

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

Construction Phase Monthly EM&A Report No.34 (For October 2018)

November 2018

Airport Authority Hong Kong

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This Monthly EM&A Report No. 34 has been reviewed and certified by the Environmental Team Leader (ETL) in accordance with

Condition 3.5 of Environmental Permit No. EP-489/2014.

Certified by:

Terence Kong

Environmental Team Leader (ETL) Mott MacDonald Hong Kong Limited

Date 14 November 2018



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By Email

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

Attn: Mr. Lawrence Tsui, Principal Manager

14 November 2018

Dear Sir,

Contract No. 3102 **3RS Independent Environmental Checker Consultancy Services**

Submission of Monthly EM&A Report No. 34 (October 2018)

Reference is made to the Environmental Team's submission of the Monthly EM&A Report No. 34 under Condition 3.5 of the Environmental Permit No. EP-489/2014 certified by the ET Leader on 14 November 2018.

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

AAHK Airport Authority Hong Kong AECOM AECOM AICOM 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 CNP Construction Noise Permit CWD Chinese White Dolphin DCM Deep Cement Mixing DEZ Dolphin Exclusion Zone DO Dissolved Oxygen EAR Ecological Acoustic Recorder EIA Environmental Impact Assessment EM&A Environmental Monitoring & Audit EP EP Environmental Permit EP Environmental Protection Department ET Er Environmental Team FCZ Fish Culture Zone HDD Horizontal Directional Drilling HKBCF Hong Kong-Zhuhai-Macao Bridge Hong Kong Boundary Crossing Facilities HKIA Hong Kong International Airport HOKLAS Hong Kong International Airport HOKLAS Hong Kong Laboratory Accreditation Scheme HSF High Speed Ferry HVS High Volume Sampler IEC Lung Kwu Chau MMHK Mott MacDonald Hong Kong Limited MMWP Marine Mammal Watching Plan MSS Marine Surveillance System MTRMP-CAV Marine Travel Routes and Management Plan for Construction and Associated Vessel NEL Northeast Lantau	3RS	Three-Runway System
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and Associated Vessel NEL Northeast Lantau		
	NEL	Northeast Lantau
, <u> </u>	NWL	Northwest Lantau
PAM Passive Acoustic Monitoring		
PVD Prefabricated Vertical Drain		
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 34th Construction Phase Monthly EM&A Report for the Project which summarizes the monitoring results and audit findings of the EM&A programme during the reporting period from 1 to 31 October 2018.

Key Activities in the Reporting Period

The key activities of the Project carried out in the reporting period included reclamation works and land-side works. Reclamation works included deep cement mixing (DCM) works, marine filling, seawall construction, laying of sand blanket, and prefabricated vertical drain (PVD) installation. Land-side works involved mainly 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

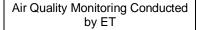
The monthly EM&A programme was undertaken in accordance with the Manual of the Project. Summary of the monitoring activities during this reporting period is presented as below:

Monitoring Activities	Number of Sessions
1-hour Total Suspended Particulates (TSP) air quality monitoring	36
Noise monitoring	20
Water quality monitoring	13
Vessel line-transect surveys for Chinese White Dolphin (CWD) monitoring	2
Land-based theodolite tracking survey effort for CWD monitoring	5
Terrestrial ecology monitoring	1

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 Marine 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







Water Spraying Conducted by Contractors



Environmental Management Meeting for EM&A Review with Works Contracts

Results of Impact Monitoring

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

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

The water quality monitoring results for dissolved oxygen (DO), turbidity, total alkalinity, and chromium 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 suspended solids (SS) and nickel, some of the testing results triggered the relevant Action or Limit Levels, and the corresponding investigations were conducted accordingly. The investigation findings concluded that the cases were 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

Advanced Works:

Contract P560 (R) Aviation Fuel Pipeline Diversion Works

- Trench backfilling;
- Shoreline reinstatement next to the new pipe; and
- Stockpiling of excavated materials from previous HDD operation.

DCM Works:

Contract 3201, 3203, and 3205 DCM Works

DCM works

Reclamation Works:

Contract 3206 Main Reclamation Works

- Laying of sand blanket;
- PVD installation;
- Seawall construction;
- Marine filling; and

DCM works.

Airfield Works:

Contract 3301 North Runway Crossover Taxiway

- Cable ducting works;
- Subgrade works;
- · Operation of aggregate mixing facility; and
- Precast of duct bank and fabrication of steel works.

Terminal 2 Expansion Works:

Contract 3501 Antenna Farm and Sewage Pumping Station

- Excavation works; and
- Pipe installation.

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

- Site clearance;
- Plant mobilization; and
- Brick wall construction.

Contract 3503 Terminal 2 Foundation and Substructure Works

- Site establishment;
- Drainage, utility, and road work;
- Piling and structure works; and
- Demolition of footbridge.

Contract 3505 Terminal 2 Spectrum Lighting Mock-ups

Assembly of lighting mock up.

Automated People Mover (APM) works:

Contract 3602 Existing APM System Modification Works

- Site establishment;
- · Site office construction; and
- Construction of concrete plinth.

Baggage Handling System (BHS) works:

Contract 3603 3RS Baggage Handling System

- Site establishment; and
- BHS modification work at Terminal 1.

Airport Support Infrastructure & Logistic Works:

Contract 3801 APM and BHS Tunnels on Existing Airport Island

- Site establishment;
- Diversion of underground utilities;
- Piling and foundation works; and
- Demolition of footbridge.

Summary Table

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

	Yes	No	Details	Analysis / Recommendation / Remedial Actions
Breach of Limit Level^		V	No breach of Limit Level was recorded.	Nil
Breach of Action Level^		V	No breach of Action Level was recorded.	Nil
Complaint Received		$\sqrt{}$	No construction activities-related complaint was received.	Nil
Notification of any summons and status of prosecutions		V	No notification of summons or prosecution was received.	Nil
Change that affect the EM&A	V		Starting from 25 Oct 2018, water quality monitoring at SR1A was commenced.	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 3.1¹. 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 updated overall phasing programme of all construction works was presented in Appendix A of the Construction Phase Monthly EM&A Report No. 7 and the contract information was presented in Appendix A of the Construction Phase Monthly EM&A Report No. 32.

1.2 Scope of this Report

This is the 34th Construction Phase Monthly EM&A Report for the Project which summarizes the key findings of the EM&A programme during the reporting period from 1 to 31 October 2018.

1.3 Project Organisation

The Project's organization structure presented in Appendix B of the Construction Phase Monthly EM&A Report No.1 remained unchanged during the reporting period. Contact details of the key personnel are presented in **Table 1.1**.

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

Table 1.1: Contact Information of Key Personnel

Party	Position	Name	Telephone
Project Manager's Representative (Airport Authority Hong Kong)	Principal Manager, Environment	Lawrence Tsui	2183 2734
Environmental Team (ET) (Mott MacDonald Hong Kong Limited)	Environmental Team Leader	Terence Kong	2828 5919
	Deputy Environmental Team Leader	Heidi Yu	2828 5704
	Deputy Environmental Team Leader	Daniel Sum	2585 8495
Independent Environmental Checker (IEC) (AECOM Asia Company Limited)	Independent Environmental Checker	Jackel Law	3922 9376
	Deputy Independent Environmental Checker	Roy Man	3922 9348
Advanced Works:			
Party	Position	Name	Telephone
Contract P560(R) Aviation Fuel Pipeline Diversion Works (Langfang Huayuan Mechanical and Electrical Engineering Co., Ltd.)	Project Manager	Wei Shih	2117 0566
	Environmental Officer	Lyn Liu	5172 6543
Deep Cement Mixing (D	CM) Works:		
Party	Position	Name	Telephone
Contract 3201 DCM (Package 1) (Penta-Ocean-China State- Dong-Ah Joint Venture)	Project Director	Tsugunari Suzuki	9178 9689
	Environmental Officer	Hiu Yeung Tang	6329 3513
Contract 3202 DCM (Package 2) (Samsung-BuildKing Joint Venture)	Project Manager	Ilkwon Nam	9643 3117
	Environmental Officer	David Man	6421 3238
Contract 3203 DCM (Package 3) (Sambo E&C Co., Ltd)	Project Manager	Eric Kan	9014 6758
	Environmental Officer	David Hung	9765 6151
Contract 3204 DCM (Package 4) (CRBC-SAMBO Joint Venture)	Project Manager	Kyung-Sik Yoo	9683 8697
	Environmental Officer	Kanny Cho	6799 8226

Contract 3205 DCM (Package 5) (Bachy Soletanche - Sambo Joint Venture) Environmental Officer Margaret Chung 9130 3696 Reclamation Works: Party Position Name Telephone Contract 3206 Main Reclamation Works (ZHEC-CCC-CDC Joint Venture) Environmental Officer Kwai Fung Wong 3763 1452 Airfield Works: Party Position Name Telephone Contract 3301 North Environmental Officer Kim Hang Chung 9412 1386 Rumway Crossover Taxiway (F.JT-CHEC-ZHEC Joint Venture) Environmental Officer Nelson Tam 9721 3942 Terminal 2 (T2) Expansion Works: Party Position Name Telephone Environmental Officer Nelson Tam 9721 3942 Terminal 2 (T2) Expansion Works: Party Position Name Telephone Contract 3501 Antenna Farm and Sewage Pumping Station (Build King Construction Ltd.) Environmental Officer Edward Tam 9287 8270 Contract 3502 Terminal 2 Project Manager Kivin Cheng 9380 3635 Environmental Officer Chun Pong Chan 9187 7118 Contract 3503 Terminal 2 Foundation and Substructure Works (Build King Construction Ltd.) Environmental Officer Stephen O Donoghue 9732 6787 Environmental Officer Stephen Tsang 5508 6361 Contract 3505 Terminal 2 Project Manager Wylar Chan 9107 5920 Environmental Officer Kelvin Lam 9379 2446	Deep Cement Mixing (D	CM) Works:		
Reclamation Works: Party Position Name Telephone Contract 3206 Main Reclamation Works (ZHEC-CCCC-CDC Joint Venture) Environmental Officer Kwai Fung Wong 3763 1509 Airfield Works: Party Position Name Telephone Contract 3301 North Runway Crossover Taxiway (FJT-CHEC-ZHEC Joint Venture) Environmental Officer Nelson Tam 9721 3942 Terminal 2 (T2) Expansion Works: Party Position Name Telephone Contract 3501 Antenna Project Manager Raymond Au 6985 8860 Terminal 2 (T2) Expansion Works: Party Position Name Telephone Contract 3501 Antenna Project Manager Raymond Au 6985 8860 Environmental Officer Edward Tam 9287 8270 Contract 3502 Terminal 2 Project Manager Kivin Cheng 9380 3635 Environmental Officer Chun Pong Chan 9187 7118 Contract 3503 Terminal 2 Construction Ltd.) Environmental Officer Chun Pong Chan 9187 7118 Contract 3503 Terminal 2 Construction Manager Stephen O'Donoghue 9732 6787 Contract 3505 Terminal 2 Project Manager Stephen Tsang 5508 6361 Contract 3505 Terminal 2 Project Manager Wylar Chan 9107 5920	(Package 5) (Bachy Soletanche - Sambo	Deputy Project Director	Min Park	9683 0765
Party Position Name Telephone Contract 3206 Main Reclamation Works (ZHEC-CCC-ODC Joint Venture) Environmental Officer Kwai Fung Wong 3763 1452 Airfield Works: Party Position Name Telephone Contract 3301 North Runway Crossover Taxiway (FJT-CHEC-ZHEC Joint Venture) Environmental Officer Nelson Tam 9721 3942 Terminal 2 (T2) Expansion Works: Party Position Name Telephone Contract 3501 Antenna Farm and Swage Pumping Station (Build King Construction Ltd.) Environmental Officer Edward Tam 9287 8270 Contract 3502 Terminal 2 Project Manager Kivin Cheng 9380 3635 Project Manager Kivin Cheng 9380 3635 Environmental Officer Chun Pong Chan 9187 7118 Contract 3503 Terminal 2 Construction Ltd.) Environmental Officer Stephen O'Donoghue 9732 6787 Contract 3505 Terminal 2 Construction Manager Stephen O'Donoghue 9732 6787 Contract 3505 Terminal 2 Project Manager Stephen Tsang 5508 6361 Contract 3505 Terminal 2 Project Manager Wylar Chan 9107 5920		Environmental Officer	Margaret Chung	9130 3696
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Party Position Name Telephone Contract 3301 North Runway Crossover Taxiway (FJT-CHEC-ZHEC Joint Venture) Environmental Officer Nelson Tam 9721 3942 Terminal 2 (T2) Expansion Works: Party Position Name Telephone Contract 3501 Antenna Farm and Sewage Pumping Station (Build King Construction Ltd.) Environmental Officer Edward Tam 9287 8270 Contract 3502 Terminal 2 APM Depot Modification Works (Build King Construction Ltd.) Environmental Officer Chun Pong Chan 9187 7118 Contract 3503 Terminal 2 Foundation and Substructure Works (Leighton – Chun Wo Joint Venture) Environmental Officer Stephen Tsang 5508 6361 Contract 3505 Terminal 2 Spectrum Lighting Mock-Ups (Union Contractors Ltd.) Environmental Officer Stephen Tsang 9107 5920		Environmental Officer	Kwai Fung Wong	3763 1452
Party Position Name Telephone Contract 3301 North Runway Crossover Taxiway (FJT-CHEC-ZHEC Joint Venture) Environmental Officer Nelson Tam 9721 3942 Terminal 2 (T2) Expansion Works: Party Position Name Telephone Contract 3501 Antenna Farm and Sewage Pumping Station (Build King Construction Ltd.) Environmental Officer Edward Tam 9287 8270 Contract 3502 Terminal 2 APM Depot Modification Works (Build King Construction Ltd.) Environmental Officer Chun Pong Chan 9187 7118 Contract 3503 Terminal 2 Foundation and Substructure Works (Leighton – Chun Wo Joint Venture) Environmental Officer Stephen Tsang 5508 6361 Contract 3505 Terminal 2 Spectrum Lighting Mock-Ups (Union Contractors Ltd.) Environmental Officer Stephen Tsang 9107 5920				
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Party Position Name Telephone Contract 3501 Antenna Farm and Sewage Pumping Station (Build King Construction Ltd.) Environmental Officer Edward Tam 9287 8270 Contract 3502 Terminal 2 APM Depot Modification Works (Build King Construction Ltd.) Environmental Officer Chun Pong Chan 9187 7118 Contract 3503 Terminal 2 Foundation and Substructure Works (Leighton – Chun Wo Joint Venture) Environmental Officer Stephen Tsang 5508 6361 Contract 3505 Terminal 2 Spectrum Lighting Mock-Ups (Union Contractors Ltd.) Project Manager Wylar Chan 9107 5920				
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Contract 3502 Terminal 2 APM Depot Modification Works (Build King Construction Ltd.) Environmental Officer Chun Pong Chan 9187 7118 Contract 3503 Terminal 2 Foundation and Substructure Works (Leighton – Chun Wo Joint Venture) Environmental Officer Stephen O'Donoghue 9732 6787 Environmental Officer Stephen Tsang 5508 6361 Contract 3505 Terminal 2 Spectrum Lighting Mock-Ups (Union Contractors Ltd.)	Farm and Sewage Pumping Station (Build King Construction	Project Manager	Raymond Au	
APM Depot Modification Works (Build King Construction Ltd.) Environmental Officer Chun Pong Chan 9187 7118 Contract 3503 Terminal 2 Foundation and Substructure Works (Leighton – Chun Wo Joint Venture) Environmental Officer Stephen Tsang 5508 6361 Contract 3505 Terminal 2 Spectrum Lighting Mock-Ups (Union Contractors Ltd.)		Environmental Officer	Edward Tam	9287 8270
Contract 3503 Terminal 2 Foundation and Substructure Works (Leighton – Chun Wo Joint Venture) Environmental Officer Stephen O'Donoghue 9732 6787	APM Depot Modification Works (Build King Construction	Project Manager	Kivin Cheng	9380 3635
Foundation and Substructure Works (Leighton – Chun Wo Joint Venture) Environmental Officer Stephen Tsang 5508 6361 Contract 3505 Terminal 2 Spectrum Lighting Mock-Ups (Union Contractors Ltd.) Project Manager Wylar Chan 9107 5920		Environmental Officer	Chun Pong Chan	9187 7118
Contract 3505 Terminal 2 Project Manager Wylar Chan 9107 5920 Spectrum Lighting Mock- Ups (Union Contractors Ltd.)	Foundation and Substructure Works (Leighton – Chun Wo Joint	Construction Manager	Stephen O'Donoghue	9732 6787
Spectrum Lighting Mock- Ups (Union Contractors Ltd.)		Environmental Officer		
Environmental Officer Kelvin Lam 9379 2446	Spectrum Lighting Mock- Ups (Union Contractors	Project Manager	Wylar Chan	9107 5920
		Environmental Officer	Kelvin Lam	9379 2446

Automated People Mover (APM) Works:

Party	Position	Name	Telephone
Contract 3602 Existing APM System Modification Works (Niigata Transys Co., Ltd.)	Project Manager	Kunihiro Tatecho	9755 0351
	Environmental Officer	Arthur Wong	9170 3394

Baggage Handling System (BHS) Works:

Party	Position	Name	Telephone
Contract 3603 3RS Baggage Handling System (VISH	Project Manager	Andy Ng	9102 2739
Consortium)	Environmental Officer	Eric Ha	9215 3432

Airport Support Infrastructure and Logistic Works:

Party	Position	Name	Telephone
Contract 3801 APM and BHS Tunnels on Existing Airport Island (China State Construction Engineering (Hong Kong) Ltd.)	Project Manager	Tony Wong	9642 8672
	Environmental Officer	Fredrick Wong	9842 2703

1.4 Summary of Construction Works

The key activities of the Project carried out in the reporting period included reclamation works and land-side works. Reclamation works included deep cement mixing (DCM) works, marine filling, seawall construction, laying of sand blanket, and prefabricated vertical drain (PVD) installation. Land-side works involved mainly foundation and substructure work for Terminal 2 expansion, modification and tunnel work for Automated People Mover (APM) and Baggage Handling System (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 the works area are presented in Figure 1.1 to Figure 1.2.

1.5 Summary of EM&A Programme Requirements

The status for all environmental aspects are presented in **Table 1.2**. The EM&A requirements remained unchanged during the reporting period and details can be referred to Table 1.2 of the Construction Phase Monthly EM&A Report No. 1.

Table 1.2: Summary of status for all environmental aspects under the Updated EM&A Manual

Parameters	Status
Air Quality	
Baseline Monitoring	The baseline air quality monitoring result has been reported in Baseline Monitoring Report and submitted to EPD under EP Condition 3.4.
Impact Monitoring	On-going
Noise	
Baseline Monitoring	The baseline noise monitoring result has been reported in Baseline Monitoring Report and submitted to EPD under EP Condition 3.4.
Impact Monitoring	On-going
Water Quality	

Parameters	Status
General Baseline Water Quality Monitoring for reclamation, water jetting and field joint works	The baseline water quality monitoring result has been reported in Baseline Water Quality Monitoring Report and submitted to EPD under EP Condition 3.4.
General Impact Water Quality Monitoring for reclamation, water jetting and field joint works	On-going
Initial Intensive Deep Cement Mixing (DCM) Water Quality Monitoring	The Initial Intensive DCM Monitoring Report was submitted and approved by EPD in accordance with the Detailed Plan on DCM.
Regular DCM Water Quality Monitoring	On-going
Waste Management	
Waste Monitoring	On-going
Land Contamination	
Supplementary Contamination Assessment Plan (CAP)	The Supplementary CAP was submitted to EPD pursuant to EP condition 2.20.
Contamination Assessment Report (CAR) for Golf Course	The CAR for Golf Course was submitted to EPD.
Terrestrial Ecology	
Pre-construction Egretry Survey Plan	The Egretry Survey Plan was submitted and approved by EPD under EP Condition 2.14.
Ecological Monitoring	On-going
Marine Ecology	
Pre-Construction Phase Coral Dive Survey	The Coral Translocation Plan was submitted and approved by EPD under EP Condition 2.12.
Coral Translocation	The coral translocation was completed.
Post-Translocation Coral Monitoring	The post-translocation monitoring programme according to the Coral Translocation Plan was completed in April 2018.
Chinese White Dolphins (CWD)	
Vessel Survey, Land-based Theodolite Tracking and Passive Acoustic Monitoring (PAM)	
Baseline Monitoring	Baseline CWD results were reported in the CWD Baseline Monitoring Report and submitted to EPD in accordance with EP Condition 3.4.
Impact Monitoring	On-going On-going
Landscape & Visual	
Baseline Monitoring	The baseline landscape & visual monitoring result has been reported in Baseline Monitoring Report and submitted to EPD under EP Condition 3.4.
Impact Monitoring	On-going
Environmental Auditing	
Regular site inspection	On-going
Marine Mammal Watching Plan (MMWP) implementation measures	On-going
Dolphin Exclusion Zone (DEZ) Plan implementation measures	On-going
SkyPier High Speed Ferries (HSF) implementation measures	On-going
Construction and Associated Vessels Implementation measures	On-going
Complaint Hotline and Email channel	On-going
Environmental Log Book	On-going

Taking into account the construction works in this reporting period, impact monitoring of air quality, noise, water quality, waste management, landscape & visual, terrestrial ecology, 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 summarized as below:

- One dolphin observer training provided by ET: 3 October 2018
- Two skipper trainings provided by ET: 18 and 30 October 2018
- Two meetings with High Speed Ferry operators for experience sharing and recommendations to strengthen the implementation of the Marine Travel Routes and Management Plan for High Speed Ferries of SkyPier: 23 and 31 October 2018
- Seven environmental management meetings for EM&A review with works contracts: 3, 15, 18, 19, 22, 26, and 29 October 2018

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 (μg/m³)	Limit Level (μg/m³)
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-002 (Serial No. 974350)	24 Aug 2018	Monthly EM&A Report No. 33, Appendix D
	SIBATA LD-3B-003 (Serial No. 276018)	24 Aug 2018	

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 1.2 m above the ground.

- b. Prior to the measurement, the equipment was set up for 1 minute span check and 6 second background check.
- c. The one hour dust measurement was started. Site conditions and dust sources at the nearby area were recorded on a record sheet.
- d. When the measurement completed, the "Count" reading per hour was recorded for result calculation.

2.3.2 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 is provided in Appendix D of the Construction Phase Monthly EM&A Report No. 33. The calibration certificates of portable direct reading dust meters listed in **Table 2.3** are still valid.

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 summarized 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/m³)	Action Level (μg/m³)	Limit Level (μg/m³)
AR1A	22 – 67	306	500
AR2	24 – 67	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 from Project activities was observed during impact air quality monitoring. Major sources of dust observed at the monitoring stations during the monitoring sessions were local air pollution and nearby traffic emissions. It is considered that the monitoring work in the reporting period is effective and there was no adverse impact attributable to the Project activities.

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 five 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:

- 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) With the commencement of construction works of Tung Chung East Development near NM3A, the monitoring results obtained at NM3A would be affected by other construction project. According to Section 4.3.3 of the Manual, the noise monitoring at NM3A was temporarily suspended starting from 1 Sep 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	75 dB(A) ⁽¹⁾

Note:

(1) Reduced to 70dB(A) for school and 65dB(A) during school examination periods for NM4.

