	
						5.4	0.3	192	20.7		8.2		27.9		97.2		7.4		5.1		32						-		-	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 04 April 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	11:44	8.8	Surface	1.0	0.5	75	17.4	17.4	7.9	7.9	30.4	30.4	105.5	105.5	8.4	8.4	2.0	2.4	6	8	75	76	804235	815620	<0.2	<0.2	0.9	0.9
						1.0	0.5	81	17.3		7.9		30.4		105.4		8.4		2.0		8		75				<0.2		0.9	
					Middle	4.4	0.5	106	16.9	16.9	7.9	7.9	30.9	30.9	103.0	103.0	8.3		2.6		7		75				<0.2		1.1	
						4.4	0.5	108	16.9		7.9		30.9		103.0		8.3		2.6		9		75				<0.2		0.9	
					Bottom	7.8	0.4	113	16.7	16.7	7.9	7.9	31.4	31.4	102.2	102.2	8.2	8.2	2.7		9		77				<0.2		0.9	
						7.8	0.5	122	16.7		7.9		31.4		102.2		8.2		2.6		7		76				<0.2		0.9	
C2	Fine	Moderate	10:15	11.9	Surface	1.0	0.2	213	20.7	20.7	8.0	8.0	24.5	24.5	92.4	92.4	7.2	7.1	3.6	3.4	5	7	73	76	806958	825682	<0.2	<0.2	3.0	2.8
						1.0	0.2	218	20.7		8.0		24.5		92.3		7.2		3.5		6		74				<0.2		2.9	
					Middle	6.0	0.3	284	20.3	20.3	8.0	8.0	28.1	28.1	90.3	90.3	6.9		3.9		8		76				<0.2		2.8	
						6.0	0.4	301	20.3		8.0		28.1		90.3		6.9		3.9		8		76				<0.2		2.8	
					Bottom	10.9	0.3	255	20.2	20.2	8.0	8.0	28.8	28.8	89.2	89.2	6.8	6.8	2.7		7		77				<0.2		2.7	
						10.9	0.3	262	20.2		8.0		28.8		89.2		6.8		2.7		7		78				<0.2		2.5	
C3	Fine	Moderate	12:27	11.8	Surface	1.0	0.2	227	21.2	21.2	8.0	8.0	27.6	27.6	100.5	100.5	7.6	7.4	2.3	2.1	3	4	73	75	817801	822109	<0.2	<0.2	1.6	1.5
						1.0	0.2	243	21.2		8.0		27.6		100.4		7.6		2.4		3		73				<0.2		1.7	
					Middle	5.9	0.3	260	20.0	20.0	8.0	8.0	30.3	30.3	92.8	92.8	7.1		2.6		6		75				<0.2		1.4	
						5.9	0.3	261	20.0		8.0		30.3		92.8		7.1		2.5		7		76				<0.2		1.5	
					Bottom	10.8	0.3	271	20.0	20.0	8.0	8.0	30.6	30.6	93.3	93.4	7.1	7.1	1.3		4		77				<0.2		1.6	
						10.8	0.3	292	20.0		8.0		30.6		93.4		7.1		1.3		3		77				<0.2		1.4	
IM1	Fine	Moderate	11:10	9.0	Surface	1.0	0.4	224	17.2	17.2	7.8	7.8	29.6	29.6	103.9	103.9	8.4	8.4	3.4	4.5	5	8	74	75	806467	818351	<0.2	<0.2	1.0	1.0
						1.0	0.5	229	17.2		7.8		29.6		103.8		8.4		3.4		4		74				<0.2		1.0	
					Middle	4.5	0.4	127	16.7	16.7	7.8	7.8	30.5	30.5	102.1	102.1	8.3		4.7		8		75				<0.2		1.0	
						4.5	0.4	136	16.7		7.8		30.5		102.1		8.3		4.7		7		76				<0.2		1.0	
					Bottom	8.0	0.3	139	16.6	16.6	7.8	7.8	30.8	30.8	101.3	101.3	8.2	8.2	5.5		11		76				<0.2		0.8	
						8.0	0.3	152	16.6		7.8		30.8		101.3		8.2		5.5		11		77				<0.2		0.9	
IM2	Fine	Moderate	11:01	9.2	Surface	1.0	0.4	217	17.2	17.2	7.8	7.8	29.4	29.4	104.7	104.7	8.4	8.4	2.3	3.3	3	7	75	76	806177	818852	<0.2	<0.2	1.0	0.8
						1.0	0.4	226	17.2		7.8		29.4		104.7		8.4		2.3		2		75				<0.2		1.0	
					Middle	4.6	0.4	144	17.0	17.0	7.8	7.9	29.5	29.6	103.3	103.3	8.3		3.2		6		76				<0.2		0.7	
						4.6	0.4	150	17.0		7.9		29.6		103.2		8.3		3.3		7		76				<0.2		0.7	
					Bottom	8.2	0.4	141	16.7	16.7	7.9	7.9	30.7	30.7	102.2	102.2	8.3	8.3	4.5		12		77				<0.2		0.8	
						8.2	0.4	146	16.7		7.9		30.6		102.2		8.3		4.3		11		77				<0.2		0.8	
IM3	Fine	Moderate	10:52	8.9	Surface	1.0	0.3	192	17.3	17.3	7.8	7.8	28.2	28.2	105.3	105.3	8.5	8.5	1.6	3.1	4	5	74	75	806038	819411	<0.2	<0.2	1.2	1.1
						1.0	0.3	208	17.3		7.8		28.2		105.3		8.5		1.7		4		74				<0.2		1.1	
					Middle	4.5	0.4	126	17.1	17.1	7.9	7.9	28.4	28.4	103.3	103.3	8.4		3.3		4		75				<0.2		1.1	
						4.5	0.4	130	17.1		7.9		28.4		103.2		8.4		3.4		5		75				<0.2		1.2	
					Bottom	7.9	0.4	129	16.7	16.8	7.9	7.9	30.6	30.6	102.0	102.1	8.2	8.2	4.6		6		76				<0.2		1.1	
						7.9	0.4	130	16.8		7.8		30.6		102.2		8.2		4.1		5		77				<0.2		0.9	
IM4	Fine	Moderate	10:43	8.5	Surface	1.0	0.4	163	17.3	17.3	7.8	7.8	26.6	26.6	106.2	106.2	8.7	8.6	2.0	2.8	8	8	74	75	805025	819570	<0.2	<0.2	1.6	1.3
						1.0	0.4	167	17.3		7.8		26.6		106.2		8.7		2.0		7		74				<0.2		1.6	
					Middle	4.3	0.5	147	17.0	17.0	7.9	7.9	28.4	28.4	104.1	104.1	8.5		2.8		10		75				<0.2		1.1	
						4.3	0.5	157	17.0		7.9		28.4		104.0		8.5		2.8		9		75				<0.2		1.1	
					Bottom	7.5	0.4	155	16.7	16.8	7.8	7.8	30.4	30.4	102.1	102.1	8.3	8.3	3.7		8		76				<0.2		1.1	
						7.5	0.4	155	16.8		7.8		30.3		102.1		8.3		3.5		6		76				<0.2		1.2	
IM5	Fine	Moderate	10:32	7.7	Surface	1.0	0.5	160	17.9	17.9	7.8	7.8	24.4	24.4	103.9	103.9	8.5	8.4	2.7	6.7	11	11	74	76	804908	820564	<0.2	<0.2	1.9	1.7
						1.0	0.5	162	17.8		7.8		24.4		103.9		8.5		2.8		9		75				<0.2		2.0	
					Middle	3.9	0.6	161	16.9	16.9	7.8	7.8	29.5	29.5	101.8	101.8	8.3		5.7		7		76				<0.2		1.6	
						3.9	0.6	161	16.9		7.8		29.5		101.7		8.3		5.8		7		76				<0.2		1.4	
					Bottom	6.7	0.6	178	16.6	16.6	7.8	7.8	30.7	30.7	100.6	100.6	8.1	8.1	11.8		15		76				<0.2		1.6	
						6.7	0.6	178	16.6		7.8		30.7		100.6		8.1		11.6		18		77				<0.2		1.4	
IM6	Fine	Moderate	10:22	7.2	Surface	1.0	0.3	206	17.9	17.9	7.8	7.8	24.2	24.2	101.6	101.6	8.3	8.2	2.9	6.3	8	10	73	75	805827	821060	<0.2	<0.2	2.2	2.0
						1.0	0.4	212	17.9		7.8		24.2		101.6		8.3		2.9		8		74				<0.2		2.2	
					Middle	3.6	0.4	135	17.0	17.0	7.8	7.8	28.3	28.3	100.1	100.1	8.1		7.3		9		74				<0.2		2.1	
						3.6	0.4	137	17.0		7.8		28.3		100.1		8.1		7.4		10		75				<0.2		2.0	
					Bottom	6.2	0.4	127	16.7	16.7	7.9	7.9	30.3	30.3	99.7	99.8	8.1	8.1	8.7		13		76				<0.2		1.9	
						6.2	0.4	130	16.7		7.9		30.3		99.8		8.1		8.7		12		76				<0.2		1.8	
IM7	Fine	Moderate	10:13	8.4	Surface	1.0	0.4	244	17.8	17.8	7.8	7.8	24.2	24.2	100.5	100.5	8.3	8.3	2.9	4.9	6	7	74	76	806830	821349	<0.2	<0.2	2.0	2.0
						1.0	0.4	250	17.8		7.8		24.2		100.5		8.3		3.0		6		75				<0.2		2.0	
					Middle	4.2	0.5	76	17.3	17.3	7.8	7.8	26.3	26.3	100.2	100.2	8.2		4.9		7		76				<0.2		2.0	
						4.2	0.5	81	17.3		7.8		26.3		100.2		8.2		4.8		6		76				<0.2		1.9	
					Bottom	7.4	0.4	87	16.8	16.8	7.8	7.8	30.0	30.0	100.1	100.1	8.1	8.1	7.1		9		77				<0.2		1.9	
						7.4	0.5	87	16.8		7.8		30.0		100.1		8.1		6.8		9		77				<0.2		2.0	
IM8	Fine	Moderate	10:45	8.5	Surface	1.0	0.3	210	21.3	21.3	8.0	8.0	23.4	23.4	97.8	97.8	7.6	7.6	5.0	6.0	9	7	74	75	807824	821695	<0.2	<0.2	2.8	3.2
						1.0	0.3	212	21.3		8.0		23.4		97.8		7.6		4.9		7		74				<0.2		2.9	
					Middle	4.3	0.2	186	20.6	20.6	8.0	8.0	26.1	26.1	96.8	96.8	7.5		6.3		6		74				<0.2		3.1	
						4.3	0.3	201	20.6		8.0		26.1		96.8		7.5		6.4		5		75				<0.2		3.1	
					Bottom	7.5	0.3	233	20.3	20.3	8.0	8.0	28.1	28.1	97.0	97.0	7.4	7.4	6.8		8		76				<0.2		3.8	
						7.5	0.3	237	20.3		8.0		28.1		97.0		7.4		6.8		7		76				<0.2		3.5	

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 04 April 17 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Fine	Moderate	10:55	7.5	Surface	1.0	0.3	226	21.4	21.4	8.0	8.0	23.8	23.8	97.8	97.8	7.5	7.5	3.1	4.0	8	7	74	75	808804	822094	<0.2	<0.2	3.4	3.5
						1.0	0.3	242	21.4		8.0		23.8		97.8		7.5		3.3		8		74				<0.2		3.4	
					Middle	3.8	0.3	227	20.8	20.8	8.0	8.0	25.2	25.2	96.4	96.4	7.5		4.2		6		74				<0.2		3.4	
						3.8	0.3	229	20.8		8.0		25.2		96.4		7.5		4.3		6		75				<0.2		3.6	
					Bottom	6.5	0.3	203	20.5	20.5	8.0	8.0	27.1	27.2	96.1	96.1	7.4	7.4	4.4		6		76				<0.2		3.6	
						6.5	0.3	205	20.5		8.0		27.2		96.1		7.4		4.5		6		77				<0.2		3.7	
IM10	Fine	Moderate	11:09	8.5	Surface	1.0	0.4	251	21.3	21.3	8.0	8.0	24.2	24.2	98.9	98.9	7.6	7.5	3.5	4.7	6	6	74	75	809832	822240	<0.2	<0.2	3.2	3.1
						1.0	0.4	254	21.3		8.0		24.2		98.8		7.6		3.7		5		74				<0.2		3.2	
					Middle	4.3	0.3	228	20.5	20.5	8.0	8.0	27.0	27.0	95.9	95.9	7.4		4.9		6		74				<0.2		3.0	
						4.3	0.3	230	20.5		8.0		27.0		95.9		7.4		5.0		6		75				<0.2		3.1	
					Bottom	7.5	0.4	219	20.3	20.3	8.0	8.0	28.0	28.0	96.3	96.3	7.4	7.4	5.6		6		75				<0.2		3.2	
						7.5	0.4	236	20.3		8.0		28.0		96.3		7.4		5.6		7		77				<0.2		3.0	
IM11	Fine	Moderate	11:19	8.7	Surface	1.0	0.3	256	21.2	21.2	8.0	8.0	23.5	23.5	98.0	98.0	7.6	7.5	2.8	5.0	6	6	73	75	810562	821501	<0.2	<0.2	1.9	2.0
						1.0	0.3	271	21.2		8.0		23.5		97.9		7.6		2.9		5		74				<0.2		2.1	
					Middle	4.4	0.3	236	20.6	20.6	8.0	8.0	26.7	26.7	95.0	95.0	7.3		5.3		4		75				<0.2		2.3	
						4.4	0.3	251	20.6		8.0		26.6		95.0		7.3		5.5		5		75				<0.2		2.0	
					Bottom	7.7	0.3	262	20.3	20.3	8.0	8.0	28.4	28.4	94.5	94.6	7.2	7.2	6.8		8		77				<0.2		1.9	
						7.7	0.3	277	20.3		8.0		28.4		94.7		7.2		6.8		6		77				<0.2		1.9	
IM12	Fine	Moderate	11:30	9.2	Surface	1.0	0.5	273	21.0	21.0	8.0	8.0	25.0	25.0	97.8	97.8	7.5	7.4	3.2	4.7	6	5	74	75	811516	821162	<0.2	<0.2	2.0	1.9
						1.0	0.5	286	21.0		8.0		25.0		97.7		7.5		3.0		4		74				<0.2		1.8	
					Middle	4.6	0.5	266	20.4	20.4	8.0	8.0	27.6	27.6	94.8	94.8	7.3		4.4		4		75				<0.2		1.9	
						4.6	0.5	266	20.4		8.0		27.6		94.8		7.3		4.4		4		75				<0.2		2.1	
					Bottom	8.2	0.3	252	20.2	20.2	8.0	8.0	29.2	29.2	94.8	94.9	7.2	7.2	6.6		7		77				<0.2		1.6	
						8.2	0.3	271	20.2		8.0		29.2		94.9		7.2		6.6		5		77				<0.2		1.9	
IM13	Fine	Moderate	11:21	5.1	Surface	1.0	0.2	159	16.9	16.9	7.8	7.8	30.2	30.3	101.8	101.8	8.2	8.2	4.9	5.4	6	7		-	807220	820085	-	-	-	-
						1.0	0.2	159	16.9		7.8		30.3		101.8		8.2		4.9		6						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-						-		-	
						-	-	-	-		-		-		-		-		-		-						-		-	
					Bottom	4.1	0.2	126	16.7	16.7	7.8	7.8	30.4	30.4	101.5	101.6	8.2	8.2	5.8		8						-		-	
						4.1	0.2	134	16.7		7.8		30.4		101.6		8.2		5.8		8						-		-	
SR2	Fine	Moderate	12:00	5.6	Surface	1.0	0.3	155	20.9	20.9	8.0	8.0	27.1	27.1	96.2	96.2	7.3	7.3	3.8	4.2	4	6	73	75	814156	821463	<0.2	<0.2	1.6	1.6
						1.0	0.3	159	20.9		8.0		27.1		96.1		7.3		3.4		6		73				<0.2		1.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-						-		-	
						-	-	-	-		-		-		-		-		-		-						-		-	
					Bottom	4.6	0.2	154	20.4	20.4	8.0	8.0	28.4	28.4	94.9	94.9	7.2	7.2	4.8		8		76				<0.2		1.7	
						4.6	0.2	162	20.4		8.0		28.4		94.9		7.2		4.8		6		76				<0.2		1.5	
SR3	Fine	Moderate	10:38	8.7	Surface	1.0	0.3	241	21.4	21.4	8.0	8.0	22.7	22.7	97.9	97.9	7.6	7.6	2.5	4.4	7	6		-	807565	822147	-	-	-	-
						1.0	0.3	243	21.4		8.0		22.7		97.8		7.6		2.5		7						-		-	
					Middle	4.4	0.3	165	20.7	20.7	8.0	8.0	25.2	25.2	96.4	96.5	7.5		4.3		5						-		-	
						4.4	0.3	166	20.7		8.0		25.2		96.5		7.5		4.5		6						-		-	
					Bottom	7.7	0.4	105	20.3	20.3	8.0	8.0	28.5	28.5	96.4	96.4	7.4	7.4	6.4		5						-		-	
						7.7	0.4	110	20.3		8.0		28.5		96.4		7.4		6.4		5						-		-	
SR4A	Fine	Moderate	12:05	9.7	Surface	1.0	0.3	132	17.5	17.5	7.8	7.8	28.9	28.9	105.3	105.3	8.5	8.5	3.3	4.0	8	9		-	807808	817189	-	-	-	-
						1.0	0.3	144	17.4		7.8		28.9		105.2		8.5		3.4		7						-		-	
					Middle	4.9	0.4	100	17.0	17.0	7.8	7.8	29.6	29.6	103.6	103.6	8.4		4.4		8						-		-	
						4.9	0.4	106	17.0		7.8		29.6		103.6		8.4		4.4		8						-		-	
					Bottom	8.7	0.3	104	17.0	17.0	7.8	7.8	29.9	29.9	102.8	102.9	8.3	8.3	4.2		10						-		-	
						8.7	0.3	111	17.0		7.8		29.8		102.9		8.3		4.0		11						-		-	
SR5A	Fine	Calm	12:22	5.6	Surface	1.0	0.4	166	17.5	17.5	7.8	7.8	28.4	28.4	103.9	103.9	8.4	8.4	4.0	4.0	9	9		-	810684	816593	-	-	-	-
						1.0	0.4	176	17.5		7.8		28.4		103.9		8.4		4.1		8						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-						-		-	
						-	-	-	-		-		-		-		-		-		-						-		-	
					Bottom	4.6	0.3	158	17.5	17.6	7.8	7.8	28.4	28.4	103.0	103.1	8.3	8.3	3.9		9						-		-	
						4.6	0.3	172	17.6		7.8		28.4		103.1		8.3		3.9		8						-		-	
SR6	Fine	Calm	12:46	5.1	Surface	1.0	0.1	141	17.4	17.4	7.8	7.8	27.1	27.1	103.7	103.7	8.4	8.4	3.4	3.7	6	6		-	814660	817899	-	-	-	-
						1.0	0.1	149	17.3		7.8		27.1		103.7		8.4		3.5		5						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-						-		-	
						-	-	-	-		-		-		-		-		-		-						-		-	
					Bottom	4.1	0.2	115	17.2	17.2	7.8	7.8	27.6	27.6	102.4	102.4	8.3	8.3	4.0		7						-		-	
						4.1	0.2	117	17.2		7.8		27.6		102.4		8.3		4.0		7						-		-	
SR7	Fine	Moderate	13:02	19.4	Surface	1.0	0.2	161	20.3	20.3	8.0	8.0	30.3	30.3	94.1	94.1	7.1	7.1	2.2	3.3	5	5		-	823745	823636	-	-	-	-
						1.0	0.2	172	20.3		8.0		30.3		94.1		7.1		2.3		6						-		-	
					Middle	9.7	0.2	174	19.9	19.9	8.0	8.0	31.3	31.3	91.6	91.6	7.0		3.6		3						-		-	
						9.7	0.2	181	19.9		8.0		31.3		91.6		7.0		3.7		5						-		-	
					Bottom	18.4	0.1	126	19.9	19.9	8.0	8.0	31.3	31.3	91.8	91.9	7.0	7.0	4.1		5						-		-	
						18.4	0.2	128	19.9		8.0		31.3		91.9		7.0		3.9		6						-		-	
SR8	Fine	Moderate	11:41	5.8	Surface	1.0	0.3	195	21.3	21.3	8.0	8.0	23.4	23.4	100.2	100.2	7.7	7.7	3.5	5.1	8	6		-	811590	820417	-	-	-	-
						1.0	0.3	200	21.3		8.0		23.4		100.1		7.7		3.5		6						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-						-		-	
						-	-	-	-		-		-		-		-		-		-						-		-	
					Bottom	4.8	0.3	194	20.4	20.4	8.0	8.0	27.1	27.1	95.7	95.8	7.4	7.4	6.8		6						-		-	
						4.8	0.3	208	20.4		8.0		27.1		95.8		7.4		6.7		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 04 April 17 during Mid-Ebb tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Moderate	06:47	8.8	Surface	1.0	0.4	215	16.8	16.8	7.8	7.8	28.2	28.2	101.5	101.5	8.3	8.3	1.5	2.1	2	3	74	75	804262	815620	<0.2	<0.2	2.1	2.4
						1.0	0.4	219	16.8		7.8		28.2		101.5		8.3		1.5		2		74				<0.2		2.3	
					Middle	4.4	0.3	173	16.7	16.7	7.8	7.8	28.7	28.7	100.9	100.9	8.3		2.3		3		75				<0.2		3.2	
						4.4	0.3	183	16.7		7.8		28.7		100.9		8.3		2.3		2		75				<0.2		3.3	
					Bottom	7.8	0.3	165	16.6	16.6	7.8	7.8	30.8	30.8	100.2	100.2	8.1	8.1	2.5		3		77				<0.2		2.4	
						7.8	0.4	171	16.6		7.8		30.8		100.2		8.1		2.5		4		77				<0.2		0.9	
C2	Fine	Moderate	08:09	11.6	Surface	1.0	0.2	188	20.6	20.6	8.0	8.0	23.1	23.2	92.4	92.5	7.3	7.3	3.6	3.9	6	5	73	75	806942	825682	<0.2	<0.2	3.9	3.8
						1.0	0.2	191	20.6		8.0		23.2		92.5		7.3		3.7		4		73				<0.2		3.7	
					Middle	5.8	0.2	176	20.5	20.5	8.0	8.0	25.9	25.9	92.9	92.9	7.2		3.5		4		76				<0.2		3.8	
						5.8	0.2	193	20.5		8.0		25.9		92.9		7.2		3.4		5		76				<0.2		4.0	
					Bottom	10.6	0.2	218	20.3	20.3	8.0	8.0	28.6	28.6	93.4	93.5	7.1	7.2	4.9		4		77				<0.2		3.8	
						10.6	0.2	221	20.3		8.0		28.5		93.5		7.2		4.5		5		77				<0.2		3.6	
C3	Fine	Moderate	06:01	12.5	Surface	1.0	0.2	120	20.1	20.1	8.0	8.0	28.5	28.5	95.4	95.4	7.3	7.3	2.0	1.7	4	5	72	74	817806	822109	<0.2	<0.2	1.8	1.8
						1.0	0.2	130	20.1		8.0		28.5		95.4		7.3		2.1		3		73				<0.2		1.7	
					Middle	6.3	0.2	114	20.1	20.1	8.0	8.0	29.3	29.4	94.8	94.8	7.2		1.2		4		74				<0.2		1.6	
						6.3	0.2	118	20.1		8.0		29.4		94.8		7.2		1.2		4		74				<0.2		1.6	
					Bottom	11.5	0.2	126	20.1	20.1	8.0	8.0	29.7	29.7	96.1	96.2	7.3	7.3	1.7		7		76				<0.2		1.8	
						11.5	0.2	128	20.1		8.0		29.7		96.2		7.3		1.7		5		76				<0.2		2.0	
IM1	Fine	Moderate	07:28	7.5	Surface	1.0	0.3	162	16.7	16.7	7.8	7.8	28.7	28.7	102.4	102.4	8.4	8.4	2.6	3.5	3	4	75	76	806443	818351	<0.2	<0.2	1.9	1.6
						1.0	0.3	173	16.7		7.8		28.7		102.4		8.4		2.6		5		75				<0.2		1.8	
					Middle	3.8	0.3	169	16.7	16.7	7.8	7.8	29.8	29.8	101.6	101.6	8.3		3.9		3		76				<0.2		1.7	
						3.8	0.3	177	16.7		7.8		29.8		101.6		8.3		4.0		4		77				<0.2		1.7	
					Bottom	6.5	0.3	179	16.6	16.6	7.8	7.8	30.3	30.3	101.9	101.9	8.3	8.3	3.8		5		77				<0.2		1.2	
						6.5	0.3	185	16.6		7.8		30.3		101.9		8.3		3.8		6		77				<0.2		1.3	
IM2	Fine	Moderate	07:37	8.7	Surface	1.0	0.3	156	17.0	17.0	7.8	7.8	26.4	26.5	101.9	101.9	8.4	8.4	1.8	2.5	3	3	74	75	806193	818852	<0.2	<0.2	2.5	2.0
						1.0	0.3	159	17.0		7.8		26.5		101.9		8.4		1.8		2		74				<0.2		2.5	
					Middle	4.4	0.3	132	16.8	16.8	7.8	7.8	28.8	28.8	101.2	101.2	8.3		2.2		2		75				<0.2		1.5	
						4.4	0.3	143	16.8		7.8		28.8		101.2		8.3		2.3		<2		75				<0.2		1.7	
					Bottom	7.7	0.4	157	16.7	16.7	7.8	7.8	30.2	30.2	100.6	100.6	8.1	8.2	3.4		3		76				<0.2		1.9	
						7.7	0.4	161	16.7		7.8		30.1		100.6		8.2		3.4		3		77				<0.2		1.9	
IM3	Fine	Moderate	07:48	8.5	Surface	1.0	0.3	191	17.4	17.4	7.8	7.8	24.0	24.0	100.8	100.8	8.4	8.3	2.7	3.5	3	3	73	75	806016	819411	<0.2	<0.2	2.7	2.0
						1.0	0.3	198	17.4		7.8		24.0		100.8		8.4		2.8		5		73				<0.2		3.0	
					Middle	4.3	0.3	168	16.9	16.9	7.8	7.8	28.5	28.5	100.3	100.3	8.2		3.7		4		74				<0.2		2.2	
						4.3	0.3	180	16.9		7.8		28.5		100.2		8.2		3.6		2		75				<0.2		2.2	
					Bottom	7.5	0.3	140	16.6	16.6	7.8	7.8	30.5	30.5	99.6	99.6	8.1	8.1	4.2		3		76				<0.2		0.8	
						7.5	0.3	147	16.6		7.8		30.5		99.6		8.1		4.2		3		76				<0.2		1.0	
IM4	Fine	Moderate	07:58	8.1	Surface	1.0	0.3	207	17.4	17.4	7.8	7.8	24.0	24.0	100.5	100.5	8.3	8.3	4.2	4.9	4	7	75	76	805052	819570	<0.2	<0.2	2.7	2.5
						1.0	0.3	221	17.4		7.8		24.0		100.5		8.3		4.1		3		75				<0.2		2.8	
					Middle	4.1	0.3	130	17.0	17.0	7.8	7.8	27.7	27.7	100.2	100.2	8.2		5.4		7		76				<0.2		2.7	
						4.1	0.3	132	17.0		7.8		27.6		100.2		8.2		5.5		7		76				<0.2		2.7	
					Bottom	7.1	0.4	116	16.7	16.7	7.8	7.8	30.5	30.5	99.8	99.8	8.1	8.1	5.1		9		78				<0.2		2.1	
						7.1	0.4	122	16.7		7.8		30.5		99.8		8.1		5.1		10		77				<0.2		2.2	
IM5	Fine	Moderate	08:11	7.1	Surface	1.0	0.3	204	17.6	17.6	7.8	7.8	24.6	24.6	100.1	100.1	8.2	8.3	3.4	5.0	3	5	74	75	804936	820564	<0.2	<0.2	2.9	2.5
						1.0	0.3	213	17.6		7.8		24.6		100.1		8.2		3.4		2		74				<0.2		2.7	
					Middle	3.6	0.4	139	17.4	17.4	7.8	7.8	25.3	25.3	100.3	100.3	8.3		4.6		3		75				<0.2		2.7	
						3.6	0.4	140	17.3		7.8		25.3		100.3		8.3		4.7		4		75				<0.2		2.5	
					Bottom	6.1	0.4	134	16.7	16.7	7.8	7.8	30.0	30.0	99.4	99.4	8.1	8.1	7.0		10		76				<0.2		2.2	
						6.1	0.4	146	16.7		7.8		30.0		99.4		8.1		7.0		8		77				<0.2		2.0	
IM6	Fine	Moderate	08:22	7.0	Surface	1.0	0.3	199	17.6	17.6	7.7	7.7	24.2	24.2	99.5	99.5	8.2	8.2	3.9	5.4	7	6	74	75	805826	821060	<0.2	<0.2	2.6	2.6
						1.0	0.3	208	17.6		7.7		24.2		99.5		8.2		3.9		5		74				<0.2		2.6	
					Middle	3.5	0.3	164	17.2	17.2	7.8	7.8	26.2	26.2	99.5	99.5	8.2		5.5		4		75				<0.2		2.8	
						3.5	0.3	176	17.2		7.8		26.2		99.5		8.2		5.4		5		75				<0.2		2.8	
					Bottom	6.0	0.4	104	16.7	16.7	7.8	7.8	29.9	29.9	99.0	99.1	8.0	8.0	6.8		8		76				<0.2		2.3	
						6.0	0.4	114	16.7		7.8		29.9		99.1		8.0		6.8		7		77				<0.2		2.4	
IM7	Fine	Moderate	08:30	7.5	Surface	1.0	0.3	231	17.8	17.8	7.7	7.7	23.1	23.1	99.6	99.6	8.2	8.3	3.1	4.2	4	6	76	77	806846	821349	<0.2	<0.2	3.3	2.7
						1.0	0.3	247	17.8		7.7		23.1		99.6		8.2		3.1		6		76				<0.2		3.2	
					Middle	3.8	0.3	129	17.4	17.4	7.8	7.8	24.4	24.4	99.6	99.6	8.3		4.3		6		77				<0.2		2.4	
						3.8	0.3	131	17.3		7.8		24.4		99.6		8.3		4.3		6		77				<0.2		2.4	
					Bottom	6.5	0.4	85	16.9	16.9	7.8	7.8	29.3	29.4	98.9	99.0	8.0	8.0	5.3		8		78				<0.2		2.3	
						6.5	0.4	87	16.9		7.8		29.4		99.0		8.0		5.2		6		78				<0.2		2.3	
IM8	Fine	Moderate	07:34	9.8	Surface	1.0	0.3	225	21.0	21.0	8.0	8.0	21.9	21.9	94.9	94.9	7.4	7.4	3.6	4.1	4	4	75	76	807844	821695	<0.2	<0.2	3.1	3.2
						1.0	0.3	242	21.0		8.0		21.9		94.9		7.4		3.6		3		75				<0.2		3.3	
					Middle	4.9	0.2	182	20.6	20.6	8.0	8.0	26.2	26.2	95.2	95.3	7.3		4.0		5		76				<0.2		3.3	
						4.9	0.2	183	20.6		8.0		26.2		95.3		7.4		3.9		5		76				<0.2		3.4	
					Bottom	8.8	0.3	156	20.3	20.4	7.9	7.9	28.9	28.9	96.1	96.1	7.3	7.3	5.0		4		77				<0.2		3.1	
						8.8	0.3	169	20.4		7.9		28.9		96.1		7.3		4.7		3		77				<0.2		3.1	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 04 April 17 during Mid-Ebb tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Fine	Moderate	07:24	7.2	Surface	1.0	0.3	170	21.1	21.1	8.0	8.0	22.6	22.6	95.2	95.2	7.4	7.3	2.8	3.4	<2	3	74	76	808794	822094	<0.2	<0.2	3.0	3.1
						1.0	0.4	185	21.1		8.0		22.6		95.2		7.4		2.9		2		74				<0.2		3.0	
					Middle	3.6	0.3	163	20.6	20.6	8.0	8.0	26.0	26.0	93.9	93.9	7.2		4.0		4		76				<0.2		3.2	
						3.6	0.3	175	20.6		8.0		26.0		93.9		7.2		4.0		3		75				<0.2		3.1	
					Bottom	6.2	0.2	152	20.5	20.5	8.0	8.0	26.7	26.7	94.3	94.3	7.3	7.3	3.3		3		77				<0.2		3.1	
						6.2	0.3	154	20.5		8.0		26.7		94.3		7.3		3.4		3		77				<0.2		3.2	
IM10	Fine	Moderate	07:15	7.3	Surface	1.0	0.3	140	20.9	20.9	8.0	8.0	24.0	24.0	94.9	94.9	7.4	7.4	2.9	5.8	5	4	73	76	809818	822240	<0.2	<0.2	2.1	2.4
						1.0	0.3	149	20.9		8.0		24.0		94.8		7.4		2.7		3		74				<0.2		2.0	
					Middle	3.7	0.3	135	20.6	20.6	8.0	8.0	26.0	26.0	94.6	94.7	7.3		3.9		4		75				<0.2		2.5	
						3.7	0.3	136	20.6		8.0		26.0		94.7		7.3		4.0		3		76				<0.2		2.7	
					Bottom	6.3	0.3	230	20.3	20.3	8.1	8.1	28.1	28.1	95.3	95.3	7.3	7.3	10.5		3		77				<0.2		2.6	
						6.3	0.3	247	20.3		8.1		28.1		95.3		7.3		10.5		4		78				<0.2		2.6	
IM11	Fine	Moderate	07:03	6.7	Surface	1.0	0.3	146	20.9	20.9	8.0	8.0	24.1	24.1	95.5	95.5	7.4	7.4	2.3	3.3	3	2	73	76	810560	821501	<0.2	<0.2	2.9	2.7
						1.0	0.3	155	20.9		8.0		24.1		95.5		7.4		2.4		3		74				<0.2		2.7	
					Middle	3.4	0.3	136	20.7	20.7	8.0	8.0	24.7	24.7	94.8	94.8	7.4		3.6		2		75				<0.2		2.9	
						3.4	0.3	139	20.7		8.0		24.7		94.8		7.4		3.7		2		76				<0.2		2.8	
					Bottom	5.7	0.2	133	20.5	20.5	8.0	8.0	26.9	26.9	95.3	95.4	7.3	7.3	4.0		2		77				<0.2		2.4	
						5.7	0.3	144	20.5		8.0		26.8		95.4		7.3		3.8		2		78				<0.2		2.4	
IM12	Fine	Moderate	06:54	9.0	Surface	1.0	0.3	124	20.8	20.8	8.0	8.0	23.7	23.7	95.2	95.2	7.4	7.5	4.3	3.5	3	3	73	75	811508	821162	<0.2	<0.2	3.0	2.9
						1.0	0.3	130	20.8		8.0		23.7		95.2		7.4		4.4		3		73				<0.2		2.9	
					Middle	4.5	0.3	124	20.7	20.7	8.0	8.0	24.1	24.1	95.8	95.9	7.5		3.3		2		75				<0.2		2.9	
						4.5	0.3	134	20.7		8.0		24.1		95.9		7.5		3.4		≤2		76				<0.2		2.8	
					Bottom	8.0	0.2	183	20.5	20.5	8.0	8.0	27.2	27.2	96.6	96.7	7.4	7.4	2.9		3		77				<0.2		2.8	
						8.0	0.3	192	20.5		7.9		27.2		96.7		7.4		2.9		3		77				<0.2		2.7	
IM13	Fine	Moderate	07:15	4.6	Surface	1.0	0.2	150	16.7	16.7	7.8	7.8	28.8	28.8	102.5	102.5	8.4	8.4	1.6	1.7	3	3		-	807199	820085	-	-	-	-
						1.0	0.2	163	16.7		7.8		28.8		102.5		8.4		1.6		2						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-						-		-	
						-	-	-	-		-		-		-		-		-		-						-		-	
					Bottom	3.6	0.2	162	16.7	16.7	7.8	7.8	29.3	29.3	102.2	102.2	8.3	8.3	1.8		5						-		-	
						3.6	0.2	170	16.7		7.8		29.3		102.2		8.3		1.9		3						-		-	
SR2	Fine	Moderate	06:26	5.1	Surface	1.0	0.3	85	20.8	20.8	8.0	8.0	24.0	24.0	97.4	97.4	7.6	7.6	1.9	1.6	3	3	73	74	814158	821463	<0.2	<0.2	3.0	3.0
						1.0	0.3	85	20.8		8.0		24.0		97.4		7.6		2.0		4		73				<0.2		2.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-						-		-	
						-	-	-	-		-		-		-		-		-		-						-		-	
					Bottom	4.1	0.3	79	20.7	20.7	8.0	8.0	25.3	25.3	98.8	98.9	7.6	7.7	1.2		3		75				<0.2		3.1	
						4.1	0.3	80	20.7		8.0		25.3		98.9		7.7		1.2		3		76				<0.2		3.1	
SR3	Fine	Moderate	07:44	8.8	Surface	1.0	0.2	198	20.9	20.9	8.0	8.0	23.4	23.4	94.9	94.9	7.4	7.4	3.1	5.4	3	4		-	807577	822147	-	-	-	-
						1.0	0.3	212	20.9		8.0		23.4		94.8		7.4		3.2		3						-		-	
					Middle	4.4	0.3	206	20.5	20.5	8.0	8.0	26.8	26.8	96.0	96.1	7.4		6.3		5						-		-	
						4.4	0.3	225	20.5		8.0		26.8		96.1		7.4		6.3		4						-		-	
					Bottom	7.8	0.3	163	20.3	20.3	8.0	8.0	29.0	29.0	96.3	96.3	7.4	7.4	6.8		3						-		-	
						7.8	0.3	164	20.3		8.0		29.0		96.3		7.4		6.7		3						-		-	
SR4A	Fine	Moderate	06:25	9.2	Surface	1.0	0.2	171	16.7	16.7	7.8	7.8	29.3	29.3	99.7	99.7	8.1	8.1	4.6	5.5	6	8		-	807817	817189	-	-	-	-
						1.0	0.3	186	16.7		7.8		29.3		99.7		8.1		4.7		6						-		-	
					Middle	4.6	0.3	132	16.6	16.6	7.8	7.8	29.7	29.7	99.3	99.3	8.1		5.7		8						-		-	
						4.6	0.3	142	16.6		7.8		29.7		99.3		8.1		5.7		6						-		-	
					Bottom	8.2	0.2	152	16.6	16.6	7.8	7.8	30.0	30.0	99.2	99.3	8.1	8.1	6.2		10						-		-	
						8.2	0.2	159	16.6		7.8		30.0		99.3		8.1		6.2		9						-		-	
SR5A	Fine	Calm	06:08	4.2	Surface	1.0	0.1	281	17.1	17.1	7.8	7.8	28.0	28.0	100.1	100.1	8.1	8.1	3.2	3.9	6	7		-	810691	816593	-	-	-	-
						1.0	0.1	286	17.1		7.8		28.0		100.0		8.1		3.2		5						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-						-		-	
						-	-	-	-		-		-		-		-		-		-						-		-	
					Bottom	3.2	0.2	269	17.0	17.0	7.8	7.8	28.1	28.1	99.6	99.6	8.1	8.1	4.5		7						-		-	
						3.2	0.2	271	17.0		7.8		28.1		99.6		8.1		4.5		8						-		-	
SR6	Fine	Calm	05:42	4.1	Surface	1.0	0.1	211	16.9	16.9	7.7	7.7	27.6	27.6	98.6	98.6	8.1	8.1	3.0	3.2	6	6		-	814655	817899	-	-	-	-
						1.0	0.1	231	16.9		7.7		27.6		98.6		8.1		3.0		4						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-						-		-	
						-	-	-	-		-		-		-		-		-		-						-		-	
					Bottom	3.1	0.1	202	16.9	16.9	7.7	7.7	27.8	27.8	99.1	99.1	8.1	8.1	3.4		7						-		-	
						3.1	0.1	204	16.9		7.7		27.8		99.1		8.1		3.4		8						-		-	
SR7	Fine	Moderate	05:23	16.8	Surface	1.0	0.2	188	20.0	20.0	8.0	8.0	30.1	30.1	92.9	92.9	7.1	7.1	2.2	2.2	8	8		-	823744	823636	-	-	-	-
						1.0	0.2	198	20.0		8.0		30.1		92.9		7.1		2.3		9						-		-	
					Middle	8.4	0.2	114	20.0	20.0	8.0	8.0	30.3	30.3	92.2	92.2	7.0		2.3		10						-		-	
						8.4	0.2	118	20.0		8.0		30.3		92.2		7.0		2.1		12						-		-	
					Bottom	15.8	0.2	123	20.0	20.0	8.0	8.0	30.3	30.3	92.0	92.0	7.0	7.0	2.1		6						-		-	
						15.8	0.2	124	20.0		8.0		30.3		92.0		7.0		2.1		5						-		-	
SR8	Fine	Moderate	06:45	5.1	Surface	1.0	0.1	200	20.8	20.8	8.0	8.0	22.9	22.9	97.3	97.3	7.6	7.6	2.3	2.4	9	7		-	811599	820417	-	-	-	-
						1.0	0.1	208	20.8		8.0		22.9		97.3		7.6		2.3		7						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-						-		-	
						-	-	-	-		-		-		-		-		-		-						-		-	
					Bottom	4.1	0.1	258	20.6	20.6	8.0	8.0	23.0	23.0	97.7	97.7	7.7	7.7	2.4		6						-		-	
						4.1	0.1	278	20.6		8.0		23.0		97.7		7.7		2.5		7						-		-	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 06 April 17 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Calm	15:05	8.8	Surface	1.0	0.3	121	17.8	17.8	7.8	7.8	23.6	23.6	106.9	106.8	8.8	8.6	1.6	2.5	4	8	75	76	804231	815620	<0.2	<0.2	2.0	1.9
						1.0	0.3	133	17.8		7.8		23.6		106.7		8.8		1.5		6		75				<0.2		2.1	
					Middle	4.4	0.3	121	17.0	17.0	7.8	7.8	26.4	26.5	101.6	101.6	8.4		2.8		9		76				<0.2		2.6	
						4.4	0.3	130	17.0		7.8		26.5		101.5		8.4		2.9		7		77				<0.2		2.4	
					Bottom	7.8	0.3	115	16.9	16.9	7.8	7.8	26.3	26.3	99.4	99.4	8.2	8.2	3.2		10		77				<0.2		1.2	
						7.8	0.3	121	16.9		7.8		26.3		99.4		8.2		3.1		11		77				<0.2		1.1	
C2	Cloudy	Moderate	13:41	13.1	Surface	1.0	0.5	204	22.0	22.0	8.0	8.0	19.8	19.8	102.0	102.0	8.0	7.6	1.8	2.7	6	7	74	75	806930	825682	<0.2	<0.2	4.8	4.7
						1.0	0.5	214	22.0		8.0		19.8		101.9		8.0		1.8		8		74				<0.2		4.7	
					Middle	6.6	0.2	179	20.9	20.9	8.0	8.0	25.8	25.8	93.7	93.7	7.2		2.2		7		75				<0.2		4.8	
						6.6	0.3	192	20.9		8.0		25.8		93.7		7.2		2.3		8		75				<0.2		4.9	
					Bottom	12.1	0.2	128	20.5	20.5	8.0	8.0	27.9	27.9	93.0	93.1	7.1	7.1	3.9		6		76				<0.2		4.5	
						12.1	0.2	134	20.5		8.0		27.9		93.1		7.1		4.0		8		76				<0.2		4.5	
C3	Cloudy	Moderate	15:54	10.9	Surface	1.0	0.2	220	21.1	21.1	8.0	8.0	27.7	27.7	104.8	104.8	7.9	7.7	1.1	2.1	5	5	73	75	817817	822109	<0.2	<0.2	3.5	3.4
						1.0	0.2	232	21.1		8.0		27.7		104.8		7.9		1.1		3		73				<0.2		3.7	
					Middle	5.5	0.3	255	20.7	20.7	8.0	8.0	29.0	29.0	97.6	97.6	7.4		1.3		5		75				<0.2		3.1	
						5.5	0.3	266	20.7		8.0		29.0		97.5		7.4		1.2		7		75				<0.2		3.1	
					Bottom	9.9	0.3	289	20.2	20.2	8.0	8.0	31.0	31.0	94.1	94.2	7.1	7.1	3.9		5		77				<0.2		3.6	
						9.9	0.4	291	20.2		8.0		31.0		94.2		7.1		3.8		3		77				<0.2		3.3	
IM1	Cloudy	Calm	14:37	7.5	Surface	1.0	0.3	179	17.8	17.8	7.8	7.8	24.0	24.0	108.8	108.8	9.0	8.8	1.4	2.5	4	9	74	75	806445	818351	<0.2	<0.2	3.4	2.4
						1.0	0.3	195	17.8		7.8		24.0		108.8		9.0		1.4		7		74				<0.2		3.3	
					Middle	3.8	0.2	178	17.3	17.3	7.8	7.8	25.1	25.1	103.6	103.5	8.6		3.0		10		75				<0.2		1.8	
						3.8	0.2	185	17.3		7.8		25.1		103.4		8.6		3.1		12		75				<0.2		1.9	
					Bottom	6.5	0.3	124	17.2	17.2	7.8	7.8	25.7	25.7	101.2	101.2	8.4	8.4	3.0		11		76				<0.2		1.7	
						6.5	0.3	129	17.2		7.8		25.7		101.1		8.3		2.9		9		76				<0.2		2.0	
IM2	Cloudy	Calm	14:29	8.4	Surface	1.0	0.3	182	18.1	18.1	7.8	7.8	22.0	22.0	106.1	106.1	8.8	8.6	2.1	2.6	5	8	74	75	806188	818852	<0.2	<0.2	2.3	2.2
						1.0	0.3	194	18.1		7.8		22.0		106.0		8.8		2.1		6		74				<0.2		2.5	
					Middle	4.2	0.3	173	17.2	17.2	7.8	7.8	25.2	25.2	101.5	101.5	8.4		3.0		11		75				<0.2		2.4	
						4.2	0.3	184	17.2		7.8		25.2		101.4		8.4		3.0		9		75				<0.2		2.2	
					Bottom	7.4	0.3	125	17.2	17.2	7.7	7.7	25.0	25.0	98.9	98.9	8.2	8.2	2.8		9		76				<0.2		1.7	
						7.4	0.3	134	17.2		7.7		24.9		98.9		8.2		2.7		9		76				<0.2		1.8	
IM3	Cloudy	Calm	14:21	8.7	Surface	1.0	0.3	200	17.7	17.7	7.8	7.8	22.6	22.6	103.5	103.5	8.6	8.5	3.1	4.2	8	10	75	75	806026	819411	<0.2	<0.2	2.5	2.1
						1.0	0.3	217	17.7		7.8		22.6		103.4		8.6		3.0		10		75				<0.2		2.4	
					Middle	4.4	0.3	159	17.1	17.1	7.8	7.8	25.4	25.4	100.1	100.1	8.3		4.5		11		75				<0.2		2.1	
						4.4	0.3	173	17.1		7.8		25.4		100.1		8.3		4.5		12		75				<0.2		2.1	
					Bottom	7.7	0.3	140	17.1	17.1	7.8	7.8	25.1	25.1	98.9	98.9	8.2	8.2	5.1		9		76				<0.2		1.6	
						7.7	0.3	145	17.1		7.8		25.1		98.9		8.2		5.1		10		76				<0.2		1.7	
IM4	Cloudy	Calm	14:11	8.1	Surface	1.0	0.3	167	18.2	18.2	7.8	7.8	20.7	20.7	105.3	105.2	8.8	8.7	2.4	3.1	7	8	75	76	805026	819570	<0.2	<0.2	3.0	2.4
						1.0	0.3	174	18.1		7.8		20.7		105.1		8.8		2.4		6		75				<0.2		3.0	
					Middle	4.1	0.3	170	17.4	17.4	7.8	7.8	23.3	23.3	102.0	102.0	8.5		3.3		6		76				<0.2		2.6	
						4.1	0.3	186	17.4		7.8		23.2		102.0		8.5		3.3		8		77				<0.2		2.5	
					Bottom	7.1	0.3	145	17.1	17.1	7.8	7.8	24.9	24.9	99.9	99.9	8.3	8.3	3.7		10		77				<0.2		1.6	
						7.1	0.3	147	17.1		7.8		24.9		99.8		8.3		3.6		11		77				<0.2		1.7	
IM5	Cloudy	Calm	14:00	6.7	Surface	1.0	0.3	187	17.9	17.9	7.8	7.8	21.4	21.4	104.1	104.0	8.7	8.6	3.6	5.2	3	8	73	74	804918	820564	<0.2	<0.2	2.9	2.2
						1.0	0.3	203	17.9		7.8		21.4		103.9		8.7		3.7		5		73				<0.2		2.6	
					Middle	3.4	0.3	179	17.3	17.3	7.8	7.8	22.2	22.2	101.3	101.3	8.5		5.3		9		74				<0.2		2.5	
						3.4	0.3	183	17.3		7.8		22.2		101.2		8.5		5.5		8		74				<0.2		2.6	
					Bottom	5.7	0.3	186	17.1	17.1	7.7	7.7	24.4	24.4	99.9	99.9	8.3	8.3	6.6		11		75				<0.2		1.2	
						5.7	0.3	200	17.1		7.7		24.4		99.9		8.3		6.6		12		75				<0.2		1.2	
IM6	Cloudy	Calm	13:51	6.9	Surface	1.0	0.4	207	17.9	17.9	7.8	7.8	20.8	20.8	101.5	101.5	8.5	8.4	4.8	6.1	10	10	74	75	805834	821060	<0.2	<0.2	2.4	2.1
						1.0	0.4	208	17.8		7.8		20.8		101.4		8.5		4.9		10		74				<0.2		2.5	
					Middle	3.5	0.3	199	17.5	17.5	7.8	7.8	22.2	22.2	99.4	99.4	8.3		6.5		6		75				<0.2		2.4	
						3.5	0.4	207	17.5		7.8		22.2		99.3		8.3		6.6		7		75				<0.2		2.4	
					Bottom	5.9	0.4	183	17.2	17.2	7.7	7.7	23.6	23.6	98.1	98.2	8.2	8.2	6.9		14		76				<0.2		1.4	
						5.9	0.4	200	17.2		7.7		23.5		98.2		8.2		6.6		12		76				<0.2		1.3	
IM7	Cloudy	Calm	13:42	8.0	Surface	1.0	0.3	197	18.1	18.1	7.8	7.8	20.0	20.0	103.1	103.0	8.6	8.5	3.0	4.4	6	7	76	76	806849	821349	<0.2	<0.2	3.0	3.1
						1.0	0.4	205	18.1		7.8		20.0		102.9		8.6		3.1		4		75				<0.2		3.3	
					Middle	4.0	0.3	173	17.4	17.4	7.7	7.7	22.3	22.3	99.6	99.6	8.4		4.9		5		76				<0.2		3.5	
						4.0	0.3	173	17.4		7.7		22.3		99.6		8.4		5.0		7		76				<0.2		3.6	
					Bottom	7.0	0.4	142	17.3	17.4	7.7	7.7	22.0	22.0	99.0	99.0	8.3	8.3	5.2		10		77				<0.2		2.6	
						7.0	0.4	149	17.4		7.7		21.9		99.0		8.3		5.1		9		77				<0.2		2.6	
IM8	Cloudy	Moderate	14:11	9.6	Surface	1.0	0.3	217	21.7	21.7	8.1	8.1	22.3	22.3	105.0	105.0	8.1	7.9	3.0	3.5	7	7	74	75	807830	821695	<0.2	<0.2	1.9	2.1
						1.0	0.3	229	21.7		8.1		22.3		104.9		8.1		3.0		9		74				<0.2		2.0	
					Middle	4.8	0.3	230	20.9	20.9	8.1	8.1	26.0	26.0	100.8	100.9	7.7		3.3		8		75				<0.2		2.3	
						4.8	0.3	233	20.9		8.1		26.0		100.9		7.7		3.3		6		75				<0.2		2.4	
					Bottom	8.6	0.3	118	20.7	20.7	8.2	8.2	28.0	28.0	101.5	101.5	7.7	7.7	4.1		6		77				<0.2		1.8	
						8.6	0.3	120	20.7		8.2		28.0		101.4		7.7		4.2		5		77				<0.2		2.0	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 06 April 17 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (μg/L)		Nickel (μg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	14:19	8.4	Surface	1.0	0.3	211	22.0	22.0	8.0	8.0	22.5	22.5	104.0	103.9	8.0	7.8	2.4	3.4	5	5	73	75	808805	822094	<0.2	<0.2	1.8	1.8
						1.0	0.3	227	22.0		8.0		22.5		103.7		8.0		2.5		4		74				<0.2		1.9	
					Middle	4.2	0.3	183	21.0	21.0	8.0	8.0	24.9	24.9	97.2	97.2	7.5		3.7		4		75				<0.2		1.8	
						4.2	0.3	190	21.0		8.0		24.9		97.1		7.5		3.4		5		75				<0.2		1.9	
					Bottom	7.4	0.3	174	20.8	20.8	8.0	8.0	26.6	26.6	96.6	96.6	7.4	7.4	4.2		4		77				<0.2		1.7	
						7.4	0.3	190	20.8		8.0		26.6		96.6		7.4		4.3		6		77				<0.2		1.7	
IM10	Cloudy	Moderate	14:29	8.7	Surface	1.0	0.4	227	21.7	21.7	8.0	8.0	23.3	23.3	103.2	103.2	7.9	7.8	2.4	4.7	4	4	74	76	809842	822240	<0.2	<0.2	1.5	1.5
						1.0	0.4	237	21.7		8.0		23.3		103.1		7.9		2.5		4		74				<0.2		1.7	
					Middle	4.4	0.3	201	20.9	20.9	8.1	8.1	26.2	26.2	98.6	98.6	7.6		4.7		4		76				<0.2		1.4	
						4.4	0.3	217	20.9		8.1		26.2		98.6		7.6		4.5		4		76				<0.2		1.5	
					Bottom	7.7	0.3	226	20.8	20.8	8.1	8.1	27.5	27.5	98.1	98.1	7.5	7.5	6.9		4		77				<0.2		1.6	
						7.7	0.3	238	20.8		8.1		27.5		98.0		7.5		7.1		4		78				<0.2		1.5	
IM11	Cloudy	Moderate	14:45	9.9	Surface	1.0	0.3	245	21.6	21.6	8.1	8.1	23.9	23.9	102.1	102.0	7.8	7.5	2.7	3.9	6	5	74	75	810526	821501	<0.2	<0.2	2.2	2.5
						1.0	0.4	264	21.5		8.1		23.9		101.9		7.8		2.5		4		74				<0.2		2.2	
					Middle	5.0	0.4	260	20.8	20.8	8.0	8.0	27.8	27.8	94.4	94.4	7.2		4.8		5		75				<0.2		2.6	
						5.0	0.4	283	20.8		8.0		27.8		94.3		7.2		4.9		4		75				<0.2		2.6	
					Bottom	8.9	0.4	260	20.5	20.5	8.0	8.0	29.3	29.3	95.9	96.0	7.3	7.3	4.3		5		77				<0.2		2.7	
						8.9	0.4	276	20.5		8.0		29.3		96.1		7.3		4.4		4		77				<0.2		2.7	
IM12	Cloudy	Moderate	15:10	10.2	Surface	1.0	0.3	258	21.2	21.2	8.0	8.0	25.7	25.7	98.4	98.1	7.5	7.3	2.8	4.3	4	5	74	75	811521	821162	<0.2	<0.2	3.0	3.2
						1.0	0.3	282	21.2		8.0		25.7		97.8		7.5		2.7		4		74				<0.2		3.1	
					Middle	5.1	0.4	267	20.7	20.7	8.0	8.0	28.1	28.1	93.1	93.1	7.1		3.3		6		74				<0.2		2.8	
						5.1	0.4	291	20.7		8.0		28.1		93.1		7.1		3.4		6		75				<0.2		3.0	
					Bottom	9.2	0.3	251	20.4	20.4	8.0	8.0	29.5	29.5	91.7	91.8	7.0	7.0	6.7		6		77				<0.2		3.4	
						9.2	0.4	255	20.4		8.0		29.5		91.8		7.0		6.9		6		77				<0.2		3.6	
IM13	Cloudy	Calm	14:44	5.2	Surface	1.0	0.2	188	17.8	17.8	7.8	7.8	24.0	24.0	102.1	102.0	8.4	8.4	2.7	3.2	3	6		-	807185	820085	-	-	-	-
						1.0	0.2	198	17.8		7.8		24.0		101.9		8.4		2.8		5						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-						-		-	
						-	-	-	-		-		-		-		-		-		-						-		-	
					Bottom	4.2	0.2	177	17.4	17.4	7.7	7.7	24.2	24.2	99.6	99.7	8.3	8.3	3.7		8						-		-	
						4.2	0.2	191	17.4		7.7		24.1		99.8		8.3		3.7		7						-		-	
SR2	Cloudy	Moderate	15:01	6.1	Surface	1.0	0.3	310	21.4	21.4	8.1	8.1	25.0	25.0	101.3	101.3	7.8	7.8	5.8	7.5	6	9	74	75	814172	821463	<0.2	<0.2	2.3	2.1
						1.0	0.3	328	21.4		8.1		25.0		101.3		7.7		5.8		9		74				<0.2		2.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-						-		-	
						-	-	-	-		-		-		-		-		-		-						-		-	
					Bottom	5.1	0.1	181	21.0	21.0	8.0	8.0	26.6	26.6	99.0	99.0	7.6	7.6	9.1		12		75				<0.2		2.0	
						5.1	0.1	192	21.0		8.0		26.6		99.0		7.6		9.1		10		76				<0.2		1.9	
SR3	Cloudy	Moderate	14:03	10.1	Surface	1.0	0.3	208	21.7	21.7	8.1	8.1	22.2	22.2	103.1	103.1	8.0	7.8	3.2	4.6	9	5		-	807551	822147	-	-	-	-
						1.0	0.3	216	21.7		8.1		22.2		103.1		8.0		3.3		8						-		-	
					Middle	5.1	0.3	216	20.9	20.9	8.1	8.1	26.3	26.3	99.8	99.8	7.6		4.8		<2						-		-	
						5.1	0.4	226	20.9		8.1		26.3		99.8		7.7		5.0		2						-		-	
					Bottom	9.1	0.3	133	20.6	20.7	8.1	8.1	28.5	28.5	99.7	99.7	7.6	7.6	5.6		4						-		-	
						9.1	0.4	145	20.7		8.1		28.5		99.7		7.6		5.6		6						-		-	
SR4A	Cloudy	Calm	15:27	9.5	Surface	1.0	0.3	207	17.8	17.8	7.8	7.8	24.9	24.9	104.9	104.9	8.6	8.6	5.4	5.3	7	7		-	807807	817189	-	-	-	-
						1.0	0.3	216	17.8		7.8		24.9		104.8		8.6		5.4		7						-		-	
					Middle	4.8	0.3	212	17.6	17.6	7.8	7.8	24.9	24.9	102.9	102.9	8.5		5.3		7						-		-	
						4.8	0.3	227	17.6		7.8		24.9		102.8		8.5		5.3		6						-		-	
					Bottom	8.5	0.2	181	17.3	17.3	7.8	7.8	25.1	25.1	100.0	100.0	8.3	8.3	5.1		6						-		-	
						8.5	0.3	193	17.3		7.8		25.0		99.9		8.3		5.2		7						-		-	
SR5A	Cloudy	Calm	15:45	5.1	Surface	1.0	0.1	259	18.1	18.1	7.8	7.8	24.7	24.7	104.6	104.6	8.5	8.5	3.8	3.9	5	6		-	810706	816593	-	-	-	-
						1.0	0.1	277	18.1		7.8		24.7		104.5		8.5		3.7		6						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-						-		-	
						-	-	-	-		-		-		-		-		-		-						-		-	
					Bottom	4.1	0.1	269	17.9	17.9	7.7	7.7	23.6	23.6	99.6	99.6	8.2	8.2	4.1		6						-		-	
						4.1	0.1	295	17.9		7.7		23.6		99.5		8.2		4.1		6						-		-	
SR6	Cloudy	Calm	16:09	4.5	Surface	1.0	0.2	233	18.0	18.0	7.8	7.8	22.7	22.7	103.7	103.7	8.6	8.6	9.0	11.1	10	15		-	814655	817899	-	-	-	-
						1.0	0.2	235	18.0		7.8		22.7		103.6		8.6		9.2		8						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-						-		-	
						-	-	-	-		-		-		-		-		-		-						-		-	
					Bottom	3.5	0.1	222	17.9	17.9	7.7	7.7	22.1	22.1	99.5	99.5	8.3	8.3	13.2		20						-		-	
						3.5	0.1	225	17.9		7.7		22.0		99.4		8.3		13.0		21						-		-	
SR7	Cloudy	Moderate	16:28	17.9	Surface	1.0	0.3	205	20.5	20.5	8.0	8.0	30.0	30.1	95.7	95.7	7.2	7.1	1.6	2.3	2	2		-	823752	823636	-	-	-	-
						1.0	0.3	216	20.5		8.0		30.1		95.7		7.2		1.7		<2						-		-	
					Middle	9.0	0.3	164	20.2	20.2	8.0	8.0	30.8	30.8	92.8	92.8	7.0		2.7		<2						-		-	
						9.0	0.3	166	20.2		8.0		30.8		92.8		7.0		2.8		<2						-		-	
					Bottom	16.9	0.1	169	20.2	20.2	8.0	8.0	31.4	31.4	92.3	92.3	7.0	7.0	2.4		2						-		-	
						16.9	0.1	182	20.2		8.0		31.4		92.3		7.0		2.5		<2						-		-	
SR8	Cloudy	Moderate	15:28	6.3	Surface	1.0	0.2	180	21.0	21.0	8.0	8.0	27.5	27.5	94.9	94.8	7.2	7.2	5.1	9.5	3	4		-	811575	820417	-	-	-	-
						1.0	0.2	181	21.0		8.0		27.5		94.7		7.2		5.2		5						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-						-		-	
						-	-	-	-		-		-		-		-		-		-						-		-	
					Bottom	5.3	0.2	213	20.7	20.7	8.0	8.0	28.8	28.8	95.3	95.4	7.2	7.2	13.8		5						-		-	
						5.3	0.3	218	20.7		8.0		28.8		95.4		7.2		13.8		4						-		-	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 06 April 17 during Mid-Ebb tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Calm	09:53	8.6	Surface	1.0	0.3	215	17.4	17.4	7.8	7.8	23.8	23.8	104.7	104.6	8.7	8.6	2.0	3.2	4	4	75	76	804246	815620	<0.2	<0.2	2.2	1.7
						1.0	0.3	226	17.3		7.8		23.8		104.5		8.7		2.0		6		74				<0.2		2.4	
					Middle	4.3	0.3	192	17.0	17.0	7.8	7.8	26.0	26.0	102.3	102.3	8.5		2.8		<2		75				<0.2		2.2	
						4.3	0.3	207	17.0		7.8		26.0		102.2		8.4		2.9		<2		76				<0.2		2.1	
					Bottom	7.6	0.3	188	16.9	16.9	7.8	7.8	25.6	25.6	100.4	100.4	8.3	8.3	4.6		5		77				<0.2		0.7	
						7.6	0.3	192	16.9		7.8		25.6		100.4		8.3		4.6		4		77				<0.2		0.7	
C2	Cloudy	Moderate	11:34	12.5	Surface	1.0	0.3	203	21.5	21.5	8.0	8.0	21.3	21.3	95.9	95.9	7.5	7.3	2.4	4.0	2	3	74	75	806954	825682	<0.2	<0.2	2.4	3.0
						1.0	0.3	210	21.5		8.0		21.3		95.8		7.5		2.5		<2		75				<0.2		2.6	
					Middle	6.3	0.3	164	20.7	20.7	8.0	8.0	27.7	27.7	92.1	92.1	7.0		3.7		2		75				<0.2		3.3	
						6.3	0.3	172	20.7		8.0		27.7		92.1		7.0		3.8		3		75				<0.2		3.1	
					Bottom	11.5	0.3	155	20.4	20.4	8.0	8.0	29.4	29.4	91.8	91.8	7.0	7.0	5.7		4		76				<0.2		3.2	
						11.5	0.3	161	20.4		8.0		29.4		91.8		7.0		5.7		3		76				<0.2		3.4	
C3	Cloudy	Moderate	09:14	13.5	Surface	1.0	0.2	92	20.6	20.6	8.0	8.0	29.4	29.4	97.0	97.0	7.3	7.3	1.3	2.4	2	2	72	74	817819	822109	<0.2	<0.2	1.6	1.4
						1.0	0.2	95	20.6		8.0		29.4		97.0		7.3		1.3		3		72				<0.2		1.4	
					Middle	6.8	0.1	148	20.3	20.3	8.0	8.0	30.4	30.4	95.1	95.2	7.2		1.8		2		73				<0.2		1.4	
						6.8	0.1	153	20.3		8.0		30.4		95.2		7.2		1.6		2		74				<0.2		1.5	
					Bottom	12.5	0.2	191	20.3	20.3	8.0	8.0	30.6	30.6	94.5	94.5	7.1	7.1	4.1		<2		75				<0.2		1.4	
						12.5	0.2	191	20.3		8.0		30.6		94.5		7.1		4.2		<2		75				<0.2		1.3	
IM1	Cloudy	Calm	10:24	7.4	Surface	1.0	0.3	219	17.5	17.5	7.8	7.8	23.7	23.7	104.7	104.7	8.7	8.6	2.2	3.1	3	6	74	76	806476	818351	<0.2	<0.2	1.8	1.5
						1.0	0.4	221	17.5		7.8		23.7		104.6		8.7		2.2		5		74				<0.2		1.8	
					Middle	3.7	0.3	208	17.1	17.1	7.8	7.8	25.6	25.6	102.4	102.4	8.5		3.3		7		76				<0.2		1.4	
						3.7	0.3	216	17.1		7.8		25.6		102.4		8.5		3.3		5		75				<0.2		1.4	
					Bottom	6.4	0.3	186	17.1	17.1	7.8	7.8	24.8	24.8	100.5	100.5	8.4	8.4	3.7		6		77				<0.2		1.4	
						6.4	0.3	186	17.1		7.8		24.7		100.4		8.4		3.6		7		77				<0.2		1.4	
IM2	Cloudy	Calm	10:31	8.4	Surface	1.0	0.3	155	17.6	17.6	7.8	7.8	23.5	23.5	105.9	105.9	8.8	8.7	1.5	2.4	4	8	75	76	806191	818852	<0.2	<0.2	1.9	1.5
						1.0	0.3	157	17.6		7.8		23.5		105.8		8.8		1.5		4		75				<0.2		1.6	
					Middle	4.2	0.2	162	17.2	17.2	7.8	7.8	25.2	25.2	103.7	103.7	8.6		2.1		8		76				<0.2		1.5	
						4.2	0.2	168	17.2		7.8		25.1		103.6		8.6		2.2		10		76				<0.2		1.4	
					Bottom	7.4	0.3	170	17.1	17.1	7.8	7.8	25.1	25.1	100.6	100.6	8.3	8.3	3.5		11		77				<0.2		1.2	
						7.4	0.3	175	17.1		7.8		25.1		100.6		8.3		3.4		11		78				<0.2		1.5	
IM3	Cloudy	Calm	10:42	8.2	Surface	1.0	0.3	186	17.7	17.7	7.8	7.8	23.1	23.1	105.8	105.8	8.8	8.7	2.2	3.1	7	5	74	76	806036	819411	<0.2	<0.2	1.6	1.5
						1.0	0.3	196	17.7		7.8		23.1		105.7		8.8		2.3		5		75				<0.2		1.9	
					Middle	4.1	0.3	192	17.2	17.2	7.8	7.8	25.3	25.3	104.2	104.2	8.6		3.7		6		76				<0.2		1.4	
						4.1	0.3	198	17.2		7.8		25.2		104.2		8.6		3.7		4		76				<0.2		1.3	
					Bottom	7.2	0.3	178	17.2	17.2	7.8	7.8	26.5	26.5	104.4	104.5	8.6	8.6	3.3		4		76				<0.2		1.5	
						7.2	0.3	180	17.2		7.8		26.4		104.5		8.6		3.2		6		77				<0.2		1.4	
IM4	Cloudy	Calm	10:50	7.9	Surface	1.0	0.3	189	17.9	17.9	7.8	7.8	22.4	22.4	104.2	104.2	8.7	8.5	2.6	3.7	6	5	75	77	805048	819570	<0.2	<0.2	1.5	1.3
						1.0	0.3	206	17.9		7.8		22.4		104.1		8.6		2.6		5		76				<0.2		1.4	
					Middle	4.0	0.3	176	17.1	17.1	7.8	7.8	26.0	26.0	100.4	100.4	8.3		4.1		4		77				<0.2		1.6	
						4.0	0.3	184	17.1		7.8		26.0		100.4		8.3		4.1		3		76				<0.2		1.4	
					Bottom	6.9	0.3	182	17.0	17.1	7.8	7.8	25.4	25.4	99.2	99.2	8.2	8.2	4.3		7		78				<0.2		1.0	
						6.9	0.3	196	17.1		7.8		25.3		99.2		8.2		4.3		5		78				<0.2		1.1	
IM5	Cloudy	Calm	11:02	6.9	Surface	1.0	0.3	189	17.7	17.7	7.8	7.8	22.3	22.3	104.5	104.5	8.7	8.6	3.7	7.1	2	5	74	75	804937	820564	<0.2	<0.2	2.1	1.9
						1.0	0.3	199	17.6		7.8		22.3		104.4		8.7		3.8		<2		74				<0.2		2.0	
					Middle	3.5	0.3	163	17.2	17.2	7.8	7.8	24.7	24.7	101.9	101.9	8.5		6.7		2		75				<0.2		2.0	
						3.5	0.4	167	17.2		7.8		24.6		101.8		8.4		6.9		3		75				<0.2		2.0	
					Bottom	5.9	0.3	168	17.0	17.0	7.8	7.8	26.2	26.2	100.8	100.8	8.3	8.3	10.7		10		75				<0.2		1.6	
						5.9	0.3	169	17.0		7.8		26.1		100.8		8.3		10.7		8		75				<0.2		1.8	
IM6	Cloudy	Calm	11:13	6.8	Surface	1.0	0.4	200	17.7	17.7	7.8	7.8	22.0	22.0	101.5	101.5	8.5	8.4	4.1	6.4	7	6	73	74	805821	821060	<0.2	<0.2	1.7	1.6
						1.0	0.4	208	17.7		7.8		22.0		101.4		8.5		4.2		6		73				<0.2		1.8	
					Middle	3.4	0.4	165	17.3	17.3	7.8	7.8	23.9	23.9	100.1	100.1	8.3		7.0		5		74				<0.2		2.1	
						3.4	0.5	172	17.3		7.8		23.8		100.0		8.3		7.1		3		75				<0.2		2.0	
					Bottom	5.8	0.4	156	17.1	17.1	7.8	7.8	25.3	25.3	98.9	98.9	8.2	8.2	8.1		7		75				<0.2		1.0	
						5.8	0.4	158	17.1		7.8		25.2		98.8		8.2		7.9		7		75				<0.2		1.0	
IM7	Cloudy	Calm	11:23	8.0	Surface	1.0	0.3	190	17.9	17.9	7.8	7.8	20.6	20.6	102.5	102.5	8.6	8.5	3.0	4.4	3	6	75	76	806820	821349	<0.2	<0.2	1.9	1.8
						1.0	0.3	196	17.9		7.8		20.6		102.4		8.6		3.1		4		75				<0.2		1.9	
					Middle	4.0	0.3	170	17.5	17.5	7.8	7.8	23.5	23.5	100.6	100.6	8.4		4.1		5		76				<0.2		1.8	
						4.0	0.3	170	17.5		7.8		23.5		100.5		8.4		4.2		4		76				<0.2		1.9	
					Bottom	7.0	0.3	146	17.2	17.2	7.8	7.8	24.6	24.6	98.5	98.5	8.2	8.2	6.0		10		77				<0.2		1.5	
						7.0	0.3	148	17.2		7.8		24.6		98.4		8.2		6.0		9		77				<0.2		1.6	
IM8	Cloudy	Moderate	11:02	9.2	Surface	1.0	0.4	168	21.2	21.2	8.1	8.1	23.3	23.3	98.9	98.9	7.7	7.7	3.5	5.1	5	5	74	75	807855	821695	<0.2	<0.2	2.8	2.5
						1.0	0.4	174	21.2		8.1		23.3		98.8		7.7		3.5		4		74				<0.2		2.5	
					Middle	4.6	0.3	138	20.8	20.8	8.0	8.0	27.0	27.0	98.7	98.8	7.6		5.2		6		75				<0.2		2.6	
						4.6	0.3	141	20.8		8.0		27.0		98.8		7.6		5.1		4		75				<0.2		2.5	
					Bottom	8.2	0.3	117	20.6	20.6	8.1	8.1	28.4	28.4	98.9	98.9	7.5	7.5	6.8		7		75				<0.2		2.4	
						8.2	0.4	117	20.6		8.1		28.4		98.8		7.5		6.7		5		76				<0.2		2.4	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 06 April 17 during Mid-Ebb tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	10:52	8.1	Surface	1.0	0.5	141	21.1	21.1	8.0	8.0	24.6	24.6	96.7	96.7	7.5	7.5	2.6	3.6	4	5	74	75	808795	822094	<0.2	<0.2	1.9	1.9
						1.0	0.5	149	21.1		8.0		24.6		96.7		7.5		2.4		4		74				<0.2		2.1	
					Middle	4.1	0.4	135	20.9	20.9	8.0	8.0	26.7	26.7	97.3	97.3	7.4		4.4		4		74				<0.2		1.9	
						4.1	0.5	136	20.9		8.0		26.7		97.3		7.4		4.0		4		75				<0.2		1.9	
					Bottom	7.1	0.3	112	20.7	20.7	8.0	8.0	27.8	27.8	97.8	97.8	7.5	7.5	4.1		6		75				<0.2		1.8	
						7.1	0.4	115	20.7		8.0		27.8		97.7		7.4		4.0		5		76				<0.2		1.7	
IM10	Cloudy	Moderate	10:43	8.2	Surface	1.0	0.5	114	21.3	21.3	8.0	8.0	23.8	23.9	98.6	98.6	7.6	7.6	2.8	7.2	7	6	73	76	809825	822240	<0.2	<0.2	1.8	1.7
						1.0	0.6	120	21.3		8.0		23.9		98.6		7.6		2.8		6		74				<0.2		1.8	
					Middle	4.1	0.5	114	21.0	21.0	8.0	8.0	25.7	25.7	98.2	98.2	7.5		5.4		3		76				<0.2		1.6	
						4.1	0.5	114	21.0		8.0		25.7		98.2		7.5		5.6		5		76				<0.2		1.7	
					Bottom	7.2	0.4	113	20.8	20.8	8.1	8.1	27.6	27.6	99.6	99.6	7.6	7.6	13.3		7		78				<0.2		1.8	
						7.2	0.5	120	20.8		8.1		27.6		99.6		7.6		13.4		6		78				<0.2		1.7	
IM11	Cloudy	Moderate	10:24	7.4	Surface	1.0	0.5	124	21.6	21.6	8.1	8.1	21.1	21.1	101.7	101.7	7.9	7.8	2.0	4.0	4	6	73	75	810564	821501	<0.2	<0.2	3.1	3.0
						1.0	0.5	130	21.5		8.1		21.1		101.6		7.9		2.1		5		73				<0.2		3.2	
					Middle	3.7	0.4	95	21.0	21.0	8.1	8.1	25.8	25.8	100.2	100.2	7.7		3.6		6		76				<0.2		2.8	
						3.7	0.4	98	21.0		8.1		25.8		100.2		7.7		3.7		4		76				<0.2		2.7	
					Bottom	6.4	0.3	112	20.8	20.8	8.1	8.1	27.6	27.6	98.8	98.8	7.5	7.5	6.1		8		76				<0.2		3.1	
						6.4	0.3	118	20.8		8.1		27.6		98.8		7.5		6.2		6		77				<0.2		3.1	
IM12	Cloudy	Moderate	10:13	10.1	Surface	1.0	0.4	147	21.3	21.3	8.1	8.1	23.7	23.7	100.1	100.1	7.7	7.6	3.0	4.1	4	5	73	75	811530	821162	<0.2	<0.2	2.9	2.7
						1.0	0.4	155	21.3		8.1		23.7		100.0		7.7		3.0		4		74				<0.2		2.9	
					Middle	5.1	0.3	109	21.0	21.0	8.1	8.1	26.2	26.2	97.4	97.4	7.5		4.4		5		75				<0.2		2.8	
						5.1	0.4	119	21.0		8.1		26.2		97.4		7.5		4.5		6		76				<0.2		2.7	
					Bottom	9.1	0.3	103	20.9	20.9	8.0	8.0	27.6	27.6	97.1	97.2	7.4	7.4	4.8		5		77				<0.2		2.4	
						9.1	0.3	107	20.9		8.0		27.6		97.2		7.4		4.9		5		77				<0.2		2.5	
IM13	Cloudy	Calm	10:17	4.5	Surface	1.0	0.1	159	17.5	17.5	7.8	7.8	23.3	23.3	103.6	103.6	8.6	8.6	1.4	1.6	5	4		-	807199	820085	-	-	-	-
						1.0	0.1	163	17.5		7.8		23.2		103.6		8.6		1.4		3						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-						-		-	
						-	-	-	-		-		-		-		-		-		-						-		-	
					Bottom	3.5	0.1	166	17.3	17.3	7.7	7.7	22.6	22.6	100.1	100.1	8.4	8.4	1.7		4						-		-	
						3.5	0.1	169	17.3		7.7		22.6		100.0		8.4		1.7		4						-		-	
SR2	Cloudy	Moderate	09:42	5.0	Surface	1.0	0.4	104	21.3	21.3	8.0	8.0	24.6	24.6	99.9	99.9	7.7	7.7	1.4	1.6	7	6	71	74	814163	821463	<0.2	<0.2	2.6	2.6
						1.0	0.4	109	21.3		8.0		24.6		99.9		7.7		1.4		6		72				<0.2		2.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-						-		-	
						-	-	-	-		-		-		-		-		-		-						-		-	
					Bottom	4.0	0.2	117	21.1	21.1	8.0	8.0	26.4	26.4	98.5	98.5	7.5	7.5	1.8		7		75				<0.2		2.7	
						4.0	0.3	121	21.1		8.0		26.4		98.5		7.5		1.8		5		76				<0.2		2.8	
SR3	Cloudy	Moderate	11:10	9.3	Surface	1.0	0.4	161	21.3	21.3	8.0	8.0	22.8	22.8	98.4	98.4	7.6	7.5	3.2	4.0	5	6		-	807580	822147	-	-	-	-
						1.0	0.4	173	21.3		8.0		22.8		98.3		7.6		3.3		7						-		-	
					Middle	4.7	0.3	171	20.8	20.8	8.0	8.0	27.0	27.0	97.2	97.2	7.4		4.5		7						-		-	
						4.7	0.3	185	20.8		8.0		27.0		97.2		7.4		4.6		7						-		-	
					Bottom	8.3	0.3	120	20.7	20.7	8.0	8.0	27.7	27.7	97.5	97.5	7.4	7.4	4.2		6						-		-	
						8.3	0.3	131	20.7		8.0		27.7		97.5		7.4		4.3		6						-		-	
SR4A	Cloudy	Calm	09:32	8.5	Surface	1.0	0.3	108	17.6	17.6	7.8	7.8	23.7	23.7	102.1	102.1	8.5	8.4	3.8	7.3	4	11		-	807802	817189	-	-	-	-
						1.0	0.3	108	17.6		7.8		23.7		102.0		8.5		4.3		6						-		-	
					Middle	4.3	0.3	158	17.4	17.4	7.8	7.8	24.0	24.0	100.6	100.6	8.3		7.2		10						-		-	
						4.3	0.3	159	17.4		7.8		24.0		100.6		8.3		7.3		9						-		-	
					Bottom	7.5	0.2	154	17.3	17.3	7.7	7.7	24.3	24.3	99.6	99.6	8.3	8.3	10.6		17						-		-	
						7.5	0.3	158	17.3		7.7		24.3		99.6		8.3		10.7		19						-		-	
SR5A	Cloudy	Calm	09:14	4.9	Surface	1.0	0.1	177	18.0	18.0	7.7	7.7	24.1	24.1	103.7	103.7	8.5	8.5	2.4	2.5	7	8		-	810715	816593	-	-	-	-
						1.0	0.1	188	18.0		7.7		24.1		103.7		8.5		2.4		7						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-						-		-	
						-	-	-	-		-		-		-		-		-		-						-		-	
					Bottom	3.9	0.1	142	18.0	18.0	7.7	7.7	23.1	23.1	101.6	101.5	8.4	8.4	2.6		9						-		-	
						3.9	0.1	146	18.0		7.7		23.1		101.4		8.4		2.6		7						-		-	
SR6	Cloudy	Calm	08:50	4.4	Surface	1.0	0.1	136	17.6	17.6	7.7	7.7	24.4	24.4	101.5	101.5	8.4	8.4	5.3	11.9	8	8		-	814655	817899	-	-	-	-
						1.0	0.2	141	17.6		7.7		24.4		101.4		8.4		5.5		8						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-						-		-	
						-	-	-	-		-		-		-		-		-		-						-		-	
					Bottom	3.4	0.2	107	17.6	17.6	7.7	7.7	24.5	24.5	100.4	100.4	8.3	8.3	18.2		8						-		-	
						3.4	0.2	109	17.6		7.7		24.4		100.4		8.3		18.5		6						-		-	
SR7	Cloudy	Moderate	08:35	20.1	Surface	1.0	0.2	106	20.4	20.4	8.0	8.0	30.1	30.1	95.6	95.6	7.2	7.2	1.8	2.4	9	7		-	823734	823636	-	-	-	-
						1.0	0.2	109	20.4		8.0		30.1		95.6		7.2		1.6		7						-		-	
					Middle	10.1	0.2	195	20.2	20.2	8.0	8.0	30.8	30.8	93.5	93.5	7.1		1.8		7						-		-	
						10.1	0.2	195	20.2		8.0		30.8		93.5		7.1		1.8		5						-		-	
					Bottom	19.1	0.2	211	20.1	20.1	8.0	8.0	31.1	31.1	92.6	92.6	7.0	7.0	3.9		9						-		-	
						19.1	0.2	216	20.1		8.0		31.1		92.6		7.0		3.6		7						-		-	
SR8	Cloudy	Moderate	10:03	5.9	Surface	1.0	0.4	249	21.5	21.5	8.0	8.0	23.8	23.8	99.6	99.6	7.7	7.7	2.6	3.2	8	6		-	811610	820417	-	-	-	-
						1.0	0.4	271	21.5		8.0		23.8		99.6		7.7		2.8		6						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-						-		-	
						-	-	-	-		-		-		-		-		-		-						-		-	
					Bottom	4.9	0.3	204	21.0	21.0	8.0	8.0	27.3	27.3	97.9	97.9	7.4	7.4	3.7		5						-		-	
						4.9	0.3	217	21.0		8.0		27.3		97.9		7.4		3.8		6						-		-	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 08 April 17 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Sunny	Moderate	17:17	8.7	Surface	1.0	0.4	96	18.6	18.6	8.0	8.0	25.6	25.6	115.6	115.1	9.3	9.0	1.8	4.2	6	7	75	76	804260	815620	<0.2	<0.2	1.8	1.7
						1.0	0.4	97	18.5		7.9		25.6		114.5		9.2		1.8		8		75				<0.2		1.8	
					Middle	4.4	0.5	81	18.0	18.0	7.9	7.9	26.6	26.6	109.0	109.0	8.8		3.7		7		76				<0.2		1.7	
						4.4	0.5	81	18.0		7.9		26.6		108.9		8.8		3.8		7		76				<0.2		1.6	
					Bottom	7.7	0.4	73	17.3	17.3	7.9	7.9	29.3	29.3	107.3	107.8	8.7	8.7	7.2		8		77				<0.2		1.6	
						7.7	0.4	78	17.3		7.9		29.2		108.2		8.7		7.1		8		77				<0.2		1.5	
C2	Fine	Moderate	15:38	12.6	Surface	1.0	0.6	190	21.8	21.8	7.9	7.9	18.6	18.7	91.8	91.8	7.2	7.2	4.3	5.9	5	7	73	75	806941	825682	<0.2	<0.2	2.2	2.0
						1.0	0.6	203	21.8		7.9		18.8		91.8		7.2		4.4		6		73				<0.2		2.3	
					Middle	6.3	0.3	175	21.2	21.2	8.0	8.0	26.1	26.1	92.7	92.7	7.1		4.6		6		75				<0.2		2.1	
						6.3	0.3	188	21.2		8.0		26.1		92.7		7.1		4.7		7		76				<0.2		1.8	
					Bottom	11.6	0.2	179	21.0	21.0	8.0	8.0	27.4	27.4	91.6	91.6	7.0	7.0	8.7		8		77				<0.2		1.9	
						11.6	0.2	182	21.0		8.0		27.4		91.6		7.0		8.4		9		78				<0.2		1.9	
C3	Fine	Moderate	17:52	12.9	Surface	1.0	0.6	243	21.6	21.6	8.1	8.1	25.1	25.1	103.9	103.9	7.9	7.7	2.2	3.4	5	7	73	75	817792	822109	<0.2	<0.2	1.6	1.4
						1.0	0.6	265	21.6		8.1		25.1		103.8		7.9		2.1		6		73				<0.2		1.6	
					Middle	6.5	0.6	251	21.1	21.1	8.1	8.1	27.9	27.9	97.9	97.9	7.4		2.7		7		76				<0.2		1.4	
						6.5	0.6	258	21.1		8.1		27.9		97.9		7.4		2.6		5		76				<0.2		1.4	
					Bottom	11.9	0.6	283	20.7	20.7	8.1	8.1	30.1	30.1	95.2	95.3	7.2	7.2	5.4		9		77				<0.2		1.1	
						11.9	0.6	283	20.7		8.1		30.1		95.3		7.2		5.5		8		77				<0.2		1.1	
IM1	Sunny	Moderate	16:45	8.8	Surface	1.0	0.4	196	18.6	18.6	7.9	7.9	24.4	24.4	110.4	110.4	8.9	8.8	2.4	4.3	7	10	74	76	806471	818351	<0.2	<0.2	2.5	2.2
						1.0	0.5	204	18.6		7.9		24.4		110.4		8.9		2.5		7		75				<0.2		2.2	
					Middle	4.4	0.3	236	17.8	17.8	7.9	7.9	26.1	26.2	105.4	105.4	8.6		4.7		10		75				<0.2		2.2	
						4.4	0.4	252	17.8		7.9		26.2		105.3		8.6		4.7		9		76				<0.2		2.1	
					Bottom	7.8	0.4	170	17.5	17.5	7.9	7.9	27.8	27.8	105.4	105.5	8.5	8.5	5.7		13		76				<0.2		1.8	
						7.8	0.5	177	17.5		7.9		27.8		105.5		8.5		5.7		14		77				<0.2		2.1	
IM2	Sunny	Moderate	16:38	8.2	Surface	1.0	0.4	235	18.1	18.1	7.8	7.8	23.4	23.4	103.9	103.8	8.5	8.5	3.8	6.0	8	8	76	77	806191	818852	<0.2	<0.2	2.5	2.6
						1.0	0.4	251	18.0		7.8		23.4		103.7		8.5		3.9		8		76				<0.2		2.8	
					Middle	4.1	0.4	170	17.7	17.7	7.8	7.8	26.0	26.1	102.9	102.8	8.4		5.0		8		77				<0.2		2.7	
						4.1	0.5	179	17.7		7.8		26.1		102.7		8.4		5.4		7		77				<0.2		2.9	
					Bottom	7.2	0.5	164	17.4	17.4	7.8	7.8	28.4	28.4	103.4	103.5	8.4	8.4	9.0		8		78				<0.2		2.4	
						7.2	0.5	167	17.4		7.8		28.4		103.6		8.4		8.9		8		78				<0.2		2.2	
IM3	Sunny	Moderate	16:26	8.0	Surface	1.0	0.6	263	18.7	18.7	7.9	7.9	21.7	21.7	111.2	111.0	9.1	8.8	2.6	4.1	7	7	74	75	806006	819411	<0.2	<0.2	2.7	2.6
						1.0	0.6	270	18.7		7.9		21.7		110.7		9.1		2.6		7		74				<0.2		2.4	
					Middle	4.0	0.4	250	18.5	18.4	7.9	7.9	22.1	22.2	104.7	104.1	8.6		3.2		6		75				<0.2		2.5	
						4.0	0.4	261	18.3		7.9		22.3		103.4		8.5		3.6		6		75				<0.2		2.6	
					Bottom	7.0	0.4	204	17.7	17.7	7.8	7.8	26.1	26.1	104.1	104.5	8.5	8.5	6.1		7		76				<0.2		2.6	
						7.0	0.4	219	17.7		7.8		26.1		104.8		8.5		6.4		7		76				<0.2		2.8	
IM4	Sunny	Moderate	16:16	7.7	Surface	1.0	0.3	234	18.7	18.7	7.8	7.8	21.7	21.8	106.2	106.0	8.7	8.6	3.7	4.2	5	8	75	76	805038	819570	<0.2	<0.2	2.6	2.6
						1.0	0.4	237	18.6		7.8		21.8		105.8		8.7		3.6		6		74				<0.2		2.5	
					Middle	3.9	0.3	227	18.0	18.0	7.8	7.8	24.6	24.6	103.6	103.6	8.5		4.5		9		76				<0.2		2.6	
						3.9	0.3	237	18.0		7.8		24.6		103.6		8.5		4.4		10		75				<0.2		2.5	
					Bottom	6.7	0.3	212	17.8	18.0	7.8	7.9	25.8	25.7	105.9	106.5	8.6	8.7	4.7		9		77				<0.2		2.5	
						6.7	0.3	215	18.1		7.9		25.6		107.0		8.7		4.4		8		77				<0.2		2.7	
IM5	Sunny	Moderate	16:07	6.7	Surface	1.0	0.3	229	18.5	18.5	7.8	7.8	21.9	21.9	102.1	102.1	8.4	8.4	8.3	8.5	7	8	73	74	804920	820564	<0.2	<0.2	2.6	3.0
						1.0	0.3	229	18.5		7.8		21.9		102.0		8.4		8.5		5		73				<0.2		2.3	
					Middle	3.4	0.3	235	18.1	18.1	7.8	7.8	23.3	23.3	101.0	101.0	8.3		9.5		9		74				<0.2		2.9	
						3.4	0.4	244	18.0		7.8		23.3		101.0		8.3		8.7		7		74				<0.2		3.0	
					Bottom	5.7	0.3	248	17.6	17.7	7.8	7.8	25.9	25.9	102.3	102.7	8.4	8.4	8.1		9		75				<0.2		3.7	
						5.7	0.3	266	17.7		7.8		25.8		103.1		8.4		7.7		9		76				<0.2		3.7	
IM6	Sunny	Moderate	15:57	6.4	Surface	1.0	0.4	256	17.9	17.9	7.8	7.8	23.9	23.9	97.2	97.2	8.0	8.1	4.7	5.3	6	7	74	75	805846	821060	<0.2	<0.2	3.0	3.0
						1.0	0.4	267	17.9		7.8		23.8		97.2		8.0		4.7		7		74				<0.2		3.3	
					Middle	3.2	0.3	255	17.7	17.7	7.8	7.8	24.4	24.4	98.6	98.7	8.1		5.4		6		75				<0.2		3.0	
						3.2	0.4	277	17.7		7.8		24.4		98.7		8.1		5.4		6		76				<0.2		3.0	
					Bottom	5.4	0.3	236	17.7	17.7	7.8	7.8	26.0	26.0	103.0	103.1	8.4	8.4	5.7		8		76				<0.2		3.1	
						5.4	0.3	258	17.7		7.8		26.0		103.2		8.4		5.7		8		77				<0.2		2.8	
IM7	Sunny	Moderate	15:39	7.9	Surface	1.0	0.5	218	18.5	18.5	7.7	7.7	20.6	20.7	100.0	99.9	8.3	8.3	3.7	4.6	4	7	75	76	806830	821349	<0.2	<0.2	3.4	3.1
						1.0	0.5	235	18.5		7.7		20.7		99.8		8.3		3.8		6		74				<0.2		3.5	
					Middle	4.0	0.5	242	18.2	18.2	7.8	7.8	21.9	22.0	98.6	98.6	8.2		4.3		7		76				<0.2		3.1	
						4.0	0.5	256	18.2		7.8		22.1		98.5		8.2		4.5		8		75				<0.2		3.1	
					Bottom	6.9	0.4	241	18.0	18.0	7.8	7.8	23.0	23.0	100.0	100.4	8.3	8.3	5.7		7		77				<0.2		2.9	
						6.9	0.5	255	18.0		7.8		23.0		100.7		8.3		5.4		8		77				<0.2		2.8	
IM8	Fine	Moderate	16:03	8.8	Surface	1.0	0.5	194	21.4	21.4	7.9	7.9	22.0	22.0	90.7	90.7	7.1	7.2	4.6	5.8	7	12	74	75	807828	821695	<0.2	<0.2	3.0	2.8
						1.0	0.6	211	21.4		7.9		22.0		90.7		7.1		4.7		6		74				<0.2		2.9	
					Middle	4.4	0.4	230	21.4	21.4	8.0	8.0	23.3	23.3	93.3	93.3	7.2		6.0		9		74				<0.2		2.8	
						4.4	0.4	252	21.4		8.0		23.3		93.3		7.2		5.9		7		75				<0.2		3.0	
					Bottom	7.8	0.4	246	21.4	21.4	8.0	8.0	23.9	23.9	93.3	93.3	7.2	7.2	6.8		20		75				<0.2		2.4	
						7.8	0.4	258	21.4		8.0		23.9		93.3		7.2		6.8		20		76				<0.2		2.5	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 08 April 17 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C) Value	Water Temperature (°C) Average	pH Value	pH Average	Salinity (ppt) Value	Salinity (ppt) Average	DO Saturation (%) Value	DO Saturation (%) Average	Dissolved Oxygen Value	Dissolved Oxygen DA	Turbidity(NTU) Value	Turbidity(NTU) DA	Suspended Solids (mg/L) Value	Suspended Solids (mg/L) DA	Total Alkalinity (ppm) Value	Total Alkalinity (ppm) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L) Value	Chromium (µg/L) DA	Nickel (µg/L) Value	Nickel (µg/L) DA
IM9	Fine	Moderate	16:17	8.0	Surface	1.0	0.4	180	21.4	21.4	8.0	8.0	22.1	22.1	91.9	92.0	7.2	7.2	4.3	5.3	9	11	74	75	808819	822094	<0.2	<0.2	3.5	<u>3.3</u>
						1.0	0.4	196	21.4		8.0		22.1		92.0		7.2		4.3		7		74				<0.2		3.7	
					Middle	4.0	0.3	212	21.4	21.4	8.0	8.0	23.6	23.6	93.5	93.5	7.2		5.1		8		75				<0.2		3.3	
						4.0	0.3	232	21.4		8.0		23.6		93.5		7.2		5.1		8		75				<0.2		3.1	
					Bottom	7.0	0.3	242	21.4	21.4	8.0	8.0	24.4	24.4	93.9	93.9	7.2	7.2	6.4		18		77				<0.2		2.9	
						7.0	0.3	248	21.4		8.0		24.4		93.9		7.2		6.4		17		77				<0.2		3.0	
IM10	Fine	Moderate	16:31	8.0	Surface	1.0	0.3	194	21.7	21.7	8.0	8.0	23.7	23.7	99.6	99.6	7.6	7.5	5.5	6.2	9	9	73	75	809852	822240	<0.2	<0.2	2.8	2.8
						1.0	0.3	200	21.7		8.0		23.6		99.6		7.6		5.6		8		74				<0.2		2.6	
					Middle	4.0	0.3	260	21.5	21.5	8.0	8.0	24.4	24.4	96.0	96.0	7.4		6.1		8		75				<0.2		2.9	
						4.0	0.4	280	21.5		8.0		24.4		96.0		7.4		6.1		9		75				<0.2		3.1	
					Bottom	7.0	0.4	259	21.4	21.4	8.0	8.0	24.8	24.8	95.0	95.0	7.3	7.3	7.0		10		77				<0.2		2.8	
						7.0	0.4	275	21.4		8.0		24.8		95.0		7.3		7.1		12		77				<0.2		2.5	
IM11	Fine	Moderate	16:42	9.7	Surface	1.0	0.4	264	21.9	21.9	8.1	8.1	22.9	22.9	103.4	103.4	7.9	7.8	4.6	9.3	6	12	73	75	810537	821501	<0.2	<0.2	2.3	2.1
						1.0	0.4	265	21.9		8.1		22.9		103.3		7.9		4.8		6		74				<0.2		2.6	
					Middle	4.9	0.3	256	21.7	21.7	8.1	8.1	23.5	23.5	101.0	101.0	7.8		6.8		5		75				<0.2		1.9	
						4.9	0.3	264	21.7		8.1		23.5		101.0		7.7		7.0		7		76				<0.2		1.9	
					Bottom	8.7	0.3	264	21.5	21.5	8.1	8.1	25.2	25.2	98.3	98.4	7.5	7.5	16.3		24		77				<0.2		1.7	
						8.7	0.4	264	21.5		8.1		25.2		98.4		7.5		16.4		23		77				<0.2		1.9	
IM12	Fine	Moderate	16:54	8.2	Surface	1.0	0.5	274	21.9	21.9	8.1	8.1	23.0	23.0	105.1	105.1	8.1	7.8	3.7	4.9	6	11	74	75	811520	821162	<0.2	<0.2	1.9	1.8
						1.0	0.6	284	21.9		8.1		23.0		105.0		8.0		3.5		8		74				<0.2		1.8	
					Middle	4.1	0.6	284	21.6	21.6	8.1	8.1	24.6	24.6	99.4	99.4	7.6		3.8		10		75				<0.2		1.9	
						4.1	0.6	294	21.6		8.1		24.6		99.3		7.6		3.8		9		75				<0.2		2.1	
					Bottom	7.2	0.5	266	21.1	21.1	8.0	8.0	27.1	27.1	94.4	94.4	7.2	7.2	7.4		18		77				<0.2		1.6	
						7.2	0.5	290	21.1		8.0		27.1		94.4		7.2		6.9		16		77				<0.2		1.6	
IM13	Sunny	Moderate	16:53	5.9	Surface	1.0	0.4	192	17.9	17.9	7.9	7.9	26.9	27.0	107.2	107.1	8.7	8.7	6.7	6.6	7	9		-	806917	820085	-	-	-	-
						1.0	0.5	203	17.9		7.9		27.0		107.0		8.6		6.7		6						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-						-		-	
						-	-	-	-		-		-		-		-		-		-						-		-	
					Bottom	4.9	0.4	222	17.7	17.7	7.9	7.9	27.6	27.6	107.1	108.1	8.7	8.8	6.5		11						-		-	
						4.9	0.4	230	17.7		7.9		27.6		109.1		8.8		6.3		12						-		-	
SR2	Fine	Moderate	17:25	5.8	Surface	1.0	0.5	255	21.5	21.5	8.1	8.1	25.7	25.7	99.6	99.6	7.6	7.6	7.9	7.2	10	13	74	75	814162	821463	<0.2	<0.2	1.5	1.5
						1.0	0.5	258	21.5		8.1		25.7		99.5		7.6		8.0		11		74				<0.2		1.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-						-		-	
						-	-	-	-		-		-		-		-		-		-						-		-	
					Bottom	4.8	0.3	200	21.1	21.1	8.1	8.1	27.6	27.6	97.9	98.0	7.4	7.4	6.5		15		75				<0.2		1.5	
						4.8	0.3	200	21.1		8.1		27.6		98.0		7.4		6.5		14		76				<0.2		1.4	
SR3	Fine	Moderate	15:58	9.6	Surface	1.0	0.6	181	21.7	21.7	7.9	7.9	20.7	20.7	91.4	91.5	7.1	7.1	5.3	6.3	9	8		-	807560	822147	-	-	-	-
						1.0	0.6	192	21.7		7.9		20.7		91.5		7.1		5.4		8						-		-	
					Middle	4.8	0.3	208	21.3	21.3	8.0	8.0	25.2	25.2	93.0	93.0	7.1		6.6		7						-		-	
						4.8	0.4	223	21.3		8.0		25.2		93.0		7.1		6.7		7						-		-	
					Bottom	8.6	0.3	233	21.2	21.2	8.0	8.0	25.3	25.3	92.8	92.8	7.1	7.1	6.7		7						-		-	
						8.6	0.4	237	21.2		8.0		25.3		92.8		7.1		6.8		7						-		-	
SR4A	Sunny	Moderate	17:37	8.2	Surface	1.0	0.4	250	18.8	18.8	7.9	7.9	25.6	25.6	114.0	114.0	9.1	9.1	5.8	6.1	9	9		-	807813	817189	-	-	-	-
						1.0	0.4	256	18.8		7.9		25.6		114.0		9.1		6.0		8						-		-	
					Middle	4.1	0.4	226	18.8	18.8	7.9	7.9	25.6	25.6	112.7	112.7	9.0		6.0		10						-		-	
						4.1	0.4	248	18.8		7.9		25.6		112.7		9.0		6.0		9						-		-	
					Bottom	7.2	0.3	236	18.5	18.5	7.9	7.9	26.0	26.0	110.9	110.9	8.9	8.9	6.5		11						-		-	
						7.2	0.4	241	18.5		7.9		26.0		110.9		8.9		6.1		9						-		-	
SR5A	Sunny	Calm	17:57	5.2	Surface	1.0	0.3	280	18.8	18.8	7.9	7.9	25.2	25.2	113.5	113.5	9.1	9.1	6.0	7.3	8	8		-	810700	816593	-	-	-	-
						1.0	0.3	297	18.8		7.9		25.2		113.5		9.1		6.0		8						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-						-		-	
						-	-	-	-		-		-		-		-		-		-						-		-	
					Bottom	4.2	0.3	289	18.7	18.7	7.9	7.9	25.4	25.4	112.7	112.8	9.0	9.0	8.6		9						-		-	
						4.2	0.3	294	18.7		7.9		25.4		112.8		9.0		8.7		8						-		-	
SR6	Sunny	Calm	18:22	4.6	Surface	1.0	0.2	146	18.4	18.4	7.9	7.9	25.0	25.0	108.4	108.3	8.8	8.8	8.3	9.0	12	12		-	814668	817899	-	-	-	-
						1.0	0.2	160	18.4		7.9		25.0		108.2		8.8		8.3		13						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-						-		-	
						-	-	-	-		-		-		-		-		-		-						-		-	
					Bottom	3.6	0.2	145	18.3	18.3	7.9	7.9	25.2	25.2	108.8	108.9	8.8	8.8	9.7		12						-		-	
						3.6	0.2	147	18.3		7.9		25.2		108.9		8.8		9.8		12						-		-	
SR7	Fine	Moderate	18:34	16.6	Surface	1.0	0.3	170	21.0	21.0	8.1	8.1	28.8	28.8	98.5	98.5	7.4	7.3	4.5	5.2	5	6		-	823729	823636	-	-	-	-
						1.0	0.3	173	21.0		8.1		28.8		98.4		7.4		4.4		5						-		-	
					Middle	8.3	0.3	168	20.7	20.7	8.1	8.1	30.3	30.3	96.3	96.3	7.2		4.3		7						-		-	
						8.3	0.3	182	20.7		8.1		30.3		96.3		7.2		4.4		6						-		-	
					Bottom	15.6	0.3	112	20.6	20.6	8.1	8.1	30.6	30.6	96.1	96.1	7.2	7.2	6.6		6						-		-	
						15.6	0.3	117	20.6		8.1		30.6		96.1		7.2		6.7		8						-		-	
SR8	Fine	Moderate	17:05	6.1	Surface	1.0	0.3	213	22.2	22.2	8.1	8.1	22.1	22.1	110.8	110.7	8.5	8.5	4.7	8.2	8	10		-	811581	820417	-	-	-	-
						1.0	0.3	214	22.2		8.1		22.1		110.6		8.5		4.8		9						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-						-		-	
						-	-	-	-		-		-		-		-		-		-						-		-	
					Bottom	5.1	0.3	246	21.7	21.7	8.1	8.1	24.5	24.5	102.6	102.7	7.8	7.8	11.7		13						-		-	
						5.1	0.4	268	21.7		8.1		24.5		102.7		7.8		11.7		10						-		-	

