MOTT MACDONALD

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

Construction Phase Monthly EM&A Report No.65 (For May 2021)

June 2021

Airport Authority Hong Kong

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This Monthly EM&A Report No. 65 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 11 June 2021

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By Email

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

Attn: Mr. Lawrence Tsui, Principal Manager, Environmental Compliance

11 June 2021

Dear Sir,

Contract No. 3102
3RS Independent Environmental Checker Consultancy Services

Submission of Monthly EM&A Report No. 65 (May 2021)

Reference is made to the Environmental Team's submission of the Monthly EM&A Report No. 65 under Condition 3.5 of the Environmental Permit No. EP-489/2014 certified by the ET Leader on 11 June 2021.

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

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

Yours faithfully,
AECOM Asia Co. Ltd.

Jackel Law
Independent Environmental Checker

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Abbreviations

3RS	Three-Runway System
AAHK	Airport Authority Hong Kong
AECOM	AECOM Asia Company Limited
AFCD	Agriculture, Fisheries and Conservation Department
AIS	Automatic Information System
ANI	Encounter Rate of Number of Dolphins
APM	Automated People Mover
AW	Airport West
BHS	Baggage Handling System
C&D	Construction and Demolition
CAP	Contamination Assessment Plan
CAR	Contamination Assessment Report
CTCC	Construction Traffic Control Centre
CWD	Chinese White Dolphin
DCM	Deep Cement Mixing
DEZ	Dolphin Exclusion Zone
DO	Dissolved Oxygen
EIA	Environmental Impact Assessment
EM&A	Environmental Monitoring & Audit
EP	Environmental Permit
EPD	Environmental Protection Department
EPSS	Emergency Power Supply Systems
ET	Environmental Team
FCZ	Fish Culture Zone
HKBCF	Hong Kong-Zhuhai-Macao Bridge Hong Kong Boundary Crossing Facilities
HKIA	Hong Kong International Airport
HOKLAS	Hong Kong Laboratory Accreditation Scheme
HSF	High Speed Ferry
HVS	High Volume Sampler
IEC	Independent Environmental Checker
LKC	Lung Kwu Chau
MMHK	Mott MacDonald Hong Kong Limited
MMWP	Marine Mammal Watching Plan
MSS	Maritime Surveillance System
MTRMP-CAV	Marine Travel Routes and Management Plan for Construction and Associated Vessel
NEL	Northeast Lantau
NWL	Northwest Lantau
PAM	Passive Acoustic Monitoring
PM	Project Manager
SC	Sha Chau
SCLKCMP	Sha Chau and Lung Kwu Chau Marine Park

SS	Suspended Solids
SSSI	Site of Special Scientific Interest
STG	Encounter Rate of Number of Dolphin Sightings
SWL	Southwest Lantau
T2	Terminal 2
The Project	The Expansion of Hong Kong International Airport into a Three-Runway System
The SkyPier Plan	Marine Travel Routes and Management Plan for High Speed Ferries of SkyPier
The Manual	The Updated EM&A Manual
TSP	Total Suspended Particulates
WL	West Lantau
WMP	Waste Management Plan

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 65th Construction Phase Monthly EM&A Report for the Project which summarises the monitoring results and audit findings of the EM&A programme during the reporting period from 1 to 31 May 2021.

Key Activities in the Reporting Period

The key activities of the Project carried out in the reporting period included reclamation works and land-based works. Works in the reclamation areas included deep cement mixing (DCM) works, marine filling, seawall and facilities construction, together with runway and associated works. Land-based works on existing airport island involved mainly airfield works, foundation and substructure work for Terminal 2 expansion, modification and tunnel work for Automated People Mover (APM) and Baggage Handling System (BHS), and preparation work for utilities, with activities include site establishment, site office construction, road and drainage works, cable ducting, demolition, piling, and excavation works.

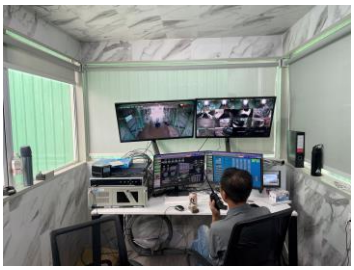
EM&A Activities Conducted in the Reporting Period

The monthly EM&A programme was undertaken in accordance with the Manual of the Project. Summary of the monitoring activities during this reporting period is presented as below:

Monitoring Activities	Number of Sessions
1-hour Total Suspended Particulates (TSP) air quality monitoring	30
Noise monitoring	16
Water quality monitoring	13
Vessel line-transect surveys for Chinese White Dolphin (CWD) monitoring	2
Land-based theodolite tracking survey effort for CWD monitoring	2

Environmental auditing works, including weekly site inspections of construction works conducted by the ET and bi-weekly site inspections conducted by the Independent Environmental Checker (IEC), audit of SkyPier High Speed Ferries (HSF), audit of construction and associated vessels, and audit of implementation of Marine Mammal Watching Plan (MMWP) and Dolphin Exclusion Zone (DEZ) Plan, were conducted in the reporting period. Based on information including ET's observations, records of Maritime Surveillance System (MSS), and contractors' site records, it is noted that environmental pollution control and mitigation measures were properly implemented and construction activities of the Project in the reporting period did not introduce adverse impacts to the sensitive receivers.

Snapshots of EM&A Activities in the Reporting Period

		
Impact Water Quality Monitoring conducted by ET	On-site Checking of WetSep Maintenance Record	Inspection of the Control Room of Asphalt Plant

Results of Impact Monitoring

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

Monitoring results of construction dust, construction waste, and CWD did not trigger the corresponding Action and Limit Levels in the reporting period.

One monitoring result of construction noise exceeded the relevant Limit Level, and the corresponding investigation was conducted as stipulated in the EM&A programme. The investigation findings concluded that the exceedance was not due to the Project.

The water quality monitoring results for all parameters, except suspended solids (SS), obtained during the reporting period were within the corresponding Action and Limit Levels stipulated in the EM&A programme. Relevant investigation and follow-up actions will be conducted according to the EM&A programme if the corresponding Action and Limit Levels are triggered. For SS, one of the testing results triggered the relevant Action Level, and the corresponding investigation was conducted accordingly. The investigation findings concluded that the case was not related to the Project. To conclude, the construction activities in the reporting period did not introduce adverse impact to all water quality sensitive receivers.

Summary of Upcoming Key Issues

Reclamation Works:

Contract 3206 Main Reclamation Works

- DCM works;
- Land-based ground improvement works;
- Seawall construction;
- Marine filling; and
- Sorting and reuse of inert waste from other 3RS contracts.

Airfield Works:

Contract 3301 North Runway Crossover Taxiway

- Cable ducting works; and
- Paving works.

Contract 3302 Eastern Vehicular Tunnel Advance Works

- Cable laying and ducting works;
- Backfilling and reinstatement works; and
- Piling and structure works.

Contract 3303 Third Runway and Associated Works

- Land-based ground improvement works;
- Operation of asphalt plant;
- Footing and utilities work; and
- Cable laying and ducting works.

Contract 3305 Airfield Ground Lighting System

- Genset installation; and
- Site establishment.

Contract 3307 Fire Training Facility

- Architectural, Builder's and Finishing works;
- Drainage and utilities works; and
- Building construction.

Third Runway Concourse:

Contract 3403 New Integrated Airport Centres Building and Civil Works

- Architectural, Builder's Work and Finishing works;
- Underground utilities construction;
- Footing construction; and
- Pre-boring and sheetpiling works.

Contract 3405 Third Runway Concourse Foundation and Substructure Works

- Foundation works;
- Piling work;
- Excavation and backfilling; and
- Road formation.

Terminal 2 Expansion:

Contract 3503 Terminal 2 Foundation and Substructure Works

- T2 re-configuration;
- Excavation works;
- Utilities road work; and
- Piling and structure works.

Contract 3508 Terminal 2 Expansion Works

- Excavation and footing construction;
- Site formation;
- Piling work; and
- Builders' works.

Automated People Mover (APM) and Baggage Handling System (BHS):

Contract 3601 New Automated People Mover System (TRC Line)

- Rebar fixing;
- Formwork erection and removal;
- Guidebeam installation; and
- Concreting work.

Contract 3602 Existing APM System Modification Works

- Car modification; and
- Concreting work.

Construction Support (Facilities):

Contract 3721 Construction Support Infrastructure Works

- Excavation and backfilling;
- Laying of drainage pipes and ducts; and
- Road works.

Contract 3722 Construction Support Facilities

- Foundation works;
- Erection of superstructure; and
- Site establishment.

Contract 3723 Construction Support Facilities

- Foundation works;
- Erection of superstructure; and
- Site establishment.

Airport Support Infrastructure:

Contract 3801 APM and BHS Tunnels on Existing Airport Island

- Formwork and rebar fixing;
- Construction of working platform;
- Cofferdam for shaft;
- Site clearance; and
- Demolition works.

Contract 3802 APM and BHS Tunnels and Related Works

- Construction of Airside Fire Station and marine sediment treatment plant;
- Installation of sheet pipes and dewatering well;
- Pre-drilling; and
- Ducting works.

Construction Support (Services / Licences):

Contract 3901A Concrete Batching Facility

- Plant operation; and
- Material conveyor belt construction.

Contract 3901B Concrete Batching Facility

- Plant operation; and
- Foundation works for conveyor belt .

Summary Table

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

	Yes	No	Details	Analysis / Recommendation / Remedial Actions
Breach of Limit Level^		√	No breach of Limit Level was recorded.	Nil
Breach of Action Level^		√	No breach of Action Level was recorded.	Nil
Complaint Received	√		In the previous reporting period, a complaint regarding alleged dusty and muddy vehicles was received on 20 April 2021.	ET requested the relevant contractors to provide information related to the complaint. Regular site inspections were conducted in which wheel washing on vehicles prior to leaving their works area was observed. For ad hoc inspections, soil and sands on road surface in Tuen Mun Public Cargo Working Area and dusty surfaces at North Eastern Quay on 3RS reclaimed land were both observed. To follow up, the contractors are reminded to ensure the wheels of outgoing vehicles from their site area are properly washed. Haul road connected to the quay would be paved and manual wheel washing would be implemented continuously. In the long term, an enhanced wheel washing measure is planned at the quays. The case was considered closed.
			A complaint regarding dust issue was received on 14 May 2021.	ET requested the relevant contractor to provide information related to the complaint. Regular site inspections and joint inspections were conducted in which sprinklers and water trucks were observed operating. ET also checked the wind speed at the Chek Lap Kok wind station and the result might suggest the presence of sudden gust. Based on the information provided by the contractor and ET's findings, the dust generation might be caused by sudden gust. Nevertheless, the contractor was reminded to continue implementing mitigation measures on dust control. The case was considered closed.
Notification of any summons and status of prosecutions		√	No notification of summons or prosecution was received.	Nil
Change that affect the EM&A		√	There was no change to the construction works that may affect the EM&A.	Nil

Note:
^ Only triggering of Action or Limit Level found related to Project works is counted as Breach of Action or Limit Level.

1 Introduction

1.1 Background

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

Airport Authority Hong Kong (AAHK) commissioned Mott MacDonald Hong Kong Limited (MMHK) to undertake the role of Environmental Team (ET) for carrying out the Environmental Monitoring & Audit (EM&A) works during the construction phase of the Project in accordance with the Updated EM&A Manual (the Manual) submitted under EP Condition 3.1[1]. 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 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 summary of construction works programme can be referred to **Section 1.4**.

1.2 Scope of this Report

This is the 65th Construction Phase Monthly EM&A Report for the Project which summarises the key findings of the EM&A programme during the reporting period from 1 to 31 May 2021.

1.3 Project Organisation

The Project's organisation structure presented in Appendix B of the Construction Phase Monthly EM&A Report No.1 remained unchanged during the reporting period. Contact details of the key personnel presented in Section 1.3 of the Construction Phase Monthly EM&A Report No.64 remained unchanged during the reporting period.

[1] The Manual is available on the Project's dedicated website (accessible at: **http://env.threerunwaysystem.com/en/index.html**).

1.4 Summary of Construction Works

The key activities of the Project carried out in the reporting period included reclamation works and land-based works. Works in the reclamation areas included DCM works, marine filling, seawall and facilities construction, together with runway and associated works. Land-based works on existing airport island involved mainly airfield works, foundation and substructure work for Terminal 2 expansion, modification and tunnel work for APM and BHS systems, and preparation work for utilities, with activities include site establishment, site office construction, road and drainage works, cable ducting, demolition of existing facilities, piling, and excavation works.

The locations of key construction activities are presented in **Figure 1.1**.

1.5 Summary of EM&A Programme Requirements

The status for all environmental aspects are presented in **Table 1.1**. The EM&A requirements remained unchanged during the reporting period.

Table 1.1: Summary of status for all environmental aspects under the Updated EM&A Manual

Parameters	EM&A Requirements	Status
Air Quality		
Baseline Monitoring	At least 14 consecutive days before commencement of construction work	The baseline air quality monitoring result has been reported in Baseline Monitoring Report and submitted to EPD under EP Condition 3.4.
Impact Monitoring	At least 3 times every 6 days	On-going
Noise		
Baseline Monitoring	Daily for a period of at least two weeks prior to the commencement of construction works	The baseline noise monitoring result has been reported in Baseline Monitoring Report and submitted to EPD under EP Condition 3.4.
Impact Monitoring	Weekly	On-going
Water Quality		
General Baseline Water Quality Monitoring for reclamation, water jetting and field joint works	Three days per week, at mid-flood and mid-ebb tides, for at least four weeks prior to the commencement of marine 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	Three days per week, at mid-flood and mid-ebb tides.	On-going for reclamation works. General impact water quality monitoring for water jetting works was completed on 23 May 2017.
Initial Intensive Deep Cement Mixing (DCM) Water Quality Monitoring	At least four weeks	The Initial Intensive DCM Monitoring Report was submitted and approved by EPD in accordance with the Detailed Plan on DCM.
Regular DCM Water Quality Monitoring	Three times per week until completion of DCM works.	On-going
Sewerage and Sewage Treatment		
Methodology for carrying out annual sewage flow monitoring for concerned gravity sewer	Methodology to be prepared and submitted to EPD at least one year before commencement of the operation of 3RS	The proposed methodology of the annual sewage flow monitoring was submitted to EPD.
Details of the routine H_2S monitoring system for the sewerage system of 3RS	Details to be prepared and submitted to EPD at least one year before commencement of the operation of 3RS	The details of the routine H_2S monitoring system will be prepared and submitted to EPD at least one year before commencement of operation of 3RS.
Waste Management		
Waste Monitoring	At least weekly	On-going

Parameters	EM&A Requirements	Status
Land Contamination		
Supplementary Contamination Assessment Plan (CAP)	At least 3 months before commencement of any soil remediation works.	The Supplementary CAP was submitted and approved by EPD under EP Condition 2.20.
Contamination Assessment Report (CAR) for Golf Course	CAR to be submitted for golf course	The CAR for Golf Course was submitted and accepted by EPD.
Contamination Assessment Reports (CAR) for Terminal 2 Emergency Power Supply Systems	CAR to be submitted for Terminal 2 Emergency Power Supply Systems	The CARs for Terminal 2 Emergency Power Supply Systems were submitted and accepted by EPD.
Terrestrial Ecology		
Pre-construction Egretry Survey Plan	Once per month in the breeding season between April and July, prior to the commencement of HDD drilling works.	The Egretry Survey Plan was submitted and approved by EPD under EP Condition 2.14.
Ecological Monitoring	Monthly monitoring during the HDD construction works period from August to March.	The terrestrial ecological monitoring at Sheung Sha Chau was completed in January 2019.
Marine Ecology		
Pre-Construction Phase Coral Dive Survey	Prior to marine construction works	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	As per an enhanced monitoring programme based on the Coral Translocation Plan	The post-translocation monitoring programme according to the Coral Translocation Plan was completed in April 2018.
Chinese White Dolphins (CWD)		
Baseline Monitoring	6 months of baseline surveys before the commencement of land formation related construction works. Vessel line transect surveys: Two full surveys per month; Land-based theodolite tracking surveys: Two days per month at the Sha Chau station and two days per month at the Lung Kwu Chau station; and Passive Acoustic Monitoring (PAM): For the whole duration of baseline period.	Baseline CWD results were reported in the CWD Baseline Monitoring Report and submitted to EPD in accordance with EP Condition 3.4.
Impact Monitoring	Vessel line transect surveys: Two full surveys per month; Land-based theodolite tracking surveys: One day per month at the Sha Chau station and one day per month at the Lung Kwu Chau station; and PAM: For the whole duration for land formation related construction works.	On-going
Landscape & Visual		
Landscape & Visual Plan	At least 3 months before the commencement of construction works on the formed land of the Project.	The Landscape & Visual Plan was submitted and approved by EPD under EP Condition 2.18
Baseline Monitoring	One-off survey within the Project site boundary prior to commencement of any construction works	The baseline landscape & visual monitoring result has been reported in Baseline Monitoring Report and submitted to EPD under EP Condition 3.4.
Impact Monitoring	Weekly	On-going
Environmental Auditing		
Regular site inspection	Weekly	On-going

Parameters	EM&A Requirements	Status
Marine Mammal Watching Plan (MMWP) implementation measures	Monitor and check	On-going
Dolphin Exclusion Zone (DEZ) Plan implementation measures	Monitor and check	On-going
SkyPier High Speed Ferries (HSF) implementation measures	Monitor and check	On-going
Construction and Associated Vessels Implementation measures	Monitor and check	On-going
Silt Curtain Deployment Plan implementation measures	Monitor and check	On-going
Spill Response Plan implementation measures	Monitor and check	On-going
Complaint Hotline and Email channel	Construction phase	On-going
Environmental Log Book	Construction phase	On-going

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

The EM&A programme also involved weekly site inspections and related auditing conducted by the ET for checking the implementation of the required environmental mitigation measures recommended in the approved EIA Report. To promote the environmental awareness and enhance the environmental performance of the contractors, environmental trainings and regular environmental management meetings were conducted during the reporting period, which are summarised as below:

- Two skipper training sessions provided by ET: 12 and 24 May 2021; and
- Seventeen environmental management meetings for EM&A review with works contracts: 6, 7, 11, 12, 17, 18, 21, 24, 26, 27 and 28 May 2021.

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

Air quality monitoring of 1-hour Total Suspended Particulates (TSP) was conducted three times every six days 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

2.1 Action and Limit Levels

In accordance with the Manual, baseline air quality monitoring of 1-hour TSP levels at the two air quality monitoring stations were established as presented in the Baseline Monitoring Report. 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**.

Table 2.2: Action and Limit Levels of Air Quality Monitoring

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

2.2 Monitoring Equipment

Portable direct reading dust meter was used to carry out the air quality monitoring. Details of equipment used in the reporting period are given in **Table 2.3**.

Table 2.3: Air Quality Monitoring Equipment

Equipment	Brand and Model	Last Calibration Date	Calibration Certificate Provided in
Portable direct reading dust meter (Laser dust monitor)	SIBATA LD-3B-2 (Serial No. 296098)	20 Oct 2020	Monthly EM&A Report No. 58, Appendix E
	SIBATA LD-3B-1 (Serial No. 597337)	10 May 2021	**Appendix D**

2.3 Monitoring Methodology

2.3.1 Measuring Procedure

The measurement procedures involved in the impact air quality monitoring can be summarised as follows:

a. The portable direct reading dust meter was mounted on a tripod at a height of 1.2m 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.

2.3.2 Maintenance and Calibration

The portable direct reading dust meter is calibrated every year against high volume sampler (HVS) to check the validity and accuracy of the results measured by direct reading method. The calibration record of the HVS provided in **Appendix D**, and the calibration certificates of portable direct reading dust meters listed in **Table 2.3** are valid in the reporting period.

2.4 Summary of Monitoring Results

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

The air quality monitoring results in the reporting period are summarised in **Table 2.4**. Detailed impact monitoring results are presented in **Appendix C**.

Table 2.4: Summary of Air Quality Monitoring Results

Monitoring Station	1-hr TSP Concentration Range (μg/m^3)	Action Level (μg/m^3)	Limit Level (μg/m^3)
AR1A	14 - 74	306	500
AR2	12 - 36	298	

The monitoring results were within the corresponding Action and Limit Levels at all monitoring stations in the reporting period.

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

2.5 Conclusion

No dust emission source was observed at the monitoring stations during the monitoring sessions. As the sensitive receivers were far away from the construction activities, with the implementation of dust control measures, there was no adverse impact at the sensitive receivers attributable to the works of the Project.

3 Noise Monitoring

Noise monitoring in the form of 30-minute measurements of L_{eq}, L_{10}, and L_{90} levels was conducted once per week between 0700 and 1900 on normal weekdays at four representative monitoring stations in the vicinity of noise sensitive receivers in Tung Chung and villages in North Lantau in accordance with the Manual. **Table 3.1** describes the details of the monitoring stations. **Figure 2.1** shows the locations of the monitoring stations.

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(2)	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.

(2) According to Section 4.3.3 of the Manual, the noise monitoring at NM3A was temporarily suspended starting from 1 September 2018 and would be resumed with the completion of the Tung Chung East Development.

3.1 Action and Limit Levels

In accordance with the Manual, baseline noise levels at the noise monitoring stations were established as presented in the Baseline Monitoring Report. 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**.

Table 3.2: Action and Limit Levels for Noise Monitoring

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	75dB(A)(1)

Note:

(1) The Limit Level for NM4 is reduced to 70dB(A) for being an educational institution. During school examination period, the Limit Level is further reduced to 65dB(A).

3.2 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 used in the reporting period are given in **Table 3.3**.

Table 3.3: Noise Monitoring Equipment

Equipment	Brand and Model	Last Calibration Date	Calibration Certificate Provided in
Integrated Sound Level Meter	Rion NL-52 (Serial No. 00998505)	20 Mar 2021	Monthly EM&A Report No. 63, Appendix E
	Rion NL-52 (Serial No. 01287679)	21 Jun 2020	Monthly EM&A Report No. 54, Appendix E
Acoustic Calibrator	Casella CEL-120/1 (Serial No. 2383737)	12 Sep 2020	Monthly EM&A Report No. 57, Appendix D
	Castle GA607 (Serial No. 040162)	20 Mar 2021	Monthly EM&A Report No. 63, Appendix E

3.3 Monitoring Methodology

3.3.1 Monitoring Procedure

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

a. The sound level meter was set on a tripod at least a height of 1.2m above the ground for free-field measurements at monitoring stations NM1A, NM4, NM5 and NM6. A correction of +3dB(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 1dB(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, when higher than the baseline monitoring levels, 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.

3.3.2 Maintenance and Calibration

The maintenance and calibration procedures are summarised below:

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

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

3.4 Summary of Monitoring Results

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

The noise monitoring results in the reporting period are summarised in **Table 3.4**. Detailed impact monitoring results are presented in **Appendix C**.

Table 3.4: Summary of Construction Noise Monitoring Results

Monitoring Station	Noise Level Range, dB(A) $L_{eq\ (30mins)}$	Limit Level, dB(A) $L_{eq\ (30mins)}$
NM1A[(1)(3)]	70 - 76	75
NM4[(1)]	60 - 66	70[(2)]
NM5[(1)(3)]	57 - 62	75
NM6[(1)(3)]	60 - 65	75

Notes:

(1) +3dB(A) Façade correction included;

(2) Reduced to 65dB(A) during school examination periods at NM4. School examination took place from 31 May to 4 June 2021.

(3) Some of the noise measurement results were higher than the baseline monitoring levels. In order to reduce the influence of non-Project related noise on the monitoring results, these measurement results were corrected with reference to the baseline monitoring levels.

No complaints were received from any sensitive receiver that triggered the Action Level.

One of the monitoring results triggered the corresponding Limit Level at NM1A on 28 May 2021. In accordance with Event and Action Plan stipulated in the Manual, EPD, IEC and Contractor were informed when the corresponding Limit Level was triggered.

It was confirmed from the on-site observation by monitoring team during the whole period of monitoring that the major noise source was from cicadas chirping. Moreover, no major construction noise was observed during the whole monitoring period. As confirmed with the contractors, noise mitigation measures were implemented for their construction works during the monitoring period.

Therefore, the case was considered not due to Project activities. The mitigation measures that have been implemented were considered effective and will be implemented continuously.

3.5 Conclusion

During the reporting period, it is noted that the vast majority of monitoring results were within their corresponding Action and Limit Levels, while only one result triggered the corresponding Limit Level, and investigation was conducted accordingly.

Based on the investigation findings, the result that triggered the corresponding Limit Level was not due to the Project. Therefore, the Project did not cause adverse impact at the noise sensitive receivers. All required actions under the Event and Action Plan were followed. This case appeared to be due to other sources not related to the Project.

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 cicadas chirping and traffic noise near NM1A, school activities at NM4 and aircraft noise near NM5 and NM6 during this reporting period. It is considered that the monitoring work during the reporting period was effective and there was no adverse impact attributable to the Project activities.

4 Water Quality Monitoring

Water quality monitoring of DO, pH, temperature, salinity, turbidity, suspended solids (SS), total alkalinity, chromium, and nickel was conducted three days per week, at mid-ebb and mid-flood tides, at a total of 23 water quality monitoring stations, comprising 12 impact (IM) stations, 8 sensitive receiver (SR) stations and 3 control (C) stations in the vicinity of water quality sensitive receivers around the airport island in accordance with the Manual. The purpose of water quality monitoring at the IM stations is to promptly capture any potential water quality impact from the Project before it could become apparent at sensitive receivers (represented by the SR stations). **Table 4.1** describes the details of the monitoring stations. **Figure 4.1** shows the locations of the monitoring stations.

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

Monitoring Station	Description	Coordinates		Parameters
		Easting	Northing	
C1	Control Station	804247	815620	General Parameters DO, pH, Temperature, Salinity, Turbidity, SS DCM Parameters Total Alkalinity, Heavy Metals(2)
C2	Control Station	806945	825682	
C3(3)	Control Station	817803	822109	
IM1	Impact Station	807132	817949	
IM2	Impact Station	806166	818163	
IM3	Impact Station	805594	818784	
IM4	Impact Station	804607	819725	
IM5	Impact Station	804867	820735	
IM6	Impact Station	805828	821060	
IM7	Impact Station	806835	821349	
IM8	Impact Station	808140	821830	
IM9	Impact Station	808811	822094	
IM10	Impact Station	809794	822385	
IM11	Impact Station	811460	822057	
IM12	Impact Station	812046	821459	
SR1A(1)	Hong Kong-Zhuhai-Macao Bridge Hong Kong Boundary Crossing Facilities (HKBCF) Seawater Intake for cooling	812660	819977	General Parameters DO, pH, Temperature, Salinity, Turbidity, SS
SR2(3)	Planned marine park / hard corals at The Brothers / Tai Mo To	814166	821463	General Parameters DO, pH, Temperature, Salinity, Turbidity, SS DCM Parameters Total Alkalinity, Heavy Metals(2)(4)
SR3	Sha Chau and Lung Kwu Chau Marine Park / fishing and spawning grounds in North Lantau	807571	822147	General Parameters DO, pH, Temperature, Salinity, Turbidity, SS
SR4A	Sha Lo Wan	807810	817189	

Monitoring Station	Description	Coordinates		Parameters
		Easting	Northing	
SR5A	San Tau Beach SSSI	810696	816593	General Parameters DO, pH, Temperature, Salinity, Turbidity, SS
SR6A(5)	Tai Ho Bay, Near Tai Ho Stream SSSI	814739	817963	
SR7	Ma Wan Fish Culture Zone (FCZ)	823742	823636	
SR8(6)	Seawater Intake for cooling at Hong Kong International Airport (East)	811623	820390	

Notes:

(1) With the operation of HKBCF, water quality monitoring at SR1A station was commenced on 25 October 2018. To better reflect the water quality in the immediate vicinity of the intake, the monitoring location of SR1A has been shifted closer to the intake starting from 5 January 2019.

(2) Details of selection criteria for the two heavy metals for regular DCM monitoring refer to the Detailed Plan on Deep Cement Mixing available on the dedicated 3RS website (**http://env.threerunwaysystem.com/en/ep-submissions.html**). DCM specific water quality monitoring parameters (total alkalinity and heavy metals) were only conducted at C1 to C3, SR2, and IM1 to IM12.

(3) According to the Baseline Water Quality Monitoring Report, C3 station is not adequately representative as a control station of impact/ SR stations during the flood tide. The control reference has been changed from C3 to SR2 from 1 September 2016 onwards.

(4) Total alkalinity and heavy metals results are collected at SR2 as a control station for regular DCM monitoring.

(5) As the access to SR6 was obstructed by the construction activities and temporary structures for Tung Chung New Town Extension, the monitoring location has been relocated to SR6A starting from 8 August 2019.

(6) The monitoring location for SR8 is subject to further changes due to silt curtain arrangements and the progressive relocation of this seawater intake.

4.1 Action and Limit Levels

In accordance with the Manual, baseline water quality levels at the above-mentioned representative water quality monitoring stations were established as presented in the Baseline Water Quality Monitoring Report. The Action and Limit Levels of 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 provided in **Table 4.2**. The control and impact stations during ebb tide and flood 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 SR1A & SR8)					
General Water Quality Monitoring	DO in mg/l (Surface, Middle & Bottom)	Surface and Middle 4.5mg/l		Surface and Middle 4.1mg/l 5mg/l for Fish Culture Zone (SR7) only	
		Bottom 3.4mg/l		Bottom 2.7mg/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	
Regular DCM Monitoring	Total Alkalinity in ppm	95		99	
	Representative Heavy Metals for regular DCM monitoring (Chromium) in µg/l	0.2		0.2	
	Representative Heavy Metals for regular DCM monitoring (Nickel) in µg/l	3.2		3.6	
Action and Limit Levels SR1A					
SS (mg/l))		33		42	
Action and Limit Levels SR8					
SS (mg/l)		52		60	

Notes:

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

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

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

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

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

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

Control Station	Impact Stations
Flood Tide	
C1	IM1, IM2, IM3, IM4, IM5, IM6, IM7, IM8, SR3
SR2(1)	IM7, IM8, IM9, IM10, IM11, IM12, SR1A, SR3, SR4A, SR5A, SR6A, SR8
Ebb Tide	
C1	SR4A, SR5A, SR6A
C2	IM1, IM2, IM3, IM4, IM5, IM6, IM7, IM8, IM9, IM10, IM11, IM12, SR1A, SR2, SR3, SR7, SR8

Note:

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

4.2 Monitoring Equipment

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

Table 4.4: Water Quality Monitoring Equipment

Equipment	Brand and Model	Last Calibration Date	Calibration Certificate Provided in
Multifunctional Meter (measurement of DO, pH, temperature, salinity and turbidity)	YSI 6920V2 (Serial No. 0001C6A7)	22 Apr 2021	Monthly EM&A Report No. 64, Appendix E
	YSI 6920V2 (Serial No. 0001CF6C)	20 May 2021	**Appendix D**
	YSI ProDSS (Serial No. 17H105557)	3 Feb 2021 (1)	Monthly EM&A Report No. 62, Appendix D
	YSI ProDSS (Serial No. 18A104824)	25 Feb 2021 (1)	Monthly EM&A Report No. 62, Appendix D
	YSI ProDSS (Serial No. 15M100005)	25 Mar 2021	Monthly EM&A Report No. 63, Appendix E
	YSI ProDSS (Serial No. 16H104234)	22 Apr 2021	Monthly EM&A Report No. 64, Appendix E
	YSI ProDSS (Serial No. 16H104233)	20 May 2021	**Appendix D**
	YSI ProDSS (Serial No. 17E100747)	25 Mar 2021	Monthly EM&A Report No. 63, Appendix E
Digital Titrator (measurement of total alkalinity)	Titrette Bottle-top Burette, 50ml (Serial No. 10N64701)	24 May 2021	**Appendix D**

Note:

(1) The monitoring equipment was not used in the reporting period after the expiry date of the calibration certificate.

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

4.3 Monitoring Methodology

4.3.1 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, alkalinity 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 4ºC without being frozen), delivered to the laboratory within 24 hours of collection.

4.3.2 Maintenance and Calibration

Calibration of In-situ Instruments

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

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

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

4.3.3 Laboratory Measurement / Analysis

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

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

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

4.4 Summary of Monitoring Results

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

The water quality monitoring results for all parameters, except SS, obtained during the reporting period were within their corresponding Action and Limit Levels. The detailed monitoring results are presented in **Appendix C**.

For SS, a testing result triggered the corresponding Action Level, and investigation was conducted accordingly.

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

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

	IM1	IM2	IM3	IM4	IM5	IM6	IM7	IM8	IM9	IM10	IM11	IM12	SR1A	SR2	SR3	SR4A	SR5A	SR6A	SR7	SR8
01/05/2021																				
04/05/2021																				
06/05/2021																				
08/05/2021																				
11/05/2021																				
13/05/2021																				
15/05/2021																				
18/05/2021																				
20/05/2021																				
22/05/2021																				
25/05/2021																				
27/05/2021														D						
29/05/2021																				
No. of result triggering Action or Limit Level	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:	
	The monitoring results were within the corresponding Action and Limit Levels
D	Monitoring result triggered the Action Level at monitoring station located downstream of the Project based on dominant tidal flow
	Upstream station with respect to the Project during the respective tide based on dominant tidal flow

One of the monitoring results triggered the corresponding Action Level on 27 May 2021. In accordance with Event and Action Plan stipulated in the Manual, IEC and Contractor were informed when the corresponding Action or Limit Levels were triggered.

Investigation focusing on the case which occurred at monitoring station located downstream of the Project was carried out. Details of the Project's marine construction activities and site observations on the concerned monitoring day were collected. Findings were summarized in **Table 4.8**.

Table 4.8: Summary of Findings from Investigation of SS Monitoring Results

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	Action or Limit Level triggered due to Project
27/05/2021	No marine construction works	Not applicable	Not applicable	No	No	No

For SS result recorded in ebb tide at SR2 on 27 May 2021 which triggered the corresponding Action Level, no silt plume was observed at this monitoring station and appropriate mitigation measures were implemented properly by contractors. No construction vessel was observed in the vicinity of SR2 during monitoring. It is noted that no marine construction activity was conducted for the whole project on that day and no abnormal observation was identified on the same day. Furthermore, all monitoring results recorded at IM stations, which are located closer to the Project Area, were within the Action and Limit Levels. Therefore, the case was considered unlikely due to the Project.

4.5 Conclusion

During the reporting period, it is noted that the vast majority of monitoring results were within their corresponding Action and Limit Levels, while only one result triggered the corresponding Action Level, and investigation was conducted accordingly.

Based on the investigation findings, the result that triggered the corresponding Action Level was not due to the Project. Therefore, the Project did not cause adverse impact at the water quality sensitive receivers. All required actions under the Event and Action Plan were followed. These case appeared to be due to natural fluctuation or other sources not related to the Project.

Nevertheless, 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 properly for reclamation works including DCM works, marine filling and seawall construction as recommended in the Manual.

5 Waste Management

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.

5.1 Action and Limit Levels

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 made included provision and maintenance of proper chemical waste storage area, as well as handling, segregation, and regular disposal of general refuse. The contractors have taken actions to implement the recommended measures. Waste management audits were carried out by ET according to the requirement of the Waste Management Plan, Updated EM&A Manual and the implementation schedule of the waste management mitigation measures in **Appendix A**.

Based on updated information provided by contractors, construction waste generated in the reporting period is summarised in **Table 5.2**. Proactive measures have been undertaken during the re-configuration of T2 building. The contractor has established the recycling strategy for C&D materials with proper planning and design to maximize recycling and reuse. Dedicated recyclers were employed for different kinds of recyclable materials by the contractor, and ET and IEC have carried out site visit to recyclers' faciltities to review recycling process. Recycling materials before leaving the site are weighted by a weight bridge and monitored by CCTV system. Dedicated areas for sorting of materials are established on site. Recyclable materials such as steel, reinforcement bar, structural steel, aluminum, copper, other metals and glass are sorted on-site and transported off-site for recycling. ET and IEC have carried out site audits regularly and reviewed the trip ticket system.

Table 5.2: Construction Waste Statistics

	C&D[1] Material Stockpiled for Reuse or Recycle (m^3)	C&D Material Reused in the Project (m^3)	C&D Material Reused in other Projects (m^3)	C&D Material Transferred to Public Fill (m^3)	Chemical Waste (kg)	Chemical Waste (l)	General Refuse (tonne)
April 2021[2][3]	*26,029	*57,644	*1,766	4,140	0	0	1,194
May 2021[2][4]	14,776	153,950	1,444	10,375	0	2,800	1,080

Notes:

(1) C&D refers to Construction and Demolition.

(2) Metals, paper and/or plastics were recycled in the reporting period.

(3) Updated figure for the previous month is reported and marked with an asterisk (*). Updated figures for earlier months will be reported in the forthcoming Quarterly and Annual EM&A Reports.

(4) The data was based on the information provided by contractors up to the submission date of this Monthly EM&A Report, and might be updated in the forthcoming Monthly EM&A Report.

There were no complaints, non-compliance of the WMP, contract-specific WMPs, statutory and contractual requirements that triggered Action and Limit Levels in the reporting period.

Along with the design and construction progress, further development on the treatment level/details and the re-use mode for marine sediment generated from 3RS Project has been conducted according to the EIA recommendation.

5.3 Marine Sediment Management

Marine sediment is managed according to the EIA Report, Updated EM&A Manual and Waste Management Plan of the Project. The sampling process, storage conditions of the excavated marine sediment, treatment process, final backfilling location as well as associated records were inspected and checked by ET and verified by IEC to ensure they were in compliance with the requirements as stipulated in the Waste Management Plan.

Sampling works for marine sediment generated from the reclaimed land area was on-going during the reporting period. The details of the marine sediment sampling, treatment and backfilling will be reported in the subsequent EM&A Reports upon completion.

6 Chinese White Dolphin Monitoring

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

The small vessel line-transect survey should be conducted at a frequency of two full surveys per month, while land-based theodolite tracking survey should be conducted at a frequency of one day per month per station at Sha Chau (SC) and Lung Kwu Chau (LKC) during the construction phase as stipulated in the Manual.

6.1 Action and Limit Levels

The Action and Limit Levels 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 Action and Limit Levels for CWD monitoring were summarised in **Table 6.1**.

Table 6.1: Derived Values of Action and Limit Levels for Chinese White Dolphin Monitoring

	NEL, NWL, AW, WL and SWL as a Whole
Action Level(3)	Running quarterly(1) STG < 1.86 & ANI < 9.35
Limit Level(3)	Two consecutive running quarterly(2) (3-month) STG < 1.86 & ANI < 9.35

Notes: (referring to the baseline monitoring report)

(1) Action Level – running quarterly encounter rates STG & ANI of this month will be calculated from the reporting period and the two preceding survey months.

(2) Limit Level – two consecutive running quarters mean both the running quarterly encounter rates of the preceding month and the running quarterly encounter rates of this month.

(3) Action Level and/or Limit Level will be triggered if both STG and ANI fall below the criteria.

6.2 CWD Monitoring Transects and Stations

6.2.1 Small Vessel Line-transect Survey

Small vessel line-transect surveys were conducted along the transects covering Northeast Lantau (NEL), Northwest Lantau (NWL), Airport West (AW), West Lantau (WL) and Southwest Lantau (SWL) areas as proposed in the Manual, which are consistent with the Agriculture, Fisheries and Conservation Department (AFCD) long-term monitoring programme (except the addition of AW). The AW transect has not been previously surveyed in the AFCD programme due to the restrictions of HKIA Approach Area, nevertheless, this transect was established during the EIA of the 3RS Project and refined in the Manual with the aim to collect project specific baseline information within the HKIA Approach Area to fill the data gap that was not covered by the AFCD programme. This also 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 following the waypoints set for construction phase monitoring as proposed in the Manual are depicted in **Figure 6.1** with the waypoint coordinates of all transect lines given in **Table 6.2**, which are subject to on-site refinement based on the actual survey conditions and constraints.

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

Waypoint	Easting	Northing	Waypoint	Easting	Northing
		NEL			
1S	813525	820900	6N	818568	824433
1N	813525	824657	7S	819532	821420
2S	814556	818449	7N	819532	824209
2N	814559	824768	8S	820451	822125
3S	815542	818807	8N	820451	823671
3N	815542	824882	9S	821504	822371
4S	816506	819480	9N	821504	823761
4N	816506	824859	10S	822513	823268
5S	817537	820220	10N	822513	824321
5N	817537	824613	11S	823477	823402
6S	818568	820735	11N	823477	824613
		NWL			
1S	804671	814577	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
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

Waypoint	Easting	Northing	Waypoint	Easting	Northing
5S	806473	801250	10S	811446	801335
5N	806473	808458	10N	811446	809436

6.2.2 Land-based Theodolite Tracking Survey

Land-based theodolite tracking survey 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 Theodolite 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, AW, WL and SWL areas as proposed in the Manual, which 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 going around 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 pairs. 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 15-20m vessel with a flying bridge observation platform about 4 to 5m above water level and unobstructed forward view, and a team of three to four observers were deployed to undertake the surveys. Two observers were on search effort at all times when following the transect lines with a constant speed of 7 to 8 knots (i.e. 13 to 15 km per hour), one using 7X handheld binoculars and the other using unaided eyes and recording data.

During on-effort survey periods, the survey team recorded effort data including time, position (waypoints), weather conditions (Beaufort sea state and visibility) and distance travelled in each

series with assistance of a handheld GPS device. The GPS device also continuously and automatically logged data including time, position (latitude and longitude) and vessel speed throughout the entire survey.

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

Focal follows of dolphins would be used for providing supplementary information only 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 would involve the boat following (at an appropriate distance to minimise 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 photograph 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 Project during the baseline monitoring stage.

6.3.3 Land-based Theodolite Tracking Survey

Land-based theodolite tracking survey 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 (>1-3km, 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 2-3km of the station were tracked, with effort made to obtain at least two positions for each vessel.

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

6.4 Monitoring Results and Observations

6.4.1 Small Vessel Line-transect Survey

Survey Effort

Within this reporting period, two complete sets of small vessel line-transect surveys were conducted on the 6, 11, 20, 21, 25, 26, 27 and 28 May 2021, covering all transects in NEL, NWL, AW, WL and SWL survey areas for twice.

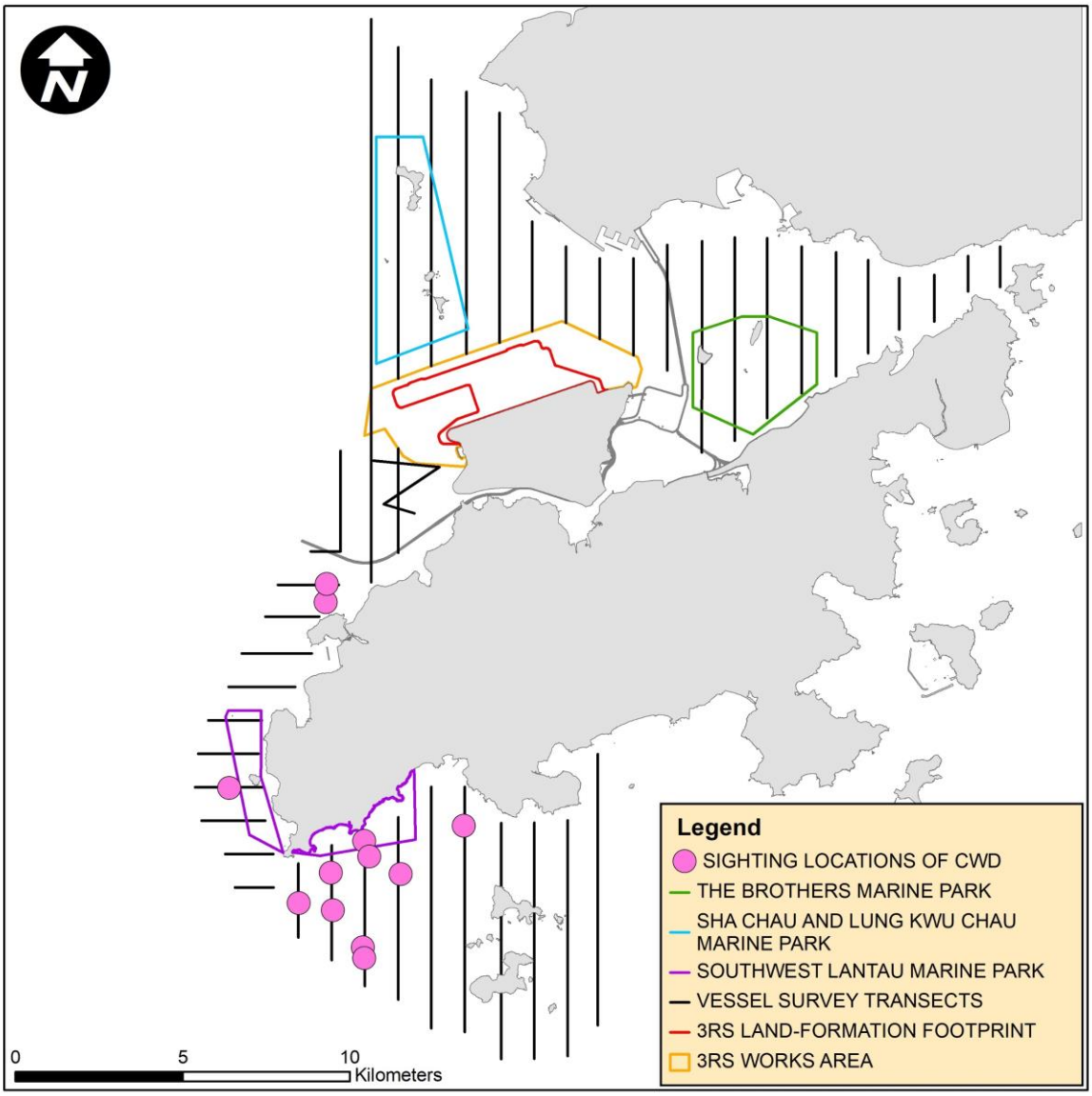
A total of around 450.37 km of survey effort was collected from these surveys and around 83.8% of the survey effort was being conducted under favourable weather condition (i.e. Beaufort Sea State 3 or below with favourable visibility). Details of the survey effort are given in **Appendix C**.

Sighting Distribution

In May 2021, 12 sightings with 31 dolphins were sighted. Amongst these sightings, 11 sightings with 29 dolphins are on-effort records under favourable weather condition (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 May 2021 is illustrated in **Figure 6.3**. In WL, two CWD sightings were recorded at Tai O and one sighting was recorded at Peaked Hill. In SWL, the majority of the CWD sightings were recorded in the western part of the survey area. No CWD sightings were recorded in neither NEL nor NWL survey areas during the reporting period.

Figure 6.3: Sightings Distribution of Chinese White Dolphins



Remarks: (1) Please note that there are 12 pink circles on the map indicating the sighting locations of CWDs. Some of them were very close to each other and therefore may appear overlapped on this distribution map. (2) Marine park excludes land area and the landward boundary generally follows the high water mark along the coastline.

Encounter Rate

Two types of dolphin encounter rates were calculated based on the vessel survey data. 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 were used)

In May 2021, a total of around 377.52 km of survey effort were conducted under Beaufort Sea State 3 or below with favourable visibility, whilst a total number of 11 on-effort sightings with 29 dolphins were sighted under such condition. Calculation of the encounter rates for the month are shown in **Appendix C**.

For the running quarter of the reporting period (i.e., from March to May 2021), a total of around 1130.01 km of survey effort were conducted under Beaufort Sea State 3 or below with favourable visibility, whilst a total number of 26 on-effort sightings and a total number of 70 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 May 2021 and during the running quarter are presented in **Table 6.4** below and compared with the Action Level. Although the running quarterly encounter rate ANI fall below the Action Level, the Action Level is not triggered as the running quarterly STG remain 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)
May 2021	2.91	7.68
Running Quarter from March to May 2021(1)	2.30	6.19
Action Level	Running quarterly(1) STG < 1.86 & ANI < 9.35	

Note: (1) Running quarterly encounter rates STG & ANI were calculated from data collected in the reporting period and the two preceding survey months, i.e. the data from March to May 2021, containing six sets of transect surveys for all monitoring areas. Action Level will be triggered if both STG and ANI fall below the criteria.

Group Size

In May 2021, 12 groups of 31 dolphins in total were sighted, and the average group size of CWDs was 2.58 dolphins per group. Sightings with small group size (i.e. 1-2 dolphins) were dominant. There were no CWD sightings with large group size (i.e. 10 or more dolphins).

Activities and Association with Fishing Boats

Two CWD sightings were recorded engaging in feeding activities in May 2021 but no association with operating fishing boats was observed.

Mother-calf Pair

In May 2021, there was one CWD sighting recorded with the presence of mother-and-unspotted juvenile pair of which the sighting was recoded in SWL.

6.4.2 Photo Identification

In May 2021, a total number of 18 different CWD individuals were identified for totally 21 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-mmm-yy)	Sighting Group No.	Area	Individual ID	Date of Sighting (dd-mmm-yy)	Sighting Group No.	Area
NLMM061	26-May-21	2	SWL	WLMM004	25-May-21	7	SWL
SLMM003	25-May-21	6	SWL		26-May-21	3	SWL
SLMM010	25-May-21	4	SWL	WLMM007	25-May-21	4	SWL
	28-May-21	2	WL	WLMM018	25-May-21	7	SWL
SLMM030	25-May-21	5	SWL	WLMM061	11-May-21	1	WL
SLMM034	25-May-21	6	SWL	WLMM063	25-May-21	7	SWL
SLMM037	25-May-21	6	SWL		26-May-21	3	SWL
SLMM045	28-May-21	1	WL	WLMM065	26-May-21	2	SWL
SLMM049	25-May-21	4	SWL	WLMM079	26-May-21	3	SWL
SLMM052	25-May-21	6	SWL	WLMM135	26-May-21	3	SWL
WLM0027	25-May-21	3	SWL				

6.4.3 Land-based Theodolite Tracking Survey

Survey Effort

Land-based theodolite tracking surveys were conducted at SC on 13 May 2021 and at LKC on 25 May 2021, with a total of two days of land-based theodolite tracking survey effort accomplished in this reporting period. No CWD groups were tracked during the reporting period. Information of survey effort and CWD groups are presented in **Table 6.6**. Details of the survey effort are presented in **Appendix C**.

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	1	6:00	0	0
Sha Chau	1	6:00	0	0
TOTAL	**2**	**12:00**	**0**	**0**

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. During this reporting period, the C-POD was retrieved on 20 May 2021 and the F-POD was deployed and positioned at south of Sha Chau Island inside the SCLKCMP (**Figure 6.5**). Both C-POD and F-POD are considered as effective PAM devices in detecting CWD occurrence, and F-POD was the main PAM device deployed where feasible. Acoustic data would be reviewed to give an indication of CWDs occurrence patterns and anthropogenic noise information. Analysis would involve use of proprietary software for objective automated data analyses and experienced analysts to perform visual validation for assessment of dolphin detection. As the period of data collection and analysis takes about four months, PAM results could not be reported in monthly intervals but report for supplementing the annual CWD monitoring analysis.

6.6 Site Audit for CWD-related Mitigation Measures

During the reporting period, silt curtains were in place by the contractor for marine filling, in which dolphin observers were deployed by contractor in accordance with the MMWP. Overall, 2 to 5 dolphin observation stations and teams of at least two dolphin observers were deployed by the contractors for continuous monitoring of the DEZ for DCM works and seawall construction works in accordance with the DEZ Plan. Trainings for the proposed dolphin observers on the implementation of MMWP and DEZ monitoring were provided by the ET prior to the aforementioned works, with a cumulative total of 704 individuals being trained and the training records kept by the ET. From the contractors' MMWP observation records, no dolphin or other marine mammals were observed within or around the silt curtains. As for DEZ monitoring records, no dolphin or other marine mammals were observed within or around the DEZs in this reporting month. These contractors' records were also audited by the ET during site inspection.

Audits of acoustic decoupling measures 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 7.4** and **Section 7.5** 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 survey 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 two days of land-based theodolite tracking survey effort as scheduled. The running quarterly encounter rates STG and ANI in the reporting period did not trigger the Action Level for CWD monitoring.

7 Environmental Site Inspection and Audit

7.1 Environmental Site Inspection

Site inspections of the construction works were carried out on a weekly basis to monitor 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. Besides, *ad-hoc* site inspections were conducted by ET and IEC if environmental problems were identified, or subsequent to receipt of an environmental complaint, or as part of the investigation work. These site inspections provided a direct means to reinforce the specified environmental protection requirements and pollution control measures in construction sites.

During site inspections, environmental situation, status of implementation of pollution control and mitigation measures were observed. Environmental documents and site records, including waste disposal record, maintenance record of environmental equipment, and relevant environmental permit and licences, were also checked on site. Observations were recorded in the site inspection checklist and passed to the contractor together with the recommended mitigation measures where necessary in order to advise contractors on environmental improvement, awareness and on-site enhancement measures. The observations were made with reference to the following information during the site inspections:

- The EIA and EM&A requirements;
- Relevant environmental protection laws, guidelines, and practice notes;
- The EP conditions and other submissions under the EP;
- Monitoring results of EM&A programme;
- Works progress and programme;
- Proposal of individual works;
- Contract specifications on environmental protection; and
- Previous site inspection results.

Good site practices were observed in site inspections during the reporting period. Advice were given when necessary to ensure the construction workforce were familiar with relevant procedures, and to maintain good environmental performance on site. Regular toolbox talks on environmental issues were organised for the construction workforce by the contractors to ensure understanding and proper implementation of environmental protection and pollution control mitigation measures.

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 Landscape and Visual Mitigation Measures

Implementation of applicable landscape and visual mitigation measures (reference to the environmental protection measures CM1 – CM10 in **Appendix A**) was monitored in accordance with the Manual. All measures undertaken by both the contractor and the landscape contractor during the construction phase and first year of the operation phase shall be audited by a landscape architect, as a member of the ET, on a regular basis to ensure compliance with the

intended aims of the measures. Site inspections shall be undertaken at least once every two months during the operation phase.

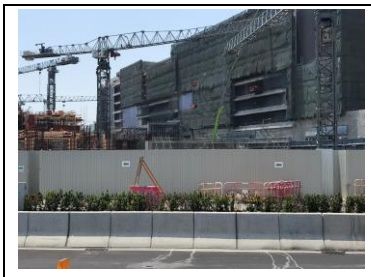
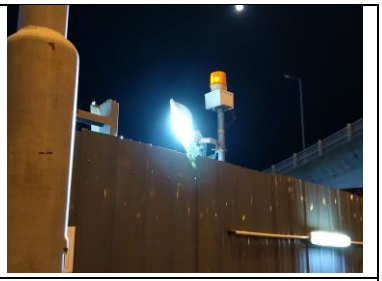
The implementation status of the environmental protection measures are summarized below in **Table 7.1**. Examples of landscape and visual mitigation measures are shown in **Table 7.2**. The monitoring programme for detailed design, construction, establishment works and long term management (10 years) stages is presented in **Table 7.3**. Event and Action Plan for Landscape and Visual impacts is stated in **Table 7.4**.

Table 7.1: Landscape and Visual – Construction Phase Audit Summary

Landscape and Visual Mitigation Measures during Construction	Implementation Status	Relevant Contract(s) in the Reporting Period
CM1- The construction area and contractor's temporary works areas shall be minimised to avoid impacts on adjacent landscape.	The implementation of mitigation measures were checked by ET during weekly site inspection and clarified by the Contractors during the monthly Environmental Management Meetings. Implementation of the measures CM5, CM6 and CM7 by Contractors was observed.	3RS Project contracts
CM2 – Reduction of construction period to practical minimum		
CM3 – Phasing of the construction stage to reduce visual impacts during the construction phase.		
CM4 – Construction traffic (land and sea) including construction plants, construction vessels and barges shall be kept to a practical minimum.		
CM5 – Erection of decorative mesh screens or construction hoardings around works areas in visually unobtrusive colours.		
CM6 – Avoidance of excessive height and bulk of site buildings and structures		
CM7 – Control of night-time lighting by hooding all lights and through minimisation of night working periods		
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	Tree Protection Specifications have been provided in the relevant Contract Specifications respectively for implementation by the Contractors under the Project. The Contractors' performance on the implementation of the trees maintenance and protection measures were observed and checked by the ET weekly during construction period.	3302, 3503, 3508, 3602, 3801 3802 (To be implemented)

Landscape and Visual Mitigation Measures during Construction	Implementation Status	Relevant Contract(s) in the Reporting Period
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	Tree Transplanting Specifications have been provided in the relevant Contract Specifications respectively for implementation by the Contractors under the Project where trees will unavoidably be affected by the construction works. The Contractors were required to submit Method Statements for tree transplanting prior to the transplanting works. Tree inspections were conducted by ET to check the tree transplanting works implemented by the Contractors on site. The Contractors' performance on the implementation of trees maintenance and protection measures on transplanted trees were observed and checked by the ET bi-monthly during the 12-month establishment period after the completion of each batch of transplanting works. Long term management of the transplanted trees were currently monitored by ET annually.	3503, 3508, 3801 3802 (To be implemented)
CM 10 – Land formation works shall be followed with advanced hydroseeding around taxiways and runways as soon as practical	To be implemented around taxiways and runways as soon as practicable.	To be implemented

Table 7.2: Examples of Landscape and Visual Mitigation Measures in the Reporting Period

		
Erection of site hoardings around works area in unobtrusive colours (CM5)	Avoidance of excessive height and bulk of site buildings (CM6)	Control of night-time lighting by hooding and minimisation of night working period (CM7)
		
General view of Tree Protection Zone for retained tree (CM8)	General view of a transplanted tree (CM9)	

In accordance with the EM&A Manual, all existing trees shall be protected carefully during construction. Trees unavoidably affected by the works shall be transplanted where practical. In this reporting period, the cumulative total number of retained and transplanted trees under the Project were 98 and 14, respectively. A works area including 4 retained trees was handed over from Contract 3801 to Contract 3508 during the reporting period. Moreover, Contract 3801 has reviewed their initial tree survey areas and confirmed that some of the surveyed areas were not to be their works areas and therefore 41 retained trees were excluded from the Project. One retained tree was removed due to safety concern of Airport Express Line (AEL) operation. Details of the retained trees, transplanted trees and to-be-transplanted trees under the Project are summarized in **Table 7.5:** . Photos of transplanted trees are presented in **Table 7.7**.

Details of the retained trees are to be discussed in the Quarterly EM&A reports.

Table 7.3: Monitoring Programme for Landscape and Visual

Stage	Monitoring Task	Monitoring Report	Form of Approval	Frequency
Detailed Design	Checking of design works against the recommendations of the landscape and visual impact assessments within the EIA shall be undertaken during detailed design and tender stage, to ensure that they fulfil the intention of the mitigation measures. Any changes to the design, including design changes on site shall also be checked.	Report by AAHK / PM confirming that the design conforms to requirements of EP.	Approved by Client	At the end of the Detailed Design Phase
Construction	Checking of the contractor's operations during the construction period.	Report on Contractor's compliance, by ET	Counter signature of report by IEC	Weekly
Establishment Works	Checking of the planting works during the twelve-month Establishment Period after completion of each batch of transplanting works.	Report on Contractor's compliance, by ET	Counter signature of report by IEC	Every two months
Long Term Management (10 year)	Monitoring of the long-term management of the planting works in the period up to 10 years after completion of each batch of transplanting works.	Report on Compliance by ET or Maintenance Agency as appropriate	Counter signature of report by Management Agency	Annually

Table 7.4: Event and Action Plan for Landscape and Visual

Event Action Level	Action			
	ET	IEC	AAHK / PM	Contractor
Design Check	Check final design conforms to the requirements of EP and prepare report.	Check report. Recommend remedial design if necessary.	Undertake remedial design if necessary.	
Non-conformity on one occasion	Identify source. Inform IEC and AAHK / PM. Discuss remedial actions with IEC, AAHK / PM and Contractor. Monitor remedial actions until rectification has been completed.	Check report. Check Contractor's working method. Discuss with ET and Contractor on possible remedial measures. Advise AAHK / PM on effectiveness of proposed remedial measures. Check implementation of remedial measures.	Notify Contractor. Ensure remedial measures are properly implemented.	Amend working methods to prevent recurrence of non-conformity. Rectify damage and undertake additional action necessary.
Repeated Non-conformity	Identify source. Inform IEC and AAHK / PM. Increase monitoring frequency. Discuss remedial actions with IEC, AAHK / PM and Contractor. Monitor remedial actions until rectification has been completed. If non-conformity stops, cease additional monitoring.	Check monitoring report. Check Contractor's working method. Discuss with ET and Contractor on possible remedial measures. Advise AAHK / PM on effectiveness of proposed remedial measures. Supervise implementation of remedial measures.	Notify Contractor. Ensure remedial measures area properly implemented.	Amend working methods to prevent recurrence of non-conformity. Rectify damage and undertake additional action necessary.

Table 7.5: Summary of the Number of Retained, Transplanted and To-be-transplanted Trees in the Reporting Period

Existing				
Contract	Retain (nos.)	Transplanted (nos.)		To-be-transplanted (nos.)
		Establishment Period	Maintenance Period	
3302	9	0	0	0
3503	19	6	3	0
3508[(1)]	25	0	0	12
3602	2	0	0	0
3801	43	0	5	0
Sub-total	98	6	8	12
Provisional				
Contract	**Retain (nos.)**	**Transplanted (nos.)**		**To-be-transplanted (nos.)**
3508[(1)]	130	0		10
Sub-total	130	0		10
Grand Total	**228**	**14**		**22**

Notes:

(1) As some of the site areas have been handed over to Contract 3508, Contractor of Contract 3508 is currently managing some of the trees. Existing trees to be managed by Contract 3508 is subject to change after initial tree surveys for each batch of site areas have been conducted by the Contractor.

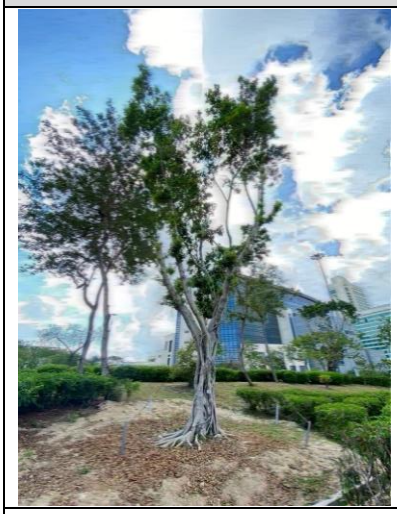
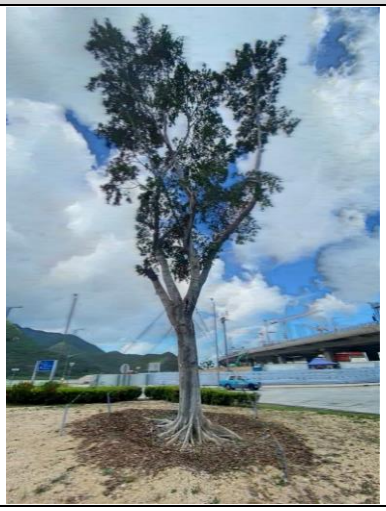
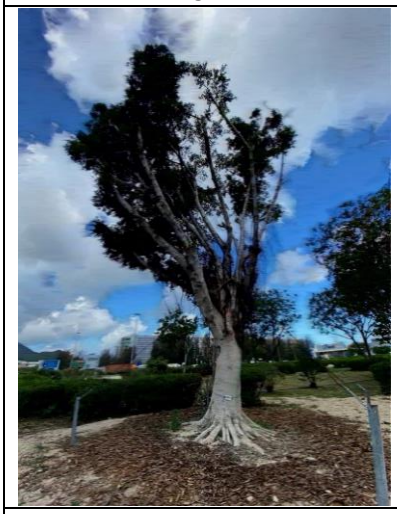
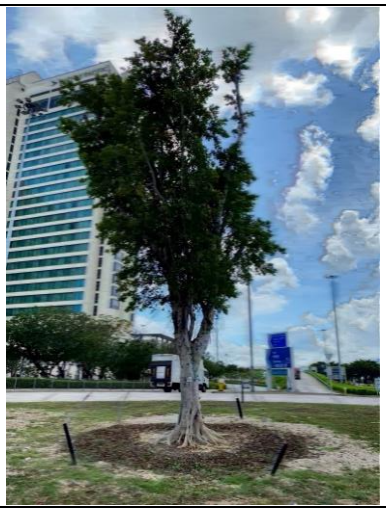
Summary of the updated transplanted trees and photos are presented in **Table 7.6** and **Table 7.7** respectively.

Table 7.6: Summary of the Transplanted Trees Updated in the Reporting Period

Tree ID	Transplant Date	Management Stage	Management Agency	Remarks
CT276	3 May 2018	Establishment period 4 May 2018 – May 2019	Contract 3801	Next inspection will be conducted in February 2022. Photos of the last inspection in February 2021 can be referred to Table 7.7 of the Construction Phase Monthly EM&A Report No.62.
		Long Term Management period Jun 2019 – May 2028	Southern Landside Petrol Filling Station	
CT1253	4 May 2018	Establishment period 5 May 2018 – May 2019	Contract 3801	
		Long Term Management period Jun 2019 – May 2028	Southern Landside Petrol Filling Station	
T835	22 Jan 2020	Establishment period 23 Jan 2020 – Jan 2021	Contract 3503	Next inspection will be conducted in February 2022. Photos of the last inspection in February 2021 can be referred to Table 7.7 of the Construction Phase Monthly EM&A Report No.62.
		Long Term Management period Feb 2021 – Jan 2030		
T836	13 Dec 2019	Establishment period 14 Dec 2020 – Jan 2021	Contract 3503	
		Long Term Management period Feb 2021 – Jan 2030		
T838	22 Jan 2020	Establishment period 23 Jan 2020 – Jan 2021	Contract 3503	
		Long Term Management period Feb 2021 – Jan 2030		
T812	21 Dec 2020	Establishment period 22 Dec 2020 – Dec 2021	Contract 3503	Next inspection will be conducted in June 2021. Photos of the last inspection in May 2021 were shown in **Table 7.7**.
T814	20 Dec 2020	Establishment period 21 Dec 2020 – Dec 2021	Contract 3503	
T815	15 Dec 2020	Establishment period 16 Dec 2020 – Dec 2021	Contract 3503	
T829	18 Dec 2020	Establishment period 19 Dec 2020 – Dec 2021	Contract 3503	
T830	14 Dec 2020	Establishment period 15 Dec 2020 – Dec 2021	Contract 3503	
T831	19 Dec 2020	Establishment period 20 Dec 2020 – Dec 2021	Contract 3503	
CT1194	4 May 2018	Establishment period 5 May 2018 – May 2019	Contract 3801	NA
		Long Term Management period Jun 2019 – May 2028	Southern Landside Petrol Filling Station	Uprooted and collapsed due to Typhoon Higos on 18 August 2020. Tree removal was conducted as recommended by tree specialist of the contractor of Southern Landside Petrol Filing Station.

Tree ID	Transplant Date	Management Stage	Management Agency	Remarks
CT1794	3 May 2018	Establishment period 4 May 2018 – May 2019	Contract 3801	NA
		Long Term Management period Jun 2019 – May 2028	AsiaWorld-Expo	The tree within the land parcel was acquired by the government for construction of emergency hospital to handle COVID19 pandemic at AsiaWorld-Expo. The tree was felled in late 2020.
CT1795	3 May 2018	Establishment period 4 May 2018 – May 2019	Contract 3801	NA
		Long Term Management period Jun 2019 – May 2028	AsiaWorld-Expo	The tree within the land parcel was acquired by the government for construction of emergency hospital to handle COVID19 pandemic at AsiaWorld-Expo. The tree was felled in late 2020.

Table 7.7: Photos of the Existing Transplanted Trees

Under 12-month Establishment Period:		
		
T812	T814	T815
		
T829	T830	T831

7.3 Land Contamination Assessment

The Supplementary CAP was submitted to EPD pursuant to EP Condition 2.20. The CARs for Golf Course and T2 Emergency Power Supply Systems (EPSS) were submitted to EPD in accordance with EP Condition 1.9 and the Supplementary CAP in which no land contamination issues were identified. EPD has issued no further comment for aforesaid CARs. No leakage was found after the removal of underground fuel pipelines and all required additional photos have been submitted to EPD.

According to the approved supplementary CAP, there are 3 remaining locations where site re-appraisal / additional site investigation are proposed. Based on the latest construction information, which has been presented in Appendix A Implementation Schedule of the approved CARs for T2 EPSS, there is no development programme for these locations at this stage. As such, the status of site re-appraisal/ additional site investigation shall be further updated upon latest development programme is available.

7.4 Audit of 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 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 implement the mitigation measure of requiring 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.

Due to the COVID-19 pandemic, all SkyPier HSF services to/from Zhuhai and Macau have been suspended from 25 March 2020 until further notice. No ferry movement between HKIA SkyPier and Zhuhai and Macau was recorded in May 2021. 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 summarised in **Table 7.8**.

The daily movement of all SkyPier HSFs, including those not using the diverted route, in this reporting period (i.e., 2 to 3 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.

As updated by CLP Power, the construction works of the Hong Kong Offshore LNG Terminal Project may affect the route diversion operation of the SkyPier HSFs from Q3 to Q4 2021. The captains were informed on the issue and ET will continue to closely monitor the implementation of the SkyPier Plan in the period.

Table 7.8: Summary of Key Audit Findings against the SkyPier Plan

Requirements in the SkyPier Plan	1 to 31 May 2021
Total number of ferry movements recorded and audited for HSF to/from Zhuhai and Macau	0
Use diverted route and enter / leave SCZ through Gate Access Points	0 deviation
Daily Cap for all SkyPier HSFs including those not using diverted route	2 to 3 daily movement (within the maximum daily cap - 125 daily movements)

7.5 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 May 2020 by EPD under EP Condition 2.9. The approved Plan is available on the dedicated website of the Project.

ET carried out the following actions during the reporting period:

- Two skipper training sessions were held for contractors' concerned skippers of relevant construction vessels to familiarize them with the predefined routes; general education on local cetaceans; guidelines for avoiding adverse water quality impact; the required environmental practices / measures while operating construction and associated vessels under the Project; and guidelines for operating vessels safely in the presence of CWDs. The list of all trained skippers was properly recorded and maintained by ET.

- Five skipper training sessions were held by contractors' Environmental Officers. Competency tests were subsequently conducted with the trained skippers by ET. The list of all trained skippers was properly recorded and maintained by ET.
- Based on the updated record, 8 skippers were trained by ET and 15 skippers were trained by contractors' Environmental Officers in the previous period. In this reporting period, 30 skippers were trained by ET and 7 skippers were trained by contractors' Environmental Officers. In total, 1784 skippers were trained from August 2016 to May 2021.
- The MSS automatically recorded deviation cases such as speeding, entering no entry zone and not travelling through the designated gate. ET conducted checking to ensure the MSS records deviation cases accurately.
- Deviations such as speeding in the works area, entered no entry zone, and entering from non-designated gates were identified. All the concerned contractors were reminded to comply with the requirements of the MTRMP-CAV during the bi-weekly Construction Traffic Control Centre (CTCC) audit.
- Three-month rolling programmes (one month record and three months forecast) for construction vessel activities were received from the contractors in order to help maintain the number of construction and associated vessels on site to a practicable minimal level.

7.6 Implementation of Dolphin Exclusion Zone

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

During the reporting period, ET was notified that no dolphin sightings were recorded within the DEZ by the contractors. The ET checked the dolphin sighting record and relevant records by the contractors to audit the implementation of DEZ.

7.7 Status of Submissions under Environmental Permits

The current status of submissions under the EP up to the reporting period is presented in **Table 7.9**.

Table 7.9: 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	

EP Condition	Submission	Status
2.16	Spill Response Plan	
2.17	Detailed Plan on Deep Cement Mixing	
2.18	Landscape & Visual Plan	
2.19	Waste Management Plan	
2.20	Supplementary Contamination Assessment Plan	
3.1	Updated EM&A Manual	
3.4	Baseline Monitoring Reports	

7.8 Compliance with Other Statutory Environmental Requirements

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

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

7.9.1 Complaints

Complaint received in the previous reporting period

For the complaint received on 20 April 2021 regarding alleged dusty and muddy vehicles from 3RS Project at Tuen Mun Public Cargo Working Area (TMPCWA), the case was investigated by ET in accordance with the Manual and the Complaint Management Plan of the Project. The ET requested the related 3RS contractors to provide more information regarding the complaint. According to the information provided by the contractors, the ET identified the relevant contractor and noted the alleged vehicle was a cement truck transported by RoRo barge service running between the 3RS reclaimed land and TMPCWA. Based on ET's regular site inspections on this contract in April 2021, it was observed that the contractor had conducted wheel washing on vehicles prior to leaving the works area.

An ad hoc inspection at TMPCWA was arranged after receiving the complaint. While no RoRo barge was observed at TMPCWA during the inspection, soil and sand were observed on the road surface. Another ad hoc inspection at North Eastern Quay on 3RS reclaimed land, the location of the said RoRo barge service, was conducted in early May 2021 where dusty surfaces at the quay area was observed. The ET reminded the quay-managing contractor to provide adequate water spraying at the quay area. Having said that, it was noted that all air quality monitoring results of the Project in April 2021 were within the corresponding Action and Limit Levels at all monitoring stations.

To follow up, individual contractors were reminded to properly wash the wheels of outgoing trucks from their respective construction sites. In the short term, a section of haul road connected to the quay would be paved to reduce fugitive dust generation and manual wheel washing would be implemented continuously. In the long term, an enhanced wheel washing measure is planned at both the North Eastern and Western Quay on the 3RS reclaimed land. ET and IEC would continue to monitor the wheel washing performance of all the contractors during the environmental site inspections. The complaint case was considered closed.

Complaint received in this reporting period

For the complaint received on 14 May 2021 regarding dust issue at 3RS construction site area, the case was investigated by ET in accordance with the Manual and the Complaint Management Plan of the Project. The anonymous complainant provided photos and did not provide any details on the complaint such as time and location of the observation. The ET recognized the concerned area and identified one related 3RS contractor and requested the contractor to provide information regarding the complaint. The contractor replied they had enhanced dust suppression measures by installing 360-degree water sprinklers. They also provided water spraying record of May and their dust control management plan. After receiving the complaint, a joint inspection by ET, IEC and AAHK was arranged, in which sprinklers and water trucks were both observed operating, and the installation of more sprinklers was underway at the concerned area. Nonetheless, ET reminded the contractor to enhance dust mitigation measures at the concerned area and review the dust control management plan regularly. Proper dust mitigation measures were observed during another joint inspection by ET, AAHK and EPD in late May 2021. In parallel, ET checked the daytime wind speed for 12 May 2021 at Chek Lap Kok wind station of Hong Kong Observatory. It was noted that the wind speed reached 26-27km/hr for several periods of time which might suggest the presence of sudden gust at the concerned area. Moreover, all air quality monitoring results of the Project in May 2021 were within the corresponding Action and Limit Levels at all monitoring stations. In view of the information mentioned above, the dust generation might be caused by sudden gust. Having said that, ET reminded the contractor to regularly review and update their dust control management plan and continue implementing dust mitigation measures according to the plan. ET and IEC would continue to monitor the related contractor's dust mitigation measures during the environmental site inspections. Hence, the complaint case was considered closed.

7.9.2 Notifications of Summons or Status of Prosecution

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

7.9.3 Cumulative Statistics

Cumulative statistics on complaints, notifications of summons and status of prosecutions are summarised 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:

Reclamation Works:

Contract 3206 Main Reclamation Works

- DCM works;
- Land-based ground improvement works;
- Seawall construction;
- Marine filling; and
- Sorting and reuse of inert waste from other 3RS contracts.

Airfield Works:

Contract 3301 North Runway Crossover Taxiway

- Cable ducting works; and
- Paving works.

Contract 3302 Eastern Vehicular Tunnel Advance Works

- Cable laying and ducting works;
- Backfilling and reinstatement works; and
- Piling and structure works;

Contract 3303 Third Runway and Associated Works

- Land-based ground improvement works;
- Operation of asphalt plant;
- Footing and utilities work; and
- Cable laying and ducting works.

Contract 3305 Airfield Ground Lighting System

- Genset installation; and
- Site establishment.

Contract 3307 Fire Training Facility

- Architectural, Builder's and Finishing works;
- Drainage and utilities works; and
- Building construction.

Third Runway Concourse:

Contract 3403 New Integrated Airport Centres Building and Civil Works

- Architectural, Builder's Work and Finishing works;
- Underground utilities construction;
- Footing construction; and
- Pre-boring and sheetpiling works.

Contract 3405 Third Runway Concourse Foundation and Substructure Works

- Foundation works;
- Piling work;
- Excavation and backfilling; and
- Road formation.

Terminal 2 Expansion:

Contract 3503 Terminal 2 Foundation and Substructure Works

- T2 re-configuration;
- Excavation works;
- Utilities and road work; and
- Piling and structure works.

Contract 3508 Terminal 2 Expansion Works

- Excavation and footing construction;
- Site formation;
- Piling work; and
- Builders' works.

Automated People Mover (APM) and Baggage Handling System (BHS):

Contract 3601 New Automated People Mover System (TRC Line)

- Rebar fixing;
- Formwork erection and removal;
- Guidebeam installation; and
- Concreting work.

Contract 3602 Existing APM System Modification Works

- Car modification; and
- Concreting work.

Construction Support (Facilities):

Contract 3721 Construction Support Infrastructure Works

- Excavation and backfilling;
- Laying of drainage pipes and ducts; and
- Road works.

Contract 3722 Construction Support Facilities

- Foundation works;
- Erection of superstructure; and
- Site establishment.

Contract 3723 Construction Support Facilities

- Foundation works;
- Erection of superstructure; and
- Site establishment.

Airport Support Infrastructure:

Contract 3801 APM and BHS Tunnels on Existing Airport Island

- Formwork and rebar fixing;
- Construction of working platform;
- Cofferdam for shaft;
- Site clearance; and
- Demolition works.

Contract 3802 APM and BHS Tunnels and Related Works

- Construction of Airside Fire Station and marine sediment treatment plant;
- Installation of sheet pipes and dewatering well;
- Pre-drilling; and
- Ducting works.

Construction Support (Services / Licenses):

Contract 3901A Concrete Batching Facility

- Plant operation; and
- Material conveyor belt construction.

Contract 3901B Concrete Batching Facility

- Plant operation; and
- Foundation works for conveyor belt.

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 DCM works and marine filling;
- DEZ monitoring for ground improvement works (DCM works) and seawall construction;
- Implementation of MMWP for silt curtain deployment;
- Sorting, recycling, storage and disposal of general refuse and construction waste;
- Reuse of treated marine sediments from piling and excavation works;
- 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**.

8.4 Review of the Key Assumptions Adopted in the EIA Report

With reference to Appendix E of the Manual, it is noted that the key assumptions adopted in approved EIA report for the construction phase are still valid and no major changes are involved. The environmental mitigation measures recommended in the approved EIA Report remain applicable and shall be implemented in undertaking construction works for the Project.

9 Conclusion and Recommendation

The key activities of the Project carried out in the reporting period included reclamation works and land-based works. Works in the reclamation areas included DCM works, marine filling, seawall and facilities construction, together with runway and associated works. Land-based works on existing airport island involved mainly airfield works, foundation and substructure work for Terminal 2 expansion, modification and tunnel work for APM and BHS systems, and preparation work for utilities, with activities include site establishment, site office construction, road and drainage works, cable ducting, demolition of existing facilities, piling, and excavation works.

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

Monitoring results of construction dust, construction noise, water quality, construction waste, and CWD did not trigger the corresponding Action and Limit Levels during the reporting period.

One monitoring result of construction noise exceeded the relevant Limit Level, and the corresponding investigation was conducted as stipulated in the EM&A programme. The investigation findings concluded that the exceedance was not due to the Project.

The water quality monitoring results for all parameters, except suspended solids (SS), obtained during the reporting period were within the corresponding Action and Limit Levels stipulated in the EM&A programme. Relevant investigation and follow-up actions will be conducted according to the EM&A programme if the corresponding Action and Limit Levels are triggered. For SS, one of the testing results triggered the relevant Action Level, and the corresponding investigation was conducted accordingly. The investigation findings concluded that the case was not related to the Project. To conclude, the construction activities in the reporting period did not introduce adverse impact to all water quality sensitive receivers.

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. Site inspection findings were recorded in the site inspection checklists and provided to the contractors to follow up.

On the implementation of the SkyPier Plan, due to the COVID-19 pandemic, all SkyPier HSF services to/from Zhuhai and Macau have been suspended from 25 March 2020 until further notice. No HSF movement between HKIA SkyPier and Zhuhai and Macau was recorded during the reporting period. Therefore, no deviation was recorded in the HSF monitoring in the reporting period. The daily movements of all SkyPier HSFs in the reporting period, including those not using the diverted route, were in the range of 2 to 3 daily movements, which are within the maximum daily cap of 125 daily movements.

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

ET reminded contractors that all vessels shall avoid entering the no-entry zone, in particular the Brothers Marine Park and the Sha Chau & Lung Kwu Chau Marine Park. Three-month rolling programmes for construction vessel activities, which ensures the proposed vessels are necessary and minimal through good planning, were also received from contractors.

Figures

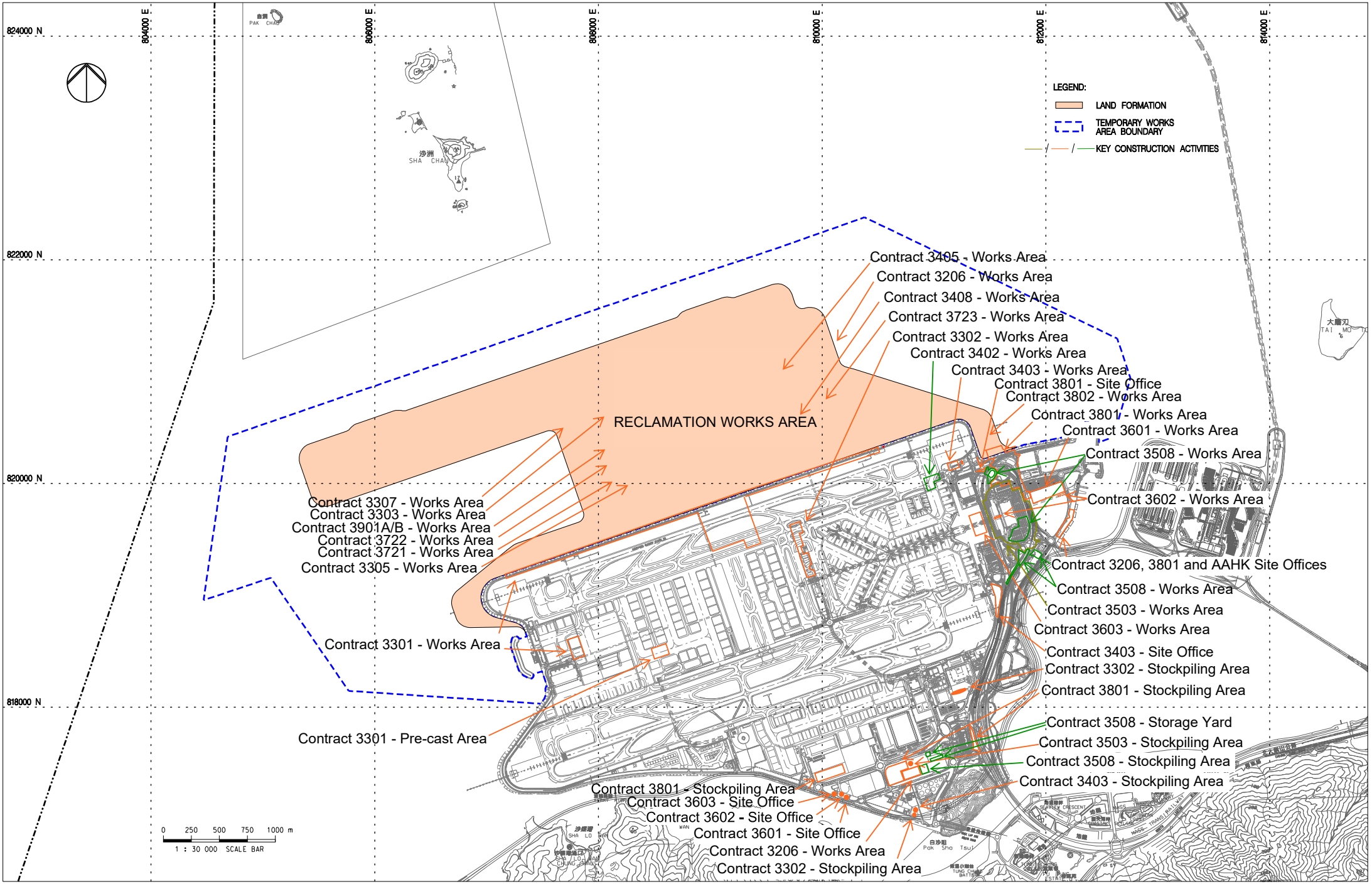
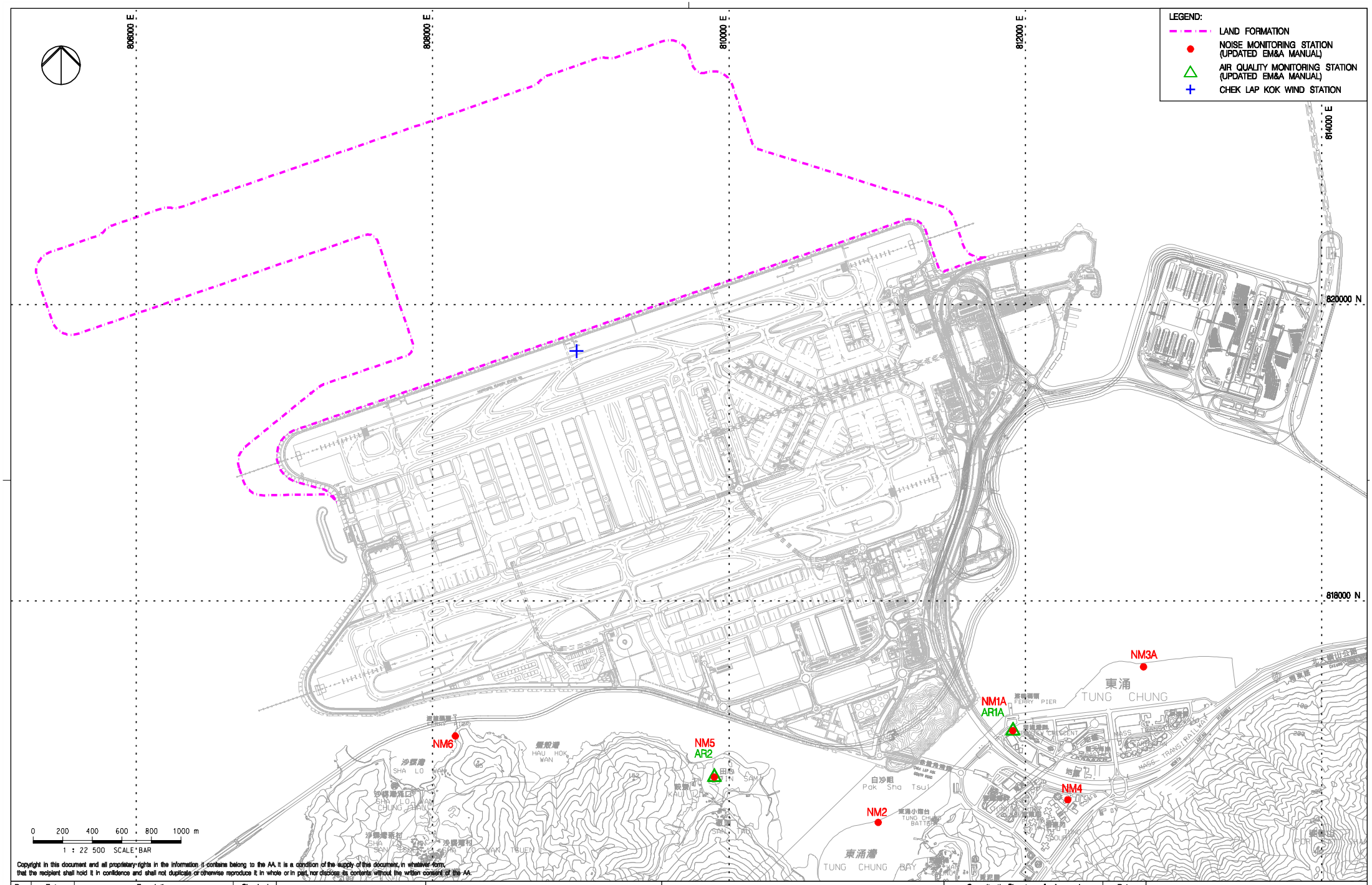


FIGURE 1.1 LOCATIONS OF KEY CONSTRUCTION ACTIVITIES

Note: The locations are for indicative purpose. The actual construction work locations are in accordnace with the construction work programme.



Rev.	Date	Description	Checked
A	06JAN16	FIRST ISSUE	RO
B	29JAN16	GENERAL REVISION	RO
C	11FEB16	GENERAL REVISION	RO
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香港國際機場 HONG KONG INTERNATIONAL AIRPORT

MOTT MACDONALD

Title

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

Consultant's Signatures for Approval		Date
Design	TK	29OCT18
Checkers	TK	29OCT18
Approver	EC	29OCT18

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

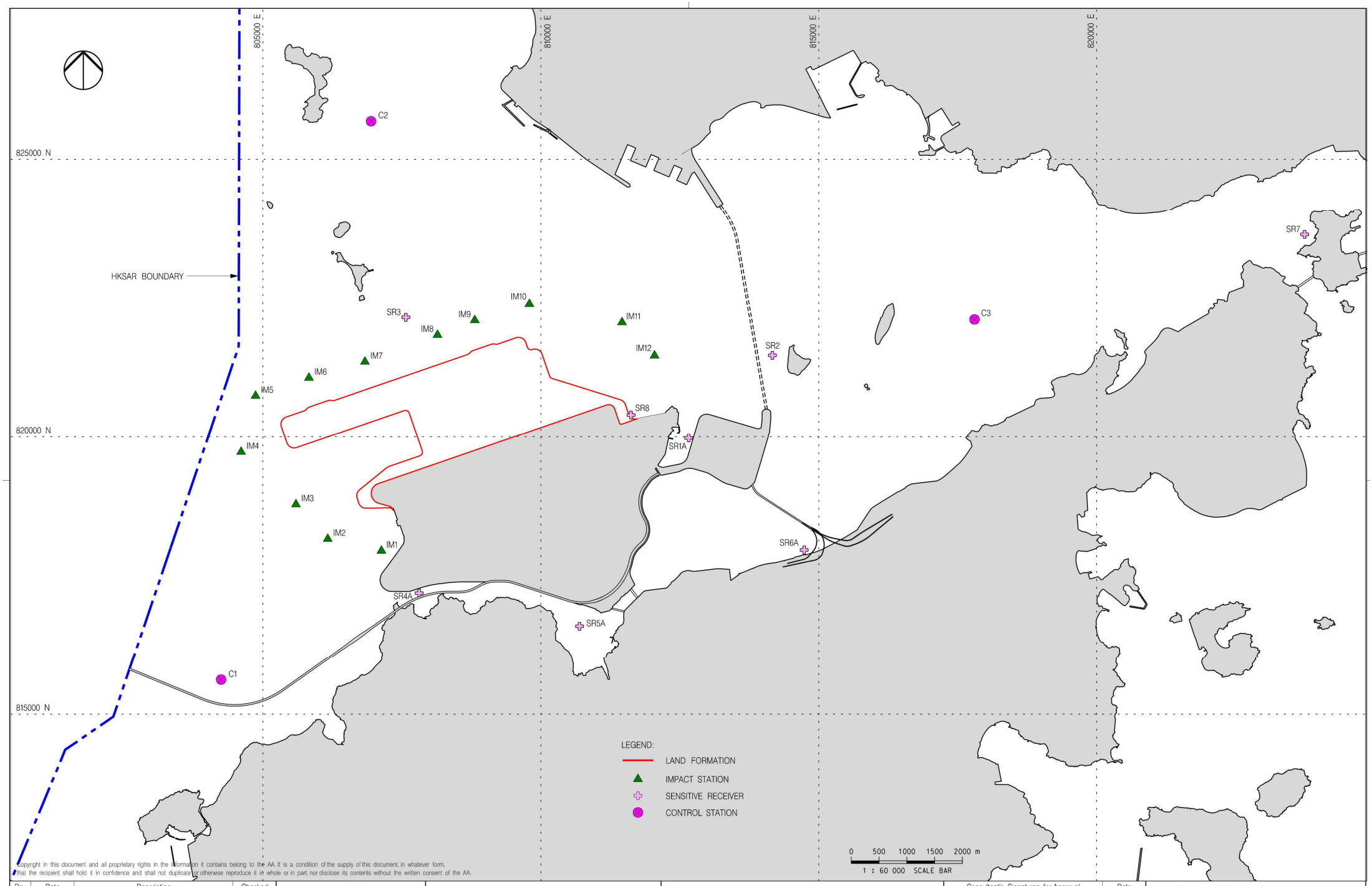
Drawing No.

FIGURE 2.1

Scale at A3 1 : 22500

Rev. D

Filename: J:\355482\REPORT\ENV\EMA\181029\FIG 2.1.dgn



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A	21AUG19	FIRST ISSUE	VL

香港國際機場 HONG KONG INTERNATIONAL AIRPORT

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Title

WATER QUALITY MONITORING STATIONS

Consultant's Signatures for Approval		Date
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EXPANSION OF HONG KONG INTERNATIONAL AIRPORT INTO A THREE-RUNWAY SYSTEM

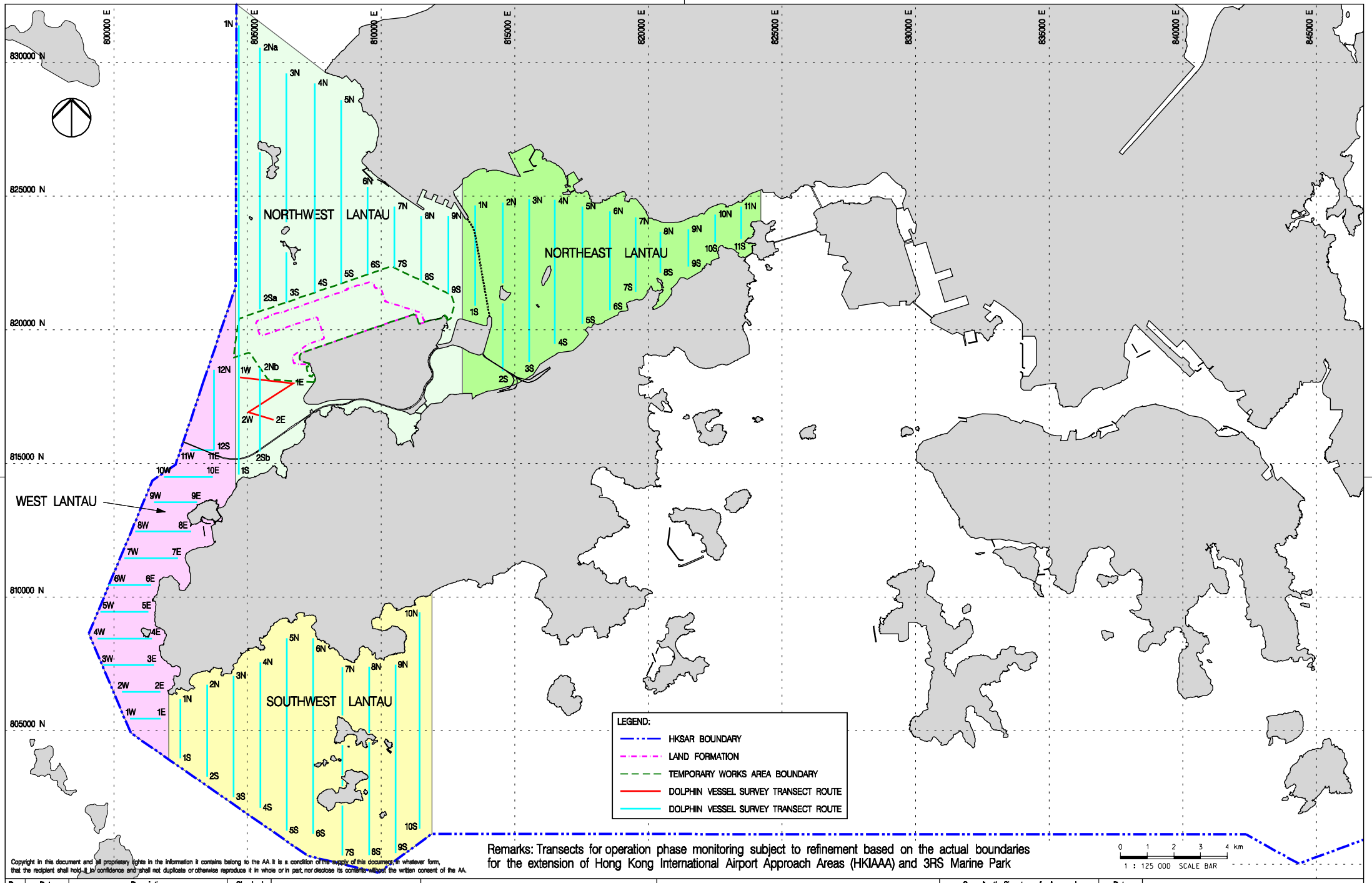
Drawing No.

FIGURE 4.1

Scale at A3 1 : 60000

Rev. A

Filename: J:\355482\REPORT\ENV\EMA\190821\FIG 4.1.dgn



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

Rev.	Date	Description	Checked
B	27JUL16	GENERAL REVISION	JT
C	06FEB17	GENERAL REVISION	JT
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E	29OCT18	GENERAL REVISION	SH
F	04APR19	GENERAL REVISION	SH

香港國際機場 HONG KONG INTERNATIONAL AIRPORT

MOTT MACDONALD

Title

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

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Design	JC	04APR19
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Approver	EC	04APR19

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

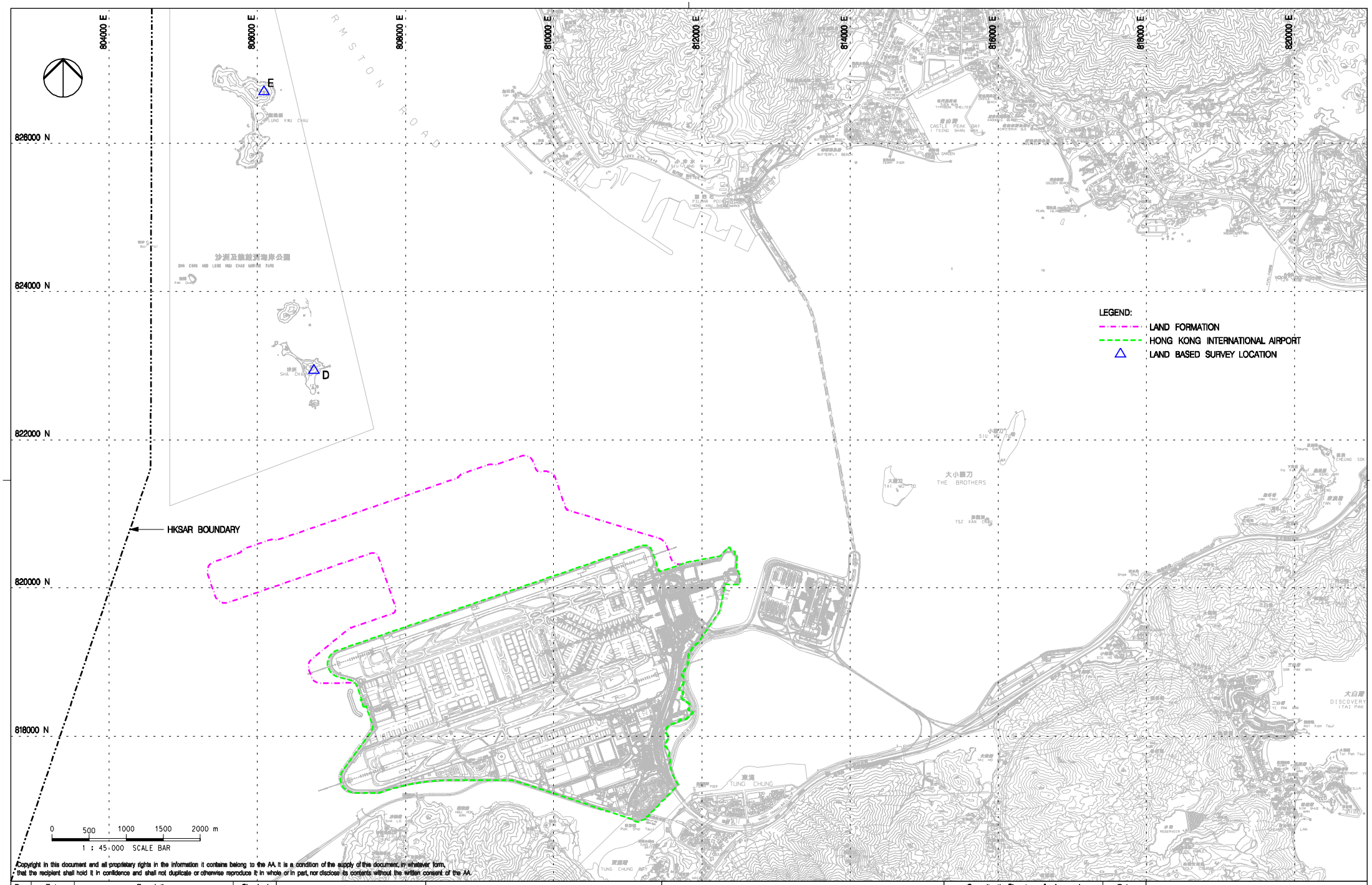
Drawing No.