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	B&K 2238 (Serial No. 2381580)	10 May 2018	Monthly EM&A Report No. 30, Appendix D
	B&K 2238 (Serial No. 2800932)	26 Jul 2018	Monthly EM&A Report No. 32, Appendix E
Acoustic Calibrator	B&K 4231 (Serial No. 3003246)	23 Jun 2018	Monthly EM&A Report No. 31, Appendix E
	B&K 4231 (Serial No. 3018753)	10 May 2018	Monthly EM&A Report No. 29, Appendix D

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 1.2 m above the ground for free-field measurements at monitoring stations NM1A, NM4, NM5 and NM6. A correction of +3 dB(A) was applied to the free field measurements.
- b. Façade measurements were made at the monitoring station NM3A.
- c. Parameters such as frequency weighting, time weighting and measurement time were set.
- d. Prior to and after each noise measurement, the meter was calibrated using the acoustic calibrator. If the difference in the calibration level before and after measurement was more than 1 dB(A), the measurement would be considered invalid and repeat of noise measurement would be required after re-calibration or repair of the equipment.
- e. During the monitoring period, L_{eq} , L_{10} and L_{90} were recorded. In addition, site conditions and noise sources were recorded on a record sheet.
- f. Noise measurement results were corrected with reference to the baseline monitoring levels.
- g. Observations were recorded when high intrusive noise (e.g. dog barking, helicopter noise) was observed during the monitoring.

3.3.2 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 still valid.

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 summarized 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)	Limit Level, dB(A)	
	Leq (30 mins)	Leq (30 mins)	
NM1A ⁽¹⁾	70 – 72	75	
NM4 ⁽¹⁾	64 – 66	70 ⁽²⁾	
NM5 ⁽¹⁾	52 – 59	75	
NM6 ⁽¹⁾	62 – 70	75	

Notes:

- (1) +3 dB(A) Façade correction included;
- (2) Reduced to 65 dB(A) during school examination periods at NM4. No examination was held in this reporting period.

No complaints were received from any sensitive receiver that triggered the Action Level. All monitoring results were also within the corresponding Limit Levels at all monitoring stations in the reporting period.

3.5 Conclusion

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 traffic and aircraft noise near NM1A, school activities at NM4, and aircraft and helicopter 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 22 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 3.1** shows the locations of the monitoring stations. With the operation of Hong Kong-Zhuhai-Macao Bridge Hong Kong Boundary Crossing Facilities, water quality monitoring at SR1A station was commenced on 25 Oct 2018.

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
C2	Control Station	806945	825682	DO, pH, Temperature,
C3 ⁽³⁾	Control Station	817803	822109	Salinity, Turbidity, SS
IM1	Impact Station	807132	817949	DCM Parameters
IM2	Impact Station	806166	818163	Total Alkalinity, Heavy
IM3	Impact Station	805594	818784	Metals ⁽²⁾
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	812586	820069	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
				<u>DCM Parameters</u> 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

Monitoring Station	Description		Coordinates	Parameters
SR4A	Sha Lo Wan	807810	817189	
SR5A	San Tau Beach SSSI	810696	816593	
SR6	Tai Ho Bay, Near Tai Ho Stream SSSI	814663	817899	
SR7	Ma Wan Fish Culture Zone (FCZ)	823742	823636	
SR8 ⁽⁵⁾	Seawater Intake for cooling at Hong Kong International Airport (East)	811418	820246	

Notes:

- (1) With the operation of HKBCF, water quality monitoring at SR1 station was commenced on 25 Oct 2018.
- (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/epsubmissions.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) 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 abovementioned 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

Parameter	s	Action Level (A	L)	Limit Level (LL)			
	Limit Levels for genera SR1A & SR8)	l water quality mor	nitoring and regular	DCM monitorin	g		
General Water Quality Monitoring	DO in mg/L (Surface, Middle & Bottom)	Surface and Middle 4.5 mg/L	9	Surface and Middle 4.1 mg/L 5 mg/L for Fish Culture Zone (SR7) only			
		Bottom 3.4 mg/L		Bottom 2.7 mg/L			
	Suspended Solids (SS) in mg/L	23	or 120% of upstream control	37	or 130% of upstream control		
	Turbidity in NTU	22.6	station at the same tide of the	36.1	station at the same tide of the		
Regular	Total Alkalinity in ppm	95	same day,	99	same day,		
DCM Monitoring	Representative Heavy Metals for regular DCM monitoring (Chromium) in µg/L	0.2	whichever is higher	0.2	whichever is higher		
	Representative Heavy Metals for regular DCM	3.2	_	3.6			

Parameters	Action Level (AL)	Limit Level (LL)	
monitoring (Nickel) in µg/L			
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/epsubmissions.html)
- (5) The Action and Limit Levels for the two representative heavy metals chosen will be the same as that for the intensive DCM monitoring.

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

Control Station	Impact Stations
Flood Tide	
C1	IM1, IM2, IM3, IM4, IM5, IM6, IM7, IM8, SR3
SR2 ⁽¹⁾	IM7, IM8, IM9, IM10, IM11, IM12, SR1A, SR3, SR4A, SR5A, SR6, SR8
Ebb Tide	
C1	SR4A, SR5A, SR6
C2	IM1, IM2, IM3, IM4, IM5, IM6, IM7, IM8, IM9, IM10, IM11, IM12, SR1A, SR2, SR3, SR7, SR8

Note:

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

4.2 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	YSI ProDSS (Serial No. 16H104234)	26 Oct 2018	Appendix D
(measurement of DO, pH,	YSI ProDSS (Serial No. 17H105557)	26 Oct 2018	
temperature, salinity and turbidity)	YSI 6920 V2 (Serial No. 0001C6A7)	20 Aug 2018	Monthly EM&A Report No. 32, Appendix E
	YSI 6920 V2 (Serial No. 00019CB2)	20 Aug 2018	Appendix E
Digital Titrator (measurement of total alkalinity)	Titrette Digital Burette 50ml Class A (Serial No. 10N64701)	18 Sep 2018	Monthly EM&A Report No. 33, Appendix D

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 4 °C 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 were checked, calibrated and certified by a laboratory accredited under HOKLAS before use. Responses of sensors and electrodes were checked with certified standard solutions before each use.

Wet bulb calibration for a DO meter was carried out before commencement of monitoring and after completion of all measurements each day. Calibration was not conducted at each monitoring location as daily calibration is adequate for the type of DO meter employed. A zero check in distilled water was performed with the turbidity probe at least once per monitoring day. The probe was then calibrated with a solution of known NTU. In addition, the turbidity probe was calibrated at least twice per month to establish the relationship between turbidity readings (in NTU) and levels of 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 listed in **Table 4.4** are still valid.

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	2 mg/L
Heavy Metals			
Chromium (Cr)	ICP-MS	USEPA 6020A	0.2 μg/L
Nickel (Ni)	ICP-MS	USEPA 6020A	0.2 μg/L

4.4 Summary of Monitoring Results

The water quality monitoring schedule for the reporting period is updated and provided in **Appendix B**. Ebb tide monitoring session on 23 October 2018 was cancelled due to marine traffic arrangement.

The water quality monitoring results for DO, turbidity, total alkalinity and chromium obtained during the reporting period were within their corresponding Action and Limit Levels.

For SS and nickel, some of the testing results triggered the corresponding Action and Limit Level, and investigations were conducted accordingly.

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

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

	IM1	IM2	IM3	IM4	IM5	IM6	IM7	IM8	IM9	IM10	IM11	IM12	SR1A	SR3	SR4A	SR5A	SR6	SR7	SR8
2/10/2018																			
4/10/2018																			
6/10/2018																			
9/10/2018					D	D													
11/10/2018					D														
13/10/2018																			
16/10/2018																			
18/10/2018																			
20/10/2018																			
23/10/2018																			
25/10/2018																			
27/10/2018																			
30/10/2018																			
No. of result triggereing Action or Limit Level	0	0	0	0	2	1	0	0	0	0	0	1	0	0	0	0	0	0	0

Note: Detailed	d results are presented in Appendix C .
Legend:	
	The monitoring results were within the corresponding Action and Limit Levels
	Monitoring result triggered the Action Level at monitoring station located upstream of the Project based on dominant tidal flow
D	Monitoring result triggered the Action Level at monitoring station located downstream of the Project based on dominant tidal flow
	No water quality monitoring conducted at SR1A before the operation of HKBCF.
	Upstream station with respect to the Project during the respective tide based on dominant tidal flow

Monitoring result triggered the corresponding Action Level on 9, 11 and 13 October 2018. The case on 13 October 2018 were recorded at location upstream of the Project during flood tide and would unlikely be affected by the Project.

Investigation focusing on the cases that occurred at monitoring stations located downstream of the Project was carried out. Details of the Project's marine construction activities on the concerned monitoring day was collected and findings are summarized in **Table 4.8**.

Table 4.8: Summary of Findings from Investigation of SS Monitoring Results (Mid-Flood Tide)

Date	Marine construction works nearby	Approximate distance from marine construction works	Status of water quality measures (if applicable)	Construction vessels in the vicinity	Turbidity / Silt plume observed near the monitoring station	Action or Limit Level triggered due to Project
09/10/2018	Marine filling, seabed regulation works and DCM works	Around 1 km	Localised and enhanced silt curtain deployed	No	No	No
11/10/2018	Marine filling, seabed regulation works and DCM works	Around 1.5 km	Localised and enhanced silt curtain deployed	No	No	No

The investigation confirmed that marine filling, seabed regulation and DCM works were operating normally with localised and enhanced silt curtains deployed. The localised and enhanced silt curtains were maintained properly except for a section of enhanced silt curtain which was found to be disconnected. Repair work was completed on the same day.

SS results recorded at IM5 and IM6 on 9 October 2018 and at IM5 on 11 October 2018 were within the baseline range. Consider that no observable silt plume during marine works and mitigation measures were properly implemented, the incident was considered not due to Project.

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

Table 4.9: Summary of Nickel Compliance Status (Mid-Ebb Tide)

	IM1	IM2	IM3	IM4	IM5	IM6	IM7	IM8	IM9	IM10	IM11	IM12
2/10/2018												
4/10/2018												
6/10/2018												
9/10/2018												
11/10/2018												
13/10/2018												
16/10/2018												
18/10/2018												
20/10/2018												
25/10/2018											D	D
27/10/2018												
30/10/2018												
No. of result triggering Action or Limit Level	0	0	0	0	0	0	0	1	1	1	1	1

Note: Deta	iled results are presented in Appendix C.
Legend:	
	The monitoring results were within the corresponding Action and Limit Levels
	Monitoring result triggered the Action Level at monitoring station located upstream of the Project based on dominant tidal flow
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

Monitoring results triggered the corresponding Action Level on 25 October 2018. The case occurred at IM8, IM9 and IM10 were located upstream of the Project during ebb tide and would unlikely be affected by the Project.

Details of the Project's marine construction activities on the concerned monitoring day was collected and findings are summarized in **Table 4.10**.

Table 4.10: Summary of Findings from Investigation of Nickel Monitoring Results (Mid-Ebb Tide)

Date	Marine construction works nearby		Status of water quality measures (if applicable)	Construction vessels in the vicinity	Silt plume	Level triggered
25/10/2018	Marine filling and DCM works	Around 1.5 km	Localised and enhanced silt curtain deployed.	No	No	No

According to the investigation findings, it was confirmed that DCM and marine filling works were operating normally with localised and enhanced silt curtains deployed. The silt curtains were maintained properly.

Action Level was triggered at IM11 and IM12 on 25 October 2018. Results from both stations were within the baseline range and there was no observation of silt plumes or other issues during construction works. Besides, nickel Action Level triggered at upstream stations IM8, IM9 and IM10 suggested the presence of external sources that may potentially affect the ambient nickel concentration. As there was no SS exceedance at all impact stations and mitigation measures were properly implemented, this case was considered due to external factors and not related 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 a minor number of results triggered their corresponding Action and Limit Levels, and investigations were conducted accordingly.

Based on the investigation findings, all results that triggered the corresponding Action and Limit Level were 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 cases appeared to be due to natural fluctuation or other sources not related to the Project.

Nevertheless, the non-project related triggers have been attended to and have initiated corresponding actions and measures. 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, seawall construction, and sand blanket laying works 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 had taken actions to implement the recommended measures.

Based on updated information provided by contractors, construction waste generated in the reporting period is summarized in **Table 5.2**.

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.

Table 5.2: Construction Waste Statistics

	C&D ⁽¹⁾ Material Transferred to Temporary Stockpiling Area (m³) ⁽²⁾	C&D Material Reused in the Project (m³)	C&D Material Transferred to Public Fill (m³)	Chemical Waste (kg)	Chemical Waste (L)	General Refuse (tonne)
Sep 2018 ⁽³⁾⁽⁴⁾	-	5,688	-	-	-	-
Oct 2018 ⁽⁴⁾	3,828	4,735	5,746	11,485	27,280	436

Notes:

- (1) C&D refers to Construction and Demolition.
- (2) The stockpiled material will be reused in the Project.
- (3) Only updated figures are presented.
- (4) Metals were recycled in the reporting period.

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 as proposed in the Manual 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 during the construction phase. In addition to the land-based theodolite tracking survey required for impact monitoring as stipulated in the Manual, supplemental theodolite tracking surveys have also been conducted during the implementation for the SkyPier HSF diversion and speed control in order to assist in monitoring the effectiveness of these measures, i.e. in total twice per month at the Sha Chau station and three times per month at the Lung Kwu Chau station.

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 summarized 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 STG & ANI will be calculated from the three preceding survey months. For CWD monitoring for October 2018, data from 1 August 2018 to 31 October 2018 was used to calculate the running quarterly encounter rates STG & ANI;
- (2) Limit Level two consecutive running quarters mean both the running quarterly encounter rates of the preceding month September 2018 (calculated by data from July 2018 to September 2018) and the running quarterly encounter rates of this month (calculated by data from August 2018 to October 2018).
- (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 follow the waypoints set for construction phase monitoring as proposed in the Manual and depicted in **Figure 6.1** with the waypoint coordinates of all transect lines given in **Table 6.2**, which are subject to on-site refinement based on the actual survey conditions and constraints.

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

ne 6.2: Coo	rdinates of Tra	nsect Lines in N	IEL, NWL, AW,	WL and SWL S	urvey Areas
Vaypoint	Easting	Northing	Waypoint	Easting	Northing
		NE	L		
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
		NV	VL		
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
		A	N		
1W	804733	818205	2W	805045	816912
1E	806708	818017	2E	805960	816633
		W	'L		
1W	800600	805450	7W	800400	811450
1E	801760	805450	7E	802400	811450
2W	800300	806450	W8	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			
		SV	VL		
1S	802494	803961	6S	807467	801137
1N	802494	806174	6N	807467	808458
2S	803489	803280	7S	808553	800329

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

6.2.2 Land-based Theodolite Tracking 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
Е	Lung Kwu Chau (LKC)	22° 22' 44.83" N 113° 53' 0.2" E	70.40	3

6.3 CWD Monitoring Methodology

6.3.1 Small Vessel Line-transect Survey

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

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

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

- Primary transect lines: the parallel and zigzag transect lines as shown in Figure 6.1; and
- Secondary transect lines: transect lines connecting between the primary transect lines and 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 15-20 m vessel with a flying bridge observation platform about 4 to 5 m above water level and unobstructed forward view, and a team of three to four observers were deployed to undertake the surveys. Two observers were on search effort at all times when following the transect lines with

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

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

When CWDs were seen, the survey team was taken off-effort, the dolphins were approached and photographed for photo-ID information (using a Canon 7D [or similar] camera and long 300 mm+telephoto lens), then followed until they were lost from view. At that point, the boat returned (off effort) to the 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 minimize disturbance) an identifiable individual dolphin for an extended period of time, and collecting detailed data on its location, behaviour, response to vessels, and associates.

6.3.2 Photo Identification

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

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

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

6.3.3 Land-based Theodolite Tracking 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 (>1-3 km, depending on station height); or environmental conditions obstructed visibility (e.g., intense haze, Beaufort sea state >4, or sunset), at which time the research effort was terminated. In addition to the tracking of CWD, all vessels that moved within 2-3 km of the station were tracked, with effort made to obtain at least two positions for each vessel.

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

6.4 Monitoring Results and Observations

6.4.1 Small Vessel Line-transect Survey

Survey Effort

Within this reporting period, two complete sets of small vessel line-transect surveys were conducted on the 4, 5, 8, 11, 12, 23, 24 and 26 October 2018, covering all transects in NEL, NWL, AW, WL and SWL survey areas for twice.

A total of around 448.50 km of survey effort was collected from these surveys, with around 94.5% of the total survey effort being conducted under favourable weather condition (i.e. Beaufort Sea State 3 or below with favourable visibility). Details of the survey effort are given in **Appendix C**.

Sighting Distribution

In October 2018, 14 sightings with 45 dolphins were sighted. Details of cetacean sightings are presented in **Appendix C**.

Distribution of all CWD sightings recorded in October 2018 is illustrated in **Figure 6.3**. In NWL, the majority of CWD sightings were recorded around Lung Kwu Chau while one sighting was recorded at the southwestern part of the survey area near Hong Kong-Zhuhai-Macao Bridge Hong Kong Link Road. In WL, CWD sightings were scattered from Tai O to Fan Lau. It is worth noting that the second CWD sighting in NEL since the commencement of 3RS dolphin monitoring was recorded in this reporting month, after the first CWD sighting in NEL recorded two months ago. Similar to the first sighting, the second sighting consisted of a single individual and was recorded within the Brothers Marine Park near its western boundary. No sightings of CWD were recorded in SWL survey area in this month.

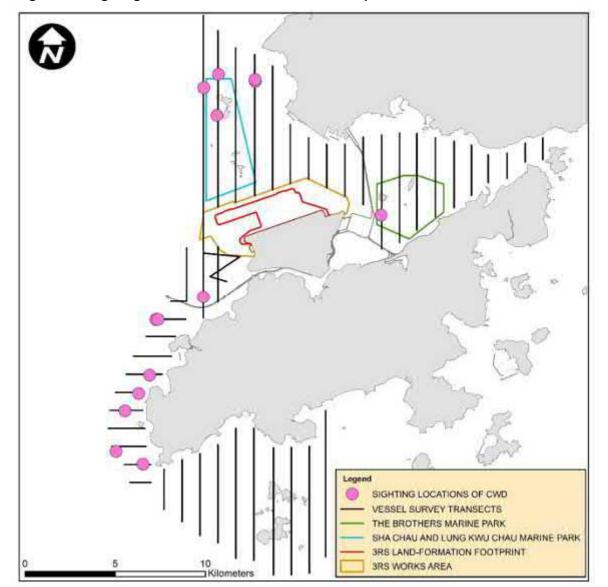


Figure 6.3: Sightings Distribution of Chinese White Dolphins

Remarks: Please note that there are 14 pink circles on the map indicating the sighting locations of CWD. Some of them were very close to each other and therefore appear overlapped on this distribution map.

Encounter Rate

Two types of dolphin encounter rates were calculated based on the data from October 2018. 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 October 2018, a total of around 423.87 km of survey effort were conducted under Beaufort Sea State 3 or below with favourable visibility, whilst a total number of 13 on-effort sightings with 38 dolphins were sighted under such condition. Calculation of the encounter rates in October 2018 are shown in **Appendix C**.

For the running quarter of the reporting period (i.e., from August to October 2018), a total of around 1313.16 km of survey effort were conducted under Beaufort Sea State 3 or below with favourable visibility, whilst a total number of 55 on-effort sightings and a total number of 180 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 October 2018 and during the running quarter are presented in **Table 6.4** below and compared with the Action Level. The running quarterly encounter rates STG and ANI did not trigger Action Level.

Table 6.4: Comparison of CWD Encounter Rates of the Whole Survey Area with Action Levels

	Encounter Rate (STG)	Encounter Rate (ANI)
October 2018	3.07	8.97
Running Quarter from August 2018 to October 2018 ⁽¹⁾	4.19	13.71
Action Level	Running quarterly ⁽¹⁾ < 1.86	Running quarterly ⁽¹⁾ < 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 August to October 2018, 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 October 2018, 14 groups with 45 dolphins were sighted, and the average group size of CWDs was 3.21 dolphins per group. Numbers of sightings with small group size (i.e. 1-2 dolphins) and medium group size (i.e. 3-9 dolphins) were similar. No sighting with large group size (i.e. 10 or more dolphins) was recorded.

Activities and Association with Fishing Boats

Five out of 14 sightings of CWDs were recorded engaging in feeding activities in October 2018. No association with operating fishing boats was observed in this reporting month.

Mother-calf Pair

In October 2018, four sightings were recorded with the presence of mother-and-unspotted calf, mother-and-unspotted juvenile or mother-and-spotted juvenile pairs. Two of these sightings were sighted in WL while others were encountered in NWL.

6.4.2 Photo Identification

In October 2018, a total number of 29 different CWD individuals were identified for totally 36 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		Sighting	Area		Date of Sighting	Sighting	Area
ID	(dd-mmm-yy)	Group No.		ID	(dd-mmm-yy)	Group No.	
NLMM002	8-Oct-18	3	NWL	SLMM027	4-Oct-18	3	WL
NLMM004	8-Oct-18	4	NWL	SLMM044	4-Oct-18	5	WL
NLMM006	8-Oct-18	5	NWL	WLMM001	24-Oct-18	2	WL
NLMM013	8-Oct-18	5	NWL	WLMM019	8-Oct-18	1	NWL
NLMM015	8-Oct-18	1	NWL	WLMM043	4-Oct-18	1	WL
		3	NWL	WLMM056	24-Oct-18	1	WL
NLMM019	4-Oct-18	5	WL	WLMM060	4-Oct-18	5	WL
NLMM020	4-Oct-18	5	WL		24-Oct-18	2	WL
NLMM023	5-Oct-18	1	NWL	WLMM065	4-Oct-18	1	WL
NLMM040	8-Oct-18	3	NWL		24-Oct-18	1	WL
NLMM041	8-Oct-18	3	NWL	WLMM071	4-Oct-18	5	WL
NLMM043	5-Oct-18	1	NWL		24-Oct-18	2	WL
NLMM058	8-Oct-18	1	NWL	WLMM089	5-Oct-18	1	NWL
NLMM059	12-Oct-18	1	NEL	WLMM114	4-Oct-18	3	WL
NLMM063	4-Oct-18	5	WL	WLMM119	24-Oct-18	2	WL
	8-Oct-18	1	NWL	WLMM127	8-Oct-18	1	NWL
		3	NWL			2	NWL
SLMM007	24-Oct-18	2	WL	WLMM130	24-Oct-18	2	WL

6.4.3 Land-based Theodolite Tracking Survey

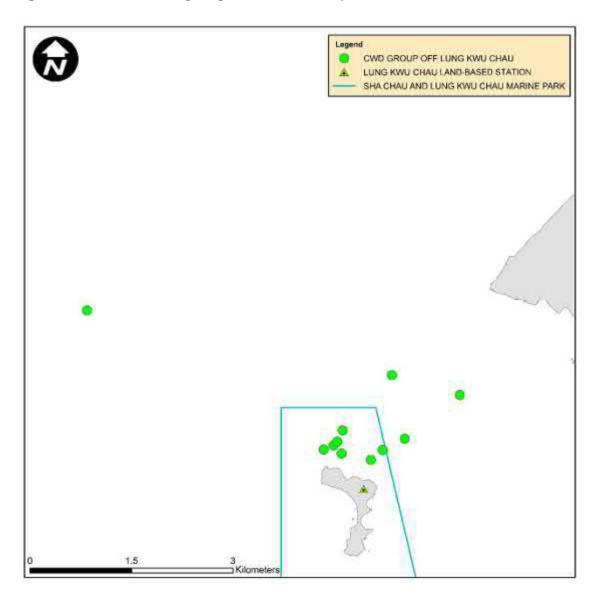
Survey Effort

Land-based theodolite tracking surveys were conducted at LKC on 15, 22 and 29 October 2018 and at SC on 8 and 9 October 2018, with a total of five days of land-based theodolite tracking survey effort accomplished in this reporting period. A total number of 11 CWD groups were tracked at LKC station during the surveys. Information of survey effort and CWD groups sighted during these land-based theodolite tracking surveys are presented in **Table 6.6**. Details of the survey effort and CWD groups tracked are presented in **Appendix C**. The first sighting locations of CWD groups tracked at LKC station during land-based theodolite tracking surveys in October 2018 were depicted in **Figure 6.4**. No CWD group was sighted from SC station in this reporting month.