DA: Depth-Averaged

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

<u>Value exceeding Action Level is underlined</u>; **<u>Value exceeding Limit Level is bolded and underlined</u>**

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

Water Quality Monitoring

Water Quality Monitoring Results on 08 April 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	11:42	8.8	Surface	1.0	0.4	223	18.0	18.0	7.8	7.8	24.9	24.9	109.2	109.2	8.9	8.8	1.8	2.3	3	3	74	75	804251	815620	<0.2	<0.2	2.3	2.4
						1.0	0.4	227	18.0		7.8		24.9		109.2		8.9		1.8		2		74				<0.2		2.4	
					Middle	4.4	0.5	198	17.7	17.7	7.8	7.8	25.8	25.9	105.3	105.3	8.6		2.6		4		75				<0.2		2.3	
						4.4	0.5	201	17.7		7.8		25.9		105.2		8.6		2.6		4		76				<0.2		2.4	
					Bottom	7.8	0.4	202	17.3	17.3	7.8	7.8	28.4	28.4	103.8	103.9	8.4	8.4	2.5		4		76				<0.2		2.4	
						7.8	0.4	210	17.3		7.8		28.4		103.9		8.4		2.6		3		77				<0.2		2.5	
C2	Cloudy	Moderate	12:55	12.2	Surface	1.0	0.8	171	22.3	22.3	8.0	8.0	20.3	20.3	97.8	97.7	7.6	7.4	4.1	4.8	6	6	73	75	806958	825682	<0.2	<0.2	3.2	2.5
						1.0	0.9	183	22.3		8.0		20.3		97.6		7.6		4.1		6		73				<0.2		2.9	
					Middle	6.1	0.6	170	21.2	21.2	8.0	8.0	25.9	25.9	93.3	93.3	7.1		4.8		5		75				<0.2		2.4	
						6.1	0.6	174	21.2		8.0		25.8		93.3		7.1		4.9		5		76				<0.2		2.4	
					Bottom	11.2	0.4	150	20.9	20.9	8.0	8.0	28.0	28.1	92.8	92.9	7.0	7.0	5.4		7		75				<0.2		2.0	
						11.2	0.4	158	20.9		8.0		28.1		92.9		7.0		5.4		8		77				<0.2		2.0	
C3	Cloudy	Moderate	10:40	12.7	Surface	1.0	0.4	127	21.5	21.5	8.1	8.1	26.8	26.8	102.8	102.8	7.8	7.7	1.5	2.1	4	5	72	74	817820	822109	<0.2	<0.2	2.1	2.0
						1.0	0.4	139	21.5		8.1		26.8		102.8		7.8		1.5		4		72				<0.2		2.3	
					Middle	6.4	0.5	121	21.0	21.0	8.1	8.1	28.1	28.1	98.5	98.5	7.5		2.2		5		74				<0.2		1.9	
						6.4	0.5	121	21.0		8.1		28.0		98.5		7.5		2.1		6		74				<0.2		1.9	
					Bottom	11.7	0.3	129	20.7	20.7	8.1	8.1	29.9	29.9	98.2	98.2	7.4	7.4	2.8		6		75				<0.2		2.0	
						11.7	0.3	135	20.7		8.1		29.9		98.2		7.4		2.7		7		75				<0.2		2.0	
IM1	Cloudy	Moderate	12:16	7.2	Surface	1.0	0.5	183	17.9	17.9	7.8	7.8	25.6	25.6	104.3	104.3	8.5	8.5	3.8	5.3	3	9	75	76	806468	818351	<0.2	<0.2	2.5	2.0
						1.0	0.5	191	17.9		7.8		25.6		104.3		8.5		3.8		4		75				<0.2		2.2	
					Middle	3.6	0.4	183	17.7	17.7	7.8	7.8	25.9	25.9	103.5	103.5	8.4		4.9		7		76				<0.2		1.7	
						3.6	0.4	183	17.7		7.8		25.9		103.5		8.4		5.0		8		75				<0.2		1.5	
					Bottom	6.2	0.4	173	17.5	17.5	7.8	7.8	27.7	27.7	103.2	103.2	8.4	8.4	7.0		15		77				<0.2		1.9	
						6.2	0.4	175	17.5		7.8		27.7		103.2		8.4		7.1		14		77				<0.2		2.1	
IM2	Cloudy	Moderate	12:23	8.2	Surface	1.0	0.5	207	18.1	18.2	7.8	7.8	25.2	25.2	107.1	107.1	8.7	8.7	3.0	5.2	5	6	74	75	806206	818852	<0.2	<0.2	2.4	2.1
						1.0	0.5	207	18.2		7.8		25.1		107.0		8.7		3.1		6		74				<0.2		2.3	
					Middle	4.1	0.5	195	17.8	17.8	7.8	7.8	26.2	26.2	105.2	105.2	8.6		4.6		6		75				<0.2		1.8	
						4.1	0.5	209	17.8		7.8		26.2		105.1		8.6		4.8		6		75				<0.2		1.8	
					Bottom	7.2	0.4	183	17.7	17.8	7.8	7.8	26.5	26.5	105.2	105.3	8.5	8.6	7.7		8		76				<0.2		2.2	
						7.2	0.4	192	17.8		7.8		26.5		105.3		8.6		7.9		6		76				<0.2		2.2	
IM3	Cloudy	Moderate	12:33	8.3	Surface	1.0	0.4	212	18.3	18.3	7.8	7.8	24.1	24.1	109.5	109.5	8.9	8.8	2.2	3.3	4	6	75	76	806033	819411	<0.2	<0.2	2.4	2.3
						1.0	0.5	218	18.3		7.8		24.1		109.4		8.9		2.1		4		75				<0.2		2.3	
					Middle	4.2	0.4	207	18.0	18.0	7.8	7.8	24.9	24.9	105.4	105.4	8.6		3.7		6		76				<0.2		2.3	
						4.2	0.5	227	18.0		7.8		24.9		105.4		8.6		3.7		6		77				<0.2		2.4	
					Bottom	7.3	0.4	203	17.8	17.8	7.8	7.8	26.7	26.7	105.9	106.0	8.6	8.6	4.0		7		78				<0.2		2.1	
						7.3	0.4	213	17.8		7.8		26.6		106.0		8.6		3.9		6		77				<0.2		2.1	
IM4	Cloudy	Moderate	12:41	7.7	Surface	1.0	0.5	207	18.5	18.5	7.9	7.9	23.4	23.4	105.6	105.6	8.6	8.5	3.6	5.8	9	9	75	76	805037	819570	<0.2	<0.2	2.4	2.3
						1.0	0.5	215	18.5		7.9		23.4		105.5		8.6		3.7		7		75				<0.2		2.4	
					Middle	3.9	0.5	196	17.7	17.7	7.8	7.8	25.1	25.1	101.7	101.7	8.3		6.4		9		76				<0.2		2.3	
						3.9	0.5	203	17.7		7.8		25.1		101.7		8.3		6.4		10		76				<0.2		2.4	
					Bottom	6.7	0.4	187	17.5	17.5	7.8	7.8	27.0	27.0	103.3	103.4	8.4	8.4	7.2		9		77				<0.2		2.1	
						6.7	0.4	199	17.5		7.8		27.0		103.5		8.4		7.2		8		77				<0.2		2.3	
IM5	Cloudy	Moderate	12:52	6.6	Surface	1.0	0.5	201	18.4	18.4	7.8	7.8	22.5	22.5	103.5	103.5	8.5	8.4	3.7	8.0	10	10	74	75	804920	820564	<0.2	<0.2	2.7	2.3
						1.0	0.5	215	18.4		7.8		22.5		103.4		8.5		3.8		9		74				<0.2		2.9	
					Middle	3.3	0.5	193	17.9	18.0	7.8	7.8	24.3	24.3	101.6	101.6	8.3		6.6		8		75				<0.2		2.2	
						3.3	0.6	208	18.0		7.8		24.2		101.6		8.3		6.7		10		75				<0.2		2.4	
					Bottom	5.6	0.4	182	17.4	17.4	7.8	7.8	27.2	27.2	99.9	99.9	8.1	8.1	13.6		10		75				<0.2		1.8	
						5.6	0.5	184	17.4		7.8		27.2		99.8		8.1		13.6		11		75				<0.2		1.6	
IM6	Cloudy	Moderate	13:01	6.6	Surface	1.0	0.4	196	18.4	18.4	7.8	7.8	22.3	22.3	101.4	101.4	8.4	8.3	4.7	7.5	9	13	74	75	805812	821060	<0.2	<0.2	2.8	2.5
						1.0	0.5	196	18.3		7.8		22.3		101.4		8.3		4.9		8		74				<0.2		3.0	
					Middle	3.3	0.5	186	18.0	18.0	7.8	7.8	23.3	23.3	100.8	100.9	8.3		8.1		9		75				<0.2		2.7	
						3.3	0.5	198	18.0		7.8		23.3		100.9		8.3		8.2		8		75				<0.2		2.4	
					Bottom	5.6	0.3	193	17.8	17.8	7.8	7.8	26.0	26.0	102.7	102.8	8.4	8.4	9.6		23		76				<0.2		1.9	
						5.6	0.4	199	17.8		7.8		26.0		102.8		8.4		9.4		22		76				<0.2		2.0	
IM7	Cloudy	Moderate	13:12	7.9	Surface	1.0	0.3	204	18.5	18.5	7.8	7.8	22.8	22.8	100.5	100.5	8.2	8.2	3.4	4.3	5	7	75	76	806834	821349	<0.2	<0.2	2.3	2.2
						1.0	0.3	214	18.5		7.8		22.7		100.5		8.2		3.5		7		75				<0.2		2.1	
					Middle	4.0	0.3	236	17.8	17.8	7.8	7.8	24.1	24.2	100.1	100.2	8.2		4.6		7		76				<0.2		2.6	
						4.0	0.3	256	17.8		7.8		24.3		100.2		8.2		4.7		5		76				<0.2		2.4	
					Bottom	6.9	0.3	223	17.8	17.8	7.8	7.8	25.7	25.7	100.9	101.0	8.2	8.2	4.7		10		77				<0.2		2.0	
						6.9	0.3	237	17.8		7.8		25.6		101.0		8.2		4.6		8		77				<0.2		2.0	
IM8	Cloudy	Moderate	12:19	9.1	Surface	1.0	0.5	175	21.9	21.9	8.0	8.0	21.2	21.2	99.8	99.8	7.7	7.7	4.5	6.0	4	8	73	75	807853	821695	<0.2	<0.2	3.1	2.9
						1.0	0.5	191	21.9		8.0		21.2		99.8		7.7		4.6		5		74				<0.2		3.3	
					Middle	4.6	0.3	168	21.3	21.3	8.1	8.1	25.7	25.7	99.5	99.5	7.6		5.6		8		76				<0.2		3.0	
						4.6	0.3	180	21.3		8.1		25.7		99.5		7.6		5.7		7		76				<0.2		3.1	
					Bottom	8.1	0.3	181	21.1	21.1	8.1	8.1	27.0	27.0	99.9	99.9	7.6	7.6	7.9		11		76				<0.2		2.5	
						8.1	0.3	196	21.1		8.1		27.0		99.9		7.6		7.9		10		77				<0.2		2.4	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 08 April 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	12:10	8.1	Surface	1.0	0.5	133	21.8	21.8	8.0	8.0	21.6	21.6	98.9	98.9	7.7	7.6	4.7	6.8	5	8	71	75	808812	822094	<0.2	<0.2	2.5	2.4
						1.0	0.6	139	21.8		8.0		21.6		98.9		7.7		4.7		5		73				<0.2		2.6	
					Middle	4.1	0.3	136	21.2	21.2	8.1	8.1	25.9	25.9	98.3	98.4	7.5		6.8		7		75				<0.2		2.5	
						4.1	0.4	148	21.2		8.1		25.9		98.4		7.5		6.8		9		75				<0.2		2.5	
					Bottom	7.1	0.3	120	21.2	21.2	8.1	8.1	26.6	26.6	99.3	99.3	7.6	7.6	9.0		10		76				<0.2		2.1	
						7.1	0.3	120	21.2		8.1		26.6		99.3		7.6		8.7		10		77				<0.2		2.2	
IM10	Cloudy	Moderate	11:59	8.1	Surface	1.0	0.7	131	21.7	21.7	8.0	8.0	21.4	21.4	97.5	97.5	7.6	7.5	6.7	9.5	4	9	73	74	809834	822240	<0.2	<0.2	2.8	2.5
						1.0	0.8	142	21.6		8.0		21.4		97.4		7.6		6.9		5		73				<0.2		2.8	
					Middle	4.1	0.6	108	21.2	21.2	8.1	8.1	25.5	25.5	96.9	96.9	7.4		9.9		8		74				<0.2		2.5	
						4.1	0.6	111	21.2		8.1		25.5		96.9		7.4		9.7		9		74				<0.2		2.5	
					Bottom	7.1	0.5	112	21.2	21.2	8.1	8.1	25.7	25.7	97.2	97.2	7.4	7.4	12.0		13		73				<0.2		2.1	
						7.1	0.5	119	21.2		8.1		25.7		97.2		7.4		11.9		14		75				<0.2		2.3	
IM11	Cloudy	Moderate	11:48	8.8	Surface	1.0	0.6	121	21.7	21.7	8.0	8.0	22.0	22.0	98.1	98.1	7.6	7.7	3.4	6.7	4	7	71	74	810561	821501	<0.2	<0.2	2.1	2.3
						1.0	0.7	132	21.7		8.0		22.0		98.1		7.6		3.3		5		74				<0.2		2.4	
					Middle	4.4	0.7	106	21.5	21.5	8.1	8.1	23.7	23.7	100.1	100.1	7.7		6.3		5		73				<0.2		2.6	
						4.4	0.7	109	21.5		8.1		23.7		100.1		7.7		6.5		6		73				<0.2		2.7	
					Bottom	7.8	0.5	89	21.4	21.4	8.1	8.1	25.6	25.6	100.0	100.0	7.6	7.6	10.4		13		74				<0.2		2.0	
						7.8	0.5	97	21.4		8.1		25.6		100.0		7.6		10.4		11		76				<0.2		1.8	
IM12	Cloudy	Moderate	11:37	10.1	Surface	1.0	0.7	97	22.0	22.0	8.1	8.1	22.2	22.2	102.3	102.3	7.9	7.8	5.5	9.8	7	12	71	74	811535	821162	<0.2	<0.2	2.2	2.1
						1.0	0.7	102	22.0		8.1		22.2		102.3		7.9		5.7		6		73				<0.2		2.3	
					Middle	5.1	0.5	91	21.4	21.4	8.1	8.1	25.5	25.5	99.2	99.2	7.6		9.1		11		75				<0.2		1.9	
						5.1	0.5	93	21.4		8.1		25.5		99.2		7.6		9.2		11		75				<0.2		2.0	
					Bottom	9.1	0.3	108	21.4	21.4	8.1	8.1	25.8	25.8	98.8	98.9	7.5	7.5	14.5		18		75				<0.2		1.9	
						9.1	0.3	113	21.4		8.1		25.8		98.9		7.5		14.6		19		76				<0.2		2.1	
IM13	Cloudy	Calm	12:09	4.2	Surface	1.0	0.1	196	18.3	18.4	7.8	7.8	25.9	25.9	104.2	104.2	8.4	8.4	6.3	6.4	4	5		-	807317	820085	-	-	-	-
						1.0	0.1	204	18.4		7.8		25.8		104.2		8.4		6.0		<2						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-						-		-	
						-	-	-	-		-		-		-		-		-		-						-		-	
					Bottom	3.2	0.2	159	17.7	17.7	7.8	7.8	27.0	27.0	104.5	104.6	8.5	8.5	6.5		6						-		-	
						3.2	0.2	168	17.7		7.8		27.0		104.7		8.5		6.6		8						-		-	
SR2	Cloudy	Moderate	11:09	5.1	Surface	1.0	0.5	102	21.7	21.7	8.1	8.1	23.4	23.4	99.6	99.6	7.6	7.6	4.4	5.5	5	6	74	75	814158	821463	<0.2	<0.2	2.3	2.1
						1.0	0.5	105	21.7		8.1		23.4		99.6		7.6		4.5		5		74				<0.2		2.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-						-		-	
						-	-	-	-		-		-		-		-		-		-						-		-	
					Bottom	4.1	0.2	116	21.4	21.4	8.1	8.1	25.7	25.7	97.9	97.9	7.5	7.5	6.6		7		75				<0.2		2.0	
						4.1	0.2	120	21.4		8.1		25.7		97.9		7.5		6.4		8		75				<0.2		2.0	
SR3	Cloudy	Moderate	12:26	9.8	Surface	1.0	0.5	180	22.1	22.1	8.0	8.0	20.8	20.8	99.6	99.6	7.7	7.4	3.6	7.1	6	8		-	807583	822147	-	-	-	-
						1.0	0.5	186	22.1		8.0		20.7		99.5		7.7		3.7		6						-		-	
					Middle	4.9	0.3	174	21.1	21.1	8.0	8.0	26.4	26.4	93.6	93.7	7.1		9.2		8						-		-	
						4.9	0.3	177	21.1		8.0		26.4		93.7		7.1		9.3		8						-		-	
					Bottom	8.8	0.2	194	21.1	21.1	8.0	8.0	26.6	26.6	94.5	94.5	7.2	7.2	8.8		10						-		-	
						8.8	0.2	204	21.1		8.0		26.6		94.5		7.2		8.2		8						-		-	
SR4A	Cloudy	Moderate	11:20	8.3	Surface	1.0	0.4	101	18.2	18.2	7.8	7.8	24.1	24.1	105.0	105.0	8.6	8.5	6.4	8.6	9	13		-	807813	817189	-	-	-	-
						1.0	0.4	105	18.2		7.8		24.1		105.0		8.6		6.4		8						-		-	
					Middle	4.2	0.3	107	17.8	17.8	7.8	7.8	25.6	25.6	103.1	103.1	8.4		9.6		15						-		-	
						4.2	0.4	113	17.8		7.8		25.6		103.1		8.4		9.6		14						-		-	
					Bottom	7.3	0.3	90	17.7	17.7	7.8	7.8	26.2	26.2	102.5	102.6	8.4	8.4	9.8		14						-		-	
						7.3	0.4	91	17.7		7.8		26.1		102.6		8.4		9.7		15						-		-	
SR5A	Cloudy	Moderate	11:01	5.0	Surface	1.0	0.2	151	18.6	18.6	7.7	7.7	23.8	23.8	106.6	106.6	8.7	8.7	4.6	4.3	8	9		-	810707	816593	-	-	-	-
						1.0	0.2	164	18.6		7.7		23.8		106.6		8.7		4.6		9						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-						-		-	
						-	-	-	-		-		-		-		-		-		-						-		-	
					Bottom	4.0	0.2	166	18.6	18.6	7.7	7.7	24.0	24.0	105.2	105.2	8.5	8.5	4.0		8						-		-	
						4.0	0.2	166	18.6		7.7		24.0		105.2		8.5		4.1		9						-		-	
SR6	Cloudy	Calm	10:31	4.2	Surface	1.0	0.2	98	18.8	18.8	7.6	7.6	19.4	19.4	105.6	105.6	8.8	8.8	9.2	12.9	8	9		-	814666	817899	-	-	-	-
						1.0	0.2	104	18.8		7.6		19.4		105.5		8.8		9.6		9						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-						-		-	
						-	-	-	-		-		-		-		-		-		-						-		-	
					Bottom	3.2	0.1	115	18.5	18.5	7.4	7.4	17.9	17.9	102.4	102.4	8.6	8.6	16.5		8						-		-	
						3.2	0.2	121	18.5		7.4		17.8		102.4		8.6		16.1		10						-		-	
SR7	Cloudy	Moderate	10:03	18.5	Surface	1.0	0.2	178	21.0	21.0	8.0	8.0	28.9	28.9	98.4	98.4	7.4	7.3	2.4	4.2	4	7		-	823746	823636	-	-	-	-
						1.0	0.2	190	21.0		8.0		28.9		98.3		7.4		2.5		4						-		-	
					Middle	9.3	0.2	140	20.7	20.7	8.0	8.0	30.0	30.0	95.8	95.8	7.2		3.9		6						-		-	
						9.3	0.2	140	20.7		8.0		30.0		95.8		7.2		4.0		7						-		-	
					Bottom	17.5	0.2	90	20.6	20.6	8.0	8.0	30.6	30.6	94.9	94.9	7.1	7.1	6.0		11						-		-	
						17.5	0.2	95	20.6		8.0		30.6		94.8		7.1		6.1		10						-		-	
SR8	Cloudy	Moderate	11:30	5.9	Surface	1.0	0.3	236	22.0	22.0	8.1	8.1	23.0	23.0	99.7	99.7	7.6	7.6	4.8	5.0	9	13		-	811588	820417	-	-	-	-
						1.0	0.3	258	22.0		8.1		23.0		99.7		7.6		4.8		11						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-						-		-	
						-	-	-	-		-		-		-		-		-		-						-		-	
					Bottom	4.9	0.3	256	21.9	21.9	8.1	8.1	23.7	23.7	99.1	99.1	7.6	7.6	5.2		15						-		-	
						4.9	0.3	276	21.9		8.1		23.7		99.0		7.6		5.1		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 12 April 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	07:36	8.3	Surface	1.0	0.6	89	21.7	21.7	8.1	8.1	28.7	28.7	100.2	100.2	7.5	7.4	5.1	11.3	7	12	75	76	804265	815620	<0.2	<0.2	1.1	1.0
						1.0	0.7	97	21.7		8.1		28.7		100.2		7.5		5.3		5		75				<0.2		1.1	
					Middle	4.2	0.7	89	21.5	21.5	8.1	8.1	30.3	30.3	99.2	99.2	7.3		9.2		5		76				<0.2		1.0	
						4.2	0.7	93	21.5		8.1		30.3		99.2		7.3		9.4		7		76				<0.2		1.1	
					Bottom	7.3	0.7	113	21.5	21.5	8.1	8.1	30.8	30.8	97.9	97.9	7.2	7.2	19.4		24		77				<0.2		0.8	
						7.3	0.7	113	21.5		8.1		30.8		97.8		7.2		19.4		26		77				<0.2		0.8	
C2	Cloudy	Rough	09:14	9.0	Surface	1.0	0.3	264	22.2	22.2	8.0	8.0	23.6	23.7	95.0	95.1	7.2	7.3	5.1	5.9	12	13	74	75	806960	825682	<0.2	<0.2	1.1	1.3
						1.0	0.3	283	22.2		8.0		23.7		95.1		7.2		4.8		11		74				<0.2		1.3	
					Middle	4.5	0.3	272	22.0	22.0	8.1	8.1	25.5	25.5	96.2	96.2	7.3		5.6		14		75				<0.2		1.1	
						4.5	0.3	286	22.0		8.1		25.5		96.2		7.3		5.6		15		75				<0.2		1.4	
					Bottom	8.0	0.4	266	21.9	21.9	8.1	8.1	27.4	27.4	95.2	95.2	7.1	7.1	7.1		15		76				<0.2		1.5	
						8.0	0.4	285	21.9		8.1		27.4		95.2		7.1		7.0		13		77				<0.2		1.5	
C3	Cloudy	Moderate	06:24	12.2	Surface	1.0	0.3	200	22.0	22.0	8.0	8.0	25.2	25.2	89.6	89.6	6.8	6.8	9.9	12.8	16	16	73	74	817807	822109	<0.2	<0.2	2.0	1.8
						1.0	0.3	215	22.0		8.0		25.2		89.6		6.8		9.9		14		73				<0.2		1.7	
					Middle	6.1	0.4	234	21.9	21.9	8.0	8.0	25.5	25.5	89.5	89.5	6.8		12.6		18		74				<0.2		1.7	
						6.1	0.4	242	21.9		8.0		25.5		89.5		6.8		12.6		18		75				<0.2		1.8	
					Bottom	11.2	0.3	238	21.7	21.7	7.9	7.9	26.4	26.4	89.4	89.4	6.7	6.7	16.0		13		75				<0.2		1.8	
						11.2	0.4	245	21.7		7.9		26.4		89.4		6.7		16.0		15		76				<0.2		1.9	
IM1	Cloudy	Moderate	08:00	8.0	Surface	1.0	0.4	209	22.1	22.1	8.1	8.1	26.5	26.6	97.6	97.6	7.3	7.3	8.0	11.0	15	16	75	76	806462	818351	<0.2	<0.2	1.4	1.5
						1.0	0.4	223	22.1		8.1		26.6		97.6		7.3		8.0		14		74				<0.2		1.6	
					Middle	4.0	0.5	152	22.0	22.0	8.1	8.1	27.0	27.0	97.0	97.0	7.3		10.1		10		75				<0.2		1.5	
						4.0	0.5	159	22.0		8.1		27.0		97.0		7.3		10.5		9		76				<0.2		1.5	
					Bottom	7.0	0.5	153	21.7	21.7	8.1	8.1	29.1	29.1	96.6	96.6	7.2	7.2	14.6		24		76				<0.2		1.6	
						7.0	0.5	156	21.7		8.1		29.1		96.6		7.2		14.5		23		77				<0.2		1.4	
IM2	Cloudy	Moderate	08:06	9.1	Surface	1.0	0.6	239	22.2	22.2	8.1	8.1	25.7	25.8	97.8	97.8	7.3	7.3	6.1	5.9	10	9	73	74	806202	818852	<0.2	<0.2	1.5	1.5
						1.0	0.6	245	22.2		8.1		25.8		97.8		7.3		6.1		9		73				<0.2		1.4	
					Middle	4.6	0.5	122	22.0	22.0	8.1	8.1	26.6	26.7	97.9	98.0	7.3		5.2		9		74				<0.2		2.0	
						4.6	0.5	122	22.0		8.1		26.7		98.0		7.3		5.3		9		74				<0.2		1.7	
					Bottom	8.1	0.6	141	21.8	21.8	8.1	8.1	28.3	28.3	97.3	97.3	7.3	7.3	6.3		7		75				<0.2		1.2	
						8.1	0.6	147	21.8		8.1		28.3		97.3		7.3		6.4		10		75				<0.2		1.1	
IM3	Cloudy	Moderate	08:13	9.0	Surface	1.0	0.6	209	22.2	22.2	8.1	8.1	25.8	25.8	98.2	98.2	7.4	7.4	5.8	5.5	8	8	75	76	806019	819411	<0.2	<0.2	1.5	1.4
						1.0	0.6	221	22.2		8.1		25.8		98.2		7.4		5.6		9		75				<0.2		1.4	
					Middle	4.5	0.6	118	21.9	21.9	8.1	8.1	27.1	27.1	98.1	98.1	7.3		5.0		8		76				<0.2		1.4	
						4.5	0.6	121	21.9		8.1		27.1		98.1		7.4		5.1		8		77				<0.2		1.4	
					Bottom	8.0	0.6	124	21.8	21.8	8.1	8.1	29.2	29.2	97.9	97.9	7.3	7.3	5.9		6		77				<0.2		1.2	
						8.0	0.6	128	21.8		8.1		29.2		97.8		7.3		5.7		7		78				<0.2		1.2	
IM4	Cloudy	Moderate	08:21	8.6	Surface	1.0	0.5	138	21.8	21.8	8.1	8.1	28.0	28.0	97.4	97.4	7.3	7.3	5.5	7.0	7	8	75	76	805026	819570	<0.2	<0.2	0.9	0.9
						1.0	0.5	147	21.8		8.1		28.0		97.4		7.3		5.6		6		75				<0.2		0.9	
					Middle	4.3	0.5	145	21.6	21.6	8.1	8.1	29.5	29.5	96.7	96.7	7.2		7.5		7		76				<0.2		0.9	
						4.3	0.5	145	21.6		8.1		29.5		96.7		7.2		7.4		7		76				<0.2		1.0	
					Bottom	7.6	0.5	147	21.5	21.5	8.1	8.1	29.9	29.9	96.9	96.9	7.2	7.2	7.9		11		77				<0.2		0.7	
						7.6	0.6	149	21.5		8.1		29.9		96.9		7.2		7.9		10		77				<0.2		0.7	
IM5	Cloudy	Rough	08:30	7.5	Surface	1.0	0.4	123	21.8	21.8	8.1	8.1	28.2	28.2	96.2	96.2	7.2	7.2	11.1	13.0	11	12	74	74	804917	820564	<0.2	<0.2	1.0	0.8
						1.0	0.5	132	21.7		8.1		28.2		96.2		7.2		11.3		11		73				<0.2		0.8	
					Middle	3.8	0.4	109	21.6	21.6	8.1	8.1	29.5	29.5	96.0	96.0	7.1		12.6		12		74				<0.2		0.6	
						3.8	0.4	119	21.6		8.1		29.5		96.0		7.1		12.6		11		74				<0.2		0.8	
					Bottom	6.5	0.5	144	21.5	21.5	8.1	8.1	30.2	30.2	96.5	96.6	7.2	7.2	15.1		12		75				<0.2		0.6	
						6.5	0.5	153	21.5		8.1		30.2		96.6		7.2		15.2		13		75				<0.2		0.9	
IM6	Cloudy	Rough	08:39	7.6	Surface	1.0	0.6	108	21.8	21.8	8.1	8.1	27.7	27.7	96.8	96.8	7.2	7.2	8.1	8.5	7	9	76	77	805823	821060	<0.2	<0.2	0.9	0.9
						1.0	0.6	110	21.8		8.1		27.7		96.8		7.2		8.2		7		75				<0.2		0.9	
					Middle	3.8	0.6	99	21.6	21.6	8.1	8.1	29.2	29.2	96.6	96.7	7.2		9.3		7		77				<0.2		1.0	
						3.8	0.6	106	21.6		8.1		29.2		96.7		7.2		9.3		7		77				<0.2		0.9	
					Bottom	6.6	0.6	117	21.6	21.6	8.1	8.1	29.4	29.4	97.1	97.1	7.2	7.2	8.2		11		77				<0.2		0.8	
						6.6	0.6	121	21.6		8.1		29.4		97.1		7.2		7.9		12		78				<0.2		0.9	
IM7	Cloudy	Rough	08:46	8.6	Surface	1.0	0.6	124	22.0	22.0	8.1	8.1	26.7	26.7	98.5	98.5	7.4	7.4	5.1	6.4	6	7	74	76	806844	821349	<0.2	<0.2	1.3	1.1
						1.0	0.6	130	22.0		8.1		26.7		98.5		7.4		5.2		8		75				<0.2		1.3	
					Middle	4.3	0.5	115	21.8	21.8	8.1	8.1	27.9	28.0	97.7	97.7	7.3		7.0		6		76				<0.2		1.2	
						4.3	0.5	125	21.8		8.1		28.0		97.7		7.3		6.9		7		77				<0.2		1.0	
					Bottom	7.6	0.6	120	21.7	21.8	8.1	8.1	28.6	28.6	98.1	98.2	7.3	7.3	7.1		7		78				<0.2		1.1	
						7.6	0.7	129	21.8		8.1		28.5		98.2		7.3		6.9		7		78				<0.2		0.9	
IM8	Cloudy	Rough	08:53	8.9	Surface	1.0	0.7	92	22.1	22.1	8.1	8.1	26.3	26.3	97.5	97.5	7.3	7.3	6.3	9.0	13	13	74	75	807833	821695	<0.2	<0.2	1.5	1.5
						1.0	0.7	100	22.1		8.1		26.3		97.4		7.3		6.4		13		73				<0.2		1.4	
					Middle	4.5	0.7	103	22.0	22.0	8.1	8.1	27.0	27.1	97.3	97.3	7.3		7.1		11		74				<0.2		1.4	
						4.5	0.7	107	22.0		8.1		27.1		97.2		7.3		7.2		11		75				<0.2		1.5	
					Bottom	7.9	0.7	105	21.8	21.8	8.1	8.1	28.0	28.0	97.5	97.6	7.3	7.3	13.5		15		75				<0.2		1.5	
						7.9	0.7	110	21.8		8.1		28.0		97.6		7.3		13.2		14		76				<0.2		1.4	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 12 April 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	07:11	7.8	Surface	1.0	0.3	180	22.3	22.3	8.0	8.0	23.1	23.1	90.5	90.5	6.9	6.9	12.1	15.0	8	9	75	76	808821	822094	<0.2	<0.2	1.7	1.6
						1.0	0.3	197	22.3		8.0		23.1		90.5		6.9		12.1		9		75				<0.2		1.7	
					Middle	3.9	0.3	205	22.3	22.3	8.0	8.0	23.2	23.2	90.6	90.6	6.9		14.6		9		76				<0.2		1.7	
						3.9	0.3	222	22.3		8.0		23.2		90.6		6.9		14.8		7		76				<0.2		1.4	
					Bottom	6.8	0.3	135	22.3	22.3	7.9	7.9	23.3	23.3	91.4	91.4	6.9	6.9	18.1		10		77				<0.2		1.5	
						6.8	0.3	136	22.3		7.9		23.3		91.4		6.9		18.1		9		77				<0.2		1.3	
IM10	Cloudy	Moderate	07:04	8.6	Surface	1.0	0.4	294	22.2	22.2	7.9	7.9	24.4	24.4	89.6	89.6	6.8	6.8	10.5	12.1	8	9	74	76	809827	822240	<0.2	<0.2	1.5	1.5
						1.0	0.4	312	22.2		7.9		24.4		89.6		6.8		10.6		6		75				<0.2		1.6	
					Middle	4.3	0.4	226	22.2	22.2	7.9	7.9	24.5	24.5	89.5	89.5	6.8		12.5		10		76				<0.2		1.3	
						4.3	0.4	241	22.2		7.9		24.5		89.5		6.8		12.5		10		76				<0.2		1.3	
					Bottom	7.6	0.3	159	22.2	22.2	7.9	7.9	24.5	24.5	89.8	89.8	6.8	6.8	13.3		9		77				<0.2		1.4	
						7.6	0.3	174	22.2		7.9		24.5		89.8		6.8		13.3		11		77				<0.2		1.6	
IM11	Cloudy	Moderate	06:58	8.8	Surface	1.0	0.4	187	22.2	22.2	8.0	8.0	24.9	24.9	89.5	89.5	6.8	6.8	13.8	14.7	12	10	74	76	810564	821501	<0.2	<0.2	1.2	1.2
						1.0	0.4	196	22.2		8.0		24.9		89.5		6.8		13.8		12		75				<0.2		1.3	
					Middle	4.4	0.3	199	22.2	22.2	7.9	7.9	24.9	24.9	89.6	89.6	6.8		14.4		9		75				<0.2		1.1	
						4.4	0.3	210	22.2		7.9		24.9		89.6		6.8		14.4		8		76				<0.2		1.1	
					Bottom	7.8	0.3	199	22.2	22.2	7.9	7.9	25.0	25.0	89.9	89.9	6.8	6.8	15.9		10		76				<0.2		1.4	
						7.8	0.3	214	22.2		7.9		25.0		89.9		6.8		15.7		10		77				<0.2		1.3	
IM12	Cloudy	Moderate	06:52	9.4	Surface	1.0	0.3	229	22.2	22.2	8.0	8.0	24.5	24.5	89.5	89.5	6.8	6.8	9.6	15.4	9	8	74	75	811515	821162	<0.2	<0.2	1.6	1.4
						1.0	0.4	245	22.2		8.0		24.5		89.5		6.8		9.6		7		74				<0.2		1.7	
					Middle	4.7	0.4	263	22.1	22.1	7.9	7.9	24.8	24.8	89.4	89.4	6.8		14.3		8		75				<0.2		1.3	
						4.7	0.4	276	22.1		7.9		24.8		89.4		6.8		14.3		8		75				<0.2		1.3	
					Bottom	8.4	0.4	245	22.1	22.1	7.8	7.8	24.6	24.6	90.7	90.7	6.9	6.9	22.4		6		76				<0.2		1.3	
						8.4	0.4	252	22.1		7.8		24.6		90.7		6.9		22.4		8		76				<0.2		1.3	
IM13	-	-	-	-	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
SR2	Cloudy	Moderate	06:31	5.4	Surface	1.0	0.2	160	22.1	22.1	7.9	7.9	24.3	24.3	89.7	89.7	6.8	6.8	9.7	11.7	10	9	74	75	814170	821463	<0.2	<0.2	0.7	0.8
						1.0	0.2	167	22.1		7.9		24.3		89.7		6.8		9.7		12		75				<0.2		0.7	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	0.2	200	22.1	22.1	7.8	7.8	24.5	24.5	90.5	90.5	6.9	6.9	13.8		5		75				<0.2		1.0	
						4.4	0.3	219	22.1		7.7		24.5		90.5		6.9		13.7		7		76				<0.2		0.9	
SR3	Cloudy	Rough	09:05	9.4	Surface	1.0	0.6	150	22.2	22.2	8.0	8.0	24.0	24.0	96.0	96.0	7.3	7.3	5.0	5.5	16	14		-	807570	822147	-	-	-	-
						1.0	0.6	161	22.2		8.0		24.0		96.0		7.3		5.0		11						-		-	
					Middle	4.7	0.7	105	22.1	22.1	8.1	8.1	25.2	25.2	96.7	96.6	7.3		5.5		11						-		-	
						4.7	0.7	105	22.1		8.1		25.2		96.5		7.3		5.5		14						-		-	
					Bottom	8.4	0.7	104	22.0	22.0	8.1	8.1	27.2	27.2	96.1	96.1	7.2	7.2	6.0		15						-		-	
						8.4	0.7	112	22.0		8.1		27.2		96.0		7.2		6.0		15						-		-	
SR4A	Cloudy	Calm	07:14	9.6	Surface	1.0	0.4	79	22.3	22.3	8.0	8.0	25.4	25.4	95.7	95.8	7.2	7.2	11.5	16.1	20	20		-	807823	817189	-	-	-	-
						1.0	0.4	82	22.3		8.0		25.4		95.8		7.2		11.6		16						-		-	
					Middle	4.8	0.4	84	22.3	22.3	8.0	8.0	25.5	25.5	95.8	95.8	7.2		12.8		19						-		-	
						4.8	0.4	89	22.3		8.0		25.5		95.8		7.2		12.9		19						-		-	
					Bottom	8.6	0.4	83	22.3	22.3	8.0	8.0	25.5	25.5	96.0	96.0	7.2	7.2	23.5		21						-		-	
						8.6	0.4	88	22.3		8.0		25.5		96.0		7.2		24.4		22						-		-	
SR5A	Cloudy	Calm	06:55	5.8	Surface	1.0	0.3	142	22.9	22.9	8.0	8.0	25.4	25.4	94.5	94.6	7.0	7.0	8.8	8.4	12	12		-	810683	816593	-	-	-	-
						1.0	0.3	143	22.9		8.0		25.4		94.6		7.0		8.8		11						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.8	0.3	156	22.9	22.9	8.0	8.0	25.4	25.4	95.4	95.4	7.1	7.1	8.0		13						-		-	
						4.8	0.3	166	22.9		8.0		25.4		95.4		7.1		8.0		11						-		-	
SR6	Cloudy	Calm	06:30	5.0	Surface	1.0	0.1	143	22.4	22.4	8.0	8.0	24.2	24.2	93.8	93.9	7.1	7.1	6.0	6.2	8	8		-	814657	817899	-	-	-	-
						1.0	0.1	147	22.4		8.0		24.2		93.9		7.1		6.1		7						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.2	122	22.3	22.3	8.0	8.0	24.2	24.2	95.5	95.5	7.2	7.2	6.4		10						-		-	
						4.0	0.2	123	22.3		8.0		24.2		95.5		7.2		6.4		8						-		-	
SR7	Fine	Calm	05:54	16.8	Surface	1.0	0.2	144	21.6	21.6	8.0	8.0	29.6	29.6	92.5	92.6	6.9	6.9	4.2	6.3	7	6		-	823729	823636	-	-	-	-
						1.0	0.2	148	21.6		8.0		29.6		92.6		6.9		4.3		5						-		-	
					Middle	8.4	0.3	102	21.5	21.5	8.0	8.0	30.7	30.7	93.0	93.0	6.9		7.7		4						-		-	
						8.4	0.3	105	21.5		8.0		30.7		93.0		6.9		7.8		5						-		-	
					Bottom	15.8	0.2	139	21.5	21.5	8.0	8.0	30.9	30.9	93.1	93.1	6.9	6.9	6.8		5						-		-	
						15.8	0.2	142	21.5		8.0		30.9		93.1		6.9		6.9		7						-		-	
SR8	Cloudy	Moderate	06:45	6.2	Surface	1.0	0.2	144	22.2	22.2	7.9	7.9	25.1	25.1	90.1	90.1	6.8	6.8	10.3	10.4	14	14		-	811575	820417	-	-	-	-
						1.0	0.3	155	22.2		7.9		25.1		90.1		6.8		10.3		16						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	5.2	0.3	115	22.2	22.2	7.8	7.8	25.2	25.2	90.7	90.7	6.8	6.8	10.5		13						-		-	
						5.2	0.3	119	22.2		7.8		25.2		90.7		6.8		10.5		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 12 April 17 during Mid-Ebb tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Rough	13:14	8.2	Surface	1.0	0.8	209	22.0	22.0	8.1	8.1	26.8	26.8	100.6	100.6	7.5	7.5	3.4	3.1	8	7	76	77	804259	815620	<0.2	<0.2	1.4	1.2
						1.0	0.8	228	22.0		8.1		26.8		100.6		7.5		3.5		6		76				<0.2		1.3	
					Middle	4.1	0.7	194	21.6	21.6	8.1	8.1	29.2	29.3	99.7	99.7	7.4		3.4		6		77				<0.2		1.5	
						4.1	0.7	202	21.6		8.1		29.3		99.7		7.4		3.5		8		78				<0.2		1.3	
					Bottom	7.2	0.4	192	21.5	21.5	8.1	8.1	30.8	30.8	99.3	99.3	7.3	7.3	2.5		8		78				<0.2		0.7	
						7.2	0.5	204	21.5		8.1		30.8		99.3		7.3		2.5		6		78				<0.2		0.8	
C2	Cloudy	Rough	11:59	9.0	Surface	1.0	0.7	178	22.2	22.2	8.0	8.0	23.5	23.6	95.3	95.4	7.2	7.3	4.6	5.1	11	13	75	75	806934	825682	<0.2	<0.2	1.3	1.3
						1.0	0.7	190	22.2		8.0		23.6		95.4		7.2		4.7		13		74				<0.2		1.2	
					Middle	4.5	0.7	182	22.1	22.1	8.1	8.1	25.5	25.5	97.1	97.1	7.3		4.9		13		75				<0.2		1.2	
						4.5	0.8	187	22.1		8.1		25.5		97.1		7.3		5.0		14		75				<0.2		1.3	
					Bottom	8.0	0.7	192	21.9	21.9	8.1	8.1	27.9	27.9	96.8	96.8	7.2	7.2	5.6		13		76				<0.2		1.3	
						8.0	0.8	193	21.9		8.1		27.9		96.8		7.2		5.6		11		77				<0.2		1.3	
C3	Cloudy	Moderate	14:44	12.4	Surface	1.0	0.7	120	22.0	22.0	8.0	8.0	26.1	26.1	90.7	90.7	6.8	6.8	5.4	5.0	11	15	74	75	817817	822109	<0.2	<0.2	1.6	1.5
						1.0	0.7	130	22.0		8.0		26.1		90.7		6.8		5.4		13		74				<0.2		1.6	
					Middle	6.2	0.4	88	21.8	21.8	8.0	8.0	27.2	27.2	90.5	90.5	6.8		4.8		15		76				<0.2		1.5	
						6.2	0.5	95	21.8		8.0		27.2		90.5		6.8		4.8		14		75				<0.2		1.5	
					Bottom	11.4	0.5	44	21.8	21.8	8.0	8.0	27.4	27.4	91.1	91.1	6.8	6.8	4.8		19		76				<0.2		1.4	
						11.4	0.5	44	21.8		8.0		27.4		91.1		6.8		4.8		18		77				<0.2		1.6	
IM1	Cloudy	Rough	12:56	7.8	Surface	1.0	0.6	178	21.7	21.7	8.1	8.1	28.0	28.0	97.7	97.7	7.3	7.3	4.1	4.9	6	8	75	76	806468	818351	<0.2	<0.2	1.2	1.0
						1.0	0.6	185	21.7		8.1		27.9		97.7		7.3		4.2		7		75				<0.2		1.3	
					Middle	3.9	0.5	158	21.6	21.6	8.1	8.1	29.7	29.7	97.1	97.1	7.2		5.0		8		76				<0.2		1.1	
						3.9	0.5	165	21.6		8.1		29.7		97.0		7.2		4.9		6		76				<0.2		1.0	
					Bottom	6.8	0.4	169	21.6	21.6	8.1	8.1	29.8	29.8	97.8	97.9	7.3	7.3	5.4		9		77				<0.2		0.5	
						6.8	0.5	176	21.6		8.1		29.8		97.9		7.3		5.5		10		77				<0.2		0.6	
IM2	Cloudy	Rough	12:51	8.4	Surface	1.0	0.6	187	22.0	22.0	8.1	8.1	25.8	25.6	97.9	97.9	7.4	7.3	3.9	5.3	6	9	75	76	806177	818852	<0.2	<0.2	1.5	1.3
						1.0	0.6	199	22.0		8.1		25.3		97.9		7.4		4.0		7		75				<0.2		1.4	
					Middle	4.2	0.6	164	21.7	21.7	8.1	8.1	28.4	28.4	97.0	97.0	7.2		5.7		8		76				<0.2		1.5	
						4.2	0.6	176	21.7		8.1		28.4		97.0		7.2		5.8		6		77				<0.2		1.6	
					Bottom	7.4	0.5	168	21.6	21.6	8.1	8.1	29.8	29.8	97.3	97.4	7.2	7.2	6.3		13		77				<0.2		0.7	
						7.4	0.5	177	21.6		8.1		29.8		97.4		7.2		6.3		13		78				<0.2		0.8	
IM3	Cloudy	Rough	12:44	8.6	Surface	1.0	0.6	193	22.0	22.0	8.1	8.1	26.3	26.3	97.8	97.8	7.3	7.3	5.7	7.7	8	13	74	75	806014	819411	<0.2	<0.2	1.3	1.2
						1.0	0.6	204	22.0		8.1		26.3		97.8		7.3		5.9		6		73				<0.2		1.5	
					Middle	4.3	0.6	179	21.8	21.8	8.1	8.1	28.1	28.1	97.1	97.1	7.2		8.2		9		74				<0.2		1.3	
						4.3	0.6	196	21.8		8.1		28.1		97.0		7.2		8.3		8		75				<0.2		1.3	
					Bottom	7.6	0.5	166	21.6	21.6	8.1	8.1	29.5	29.5	97.5	97.6	7.2	7.2	9.0		23		75				<0.2		0.9	
						7.6	0.5	178	21.6		8.1		29.5		97.6		7.2		9.1		23		76				<0.2		1.0	
IM4	Cloudy	Rough	12:37	8.2	Surface	1.0	0.7	178	21.6	21.6	8.1	8.1	28.8	28.8	96.3	96.3	7.2	7.2	11.7	15.2	15	13	75	76	805036	819570	<0.2	<0.2	1.0	0.9
						1.0	0.8	187	21.6		8.1		28.8		96.2		7.2		11.9		14		75				<0.2		1.0	
					Middle	4.1	0.5	185	21.6	21.6	8.1	8.1	29.6	29.6	95.8	95.8	7.1		15.5		15		75				<0.2		0.9	
						4.1	0.6	201	21.5		8.1		29.6		95.8		7.1		15.5		12		76				<0.2		1.0	
					Bottom	7.2	0.6	174	21.5	21.5	8.1	8.1	29.9	29.9	95.7	95.8	7.1	7.1	18.4		12		77				<0.2		0.8	
						7.2	0.6	174	21.5		8.1		29.9		95.8		7.1		18.1		11		77				<0.2		0.8	
IM5	Cloudy	Rough	12:30	7.5	Surface	1.0	0.8	156	21.6	21.6	8.1	8.1	28.3	28.3	97.0	97.0	7.2	7.2	7.4	10.4	6	10	74	75	804933	820564	<0.2	<0.2	1.2	1.1
						1.0	0.8	162	21.6		8.1		28.3		96.9		7.2		7.5		8		74				<0.2		1.2	
					Middle	3.8	0.8	142	21.5	21.5	8.1	8.1	29.7	29.7	96.2	96.2	7.1		11.2		7		75				<0.2		1.1	
						3.8	0.8	148	21.5		8.1		29.6		96.2		7.2		11.4		8		75				<0.2		0.9	
					Bottom	6.5	0.8	153	21.5	21.5	8.1	8.1	30.0	30.0	97.6	97.7	7.2	7.2	12.5		16		76				<0.2		0.9	
						6.5	0.8	153	21.5		8.1		29.9		97.7		7.2		12.3		15		76				<0.2		1.0	
IM6	Cloudy	Rough	12:22	7.6	Surface	1.0	0.6	155	21.8	21.8	8.1	8.1	27.9	27.9	96.5	96.5	7.2	7.2	9.8	10.6	12	14	74	75	805844	821060	<0.2	<0.2	1.1	1.0
						1.0	0.7	158	21.8		8.1		27.9		96.5		7.2		9.9		13		74				<0.2		1.1	
					Middle	3.8	0.6	139	21.6	21.6	8.1	8.1	29.3	29.3	96.6	96.6	7.2		10.9		14		75				<0.2		1.2	
						3.8	0.6	149	21.6		8.1		29.3		96.6		7.2		10.9		15		75				<0.2		1.1	
					Bottom	6.6	0.5	145	21.6	21.6	8.1	8.1	29.6	29.6	97.4	97.5	7.2	7.2	11.1		15		77				<0.2		0.8	
						6.6	0.5	149	21.6		8.1		29.6		97.5		7.2		11.0		13		76				<0.2		0.9	
IM7	Cloudy	Rough	12:11	8.8	Surface	1.0	0.6	133	21.8	21.8	8.1	8.1	27.5	27.5	98.3	98.3	7.4	7.4	4.4	6.9	8	8	76	77	806835	821349	<0.2	<0.2	1.3	1.2
						1.0	0.6	134	21.8		8.1		27.5		98.3		7.4		4.5		6		75				<0.2		1.1	
					Middle	4.4	0.6	135	21.7	21.7	8.1	8.1	28.3	28.3	97.6	97.6	7.3		6.3		7		76				<0.2		1.2	
						4.4	0.6	139	21.7		8.1		28.3		97.6		7.3		6.4		8		77				<0.2		1.2	
					Bottom	7.8	0.6	127	21.7	21.7	8.1	8.1	29.1	29.1	97.6	97.6	7.3	7.3	10.0		9		78				<0.2		1.2	
						7.8	0.6	138	21.7		8.1		29.1		97.6		7.3		10.0		9		77				<0.2		1.2	
IM8	Cloudy	Rough	12:05	8.6	Surface	1.0	0.5	140	22.2	22.2	8.0	8.0	22.5	22.5	96.5	96.5	7.4	7.4	3.4	4.1	6	8	74	76	807837	821695	<0.2	0.2	2.1	2.3
						1.0	0.5	143	22.2		8.0		22.5		96.5		7.4		3.4		8		75				<0.2		2.2	
					Middle	4.3	0.5	96	22.1	22.1	8.1	8.1	25.9	25.9	97.3	97.4	7.3		3.8		9		75				<0.2		2.3	
						4.3	0.5	103	22.1		8.1		25.9		97.4		7.3		3.9		10		76				<0.2		2.2	
					Bottom	7.6	0.7	79	22.0	22.0	8.1	8.1	27.9	28.0	96.6	96.6	7.2	7.2	5.1		7		76				0.2		2.4	
						7.6	0.7	83	22.0		8.1		28.0		96.6		7.2		5.0		9		77				<0.2		2.4	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 12 April 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	13:55	7.9	Surface	1.0	0.6	138	22.1	22.1	8.0	8.0	23.7	23.7	93.4	93.5	7.1	7.1	5.0	6.0	9	12	73	74	808806	822094	<0.2	0.2	2.2	2.2
						1.0	0.6	142	22.1		8.0		23.7		93.5		7.1		5.1		11		73				0.2		2.4	
					Middle	4.0	0.4	90	22.0	22.0	8.0	8.0	25.3	25.3	93.8	93.8	7.1		6.1		12		74				<0.2		2.2	
						4.0	0.4	95	22.0		8.0		25.3		93.8		7.1		6.1		15		74				<0.2		2.1	
					Bottom	6.9	0.4	108	21.8	21.8	8.0	8.0	26.9	26.9	93.9	93.9	7.1	7.1	6.7		13		75				0.2		2.1	
						6.9	0.4	117	21.8		8.0		26.9		93.9		7.1		6.7		13		76				<0.2		2.2	
IM10	Cloudy	Moderate	14:01	8.7	Surface	1.0	0.3	175	22.1	22.1	8.0	8.0	23.8	23.8	92.2	92.2	7.0	7.1	5.7	5.8	12	10	73	74	809831	822240	<0.2	0.2	2.2	2.0
						1.0	0.3	180	22.1		8.0		23.8		92.2		7.0		5.7		11		74				<0.2		2.0	
					Middle	4.4	0.3	146	22.1	22.1	8.0	8.0	23.9	23.9	92.9	92.9	7.1		5.7		9		74				<0.2		2.0	
						4.4	0.4	154	22.1		8.0		23.9		92.9		7.1		5.7		10		75				<0.2		1.7	
					Bottom	7.7	0.3	153	22.0	22.0	7.9	7.9	25.0	25.0	94.0	94.0	7.1	7.1	5.9		8		75				0.2		2.0	
						7.7	0.3	163	22.0		7.9		25.0		94.0		7.1		5.9		10		75				<0.2		1.9	
IM11	Cloudy	Moderate	14:06	8.4	Surface	1.0	0.6	120	22.1	22.1	8.0	8.0	24.0	24.0	93.3	93.3	7.1	7.1	5.4	5.9	11	10	74	76	810547	821501	<0.2	<0.2	1.3	1.5
						1.0	0.6	130	22.1		8.0		24.0		93.3		7.1		5.4		9		75				<0.2		1.3	
					Middle	4.2	0.6	120	22.0	22.0	8.0	8.0	24.6	24.6	93.8	93.8	7.1		6.1		11		75				<0.2		1.6	
						4.2	0.6	129	22.0		8.0		24.6		93.8		7.1		6.1		9		76				<0.2		1.4	
					Bottom	7.4	0.5	97	22.0	22.0	8.0	8.0	25.0	25.0	94.3	94.3	7.1	7.1	6.2		10		77				<0.2		1.6	
						7.4	0.6	105	22.0		8.0		25.0		94.3		7.1		6.2		8		77				<0.2		1.6	
IM12	Cloudy	Moderate	14:12	7.7	Surface	1.0	0.8	118	22.1	22.1	8.0	8.0	24.5	24.5	92.9	92.9	7.0	7.1	6.6	8.8	13	12	75	76	811526	821162	<0.2	<0.2	1.5	1.6
						1.0	0.8	122	22.1		8.0		24.5		92.9		7.0		6.6		13		75				<0.2		1.6	
					Middle	3.9	0.7	115	22.0	22.0	8.0	8.0	25.1	25.1	93.3	93.3	7.1		9.0		10		76				<0.2		1.6	
						3.9	0.8	122	22.0		8.0		25.1		93.3		7.1		9.0		9		76				<0.2		1.5	
					Bottom	6.7	0.5	96	22.0	22.0	8.0	8.0	25.4	25.4	94.8	94.8	7.2	7.2	10.8		14		76				<0.2		1.5	
						6.7	0.5	102	22.0		8.0		25.4		94.8		7.2		10.8		12		76				<0.2		1.6	
IM13	-	-	-	-	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
SR2	Cloudy	Moderate	14:25	4.8	Surface	1.0	0.7	105	22.1	22.1	8.0	8.0	24.5	24.5	94.8	94.8	7.2	7.2	5.1	5.9	12	11	75	76	814180	821463	<0.2	<0.2	1.1	1.2
						1.0	0.7	113	22.1		8.0		24.5		94.8		7.2		5.1		12		75				<0.2		1.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.5	100	22.0	22.0	7.8	7.8	26.2	26.2	96.1	96.1	7.2	7.2	6.7		10		77				<0.2		1.5	
						3.8	0.6	102	22.0		7.8		26.2		96.1		7.2		6.7		10		77				<0.2		1.3	
SR3	Cloudy	Rough	12:01	9.4	Surface	1.0	0.5	138	22.2	22.2	8.0	8.0	23.5	23.5	96.6	96.6	7.3	7.4	4.5	4.7	9	10		-	807557	822147	-	-	-	-
						1.0	0.6	143	22.2		8.0		23.5		96.6		7.4		4.6		10						-		-	
					Middle	4.7	0.5	87	22.1	22.1	8.1	8.1	24.9	24.9	97.2	97.2	7.3		4.7		8						-		-	
						4.7	0.5	87	22.1		8.1		24.9		97.2		7.4		4.6		9						-		-	
					Bottom	8.4	0.6	85	22.0	22.0	8.1	8.1	27.8	27.9	96.9	96.9	7.2	7.2	5.1		10						-		-	
						8.4	0.6	90	22.0		8.1		27.9		96.9		7.2		4.9		11						-		-	
SR4A	Cloudy	Calm	13:41	9.1	Surface	1.0	0.3	105	21.8	21.8	8.1	8.1	28.4	28.4	96.7	96.7	7.2	7.2	8.6	10.3	10	12		-	807815	817189	-	-	-	-
						1.0	0.3	109	21.8		8.1		28.4		96.7		7.2		8.7		9						-		-	
					Middle	4.6	0.4	94	21.7	21.7	8.1	8.1	28.8	28.8	96.7	96.8	7.2		11.2		10						-		-	
						4.6	0.4	94	21.7		8.1		28.8		96.8		7.2		11.2		10						-		-	
					Bottom	8.1	0.3	110	21.7	21.7	8.1	8.1	29.3	29.3	97.2	97.3	7.2	7.2	11.1		16						-		-	
						8.1	0.3	115	21.7		8.1		29.3		97.3		7.2		11.1		16						-		-	
SR5A	Cloudy	Calm	13:58	4.7	Surface	1.0	0.2	152	22.8	22.8	8.0	8.0	25.5	25.5	95.5	95.5	7.1	7.1	7.5	7.8	10	10		-	810692	816593	-	-	-	-
						1.0	0.2	163	22.8		8.0		25.5		95.5		7.1		7.5		11						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.2	130	22.6	22.6	8.0	8.0	25.7	25.7	96.0	96.1	7.2	7.2	8.0		9						-		-	
						3.7	0.2	130	22.6		8.0		25.7		96.1		7.2		8.0		10						-		-	
SR6	Cloudy	Calm	14:22	4.1	Surface	1.0	0.2	140	22.7	22.7	8.0	8.0	24.9	24.9	95.1	95.1	7.1	7.1	8.6	6.5	12	18		-	814682	817899	-	-	-	-
						1.0	0.2	153	22.7		8.0		24.9		95.1		7.1		8.7		14						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.2	135	22.7	22.7	8.0	8.0	24.9	24.9	96.3	96.3	7.2	7.2	4.5		24						-		-	
						3.1	0.2	136	22.7		8.0		24.9		96.3		7.2		4.3		23						-		-	
SR7	Cloudy	Moderate	15:10	16.1	Surface	1.0	0.6	69	22.0	22.0	8.0	8.0	26.0	26.0	94.1	94.1	7.1	7.1	2.3	3.2	7	7		-	823723	823636	-	-	-	-
						1.0	0.6	73	22.0		8.0		25.9		94.1		7.1		2.3		7						-		-	
					Middle	8.1	0.5	73	22.0	22.0	8.0	8.0	26.4	26.4	94.1	94.1	7.1		2.8		9						-		-	
						8.1	0.5	74	22.0		8.0		26.4		94.1		7.1		2.9		7						-		-	
					Bottom	15.1	0.4	119	22.0	22.0	8.0	8.0	26.5	26.5	95.1	95.1	7.1	7.1	4.7		8						-		-	
						15.1	0.4	128	22.0		8.0		26.5		95.1		7.1		4.4		6						-		-	
SR8	Cloudy	Moderate	14:18	4.6	Surface	1.0	0.7	105	22.1	22.1	8.0	8.0	24.3	24.3	92.8	92.8	7.0	7.0	8.8	8.7	15	14		-	811582	820417	-	-	-	-
						1.0	0.7	110	22.1		8.0		24.3		92.8		7.0		8.8		14						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.6	98	22.1	22.1	8.0	8.0	24.4	24.4	93.3	93.3	7.1	7.1	8.5		14						-		-	
						3.6	0.6	100	22.1		8.0		24.4		93.3		7.1		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 14 April 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	08:34	8.1	Surface	1.0	0.7	80	17.7	17.7	7.8	7.8	28.7	28.7	100.2	100.2	8.0	8.0	10.7	20.0	22	31	74	75	804242	815620	<0.2	<0.2	0.6	0.5
						1.0	0.7	83	17.7		7.8		28.7		100.2		8.0		9.6		19		74				<0.2		0.6	
					Middle	4.1	0.7	65	17.8	17.8	7.8	7.8	28.5	28.5	99.7	99.7	8.0		15.3		31		75				<0.2		0.6	
						4.1	0.7	65	17.8		7.8		28.5		99.7		8.0		15.3		30		75				<0.2		0.6	
					Bottom	7.1	0.7	78	17.8	17.8	7.8	7.8	28.3	28.3	99.2	99.2	8.0	8.0	35.1		42		76				<0.2		0.4	
						7.1	0.7	78	17.8		7.8		28.2		99.2		8.0		34.0		41		76				<0.2		0.4	
C2	Cloudy	Moderate	09:38	12.9	Surface	1.0	0.6	128	21.8	21.8	8.0	8.0	25.1	25.1	91.5	91.5	7.0	7.0	8.0	11.3	9	9	75	78	806949	825682	<0.2	<0.2	1.9	1.9
						1.0	0.6	130	21.8		8.0		25.1		91.5		7.0		8.1		10		76				<0.2		2.0	
					Middle	6.5	0.6	138	21.8	21.8	8.0	8.0	25.4	25.4	91.6	91.6	6.9		11.4		9		78				<0.2		1.8	
						6.5	0.6	140	21.8		8.0		25.4		91.6		6.9		11.4		10		78				<0.2		1.8	
					Bottom	11.9	0.6	215	21.8	21.8	8.1	8.1	25.3	25.3	93.1	93.1	7.1	7.1	14.5		8		79				<0.2		2.0	
						11.9	0.6	219	21.8		8.1		25.3		93.1		7.1		14.5		9		79				<0.2		1.8	
C3	Cloudy	Moderate	07:14	12.6	Surface	1.0	0.4	242	21.6	21.6	8.1	8.1	29.0	29.0	91.8	91.8	6.8	6.8	3.5	7.8	4	5	74	76	817807	822109	<0.2	<0.2	1.7	1.6
						1.0	0.5	252	21.6		8.1		29.0		91.8		6.8		3.3		3		74				<0.2		1.7	
					Middle	6.3	0.5	241	21.5	21.5	8.1	8.1	30.6	30.6	91.4	91.5	6.8		6.4		5		75				<0.2		1.5	
						6.3	0.5	245	21.5		8.1		30.6		91.5		6.8		6.5		4		75				<0.2		1.4	
					Bottom	11.6	0.5	238	21.5	21.5	8.1	8.1	30.7	30.7	92.6	92.6	6.8	6.8	13.4		6		77				<0.2		1.7	
						11.6	0.5	245	21.5		8.1		30.7		92.6		6.8		13.4		6		78				<0.2		1.5	
IM1	Cloudy	Moderate	08:54	7.2	Surface	1.0	0.4	285	17.6	17.6	7.7	7.7	25.9	25.9	95.9	95.9	7.8	7.8	7.2	10.9	8	20	75	76	806446	818351	<0.2	<0.2	1.2	1.0
						1.0	0.4	307	17.6		7.7		25.9		95.9		7.8		7.2		10		75				<0.2		1.1	
					Middle	3.6	0.4	30	17.7	17.7	7.7	7.7	26.5	26.5	95.7	95.8	7.8		8.9		12		76				<0.2		1.0	
						3.6	0.5	32	17.7		7.7		26.5		95.8		7.8		9.2		11		76				<0.2		1.0	
					Bottom	6.2	0.4	35	17.6	17.6	7.8	7.8	26.9	26.9	96.5	96.6	7.8	7.8	16.0		38		77				<0.2		0.8	
						6.2	0.4	35	17.6		7.8		26.8		96.6		7.8		16.6		42		77				<0.2		0.9	
IM2	Cloudy	Moderate	09:01	8.2	Surface	1.0	0.5	144	17.6	17.6	7.8	7.8	26.5	26.5	97.3	97.4	7.9	7.9	5.8	17.9	8	29	74	75	806192	818852	<0.2	<0.2	1.0	0.8
						1.0	0.5	150	17.6		7.8		26.5		97.4		7.9		5.9		10		73				<0.2		1.0	
					Middle	4.1	0.5	70	17.6	17.6	7.8	7.8	27.7	27.7	97.5	97.5	7.9		8.9		6		74				<0.2		0.8	
						4.1	0.5	70	17.6		7.8		27.7		97.5		7.9		8.9		6		75				<0.2		0.7	
					Bottom	7.2	0.4	78	17.7	17.7	7.8	7.8	27.5	27.5	97.4	97.4	7.9	7.9	38.4		72		75				<0.2		0.6	
						7.2	0.4	80	17.7		7.8		27.4		97.4		7.9		39.5		69		76				<0.2		0.6	
IM3	Cloudy	Moderate	09:09	8.5	Surface	1.0	0.4	102	17.5	17.5	7.8	7.8	26.4	26.4	98.3	98.3	8.0	8.0	4.5	14.7	8	18	74	75	806031	819411	<0.2	<0.2	0.8	0.7
						1.0	0.5	107	17.5		7.8		26.4		98.3		8.0		4.5		7		74				<0.2		0.9	
					Middle	4.3	0.5	83	17.5	17.5	7.8	7.8	27.7	27.7	97.6	97.6	7.9		8.8		8		75				<0.2		0.7	
						4.3	0.5	83	17.5		7.8		27.7		97.6		7.9		8.8		10		75				<0.2		0.7	
					Bottom	7.5	0.4	91	17.7	17.7	7.8	7.8	27.7	27.7	96.9	97.1	7.8	7.8	30.9		40		76				<0.2		0.5	
						7.5	0.4	91	17.7		7.8		27.7		97.2		7.8		30.5		37		77				<0.2		0.5	
IM4	Cloudy	Moderate	09:20	8.2	Surface	1.0	0.4	114	17.6	17.6	7.8	7.8	28.3	28.3	98.2	98.2	7.9	7.9	6.9	10.9	12	16	74	76	805025	819570	<0.2	<0.2	0.7	0.6
						1.0	0.5	118	17.6		7.8		28.3		98.1		7.9		7.2		10		75				<0.2		0.6	
					Middle	4.1	0.4	121	17.7	17.7	7.8	7.8	28.7	28.7	97.2	97.2	7.8		11.1		14		75				<0.2		0.5	
						4.1	0.5	124	17.7		7.8		28.7		97.1		7.8		11.3		13		76				<0.2		0.4	
					Bottom	7.2	0.4	107	17.7	17.7	7.8	7.8	28.7	28.6	97.1	97.2	7.8	7.8	14.5		21		76				<0.2		0.6	
						7.2	0.4	107	17.7		7.8		28.5		97.2		7.8		14.5		23		77				<0.2		0.6	
IM5	Cloudy	Moderate	09:29	7.1	Surface	1.0	0.4	88	17.6	17.6	7.8	7.8	27.7	27.7	97.7	97.7	7.9	7.8	5.2	15.9	10	20	73	74	804935	820564	<0.2	<0.2	0.8	0.7
						1.0	0.4	94	17.6		7.8		27.7		97.6		7.9		5.2		11		73				<0.2		0.8	
					Middle	3.6	0.4	95	17.7	17.7	7.8	7.8	28.1	28.1	96.0	96.0	7.7		12.1		11		74				<0.2		0.7	
						3.6	0.4	103	17.7		7.8		28.1		95.9		7.7		12.2		11		74				<0.2		0.8	
					Bottom	6.1	0.3	146	17.7	17.7	7.8	7.8	27.9	27.9	97.0	97.1	7.8	7.8	31.0		37		75				<0.2		0.6	
						6.1	0.4	148	17.7		7.8		27.8		97.2		7.8		29.8		38		76				<0.2		0.6	
IM6	Cloudy	Moderate	09:39	7.0	Surface	1.0	0.4	101	17.6	17.6	7.8	7.8	27.5	27.5	97.4	97.4	7.9	7.8	6.0	15.0	10	19	73	74	805825	821060	<0.2	<0.2	0.8	0.7
						1.0	0.5	102	17.6		7.8		27.5		97.4		7.9		6.1		8		74				<0.2		0.7	
					Middle	3.5	0.4	105	17.7	17.7	7.8	7.8	28.1	28.1	96.1	96.1	7.7		16.2		14		74				<0.2		0.6	
						3.5	0.4	107	17.7		7.8		28.1		96.1		7.7		16.3		12		75				<0.2		0.6	
					Bottom	6.0	0.3	130	17.7	17.7	7.8	7.8	27.9	27.9	97.0	97.2	7.8	7.8	22.0		33		75				<0.2		0.7	
						6.0	0.3	142	17.7		7.8		27.8		97.3		7.8		23.1		35		75				<0.2		0.6	
IM7	Cloudy	Moderate	09:46	8.3	Surface	1.0	0.5	84	17.6	17.6	7.8	7.8	26.8	26.8	97.7	97.7	7.9	7.9	4.6	12.0	6	15	75	76	806844	821349	<0.2	<0.2	1.0	0.8
						1.0	0.5	90	17.6		7.8		26.8		97.6		7.9		4.6		6		75				<0.2		1.0	
					Middle	4.2	0.5	70	17.6	17.6	7.8	7.8	27.3	27.4	96.7	96.6	7.8		7.3		8		76				<0.2		0.9	
						4.2	0.5	74	17.6		7.8		27.4		96.5		7.8		7.9		6		76				<0.2		0.9	
					Bottom	7.3	0.4	91	17.7	17.7	7.8	7.8	27.9	27.9	96.5	96.6	7.8	7.8	23.3		30		76				<0.2		0.6	
						7.3	0.4	98	17.7		7.8		27.9		96.7		7.8		24.0		32		76				<0.2		0.6	
IM8	Cloudy	Moderate	09:05	9.2	Surface	1.0	0.8	102	21.3	21.3	8.1	8.1	28.6	28.6	94.4	94.4	7.1	7.1	6.6	12.7	6	5	74	76	807823	821695	<0.2	<0.2	1.2	1.2
						1.0	0.8	104	21.3		8.1		28.6		94.4		7.1		6.7		8		74				<0.2		1.1	
					Middle	4.6	0.7	97	21.4	21.4	8.1	8.1	29.3	29.3	93.7	93.7	7.0	7.1	10.7		6		75				<0.2		1.2	
						4.6	0.7	102	21.4		8.1		29.2		93.6		7.0		10.8		4		76				<0.2		1.2	
					Bottom	8.2	0.7	103	21.4	21.4	8.1	8.1	29.8	29.8	93.6	93.7	7.0	7.0	20.3		4		77				<0.2		1.2	
						8.2	0.7	110	21.4		8.1		29.8		93.7		7.0		20.9		4		77				<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**