FIGURE 6.1

Scale at A3 1 : 125000

Rev. F

Filename: J:\355482\REPORT\ENV\EMA\190404\FIG 6.1.dgn



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C	29OCT18	GENERAL REVISION	SH

香港國際機場 HONG KONG INTERNATIONAL AIRPORT

MOTT MACDONALD

Title

LAND BASED DOLPHIN MONITORING IN BASELINE AND CONSTRUCTION PHASES

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Approver	EC	29OCT18

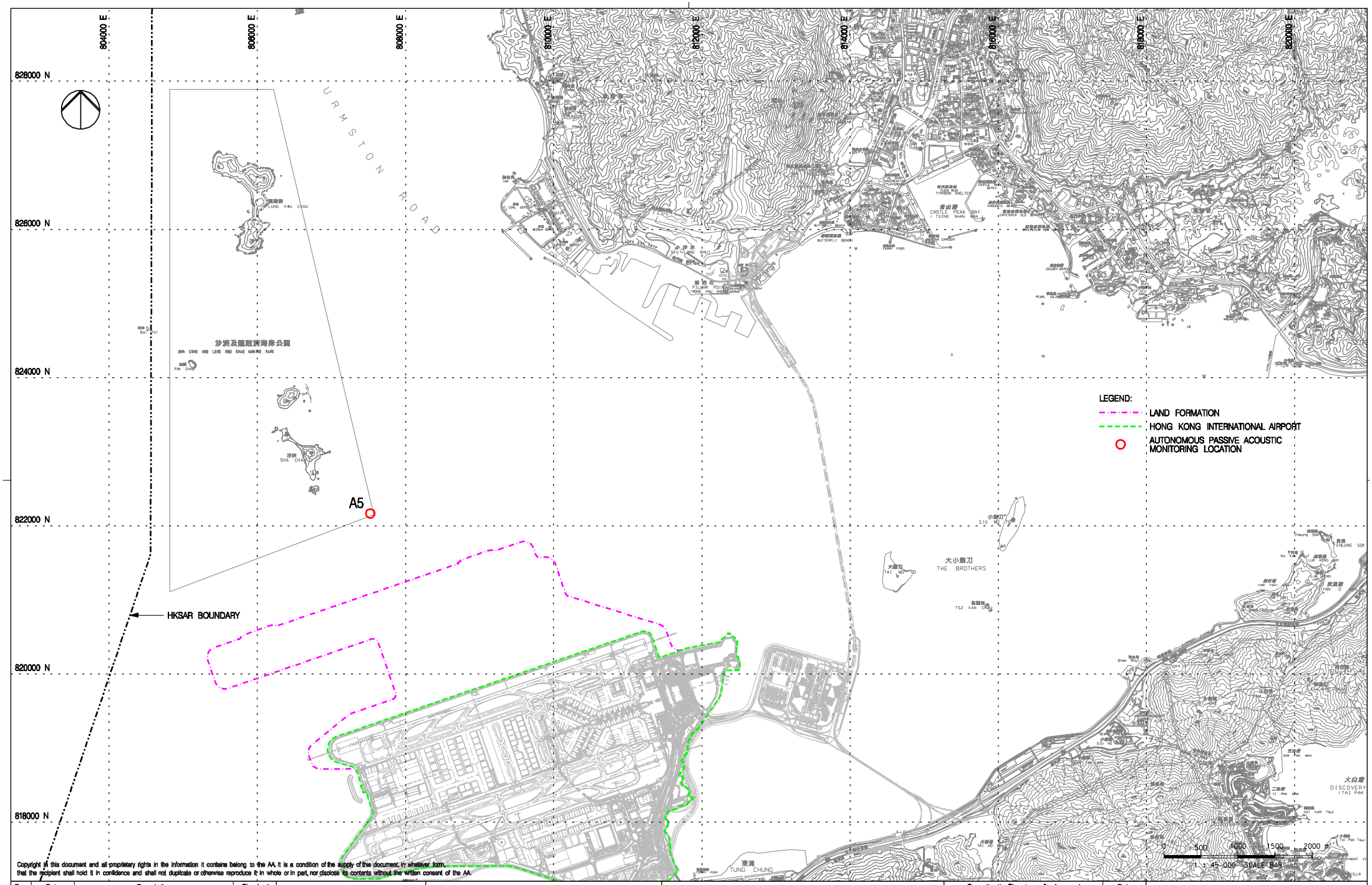
EXPANSION OF HONG KONG INTERNATIONAL AIRPORT INTO A THREE-RUNWAY SYSTEM

Drawing No. FIGURE 6.2

Scale at A3 1 : 45000

Rev. C

Filename: J:\355482\REPORT\ENV\EMA\181029\FIG 2.5.dgn



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A	29AUG17	FIRST ISSUE	JT
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香港國際機場 HONG KONG INTERNATIONAL AIRPORT

MOTT MACDONALD

Title

LOCATION FOR AUTONOMOUS PASSIVE ACOUSTIC MONITORING

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Checkers	JC / TK	29OCT18
Approver	EC	29OCT18

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

Drawing No. FIGURE 6.5

Scale at A3 1 : 45000

Rev. C

Filename: J:\355482\REPORT\EN\EMA\181029\FIG 2.11.dgn

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

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	I

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	I

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	I

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	I
			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	I
			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	I
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	I

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	I
			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	I

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	I
			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	I
			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	I
			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	I
5.2.6.7	2.1	-	**Best Practices for Rock Crushing Plants** The relevant best practices for dust control as stipulated in the Guidance Note on the Best Practicable Means for Mineral Works (Stone Crushing Plant) BPM 11/1 (95) as well as in the future Specified Process licence should be adopted. These include:	Within Concrete Batching Plant / Duration of the construction phase	N/A

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

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

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

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
8.8.1.2 and 8.8.1.3	5.1	2.26	**Marine Construction Activities** <u>General Measures to be Applied to All Works Areas</u> ▪ Barges or hoppers shall not be filled to a level which will cause overflow of materials or pollution of water during loading or transportation; ▪ Use of Lean Material Overboard (LMOB) systems shall be prohibited; ▪ Excess materials shall be cleaned from the decks and exposed fittings of barges and hopper dredgers before the vessels are moved; ▪ Plants should not be operated with leaking pipes and any pipe leakages shall be repaired quickly; ▪ Adequate freeboard shall be maintained on barges to reduce the likelihood of decks being washed by wave action; ▪ All vessels shall be sized such that adequate clearance is maintained between vessels and the sea bed at all states of the tide to ensure that undue turbidity is not generated by turbulence from vessel movement or propeller wash; ▪ The works shall not cause foam, oil, grease, litter or other objectionable matter to be present in the water within and adjacent to the works site; and ▪ For ground improvement activities including DCM, the wash water from cleaning of the drilling shaft should be appropriately treated before discharge. The Contractor should ensure the waste water meets the WPCO/TM requirements before discharge. No direct discharge of contaminated water is permitted.	Within construction site / Duration of the construction phase	I
			<u>Specific Measures to be Applied to All Works Areas</u> ▪ The daily maximum production rates shall not exceed those assumed in the water quality assessment in the EIA report; ▪ A maximum of 10 % fines content to be adopted for sand blanket and 20 % fines content for marine filling below +2.5 mPD prior to substantial completion of seawall (until end of Year 2017) shall be specified in the works contract document;	Within construction site / Duration of the construction phase	I
			▪ An advance seawall of at least 200m to be constructed (comprising either rows of contiguous permanent steel cells completed above high tide mark or partially completed seawalls with rock core to high tide mark and filter layer on the inner side) prior to commencement of marine filling activities;		I
			▪ 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	N/A *(The arrangement of silt curtain has been modified. The details can be referred to Silt Curtain Deployment Plan)
			▪ Double layer silt curtains to enclose WSRs C7a and silt screens installed at the intake points for both WSR C7a and C8 prior to commencement of construction; and		For C7a, I For C8, I *(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	I *(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.		I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			Specific Measures to be Applied to 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 at 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.	Within construction site / Duration of the construction phase	I
			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.		I
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:	Within construction site / Duration of the construction phase	
			▪ 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		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;		I
			▪ 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		I
			▪ 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		I

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.		I
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;	Project Site Area / Construction Phase	I
			▪ 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;		I
			▪ All practical measures, including but not limited to speed control for vehicles, should be taken to minimise dust emission;		I
			▪ Good housekeeping should be maintained at all times at the sediment treatment facility and storage area;		I
			▪ Treated and untreated sediment should be clearly separated and stored separately; and		I
			▪ 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.		I
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	I
			Land Contamination – Construction Phase		
11.10.1.2 to 11.10.1.3	8.1	2.32	For areas inaccessible during site reconnaissance survey ▪ Further site reconnaissance would be conducted once the areas are accessible in order to identify any land contamination concern for the areas.	Project Site Area inaccessible during site reconnaissance / Prior to Construction Phase	I
			▪ Subject to further site reconnaissance findings, a supplementary Contamination Assessment Plan (CAP) for additional site investigation (SI) (if necessary) may be prepared and submitted to EPD for endorsement prior to the commencement of SI at these areas.		I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			▪ After completion of SI, the Contamination Assessment Report (CAR) will be prepared and submitted to EPD for approval prior to start of the proposed construction works at the golf course, the underground and above-ground fuel storage tank areas, emergency power generation units, airside petrol filling station and fuel tank room.		I *(CAR for golf course and Terminal 2 Emergency Power Supply System Nos.1, 2, 3, 4 and 5)
			▪ 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	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
				HDD drilling works at HKIA	
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

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			▪ Use of Deep Cement Mixing (DCM) method instead of conventional seabed dredging for the land formation works to reduce the risk of negative impacts through the elevation of suspended solids and contaminants on CWDs, 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;		I
			▪ 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		I
			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

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
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
13.11.5.4 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.		I
13.11.5.19	10.4	2.31	**Acoustic Decoupling of Construction Equipment** ▪ Air compressors and other noisy equipment that must be mounted on steel barges should be acoustically-decoupled to the greatest extent feasible, for instance by using rubber or air-filled tyres; and ▪ Specific acoustic decoupling measures shall be specified during the detailed design of the project for use during the land formation works.	Around coastal works area during construction phase	I
13.11.5.20	10.6.1	2.29	**Spill Response Plan**	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?^
			▪ 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.		
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		I
			▪ 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

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
14.9.1.12	-		**Good Construction Site Practices** ▪ Regular inspection of the integrity and effectiveness of all silt curtains and monitoring of effluents to ensure that any discharge meets effluent discharge guidelines; ▪ Keep the number of working or stationary vessels present on-site to the minimum anytime; and ▪ Unscheduled, on-site audits for all good site practice restrictions should be conducted, and fines or penalties sufficient to be an effective deterrent need to be levied against violators.	All works area during the construction phase	I
14.9.1.13 to 14.9.1.18	-		**Mitigation for Indirect Disturbance due to Deterioration of Water Quality** ▪ Water quality mitigation measures during construction phases include consideration of alternative construction methods, deployment of silt curtain and good site practices;	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		I
			▪ 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

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
Table 15.6	12.3	-	**CM5 -** Erection of decorative mesh screens or construction hoardings around works areas in visually unobtrusive colours.	All works areas for duration of works; Upon handover and completion of works. – may be disassembled in phases	I
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.	I
Table 15.6	12.3	-	**CM7** - Control of night-time lighting by hooding all lights and through minimisation of night working periods.	All works areas for duration of works; Upon handover and completion of works. – may be disassembled in phases	I
Table 15.6	12.3	-	**CM8 -** All existing trees shall be carefully protected during construction. Detailed Tree Protection Specification shall be provided in the Contract Specification. Under this specification, the Contractor shall be required to submit, for approval, a detailed working method statement for the protection of trees prior to undertaking any works adjacent to all retained trees, including trees in contractor's works areas.	All existing trees to be retained; Upon handover and completion of works.	I
Table 15.6	12.3	-	**CM9 -** Trees unavoidably affected by the works shall be transplanted where practical. A detailed Tree Transplanting Specification shall be provided in the Contract Specification, if applicable. Sufficient time for necessary tree root and crown preparation periods shall be allowed in the project programme.	All existing trees to be affected by the works; Upon handover and completion of works.	I
Table 15.6	12.3	-	**CM10 -** Land formation works shall be followed with advanced hydroseeding around taxiways and runways as soon as practical.	All affected existing grass areas around runways and verges/Duration of works;	N/A

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
				Upon handover and completion of works.	
			Cultural Heritage Impact – Construction Phase		
			Not applicable.		
			Health Impact – Aircraft Emissions		
			Not applicable.		
			Health Impact – Aircraft Noise		
			Not applicable.		

Notes:

" - " For items denoted as " - " provided under the columns of EM&A Ref. or EP Condition, environmental protection measures should be referred to the relevant paragraph(s) / table(s) in the approved EIA Report.

" 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

May-21

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1 WQ General & Regular DCM mid-ebb: 16:10 mid-flood: 9:05
2	**3** Site Inspection	**4** Site Inspection NM4, NM6 WQ General & Regular DCM mid-ebb: 19:28 mid-flood: 6:51	**5** CWD Survey (Vessel) AR1A, AR2 NM1A, NM5	**6** Site Inspection WQ General & Regular DCM mid-ebb: 10:29 mid-flood: 15:26	**7** Site Inspection	**8** WQ General & Regular DCM mid-ebb: 11:38 mid-flood: 17:17
9	**10** Site Inspection NM4, NM6	**11** Site Inspection CWD Survey (Vessel) AR1A, AR2 NM1A, NM5 WQ General & Regular DCM mid-ebb: 13:01 mid-flood: 6:30	**12**	**13** Site Inspection CWD Survey (Land-based) WQ General & Regular DCM mid-ebb: 14:00 mid-flood: 7:12	**14** Site Inspection	**15** WQ General & Regular DCM mid-ebb: 15:05 mid-flood: 7:58
16	**17** Site Inspection AR1A, AR2 NM1A, NM5	**18** Site Inspection WQ General & Regular DCM mid-ebb: 17:15 mid-flood: 4:47	**19**	**20** Site Inspection CWD Survey (Vessel) NM4, NM6 WQ General & Regular DCM mid-ebb: 19:26 mid-flood: 6:57	**21** Site Inspection CWD Survey (Vessel)	**22** AR1A, AR2 WQ General & Regular DCM mid-ebb: 10:02 mid-flood: 15:33
23	**24** Site Inspection CWD Survey (Land-based)	**25** Site Inspection CWD Survey (Vessel) WQ General & Regular DCM mid-ebb: 12:03 mid-flood: 18:43	**26** Site Inspection CWD Survey (Vessel) NM4, NM6	**27** Site Inspection CWD Survey (Vessel) WQ General & Regular DCM mid-ebb: 13:33 mid-flood: 6:45	**28** Site Inspection CWD Survey (Vessel) AR1A, AR2 NM1A, NM5	**29** WQ General & Regular DCM mid-ebb: 15:09 mid-flood: 8:03
30	**31** Site Inspection	**Notes:** CWD - Chinese White Dolphin Air quality and Noise Monitoring Station WQ - Water Quality DCM - Deep Cement Mixing NM1A/AR1A - Man Tung Road Park 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

Jun-21

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1 Site Inspection NM4, NM6 WQ General & Regular DCM mid-ebb: 17:46 mid-flood: 10:29	**2** Site Inspection	**3** Site Inspection AR1A, AR2 NM1A, NM5 WQ General & Regular DCM mid-ebb: 8:48 mid-flood: 13:31	**4** Site Inspection CWD Survey (Vessel)	**5** WQ General & Regular DCM mid-ebb: 10:25 mid-flood: 16:02
6	**7** Site Inspection CWD Survey (Vessel)	**8** Site Inspection CWD Survey (Vessel) WQ General & Regular DCM mid-ebb: 12:05 mid-flood: 5:19	**9** Site Inspection CWD Survey (Land-based) AR1A, AR2 NM1A, NM5	**10** Site Inspection WQ General & Regular DCM mid-ebb: 13:08 mid-flood: 6:07	**11** Site Inspection NM4, NM6	**12** WQ General & Regular DCM mid-ebb: 14:16 mid-flood: 7:03
13	**14**	**15** Site Inspection CWD Survey (Land-based) AR1A, AR2 NM1A, NM5 WQ General & Regular DCM mid-ebb: 16:13 mid-flood: 8:50	**16** Site Inspection	**17** Site Inspection CWD Survey (Vessel) NM4, NM6 WQ General & Regular DCM mid-ebb: 17:50 mid-flood: 10:38	**18** Site Inspection	**19** WQ General & Regular DCM mid-ebb: 8:20 mid-flood: 13:46
20	**21** Site Inspection CWD Survey (Vessel) AR1A, AR2 NM1A, NM5	**22** Site Inspection CWD Survey (Vessel) WQ General & Regular DCM mid-ebb: 10:56 mid-flood: 4:15	**23** Site Inspection	**24** Site Inspection CWD Survey (Vessel) NM4, NM6 WQ General & Regular DCM mid-ebb: 12:34 mid-flood: 5:36	**25** Site Inspection	**26** AR1A, AR2 WQ General & Regular DCM mid-ebb: 14:10 mid-flood: 7:02
27	**28** Site Inspection CWD Survey (Vessel)	**29** Site Inspection WQ General & Regular DCM mid-ebb: 16:30 mid-flood: 9:25	**30** NM4, NM6			

Notes:

CWD - Chinese White Dolphin

Air quality and Noise Monitoring Station

WQ - Water Quality
DCM - Deep Cement Mixing

NM1A/AR1A - Man Tung Road Park
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

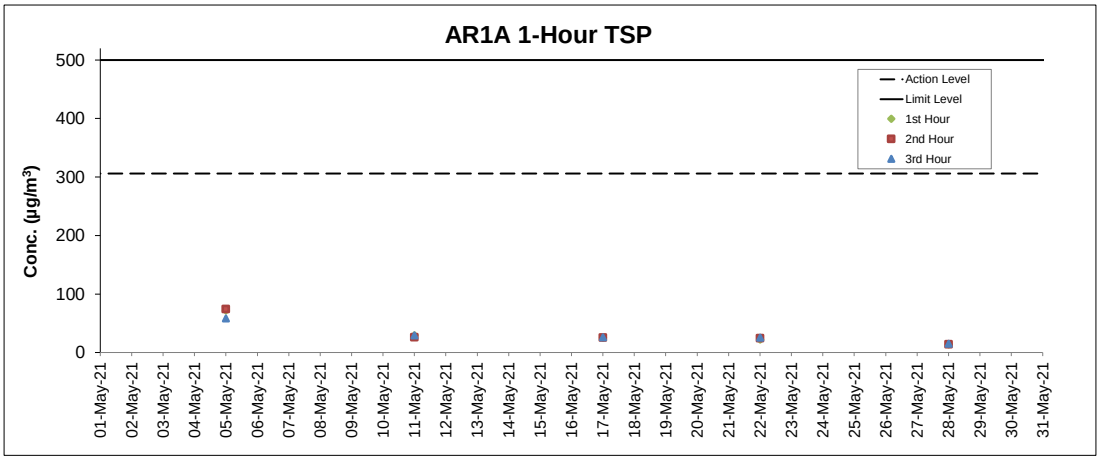
Station: AR1A- Man Tung Road Park

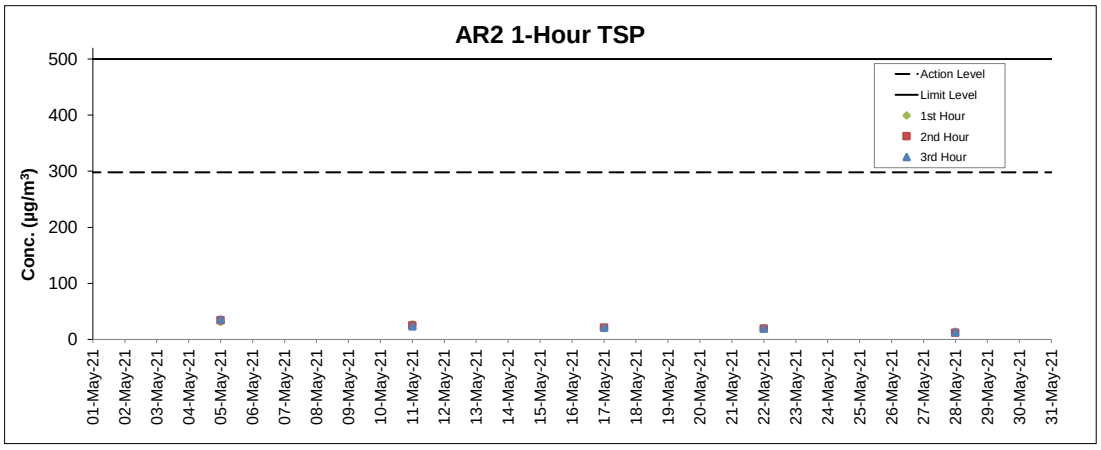
Date	Time	Weather	Wind Speed (m/s)	Wind Direction (deg)	1-hr TSP (μg/m^3)	Action Level (μg/m^3)	Limit Level (μg/m^3)
5-May-21	9:30	Sunny	2.8	320	72	306	500
5-May-21	10:30	Sunny	2.2	312	74	306	500
5-May-21	11:30	Sunny	2.2	335	58	306	500
11-May-21	13:15	Sunny	5.8	209	29	306	500
11-May-21	14:15	Sunny	5.3	224	26	306	500
11-May-21	15:15	Sunny	5.0	214	29	306	500
17-May-21	13:22	Sunny	6.4	215	25	306	500
17-May-21	14:22	Sunny	5.0	195	25	306	500
17-May-21	15:22	Sunny	6.4	198	26	306	500
22-May-21	13:32	Sunny	6.1	146	22	306	500
22-May-21	14:32	Sunny	5.0	160	24	306	500
22-May-21	15:32	Sunny	5.8	164	25	306	500
28-May-21	13:15	Sunny	7.8	230	14	306	500
28-May-21	14:15	Sunny	8.9	230	14	306	500
28-May-21	15:15	Sunny	9.4	230	15	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 (μg/m^3)	Action Level (μg/m^3)	Limit Level (μg/m^3)
5-May-21	13:40	Cloudy	4.2	264	31	298	500
5-May-21	14:40	Cloudy	4.2	253	34	298	500
5-May-21	15:40	Cloudy	3.3	260	36	298	500
11-May-21	9:14	Sunny	5.8	187	27	298	500
11-May-21	10:14	Sunny	6.4	198	25	298	500
11-May-21	11:14	Sunny	5.3	239	23	298	500
17-May-21	9:17	Sunny	4.2	219	20	298	500
17-May-21	10:17	Sunny	4.7	224	21	298	500
17-May-21	11:17	Sunny	5.6	196	21	298	500
22-May-21	9:24	Sunny	4.7	189	20	298	500
22-May-21	10:24	Sunny	5.8	206	19	298	500
22-May-21	11:24	Sunny	4.4	183	19	298	500
28-May-21	13:24	Sunny	7.5	233	14	298	500
28-May-21	14:24	Sunny	8.3	229	12	298	500
28-May-21	15:24	Sunny	9.4	231	13	298	500





Notes

1. Major site activities carried out during the reporting period are summarized in Section 1.4 of the monthly EM&A report.
2. Weather conditions during monitoring are presented in the data tables above.
3. QA/QC requirements as stipulated in the EM&A Manual were carried out during measurement.

Noise Monitoring Results

Noise Measurement Results

Station: NM1A- Man Tung Road Park

Date	Weather	Time	Measured L_{10} dB(A)	Measured L_{90} dB(A)	$L_{eq(30mins)}$ dB(A) ^
05-May-21	Sunny	12:12	74.6	51.3	71*
05-May-21	Sunny	12:17	77.0	56.1	
05-May-21	Sunny	12:22	76.5	54.0	
05-May-21	Sunny	12:27	76.5	54.0	
05-May-21	Sunny	12:32	73.3	59.7	
05-May-21	Sunny	12:37	75.6	55.6	
11-May-21	Sunny	14:07	69.7	64.8	70
11-May-21	Sunny	14:12	69.4	64.9	
11-May-21	Sunny	14:17	69.6	65.1	
11-May-21	Sunny	14:22	68.4	63.8	
11-May-21	Sunny	14:27	68.1	63.9	
11-May-21	Sunny	14:32	68.0	63.5	
17-May-21	Sunny	14:00	73.0	61.0	71
17-May-21	Sunny	14:05	68.8	60.4	
17-May-21	Sunny	14:10	68.0	60.2	
17-May-21	Sunny	14:15	73.9	63.5	
17-May-21	Sunny	14:20	73.6	63.9	
17-May-21	Sunny	14:25	69.5	60.5	
28-May-21	Sunny	13:30	78.3	68.2	**76***
28-May-21	Sunny	13:35	77.3	63.2	
28-May-21	Sunny	13:40	76.1	61.0	
28-May-21	Sunny	13:45	78.3	63.6	
28-May-21	Sunny	13:50	77.1	61.6	
28-May-21	Sunny	13:55	76.5	60.8	

Remarks:
(^) +3dB (A) correction in Leq(30mins) dB(A) was applied to free-field measurement.
(*) The measurement result was corrected with reference to the baseline monitoring levels.
Value exceeding Limit Level is bolded and underlined

Noise Measurement Results

Station: NM4- Ching Chung Hau Po Woon Primary School

Date	Weather	Time	Measured L_{10} dB(A)	Measured L_{90} dB(A)	$L_{eq(30mins)}$ dB(A) ^
04-May-21	Cloudy	13:07	61.2	58.3	63
04-May-21	Cloudy	13:12	62.8	58.5	
04-May-21	Cloudy	13:17	61.8	59.1	
04-May-21	Cloudy	13:22	60.5	58.1	
04-May-21	Cloudy	13:27	60.8	58.1	
04-May-21	Cloudy	13:32	61.0	58.1	
10-May-21	Sunny	14:14	60.7	55.6	60
10-May-21	Sunny	14:19	57.7	54.6	
10-May-21	Sunny	14:24	58.3	54.5	
10-May-21	Sunny	14:29	59.2	55.1	
10-May-21	Sunny	14:34	59.3	54.9	
10-May-21	Sunny	14:39	58.3	54.4	
20-May-21	Sunny	13:01	60.1	56.8	64
20-May-21	Sunny	13:06	58.6	56.5	
20-May-21	Sunny	13:11	59.5	57.0	
20-May-21	Sunny	13:16	60.0	57.2	
20-May-21	Sunny	13:21	61.9	57.6	
20-May-21	Sunny	13:26	63.4	57.5	
26-May-21	Sunny	13:16	61.0	56.8	66
26-May-21	Sunny	13:21	64.0	58.6	
26-May-21	Sunny	13:26	63.2	60.4	
26-May-21	Sunny	13:31	63.8	60.9	
26-May-21	Sunny	13:36	63.7	60.9	
26-May-21	Sunny	13:41	63.0	60.6	

Remarks:
(^) +3dB (A) correction in Leq(30mins) dB(A) was applied to free-field measurement.
Limit Level at NM4 was reduced to 65 dB(A) during school examination period from 31 May to 4 June 2021.

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

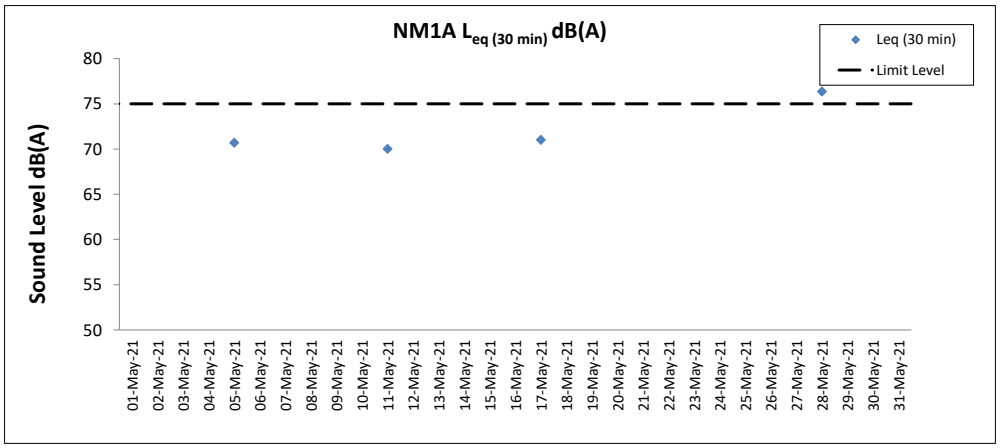
Date	Weather	Time	Measured L_{10} dB(A)	Measured L_{90} dB(A)	$L_{eq(30mins)}$ dB(A) ^
5-May-21	Cloudy	13:42	64.9	57.2	62*
5-May-21	Cloudy	13:47	64.3	55.8	
5-May-21	Cloudy	13:52	63.3	55.1	
5-May-21	Cloudy	13:57	57.1	50.8	
5-May-21	Cloudy	14:02	55.5	49.8	
5-May-21	Cloudy	14:07	56.0	52.1	
11-May-21	Sunny	09:29	57.0	48.9	58
11-May-21	Sunny	09:34	54.3	48.4	
11-May-21	Sunny	09:39	54.3	48.2	
11-May-21	Sunny	09:44	51.2	47.8	
11-May-21	Sunny	09:49	57.7	49.5	
11-May-21	Sunny	09:54	55.2	49.8	
17-May-21	Sunny	09:20	60.2	53.6	62*
17-May-21	Sunny	09:25	58.6	53.8	
17-May-21	Sunny	09:30	59.7	56.9	
17-May-21	Sunny	09:35	59.5	57.2	
17-May-21	Sunny	09:40	65.1	57.5	
17-May-21	Sunny	09:45	59.4	57.0	
28-May-21	Sunny	13:16	61.6	48.9	57*
28-May-21	Sunny	13:21	60.7	54.7	
28-May-21	Sunny	13:26	59.8	50.4	
28-May-21	Sunny	13:31	59.4	51.7	
28-May-21	Sunny	13:36	57.7	48.4	
28-May-21	Sunny	13:41	60.7	48.8	

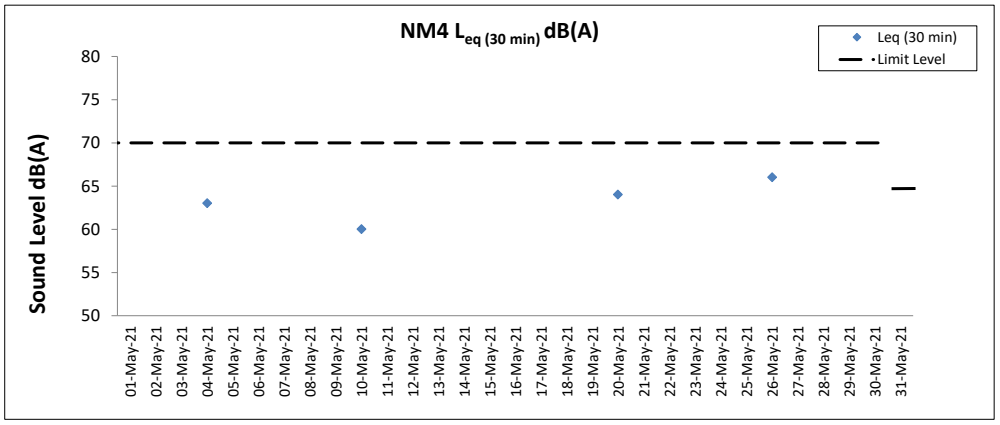
Remarks:
(^) +3dB (A) correction in Leq(30mins) dB(A) was applied to free-field measurement.
(*) The measurement result was corrected with reference to the baseline monitoring levels.

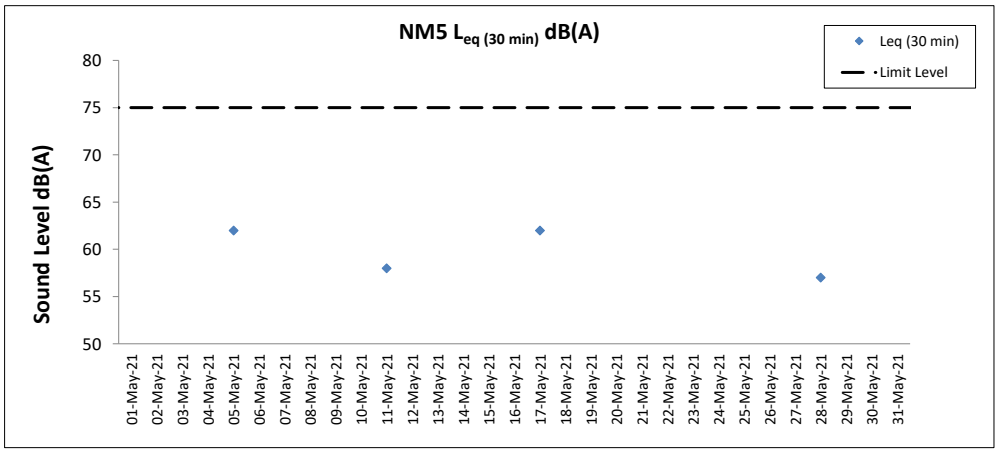
Noise Measurement Results
Station: NM6- House No.1 Sha Lo Wan

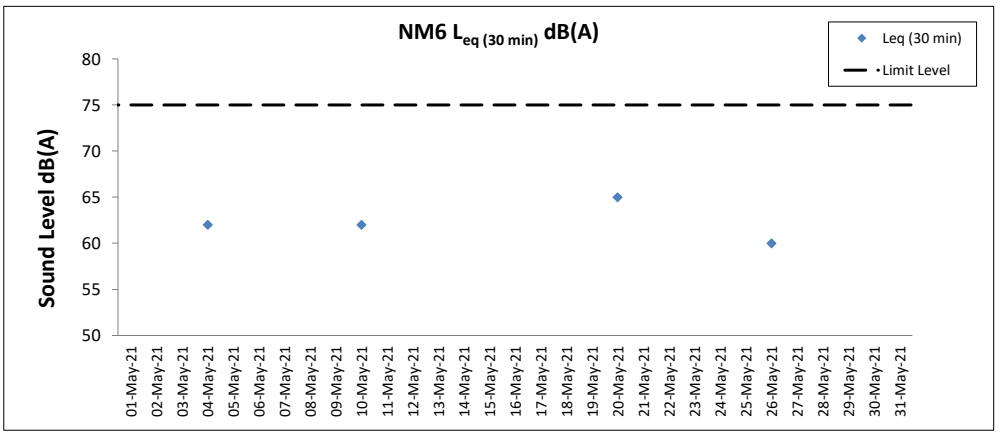
Date	Weather	Time	Measured L_{10} dB(A)	Measured L_{90} dB(A)	$L_{eq(30mins)}$ dB(A) ^
4-May-21	Cloudy	15:44	59.9	49.1	62
4-May-21	Cloudy	15:49	63.6	54.5	
4-May-21	Cloudy	15:54	56.4	53.5	
4-May-21	Cloudy	15:59	56.0	53.5	
4-May-21	Cloudy	16:04	57.5	53.5	
4-May-21	Cloudy	16:09	65.1	54.0	
10-May-21	Sunny	15:41	65.9	48.9	62*
10-May-21	Sunny	15:46	59.5	45.6	
10-May-21	Sunny	15:51	75.9	48.9	
10-May-21	Sunny	15:56	56.5	46.3	
10-May-21	Sunny	16:01	60.6	47.5	
10-May-21	Sunny	16:06	69.3	46.5	
20-May-21	Cloudy	15:46	63.8	53.2	65
20-May-21	Cloudy	15:51	67.2	52.8	
20-May-21	Cloudy	15:56	62.3	53.2	
20-May-21	Cloudy	16:01	57.0	50.6	
20-May-21	Cloudy	16:06	57.3	50.4	
20-May-21	Cloudy	16:11	64.8	51.0	
26-May-21	Sunny	15:48	61.5	54.6	60
26-May-21	Sunny	15:53	59.2	54.2	
26-May-21	Sunny	15:58	62.8	54.7	
26-May-21	Sunny	16:03	57.2	51.3	
26-May-21	Sunny	16:08	56.5	49.2	
26-May-21	Sunny	16:13	54.4	48.6	

Remarks:
(^) +3dB (A) correction in Leq(30mins) dB(A) was applied to free-field measurement.
(*) The measurement result was corrected with reference to the baseline monitoring levels.









Notes

1. Major site activities carried out during the reporting period are summarized in Section 1.4 of the monthly EM&A report.
2. Weather conditions during monitoring are presented in the data tables above.
3. QA/QC requirements as stipulated in the EM&A Manual were carried out during measurement.

Water Quality Monitoring Results

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

Water Quality Monitoring

Water Quality Monitoring Results on 01 May 21 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	15:40	9.1	Surface	1.0	2.2	281	25.6	25.6	8.2	8.2	30.7	30.7	109.8	109.8	7.6	7.5	3.0	4.1	5	5	84	87	815610	804246	<0.2	<0.2	0.6	1.0
						1.0	2.3	288	25.5		8.2		30.7		109.8		7.6		3.0		4		84				<0.2		0.6	
					Middle	4.6	2.4	278	24.7	24.7	8.2	8.2	31.8	31.8	104.9	104.9	7.3		4.2		4		87				<0.2		1.2	
						4.6	2.4	290	24.6		8.2		31.9		104.9		7.3		4.3		5		87				<0.2		1.1	
					Bottom	8.1	2.6	277	24.4	24.5	8.2	8.2	32.4	32.3	100.6	100.7	7.0	7.0	5.1		5		90				<0.2		1.1	
						8.1	2.8	289	24.5		8.2		32.3		100.8		7.0		5.2		6		89				<0.2		1.1	
C2	Fine	Moderate	14:26	11.5	Surface	1.0	0.2	135	25.5	25.5	8.1	8.1	22.6	22.6	94.1	94.1	6.8	6.6	3.9	13.6	5	5	85	88	825695	806958	<0.2	<0.2	1.7	1.7
						1.0	0.2	137	25.5		8.1		22.6		94.0		6.8		3.9		5		85				<0.2		1.8	
					Middle	5.8	0.5	154	25.0	25.0	8.1	8.1	26.6	26.6	88.5	88.5	6.3		16.8		5		87				<0.2		1.7	
						5.8	0.5	156	25.0		8.1		26.6		88.5		6.3		16.4		5		87				<0.2		1.8	
					Bottom	10.5	0.5	144	24.9	24.9	8.1	8.1	28.0	28.0	86.2	86.2	6.1	6.1	20.2		4		91				<0.2		1.7	
						10.5	0.5	144	24.9		8.1		28.0		86.2		6.1		20.5		5		90				<0.2		1.7	
C3	Fine	Moderate	16:22	10.8	Surface	1.0	0.4	286	24.9	24.9	8.1	8.1	29.7	29.7	85.1	85.1	6.0	6.0	3.6	3.7	4	5	84	86	822126	817823	<0.2	<0.2	1.0	1.1
						1.0	0.4	303	24.9		8.1		29.7		85.1		6.0		3.6		4		84				<0.2		1.0	
					Middle	5.4	0.2	257	24.8	24.8	8.1	8.1	30.3	30.3	84.1	84.1	5.9		3.7		5		85				<0.2		1.3	
						5.4	0.2	264	24.8		8.1		30.3		84.1		5.9		3.7		5		85				<0.2		1.2	
					Bottom	9.8	0.1	120	24.6	24.6	8.1	8.1	30.9	30.9	83.1	83.1	5.8	5.8	3.7		5		88				<0.2		0.9	
						9.8	0.1	121	24.6		8.1		31.0		83.1		5.8		3.7		6		88				<0.2		1.0	
IM1	Fine	Moderate	15:19	5.7	Surface	1.0	2.7	238	25.4	25.4	8.1	8.1	27.3	27.2	96.9	96.9	6.8	6.8	5.8	6.2	6	4	85	87	817945	807108	<0.2	<0.2	1.1	1.1
						1.0	2.7	248	25.4		8.1		27.2		96.9		6.8		5.7		5		85				<0.2		1.1	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.7	2.4	236	24.7	24.7	8.1	8.1	30.0	30.0	96.4	96.4	6.8	6.8	6.7		3		88				<0.2		1.2	
						4.7	2.4	238	24.7		8.1		30.0		96.4		6.8		6.6		3		88				<0.2		1.1	
IM2	Fine	Moderate	15:09	7.7	Surface	1.0	1.7	24	25.4	25.4	8.1	8.1	27.3	27.3	97.8	97.9	6.9	6.9	5.3	5.8	4	5	83	86	818184	806158	<0.2	<0.2	1.1	1.1
						1.0	1.7	24	25.4		8.1		27.3		97.9		6.9		5.3		5		83				<0.2		1.2	
					Middle	3.9	1.5	23	25.0	25.0	8.1	8.1	28.4	28.4	97.9	98.1	6.9		5.7		5		86				<0.2		1.1	
						3.9	1.6	25	25.0		8.1		28.4		98.2		6.9		5.6		4		86				<0.2		1.2	
					Bottom	6.7	1.6	28	24.6	24.6	8.2	8.2	30.9	30.9	98.9	99.0	6.9	6.9	6.5		5		89				<0.2		1.1	
						6.7	1.8	30	24.6		8.2		30.9		99.0		6.9		6.3		5		89				<0.2		1.1	
IM3	Fine	Moderate	15:03	7.9	Surface	1.0	2.8	196	25.6	25.6	8.1	8.1	27.1	27.1	101.6	101.6	7.1	7.1	4.4	4.5	3	4	83	86	818807	805589	<0.2	<0.2	1.1	1.3
						1.0	2.8	205	25.6		8.1		27.2		101.6		7.1		4.4		4		83				<0.2		1.0	
					Middle	4.0	2.4	195	25.2	25.2	8.1	8.1	28.4	28.4	101.8	101.8	7.1		3.9		3		86				<0.2		1.1	
						4.0	2.6	204	25.2		8.2		28.4		101.8		7.1		4.2		3		86				<0.2		1.1	
					Bottom	6.9	2.7	191	24.6	24.6	8.2	8.2	31.0	31.0	99.1	99.1	6.9	6.9	5.0		5		89				<0.2		1.7	
						6.9	2.9	193	24.6		8.2		31.0		99.1		6.9		5.0		4		89				<0.2		1.7	
IM4	Fine	Moderate	14:53	9.5	Surface	1.0	2.0	194	25.7	25.7	8.1	8.1	28.0	28.0	104.1	104.1	7.3	7.2	3.6	4.6	5	5	82	86	819717	804616	<0.2	<0.2	1.6	1.2
						1.0	2.0	196	25.7		8.1		28.0		104.1		7.3		3.6		6		82				<0.2		1.6	
					Middle	4.8	2.4	188	25.3	25.3	8.1	8.1	29.1	29.2	102.5	102.5	7.1		4.7		6		86				<0.2		1.0	
						4.8	2.6	196	25.3		8.1		29.2		102.5		7.1		4.7		5		86				<0.2		1.1	
					Bottom	8.5	2.5	185	24.6	24.6	8.1	8.1	31.0	31.0	98.9	98.9	6.9	6.9	5.4		5		89				<0.2		1.1	
						8.5	2.7	186	24.6		8.1		31.0		98.9		6.9		5.5		4		88				<0.2		1.0	
IM5	Fine	Moderate	14:45	8.5	Surface	1.0	1.5	62	25.3	25.3	8.1	8.1	26.9	26.9	98.3	98.4	6.9	6.9	6.3	7.5	4	4	82	85	820752	804869	<0.2	<0.2	1.7	1.6
						1.0	1.6	63	25.3		8.1		26.8		98.4		6.9		6.4		5		83				<0.2		1.6	
					Middle	4.3	1.7	69	24.7	24.7	8.1	8.1	30.2	30.2	97.8	97.8	6.8		7.7		4		85				<0.2		1.4	
						4.3	1.8	69	24.7		8.1		30.2		97.7		6.8		7.9		3		85				<0.2		1.6	
					Bottom	7.5	1.6	67	24.6	24.6	8.1	8.1	30.5	30.5	96.6	96.7	6.8	6.8	8.5		3		88				<0.2		1.6	
						7.5	1.8	72	24.6		8.1		30.5		96.7		6.8		8.5		3		88				<0.2		1.5	
IM6	Fine	Moderate	14:38	8.4	Surface	1.0	0.8	6	25.5	25.5	8.1	8.1	25.0	25.0	98.0	98.0	7.0	6.9	4.0	5.0	3	4	82	85	821056	805829	<0.2	<0.2	1.6	1.6
						1.0	0.9	6	25.5		8.1		25.0		98.0		7.0		4.0		3		83				<0.2		1.6	
					Middle	4.2	1.3	17	25.0	25.0	8.1	8.1	27.1	27.1	94.0	94.1	6.7		4.7		3		85				<0.2		1.6	
						4.2	1.4	17	25.0		8.1		27.1		94.1		6.7		4.8		4		85				<0.2		1.6	
					Bottom	7.4	1.6	22	24.8	24.8	8.1	8.1	29.6	29.6	95.4	95.5	6.7	6.7	6.1		4		88				<0.2		1.7	
						7.4	1.7	24	24.8		8.1		29.6		95.5		6.7		6.3		4		88				<0.2		1.6	
IM7	Fine	Moderate	14:30	9.7	Surface	1.0	0.2	240	26.0	26.0	8.0	8.0	24.2	24.2	100.4	100.4	7.1	6.8	3.4	3.9	3	4	83	86	821348	806835	<0.2	<0.2	1.6	1.6
						1.0	0.2	250	26.0		8.0		24.1		100.4		7.1		3.4		3		83				<0.2		1.6	
					Middle	4.9	0.2	199	24.9	24.9	8.0	8.0	27.1	27.1	91.2	91.2	6.5		4.0		3		86				<0.2		1.7	
						4.9	0.2	208	24.9		8.0		27.1		91.2		6.5		3.9		4		86				<0.2		1.6	
					Bottom	8.7	0.2	255	24.9	24.9	8.0	8.0	27.9	27.9	89.1	89.1	6.3	6.3	4.6		4		89				<0.2		1.7	
						8.7	0.2	256	24.9		8.0		27.9		89.1		6.3		4.3		5		89				<0.2		1.6	
IM8	Fine	Moderate	14:52	8.0	Surface	1.0	0.3	100	25.8	25.8	8.1	8.1	24.6	24.6	92.5	92.5	6.6	6.5	3.7	9.5	3	4	82	84	821831	808141	<0.2	<0.2	1.6	1.5
						1.0	0.3	105	25.8		8.1		24.6		92.5		6.6		3.7		4		82				<0.2		1.6	
					Middle	4.0	0.4	75	25.1	25.1	8.1	8.1	27.1	27.1	89.7	89.6	6.3		7.2		4		84				<0.2		1.4	
						4.0	0.4	75	25.1		8.1		27.1		89.5		6.3		7.1		4		84				<0.2		1.4	
					Bottom	7.0	0.4	76	25.0	25.0	8.1	8.1	28.3	28.3	88.5	88.6	6.2	6.2	17.8		6		86				<0.2		1.5	
						7.0	0.4	76	25.0		8.1		28.3		88.6		6.2		17.7		5		86				<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 01 May 21 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Fine	Moderate	14:58	7.6	Surface	1.0	0.7	87	25.7	25.7	8.1	8.1	24.1	24.1	94.8	94.8	6.7	6.6	4.0	8.7	4	5	82	85	822078	808808	<0.2	<0.2	1.5	1.6
						1.0	0.7	87	25.7		8.1		24.1		94.7		6.7		4.0		5		83				<0.2		1.6	
					Middle	3.8	0.7	76	25.2	25.2	8.1	8.1	26.6	26.6	90.7	90.7	6.4		6.9		5		84				<0.2		1.6	
						3.8	0.7	81	25.2		8.1		26.6		90.7		6.4		7.0		4		85				<0.2		1.6	
					Bottom	6.6	0.6	64	25.0	25.0	8.1	8.1	27.8	27.8	88.3	88.3	6.2	6.2	15.2		5		87				<0.2		1.5	
						6.6	0.6	65	25.0		8.1		27.8		88.3		6.2		15.2		5		87				<0.2		1.5	
IM10	Fine	Moderate	15:04	8.4	Surface	1.0	0.9	77	25.3	25.3	8.1	8.1	26.0	26.0	91.8	91.8	6.5	6.3	4.7	9.7	9	8	84	85	822363	809781	<0.2	<0.2	1.6	1.6
						1.0	0.9	77	25.3		8.1		26.0		91.8		6.5		4.7		9		84				<0.2		1.7	
					Middle	4.2	0.8	84	24.9	24.9	8.1	8.1	27.7	27.7	86.2	86.2	6.1		10.8		8		85				<0.2		1.6	
						4.2	0.8	88	24.9		8.1		27.7		86.1		6.1		10.9		8		85				<0.2		1.6	
					Bottom	7.4	0.6	101	24.9	24.9	8.1	8.1	28.8	28.8	82.4	82.5	5.8	5.8	13.6		7		87				<0.2		1.7	
						7.4	0.6	103	24.9		8.1		28.8		82.5		5.8		13.7		6		87				<0.2		1.6	
IM11	Fine	Moderate	15:13	8.9	Surface	1.0	0.8	91	25.4	25.4	8.1	8.1	26.4	26.4	88.8	88.8	6.3	6.2	4.5	6.2	9	8	82	85	822073	811473	<0.2	<0.2	1.7	1.6
						1.0	0.9	93	25.4		8.1		26.4		88.8		6.3		4.6		8		83				<0.2		1.6	
					Middle	4.5	0.8	97	25.1	25.1	8.1	8.1	27.5	27.5	84.3	84.3	6.0		6.2		7		84				<0.2		1.6	
						4.5	0.8	106	25.1		8.1		27.5		84.3		6.0		6.2		8		85				<0.2		1.6	
					Bottom	7.9	0.4	94	24.9	24.9	8.1	8.1	28.9	28.9	82.9	82.9	5.8	5.8	7.9		7		87				<0.2		1.5	
						7.9	0.4	100	24.9		8.1		28.9		82.9		5.8		7.9		7		86				<0.2		1.4	
IM12	Fine	Moderate	15:19	8.3	Surface	1.0	0.5	95	25.4	25.4	8.1	8.1	26.8	26.8	87.7	87.7	6.2	6.1	4.2	5.0	7	6	82	85	821452	812042	<0.2	<0.2	1.3	1.3
						1.0	0.5	99	25.4		8.1		26.8		87.7		6.2		4.2		6		82				<0.2		1.3	
					Middle	4.2	0.4	116	25.3	25.3	8.1	8.1	28.1	28.1	85.4	85.4	6.0		5.0		7		84				<0.2		1.3	
						4.2	0.4	119	25.3		8.1		28.1		85.4		6.0		4.9		6		85				<0.2		1.2	
					Bottom	7.3	0.2	92	25.0	25.0	8.1	8.1	28.6	28.6	83.3	83.3	5.9	5.9	6.0		5		87				<0.2		1.5	
						7.3	0.3	93	25.0		8.1		28.6		83.3		5.9		6.0		5		88				<0.2		1.3	
SR1A	Fine	Moderate	15:50	5.6	Surface	1.0	-	-	26.0	26.0	8.1	8.1	27.0	27.0	91.6	91.6	6.4	6.4	2.6	4.1	2	3	-	-	819975	812655	-	-	-	-
						1.0	-	-	26.0		8.1		27.0		91.5		6.4		2.7		3		-				-		-	
					Middle	2.8	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.8	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.6	-	-	25.2	25.2	8.1	8.1	28.5	28.5	84.2	84.4	5.9	5.9	5.6		3		-				-		-	
						4.6	-	-	25.2		8.1		28.5		84.5		5.9		5.4		4		-				-		-	
SR2	Fine	Moderate	16:04	4.6	Surface	1.0	0.6	127	25.7	25.7	8.1	8.1	26.4	26.4	90.7	90.6	6.4	6.4	3.6	4.9	4	4	82	83	821443	814147	<0.2	<0.2	1.2	1.3
						1.0	0.6	136	25.7		8.1		26.4		90.5		6.4		3.6		4		82				<0.2		1.3	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.3	162	25.1	25.1	8.1	8.1	28.6	28.6	83.9	83.9	5.9	5.9	6.1		5		83				<0.2		1.2	
						3.6	0.3	169	25.0		8.1		28.7		83.9		5.9		6.3		4		84				<0.2		1.3	
SR3	Fine	Moderate	14:47	8.8	Surface	1.0	0.3	121	25.2	25.2	8.1	8.1	25.9	25.9	87.6	87.6	6.2	6.2	5.3	10.7	7	6	-	-	822155	807586	-	-	-	-
						1.0	0.4	126	25.2		8.1		26.0		87.6		6.2		5.3		6		-				-		-	
					Middle	4.4	0.4	103	25.0	25.0	8.1	8.1	27.0	27.0	86.5	86.5	6.1		10.1		6		-				-		-	
						4.4	0.4	111	25.0		8.1		27.0		86.5		6.1		10.0		6		-				-		-	
					Bottom	7.8	0.4	78	25.1	25.1	8.2	8.2	28.2	28.2	89.4	89.4	6.3	6.3	17.0		5		-				-		-	
						7.8	0.4	80	25.1		8.2		28.2		89.4		6.3		16.6		5		-				-		-	
SR4A	Fine	Calm	16:02	9.6	Surface	1.0	1.6	191	25.3	25.3	8.1	8.1	29.0	29.0	98.5	98.5	6.9	6.8	6.7	7.4	3	5	-	-	817177	807816	-	-	-	-
						1.0	1.8	202	25.3		8.1		29.0		98.4		6.9		6.8		2		-				-		-	
					Middle	4.8	1.7	198	24.7	24.7	8.1	8.1	30.0	30.0	95.6	95.7	6.7		7.3		4		-				-		-	
						4.8	1.8	204	24.7		8.1		30.0		95.7		6.7		7.4		5		-				-		-	
					Bottom	8.6	1.7	196	24.7	24.7	8.1	8.1	30.2	30.2	95.9	95.9	6.7	6.7	8.1		7		-				-		-	
						8.6	1.9	209	24.7		8.1		30.2		95.9		6.7		8.2		7		-				-		-	
SR5A	Fine	Calm	16:19	3.6	Surface	1.0	0.2	307	25.4	25.4	8.0	8.0	27.2	27.2	94.2	94.2	6.6	6.6	5.6	6.4	7	7	-	-	816599	810684	-	-	-	-
						1.0	0.2	331	25.4		8.0		27.2		94.2		6.6		5.6		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.6	0.1	308	25.2	25.2	8.0	8.0	27.2	27.2	92.6	92.6	6.5	6.5	7.2		7		-				-		-	
						2.6	0.1	308	25.2		8.0		27.2		92.6		6.5		7.3		7		-				-		-	
SR6A	Fine	Calm	16:52	4.1	Surface	1.0	0.1	44	25.6	25.6	8.0	8.0	26.9	26.9	96.4	96.5	6.8	6.8	3.6	3.7	5	5	-	-	817963	814733	-	-	-	-
						1.0	0.1	44	25.6		8.1		27.0		96.5		6.8		3.6		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.1	113	25.6	25.6	8.1	8.1	27.3	27.3	95.7	95.6	6.7	6.7	3.8		4		-				-		-	
						3.1	0.1	120	25.6		8.1		27.3		95.4		6.7		3.9		4		-				-		-	
SR7	Fine	Moderate	16:54	14.6	Surface	1.0	0.6	61	25.3	25.3	8.1	8.1	29.3	29.3	89.9	89.9	6.3	6.1	3.3	4.3	5	4	-	-	823643	823744	-	-	-	-
						1.0	0.7	61	25.3		8.1		29.3		89.9		6.3		3.2		4		-				-		-	
					Middle	7.3	0.2	14	24.7	24.7	8.1	8.1	31.1	31.1	85.4	85.4	5.9		4.1		5		-				-		-	
						7.3	0.2	14	24.7		8.1		31.1		85.4		5.9		4.2		4		-				-		-	
					Bottom	13.6	0.2	55	24.5	24.5	8.2	8.2	32.1	32.1	84.3	84.4	5.9	5.9	5.5		3		-				-		-	
						13.6	0.2	57	24.5		8.2		32.1		84.4		5.9		5.6		4		-				-		-	
SR8	Fine	Moderate	15:28	4.3	Surface	1.0	-	-	25.5	25.5	8.1	8.1	28.0	28.0	84.6	84.6	5.9	5.9	7.3	7.8	10	11	-	-	820411	811635	-	-	-	-
						1.0	-	-	25.5		8.1		28.0		84.6		5.9		7.4		11		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	-	-	25.1	25.1	8.1	8.1	28.3	28.3	84.2	84.3	5.9	5.9	8.3		10		-				-		-	
						3.3	-	-	25.1		8.1		28.3		84.4		5.9		8.3		11		-				-		-	

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 01 May 21 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	09:39	9.2	Surface	1.0	2.8	345	24.7	24.7	8.1	8.1	29.8	29.8	99.5	99.5	7.0	7.0	6.4	6.9	8	6	84	87	815634	804260	<0.2	<0.2	1.1	1.1
						1.0	3.0	350	24.7		8.1		29.8		99.5		7.0		6.5		7		84				<0.2		1.1	
					Middle	4.6	2.8	344	24.5	24.5	8.1	8.1	31.4	31.4	98.6	98.6	6.9		6.7		6		87				<0.2		1.2	
						4.6	3.0	2	24.5		8.1		31.4		98.6		6.9		6.8		5		87				<0.2		1.1	
					Bottom	8.2	3.0	348	24.5	24.5	8.1	8.1	31.5	31.5	98.2	98.2	6.9	6.9	7.5		4		90				<0.2		1.2	
						8.2	3.1	12	24.5		8.2		31.5		98.2		6.9		7.6		5		90				<0.2		1.1	
C2	Fine	Moderate	10:42	12.6	Surface	1.0	0.3	350	25.2	25.2	8.1	8.1	25.6	25.6	88.0	88.0	6.3	6.2	3.8	9.9	4	4	86	88	825669	806930	<0.2	<0.2	1.6	1.7
						1.0	0.3	322	25.2		8.1		25.6		87.9		6.3		3.8		5		86				<0.2		1.6	
					Middle	6.3	0.4	28	24.9	24.9	8.1	8.1	27.2	27.2	84.8	84.8	6.0		8.0		4		88				<0.2		1.7	
						6.3	0.4	29	24.9		8.1		27.2		84.8		6.0		7.9		4		89				<0.2		1.7	
					Bottom	11.6	0.4	346	24.9	24.9	8.1	8.1	27.6	27.6	82.3	82.2	5.8	5.8	18.0		4		91				<0.2		1.7	
						11.6	0.4	318	24.9		8.1		27.6		82.1		5.8		17.8		4		90				<0.2		1.6	
C3	Fine	Moderate	08:42	12.1	Surface	1.0	0.3	241	25.1	25.1	8.1	8.1	27.2	27.2	86.0	86.0	6.1	6.0	3.4	6.9	3	3	84	88	822130	817790	<0.2	<0.2	1.5	1.4
						1.0	0.3	261	25.1		8.1		27.2		85.9		6.1		3.4		3		84				<0.2		1.4	
					Middle	6.1	0.4	252	24.8	24.8	8.1	8.1	29.3	29.3	83.8	83.8	5.9		4.4		2		89				<0.2		1.3	
						6.1	0.4	257	24.8		8.1		29.3		83.8		5.9		4.3		3		89				<0.2		1.4	
					Bottom	11.1	0.4	266	24.6	24.6	8.1	8.1	31.0	31.0	82.7	82.8	5.8	5.8	13.1		3		89				<0.2		1.4	
						11.1	0.4	288	24.6		8.1		31.0		82.8		5.8		12.9		2		90				<0.2		1.4	
IM1	Fine	Moderate	09:58	5.8	Surface	1.0	2.3	201	25.0	25.0	8.0	8.0	27.0	27.0	94.3	94.3	6.7	6.7	5.3	5.8	5	5	85	87	817942	807153	<0.2	<0.2	1.2	1.2
						1.0	2.5	220	25.0		8.0		26.9		94.3		6.7		5.2		4		85				<0.2		1.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.8	2.1	202	24.9	24.9	8.0	8.0	27.6	27.7	92.4	92.4	6.5	6.5	6.3		6		88				<0.2		1.1	
						4.8	2.3	219	24.9		8.0		27.7		92.4		6.5		6.5		5		88				<0.2		1.2	
IM2	Fine	Moderate	10:05	7.7	Surface	1.0	1.7	191	25.0	25.0	8.1	8.1	27.1	27.1	96.6	96.6	6.8	6.7	4.4	4.9	7	5	83	86	818142	806173	<0.2	<0.2	1.1	1.2
						1.0	1.7	191	25.0		8.1		27.1		96.6		6.8		4.4		6		83				<0.2		1.1	
					Middle	3.9	1.5	189	24.9	24.9	8.1	8.1	28.2	28.2	92.3	92.4	6.5		4.8		5		86				<0.2		1.2	
						3.9	1.5	197	24.9		8.1		28.2		92.4		6.5		5.0		4		86				<0.2		1.2	
					Bottom	6.7	1.7	187	24.9	24.9	8.1	8.1	28.4	28.4	91.8	91.9	6.5	6.5	5.4		4		89				<0.2		1.2	
						6.7	1.9	203	24.9		8.1		28.4		91.9		6.5		5.4		4		89				<0.2		1.1	
IM3	Fine	Moderate	10:12	8.0	Surface	1.0	2.6	14	25.0	25.0	8.1	8.1	26.9	26.9	97.3	97.3	6.9	6.8	4.0	4.7	3	3	83	86	818786	805601	<0.2	<0.2	1.2	1.2
						1.0	2.7	15	25.0		8.1		26.9		97.2		6.9		4.1		4		83				<0.2		1.2	
					Middle	4.0	2.3	12	24.8	24.8	8.1	8.1	29.0	29.0	94.1	94.2	6.6		4.4		3		86				<0.2		1.1	
						4.0	2.5	12	24.8		8.1		29.0		94.2		6.6		4.4		3		86				<0.2		1.2	
					Bottom	7.0	2.4	16	24.8	24.8	8.1	8.1	29.4	29.4	95.0	95.0	6.7	6.7	5.6		3		88				<0.2		1.2	
						7.0	2.6	16	24.8		8.1		29.4		95.0		6.7		5.5		3		88				<0.2		1.2	
IM4	Fine	Moderate	10:21	9.3	Surface	1.0	1.8	254	25.5	25.5	8.1	8.1	26.5	26.5	100.4	100.5	7.1	7.0	3.4	3.9	2	3	83	86	819736	804629	<0.2	<0.2	1.2	1.2
						1.0	2.0	263	25.5		8.1		26.5		100.5		7.1		3.4		2		83				<0.2		1.2	
					Middle	4.7	2.0	244	25.0	25.0	8.1	8.1	27.9	27.9	98.1	98.1	6.9		3.9		4		85				<0.2		1.1	
						4.7	2.2	251	25.0		8.1		27.9		98.1		6.9		3.9		3		86				<0.2		1.2	
					Bottom	8.3	1.9	252	24.7	24.7	8.1	8.1	29.9	29.9	95.4	95.4	6.7	6.7	4.5		3		88				<0.2		1.2	
						8.3	2.1	263	24.7		8.1		29.9		95.4		6.7		4.4		4		88				<0.2		1.2	
IM5	Fine	Moderate	10:28	8.2	Surface	1.0	3.2	349	24.9	24.9	8.1	8.1	28.1	28.0	95.4	95.4	6.7	6.7	13.0	14.4	3	4	83	86	820756	804865	<0.2	<0.2	1.2	1.2
						1.0	3.2	321	24.9		8.1		28.0		95.4		6.7		13.0		4		83				<0.2		1.2	
					Middle	4.1	3.3	345	24.9	24.9	8.1	8.1	28.3	28.2	94.6	94.6	6.7		14.3		3		86				<0.2		1.1	
						4.1	3.4	357	24.9		8.1		28.2		94.6		6.7		14.4		4		86				<0.2		1.1	
					Bottom	7.2	3.2	339	24.9	24.9	8.1	8.1	28.5	28.5	93.9	93.9	6.6	6.6	15.8		5		89				<0.2		1.2	
						7.2	3.5	347	24.9		8.1		28.5		93.9		6.6		16.0		6		89				<0.2		1.2	
IM6	Fine	Moderate	10:36	8.3	Surface	1.0	2.5	221	25.2	25.2	8.1	8.1	25.1	25.1	95.6	95.6	6.8	6.8	4.2	5.8	5	4	84	86	821067	805831	<0.2	<0.2	1.5	1.5
						1.0	2.5	236	25.2		8.1		25.2		95.5		6.8		4.3		4		83				<0.2		1.5	
					Middle	4.2	2.3	219	25.1	25.1	8.1	8.1	25.8	25.8	94.5	94.5	6.7		5.6		3		86				<0.2		1.5	
						4.2	2.4	219	25.1		8.1		25.8		94.5		6.7		5.7		4		86				<0.2		1.5	
					Bottom	7.3	2.7	216	24.9	24.9	8.1	8.1	27.2	27.2	91.2	91.2	6.5	6.5	7.5		3		89				<0.2		1.6	
						7.3	2.7	226	24.9		8.1		27.3		91.1		6.5		7.3		4		89				<0.2		1.6	
IM7	Fine	Moderate	10:45	9.2	Surface	1.0	0.0	0	25.4	25.4	8.1	8.1	24.9	24.9	96.1	96.0	6.8	6.7	3.9	4.6	3	3	84	86	821342	806846	<0.2	<0.2	1.8	1.9
						1.0	0.0	0	25.4		8.1		25.0		95.8		6.8		4.0		3		83				<0.2		1.9	
					Middle	4.6	0.2	134	25.0	25.0	8.1	8.1	26.3	26.3	93.4	93.3	6.7		4.3		3		86				<0.2		1.9	
						4.6	0.2	136	25.0		8.1		26.4		93.1		6.6		4.3		3		86				<0.2		1.9	
					Bottom	8.2	0.2	135	24.9	24.9	8.1	8.1	27.5	27.5	90.8	90.8	6.4	6.4	5.7		3		88				<0.2		1.8	
						8.2	0.2	143	24.9		8.1		27.5		90.8		6.4		5.7		4		89				<0.2		1.9	
IM8	Fine	Moderate	10:16	8.6	Surface	1.0	0.1	149	25.2	25.2	8.0	8.0	26.0	26.0	85.7	85.7	6.1	6.1	4.4	6.5	5	6	84	87	821821	808128	<0.2	<0.2	1.6	1.5
						1.0	0.1	163	25.2		8.0		26.0		85.7		6.1		4.5		6		84				<0.2		1.5	
					Middle	4.3	0.1	118	25.1	25.1	8.0	8.0	26.2	26.2	85.1	85.1	6.1		5.5		5		87				<0.2		1.5	
						4.3	0.1	127	25.1		8.0		26.2		85.1		6.1		5.5		6		88				<0.2		1.5	
					Bottom	7.6	0.3	101	24.9	24.9	8.1	8.1	28.0	28.0	84.1	84.2	5.9	5.9	9.4		6		90				<0.2		1.5	
						7.6	0.3	103	24.9		8.1		28.0		84.2		5.9		9.5		6		91				<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 01 May 21 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	10:10	8.2	Surface	1.0	0.2	103	25.2	25.2	8.1	8.1	26.2	26.2	83.8	83.8	6.0	5.9	7.8	10.9	6	5	83	86	822108	808831	<0.2	<0.2	1.4	1.5
						1.0	0.2	104	25.2		8.1		26.2		83.8		5.9		7.8		6		83				<0.2		1.6	
					Middle	4.1	0.2	137	25.2	25.2	8.1	8.1	26.4	26.4	83.2	83.2	5.9		10.9		4		86				<0.2		1.4	
						4.1	0.2	145	25.2		8.1		26.4		83.2		5.9		10.9		5		87				<0.2		1.5	
					Bottom	7.2	0.2	132	25.2	25.2	8.0	8.0	26.5	26.5	83.5	83.6	5.9	5.9	14.2		4		90				<0.2		1.5	
						7.2	0.2	138	25.2		8.0		26.5		83.6		5.9		14.0		5		89				<0.2		1.5	
IM10	Fine	Moderate	10:02	8.8	Surface	1.0	0.8	298	25.3	25.3	8.0	8.0	25.9	25.9	87.1	87.1	6.2	6.0	3.7	11.1	3	3	82	86	822408	809805	<0.2	<0.2	1.2	1.4
						1.0	0.9	318	25.3		8.0		25.9		87.0		6.2		3.7		4		81				<0.2		1.3	
					Middle	4.4	0.6	296	25.0	25.0	8.0	8.0	27.7	27.7	82.5	82.5	5.8		11.3		3		82				<0.2		1.5	
						4.4	0.6	325	25.0		8.0		27.7		82.4		5.8		11.5		2		83				<0.2		1.5	
					Bottom	7.8	0.5	296	25.0	25.0	8.0	8.0	27.8	27.8	82.3	82.3	5.8	5.8	18.1		2		93				<0.2		1.4	
						7.8	0.5	302	25.0		8.0		27.8		82.3		5.8		18.0		2		93				<0.2		1.4	
IM11	Fine	Moderate	09:53	8.6	Surface	1.0	0.8	312	25.3	25.3	8.0	8.0	26.2	26.2	88.0	88.0	6.2	6.0	3.6	12.0	3	3	82	86	822058	811454	<0.2	<0.2	1.2	1.3
						1.0	0.9	319	25.3		8.0		26.2		87.9		6.2		3.6		2		82				<0.2		1.3	
					Middle	4.3	0.8	310	25.0	25.0	8.0	8.0	28.1	28.1	82.2	82.2	5.8		12.3		3		87				<0.2		1.3	
						4.3	0.8	313	25.0		8.0		28.1		82.2		5.8		12.5		2		87				<0.2		1.3	
					Bottom	7.6	0.5	318	24.9	24.9	8.0	8.0	28.5	28.5	81.5	81.5	5.7	5.7	19.9		4		90				<0.2		1.3	
						7.6	0.5	340	24.9		8.0		28.5		81.5		5.7		20.0		3		89				<0.2		1.3	
IM12	Fine	Moderate	09:47	9.1	Surface	1.0	0.9	300	25.2	25.2	8.0	8.0	27.3	27.3	86.3	86.3	6.1	6.1	3.6	9.7	5	4	85	89	821478	812029	<0.2	<0.2	1.2	1.3
						1.0	0.9	306	25.2		8.0		27.3		86.3		6.1		3.6		4		85				<0.2		1.3	
					Middle	4.6	0.9	304	25.2	25.2	8.0	8.0	27.6	27.6	85.3	85.3	6.0		5.4		5		89				<0.2		1.3	
						4.6	0.9	314	25.2		8.0		27.6		85.3		6.0		5.7		4		90				<0.2		1.3	
					Bottom	8.1	0.6	313	25.0	25.0	8.0	8.0	28.4	28.4	83.6	83.7	5.9	5.9	19.9		4		91				<0.2		1.4	
						8.1	0.6	316	25.0		8.0		28.4		83.7		5.9		20.1		3		92				<0.2		1.3	
SR1A	Fine	Moderate	09:16	5.1	Surface	1.0	-	-	25.3	25.3	8.0	8.0	26.1	26.1	85.6	85.6	6.1	6.1	3.1	3.6	4	4	-	-	819972	812665	-	-	-	-
						1.0	-	-	25.3		8.0		26.1		85.6		6.1		3.1		5		-				-		-	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	-	-	25.1	25.1	8.0	8.0	27.1	27.1	82.9	83.0	5.9	5.9	4.1		3		-				-		-	
						4.1	-	-	25.1		8.0		27.1		83.1		5.9		4.1		3		-				-		-	
SR2	Fine	Moderate	09:02	4.3	Surface	1.0	0.2	96	25.1	25.1	8.0	8.0	27.9	27.9	83.4	83.4	5.9	5.9	6.2	7.8	4	4	85	86	821477	814183	<0.2	<0.2	1.4	1.3
						1.0	0.2	97	25.0		8.0		27.9		83.4		5.9		6.2		4		85				<0.2		1.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.2	84	25.0	25.0	8.0	8.0	28.3	28.3	83.3	83.4	5.9	5.9	9.3		4		88				<0.2		1.3	
						3.3	0.2	88	25.0		8.0		28.3		83.4		5.9		9.4		5		87				<0.2		1.3	
SR3	Fine	Moderate	10:22	9.9	Surface	1.0	0.1	351	25.1	25.2	8.0	8.0	25.6	25.6	88.4	88.5	6.3	6.2	3.7	6.2	4	5	-	-	822164	807554	-	-	-	-
						1.0	0.1	323	25.2		8.0		25.5		88.5		6.3		3.7		5		-				-		-	
					Middle	5.0	0.1	32	25.0	25.0	8.0	8.0	26.4	26.4	85.9	85.9	6.1		4.5		5		-				-		-	
						5.0	0.1	32	25.0		8.0		26.4		85.9		6.1		4.5		4		-				-		-	
					Bottom	8.9	0.2	96	24.9	24.9	8.1	8.1	27.6	27.6	84.5	84.6	6.0	6.0	10.2		6		-				-		-	
						8.9	0.2	99	24.9		8.1		27.6		84.6		6.0		10.4		5		-				-		-	
SR4A	Cloudy	Calm	09:16	9.8	Surface	1.0	2.1	76	24.9	24.9	8.0	8.0	26.8	26.8	92.3	92.3	6.6	6.5	5.8	6.9	4	5	-	-	817171	807824	-	-	-	-
						1.0	2.2	78	24.9		8.0		26.8		92.2		6.6		5.7		3		-				-		-	
					Middle	4.9	2.6	77	24.9	24.9	8.0	8.0	27.2	27.2	89.9	89.9	6.4		7.0		5		-				-		-	
						4.9	2.6	77	24.9		8.0		27.2		89.8		6.4		7.0		4		-				-		-	
					Bottom	8.8	2.4	75	24.9	24.9	8.1	8.1	27.7	27.7	89.1	89.2	6.3	6.3	7.8		6		-				-		-	
						8.8	2.6	77	24.9		8.1		27.7		89.2		6.3		7.8		6		-				-		-	
SR5A	Fine	Calm	08:58	3.3	Surface	1.0	0.1	280	25.0	25.0	8.0	8.0	27.6	27.6	91.1	91.0	6.4	6.4	5.0	5.6	4	4	-	-	816575	810718	-	-	-	-
						1.0	0.1	297	25.0		8.0		27.6		90.8		6.4		5.1		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.3	0.1	276	25.0	25.0	8.0	8.0	27.8	27.8	89.7	89.7	6.3	6.3	6.1		3		-				-		-	
						2.3	0.1	291	25.0		8.0		27.8		89.7		6.3		6.1		4		-				-		-	
SR6A	Cloudy	Calm	08:31	4.2	Surface	1.0	0.1	302	25.2	25.2	8.0	8.0	26.3	26.3	90.6	90.6	6.4	6.4	5.8	5.5	5	5	-	-	817957	814734	-	-	-	-
						1.0	0.1	303	25.2		8.0		26.3		90.6		6.4		5.8		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.1	325	25.2	25.2	7.9	7.9	26.6	26.6	91.0	91.1	6.4	6.5	5.2		6		-				-		-	
						3.2	0.1	353	25.2		7.9		26.6		91.1		6.5		5.2		5		-				-		-	
SR7	Fine	Moderate	08:13	14.5	Surface	1.0	0.0	116	25.0	25.0	8.1	8.1	28.2	28.2	86.7	86.7	6.1	6.0	3.4	3.4	4	4	-	-	823644	823727	-	-	-	-
						1.0	0.0	122	25.0		8.1		28.2		86.7		6.1		3.4		3		-				-		-	
					Middle	7.3	0.1	184	24.8	24.8	8.1	8.1	29.3	29.3	84.4	84.4	5.9		3.6		4		-				-		-	
						7.3	0.1	193	24.8		8.1		29.2		84.3		5.9		3.6		3		-				-		-	
					Bottom	13.5	0.1	76	24.7	24.7	8.1	8.1	30.4	30.4	83.5	83.5	5.8	5.8	3.2		5		-				-		-	
						13.5	0.1	79	24.7		8.1		30.4		83.5		5.8		3.2		4		-				-		-	
SR8	Fine	Moderate	09:40	4.4	Surface	1.0	-	-	25.2	25.2	8.0	8.0	26.4	26.4	85.6	85.6	6.1	6.1	12.3	14.2	17	20	-	-	820367	811640	-	-	-	-
						1.0	-	-	25.2		8.0		26.4		85.6		6.1		12.4		19		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	-	-	25.2	25.2	8.0	8.0	26.9	26.9	85.1	85.2	6.0	6.0	16.2		22		-				-		-	
						3.4	-	-	25.2		8.0		26.9		85.2		6.0		16.1		21		-				-		-	

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 04 May 21 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	Calm	18:42	8.4	Surface	1.0	2.0	99	25.3	25.3	8.1	8.1	24.9	24.9	96.6	96.3	6.9	6.8	3.5	5.8	4	3	88	91	815643	804255	<0.2	<0.2	1.2	1.3
						1.0	2.0	103	25.2		8.1		24.9		96.0		6.9		3.4		3		88				<0.2		1.3	
					Middle	4.2	1.9	94	25.1	25.1	8.1	8.1	28.9	28.9	94.0	93.9	6.6		6.1		3		91				<0.2		1.3	
						4.2	1.9	100	25.1		8.1		29.0		93.8		6.6		6.2		3		92				<0.2		1.2	
					Bottom	7.4	2.0	98	25.1	25.1	8.1	8.1	29.1	29.1	93.7	93.8	6.6	6.6	7.9		3		93				<0.2		1.2	
						7.4	2.2	107	25.1		8.1		29.1		93.8		6.6		7.9		2		93				<0.2		1.3	
C2	Fine	Moderate	17:44	11.9	Surface	1.0	0.5	143	25.4	25.4	8.1	8.1	24.2	24.2	88.2	88.1	6.3	6.0	3.4	4.2	6	5	84	88	825662	806958	<0.2	<0.2	1.7	1.7
						1.0	0.5	148	25.4		8.1		24.2		88.0		6.3		3.5		5		85				<0.2		1.6	
					Middle	6.0	0.5	133	25.1	25.1	8.1	8.1	28.5	28.6	81.0	80.9	5.7		4.4		4		88				<0.2		1.8	
						6.0	0.5	139	25.1		8.1		28.7		80.7		5.7		4.5		5		88				<0.2		1.6	
					Bottom	10.9	0.4	165	25.0	25.0	8.1	8.1	29.7	29.7	80.0	80.1	5.6	5.6	4.8		5		92				<0.2		1.6	
						10.9	0.4	173	25.0		8.1		29.7		80.1		5.6		4.6		4		91				<0.2		1.6	
C3	Fine	Moderate	19:31	12.2	Surface	1.0	0.6	123	25.3	25.3	8.1	8.1	28.8	28.8	87.4	87.3	6.1	6.1	3.1	2.9	2	3	89	91	822121	817783	<0.2	<0.2	1.9	1.8
						1.0	0.6	132	25.2		8.1		28.9		87.1		6.1		2.9		3		88				<0.2		1.9	
					Middle	6.1	0.4	121	25.1	25.1	8.1	8.1	29.4	29.4	86.5	86.5	6.0		2.5		3		90				<0.2		1.8	
						6.1	0.4	125	25.1		8.1		29.4		86.5		6.0		2.5		3		90				<0.2		1.9	
					Bottom	11.2	0.3	109	24.7	24.8	8.1	8.1	31.4	31.4	84.9	85.2	5.9	5.9	3.4		3		93				<0.2		1.7	
						11.2	0.3	110	24.8		8.1		31.4		85.4		5.9		3.0		3		93				<0.2		1.8	
IM1	Fine	Calm	18:24	5.2	Surface	1.0	0.2	190	25.3	25.3	8.1	8.1	25.0	25.0	97.2	97.0	6.9	6.9	2.5	3.0	3	4	88	87	817970	807113	<0.2	<0.2	1.2	1.2
						1.0	0.2	199	25.2		8.1		25.0		96.8		6.9		2.5		4		87				<0.2		1.1	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.1	186	25.2	25.2	8.1	8.1	28.7	28.7	97.0	97.2	6.8	6.8	3.4		3		87				<0.2		1.2	
						4.2	0.1	198	25.2		8.1		28.7		97.4		6.8		3.5		4		87				<0.2		1.2	
IM2	Fine	Calm	18:19	7.0	Surface	1.0	2.3	303	25.2	25.2	8.1	8.1	25.0	25.0	96.7	96.5	6.9	6.8	3.3	4.5	3	4	87	90	818152	806155	<0.2	<0.2	1.2	1.1
						1.0	2.5	310	25.2		8.1		25.0		96.3		6.9		3.4		4		87				<0.2		1.1	
					Middle	3.5	2.5	301	25.1	25.1	8.1	8.1	28.7	28.7	95.1	95.1	6.7		4.8		4		91				<0.2		1.1	
						3.5	2.7	315	25.1		8.1		28.8		95.0		6.7		4.8		4		92				<0.2		1.1	
					Bottom	6.0	2.3	298	25.1	25.1	8.1	8.1	29.0	29.0	95.2	95.4	6.7	6.7	5.3		4		92				<0.2		1.1	
						6.0	2.4	313	25.1		8.1		29.0		95.6		6.7		5.3		4		93				<0.2		1.0	
IM3	Fine	Calm	18:14	7.4	Surface	1.0	1.6	276	25.3	25.3	8.1	8.1	25.0	25.0	97.1	96.9	6.9	6.8	3.1	4.6	5	4	89	91	818799	805604	<0.2	<0.2	1.1	1.1
						1.0	1.8	300	25.2		8.1		25.0		96.6		6.9		3.1		5		89				<0.2		1.0	
					Middle	3.7	1.7	260	25.1	25.1	8.1	8.1	28.7	28.8	95.4	95.3	6.7		5.1		4		92				<0.2		1.2	
						3.7	1.8	275	25.1		8.1		28.8		95.2		6.7		5.1		5		92				<0.2		1.2	
					Bottom	6.4	1.8	274	25.1	25.1	8.1	8.1	29.0	29.0	95.4	95.5	6.7	6.7	5.7		4		93				<0.2		1.2	
						6.4	1.8	275	25.1		8.1		29.0		95.6		6.7		5.7		3		93				<0.2		1.1	
IM4	Fine	Calm	18:08	8.6	Surface	1.0	2.2	231	25.4	25.4	8.1	8.1	24.8	24.8	98.6	98.6	7.0	6.9	3.0	4.4	3	3	88	91	819723	804592	<0.2	<0.2	1.2	1.2
						1.0	2.3	253	25.4		8.1		24.8		98.5		7.0		3.0		3		89				<0.2		1.3	
					Middle	4.3	2.3	245	25.1	25.1	8.1	8.1	28.8	28.8	95.2	95.1	6.7		4.4		4		91				<0.2		1.1	
						4.3	2.5	251	25.1		8.1		28.8		95.0		6.7		4.5		3		91				<0.2		1.1	
					Bottom	7.6	2.1	254	25.1	25.1	8.1	8.1	29.0	29.0	94.5	94.6	6.6	6.6	5.7		3		93				<0.2		1.1	
						7.6	2.2	269	25.1		8.1		29.0		94.6		6.6		5.6		4		93				<0.2		1.2	
IM5	Fine	Calm	18:03	8.0	Surface	1.0	2.0	254	25.3	25.3	8.1	8.1	25.5	25.6	96.0	96.0	6.8	6.8	2.2	4.5	3	4	91	92	820720	804869	<0.2	<0.2	1.2	1.2
						1.0	2.0	256	25.2		8.1		25.8		95.7		6.8		2.2		3		91				<0.2		1.1	
					Middle	4.0	2.3	266	25.1	25.1	8.1	8.1	26.6	26.7	95.0	94.9	6.7		5.5		3		91				<0.2		1.2	
						4.0	2.4	276	25.1		8.1		26.7		94.8		6.7		5.5		4		91				<0.2		1.1	
					Bottom	7.0	2.1	276	25.1	25.1	8.1	8.1	29.0	29.0	94.7	94.8	6.6	6.6	5.9		4		93				<0.2		1.2	
						7.0	2.2	287	25.1		8.1		29.0		94.8		6.6		6.0		5		93				<0.2		1.1	
IM6	Fine	Calm	17:58	7.8	Surface	1.0	1.4	111	25.5	25.5	8.1	8.1	24.7	24.7	98.9	98.9	7.0	6.9	2.9	5.0	3	3	88	90	821038	805816	<0.2	<0.2	1.2	1.1
						1.0	1.4	118	25.5		8.1		24.8		98.8		7.0		3.0		3		88				<0.2		1.0	
					Middle	3.9	1.6	128	25.1	25.1	8.1	8.1	28.4	28.2	94.8	94.7	6.7		4.9		3		90				<0.2		1.1	
						3.9	1.7	139	25.1		8.1		28.1		94.6		6.7		4.9		3		90				<0.2		1.1	
					Bottom	6.8	1.7	122	25.1	25.1	8.1	8.1	29.0	29.0	94.1	94.1	6.6	6.6	7.3		3		92				<0.2		1.1	
						6.8	1.8	130	25.1		8.1		29.0		94.1		6.6		7.3		4		91				<0.2		1.1	
IM7	Fine	Calm	17:46	8.8	Surface	1.0	1.8	45	25.3	25.3	8.1	8.1	25.1	25.1	96.9	96.6	6.9	6.7	3.2	6.1	3	3	87	90	821355	806843	<0.2	<0.2	1.1	1.1
						1.0	1.8	49	25.3		8.1		25.1		96.3		6.9		3.2		3		87				<0.2		1.1	
					Middle	4.4	1.6	57	25.1	25.1	8.1	8.1	28.9	29.0	93.6	93.5	6.6		6.8		4		90				<0.2		1.0	
						4.4	1.7	59	25.1		8.1		29.0		93.4		6.5		6.8		3		90				<0.2		1.1	
					Bottom	7.8	1.6	43	25.1	25.1	8.1	8.1	29.0	29.0	93.2	93.2	6.5	6.5	8.3		4		92				<0.2		1.2	
						7.8	1.6	44	25.1		8.1		29.0		93.2		6.5		8.3		3		92				<0.2		1.1	
IM8	Fine	Moderate	18:08	7.9	Surface	1.0	0.2	143	25.4	25.4	8.1	8.1	26.0	26.1	86.7	86.6	6.1	6.2	3.8	5.2	4	4	83	88	821816	808132	<0.2	<0.2	1.8	1.8
						1.0	0.2	150	25.4		8.1		26.1		86.5		6.1		4.0		3		84				<0.2		1.7	
					Middle	4.0	0.2	88	25.2	25.2	8.1	8.1	27.1	27.1	87.9	88.1	6.2		5.2		3		89				<0.2		1.8	
						4.0	0.2	95	25.2		8.1		27.1		88.3		6.2		5.5		4		90				<0.2		1.8	
					Bottom	6.9	0.3	59	25.1	25.1	8.1	8.1	29.1	29.0	89.0	89.0	6.2	6.2	6.4		3		90				<0.2		1.9	
						6.9	0.3	61	25.1		8.1		29.0		89.0		6.2		6.3		4		92				<0.2		1.7	