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

Land-based Station	No. of Survey Sessions	Survey Effort (hh:mm)	No. of CWD Groups Sighted	CWD Group Sighting per Survey Hour
Lung Kwu Chau	3	18:00	11	0.61
Sha Chau	2	12:00	0	0
TOTAL	5	30:00	11	0.37

Figure 6.4: Plots of First Sightings of All CWD Groups obtained from Land-based Stations



6.5 Progress Update on Passive Acoustic Monitoring

Underwater acoustic monitoring using Passive Acoustic Monitoring (PAM) should be undertaken during land formation related construction works. In this reporting period, the Ecological Acoustic Recorder (EAR) was retrieved on 16 October 2018 and subsequently redeployed and positioned at south of Sha Chau Island inside the SCLKCMP with 20% duty cycle (**Figure 6.5**). The EAR deployment is generally for 6 weeks prior to data retrieval for analysis. Acoustic data is reviewed to give an indication of CWDs occurrence patterns and to obtain anthropogenic noise information

simultaneously. Analysis (by a specialized team of acousticians) involved manually browsing through every acoustic recording and logging the occurrence of dolphin signals. All data will be re-played by computer as well as listened to by human ears for accurate assessment of dolphin group presence. As the period of data collection and analysis takes more than 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 contractors for sand blanket laying works, in which dolphin observers were deployed by each contractor in accordance with the MMWP. Teams of at least two dolphin observers were deployed at 12 to 18 dolphin observation stations by the contractors for continuous monitoring of the DEZ by all contractors for ground improvement works (DCM works and PVD installation) and seawall construction 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 654 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 7.2** and **Section 7.3** respectively.

6.7 Timing of Reporting CWD Monitoring Results

Detailed analysis of CWD monitoring results collected by small vessel line-transect survey will be provided in future quarterly reports. Detailed analysis of CWD monitoring results collected by land-based theodolite tracking 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 five days of land-based theodolite tracking survey effort as scheduled. The running quarterly encounter rates STG and ANI in the reporting period did not trigger the Action Level for CWD monitoring.

7 Environmental Site Inspection and Audit

7.1 Environmental Site Inspection

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**. Biweekly 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 both within the site area as well as outside the project sites which was likely to be affected, directly or indirectly, by the site activities. 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 appropriate 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 organized 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 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.

Key audit findings for the SkyPier HSFs travelling to/from Zhuhai and Macau against the requirements of the SkyPier Plan during the reporting period are summarized in **Table 7.1**. The daily movements of all SkyPier HSFs in this reporting period (i.e., 87 to 102 daily movements) were within the maximum daily cap of 125 daily movements. Status of compliance with the annual daily average of 99 movements will be further reviewed in the annual EM&A Report.

In total, 894 ferry movements between HKIA SkyPier and Zhuhai / Macau were recorded in October 2018 and the data are presented in **Appendix G**. The time spent by the SkyPier HSFs travelling through the SCZ in October 2018 were presented in **Figure 7.1**. It will take 9.6 minutes to travel through the SCZ when the SkyPier HSFs adopt the maximum allowable speed of 15 knots within the SCZ. **Figure 7.1** shows that all of the SkyPier HSFs spent more than 9.6 minutes to travel through the SCZ.

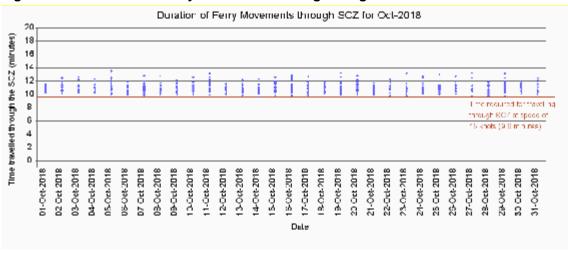


Figure 7.1: Duration of the SkyPier HSFs travelling through the SCZ for October 2018

Note: Data above the red line indicated that the time spent by the SkyPier HSFs travelling through the SCZ is more than 9.6 minutes, which is in compliance with the SkyPier Plan.

One ferry was recorded with minor deviation from the diverted route on 18 October 2018. A notice was sent to the ferry operator and the case is under investigation by ET. The investigation results will be presented in the next monthly EM&A report.

As reported in the Construction Phase Monthly EM&A Report No. 33, one ferry was recorded with minor deviation from the diverted route on 10 September 2018. ET's investigation found that the vessel captain had to give way to other vessels for safety reason.

Two meetings were held with the ferry operators on 23 and 31 October 2018 to review and discuss the deviation cases happened in the past few months as well as to share experience and recommendations to further strengthen the implementation of SkyPier Plan.

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

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Requirements in the SkyPier Plan	1 October to 31 October 2018
Total number of ferry movements recorded and audited	894

Requirements in the SkyPier Plan	1 October to 31 October 2018
Use diverted route and enter / leave SCZ through Gate Access Points	1 deviation
Speed control in speed control zone	The average speeds taken within the SCZ by all HSFs were within 15 knots (10.0 knots to 14.2 knots), which complied with the SkyPier Plan. The time used by HSFs to travel through SCZ is presented in Figure 7.1 .
Daily Cap (including all SkyPier HSFs)	87 to 102 daily movements (within the maximum daily cap - 125 daily movements).

7.3 Audit of Construction and Associated Vessels

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

ET carried out the following actions during the reporting period:

- 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.
- Four skipper training sessions were held by contractor's Environmental Officer. Competency tests were subsequently conducted with the trained skippers by ET.
- In this reporting period, twelve skippers were trained by ET and seven skippers were trained by contractor's Environmental Officer. In total, 1065 skippers were trained from August 2016 to October 2018.
- The Marine Surveillance System (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 MTCC 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.

7.4 Implementation of Dolphin Exclusion Zone

The DEZ Plan was submitted in accordance with EP Condition 3.1 (v) requirement and Section 10.3 of the Manual, and approved in April 2016 by EPD. The 24-hour DEZs with a 250m radius for marine works were established and implemented by the contractors for ground improvement works (DCM works and PVD installation) 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 relevant records by the contractors and conducted competence checking to audit the implementation of DEZ.

7.5 Terrestrial Ecological Monitoring

In accordance with the Manual, ecological monitoring shall be undertaken monthly at the HDD daylighting location on Sheung Sha Chau Island during the HDD construction works period from August to March to identify and evaluate any impacts with appropriate actions taken as required to address and minimise any adverse impact found. During the reporting period, it was observed from the monthly ecological monitoring at the HDD daylighting location on Sheung Sha Chau that preparation works for shoreline landscape reinstatement were carried out under the Contract P560(R), and there was no encroachment of any works upon the egretry area nor any significant disturbance to the ardeids on the island by the works. No signs of breeding or nursery activities were observed. At the HDD daylighting location, neither nest nor breeding activity of ardeids were found during the monthly ecological monitoring and weekly site inspections in the reporting period. The location map and site photos regarding the monthly ecological monitoring for the HDD works and egretry area are provided in **Appendix C** for reference.

7.6 Status of Submissions under Environmental Permits

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

Table 7.2: Status of Submissions under Environmental Permit

EP Condition	Submission	Status
2.1	Complaint Management Plan	_
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	Accepted / approved
2.13	Fisheries Management Plan	by EPD
2.14	Egretry Survey Plan	_
2.15	Silt Curtain Deployment Plan	_
2.16	Spill Response Plan	_
2.17	Detailed Plan on Deep Cement Mixing	_
2.19	Waste Management Plan	_
2.20	Supplementary Contamination Assessment Plan	_
3.1	Updated EM&A Manual	_
3.4	Baseline Monitoring Reports	_

7.7 Compliance with Other Statutory Environmental Requirements

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

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

7.8.1 Complaints

No construction activities-related complaint was received during the reporting period.

7.8.2 Notifications of Summons or Status of Prosecution

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

7.8.3 Cumulative Statistics

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

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

8.1 Construction Programme for the Coming Reporting Period

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

Advanced Works:

Contract P560 (R) Aviation Fuel Pipeline Diversion Works

- Trench backfilling;
- Shoreline reinstatement next to the new pipe; and
- Stockpiling of excavated materials from previous HDD operation.

DCM Works:

Contract 3201, 3203, and 3205 DCM Works

DCM works

Reclamation Works:

Contract 3206 Main Reclamation Works

- Laying of sand blanket;
- PVD installation:
- Seawall construction;
- Marine filling; and
- DCM works.

Airfield Works:

Contract 3301 North Runway Crossover Taxiway

- Cable ducting works;
- Subgrade works;
- Operation of aggregate mixing facility; and
- Precast of duct bank and fabrication of steel works.

Terminal 2 Expansion Works:

Contract 3501 Antenna Farm and Sewage Pumping Station

- Excavation works; and
- Pipe installation.

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

- Site clearance;
- Plant mobilization; and
- Brick wall construction.

Contract 3503 Terminal 2 Foundation and Substructure Works

- Site establishment;
- Drainage, utility, and road work;
- Piling and structure works; and
- Demolition of footbridge.

Contract 3505 Terminal 2 Spectrum Lighting Mock-ups

Assembly of lighting mock up.

Automated People Mover (APM) works:

Contract 3602 Existing APM System Modification Works

- Site establishment;
- Site office construction; and
- Construction of concrete plinth.

Baggage Handling System (BHS) works:

Contract 3603 3RS Baggage Handling System

- Site establishment; and
- BHS modification work at Terminal 1.

Airport Support Infrastructure & Logistic Works:

Contract 3801 APM and BHS Tunnels on Existing Airport Island

- Site establishment;
- Diversion of underground utilities;
- Piling and foundation works; and
- Demolition of footbridge.

8.2 Key Environmental Issues for the Coming Reporting Period

The key environmental issues for the Project in the coming reporting period expected to be associated with the construction activities include:

- Generation of dust from construction works and stockpiles;
- Noise from operating equipment and machinery on-site;
- Generation of site surface runoffs and wastewater from activities on-site;
- Water quality from laying of sand blanket, DCM works, and marine filling;
- DEZ monitoring for ground improvement works (DCM works and PVD installation) and seawall construction;
- Implementation of MMWP for silt curtain deployment by the contractors' dolphin observers;
- Terrestrial ecological monitoring on Sheung Sha Chau;
- Sorting, recycling, storage and disposal of general refuse and construction waste;
- Management of chemicals and avoidance of oil spillage on-site; and
- Acoustic decoupling measures for equipment on marine vessels.

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

8.3 Monitoring Schedule for the Coming Reporting Period

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

9 Conclusion and Recommendation

The key activities of the Project carried out in the reporting period included reclamation works and land-side works. Reclamation works included deep cement mixing (DCM) works, marine filling, seawall construction, laying of sand blanket, and prefabricated vertical drain (PVD) installation. Land-side works involved mainly foundation and substructure work for Terminal 2 expansion, modification and tunnel work for Automated People Mover (APM) and Baggage Handling System (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, terrestrial ecology, and CWD were conducted during the reporting period in accordance with the Manual.

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

The water quality monitoring results for DO, turbidity, total alkalinity, and chromium obtained during the reporting period complied with 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 and nickel, some of the testing results triggered the relevant Action and Limit Levels, and the corresponding investigations were conducted accordingly. The investigation findings concluded that the cases were not related to the Project. To conclude, the construction activities during the reporting period did not introduce adverse impact to all water quality sensitive receivers.

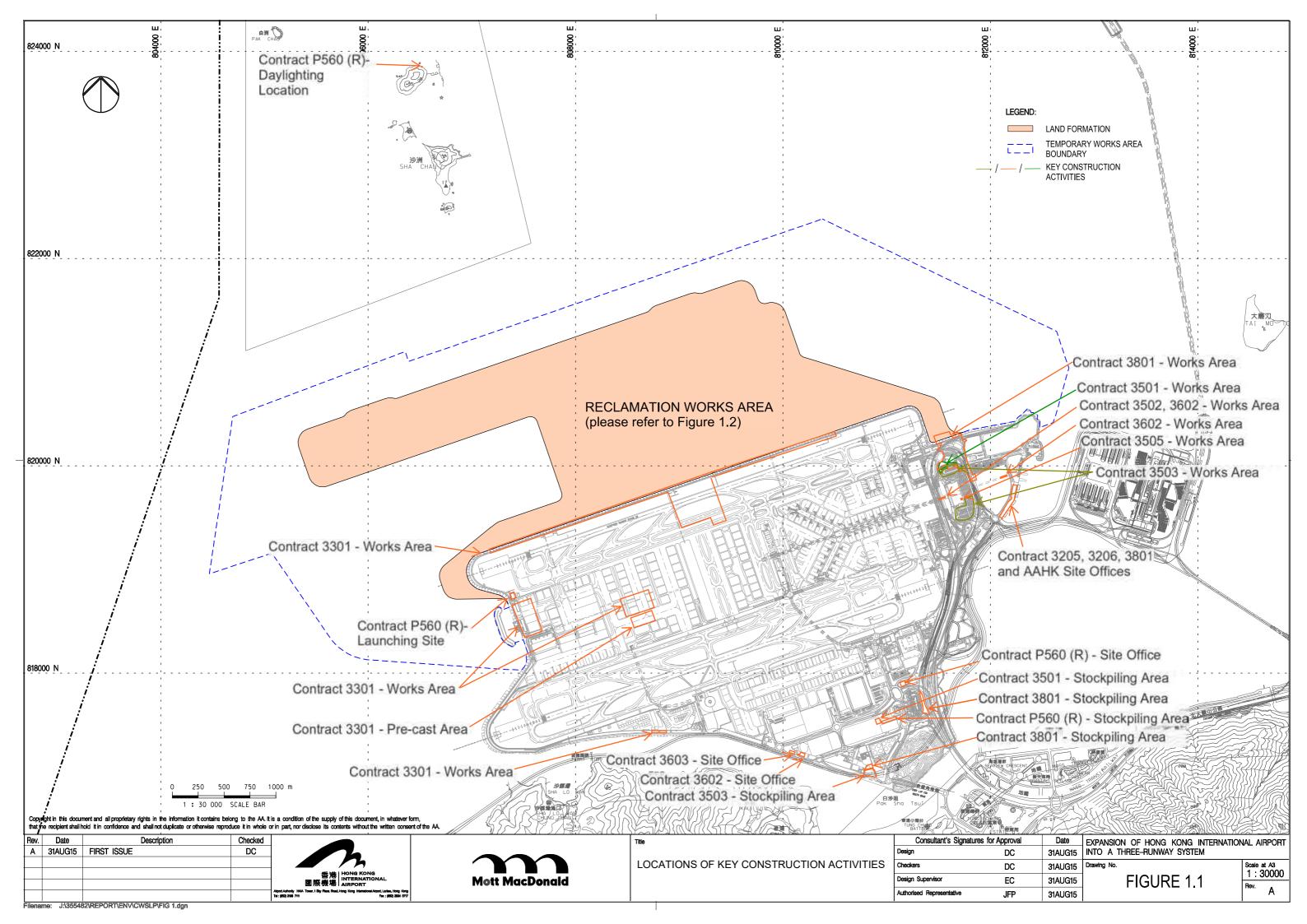
Weekly site inspections of the construction works were carried out by the ET to audit the implementation of proper environmental pollution control and mitigation measures for the Project. Bi-weekly site inspections were also conducted by the IEC. Site inspection findings were recorded in the site inspection checklists and provided to the contractors to follow up.

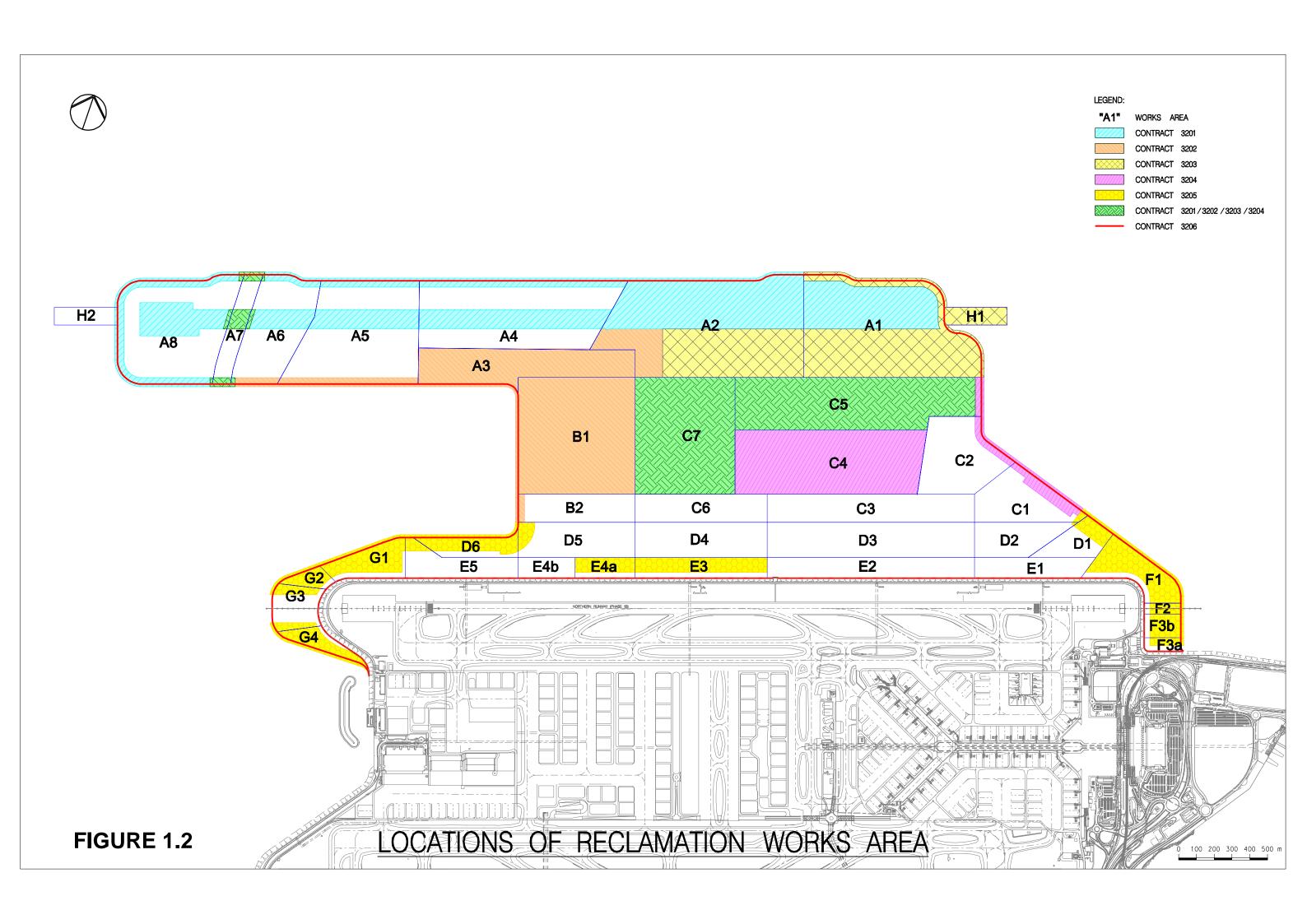
On the implementation of the SkyPier Plan, the daily movements of all SkyPier high speed ferries (HSFs) in October 2018 were in the range of 87 to 102 daily movements, which are within the maximum daily cap of 125 daily movements. A total of 894 HSF movements under the SkyPier Plan were recorded in the reporting period. All HSFs had travelled through the SCZ with average speeds under 15 knots (10.0 to 14.2 knots), which were in compliance with the SkyPier Plan. One deviation from the diverted route in October 2018 was recorded in the HSF monitoring. In summary, the ET and IEC have audited the HSF movements against the SkyPier Plan and conducted follow up investigations or actions accordingly.

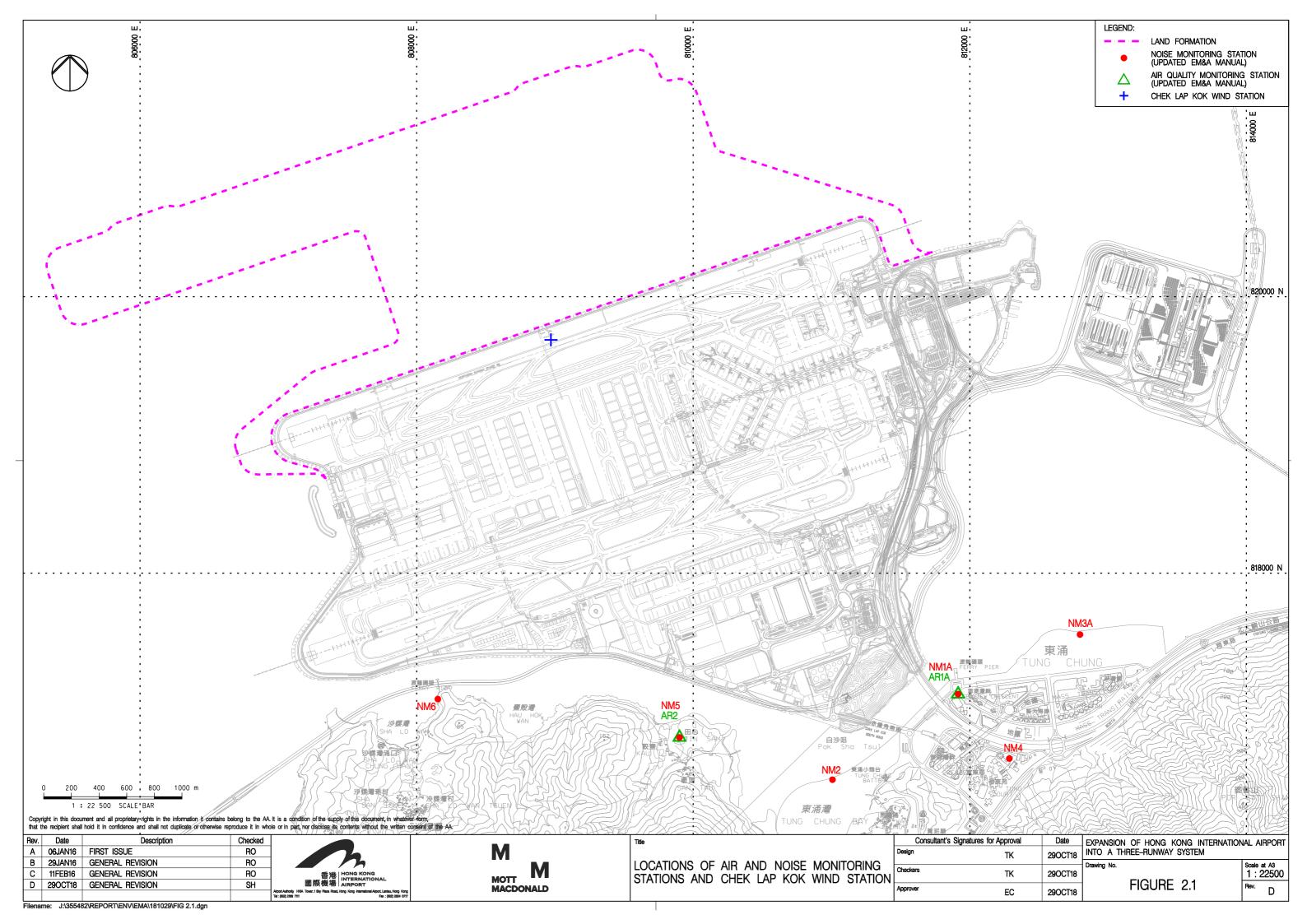
On the implementation of MTRMP-CAV, the MSS automatically recorded the deviation case such as speeding, entering no entry zone, not travelling through the designated gates. ET conducted checking to ensure the MSS records all deviation cases accurately. Training has been provided for the concerned skippers 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 MTCC 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

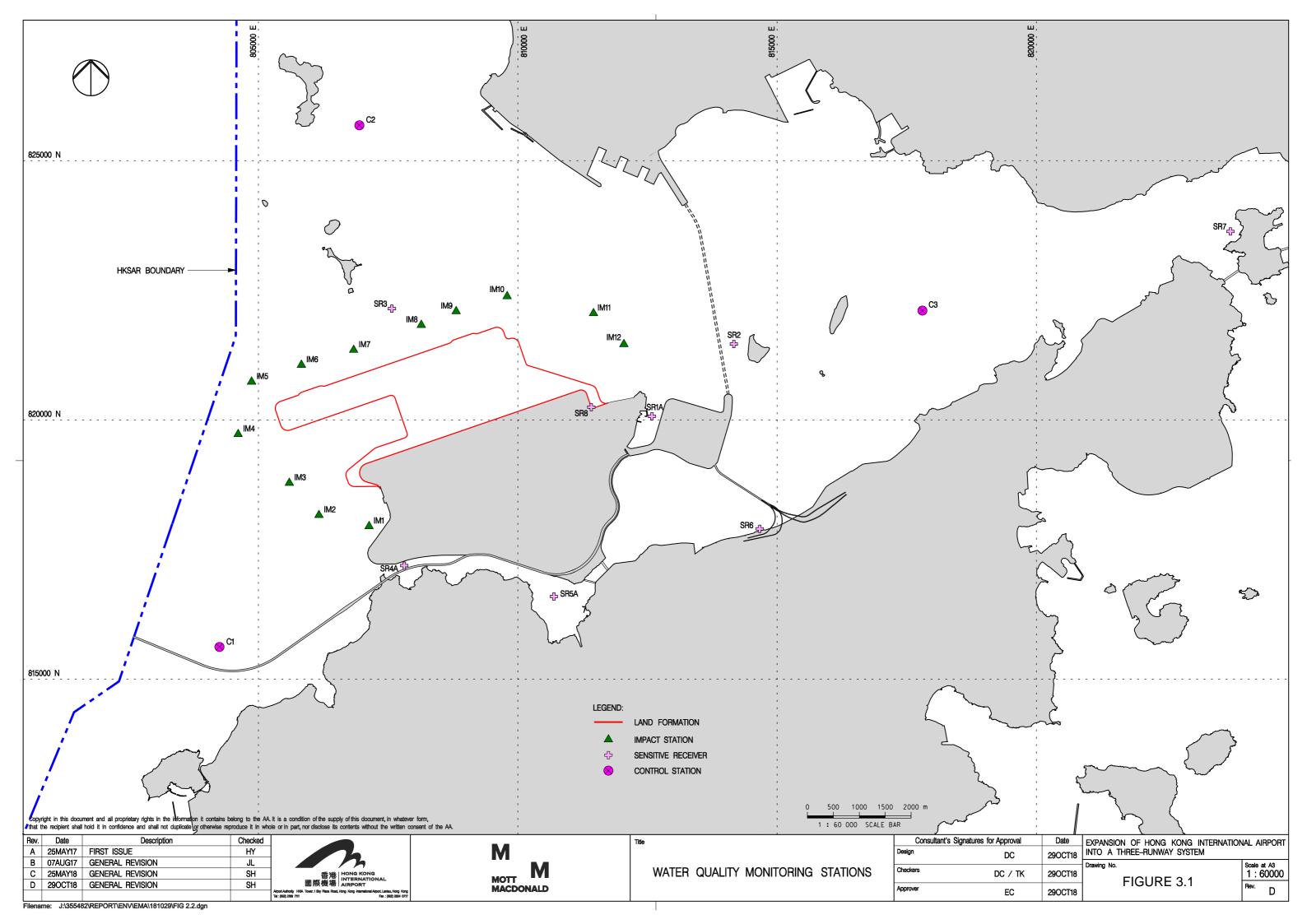
Brothers Marine Park. Three-month rolling programmes for construction vessel activities, which ensures the proposed vessels are necessary and minimal through good planning, were also received from contractors.