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Water Quality Monitoring

Water Quality Monitoring Results on 14 April 17 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	08:53	8.3	Surface	1.0	0.5	177	21.7	21.7	8.1	8.1	26.0	26.0	92.5	92.5	7.0	7.0	6.3	12.6	6	6	73	76	808811	822094	<0.2	<0.2	1.9	1.9
						1.0	0.5	186	21.7		8.1		26.0		92.5		7.0		5.6		6		74				<0.2		1.9	
					Middle	4.2	0.6	103	21.5	21.5	8.1	8.1	27.7	27.7	93.0	93.1	7.0		8.6		7		76				<0.2		1.7	
						4.2	0.6	104	21.5		8.1		27.7		93.1		7.0		8.8		6		76				<0.2		1.9	
					Bottom	7.3	0.6	86	21.4	21.4	8.1	8.1	29.1	29.1	93.9	93.9	7.0	7.0	23.2		4		77				<0.2		2.0	
						7.3	0.7	87	21.4		8.1		29.1		93.9		7.0		23.3		6		78				<0.2		1.8	
IM10	Cloudy	Moderate	08:41	8.4	Surface	1.0	0.4	140	21.7	21.7	8.1	8.1	26.6	26.6	91.0	91.0	6.9	6.9	7.0	10.9	7	8	73	75	809849	822240	<0.2	<0.2	1.6	1.7
						1.0	0.5	142	21.7		8.1		26.6		91.0		6.9		7.1		6		74				<0.2		1.8	
					Middle	4.2	0.4	183	21.7	21.7	8.1	8.1	27.1	27.1	90.7	90.7	6.8		11.2		8		75				<0.2		1.8	
						4.2	0.5	184	21.7		8.1		27.1		90.7		6.8		11.2		9		76				<0.2		1.6	
					Bottom	7.4	0.4	211	21.7	21.7	8.1	8.1	27.3	27.3	92.6	92.7	6.9	7.0	14.5		7		77				<0.2		1.6	
						7.4	0.5	212	21.7		8.1		27.3		92.7		7.0		14.5		8		77				<0.2		1.6	
IM11	Cloudy	Moderate	08:26	8.3	Surface	1.0	0.4	133	21.7	21.7	8.1	8.1	27.0	27.0	90.7	90.7	6.8	6.8	7.7	10.5	8	9	74	76	810538	821501	<0.2	<0.2	1.1	1.3
						1.0	0.4	137	21.7		8.1		27.0		90.7		6.8		7.8		9		74				<0.2		1.0	
					Middle	4.2	0.3	168	21.7	21.7	8.1	8.1	27.2	27.2	90.4	90.4	6.8		9.7		8		75				<0.2		1.1	
						4.2	0.4	169	21.7		8.1		27.2		90.4		6.8		9.6		10		76				<0.2		1.4	
					Bottom	7.3	0.4	193	21.7	21.7	8.1	8.1	27.5	27.5	90.9	90.9	6.8	6.8	13.9		9		77				<0.2		1.4	
						7.3	0.4	197	21.7		8.1		27.5		90.9		6.8		14.4		11		77				<0.2		1.5	
IM12	Cloudy	Moderate	08:14	9.2	Surface	1.0	0.4	209	21.7	21.7	8.1	8.1	27.4	27.4	90.1	90.1	6.8	6.8	13.1	16.3	21	17	75	76	811517	821162	<0.2	<0.2	1.0	1.1
						1.0	0.4	213	21.7		8.1		27.4		90.1		6.8		13.2		18		75				<0.2		1.3	
					Middle	4.6	0.4	212	21.7	21.7	8.1	8.1	27.6	27.6	89.7	89.7	6.7		16.9		17		76				<0.2		1.0	
						4.6	0.4	217	21.7		8.1		27.6		89.7		6.7		17.1		15		76				<0.2		1.2	
					Bottom	8.2	0.4	202	21.7	21.7	8.1	8.1	27.6	27.6	90.0	90.0	6.7	6.7	18.8		15		77				<0.2		1.1	
						8.2	0.4	213	21.7		8.1		27.6		90.0		6.7		18.9		16		77				<0.2		1.1	
IM13	Cloudy	Moderate	10:00	7.3	Surface	1.0	0.5	88	18.0	18.0	7.9	7.9	28.6	28.6	95.3	95.3	7.1	7.1	4.3	15.3	6	13		-	806297	820085	-	-	-	-
						1.0	0.5	95	18.0		7.9		28.5		95.3		7.1		4.3		4						-		-	
					Middle	3.7	0.4	90	18.1	18.1	7.8	7.8	29.7	29.7	94.6	94.6	7.0		14.8		6						-		-	
						3.7	0.4	93	18.1		7.8		29.7		94.6		7.0		15.1		5						-		-	
					Bottom	6.3	0.4	91	18.1	18.1	7.9	7.9	29.6	29.6	94.8	94.9	7.1	7.1	26.8		29						-		-	
						6.3	0.4	91	18.1		7.9		29.5		95.0		7.1		26.7		29						-		-	
SR2	Cloudy	Moderate	07:42	5.6	Surface	1.0	0.4	188	21.6	21.6	8.1	8.1	27.3	27.3	90.9	90.9	6.8	6.8	11.7	12.4	14	14	75	77	814182	821463	<0.2	<0.2	1.2	1.1
						1.0	0.5	190	21.6		8.1		27.3		90.9		6.8		11.7		14		76				<0.2		1.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-						-		-	
						-	-	-	-		-		-		-		-		-		-						-		-	
					Bottom	4.6	0.5	194	21.7	21.7	8.1	8.1	27.5	27.5	92.6	92.7	7.0	7.0	13.1		13		77				<0.2		1.0	
						4.6	0.5	205	21.7		8.1		27.5		92.7		7.0		13.1		15		78				<0.2		1.1	
SR3	Cloudy	Moderate	09:13	9.7	Surface	1.0	1.0	85	21.3	21.3	8.1	8.1	28.1	28.1	94.7	94.7	7.1	7.1	6.2	11.7	7	8		-	807576	822147	-	-	-	-
						1.0	1.0	88	21.3		8.1		28.1		94.6		7.1		6.4		7						-		-	
					Middle	4.9	0.8	77	21.4	21.4	8.1	8.1	29.9	29.9	93.7	93.7	7.0		12.1		8						-		-	
						4.9	0.9	77	21.4		8.1		29.9		93.6		7.0		12.1		7						-		-	
					Bottom	8.7	0.8	96	21.4	21.4	8.1	8.1	30.1	30.1	94.5	94.5	7.0	7.0	16.7		8						-		-	
						8.7	0.9	101	21.4		8.1		30.1		94.5		7.0		16.6		8						-		-	
SR4A	Cloudy	Moderate	08:08	9.2	Surface	1.0	0.3	101	17.8	17.8	7.7	7.7	24.1	24.1	93.0	93.0	7.6	7.7	7.8	10.2	9	13		-	807790	817189	-	-	-	-
						1.0	0.4	109	17.8		7.7		24.1		93.0		7.6		7.7		11						-		-	
					Middle	4.6	0.4	81	17.8	17.8	7.7	7.7	24.0	24.0	93.2	93.3	7.7		9.3		10						-		-	
						4.6	0.4	82	17.8		7.7		24.0		93.3		7.7		9.3		11						-		-	
					Bottom	8.2	0.4	90	17.7	17.7	7.7	7.7	23.6	23.6	93.9	94.0	7.8	7.8	14.0		18						-		-	
						8.2	0.4	94	17.7		7.7		23.5		94.1		7.8		13.1		20						-		-	
SR5A	Cloudy	Calm	07:49	5.2	Surface	1.0	0.3	145	18.3	18.3	7.6	7.6	21.9	21.9	91.2	91.3	7.5	7.5	5.8	7.1	10	12		-	810684	816593	-	-	-	-
						1.0	0.3	153	18.3		7.6		21.9		91.3		7.5		5.9		10						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-						-		-	
						-	-	-	-		-		-		-		-		-		-						-		-	
					Bottom	4.2	0.3	152	18.3	18.3	7.6	7.6	20.9	20.8	93.2	93.6	7.7	7.8	8.0		13						-		-	
						4.2	0.3	160	18.3		7.6		20.6		94.0		7.8		8.8		14						-		-	
SR6	Cloudy	Calm	07:20	4.2	Surface	1.0	0.1	165	18.0	18.0	7.6	7.6	21.9	21.9	92.0	92.1	7.6	7.6	1.9	2.6	10	10		-	814652	817899	-	-	-	-
						1.0	0.1	173	18.0		7.6		21.9		92.1		7.6		1.9		11						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-						-		-	
						-	-	-	-		-		-		-		-		-		-						-		-	
					Bottom	3.2	0.1	174	18.0	18.0	7.6	7.6	20.8	20.6	94.4	94.7	7.9	8.0	3.3		9						-		-	
						3.2	0.1	187	18.0		7.6		20.4		95.0		8.0		3.3		11						-		-	
SR7	Cloudy	Moderate	06:39	18.5	Surface	1.0	0.2	213	21.5	21.5	8.0	8.0	29.4	29.4	91.2	91.2	6.8	6.8	3.7	5.9	8	7		-	823751	823636	-	-	-	-
						1.0	0.2	233	21.5		8.0		29.4		91.2		6.8		3.7		8						-		-	
					Middle	9.3	0.2	96	21.5	21.5	8.0	8.0	30.9	30.9	91.1	91.1	6.7		7.1		6						-		-	
						9.3	0.3	104	21.5		8.0		30.9		91.1		6.7		6.4		8						-		-	
					Bottom	17.5	0.3	106	21.5	21.5	8.0	8.0	31.2	31.2	91.6	91.6	6.8	6.8	7.3		7						-		-	
						17.5	0.3	109	21.5		8.0		31.2		91.6		6.8		7.4		6						-		-	
SR8	Cloudy	Moderate	08:03	5.9	Surface	1.0	0.4	118	21.7	21.7	8.1	8.1	27.3	27.3	91.2	91.2	6.8	6.8	8.7	10.1	14	14		-	811610	820417	-	-	-	-
						1.0	0.4	124	21.7		8.1		27.3		91.2		6.8		8.7		13						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-						-		-	
						-	-	-	-		-		-		-		-		-		-						-		-	
					Bottom	4.9	0.5	109	21.7	21.7	8.1	8.1	27.6	27.6	94.1	94.1	7.1	7.1	11.4		13						-		-	
						4.9	0.5	116	21.7		8.1		27.6		94.1		7.1		11.7		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 14 April 17 during Mid-Ebb tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	14:14	8.0	Surface	1.0	0.7	193	17.8	17.8	7.8	7.8	28.2	28.2	102.8	102.8	8.3	8.3	2.2	2.0	5	4	73	74	804257	815620	<0.2	<0.2	0.8	0.7
						1.0	0.7	209	17.8		7.8		28.2		102.8		8.3		2.2		4		73				<0.2		0.8	
					Middle	4.0	0.6	200	17.8	17.8	7.8	7.8	28.5	28.5	103.9	104.0	8.3		1.7		4		74				<0.2		0.7	
						4.0	0.7	201	17.8		7.8		28.5		104.0		8.3		1.7		5		75				<0.2		0.7	
					Bottom	7.0	0.5	221	17.8	17.8	7.9	7.9	28.2	28.2	103.8	103.8	8.3		2.2		4		75				<0.2		0.7	
						7.0	0.5	233	17.8		7.9		28.2		103.8		8.3		2.0		3		76				<0.2		0.5	
C2	Cloudy	Moderate	13:00	12.6	Surface	1.0	0.7	173	21.7	21.7	8.1	8.1	26.4	26.4	91.9	91.9	6.9	7.0	5.9	5.8	6	6	75	76	806928	825682	<0.2	<0.2	1.9	1.8
						1.0	0.8	176	21.7		8.1		26.4		91.8		6.9		5.9		6		76				<0.2		2.0	
					Middle	6.3	0.6	167	21.7	21.7	8.1	8.1	28.0	28.0	92.9	93.0	7.0		5.9		6		76				<0.2		1.8	
						6.3	0.6	181	21.7		8.1		28.0		93.0		7.0		5.8		6		76				<0.2		1.8	
					Bottom	11.6	0.6	149	21.7	21.7	8.1	8.1	28.4	28.4	95.4	95.5	7.1	7.1	5.6		6		77				<0.2		1.7	
						11.6	0.6	159	21.7		8.1		28.3		95.5		7.1		5.6		5		78				<0.2		1.8	
C3	Cloudy	Moderate	14:44	12.4	Surface	1.0	0.5	100	21.7	21.7	8.1	8.1	28.1	28.2	91.1	91.1	6.8	6.8	8.2	8.9	6	7	74	76	817821	822109	<0.2	<0.2	1.4	1.5
						1.0	0.5	100	21.7		8.1		28.2		91.1		6.8		8.4		6		74				<0.2		1.6	
					Middle	6.2	0.4	108	21.6	21.6	8.1	8.1	29.0	29.0	91.2	91.2	6.8		9.3		6		76				<0.2		1.4	
						6.2	0.5	110	21.6		8.1		29.0		91.2		6.8		9.4		8		76				<0.2		1.4	
					Bottom	11.4	0.4	85	21.6	21.6	8.1	8.1	29.5	29.5	94.2	94.2	7.0	7.0	9.1		8		77				<0.2		1.5	
						11.4	0.5	85	21.6		8.1		29.4		94.2		7.0		9.1		7		77				<0.2		1.5	
IM1	Cloudy	Moderate	13:55	7.7	Surface	1.0	0.4	189	17.8	17.8	7.8	7.8	27.7	27.7	98.9	99.1	8.0	8.0	4.6	3.9	8	9	74	75	806449	818351	<0.2	<0.2	1.0	0.8
						1.0	0.4	206	17.8		7.8		27.7		99.3		8.0		4.7		8		73				<0.2		0.8	
					Middle	3.9	0.3	170	17.8	17.8	7.8	7.8	29.3	29.3	100.3	100.3	8.0		2.9		10		74				<0.2		0.7	
						3.9	0.3	171	17.8		7.8		29.3		100.3		8.0		2.9		9		75				<0.2		0.5	
					Bottom	6.7	0.3	164	17.7	17.7	7.8	7.8	29.2	29.2	100.4	100.4	8.0	8.0	4.2		9		75				<0.2		0.7	
						6.7	0.4	178	17.7		7.8		29.2		100.4		8.0		4.1		11		76				<0.2		0.8	
IM2	Cloudy	Moderate	13:49	8.4	Surface	1.0	0.4	210	18.1	18.1	7.8	7.8	25.9	25.9	97.4	97.5	7.9	7.9	2.5	4.3	5	7	75	76	806187	818852	<0.2	<0.2	1.4	1.0
						1.0	0.4	230	18.1		7.8		25.8		97.5		7.9		2.5		5		75				<0.2		1.4	
					Middle	4.2	0.3	159	17.7	17.7	7.8	7.8	29.2	29.2	98.8	98.8	7.9		4.9		6		75				<0.2		0.9	
						4.2	0.4	161	17.7		7.8		29.2		98.8		7.9		4.7		6		76				<0.2		1.1	
					Bottom	7.4	0.4	172	17.7	17.7	7.8	7.8	28.9	28.9	99.2	99.2	7.9	7.9	5.6		9		77				<0.2		0.6	
						7.4	0.4	176	17.7		7.8		28.9		99.2		7.9		5.6		9		77				<0.2		0.8	
IM3	Cloudy	Moderate	13:41	8.3	Surface	1.0	0.3	207	17.8	17.8	7.8	7.8	27.4	27.4	99.6	99.7	8.0	8.1	3.4	4.1	5	5	73	74	806028	819411	<0.2	<0.2	1.2	0.9
						1.0	0.4	207	17.8		7.8		27.3		99.8		8.0		3.5		5		73				<0.2		1.1	
					Middle	4.2	0.3	164	17.8	17.8	7.8	7.8	28.5	28.5	101.0	101.0	8.1		5.1		4		74				<0.2		0.9	
						4.2	0.3	175	17.8		7.8		28.5		101.0		8.1		5.3		3		74				<0.2		0.8	
					Bottom	7.3	0.3	142	17.7	17.7	7.8	7.8	28.6	28.6	101.0	101.1	8.1	8.1	3.5		6		75				<0.2		0.6	
						7.3	0.4	145	17.7		7.8		28.6		101.1		8.1		3.5		6		75				<0.2		0.7	
IM4	Cloudy	Moderate	13:33	8.0	Surface	1.0	0.4	175	17.8	17.8	7.8	7.8	27.7	27.7	101.2	101.2	8.1	8.1	2.4	3.0	5	5	75	76	805052	819570	<0.2	<0.2	1.2	1.1
						1.0	0.4	176	17.8		7.8		27.7		101.2		8.1		2.4		4		74				<0.2		1.2	
					Middle	4.0	0.3	175	17.7	17.7	7.8	7.8	28.6	28.6	101.2	101.2	8.1		3.1		4		75				<0.2		1.0	
						4.0	0.3	182	17.7		7.8		28.6		101.2		8.1		3.1		4		76				<0.2		1.2	
					Bottom	7.0	0.3	176	17.7	17.7	7.8	7.8	28.7	28.7	100.9	101.0	8.1	8.1	3.5		8		76				<0.2		0.8	
						7.0	0.3	187	17.7		7.8		28.6		101.0		8.1		3.3		7		77				<0.2		0.9	
IM5	Cloudy	Moderate	13:24	6.8	Surface	1.0	0.3	153	17.8	17.8	7.8	7.8	27.0	27.0	97.3	97.3	7.9	7.9	6.1	8.5	4	8	75	76	804929	820564	<0.2	<0.2	1.0	0.9
						1.0	0.4	157	17.8		7.8		27.0		97.3		7.9		6.2		4		75				<0.2		1.1	
					Middle	3.4	0.3	161	17.7	17.7	7.8	7.8	27.7	27.7	97.0	97.0	7.8		9.7		7		76				<0.2		1.0	
						3.4	0.3	165	17.7		7.8		27.7		97.0		7.8		9.7		7		76				<0.2		1.0	
					Bottom	5.8	0.3	165	17.7	17.7	7.8	7.8	27.5	27.5	98.3	98.3	7.9	7.9	9.6		11		77				<0.2		0.6	
						5.8	0.3	176	17.7		7.8		27.4		98.2		7.9		9.6		13		77				<0.2		0.6	
IM6	Cloudy	Moderate	13:15	7.4	Surface	1.0	0.4	136	17.8	17.8	7.8	7.8	26.9	26.9	97.7	97.7	7.9	7.9	6.2	11.6	7	12	75	76	805819	821060	<0.2	<0.2	1.0	1.0
						1.0	0.4	149	17.8		7.8		26.9		97.6		7.9		6.2		7		75				<0.2		1.1	
					Middle	3.7	0.4	144	17.7	17.7	7.8	7.8	27.2	27.2	96.5	96.5	7.8		10.7		7		76				<0.2		1.1	
						3.7	0.4	150	17.7		7.8		27.2		96.5		7.8		10.7		8		76				<0.2		0.9	
					Bottom	6.4	0.3	148	17.7	17.7	7.8	7.8	26.6	26.6	97.7	97.9	7.9	8.0	18.1		20		77				<0.2		0.9	
						6.4	0.3	148	17.7		7.8		26.5		98.0		8.0		17.5		20		77				<0.2		0.9	
IM7	Cloudy	Moderate	13:06	7.9	Surface	1.0	0.3	131	17.8	17.8	7.8	7.8	26.1	26.1	100.4	100.4	8.2	8.2	1.6	2.7	2	3	76	77	806827	821349	<0.2	<0.2	0.9	1.0
						1.0	0.3	136	17.8		7.8		26.0		100.4		8.2		1.4		2		75				<0.2		1.2	
					Middle	4.0	0.3	121	17.8	17.8	7.8	7.8	25.9	25.9	99.7	99.7	8.1		2.2		4		77				<0.2		1.0	
						4.0	0.3	122	17.8		7.8		25.8		99.7		8.1		2.3		3		77				<0.2		1.0	
					Bottom	6.9	0.4	120	17.7	17.7	7.8	7.8	25.2	25.2	99.6	99.7	8.1	8.2	4.2		4		77				<0.2		1.1	
						6.9	0.4	128	17.7		7.8		25.2		99.7		8.2		4.2		4		78				<0.2		1.0	
IM8	Cloudy	Moderate	13:25	8.7	Surface	1.0	0.5	161	21.8	21.8	8.1	8.1	25.3	25.3	94.7	94.7	7.2	7.2	3.7	7.1	4	4	74	75	807851	821695	<0.2	<0.2	2.2	2.1
						1.0	0.5	176	21.8		8.1		25.3		94.7		7.2		3.7		4		74				<0.2		2.4	
					Middle	4.4	0.4	121	21.4	21.4	8.1	8.1	29.0	29.0	96.4	96.4	7.2		7.8		3		75				<0.2		2.0	
						4.4	0.4	125	21.4		8.1		29.0		96.4		7.2		7.8		4		75				<0.2		2.2	
					Bottom	7.7	0.4	108	21.4	21.4	8.1	8.1	30.2	30.2	97.0	97.1	7.2	7.2	9.7		5		76				<0.2		2.1	
						7.7	0.4	112	21.4		8.1		30.2		97.1		7.2		9.7		4		77				<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 14 April 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	7.1	Surface	1.0	0.7	131	21.6	21.6	8.1	8.1	26.6	26.6	95.3	95.3	7.2	7.2	4.7	7.8	4	6	73	76	808825	822094	<0.2	<0.2	1.8	1.9
						1.0	0.7	136	21.6		8.1		26.6		95.3		7.2		4.8		5		74				<0.2		1.9	
					Middle	3.6	0.6	106	21.4	21.4	8.1	8.1	28.4	28.4	95.7	95.7	7.2		7.1		9		76				<0.2		2.0	
						3.6	0.6	108	21.4		8.1		28.4		95.7		7.2		7.3		7		76				<0.2		1.9	
					Bottom	6.1	0.5	89	21.3	21.3	8.1	8.1	29.9	29.9	95.6	95.6	7.1	7.1	11.3		6		77				<0.2		1.8	
						6.1	0.5	94	21.3		8.1		29.9		95.5		7.1		11.4		4		77				<0.2		1.7	
IM10	Cloudy	Moderate	13:43	7.3	Surface	1.0	0.8	128	21.8	21.8	8.1	8.1	25.7	25.7	94.6	94.6	7.1	7.2	4.4	8.5	6	5	73	75	809846	822240	<0.2	<0.2	2.1	2.0
						1.0	0.9	130	21.8		8.1		25.7		94.6		7.1		4.5		4		73				<0.2		2.2	
					Middle	3.7	0.7	120	21.7	21.7	8.1	8.1	26.7	26.7	95.6	95.6	7.2		7.3		5		75				<0.2		1.8	
						3.7	0.8	128	21.7		8.1		26.7		95.6		7.2		7.5		6		76				<0.2		1.9	
					Bottom	6.3	0.7	89	21.4	21.4	8.1	8.1	29.2	29.2	98.1	98.2	7.3	7.3	13.7		5		77				<0.2		2.1	
						6.3	0.7	97	21.4		8.1		29.2		98.2		7.3		13.6		5		76				<0.2		2.0	
IM11	Cloudy	Moderate	13:55	8.6	Surface	1.0	0.7	115	21.7	21.7	8.1	8.1	26.8	26.8	95.7	95.7	7.2	7.2	6.1	11.8	5	5	74	76	810531	821501	<0.2	0.2	1.6	1.7
						1.0	0.8	121	21.7		8.1		26.8		95.7		7.2		6.1		4		74				0.2		1.6	
					Middle	4.3	0.6	106	21.6	21.6	8.1	8.1	27.6	27.6	95.6	95.6	7.2		11.5		7		75				<0.2		1.8	
						4.3	0.7	110	21.6		8.1		27.6		95.6		7.2		11.7		8		76				<0.2		1.6	
					Bottom	7.6	0.4	98	21.5	21.5	8.1	8.1	28.6	28.6	97.1	97.2	7.3	7.3	17.7		5		77				<0.2		1.6	
						7.6	0.5	101	21.5		8.1		28.6		97.2		7.3		17.9		3		77				<0.2		1.7	
IM12	Cloudy	Moderate	14:03	9.5	Surface	1.0	1.1	123	21.7	21.7	8.1	8.1	26.9	26.9	95.0	95.0	7.1	7.1	4.9	11.1	2	4	76	77	811518	821162	<0.2	<0.2	1.4	1.4
						1.0	1.1	127	21.7		8.1		26.9		95.0		7.1		5.0		3		76				<0.2		1.4	
					Middle	4.8	1.0	103	21.5	21.5	8.1	8.1	28.4	28.4	94.1	94.1	7.0		11.5		5		76				<0.2		1.4	
						4.8	1.1	109	21.5		8.1		28.4		94.1		7.0		11.4		3		77				<0.2		1.4	
					Bottom	8.5	0.9	117	21.5	21.5	8.1	8.1	28.7	28.7	94.7	94.7	7.1	7.1	17.1		4		77				<0.2		1.4	
						8.5	0.9	123	21.5		8.1		28.6		94.7		7.1		16.9		4		78				<0.2		1.4	
IM13	Cloudy	Moderate	13:00	7.7	Surface	1.0	0.4	172	18.5	18.5	7.9	7.9	27.7	27.7	95.6	95.6	7.2	7.2	2.5	8.2	3	11		-	805798	820085	-	-	-	-
						1.0	0.4	188	18.5		7.9		27.6		95.6		7.2		2.5		2						-		-	
					Middle	3.9	0.4	170	18.4	18.4	7.9	7.9	29.5	29.5	95.0	95.1	7.1		6.8		15						-		-	
						3.9	0.4	183	18.3		7.9		29.4		95.1		7.1		7.1		14						-		-	
					Bottom	6.7	0.3	168	18.8	18.8	7.9	7.9	29.4	29.4	95.3	95.3	7.1	7.1	15.2		15						-		-	
						6.7	0.3	183	18.8		7.9		29.4		95.3		7.1		15.1		15						-		-	
SR2	Cloudy	Moderate	14:27	4.7	Surface	1.0	0.7	66	21.6	21.6	8.1	8.1	28.0	28.0	92.8	92.8	7.0	7.0	13.8	16.1	11	12	76	77	814146	821463	<0.2	0.2	1.4	1.4
						1.0	0.7	68	21.6		8.1		28.0		92.8		7.0		13.9		14		76				0.2		1.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-						-	0.2	-	1.4
						-	-	-	-		-		-		-		-		-		-						-		-	
					Bottom	3.7	0.5	54	21.6	21.6	8.1	8.1	28.1	28.1	93.5	93.6	7.0	7.0	18.5		11		77				0.2		1.4	
						3.7	0.5	58	21.6		8.1		28.1		93.6		7.0		18.2		12		78				<0.2		1.4	
SR3	Cloudy	Moderate	13:18	9.6	Surface	1.0	0.6	176	21.9	21.9	8.1	8.1	25.5	25.5	93.4	93.4	7.1	7.1	5.1	9.2	5	3		-	807582	822147	-	-	-	-
						1.0	0.6	182	21.9		8.1		25.5		93.4		7.1		5.0		3						-		-	
					Middle	4.8	0.3	155	21.5	21.5	8.1	8.1	28.0	28.0	93.8	93.8	7.0		8.7		3						-		-	
						4.8	0.3	169	21.5		8.1		28.0		93.8		7.0		8.7		3						-		-	
					Bottom	8.6	0.4	88	21.4	21.4	8.1	8.1	30.2	30.2	96.2	96.3	7.2	7.2	14.0		3						-		-	
						8.6	0.5	92	21.4		8.1		30.1		96.3		7.2		13.8		2						-		-	
SR4A	Cloudy	Moderate	14:37	8.0	Surface	1.0	0.4	83	17.7	17.7	7.8	7.8	28.4	28.4	98.3	98.3	7.9	7.9	6.4	8.0	9	12		-	807814	817189	-	-	-	-
						1.0	0.4	88	17.7		7.8		28.3		98.3		7.9		6.5		10						-		-	
					Middle	4.0	0.4	91	17.7	17.7	7.8	7.8	28.4	28.4	98.5	98.5	7.9		7.4		12						-		-	
						4.0	0.4	97	17.7		7.8		28.4		98.5		7.9		7.4		10						-		-	
					Bottom	7.0	0.3	81	17.7	17.7	7.8	7.8	27.9	27.9	99.5	99.6	8.0	8.0	10.3		16						-		-	
						7.0	0.4	85	17.7		7.8		27.8		99.6		8.0		10.2		15						-		-	
SR5A	Cloudy	Calm	14:54	4.8	Surface	1.0	0.1	117	18.1	18.1	7.7	7.7	24.8	24.8	94.2	94.3	7.7	7.7	6.6	7.5	9	8		-	810676	816593	-	-	-	-
						1.0	0.1	122	18.1		7.7		24.8		94.3		7.7		6.6		9						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-						-		-	
						-	-	-	-		-		-		-		-		-		-						-		-	
					Bottom	3.8	0.2	116	17.7	17.7	7.8	7.8	26.0	25.9	96.2	96.4	7.8	7.9	8.5		6						-		-	
						3.8	0.2	122	17.7		7.8		25.8		96.6		7.9		8.4		7						-		-	
SR6	Cloudy	Calm	15:15	4.1	Surface	1.0	0.2	93	18.7	18.7	7.7	7.7	23.8	23.8	93.3	93.3	7.6	7.6	3.6	4.6	5	7		-	814682	817899	-	-	-	-
						1.0	0.2	100	18.7		7.7		23.7		93.3		7.6		3.7		5						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-						-		-	
						-	-	-	-		-		-		-		-		-		-						-		-	
					Bottom	3.1	0.2	99	18.4	18.4	7.7	7.7	23.7	23.7	92.9	93.1	7.6	7.6	5.4		8						-		-	
						3.1	0.2	107	18.4		7.7		23.7		93.3		7.6		5.5		8						-		-	
SR7	Cloudy	Moderate	15:13	18.9	Surface	1.0	0.7	62	21.7	21.7	8.1	8.1	28.1	28.2	90.6	90.6	6.8	6.8	2.7	3.1	4	3		-	823757	823636	-	-	-	-
						1.0	0.7	65	21.7		8.1		28.2		90.6		6.8		2.8		3						-		-	
					Middle	9.5	0.4	79	21.7	21.7	8.1	8.1	28.6	28.6	91.7	91.8	6.8		3.5		4						-		-	
						9.5	0.4	82	21.7		8.1		28.6		91.8		6.8		3.5		3						-		-	
					Bottom	17.9	0.4	162	21.7	21.7	8.1	8.1	28.7	28.7	92.3	92.4	6.9	6.9	3.0		3						-		-	
						17.9	0.4	165	21.7		8.1		28.7		92.4		6.9		3.0		3						-		-	
SR8	Cloudy	Moderate	14:13	5.6	Surface	1.0	0.3	181.0	21.7	21.7	8.1	8.1	27.3	27.3	92.1	92.1	6.9	6.9	11.2	13.3	8	9		-	811574	820417	-	-	-	-
						1.0	0.3	191.0	21.7		8.1		27.3		92.1		6.9		11.3		9						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-						-		-	
						-	-	-	-		-		-		-		-		-		-						-		-	
					Bottom	4.6	0.3	131.0	21.7	21.7	8.1	8.1	27.8	27.8	92.8	92.8	7.0	7.0	15.4		8						-		-	
						4.6	0.4	143.0	21.7		8.1		27.8		92.8		7.0		15.4		9						-		-	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 16 April 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	09:36	8.5	Surface	1.0	0.6	63	18.5	18.5	7.8	7.8	26.4	26.4	96.2	96.2	7.7	7.7	2.6	4.7	8	8	75	76	804246	815620	<0.2	<0.2	1.2	1.2
						1.0	0.7	68	18.5		7.8		26.4		96.2		7.7		2.6		8		75				<0.2		1.3	
					Middle	4.3	0.6	66	18.3	18.3	7.8	7.8	28.0	28.0	95.8	95.8	7.6		3.6		6		76				<0.2		1.6	
						4.3	0.6	68	18.3		7.8		28.0		95.8		7.6		3.6		7		76				<0.2		1.3	
					Bottom	7.5	0.5	86	18.1	18.1	7.9	7.9	29.3	29.3	95.6	95.6	7.6	7.6	7.9		8		77				<0.2		0.9	
						7.5	0.5	87	18.1		7.9		29.3		95.6		7.6		7.9		9		77				<0.2		0.9	
C2	Cloudy	Moderate	09:43	7.8	Surface	1.0	0.9	245	19.3	19.3	7.8	7.8	23.3	23.3	95.7	95.8	7.7	7.7	2.4	5.0	8	7	74	75	806932	825682	<0.2	<0.2	2.2	2.2
						1.0	0.9	262	19.3		7.8		23.3		95.8		7.7		2.4		7		74				<0.2		2.3	
					Middle	3.9	0.8	250	19.1	19.1	7.9	7.9	25.9	25.9	95.7	95.6	7.6		3.7		7		75				<0.2		2.2	
						3.9	0.8	270	19.1		7.9		25.9		95.4		7.6		4.0		7		75				<0.2		2.2	
					Bottom	6.8	0.8	232	18.8	18.8	7.9	7.9	27.0	27.0	93.8	93.8	7.5	7.5	8.6		6		76				<0.2		2.1	
						6.8	0.8	254	18.8		7.9		27.0		93.8		7.5		8.8		7		76				<0.2		2.2	
C3	Cloudy	Moderate	08:00	12.2	Surface	1.0	0.6	270	22.1	22.1	8.0	8.0	25.8	25.8	87.7	87.7	6.6	6.6	2.9	3.5	6	6	75	76	817797	822109	<0.2	<0.2	1.6	1.7
						1.0	0.7	290	22.1		8.0		25.8		87.7		6.6		2.9		7		75				<0.2		1.5	
					Middle	6.1	0.7	251	21.8	21.8	8.0	8.0	27.7	27.7	87.0	87.0	6.5		4.0		5		75				<0.2		2.1	
						6.1	0.7	260	21.8		8.0		27.7		87.0		6.5		4.0		5		76				<0.2		2.1	
					Bottom	11.2	0.6	263	21.8	21.8	8.0	8.0	29.0	29.0	88.0	88.0	6.5	6.5	3.5		5		77				<0.2		1.4	
						11.2	0.6	279	21.8		8.0		29.0		88.0		6.5		3.5		6		77				<0.2		1.6	
IM1	Cloudy	Moderate	09:54	7.6	Surface	1.0	0.6	138	19.1	19.1	7.8	7.8	24.7	24.7	97.8	97.8	7.8	7.7	2.4	5.7	4	8	74	76	806469	818351	<0.2	<0.2	1.6	1.5
						1.0	0.6	150	19.1		7.8		24.7		97.8		7.8		2.5		5		74				<0.2		1.7	
					Middle	3.8	0.6	156	18.6	18.6	7.8	7.8	26.8	26.8	95.7	95.7	7.6		7.2		5		75				<0.2		1.8	
						3.8	0.6	160	18.6		7.8		26.8		95.7		7.6		7.2		5		76				<0.2		1.6	
					Bottom	6.6	0.4	204	18.4	18.4	7.9	7.9	27.7	27.7	95.2	95.3	7.6	7.6	7.5		15		77				<0.2		1.0	
						6.6	0.4	221	18.4		7.9		27.7		95.3		7.6		7.5		16		77				<0.2		1.0	
IM2	Cloudy	Moderate	10:01	7.4	Surface	1.0	0.6	65	19.0	19.0	7.8	7.8	24.8	24.8	98.5	98.5	7.9	7.8	2.8	4.4	3	6	73	75	806184	818852	<0.2	<0.2	1.6	1.5
						1.0	0.6	65	19.0		7.8		24.8		98.5		7.9		2.8		4		74				<0.2		1.6	
					Middle	3.7	0.7	62	18.7	18.7	7.8	7.8	26.6	26.6	96.8	96.8	7.7		2.7		4		75				<0.2		1.8	
						3.7	0.7	66	18.7		7.8		26.6		96.8		7.7		2.8		4		76				<0.2		1.5	
					Bottom	6.4	0.5	90	18.4	18.4	7.9	7.9	27.9	27.9	95.4	95.4	7.6	7.6	7.6		10		77				<0.2		1.1	
						6.4	0.5	93	18.4		7.9		27.9		95.4		7.6		7.6		9		77				<0.2		1.1	
IM3	Cloudy	Moderate	10:08	7.7	Surface	1.0	0.6	92	19.0	19.0	7.8	7.8	25.2	25.2	97.1	97.1	7.8	7.7	3.1	6.4	5	6	74	76	806016	819411	<0.2	<0.2	1.7	1.6
						1.0	0.6	92	19.0		7.8		25.2		97.1		7.8		3.2		6		74				<0.2		1.6	
					Middle	3.9	0.5	85	18.4	18.4	7.8	7.8	27.6	27.6	95.5	95.5	7.6		7.9		7		76				<0.2		1.7	
						3.9	0.6	91	18.4		7.8		27.6		95.5		7.6		8.1		5		76				<0.2		1.4	
					Bottom	6.7	0.5	98	18.4	18.4	7.8	7.8	27.9	27.9	96.0	96.1	7.6	7.6	8.1		5		77				<0.2		1.7	
						6.7	0.5	99	18.4		7.8		27.9		96.1		7.6		8.0		5		77				<0.2		1.7	
IM4	Cloudy	Moderate	10:17	7.1	Surface	1.0	0.7	125	19.1	19.1	7.8	7.8	25.4	25.4	98.5	98.5	7.8	7.7	2.8	7.0	3	4	74	76	805036	819570	<0.2	<0.2	1.7	1.6
						1.0	0.7	125	19.1		7.8		25.4		98.5		7.9		2.9		3		74				<0.2		1.5	
					Middle	3.6	0.6	114	18.6	18.6	7.8	7.8	26.8	26.8	95.8	95.8	7.6		9.4		5		76				<0.2		1.5	
						3.6	0.7	117	18.6		7.8		26.8		95.8		7.6		9.8		4		76				<0.2		1.5	
					Bottom	6.1	0.5	155	18.2	18.2	7.9	7.9	28.4	28.4	94.8	94.8	7.5	7.5	8.4		6		77				<0.2		1.7	
						6.1	0.5	168	18.2		7.9		28.4		94.8		7.5		8.4		5		77				<0.2		1.7	
IM5	Cloudy	Moderate	10:24	8.4	Surface	1.0	0.7	171	19.0	19.0	7.8	7.8	25.1	25.1	97.7	97.7	7.8	7.7	4.2	7.9	5	4	74	75	804912	820564	<0.2	<0.2	1.6	1.6
						1.0	0.7	174	19.0		7.8		25.1		97.6		7.8		4.3		4		74				<0.2		1.6	
					Middle	4.2	0.7	167	18.4	18.4	7.8	7.8	27.7	27.7	95.1	95.1	7.6		9.8		4		75				<0.2		1.7	
						4.2	0.7	174	18.4		7.8		27.7		95.1		7.6		9.8		4		75				<0.2		1.5	
					Bottom	7.4	0.5	170	18.3	18.4	7.8	7.8	28.1	28.1	94.9	94.9	7.5	7.5	9.6		3		77				<0.2		1.3	
						7.4	0.5	170	18.4		7.8		28.1		94.9		7.5		9.6		4		77				<0.2		1.6	
IM6	Cloudy	Moderate	10:32	7.8	Surface	1.0	0.5	154	18.9	18.9	7.9	7.9	25.7	25.7	95.1	95.1	7.6	7.6	4.5	6.7	5	7	73	75	805819	821060	<0.2	<0.2	1.2	1.3
						1.0	0.5	158	18.9		7.9		25.7		95.0		7.6		4.6		7		73				<0.2		1.4	
					Middle	3.9	0.4	151	18.4	18.4	8.0	8.0	27.2	27.2	93.7	93.8	7.5		7.1		5		75				<0.2		1.4	
						3.9	0.4	159	18.4		8.0		27.2		93.8		7.5		7.2		6		76				<0.2		1.2	
					Bottom	6.8	0.3	124	18.4	18.4	8.0	8.0	27.5	27.5	94.4	94.5	7.5	7.5	8.4		8		77				<0.2		1.4	
						6.8	0.4	129	18.4		8.0		27.5		94.5		7.5		8.4		9		77				<0.2		1.3	
IM7	Cloudy	Moderate	10:39	7.3	Surface	1.0	0.5	55	19.0	19.0	7.8	7.8	25.2	25.2	96.5	96.5	7.7	7.6	3.1	6.3	5	6	74	76	806845	821349	<0.2	<0.2	1.2	1.4
						1.0	0.5	58	19.0		7.8		25.2		96.4		7.7		3.1		7		74				<0.2		1.4	
					Middle	3.7	0.4	85	18.4	18.4	7.9	7.9	27.3	27.3	93.9	93.9	7.5		7.6		6		75				<0.2		1.3	
						3.7	0.4	89	18.4		7.9		27.3		93.9		7.5		7.5		6		76				<0.2		1.4	
					Bottom	6.3	0.3	101	18.4	18.4	7.9	7.9	27.3	27.3	94.7	94.8	7.6	7.6	8.3		6		77				<0.2		1.6	
						6.3	0.3	106	18.4		7.9		27.3		94.8		7.6		8.3		5		77				<0.2		1.4	
IM8	Cloudy	Moderate	09:16	7.4	Surface	1.0	0.3	198	19.3	19.3	7.9	7.9	24.0	24.0	95.4	95.5	7.6	7.6	2.2	4.5	6	5	76	77	807849	821695	<0.2	0.2	2.0	2.0
						1.0	0.4	216	19.3		7.9		23.9		95.5		7.7		2.2		4		75				0.2		2.1	
					Middle	3.7	0.5	143	19.3	19.3	7.9	7.9	25.7	25.7	95.4	95.4	7.6		3.5		6		76				<0.2		2.0	
						3.7	0.5	153	19.3		7.9		25.7		95.4		7.6		3.5		5		77				<0.2		1.8	
					Bottom	6.4	0.4	167	19.0	19.0	8.0	8.0	26.8	26.8	95.0	95.1	7.5	7.5	7.1		4		78				<0.2		2.0	
						6.4	0.5	183	19.0		8.0		26.8		95.2		7.5		8.3		4		77				<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 16 April 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	09:05	7.2	Surface	1.0	0.5	241	22.4	22.4	8.0	8.0	23.0	23.0	87.3	87.3	6.6	6.6	3.4	4.1	5	6	74	76	808829	822094	<0.2	<0.2	2.1	2.1
						1.0	0.5	251	22.4		8.0		23.0		87.3		6.6		3.4		5		75				<0.2		2.2	
					Middle	3.6	0.6	228	22.3	22.3	8.1	8.1	23.8	23.8	87.4	87.4	6.6		4.3		6		76				<0.2		2.1	
						3.6	0.6	247	22.3		8.1		23.8		87.4		6.6		4.3		4		77				<0.2		2.0	
					Bottom	6.2	0.7	234	22.2	22.2	8.1	8.1	25.1	25.1	87.6	87.6	6.6	6.6	4.6		10		78				<0.2		2.0	
						6.2	0.7	240	22.2		8.1		25.1		87.6		6.6		4.6		8		78				<0.2		2.0	
IM10	Cloudy	Moderate	08:55	7.5	Surface	1.0	0.5	253	22.3	22.3	8.0	8.0	23.6	23.6	87.9	87.9	6.7	6.7	3.8	10.9	4	5	76	77	809841	822240	<0.2	<0.2	2.0	2.0
						1.0	0.6	266	22.3		8.0		23.6		87.9		6.7		3.8		3		75				<0.2		1.9	
					Middle	3.8	0.6	261	22.2	22.2	8.0	8.0	24.9	24.9	87.5	87.5	6.6		8.7		3		77				<0.2		2.0	
						3.8	0.6	286	22.2		8.0		24.9		87.5		6.6		8.7		5		77				<0.2		2.0	
					Bottom	6.5	0.5	223	22.1	22.1	8.0	8.0	26.4	26.4	87.6	87.6	6.6	6.6	20.2		6		77				<0.2		2.0	
						6.5	0.5	225	22.1		8.0		26.4		87.6		6.6		20.2		8		78				<0.2		1.9	
IM11	Cloudy	Moderate	08:43	8.2	Surface	1.0	0.4	276	22.3	22.3	8.0	8.0	24.0	24.0	88.1	88.1	6.7	6.7	5.0	5.9	3	4	73	74	810531	821501	<0.2	<0.2	1.7	1.9
						1.0	0.5	300	22.3		8.0		24.0		88.1		6.7		5.0		4		73				<0.2		1.8	
					Middle	4.1	0.5	279	22.1	22.1	8.0	8.0	25.0	25.0	88.3	88.3	6.7		7.4		5		74				<0.2		1.8	
						4.1	0.5	298	22.1		8.0		25.0		88.3		6.7		7.4		4		74				<0.2		1.9	
					Bottom	7.2	0.5	281	22.1	22.1	8.0	8.0	27.4	27.4	88.7	88.7	6.6	6.6	5.2		5		75				<0.2		2.2	
						7.2	0.5	297	22.1		8.0		27.4		88.7		6.6		5.2		5		75				<0.2		2.1	
IM12	Cloudy	Moderate	08:32	9.4	Surface	1.0	0.6	253	22.3	22.3	8.0	8.0	24.4	24.4	88.3	88.3	6.7	6.6	4.5	6.8	3	4	75	76	811513	821162	<0.2	<0.2	1.8	1.8
						1.0	0.7	255	22.3		8.0		24.4		88.3		6.7		4.5		5		74				<0.2		1.8	
					Middle	4.7	0.8	270	22.1	22.1	8.0	8.0	26.6	26.6	87.4	87.4	6.5		7.6		3		75				<0.2		1.6	
						4.7	0.9	286	22.1		8.0		26.6		87.4		6.5		7.6		4		76				<0.2		1.7	
					Bottom	8.4	0.5	258	22.0	22.0	8.0	8.0	27.7	27.7	87.6	87.6	6.5	6.5	8.3		3		76				<0.2		1.9	
						8.4	0.6	278	22.0		8.0		27.7		87.6		6.5		8.3		4		77				<0.2		1.8	
IM13	Cloudy	Moderate	10:56	7.0	Surface	1.0	0.8	74	18.9	18.9	7.8	7.8	25.8	25.8	96.5	96.5	7.7	7.7	2.6	5.6	<2	2		-	806233	820085	-	-	-	-
						1.0	0.8	78	18.9		7.8		25.8		96.5		7.7		2.7		2						-		-	
					Middle	3.5	0.7	64	18.5	18.5	7.9	7.9	27.3	27.3	94.9	94.9	7.6		5.8		3						-		-	
						3.5	0.7	66	18.5		7.9		27.3		94.9		7.6		5.9		3						-		-	
					Bottom	6.0	0.5	109	18.4	18.4	7.9	7.9	27.6	27.6	95.1	95.2	7.6	7.6	8.4		2						-		-	
						6.0	0.5	116	18.4		7.9		27.6		95.2		7.6		8.4		2						-		-	
SR2	Cloudy	Moderate	08:15	5.2	Surface	1.0	0.2	267	22.1	22.1	8.0	8.0	27.1	27.1	87.7	87.7	6.5	6.5	6.2	5.8	4	4	74	75	814168	821463	<0.2	<0.2	1.1	1.2
						1.0	0.2	286	22.1		8.0		27.1		87.7		6.5		6.2		3		74				<0.2		1.1	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-						-		-	
						-	-	-	-		-		-		-		-		-		-						-		-	
					Bottom	4.2	0.2	274	22.0	22.0	8.0	8.0	27.7	27.7	88.6	88.6	6.6	6.6	5.3		3		75				<0.2		1.2	
						4.2	0.2	286	22.0		8.0		27.7		88.6		6.6		5.3		4		75				<0.2		1.2	
SR3	Cloudy	Moderate	09:26	9.9	Surface	1.0	0.4	102	19.4	19.4	7.8	7.8	23.2	23.2	94.4	94.5	7.6	7.6	1.9	5.0	3	3		-	807577	822147	-	-	-	-
						1.0	0.5	108	19.4		7.8		23.2		94.5		7.6		1.9		2						-		-	
					Middle	5.0	0.6	82	19.2	19.2	7.9	7.9	25.9	25.9	95.7	95.7	7.6		4.8		3						-		-	
						5.0	0.6	88	19.2		7.9		25.9		95.6		7.6		5.0		3						-		-	
					Bottom	8.9	0.5	109	18.9	18.9	7.9	7.9	26.9	26.9	95.0	95.0	7.5	7.5	8.2		3						-		-	
						8.9	0.5	117	18.9		7.9		26.9		95.0		7.5		8.2		3						-		-	
SR4A	Cloudy	Moderate	09:15	6.3	Surface	1.0	0.3	194	18.9	18.9	7.8	7.8	25.9	25.9	94.9	94.9	7.6	7.6	3.7	6.3	4	5		-	807802	817189	-	-	-	-
						1.0	0.3	202	18.9		7.8		25.9		94.9		7.6		3.7		5						-		-	
					Middle	3.2	0.4	204	18.7	18.7	7.8	7.8	26.5	26.5	94.2	94.2	7.5		7.2		5						-		-	
						3.2	0.4	205	18.7		7.8		26.5		94.2		7.5		7.4		6						-		-	
					Bottom	5.3	0.4	223	18.6	18.6	7.8	7.8	27.0	27.0	93.9	93.9	7.5	7.5	7.8		6						-		-	
						5.3	0.4	229	18.6		7.8		27.0		93.9		7.5		7.8		6						-		-	
SR5A	Cloudy	Calm	08:55	4.7	Surface	1.0	0.4	206	18.8	18.8	7.8	7.8	26.2	26.2	94.0	94.0	7.5	7.5	4.4	5.5	5	5		-	810700	816593	-	-	-	-
						1.0	0.4	225	18.8		7.8		26.2		94.0		7.5		4.4		3						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-						-		-	
						-	-	-	-		-		-		-		-		-		-						-		-	
					Bottom	3.7	0.3	219	18.8	18.8	7.6	7.6	26.2	26.2	93.6	93.6	7.5	7.5	6.5		5						-		-	
						3.7	0.3	229	18.8		7.6		26.2		93.6		7.5		6.6		6						-		-	
SR6	Cloudy	Calm	08:32	4.2	Surface	1.0	0.2	287	18.8	18.8	7.8	7.8	24.5	24.5	93.0	93.1	7.5	7.5	3.5	3.4	3	3		-	814671	817899	-	-	-	-
						1.0	0.2	300	18.8		7.8		24.5		93.1		7.5		3.5		3						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-						-		-	
						-	-	-	-		-		-		-		-		-		-						-		-	
					Bottom	3.2	0.2	286	18.7	18.7	7.8	7.8	24.7	24.7	93.7	93.7	7.5	7.6	3.3		3						-		-	
						3.2	0.2	293	18.7		7.8		24.7		93.7		7.6		3.3		3						-		-	
SR7	Cloudy	Moderate	07:30	17.3	Surface	1.0	0.2	203	18.6	18.6	7.7	7.7	22.5	22.5	92.0	92.0	7.5	7.5	1.5	1.4	3	3		-	823754	823636	-	-	-	-
						1.0	0.2	219	18.6		7.7		22.5		92.0		7.5		1.4		4						-		-	
					Middle	8.7	0.2	185	18.3	18.3	7.7	7.7	23.4	23.4	89.9	89.9	7.4		1.3		3						-		-	
						8.7	0.3	198	18.3		7.7		23.4		89.9		7.4		1.3		2						-		-	
					Bottom	16.3	0.2	162	18.3	18.3	7.7	7.7	22.8	22.8	90.9	91.0	7.5	7.5	1.5		3						-		-	
						16.3	0.2	163	18.3		7.7		22.7		91.0		7.5		1.5		3						-		-	
SR8	Cloudy	Moderate	08:25	5.5	Surface	1.0	0.6	271	22.3	22.3	8.0	8.0	24.6	24.6	89.5	89.5	6.8	6.8	3.4	3.7	3	3		-	811609	820417	-	-	-	-
						1.0	0.6	273	22.3		8.0		24.6		89.5		6.8		3.5		3						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-						-		-	
						-	-	-	-		-		-		-		-		-		-						-		-	
					Bottom	4.5	0.5	260	22.2	22.2	8.0	8.0	26.0	26.0	89.8	89.8	6.7	6.7	4.0		3						-		-	
						4.5	0.5	276	22.2		8.0		26.0		89.8		6.7		4.0		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 16 April 17 during Mid-Ebb tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Sunny	Moderate	15:35	7.2	Surface	1.0	0.4	175	19.4	19.4	7.9	7.9	27.4	27.4	104.0	104.0	8.1	8.0	3.3	4.7	4	5	75	76	804265	815620	<0.2	<0.2	1.5	1.6
						1.0	0.5	191	19.4		7.9		27.4		103.9		8.1		3.3		5		75				<0.2		1.7	
					Middle	3.6	0.5	164	19.4	19.4	7.9	7.9	28.3	28.3	101.5	101.5	7.9		3.4		7		76				<0.2		1.5	
						3.6	0.5	168	19.4		7.9		28.3		101.5		7.9		3.5		6		76				<0.2		1.4	
					Bottom	6.2	0.4	151	18.9	18.9	7.9	7.9	29.2	29.2	100.4	100.5	7.9	7.9	7.3		5		77				<0.2		1.5	
						6.2	0.5	159	18.9		7.9		29.2		100.5		7.9		7.3		5		77				<0.2		1.7	
C2	Sunny	Moderate	14:14	9.8	Surface	1.0	0.3	110	19.0	19.0	7.8	7.8	24.9	24.9	93.9	93.9	7.5	7.5	4.1	7.0	5	6	75	78	806944	825682	<0.2	<0.2	2.0	2.2
						1.0	0.3	112	19.0		7.8		24.8		93.9		7.5		4.1		5		76				<0.2		2.0	
					Middle	4.9	0.2	154	18.6	18.6	7.8	7.8	27.4	27.4	93.9	93.9	7.5		8.3		5		78				<0.2		2.3	
						4.9	0.2	164	18.6		7.8		27.4		93.9		7.5		8.3		7		78				<0.2		2.2	
					Bottom	8.8	0.2	221	18.6	18.6	7.8	7.8	27.8	27.8	93.1	93.1	7.4	7.4	8.6		6		79				<0.2		2.2	
						8.8	0.2	242	18.6		7.8		27.8		93.1		7.4		8.6		6		79				<0.2		2.3	
C3	Sunny	Moderate	15:50	9.0	Surface	1.0	0.9	109	22.4	22.4	8.1	8.1	26.7	26.7	88.9	88.9	6.6	6.6	5.3	5.5	6	6	74	75	817785	822109	<0.2	<0.2	1.8	1.9
						1.0	1.0	116	22.4		8.1		26.7		88.9		6.6		5.3		6		74				<0.2		1.8	
					Middle	4.5	0.7	109	22.1	22.1	8.0	8.0	28.6	28.6	87.5	87.5	6.5		5.5		6		76				<0.2		2.2	
						4.5	0.8	113	22.1		8.0		28.6		87.5		6.5		5.5		6		75				<0.2		2.2	
					Bottom	8.0	0.3	140	22.1	22.1	8.0	8.0	28.7	28.7	87.4	87.4	6.5	6.5	5.6		6		76				<0.2		1.8	
						8.0	0.3	144	22.1		8.0		28.7		87.4		6.5		5.6		6		77				<0.2		1.8	
IM1	Sunny	Moderate	15:22	8.2	Surface	1.0	0.4	169	19.1	19.1	7.9	7.9	28.4	28.4	99.2	99.2	7.8	7.7	2.1	3.9	6	5	73	74	806451	818351	<0.2	<0.2	1.2	1.1
						1.0	0.5	181	19.1		7.9		28.4		99.2		7.8		2.2		5		74				<0.2		1.1	
					Middle	4.1	0.4	170	18.6	18.6	7.9	7.9	29.7	29.7	96.0	96.0	7.5		3.4		4		74				<0.2		1.0	
						4.1	0.4	173	18.6		7.9		29.7		96.0		7.5		3.5		5		75				<0.2		1.1	
					Bottom	7.2	0.3	173	18.6	18.6	7.9	7.9	30.1	30.1	93.9	93.9	7.3	7.3	6.1		4		75				<0.2		1.1	
						7.2	0.4	180	18.6		7.9		30.1		93.8		7.3		6.1		5		75				<0.2		1.1	
IM2	Sunny	Moderate	15:18	8.4	Surface	1.0	0.4	165	19.6	19.6	7.9	7.9	27.7	27.7	97.9	97.9	7.6	7.5	2.9	4.1	4	5	73	74	806202	818852	<0.2	<0.2	1.5	1.7
						1.0	0.4	168	19.6		7.9		27.7		97.8		7.6		3.0		5		73				<0.2		1.6	
					Middle	4.2	0.4	173	18.6	18.6	8.0	8.0	29.9	29.9	94.3	94.3	7.4		4.8		5		74				<0.2		1.6	
						4.2	0.5	183	18.6		8.0		29.9		94.3		7.4		4.9		6		74				<0.2		1.6	
					Bottom	7.4	0.3	156	18.6	18.6	8.0	8.0	30.2	30.2	93.9	93.9	7.3	7.3	4.5		4		75				<0.2		1.8	
						7.4	0.3	158	18.6		8.0		30.2		93.9		7.3		4.4		4		76				<0.2		2.0	
IM3	Sunny	Moderate	15:10	8.4	Surface	1.0	0.4	149	20.4	20.4	7.9	7.9	26.5	26.6	104.3	104.3	8.1	7.8	2.1	3.7	5	5	74	76	806031	819411	<0.2	<0.2	1.3	1.3
						1.0	0.4	159	20.4		7.9		26.6		104.2		8.0		2.1		5		75				<0.2		1.2	
					Middle	4.2	0.5	147	19.1	19.2	7.9	7.9	28.8	28.8	97.2	97.2	7.6		3.7		5		75				<0.2		1.3	
						4.2	0.5	160	19.2		7.9		28.8		97.1		7.6		3.7		4		76				<0.2		1.4	
					Bottom	7.4	0.3	164	18.3	18.3	7.9	7.9	30.5	30.5	95.3	95.4	7.5	7.5	5.4		5		76				<0.2		1.2	
						7.4	0.3	173	18.3		7.9		30.5		95.4		7.5		5.4		5		77				<0.2		1.5	
IM4	Sunny	Moderate	15:02	7.0	Surface	1.0	0.6	177	19.4	19.4	7.8	7.8	25.9	25.9	97.5	97.5	7.7	7.6	3.4	4.7	5	8	74	75	805041	819570	<0.2	<0.2	2.0	1.9
						1.0	0.6	189	19.4		7.8		25.9		97.5		7.7		3.4		6		74				<0.2		2.1	
					Middle	3.5	0.5	177	18.4	18.4	7.9	7.9	29.8	29.8	94.8	94.8	7.5		5.5		9		74				<0.2		2.0	
						3.5	0.6	181	18.4		7.9		29.8		94.8		7.5		5.5		7		75				<0.2		2.0	
					Bottom	6.0	0.3	188	18.3	18.3	7.9	7.9	30.6	30.6	93.7	93.7	7.4	7.4	5.2		9		76				<0.2		1.5	
						6.0	0.3	204	18.3		7.9		30.6		93.7		7.4		5.0		9		77				<0.2		1.8	
IM5	Sunny	Moderate	14:55	7.8	Surface	1.0	0.5	162	18.5	18.5	7.8	7.8	29.2	29.2	94.9	94.9	7.5	7.5	7.1	8.0	7	6	74	75	804942	820564	<0.2	<0.2	1.4	1.5
						1.0	0.5	170	18.5		7.8		29.1		94.8		7.5		7.1		7		73				<0.2		1.4	
					Middle	3.9	0.4	167	18.3	18.3	7.8	7.8	29.7	29.7	94.1	94.1	7.4		8.2		6		74				<0.2		1.4	
						3.9	0.4	173	18.3		7.8		29.7		94.1		7.4		8.2		6		75				<0.2		1.6	
					Bottom	6.8	0.4	168	18.3	18.3	7.9	7.9	30.1	30.1	93.9	93.9	7.4	7.4	8.8		5		75				<0.2		1.7	
						6.8	0.4	182	18.3		7.9		30.1		93.9		7.4		8.8		5		76				<0.2		1.6	
IM6	Sunny	Moderate	14:39	7.3	Surface	1.0	0.4	172	20.4	20.4	7.9	7.9	26.6	26.6	101.6	101.5	7.8	7.7	2.6	5.9	6	6	75	76	805825	821060	<0.2	<0.2	1.3	1.4
						1.0	0.5	183	20.4		7.9		26.6		101.3		7.8		2.7		7		75				<0.2		1.3	
					Middle	3.7	0.4	157	18.5	18.5	7.9	7.9	29.6	29.6	94.8	94.8	7.5		6.3		5		76				<0.2		1.4	
						3.7	0.4	168	18.5		7.9		29.6		94.8		7.5		6.4		6		76				<0.2		1.4	
					Bottom	6.3	0.3	166	18.4	18.4	7.9	7.9	29.9	29.9	94.1	94.1	7.4	7.4	8.5		5		77				<0.2		1.5	
						6.3	0.4	169	18.4		7.9		29.9		94.1		7.4		8.6		6		77				<0.2		1.2	
IM7	Sunny	Moderate	14:29	8.2	Surface	1.0	0.5	170	19.8	19.8	7.9	7.9	27.0	27.0	104.5	104.5	8.1	8.0	1.9	3.4	4	5	74	75	806835	821349	<0.2	<0.2	1.6	1.4
						1.0	0.5	170	19.8		7.9		27.0		104.5		8.1		1.9		6		74				<0.2		1.6	
					Middle	4.1	0.4	160	19.4	19.4	7.9	7.9	27.8	27.8	100.8	100.8	7.9		3.0		7		75				<0.2		1.2	
						4.1	0.4	173	19.4		7.9		27.8		100.7		7.9		3.0		5		75				<0.2		1.3	
					Bottom	7.2	0.4	161	18.6	18.6	7.9	7.9	29.6	29.6	97.7	97.7	7.7	7.7	5.3		5		76				<0.2		1.5	
						7.2	0.4	163	18.6		7.9		29.6		97.7		7.7		5.2		5		76				<0.2		1.2	
IM8	Sunny	Moderate	14:21	8.0	Surface	1.0	0.4	157	19.3	19.4	7.8	7.8	25.3	25.3	94.7	94.8	7.5	7.6	3.3	3.6	5	5	74	76	807856	821695	<0.2	<0.2	2.4	2.3
						1.0	0.4	158	19.4		7.8		25.2		94.8		7.5		3.3		5		75				<0.2		2.4	
					Middle	4.0	0.3	124	18.7	18.7	7.8	7.8	27.8	27.8	96.4	96.4	7.6		4.1		6		75				<0.2		2.1	
						4.0	0.3	128	18.7		7.8		27.8		96.4		7.6		4.1		4		76				<0.2		2.2	
					Bottom	7.0	0.3	141	18.7	18.7	7.9	7.9	29.1	29.2	95.4	95.4	7.5	7.5	3.4		4		76				<0.2		2.2	
						7.0	0.4	148	18.7		7.9		29.2		95.3		7.5		3.4		6		77				<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 16 April 17 during Mid-Ebb tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Sunny	Moderate	14:31	6.6	Surface	1.0	0.7	131	22.8	22.8	8.1	8.1	25.2	25.2	94.4	94.4	7.0	7.0	5.1	6.4	4	6	73	74	808828	822094	<0.2	<0.2	2.2	1.9
						1.0	0.7	143	22.8		8.1		25.2		94.4		7.0		5.1		6		73				<0.2		2.1	
					Middle	3.3	0.6	134	22.2	22.2	8.1	8.1	27.7	27.7	92.6	92.7	6.9		7.0		4		74				<0.2		2.3	
						3.3	0.6	137	22.2		8.1		27.7		92.7		6.9		7.0		5		74				<0.2		2.2	
					Bottom	5.6	0.5	104	22.1	22.1	8.1	8.1	28.3	28.3	92.5	92.5	6.9	6.9	7.0		10		75				<0.2		1.5	
						5.6	0.6	108	22.1		8.1		28.3		92.5		6.9		7.0		9		76				<0.2		1.3	
IM10	Sunny	Moderate	14:42	7.0	Surface	1.0	0.5	147	23.0	23.0	8.0	8.0	24.5	24.5	94.0	94.0	7.0	7.0	3.7	5.2	6	5	73	74	809841	822240	<0.2	<0.2	2.0	2.1
						1.0	0.5	148	23.0		8.0		24.5		94.0		7.0		3.7		4		74				<0.2		2.0	
					Middle	3.5	0.6	153	22.5	22.5	8.1	8.1	26.1	26.1	92.0	92.0	6.9		5.5		6		74				<0.2		2.1	
						3.5	0.6	157	22.5		8.1		26.1		92.0		6.9		5.5		4		74				<0.2		2.2	
					Bottom	6.0	0.5	161	22.4	22.4	8.1	8.1	26.6	26.6	91.2	91.2	6.8	6.8	6.3		4		75				<0.2		2.0	
						6.0	0.5	166	22.4		8.1		26.6		91.2		6.8		6.3		5		75				<0.2		2.2	
IM11	Sunny	Moderate	14:53	7.8	Surface	1.0	0.6	123	22.7	22.7	8.1	8.1	25.0	25.0	93.6	93.6	7.0	7.0	4.5	5.1	5	5	74	76	810534	821501	<0.2	<0.2	1.4	1.6
						1.0	0.6	126	22.7		8.1		25.0		93.6		7.0		4.5		4		75				<0.2		1.6	
					Middle	3.9	0.5	106	22.5	22.5	8.1	8.1	25.9	25.9	92.8	92.8	6.9		5.5		4		75				<0.2		1.6	
						3.9	0.5	114	22.5		8.1		25.9		92.8		6.9		5.5		5		76				<0.2		1.5	
					Bottom	6.8	0.4	83	22.5	22.5	8.1	8.1	27.1	27.1	91.6	91.6	6.8	6.8	5.3		6		77				<0.2		1.7	
						6.8	0.4	87	22.5		8.1		27.1		91.6		6.8		5.3		8		77				<0.2		1.5	
IM12	Sunny	Moderate	15:05	8.7	Surface	1.0	0.9	110	22.9	22.9	8.1	8.1	24.6	24.6	96.9	96.9	7.2	7.2	4.9	5.8	4	5	75	75	811501	821162	<0.2	<0.2	1.8	1.8
						1.0	0.9	119	22.9		8.1		24.6		96.9		7.2		4.9		4		75				<0.2		1.8	
					Middle	4.4	1.1	122	22.7	22.7	8.1	8.1	27.1	27.1	95.9	95.9	7.1		7.3		5		75				<0.2		1.8	
						4.4	1.2	122	22.7		8.1		27.1		95.9		7.1		7.3		7		75				<0.2		1.8	
					Bottom	7.7	0.8	124	22.8	22.8	8.1	8.1	26.9	26.9	96.0	96.0	7.1	7.1	5.1		6		76				<0.2		1.9	
						7.7	0.9	125	22.8		8.1		26.9		96.0		7.1		5.1		5		76				<0.2		1.7	
IM13	Sunny	Moderate	14:44	7.0	Surface	1.0	0.3	164	20.0	20.0	7.9	7.9	26.8	26.8	102.5	102.5	8.0	7.8	1.8	4.0	6	6		-	806111	820085	-	-	-	-
						1.0	0.3	177	20.0		7.9		26.8		102.4		8.0		1.8		7						-		-	
					Middle	3.5	0.3	154	18.9	18.9	7.9	7.9	28.3	28.3	97.2	97.2	7.6		3.0		7						-		-	
						3.5	0.3	159	18.9		7.9		28.3		97.2		7.6		3.1		7						-		-	
					Bottom	6.0	0.3	148	18.4	18.4	7.9	7.9	30.4	30.4	94.0	94.0	7.4	7.4	7.0		6						-		-	
						6.0	0.3	159	18.4		7.9		30.4		94.0		7.4		7.0		5						-		-	
SR2	Sunny	Moderate	15:30	5.2	Surface	1.0	0.8	95	22.8	22.8	8.1	8.1	25.9	25.9	93.2	93.2	6.9	6.9	4.1	4.4	6	6	76	76	814148	821463	<0.2	<0.2	1.9	1.7
						1.0	0.8	101	22.8		8.1		25.9		93.2		6.9		4.1		4		75				<0.2		2.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-						-		-	
						-	-	-	-		-		-		-		-		-		-						-		-	
					Bottom	4.2	1.0	90	22.7	22.7	8.1	8.1	26.1	26.1	91.6	91.6	6.8	6.8	4.7		7		77				<0.2		1.5	
						4.2	1.0	93	22.7		8.1		26.1		91.6		6.8		4.7		6		77				<0.2		1.5	
SR3	Sunny	Moderate	14:30	8.9	Surface	1.0	0.5	151	18.8	18.8	7.8	7.8	25.9	25.9	93.5	93.5	7.5	7.5	4.6	6.9	5	4		-	807575	822147	-	-	-	-
						1.0	0.6	164	18.8		7.8		25.9		93.4		7.5		4.7		4						-		-	
					Middle	4.5	0.4	162	18.6	18.6	7.8	7.8	27.9	27.9	93.9	93.9	7.4		8.0		4						-		-	
						4.5	0.4	169	18.6		7.8		27.9		93.9		7.4		8.0		4						-		-	
					Bottom	7.9	0.3	144	18.6	18.6	7.8	7.8	28.5	28.6	94.3	94.4	7.4	7.4	8.2		3						-		-	
						7.9	0.3	154	18.6		7.8		28.6		94.4		7.4		8.1		4						-		-	
SR4A	Sunny	Moderate	15:51	8.3	Surface	1.0	0.3	140	19.6	19.6	7.9	7.9	27.7	27.7	100.5	100.5	7.8	7.8	6.0	6.8	7	7		-	807803	817189	-	-	-	-
						1.0	0.3	151	19.6		7.9		27.7		100.4		7.8		6.1		6						-		-	
					Middle	4.2	0.3	133	19.2	19.2	7.9	7.9	28.4	28.4	98.6	98.6	7.7		6.9		6						-		-	
						4.2	0.3	144	19.2		7.9		28.4		98.6		7.7		7.0		8						-		-	
					Bottom	7.3	0.3	137	19.1	19.1	7.9	7.9	28.5	28.5	98.8	98.8	7.7	7.7	7.4		8						-		-	
						7.3	0.3	144	19.1		7.9		28.5		98.8		7.7		7.4		7						-		-	
SR5A	Sunny	Calm	16:07	4.2	Surface	1.0	0.1	172	20.3	20.3	7.9	7.9	27.7	27.7	105.7	105.6	8.1	8.1	4.5	5.5	7	7		-	810696	816593	-	-	-	-
						1.0	0.1	177	20.3		7.9		27.7		105.5		8.1		4.5		7						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-						-		-	
						-	-	-	-		-		-		-		-		-		-						-		-	
					Bottom	3.2	0.1	175	19.3	19.3	7.9	7.9	27.8	27.8	99.2	99.2	7.8	7.8	6.5		6						-		-	
						3.2	0.1	175	19.3		7.9		27.8		99.2		7.8		6.5		7						-		-	
SR6	Sunny	Calm	16:30	4.1	Surface	1.0	0.1	95	19.6	19.6	7.9	7.9	26.7	26.8	100.0	100.0	7.8	7.8	4.0	4.1	6	6		-	814670	817899	-	-	-	-
						1.0	0.1	99	19.6		7.9		26.8		99.9		7.8		4.1		4						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-						-		-	
						-	-	-	-		-		-		-		-		-		-						-		-	
					Bottom	3.1	0.1	129	19.2	19.2	7.8	7.8	27.2	27.2	97.6	97.6	7.7	7.7	4.2		7						-		-	
						3.1	0.1	132	19.2		7.8		27.2		97.6		7.7		4.0		5						-		-	
SR7	Sunny	Moderate	16:21	15.8	Surface	1.0	0.4	97	19.1	19.1	7.8	7.8	27.7	27.7	95.2	95.2	7.5	7.5	2.1	2.7	4	7		-	823736	823636	-	-	-	-
						1.0	0.5	104	19.1		7.8		27.7		95.1		7.5		2.1		5						-		-	
					Middle	7.9	0.3	71	19.1	19.1	7.8	7.8	27.8	27.8	94.2	94.2	7.4		2.7		9						-		-	
						7.9	0.4	75	19.1		7.8		27.8		94.2		7.4		2.7		8						-		-	
					Bottom	14.8	0.2	94	19.0	19.0	7.8	7.8	27.9	27.9	93.2	93.3	7.3	7.3	3.4		8						-		-	
						14.8	0.3	102	19.0		7.8		27.9		93.3		7.3		3.4		7						-		-	
SR8	Sunny	Moderate	15:14	5.2	Surface	1.0	0.4	198.0	22.9	22.9	8.1	8.1	24.9	24.9	96.1	96.1	7.2	7.2	3.5	3.6	6	5		-	811585	820417	-	-	-	-
						1.0	0.4	198.0	22.9		8.1		24.9		96.1		7.2		3.5		4						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-						-		-	
						-	-	-	-		-		-		-		-		-		-						-		-	
					Bottom	4.2	0.3	171.0	23.0	23.0	8.1	8.1	26.3	26.3	94.5	94.5	7.0	7.0	3.7		6						-		-	
						4.2	0.4	177.0	23.0		8.1		26.3		94.5		7.0		3.7		5						-		-	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 18 April 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	9.2	Surface	1.0	0.4	119	24.3	24.4	8.1	8.1	22.7	22.5	108.1	108.0	8.5	7.8	2.3	4.3	5	7	73	74	804244	815620	<0.2	<0.2	2.1	1.4
						1.0	0.4	128	24.4		8.1		22.2		107.9		8.6		2.2		4		77				<0.2		2.0	
					Middle	4.6	0.4	121	22.8	22.8	8.0	8.0	27.7	27.7	89.5	89.6	7.1		4.4		8		73				<0.2		1.3	
						4.6	0.4	132	22.8		8.0		27.6		89.6		7.1		4.5		7		72				<0.2		1.2	
					Bottom	8.2	0.4	168	22.3	22.3	8.0	8.0	29.1	29.1	88.8	88.8	7.0	7.0	6.3		8		73				<0.2		0.9	
						8.2	0.4	173	22.3		8.0		29.1		88.8		7.0		6.3		9		74				<0.2		0.8	
C2	Cloudy	Moderate	10:44	12.1	Surface	1.0	0.4	123	24.9	24.9	8.1	8.1	19.5	19.5	98.6	98.4	7.9	7.6	2.6	3.5	5	6	76	75	806941	825682	<0.2	<0.2	2.0	1.8
						1.0	0.4	127	24.9		8.1		19.5		98.2		7.8		2.7		4		77				<0.2		2.0	
					Middle	6.1	0.4	132	23.7	23.7	8.0	8.0	21.7	21.7	90.0	90.0	7.3		4.3		5		74				<0.2		2.2	
						6.1	0.4	133	23.6		8.0		21.7		89.9		7.3		4.4		3		74				<0.2		2.3	
					Bottom	11.1	0.4	170	23.5	23.5	8.0	8.0	26.2	26.2	90.3	90.4	7.1	7.1	3.6		10		75				<0.2		1.2	
						11.1	0.5	183	23.5		8.0		26.1		90.4		7.1		3.5		8		76				<0.2		1.3	
C3	Cloudy	Moderate	09:00	12.8	Surface	1.0	0.3	132	23.9	23.9	8.1	8.1	24.7	24.7	114.8	114.8	8.4	8.2	1.8	2.2	3	5	78	75	817810	822109	<0.2	<0.2	2.5	2.4
						1.0	0.3	143	23.9		8.1		24.7		114.7		8.4		1.9		5		74				<0.2		2.4	
					Middle	6.4	0.4	138	23.8	23.8	8.1	8.1	24.8	24.8	109.0	109.0	8.0		2.0		4		74				<0.2		2.2	
						6.4	0.5	150	23.8		8.1		24.8		109.0		8.0		2.0		5		75				<0.2		2.2	
					Bottom	11.8	0.4	153	22.9	22.9	8.1	8.1	29.4	29.4	108.9	108.9	7.9	7.9	2.6		5		75				<0.2		2.4	
						11.8	0.4	156	22.9		8.1		29.4		108.9		7.9		2.6		6		76				<0.2		2.5	
IM1	Cloudy	Moderate	10:42	7.8	Surface	1.0	0.4	126	24.8	24.8	8.1	8.1	19.3	19.3	112.2	112.2	9.0	8.6	1.8	3.0	5	6	73	74	806468	818351	<0.2	<0.2	2.4	2.3
						1.0	0.4	135	24.8		8.1		19.3		112.2		9.0		1.8		4		73				<0.2		2.2	
					Middle	3.9	0.3	139	24.3	24.3	8.0	8.0	20.3	20.3	100.9	100.9	8.1		2.5		6		74				<0.2		2.4	
						3.9	0.3	146	24.3		8.0		20.3		100.8		8.1		2.5		5		74				<0.2		2.4	
					Bottom	6.8	0.6	144	23.3	23.3	8.0	8.0	25.9	26.0	94.8	94.9	7.5	7.5	4.7		8		73				<0.2		2.2	
						6.8	0.6	148	23.3		8.0		26.0		94.9		7.5		4.7		9		74				<0.2		2.2	
IM2	Cloudy	Moderate	10:51	8.7	Surface	1.0	0.3	210	24.7	24.7	8.1	8.1	19.4	19.4	112.3	111.1	9.0	8.2	2.3	5.1	5	6	76	74	806187	818852	<0.2	<0.2	2.4	2.1
						1.0	0.3	229	24.7		8.1		19.4		109.9		8.8		2.6		6		76				<0.2		2.1	
					Middle	4.4	0.3	155	23.7	23.7	8.0	8.0	23.9	24.0	94.3	94.3	7.5		5.2		5		73				<0.2		2.3	
						4.4	0.3	157	23.7		8.0		24.0		94.3		7.5		5.3		7		74				<0.2		2.3	
					Bottom	7.7	0.3	145	23.0	23.0	8.0	8.0	27.5	27.5	93.7	93.8	7.4	7.4	7.6		5		73				<0.2		1.7	
						7.7	0.3	158	23.0		8.0		27.4		93.9		7.4		7.6		7		74				<0.2		1.9	
IM3	Cloudy	Moderate	10:59	9.0	Surface	1.0	0.3	234	24.5	24.5	8.1	8.1	19.1	19.1	102.1	102.0	8.2	7.8	2.7	5.0	3	5	76	74	806001	819411	<0.2	<0.2	2.5	2.0
						1.0	0.3	256	24.5		8.1		19.1		101.8		8.2		2.7		2		75				<0.2		2.3	
					Middle	4.5	0.3	194	23.6	23.6	8.0	8.0	25.4	25.4	94.0	94.0	7.4		4.2		6		73				<0.2		1.9	
						4.5	0.3	212	23.6		8.0		25.3		93.9		7.4		4.3		4		73				<0.2		1.9	
					Bottom	8.0	0.3	124	22.8	22.8	8.0	8.0	27.8	27.8	92.2	92.2	7.3	7.3	7.9		7		74				<0.2		1.9	
						8.0	0.3	127	22.8		8.0		27.8		92.2		7.3		7.9		5		74				<0.2		1.7	
IM4	Cloudy	Moderate	11:09	8.3	Surface	1.0	0.4	227	24.8	24.8	8.2	8.2	19.2	19.2	98.2	97.9	7.9	7.5	3.1	6.1	4	6	75	74	805048	819570	<0.2	<0.2	1.9	2.0
						1.0	0.4	233	24.8		8.1		19.2		97.5		7.8		3.1		4		75				<0.2		2.2	
					Middle	4.2	0.3	174	23.1	23.1	8.0	8.0	26.3	26.3	90.0	90.0	7.1		4.5		5		74				<0.2		1.6	
						4.2	0.3	185	23.1		8.0		26.3		89.9		7.1		4.7		5		73				<0.2		1.6	
					Bottom	7.3	0.4	141	22.6	22.6	8.0	8.0	28.1	28.1	88.7	88.7	7.0	7.0	10.6		8		75				<0.2		2.3	
						7.3	0.4	142	22.6		8.0		28.1		88.7		7.0		10.5		10		74				<0.2		2.2	
IM5	Cloudy	Moderate	11:18	7.4	Surface	1.0	0.3	162	24.0	24.0	8.1	8.1	21.6	21.6	97.8	97.6	7.8	7.5	3.5	7.1	5	6	76	74	804927	820564	<0.2	<0.2	2.2	1.7
						1.0	0.3	177	24.0		8.1		21.6		97.4		7.8		3.5		3		75				<0.2		2.0	
					Middle	3.7	0.2	162	23.3	23.3	8.0	8.0	25.9	25.9	90.7	90.7	7.2		6.1		4		73				<0.2		1.6	
						3.7	0.3	172	23.3		8.0		25.8		90.6		7.2		6.3		5		73				<0.2		1.4	
					Bottom	6.4	0.3	152	22.6	22.6	8.0	8.0	28.1	28.1	88.2	88.2	7.0	7.0	11.7		7		74				<0.2		1.6	
						6.4	0.3	166	22.6		8.0		28.1		88.2		7.0		11.7		9		74				<0.2		1.5	
IM6	Cloudy	Moderate	11:27	7.1	Surface	1.0	0.3	194	24.2	24.2	8.1	8.1	20.5	20.5	96.8	96.6	7.8	7.4	4.8	6.6	6	9	75	74	805846	821060	<0.2	<0.2	1.7	1.4
						1.0	0.3	207	24.2		8.1		20.5		96.4		7.7		4.9		4		75				<0.2		1.7	
					Middle	3.6	0.3	163	23.4	23.4	8.0	8.0	24.9	24.9	89.4	89.4	7.1		6.9		10		73				<0.2		1.3	
						3.6	0.3	169	23.4		8.0		24.9		89.3		7.1		6.7		9		74				<0.2		1.3	
					Bottom	6.1	0.3	138	22.8	22.8	8.0	8.0	27.5	27.5	88.4	88.4	7.0	7.0	8.2		12		74				<0.2		1.2	
						6.1	0.3	150	22.8		8.0		27.5		88.4		7.0		8.2		11		73				<0.2		1.4	
IM7	Cloudy	Moderate	11:41	8.6	Surface	1.0	0.3	85	24.6	24.6	8.2	8.2	19.3	19.3	105.2	105.0	8.4	7.9	2.7	3.3	5	6	74	74	806838	821349	<0.2	<0.2	1.5	1.7
						1.0	0.3	93	24.6		8.2		19.3		104.7		8.4		2.7		4		74				<0.2		1.9	
					Middle	4.3	0.4	72	23.7	23.7	8.0	8.0	24.3	24.3	93.8	93.8	7.4		3.0		3		75				<0.2		2.1	
						4.3	0.4	76	23.7		8.0		24.3		93.7		7.4		3.1		3		75				<0.2		2.1	
					Bottom	7.6	0.4	73	23.0	23.1	8.0	8.0	26.6	26.6	92.1	92.2	7.3	7.3	4.0		10		74				<0.2		1.3	
						7.6	0.4	76	23.1		8.0		26.5		92.2		7.3		4.0		10		73				<0.2		1.3	
IM8	Cloudy	Moderate	10:19	8.7	Surface	1.0	0.5	132	24.7	24.7	8.1	8.1	19.5	19.5	103.4	103.3	8.3	7.7	2.5	4.7	3	5	74	75	807823	821695	<0.2	<0.2	2.2	2.3
						1.0	0.6	139	24.7		8.1		19.5		103.2		8.3		2.4		4		74				<0.2		2.4	
					Middle	4.4	0.6	132	23.6	23.6	8.0	8.0	23.0	23.0	88.9	88.9	7.1		5.1		5		74				<0.2		2.5	
						4.4	0.6	143	23.5		8.0		23.0		88.8		7.1		5.1		4		74				<0.2		2.4	
					Bottom	7.7	0.5	145	23.0	23.0	8.0	8.0	26.6	26.6	88.9	89.0	7.0	7.1	6.5		9		75				<0.2		2.2	
						7.7	0.5	152	23.0		8.0		26.6		89.1		7.1		6.5		7		76				<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 18 April 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	10:07	8.0	Surface	1.0	0.4	222	23.8	23.8	8.1	8.1	22.0	22.0	107.8	107.7	8.0	7.7	2.9	4.4	4	4	73	75	808808	822094	<0.2	<0.2	1.9	2.0
						1.0	0.4	241	23.7		8.1		22.0		107.6		8.0		2.9		4		74				<0.2		1.9	
					Middle	4.0	0.4	211	23.3	23.3	8.1	8.1	24.9	24.9	100.3	100.3	7.4		4.6		4		75				<0.2		1.9	
						4.0	0.4	230	23.2		8.1		24.9		100.2		7.4		4.6		4		76				<0.2		2.1	
					Bottom	7.0	0.3	162	22.7	22.7	8.1	8.1	27.6	27.6	101.0	101.0	7.4	7.4	5.8		5		76				<0.2		1.9	
						7.0	0.4	172	22.7		8.1		27.6		101.0		7.4		5.8		5		77				<0.2		2.0	
IM10	Cloudy	Moderate	09:56	7.6	Surface	1.0	0.3	234	24.5	24.5	8.2	8.2	21.1	21.1	122.4	122.4	9.1	8.6	2.1	3.3	5	4	74	75	809832	822240	<0.2	<0.2	2.2	1.9
						1.0	0.3	237	24.5		8.2		21.1		122.4		9.1		2.1		3		74				<0.2		2.1	
					Middle	3.8	0.3	180	23.7	23.7	8.1	8.1	22.5	22.5	108.3	108.3	8.1		2.8		3		75				<0.2		2.0	
						3.8	0.4	189	23.7		8.1		22.5		108.3		8.1		2.8		3		75				<0.2		1.8	
					Bottom	6.6	0.3	156	23.0	23.0	8.1	8.1	26.4	26.4	107.2	107.2	7.9	7.9	4.9		4		76				<0.2		1.7	
						6.6	0.4	157	23.0		8.1		26.4		107.2		7.9		4.9		4		76				<0.2		1.6	
IM11	Cloudy	Moderate	09:48	8.6	Surface	1.0	0.3	221	24.3	24.3	8.2	8.2	21.2	21.2	113.0	113.0	8.4	8.1	2.8	3.6	4	4	74	76	810548	821501	<0.2	<0.2	2.4	2.2
						1.0	0.3	227	24.3		8.2		21.2		113.0		8.4		2.8		3		75				<0.2		2.3	
					Middle	4.3	0.3	177	23.5	23.5	8.1	8.1	22.6	22.6	105.4	105.3	7.9		3.8		5		76				<0.2		2.4	
						4.3	0.3	184	23.5		8.1		22.6		105.1		7.8		3.8		4		76				<0.2		2.2	
					Bottom	7.6	0.3	177	23.1	23.2	8.1	8.1	26.5	26.5	111.9	113.8	8.2	8.4	4.3		4		77				<0.2		2.0	
						7.6	0.3	189	23.2		8.1		26.4		115.6		8.5		4.1		5		78				<0.2		2.0	
IM12	Cloudy	Moderate	09:37	9.8	Surface	1.0	0.4	221	24.8	24.8	8.2	8.2	21.0	21.0	122.4	122.4	9.0	8.4	2.3	3.5	5	6	73	75	811513	821162	<0.2	<0.2	2.1	2.3
						1.0	0.4	236	24.8		8.2		21.0		122.4		8.9		2.3		5		73				<0.2		2.2	
					Middle	4.9	0.4	199	23.6	23.6	8.1	8.1	22.5	22.5	108.3	108.3	7.9		3.8		4		75				<0.2		2.4	
						4.9	0.4	209	23.6		8.1		22.5		108.3		7.9		3.8		3		76				<0.2		2.1	
					Bottom	8.8	0.5	167	23.1	23.1	8.0	8.0	26.6	26.6	107.2	107.2	8.2	8.2	4.4		9		77				<0.2		2.4	
						8.8	0.6	182	23.1		8.0		26.6		107.2		8.2		4.4		10		77				<0.2		2.4	
IM13	-	-	-	-	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
SR2	Cloudy	Moderate	09:13	4.6	Surface	1.0	0.5	221	24.2	24.2	8.2	8.2	21.4	21.4	124.4	124.4	9.2	9.2	2.1	2.1	7	7	76	76	814172	821463	<0.2	<0.2	2.1	2.1
						1.0	0.5	225	24.2		8.2		21.4		124.4		9.2		2.1		8		74				<0.2		1.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.5	150	24.3	24.3	8.2	8.2	22.3	22.3	125.7	125.7	9.3	9.3	2.1		7		76				<0.2		2.2	
						3.6	0.5	152	24.3		8.2		22.3		125.7		9.3		2.1		6		76				<0.2		2.2	
SR3	Cloudy	Moderate	10:31	9.2	Surface	1.0	0.4	245	24.7	24.7	8.1	8.1	19.6	19.6	103.0	102.9	8.2	7.9	2.1	3.1	3	4		-	807588	822147	-	-	-	-
						1.0	0.4	262	24.7		8.1		19.6		102.7		8.2		2.1		3						-		-	
					Middle	4.6	0.4	229	23.9	23.9	8.0	8.0	21.6	21.6	93.5	93.5	7.5		3.0		4						-		-	
						4.6	0.4	229	23.9		8.0		21.6		93.4		7.5		3.1		4						-		-	
					Bottom	8.2	0.3	217	23.3	23.3	8.0	8.0	26.3	26.3	93.7	93.8	7.4	7.4	4.1		5						-		-	
						8.2	0.4	222	23.3		8.0		26.3		93.9		7.4		3.9		5						-		-	
SR4A	Cloudy	Moderate	09:59	9.5	Surface	1.0	0.3	111	24.6	24.6	8.0	8.0	22.0	22.0	102.3	102.3	8.1	7.6	3.5	6.4	5	6		-	807820	817189	-	-	-	-
						1.0	0.3	112	24.6		8.0		22.0		102.2		8.1		3.5		4						-		-	
					Middle	4.8	0.3	104	23.9	23.9	8.0	8.0	24.7	24.7	90.7	90.6	7.1		7.9		4						-		-	
						4.8	0.3	107	23.9		8.0		24.7		90.5		7.1		7.9		4						-		-	
					Bottom	8.5	0.3	102	23.1	23.1	8.0	8.0	27.0	27.1	89.2	89.3	7.0	7.0	7.7		9						-		-	
						8.5	0.4	108	23.1		8.0		27.1		89.3		7.0		7.7		8						-		-	
SR5A	Cloudy	Moderate	09:43	4.3	Surface	1.0	0.2	168	24.8	24.8	8.0	8.0	24.0	24.0	101.3	101.2	7.9	7.9	2.0	3.2	3	7		-	810693	816593	-	-	-	-
						1.0	0.2	183	24.8		8.0		24.0		101.1		7.9		2.0		4						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.1	183	24.3	24.3	8.0	8.0	24.9	24.9	94.0	94.0	7.3	7.3	4.4		10						-		-	
						3.3	0.1	201	24.3		8.0		24.9		94.0		7.3		4.4		9						-		-	
SR6	Cloudy	Moderate	09:20	4.7	Surface	1.0	0.2	123	24.1	24.1	8.0	8.0	22.2	22.2	96.0	96.0	7.6	7.6	5.1	4.4	6	6		-	814679	817899	-	-	-	-
						1.0	0.2	124	24.1		8.0		22.2		95.9		7.6		5.1		6						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.2	123	24.0	24.0	8.0	8.0	23.7	23.7	93.5	93.5	7.4	7.4	3.6		6						-		-	
						3.7	0.2	129	24.0		8.0		23.7		93.5		7.4		3.6		7						-		-	
SR7	Cloudy	Moderate	08:27	16.5	Surface	1.0	0.3	218	23.9	23.9	8.0	8.0	25.2	25.2	89.4	89.3	7.0	6.8	1.2	1.7	6	5		-	823732	823636	-	-	-	-
						1.0	0.3	220	23.9		8.0		25.2		89.2		7.0		1.2		5						-		-	
					Middle	8.3	0.2	179	23.2	23.2	8.0	8.0	28.1	28.1	84.1	84.1	6.6		1.5		4						-		-	
						8.3	0.2	196	23.2		8.0		28.1		84.0		6.6		1.5		4						-		-	
					Bottom	15.5	0.3	134	22.7	22.7	8.0	8.0	30.8	30.8	82.4	82.4	6.4	6.4	2.3		4						-		-	
						15.5	0.3	137	22.7		8.0		30.8		82.4		6.4		2.3		4						-		-	
SR8	Cloudy	Moderate	09:27	5.2	Surface	1.0	0.4	196	24.3	24.3	8.2	8.2	21.3	21.3	119.6	119.4	8.9	8.9	2.2	2.4	5	6		-	811583	820417	-	-	-	-
						1.0	0.4	208	24.2		8.2		21.3		119.2		8.8		2.3		6						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.3	157	23.6	23.6	8.1	8.1	22.6	22.6	116.4	116.4	8.7	8.7	2.6		5						-		-	
						4.2	0.3	161	23.6		8.1		22.6		116.4		8.7		2.6		6						-		-	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 18 April 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	17:30	8.4	Surface	1.0	0.4	149	25.4	25.4	8.3	8.3	19.8	19.9	111.7	111.2	8.8	7.9	2.3	4.2	6	6	75	74	804245	815620	<0.2	<0.2	2.4	1.5
						1.0	0.4	152	25.4		8.3		19.9		110.7		8.7		2.4		4		75				<0.2		2.3	
					Middle	4.2	0.4	134	22.5	22.5	8.0	8.0	28.6	28.6	88.9	88.9	7.0		4.6		4		76				<0.2		1.2	
						4.2	0.4	144	22.5		8.0		28.6		88.9		7.0		4.7		4		74				<0.2		1.3	
					Bottom	7.4	0.4	167	22.4	22.4	8.0	8.0	28.9	28.9	90.5	90.6	7.2	7.2	5.5		8		73				<0.2		0.9	
						7.4	0.4	182	22.4		8.0		28.9		90.6		7.2		5.5		8		73				<0.2		0.7	
C2	Cloudy	Moderate	15:46	11.8	Surface	1.0	0.3	145	25.2	25.2	8.2	8.2	18.2	18.2	114.6	114.4	9.2	8.3	3.0	5.4	5	7	76	75	806936	825682	<0.2	<0.2	2.3	2.0
						1.0	0.3	149	25.2		8.2		18.1		114.1		9.1		3.1		4		76				<0.2		2.3	
					Middle	5.9	0.4	150	23.5	23.5	8.0	8.0	23.0	23.0	93.0	93.0	7.5		4.7		6		75				<0.2		2.3	
						5.9	0.4	155	23.5		8.0		23.0		93.0		7.5		4.8		6		74				<0.2		2.0	
					Bottom	10.8	0.4	139	23.1	23.1	8.0	8.0	24.4	24.4	95.0	95.7	7.6	7.7	8.1		10		76				<0.2		1.4	
						10.8	0.4	152	23.1		8.0		24.4		96.3		7.7		8.4		11		75				<0.2		1.6	
C3	Cloudy	Moderate	17:32	11.8	Surface	1.0	0.3	146	23.8	23.8	8.1	8.1	24.8	24.8	113.1	113.1	8.3	8.0	1.9	2.1	7	6	76	75	817798	822109	<0.2	<0.2	2.4	2.8
						1.0	0.4	156	23.8		8.1		24.8		113.1		8.3		1.9		7		74				<0.2		2.4	
					Middle	5.9	0.4	148	23.6	23.6	8.1	8.1	25.1	25.1	104.5	104.5	7.7		2.2		5		73				<0.2		3.0	
						5.9	0.4	156	23.6		8.1		25.1		104.5		7.7		2.2		5		75				<0.2		3.1	
					Bottom	10.8	0.4	151	23.3	23.3	8.1	8.1	28.2	28.2	109.8	109.8	8.0	8.0	2.2		5		74				<0.2		3.0	
						10.8	0.4	162	23.3		8.1		28.2		109.8		8.0		2.2		5		76				<0.2		3.1	
IM1	Cloudy	Moderate	17:18	6.5	Surface	1.0	0.3	157	25.1	25.1	8.3	8.3	22.2	22.2	118.3	117.9	9.2	8.1	2.6	4.3	8	10	76	75	806443	818351	<0.2	<0.2	2.3	1.4
						1.0	0.4	167	25.1		8.3		22.2		117.5		9.2		2.6		7		76				<0.2		2.3	
					Middle	3.3	0.3	144	23.0	23.0	8.0	8.0	27.7	27.7	88.2	88.2	6.9		4.7		7		75				<0.2		1.2	
						3.3	0.3	144	23.0		8.0		27.7		88.2		6.9		4.7		9		74				<0.2		1.2	
					Bottom	5.5	0.3	157	23.0	23.0	8.0	8.0	27.9	27.9	88.3	88.3	6.9	6.9	5.5		14		75				<0.2		0.8	
						5.5	0.3	162	23.0		8.0		27.9		88.3		6.9		5.5		13		74				<0.2		0.8	
IM2	Cloudy	Moderate	17:11	7.9	Surface	1.0	0.4	201	24.2	24.3	8.1	8.1	23.5	23.5	106.5	106.3	8.4	7.8	2.7	4.6	6	8	74	76	806203	818852	<0.2	<0.2	2.4	2.0
						1.0	0.4	205	24.3		8.1		23.5		106.1		8.4		2.8		7		75				<0.2		2.3	
					Middle	4.0	0.4	207	22.8	22.8	8.0	8.0	27.3	27.3	91.2	91.3	7.2		4.7		6		75				<0.2		2.1	
						4.0	0.4	210	22.8		8.0		27.3		91.3		7.2		4.7		6		77				<0.2		2.0	
					Bottom	6.9	0.3	203	22.6	22.6	8.0	8.0	28.1	28.1	90.5	90.6	7.2	7.2	6.4		10		77				<0.2		1.7	
						6.9	0.3	210	22.6		8.0		28.1		90.7		7.2		6.3		12		76				<0.2		1.7	
IM3	Cloudy	Moderate	17:01	8.9	Surface	1.0	0.3	176	25.7	25.7	8.3	8.3	19.5	19.5	109.6	109.0	8.6	7.9	2.3	2.9	9	10	76	76	806034	819411	<0.2	<0.2	2.2	1.9
						1.0	0.3	185	25.7		8.3		19.5		108.3		8.5		2.4		8		75				<0.2		2.1	
					Middle	4.5	0.3	165	23.0	23.0	8.0	8.0	26.8	26.8	92.5	92.6	7.3		3.3		9		76				<0.2		1.8	
						4.5	0.3	171	23.0		8.0		26.8		92.6		7.3		3.3		11		77				<0.2		1.8	
					Bottom	7.9	0.3	155	22.8	22.8	8.0	8.0	27.3	27.3	93.6	93.7	7.4	7.4	3.0		10		77				<0.2		1.9	
						7.9	0.3	166	22.8		8.0		27.2		93.7		7.4		3.0		10		75				<0.2		1.6	
IM4	Cloudy	Moderate	17:01	8.5	Surface	1.0	0.3	195	26.6	26.6	8.4	8.4	18.8	18.8	141.4	141.1	11.0	9.2	2.9	4.3	7	7	74	76	805058	819570	<0.2	<0.2	2.2	2.1
						1.0	0.3	211	26.6		8.4		18.8		140.8		10.9		2.8		6		75				<0.2		2.3	
					Middle	4.3	0.3	178	23.3	23.3	8.0	8.0	25.9	25.9	93.1	93.1	7.4		4.0		8		75				<0.2		2.6	
						4.3	0.3	183	23.3		8.0		25.9		93.0		7.4		4.0		6		76				<0.2		2.3	
					Bottom	7.5	0.2	147	22.7	22.7	8.0	8.0	27.7	27.7	92.3	92.4	7.3	7.3	6.1		7		77				<0.2		1.4	
						7.5	0.3	148	22.7		8.0		27.7		92.4		7.3		6.2		9		76				<0.2		1.5	
IM5	Cloudy	Moderate	16:45	8.0	Surface	1.0	0.4	191	26.6	26.6	8.3	8.3	18.8	18.8	110.4	110.6	10.0	8.7	2.5	4.3	7	8	73	75	804943	820564	<0.2	<0.2	2.2	1.8
						1.0	0.4	201	26.5		8.3		18.8		110.8		9.9		2.6		7		75				<0.2		2.2	
					Middle	4.0	0.4	208	23.2	23.2	8.3	8.3	25.8	25.9	93.1	93.3	7.4		4.0		6		75				<0.2		2.0	
						4.0	0.4	210	23.2		8.3		25.9		93.4		7.4		4.1		6		76				<0.2		2.3	
					Bottom	7.0	0.4	186	22.7	22.7	8.0	8.0	27.7	27.7	92.5	92.6	7.4	7.4	6.2		13		77				<0.2		1.1	
						7.0	0.4	200	22.7		8.0		27.7		92.6		7.4		6.3		11		74				<0.2		1.0	
IM6	Cloudy	Moderate	16:39	7.4	Surface	1.0	0.3	190	25.7	25.7	8.4	8.4	19.0	19.0	147.5	147.2	11.6	9.4	2.5	5.3	5	6	75	75	805825	821060	<0.2	<0.2	2.4	2.4
						1.0	0.3	196	25.7		8.4		19.0		146.8		11.6		2.5		4		75				<0.2		2.3	
					Middle	3.7	0.3	182	22.6	22.6	8.0	8.0	27.9	27.9	90.5	90.6	7.2		6.7		6		76				<0.2		2.6	
						3.7	0.3	193	22.6		8.0		27.9		90.6		7.2		6.7		6		76				<0.2		2.4	
					Bottom	6.4	0.3	154	22.5	22.6	8.0	8.0	28.2	28.2	95.3	95.4	7.5	7.6	6.8		8		76				<0.2		2.4	
						6.4	0.3	159	22.6		8.0		28.1		95.5		7.6		6.6		7		71				<0.2		2.2	
IM7	Cloudy	Moderate	16:14	7.3	Surface	1.0	0.3	167	25.0	25.0	8.2	8.2	19.6	19.6	121.6	121.6	9.7	8.8	3.3	7.6	6	7	72	74	806829	821349	<0.2	<0.2	2.6	2.2
						1.0	0.4	171	25.0		8.2		19.5		121.5		9.7		3.4		5		74				<0.2		2.3	
					Middle	3.7	0.3	178	24.3	24.3	8.1	8.1	20.8	20.8	98.1	97.9	7.9		7.0		7		74				<0.2		2.4	
						3.7	0.3	178	24.3		8.1		20.8		97.6		7.8		7.2		5		75				<0.2		2.4	
					Bottom	6.3	0.4	133	22.6	22.6	8.0	8.0	26.9	26.9	89.4	89.5	7.1	7.1	12.3		9		76				<0.2		1.7	
						6.3	0.4	138	22.6		8.0		26.9		89.5		7.1		12.3		7		74				<0.2		1.7	
IM8	Cloudy	Moderate	16:10	8.1	Surface	1.0	0.3	133	24.7	24.8	8.1	8.1	19.0	19.0	110.8	110.6	8.9	8.2	2.8	6.2	4	9	77	75	807832	821695	<0.2	<0.2	1.2	1.7
						1.0	0.3	141	24.8		8.1		18.9		110.4		8.9		2.9		4		76				<0.2		1.7	
					Middle	4.1	0.3	176	23.4	23.4	8.0	8.0	23.9	24.0	92.4	92.4	7.4		5.7		4		74				<0.2		1.9	
						4.1	0.4	180	23.4		8.0		24.0		92.3		7.4		5.9		4		73				<0.2		1.8	
					Bottom	7.1	0.4	140	23.0	23.1	8.0	8.0	25.9	25.9	90.6	90.7	7.2	7.2	9.9		19		75				<0.2		1.8	
						7.1	0.4	148	23.1		8.0		25.8		90.7		7.2		9.7		17		74				<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 18 April 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	16:12	7.4	Surface	1.0	0.3	136	23.9	23.9	8.1	8.1	21.7	21.7	111.5	111.5	8.3	8.0	2.5	5.6	4	7	75	75	808825	822094	<0.2	<0.2	2.2	2.1
						1.0	0.3	140	23.9		8.1		21.7		111.4		8.3		2.5		6		76				<0.2		1.9	
					Middle	3.7	0.4	180	23.5	23.5	8.1	8.1	23.7	23.7	102.3	102.2	7.6		4.7		6		73				<0.2		2.2	
						3.7	0.4	180	23.5		8.1		23.7		102.1		7.6		4.8		7		74				<0.2		2.1	
					Bottom	6.4	0.3	148	22.6	22.6	8.1	8.1	27.8	27.8	97.0	97.0	7.1	7.1	9.6		8		75				<0.2		2.1	
						6.4	0.3	157	22.6		8.1		27.8		97.0		7.1		9.6		9		75				<0.2		2.1	
IM10	Cloudy	Moderate	16:23	8.4	Surface	1.0	0.5	119	24.3	24.3	8.2	8.2	21.3	21.3	115.7	115.7	8.6	8.2	2.3	3.5	6	5	76	76	809845	822240	<0.2	<0.2	2.1	2.2
						1.0	0.5	121	24.3		8.2		21.3		115.7		8.6		2.3		5		77				<0.2		2.1	
					Middle	4.2	0.4	169	23.6	23.6	8.1	8.1	22.7	22.7	103.7	103.7	7.7		3.8		5		74				<0.2		2.1	
						4.2	0.4	172	23.6		8.1		22.7		103.7		7.7		3.8		5		75				<0.2		2.2	
					Bottom	7.4	0.3	146	23.2	23.2	8.1	8.1	26.1	26.1	106.3	106.3	7.8	7.8	4.4		5		76				<0.2		2.2	
						7.4	0.3	147	23.2		8.1		26.1		106.3		7.8		4.4		4		76				<0.2		2.2	
IM11	Cloudy	Moderate	16:35	8.5	Surface	1.0	0.4	129	24.5	24.5	8.2	8.2	21.0	21.0	114.1	114.1	8.4	7.9	4.3	8.7	5	6	77	75	810545	821501	<0.2	<0.2	2.2	2.4
						1.0	0.5	140	24.5		8.2		21.0		114.1		8.4		4.3		4		76				<0.2		2.5	
					Middle	4.3	0.3	118	23.5	23.5	8.1	8.1	22.8	22.8	98.8	98.8	7.4		10.3		6		74				<0.2		2.3	
						4.3	0.3	128	23.5		8.1		22.8		98.8		7.4		10.3		5		73				<0.2		2.5	
					Bottom	7.5	0.4	198	22.9	22.9	8.1	8.1	26.7	26.7	100.3	100.3	7.4	7.4	11.6		9		75				<0.2		2.3	
						7.5	0.4	199	22.9		8.1		26.7		100.3		7.4		11.6		7		75				<0.2		2.3	
IM12	Cloudy	Moderate	16:45	8.0	Surface	1.0	0.4	133	24.5	24.5	8.2	8.2	21.0	21.0	121.1	120.8	9.0	8.4	2.4	3.8	4	5	75	75	811518	821162	<0.2	<0.2	2.6	2.5
						1.0	0.4	138	24.5		8.2		21.0		120.5		8.9		2.4		6		76				<0.2		2.4	
					Middle	4.0	0.4	185	23.6	23.6	8.1	8.1	22.5	22.5	105.7	105.7	7.9		3.8		4		74				<0.2		2.5	
						4.0	0.4	193	23.6		8.1		22.5		105.7		7.9		3.8		6		73				<0.2		2.4	
					Bottom	7.0	0.4	166	23.0	23.0	8.1	8.1	26.6	26.6	111.8	111.8	8.2	8.2	5.3		5		74				<0.2		2.4	
						7.0	0.4	167	23.0		8.1		26.6		111.8		8.2		5.3		4		75				<0.2		2.4	
IM13	-	-	-	-	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
SR2	Cloudy	Moderate	17:15	4.6	Surface	1.0	0.4	132	24.2	24.2	8.2	8.2	21.4	21.4	122.3	122.3	9.1	9.1	2.2	2.2	7	7	76	75	814154	821463	<0.2	<0.2	1.6	1.8
						1.0	0.4	140	24.2		8.2		21.4		122.3		9.1		2.2		7		73				<0.2		1.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.3	206	23.8	23.8	8.2	8.2	22.3	22.3	122.5	122.5	9.1	9.1	2.2		7		75				<0.2		2.0	
						3.6	0.3	214	23.8		8.2		22.3		122.5		9.1		2.2		7		77				<0.2		1.8	
SR3	Cloudy	Moderate	15:59	9.8	Surface	1.0	0.5	129	25.0	25.0	8.1	8.1	18.6	18.6	109.0	108.8	8.7	8.0	2.9	5.2	5	9		-	807559	822147	-	-	-	-
						1.0	0.5	130	25.0		8.1		18.6		108.5		8.7		2.9		7						-		-	
					Middle	4.9	0.3	115	23.5	23.5	8.0	8.0	23.6	23.6	91.9	91.9	7.3		4.2		8						-		-	
						4.9	0.3	119	23.5		8.0		23.6		91.8		7.3		4.3		9						-		-	
					Bottom	8.8	0.3	135	23.0	23.0	7.9	7.9	25.3	25.3	88.0	88.1	7.0	7.0	8.6		12						-		-	
						8.8	0.4	140	23.0		7.9		25.3		88.1		7.0		8.5		12						-		-	
SR4A	Cloudy	Moderate	17:46	8.8	Surface	1.0	0.3	150	25.2	25.3	8.3	8.3	22.7	22.7	119.7	119.3	9.3	8.2	5.1	7.0	6	8		-	807811	817189	-	-	-	-
						1.0	0.3	158	25.3		8.3		22.6		118.9		9.2		5.1		6						-		-	
					Middle	4.4	0.3	157	22.8	22.8	8.0	8.0	27.4	27.4	89.5	89.6	7.1		8.1		8						-		-	
						4.4	0.3	172	22.8		8.0		27.4		89.6		7.1		8.1		10						-		-	
					Bottom	7.8	0.2	155	22.8	22.8	8.0	8.0	27.4	27.4	92.3	92.4	7.3	7.3	7.9		9						-		-	
						7.8	0.2	168	22.8		8.0		27.4		92.5		7.3		7.9		9						-		-	
SR5A	Cloudy	Moderate	18:09	4.5	Surface	1.0	0.1	168	25.8	25.8	8.2	8.2	22.8	22.8	114.5	114.5	8.8	8.8	5.9	7.0	4	5		-	810711	816593	-	-	-	-
						1.0	0.1	174	25.8		8.2		22.8		114.5		8.8		6.1		4						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.1	190	24.6	24.6	8.0	8.0	23.7	23.7	111.9	112.0	8.7	8.8	8.0		6						-		-	
						3.5	0.1	191	24.6		8.0		23.7		112.0		8.8		8.0		5						-		-	
SR6	Cloudy	Moderate	18:27	4.3	Surface	1.0	0.2	252	25.7	25.8	8.1	8.1	21.9	21.9	130.2	130.2	10.1	10.1	6.1	7.9	7	10		-	814657	817899	-	-	-	-
						1.0	0.2	264	25.8		8.1		21.9		130.2		10.1		6.0		7						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.1	213	25.0	25.1	8.1	8.1	22.6	22.6	123.3	123.3	9.6	9.6	9.8		12						-		-	
						3.3	0.1	226	25.1		8.1		22.5		123.2		9.6		9.5		13						-		-	
SR7	Cloudy	Moderate	18:01	17.2	Surface	1.0	0.4	152	25.1	25.1	8.1	8.1	22.1	22.1	116.7	116.6	9.1	8.5	0.5	0.9	4	4		-	823749	823636	-	-	-	-
						1.0	0.4	157	25.1		8.1		22.1		116.4		9.1		0.5		4						-		-	
					Middle	8.6	0.3	142	23.8	23.8	8.0	8.0	24.5	24.5	99.1	99.1	7.8		1.0		3						-		-	
						8.6	0.4	146	23.8		8.0		24.4		99.1		7.8		1.0		3						-		-	
					Bottom	16.2	0.3	226	23.6	23.7	7.9	7.9	26.3	26.3	103.1	103.3	8.1	8.1	1.2		4						-		-	
						16.2	0.3	232	23.7		7.9		26.3		103.4		8.1		1.2		4						-		-	
SR8	Cloudy	Moderate	16:54	5.2	Surface	1.0	0.4	199	24.3	24.3	8.2	8.2	21.3	21.3	119.6	119.4	8.9	8.9	2.2	2.4	6	6		-	811574	820417	-	-	-	-
						1.0	0.4	207	24.2		8.2		21.3		119.2		8.8		2.3		6						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.4	161	23.6	23.6	8.1	8.1	22.6	22.6	116.4	116.4	8.7	8.7	2.6		6						-		-	
						4.2	0.4	161	23.6		8.1		22.6		116.4		8.7		2.6		6						-		-	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 20 April 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	13:09	7.1	Surface	1.0	0.4	190	24.6	24.6	8.3	8.3	23.9	23.9	107.0	106.8	8.4	8.0	1.6	3.4	4	6	75	76	804242	815620	<0.2	<0.2	2.2	1.9
						1.0	0.4	191	24.6		8.3		23.9		106.6		8.3		1.6		3		75				<0.2		2.1	
					Middle	3.6	0.4	237	19.8	19.8	8.2	8.2	25.9	25.9	98.7	98.6	7.7		2.7		9		76				<0.2		2.0	
						3.6	0.4	256	19.8		8.2		25.9		98.5		7.7		2.7		10		76				<0.2		2.1	
					Bottom	6.1	0.4	215	18.7	18.7	8.1	8.1	29.8	29.8	102.2	102.2	8.0	8.0	5.8		4		77				<0.2		1.4	
						6.1	0.4	236	18.7		8.1		29.8		102.2		8.0		5.8		4		77				<0.2		1.4	
C2	Rainy	Moderate	14:20	12.4	Surface	1.0	0.4	161	24.1	24.1	8.3	8.3	20.5	20.5	111.6	111.4	8.8	8.4	1.1	1.6	5	6	75	78	806941	825682	<0.2	<0.2	2.6	2.4
						1.0	0.4	171	24.1		8.3		20.5		111.1		8.8		1.0		3		76				<0.2		2.7	
					Middle	6.2	0.3	157	20.4	20.4	8.1	8.1	23.4	23.5	100.3	100.2	7.9		1.2		8		78				<0.2		2.6	
						6.2	0.3	157	20.4		8.1		23.5		100.1		7.9		1.2		6		78				<0.2		2.8	
					Bottom	11.4	0.4	152	19.2	19.2	8.0	8.0	26.6	26.6	106.1	106.5	8.4	8.4	2.6		8		79				<0.2		1.6	
						11.4	0.4	152	19.2		8.0		26.6		106.8		8.4		2.5		8		80				<0.2		1.9	
C3	Cloudy	Moderate	11:45	12.4	Surface	1.0	0.2	152	24.5	24.5	8.3	8.3	23.3	23.3	128.8	128.8	9.4	8.5	0.7	1.3	6	4	74	76	817805	822109	<0.2	0.2	2.2	2.4
						1.0	0.2	158	24.5		8.3		23.3		128.7		9.4		0.7		4		75				<0.2		2.0	
					Middle	6.2	0.2	102	23.6	23.6	8.1	8.1	26.5	26.5	102.9	102.9	7.5		1.3		4		75				<0.2		2.7	
						6.2	0.2	110	23.6		8.1		26.5		102.9		7.5		1.3		4		75				<0.2		2.6	
					Bottom	11.4	0.2	132	23.2	23.2	8.1	8.1	28.6	28.6	111.4	111.4	8.1	8.1	1.8		2		77				<0.2		2.4	
						11.4	0.2	141	23.2		8.1		28.6		111.4		8.1		1.8		3		77				0.2		2.4	
IM1	Rainy	Moderate	13:26	8.8	Surface	1.0	0.3	174	24.0	24.0	8.3	8.3	22.1	22.1	103.2	103.0	8.1	7.8	2.3	4.4	4	6	74	75	806462	818351	<0.2	<0.2	2.5	2.1
						1.0	0.3	189	24.0		8.3		22.0		102.7		8.1		2.3		5		74				<0.2		2.5	
					Middle	4.4	0.3	180	19.2	19.2	8.1	8.1	27.2	27.2	95.5	95.5	7.5		4.5		4		75				<0.2		2.7	
						4.4	0.3	193	19.2		8.1		27.2		95.5		7.5		4.6		6		76				<0.2		2.4	
					Bottom	7.8	0.3	181	18.9	18.9	8.1	8.1	29.1	29.1	99.7	99.9	7.8	7.8	6.3		10		76				<0.2		1.2	
						7.8	0.3	186	18.9		8.1		29.1		100.0		7.8		6.3		9		77				<0.2		1.5	
IM2	Rainy	Moderate	13:32	8.5	Surface	1.0	0.4	197	24.1	24.1	8.3	8.3	20.5	20.5	100.2	99.9	7.9	7.7	2.2	3.7	5	6	75	76	806191	818852	<0.2	<0.2	2.4	1.9
						1.0	0.4	213	24.1		8.3		20.5		99.6		7.9		2.3		6		75				<0.2		2.3	
					Middle	4.3	0.3	205	18.9	18.9	8.0	8.0	27.8	27.8	93.5	93.7	7.4		4.3		3		75				<0.2		2.2	
						4.3	0.3	223	18.9		8.0		27.8		93.8		7.4		4.3		4		75				<0.2		2.3	
					Bottom	7.5	0.3	176	18.9	18.9	8.0	8.0	29.1	29.1	101.8	102.1	8.0	8.0	4.4		9		77				<0.2		1.1	
						7.5	0.3	183	18.9		8.0		29.1		102.3		8.0		4.4		7		77				<0.2		1.1	
IM3	Rainy	Moderate	13:40	8.6	Surface	1.0	0.3	202	24.1	24.1	8.3	8.3	20.6	20.6	105.3	105.0	8.3	7.5	1.4	3.4	5	6	74	75	806015	819411	<0.2	<0.2	2.3	1.9
						1.0	0.3	216	24.1		8.3		20.6		104.7		8.3		1.5		7		74				<0.2		2.3	
					Middle	4.3	0.3	207	19.1	19.1	8.0	8.0	27.3	27.3	85.4	85.4	6.7		3.7		3		75				<0.2		2.3	
						4.3	0.3	215	19.1		8.0		27.3		85.4		6.7		3.8		4		75				<0.2		2.6	
					Bottom	7.6	0.3	151	18.9	18.9	8.0	8.0	28.8	28.8	93.4	93.6	7.3	7.3	5.1		6		77				<0.2		1.1	
						7.6	0.3	164	18.9		8.0		28.8		93.8		7.3		5.1		8		77				<0.2		1.0	
IM4	Rainy	Moderate	13:52	8.3	Surface	1.0	0.3	177	24.1	24.1	8.3	8.3	20.4	20.4	92.2	91.7	7.3	7.1	1.9	3.8	5	8	75	76	805030	819570	<0.2	<0.2	2.3	1.9
						1.0	0.3	188	24.1		8.3		20.4		91.2		7.2		2.0		7		76				<0.2		2.3	
					Middle	4.2	0.3	217	19.1	19.2	7.9	7.9	26.9	26.9	87.0	87.1	6.9		3.4		6		76				<0.2		2.2	
						4.2	0.3	233	19.2		7.9		26.9		87.2		6.9		3.5		5		77				<0.2		2.5	
					Bottom	7.3	0.3	166	18.7	18.7	8.0	8.0	29.4	29.4	99.7	100.0	7.8	7.8	6.1		12		77				<0.2		1.1	
						7.3	0.3	178	18.7		8.0		29.4		100.2		7.8		6.0		13		77				<0.2		1.0	
IM5	Rainy	Moderate	14:00	7.2	Surface	1.0	0.3	169	24.1	24.1	8.4	8.4	20.6	20.6	107.9	107.6	8.5	7.7	1.5	3.9	5	6	74	75	804936	820564	<0.2	<0.2	2.4	2.1
						1.0	0.3	169	24.1		8.4		20.6		107.3		8.5		1.6		7		75				<0.2		2.4	
					Middle	3.6	0.3	180	20.0	20.0	8.0	8.0	23.8	23.9	87.7	87.6	6.9		4.2		5		75				<0.2		1.7	
						3.6	0.3	194	20.0		8.0		23.9		87.4		6.9		4.2		4		75				<0.2		2.0	
					Bottom	6.2	0.2	175	18.7	18.7	8.0	8.0	28.9	28.9	90.4	90.6	7.1	7.1	6.0		6		76				<0.2		1.8	
						6.2	0.3	182	18.7		8.0		28.9		90.8		7.1		5.9		6		77				<0.2		2.0	
IM6	Rainy	Moderate	14:09	7.9	Surface	1.0	0.4	195	24.1	24.1	8.3	8.3	20.6	20.6	94.7	94.3	7.5	7.1	1.8	2.9	4	6	74	75	805815	821060	<0.2	<0.2	2.2	2.0
						1.0	0.4	202	24.1		8.2		20.6		93.8		7.4		1.8		6		74				<0.2		2.1	
					Middle	4.0	0.4	198	19.7	19.7	8.0	8.0	24.1	24.1	85.9	85.9	6.8		3.1		6		76				<0.2		2.0	
						4.0	0.4	217	19.7		8.0		24.1		85.9		6.8		3.2		6		75				<0.2		1.7	
					Bottom	6.9	0.4	146	19.0	19.0	7.9	7.9	27.3	27.3	92.6	92.9	7.3	7.4	3.7		6		76				<0.2		1.9	
						6.9	0.4	155	19.0		7.9		27.3		93.2		7.4		3.6		5		76				<0.2		1.8	
IM7	Rainy	Moderate	14:20	8.2	Surface	1.0	0.4	153	24.1	24.1	8.2	8.2	19.8	19.8	94.4	94.0	7.5	7.3	1.6	2.2	8	8	74	75	806826	821349	<0.2	0.2	2.1	2.1
						1.0	0.4	163	24.0		8.2		19.8		93.6		7.4		1.6		9		74				<0.2		2.2	
					Middle	4.1	0.3	186	19.8	19.8	8.0	8.0	24.0	24.0	89.2	89.2	7.1		2.6		8		75				<0.2		2.2	
						4.1	0.3	203	19.8		8.0		24.0		89.2		7.1		2.7		8		75				<0.2		2.4	
					Bottom	7.2	0.3	128	19.4	19.5	8.0	8.0	27.0	27.0	100.0	100.3	7.8	7.9	2.3		9		76				0.3		1.7	
						7.2	0.4	138	19.5		8.0		26.9		100.6		7.9		2.2		8		77				<0.2		1.8	
IM8	Rainy	Moderate	13:45	9.4	Surface	1.0	0.3	170	24.7	24.7	8.3	8.3	20.6	20.6	103.6	103.3	8.2	7.5	1.1	1.9	7	10	75	76	807856	821695	<0.2	<0.2	2.0	1.7
						1.0	0.3	184	24.7		8.3		20.6		103.0		8.1		1.1		7		75				<0.2		2.2	
					Middle	4.7	0.3	184	20.2	20.2	8.1	8.1	23.2	23.2	86.2	86.3	6.8		1.8		6		75				<0.2		2.1	
						4.7	0.3	185	20.2		8.1		23.2		86.3		6.8		1.9		8		76				<0.2		2.1	
					Bottom	8.4	0.3	119	19.6	19.6	8.0	8.0	25.3	25.3	83.6	83.7	6.6	6.6	2.7		16		78				<0.2		1.0	
						8.4	0.3	122	19.6		8.0		25.3		83.7		6.6		2.7		14		77				<0.2		0.9	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 20 April 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	13:25	8.7	Surface	1.0	0.3	146	24.8	24.8	8.4	8.4	21.2	21.2	124.0	124.0	9.1	8.2	1.0	2.5	7	7	76	78	808818	822094	<0.2	<0.2	1.9	2.1
						1.0	0.3	157	24.8		8.4		21.2		124.0		9.1		1.0		7		76				<0.2		1.9	
					Middle	4.4	0.3	128	23.9	23.9	8.1	8.1	25.0	25.0	98.5	98.5	7.2		1.6		6		77				<0.2		1.7	
						4.4	0.3	133	23.9		8.1		25.0		98.5		7.2		1.6		6		78				<0.2		1.7	
					Bottom	7.7	0.3	176	22.8	22.8	8.0	8.0	28.0	28.0	95.5	95.5	7.0	7.0	4.9		6		79				<0.2		2.5	
						7.7	0.3	179	22.8		8.0		28.0		95.5		7.0		4.9		7		79				<0.2		2.6	
IM10	Rainy	Moderate	13:15	7.8	Surface	1.0	0.4	151	24.7	24.7	8.3	8.3	21.3	21.3	124.8	124.8	9.2	8.0	1.0	3.5	6	7	74	76	809850	822240	<0.2	<0.2	2.6	2.9
						1.0	0.4	157	24.7		8.3		21.3		124.8		9.2		1.0		7		74				<0.2		2.6	
					Middle	3.9	0.3	147	23.5	23.5	8.0	8.0	25.9	25.9	91.8	91.8	6.7		1.9		7		75				<0.2		3.1	
						3.9	0.3	153	23.5		8.0		25.9		91.8		6.7		1.9		5		76				<0.2		3.0	
					Bottom	6.8	0.3	131	22.8	22.8	8.0	8.0	28.0	28.0	91.9	92.1	6.7	6.8	7.4		8		77				<0.2		3.1	
						6.8	0.3	139	22.8		8.0		28.0		92.3		6.8		7.5		6		78				<0.2		2.9	
IM11	Rainy	Moderate	13:00	8.2	Surface	1.0	0.4	150	24.8	24.8	8.4	8.4	21.2	21.2	123.4	123.1	9.1	7.9	1.1	2.5	6	9	74	76	810526	821501	<0.2	<0.2	2.9	2.8
						1.0	0.4	155	24.8		8.4		21.2		122.7		9.0		1.1		8		75				<0.2		3.0	
					Middle	4.1	0.3	142	23.6	23.6	8.0	8.0	25.7	25.7	92.7	92.7	6.8		1.8		10		76				<0.2		2.6	
						4.1	0.3	143	23.6		8.0		25.7		92.7		6.8		1.8		8		76				<0.2		2.8	
					Bottom	7.2	0.3	115	22.8	22.8	8.0	8.0	28.0	28.0	94.8	94.8	7.0	7.0	4.6		9		78				<0.2		2.9	
						7.2	0.3	118	22.8		8.0		28.0		94.8		7.0		4.6		11		77				<0.2		2.8	
IM12	Rainy	Moderate	12:45	9.6	Surface	1.0	0.4	135	24.8	24.8	8.3	8.3	21.3	21.3	126.9	126.9	9.3	8.1	0.9	2.5	7	5	73	75	811513	821162	<0.2	<0.2	2.7	2.7
						1.0	0.4	138	24.8		8.3		21.3		126.9		9.3		0.9		9		73				<0.2		2.7	
					Middle	4.8	0.3	139	23.8	23.8	8.0	8.0	25.2	25.2	94.2	94.2	6.9		1.6		4		75				<0.2		2.8	
						4.8	0.3	144	23.8		8.0		25.2		94.2		6.9		1.6		5		75				<0.2		2.5	
					Bottom	8.6	0.3	117	22.8	22.8	7.9	7.9	27.9	27.9	94.0	94.0	6.9	6.9	5.1		4		78				<0.2		2.7	
						8.6	0.3	124	22.8		7.9		27.9		94.0		6.9		5.1		3		78				<0.2		2.8	
IM13	-	-	-	-	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
SR2	Rainy	Moderate	12:15	4.3	Surface	1.0	0.2	134	24.5	24.5	8.3	8.3	23.6	23.6	129.1	129.1	9.4	9.4	0.7	0.6	3	4	74	74	814157	821463	<0.2	<0.2	2.2	2.2
						1.0	0.2	134	24.5		8.3		23.6		129.1		9.4		0.7		4		73				<0.2		2.3	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-						-		-	
						-	-	-	-		-		-		-		-		-		-						-		-	
					Bottom	3.3	0.2	150	24.4	24.4	8.3	8.3	23.9	23.9	124.4	124.4	9.1	9.1	0.5		3		74				<0.2		2.1	
						3.3	0.2	155	24.4		8.3		23.9		124.4		9.1		0.5		4		75				<0.2		2.1	
SR3	Rainy	Moderate	14:00	8.8	Surface	1.0	0.3	173	25.0	25.0	8.3	8.3	20.3	20.3	109.7	109.6	8.7	7.9	1.0	2.2	4	3		-	807572	822147	-	-	-	-
						1.0	0.3	176	25.0		8.3		20.3		109.4		8.7		1.0		4						-		-	
					Middle	4.4	0.3	173	20.2	20.2	8.1	8.1	23.2	23.2	88.1	87.9	7.0		2.3		3						-		-	
						4.4	0.3	176	20.1		8.1		23.2		87.7		7.0		2.4		2						-		-	
					Bottom	7.8	0.3	144	19.3	19.3	8.0	8.0	26.5	26.5	91.0	91.2	7.2	7.2	3.3		3						-		-	
						7.8	0.3	152	19.3		8.0		26.5		91.4		7.2		3.3		2						-		-	
SR4A	Rainy	Moderate	12:53	9.5	Surface	1.0	0.3	101	24.9	24.9	8.2	8.2	23.3	23.3	98.3	98.1	7.7	7.5	3.7	4.3	3	3		-	807792	817189	-	-	-	-
						1.0	0.3	109	24.9		8.2		23.2		97.9		7.6		3.8		2						-		-	
					Middle	4.8	0.3	144	19.4	19.4	8.1	8.1	26.6	26.6	93.1	93.2	7.3		4.7		2						-		-	
						4.8	0.3	155	19.4		8.1		26.6		93.2		7.3		4.7		2						-		-	
					Bottom	8.5	0.3	126	19.0	19.0	8.1	8.1	28.6	28.6	94.3	94.4	7.4	7.4	4.4		4						-		-	
						8.5	0.3	126	19.0		8.1		28.6		94.4		7.4		4.4		4						-		-	
SR5A	Rainy	Moderate	12:37	5.0	Surface	1.0	0.4	128	24.3	24.3	8.3	8.3	23.2	23.2	109.5	109.5	8.5	8.5	3.3	4.2	6	10		-	810697	816593	-	-	-	-
						1.0	0.4	130	24.3		8.3		23.2		109.4		8.5		3.3		5						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-						-		-	
						-	-	-	-		-		-		-		-		-		-						-		-	
					Bottom	4.0	0.3	153	20.9	20.9	8.1	8.2	24.2	24.2	108.3	108.4	8.4	8.4	5.1		14						-		-	
						4.0	0.3	158	20.9		8.2		24.2		108.5		8.4		5.1		16						-		-	
SR6	Cloudy	Moderate	12:15	4.5	Surface	1.0	0.2	151	24.2	24.2	8.1	8.1	23.6	23.6	106.3	106.2	8.2	8.2	6.6	7.9	8	13		-	814675	817899	-	-	-	-
						1.0	0.2	166	24.2		8.1		23.6		106.1		8.2		6.7		10						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-						-		-	
						-	-	-	-		-		-		-		-		-		-						-		-	
					Bottom	3.5	0.2	167	20.7	20.7	8.1	8.1	24.3	24.3	106.2	106.5	8.3	8.3	9.3		17						-		-	
						3.5	0.2	178	20.7		8.1		24.2		106.7		8.3		9.0		18						-		-	
SR7	Cloudy	Moderate	11:15	24.9	Surface	1.0	0.6	117	20.6	20.6	8.2	8.2	24.7	24.7	107.0	106.9	8.3	7.5	1.6	1.8	4	4		-	823760	823636	-	-	-	-
						1.0	0.6	118	20.6		8.2		24.7		106.7		8.3		1.6		3						-		-	
					Middle	12.5	0.3	115	19.0	19.0	8.0	8.0	30.5	30.5	86.3	86.3	6.7		1.8		5						-		-	
						12.5	0.3	121	19.0		8.0		30.5		86.3		6.7		1.8		6						-		-	
					Bottom	23.9	0.2	161	18.9	18.9	8.0	8.0	30.9	30.9	90.2	90.3	7.0	7.0	1.9		5						-		-	
						23.9	0.2	168	18.9		8.0		30.9		90.3		7.0		1.9		3						-		-	
SR8	Rainy	Moderate	12:30	5.6	Surface	1.0	0.2	121	24.5	24.5	8.3	8.3	23.4	23.4	128.1	128.1	9.4	9.4	0.7	0.8	5	4		-	811581	820417	-	-	-	-
						1.0	0.2	131	24.5		8.3		23.4		128.1		9.4		0.7		4						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-						-		-	
						-	-	-	-		-		-		-		-		-		-						-		-	
					Bottom	4.6	0.3	158	24.5	24.5	8.2	8.2	23.7	23.7	116.7	116.7	8.5	8.5	0.8		4						-		-	
						4.6	0.3	160	24.5		8.2		23.7		116.7		8.5		0.8		4						-		-	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 20 April 17 during Mid-Ebb tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Moderate	19:42	7.2	Surface	1.0	0.3	128	24.1	24.1	8.4	8.4	22.0	22.0	110.7	110.5	8.7	8.0	1.5	3.8	11	9	73	74	804229	815620	<0.2	<0.2	1.3	1.3
						1.0	0.3	138	24.1		8.4		22.0		110.3		8.6		1.5		13		73				<0.2		1.4	
					Middle	3.6	0.3	147	20.2	20.2	8.2	8.2	25.1	25.1	94.5	94.4	7.4		4.0		5		74				<0.2		1.3	
						3.6	0.3	147	20.2		8.2		25.0		94.2		7.4		4.1		7		74				<0.2		1.3	
					Bottom	6.2	0.2	174	18.7	18.7	8.0	8.0	29.4	29.4	97.7	97.9	7.7	7.7	5.9		9		76				<0.2		1.3	
						6.2	0.3	185	18.7		8.0		29.4		98.1		7.7		5.8		7		76				<0.2		1.0	
C2	Fine	Moderate	18:11	18.2	Surface	1.0	0.3	149	24.3	24.3	8.4	8.4	20.0	20.0	126.5	126.3	10.0	8.4	1.2	3.8	9	6	73	75	806931	825682	<0.2	<0.2	1.6	1.5
						1.0	0.3	157	24.3		8.4		20.0		126.0		9.9		1.2		7		73				<0.2		1.7	
					Middle	9.1	0.2	172	20.0	20.1	8.0	8.0	24.5	24.5	87.9	87.5	6.9		3.3		5		75				<0.2		2.0	
						9.1	0.2	175	20.1		8.0		24.5		87.1		6.8		3.7		6		76				<0.2		1.9	
					Bottom	17.2	0.2	169	19.0	19.0	8.0	8.0	27.2	27.2	87.1	88.1	6.9	7.0	6.9		4		77				<0.2		0.9	
						17.2	0.2	175	19.0		8.0		27.2		89.0		7.0		6.5		6		77				<0.2		0.8	
C3	Fine	Moderate	20:45	20.1	Surface	1.0	0.2	176	24.5	24.5	8.3	8.3	23.4	23.4	117.2	117.2	8.6	8.1	0.7	1.1	7	7	74	75	817819	822109	<0.2	<0.2	2.1	1.8
						1.0	0.2	187	24.5		8.3		23.4		117.2		8.6		0.7		7		74				<0.2		2.1	
					Middle	10.1	0.2	199	23.7	23.7	8.1	8.1	26.2	26.2	102.9	102.8	7.5		0.9		7		74				<0.2		1.9	
						10.1	0.2	201	23.7		8.1		26.2		102.7		7.5		0.9		9		75				<0.2		1.6	
					Bottom	19.1	0.2	206	23.2	23.2	8.1	8.1	28.8	28.8	109.8	109.8	8.0	8.0	1.7		5		76				<0.2		1.8	
						19.1	0.2	207	23.2		8.1		28.8		109.8		8.0		1.7		7		77				<0.2		1.5	
IM1	Fine	Moderate	19:28	7.3	Surface	1.0	0.3	187	24.5	24.5	8.4	8.4	20.5	20.5	112.6	112.3	8.8	8.3	1.4	2.4	4	6	71	75	806443	818351	<0.2	<0.2	1.9	1.7
						1.0	0.3	198	24.5		8.4		20.5		111.9		8.8		1.4		4		73				<0.2		1.8	
					Middle	3.7	0.3	145	19.5	19.6	8.1	8.1	27.3	27.3	98.2	98.2	7.7		2.6		6		75				<0.2		1.4	
						3.7	0.3	157	19.6		8.1		27.2		98.2		7.7		2.6		7		76				<0.2		1.3	
					Bottom	6.3	0.2	191	19.0	19.0	8.0	8.1	29.0	29.0	101.5	101.7	7.9	8.0	3.3		6		77				<0.2		2.0	
						6.3	0.3	192	19.0		8.1		29.0		101.9		8.0		3.3		6		78				<0.2		1.7	
IM2	Fine	Moderate	19:23	8.8	Surface	1.0	0.3	217	24.5	24.5	8.4	8.4	20.4	20.4	116.0	115.7	9.1	7.9	1.0	3.3	8	8	74	76	806181	818852	<0.2	<0.2	2.5	2.1
						1.0	0.3	226	24.5		8.4		20.4		115.3		9.1		1.1		6		74				<0.2		2.3	
					Middle	4.4	0.3	125	18.9	18.9	8.0	8.0	28.6	28.6	85.5	85.6	6.7		3.9		8		75				<0.2		2.1	
						4.4	0.3	136	18.9		8.0		28.6		85.6		6.7		4.0		10		75				<0.2		2.0	
					Bottom	7.8	0.3	168	18.8	18.8	8.0	8.0	29.2	29.2	88.5	88.6	6.9	6.9	4.8		10		77				<0.2		1.7	
						7.8	0.3	168	18.8		8.0		29.2		88.7		6.9		4.9		8		78				<0.2		2.0	
IM3	Fine	Moderate	19:15	8.1	Surface	1.0	0.4	224	24.4	24.4	8.4	8.4	20.3	20.3	104.9	104.4	8.3	7.8	1.4	2.4	5	7	74	76	806002	819411	<0.2	<0.2	2.0	1.5
						1.0	0.4	234	24.4		8.4		20.3		103.9		8.2		1.5		7		74				<0.2		1.8	
					Middle	4.1	0.3	206	20.0	20.1	8.1	8.1	25.1	25.1	93.5	93.5	7.3		2.6		8		76				<0.2		1.1	
						4.1	0.4	225	20.1		8.1		25.1		93.4		7.3		2.6		6		78				<0.2		1.1	
					Bottom	7.1	0.4	200	18.8	18.8	8.0	8.0	29.2	29.2	100.3	100.6	7.9	7.9	3.2		9		77				<0.2		1.5	
						7.1	0.4	212	18.8		8.0		29.2		100.8		7.9		3.1		8		77				<0.2		1.5	
IM4	Fine	Moderate	19:09	8.1	Surface	1.0	0.4	224	24.3	24.3	8.4	8.4	20.9	20.9	107.5	107.1	8.4	7.4	2.2	5.7	6	6	74	76	805035	819570	<0.2	<0.2	2.1	2.1
						1.0	0.4	235	24.3		8.4		20.9		106.7		8.4		2.3		4		74				<0.2		2.2	
					Middle	4.1	0.3	193	19.9	19.9	8.0	8.0	25.7	25.4	81.7	81.6	6.4		6.1		4		75				<0.2		2.0	
						4.1	0.3	203	19.9		8.0		25.0		81.5		6.4		6.2		4		75				<0.2		1.9	
					Bottom	7.1	0.3	204	18.7	18.7	8.0	8.0	29.3	29.3	79.7	79.7	6.3	6.3	8.7		7		78				<0.2		2.1	
						7.1	0.3	209	18.7		8.0		29.3		79.7		6.3		8.7		9		78				<0.2		2.0	
IM5	Fine	Moderate	19:00	7.5	Surface	1.0	0.4	196	24.5	24.5	8.5	8.5	20.4	20.4	119.3	118.8	9.4	8.5	1.8	5.2	8	7	74	75	804928	820564	<0.2	<0.2	2.2	1.5
						1.0	0.4	214	24.5		8.5		20.4		118.2		9.3		1.8		9		74				<0.2		2.0	
					Middle	3.8	0.4	168	20.2	20.2	8.1	8.1	24.3	24.4	97.4	97.4	7.7		5.5		7		75				<0.2		1.3	
						3.8	0.4	176	20.2		8.1		24.5		97.4		7.6		5.5		9		75				<0.2		1.4	
					Bottom	6.5	0.4	145	18.7	18.7	8.0	8.0	29.0	29.0	89.3	89.5	7.0	7.0	8.3		6		76				<0.2		1.1	
						6.5	0.4	149	18.7		8.0		29.0		89.6		7.0		8.3		5		76				<0.2		1.2	
IM6	Fine	Moderate	18:51	7.5	Surface	1.0	0.3	202	25.0	25.0	8.3	8.3	20.6	20.6	99.4	99.0	7.9	7.4	2.1	4.9	5	5	74	76	805836	821060	<0.2	<0.2	2.1	1.7
						1.0	0.3	221	24.9		8.3		20.6		98.6		7.8		2.2		7		74				<0.2		1.9	
					Middle	3.8	0.3	169	20.2	20.2	8.1	8.1	23.3	23.4	89.0	88.7	7.0		4.0		3		76				<0.2		2.0	
						3.8	0.3	183	20.2		8.1		23.5		88.4		7.0		4.2		4		76				<0.2		1.8	
					Bottom	6.5	0.3	161	18.7	18.7	8.0	8.0	28.8	28.8	92.0	92.2	7.2	7.3	8.8		6		77				<0.2		1.2	
						6.5	0.3	175	18.7		8.0		28.8		92.4		7.3		8.3		4		77				<0.2		1.2	
IM7	Fine	Moderate	18:37	8.0	Surface	1.0	0.3	175	24.3	24.3	8.3	8.3	20.0	20.0	97.8	97.3	7.7	7.1	1.7	3.2	4	4	73	76	806847	821349	<0.2	<0.2	1.9	2.0
						1.0	0.3	187	24.3		8.3		20.0		96.8		7.6		1.8		3		74				<0.2		1.9	
					Middle	4.0	0.3	138	19.8	19.8	8.0	8.0	24.1	24.1	82.5	82.4	6.5		3.0		3		76				<0.2		2.0	
						4.0	0.3	140	19.7		8.0		24.1		82.3		6.5		3.1		4		76				<0.2		1.9	
					Bottom	7.0	0.3	135	19.0	19.0	8.0	8.0	27.7	27.7	83.9	83.9	6.6	6.6	4.8		6		77				<0.2		2.1	
						7.0	0.3	142	19.0		8.0		27.7		83.9		6.6		4.7		3		77				<0.2		2.2	
IM8	Fine	Moderate	18:45	6.5	Surface	1.0	0.3	142	24.3	24.3	8.4	8.4	19.6	19.6	110.7	110.4	8.8	7.8	1.1	3.3	4	4	75	76	807823	821695	<0.2	<0.2	1.8	1.8
						1.0	0.3	152	24.3		8.4		19.6		110.1		8.7		1.1		5		75				<0.2		1.8	
					Middle	3.3	0.3	133	20.0	20.0	8.1	8.1	24.1	24.1	87.7	87.7	6.9		2.3		3		76				<0.2		1.8	
						3.3	0.3	145	20.0		8.1		24.1		87.6		6.9		2.3		3		76				<0.2		2.1	
					Bottom	5.5	0.3	119	19.5	19.5	8.1	8.1	25.4	25.4	83.6	83.7	6.6	6.6	6.5		5		76				<0.2		1.5	
						5.5	0.3	126	19.5		8.1		25.4		83.7		6.6		6.7		6		77				<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 20 April 17 during Mid-Ebb tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Fine	Moderate	19:00	7.3	Surface	1.0	0.5	159	24.8	24.8	8.4	8.4	21.1	21.1	132.7	132.7	9.8	8.6	0.8	2.1	8	8	73	75	808806	822094	<0.2	<0.2	2.0	2.1
						1.0	0.5	161	24.8		8.4		21.1		132.7		9.8		0.8		8		74				<0.2		2.2	
					Middle	3.7	0.6	141	23.8	23.8	8.1	8.1	25.2	25.2	101.0	101.0	7.4		1.1		6		74				<0.2		2.0	
						3.7	0.6	142	23.8		8.1		25.2		101.0		7.4		1.1		7		75				<0.2		1.9	
					Bottom	6.3	0.5	152	22.8	22.8	8.0	8.0	28.0	28.0	100.1	100.1	7.3	7.3	4.3		10		76				<0.2		2.4	
						6.3	0.6	166	22.8		8.0		28.0		100.1		7.3		4.3		11		76				<0.2		2.2	
IM10	Fine	Moderate	19:12	7.9	Surface	1.0	0.6	146	24.4	24.4	8.2	8.2	21.7	21.7	113.9	113.9	8.4	7.7	0.9	3.8	8	8	74	76	809836	822240	<0.2	<0.2	2.3	2.4
						1.0	0.6	148	24.4		8.2		21.7		113.9		8.4		0.9		10		74				<0.2		2.3	
					Middle	4.0	0.5	146	23.7	23.7	8.1	8.1	25.4	25.4	95.7	95.7	7.0		1.6		8		75				<0.2		2.3	
						4.0	0.5	153	23.7		8.1		25.4		95.7		7.0		1.6		6		76				<0.2		2.5	
					Bottom	6.9	0.5	187	22.8	22.8	8.0	8.0	28.0	28.0	84.4	84.4	6.2	6.2	8.8		7		77				<0.2		2.5	
						6.9	0.5	187	22.8		8.0		28.0		84.4		6.2		8.8		6		77				<0.2		2.5	
IM11	Fine	Moderate	19:20	8.1	Surface	1.0	0.4	125	24.6	24.6	8.3	8.3	21.3	21.3	127.6	127.6	9.4	8.6	1.0	2.1	8	7	74	76	810540	821501	<0.2	<0.2	1.6	1.7
						1.0	0.4	126	24.6		8.3		21.3		127.6		9.4		1.0		8		74				<0.2		1.7	
					Middle	4.1	0.4	132	24.1	24.1	8.2	8.2	23.9	23.9	105.7	105.7	7.8		1.2		7		76				<0.2		1.5	
						4.1	0.4	132	24.1		8.2		23.9		105.7		7.8		1.2		6		75				<0.2		1.8	
					Bottom	7.1	0.3	181	22.7	22.7	8.0	8.0	28.1	28.1	86.0	86.0	6.3	6.3	4.2		8		77				<0.2		1.7	
						7.1	0.4	189	22.7		8.0		28.1		86.0		6.3		4.2		6		77				<0.2		1.6	
IM12	Fine	Moderate	19:48	7.8	Surface	1.0	0.4	136	24.8	24.8	8.3	8.3	21.1	21.1	116.0	116.0	8.5	7.4	1.5	3.0	10	8	75	76	811528	821162	<0.2	<0.2	1.7	1.6
						1.0	0.5	138	24.8		8.3		21.1		116.0		8.5		1.5		8		75				<0.2		1.4	
					Middle	3.9	0.4	192	23.2	23.2	8.1	8.1	26.6	26.6	84.0	84.0	6.2		2.1		8		75				<0.2		1.3	
						3.9	0.4	197	23.2		8.1		26.6		84.0		6.2		2.1		6		76				<0.2		1.2	
					Bottom	6.8	0.4	143	22.7	22.7	8.0	8.0	28.1	28.1	77.6	77.6	5.7	5.7	5.4		8		77				<0.2		1.9	
						6.8	0.5	149	22.7		8.0		28.1		77.6		5.7		5.4		10		77				<0.2		2.0	
IM13	-	-	-	-	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
SR2	Fine	Moderate	20:30	4.8	Surface	1.0	0.4	141	24.5	24.5	8.3	8.3	23.6	23.6	129.1	129.1	9.4	9.4	0.7	0.6	8	7	74	75	814185	821463	<0.2	<0.2	1.8	1.9
						1.0	0.4	144	24.5		8.3		23.6		129.1		9.4		0.7		9		74				<0.2		1.9	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.3	229	24.4	24.4	8.3	8.3	23.9	23.9	124.4	124.4	9.1	9.1	0.5		5		76				<0.2		2.0	
						3.8	0.3	242	24.4		8.3		23.9		124.4		9.1		0.5		6		76				<0.2		2.0	
SR3	Fine	Moderate	18:30	7.4	Surface	1.0	0.3	136	24.2	24.2	8.4	8.4	20.0	20.0	109.9	109.5	8.7	8.1	1.3	3.1	6	5		-	807565	822147	-	-	-	-
						1.0	0.3	136	24.2		8.4		20.0		109.1		8.6		1.3		6						-		-	
					Middle	3.7	0.3	119	20.5	20.5	8.1	8.1	22.1	22.1	95.3	95.2	7.5		2.1		7						-		-	
						3.7	0.4	122	20.5		8.1		22.1		95.0		7.5		2.2		5						-		-	
					Bottom	6.4	0.3	144	19.1	19.1	8.0	8.0	27.1	27.1	98.7	99.0	7.8	7.8	5.9		4						-		-	
						6.4	0.3	149	19.0		8.0		27.1		99.3		7.8		6.0		4						-		-	
SR4A	Fine	Moderate	20:00	8.2	Surface	1.0	0.3	136	23.8	23.8	8.3	8.3	23.1	23.1	104.2	104.0	8.1	7.8	2.3	4.0	7	9		-	807815	817189	-	-	-	-
						1.0	0.3	144	23.8		8.3		23.1		103.8		8.1		2.3		5						-		-	
					Middle	4.1	0.4	97	19.9	19.9	8.1	8.1	26.0	26.0	94.9	94.9	7.4		4.5		11						-		-	
						4.1	0.4	106	19.9		8.1		25.9		94.9		7.4		4.5		10						-		-	
					Bottom	7.2	0.3	99	19.3	19.3	8.0	8.1	28.0	28.0	98.6	98.8	7.7	7.7	5.4		9						-		-	
						7.2	0.4	100	19.3		8.1		27.9		99.0		7.7		5.2		10						-		-	
SR5A	Fine	Moderate	20:15	4.5	Surface	1.0	0.1	145	24.4	24.4	8.2	8.2	22.8	22.8	103.9	103.8	8.1	8.1	6.8	5.1	8	9		-	810684	816593	-	-	-	-
						1.0	0.1	151	24.4		8.2		22.8		103.7		8.0		6.8		6						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.2	145	20.5	20.5	8.1	8.1	24.8	24.8	98.1	98.1	7.6	7.6	3.4		11						-		-	
						3.5	0.2	151	20.5		8.1		24.8		98.1		7.6		3.4		9						-		-	
SR6	Fine	Moderate	20:37	4.1	Surface	1.0	0.1	183	24.3	24.3	8.2	8.2	23.0	23.0	105.1	104.9	8.1	8.1	3.3	4.9	6	8		-	814655	817899	-	-	-	-
						1.0	0.1	186	24.3		8.2		23.0		104.6		8.1		3.4		8						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.1	164	21.0	21.0	8.1	8.1	23.6	23.6	100.1	100.1	7.8	7.8	6.5		8						-		-	
						3.1	0.1	167	21.0		8.1		23.6		100.0		7.8		6.5		8						-		-	
SR7	Fine	Moderate	20:57	28.6	Surface	1.0	0.4	158	24.0	24.0	8.3	8.3	22.1	22.1	114.1	113.8	8.9	8.0	1.4	1.6	6	4		-	823759	823636	-	-	-	-
						1.0	0.4	170	24.0		8.3		22.1		113.5		8.9		1.4		5						-		-	
					Middle	14.3	0.3	148	19.7	19.7	8.0	8.0	27.6	27.6	91.9	91.9	7.1		1.6		4						-		-	