DA: Depth-Averaged

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

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 04 May 21 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	18:13	7.6	Surface	1.0	0.4	142	25.4	25.4	8.1	8.1	25.7	25.7	88.1	88.0	6.2	6.2	3.5	4.8	3	3	83	87	822106	808809	<0.2	<0.2	1.7	1.8
						1.0	0.4	153	25.4		8.1		25.8		87.9		6.2		3.5		3		83				<0.2		1.9	
					Middle	3.8	0.3	132	25.3	25.3	8.1	8.1	26.1	26.1	87.9	88.0	6.2		4.4		3		86				<0.2		1.8	
						3.8	0.3	143	25.2		8.1		26.1		88.0		6.3		4.6		4		87				<0.2		1.6	
					Bottom	6.6	0.4	107	25.1	25.1	8.1	8.1	29.0	29.0	88.2	88.2	6.2	6.2	6.6		4		90				<0.2		1.8	
						6.6	0.4	107	25.1		8.1		29.0		88.2		6.2		6.4		3		90				<0.2		1.7	
IM10	Fine	Moderate	18:18	7.2	Surface	1.0	0.6	115	25.5	25.5	8.1	8.1	24.6	24.6	92.2	92.1	6.6	6.4	3.2	4.3	4	4	85	88	822386	809812	<0.2	<0.2	1.6	1.6
						1.0	0.6	124	25.4		8.1		24.6		92.0		6.6		3.3		3		85				<0.2		1.7	
					Middle	3.6	0.5	100	25.2	25.2	8.1	8.1	27.2	27.4	86.8	86.8	6.1		4.3		3		88				<0.2		1.6	
						3.6	0.5	100	25.2		8.1		27.5		86.7		6.1		4.1		4		88				<0.2		1.7	
					Bottom	6.2	0.4	127	25.2	25.2	8.1	8.1	28.4	28.4	86.9	87.0	6.1	6.1	5.5		4		91				<0.2		1.5	
						6.2	0.4	139	25.2		8.1		28.3		87.0		6.1		5.5		3		91				<0.2		1.6	
IM11	Fine	Moderate	18:27	7.0	Surface	1.0	0.7	124	25.5	25.5	8.1	8.1	25.0	25.0	90.1	89.9	6.4	6.2	3.2	4.1	2	3	86	89	822050	811441	<0.2	<0.2	1.7	1.8
						1.0	0.8	136	25.4		8.1		25.0		89.7		6.4		3.4		3		87				<0.2		1.8	
					Middle	3.5	0.6	116	25.3	25.3	8.1	8.1	27.6	27.7	83.6	83.5	5.9		4.2		4		89				<0.2		1.8	
						3.5	0.6	121	25.2		8.1		27.9		83.4		5.9		4.3		3		89				<0.2		1.7	
					Bottom	6.0	0.5	138	25.2	25.2	8.1	8.1	28.5	28.4	84.0	84.2	5.9	5.9	4.7		4		91				<0.2		1.8	
						6.0	0.5	138	25.2		8.1		28.4		84.3		5.9		4.7		3		90				<0.2		1.7	
IM12	Fine	Moderate	18:32	9.6	Surface	1.0	0.6	99	25.4	25.4	8.1	8.1	26.7	26.7	85.8	85.7	6.1	5.9	3.5	4.6	4	4	85	88	821441	812044	<0.2	<0.2	1.8	1.8
						1.0	0.7	106	25.4		8.1		26.8		85.6		6.0		3.6		5		87				<0.2		1.8	
					Middle	4.8	0.6	102	25.1	25.1	8.1	8.1	28.5	28.5	82.1	81.9	5.8		4.7		4		88				<0.2		1.8	
						4.8	0.6	110	25.1		8.1		28.6		81.6		5.7		4.8		4		87				<0.2		1.8	
					Bottom	8.6	0.5	75	25.1	25.1	8.1	8.1	29.0	28.9	80.0	80.3	5.6	5.6	5.5		3		91				<0.2		1.8	
						8.6	0.5	81	25.1		8.1		28.9		80.5		5.6		5.6		3		91				<0.2		1.8	
SR1A	Fine	Calm	18:59	5.3	Surface	1.0	-	-	25.3	25.3	8.1	8.1	27.5	27.7	84.8	84.6	6.0	6.0	4.3	5.0	3	4	-	-	819971	812665	-	-	-	-
						1.0	-	-	25.2		8.1		27.8		84.4		5.9		4.7		4		-				-		-	
					Middle	2.7	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.7	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	-	-	25.1	25.1	8.1	8.1	28.6	28.7	84.4	84.7	5.9	6.0	5.5		4		-				-		-	
						4.3	-	-	25.1		8.1		28.7		84.9		6.0		5.6		5		-				-		-	
SR2	Fine	Calm	19:12	4.4	Surface	1.0	0.4	89	25.6	25.6	8.1	8.1	25.9	26.0	92.1	92.0	6.5	6.5	2.5	2.5	7	5	87	90	821443	814147	<0.2	<0.2	1.7	1.8
						1.0	0.4	97	25.5		8.1		26.2		91.8		6.5		2.5		7		87				<0.2		1.9	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.4	74	25.4	25.4	8.1	8.1	26.8	26.9	91.6	91.7	6.5	6.5	2.5		3		92				<0.2		1.8	
						3.4	0.4	80	25.4		8.1		26.9		91.7		6.5		2.5		4		93				<0.2		1.8	
SR3	Fine	Moderate	18:04	9.0	Surface	1.0	0.1	211	25.5	25.5	8.1	8.1	24.6	24.6	90.3	90.1	6.4	6.2	3.4	4.4	4	4	-	-	822123	807580	-	-	-	-
						1.0	0.1	219	25.4		8.1		24.6		89.9		6.4		3.5		4		-				-		-	
					Middle	4.5	0.1	138	25.2	25.2	8.1	8.1	28.1	28.2	84.0	84.3	5.9		4.3		4		-				-		-	
						4.5	0.1	145	25.1		8.1		28.4		84.6		5.9		4.1		3		-				-		-	
					Bottom	8.0	0.1	126	25.0	25.1	8.1	8.1	29.2	29.2	89.2	89.2	6.2	6.2	5.7		4		-				-		-	
						8.0	0.1	134	25.1		8.1		29.2		89.1		6.2		5.6		3		-				-		-	
SR4A	Fine	Calm	19:02	9.0	Surface	1.0	2.1	251	25.4	25.4	8.1	8.1	24.7	24.7	98.8	98.8	7.1	6.9	3.5	4.6	3	3	-	-	817181	807798	-	-	-	-
						1.0	2.2	267	25.3		8.1		24.7		98.7		7.1		3.5		2		-				-		-	
					Middle	4.5	2.2	267	25.1	25.1	8.1	8.1	29.0	29.0	94.4	94.5	6.6		4.9		3		-				-		-	
						4.5	2.3	280	25.1		8.1		29.0		94.5		6.6		4.9		3		-				-		-	
					Bottom	8.0	2.4	258	25.1	25.1	8.1	8.1	28.6	28.6	95.6	95.8	6.7	6.7	5.4		3		-				-		-	
						8.0	2.4	273	25.1		8.1		28.5		95.9		6.7		5.4		3		-				-		-	
SR5A	Fine	Calm	19:17	3.6	Surface	1.0	0.1	56	25.5	25.5	8.1	8.1	24.7	24.8	97.5	97.2	6.9	6.9	2.9	3.1	3	3	-	-	816569	810705	-	-	-	-
						1.0	0.1	59	25.5		8.1		24.9		96.9		6.9		3.0		3		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.6	0.1	50	25.4	25.4	8.1	8.1	25.8	25.8	97.0	97.4	6.9	6.9	3.3		3		-				-		-	
						2.6	0.1	50	25.4		8.1		25.8		97.7		6.9		3.3		3		-				-		-	
SR6A	Fine	Calm	19:44	4.0	Surface	1.0	0.1	354	25.3	25.3	8.1	8.1	24.9	24.9	97.5	97.4	7.0	7.0	2.1	2.6	3	3	-	-	817943	814761	-	-	-	-
						1.0	0.1	326	25.3		8.1		24.9		97.2		6.9		2.1		2		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	0.0	340	25.3	25.4	8.1	8.1	27.9	27.8	97.8	98.0	6.9	6.9	3.0		3		-				-		-	
						3.0	0.0	352	25.4		8.1		27.7		98.2		6.9		3.0		2		-				-		-	
SR7	Fine	Calm	20:02	19.5	Surface	1.0	0.6	72	25.1	25.1	8.1	8.1	30.1	30.1	89.9	89.8	6.3	6.0	2.4	3.2	<2	2	-	-	823632	823740	-	-	-	-
						1.0	0.7	72	25.0		8.1		30.2		89.7		6.2		2.4		<2		-				-		-	
					Middle	9.8	0.5	56	24.7	24.7	8.1	8.1	31.8	31.8	83.4	83.4	5.8		2.9		<2		-				-		-	
						9.8	0.6	58	24.7		8.1		31.8		83.3		5.8		3.2		<2		-				-		-	
					Bottom	18.5	0.4	38	24.6	24.6	8.1	8.1	32.0	31.9	79.8	79.6	5.5	5.5	4.4		3		-				-		-	
						18.5	0.4	39	24.6		8.1		31.9		79.3		5.5		4.1		2		-				-		-	
SR8	Fine	Calm	18:39	4.2	Surface	1.0	-	-	25.6	25.6	8.1	8.1	26.1	26.1	90.8	90.9	6.4	6.4	3.8	3.7	4	4	-	-	820386	811628	-	-	-	-
						1.0	-	-	25.6		8.1		26.1		90.9		6.4		3.8		3		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	-	-	25.8	25.9	8.1	8.1	26.0	26.0	91.3	91.3	6.4	6.4	3.7		4		-				-		-	
						3.2	-	-	26.0		8.1		26.0		91.3		6.4		3.7		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 04 May 21 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	Calm	07:30	8.4	Surface	1.0	1.7	233	25.0	25.0	8.1	8.1	29.1	29.2	100.9	100.7	7.1	7.0	4.0	7.1	4	3	86	88	815640	804237	<0.2	<0.2	1.4	1.4
						1.0	1.8	247	25.0		8.1		29.3		100.5		7.0		4.0		3		86				<0.2		1.4	
					Middle	4.2	1.8	235	25.0	25.0	8.1	8.1	30.4	30.4	98.6	98.5	6.9		8.2		4		89				<0.2		1.4	
						4.2	2.0	239	24.9		8.1		30.4		98.4		6.9		8.2		3		89				<0.2		1.4	
					Bottom	7.4	1.8	228	24.9	24.9	8.1	8.1	30.4	30.4	97.1	97.2	6.8	6.8	9.0		2		88				<0.2		1.5	
						7.4	1.9	246	24.9		8.1		30.4		97.2		6.8		9.1		3		88				<0.2		1.5	
C2	Cloudy	Moderate	08:32	12.2	Surface	1.0	0.3	180	25.3	25.3	8.1	8.1	24.8	24.8	84.9	84.6	6.1	5.9	3.8	4.7	2	3	86	90	825678	806925	<0.2	<0.2	1.0	1.1
						1.0	0.3	188	25.3		8.1		24.8		84.2		6.0		3.9		3		87				<0.2		1.0	
					Middle	6.1	0.2	178	25.2	25.2	8.1	8.1	28.1	28.2	82.2	82.2	5.8		4.7		3		92				<0.2		1.1	
						6.1	0.2	181	25.2		8.1		28.3		82.1		5.8		5.0		4		91				<0.2		1.1	
					Bottom	11.2	0.2	164	25.1	25.2	8.1	8.1	29.3	29.2	82.9	83.1	5.8	5.8	5.3		4		93				<0.2		1.1	
						11.2	0.2	177	25.2		8.1		29.2		83.2		5.8		5.2		3		93				<0.2		1.0	
C3	Cloudy	Moderate	06:29	12.4	Surface	1.0	0.2	214	24.8	24.8	8.1	8.1	30.2	30.2	86.8	86.7	6.1	5.9	2.3	3.0	3	3	87	90	822126	817798	<0.2	<0.2	1.6	1.6
						1.0	0.2	215	24.8		8.1		30.2		86.5		6.0		2.3		3		88				<0.2		1.7	
					Middle	6.2	0.2	247	24.7	24.7	8.1	8.1	31.7	31.7	82.9	82.9	5.8		3.0		3		90				<0.2		1.5	
						6.2	0.2	253	24.7		8.1		31.7		82.8		5.8		3.1		3		91				<0.2		1.6	
					Bottom	11.4	0.1	283	24.7	24.7	8.1	8.1	31.8	31.8	83.3	83.4	5.8	5.8	3.7		2		92				<0.2		1.7	
						11.4	0.1	298	24.7		8.1		31.8		83.4		5.8		3.6		2		92				<0.2		1.6	
IM1	Fine	Calm	07:51	5.2	Surface	1.0	1.9	243	25.2	25.2	8.1	8.1	27.9	28.0	98.9	98.9	7.0	7.0	3.4	4.3	3	4	87	87	817941	807146	<0.2	<0.2	1.4	1.5
						1.0	1.9	245	25.2		8.1		28.0		98.9		7.0		3.4		4		86				<0.2		1.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	1.6	240	25.0	25.1	8.0	8.0	28.5	28.4	94.0	94.1	6.6	6.6	5.3		4		88				<0.2		1.5	
						4.2	1.6	263	25.1		8.0		28.3		94.1		6.6		5.2		4		88				<0.2		1.4	
IM2	Fine	Calm	07:59	7.2	Surface	1.0	1.7	54	25.1	25.1	8.1	8.1	28.3	28.3	99.5	99.4	7.0	7.0	4.1	6.0	5	4	86	89	818142	806179	<0.2	<0.2	1.5	1.5
						1.0	1.8	56	25.1		8.1		28.3		99.3		7.0		4.1		4		86				<0.2		1.6	
					Middle	3.6	1.6	55	25.0	25.0	8.1	8.1	28.5	28.5	98.9	98.9	7.0		6.2		4		90				<0.2		1.5	
						3.6	1.7	57	25.0		8.1		28.5		98.9		7.0		6.2		5		90				<0.2		1.4	
					Bottom	6.2	1.5	60	24.8	24.8	8.1	8.1	30.7	30.7	93.7	93.7	6.5	6.5	8.0		2		90				<0.2		1.6	
						6.2	1.6	61	24.8		8.1		30.7		93.7		6.5		7.9		3		90				<0.2		1.5	
IM3	Fine	Calm	08:02	7.4	Surface	1.0	2.5	8	25.1	25.1	8.1	8.1	28.5	28.6	99.8	99.7	7.0	6.9	1.6	4.1	4	5	87	89	818763	805608	<0.2	<0.2	1.6	1.5
						1.0	2.7	8	25.0		8.1		28.8		99.6		7.0		1.6		5		87				<0.2		1.5	
					Middle	3.7	2.7	10	24.9	24.9	8.1	8.1	29.9	30.0	98.0	96.2	6.9		4.4		5		90				<0.2		1.6	
						3.7	2.7	10	24.9		8.1		30.2		94.4		6.6		4.3		4		90				<0.2		1.4	
					Bottom	6.4	2.7	9	24.9	24.9	8.1	8.1	30.7	30.7	93.9	94.0	6.5	6.5	6.5		5		91				<0.2		1.5	
						6.4	2.8	9	24.9		8.1		30.7		94.1		6.5		6.5		4		91				<0.2		1.5	
IM4	Fine	Calm	08:08	8.6	Surface	1.0	2.6	11	25.2	25.2	8.1	8.1	26.6	26.6	102.0	101.8	7.2	7.1	3.5	4.9	4	4	88	89	819723	804612	<0.2	<0.2	1.5	1.5
						1.0	2.9	11	25.2		8.1		26.6		101.6		7.2		3.6		4		88				<0.2		1.5	
					Middle	4.3	3.0	13	25.1	25.1	8.1	8.1	29.2	29.3	99.2	99.2	6.9		3.8		5		91				<0.2		1.5	
						4.3	3.3	13	25.1		8.1		29.3		99.1		6.9		3.8		4		91				<0.2		1.6	
					Bottom	7.6	3.2	14	25.0	25.0	8.1	8.1	30.0	30.0	93.9	94.0	6.6	6.6	7.2		3		92				<0.2		1.6	
						7.6	3.4	14	25.0		8.1		29.9		94.1		6.6		7.3		4		86				<0.2		1.5	
IM5	Fine	Calm	08:15	8.0	Surface	1.0	2.0	271	25.3	25.3	8.1	8.1	26.5	26.4	102.4	102.3	7.2	7.1	3.2	5.1	5	4	86	89	820754	804848	<0.2	<0.2	1.2	1.4
						1.0	2.2	282	25.3		8.1		26.4		102.2		7.2		3.3		4		87				<0.2		1.3	
					Middle	4.0	2.2	266	25.0	25.0	8.1	8.1	29.6	29.7	99.3	99.0	6.9		4.7		4		90				<0.2		1.6	
						4.0	2.4	280	25.0		8.1		29.7		98.7		6.9		4.8		5		90				<0.2		1.7	
					Bottom	7.0	2.0	254	25.0	25.0	8.1	8.1	30.0	29.9	94.6	94.5	6.6	6.6	7.4		3		91				<0.2		1.2	
						7.0	2.0	264	25.0		8.1		29.9		94.4		6.6		7.4		4		91				<0.2		1.4	
IM6	Fine	Calm	08:21	7.8	Surface	1.0	1.8	290	25.1	25.1	8.1	8.1	26.6	26.6	100.9	100.8	7.2	7.1	3.4	3.7	3	3	89	90	821060	805840	<0.2	<0.2	1.6	1.5
						1.0	1.9	311	25.1		8.1		26.7		100.6		7.1		3.4		4		89				<0.2		1.6	
					Middle	3.9	2.1	276	25.1	25.1	8.1	8.1	29.2	29.2	99.5	99.2	7.0		3.6		4		89				<0.2		1.6	
						3.9	2.3	284	25.1		8.1		29.3		98.9		6.9		3.7		3		89				<0.2		1.6	
					Bottom	6.8	1.9	290	25.1	25.1	8.1	8.1	29.8	29.8	97.0	97.1	6.8	6.8	4.1		2		92				<0.2		1.2	
						6.8	1.9	307	25.1		8.1		29.8		97.2		6.8		4.2		3		92				<0.2		1.2	
IM7	Fine	Calm	08:31	9.0	Surface	1.0	1.9	43	25.1	25.1	8.1	8.1	26.7	26.8	99.8	99.6	7.1	6.9	2.7	4.0	2	3	88	90	821369	806851	<0.2	<0.2	1.6	1.6
						1.0	2.0	46	25.1		8.1		26.8		99.3		7.0		2.6		3		88				<0.2		1.4	
					Middle	4.5	2.0	56	25.0	25.0	8.1	8.1	29.9	29.9	97.6	97.0	6.8		3.9		3		90				<0.2		1.6	
						4.5	2.1	58	24.9		8.1		30.0		96.3		6.7		3.8		2		90				<0.2		1.5	
					Bottom	8.0	2.0	42	24.9	24.9	8.1	8.1	30.2	30.1	92.0	92.1	6.4	6.4	5.5		3		91				<0.2		1.6	
						8.0	2.2	46	24.9		8.1		30.1		92.2		6.4		5.5		2		92				<0.2		1.6	
IM8	Cloudy	Moderate	08:07	8.0	Surface	1.0	0.1	271	25.4	25.4	8.1	8.1	25.3	25.4	87.4	87.2	6.2	6.2	3.7	4.3	3	4	86	90	821852	808160	<0.2	<0.2	1.6	1.6
						1.0	0.1	286	25.4		8.1		25.4		87.0		6.2		3.8		4		87				<0.2		1.6	
					Middle	4.0	0.1	211	25.3	25.3	8.1	8.1	26.2	26.3	87.2	87.4	6.2		4.2		4		90				<0.2		1.6	
						4.0	0.1	218	25.2		8.1		26.3		87.5		6.2		4.3		3		90				<0.2		1.5	
					Bottom	7.0	0.2	107	25.0	25.0	8.1	8.1	29.1	29.1	88.1	88.1	6.2	6.2	4.7		4		92				<0.2		1.6	
						7.0	0.2	110	25.0		8.1		29.1		88.1		6.2		5.0		4		93				<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 04 May 21 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	08:02	7.8	Surface	1.0	0.1	65	25.4	25.4	8.0	8.0	25.4	25.5	86.8	86.7	6.2	6.2	4.0	4.8	3	4	85	88	822092	808797	<0.2	<0.2	1.6	1.6
						1.0	0.1	70	25.4		8.0		25.5		86.6		6.1		4.1		3		86				<0.2		1.6	
					Middle	3.9	0.1	46	25.3	25.3	8.1	8.1	27.0	27.0	86.8	87.0	6.1		4.4		4		88				<0.2		1.6	
						3.9	0.1	47	25.2		8.1		27.0		87.1		6.2		4.3		3		87				<0.2		1.6	
					Bottom	6.8	0.1	138	25.0	25.0	8.1	8.1	29.0	29.0	87.9	87.9	6.2	6.2	5.9		4		90				<0.2		1.6	
						6.8	0.1	143	25.0		8.1		29.0		87.9		6.2		5.9		4		90				<0.2		1.6	
IM10	Cloudy	Moderate	07:55	7.4	Surface	1.0	0.2	49	25.4	25.4	8.1	8.1	25.4	25.4	86.2	86.2	6.1	6.1	3.8	4.8	5	4	85	87	822373	809771	<0.2	<0.2	1.6	1.6
						1.0	0.2	51	25.4		8.1		25.5		86.1		6.1		4.0		4		85				<0.2		1.5	
					Middle	3.7	0.2	73	25.2	25.2	8.1	8.1	26.4	26.4	85.9	86.0	6.1		4.7		4		87				<0.2		1.6	
						3.7	0.2	75	25.2		8.1		26.4		86.0		6.1		4.8		3		87				<0.2		1.7	
					Bottom	6.4	0.2	53	25.1	25.2	8.1	8.1	28.6	28.5	86.3	86.4	6.1	6.1	5.7		4		90				<0.2		1.6	
						6.4	0.3	54	25.2		8.1		28.3		86.4		6.1		5.8		3		89				<0.2		1.5	
IM11	Cloudy	Moderate	07:44	7.2	Surface	1.0	0.3	137	25.4	25.4	8.1	8.1	25.3	25.3	88.5	88.4	6.3	6.2	3.0	3.9	5	4	85	88	822042	811470	<0.2	<0.2	1.3	1.3
						1.0	0.3	142	25.3		8.1		25.4		88.3		6.3		3.0		5		85				<0.2		1.4	
					Middle	3.6	0.2	147	25.2	25.2	8.1	8.1	28.1	28.1	86.1	86.0	6.1		3.4		5		88				<0.2		1.3	
						3.6	0.2	156	25.2		8.1		28.2		85.8		6.0		3.6		4		89				<0.2		1.3	
					Bottom	6.2	0.1	136	25.1	25.1	8.1	8.1	28.6	28.6	85.0	85.0	6.0	6.0	5.2		4		89				<0.2		1.3	
						6.2	0.1	140	25.1		8.1		28.6		85.0		6.0		5.4		3		90				<0.2		1.4	
IM12	Cloudy	Moderate	07:36	10.0	Surface	1.0	0.4	146	25.3	25.3	8.1	8.1	26.4	26.5	89.5	89.4	6.3	6.0	3.0	4.3	5	4	83	88	821481	812032	<0.2	<0.2	1.3	1.3
						1.0	0.4	149	25.2		8.1		26.5		89.2		6.3		3.1		4		83				<0.2		1.4	
					Middle	5.0	0.1	169	25.1	25.1	8.1	8.1	28.7	28.8	82.5	82.3	5.8		4.0		4		89				<0.2		1.3	
						5.0	0.2	169	25.1		8.1		28.8		82.0		5.7		4.0		5		90				<0.2		1.3	
					Bottom	9.0	0.2	138	25.1	25.1	8.1	8.1	29.2	29.1	81.7	81.9	5.7	5.7	5.7		3		91				<0.2		1.3	
						9.0	0.2	149	25.1		8.1		28.9		82.1		5.7		5.8		3		92				<0.2		1.3	
SR1A	Cloudy	Calm	07:07	5.3	Surface	1.0	-	-	25.1	25.1	8.1	8.1	27.1	27.1	83.6	83.5	5.9	5.9	4.2	4.4	3	3	-	-	819973	812654	-	-	-	-
						1.0	-	-	25.1		8.1		27.1		83.4		5.9		4.1		3		-				-		-	
					Middle	2.7	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.7	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	-	-	25.1	25.1	8.1	8.1	29.2	29.2	83.4	83.6	5.8	5.9	4.8		2		-				-		-	
						4.3	-	-	25.1		8.1		29.2		83.7		5.9		4.5		3		-				-		-	
SR2	Cloudy	Calm	06:52	4.6	Surface	1.0	0.4	24	25.2	25.2	8.1	8.1	27.9	28.0	85.2	84.9	6.0	6.0	4.1	4.8	4	3	89	90	821485	814166	<0.2	<0.2	1.0	1.0
						1.0	0.4	24	25.2		8.1		28.0		84.5		5.9		4.2		3		89				<0.2		1.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.2	33	25.0	25.0	8.1	8.1	29.0	29.1	82.7	82.5	5.8	5.8	5.5		2		90				<0.2		1.0	
						3.6	0.2	33	25.0		8.1		29.1		82.3		5.8		5.3		2		90				<0.2		1.1	
SR3	Cloudy	Moderate	08:12	9.2	Surface	1.0	0.1	328	25.4	25.4	8.0	8.0	24.9	25.0	86.2	85.9	6.1	6.1	3.4	4.5	4	4	-	-	822152	807567	-	-	-	-
						1.0	0.1	344	25.4		8.1		25.1		85.6		6.1		3.6		5		-				-		-	
					Middle	4.6	0.1	304	25.2	25.2	8.1	8.1	27.3	27.3	83.9	84.8	5.9		4.7		4		-				-		-	
						4.6	0.1	316	25.1		8.1		27.2		85.6		6.1		4.4		5		-				-		-	
					Bottom	8.2	0.1	1	25.1	25.1	8.1	8.1	29.0	28.9	88.8	88.7	6.2	6.2	5.3		3		-				-		-	
						8.2	0.1	1	25.1		8.1		28.9		88.6		6.2		5.3		4		-				-		-	
SR4A	Fine	Calm	07:09	9.6	Surface	1.0	1.6	259	25.1	25.1	8.1	8.1	28.4	28.4	97.5	97.4	6.8	6.8	4.1	6.4	4	3	-	-	817198	807817	-	-	-	-
						1.0	1.6	271	25.1		8.1		28.5		97.3		6.8		4.2		3		-				-		-	
					Middle	4.8	1.8	259	25.0	25.0	8.1	8.1	29.5	29.5	95.9	95.9	6.7		6.4		3		-				-		-	
						4.8	1.9	266	25.0		8.1		29.5		95.8		6.7		6.3		4		-				-		-	
					Bottom	8.6	1.7	263	25.0	25.0	8.1	8.1	29.7	29.7	95.8	96.0	6.7	6.7	8.7		2		-				-		-	
						8.6	1.7	268	25.0		8.1		29.7		96.2		6.7		8.7		3		-				-		-	
SR5A	Fine	Calm	06:50	3.6	Surface	1.0	0.0	13	25.1	25.1	8.0	8.0	27.2	27.3	91.2	91.0	6.4	6.4	3.8	5.3	<2	3	-	-	816572	810702	-	-	-	-
						1.0	0.0	13	25.1		8.0		27.3		90.7		6.4		3.9		<2		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.6	0.0	77	25.1	25.1	8.0	8.0	27.2	27.2	89.2	89.0	6.3	6.3	6.8		3		-				-		-	
						2.6	0.0	78	25.1		8.0		27.2		88.8		6.3		6.7		4		-				-		-	
SR6A	Fine	Calm	06:23	4.2	Surface	1.0	0.1	129	25.2	25.2	8.0	8.0	27.1	27.1	91.6	91.6	6.5	6.5	3.7	4.3	3	3	-	-	817974	814733	-	-	-	-
						1.0	0.1	131	25.2		8.0		27.2		91.5		6.5		3.6		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.1	133	25.2	25.2	8.0	8.0	27.5	27.6	89.9	89.8	6.3	6.3	5.0		2		-				-		-	
						3.2	0.1	141	25.2		8.0		27.6		89.6		6.3		5.0		3		-				-		-	
SR7	Fine	Calm	05:57	19.9	Surface	1.0	0.0	98	24.7	24.7	8.1	8.1	31.4	31.3	83.6	83.6	5.8	5.8	2.8	3.8	4	3	-	-	823626	823743	-	-	-	-
						1.0	0.0	107	24.7		8.1		31.3		83.6		5.8		2.8		4		-				-		-	
					Middle	10.0	0.0	80	24.6	24.6	8.1	8.1	32.3	32.3	82.8	82.9	5.7	5.8	4.1		3		-				-		-	
						10.0	0.0	84	24.6		8.1		32.3		83.0		5.8		4.2		2		-				-		-	
					Bottom	18.9	0.0	46	24.5	24.5	8.1	8.1	32.8	32.8	84.0	84.0	5.8	5.8	4.4		3		-				-		-	
						18.9	0.0	49	24.5		8.1		32.8		84.0		5.8		4.5		2		-				-		-	
SR8	Cloudy	Calm	07:29	4.2	Surface	1.0	-	-	25.8	25.8	8.1	8.1	27.2	27.3	88.7	88.6	6.2	6.2	3.0	3.5	5	4	-	-	820401	811617	-	-	-	-
						1.0	-	-	25.8		8.1		27.3		88.5		6.2		3.2		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	-	-	25.7	25.7	8.1	8.1	27.7	27.8	87.1	86.9	6.1	6.1	3.9		3		-				-		-	
						3.2	-	-	25.6		8.1		27.8		86.6		6.1		4.1		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 06 May 21 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	Calm	10:28	8.2	Surface	1.0	2.5	104	25.7	25.7	8.2	8.2	28.1	28.2	108.0	108.0	7.5	7.2	2.3	4.9	3	5	85	88	815602	804269	<0.2	<0.2	0.6	0.6
						1.0	2.5	106	25.6		8.2		28.2		107.9		7.5		2.4		4		86				<0.2		0.8	
					Middle	4.1	2.2	107	25.1	25.1	8.1	8.1	32.1	32.2	99.8	99.7	6.9		4.4		4		89				<0.2		0.5	
						4.1	2.3	111	25.1		8.1		32.2		99.6		6.8		4.3		4		89				<0.2		0.7	
					Bottom	7.2	2.4	113	25.1	25.1	8.1	8.1	32.2	32.2	99.2	99.2	6.8	6.8	7.9		7		89				<0.2		0.6	
						7.2	2.4	119	25.1		8.1		32.2		99.2		6.8		8.0		7		90				<0.2		0.6	
C2	Fine	Moderate	12:05	11.5	Surface	1.0	0.3	176	26.5	26.5	8.2	8.2	25.9	25.9	111.5	111.3	7.8	7.2	1.4	2.2	4	3	83	86	825683	806945	<0.2	<0.2	0.7	0.7
						1.0	0.3	189	26.5		8.2		25.9		111.0		7.7		1.4		3		83				<0.2		0.8	
					Middle	5.8	0.2	180	25.7	25.7	8.1	8.1	27.3	27.4	96.3	96.2	6.7		1.8		2		86				<0.2		0.7	
						5.8	0.2	184	25.7		8.1		27.4		96.0		6.7		2.0		3		86				<0.2		0.7	
					Bottom	10.5	0.2	176	25.3	25.3	8.1	8.1	29.4	29.4	84.2	84.2	5.9	5.9	3.3		2		88				<0.2		0.7	
						10.5	0.2	189	25.3		8.1		29.4		84.2		5.9		3.4		3		88				<0.2		0.6	
C3	Fine	Moderate	09:40	12.4	Surface	1.0	0.3	49	25.6	25.6	8.2	8.2	28.4	28.4	97.6	97.6	6.8	6.5	1.1	2.0	<2	2	83	86	822086	817785	<0.2	<0.2	0.7	0.7
						1.0	0.3	51	25.6		8.2		28.4		97.5		6.8		1.1		<2		83				<0.2		0.7	
					Middle	6.2	0.3	90	24.9	24.9	8.2	8.2	32.0	32.0	89.1	89.1	6.2		1.5		2		85				<0.2		0.6	
						6.2	0.3	97	24.9		8.2		32.0		89.0		6.1		1.5		2		86				<0.2		0.6	
					Bottom	11.4	0.2	110	24.8	24.8	8.2	8.2	32.7	32.7	87.1	87.2	6.0	6.0	3.4		2		89				<0.2		0.7	
						11.4	0.2	119	24.8		8.2		32.7		87.2		6.0		3.3		3		89				<0.2		0.7	
IM1	Fine	Calm	10:50	5.0	Surface	1.0	0.0	238	25.4	25.4	8.1	8.1	29.7	29.7	101.0	98.6	7.0	6.9	6.6	7.0	5	5	85	86	817966	807140	<0.2	<0.2	0.6	0.6
						1.0	0.0	238	25.4		8.1		29.8		96.2		6.7		6.5		6		85				<0.2		0.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.0	128	25.5	25.5	8.1	8.1	29.6	29.5	96.2	96.4	6.7	6.7	7.5		4		89				<0.2		0.7	
						4.0	0.0	137	25.5		8.1		29.5		96.5		6.7		7.5		4		86				<0.2		0.6	
IM2	Fine	Calm	10:57	6.6	Surface	1.0	2.4	303	25.5	25.5	8.1	8.1	29.8	29.9	101.3	101.0	7.0	6.9	4.0	5.4	2	4	86	89	818160	806184	<0.2	<0.2	0.7	0.6
						1.0	2.5	323	25.4		8.1		30.0		100.6		7.0		3.9		2		85				<0.2		0.7	
					Middle	3.3	2.5	305	25.3	25.3	8.1	8.1	30.5	30.5	99.1	99.0	6.9		5.6		5		90				<0.2		0.7	
						3.3	2.6	331	25.3		8.1		30.6		98.9		6.8		5.6		4		90				<0.2		0.5	
					Bottom	5.6	2.6	306	25.3	25.4	8.1	8.1	30.6	30.6	99.1	99.1	6.8	6.8	6.6		5		91				<0.2		0.5	
						5.6	2.7	328	25.4		8.1		30.5		99.1		6.8		6.6		6		91				<0.2		0.5	
IM3	Fine	Calm	11:04	7.0	Surface	1.0	2.1	346	25.5	25.5	8.1	8.1	29.6	29.7	103.2	103.2	7.2	6.9	3.2	5.3	5	4	87	89	818778	805575	<0.2	<0.2	0.6	0.7
						1.0	2.3	359	25.4		8.1		29.7		103.1		7.1		3.3		4		90				<0.2		0.6	
					Middle	3.5	2.5	350	25.3	25.3	8.1	8.1	30.4	30.5	97.4	97.2	6.7		5.4		3		90				<0.2		0.6	
						3.5	2.7	357	25.3		8.1		30.5		97.0		6.7		5.5		4		91				<0.2		0.7	
					Bottom	6.0	2.6	352	25.3	25.4	8.1	8.1	30.7	30.6	97.5	97.7	6.7	6.8	7.2		4		91				<0.2		0.7	
						6.0	2.7	324	25.4		8.1		30.6		97.8		6.8		7.2		3		87				<0.2		0.7	
IM4	Fine	Moderate	11:13	8.2	Surface	1.0	1.9	23	25.6	25.6	8.1	8.1	28.8	28.8	99.9	99.8	6.9	6.7	3.0	6.7	3	3	88	90	819731	804609	<0.2	<0.2	0.8	0.6
						1.0	1.9	24	25.6		8.1		28.8		99.7		6.9		3.0		4		90				<0.2		0.8	
					Middle	4.1	1.9	25	25.2	25.2	8.1	8.1	30.7	30.7	94.7	94.6	6.6		7.9		3		91				<0.2		0.6	
						4.1	2.1	26	25.2		8.1		30.8		94.4		6.5		7.4		4		91				<0.2		0.6	
					Bottom	7.2	2.2	25	25.1	25.1	8.1	8.1	31.2	31.2	93.7	93.7	6.5	6.5	9.4		3		92				<0.2		0.5	
						7.2	2.4	26	25.1		8.1		31.2		93.7		6.5		9.5		3		86				<0.2		0.5	
IM5	Fine	Moderate	11:23	7.4	Surface	1.0	3.0	215	25.9	25.9	8.2	8.2	27.1	27.1	104.0	103.9	7.3	7.1	2.7	5.9	4	4	86	88	820716	804846	<0.2	<0.2	0.7	0.7
						1.0	3.2	225	25.8		8.2		27.1		103.8		7.3		2.6		3		86				<0.2		0.9	
					Middle	3.7	3.2	211	25.5	25.5	8.2	8.1	28.8	29.0	100.1	100.0	7.0		5.6		4		90				<0.2		0.6	
						3.7	3.4	216	25.4		8.1		29.1		99.8		6.9		5.5		3		90				<0.2		0.7	
					Bottom	6.4	3.0	209	25.2	25.2	8.1	8.1	30.6	30.6	94.0	94.1	6.5	6.5	9.4		5		91				<0.2		0.6	
						6.4	3.1	221	25.2		8.1		30.6		94.1		6.5		9.4		4		86				<0.2		0.5	
IM6	Fine	Moderate	11:33	7.2	Surface	1.0	2.9	227	25.8	25.8	8.1	8.1	27.1	27.2	101.6	101.5	7.1	7.1	2.9	5.2	4	4	86	89	821042	805828	<0.2	<0.2	0.6	0.7
						1.0	3.0	233	25.7		8.1		27.3		101.3		7.1		2.9		5		89				<0.2		0.6	
					Middle	3.6	3.2	225	25.6	25.6	8.1	8.1	28.2	28.2	99.9	99.9	7.0		5.0		4		89				<0.2		0.7	
						3.6	3.4	240	25.5		8.1		28.2		99.9		7.0		5.0		5		89				<0.2		0.7	
					Bottom	6.2	3.0	225	25.4	25.5	8.1	8.1	30.1	30.0	94.5	94.5	6.5	6.5	7.8		3		91				<0.2		0.7	
						6.2	3.2	227	25.5		8.1		30.0		94.5		6.5		7.7		2		91				<0.2		0.8	
IM7	Fine	Moderate	11:42	8.2	Surface	1.0	2.4	218	25.9	25.9	8.1	8.1	26.6	26.6	102.9	102.9	7.2	7.0	2.1	4.6	6	4	88	89	821367	806825	<0.2	<0.2	0.8	0.7
						1.0	2.5	227	25.9		8.1		26.7		102.8		7.2		2.1		5		88				<0.2		0.7	
					Middle	4.1	2.4	217	25.6	25.6	8.1	8.1	28.1	28.2	97.0	96.8	6.8		4.3		5		89				<0.2		0.8	
						4.1	2.5	234	25.6		8.1		28.2		96.6		6.7		4.2		4		90				<0.2		0.7	
					Bottom	7.2	2.5	206	25.4	25.4	8.1	8.1	29.7	29.7	93.5	93.6	6.5	6.5	7.4		3		91				<0.2		0.6	
						7.2	2.5	226	25.4		8.1		29.7		93.7		6.5		7.4		3		88				<0.2		0.6	
IM8	Fine	Moderate	11:36	7.3	Surface	1.0	0.1	144	26.0	26.0	8.2	8.2	27.4	27.4	99.7	99.7	6.9	6.9	2.0	2.7	2	3	82	85	821848	808125	<0.2	<0.2	0.5	0.6
						1.0	0.1	145	26.0		8.2		27.4		99.7		6.9		2.0		2		82				<0.2		0.5	
					Middle	3.7	0.2	92	25.8	25.8	8.2	8.2	27.7	27.7	97.5	97.4	6.8		2.2		2		85				<0.2		0.6	
						3.7	0.2	96	25.8		8.2		27.7		97.3		6.8		2.3		3		85				<0.2		0.6	
					Bottom	6.3	0.2	45	25.5	25.5	8.2	8.2	29.0	29.0	91.2	91.2	6.3	6.3	3.8		3		87				<0.2		0.6	
						6.3	0.2	45	25.5		8.2		29.0		91.2		6.3		4.1		3		88				<0.2		0.5	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 06 May 21 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Fine	Moderate	11:30	7.2	Surface	1.0	0.1	112	26.0	26.0	8.1	8.1	27.5	27.5	98.6	98.5	6.9	6.7	1.8	2.6	4	3	83	85	822100	808834	<0.2	<0.2	0.7	0.6
						1.0	0.1	118	26.0		8.1		27.5		98.4		6.8		1.8		4		83				<0.2		0.6	
					Middle	3.6	0.1	99	25.6	25.6	8.1	8.1	28.4	28.4	94.0	93.9	6.5		2.5		3		85				<0.2		0.6	
						3.6	0.1	102	25.6		8.1		28.4		93.8		6.5		2.7		3		85				<0.2		0.6	
					Bottom	6.2	0.1	74	25.5	25.5	8.1	8.1	29.0	29.0	90.8	90.9	6.3	6.3	3.5		3		88				<0.2		0.6	
						6.2	0.1	75	25.5		8.1		29.0		90.9		6.3		3.5		3		88				<0.2		0.7	
IM10	Fine	Moderate	11:21	8.3	Surface	1.0	0.3	94	25.9	25.9	8.2	8.2	27.6	27.6	97.7	97.6	6.8	6.6	1.8	2.5	3	2	83	86	822375	809772	<0.2	<0.2	0.7	0.8
						1.0	0.3	96	25.9		8.2		27.6		97.5		6.8		1.9		2		84				<0.2		0.7	
					Middle	4.2	0.3	87	25.5	25.5	8.2	8.2	29.0	29.0	90.7	90.8	6.3		2.4		3		86				<0.2		0.7	
						4.2	0.3	93	25.5		8.2		28.9		90.9		6.3		2.3		2		86				<0.2		0.8	
					Bottom	7.3	0.2	101	25.4	25.4	8.2	8.2	29.3	29.3	88.8	88.9	6.2	6.2	3.2		<2		88				<0.2		0.8	
						7.3	0.2	110	25.4		8.2		29.3		89.0		6.2		3.2		<2		88				<0.2		0.8	
IM11	Fine	Moderate	11:08	8.4	Surface	1.0	0.4	91	25.8	25.8	8.2	8.2	28.0	28.0	98.8	98.9	6.9	6.8	1.4	2.0	2	2	83	86	822046	811450	<0.2	<0.2	0.6	0.6
						1.0	0.4	96	25.8		8.2		28.0		98.9		6.9		1.4		2		83				<0.2		0.6	
					Middle	4.2	0.3	74	25.6	25.6	8.2	8.2	28.3	28.3	96.0	96.0	6.7		1.5		<2		85				<0.2		0.6	
						4.2	0.3	81	25.6		8.2		28.2		96.0		6.7		1.5		<2		86				<0.2		0.6	
					Bottom	7.4	0.2	70	25.3	25.4	8.2	8.2	29.6	29.5	90.5	90.6	6.3	6.3	3.0		<2		88				<0.2		0.6	
						7.4	0.2	73	25.4		8.2		29.5		90.7		6.3		2.9		<2		88				<0.2		0.6	
IM12	Fine	Moderate	10:59	9.1	Surface	1.0	0.3	85	25.9	25.9	8.1	8.1	27.5	27.5	93.7	93.7	6.5	6.2	1.9	2.9	3	3	82	85	821450	812064	<0.2	<0.2	0.7	0.7
						1.0	0.3	91	25.9		8.1		27.5		93.6		6.5		1.9		4		82				<0.2		0.7	
					Middle	4.6	0.2	88	25.4	25.4	8.1	8.1	29.4	29.4	85.4	85.4	5.9		3.1		3		85				<0.2		0.8	
						4.6	0.2	89	25.4		8.1		29.4		85.4		5.9		3.0		2		86				<0.2		0.6	
					Bottom	8.1	0.1	76	25.2	25.2	8.1	8.1	30.2	30.2	81.8	82.0	5.7	5.7	3.6		3		88				<0.2		0.6	
						8.1	0.1	76	25.2		8.1		30.1		82.2		5.7		3.7		2		88				<0.2		0.8	
SR1A	Fine	Calm	10:22	5.0	Surface	1.0	-	-	25.7	25.7	8.1	8.1	28.3	28.3	88.4	88.4	6.2	6.2	2.2	2.2	2	2	-	-	819979	812657	-	-	-	-
						1.0	-	-	25.7		8.1		28.3		88.4		6.1		2.2		2		-				-		-	
					Middle	2.5	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.5	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	-	-	25.6	25.6	8.1	8.1	28.7	28.8	88.3	88.4	6.1	6.1	2.2		<2		-				-		-	
						4.0	-	-	25.6		8.1		28.8		88.4		6.1		2.2		<2		-				-		-	
SR2	Fine	Moderate	10:05	4.6	Surface	1.0	0.3	102	25.5	25.5	8.2	8.2	29.0	29.0	93.6	93.6	6.5	6.5	1.6	1.7	<2	2	85	86	821444	814149	<0.2	<0.2	0.7	0.8
						1.0	0.3	109	25.5		8.2		29.0		93.5		6.5		1.6		<2		85				<0.2		0.7	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.3	113	25.3	25.3	8.2	8.2	29.8	29.8	91.1	91.1	6.3	6.3	1.8		2		86				<0.2		0.8	
						3.6	0.3	122	25.3		8.2		29.8		91.1		6.3		1.8		3		87				<0.2		0.8	
SR3	Fine	Moderate	11:43	8.8	Surface	1.0	0.2	167	25.9	25.9	8.2	8.2	27.6	27.6	98.1	98.1	6.8	6.6	1.8	2.7	3	3	-	-	822145	807590	-	-	-	-
						1.0	0.2	182	25.9		8.2		27.6		98.0		6.8		1.8		4		-				-		-	
					Middle	4.4	0.3	154	25.5	25.5	8.2	8.2	29.0	29.0	89.9	89.9	6.3		2.8		4		-				-		-	
						4.4	0.4	162	25.5		8.2		29.0		89.9		6.3		2.9		3		-				-		-	
					Bottom	7.8	0.1	180	25.4	25.4	8.2	8.2	29.7	29.7	89.3	89.4	6.2	6.2	3.5		2		-				-		-	
						7.8	0.1	180	25.4		8.2		29.6		89.5		6.2		3.4		2		-				-		-	
SR4A	Fine	Calm	10:07	9.6	Surface	1.0	2.2	242	25.5	25.5	8.1	8.1	29.1	29.2	103.3	103.2	7.2	7.0	4.1	6.2	3	4	-	-	817200	807805	-	-	-	-
						1.0	2.4	264	25.5		8.1		29.3		103.1		7.2		4.2		4		-				-		-	
					Middle	4.8	2.0	245	25.4	25.4	8.1	8.1	29.8	29.8	97.1	97.1	6.7		5.7		5		-				-		-	
						4.8	2.2	254	25.4		8.1		29.8		97.0		6.7		5.7		4		-				-		-	
					Bottom	8.6	2.3	236	25.4	25.4	8.1	8.1	29.9	29.9	96.7	96.8	6.7	6.7	8.7		5		-				-		-	
						8.6	2.5	256	25.4		8.1		29.9		96.8		6.7		8.7		4		-				-		-	
SR5A	Fine	Calm	09:48	4.0	Surface	1.0	0.0	151	25.9	25.9	8.1	8.1	27.4	27.5	98.4	98.2	6.9	6.9	4.0	4.3	8	8	-	-	816606	810687	-	-	-	-
						1.0	0.0	159	25.8		8.1		27.5		98.0		6.8		4.0		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	0.1	245	25.7	25.7	8.0	8.0	28.2	28.2	97.0	97.0	6.8	6.8	4.7		7		-				-		-	
						3.0	0.1	252	25.7		8.0		28.2		96.9		6.7		4.7		8		-				-		-	
SR6A	Fine	Calm	09:20	4.2	Surface	1.0	0.1	110	25.9	25.9	8.1	8.1	26.3	26.4	103.7	103.6	7.3	7.3	2.7	2.8	4	4	-	-	817943	814755	-	-	-	-
						1.0	0.1	119	25.9		8.1		26.5		103.5		7.3		2.6		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.1	135	25.8	25.8	8.1	8.1	27.2	27.2	98.9	99.0	6.9	6.9	3.0		4		-				-		-	
						3.2	0.1	138	25.8		8.1		27.2		99.0		6.9		3.0		3		-				-		-	
SR7	Cloudy	Moderate	08:45	16.6	Surface	1.0	0.3	19	24.9	24.9	8.2	8.2	32.3	32.3	87.5	87.5	6.0	6.0	1.5	1.8	2	2	-	-	823618	823737	-	-	-	-
						1.0	0.3	20	24.9		8.2		32.3		87.5		6.0		1.5		2		-				-		-	
					Middle	8.3	0.3	47	24.9	24.9	8.2	8.2	32.4	32.4	86.9	86.9	6.0		1.6		2		-				-		-	
						8.3	0.4	50	24.9		8.2		32.4		86.9		6.0		1.6		2		-				-		-	
					Bottom	15.6	0.3	46	24.7	24.7	8.2	8.2	33.1	33.1	86.5	86.6	6.0	6.0	2.1		2		-				-		-	
						15.6	0.3	49	24.7		8.2		33.1		86.6		6.0		2.2		3		-				-		-	
SR8	Fine	Moderate	10:51	4.9	Surface	1.0	-	-	26.0	26.0	8.1	8.1	27.9	27.9	93.4	93.4	6.5	6.5	2.1	2.6	3	3	-	-	820384	811626	-	-	-	-
						1.0	-	-	25.9		8.1		27.9		93.3		6.5		2.1		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	-	-	25.7	25.7	8.1	8.1	28.4	28.4	91.5	91.6	6.4	6.4	3.2		2		-				-		-	
						3.9	-	-	25.7		8.1		28.4		91.6		6.4		3.1		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 06 May 21 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	Calm	15:01	8.0	Surface	1.0	2.6	83	26.1	26.1	8.2	8.2	28.5	28.7	112.8	112.8	7.8	7.6	2.9	5.1	6	5	88	91	815635	804253	<0.2	<0.2	0.7	0.7
						1.0	2.7	87	26.0		8.2		28.8		112.8		7.8		2.9		6		88				<0.2		0.7	
					Middle	4.0	2.7	86	25.4	25.4	8.1	8.1	30.9	31.1	106.8	106.6	7.4		3.0		5		92				<0.2		0.8	
						4.0	2.8	88	25.3		8.1		31.2		106.3		7.3		3.0		4		92				<0.2		1.0	
					Bottom	7.0	2.5	85	25.2	25.2	8.1	8.1	31.9	31.9	98.1	98.0	6.7	6.7	9.2		4		93				<0.2		0.6	
						7.0	2.7	88	25.2		8.1		31.9		97.9		6.7		9.7		5		93				<0.2		0.5	
C2	Fine	Moderate	13:51	11.8	Surface	1.0	0.1	220	26.1	26.1	8.2	8.2	26.2	26.2	105.1	105.0	7.3	6.9	1.5	2.2	4	3	83	86	825666	806949	<0.2	<0.2	0.6	0.6
						1.0	0.1	225	26.1		8.2		26.3		104.8		7.3		1.5		3		83				<0.2		0.6	
					Middle	5.9	0.1	215	25.6	25.6	8.2	8.2	28.0	28.0	92.1	92.1	6.4		2.1		4		86				<0.2		0.6	
						5.9	0.1	232	25.6		8.2		28.0		92.1		6.4		2.1		3		86				<0.2		0.6	
					Bottom	10.8	0.2	56	25.4	25.4	8.2	8.2	29.1	29.1	88.7	88.8	6.2	6.2	3.0		3		88				<0.2		0.7	
						10.8	0.3	56	25.4		8.2		29.1		88.8		6.2		3.1		2		88				<0.2		0.7	
C3	Fine	Moderate	16:10	12.9	Surface	1.0	0.2	242	25.9	25.9	8.2	8.2	29.3	29.3	109.5	109.4	7.5	7.0	1.1	2.0	<2	3	84	87	822121	817801	<0.2	<0.2	0.6	0.7
						1.0	0.2	251	25.8		8.2		29.4		109.2		7.5		1.1		<2		84				<0.2		0.7	
					Middle	6.5	0.2	231	25.2	25.2	8.2	8.2	31.8	31.8	94.7	94.8	6.5		1.6		2		86				<0.2		0.7	
						6.5	0.2	245	25.2		8.2		31.8		94.9		6.5		1.7		3		87				<0.2		0.6	
					Bottom	11.9	0.3	278	24.8	24.8	8.2	8.2	32.9	32.9	90.8	91.1	6.3	6.3	3.2		5		89				<0.2		0.7	
						11.9	0.3	285	24.8		8.2		32.9		91.3		6.3		3.2		4		89				<0.2		0.7	
IM1	Fine	Calm	14:38	5.0	Surface	1.0	0.1	22	25.4	25.4	8.1	8.1	30.5	30.5	99.0	98.9	6.8	6.8	5.8	6.2	5	4	87	89	817938	807152	<0.2	<0.2	0.7	0.7
						1.0	0.1	23	25.4		8.1		30.6		98.7		6.8		5.8		5		88				<0.2		0.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.1	34	25.4	25.4	8.1	8.1	30.5	30.4	97.0	96.7	6.7	6.7	6.6		2		90				<0.2		0.6	
						4.0	0.1	34	25.4		8.1		30.4		96.4		6.7		6.6		3		91				<0.2		0.7	
IM2	Fine	Calm	14:31	6.8	Surface	1.0	2.4	45	25.7	25.7	8.2	8.2	30.1	30.2	106.1	106.1	7.3	7.0	3.1	5.5	3	3	87	90	818154	806157	<0.2	<0.2	0.9	0.8
						1.0	2.5	46	25.6		8.2		30.2		106.0		7.3		3.1		3		87				<0.2		0.8	
					Middle	3.4	2.6	45	25.3	25.3	8.1	8.1	31.2	31.2	98.3	98.1	6.8		4.8		3		91				<0.2		0.8	
						3.4	2.6	46	25.2		8.1		31.3		97.9		6.7		4.9		2		92				<0.2		0.8	
					Bottom	5.8	2.4	49	25.2	25.3	8.1	8.1	31.4	31.3	97.2	97.1	6.7	6.7	8.7		3		92				<0.2		0.9	
						5.8	2.6	50	25.3		8.1		31.2		97.0		6.7		8.7		2		93				<0.2		0.8	
IM3	Fine	Calm	14:24	7.0	Surface	1.0	2.6	237	25.8	25.8	8.2	8.2	29.8	29.8	105.6	105.5	7.3	7.2	2.8	4.5	2	2	89	91	818806	805614	<0.2	<0.2	0.9	0.9
						1.0	2.8	242	25.8		8.2		29.8		105.4		7.3		2.8		2		89				<0.2		1.0	
					Middle	3.5	2.5	236	25.3	25.3	8.1	8.1	30.9	31.0	102.1	101.5	7.0		4.6		2		92				<0.2		0.9	
						3.5	2.6	237	25.2		8.1		31.1		100.8		7.0		4.7		3		92				<0.2		0.9	
					Bottom	6.0	2.5	238	25.2	25.2	8.1	8.1	31.6	31.6	97.8	97.9	6.7	6.7	6.0		3		89				<0.2		0.9	
						6.0	2.7	241	25.2		8.1		31.6		98.0		6.7		6.0		2		93				<0.2		0.9	
IM4	Fine	Calm	14:14	8.4	Surface	1.0	2.1	188	25.8	25.8	8.2	8.2	29.5	29.5	108.4	108.3	7.5	7.1	2.3	5.1	3	3	88	91	819703	804604	<0.2	<0.2	0.9	0.7
						1.0	2.1	191	25.8		8.2		29.5		108.2		7.5		2.3		3		89				<0.2		0.8	
					Middle	4.2	2.1	183	25.2	25.2	8.1	8.1	30.9	30.9	96.7	96.7	6.7		5.7		2		91				<0.2		0.7	
						4.2	2.2	196	25.2		8.1		31.0		96.6		6.7		5.8		3		91				<0.2		0.7	
					Bottom	7.4	1.7	181	25.1	25.2	8.1	8.1	31.6	31.6	96.0	96.0	6.6	6.6	7.3		3		92				<0.2		0.7	
						7.4	1.8	183	25.2		8.1		31.5		96.0		6.6		7.4		2		93				<0.2		0.6	
IM5	Fine	Calm	14:06	7.8	Surface	1.0	1.7	22	25.7	25.7	8.1	8.1	27.5	27.6	104.7	104.3	7.3	6.8	4.3	6.8	4	3	87	90	820746	804853	<0.2	<0.2	0.9	0.8
						1.0	1.9	22	25.6		8.1		27.6		103.8		7.3		4.4		5		87				<0.2		0.9	
					Middle	3.9	2.0	25	25.3	25.3	8.1	8.1	30.2	30.2	91.1	90.9	6.3		7.4		3		91				<0.2		0.7	
						3.9	2.1	25	25.3		8.1		30.3		90.7		6.3		7.3		2		91				<0.2		0.7	
					Bottom	6.8	2.2	28	25.3	25.3	8.1	8.1	30.6	30.5	91.4	91.6	6.3	6.4	8.7		2		92				<0.2		0.8	
						6.8	2.3	30	25.3		8.1		30.4		91.8		6.4		8.7		2		93				<0.2		0.8	
IM6	Fine	Calm	13:59	7.2	Surface	1.0	1.9	217	26.0	26.0	8.1	8.1	27.3	27.4	107.9	107.8	7.5	7.2	2.1	4.2	<2	<2	87	90	821048	805822	<0.2	<0.2	0.7	0.8
						1.0	2.0	226	25.9		8.1		27.5		107.7		7.5		2.0		<2		88				<0.2		0.7	
					Middle	3.6	1.6	216	25.6	25.6	8.1	8.1	28.8	29.0	98.7	98.6	6.9		4.1		<2		90				<0.2		0.7	
						3.6	1.7	226	25.5		8.1		29.1		98.5		6.8		4.1		<2		90				<0.2		0.8	
					Bottom	6.2	2.1	219	25.5	25.5	8.1	8.1	29.4	29.4	92.6	92.7	6.4	6.4	6.6		<2		91				<0.2		0.9	
						6.2	2.1	239	25.5		8.1		29.4		92.8		6.4		6.5		<2		91				<0.2		0.8	
IM7	Fine	Calm	13:52	8.4	Surface	1.0	0.9	35	25.8	25.8	8.1	8.1	27.7	27.8	105.9	105.6	7.4	7.0	2.7	4.1	<2	<2	87	90	821355	806828	<0.2	<0.2	0.8	0.8
						1.0	1.0	38	25.7		8.1		27.9		105.3		7.3		2.8		<2		88				<0.2		0.8	
					Middle	4.2	0.9	26	25.5	25.5	8.1	8.1	28.7	28.8	96.8	96.7	6.7		4.0		<2		90				<0.2		0.8	
						4.2	0.9	26	25.5		8.1		29.0		96.6		6.7		3.9		<2		90				<0.2		0.8	
					Bottom	7.4	0.9	56	25.4	25.4	8.1	8.1	29.6	29.6	92.2	92.2	6.4	6.4	5.7		<2		92				<0.2		0.9	
						7.4	0.9	59	25.4		8.1		29.6		92.2		6.4		5.6		<2		92				<0.2		0.8	
IM8	Fine	Moderate	14:17	8.0	Surface	1.0	0.2	234	26.2	26.2	8.2	8.2	27.7	27.7	106.0	106.0	7.3	7.2	1.8	2.7	4	3	83	85	821850	808154	<0.2	<0.2	1.0	0.9
						1.0	0.2	240	26.2		8.2		27.7		105.9		7.3		1.8		4		83				<0.2		1.0	
					Middle	4.0	0.2	223	25.8	25.8	8.2	8.2	28.3	28.3	101.3	101.3	7.0		2.5		3		85				<0.2		0.9	
						4.0	0.2	239	25.8		8.2		28.3		101.3		7.0		2.5		4		85				<0.2		0.9	
					Bottom	7.0	0.1	260	25.5	25.5	8.2	8.2	29.2	29.2	90.9	91.0	6.3	6.3	3.9		2		88				<0.2		0.8	
						7.0	0.1	268	25.5		8.2		29.2		91.0		6.3		4.0		2		87				<0.2		0.7	