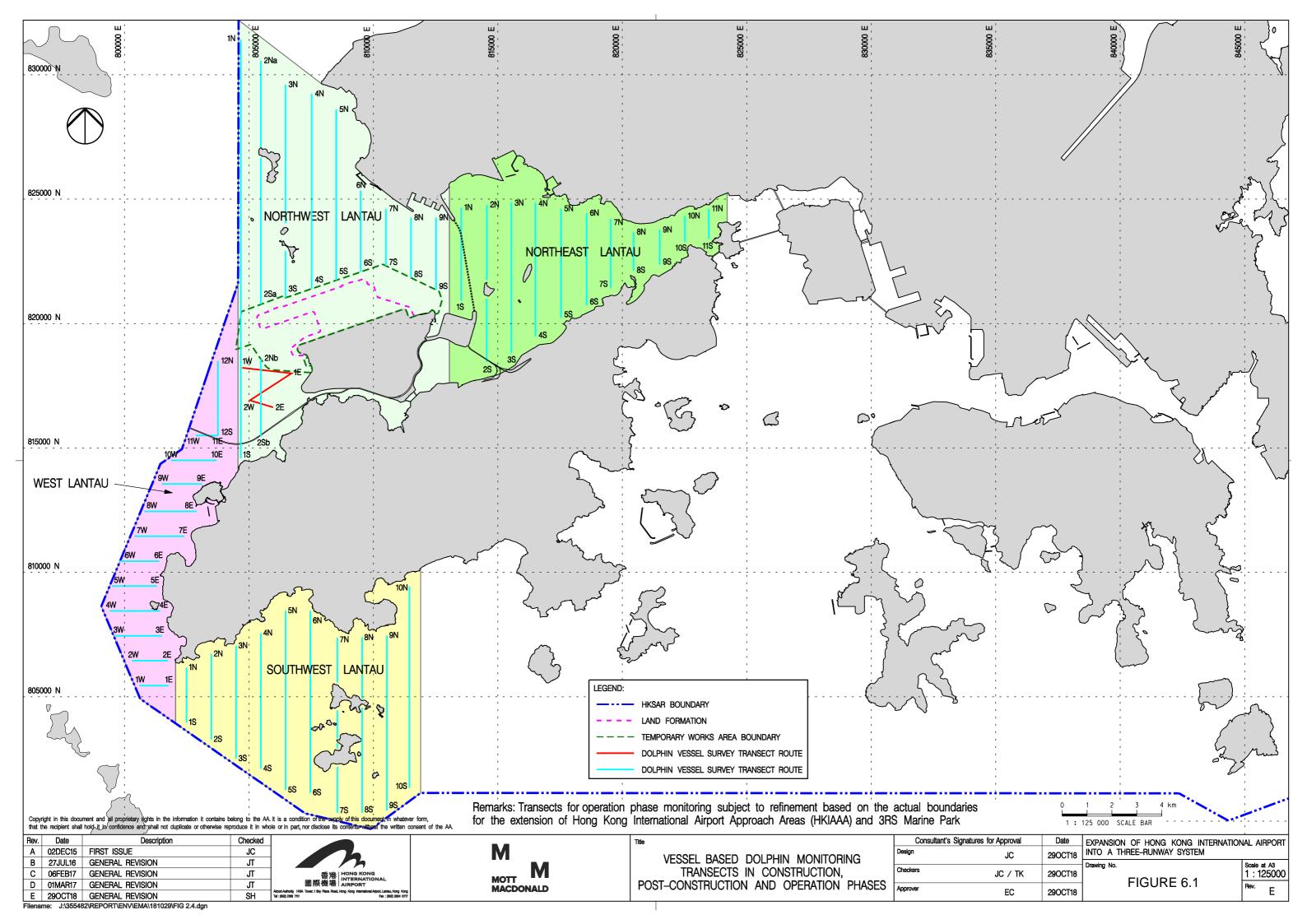
Figures

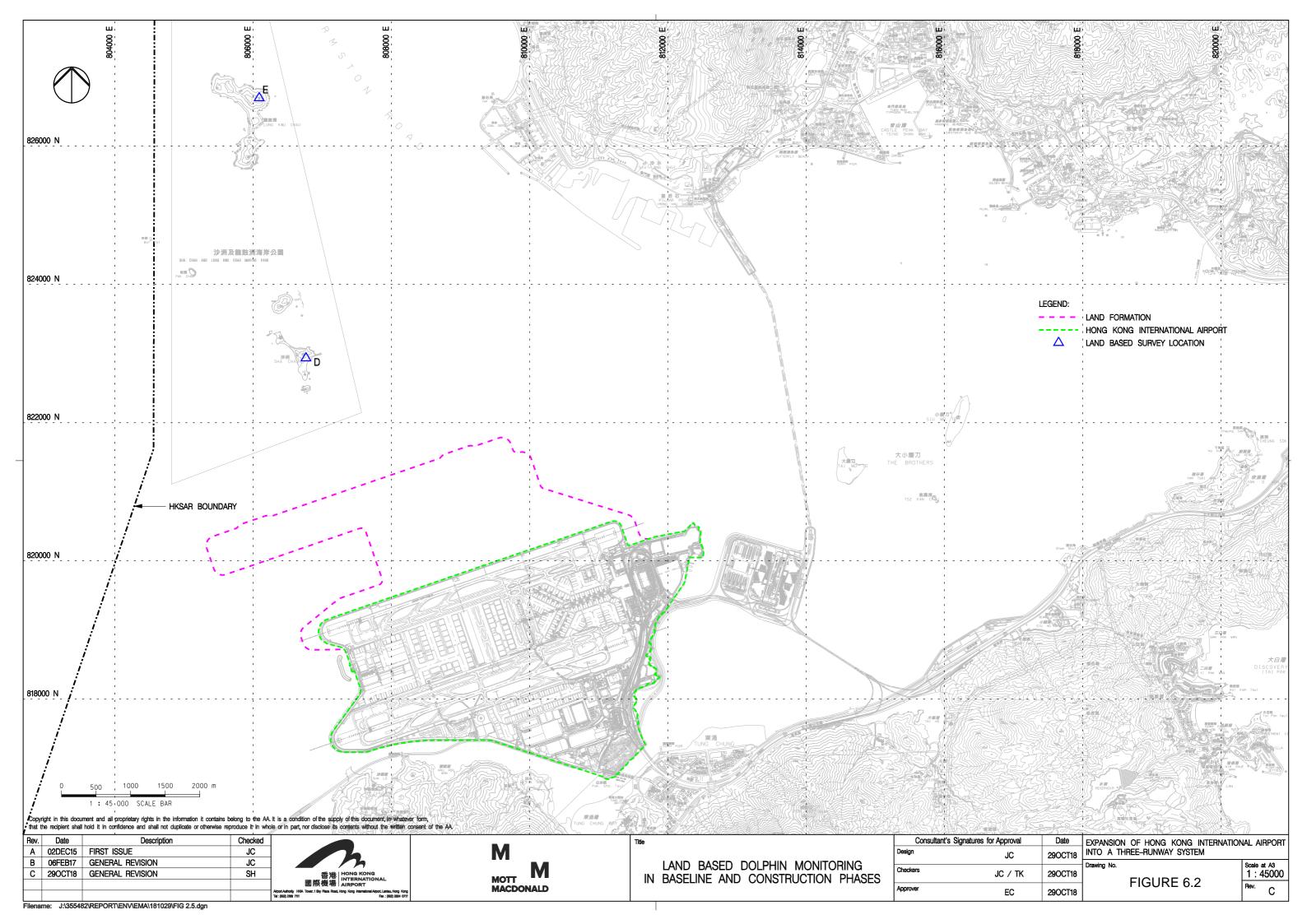


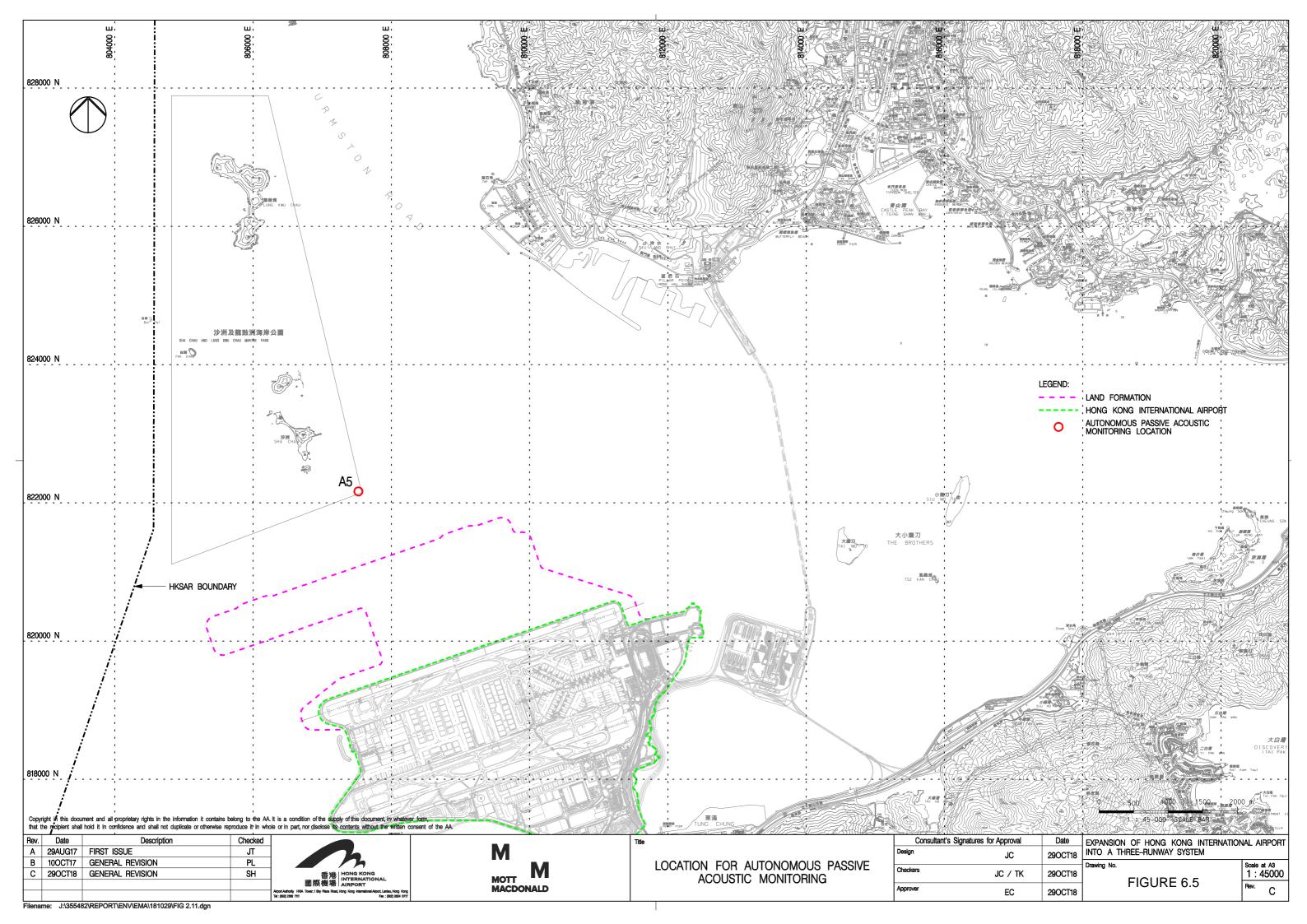












Appendix A. Environmental Mitigation Implementation Schedule (EMIS) for Construction Phase



Appendix A

Environmental Mitigation Implementation Schedule (EMIS) for Construction Phase

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



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion	Mitigation Measures Implemented?
				of measures	
			 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	ı
			Debris Handling	Within construction	ı
			 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 	site / Duration of the construction phase	
			Before debris is dumped into a chute, water should be sprayed so that it remains wet when it is dumped.		
			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	Within construction	I
			 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; 	site / Duration of the construction phase	
			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.		
			Site hoarding	Within construction	I
			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.	site / Duration of the construction phase	
5.2.6.5	2.1	-	Best Practices for Concrete Batching Plant	Within Concrete	N/A
			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:	Batching Plant / Duration of the construction phase	
			Cement and other dusty materials		



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	Within Concrete	N/A
			 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; 	Batching Plant / Duration of the construction phase	
			 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; 		



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	Within Concrete	N/A
			Concrete truck shall be loaded in such a way as to minimise airborne dust emissions. The following control measures shall be implemented:	Batching Plant / Duration of the	
			(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	construction phase	
			(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.		
			Vehicles	Within Concrete	N/A
			 All practicable measures shall be taken to prevent or minimize the dust emission caused by vehicle movement; and 	Batching Plant / Duration of the	
			 All access and route roads within the premises shall be paved and adequately wetted. 	construction phase	
			Housekeeping	Within Concrete	N/A
			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.	Batching Plant / Duration of the construction phase	
5.2.6.6	2.1	-	Best Practices for Asphaltic Concrete Plant	Within Concrete	N/A
			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:	Batching Plant / Duration of the construction phase	
			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;		



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented? ⁴
			■ 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	Within Concrete	N/A
			 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; 	Batching Plant / Duration of the construction phase	
			• 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 	Within Concrete Batching Plant / Duration of the construction phase	
			 All materials returned from dust collection system shall be transferred in enclosed system and shall be stored inside bins or enclosures. 		
			Hot feed side		N/A
			 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; 		



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	Within Concrete	N/A
			• 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;	Batching Plant / Duration of the construction phase	
			 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. 		
			Control of emissions from bitumen decanting	Within Concrete	N/A
			 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; 	Batching Plant / Duration of the construction phase Within Concrete Batching Plant / Duration of the construction phase	
			 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.		
			Liquid fuel		N/A
			 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. 		
			Housekeeping	Within Concrete	N/A
			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.	Batching Plant / Duration of the construction phase	
5.2.6.7	2.1	-	Best Practices for Rock Crushing Plants	Within Concrete	N/A
			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:	Batching Plant / Duration of the construction phase	



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	Within Concrete	N/A
			• 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	Batching Plant / Duration of the construction phase	
			 All grizzlies shall be enclosed on top and 3 sides and sufficient water sprayers shall be installed at their feeding and outlet areas. 		
			Belt conveyors	Within Concrete	N/A
			 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; 	Batching Plant / Duration of the construction phase	
			• 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.		



EIA Ref.		A EP Environmental Protection Measures Condition	Environmental Protection Measures	Location / Duration of measures	Mitigation Measures Implemented?^
			Timing of completion of measures		
			Storage piles and bins	Within Concrete	N/A
			 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. 	Batching Plant / Duration of the construction phase	
			 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. 		
			Rock drilling equipment	Within Concrete	N/A
			 Appropriate dust control equipment such as a dust extraction and collection system shall be used during rock drilling activities. 	Batching Plant / Duration of the construction phase	
			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	1
Table 6.40	3.2	-	 An appropriate marine traffic management system should be established to minimize risk of ship collision. 	Construction Site / Construction Period	1
Table 6.40	3.2	-	 Location of all existing hydrant networks should be clearly identified prior to any construction works. 	Construction Site / Construction Period	1
			Noise Impact – Construction Phase		
7.5.6	4.3	.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:	Within the Project site / During construction phase / Prior to	I
			 only well-maintained plant to be operated on-site and plant should be serviced regularly during the construction works; 	commencement of operation	
			 machines and plant that may be in intermittent use to be shut down between work periods or should be throttled down to a minimum; 		



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			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	Within the Project site /	1
7.0.0			• QPME should be adopted as far as applicable.	During construction phase / Prior to commencement of operation	
7.5.6	4.3	-	Use of Movable Noise Barriers	Within the Project site /	1
			 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. 	During construction phase / Prior to commencement of operation	
7.5.6	4.3	Use of Noise Enclosure/ Acoustic Shed	Use of Noise Enclosure/ Acoustic Shed	Within the Project site /	1
			 Noise enclosure or acoustic shed should be used to cover stationary PME such as air compressor and generator. 	During construction phase / Prior to commencement of operation	
			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 General Measures to be Applied to All Works Areas	Within construction site / Duration of the	I
		 Barges or hoppers shall not be filled to a level which will cause overflow of materials or pollution of water during loading or transportation; 	construction phase		
			 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.		
			Specific Measures to be Applied to All Works Areas	Within construction	
			 The daily maximum production rates shall not exceed those assumed in the water quality assessment in the EIA report; 	site / Duration of the construction phase	I
			 A maximum of 10 % fines content to be adopted for sand blanket and 20 % fines content for marine filling below +2.5 mPD prior to substantial completion of seawall (until end of Year 2017) shall be specified in the works contract document; 		
			 An advance seawall of at least 200m to be constructed (comprising either rows of contiguous permanent steel cells completed above high tide mark or partially completed seawalls with rock core to high tide mark and filter layer on the inner side) prior to commencement of marine filling activities; 		N/A
			 Closed grab dredger shall be used to excavate marine sediment; 		N/A
			 Silt curtains surrounding the closed grab dredger shall be deployed in accordance with the Silt Curtain Deployment Plan; and 		*(The arrangement silt curtain has beer modified. The detail can be referred to S Curtain Deployment Plan)
			The Silt Curtain Deployment Plan shall be implemented.	-	



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



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures	Mitigation Measures Implemented?
				Timing of completion of measures	•
			Specific Measures to be Applied to the Field Joint Excavation Works for the Submarine Cable Diversion	Within construction	N/A
			 Only closed grabs designed and maintained to avoid spillage shall be used and should seal tightly when operated. Excavated materials shall be disposed at designated marine disposal area in accordance with the Dumping and Sea Ordinance (DASO) permit conditions; and 	site / Duration of the construction phase	
			 Silt curtains surrounding the closed grab dredger to be deployed as a precautionary measure. 		
8.8.1.4	5.1	-	Modification of the Existing Seawall	At the existing	N/A
			• 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.	northern seawall / Duration of the construction phase	
8.8.1.5	5.1	-	Construction of New Stormwater Outfalls and Modifications to Existing Outfalls	Within construction	N/A
		- Duffin operation of the temporary drainage charifier, fution control ineasures such as pulluting of sill	site / Duration of the construction phase		
8.8.1.6	5.1	2.27	Piling Activities for Construction of New Runway Approach Lights and HKIAAA Marker Beacons	Within construction	N/A
8.8.1.7			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.	site / Duration of the construction phase	
			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.		
8.8.1.8	5.1	-	Construction of Site Runoff and Drainage	Within construction	
			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:	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	Mitigation Measures
				Timing of completion of 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 onsite using a suitable wastewater treatment process. The effluent should be treated according to the requirements of the TM-DSS standards under the WPCO prior to discharge to foul sewers or collected for proper disposal off-site. No direct discharge of contaminated groundwater is permitted; and		N/A
			• All vehicles and plant should be cleaned before leaving a construction site to ensure no earth, mud, debris and the like is deposited by them on roads. An adequately designed and sited wheel washing facility should be provided at construction site exits. Wash-water should have sand and silt settled out and removed regularly to ensure the continued efficiency of the process. The section of access road leading to, and exiting from, the wheel-wash bay to the public road should be paved with sufficient backfall toward the wheel-wash bay to prevent vehicle tracking of soil and silty water to public roads and drains. All washwater should be treated according to the requirements of the TM-DSS standards under the WPCO prior to discharge.		I
8.8.1.9	5.1	-	Sewage Effluent from Construction Workforce	Within construction	1
			 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. 	site / During construction phase	
8.8.1.10	5.1		General Construction Activities	Within construction	I
8.8.1.11			 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 	site / During construction phase	



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures	Mitigation Measures
			Timing of completion of measures	Implemented? ⁴	
			• 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	5.1	2.28	Drilling Activities for the Submarine Aviation Fuel Pipelines	Within construction	1
8.8.1.13			To prevent potential water quality impacts at Sha Chau, the following measures shall be applied:	site / During	
			 A 'zero-discharge' policy shall be applied for all activities to be conducted at Sha Chau; 	construction phase	
			 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. 		
			At the airport island side of the drilling works, the following measures shall be applied for treatment of wastewater:	Within construction site / During	1
			 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 	construction phase	
			 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. 		
			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	ı
			 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; 		1
			 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; 	•	ı
			 Excavation work for constructing the APM tunnels, BHS tunnels and airside tunnels will not be down to the CMPs beneath the fill materials in order to avoid excavating any sediments; and 	-	N/A