						14.3	0.3	159	19.7		8.0		27.5		91.9		7.2		1.6		3						-		-	
					Bottom	27.6	0.3	234	19.2	19.2	8.0	8.0	29.9	29.9	95.6	95.7	7.4	7.4	1.7		3						-		-	
						27.6	0.3	254	19.2		8.0		29.9		95.8		7.4		1.7		2						-		-	
SR8	Fine	Moderate	20:15	5.1	Surface	1.0	0.4	205	24.5	24.5	8.3	8.3	23.4	23.4	134.4	134.4	9.8	9.8	0.8	0.7	4	4		-	811609	820417	-	-	-	-
						1.0	0.5	216	24.5		8.3		23.4		134.4		9.8		0.8		5						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	0.4	167	24.5	24.5	8.3	8.3	23.7	23.7	133.6	133.6	9.7	9.7	0.6		4						-		-	
						4.1	0.4	173	24.5		8.3		23.7		133.6		9.7		0.6		4						-		-	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 22 April 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	15:28	8.0	Surface	1.0	0.4	99	23.6	23.6	8.4	8.4	22.2	22.2	107.7	107.5	8.0	7.0	1.5	3.3	5	6	66	67	804254	815620	<0.2	<0.2	1.5	1.6
						1.0	0.4	99	23.6		8.4		22.2		107.2		8.0		1.6		7		66				<0.2		1.6	
					Middle	4.0	0.4	92	22.5	22.5	8.1	8.1	31.5	31.5	83.4	83.5	6.0		3.5		5		68				<0.2		1.6	
						4.0	0.4	98	22.5		8.1		31.5		83.5		6.0		3.5		5		67				<0.2		1.7	
					Bottom	7.0	0.4	95	22.4	22.4	8.1	8.1	32.3	32.3	95.5	95.8	6.9	6.9	4.9		7		68				<0.2		1.7	
						7.0	0.4	102	22.4		8.1		32.3		96.0		6.9		4.8		5		69				<0.2		1.7	
C2	Cloudy	Moderate	13:58	8.8	Surface	1.0	0.4	210	24.0	24.0	8.2	8.2	21.5	21.6	98.0	97.9	7.3	7.1	3.9	4.6	7	7	67	69	806927	825682	<0.2	<0.2	1.7	1.8
						1.0	0.4	225	24.0		8.2		21.6		97.7		7.3		3.9		9		67				<0.2		1.6	
					Middle	4.4	0.3	204	23.9	23.9	8.2	8.2	25.0	25.0	93.9	93.9	6.9		4.7		8		70				<0.2		2.1	
						4.4	0.3	218	23.8		8.2		25.0		93.8		6.9		4.8		9		70				<0.2		1.9	
					Bottom	7.8	0.3	133	23.6	23.7	8.1	8.1	28.7	28.7	97.8	98.0	7.0	7.1	5.3		5		71				<0.2		1.8	
						7.8	0.3	136	23.7		8.1		28.6		98.2		7.1		5.1		5		71				<0.2		1.8	
C3	Cloudy	Moderate	16:08	12.8	Surface	1.0	0.3	240	23.5	23.5	8.2	8.2	25.7	25.7	103.2	103.2	7.6	7.0	1.0	1.6	3	5	67	68	817801	822109	<0.2	<0.2	1.2	1.2
						1.0	0.3	258	23.5		8.2		25.7		103.2		7.6		1.0		4		68				<0.2		1.1	
					Middle	6.4	0.6	257	23.0	23.0	8.1	8.1	30.3	30.3	87.2	87.2	6.3		1.6		3		68				<0.2		1.1	
						6.4	0.6	265	23.0		8.1		30.3		87.2		6.3		1.6		4		69				<0.2		1.2	
					Bottom	11.8	0.3	267	22.8	22.8	8.1	8.1	31.1	31.1	87.5	87.5	6.3	6.3	2.1		8		69				<0.2		1.4	
						11.8	0.3	287	22.8		8.1		31.1		87.5		6.3		2.1		8		69				<0.2		1.3	
IM1	Cloudy	Moderate	15:10	7.5	Surface	1.0	0.3	163	23.3	23.3	8.2	8.2	26.5	26.5	88.9	88.8	6.5	6.2	4.3	6.2	13	12	66	67	806448	818351	<0.2	<0.2	1.1	1.1
						1.0	0.3	163	23.3		8.2		26.5		88.6		6.5		4.3		11		66				<0.2		1.1	
					Middle	3.8	0.3	174	22.8	22.8	8.1	8.1	30.0	30.0	81.1	81.1	5.9		6.0		12		67				<0.2		1.1	
						3.8	0.3	177	22.8		8.1		30.0		81.1		5.9		6.1		10		67				<0.2		1.1	
					Bottom	6.5	0.3	116	22.5	22.5	8.1	8.1	31.3	31.3	82.3	82.4	5.9	6.0	8.3		14		68				<0.2		1.1	
						6.5	0.3	124	22.5		8.1		31.3		82.5		6.0		8.3		12		69				<0.2		1.1	
IM2	Cloudy	Moderate	15:04	8.2	Surface	1.0	0.3	214	23.8	23.8	8.3	8.3	24.3	23.9	93.5	93.2	6.9	6.3	3.0	5.6	8	7	66	67	806211	818852	<0.2	<0.2	2.2	2.3
						1.0	0.3	222	23.8		8.3		23.4		92.9		6.9		2.8		7		66				<0.2		2.4	
					Middle	4.1	0.4	119	22.6	22.6	8.1	8.1	30.7	30.7	79.2	79.2	5.7		5.8		7		68				<0.2		2.2	
						4.1	0.4	126	22.6		8.1		30.7		79.2		5.7		6.0		8		67				<0.2		2.2	
					Bottom	7.2	0.3	117	22.5	22.5	8.1	8.1	31.4	31.4	85.9	86.0	6.2	6.2	8.0		5		68				<0.2		2.5	
						7.2	0.3	119	22.5		8.1		31.4		86.1		6.2		8.1		5		69				<0.2		2.4	
IM3	Cloudy	Moderate	14:56	8.3	Surface	1.0	0.3	221	23.9	23.9	8.3	8.3	21.6	21.7	97.3	97.1	7.3	6.5	3.5	6.2	9	8	67	68	806002	819411	<0.2	<0.2	2.2	2.2
						1.0	0.3	238	23.9		8.3		21.7		96.8		7.2		3.6		7		67				<0.2		2.5	
					Middle	4.2	0.3	118	22.7	22.7	8.1	8.1	30.5	30.5	79.4	79.4	5.8		6.1		9		67				<0.2		1.9	
						4.2	0.3	125	22.7		8.1		30.5		79.4		5.8		6.3		8		69				<0.2		1.8	
					Bottom	7.3	0.3	135	22.5	22.5	8.1	8.1	31.3	31.3	81.8	82.0	5.9	5.9	8.9		9		70				<0.2		2.3	
						7.3	0.3	140	22.5		8.1		31.3		82.2		5.9		8.7		6		70				<0.2		2.2	
IM4	Cloudy	Moderate	14:47	7.9	Surface	1.0	0.3	207	23.5	23.5	8.3	8.3	22.4	22.5	89.1	88.5	6.7	6.3	3.4	4.1	9	9	66	68	805048	819570	<0.2	<0.2	2.1	2.1
						1.0	0.4	225	23.5		8.2		22.5		87.8		6.6		3.4		8		67				<0.2		2.2	
					Middle	4.0	0.3	157	22.5	22.5	8.1	8.1	31.2	31.2	83.2	83.2	6.0		5.6		10		67				<0.2		2.0	
						4.0	0.3	161	22.5		8.1		31.2		83.2		6.0		5.8		12		68				<0.2		1.9	
					Bottom	6.9	0.3	163	22.5	22.5	8.1	8.1	31.8	31.8	92.2	92.4	6.7	6.7	3.2		9		69				<0.2		2.0	
						6.9	0.4	174	22.5		8.1		31.8		92.5		6.7		3.2		7		69				<0.2		2.3	
IM5	Cloudy	Moderate	14:39	6.7	Surface	1.0	0.3	222	23.9	23.9	8.3	8.3	21.6	21.6	96.6	96.3	7.2	6.7	5.3	7.7	7	7	67	68	804917	820564	<0.2	<0.2	2.3	2.0
						1.0	0.3	224	23.9		8.3		21.6		96.0		7.2		5.4		7		68				<0.2		2.0	
					Middle	3.4	0.3	216	22.9	22.9	8.1	8.1	26.8	26.8	82.2	82.2	6.1		8.1		8		68				<0.2		1.9	
						3.4	0.3	230	22.8		8.1		26.8		82.1		6.1		8.1		10		68				<0.2		2.0	
					Bottom	5.7	0.3	161	22.5	22.5	8.1	8.1	31.3	31.3	82.3	82.4	5.9	6.0	9.6		6		69				<0.2		1.9	
						5.7	0.3	162	22.5		8.1		31.3		82.4		6.0		9.6		6		69				<0.2		2.0	
IM6	Cloudy	Moderate	14:30	6.5	Surface	1.0	0.4	264	23.9	23.9	8.2	8.2	22.6	22.6	94.9	94.7	7.0	6.7	4.2	7.2	11	9	65	66	805810	821060	<0.2	<0.2	2.0	1.9
						1.0	0.4	282	23.9		8.2		22.6		94.5		7.0		4.3		9		65				<0.2		1.9	
					Middle	3.3	0.4	213	23.6	23.6	8.2	8.2	25.4	25.4	86.9	86.7	6.4		8.5		8		66				<0.2		1.6	
						3.3	0.4	219	23.6		8.2		25.4		86.4		6.3		8.5		8		66				<0.2		1.9	
					Bottom	5.5	0.3	178	22.7	22.7	8.1	8.1	30.4	30.4	82.9	83.0	6.0	6.0	8.7		7		67				<0.2		1.9	
						5.5	0.3	189	22.7		8.1		30.4		83.0		6.0		8.8		8		68				<0.2		1.9	
IM7	Cloudy	Moderate	14:17	8.0	Surface	1.0	0.4	233	24.0	24.0	8.3	8.3	20.6	20.6	100.5	100.3	7.5	7.0	3.3	6.0	7	8	66	68	806833	821349	<0.2	<0.2	2.2	2.0
						1.0	0.4	249	24.0		8.3		20.6		100.0		7.5		3.3		7		67				<0.2		2.2	
					Middle	4.0	0.3	242	23.8	23.8	8.2	8.2	25.0	25.0	87.1	87.0	6.4		5.4		8		67				<0.2		1.8	
						4.0	0.4	254	23.8		8.2		25.0		86.9		6.4		5.6		8		68				<0.2		1.8	
					Bottom	7.0	0.4	87	23.0	23.0	8.1	8.1	29.7	29.7	85.2	85.4	6.2	6.2	9.1		9		68				<0.2		2.1	
						7.0	0.4	92	23.0		8.1		29.7		85.5		6.2		9.2		7		69				<0.2		2.1	
IM8	Cloudy	Moderate	14:18	7.7	Surface	1.0	0.5	192	24.1	24.1	8.2	8.2	21.2	21.2	97.6	97.5	7.3	7.1	3.6	4.4	7	7	70	71	807845	821695	<0.2	<0.2	2.7	2.7
						1.0	0.5	199	24.1		8.2		21.2		97.4		7.3		3.6		9		70				<0.2		2.5	
					Middle	3.9	0.3	211	24.0	24.0	8.2	8.2	23.8	23.8	94.6	94.5	7.0		3.9		8		71				<0.2		2.5	
						3.9	0.3	225	23.9		8.2		23.8		94.3		6.9		3.9		7		71				<0.2		2.7	
					Bottom	6.7	0.3	162	23.3	23.4	8.2	8.2	27.7	27.8	96.4	96.5	7.0	7.0	5.6		6		72				<0.2		3.0	
						6.7	0.3	167	23.4		8.2		27.8		96.6		7.0		5.7		6		72				<0.2		2.8	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 22 April 17 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (μg/L)		Nickel (μg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	14:25	7.2	Surface	1.0	0.3	188	24.0	24.0	8.3	8.3	21.0	21.0	107.2	107.1	8.0	7.6	2.8	4.0	6	7	65	67	808791	822094	<0.2	<0.2	3.0	2.7
						1.0	0.3	201	24.0		8.3		21.0		107.0		8.0		2.9		6		65				<0.2		2.8	
					Middle	3.6	0.2	219	23.9	23.9	8.2	8.2	23.5	23.5	97.4	97.4	7.2		5.0		5		68				<0.2		3.1	
						3.6	0.2	235	23.9		8.2		23.5		97.4		7.2		5.0		6		68				<0.2		3.1	
					Bottom	6.2	0.3	202	24.0	24.0	8.2	8.2	23.5	23.5	102.7	102.7	7.6	7.6	4.2		9		69				<0.2		2.1	
						6.2	0.3	210	24.0		8.2		23.5		102.7		7.6		4.2		8		69				<0.2		2.1	
IM10	Cloudy	Moderate	14:36	7.8	Surface	1.0	0.4	199	24.0	24.0	8.3	8.3	21.0	21.0	102.4	102.2	7.7	7.5	3.9	4.3	6	7	68	69	809856	822240	<0.2	<0.2	2.7	2.5
						1.0	0.4	199	24.0		8.3		21.0		102.0		7.6		4.0		7		67				<0.2		2.8	
					Middle	3.9	0.3	201	24.0	24.0	8.2	8.2	23.4	23.4	98.6	98.9	7.3		5.6		7		68				<0.2		2.8	
						3.9	0.3	211	23.9		8.2		23.4		99.1		7.3		5.5		6		69				<0.2		2.7	
					Bottom	6.8	0.3	179	24.0	24.0	8.2	8.2	23.4	23.4	107.6	107.6	7.9	7.9	3.4		7		69				<0.2		2.0	
						6.8	0.3	183	24.0		8.2		23.4		107.6		7.9		3.4		8		70				<0.2		2.1	
IM11	Cloudy	Moderate	14:51	8.6	Surface	1.0	0.3	191	24.0	24.0	8.2	8.2	21.4	21.4	100.1	100.1	7.5	7.2	3.7	4.7	6	6	66	68	810534	821501	<0.2	<0.2	1.7	1.9
						1.0	0.4	203	24.0		8.2		21.4		100.1		7.5		3.7		4		66				<0.2		1.9	
					Middle	4.3	0.3	206	23.9	23.9	8.2	8.2	23.6	23.6	92.8	92.8	6.8		4.9		6		68				<0.2		2.1	
						4.3	0.3	221	23.9		8.2		23.6		92.8		6.8		4.9		7		69				<0.2		2.0	
					Bottom	7.6	0.3	199	23.8	23.8	8.2	8.2	25.4	25.4	92.4	92.4	6.7	6.7	5.6		7		70				<0.2		1.7	
						7.6	0.3	214	23.8		8.2		25.4		92.4		6.7		5.6		7		69				<0.2		1.7	
IM12	Cloudy	Moderate	15:01	8.9	Surface	1.0	0.3	197	24.0	24.0	8.2	8.2	21.1	21.1	100.8	100.8	7.5	7.2	6.5	5.4	8	8	66	67	811517	821162	<0.2	<0.2	1.9	1.8
						1.0	0.3	210	24.0		8.2		21.1		100.8		7.5		6.5		10		65				<0.2		1.7	
					Middle	4.5	0.3	218	23.9	23.9	8.2	8.2	23.6	23.6	94.1	94.1	6.9		5.1		6		67				<0.2		1.7	
						4.5	0.3	233	23.9		8.2		23.6		94.1		6.9		5.1		8		68				<0.2		1.7	
					Bottom	7.9	0.3	177	23.9	23.9	8.2	8.2	24.9	24.9	99.9	99.9	7.3	7.3	4.7		8		68				<0.2		2.0	
						7.9	0.3	180	23.9		8.2		24.9		99.9		7.3		4.7		9		69				<0.2		1.7	
IM13	-	-	-	-	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
SR2	Cloudy	Moderate	15:32	4.5	Surface	1.0	0.4	254	23.6	23.6	8.2	8.2	23.2	23.2	94.7	94.7	7.0	7.0	4.4	5.0	<2	2	65	66	814175	821463	<0.2	<0.2	1.5	1.6
						1.0	0.4	268	23.6		8.2		23.2		94.7		7.0		4.4		<2		65				<0.2		1.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.3	225	23.2	23.2	8.1	8.1	29.2	29.2	94.5	94.5	6.8	6.8	5.6		3		67				<0.2		1.9	
						3.5	0.3	234	23.2		8.1		29.2		94.5		6.8		5.6		2		68				<0.2		1.6	
SR3	Cloudy	Moderate	14:09	13.1	Surface	1.0	0.4	206	24.0	24.0	8.2	8.2	21.6	21.6	95.9	95.7	7.1	7.0	4.2	4.5	5	5		-	807590	822147	-	-	-	-
						1.0	0.4	210	24.0		8.2		21.6		95.5		7.1		4.2		5						-		-	
					Middle	6.6	0.3	188	23.5	23.5	8.1	8.1	26.6	26.6	93.2	93.2	6.8		5.7		5						-		-	
						6.6	0.3	189	23.5		8.1		26.6		93.2		6.8		5.9		5						-		-	
					Bottom	12.1	0.3	129	23.4	23.5	8.1	8.1	28.6	28.6	98.9	99.2	7.1	7.2	3.6		4						-		-	
						12.1	0.3	134	23.5		8.1		28.5		99.4		7.2		3.6		4						-		-	
SR4A	Cloudy	Moderate	15:48	9.0	Surface	1.0	0.4	242	23.7	23.7	8.2	8.2	25.1	25.1	86.4	86.2	6.3	6.1	7.0	7.4	8	8		-	807827	817189	-	-	-	-
						1.0	0.4	254	23.7		8.2		25.1		86.0		6.3		6.8		7						-		-	
					Middle	4.5	0.3	212	22.9	22.9	8.1	8.1	29.3	29.3	80.5	80.6	5.8		7.5		9						-		-	
						4.5	0.4	223	22.9		8.1		29.3		80.6		5.9		7.5		8						-		-	
					Bottom	8.0	0.3	179	22.7	22.7	8.1	8.1	30.6	30.6	83.3	83.4	6.0	6.0	7.7		10						-		-	
						8.0	0.3	190	22.7		8.1		30.6		83.4		6.0		7.7		8						-		-	
SR5A	Cloudy	Moderate	16:05	5.2	Surface	1.0	0.2	207	24.0	24.0	8.2	8.2	24.5	24.5	100.1	100.1	7.3	7.3	4.7	5.0	5	6		-	810713	816593	-	-	-	-
						1.0	0.2	222	24.0		8.2		24.5		100.0		7.3		4.7		5						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.2	256	24.0	24.0	8.1	8.1	25.4	25.4	98.7	98.8	7.2	7.2	5.2		6						-		-	
						4.2	0.2	263	24.0		8.1		25.4		98.9		7.2		5.2		6						-		-	
SR6	Cloudy	Moderate	16:38	4.1	Surface	1.0	0.1	189	23.9	23.9	8.3	8.3	22.3	22.3	110.5	110.4	8.2	8.2	2.3	2.9	3	3		-	814653	817899	-	-	-	-
						1.0	0.1	190	23.9		8.3		22.3		110.2		8.2		2.3		4						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.1	231	23.7	23.7	8.2	8.2	27.3	27.3	114.1	114.4	8.3	8.3	3.6		2						-		-	
						3.1	0.1	238	23.7		8.2		27.3		114.6		8.3		3.5		4						-		-	
SR7	Cloudy	Moderate	16:42	28.4	Surface	1.0	0.1	203	23.2	23.2	8.2	8.2	29.0	29.0	96.2	96.2	7.0	6.7	1.1	2.1	3	3		-	823742	823636	-	-	-	-
						1.0	0.1	219	23.2		8.2		28.9		96.2		7.0		1.1		3						-		-	
					Middle	14.2	0.2	111	22.8	22.8	8.1	8.1	31.5	31.5	88.8	88.8	6.4		2.7		2						-		-	
						14.2	0.2	115	22.8		8.1		31.5		88.8		6.4		2.8		3						-		-	
					Bottom	27.4	0.2	186	22.8	22.8	8.1	8.1	31.5	31.5	92.0	92.1	6.6	6.6	2.5		3						-		-	
						27.4	0.2	197	22.8		8.1		31.5		92.2		6.6		2.2		3						-		-	
SR8	Cloudy	Moderate	15:18	4.9	Surface	1.0	0.5	286	23.6	23.6	8.2	8.2	23.8	23.8	94.0	94.0	7.0	7.0	4.7	5.6	6	6		-	811589	820417	-	-	-	-
						1.0	0.5	296	23.6		8.2		23.8		94.0		7.0		4.7		5						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	0.3	198	23.2	23.2	8.1	8.1	29.3	29.3	94.0	94.0	6.8	6.8	6.5		6						-		-	
						3.9	0.3	213	23.2		8.1		29.3		94.0		6.8		6.5		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 22 April 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	Rainy	Rough	10:38	7.5	Surface	1.0	0.9	201	23.8	23.8	8.3	8.3	22.2	22.2	93.2	92.9	6.9	6.4	5.1	6.5	7	8	67	70	804253	815620	<0.2	<0.2	2.2	2.3
						1.0	0.9	211	23.8		8.3		22.2		92.6		6.9		5.0		9		69				<0.2		2.5	
					Middle	3.8	0.8	180	22.4	22.4	8.1	8.1	32.2	32.2	82.2	82.3	5.9		6.1		7		69				<0.2		2.2	
						3.8	0.8	190	22.4		8.1		32.1		82.3		5.9		6.0		8		70				<0.2		2.3	
					Bottom	6.5	0.9	193	22.4	22.4	8.1	8.1	32.3	32.3	90.1	90.3	6.5	6.5	8.8		9		71				<0.2		2.0	
						6.5	0.9	193	22.4		8.1		32.3		90.5		6.5		8.0		9		71				<0.2		2.3	
C2	Rainy	Moderate	11:45	12.5	Surface	1.0	0.5	204	23.9	23.9	8.3	8.3	19.8	19.8	100.9	100.8	7.6	7.1	3.9	6.8	10	8	66	70	806932	825682	<0.2	<0.2	2.6	2.3
						1.0	0.5	213	23.9		8.3		19.8		100.6		7.6		4.0		10		66				<0.2		2.3	
					Middle	6.3	0.4	195	23.7	23.7	8.1	8.1	25.3	25.3	89.7	89.7	6.6		6.8		7		70				<0.2		2.1	
						6.3	0.4	199	23.7		8.1		25.3		89.7		6.6		6.8		6		70				<0.2		2.2	
					Bottom	11.5	0.4	130	23.4	23.4	8.1	8.1	26.6	26.6	88.8	88.9	6.5	6.5	9.5		7		73				<0.2		2.2	
						11.5	0.4	131	23.4		8.1		26.6		88.9		6.5		9.8		9		73				<0.2		2.5	
C3	Rainy	Moderate	09:10	13.2	Surface	1.0	0.3	223	23.3	23.3	8.2	8.2	26.5	26.5	91.6	91.6	6.7	6.6	1.6	2.2	5	5	69	74	817808	822109	<0.2	<0.2	1.5	1.5
						1.0	0.3	241	23.3		8.2		26.5		91.6		6.7		1.6		6		69				<0.2		1.8	
					Middle	6.6	0.5	247	22.9	22.9	8.1	8.1	30.4	30.4	89.1	89.1	6.4		2.3		4		74				<0.2		1.4	
						6.6	0.5	263	22.9		8.1		30.4		89.1		6.4		2.3		5		75				<0.2		1.4	
					Bottom	12.2	0.3	258	22.7	22.7	8.1	8.1	31.4	31.4	93.5	93.5	6.7	6.7	2.7		4		77				<0.2		1.2	
						12.2	0.4	281	22.7		8.1		31.4		93.5		6.7		2.7		6		77				<0.2		1.4	
IM1	Rainy	Rough	11:05	7.5	Surface	1.0	0.5	192	23.7	23.7	8.2	8.2	23.5	23.3	90.2	90.1	6.7	6.3	5.6	5.6	10	9	66	67	806461	818351	<0.2	<0.2	1.5	1.6
						1.0	0.5	203	23.6		8.2		23.0		89.9		6.7		5.8		10		66				<0.2		1.4	
					Middle	3.8	0.4	173	22.7	22.7	8.1	8.1	30.5	30.5	79.9	79.9	5.8		5.5		7		67				<0.2		1.6	
						3.8	0.5	186	22.7		8.1		30.5		79.9		5.8		5.5		9		68				<0.2		1.7	
					Bottom	6.5	0.6	159	22.7	22.7	8.1	8.1	30.5	30.5	84.1	84.2	6.1	6.1	5.5		9		68				<0.2		1.6	
						6.5	0.6	160	22.7		8.1		30.5		84.3		6.1		5.5		11		69				<0.2		1.9	
IM2	Rainy	Rough	11:16	8.4	Surface	1.0	0.7	173	23.8	23.8	8.2	8.2	21.6	21.6	93.5	93.3	7.0	6.5	3.4	4.4	10	10	65	66	806196	818852	<0.2	<0.2	2.3	2.1
						1.0	0.7	188	23.7		8.2		21.5		93.1		7.0		3.4		12		65				<0.2		2.2	
					Middle	4.2	0.6	155	22.7	22.7	8.1	8.1	30.3	30.3	82.9	82.9	6.0		5.0		8		66				<0.2		2.3	
						4.2	0.6	161	22.7		8.1		30.3		82.9		6.0		5.1		8		66				<0.2		2.0	
					Bottom	7.4	0.7	152	22.7	22.7	8.1	8.1	30.7	30.7	85.1	85.2	6.2	6.2	4.7		9		67				<0.2		1.8	
						7.4	0.7	162	22.7		8.1		30.7		85.2		6.2		4.7		10		67				<0.2		1.9	
IM3	Rainy	Rough	11:40	7.4	Surface	1.0	0.5	187	23.7	23.7	8.3	8.3	21.7	21.7	94.7	94.5	7.1	6.5	2.3	4.2	6	7	68	69	806020	819411	<0.2	<0.2	1.8	1.9
						1.0	0.5	199	23.7		8.3		21.7		94.3		7.1		2.4		6		67				<0.2		1.8	
					Middle	3.7	0.5	146	22.7	22.7	8.1	8.1	30.3	30.3	79.5	79.5	5.8		4.9		10		68				<0.2		1.8	
						3.7	0.5	153	22.7		8.1		30.3		79.4		5.8		4.8		8		69				<0.2		2.0	
					Bottom	6.4	0.5	160	22.6	22.6	8.1	8.1	30.9	30.9	80.6	80.7	5.8	5.8	5.4		6		69				<0.2		1.9	
						6.4	0.5	170	22.6		8.1		30.9		80.7		5.8		5.4		8		70				<0.2		2.0	
IM4	Rainy	Rough	11:52	6.9	Surface	1.0	0.8	191	23.6	23.6	8.3	8.3	21.3	21.3	95.4	95.2	7.2	6.8	2.9	5.3	6	7	66	68	805055	819570	<0.2	<0.2	1.4	1.6
						1.0	0.8	202	23.6		8.3		21.3		95.0		7.1		3.0		8		67				<0.2		1.4	
					Middle	3.5	0.5	180	22.5	22.5	8.1	8.1	31.1	31.1	87.7	87.9	6.3		6.2		6		68				<0.2		1.8	
						3.5	0.6	189	22.5		8.1		31.1		88.0		6.4		6.4		7		69				<0.2		1.8	
					Bottom	5.9	0.6	149	22.6	22.6	8.1	8.1	31.4	31.4	93.3	93.6	6.7	6.8	6.8		8		69				<0.2		1.6	
						5.9	0.6	153	22.6		8.1		31.3		93.8		6.8		6.7		6		70				<0.2		1.6	
IM5	Rainy	Rough	12:02	7.7	Surface	1.0	0.5	205	23.8	23.8	8.3	8.3	20.9	20.9	96.5	96.3	7.2	6.7	1.8	4.5	7	7	66	68	804924	820564	<0.2	<0.2	2.2	2.2
						1.0	0.6	219	23.8		8.3		20.9		96.0		7.2		1.9		6		67				<0.2		2.5	
					Middle	3.9	0.5	182	23.0	23.0	8.1	8.1	28.4	28.4	83.7	83.7	6.1		2.2		9		68				<0.2		2.3	
						3.9	0.5	182	23.0		8.1		28.4		83.6		6.1		2.0		7		69				<0.2		2.2	
					Bottom	6.7	0.5	183	22.5	22.5	8.1	8.1	31.3	31.3	83.6	83.7	6.0	6.1	9.7		6		70				<0.2		1.8	
						6.7	0.6	193	22.5		8.1		31.3		83.8		6.1		9.6		6		69				<0.2		2.1	
IM6	Rainy	Rough	12:10	7.1	Surface	1.0	0.4	196	23.7	23.7	8.2	8.2	21.7	21.7	88.4	88.2	6.6	6.3	6.9	9.1	12	9	66	68	805829	821060	<0.2	<0.2	2.0	2.0
						1.0	0.4	197	23.7		8.2		21.6		87.9		6.6		7.1		10		66				<0.2		2.0	
					Middle	3.6	0.4	162	23.3	23.3	8.1	8.1	27.4	27.4	80.5	80.5	5.9		8.4		9		69				<0.2		2.1	
						3.6	0.4	167	23.3		8.1		27.4		80.5		5.9		8.5		7		69				<0.2		2.1	
					Bottom	6.1	0.3	142	22.7	22.7	8.1	8.1	30.3	30.3	78.4	78.5	5.7	5.7	11.7		7		70				<0.2		2.0	
						6.1	0.4	155	22.7		8.1		30.3		78.5		5.7		11.7		7		70				<0.2		1.9	
IM7	Rainy	Moderate	12:25	8.0	Surface	1.0	0.4	204	24.0	24.0	8.2	8.2	20.6	20.7	97.7	97.6	7.3	6.9	6.1	6.9	6	6	67	68	806817	821349	<0.2	<0.2	1.8	1.9
						1.0	0.5	214	24.0		8.2		20.7		97.4		7.3		6.1		6		68				<0.2		2.0	
					Middle	4.0	0.4	192	23.6	23.6	8.1	8.1	25.1	25.1	87.8	87.8	6.5		7.0		6		68				<0.2		1.8	
						4.0	0.4	202	23.5		8.1		25.1		87.7		6.5		7.1		6		68				<0.2		1.8	
					Bottom	7.0	0.4	125	23.0	23.1	8.1	8.1	29.3	29.3	91.3	91.5	6.6	6.6	7.5		7		69				<0.2		2.2	
						7.0	0.4	130	23.1		8.1		29.2		91.7		6.6		7.4		6		69				<0.2		1.9	
IM8	Rainy	Moderate	10:55	8.2	Surface	1.0	0.5	190	24.0	24.0	8.2	8.2	20.7	20.7	99.8	99.7	7.5	7.1	2.9	3.9	8	8	70	71	807828	821695	<0.2	<0.2	2.8	2.9
						1.0	0.5	205	24.0		8.2		20.7		99.5		7.4		3.0		7		70				<0.2		3.0	
					Middle	4.1	0.3	182	23.7	23.7	8.2	8.2	25.0	25.1	93.0	93.0	6.8		4.0		7		71				<0.2		2.8	
						4.1	0.3	197	23.7		8.2		25.1		93.0		6.8		4.0		8		71				<0.2		3.1	
					Bottom	7.2	0.3	145	23.2	23.2	8.1	8.1	28.3	28.3	95.6	95.8	6.9	7.0	4.6		8		73				<0.2		2.8	
						7.2	0.3	158	23.2		8.1		28.3		95.9		7.0		4.6		10		73				<0.2		2.8	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 22 April 17 during Mid-Ebb tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Rainy	Moderate	10:43	6.9	Surface	1.0	0.3	185	24.0	24.0	8.3	8.3	21.0	21.0	105.7	105.7	7.9	7.6	2.7	3.6	8	8	67	70	808793	822094	<0.2	<0.2	2.7	2.7
						1.0	0.3	189	24.0		8.3		21.0		105.7		7.9		2.7		8		68				<0.2		2.7	
					Middle	3.5	0.3	205	24.0	24.0	8.2	8.2	23.4	23.4	97.8	97.8	7.2		4.4		7		70				<0.2		2.7	
						3.5	0.3	205	24.0		8.2		23.4		97.8		7.2		4.4		5		70				<0.2		2.9	
					Bottom	5.9	0.3	187	24.0	24.0	8.2	8.2	23.4	23.4	103.6	103.6	7.6	7.6	3.7		10		73				<0.2		2.6	
						5.9	0.3	193	24.0		8.2		23.4		103.6		7.6		3.7		8		73				<0.2		2.6	
IM10	Rainy	Moderate	10:33	7.9	Surface	1.0	0.4	195	24.0	24.0	8.2	8.2	21.0	21.0	99.3	99.3	7.4	7.3	3.5	4.0	10	8	67	71	809828	822240	<0.2	<0.2	2.8	2.5
						1.0	0.4	211	24.0		8.2		21.0		99.3		7.4		3.5		8		68				<0.2		2.6	
					Middle	4.0	0.3	202	24.0	24.0	8.2	8.2	23.5	23.5	96.6	96.6	7.1		4.2		8		71				<0.2		2.7	
						4.0	0.3	216	24.0		8.2		23.5		96.6		7.1		4.2		8		72				<0.2		2.5	
					Bottom	6.9	0.3	208	24.0	24.0	8.2	8.2	25.1	25.1	101.4	101.4	7.4	7.4	4.4		7		73				<0.2		2.1	
						6.9	0.3	214	24.0		8.2		25.1		101.4		7.4		4.4		7		73				<0.2		2.4	
IM11	Rainy	Moderate	10:22	8.4	Surface	1.0	0.3	187	24.0	24.0	8.2	8.2	21.1	21.1	98.1	98.1	7.3	7.2	3.5	4.7	6	7	65	71	810540	821501	<0.2	<0.2	2.0	2.0
						1.0	0.3	204	24.0		8.2		21.1		98.1		7.3		3.5		6		66				<0.2		1.8	
					Middle	4.2	0.3	234	24.0	24.0	8.2	8.2	23.6	23.6	94.9	94.9	7.0		4.6		6		73				<0.2		2.0	
						4.2	0.3	236	24.0		8.2		23.6		94.9		7.0		4.6		6		74				<0.2		1.9	
					Bottom	7.4	0.2	182	23.7	23.7	8.2	8.2	24.3	24.3	95.3	95.4	7.0	7.0	5.8		9		75				<0.2		2.3	
						7.4	0.2	195	23.7		8.2		24.3		95.4		7.0		5.9		8		75				<0.2		2.0	
IM12	Rainy	Moderate	10:11	9.6	Surface	1.0	0.3	185	24.1	24.1	8.2	8.2	21.3	21.3	103.8	103.8	7.7	7.4	2.9	3.9	7	8	67	72	811501	821162	<0.2	<0.2	1.9	2.0
						1.0	0.3	196	24.1		8.2		21.3		103.8		7.7		2.9		6		67				<0.2		2.1	
					Middle	4.8	0.3	223	24.0	24.0	8.2	8.2	23.5	23.5	97.1	97.1	7.1		4.1		8		74				<0.2		2.3	
						4.8	0.3	228	24.0		8.2		23.5		97.1		7.1		4.1		9		74				<0.2		2.0	
					Bottom	8.6	0.2	178	23.8	23.8	8.2	8.2	24.8	24.8	98.1	98.1	7.2	7.2	4.8		8		75				<0.2		1.8	
						8.6	0.3	187	23.8		8.2		24.8		98.1		7.2		4.8		8		75				<0.2		1.7	
IM13	-	-	-	-	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
SR2	Rainy	Moderate	09:37	4.8	Surface	1.0	0.4	257	23.6	23.6	8.2	8.2	24.2	24.2	95.5	95.5	7.0	7.0	4.6	6.1	3	4	68	70	814151	821463	<0.2	<0.2	1.7	1.7
						1.0	0.4	268	23.6		8.2		24.2		95.5		7.0		4.6		2		68				<0.2		1.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-						-		-	
						-	-	-	-		-		-		-		-		-		-						-		-	
					Bottom	3.8	0.3	253	23.2	23.2	8.1	8.1	29.0	29.0	96.9	96.9	7.0	7.0	7.5		5		71				<0.2		1.6	
						3.8	0.3	259	23.2		8.1		29.0		96.9		7.0		7.5		4		71				<0.2		1.8	
SR3	Rainy	Moderate	11:23	8.4	Surface	1.0	0.4	187	24.0	24.0	8.2	8.2	21.2	21.2	98.8	98.7	7.4	7.2	4.7	5.3	7	8		-	807564	822147	-	-	-	-
						1.0	0.5	196	24.0		8.2		21.1		98.6		7.4		4.6		7						-		-	
					Middle	4.2	0.4	198	23.8	23.8	8.1	8.1	25.1	25.1	93.5	93.6	6.9		5.5		7						-		-	
						4.2	0.4	199	23.8		8.1		25.1		93.6		6.9		5.5		7						-		-	
					Bottom	7.4	0.3	184	23.6	23.6	8.1	8.1	26.6	26.7	96.7	96.9	7.0	7.1	5.6		7						-		-	
						7.4	0.3	195	23.6		8.1		26.7		97.0		7.1		5.7		10						-		-	
SR4A	Rainy	Moderate	10:18	7.4	Surface	1.0	0.3	179	23.7	23.7	8.2	8.2	25.3	25.3	86.6	86.5	6.3	6.2	8.7	8.4	23	15		-	807798	817189	-	-	-	-
						1.0	0.3	189	23.7		8.2		25.3		86.4		6.3		8.8		23						-		-	
					Middle	3.7	0.4	122	23.4	23.4	8.1	8.1	27.2	27.2	82.7	82.7	6.0		8.4		13						-		-	
						3.7	0.4	134	23.4		8.1		27.2		82.6		6.0		8.4		11						-		-	
					Bottom	6.4	0.4	106	23.0	23.0	8.1	8.1	29.4	29.4	84.8	84.9	6.1	6.2	8.0		10						-		-	
						6.4	0.4	111	23.0		8.1		29.4		84.9		6.2		8.1		12						-		-	
SR5A	Rainy	Moderate	09:56	5.2	Surface	1.0	0.1	184	24.0	24.0	8.2	8.2	24.5	24.5	98.6	98.6	7.2	7.2	1.1	2.2	9	8		-	810680	816593	-	-	-	-
						1.0	0.1	184	24.0		8.2		24.5		98.6		7.2		1.1		8						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-						-		-	
						-	-	-	-		-		-		-		-		-		-						-		-	
					Bottom	4.2	0.1	165	24.2	24.2	8.1	8.1	24.8	24.8	100.4	100.5	7.3	7.3	3.3		8						-		-	
						4.2	0.1	166	24.2		8.1		24.8		100.5		7.3		3.3		6						-		-	
SR6	Rainy	Moderate	09:30	4.5	Surface	1.0	0.1	157	24.2	24.2	8.3	8.3	22.5	22.5	104.8	104.7	7.7	7.7	5.6	7.4	10	10		-	814681	817899	-	-	-	-
						1.0	0.1	165	24.2		8.3		22.5		104.5		7.7		5.6		10						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-						-		-	
						-	-	-	-		-		-		-		-		-		-						-		-	
					Bottom	3.5	0.1	146	24.3	24.3	8.1	8.1	24.0	24.0	98.2	98.3	7.2	7.2	9.2		11						-		-	
						3.5	0.1	146	24.3		8.1		24.0		98.4		7.2		9.2		10						-		-	
SR7	Rainy	Moderate	08:49	19.0	Surface	1.0	0.2	210	23.3	23.3	8.1	8.1	29.3	29.3	90.2	90.2	6.5	6.5	3.7	3.3	5	5		-	823742	823636	-	-	-	-
						1.0	0.3	227	23.2		8.0		29.3		90.2		6.5		3.8		4						-		-	
					Middle	9.5	0.3	206	23.0	23.0	8.0	8.0	30.8	30.8	88.4	88.4	6.4		3.1		5						-		-	
						9.5	0.3	209	23.0		8.0		30.8		88.4		6.4		3.2		6						-		-	
					Bottom	18.0	0.2	137	22.9	22.9	8.0	8.0	31.0	31.0	88.9	88.9	6.4	6.4	2.9		4						-		-	
						18.0	0.2	143	22.9		8.0		31.0		88.9		6.4		2.9		5						-		-	
SR8	Rainy	Moderate	09:58	5.2	Surface	1.0	0.4	272	23.7	23.7	8.2	8.2	24.3	24.3	97.1	97.1	7.2	7.2	4.6	5.1	6	8		-	811609	820417	-	-	-	-
						1.0	0.5	278	23.7		8.2		24.3		97.1		7.2		4.6		7						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-						-		-	
						-	-	-	-		-		-		-		-		-		-						-		-	
					Bottom	4.2	0.3	207	23.3	23.3	8.1	8.1	28.9	28.9	97.2	97.2	7.0	7.0	5.6		9						-		-	
						4.2	0.3	214	23.3		8.1		28.9		97.2		7.0		5.6		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 25 April 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	18:10	7.1	Surface	1.0	0.7	61	23.1	23.1	7.9	7.9	24.9	24.9	75.4	75.4	5.9	5.9	20.1	25.8	16	24	75	76	804260	815620	<0.2	<0.2	1.2	1.1
						1.0	0.7	65	23.1		7.9		24.9		75.4		5.9		20.1		15		75				<0.2		0.9	
					Middle	3.6	0.6	78	23.1	23.1	7.9	7.9	24.9	24.9	77.6	77.6	5.9		26.8		20		75				<0.2		1.1	
						3.6	0.6	78	23.1		7.9		24.9		77.6		5.9		26.7		20		76				<0.2		1.0	
					Bottom	6.1	0.5	108	23.1	23.1	7.9	7.9	24.9	24.9	79.5	79.5	5.9	5.9	30.5		37		76				<0.2		1.1	
						6.1	0.6	115	23.1		7.9		24.9		79.5		5.9		30.5		38		76				<0.2		1.0	
C2	Rainy	Rough	16:39	8.5	Surface	1.0	1.2	330	23.1	23.1	7.9	7.9	23.6	23.6	79.7	79.7	6.0	5.9	11.2	22.2	10	14	73	75	806949	825682	<0.2	<0.2	1.9	1.9
						1.0	1.3	333	23.1		7.9		23.6		79.6		6.0		11.4		11		74				<0.2		1.9	
					Middle	4.3	0.7	328	23.1	23.1	7.9	7.9	25.4	25.5	78.8	78.8	5.8		38.1		16		75				<0.2		2.1	
						4.3	0.7	359	23.1		7.9		25.5		78.8		5.8		39.1		16		75				<0.2		1.9	
					Bottom	7.5	0.7	340	23.1	23.1	7.9	7.9	25.7	25.7	78.9	78.9	5.8	5.8	16.7		17		77				<0.2		1.7	
						7.5	0.8	350	23.1		7.9		25.7		78.9		5.8		16.7		15		77				<0.2		2.0	
C3	Rainy	Rough	18:41	9.9	Surface	1.0	0.6	270	22.8	22.8	7.9	7.9	28.8	28.8	84.4	84.4	6.1	6.0	6.6	8.3	10	13	76	77	817819	822109	<0.2	<0.2	1.1	1.2
						1.0	0.6	275	22.8		7.9		28.8		84.4		6.1		6.7		10		77				<0.2		1.3	
					Middle	5.0	0.7	269	22.6	22.6	7.9	7.9	29.9	29.9	81.3	81.3	5.9		8.5		17		78				<0.2		1.4	
						5.0	0.7	277	22.6		7.9		29.9		81.3		5.9		8.7		15		78				<0.2		1.1	
					Bottom	8.9	0.7	279	22.5	22.5	7.9	7.9	30.0	30.0	84.2	84.2	6.2	6.2	9.4		14		75				<0.2		1.2	
						8.9	0.7	297	22.5		7.9		30.0		84.2		6.2		9.9		13		77				<0.2		1.3	
IM1	Rainy	Rough	17:43	7.9	Surface	1.0	0.6	19	23.1	23.1	7.9	7.9	24.9	24.9	78.8	78.8	6.0	6.0	18.4	25.0	15	17	73	75	806476	818351	<0.2	<0.2	1.5	1.3
						1.0	0.6	20	23.0		7.9		24.9		78.8		6.0		18.1		15		73				<0.2		1.2	
					Middle	4.0	0.6	40	23.0	23.0	7.9	7.9	24.9	24.9	79.9	79.9	5.9		26.3		16		75				<0.2		1.1	
						4.0	0.6	43	23.0		7.9		24.9		79.9		5.9		26.3		18		75				<0.2		1.3	
					Bottom	6.9	0.4	33	23.0	23.0	7.9	7.9	24.9	24.9	80.2	80.2	6.0	6.0	30.4		18		77				<0.2		1.3	
						6.9	0.5	34	23.0		7.9		24.9		80.2		6.0		30.4		17		77				<0.2		1.2	
IM2	Rainy	Rough	17:39	7.5	Surface	1.0	0.7	19	23.1	23.1	7.9	7.9	24.9	24.9	79.8	79.8	5.9	5.9	16.7	22.7	17	16	73	75	806187	818852	<0.2	<0.2	1.4	1.5
						1.0	0.7	20	23.1		7.9		24.9		79.8		5.9		16.7		15		73				<0.2		1.5	
					Middle	3.8	0.6	30	23.1	23.1	7.9	7.9	24.9	24.9	80.0	80.0	5.9		22.5		17		75				<0.2		1.6	
						3.8	0.6	31	23.1		7.9		24.9		80.0		5.9		22.5		19		76				<0.2		1.4	
					Bottom	6.5	0.5	18	23.0	23.0	7.9	7.9	24.9	24.9	80.0	80.0	5.9	5.9	28.8		14		77				<0.2		1.4	
						6.5	0.5	18	23.0		7.9		24.9		80.0		5.9		28.8		16		77				<0.2		1.6	
IM3	Rainy	Rough	17:30	7.0	Surface	1.0	0.8	21	23.1	23.1	7.9	7.9	24.9	24.9	80.0	80.0	6.0	6.0	16.7	23.1	14	17	74	75	806030	819411	<0.2	<0.2	1.8	1.8
						1.0	0.9	22	23.1		7.9		24.9		80.0		6.0		16.7		12		73				<0.2		1.8	
					Middle	3.5	0.7	22	23.1	23.1	7.9	7.9	24.9	24.9	80.0	80.0	5.9		22.5		18		75				<0.2		1.9	
						3.5	0.7	22	23.1		7.9		24.9		80.0		5.9		22.5		16		75				<0.2		1.9	
					Bottom	6.0	0.6	27	23.1	23.1	7.9	7.9	24.9	24.9	80.1	80.1	6.0	6.0	30.1		20		77				<0.2		1.6	
						6.0	0.6	27	23.1		7.9		24.9		80.1		6.0		30.1		22		77				<0.2		1.6	
IM4	Rainy	Rough	17:18	7.1	Surface	1.0	0.9	24	23.1	23.1	7.9	7.9	25.1	25.1	81.3	81.3	6.0	6.1	17.5	23.9	14	21	73	76	805032	819570	<0.2	<0.2	1.7	1.7
						1.0	0.9	25	23.1		7.9		25.1		81.3		6.0		17.5		16		74				<0.2		1.7	
					Middle	3.6	0.7	24	23.0	23.0	7.9	7.9	25.2	25.2	82.0	82.1	6.1		23.4		11		76				<0.2		1.9	
						3.6	0.7	25	23.0		7.9		25.2		82.1		6.1		23.5		12		76				<0.2		1.8	
					Bottom	6.1	0.6	26	23.0	23.0	7.9	7.9	25.3	25.3	86.5	86.6	6.4	6.4	30.6		36		77				<0.2		1.5	
						6.1	0.6	27	23.0		7.9		25.2		86.7		6.4		30.6		35		78				<0.2		1.8	
IM5	Rainy	Rough	17:06	6.0	Surface	1.0	0.9	43	23.1	23.1	7.9	7.9	24.9	24.9	79.8	79.8	5.9	5.9	18.2	23.4	12	15	74	76	804919	820564	<0.2	<0.2	1.7	1.9
						1.0	0.9	44	23.1		7.9		24.9		79.8		5.9		18.5		12		74				<0.2		1.8	
					Middle	3.0	0.7	41	23.1	23.1	7.9	7.9	24.9	24.9	79.8	79.8	5.9		24.7		12		75				<0.2		2.1	
						3.0	0.7	43	23.1		7.9		24.9		79.8		5.9		24.5		11		76				<0.2		2.1	
					Bottom	5.0	0.6	46	23.1	23.1	7.9	7.9	24.9	24.9	79.9	79.9	5.9	5.9	27.8		22		77				<0.2		1.9	
						5.0	0.6	47	23.1		7.9		24.9		79.9		5.9		26.4		22		77				<0.2		1.8	
IM6	Rainy	Rough	16:52	6.5	Surface	1.0	0.8	38	23.1	23.1	7.9	7.9	24.9	24.9	80.1	80.1	6.0	6.0	25.3	27.7	22	23	73	76	805838	821060	<0.2	<0.2	2.0	2.1
						1.0	0.8	41	23.1		7.9		24.9		80.1		6.0		25.4		24		74				<0.2		2.0	
					Middle	3.3	0.7	33	23.1	23.1	7.9	7.9	24.9	24.9	80.1	80.1	5.9		28.9		19		76				<0.2		2.1	
						3.3	0.8	34	23.1		7.9		24.9		80.1		5.9		29.0		20		76				<0.2		2.2	
					Bottom	5.5	0.5	32	23.1	23.1	7.9	7.9	24.9	24.9	80.4	80.4	6.0	6.0	28.9		27		77				<0.2		2.1	
						5.5	0.5	34	23.1		7.9		24.9		80.4		6.0		28.8		26		78				<0.2		2.1	
IM7	Rainy	Rough	16:39	7.1	Surface	1.0	0.7	41	23.1	23.1	7.9	7.9	24.9	24.9	80.9	80.9	6.0	6.2	24.7	28.9	17	21	74	75	806841	821349	<0.2	<0.2	2.0	2.0
						1.0	0.8	43	23.1		7.9		24.9		80.9		6.0		24.7		15		74				<0.2		2.0	
					Middle	3.6	0.6	40	23.1	23.1	7.9	7.9	24.9	24.9	84.2	84.3	6.3		28.8		18		75				<0.2		1.9	
						3.6	0.7	43	23.1		7.9		24.9		84.3		6.3		28.8		20		75				<0.2		2.0	
					Bottom	6.1	0.6	60	23.1	23.1	7.8	7.8	24.9	24.9	91.6	91.7	6.8	6.8	33.3		30		77				<0.2		1.9	
						6.1	0.6	65	23.1		7.8		24.9		91.8		6.8		33.3		27		77				<0.2		1.9	
IM8	Rainy	Rough	17:05	8.2	Surface	1.0	1.0	210	23.1	23.1	7.9	7.9	24.2	24.2	81.4	81.4	6.1	6.0	7.9	25.8	14	21	75	76	807840	821695	<0.2	<0.2	2.0	1.8
						1.0	1.0	218	23.1		7.9		24.2		81.4		6.1		8.0		12		75				<0.2		1.8	
					Middle	4.1	0.7	216	23.0	23.0	7.9	7.9	25.6	25.6	79.3	79.3	5.9		27.5		19		75				<0.2		2.0	
						4.1	0.7	219	23.0		7.9		25.5		79.3		5.9		27.4		17		74				<0.2		1.8	
					Bottom	7.2	0.6	227	23.0	23.0	7.9	7.9	25.7	25.7	81.8	81.8	6.0	6.1	41.8		32		77				<0.2		1.6	
						7.2	0.6	249	23.0		7.9		25.7		81.8		6.1		42.3		34		77				<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 25 April 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	Rough	17:16	8.1	Surface	1.0	0.9	279	23.0	23.0	8.1	8.1	27.8	27.8	85.9	85.9	6.3	6.3	7.0	8.4	10	10	75	75	808820	822094	<0.2	<0.2	1.2	1.2
						1.0	0.9	283	23.0		8.1		27.8		85.9		6.3		7.3		9		75				<0.2		1.2	
					Middle	4.1	0.8	281	22.6	22.6	8.1	8.1	28.4	28.4	86.2	86.2	6.3		8.6		10		76				<0.2		1.1	
						4.1	0.8	298	22.6		8.1		28.4		86.2		6.3		8.6		10		76				<0.2		1.2	
					Bottom	7.1	0.9	288	22.7	22.7	8.1	8.1	29.2	29.2	86.2	86.2	6.3		9.6		11		73				<0.2		1.2	
						7.1	0.9	309	22.7		8.1		29.1		86.2		6.3		9.5		10		73				<0.2		1.0	
IM10	Rainy	Rough	17:28	8.5	Surface	1.0	0.9	268	22.7	22.7	8.1	8.1	27.7	27.7	81.4	81.4	6.1	6.0	7.0	8.5	12	11	74	75	809818	822240	<0.2	<0.2	1.1	1.2
						1.0	0.9	283	22.7		8.1		27.7		81.4		6.1		7.2		13		74				<0.2		1.4	
					Middle	4.3	0.8	266	22.6	22.6	8.1	8.1	28.5	28.5	79.3	79.3	5.9		8.5		10		75				<0.2		1.4	
						4.3	0.8	271	22.6		8.1		28.5		79.3		5.9		8.0		10		75				<0.2		1.2	
					Bottom	7.5	0.8	277	22.5	22.5	8.1	8.1	29.1	29.1	81.8	81.8	6.0	6.1	10.1		12		75				<0.2		1.1	
						7.5	0.8	282	22.5		8.1		29.1		81.8		6.1		10.1		10		75				<0.2		1.2	
IM11	Rainy	Rough	17:39	9.0	Surface	1.0	0.8	270	22.7	22.7	8.1	8.1	27.5	27.5	84.9	84.9	6.4	6.3	6.8	8.3	16	16	76	76	810544	821501	<0.2	<0.2	1.3	1.4
						1.0	0.8	294	22.7		8.1		27.5		84.9		6.4		6.7		18		77				<0.2		1.5	
					Middle	4.5	0.8	269	22.5	22.5	8.1	8.1	28.4	28.4	85.2	85.2	6.2		8.5		16		77				<0.2		1.4	
						4.5	0.9	294	22.5		8.1		28.4		85.2		6.2		8.8		14		77				<0.2		1.3	
					Bottom	8.0	0.8	273	22.5	22.5	8.1	8.1	29.3	29.3	85.2	85.2	6.2	6.2	9.4		16		75				<0.2		1.5	
						8.0	0.8	279	22.5		8.1		29.3		85.2		6.2		9.4		17		75				<0.2		1.4	
IM12	Rainy	Rough	17:48	8.7	Surface	1.0	0.8	281	23.1	23.1	8.1	8.1	27.3	27.3	80.4	80.4	6.0	6.0	6.8	9.0	10	9	75	75	811515	821162	<0.2	<0.2	1.5	1.4
						1.0	0.8	283	23.1		8.1		27.3		80.4		6.0		6.6		10		75				<0.2		1.3	
					Middle	4.4	0.8	289	22.9	22.9	8.1	8.1	28.3	28.3	79.1	79.1	5.9		8.3		9		76				<0.2		1.4	
						4.4	0.9	299	22.9		8.1		28.3		79.1		5.9		8.7		11		76				<0.2		1.2	
					Bottom	7.7	0.8	281	22.8	22.8	8.1	8.1	29.2	29.2	83.8	83.8	6.1	6.1	11.3		6		74				<0.2		1.4	
						7.7	0.8	288	22.8		8.1		29.2		83.8		6.1		12.0		8		74				<0.2		1.4	
IM13	-	-	-	-	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
SR2	Rainy	Rough	18:14	5.0	Surface	1.0	0.7	282	23.0	23.0	8.0	8.0	28.4	28.4	79.4	79.3	5.8	5.8	10.3	12.4	9	9	75	75	814177	821463	<0.2	<0.2	1.4	1.3
						1.0	0.8	287	23.0		8.0		28.4		79.2		5.8		10.1		10		75				<0.2		1.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					-		-	
						-	-	-	-		-		-		-		-		-		-						-		-	
					Bottom	4.0	0.8	286	22.6	22.6	8.0	8.0	29.4	29.4	83.8	83.8	6.2	6.2	14.8		9		75				<0.2		1.2	
						4.0	0.8	288	22.6		8.0		29.4		83.8		6.2		14.3		9		75				<0.2		1.1	
SR3	Rainy	Rough	16:55	13.2	Surface	1.0	1.1	322	23.1	23.1	7.9	7.9	23.7	23.7	78.7	78.7	5.9	5.9	11.1	22.1	7	9		-	807559	822147	-	-	-	-
						1.0	1.1	322	23.1		7.9		23.7		78.7		5.9		11.3		8						-		-	
					Middle	6.6	0.9	318	23.1	23.1	7.9	7.9	25.4	25.4	78.4	78.4	5.8		12.2		9						-		-	
						6.6	0.9	322	23.1		7.9		25.4		78.4		5.8		11.9		7						-		-	
					Bottom	12.2	0.8	333	23.1	23.1	7.9	7.9	25.8	25.8	78.8	78.8	5.8	5.8	43.1		13						-		-	
						12.2	0.8	346	23.1		7.9		25.8		78.8		5.8		43.2		12						-		-	
SR4A	Cloudy	Moderate	18:44	7.4	Surface	1.0	0.3	296	22.8	22.8	7.9	7.9	24.4	24.4	77.8	77.8	5.8	5.9	11.3	19.3	12	16		-	807822	817189	-	-	-	-
						1.0	0.3	300	22.8		7.9		24.4		77.7		5.8		11.1		12						-		-	
					Middle	3.7	0.3	298	22.8	22.8	7.9	7.9	24.8	24.8	79.6	79.6	5.9		22.8		14						-		-	
						3.7	0.3	319	22.8		7.9		24.8		79.6		5.9		22.7		16						-		-	
					Bottom	6.4	0.2	259	23.0	23.0	7.9	7.9	24.9	24.9	81.0	81.0	6.0	6.0	23.8		23						-		-	
						6.4	0.2	281	23.0		7.9		24.9		81.0		6.0		23.8		20						-		-	
SR5A	Cloudy	Moderate	19:00	5.9	Surface	1.0	0.3	266	22.8	22.8	7.9	7.9	24.8	24.8	79.5	79.7	5.8	5.8	13.5	17.0	13	13		-	810693	816593	-	-	-	-
						1.0	0.4	269	22.8		7.9		24.8		79.9		5.8		13.6		14						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					-		-	
						-	-	-	-		-		-		-		-		-		-						-		-	
					Bottom	4.9	0.4	269	23.2	23.2	7.9	7.9	25.0	25.0	80.4	80.4	5.9	5.9	20.5		13						-		-	
						4.9	0.4	272	23.2		7.9		25.0		80.3		5.9		20.5		12						-		-	
SR6	Cloudy	Moderate	19:14	5.8	Surface	1.0	0.4	244	22.9	22.9	7.9	7.9	24.9	24.9	77.9	77.9	5.8	5.8	11.8	17.2	14	14		-	814659	817899	-	-	-	-
						1.0	0.4	246	22.9		7.9		24.9		77.8		5.8		11.6		13						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					-		-	
						-	-	-	-		-		-		-		-		-		-						-		-	
					Bottom	4.8	0.5	250	23.1	23.1	7.9	7.9	25.0	25.0	80.5	80.5	6.0	6.0	22.7		13						-		-	
						4.8	0.5	272	23.1		7.9		25.0		80.4		6.0		22.7		14						-		-	
SR7	Rainy	Rough	19:06	16.8	Surface	1.0	0.4	120	22.7	22.7	7.9	7.9	30.1	30.1	85.3	85.3	6.1	6.1	6.8	8.2	9	9		-	823747	823636	-	-	-	-
						1.0	0.4	126	22.7		7.9		30.1		85.3		6.1		6.6		7						-		-	
					Middle	8.4	0.3	102	22.6	22.6	7.9	7.9	30.2	30.2	85.1	85.1	6.1		8.4		8						-		-	
						8.4	0.3	107	22.6		7.9		30.2		85.1		6.1		8.2		9						-		-	
					Bottom	15.8	0.2	169	22.5	22.5	7.9	7.9	30.5	30.5	86.0	86.0	6.3	6.3	9.4		10						-		-	
						15.8	0.2	184	22.5		7.9		30.5		86.0		6.3		10.0		10						-		-	
SR8	Rainy	Rough	17:57	5.1	Surface	1.0	0.7	300	23.1	23.1	8.0	8.0	28.5	28.5	82.9	82.9	6.2	6.2	11.6	12.9	7	7		-	811604	820417	-	-	-	-
						1.0	0.7	320	23.1		8.0		28.5		82.9		6.2		11.3		7						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					-		-	
						-	-	-	-		-		-		-		-		-		-						-		-	
					Bottom	4.1	0.7	311	22.8	22.8	7.9	7.9	29.6	29.6	86.0	86.0	6.4	6.4	14.6		8						-		-	
						4.1	0.8	319	22.8		7.9		29.6		86.0		6.4		14.0		7						-		-	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 25 April 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	12:25	7.9	Surface	1.0	0.5	208	22.7	22.7	8.1	8.1	30.0	30.0	93.0	93.0	6.8	6.7	5.6	6.9	9	8	72	74	804245	815620	<0.2	<0.2	0.8	0.7
						1.0	0.5	213	22.7		8.1		30.0		93.0		6.8		5.7		7		72				<0.2		0.7	
					Middle	4.0	0.5	218	22.6	22.6	8.1	8.1	30.5	30.5	90.9	90.9	6.6		6.0		10		73				<0.2		0.6	
						4.0	0.5	228	22.6		8.1		30.5		90.9		6.6		6.1		8		74				<0.2		0.7	
					Bottom	6.9	0.5	232	22.6	22.6	8.1	8.1	30.8	30.8	91.3	91.3	6.6	6.6	8.9		8		75				<0.2		0.6	
						6.9	0.5	251	22.6		8.1		30.8		91.2		6.6		8.9		8		76				<0.2		0.7	
C2	Rainy	Rough	13:10	12.5	Surface	1.0	0.9	201	23.1	23.1	8.0	8.0	25.4	25.4	84.1	84.1	6.2	6.1	8.7	14.0	10	15	74	75	806952	825682	<0.2	<0.2	2.0	1.8
						1.0	0.9	203	23.1		8.0		25.4		84.1		6.2		8.7		12		73				<0.2		1.9	
					Middle	6.3	0.7	195	22.8	22.8	8.0	8.0	28.1	28.1	80.9	81.0	5.9		13.9		14		74				<0.2		2.0	
						6.3	0.7	199	22.8		8.0		28.1		81.0		5.9		13.9		12		75				<0.2		1.8	
					Bottom	11.5	1.1	224	22.8	22.8	8.0	8.0	28.6	28.6	81.5	81.5	6.0	6.0	19.3		21		76				<0.2		1.5	
						11.5	1.1	234	22.8		8.0		28.6		81.5		6.0		19.3		19		77				<0.2		1.5	
C3	Rainy	Rough	11:08	11.3	Surface	1.0	0.7	126	22.6	22.6	8.1	8.1	29.8	29.8	81.4	81.4	5.9	5.9	3.2	3.2	8	9	77	75	817812	822109	<0.2	<0.2	2.8	1.6
						1.0	0.8	130	22.6		8.1		29.8		81.3		5.9		3.2		10		74				<0.2		2.8	
					Middle	5.7	0.7	126	22.6	22.6	8.1	8.1	30.1	30.1	79.8	79.8	5.8		3.0		8		74				<0.2		1.0	
						5.7	0.8	129	22.6		8.1		30.1		79.7		5.8		3.0		7		75				<0.2		1.0	
					Bottom	10.3	0.8	123	22.6	22.6	8.1	8.1	30.6	30.6	79.4	79.4	5.8	5.8	3.3		10		75				<0.2		1.0	
						10.3	0.8	125	22.6		8.1		30.6		79.4		5.8		3.4		12		76				<0.2		1.2	
IM1	Cloudy	Moderate	12:47	7.5	Surface	1.0	0.5	203	22.6	22.6	8.1	8.1	30.2	30.2	88.4	88.4	6.4	6.4	6.6	7.9	9	11	72	73	806471	818351	<0.2	<0.2	0.9	0.8
						1.0	0.5	203	22.6		8.1		30.2		88.4		6.4		6.6		11		72				<0.2		1.0	
					Middle	3.8	0.4	168	22.6	22.6	8.1	8.1	30.7	30.7	88.7	88.7	6.4		7.4		13		73				<0.2		0.8	
						3.8	0.4	179	22.6		8.1		30.7		88.7		6.4		7.5		11		73				<0.2		0.8	
					Bottom	6.5	0.3	174	22.6	22.6	8.1	8.1	30.9	30.9	89.2	89.2	6.5	6.5	9.8		9		75				<0.2		0.8	
						6.5	0.4	189	22.6		8.1		30.9		89.2		6.5		9.7		10		75				<0.2		0.7	
IM2	Cloudy	Moderate	12:58	8.6	Surface	1.0	0.5	210	22.6	22.6	8.1	8.1	29.7	29.7	89.9	89.9	6.5	6.6	5.6	6.5	9	10	73	75	806180	818852	<0.2	<0.2	0.9	0.8
						1.0	0.5	226	22.6		8.1		29.7		89.9		6.5		5.6		11		74				<0.2		0.9	
					Middle	4.3	0.5	193	22.6	22.6	8.1	8.1	30.3	30.3	90.5	90.5	6.6		5.8		8		75				<0.2		0.8	
						4.3	0.5	208	22.6		8.1		30.3		90.5		6.6		5.8		9		75				<0.2		0.9	
					Bottom	7.6	0.4	187	22.6	22.6	8.1	8.1	30.7	30.7	90.8	90.9	6.6	6.6	7.9		11		77				<0.2		0.7	
						7.6	0.4	202	22.6		8.1		30.7		90.9		6.6		8.0		12		77				<0.2		0.8	
IM3	Rainy	Moderate	13:07	8.7	Surface	1.0	0.7	216	22.6	22.6	8.1	8.1	29.9	29.9	90.5	90.5	6.6	6.6	6.7	6.3	9	10	73	75	806038	819411	<0.2	<0.2	1.0	0.9
						1.0	0.8	220	22.6		8.1		29.9		90.5		6.6		6.8		9		73				<0.2		1.0	
					Middle	4.4	0.6	207	22.6	22.6	8.1	8.1	30.4	30.5	91.1	91.1	6.6		6.1		12		75				<0.2		0.8	
						4.4	0.6	211	22.6		8.1		30.5		91.1		6.6		6.1		10		75				<0.2		0.9	
					Bottom	7.7	0.6	210	22.6	22.6	8.1	8.1	30.6	30.6	94.0	94.1	6.8	6.8	6.1		10		77				<0.2		0.7	
						7.7	0.7	226	22.6		8.1		30.6		94.1		6.8		6.2		10		77				<0.2		0.8	
IM4	Rainy	Moderate	13:16	7.6	Surface	1.0	0.7	196	22.6	22.6	8.1	8.1	29.7	29.7	88.5	88.5	6.4	6.4	9.4	14.1	12	18	73	75	805019	819570	<0.2	<0.2	0.7	0.9
						1.0	0.8	211	22.6		8.1		29.7		88.5		6.4		9.5		14		73				<0.2		0.8	
					Middle	3.8	0.5	195	22.6	22.6	8.1	8.1	29.9	29.9	88.2	88.2	6.4		12.0		21		76				<0.2		0.9	
						3.8	0.6	201	22.6		8.1		29.9		88.2		6.4		12.0		19		76				<0.2		0.9	
					Bottom	6.6	0.6	197	22.6	22.6	8.1	8.1	30.0	30.0	90.1	90.2	6.6	6.6	20.9		21		77				<0.2		1.0	
						6.6	0.6	202	22.6		8.1		30.0		90.2		6.6		20.7		23		77				<0.2		1.1	
IM5	Rainy	Moderate	13:25	7.4	Surface	1.0	0.8	194	22.6	22.6	8.1	8.1	29.5	29.5	87.8	87.8	6.4	6.4	13.8	15.1	16	19	73	75	804926	820564	<0.2	<0.2	0.9	0.9
						1.0	0.9	201	22.6		8.1		29.5		87.8		6.4		13.9		18		73				<0.2		0.9	
					Middle	3.7	0.7	188	22.6	22.6	8.1	8.1	29.6	29.6	88.1	88.1	6.4		15.1		15		75				<0.2		1.1	
						3.7	0.7	200	22.6		8.1		29.6		88.1		6.4		15.1		17		76				<0.2		1.0	
					Bottom	6.4	0.6	196	22.6	22.6	8.0	8.0	30.2	30.2	89.8	89.9	6.5	6.5	16.3		22		77				<0.2		0.9	
						6.4	0.6	210	22.6		8.0		30.2		89.9		6.5		16.4		25		77				<0.2		0.8	
IM6	Rainy	Moderate	13:27	6.8	Surface	1.0	0.8	219	22.6	22.6	8.1	8.1	29.5	29.5	86.7	86.7	6.3	6.3	17.9	18.3	14	15	73	75	805809	821060	<0.2	<0.2	1.2	1.3
						1.0	0.9	230	22.6		8.1		29.5		86.7		6.3		17.8		12		73				<0.2		1.5	
					Middle	3.4	0.7	200	22.6	22.6	8.1	8.1	29.6	29.7	85.9	85.9	6.3		17.7		14		75				<0.2		1.4	
						3.4	0.7	204	22.6		8.1		29.7		85.9		6.3		17.7		13		76				<0.2		1.3	
					Bottom	5.8	0.6	196	22.6	22.6	8.1	8.1	30.4	30.4	85.5	85.5	6.2	6.2	19.3		18		77				<0.2		1.2	
						5.8	0.7	210	22.6		8.1		30.4		85.5		6.2		19.5		20		77				<0.2		1.0	
IM7	Rainy	Rough	13:46	7.2	Surface	1.0	1.0	216	22.8	22.8	8.0	8.0	27.5	27.5	88.4	88.4	6.5	6.6	9.7	11.4	12	15	73	75	806841	821349	<0.2	<0.2	1.5	1.3
						1.0	1.0	218	22.8		8.0		27.5		88.4		6.5		9.8		13		73				<0.2		1.3	
					Middle	3.6	0.6	216	22.7	22.7	8.0	8.0	27.8	27.8	89.4	89.5	6.6		11.8		16		75				<0.2		1.3	
						3.6	0.7	228	22.7		8.0		27.8		89.5		6.6		11.7		14		76				<0.2		1.3	
					Bottom	6.2	0.6	212	22.7	22.7	8.0	8.0	29.3	29.3	92.2	92.3	6.7	6.7	12.8		17		77				<0.2		1.1	
						6.2	0.6	213	22.7		8.0		29.3		92.4		6.7		12.5		16		77				<0.2		1.4	
IM8	Rainy	Rough	12:40	8.6	Surface	1.0	1.0	195	23.1	23.1	8.0	8.0	25.4	25.4	84.0	84.0	6.2	6.1	7.2	16.7	13	15	73	75	807843	821695	<0.2	<0.2	2.0	2.0
						1.0	1.1	201	23.1		8.0		25.4		84.0		6.2		7.3		11		73				<0.2		2.1	
					Middle	4.3	0.8	187	22.9	22.9	8.0	8.0	27.4	27.4	81.2	81.2	6.0		11.6		14		75				<0.2		1.9	
						4.3	0.9	199	22.9		8.0		27.4		81.2		6.0		11.5		13		74				<0.2		2.1	
					Bottom	7.6	0.6	200	22.8	22.8	8.0	8.0	28.3	28.3	81.9	81.9	6.0	6.0	31.4		20		76				<0.2		1.9	
						7.6	0.6	208	22.8		8.0		28.3		81.9		6.0		31.3		18		77				<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 25 April 17 during Mid-Ebb tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (μg/L)		Nickel (μg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Rainy	Rough	12:32	8.5	Surface	1.0	0.8	166	22.7	22.7	8.1	8.1	27.4	27.4	85.1	85.1	6.3	6.3	7.8	10.6	12	15	77	77	808810	822094	<0.2	<0.2	1.4	1.2
						1.0	0.9	174	22.7		8.1		27.4		85.0		6.3		7.9		14		77				<0.2		1.2	
					Middle	4.3	0.6	141	22.5	22.5	8.1	8.1	29.0	29.0	85.0	85.0	6.2		11.1		17		77				<0.2		1.2	
						4.3	0.7	141	22.5		8.1		29.0		85.0		6.2		11.1		16		77				<0.2		1.2	
					Bottom	7.5	1.0	140	22.5	22.5	8.1	8.1	30.1	30.1	85.5	85.6	6.2	6.2	12.8		16		77				<0.2		1.2	
						7.5	1.0	142	22.5		8.1		30.1		85.6		6.2		12.7		14		77				<0.2		1.0	
IM10	Rainy	Rough	12:20	8.7	Surface	1.0	0.7	171	22.7	22.7	8.1	8.1	27.8	27.8	85.9	85.9	6.3	6.3	7.0	8.4	9	12	75	76	809848	822240	<0.2	<0.2	1.4	1.1
						1.0	0.7	182	22.7		8.1		27.8		85.9		6.3		7.3		9		76				<0.2		1.2	
					Middle	4.4	0.6	150	22.6	22.6	8.1	8.1	28.4	28.4	86.2	86.2	6.3		8.6		10		76				<0.2		1.1	
						4.4	0.7	153	22.6		8.1		28.4		86.2		6.3		8.6		9		75				<0.2		1.0	
					Bottom	7.7	0.5	149	22.5	22.5	8.1	8.1	29.2	29.2	86.2	86.2	6.3	6.3	9.6		17		75				<0.2		0.9	
						7.7	0.5	149	22.5		8.1		29.1		86.2		6.3		9.5		15		76				<0.2		0.9	
IM11	Rainy	Rough	12:09	8.8	Surface	1.0	0.9	154	22.7	22.7	8.1	8.1	27.9	27.9	86.3	86.3	6.3	6.3	6.9	8.5	13	20	75	75	810531	821501	<0.2	<0.2	1.6	1.4
						1.0	1.0	163	22.7		8.1		27.9		86.3		6.3		7.0		12		76				<0.2		1.4	
					Middle	4.4	0.7	125	22.6	22.6	8.1	8.1	28.4	28.4	86.4	86.4	6.3		8.2		23		76				<0.2		1.3	
						4.4	0.8	134	22.6		8.1		28.4		86.4		6.3		8.2		21		74				<0.2		1.1	
					Bottom	7.8	0.8	113	22.5	22.5	8.1	8.1	29.2	29.2	86.7	86.8	6.3	6.3	10.3		25		74				<0.2		1.4	
						7.8	0.8	116	22.5		8.1		29.2		86.8		6.3		10.4		24		75				<0.2		1.3	
IM12	Rainy	Rough	11:58	9.2	Surface	1.0	0.8	128	22.8	22.8	8.1	8.1	27.3	27.3	84.9	84.8	6.3	6.2	8.0	18.0	13	14	75	75	811499	821162	<0.2	<0.2	1.2	1.3
						1.0	0.8	136	22.8		8.1		27.3		84.7		6.2		8.1		12		76				<0.2		1.3	
					Middle	4.6	0.8	112	22.6	22.6	8.1	8.1	28.2	28.2	82.7	82.7	6.1		17.4		14		76				<0.2		1.4	
						4.6	0.8	119	22.6		8.1		28.2		82.7		6.1		17.7		12		74				<0.2		1.3	
					Bottom	8.2	0.8	115	22.5	22.5	8.1	8.1	28.4	28.4	82.5	82.6	6.1	6.1	29.3		16		74				<0.2		1.3	
						8.2	0.9	115	22.5		8.1		28.4		82.6		6.1		27.7		17		75				<0.2		1.5	
IM13	-	-	-	-	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
SR2	Rainy	Rough	11:29	5.2	Surface	1.0	0.6	109	22.6	22.6	8.1	8.1	28.4	28.4	80.2	80.2	5.9	5.9	10.0	10.0	15	19	76	76	814160	821463	<0.2	<0.2	1.4	1.3
						1.0	0.6	116	22.6		8.1		28.4		80.1		5.9		10.1		16		74				<0.2		1.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.7	149	22.6	22.6	8.1	8.1	29.9	29.9	80.5	80.5	5.8	5.8	10.1		21		77				<0.2		1.2	
						4.2	0.7	157	22.6		8.1		29.9		80.5		5.8		9.8		22		78				<0.2		1.2	
SR3	Rainy	Rough	12:53	7.0	Surface	1.0	0.9	199	23.1	23.1	8.0	8.0	25.4	25.4	84.6	84.6	6.3	6.3	8.0	11.1	11	17		-	807572	822147	-	-	-	-
						1.0	0.9	215	23.1		8.0		25.4		84.6		6.3		8.1		12						-		-	
					Middle	3.5	0.6	193	23.0	23.0	8.0	8.0	26.6	26.6	84.7	84.8	6.2		10.9		15						-		-	
						3.5	0.7	209	23.0		8.0		26.6		84.8		6.2		11.1		17						-		-	
					Bottom	6.0	0.5	205	22.8	22.8	8.0	8.0	28.5	28.5	89.9	90.1	6.6	6.6	14.6		24						-		-	
						6.0	0.5	218	22.8		8.0		28.5		90.2		6.6		14.1		22						-		-	
SR4A	Cloudy	Moderate	12:05	9.5	Surface	1.0	0.4	105	22.7	22.7	8.1	8.1	30.3	30.3	89.7	89.7	6.5	6.5	8.9	9.7	17	15		-	807793	817189	-	-	-	-
						1.0	0.4	105	22.7		8.1		30.3		89.7		6.5		9.0		16						-		-	
					Middle	4.8	0.4	92	22.7	22.7	8.1	8.1	30.3	30.3	89.6	89.6	6.5		9.1		13						-		-	
						4.8	0.4	99	22.7		8.1		30.3		89.6		6.5		9.2		14						-		-	
					Bottom	8.5	0.4	105	22.6	22.6	8.1	8.1	30.4	30.4	89.2	89.8	6.5	6.6	11.2		14						-		-	
						8.5	0.4	105	22.6		8.0		30.4		90.4		6.6		10.7		16						-		-	
SR5A	Cloudy	Moderate	11:46	5.5	Surface	1.0	0.3	147	22.7	22.7	8.0	8.0	28.2	28.2	85.0	85.0	6.2	6.2	8.4	9.7	12	13		-	810693	816593	-	-	-	-
						1.0	0.3	159	22.7		8.0		28.2		85.0		6.2		8.5		11						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.5	0.3	135	22.6	22.6	8.0	8.0	28.8	28.8	85.4	85.4	6.3	6.3	10.9		14						-		-	
						4.5	0.4	142	22.6		8.0		28.8		85.3		6.3		10.9		16						-		-	
SR6	Cloudy	Moderate	11:37	4.7	Surface	1.0	0.2	86	22.7	22.7	8.0	8.0	28.0	28.0	85.9	85.9	6.3	6.3	6.4	7.5	14	14		-	814670	817899	-	-	-	-
						1.0	0.2	88	22.7		8.0		28.0		85.9		6.3		6.5		12						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.2	109	22.7	22.7	8.0	8.0	28.2	28.2	87.5	87.9	6.4	6.5	9.0		14						-		-	
						3.7	0.2	119	22.7		8.0		28.2		88.3		6.5		8.1		14						-		-	
SR7	Rainy	Rough	10:33	16.5	Surface	1.0	0.2	177	22.7	22.7	8.1	8.1	31.0	31.0	79.7	79.7	5.8	5.8	5.6	5.2	9	10		-	823757	823636	-	-	-	-
						1.0	0.2	193	22.7		8.1		31.0		79.7		5.8		5.5		9						-		-	
					Middle	8.3	0.2	127	22.7	22.7	8.1	8.1	31.1	31.1	79.7	79.7	5.8		4.9		10						-		-	
						8.3	0.2	134	22.7		8.1		31.1		79.7		5.8		4.7		12						-		-	
					Bottom	15.5	0.2	201	22.7	22.7	8.1	8.1	31.3	31.3	80.1	80.1	5.8	5.8	5.3		12						-		-	
						15.5	0.2	207	22.7		8.1		31.3		80.1		5.8		5.4		10						-		-	
SR8	Rainy	Rough	11:47	5.6	Surface	1.0	0.5	203	22.7	22.7	8.1	8.1	27.6	27.6	83.0	82.9	6.1	6.1	8.0	9.2	16	14		-	811584	820417	-	-	-	-
						1.0	0.5	204	22.7		8.1		27.6		82.8		6.1		8.2		14						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.6	0.5	185	22.6	22.6	8.1	8.1	28.4	28.4	82.3	82.3	6.0	6.0	10.3		14						-		-	
						4.6	0.5	195	22.6		8.1		28.4		82.3		6.0		10.3		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 27 April 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	07:49	8.4	Surface	1.0	0.6	194	23.1	23.1	8.1	8.1	27.6	27.6	91.0	91.0	6.6	6.6	4.6	7.3	10	10	73	75	804253	815620	<0.2	<0.2	1.2	1.1
						1.0	0.6	198	23.1		8.1		27.6		91.0		6.6		4.6		8		73				<0.2		1.2	
					Middle	4.2	0.5	202	23.1	23.1	8.1	8.1	28.1	28.1	90.7	90.7	6.6		7.5		9		75				<0.2		0.9	
						4.2	0.6	221	23.1		8.1		28.1		90.7		6.6		7.4		11		76				<0.2		1.1	
					Bottom	7.4	0.4	208	23.2	23.2	8.1	8.1	29.9	29.9	92.0	92.0	6.6	6.6	10.0		10		77				<0.2		1.0	
						7.4	0.4	216	23.2		8.1		29.9		92.0		6.6		9.5		12		77				<0.2		1.0	
C2	Cloudy	Moderate	07:44	13.2	Surface	1.0	0.5	149	23.3	23.3	8.0	8.0	25.5	25.5	85.2	85.3	6.3	6.3	10.9	15.5	16	19	73	75	806963	825682	<0.2	<0.2	1.8	1.5
						1.0	0.6	155	23.3		8.0		25.5		85.3		6.3		11.1		15		73				<0.2		1.8	
					Middle	6.6	0.3	146	23.2	23.2	8.1	8.1	27.4	27.4	85.5	85.5	6.2		17.1		17		75				<0.2		1.5	
						6.6	0.3	152	23.2		8.1		27.3		85.4		6.2		17.0		16		76				<0.2		1.5	
					Bottom	12.2	0.3	46	23.2	23.2	8.1	8.1	28.1	28.1	85.4	85.4	6.2	6.2	18.5		24		76				<0.2		1.1	
						12.2	0.3	46	23.2		8.1		28.1		85.3		6.2		18.3		24		77				<0.2		1.1	
C3	Cloudy	Moderate	05:54	12.3	Surface	1.0	0.7	86	23.2	23.2	8.2	8.2	26.3	26.3	81.9	81.9	6.0	6.0	14.0	15.5	16	18	74	76	817804	822109	<0.2	<0.2	1.7	1.7
						1.0	0.8	88	23.2		8.2		26.3		81.9		6.0		14.0		17		75				<0.2		1.6	
					Middle	6.2	0.4	89	23.0	23.0	8.1	8.1	27.8	27.8	81.8	81.9	6.0		16.1		20		75				<0.2		1.8	
						6.2	0.4	92	23.0		8.1		27.8		81.9		6.0		16.2		18		76				<0.2		1.7	
					Bottom	11.3	0.3	68	23.1	23.1	8.1	8.1	27.7	27.7	85.8	85.8	6.3	6.3	16.2		18		77				<0.2		1.8	
						11.3	0.3	74	23.1		8.1		27.7		85.8		6.3		16.2		18		76				<0.2		1.5	
IM1	Cloudy	Moderate	08:08	8.0	Surface	1.0	0.8	196	23.1	23.1	8.1	8.1	27.8	27.8	90.7	90.7	6.6	6.5	5.5	10.2	8	13	73	75	806449	818351	<0.2	<0.2	0.9	1.0
						1.0	0.8	199	23.1		8.1		27.8		90.6		6.6		5.7		9		73				<0.2		0.9	
					Middle	4.0	0.6	191	23.2	23.2	8.1	8.1	28.2	28.2	88.4	88.4	6.4		10.5		11		75				<0.2		1.1	
						4.0	0.6	194	23.2		8.1		28.2		88.4		6.4		10.6		9		75				<0.2		1.0	
					Bottom	7.0	0.5	195	23.2	23.2	8.1	8.1	28.3	28.3	88.3	88.3	6.4	6.4	14.4		19		77				<0.2		1.0	
						7.0	0.5	212	23.2		8.1		28.3		88.3		6.4		14.4		22		77				<0.2		0.9	
IM2	Cloudy	Moderate	08:11	9.2	Surface	1.0	0.8	200	23.1	23.1	8.1	8.1	27.9	27.9	90.3	90.3	6.6	6.6	7.2	9.4	7	10	74	75	806186	818852	<0.2	<0.2	1.0	1.0
						1.0	0.9	214	23.1		8.1		27.9		90.3		6.6		7.4		5		73				<0.2		1.1	
					Middle	4.6	0.7	210	23.2	23.2	8.1	8.1	28.3	28.3	89.2	89.2	6.5		9.8		10		75				<0.2		1.0	
						4.6	0.8	212	23.2		8.1		28.3		89.2		6.5		9.8		8		75				<0.2		0.8	
					Bottom	8.2	0.6	201	23.2	23.2	8.1	8.1	28.5	28.5	90.3	90.4	6.6	6.6	11.1		15		77				<0.2		1.0	
						8.2	0.6	211	23.2		8.1		28.5		90.4		6.6		11.2		16		77				<0.2		1.0	
IM3	Cloudy	Moderate	08:19	10.4	Surface	1.0	0.8	199	23.1	23.1	8.1	8.1	28.1	28.1	90.6	90.6	6.6	6.6	6.8	9.6	6	10	73	75	806021	819411	<0.2	<0.2	1.0	1.0
						1.0	0.9	211	23.1		8.1		28.1		90.6		6.6		7.0		6		73				<0.2		1.0	
					Middle	5.2	0.7	208	23.2	23.2	8.1	8.1	28.8	28.8	89.9	89.9	6.5		9.8		11		75				<0.2		1.0	
						5.2	0.8	213	23.2		8.1		28.8		89.9		6.5		9.9		10		75				<0.2		0.8	
					Bottom	9.4	0.6	206	23.2	23.2	8.1	8.1	28.9	28.9	91.1	91.1	6.6	6.6	12.0		13		77				<0.2		0.9	
						9.4	0.6	213	23.2		8.1		28.9		91.1		6.6		11.8		12		77				<0.2		1.0	
IM4	Cloudy	Moderate	08:29	8.4	Surface	1.0	0.6	189	23.1	23.1	8.1	8.1	28.1	28.1	88.9	88.9	6.5	6.6	11.2	10.7	14	16	73	75	805029	819570	<0.2	<0.2	1.2	1.0
						1.0	0.6	203	23.1		8.1		28.1		88.9		6.5		11.1		16		73				<0.2		1.0	
					Middle	4.2	0.4	207	23.2	23.2	8.1	8.1	29.1	29.1	90.6	90.6	6.6		8.1		15		75				<0.2		1.0	
						4.2	0.5	220	23.2		8.1		29.1		90.6		6.6		8.2		17		75				<0.2		1.0	
					Bottom	7.4	0.3	200	23.2	23.2	8.1	8.1	29.3	29.3	90.3	90.3	6.5	6.5	12.9		17		78				<0.2		1.0	
						7.4	0.3	212	23.2		8.1		29.3		90.3		6.5		12.9		15		77				<0.2		0.9	
IM5	Cloudy	Moderate	08:38	7.5	Surface	1.0	0.7	186	23.1	23.1	8.1	8.1	28.0	28.0	88.9	88.9	6.5	6.6	11.7	10.5	15	17	73	75	804915	820564	<0.2	<0.2	1.1	1.1
						1.0	0.7	186	23.1		8.1		28.0		88.8		6.5		11.8		16		73				<0.2		1.1	
					Middle	3.8	0.5	189	23.2	23.2	8.1	8.1	29.0	29.0	90.5	90.5	6.6		9.1		18		75				<0.2		1.3	
						3.8	0.5	195	23.2		8.1		29.0		90.5		6.6		9.2		16		75				<0.2		1.0	
					Bottom	6.5	0.3	182	23.2	23.2	8.1	8.1	29.2	29.2	90.5	90.5	6.5	6.5	10.4		17		77				<0.2		1.0	
						6.5	0.3	193	23.2		8.1		29.2		90.5		6.5		10.5		19		77				<0.2		0.9	
IM6	Cloudy	Moderate	08:42	7.7	Surface	1.0	0.5	172	23.1	23.1	8.1	8.1	28.0	28.0	88.6	88.6	6.5	6.5	12.0	12.5	14	15	73	75	805844	821060	<0.2	<0.2	1.2	1.0
						1.0	0.5	185	23.1		8.1		28.0		88.6		6.5		12.0		15		73				<0.2		1.0	
					Middle	3.9	0.3	186	23.1	23.1	8.1	8.1	28.6	28.6	88.8	88.9	6.5		13.3		15		75				<0.2		1.2	
						3.9	0.4	201	23.1		8.1		28.6		88.9		6.5		13.2		14		75				<0.2		1.0	
					Bottom	6.7	0.3	190	23.2	23.2	8.1	8.1	29.2	29.2	89.2	89.2	6.5	6.5	12.2		17		77				<0.2		0.8	
						6.7	0.3	207	23.2		8.1		29.2		89.2		6.5		12.1		16		77				<0.2		1.0	
IM7	Cloudy	Moderate	08:44	8.4	Surface	1.0	0.5	186	23.3	23.3	8.0	8.0	25.9	25.9	87.9	88.0	6.5	6.5	9.6	12.6	11	14	73	75	806838	821349	<0.2	<0.2	1.7	1.1
						1.0	0.5	201	23.3		8.0		25.9		88.0		6.5		9.7		9		73				<0.2		1.7	
					Middle	4.2	0.4	157	23.2	23.2	8.1	8.1	27.6	27.6	88.4	88.4	6.5		12.8		12		75				<0.2		0.7	
						4.2	0.4	169	23.2		8.1		27.6		88.4		6.5		12.8		13		76				<0.2		0.7	
					Bottom	7.4	0.3	132	23.1	23.1	8.1	8.1	28.4	28.4	88.8	88.8	6.5	6.5	15.4		18		77				<0.2		0.9	
						7.4	0.3	138	23.1		8.1		28.4		88.8		6.5		15.4		19		77				<0.2		1.0	
IM8	Cloudy	Moderate	07:14	9.1	Surface	1.0	0.3	171	23.3	23.3	8.0	8.0	25.6	25.6	86.7	86.8	6.4	6.4	10.3	13.5	15	18	73	75	807844	821695	<0.2	<0.2	2.6	2.5
						1.0	0.3	174	23.3		8.0		25.6		86.8		6.4		10.3		14		73				<0.2		2.6	
					Middle	4.6	0.3	136	23.2	23.2	8.1	8.1	27.8	27.8	87.7	87.8	6.4		13.6		18		75				<0.2		2.7	
						4.6	0.3	145	23.2		8.1		27.8		87.8		6.4		13.7		19		76				<0.2		2.5	
					Bottom	8.1	0.2	99	23.1	23.1	8.1	8.1	28.4	28.4	87.7	87.7	6.4	6.4	16.5		22		77				<0.2		2.3	
						8.1	0.2	106	23.1		8.1		28.4		87.6		6.4		16.6		20		77				<0.2		2.4	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 27 April 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	07:03	8.2	Surface	1.0	0.4	186	23.1	23.1	8.2	8.2	26.1	26.1	84.4	84.4	6.2	6.2	12.3	12.1	11	11	73	75	808800	822094	<0.2	<0.2	2.6	2.7
						1.0	0.4	194	23.1		8.2		26.1		84.4		6.2		12.3		12		74				<0.2		2.7	
					Middle	4.1	0.5	133	23.1	23.1	8.2	8.2	26.5	26.5	84.4	84.4	6.2		11.9		11		75				<0.2		2.9	
						4.1	0.5	138	23.1		8.2		26.5		84.4		6.2		11.9		10		75				<0.2		2.9	
					Bottom	7.2	0.2	166	23.1	23.1	8.2	8.2	26.8	26.8	84.4	84.4	6.2	6.2	12.1		10		77				<0.2		2.6	
						7.2	0.2	177	23.1		8.2		26.8		84.4		6.2		12.1		10		77				<0.2		2.6	
IM10	Cloudy	Moderate	06:56	8.8	Surface	1.0	0.4	176	23.2	23.2	8.1	8.1	25.4	25.4	84.3	84.3	6.2	6.2	10.4	12.2	8	11	73	75	809818	822240	<0.2	<0.2	2.7	2.7
						1.0	0.5	188	23.2		8.1		25.4		84.3		6.2		10.4		9		73				<0.2		2.6	
					Middle	4.4	0.5	122	23.2	23.2	8.2	8.2	26.2	26.3	84.5	84.6	6.2		13.2		12		75				<0.2		2.7	
						4.4	0.5	122	23.2		8.2		26.3		84.6		6.2		13.6		10		75				<0.2		2.8	
					Bottom	7.8	0.2	135	23.2	23.2	8.2	8.2	26.5	26.5	84.6	84.6	6.2	6.2	12.9		13		77				<0.2		2.8	
						7.8	0.2	135	23.2		8.2		26.5		84.6		6.2		12.9		12		77				<0.2		2.6	
IM11	Cloudy	Moderate	06:48	8.8	Surface	1.0	0.5	179	23.2	23.2	8.2	8.2	25.3	25.3	86.1	86.1	6.4	6.4	12.7	14.4	12	11	73	75	810537	821501	<0.2	<0.2	1.8	2.0
						1.0	0.5	185	23.2		8.2		25.3		86.1		6.4		12.7		11		73				<0.2		1.7	
					Middle	4.4	0.4	128	23.1	23.1	8.2	8.2	26.5	26.5	87.6	87.6	6.4		16.1		10		75				<0.2		1.8	
						4.4	0.5	134	23.1		8.2		26.5		87.6		6.4		16.1		9		75				<0.2		2.0	
					Bottom	7.8	0.3	133	23.1	23.1	8.2	8.2	26.5	26.5	91.6	91.6	6.7	6.7	14.4		11		76				<0.2		2.2	
						7.8	0.3	133	23.1		8.2		26.5		91.6		6.7		14.4		11		77				<0.2		2.3	
IM12	Cloudy	Moderate	06:41	9.2	Surface	1.0	0.4	170	23.2	23.2	8.2	8.2	25.7	25.8	84.1	84.1	6.2	6.2	13.0	14.9	12	11	73	75	811517	821162	<0.2	<0.2	2.0	2.1
						1.0	0.5	186	23.2		8.2		25.8		84.1		6.2		13.2		10		73				<0.2		2.1	
					Middle	4.6	0.4	129	23.2	23.2	8.2	8.2	26.3	26.3	84.1	84.1	6.2		16.2		10		75				<0.2		2.2	
						4.6	0.4	130	23.2		8.2		26.3		84.1		6.2		16.2		11		76				<0.2		2.2	
					Bottom	8.2	0.3	148	23.1	23.1	8.2	8.2	26.7	26.7	84.0	84.0	6.2	6.2	15.3		10		77				<0.2		2.0	
						8.2	0.3	158	23.1		8.2		26.7		84.0		6.2		15.3		12		76				<0.2		2.0	
IM13	-	-	-	-	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
SR2	Cloudy	Moderate	06:17	4.4	Surface	1.0	0.6	95	23.2	23.2	8.2	8.2	26.2	26.2	83.8	83.8	6.2	6.2	16.2	18.3	16	16	75	75	814168	821463	<0.2	<0.2	1.6	1.8
						1.0	0.7	101	23.2		8.2		26.2		83.8		6.2		16.2		14		75				<0.2		1.7	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.4	92	23.1	23.1	8.2	8.2	26.7	26.7	83.8	83.8	6.1	6.1	20.4		17		75				<0.2		2.1	
						3.4	0.4	95	23.1		8.2		26.7		83.7		6.1		20.4		17		76				<0.2		1.8	
SR3	Cloudy	Moderate	07:18	8.6	Surface	1.0	0.4	166	23.3	23.3	8.0	8.0	25.9	25.9	85.7	85.8	6.3	6.3	14.3	17.6	9	16		-	807551	822147	-	-	-	-
						1.0	0.4	173	23.3		8.0		25.8		85.8		6.3		14.6		9						-		-	
					Middle	4.3	0.2	143	23.2	23.2	8.1	8.1	27.2	27.3	86.8	86.9	6.3		19.1		12						-		-	
						4.3	0.2	153	23.2		8.1		27.3		86.9		6.4		19.3		14						-		-	
					Bottom	7.6	0.3	92	23.2	23.2	8.1	8.1	27.9	27.9	87.0	87.0	6.3	6.3	19.3		25						-		-	
						7.6	0.3	94	23.2		8.1		27.9		87.0		6.3		19.2		25						-		-	
SR4A	Cloudy	Moderate	07:23	10.6	Surface	1.0	0.2	246	23.2	23.2	8.1	8.1	27.6	27.6	87.7	87.7	6.4	6.4	14.8	17.2	18	20		-	807805	817189	-	-	-	-
						1.0	0.2	252	23.2		8.1		27.6		87.7		6.4		14.6		18						-		-	
					Middle	5.3	0.2	253	23.2	23.2	8.1	8.1	27.6	27.6	87.4	87.4	6.4		17.1		20						-		-	
						5.3	0.2	274	23.2		8.1		27.6		87.4		6.4		17.4		18						-		-	
					Bottom	9.6	0.2	261	23.2	23.2	8.1	8.1	27.7	27.7	87.5	87.5	6.4	6.4	19.7		23						-		-	
						9.6	0.2	263	23.2		8.1		27.7		87.5		6.4		19.8		23						-		-	
SR5A	Cloudy	Moderate	07:00	5.6	Surface	1.0	0.2	324	23.4	23.4	8.0	8.0	27.8	27.8	83.0	83.0	6.0	6.0	8.8	10.9	10	12		-	810691	816593	-	-	-	-
						1.0	0.2	325	23.4		8.0		27.8		83.0		6.0		8.8		11						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.6	0.2	328	23.4	23.4	8.0	8.0	27.8	27.8	83.9	83.9	6.1	6.1	12.8		14						-		-	
						4.6	0.2	344	23.4		8.0		27.8		83.9		6.1		13.0		12						-		-	
SR6	Cloudy	Moderate	06:26	5.3	Surface	1.0	0.2	334	23.3	23.3	8.0	8.0	26.4	26.4	84.3	84.3	6.2	6.2	6.6	6.4	6	7		-	814649	817899	-	-	-	-
						1.0	0.2	337	23.3		8.0		26.4		84.3		6.2		6.8		6						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	0.2	329	23.3	23.3	8.0	8.0	26.6	26.6	86.4	86.5	6.3	6.3	6.0		8						-		-	
						4.3	0.2	356	23.3		8.0		26.6		86.5		6.3		6.0		9						-		-	
SR7	Cloudy	Moderate	05:30	16.8	Surface	1.0	0.6	82	22.9	22.9	8.0	8.0	29.7	29.7	79.2	79.2	5.7	5.7	8.5	10.4	9	11		-	823729	823636	-	-	-	-
						1.0	0.6	88	22.9		8.0		29.7		79.2		5.7		8.6		9						-		-	
					Middle	8.4	0.4	57	22.9	22.9	8.0	8.0	30.3	30.3	79.3	79.4	5.7		10.3		12						-		-	
						8.4	0.5	62	22.9		8.0		30.3		79.4		5.7		10.3		10						-		-	
					Bottom	15.8	0.3	27	22.8	22.8	7.9	7.9	30.6	30.6	79.5	79.5	5.7	5.7	12.4		12						-		-	
						15.8	0.3	28	22.8		7.9		30.6		79.5		5.7		12.4		11						-		-	
SR8	Cloudy	Moderate	06:32	5.2	Surface	1.0	0.5	95	23.2	23.2	8.2	8.2	26.2	26.2	83.5	83.5	6.1	6.1	16.3	16.1	6	7		-	811574	820417	-	-	-	-
						1.0	0.5	100	23.2		8.2		26.2		83.5		6.1		16.3		7						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.3	112	23.2	23.2	8.2	8.2	26.3	26.3	83.7	83.7	6.2	6.2	15.8		7						-		-	
						4.2	0.3	119	23.2		8.2		26.3		83.7		6.2		15.8		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 27 April 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	Rainy	Moderte	13:18	6.0	Surface	1.0	0.3	89	23.2	23.2	8.1	8.1	26.9	26.9	89.4	89.4	6.5	6.5	8.9	13.0	15	15	73	75	804264	815620	<0.2	<0.2	1.2	1.2
						1.0	0.3	93	23.2		8.1		26.9		89.4		6.5		9.0		15		73				<0.2		1.4	
					Middle	3.0	0.3	86	23.2	23.2	8.1	8.1	28.4	28.4	89.8	89.8	6.5		12.4		14		75				<0.2		1.2	
						3.0	0.3	87	23.2		8.1		28.4		89.8		6.5		12.4		14		75				<0.2		1.3	
					Bottom	5.0	0.2	83	23.2	23.2	8.1	8.1	28.6	28.6	90.8	90.8	6.6	6.6	17.6		14		77				<0.2		0.9	
						5.0	0.2	85	23.2		8.1		28.6		90.8		6.6		17.6		15		77				<0.2		1.1	
C2	Cloudy	Moderate	12:00	13.0	Surface	1.0	0.3	165	23.3	23.3	8.0	8.0	25.4	25.4	85.5	85.5	6.3	6.3	9.4	16.6	11	16	73	75	806934	825682	<0.2	<0.2	1.9	1.7
						1.0	0.4	178	23.3		8.0		25.4		85.5		6.3		9.5		11		74				<0.2		1.8	
					Middle	6.5	0.2	120	23.2	23.2	8.1	8.1	27.7	27.7	87.0	87.0	6.3		18.6		16		75				<0.2		1.8	
						6.5	0.2	122	23.2		8.1		27.7		87.0		6.3		18.6		16		76				<0.2		2.0	
					Bottom	12.0	0.2	63	23.1	23.1	8.1	8.1	28.4	28.4	87.2	87.2	6.3	6.3	21.7		19		76				<0.2		1.3	
						12.0	0.2	67	23.1		8.1		28.4		87.1		6.3		21.8		21		77				<0.2		1.6	
C3	Cloudy	Moderate	14:07	11.8	Surface	1.0	0.8	293	23.2	23.2	8.2	8.2	26.3	26.3	80.8	80.8	5.9	5.9	14.7	15.6	17	17	74	76	817787	822109	<0.2	<0.2	2.0	1.8
						1.0	0.8	316	23.2		8.2		26.3		80.8		5.9		14.7		17		75				<0.2		1.7	
					Middle	5.9	0.3	268	23.0	23.0	8.2	8.2	27.7	27.7	79.8	79.8	5.8		16.2		15		75				<0.2		1.7	
						5.9	0.3	285	23.0		8.2		27.7		79.8		5.8		16.2		15		76				<0.2		1.6	
					Bottom	10.8	0.3	282	23.1	23.1	8.2	8.2	27.7	27.7	81.1	81.1	5.9	5.9	15.8		18		76				<0.2		1.9	
						10.8	0.3	290	23.1		8.2		27.7		81.1		5.9		15.8		17		77				<0.2		1.8	
IM1	Rainy	Moderte	13:09	7.0	Surface	1.0	0.2	68	23.2	23.2	8.1	8.1	26.5	26.5	88.5	88.5	6.5	6.5	9.2	17.5	10	16	73	75	806468	818351	<0.2	<0.2	1.6	1.3
						1.0	0.3	72	23.2		8.1		26.5		88.5		6.5		9.3		12		73				<0.2		1.5	
					Middle	3.5	0.1	75	23.2	23.2	8.1	8.1	28.2	28.2	88.9	88.9	6.5		14.4		14		75				<0.2		1.2	
						3.5	0.1	81	23.2		8.1		28.2		88.9		6.5		14.3		13		76				<0.2		1.2	
					Bottom	6.0	0.1	132	23.2	23.2	8.1	8.1	28.4	28.4	90.2	90.2	6.6	6.6	28.7		22		77				<0.2		1.0	
						6.0	0.1	136	23.2		8.1		28.4		90.2		6.6		28.8		23		77				<0.2		1.1	
IM2	Cloudy	Moderte	13:00	8.5	Surface	1.0	0.2	26	23.2	23.2	8.1	8.1	26.0	26.0	87.7	87.7	6.5	6.6	8.4	10.6	14	17	73	75	806201	818852	<0.2	<0.2	1.5	1.4
						1.0	0.3	27	23.2		8.1		26.0		87.7		6.5		8.5		12		73				<0.2		1.6	
					Middle	4.3	0.1	23	23.2	23.2	8.1	8.1	27.7	27.7	89.8	89.8	6.6		10.4		17		75				<0.2		1.3	
						4.3	0.1	24	23.2		8.1		27.7		89.8		6.6		10.6		15		76				<0.2		1.3	
					Bottom	7.5	0.2	66	23.2	23.2	8.1	8.1	28.0	28.0	92.5	92.6	6.7	6.7	12.8		21		76				<0.2		1.2	
						7.5	0.2	67	23.2		8.1		28.0		92.6		6.7		12.6		20		77				<0.2		1.4	
IM3	Cloudy	Moderte	12:53	7.5	Surface	1.0	0.1	66	23.2	23.2	8.1	8.1	27.0	27.0	87.4	87.4	6.4	6.5	10.9	14.7	17	19	74	76	806003	819411	<0.2	<0.2	1.2	1.3
						1.0	0.1	69	23.2		8.1		27.0		87.4		6.4		10.9		18		74				<0.2		1.3	
					Middle	3.8	0.1	61	23.2	23.2	8.1	8.1	27.4	27.4	88.7	88.7	6.5		15.3		16		75				<0.2		1.5	
						3.8	0.1	64	23.2		8.1		27.4		88.7		6.5		15.4		16		76				<0.2		1.4	
					Bottom	6.5	0.3	56	23.1	23.1	8.1	8.1	28.3	28.3	89.3	89.4	6.5	6.5	17.7		22		77				<0.2		1.2	
						6.5	0.3	58	23.1		8.1		28.3		89.4		6.5		17.8		24		77				<0.2		1.2	
IM4	Cloudy	Moderte	12:46	7.5	Surface	1.0	0.2	144	23.2	23.2	8.1	8.1	27.7	27.7	88.6	88.6	6.5	6.5	13.7	16.0	14	18	73	75	805030	819570	<0.2	<0.2	1.7	1.5
						1.0	0.2	152	23.2		8.1		27.7		88.6		6.5		13.7		15		74				<0.2		1.7	
					Middle	3.8	0.1	134	23.2	23.2	8.1	8.1	27.9	27.9	89.1	89.2	6.5		15.8		18		75				<0.2		1.5	
						3.8	0.1	141	23.2		8.1		27.9		89.2		6.5		15.9		19		75				<0.2		1.4	
					Bottom	6.5	0.1	193	23.2	23.2	8.1	8.1	28.4	28.4	90.9	91.0	6.6	6.6	18.4		20		77				<0.2		1.2	
						6.5	0.1	212	23.2		8.1		28.4		91.1		6.6		18.6		22		77				<0.2		1.2	
IM5	Cloudy	Moderte	12:40	6.7	Surface	1.0	0.3	144	23.2	23.2	8.1	8.1	27.5	27.5	86.9	86.9	6.3	6.3	14.8	16.8	18	19	73	75	804940	820564	<0.2	<0.2	1.2	1.3
						1.0	0.4	157	23.2		8.1		27.5		86.8		6.3		14.9		19		73				<0.2		1.3	
					Middle	3.4	0.2	148	23.2	23.2	8.1	8.1	27.7	27.8	86.8	86.8	6.3		16.7		19		75				<0.2		1.4	
						3.4	0.2	156	23.2		8.1		27.8		86.7		6.3		16.6		19		76				<0.2		1.3	
					Bottom	5.7	0.1	142	23.1	23.1	8.1	8.1	28.7	28.7	88.9	88.9	6.5	6.5	18.7		18		76				<0.2		1.2	
						5.7	0.1	143	23.1		8.1		28.7		88.9		6.5		18.8		18		77				<0.2		1.2	
IM6	Cloudy	Moderte	12:21	7.1	Surface	1.0	0.3	144	23.2	23.2	8.1	8.1	27.0	27.0	86.8	86.8	6.4	6.4	12.8	16.0	15	18	73	74	805827	821060	<0.2	<0.2	1.1	1.2
						1.0	0.3	154	23.2		8.1		27.0		86.8		6.4		12.9		15		73				<0.2		1.3	
					Middle	3.6	0.1	153	23.2	23.2	8.1	8.1	27.7	27.7	87.4	87.4	6.4		17.6		17		75				<0.2		1.2	
						3.6	0.1	153	23.2		8.1		27.7		87.4		6.4		17.7		18		75				<0.2		1.1	
					Bottom	6.1	0.1	168	23.1	23.1	8.1	8.1	28.5	28.5	88.4	88.5	6.4	6.4	17.4		20		75				<0.2		1.1	
						6.1	0.1	170	23.1		8.1		28.5		88.5		6.4		17.3		20		75				<0.2		1.3	
IM7	Cloudy	Moderte	12:12	8.3	Surface	1.0	0.4	157	23.3	23.3	8.0	8.0	25.4	25.4	86.0	86.1	6.3	6.3	10.4	13.4	11	15	73	75	806853	821349	<0.2	<0.2	1.1	1.2
						1.0	0.4	163	23.3		8.0		25.4		86.1		6.4		10.5		11		73				<0.2		1.4	
					Middle	4.2	0.3	131	23.2	23.2	8.1	8.1	27.0	27.0	86.5	86.5	6.3		14.1		15		75				<0.2		1.3	
						4.2	0.3	142	23.2		8.1		27.0		86.5		6.3		14.1		13		75				<0.2		1.2	
					Bottom	7.3	0.1	91	23.2	23.2	8.1	8.1	28.0	28.0	89.7	89.8	6.5	6.5	15.6		20		75				<0.2		1.2	
						7.3	0.2	93	23.2		8.1		28.0		89.8		6.5		15.6		18		76				<0.2		1.1	
IM8	Cloudy	Moderate	12:31	8.6	Surface	1.0	0.3	169	23.3	23.3	8.0	8.0	25.6	25.6	85.9	86.0	6.3	6.4	9.6	12.8	12	13	73	75	807842	821695	0.4	0.2	2.5	2.4
						1.0	0.4	172	23.3		8.0		25.6		86.0		6.3		9.7		11		73				<0.2		2.5	
					Middle	4.3	0.3	126	23.2	23.2	8.1	8.1	27.1	27.1	87.5	87.5	6.4		15.0		14		75				<0.2		2.5	
						4.3	0.3	135	23.2		8.1		27.1		87.5		6.4		15.0		14		75				<0.2		2.6	
					Bottom	7.6	0.2	74	23.1	23.1	8.1	8.1	28.2	28.2	90.1	90.1	6.6	6.6	13.8		13		75				<0.2		2.2	
						7.6	0.2	74	23.1		8.1		28.2		90.1		6.6		13.8		12		76				<0.2		2.0	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 27 April 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	12:39	8.3	Surface	1.0	0.6	109	23.3	23.3	8.2	8.2	25.7	25.7	84.0	84.0	6.2	6.2	11.6	12.2	12	15	74	75	808825	822094	<0.2	<0.2	3.1	2.9
						1.0	0.6	109	23.3		8.2		25.7		84.0		6.2		11.6		12		73				<0.2		3.0	
					Middle	4.2	0.5	92	23.3	23.3	8.2	8.2	26.3	26.3	83.9	83.9	6.2		13.2		16		75				<0.2		2.8	
						4.2	0.6	98	23.3		8.2		26.3		83.9		6.2		13.2		15		76				<0.2		3.0	
					Bottom	7.3	0.5	82	23.3	23.3	8.2	8.2	26.6	26.6	83.6	83.6	6.2	6.2	11.7		17		76				<0.2		2.7	
						7.3	0.5	84	23.3		8.2		26.6		83.6		6.2		11.7		18		76				<0.2		2.6	
IM10	Cloudy	Moderate	12:46	8.2	Surface	1.0	0.7	111	23.3	23.3	8.2	8.2	25.5	25.5	83.7	83.7	6.2	6.2	10.3	12.1	7	10	73	76	809837	822240	<0.2	<0.2	2.5	2.7
						1.0	0.7	112	23.3		8.2		25.5		83.7		6.2		10.3		9		73				<0.2		2.7	
					Middle	4.1	0.6	90	23.3	23.3	8.2	8.2	26.2	26.2	83.9	83.9	6.2		13.4		10		76				<0.2		2.7	
						4.1	0.6	96	23.3		8.2		26.2		83.9		6.2		13.4		10		77				<0.2		2.8	
					Bottom	7.2	0.5	79	23.2	23.2	8.2	8.2	26.3	26.3	83.7	83.7	6.2	6.2	12.7		10		77				<0.2		2.7	
						7.2	0.5	84	23.2		8.2		26.3		83.7		6.2		12.6		11		78				<0.2		2.5	
IM11	Cloudy	Moderate	12:54	7.9	Surface	1.0	0.7	112	23.3	23.3	8.2	8.2	25.7	25.7	83.8	83.8	6.2	6.2	10.6	11.7	14	14	73	75	810557	821501	<0.2	<0.2	1.7	1.8
						1.0	0.7	117	23.3		8.2		25.7		83.8		6.2		10.6		13		73				<0.2		1.8	
					Middle	4.0	0.5	92	23.2	23.2	8.2	8.2	26.2	26.2	83.8	83.8	6.2		12.8		15		75				<0.2		1.8	
						4.0	0.5	97	23.2		8.2		26.2		83.8		6.2		12.8		14		76				<0.2		1.7	
					Bottom	6.9	0.4	78	23.2	23.2	8.2	8.2	26.2	26.2	83.6	83.6	6.2	6.2	11.7		14		77				<0.2		1.9	
						6.9	0.4	83	23.2		8.2		26.2		83.6		6.2		11.7		16		77				<0.2		2.0	
IM12	Cloudy	Moderate	13:08	8.6	Surface	1.0	0.7	111	23.2	23.2	8.2	8.2	25.2	25.2	83.7	83.7	6.2	6.2	8.9	11.1	19	20	73	75	811518	821162	<0.2	<0.2	1.7	1.8
						1.0	0.8	115	23.2		8.2		25.2		83.7		6.2		8.7		19		74				<0.2		1.8	
					Middle	4.3	0.5	105	23.2	23.2	8.2	8.2	26.0	26.1	83.7	83.7	6.2		12.1		21		75				<0.2		2.0	
						4.3	0.5	113	23.2		8.2		26.1		83.6		6.2		12.5		19		76				<0.2		1.8	
					Bottom	7.6	0.4	82	23.2	23.2	8.2	8.2	26.0	26.0	83.4	83.4	6.1	6.1	12.1		21		77				<0.2		1.8	
						7.6	0.4	82	23.2		8.2		26.0		83.4		6.1		12.1		21		77				<0.2		1.8	
IM13	-	-	-	-	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
SR2	Cloudy	Moderate	13:48	4.6	Surface	1.0	0.6	295	23.2	23.2	8.2	8.2	26.1	26.1	83.3	83.3	6.1	6.1	15.7	19.4	18	18	74	75	814164	821463	<0.2	<0.2	1.9	1.8
						1.0	0.7	320	23.2		8.2		26.1		83.3		6.1		15.8		18		75				<0.2		1.9	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.4	292	23.2	23.2	8.2	8.2	26.6	26.6	83.1	83.1	6.1	6.1	23.1		17		75				<0.2		1.7	
						3.6	0.4	318	23.2		8.2		26.6		83.1		6.1		23.1		17		75				<0.2		1.5	
SR3	Cloudy	Moderate	12:26	9.2	Surface	1.0	0.3	161	23.3	23.3	8.0	8.0	25.4	25.4	85.3	85.3	6.3	6.3	8.9	12.5	14	15		-	807587	822147	-	-	-	-
						1.0	0.3	175	23.3		8.0		25.4		85.3		6.3		8.9		12						-		-	
					Middle	4.6	0.3	107	23.2	23.2	8.1	8.1	26.9	26.9	85.4	85.5	6.3		15.0		14						-		-	
						4.6	0.3	116	23.2		8.1		26.9		85.5		6.3		15.0		12						-		-	
					Bottom	8.2	0.2	70	23.2	23.2	8.1	8.1	28.0	28.0	84.9	84.9	6.2	6.2	13.8		18						-		-	
						8.2	0.2	74	23.2		8.1		27.9		84.9		6.2		13.5		18						-		-	
SR4A	Rainy	Moderate	13:20	8.9	Surface	1.0	0.4	78	23.2	23.2	8.1	8.1	28.0	28.0	87.6	87.6	6.4	6.5	14.1	11.4	17	16		-	807797	817189	-	-	-	-
						1.0	0.4	82	23.2		8.1		28.0		87.6		6.4		14.1		17						-		-	
					Middle	4.5	0.3	74	23.2	23.2	8.1	8.1	27.3	27.3	89.0	89.0	6.5		7.5		16						-		-	
						4.5	0.4	80	23.2		8.1		27.3		89.0		6.5		7.6		15						-		-	
					Bottom	7.9	0.3	74	23.2	23.2	8.1	8.1	28.5	28.5	89.2	89.2	6.5	6.5	12.7		15						-		-	
						7.9	0.3	76	23.2		8.1		28.5		89.2		6.5		12.5		16						-		-	
SR5A	Rainy	Moderate	13:46	4.9	Surface	1.0	0.3	80	23.4	23.4	8.0	8.0	27.7	27.7	82.7	82.8	6.0	6.0	14.2	14.9	15	16		-	810694	816593	-	-	-	-
						1.0	0.4	80	23.4		8.0		27.7		82.8		6.0		14.1		15						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	0.3	76	23.4	23.4	8.0	8.0	27.7	27.7	88.2	88.3	6.4	6.4	15.5		16						-		-	
						3.9	0.3	78	23.4		8.0		27.7		88.4		6.4		15.6		16						-		-	
SR6	Rainy	Moderate	13:48	4.5	Surface	1.0	0.1	133	23.3	23.3	8.0	8.0	27.6	27.6	84.8	84.9	6.2	6.2	9.6	9.1	13	14		-	814674	817899	-	-	-	-
						1.0	0.1	145	23.3		8.0		27.6		84.9		6.2		9.8		12						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.1	60	23.4	23.4	8.0	8.0	27.6	27.6	82.4	82.4	6.0	6.0	8.4		15						-		-	
						3.5	0.1	61	23.4		8.0		27.6		82.4		6.0		8.4		16						-		-	
SR7	Cloudy	Moderate	14:37	17.2	Surface	1.0	0.1	215	23.2	23.2	8.1	8.1	27.1	27.1	83.3	83.3	6.1	6.1	8.3	8.5	13	14		-	823732	823636	-	-	-	-
						1.0	0.1	232	23.2		8.1		27.1		83.3		6.1		8.4		12						-		-	
					Middle	8.6	0.3	81	23.2	23.2	8.0	8.0	27.3	27.3	83.9	83.9	6.1		8.4		15						-		-	
						8.6	0.3	87	23.2		8.0		27.2		83.9		6.1		8.5		13						-		-	
					Bottom	16.2	0.2	95	23.2	23.2	8.0	8.0	27.3	27.3	85.7	85.8	6.3	6.3	8.8		17						-		-	
						16.2	0.2	100	23.2		8.0		27.3		85.8		6.3		8.8		15						-		-	
SR8	Cloudy	Moderate	13:21	5.0	Surface	1.0	0.5	295	23.2	23.2	8.2	8.2	26.2	26.2	83.5	83.5	6.1	6.1	16.3	16.1	17	18		-	811608	820417	-	-	-	-
						1.0	0.5	322	23.2		8.2		26.2		83.5		6.1		16.3		16						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.3	212	23.2	23.2	8.2	8.2	26.3	26.3	83.7	83.7	6.2	6.2	15.8		19						-		-	
						4.0	0.3	231	23.2		8.2		26.3		83.7		6.2		15.8		18						-		-	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 29 April 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	08:11	8.6	Surface	1.0	0.6	23	23.4	23.4	8.1	8.1	26.3	26.3	91.5	91.5	6.7	6.7	8.1	16.8	10	19	74	76	804229	815620	<0.2	<0.2	1.8	1.7
						1.0	0.6	23	23.4		8.1		26.3		91.5		6.7		8.0		12		75				<0.2		1.9	
					Middle	4.3	0.5	13	23.3	23.3	8.1	8.1	29.2	29.2	92.8	92.9	6.7		22.0		24		75				<0.2		1.9	
						4.3	0.5	13	23.3		8.1		29.2		92.9		6.7		22.1		22		76				<0.2		1.7	
					Bottom	7.6	0.4	3	23.3	23.3	8.1	8.1	30.0	30.1	92.8	92.9	6.7	6.7	21.0		21		77				<0.2		1.4	
						7.6	0.4	3	23.3		8.1		30.1		92.9		6.7		19.7		23		78				<0.2		1.3	
C2	Cloudy	Moderate	08:53	12.3	Surface	1.0	0.5	83	23.7	23.7	8.1	8.1	28.2	28.2	92.0	92.0	6.6	6.6	12.5	15.7	13	21	75	75	806960	825682	<0.2	<0.2	1.2	1.3
						1.0	0.5	89	23.7		8.1		28.2		91.9		6.6		12.6		15		75				<0.2		1.4	
					Middle	6.2	0.5	82	23.5	23.5	8.1	8.1	28.3	28.3	91.0	91.0	6.6		18.1		22		72				<0.2		1.3	
						6.2	0.5	86	23.5		8.1		28.3		91.0		6.6		18.4		20		76				<0.2		1.4	
					Bottom	11.3	0.3	76	23.6	23.6	8.1	8.1	28.3	28.3	91.5	91.5	6.6	6.6	16.3		30		77				<0.2		1.4	
						11.3	0.4	81	23.6		8.1		28.3		91.5		6.6		16.3		27		77				<0.2		1.3	
C3	Cloudy	Moderate	06:53	12.3	Surface	1.0	0.9	110	23.8	23.8	8.2	8.2	26.9	26.9	83.5	83.5	6.1	6.0	11.8	12.6	15	16	76	77	817811	822109	<0.2	<0.2	2.0	1.8
						1.0	0.9	117	23.8		8.2		26.9		83.5		6.1		11.8		17		75				<0.2		1.8	
					Middle	6.2	0.4	103	23.3	23.3	8.2	8.2	28.3	28.3	81.1	81.1	5.9		12.9		13		76				<0.2		1.9	
						6.2	0.4	112	23.3		8.2		28.3		81.1		5.9		12.9		14		77				<0.2		1.9	
					Bottom	11.3	0.5	116	23.1	23.1	8.2	8.2	28.9	28.9	80.9	80.9	5.9	5.9	13.1		16		77				<0.2		1.5	
						11.3	0.5	118	23.1		8.2		28.9		80.9		5.9		13.1		19		78				<0.2		1.8	
IM1	Cloudy	Moderate	08:20	8.4	Surface	1.0	0.6	27	23.4	23.4	8.1	8.1	28.1	28.1	91.5	91.5	6.6	6.6	12.2	18.1	14	18	74	76	806457	818351	<0.2	<0.2	1.4	1.5
						1.0	0.6	29	23.4		8.1		28.1		91.4		6.6		12.4		13		74				<0.2		1.7	
					Middle	4.2	0.5	26	23.4	23.4	8.1	8.1	28.3	28.3	90.8	90.8	6.6		17.7		21		76				<0.2		1.4	
						4.2	0.5	26	23.4		8.1		28.3		90.8		6.6		17.7		23		76				<0.2		1.5	
					Bottom	7.4	0.3	24	23.3	23.3	8.1	8.1	28.3	28.3	90.4	90.4	6.6	6.6	24.2		17		77				<0.2		1.6	
						7.4	0.4	26	23.3		8.1		28.3		90.4		6.6		24.4		18		77				<0.2		1.5	
IM2	Cloudy	Moderate	08:27	9.8	Surface	1.0	0.5	39	23.4	23.4	8.1	8.1	28.1	28.1	91.7	91.7	6.6	6.6	13.5	21.1	8	22	74	76	806180	818852	<0.2	<0.2	1.5	1.3
						1.0	0.5	42	23.4		8.1		28.1		91.7		6.6		13.7		10		75				<0.2		1.5	
					Middle	4.9	0.4	43	23.3	23.3	8.1	8.1	28.7	28.7	91.0	91.0	6.6		25.5		27		76				<0.2		1.4	
						4.9	0.4	46	23.3		8.1		28.7		91.0		6.6		25.5		26		75				<0.2		1.2	
					Bottom	8.8	0.3	60	23.3	23.3	8.1	8.1	28.7	28.7	91.2	91.2	6.6	6.6	24.4		29		77				<0.2		1.0	
						8.8	0.3	60	23.3		8.1		28.7		91.2		6.6		24.2		30		78				<0.2		1.1	
IM3	Cloudy	Moderate	08:35	9.4	Surface	1.0	0.5	33	23.4	23.4	8.1	8.1	28.5	28.5	91.9	91.9	6.6	6.6	13.1	20.8	10	19	75	76	806021	819411	<0.2	<0.2	1.3	1.2
						1.0	0.5	33	23.4		8.1		28.5		91.9		6.6		13.2		12		75				<0.2		1.2	
					Middle	4.7	0.4	31	23.3	23.3	8.1	8.1	28.9	28.9	91.2	91.2	6.6		25.3		22		76				<0.2		1.2	
						4.7	0.5	32	23.3		8.1		28.9		91.2		6.6		25.0		20		76				<0.2		1.3	
					Bottom	8.4	0.5	42	23.3	23.3	8.1	8.1	28.9	28.9	91.5	91.5	6.6	6.6	24.6		26		77				<0.2		1.2	
						8.4	0.5	43	23.3		8.1		28.9		91.5		6.6		23.8		24		77				<0.2		1.2	
IM4	Cloudy	Moderate	08:41	8.8	Surface	1.0	0.4	21	23.5	23.5	8.1	8.1	28.8	28.8	93.0	93.0	6.7	6.7	13.4	20.5	22	25	74	76	805042	819570	<0.2	<0.2	1.0	1.2
						1.0	0.4	22	23.5		8.1		28.8		93.0		6.7		13.5		25		75				<0.2		1.2	
					Middle	4.4	0.4	14	23.3	23.3	8.1	8.1	29.0	29.0	92.0	92.0	6.6		23.8		18		75				<0.2		1.0	
						4.4	0.4	15	23.3		8.1		29.0		92.0		6.6		24.1		21		76				<0.2		1.2	
					Bottom	7.8	0.3	18	23.3	23.3	8.1	8.1	29.0	29.0	92.4	92.4	6.7	6.7	24.2		34		77				<0.2		1.2	
						7.8	0.3	18	23.3		8.1		29.0		92.4		6.7		24.2		31		77				<0.2		1.4	
IM5	Cloudy	Moderate	08:50	7.9	Surface	1.0	0.3	44	23.7	23.7	8.1	8.1	28.6	28.6	92.4	92.4	6.7	6.7	13.9	17.8	15	19	75	76	804908	820564	<0.2	<0.2	1.3	1.3
						1.0	0.4	46	23.7		8.1		28.6		92.4		6.7		13.8		13		74				<0.2		1.4	
					Middle	4.0	0.2	65	23.5	23.5	8.1	8.1	28.8	28.8	92.2	92.2	6.7		19.7		22		76				<0.2		1.3	
						4.0	0.3	66	23.5		8.1		28.8		92.2		6.7		19.5		21		75				<0.2		1.3	
					Bottom	6.9	0.2	76	23.5	23.5	8.1	8.1	28.9	28.9	94.0	94.1	6.8	6.8	20.4		23		77				<0.2		1.5	
						6.9	0.3	79	23.5		8.1		28.9		94.1		6.8		19.5		22		78				<0.2		1.2	
IM6	Cloudy	Moderate	08:56	7.8	Surface	1.0	0.4	63	23.7	23.7	8.1	8.1	28.6	28.6	91.9	91.9	6.6	6.6	15.9	21.9	20	24	74	76	805845	821060	<0.2	<0.2	1.1	1.2
						1.0	0.4	67	23.7		8.1		28.6		91.9		6.6		16.1		19		73				<0.2		1.1	
					Middle	3.9	0.4	65	23.5	23.5	8.1	8.1	28.8	28.8	90.9	90.9	6.6		24.2		22		76				<0.2		1.2	
						3.9	0.4	70	23.5		8.1		28.8		90.9		6.6		24.4		24		76				<0.2		1.4	
					Bottom	6.8	0.3	63	23.4	23.4	8.1	8.1	28.8	28.8	91.8	91.8	6.6	6.6	25.4		28		77				<0.2		1.3	
						6.8	0.4	65	23.4		8.1		28.8		91.8		6.6		25.4		29		78				<0.2		1.3	
IM7	Cloudy	Moderate	09:04	9.3	Surface	1.0	0.5	75	23.6	23.6	8.1	8.1	28.5	28.5	91.8	91.8	6.6	6.6	15.2	19.4	19	23	74	76	806837	821349	<0.2	<0.2	1.4	1.4
						1.0	0.5	80	23.6		8.1		28.5		91.8		6.6		15.3		18		75				<0.2		1.6	
					Middle	4.7	0.4	74	23.5	23.5	8.1	8.1	28.6	28.6	91.5	91.5	6.6		19.0		24		75				<0.2		1.4	
						4.7	0.4	74	23.5		8.1		28.6		91.5		6.6		19.2		25		76				<0.2		1.3	
					Bottom	8.3	0.3	78	23.5	23.5	8.1	8.1	28.6	28.6	92.5	92.6	6.7	6.7	23.7		23		77				<0.2		1.4	
						8.3	0.3	84	23.5		8.1		28.6		92.6		6.7		23.7		27		78				<0.2		1.4	
IM8	Cloudy	Moderate	08:21	9.0	Surface	1.0	0.4	129	23.7	23.7	8.1	8.1	28.1	28.1	90.6	90.6	6.5	6.5	13.8	16.8	20	19	76	77	807829	821695	<0.2	<0.2	1.1	1.4
						1.0	0.4	140	23.7		8.1		28.1		90.6		6.5		13.9		21		75				<0.2		1.2	
					Middle	4.5	0.3	88	23.4	23.4	8.1	8.1	28.2	28.2	90.4	90.4	6.5		21.4		19		76				<0.2		1.4	
						4.5	0.3	95	23.4		8.1		28.2		90.4		6.5		21.4		17		77				<0.2		1.5	
					Bottom	8.0	0.3	65	23.5	23.5	8.1	8.1	28.2	28.2	92.3	92.4	6.7	6.7	15.2		20		77				<0.2		1.4	
						8.0	0.3	68	23.5		8.1		28.2		92.4		6.7		15.2		18		78				<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 29 April 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	08:16	8.8	Surface	1.0	0.6	115	23.6	23.6	8.2	8.2	26.2	26.2	87.9	87.9	6.4	6.4	10.3	12.1	11	15	76	77	808809	822094	<0.2	<0.2	1.8	1.6
						1.0	0.6	120	23.6		8.2		26.2		87.9		6.4		10.3		10		75				<0.2		1.6	
					Middle	4.4	0.5	87	23.5	23.5	8.2	8.2	27.4	27.4	88.1	88.1	6.4		14.2		13		77				<0.2		1.8	
						4.4	0.5	92	23.5		8.2		27.4		88.1		6.4		14.2		11		77				<0.2		1.7	
					Bottom	7.8	0.4	85	23.5	23.5	8.2	8.2	28.6	28.6	89.0	89.0	6.4	6.4	11.8		24		78				<0.2		1.2	
						7.8	0.4	86	23.5		8.2		28.6		89.0		6.4		11.8		21		78				<0.2		1.3	
IM10	Cloudy	Moderate	08:08	8.2	Surface	1.0	0.6	115	24.0	24.0	8.2	8.2	25.7	25.7	94.5	94.5	6.9	6.7	5.6	14.1	7	11	75	76	809841	822240	<0.2	<0.2	1.9	1.8
						1.0	0.6	125	24.0		8.2		25.7		94.5		6.9		5.6		7		75				<0.2		1.8	
					Middle	4.1	0.5	78	23.5	23.5	8.2	8.2	28.1	28.1	88.5	88.5	6.4		14.3		8		76				<0.2		1.6	
						4.1	0.5	82	23.5		8.2		28.1		88.5		6.4		14.3		8		77				<0.2		1.7	
					Bottom	7.2	0.4	73	23.4	23.4	8.2	8.2	28.8	28.8	89.0	89.0	6.4	6.4	22.4		18		77				<0.2		1.8	
						7.2	0.5	80	23.4		8.2		28.8		89.0		6.4		22.4		18		78				<0.2		1.7	
IM11	Cloudy	Moderate	07:56	7.8	Surface	1.0	0.6	126	23.7	23.7	8.2	8.2	26.1	26.1	88.0	88.0	6.4	6.4	8.9	12.2	10	12	75	76	810539	821501	<0.2	<0.2	2.0	1.9
						1.0	0.6	126	23.7		8.2		26.1		88.0		6.4		8.9		12		75				<0.2		1.7	
					Middle	3.9	0.6	92	23.5	23.5	8.2	8.2	28.3	28.3	88.2	88.2	6.4		13.8		12		76				<0.2		1.8	
						3.9	0.6	98	23.5		8.2		28.3		88.2		6.4		13.8		10		75				<0.2		1.8	
					Bottom	6.8	0.5	79	23.5	23.5	8.2	8.2	28.7	28.7	87.6	87.6	6.3	6.3	14.0		14		77				<0.2		2.0	
						6.8	0.5	84	23.5		8.2		28.7		87.6		6.3		14.0		16		78				<0.2		1.9	
IM12	Cloudy	Moderate	07:48	9.6	Surface	1.0	0.6	115	23.6	23.6	8.2	8.2	25.9	25.9	88.5	88.5	6.5	6.5	10.0	16.5	8	10	75	77	811520	821162	<0.2	<0.2	2.0	1.9
						1.0	0.6	123	23.6		8.2		25.9		88.5		6.5		10.0		10		75				<0.2		1.9	
					Middle	4.8	0.5	88	23.5	23.5	8.2	8.2	28.2	28.2	88.5	88.5	6.4		13.8		9		76				<0.2		1.8	
						4.8	0.6	92	23.5		8.2		28.2		88.5		6.4		13.8		9		77				<0.2		1.9	
					Bottom	8.6	0.4	72	23.4	23.4	8.2	8.2	28.8	28.8	89.1	89.1	6.4	6.4	25.6		12		78				<0.2		1.9	
						8.6	0.4	73	23.4		8.2		28.8		89.1		6.4		25.6		12		78				<0.2		2.0	
IM13	-	-	-	-	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
SR2	Cloudy	Moderate	07:14	5.2	Surface	1.0	0.6	99	23.8	23.8	8.2	8.2	26.5	26.5	87.6	87.6	6.4	6.4	12.7	18.7	17	15	76	77	814156	821463	<0.2	<0.2	2.0	2.0
						1.0	0.6	106	23.8		8.2		26.5		87.6		6.4		12.9		15		77				<0.2		1.9	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-						-		-	
					Bottom	4.2	0.4	105	23.5	23.5	8.2	8.2	28.1	28.1	87.6	87.6	6.3	6.3	24.5		13		78				<0.2		2.0	
						4.2	0.4	108	23.5		8.2		28.1		87.6		6.3		24.5		14		78				<0.2		1.9	
SR3	Cloudy	Moderate	08:24	9.2	Surface	1.0	0.4	78	23.6	23.6	8.1	8.1	28.1	28.1	90.3	90.3	6.5	6.5	12.9	16.3	15	21		-	807567	822147	-	-	-	-
						1.0	0.4	82	23.6		8.1		28.1		90.3		6.5		12.7		15						-		-	
					Middle	4.6	0.4	63	23.4	23.5	8.1	8.1	28.2	28.2	89.9	89.9	6.5		18.8		30						-		-	
						4.6	0.4	67	23.5		8.1		28.2		89.9		6.5		18.5		32						-		-	
					Bottom	8.2	0.4	68	23.5	23.5	8.1	8.1	28.2	28.2	90.1	90.1	6.5	6.5	17.5		17						-		-	
						8.2	0.4	69	23.5		8.1		28.2		90.1		6.5		17.2		18						-		-	
SR4A	Cloudy	Moderate	07:47	8.9	Surface	1.0	0.6	46	23.2	23.2	8.1	8.1	27.6	27.6	87.9	87.9	6.4	6.4	19.3	16.8	24	25		-	807793	817189	-	-	-	-
						1.0	0.7	50	23.2		8.1		27.6		87.9		6.4		19.3		24						-		-	
					Middle	4.5	0.5	37	23.1	23.1	8.0	8.0	27.9	27.9	85.7	85.7	6.3		15.5		26						-		-	
						4.5	0.5	39	23.1		8.0		27.9		85.7		6.3		15.5		27						-		-	
					Bottom	7.9	0.4	43	23.1	23.1	8.0	8.0	28.0	28.0	86.4	86.4	6.3	6.3	15.6		22						-		-	
						7.9	0.4	46	23.1		8.0		28.0		86.4		6.3		15.7		24						-		-	
SR5A	Cloudy	Moderate	07:35	5.8	Surface	1.0	0.1	316	23.2	23.2	8.0	8.0	27.5	27.5	85.0	85.0	6.2	6.2	12.1	12.9	11	12		-	810695	816593	-	-	-	-
						1.0	0.1	321	23.2		8.0		27.5		85.0		6.2		12.2		11						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-						-		-	
					Bottom	4.8	0.0	356	23.1	23.1	8.0	8.0	27.5	27.5	86.1	86.2	6.3	6.3	13.7		13						-		-	
						4.8	0.0	352	23.1		8.0		27.5		86.2		6.3		13.7		14						-		-	
SR6	Cloudy	Moderate	07:27	5.0	Surface	1.0	0.1	240	23.3	23.3	8.0	8.0	26.5	26.5	85.0	85.0	6.2	6.2	13.2	14.9	12	14		-	814662	817899	-	-	-	-
						1.0	0.1	249	23.3		8.0		26.5		85.0		6.2		13.3		11						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-						-		-	
					Bottom	4.0	0.1	261	23.2	23.2	8.0	8.0	26.9	26.9	86.1	86.2	6.3	6.3	16.4		16						-		-	
						4.0	0.1	275	23.2		8.0		26.9		86.2		6.3		16.5		16						-		-	
SR7	Cloudy	Moderate	06:33	15.6	Surface	1.0	0.2	330	23.1	23.1	8.0	8.0	28.3	28.3	81.9	81.9	6.0	5.9	5.4	9.1	7	8		-	823751	823636	-	-	-	-
						1.0	0.2	343	23.1		8.0		28.3		81.8		6.0		5.4		8						-		-	
					Middle	7.8	0.3	255	23.0	23.0	8.0	8.0	29.4	29.4	80.1	80.1	5.8		11.9		8						-		-	
						7.8	0.3	256	23.0		8.0		29.4		80.1		5.8		12.0		10						-		-	
					Bottom	14.6	0.7	223	23.0	23.0	7.9	7.9	29.3	29.3	82.5	82.6	6.0	6.0	10.0		7						-		-	
						14.6	0.7	231	23.0		7.9		29.3		82.6		6.0		10.0		7						-		-	
SR8	Cloudy	Moderate	07:37	4.5	Surface	1.0	0.7	114	23.6	23.6	8.2	8.2	27.6	27.6	87.5	87.5	6.3	6.3	14.7	14.3	8	10		-	811589	820417	-	-	-	-
						1.0	0.7	124	23.6		8.2		27.6		87.5		6.3		14.7		9						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-						-		-	
					Bottom	3.5	0.4	127	23.7	23.7	8.2	8.2	27.9	27.9	87.1	87.1	6.3	6.3	13.8		12						-		-	
						3.5	0.4	127	23.7		8.2		27.9		87.1		6.3		13.8		12						-		-	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 29 April 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	15:06	7.8	Surface	1.0	0.5	204	24.2	24.2	8.1	8.1	27.4	27.4	97.6	97.6	7.0	7.0	6.2	7.5	4	6	75	76	804232	815620	<0.2	<0.2	1.1	1.1
						1.0	0.5	205	24.2		8.1		27.3		97.5		7.0		6.4		6		75				<0.2		1.1	
					Middle	3.9	0.6	210	24.2	24.2	8.1	8.1	28.8	28.8	96.2	96.3	6.9		7.9		6		76				<0.2		1.0	
						3.9	0.6	212	24.2		8.1		28.8		96.3		6.9		8.0		6		76				<0.2		1.2	
					Bottom	6.8	0.4	215	23.4	23.4	8.1	8.1	29.6	29.6	95.9	96.0	6.9	6.9	8.4		6		78				<0.2		1.2	
						6.8	0.4	222	23.4		8.1		29.6		96.0		6.9		8.2		8		78				<0.2		1.2	
C2	Cloudy	Moderate	13:17	13.6	Surface	1.0	0.3	130	23.8	23.8	8.1	8.1	25.9	25.9	89.8	89.9	6.6	6.6	9.4	12.7	10	14	75	76	806957	825682	<0.2	<0.2	2.2	2.1
						1.0	0.4	135	23.8		8.1		25.9		89.9		6.6		9.6		12		75				<0.2		2.2	
					Middle	6.8	0.2	125	23.7	23.7	8.1	8.1	28.5	28.5	91.5	91.5	6.6		13.1		14		76				<0.2		1.8	
						6.8	0.2	133	23.7		8.1		28.5		91.5		6.6		13.1		13		76				<0.2		1.8	
					Bottom	12.6	0.1	117	23.5	23.5	8.1	8.1	28.6	28.6	92.0	92.1	6.6	6.6	15.4		16		77				<0.2		2.6	
						12.6	0.1	124	23.5		8.1		28.6		92.1		6.6		15.4		16		78				<0.2		2.2	
C3	Cloudy	Moderate	15:33	12.5	Surface	1.0	0.8	114	23.7	23.7	8.2	8.2	27.1	27.1	84.1	84.1	6.1	6.1	12.3	12.4	15	17	75	76	817783	822109	<0.2	<0.2	1.7	1.6
						1.0	0.9	124	23.7		8.2		27.1		84.1		6.1		12.3		17		75				<0.2		1.8	
					Middle	6.3	0.4	106	23.4	23.4	8.2	8.2	27.9	27.9	83.1	83.1	6.0		12.7		14		76				<0.2		1.5	
						6.3	0.4	107	23.4		8.2		27.9		83.1		6.0		12.7		16		77				<0.2		1.6	
					Bottom	11.5	0.4	108	23.2	23.2	8.2	8.2	28.7	28.7	83.9	83.9	6.1	6.1	12.3		20		77				<0.2		1.5	
						11.5	0.4	112	23.2		8.2		28.7		83.9		6.1		12.3		22		78				<0.2		1.6	
IM1	Cloudy	Moderate	14:51	8.1	Surface	1.0	0.5	205	24.0	24.0	8.1	8.1	27.5	27.5	97.5	97.5	7.0	6.9	3.7	7.2	9	12	74	76	806475	818351	<0.2	<0.2	1.5	1.4
						1.0	0.5	218	24.0		8.1		27.5		97.5		7.0		3.8		11		75				<0.2		1.3	
					Middle	4.1	0.6	204	23.4	23.4	8.1	8.1	28.3	28.3	93.8	93.8	6.8		7.7		14		76				<0.2		1.4	
						4.1	0.6	205	23.4		8.1		28.3		93.8		6.8		7.9		12		75				<0.2		1.4	
					Bottom	7.1	0.4	212	23.3	23.4	8.1	8.1	29.0	29.0	94.4	94.4	6.8	6.8	9.9		12		77				<0.2		1.3	
						7.1	0.4	232	23.4		8.1		29.0		94.4		6.8		10.1		13		78				<0.2		1.2	
IM2	Cloudy	Moderate	14:28	9.0	Surface	1.0	0.2	172	23.9	23.9	8.1	8.1	28.3	28.3	97.2	97.2	7.0	6.9	5.1	7.5	11	9	75	76	806193	818852	<0.2	<0.2	1.4	1.3
						1.0	0.2	185	23.9		8.1		28.3		97.1		7.0		5.1		10		75				<0.2		1.2	
					Middle	4.5	0.4	178	23.4	23.4	8.1	8.1	29.0	29.0	93.3	93.3	6.7		9.8		9		76				<0.2		1.1	
						4.5	0.4	185	23.4		8.1		29.0		93.3		6.7		9.8		9		75				<0.2		1.3	
					Bottom	8.0	0.2	166	23.4	23.4	8.1	8.1	29.1	29.1	94.5	94.6	6.8	6.8	7.9		7		77				<0.2		1.3	
						8.0	0.3	171	23.4		8.1		29.0		94.6		6.8		7.5		6		77				<0.2		1.3	
IM3	Cloudy	Moderate	14:13	9.1	Surface	1.0	0.2	230	24.0	24.0	8.1	8.1	28.7	28.7	95.6	95.6	6.8	6.8	7.0	7.2	10	13	75	76	806010	819411	<0.2	<0.2	1.2	1.2
						1.0	0.2	235	24.0		8.1		28.7		95.6		6.8		7.1		9		75				<0.2		1.1	
					Middle	4.6	0.2	195	23.6	23.6	8.1	8.1	28.9	28.9	94.4	94.4	6.8		7.1		16		75				<0.2		1.2	
						4.6	0.2	204	23.6		8.1		28.9		94.4		6.8		7.2		16		76				<0.2		1.2	
					Bottom	8.1	0.2	183	23.6	23.6	8.1	8.1	28.9	28.9	94.5	94.6	6.8	6.8	7.3		13		77				<0.2		1.1	
						8.1	0.2	194	23.6		8.1		28.9		94.6		6.8		7.2		12		78				<0.2		1.3	
IM4	Cloudy	Moderate	14:06	8.6	Surface	1.0	0.3	168	23.8	23.8	8.1	8.1	28.6	28.6	92.9	92.9	6.7	6.7	12.5	13.1	11	17	75	76	805057	819570	<0.2	<0.2	1.2	1.2
						1.0	0.3	174	23.7		8.1		28.6		92.9		6.7		12.4		12		76				<0.2		1.2	
					Middle	4.3	0.2	183	23.4	23.4	8.1	8.1	29.0	29.0	92.5	92.6	6.7		13.1		20		76				<0.2		1.0	
						4.3	0.3	191	23.4		8.1		29.0		92.6		6.7		13.2		18		76				<0.2		1.3	
					Bottom	7.6	0.2	195	23.4	23.4	8.1	8.1	29.2	29.2	93.8	93.9	6.8	6.8	13.5		20		77				<0.2		1.2	
						7.6	0.2	199	23.4		8.1		29.2		94.0		6.8		14.0		18		77				<0.2		1.1	
IM5	Cloudy	Moderate	13:57	7.8	Surface	1.0	0.2	130	23.8	23.8	8.1	8.1	28.4	28.4	93.3	93.3	6.7	6.7	9.9	16.9	12	15	74	76	804910	820564	<0.2	<0.2	1.1	1.2
						1.0	0.2	137	23.8		8.1		28.4		93.2		6.7		9.7		14		75				<0.2		1.2	
					Middle	3.9	0.2	136	23.4	23.4	8.1	8.1	28.7	28.7	91.2	91.2	6.6		15.9		14		75				<0.2		1.2	
						3.9	0.2	142	23.4		8.1		28.7		91.2		6.6		16.1		16		76				<0.2		1.3	
					Bottom	6.8	0.2	144	23.4	23.4	8.1	8.1	29.0	29.0	91.2	91.2	6.6	6.6	24.8		16		77				<0.2		1.1	
						6.8	0.2	144	23.4		8.1		29.0		91.2		6.6		24.9		16		78				<0.2		1.3	
IM6	Cloudy	Moderate	13:47	7.3	Surface	1.0	0.2	165	23.9	23.9	8.1	8.1	28.3	28.3	92.5	92.5	6.6	6.6	9.6	9.6	12	14	75	76	805810	821060	<0.2	<0.2	1.4	1.3
						1.0	0.3	180	23.9		8.1		28.3		92.5		6.6		9.6		13		75				<0.2		1.3	
					Middle	3.7	0.2	164	23.5	23.5	8.1	8.1	28.5	28.5	91.2	91.2	6.6		11.5		14		76				<0.2		1.3	
						3.7	0.3	169	23.5		8.1		28.5		91.2		6.6		11.5		12		76				<0.2		1.2	
					Bottom	6.3	0.2	158	23.5	23.5	8.1	8.1	28.7	28.7	92.8	92.9	6.7	6.7	7.7		16		78				<0.2		1.1	
						6.3	0.2	160	23.5		8.1		28.7		92.9		6.7		7.7		18		78				<0.2		1.3	
IM7	Cloudy	Moderate	13:40	8.8	Surface	1.0	0.3	160	24.0	24.0	8.1	8.1	28.4	28.4	92.6	92.6	6.6	6.6	10.4	12.5	12	15	75	76	806818	821349	<0.2	<0.2	1.2	1.2
						1.0	0.3	166	24.0		8.1		28.4		92.6		6.6		10.5		14		75				<0.2		1.2	
					Middle	4.4	0.2	162	23.6	23.6	8.1	8.1	28.6	28.6	91.2	91.3	6.6		12.6		13		76				<0.2		1.1	
						4.4	0.3	165	23.6		8.1		28.6		91.3		6.6		12.7		12		76				<0.2		1.2	
					Bottom	7.8	0.1	161	23.5	23.5	8.1	8.1	28.8	28.8	92.6	92.6	6.7	6.7	14.3		19		77				<0.2		1.2	
						7.8	0.1	175	23.5		8.1		28.8		92.6		6.7		14.5		19		77				<0.2		1.3	
IM8	Cloudy	Moderate	13:42	8.8	Surface	1.0	0.3	153	23.6	23.6	8.1	8.1	25.5	25.5	88.6	88.6	6.5	6.5	11.7	12.9	13	15	75	76	807841	821695	<0.2	<0.2	1.8	1.6
						1.0	0.3	157	23.6		8.1		25.5		88.6		6.5		11.9		15		74				<0.2		1.9	
					Middle	4.4	0.3	92	23.5	23.5	8.1	8.1	28.4	28.4	88.8	88.8	6.4		14.7		13		75				<0.2		1.5	
						4.4	0.3	93	23.5		8.1		28.4		88.8		6.4		14.8		14		76				<0.2		1.5	
					Bottom	7.8	0.3	72	23.6	23.6	8.1	8.1	28.3	28.3	87.9	87.9	6.3	6.3	12.2		19		76				<0.2		1.6	
						7.8	0.3	76	23.6		8.1		28.3		87.9		6.3		12.2		17		77				<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