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 06 May 21 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	14:24	7.7	Surface	1.0	0.3	297	26.2	26.2	8.2	8.2	28.0	28.0	99.8	99.9	6.9	7.1	2.1	2.1	<2	<2	83	85	822089	808832	<0.2	<0.2	0.8	0.8
						1.0	0.3	318	26.2		8.2		28.0		99.9		6.9		2.1		<2		83				<0.2		0.7	
					Middle	3.9	0.2	279	25.9	25.9	8.2	8.2	28.1	28.1	103.4	103.4	7.2		1.5		<2		85				<0.2		0.8	
						3.9	0.2	296	25.9		8.2		28.1		103.4		7.2		1.5		<2		85				<0.2		0.7	
					Bottom	6.7	0.2	288	25.5	25.5	8.2	8.2	29.1	29.1	95.2	95.3	6.6	6.6	2.7		<2		87				<0.2		0.8	
						6.7	0.2	290	25.5		8.2		29.1		95.4		6.6		2.7		<2		88				<0.2		0.7	
IM10	Fine	Moderate	14:32	8.1	Surface	1.0	0.2	336	26.2	26.2	8.2	8.2	28.0	28.0	100.0	100.0	6.9	6.9	2.1	1.9	<2	2	84	86	822393	809815	<0.2	<0.2	0.9	0.9
						1.0	0.2	346	26.2		8.2		28.0		100.0		6.9		2.1		<2		84				<0.2		0.8	
					Middle	4.1	0.2	320	25.9	25.9	8.2	8.2	28.3	28.3	99.4	99.5	6.9		2.0		<2		85				<0.2		0.8	
						4.1	0.2	334	25.9		8.2		28.3		99.5		6.9		2.0		<2		85				<0.2		0.8	
					Bottom	7.1	0.2	292	25.5	25.6	8.2	8.2	29.1	29.1	97.9	97.9	6.8	6.8	1.7		3		88				<0.2		1.0	
						7.1	0.2	315	25.6		8.2		29.1		97.9		6.8		1.6		2		88				<0.2		0.9	
IM11	Fine	Moderate	14:46	8.2	Surface	1.0	0.1	314	26.1	26.1	8.2	8.2	28.1	28.1	108.0	108.1	7.5	7.5	1.4	1.3	<2	2	84	86	822056	811452	<0.2	<0.2	0.9	0.8
						1.0	0.1	314	26.1		8.2		28.1		108.1		7.5		1.4		<2		84				<0.2		0.7	
					Middle	4.1	0.1	293	25.8	25.8	8.2	8.2	28.4	28.4	107.9	107.9	7.5		1.3		<2		85				<0.2		0.8	
						4.1	0.1	301	25.8		8.2		28.4		107.8		7.5		1.2		<2		86				<0.2		0.8	
					Bottom	7.2	0.1	311	25.5	25.5	8.3	8.3	29.4	29.4	101.9	102.0	7.1	7.1	1.4		3		88				<0.2		0.7	
						7.2	0.1	319	25.5		8.3		29.4		102.1		7.1		1.4		2		88				<0.2		0.8	
IM12	Fine	Moderate	14:53	9.5	Surface	1.0	0.2	320	26.2	26.2	8.2	8.2	27.8	27.8	105.8	105.8	7.3	7.2	1.6	2.0	2	3	83	85	821478	812064	<0.2	<0.2	0.7	0.7
						1.0	0.2	333	26.2		8.2		27.8		105.7		7.3		1.6		3		83				<0.2		0.8	
					Middle	4.8	0.2	284	25.6	25.6	8.2	8.2	28.9	28.9	100.2	100.2	7.0		1.3		2		85				<0.2		0.8	
						4.8	0.2	311	25.6		8.2		28.9		100.2		7.0		1.3		3		85				<0.2		0.8	
					Bottom	8.5	0.2	299	25.3	25.3	8.2	8.2	30.2	30.1	94.0	94.2	6.5	6.5	3.0		3		87				<0.2		0.7	
						8.5	0.3	299	25.3		8.2		30.1		94.3		6.5		3.0		2		87				<0.2		0.6	
SR1A	Fine	Calm	15:28	5.1	Surface	1.0	-	-	26.5	26.5	8.2	8.2	27.7	27.6	105.6	105.7	7.3	7.3	1.5	1.5	3	3	-	-	819981	812654	-	-	-	-
						1.0	-	-	26.5		8.2		27.6		105.7		7.3		1.5		2		-				-		-	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	-	-	26.4	26.4	8.2	8.2	27.9	27.9	107.7	107.8	7.4	7.4	1.5		3		-				-		-	
						4.1	-	-	26.4		8.2		27.9		107.9		7.4		1.5		2		-				-		-	
SR2	Fine	Moderate	15:46	4.8	Surface	1.0	0.3	328	26.1	26.1	8.2	8.2	28.4	28.5	104.0	103.9	7.2	7.2	1.5	2.4	2	2	84	85	821449	814155	<0.2	<0.2	0.7	0.7
						1.0	0.3	356	26.1		8.2		28.5		103.8		7.2		1.5		2		84				<0.2		0.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.1	284	25.3	25.3	8.2	8.2	30.9	30.9	91.5	91.8	6.3	6.4	3.4		2		86				<0.2		0.8	
						3.8	0.1	291	25.3		8.2		30.8		92.0		6.4		3.4		2		86				<0.2		0.7	
SR3	Fine	Moderate	14:10	9.3	Surface	1.0	0.2	255	26.1	26.1	8.2	8.2	27.9	27.9	106.9	107.0	7.4	7.4	1.2	1.6	3	2	-	-	822161	807575	-	-	-	-
						1.0	0.2	258	26.1		8.2		27.9		107.0		7.4		1.2		2		-				-		-	
					Middle	4.7	0.2	254	25.9	25.9	8.2	8.2	27.9	27.9	105.1	104.9	7.3		1.1		3		-				-		-	
						4.7	0.2	268	25.9		8.2		27.9		104.7		7.3		1.2		2		-				-		-	
					Bottom	8.3	0.2	267	25.4	25.4	8.2	8.2	29.6	29.6	92.5	92.7	6.4	6.4	2.4		2		-				-		-	
						8.3	0.2	274	25.4		8.2		29.6		92.8		6.4		2.3		2		-				-		-	
SR4A	Fine	Calm	15:21	8.4	Surface	1.0	1.7	52	25.6	25.6	8.1	8.1	29.7	29.8	105.8	105.6	7.3	7.0	3.0	5.5	<2	3	-	-	817167	807818	-	-	-	-
						1.0	1.9	53	25.5		8.1		29.9		105.3		7.3		3.1		<2		-				-		-	
					Middle	4.2	1.9	54	25.4	25.4	8.1	8.1	30.4	30.5	97.2	97.0	6.7		5.5		3		-				-		-	
						4.2	2.0	56	25.4		8.1		30.5		96.8		6.7		5.5		3		-				-		-	
					Bottom	7.4	2.0	45	25.4	25.4	8.1	8.1	30.5	30.5	96.6	96.6	6.7	6.7	8.0		3		-				-		-	
						7.4	2.1	49	25.4		8.1		30.5		96.6		6.7		8.0		2		-				-		-	
SR5A	Fine	Calm	15:39	4.8	Surface	1.0	0.0	334	26.1	26.1	8.1	8.1	27.8	27.9	114.2	113.9	7.9	7.9	7.9	8.7	3	3	-	-	816569	810687	-	-	-	-
						1.0	0.0	334	26.0		8.1		28.0		113.6		7.9		7.8		2		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.0	260	25.7	25.8	8.0	8.0	28.4	28.4	101.3	101.4	7.0	7.0	9.5		3		-				-		-	
						3.8	0.0	270	25.8		8.0		28.3		101.4		7.0		9.5		2		-				-		-	
SR6A	Fine	Calm	16:08	4.6	Surface	1.0	0.1	210	26.1	26.1	8.1	8.1	28.4	28.4	112.3	112.1	7.7	7.7	3.8	4.6	2	2	-	-	817966	814740	-	-	-	-
						1.0	0.1	217	26.1		8.1		28.4		111.8		7.7		3.8		3		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.1	253	25.7	25.7	8.0	8.0	28.8	28.9	101.9	101.9	7.1	7.1	5.4		<2		-				-		-	
						3.6	0.1	262	25.7		8.0		28.9		101.8		7.1		5.5		<2		-				-		-	
SR7	Fine	Moderate	16:44	16.2	Surface	1.0	0.1	1	25.2	25.2	8.2	8.2	32.2	32.2	92.2	92.2	6.3	6.3	1.3	1.9	<2	2	-	-	823659	823744	-	-	-	-
						1.0	0.1	1	25.2		8.2		32.2		92.2		6.3		1.3		<2		-				-		-	
					Middle	8.1	0.1	129	25.0	25.0	8.2	8.2	32.9	32.9	89.8	89.7	6.2		1.7		2		-				-		-	
						8.1	0.1	139	24.9		8.2		32.9		89.6		6.2		1.8		2		-				-		-	
					Bottom	15.2	0.1	73	24.8	24.8	8.2	8.2	33.5	33.5	89.6	89.8	6.2	6.2	2.8		2		-				-		-	
						15.2	0.1	78	24.8		8.2		33.5		89.9		6.2		2.7		3		-				-		-	
SR8	Fine	Moderate	15:02	5.2	Surface	1.0	-	-	26.8	26.8	8.2	8.2	27.9	27.9	102.5	102.5	7.0	7.0	2.6	3.1	2	2	-	-	820380	811606	-	-	-	-
						1.0	-	-	26.7		8.2		27.9		102.5		7.0		2.6		3		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	-	-	25.6	25.6	8.2	8.2	28.7	28.7	95.2	95.4	6.6	6.6	3.6		2		-				-		-	
						4.2	-	-	25.6		8.2		28.7		95.6		6.6		3.4		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 08 May 21 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Moderate	11:50	8.3	Surface	1.0	2.3	350	27.0	27.0	7.8	7.8	21.2	21.2	138.5	137.7	9.8	8.7	2.5	5.1	4	4	86	87	815624	804253	<0.2	<0.2	1.0	1.1
						1.0	2.3	322	27.0		7.8		21.1		136.9		9.7		2.6		4		85				<0.2		1.0	
					Middle	4.2	2.2	358	25.6	25.6	7.8	7.8	30.3	30.3	110.5	110.8	7.6		4.0		4		88				<0.2		1.0	
						4.2	2.4	329	25.6		7.8		30.3		111.0		7.6		4.1		3		88				<0.2		1.0	
					Bottom	7.3	2.2	355	25.4	25.4	7.8	7.8	31.5	31.5	101.3	101.4	6.9	7.0	8.9		4		89				<0.2		1.2	
						7.3	2.2	327	25.4		7.8		31.5		101.5		7.0		8.7		3		88				<0.2		1.1	
C2	Sunny	Moderate	13:17	11.4	Surface	1.0	0.6	175	27.0	27.0	8.1	8.1	20.4	20.4	114.1	114.1	8.1	7.8	3.2	3.4	5	5	86	88	825675	806950	<0.2	<0.2	1.9	2.0
						1.0	0.7	186	27.0		8.1		20.4		114.1		8.1		3.2		4		86				<0.2		2.0	
					Middle	5.7	0.3	164	26.3	26.3	8.1	8.1	24.3	24.3	105.4	105.4	7.4		3.3		6		88				<0.2		2.0	
						5.7	0.3	167	26.3		8.1		24.3		105.4		7.4		3.3		5		89				<0.2		2.0	
					Bottom	10.4	0.2	111	26.0	26.0	8.0	8.0	26.6	26.6	98.2	98.2	6.9	6.9	3.7		5		91				<0.2		2.0	
						10.4	0.2	119	26.0		8.0		26.6		98.2		6.9		3.9		6		90				<0.2		2.0	
C3	Sunny	Moderate	10:44	11.5	Surface	1.0	0.5	114	26.2	26.2	8.1	8.1	26.5	26.5	126.3	126.3	8.8	8.5	2.7	2.7	4	4	84	88	822112	817816	<0.2	<0.2	1.4	1.3
						1.0	0.5	118	26.2		8.1		26.5		126.2		8.8		2.7		5		84				<0.2		1.4	
					Middle	5.8	0.2	257	26.0	26.0	8.1	8.1	27.6	27.6	116.2	116.3	8.1		3.3		5		89				<0.2		1.3	
						5.8	0.2	259	26.0		8.1		27.5		116.3		8.1		3.2		4		89				<0.2		1.3	
					Bottom	10.5	0.1	120	25.8	25.8	8.2	8.2	29.4	29.4	111.5	111.5	7.7	7.7	2.1		3		89				<0.2		1.3	
						10.5	0.1	130	25.8		8.2		29.5		111.4		7.7		2.2		4		90				<0.2		1.3	
IM1	Fine	Moderate	12:11	4.7	Surface	1.0	0.1	134	27.3	27.3	7.8	7.8	20.8	20.8	145.1	145.0	10.2	10.2	2.4	8.0	4	4	86	87	817948	807139	<0.2	<0.2	1.6	1.6
						1.0	0.1	143	27.3		7.8		20.8		144.8		10.2		2.5		3		87				<0.2		1.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.1	311	25.6	25.7	7.8	7.8	29.3	29.3	101.7	101.8	7.0	7.1	13.6		4		88				<0.2		1.5	
						3.7	0.1	314	25.7		7.8		29.3		101.9		7.1		13.5		3		88				<0.2		1.5	
IM2	Fine	Moderate	12:19	6.5	Surface	1.0	2.4	4	26.4	26.5	7.7	7.7	24.1	24.0	133.1	133.2	9.4	8.4	3.2	5.5	4	4	86	87	818156	806152	<0.2	<0.2	1.6	1.5
						1.0	2.5	4	26.5		7.7		24.0		133.3		9.4		3.2		3		85				<0.2		1.6	
					Middle	3.3	2.4	12	26.0	26.0	7.8	7.8	27.0	27.0	105.4	105.4	7.3		5.1		3		87				<0.2		1.4	
						3.3	2.5	12	26.0		7.8		27.0		105.3		7.3		5.2		4		88				<0.2		1.5	
					Bottom	5.5	2.4	10	25.5	25.5	7.8	7.8	30.6	30.6	101.5	101.5	7.0	7.0	8.4		5		89				<0.2		1.4	
						5.5	2.6	10	25.5		7.8		30.6		101.5		7.0		8.1		4		89				<0.2		1.4	
IM3	Fine	Moderate	12:27	6.7	Surface	1.0	2.5	354	26.7	26.7	7.7	7.7	21.7	21.7	138.2	138.1	9.8	8.4	2.8	8.1	4	4	86	88	818790	805589	<0.2	<0.2	1.6	1.5
						1.0	2.6	326	26.7		7.7		21.7		138.0		9.8		2.8		3		85				<0.2		1.5	
					Middle	3.4	2.7	356	26.1	26.1	7.7	7.7	26.4	26.4	99.8	99.7	7.0		10.3		5		88				<0.2		1.5	
						3.4	2.8	328	26.0		7.7		26.4		99.6		7.0		10.4		4		88				<0.2		1.5	
					Bottom	5.7	2.9	357	25.6	25.6	7.6	7.6	30.0	30.0	97.3	97.4	6.7	6.7	11.2		4		89				<0.2		1.6	
						5.7	3.0	328	25.6		7.6		30.0		97.4		6.7		11.3		5		90				<0.2		1.4	
IM4	Fine	Moderate	12:37	7.8	Surface	1.0	2.0	340	26.4	26.4	7.7	7.7	24.6	24.6	112.4	112.4	7.9	7.9	6.0	11.0	5	4	85	88	819722	804597	<0.2	<0.2	1.4	1.4
						1.0	2.0	353	26.4		7.7		24.6		112.3		7.9		6.0		4		86				<0.2		1.4	
					Middle	3.9	2.0	346	26.2	26.2	7.7	7.7	25.5	25.4	111.6	111.7	7.8		9.8		4		88				<0.2		1.4	
						3.9	2.1	356	26.2		7.7		25.4		111.7		7.8		9.8		3		89				<0.2		1.5	
					Bottom	6.8	2.1	352	26.2	26.2	7.7	7.7	26.5	26.5	106.6	106.7	7.4	7.4	17.6		3		89				<0.2		1.4	
						6.8	2.3	324	26.2		7.7		26.5		106.7		7.4		17.1		4		89				<0.2		1.3	
IM5	Fine	Moderate	12:47	7.3	Surface	1.0	2.2	339	26.7	26.7	7.7	7.7	23.3	23.3	130.8	130.8	9.2	9.0	3.9	7.3	9	7	85	87	820713	804881	<0.2	<0.2	1.6	1.6
						1.0	2.3	348	26.7		7.7		23.4		130.7		9.2		4.1		9		85				<0.2		1.6	
					Middle	3.7	2.4	342	26.6	26.6	7.8	7.8	23.7	23.7	125.0	125.0	8.8		4.7		7		88				<0.2		1.6	
						3.7	2.7	356	26.5		7.8		23.7		124.9		8.8		4.7		7		88				<0.2		1.5	
					Bottom	6.3	2.4	347	26.2	26.3	7.8	7.8	25.6	25.6	108.6	108.6	7.6	7.6	12.9		4		88				<0.2		1.8	
						6.3	2.4	352	26.3		7.8		25.6		108.6		7.6		13.3		4		89				<0.2		1.7	
IM6	Fine	Moderate	12:56	7.0	Surface	1.0	2.1	354	26.6	26.6	7.7	7.7	23.7	23.8	117.9	117.8	8.3	8.0	5.0	7.3	5	7	86	87	821078	805825	<0.2	<0.2	1.7	1.7
						1.0	2.2	359	26.5		7.7		23.9		117.7		8.3		5.2		6		86				<0.2		1.7	
					Middle	3.5	1.9	0	26.3	26.3	7.8	7.8	25.0	25.1	108.6	108.8	7.6		7.2		8		87				<0.2		1.7	
						3.5	1.9	0	26.3		7.8		25.1		109.0		7.6		7.5		9		87				<0.2		1.7	
					Bottom	6.0	2.1	4	26.2	26.2	7.8	7.8	25.7	25.6	106.0	106.1	7.4	7.4	9.3		8		87				<0.2		1.6	
						6.0	2.3	4	26.2		7.8		25.6		106.1		7.4		9.3		8		88				<0.2		1.6	
IM7	Fine	Moderate	13:05	8.0	Surface	1.0	1.8	191	26.7	26.7	7.6	7.6	23.2	23.3	123.5	123.5	8.7	8.3	4.7	7.8	8	7	85	88	821366	806841	<0.2	<0.2	1.6	1.7
						1.0	1.9	194	26.7		7.6		23.3		123.4		8.7		5.0		7		86				<0.2		1.7	
					Middle	4.0	2.1	182	26.3	26.3	7.7	7.7	24.9	24.9	110.6	110.6	7.8		7.5		8		88				<0.2		1.8	
						4.0	2.3	192	26.3		7.7		24.9		110.5		7.8		7.9		7		87				<0.2		1.8	
					Bottom	7.0	2.4	180	26.2	26.2	7.6	7.6	25.2	25.2	102.5	102.5	7.2	7.2	10.7		6		90				<0.2		1.6	
						7.0	2.6	194	26.2		7.6		25.2		102.5		7.2		10.8		7		89				<0.2		1.5	
IM8	Sunny	Moderate	12:48	8.4	Surface	1.0	0.1	132	27.1	27.1	8.2	8.2	21.0	21.0	133.1	133.0	9.4	8.6	2.4	4.9	5	4	84	87	821810	808148	<0.2	<0.2	1.7	1.8
						1.0	0.1	133	27.1		8.2		21.1		132.8		9.4		2.4		4		84				<0.2		1.8	
					Middle	4.2	0.2	90	26.3	26.3	8.2	8.2	23.5	23.6	110.4	109.6	7.8		4.0		4		87				<0.2		2.0	
						4.2	0.2	90	26.2		8.2		23.8		108.7		7.7		4.3		4		88				<0.2		1.9	
					Bottom	7.4	0.2	23	26.2	26.2	8.2	8.2	25.1	25.1	102.1	102.3	7.2	7.2	8.2		5		90				<0.2		1.8	
						7.4	0.2	23	26.2		8.2		25.1		102.4		7.2		8.1		4		91				<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 08 May 21 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Sunny	Moderate	12:42	7.7	Surface	1.0	0.1	102	27.2	27.2	8.2	8.2	20.9	20.9	134.8	134.6	9.5	9.4	2.6	4.0	4	5	83	86	822115	808797	<0.2	<0.2	1.8	1.7
						1.0	0.1	110	27.2		8.2		20.9		134.3		9.5		2.7		4		83				<0.2		1.7	
					Middle	3.9	0.1	99	27.0	27.0	8.2	8.2	21.1	21.1	132.0	131.9	9.3		2.8		5		86				<0.2		1.6	
						3.9	0.1	107	27.0		8.2		21.2		131.7		9.3		2.8		6		87				<0.2		1.6	
					Bottom	6.7	0.1	76	26.1	26.2	8.2	8.2	24.9	24.9	100.7	100.8	7.1	7.1	6.7		6		90				<0.2		1.8	
						6.7	0.1	80	26.2		8.2		24.9		100.9		7.1		6.7		7		89				<0.2		1.9	
IM10	Sunny	Moderate	12:33	8.2	Surface	1.0	0.3	88	27.0	27.0	8.2	8.2	20.2	20.2	130.6	130.5	9.3	8.2	2.4	8.8	5	4	82	86	822391	809788	<0.2	<0.2	1.9	1.9
						1.0	0.4	95	27.0		8.2		20.2		130.4		9.3		2.5		4		81				<0.2		1.9	
					Middle	4.1	0.2	90	26.1	26.1	8.2	8.2	25.1	25.1	99.7	99.8	7.0		9.6		4		82				<0.2		1.9	
						4.1	0.3	93	26.1		8.2		25.0		99.9		7.0		9.2		3		83				<0.2		2.0	
					Bottom	7.2	0.2	96	26.1	26.1	8.2	8.2	25.4	25.4	96.5	96.5	6.8	6.8	14.5		3		93				<0.2		1.9	
						7.2	0.2	102	26.1		8.2		25.4		96.5		6.8		14.5		4		93				<0.2		1.9	
IM11	Sunny	Moderate	12:16	8.3	Surface	1.0	0.4	86	26.6	26.6	8.2	8.2	21.7	21.7	122.6	122.1	8.7	8.0	4.4	7.2	4	4	82	86	822046	811441	<0.2	<0.2	1.9	1.8
						1.0	0.4	89	26.5		8.2		21.7		121.5		8.7		4.8		5		82				<0.2		1.9	
					Middle	4.2	0.2	63	26.1	26.1	8.2	8.2	25.1	25.1	102.3	102.4	7.2		8.0		4		87				<0.2		1.7	
						4.2	0.2	64	26.1		8.2		25.1		102.4		7.2		8.3		5		87				<0.2		1.7	
					Bottom	7.3	0.2	84	26.1	26.1	8.2	8.2	25.8	25.8	99.5	99.8	7.0	7.0	9.0		3		90				<0.2		1.7	
						7.3	0.2	91	26.1		8.2		25.8		100.0		7.0		8.9		4		89				<0.2		1.8	
IM12	Sunny	Moderate	12:06	8.1	Surface	1.0	0.5	95	27.1	27.1	8.2	8.2	21.1	21.1	130.1	130.0	9.2	8.2	2.7	5.2	4	4	85	89	821459	812053	<0.2	<0.2	1.6	1.8
						1.0	0.5	98	27.1		8.2		21.1		129.9		9.2		2.7		5		85				<0.2		1.6	
					Middle	4.1	0.4	116	26.2	26.2	8.2	8.2	25.1	25.2	101.2	101.0	7.1		6.2		5		89				<0.2		2.0	
						4.1	0.4	127	26.1		8.2		25.2		100.7		7.1		6.2		4		90				<0.2		2.0	
					Bottom	7.1	0.2	92	26.1	26.1	8.2	8.2	25.9	25.9	96.5	96.5	6.8	6.8	6.6		4		91				<0.2		1.8	
						7.1	0.2	101	26.1		8.2		25.9		96.4		6.8		6.6		4		92				<0.2		1.9	
SR1A	Sunny	Moderate	11:30	5.5	Surface	1.0	-	-	26.6	26.6	8.2	8.2	20.8	20.8	117.2	117.2	8.4	8.4	3.1	3.4	4	5	-	-	819976	812653	-	-	-	-
						1.0	-	-	26.6		8.2		20.8		117.1		8.4		3.0		5		-				-		-	
					Middle	2.8	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.8	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.5	-	-	26.2	26.2	8.2	8.2	24.5	24.5	111.1	111.0	7.8	7.8	3.8		4		-				-		-	
						4.5	-	-	26.2		8.2		24.5		110.9		7.8		3.8		5		-				-		-	
SR2	Sunny	Moderate	11:13	4.7	Surface	1.0	0.5	114	27.0	27.0	8.2	8.2	18.3	18.2	134.5	134.3	9.7	9.7	2.5	3.6	4	5	85	86	821481	814179	<0.2	<0.2	2.1	2.2
						1.0	0.5	115	27.0		8.2		18.2		134.1		9.7		2.6		5		85				<0.2		2.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.3	112	26.3	26.3	8.2	8.2	23.5	23.6	108.1	108.1	7.6	7.6	4.6		4		88				<0.2		2.4	
						3.7	0.3	119	26.3		8.2		23.7		108.1		7.6		4.7		5		87				<0.2		2.3	
SR3	Sunny	Moderate	12:55	8.9	Surface	1.0	0.2	155	27.2	27.2	8.1	8.1	21.3	21.3	135.2	135.0	9.5	8.8	2.8	6.7	5	4	-	-	822163	807589	-	-	-	-
						1.0	0.2	166	27.2		8.1		21.3		134.7		9.5		2.7		4		-				-		-	
					Middle	4.5	0.3	147	26.3	26.3	8.2	8.2	23.7	23.7	113.6	113.6	8.0		4.0		5		-				-		-	
						4.5	0.3	154	26.3		8.2		23.7		113.5		8.0		4.0		4		-				-		-	
					Bottom	7.9	0.1	181	26.1	26.1	8.2	8.2	25.6	25.6	100.6	100.7	7.1	7.1	13.5		4		-				-		-	
						7.9	0.1	185	26.1		8.2		25.6		100.7		7.1		13.4		4		-				-		-	
SR4A	Fine	Moderate	11:29	8.9	Surface	1.0	1.9	31	26.4	26.4	7.8	7.8	21.1	21.2	130.8	130.2	9.4	8.2	5.7	7.7	4	5	-	-	817209	807832	-	-	-	-
						1.0	2.0	32	26.3		7.8		21.2		129.5		9.3		6.3		5		-				-		-	
					Middle	4.5	2.1	29	25.8	25.8	7.8	7.8	28.5	28.5	101.7	101.9	7.1		8.4		5		-				-		-	
						4.5	2.1	30	25.8		7.8		28.5		102.0		7.1		8.4		4		-				-		-	
					Bottom	7.9	2.3	32	25.7	25.7	7.8	7.8	29.4	29.4	98.4	98.5	6.8	6.8	8.4		6		-				-		-	
						7.9	2.5	34	25.7		7.8		29.4		98.5		6.8		8.8		5		-				-		-	
SR5A	Fine	Moderate	11:11	3.4	Surface	1.0	0.1	344	26.8	26.8	7.8	7.8	22.7	22.7	144.9	144.7	10.2	10.2	3.6	7.0	5	5	-	-	816584	810717	-	-	-	-
						1.0	0.1	316	26.8		7.8		22.8		144.5		10.2		4.0		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.4	0.1	356	26.8	26.8	7.7	7.7	23.0	23.0	141.8	141.5	10.0	10.0	10.4		4		-				-		-	
						2.4	0.1	328	26.8		7.7		23.0		141.2		9.9		10.1		5		-				-		-	
SR6A	Fine	Moderate	10:43	4.5	Surface	1.0	0.1	101	26.7	26.7	7.7	7.7	23.2	23.2	149.3	149.0	10.5	10.5	7.0	9.7	5	4	-	-	817958	814724	-	-	-	-
						1.0	0.1	104	26.6		7.7		23.3		148.6		10.5		7.7		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.0	159	26.3	26.4	7.7	7.7	25.8	25.7	120.5	120.8	8.4	8.4	12.2		3		-				-		-	
						3.5	0.0	174	26.4		7.7		25.7		121.0		8.4		11.9		4		-				-		-	
SR7	Sunny	Moderate	10:03	14.8	Surface	1.0	0.6	61	25.8	25.8	8.0	8.0	29.4	29.5	111.3	111.2	7.7	7.4	3.0	3.1	5	5	-	-	823651	823752	-	-	-	-
						1.0	0.7	62	25.7		8.0		29.5		111.1		7.7		3.0		6		-				-		-	
					Middle	7.4	0.2	14	25.5	25.5	8.0	8.0	30.5	30.5	103.5	103.4	7.1		3.0		5		-				-		-	
						7.4	0.2	14	25.5		8.0		30.6		103.3		7.1		3.1		6		-				-		-	
					Bottom	13.8	0.2	55	25.5	25.5	8.1	8.1	30.9	30.9	100.7	100.6	6.9	6.9	3.3		3		-				-		-	
						13.8	0.2	56	25.4		8.1		31.0		100.4		6.9		3.3		4		-				-		-	
SR8	Sunny	Moderate	11:57	4.7	Surface	1.0	-	-	26.8	26.8	8.2	8.2	19.9	19.8	126.8	126.5	9.1	9.1	3.2	5.0	5	4	-	-	820410	811603	-	-	-	-
						1.0	-	-	26.8		8.2		19.8		126.1		9.0		3.3		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	-	-	27.0	27.0	8.1	8.1	21.7	21.7	112.9	112.9	8.0	8.0	6.8		4		-				-		-	
						3.7	-	-	27.0		8.1		21.7		112.9		8.0		6.9		3		-				-		-	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 08 May 21 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	Rough	16:43	8.2	Surface	1.0	2.3	143	27.5	27.5	7.8	7.8	21.7	21.7	156.4	156.2	10.9	10.0	2.7	6.8	5	5	86	88	815609	804254	<0.2	<0.2	1.4	1.4
						1.0	2.4	147	27.5		7.8		21.7		155.9		10.9		2.8		6		87				<0.2		1.4	
					Middle	4.1	2.8	144	26.7	26.7	7.8	7.8	23.1	23.7	134.2	128.6	9.4		4.6		5		87				<0.2		1.4	
						4.1	2.9	146	26.6		7.8		24.4		123.0		8.6		4.8		5		88				<0.2		1.5	
					Bottom	7.2	2.6	146	25.8	25.8	7.8	7.8	29.4	29.4	105.0	105.1	7.2	7.3	12.9		5		89				<0.2		1.4	
						7.2	2.7	159	25.8		7.8		29.4		105.1		7.3		12.9		4		90				<0.2		1.4	
C2	Sunny	Moderate	15:33	10.9	Surface	1.0	0.3	350	26.9	26.9	8.1	8.1	19.7	19.7	116.7	116.8	8.4	7.6	3.3	5.0	4	5	85	88	825666	806936	<0.2	<0.2	1.9	1.9
						1.0	0.3	353	26.8		8.1		19.8		116.8		8.4		3.4		5		85				<0.2		2.1	
					Middle	5.5	0.4	28	26.0	26.0	8.1	8.1	26.0	25.9	97.4	97.5	6.8		5.3		4		87				<0.2		1.9	
						5.5	0.4	28	26.0		8.1		25.9		97.5		6.8		5.2		5		87				<0.2		1.8	
					Bottom	9.9	0.4	346	26.0	26.0	8.1	8.1	26.5	26.5	96.1	96.2	6.7	6.7	6.5		5		91				<0.2		1.9	
						9.9	0.4	350	26.0		8.1		26.5		96.2		6.7		6.5		6		90				<0.2		1.8	
C3	Sunny	Moderate	17:49	11.5	Surface	1.0	0.3	241	27.3	27.3	8.0	8.0	22.4	22.4	159.0	158.7	11.1	9.0	2.5	8.6	5	6	84	86	822116	817804	<0.2	<0.2	1.9	1.9
						1.0	0.3	246	27.3		8.0		22.4		158.4		11.1		2.4		6		84				<0.2		2.0	
					Middle	5.8	0.4	252	25.5	25.5	8.0	8.0	30.4	30.4	98.4	98.4	6.8		3.9		5		85				<0.2		1.9	
						5.8	0.4	271	25.5		8.0		30.4		98.3		6.8		3.8		6		85				<0.2		1.9	
					Bottom	10.5	0.4	266	25.3	25.3	8.1	8.1	31.9	31.9	93.3	93.4	6.4	6.4	19.0		6		88				<0.2		1.8	
						10.5	0.4	279	25.3		8.1		31.9		93.5		6.4		20.1		6		88				<0.2		1.7	
IM1	Fine	Rough	16:19	4.3	Surface	1.0	0.3	244	27.8	27.8	7.7	7.7	21.1	21.1	144.6	142.9	10.1	10.0	2.3	8.2	4	4	85	88	817938	807136	<0.2	<0.2	1.2	1.1
						1.0	0.3	258	27.8		7.7		21.1		141.2		9.9		2.3		5		85				<0.2		1.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.2	266	25.8	25.8	7.8	7.8	29.3	29.3	105.0	105.8	7.3	7.4	14.2		4		90				<0.2		1.1	
						3.3	0.3	268	25.8		7.8		29.3		106.6		7.4		13.9		3		91				<0.2		1.1	
IM2	Fine	Rough	16:12	6.5	Surface	1.0	2.4	20	27.4	27.4	7.7	7.7	22.5	22.5	141.9	141.8	9.9	9.6	3.5	5.4	4	4	85	88	818159	806180	<0.2	<0.2	1.2	1.1
						1.0	2.6	20	27.4		7.7		22.5		141.6		9.9		3.7		4		85				<0.2		1.1	
					Middle	3.3	2.7	25	25.9	25.9	7.7	7.7	26.4	26.4	133.3	132.1	9.3		4.7		3		89				<0.2		1.1	
						3.3	2.8	27	25.8		7.7		26.4		130.8		9.2		5.3		2		89				<0.2		1.2	
					Bottom	5.5	2.7	20	25.7	25.7	7.7	7.7	30.4	30.4	104.7	104.9	7.2	7.2	7.6		6		90				<0.2		1.1	
						5.5	2.8	20	25.7		7.7		30.4		105.1		7.2		7.3		3		90				<0.2		1.1	
IM3	Fine	Rough	16:05	7.0	Surface	1.0	1.9	195	26.8	26.8	7.7	7.7	23.7	23.7	135.0	134.9	9.5	8.3	3.1	8.6	4	5	85	88	818764	805594	<0.2	<0.2	1.2	1.3
						1.0	2.0	196	26.8		7.7		23.7		134.7		9.4		3.3		4		85				<0.2		1.1	
					Middle	3.5	1.9	199	25.7	25.7	7.7	7.7	28.8	28.8	101.2	102.0	7.0		7.9		4		87				<0.2		1.2	
						3.5	2.0	210	25.7		7.7		28.8		102.7		7.1		8.3		4		88				<0.2		1.1	
					Bottom	6.0	2.0	204	25.6	25.6	7.7	7.7	30.3	30.3	99.2	99.3	6.8	6.8	14.5		5		90				<0.2		1.4	
						6.0	2.1	220	25.6		7.7		30.4		99.4		6.8		14.4		6		91				<0.2		1.5	
IM4	Fine	Rough	15:56	7.7	Surface	1.0	2.8	170	26.9	26.8	7.7	7.7	19.8	19.8	141.7	140.5	10.1	8.7	4.7	7.3	4	4	86	89	819719	804585	<0.2	<0.2	1.4	1.4
						1.0	3.0	182	26.7		7.7		19.8		139.2		10.0		4.9		3		87				<0.2		1.4	
					Middle	3.9	2.9	169	26.2	26.2	7.7	7.7	24.9	24.9	105.6	105.4	7.4		8.0		5		89				<0.2		1.5	
						3.9	3.1	176	26.2		7.7		24.9		105.2		7.4		8.3		4		89				<0.2		1.6	
					Bottom	6.7	2.5	164	26.0	26.1	7.7	7.7	27.0	26.9	99.8	99.9	7.0	7.0	9.3		5		90				<0.2		1.2	
						6.7	2.7	167	26.1		7.7		26.9		99.9		7.0		8.8		4		90				<0.2		1.2	
IM5	Fine	Rough	15:48	7.3	Surface	1.0	1.8	338	27.1	27.1	7.7	7.7	19.7	19.7	146.3	145.9	10.4	9.7	3.7	7.2	3	3	86	88	820738	804876	<0.2	<0.2	1.2	1.1
						1.0	1.9	355	27.1		7.7		19.7		145.5		10.4		3.9		4		86				<0.2		1.1	
					Middle	3.7	2.1	338	26.7	26.7	7.7	7.7	23.3	23.3	126.8	127.0	8.9		6.8		2		89				<0.2		1.0	
						3.7	2.3	348	26.6		7.7		23.2		127.1		9.0		7.5		3		86				<0.2		1.2	
					Bottom	6.3	2.0	347	26.4	26.4	7.7	7.7	24.7	24.7	111.0	111.0	7.8	7.8	10.5		3		90				<0.2		1.1	
						6.3	2.0	319	26.4		7.7		24.7		111.0		7.8		10.7		3		91				<0.2		1.1	
IM6	Fine	Rough	15:40	6.8	Surface	1.0	1.3	2	27.2	27.2	7.7	7.7	20.6	20.6	141.7	141.4	10.0	9.6	3.2	5.5	5	5	88	89	821038	805844	<0.2	<0.2	1.2	1.3
						1.0	1.3	2	27.2		7.7		20.7		141.1		10.0		3.4		5		87				<0.2		1.1	
					Middle	3.4	1.5	4	26.8	26.8	7.8	7.8	22.8	22.8	130.5	130.5	9.2		4.7		5		89				<0.2		1.4	
						3.4	1.5	4	26.8		7.8		22.8		130.4		9.2		5.3		5		89				<0.2		1.4	
					Bottom	5.8	1.4	4	26.4	26.4	7.8	7.8	24.7	24.7	108.0	107.8	7.6	7.6	8.2		5		90				<0.2		1.4	
						5.8	1.5	4	26.4		7.8		24.7		107.5		7.5		8.4		4		90				<0.2		1.5	
IM7	Fine	Rough	15:32	7.7	Surface	1.0	0.3	258	26.8	26.8	7.7	7.7	21.4	21.4	139.4	138.9	9.9	8.9	4.1	6.4	6	7	85	88	821348	806814	<0.2	<0.2	1.3	1.5
						1.0	0.4	276	26.7		7.7		21.4		138.4		9.8		4.3		7		86				<0.2		1.4	
					Middle	3.9	0.5	249	26.3	26.3	7.7	7.7	24.1	24.2	113.2	113.0	8.0		5.4		7		89				<0.2		1.2	
						3.9	0.6	262	26.3		7.7		24.2		112.7		7.9		5.5		7		89				<0.2		1.1	
					Bottom	6.7	0.3	276	26.3	26.3	7.7	7.7	24.6	24.6	109.2	109.3	7.7	7.7	9.8		7		90				<0.2		2.0	
						6.7	0.3	302	26.3		7.7		24.6		109.3		7.7		9.6		7		90				<0.2		2.0	
IM8	Sunny	Moderate	16:01	7.6	Surface	1.0	0.3	248	27.1	27.1	8.1	8.1	20.9	20.9	133.8	133.8	9.5	9.3	3.3	4.8	5	5	82	84	821806	808123	<0.2	<0.2	2.2	1.9
						1.0	0.3	268	27.1		8.1		20.9		133.7		9.5		3.4		6		82				<0.2		2.2	
					Middle	3.8	0.3	240	27.1	27.1	8.1	8.1	21.1	21.1	128.8	128.6	9.1		3.4		5		84				<0.2		1.8	
						3.8	0.3	259	27.1		8.1		21.1		128.3		9.1		3.4		5		84				<0.2		1.7	
					Bottom	6.6	0.2	263	26.3	26.3	8.2	8.2	24.3	24.2	107.8	107.9	7.6	7.6	7.8		5		86				<0.2		1.7	
						6.6	0.2	280	26.3		8.2		24.2		107.9		7.6		7.7		4		86				<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 08 May 21 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Sunny	Moderate	16:07	7.4	Surface	1.0	0.1	321	27.2	27.2	8.1	8.1	20.6	20.6	136.1	136.1	9.6	9.5	3.0	3.5	4	4	82	85	822077	808811	<0.2	<0.2	1.8	1.9
						1.0	0.1	321	27.2		8.1		20.6		136.0		9.6		3.0		4		83				<0.2		1.8	
					Middle	3.7	0.1	322	27.2	27.2	8.1	8.1	20.6	20.6	132.5	132.4	9.4		3.1		5		84				<0.2		1.9	
						3.7	0.1	347	27.2		8.1		20.6		132.3		9.4		3.1		4		85				<0.2		1.9	
					Bottom	6.4	0.1	241	26.5	26.5	8.2	8.2	23.1	23.1	115.3	115.1	8.1	8.1	4.5		4		87				<0.2		2.1	
						6.4	0.1	260	26.5		8.2		23.1		114.9		8.1		4.5		5		87				<0.2		2.0	
IM10	Sunny	Moderate	16:15	8.3	Surface	1.0	0.2	337	27.2	27.2	8.1	8.1	20.5	20.5	135.6	135.4	9.6	8.7	2.9	4.4	4	4	84	85	822406	809809	<0.2	<0.2	2.1	2.0
						1.0	0.2	339	27.2		8.1		20.5		135.1		9.6		3.0		4		84				<0.2		2.1	
					Middle	4.2	0.2	21	26.4	26.4	8.1	8.1	23.4	23.4	110.3	110.2	7.8		3.5		4		85				<0.2		2.1	
						4.2	0.2	22	26.4		8.1		23.4		110.1		7.8		3.5		4		85				<0.2		2.2	
					Bottom	7.3	0.2	355	26.3	26.3	8.1	8.1	24.5	24.5	94.4	94.5	6.7	6.7	6.6		5		87				<0.2		1.7	
						7.3	0.2	327	26.3		8.1		24.5		94.5		6.7		6.5		4		87				<0.2		1.8	
IM11	Sunny	Moderate	16:26	7.7	Surface	1.0	0.2	340	27.3	27.3	8.2	8.2	21.2	21.2	142.4	142.4	10.0	8.8	2.9	6.1	4	5	82	85	822068	811471	<0.2	<0.2	1.6	1.9
						1.0	0.2	313	27.3		8.2		21.2		142.4		10.0		2.9		5		83				<0.2		1.8	
					Middle	3.9	0.3	308	26.3	26.3	8.2	8.2	24.3	24.3	107.5	107.5	7.6		4.4		4		84				<0.2		2.1	
						3.9	0.3	318	26.3		8.2		24.3		107.4		7.6		4.4		5		85				<0.2		2.0	
					Bottom	6.7	0.4	258	25.9	25.9	8.2	8.2	26.8	26.8	91.7	91.9	6.4	6.4	11.1		5		87				<0.2		1.9	
						6.7	0.4	274	25.9		8.3		26.8		92.0		6.4		10.8		6		86				<0.2		1.8	
IM12	Sunny	Moderate	16:33	8.7	Surface	1.0	0.2	313	27.4	27.4	8.1	8.1	20.9	20.9	151.0	150.9	10.6	9.0	2.9	4.7	4	5	82	85	821464	812037	<0.2	<0.2	1.8	1.8
						1.0	0.3	317	27.4		8.1		20.9		150.7		10.6		2.9		4		82				<0.2		1.8	
					Middle	4.4	0.4	296	26.3	26.3	8.1	8.1	24.7	24.6	105.8	105.8	7.4		4.1		6		84				<0.2		1.8	
						4.4	0.4	323	26.3		8.1		24.6		105.8		7.4		4.1		5		85				<0.2		1.8	
					Bottom	7.7	0.4	290	25.6	25.6	8.1	8.1	27.2	28.2	88.7	88.7	6.2	6.2	6.9		5		87				<0.2		1.8	
						7.7	0.4	293	25.6		8.1		29.2		88.7		6.2		7.2		6		88				<0.2		1.7	
SR1A	Sunny	Moderate	17:08	5.4	Surface	1.0	-	-	27.4	27.4	8.0	8.0	21.4	21.4	161.9	161.5	11.4	11.4	3.1	3.8	5	4	-	-	819973	812656	-	-	-	-
						1.0	-	-	27.4		8.0		21.4		161.0		11.3		3.1		4		-				-		-	
					Middle	2.7	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.7	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	-	-	27.0	27.0	8.1	8.1	24.2	24.1	141.7	141.9	9.9	9.9	4.6		4		-				-		-	
						4.4	-	-	27.0		8.1		24.1		142.0		9.9		4.5		4		-				-		-	
SR2	Sunny	Moderate	17:24	5.0	Surface	1.0	0.2	343	27.4	27.4	8.0	8.0	22.0	22.0	156.8	156.5	11.0	11.0	3.4	5.5	5	5	82	83	821463	814158	<0.2	<0.2	1.7	1.8
						1.0	0.2	355	27.4		8.0		22.0		156.2		10.9		3.5		4		82				<0.2		1.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.0	270	26.1	26.1	8.1	8.1	27.9	27.9	104.4	105.1	7.2	7.3	7.6		5		83				<0.2		1.9	
						4.0	0.0	290	26.1		8.1		27.9		105.7		7.3		7.5		5		84				<0.2		2.0	
SR3	Sunny	Moderate	15:54	8.4	Surface	1.0	0.2	267	27.2	27.2	8.1	8.1	20.8	20.8	134.7	134.6	9.5	8.9	3.1	4.8	4	5	-	-	822133	807555	-	-	-	-
						1.0	0.2	277	27.2		8.1		20.8		134.5		9.5		3.0		5		-				-		-	
					Middle	4.2	0.3	209	26.5	26.5	8.1	8.1	22.7	22.8	116.0	115.8	8.2		3.1		5		-				-		-	
						4.2	0.3	219	26.5		8.1		22.9		115.5		8.2		3.1		4		-				-		-	
					Bottom	7.4	0.1	301	26.1	26.1	8.2	8.2	25.7	25.7	101.6	101.7	7.1	7.1	8.0		6		-				-		-	
						7.4	0.1	314	26.1		8.2		25.7		101.8		7.1		8.2		5		-				-		-	
SR4A	Fine	Moderate	17:04	8.8	Surface	1.0	1.9	40	27.8	27.8	7.8	7.8	22.5	22.5	169.4	169.0	11.8	10.3	4.7	6.1	10	7	-	-	817185	807798	-	-	-	-
						1.0	2.1	40	27.8		7.8		22.5		168.6		11.7		5.0		10		-				-		-	
					Middle	4.4	2.3	44	26.5	26.5	7.8	7.8	24.5	24.5	125.3	125.0	8.8		5.7		6		-				-		-	
						4.4	2.3	47	26.4		7.8		24.6		124.6		8.8		6.0		5		-				-		-	
					Bottom	7.8	2.3	50	25.7	25.7	7.8	7.8	29.0	29.0	98.0	98.4	6.8	6.8	7.5		5		-				-		-	
						7.8	2.3	54	25.7		7.8		28.9		98.7		6.8		7.5		4		-				-		-	
SR5A	Fine	Moderate	17:23	3.4	Surface	1.0	0.2	279	27.3	27.3	7.8	7.8	23.8	23.8	165.9	165.7	11.5	11.5	3.7	5.1	6	6	-	-	816580	810678	-	-	-	-
						1.0	0.2	306	27.3		7.8		23.8		165.4		11.5		3.8		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.4	0.2	304	26.9	26.9	7.8	7.8	24.2	24.2	151.5	151.3	10.6	10.6	6.4		6		-				-		-	
						2.4	0.2	321	26.9		7.8		24.2		151.1		10.5		6.4		7		-				-		-	
SR6A	Fine	Moderate	18:08	4.2	Surface	1.0	0.0	200	27.4	27.4	7.7	7.7	21.6	21.7	173.9	173.7	12.2	12.2	5.1	5.6	6	6	-	-	817984	814731	-	-	-	-
						1.0	0.0	206	27.4		7.7		21.8		173.4		12.1		5.5		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.1	205	27.4	27.4	7.7	7.7	22.0	22.0	165.9	165.7	11.6	11.6	5.9		6		-				-		-	
						3.2	0.1	218	27.4		7.7		22.0		165.5		11.6		5.9		5		-				-		-	
SR7	Cloudy	Moderate	18:25	14.6	Surface	1.0	0.0	116	25.9	25.9	8.1	8.1	29.2	29.2	112.9	112.9	7.8	7.5	2.6	3.3	5	5	-	-	823654	823757	-	-	-	-
						1.0	0.0	126	25.9		8.1		29.2		112.8		7.8		2.5		6		-				-		-	
					Middle	7.3	0.1	184	25.6	25.6	8.0	8.0	30.6	30.6	104.2	104.2	7.2		3.2		4		-				-		-	
						7.3	0.1	196	25.6		8.0		30.6		104.2		7.2		3.3		5		-				-		-	
					Bottom	13.6	0.1	76	25.3	25.3	8.0	8.0	32.5	32.5	94.5	94.6	6.5	6.5	4.1		4		-				-		-	
						13.6	0.1	77	25.3		8.0		32.5		94.6		6.5		4.1		5		-				-		-	
SR8	Sunny	Moderate	16:42	4.1	Surface	1.0	-	-	27.2	27.2	8.0	8.0	21.3	21.3	151.2	151.0	10.7	10.7	3.3	8.6	5	5	-	-	820374	811621	-	-	-	-
						1.0	-	-	27.2		8.0		21.3		150.7		10.6		3.4		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	-	-	27.4	27.4	8.2	8.2	21.9	21.8	141.8	142.0	9.9	10.0	13.6		5		-				-		-	
						3.1	-	-	27.4		8.2		21.8		142.1		10.0		13.9		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 11 May 21 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	12:24	8.8	Surface	1.0	2.6	348	27.5	27.5	8.1	8.1	22.4	22.4	106.5	106.4	7.4	7.2	2.7	5.4	2	2	87	90	815623	804247	<0.2	<0.2	1.0	1.3
						1.0	2.7	320	27.5		8.1		22.4		106.2		7.4		2.8		3		87				<0.2		1.0	
					Middle	4.4	2.6	349	26.0	26.0	8.1	8.1	26.4	26.4	101.6	100.6	7.1		3.2		2		91				<0.2		1.5	
						4.4	2.8	321	26.0		8.1		26.5		99.5		7.0		3.4		2		91				<0.2		1.5	
					Bottom	7.8	2.8	355	25.9	25.9	8.1	8.1	30.7	30.7	93.4	93.7	6.4	6.4	10.3		<2		92				<0.2		1.3	
						7.8	2.9	327	25.9		8.1		30.6		94.0		6.4		10.1		<2		92				<0.2		1.5	
C2	Fine	Moderate	11:18	11.9	Surface	1.0	0.6	179	27.3	27.3	8.2	8.2	23.0	23.0	96.0	96.0	6.7	6.6	5.3	6.1	8	9	84	86	825680	806959	<0.2	<0.2	1.5	1.4
						1.0	0.6	183	27.3		8.2		23.0		96.0		6.7		5.3		7		83				<0.2		1.5	
					Middle	6.0	0.3	167	26.9	26.9	8.2	8.2	24.6	24.6	92.2	92.1	6.4		5.5		7		86				<0.2		1.4	
						6.0	0.3	169	26.8		8.2		24.6		91.9		6.4		5.6		8		86				<0.2		1.5	
					Bottom	10.9	0.2	124	26.5	26.5	8.2	8.2	27.1	27.1	89.4	89.5	6.2	6.2	7.5		12		88				<0.2		1.3	
						10.9	0.2	136	26.5		8.2		27.1		89.5		6.2		7.4		11		88				<0.2		1.4	
C3	Fine	Moderate	13:27	11.0	Surface	1.0	2.5	339	27.2	27.2	8.2	8.2	25.1	25.2	99.5	99.5	6.9	6.8	3.7	3.7	7	4	85	88	822099	817787	<0.2	<0.2	1.5	1.5
						1.0	2.8	357	27.2		8.2		25.2		99.4		6.9		3.7		7		86				<0.2		1.5	
					Middle	5.5	2.6	341	26.9	26.9	8.2	8.2	26.1	26.1	97.5	97.5	6.7		3.1		3		88				<0.2		1.6	
						5.5	2.8	314	26.9		8.2		26.1		97.5		6.7		3.1		3		89				<0.2		1.5	
					Bottom	10.0	2.8	358	26.2	26.2	8.3	8.3	29.2	29.2	91.6	91.6	6.3	6.3	4.4		3		91				<0.2		1.5	
						10.0	3.0	329	26.2		8.2		29.2		91.6		6.3		4.4		3		91				<0.2		1.4	
IM1	Fine	Moderate	12:03	5.2	Surface	1.0	0.2	168	27.4	27.4	8.2	8.2	22.1	22.1	110.1	110.1	7.7	7.7	2.4	3.1	3	2	87	88	817950	807142	<0.2	<0.2	1.4	1.4
						1.0	0.2	169	27.4		8.2		22.1		110.0		7.7		2.4		2		87				<0.2		1.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.1	221	27.3	27.3	8.2	8.2	22.6	22.6	104.9	104.8	7.3	7.3	3.8		<2		89				<0.2		1.3	
						4.2	0.2	229	27.3		8.2		22.7		104.6		7.3		3.8		<2		88				<0.2		1.3	
IM2	Fine	Moderate	11:55	7.0	Surface	1.0	1.9	26	27.2	27.2	8.2	8.2	22.9	22.9	107.6	107.5	7.5	7.1	3.5	7.9	2	3	86	90	818155	806145	<0.2	<0.2	1.2	1.1
						1.0	2.0	27	27.2		8.2		23.0		107.4		7.5		3.9		3		86				<0.2		1.1	
					Middle	3.5	2.3	33	26.8	26.8	8.2	8.2	24.2	24.2	96.1	96.0	6.7		7.1		2		91				<0.2		1.0	
						3.5	2.4	34	26.7		8.2		24.1		95.8		6.7		7.4		3		91				<0.2		1.1	
					Bottom	6.0	2.3	27	26.6	26.6	8.1	8.1	26.3	26.3	95.0	95.0	6.6	6.6	12.7		4		91				<0.2		1.1	
						6.0	2.5	27	26.6		8.1		26.3		95.0		6.6		12.9		4		92				<0.2		1.0	
IM3	Fine	Moderate	11:48	7.4	Surface	1.0	1.6	294	27.0	27.0	8.2	8.1	23.8	23.9	100.4	100.2	7.0	7.0	4.3	7.7	4	4	88	90	818760	805583	<0.2	<0.2	1.2	1.2
						1.0	1.7	318	26.9		8.1		23.9		99.9		7.0		4.7		5		88				<0.2		1.1	
					Middle	3.7	1.3	281	26.8	26.8	8.1	8.1	24.2	24.2	99.3	99.2	6.9		5.1		4		91				<0.2		1.1	
						3.7	1.3	303	26.7		8.1		24.3		99.1		6.9		5.2		5		91				<0.2		1.1	
					Bottom	6.4	1.4	314	26.5	26.5	8.1	8.1	27.2	27.2	94.9	95.0	6.5	6.6	13.4		4		92				<0.2		1.2	
						6.4	1.4	328	26.5		8.1		27.2		95.1		6.6		13.6		3		92				<0.2		1.2	
IM4	Fine	Moderate	11:39	8.4	Surface	1.0	1.5	181	27.0	27.0	8.1	8.1	23.3	23.3	98.3	98.3	6.9	6.7	6.5	8.4	4	4	87	90	819742	804630	<0.2	<0.2	1.3	1.3
						1.0	1.5	192	27.0		8.1		23.3		98.3		6.9		6.6		4		88				<0.2		1.2	
					Middle	4.2	0.7	183	26.4	26.4	8.1	8.1	27.5	27.5	93.4	93.4	6.5		9.6		5		90				<0.2		1.4	
						4.2	0.7	184	26.4		8.1		27.6		93.3		6.4		8.9		4		90				<0.2		1.3	
					Bottom	7.4	1.0	177	26.3	26.3	8.1	8.1	27.9	27.9	93.1	93.2	6.4	6.4	9.5		4		92				<0.2		1.3	
						7.4	1.0	181	26.3		8.1		27.9		93.2		6.4		9.5		5		92				<0.2		1.2	
IM5	Fine	Moderate	11:32	8.2	Surface	1.0	1.6	183	27.1	27.1	8.1	8.1	22.8	22.8	102.0	102.0	7.1	6.9	4.6	8.5	3	4	90	91	820757	804871	<0.2	<0.2	1.5	1.4
						1.0	1.7	188	27.1		8.1		22.8		102.0		7.2		4.7		3		90				<0.2		1.5	
					Middle	4.1	1.7	175	26.6	26.6	8.1	8.1	25.3	25.3	96.0	95.8	6.7		8.7		4		90				<0.2		1.4	
						4.1	1.7	179	26.5		8.1		25.3		95.6		6.7		9.3		3		90				<0.2		1.4	
					Bottom	7.2	1.4	180	26.4	26.5	8.1	8.1	27.3	27.3	95.4	95.5	6.6	6.6	11.9		4		92				<0.2		1.2	
						7.2	1.4	194	26.5		8.1		27.3		95.6		6.6		11.9		5		92				<0.2		1.4	
IM6	Fine	Moderate	11:24	7.6	Surface	1.0	1.9	344	27.1	27.1	8.1	8.1	21.6	21.6	104.0	103.9	7.3	7.0	6.0	8.4	3	3	87	89	821058	805826	<0.2	<0.2	1.5	1.5
						1.0	2.0	346	27.0		8.1		21.6		103.7		7.3		6.5		2		87				<0.2		1.5	
					Middle	3.8	1.8	351	26.8	26.8	8.1	8.1	24.7	24.7	96.3	96.2	6.7		9.1		3		89				<0.2		1.4	
						3.8	1.9	353	26.8		8.1		24.7		96.1		6.7		9.6		2		90				<0.2		1.4	
					Bottom	6.6	1.8	344	26.8	26.8	8.1	8.1	24.8	24.7	95.2	95.3	6.6	6.6	9.7		2		91				<0.2		1.4	
						6.6	1.9	357	26.8		8.1		24.6		95.3		6.6		9.7		3		91				<0.2		1.5	
IM7	Fine	Moderate	11:17	7.8	Surface	1.0	1.1	200	27.3	27.3	8.1	8.1	21.8	21.8	101.2	101.0	7.1	7.1	5.1	7.2	<2	2	86	89	821335	806835	<0.2	<0.2	1.4	1.5
						1.0	1.1	219	27.3		8.1		21.9		100.8		7.1		5.3		<2		86				<0.2		1.5	
					Middle	3.9	1.0	200	27.1	27.1	8.1	8.1	22.8	22.8	99.6	99.6	7.0		7.5		2		89				<0.2		1.5	
						3.9	1.0	208	27.1		8.1		22.9		99.6		7.0		7.7		3		89				<0.2		1.4	
					Bottom	6.8	0.9	199	27.0	27.0	8.1	8.1	23.4	23.4	99.7	99.8	7.0	7.0	8.9		2		91				<0.2		1.5	
						6.8	0.9	211	27.0		8.1		23.4		99.9		7.0		8.8		3		91				<0.2		1.5	
IM8	Fine	Moderate	11:42	7.9	Surface	1.0	2.4	290	27.4	27.4	8.2	8.2	22.1	22.1	96.2	96.2	6.7	6.5	4.5	5.7	4	5	85	87	821848	808160	<0.2	<0.2	1.2	1.3
						1.0	2.5	295	27.4		8.2		22.1		96.1		6.7		4.5		5		84				<0.2		1.3	
					Middle	4.0	2.4	274	27.0	27.0	8.2	8.2	23.8	23.8	90.3	90.3	6.3		5.7		6		87				<0.2		1.4	
						4.0	2.6	277	26.9		8.2		23.9		90.3		6.3		5.6		5		86				<0.2		1.4	
					Bottom	6.9	2.5	281	26.9	26.9	8.2	8.2	24.3	24.3	90.6	90.6	6.3	6.3	7.0		5		89				<0.2		1.4	
						6.9	2.6	286	26.9		8.2		24.3		90.6		6.3		6.9		6		89				<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 11 May 21 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Fine	Moderate	11:48	7.6	Surface	1.0	2.8	200	27.4	27.4	8.2	8.2	22.3	22.3	96.3	96.3	6.7	6.6	4.7	5.9	5	5	84	87	822082	808821	<0.2	<0.2	1.4	1.5
						1.0	2.8	218	27.4		8.2		22.3		96.3		6.7		4.8		5		84				<0.2		1.5	
					Middle	3.8	2.8	215	26.9	26.9	8.2	8.2	24.5	24.5	91.2	91.2	6.4		5.7		5		87				<0.2		1.4	
						3.8	2.8	215	26.9		8.2		24.5		91.1		6.4		5.9		5		87				<0.2		1.5	
					Bottom	6.6	2.5	204	26.9	26.9	8.2	8.2	24.6	24.6	90.6	90.6	6.3	6.3	7.1		6		89				<0.2		1.4	
						6.6	2.5	217	26.9		8.2		24.6		90.6		6.3		7.0		5		88				<0.2		1.5	
IM10	Fine	Moderate	11:55	8.1	Surface	1.0	2.7	198	27.3	27.3	8.2	8.2	22.7	22.7	96.7	96.7	6.8	6.6	4.7	5.4	4	5	84	87	822401	809774	<0.2	<0.2	1.5	1.5
						1.0	3.0	199	27.3		8.2		22.7		96.6		6.8		4.6		4		84				<0.2		1.5	
					Middle	4.1	2.8	187	26.8	26.8	8.2	8.2	24.5	24.5	92.3	92.3	6.4		5.1		4		87				<0.2		1.5	
						4.1	3.0	195	26.8		8.2		24.5		92.2		6.4		5.0		5		87				<0.2		1.5	
					Bottom	7.1	2.7	190	26.8	26.8	8.2	8.2	24.6	24.6	91.8	91.8	6.4	6.4	6.2		6		89				<0.2		1.5	
						7.1	2.7	190	26.8		8.3		24.6		91.8		6.4		6.6		5		89				<0.2		1.6	
IM11	Fine	Moderate	12:08	9.0	Surface	1.0	3.1	77	27.7	27.7	8.2	8.2	21.5	21.5	100.8	100.7	7.0	6.9	2.7	3.6	6	5	83	87	822069	811453	<0.2	<0.2	1.5	1.5
						1.0	3.2	78	27.7		8.2		21.5		100.6		7.0		2.8		5		84				<0.2		1.5	
					Middle	4.5	2.8	78	27.2	27.2	8.2	8.2	23.5	23.5	96.7	96.7	6.7		3.0		5		87				<0.2		1.4	
						4.5	3.1	80	27.2		8.2		23.5		96.7		6.7		3.0		4		87				<0.2		1.4	
					Bottom	8.0	3.2	81	27.0	27.0	8.3	8.3	23.8	23.8	94.5	94.6	6.6	6.6	5.0		4		89				<0.2		1.5	
						8.0	3.3	86	27.0		8.3		23.8		94.6		6.6		5.2		3		90				<0.2		1.5	
IM12	Fine	Moderate	12:14	9.5	Surface	1.0	2.5	76	27.5	27.5	8.2	8.2	21.5	21.5	99.7	99.7	7.0	6.8	3.1	4.1	3	4	84	87	821442	812063	<0.2	<0.2	1.5	1.5
						1.0	2.6	79	27.5		8.2		21.5		99.7		7.0		3.1		4		85				<0.2		1.5	
					Middle	4.8	2.6	64	27.1	27.1	8.2	8.2	23.6	23.6	93.3	93.2	6.5		4.0		3		87				<0.2		1.5	
						4.8	2.7	67	27.1		8.2		23.7		93.0		6.5		4.1		4		88				<0.2		1.5	
					Bottom	8.5	2.7	61	26.9	26.9	8.2	8.2	24.8	24.8	89.3	89.4	6.2	6.2	5.3		4		90				<0.2		1.6	
						8.5	2.9	62	26.9		8.2		24.8		89.4		6.2		5.3		3		90				<0.2		1.6	
SR1A	Fine	Moderate	12:51	5.2	Surface	1.0	-	-	27.4	27.4	8.2	8.2	23.5	23.5	93.5	93.5	6.5	6.5	6.0	6.3	8	7	-	-	819974	812661	-	-	-	-
						1.0	-	-	27.4		8.2		23.6		93.5		6.5		6.1		8		-				-		-	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	-	-	27.1	27.2	8.2	8.2	24.4	24.4	93.4	93.4	6.5	6.5	6.6		6		-				-		-	
						4.2	-	-	27.2		8.2		24.4		93.4		6.5		6.6		5		-				-		-	
SR2	Fine	Moderate	13:07	4.8	Surface	1.0	0.4	89	27.7	27.7	8.3	8.3	22.6	22.6	100.6	100.6	7.0	7.0	3.6	4.6	7	5	87	88	821440	814182	<0.2	<0.2	1.4	1.4
						1.0	0.5	94	27.7		8.3		22.6		100.6		7.0		3.7		7		87				<0.2		1.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.3	87	27.1	27.1	8.3	8.3	24.0	24.0	95.7	95.8	6.7	6.7	5.6		4		88				<0.2		1.4	
						3.8	0.4	90	27.1		8.3		24.0		95.8		6.7		5.5		3		89				<0.2		1.4	
SR3	Fine	Moderate	11:37	9.1	Surface	1.0	2.1	243	27.6	27.6	8.2	8.2	21.9	21.9	97.1	97.1	6.8	6.7	3.6	4.9	7	6	-	-	822153	807565	-	-	-	-
						1.0	2.2	263	27.6		8.2		21.9		97.1		6.8		3.5		7		-				-		-	
					Middle	4.6	2.1	254	27.0	27.0	8.2	8.2	23.6	23.6	92.5	92.5	6.5		4.8		5		-				-		-	
						4.6	2.1	276	27.0		8.2		23.6		92.4		6.5		4.8		6		-				-		-	
					Bottom	8.1	1.9	239	26.9	26.9	8.3	8.3	24.6	24.6	91.3	91.4	6.4	6.4	6.4		4		-				-		-	
						8.1	2.0	254	26.9		8.3		24.6		91.4		6.4		6.3		5		-				-		-	
SR4A	Fine	Moderate	12:48	8.0	Surface	1.0	2.7	58	27.4	27.4	8.1	8.1	23.1	23.1	105.0	104.9	7.3	7.2	4.5	5.5	3	3	-	-	817212	807795	-	-	-	-
						1.0	2.7	59	27.3		8.1		23.1		104.7		7.3		4.7		3		-				-		-	
					Middle	4.0	2.7	56	27.1	27.1	8.1	8.1	23.4	23.4	100.5	100.5	7.0		5.9		3		-				-		-	
						4.0	2.9	59	27.1		8.1		23.4		100.5		7.0		6.0		3		-				-		-	
					Bottom	7.0	2.5	53	27.1	27.1	8.1	8.1	23.4	23.4	95.5	95.8	6.7	6.7	6.1		3		-				-		-	
						7.0	2.6	56	27.1		8.1		23.4		96.1		6.7		6.0		4		-				-		-	
SR5A	Fine	Moderate	13:05	3.9	Surface	1.0	0.1	332	28.0	28.0	8.2	8.1	23.0	23.0	108.3	108.2	7.5	7.5	4.2	4.8	4	5	-	-	816614	810678	-	-	-	-
						1.0	0.1	332	28.0		8.1		23.0		108.0		7.4		4.2		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.9	0.1	321	27.8	27.8	8.1	8.1	23.1	23.1	106.1	106.1	7.3	7.3	5.4		4		-				-		-	
						2.9	0.1	337	27.8		8.1		23.1		106.0		7.3		5.5		5		-				-		-	
SR6A	Fine	Moderate	13:49	4.0	Surface	1.0	0.1	34	27.3	27.3	8.1	8.1	23.7	23.7	104.6	104.5	7.3	7.3	9.6	10.3	4	5	-	-	817948	814730	-	-	-	-
						1.0	0.1	35	27.3		8.1		23.7		104.3		7.2		9.9		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	0.1	42	27.2	27.2	8.1	8.1	23.9	23.9	94.4	94.4	6.6	6.6	10.9		5		-				-		-	
						3.0	0.1	42	27.2		8.1		23.9		94.4		6.6		10.9		5		-				-		-	
SR7	Fine	Moderate	13:57	15.6	Surface	1.0	3.8	4	27.6	27.6	8.3	8.3	23.3	23.3	104.5	104.4	7.2	7.1	2.2	3.0	5	4	-	-	823641	823764	-	-	-	-
						1.0	4.1	4	27.5		8.3		23.4		104.3		7.2		2.3		4		-				-		-	
					Middle	7.8	3.7	1	27.1	27.1	8.3	8.3	25.4	25.4	100.3	100.3	6.9		3.1		5		-				-		-	
						7.8	3.9	1	27.1		8.3		25.4		100.3		6.9		3.1		4		-				-		-	
					Bottom	14.6	3.7	10	27.0	27.0	8.3	8.3	25.8	25.8	99.7	99.7	6.9	6.9	3.7		4		-				-		-	
						14.6	3.9	10	27.0		8.3		25.8		99.7		6.9		3.7		3		-				-		-	
SR8	Fine	Moderate	12:23	5.1	Surface	1.0	-	-	27.7	27.7	8.2	8.2	23.8	23.8	95.4	95.4	6.6	6.6	5.8	6.6	7	5	-	-	820380	811611	-	-	-	-
						1.0	-	-	27.7		8.2		23.8		95.4		6.6		5.9		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	-	-	27.4	27.4	8.2	8.2	23.9	23.9	94.6	94.6	6.6	6.6	7.4		2		-				-		-	
						4.1	-	-	27.4		8.3		23.9		94.6		6.6		7.5		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 11 May 21 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Moderate	06:29	8.4	Surface	1.0	2.9	5	26.6	26.6	8.1	8.1	21.6	21.7	103.4	103.3	7.4	6.9	5.2	8.5	2	2	85	87	815629	804234	<0.2	<0.2	1.3	1.4
						1.0	3.1	5	26.5		8.1		21.7		103.2		7.4		5.8		3		85				<0.2		1.4	
					Middle	4.2	3.1	5	25.7	25.7	8.1	8.1	31.0	31.2	93.4	93.4	6.4		9.6		3		88				<0.2		1.4	
						4.2	3.4	5	25.7		8.1		31.3		93.3		6.4		9.7		2		88				<0.2		1.4	
					Bottom	7.4	3.0	1	25.6	25.6	8.1	8.1	31.9	31.9	94.1	94.2	6.4	6.4	10.7		<2		88				<0.2		1.4	
						7.4	3.0	1	25.6		8.1		31.9		94.3		6.4		10.1		<2		88				<0.2		1.4	
C2	Fine	Moderate	07:49	12.5	Surface	1.0	2.0	92	27.3	27.3	8.2	8.2	21.8	21.8	97.9	97.9	6.9	6.8	6.3	8.0	5	8	83	86	825691	806949	<0.2	<0.2	1.6	1.6
						1.0	2.1	100	27.3		8.2		21.8		97.8		6.9		6.6		3		84				<0.2		1.5	
					Middle	6.3	2.1	88	27.1	27.1	8.2	8.2	22.8	22.8	95.1	95.1	6.7		7.5		3		86				<0.2		1.6	
						6.3	2.2	92	27.1		8.2		22.8		95.0		6.7		7.6		14		86				<0.2		1.6	
					Bottom	11.5	2.0	90	26.2	26.2	8.2	8.2	28.5	28.5	87.9	87.9	6.1	6.1	9.9		14		87				<0.2		1.6	
						11.5	2.1	92	26.2		8.2		28.5		87.9		6.1		10.0		11		87				<0.2		1.5	
C3	Cloudy	Moderate	05:29	11.3	Surface	1.0	1.9	314	26.9	26.9	8.3	8.3	24.7	24.7	99.4	99.3	6.9	6.7	2.2	3.3	3	3	85	88	822098	817802	<0.2	<0.2	1.7	1.6
						1.0	2.1	330	26.9		8.3		24.8		99.2		6.9		2.2		2		85				<0.2		1.7	
					Middle	5.7	1.9	322	26.2	26.2	8.2	8.2	29.2	29.2	94.0	93.9	6.5		2.8		2		88				<0.2		1.6	
						5.7	2.0	344	26.2		8.2		29.2		93.8		6.4		2.9		3		88				<0.2		1.6	
					Bottom	10.3	1.8	330	25.9	25.9	8.3	8.3	30.6	30.6	92.1	92.2	6.3	6.3	4.9		4		90				<0.2		1.5	
						10.3	1.8	338	25.9		8.3		30.6		92.2		6.3		4.8		3		90				<0.2		1.4	
IM1	Fine	Moderate	06:47	5.2	Surface	1.0	2.0	53	27.0	27.0	8.1	8.1	23.5	23.5	101.0	100.9	7.1	7.1	4.0	4.1	<2	2	86	87	817965	807112	<0.2	<0.2	1.4	1.4
						1.0	2.2	57	27.0		8.1		23.6		100.7		7.0		4.0		<2		86				<0.2		1.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	2.4	54	27.0	27.0	8.1	8.1	23.9	23.9	100.0	100.0	7.0	7.0	4.3		2		87				<0.2		1.4	
						4.2	2.5	56	27.0		8.1		23.9		100.0		7.0		4.3		3		87				<0.2		1.3	
IM2	Fine	Moderate	06:56	7.5	Surface	1.0	1.8	160	27.0	27.0	8.2	8.2	22.2	22.2	102.0	101.9	7.2	7.1	3.7	4.2	4	5	85	88	818161	806182	<0.2	<0.2	1.4	1.3
						1.0	1.8	171	27.0		8.2		22.3		101.7		7.2		3.8		4		86				<0.2		1.3	
					Middle	3.8	1.9	154	26.9	26.9	8.2	8.2	24.1	24.2	99.1	99.0	6.9		4.4		5		89				<0.2		1.4	
						3.8	2.0	169	26.9		8.2		24.2		98.8		6.9		4.4		6		90				<0.2		1.4	
					Bottom	6.5	1.9	163	26.9	26.9	8.1	8.1	24.6	24.7	97.2	97.1	6.8	6.8	4.4		6		90				<0.2		1.2	
						6.5	2.0	173	26.8		8.1		24.7		96.9		6.7		4.6		5		90				<0.2		1.1	
IM3	Fine	Moderate	07:02	7.6	Surface	1.0	1.7	254	27.0	27.0	8.2	8.2	23.2	23.2	102.7	102.7	7.2	7.0	3.9	7.5	4	4	86	88	818797	805589	<0.2	<0.2	1.6	1.3
						1.0	1.8	269	27.0		8.2		23.2		102.6		7.2		3.9		4		86				<0.2		1.5	
					Middle	3.8	1.9	248	26.8	26.8	8.2	8.2	24.5	24.6	96.9	96.8	6.8		5.9		4		89				<0.2		1.2	
						3.8	2.0	266	26.8		8.2		24.6		96.7		6.7		6.1		4		89				<0.2		1.2	
					Bottom	6.6	1.7	242	26.8	26.8	8.1	8.1	24.7	24.8	96.0	96.1	6.7	6.7	12.0		3		90				<0.2		1.1	
						6.6	1.8	243	26.8		8.1		24.8		96.2		6.7		13.2		4		90				<0.2		1.2	
IM4	Fine	Moderate	07:12	8.7	Surface	1.0	2.1	139	26.8	26.8	8.1	8.1	24.4	24.4	100.0	99.8	7.0	6.8	4.8	6.9	2	4	87	89	819715	804626	<0.2	<0.2	1.1	1.3
						1.0	2.3	148	26.8		8.1		24.5		99.5		6.9		5.2		3		88				<0.2		1.2	
					Middle	4.4	2.0	144	26.7	26.7	8.1	8.1	25.4	25.4	97.0	97.0	6.7		7.9		4		90				<0.2		1.1	
						4.4	2.1	147	26.7		8.1		25.4		97.0		6.7		8.0		4		90				<0.2		1.1	
					Bottom	7.7	2.2	135	26.7	26.7	8.1	8.1	25.3	25.3	97.9	98.0	6.8	6.8	7.9		6		91				<0.2		1.5	
						7.7	2.4	141	26.7		8.1		25.3		98.1		6.8		7.7		5		85				<0.2		1.5	
IM5	Fine	Moderate	07:18	8.5	Surface	1.0	2.9	10	27.0	27.0	8.2	8.1	22.4	22.4	103.0	102.9	7.2	7.0	5.2	8.2	3	3	86	89	820732	804845	<0.2	<0.2	1.6	1.5
						1.0	3.2	10	27.0		8.1		22.4		102.8		7.2		5.5		3		86				<0.2		1.4	
					Middle	4.3	2.9	8	26.8	26.8	8.1	8.1	24.6	24.6	96.7	96.7	6.7		8.6		3		90				<0.2		1.4	
						4.3	3.2	8	26.8		8.1		24.7		96.6		6.7		9.0		4		90				<0.2		1.4	
					Bottom	7.5	2.9	17	26.8	26.8	8.1	8.1	24.9	24.9	98.0	98.1	6.8	6.8	10.6		3		91				<0.2		1.5	
						7.5	3.0	17	26.8		8.1		24.9		98.2		6.8		10.5		4		91				<0.2		1.7	
IM6	Fine	Moderate	07:26	8.2	Surface	1.0	2.2	17	27.3	27.3	8.2	8.2	19.8	19.8	105.9	105.9	7.5	7.3	3.0	3.9	5	4	89	90	821057	805827	<0.2	<0.2	1.4	1.3
						1.0	2.2	17	27.3		8.2		19.8		105.8		7.5		3.1		4		89				<0.2		1.5	
					Middle	4.1	2.5	21	27.1	27.1	8.1	8.1	22.5	22.5	100.6	100.4	7.1		3.8		4		89				<0.2		1.2	
						4.1	2.7	21	27.1		8.1		22.6		100.2		7.0		4.0		4		89				<0.2		1.2	
					Bottom	7.2	2.3	11	27.1	27.1	8.1	8.1	23.0	23.0	99.7	99.7	7.0	7.0	4.7		3		92				<0.2		1.1	
						7.2	2.3	11	27.1		8.1		23.0		99.7		7.0		4.7		4		92				<0.2		1.1	
IM7	Fine	Moderate	07:34	7.8	Surface	1.0	2.4	168	27.2	27.2	8.1	8.1	20.1	20.1	104.2	104.2	7.4	7.2	6.3	10.9	5	4	87	89	821333	806847	<0.2	<0.2	1.2	1.4
						1.0	2.4	182	27.1		8.1		20.1		104.1		7.4		6.8		4		87				<0.2		1.2	
					Middle	3.9	2.4	163	27.0	27.0	8.1	8.1	22.9	22.9	99.9	99.9	7.0		11.2		4		89				<0.2		1.6	
						3.9	2.5	172	27.0		8.1		22.9		99.8		7.0		11.4		4		89				<0.2		1.5	
					Bottom	6.8	2.7	164	27.0	27.0	8.1	8.1	22.9	22.9	99.4	99.4	7.0	7.0	14.8		4		91				<0.2		1.4	
						6.8	2.9	168	27.0		8.1		22.9		99.3		7.0		14.8		4		91				<0.2		1.4	
IM8	Fine	Moderate	07:22	8.3	Surface	1.0	2.8	121	27.3	27.3	8.2	8.2	20.9	20.9	97.2	97.2	6.9	6.8	4.0	5.1	5	5	84	86	821812	808149	<0.2	<0.2	1.6	1.6
						1.0	3.0	126	27.3		8.2		20.9		97.1		6.9		4.0		6		84				<0.2		1.6	
					Middle	4.2	2.8	115	27.0	27.0	8.2	8.2	22.7	22.6	94.3	94.3	6.6		5.0		6		86				<0.2		1.6	
						4.2	3.0	123	27.0		8.2		22.6		94.3		6.6		4.8		5		87				<0.2		1.6	
					Bottom	7.3	2.8	119	27.0	27.0	8.2	8.2	24.1	24.1	89.8	89.9	6.3	6.3	6.2		4		88				<0.2		1.7	
						7.3	3.1	128	27.0		8.2		24.1		89.9		6.3		6.2		5		88				<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 11 May 21 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Fine	Moderate	07:15	7.9	Surface	1.0	2.7	88	27.2	27.2	8.2	8.2	21.7	21.7	93.8	93.7	6.6	6.5	5.6	6.6	4	6	84	86	822081	808829	<0.2	<0.2	1.6	1.5
						1.0	2.9	90	27.2		8.2		21.8		93.6		6.6		5.6		5		84				<0.2		1.5	
					Middle	4.0	2.6	98	27.2	27.2	8.2	8.2	22.4	22.4	91.0	90.9	6.4		6.5		6		86				<0.2		1.5	
						4.0	2.8	99	27.2		8.2		22.4		90.8		6.4		6.5		7		86				<0.2		1.4	
					Bottom	6.9	2.7	85	26.7	26.7	8.2	8.2	25.5	25.4	87.4	87.5	6.1	6.1	7.7		8		88				<0.2		1.5	
						6.9	2.9	90	26.7		8.2		25.4		87.6		6.1		7.7		8		88				<0.2		1.5	
IM10	Fine	Moderate	07:06	8.0	Surface	1.0	1.5	65	27.3	27.3	8.2	8.2	21.1	21.1	95.7	95.6	6.7	6.7	4.1	5.6	4	4	84	87	822397	809791	<0.2	<0.2	1.4	1.3
						1.0	1.6	68	27.3		8.2		21.1		95.4		6.7		4.2		5		89				<0.2		1.5	
					Middle	4.0	1.7	79	27.1	27.1	8.2	8.2	23.3	23.3	93.8	93.8	6.6		5.5		5		87				<0.2		1.2	
						4.0	1.8	80	27.1		8.2		23.3		93.8		6.6		5.5		4		87				<0.2		1.2	
					Bottom	7.0	1.8	51	26.9	26.9	8.2	8.2	24.6	24.6	92.6	92.7	6.4	6.4	7.1		3		88				<0.2		1.3	
						7.0	1.9	52	26.9		8.2		24.6		92.7		6.4		7.0		4		89				<0.2		1.2	
IM11	Fine	Moderate	06:54	8.7	Surface	1.0	1.7	35	27.0	27.0	8.2	8.2	23.9	23.9	97.5	97.5	6.8	6.8	4.2	5.1	11	7	84	86	822047	811439	<0.2	<0.2	1.4	1.3
						1.0	1.7	38	27.0		8.2		24.0		97.4		6.8		4.2		11		84				<0.2		1.3	
					Middle	4.4	1.7	46	26.9	26.9	8.2	8.2	24.1	24.2	96.1	96.1	6.7		4.3		6		87				<0.2		1.3	
						4.4	1.9	48	26.8		8.2		24.2		96.1		6.7		4.5		5		87				<0.2		1.2	
					Bottom	7.7	1.9	44	26.5	26.5	8.2	8.2	27.2	27.2	89.9	89.8	6.2	6.2	6.4		5		88				<0.2		1.4	
						7.7	1.9	46	26.5		8.2		27.1		89.6		6.2		6.8		4		88				<0.2		1.4	
IM12	Fine	Moderate	06:47	9.9	Surface	1.0	1.2	79	27.0	27.0	8.2	8.2	24.9	24.9	96.2	96.2	6.7	6.6	4.9	6.3	10	7	84	86	821452	812022	<0.2	<0.2	1.6	1.5
						1.0	1.3	86	27.0		8.2		24.9		96.1		6.7		4.9		4		84				<0.2		1.5	
					Middle	5.0	1.2	70	26.6	26.6	8.2	8.2	26.1	26.1	92.3	92.3	6.4		5.8		4		87				<0.2		1.5	
						5.0	1.3	70	26.6		8.2		26.1		92.3		6.4		5.7		8		87				<0.2		1.6	
					Bottom	8.9	1.2	86	26.6	26.6	8.3	8.3	26.4	26.4	91.8	91.9	6.4	6.4	8.2		8		88				<0.2		1.5	
						8.9	1.2	88	26.6		8.3		26.4		91.9		6.4		8.4		7		88				<0.2		1.5	
SR1A	Fine	Calm	06:10	4.9	Surface	1.0	-	-	27.3	27.3	8.2	8.2	23.2	23.2	97.1	97.1	6.8	6.8	3.4	4.7	6	5	-	-	819982	812657	-	-	-	-
						1.0	-	-	27.3		8.2		23.2		97.1		6.8		3.4		5		-				-		-	
					Middle	2.5	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.5	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	-	-	27.2	27.2	8.2	8.2	23.8	23.7	96.3	96.4	6.7	6.7	6.0		4		-				-		-	
						3.9	-	-	27.2		8.2		23.7		96.5		6.7		5.9		3		-				-		-	
SR2	Fine	Moderate	05:50	4.7	Surface	1.0	0.2	122	27.0	27.0	8.3	8.3	23.4	23.4	97.9	97.8	6.8	6.8	4.7	6.2	4	4	87	87	821461	814175	<0.2	<0.2	1.4	1.5
						1.0	0.2	132	27.0		8.3		23.5		97.7		6.8		5.1		4		86				<0.2		1.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.2	114	26.9	26.9	8.3	8.3	24.1	24.1	97.1	97.2	6.8	6.8	7.7		4		88				<0.2		1.5	
						3.7	0.2	119	26.9		8.3		24.1		97.3		6.8		7.5		3		88				<0.2		1.5	
SR3	Fine	Moderate	07:29	9.4	Surface	1.0	2.6	347	27.3	27.3	8.2	8.2	20.3	20.3	96.7	96.6	6.8	6.7	3.6	5.3	3	5	-	-	822150	807593	-	-	-	-
						1.0	2.7	319	27.3		8.2		20.4		96.4		6.8		3.6		4		-				-		-	
					Middle	4.7	2.7	355	27.1	27.1	8.2	8.2	21.7	21.7	93.7	93.7	6.6		5.5		5		-				-		-	
						4.7	2.9	327	27.1		8.2		21.8		93.7		6.6		5.4		5		-				-		-	
					Bottom	8.4	2.5	359	27.0	27.0	8.2	8.2	23.2	23.2	93.4	93.5	6.5	6.5	6.9		5		-				-		-	
						8.4	2.7	332	27.0		8.2		23.2		93.5		6.5		6.7		5		-				-		-	
SR4A	Fine	Moderate	06:05	8.7	Surface	1.0	1.5	312	27.0	27.0	8.2	8.2	23.1	23.1	103.1	103.0	7.2	7.2	4.6	8.7	3	2	-	-	817182	807789	-	-	-	-
						1.0	1.5	335	27.0		8.2		23.1		102.9		7.2		4.9		2		-				-		-	
					Middle	4.4	1.5	312	27.0	27.0	8.2	8.2	23.4	23.4	101.2	101.1	7.1		7.9		2		-				-		-	
						4.4	1.7	319	27.0		8.2		23.5		101.0		7.1		7.9		3		-				-		-	
					Bottom	7.7	1.9	312	27.0	27.0	8.1	8.1	23.6	23.6	100.5	100.5	7.0	7.0	13.4		<2		-				-		-	
						7.7	2.0	333	27.0		8.1		23.7		100.5		7.0		13.6		<2		-				-		-	
SR5A	Fine	Moderate	05:46	3.7	Surface	1.0	0.0	34	27.6	27.6	8.1	8.1	23.0	23.0	108.3	108.3	7.5	7.5	4.0	4.0	4	4	-	-	816614	810692	-	-	-	-
						1.0	0.0	34	27.6		8.1		23.0		108.2		7.5		4.0		3		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.7	0.0	81	27.5	27.5	8.1	8.1	23.0	23.0	107.7	107.7	7.5	7.5	4.0		4		-				-		-	
						2.7	0.0	83	27.5		8.1		23.1		107.6		7.5		4.0		5		-				-		-	
SR6A	Fine	Moderate	05:19	4.7	Surface	1.0	0.1	147	27.2	27.2	8.1	8.1	22.5	22.5	104.6	104.6	7.3	7.3	4.5	4.9	4	4	-	-	817980	814730	-	-	-	-
						1.0	0.1	156	27.2		8.1		22.5		104.5		7.3		4.8		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.1	151	27.2	27.2	8.0	8.0	22.6	22.6	104.5	104.5	7.3	7.3	5.2		3		-				-		-	
						3.7	0.1	159	27.2		8.0		22.6		104.5		7.3		5.0		4		-				-		-	
SR7	Cloudy	Moderate	04:59	15.4	Surface	1.0	2.4	304	26.5	26.5	8.3	8.3	27.5	27.5	96.2	96.2	6.6	6.5	2.4	4.0	3	3	-	-	823627	823760	-	-	-	-
						1.0	2.5	326	26.5		8.3		27.5		96.1		6.6		2.4		2		-				-		-	
					Middle	7.7	2.5	317	25.8	25.8	8.3	8.3	31.3	31.3	91.7	91.8	6.3		3.6		2		-				-		-	
						7.7	2.6	338	25.8		8.3		31.3		91.8		6.3		3.7		3		-				-		-	
					Bottom	14.4	2.4	319	25.7	25.7	8.4	8.4	31.6	31.6	93.0	93.0	6.3	6.3	6.1		4		-				-		-	
						14.4	2.6	339	25.7		8.4		31.6		93.0		6.3		5.9		4		-				-		-	
SR8	Fine	Moderate	06:39	5.0	Surface	1.0	-	-	27.0	27.0	8.2	8.2	24.7	24.7	95.5	95.4	6.6	6.6	6.2	6.7	11	11	-	-	820411	811602	-	-	-	-
						1.0	-	-	27.0		8.2		24.7		95.3		6.6		6.3		12		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	-	-	26.7	26.8	8.3	8.3	25.7	25.7	92.5	92.6	6.4	6.4	7.3		10		-				-		-	
						4.0	-	-	26.8		8.3		25.7		92.7		6.4		7.1		11		-				-		-	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 13 May 21 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	13:30	8.1	Surface	1.0	1.7	188	28.3	28.3	8.3	8.3	23.3	23.3	111.4	111.3	7.6	7.0	3.7	9.2	3	4	89	92	815623	804225	<0.2	<0.2	1.3	1.4
						1.0	1.7	191	28.3		8.3		23.3		111.2		7.6		3.7		4		90				<0.2		1.3	
					Middle	4.1	2.0	180	27.1	27.1	8.3	8.3	25.9	25.9	91.2	91.2	6.3		5.6		4		93				<0.2		1.4	
						4.1	2.1	188	27.1		8.3		25.9		91.2		6.3		5.6		3		94				<0.2		1.3	
					Bottom	7.1	2.0	183	26.2	26.2	8.2	8.2	29.9	29.9	84.7	84.8	5.8	5.8	18.1		4		94				<0.2		1.4	
						7.1	2.2	199	26.2		8.2		29.9		84.9		5.8		18.1		5		94				<0.2		1.4	
C2	Fine	Calm	12:16	12.0	Surface	1.0	1.6	87	27.8	27.8	8.1	8.1	21.8	21.8	87.5	87.3	6.1	6.1	3.4	5.7	2	3	88	91	825703	806950	<0.2	<0.2	1.3	1.3
						1.0	1.7	94	27.8		8.1		21.9		87.1		6.1		3.4		3		88				<0.2		1.4	
					Middle	6.0	1.7	98	27.4	27.4	8.1	8.1	22.6	22.6	85.4	85.3	6.0		6.7		3		91				<0.2		1.2	
						6.0	1.7	105	27.3		8.1		22.6		85.1		6.0		6.7		3		91				<0.2		1.4	
					Bottom	11.0	2.0	70	27.2	27.2	8.0	8.0	26.1	26.1	81.5	81.5	5.6	5.6	7.1		4		93				<0.2		1.2	
						11.0	2.1	73	27.2		8.0		26.1		81.5		5.6		7.1		3		94				<0.2		1.4	
C3	Fine	Calm	14:05	12.0	Surface	1.0	2.2	57	28.3	28.3	8.1	8.1	22.7	22.7	103.2	103.2	7.1	6.8	1.1	2.3	2	3	86	89	822091	817823	<0.2	<0.2	1.2	1.3
						1.0	2.3	61	28.2		8.1		22.8		103.1		7.1		1.1		3		87				<0.2		1.2	
					Middle	6.0	1.9	66	27.9	27.9	8.1	8.1	24.0	24.1	94.8	94.6	6.5		2.6		3		88				<0.2		1.3	
						6.0	2.0	66	27.9		8.1		24.2		94.4		6.5		2.7		3		89				<0.2		1.3	
					Bottom	11.0	2.1	61	27.7	27.7	8.1	8.1	24.8	24.8	93.7	93.8	6.4	6.4	3.2		4		93				<0.2		1.2	
						11.0	2.1	66	27.7		8.1		24.8		93.8		6.4		3.2		3		93				<0.2		1.3	
IM1	Cloudy	Moderate	13:09	5.1	Surface	1.0	0.2	134	28.4	28.4	8.2	8.2	22.2	22.2	113.4	113.4	7.8	7.8	3.3	5.9	5	5	86	89	817962	807142	<0.2	<0.2	1.5	1.4
						1.0	0.2	145	28.4		8.2		22.2		113.3		7.8		3.3		4		87				<0.2		1.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	0.2	145	27.7	27.8	8.2	8.2	23.3	23.3	98.7	98.8	6.8	6.8	8.4		6		92				<0.2		1.3	
						4.1	0.2	149	27.8		8.2		23.3		98.8		6.8		8.6		5		92				<0.2		1.4	
IM2	Cloudy	Moderate	13:01	7.0	Surface	1.0	2.0	337	28.3	28.3	8.2	8.2	22.3	22.3	113.3	113.2	7.8	7.2	2.6	4.9	2	3	86	89	818185	806155	<0.2	<0.2	1.3	1.4
						1.0	2.1	310	28.3		8.2		22.3		113.1		7.8		2.6		2		86				<0.2		1.3	
					Middle	3.5	2.1	338	27.6	27.6	8.2	8.2	23.7	23.7	94.5	94.5	6.5		4.0		2		90				<0.2		1.5	
						3.5	2.2	352	27.6		8.2		23.7		94.5		6.5		4.0		2		91				<0.2		1.4	
					Bottom	6.0	1.9	345	27.3	27.3	8.2	8.2	25.3	25.3	87.9	87.9	6.1	6.1	8.3		3		91				<0.2		1.3	
						6.0	2.0	350	27.3		8.2		25.3		87.8		6.1		8.2		4		92				<0.2		1.4	
IM3	Cloudy	Moderate	12:52	7.3	Surface	1.0	1.8	136	27.9	27.9	8.2	8.2	23.3	23.3	95.9	95.8	6.6	6.4	5.2	8.8	3	3	89	91	818776	805584	<0.2	<0.2	1.2	1.3
						1.0	1.9	138	27.8		8.2		23.4		95.7		6.6		5.3		3		88				<0.2		1.2	
					Middle	3.7	1.9	134	27.2	27.2	8.2	8.2	25.1	25.2	88.2	88.1	6.1		8.3		3		91				<0.2		1.3	
						3.7	2.0	145	27.2		8.2		25.2		88.0		6.1		8.4		4		91				<0.2		1.3	
					Bottom	6.3	1.9	129	27.1	27.1	8.2	8.2	25.8	25.8	87.3	87.4	6.0	6.0	12.5		4		92				<0.2		1.3	
						6.3	2.1	138	27.1		8.2		25.8		87.4		6.0		13.0		3		92				<0.2		1.4	
IM4	Cloudy	Moderate	12:42	8.5	Surface	1.0	1.3	184	27.6	27.6	8.2	8.2	23.9	23.9	90.4	90.5	6.2	6.2	7.3	9.5	9	7	87	90	819703	804603	<0.2	<0.2	1.3	1.3
						1.0	1.4	188	27.6		8.2		23.9		90.5		6.2		7.2		8		88				<0.2		1.2	
					Middle	4.3	1.2	160	27.0	27.0	8.2	8.2	26.0	26.0	88.4	88.4	6.1		8.6		7		90				<0.2		1.3	
						4.3	1.2	161	27.0		8.2		26.0		88.3		6.1		9.0		7		90				<0.2		1.4	
					Bottom	7.5	0.8	177	26.7	26.7	8.2	8.2	27.3	27.3	85.3	85.4	5.9	5.9	12.7		5		91				<0.2		1.3	
						7.5	0.9	187	26.7		8.2		27.3		85.4		5.9		12.4		6		92				<0.2		1.3	
IM5	Cloudy	Moderate	12:34	8.3	Surface	1.0	1.0	181	27.8	27.8	8.2	8.2	22.7	22.5	98.6	98.6	6.8	6.5	4.7	7.7	<2	<2	92	93	820735	804886	<0.2	<0.2	1.3	1.2
						1.0	1.1	196	27.8		8.2		22.3		98.6		6.8		4.7		<2		92				<0.2		1.2	
					Middle	4.2	0.8	153	26.9	26.9	8.2	8.2	26.4	26.3	88.8	88.8	6.1		8.7		<2		92				<0.2		1.2	
						4.2	0.8	153	26.9		8.2		26.3		88.8		6.1		8.6		<2		93				<0.2		1.2	
					Bottom	7.3	1.0	159	26.8	26.8	8.2	8.2	27.0	27.0	86.7	86.8	6.0	6.0	9.7		<2		93				<0.2		1.2	
						7.3	1.0	164	26.8		8.2		27.0		86.8		6.0		9.7		<2		94				<0.2		1.3	
IM6	Cloudy	Moderate	12:26	7.8	Surface	1.0	0.4	35	28.2	28.2	8.2	8.2	20.9	20.9	101.2	101.2	7.0	6.6	4.0	5.9	4	4	88	91	821074	805845	<0.2	<0.2	1.1	1.2
						1.0	0.4	37	28.2		8.2		20.9		101.1		7.0		4.0		5		90				<0.2		1.2	
					Middle	3.9	0.4	52	27.2	27.2	8.2	8.2	25.1	25.1	88.9	88.9	6.1		5.6		5		92				<0.2		1.2	
						3.9	0.4	54	27.2		8.2		25.1		88.9		6.1		5.6		4		92				<0.2		1.1	
					Bottom	6.8	0.6	50	27.2	27.2	8.2	8.2	25.1	25.1	88.4	88.6	6.1	6.1	8.2		3		92				<0.2		1.2	
						6.8	0.6	52	27.2		8.2		25.1		88.7		6.1		8.2		3		93				<0.2		1.1	
IM7	Cloudy	Moderate	12:16	8.8	Surface	1.0	3.0	321	27.9	27.9	8.1	8.1	21.5	21.5	96.2	96.2	6.7	6.6	4.9	7.1	7	4	88	91	821366	806834	<0.2	<0.2	1.1	1.1
						1.0	3.3	347	27.9		8.1		21.5		96.1		6.7		5.2		3		89				<0.2		1.1	
					Middle	4.4	3.0	325	27.6	27.6	8.1	8.1	23.3	23.3	94.1	94.1	6.5		6.8		4		91				<0.2		1.2	
						4.4	3.3	330	27.6		8.1		23.3		94.0		6.5		7.1		3		92				<0.2		1.1	
					Bottom	7.8	3.1	326	27.4	27.4	8.1	8.1	24.4	24.4	89.9	89.9	6.2	6.2	9.4		4		93				<0.2		1.0	
						7.8	3.2	327	27.4		8.1		24.4		89.9		6.2		9.3		3		94				<0.2		1.2	
IM8	Fine	Calm	12:37	8.0	Surface	1.0	1.4	19	28.3	28.3	8.1	8.1	21.0	21.0	92.3	92.2	6.4	6.1	4.0	6.9	3	2	87	90	821848	808125	<0.2	<0.2	1.3	1.4
						1.0	1.5	20	28.2		8.1		21.1		92.1		6.4		4.0		2		86				<0.2		1.2	
					Middle	4.0	1.5	12	27.8	27.8	8.1	8.1	22.7	22.7	84.0	84.0	5.8		7.8		2		89				<0.2		1.8	
						4.0	1.6	12	27.8		8.1		22.7		84.0		5.8		7.8		2		91				<0.2		1.8	
					Bottom	7.0	1.7	25	27.9	27.9	8.1	8.1	22.9	22.9	85.1	85.2	5.9	5.9	9.0		<2		93				<0.2		1.2	
						7.0	1.8	27	27.9		8.1		22.9		85.3		5.9		9.1		<2		93				<0.2		1.2	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 13 May 21 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Fine	Calm	12:42	7.4	Surface	1.0	1.9	37	27.9	27.9	8.1	8.1	21.2	21.2	91.0	90.5	6.4	6.0	3.9	6.5	4	4	87	90	822086	808806	<0.2	<0.2	1.2	1.2
						1.0	2.0	38	27.8		8.1		21.2		90.0		6.3		4.0		5		87				<0.2		1.2	
					Middle	3.7	2.0	34	27.7	27.7	8.1	8.1	23.0	23.0	82.7	82.7	5.7		7.0		3		89				<0.2		1.2	
						3.7	2.0	34	27.7		8.1		23.0		82.7		5.7		6.9		4		91				<0.2		1.1	
					Bottom	6.4	2.0	32	27.8	27.8	8.1	8.1	23.0	23.0	83.2	83.4	5.8	5.8	8.7		2		92				<0.2		1.2	
						6.4	2.2	32	27.8		8.1		23.0		83.5		5.8		8.7		3		92				<0.2		1.2	
IM10	Fine	Calm	12:48	7.6	Surface	1.0	1.9	43	27.9	27.9	8.1	8.1	22.3	22.4	92.1	91.8	6.4	6.2	2.7	5.1	7	6	87	90	822362	809809	<0.2	<0.2	1.3	1.3
						1.0	2.0	44	27.8		8.1		22.4		91.4		6.3		2.8		8		87				<0.2		1.2	
					Middle	3.8	2.1	48	27.7	27.8	8.1	8.1	22.8	22.8	86.6	86.5	6.0		6.0		6		91				<0.2		1.1	
						3.8	2.2	48	27.8		8.1		22.8		86.3		6.0		6.0		5		91				<0.2		1.3	
					Bottom	6.6	2.2	40	27.8	27.8	8.1	8.1	23.1	23.1	85.6	85.8	5.9	5.9	6.6		4		92				<0.2		1.4	
						6.6	2.2	40	27.8		8.1		23.1		85.9		5.9		6.7		5		92				<0.2		1.4	
IM11	Fine	Calm	13:00	8.0	Surface	1.0	1.9	46	28.0	28.0	8.1	8.1	21.9	21.9	93.5	93.0	6.5	6.2	2.6	4.8	6	6	86	90	822038	811454	<0.2	<0.2	1.4	1.3
						1.0	1.9	46	27.9		8.1		22.0		92.5		6.4		2.7		7		87				<0.2		1.3	
					Middle	4.0	2.1	54	27.9	27.9	8.1	8.1	22.3	22.3	86.6	86.6	6.0		4.6		7		90				<0.2		1.3	
						4.0	2.1	58	27.9		8.1		22.3		86.5		6.0		4.6		6		92				<0.2		1.4	
					Bottom	7.0	2.0	44	27.9	27.9	8.1	8.1	22.5	22.4	87.0	87.2	6.0	6.0	7.0		5		93				<0.2		1.3	
						7.0	2.2	46	27.9		8.1		22.4		87.3		6.0		7.0		5		91				<0.2		1.3	
IM12	Fine	Calm	13:05	9.2	Surface	1.0	2.1	56	28.0	28.0	8.1	8.1	20.4	20.4	93.8	93.3	6.6	6.1	2.6	3.6	4	4	86	89	821460	812035	<0.2	<0.2	1.4	1.4
						1.0	2.3	59	28.0		8.1		20.5		92.8		6.5		2.6		5		86				<0.2		1.3	
					Middle	4.6	2.3	42	27.8	27.8	8.1	8.1	23.2	23.2	81.8	81.7	5.7		3.9		4		87				<0.2		1.3	
						4.6	2.4	44	27.8		8.1		23.3		81.5		5.6		4.0		5		90				<0.2		1.4	
					Bottom	8.2	2.1	46	27.8	27.8	8.1	8.1	23.5	23.5	81.7	81.9	5.6	5.7	4.4		4		92				<0.2		1.5	
						8.2	2.3	49	27.8		8.1		23.5		82.1		5.7		4.3		3		92				<0.2		1.5	
SR1A	Fine	Calm	13:32	4.2	Surface	1.0	-	-	28.2	28.2	8.1	8.1	20.9	21.0	95.5	95.3	6.6	6.6	5.1	6.4	4	5	-	-	819974	812654	-	-	-	-
						1.0	-	-	28.1		8.1		21.0		95.0		6.6		5.0		5		-				-		-	
					Middle	2.1	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.1	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	-	-	27.9	27.9	8.1	8.1	23.1	23.1	88.2	88.2	6.1	6.1	7.8		6		-				-		-	
						3.2	-	-	27.9		8.1		23.2		88.2		6.1		7.8		5		-				-		-	
SR2	Fine	Calm	13:46	3.6	Surface	1.0	0.5	31	28.3	28.3	8.1	8.1	21.6	21.6	94.6	94.5	6.5	6.5	4.2	5.1	4	4	90	92	821474	814161	<0.2	<0.2	1.2	1.3
						1.0	0.5	32	28.2		8.1		21.7		94.4		6.5		4.1		3		91				<0.2		1.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.6	0.3	47	28.1	28.1	8.0	8.0	22.3	22.3	91.1	91.2	6.3	6.3	6.0		3		92				<0.2		1.3	
						2.6	0.3	48	28.1		8.0		22.3		91.2		6.3		5.9		4		93				<0.2		1.2	
SR3	Fine	Calm	12:32	9.0	Surface	1.0	1.3	33	28.2	28.2	8.1	8.1	20.6	20.5	91.7	92.1	6.4	6.1	2.1	4.1	4	3	-	-	822141	807593	-	-	-	-
						1.0	1.4	33	28.2		8.1		20.5		92.4		6.4		2.0		3		-				-		-	
					Middle	4.5	1.3	38	27.6	27.6	8.1	8.1	23.2	23.2	81.9	81.9	5.7		3.4		3		-				-		-	
						4.5	1.3	40	27.6		8.1		23.2		81.9		5.7		3.4		4		-				-		-	
					Bottom	8.0	1.5	39	27.6	27.6	8.1	8.1	23.3	23.3	82.0	82.0	5.7	5.7	6.9		3		-				-		-	
						8.0	1.5	40	27.6		8.1		23.3		82.0		5.7		6.9		3		-				-		-	
SR4A	Cloudy	Calm	13:56	8.7	Surface	1.0	2.0	108	28.5	28.5	8.2	8.2	22.4	22.4	110.2	110.1	7.5	7.1	4.1	7.0	5	5	-	-	817193	807792	-	-	-	-
						1.0	2.1	114	28.5		8.2		22.4		109.9		7.5		4.2		5		-				-		-	
					Middle	4.4	1.9	108	27.8	27.8	8.2	8.2	23.3	23.3	97.8	97.7	6.8		6.0		4		-				-		-	
						4.4	2.0	109	27.8		8.2		23.3		97.5		6.7		6.1		5		-				-		-	