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?
			For the marine sediments expected to be excavated from the piling works of TRC, APM & BHS tunnels, airside tunnels and other facilities on the proposed land formation area, piling work of marine sections of the approach lights and HKIAAA beacons, basement works for some of T2 expansion area and excavation works for the proposed APM depot should be treated and reused on-site as backfilling materials, although required treatment level / detail and the specific re-use mode are under development.		N/A
10.5.1.1	7.1	-	The following good site practices should be performed during the construction activities include:	Project Site Area /	1
			 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; 	Construction Phase	
			 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.		
10.5.1.3	7.1	-	The following practices should be performed to achieve waste reduction include:	Project Site Area /	1
			 Use of steel or aluminium formworks and falseworks for temporary works as far as practicable; 	Construction Phase	
			 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; 		



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	1
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	1
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	N/A
			 The loading, unloading, handling, transfer or storage of treated and untreated sediment should be carried out in such a manner to prevent or minimise dust emissions; 		
			 All practical measures, including but not limited to speed control for vehicles, should be taken to minimise dust emission; 		
			 Good housekeeping should be maintained at all times at the sediment treatment facility and storage area; 		
			 Treated and untreated sediment should be clearly separated and stored separately; and 		
			 Surface runoff from the enclosed area should be properly collected and stored separately, and then properly treated to levels in compliance with the relevant effluent standards as required by the Water Pollution Control Ordinance before final discharge. 		
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:	Project Site Area / Construction Phase	1
			 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. 		
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	1
10.5.1.21	7.1	-	 The construction contractors will be required to regularly check and clean any refuse trapped or accumulated along the newly constructed seawall. Such refuse will then be stored and disposed of together with the general refuse. 	Project Site Area / Construction Phase	N/A
			Land Contamination – Construction Phase		
11.10.1.2	8.1	2.32	For areas inaccessible during site reconnaissance survey	Project Site Area	
to 11.10.1.3			• Further site reconnaissance would be conducted once the areas are accessible in order to identify any land contamination concern for the areas.	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	Mitigation Measures Implemented?
				Timing of completion of measures	•
			• After completion of SI, the Contamination Assessment Report (CAR) will be prepared and submitted to EPD for approval prior to start of the proposed construction works at the golf course, the underground and above-ground fuel storage tank areas, emergency power generation units, airside petrol filling station and fuel tank room.	_	I*(CAR for golf course)
			 Should remediation be required, Remediation Action Plan (RAP) and Remediation Report (RR) will be prepared for EPD's approval prior to commencement of the proposed remediation and any construction works respectively. 		N/A
11.8.1.2	8.1	-	If contaminated soil is identified, the following mitigation measures are for the excavation and transportation of contaminated materials (if any):	Project Site Area / Construction Phase	N/A
			 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. 		
			Terrestrial Ecological – Construction Phase		
12.10.1.1	9.2	2.14	Pre-construction Egretry Survey ■ Conduct ecological survey for Sha Chau egretry to update the latest boundary of the egretry.	Breeding season (April - July) prior to commencement of HDD drilling works at HKIA	1



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?
12.7.2.3	9.1	2.30	Avoidance and Minimisation of Direct Impact to Egretry	During construction	I
and 12.7.2.6			 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; 	phase at Sheung Sha Chau Island	
			• 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.		
12.7.2.5	9.1	2.30	Preservation of Nesting Vegetation	During construction	1
			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.	phase at Sheung Sha Chau Island	
12.7.2.4	9.1	2.30	Timing the Pipe Connection Works outside Ardeid's Breeding Season	During construction	1
and 12.7.2.6			 All HDD and related construction works on Sheung Sha Chau Island will be scheduled outside the ardeids' breeding season (between April and July). No night-time construction work will be allowed on Sheung Sha Chau Island during all seasons. 	phase at Sheung Sha Chau Island	
12.10.1.1	9.3	-	 Ecological Monitoring During the HDD construction works period from August to March, ecological monitoring will be undertaken monthly at the HDD daylighting location on Sheung Sha Chau Island to identify and evaluate any impacts with appropriate actions taken as required to address and minimise any adverse impact found. 	at Sheung Sha Chau Island	I
			Marine Ecological Impact – Pre-construction Phase		
13.11.4.1	10.2.2	-	■ Pre-construction phase Coral Dive Survey.	HKIAAA artificial seawall	I
			Marine Ecological Impact – Construction Phase		
13.11.1.3	-	-	Minimisation of Land Formation Area	Land formation	1
to 13.11.1.6			 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. 	footprint / during detailed design phase to completion of construction	
13.11.1.7	-	2.31	Use of Construction Methods with Minimal Risk/Disturbance	During construction	
to 13.11.1.10		 Use of non-dredge method for the main land formation and ancillary works including the diversion of the aviation fuel pipeline to the AFRF; 	phase at marine works area	I	
			 Use of Deep Cement Mixing (DCM) method instead of conventional seabed dredging for the land formation works to reduce the risk of negative impacts through the elevation of suspended solids and contaminants on CWDs, fisheries and the marine environment; 		1



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			 Use of bored piling in short duration to form the new approach lights and marker beacons for the new runway; 		N/A
			 Avoid bored piling during CWD peak calving season (Mar to Jun); 	•	1
			Prohibition of underwater percussive piling; and	•	1
			 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. 	•	1
13.11.2.1	-	-	Mitigation for Indirect Disturbance due to Deterioration of Water Quality	All works area during	
to 13.11.2.7			 Water quality mitigation measures during construction phases include consideration of alternative construction methods, deployment of silt curtain and good site practices; 	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); 		ı
			 Use of bored piling in short duration to form the new approach lights and marker beacons for the new runway; and 		N/A
			Use of horizontal directional drilling (HDD) method and water jetting methods for placement of undersea cables and pipelines to minimise the disturbance to the CWDs and other marine ecological resources.	-	I
13.11.1.12	-	-	Strict Enforcement of No-Dumping Policy	All works area during	1
			 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; 	the construction phase	
			 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. 		
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	
13.11.1.3	-	-	Minimisation of Land Formation Area	Land formation	1
to 13.11.1.6			 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. 	footprint / during detailed design phase	



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures	Mitigation Measures
				Timing of completion of measures	Implemented?^
				to completion of construction	
13.11.5.4	10.3.1	-	SkyPier High Speed Ferries' Speed Restrictions and Route Diversions	Area between the	ļ
to 13.11.5.13			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	footprint and SCLKC Marine Park during construction phase	
			■ A maximum of 10 knots will be enforced through the designated SCLKC Marine Park area at all times.		
			Other mitigation measures	Area between the	1
			 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 	footprint and SCLKC Marine Park during construction phase	
			 The effectiveness of the CWD mitigation measures after implementation of initial six month SkyPier HSF diversion and speed restriction will be reviewed. 		
13.11.5.14	10.3.1	2.31	Dolphin Exclusion Zone	Marine waters around	
to 13.11.5.18			 Establishment of a 24 hr Dolphin Exclusion Zone (DEZ) with a 250 m radius around the land formation works areas; 	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 	· '	1
			 A DEZ would also be implemented during bored piling work but as a precautionary measure only. 		N/A
13.11.5.19	10.4	2.31	Acoustic Decoupling of Construction Equipment	Around coastal works	1
			 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 	area during construction phase	
			 Specific acoustic decoupling measures shall be specified during the detailed design of the project for use during the land formation works. 		
13.11.5.20	10.6.1	2.29	Spill Response Plan	Construction phase	1
			 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. 		



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
13.11.5.21 to 13.11.5.23	10.6.1	-	Construction Vessel Speed Limits and Skipper Training A speed limit of 10 knots should be strictly observed for construction vessels at areas with the highest CWD densities; and Vessels traversing through the work areas should be required to use predefined and regular routes (which would presumably become known to resident dolphins) to reduce disturbance to cetaceans due to vessel movements. Specific marine routes shall be specified by the Contractor prior to construction commencing.	All areas north and west of Lantau Island during construction phase	I
			Fisheries Impact – Construction Phase		
14.9.1.2 to 14.9.1.5	-		Minimisation of Land Formation Area • Minimise the overall size of the land formation needed for the additional facilities to minimise the overall loss of habitat for fisheries resources.	Land formation footprint / during detailed design phase to completion of construction	I
14.9.1.6	-	-	Use of Construction Methods with Minimal Risk/Disturbance Use of non-dredge method for the main land formation and ancillary works including the diversion of the aviation fuel pipeline to the AFRF;	During construction phase at marine works area	1
			 Use of Deep Cement Mixing (DCM) method instead of conventional seabed dredging for the land formation works to reduce the risk of negative impacts through the elevation of suspended solids and contaminants on fisheries and the marine environment; 		I
			 Use of bored piling in short duration to form the new approach lights and marker beacons for the new runway; and 	_	N/A
			 Use of horizontal directional drilling (HDD) method and water jetting methods for placement of undersea cables and pipelines to minimise the disturbance to fisheries resources. 	_	I
14.9.1.11	-		Strict Enforcement of No-Dumping Policy • A policy prohibiting dumping of wastes, chemicals, oil, trash, plastic, or any other substance that would potentially be harmful to dolphins and/or their habitat in the work area;	All works area during the construction phase	I
			 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. 		
14.9.1.12	-		 Good Construction Site Practices Regular inspection of the integrity and effectiveness of all silt curtains and monitoring of effluents to ensure that any discharge meets effluent discharge guidelines; Keep the number of working or stationary vessels present on-site to the minimum anytime; and 	All works area during the construction phase	1



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			 Unscheduled, on-site audits for all good site practice restrictions should be conducted, and fines or penalties sufficient to be an effective deterrent need to be levied against violators. 		
14.9.1.13	-		Mitigation for Indirect Disturbance due to Deterioration of Water Quality	All works area during	
to 14.9.1.18			 Water quality mitigation measures during construction phases include consideration of alternative construction methods, deployment of silt curtain and good site practices; 	the construction phase	1
			Alternative construction methods including use of non-dredge methods for ground improvement (e.g. Deep Cement Mixing (DCM), prefabricated vertical drains (PVD), sand compaction piles, steel cells, stone columns and vertical sand drains);		I
			 Use of bored piling in short duration to form the new approach lights and marker beacons for the new runway; and 		N/A
			 Use of horizontal directional drilling (HDD) method and water jetting methods for placement of undersea cables and pipelines to minimise the disturbance to fisheries resources. 	-	I
			Landscape and Visual Impact – Construction Phase		
Table 15.6	12.3	-	CM1 - The construction area and contractor's temporary works areas should be minimised to avoid impacts on adjacent landscape.	All works areas for duration of works;	I
				Upon handover and completion of works.	
Table 15.6	12.3	-	CM2 - Reduction of construction period to practical minimum.	All works areas for duration of works;	I
				Upon handover and completion of works.	
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;	I
				Upon handover and completion of works.	
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;	I
				Upon handover and completion of works.	
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;	I
				Upon handover and completion of works. –	



EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
				may be disassembled in phases	
Table 15.6	12.3	-	CM6 - Avoidance of excessive height and bulk of site buildings and structures.	New passenger concourse, terminal 2 expansion and other proposed airport related buildings and structures under the project; Upon handover and completion of works.	N/A
Table 15.6	12.3	-	CM7 - Control of night-time lighting by hooding all lights and through minimisation of night working periods.	All works areas for duration of works;	1
				Upon handover and completion of works. – may be disassembled in phases	
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	All existing trees to be retained;	I
			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.	Upon handover and completion of works.	
Table 15.6	12.3	-	CM9 - Trees unavoidably affected by the works shall be transplanted where practical. A detailed Tree Transplanting Specification shall be provided in the Contract Specification, if applicable. Sufficient time for	All existing trees to be affected by the works;	1
			necessary tree root and crown preparation periods shall be allowed in the project programme.	Upon handover and completion of works.	
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
				Upon handover and completion of works.	
			Cultural Heritage Impact – Construction Phase		
			Not applicable.		



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

Notes:

I= implemented where applicable;

N/A= not applicable to the construction works implemented during the reporting month. ^ Checked by ET through site inspection and record provided by the Contractor.

Appendix B. Monitoring Schedule

Monitoring Schedule of This Reporting Period

Oct-18

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1	2	3	4	5	6
		Site Inspection	Site Inspection	Site Inspection	Site Inspection	
				CWD Survey (Vessel)	CWD Survey (Vessel)	
				AR1A, AR2		
		NM6		NM1A, NM4, NM5		
		WQ General & Regular DCM		WQ General & Regular DCM		WQ General & Regular DCM
		mid-ebb: 18:23		mid-ebb: 8:17		mid-ebb: 10:42
		mid-flood: 13:19		mid-flood: 16:16		mid-flood: 17:43
7	8	9	10	11	12	13
	Site Inspection	Site Inspection	Site Inspection	Site Inspection	Site Inspection	
	CWD Survey (Vessel, Land-based)	CWD Survey (Land-based)	AR1A, AR2	CWD Survey (Vessel)	CWD Survey (Vessel)	
	NM6		NM1A, NM4, NM5			
			,,	Ecological Monitoring		
		WQ General & Regular DCM		WQ General & Regular DCM		WQ General & Regular DCM
		mid-ebb: 13:05		mid-ebb: 14:25 mid-flood: 8:24		mid-ebb: 15:44
4.4	15	mid-flood: 6:47 16	17	mid-flood: 8:24 18	19	mid-flood: 10:03
14	Site Inspection	Site Inspection	17	Site Inspection	Site Inspection	20
	CWD Survey (Land-based)	Site inspection		Site inspection	Site inspection	
	AR1A, AR2				AR1A, AR2	
	NM1A, NM4, NM5				NM6	
		WO Conserved a Describe DOM		MO Conservation Power POM		WO Occasion Resources DOM
		WQ General & Regular DCM mid-ebb: 5:24		WQ General & Regular DCM mid-ebb: 7:47		WQ General & Regular DCM mid-ebb: 10:02
		mid-flood: 17:49		mid-flood: 16:25		mid-flood: 17:19
21	22	23	24	25	26	27
		Site Inspection	Site Inspection	Site Inspection	Site Inspection	
	CWD Survey (Land-based)	CWD Survey (Vessel)	CWD Survey (Vessel)		CWD Survey (Vessel)	
		NM6		AR1A, AR2 NM1A, NM4, NM5		
		TVIVIO		THINTIA, THINIA, THINIS		
		WQ General & Regular DCM		WQ General & Regular DCM		WQ General & Regular DCM
		mid-ebb: 12:02*		mid-ebb: 13:14		mid-ebb: 14:33
		mid-flood: 5:57	24	mid-flood: 7:21		mid-flood: 8:51
28	29	30	31			
	CWD Survey (Land-based)	Site Inspection	Site Inspection			
	OVVD Curvey (Earla basea)		AR1A, AR2			
	NM6		NM1A, NM4, NM5			
		W0 0 10 B 1 B011				
		WQ General & Regular DCM mid-ebb: 17:05				
		mid-flood: 11:55				
		Notes:				
		CWD - Chinese White Dolphin				
			NM1A/AR1A - Man Tung Road Park			
		Air quality and Noise Monitoring Station	NM4 - Ching Chung Hau Po Woon I NM5/AR2 - Village House, Tin Sum	rimary School		
			NM6 - House No. 1, Sha Lo Wan			
		WQ - Water Quality				
		DCM - Deep Cement Mixing *Ebb tide WQ monitoring session on 23	Octobor was capsalled due to marin	o traffic management		
		EDD tide WQ monitoring session on 23	October was cancelled due to marin	e trame management.		

Tentative Monitoring Schedule of Next Reporting Period

Nov-18

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1 Site Inspection	2 Site Inspection	3
				General WQ & Regular DCM mid-ebb: 6: mid-flood: 14:	:20 :54	General WQ & Regular DCM mid-ebb: 9:20 mid-flood: 16:30
4	5 CWD Survey (Land-based)	Site Inspection CWD Survey (Vessel) AR1A, AR2 NM1A, NM4, NM5	7 Site Inspection CWD Survey (Vessel)	Site Inspection CWD Survey (Vessel) NM6 Terrestrial Ecological Monitoring	9 Site Inspection	10
		General WQ & Regular DCM mid-ebb: 12:01 mid-flood: 18:03		General WQ & Regular DCM mid-ebb: 13: mid-flood: 19:		General WQ & Regular DCM mid-ebb: 14:45 mid-flood: 9:13
11	CWD Survey (Vessel) AR1A, AR2 NM1A, NM4, NM5	13 Site Inspection CWD Survey (Vessel, Land-based)	Site Inspection CWD Survey (Land-based) NM6	15 Site Inspection	Site Inspection CWD Survey (Vessel) AR1A, AR2	17
		General WQ & Regular DCM mid-ebb: 4:00 mid-flood: 11:45		General WQ & Regular DCM mid-ebb: 5: mid-flood: 17:	:29	General WQ & Regular DCM mid-ebb: 22:11 mid-flood: 15:50
18	19	Site Inspection CWD Survey (Land-based) NM6	Site Inspection CWD Survey (Land-based)	Site Inspection CWD Survey (Vessel) AR1A, AR2 NM1A, NM4, NM5	Site Inspection CWD Survey (Vessel)	24
		General WQ & Regular DCM mid-ebb: 10:42 mid-flood: 17:06		General WQ & Regular DCM mid-ebb: 12: mid-flood: 17:		General WQ & Regular DCM mid-ebb: 13:36 mid-flood: 8:03
25	26	27 Site Inspection	28 Site Inspection	29 Site Inspection	30 Site Inspection	
	NM6		AR1A, AR2 NM1A, NM4, NM5			
		General WQ & Regular DCM mid-ebb: 16:01 mid-flood: 10:47		General WQ & Regular DCM mid-ebb: 18: mid-flood: 12:		
		Air Quality and Noise Monitoring Station	NM1A/AR1A - Man Tung Road Park NM4 - Ching Chung Hau Po Woon Pri NM5/AR2 - Village House, Tin Sum NM6 - House No. 1, Sha Lo Wan	mary School		
		WQ - Water Quality DCM - Deep Cement Mixing				

Appendix C. Monitoring Results

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

Air Quality Monitoring Results

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

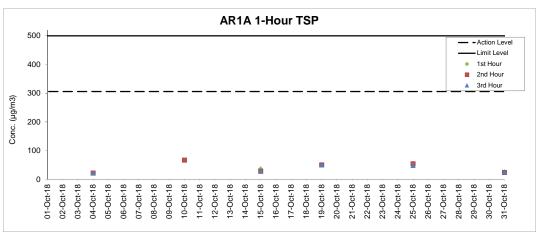
Date	Time	Weather	Wind Speed (m/s)	Wind Direction (deg)	1-hr TSP (μg/m³)	Action Level (µg/m³)	Limit Level (µg/m³)
04-Oct-18	8:59	Sunny	5.9	355	22	306	500
04-Oct-18	9:59	Sunny	5.9	346	22	306	500
04-Oct-18	10:59	Sunny	4.5	329	22	306	500
10-Oct-18	8:56	Cloudy	2.6	49	67	306	500
10-Oct-18	9:56	Cloudy	3.1	44	67	306	500
10-Oct-18	10:56	Rainy	2.0	323	NA*	306	500
15-Oct-18	09:01	Fine	3.9	115	37	306	500
15-Oct-18	10:01	Fine	6.9	90	28	306	500
15-Oct-18	11:01	Fine	6.5	105	31	306	500
19-Oct-18	09:03	Sunny	8.2	95	52	306	500
19-Oct-18	10:03	Sunny	8.7	98	50	306	500
19-Oct-18	11:03	Sunny	9.0	92	51	306	500
25-Oct-18	9:07	Sunny	5.6	88	52	306	500
25-Oct-18	10:07	Sunny	5.7	108	54	306	500
25-Oct-18	11:07	Sunny	4.7	97	48	306	500
31-Oct-18	9:01	Sunny	4.0	22	26	306	500
31-Oct-18	10:01	Sunny	6.8	357	24	306	500
31-Oct-18	11:01	Sunny	6.9	357	25	306	500

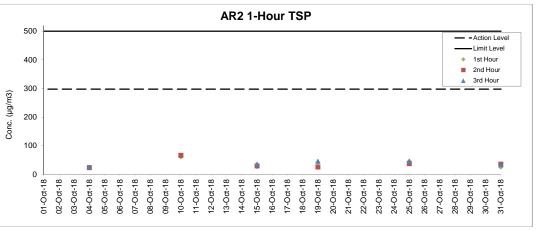
NA*: Abnormal result, which may be caused by malfunction of monitoring equipment during inclement weather, was recorded. The measurement result was discarded after review

4	haur	TCD	Results	
1	-nour	132	Results	

1-nour 15P Results							
Station: AR2 - Village House	, Tin Sum			Wind Direction	1-hr TSP	Action Level	Limit Level
Date	Time	Weather	Wind Speed	(deg)	$(\mu g/m^3)$	(µg/m ³)	$(\mu g/m^3)$
04-Oct-18	8:45	Fine	(ng/g)	357	25	298	500
04-Oct-18	9:45	Fine	5.3	343	24	298	500
04-Oct-18	10:45	Fine	5.9	332	26	298	500
10-Oct-18	8:54	Cloudy	2.8	47	62	298	500
10-Oct-18	9:54	Cloudy	3.2	44	67	298	500
10-Oct-18	10:54	Rainy	1.6	344	NA*	298	500
15-Oct-18	08:46	Sunny	3.8	151	28	298	500
15-Oct-18	9:46	Sunny	6.9	90	30	298	500
15-Oct-18	10:46	Sunny	6.9	101	36	298	500
19-Oct-18	9:00	Fine	7.9	93	43	298	500
19-Oct-18	10:00	Fine	8.8	97	26	298	500
19-Oct-18	11:00	Fine	9.1	92	46	298	500
25-Oct-18	8:50	Cloudy	6.1	87	46	298	500
25-Oct-18	9:50	Cloudy	4.8	108	38	298	500
25-Oct-18	10:50	Cloudy	5.2	97	46	298	500
31-Oct-18	8:48	Sunny	5.0	28	26	298	500
31-Oct-18	9:48	Sunny	6.6	355	36	298	500
31-Oct-18	10:48	Sunny	6.7	358	34	298	500

NA*: Abnormal result, which may be caused by malfunction of monitoring equipment during inclement weather, was recorded. The measurement result was discarded after review.