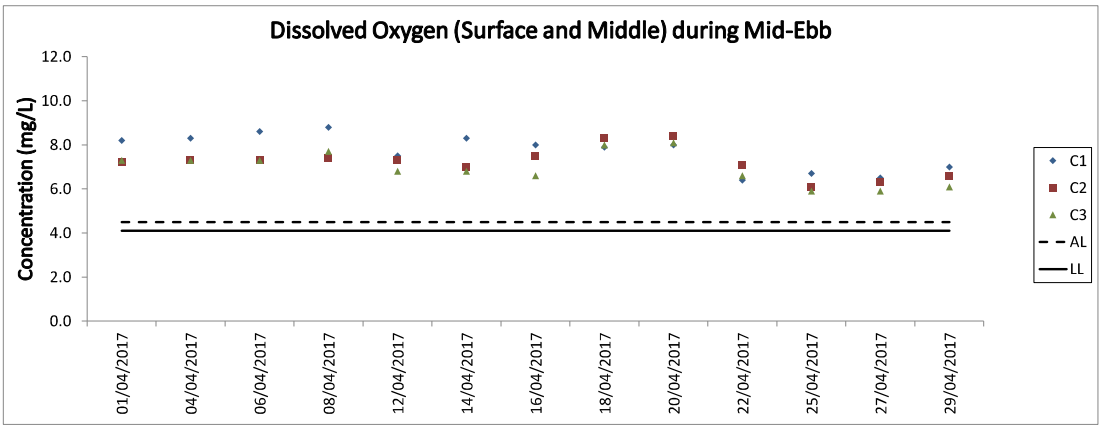
Water Quality Monitoring Results on 29 April 17 during Mid-Ebb tide