					Bottom	7.7	2.0	112	27.5	27.5	8.2	8.2	24.6	24.6	83.9	84.0	5.8	5.8	11.0		4		-				-		-	
						7.7	2.0	112	27.5		8.2		24.6		84.1		5.8		10.9		5		-				-		-	
SR5A	Cloudy	Calm	14:16	3.1	Surface	1.0	0.1	325	28.6	28.6	8.2	8.2	22.8	22.8	107.0	107.0	7.3	7.3	4.8	5.6	5	5	-	-	816587	810702	-	-	-	-
						1.0	0.1	336	28.6		8.2		22.8		106.9		7.3		4.8		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.1	0.1	312	28.3	28.3	8.2	8.2	22.9	22.9	100.9	100.7	6.9	6.9	6.3		4		-				-		-	
						2.1	0.1	334	28.3		8.2		22.9		100.5		6.9		6.5		5		-				-		-	
SR6A	Cloudy	Calm	15:11	3.9	Surface	1.0	0.0	325	28.2	28.2	8.1	8.1	23.1	23.0	103.1	103.0	7.1	7.1	5.5	7.2	5	5	-	-	817979	814742	-	-	-	-
						1.0	0.0	332	28.2		8.1		23.0		102.9		7.1		5.5		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.9	0.0	259	27.6	27.6	8.1	8.1	23.7	23.9	85.9	86.0	5.9	5.9	8.8		6		-				-		-	
						2.9	0.0	281	27.6		8.1		24.1		86.0		5.9		9.0		5		-				-		-	
SR7	Fine	Calm	14:31	18.0	Surface	1.0	0.9	189	27.9	27.9	8.1	8.1	22.8	22.8	102.1	101.9	7.1	6.8	3.0	3.6	3	3	-	-	823657	823761	-	-	-	-
						1.0	1.0	191	27.9		8.1		22.8		101.7		7.0		2.9		3		-				-		-	
					Middle	9.0	0.8	177	27.7	27.7	8.1	8.1	24.5	24.5	94.2	94.2	6.5		3.1		3		-				-		-	
						9.0	0.8	178	27.7		8.1		24.5		94.1		6.5		3.1		4		-				-		-	
					Bottom	17.0	0.9	198	27.6	27.6	8.1	8.1	24.8	24.8	93.6	93.7	6.4	6.4	4.8		3		-				-		-	
						17.0	1.0	210	27.6		8.1		24.8		93.7		6.4		4.8		4		-				-		-	
SR8	Fine	Calm	13:12	5.4	Surface	1.0	-	-	28.3	28.3	8.1	8.1	22.2	22.2	86.2	86.0	5.9	5.9	4.7	5.4	4	4	-	-	820392	811639	-	-	-	-
						1.0	-	-	28.3		8.1		22.2		85.8		5.9		4.7		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	-	-	28.3	28.3	8.1	8.1	22.1	22.1	85.3	85.0	5.9	5.9	6.1		4		-				-		-	
						4.4	-	-	28.3		8.1		22.1		84.6		5.8		6.1		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 13 May 21 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	07:40	8.9	Surface	1.0	0.8	199	27.5	27.5	8.1	8.1	23.0	23.0	98.9	98.9	6.9	6.5	3.5	8.2	2	3	85	87	815639	804230	<0.2	<0.2	1.1	1.2
						1.0	0.9	211	27.5		8.1		22.9		98.9		6.9		3.7		2		85				<0.2		1.2	
					Middle	4.5	0.7	192	26.6	26.6	8.1	8.1	28.3	28.3	88.9	89.0	6.1		9.9		2		88				<0.2		1.1	
						4.5	0.7	201	26.6		8.1		28.3		89.0		6.1		9.8		3		88				<0.2		1.2	
					Bottom	7.9	0.9	194	26.5	26.5	8.1	8.1	29.0	29.0	87.7	87.8	6.0	6.0	11.1		3		89				<0.2		1.1	
						7.9	1.0	194	26.5		8.1		29.0		87.9		6.0		11.2		4		89				<0.2		1.2	
C2	Fine	Calm	08:53	12.0	Surface	1.0	1.9	12	28.0	28.0	7.9	7.9	18.4	18.4	89.2	89.0	6.3	6.2	2.9	6.7	4	4	85	89	825697	806947	<0.2	<0.2	1.3	1.3
						1.0	2.0	13	28.0		7.9		18.4		88.8		6.3		2.8		3		86				<0.2		1.2	
					Middle	6.0	2.1	19	28.0	28.0	7.9	7.9	21.1	21.2	87.9	87.9	6.1		7.7		4		89				<0.2		1.3	
						6.0	2.3	19	27.9		7.9		21.2		87.9		6.1		7.7		3		89				<0.2		1.3	
					Bottom	11.0	2.0	12	27.6	27.6	7.9	7.9	22.9	22.9	81.5	81.4	5.7	5.7	9.4		3		91				<0.2		1.3	
						11.0	2.1	12	27.6		7.9		22.9		81.3		5.6		9.4		4		92				<0.2		1.3	
C3	Fine	Calm	06:58	12.0	Surface	1.0	1.4	311	27.7	27.6	7.8	7.8	21.7	21.7	92.3	92.3	6.4	6.1	1.7	5.0	3	3	83	86	822101	817824	<0.2	<0.2	0.9	0.9
						1.0	1.4	316	27.5		7.8		21.8		92.2		6.5		1.6		2		83				<0.2		0.8	
					Middle	6.0	1.2	347	26.6	26.6	7.8	7.8	28.4	28.4	85.3	85.2	5.8		4.2		3		86				<0.2		0.9	
						6.0	1.3	319	26.6		7.8		28.5		85.1		5.8		4.2		2		86				<0.2		0.8	
					Bottom	11.0	1.2	337	26.7	26.8	7.8	7.8	29.1	29.1	85.0	85.1	5.8	5.8	9.1		2		88				<0.2		0.8	
						11.0	1.2	346	26.8		7.8		29.0		85.1		5.8		9.1		3		88				<0.2		0.9	
IM1	Cloudy	Moderate	07:58	5.7	Surface	1.0	2.4	271	27.9	27.9	8.1	8.1	22.2	22.2	99.3	99.3	6.9	6.9	3.7	5.4	5	4	84	85	817942	807137	<0.2	<0.2	1.2	1.3
						1.0	2.5	273	27.9		8.1		22.2		99.2		6.9		3.7		4		84				<0.2		1.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.7	2.5	270	27.5	27.6	8.1	8.1	24.4	24.4	91.5	91.6	6.3	6.3	7.1		4		88				<0.2		1.3	
						4.7	2.5	286	27.6		8.1		24.4		91.7		6.3		7.3		3		85				<0.2		1.4	
IM2	Cloudy	Moderate	08:07	7.6	Surface	1.0	0.2	355	27.7	27.7	8.2	8.2	22.6	22.6	94.8	94.8	6.6	6.5	4.7	7.4	3	3	85	88	818171	806165	<0.2	<0.2	1.3	1.3
						1.0	0.2	336	27.7		8.2		22.6		94.8		6.6		4.9		4		84				<0.2		1.2	
					Middle	3.8	0.2	3	27.3	27.3	8.2	8.2	24.9	24.8	90.9	90.9	6.3		6.6		4		88				<0.2		1.2	
						3.8	0.3	3	27.3		8.2		24.8		90.9		6.3		6.7		3		89				<0.2		1.2	
					Bottom	6.6	0.2	12	27.2	27.2	8.2	8.2	25.7	25.6	88.8	88.9	6.1	6.1	10.6		2		90				<0.2		1.5	
						6.6	0.2	13	27.2		8.2		25.6		88.9		6.1		10.6		3		90				<0.2		1.3	
IM3	Cloudy	Moderate	08:15	7.5	Surface	1.0	0.4	334	27.9	27.9	8.3	8.3	21.2	21.2	99.9	99.9	7.0	6.7	3.8	6.6	3	3	86	88	818807	805597	<0.2	<0.2	1.4	1.4
						1.0	0.4	339	27.9		8.3		21.2		99.8		7.0		3.9		2		88				<0.2		1.6	
					Middle	3.8	0.3	341	27.4	27.4	8.2	8.2	23.5	23.5	92.6	92.6	6.4		5.2		2		89				<0.2		1.4	
						3.8	0.3	358	27.4		8.2		23.5		92.5		6.4		5.5		3		90				<0.2		1.5	
					Bottom	6.5	0.2	355	27.2	27.2	8.2	8.2	25.6	25.6	88.6	88.6	6.1	6.1	10.6		3		90				<0.2		1.4	
						6.5	0.2	336	27.2		8.2		25.6		88.6		6.1		10.4		3		86				<0.2		1.3	
IM4	Cloudy	Moderate	08:23	7.8	Surface	1.0	0.6	330	27.8	27.8	8.3	8.3	20.9	20.9	102.3	102.3	7.2	6.8	3.7	8.4	<2	<2	89	91	819714	804607	<0.2	<0.2	1.3	1.4
						1.0	0.6	347	27.7		8.3		21.0		102.2		7.2		4.2		<2		92				<0.2		1.3	
					Middle	3.9	0.5	348	27.2	27.2	8.3	8.3	25.3	25.3	91.5	91.5	6.3		7.5		<2		92				<0.2		1.3	
						3.9	0.5	339	27.2		8.3		25.3		91.5		6.3		7.9		<2		92				<0.2		1.4	
					Bottom	6.8	0.5	349	27.1	27.1	8.3	8.3	26.0	26.0	89.7	89.8	6.2	6.2	13.4		<2		93				<0.2		1.4	
						6.8	0.5	321	27.1		8.3		26.0		89.9		6.2		13.7		<2		87				<0.2		1.4	
IM5	Cloudy	Moderate	08:30	6.7	Surface	1.0	0.7	13	27.9	27.9	8.2	8.2	20.7	20.7	100.7	100.6	7.0	6.7	3.3	6.8	2	3	87	90	820714	804849	<0.2	<0.2	1.5	1.4
						1.0	0.7	13	27.9		8.2		20.6		100.4		7.0		3.3		3		88				<0.2		1.6	
					Middle	3.4	0.7	9	27.3	27.3	8.3	8.3	24.5	24.5	91.8	91.9	6.3		6.2		2		91				<0.2		1.4	
						3.4	0.7	9	27.3		8.3		24.5		91.9		6.4		6.1		3		92				<0.2		1.2	
					Bottom	5.7	0.6	21	27.2	27.2	8.3	8.3	25.4	25.4	89.9	90.0	6.2	6.2	11.1		4		92				<0.2		1.4	
						5.7	0.6	22	27.2		8.3		25.4		90.0		6.2		11.0		3		87				<0.2		1.4	
IM6	Cloudy	Moderate	08:37	7.2	Surface	1.0	0.1	359	27.9	27.9	8.2	8.2	19.9	19.9	101.9	101.9	7.2	6.9	3.7	7.7	4	4	87	90	821073	805841	<0.2	<0.2	1.3	1.3
						1.0	0.1	340	27.9		8.2		19.9		101.8		7.2		3.9		3		90				<0.2		1.3	
					Middle	3.6	0.3	43	27.6	27.6	8.3	8.3	22.5	22.5	94.4	94.4	6.6		6.7		4		90				<0.2		1.4	
						3.6	0.3	44	27.6		8.3		22.5		94.4		6.6		6.7		4		90				<0.2		1.2	
					Bottom	6.2	0.3	59	27.5	27.5	8.3	8.3	23.9	23.9	90.2	90.3	6.2	6.3	12.7		4		92				<0.2		1.4	
						6.2	0.3	63	27.5		8.3		23.9		90.3		6.3		12.8		4		92				<0.2		1.3	
IM7	Cloudy	Moderate	08:45	7.6	Surface	1.0	0.1	87	28.0	28.0	8.2	8.2	20.1	20.1	101.0	100.9	7.1	7.0	3.6	5.4	3	3	89	91	821365	806850	<0.2	<0.2	1.2	1.3
						1.0	0.1	92	28.0		8.2		20.1		100.8		7.1		3.7		4		89				<0.2		1.2	
					Middle	3.8	0.2	79	27.8	27.8	8.3	8.3	20.7	20.8	97.3	97.2	6.8		4.0		4		90				<0.2		1.3	
						3.8	0.2	80	27.8		8.3		20.8		97.1		6.8		4.1		3		91				<0.2		1.5	
					Bottom	6.6	0.2	80	27.4	27.4	8.3	8.3	24.2	24.3	87.9	87.9	6.1	6.1	8.6		3		92				<0.2		1.3	
						6.6	0.2	83	27.4		8.3		24.4		87.9		6.1		8.6		2		93				<0.2		1.3	
IM8	Fine	Calm	08:31	8.0	Surface	1.0	2.2	50	28.1	28.1	7.9	7.9	19.9	19.9	92.3	92.3	6.5	6.2	3.6	6.5	4	4	86	90	821818	808161	<0.2	<0.2	1.4	1.3
						1.0	2.3	52	28.1		7.9		19.9		92.3		6.5		3.5		4		86				<0.2		1.3	
					Middle	4.0	2.2	67	27.9	27.9	7.9	7.9	21.4	21.5	85.2	84.6	5.9		6.6		4		91				<0.2		1.2	
						4.0	2.3	71	27.9		7.9		21.7		84.0		5.8		6.7		4		91				<0.2		1.3	
					Bottom	7.0	2.4	52	28.0	28.0	7.9	7.9	21.7	21.7	83.7	83.8	5.8	5.8	9.3		4		92				<0.2		1.3	
						7.0	2.5	57	28.0		7.9		21.7		83.9		5.8		9.2		4		92				<0.2		1.2	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 13 May 21 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	Calm	08:25	7.4	Surface	1.0	1.6	68	28.1	28.1	7.9	7.9	19.4	19.4	92.7	92.5	6.5	6.2	2.5	4.3	7	6	86	89	822072	808807	<0.2	<0.2	1.7	1.6
						1.0	1.7	72	28.1		7.9		19.5		92.3		6.5		2.6		7		86				<0.2		1.6	
					Middle	3.7	1.8	54	27.9	27.9	7.9	7.9	22.2	22.2	83.9	83.9	5.8		3.9		7		89				<0.2		1.6	
						3.7	2.0	57	27.9		7.9		22.2		83.8		5.8		3.9		6		90				<0.2		1.7	
					Bottom	6.4	2.1	53	28.0	28.0	7.9	7.9	22.4	22.3	83.7	83.8	5.8	5.8	6.6		5		90				<0.2		1.5	
						6.4	2.3	57	28.0		7.9		22.3		83.8		5.8		6.5		4		90				<0.2		1.5	
IM10	Fine	Calm	08:17	7.6	Surface	1.0	1.5	7	27.8	27.8	7.9	7.9	21.4	21.4	91.2	91.1	6.4	6.2	5.2	7.0	5	5	83	87	822361	809778	<0.2	<0.2	1.4	1.4
						1.0	1.5	7	27.7		7.9		21.4		91.0		6.4		5.2		5		83				<0.2		1.4	
					Middle	3.8	1.5	8	27.7	27.7	7.9	7.9	23.4	23.4	86.4	86.3	6.0		7.6		5		87				<0.2		1.4	
						3.8	1.6	8	27.6		7.9		23.4		86.1		6.0		7.6		5		87				<0.2		1.5	
					Bottom	6.6	1.5	1	27.7	27.7	7.9	7.9	23.8	23.8	85.0	85.1	5.9	5.9	8.4		5		90				<0.2		1.3	
						6.6	1.6	1	27.7		7.9		23.8		85.1		5.9		8.3		6		90				<0.2		1.4	
IM11	Fine	Calm	08:08	8.0	Surface	1.0	1.1	24	27.7	27.7	7.9	7.9	22.8	22.8	89.6	89.6	6.2	6.2	3.2	5.1	6	6	84	85	822075	811450	<0.2	<0.2	1.4	1.5
						1.0	1.2	24	27.6		7.9		22.9		89.5		6.2		3.1		6		84				<0.2		1.5	
					Middle	4.0	1.1	32	27.4	27.4	7.9	7.9	23.0	23.0	88.9	88.4	6.2		4.9		5		86				<0.2		1.7	
						4.0	1.1	34	27.3		7.9		23.0		87.8		6.1		4.9		6		85				<0.2		1.6	
					Bottom	7.0	1.1	23	27.3	27.3	7.9	7.9	25.0	25.0	83.6	83.6	5.8	5.8	7.4		5		87				<0.2		1.4	
						7.0	1.2	23	27.3		7.9		25.0		83.6		5.8		7.4		6		86				<0.2		1.4	
IM12	Fine	Calm	08:02	9.2	Surface	1.0	0.5	12	27.5	27.5	7.9	7.9	23.7	23.8	86.0	86.0	5.9	5.9	3.3	6.8	7	7	84	86	821473	812067	<0.2	<0.2	0.9	1.3
						1.0	0.5	12	27.5		7.9		23.8		85.9		5.9		3.4		6		85				<0.2		0.9	
					Middle	4.6	0.5	14	27.3	27.3	7.9	7.9	24.9	24.9	84.5	84.5	5.8		7.3		6		85				<0.2		1.5	
						4.6	0.5	14	27.3		7.9		25.0		84.4		5.8		7.3		7		85				<0.2		1.5	
					Bottom	8.2	0.5	20	27.3	27.4	7.9	7.9	25.3	25.3	84.3	84.3	5.8	5.8	9.7		8		88				<0.2		1.4	
						8.2	0.5	20	27.4		7.9		25.3		84.3		5.8		9.7		9		89				<0.2		1.4	
SR1A	Fine	Calm	07:33	4.2	Surface	1.0	-	-	28.0	28.0	7.9	7.9	20.8	20.8	87.5	87.4	6.1	6.1	3.5	3.9	4	4	-	-	819972	812662	-	-	-	-
						1.0	-	-	28.0		7.9		20.8		87.3		6.1		3.4		4		-				-		-	
					Middle	2.1	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.1	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	-	-	28.0	28.0	7.9	7.9	22.0	22.1	87.5	87.7	6.1	6.1	4.3		3		-				-		-	
						3.2	-	-	28.0		7.9		22.1		87.9		6.1		4.3		3		-				-		-	
SR2	Fine	Calm	07:18	3.6	Surface	1.0	0.3	116	27.6	27.6	7.9	7.9	23.2	23.1	86.9	87.0	6.0	6.0	6.0	8.0	4	4	85	86	821465	814182	<0.2	<0.2	0.9	0.9
						1.0	0.3	117	27.6		7.9		23.1		87.0		6.0		6.1		3		84				<0.2		0.9	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.6	0.2	87	27.6	27.6	7.9	7.9	23.1	23.0	87.7	88.0	6.1	6.1	10.0		4		86				<0.2		0.9	
						2.6	0.2	92	27.6		7.9		23.0		88.3		6.1		10.0		3		87				<0.2		0.9	
SR3	Fine	Calm	08:37	9.0	Surface	1.0	2.1	45	28.1	28.1	7.8	7.8	19.1	19.2	93.8	93.7	6.6	6.5	2.3	3.7	3	4	-	-	822127	807577	-	-	-	-
						1.0	2.2	46	28.1		7.8		19.2		93.5		6.6		2.4		2		-				-		-	
					Middle	4.5	2.3	42	28.0	28.0	7.9	7.9	19.6	19.6	91.5	91.1	6.4		3.8		3		-				-		-	
						4.5	2.4	42	28.0		7.9		19.6		90.6		6.4		3.7		4		-				-		-	
					Bottom	8.0	2.3	56	27.9	27.9	7.9	7.9	21.1	21.1	85.5	85.4	6.0	6.0	5.0		5		-				-		-	
						8.0	2.4	56	27.9		7.9		21.2		85.2		5.9		5.1		4		-				-		-	
SR4A	Cloudy	Calm	07:14	9.9	Surface	1.0	1.9	147	28.0	28.0	8.2	8.2	22.4	22.4	94.3	94.3	6.5	6.4	4.0	7.3	2	2	-	-	817194	807803	-	-	-	-
						1.0	1.9	148	28.0		8.2		22.4		94.2		6.5		4.1		2		-				-		-	
					Middle	5.0	2.0	142	27.6	27.6	8.2	8.2	23.8	23.8	90.6	90.6	6.3		5.7		2		-				-		-	
						5.0	2.1	148	27.6		8.2		23.8		90.5		6.3		5.7		2		-				-		-	
					Bottom	8.9	1.9	150	27.2	27.2	8.2	8.2	26.0	26.0	85.0	85.1	5.8	5.9	12.1		2		-				-		-	
						8.9	2.1	161	27.2		8.2		26.0		85.1		5.9		12.4		3		-				-		-	
SR5A	Cloudy	Calm	06:55	4.5	Surface	1.0	0.1	280	28.1	28.1	8.1	8.1	22.8	22.8	95.9	95.9	6.6	6.6	5.8	7.3	4	5	-	-	816578	810706	-	-	-	-
						1.0	0.1	291	28.1		8.1		22.9		95.8		6.6		6.3		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.1	293	28.1	28.1	8.1	8.1	23.0	23.0	95.3	95.3	6.6	6.6	8.5		6		-				-		-	
						3.5	0.1	312	28.1		8.1		23.0		95.3		6.6		8.7		6		-				-		-	
SR6A	Cloudy	Moderate	06:22	4.6	Surface	1.0	0.1	239	27.8	27.8	8.0	8.0	22.5	22.6	95.7	95.7	6.6	6.6	4.6	4.2	5	5	-	-	817950	814753	-	-	-	-
						1.0	0.1	260	27.8		8.0		22.7		95.7		6.6		4.5		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.0	325	27.8	27.8	8.0	8.0	22.7	22.8	95.8	95.8	6.6	6.6	3.9		6		-				-		-	
						3.6	0.0	332	27.8		8.0		22.8		95.8		6.6		4.0		5		-				-		-	
SR7	Fine	Calm	06:30	18.0	Surface	1.0	2.8	12	27.2	27.2	7.9	7.9	22.7	22.7	91.4	91.4	6.4	6.1	1.5	2.2	2	2	-	-	823619	823745	-	-	-	-
						1.0	2.8	12	27.1		7.9		22.8		91.3		6.4		1.6		3		-				-		-	
					Middle	9.0	3.0	14	26.7	26.7	7.9	7.9	27.9	27.9	85.4	85.4	5.9		2.0		2		-				-		-	
						9.0	3.1	15	26.7		7.9		27.9		85.3		5.8		1.9		3		-				-		-	
					Bottom	17.0	2.8	11	26.4	26.5	7.9	7.9	29.9	29.9	84.4	84.6	5.7	5.8	3.1		<2		-				-		-	
						17.0	2.9	11	26.5		7.9		29.8		84.7		5.8		3.0		<2		-				-		-	
SR8	Fine	Calm	07:55	5.4	Surface	1.0	-	-	27.7	27.7	7.9	7.9	21.6	21.6	87.3	87.5	6.1	6.1	5.1	5.6	5	4	-	-	820404	811609	-	-	-	-
						1.0	-	-	27.6		7.9		21.6		87.6		6.1		5.0		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	-	-	27.5	27.5	7.9	7.9	24.1	24.1	83.6	83.7	5.8	5.8	6.1		4		-				-		-	
						4.4	-	-	27.5		7.9		24.0		83.7		5.8		6.1		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 15 May 21 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Moderate	14:34	8.6	Surface	1.0	0.5	224	28.6	28.6	8.2	8.2	24.1	24.1	119.4	119.3	8.1	7.8	3.9	5.5	6	6	85	88	815616	804239	<0.2	<0.2	1.7	1.6
						1.0	0.5	232	28.5		8.2		24.1		119.1		8.1		3.9		6		86				<0.2		1.9	
					Middle	4.3	0.4	216	27.6	27.6	8.1	8.1	24.4	24.4	108.7	108.0	7.5		4.1		6		87				<0.2		1.5	
						4.3	0.4	230	27.5		8.1		24.4		107.3		7.4		4.1		7		88				<0.2		1.5	
					Bottom	7.6	0.2	209	27.0	27.0	8.1	8.1	27.3	27.3	87.5	87.6	6.0	6.0	8.4		5		90				<0.2		1.5	
						7.6	0.2	213	27.0		8.1		27.3		87.6		6.0		8.5		6		91				<0.2		1.5	
C2	Fine	Calm	13:21	12.0	Surface	1.0	1.6	82	28.5	28.5	8.1	8.1	20.5	20.6	92.8	92.7	6.4	6.2	1.5	2.6	6	7	88	91	825701	806965	<0.2	<0.2	1.8	1.9
						1.0	1.7	84	28.4		8.1		20.6		92.6		6.4		1.6		6		88				<0.2		1.8	
					Middle	6.0	1.7	84	27.8	27.8	8.1	8.1	21.0	21.1	86.2	86.1	6.0		2.5		7		91				<0.2		1.9	
						6.0	1.7	89	27.7		8.1		21.1		86.0		6.0		2.5		7		91				<0.2		1.9	
					Bottom	11.0	2.0	79	27.7	27.8	8.0	8.0	26.8	26.8	79.5	79.6	5.4	5.4	3.8		7		93				<0.2		1.9	
						11.0	2.0	86	27.8		8.0		26.7		79.6		5.4		3.7		8		94				<0.2		1.9	
C3	Fine	Calm	15:09	12.0	Surface	1.0	2.2	55	27.9	27.9	8.1	8.1	24.2	24.3	89.5	89.4	6.1	5.9	5.6	7.2	9	10	87	90	822120	817826	<0.2	<0.2	1.3	1.3
						1.0	2.3	59	27.9		8.1		24.3		89.3		6.1		5.7		10		87				<0.2		1.3	
					Middle	6.0	1.9	57	27.4	27.4	8.1	8.1	25.2	25.2	81.2	81.0	5.6		6.8		11		88				<0.2		1.3	
						6.0	2.0	62	27.3		8.1		25.2		80.8		5.6		6.7		10		89				<0.2		1.4	
					Bottom	11.0	2.1	60	27.2	27.3	8.1	8.1	28.3	28.2	79.8	79.8	5.4	5.4	9.3		11		93				<0.2		1.3	
						11.0	2.2	63	27.3		8.1		28.2		79.8		5.4		9.3		10		93				<0.2		1.2	
IM1	Fine	Moderate	14:14	5.0	Surface	1.0	0.1	196	28.1	28.1	8.1	8.1	23.1	23.2	109.9	109.5	7.6	7.6	4.6	6.5	14	8	87	88	817926	807120	<0.2	<0.2	1.5	1.4
						1.0	0.1	198	28.0		8.1		23.3		109.0		7.5		4.7		6		86				<0.2		1.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.1	136	27.8	27.8	8.1	8.1	23.9	23.9	91.0	91.1	6.3	6.3	8.7		6		90				<0.2		1.4	
						4.0	0.1	143	27.8		8.1		23.9		91.1		6.3		8.2		6		90				<0.2		1.4	
IM2	Fine	Moderate	14:07	7.2	Surface	1.0	0.2	180	28.1	28.1	8.1	8.1	22.9	22.9	106.8	106.8	7.4	6.8	4.6	8.4	4	5	85	88	818159	806187	<0.2	<0.2	1.4	1.5
						1.0	0.2	180	28.0		8.1		22.9		106.8		7.4		4.6		5		87				<0.2		1.4	
					Middle	3.6	0.2	165	27.6	27.6	8.1	8.1	23.6	23.7	91.1	90.7	6.3		5.2		4		87				<0.2		1.6	
						3.6	0.2	175	27.5		8.1		23.7		90.2		6.2		4.9		5		89				<0.2		1.4	
					Bottom	6.2	0.2	120	27.5	27.5	8.1	8.1	25.2	25.2	84.8	84.8	5.8	5.8	15.7		5		90				<0.2		1.4	
						6.2	0.2	128	27.5		8.1		25.2		84.8		5.8		15.6		6		92				<0.2		1.5	
IM3	Fine	Moderate	14:00	7.4	Surface	1.0	0.2	204	27.6	27.6	8.1	8.1	24.1	24.2	87.3	87.2	6.0	6.0	10.0	12.3	10	10	86	88	818794	805581	<0.2	<0.2	1.5	1.5
						1.0	0.2	212	27.6		8.1		24.3		87.1		6.0		10.7		9		85				<0.2		1.6	
					Middle	3.7	0.2	157	27.4	27.4	8.1	8.1	25.3	25.3	86.9	86.9	6.0		13.5		9		87				<0.2		1.5	
						3.7	0.2	162	27.4		8.1		25.3		86.9		6.0		13.5		10		89				<0.2		1.5	
					Bottom	6.4	0.2	128	27.4	27.4	8.1	8.1	25.4	25.4	87.2	87.2	6.0	6.0	13.3		11		90				<0.2		1.5	
						6.4	0.2	138	27.4		8.1		25.5		87.2		6.0		13.1		10		90				<0.2		1.5	
IM4	Fine	Moderate	13:51	8.4	Surface	1.0	0.4	196	27.7	27.7	8.1	8.1	23.3	23.3	94.1	94.1	6.5	6.3	8.2	11.0	10	11	85	88	819735	804604	<0.2	<0.2	1.6	1.5
						1.0	0.4	214	27.7		8.1		23.3		94.1		6.5		8.5		11		87				<0.2		1.6	
					Middle	4.2	0.2	180	27.2	27.2	8.1	8.1	26.2	26.2	87.8	87.7	6.0		11.4		11		89				<0.2		1.4	
						4.2	0.2	185	27.1		8.1		26.3		87.6		6.0		11.2		10		88				<0.2		1.5	
					Bottom	7.4	0.2	143	27.1	27.1	8.1	8.1	26.6	26.6	87.0	87.1	6.0	6.0	13.3		11		90				<0.2		1.5	
						7.4	0.3	143	27.1		8.1		26.6		87.1		6.0		13.3		12		91				<0.2		1.4	
IM5	Fine	Moderate	13:44	8.6	Surface	1.0	0.5	225	28.2	28.2	8.1	8.1	21.8	21.8	103.0	103.0	7.1	6.9	10.9	10.2	8	8	86	88	820715	804888	<0.2	<0.2	1.5	1.5
						1.0	0.5	227	28.2		8.1		21.8		102.9		7.1		11.0		9		86				<0.2		1.6	
					Middle	4.3	0.3	188	27.4	27.4	8.1	8.1	23.7	23.7	97.3	97.1	6.8		9.8		7		88				<0.2		1.5	
						4.3	0.3	204	27.3		8.1		23.7		96.8		6.7		10.5		8		89				<0.2		1.4	
					Bottom	7.6	0.2	166	27.2	27.2	8.1	8.1	25.9	25.9	89.2	89.4	6.1	6.2	9.7		8		90				<0.2		1.5	
						7.6	0.2	176	27.2		8.1		25.9		89.6		6.2		9.0		7		91				<0.2		1.5	
IM6	Fine	Moderate	13:36	7.8	Surface	1.0	0.3	247	27.9	27.9	8.1	8.1	21.4	21.4	102.5	102.0	7.1	6.6	8.8	11.8	7	8	87	89	821061	805824	<0.2	<0.2	1.7	1.7
						1.0	0.3	247	27.8		8.1		21.4		101.5		7.1		10.1		7		86				<0.2		1.6	
					Middle	3.9	0.2	186	27.5	27.5	8.1	8.1	24.3	24.3	87.9	87.8	6.1		10.9		8		88				<0.2		1.6	
						3.9	0.2	201	27.5		8.1		24.3		87.7		6.0		10.8		7		88				<0.2		1.7	
					Bottom	6.8	0.2	182	27.5	27.5	8.1	8.1	24.4	24.4	87.5	87.6	6.0	6.0	15.2		8		91				<0.2		1.8	
						6.8	0.2	184	27.5		8.1		24.4		87.6		6.0		15.3		8		92				<0.2		1.6	
IM7	Fine	Moderate	13:27	8.2	Surface	1.0	0.2	250	28.5	28.5	8.1	8.1	20.8	20.9	102.2	102.2	7.1	6.9	5.4	9.3	7	7	85	88	821362	806855	<0.2	<0.2	1.7	1.7
						1.0	0.2	267	28.4		8.1		20.9		102.1		7.1		5.7		8		86				<0.2		1.7	
					Middle	4.1	0.0	189	28.0	28.0	8.1	8.1	22.2	22.3	96.4	96.3	6.7		9.4		7		88				<0.2		1.7	
						4.1	0.0	203	28.0		8.1		22.3		96.1		6.6		9.9		8		87				<0.2		1.6	
					Bottom	7.2	0.2	125	27.9	27.9	8.1	8.1	23.0	23.0	95.1	95.1	6.6	6.6	12.8		6		90				<0.2		1.7	
						7.2	0.2	137	27.9		8.1		23.0		95.0		6.6		12.8		6		89				<0.2		1.7	
IM8	Fine	Calm	13:42	8.0	Surface	1.0	1.4	15	28.3	28.3	8.0	8.0	20.6	20.6	90.5	90.3	6.3	6.1	2.7	3.5	7	6	87	90	821809	808153	<0.2	<0.2	1.7	1.6
						1.0	1.4	15	28.3		8.0		20.6		90.1		6.3		2.8		6		86				<0.2		1.7	
					Middle	4.0	1.5	18	28.2	28.2	8.2	8.2	22.2	22.2	83.9	83.8	5.8		3.6		5		89				<0.2		1.6	
						4.0	1.5	18	28.2		8.2		22.2		83.7		5.8		3.6		6		90				<0.2		1.5	
					Bottom	7.0	1.7	19	28.2	28.2	8.2	8.2	22.3	22.3	83.7	83.7	5.8	5.8	4.1		6		93				<0.2		1.7	
						7.0	1.8	19	28.2		8.2		22.3		83.7		5.8		4.1		5		93				<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 15 May 21 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C) Value	Water Temperature (°C) Average	pH Value	pH Average	Salinity (ppt) Value	Salinity (ppt) Average	DO Saturation (%) Value	DO Saturation (%) Average	Dissolved Oxygen Value	Dissolved Oxygen DA	Turbidity(NTU) Value	Turbidity(NTU) DA	Suspended Solids (mg/L) Value	Suspended Solids (mg/L) DA	Total Alkalinity (ppm) Value	Total Alkalinity (ppm) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L) Value	Chromium (µg/L) DA	Nickel (µg/L) Value	Nickel (µg/L) DA
IM9	Fine	Calm	13:47	7.4	Surface	1.0	1.9	33	28.3	28.3	8.0	8.0	20.6	20.6	91.5	91.3	6.4	6.0	6.5	7.6	7	7	87	90	822073	808801	<0.2	<0.2	1.6	1.6
						1.0	2.1	34	28.2		8.0		20.6		91.0		6.3		6.5		8		87				<0.2		1.5	
					Middle	3.7	2.0	31	28.1	28.1	8.2	8.2	22.4	22.4	82.2	82.2	5.7		7.2		7		89				<0.2		1.6	
						3.7	2.1	34	28.1		8.2		22.4		82.1		5.7		7.2		7		91				<0.2		1.6	
					Bottom	6.4	2.1	33	28.2	28.2	8.2	8.2	22.5	22.5	82.9	83.0	5.7	5.7	9.1		7		92				<0.2		1.7	
						6.4	2.2	35	28.2		8.2		22.5		83.0		5.7		9.0		7		92				<0.2		1.7	
IM10	Fine	Calm	13:52	7.6	Surface	1.0	1.9	45	28.9	28.9	8.0	8.0	20.3	20.3	98.1	98.1	6.8	6.8	4.7	5.3	7	6	86	90	822374	809785	<0.2	<0.2	1.5	1.6
						1.0	1.9	48	28.9		8.0		20.3		98.1		6.8		4.8		7		87				<0.2		1.6	
					Middle	3.8	2.1	44	28.5	28.5	8.2	8.2	20.5	20.5	96.9	96.5	6.7		5.2		5		91				<0.2		1.6	
						3.8	2.2	48	28.4		8.2		20.6		96.1		6.7		5.2		6		91				<0.2		1.7	
					Bottom	6.6	2.2	41	28.2	28.2	8.2	8.2	22.4	22.4	86.3	86.4	6.0	6.0	6.1		5		92				<0.2		1.7	
						6.6	2.4	43	28.2		8.2		22.4		86.5		6.0		6.0		6		92				<0.2		1.7	
IM11	Fine	Calm	14:01	8.0	Surface	1.0	1.9	47	28.5	28.5	8.0	8.0	20.5	20.6	97.2	96.9	6.7	6.3	2.6	3.9	7	6	86	90	822034	811457	<0.2	<0.2	1.6	1.6
						1.0	2.1	49	28.4		8.0		20.6		96.6		6.7		2.5		6		87				<0.2		1.5	
					Middle	4.0	2.0	49	28.2	28.2	8.2	8.2	22.3	22.3	86.1	86.1	5.9		3.5		7		90				<0.2		1.6	
						4.0	2.2	52	28.2		8.2		22.3		86.1		5.9		3.6		6		91				<0.2		1.6	
					Bottom	7.0	2.0	46	28.5	28.5	8.2	8.2	22.2	22.2	86.3	86.4	5.9	5.9	5.7		6		92				<0.2		1.6	
						7.0	2.1	48	28.5		8.2		22.2		86.4		5.9		5.7		5		91				<0.2		1.6	
IM12	Fine	Calm	14:06	9.2	Surface	1.0	2.1	49	28.7	28.7	8.0	8.0	20.8	20.9	98.3	98.1	6.8	6.2	2.0	2.5	6	6	86	88	821479	812050	<0.2	<0.2	1.7	1.6
						1.0	2.1	52	28.6		8.0		21.0		97.8		6.7		1.9		6		86				<0.2		1.7	
					Middle	4.6	2.3	43	28.1	28.1	8.2	8.2	22.4	22.4	81.2	81.1	5.6		2.2		7		87				<0.2		1.6	
						4.6	2.3	46	28.0		8.2		22.5		81.0		5.6		2.2		6		87				<0.2		1.6	
					Bottom	8.2	2.1	45	28.1	28.1	8.2	8.2	22.7	22.6	81.5	81.8	5.6	5.7	3.6		7		92				<0.2		1.7	
						8.2	2.2	46	28.1		8.2		22.6		82.0		5.7		3.5		6		92				<0.2		1.5	
SR1A	Fine	Calm	14:36	4.2	Surface	1.0	-	-	28.6	28.6	8.1	8.1	20.7	20.7	93.5	93.5	6.5	6.5	4.6	5.7	8	8	-	-	819972	812657	-	-	-	-
						1.0	-	-	28.5		8.1		20.7		93.4		6.5		4.6		7		-				-		-	
					Middle	2.1	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.1	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	-	-	28.4	28.4	8.1	8.1	22.4	22.5	87.0	86.6	6.0	6.0	6.8		9		-				-		-	
						3.2	-	-	28.3		8.1		22.5		86.2		5.9		6.7		8		-				-		-	
SR2	Fine	Calm	14:50	3.6	Surface	1.0	0.5	38	29.3	29.3	8.1	8.1	20.4	20.4	105.0	104.9	7.2	7.2	2.2	2.6	6	5	90	91	821478	814182	<0.2	<0.2	1.1	1.2
						1.0	0.5	40	29.2		8.1		20.5		104.7		7.2		2.2		5		90				<0.2		1.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.6	0.3	40	28.8	28.8	8.1	8.1	21.2	21.2	95.3	95.1	6.5	6.5	2.9		5		92				<0.2		1.2	
						2.6	0.3	42	28.8		8.1		21.3		94.9		6.5		3.0		5		92				<0.2		1.1	
SR3	Fine	Calm	13:36	9.0	Surface	1.0	1.3	32	28.3	28.3	8.0	8.0	20.5	20.5	90.5	90.2	6.3	6.0	2.0	3.2	4	4	-	-	822135	807565	-	-	-	-
						1.0	1.4	34	28.2		8.1		20.5		89.8		6.3		1.9		5		-				-		-	
					Middle	4.5	1.3	31	28.1	28.1	8.0	8.0	22.4	22.4	82.0	82.0	5.7		3.2		4		-				-		-	
						4.5	1.4	33	28.1		8.0		22.4		81.9		5.6		3.1		5		-				-		-	
					Bottom	8.0	1.5	30	28.2	28.2	8.2	8.1	22.3	22.3	81.6	81.6	5.6	5.6	4.6		3		-				-		-	
						8.0	1.5	32	28.2		8.0		22.3		81.5		5.6		4.6		4		-				-		-	
SR4A	Fine	Moderate	14:59	8.4	Surface	1.0	0.0	83	28.2	28.2	8.1	8.1	23.5	23.5	109.0	108.8	7.5	7.1	6.8	7.6	9	8	-	-	817202	807794	-	-	-	-
						1.0	0.0	90	28.1		8.1		23.6		108.6		7.4		7.0		8		-				-		-	
					Middle	4.2	0.1	68	27.9	27.9	8.1	8.1	24.1	24.1	97.1	97.1	6.7		7.6		8		-				-		-	
						4.2	0.1	71	27.8		8.1		24.1		97.0		6.7		7.7		7		-				-		-	
					Bottom	7.4	0.1	60	27.7	27.8	8.1	8.1	24.5	24.5	89.3	89.4	6.1	6.1	8.2		7		-				-		-	
						7.4	0.1	65	27.8		8.1		24.4		89.4		6.1		8.1		6		-				-		-	
SR5A	Fine	Moderate	15:19	3.5	Surface	1.0	0.0	112	28.5	28.5	8.1	8.1	23.0	23.0	102.6	102.6	7.0	7.0	8.4	11.7	8	10	-	-	816602	810717	-	-	-	-
						1.0	0.0	112	28.5		8.1		23.0		102.5		7.0		8.7		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.5	0.0	119	28.4	28.4	8.0	8.0	23.3	23.3	98.1	98.1	6.7	6.7	14.7		11		-				-		-	
						2.5	0.0	128	28.4		8.0		23.3		98.1		6.7		15.1		10		-				-		-	
SR6A	Fine	Moderate	16:02	4.0	Surface	1.0	0.1	23	28.6	28.6	8.1	8.1	22.8	22.8	101.0	100.9	6.9	6.9	8.0	8.5	12	13	-	-	817984	814718	-	-	-	-
						1.0	0.1	23	28.6		8.1		22.9		100.8		6.9		8.1		13		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	0.1	20	28.3	28.3	8.0	8.0	23.1	23.1	91.7	91.6	6.3	6.3	8.9		13		-				-		-	
						3.0	0.1	21	28.2		8.0		23.2		91.5		6.3		9.0		13		-				-		-	
SR7	Fine	Calm	15:36	18.0	Surface	1.0	0.9	178	28.6	28.6	8.1	8.1	21.9	22.0	103.3	103.2	7.1	7.0	2.2	3.6	6	6	-	-	823618	823739	-	-	-	-
						1.0	1.0	191	28.6		8.1		22.0		103.1		7.1		2.1		5		-				-		-	
					Middle	9.0	0.8	174	28.6	28.6	8.1	8.1	22.5	22.5	98.8	98.8	6.8		3.1		6		-				-		-	
						9.0	0.8	179	28.6		8.1		22.5		98.7		6.8		3.0		5		-				-		-	
					Bottom	17.0	0.9	194	28.6	28.6	8.1	8.1	22.6	22.6	97.7	97.7	6.7	6.7	5.6		6		-				-		-	
						17.0	1.0	195	28.6		8.1		22.6		97.7		6.7		5.5		7		-				-		-	
SR8	Fine	Calm	14:14	5.4	Surface	1.0	-	-	28.9	28.9	8.1	8.1	21.4	21.4	88.0	88.1	6.0	6.0	6.6	7.5	8	9	-	-	820373	811613	-	-	-	-
						1.0	-	-	28.9		8.1		21.4		88.1		6.0		6.7		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	-	-	28.9	28.9	8.2	8.2	21.5	21.4	88.7	88.8	6.1	6.1	8.4		8		-				-		-	
						4.4	-	-	28.9		8.2		21.4		88.8		6.1		8.4		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 15 May 21 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	08:24	8.5	Surface	1.0	0.4	37	27.6	27.6	8.1	8.1	21.9	21.9	99.4	99.3	6.9	6.6	4.5	9.0	4	5	85	88	815638	804258	<0.2	<0.2	1.2	1.3
						1.0	0.4	38	27.6		8.1		21.9		99.2		6.9		4.5		5		86				<0.2		1.3	
					Middle	4.3	0.4	35	27.3	27.3	8.1	8.1	24.8	24.8	91.4	91.3	6.3		10.3		4		87				<0.2		1.2	
						4.3	0.5	36	27.2		8.1		24.8		91.1		6.3		10.7		5		88				<0.2		1.2	
					Bottom	7.5	0.4	36	27.2	27.2	8.1	8.1	26.1	26.1	90.9	91.0	6.2	6.3	12.2		4		90				<0.2		1.4	
						7.5	0.4	38	27.2		8.1		26.0		91.0		6.3		12.0		5		91				<0.2		1.3	
C2	Fine	Calm	09:39	12.0	Surface	1.0	1.9	17	28.3	28.3	8.0	8.0	18.1	18.1	85.2	85.1	6.0	5.9	1.3	2.6	6	6	85	89	825688	806950	<0.2	<0.2	1.8	1.4
						1.0	2.0	17	28.3		8.0		18.1		84.9		6.0		1.3		6		86				<0.2		1.7	
					Middle	6.0	2.1	17	28.1	28.1	8.0	8.0	21.8	21.8	82.9	82.8	5.7		2.1		6		89				<0.2		1.2	
						6.0	2.1	18	28.1		8.0		21.9		82.7		5.7		2.1		7		89				<0.2		1.2	
					Bottom	11.0	2.0	15	28.1	28.2	8.2	8.2	22.2	22.2	81.8	81.7	5.6	5.6	4.5		6		91				<0.2		1.4	
						11.0	2.2	15	28.2		8.2		22.2		81.6		5.6		4.5		7		92				<0.2		1.3	
C3	Fine	Calm	07:44	12.0	Surface	1.0	1.1	339	27.7	27.7	8.2	8.2	21.1	21.1	87.6	87.5	6.1	5.8	1.8	3.5	4	4	83	86	822126	817794	<0.2	<0.2	1.5	1.5
						1.0	1.1	343	27.6		8.2		21.2		87.4		6.1		1.8		5		83				<0.2		1.6	
					Middle	6.0	1.2	343	26.9	26.9	8.2	8.2	27.0	26.9	80.3	80.2	5.5		3.9		4		86				<0.2		1.5	
						6.0	1.3	316	26.9		8.2		26.8		80.1		5.5		3.9		5		86				<0.2		1.4	
					Bottom	11.0	1.2	329	26.8	26.8	8.2	8.2	28.5	28.5	79.2	79.2	5.4	5.4	4.9		4		88				<0.2		1.4	
						11.0	1.2	334	26.8		8.2		28.5		79.2		5.4		5.0		3		88				<0.2		1.5	
IM1	Sunny	Moderate	08:45	5.7	Surface	1.0	0.1	319	27.7	27.7	8.1	8.1	23.2	23.2	94.6	94.5	6.6	6.6	8.1	9.9	6	6	88	89	817970	807138	<0.2	<0.2	1.2	1.2
						1.0	0.1	346	27.6		8.1		23.2		94.3		6.5		8.8		7		87				<0.2		1.3	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.7	0.1	33	27.5	27.5	8.0	8.0	25.4	25.4	86.9	86.9	6.0	6.0	11.5		6		90				<0.2		1.2	
						4.7	0.1	36	27.5		8.0		25.4		86.8		6.0		11.3		6		91				<0.2		1.2	
IM2	Sunny	Moderate	08:55	7.6	Surface	1.0	0.2	357	27.9	27.9	8.1	8.1	22.7	22.8	100.4	100.4	6.9	6.8	4.8	6.0	4	5	85	87	818141	806173	<0.2	<0.2	1.2	1.2
						1.0	0.2	328	27.9		8.1		22.8		100.4		6.9		4.8		5		86				<0.2		1.2	
					Middle	3.8	0.3	2	27.6	27.6	8.1	8.1	23.0	23.0	94.6	94.5	6.6		4.8		5		87				<0.2		1.3	
						3.8	0.3	2	27.6		8.1		23.0		94.4		6.6		4.8		4		86				<0.2		1.2	
					Bottom	6.6	0.2	4	27.5	27.5	8.1	8.1	25.2	25.2	87.7	87.7	6.0	6.0	8.4		5		89				<0.2		1.3	
						6.6	0.2	4	27.5		8.1		25.2		87.7		6.0		8.4		5		89				<0.2		1.2	
IM3	Sunny	Moderate	09:06	7.9	Surface	1.0	0.4	340	27.9	27.9	8.2	8.2	21.9	22.0	103.4	103.4	7.2	7.2	4.4	5.1	5	4	86	88	818786	805583	<0.2	<0.2	1.3	1.3
						1.0	0.4	313	27.9		8.2		22.0		103.3		7.2		4.5		6		85				<0.2		1.3	
					Middle	4.0	0.3	348	27.9	27.9	8.1	8.1	22.6	22.6	102.7	102.6	7.1		4.8		4		88				<0.2		1.3	
						4.0	0.3	320	27.9		8.1		22.6		102.5		7.1		4.8		4		88				<0.2		1.2	
					Bottom	6.9	0.2	350	27.8	27.8	8.1	8.1	23.0	23.1	97.0	96.9	6.7	6.7	5.6		3		91				<0.2		1.3	
						6.9	0.2	352	27.7		8.1		23.2		96.7		6.7		6.3		4		91				<0.2		1.3	
IM4	Sunny	Moderate	09:16	8.0	Surface	1.0	0.6	349	27.7	27.7	8.1	8.1	22.3	22.4	97.1	96.9	6.7	6.7	4.7	8.2	6	5	86	88	819722	804609	<0.2	<0.2	1.2	1.2
						1.0	0.6	321	27.7		8.1		22.4		96.7		6.7		4.8		5		85				<0.2		1.3	
					Middle	4.0	0.5	355	27.5	27.5	8.1	8.1	23.0	23.0	95.1	94.8	6.6		8.6		4		87				<0.2		1.2	
						4.0	0.6	327	27.4		8.1		23.0		94.5		6.6		9.4		5		88				<0.2		1.2	
					Bottom	7.0	0.5	356	27.3	27.3	8.1	8.1	25.2	25.2	86.5	86.5	6.0	6.0	10.8		4		90				<0.2		1.2	
						7.0	0.5	328	27.3		8.1		25.2		86.5		6.0		10.6		5		90				<0.2		1.1	
IM5	Sunny	Moderate	09:23	7.8	Surface	1.0	0.7	4	27.9	27.9	8.1	8.1	21.7	21.7	100.7	100.7	7.0	6.8	4.4	10.2	4	4	85	88	820752	804860	<0.2	<0.2	1.3	1.2
						1.0	0.8	4	27.9		8.1		21.7		100.7		7.0		4.6		3		87				<0.2		1.2	
					Middle	3.9	0.7	6	27.7	27.7	8.1	8.1	23.3	23.3	93.7	93.5	6.5		10.9		3		89				<0.2		1.2	
						3.9	0.8	6	27.7		8.1		23.3		93.3		6.5		11.6		4		88				<0.2		1.3	
					Bottom	6.8	0.6	14	27.6	27.6	8.1	8.1	23.7	23.7	92.6	92.8	6.4	6.4	14.9		5		89				<0.2		1.2	
						6.8	0.6	15	27.6		8.1		23.7		92.9		6.4		14.9		6		90				<0.2		1.2	
IM6	Sunny	Moderate	09:32	8.4	Surface	1.0	0.1	359	28.3	28.3	8.1	8.1	18.9	18.9	100.4	100.3	7.0	6.9	4.5	7.5	3	4	85	87	821050	805839	<0.2	<0.2	1.3	1.3
						1.0	0.1	336	28.3		8.1		18.9		100.2		7.0		4.6		4		85				<0.2		1.3	
					Middle	4.2	0.3	32	28.0	28.0	8.1	8.1	21.1	21.1	97.2	97.0	6.8		7.8		4		87				<0.2		1.3	
						4.2	0.3	33	27.9		8.1		21.2		96.8		6.8		8.3		5		88				<0.2		1.3	
					Bottom	7.4	0.3	56	27.9	27.9	8.1	8.1	22.5	22.5	96.1	96.2	6.7	6.7	9.9		5		89				<0.2		1.2	
						7.4	0.3	61	27.9		8.1		22.5		96.2		6.7		9.7		4		89				<0.2		1.3	
IM7	Sunny	Moderate	09:40	8.4	Surface	1.0	0.1	80	28.3	28.3	8.1	8.1	19.6	19.6	96.6	96.5	6.8	6.7	4.2	8.4	4	4	85	88	821361	806822	<0.2	<0.2	1.5	1.4
						1.0	0.1	84	28.2		8.1		19.6		96.4		6.7		4.4		3		86				<0.2		1.6	
					Middle	4.2	0.2	77	27.8	27.8	8.1	8.1	20.4	20.4	94.4	94.3	6.6		9.9		4		87				<0.2		1.2	
						4.2	0.2	79	27.7		8.1		20.4		94.2		6.6		10.9		4		88				<0.2		1.3	
					Bottom	7.4	0.2	84	27.7	27.7	8.1	8.1	24.0	24.1	87.8	87.6	6.0	6.0	10.9		5		90				<0.2		1.2	
						7.4	0.2	84	27.7		8.1		24.2		87.4		6.0		10.0		6		91				<0.2		1.3	
IM8	Fine	Calm	09:16	8.0	Surface	1.0	2.3	52	28.3	28.3	8.0	8.0	19.6	19.6	87.4	85.6	6.1	5.9	1.1	2.1	6	6	86	90	821852	808138	<0.2	<0.2	1.6	1.5
						1.0	2.3	56	28.3		8.0		19.6		83.7		5.9		1.1		6		86				<0.2		1.6	
					Middle	4.0	2.2	51	28.2	28.2	8.2	8.2	19.9	19.9	82.7	82.7	5.8		2.0		6		91				<0.2		1.5	
						4.0	2.4	55	28.2		8.2		19.8		82.7		5.8		1.9		6		91				<0.2		1.5	
					Bottom	7.0	2.4	53	28.2	28.2	8.2	8.2	21.3	21.2	83.9	84.0	5.8	5.8	3.3		5		92				<0.2		1.5	
						7.0	2.5	53	28.2		8.2		21.2		84.1		5.8		3.2		6		92				<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 15 May 21 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	Calm	09:10	7.4	Surface	1.0	1.6	50	28.3	28.3	8.0	8.0	18.7	18.7	87.3	87.2	6.1	6.0	1.7	3.0	5	5	86	89	822102	808817	<0.2	<0.2	1.2	1.4
						1.0	1.6	51	28.3		8.0		18.7		87.0		6.1		1.7		4		86				<0.2		1.2	
					Middle	3.7	1.9	51	28.2	28.2	8.2	8.2	20.5	20.5	84.3	84.4	5.9		2.8		5		89				<0.2		1.5	
						3.7	1.9	55	28.2		8.2		20.4		84.5		5.9		2.8		4		91				<0.2		1.4	
					Bottom	6.4	2.0	50	28.1	28.1	8.2	8.2	22.0	22.0	82.0	82.3	5.7	5.7	4.4		5		90				<0.2		1.6	
						6.4	2.1	50	28.1		8.2		22.0		82.5		5.7		4.5		4		91				<0.2		1.6	
IM10	Fine	Calm	09:03	7.6	Surface	1.0	1.5	3	28.3	28.3	8.0	8.0	20.6	20.6	88.3	88.2	6.1	6.1	1.0	2.3	6	5	83	87	822394	809784	<0.2	<0.2	1.3	1.5
						1.0	1.5	3	28.3		8.0		20.6		88.1		6.1		1.1		6		83				<0.2		1.3	
					Middle	3.8	1.5	2	28.0	28.0	8.2	8.2	21.5	21.5	85.9	85.9	6.0		2.1		5		87				<0.2		1.4	
						3.8	1.6	2	28.0		8.2		21.6		85.9		6.0		2.1		4		88				<0.2		1.5	
					Bottom	6.6	1.5	6	27.9	27.9	8.2	8.2	23.4	23.4	81.4	81.6	5.6	5.6	3.8		5		90				<0.2		1.7	
						6.6	1.6	6	27.9		8.2		23.4		81.7		5.6		3.9		4		90				<0.2		1.6	
IM11	Fine	Calm	08:54	8.0	Surface	1.0	1.1	25	27.9	27.9	8.0	8.0	22.4	22.4	85.3	85.3	5.9	5.8	2.0	2.6	7	6	84	85	822072	811471	<0.2	<0.2	1.3	1.4
						1.0	1.1	26	27.9		8.0		22.4		85.3		5.9		1.9		7		84				<0.2		1.5	
					Middle	4.0	1.1	24	27.7	27.7	8.2	8.2	22.5	22.5	83.7	82.0	5.8		2.2		6		86				<0.2		1.4	
						4.0	1.1	25	27.7		8.2		22.5		80.3		5.6		2.1		7		85				<0.2		1.4	
					Bottom	7.0	1.1	20	27.7	27.7	8.1	8.1	24.2	24.2	79.9	79.9	5.5	5.5	3.8		5		87				<0.2		1.5	
						7.0	1.2	21	27.7		8.1		24.2		79.8		5.5		3.7		6		86				<0.2		1.5	
IM12	Fine	Calm	08:49	9.2	Surface	1.0	0.5	14	28.0	28.0	8.2	8.2	21.6	21.6	88.2	88.2	6.1	5.9	1.7	2.6	5	6	84	86	821436	812053	<0.2	<0.2	1.5	1.5
						1.0	0.5	15	27.9		8.2		21.6		88.1		6.1		1.8		6		84				<0.2		1.4	
					Middle	4.6	0.5	17	27.7	27.7	8.2	8.2	23.8	23.8	81.9	81.9	5.6		2.0		6		85				<0.2		1.6	
						4.6	0.5	17	27.7		8.2		23.9		81.8		5.6		2.0		6		85				<0.2		1.5	
					Bottom	8.2	0.5	15	27.7	27.8	8.2	8.2	24.0	23.9	81.4	81.4	5.6	5.6	4.1		7		88				<0.2		1.4	
						8.2	0.5	15	27.8		8.2		23.8		81.4		5.6		4.1		6		88				<0.2		1.5	
SR1A	Fine	Calm	08:18	4.2	Surface	1.0	-	-	28.2	28.2	8.2	8.2	19.8	19.8	86.0	85.8	6.0	6.0	1.1	1.1	4	5	-	-	819973	812665	-	-	-	-
						1.0	-	-	28.2		8.2		19.7		85.6		6.0		1.1		5		-				-		-	
					Middle	2.1	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.1	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	-	-	28.1	28.1	8.2	8.2	21.0	21.0	84.0	84.0	5.9	5.9	1.1		4		-				-		-	
						3.2	-	-	28.0		8.2		21.0		83.9		5.8		1.2		5		-				-		-	
SR2	Fine	Calm	08:03	3.6	Surface	1.0	0.3	102	28.0	28.0	8.2	8.2	22.1	22.1	83.8	83.7	5.8	5.8	2.1	2.6	9	8	85	86	821461	814187	<0.2	<0.2	1.8	1.7
						1.0	0.3	105	28.0		8.2		22.1		83.5		5.8		2.1		8		84				<0.2		1.7	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.6	0.2	83	27.8	27.8	8.2	8.2	22.6	22.6	80.9	80.9	5.6	5.6	3.2		7		86				<0.2		1.7	
						2.6	0.3	87	27.8		8.2		22.6		80.8		5.6		3.1		6		87				<0.2		1.6	
SR3	Fine	Calm	09:22	9.0	Surface	1.0	2.1	39	28.3	28.3	8.0	8.0	18.3	18.3	90.4	90.2	6.4	6.1	1.4	2.3	4	5	-	-	822156	807579	-	-	-	-
						1.0	2.1	39	28.3		8.0		18.3		90.0		6.3		1.4		5		-				-		-	
					Middle	4.5	2.3	41	28.2	28.2	8.2	8.2	20.9	20.9	82.8	82.7	5.8		2.3		5		-				-		-	
						4.5	2.3	43	28.2		8.2		21.0		82.5		5.7		2.2		6		-				-		-	
					Bottom	8.0	2.3	44	28.2	28.3	8.2	8.2	21.2	21.2	81.3	81.2	5.6	5.6	3.2		5		-				-		-	
						8.0	2.5	44	28.3		8.2		21.2		81.1		5.6		3.2		6		-				-		-	
SR4A	Sunny	Moderate	07:57	8.6	Surface	1.0	0.1	81	27.9	27.9	8.1	8.1	22.3	22.3	93.6	93.6	6.5	6.3	5.5	8.0	6	6	-	-	817176	807826	-	-	-	-
						1.0	0.1	84	27.9		8.1		22.3		93.5		6.5		5.6		5		-				-		-	
					Middle	4.3	0.3	72	27.8	27.8	8.0	8.0	23.2	23.3	88.5	88.5	6.1		5.8		6		-				-		-	
						4.3	0.3	77	27.8		8.0		23.3		88.5		6.1		5.8		5		-				-		-	
					Bottom	7.6	0.3	66	27.5	27.5	8.0	8.0	24.9	24.9	86.0	86.2	5.9	5.9	12.8		8		-				-		-	
						7.6	0.3	71	27.5		8.0		24.9		86.3		5.9		12.6		7		-				-		-	
SR5A	Sunny	Moderate	07:36	4.6	Surface	1.0	0.1	282	28.2	28.2	8.0	8.0	22.5	22.5	95.4	95.4	6.6	6.6	5.2	6.0	7	8	-	-	816582	810712	-	-	-	-
						1.0	0.1	286	28.2		8.0		22.5		95.4		6.6		5.2		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.1	287	28.2	28.2	8.0	8.0	22.7	22.7	94.8	94.8	6.5	6.5	6.9		9		-				-		-	
						3.6	0.1	295	28.1		8.0		22.7		94.8		6.5		6.8		10		-				-		-	
SR6A	Sunny	Moderate	07:05	4.3	Surface	1.0	0.1	292	28.0	28.0	8.1	8.1	21.4	21.2	93.5	93.4	6.5	6.5	4.7	5.7	6	5	-	-	817977	814762	-	-	-	-
						1.0	0.1	313	28.0		8.1		21.1		93.2		6.5		5.0		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.1	249	28.0	28.0	8.0	8.0	22.9	22.8	91.9	92.2	6.3	6.4	6.6		4		-				-		-	
						3.3	0.1	249	28.0		8.0		22.8		92.5		6.4		6.4		5		-				-		-	
SR7	Fine	Calm	07:15	18.0	Surface	1.0	2.8	19	27.9	27.9	8.2	8.2	21.5	21.5	89.1	89.0	6.2	5.9	1.4	2.5	4	4	-	-	823624	823738	-	-	-	-
						1.0	3.0	20	27.8		8.2		21.5		88.8		6.2		1.3		4		-				-		-	
					Middle	9.0	3.0	15	27.1	27.1	8.2	8.2	26.9	27.0	81.0	81.0	5.5		2.6		3		-				-		-	
						9.0	3.3	15	27.1		8.2		27.1		81.0		5.5		2.6		4		-				-		-	
					Bottom	17.0	2.8	19	26.7	26.7	8.2	8.2	29.3	29.3	77.1	77.5	5.2	5.3	3.6		4		-				-		-	
						17.0	3.0	19	26.7		8.2		29.3		77.8		5.3		3.6		3		-				-		-	
SR8	Fine	Calm	08:42	5.4	Surface	1.0	-	-	28.1	28.1	8.2	8.2	21.4	21.4	83.9	83.9	5.8	5.8	2.5	3.1	6	6	-	-	820410	811645	-	-	-	-
						1.0	-	-	28.1		8.2		21.4		83.8		5.8		2.5		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	-	-	28.1	28.1	8.2	8.2	21.5	21.5	84.2	84.3	5.8	5.9	3.7		6		-				-		-	
						4.4	-	-	28.1		8.2		21.5		84.4		5.9		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 18 May 21 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Rough	16:37	7.8	Surface	1.0	0.3	200	29.2	29.2	8.2	8.2	18.1	18.1	138.9	138.8	9.6	9.5	3.4	3.9	4	5	85	88	815624	804254	<0.2	<0.2	2.1	1.9
						1.0	0.3	204	29.2		8.2		18.2		138.7		9.6		3.4		5		85				<0.2		1.9	
					Middle	3.9	0.4	199	29.2	29.2	8.2	8.2	18.2	18.2	136.7	136.5	9.5		3.4		5		88				<0.2		1.8	
						3.9	0.4	199	29.2		8.2		18.2		136.2		9.4		3.4		4		88				<0.2		1.9	
					Bottom	6.8	0.4	202	27.6	27.6	8.2	8.2	23.3	23.9	91.8	92.1	6.4	6.4	5.0		5		91				<0.2		1.7	
						6.8	0.4	220	27.5		8.2		24.4		92.3		6.4		5.0		5		91				<0.2		1.8	
C2	Sunny	Rough	15:30	11.4	Surface	1.0	0.7	246	29.5	29.5	8.3	8.3	16.8	16.8	110.7	110.7	7.7	6.7	2.0	7.1	5	5	87	90	825698	806925	<0.2	<0.2	1.6	1.6
						1.0	0.7	260	29.5		8.3		16.8		110.6		7.7		2.0		4		87				<0.2		1.6	
					Middle	5.7	1.4	263	27.8	27.7	8.2	8.2	22.7	22.8	82.7	82.2	5.7		8.5		5		89				<0.2		1.5	
						5.7	1.5	284	27.6		8.2		23.0		81.7		5.7		9.7		4		90				<0.2		1.6	
					Bottom	10.4	1.4	256	27.1	27.1	8.3	8.3	28.0	28.0	72.4	72.5	4.9	4.9	10.0		5		92				<0.2		1.6	
						10.4	1.4	267	27.1		8.3		28.0		72.6		4.9		10.5		4		93				<0.2		1.5	
C3	Sunny	Moderate	17:27	12.1	Surface	1.0	2.7	289	29.5	29.5	8.2	8.2	18.3	18.3	131.1	130.9	9.0	7.4	1.6	2.7	4	5	85	88	822099	817791	<0.2	<0.2	1.5	1.5
						1.0	2.7	306	29.5		8.2		18.3		130.6		9.0		1.6		5		86				<0.2		1.5	
					Middle	6.1	3.1	289	27.0	27.0	8.2	8.2	26.7	26.7	84.0	84.1	5.8		3.4		5		87				<0.2		1.6	
						6.1	3.4	300	26.9		8.2		26.8		84.2		5.8		3.2		4		88				<0.2		1.6	
					Bottom	11.1	3.0	299	26.8	26.9	8.2	8.2	28.7	28.7	86.6	87.7	5.9	6.0	3.4		5		91				<0.2		1.5	
						11.1	3.1	323	26.9		8.2		28.7		88.7		6.0		3.1		4		92				<0.2		1.4	
IM1	Fine	Rough	16:14	5.0	Surface	1.0	0.1	256	29.4	29.4	8.2	8.2	16.9	16.9	148.4	148.2	10.3	10.3	3.2	3.7	5	4	89	90	817955	807146	<0.2	<0.2	2.1	1.6
						1.0	0.1	273	29.4		8.2		16.9		147.9		10.3		3.3		4		89				<0.2		2.1	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.2	243	27.4	27.4	8.2	8.2	26.5	26.4	82.6	82.9	5.6	5.7	4.1		4		91				<0.2		1.1	
						4.0	0.2	266	27.4		8.2		26.4		83.2		5.7		4.2		3		92				<0.2		1.1	
IM2	Fine	Rough	16:07	7.1	Surface	1.0	0.2	111	28.9	28.9	8.2	8.2	17.0	17.0	133.6	133.0	9.4	8.3	3.3	4.1	6	5	85	88	818186	806149	<0.2	<0.2	1.9	1.8
						1.0	0.2	120	28.8		8.2		17.0		132.4		9.3		3.4		5		85				<0.2		2.1	
					Middle	3.6	0.2	132	28.2	28.2	8.2	8.2	20.8	20.8	103.8	103.5	7.2		3.8		5		89				<0.2		1.8	
						3.6	0.2	142	28.2		8.2		20.9		103.1		7.2		3.9		4		89				<0.2		1.9	
					Bottom	6.1	0.1	159	26.9	26.9	8.1	8.1	27.7	27.7	80.7	80.9	5.5	5.5	4.9		5		90				<0.2		1.4	
						6.1	0.1	173	26.9		8.1		27.7		81.0		5.5		5.0		4		90				<0.2		1.5	
IM3	Fine	Rough	16:01	7.0	Surface	1.0	0.2	338	29.1	29.1	8.2	8.2	16.8	16.8	127.2	126.7	8.9	8.2	3.6	4.2	5	5	86	89	818774	805576	<0.2	<0.2	1.4	1.8
						1.0	0.3	355	29.1		8.2		16.8		126.2		8.8		3.6		4		87				<0.2		1.3	
					Middle	3.5	0.2	12	28.8	28.8	8.2	8.2	18.5	18.6	109.0	108.7	7.6		4.0		4		89				<0.2		2.0	
						3.5	0.2	12	28.8		8.2		18.7		108.4		7.6		4.1		5		90				<0.2		1.9	
					Bottom	6.0	0.1	143	26.6	26.7	8.0	8.0	28.5	28.5	78.7	78.9	5.4	5.4	4.9		4		90				<0.2		2.2	
						6.0	0.1	149	26.7		8.0		28.5		79.0		5.4		5.2		5		91				<0.2		2.0	
IM4	Fine	Rough	15:51	8.6	Surface	1.0	0.4	164	29.3	29.3	8.3	8.3	16.0	16.0	129.7	129.7	9.1	8.3	3.3	4.5	5	5	82	88	819706	804592	<0.2	<0.2	1.4	1.5
						1.0	0.4	180	29.3		8.3		16.0		129.6		9.1		3.3		6		84				<0.2		1.4	
					Middle	4.3	0.4	186	28.8	28.8	8.2	8.2	18.4	18.5	109.7	108.5	7.6		4.7		4		89				<0.2		2.0	
						4.3	0.4	189	28.8		8.2		18.6		107.3		7.5		5.0		5		90				<0.2		1.8	
					Bottom	7.6	0.4	151	26.8	26.8	8.0	8.0	28.2	28.2	75.0	75.2	5.1	5.1	5.4		4		91				<0.2		1.2	
						7.6	0.4	158	26.8		8.0		28.2		75.3		5.1		5.5		5		92				<0.2		1.4	
IM5	Fine	Rough	15:44	7.9	Surface	1.0	0.4	177	29.3	29.3	8.1	8.2	15.7	15.7	128.5	128.3	9.0	8.3	2.9	4.4	5	5	84	88	820744	804848	<0.2	<0.2	1.2	1.7
						1.0	0.4	180	29.3		8.2		15.7		128.1		9.0		3.0		5		84				<0.2		1.3	
					Middle	4.0	0.5	229	28.8	28.8	8.2	8.2	17.8	17.8	108.4	108.4	7.6		4.6		5		88				<0.2		1.9	
						4.0	0.6	240	28.8		8.2		17.8		108.3		7.6		4.6		4		88				<0.2		2.0	
					Bottom	6.9	0.4	197	26.9	26.9	8.0	8.0	27.5	27.5	74.7	74.9	5.1	5.1	5.5		4		92				<0.2		2.0	
						6.9	0.4	210	26.9		8.0		27.5		75.0		5.1		5.7		4		91				<0.2		2.0	
IM6	Fine	Rough	15:36	8.0	Surface	1.0	0.2	203	29.0	29.0	8.1	8.1	16.1	16.1	125.8	125.2	8.9	7.9	3.9	4.6	5	5	87	89	821039	805829	<0.2	<0.2	2.1	1.6
						1.0	0.2	204	28.9		8.1		16.1		124.6		8.8		4.0		5		87				<0.2		2.0	
					Middle	4.0	0.3	258	28.6	28.6	8.1	8.1	19.5	19.5	99.1	98.9	6.9		4.6		5		89				<0.2		1.6	
						4.0	0.3	275	28.6		8.1		19.5		98.7		6.8		4.6		5		89				<0.2		1.6	
					Bottom	7.0	0.2	241	26.9	26.9	8.0	8.0	27.6	27.5	80.4	83.8	5.5	5.8	5.1		6		91				<0.2		1.1	
						7.0	0.2	253	26.9		8.0		27.5		87.2		6.0		5.2		5		91				<0.2		1.1	
IM7	Fine	Rough	15:31	9.0	Surface	1.0	0.1	85	29.3	29.3	8.3	8.3	15.9	15.9	129.2	129.2	9.1	7.7	3.4	4.8	5	4	87	89	821338	806837	<0.2	<0.2	1.4	1.5
						1.0	0.1	87	29.3		8.3		15.9		129.1		9.1		3.3		5		86				<0.2		1.4	
					Middle	4.5	0.2	209	28.6	28.6	8.0	8.0	20.3	20.3	89.1	89.0	6.2		5.1		4		89				<0.2		1.7	
						4.5	0.2	219	28.6		8.0		20.3		88.8		6.2		5.1		3		89				<0.2		1.8	
					Bottom	8.0	0.1	208	26.7	26.7	8.0	8.0	28.3	28.2	71.1	71.3	4.9	4.9	5.8		3		91				<0.2		1.4	
						8.0	0.1	211	26.7		8.0		28.2		71.5		4.9		5.8		4		91				<0.2		1.3	
IM8	Sunny	Rough	15:53	7.8	Surface	1.0	1.5	139	28.9	28.8	8.2	8.2	16.6	16.6	110.0	109.4	7.7	7.0	2.8	4.9	4	4	86	89	821839	808116	<0.2	<0.2	1.6	1.6
						1.0	1.6	147	28.7		8.2		16.6		108.8		7.7		3.1		5		85				<0.2		1.5	
					Middle	3.9	1.6	140	28.2	28.2	8.0	8.0	19.7	19.7	91.1	90.8	6.4		4.8		3		88				<0.2		1.6	
						3.9	1.6	149	28.1		8.0		19.7		90.4		6.3		5.2		3		89				<0.2		1.6	
					Bottom	6.8	2.1	141	27.7	27.7	8.0	8.0	24.7	24.7	76.3	76.7	5.2	5.3	6.7		4		92				<0.2		1.5	
						6.8	2.2	150	27.7		8.0		24.7		77.1		5.3		6.7		3		92				<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 18 May 21 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Sunny	Moderate	15:59	7.9	Surface	1.0	2.0	91	29.1	29.1	8.3	8.3	16.3	16.3	117.1	116.3	8.2	7.0	2.0	8.0	4	6	86	89	822086	808822	<0.2	<0.2	1.6	1.5
						1.0	2.1	98	29.0		8.3		16.3		115.4		8.1		2.2		4		86				<0.2		1.4	
					Middle	4.0	2.3	96	28.1	28.1	8.0	8.0	20.4	20.4	84.0	84.1	5.9		7.8		5		88				<0.2		1.4	
						4.0	2.3	101	28.0		8.0		20.5		84.2		5.9		8.7		6		90				<0.2		1.6	
					Bottom	6.9	2.1	92	27.5	27.5	8.0	8.0	25.4	25.4	73.8	74.2	5.1	5.1	13.5		8		90				<0.2		1.5	
						6.9	2.3	95	27.5		8.0		25.4		74.5		5.1		13.9		9		91				<0.2		1.5	
IM10	Sunny	Moderate	16:04	7.8	Surface	1.0	1.9	106	29.1	29.1	8.2	8.2	17.1	17.1	110.5	110.3	7.7	6.8	2.0	8.3	4	4	85	89	822403	809798	<0.2	<0.2	1.4	1.5
						1.0	2.0	115	29.1		8.2		17.1		110.1		7.7		2.1		5		85				<0.2		1.6	
					Middle	3.9	2.7	111	28.0	28.0	8.1	8.1	21.0	20.8	83.1	83.6	5.8		10.9		4		90				<0.2		1.5	
						3.9	3.0	111	27.9		8.1		20.7		84.0		5.9		11.8		4		90				<0.2		1.4	
					Bottom	6.8	2.1	115	27.7	27.7	8.1	8.1	25.2	25.2	76.6	76.8	5.2	5.3	11.7		3		91				<0.2		1.6	
						6.8	2.3	122	27.7		8.1		25.2		77.0		5.3		11.2		4		91				<0.2		1.4	
IM11	Sunny	Moderate	16:15	8.3	Surface	1.0	2.8	100	29.5	29.5	8.2	8.2	16.9	16.9	110.9	110.6	7.7	6.5	3.0	6.0	3	4	85	89	822050	811468	<0.2	<0.2	1.5	1.5
						1.0	3.1	104	29.5		8.2		16.9		110.2		7.7		3.1		4		86				<0.2		1.6	
					Middle	4.2	2.6	96	27.6	27.6	8.1	8.1	22.8	22.8	74.7	74.8	5.2		7.2		4		89				<0.2		1.6	
						4.2	2.8	104	27.6		8.1		22.8		74.8		5.2		7.5		4		90				<0.2		1.5	
					Bottom	7.3	2.7	96	27.6	27.6	8.1	8.1	26.0	26.0	76.1	76.4	5.2	5.2	7.5		5		92				<0.2		1.4	
						7.3	2.7	100	27.6		8.1		26.0		76.6		5.2		7.6		4		90				<0.2		1.6	
IM12	Sunny	Moderate	16:21	8.8	Surface	1.0	3.2	115	28.9	28.8	8.2	8.2	17.2	17.2	106.6	105.7	7.5	6.4	4.5	5.9	4	4	84	88	821465	812037	<0.2	<0.2	1.5	1.6
						1.0	3.3	116	28.7		8.2		17.2		104.8		7.4		5.1		3		85				<0.2		1.5	
					Middle	4.4	3.0	114	28.2	28.2	8.0	8.0	21.3	21.3	78.4	78.4	5.4		6.7		4		86				<0.2		1.5	
						4.4	3.2	121	28.1		8.0		21.3		78.4		5.4		6.7		4		89				<0.2		1.8	
					Bottom	7.8	3.2	111	28.4	28.4	8.0	8.0	23.6	23.6	81.3	81.7	5.6	5.6	6.3		4		91				<0.2		1.7	
						7.8	3.4	118	28.4		8.0		23.5		82.0		5.6		6.4		4		90				<0.2		1.5	
SR1A	Sunny	Moderate	16:51	4.7	Surface	1.0	-	-	29.2	29.2	8.2	8.2	18.7	18.7	112.3	112.1	7.8	7.8	2.5	2.8	5	5	-	-	819974	812659	-	-	-	-
						1.0	-	-	29.2		8.2		18.8		111.9		7.7		2.5		4		-				-		-	
					Middle	2.4	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.4	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	-	-	28.8	28.9	8.1	8.1	20.4	20.4	98.3	98.8	6.8	6.8	3.0		4		-				-		-	
						3.7	-	-	28.9		8.1		20.4		99.3		6.8		3.1		5		-				-		-	
SR2	Sunny	Moderate	17:05	5.1	Surface	1.0	0.4	90	29.4	29.4	8.2	8.2	17.3	17.3	115.9	115.7	8.1	8.1	1.6	2.2	4	4	89	90	821486	814156	<0.2	<0.2	1.6	1.5
						1.0	0.4	98	29.4		8.2		17.3		115.5		8.0		1.6		5		90				<0.2		1.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	0.2	57	28.8	28.8	8.1	8.1	19.8	19.8	96.1	96.3	6.6	6.7	2.9		4		91				<0.2		1.4	
						4.1	0.2	61	28.8		8.1		19.8		96.4		6.7		2.9		4		91				<0.2		1.5	
SR3	Sunny	Rough	15:48	8.4	Surface	1.0	2.3	85	29.3	29.3	8.3	8.3	16.2	16.2	117.1	117.0	8.2	7.2	1.7	5.2	4	4	-	-	822155	807549	-	-	-	-
						1.0	2.6	89	29.2		8.3		16.2		116.8		8.2		1.7		4		-				-		-	
					Middle	4.2	2.3	87	28.2	28.2	8.1	8.1	20.6	20.7	89.2	89.0	6.2		5.3		5		-				-		-	
						4.2	2.4	91	28.1		8.1		20.7		88.7		6.2		5.8		4		-				-		-	
					Bottom	7.4	2.3	95	27.7	27.7	8.1	8.1	25.0	25.0	76.3	76.9	5.2	5.3	8.3		4		-				-		-	
						7.4	2.4	100	27.7		8.1		25.0		77.5		5.3		8.2		4		-				-		-	
SR4A	Fine	Calm	16:59	8.2	Surface	1.0	0.1	171	29.3	29.3	8.2	8.2	17.9	17.9	132.0	131.6	9.2	7.4	5.0	5.8	4	5	-	-	817194	807786	-	-	-	-
						1.0	0.2	177	29.3		8.2		17.9		131.1		9.1		5.1		5		-				-		-	
					Middle	4.1	0.1	239	27.2	27.2	8.0	8.0	26.1	26.1	80.9	80.9	5.6		5.9		5		-				-		-	
						4.1	0.1	253	27.2		8.0		26.2		80.9		5.6		5.9		4		-				-		-	
					Bottom	7.2	0.1	283	27.1	27.1	8.0	8.0	27.0	26.9	78.1	78.3	5.3	5.4	6.3		5		-				-		-	
						7.2	0.2	293	27.1		8.0		26.9		78.5		5.4		6.5		5		-				-		-	
SR5A	Fine	Calm	17:16	4.0	Surface	1.0	0.1	254	29.5	29.5	8.2	8.2	19.5	19.6	146.6	146.3	10.0	10.0	6.1	6.5	4	4	-	-	816588	810704	-	-	-	-
						1.0	0.1	260	29.5		8.2		19.6		146.0		10.0		6.3		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	0.1	271	29.4	29.4	8.2	8.2	19.8	19.8	126.7	126.4	8.7	8.7	6.8		4		-				-		-	
						3.0	0.1	271	29.4		8.2		19.8		126.1		8.6		6.8		5		-				-		-	
SR6A	Fine	Calm	17:46	3.2	Surface	1.0	0.1	347	29.1	29.1	8.2	8.2	19.8	19.8	129.2	128.7	8.9	8.9	6.8	7.2	3	4	-	-	817979	814734	-	-	-	-
						1.0	0.1	319	29.1		8.2		19.9		128.2		8.8		7.0		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.2	0.1	351	29.0	29.0	8.1	8.1	20.2	20.2	109.3	109.7	7.5	7.6	7.4		4		-				-		-	
						2.2	0.1	323	29.0		8.1		20.1		110.0		7.6		7.5		5		-				-		-	
SR7	Sunny	Moderate	17:56	16.8	Surface	1.0	1.2	46	29.5	29.5	8.2	8.2	17.3	17.3	132.2	132.1	9.2	7.9	1.1	1.5	5	4	-	-	823633	823729	-	-	-	-
						1.0	1.2	46	29.5		8.2		17.3		131.9		9.1		1.1		5		-				-		-	
					Middle	8.4	1.8	13	27.8	27.8	8.2	8.2	23.0	23.0	94.9	94.9	6.6		1.4		5		-				-		-	
						8.4	1.9	13	27.7		8.2		23.0		94.8		6.6		1.4		4		-				-		-	
					Bottom	15.8	1.7	22	27.2	27.2	8.2	8.2	27.3	27.3	91.8	92.1	6.3	6.3	2.1		3		-				-		-	
						15.8	1.7	22	27.2		8.2		27.3		92.4		6.3		2.0		4		-				-		-	
SR8	Sunny	Moderate	16:29	4.6	Surface	1.0	-	-	29.0	29.0	8.1	8.1	19.5	19.5	98.1	97.8	6.8	6.8	9.2	11.1	5	5	-	-	820408	811614	-	-	-	-
						1.0	-	-	28.9		8.1		19.6		97.4		6.7		10.2		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	-	-	28.8	28.8	8.1	8.1	19.9	19.9	90.6	90.6	6.3	6.3	12.7		5		-				-		-	
						3.6	-	-	28.8		8.1		20.0		90.6		6.3		12.2		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 18 May 21 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	04:58	9.0	Surface	1.0	0.2	31	29.1	29.1	8.2	8.2	16.8	16.8	116.7	116.0	8.2	7.2	3.6	4.5	3	4	85	88	815634	804224	<0.2	<0.2	1.1	1.3
						1.0	0.2	31	29.1		8.2		16.8		115.3		8.1		3.9		2		86				<0.2		1.1	
					Middle	4.5	0.1	41	26.7	26.7	8.1	8.1	28.3	28.3	89.9	90.2	6.1		4.1		4		88				<0.2		1.4	
						4.5	0.1	41	26.7		8.1		28.3		90.5		6.2		4.0		5		89				<0.2		1.4	
					Bottom	8.0	0.1	44	25.9	25.9	8.1	8.1	31.3	31.3	74.7	74.8	5.1	5.1	5.8		4		90				<0.2		1.3	
						8.0	0.1	47	25.9		8.1		31.3		74.9		5.1		5.9		4		90				<0.2		1.3	
C2	Cloudy	Moderate	06:22	12.4	Surface	1.0	2.2	285	29.5	29.5	8.3	8.3	14.8	14.8	117.1	117.1	8.2	7.2	1.6	2.2	3	3	85	87	825667	806950	<0.2	<0.2	1.5	1.6
						1.0	2.2	285	29.5		8.3		14.8		117.1		8.2		1.6		2		85				<0.2		1.5	
					Middle	6.2	2.6	282	28.6	28.6	8.1	8.1	21.3	21.3	88.1	88.2	6.1		1.3		2		87				<0.2		1.6	
						6.2	2.6	292	28.5		8.1		21.3		88.2		6.1		1.4		3		88				<0.2		1.5	
					Bottom	11.4	2.4	282	27.7	27.7	8.1	8.1	25.4	25.4	78.3	78.5	5.4	5.4	3.7		4		89				<0.2		1.6	
						11.4	2.4	305	27.7		8.1		25.5		78.6		5.4		3.5		4		90				<0.2		1.6	
C3	Cloudy	Moderate	04:18	12.4	Surface	1.0	2.9	80	29.4	29.4	8.2	8.2	16.1	16.1	112.1	112.0	7.8	6.7	1.2	1.5	3	4	85	88	822088	817824	<0.2	<0.2	1.5	1.6
						1.0	3.0	86	29.4		8.2		16.2		111.9		7.8		1.2		4		85				<0.2		1.5	
					Middle	6.2	2.9	80	26.8	26.8	8.2	8.2	26.7	26.7	80.6	80.6	5.6		1.4		3		88				<0.2		1.6	
						6.2	3.0	82	26.7		8.2		26.7		80.6		5.6		1.4		4		88				<0.2		1.5	
					Bottom	11.4	3.1	80	26.6	26.7	8.2	8.2	30.4	30.4	76.2	76.3	5.2	5.2	2.0		4		90				<0.2		1.8	
						11.4	3.3	87	26.7		8.2		30.4		76.3		5.2		1.8		3		90				<0.2		1.8	
IM1	Fine	Calm	05:18	5.5	Surface	1.0	0.0	25	29.2	29.2	8.2	8.2	16.7	16.7	133.4	133.2	9.3	9.3	2.7	3.6	4	4	87	90	817968	807146	<0.2	<0.2	2.3	1.7
						1.0	0.0	27	29.2		8.2		16.7		133.0		9.3		2.8		4		87				<0.2		2.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.5	0.1	225	28.8	28.8	8.2	8.2	18.1	18.2	116.2	115.9	8.1	8.1	4.4		4		92				<0.2		1.2	
						4.5	0.1	244	28.8		8.2		18.2		115.5		8.1		4.4		5		93				<0.2		1.2	
IM2	Fine	Rough	05:27	7.6	Surface	1.0	0.2	29	29.0	29.0	8.2	8.2	17.1	17.1	125.1	124.9	8.8	8.4	2.9	4.3	7	6	86	88	818168	806170	<0.2	<0.2	1.4	1.6
						1.0	0.2	31	29.0		8.2		17.1		124.7		8.7		2.9		7		85				<0.2		1.4	
					Middle	3.8	0.2	16	28.9	28.9	8.2	8.2	17.4	17.4	117.6	115.3	8.2		4.5		5		88				<0.2		2.0	
						3.8	0.2	17	28.9		8.2		17.4		112.9		7.9		4.6		6		89				<0.2		2.0	
					Bottom	6.6	0.1	344	27.1	27.1	8.1	8.1	27.0	27.0	82.6	83.0	5.7	5.7	5.3		4		90				<0.2		1.3	
						6.6	0.1	316	27.1		8.1		27.0		83.3		5.7		5.5		5		90				<0.2		1.3	
IM3	Fine	Rough	05:33	7.5	Surface	1.0	0.1	19	29.0	29.0	8.1	8.1	16.7	16.7	122.2	121.9	8.6	8.4	3.1	4.4	6	6	87	89	818779	805617	<0.2	<0.2	1.5	1.7
						1.0	0.1	20	29.0		8.1		16.7		121.6		8.5		3.1		5		87				<0.2		1.6	
					Middle	3.8	0.1	245	28.9	28.9	8.1	8.1	17.4	17.4	117.3	116.8	8.2		4.3		6		88				<0.2		1.5	
						3.8	0.1	249	28.9		8.1		17.4		116.3		8.1		4.2		5		89				<0.2		1.5	
					Bottom	6.5	0.1	153	27.0	27.0	8.1	8.1	27.4	27.3	80.5	80.6	5.5	5.5	5.8		6		91				<0.2		2.1	
						6.5	0.1	163	27.0		8.1		27.3		80.7		5.5		5.7		5		91				<0.2		2.0	
IM4	Fine	Rough	05:43	8.8	Surface	1.0	0.5	342	29.0	29.0	8.2	8.2	16.0	16.0	116.8	116.6	8.2	6.9	3.3	5.0	6	5	83	87	819715	804619	<0.2	<0.2	2.0	1.9
						1.0	0.6	315	29.0		8.2		16.0		116.4		8.2		3.8		5		83				<0.2		2.1	
					Middle	4.4	0.5	354	27.1	27.1	8.1	8.1	26.8	26.8	81.6	81.6	5.6		5.4		5		86				<0.2		2.0	
						4.4	0.6	326	27.1		8.1		26.8		81.6		5.6		5.3		6		87				<0.2		2.0	
					Bottom	7.8	0.5	360	26.4	26.4	8.1	8.1	29.2	29.2	76.9	77.0	5.3	5.3	6.1		4		90				<0.2		1.8	
						7.8	0.5	331	26.4		8.1		29.2		77.0		5.3		6.3		3		90				<0.2		1.7	
IM5	Fine	Rough	05:50	7.9	Surface	1.0	0.7	5	29.1	29.1	8.3	8.3	16.3	16.3	119.6	119.5	8.4	7.2	3.2	5.1	4	4	85	88	820713	804883	<0.2	<0.2	2.2	2.0
						1.0	0.8	5	29.1		8.3		16.3		119.4		8.4		3.2		5		85				<0.2		2.0	
					Middle	4.0	0.7	7	27.1	27.1	8.1	8.1	26.4	25.1	85.2	85.7	5.9		5.5		5		88				<0.2		1.9	
						4.0	0.8	7	27.0		8.1		23.8		86.1		6.0		5.7		4		88				<0.2		1.9	
					Bottom	6.9	0.6	12	26.6	26.6	8.1	8.1	28.4	28.4	75.5	75.6	5.2	5.2	6.3		4		91				<0.2		1.9	
						6.9	0.6	12	26.6		8.1		28.5		75.7		5.2		6.4		4		91				<0.2		1.9	
IM6	Fine	Rough	05:58	7.2	Surface	1.0	0.1	354	29.1	29.1	8.2	8.2	17.7	17.7	113.3	113.1	7.9	7.2	3.7	5.1	5	5	87	89	821077	805808	<0.2	<0.2	2.2	2.0
						1.0	0.1	326	29.0		8.2		17.8		112.9		7.9		3.9		5		87				<0.2		2.2	
					Middle	3.6	0.3	37	27.9	27.9	8.1	8.1	21.7	21.7	92.4	92.3	6.4		5.4		5		89				<0.2		1.9	
						3.6	0.3	38	27.8		8.1		21.8		92.1		6.4		5.4		5		90				<0.2		2.0	
					Bottom	6.2	0.3	59	26.7	26.7	8.0	8.0	28.2	28.2	70.8	71.0	4.8	4.9	6.1		6		91				<0.2		1.7	
						6.2	0.3	61	26.7		8.0		28.2		71.1		4.9		6.3		6		92				<0.2		1.7	
IM7	Fine	Rough	06:07	8.9	Surface	1.0	0.1	82	29.1	29.1	8.2	8.2	16.5	16.5	120.9	120.8	8.5	7.4	3.5	4.6	5	5	87	90	821333	806830	<0.2	<0.2	1.4	1.3
						1.0	0.1	85	29.1		8.2		16.6		120.6		8.5		3.7		5		88				<0.2		1.3	
					Middle	4.5	0.2	79	28.3	28.4	8.1	8.1	22.0	22.0	90.0	90.2	6.2		4.7		5		89				<0.2		1.4	
						4.5	0.2	83	28.4		8.1		22.0		90.3		6.2		4.6		5		90				<0.2		1.2	
					Bottom	7.9	0.2	80	26.7	26.7	8.0	8.0	28.2	28.2	71.3	71.5	4.9	4.9	5.5		6		92				<0.2		1.2	
						7.9	0.2	83	26.7		8.0		28.2		71.6		4.9		5.6		5		93				<0.2		1.2	
IM8	Cloudy	Moderate	05:57	8.3	Surface	1.0	2.5	101	29.3	29.3	8.1	8.1	17.4	17.4	101.3	101.3	7.1	6.8	1.5	3.0	3	3	85	88	821846	808129	<0.2	<0.2	1.7	1.6
						1.0	2.7	111	29.2		8.1		17.5		101.2		7.0		1.5		3		85				<0.2		1.9	
					Middle	4.2	2.6	100	28.8	28.8	8.0	8.0	18.0	18.0	93.3	93.2	6.5		3.2		3		89				<0.2		1.5	
						4.2	2.8	109	28.7		8.0		18.0		93.1		6.5		3.6		3		88				<0.2		1.5	
					Bottom	7.3	2.6	98	28.6	28.7	8.0	8.0	21.5	21.5	78.3	78.7	5.4	5.4	4.3		4		90				<0.2		1.6	
						7.3	2.9	100	28.7		8.0		21.5		79.0		5.4		3.9		3		90				<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 18 May 21 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	05:51	7.8	Surface	1.0	2.8	98	29.4	29.4	8.2	8.2	17.0	17.0	101.8	101.7	7.1	6.4	1.9	6.0	3	4	86	88	822086	808807	<0.2	<0.2	1.7	1.6
						1.0	2.8	102	29.3		8.2		17.0		101.5		7.1		2.0		4		85				<0.2		1.7	
					Middle	3.9	2.4	95	28.5	28.5	8.0	8.0	20.9	20.9	81.9	81.9	5.7		7.0		4		87				<0.2		1.5	
						3.9	2.4	102	28.5		8.0		21.0		81.8		5.7		7.6		4		88				<0.2		1.5	
					Bottom	6.8	2.8	95	28.4	28.4	8.0	8.0	22.1	22.0	76.9	77.0	5.3	5.3	8.9		4		89				<0.2		1.5	
						6.8	2.9	98	28.4		8.0		22.0		77.1		5.3		8.4		4		92				<0.2		1.4	
IM10	Cloudy	Moderate	05:42	8.2	Surface	1.0	2.5	110	29.2	29.2	8.1	8.1	16.9	16.9	103.3	103.0	7.2	6.7	1.9	3.1	4	4	85	89	822380	809800	<0.2	<0.2	1.5	1.6
						1.0	2.7	113	29.2		8.1		16.9		102.7		7.2		1.9		4		85				<0.2		1.6	
					Middle	4.1	2.6	105	28.6	28.6	8.1	8.1	20.2	20.2	89.1	89.0	6.2		1.8		4		89				<0.2		1.8	
						4.1	2.7	112	28.6		8.1		20.2		88.9		6.2		1.9		4		89				<0.2		1.8	
					Bottom	7.2	2.9	104	28.1	28.1	8.1	8.1	23.6	23.7	79.9	80.0	5.5	5.5	5.2		4		92				<0.2		1.5	
						7.2	3.1	110	28.1		8.1		23.7		80.0		5.5		5.8		3		92				<0.2		1.6	
IM11	Cloudy	Moderate	05:31	8.2	Surface	1.0	1.1	27	29.2	29.2	8.2	8.2	16.4	16.4	107.1	106.9	7.5	6.9	1.4	2.7	4	3	86	87	822046	811454	<0.2	<0.2	1.5	1.4
						1.0	1.2	28	29.2		8.2		16.5		106.7		7.5		1.4		3		86				<0.2		1.4	
					Middle	4.1	1.1	22	28.2	28.2	8.1	8.1	20.7	20.7	89.8	89.6	6.2		3.0		3		88				<0.2		1.4	
						4.1	1.1	23	28.2		8.1		20.7		89.4		6.2		3.3		3		87				<0.2		1.5	
					Bottom	7.2	1.1	24	28.4	28.5	8.1	8.1	24.5	24.5	83.5	83.8	5.7	5.7	3.6		2		89				<0.2		1.4	
						7.2	1.2	26	28.5		8.1		24.5		84.0		5.7		3.5		3		88				<0.2		1.4	
IM12	Cloudy	Moderate	05:25	9.8	Surface	1.0	2.0	73	29.6	29.6	8.2	8.2	16.1	16.1	110.9	110.9	7.7	6.7	1.8	3.8	2	3	86	88	821457	812035	<0.2	<0.2	1.5	1.5
						1.0	2.2	74	29.6		8.2		16.2		110.8		7.7		2.0		3		87				<0.2		1.6	
					Middle	4.9	2.3	69	28.0	28.0	8.2	8.2	22.8	22.9	81.4	81.4	5.6		5.5		3		87				<0.2		1.5	
						4.9	2.4	74	28.0		8.2		22.9		81.3		5.6		5.4		3		87				<0.2		1.4	
					Bottom	8.8	2.6	68	27.8	27.8	8.2	8.2	25.8	25.8	83.0	83.1	5.7	5.7	4.1		3		90				<0.2		1.5	
						8.8	2.7	73	27.8		8.2		25.8		83.2		5.7		4.2		4		91				<0.2		1.4	
SR1A	Cloudy	Moderate	04:56	4.6	Surface	1.0	-	-	29.5	29.5	8.1	8.1	17.0	17.0	105.3	105.2	7.3	7.3	1.8	2.3	3	3	-	-	819978	812664	-	-	-	-
						1.0	-	-	29.4		8.1		17.1		105.0		7.3		1.8		2		-				-		-	
					Middle	2.3	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.3	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	-	-	29.1	29.1	8.1	8.1	19.0	19.0	97.8	97.8	6.8	6.8	2.7		3		-				-		-	
						3.6	-	-	29.1		8.1		19.0		97.8		6.8		2.7		4		-				-		-	
SR2	Cloudy	Moderate	04:41	4.8	Surface	1.0	2.1	54	29.4	29.4	8.2	8.2	16.3	16.3	111.8	111.7	7.8	7.8	1.5	2.3	3	3	87	88	821465	814155	<0.2	<0.2	1.5	1.5
						1.0	2.2	56	29.4		8.2		16.3		111.6		7.8		1.7		2		87				<0.2		1.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	2.0	54	28.7	28.8	8.2	8.2	21.0	21.0	93.1	93.3	6.4	6.4	3.1		4		88				<0.2		1.5	
						3.8	2.0	59	28.8		8.2		21.0		93.4		6.4		3.0		4		89				<0.2		1.5	
SR3	Cloudy	Moderate	06:02	8.7	Surface	1.0	2.9	103	29.3	29.3	8.2	8.2	15.9	15.9	111.4	111.3	7.8	7.0	1.5	8.0	3	4	-	-	822134	807559	-	-	-	-
						1.0	3.1	112	29.3		8.2		15.9		111.1		7.8		1.5		3		-				-		-	
					Middle	4.4	3.0	102	28.3	28.3	8.1	8.1	18.4	18.4	87.5	87.0	6.2		8.3		3		-				-		-	
						4.4	3.0	106	28.2		8.1		18.5		86.5		6.1		9.2		4		-				-		-	
					Bottom	7.7	2.8	104	28.0	28.0	8.0	8.0	22.9	22.9	71.1	71.2	4.9	4.9	13.5		5		-				-		-	
						7.7	2.9	112	28.0		8.0		22.9		71.2		4.9		14.0		5		-				-		-	
SR4A	Fine	Calm	04:34	9.6	Surface	1.0	0.4	74	29.0	29.0	8.3	8.3	18.2	18.2	124.8	124.7	8.7	8.0	3.7	4.6	5	5	-	-	817190	807817	-	-	-	-
						1.0	0.4	80	28.9		8.3		18.2		124.6		8.7		3.9		6		-				-		-	
					Middle	4.8	0.3	59	28.7	28.7	8.2	8.2	20.0	20.0	105.4	105.2	7.3		4.6		4		-				-		-	
						4.8	0.3	61	28.7		8.2		20.0		104.9		7.3		4.6		5		-				-		-	
					Bottom	8.6	0.2	70	26.9	26.9	8.1	8.1	28.0	28.0	78.5	78.6	5.4	5.4	5.4		5		-				-		-	
						8.6	0.2	71	26.9		8.1		28.0		78.7		5.4		5.3		4		-				-		-	
SR5A	Fine	Calm	03:44	4.5	Surface	1.0	0.0	261	29.2	29.2	8.2	8.2	18.8	18.8	119.8	119.5	8.3	8.3	4.4	5.1	6	6	-	-	816592	810675	-	-	-	-
						1.0	0.0	285	29.1		8.2		18.8		119.2		8.3		4.8		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.0	315	29.0	29.0	8.2	8.2	20.4	20.4	106.4	106.5	7.3	7.3	5.8		6		-				-		-	
						3.5	0.0	340	29.0		8.2		20.4		106.5		7.3		5.6		5		-				-		-	
SR6A	Fine	Calm	03:16	4.6	Surface	1.0	0.1	280	29.3	29.3	8.1	8.1	17.1	17.1	113.1	113.1	7.9	7.9	4.2	4.7	4	5	-	-	817961	814730	-	-	-	-
						1.0	0.1	284	29.3		8.1		17.1		113.0		7.9		4.4		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.1	276	28.9	28.9	8.0	8.0	18.4	18.4	102.7	102.6	7.1	7.1	5.0		5		-				-		-	
						3.6	0.1	288	28.9		8.0		18.4		102.5		7.1		5.2		4		-				-		-	
SR7	Cloudy	Moderate	03:47	16.8	Surface	1.0	2.6	64	28.8	28.8	8.2	8.2	17.8	17.8	105.2	105.1	7.4	6.7	0.4	1.0	2	3	-	-	823620	823746	-	-	-	-
						1.0	2.7	68	28.7		8.2		17.9		104.9		7.4		0.4		3		-				-		-	
					Middle	8.4	2.6	62	27.2	27.2	8.2	8.2	25.8	25.9	85.5	85.4	5.9		0.8		3		-				-		-	
						8.4	2.7	64	27.1		8.2		25.9		85.3		5.9		1.0		2		-				-		-	
					Bottom	15.8	2.6	60	26.3	26.3	8.2	8.2	30.5	30.4	77.7	77.7	5.3	5.3	1.8		3		-				-		-	
						15.8	2.8	63	26.3		8.2		30.4		77.7		5.3		1.8		3		-				-		-	
SR8	Cloudy	Moderate	05:17	4.8	Surface	1.0	-	-	29.0	29.0	8.1	8.1	19.0	19.1	93.0	92.9	6.4	6.4	2.3	2.3	4	4	-	-	820379	811606	-	-	-	-
						1.0	-	-	28.9		8.1		19.2		92.8		6.4		2.3		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	-	-	28.8	28.8	8.1	8.1	19.9	19.9	91.1	91.1	6.3	6.3	2.2		5		-				-		-	
						3.8	-	-	28.8		8.1		19.8		91.0		6.3		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 20 May 21 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	Calm	18:51	8.4	Surface	1.0	0.3	213	29.2	29.2	8.3	8.3	13.3	13.3	124.8	124.8	8.9	8.4	7.2	8.3	6	6	89	90	815642	804264	<0.2	<0.2	1.3	1.3
						1.0	0.3	220	29.2		8.3		13.3		124.7		8.9		7.1		6		89				<0.2		1.4	
					Middle	4.2	0.2	209	29.1	29.1	8.3	8.3	16.5	16.5	112.6	112.4	7.9		8.8		6		90				<0.2		1.2	
						4.2	0.2	218	29.1		8.3		16.5		112.2		7.9		8.8		6		90				<0.2		1.2	
					Bottom	7.4	0.2	190	28.5	28.7	8.1	8.1	21.8	22.3	105.0	107.5	7.2	7.4	9.1		6		91				<0.2		1.3	
						7.4	0.2	205	28.9		8.1		22.8		110.0		7.5		9.0		6		92				<0.2		1.3	
C2	Cloudy	Moderate	17:43	11.6	Surface	1.0	0.3	176	29.2	29.2	8.3	8.3	12.7	12.7	110.1	110.1	7.9	7.0	4.3	4.3	4	5	83	86	825661	806939	<0.2	<0.2	1.5	1.4
						1.0	0.3	185	29.2		8.3		12.7		110.0		7.9				5		84				<0.2		1.4	
					Middle	5.8	0.2	166	28.2	28.2	8.1	8.1	22.2	22.2	87.3	87.3	6.0		3.5		5		87				<0.2		1.4	
						5.8	0.2	173	28.2		8.1		22.2		87.2		6.0		3.6		5		86				<0.2		1.4	
					Bottom	10.6	0.3	180	27.2	27.2	8.1	8.1	27.0	27.0	72.6	72.7	5.0	5.0	4.9		5		88				<0.2		1.4	
						10.6	0.3	182	27.2		8.1		27.0		72.7		5.0		4.9		5		89				<0.2		1.4	
C3	Cloudy	Moderate	19:57	12.3	Surface	1.0	0.4	47	29.6	29.6	8.5	8.5	14.5	14.5	156.9	156.6	11.0	8.6	3.8	4.0	9	8	86	88	822095	817804	<0.2	<0.2	1.4	1.4
						1.0	0.5	51	29.6		8.5		14.5		156.2		11.0		3.8		8		86				<0.2		1.4	
					Middle	6.2	0.2	22	27.2	27.2	8.2	8.2	26.8	26.9	90.8	90.7	6.2		2.6		8		88				<0.2		1.4	
						6.2	0.2	22	27.2		8.2		26.9		90.6		6.2		2.6		7		88				<0.2		1.4	
					Bottom	11.3	0.1	68	26.1	26.1	8.1	8.1	30.7	30.7	77.7	77.8	5.3	5.3	5.3		8		90				<0.2		1.4	
						11.3	0.2	70	26.1		8.1		30.7		77.8		5.3		5.7		8		90				<0.2		1.4	
IM1	Fine	Calm	18:27	5.2	Surface	1.0	0.1	178	29.6	29.6	8.3	8.3	12.8	12.9	119.7	118.9	8.5	8.5	7.1	7.3	6	6	87	89	817927	807127	<0.2	<0.2	2.1	2.5
						1.0	0.1	183	29.6		8.3		12.9		118.1		8.4		7.1		6		88				<0.2		2.1	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.1	216	29.3	29.3	8.2	8.2	16.3	16.3	109.0	109.3	7.6	7.7	7.4		6		90				<0.2		2.8	
						4.2	0.1	233	29.3		8.2		16.3		109.5		7.7		7.4		6		91				<0.2		2.8	