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Noise Monitoring Results

Noise Measurement Results

Station: NM1A- Man Tung Road Park

	Marthan		Measured	Measured	
Date	Weather	Time	L_{10} dB(A)	L ₉₀ dB(A)	L _{eq(30mins)} dB(A)
04-Oct-18	Sunny	9:11	72.5	54.5	
04-Oct-18	Sunny	9:16	71.5	54.5	7
04-Oct-18	Sunny	9:21	73.0	56.0	74
04-Oct-18	Sunny	9:26	70.0	53.5	71
04-Oct-18	Sunny	9:31	72.0	53.5	1
04-Oct-18	Sunny	9:36	71.5	54.5	1
10-Oct-18	Fine	9:09	71.5	54.0	
10-Oct-18	Fine	9:14	72.0	54.0	1
10-Oct-18	Fine	9:19	72.5	54.0	74
10-Oct-18	Fine	9:24	71.5	53.5	71
10-Oct-18	Fine	9:29	72.5	53.5	7
10-Oct-18	Fine	9:34	72.0	53.0	7
15-Oct-18	Sunny	9:17	72.0	54.5	
15-Oct-18	Sunny	9:22	71.5	54.5	7
15-Oct-18	Sunny	9:27	70.0	51.5	70
15-Oct-18	Sunny	9:32	72.0	53.5	70
15-Oct-18	Sunny	9:37	70.5	54.5	7
15-Oct-18	Sunny	9:42	69.5	54.5	7
25-Oct-18	Sunny	9:26	72.0	53.0	
25-Oct-18	Sunny	9:31	73.0	57.0	1
25-Oct-18	Sunny	9:36	71.5	54.0	71
25-Oct-18	Sunny	9:41	72.5	55.5	7 '
25-Oct-18	Sunny	9:46	69.5	53.5	1
25-Oct-18	Sunny	9:51	72.0	53.5	1
31-Oct-18	Sunny	9:23	73.0	55.5	
31-Oct-18	Sunny	9:28	72.5	55.0	1
31-Oct-18	Sunny	9:33	72.0	54.5	72
31-Oct-18	Sunny	9:38	73.5	55.5	72
31-Oct-18	Sunny	9:43	70.0	53.5	7
31-Oct-18	Sunny	9:48	74.5	57.0	7

Remarks:

Noise Measurement Results

Station: NM4- Ching Chung Hau Po Woon Primary School

Date	Weather	Time	Measured	Measured	dB(Λ)
Date	weather	Tille	$\mathbf{L}_{10} dB(A)$	$\mathbf{L}_{90} dB(A)$	L _{eq(30mins)} dB(A)
04-Oct-18	Sunny	13:27	66.5	59.5	
04-Oct-18	Sunny	13:32	65.5	59.5	
04-Oct-18	Sunny	13:37	64.5	60.0	66
04-Oct-18	Sunny	13:42	64.5	59.0	00
04-Oct-18	Sunny	13:47	64.0	60.0	
04-Oct-18	Sunny	13:52	63.5	60.5	
10-Oct-18	Cloudy	13:48	64.0	62.0	
10-Oct-18	Cloudy	13:53	64.5	62.0	
10-Oct-18	Cloudy	13:58	65.0	62.0	66
10-Oct-18	Cloudy	14:03	64.0	61.0	7 00
10-Oct-18	Cloudy	14:08	64.0	61.5	1
10-Oct-18	Cloudy	14:13	64.0	61.0	1
15-Oct-18	Fine	14:46	63.5	59.5	
15-Oct-18	Fine	14:51	65.0	59.0	1
15-Oct-18	Fine	14:56	63.5	59.5	65
15-Oct-18	Fine	15:01	64.5	59.0	05
15-Oct-18	Fine	15:06	63.0	58.5	
15-Oct-18	Fine	15:11	63.5	59.0	
25-Oct-18	Sunny	13:50	62.5	58.5	
25-Oct-18	Sunny	13:55	63.0	58.5	
25-Oct-18	Sunny	14:00	63.0	58.5	64
25-Oct-18	Sunny	14:05	62.5	58.5	04
25-Oct-18	Sunny	14:10	62.5	58.5	
25-Oct-18	Sunny	14:15	62.5	59.0	1
31-Oct-18	Sunny	13:31	63.5	59.0	
31-Oct-18	Sunny	13:36	64.0	59.0	7
31-Oct-18	Sunny	13:41	65.0	59.5	65
31-Oct-18	Sunny	13:46	63.5	59.0	7 05
31-Oct-18	Sunny	13:51	63.5	58.5	7
31-Oct-18	Sunny	13:56	65.0	59.0	<u> </u>

Remarks:

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

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

Noise Measurement Results

Station: NM5- Village House, Tin Sum

Dete	Maathar	Time	Measured	Measured	I 4P(A)
Date	Weather	Time	$\mathbf{L}_{10} dB(A)$	L ₉₀ dB(A)	L _{eq(30mins)} dB(A)
04-Oct-18	Fine	8:47	56.0	51.0	
04-Oct-18	Fine	8:52	61.0	50.0	7
04-Oct-18	Fine	8:57	58.5	50.0	53
04-Oct-18	Fine	9:02	59.5	52.0	53
04-Oct-18	Fine	9:07	60.5	53.0	
04-Oct-18	Fine	9:12	58.0	50.5	
10-Oct-18	Fine	8:49	54.5	42.0	
10-Oct-18	Fine	8:54	50.5	42.5	
10-Oct-18	Fine	8:59	52.0	43.5	
10-Oct-18	Fine	9:04	53.5	42.5	- 55
10-Oct-18	Fine	9:09	50.5	42.5	
10-Oct-18	Fine	9:14	57.5	43.0	
15-Oct-18	Sunny	8:53	52.0	42.0	
15-Oct-18	Sunny	8:58	53.0	43.0	
15-Oct-18	Sunny	9:03	54.5	42.0	52
15-Oct-18	Sunny	9:08	51.0	43.5	52
15-Oct-18	Sunny	9:13	49.5	42.0	
15-Oct-18	Sunny	9:18	49.5	43.0	
25-Oct-18	Cloudy	9:06	56.0	49.0	
25-Oct-18	Cloudy	9:11	58.0	49.5	
25-Oct-18	Cloudy	9:16	58.0	49.5	59
25-Oct-18	Cloudy	9:21	59.5	48.5	7 59
25-Oct-18	Cloudy	9:26	56.0	49.5	
25-Oct-18	Cloudy	9:31	55.0	49.0	
31-Oct-18	Sunny	9:08	63.0	54.0	
31-Oct-18	Sunny	9:13	61.5	53.5	7
31-Oct-18	Sunny	9:18	62.0	54.0	57
31-Oct-18	Sunny	9:23	60.5	52.5	٥/
31-Oct-18	Sunny	9:28	58.0	52.5	
31-Oct-18	Sunny	9:33	58.5	52.0	

Remarks:

Noise Measurement Results

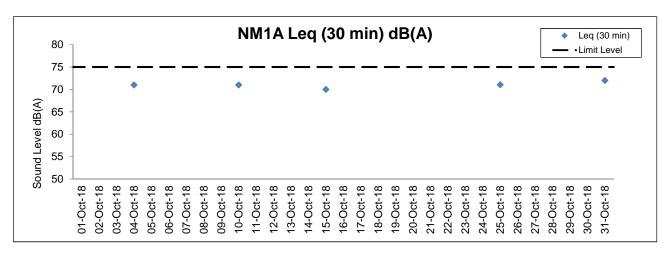
Station: NM6- House No.1 Sha Lo Wan

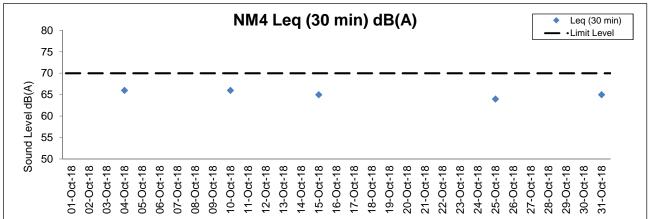
Data	Weather	Time	Measured	Measured	1 dB(A)
Date	weather	Time	$L_{10} dB(A)$	L ₉₀ dB(A)	L _{eq(30mins)} dB(A)
02-Oct-18	Sunny	9:40	76.0	58.5	
02-Oct-18	Sunny	9:45	68.5	57.0	
02-Oct-18	Sunny	9:50	74.5	56.0	70
02-Oct-18	Sunny	9:55	72.0	57.5	70
02-Oct-18	Sunny	10:00	75.5	57.0	
02-Oct-18	Sunny	10:05	71.0	55.0	
08-Oct-18	Sunny	9:44	63.0	55.5	
08-Oct-18	Sunny	9:49	72.5	55.5	
08-Oct-18	Sunny	9:54	65.0	54.0	68
08-Oct-18	Sunny	9:59	68.5	52.0	00
08-Oct-18	Sunny	10:04	71.0	53.0	
08-Oct-18	Sunny	10:09	67.5	51.5	1
19-Oct-18	Fine	9:41	63.5	54.0	
19-Oct-18	Fine	9:46	64.0	56.0	
19-Oct-18	Fine	9:51	67.0	55.0	62
19-Oct-18	Fine	9:56	72.5	61.0	02
19-Oct-18	Fine	10:01	69.5	54.0	
19-Oct-18	Fine	10:06	71.5	54.0	
23-Oct-18	Cloudy	9:52	72.5	56.5	
23-Oct-18	Cloudy	9:57	75.0	58.5	
23-Oct-18	Cloudy	10:02	72.5	59.0	68
23-Oct-18	Cloudy	10:07	69.0	55.5	00
23-Oct-18	Cloudy	10:12	68.0	52.5	
23-Oct-18	Cloudy	10:17	67.0	53.0	
29-Oct-18	Sunny	9:48	73.0	59.5	
29-Oct-18	Sunny	9:53	71.5	61.5]
29-Oct-18	Sunny	9:58	68.5	57.0	70
29-Oct-18	Sunny	10:03	74.0	60.0	70
29-Oct-18	Sunny	10:08	73.5	59.5	7
29-Oct-18	Sunny	10:13	74.0	57.0	7

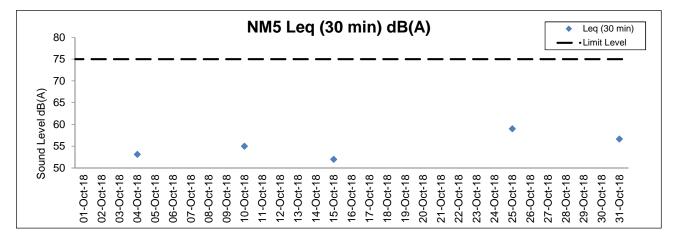
Remarks:

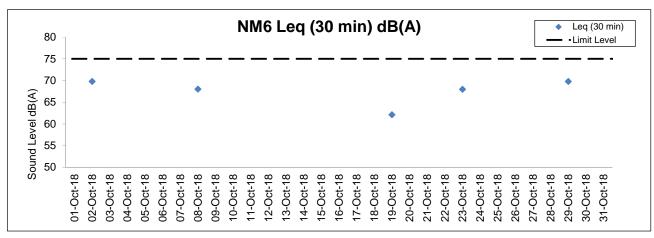
⁺³dB (A) correction was applied to free-field measurement.

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









Mott Mac	Donald Evn	ancion of Hone	a Kona Interna	ational Airport into	a Three-Runway System

Water Quality Monitoring Results

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

Water Quality Monitoring Results on 02 October 18 during Mid-Ebb Tide DO Saturation Dissolved Suspended Solids Total Alkalinity Chromium Turbidity(NTU) Sampling Water Water Temperature (°C) Salinity (ppt) Coordinate Coordinate Nickel (µg/L) Monitoring Current Speed Oxygen (mg/L) (ppm) (µg/L) Sampling Depth (m) HK Grid HK Grid Station Direction DA DA DA Value DA Value DA Condition Condition Time Depth (m) (m/s) Value Average Value Average Value Value Average Value Value Value (Northing) (Easting) Value 0.6 250 28.4 1.0 8.1 20.2 86.4 6.0 2.9 90 < 0.2 1.6 Surface 28.4 86.4 1.0 0.6 268 28.4 8.1 20.2 86.3 6.0 2.9 4 91 < 0.2 1.5 5.7 6.0 94 1.5 43 0.2 144 27.6 8.1 23.8 82.5 6 <0.2 C1 18:00 8.6 Middle 23.7 82.5 94 815594 804259 1.5 Fine Moderate 4.3 0.2 151 27.6 8.1 23.6 82.5 5.7 6.1 6 94 <0.2 1.6 7.6 0.1 281 27.7 8.2 10.1 97 <0.2 1.5 Bottom 27.7 8.2 25.9 82.8 5.6 7.6 0.1 27.7 8.2 25.9 82.8 5.6 9.9 97 <0.2 1.5 1.0 0.2 25 8.1 8.7 84 2.3 28.1 21.4 77.8 5.4 5 < 0.2 Surface 28.1 8.1 21.4 77.8 77.7 2.4 8.1 5.4 1.0 0.2 27 28.1 21.4 8.8 5 85 <0.2 2.4 6.0 87 0.2 21 27.7 23.7 5.2 6 < 0.2 8.1 74.9 9.9 23.7 74.9 825668 C2 Fine Moderate 16:54 12.0 Middle 27.7 8.1 87 806922 2.4 74.8 5.2 88 < 0.2 6.0 0.2 21 27.7 8.1 23.7 10.0 6 11.0 0.2 316 27.6 8.2 25.6 5.1 14.4 7 89 <0.2 2.3 Bottom 8.2 25.6 75.3 11.0 0.2 328 27.6 8.2 25.6 75.3 5.1 14.5 8 89 < 0.2 2.3 0.1 27.8 8.2 6.9 88 <0.2 2.5 2.4 26.7 5.5 Surface 27.8 8.2 26.7 81.1 1.0 0.1 27.8 8.2 5.5 6.9 5 88 <0.2 6.3 167 8.4 91 2.4 0.1 27.6 8.2 76.7 5.2 < 0.2 27.2 6 C3 27.2 822080 817807 Cloudy Moderate 18:36 12.6 Middle 27.6 8.2 76.8 2.5 6.3 180 8.2 76.8 5.2 0.1 27.6 27.2 8.4 6 91 < 0.2 93 2.5 11.6 0.1 279 27.4 8.2 27.9 76.9 5.2 12.9 6 < 0.2 Bottom 8.2 27.9 77.0 11.6 0.1 294 27.4 8.2 27 9 77.0 5.2 12.9 6 93 < 0.2 26 1.0 0.2 177 28.4 8.1 2.8 4 <0.2 1.6 20.2 86.5 6.0 89 Surface 28.4 8.1 20.2 86.5 1.0 8.1 86.4 6.0 89 <0.2 1.5 0.2 28.4 20.2 2.8 3 6.0 817957 -IM1 Fine Moderate 17:43 5.3 Middle 91 807133 1.5 4.3 92 <0.2 0.2 180 5.8 5.8 1.4 27.6 8.1 22.7 83.4 83.4 4.1 6 Bottom 22.7 83.4 5.8 43 0.2 183 27.6 8.1 22.7 41 4 92 <0.2 14 1.0 0.2 222 28.4 2.8 86 <0.2 1.5 8.1 20.2 6.0 20.2 86.7 Surface 1.0 0.2 243 28.4 8.1 20.2 86.6 6.0 4 86 <0.2 1.4 3.8 0.3 4.1 1.4 216 27.7 8.1 22.2 83.8 5.8 6 91 <0.2 IM2 Moderate 17:35 7.5 Middle 27.7 8.1 22.2 83.8 818147 806149 Fine 3.8 0.3 27.7 8.1 5.8 4.1 6 91 < 0.2 1.5 6.5 0.2 27.7 84.2 7.5 94 <0.2 1.4 8.1 25.4 5.8 6 Bottom 25.4 84.2 5.8 6.5 25.4 84.2 5.8 7.4 0.2 27.7 8.1 5 95 <0.2 14 1.0 0.2 233 27 87 28.4 8.1 20.2 86.6 6.0 5 <0.2 1.4 Surface 20.2 86.6 1.0 0.2 242 28.4 8.1 20.2 86.5 6.0 2.8 6 88 <0.2 1.6 4.1 0.2 27.7 3.8 90 <0.2 1.5 8.1 IM3 17:28 8.2 Middle 27.7 8.1 22.1 84.5 5.2 818782 805621 Fine Moderate 0.2 27.7 8.1 84.5 5.9 3.9 91 <0.2 1.4 7.2 0.1 149 27.8 8.9 6 95 < 0.2 1.4 8.1 25.6 84.6 5.8 5.8 8.1 25.6 84.6 Bottom 27.8 8.1 25.6 84.6 5.8 95 1.5 7.2 0.1 152 27.8 8.8 6 < 0.2 1.0 0.1 316 27.9 90 <0.2 1.5 1.4 8.2 24.0 6.0 6.2 Surface 27 9 24.0 87.1 87 N 8.2 6.0 91 < 0.2 1.0 0.1 332 27.9 24.0 6.3 6 1.4 3.9 0.1 99 27.5 8.2 26.8 5.5 20.4 6 94 <0.2 IM4 Moderate 17:19 7.8 Middle 27.5 8.2 26.8 80.8 819707 804632 Fine 3.9 0.1 106 27.5 8.2 26.8 80.8 5.5 20.5 6 95 <0.2 6.8 0.1 116 27.5 8.2 26.9 5.5 24.1 97 <0.2 1.5 27.5 81.5 Bottom 8.2 26.9 5.5 6.8 0.1 126 27.5 8.2 5.5 23.8 98 <0.2 1.3 27.9 87 1.4 0.2 8.2 24.7 86.5 5.9 7.1 6 <0.2 Surface 27.9 8.2 24.7 86.5 1.0 0.2 16 27.9 8.2 24.7 86.4 5.9 7.2 6 88 < 0.2 1.4 5.6 18.9 7 91 3.7 0.2 291 27.5 8.2 26.6 81.6 < 0.2 IM5 Fine Moderate 17:10 7.3 Middle 8.2 26.5 81.6 820734 804892 3.7 0.2 303 27.5 8.2 26.5 81.6 5.6 18.7 8 91 <0.2 1.4 26.9 81.3 6.3 0.1 88 27.5 34.6 8 97 <0.2 1.4 8.2 26.9 5.5 Bottom 27.5 8.2 81.4 5.5 8.2 81.5 5.5 34.5 98 <0.2 1.5 27.5 1.0 0.1 287 27.9 8.2 25.7 87.4 6.0 6.0 8 87 <0.2 1.4 Surface 27 9 8.2 25.7 87.4 8.2 25.7 87.4 5.9 87 <0.2 1.4 6.1 1.0 0.1 315 27.9 8 3.8 0.0 261 27.7 8.2 26.3 83.7 5.7 10.2 8 92 <0.2 1.4 IM6 17:02 7.5 Middle 26.3 83.7 821040 805808 Moderate 3.8 0.0 274 27.7 8.2 26.3 83.7 5.7 10.3 9 92 < 0.2 1.4 6.5 0.1 133 27.6 8.2 26.4 84.2 5.7 5.7 10.6 12 94 <0.2 1.4 26.4 84.2 Rottom 6.5 0.1 139 27.6 8.2 26.4 84.2 10.5 11 95 < 0.2 1.5 1.0 0.0 267 28.4 8.1 20.2 86.3 6.0 2.9 10 86 <0.2 1.4 20.2 86.3 Surface 28.4 8.1 1.0 0.0 271 28.4 8.1 20.2 86.3 6.0 2.9 9 87 < 0.2 1.4 1.5 1.4 3.8 10 91 < 0.2 4.3 0.3 27.7 8.1 22.1 84.4 5.9 IM7 Fine Moderate 16:55 8.5 Middle 22.1 84.4 91 821343 806836 4.3 0.3 82 84.4 5.9 92 27.7 8.1 22.1 3.8 9 < 0.2 7.5 0.2 92 27.8 8.2 25.7 85.2 5.8 8.0 13 94 < 0.2 1.3 25.7 85.2 5.8 7.5 0.2 93 27.8 8.1 25.7 85.2 5.8 8.0 14 95 < 0.2 1.3 20.5 87.1 1.0 0.1 97 28.2 8.1 8.9 83 <0.2 2.1 Surface 28.2 8.1 87.1 8.1 20.5 87.0 6.1 8.9 84 <0.2 2.1 0.1 28.2 6 2.1 2.1 2.1 4.0 0.3 63 5.9 12.2 88 28.0 8.2 23.7 86.2 8 < 0.2 23.7 821825 IM8 Fine Moderate 17:20 8.0 Middle 28.0 8.2 86.2 13.0 87 808126 2.1 8.2 23.7 86.2 5.9 12.3 88 <0.2 40 0.4 65 28.0 8 9 7.0 80 89 0.3 27.8 8.2 25.6 85.7 5.8 17.8 <0.2 Bottom 25.6 85.7 7.0 0.3 85 27.8 10 90 < 0.2 2.1

DA: Depth-Average

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

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

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

Water Quality Monitoring Results on 02 October 18 during Mid-Ebb Tide Suspended Solids DO Saturation Dissolved otal Alkalinity Chromium Turbidity(NTU) Nickel (µg/L) Sampling Water Water Temperature (°C) Salinity (ppt) Coordinate Coordinate Monitoring Current (ppm) (µg/L) Speed Oxygen (mg/L) Sampling Depth (m) HK Grid HK Grid Station Direction DA DA DA Value DA Value DA Condition Condition Time Depth (m) (m/s) Value Average Value Average Value Value Average Value Value Value (Northing) (Easting) Value 0.3 27.9 8.2 10.6 1.0 82 21.9 83.9 5.8 84 < 0.2 2.2 Surface 27.9 8.2 21.9 83.9 1.0 8.2 21 9 0.3 88 27 9 83.9 5.8 10.7 q 84 < 0.2 2.2 5.7 87 3.7 0.2 8.2 16.5 2.1 83 27.7 23.7 82.8 8 <0.2 IM9 Moderate 17:27 7.4 Middle 8.2 23.7 82.9 15.2 87 822089 808839 2.2 Fine 3.7 0.2 90 27.7 8.2 23.7 82.9 5.7 16.7 9 87 <0.2 2.0 6.4 0.2 88 27.7 8.2 24.4 18.3 10 89 <0.2 2.2 24.4 Bottom 27.7 8.2 85.4 5.9 6.4 0.3 27.7 8.2 24.4 85.4 5.9 18.3 10 89 <0.2 2.2 1.0 0.2 55 8.2 6.0 9.3 4 85 2.2 28.0 21.4 86.2 < 0.2 Surface 28.0 8.2 21.4 86.2 2.1 8.2 86.1 6.0 1.0 0.2 57 28.0 21.4 9.4 5 84 <0.2 2.0 353 87 3.5 0.2 8.3 83.7 5.7 13.6 5 < 0.2 27.9 23.9 23.9 83.7 822399 IM10 Fine Moderate 17:34 6.9 Middle 27.9 8.3 13 1 87 809781 2.1 23.9 83.6 5.7 13.7 87 < 0.2 3.5 0.2 356 27.9 8.3 5 5.9 0.2 301 27.7 8.2 25.0 82.2 5.6 16.2 6 89 <0.2 2.1 Bottom 27.7 8.2 25.0 82.2 5.9 0.2 314 27.7 8.2 25.0 82.2 5.6 16.2 6 90 < 0.2 2.3 0.2 27.7 8.2 10.5 86 <0.2 2.1 25.2 5.4 Surface 27.7 8.2 25.2 79.5 1.0 0.2 27.7 8.2 25.2 5.4 10.5 6 86 <0.2 3.8 310 5.4 11.5 90 2.1 0.2 27.6 8.2 78.4 7 < 0.2 25.5 25.5 822051 811487 IM11 Fine Moderate 17:45 7.6 Middle 27.6 8.2 78.4 2.1 3.8 8.2 25.5 5.4 90 0.2 314 27.6 78.4 11.5 7 < 0.2 92 2.1 6.6 0.1 291 27.6 8.2 26.3 77.3 5.3 12.4 8 < 0.2 Bottom 8.2 26.3 77.3 7 6.6 0.1 319 27.6 8.2 26.3 77.2 5.3 12.4 93 < 0.2 2.0 1.0 0.1 109 27.7 8.2 25.1 81.2 10.0 6 86 <0.2 2.0 25.1 5.6 Surface 27.7 8.2 81.2 1.0 0.1 8.2 25.1 81.2 5.6 10.1 86 <0.2 2.0 27.7 2.0 5.1 0.1 226 27.5 8.2 25.6 76.8 5.3 15.4 7 90 <0.2 27.5 25.6 76.8 821474 IM12 Cloudy Moderate 17:54 10.2 Middle 8.2 15.0 89 812039 2.0 5.1 0.1 8.2 25.6 76.8 5.3 15.4 7 89 <0.2 2.0 241 27.5 9.2 2.0 7 92 < 0.2 0.1 227 27.5 8.2 25.7 77.8 5.3 5.3 19.6 Bottom 27.5 25.7 77.9 5.3 92 0.1 227 27.5 8.2 25.7 77.9 19.5 8 92 <0.2 2.0 1.0 0.3 353 27.9 5.8 7.5 87 <0.2 2.1 8.3 25.1 25.1 85.5 Surface 8.3 1.0 0.4 325 27.9 8.3 5.8 7.5 7 88 <0.2 5.8 -SR2 Cloudy Moderate 18:20 4.8 Middle 89 821470 814184 2.1 <0.2 3.8 0.3 349 27.9 5.8 8.3 90 2.0 8.3 25.3 85.6 8 Bottom 27.9 8.3 25.3 85.7 5.8 3.8 0.3 359 8.3 25.3 85.7 5.8 27 9 8.2 8 91 21 <0.2 1.0 108 10.5 0.1 28.2 8.2 20.2 83.3 5.8 6 Surface 8.2 20.2 83.3 1.0 0.1 116 28.2 8.2 20.2 83.3 5.8 10.6 4.6 0.2 52 27.7 8.2 5.7 15.5 6 82.5 SR3 Fine Moderate 17:15 9.2 Middle 27.7 8.2 25.0 82.5 822152 807597 4.6 0.2 27.7 8.2 25.1 82.4 5.6 15.6 8.2 0.2 57 27.6 8.2 5.6 20.6 25.7 82.2 8 5.6 27.6 8.2 25.7 82.3 Bottom 8.2 5.6 25.7 82.3 8.2 0.2 61 27.6 20.6 9 1.0 0.3 65 28.4 3.0 8.1 20.1 86.2 6.0 8 Surface 28.4 20.1 86.2 6.0 8.1 86.1 1.0 0.3 70 28.4 20.1 3.0 7 4.2 0.4 71 27.6 8.1 22.5 82.6 5.7 5.2 8 SR4A Fine 18:22 8.4 Middle 8.1 22.5 82.6 817195 Calm 4.2 0.4 73 27.6 8.1 22.5 82.6 5.7 5.3 9 7.4 0.3 27.7 8.1 25.7 5.6 8.6 27.7 25.7 82.7 Bottom 8.1 5.6 7.4 0.3 70 27.7 8.1 25.7 82.7 5.6 8.5 11 1.0 290 28.4 2.7 0.1 8.1 20.2 86.5 6.0 6 Surface 28.4 8.1 20.2 86.5 1.0 0.1 310 8.1 20.2 86.5 6.0 2.7 7 28.4 6.0 SR5A Fine Calm 18:35 3.8 Middle 816596 810679 2.8 0.1 322 27.7 8.1 2.9 8 22.2 5.9 Bottom 27.7 8.1 22.2 84.3 5.9 0.1 344 8.1 84.3 5.9 2.9 27.7 22.2 1.0 0.0 43 28.4 8.1 20.2 86.7 6.0 2.6 6 Surface 28.4 8.1 20.2 86.7 0.0 8.1 86.7 6.0 1.0 43 20.2 2.6 28.4 7 6.0 SR6 18:58 4.3 Middle 817923 814673 Calm 3.3 0.0 27.8 8.1 22.1 5.9 2.6 85.4 22.0 85.4 Rottom 8.1 5.9 3.3 0.0 18 27.8 8.1 22.0 85.4 5.9 2.6 7 1.0 0.2 82 27.7 8.2 26.6 78.1 5.3 7.8 5 Surface 27.7 26.6 78.1 8.2 78.0 1.0 0.2 83 27.7 8.2 26.6 5.3 7.8 5 5.2 325 8.5 8.2 0.1 27.5 8.2 27.7 75.0 5.1 5 SR7 Cloudy Moderate 18:58 16.4 Middle 8.2 27.7 75.0 823609 823749 8.2 0.1 8.2 27.7 5.1 350 27.5 75.0 8.4 5 15.4 0.1 178 27.5 8.2 28.1 77.3 5.2 9.6 6 Bottom 8.2 28.1 77.3 5.2 15.4 0.1 180 27.5 8.2 28.1 77.3 5.2 9.7 6 1.0 27.8 8.3 24.6 82.5 10.7 Surface 27.8 8.3 24.6 82.5 1.0 27.8 8.3 24.6 82.4 5.7 10.7 5 5.7 SR8 Cloudy Moderate 18:05 5.3 Middle 12.0 820519 811660 4.3 27.5 8.2 25.5 80.3 5.5 13.2 6 Bottom 27.5 8.2 25.5 80.4 5.5 13 27.5 8.2

DA: Depth-Averaged

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

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

Note: Access to SR8 was blocked by barge. The monitoring at SR8 was slightly shifted to the closest safe and accessible location temporarily.