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	14:06	8.6	Surface	1.0	0.5	113	24.0	24.0	8.3	8.3	27.1	27.1	89.1	89.1	6.4	6.4	14.7	15.3	12	14	75	76	808801	822094	<0.2	<0.2	1.6	1.5
						1.0	0.6	114	24.0		8.3		27.1		89.1		6.4		14.7		10		75				<0.2		1.6	
					Middle	4.3	0.5	85	23.7	23.7	8.3	8.3	27.5	27.5	88.7	88.7	6.4		17.7		15		76				<0.2		1.6	
						4.3	0.5	86	23.7		8.3		27.5		88.7		6.4		17.7		13		76				<0.2		1.4	
					Bottom	7.6	0.4	68	23.8	23.8	8.3	8.3	27.7	27.7	89.2	89.2	6.4		13.4		16		77				<0.2		1.5	
						7.6	0.4	70	23.8		8.3		27.7		89.2		6.4		13.4		16		77				<0.2		1.5	
IM10	Cloudy	Moderate	14:11	9.2	Surface	1.0	0.6	113	23.9	23.9	8.3	8.3	27.2	27.2	89.2	89.2	6.4	6.5	14.8	14.1	11	11	75	76	809840	822240	<0.2	<0.2	1.8	1.6
						1.0	0.7	123	23.9		8.3		27.2		89.2		6.4		14.8		10		75				<0.2		1.8	
					Middle	4.6	0.5	88	23.7	23.7	8.3	8.3	27.6	27.6	89.4	89.4	6.5		15.3		10		76				<0.2		1.5	
						4.6	0.5	95	23.7		8.3		27.6		89.4		6.5		15.3		11		76				<0.2		1.6	
					Bottom	8.2	0.4	78	23.7	23.7	8.3	8.3	28.2	28.2	89.5	89.5	6.4	6.4	12.3		12		77				<0.2		1.4	
						8.2	0.4	83	23.7		8.3		28.2		89.5		6.4		12.3		14		77				<0.2		1.3	
IM11	Cloudy	Moderate	14:18	7.9	Surface	1.0	0.6	116	23.9	23.9	8.3	8.3	27.2	27.2	89.2	89.2	6.4	6.5	14.7	15.1	11	14	74	76	810537	821501	<0.2	<0.2	2.0	1.9
						1.0	0.6	121	23.9		8.3		27.2		89.2		6.4		14.7		10		75				<0.2		2.0	
					Middle	4.0	0.6	98	23.8	23.8	8.2	8.2	27.3	27.3	89.4	89.4	6.5		15.5		10		75				<0.2		2.2	
						4.0	0.7	106	23.8		8.2		27.3		89.4		6.5		15.5		11		76				<0.2		2.1	
					Bottom	6.9	0.4	81	23.7	23.7	8.3	8.3	28.2	28.2	89.3	89.3	6.4	6.4	15.1		20		77				<0.2		1.8	
						6.9	0.5	83	23.7		8.3		28.2		89.3		6.4		15.1		21		77				<0.2		1.5	
IM12	Cloudy	Moderate	14:24	8.7	Surface	1.0	0.5	117	23.9	23.9	8.3	8.3	27.2	27.2	88.8	88.8	6.4	6.4	14.8	15.1	8	12	75	76	811534	821162	<0.2	<0.2	1.9	1.9
						1.0	0.5	123	23.9		8.3		27.2		88.8		6.4		14.9		10		75				<0.2		1.8	
					Middle	4.4	0.5	101	23.7	23.7	8.2	8.2	27.4	27.4	88.8	88.8	6.4		15.9		9		76				<0.2		1.9	
						4.4	0.5	104	23.7		8.2		27.4		88.8		6.4		15.9		10		76				<0.2		2.1	
					Bottom	7.7	0.4	80	23.7	23.7	8.3	8.3	27.8	27.8	88.5	88.5	6.4	6.4	14.5		16		78				<0.2		1.7	
						7.7	0.5	82	23.7		8.3		27.8		88.5		6.4		14.5		18		78				<0.2		1.7	
IM13	-	-	-	-	Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
SR2	Cloudy	Moderate	15:01	4.5	Surface	1.0	0.6	112	23.6	23.6	8.2	8.2	27.9	27.9	87.2	87.2	6.3	6.3	14.6	14.2	12	13	76	77	814170	821463	<0.2	<0.2	1.2	1.4
						1.0	0.7	113	23.6		8.2		27.9		87.2		6.3		14.6		14		76				<0.2		1.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.4	147	23.7	23.7	8.2	8.2	27.9	27.9	87.1	87.1	6.3	6.3	13.8		14		78				<0.2		1.5	
						3.5	0.4	147	23.7		8.2		27.9		87.1		6.3		13.8		13		77				<0.2		1.5	
SR3	Cloudy	Moderate	13:37	9.7	Surface	1.0	0.3	150	23.5	23.5	8.1	8.1	25.9	25.9	88.5	88.5	6.5	6.5	11.2	12.6	9	15		-	807574	822147	-	-	-	-
						1.0	0.3	160	23.5		8.1		25.9		88.5		6.5		11.3		8						-		-	
					Middle	4.9	0.4	108	23.6	23.6	8.1	8.1	28.0	28.0	90.3	90.3	6.5		13.7		16						-		-	
						4.9	0.4	118	23.5		8.1		28.0		90.3		6.5		13.7		18						-		-	
					Bottom	8.7	0.3	84	23.5	23.5	8.1	8.1	28.4	28.4	90.8	90.8	6.6	6.6	12.7		17						-		-	
						8.7	0.3	86	23.5		8.1		28.4		90.8		6.6		12.7		19						-		-	
SR4A	Cloudy	Moderate	15:07	10.7	Surface	1.0	0.4	75	24.3	24.3	8.1	8.1	27.1	27.1	95.9	95.9	6.9	6.8	8.7	13.0	9	12		-	807829	817189	-	-	-	-
						1.0	0.4	78	24.3		8.1		27.1		95.8		6.9		8.7		11						-		-	
					Middle	5.4	0.3	70	23.9	23.9	8.1	8.1	27.4	27.4	93.4	93.4	6.7		12.4		8						-		-	
						5.4	0.3	73	23.9		8.1		27.4		93.4		6.7		12.3		9						-		-	
					Bottom	9.7	0.2	76	23.6	23.6	8.1	8.1	27.9	27.9	93.6	93.7	6.8	6.8	17.9		17						-		-	
						9.7	0.2	76	23.6		8.1		27.9		93.7		6.8		18.1		15						-		-	
SR5A	Cloudy	Moderate	16:09	5.6	Surface	1.0	0.1	99	24.6	24.6	8.1	8.1	27.6	27.6	95.9	95.9	6.8	6.8	7.3	6.6	11	11		-	810703	816593	-	-	-	-
						1.0	0.1	100	24.6		8.1		27.6		95.8		6.8		7.5		9						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.6	0.1	131	24.0	24.0	8.1	8.1	27.8	27.8	94.8	94.9	6.8	6.8	5.8		13						-		-	
						4.6	0.1	131	24.0		8.1		27.8		94.9		6.8		5.8		11						-		-	
SR6	Cloudy	Moderate	16:30	5.4	Surface	1.0	0.1	136	24.2	24.2	8.1	8.1	27.7	27.7	94.6	94.6	6.8	6.8	8.2	8.5	9	10		-	814675	817899	-	-	-	-
						1.0	0.1	147	24.2		8.1		27.7		94.5		6.8		8.2		9						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	0.1	108	24.0	24.0	8.1	8.1	27.8	27.8	94.1	94.2	6.8	6.8	8.8		10						-		-	
						4.4	0.1	109	24.0		8.1		27.8		94.2		6.8		8.7		11						-		-	
SR7	Cloudy	Moderate	16:03	16.8	Surface	1.0	1.2	86	23.8	23.8	8.0	8.0	27.1	27.1	86.1	86.1	6.2	6.2	6.9	7.8	8	11		-	823758	823636	-	-	-	-
						1.0	1.2	91	23.8		8.0		27.1		86.1		6.2		7.0		6						-		-	
					Middle	8.4	0.8	83	23.5	23.5	8.0	8.0	27.6	27.6	84.1	84.1	6.1		8.3		10						-		-	
						8.4	0.8	84	23.5		8.0		27.6		84.1		6.1		8.1		13						-		-	
					Bottom	15.8	0.6	103	23.5	23.5	8.0	8.0	27.7	27.7	85.4	85.5	6.2	6.2	8.2		13						-		-	
						15.8	0.7	104	23.5		8.0		27.6		85.5		6.2		8.2		13						-		-	
SR8	Cloudy	Moderate	14:40	5.2	Surface	1.0	0.6	110.0	23.8	23.8	8.2	8.2	26.5	26.5	87.6	87.6	6.4	6.4	12.7	18.7	14	17		-	811579	820417	-	-	-	-
						1.0	0.7	115.0	23.8		8.2		26.5		87.6		6.4		12.9		15						-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.3	135.0	23.5	23.5	8.2	8.2	28.1	28.1	87.6	87.6	6.3	6.3	24.5		19						-		-	
						4.2	0.3	138.0	23.5		8.2		28.1		87.6		6.3		24.5		21						-		-	

DA: Depth-Averaged

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

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


Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
12.0
10.0
8.0
6.0
4.0
2.0
0.0
01/04/2017
04/04/2017
06/04/2017
08/04/2017
12/04/2017
14/04/2017
16/04/2017
18/04/2017
20/04/2017
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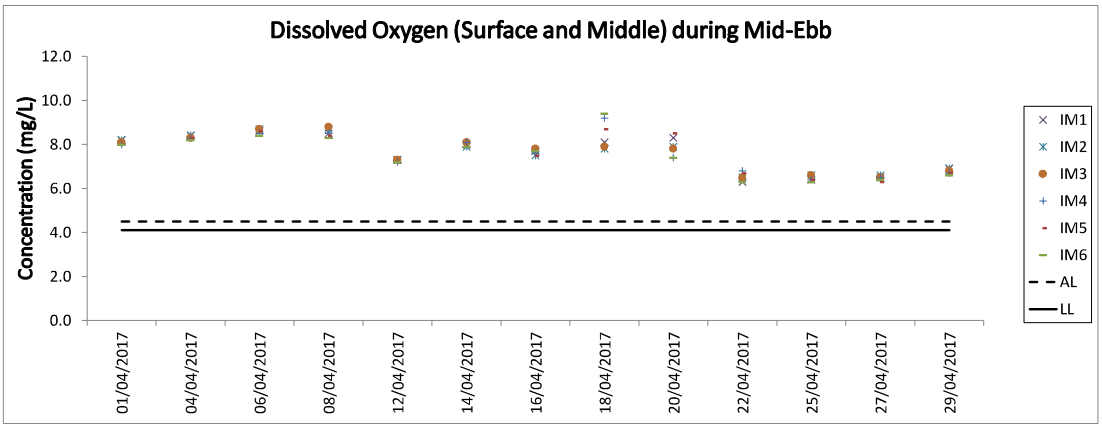
C1
C2
C3
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
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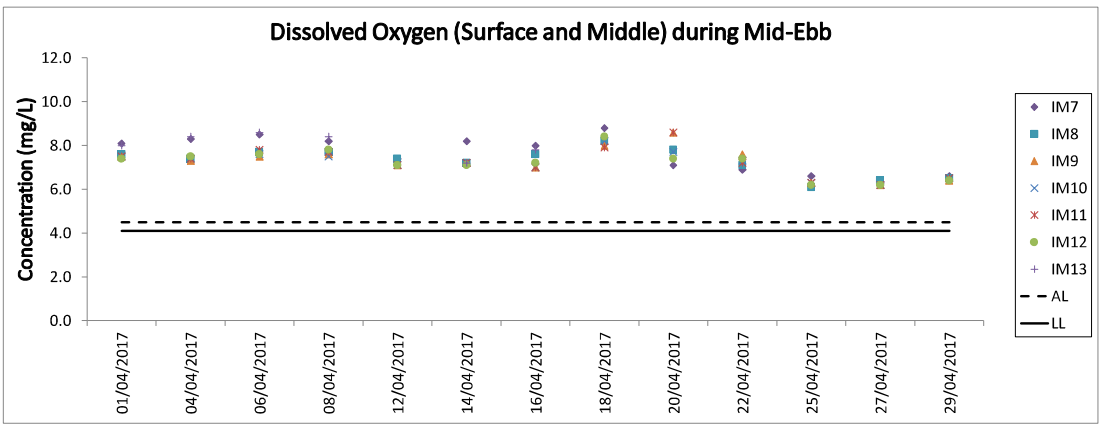
10.0
8.0
6.0
4.0
2.0
0.0
01/04/2017
04/04/2017
06/04/2017
08/04/2017
12/04/2017
14/04/2017
16/04/2017
18/04/2017
20/04/2017
22/04/2017
25/04/2017
27/04/2017
29/04/2017
IM1
IM2
IM3
IM4
IM5
IM6
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
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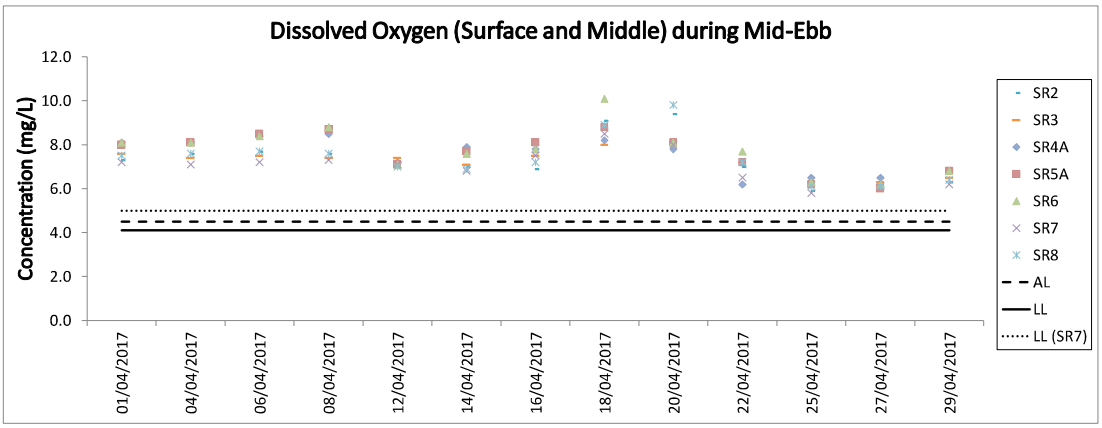
10.0
8.0
6.0
4.0
2.0
0.0
01/04/2017
04/04/2017
06/04/2017
08/04/2017
12/04/2017
14/04/2017
16/04/2017
18/04/2017
20/04/2017
22/04/2017
25/04/2017
27/04/2017
29/04/2017
IM7
IM8
IM9
IM10
IM11
IM12
IM13
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
12.0
10.0
8.0
6.0
4.0
2.0
0.0
01/04/2017
04/04/2017
06/04/2017
08/04/2017
12/04/2017
14/04/2017
16/04/2017
18/04/2017
20/04/2017
22/04/2017
25/04/2017
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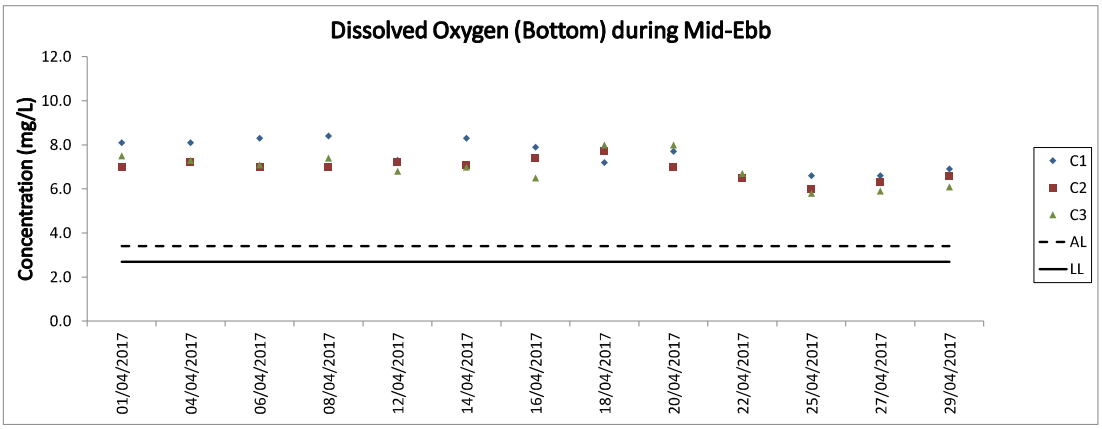
SR7
SR8
AL
LL
LL (SR7)


Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
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8.0
6.0
4.0
2.0
0.0
01/04/2017
04/04/2017
06/04/2017
08/04/2017
12/04/2017
14/04/2017
16/04/2017
18/04/2017
20/04/2017
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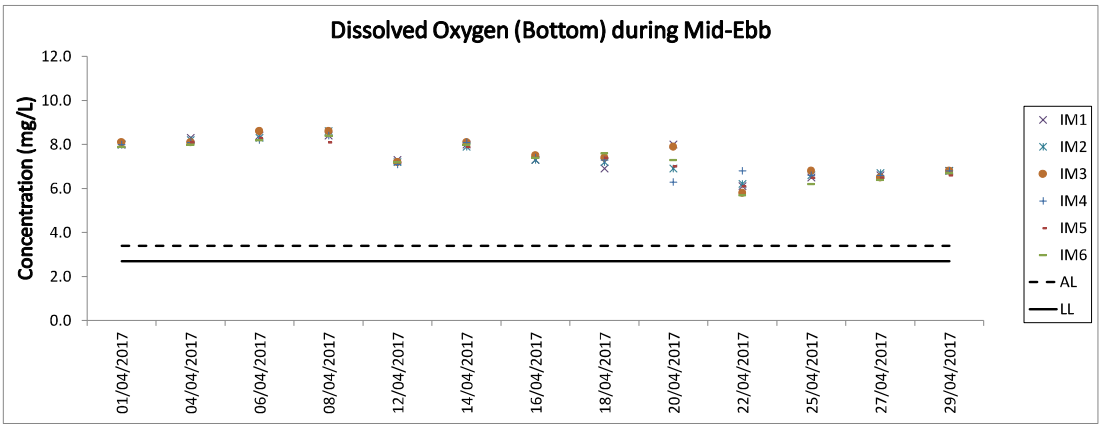
29/04/2017
C1
C2
C3
AL
LL


Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
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8.0
6.0
4.0
2.0
0.0
01/04/2017
04/04/2017
06/04/2017
08/04/2017
12/04/2017
14/04/2017
16/04/2017
18/04/2017
20/04/2017
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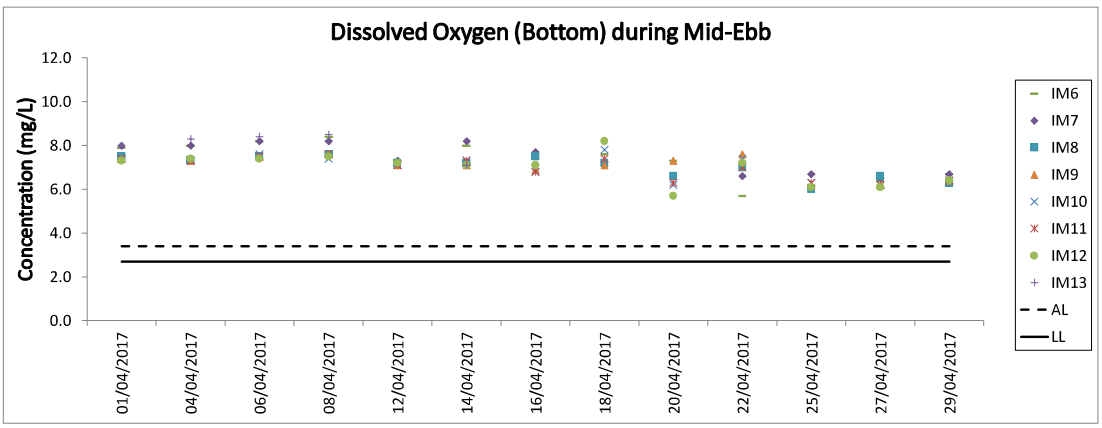
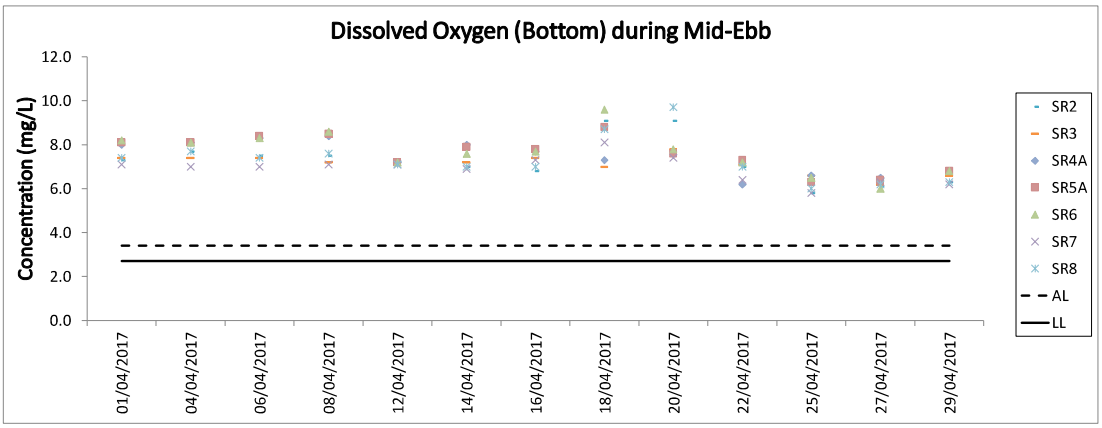
IM1
IM2
IM3
IM4
IM5
IM6
AL
LL


Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
12.0
10.0
8.0
6.0
4.0
2.0
0.0
01/04/2017
04/04/2017
06/04/2017
08/04/2017
12/04/2017
14/04/2017
16/04/2017
18/04/2017
20/04/2017
22/04/2017
25/04/2017
27/04/2017
29/04/2017
IM6
IM7
IM8
IM9
IM10
IM11
IM12
IM13
AL
LL


Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
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10.0
8.0
6.0
4.0
2.0
0.0
01/04/2017
04/04/2017
06/04/2017
08/04/2017
12/04/2017
14/04/2017
16/04/2017
18/04/2017
20/04/2017
22/04/2017
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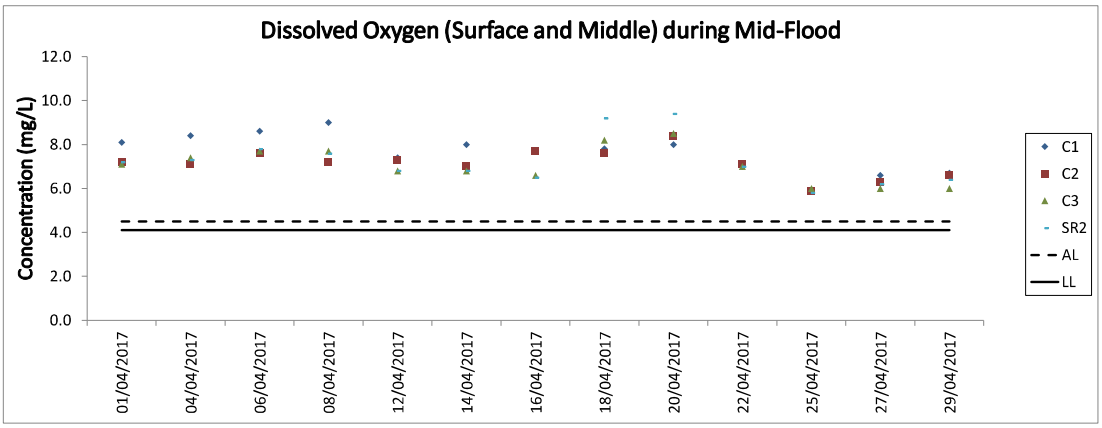
SR3
SR4A
SR5A
SR6
SR7
SR8
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
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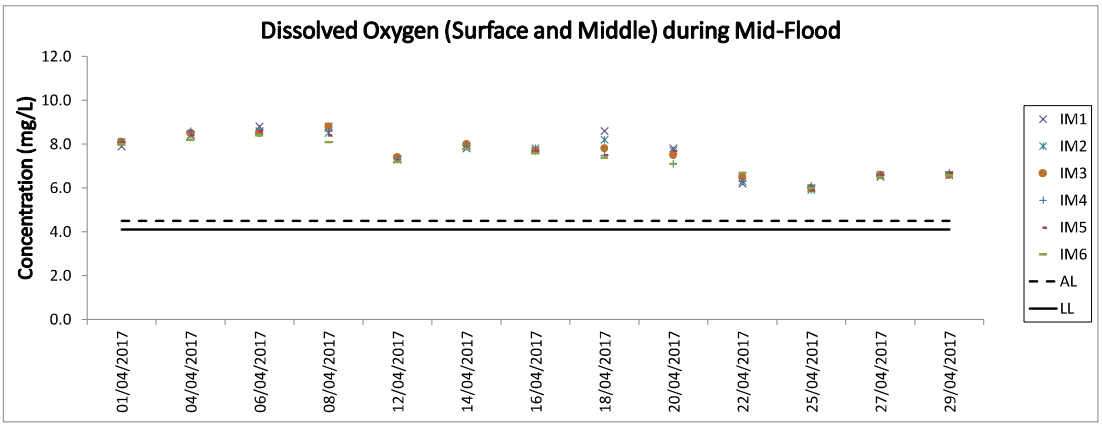
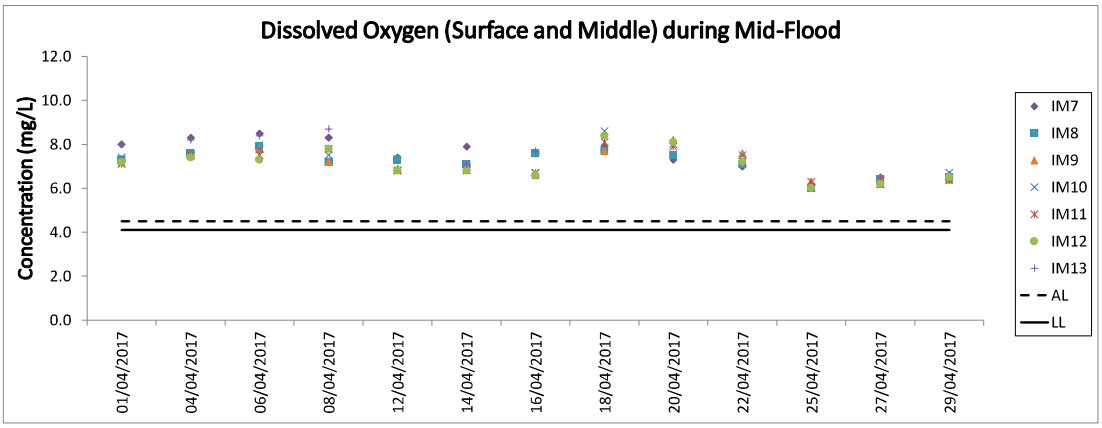
10.0
8.0
6.0
4.0
2.0
0.0
01/04/2017
04/04/2017
06/04/2017
08/04/2017
12/04/2017
14/04/2017
16/04/2017
18/04/2017
20/04/2017
22/04/2017
25/04/2017
27/04/2017
29/04/2017
C1
C2
C3
SR2
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
12.0
10.0
8.0
6.0
4.0
2.0
0.0
01/04/2017
04/04/2017
06/04/2017
08/04/2017
12/04/2017
14/04/2017
16/04/2017
18/04/2017
20/04/2017
22/04/2017
25/04/2017
27/04/2017
29/04/2017
IM1
IM2
IM3
IM4
IM5
IM6
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
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10.0
8.0
6.0
4.0
2.0
0.0
01/04/2017
04/04/2017
06/04/2017
08/04/2017
12/04/2017
14/04/2017
16/04/2017
18/04/2017
20/04/2017
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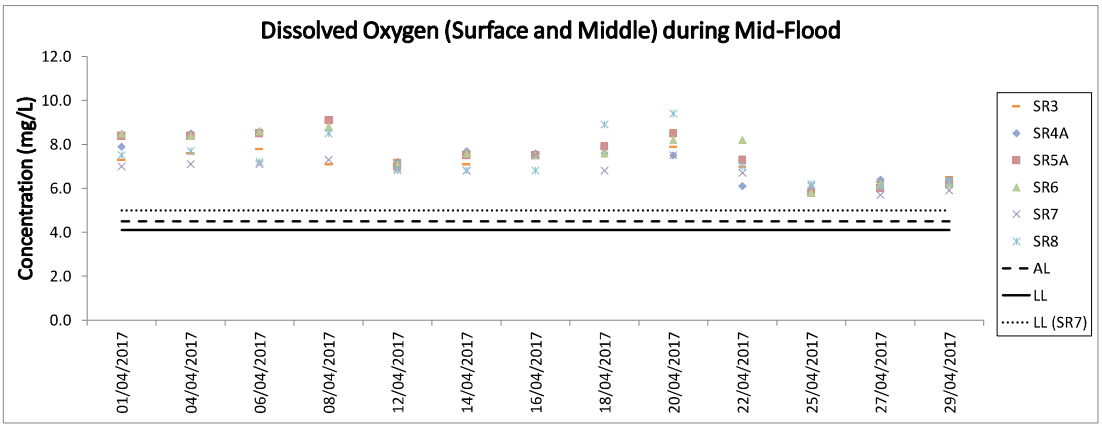
IM8
IM9
IM10
IM11
IM12
IM13
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
12.0
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8.0
6.0
4.0
2.0
0.0
01/04/2017
04/04/2017
06/04/2017
08/04/2017
12/04/2017
14/04/2017
16/04/2017
18/04/2017
20/04/2017
22/04/2017
25/04/2017
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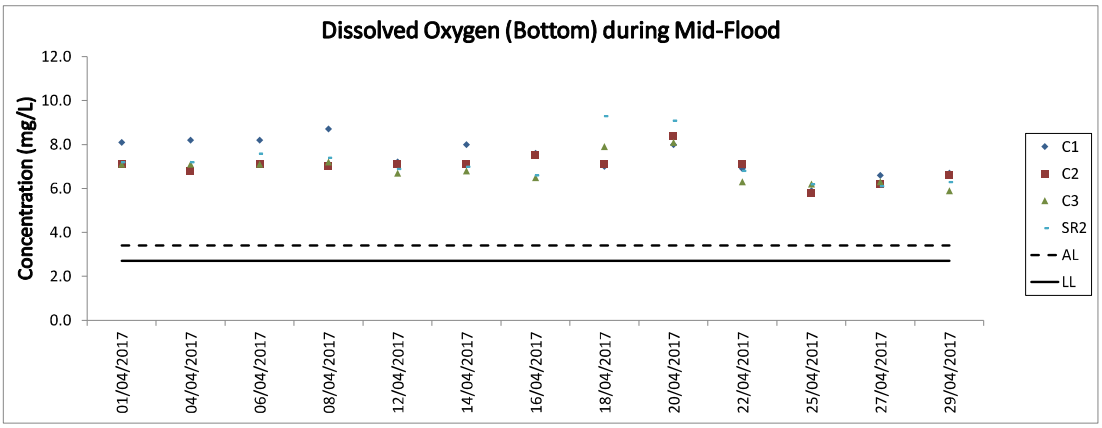
29/04/2017
SR3
SR4A
SR5A
SR6
SR7
SR8
AL
LL
LL (SR7)


Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
12.0
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8.0
6.0
4.0
2.0
0.0
01/04/2017
04/04/2017
06/04/2017
08/04/2017
12/04/2017
14/04/2017
16/04/2017
18/04/2017
20/04/2017
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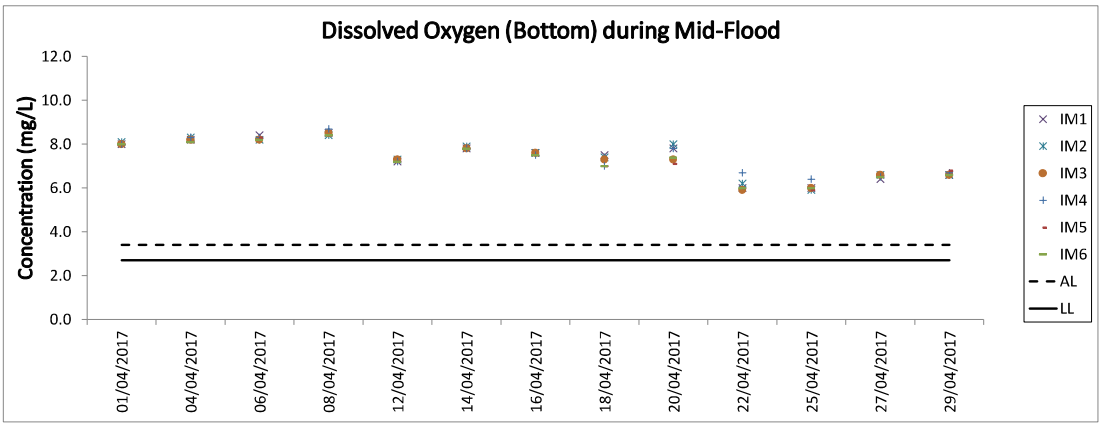
C1
C2
C3
SR2
AL
LL


Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
12.0
10.0
8.0
6.0
4.0
2.0
0.0
01/04/2017
04/04/2017
06/04/2017
08/04/2017
12/04/2017
14/04/2017
16/04/2017
18/04/2017
20/04/2017
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IM3
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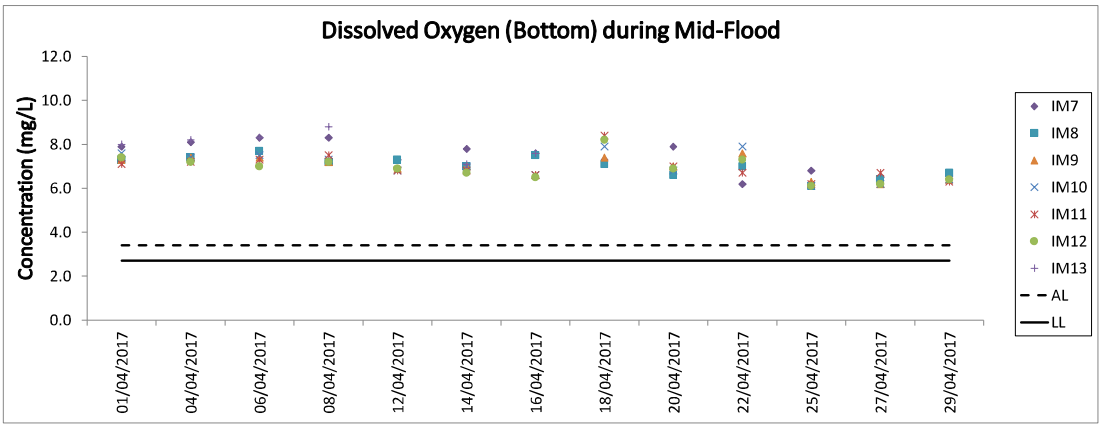
IM5
IM6
AL
LL


Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
12.0
10.0
8.0
6.0
4.0
2.0
0.0
01/04/2017
04/04/2017
06/04/2017
08/04/2017
12/04/2017
14/04/2017
16/04/2017
18/04/2017
20/04/2017
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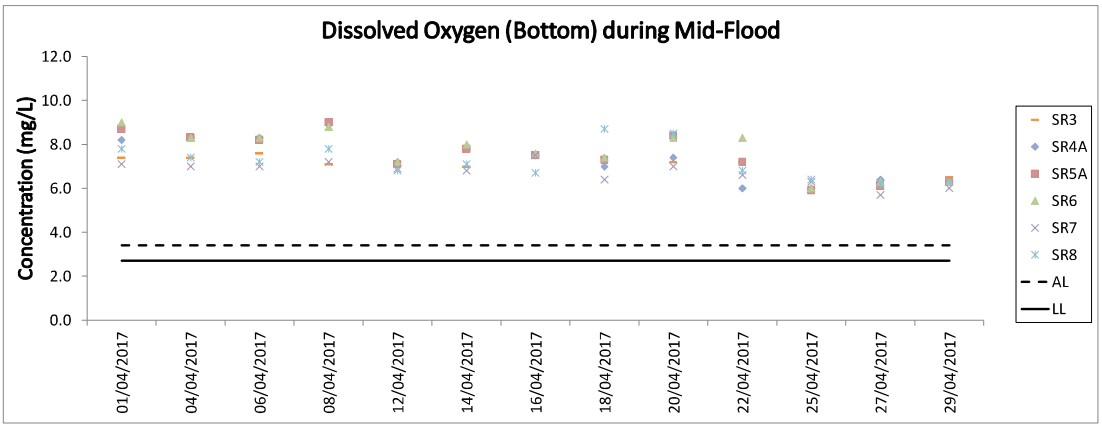
IM12
IM13
AL
LL


Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
12.0
10.0
8.0
6.0
4.0
2.0
0.0
01/04/2017
04/04/2017
06/04/2017
08/04/2017
12/04/2017
14/04/2017
16/04/2017
18/04/2017
20/04/2017
22/04/2017
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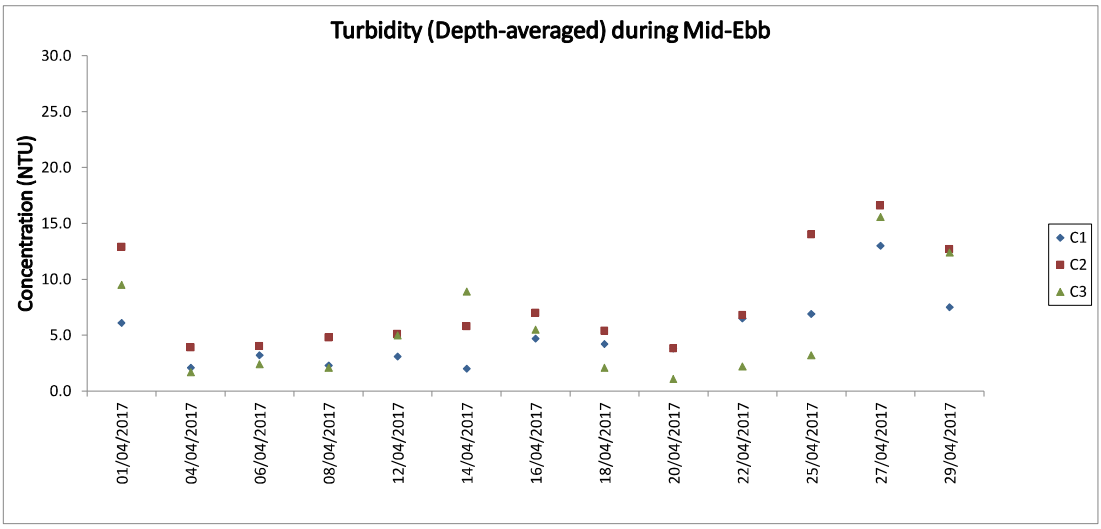
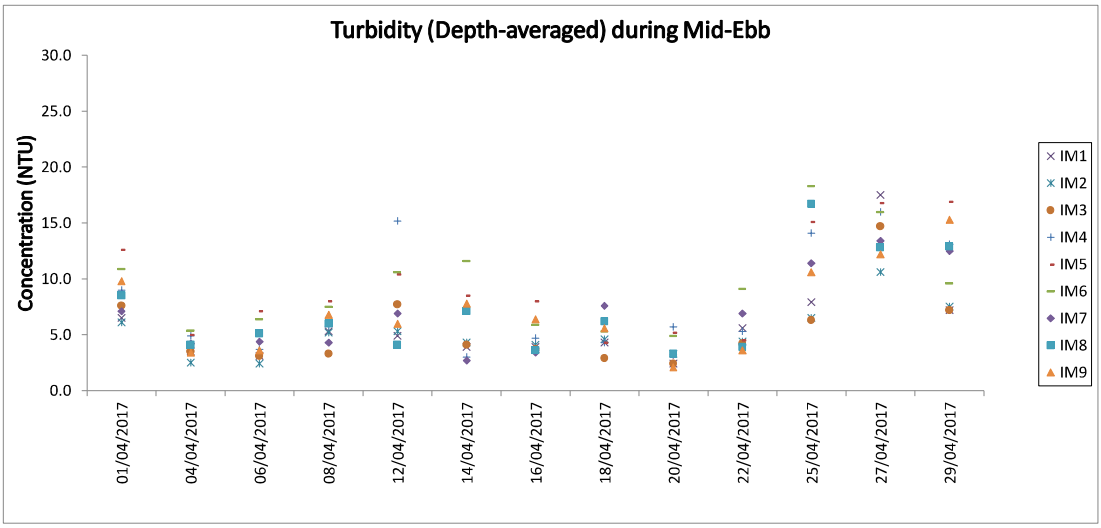
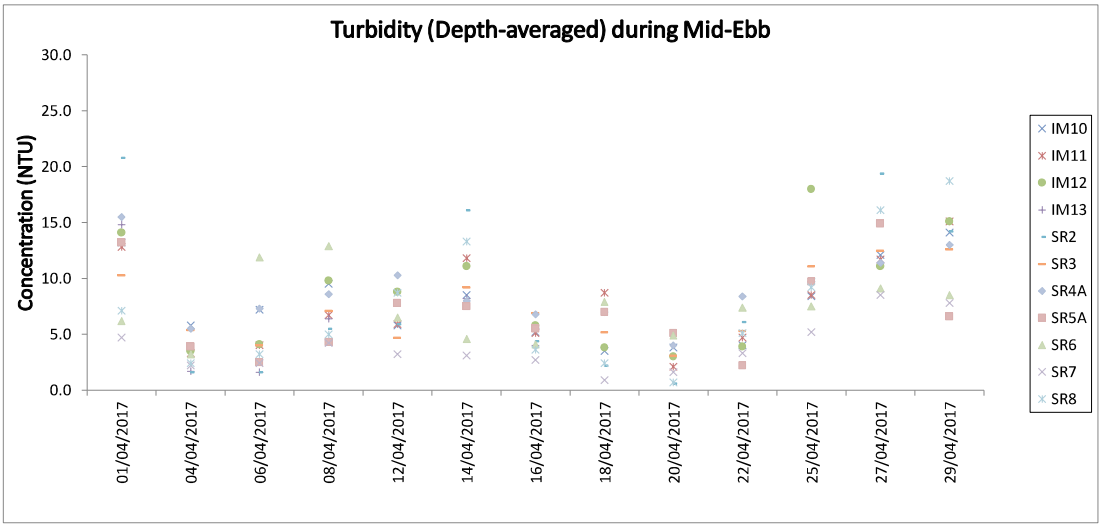
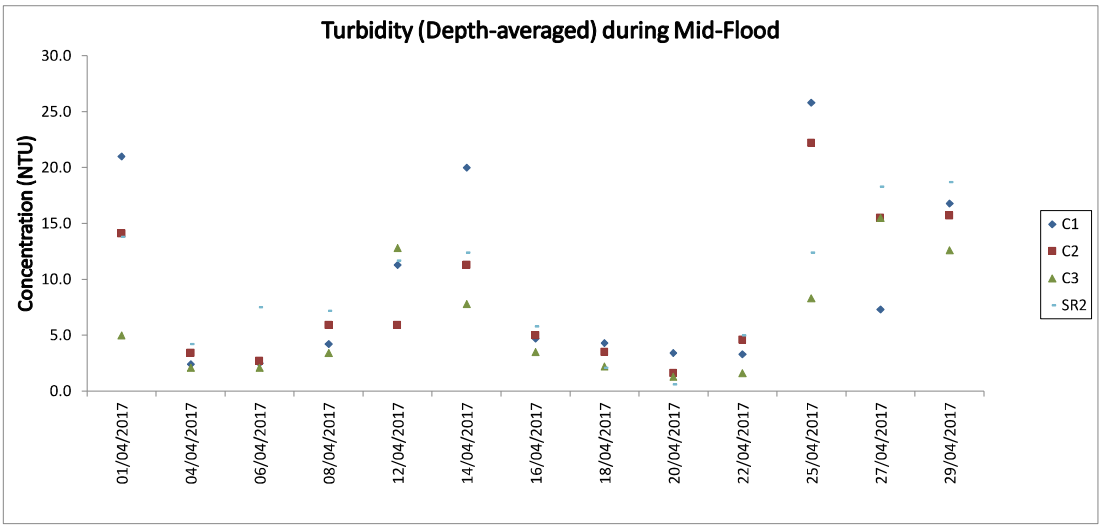
29/04/2017
SR3
SR4A
SR5A
SR6
SR7
SR8
AL
LL

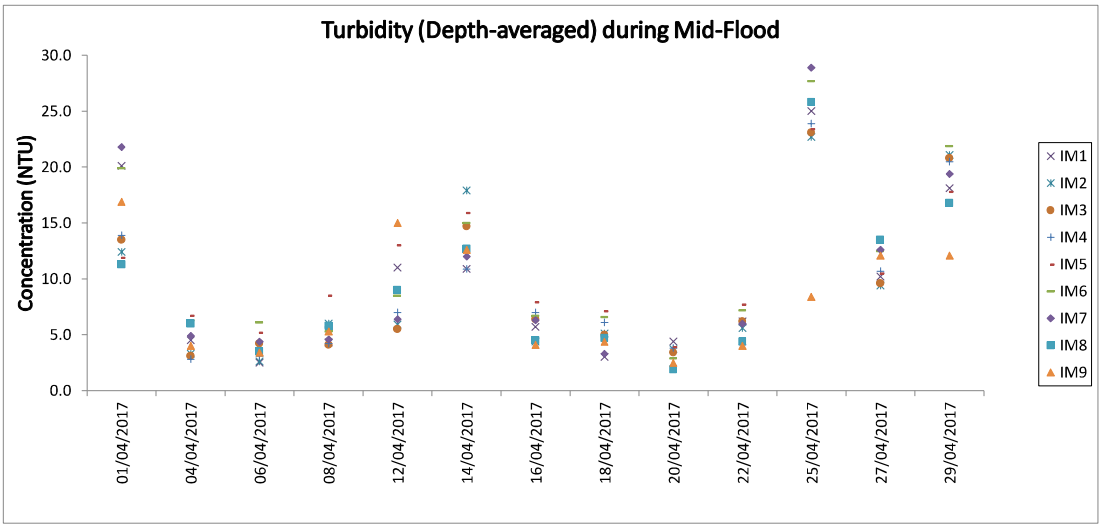


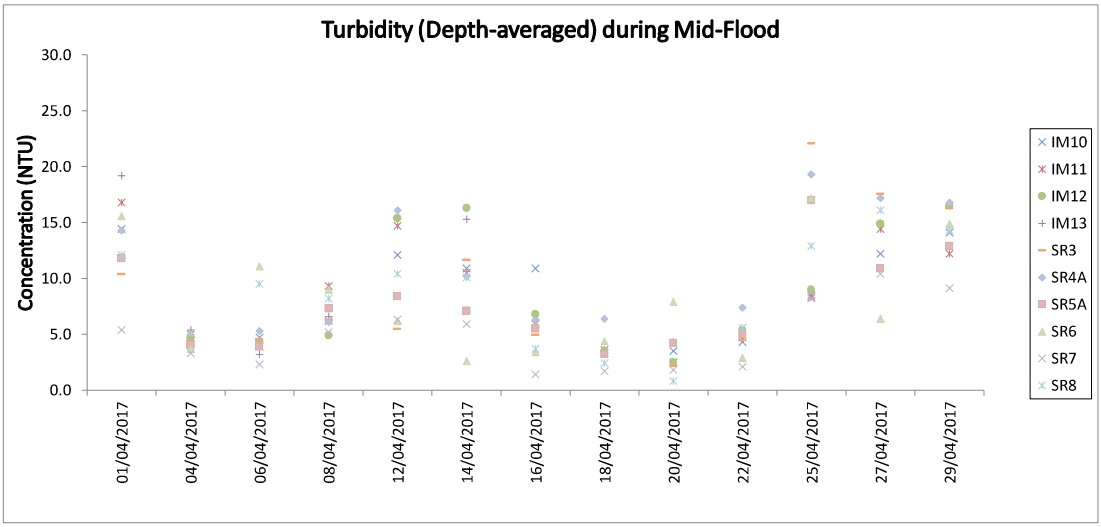




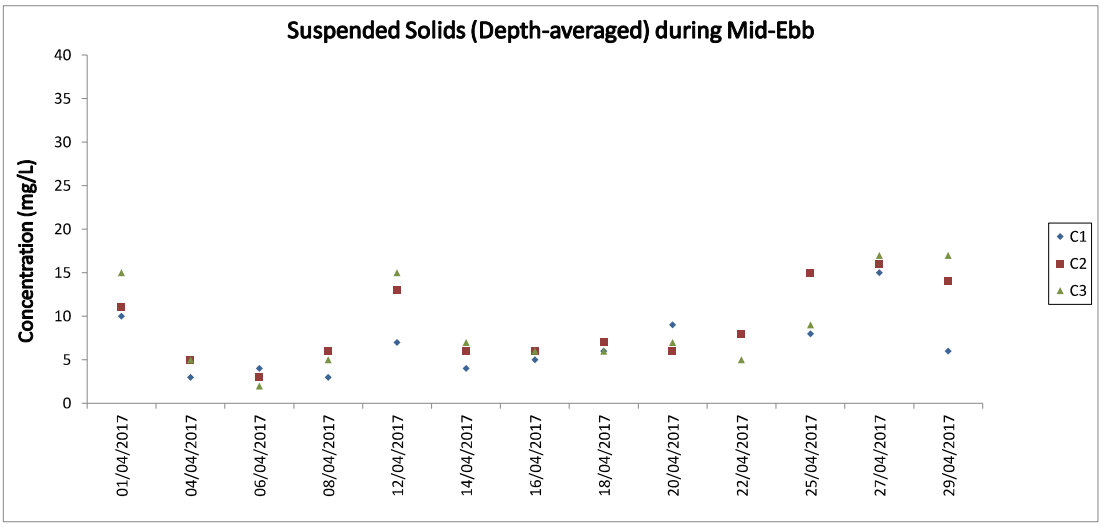
Note: The Action and Limit Level of Turbidity can be referred to Table 4.2 of the monthly EM&A report.

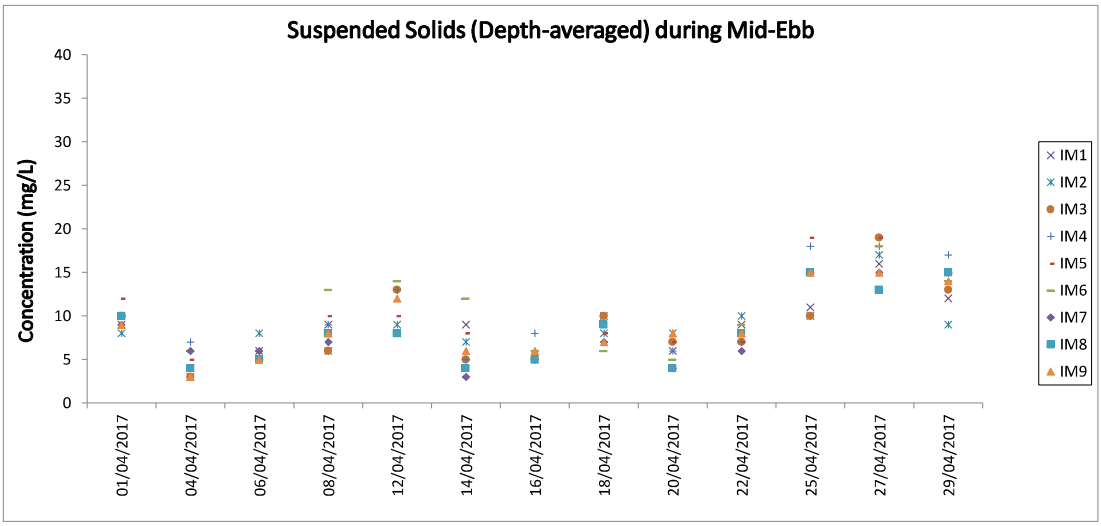


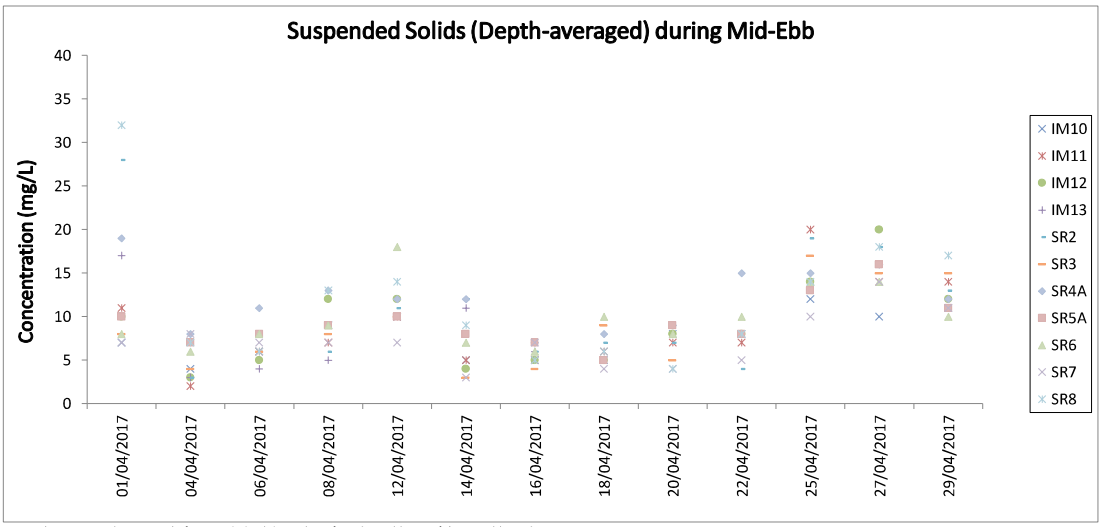




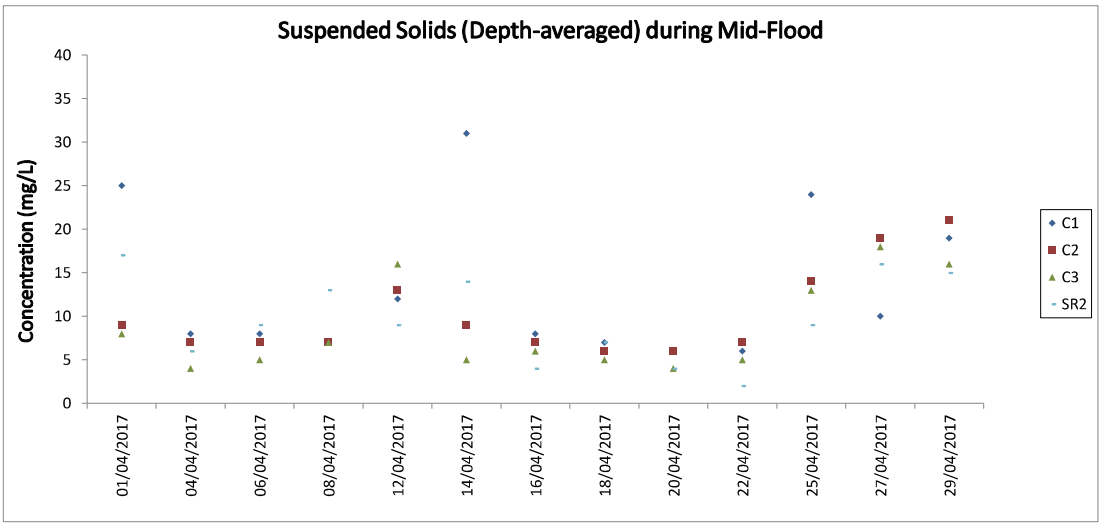
Note: The Action and Limit Level of Turbidity can be referred to Table 4.2 of the monthly EM&A report.

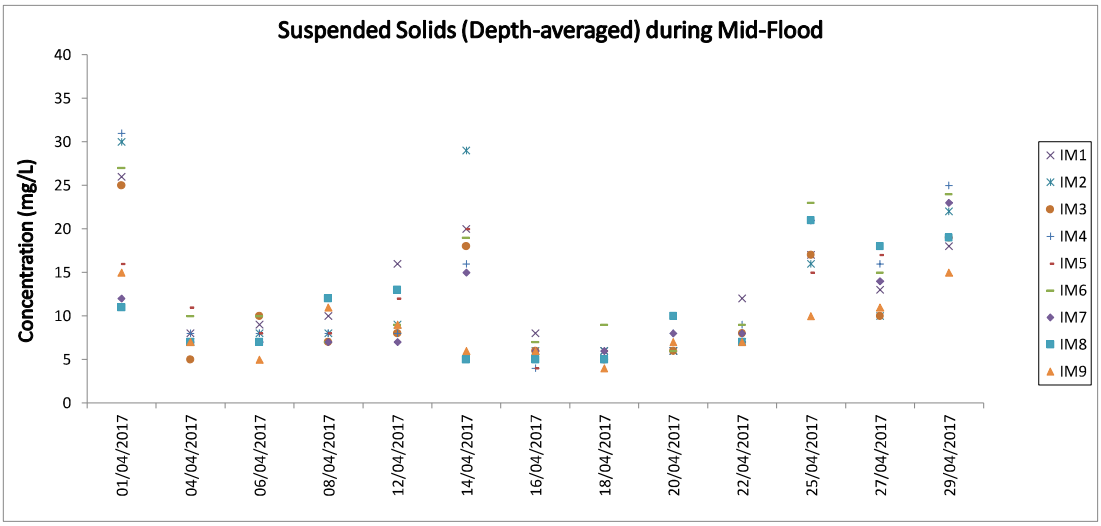


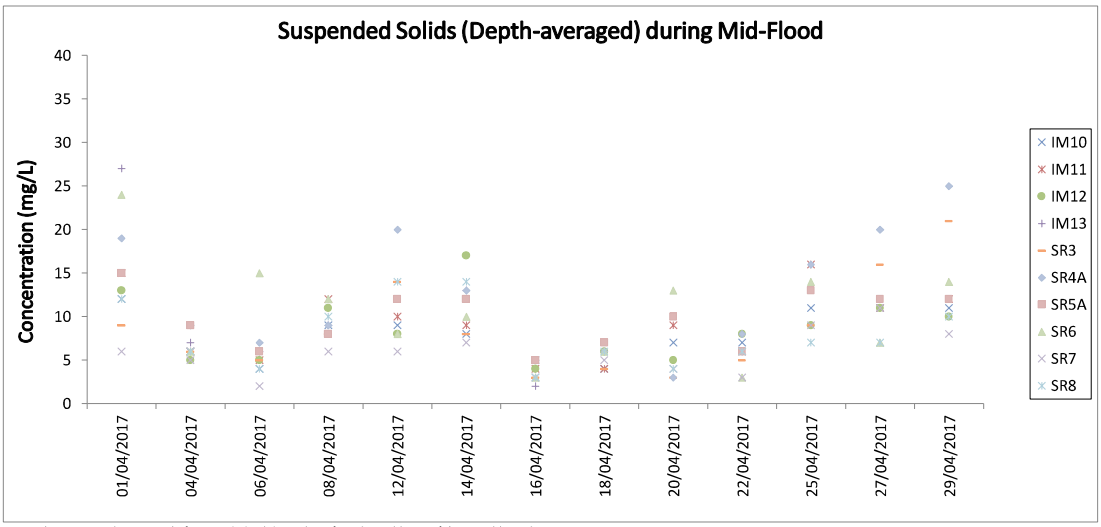




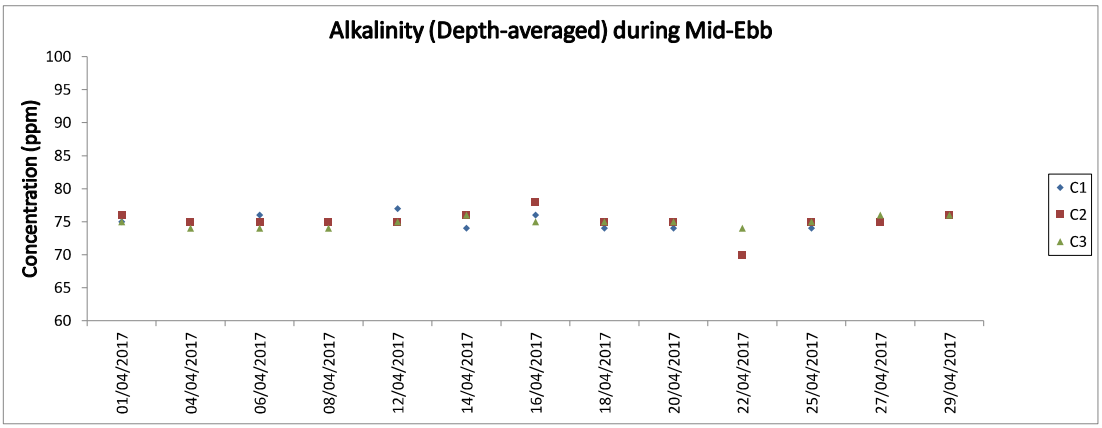
Note: The Action and Limit Level of Suspended Solids can be referred to Table 4.2 of the monthly EM&A report.

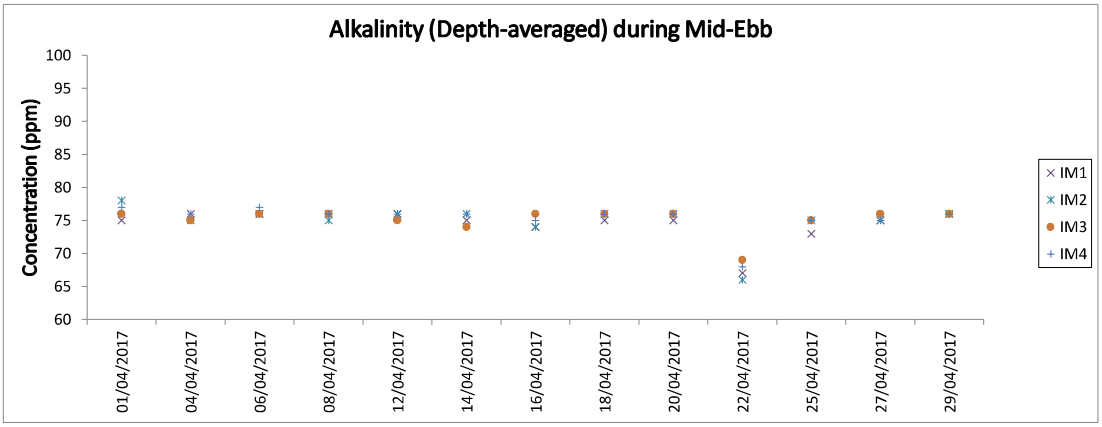


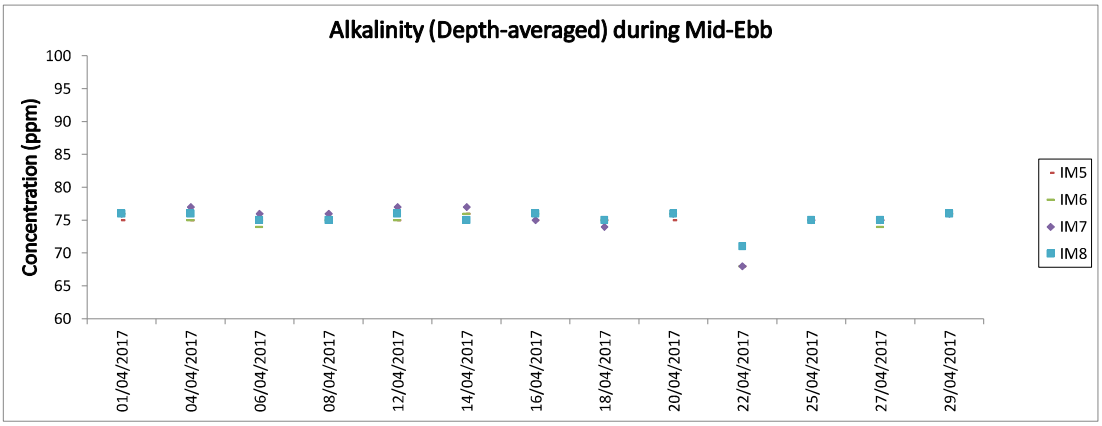


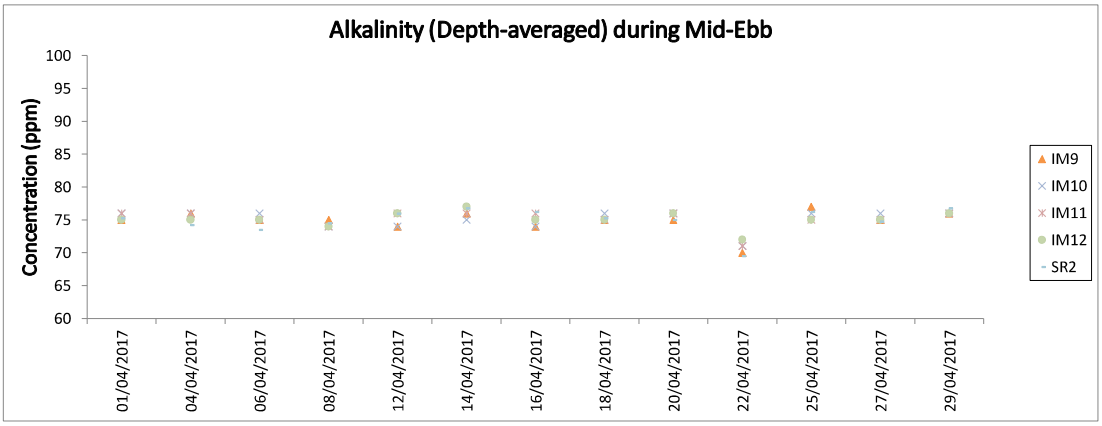


Note: The Action and Limit Level of Suspended Solids can be referred to Table 4.2 of the monthly EM&A report.

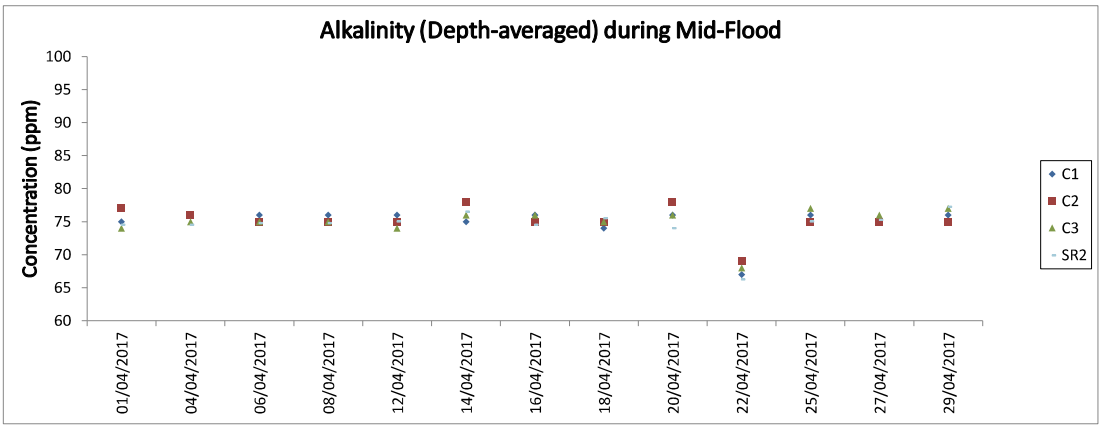


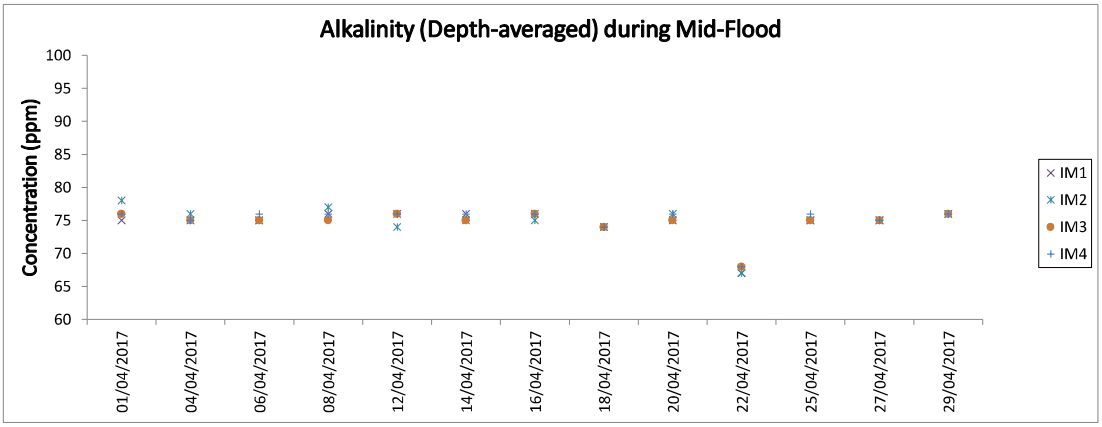


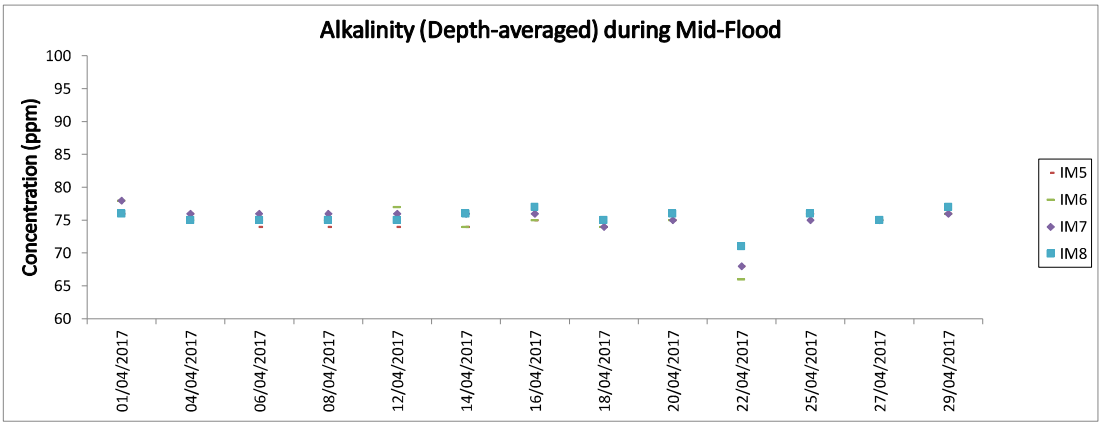


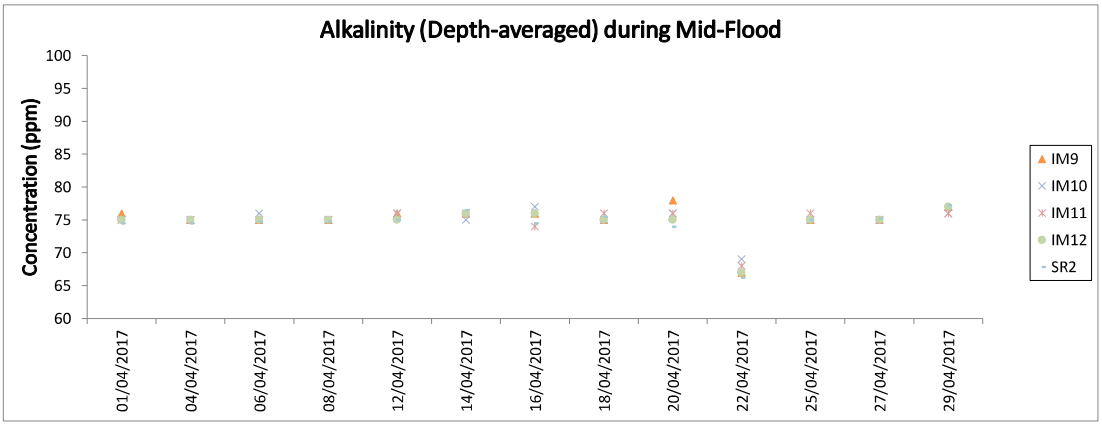


Note: The Action and Limit Level of Alkalinity can be referred to Table 4.2 of the monthly EM&A report.

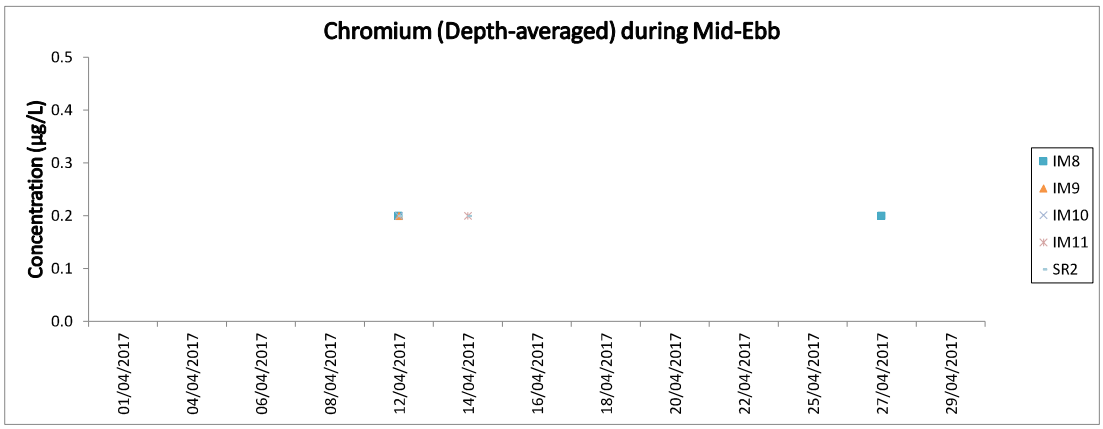


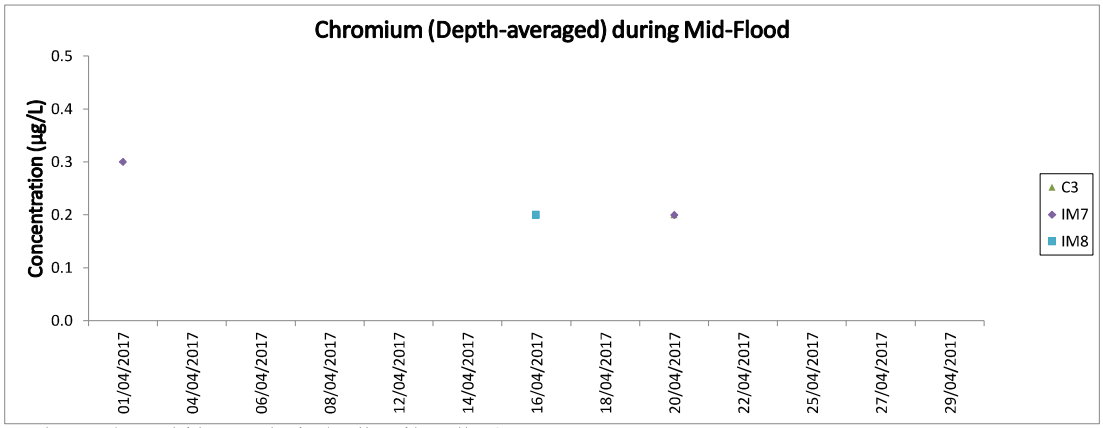




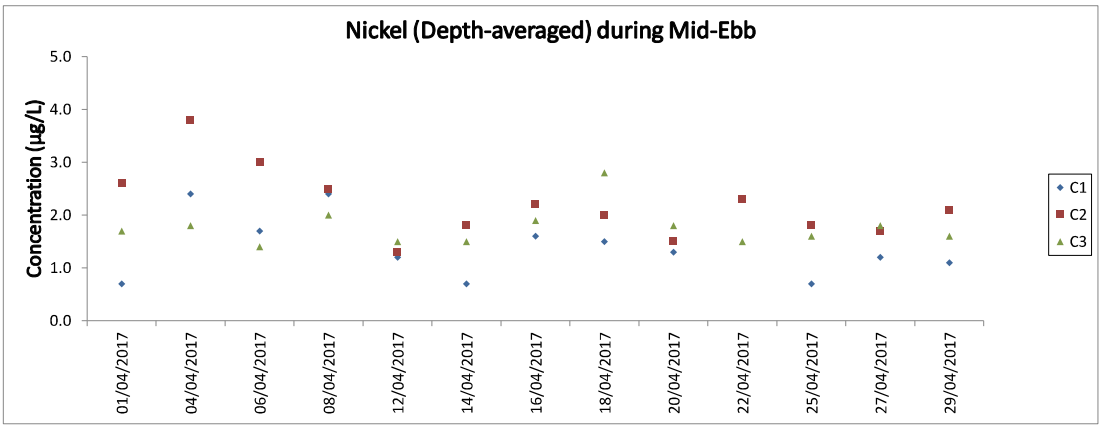


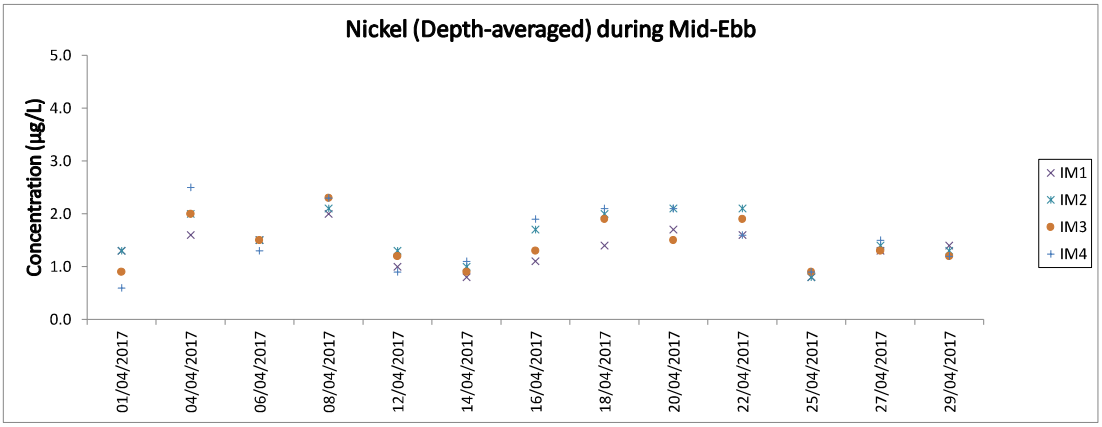
Note: The Action and Limit Level of Alkalinity can be referred to Table 4.2 of the monthly EM&A report.

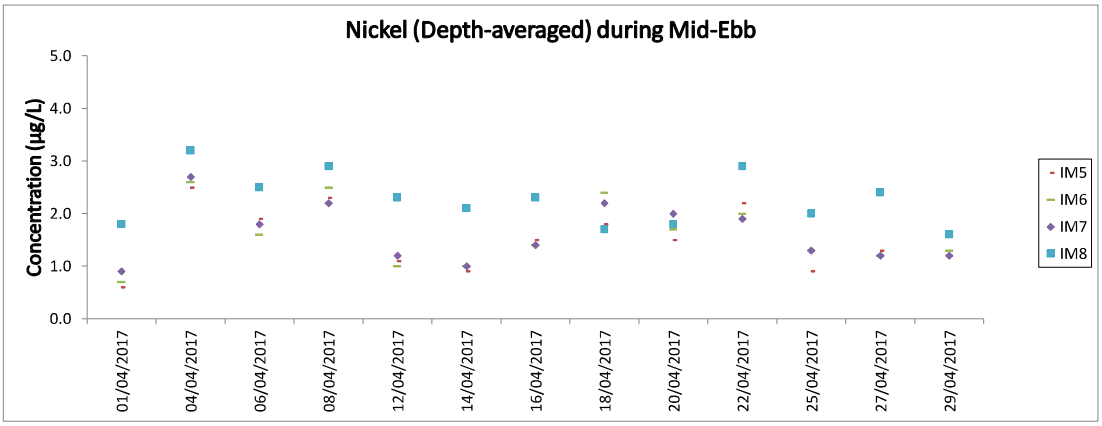


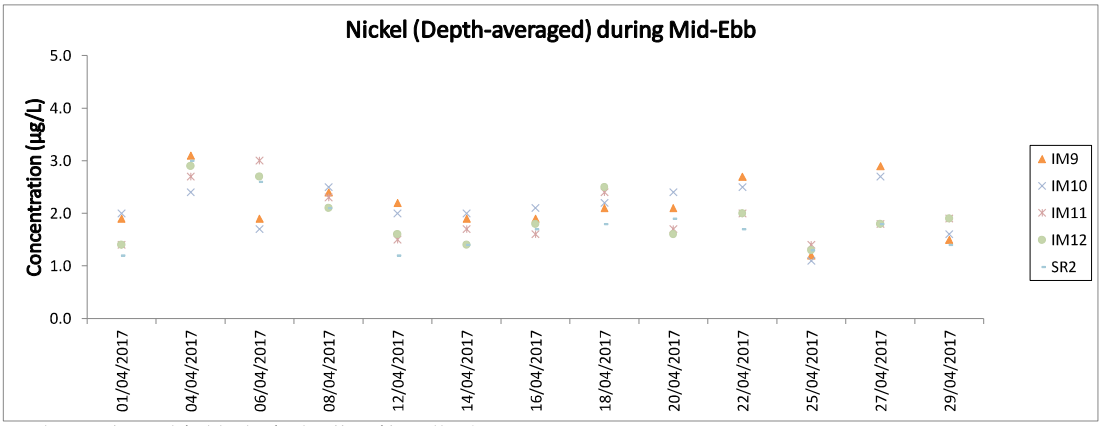


Note: The Action and Limit Level of Chromium can be referred to Table 4.2 of the monthly EM&A report.
The monitoring results of Chromium not presented in the graphs were below the reporting limit 0.2 µg/L.
The impact monitoring results of Chromium at all monitoring stations can be referred to Appendix E of the monthly EM&A report.

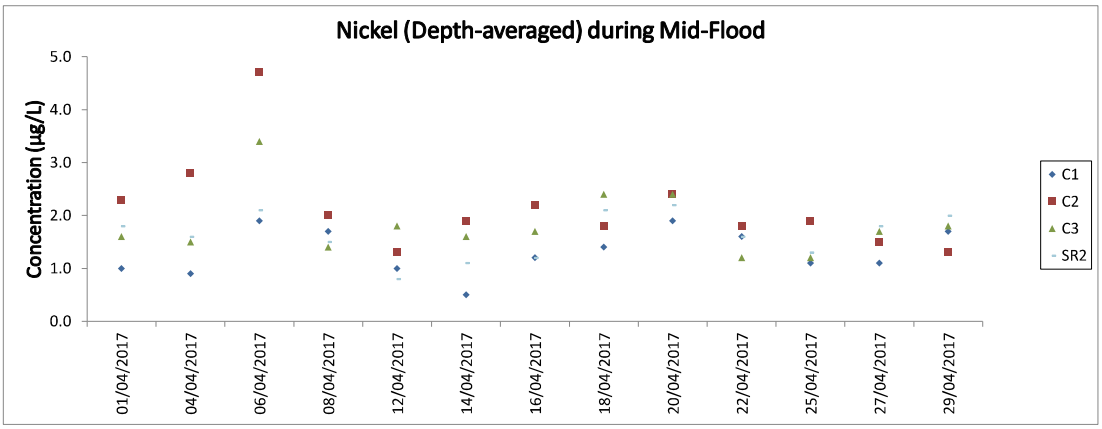


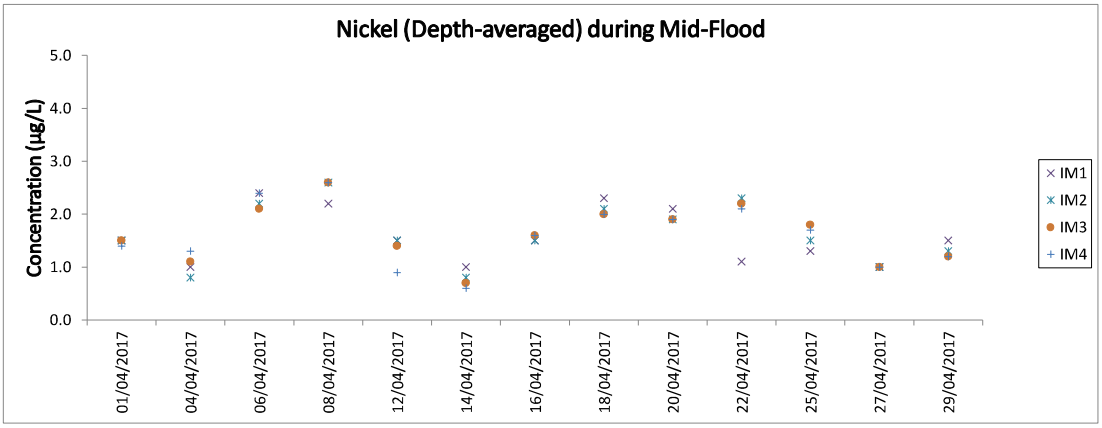


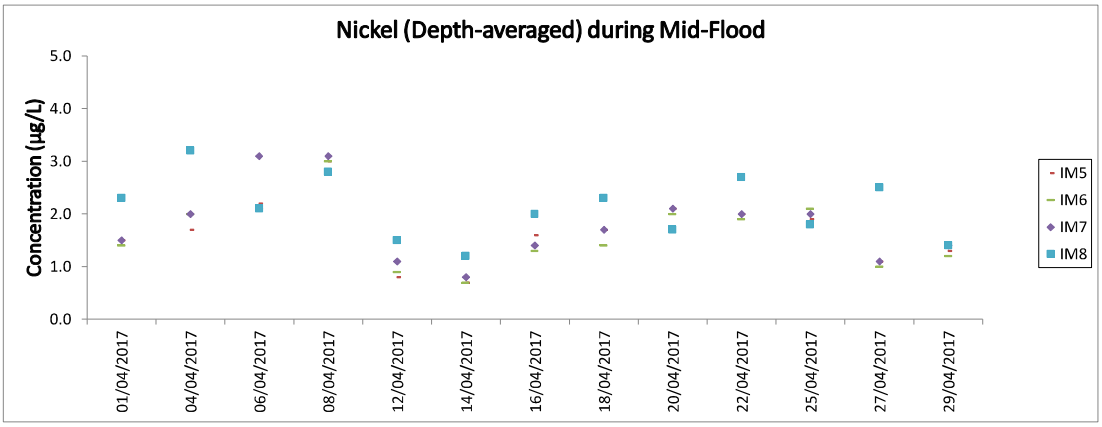


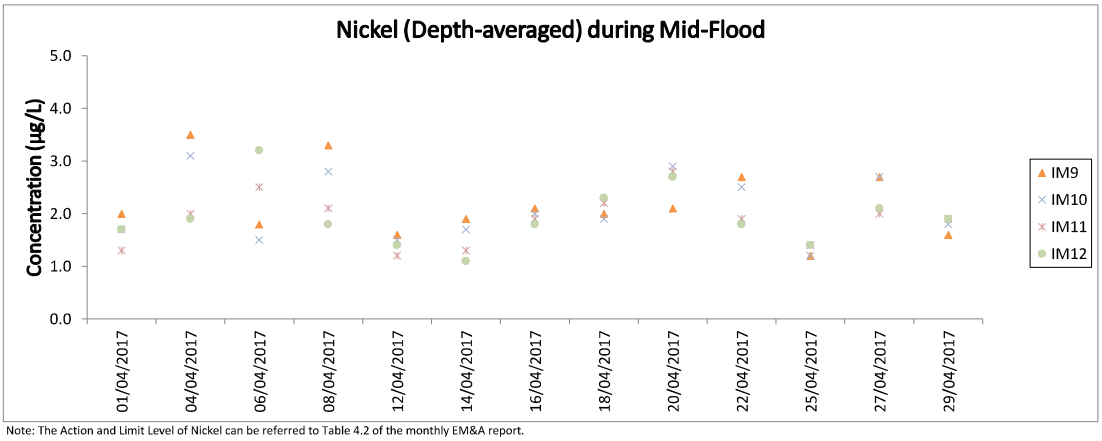


Note: The Action and Limit Level of Nickel can be referred to Table 4.2 of the monthly EM&A report.









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

Chinese White Dolphin Monitoring Results

CWD Small Vessel Line-transect Survey — Survey Effort Data

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE
06-Feb-17	AW	2	2.94	WINTER	32166	3RS ET
06-Feb-17	AW	3	1.93	WINTER	32166	3RS ET
06-Feb-17	WL	2	17.00	WINTER	32166	3RS ET
06-Feb-17	WL	3	9.79	WINTER	32166	3RS ET
06-Feb-17	WL	4	3.53	WINTER	32166	3RS ET
06-Feb-17	SWL	4	2.54	WINTER	32166	3RS ET
06-Feb-17	SWL	5	4.35	WINTER	32166	3RS ET
07-Feb-17	NEL	2	5.80	WINTER	32166	3RS ET
07-Feb-17	NEL	3	25.76	WINTER	32166	3RS ET
07-Feb-17	NEL	4	11.47	WINTER	32166	3RS ET
07-Feb-17	NEL	5	4.27	WINTER	32166	3RS ET
09-Feb-17	SWL	2	0.90	WINTER	32166	3RS ET
09-Feb-17	SWL	3	14.17	WINTER	32166	3RS ET
09-Feb-17	SWL	4	15.23	WINTER	32166	3RS ET
09-Feb-17	SWL	5	32.40	WINTER	32166	3RS ET
10-Feb-17	NEL	1	3.30	WINTER	32166	3RS ET
10-Feb-17	NEL	2	8.03	WINTER	32166	3RS ET
10-Feb-17	NEL	3	34.17	WINTER	32166	3RS ET
10-Feb-17	NEL	4	2.00	WINTER	32166	3RS ET
16-Feb-17	AW	1	4.73	WINTER	32166	3RS ET
16-Feb-17	WL	1	18.36	WINTER	32166	3RS ET
16-Feb-17	WL	2	3.10	WINTER	32166	3RS ET
16-Feb-17	WL	3	6.07	WINTER	32166	3RS ET
17-Feb-17	SWL	1	37.70	WINTER	32166	3RS ET
17-Feb-17	SWL	2	29.26	WINTER	32166	3RS ET
20-Feb-17	NWL	1	27.20	WINTER	32166	3RS ET
20-Feb-17	NWL	2	48.10	WINTER	32166	3RS ET
21-Feb-17	NWL	3	14.17	WINTER	32166	3RS ET
21-Feb-17	NWL	4	38.72	WINTER	32166	3RS ET
21-Feb-17	NWL	5	21.81	WINTER	32166	3RS ET
06-Mar-17	NWL	1	5.00	SPRING	32166	3RS ET
06-Mar-17	NWL	2	17.10	SPRING	32166	3RS ET
06-Mar-17	NWL	3	50.10	SPRING	32166	3RS ET
06-Mar-17	NWL	4	3.70	SPRING	32166	3RS ET
10-Mar-17	NEL	1	1.00	SPRING	32166	3RS ET
10-Mar-17	NEL	2	11.75	SPRING	32166	3RS ET
10-Mar-17	NEL	3	34.25	SPRING	32166	3RS ET
13-Mar-17	AW	2	4.72	SPRING	32166	3RS ET
13-Mar-17	WL	2	12.18	SPRING	32166	3RS ET
13-Mar-17	WL	3	20.82	SPRING	32166	3RS ET
13-Mar-17	SWL	2	12.50	SPRING	32166	3RS ET
14-Mar-17	SWL	3	22.60	SPRING	32166	3RS ET
14-Mar-17	SWL	4	18.78	SPRING	32166	3RS ET
14-Mar-17	SWL	5	16.02	SPRING	32166	3RS ET
20-Mar-17	SWL	2	36.22	SPRING	32166	3RS ET
20-Mar-17	SWL	3	26.04	SPRING	32166	3RS ET

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE
21-Mar-17	AW	1	4.85	SPRING	32166	3RS ET
21-Mar-17	WL	1	9.95	SPRING	32166	3RS ET
21-Mar-17	WL	2	19.08	SPRING	32166	3RS ET
21-Mar-17	WL	3	2.33	SPRING	32166	3RS ET
21-Mar-17	SWL	2	0.38	SPRING	32166	3RS ET
21-Mar-17	SWL	3	6.43	SPRING	32166	3RS ET
23-Mar-17	NWL	1	32.61	SPRING	32166	3RS ET
23-Mar-17	NWL	2	43.77	SPRING	32166	3RS ET
24-Mar-17	NEL	3	27.72	SPRING	32166	3RS ET
24-Mar-17	NEL	4	18.88	SPRING	32166	3RS ET
05-Apr-17	NWL	1	3.00	SPRING	32166	3RS ET
05-Apr-17	NWL	2	38.73	SPRING	32166	3RS ET
05-Apr-17	NWL	3	32.70	SPRING	32166	3RS ET
10-Apr-17	AW	2	1.92	SPRING	32166	3RS ET
10-Apr-17	AW	3	1.09	SPRING	32166	3RS ET
10-Apr-17	AW	4	1.81	SPRING	32166	3RS ET
10-Apr-17	WL	3	24.72	SPRING	32166	3RS ET
10-Apr-17	WL	4	8.88	SPRING	32166	3RS ET
10-Apr-17	SWL	2	8.94	SPRING	32166	3RS ET
10-Apr-17	SWL	3	3.36	SPRING	32166	3RS ET
11-Apr-17	SWL	1	20.09	SPRING	32166	3RS ET
11-Apr-17	SWL	2	32.09	SPRING	32166	3RS ET
11-Apr-17	SWL	3	4.90	SPRING	32166	3RS ET
12-Apr-17	NEL	1	13.48	SPRING	32166	3RS ET
12-Apr-17	NEL	2	26.22	SPRING	32166	3RS ET
12-Apr-17	NEL	3	7.30	SPRING	32166	3RS ET
18-Apr-17	AW	3	4.87	SPRING	32166	3RS ET
18-Apr-17	WL	2	25.68	SPRING	32166	3RS ET
18-Apr-17	WL	3	4.96	SPRING	32166	3RS ET
18-Apr-17	SWL	1	0.82	SPRING	32166	3RS ET
18-Apr-17	SWL	2	5.05	SPRING	32166	3RS ET
24-Apr-17	NEL	2	26.15	SPRING	32166	3RS ET
24-Apr-17	NEL	3	20.65	SPRING	32166	3RS ET
25-Apr-17	NWL	2	1.10	SPRING	32166	3RS ET
25-Apr-17	NWL	3	35.32	SPRING	32166	3RS ET
25-Apr-17	NWL	4	38.88	SPRING	32166	3RS ET
26-Apr-17	SWL	1	1.40	SPRING	32166	3RS ET
26-Apr-17	SWL	2	40.23	SPRING	32166	3RS ET
26-Apr-17	SWL	3	20.41	SPRING	32166	3RS ET

Notes:

CWD monitoring survey data of the two preceding survey months (i.e. February and March 2017) are presented for reference only.

CWD Small Vessel Line-transect Survey

Sighting Data

DATE	STG #	TIME	CWD/FP	GP SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.
06-Feb-17	1	1013	CWD	3	WL	3	854	ON	3RS ET	22.2826	113.8613	WINTER	NONE
06-Feb-17	2	1140	CWD	3	WL	2	243	ON	3RS ET	22.2237	113.8323	WINTER	NONE
06-Feb-17	3	1218	CWD	3	WL	3	23	ON	3RS ET	22.2147	113.8300	WINTER	NONE
16-Feb-17	1	0957	CWD	2	AW	1	16	ON	3RS ET	22.2920	113.8749	WINTER	GILLNET
16-Feb-17	2	1037	CWD	5	WL	1	220	ON	3RS ET	22.2953	113.8612	WINTER	NONE
16-Feb-17	3	1121	CWD	4	WL	1	58	ON	3RS ET	22.2628	113.8564	WINTER	NONE
16-Feb-17	4	1147	CWD	3	WL	1	244	ON	3RS ET	22.2602	113.8470	WINTER	NONE
16-Feb-17	5	1206	CWD	2	WL	1	53	ON	3RS ET	22.2535	113.8348	WINTER	NONE
16-Feb-17	6	1215	CWD	3	WL	1	20	ON	3RS ET	22.2504	113.8378	WINTER	NONE
16-Feb-17	7	1231	CWD	7	WL	1	173	ON	3RS ET	22.2418	113.8473	WINTER	NONE
16-Feb-17	8	1304	CWD	2	WL	1	19	ON	3RS ET	22.2414	113.8428	WINTER	NONE
16-Feb-17	9	1315	CWD	2	WL	1	31	ON	3RS ET	22.2382	113.8266	WINTER	NONE
16-Feb-17	10	1333	CWD	14	WL	1	226	ON	3RS ET	22.2308	113.8381	WINTER	PURSE SEINE
16-Feb-17	11	1420	CWD	2	WL	2	452	ON	3RS ET	22.2139	113.8244	WINTER	NONE
16-Feb-17	12	1449	CWD	1	WL	2	29	ON	3RS ET	22.2051	113.8191	WINTER	NONE
17-Feb-17	1	1048	FP	2	SWL	2	174	ON	3RS ET	22.1586	113.9356	WINTER	NONE
17-Feb-17	2	1238	CWD	3	SWL	1	1380	ON	3RS ET	22.2005	113.9079	WINTER	PURSE SEINE
17-Feb-17	3	1349	CWD	2	SWL	1	50	ON	3RS ET	22.1889	113.8879	WINTER	NONE
17-Feb-17	4	1551	CWD	1	SWL	1	N/A	OFF	3RS ET	22.2009	113.8934	WINTER	NONE
17-Feb-17	5	1559	CWD	1	SWL	1	N/A	OFF	3RS ET	22.2025	113.9121	WINTER	NONE
20-Feb-17	1	1137	CWD	1	NWL	2	259	ON	3RS ET	22.3819	113.8760	WINTER	NONE
21-Feb-17	1	1137	CWD	4	NWL	3	64	ON	3RS ET	22.3866	113.8776	WINTER	NONE
13-Mar-17	1	1130	CWD	4	WL	2	374	ON	3RS ET	22.2229	113.8269	SPRING	NONE
14-Mar-17	1	1045	FP	1	SWL	4	N/A	OFF	3RS ET	22.1827	113.9356	SPRING	NONE
14-Mar-17	2	1214	FP	1	SWL	5	N/A	ON	3RS ET	22.1461	113.9081	SPRING	NONE
20-Mar-17	1	1025	CWD	1	SWL	2	209	ON	3RS ET	22.2001	113.8688	SPRING	GILLNET
20-Mar-17	2	1211	FP	1	SWL	2	100	ON	3RS ET	22.1622	113.8978	SPRING	NONE
20-Mar-17	3	1257	CWD	1	SWL	2	36	ON	3RS ET	22.1846	113.9041	SPRING	NONE
20-Mar-17	4	1432	FP	3	SWL	3	108	ON	3RS ET	22.1470	113.9278	SPRING	NONE
20-Mar-17	5	1439	FP	2	SWL	3	63	ON	3RS ET	22.1472	113.9326	SPRING	NONE
20-Mar-17	6	1457	FP	2	SWL	3	24	ON	3RS ET	22.1816	113.9359	SPRING	NONE

DATE	STG #	TIME	CWD/FP	GP SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.
21-Mar-17	1	1025	CWD	4	WL	1	202	ON	3RS ET	22.2603	113.8533	SPRING	PURSE SEINE
21-Mar-17	2	1214	CWD	13	WL	3	397	ON	3RS ET	22.1980	113.8262	SPRING	PURSE SEINE
21-Mar-17	3	1242	CWD	7	WL	2	1163	ON	3RS ET	22.1870	113.8386	SPRING	PURSE SEINE
23-Mar-17	1	1128	CWD	3	NWL	1	123	ON	3RS ET	22.3779	113.8767	SPRING	NONE
23-Mar-17	2	1222	CWD	3	NWL	1	19	ON	3RS ET	22.3733	113.8881	SPRING	NONE
05-Apr-17	1	1132	CWD	2	NWL	2	128	ON	3RS ET	22.3787	113.8765	SPRING	NONE
05-Apr-17	2	1147	CWD	3	NWL	2	16	ON	3RS ET	22.3827	113.8768	SPRING	NONE
11-Apr-17	1	1042	FP	1	SWL	1	336	ON	3RS ET	22.1801	113.9363	SPRING	NONE
11-Apr-17	2	1051	FP	6	SWL	1	3	ON	3RS ET	22.1699	113.9359	SPRING	NONE
11-Apr-17	3	1103	FP	5	SWL	1	43	ON	3RS ET	22.1561	113.9358	SPRING	NONE
11-Apr-17	4	1212	FP	5	SWL	2	363	ON	3RS ET	22.1480	113.9180	SPRING	NONE
18-Apr-17	1	1023	CWD	1	WL	3	17	ON	3RS ET	22.2698	113.8441	SPRING	NONE
18-Apr-17	2	1047	CWD	7	WL	2	580	ON	3RS ET	22.2605	113.8488	SPRING	NONE
18-Apr-17	3	1113	CWD	5	WL	2	277	ON	3RS ET	22.2578	113.8378	SPRING	NONE
18-Apr-17	4	1246	CWD	3	WL	2	278	ON	3RS ET	22.1873	113.8417	SPRING	NONE
18-Apr-17	5	1302	CWD	5	WL	2	450	ON	3RS ET	22.1870	113.8378	SPRING	NONE
18-Apr-17	6	1330	CWD	2	SWL	2	40	ON	3RS ET	22.1831	113.8499	SPRING	NONE
18-Apr-17	7	1406	CWD	2	SWL	2	512	ON	3RS ET	22.1925	113.8595	SPRING	NONE
26-Apr-17	1	1022	CWD	1	SWL	2	48	ON	3RS ET	22.2170	113.9356	SPRING	PURSE SEINE
26-Apr-17	2	1224	FP	2	SWL	2	89	ON	3RS ET	22.1526	113.9068	SPRING	NONE
26-Apr-17	3	1441	CWD	3	SWL	3	55	ON	3RS ET	22.1699	113.8684	SPRING	NONE
26-Apr-17	4	1456	CWD	2	SWL	3	755	ON	3RS ET	22.1692	113.8691	SPRING	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. February and March 2017) are presented for reference only. No relevant figure or text will be mentioned in the monthly EM&A report.