IM2	Fine	Calm	18:22	7.0	Surface	1.0	0.2	167	29.6	29.6	8.3	8.3	12.7	12.7	121.0	120.6	8.6	8.1	6.5	7.3	5	6	89	90	818181	806169	<0.2	<0.2	1.6	1.7
						1.0	0.2	173	29.6		8.3		12.7		120.2		8.5		6.5		5		89				<0.2		1.6	
					Middle	3.5	0.2	132	29.3	29.3	8.2	8.2	15.1	15.0	108.9	108.3	7.7		7.4		6		90				<0.2		1.6	
						3.5	0.2	143	29.3		8.2		15.0		107.6		7.6		7.5		5		91				<0.2		1.6	
					Bottom	6.0	0.2	141	28.9	28.9	8.1	8.1	20.1	20.0	97.4	98.5	6.7	6.8	8.0		7		91				<0.2		1.7	
						6.0	0.2	152	28.9		8.1		20.0		99.5		6.9		8.0		6		91				<0.2		1.8	
IM3	Fine	Calm	18:17	7.4	Surface	1.0	0.2	215	29.5	29.5	8.3	8.3	13.4	13.2	110.2	110.0	7.8	7.5	7.6	8.0	7	5	89	90	818793	805615	<0.2	<0.2	2.3	2.3
						1.0	0.2	227	29.5		8.3		13.0		109.7		7.8		7.6		6		89				<0.2		2.2	
					Middle	3.7	0.1	184	29.3	29.3	8.2	8.2	15.3	15.2	102.5	102.2	7.2		7.7		5		90				<0.2		2.6	
						3.7	0.1	194	29.3		8.2		15.2		101.8		7.2		7.8		5		90				<0.2		2.6	
					Bottom	6.4	0.3	122	28.8	28.8	8.1	8.1	20.2	20.1	93.3	94.0	6.4	6.5	8.6		3		91				<0.2		2.0	
						6.4	0.3	132	28.8		8.1		20.1		94.6		6.5		8.6		4		92				<0.2		2.0	
IM4	Fine	Calm	18:10	8.6	Surface	1.0	0.4	233	29.7	29.6	8.3	8.3	12.6	12.6	119.1	118.4	8.5	7.4	7.7	9.2	4	5	87	89	819719	804590	<0.2	<0.2	1.6	1.6
						1.0	0.4	239	29.6		8.3		12.6		117.7		8.4		7.9		4		88				<0.2		1.7	
					Middle	4.3	0.2	156	29.0	29.0	8.1	8.1	16.0	16.1	89.9	89.7	6.3		9.3		6		89				<0.2		1.6	
						4.3	0.2	161	29.0		8.1		16.2		89.4		6.3		9.4		5		89				<0.2		1.6	
					Bottom	7.6	0.2	149	28.6	28.6	8.0	8.0	21.1	21.5	89.2	90.3	6.2	6.3	10.5		6		91				<0.2		1.6	
						7.6	0.2	160	28.6		8.0		21.8		91.4		6.3		10.1		6		91				<0.2		1.7	
IM5	Fine	Calm	18:04	8.0	Surface	1.0	0.3	216	29.6	29.6	8.3	8.3	12.6	12.6	119.2	118.5	8.5	7.7	7.6	8.0	5	5	87	89	820736	804889	<0.2	<0.2	2.2	1.9
						1.0	0.3	229	29.6		8.3		12.6		117.8		8.4		7.5		5		88				<0.2		2.3	
					Middle	4.0	0.2	171	29.2	29.2	8.2	8.2	15.4	15.4	100.3	99.2	7.1		8.0		5		89				<0.2		1.8	
						4.0	0.2	183	29.2		8.2		15.4		98.1		6.9		8.2		5		89				<0.2		1.9	
					Bottom	7.0	0.2	157	28.9	29.0	8.1	8.1	20.4	20.4	104.8	107.3	7.2	7.4	8.3		4		91				<0.2		1.6	
						7.0	0.2	167	29.1		8.1		20.4		109.7		7.5		8.3		4		91				<0.2		1.6	
IM6	Fine	Calm	17:53	7.8	Surface	1.0	0.2	298	29.6	29.6	8.3	8.3	12.8	12.8	118.6	118.5	8.4	7.6	7.6	8.1	4	5	87	89	821055	805836	<0.2	<0.2	1.9	2.0
						1.0	0.3	322	29.6		8.3		12.8		118.4		8.4		7.6		4		87				<0.2		1.9	
					Middle	3.9	0.1	235	29.2	29.2	8.2	8.2	15.6	15.6	97.7	96.5	6.9		8.0		5		88				<0.2		2.2	
						3.9	0.1	245	29.2		8.2		15.6		95.2		6.7		8.1		5		89				<0.2		2.2	
					Bottom	6.8	0.2	192	28.8	28.8	8.1	8.1	20.2	20.2	92.9	94.4	6.4	6.5	8.7		5		90				<0.2		1.9	
						6.8	0.2	207	28.8		8.1		20.2		95.8		6.6		8.6		4		91				<0.2		1.8	
IM7	Fine	Calm	17:42	8.8	Surface	1.0	0.1	254	29.6	29.6	8.3	8.3	12.6	12.6	115.9	115.6	8.2	7.5	7.5	8.6	6	5	85	88	821366	806814	<0.2	<0.2	1.7	2.0
						1.0	0.1	274	29.6		8.3		12.6		115.3		8.2		7.5		6		85				<0.2		1.8	
					Middle	4.4	0.0	68	29.2	29.2	8.2	8.2	15.7	15.7	97.7	97.5	6.9		8.3		5		87				<0.2		2.5	
						4.4	0.0	69	29.2		8.2		15.7		97.3		6.8		8.4		5		88				<0.2		2.5	
					Bottom	7.8	0.1	139	28.6	28.7	8.0	8.0	21.1	21.3	91.6	93.4	6.3	6.4	10.1		4		92				<0.2		1.7	
						7.8	0.1	147	28.7		8.0		21.4		95.2		6.5		10.0		4		91				<0.2		1.8	
IM8	Cloudy	Moderate	18:08	7.3	Surface	1.0	0.1	156	29.5	29.5	8.3	8.3	13.5	13.5	120.5	120.4	8.5	7.9	4.1	4.6	5	5	85	86	821848	808117	<0.2	<0.2	1.5	1.4
						1.0	0.1	159	29.5		8.3		13.5		120.2		8.5		4.1		5		84				<0.2		1.4	
					Middle	3.7	0.2	124	29.1	29.1	8.2	8.2	15.5	15.6	104.3	104.1	7.4		4.3		4		86				<0.2		1.4	
						3.7	0.2	129	29.1		8.2		15.6		103.9		7.3		4.3		5		86				<0.2		1.4	
					Bottom	6.3	0.2	89	28.6	28.6	8.1	8.1	19.9	19.9	80.7	80.8	5.6	5.6	5.3		4		88				<0.2		1.4	
						6.3	0.2	94	28.6		8.1		20.0		80.8		5.6		5.4		4		89				<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 20 May 21 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	18:13	7.1	Surface	1.0	0.2	100	29.3	29.3	8.3	8.3	13.3	13.3	118.9	118.8	8.5	8.0	4.0	4.8	4	5	85	87	822076	808831	<0.2	<0.2	1.4	1.4
						1.0	0.2	107	29.3		8.3		13.3		118.6		8.4		4.0		4		84				<0.2		1.4	
					Middle	3.6	0.2	92	29.1	29.1	8.2	8.2	14.5	14.5	106.8	106.7	7.6		4.3		5		86				<0.2		1.4	
						3.6	0.2	95	29.1		8.2		14.6		106.6		7.6		4.2		5		87				<0.2		1.5	
					Bottom	6.1	0.2	77	28.5	28.5	8.0	8.0	20.8	20.8	72.8	72.8	5.0	5.0	6.1		5		89				<0.2		1.4	
						6.1	0.3	77	28.5		8.0		20.8		72.8		5.0		6.0		5		89				<0.2		1.5	
IM10	Cloudy	Moderate	18:21	8.0	Surface	1.0	0.5	109	29.2	29.2	8.3	8.3	13.1	13.1	117.5	117.5	8.4	8.0	3.9	4.5	5	5	85	87	822376	809796	<0.2	<0.2	1.4	1.4
						1.0	0.5	109	29.2		8.3		13.1		117.4		8.4		3.9		5		84				<0.2		1.4	
					Middle	4.0	0.5	121	29.1	29.1	8.2	8.2	15.5	15.5	105.8	105.8	7.5		4.1		5		87				<0.2		1.4	
						4.0	0.5	123	29.1		8.2		15.5		105.7		7.5		4.1		4		87				<0.2		1.4	
					Bottom	7.0	0.4	91	28.1	28.1	8.0	8.0	22.7	22.7	71.0	71.1	4.9	4.9	5.7		4		89				<0.2		1.4	
						7.0	0.5	92	28.1		8.0		22.7		71.2		4.9		5.6		4		89				<0.2		1.3	
IM11	Cloudy	Moderate	18:32	8.1	Surface	1.0	0.8	112	29.3	29.3	8.3	8.3	13.8	13.8	117.9	117.8	8.4	7.9	4.0	4.7	5	4	85	87	822047	811442	<0.2	<0.2	1.4	1.4
						1.0	0.9	114	29.2		8.3		13.9		117.6		8.4		4.0		5		84				<0.2		1.4	
					Middle	4.1	0.6	128	29.1	29.1	8.2	8.2	16.1	16.1	104.7	104.7	7.4		4.1		4		87				<0.2		1.3	
						4.1	0.6	136	29.1		8.2		16.1		104.6		7.4		4.0		4		87				<0.2		1.3	
					Bottom	7.1	0.3	78	27.8	27.8	8.1	8.1	24.6	24.5	83.1	83.2	5.7	5.7	6.2		4		89				<0.2		1.5	
						7.1	0.3	80	27.8		8.1		24.5		83.3		5.7		5.8		4		89				<0.2		1.6	
IM12	Cloudy	Moderate	18:38	9.5	Surface	1.0	0.6	126	29.6	29.6	8.4	8.4	13.8	13.8	131.1	131.0	9.3	8.2	4.2	5.4	4	5	84	86	821462	812048	<0.2	<0.2	1.6	1.6
						1.0	0.7	132	29.6		8.4		13.9		130.9		9.2		4.2		4		84				<0.2		1.6	
					Middle	4.8	0.5	108	28.9	28.9	8.2	8.2	17.6	17.4	101.1	101.3	7.1		4.0		6		86				<0.2		1.6	
						4.8	0.5	111	28.9		8.2		17.2		101.4		7.1		4.0		6		87				<0.2		1.5	
					Bottom	8.5	0.3	89	27.1	27.1	8.1	8.1	27.6	27.6	78.1	78.2	5.3	5.3	8.1		6		88				<0.2		1.6	
						8.5	0.3	92	27.1		8.1		27.6		78.2		5.3		8.0		6		89				<0.2		1.6	
SR1A	Cloudy	Moderate	19:18	4.9	Surface	1.0	-	-	29.6	29.6	8.5	8.5	14.2	14.2	142.8	142.5	10.1	10.1	3.3	4.4	8	8	-	-	819976	812661	-	-	-	-
						1.0	-	-	29.6		8.5		14.2		142.2		10.0		3.3		8		-				-		-	
					Middle	2.5	-	-	-	-	-	-	-	-	-	-	-		-		-		-	-			-		-	
						2.5	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	-	-	29.1	29.1	8.3	8.3	17.5	17.5	121.3	121.3	8.5	8.5	5.5		7		-				-		-	
						3.9	-	-	29.1		8.3		17.5		121.3		8.5		5.4		7		-				-		-	
SR2	Cloudy	Moderate	19:35	4.5	Surface	1.0	0.5	78	29.6	29.6	8.5	8.5	13.6	13.6	144.5	144.4	10.2	10.2	4.3	4.6	8	8	86	86	821475	814145	<0.2	<0.2	1.5	1.6
						1.0	0.5	83	29.6		8.5		13.6		144.2		10.2		4.3		8		85				<0.2		1.7	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-	-			-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.3	84	29.1	29.2	8.4	8.4	18.6	18.5	118.8	119.2	8.2	8.3	5.0		7		87				<0.2		1.5	
						3.5	0.4	87	29.2		8.4		18.5		119.6		8.3		4.8		8		87				<0.2		1.5	
SR3	Cloudy	Moderate	18:03	9.2	Surface	1.0	0.2	216	29.3	29.3	8.3	8.3	13.5	13.5	116.7	116.7	8.3	8.0	4.0	4.6	4	5	-	-	822156	807576	-	-	-	-
						1.0	0.2	224	29.3		8.3		13.5		116.6		8.3		4.0		4		-				-		-	
					Middle	4.6	0.3	198	29.1	29.2	8.3	8.3	15.7	15.6	108.8	108.8	7.7		4.0		4		-				-		-	
						4.6	0.3	213	29.2		8.3		15.5		108.8		7.7		4.1		5		-				-		-	
					Bottom	8.2	0.1	188	28.4	28.4	8.1	8.1	20.6	20.8	83.7	83.8	5.8	5.8	5.9		5		-				-		-	
						8.2	0.1	199	28.3		8.1		21.0		83.9		5.8		5.9		5		-				-		-	
SR4A	Fine	Calm	19:10	9.0	Surface	1.0	0.2	68	29.2	29.2	8.4	8.4	13.3	13.3	126.5	126.4	9.0	8.1	7.2	9.0	4	6	-	-	817195	807808	-	-	-	-
						1.0	0.2	71	29.2		8.4		13.3		126.3		9.0		7.2		4		-				-		-	
					Middle	4.5	0.1	56	29.0	29.0	8.2	8.2	16.9	16.9	103.1	103.0	7.2		9.5		6		-				-		-	
						4.5	0.1	56	29.0		8.2		16.9		102.8		7.2		9.5		6		-				-		-	
					Bottom	8.0	0.1	70	28.5	28.2	8.1	8.1	20.7	20.9	102.0	109.1	7.1	7.5	10.2		7		-				-		-	
						8.0	0.1	72	27.9		8.1		21.1		116.1		7.9		10.2		7		-				-		-	
SR5A	Fine	Calm	19:34	3.6	Surface	1.0	0.0	99	29.2	29.2	8.3	8.3	13.3	13.3	126.8	126.9	9.0	9.0	6.9	7.3	5	6	-	-	816595	810674	-	-	-	-
						1.0	0.0	107	29.2		8.3		13.3		126.9		9.0		6.9		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-	-			-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.6	0.1	110	29.1	29.1	8.3	8.3	14.0	14.0	125.1	125.0	8.9	8.9	7.6		6		-				-		-	
						2.6	0.1	111	29.1		8.3		13.9		124.8		8.9		7.6		6		-				-		-	
SR6A	Fine	Calm	19:58	4.0	Surface	1.0	0.0	94	29.2	29.1	8.3	8.3	13.3	13.3	122.7	122.7	8.7	8.7	7.6	7.9	6	6	-	-	817949	814746	-	-	-	-
						1.0	0.0	98	29.1		8.3		13.3		122.7		8.7		7.7		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-	-			-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	0.1	72	29.1	29.1	8.3	8.3	16.6	16.7	122.2	122.4	8.6	8.6	8.1		5		-				-		-	
						3.0	0.1	73	29.1		8.3		16.7		122.5		8.6		8.1		5		-				-		-	
SR7	Cloudy	Moderate	20:30	15.2	Surface	1.0	0.6	76	29.3	29.3	8.6	8.6	15.5	15.6	153.8	153.5	10.8	8.9	3.6	3.5	7	7	-	-	823614	823727	-	-	-	-
						1.0	0.6	82	29.3		8.6		15.6		153.2		10.8		3.6		7		-				-		-	
					Middle	7.6	0.3	40	27.7	27.7	8.3	8.3	24.5	24.5	102.1	102.0	7.0		2.9		7		-				-		-	
						7.6	0.4	40	27.7		8.3		24.5		101.9		7.0		2.9		7		-				-		-	
					Bottom	14.2	0.4	34	25.9	25.9	8.1	8.1	31.3	31.3	76.0	76.0	5.2	5.2	4.2		8		-				-		-	
						14.2	0.4	36	25.9		8.1		31.3		75.9		5.2		4.1		8		-				-		-	
SR8	Cloudy	Moderate	18:57	4.6	Surface	1.0	-	-	29.8	29.8	8.5	8.5	13.8	13.9	142.6	142.4	10.0	10.0	4.1	4.0	5	6	-	-	820396	811635	-	-	-	-
						1.0	-	-	29.7		8.5		13.9		142.2		10.0		4.1		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-	-			-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	-	-	29.1	29.1	8.2	8.2	17.6	17.6	108.4	108.3	7.6	7.6	3.9		6		-				-		-	
						3.6	-	-	29.1		8.2		17.6		108.1		7.5		3.9		7		-				-		-	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 20 May 21 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Misty	Calm	07:23	8.6	Surface	1.0	0.7	58	28.9	28.9	8.2	8.2	13.2	13.2	104.1	103.6	7.5	6.8	5.1	6.2	5	4	88	89	815624	804232	<0.2	<0.2	1.3	1.3
						1.0	0.8	60	28.9		8.2		13.2		103.0		7.4		5.1		4		88				<0.2		1.3	
					Middle	4.3	0.8	69	28.5	28.5	8.1	8.1	20.4	20.4	89.3	89.3	6.2		6.2		4		89				<0.2		1.5	
						4.3	0.8	72	28.5		8.1		20.4		89.2		6.2		6.2		4		89				<0.2		1.5	
					Bottom	7.6	0.6	52	27.2	27.2	8.1	8.1	27.1	27.1	79.4	79.3	5.4	5.4	7.4		3		90				<0.2		1.2	
						7.6	0.7	55	27.2		8.1		27.2		79.1		5.4		7.4		3		91				<0.2		1.2	
C2	Cloudy	Moderate	08:31	11.4	Surface	1.0	3.2	188	29.1	29.1	8.3	8.2	12.8	12.8	107.3	107.0	7.7	7.0	4.4	5.0	4	5	84	86	825696	806927	<0.2	<0.2	1.5	1.4
						1.0	3.3	193	29.1		8.2		12.8		106.7		7.6		4.4		4		84				<0.2		1.5	
					Middle	5.7	3.4	188	28.5	28.5	8.2	8.2	20.4	20.5	92.6	92.6	6.4		4.2		4		87				<0.2		1.5	
						5.7	3.4	202	28.5		8.2		20.5		92.5		6.4		4.1		5		87				<0.2		1.4	
					Bottom	10.4	3.3	188	27.3	27.3	8.1	8.1	26.4	26.4	74.8	74.9	5.1	5.1	6.3		5		88				<0.2		1.3	
						10.4	3.5	199	27.3		8.1		26.4		74.9		5.1		6.4		5		88				<0.2		1.4	
C3	Cloudy	Moderate	06:06	12.1	Surface	1.0	2.5	189	28.9	28.9	8.3	8.3	15.7	15.7	117.5	117.4	8.3	8.0	3.3	3.3	6	5	85	87	822124	817823	<0.2	<0.2	1.4	1.3
						1.0	2.8	201	28.9		8.3		15.7		117.3		8.3		3.3		6		85				<0.2		1.3	
					Middle	6.1	2.8	187	28.3	28.3	8.3	8.3	23.1	23.1	112.8	113.0	7.7		3.1		5		88				<0.2		1.2	
						6.1	3.0	199	28.3		8.3		23.0		113.1		7.8		3.1		5		87				<0.2		1.2	
					Bottom	11.1	2.7	199	27.0	27.0	8.2	8.2	27.9	27.9	95.2	95.3	6.5	6.5	3.5		4		89				<0.2		1.3	
						11.1	2.8	211	27.0		8.2		27.9		95.3		6.5		3.5		4		89				<0.2		1.3	
IM1	Misty	Calm	07:45	5.2	Surface	1.0	0.1	26	28.8	28.7	8.2	8.2	13.0	13.0	95.6	93.2	6.9	6.7	9.2	10.5	7	7	86	87	817967	807129	<0.2	<0.2	1.1	1.1
						1.0	0.1	28	28.6		8.2		13.1		90.8		6.5		9.1		8		86				<0.2		1.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.2	43	28.2	28.4	8.0	8.0	24.4	24.5	96.2	99.2	6.6	6.8	11.8		6		87				<0.2		1.1	
						4.2	0.2	46	28.6		8.1		24.7		102.1		6.9		11.8		6		87				<0.2		1.1	
IM2	Misty	Calm	07:52	7.2	Surface	1.0	0.3	29	28.9	28.8	8.2	8.2	13.4	13.5	94.4	92.5	6.8	6.1	7.2	9.2	6	8	87	89	818141	806151	<0.2	<0.2	1.0	1.1
						1.0	0.3	30	28.7		8.2		13.5		90.5		6.5		7.2		7		87				<0.2		1.0	
					Middle	3.6	0.6	44	27.8	27.6	8.0	8.0	21.1	21.4	78.7	78.5	5.5		9.5		8		89				<0.2		1.1	
						3.6	0.6	47	27.4		8.0		21.7		78.3		5.5		9.5		8		89				<0.2		1.2	
					Bottom	6.2	0.2	13	26.9	26.9	8.0	8.0	28.8	28.8	84.2	87.2	5.7	5.9	10.9		9		91				<0.2		1.1	
						6.2	0.2	13	26.9		8.0		28.8		90.1		6.1		10.8		8		91				<0.2		1.0	
IM3	Misty	Calm	08:00	7.4	Surface	1.0	0.3	2	29.0	29.0	8.2	8.2	12.6	12.6	100.9	99.6	7.2	6.1	8.8	10.1	5	6	85	88	818790	805614	<0.2	<0.2	1.0	1.3
						1.0	0.3	2	29.0		8.2		12.6		98.3		7.1		8.9		5		86				<0.2		1.1	
					Middle	3.7	0.3	16	28.6	28.5	8.0	8.0	18.7	18.5	72.8	71.4	5.1		9.8		6		87				<0.2		1.0	
						3.7	0.3	17	28.5		8.0		18.3		69.9		4.9		9.7		6		88				<0.2		1.0	
					Bottom	6.4	0.3	10	26.7	26.7	8.0	8.0	29.3	29.3	69.8	70.0	4.8	4.8	11.6		7		91				<0.2		1.8	
						6.4	0.3	10	26.7		8.0		29.3		70.2		4.8		11.6		7		91				<0.2		1.7	
IM4	Misty	Moderate	08:10	8.6	Surface	1.0	0.6	321	28.9	28.9	8.2	8.2	12.1	12.1	95.3	92.6	6.9	5.8	7.9	8.7	6	5	86	89	819710	804602	<0.2	<0.2	1.0	1.2
						1.0	0.6	346	29.0		8.2		12.1		89.9		6.5		7.8		6		87				<0.2		1.1	
					Middle	4.3	0.5	342	29.0	29.0	8.1	8.1	15.1	15.1	72.2	69.6	5.1		8.6		5		89				<0.2		1.4	
						4.3	0.5	352	28.9		8.0		15.1		67.0		4.8		8.6		5		89				<0.2		1.3	
					Bottom	7.6	0.4	350	26.6	26.6	7.9	7.9	29.6	29.5	66.4	66.6	4.5	4.5	9.7		5		91				<0.2		1.2	
						7.6	0.5	322	26.6		7.9		29.5		66.7		4.5		9.6		4		92				<0.2		1.2	
IM5	Misty	Moderate	08:20	8.0	Surface	1.0	0.8	325	29.0	29.0	8.2	8.1	12.0	12.0	94.5	93.8	6.8	6.5	6.4	8.3	5	5	87	89	820742	804882	<0.2	<0.2	1.1	1.4
						1.0	0.8	336	29.0		8.1		12.0		93.1		6.7		6.3		5		87				<0.2		1.1	
					Middle	4.0	0.7	346	29.0	29.0	8.1	8.1	17.3	17.3	89.7	89.7	6.3		8.2		5		88				<0.2		1.5	
						4.0	0.7	318	29.0		8.1		17.3		89.6		6.3		8.1		5		89				<0.2		1.5	
					Bottom	7.0	0.6	12	28.2	28.2	7.8	7.8	22.1	22.1	70.7	74.1	4.9	5.1	10.5		4		90				<0.2		1.6	
						7.0	0.6	12	28.3		7.8		22.2		77.5		5.3		10.5		4		91				<0.2		1.5	
IM6	Misty	Moderate	08:30	7.8	Surface	1.0	0.1	212	28.9	28.9	8.2	8.2	11.9	11.9	104.4	104.4	7.5	7.1	7.0	9.0	4	5	87	89	821055	805851	<0.2	<0.2	1.1	1.3
						1.0	0.1	220	28.9		8.2		11.9		104.4		7.5		7.0		4		88				<0.2		1.1	
					Middle	3.9	0.2	78	29.0	29.0	8.1	8.1	16.9	16.8	94.2	94.2	6.6		9.7		4		88				<0.2		1.6	
						3.9	0.2	81	29.0		8.1		16.8		94.2		6.6		9.7		5		89				<0.2		1.6	
					Bottom	6.8	0.2	50	28.6	28.6	7.9	7.9	21.0	21.1	85.1	88.0	5.9	6.1	10.3		6		91				<0.2		1.1	
						6.8	0.2	53	28.7		8.0		21.2		90.8		6.3		10.2		7		91				<0.2		1.1	
IM7	Misty	Moderate	08:36	9.0	Surface	1.0	0.0	12	28.9	28.9	8.2	8.2	11.9	11.9	100.1	100.0	7.2	6.0	8.9	9.9	7	7	89	90	821330	806823	<0.2	<0.2	1.4	1.5
						1.0	0.0	12	28.9		8.2		11.9		99.9		7.2		8.9		7		89				<0.2		1.3	
					Middle	4.5	0.2	113	28.8	28.8	8.0	8.0	17.4	17.4	69.8	69.4	4.9		9.5		7		90				<0.2		1.6	
						4.5	0.2	114	28.8		8.0		17.4		69.0		4.8		9.6		7		90				<0.2		1.6	
					Bottom	8.0	0.2	143	28.3	28.3	7.8	7.8	21.4	21.4	63.4	63.4	4.4	4.4	11.2		8		91				<0.2		1.5	
						8.0	0.2	146	28.3		7.8		21.4		63.3		4.4		11.1		8		92				<0.2		1.6	
IM8	Cloudy	Moderate	08:03	7.7	Surface	1.0	1.2	247	29.1	29.1	8.3	8.3	13.4	13.5	109.4	109.3	7.8	7.5	4.2	5.3	6	6	84	86	821814	808162	<0.2	<0.2	1.3	1.4
						1.0	1.2	247	29.1		8.3		13.5		109.2		7.8		4.2		6		84				<0.2		1.3	
					Middle	3.9	1.1	229	29.1	29.1	8.2	8.2	16.1	16.1	102.8	102.8	7.2		4.1		6		87				<0.2		1.4	
						3.9	1.2	240	29.1		8.2		16.1		102.8		7.2		4.1		6		86				<0.2		1.4	
					Bottom	6.7	1.2	224	28.5	28.5	8.1	8.1	20.0	19.9	84.5	84.6	5.9	5.9	7.5		6		88				<0.2		1.5	
						6.7	1.3	237	28.5		8.1		19.9		84.7		5.9		7.4		7		88				<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 20 May 21 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	07:56	7.5	Surface	1.0	1.9	212	29.3	29.3	8.3	8.3	13.5	13.5	114.9	114.9	8.2	8.0	4.0	4.4	6	6	85	86	822114	808790	<0.2	<0.2	1.6	1.5
						1.0	2.1	231	29.3		8.3		13.5		114.8		8.2		4.0		6		84				<0.2		1.4	
					Middle	3.8	1.7	212	29.2	29.2	8.3	8.3	15.7	15.7	109.9	109.9	7.7		4.0		6		87				<0.2		1.4	
						3.8	1.8	230	29.2		8.3		15.7		109.8		7.7		3.9		6		86				<0.2		1.5	
					Bottom	6.5	1.7	212	28.7	28.7	8.2	8.2	20.1	20.1	92.3	92.4	6.4	6.4	5.2		6		88				<0.2		1.4	
						6.5	1.8	224	28.7		8.2		20.0		92.5		6.4		5.3		6		88				<0.2		1.4	
IM10	Cloudy	Moderate	07:47	7.8	Surface	1.0	2.0	139	29.2	29.2	8.3	8.3	13.8	13.8	113.9	113.9	8.1	7.9	4.2	5.0	6	7	84	87	822390	809795	<0.2	<0.2	1.5	1.4
						1.0	2.2	149	29.2		8.3		13.8		113.9		8.1		4.1		6		85				<0.2		1.3	
					Middle	3.9	2.0	141	29.2	29.2	8.3	8.3	15.3	15.3	109.6	109.6	7.7		3.8		6		87				<0.2		1.4	
						3.9	2.1	148	29.2		8.3		15.3		109.5		7.7		4.0		7		86				<0.2		1.5	
					Bottom	6.8	2.1	143	28.0	28.1	8.1	8.1	23.4	23.4	78.6	78.8	5.4	5.4	6.9		8		88				<0.2		1.3	
						6.8	2.2	148	28.1		8.1		23.3		78.9		5.4		7.1		7		89				<0.2		1.4	
IM11	Cloudy	Moderate	07:33	8.6	Surface	1.0	1.8	207	29.2	29.2	8.3	8.3	13.7	13.7	112.2	112.2	8.0	7.6	4.0	4.9	5	6	84	86	822079	811468	<0.2	<0.2	1.4	1.4
						1.0	1.9	219	29.2		8.3		13.7		112.1		8.0		4.0		5		85				<0.2		1.4	
					Middle	4.3	1.7	214	29.1	29.1	8.2	8.2	16.5	16.5	102.6	102.5	7.2		4.3		6		86				<0.2		1.3	
						4.3	1.7	224	29.1		8.2		16.6		102.3		7.2		4.3		6		87				<0.2		1.4	
					Bottom	7.6	1.9	219	27.8	27.8	8.1	8.1	24.5	24.5	72.5	72.5	5.0	5.0	6.3		6		88				<0.2		1.4	
						7.6	1.9	234	27.8		8.1		24.4		72.5		5.0		6.5		7		88				<0.2		1.3	
IM12	Cloudy	Moderate	07:25	9.7	Surface	1.0	2.3	174	29.3	29.3	8.3	8.3	12.6	12.6	118.8	118.8	8.5	8.2	4.4	6.1	7	6	84	86	821439	812046	<0.2	<0.2	1.4	1.4
						1.0	2.5	177	29.3		8.3		12.6		118.7		8.5		4.4		6		84				<0.2		1.4	
					Middle	4.9	2.5	175	29.0	29.0	8.3	8.3	18.0	18.0	112.9	112.9	7.9		4.2		6		87				<0.2		1.4	
						4.9	2.6	176	29.0		8.3		18.0		112.8		7.9		4.2		6		86				<0.2		1.4	
					Bottom	8.7	2.3	181	27.3	27.3	8.1	8.1	27.0	27.0	81.3	81.6	5.5	5.6	9.7		6		89				<0.2		1.4	
						8.7	2.4	184	27.3		8.1		26.9		81.9		5.6		9.5		6		88				<0.2		1.4	
SR1A	Cloudy	Calm	06:49	4.8	Surface	1.0	-	-	29.2	29.2	8.3	8.3	13.5	13.5	115.9	116.0	8.3	8.3	3.5	4.4	4	5	-	-	819979	812657	-	-	-	-
						1.0	-	-	29.1		8.3		13.5		116.0		8.3		3.4		5		-				-		-	
					Middle	2.4	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.4	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	-	-	29.1	29.1	8.4	8.4	15.7	15.7	117.2	117.4	8.3	8.3	5.4		5		-				-		-	
						3.8	-	-	29.1		8.4		15.7		117.5		8.3		5.4		5		-				-		-	
SR2	Cloudy	Moderate	06:33	4.4	Surface	1.0	0.2	84	29.1	29.1	8.4	8.4	13.4	13.4	116.8	116.9	8.3	8.3	3.8	4.6	6	7	86	87	821462	814160	<0.2	<0.2	1.4	1.4
						1.0	0.2	86	29.1		8.4		13.5		116.9		8.3		3.7		6		86				<0.2		1.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.1	60	29.1	29.1	8.4	8.4	16.3	16.3	118.3	118.4	8.3	8.3	5.5		7		88				<0.2		1.4	
						3.4	0.1	60	29.1		8.4		16.2		118.4		8.3		5.4		7		88				<0.2		1.3	
SR3	Cloudy	Moderate	08:10	9.3	Surface	1.0	1.1	35	29.1	29.1	8.3	8.3	14.3	14.3	110.4	110.4	7.8	7.7	4.2	4.6	6	6	-	-	822150	807588	-	-	-	-
						1.0	1.2	35	29.1		8.3		14.3		110.4		7.8		4.2		6		-				-		-	
					Middle	4.7	0.9	31	29.1	29.1	8.3	8.3	16.6	16.6	107.9	107.9	7.6		4.0		6		-				-		-	
						4.7	1.0	34	29.1		8.3		16.6		107.8		7.5		4.0		6		-				-		-	
					Bottom	8.3	1.5	30	28.1	28.1	8.1	8.1	22.5	22.5	78.8	78.9	5.4	5.4	5.7		6		-				-		-	
						8.3	1.6	31	28.1		8.1		22.5		78.9		5.4		5.5		6		-				-		-	
SR4A	Misty	Calm	06:59	9.4	Surface	1.0	0.0	80	28.8	28.8	8.2	8.2	13.6	13.6	90.6	90.2	6.5	5.7	7.5	8.7	7	8	-	-	817169	807795	-	-	-	-
						1.0	0.0	83	28.8		8.2		13.6		89.7		6.4		7.5		7		-				-		-	
					Middle	4.7	0.1	92	27.5	27.5	8.0	8.0	24.6	24.6	72.0	71.7	5.0		8.3		7		-				-		-	
						4.7	0.1	99	27.4		8.0		24.6		71.4		4.9		8.2		8		-				-		-	
					Bottom	8.4	0.1	36	27.1	27.1	8.0	8.0	27.3	27.3	70.6	70.5	4.8	4.8	10.5		8		-				-		-	
						8.4	0.1	37	27.1		8.0		27.3		70.4		4.8		10.4		8		-				-		-	
SR5A	Misty	Calm	06:38	3.6	Surface	1.0	0.1	67	28.9	28.9	8.2	8.2	16.8	16.7	109.6	109.6	7.7	7.7	6.5	7.7	6	6	-	-	816615	810686	-	-	-	-
						1.0	0.1	68	28.9		8.2		16.7		109.5		7.7		6.7		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.6	0.1	33	28.9	28.9	8.2	8.2	18.0	18.0	108.2	107.6	7.5	7.5	8.6		6		-				-		-	
						2.6	0.1	35	28.9		8.2		18.0		107.0		7.5		8.9		7		-				-		-	
SR6A	Misty	Calm	06:09	4.2	Surface	1.0	0.1	42	29.1	29.1	8.2	8.2	18.3	18.3	107.2	106.7	7.4	7.4	4.5	6.9	6	8	-	-	817957	814748	-	-	-	-
						1.0	0.1	45	29.1		8.2		18.3		106.1		7.4		4.0		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.0	221	29.0	29.0	8.2	8.2	20.0	19.9	104.8	104.5	7.2	7.2	9.5		9		-				-		-	
						3.2	0.0	238	29.0		8.2		19.9		104.1		7.2		9.5		9		-				-		-	
SR7	Cloudy	Moderate	05:28	14.9	Surface	1.0	2.6	189	28.8	28.8	8.4	8.4	17.1	17.1	118.4	118.4	8.3	7.4	2.9	3.3	5	6	-	-	823629	823757	-	-	-	-
						1.0	2.7	189	28.8		8.4		17.1		118.3		8.3		2.9		5		-				-		-	
					Middle	7.5	3.3	196	27.1	27.1	8.2	8.2	27.5	27.5	93.5	93.5	6.4		3.4		6		-				-		-	
						7.5	3.3	208	27.1		8.2		27.5		93.4		6.4		3.4		6		-				-		-	
					Bottom	13.9	3.6	197	25.9	25.9	8.2	8.2	31.4	31.4	81.7	82.0	5.6	5.6	3.6		7		-				-		-	
						13.9	3.8	214	25.9		8.2		31.4		82.2		5.6		3.6		7		-				-		-	
SR8	Cloudy	Moderate	07:17	4.7	Surface	1.0	-	-	29.8	29.8	8.3	8.3	15.2	15.2	115.6	115.6	8.1	8.1	4.5	4.3	6	6	-	-	820394	811635	-	-	-	-
						1.0	-	-	29.8		8.3		15.2		115.6		8.1		4.5		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	-	-	29.2	29.2	8.3	8.3	15.7	15.7	114.1	114.1	8.0	8.0	4.1		6		-				-		-	
						3.7	-	-	29.2		8.3		15.7		114.1		8.0		4.1		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 22 May 21 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Sunny	Moderate	10:05	8.9	Surface	1.0	0.2	225	29.5	29.5	8.2	8.2	11.1	11.1	113.7	113.6	8.2	6.7	4.0	4.8	7	6	87	89	815597	804245	<0.2	<0.2	1.6	1.6
						1.0	0.3	240	29.5		8.2		11.1		113.5		8.1		4.0		7		87				<0.2		1.6	
					Middle	4.5	0.3	217	27.8	27.8	8.0	8.0	21.2	21.2	74.2	73.5	5.2		4.7		6		88				<0.2		1.5	
						4.5	0.3	228	27.8		8.0		21.3		72.8		5.1		4.6		6		89				<0.2		1.6	
					Bottom	7.9	0.2	195	25.6	25.6	7.8	7.8	31.5	31.5	56.0	56.2	3.8	3.9	5.7		5		90				<0.2		1.5	
						7.9	0.2	196	25.6		7.8		31.5		56.3		3.9		5.7		4		91				<0.2		1.5	
C2	Sunny	Moderate	11:45	11.4	Surface	1.0	0.2	135	29.4	29.4	8.0	8.0	11.0	11.0	113.7	113.7	8.2	6.9	6.5	6.3	6	5	84	88	825689	806952	<0.2	<0.2	1.4	1.5
						1.0	0.2	140	29.4		8.0		11.0		113.7		8.2		6.5		6		84				<0.2		1.6	
					Middle	5.7	0.5	154	28.2	28.2	8.1	8.1	21.4	21.4	81.0	81.0	5.6		5.5		5		89				<0.2		1.6	
						5.7	0.5	166	28.2		8.1		21.4		80.9		5.6		5.6		5		88				<0.2		1.4	
					Bottom	10.4	0.5	144	27.0	27.0	8.1	8.1	27.3	27.3	65.8	65.9	4.5	4.5	6.9		5		92				<0.2		1.4	
						10.4	0.5	150	27.0		8.1		27.3		65.9		4.5		6.9		5		92				<0.2		1.5	
C3	Sunny	Moderate	08:52	12.5	Surface	1.0	0.4	286	29.0	29.0	8.1	8.1	16.7	16.7	123.7	123.7	8.7	7.9	3.6	3.6	5	4	84	89	822125	817787	<0.2	<0.2	1.2	1.2
						1.0	0.4	302	29.0		8.1		16.7		123.6		8.7		3.6		5		85				<0.2		1.0	
					Middle	6.3	0.2	257	28.0	28.0	8.1	8.1	22.3	22.2	102.9	102.9	7.1		3.0		4		89				<0.2		1.1	
						6.3	0.2	259	28.0		8.1		22.2		102.9		7.1		3.0		4		89				<0.2		1.1	
					Bottom	11.5	0.1	120	26.1	26.1	8.2	8.2	29.9	29.9	78.1	78.2	5.3	5.4	4.2		3		93				<0.2		1.4	
						11.5	0.1	122	26.1		8.2		29.9		78.3		5.4		4.2		4		92				<0.2		1.3	
IM1	Sunny	Moderate	10:26	4.8	Surface	1.0	0.1	182	27.7	27.7	7.9	7.9	21.7	21.8	75.7	75.6	5.3	5.3	5.9	6.2	5	6	86	87	817942	807114	<0.2	<0.2	1.4	1.5
						1.0	0.1	191	27.7		7.9		21.8		75.5		5.3		5.9		4		86				<0.2		1.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.1	151	26.5	26.5	7.8	7.8	27.6	27.6	63.1	65.3	4.4	4.6	6.6		8		87				<0.2		1.6	
						3.8	0.1	159	26.5		7.8		27.7		67.5		4.7		6.4		8		87				<0.2		1.6	
IM2	Sunny	Moderate	10:37	6.8	Surface	1.0	0.1	217	29.3	29.3	8.1	8.1	14.6	14.7	104.1	104.0	7.3	5.5	4.6	5.5	4	6	87	89	818139	806149	<0.2	<0.2	1.5	1.5
						1.0	0.1	219	29.3		8.1		14.7		103.8		7.3		4.7		4		88				<0.2		1.5	
					Middle	3.4	0.1	142	26.2	26.2	7.8	7.8	29.1	29.1	54.0	54.1	3.7		5.5		6		89				<0.2		1.5	
						3.4	0.1	148	26.2		7.8		29.1		54.1		3.7		5.4		6		89				<0.2		1.6	
					Bottom	5.8	0.2	92	25.9	25.9	7.8	7.8	30.2	30.2	56.5	56.6	3.9	3.9	6.3		8		91				<0.2		1.4	
						5.8	0.2	94	25.9		7.8		30.2		56.6		3.9		6.4		8		91				<0.2		1.4	
IM3	Sunny	Moderate	10:44	7.0	Surface	1.0	0.1	177	28.6	28.6	8.0	8.0	16.3	16.3	92.0	92.1	6.5	5.1	6.4	7.5	6	6	87	89	818796	805602	<0.2	<0.2	1.5	1.6
						1.0	0.1	181	28.6		8.0		16.2		92.1		6.5		6.3		6		88				<0.2		1.5	
					Middle	3.5	0.1	113	26.1	26.1	7.8	7.8	29.6	29.7	52.0	52.1	3.6		7.1		6		89				<0.2		1.5	
						3.5	0.1	124	26.1		7.8		29.7		52.1		3.6		7.1		6		89				<0.2		1.4	
					Bottom	6.0	0.2	86	25.7	25.7	7.8	7.8	31.0	31.0	56.1	56.4	3.8	3.9	8.9		7		91				<0.2		1.9	
						6.0	0.2	93	25.7		7.8		31.0		56.6		3.9		9.0		7		91				<0.2		1.8	
IM4	Sunny	Moderate	10:55	8.2	Surface	1.0	0.1	221	29.6	29.6	8.1	8.1	10.7	10.7	107.5	107.4	7.7	5.6	5.1	5.9	5	5	87	89	819744	804585	<0.2	<0.2	1.8	1.8
						1.0	0.1	222	29.6		8.1		10.7		107.3		7.7		5.1		5		88				<0.2		1.8	
					Middle	4.1	0.0	109	26.2	26.4	7.8	7.8	27.7	28.9	50.4	51.3	3.5		5.9		5		89				<0.2		1.8	
						4.1	0.0	111	26.5		7.8		30.0		52.2		3.6		5.9		5		89				<0.2		1.8	
					Bottom	7.2	0.1	253	25.7	25.8	7.8	7.8	31.1	31.1	50.2	50.2	3.4	3.4	6.7		6		91				<0.2		1.8	
						7.2	0.1	267	25.8		7.8		31.1		50.2		3.4		6.7		6		91				<0.2		1.8	
IM5	Sunny	Moderate	11:06	7.3	Surface	1.0	0.1	348	29.4	29.4	8.2	8.2	9.2	9.2	111.7	111.6	8.1	7.5	4.3	5.5	4	4	92	93	820736	804846	<0.2	<0.2	2.0	1.8
						1.0	0.1	320	29.4		8.2		9.2		111.5		8.1		4.3		4		92				<0.2		1.8	
					Middle	3.7	0.0	96	29.1	29.1	8.0	8.0	12.6	12.6	97.0	96.9	6.9		5.7		4		93				<0.2		1.7	
						3.7	0.0	102	29.1		8.0		12.7		96.7		6.9		5.7		4		93				<0.2		1.8	
					Bottom	6.3	0.1	80	27.5	27.5	7.8	7.8	21.7	22.5	64.5	64.7	4.5	4.5	6.5		4		93				<0.2		1.7	
						6.3	0.1	86	27.5		7.8		23.3		64.8		4.5		6.6		4		93				<0.2		1.6	
IM6	Sunny	Moderate	11:15	7.0	Surface	1.0	0.0	233	29.9	29.9	8.1	8.1	12.0	12.0	108.3	108.3	7.7	6.7	5.2	7.6	3	4	88	89	821072	805831	<0.2	<0.2	1.8	1.7
						1.0	0.0	245	29.9		8.1		12.0		108.2		7.7		5.2		3		88				<0.2		1.9	
					Middle	3.5	0.0	79	28.7	28.7	7.9	7.9	17.2	17.2	81.5	81.6	5.7		8.8		4		89				<0.2		1.8	
						3.5	0.0	79	28.7		7.9		17.2		81.6		5.7		8.7		4		89				<0.2		1.7	
					Bottom	6.0	0.2	108	27.7	27.7	7.8	7.8	21.9	21.8	65.5	67.2	4.6	4.7	8.9		5		90				<0.2		1.6	
						6.0	0.2	117	27.7		7.8		21.7		68.9		4.8		9.0		5		90				<0.2		1.6	
IM7	Sunny	Moderate	11:24	8.0	Surface	1.0	0.1	115	29.4	29.4	8.1	8.1	13.6	13.6	108.5	108.3	7.7	7.0	4.7	5.4	5	5	86	88	821349	806837	<0.2	<0.2	1.8	1.7
						1.0	0.1	118	29.4		8.1		13.6		108.0		7.7		4.7		5		86				<0.2		1.6	
					Middle	4.0	0.2	116	28.9	28.9	8.0	8.0	16.9	16.9	88.8	88.7	6.2		5.7		5		87				<0.2		1.8	
						4.0	0.2	125	28.9		8.0		16.9		88.5		6.2		5.7		5		87				<0.2		1.6	
					Bottom	7.0	0.1	81	27.4	27.4	7.7	7.7	24.3	24.3	59.8	60.0	4.1	4.2	5.9		6		92				<0.2		1.8	
						7.0	0.1	85	27.4		7.7		24.4		60.1		4.2		5.9		6		91				<0.2		1.8	
IM8	Sunny	Moderate	11:19	7.7	Surface	1.0	1.9	214	29.6	29.6	8.3	8.3	12.4	12.4	117.6	117.5	8.4	7.5	5.3	10.6	5	6	85	89	821853	808138	<0.2	<0.2	1.6	1.6
						1.0	2.0	227	29.6		8.3		12.4		117.3		8.4		5.3		5		84				<0.2		1.7	
					Middle	3.9	2.2	211	28.9	28.9	8.2	8.2	15.3	15.7	93.6	93.6	6.6		5.5		6		89				<0.2		1.7	
						3.9	2.4	221	28.9		8.2		16.2		93.5		6.6		5.5		6		89				<0.2		1.6	
					Bottom	6.7	2.5	215	27.8	27.8	8.0	8.0	21.9	21.9	63.3	63.4	4.4	4.4	21.1		7		93				<0.2		1.5	
						6.7	2.5	235	27.8		8.0		21.9		63.4		4.4		21.1		7		92				<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 22 May 21 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Sunny	Moderate	11:11	7.3	Surface	1.0	2.4	227	29.7	29.7	8.0	8.0	11.8	11.9	120.4	120.1	8.6	7.7	5.0	9.0	6	5	84	89	822082	808798	<0.2	<0.2	1.8	1.7
						1.0	2.6	238	29.7		8.0		11.9		119.8		8.5		5.0		6		85				<0.2		1.9	
					Middle	3.7	2.4	225	28.9	28.9	8.2	8.2	17.6	17.6	98.8	98.8	6.9		5.0		5		88				<0.2		1.8	
						3.7	2.6	238	28.9		8.2		17.7		98.7		6.9		5.0		5		89				<0.2		1.6	
					Bottom	6.3	2.5	229	28.2	28.2	8.1	8.1	20.6	20.6	77.6	77.8	5.4	5.4	16.9		4		93				<0.2		1.6	
						6.3	2.7	247	28.2		8.1		20.6		77.9		5.4		16.9		4		92				<0.2		1.6	
IM10	Sunny	Moderate	11:02	7.4	Surface	1.0	3.0	101	29.7	29.7	8.1	8.1	11.4	11.4	119.3	119.1	8.5	7.8	4.9	7.5	7	6	84	89	822400	809773	<0.2	<0.2	1.7	1.7
						1.0	3.1	104	29.7		8.1		11.4		118.9		8.5		4.9		7		85				<0.2		1.6	
					Middle	3.7	3.0	100	29.0	29.0	8.1	8.1	17.3	17.3	99.9	99.9	7.0		4.7		5		89				<0.2		1.7	
						3.7	3.2	107	29.0		8.1		17.2		99.8		7.0		4.7		5		89				<0.2		1.7	
					Bottom	6.4	3.1	102	28.3	28.3	8.1	8.1	20.5	20.5	76.2	76.2	5.3	5.3	12.8		5		92				<0.2		1.7	
						6.4	3.1	109	28.3		8.1		20.6		76.1		5.3		12.9		5		93				<0.2		1.8	
IM11	Sunny	Moderate	10:15	8.4	Surface	1.0	2.6	98	29.6	29.6	8.0	8.0	10.7	10.7	118.6	118.5	8.5	7.6	4.6	6.9	5	5	84	89	822034	811465	<0.2	<0.2	1.8	1.7
						1.0	2.7	106	29.6		8.0		10.7		118.3		8.5		4.6		5		85				<0.2		1.8	
					Middle	4.2	2.6	97	28.8	28.8	8.2	8.2	18.3	18.3	94.0	94.0	6.6		6.5		5		89				<0.2		1.6	
						4.2	2.6	102	28.8		8.2		18.3		94.0		6.6		6.5		5		89				<0.2		1.6	
					Bottom	7.4	2.6	94	27.4	27.4	8.1	8.1	25.0	25.1	69.9	69.8	4.8	4.8	9.5		4		93				<0.2		1.6	
						7.4	2.6	99	27.4		8.1		25.1		69.7		4.8		9.6		4		93				<0.2		1.6	
IM12	Sunny	Moderate	10:07	10.0	Surface	1.0	2.6	94	29.8	29.8	8.0	8.0	9.6	9.6	120.6	120.6	8.7	7.7	5.0	8.3	7	6	84	90	821467	812040	<0.2	<0.2	1.6	1.7
						1.0	2.8	102	29.8		8.0		9.6		120.5		8.7		5.0		6		89				<0.2		1.6	
					Middle	5.0	2.7	96	28.8	28.8	8.2	8.2	17.9	17.9	94.2	94.2	6.6		6.0		7		89				<0.2		1.7	
						5.0	2.8	98	28.8		8.2		17.9		94.1		6.6		6.0		6		89				<0.2		1.7	
					Bottom	9.0	2.6	94	27.3	27.3	8.1	8.1	26.0	26.0	66.4	66.5	4.6	4.6	13.8		5		93				<0.2		1.8	
						9.0	2.7	100	27.2		8.1		26.0		66.5		4.6		14.0		6		93				<0.2		1.6	
SR1A	Sunny	Calm	09:34	5.5	Surface	1.0	-	-	29.5	29.5	8.2	8.2	11.5	11.5	117.4	117.3	8.4	8.4	3.9	4.1	5	5	-	-	819972	812657	-	-	-	-
						1.0	-	-	29.5		8.2		11.5		117.1		8.4		3.9		5		-				-		-	
					Middle	2.8	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.8	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.5	-	-	29.4	29.4	8.1	8.1	13.5	13.5	114.3	114.3	8.1	8.1	4.4		4		-				-		-	
						4.5	-	-	29.4		8.1		13.5		114.3		8.1		4.4		4		-				-		-	
SR2	Sunny	Moderate	09:17	4.6	Surface	1.0	0.5	57	29.4	29.4	8.1	8.1	11.5	11.5	121.4	121.4	8.7	8.7	4.3	4.5	4	5	84	86	821472	814173	<0.2	<0.2	1.7	1.7
						1.0	0.5	60	29.4		8.1		11.5		121.4		8.7		4.3		5		84				<0.2		1.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.5	53	29.4	29.4	8.2	8.2	12.6	12.6	117.3	117.3	8.4	8.4	4.8		5		89				<0.2		1.8	
						3.6	0.5	55	29.4		8.2		12.6		117.3		8.4		4.8		5		88				<0.2		1.6	
SR3	Sunny	Moderate	11:25	9.0	Surface	1.0	2.1	225	29.7	29.7	8.1	8.1	12.2	12.2	113.2	112.9	8.0	6.9	5.5	7.6	7	6	-	-	822128	807582	-	-	-	-
						1.0	2.2	240	29.7		8.1		12.2		112.6		8.0		5.5		7		-				-		-	
					Middle	4.5	2.3	225	28.6	28.6	8.1	8.1	18.7	18.7	82.8	82.8	5.8		8.0		6		-				-		-	
						4.5	2.4	225	28.6		8.1		18.7		82.7		5.8		8.0		6		-				-		-	
					Bottom	8.0	2.2	229	27.6	27.6	8.1	8.1	24.5	24.5	74.6	74.7	5.1	5.1	9.2		5		-				-		-	
						8.0	2.2	230	27.6		8.1		24.6		74.7		5.1		9.3		5		-				-		-	
SR4A	Sunny	Moderate	09:42	9.7	Surface	1.0	0.2	73	28.8	28.9	8.1	8.1	14.9	14.9	94.6	94.7	6.7	5.4	6.6	8.4	4	5	-	-	817182	807818	-	-	-	-
						1.0	0.2	75	28.9		8.1		14.8		94.7		6.7		6.6		5		-				-		-	
					Middle	4.9	0.2	83	26.4	26.4	7.8	7.8	28.2	28.2	58.3	58.3	4.0		8.4		5		-				-		-	
						4.9	0.2	84	26.4		7.8		28.2		58.3		4.0		8.3		5		-				-		-	
					Bottom	8.7	0.2	60	26.4	26.4	7.9	7.9	28.3	28.3	59.2	59.4	4.1	4.1	10.4		5		-				-		-	
						8.7	0.2	65	26.4		7.9		28.3		59.5		4.1		10.3		6		-				-		-	
SR5A	Sunny	Moderate	09:23	3.6	Surface	1.0	0.1	43	29.3	29.3	8.1	8.1	14.7	14.7	113.0	112.9	8.0	8.0	6.5	7.6	5	7	-	-	816597	810712	-	-	-	-
						1.0	0.1	46	29.3		8.1		14.7		112.8		8.0		6.4		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.6	0.0	50	29.2	29.2	8.1	8.1	15.5	15.5	108.3	108.2	7.6	7.6	8.8		8		-				-		-	
						2.6	0.0	53	29.2		8.1		15.5		108.1		7.6		8.8		8		-				-		-	
SR6A	Sunny	Moderate	08:55	4.4	Surface	1.0	0.1	62	29.5	29.5	8.2	8.2	15.0	15.0	120.1	119.8	8.4	8.4	9.5	9.9	5	4	-	-	817963	814721	-	-	-	-
						1.0	0.1	67	29.5		8.2		15.0		119.5		8.4		9.5		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.1	74	28.7	28.7	8.0	8.0	19.7	19.7	97.2	97.3	6.7	6.7	10.2		4		-				-		-	
						3.4	0.1	78	28.7		8.0		19.7		97.3		6.7		10.3		4		-				-		-	
SR7	Sunny	Moderate	08:17	14.8	Surface	1.0	0.6	61	28.4	28.4	8.0	8.0	20.9	20.9	113.8	113.7	7.9	6.8	2.8	3.6	5	5	-	-	823627	823760	-	-	-	-
						1.0	0.7	64	28.4		8.0		20.9		113.6		7.9		2.9		5		-				-		-	
					Middle	7.4	0.2	14	26.7	26.7	8.2	8.2	27.8	27.8	81.1	81.1	5.6		3.5		5		-				-		-	
						7.4	0.2	14	26.7		8.2		27.8		81.1		5.6		3.5		5		-				-		-	
					Bottom	13.8	0.2	55	25.5	25.5	8.1	8.1	31.8	31.8	70.4	70.4	4.8	4.8	4.4		4		-				-		-	
						13.8	0.2	56	25.5		8.1		31.8		70.4		4.8		4.5		4		-				-		-	
SR8	Sunny	Moderate	09:59	4.8	Surface	1.0	-	-	29.8	29.8	8.1	8.1	11.0	11.0	118.6	118.6	8.5	8.5	4.8	7.9	4	5	-	-	820384	811633	-	-	-	-
						1.0	-	-	29.8		8.1		11.1		118.5		8.5		5.1		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	-	-	29.5	29.5	8.1	8.1	13.7	13.8	110.9	110.8	7.8	7.8	11.0		6		-				-		-	
						3.8	-	-	29.5		8.1		13.8		110.7		7.8		10.9		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 22 May 21 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	15:11	8.2	Surface	1.0	0.4	43	29.6	29.6	8.1	8.1	8.9	9.0	109.1	109.0	7.9	7.2	4.8	5.0	4	5	95	91	815611	804238	<0.2	<0.2	1.6	1.5
						1.0	0.5	44	29.5		8.1		9.1		108.8		7.9		4.8		4		95				<0.2		1.6	
					Middle	4.1	0.5	43	28.9	29.0	8.0	8.0	17.1	17.1	90.3	90.4	6.3		5.0		4		87				<0.2		1.4	
						4.1	0.5	46	29.0		8.0		17.0		90.4		6.5		5.0		4		87				<0.2		1.4	
					Bottom	7.2	0.4	39	26.2	26.2	7.8	7.8	29.2	29.1	56.8	56.9	3.9	3.9	5.3		6		91				<0.2		1.5	
						7.2	0.4	39	26.2		7.8		29.1		57.0		3.9		5.3		6		91				<0.2		1.6	
C2	Sunny	Moderate	13:48	11.3	Surface	1.0	0.3	352	29.7	29.7	8.2	8.2	11.2	11.2	103.6	103.4	7.4	6.6	5.9	6.0	6	6	86	90	825665	806921	<0.2	<0.2	1.6	1.6
						1.0	0.3	324	29.7		8.2		11.2		103.2		7.4		5.8		6		87				<0.2		1.4	
					Middle	5.7	0.5	16	28.4	28.4	8.1	8.1	20.2	20.2	82.1	82.1	5.7		6.8		6		90				<0.2		1.7	
						5.7	0.5	16	28.3		8.1		20.2		82.0		5.7		6.7		5		90				<0.2		1.7	
					Bottom	10.3	0.3	9	27.1	27.1	8.1	8.1	26.9	26.9	67.5	67.6	4.6	4.6	5.5		5		94				<0.2		1.7	
						10.3	0.3	9	27.1		8.1		26.9		67.6		4.6		5.5		5		94				<0.2		1.6	
C3	Sunny	Moderate	15:55	11.5	Surface	1.0	0.3	241	29.4	29.5	8.0	8.0	15.5	15.5	136.8	137.1	9.6	7.8	4.3	5.2	6	8	86	90	822121	817794	<0.2	<0.2	1.5	1.5
						1.0	0.3	254	29.5		8.0		15.5		137.3		9.6		4.4		6		86				<0.2		1.4	
					Middle	5.8	0.4	252	27.5	27.5	8.2	8.2	24.5	24.5	87.8	87.7	6.1		3.3		7		90				<0.2		1.5	
						5.8	0.4	275	27.5		8.2		24.5		87.6		6.0		3.3		9		89				<0.2		1.4	
					Bottom	10.5	0.4	266	25.6	25.6	8.1	8.1	31.5	31.5	68.4	68.4	4.7	4.7	7.9		9		94				<0.2		1.6	
						10.5	0.4	288	25.6		8.1		31.5		68.4		4.7		7.9		9		93				<0.2		1.5	
IM1	Sunny	Moderate	14:46	4.6	Surface	1.0	0.1	5	30.0	30.0	8.1	8.1	9.4	9.4	123.2	123.2	8.8	8.8	5.1	6.0	6	7	89	90	817964	807133	<0.2	<0.2	1.8	1.8
						1.0	0.1	5	30.0		8.1		9.4		123.2		8.8		5.2		6		89				<0.2		1.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.1	356	30.2	30.2	8.1	8.1	10.7	10.8	122.5	122.4	8.7	8.7	6.8		8		91				<0.2		1.8	
						3.6	0.1	328	30.2		8.1		10.8		122.2		8.7		6.8		8		91				<0.2		1.8	
IM2	Sunny	Moderate	14:38	6.9	Surface	1.0	0.3	12	30.1	30.1	8.2	8.2	9.1	9.1	119.9	119.8	8.6	8.3	4.5	6.1	5	5	91	92	818141	806171	<0.2	<0.2	1.9	1.9
						1.0	0.3	12	30.1		8.2		9.1		119.7		8.6		4.5		5		91				<0.2		1.9	
					Middle	3.5	0.3	359	29.7	29.7	8.1	8.1	12.2	12.1	111.4	111.1	7.9		6.4		5		93				<0.2		1.8	
						3.5	0.3	330	29.7		8.1		12.1		110.8		7.9		6.3		5		93				<0.2		1.8	
					Bottom	5.9	0.2	327	26.3	26.3	7.8	7.8	28.8	28.7	58.6	58.7	4.0	4.0	7.3		6		92				<0.2		1.9	
						5.9	0.2	355	26.3		7.8		28.7		58.7		4.0		7.3		6		92				<0.2		1.9	
IM3	Sunny	Moderate	14:28	7.0	Surface	1.0	0.3	358	30.3	30.3	8.2	8.2	9.8	9.8	122.6	122.6	8.7	7.7	4.5	5.2	7	7	87	88	818797	805609	<0.2	<0.2	1.9	1.9
						1.0	0.4	329	30.3		8.2		9.8		122.5		8.7		4.5		7		87				<0.2		1.9	
					Middle	3.5	0.3	337	28.6	28.6	8.0	8.0	17.5	17.6	95.2	94.7	6.7		5.1		7		87				<0.2		1.9	
						3.5	0.3	348	28.6		8.0		17.7		94.2		6.6		5.0		7		87				<0.2		1.9	
					Bottom	6.0	0.3	317	26.6	26.6	7.8	7.7	27.4	27.5	66.2	66.5	4.6	4.6	5.9		7		87				<0.2		1.9	
						6.0	0.3	344	26.6		7.7		27.5		66.7		4.6		6.0		6		93				<0.2		1.8	
IM4	Sunny	Moderate	14:16	8.2	Surface	1.0	0.5	356	29.8	29.8	8.1	8.1	15.0	15.0	121.6	121.4	8.5	7.4	5.4	5.9	6	7	89	90	819710	804584	<0.2	<0.2	2.0	2.0
						1.0	0.5	328	29.8		8.1		15.0		121.1		8.5		5.5		6		89				<0.2		1.9	
					Middle	4.1	0.4	0	28.5	28.5	8.0	8.0	19.4	19.5	89.4	89.0	6.2		5.9		7		90				<0.2		2.0	
						4.1	0.5	0	28.5		8.0		19.5		88.5		6.2		6.0		7		90				<0.2		1.8	
					Bottom	7.2	0.4	3	25.9	25.9	7.7	7.7	30.4	30.4	56.0	56.2	3.8	3.9	6.4		8		91				<0.2		2.1	
						7.2	0.5	3	25.9		7.7		30.4		56.4		3.9		6.4		8		92				<0.2		2.1	
IM5	Sunny	Moderate	14:06	6.6	Surface	1.0	0.7	9	30.3	30.3	8.2	8.2	10.3	10.6	127.0	126.9	9.0	7.7	4.7	5.8	6	7	89	90	820747	804875	<0.2	<0.2	2.0	1.9
						1.0	0.8	9	30.3		8.2		11.0		126.8		9.0		4.8		6		89				<0.2		1.9	
					Middle	3.3	0.7	12	28.8	28.8	7.9	7.9	16.2	16.2	89.9	89.7	6.3		6.1		7		90				<0.2		1.9	
						3.3	0.7	12	28.7		7.9		16.2		89.4		6.3		6.1		7		90				<0.2		2.0	
					Bottom	5.6	0.5	17	26.9	26.9	7.7	7.7	26.6	26.3	61.7	62.6	4.3	4.4	6.6		9		91				<0.2		1.9	
						5.6	0.5	17	26.9		7.7		26.1		63.5		4.4		6.6		9		92				<0.2		1.9	
IM6	Sunny	Moderate	13:57	7.2	Surface	1.0	0.1	23	29.3	29.3	8.0	8.0	14.3	14.2	104.0	103.8	7.4	5.8	4.9	5.1	9	7	85	88	821064	805837	<0.2	<0.2	1.9	2.0
						1.0	0.1	24	29.3		8.0		14.2		103.6		7.3		5.0		9		85				<0.2		1.9	
					Middle	3.6	0.1	43	27.4	27.4	7.7	7.7	22.8	22.8	60.3	60.3	4.2		5.1		7		87				<0.2		1.9	
						3.6	0.1	46	27.4		7.7		22.8		60.2		4.2		5.1		7		88				<0.2		1.9	
					Bottom	6.2	0.1	50	27.2	27.3	7.7	7.7	26.6	26.5	55.3	55.9	3.8	3.9	5.3		6		92				<0.2		2.0	
						6.2	0.1	50	27.3		7.7		26.5		56.5		3.9		5.3		6		91				<0.2		2.1	
IM7	Sunny	Moderate	13:50	8.3	Surface	1.0	0.2	150	29.3	29.3	8.1	8.1	13.5	13.0	113.1	113.8	8.0	7.1	4.3	4.8	6	6	88	89	821343	806841	<0.2	<0.2	1.8	1.8
						1.0	0.2	152	29.2		8.1		12.4		114.5		8.2		4.3		7		88				<0.2		1.8	
					Middle	4.1	0.2	132	28.8	28.8	7.9	7.9	16.9	16.9	86.7	86.6	6.1		4.5		6		89				<0.2		1.6	
						4.1	0.2	141	28.8		7.9		16.8		86.4		6.1		4.5		5		89				<0.2		1.8	
					Bottom	7.3	0.2	142	27.8	27.8	7.8	7.8	25.0	25.0	67.6	68.0	4.6	4.7	5.5		5		90				<0.2		1.8	
						7.3	0.2	142	27.8		7.8		25.0		68.3		4.7		5.5		5		91				<0.2		1.9	
IM8	Sunny	Moderate	14:13	7.8	Surface	1.0	0.2	341	30.2	30.2	8.0	8.0	11.4	11.4	133.6	133.5	9.5	8.3	5.2	7.1	7	6	87	90	821816	808158	<0.2	<0.2	1.7	1.7
						1.0	0.2	314	30.2		8.0		11.4		133.4		9.5		5.2		7		86				<0.2		1.7	
					Middle	3.9	0.2	351	29.0	29.0	8.2	8.2	15.0	15.0	100.6	100.5	7.1		5.2		6		90				<0.2		1.6	
						3.9	0.2	357	29.0		8.2		15.0		100.4		7.1		5.2		6		90				<0.2		1.6	
					Bottom	6.8	0.1	40	28.6	28.6	8.1	8.1	18.8	18.8	85.8	85.9	6.0	6.0	10.9		4		94				<0.2		1.6	
						6.8	0.1	43	28.6		8.1		18.8		85.9		6.0		11.0		5		94				<0.2		1.7	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 22 May 21 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Sunny	Moderate	14:20	7.4	Surface	1.0	0.3	36	29.8	29.8	8.1	8.1	10.9	10.9	127.0	127.0	9.1	8.4	5.4	6.9	7	6	87	90	822080	808829	<0.2	<0.2	1.6	1.7
						1.0	0.3	39	29.8		8.2		10.9		126.9		9.1		5.4		7		86				<0.2		1.6	
					Middle	3.7	0.1	65	29.2	29.2	8.2	8.2	13.8	13.8	106.6	106.6	7.6		5.4		6		90				<0.2		1.7	
						3.7	0.2	69	29.2		8.2		13.7		106.6		7.6		5.4		6		91				<0.2		1.7	
					Bottom	6.4	0.2	90	28.7	28.7	8.1	8.1	18.2	18.2	78.0	78.1	5.5	5.5	9.8		6		94				<0.2		1.7	
						6.4	0.2	91	28.7		8.1		18.2		78.1		5.5		9.8		6		94				<0.2		1.7	
IM10	Sunny	Moderate	14:28	9.0	Surface	1.0	0.6	297	29.9	29.9	8.0	8.0	11.3	11.3	127.9	127.7	9.1	8.1	5.2	11.4	6	6	86	90	822377	809783	<0.2	<0.2	1.5	1.6
						1.0	0.6	324	29.9		8.0		11.3		127.5		9.1		5.2		6		86				<0.2		1.7	
					Middle	4.5	0.5	292	29.2	29.2	8.2	8.2	14.9	14.9	100.0	99.8	7.1		5.6		6		91				<0.2		1.6	
						4.5	0.6	303	29.2		8.2		14.9		99.6		7.0		5.6		6		90				<0.2		1.6	
					Bottom	8.0	0.5	295	28.0	28.0	8.0	8.0	22.2	22.3	64.3	64.3	4.5	4.5	23.3		7		94				<0.2		1.7	
						8.0	0.5	305	28.0		8.0		22.3		64.3		4.4		23.7		7		94				<0.2		1.6	
IM11	Sunny	Moderate	14:40	8.4	Surface	1.0	0.5	274	30.0	30.0	8.0	8.0	11.8	11.7	135.2	135.2	9.6	8.2	4.9	8.6	5	6	86	90	822063	811448	<0.2	<0.2	1.7	1.7
						1.0	0.5	300	30.0		8.0		11.7		135.1		9.6		4.9		5		86				<0.2		1.8	
					Middle	4.2	0.4	283	29.1	29.1	8.2	8.2	15.8	15.8	97.2	97.1	6.9		5.2		6		90				<0.2		1.7	
						4.2	0.4	299	29.0		8.2		15.8		96.9		6.8		5.2		6		91				<0.2		1.6	
					Bottom	7.4	0.4	275	27.8	27.9	8.1	8.1	23.2	23.1	76.8	77.1	5.3	5.3	15.4		6		94				<0.2		1.7	
						7.4	0.5	275	27.9		8.1		23.0		77.3		5.3		15.9		6		94				<0.2		1.7	
IM12	Sunny	Moderate	14:47	8.8	Surface	1.0	1.8	51	30.1	30.1	8.0	8.1	12.1	12.0	147.6	147.7	10.4	9.1	5.1	6.5	7	7	86	91	821441	812066	<0.2	<0.2	1.7	1.7
						1.0	1.9	55	30.1		8.1		12.0		147.7		10.4		5.0		7		87				<0.2		1.7	
					Middle	4.4	1.8	50	29.1	29.1	8.1	8.1	16.5	16.4	111.2	111.2	7.8		4.9		7		90				<0.2		1.8	
						4.4	1.9	50	29.1		8.1		16.4		111.1		7.8		4.9		7		91				<0.2		1.7	
					Bottom	7.8	2.0	53	26.9	26.9	8.1	8.1	27.5	27.4	68.8	69.0	4.7	4.7	9.6		7		94				<0.2		1.6	
						7.8	2.1	53	26.9		8.1		27.4		69.1		4.7		9.5		6		95				<0.2		1.6	
SR1A	Sunny	Calm	15:19	5.6	Surface	1.0	-	-	30.1	30.1	8.1	8.1	12.6	12.6	150.9	150.8	10.6	10.6	5.1	6.4	8	8	-	-	819979	812657	-	-	-	-
						1.0	-	-	30.1		8.0		12.6		150.6		10.6		5.1		8		-				-		-	
					Middle	2.8	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.8	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.6	-	-	29.4	29.4	8.0	8.0	15.8	15.8	113.2	113.2	7.9	7.9	7.7		8		-				-		-	
						4.6	-	-	29.4		8.0		15.8		113.2		7.9		7.8		7		-				-		-	
SR2	Sunny	Moderate	15:33	5.2	Surface	1.0	0.3	326	29.8	29.9	8.1	8.1	14.4	14.4	141.1	141.1	9.9	9.9	5.4	9.0	9	8	87	88	821486	814153	<0.2	<0.2	1.6	1.6
						1.0	0.3	332	29.9		8.1		14.4		141.0		9.9		5.4		8		86				<0.2		1.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.2	327	28.3	28.3	8.2	8.2	20.5	20.5	91.5	91.6	6.4	6.4	12.4		8		90				<0.2		1.6	
						4.2	0.2	355	28.3		8.2		20.5		91.6		6.4		12.6		8		90				<0.2		1.5	
SR3	Sunny	Moderate	14:07	8.7	Surface	1.0	0.0	231	30.1	30.1	8.0	8.0	11.1	11.1	130.5	130.5	9.3	8.0	5.2	8.9	7	6	-	-	822127	807549	-	-	-	-
						1.0	0.0	246	30.1		8.0		11.1		130.4		9.3		5.2		7		-				-		-	
					Middle	4.4	0.1	46	28.9	28.9	8.2	8.2	15.8	15.8	95.7	95.5	6.8		5.2		6		-				-		-	
						4.4	0.1	47	28.9		8.2		15.8		95.3		6.7		5.2		6		-				-		-	
					Bottom	7.7	0.2	53	27.6	27.6	8.1	8.1	24.9	24.9	71.1	71.2	4.9	4.9	16.1		5		-				-		-	
						7.7	0.2	57	27.6		8.1		24.9		71.3		4.9		16.1		5		-				-		-	
SR4A	Sunny	Moderate	15:30	9.7	Surface	1.0	0.5	70	30.2	30.2	8.2	8.2	10.4	10.4	126.6	126.7	9.0	9.1	5.9	6.5	4	5	-	-	817173	807810	-	-	-	-
						1.0	0.5	70	30.2		8.2		10.4		126.7		9.0		6.0		4		-				-		-	
					Middle	4.8	0.4	76	30.1	30.1	8.1	8.1	15.0	15.0	131.3	131.1	9.1		6.5		5		-				-		-	
						4.8	0.4	78	30.1		8.1		15.1		130.9		9.1		6.5		5		-				-		-	
					Bottom	8.7	0.3	80	26.6	26.6	7.8	7.8	27.7	27.8	66.3	67.2	4.6	4.7	6.9		6		-				-		-	
						8.7	0.3	84	26.5		7.8		27.9		68.1		4.7		7.0		6		-				-		-	
SR5A	Sunny	Moderate	15:47	4.1	Surface	1.0	0.1	113	29.9	29.9	8.2	8.2	15.8	15.8	134.3	134.0	9.3	9.3	6.3	6.7	4	4	-	-	816579	810698	-	-	-	-
						1.0	0.1	115	29.8		8.2		15.9		133.7		9.3		6.3		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.1	114	29.1	29.1	8.0	8.0	18.1	18.1	101.3	101.2	7.0	7.0	7.1		4		-				-		-	
						3.1	0.1	125	29.0		8.0		18.2		101.0		7.0		7.2		4		-				-		-	
SR6A	Sunny	Moderate	16:29	4.7	Surface	1.0	0.0	287	29.8	29.8	8.2	8.2	16.0	16.0	132.9	133.0	9.2	9.3	7.4	8.2	10	9	-	-	817940	814720	-	-	-	-
						1.0	0.0	314	29.8		8.2		15.9		133.0		9.3		7.3		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.0	269	28.8	28.9	8.0	8.0	18.1	18.0	95.3	95.5	6.7	6.7	9.0		8		-				-		-	
						3.7	0.0	283	28.9		8.0		17.9		95.7		6.7		8.9		8		-				-		-	
SR7	Sunny	Moderate	16:30	14.5	Surface	1.0	0.0	116	28.7	28.7	8.1	8.1	19.4	19.4	129.5	129.4	5.3	5.0	3.6	3.9	6	6	-	-	823623	823748	-	-	-	-
						1.0	0.0	123	28.7		8.1		19.5		129.3		5.3		3.6		7		-				-		-	
					Middle	7.3	0.1	184	27.4	27.4	8.2	8.2	25.1	25.1	94.2	94.2	4.6		3.6		5		-				-		-	
						7.3	0.1	186	27.3		8.2		25.2		94.1		4.6		3.6		6		-				-		-	
					Bottom	13.5	0.1	76	25.6	25.6	8.1	8.1	31.7	31.6	72.2	72.3	4.3	4.3	4.5		6		-				-		-	
						13.5	0.1	77	25.6		8.1		31.6		72.4		4.4		4.5		6		-				-		-	
SR8	Sunny	Moderate	14:55	4.4	Surface	1.0	-	-	29.6	29.7	8.0	8.0	13.6	13.6	120.9	121.0	8.5	8.5	5.4	5.4	5	6	-	-	820403	811623	-	-	-	-
						1.0	-	-	29.7		8.0		13.6		121.1		8.5		5.4		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	-	-	29.3	29.3	8.1	8.1	14.5	14.5	113.3	113.3	8.0	8.0	5.5		7		-				-		-	
						3.4	-	-	29.3		8.1		14.5		113.3		8.0		5.5		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 25 May 21 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Misty	Calm	12:14	8.0	Surface	1.0	0.6	203	27.4	27.4	7.9	7.9	21.7	21.8	70.8	70.5	5.0	4.4	6.4	8.0	10	9	85	87	815618	804257	<0.2	<0.2	0.9	1.1
						1.0	0.7	213	27.3		7.9		21.8		70.1		4.9		6.3		10		85				<0.2		1.0	
					Middle	4.0	0.8	191	26.3	26.3	7.8	7.8	26.5	26.6	56.5	56.4	3.9		8.8		10		88				<0.2		1.2	
						4.0	0.9	195	26.2		7.8		26.7		56.2		3.9		8.1		9		88				<0.2		1.3	
					Bottom	7.0	0.6	214	25.8	25.8	7.8	7.8	30.5	30.5	50.8	52.9	3.5	3.7	9.1		6		89				<0.2		1.2	
						7.0	0.6	233	25.8		7.8		30.5		54.9		3.8		9.1		6		89				<0.2		1.2	
C2	Cloudy	Moderate	13:39	11.1	Surface	1.0	4.2	192	28.9	28.9	8.2	8.2	14.9	14.9	93.1	93.0	6.6	5.9	6.4	9.9	6	6	83	86	825671	806933	<0.2	<0.2	1.4	1.3
						1.0	4.3	203	28.9		8.2		14.9		92.9		6.6		6.4		6		84				<0.2		1.4	
					Middle	5.6	4.3	196	27.8	27.8	8.1	8.1	21.5	21.5	74.1	74.2	5.2		9.7		6		86				<0.2		1.1	
						5.6	4.7	205	27.8		8.1		21.5		74.2		5.2		9.8		6		86				<0.2		1.2	
					Bottom	10.1	4.1	193	27.1	27.1	8.1	8.1	25.6	25.6	71.0	71.0	4.9	4.9	13.6		6		88				<0.2		1.3	
						10.1	4.4	202	27.1		8.1		25.6		71.0		4.9		13.4		7		89				<0.2		1.3	
C3	Rainy	Moderate	11:08	12.4	Surface	1.0	3.7	75	27.6	27.6	8.2	8.2	23.1	23.1	88.8	88.8	6.2	6.1	6.9	6.0	10	9	85	88	822088	817811	<0.2	<0.2	0.9	0.8
						1.0	3.7	76	27.6		8.2		23.1		88.8		6.2		6.9		10		85				<0.2		0.8	
					Middle	6.2	3.3	73	27.2	27.2	8.2	8.2	25.3	25.3	84.9	84.9	5.9		5.2		10		88				<0.2		0.8	
						6.2	3.6	73	27.2		8.2		25.3		84.9		5.9		5.2		10		88				<0.2		0.9	
					Bottom	11.4	3.6	72	26.9	26.9	8.2	8.2	26.3	26.3	79.7	79.8	5.5	5.5	5.9		8		90				<0.2		0.8	
						11.4	3.8	73	26.9		8.2		26.2		79.8		5.5		5.8		8		91				<0.2		0.8	
IM1	Fine	Calm	12:38	4.4	Surface	1.0	0.1	300	26.3	26.3	7.8	7.8	28.0	28.1	56.4	56.3	5.9	5.9	9.5	9.8	11	11	84	85	817961	807137	<0.2	<0.2	1.0	1.1
						1.0	0.1	320	26.3		7.8		28.2		56.2		5.9		9.6		10		84				<0.2		1.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.1	91	26.6	26.7	7.8	7.8	28.3	28.3	56.3	56.9	3.9	3.9	10.1		11		85				<0.2		1.1	
						3.4	0.1	99	26.7		7.8		28.2		57.5		3.9		10.0		11		85				<0.2		1.1	
IM2	Fine	Calm	12:45	6.2	Surface	1.0	0.3	145	26.9	26.8	7.9	7.9	22.8	22.8	65.6	64.9	5.6	4.5	7.3	8.4	10	10	85	88	818184	806167	<0.2	<0.2	1.1	1.2
						1.0	0.3	148	26.7		7.9		22.8		64.1		5.5		7.3		10		85				<0.2		1.0	
					Middle	3.1	0.3	133	26.2	26.2	7.8	7.8	27.6	27.6	50.3	50.4	3.5		9.0		10		89				<0.2		1.2	
						3.1	0.3	140	26.1		7.8		27.6		50.4		3.5		8.9		10		89				<0.2		1.3	
					Bottom	5.2	0.1	41	26.0	26.0	7.8	7.8	29.7	29.6	51.0	51.5	3.5	3.6	9.1		10		90				<0.2		1.2	
						5.2	0.1	44	26.0		7.8		29.6		51.9		3.6		9.0		10		90				<0.2		1.3	
IM3	Fine	Calm	12:52	6.4	Surface	1.0	0.1	142	27.3	27.3	7.9	7.9	21.2	21.2	70.6	70.2	5.0	5.4	6.4	7.6	13	14	86	89	818780	805593	<0.2	<0.2	1.1	1.1
						1.0	0.1	154	27.2		7.9		21.3		69.8		5.0		6.5		14		86				<0.2		1.0	
					Middle	3.2	0.1	143	26.7	26.7	7.8	7.8	26.1	26.1	55.3	55.4	5.8		7.1		14		89				<0.2		1.2	
						3.2	0.1	147	26.7		7.8		26.1		55.4		5.8		7.2		14		89				<0.2		1.2	
					Bottom	5.4	0.1	102	26.8	26.9	7.8	7.8	26.3	26.3	55.6	56.0	3.8	3.9	9.4		13		90				<0.2		1.1	
						5.4	0.1	103	26.9		7.8		26.2		56.4		3.9		9.3		13		91				<0.2		1.1	
IM4	Fine	Calm	13:13	8.4	Surface	1.0	0.2	209	28.1	28.1	7.9	7.9	16.7	16.7	80.1	80.1	5.7	5.4	6.3	8.5	11	13	86	89	819739	804618	<0.2	<0.2	1.1	1.1
						1.0	0.2	215	28.1		7.9		16.7		80.0		5.7		6.3		11		87				<0.2		1.1	
					Middle	4.2	0.1	160	27.8	27.8	7.9	7.9	20.4	20.5	73.1	73.0	5.1		9.4		13		89				<0.2		1.1	
						4.2	0.1	164	27.8		7.9		20.5		72.9		5.1		9.3		13		89				<0.2		1.0	
					Bottom	7.4	0.1	122	27.8	27.8	7.9	7.9	21.1	21.1	72.0	72.2	5.0	5.1	10.0		15		90				<0.2		1.0	
						7.4	0.1	125	27.8		7.9		21.1		72.4		5.1		10.0		15		90				<0.2		1.0	
IM5	Fine	Calm	13:14	7.0	Surface	1.0	1.4	217	28.0	28.0	7.9	7.9	17.0	17.0	78.7	78.4	5.6	5.3	8.2	9.3	8	7	85	88	820720	804875	<0.2	<0.2	0.9	0.9
						1.0	1.5	230	28.0		7.9		17.0		78.1		5.6		8.3		8		85				<0.2		0.9	
					Middle	3.5	1.1	221	27.8	27.8	7.9	7.9	20.6	20.7	71.3	71.1	5.0		9.4		7		89				<0.2		0.9	
						3.5	1.1	234	27.8		7.9		20.8		70.8		5.0		9.5		7		89				<0.2		0.9	
					Bottom	6.0	0.8	215	27.7	27.7	7.9	7.9	21.2	21.2	70.2	70.3	4.9	4.9	10.2		5		90				<0.2		1.0	
						6.0	0.8	227	27.7		7.9		21.2		70.3		4.9		10.2		5		90				<0.2		1.0	
IM6	Fine	Calm	13:26	6.6	Surface	1.0	1.2	246	28.2	28.2	7.9	7.9	18.2	18.3	79.3	79.0	5.6	5.4	5.1	7.3	5	5	85	87	821042	805824	<0.2	<0.2	0.8	1.0
						1.0	1.3	250	28.2		7.9		18.4		78.6		5.5		5.1		5		85				<0.2		0.8	
					Middle	3.3	1.0	246	27.7	27.7	7.8	7.8	19.3	19.3	74.9	74.8	5.3		7.6		5		88				<0.2		1.1	
						3.3	1.1	262	27.6		7.8		19.3		74.7		5.3		7.7		5		88				<0.2		1.0	
					Bottom	5.6	0.8	241	27.6	27.7	7.8	7.8	22.3	22.3	68.3	68.6	4.8	4.8	9.2		5		89				<0.2		1.1	
						5.6	0.9	252	27.7		7.8		22.3		68.9		4.8		9.3		5		89				<0.2		1.0	
IM7	Fine	Calm	13:39	7.4	Surface	1.0	1.0	241	28.4	28.4	7.9	7.9	17.6	17.6	83.2	83.2	5.9	5.9	6.6	7.9	6	5	86	88	821370	806830	<0.2	<0.2	0.9	0.9
						1.0	1.1	255	28.4		7.9		17.6		83.1		5.9		6.7		5		86				<0.2		0.8	
					Middle	3.7	1.0	246	28.4	28.4	7.9	7.9	17.6	17.6	82.8	82.8	5.8		7.9		5		88				<0.2		1.0	
						3.7	1.0	249	28.4		7.9		17.6		82.8		5.8		7.8		5		88				<0.2		1.0	
					Bottom	6.4	0.9	250	28.4	28.4	7.9	7.9	17.6	17.6	83.8	84.1	5.9	6.0	9.0		5		90				<0.2		0.9	
						6.4	0.9	252	28.3		7.9		17.6		84.3		6.0		9.1		5		90				<0.2		0.9	
IM8	Cloudy	Moderate	13:02	7.5	Surface	1.0	0.9	25	28.6	28.6	8.2	8.2	16.5	16.5	90.1	90.1	6.4	6.1	7.2	9.0	7	9	85	87	821822	808151	<0.2	<0.2	1.3	1.2
						1.0	0.9	26	28.6		8.2		16.5		90.0		6.4		7.2		7		84				<0.2		1.3	
					Middle	3.8	1.1	19	28.2	28.2	8.1	8.1	18.3	18.3	82.2	82.2	5.8		9.1		10		86				<0.2		1.2	
						3.8	1.1	19	28.2		8.1		18.3		82.1		5.8		9.4		10		87				<0.2		1.1	
					Bottom	6.5	0.9	11	28.2	28.2	8.1	8.1	18.6	18.6	81.9	81.9	5.8	5.8	10.6		11		90				<0.2		1.1	
						6.5	1.0	11	28.2		8.1		18.6		81.9		5.8		10.5		11		90				<0.2		1.2	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 25 May 21 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	12:56	7.0	Surface	1.0	2.2	67	28.4	28.4	8.1	8.1	17.5	17.5	85.8	85.8	6.1	6.0	7.8	8.6	9	9	84	87	822104	808820	<0.2	<0.2	1.1	1.1
						1.0	2.4	69	28.4		8.1		17.5		85.7		6.0		7.8		9		84				<0.2		1.1	
					Middle	3.5	2.3	60	28.3	28.3	8.1	8.1	18.1	18.1	83.4	83.4	5.9		8.6		9		86				<0.2		1.1	
						3.5	2.5	62	28.3		8.1		18.1		83.3		5.9		8.7		9		86				<0.2		1.1	
					Bottom	6.0	2.6	55	28.2	28.2	8.1	8.1	18.5	18.5	81.8	81.8	5.8	5.8	9.4		9		90				<0.2		1.1	
						6.0	2.7	55	28.2		8.1		18.6		81.7		5.8		9.6		90						<0.2		1.1	
IM10	Cloudy	Moderate	12:45	7.1	Surface	1.0	2.0	61	28.8	28.8	8.2	8.2	16.5	16.5	91.4	91.4	6.4	6.1	6.9	9.0	7	8	85	88	822388	809772	<0.2	<0.2	1.2	1.2
						1.0	2.2	67	28.8		8.2		16.5		91.3		6.4		6.9		7		89				<0.2		1.3	
					Middle	3.6	2.0	53	28.2	28.2	8.1	8.1	18.5	18.5	81.5	81.6	5.7		8.8		7		87				<0.2		1.2	
						3.6	2.2	56	28.2		8.1		18.5		81.6		5.7		8.8		7		87				<0.2		1.2	
					Bottom	6.1	2.1	38	27.9	27.9	8.1	8.1	19.9	19.9	77.2	77.3	5.4	5.4	11.3		9		90				<0.2		1.2	
						6.1	2.3	38	27.9		8.1		19.9		77.3		5.4		11.3		9		90				<0.2		1.2	
IM11	Cloudy	Moderate	12:30	7.3	Surface	1.0	2.5	56	28.9	28.9	8.2	8.2	16.3	16.3	96.9	96.9	6.8	6.3	6.5	10.3	7	9	84	87	822037	811441	<0.2	<0.2	1.2	1.2
						1.0	2.5	56	28.9		8.2		16.3		96.8		6.8		6.5		8		84				<0.2		1.2	
					Middle	3.7	2.6	49	28.2	28.2	8.1	8.1	18.6	18.6	82.3	82.3	5.8		9.5		9		87				<0.2		1.2	
						3.7	2.7	50	28.2		8.1		18.6		82.3		5.8		9.6		9		87				<0.2		1.2	
					Bottom	6.3	2.4	35	27.9	27.9	8.1	8.1	20.2	20.2	77.3	77.3	5.4	5.4	14.8		10		89				<0.2		1.1	
						6.3	2.5	38	27.9		8.1		20.2		77.3		5.4		14.7		10		90				<0.2		1.2	
IM12	Cloudy	Moderate	12:19	9.2	Surface	1.0	2.7	53	28.2	28.2	8.1	8.1	18.7	18.7	83.0	83.0	5.8	5.6	10.6	11.4	7	12	85	87	821437	812029	<0.2	<0.2	1.0	1.1
						1.0	2.8	55	28.2		8.1		18.7		82.9		5.8		10.7		6		84				<0.2		1.1	
					Middle	4.6	2.7	47	27.9	27.9	8.1	8.1	20.8	20.8	75.3	75.4	5.3		11.2		14		87				<0.2		1.1	
						4.6	2.7	49	27.9		8.1		20.8		75.4		5.3		11.0		14		87				<0.2		1.1	
					Bottom	8.2	2.7	33	27.6	27.6	8.1	8.1	22.7	22.7	70.8	70.9	4.9	4.9	12.5		15		90				<0.2		1.2	
						8.2	2.8	36	27.6		8.1		22.7		70.9		4.9		12.6		16		90				<0.2		1.2	
SR1A	Cloudy	Moderate	11:57	5.4	Surface	1.0	-	-	28.4	28.4	8.2	8.2	18.6	18.6	87.7	87.6	6.2	6.2	7.6	8.8	8	10	-	-	819971	812660	-	-	-	-
						1.0	-	-	28.3		8.2		18.6		87.4		6.1		7.6		8		-				-		-	
					Middle	2.7	-	-	-	-	-	-	-	-	-	-	-	-	-		-		-				-		-	
						2.7	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	-	-	28.1	28.1	8.2	8.2	20.6	20.6	84.1	84.2	5.9	5.9	10.1		11		-				-		-	
						4.4	-	-	28.1		8.2		20.6		84.2		5.9		10.0		11		-				-		-	
SR2	Cloudy	Moderate	11:41	3.7	Surface	1.0	0.5	83	28.1	28.1	8.2	8.2	20.3	20.3	85.4	85.5	6.0	6.0	8.7	9.7	10	13	85	86	821475	814154	<0.2	<0.2	1.1	1.1
						1.0	0.5	89	28.1		8.2		20.4		85.5		6.0		8.7		10		85				<0.2		1.1	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.7	0.2	76	27.8	27.8	8.2	8.2	22.0	22.0	80.9	81.0	5.6	5.6	10.7		16		87				<0.2		1.1	
						2.7	0.2	76	27.8		8.2		22.0		81.0		5.6		10.8		16		87				<0.2		1.1	
SR3	Cloudy	Moderate	13:09	8.4	Surface	1.0	0.6	26	28.5	28.5	8.1	8.1	17.0	17.1	87.7	87.7	6.2	6.0	7.7	8.8	11	9	-	-	822135	807566	-	-	-	-
						1.0	0.7	27	28.4		8.1		17.1		87.7		6.2		7.8		11		-				-		-	
					Middle	4.2	1.0	18	28.2	28.2	8.1	8.1	18.5	18.5	81.6	81.7	5.8		8.6		10		-				-		-	
						4.2	1.1	18	28.2		8.1		18.5		81.7		5.8		8.6		10		-				-		-	
					Bottom	7.4	0.7	12	28.1	28.1	8.1	8.1	19.0	19.0	79.6	79.6	5.6	5.6	10.0		6		-				-		-	
						7.4	0.8	13	28.1		8.1		19.0		79.6		5.6		10.1		7		-				-		-	
SR4A	Misty	Calm	11:53	9.0	Surface	1.0	0.1	250	28.0	28.0	7.9	7.9	19.8	19.8	73.2	73.0	5.1	5.4	7.3	9.4	8	10	-	-	817173	807827	-	-	-	-
						1.0	0.1	254	28.0		7.9		19.7		72.8		5.1		7.2		8		-				-		-	
					Middle	4.5	0.1	61	26.3	26.3	7.8	7.8	28.0	28.0	54.2	54.3	5.7		10.0		10		-				-		-	
						4.5	0.1	62	26.3		7.8		28.1		54.4		5.8		10.0		10		-				-		-	
					Bottom	8.0	0.2	70	26.6	26.7	7.8	7.8	28.2	28.1	57.1	57.5	3.9	4.0	10.8		11		-				-		-	
						8.0	0.2	76	26.8		7.8		28.1		57.9		4.0		10.8		11		-				-		-	
SR5A	Misty	Calm	11:36	3.6	Surface	1.0	0.1	15	28.7	28.7	8.0	8.0	17.4	17.4	88.9	88.8	6.2	6.2	10.0	10.0	9	10	-	-	816607	810697	-	-	-	-
						1.0	0.1	15	28.7		8.0		17.4		88.6		6.2		10.0		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.6	0.0	95	28.7	28.7	8.0	8.0	17.5	17.5	88.4	88.7	6.2	6.2	10.0		11		-				-		-	
						2.6	0.0	97	28.7		8.0		17.5		88.9		6.2		10.0		11		-				-		-	
SR6A	Misty	Calm	11:07	4.4	Surface	1.0	0.1	100	28.1	28.0	8.0	8.0	19.2	19.2	85.1	85.0	6.0	6.0	9.1	9.7	5	6	-	-	817966	814750	-	-	-	-
						1.0	0.1	102	27.9		8.0		19.3		84.9		6.0		9.0		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.0	1	27.2	27.2	7.9	7.9	25.4	25.4	74.4	74.6	5.1	5.2	10.4		6		-				-		-	
						3.4	0.0	1	27.2		7.9		25.4		74.7		5.2		10.5		6		-				-		-	
SR7	Cloudy	Moderate	10:20	17.3	Surface	1.0	3.0	122	27.6	27.6	8.2	8.2	23.7	23.7	92.0	92.1	6.4	6.0	5.0	6.1	6	8	-	-	823627	823764	-	-	-	-
						1.0	3.0	127	27.6		8.2		23.7		92.1		6.4		5.0		6		-				-		-	
					Middle	8.7	3.0	123	27.0	27.0	8.2	8.2	25.9	25.9	81.9	81.9	5.6		5.5		8		-				-		-	
						8.7	3.1	127	27.0		8.2		25.9		81.9		5.6		5.5		8		-				-		-	
					Bottom	16.3	3.1	120	26.1	26.1	8.1	8.1	29.4	29.4	74.1	74.2	5.1	5.1	8.0		9		-				-		-	
						16.3	3.4	126	26.1		8.1		29.4		74.2		5.1		7.8		8		-				-		-	
SR8	Cloudy	Moderate	12:09	5.2	Surface	1.0	-	-	28.8	28.8	8.2	8.2	17.1	17.2	95.3	95.2	6.7	6.7	7.3	8.9	8	10	-	-	820369	811643	-	-	-	-
						1.0	-	-	28.8		8.2		17.2		95.1		6.7		7.4		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	-	-	29.2	29.2	8.2	8.2	18.3	18.2	94.0	94.0	6.5	6.5	10.5		13		-				-		-	
						4.2	-	-	29.2		8.2		18.2		94.0		6.5		10.4		12		-				-		-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 25 May 21 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	Calm	18:02	8.0	Surface	1.0	0.3	46	28.0	28.0	7.9	7.9	19.1	19.1	78.1	77.9	5.5	4.9	7.7	8.8	4	6	89	91	815601	804231	<0.2	<0.2	1.1	1.1
						1.0	0.3	46	27.9		7.9		19.1		77.7		5.5		7.7		4		89				<0.2		1.0	
					Middle	4.0	0.2	34	27.0	27.0	7.8	7.8	24.4	24.4	61.7	61.7	4.3		8.5		5		92				<0.2		1.0	
						4.0	0.2	36	26.9		7.8		24.5		61.6		4.3		8.4		5		92				<0.2		1.0	
					Bottom	7.0	0.2	45	26.6	26.6	7.8	7.8	26.3	26.5	55.0	54.8	3.8	3.8	10.4		9		93				<0.2		1.1	
						7.0	0.2	45	26.5		7.8		26.6		54.5		3.8		10.4		8		93				<0.2		1.3	
C2	Cloudy	Moderate	17:10	11.6	Surface	1.0	3.3	34	28.8	28.8	8.1	8.1	12.9	12.9	84.4	84.4	6.1	5.6	6.2	8.4	5	5	84	86	825676	806941	<0.2	<0.2	1.5	1.6
						1.0	3.6	34	28.8		8.1		12.9		84.4		6.1		6.1		5		83				<0.2		1.4	
					Middle	5.8	3.6	28	27.8	27.8	8.1	8.1	20.5	20.4	70.7	70.7	5.0		8.2		5		86				<0.2		1.7	
						5.8	3.8	30	27.8		8.1		20.4		70.7		5.0		8.5		4		86				<0.2		1.7	
					Bottom	10.6	3.8	33	27.3	27.3	8.1	8.1	23.5	23.5	67.0	67.0	4.7	4.7	10.6		4		88				<0.2		1.6	
						10.6	3.9	33	27.3		8.1		23.5		67.0		4.7		10.7		4		88				<0.2		1.6	
C3	Cloudy	Moderate	19:17	11.5	Surface	1.0	3.3	142	28.6	28.6	8.3	8.3	18.9	18.9	100.5	100.5	7.0	6.1	4.2	6.6	7	6	85	88	822118	817816	<0.2	<0.2	1.4	1.3
						1.0	3.5	142	28.6		8.3		19.0		100.4		7.0		4.3		7		85				<0.2		1.3	
					Middle	5.8	3.2	144	27.4	27.4	8.1	8.1	23.6	23.6	74.2	74.3	5.2		6.1		6		88				<0.2		1.3	
						5.8	3.3	156	27.4		8.1		23.6		74.3		5.2		6.1		6		88				<0.2		1.3	
					Bottom	10.5	3.3	136	27.0	27.0	8.2	8.2	25.6	25.6	75.0	75.2	5.2	5.2	9.3		5		90				<0.2		1.3	
						10.5	3.4	138	27.0		8.2		25.6		75.4		5.2		9.5		6		90				<0.2		1.4	
IM1	Fine	Calm	17:43	4.6	Surface	1.0	0.1	354	27.0	27.0	7.9	7.9	24.7	24.7	65.1	65.2	4.5	4.5	7.2	8.1	6	5	85	88	817950	807138	<0.2	<0.2	1.2	1.2
						1.0	0.1	326	27.0		7.9		24.7		65.2		4.5		7.3		6		86				<0.2		1.1	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.1	28	26.3	26.3	7.8	7.8	28.4	28.3	52.9	53.3	3.6	3.7	9.0		5		91				<0.2		1.2	
						3.6	0.1	29	26.3		7.8		28.3		53.6		3.7		9.0		4		91				<0.2		1.3	
IM2	Fine	Calm	17:36	6.4	Surface	1.0	0.1	325	27.2	27.1	7.8	7.8	24.0	24.1	65.0	64.7	4.5	4.5	8.9	9.4	5	6	85	88	818173	806159	<0.2	<0.2	1.4	1.2
						1.0	0.1	340	27.0		7.8		24.1		64.4		4.5		8.9		5		85				<0.2		1.4	
					Middle	3.2	0.1	357	26.5	26.5	7.8	7.8	26.2	26.2	53.0	52.9	4.4		9.5		5		89				<0.2		1.0	
						3.2	0.1	338	26.5		7.8		26.2		52.8		4.4		9.5		5		90				<0.2		1.0	
					Bottom	5.4	0.2	42	26.2	26.2	7.8	7.8	28.8	28.7	53.4	53.8	4.3	4.3	9.8		6		90				<0.2		1.1	
						5.4	0.2	44	26.2		7.8		28.6		54.2		4.3		9.7		7		91				<0.2		1.1	
IM3	Fine	Calm	17:28	6.8	Surface	1.0	0.1	312	27.5	27.6	7.9	7.9	22.1	21.9	70.2	70.0	4.9	4.7	5.5	7.1	7	6	88	90	818781	805570	<0.2	<0.2	1.1	1.1
						1.0	0.1	317	27.6		7.9		21.7		69.7		4.9		5.4		6		88				<0.2		1.0	
					Middle	3.4	0.1	344	26.5	26.5	7.8	7.8	27.0	27.1	50.4	50.3	4.5		7.0		6		90				<0.2		1.2	
						3.4	0.1	316	26.5		7.8		27.1		50.2		4.5		7.0		6		90				<0.2		1.1	
					Bottom	5.8	0.1	37	26.0	26.0	7.7	7.7	29.6	29.5	48.5	48.6	4.3	4.3	8.9		6		91				<0.2		1.1	
						5.8	0.1	39	26.0		7.7		29.5		48.7		4.3		8.9		6		91				<0.2		1.2	
IM4	Fine	Calm	17:19	8.0	Surface	1.0	0.1	337	28.5	28.5	7.9	7.9	17.4	17.4	82.4	82.3	5.8	5.4	6.2	8.1	5	7	91	90	819742	804605	<0.2	<0.2	1.2	1.3
						1.0	0.1	342	28.4		7.9		17.4		82.2		5.8		6.2		5		87				<0.2		1.4	
					Middle	4.0	0.1	4	27.4	27.3	7.9	7.9	20.4	20.4	71.6	71.1	5.1		8.2		8		89				<0.2		1.2	
						4.0	0.1	4	27.1		7.9		20.4		70.5		5.0		8.2		8		90				<0.2		1.3	
					Bottom	7.0	0.1	31	26.5	26.5	7.8	7.8	27.3	27.3	56.0	57.2	3.9	4.0	9.9		8		91				<0.2		1.2	
						7.0	0.2	31	26.5		7.8		27.3		58.3		4.0		9.8		9		91				<0.2		1.2	
IM5	Fine	Calm	17:12	7.4	Surface	1.0	0.1	302	28.2	28.2	7.9	7.9	18.6	18.6	78.4	78.4	5.5	5.5	5.5	8.2	7	6	86	89	820732	804871	<0.2	<0.2	1.1	1.1
						1.0	0.1	305	28.2		7.9		18.6		78.3		5.5		5.5		7		87				<0.2		1.1	
					Middle	3.7	0.1	290	28.2	28.2	7.9	7.9	18.6	18.6	78.1	78.1	5.5		8.1		6		90				<0.2		1.2	
						3.7	0.1	300	28.2		7.9		18.6		78.1		5.5		8.1		6		90				<0.2		1.1	
					Bottom	6.4	0.0	132	28.2	28.2	7.9	7.9	18.5	18.5	78.7	78.7	5.5	5.5	11.1		4		91				<0.2		1.1	
						6.4	0.0	138	28.2		7.9		18.5		78.7		5.5		11.0		4		91				<0.2		1.2	
IM6	Fine	Calm	17:07	7.0	Surface	1.0	0.1	193	28.4	28.4	7.9	7.9	17.8	17.8	83.9	83.9	5.9	5.9	5.6	7.6	5	5	86	88	821038	805842	<0.2	<0.2	1.1	1.0
						1.0	0.1	207	28.4		7.9		17.8		83.9		5.9		5.7		5		86				<0.2		1.0	
					Middle	3.5	0.1	213	28.4	28.4	7.9	7.9	17.8	17.8	83.7	83.7	5.9		7.5		5		89				<0.2		1.0	
						3.5	0.1	213	28.4		7.9		17.8		83.7		5.9		7.5		5		89				<0.2		1.1	
					Bottom	6.0	0.1	236	28.3	28.3	7.9	7.9	17.8	17.7	83.8	83.9	5.9	5.9	9.7		5		90				<0.2		1.0	
						6.0	0.1	238	28.3		7.9		17.7		84.0		5.9		9.7		5		90				<0.2		0.9	
IM7	Fine	Calm	17:01	8.0	Surface	1.0	0.2	221	28.4	28.4	7.9	7.9	16.0	16.1	89.7	89.6	6.4	6.1	8.0	9.2	6	5	86	89	821367	806854	<0.2	<0.2	0.9	1.0
						1.0	0.2	239	28.4		7.9		16.1		89.4		6.4		8.1		6		86				<0.2		0.9	
					Middle	4.0	0.1	243	28.2	28.2	7.9	7.9	18.2	18.2	81.1	81.1	5.7		9.1		5		89				<0.2		1.2	
						4.0	0.1	264	28.2		7.9		18.2		81.1		5.7		9.1		5		89				<0.2		1.0	
					Bottom	7.0	0.1	80	28.3	28.3	7.9	7.9	18.1	18.0	83.2	83.4	5.9	5.9	10.5		4		91				<0.2		1.0	
						7.0	0.1	80	28.3		7.9		18.0		83.6		5.9		10.4		4		91				<0.2		1.0	
IM8	Cloudy	Moderate	17:31	7.7	Surface	1.0	2.4	8	29.1	29.1	8.2	8.2	15.2	15.2	96.2	96.2	6.8	6.4	4.9	6.4	5	5	85	87	821826	808142	<0.2	<0.2	1.5	1.5
						1.0	2.5	8	29.1		8.2		15.2		96.1		6.8		4.9		5		84				<0.2		1.6	
					Middle	3.9	2.5	9	28.5	28.5	8.1	8.1	17.6	17.6	84.6	84.5	6.0		6.4		5		87				<0.2		1.4	
						3.9	2.6	9	28.5		8.1		17.6		84.3		5.9		6.4		5		86				<0.2		1.6	
					Bottom	6.7	2.4	12	28.3	28.3	8.1	8.1	18.2	18.2	82.9	82.9	5.8	5.8	7.8		5		89				<0.2		1.5	
						6.7	2.5	12	28.3		8.1		18.2		82.9		5.8		8.0		5		90				<0.2		1.6	