Water Quality Monitoring 02 October 18 during Mid-Flood Tide

Water Qua	lity Monite	oring Resu	Its on		02 October 18	during Mid-		de																				
Monitoring	Weather	Sea	Sampling	Water	Sampling De	oth (m)	Current Speed	Current	Water Ter	mperature (°C)	F	Н	Salir	nity (ppt)		aturation (%)	Disso Oxy		Turbidity(NTU)	Suspende (mg/		Total Alkalinity (ppm)	Coordinate HK Grid	Coordinate HK Grid	Chrom (µg/		el (µg/L)
Station	Condition	Condition	Time	Depth (m)			(m/s)	Direction	Value	Average		Average		Average		Average	Value	DA	Value	DA	Value	DA	Value DA	(Northing)	(Easting)			DA DA
					Surface	1.0	0.7	31 31	27.5 27.5	27.5	8.2	8.2	25.7 25.7	25.7	86.5 86.5	86.5	5.9 5.9		7.4 7.5	-	9		86 86			<0.2	1.2	-
C1	Fine	Moderate	12:40	8.7	Middle	4.4	0.4	27	27.4	27.4	8.2	8.2	27.3	27.3	84.9	84.9	5.8	5.9	12.9	12.7	9	9	94 02	815608	804275	<0.2	1.3	14
					D-#	4.4 7.7	0.4	29 28	27.4 27.4	07.4	8.2 8.2		27.3 28.7	00.7	84.9 85.1	05.4	5.8 5.7		12.9 17.7	F	9		96 98			<0.2	1.3	
					Bottom	7.7 1.0	0.3	30 16	27.4 28.3	27.4	8.2 8.1	8.2	28.7	28.7	85.1 78.2	85.1	5.7 5.4	5.7	17.6 9.9		10 5		100 84			<0.2	1.5 1.2	
					Surface	1.0	0.1	16	28.3	28.3	8.1	8.1	20.6	20.6	78.1	78.2	5.4	5.3	9.9		5		84			< 0.2	1.2	
C2	Fine	Moderate	14:42	12.1	Middle	6.1	0.2	20 20	27.7 27.7	27.7	8.2 8.2	8.2	23.6	23.6	74.9	74.8	5.2		15.5 15.8	15.8	5 6	6	87 87	825687	806925	<0.2	<0.2	
					Bottom	11.1 11.1	0.2	329 350	27.6 27.6	27.6	8.2 8.2	8.2	26.3 26.3	26.3	73.8 74.0	73.9	5.0	5.0	21.7 21.7	Ī	8		91 92			<0.2	1.5 1.5	
					Surface	1.0	0.5	262	27.6	27.6	8.2	8.2	25.4	25.4	77.5	77.4	5.3		7.7		4		86			<0.2	1.4	
	_					1.0 5.5	0.5	279 260	27.6 27.5		8.2 8.2		25.5 26.6		77.3 73.5		5.3 5.0	5.2	7.7 9.5		5		91 00			<0.2	1.4	-
C3	Fine	Moderate	12:51	11.0	Middle	5.5	0.5	268	27.5	27.5	8.2	8.2	26.6	26.6	73.5	73.5	5.0		9.5	9.3	5	6	91 93	822134	817790	<0.2	<0.2	1.3
					Bottom	10.0 10.0	0.3	260 269	27.5 27.5	27.5	8.2 8.2	8.2	26.8	26.8	73.9 73.9	73.9	5.0	5.0	10.6 10.6	-	9		93			<0.2	1.3	
					Surface	1.0	0.2	1	27.6 27.6	27.6	8.2	8.2	25.0 25.0	25.0	89.3 89.3	89.3	6.1		11.7 11.7		10 11		87 87			<0.2	1.5	
IM1	Fine	Moderate	12:57	5.1	Middle	-	-	-	-	-	-	-	-		-	-	-	6.1	-	11.1	-	11	- 89	817946	807108	-	<0.2	1.5
					Bottom	4.1	0.2	343	27.7	27.7	8.2	8.2	26.0	26.0	92.6	92.6	6.3	6.3	10.5	-	12		90			<0.2	1.4	
						4.1 1.0	0.2	316 23	27.7 27.6		8.2		26.0 25.4		92.6 87.3		6.3	0.5	10.5 7.1		12 5		91 86			<0.2	1.4	
					Surface	1.0	0.4	23	27.6	27.6	8.2	8.2	25.4	25.4	87.3	87.3	6.0	5.9	7.2	į	5		87			<0.2	1.5	
IM2	Fine	Moderate	13:04	7.7	Middle	3.9	0.4	27 28	27.5 27.5	27.5	8.2	8.2	26.4 26.4	26.4	84.5 84.5	84.5	5.8 5.8		13.4 13.4	14.3	5 5	5	90 91 90	818158	806177	<0.2	<0.2	
					Bottom	6.7 6.7	0.3	28 29	27.5 27.5	27.5	8.2 8.2	8.2	26.8 26.8	26.8	88.5 88.7	88.6	6.0	6.0	22.3 22.2	Ī	6		94 94			<0.2	1.4	
					Surface	1.0	0.3	43	28.0	28.0	8.2	8.2	24.7	24.7	88.7	88.6	6.1		7.1		4		87			<0.2	1.3	
IM3	Ei	Madaata	13:10	7.8		1.0 3.9	0.4	46 31	28.0 27.5	27.5	8.2 8.2	8.2	24.7 26.9	26.9	88.5 81.3	81.3	6.0 5.5	5.8	7.2 10.1	10.6	5 7	7	90 91	818765	805617	<0.2	<0.2	
IIVI3	Fine	Moderate	13:10	7.8	Middle	3.9 6.8	0.3	34 26	27.5 27.5		8.2 8.2		26.9 27.0		81.3 83.7		5.5 5.7		10.3 14.3	10.6	8	,	90 91	818765	805617	<0.2	1.3	
					Bottom	6.8	0.2	26	27.5	27.5	8.2	8.2	27.0	27.0	83.8	83.8	5.7	5.7	14.3		9		95			<0.2	1.4	
					Surface	1.0	0.4	359 330	27.7 27.7	27.7	8.2	8.2	25.2 25.2	25.2	85.1 85.0	85.1	5.8 5.8		8.1 8.2	-	7		86 86			<0.2	1.3	
IM4	Fine	Moderate	13:24	7.3	Middle	3.7	0.4	359 330	27.5 27.5	27.5	8.2 8.2	8.2	26.8 26.8	26.8	81.8 81.8	81.8	5.6 5.6	5.7	12.6 12.6	13.5	7	8	91 91	819753	804598	<0.2	<0.2	13
					Bottom	6.3	0.3	352	27.5	27.5	8.2	8.2	26.9	26.9	84.5	84.6	5.8	5.8	19.8		8		94			<0.2	1.3	
						6.3 1.0	0.3	324	27.5 27.9		8.2		26.9		84.7 86.6		5.8	0.0	19.9 7.0		8 5		95 88			<0.2	1.4	
					Surface	1.0	0.5	-	27.9	27.9	8.2	8.2	24.8	24.7	86.5	86.6	5.9	5.8	7.2		4		88			<0.2	1.4	
IM5	Fine	Moderate	13:32	7.6	Middle	3.8	0.5 0.5	356 358	27.5 27.5	27.5	8.2	8.2	26.6 26.6	26.6	82.5 82.5	82.5	5.6 5.6		14.3 14.2	12.8	6 5	5	91 91	820729	804874	<0.2	<0.2	1.3
					Bottom	6.6	0.3	358 329	27.5 27.5	27.5	8.2	8.2	26.9 26.9	26.9	84.7 84.8	84.8	5.8	5.8	17.2 17.1	-	6		94 95			<0.2	1.3	-
					Surface	1.0	0.3	49	27.9	27.9	8.2	8.2	25.6 25.6	25.6	88.2 88.1	88.2	6.0		6.0		5		88 89			<0.2	1.4	
IM6	Fine	Moderate	13:40	7.4	Middle	1.0 3.7	0.3	52 38	27.9 27.7	27.7	8.2 8.2	8.2	26.2	26.2	84.3	84.3	6.0 5.7	5.9	6.1 10.3	10.2	6	7	91 91	821052	805844	<0.2	<0.2	
livio	Fille	Moderate	13.40	7.4		3.7 6.4	0.2	38 16	27.7 27.6		8.2 8.2		26.2 26.5	-	84.3 85.6		5.7 5.8		10.4 14.1	10.2	7 8	,	91 91	021052	003044	<0.2	1.4	
					Bottom	6.4	0.2	17	27.6	27.6	8.2	8.2	26.5	26.5	85.7	85.7	5.8	5.8	14.1		8		95			<0.2	1.5	
					Surface	1.0	0.0	239 244	28.4 28.4	28.4	8.1	8.1	20.2	20.2	86.5 86.5	86.5	6.0		2.8		5 6		87 88			<0.2	1.5 1.5	-
IM7	Fine	Moderate	13:49	8.6	Middle	4.3 4.3	0.1	287 303	27.7 27.7	27.7	8.1 8.1	8.1	22.1	22.1	84.4 84.4	84.4	5.9 5.9	6.0	3.4 3.4	4.8	8	8	94 93	821375	806840	<0.2	<0.2	
					Bottom	7.6	0.1	101	27.8	27.8	8.2	8.2	25.7	25.7	88.3	88.3	6.0	6.0	8.2	-	9		95 97			< 0.2	1.5	
			1			7.6 1.0	0.1	105 25	27.8 28.1		8.2 8.1		25.7		88.3 85.4		6.0	0.0	8.2 8.1		9		97 83	1		<0.2	1.7	
					Surface	1.0	0.0	26	28.1	28.1	8.1	8.1	20.3	20.3	85.4	85.4	6.0	6.0	8.1	Į	6		84			<0.2	1.4	
IM8	Fine	Moderate	14:16	7.8	Middle	3.9 3.9	0.1	74 75	27.9 27.9	27.9	8.2	8.2	21.9	21.9	85.8 85.9	85.9	6.0		9.9 9.9	10.0	6	6	87 87	821856	808145	<0.2	<0.2	1.4
					Bottom	6.8 6.8	0.2	56 57	27.8 27.8	27.8	8.2 8.2	8.2	23.7	23.7	87.0 87.0	87.0	6.0	6.0	12.0 11.9	Ī	7 6		90 90			<0.2	1.4	
DA: Donth Avor					1	0.0	1 0.2	- 01	21.0		0.2		20.1		07.0		0.0		11.5		U		_ JU	1	1	1 70.2		

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 02 October 18 during Mid-Flood Tide Suspended Solids DO Saturation Dissolved otal Alkalinity Chromium Turbidity(NTU) Nickel (µg/L) Sampling Water Water Temperature (°C) Salinity (ppt) Coordinate Coordinate Monitoring Current (ppm) Speed Oxygen (mg/L) (µg/L) Sampling Depth (m) HK Grid HK Grid Station Direction DA DA DA Value DA Value DA Condition Condition Time Depth (m) (m/s) Value Average Value Average Value Average Value Value Value (Northing) (Fasting) Value 0.2 27.9 8.1 1.0 63 21.1 86.0 6.0 8.3 84 < 0.2 1.3 Surface 8.1 21.0 86.1 1.0 0.2 63 27 9 8.1 21.0 86 1 6.0 8.2 84 < 0.2 1.4 1.4 3.7 0.1 8.2 6.0 9.6 86 34 27 9 22.2 86.4 8 <0.2 IM9 Moderate 14:09 7.3 Middle 8.2 22.2 86.4 86 822084 808801 1.4 Fine 3.7 0.2 27.9 8.2 22.2 86.3 6.0 9.7 9 86 <0.2 1.3 6.3 0.1 291 27.8 8.2 10.8 10 88 <0.2 1.4 23.8 Bottom 27.8 8.2 86.0 5.9 6.3 0.1 27.8 8.2 23.8 86.0 5.9 10.8 10 89 <0.2 1.3 1.0 0.3 345 8.3 23.3 23.3 5.9 11.1 85 1.4 28.0 < 0.2 Surface 28.0 8.3 86.3 86.3 8.3 23.3 5.9 1.4 1.0 0.3 317 28.0 11.1 8 85 <0.2 4.0 0.4 305 27.7 8.2 24.3 84.0 5.8 13.1 7 88 < 0.2 1.4 24.3 84.0 822407 IM10 Moderate 14:01 7.9 Middle 27.7 8.2 147 88 809782 8.2 24.3 84.0 5.8 88 < 0.2 4.0 0.4 320 27.7 13.3 8 297 6.9 0.3 27.5 8.2 24.7 82.8 5.7 19.6 8 91 <0.2 1.4 24.7 82.8 Bottom 8.2 6.9 0.3 310 27.5 8.2 24.7 82.8 5.7 19.7 8 91 < 0.2 1.3 0.4 27.8 8.2 86 <0.2 1.3 25.1 5.6 Surface 27.8 8.2 25.1 82.0 1.0 0.4 302 27.8 8.2 5.6 11.5 10 87 <0.2 1.4 3.6 0.3 307 12.5 11 89 1.4 27.7 8.2 5.6 < 0.2 25.1 81.6 25.1 822062 811479 IM11 Fine Moderate 13:49 7.2 Middle 27.7 8.2 81.6 10 3.6 310 8.2 5.6 < 0.2 1.4 0.4 27.7 25.1 81.5 12.5 10 89 10 92 1.6 6.2 0.3 316 27.6 8.2 25.3 81.9 5.6 15.4 < 0.2 Bottom 25.3 82.0 6.2 0.3 330 27.6 8.2 25.3 82.0 5.6 15.4 10 92 < 0.2 1.5 1.0 0.3 267 27.7 8.2 25.1 81.2 13.8 10 87 <0.2 1.5 25.1 5.6 Surface 8.2 81.2 1.0 0.3 8.2 25.1 5.6 13.9 87 <0.2 1.5 27.7 9 1.4 5.0 0.3 271 27.5 8.2 25.3 79.8 5.5 16.7 10 89 <0.2 27.5 25.3 79.9 17.3 821443 IM12 Fine Moderate 13:42 qq Middle 8.2 10 90 812068 5.0 8.2 25.3 79.9 5.5 17.1 11 90 <0.2 1.4 0.3 287 27.5 8.9 5.5 5.5 11 1.4 0.3 264 27.5 8.2 25.3 80.8 21.4 92 < 0.2 Bottom 25.3 89 0.3 274 27.5 8.2 25.3 80.8 20.9 11 92 <0.2 14 1.0 0.3 314 27.7 24.9 84.3 5.8 12.0 85 <0.2 1.5 8.2 Surface 24.9 84.3 8.2 1.0 0.4 319 27.7 8.2 24.9 84.2 5.8 12.1 9 85 <0.2 1.5 5.8 -SR2 Moderate 13:12 4.5 Middle 88 821456 814145 1.5 Fine 3.5 0.3 315 27.7 8.2 24.8 5.9 13.3 13 91 <0.2 1.4 85.6 Bottom 8.2 24.8 85.6 5.9 13 3.5 0.3 27.7 8.2 24.8 85.6 5.9 324 13.4 91 1.5 <0.2 1.0 0.1 28.2 8.1 20.0 83.0 5.8 8.8 Surface 20.1 83.0 1.0 0.1 53 28.2 8.1 20.1 82.9 5.8 8.8 4.7 0.1 69 27.6 8.2 5.6 13.4 8 23.4 SR3 Fine Moderate 14:22 9.3 Middle 27.6 8.2 23.4 81.3 822162 807563 4.7 27.6 8.2 23.4 81.3 13.5 8.3 0.2 51 27.5 25.0 83.3 5.7 18.7 10 8.3 25.0 83.3 5.7 27.5 8.3 Bottom 83.3 5.7 8.3 25.0 18.7 8.3 0.2 27.5 9 53 1.0 0.2 61 27.9 6.2 7.8 8 8.2 24.6 Surface 27 9 24.6 90.1 90.0 8.2 24.6 6.2 7.7 1.0 0.2 64 27.9 9 4.6 0.1 356 27.7 8.1 25.7 84.8 5.8 7.3 8 SR4A Fine Calm 12:17 9.2 Middle 25.7 817189 4.6 0.1 356 27.7 8.1 25.7 84.8 5.8 7.3 8 0.0 27.6 8.1 25.9 85.6 5.8 7.8 10 27.6 25.9 85.7 Bottom 8.1 5.9 8.2 0.0 40 27.6 8.1 25.9 5.9 7.8 9 1.0 0.1 250 27.7 5.5 8.1 25.4 84.5 5.8 Surface 27.7 8.1 25.4 84.5 1.0 0.1 262 27.7 8.1 84.5 5.8 5.5 6 25.4 SR5A Fine Calm 12:01 4.3 816578 810688 3.3 0.0 299 27.9 8.1 5.2 25.3 85.5 5.8 Bottom 27.9 8.1 25.3 85.5 5.8 0.0 8.1 25.3 85.5 5.8 5.2 27.9 1.0 0.1 220 27.7 8.1 25.0 84.7 5.8 4.5 5 Surface 27.7 8.1 25.0 84.7 8.1 25.0 84.6 5.8 1.0 0.1 236 27.7 4.6 6 5.8 SR6 11:38 4.6 Middle 817877 814645 Calm 3.6 0.1 232 27.7 8.1 25.1 84.0 5.8 6.0 25.1 84.0 Rottom 8.1 3.6 0.1 245 27.7 8.1 25.1 84.0 5.8 6.0 6 1.0 0.1 27.7 8.2 25.8 77.3 5.3 8.3 4 Surface 27.7 25.8 77.3 8.2 1.0 0.1 52 27.7 8.2 25.8 77.2 5.3 8.3 5 106 12.6 8.1 0.2 27.4 8.2 27.5 73.7 5.0 6 SR7 Fine Rough 12:22 16.2 Middle 27.4 27.5 73.8 823654 823728 8.1 0.3 107 8.2 27.5 73.8 5.0 7 27.4 12 7 15.2 0.3 208 27 4 8.2 28.0 74.5 5.0 14.3 7 Bottom 8.2 28.0 74.6 15.2 0.4 227 27.4 8.2 28.0 74.7 5.1 14.2 1.0 28.0 8.2 24.2 83.2 13.7 Surface 28.0 8.2 24.2 83.2 1.0 28.0 8.2 24.2 83.1 5.7 13.9 SR8 Fine Moderate 13:32 4.8 Middle 16.9 820490 811636 3.8 27.5 8.2 25.4 9 5.6 199 81.0 Bottom 27.5 8.2 25.4 81.1

8.2

a

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

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

Note: Access to SR8 was blocked by barge. The monitoring at SR8 was slightly shifted to the closest safe and accessible location temporarily.