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

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

A total of 405.18 km of survey effort was collected under Beaufort Sea State 3 or below with favourable visibility; total no. of 12 on-effort sightings and total number of 36 dolphins from on-effort sightings were collected under such condition. Calculation of the encounter rates in April 2017 are shown as below:

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

$$STG = \frac{12}{405.18}\ x\ 100 = 2.96$$

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

$$ANI = \frac{36}{405.18}\ x\ 100 = 8.88$$

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

A total of 1119.06 km of survey effort was collected under Beaufort Sea State 3 or below with favourable visibility; total no. of 39 on-effort sightings and total number of 138 dolphins from on-effort sightings were collected under such condition. Calculation of the running quarterly encounter rates are shown as below:

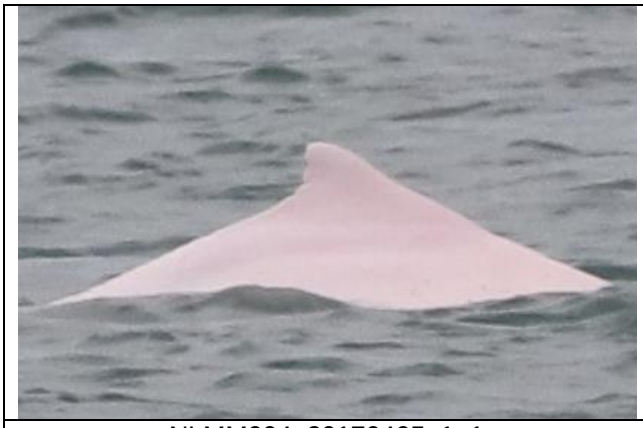
Running Quarterly Encounter Rate by Number of Dolphin Sightings (STG)

$$STG = \frac{39}{1119.06}\ x\ 100 = 3.49$$

Running Quarterly Encounter Rate by Number of Dolphins (ANI)

$$ANI = \frac{138}{1119.06}\ x\ 100 = 12.33$$

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



NLMM004_20170405_1_1

NLMM016_20170405_1_1

NLMM004_20170405_2_2

NLMM016_20170405_2_2

NLMM016_20170418_1_1

WLMM030_20170418_2_2

WLMM060_20170418_2_1

WLMM068_20170418_2_8

WLMM071_20170418_2_4	WLMM072_20170418_2_5
WLMM075_20170418_2_3	WLMM030_20170418_3_1
WLMM060_20170418_3_1 (Right One)	WLMM068_20170418_3_1
WLMM071_20170418_3_1	SLMM028_20170418_5_3

SLMM054_20170418_7_1	SLMM021_20170426_1_4
WLMM064_20170426_3_4	SLMM055_20170426_4_4

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
6/Apr/17	Sha Chau	8:35	14:35	6:00	2	3	0	N/A
7/Apr/17	Lung Kwu Chau	8:44	14:44	6:00	2	2-3	2	2
20/Apr/17	Lung Kwu Chau	8:50	14:50	6:00	1-2	2-4	4	2-3
25/Apr/17	Lung Kwu Chau	8:49	14:49	6:00	3-4	3-4	0	N/A
27/Apr/17	Sha Chau	8:50	14:50	6:00	2-4	1-4	0	N/A

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

Appendix D. Calibration Certificates

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

CALIBRATION REPORT

Test Report No. : AG030105
Date of Issue : March 20, 2017

PART A – CUSTOMER INFORMATION

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

PART B – SAMPLE INFORMATION

Description of Samples	:	Titrette bottletop burette, 50ml
Brand Name	:	BRAND
Model Number	:	1224B90
Serial Number	:	10N64701
Equipment Number	:	--
Date of Received	:	Mar 16, 2017
Date of Calibration	:	Mar 17, 2017
Date of Next Calibration[(a)]	:	Jun 17, 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

CALIBRATION REPORT

PART D – RESULT[b],[c]

Water temperature: 22 ℃
Relative humidity: 57%
z-Factor: 1.0033

Trial	Nominal volume (mL) at interval				
	3	3	3	3	3
	Range: (1-4)	Range: (16-19)	Range: (23-26)	Range: (34-37)	Range: (42-45)
1	2.9906	2.9810	2.9798	2.9889	2.9900
2	2.9899	2.9908	2.9970	2.9747	2.9904
3	2.9930	2.9884	2.9901	2.9865	2.9876
4	2.9910	2.9844	2.9945	2.9870	2.9801
5	2.9868	2.9863	2.9802	2.9874	2.9913
6	2.9910	2.9887	2.9833	2.9866	2.9873
7	2.9929	2.9877	2.9885	2.9913	2.9907
8	2.9878	2.9881	2.9908	2.9852	2.9869
9	2.9916	2.9914	2.9882	2.9830	2.9850
10	2.9894	2.9883	2.9924	2.9853	2.9806
Average	2.9904	2.9875	2.9885	2.9856	2.9870
Standard deviation	0.0020	0.0030	0.0058	0.0044	0.0040
Calculate volume (mL)	3.0003	2.9974	2.9983	2.9954	2.9968
Error (%)	0.0089	-0.0877	-0.0553	-0.1519	-0.1051
RSD (%)	0.0668	0.1011	0.1935	0.1477	0.1343

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
Email: info@qualityprotest.com; Website: www.qualityprotest.com
Tel: (852) 3956 8717; Fax: (852) 3956 3928

CALIBRATION REPORT

Report No. : AG030099A
Date of Issue : April 13, 2017

PART A – CUSTOMER INFORMATION

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

PART B – DESCRIPTION

Name of Equipment	:	YSI ProDSS (Multi-Parameters)
Manufacturer	:	YSI (a xylem brand)
Serial Number	:	16J101715
Date of Received	:	Mar 16, 2017
Date of Calibration	:	Mar 16, 2017
Date of Next Calibration[a]	:	Jun 16, 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	4.08	+0.08	Satisfactory
7.42	7.47	+0.05	Satisfactory
10.01	10.08	+0.07	Satisfactory

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

(2) Temperature

Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)	Results
10.0	10.1	+0.1	Satisfactory
22.0	22.3	+0.3	Satisfactory
38.0	38.3	+0.3	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 : _____
CHAN Mei-wah Amy
Assistant Lab. 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

CALIBRATION REPORT

PART D – CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
0.16	0.14	-0.02	Satisfactory
4.38	4.34	-0.04	Satisfactory
8.51	8.45	-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	142.3	-3.1	Satisfactory
1412	1432	+1.4	Satisfactory
12890	13182	+2.3	Satisfactory
58670	59344	+1.1	Satisfactory
111900	112962	+0.9	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	20.09	+0.4	Satisfactory
30	30.19	+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	3.9	-2.5	Satisfactory
20	19.8	-1.0	Satisfactory
100	97.6	-2.4	Satisfactory
800	781	-2.4	Satisfactory

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

PART F – REMARK(S)

This report supersedes the previous test report no. AG030099 dated 17 March, 2017.

~ 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
Email: info@qualityprotest.com; Website: www.qualityprotest.com
Tel: (852) 3956 8717; Fax: (852) 3956 3928

CALIBRATION REPORT

Report No. : AG030100A
Date of Issue : April 13, 2017

PART A – CUSTOMER INFORMATION

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

PART B – DESCRIPTION

Name of Equipment	:	YSI ProDSS (Multi-Parameters)
Manufacturer	:	YSI (a xylem brand)
Serial Number	:	16J101716
Date of Received	:	Mar 16, 2017
Date of Calibration	:	Mar 16, 2017
Date of Next Calibration[a]	:	Jun 16, 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	3.96	-0.04	Satisfactory
7.42	7.37	-0.05	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
10.0	9.8	-0.2	Satisfactory
22.0	22.4	+0.4	Satisfactory
38.0	37.8	-0.2	Satisfactory

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

~ CONTINUED ON NEXT PAGE ~

Remark(s): -

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

APPROVED SIGNATORY :

CHAN Mei-wah Amy
Assistant Lab. 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

CALIBRATION REPORT

Report No. : AG030100A
Date of Issue : April 13, 2017

PART D – CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
0.16	0.14	-0.02	Satisfactory
4.38	4.32	-0.06	Satisfactory
8.51	8.46	-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	142.8	-2.8	Satisfactory
1412	1407	-0.4	Satisfactory
12890	12404	-3.8	Satisfactory
58670	58002	-1.1	Satisfactory
111900	100892	-9.8	Satisfactory

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

(5) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	9.89	-1.1	Satisfactory
20	20.11	+0.5	Satisfactory
30	30.11	+0.4	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	3.9	-2.5	Satisfactory
20	20.1	+0.5	Satisfactory
100	107	+7.0	Satisfactory
800	814	+1.8	Satisfactory

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

PART F – REMARK(S)

This report supersedes the previous test report no. AG030100 dated 17 March, 2017.

~ 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
Email: info@qualityprotest.com; Website: www.qualityprotest.com
Tel: (852) 3956 8717; Fax: (852) 3956 3928

CALIBRATION REPORT

Report No. : AG030097A
Date of Issue : April 13, 2017

PART A – CUSTOMER INFORMATION

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

PART B – DESCRIPTION

Name of Equipment	:	YSI 6920 V2 (Multi-Parameters)
Manufacturer	:	YSI (a xylem brand)
Serial Number	:	0001C6B0
Date of Received	:	Mar 16, 2017
Date of Calibration	:	Mar 16, 2017
Date of Next Calibration[a]	:	Jun 16, 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	4.04	+0.04	Satisfactory
7.42	7.44	+0.02	Satisfactory
10.01	10.1	+0.09	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
10.0	9.8	-0.2	Satisfactory
22.0	21.4	-0.6	Satisfactory
38.0	37.2	-0.8	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 : _____
CHAN Mei-wah Amy
Assistant Lab. 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

CALIBRATION REPORT

Report No. : AG030097A
Date of Issue : April 13, 2017

PART D – CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
0.16	0.2	+0.04	Satisfactory
4.38	4.28	-0.1	Satisfactory
8.51	8.56	+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	144.2	-1.8	Satisfactory
1412	1398	-1.0	Satisfactory
12890	12580	-2.4	Satisfactory
58670	58172	-0.8	Satisfactory
111900	109322	-2.3	Satisfactory

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

(5) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	9.98	-0.2	Satisfactory
20	19.77	-1.2	Satisfactory
30	29.72	-0.9	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	4.1	+2.5	Satisfactory
20	20.3	+1.5	Satisfactory
100	108	+8.0	Satisfactory
800	785	-1.9	Satisfactory

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

PART F – REMARKS

This report supersedes the previous test report AG030097 dated 17 March 2017.

~ 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
Email: info@qualityprotest.com; Website: www.qualityprotest.com
Tel: (852) 3956 8717; Fax: (852) 3956 3928

CALIBRATION REPORT

Report No. : AG030096A
Date of Issue : April 13, 2017

PART A – CUSTOMER INFORMATION

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

PART B – DESCRIPTION

Name of Equipment	:	YSI 6920 V2 (Multi-Parameters)
Manufacturer	:	YSI (a xylem brand)
Serial Number	:	000109DF
Date of Received	:	Mar 16, 2017
Date of Calibration	:	Mar 16, 2017
Date of Next Calibration[a]	:	Jun 16, 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	4.04	+0.04	Satisfactory
7.42	7.47	+0.05	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
10.0	10.1	+0.1	Satisfactory
22.0	22.3	+0.3	Satisfactory
38.0	37.1	-0.9	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 : _____
CHAN Mei-wah, Amy
Assistant Lab. 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

CALIBRATION REPORT

Report No. : AG030096A
Date of Issue : April 13, 2017

PART D – CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
0.16	0.20	+0.04	Satisfactory
4.38	4.39	+0.01	Satisfactory
8.51	8.45	-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	141.7	-3.5	Satisfactory
1412	1385	-1.9	Satisfactory
12890	12177	-5.5	Satisfactory
58670	59064	+0.7	Satisfactory
111900	12866	+0.9	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	19.92	-0.4	Satisfactory
30	29.82	-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	3.9	-2.5	Satisfactory
20	19.8	-1.0	Satisfactory
100	109	+9.0	Satisfactory
800	789	-1.4	Satisfactory

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

PART F – REMARK(S)

This report supersedes the previous test report no. AG030096 dated 17 March, 2017.

~ 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 E. Status of Environmental Permits and Licences

	Description		Permit/ Reference No.	Status
EIAO	Environmental Permit		EP-489/2014	Approved on 7 Nov 2014
Contract No.	**Description**	**Location**	**Permit/ Reference No.**	**Status**
P560 (R)	Notification of Construction Work under APCO	Launching Site	397150	Receipt acknowledged by EPD on 15 Jan 2016
		Site Office	397151	
		Stockpiling Area	398015	Receipt acknowledged by EPD on 18 Jan 2016
		Sheung Sha Chau	405860	Receipt acknowledged by EPD on 5 Aug 2016
	Construction Noise Permit (General Works)	Launching Site	GW-RS0243-17	Valid from 21 Mar 2017 to 20 Sep 2017
		Stockpiling Area	GW-RS0242-17	Valid from 23 Mar 2017 to 22 Sep 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-RS0247-17	Valid from 20 Mar 2017 to 19 Sep 2017
	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-RS155-17	Valid from 24 Feb 2017 to 23 Aug 2017 (superseded by GW-RS312-17 on 7 Apr 2017)
	Construction Noise Permit (General Works)	Works area of 3202	GW-RS312-17	Valid from 7 Apr 2017 to 26 Sep 2017

	Description		Permit/ Reference No.	Status
	Construction Noise Permit (General Works)	Site Office of 3202	GW-RS145-17	Valid from 21 Feb 2017 to 20 Aug 2017
	Registration as Chemical Waste Producer	Works area of 3202	WPN 5213-951-P3967-01	Completion of Registration on 24 Oct 2016
	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-RS0014-17	Valid from 12 Jan 2017 to 11 Jun 2017(superseded by GW-RS323-17 on 18 Apr 2017 on 19 Apr 2017)
	Construction Noise Permit (General Works)	Works area of 3203	GW-RS0323-17	Valid from 19 Apr 2017 to 18 Oct 2017
	Registration as Chemical Waste Producer	Works area of 3203	WPN 5213-951-S3954-01	Update the Registration on 12 Dec 2016
	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
		Site Office of 3204	413046	Receipt acknowledged by EPD on 3 Feb 2017
	Construction Noise Permit (General Works)	Works Area of 3204	GW-RS213-17	Valid from 14 Mar 2017 to 13 Sep 2017
	Construction Noise Permit (General Works)	Site Office of 3204	GW-RS136-17	Valid from 17 Feb 2017 to 16 Aug 2017
	Registration as Chemical Waste Producer	Site office of 3204	WPN 5213-951-C4102-01	Completion of Registration on 15 Sep 2016
	Registration as Chemical Waste Producer	Works Area of 3204	WPN 5213-951-C4102-02	Completion of Registration on 17 Mar 2017
	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
	Registration as Chemical Waste Producer	Works Area of 3205	WPN 5111-421-B2509-01	Completion of Registration on 22 Feb 2017
	Construction Noise Permit (General Works)	Works Area of 3205	GW-RS0152-17	Valid from 23 Feb 2017 to 22 Aug 2017 (superseded by GW-RS0335-17 on 13 Apr 2017)
	Construction Noise Permit (General Works)	Works Area of 3205	GW-RS0335-17	Valid from 13 Apr 2017 to 1 Oct 2017
	Bill Account for disposal	Works area of 3205	A/C 7026295	Approval granted from EPD on 9 Nov 2016

	Description		Permit/ Reference No.	Status
3206	Notification of Construction Work under APCO	Works area of 3206	409237	Receipt acknowledged by EPD on 25 Oct 2016
	Registration as Chemical Waste Producer	Site office of 3206	WPN 5213-951-Z4035-01	Completion of Registration on 18 Nov 2016
	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-RS0119-17	Valid from 10 Feb 2017 to 10 Jun 2017 (superseded by GW-RS0351-17 on 22 Apr 2017)
		Works Area of 3206	GW-RS0351-17	Valid from 22 Apr 2017 to 18 Aug 2017
	Construction Noise Permit (General Works)	Site Office of 3206	GW-RS0148-17	Valid from 27 Feb 2017 to 10 Jun 2017
	Bill Account for disposal	Works area of 3206	A/C 7026398	Approval granted from EPD on 16 Nov 2016
3212	Construction Noise Permit (General Works)	Works Area of 3212	GW-RS0151-17	Valid from 1 Mar 2017 to 1 Jun 2017

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

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

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

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

Statistics for Complaints, Notifications of Summons and Prosecution

Reporting Period	Cumulative Statistics		
	Complaints	Notifications of Summons	Prosecutions
This reporting month	1	0	0
From 28 December 2015 to end of the reporting month	3	0	0

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

Data of SkyPier HSF Movements to/from Zhuhai and Macau (between 1 and 30 April 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-Apr	08:16	3A061	YFT	Arrival	11.6	-	-
01-Apr	08:39	8S210	MFM	Arrival	11.8	-	-
01-Apr	09:55	3A071	MFM	Arrival	10.7	-	-
01-Apr	10:40	8S212	MFM	Arrival	12.1	-	-
01-Apr	10:42	3A081	ZUI	Arrival	12.1	-	-
01-Apr	11:16	8S121	MFM	Departure	12.8	-	-
01-Apr	11:19	3A063	YFT	Arrival	12.3	-	-
01-Apr	12:09	3A181	ZUI	Departure	13.3	-	-
01-Apr	12:25	3A168	YFT	Departure	13.2	-	-
01-Apr	12:49	8S215	MFM	Arrival	13.0	-	-
01-Apr	12:59	3A064	YFT	Arrival	11.9	-	-
01-Apr	13:14	8S123	MFM	Departure	13.1	-	-
01-Apr	13:48	3A082	ZUI	Arrival	12.8	-	-
01-Apr	14:21	3A182	ZUI	Departure	13.5	-	-
01-Apr	14:24	3A164	YFT	Departure	12.4	-	-
01-Apr	14:54	3A065	YFT	Arrival	13.0	-	-
01-Apr	16:17	3A167	YFT	Departure	13.0	-	-
01-Apr	16:40	8S218	MFM	Arrival	13.1	-	-
01-Apr	16:46	3A083	ZUI	Arrival	13.1	-	-
01-Apr	17:01	3A183	ZUI	Departure	13.1	-	-
01-Apr	17:03	8S126	MFM	Departure	12.8	-	-
01-Apr	17:05	3A067	YFT	Arrival	12.8	-	-
01-Apr	19:03	3A166	YFT	Departure	12.2	-	-
01-Apr	19:53	3A084	ZUI	Arrival	12.9	-	-
01-Apr	20:17	3A185	ZUI	Departure	13.3	-	-
01-Apr	20:58	3A169	YFT	Departure	12.9	-	-
01-Apr	21:10	8S2113	MFM	Arrival	12.2	-	-
01-Apr	22:10	8S522	MFM	Departure	12.6	-	-
02-Apr	08:16	3A061	YFT	Arrival	11.6	-	-
02-Apr	08:29	8S210	MFM	Arrival	12.8	-	-
02-Apr	09:55	3A071	MFM	Arrival	12.0	-	-
02-Apr	10:44	8S212	MFM	Arrival	11.5	-	-
02-Apr	10:55	3A081	ZUI	Arrival	12.4	-	-
02-Apr	11:09	8S121	MFM	Departure	11.0	-	-
02-Apr	11:21	3A063	YFT	Arrival	12.3	-	-
02-Apr	12:23	3A168	YFT	Departure	12.8	-	-

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)
02-Apr	12:46	3A181	ZUI	Departure	13.6	-	-
02-Apr	12:47	8S215	MFM	Arrival	11.9	-	-
02-Apr	13:01	3A064	YFT	Arrival	11.1	-	-
02-Apr	13:19	8S123	MFM	Departure	13.2	-	-
02-Apr	13:47	3A082	ZUI	Arrival	13.0	-	-
02-Apr	14:14	3A182	ZUI	Departure	13.6	-	-
02-Apr	14:18	3A164	YFT	Departure	11.7	-	-
02-Apr	14:57	3A065	YFT	Arrival	12.1	-	-
02-Apr	16:19	3A167	YFT	Departure	12.5	-	-
02-Apr	16:49	8S218	MFM	Arrival	12.6	-	-
02-Apr	16:50	3A083	ZUI	Arrival	12.4	-	-
02-Apr	17:02	3A067	YFT	Arrival	11.5	-	-
02-Apr	17:08	8S126	MFM	Departure	13.4	-	-
02-Apr	17:09	3A183	ZUI	Departure	13.4	-	-
02-Apr	19:11	3A166	YFT	Departure	12.2	-	-
02-Apr	19:49	3A084	ZUI	Arrival	12.5	-	-
02-Apr	20:13	3A185	ZUI	Departure	12.5	-	-
02-Apr	20:56	8S2113	MFM	Arrival	14.0	≤5	<3
02-Apr	21:10	3A169	YFT	Departure	10.6	-	-
02-Apr	22:02	8S522	MFM	Departure	12.2	-	-
03-Apr	08:10	3A061	YFT	Arrival	12.8	-	-
03-Apr	08:29	8S210	MFM	Arrival	13.3	-	-
03-Apr	09:57	3A071	MFM	Arrival	12.1	-	-
03-Apr	10:35	8S212	MFM	Arrival	12.3	-	-
03-Apr	10:43	3A081	ZUI	Arrival	12.6	-	-
03-Apr	10:57	8S121	MFM	Departure	12.6	-	-
03-Apr	11:19	3A063	YFT	Arrival	11.3	-	-
03-Apr	12:10	3A181	ZUI	Departure	13.3	-	-
03-Apr	12:41	8S215	MFM	Arrival	12.9	-	-
03-Apr	12:43	3A168	YFT	Departure	12.6	-	-
03-Apr	12:59	3A064	YFT	Arrival	11.8	-	-
03-Apr	13:20	8S123	MFM	Departure	12.9	-	-
03-Apr	13:46	3A082	ZUI	Arrival	12.4	-	-
03-Apr	14:13	3A182	ZUI	Departure	13.7	-	-
03-Apr	14:22	3A164	YFT	Departure	11.5	-	-
03-Apr	14:59	3A065	YFT	Arrival	12.7	-	-
03-Apr	16:20	3A167	YFT	Departure	12.5	-	-
03-Apr	16:40	3A083	ZUI	Arrival	12.6	-	-
03-Apr	16:49	8S218	MFM	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)
03-Apr	16:58	3A067	YFT	Arrival	11.9	-	-
03-Apr	17:07	3A183	ZUI	Departure	13.2	-	-
03-Apr	17:12	8S126	MFM	Departure	13.2	-	-
03-Apr	18:56	3A166	YFT	Departure	11.6	-	-
03-Apr	19:47	3A084	ZUI	Arrival	11.9	-	-
03-Apr	20:11	3A185	ZUI	Departure	13.1	-	-
03-Apr	20:56	8S2113	MFM	Arrival	12.1	-	-
03-Apr	20:58	3A169	YFT	Departure	12.1	-	-
03-Apr	21:57	8S522	MFM	Departure	16.9	>15	<3
04-Apr	08:10	3A061	YFT	Arrival	12.4	-	-
04-Apr	08:23	8S210	MFM	Arrival	13.3	-	-
04-Apr	09:52	3A071	MFM	Arrival	11.2	-	-
04-Apr	10:49	3A081	ZUI	Arrival	12.9	-	-
04-Apr	10:55	8S212	MFM	Arrival	11.9	-	-
04-Apr	11:10	8S121	MFM	Departure	12.9	-	-
04-Apr	11:22	3A063	YFT	Arrival	12.4	-	-
04-Apr	12:12	3A181	ZUI	Departure	13.4	-	-
04-Apr	12:19	3A168	YFT	Departure	13.4	-	-
04-Apr	12:52	8S215	MFM	Arrival	10.6	-	-
04-Apr	13:01	3A064	YFT	Arrival	13.2	-	-
04-Apr	13:16	8S123	MFM	Departure	13.2	-	-
04-Apr	13:47	3A082	ZUI	Arrival	13.0	-	-
04-Apr	14:15	3A182	ZUI	Departure	13.3	-	-
04-Apr	14:21	3A164	YFT	Departure	13.8	-	-
04-Apr	14:58	3A065	YFT	Arrival	12.8	-	-
04-Apr	16:13	3A167	YFT	Departure	13.5	-	-
04-Apr	16:37	8S218	MFM	Arrival	11.2	-	-
04-Apr	16:45	3A083	ZUI	Arrival	12.3	-	-
04-Apr	16:52	3A067	YFT	Arrival	13.2	-	-
04-Apr	16:58	8S126	MFM	Departure	12.9	-	-
04-Apr	16:59	3A183	ZUI	Departure	12.2	-	-
04-Apr	18:56	3A166	YFT	Departure	13.1	-	-
04-Apr	19:50	3A084	ZUI	Arrival	12.3	-	-
04-Apr	20:08	3A185	ZUI	Departure	11.4	-	-
04-Apr	20:58	3A169	YFT	Departure	11.6	-	-
04-Apr	21:00	8S2113	MFM	Arrival	12.9	>15	<1
04-Apr	21:50	8S522	MFM	Departure	11.2	-	-
05-Apr	08:09	3A061	YFT	Arrival	12.5	-	-
05-Apr	08:28	8S210	MFM	Arrival	13.0	-	-

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)
05-Apr	09:46	3A071	MFM	Arrival	13.2	-	-
05-Apr	10:42	3A081	ZUI	Arrival	13.3	-	-
05-Apr	10:44	8S212	MFM	Arrival	12.4	-	-
05-Apr	11:06	8S121	MFM	Departure	13.4	-	-
05-Apr	11:25	3A063	YFT	Arrival	11.7	-	-
05-Apr	11:48	3A163	YFT	Departure	11.5	-	-
05-Apr	12:15	3A181	ZUI	Departure	13.7	-	-
05-Apr	12:29	3A168	YFT	Departure	12.1	-	-
05-Apr	12:53	3A064	YFT	Arrival	12.5	-	-
05-Apr	12:53	8S215	MFM	Arrival	11.4	-	-
05-Apr	13:24	8S123	MFM	Departure	12.2	-	-
05-Apr	13:44	3A082	ZUI	Arrival	13.1	-	-
05-Apr	14:19	3A182	ZUI	Departure	12.4	-	-
05-Apr	14:20	3A164	YFT	Departure	12.9	-	-
05-Apr	15:13	3A065	YFT	Arrival	11.8	-	-
05-Apr	15:40	3A165	YFT	Departure	12.5	-	-
05-Apr	16:22	3A167	YFT	Departure	11.6	-	-
05-Apr	16:48	8S218	MFM	Arrival	9.9	-	-
05-Apr	16:52	3A083	ZUI	Arrival	12.2	-	-
05-Apr	16:54	3A067	YFT	Arrival	12.7	-	-
05-Apr	17:04	3A183	ZUI	Departure	12.8	-	-
05-Apr	17:05	8S126	MFM	Departure	12.3	-	-
05-Apr	19:15	3A166	YFT	Departure	12.4	-	-
05-Apr	19:58	3A084	ZUI	Arrival	12.5	-	-
05-Apr	20:11	3A185	ZUI	Departure	12.0	-	-
05-Apr	20:52	8S2113	MFM	Arrival	11.2	-	-
05-Apr	20:56	3A169	YFT	Departure	13.0	-	-
05-Apr	21:53	8S522	MFM	Departure	11.0	-	-
06-Apr	08:12	3A061	YFT	Arrival	12.6	-	-
06-Apr	08:27	8S210	MFM	Arrival	12.7	-	-
06-Apr	09:50	3A071	MFM	Arrival	13.4	-	-
06-Apr	10:37	8S212	MFM	Arrival	12.0	-	-
06-Apr	10:44	3A081	ZUI	Arrival	13.3	-	-
06-Apr	10:58	8S121	MFM	Departure	12.6	-	-
06-Apr	11:20	3A063	YFT	Arrival	11.8	-	-
06-Apr	12:17	3A181	ZUI	Departure	13.7	-	-
06-Apr	12:22	3A168	YFT	Departure	11.5	-	-
06-Apr	12:47	8S215	MFM	Arrival	12.2	-	-
06-Apr	12:57	3A064	YFT	Arrival	12.2	-	-

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)
06-Apr	13:14	8S123	MFM	Departure	13.5	-	-
06-Apr	13:48	3A082	ZUI	Arrival	12.1	-	-
06-Apr	14:15	3A182	ZUI	Departure	12.7	-	-
06-Apr	14:16	3A164	YFT	Departure	13.3	-	-
06-Apr	15:03	3A065	YFT	Arrival	11.7	-	-
06-Apr	16:15	3A167	YFT	Departure	11.6	-	-
06-Apr	16:45	3A083	ZUI	Arrival	12.3	-	-
06-Apr	16:51	8S218	MFM	Arrival	10.8	-	-
06-Apr	17:00	3A067	YFT	Arrival	12.5	-	-
06-Apr	17:03	3A183	ZUI	Departure	13.7	-	-
06-Apr	17:05	8S126	MFM	Departure	13.6	-	-
06-Apr	19:11	3A166	YFT	Departure	12.1	-	-
06-Apr	19:49	3A084	ZUI	Arrival	12.3	-	-
06-Apr	20:13	3A185	ZUI	Departure	12.0	-	-
06-Apr	20:54	8S2113	MFM	Arrival	12.4	-	-
06-Apr	20:57	3A169	YFT	Departure	12.5	-	-
06-Apr	21:58	8S522	MFM	Departure	12.7	-	-
07-Apr	08:17	3A061	YFT	Arrival	11.8	-	-
07-Apr	08:38	8S210	MFM	Arrival	10.8	-	-
07-Apr	09:46	3A062	YFT	Arrival	12.8	-	-
07-Apr	10:37	3A081	ZUI	Arrival	13.9	-	-
07-Apr	10:41	8S212	MFM	Arrival	10.6	>5 and ≤15	<1
07-Apr	11:08	8S121	MFM	Departure	11.1	-	-
07-Apr	11:25	3A063	YFT	Arrival	12.8	-	-
07-Apr	12:17	3A168	YFT	Departure	13.1	-	-
07-Apr	12:26	3A181	ZUI	Departure	13.0	-	-
07-Apr	12:42	8S215	MFM	Arrival	13.0	-	-
07-Apr	12:58	3A064	YFT	Arrival	12.3	-	-
07-Apr	13:16	8S123	MFM	Departure	13.0	-	-
07-Apr	13:47	3A082	ZUI	Arrival	12.5	-	-
07-Apr	14:17	3A182	ZUI	Departure	13.8	-	-
07-Apr	14:19	3A164	YFT	Departure	12.0	-	-
07-Apr	14:58	3A065	YFT	Arrival	13.1	≤5	<1
07-Apr	16:11	3A167	YFT	Departure	13.6	-	-
07-Apr	16:38	8S218	MFM	Arrival	12.3	-	-
07-Apr	16:41	3A083	ZUI	Arrival	12.0	-	-
07-Apr	17:01	3A067	YFT	Arrival	11.8	-	-
07-Apr	17:05	8S126	MFM	Departure	12.4	-	-
07-Apr	17:07	3A183	ZUI	Departure	13.6	-	-

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)
07-Apr	18:38	3A068	YFT	Arrival	12.4	-	-
07-Apr	19:00	3A166	YFT	Departure	12.3	-	-
07-Apr	19:52	3A084	ZUI	Arrival	12.6	-	-
07-Apr	20:11	3A185	ZUI	Departure	12.5	-	-
07-Apr	20:49	8S2113	MFM	Arrival	12.8	-	-
07-Apr	20:57	3A169	YFT	Departure	12.9	-	-
07-Apr	21:57	8S522	MFM	Departure	13.3	-	-
08-Apr	08:15	3A061	YFT	Arrival	12.7	-	-
08-Apr	08:27	8S210	MFM	Arrival	13.0	-	-
08-Apr	09:57	3A071	MFM	Arrival	12.1	-	-
08-Apr	10:37	3A081	ZUI	Arrival	13.8	-	-
08-Apr	10:37	8S212	MFM	Arrival	11.5	-	-
08-Apr	11:12	8S121	MFM	Departure	11.2	-	-
08-Apr	11:19	3A063	YFT	Arrival	12.6	-	-
08-Apr	12:17	3A168	YFT	Departure	12.3	-	-
08-Apr	12:18	3A181	ZUI	Departure	13.2	-	-
08-Apr	12:50	8S215	MFM	Arrival	11.9	-	-
08-Apr	13:00	3A064	YFT	Arrival	13.0	-	-
08-Apr	13:18	8S123	MFM	Departure	13.1	-	-
08-Apr	13:44	3A082	ZUI	Arrival	13.1	-	-
08-Apr	14:21	3A164	YFT	Departure	13.3	-	-
08-Apr	14:24	3A182	ZUI	Departure	10.6	-	-
08-Apr	14:53	3A065	YFT	Arrival	12.9	-	-
08-Apr	16:18	3A167	YFT	Departure	13.5	≤5	<1
08-Apr	16:44	8S218	MFM	Arrival	11.9	-	-
08-Apr	16:50	3A083	ZUI	Arrival	12.9	-	-
08-Apr	17:03	3A183	ZUI	Departure	12.5	-	-
08-Apr	17:04	8S126	MFM	Departure	14.0	-	-
08-Apr	17:13	3A067	YFT	Arrival	12.7	-	-
08-Apr	19:09	3A166	YFT	Departure	13.1	≤5	<1
08-Apr	19:48	3A084	ZUI	Arrival	12.2	-	-
08-Apr	20:07	3A185	ZUI	Departure	13.0	-	-
08-Apr	20:51	8S2113	MFM	Arrival	12.5	-	-
08-Apr	21:02	3A169	YFT	Departure	12.9	-	-
08-Apr	21:58	8S522	MFM	Departure	12.4	-	-
09-Apr	08:15	3A061	YFT	Arrival	11.5	-	-
09-Apr	08:38	8S210	MFM	Arrival	12.8	-	-
09-Apr	10:07	3A071	MFM	Arrival	12.1	-	-
09-Apr	10:43	8S212	MFM	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)
09-Apr	10:52	3A081	ZUI	Arrival	12.1	-	-
09-Apr	11:08	8S121	MFM	Departure	12.6	-	-
09-Apr	11:16	3A063	YFT	Arrival	11.3	-	-
09-Apr	12:25	3A168	YFT	Departure	12.2	-	-
09-Apr	12:27	3A181	ZUI	Departure	13.7	-	-
09-Apr	12:51	8S215	MFM	Arrival	11.2	-	-
09-Apr	12:57	3A064	YFT	Arrival	12.3	-	-
09-Apr	13:14	8S123	MFM	Departure	12.8	-	-
09-Apr	13:47	3A082	ZUI	Arrival	12.3	-	-
09-Apr	14:19	3A164	YFT	Departure	12.3	-	-
09-Apr	14:19	3A182	ZUI	Departure	13.2	-	-
09-Apr	14:59	3A065	YFT	Arrival	12.0	-	-
09-Apr	16:16	3A167	YFT	Departure	12.3	-	-
09-Apr	16:46	3A083	ZUI	Arrival	12.8	-	-
09-Apr	16:48	8S218	MFM	Arrival	12.4	-	-
09-Apr	17:03	3A067	YFT	Arrival	11.6	-	-
09-Apr	17:06	3A183	ZUI	Departure	12.9	-	-
09-Apr	17:11	8S126	MFM	Departure	12.9	-	-
09-Apr	18:58	3A166	YFT	Departure	12.4	-	-
09-Apr	19:50	3A084	ZUI	Arrival	12.2	-	-
09-Apr	20:09	3A185	ZUI	Departure	13.3	-	-
09-Apr	20:59	8S2113	MFM	Arrival	12.2	-	-
09-Apr	20:59	3A169	YFT	Departure	12.4	-	-
09-Apr	21:54	8S522	MFM	Departure	13.2	-	-
10-Apr	08:14	3A061	YFT	Arrival	12.7	-	-
10-Apr	08:36	8S210	MFM	Arrival	12.3	-	-
10-Apr	09:58	3A071	MFM	Arrival	11.9	-	-
10-Apr	10:47	3A081	ZUI	Arrival	14.1	-	-
10-Apr	11:01	8S212	MFM	Arrival	12.0	-	-
10-Apr	11:25	3A063	YFT	Arrival	11.4	-	-
10-Apr	11:25	8S121	MFM	Departure	12.2	-	-
10-Apr	12:11	3A181	ZUI	Departure	13.4	≤5	<1
10-Apr	12:17	3A168	YFT	Departure	10.8	-	-
10-Apr	12:45	8S215	MFM	Arrival	10.7	-	-
10-Apr	13:04	3A064	YFT	Arrival	13.1	-	-
10-Apr	13:16	8S123	MFM	Departure	11.0	-	-
10-Apr	13:45	3A082	ZUI	Arrival	12.3	-	-
10-Apr	14:21	3A182	ZUI	Departure	13.9	-	-
10-Apr	14:22	3A164	YFT	Departure	13.3	-	-

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)
10-Apr	14:56	3A065	YFT	Arrival	12.4	-	-
10-Apr	16:15	3A167	YFT	Departure	12.2	-	-
10-Apr	16:42	8S218	MFM	Arrival	11.6	-	-
10-Apr	16:47	3A083	ZUI	Arrival	13.0	-	-
10-Apr	16:59	3A067	YFT	Arrival	12.7	-	-
10-Apr	17:04	8S126	MFM	Departure	11.2	-	-
10-Apr	17:05	3A183	ZUI	Departure	12.5	-	-
10-Apr	19:05	3A166	YFT	Departure	11.7	-	-
10-Apr	19:49	3A084	ZUI	Arrival	12.4	-	-
10-Apr	20:09	3A185	ZUI	Departure	13.4	-	-
10-Apr	20:54	8S2113	MFM	Arrival	12.2	-	-
10-Apr	20:59	3A169	YFT	Departure	11.9	-	-
11-Apr	08:20	3A061	YFT	Arrival	13.2	-	-
11-Apr	08:29	8S210	MFM	Arrival	9.9	-	-
11-Apr	10:10	3A071	MFM	Arrival	12.5	-	-
11-Apr	10:43	8S212	MFM	Arrival	12.8	-	-
11-Apr	10:50	3A081	ZUI	Arrival	13.1	-	-
11-Apr	11:11	8S121	MFM	Departure	12.8	-	-
11-Apr	11:15	3A063	YFT	Arrival	11.9	-	-
11-Apr	12:27	3A168	YFT	Departure	12.9	-	-
11-Apr	12:28	3A181	ZUI	Departure	14.1	-	-
11-Apr	12:52	8S215	MFM	Arrival	13.0	-	-
11-Apr	12:58	3A064	YFT	Arrival	13.5	-	-
11-Apr	13:20	8S123	MFM	Departure	10.5	-	-
11-Apr	13:59	3A082	ZUI	Arrival	13.1	-	-
11-Apr	14:15	3A182	ZUI	Departure	12.6	-	-
11-Apr	14:18	3A164	YFT	Departure	12.0	-	-
11-Apr	15:04	3A065	YFT	Arrival	11.8	-	-
11-Apr	16:17	3A167	YFT	Departure	12.1	-	-
11-Apr	16:47	8S218	MFM	Arrival	9.4	-	-
11-Apr	16:48	3A083	ZUI	Arrival	12.6	-	-
11-Apr	17:13	3A183	ZUI	Departure	13.8	-	-
11-Apr	17:15	3A067	YFT	Arrival	12.7	-	-
11-Apr	17:16	8S126	MFM	Departure	11.8	-	-
11-Apr	19:01	3A166	YFT	Departure	12.7	-	-
11-Apr	19:49	3A084	ZUI	Arrival	12.1	-	-
11-Apr	20:14	3A185	ZUI	Departure	13.1	-	-
11-Apr	20:47	8S2113	MFM	Arrival	11.9	-	-
11-Apr	21:03	3A169	YFT	Departure	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)
11-Apr	21:59	8S522	MFM	Departure	13.0	-	-
12-Apr	08:16	3A061	YFT	Arrival	11.4	-	-
12-Apr	08:39	8S210	MFM	Arrival	8.8	-	-
12-Apr	10:10	3A071	MFM	Arrival	12.3	-	-
12-Apr	10:41	8S212	MFM	Arrival	12.4	-	-
12-Apr	10:47	3A081	ZUI	Arrival	13.3	-	-
12-Apr	11:04	8S121	MFM	Departure	13.0	-	-
12-Apr	11:16	3A063	YFT	Arrival	12.2	-	-
12-Apr	12:21	3A181	ZUI	Departure	14.0	-	-
12-Apr	12:24	3A168	YFT	Departure	12.8	-	-
12-Apr	12:47	8S215	MFM	Arrival	12.8	-	-
12-Apr	12:55	3A064	YFT	Arrival	12.4	-	-
12-Apr	13:15	8S123	MFM	Departure	12.8	-	-
12-Apr	13:56	3A082	ZUI	Arrival	11.7	-	-
12-Apr	14:17	3A182	ZUI	Departure	12.7	-	-
12-Apr	14:18	3A164	YFT	Departure	13.1	-	-
12-Apr	14:55	3A065	YFT	Arrival	13.0	-	-
12-Apr	16:47	3A083	ZUI	Arrival	12.6	-	-
12-Apr	16:50	8S218	MFM	Arrival	10.3	≤5	<1
12-Apr	16:59	3A067	YFT	Arrival	11.8	-	-
12-Apr	17:07	3A183	ZUI	Departure	13.8	-	-
12-Apr	17:09	8S126	MFM	Departure	12.6	-	-
12-Apr	17:11	3A167	YFT	Departure	12.8	>5 and ≤15	<1
12-Apr	19:14	3A166	YFT	Departure	12.4	-	-
12-Apr	19:49	3A084	ZUI	Arrival	12.5	-	-
12-Apr	20:11	3A185	ZUI	Departure	13.9	-	-
12-Apr	20:55	8S2113	MFM	Arrival	12.5	-	-
12-Apr	20:57	3A169	YFT	Departure	12.9	-	-
12-Apr	22:09	8S522	MFM	Departure	12.3	-	-
13-Apr	08:15	3A061	YFT	Arrival	13.4	-	-
13-Apr	08:34	8S210	MFM	Arrival	11.4	-	-
13-Apr	09:57	3A071	MFM	Arrival	12.3	≤5	<1
13-Apr	10:44	3A081	ZUI	Arrival	12.5	-	-
13-Apr	10:52	8S212	MFM	Arrival	12.1	-	-
13-Apr	11:16	3A063	YFT	Arrival	8.2	-	-
13-Apr	11:19	8S121	MFM	Departure	11.5	-	-
13-Apr	12:26	3A168	YFT	Departure	11.1	-	-
13-Apr	12:27	3A181	ZUI	Departure	13.1	-	-
13-Apr	12:56	3A064	YFT	Arrival	13.7	≤5	<1

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-Apr	12:59	8S215	MFM	Arrival	13.4	-	-
13-Apr	13:24	8S123	MFM	Departure	9.3	-	-
13-Apr	13:57	3A082	ZUI	Arrival	12.7	-	-
13-Apr	14:20	3A182	ZUI	Departure	13.0	-	-
13-Apr	14:21	3A164	YFT	Departure	13.3	-	-
13-Apr	14:56	3A065	YFT	Arrival	11.6	-	-
13-Apr	16:20	3A167	YFT	Departure	10.7	-	-
13-Apr	16:42	3A083	ZUI	Arrival	13.0	-	-
13-Apr	16:43	8S218	MFM	Arrival	13.4	-	-
13-Apr	17:01	3A067	YFT	Arrival	13.1	-	-
13-Apr	17:08	3A183	ZUI	Departure	13.2	-	-
13-Apr	17:11	8S126	MFM	Departure	13.0	-	-
13-Apr	19:13	3A166	YFT	Departure	13.0	-	-
13-Apr	19:48	3A084	ZUI	Arrival	13.1	-	-
13-Apr	20:10	3A185	ZUI	Departure	13.1	-	-
13-Apr	21:08	3A169	YFT	Departure	13.0	-	-
13-Apr	21:18	8S2113	MFM	Arrival	11.1	-	-
13-Apr	21:55	8S522	MFM	Departure	12.2	-	-
14-Apr	08:15	3A061	YFT	Arrival	11.4	-	-
14-Apr	08:29	8S210	MFM	Arrival	12.5	-	-
14-Apr	10:07	3A071	MFM	Arrival	11.7	-	-
14-Apr	10:46	3A081	ZUI	Arrival	12.9	-	-
14-Apr	10:46	8S212	MFM	Arrival	11.1	-	-
14-Apr	11:13	3A063	YFT	Arrival	9.5	-	-
14-Apr	11:13	8S121	MFM	Departure	8.9	-	-
14-Apr	12:23	3A168	YFT	Departure	13.7	-	-
14-Apr	12:24	3A181	ZUI	Departure	13.7	-	-
14-Apr	12:45	8S215	MFM	Arrival	12.8	-	-
14-Apr	12:56	3A064	YFT	Arrival	12.2	-	-
14-Apr	13:15	8S123	MFM	Departure	13.2	-	-
14-Apr	13:40	3A082	ZUI	Arrival	12.1	-	-
14-Apr	14:16	3A164	YFT	Departure	11.6	-	-
14-Apr	14:18	3A182	ZUI	Departure	13.3	-	-
14-Apr	14:59	3A065	YFT	Arrival	12.1	-	-
14-Apr	16:14	3A167	YFT	Departure	13.7	-	-
14-Apr	16:39	8S218	MFM	Arrival	11.3	-	-
14-Apr	16:45	3A083	ZUI	Arrival	12.7	-	-
14-Apr	16:57	3A067	YFT	Arrival	12.3	-	-
14-Apr	17:03	3A183	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)
14-Apr	17:04	8S126	MFM	Departure	12.9	-	-
14-Apr	19:02	3A166	YFT	Departure	13.6	≤5	<1
14-Apr	19:49	3A084	ZUI	Arrival	12.6	-	-
14-Apr	20:10	3A185	ZUI	Departure	13.3	-	-
14-Apr	20:56	8S2113	MFM	Arrival	11.8	-	-
14-Apr	20:57	3A169	YFT	Departure	12.2	-	-
14-Apr	21:52	8S522	MFM	Departure	11.0	-	-
15-Apr	08:18	3A061	YFT	Arrival	12.0	≤5	<1
15-Apr	08:25	8S210	MFM	Arrival	13.1	-	-
15-Apr	10:07	3A071	MFM	Arrival	13.3	-	-
15-Apr	10:44	3A081	ZUI	Arrival	12.4	-	-
15-Apr	10:50	8S212	MFM	Arrival	11.5	-	-
15-Apr	11:12	3A063	YFT	Arrival	13.5	-	-
15-Apr	11:12	8S121	MFM	Departure	12.1	-	-
15-Apr	12:11	3A181	ZUI	Departure	13.0	-	-
15-Apr	12:16	3A168	YFT	Departure	13.7	-	-
15-Apr	12:51	8S215	MFM	Arrival	13.2	-	-
15-Apr	13:10	3A064	YFT	Arrival	11.9	-	-
15-Apr	13:18	8S123	MFM	Departure	13.1	-	-
15-Apr	13:48	3A082	ZUI	Arrival	13.2	-	-
15-Apr	14:16	3A164	YFT	Departure	10.1	-	-
15-Apr	14:18	3A182	ZUI	Departure	11.8	-	-
15-Apr	15:02	3A065	YFT	Arrival	11.1	-	-
15-Apr	16:14	3A167	YFT	Departure	14.0	-	-
15-Apr	16:42	3A083	ZUI	Arrival	13.3	-	-
15-Apr	16:42	8S218	MFM	Arrival	12.4	-	-
15-Apr	17:08	3A067	YFT	Arrival	11.2	-	-
15-Apr	17:17	3A183	ZUI	Departure	13.9	-	-
15-Apr	17:18	8S126	MFM	Departure	12.3	-	-
15-Apr	19:06	3A166	YFT	Departure	12.7	-	-
15-Apr	19:51	3A084	ZUI	Arrival	12.9	-	-
15-Apr	20:09	3A185	ZUI	Departure	13.5	-	-
15-Apr	20:54	8S2113	MFM	Arrival	12.3	-	-
15-Apr	21:07	3A169	YFT	Departure	12.2	-	-
15-Apr	21:51	8S522	MFM	Departure	12.1	-	-
16-Apr	08:13	3A061	YFT	Arrival	11.9	-	-
16-Apr	08:28	8S210	MFM	Arrival	12.4	-	-
16-Apr	09:56	3A071	MFM	Arrival	11.8	-	-
16-Apr	10:42	3A081	ZUI	Arrival	12.7	-	-

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)
16-Apr	10:44	8S212	MFM	Arrival	11.6	-	-
16-Apr	11:09	8S121	MFM	Departure	10.8	-	-
16-Apr	11:11	3A063	YFT	Arrival	12.3	-	-
16-Apr	12:17	3A168	YFT	Departure	12.2	-	-
16-Apr	12:18	3A181	ZUI	Departure	13.6	-	-
16-Apr	12:47	8S215	MFM	Arrival	11.6	-	-
16-Apr	12:58	3A064	YFT	Arrival	12.2	-	-
16-Apr	13:14	8S123	MFM	Departure	13.3	-	-
16-Apr	13:41	3A082	ZUI	Arrival	12.9	-	-
16-Apr	14:15	3A182	ZUI	Departure	12.5	-	-
16-Apr	14:17	3A164	YFT	Departure	12.3	-	-
16-Apr	14:53	3A065	YFT	Arrival	12.9	-	-
16-Apr	16:19	3A167	YFT	Departure	13.1	-	-
16-Apr	16:48	8S218	MFM	Arrival	12.2	-	-
16-Apr	16:50	3A083	ZUI	Arrival	13.1	-	-
16-Apr	17:01	3A067	YFT	Arrival	12.4	-	-
16-Apr	17:13	8S126	MFM	Departure	12.8	-	-
16-Apr	17:14	3A183	ZUI	Departure	12.7	-	-
16-Apr	19:18	3A166	YFT	Departure	12.2	-	-
16-Apr	19:57	3A084	ZUI	Arrival	12.3	-	-
16-Apr	20:16	3A185	ZUI	Departure	12.5	-	-
16-Apr	20:59	3A169	YFT	Departure	13.5	-	-
16-Apr	21:25	8S2113	MFM	Arrival	12.7	-	-
16-Apr	21:56	8S522	MFM	Departure	13.1	-	-
17-Apr	08:17	3A061	YFT	Arrival	11.8	-	-
17-Apr	08:29	8S210	MFM	Arrival	11.7	-	-
17-Apr	09:51	3A071	MFM	Arrival	12.0	-	-
17-Apr	10:37	8S212	MFM	Arrival	12.0	-	-
17-Apr	10:44	3A081	ZUI	Arrival	12.8	-	-
17-Apr	11:01	8S121	MFM	Departure	13.2	-	-
17-Apr	11:19	3A063	YFT	Arrival	12.6	-	-
17-Apr	12:10	3A181	ZUI	Departure	13.9	-	-
17-Apr	12:11	3A168	YFT	Departure	13.3	-	-
17-Apr	12:52	8S215	MFM	Arrival	11.7	-	-
17-Apr	13:00	3A064	YFT	Arrival	10.7	-	-
17-Apr	13:17	8S123	MFM	Departure	11.6	-	-
17-Apr	13:41	3A082	ZUI	Arrival	12.6	-	-
17-Apr	14:14	3A164	YFT	Departure	11.2	-	-
17-Apr	14:17	3A182	ZUI	Departure	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)
17-Apr	14:57	3A065	YFT	Arrival	13.1	-	-
17-Apr	16:13	3A167	YFT	Departure	12.7	-	-
17-Apr	16:41	8S218	MFM	Arrival	12.0	-	-
17-Apr	16:45	3A083	ZUI	Arrival	13.7	-	-
17-Apr	17:02	3A067	YFT	Arrival	11.7	-	-
17-Apr	17:02	8S126	MFM	Departure	11.7	-	-
17-Apr	17:13	3A183	ZUI	Departure	13.1	-	-
17-Apr	19:00	3A166	YFT	Departure	12.5	-	-
17-Apr	19:49	3A084	ZUI	Arrival	12.7	-	-
17-Apr	20:08	3A185	ZUI	Departure	13.3	-	-
17-Apr	20:57	8S2113	MFM	Arrival	11.6	-	-
17-Apr	20:58	3A169	YFT	Departure	11.3	-	-
17-Apr	21:54	8S522	MFM	Departure	13.0	-	-
18-Apr	08:13	3A061	YFT	Arrival	12.7	-	-
18-Apr	08:30	8S210	MFM	Arrival	11.0	-	-
18-Apr	09:50	3A071	MFM	Arrival	12.5	-	-
18-Apr	10:41	8S212	MFM	Arrival	12.4	-	-
18-Apr	10:46	3A081	ZUI	Arrival	12.9	-	-
18-Apr	11:09	8S121	MFM	Departure	11.6	-	-
18-Apr	11:18	3A063	YFT	Arrival	11.9	-	-
18-Apr	12:13	3A168	YFT	Departure	13.3	-	-
18-Apr	12:14	3A181	ZUI	Departure	13.4	-	-
18-Apr	12:53	8S215	MFM	Arrival	11.4	-	-
18-Apr	12:59	3A064	YFT	Arrival	11.0	-	-
18-Apr	13:16	8S123	MFM	Departure	12.3	-	-
18-Apr	13:51	3A082	ZUI	Arrival	12.7	-	-
18-Apr	14:15	3A164	YFT	Departure	11.3	-	-
18-Apr	14:21	3A182	ZUI	Departure	13.8	-	-
18-Apr	14:54	3A065	YFT	Arrival	12.3	-	-
18-Apr	16:20	3A167	YFT	Departure	12.7	-	-
18-Apr	16:39	3A083	ZUI	Arrival	13.0	-	-
18-Apr	16:44	8S218	MFM	Arrival	12.1	-	-
18-Apr	16:57	3A067	YFT	Arrival	11.7	-	-
18-Apr	17:09	8S126	MFM	Departure	12.1	-	-
18-Apr	17:11	3A183	ZUI	Departure	13.3	-	-
18-Apr	19:04	3A166	YFT	Departure	11.8	-	-
18-Apr	19:46	3A084	ZUI	Arrival	12.5	-	-
18-Apr	20:18	3A185	ZUI	Departure	12.6	-	-
18-Apr	20:59	3A169	YFT	Departure	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)
18-Apr	21:00	8S2113	MFM	Arrival	12.1	-	-
18-Apr	21:55	8S522	MFM	Departure	12.3	-	-
19-Apr	08:16	3A061	YFT	Arrival	13.3	-	-
19-Apr	08:31	8S210	MFM	Arrival	12.3	-	-
19-Apr	09:58	3A071	MFM	Arrival	11.8	-	-
19-Apr	10:38	8S212	MFM	Arrival	11.0	-	-
19-Apr	10:51	3A081	ZUI	Arrival	13.2	-	-
19-Apr	11:05	8S121	MFM	Departure	12.0	-	-
19-Apr	11:20	3A063	YFT	Arrival	13.4	-	-
19-Apr	12:27	3A181	ZUI	Departure	14.0	-	-
19-Apr	12:27	3A168	YFT	Departure	13.5	-	-
19-Apr	12:55	3A064	YFT	Arrival	13.3	-	-
19-Apr	12:56	8S215	MFM	Arrival	12.6	-	-
19-Apr	13:17	8S123	MFM	Departure	11.3	-	-
19-Apr	13:57	3A082	ZUI	Arrival	13.5	-	-
19-Apr	14:16	3A182	ZUI	Departure	12.7	-	-
19-Apr	14:17	3A164	YFT	Departure	13.7	-	-
19-Apr	15:00	3A065	YFT	Arrival	13.6	-	-
19-Apr	16:12	3A167	YFT	Departure	13.6	-	-
19-Apr	16:40	3A083	ZUI	Arrival	12.4	-	-
19-Apr	16:50	8S218	MFM	Arrival	12.7	-	-
19-Apr	17:02	3A067	YFT	Arrival	13.4	-	-
19-Apr	17:13	8S126	MFM	Departure	13.0	-	-
19-Apr	17:14	3A183	ZUI	Departure	12.5	-	-
19-Apr	18:59	3A166	YFT	Departure	12.9	-	-
19-Apr	19:46	3A084	ZUI	Arrival	12.9	-	-
19-Apr	20:12	3A185	ZUI	Departure	12.9	-	-
19-Apr	20:55	8S2113	MFM	Arrival	12.3	-	-
19-Apr	21:01	3A169	YFT	Departure	11.6	-	-
20-Apr	08:06	3A061	YFT	Arrival	12.8	-	-
20-Apr	09:35	8S210	MFM	Arrival	12.6	-	-
20-Apr	09:50	3A071	MFM	Arrival	11.9	-	-
20-Apr	10:39	8S212	MFM	Arrival	12.7	-	-
20-Apr	10:52	3A081	ZUI	Arrival	13.1	-	-
20-Apr	11:00	8S121	MFM	Departure	12.3	-	-
20-Apr	11:21	3A063	YFT	Arrival	11.8	-	-
20-Apr	12:18	3A168	YFT	Departure	12.1	-	-
20-Apr	12:21	3A181	ZUI	Departure	13.7	-	-
20-Apr	12:54	3A064	YFT	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)
20-Apr	13:04	8S215	MFM	Arrival	11.4	-	-
20-Apr	13:26	8S123	MFM	Departure	11.9	-	-
20-Apr	13:52	3A082	ZUI	Arrival	13.3	-	-
20-Apr	14:17	3A164	YFT	Departure	11.2	-	-
20-Apr	14:21	3A182	ZUI	Departure	11.7	-	-
20-Apr	14:57	3A065	YFT	Arrival	11.4	-	-
20-Apr	16:18	3A167	YFT	Departure	11.8	-	-
20-Apr	16:39	3A083	ZUI	Arrival	12.4	-	-
20-Apr	16:42	8S218	MFM	Arrival	9.0	-	-
20-Apr	16:52	3A067	YFT	Arrival	13.3	-	-
20-Apr	16:56	3A183	ZUI	Departure	13.7	-	-
20-Apr	17:04	8S126	MFM	Departure	11.2	-	-
20-Apr	18:59	3A166	YFT	Departure	13.1	-	-
20-Apr	19:48	3A084	ZUI	Arrival	12.6	-	-
20-Apr	20:09	3A185	ZUI	Departure	13.4	-	-
20-Apr	20:54	8S2113	MFM	Arrival	10.9	-	-
20-Apr	21:06	3A169	YFT	Departure	12.8	-	-
21-Apr	08:12	3A061	YFT	Arrival	12.4	-	-
21-Apr	08:32	8S210	MFM	Arrival	12.9	-	-
21-Apr	10:02	3A071	MFM	Arrival	13.3	-	-
21-Apr	10:49	8S212	MFM	Arrival	11.2	-	-
21-Apr	10:54	3A081	ZUI	Arrival	12.9	-	-
21-Apr	11:02	8S121	MFM	Departure	12.6	-	-
21-Apr	11:18	3A063	YFT	Arrival	11.9	-	-
21-Apr	12:21	3A168	YFT	Departure	11.9	-	-
21-Apr	12:24	3A181	ZUI	Departure	13.1	-	-
21-Apr	12:53	8S215	MFM	Arrival	12.4	-	-
21-Apr	13:00	3A064	YFT	Arrival	12.5	-	-
21-Apr	13:22	8S123	MFM	Departure	12.6	-	-
21-Apr	13:59	3A082	ZUI	Arrival	13.5	-	-
21-Apr	14:19	3A182	ZUI	Departure	12.4	-	-
21-Apr	14:24	3A164	YFT	Departure	13.3	-	-
21-Apr	14:57	3A065	YFT	Arrival	11.3	-	-
21-Apr	16:41	3A083	ZUI	Arrival	12.6	-	-
21-Apr	16:48	8S218	MFM	Arrival	12.5	-	-
21-Apr	16:56	3A167	YFT	Departure	11.2	≤5	<1
21-Apr	17:04	3A183	ZUI	Departure	13.8	-	-
21-Apr	17:06	3A067	YFT	Arrival	11.5	-	-
21-Apr	17:09	8S126	MFM	Departure	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)
21-Apr	19:13	3A166	YFT	Departure	12.6	-	-
21-Apr	19:53	3A084	ZUI	Arrival	13.0	-	-
21-Apr	20:07	3A185	ZUI	Departure	13.6	-	-
21-Apr	21:01	8S2113	MFM	Arrival	12.7	-	-
21-Apr	21:03	3A169	YFT	Departure	11.9	-	-
21-Apr	21:52	8S522	MFM	Departure	10.0	-	-
22-Apr	08:16	3A061	YFT	Arrival	11.4	-	-
22-Apr	08:36	8S210	MFM	Arrival	12.5	-	-
22-Apr	09:53	3A071	MFM	Arrival	12.6	-	-
22-Apr	10:36	8S212	MFM	Arrival	13.1	-	-
22-Apr	10:46	3A081	ZUI	Arrival	12.6	≤5	<1
22-Apr	11:01	8S121	MFM	Departure	13.5	-	-
22-Apr	11:20	3A063	YFT	Arrival	11.1	-	-
22-Apr	12:10	3A168	YFT	Departure	11.4	-	-
22-Apr	12:16	3A181	ZUI	Departure	13.5	-	-
22-Apr	12:54	8S215	MFM	Arrival	11.4	-	-
22-Apr	13:01	3A064	YFT	Arrival	12.1	-	-
22-Apr	13:16	8S123	MFM	Departure	13.1	-	-
22-Apr	13:57	3A082	ZUI	Arrival	11.6	-	-
22-Apr	14:19	3A164	YFT	Departure	12.6	-	-
22-Apr	14:24	3A182	ZUI	Departure	13.7	-	-
22-Apr	14:59	3A065	YFT	Arrival	9.5	-	-
22-Apr	16:20	3A167	YFT	Departure	11.8	-	-
22-Apr	16:38	8S218	MFM	Arrival	11.5	-	-
22-Apr	16:49	3A083	ZUI	Arrival	12.9	-	-
22-Apr	17:01	3A067	YFT	Arrival	11.1	-	-
22-Apr	17:01	3A183	ZUI	Departure	13.6	-	-
22-Apr	17:03	8S126	MFM	Departure	12.4	-	-
22-Apr	18:58	3A166	YFT	Departure	12.6	-	-
22-Apr	19:46	3A084	ZUI	Arrival	12.8	-	-
22-Apr	20:09	3A185	ZUI	Departure	13.9	-	-
22-Apr	21:00	8S2113	MFM	Arrival	12.4	-	-
22-Apr	21:02	3A169	YFT	Departure	12.0	-	-
22-Apr	22:01	8S522	MFM	Departure	12.4	-	-
23-Apr	08:16	3A061	YFT	Arrival	13.0	-	-
23-Apr	08:29	8S210	MFM	Arrival	10.9	-	-
23-Apr	09:54	3A071	MFM	Arrival	12.7	-	-
23-Apr	10:44	3A081	ZUI	Arrival	12.9	-	-
23-Apr	10:45	8S212	MFM	Arrival	11.1	-	-

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)
23-Apr	11:14	8S121	MFM	Departure	13.0	-	-
23-Apr	11:20	3A063	YFT	Arrival	12.3	-	-
23-Apr	12:18	3A168	YFT	Departure	12.0	-	-
23-Apr	12:29	3A181	ZUI	Departure	13.6	-	-
23-Apr	12:44	8S215	MFM	Arrival	11.8	-	-
23-Apr	13:00	3A064	YFT	Arrival	12.9	-	-
23-Apr	13:12	8S123	MFM	Departure	13.5	-	-
23-Apr	13:47	3A082	ZUI	Arrival	12.3	-	-
23-Apr	14:20	3A164	YFT	Departure	13.3	-	-
23-Apr	14:20	3A182	ZUI	Departure	13.2	-	-
23-Apr	14:59	3A065	YFT	Arrival	12.6	-	-
23-Apr	16:23	3A167	YFT	Departure	11.5	-	-
23-Apr	16:42	8S218	MFM	Arrival	11.3	-	-
23-Apr	16:43	3A083	ZUI	Arrival	12.3	-	-
23-Apr	17:03	3A067	YFT	Arrival	12.7	-	-
23-Apr	17:09	8S126	MFM	Departure	13.4	-	-
23-Apr	17:10	3A183	ZUI	Departure	12.8	-	-
23-Apr	19:02	3A166	YFT	Departure	11.9	-	-
23-Apr	19:44	3A084	ZUI	Arrival	13.9	-	-
23-Apr	20:04	3A185	ZUI	Departure	13.1	-	-
23-Apr	20:49	8S2113	MFM	Arrival	12.1	-	-
23-Apr	21:07	3A169	YFT	Departure	12.4	-	-
23-Apr	21:52	8S522	MFM	Departure	13.6	-	-
24-Apr	08:17	3A061	YFT	Arrival	11.5	-	-
24-Apr	08:28	8S210	MFM	Arrival	13.1	-	-
24-Apr	09:47	3A161	YFT	Departure	11.6	-	-
24-Apr	09:54	3A071	MFM	Arrival	12.0	-	-
24-Apr	10:40	8S212	MFM	Arrival	12.4	-	-
24-Apr	10:44	3A081	ZUI	Arrival	13.1	-	-
24-Apr	11:03	8S121	MFM	Departure	12.4	-	-
24-Apr	11:10	3A063	YFT	Arrival	12.0	-	-
24-Apr	12:16	3A181	ZUI	Departure	12.6	-	-
24-Apr	12:20	3A168	YFT	Departure	11.8	-	-
24-Apr	12:47	8S215	MFM	Arrival	12.7	-	-
24-Apr	12:50	3A064	YFT	Arrival	13.5	-	-
24-Apr	13:16	8S123	MFM	Departure	12.5	-	-
24-Apr	13:47	3A082	ZUI	Arrival	12.2	-	-
24-Apr	14:22	3A182	ZUI	Departure	12.3	-	-
24-Apr	14:25	3A164	YFT	Departure	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)
24-Apr	15:02	3A065	YFT	Arrival	11.9	-	-
24-Apr	16:20	3A167	YFT	Departure	11.8	-	-
24-Apr	16:45	8S218	MFM	Arrival	12.8	-	-
24-Apr	16:50	3A083	ZUI	Arrival	12.9	-	-
24-Apr	16:54	3A067	YFT	Arrival	13.2	-	-
24-Apr	17:07	3A183	ZUI	Departure	14.0	-	-
24-Apr	17:07	8S126	MFM	Departure	13.0	-	-
24-Apr	17:27	3A162	YFT	Departure	14.1	-	-
24-Apr	19:09	3A166	YFT	Departure	13.5	-	-
24-Apr	19:49	3A084	ZUI	Arrival	13.5	-	-
24-Apr	20:09	3A185	ZUI	Departure	12.3	>5 and ≤15	<1
24-Apr	20:53	3A169	YFT	Departure	13.0	-	-
24-Apr	20:57	8S2113	MFM	Arrival	13.0	-	-
24-Apr	21:57	8S522	MFM	Departure	12.7	-	-
25-Apr	08:20	3A061	YFT	Arrival	12.3	-	-
25-Apr	08:28	8S210	MFM	Arrival	12.2	-	-
25-Apr	09:48	3A161	YFT	Departure	12.4	-	-
25-Apr	09:50	3A071	MFM	Arrival	13.3	-	-
25-Apr	10:37	8S212	MFM	Arrival	12.6	-	-
25-Apr	10:50	3A081	ZUI	Arrival	12.8	-	-
25-Apr	11:07	8S121	MFM	Departure	13.1	-	-
25-Apr	11:16	3A063	YFT	Arrival	12.2	-	-
25-Apr	12:08	3A181	ZUI	Departure	13.6	-	-
25-Apr	12:15	3A168	YFT	Departure	12.3	-	-
25-Apr	12:45	8S215	MFM	Arrival	12.8	-	-
25-Apr	12:57	3A064	YFT	Arrival	11.1	-	-
25-Apr	13:19	8S123	MFM	Departure	12.8	-	-
25-Apr	13:50	3A082	ZUI	Arrival	12.3	-	-
25-Apr	14:21	3A182	ZUI	Departure	12.7	-	-
25-Apr	14:23	3A164	YFT	Departure	12.8	-	-
25-Apr	14:57	3A065	YFT	Arrival	12.2	-	-
25-Apr	16:17	3A167	YFT	Departure	12.5	-	-
25-Apr	16:42	8S218	MFM	Arrival	12.5	-	-
25-Apr	16:50	3A083	ZUI	Arrival	12.4	-	-
25-Apr	16:59	8S126	MFM	Departure	13.3	-	-
25-Apr	17:01	3A067	YFT	Arrival	10.4	-	-
25-Apr	17:04	3A183	ZUI	Departure	13.5	-	-
25-Apr	17:32	3A162	YFT	Departure	14.1	-	-
25-Apr	18:59	3A166	YFT	Departure	12.1	-	-

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)
25-Apr	19:49	3A084	ZUI	Arrival	12.2	-	-
25-Apr	20:11	3A185	ZUI	Departure	13.1	-	-
25-Apr	20:51	8S2113	MFM	Arrival	11.9	-	-
25-Apr	21:09	3A169	YFT	Departure	12.1	-	-
25-Apr	21:59	8S522	MFM	Departure	12.0	-	-
26-Apr	08:20	3A061	YFT	Arrival	11.0	-	-
26-Apr	08:27	8S210	MFM	Arrival	13.0	-	-
26-Apr	09:53	3A071	MFM	Arrival	11.5	-	-
26-Apr	10:34	8S212	MFM	Arrival	11.9	-	-
26-Apr	10:39	3A081	ZUI	Arrival	14.3	-	-
26-Apr	11:05	8S121	MFM	Departure	11.0	-	-
26-Apr	11:20	3A063	YFT	Arrival	12.4	-	-
26-Apr	12:14	3A168	YFT	Departure	12.9	-	-
26-Apr	12:15	3A181	ZUI	Departure	12.3	-	-
26-Apr	12:45	8S215	MFM	Arrival	11.9	-	-
26-Apr	13:01	3A064	YFT	Arrival	11.9	-	-
26-Apr	13:15	8S123	MFM	Departure	11.7	-	-
26-Apr	13:51	3A082	ZUI	Arrival	13.2	-	-
26-Apr	14:15	3A182	ZUI	Departure	13.9	-	-
26-Apr	14:19	3A164	YFT	Departure	10.3	-	-
26-Apr	14:59	3A065	YFT	Arrival	12.3	-	-
26-Apr	16:25	3A167	YFT	Departure	13.4	-	-
26-Apr	16:43	8S218	MFM	Arrival	11.7	-	-
26-Apr	16:51	3A083	ZUI	Arrival	13.2	-	-
26-Apr	16:58	3A067	YFT	Arrival	9.6	-	-
26-Apr	17:06	8S126	MFM	Departure	12.5	-	-
26-Apr	17:10	3A183	ZUI	Departure	12.9	-	-
26-Apr	18:59	3A166	YFT	Departure	12.5	-	-
26-Apr	19:43	3A084	ZUI	Arrival	12.9	-	-
26-Apr	20:07	3A185	ZUI	Departure	13.3	-	-
26-Apr	20:52	8S2113	MFM	Arrival	10.4	-	-
26-Apr	21:00	3A169	YFT	Departure	12.5	-	-
26-Apr	22:05	8S522	MFM	Departure	12.4	-	-
27-Apr	08:18	3A061	YFT	Arrival	13.1	≤5	<1
27-Apr	08:25	8S210	MFM	Arrival	11.1	-	-
27-Apr	09:49	3A071	MFM	Arrival	11.7	-	-
27-Apr	10:41	8S212	MFM	Arrival	12.5	-	-
27-Apr	10:52	3A081	ZUI	Arrival	13.0	-	-
27-Apr	11:02	8S121	MFM	Departure	12.8	-	-

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)
27-Apr	11:17	3A063	YFT	Arrival	12.9	-	-
27-Apr	12:15	3A181	ZUI	Departure	14.0	-	-
27-Apr	12:27	3A168	YFT	Departure	12.4	-	-
27-Apr	12:52	8S215	MFM	Arrival	12.8	-	-
27-Apr	13:01	3A064	YFT	Arrival	13.0	-	-
27-Apr	13:25	8S123	MFM	Departure	11.8	-	-
27-Apr	13:47	3A082	ZUI	Arrival	12.4	-	-
27-Apr	14:12	3A164	YFT	Departure	12.1	-	-
27-Apr	14:16	3A182	ZUI	Departure	12.4	-	-
27-Apr	14:56	3A065	YFT	Arrival	12.4	-	-
27-Apr	16:19	3A167	YFT	Departure	12.1	-	-
27-Apr	16:42	3A083	ZUI	Arrival	12.8	-	-
27-Apr	16:42	8S218	MFM	Arrival	12.6	-	-
27-Apr	17:00	3A183	ZUI	Departure	13.3	-	-
27-Apr	17:01	8S126	MFM	Departure	13.5	-	-
27-Apr	17:06	3A067	YFT	Arrival	12.5	-	-
27-Apr	19:00	3A166	YFT	Departure	12.3	-	-
27-Apr	19:47	3A084	ZUI	Arrival	12.0	-	-
27-Apr	20:15	3A185	ZUI	Departure	13.1	-	-
27-Apr	21:01	8S2113	MFM	Arrival	11.4	-	-
27-Apr	21:02	3A169	YFT	Departure	13.2	-	-
27-Apr	22:09	8S522	MFM	Departure	13.2	-	-
28-Apr	08:15	3A061	YFT	Arrival	12.7	-	-
28-Apr	08:29	8S210	MFM	Arrival	11.9	-	-
28-Apr	09:53	3A071	MFM	Arrival	11.2	-	-
28-Apr	10:40	8S212	MFM	Arrival	13.1	-	-
28-Apr	10:52	3A081	ZUI	Arrival	12.8	-	-
28-Apr	11:06	8S121	MFM	Departure	13.3	-	-
28-Apr	11:22	3A063	YFT	Arrival	11.5	-	-
28-Apr	12:19	3A181	ZUI	Departure	13.0	-	-
28-Apr	12:25	3A168	YFT	Departure	11.3	-	-
28-Apr	12:44	8S215	MFM	Arrival	11.0	-	-
28-Apr	12:56	3A064	YFT	Arrival	12.6	-	-
28-Apr	13:15	8S123	MFM	Departure	12.8	-	-
28-Apr	13:43	3A082	ZUI	Arrival	13.6	-	-
28-Apr	14:21	3A164	YFT	Departure	12.4	-	-
28-Apr	14:24	3A182	ZUI	Departure	13.3	-	-
28-Apr	14:59	3A065	YFT	Arrival	11.4	-	-
28-Apr	16:15	3A167	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)
28-Apr	16:36	8S218	MFM	Arrival	11.9	-	-
28-Apr	16:45	3A083	ZUI	Arrival	12.8	-	-
28-Apr	16:59	8S126	MFM	Departure	12.4	-	-
28-Apr	17:02	3A067	YFT	Arrival	12.3	-	-
28-Apr	17:02	3A183	ZUI	Departure	12.8	-	-
28-Apr	18:58	3A066	YFT	Arrival	12.1	-	-
28-Apr	19:04	3A166	YFT	Departure	13.1	-	-
28-Apr	19:50	3A084	ZUI	Arrival	12.7	-	-
28-Apr	20:07	3A185	ZUI	Departure	13.3	-	-
28-Apr	21:00	8S2113	MFM	Arrival	11.1	-	-
28-Apr	21:00	3A169	YFT	Departure	12.7	-	-
28-Apr	21:57	8S522	MFM	Departure	10.8	-	-
29-Apr	08:18	3A061	YFT	Arrival	11.8	-	-
29-Apr	08:31	8S210	MFM	Arrival	10.7	-	-
29-Apr	09:53	3A071	MFM	Arrival	11.9	-	-
29-Apr	10:36	8S212	MFM	Arrival	13.0	-	-
29-Apr	10:50	3A081	ZUI	Arrival	12.3	-	-
29-Apr	11:05	8S121	MFM	Departure	13.5	-	-
29-Apr	11:23	3A063	YFT	Arrival	12.1	-	-
29-Apr	12:14	3A181	ZUI	Departure	13.4	-	-
29-Apr	12:17	3A168	YFT	Departure	11.5	-	-
29-Apr	12:47	8S215	MFM	Arrival	11.5	-	-
29-Apr	13:04	3A064	YFT	Arrival	12.4	≤5	<1
29-Apr	13:18	8S123	MFM	Departure	11.3	-	-
29-Apr	13:43	3A082	ZUI	Arrival	13.1	-	-
29-Apr	14:15	3A182	ZUI	Departure	13.4	-	-
29-Apr	14:19	3A164	YFT	Departure	11.7	-	-
29-Apr	15:04	3A065	YFT	Arrival	12.1	-	-
29-Apr	16:14	3A167	YFT	Departure	11.7	-	-
29-Apr	16:42	8S218	MFM	Arrival	11.8	-	-
29-Apr	16:48	3A083	ZUI	Arrival	12.7	≤5	<1
29-Apr	17:00	3A183	ZUI	Departure	11.3	-	-
29-Apr	17:05	3A067	YFT	Arrival	11.6	-	-
29-Apr	17:05	8S126	MFM	Departure	11.9	-	-
29-Apr	19:09	3A166	YFT	Departure	11.1	-	-
29-Apr	19:46	3A084	ZUI	Arrival	12.1	-	-
29-Apr	20:11	3A185	ZUI	Departure	13.5	-	-
29-Apr	21:08	8S2113	MFM	Arrival	11.7	-	-
29-Apr	21:08	3A169	YFT	Departure	13.0	-	-

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)
29-Apr	21:51	8S522	MFM	Departure	13.1	-	-
30-Apr	08:17	3A061	YFT	Arrival	12.4	-	-
30-Apr	08:31	8S210	MFM	Arrival	11.5	-	-
30-Apr	09:57	3A071	MFM	Arrival	11.5	-	-
30-Apr	10:41	3A081	ZUI	Arrival	12.8	-	-
30-Apr	10:41	8S212	MFM	Arrival	12.9	-	-
30-Apr	11:01	8S121	MFM	Departure	13.7	-	-
30-Apr	11:15	3A063	YFT	Arrival	13.4	-	-
30-Apr	12:12	3A181	ZUI	Departure	13.3	-	-
30-Apr	12:13	3A168	YFT	Departure	13.7	-	-
30-Apr	12:46	8S215	MFM	Arrival	11.8	-	-
30-Apr	12:55	3A064	YFT	Arrival	12.3	-	-
30-Apr	13:14	8S123	MFM	Departure	11.2	-	-
30-Apr	13:42	3A082	ZUI	Arrival	11.9	-	-
30-Apr	14:25	3A182	ZUI	Departure	12.8	-	-
30-Apr	14:29	3A164	YFT	Departure	12.6	-	-
30-Apr	14:51	3A065	YFT	Arrival	13.6	-	-
30-Apr	16:12	3A167	YFT	Departure	13.5	-	-
30-Apr	16:41	8S218	MFM	Arrival	12.0	-	-
30-Apr	16:46	3A083	ZUI	Arrival	13.1	-	-
30-Apr	16:58	3A067	YFT	Arrival	12.7	-	-
30-Apr	17:04	8S126	MFM	Departure	12.7	-	-
30-Apr	17:07	3A183	ZUI	Departure	12.4	-	-
30-Apr	19:03	3A166	YFT	Departure	12.3	-	-
30-Apr	19:47	3A084	ZUI	Arrival	12.6	-	-
30-Apr	20:10	3A185	ZUI	Departure	12.9	-	-
30-Apr	20:58	3A169	YFT	Departure	12.4	-	-
30-Apr	20:59	8S2113	MFM	Arrival	11.5	-	-
30-Apr	21:57	8S522	MFM	Departure	11.8	-	-

Follow-up on instantaneous speeding

Referring to the data of SkyPier HSF movements in April 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 20 HSF movements. The duration of instantaneous speeding of 18 HSF movements were less than one minute and the remaining two movements were less than 3 minutes. After investigation, the AIS data and ferry operators' responses showed the cases were due to local strong water currents / giving way to other vessels. The captain had reduced speed and maintained the speed at less than 15 knots after the public safety / emergency incidents.

Three HSF movements with insufficient transmission of AIS data received in April 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.