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

Water Quality Monitoring Results on 25 May 21 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	17:37	7.2	Surface	1.0	2.5	225	29.1	29.1	8.2	8.2	15.3	15.3	98.4	98.4	6.9	6.6	5.1	7.0	6	5	85	87	822071	808801	<0.2	<0.2	1.5	1.5
						1.0	2.7	231	29.1		8.2		15.3		98.3		6.9		5.2		5		84				<0.2		1.5	
					Middle	3.6	2.4	231	28.8	28.8	8.2	8.2	16.9	16.9	88.2	90.3	6.2		6.6		5		86				<0.2		1.5	
						3.6	2.4	239	28.8		8.2		16.8		92.4		6.5		6.5		5		87				<0.2		1.4	
					Bottom	6.2	2.1	246	28.4	28.4	8.2	8.2	18.4	18.4	86.3	86.8	6.1	6.1	9.4		4		89				<0.2		1.5	
						6.2	2.2	260	28.4		8.2		18.4		87.3		6.1		9.4		4		89				<0.2		1.3	
IM10	Cloudy	Moderate	17:44	7.3	Surface	1.0	2.6	25	28.9	28.9	8.2	8.2	16.0	16.0	93.1	93.1	6.6	6.2	5.9	7.1	5	5	84	87	822383	809792	<0.2	<0.2	1.3	1.3
						1.0	2.6	26	28.9		8.2		16.0		93.0		6.6		5.9		5		84				<0.2		1.2	
					Middle	3.7	2.3	31	28.3	28.3	8.1	8.1	18.5	18.5	82.9	82.9	5.8		7.9		5		87				<0.2		1.2	
						3.7	2.4	31	28.3		8.1		18.5		82.8		5.8		7.9		5		87				<0.2		1.2	
					Bottom	6.3	2.6	23	28.3	28.3	8.1	8.1	18.7	18.7	82.4	82.5	5.8	5.8	7.4		6		89				<0.2		1.2	
						6.3	2.8	24	28.3		8.1		18.7		82.5		5.8		7.3		6		89				<0.2		1.4	
IM11	Cloudy	Moderate	17:54	7.9	Surface	1.0	2.6	49	28.6	28.6	8.2	8.2	17.4	17.4	89.0	89.0	6.3	6.0	6.6	8.7	6	5	84	87	822033	811475	<0.2	<0.2	1.2	1.2
						1.0	2.9	52	28.6		8.2		17.5		89.0		6.3		6.7		6		84				<0.2		1.2	
					Middle	4.0	2.5	42	28.3	28.3	8.1	8.1	18.5	18.5	81.3	81.3	5.7		8.3		5		87				<0.2		1.1	
						4.0	2.7	42	28.3		8.1		18.5		81.3		5.7		8.3		5		87				<0.2		1.2	
					Bottom	6.9	2.8	39	28.2	28.2	8.1	8.1	18.7	18.7	79.5	79.6	5.6	5.6	11.3		5		90				<0.2		1.2	
						6.9	2.9	42	28.2		8.1		18.7		79.6		5.6		11.2		5		90				<0.2		1.2	
IM12	Cloudy	Moderate	18:01	9.1	Surface	1.0	2.9	46	28.6	28.6	8.2	8.2	17.1	17.1	90.0	90.1	6.3	6.1	6.2	8.1	5	6	84	87	821457	812039	<0.2	<0.2	1.4	1.3
						1.0	3.2	47	28.6		8.2		17.1		90.1		6.4		6.2		5		85				<0.2		1.2	
					Middle	4.6	2.8	40	28.3	28.3	8.1	8.1	18.1	18.1	82.0	82.0	5.8		7.9		6		87				<0.2		1.3	
						4.6	2.8	40	28.3		8.1		18.1		81.9		5.8		8.0		6		88				<0.2		1.2	
					Bottom	8.1	2.8	32	28.2	28.2	8.1	8.1	18.7	18.7	80.2	80.2	5.6	5.6	10.2		6		90				<0.2		1.3	
						8.1	3.0	34	28.2		8.1		18.7		80.2		5.6		10.2		6		90				<0.2		1.2	
SR1A	Cloudy	Calm	18:35	4.9	Surface	1.0	-	-	28.7	28.7	8.2	8.2	17.6	17.6	98.9	98.9	6.9	6.9	6.8	7.7	8	7	-	-	819976	812655	-	-	-	-
						1.0	-	-	28.7		8.2		17.6		98.8		6.9		6.8		8		-				-		-	
					Middle	2.5	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.5	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	-	-	28.6	28.6	8.2	8.2	18.0	18.0	96.2	96.2	6.8	6.8	8.6		6		-				-		-	
						3.9	-	-	28.6		8.2		18.0		96.2		6.8		8.6		6		-				-		-	
SR2	Cloudy	Moderate	18:53	4.3	Surface	1.0	0.4	321	28.6	28.6	8.2	8.2	18.7	18.7	99.4	99.3	6.9	6.9	7.9	8.7	7	8	86	88	821440	814167	<0.2	<0.2	1.3	1.3
						1.0	0.4	321	28.6		8.2		18.7		99.1		6.9		8.0		7		86				<0.2		1.3	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.2	321	28.5	28.5	8.2	8.2	18.8	18.8	97.2	97.3	6.8	6.8	9.4		9		89				<0.2		1.3	
						3.3	0.2	326	28.5		8.2		18.8		97.3		6.8		9.4		9		89				<0.2		1.3	
SR3	Cloudy	Moderate	17:26	9.0	Surface	1.0	2.2	237	28.8	28.8	8.2	8.2	15.3	15.4	91.3	91.2	6.5	6.2	6.8	9.6	4	5	-	-	822159	807556	-	-	-	-
						1.0	2.4	246	28.8		8.2		15.4		91.1		6.5		7.0		4		-				-		-	
					Middle	4.5	2.3	240	28.4	28.4	8.1	8.1	17.6	17.6	84.2	84.2	5.9		9.1		4		-				-		-	
						4.5	2.3	262	28.4		8.1		17.6		84.2		5.9		9.2		5		-				-		-	
					Bottom	8.0	2.2	225	28.3	28.3	8.1	8.1	18.7	18.7	82.5	82.6	5.8	5.8	12.8		5		-				-		-	
						8.0	2.4	226	28.3		8.1		18.7		82.6		5.8		12.8		5		-				-		-	
SR4A	Fine	Calm	18:24	9.0	Surface	1.0	0.1	243	28.4	28.4	7.9	7.9	19.1	19.1	81.7	81.7	5.7	5.7	7.5	8.3	5	5	-	-	817190	807802	-	-	-	-
						1.0	0.1	258	28.4		7.9		19.1		81.6		5.7		7.4		5		-				-		-	
					Middle	4.5	0.0	110	28.4	28.4	7.9	7.9	19.1	19.1	81.4	81.4	5.7		8.1		5		-				-		-	
						4.5	0.0	110	28.4		7.9		19.1		81.3		5.7		8.2		4		-				-		-	
					Bottom	8.0	0.1	86	28.3	28.4	7.9	7.9	19.2	19.2	81.1	81.2	5.7	5.7	9.2		5		-				-		-	
						8.0	0.1	91	28.4		7.9		19.2		81.2		5.7		9.2		6		-				-		-	
SR5A	Fine	Calm	18:46	3.6	Surface	1.0	0.1	243	28.6	28.6	8.0	8.0	18.3	18.3	92.4	92.3	6.5	6.5	7.6	8.7	4	4	-	-	816578	810674	-	-	-	-
						1.0	0.1	264	28.6		8.0		18.4		92.1		6.4		7.6		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.6	0.1	277	28.6	28.6	8.0	8.0	18.4	18.3	92.2	92.3	6.5	6.5	9.9		4		-				-		-	
						2.6	0.1	283	28.6		8.0		18.3		92.3		6.5		9.9		4		-				-		-	
SR6A	Fine	Calm	19:18	4.0	Surface	1.0	0.1	231	28.7	28.7	8.1	8.1	18.4	18.4	105.7	105.8	7.4	7.4	7.0	7.9	6	7	-	-	817939	814749	-	-	-	-
						1.0	0.1	235	28.7		8.1		18.4		105.8		7.4		7.0		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	0.0	243	28.4	28.4	7.9	7.9	21.6	21.4	83.5	84.5	5.8	5.9	8.8		7		-				-		-	
						3.0	0.0	258	28.4		7.9		21.2		85.5		5.9		8.7		7		-				-		-	
SR7	Cloudy	Moderate	19:58	15.6	Surface	1.0	1.1	96	27.3	27.3	8.2	8.2	24.5	24.5	80.1	80.1	5.5	5.4	5.6	8.2	7	8	-	-	823619	823732	-	-	-	-
						1.0	1.2	98	27.3		8.2		24.5		80.0		5.5		5.6		7		-				-		-	
					Middle	7.8	1.2	94	26.8	26.8	8.1	8.1	26.6	26.6	75.6	75.6	5.2		8.1		8		-				-		-	
						7.8	1.2	94	26.8		8.1		26.6		75.6		5.2		8.1		9		-				-		-	
					Bottom	14.6	1.3	101	26.0	26.0	8.1	8.1	29.6	29.6	73.1	73.2	5.0	5.0	11.0		10		-				-		-	
						14.6	1.4	105	26.0		8.1		29.6		73.2		5.0		10.8		9		-				-		-	
SR8	Cloudy	Moderate	18:08	4.8	Surface	1.0	-	-	29.2	29.2	8.2	8.2	17.6	17.6	98.0	98.0	6.8	6.8	10.6	11.2	8	11	-	-	820409	811628	-	-	-	-
						1.0	-	-	29.2		8.2		17.6		98.0		6.8		10.5		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	-	-	29.1	29.1	8.2	8.2	17.4	17.4	98.0	98.1	6.8	6.8	11.9		13		-				-		-	
						3.8	-	-	29.1		8.2		17.4		98.1		6.8		11.7		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 May 21 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	Calm	13:02	8.8	Surface	1.0	0.7	210	28.9	28.9	8.0	8.0	19.4	19.4	72.7	72.7	5.0	4.6	11.1	11.8	4	4	89	90	815643	804245	<0.2	<0.2	1.5	1.6
						1.0	0.7	217	28.9		8.0		19.4		72.7		5.0		11.2		4		89				<0.2		1.6	
					Middle	4.4	0.8	199	27.4	27.4	7.9	7.9	24.5	24.5	58.8	58.9	4.1		11.9		3		90				<0.2		1.9	
						4.4	0.8	215	27.4		7.9		24.4		58.9		4.1		11.8		4		90				<0.2		1.8	
					Bottom	7.8	0.6	221	26.5	26.6	7.9	7.9	30.2	30.0	61.9	63.5	4.2	4.3	12.5		4		91				<0.2		1.5	
						7.8	0.6	232	26.8		7.8		29.8		65.0		4.4		12.5		3		92				<0.2		1.3	
C2	Sunny	Moderate	11:48	12.4	Surface	1.0	3.2	170	28.0	28.0	7.8	7.8	21.4	21.4	65.3	65.2	4.5	4.5	10.6	11.5	13	13	84	87	825696	806936	<0.2	<0.2	1.1	1.1
						1.0	3.3	173	27.9		7.8		21.5		65.1		4.5		11.0		13		85				<0.2		1.1	
					Middle	6.2	3.2	172	27.5	27.5	7.9	7.9	22.5	22.5	64.2	64.0	4.5		10.9		14		87				<0.2		1.1	
						6.2	3.3	177	27.5		7.9		22.5		63.8		4.5		10.9		13		88				<0.2		1.0	
					Bottom	11.4	3.2	168	27.3	27.3	7.9	7.9	25.4	25.3	64.9	65.0	4.5	4.5	12.9		14		89				<0.2		1.2	
						11.4	3.2	173	27.3		7.9		25.3		65.1		4.5		12.9		13		89				<0.2		1.1	
C3	Sunny	Moderate	14:51	12.0	Surface	1.0	1.1	217	28.1	28.1	7.9	7.9	23.5	23.5	69.5	69.4	4.8	4.7	8.2	11.2	13	12	86	89	822119	817821	<0.2	<0.2	1.1	1.1
						1.0	1.2	235	28.1		7.9		23.5		69.3		4.8		8.2		12		86				<0.2		1.0	
					Middle	6.0	0.7	220	27.3	27.3	7.9	7.9	25.5	25.6	65.4	65.1	4.5		8.5		13		89				<0.2		1.1	
						6.0	0.7	221	27.2		7.9		25.7		64.8		4.5		8.6		12		90				<0.2		1.0	
					Bottom	11.0	0.7	254	26.9	26.9	7.9	7.9	26.7	26.7	60.6	60.7	4.2	4.2	17.3		12		90				<0.2		1.1	
						11.0	0.7	274	26.9		7.9		26.8		60.7		4.2		16.6		11		91				<0.2		1.1	
IM1	Fine	Calm	12:41	5.4	Surface	1.0	0.1	211	28.1	28.2	7.9	7.9	21.5	21.4	66.8	66.7	4.6	4.6	9.8	10.2	5	7	89	90	817949	807116	<0.2	<0.2	1.2	1.9
						1.0	0.1	230	28.2		7.9		21.2		66.6		4.6		9.8		5		89				<0.2		1.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	0.1	135	27.1	27.1	7.8	7.8	26.3	26.2	67.8	70.1	4.7	4.9	10.7		8		92				<0.2		2.6	
						4.4	0.1	139	27.2		7.8		26.2		72.4		5.0		10.6		9		91				<0.2		2.5	
IM2	Fine	Calm	12:33	7.0	Surface	1.0	0.1	227	27.7	27.6	7.9	7.9	22.5	22.5	57.4	56.4	5.1	5.1	7.5	8.8	8	6	89	90	818181	806178	<0.2	<0.2	2.2	2.0
						1.0	0.1	229	27.5		7.9		22.4		55.4		5.0		7.4		7		89				<0.2		2.0	
					Middle	3.5	0.1	173	27.0	27.0	7.9	7.9	26.5	26.5	54.5	54.8	5.1		8.7		5		90				<0.2		1.7	
						3.5	0.1	189	27.1		7.9		26.5		55.1		5.2		8.6		5		90				<0.2		1.6	
					Bottom	6.0	0.3	116	26.6	26.6	7.9	7.8	28.8	28.8	61.1	62.9	4.2	4.3	10.5		5		91				<0.2		2.2	
						6.0	0.3	125	26.7		7.8		28.8		64.6		4.4		10.4		4		91				<0.2		2.1	
IM3	Fine	Calm	12:25	7.4	Surface	1.0	0.1	218	29.1	29.1	7.9	7.9	18.7	18.8	66.8	65.3	5.1	5.1	8.5	9.1	11	11	89	90	818775	805599	<0.2	<0.2	1.4	1.4
						1.0	0.1	229	29.1		7.9		18.8		63.8		5.2		8.5		12		89				<0.2		1.5	
					Middle	3.7	0.1	176	27.7	27.7	7.9	7.9	24.1	24.0	58.7	58.4	5.0		9.2		11		90				<0.2		1.3	
						3.7	0.2	184	27.7		7.9		23.9		58.1		5.0		9.1		10		90				<0.2		1.2	
					Bottom	6.4	0.4	129	26.6	26.7	7.8	7.8	28.3	28.3	59.9	61.5	4.1	4.2	9.6		10		91				<0.2		1.4	
						6.4	0.5	134	26.7		7.8		28.2		63.0		4.3		9.5		10		91				<0.2		1.4	
IM4	Fine	Calm	12:15	8.6	Surface	1.0	1.0	201	27.7	27.7	7.9	7.9	23.1	23.1	61.1	61.1	5.2	5.1	8.3	10.1	12	10	87	89	819711	804604	<0.2	<0.2	2.2	2.3
						1.0	1.1	215	27.7		7.9		23.0		61.0		5.2		8.3		12		88				<0.2		2.3	
					Middle	4.3	1.0	198	27.2	27.2	7.9	7.9	25.1	25.1	55.4	55.4	5.0		10.0		9		89				<0.2		2.4	
						4.3	1.1	205	27.2		7.9		25.1		55.3		5.0		10.1		10		89				<0.2		2.4	
					Bottom	7.6	0.6	162	26.7	26.8	7.8	7.8	28.3	28.2	58.0	59.2	4.0	4.1	12.1		7		91				<0.2		2.3	
						7.6	0.6	173	26.8		7.8		28.2		60.4		4.1		12.0		8		91				<0.2		2.3	
IM5	Fine	Calm	12:07	8.4	Surface	1.0	0.7	215	27.9	27.9	7.9	7.9	22.6	22.6	61.2	61.0	5.2	5.1	8.2	10.3	3	5	87	89	820717	804887	<0.2	<0.2	1.6	1.5
						1.0	0.7	227	27.9		7.9		22.6		60.8		5.2		8.2		3		88				<0.2		1.6	
					Middle	4.2	0.6	210	27.3	27.2	7.9	7.9	24.0	24.1	54.4	54.2	5.0		11.0		5		89				<0.2		1.6	
						4.2	0.7	218	27.1		7.9		24.2		53.9		5.0		10.9		6		89				<0.2		1.6	
					Bottom	7.4	0.5	181	26.9	27.0	7.8	7.8	27.5	27.3	60.4	63.2	4.1	4.3	11.8		5		91				<0.2		1.4	
						7.4	0.6	190	27.2		7.8		27.2		66.0		4.5		11.7		6		91				<0.2		1.4	
IM6	Fine	Calm	11:58	8.0	Surface	1.0	0.4	258	28.4	28.4	7.9	7.9	20.7	20.7	65.4	65.4	5.5	5.3	8.2	9.4	9	7	87	89	821045	805818	<0.2	<0.2	2.6	2.1
						1.0	0.4	264	28.4		7.9		20.7		65.4		5.5		8.1		10		87				<0.2		2.7	
					Middle	4.0	0.4	224	27.3	27.3	7.9	7.9	24.5	24.5	55.0	55.0	5.0		9.7		10		88				<0.2		2.0	
						4.0	0.4	232	27.3		7.9		24.5		54.9		5.0		9.6		3		88				<0.2		2.0	
					Bottom	7.0	0.4	193	27.0	27.0	7.9	7.9	26.3	26.3	53.4	53.5	3.7	3.7	10.4		5		90				<0.2		1.6	
						7.0	0.4	205	27.0		7.9		26.2		53.6		3.7		10.3		6		91				<0.2		1.7	
IM7	Fine	Calm	11:50	9.0	Surface	1.0	0.1	263	28.4	28.4	7.9	7.9	20.7	20.7	67.5	67.0	4.7	4.5	7.4	8.5	5	6	85	88	821343	806857	<0.2	<0.2	1.2	1.6
						1.0	0.2	276	28.4		7.9		20.8		66.4		4.6		7.3		6		85				<0.2		1.3	
					Middle	4.5	0.1	208	27.7	27.7	7.9	7.9	22.5	22.5	61.9	62.0	4.3		8.5		5		87				<0.2		1.4	
						4.5	0.1	212	27.7		7.9		22.5		62.1		4.3		8.5		6		87				<0.2		1.4	
					Bottom	8.0	0.1	185	27.7	27.7	7.8	7.8	22.7	22.6	64.4	65.7	4.5	4.6	9.7		6		92				<0.2		2.0	
						8.0	0.1	196	27.7		7.8		22.6		66.9		4.6		9.7		5		92				<0.2		2.0	
IM8	Sunny	Moderate	12:15	8.4	Surface	1.0	1.9	177	28.2	28.2	7.8	7.8	20.7	20.8	69.2	69.2	4.8	4.7	9.6	12.5	10	10	85	87	821807	808130	<0.2	<0.2	1.0	1.0
						1.0	2.0	193	28.1		7.8		20.9		69.1		4.8		10.0		9		85				<0.2		1.0	
					Middle	4.2	1.9	173	27.5	27.5	7.8	7.8	21.8	21.9	63.6	63.8	4.5		11.6		10		87				<0.2		1.0	
						4.2	2.0	186	27.4		7.8		21.9		64.0		4.5		11.5		10		87				<0.2		1.0	
					Bottom	7.4	2.4	176	27.4	27.4	7.8	7.8	24.4	24.4	65.1	65.4	4.5	4.5	15.9		12		90				<0.2		1.1	
						7.4	2.5	188	27.4		7.8		24.4		65.6		4.5		16.4		11		90				<0.2		1.1	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 27 May 21 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Sunny	Moderate	12:21	7.9	Surface	1.0	1.9	162	28.0	28.0	7.8	7.8	21.0	21.0	65.7	65.5	5.2	5.1	10.5	13.6	13	13	86	88	822079	808825	<0.2	<0.2	1.2	1.1
						1.0	1.9	177	28.0		7.8		21.0		65.3		5.2		10.5		12		87				<0.2		1.2	
					Middle	4.0	1.9	162	27.5	27.5	7.8	7.8	22.7	22.7	60.5	60.4	5.1		15.0		12		88				<0.2		1.1	
						4.0	2.0	175	27.4		7.8		22.7		60.3		5.0		15.0		13		88				<0.2		1.0	
					Bottom	6.9	1.9	167	27.2	27.2	7.8	7.8	24.4	24.4	60.6	60.9	4.2	4.2	15.6		13		89				<0.2		1.1	
						6.9	2.0	178	27.2		7.8		24.4		61.2		4.2		15.3		13		89				<0.2		1.1	
IM10	Sunny	Moderate	12:28	7.4	Surface	1.0	2.5	153	28.4	28.4	7.8	7.8	20.6	20.6	70.5	70.3	4.9	4.8	8.5	9.4	12	13	85	87	822365	809815	<0.2	<0.2	1.0	1.1
						1.0	2.7	163	28.4		7.8		20.6		70.1		4.9		8.6		13		85				<0.2		1.2	
					Middle	3.7	2.8	154	28.1	28.1	7.8	7.8	20.9	20.9	67.8	67.7	4.7		9.2		12		87				<0.2		1.1	
						3.7	2.9	167	28.0		7.8		20.9		67.6		4.7		9.3		13		88				<0.2		1.0	
					Bottom	6.4	2.2	160	27.7	27.7	7.8	7.8	22.8	22.8	67.5	67.8	4.7	4.7	10.3		14		89				<0.2		1.1	
						6.4	2.3	161	27.7		7.9		22.8		68.0		4.7		10.9		13		89				<0.2		1.1	
IM11	Sunny	Moderate	12:36	8.2	Surface	1.0	2.2	151	28.4	28.4	7.8	7.8	20.5	20.5	70.2	70.1	4.9	4.9	8.6	9.6	14	12	86	89	822073	811467	<0.2	<0.2	1.2	1.1
						1.0	2.3	159	28.4		7.8		20.5		70.0		4.9		8.7		13		86				<0.2		1.1	
					Middle	4.1	2.6	153	28.4	28.4	7.8	7.8	20.6	20.6	69.5	69.6	4.8		9.0		14		89				<0.2		1.0	
						4.1	2.8	153	28.3		7.8		20.6		69.6		4.8		8.7		13		89				<0.2		1.1	
					Bottom	7.2	2.4	167	27.7	27.8	7.8	7.8	22.7	22.7	66.5	66.8	4.6	4.6	11.1		10		90				<0.2		1.0	
						7.2	2.4	169	27.8		7.8		22.7		67.1		4.6		11.3		9		91				<0.2		1.1	
IM12	Sunny	Moderate	12:43	8.8	Surface	1.0	2.3	192	27.9	27.9	7.8	7.8	21.6	21.7	64.3	64.2	5.1	5.0	11.0	12.5	10	10	85	88	821460	812069	<0.2	<0.2	1.1	1.1
						1.0	2.4	204	27.8		7.8		21.8		64.0		5.0		11.1		9		85				<0.2		1.1	
					Middle	4.4	2.1	191	27.5	27.5	7.8	7.8	22.5	22.5	63.0	63.0	5.0		12.8		11		88				<0.2		1.1	
						4.4	2.2	194	27.5		7.8		22.4		63.0		5.0		12.8		10		88				<0.2		1.1	
					Bottom	7.8	2.3	206	27.5	27.6	7.8	7.8	24.6	24.6	63.2	65.0	4.4	4.5	13.2		10		91				<0.2		1.1	
						7.8	2.4	209	27.6		7.8		24.6		66.8		4.6		14.0		11		91				<0.2		1.0	
SR1A	Sunny	Moderate	13:02	5.0	Surface	1.0	-	-	28.5	28.4	7.8	7.8	21.7	21.9	75.0	75.0	5.2	5.2	7.4	10.9	9	9	-	-	819975	812659	-	-	-	-
						1.0	-	-	28.3		7.8		22.0		75.0		5.2		7.9		9		-				-		-	
					Middle	2.5	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.5	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	-	-	28.0	28.0	7.9	7.9	22.6	22.5	70.4	70.9	4.9	4.9	14.5		8		-				-		-	
						4.0	-	-	28.0		7.9		22.5		71.3		4.9		13.7		9		-				-		-	
SR2	Sunny	Moderate	14:31	4.2	Surface	1.0	0.6	70	28.2	28.2	7.8	7.8	21.1	21.2	67.8	67.6	4.7	4.7	13.8	15.8	24	24	84	86	821447	814173	<0.2	<0.2	1.1	1.1
						1.0	0.6	74	28.1		7.8		21.3		67.4		4.7		13.8		24		85				<0.2		1.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.3	67	27.9	27.9	7.8	7.8	21.9	21.9	67.5	67.5	4.7	4.7	17.8		24		88				<0.2		1.0	
						3.2	0.3	70	27.9		7.8		21.9		67.5		4.7		17.9		23		88				<0.2		1.1	
SR3	Sunny	Moderate	12:08	9.2	Surface	1.0	2.6	0	27.9	27.9	7.8	7.8	21.1	21.2	65.2	65.0	4.5	4.5	9.6	11.8	10	13	-	-	822168	807583	-	-	-	-
						1.0	2.7	0	27.9		7.8		21.2		64.7		4.5		10.1		11		-				-		-	
					Middle	4.6	2.4	0	27.6	27.6	7.8	7.8	22.0	22.0	62.8	62.8	4.4		12.8		12		-				-		-	
						4.6	2.4	0	27.6		7.8		22.0		62.7		4.4		13.4		13		-				-		-	
					Bottom	8.2	2.6	0	27.3	27.4	7.8	7.8	24.9	24.9	64.4	64.7	4.4	4.5	12.6		14		-				-		-	
						8.2	2.6	0	27.4		7.8		25.0		64.9		4.5		12.3		15		-				-		-	
SR4A	Fine	Calm	13:27	9.6	Surface	1.0	0.2	268	28.5	28.5	7.9	7.9	19.6	19.6	65.2	64.9	5.1	5.1	8.0	9.3	3	4	-	-	817198	807821	-	-	-	-
						1.0	0.2	288	28.5		7.9		19.6		64.6		5.2		7.9		4		-				-		-	
					Middle	4.8	0.1	269	27.6	27.7	7.9	7.9	24.2	24.0	59.3	59.4	5.0		9.2		4		-				-		-	
						4.8	0.1	279	27.7		7.9		23.9		59.4		5.1		9.1		4		-				-		-	
					Bottom	8.6	0.0	262	27.3	27.3	7.8	7.8	25.6	25.5	64.2	65.5	4.4	4.5	10.9		4		-				-		-	
						8.6	0.0	266	27.4		7.8		25.5		66.8		4.6		10.8		4		-				-		-	
SR5A	Fine	Calm	13:46	3.8	Surface	1.0	0.2	290	29.2	29.2	7.9	7.9	19.8	19.8	81.4	81.3	5.6	5.6	11.5	11.9	3	4	-	-	816599	810711	-	-	-	-
						1.0	0.2	317	29.2		7.9		19.8		81.1		5.6		11.6		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	0.1	278	29.1	29.1	7.9	7.9	19.9	19.9	82.0	82.4	5.6	5.7	12.3		4		-				-		-	
						2.8	0.1	280	29.1		7.9		19.9		82.7		5.7		12.3		4		-				-		-	
SR6A	Fine	Calm	14:17	3.8	Surface	1.0	0.1	13	29.2	29.2	7.9	7.9	19.9	19.9	79.3	79.2	5.5	5.5	8.8	9.4	5	5	-	-	817980	814729	-	-	-	-
						1.0	0.1	13	29.1		7.9		19.9		79.0		5.4		8.7		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	0.0	325	28.8	28.8	7.9	7.9	20.2	20.2	76.4	77.1	5.3	5.4	10.1		4		-				-		-	
						2.8	0.0	344	28.9		7.9		20.2		77.7		5.4		10.1		5		-				-		-	
SR7	Sunny	Moderate	15:13	16.4	Surface	1.0	0.6	126	27.9	27.9	7.9	7.9	22.9	22.9	67.2	67.2	5.0	5.0	9.9	10.7	13	10	-	-	823633	823732	-	-	-	-
						1.0	0.6	131	27.9		7.9		22.9		67.1		5.0		10.0		12		-				-		-	
					Middle	8.2	0.5	148	27.8	27.8	7.9	7.9	23.3	23.3	65.9	65.9	5.1		10.7		9		-				-		-	
						8.2	0.6	160	27.7		7.9		23.3		65.8		5.0		10.8		10		-				-		-	
					Bottom	15.4	0.3	158	27.6	27.6	7.9	7.9	23.9	23.9	65.6	65.8	4.5	4.6	11.5		8		-				-		-	
						15.4	0.3	173	27.6		7.9		23.9		66.0		4.6		11.6		9		-				-		-	
SR8	Sunny	Moderate	12:53	4.8	Surface	1.0	-	-	28.8	28.7	7.9	7.9	22.1	22.1	75.8	75.6	5.2	5.2	12.0	13.6	12	12	-	-	820405	811607	-	-	-	-
						1.0	-	-	28.5		7.9		22.2		75.4		5.2		11.5		11		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	-	-	28.1	28.2	7.9	7.9	22.4	22.4	70.6	70.8	4.9	4.9	15.1		12		-				-		-	
						3.8	-	-	28.2		7.9		22.4		70.9		4.9		16.0		13		-				-		-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 27 May 21 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	Calm	07:09	9.2	Surface	1.0	0.6	32	28.0	28.0	7.9	7.9	18.6	18.5	62.5	61.3	4.4	4.0	7.8	9.5	5	6	88	89	815605	804238	<0.2	<0.2	1.6	1.6
						1.0	0.6	33	28.0		7.9		18.5		60.0		4.2		8.7		4		88				<0.2		1.6	
					Middle	4.6	0.7	35	26.3	26.3	7.9	7.9	29.3	29.4	52.6	52.6	3.6		9.7		5		89				<0.2		1.6	
						4.6	0.7	37	26.3		7.9		29.4		52.5		3.6		9.7		6		89				<0.2		1.6	
					Bottom	8.2	0.4	29	25.9	25.9	7.9	7.9	31.7	31.7	56.0	56.8	3.8	3.9	10.6		9		90				<0.2		1.7	
						8.2	0.4	30	26.0		7.9		31.7		57.6		3.9		10.5		8		90				<0.2		1.5	
C2	Sunny	Moderate	08:10	12.4	Surface	1.0	0.2	326	28.2	28.2	7.8	7.8	18.6	18.6	70.6	70.6	5.0	4.9	16.6	16.6	14	15	86	88	825692	806965	<0.2	<0.2	1.3	1.2
						1.0	0.2	346	28.2		7.8		18.6		70.6		5.0		16.6		15		87				<0.2		1.4	
					Middle	6.2	0.2	284	28.0	28.0	7.8	7.8	19.5	19.4	68.4	68.4	4.8		16.2		16		88				<0.2		1.1	
						6.2	0.2	284	28.0		7.8		19.4		68.3		4.8		15.7		15		89				<0.2		1.2	
					Bottom	11.4	0.1	165	27.9	27.9	7.9	7.9	21.1	21.1	69.2	69.5	4.8	4.9	17.2		15		90				<0.2		1.2	
						11.4	0.1	165	27.9		7.9		21.1		69.7		4.9		17.2		16		90				<0.2		1.2	
C3	Sunny	Moderate	06:02	12.6	Surface	1.0	2.9	244	27.7	27.7	7.9	7.9	23.1	23.1	69.8	69.7	4.8	4.4	4.5	10.3	5	5	85	88	822106	817817	<0.2	<0.2	1.1	1.0
						1.0	3.1	258	27.7		7.9		23.1		69.6		4.8		4.5		4		85				<0.2		1.2	
					Middle	6.3	3.2	243	26.2	26.2	7.9	7.9	29.7	29.7	58.1	58.1	4.0		11.0		4		88				<0.2		0.9	
						6.3	3.4	256	26.2		7.9		29.7		58.1		4.0		11.2		4		89				<0.2		0.9	
					Bottom	11.6	3.7	243	26.2	26.2	7.9	7.9	29.8	29.8	58.3	58.4	4.0	4.0	15.2		6		90				<0.2		0.9	
						11.6	3.7	247	26.2		7.9		29.8		58.4		4.0		15.4		5		91				<0.2		0.9	
IM1	Fine	Calm	07:30	5.2	Surface	1.0	1.6	4	28.3	28.3	7.9	7.9	18.5	18.5	74.2	73.9	5.2	5.2	10.3	10.6	8	6	86	87	817926	807114	<0.2	<0.2	2.0	1.9
						1.0	1.7	4	28.2		7.9		18.5		73.5		5.2		10.4		7		86				<0.2		1.9	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	1.5	359	28.1	28.1	7.8	7.8	20.1	20.1	73.0	75.3	5.1	5.3	10.8		4		87				<0.2		1.8	
						4.2	1.6	330	28.1		7.8		20.1		77.5		5.4		10.8		3		87				<0.2		1.8	
IM2	Fine	Calm	07:38	7.2	Surface	1.0	0.1	346	28.3	28.3	7.9	7.9	17.7	17.8	72.7	72.2	5.1	4.8	8.3	9.8	6	7	87	89	818148	806163	<0.2	<0.2	1.8	1.7
						1.0	0.1	318	28.3		7.9		17.8		71.6		5.1		8.3		5		87				<0.2		1.8	
					Middle	3.6	0.1	353	27.8	27.8	7.9	7.9	21.8	21.8	63.9	64.0	4.4		9.5		5		89				<0.2		1.7	
						3.6	0.1	325	27.8		7.9		21.8		64.1		4.5		9.5		6		89				<0.2		1.6	
					Bottom	6.2	0.2	37	27.8	27.8	7.9	7.9	22.0	22.0	64.1	64.2	4.5	4.5	11.5		10		91				<0.2		1.6	
						6.2	0.2	37	27.8		7.9		22.0		64.3		4.5		11.5		9		91				<0.2		1.5	
IM3	Fine	Calm	07:46	7.4	Surface	1.0	0.1	326	28.2	28.2	7.9	7.9	19.0	19.0	67.8	67.4	4.8	4.5	6.9	8.7	3	6	85	88	818769	805589	<0.2	<0.2	1.7	1.8
						1.0	0.1	340	28.2		7.9		18.9		66.9		4.7		6.9		4		85				<0.2		1.7	
					Middle	3.7	0.1	335	27.7	27.7	7.9	7.9	22.6	22.6	61.8	61.8	4.3		8.5		9		87				<0.2		1.9	
						3.7	0.1	308	27.7		7.9		22.6		61.8		4.3		8.5		4		88				<0.2		1.8	
					Bottom	6.4	0.1	14	27.7	27.7	7.9	7.9	22.9	22.9	61.8	62.0	4.3	4.3	10.7		5		91				<0.2		1.7	
						6.4	0.1	14	27.7		7.9		22.9		62.1		4.3		10.6		8		91				<0.2		1.7	
IM4	Fine	Calm	07:57	8.6	Surface	1.0	0.1	354	28.2	28.1	7.9	7.9	19.3	18.9	67.6	66.9	4.7	4.5	8.9	9.8	3	4	86	89	819703	804603	<0.2	<0.2	1.5	1.6
						1.0	0.1	354	28.0		7.9		18.5		66.2		4.7		8.8		4		87				<0.2		1.4	
					Middle	4.3	0.1	6	27.5	27.5	7.9	7.9	23.4	23.4	61.5	61.7	4.3		9.5		3		89				<0.2		1.6	
						4.3	0.1	6	27.5		7.9		23.4		61.8		4.3		9.4		4		89				<0.2		1.6	
					Bottom	7.6	0.2	21	27.2	27.3	7.8	7.8	25.5	25.5	65.1	66.7	4.5	4.6	11.1		4		91				<0.2		1.7	
						7.6	0.2	22	27.3		7.8		25.4		68.3		4.7		11.0		5		92				<0.2		1.7	
IM5	Fine	Calm	08:04	8.0	Surface	1.0	0.2	263	28.2	28.1	7.9	7.9	19.2	19.2	65.7	65.1	4.6	4.5	7.7	9.3	3	4	87	89	820724	804882	<0.2	<0.2	2.1	2.2
						1.0	0.2	266	28.1		7.9		19.2		64.5		4.5		7.7		4		87				<0.2		2.1	
					Middle	4.0	0.1	256	27.7	27.7	7.8	7.8	22.5	22.4	62.6	62.7	4.4		9.6		3		88				<0.2		2.0	
						4.0	0.1	273	27.7		7.8		22.3		62.7		4.4		9.5		4		88				<0.2		2.0	
					Bottom	7.0	0.0	187	27.6	27.6	7.8	7.8	23.2	23.2	65.6	66.7	4.5	4.6	10.6		5		90				<0.2		2.4	
						7.0	0.0	187	27.7		7.8		23.2		67.7		4.7		10.5		5		91				<0.2		2.3	
IM6	Fine	Calm	08:14	7.8	Surface	1.0	0.1	224	28.7	28.7	7.9	7.9	17.6	17.6	76.3	76.0	5.4	5.2	10.2	10.8	7	5	87	89	821053	805813	<0.2	0.2	1.5	2.1
						1.0	0.1	241	28.7		7.9		17.6		75.6		5.3		10.1		7		88				<0.2		1.6	
					Middle	3.9	0.1	208	28.4	28.4	7.9	7.9	18.4	18.4	72.4	72.2	5.1		11.0		5		88				<0.2		1.8	
						3.9	0.1	210	28.4		7.9		18.4		71.9		5.0		11.0		4		89				<0.2		1.7	
					Bottom	6.8	0.1	234	27.9	27.9	7.8	7.8	21.4	21.4	68.6	69.4	4.8	4.9	11.2		4		91				0.2		2.9	
						6.8	0.1	252	28.0		7.8		21.4		70.2		4.9		11.1		5		91				0.2		3.0	
IM7	Fine	Calm	08:24	9.0	Surface	1.0	0.2	242	28.3	28.3	7.9	7.9	19.1	19.1	69.4	69.0	4.9	4.8	8.6	10.2	5	4	89	90	821329	806821	<0.2	<0.2	1.5	1.5
						1.0	0.2	259	28.2		7.9		19.2		68.6		4.8		8.7		4		89				<0.2		1.4	
					Middle	4.5	0.1	227	28.0	28.0	7.9	7.9	20.5	20.5	67.0	67.0	4.7		10.4		4		90				<0.2		1.4	
						4.5	0.1	247	28.0		7.9		20.5		66.9		4.7		10.3		5		90				<0.2		1.5	
					Bottom	8.0	0.1	62	27.8	27.8	7.8	7.8	21.6	21.6	69.2	70.3	4.8	4.9	11.6		4		91				<0.2		1.6	
						8.0	0.1	65	27.9		7.8		21.6		71.4		5.0		11.6		4		92				<0.2		1.7	
IM8	Sunny	Moderate	07:44	8.5	Surface	1.0	0.3	56	28.3	28.3	7.8	7.8	18.3	18.3	71.4	71.2	5.0	4.8	8.7	9.6	8	7	85	87	821820	808158	<0.2	<0.2	1.2	1.1
						1.0	0.3	59	28.3		7.8		18.3		70.9		5.0		8.9		8		85				<0.2		1.1	
					Middle	4.3	0.2	61	28.0	28.0	7.8	7.8	19.7	19.7	66.4	66.2	4.7		9.9		7		88				<0.2		1.1	
						4.3	0.3	61	27.9		7.8		19.8		65.9		4.6		10.0		7		88				<0.2		1.0	
					Bottom	7.5	0.2	58	27.6	27.7	7.8	7.8	21.9	21.9	66.8	67.1	4.7	4.7	10.4		7		89				<0.2		1.0	
						7.5	0.2	60	27.7		7.8		21.8		67.3		4.7		10.0		7		89				<0.2		1.0	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 27 May 21 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Sunny	Moderate	07:39	7.2	Surface	1.0	0.3	32	28.1	28.1	7.8	7.8	19.8	19.9	65.7	65.6	4.6	4.6	12.7	12.5	14	11	85	88	822088	808793	<0.2	<0.2	1.2	1.1
						1.0	0.3	34	28.1		7.8		19.9		65.4		4.6		12.4		13		85				<0.2		1.1	
					Middle	3.6	0.2	40	28.0	28.0	7.8	7.8	20.4	20.4	64.9	65.0	4.5		12.3		11		88				<0.2		1.1	
						3.6	0.2	41	28.0		7.8		20.4		65.1		4.6		12.6		10		89				<0.2		1.1	
					Bottom	6.2	0.2	46	28.1	28.1	7.9	7.9	20.5	20.5	69.5	69.8	4.9	4.9	12.9		9		89				<0.2		1.1	
						6.2	0.2	47	28.1		7.9		20.5		70.1		4.9		12.1		10		90				<0.2		1.0	
IM10	Sunny	Moderate	07:30	7.6	Surface	1.0	0.6	299	28.2	28.2	7.9	7.9	19.4	19.4	69.6	69.6	4.9	4.9	8.7	10.1	19	17	85	88	822387	809797	<0.2	<0.2	0.9	1.0
						1.0	0.6	308	28.2		7.9		19.5		69.5		4.9		8.8		20		86				<0.2		1.0	
					Middle	3.8	0.5	306	27.9	27.9	7.9	7.9	21.4	21.4	69.1	69.1	4.8		9.9		19		89				<0.2		0.9	
						3.8	0.5	306	27.9		7.9		21.5		69.0		4.8		9.9		20		89				<0.2		1.0	
					Bottom	6.6	0.4	311	27.9	27.9	7.9	7.9	22.0	22.0	68.9	69.1	4.8	4.8	11.3		12		90				<0.2		1.0	
						6.6	0.4	334	27.8		7.9		22.1		69.3		4.8		12.0		13		90				<0.2		1.0	
IM11	Cloudy	Moderate	07:19	8.6	Surface	1.0	2.0	203	27.9	27.9	7.9	7.9	22.0	22.0	68.2	68.2	4.7	4.7	9.5	11.1	13	15	85	88	822063	811479	<0.2	<0.2	0.9	0.9
						1.0	2.0	222	27.9		7.9		22.0		68.1		4.7		9.8		13		85				<0.2		0.9	
					Middle	4.3	2.1	203	27.3	27.3	7.9	7.9	22.3	22.3	67.4	67.3	4.7		11.3		14		88				<0.2		0.8	
						4.3	2.2	217	27.2		7.9		22.4		67.2		4.7		11.1		15		88				<0.2		0.9	
					Bottom	7.6	2.1	202	26.6	26.6	7.9	7.9	28.1	28.1	62.6	62.8	4.3	4.3	12.4		16		89				<0.2		1.0	
						7.6	2.3	210	26.6		7.9		28.1		62.9		4.3		12.6		16		90				<0.2		1.0	
IM12	Cloudy	Moderate	07:12	9.8	Surface	1.0	3.0	164	27.5	27.5	7.9	7.9	23.8	23.8	64.2	64.2	4.8	4.6	14.2	13.9	12	9	84	87	821452	812066	<0.2	<0.2	1.1	1.1
						1.0	3.1	168	27.5		7.9		23.9		64.2		4.7		14.1		12		84				<0.2		1.0	
					Middle	4.9	2.9	164	27.3	27.3	7.9	7.9	24.2	24.3	63.1	63.0	4.5		12.9		10		88				<0.2		1.0	
						4.9	3.0	169	27.2		7.9		24.3		62.9		4.4		13.0		9		88				<0.2		1.1	
					Bottom	8.8	3.3	167	26.9	26.9	7.9	7.9	26.3	26.3	62.2	62.2	4.3	4.3	14.5		6		89				<0.2		1.1	
						8.8	3.6	176	26.9		7.9		26.3		62.2		4.3		15.0		7		89				<0.2		1.0	
SR1A	Cloudy	Moderate	06:40	5.1	Surface	1.0	-	-	28.1	28.1	7.9	7.9	21.0	21.1	69.8	69.7	4.9	4.9	9.4	10.8	6	6	-	-	819978	812665	-	-	-	-
						1.0	-	-	28.0		7.9		21.1		69.6		4.8		10.0		6		-				-		-	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	-	-	28.0	28.0	7.9	7.9	21.4	21.4	69.3	71.1	4.8	5.0	11.9		6		-				-		-	
						4.1	-	-	27.9		7.9		21.4		72.9		5.1		12.0		5		-				-		-	
SR2	Sunny	Moderate	06:22	4.6	Surface	1.0	1.1	66	28.1	28.1	7.9	7.9	20.4	20.4	71.3	71.2	5.0	5.0	7.0	8.6	6	6	84	86	821457	814159	<0.2	<0.2	1.0	0.9
						1.0	1.1	66	28.1		7.9		20.5		71.1		5.0		7.6		7		85				<0.2		0.9	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.9	84	27.8	27.8	7.9	7.9	22.0	22.0	66.5	66.5	4.6	4.6	9.9		6		88				<0.2		0.9	
						3.6	1.0	86	27.8		7.9		22.0		66.5		4.6		9.9		5		88				<0.2		0.9	
SR3	Sunny	Moderate	07:50	8.9	Surface	1.0	0.3	46	28.1	28.1	7.8	7.8	19.4	19.4	70.1	70.1	4.9	4.9	11.8	12.8	7	6	-	-	822132	807580	-	-	-	-
						1.0	0.3	46	28.1		7.8		19.4		70.0		4.9		11.9		6		-				-		-	
					Middle	4.5	0.4	65	28.0	28.0	7.8	7.8	19.8	19.9	68.6	68.6	4.8		14.0		7		-				-		-	
						4.5	0.4	71	27.9		7.8		19.9		68.6		4.8		14.0		6		-				-		-	
					Bottom	7.9	0.8	78	27.9	27.9	7.8	7.8	20.4	20.4	69.2	69.5	4.9	4.9	12.5		5		-				-		-	
						7.9	0.8	85	27.9		7.8		20.4		69.8		4.9		12.8		6		-				-		-	
SR4A	Fine	Calm	06:42	9.9	Surface	1.0	0.8	74	28.1	28.1	7.9	7.9	18.7	18.7	73.9	73.8	5.2	5.0	5.7	7.0	6	6	-	-	817210	807812	-	-	-	-
						1.0	0.8	80	28.1		7.9		18.7		73.6		5.2		5.6		7		-				-		-	
					Middle	5.0	0.7	73	28.1	28.1	7.9	7.9	19.7	19.7	69.8	69.5	4.9		6.7		5		-				-		-	
						5.0	0.7	77	28.1		7.9		19.7		69.1		4.8		6.6		6		-				-		-	
					Bottom	8.9	0.6	56	27.8	27.9	7.8	7.8	22.2	22.3	68.0	69.1	4.7	4.8	8.7		5		-				-		-	
						8.9	0.6	57	27.9		7.8		22.4		70.2		4.9		8.7		6		-				-		-	
SR5A	Fine	Calm	06:20	4.6	Surface	1.0	0.1	82	28.5	28.5	7.9	7.9	21.2	21.2	73.5	73.4	5.1	5.1	7.6	7.9	6	7	-	-	816601	810710	-	-	-	-
						1.0	0.1	83	28.5		7.9		21.2		73.2		5.1		7.6		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.1	75	28.4	28.4	7.8	7.8	21.4	21.3	75.8	76.4	5.2	5.3	8.2		7		-				-		-	
						3.6	0.1	82	28.4		7.8		21.3		77.0		5.3		8.3		8		-				-		-	
SR6A	Fine	Calm	05:52	4.4	Surface	1.0	0.0	263	28.4	28.4	7.9	7.9	20.3	20.3	73.3	73.2	5.1	5.1	9.5	9.9	4	4	-	-	817972	814734	-	-	-	-
						1.0	0.0	282	28.4		7.9		20.3		73.1		5.1		9.5		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.0	286	28.4	28.3	7.9	7.9	20.4	20.4	73.8	74.7	5.1	5.2	10.3		5		-				-		-	
						3.4	0.0	287	28.3		7.9		20.4		75.5		5.3		10.2		4		-				-		-	
SR7	Sunny	Moderate	05:25	16.4	Surface	1.0	0.6	145	27.0	27.0	7.9	7.9	26.2	26.2	63.3	63.2	4.9	5.0	5.4	7.9	4	4	-	-	823642	823731	-	-	-	-
						1.0	0.6	151	27.0		7.9		26.2		63.0		5.0		5.6		4		-				-		-	
					Middle	8.2	0.8	132	26.5	26.5	7.9	7.9	28.0	28.0	60.3	60.2	5.0		6.9		4		-				-		-	
						8.2	0.8	133	26.5		7.9		28.0		60.0		5.2		7.1		3		-				-		-	
					Bottom	15.4	1.2	134	25.8	25.8	7.9	7.9	30.8	30.8	59.2	59.3	4.1	4.1	11.1		3		-				-		-	
						15.4	1.2	142	25.8		7.9		30.8		59.3		4.1		11.0		3		-				-		-	
SR8	Cloudy	Moderate	07:03	4.3	Surface	1.0	-	-	27.7	27.7	7.9	7.9	23.1	23.1	65.0	65.0	4.5	4.5	14.1	13.9	5	6	-	-	820404	811619	-	-	-	-
						1.0	-	-	27.7		7.9		23.1		65.0		4.5		14.0		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	-	-	27.5	27.5	7.9	7.9	23.8	23.8	65.1	65.5	4.5	4.6	13.9		7		-				-		-	
						3.3	-	-	27.5		7.9		23.8		65.8		4.6		13.6		7		-				-		-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 29 May 21 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Rough	14:32	8.6	Surface	1.0	0.4	217	28.9	28.9	8.2	8.2	19.2	19.2	91.1	91.1	6.3	5.2	5.1	11.0	7	7	89	90	815619	804224	<0.2	<0.2	1.1	1.7
						1.0	0.4	228	28.9		8.2		19.2		91.0		6.3		5.1		6		89				<0.2		1.2	
					Middle	4.3	0.6	197	27.0	27.1	8.2	8.2	27.7	27.6	60.0	60.1	4.1		14.0		7		90				<0.2		1.5	
						4.3	0.6	198	27.1		8.2		27.6		60.1		4.1		13.0		6		90				<0.2		1.4	
					Bottom	7.6	0.4	220	26.5	26.5	8.2	8.2	28.9	28.9	58.6	58.7	4.0	4.0	14.7		7		91				<0.2		2.4	
						7.6	0.4	233	26.5		8.2		28.9		58.7		4.0		14.2		7		91				<0.2		2.3	
C2	Fine	Moderate	13:25	13.0	Surface	1.0	0.2	135	28.7	28.7	7.9	7.9	19.9	19.9	73.0	73.0	5.1	4.9	8.3	9.4	13	13	88	91	825688	806933	<0.2	<0.2	1.3	1.3
						1.0	0.2	135	28.7		7.9		19.9		72.9		5.1		8.4		14		88				<0.2		1.2	
					Middle	6.5	0.5	154	28.5	28.5	7.9	7.9	20.8	20.8	67.6	67.1	4.7		9.1		12		91				<0.2		1.3	
						6.5	0.5	159	28.4		7.9		20.8		66.6		4.6		9.3		13		91				<0.2		1.3	
					Bottom	12.0	0.5	144	27.2	27.3	7.9	7.9	27.3	27.2	65.5	67.0	4.5	4.6	10.8		13		93				<0.2		1.3	
						12.0	0.5	150	27.4		7.9		27.2		68.4		4.7		10.5		12		94				<0.2		1.2	
C3	Fine	Calm	15:26	10.8	Surface	1.0	0.4	286	28.4	28.4	8.0	8.0	23.8	23.8	73.6	73.5	5.0	4.8	7.1	8.4	8	8	87	89	822115	817784	<0.2	<0.2	1.0	1.0
						1.0	0.4	293	28.4		8.0		23.8		73.3		5.0		7.3		9		87				<0.2		1.1	
					Middle	5.4	0.2	257	27.6	27.5	8.0	8.0	25.2	25.3	66.8	66.6	4.6		8.3		9		88				<0.2		0.9	
						5.4	0.2	260	27.4		8.0		25.3		66.3		4.6		8.1		8		88				<0.2		1.0	
					Bottom	9.8	0.1	120	26.8	26.8	8.0	8.0	29.7	29.7	69.9	70.1	4.7	4.8	9.9		8		93				<0.2		0.9	
						9.8	0.1	127	26.8		8.0		29.7		70.3		4.8		9.6		7		93				<0.2		1.0	
IM1	Fine	Rough	14:13	5.6	Surface	1.0	0.1	134	29.1	29.1	8.2	8.2	19.0	19.0	87.6	87.5	6.1	6.1	5.3	8.9	5	6	88	90	817960	807133	<0.2	<0.2	2.1	1.7
						1.0	0.1	146	29.1		8.2		19.0		87.3		6.0		5.5		6		88				<0.2		2.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.6	0.1	311	26.9	26.9	8.2	8.2	27.2	27.2	60.8	61.0	4.2	4.2	12.6		7		91				<0.2		1.4	
						4.6	0.1	315	26.9		8.2		27.2		61.1		4.2		12.3		6		91				<0.2		1.3	
IM2	Fine	Rough	14:06	7.2	Surface	1.0	0.1	200	28.9	28.9	8.2	8.2	19.1	19.1	84.9	84.8	5.9	4.9	4.8	9.0	6	6	88	90	818163	806144	<0.2	<0.2	2.2	2.0
						1.0	0.1	218	28.9		8.2		19.1		84.7		5.9		4.8		7		89				<0.2		2.2	
					Middle	3.6	0.2	145	27.1	27.1	8.2	8.2	26.4	26.6	57.3	57.5	3.9		10.2		6		90				<0.2		2.2	
						3.6	0.2	158	27.1		8.2		26.8		57.7		4.0		10.8		5		90				<0.2		2.2	
					Bottom	6.2	0.1	128	26.8	26.8	8.2	8.2	28.0	28.0	60.9	61.1	4.2	4.2	12.0		6		90				<0.2		1.7	
						6.2	0.1	129	26.8		8.2		28.0		61.3		4.2		11.6		5		90				<0.2		1.6	
IM3	Fine	Rough	13:59	7.6	Surface	1.0	0.1	220	29.1	29.1	8.2	8.2	18.5	18.5	92.0	91.9	6.4	5.5	5.0	10.6	7	7	89	90	818790	805596	<0.2	<0.2	2.4	2.0
						1.0	0.1	238	29.1		8.2		18.5		91.8		6.4		5.0		7		89				<0.2		2.3	
					Middle	3.8	0.2	158	27.2	27.2	8.2	8.2	23.2	23.1	65.2	65.2	4.6		14.6		7		89				<0.2		1.5	
						3.8	0.2	172	27.2		8.2		23.1		65.2		4.6		14.0		6		90				<0.2		1.4	
					Bottom	6.6	0.4	120	26.9	26.9	8.2	8.2	27.5	27.5	57.2	57.5	3.9	4.0	12.8		6		91				<0.2		2.1	
						6.6	0.5	127	26.9		8.2		27.5		57.7		4.0		12.2		7		91				<0.2		2.2	
IM4	Fine	Rough	13:50	7.8	Surface	1.0	0.7	196	27.4	27.4	8.1	8.1	23.7	23.7	69.8	69.8	4.8	4.6	12.6	13.4	2	7	87	89	819735	804602	<0.2	<0.2	2.0	2.2
						1.0	0.7	205	27.4		8.1		23.7		69.8		4.8		13.9		10		87				<0.2		2.1	
					Middle	3.9	0.7	187	27.1	27.1	8.1	8.1	26.0	26.0	65.2	65.2	4.4		14.0		6		88				<0.2		2.4	
						3.9	0.7	187	27.1		8.1		26.0		65.2		4.4		13.5		10		89				<0.2		2.2	
					Bottom	6.8	0.2	175	27.1	27.2	8.1	8.1	26.6	26.6	56.2	56.3	3.9	3.9	13.4		8		90				<0.2		2.2	
						6.8	0.2	176	27.2		8.1		26.5		56.4		3.9		13.3		7		91				<0.2		2.4	
IM5	Fine	Rough	13:42	7.7	Surface	1.0	0.6	217	27.5	27.5	8.1	8.1	24.1	24.1	69.4	69.4	4.8	4.7	10.7	13.0	14	13	87	89	820720	804846	<0.2	<0.2	1.3	1.6
						1.0	0.6	235	27.5		8.1		24.1		69.4		4.8		10.6		14		88				<0.2		1.2	
					Middle	3.9	0.7	223	27.1	27.1	8.2	8.2	26.1	26.1	65.8	65.8	4.5		13.8		14		88				<0.2		1.3	
						3.9	0.8	238	27.1		8.2		26.1		65.8		4.5		14.3		13		89				<0.2		1.4	
					Bottom	6.7	0.6	211	27.1	27.1	8.2	8.2	26.6	26.6	56.2	56.2	3.9	3.9	14.2		12		90				<0.2		2.0	
						6.7	0.6	225	27.1		8.2		26.6		56.2		3.9		14.2		11		91				<0.2		2.1	
IM6	Fine	Rough	13:34	8.2	Surface	1.0	0.5	258	28.6	28.6	8.2	8.2	19.7	19.7	73.0	73.0	5.1	4.9	10.0	13.0	15	9	86	88	821050	805829	<0.2	<0.2	2.1	1.9
						1.0	0.5	283	28.5		8.2		19.7		72.9		5.1		10.2		6		87				<0.2		2.1	
					Middle	4.1	0.3	234	27.7	27.7	8.2	8.2	21.5	21.5	66.3	66.3	4.6		13.6		4		88				<0.2		1.6	
						4.1	0.4	242	27.7		8.2		21.5		66.3		4.6		13.5		14		88				<0.2		1.4	
					Bottom	7.2	0.3	182	27.5	27.5	8.2	8.2	25.3	25.3	60.0	60.1	4.1	4.1	14.8		13		90				<0.2		2.2	
						7.2	0.3	192	27.5		8.2		25.3		60.2		4.1		15.8		4		90				<0.2		2.1	
IM7	Fine	Rough	13:26	8.3	Surface	1.0	0.2	305	28.7	28.7	8.2	8.2	19.1	19.1	74.2	74.2	5.2	4.8	9.4	12.3	6	5	86	88	821334	806848	<0.2	<0.2	1.3	1.6
						1.0	0.2	320	28.7		8.2		19.2		74.2		5.2		9.7		5		87				<0.2		1.3	
					Middle	4.2	0.1	215	28.2	28.2	8.2	8.2	21.1	21.1	63.0	63.0	4.4		15.3		6		87				<0.2		1.3	
						4.2	0.1	221	28.2		8.2		21.2		63.0		4.4		15.1		5		87				<0.2		1.3	
					Bottom	7.3	0.2	164	28.2	28.2	8.2	8.2	21.4	21.4	62.9	63.1	4.4	4.4	12.1		5		91				<0.2		2.1	
						7.3	0.2	166	28.2		8.2		21.4		63.2		4.4		12.0		5		91				<0.2		2.2	
IM8	Fine	Calm	13:51	8.4	Surface	1.0	1.0	42	28.8	28.8	7.9	7.9	20.1	20.1	77.2	77.0	5.3	5.1	7.4	8.5	11	11	87	90	821820	808151	<0.2	<0.2	1.1	1.2
						1.0	1.1	42	28.8		7.9		20.1		76.8		5.3		7.6		12		86				<0.2		1.0	
					Middle	4.2	0.9	49	28.4	28.4	7.9	7.9	21.4	21.4	71.4	71.4	4.9		8.8		11		89				<0.2		1.2	
						4.2	1.0	53	28.4		7.9		21.4		71.3		4.9		8.8		11		90				<0.2		1.2	
					Bottom	7.4	0.7	43	27.9	27.9	7.9	7.9	23.7	23.7	69.3	70.2	4.8	4.9	9.0		11		93				<0.2		1.3	
						7.4	0.7	46	27.9		7.9		23.8		71.0		4.9		9.3		12		93				<0.2		1.2	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 29 May 21 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Fine	Calm	13:57	8.0	Surface	1.0	1.4	58	28.8	28.8	7.9	7.9	20.2	20.2	78.9	78.9	5.4	5.4	6.7	7.6	11	11	87	90	822111	808796	<0.2	<0.2	1.1	1.2
						1.0	1.4	61	28.8		7.9		20.2		78.8		5.4		6.1		11		87				<0.2		1.1	
					Middle	4.0	1.2	57	28.8	28.8	7.9	7.9	20.3	20.3	77.2	77.2	5.3		7.6		12		89				<0.2		1.0	
						4.0	1.3	59	28.8		7.9		20.3		77.1		5.3		7.3		11		91				<0.2		1.1	
					Bottom	7.0	1.6	54	28.4	28.5	7.9	7.9	21.7	22.0	78.9	79.8	5.4	5.5	8.7		11		92				<0.2		1.2	
						7.0	1.7	55	28.6		7.9		22.3		80.7		5.5		8.9		12		92				<0.2		1.4	
IM10	Fine	Calm	14:04	8.8	Surface	1.0	1.4	80	29.0	29.0	7.9	7.9	18.9	18.9	79.4	79.1	5.5	5.4	7.0	8.4	13	12	86	90	822405	809814	<0.2	<0.2	1.4	1.3
						1.0	1.5	81	29.0		7.9		18.9		78.8		5.5		7.0		12		87				<0.2		1.4	
					Middle	4.4	1.7	74	28.6	28.6	7.9	7.9	20.3	20.3	75.3	75.2	5.2		8.4		12		91				<0.2		1.2	
						4.4	1.7	80	28.6		7.9		20.4		75.1		5.2		8.9		11		91				<0.2		1.2	
					Bottom	7.8	2.0	62	28.6	28.6	7.9	7.9	20.6	20.6	76.5	76.9	5.3	5.3	9.2		10		92				<0.2		1.1	
						7.8	2.0	66	28.6		7.9		20.6		77.3		5.3		9.9		11		92				<0.2		1.2	
IM11	Fine	Calm	14:14	9.2	Surface	1.0	1.5	80	29.3	29.2	8.0	8.0	18.0	18.0	83.6	82.9	5.8	5.5	8.9	9.3	12	10	86	90	822037	811449	<0.2	<0.2	1.2	1.2
						1.0	1.5	80	29.2		8.0		18.1		82.1		5.7		8.7		11		87				<0.2		1.1	
					Middle	4.6	1.5	69	28.7	28.6	7.9	7.9	20.2	20.2	77.1	77.0	5.3		9.1		10		90				<0.2		1.1	
						4.6	1.6	75	28.6		7.9		20.2		76.9		5.3		9.1		9		91				<0.2		1.1	
					Bottom	8.2	1.8	61	28.5	28.5	7.9	7.9	21.0	21.0	78.9	79.6	5.5	5.5	10.1		9		92				<0.2		1.2	
						8.2	1.9	62	28.5		7.9		21.0		80.3		5.5		10.0		10		91				<0.2		1.2	
IM12	Fine	Calm	14:20	10.0	Surface	1.0	0.5	95	29.0	29.0	8.0	8.0	19.7	19.7	79.8	79.5	5.5	5.3	7.2	8.4	14	12	86	88	821460	812050	<0.2	<0.2	1.0	1.0
						1.0	0.5	100	29.0		8.0		19.7		79.2		5.5		7.0		13		86				<0.2		1.1	
					Middle	5.0	0.4	116	28.6	28.5	7.9	7.9	21.2	21.2	72.6	72.4	5.0		8.1		12		87				<0.2		1.0	
						5.0	0.4	122	28.5		7.9		21.3		72.2		5.0		8.8		12		87				<0.2		1.0	
					Bottom	9.0	0.2	92	28.3	28.3	7.9	7.9	22.2	22.2	73.8	73.8	5.1	5.1	9.9		11		92				<0.2		1.0	
						9.0	0.3	95	28.3		7.9		22.2		73.8		5.1		9.2		11		88				<0.2		1.1	
SR1A	Fine	Calm	14:52	4.2	Surface	1.0	-	-	29.1	29.1	8.0	8.0	20.9	20.9	81.0	81.0	5.5	5.5	9.3	9.2	10	10	-	-	819982	812655	-	-	-	-
						1.0	-	-	29.1		8.0		20.9		80.9		5.5		9.3		10		-				-		-	
					Middle	2.1	-	-	-	-	-	-	-	-	-	-	-		-		-		-	-			-		-	
						2.1	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	-	-	28.7	28.7	8.0	8.0	21.3	21.3	90.9	90.9	6.3	6.3	9.1		10		-				-		-	
						3.2	-	-	28.7		8.0		21.3		90.9		6.3		9.0		10		-				-		-	
SR2	Fine	Calm	15:07	5.0	Surface	1.0	1.7	52	29.4	29.4	8.0	8.0	17.4	17.4	85.7	85.6	6.0	6.0	7.2	7.6	13	14	90	91	821455	814183	<0.2	<0.2	1.2	1.2
						1.0	1.8	56	29.4		8.0		17.4		85.4		5.9		7.0		12		90				<0.2		1.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-	-			-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	1.7	44	28.6	28.6	7.9	7.9	21.0	21.1	79.2	81.3	5.5	5.6	8.3		14		92				<0.2		1.1	
						4.0	1.8	44	28.6		8.0		21.1		83.3		5.7		8.0		15		92				<0.2		1.2	
SR3	Fine	Calm	13:44	9.8	Surface	1.0	0.0	246	28.9	28.9	8.0	8.0	20.1	20.1	79.7	79.5	5.5	5.2	7.5	8.3	11	12	-	-	822131	807576	-	-	-	-
						1.0	0.0	254	28.9		8.0		20.1		79.3		5.5		7.6		12		-				-		-	
					Middle	4.9	0.1	194	28.3	28.3	7.9	7.9	21.7	21.7	71.4	71.5	4.9		8.1		12		-				-		-	
						4.9	0.1	208	28.4		7.9		21.7		71.5		4.9		8.2		13		-				-		-	
					Bottom	8.8	0.1	258	28.2	28.2	7.9	7.9	22.3	22.3	71.5	71.8	4.9	5.0	9.0		13		-				-		-	
						8.8	0.1	273	28.2		7.9		22.3		72.0		5.0		9.1		12		-				-		-	
SR4A	Fine	Rough	14:53	8.9	Surface	1.0	0.2	256	28.9	28.9	8.1	8.1	19.7	19.7	78.2	78.1	5.4	4.9	8.0	11.7	8	8	-	-	817210	807827	-	-	-	-
						1.0	0.2	271	28.9		8.1		19.7		77.9		5.4		8.2		7		-				-		-	
					Middle	4.5	0.1	259	27.2	27.2	8.1	8.1	23.3	23.3	62.7	62.6	4.4		14.3		6		-				-		-	
						4.5	0.1	281	27.1		8.1		23.2		62.5		4.4		14.8		4		-				-		-	
					Bottom	7.9	0.1	75	26.9	26.9	8.1	8.1	27.3	27.3	57.5	57.6	3.9	4.0	12.6		12		-				-		-	
						7.9	0.1	76	26.9		8.1		27.3		57.6		4.0		12.2		8		-				-		-	
SR5A	Fine	Moderate	15:12	4.2	Surface	1.0	0.1	15	29.1	29.1	8.1	8.1	19.6	19.6	82.0	82.0	5.7	5.7	12.9	11.9	17	14	-	-	816585	810710	-	-	-	-
						1.0	0.1	16	29.1		8.1		19.6		82.0		5.7		12.9		18		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-	-			-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.1	50	29.1	29.1	8.1	8.1	19.6	19.6	82.4	82.5	5.7	5.7	10.9		10		-				-		-	
						3.2	0.1	51	29.1		8.1		19.6		82.6		5.7		11.0		10		-				-		-	
SR6A	Fine	Moderate	15:36	4.5	Surface	1.0	0.1	83	29.0	29.0	8.1	8.1	20.5	20.5	76.7	76.7	5.3	5.3	7.8	8.7	5	11	-	-	817944	814736	-	-	-	-
						1.0	0.1	86	28.9		8.1		20.6		76.7		5.3		7.9		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-	-			-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.0	54	28.6	28.7	8.1	8.1	21.3	21.3	71.5	71.7	4.9	4.9	9.6		20		-				-		-	
						3.5	0.0	57	28.7		8.1		21.2		71.8		4.9		9.6		10		-				-		-	
SR7	Fine	Calm	15:51	18.0	Surface	1.0	1.0	118	28.7	28.7	8.0	8.0	21.7	21.7	75.3	75.3	5.2	5.2	7.5	8.4	10	12	-	-	823619	823739	-	-	-	-
						1.0	1.0	129	28.6		8.0		21.7		75.2		5.2		7.5		11		-				-		-	
					Middle	9.0	0.7	126	28.3	28.3	8.0	8.0	23.3	23.2	74.8	74.9	5.1		8.0		13		-				-		-	
						9.0	0.7	130	28.3		8.0		23.2		74.9		5.1		8.0		12		-				-		-	
					Bottom	17.0	0.3	184	28.5	28.5	8.0	8.0	23.0	22.8	82.1	83.5	5.6	5.7	9.6		13		-				-		-	
						17.0	0.3	199	28.6		8.0		22.6		84.9		5.8		9.6		12		-				-		-	
SR8	Fine	Calm	14:29	5.4	Surface	1.0	-	-	29.7	29.6	7.9	7.9	21.4	21.4	82.3	82.4	5.6	5.6	10.0	10.7	13	11	-	-	820376	811642	-	-	-	-
						1.0	-	-	29.6		7.9		21.4		82.4		5.6		10.0		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-	-			-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	-	-	29.4	29.5	8.0	8.0	21.4	21.4	86.3	87.8	5.9	6.0	11.5		12		-				-		-	
						4.4	-	-	29.5		8.0		21.4		89.3		6.1		11.4		11		-				-		-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 29 May 21 during Mid-Flood Tide

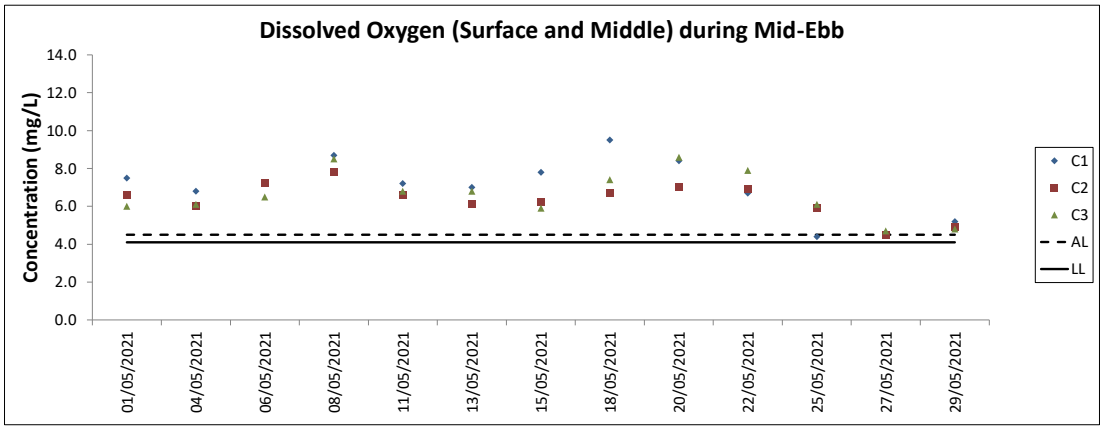
Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Moderate	08:37	8.4	Surface	1.0	0.7	32	28.2	28.2	8.1	8.1	18.5	18.5	74.6	74.5	5.3	4.7	9.0	10.5	5	4	86	87	815621	804224	<0.2	<0.2	1.2	1.3
						1.0	0.8	32	28.1		8.1		18.4		74.4		5.3		9.9		5		86				<0.2		1.3	
					Middle	4.2	0.6	25	27.3	27.3	8.1	8.1	25.3	25.4	57.8	57.8	4.0		10.1		5		87				<0.2		1.3	
						4.2	0.6	26	27.2		8.1		25.5		57.8		4.0		10.8		4		87				<0.2		1.2	
					Bottom	7.4	0.4	47	27.0	27.0	8.1	8.1	26.8	26.8	59.0	59.1	4.1	4.1	11.4		3		89				<0.2		1.3	
						7.4	0.4	50	27.0		8.1		26.9		59.2		4.1		11.9		4		89				<0.2		1.4	
C2	Fine	Calm	09:32	13.4	Surface	1.0	1.6	57	29.1	29.1	8.0	8.0	14.5	14.5	81.2	80.8	5.8	5.4	7.1	8.4	4	6	85	89	825667	806967	<0.2	<0.2	1.3	1.3
						1.0	1.8	59	29.1		8.0		14.5		80.4		5.7		7.5		5		86				<0.2		1.3	
					Middle	6.7	1.4	55	28.6	28.6	7.9	7.9	19.7	19.7	71.6	71.7	5.0		8.6		6		89				<0.2		1.3	
						6.7	1.5	55	28.6		7.9		19.7		71.7		5.0		8.6		7		89				<0.2		1.3	
					Bottom	12.4	1.5	56	28.6	28.6	7.9	7.9	21.1	20.4	76.7	77.7	5.3	5.4	9.1		6		91				<0.2		1.2	
						12.4	1.7	58	28.7		7.9		19.7		78.7		5.5		9.5		7		92				<0.2		1.3	
C3	Fine	Calm	07:25	12.2	Surface	1.0	0.3	241	28.7	28.7	8.0	8.0	19.6	19.6	72.3	72.3	5.0	4.8	6.3	7.5	4	6	83	86	822117	817798	<0.2	<0.2	1.4	1.4
						1.0	0.3	246	28.7		8.0		19.6		72.2		5.0		6.1		5		83				<0.2		1.4	
					Middle	6.1	0.4	252	28.3	28.2	8.0	8.0	22.2	22.2	67.8	67.6	4.7		7.3		5		86				<0.2		1.5	
						6.1	0.4	276	28.2		8.0		22.2		67.3		4.6		7.7		6		86				<0.2		1.5	
					Bottom	11.2	0.4	266	27.2	27.3	8.0	8.0	27.8	27.7	67.4	68.6	4.6	4.7	8.5		8		88				<0.2		1.1	
						11.2	0.4	282	27.3		8.0		27.6		69.8		4.7		8.8		8		88				<0.2		1.2	
IM1	Fine	Moderate	08:54	5.6	Surface	1.0	0.1	331	28.5	28.5	8.1	8.1	19.7	19.7	76.2	76.2	5.3	5.3	5.1	6.6	5	8	88	87	817933	807141	<0.2	<0.2	1.3	1.2
						1.0	0.1	353	28.4		8.1		19.7		76.1		5.3		5.4		12		87				<0.2		1.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.6	0.1	245	27.7	27.7	8.1	8.1	23.9	23.9	62.7	62.8	4.3	4.3	8.0		8		85				<0.2		1.2	
						4.6	0.1	259	27.7		8.1		23.9		62.9		4.3		8.0		8		86				<0.2		1.2	
IM2	Fine	Moderate	09:02	7.4	Surface	1.0	0.5	12	28.5	28.5	8.1	8.1	18.1	18.0	78.6	78.6	5.5	5.2	5.2	8.7	8	9	85	87	818142	806187	<0.2	<0.2	1.2	1.3
						1.0	0.6	12	28.5		8.1		18.0		78.5		5.5		5.2		9		86				<0.2		1.4	
					Middle	3.7	0.4	353	28.5	28.5	8.1	8.1	19.6	19.6	70.2	70.2	4.9		7.0		10		87				<0.2		1.4	
						3.7	0.4	325	28.5		8.1		19.6		70.1		4.9		7.7		9		88				<0.2		1.3	
					Bottom	6.4	0.2	288	28.0	28.0	8.1	8.1	20.1	20.2	68.3	67.7	4.8	4.8	13.4		9		89				<0.2		1.2	
						6.4	0.2	303	28.0		8.1		20.3		67.0		4.7		13.7		10		89				<0.2		1.1	
IM3	Fine	Moderate	09:09	8.1	Surface	1.0	0.6	359	28.5	28.5	8.1	8.1	18.5	18.5	74.6	74.6	5.2	5.0	5.5	8.3	9	8	86	87	818783	805593	<0.2	<0.2	1.6	1.4
						1.0	0.7	330	28.5		8.1		18.5		74.6		5.2		5.6		8		85				<0.2		1.6	
					Middle	4.1	0.6	343	28.3	28.3	8.1	8.1	20.6	20.6	67.4	67.4	4.7		8.8		9		86				<0.2		1.2	
						4.1	0.6	316	28.2		8.1		20.6		67.3		4.7		9.8		8		86				<0.2		1.4	
					Bottom	7.1	0.3	279	27.6	27.6	8.1	8.1	24.1	24.1	61.2	61.3	4.2	4.2	10.0		8		89				<0.2		1.3	
						7.1	0.3	281	27.6		8.1		24.1		61.3		4.2		10.0		8		89				<0.2		1.4	
IM4	Fine	Moderate	09:19	8.5	Surface	1.0	1.1	0	28.4	28.4	8.1	8.1	18.9	18.9	72.9	72.8	5.1	4.8	5.5	9.7	8	8	85	88	819726	804605	<0.2	<0.2	1.2	1.2
						1.0	1.2	0	28.4		8.1		19.0		72.7		5.1		5.8		9		85				<0.2		1.2	
					Middle	4.3	1.0	347	28.1	28.1	8.1	8.1	20.9	20.9	65.0	64.8	4.5		10.1		8		88				<0.2		1.2	
						4.3	1.0	359	28.0		8.1		20.9		64.6		4.5		10.0		9		87				<0.2		1.3	
					Bottom	7.5	0.6	345	27.7	27.7	8.1	8.1	23.8	23.8	62.5	62.6	4.3	4.3	13.8		5		90				<0.2		1.1	
						7.5	0.6	346	27.7		8.1		23.8		62.6		4.3		13.1		6		90				<0.2		1.2	
IM5	Fine	Moderate	09:24	8.0	Surface	1.0	1.3	10	28.4	28.4	8.1	8.1	18.2	18.2	76.2	76.1	5.4	5.1	5.4	11.8	5	8	86	87	820730	804874	<0.2	<0.2	1.4	1.3
						1.0	1.4	10	28.4		8.1		18.2		76.0		5.3		5.5		6		86				<0.2		1.5	
					Middle	4.0	1.2	5	28.2	28.2	8.1	8.1	20.3	20.3	68.8	68.7	4.8		15.8		9		87				<0.2		1.4	
						4.0	1.2	5	28.2		8.1		20.4		68.6		4.8		15.5		10		87				<0.2		1.4	
					Bottom	7.0	0.7	15	28.1	28.1	8.1	8.1	21.1	21.1	67.4	67.5	4.7	4.7	14.0		9		89				<0.2		1.1	
						7.0	0.8	16	28.1		8.1		21.1		67.5		4.7		14.7		10		89				<0.2		1.1	
IM6	Fine	Moderate	09:32	8.4	Surface	1.0	0.2	264	29.0	29.0	8.1	8.1	16.6	16.6	79.4	79.4	5.6	5.4	3.8	8.4	10	9	86	88	821038	805835	<0.2	<0.2	1.5	1.7
						1.0	0.2	287	29.0		8.1		16.7		79.3		5.6		4.1		9		86				<0.2		1.5	
					Middle	4.2	0.1	12	28.0	28.0	8.1	8.1	18.6	18.6	72.6	72.5	5.1		10.8		9		87				<0.2		1.7	
						4.2	0.1	13	27.9		8.1		18.6		72.3		5.1		10.6		8		87				<0.2		1.7	
					Bottom	7.4	0.1	309	27.5	27.5	8.0	8.0	24.6	24.6	58.9	59.2	4.1	4.1	10.2		7		89				<0.2		1.9	
						7.4	0.1	335	27.5		8.0		24.6		59.4		4.1		10.8		8		90				<0.2		1.9	
IM7	Fine	Moderate	09:40	8.6	Surface	1.0	0.2	227	28.9	28.9	8.1	8.1	17.3	17.3	74.0	73.9	5.2	5.0	4.7	7.3	6	7	87	88	821339	806818	<0.2	<0.2	1.3	1.3
						1.0	0.2	230	28.8		8.1		17.4		73.8		5.2		4.7		7		87				<0.2		1.4	
					Middle	4.3	0.2	147	28.3	28.3	8.1	8.1	19.7	19.8	69.8	69.6	4.9		8.9		6		88				<0.2		1.4	
						4.3	0.2	161	28.3		8.1		19.8		69.4		4.8		8.2		7		88				<0.2		1.3	
					Bottom	7.6	0.1	130	28.1	28.1	8.1	8.1	21.6	21.7	65.5	65.5	4.5	4.5	8.8		7		90				<0.2		1.3	
						7.6	0.2	139	28.1		8.1		21.8		65.4		4.5		8.6		7		90				<0.2		1.3	
IM8	Fine	Calm	09:05	8.8	Surface	1.0	0.4	71	28.9	28.9	7.9	7.9	18.1	18.0	74.1	74.1	5.2	5.2	6.4	7.6	5	7	86	90	821818	808141	<0.2	<0.2	1.2	1.3
						1.0	0.4	77	28.9		7.9		17.9		74.1		5.2		6.2		6		86				<0.2		1.3	
					Middle	4.4	0.3	60	28.7	28.7	7.9	7.9	19.2	19.2	74.4	74.6	5.2		7.6		6		91				<0.2		1.2	
						4.4	0.3	64	28.7		7.9		19.2		74.8		5.2		7.9		7		91				<0.2		1.2	
					Bottom	7.8	0.1	54	28.7	28.7	7.9	7.9	20.4	20.3	79.8	81.3	5.5	5.6	8.8		7		92				<0.2		1.3	
						7.8	0.1	58	28.7		7.9		20.3		82.8		5.7		8.4		8		92				<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 May 21 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	Calm	08:57	8.2	Surface	1.0	1.9	50	28.9	28.9	7.9	7.9	19.0	19.1	72.8	72.6	5.1	5.0	6.6	7.5	6	7	86	89	822077	808790	<0.2	<0.2	1.4	1.3
						1.0	2.1	54	28.9		7.9		19.1		72.3		5.0		6.1		5		86				<0.2		1.4	
					Middle	4.1	1.5	50	28.8	28.8	7.9	7.9	19.5	19.5	71.7	71.7	5.0		7.2		6		89				<0.2		1.4	
						4.1	1.6	51	28.8		7.9		19.5		71.7		5.0		7.2		6		91				<0.2		1.4	
					Bottom	7.2	1.8	46	28.8	28.8	7.9	7.9	19.7	19.7	72.5	73.1	5.0	5.1	8.8		8		90				<0.2		1.2	
						7.2	1.9	46	28.8		7.9		19.7		73.7		5.1		8.8		8		91				<0.2		1.2	
IM10	Fine	Calm	08:49	9.0	Surface	1.0	2.8	25	28.8	28.8	7.9	7.9	19.0	19.1	72.6	71.9	5.0	4.9	6.3	7.3	7	9	83	87	822398	809796	<0.2	<0.2	1.4	1.3
						1.0	2.9	25	28.7		7.9		19.1		71.1		5.0		6.8		7		83				<0.2		1.5	
					Middle	4.5	2.7	29	28.3	28.2	7.9	7.9	22.3	22.3	68.6	68.6	4.7		7.5		8		87				<0.2		1.4	
						4.5	2.9	29	28.2		7.9		22.4		68.5		4.7		7.0		7		88				<0.2		1.4	
					Bottom	8.0	2.4	34	28.2	28.2	7.9	7.9	23.4	23.4	70.7	71.7	4.8	4.9	8.2		12		90				<0.2		1.0	
						8.0	2.5	35	28.2		7.9		23.3		72.7		5.0		8.0		11		90				<0.2		1.1	
IM11	Fine	Calm	08:40	9.4	Surface	1.0	1.3	349	28.7	28.7	8.0	8.0	19.0	19.0	71.0	70.9	4.9	4.8	7.2	8.5	5	7	84	85	822060	811472	<0.2	<0.2	1.4	1.3
						1.0	1.4	321	28.7		8.0		19.0		70.7		4.9		7.3		6		84				<0.2		1.3	
					Middle	4.7	1.0	340	28.2	28.2	7.9	7.9	22.2	22.2	67.9	68.0	4.7		8.3		7		86				<0.2		1.4	
						4.7	1.0	350	28.2		7.9		22.1		68.0		4.7		8.9		7		85				<0.2		1.4	
					Bottom	8.4	0.9	3	28.0	28.0	7.9	7.9	23.6	23.6	72.1	72.2	5.0	5.0	9.6		9		87				<0.2		1.2	
						8.4	0.9	3	28.0		7.9		23.6		72.3		5.0		9.6		8		86				<0.2		1.3	
IM12	Fine	Calm	08:32	10.0	Surface	1.0	1.5	40	28.6	28.6	7.9	7.9	20.5	20.5	73.1	72.9	5.1	4.9	5.7	6.6	6	8	84	86	821470	812031	<0.2	<0.2	1.2	1.3
						1.0	1.5	40	28.6		7.9		20.5		72.6		5.0		5.9		7		84				<0.2		1.3	
					Middle	5.0	1.8	38	28.2	28.2	7.9	7.9	22.6	22.5	68.4	68.3	4.7		6.1		6		85				<0.2		1.3	
						5.0	1.9	39	28.2		7.9		22.5		68.2		4.7		6.8		6		85				<0.2		1.3	
					Bottom	9.0	2.0	44	27.9	28.0	7.9	7.9	24.1	24.1	70.2	70.9	4.8	4.9	7.4		13		88				<0.2		1.2	
						9.0	2.2	45	28.0		7.9		24.1		71.5		4.9		7.6		12		88				<0.2		1.2	
SR1A	Fine	Calm	08:07	4.2	Surface	1.0	-	-	28.9	28.9	7.9	7.9	19.3	19.4	75.1	75.7	5.2	5.3	9.5	9.8	5	6	-	-	819973	812659	-	-	-	-
						1.0	-	-	28.9		7.9		19.5		76.3		5.3		9.6		5		-				-		-	
					Middle	2.1	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.1	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	-	-	28.9	28.8	7.9	7.9	19.3	19.5	77.7	80.0	5.4	5.6	10.1		6		-				-		-	
						3.2	-	-	28.8		7.9		19.7		82.2		5.7		10.0		7		-				-		-	
SR2	Fine	Calm	07:46	5.0	Surface	1.0	2.0	145	28.7	28.6	7.9	7.9	19.1	19.1	73.3	73.3	5.1	5.1	7.2	7.9	6	8	85	86	821472	814163	<0.2	<0.2	1.4	1.2
						1.0	2.2	149	28.6		7.9		19.2		73.2		5.1		7.5		5		84				<0.2		1.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	1.9	149	28.3	28.3	7.9	7.9	22.1	22.2	76.0	77.0	5.2	5.3	8.6		11		86				<0.2		1.1	
						4.0	1.9	153	28.3		7.9		22.2		78.0		5.4		8.4		10		87				<0.2		1.0	
SR3	Fine	Calm	09:11	10.0	Surface	1.0	1.6	48	29.0	29.0	8.0	7.9	14.9	15.5	78.3	78.2	5.5	5.3	5.4	6.5	4	5	-	-	822135	807576	-	-	-	-
						1.0	1.7	51	29.0		7.9		16.1		78.0		5.5		5.6		5		-				-		-	
					Middle	5.0	1.6	52	28.8	28.8	7.9	7.9	19.1	19.1	72.7	72.7	5.1		6.3		5		-				-		-	
						5.0	1.7	52	28.7		7.9		19.1		72.6		5.0		6.2		6		-				-		-	
					Bottom	9.0	2.1	53	28.7	28.7	7.9	7.9	20.2	20.2	74.4	75.3	5.1	5.2	7.8		5		-				-		-	
						9.0	2.1	53	28.7		7.9		20.2		76.2		5.3		7.6		6		-				-		-	
SR4A	Fine	Moderate	08:13	8.8	Surface	1.0	0.3	242	28.6	28.6	8.0	8.0	19.0	19.0	72.4	72.4	5.1	4.7	7.4	8.7	8	7	-	-	817180	807786	-	-	-	-
						1.0	0.3	263	28.6		8.0		19.0		72.3		5.1		7.6		7		-				-		-	
					Middle	4.4	0.2	245	28.0	28.0	8.1	8.1	20.9	21.5	62.3	62.0	4.3		8.4		6		-				-		-	
						4.4	0.2	252	27.9		8.1		22.2		61.7		4.3		8.7		7		-				-		-	
					Bottom	7.8	0.1	47	27.6	27.6	8.0	8.0	24.4	24.4	60.0	60.2	4.1	4.2	10.0		6		-				-		-	
						7.8	0.1	51	27.6		8.0		24.4		60.3		4.2		10.0		7		-				-		-	
SR5A	Fine	Moderate	07:55	4.6	Surface	1.0	0.2	273	28.8	28.8	8.1	8.1	19.6	19.6	72.7	72.7	5.0	5.0	8.8	10.1	5	6	-	-	816595	810716	-	-	-	-
						1.0	0.2	279	28.8		8.1		19.7		72.6		5.0		9.3		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.2	283	28.8	28.8	8.1	8.1	19.8	19.8	72.3	72.3	5.0	5.0	11.1		5		-				-		-	
						3.6	0.2	295	28.8		8.1		19.8		72.2		5.0		11.3		6		-				-		-	
SR6A	Cloudy	Moderate	07:29	4.1	Surface	1.0	0.1	288	28.9	28.9	8.1	8.1	17.8	17.9	73.9	73.9	5.2	5.2	5.6	6.3	5	4	-	-	817940	814748	-	-	-	-
						1.0	0.1	295	28.9		8.1		17.9		73.8		5.2		5.7		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.1	322	28.8	28.8	8.1	8.1	18.5	18.5	73.1	73.2	5.1	5.1	6.9		4		-				-		-	
						3.1	0.1	328	28.8		8.1		18.5		73.2		5.1		7.1		3		-				-		-	
SR7	Fine	Calm	06:55	18.0	Surface	1.0	0.0	116	28.8	28.7	8.0	8.0	19.8	19.8	74.1	74.0	5.1	5.1	6.5	7.3	4	6	-	-	823637	823739	-	-	-	-
						1.0	0.0	119	28.7		8.0		19.8		73.8		5.1		6.5		4		-				-		-	
					Middle	9.0	0.1	184	27.7	27.7	8.0	8.0	24.1	24.2	65.5	65.3	5.0		7.2		7		-				-		-	
						9.0	0.1	192	27.6		8.0		24.3		65.1		5.0		7.1		6		-				-		-	
					Bottom	17.0	0.1	76	26.9	27.0	8.0	8.0	28.8	28.7	65.9	67.6	4.5	4.6	8.0		7		-				-		-	
						17.0	0.1	76	27.2		8.0		28.5		69.3		4.7		8.2		7		-				-		-	
SR8	Fine	Calm	08:23	5.4	Surface	1.0	-	-	28.8	28.8	7.9	7.9	19.5	19.5	73.1	73.2	5.1	5.1	8.1	8.7	9	10	-	-	820412	811629	-	-	-	-
						1.0	-	-	28.8		7.9		19.5		73.2		5.1		8.3		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	-	-	28.6	28.7	7.9	7.9	20.9	20.9	77.1	79.7	5.3	5.5	9.3		11		-				-		-	
						4.4	-	-	28.7		7.9		20.8		82.2		5.7		9.0		10		-				-		-	

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


Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
01/05/2021
04/05/2021
06/05/2021
08/05/2021
11/05/2021
13/05/2021
15/05/2021
18/05/2021
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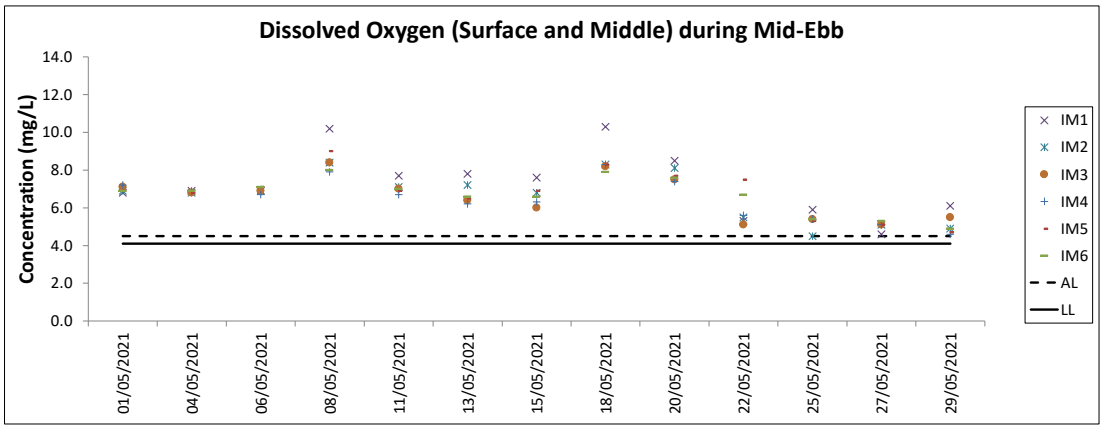
29/05/2021
C1
C2
C3
AL
LL


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
01/05/2021
04/05/2021
06/05/2021
08/05/2021
11/05/2021
13/05/2021
15/05/2021
18/05/2021
20/05/2021
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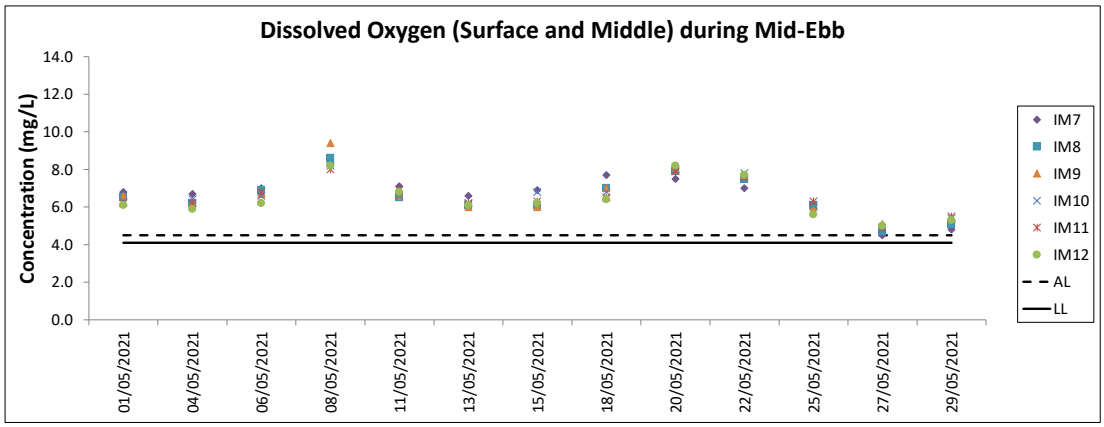
IM1
IM2
IM3
IM4
IM5
IM6
AL
LL


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
01/05/2021
04/05/2021
06/05/2021
08/05/2021
11/05/2021
13/05/2021
15/05/2021
18/05/2021
20/05/2021
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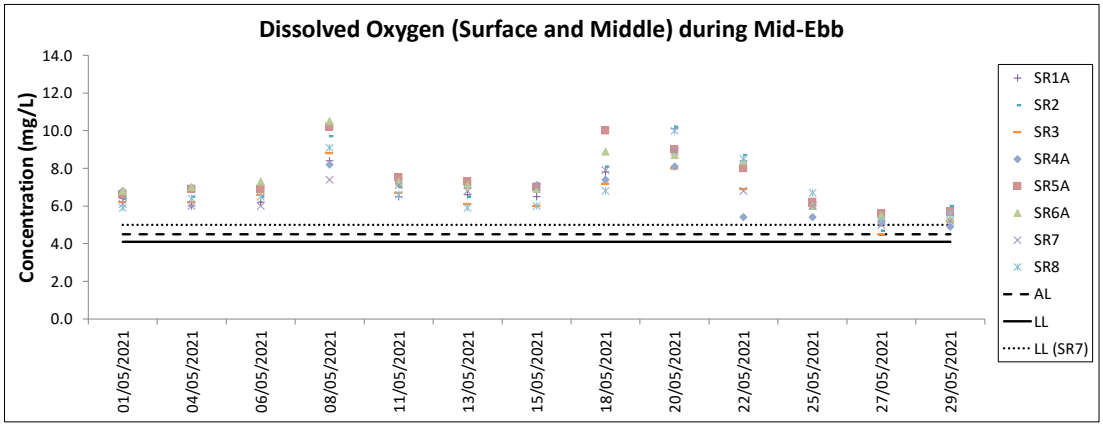
IM7
IM8
IM9
IM10
IM11
IM12
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
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12.0
10.0
8.0
6.0
4.0
2.0
0.0
01/05/2021
04/05/2021
06/05/2021
08/05/2021
11/05/2021
13/05/2021
15/05/2021
18/05/2021
20/05/2021
22/05/2021
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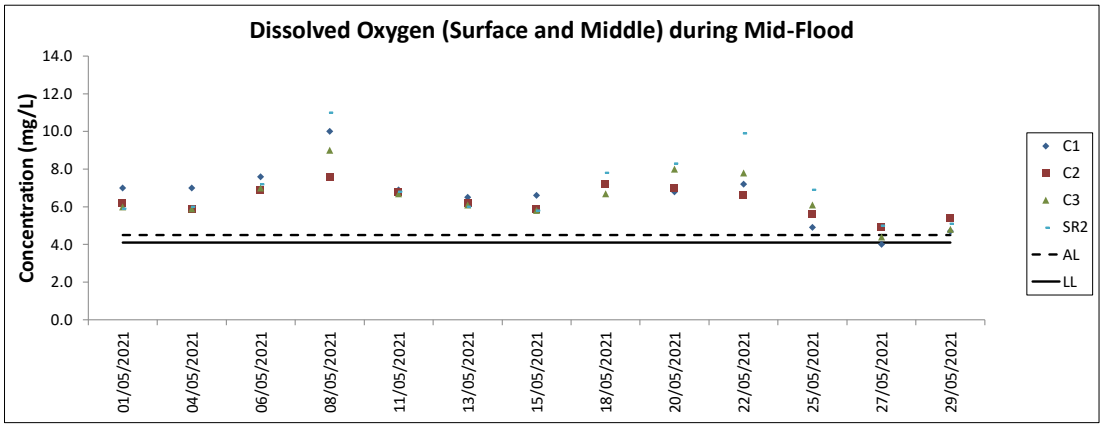
SR6A
SR7
SR8
AL
LL
LL (SR7)


Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
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10.0
8.0
6.0
4.0
2.0
0.0
01/05/2021
04/05/2021
06/05/2021
08/05/2021
11/05/2021
13/05/2021
15/05/2021
18/05/2021
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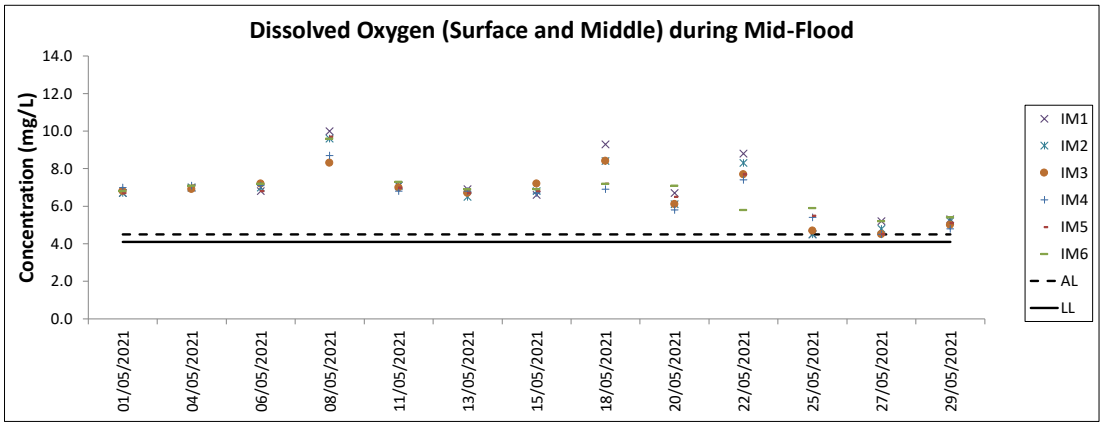
29/05/2021
C1
C2
C3
SR2
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
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12.0
10.0
8.0
6.0
4.0
2.0
0.0
01/05/2021
04/05/2021
06/05/2021
08/05/2021
11/05/2021
13/05/2021
15/05/2021
18/05/2021
20/05/2021
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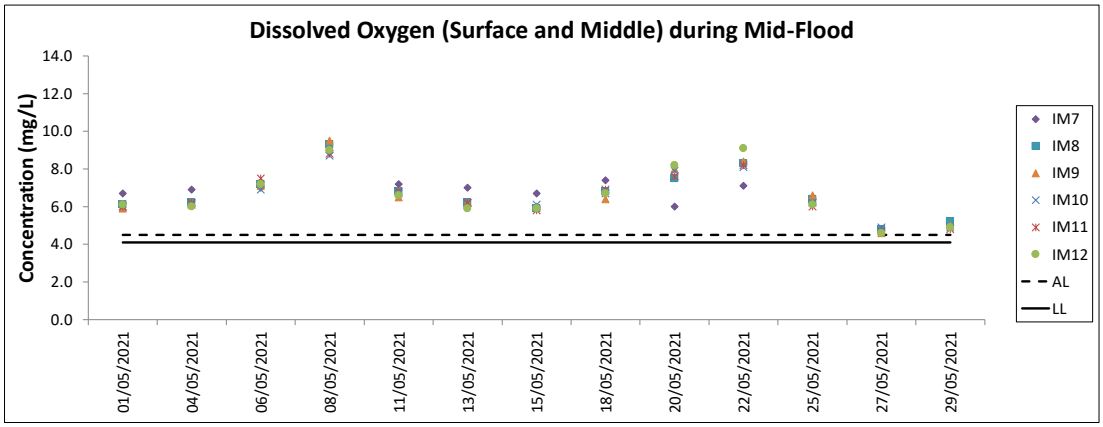
IM1
IM2
IM3
IM4
IM5
IM6
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
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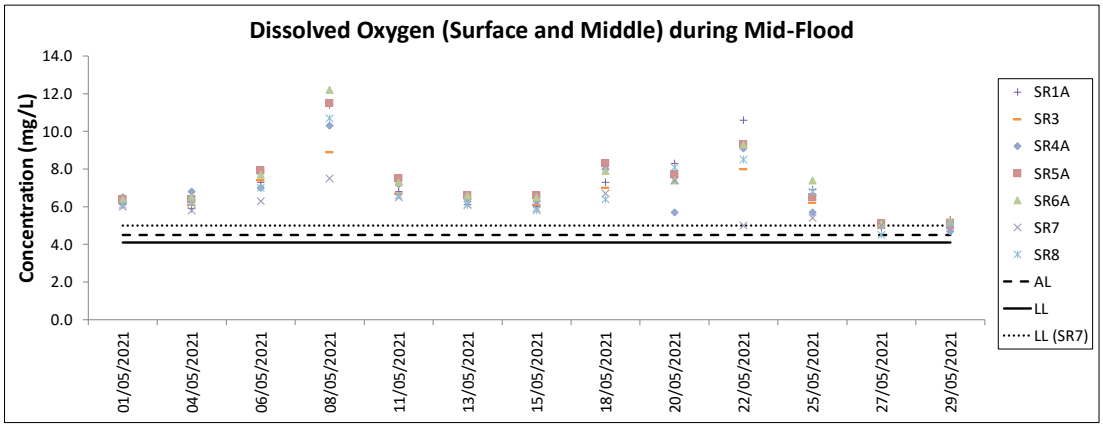
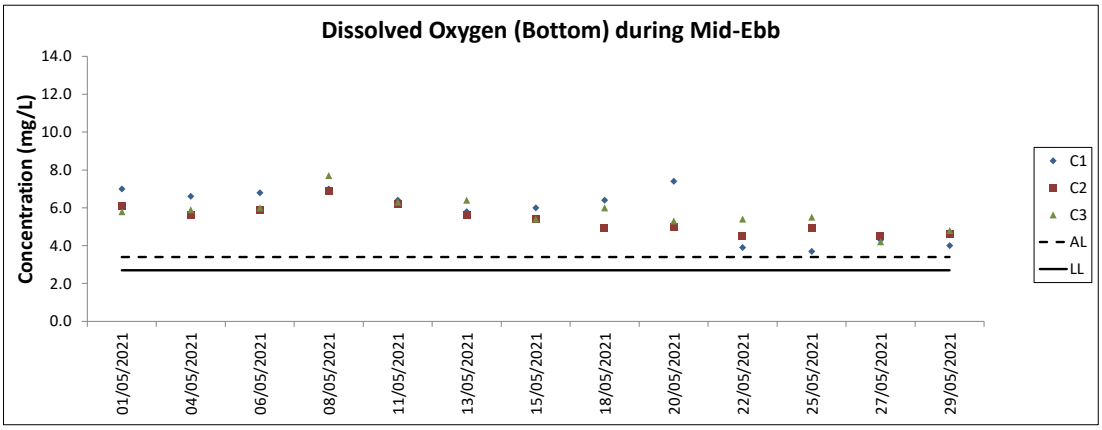
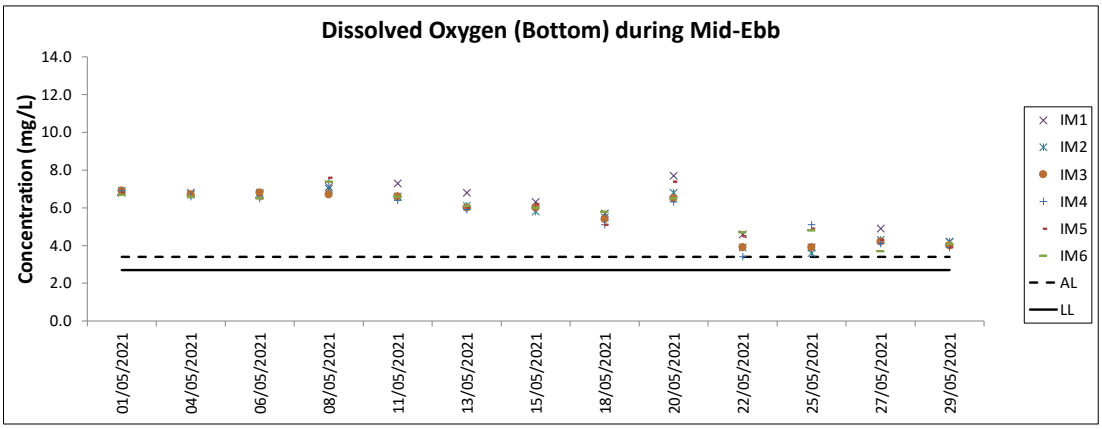
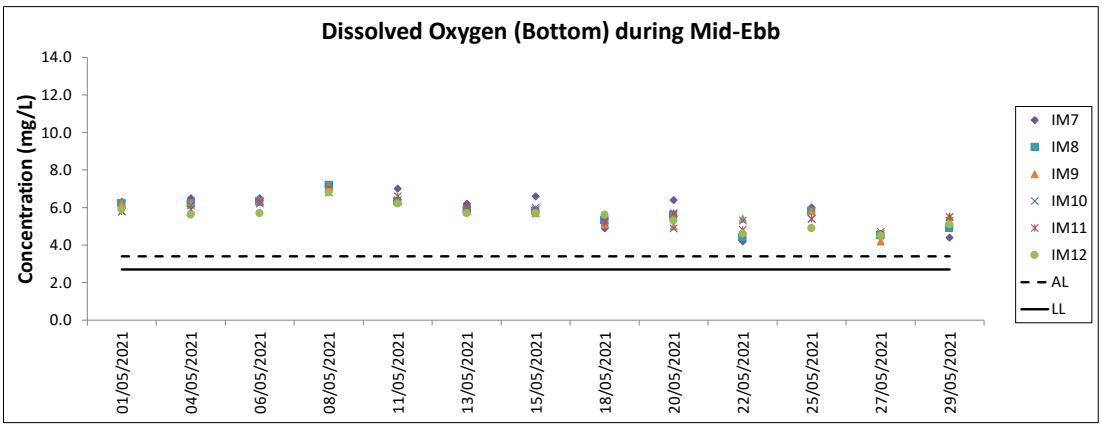
12.0
10.0
8.0
6.0
4.0
2.0
0.0
01/05/2021
04/05/2021
06/05/2021
08/05/2021
11/05/2021
13/05/2021
15/05/2021
18/05/2021
20/05/2021
22/05/2021
25/05/2021
27/05/2021
29/05/2021
IM7
IM8
IM9
IM10
IM11
IM12
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
01/05/2021
04/05/2021
06/05/2021
08/05/2021
11/05/2021
13/05/2021
15/05/2021
18/05/2021
20/05/2021
22/05/2021
25/05/2021
27/05/2021
29/05/2021
SR1A
SR3
SR4A
SR5A
SR6A
SR7
SR8
AL
LL
LL (SR7)


Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
01/05/2021
04/05/2021
06/05/2021
08/05/2021
11/05/2021
13/05/2021
15/05/2021
18/05/2021
20/05/2021
22/05/2021
25/05/2021
27/05/2021
29/05/2021
C1
C2
C3
AL
LL


Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
01/05/2021
04/05/2021
06/05/2021
08/05/2021
11/05/2021
13/05/2021
15/05/2021
18/05/2021
20/05/2021
22/05/2021
25/05/2021
27/05/2021
29/05/2021
IM1
IM2
IM3
IM4
IM5
IM6
AL
LL


Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
01/05/2021
04/05/2021
06/05/2021
08/05/2021
11/05/2021
13/05/2021
15/05/2021
18/05/2021
20/05/2021
22/05/2021
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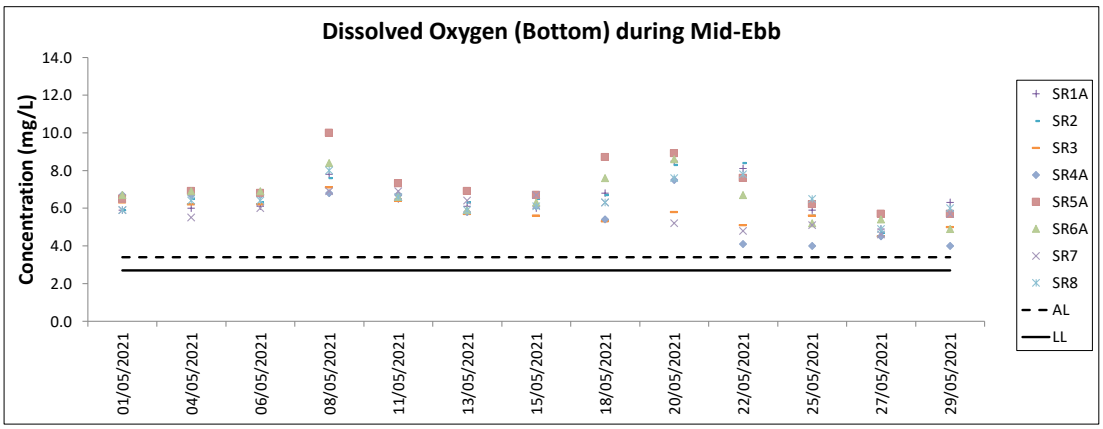
29/05/2021
IM7
IM8
IM9
IM10
IM11
IM12
AL
LL


Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
01/05/2021
04/05/2021
06/05/2021
08/05/2021
11/05/2021
13/05/2021
15/05/2021
18/05/2021
20/05/2021
22/05/2021
25/05/2021
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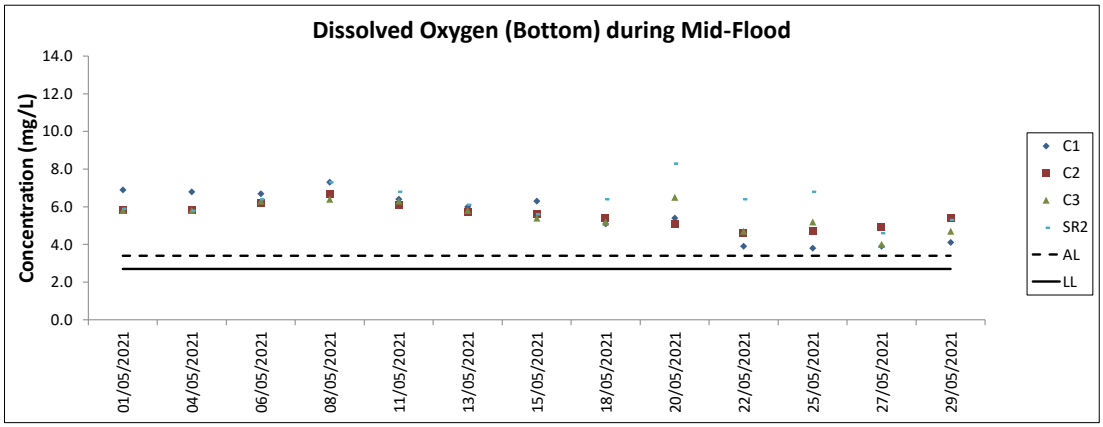
SR1A
SR2
SR3
SR4A
SR5A
SR6A
SR7
SR8
AL
LL


Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
01/05/2021
04/05/2021
06/05/2021
08/05/2021
11/05/2021
13/05/2021
15/05/2021
18/05/2021
20/05/2021
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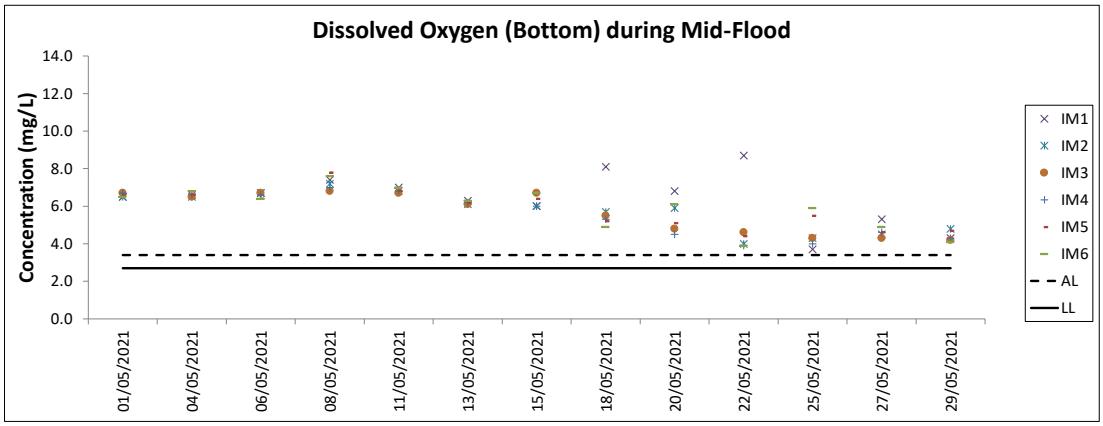
C1
C2
C3
SR2
AL
LL


Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
01/05/2021
04/05/2021
06/05/2021
08/05/2021
11/05/2021
13/05/2021
15/05/2021
18/05/2021
20/05/2021
22/05/2021
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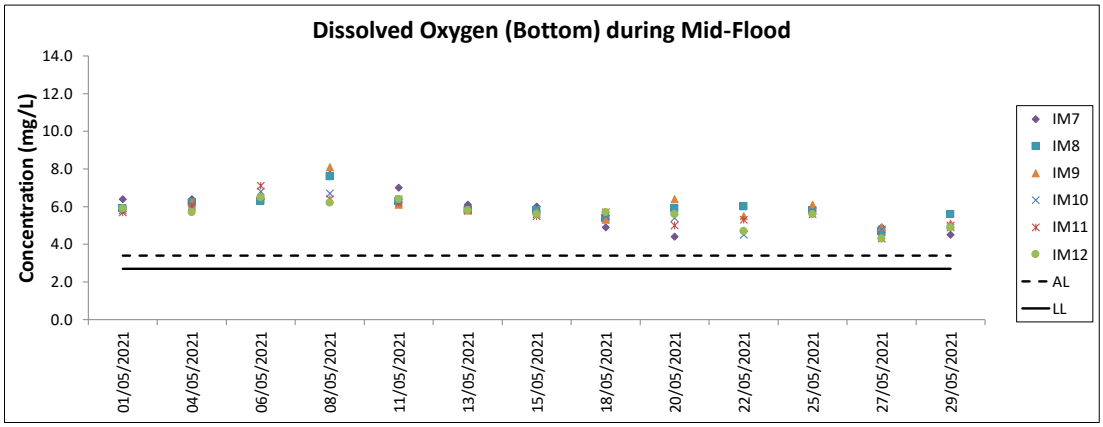
29/05/2021
IM1
IM2
IM3
IM4
IM5
IM6
AL
LL


Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
01/05/2021
04/05/2021
06/05/2021
08/05/2021
11/05/2021
13/05/2021
15/05/2021
18/05/2021
20/05/2021
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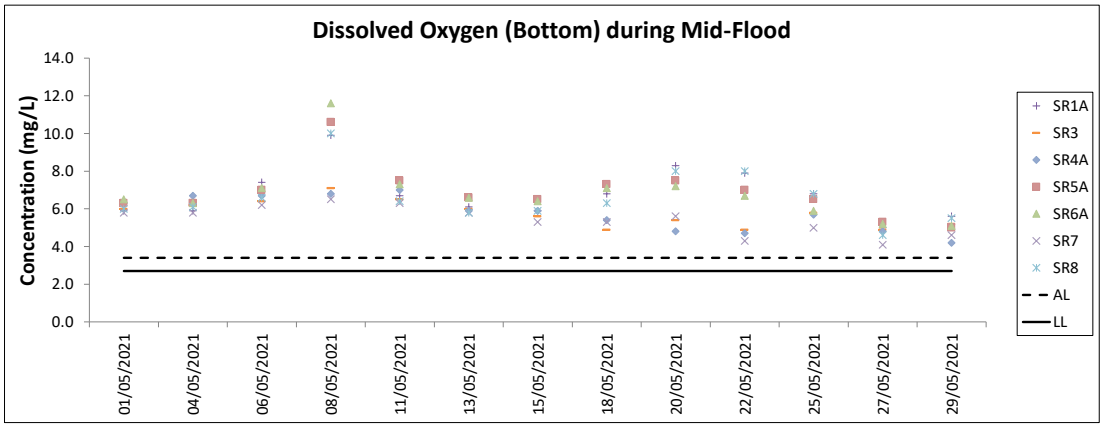
IM7
IM8
IM9
IM10
IM11
IM12
AL
LL


Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
01/05/2021
04/05/2021
06/05/2021
08/05/2021
11/05/2021
13/05/2021
15/05/2021
18/05/2021
20/05/2021
22/05/2021
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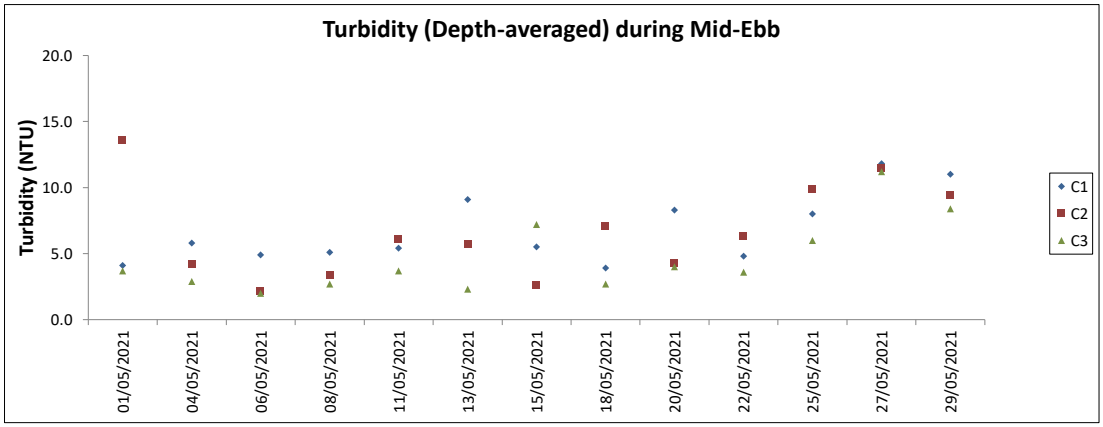
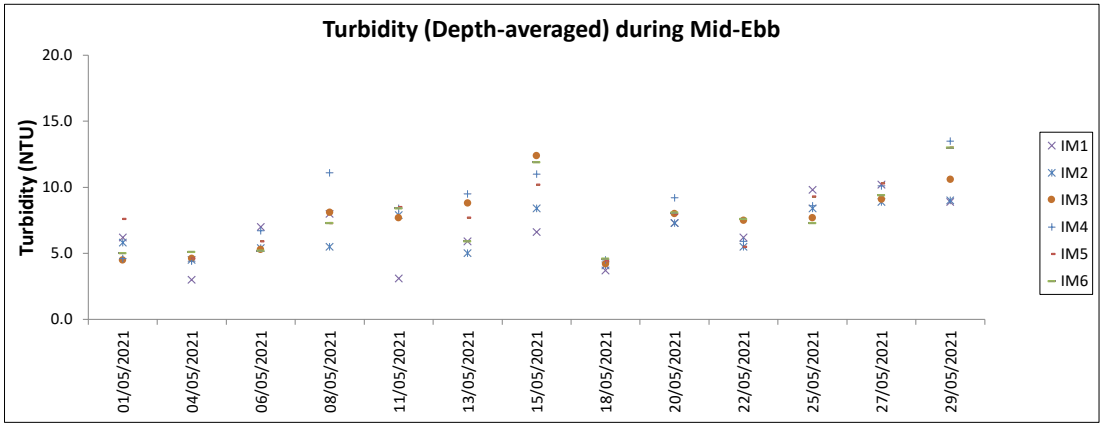
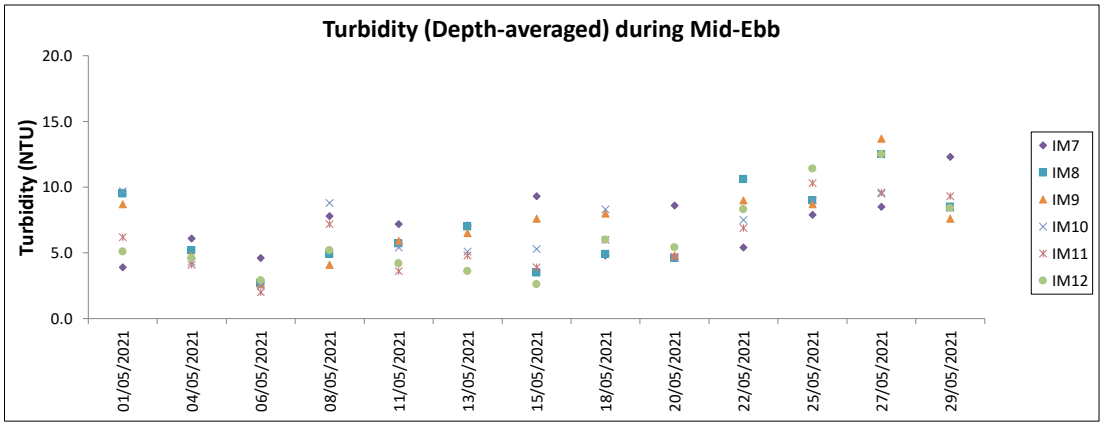
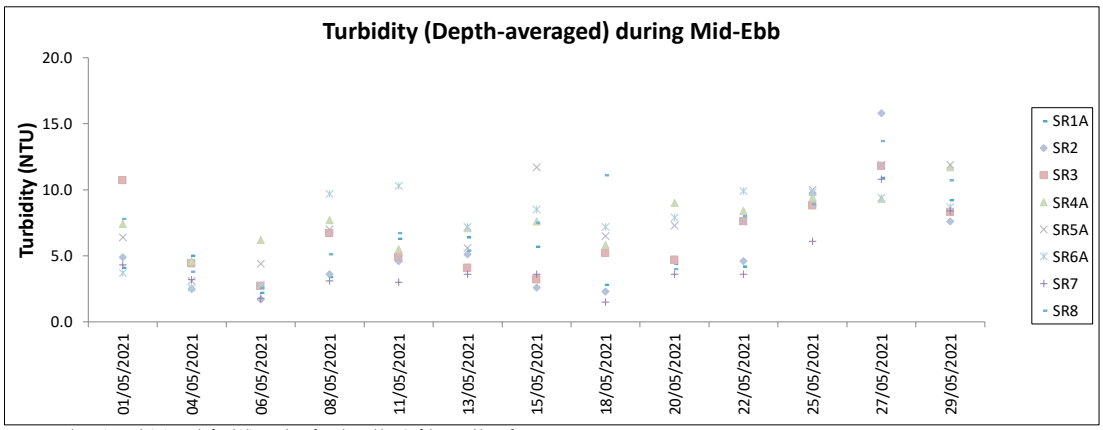
SR1A
SR3
SR4A
SR5A
SR6A
SR7
SR8
AL
LL

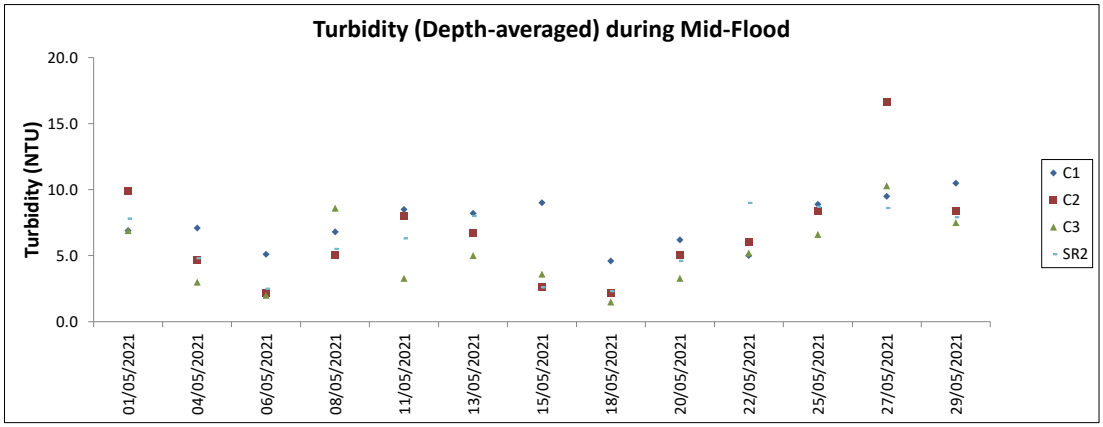


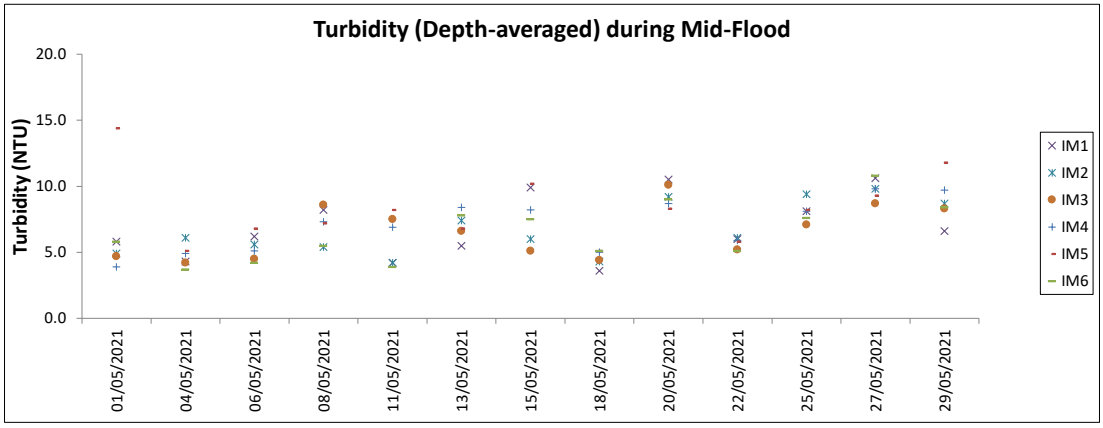


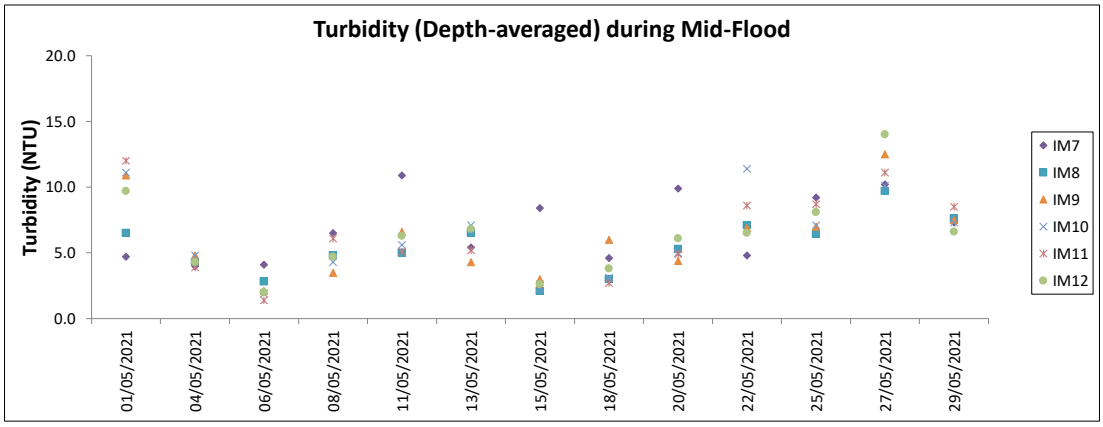


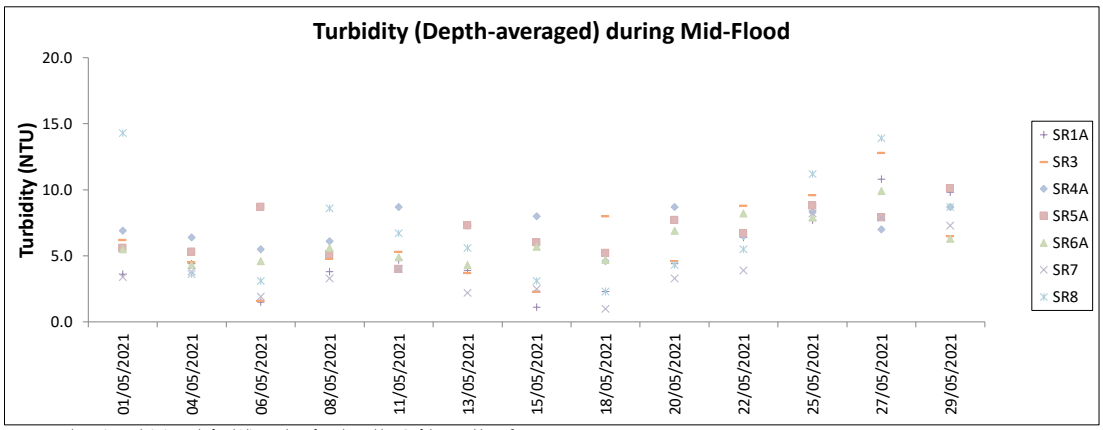


Note: The Action and Limit Level of turbidity can be referred to Table 4.2 of the monthly EM&A report.

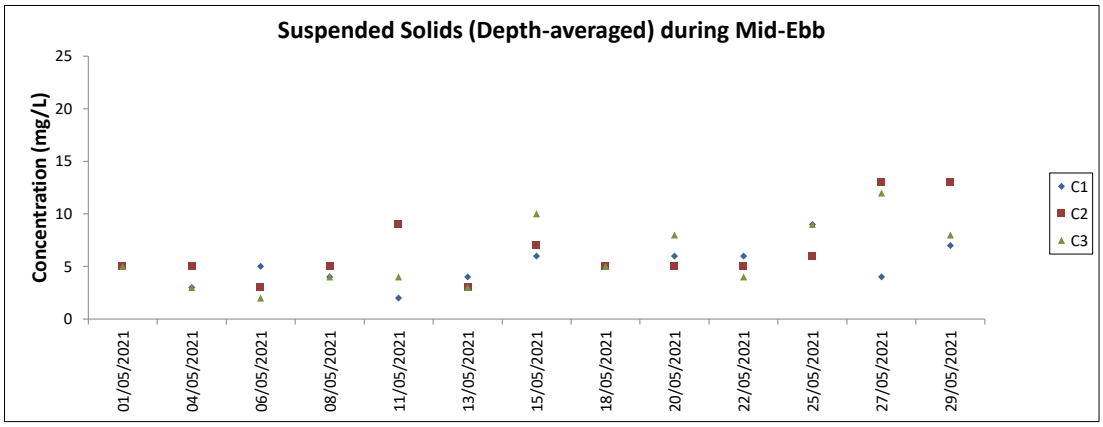


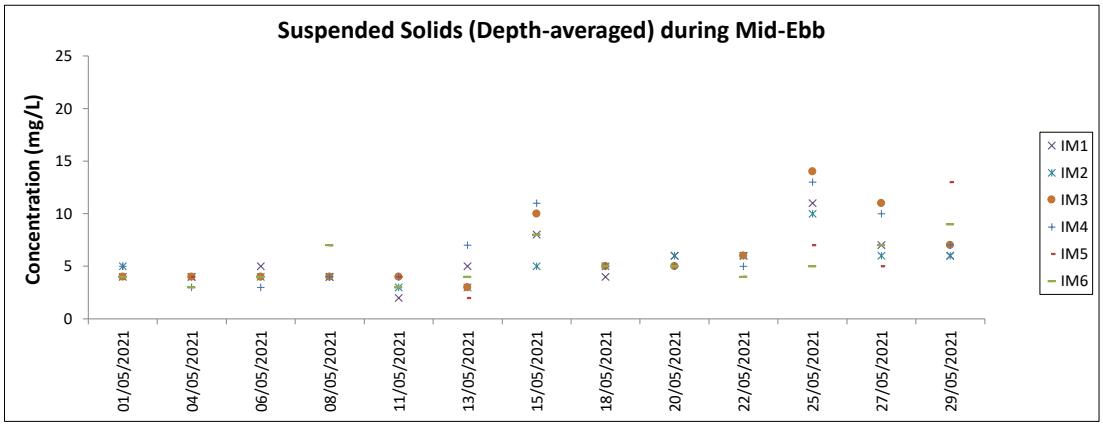


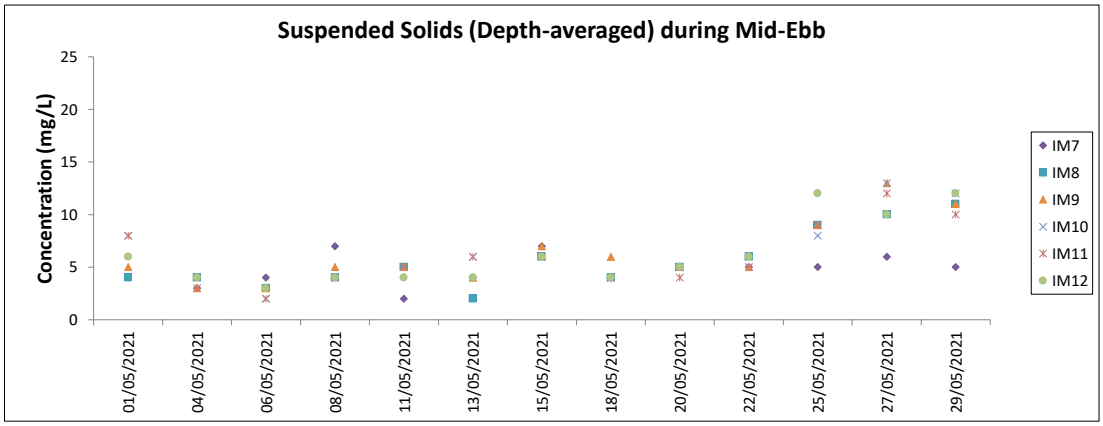


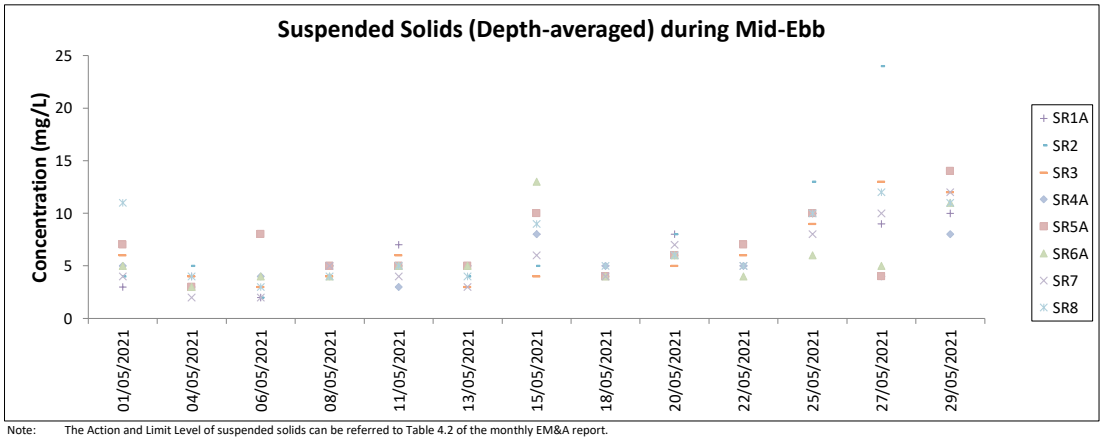


Note: The Action and Limit Level of turbidity can be referred to Table 4.2 of the monthly EM&A report.

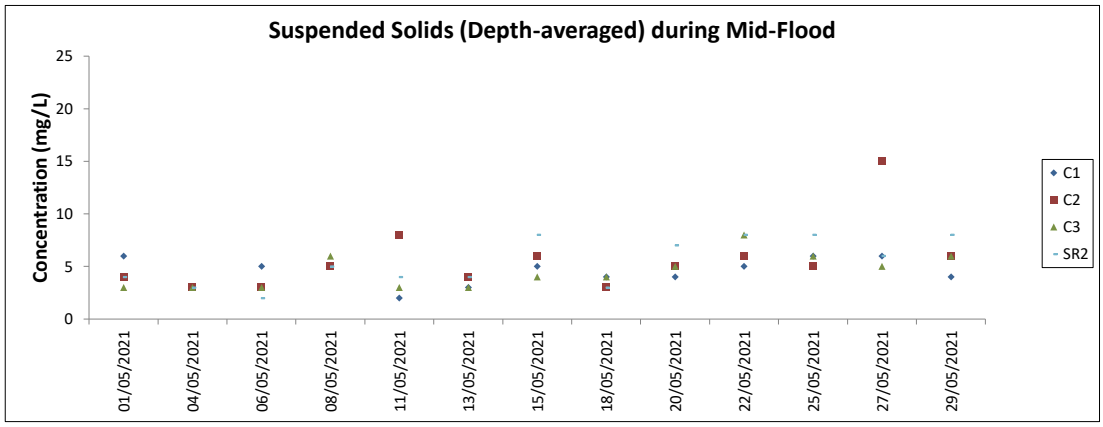


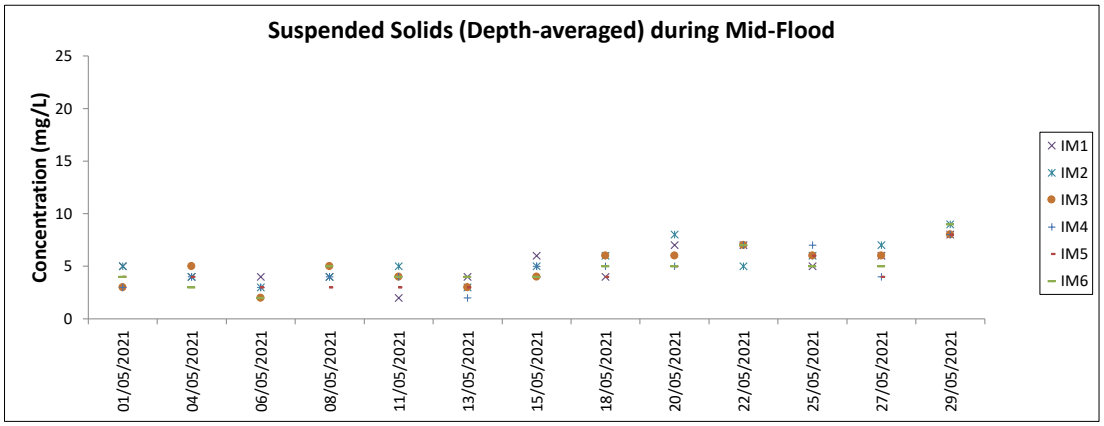


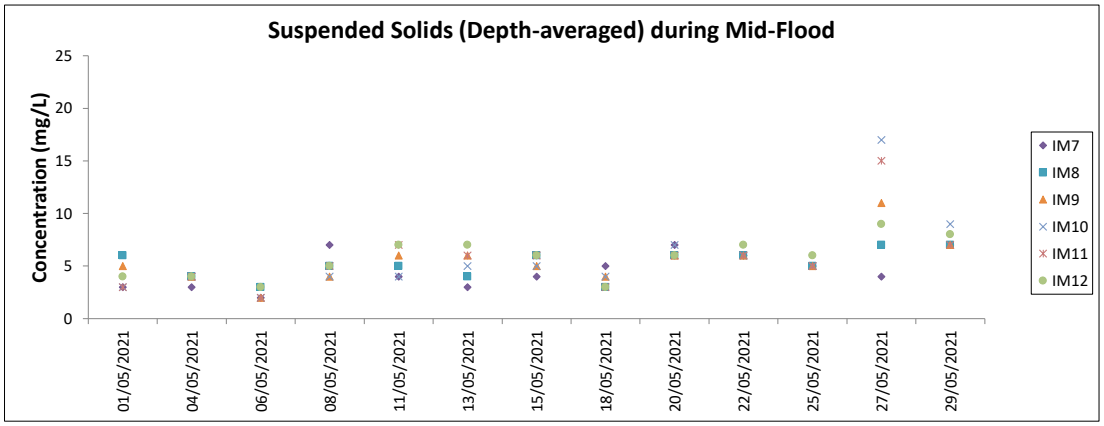


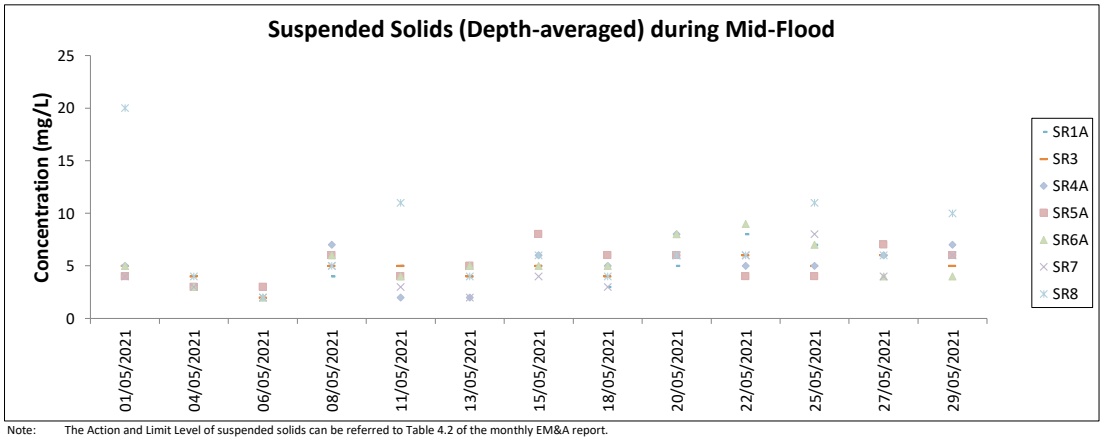


Note: The Action and Limit Level of suspended solids can be referred to Table 4.2 of the monthly EM&A report.

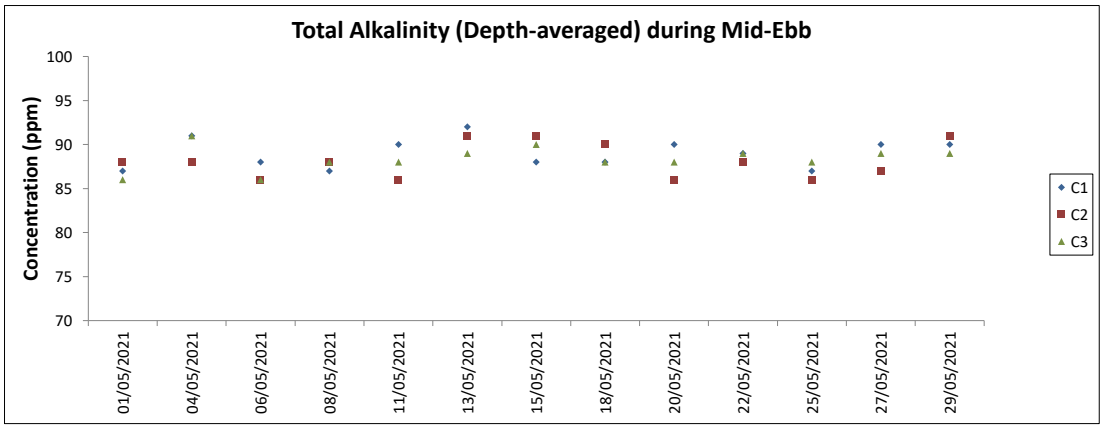


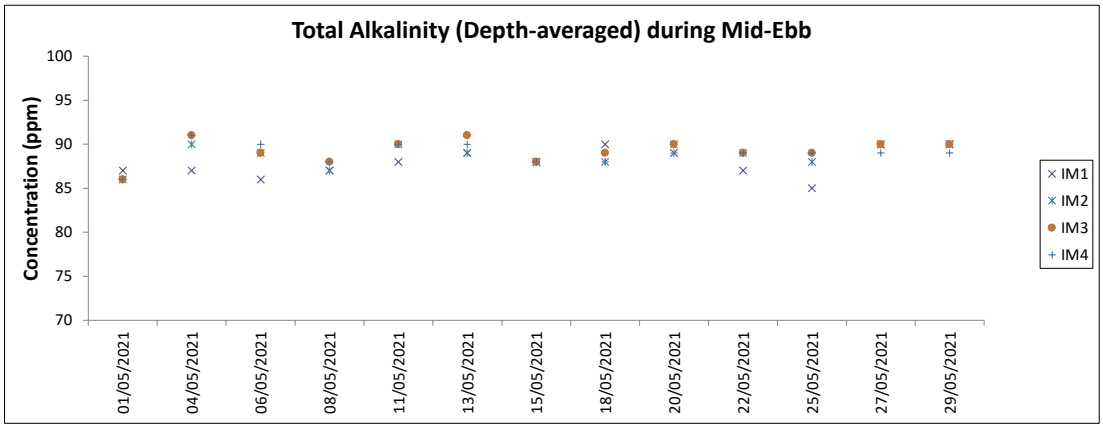


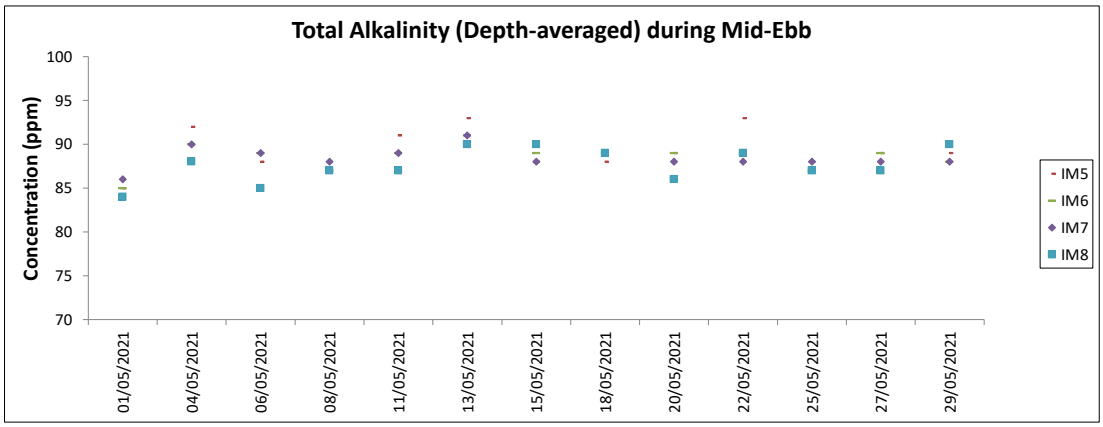


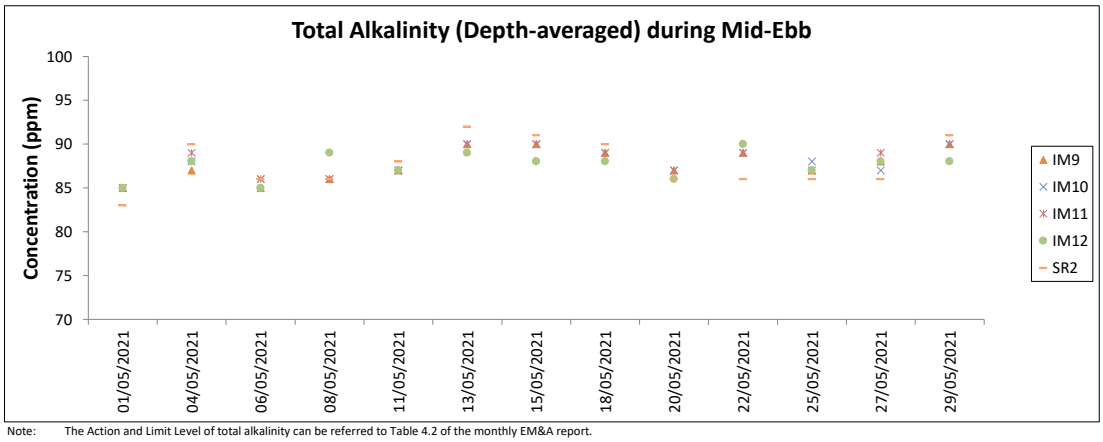


Note: The Action and Limit Level of suspended solids can be referred to Table 4.2 of the monthly EM&A report.

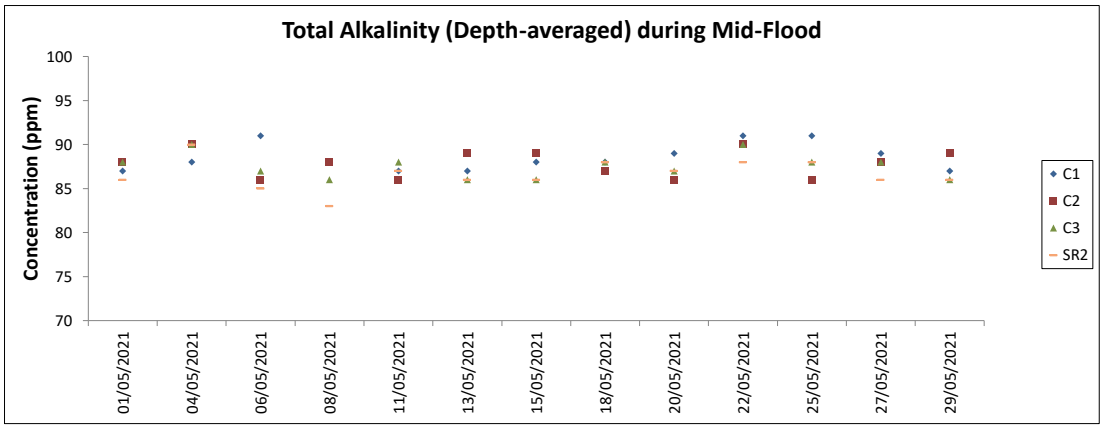


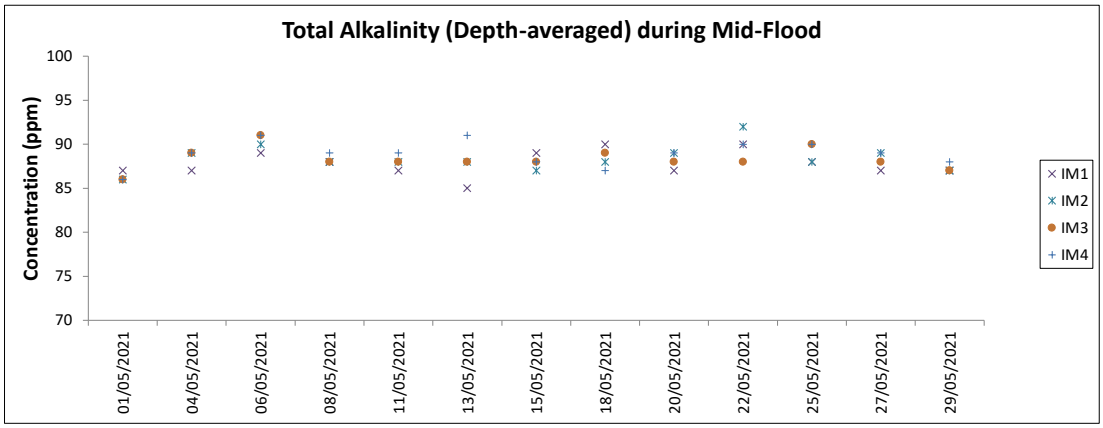


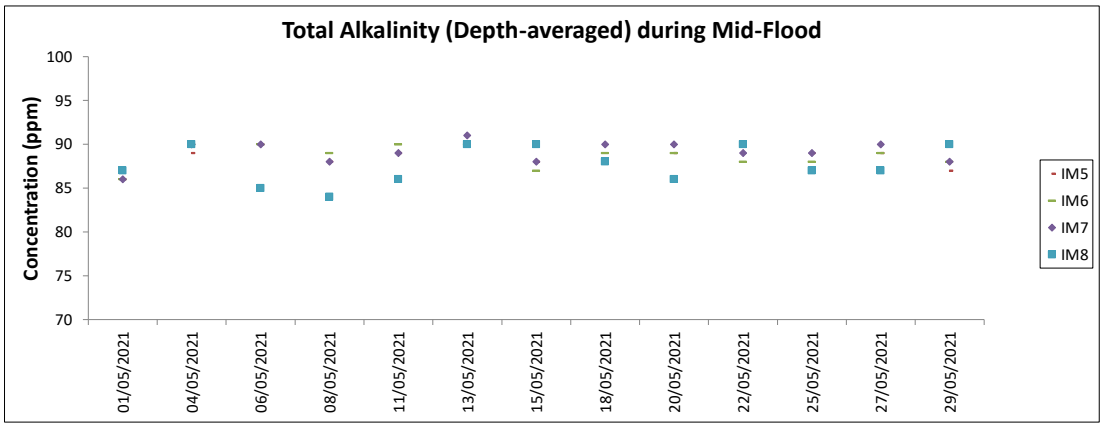


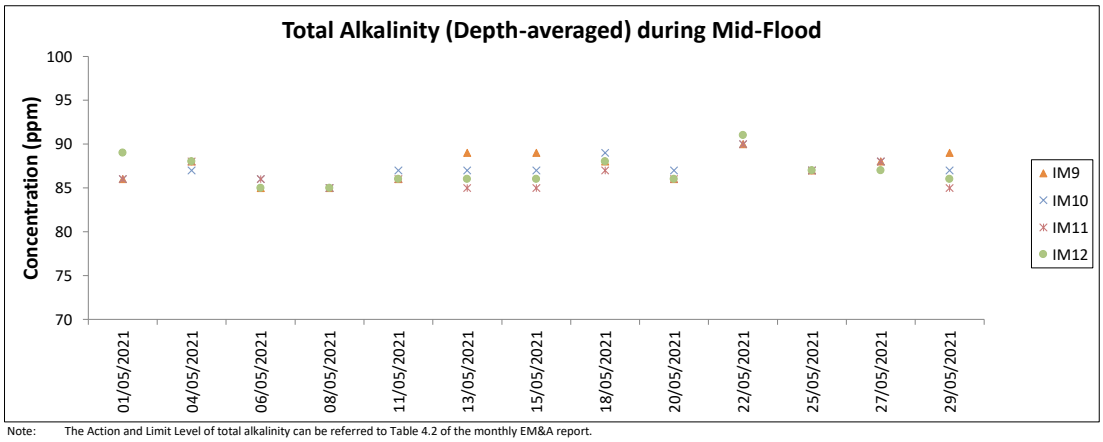


Note: The Action and Limit Level of total alkalinity can be referred to Table 4.2 of the monthly EM&A report.

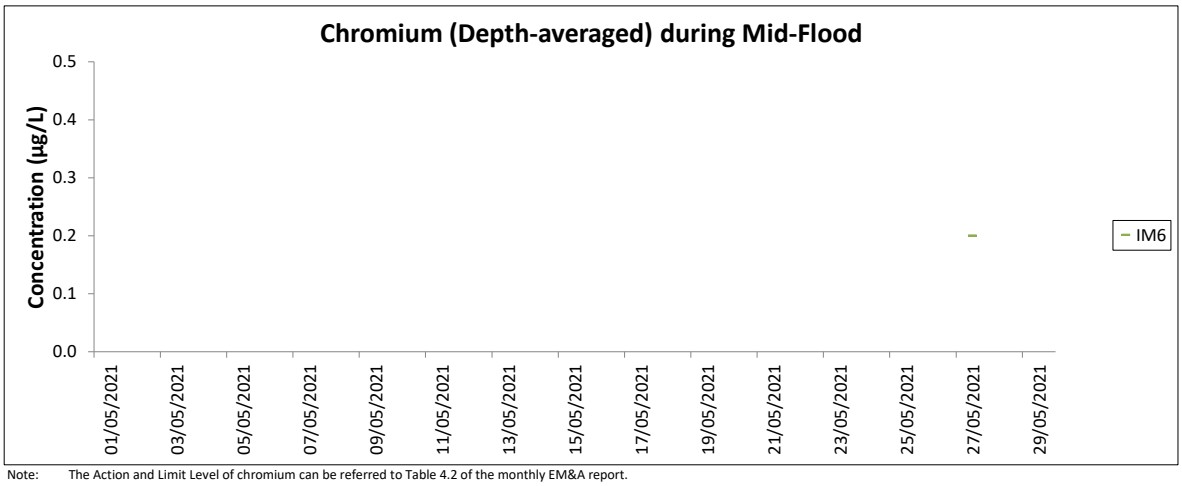




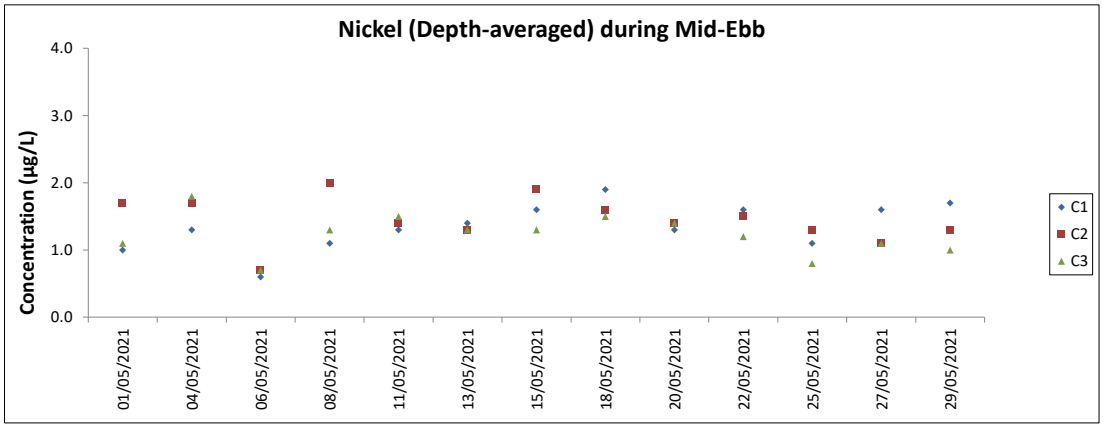


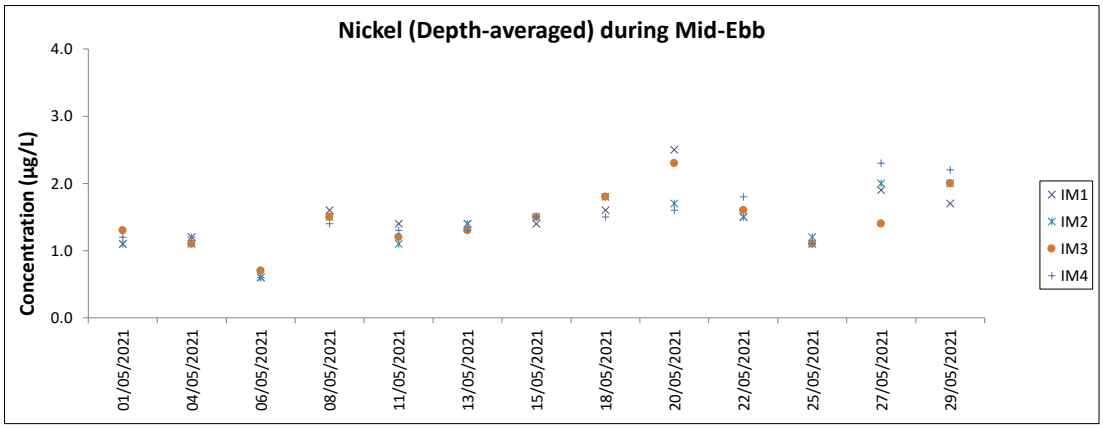


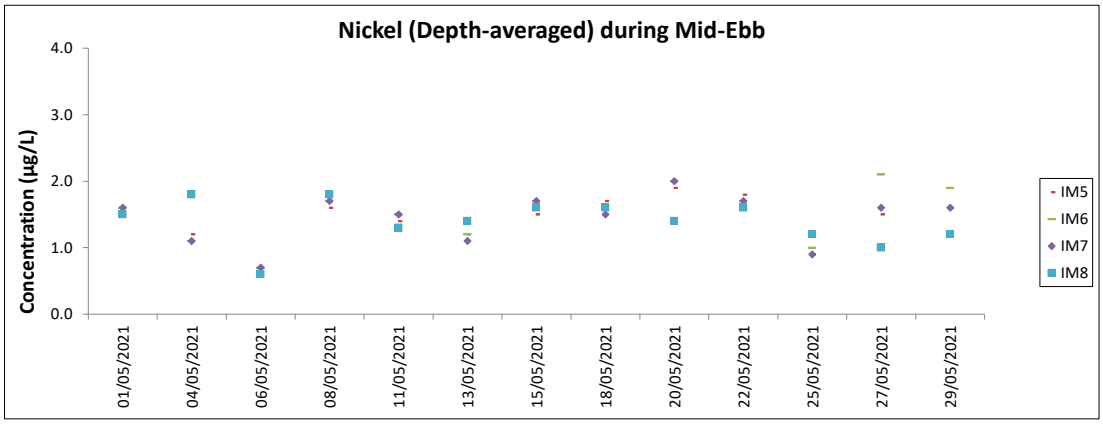
Note: The Action and Limit Level of total alkalinity can be referred to Table 4.2 of the monthly EM&A report.

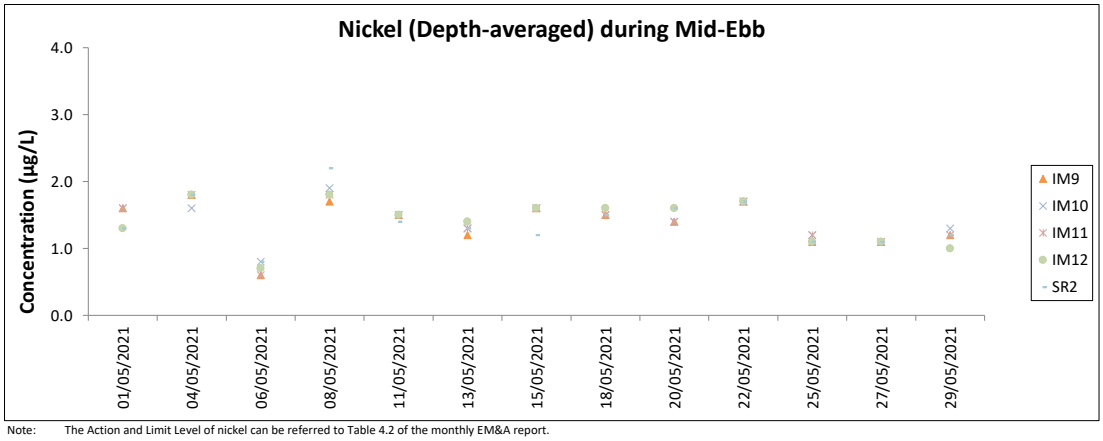


Note: The Action and Limit Level of chromium can be referred to Table 4.2 of the monthly EM&A report.
All other chromium in the reporting period was below the reporting limit 0.2 µg/L.

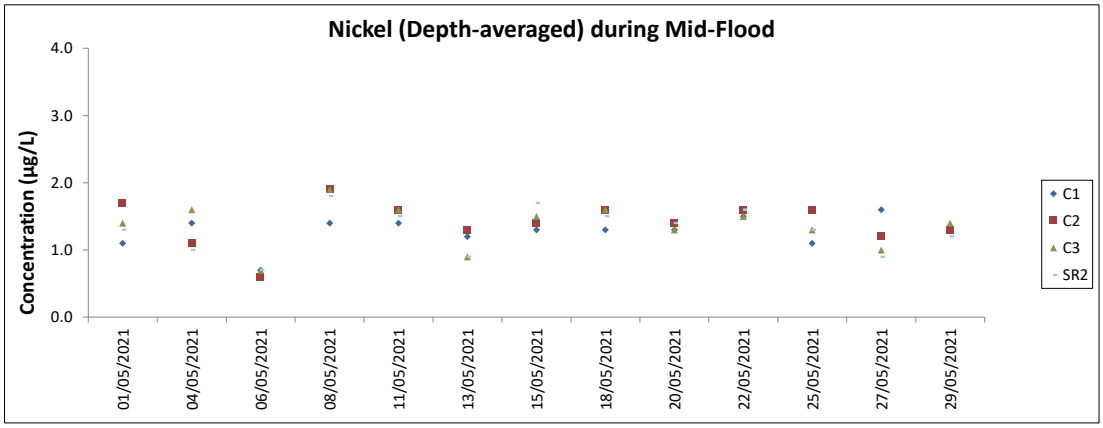


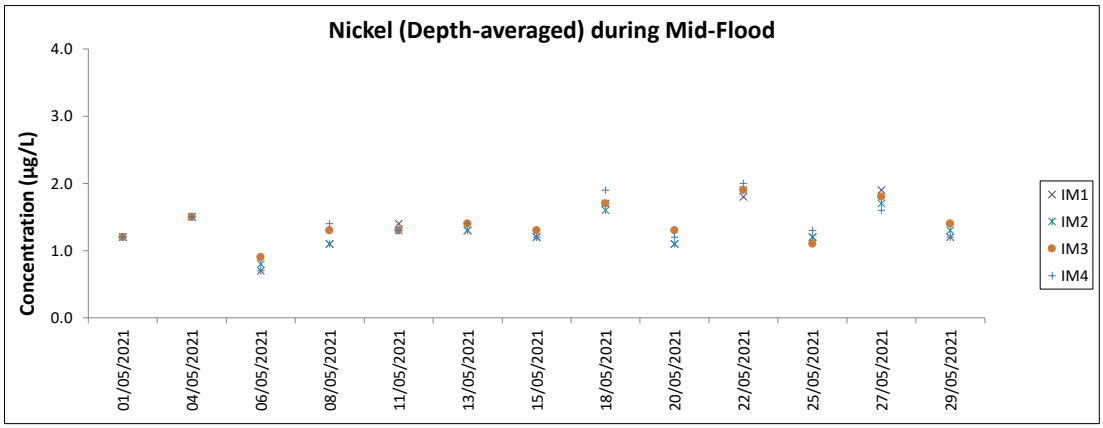


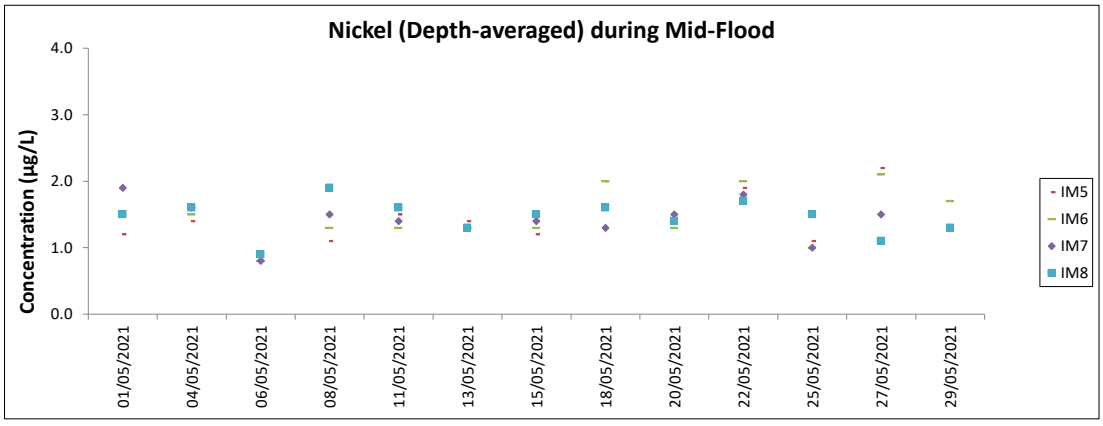


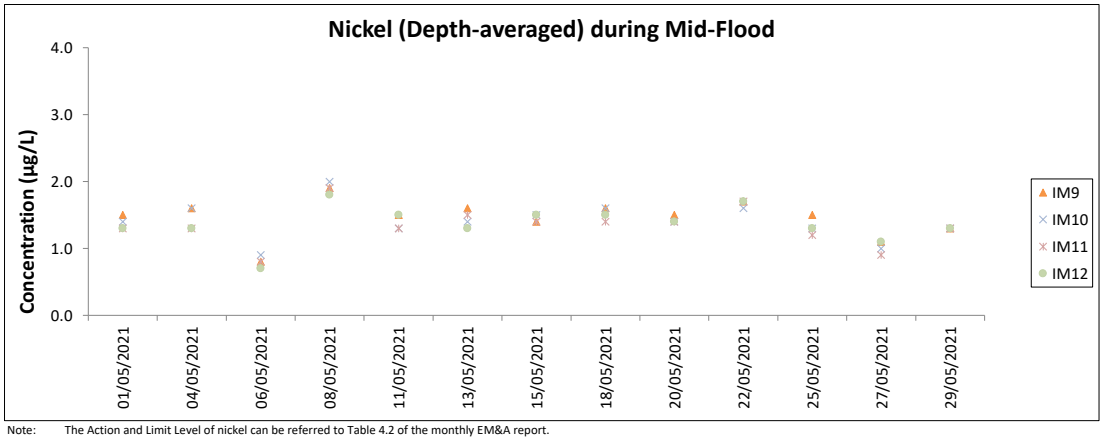


Note: The Action and Limit Level of nickel can be referred to Table 4.2 of the monthly EM&A report.









Note: The Action and Limit Level of nickel can be referred to Table 4.2 of the monthly EM&A report.
Major site activities carried out during the reporting period are summarized in Section 1.4 of the monthly EM&A report.
Weather conditions during monitoring are presented in the data tables above.
QA/ QC requirements as stipulated in the EM&A Manual were carried out during measurement.

Chinese White Dolphin Monitoring Results

CWD Small Vessel Line-transect Survey — Survey Effort Data

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
3-Mar-21	NEL	3	37.340	SPRING	32166	3RS ET	P
3-Mar-21	NEL	3	9.760	SPRING	32166	3RS ET	S
8-Mar-21	NWL	2	1.100	SPRING	32166	3RS ET	P
8-Mar-21	NWL	3	35.740	SPRING	32166	3RS ET	P
8-Mar-21	NWL	4	26.780	SPRING	32166	3RS ET	P
8-Mar-21	NWL	2	2.300	SPRING	32166	3RS ET	S
8-Mar-21	NWL	3	5.000	SPRING	32166	3RS ET	S
8-Mar-21	NWL	4	3.900	SPRING	32166	3RS ET	S
9-Mar-21	AW	3	4.720	SPRING	32166	3RS ET	P
9-Mar-21	WL	2	9.720	SPRING	32166	3RS ET	P
9-Mar-21	WL	3	10.360	SPRING	32166	3RS ET	P
9-Mar-21	WL	2	6.740	SPRING	32166	3RS ET	S
9-Mar-21	WL	3	4.630	SPRING	32166	3RS ET	S
10-Mar-21	NEL	2	1.100	SPRING	32166	3RS ET	P
10-Mar-21	NEL	3	25.400	SPRING	32166	3RS ET	P
10-Mar-21	NEL	4	10.430	SPRING	32166	3RS ET	P
10-Mar-21	NEL	3	7.070	SPRING	32166	3RS ET	S
10-Mar-21	NEL	4	3.100	SPRING	32166	3RS ET	S
12-Mar-21	SWL	1	3.850	SPRING	32166	3RS ET	P
12-Mar-21	SWL	2	49.702	SPRING	32166	3RS ET	P
12-Mar-21	SWL	3	0.900	SPRING	32166	3RS ET	P
12-Mar-21	SWL	2	14.678	SPRING	32166	3RS ET	S
12-Mar-21	SWL	3	1.100	SPRING	32166	3RS ET	S
15-Mar-21	AW	2	1.910	SPRING	32166	3RS ET	P
15-Mar-21	AW	3	2.740	SPRING	32166	3RS ET	P
15-Mar-21	WL	2	16.658	SPRING	32166	3RS ET	P
15-Mar-21	WL	3	3.340	SPRING	32166	3RS ET	P
15-Mar-21	WL	2	9.742	SPRING	32166	3RS ET	S
16-Mar-21	NWL	2	58.960	SPRING	32166	3RS ET	P
16-Mar-21	NWL	3	3.860	SPRING	32166	3RS ET	P
16-Mar-21	NWL	2	8.700	SPRING	32166	3RS ET	S
16-Mar-21	NWL	3	1.900	SPRING	32166	3RS ET	S
17-Mar-21	SWL	2	49.752	SPRING	32166	3RS ET	P
17-Mar-21	SWL	3	2.340	SPRING	32166	3RS ET	P
17-Mar-21	SWL	2	15.682	SPRING	32166	3RS ET	S
7-Apr-21	NWL	2	5.840	SPRING	32166	3RS ET	P
7-Apr-21	NWL	3	45.160	SPRING	32166	3RS ET	P
7-Apr-21	NWL	4	12.900	SPRING	32166	3RS ET	P
7-Apr-21	NWL	3	8.800	SPRING	32166	3RS ET	S
7-Apr-21	NWL	4	2.600	SPRING	32166	3RS ET	S
12-Apr-21	AW	2	2.950	SPRING	32166	3RS ET	P
12-Apr-21	AW	3	1.920	SPRING	32166	3RS ET	P
12-Apr-21	WL	2	14.085	SPRING	32166	3RS ET	P
12-Apr-21	WL	3	4.941	SPRING	32166	3RS ET	P
12-Apr-21	WL	2	7.213	SPRING	32166	3RS ET	S
12-Apr-21	WL	3	2.029	SPRING	32166	3RS ET	S
12-Apr-21	WL	4	0.970	SPRING	32166	3RS ET	S

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
13-Apr-21	SWL	1	1.810	SPRING	32166	3RS ET	P
13-Apr-21	SWL	2	43.686	SPRING	32166	3RS ET	P
13-Apr-21	SWL	3	7.090	SPRING	32166	3RS ET	P
13-Apr-21	SWL	2	13.349	SPRING	32166	3RS ET	S
13-Apr-21	SWL	3	2.280	SPRING	32166	3RS ET	S
14-Apr-21	NEL	3	37.080	SPRING	32166	3RS ET	P
14-Apr-21	NEL	3	9.920	SPRING	32166	3RS ET	S
15-Apr-21	NEL	3	29.770	SPRING	32166	3RS ET	P
15-Apr-21	NEL	4	7.400	SPRING	32166	3RS ET	P
15-Apr-21	NEL	3	7.730	SPRING	32166	3RS ET	S
15-Apr-21	NEL	4	2.100	SPRING	32166	3RS ET	S
19-Apr-21	NWL	3	24.300	SPRING	32166	3RS ET	P
19-Apr-21	NWL	4	33.330	SPRING	32166	3RS ET	P
19-Apr-21	NWL	5	6.370	SPRING	32166	3RS ET	P
19-Apr-21	NWL	3	5.900	SPRING	32166	3RS ET	S
19-Apr-21	NWL	4	2.900	SPRING	32166	3RS ET	S
19-Apr-21	NWL	5	3.000	SPRING	32166	3RS ET	S
20-Apr-21	AW	3	4.860	SPRING	32166	3RS ET	P
20-Apr-21	WL	2	1.600	SPRING	32166	3RS ET	P
20-Apr-21	WL	3	18.466	SPRING	32166	3RS ET	P
20-Apr-21	WL	2	1.100	SPRING	32166	3RS ET	S
20-Apr-21	WL	3	9.774	SPRING	32166	3RS ET	S
21-Apr-21	SWL	3	25.980	SPRING	32166	3RS ET	P
21-Apr-21	SWL	4	13.080	SPRING	32166	3RS ET	P
21-Apr-21	SWL	5	15.050	SPRING	32166	3RS ET	P
21-Apr-21	SWL	3	8.070	SPRING	32166	3RS ET	S
21-Apr-21	SWL	4	4.740	SPRING	32166	3RS ET	S
21-Apr-21	SWL	5	3.380	SPRING	32166	3RS ET	S
6-May-21	NEL	3	30.130	SPRING	32166	3RS ET	P
6-May-21	NEL	4	7.170	SPRING	32166	3RS ET	P
6-May-21	NEL	3	10.100	SPRING	32166	3RS ET	S
11-May-21	AW	3	4.870	SPRING	32166	3RS ET	P
11-May-21	WL	3	17.180	SPRING	32166	3RS ET	P
11-May-21	WL	4	3.240	SPRING	32166	3RS ET	P
11-May-21	WL	3	7.890	SPRING	32166	3RS ET	S
11-May-21	WL	4	1.970	SPRING	32166	3RS ET	S
20-May-21	NWL	3	41.600	SPRING	32166	3RS ET	P
20-May-21	NWL	4	22.100	SPRING	32166	3RS ET	P
20-May-21	NWL	3	6.000	SPRING	32166	3RS ET	S
20-May-21	NWL	4	5.400	SPRING	32166	3RS ET	S
21-May-21	NEL	2	0.669	SPRING	32166	3RS ET	P
21-May-21	NEL	3	36.410	SPRING	32166	3RS ET	P
21-May-21	NEL	2	0.941	SPRING	32166	3RS ET	S
21-May-21	NEL	3	8.580	SPRING	32166	3RS ET	S
25-May-21	SWL	1	4.200	SPRING	32166	3RS ET	P
25-May-21	SWL	2	26.979	SPRING	32166	3RS ET	P
25-May-21	SWL	3	20.210	SPRING	32166	3RS ET	P
25-May-21	SWL	4	1.310	SPRING	32166	3RS ET	P
25-May-21	SWL	1	3.900	SPRING	32166	3RS ET	S

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
25-May-21	SWL	2	5.088	SPRING	32166	3RS ET	S
25-May-21	SWL	3	6.580	SPRING	32166	3RS ET	S
26-May-21	SWL	1	1.240	SPRING	32166	3RS ET	P
26-May-21	SWL	2	18.494	SPRING	32166	3RS ET	P
26-May-21	SWL	3	27.800	SPRING	32166	3RS ET	P
26-May-21	SWL	4	6.000	SPRING	32166	3RS ET	P
26-May-21	SWL	2	3.830	SPRING	32166	3RS ET	S
26-May-21	SWL	3	9.860	SPRING	32166	3RS ET	S
26-May-21	SWL	4	1.330	SPRING	32166	3RS ET	S
27-May-21	NWL	2	8.010	SPRING	32166	3RS ET	P
27-May-21	NWL	3	37.990	SPRING	32166	3RS ET	P
27-May-21	NWL	4	18.800	SPRING	32166	3RS ET	P
27-May-21	NWL	3	8.600	SPRING	32166	3RS ET	S
27-May-21	NWL	4	2.300	SPRING	32166	3RS ET	S
28-May-21	AW	2	4.730	SPRING	32166	3RS ET	P
28-May-21	WL	2	2.400	SPRING	32166	3RS ET	P
28-May-21	WL	3	14.857	SPRING	32166	3RS ET	P
28-May-21	WL	4	2.016	SPRING	32166	3RS ET	P
28-May-21	WL	3	8.377	SPRING	32166	3RS ET	S
28-May-21	WL	4	1.220	SPRING	32166	3RS ET	S

Notes: CWD monitoring survey data of the two preceding survey months 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.	P/S
8-Mar-21	1	0939	CWD	1	NWL	3	150	ON	3RS ET	22.4023	113.8702	SPRING	NONE	P
9-Mar-21	1	1145	CWD	4	WL	3	41	ON	3RS ET	22.2052	113.8337	SPRING	NONE	P
12-Mar-21	1	1051	FP	8	SWL	1	49	ON	3RS ET	22.1885	113.9365	SPRING	NONE	P
12-Mar-21	2	1105	FP	3	SWL	2	25	ON	3RS ET	22.1730	113.9361	SPRING	NONE	P
12-Mar-21	3	1114	FP	2	SWL	2	41	ON	3RS ET	22.1572	113.9366	SPRING	NONE	P
12-Mar-21	4	1145	FP	2	SWL	2	17	ON	3RS ET	22.1934	113.9270	SPRING	NONE	P
15-Mar-21	1	1010	CWD	1	WL	3	71	ON	3RS ET	22.2908	113.8613	SPRING	NONE	P
15-Mar-21	2	1146	CWD	7	WL	2	434	ON	3RS ET	22.2074	113.8395	SPRING	NONE	S
15-Mar-21	3	1217	CWD	1	WL	2	404	ON	3RS ET	22.2054	113.8230	SPRING	NONE	P
16-Mar-21	1	1039	CWD	1	NWL	2	915	ON	3RS ET	22.2800	113.8784	SPRING	NONE	P
16-Mar-21	2	1105	CWD	2	NWL	2	223	ON	3RS ET	22.3070	113.8753	SPRING	NONE	S
17-Mar-21	1	1038	FP	3	SWL	2	200	ON	3RS ET	22.2012	113.9359	SPRING	NONE	P
17-Mar-21	2	1046	FP	7	SWL	2	315	ON	3RS ET	22.1876	113.9360	SPRING	NONE	P
17-Mar-21	3	1054	FP	8	SWL	2	9	ON	3RS ET	22.1763	113.9359	SPRING	NONE	P
17-Mar-21	4	1107	FP	2	SWL	2	2	ON	3RS ET	22.1491	113.9344	SPRING	NONE	S
17-Mar-21	5	1216	FP	2	SWL	2	58	ON	3RS ET	22.1411	113.9089	SPRING	NONE	S
17-Mar-21	6	1223	FP	4	SWL	2	211	ON	3RS ET	22.1526	113.9079	SPRING	NONE	P
17-Mar-21	7	1228	FP	2	SWL	2	13	ON	3RS ET	22.1556	113.9019	SPRING	NONE	S
17-Mar-21	8	1319	FP	4	SWL	2	184	ON	3RS ET	22.1728	113.8968	SPRING	NONE	P
17-Mar-21	9	1327	FP	3	SWL	2	72	ON	3RS ET	22.1582	113.8974	SPRING	NONE	P
17-Mar-21	10	1340	FP	2	SWL	2	186	ON	3RS ET	22.1579	113.8881	SPRING	NONE	P
17-Mar-21	11	1420	FP	3	SWL	3	67	ON	3RS ET	22.1856	113.8779	SPRING	NONE	P
17-Mar-21	12	1431	FP	1	SWL	2	122	ON	3RS ET	22.1630	113.8785	SPRING	NONE	P
17-Mar-21	13	1451	FP	1	SWL	2	11	ON	3RS ET	22.1891	113.8686	SPRING	NONE	P
17-Mar-21	14	1524	CWD	1	SWL	2	86	ON	3RS ET	22.1843	113.8486	SPRING	NONE	P
12-Apr-21	1	1047	CWD	2	WL	2	271	ON	3RS ET	22.2501	113.8423	SPRING	NONE	P
12-Apr-21	2	1130	CWD	4	WL	2	335	ON	3RS ET	22.2322	113.8306	SPRING	NONE	P
12-Apr-21	3	1140	CWD	2	WL	2	52	ON	3RS ET	22.2237	113.8375	SPRING	NONE	S
12-Apr-21	4	1206	CWD	7	WL	2	438	ON	3RS ET	22.2143	113.8293	SPRING	NONE	P
13-Apr-21	1	1050	FP	3	SWL	2	222	ON	3RS ET	22.1852	113.9374	SPRING	NONE	P
13-Apr-21	2	1055	FP	4	SWL	2	150	ON	3RS ET	22.1759	113.9373	SPRING	NONE	P
13-Apr-21	3	1100	FP	3	SWL	2	14	ON	3RS ET	22.1700	113.9372	SPRING	NONE	P

DATE	STG #	TIME	CWD/FP	GP SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.	P/S
13-Apr-21	4	1214	FP	1	SWL	2	419	ON	3RS ET	22.1414	113.9163	SPRING	NONE	S
13-Apr-21	5	1349	FP	3	SWL	2	413	ON	3RS ET	22.1900	113.8887	SPRING	NONE	P
13-Apr-21	6	1450	CWD	3	SWL	3	125	ON	3RS ET	22.1923	113.8691	SPRING	PURSE SEINER	P
13-Apr-21	7	1536	CWD	3	SWL	3	322	ON	3RS ET	22.1893	113.8491	SPRING	PURSE SEINER	P
20-Apr-21	1	1204	CWD	2	WL	3	155	ON	3RS ET	22.1910	113.8417	SPRING	PURSE SEINER	S
21-Apr-21	1	1152	FP	4	SWL	5	132	ON	3RS ET	22.1602	113.9181	SPRING	NONE	P
11-May-21	1	1043	CWD	2	WL	3	74	ON	3RS ET	22.2643	113.8571	SPRING	NONE	S
25-May-21	1	1105	FP	2	SWL	2	16	ON	3RS ET	22.1593	113.9280	SPRING	NONE	P
25-May-21	2	1109	FP	2	SWL	2	17	ON	3RS ET	22.1634	113.9279	SPRING	NONE	P
25-May-21	3	1252	CWD	1	SWL	2	256	ON	3RS ET	22.2042	113.8973	SPRING	NONE	P
25-May-21	4	1438	CWD	6	SWL	3	1	ON	3RS ET	22.1713	113.8681	SPRING	NONE	P
25-May-21	5	1521	CWD	1	SWL	2	129	ON	3RS ET	22.2000	113.8684	SPRING	NONE	P
25-May-21	6	1540	CWD	3	SWL	2	71	ON	3RS ET	22.1914	113.8587	SPRING	NONE	P
25-May-21	7	1610	CWD	3	SWL	2	1	ON	3RS ET	22.1813	113.8594	SPRING	NONE	P
25-May-21	8	1634	CWD	1	SWL	3	461	ON	3RS ET	22.1832	113.8495	SPRING	NONE	P
26-May-21	1	1357	CWD	2	SWL	3	199	ON	3RS ET	22.1911	113.8790	SPRING	NONE	P
26-May-21	2	1437	CWD	3	SWL	3	137	ON	3RS ET	22.1684	113.8685	SPRING	NONE	P
26-May-21	3	1504	CWD	6	SWL	2	631	ON	3RS ET	22.1958	113.8699	SPRING	NONE	P
28-May-21	1	1030	CWD	1	WL	3	651	ON	3RS ET	22.2693	113.8574	SPRING	NONE	P
28-May-21	2	1144	CWD	2	WL	4	240	ON	3RS ET	22.2142	113.8292	SPRING	NONE	P

Abbreviations: STG# = Sighting Number; GP SZ = 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; P/S = Primary Transect / Secondary Transect

Notes:

CWD monitoring survey data of the two preceding survey months are presented for reference only. No relevant figure or text will be mentioned in this 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 encounter rates STG and ANI in the whole survey area (NEL, NWL, AW, WL, SWL):

A total of 377.515 km of survey effort was collected under Beaufort Sea State 3 or below with favourable visibility; total no. of 11 on-effort sightings and total number of 29 dolphins from on-effort sightings were collected under such condition. Calculation of the encounter rates in May 2021 are shown as below:

Encounter Rate by Number of Dolphin Sightings (STG) in May 2021

$$STG = \frac{7}{377.515}\ x\ 100 = 2.91$$

Encounter Rate by Number of Dolphins (ANI) in May 2021

$$ANI = \frac{29}{377.515}\ x\ 100 = 7.68$$

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

A total of 1130.012 km of survey effort was collected under Beaufort Sea State 3 or below with favourable visibility; total no. of 26 on-effort sightings and total number of 70 dolphins from on-effort sightings were collected under such condition. Calculation of the running quarterly encounter rates are shown as below:

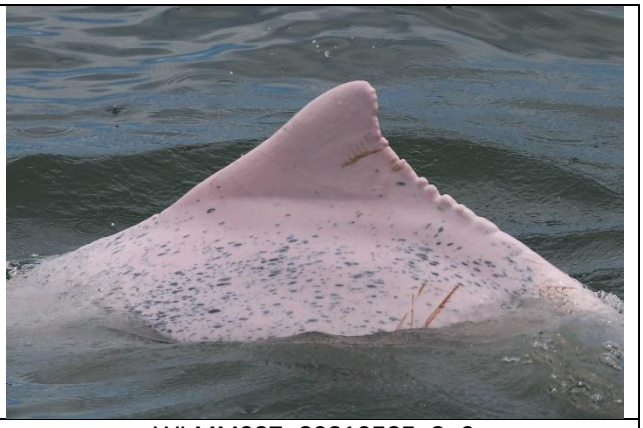
Running Quarterly Encounter Rate by Number of Dolphin Sightings (STG)

$$STG = \frac{26}{1130.012}\ x\ 100 = 2.30$$

Running Quarterly Encounter Rate by Number of Dolphins (ANI)

$$ANI = \frac{70}{1130.012}\ x\ 100 = 6.19$$

CWD Small Vessel Line-transect Survey **Photo Identification**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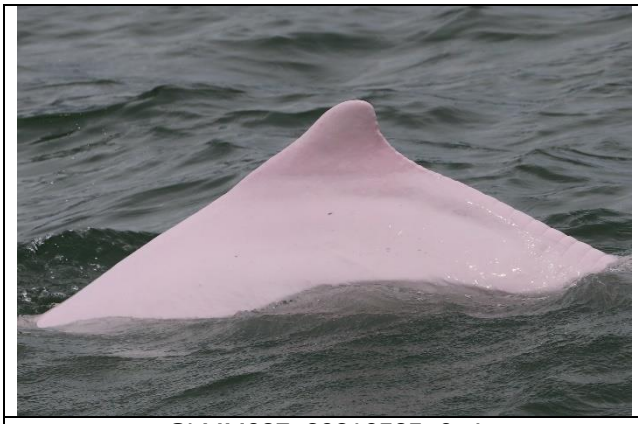	
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	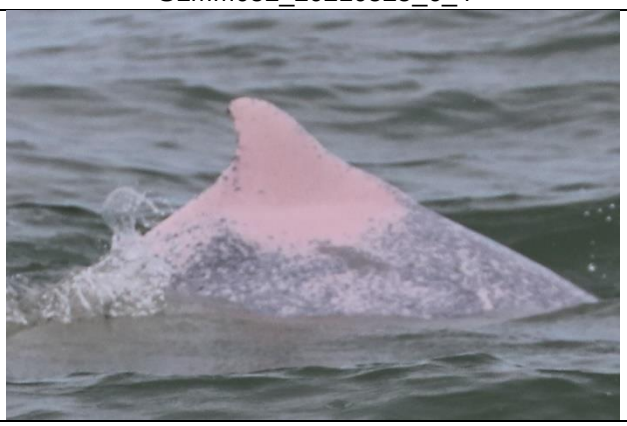
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SLMM010_20210528_2_5	

CWD Land-based Theodolite Tracking Survey

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
13/May/21	Sha Chau	10:44	16:44	6:00	2	1	0	-
25/May/21	Lung Kwu Chau	9:20	15:20	6:00	2	1-4	0	-

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

Appendix D. Calibration Certificates

ALS Technichem (HK) Pty Ltd

ALS Laboratory Group
ANALYTICAL CHEMISTRY & TESTING SERVICES

SUB-CONTRACTING REPORT

CONTACT	: VANIA CHU	WORK ORDER	:	**HK2117719**
CLIENT	: **MOTT MACDONALD HONG KONG LIMITED**			
ADDRESS	: 3/F INTERNATIONAL TRADE TOWER, 348 KWUN TONG ROAD, KWUN TONG, KOWLOON, HONG KONG	SUB-BATCH	:	1
		DATE RECEIVED	:	3-MAY-2021
		DATE OF ISSUE	:	18-MAY-2021
PROJECT	: CALIBIRATION/PERFORMANCE CHECK OF DUST METER(S/N: 597337)	NO. OF SAMPLES	:	1
		CLIENT ORDER		----

General Comments

- **Sample(s) was/ were submitted by client. Sample(s) arrived laboratory in ambient condition. The result(s) related only to the item(s) tested.**
- **Sample information (Project name, Sample ID, Sampling date/time, etc.) is provided by client.**
- **Calibration was subcontracted to and analysed by Action United Enviro Services.**

Signatories

This document has been signed by those names that appear on this report and are the authorised signatories

Signatories	*Position*
Richard Fung	Managing Director

This is the Final Report and supersedes any preliminary report with this batch number.

All pages of this report have been checked and approved for release.

ALS Technichem (HK) Pty Ltd
Part of the ALS Laboratory Group
11/F. Chung Shun Knitting Centre 1 - 3 Wing Yip Street Kwai Chung N.T. Hong Kong
Tel. +852 2610 1044 Fax. +852 2610 2021 **www.alsglobal.com**

WORK ORDER : HK2117719
SUB-BATCH : 1
CLIENT : MOTT MACDONALD HONG KONG LIMITED
PROJECT : CALIBIRATION/PERFORMANCE CHECK OF DUST METER(S/N: 597337)

ALS Lab ID	Client's Sample ID	Sample Type	Sample Date	External Lab Report No.
HK2117719-001	S/N: 597337	Equipments	03-May-2021	S/N: 597337

Equipment Verification Report (TSP)

Equipment Calibrated:

Type:	Laser Dust monitor
Manufacturer:	Sibata LD-3B
Serial No.	597337
Equipment Ref:	Nil
Job Order	HK2117719

Standard Equipment:

Standard Equipment:	Higher Volume Sampler
Location & Location ID:	AUES office (calibration room)
Equipment Ref:	HVS 018
Last Calibration Date:	26 April 2021

Equipment Verification Results:

Testing Date: 10&11 May 2021

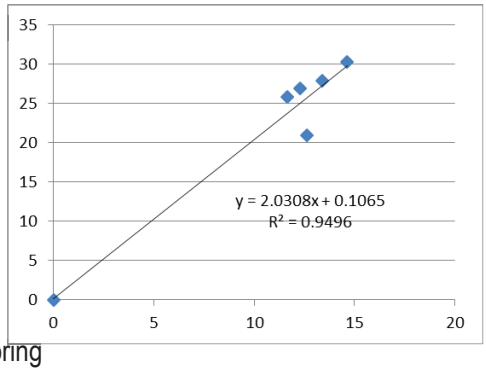
Hour	Time	Mean Temp °C	Mean Pressure (hPa)	Concentration in µg/m^3 (Standard Equipment)	Total Count (Calibrated Equipment)	Count/Minute (Total Count/min)
2hr01min	09:17 ~ 11:18	28.4	1008.8	26	1410	11.6
2hr	11:20 ~ 13:20	28.4	1008.8	21	1513	12.6
2hr01min	13:22 ~ 15:23	28.4	1008.8	27	1481	12.3
2hr01min	09:24 ~ 11:25	29.2	1008.4	28	1615	13.4
2hr01min	11:26 ~ 13:27	29.2	1008.4	30	1772	14.6

Linear Regression of Y or X

Slope (K-factor): 2.0308 (µg/m3)/CPM

Correlation Coefficient 0.9745

Date of Issue 17 May 2021



Remarks:

1. **Strong** Correlation (R>0.8)
2. Factor 2.0308 (µg/m3)/CPM should be applied for TSP monitoring

*If R<0.5, repair or re-verification is required for the equipment

Operator : Fai So Signature : Date : 17 May 2021

QC Reviewer : Ben Tam Signature : Date : 17 May 2021

TSP SAMPLER CALIBRATION CALCULATION SPREADSHEET

Location :	Gold King Industrial Building, Kwai Chung	Date of Calibration:	26-Apr-21
Location ID :	Calibration Room	Next Calibration Date:	26-Jul-21

CONDITIONS

Sea Level Pressure (hPa)	1013.7	Corrected Pressure (mm Hg)	760.275
Temperature (°C)	23.4	Temperature (K)	296

CALIBRATION ORIFICE

Make->	TISCH	Qstd Slope ->	2.10574
Model->	5025A	Qstd Intercept ->	-0.00985
Calibration Date->	19-Jan-21	Expiry Date->	18-Jan-22

CALIBRATION

Plate No.	H20 (L) (in)	H2O (R) (in)	H20 (in)	Qstd (m3/min)	I (chart)	IC corrected	LINEAR REGRESSION
18	6.9	6.9	13.8	1.774	56	56.16	Slope = 39.9922
13	5.5	5.5	11.0	1.584	50	50.14	Intercept = -13.7742
10	4.2	4.2	8.4	1.385	42	42.12	Corr. coeff. = 0.9961
8	2.7	2.7	5.4	1.111	32	32.09	
5	1.9	1.9	3.8	0.933	22	22.06	

Calculations :

Qstd = 1/m[Sqrt(H20(Pa/Pstd)(Tstd/Ta))-b]

IC = I[Sqrt(Pa/Pstd)(Tstd/Ta)]

Qstd = standard flow rate

IC = corrected chart respones

I = actual chart response

m = calibrator Qstd slope

b = calibrator Qstd intercept

Ta = actual temperature during calibration (deg K)

Pstd = actual pressure during calibration (mm Hg)

For subsequent calculation of sampler flow:

1/m((I)[Sqrt(298/Tav)(Pav/760)]-b)

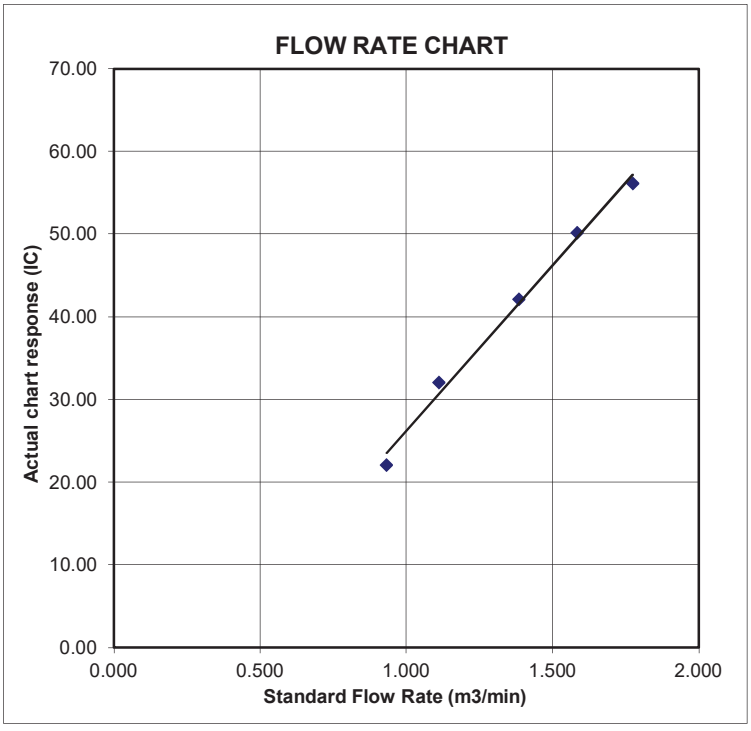
m = sampler slope

b = sampler intercept

I = chart response

Tav = daily average temperature

Pav = daily average pressure



TISCH Environmental

RECALIBRATION DUE DATE:
January 19, 2022

Certificate of Calibration

Calibration Certification Information				
Cal. Date:	January 19, 2021	**Rootsmeter S/N:** 438320	**Ta:** 294	°K
Operator:	Jim Tisch		**Pa:** 755.1	mm Hg
Calibration Model #:	TE-5025A	**Calibrator S/N:** **1941**		

Run	Vol. Init (m3)	Vol. Final (m3)	ΔVol. (m3)	ΔTime (min)	ΔP (mm Hg)	ΔH (in H2O)
1	1	2	1	1.4830	3.2	2.00
2	3	4	1	1.0420	6.4	4.00
3	5	6	1	0.9290	8.0	5.00
4	7	8	1	0.8840	8.8	5.50
5	9	10	1	0.7340	12.9	8.00

Data Tabulation

Vstd (m3)	Qstd (x-axis)	$\sqrt{\Delta H\left(\frac{Pa}{Pstd}\right)\left(\frac{Tstd}{Ta}\right)}$ (y-axis)	Va	Qa (x-axis)	$\sqrt{\Delta H\left(Ta/Pa\right)}$ (y-axis)
1.0029	0.6762	1.4192	0.9958	0.6715	0.8824
0.9986	0.9583	2.0071	0.9915	0.9516	1.2479
0.9965	1.0726	2.2440	0.9894	1.0650	1.3952
0.9954	1.1260	2.3535	0.9883	1.1180	1.4633
0.9899	1.3487	2.8385	0.9829	1.3391	1.7648
QSTD	**m=**	**2.10574**	**QA**	**m=**	**1.31858**
	b=	**-0.00985**		**b=**	**-0.00612**
	r=	**0.99992**		**r=**	**0.99992**

Calculations

Vstd=	ΔVol((Pa-ΔP)/Pstd)(Tstd/Ta)	**Va=**	ΔVol((Pa-ΔP)/Pa)
Qstd=	Vstd/ΔTime	**Qa=**	Va/ΔTime

For subsequent flow rate calculations:

Qstd= $1/m\left(\left(\sqrt{\Delta H\left(\frac{Pa}{Pstd}\right)\left(\frac{Tstd}{Ta}\right)}\right)-b\right)$

Qa= $1/m\left(\left(\sqrt{\Delta H\left(Ta/Pa\right)}\right)-b\right)$

Standard Conditions	
Tstd:	298.15 °K
Pstd:	760 mm Hg

Key
ΔH: calibrator manometer reading (in H2O)
ΔP: rootsmeter manometer reading (mm Hg)
Ta: actual absolute temperature (°K)
Pa: actual barometric pressure (mm Hg)
b: intercept
m: slope

RECALIBRATION

US EPA recommends annual recalibration per 1998 40 Code of Federal Regulations Part 50 to 51, Appendix B to Part 50, Reference Method for the Determination of Suspended Particulate Matter in the Atmosphere, 9.2.17, page 30

Tisch Environmental, Inc.
145 South Miami Avenue
Village of Cleves, OH 45002

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FAX: (513)467-9009

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CALIBRATION REPORT

Test Report No. : BA050103
Date of Issue : 24 May 2021

PART A – CUSTOMER INFORMATION

Enovative Environmental Service Ltd.
Flat 2207, Yu Fun House,
Yu Chui Court, Shatin,
New Territories, Hong Kong
Attn: Mr. Thomas Wong

PART B – SAMPLE INFORMATION

Description of Samples	:	Titrette® bottle-top burette, 50mL
Brand Name	:	BRAND
Model Number	:	1224B90
Serial Number	:	10N64701
Date of Received	:	May 24, 2021
Date of Calibration	:	May 24, 2021
Date of Next Calibration[a]	:	Aug 23, 2021

PART C – CALIBRATION REQUESTED

Parameter[b]	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 from relevant international standards.*

[b] *All chemical and microbiological tests were performed at unit 10-5/F and unit 10-14/F respectively of the company address stated above.*

LEE Chun-ning Desmond
Senior Chemist

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CALIBRATION REPORT

Test Report No. : BA050103
Date of Issue : 24 May 2021

PART D – RESULT[(c),(d)]

Water temperature: 24.7°C
Environmental conditions of the calibration:
Relative humidity: 54%
Z-Factor: 1.0030
Nominal volume: 3.0ml

Trial	Range: (1-4)	Range: (16-19)	Range: (23-26)	Range: (34-37)	Range: (42-45)
1	2.9954	2.9972	2.9875	3.0062	2.9965
2	2.9976	2.9952	2.9867	3.0042	2.9957
3	2.9951	2.9952	2.9876	3.0042	2.9966
4	2.9948	2.9926	2.9753	3.0016	2.9842
5	2.9908	2.9944	2.9786	3.0034	2.9875
6	2.9842	2.9867	2.9825	2.9957	2.9914
7	2.9875	2.9895	2.9825	2.9985	2.9914
8	2.9877	2.9865	2.9850	2.9955	2.9940
9	2.9854	2.9877	2.9877	2.9967	2.9967
10	2.9851	2.9866	2.9867	2.9956	2.9957
Average (g)	2.9904	2.9912	2.9840	3.0001	2.9930
Standard deviation	0.0050	0.0042	0.0043	0.0000	0.0000
Converted volume (mL)	2.9993	3.0001	2.9930	2.9878	2.9954
Error (%)	-0.0223	0.0044	-0.2346	-0.4054	-0.1530
RSD (%)	0.1669	0.1400	0.1426	0.1336	0.0657

Acceptance Criteria [(e)]

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

~ END OF REPORT~

Remark(s): -
(c) *The results relate only to the tested sample as received*
(d) *The performance of the equipment stated in this report is checked with independent reference material and results compared against a calibrated secondary source.*
(e) *The "acceptance criteria" is applicable for similar equipment used by QPT or quoted from relevant international standards.*

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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : BA050076
Date of Issue : 21 May 2021

PART A – CUSTOMER INFORMATION

Enovative Environmental Service Ltd.
Flat 2207, Yu Fun House,
Yu Chui Court, Shatin
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	:	16H104233
Date of Received	:	May 20, 2021
Date of Calibration	:	May 20, 2021
Date of Next Calibration[a]	:	Aug 19, 2021

PART C – REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

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

PART D – CALIBRATION RESULTS[b,c]

(1) pH at 25°C

Target (pH unit)	Displayed Reading[d] (pH Unit)	Tolerance[e](pH Unit)	Results
4.00	4.03	0.03	Satisfactory
7.42	7.44	0.02	Satisfactory
10.01	9.98	-0.03	Satisfactory

Tolerance of pH should be less than ±0.20 (pH unit)

(2) Temperature

Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)	Results
10	10.05	0.05	Satisfactory
25	24.96	-0.04	Satisfactory
50	49.92	-0.08	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 Quality Pro Test-Consult Ltd. or quoted form relevant international standards..*

LEE Chun-ning, Desmond
Senior Chemist

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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : BA050076
Date of Issue : 21 May 2021

PART D – CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
0.01	0.30	0.29	Satisfactory
1.30	1.20	-0.10	Satisfactory
4.34	4.44	0.10	Satisfactory
7.53	7.60	0.07	Satisfactory

Tolerance limit of dissolved oxygen should be less than ±0.50 (mg/L)

(4) Conductivity at 25°C

Conc. of KCl (M)	Expected Reading (µS/cm)	Displayed Reading (µS/cm)	Tolerance (%)	Results
0.001	146.9	152.8	4.02	Satisfactory
0.01	1412	1452	2.83	Satisfactory
0.1	12890	12834	-0.43	Satisfactory
0.5	58670	58016	-1.11	Satisfactory
1.0	111900	110890	-0.90	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	-1.10	Satisfactory
20	20.51	2.55	Satisfactory
30	29.87	-0.43	Satisfactory

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

(6) Turbidity

Expected Reading (NTU)	Displayed Reading[f] (NTU)	Tolerance[g] (%)	Results
0	0.11	--	Satisfactory
10	10.08	0.80	Satisfactory
20	19.33	-3.35	Satisfactory
100	97.88	-2.12	Satisfactory
800	813.47	1.68	Satisfactory

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

~ END OF REPORT ~

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

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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : BA050075
Date of Issue : 21 May 2021

PART A – CUSTOMER INFORMATION

Enovative Environmental Service Ltd.
Flat 2207, Yu Fun House,
Yu Chui Court, Shatin
New Territories, Hong Kong
Attn: Mr. Thomas WONG

PART B – DESCRIPTION

Name of Equipment	:	YSI 6920V2 (Multi-Parameters)
Manufacturer	:	YSI (a xylem brand)
Serial Number	:	0001CF6C
Date of Received	:	May 20, 2021
Date of Calibration	:	May 20, 2021
Date of Next Calibration[a]	:	Aug 19, 2021

PART C – REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

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

PART D – CALIBRATION RESULTS[b,c]

(1) pH at 25°C

Target (pH unit)	Displayed Reading[d] (pH Unit)	Tolerance[e](pH Unit)	Results
4.00	4.05	0.05	Satisfactory
7.42	7.45	0.03	Satisfactory
10.01	10.03	0.02	Satisfactory

Tolerance of pH should be less than ±0.20 (pH unit)

(2) Temperature

Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)	Results
10	10.1	0.1	Satisfactory
25	24.9	-0.1	Satisfactory
50	49.8	-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 Quality Pro Test-Consult Ltd. or quoted form relevant international standards..*

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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : BA050075
Date of Issue : 21 May 2021

PART D – CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
0.01	0.31	0.30	Satisfactory
1.30	1.21	-0.09	Satisfactory
4.34	4.38	0.04	Satisfactory
7.53	7.62	0.09	Satisfactory

Tolerance limit of dissolved oxygen should be less than ±0.50 (mg/L)

(4) Conductivity at 25°C

Conc. of KCl (M)	Expected Reading (µS/cm)	Displayed Reading (µS/cm)	Tolerance (%)	Results
0.001	146.9	153.0	4.15	Satisfactory
0.01	1412	1387	-1.77	Satisfactory
0.1	12890	12809	-0.63	Satisfactory
0.5	58670	57942	-1.24	Satisfactory
1.0	111900	110923	-0.87	Satisfactory

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

(5) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	9.8	-2.0	Satisfactory
20	20.4	2.0	Satisfactory
30	29.8	-0.7	Satisfactory

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

(6) Turbidity

Expected Reading (NTU)	Displayed Reading[f] (NTU)	Tolerance[g] (%)	Results
0	0.1	--	Satisfactory
10	9.8	-2.0	Satisfactory
20	19.2	-4.0	Satisfactory
100	99.4	-0.6	Satisfactory
800	816.2	2.0	Satisfactory

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

~ END OF REPORT ~

Remark(s): -

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

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

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
3206	Notification of Construction Work under APCO	Works area of 3206	409237	Receipt acknowledged by EPD on 25 Oct 2016
		Works area of 3206 (Area 11)	447899	Receipt acknowledged by EPD on 8 Aug 2019
	Registration as Chemical Waste Producer	Site office of 3206	WPN 5213-951-Z4035-01	Completion of Registration on 18 Nov 2016
		Works area of 3206	WPN 5213-951-Z4035-02	Completion of Registration on 18 Nov 2016
		Works Area of 3206 (Area 11)	WPN 5213-951-Z4035-04	Completion of Registration on 4 Sep 2019
	Construction Noise Permit (General Works)	Works Area of 3206	GW-RS0187-21	Valid from 24 Mar 2021 to 15 Sep 2021
		Works Area of 3206 (Area 11)	GW-RS0107-21	Valid from 2 Mar 2021 to 30 Jun 2021
	Bill Account for disposal	Works area of 3206	A/C 7026398	Approval granted from EPD on 16 Nov 2016
3301	Notification of Construction Work under APCO	Works area of 3301	415821	Receipt acknowledged by EPD on 19 Apr 2017
	Registration as Chemical Waste Producer	Works area of 3301	WPN 5213-951-F2718-02	Completion of Registration on 9 Jun 2017
	Discharge License under WPCO	Works area of 3301	WT00029286-2017	Valid from 20 Sep 2017 to 30 Sep 2022
	Bill Account for disposal	Works area of 3301	A/C 7027728	Approval granted from EPD on 8 May 2017
	Construction Noise Permit (General Works)	Works area of 3301	GW-RS0118-21	Valid from 24 Feb 2021 to 21 Aug 2021
		Works area of 3301 (Cable ducting works) (Special Case)	GW-RS0188-21	Valid from 29 Mar 2021 to 28 Sep 2021
3302	Notification of Construction Work under APCO	Works area of 3302	440222	Receipt acknowledged by EPD on 10 Dec 2018
		Staging area of 3302	2018CES1	Receipt acknowledged by EPD on 21 Dec 2018
			454882	Receipt acknowledged by EPD on 2 Apr 2020
	Registration as Chemical Waste Producer	Works area of 3302	5296-951-C4331-01	Completion of Registration on 4 Jan 2019

Contract No.	Description	Location	Permit/ Reference No.	Status
	Discharge License under WPCO	Works area of 3302	WT00034539-2019	Valid from 11 Mar 2020 to 31 Mar 2025
		Works area of 3302	WT00034541-2019	Valid from 14 Oct 2019 to 31 Oct 2024
	Bill Account for disposal	Works area of 3302	A/C 7032881	Approval granted from EPD on 8 Jan 2019
	Construction Noise Permit (General Works)	Works area of 3302	GW-RS0988-20	Valid from 7 Jan 2021 to 6 July 2021
			GW-RS0987-20	Valid from 7 Jan 2020 to 6 July 2021
3303	Notification of Construction Work under APCO	Works area of 3303	445611	Receipt acknowledged by EPD on 27 May 2019
	Registration as Chemical Waste Producer	Works area of 3303	5213-951-S4174-01	Completion of Registration on 17 Jun 2019
	Discharge License under WPCO	Works area of 3303	WT00035689-2020	Valid from 11 May 2020 to 31 May 2025
		Works area of 3303	WT00036734-2020	Valid from 1 Dec 2020 to 31 Dec 2025
	Bill Account for disposal	Works area of 3303	A/C 7034272	Approval granted from EPD on 10 Jun 2019
	Construction Noise Permit (General Works)	Works area of 3303 (Existing airport)	GW-RS0825-20	Valid from 16 Nov 2020 to 15 May 2021
			GW-RS0286-21	Valid from 16 May 2021 to 15 Nov 2021
		Works area of 3303 (Reclamation area)	GW-RS0285-21	Valid from 30 Apr 2021 to 28 Oct 2021
3305	Notification of Construction Work under APCO	Works area of 3305	460857	Receipt acknowledged by EPD on 12 Oct 2020
	Registration as Chemical Waste Producer	Works area of 3305	5213-951-A3024-01	Completion of Registration on 13 Nov 2020
	Bill Account for disposal	Works area of 3305	A/C 7035360	Approval granted from EPD on 9 Oct 2019
3307	Notification of Construction Work under APCO	Works area of 3307	454964	Receipt acknowledged by EPD on 6 Apr 2020
	Registration as Chemical Waste Producer	Works area of 3307	5211-951-P3379-01	Completion of Registration on 8 Jun 2020
	Discharge License under WPCO	Works area of 3307	WT00036926-2020	Valid from 31 Dec 2020 to 31 Dec 2025
	Bill Account for disposal	Works area of 3307	A/C 7037129	Approval granted from EPD on 5 May 2020
	Construction Noise Permit (General Works)	Works area of 3307	GW-RS0033-21	Valid from 7 Feb 2021 to 6 Aug 2021
3402	Notification of Construction Work under APCO	Works area of 3402	464622	Receipt acknowledged by EPD on 18 Feb 2021
	Bill Account for disposal	Works area of 3402	A/C 7032577	Approval granted from EPD on 27 Nov 2018
	Construction Noise Permit (General Works)	Works area of 3402	GW-RS0129-21	Valid from 20 Mar 2021 to 9 Sep 2021
3403	Notification of Construction Work under APCO	Works area of 3403	450860	Receipt acknowledged by EPD on 11 Nov 2019

Contract No.	Description	Location	Permit/ Reference No.	Status
	Registration as Chemical Waste Producer	Works area of 3403	WPN 5213-951-S4218-01	Completion of Registration on 9 Jan 2020
	Discharge License under WPCO	Works area of 3403	WT00035841-2020	Valid from 5 Jun 2020 to 30 Jun 2025
	Bill Account for disposal	Works area of 3403	A/C 7035267	Approval granted from EPD on 30 Sep 2019
	Construction Noise Permit (General Works)	Works area of 3403	GW-RS0822-20	Valid from 29 Nov 2020 to 28 May 2021
			GW-RS0329-21	Valid from 29 May 2021 to 28 Nov 2021
	Construction Noise Permit (Special Case)	Works area of 3403	GW-RS0010-21	Valid from 15 Jan 2021 to 31 May 2021
3405	Notification of Construction Work under APCO	Works area of 3405	453447	Receipt acknowledged by EPD on 18 Feb 2020
	Registration as Chemical Waste Producer	Works area of 3405	WPN 5218-951-C4431-01	Completion of Registration on 12 Mar 2020
	Discharge License under WPCO	Works area of 3405	WT00037084-2020	Valid from 17 Mar 2021 to 31 Mar 2026
	Bill Account for disposal	Works area of 3405	A/C 7036796	Approval granted from EPD on 20 Mar 2020
	Construction Noise Permit (General Works)	Works area of 3405	GW-RS0013-21	Superseded by GW-RS0339-21
			GW-RS0339-21	Valid from 15 May 2021 to 12 Nov 2021
3408	Notification of Construction Work under APCO	Works area of 3408	461958	Receipt acknowledged by EPD on 17 Nov 2020
	Registration as Chemical Waste Producer	Works area of 3408	WPN 5218-951-B2621-01	Completion of Registration on 14 Jan 2021
	Bill Account for disposal	Works area of 3408	A/C 7039063	Approval granted from EPD on 2 Dec 2020
	Construction Noise Permit (General Works)	Works area of 3408	GW-RS0224-21	Valid from 11 Apr 2021 to 30 Sep 2021
3503	Notification of Construction Work under APCO	Works area of 3503	459394	Receipt acknowledged by EPD on 28 Aug 2020
		Stockpiling area of 3503	459392	Receipt acknowledged by EPD on 28 Aug 2020
	Registration as Chemical Waste Producer	Works area of 3503	WPN 5113-951-L2845-02	Completion of Registration on 3 Sep 2019
		Stockpiling area of 3503	WPN 5113-951-L2845-04	Completion of Registration on 19 Jun 2020
	Discharge License under WPCO	Works area of 3503	WT00031258-2018	Valid from 6 Aug 2019 to 30 Jun 2023
			WT00036551-2020	Valid from 17 Sep 2020 to 30 Sep 2025
			WT00036697-2020	Valid from 2 Nov 2020 to 30 Nov 2025
	Bill Account for disposal	Works area of 3503	A/C 7029665	Approval granted from EPD on 27 Dec 2017

Contract No.	Description	Location	Permit/ Reference No.	Status
	Construction Noise Permit (General Works)	Works area of 3503	GW-RS0257-21	Valid from 16 Apr 2021 to 12 Oct 2021
		Stockpiling area of 3503	GW-RS0215-21	Valid from 19 Apr 2021 to 18 Oct 2021
		Works area of 3503 (Special Case)	GW-RS0246-21	Valid from 15 Apr 2021 to 31 May 2021
3508	Notification of Construction Work under APCO	Works area of 3508	459469	Receipt acknowledged by EPD on 4 Sep 2020
	Registration as Chemical Waste Producer	Works area of 3508	WPN-5218-951-G2898-01	Completion of Registration on 28 Sep 2020
	Discharge License under WPCO	Works area of 3508	WT00037209-2020	Valid from 11 Mar 2021 to 31 Mar 2026
			WT00037523-2021	Valid from 1 Apr 2021 to 30 Apr 2026
			WT00037225-2020	Valid from 1 Apr 2021 to 30 Apr 2026
			WT00037549-2021	Valid from 1 Apr 2021 to 30 Apr 2026
	Bill Account for disposal	Works area of 3508	7038224	Approval granted from EPD on 8 Sep 2020
	Construction Noise Permit (General Works)	Works area of 3508	GW-RS0213-21	Superseded by GW-RS0304-21
			GW-RS0304-21	Valid from 2 May 2021 to 29 Oct 2021
		Works area of 3508 (Area 3, Area J, Area K)	GW-RS0281-21	Valid rom 1 May 2021 to 28 Oct 2021
		Works area of 3508 (Special Case)	GW-RS0884-20	Superseded by GW-RS0414-21
			GW-RS0414-21	Valid from 30 May 2021 to 25 Nov 2021
		Works area of 3508 (Special Case)	GW-RS0175-21	Valid from 1 Apr 2021 to 31 May 2021
		Works area of 3508 (Special Case)	GW-RS0315-21	Valid from 12 May 2021 to 9 Nov 2021
3601	Notification of Construction Work under APCO	Works area of 3601	451762	Receipt acknowledged by EPD on 10 Dec 2019 May
	Registration as Chemical Waste Producer	Works area of 3601	WPN 7119-951-C4421-01	Completion of Registration on 9 Jan 2020
	Bill Account for disposal	Works area of 3601	A/C 7029991	Approval granted from EPD on 1 Feb 2018
3602	Notification of Construction Work under APCO	Works area of 3602	421278	Receipt acknowledged by EPD on 18 Sep 2017
	Registration as Chemical Waste Producer	Works area of 3602	WPN 5296-951-N2673-01	Completion of Registration on 9 Oct 2017
		Site office of 3602	WPN 5296-951-N2673-02	Completion of Registration on 11 Dec 2017
	Bill Account for disposal	Works area of 3602	A/C 7028942	Approval granted from EPD on 6 Oct 2017

Contract No.	Description	Location	Permit/ Reference No.	Status
	Construction Noise Permit (General Works)	Works area of 3602	GW-RS0186-21	Valid from 31 Mar 2021 to 30 Sep 2021
3603	Registration as Chemical Waste Producer	Site office of 3603	5296-951-S4069-01	Completion of Registration on 22 Jan 2018
		Test Loop Site of 3603	8334-512-S4273-01	Completion of Registration on 17 Sep 2020
	Bill Account for disposal	Works area of 3603	A/C 7030002	Approval granted from EPD on 1 Feb 2018
	Construction Noise Permit (General Works)	Works area of 3603	GW-RS0190-21	Superseded by GW-RS0367-21
			GW-RS0367-21	Valid from 24 May 2021 to 23 Nov 2021
3721	Notification of Construction Work under APCO	Works area of 3721	448657	Receipt acknowledged by EPD on 02 Sep 2019
	Registration as Chemical Waste Producer	Works area of 3721	WPN 5218-951-C4412-01	Completion of Registration on 9 Dec 2019
	Bill Account for disposal	Works area of 3721	A/C 7035234	Approval granted from EPD on 25 Sep 2019
	Construction Noise Permit (General Works)	Works area of 3721	GW-RS0916-20	Superseded by GW-RS0326-21
			GW-RS0326-21	Valid from 15 May 2021 to 12 Nov 2021
3722	Notification of Construction Work under APCO	Works area of 3722A	465843	Receipt acknowledged by EPD on 14 Aug 2020
		Works area of 3722B	465845	Receipt acknowledged by EPD on 14 Aug 2020
		Works area of 3722C	465842	Receipt acknowledged by EPD on 14 Aug 2020
		Works area of 3722D	465846	Receipt acknowledged by EPD on 14 Aug 2020
	Registration as Chemical Waste Producer	Works area of 3722A	WPN 5218-951-T3863-01	Completion of Registration on 18 Mar 2020
		Works area of 3722B	WPN 5218-951-T3864-01	Completion of Registration on 18 Mar 2020
		Works area of 3722C	WPN 5218-951-T3862-01	Completion of Registration on 18 Mar 2020
		Works area of 3722D	WPN 5218-951-T3865-01	Completion of Registration on 18 Mar 2020
	Bill Account for disposal	Works area of 3722A	A/C 7036752	Approval granted from EPD on 11 Mar 2020
		Works area of 3722B	A/C 7036966	Approval granted from EPD on 6 Apr 2020
		Works area of 3722C	A/C 7036967	Approval granted from EPD on 6 Apr 2020
		Works area of 3722D	A/C 7036795	Approval granted from EPD on 20 Mar 2020
	Construction Noise Permit (General Works)	Works area of 3722A, 3722B, 3722C and 3722D	GW-RS0153-21	Valid from 15 Mar 2021 to 14 Sep 2021
3723		3723A	464440	Receipt acknowledged by EPD on 9 Feb 2021

Contract No.	Description	Location	Permit/ Reference No.	Status
	Notification of Construction Work under APCO	3723B	464444	Receipt acknowledged by EPD on 9 Feb 2021
	Registration as Chemical Waste Producer	3723A	WPN 5218-951-T3920-01	Completion of Registration on 9 Feb 2021
		3723B	WPN 5218-951-T3921-01	Completion of Registration on 9 Feb 2021
	Discharge License under WPCO	Works area of 3723A & 3723B	/	Application submitted on 15 March 2021
	Bill Account for disposal	Works area of 3723A	A/C 7039755	Approval granted from EPD on 24 Feb 2021
		Works area of 3723B	A/C 7039754	Approval granted from EPD on 24 Feb 2021
	Construction Noise Permit (General Works)	Works area of 3723A & 3723B	GW-RS0221-21	Superseded by GW-RS0320-21
			GW-RS0320-21	Valid from 13 May 2021 to 11 Nov 2021
3801	Notification of Construction Work under APCO	Works area of 3801	418345	Receipt acknowledged by EPD on 26 Jun 2017
			430372	Receipt acknowledged by EPD on 2 Feb 2018
			435652	Receipt acknowledged by EPD on 16 Jul 2018
			451991	Receipt acknowledged by EPD on 18 Dec 2019
		Stockpiling area of 3801	450940	Receipt acknowledged by EPD on 13 Nov 2019
	Registration as Chemical Waste Producer	Works area of 3801	WPN 5296-951-C1169-53	Completion of Registration on 14 Aug 2018
	Discharge License under WPCO	Works and stockpiling area of 3801	WT00029535-2017	Valid from 24 Nov 2017 to 30 Nov 2022
		Stockpiling area of 3801	WT00037354-2021	Valid from 8 Mar 2021 to 31 Mar 2026
	Bill Account for disposal	Works area of 3801	A/C 7028254	Approval granted from EPD on 3 Jul 2017
	Construction Noise Permit (General Works)	Works area of 3801	GW-RS0245-21	Valid from 28 Apr 2021 to 27 Oct 2021
3802	Notification of Construction Work under APCO	Works area of 3802	458122	Receipt acknowledged by EPD on 14 Jul 2020
	Registration as Chemical Waste Producer	Works area of 3802	WPN 5218-951-G2895-01	Completion of Registration on 28 Aug 2020
	Bill Account for disposal	Works area of 3802	A/C 7037575	Approval granted from EPD on 15 Jun 2020
	Construction Noise Permit (General Works)	Works area of 3802	GW-RS0225-21	Superseded by GW-RS0404-21
			GW-RS0404-21	Valid from 31 May 2021 to 30 Nov 2021
3901A	Notification of Construction Work under APCO	Works area of 3901A	466883	Receipt acknowledged by EPD on 26 Apr 2021
	Specified Process license under APCO	Works area of 3901A	L-3-261(1)	Valid from 14 Sep 2020 to 13 Sep 2024

Contract No.	Description	Location	Permit/ Reference No.	Status
	Registration as Chemical Waste Producer	Works area of 3901A	WPN 5218-951-K3400-01	Completion of Registration on 17 Jul 2020
	Bill Account for disposal	Works area of 3901A	A/C7037889	Approval granted from EPD on 20 Jul 2020
	Construction Noise Permit (General Works)	Works area of 3901A	GW-RS0095-21	Valid from 19 Feb 2021 to 17 Jul 2021
3901B	Notification of Construction Work under APCO	Works area of 3901B	466885	Receipt acknowledged by EPD on 26 Apr 2021
	Specified Process license under APCO	Works area of 3901B	L-3-262(1)	Valid from 17 Nov 2020 to 16 Nov 2024
	Registration as Chemical Waste Producer	Works area of 3901B	WPN 5218-951-G2880-01	Completion of Registration on 17 Jan 2020
	Bill Account for disposal	Works area of 3901B	A/C 7032417	Approval granted from EPD on 13 Nov 2018
	Construction Noise Permit (General Works)	Works area of 3901B	GW-RS0146-21	Valid from 14 Mar 2021 to 10 Sep 2021

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

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

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

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

Statistics for Complaints, Notifications of Summons and Prosecutions

Reporting Period	Cumulative Statistics		
	Complaints	Notifications of Summons	Prosecutions
This reporting period	1	0	0
From 28 December 2015 to end of the reporting period	36	1	1