3.8

27.5

Expansion of Hong Kong International Airport into a Three-Runway System Water Quality Monitoring Water Quality Monitoring Results on 04 October 18 during

during Mid-Ebb Tide

Number See	Water	Quality Moni	toring Resu	Its on		04 October 18	during Mid-		е																				
Column C		oring	Sea	Sampling	Water	Sampling Dep	th (m)	Current Speed		Water Ten	nperature (°C)	1	рН	Salii	nity (ppt)					Turbidity(NTU)								el (µg/L)
Color Vindence Color C	Siai	Condition	Condition	Time	Depth (m)			(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value DA	(Northing)	(Easting)	Value	DA Value	DA
Strey Notices One One						Surface					27.3		8.2		23.2		87.7											1.8	
Martin Second S		1 Sunny	Moderate	08:16	8.9	Middle	4.5	0.5	229	27.5	27.5	8.2	8.2	27.5	27.5	83.1	83.1	5.6	5.9	14.0	122		q	87	815600	804258	<0.2	-0.2 1.9	17
Secondary Moderate Moderate																						-	-	86				2.0	
Second Composition Compo						Bottom	7.9	0.3	221	27.5	27.5	8.2	8.2	27.7	27.7	85.6	85.6	5.8	5.8	18.4		10		89			<0.2	1.5	
Column C						Surface					27.5		8.0		21.1		81.8				-							1.0	
Burry Moderate CF Burry Moderate CF CF CF CF CF CF CF C	С	2 Sunny	Moderate	10:00	11.3	Middle	5.7		176	27.5	27.5	8.0	8.0		23.3		79.9	5.5	5.6	3.2	3.8		4	85	825664	806951	<0.2	-0.2 1.0	1.0
10						Pottom					27.6		9.0		27.0		75.5		E 1			_						1.0	
California Cal			1																5.1			-						0.9	
California Cal						Surface	1.0	0.3	109	27.3	27.3	7.9	7.9	27.1	27.1	80.1	80.2	5.5	5.4	1.9		5		87			<0.2	0.7	
Beston 112 0.3 0.4 776 7	С	3 Sunny	Moderate	07:45	12.2	Middle					27.4		7.9		27.6		78.8				1.8		6		822136	817807		<0.2 0.7	
Surry Moderate OS 20 O						Bottom	11.2	0.3	48	27.5	27.5	7.9	7.9	28.0	28.0	78.3	78.6	5.3	5.3	2.0		8		93			<0.2	0.7	
Miles Modernia Ge.40 4.5 Modernia						0					07.0																	0.7 1.6	
MM Surry Moderate 08:40 4:5 Mode 7: 7: 7: 7: 7: 7: 7: 7: 7: 7: 7: 7: 7:						Surrace					21.3		8.2	25.8	25.8	86.7	86.7	_	6.0									2.0	1
Max Surry Moderate Modera	IN	1 Sunny	Moderate	08:40	4.5	Middle	-		-		-	-	-	-	-	-	-	-		-	7.6		5	87	817958	807123	-	<0.2	1.6
M2 Surry Moderate 06:48 6.9 Missis 35 05 198 273 273 62 82 251 251 861 81 81 1 774 774 5 5 88 8 8 8 18152 806159 602 602 602 602 602 602 602 602 602 602						Bottom					27.4		8.2		26.6		88.7		6.1									1.5	
M2 Sunny Moderate 0848 6.9 Middle 35 05 198 273 73 6.2 8.5 180 171 173 15 5 6.8 87 818162 086186 402 402 402 402 402 402 402 402 402 402						Surface	1.0	0.6	207	27.3	27.3	8.2	8.2	25.1	25.1	89.1	89.1	6.1		7.4		5		85			<0.2	1.5	
Mode				00.40															6.1				_	96	040450			1.4	_
M3 Surny Moderate Moderat	IIV	2 Sunny	Moderate	08:48	6.9	Middle	3.5	0.5	215	27.3	27.3	8.2	8.2	25.5	25.5	87.2	87.2	6.0		17.3	17.5	5	5	88	818152	806158	<0.2	1.0	1.2
M3 Sunny Moderate 09:03 6.5 Moderate 09:03 6.5 Moderate 09:03 6.5 Moderate 09:03 6.5 Moderate 09:03 0.5 Moderate 09:04 Moderate 09:05 Moderate 09:05						Bottom					27.3		8.2		25.8		87.6		6.0		-	-						1.0	
Middle 3.3 0.7 206 274 274 8.2 8.2 246 246 871 871 6.0 1 14.8 13.7 8 9 88 88 88 88 88 88						Surface					27.4		8.2		24.1		87.7											1.3	
Moderate Moderate	II.	3 Sunny	Moderate	00.03	6.5	Middle	3.3	0.7	208	27.4	27.4	8.2	8.2	24.6	24.6	87.1	87.1	6.0	6.1	14.8	13.7	8	a	88 88	818808	805569	<0.2	-0.2 1.4	13
Solution S.5 O.5	"	ournly	Woderate	03.03	0.5	Wilde															10.7	-	3	88	010000	000000		1.1	
MA						Bottom	5.5	0.5	216	27.4	27.4	8.2	8.2	24.8	24.8	87.3	87.3	6.0	6.0	16.0		11		90			<0.2	1.3	
MA						Surface					27.5		8.2		24.3		86.7				H							1.9	
Bottom 5.8 0.4 229 27.5 27.5 8.2 8.2 24.7 24.7 87.7 87.7 8.0 6.0 6.0 13.4 11 91 89 9	IN	4 Sunny	Moderate	09:15	6.8	Middle					27.5		8.2		24.6		86.9		6.0		11.9		10		819711	804588		<0.2 2.0	
Middle Sunny Moderate O9:24 6.6 Surface 1.0 0.7 246 27.5 27.5 8.1 8.2 24.1 24.1 85.7 85.7 5.9 5.9 13.4 11 899 4.02						Pottom					27 F		0.2		24.7	_	07.7		6.0									1.2	
Moderate 09:24 6.6 Middle 3.3 0.5 242 27.5 27.5 8.1 8.1 24.1 24.1 86.7 8.7 5.9 5.9 13.4 12.6 17.5 17			1																6.0									1.4	
Moderate Moderate						Surface	1.0	0.7	262	27.5	27.5	8.1	8.1	24.1	24.1	85.7	85.7	5.9	5.9	13.4		17		86			<0.2	2.2	
Bottom S.6. O.4 2.36 2.7.4 27.4 8.2 8.2 25.0 25.0 86.8 86.8 6.0 6.0 11.2 18 90	IN	5 Sunny	Moderate	09:24	6.6	Middle					27.5		8.1		24.3		85.6				12.6		17		820711	804865		<0.2	
Moderate Number Sunny Moderate Og:35 T.3 Surface 1.0 0.8 235 27.5 27.5 8.1 8.1 22.3 22.3 86.6 86.6 6.0 6						Bottom	5.6	0.4	236	27.4	27.4	8.2	8.2	25.0	25.0	86.8	86.8		6.0	11.2	Ī	18		90			<0.2	1.6	
Middle Sunny Moderate Og:35 7.3 Middle Sunny Moderate Og:35 7.3 Middle Sunny Moderate Og:36 The color of						0					07.5	_	0.4		00.0		00.0											1.5 1.9	
Moderate 1.0						Surface					27.5		8.1	22.3	22.3		86.6		6.1			-						1.8	
Sumary Moderate Op:36 Part Op:36 O	IN	6 Sunny	Moderate	09:35	7.3	Middle					27.5		8.1		22.6		87.5				7.3		9		821088	805828		<0.2	1.8
Moderate Number						Bottom					27.5		8.1	22.8	22.8		89.9		6.3									1.7	
Moderate 09:36 7.0 Middle 3.5 0.8 239 27.5 27.5 8.1 22.2 85.9 6.0 6.0 6.0 6.0 8.5 8.5 6.2 9 9 88 88 821322 806825 0.2 0.						Surface	1.0	0.8	239	27.5	27.5	8.1	8 1	22.2	22.2	85.9	85.9	6.0		5.1		8		87			<0.2	2.2	
Mr Sunny Moderate 09:36 7.0 Middle 3.5 0.8 2.55 27.5 27.5 8.1 8.1 22.7 22.7 8.6 8.5 6.0 8.5 6.2 9 9 8.8 88 821322 808825 0.2																			6.0		-			00				2.0	7
Bottom 6.0 0.6 259 27.5 27.5 8.1 8.1 22.6 22.6 86.1 86.1 6.0 6.0 5.1 10 91 0 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0	II.	7 Sunny	Moderate	09:36	7.0	Middle	3.5	0.8	255	27.5	27.5	8.1	8.1	22.7	22.7	85.6	85.6	6.0		8.5	6.2	9	9	88	821322	806825	<0.2	1.6	1.9
Surface 1.0 0.6 182 27.5 27.5 8.0 8.0 8.0 24.5 24.5 83.2 83.2 83.2 83.2 83.2 83.2 83.2 83.2						Bottom					27.5		8.1		22.6		86.1		6.0		ŀ							1.7	
IM8 Sunny Moderate 09:28 7.4 Middle 3.7 0.4 189 27.5 27.5 8.0 8.0 25.6 25.6 83.1 83.1 5.7 5.7 2.6 3.6 5 88 88 821829 808149 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2						Surface	1.0	0.6	182	27.5	27.5	8.0	8.0	24.5	24.5	83.2	83.2	5.7		1.8	ļ	4		85			<0.2	1.0	
Sunny Moderate U9:28 7.4 Mildel 3.7 0.4 203 27.5 27.5 8.0 8.0 25.6 25.0 83.1 83.1 5.7 2.6 3.0 5 5 88 80 821829 808149 40.2 40.2 40.2	,,,	0 0	Moderate	00:20	7.4	Middle					27.5								5.7		26		F	00	924920	909440		0.9	
	IIV	Sunny	woderate	09:28	1.4							8.0									3.0		э	88	021829	006149	<0.2	<0.2 0.9 1.0	0.9
6.4 0.3 211 27.4 8.0 26.3 84.8 5.8 6.4 6 91 <0.2						Bottom	6.4	0.3	207	27.4	27.4	8.0	8.0	26.3	26.3	84.8	84.7	5.8	5.8	6.4		6		91			<0.2	0.9	

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

Water Quality Monitoring

Water Qual	lity Monit	oring Resu	lts on		04 October 18	during Mid-	Ebb Tide	е																				
Monitoring	Weather	Sea	Sampling	Water	Sampling De	oth (m)	Current Speed	Current	Water Ter	nperature (°C)	р	Н	Salin	ity (ppt)		aturation %)	Disso Oxy		Turbidity(NTU)	Suspende (mg/		Total Alkalinity (ppm)	Coordinate HK Grid	Coordinate HK Grid	Chrom (µg/		l (µg/L)
Station	Condition	Condition	Time	Depth (m)	24		(m/s)	Direction	Value	Average		Average		Average		Average	Value	DA	Value	DA	Value	DA	Value DA	(Northing)	(Easting)		DA Value	DA
					Surface	1.0	0.4 0.5	157 168	27.6 27.6	27.6	8.0	8.0	25.1 25.2	25.2	82.8 82.8	82.8	5.7 5.7	5.7	1.8 1.9		4		85 85			<0.2	1.0	
IM9	Sunny	Moderate	09:20	6.9	Middle	3.5 3.5	0.3	149 163	27.6 27.6	27.6	8.0	8.0	25.5 25.5	25.5	82.8 82.8	82.8	5.7 5.7	-	1.9 1.9	2.6	5 6	5	88 89	822078	808815	<0.2	<0.2	1.0
					Bottom	5.9 5.9	0.1 0.1	92 97	27.4 27.4	27.4	8.1 8.1	8.1	26.7 26.7	26.7	83.9 84.0	84.0	5.7 5.7	5.7	3.9 4.3		6		92 91			<0.2	1.0]
					Surface	1.0	0.6	136 141	27.7 27.7	27.7	8.0 8.0	8.0	25.3 25.3	25.3	82.8 82.7	82.8	5.7 5.7		1.3 1.4		4		86 86			<0.2	1.0	
IM10	Sunny	Moderate	09:10	7.7	Middle	3.9 3.9	0.6	132 143	27.6 27.6	27.6	8.0	8.0	26.5 26.5	26.5	80.9 80.8	80.9	5.5 5.5	5.6	4.1 4.2	5.3	4	4	89 89	822411	809766	<0.2	<0.2	1.0
					Bottom	6.7	0.4	121 126	27.5 27.5	27.5	8.0	8.0	27.1	27.1	79.4 79.5	79.5	5.4	5.4	10.1	ŀ	5		90			<0.2	1.0	
					Surface	1.0	0.7	109 117	27.5 27.5	27.5	8.0 8.0	8.0	25.8 25.8	25.8	84.8 84.7	84.8	5.8		1.0		4 4		86 86			<0.2	1.0	
IM11	Sunny	Moderate	08:53	7.8	Middle	3.9	0.5	107	27.4	27.4	8.1	8.1	26.6 26.6	26.6	83.6 83.6	83.6	5.7	5.8	7.5 7.6	6.7	3 4	4	89	822084	811477	<0.2	1.0	1.0
					Bottom	6.8	0.5	105	27.4	27.4	8.1	8.1	26.8	26.8	83.3	83.4	5.7	5.7	11.7		3		89 92			<0.2	1.0	
					Surface	6.8 1.0	0.4	113 110	27.4 27.4	27.4	8.1 8.0	8.0	26.8 26.1	26.1	83.4 85.2	85.2	5.7 5.8		11.4 3.0		3 5		91 87			<0.2	1.1 0.9	-
IM12	Sunny	Moderate	08:42	9.9	Middle	1.0 5.0	0.6 0.5	111 103	27.4 27.3	27.3	8.0 8.1	8.1	26.1 26.8	26.8	85.2 84.5	84.5	5.8 5.8	5.8	2.9 5.3	7.2	6	6	90 89	821439	812073	<0.2	<0.2	0.9
2	Cumy	Wodorato	00.12	0.0	Bottom	5.0 8.9	0.5 0.3	103 83	27.3 27.5	27.5	8.1 8.1	8.1	26.8 27.4	27.4	84.5 84.3	84.4	5.8 5.7	5.7	5.4 13.6		7	Ü	90	021100	0.2070	<0.2	1.0	- 0.0
					Surface	1.0	0.4	91 95	27.5 27.2	27.2	8.1	8.0	27.4 25.5	25.5	84.5 87.1	87.1	5.7 6.0	5.7	12.8 1.1		7		89 86			<0.2	0.8	
SR2	0	Madaas	00:44	4.4	Middle	1.0	0.6	96	27.2	21.2	8.0	0.0	25.5	25.5	87.1	07.1	6.0	6.0	1.1	4.5	4	5	85 - 89	821483	814146	<0.2	0.8	T 1
5K2	Sunny	Moderate	08:11	4.4		3.4	0.3	- 99	27.5		8.0		27.3	-	81.7		5.5		8.0	4.5	- 6	5	92	821483	814146	<0.2	<0.2	0.8
					Bottom	3.4 1.0	0.4	108 181	27.5 27.4	27.5	8.0	8.0	27.3	27.3	81.9 83.5	81.8	5.6 5.8	5.6	7.9 2.5	-	7		92			<0.2	0.8	\perp
					Surface	1.0	0.8	186 198	27.4	27.4	8.0	8.0	23.6	23.7	83.2 81.4	83.4	5.8	5.7	2.5		4		-			-	-	1
SR3	Sunny	Moderate	09:36	7.8	Middle	3.9	0.4	210 227	27.5	27.5	8.0	8.0	25.8 27.2	25.8	81.4 81.1	81.4	5.6 5.5		3.6 5.9	4.0	4 5	5	-	822126	807578			-
					Bottom	6.8	0.3	235	27.4	27.4	8.1	8.1	27.3	27.2	81.2	81.2	5.5	5.5	6.0	-	5		-			-	-	
					Surface	1.0	0.1	246 248	27.5 27.5	27.5	8.2	8.2	26.1 26.1	26.1	82.7 82.7	82.7	5.7 5.7	5.7	3.7 3.7		6		-			-	-	-
SR4A	Sunny	Moderate	07:56	8.7	Middle	4.4 4.4	0.2	227 244	27.4 27.4	27.4	8.2	8.2	27.0 27.0	27.0	82.8 82.8	82.8	5.6 5.6		6.0	5.6	6 5	6		817202	807823	-		-
					Bottom	7.7	0.1 0.1	236 256	27.5 27.5	27.5	8.2	8.2	27.5 27.5	27.5	83.8	83.8	5.7 5.7	5.7	7.1 7.1		7 6		-			-	-	-
					Surface	1.0	0.1	330 338	27.6 27.6	27.6	8.2 8.2	8.2	25.9 25.9	25.9	86.2 86.2	86.2	5.9 5.9	5.9	2.0		3		-			-	-	-
SR5A	Sunny	Moderate	07:39	3.7	Middle	-	-	-	-	-	-	-	-	-	-	-	-	5.5	-	4.3	-	4		816615	810682	-		-
					Bottom	2.7 2.7	0.0	269 284	27.7 27.7	27.7	8.1 8.1	8.1	26.2 26.2	26.2	88.5 88.5	88.5	6.0	6.0	6.6 6.6	-	4		-			-	-	-
					Surface	1.0 1.0	0.0	12 12	27.6 27.6	27.6	8.1 8.1	8.1	24.5 24.5	24.5	83.5 83.5	83.5	5.7 5.7		4.1 4.1		6 7		-			-	-	
SR6	Sunny	Moderate	07:06	4.3	Middle	-	-	-	-	-	-	-	-		-	-	-	5.7	-	4.7	-	7		817920	814667	-		1 .
					Bottom	3.3	0.1	69 73	27.8	27.8	8.1	8.1	25.4 25.4	25.4	86.0 86.0	86.0	5.9	5.9	5.2		7		-			-]
					Surface	1.0	0.7	79	27.1	27.1	7.9	7.9	27.2	27.2	82.9	82.9	5.7		1.4		4		-			-	-	
SR7	Sunny	Moderate	07:06	16.2	Middle	1.0 8.1	0.7	84 80	27.1 27.3	27.3	7.9 7.9	7.9	27.2 28.4	28.4	82.8 79.4	79.4	5.7 5.4	5.6	1.4	1.5	3	4	-	823656	823737	-	-	<u> </u>
				-	Bottom	8.1 15.2	0.4	85 15	27.3 27.3	27.3	7.9 7.8	7.8	28.4 28.8	28.8	79.4 78.7	78.8	5.4 5.3	5.3	1.4		6		-			-	-	<u> </u>
					Surface	15.2 1.0	0.2	15	27.3 27.2	27.2	7.8 8.1	8.1	28.8	25.7	78.8 88.8	88.8	5.3 6.1	0.0	1.7 1.6		6 5		-			-	-	\vdash
SR8	Cumni	Madarat-	00:22	E 4		1.0	-	-	27.2	21.2	8.1	0.1	25.7	23.1	88.8	00.0	6.1	6.1	1.6	4.1	4	5	-	820474	811654	-	-	
248	Sunny	Moderate	08:32	5.1	Middle	4.1	-	-	27.3	-	8.1	-	26.1	-	89.2	-	6.1	0.	6.5	4.1	- 6	5	-	820474	811004	-	-	1 -
					Bottom	4.1	-	-	27.3	27.3	8.1	8.1	26.2	26.1	89.4	89.3	6.1	6.1	6.7		6		-			-		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
Note: Access to SR8 was blocked by barge. The monitoring at SR8 was slightly shifted to the closest safe and accessible location temporarily.

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

Water Quality Monitoring Results on 04 October 18 during Mid-Flood Tide DO Saturation Dissolved Suspended Solids otal Alkalinity Chromium Turbidity(NTU) Sampling Water Water Temperature (°C) Salinity (ppt) Coordinate Coordinate Nickel (µg/L) Monitoring Current Speed Oxygen (mg/L) (ppm) (µg/L) Sampling Depth (m) HK Grid HK Grid Station Direction DA DA DA DA DA Condition Condition Time Depth (m) (m/s) Value Average Value Average Value Average Value Value Value Value (Northing) (Easting) Value Value 0.1 171 27.8 8.2 1.0 24.7 91.9 6.3 3.3 87 < 0.2 1.9 Surface 8.2 1.0 0.1 183 27.8 8.2 24.7 91.9 6.3 3.3 86 <0.2 1.8 6.2 4.1 0.1 127 27.4 8.2 26.1 87.6 6.0 7.5 7 88 <0.2 1.9 C1 15:35 8.1 Middle 27.4 8.2 26.1 87.6 815648 804267 Sunnv Moderate 89 0.1 132 27.4 8.2 26.1 87.6 6.0 7.5 91 <0.2 1.6 7.1 0.1 <0.2 1.8 71 27.5 8.2 26.4 90.1 6.1 7.6 8 89 Bottom 8.2 26.4 90.1 7 1 0.1 77 27.5 8.2 26.4 90.1 6.1 7.6 q 90 <0.2 1.8 1.0 170 79.5 79.4 4.4 1.7 8.0 27.7 7.9 19.5 5.6 81 <0.2 Surface 27.7 7.9 19.5 79.5 1.0 0.9 27.7 7.9 19.5 5.6 4.4 6 81 <0.2 1.6 2.1 5.4 0.2 27.6 8.0 25.4 74.3 5.1 5.2 6 88 <0.2 27.6 825701 74.3 C2 Sunnv Moderate 14:35 10.8 Middle 8.0 25.4 87 806935 2.3 5.4 0.3 188 8.0 25.4 74.2 5.1 5.2 87 < 0.2 27.6 92 9.8 0.1 224 27.6 8.0 28.3 73.9 5.0 12.3 10 <0.2 Bottom 28.3 73.9 5.0 9.8 0.1 244 27.6 8.0 28.3 73.9 5.0 12.4 8 91 <0.2 2.5 1.0 0.5 260 27.6 8.1 26.8 84.9 5.8 1.8 87 <0.2 2.5 26.8 84.8 1.0 0.5 270 27.6 8.1 26.8 84.7 5.8 1.7 86 <0.2 2.4 5.8 0.5 2.6 2.5 27.5 8.1 27.2 79.6 5.4 3 88 <0.2 C3 16:20 Middle 27.5 8.1 27.3 79.5 822138 817799 25 11.6 Sunny Moderate 79.3 2.5 5.8 8.1 27.3 5.4 89 <0.2 0.5 282 27.5 2.6 4 10.6 0.4 265 27.6 5.0 4 92 < 0.2 2.6 8.0 28.8 74.6 6.4 Bottom 27.6 8.0 28.8 74.7 5.0 74.7 5.0 10.6 8.0 28.8 6.6 0.4 266 27.6 92 <02 24 1.0 0.2 21 27.7 87 1.8 8.2 26.0 6.0 8.3 <0.2 Surface 27.7 26.0 87.7 1.0 0.2 23 27.7 8.2 26.0 87.7 6.0 8.3 4 88 <0.2 817931 IM1 15:16 Middle 89 807147 Sunny Moderate 4.9 3.9 0.2 15 27.5 5.9 12.8 89 <0.2 1.8 8.2 26.3 87.0 6 Bottom 27.5 8.2 26.3 87.0 5.9 87.0 3.9 0.2 27.5 8.2 26.3 5.9 12.8 92 1.7 16 7 < 0.2 1.0 0.2 213 27.6 85 8.3 24.8 89.6 6.2 8.4 <0.2 2.0 Surface 24.8 1.0 220 89.6 6.2 7 86 <0.2 1.9 0.2 27.6 8.3 24.8 8.4 3.3 0.1 254 27.4 8.3 25.6 86.9 6.0 10.7 7 87 < 0.2 2.0 25.6 86.9 818188 806157 IM2 Moderate 15:08 6.6 Middle 8.3 Sunny 1.8 3.3 0.1 271 27.4 8.3 25.6 86.9 6.0 10.7 8 88 <0.2 5.6 0.1 358 27.4 8.2 25.8 25.8 87.2 87.2 11.3 8 89 <0.2 1.8 6.0 Bottom 27.4 8.2 87.2 6.0 5.6 329 8.2 25.8 6.0 11.3 91 <0.2 1.8 0.1 27.4 1.0 0.4 222 27.7 85 2.1 6.2 6.7 9 <0.2 8.1 23.2 89.0 27.7 23.2 89.0 Surface 8.1 8.1 23.2 89.0 6.2 6.7 87 < 0.2 1.0 0.4 240 27.7 9 2.1 3.7 0.3 227 27.5 8.2 24.5 88.7 6.1 12.0 8 89 <0.2 Moderate 15:01 7.3 24.5 88.7 818770 805573 Sunny 3.7 0.3 234 27.5 8.2 24.5 88.7 6.1 12.0 8 90 < 0.2 6.3 0.2 13.3 10 91 <0.2 1.8 27.4 8.2 24.8 6.2 Bottom 27.4 8.2 24.8 89.3 6.2 6.3 0.2 27.4 8.2 24.8 6.2 13.3 < 0.2 2.0 2.0 0.4 27.5 8.1 22.6 86.0 6.0 15.7 11 86 <0.2 Surface 27.5 8.1 22.6 86.0 1.0 0.4 248 8.1 22.6 6.0 15.7 11 85 < 0.2 27.5 86.0 3.4 0.2 230 27.5 8.1 23.6 85.3 5.9 19.0 14 89 < 0.2 2.2 IM4 Moderate 14:52 6.7 Middle 23.6 85.3 13 89 819751 804621 2.0 3.4 0.2 236 27.5 8.1 23.6 85.3 5.9 19.0 13 89 < 0.2 2.0 5.7 0.1 260 27.5 8.1 24.4 5.9 18.5 15 92 <0.2 2.0 24.4 Bottom 8.1 86.1 5.7 0.1 264 27.5 8.1 24.4 86.1 5.9 18.5 15 90 <0.2 2.0 23.4 84.8 1.0 0.6 250 2.4 27.6 8.1 5.9 11.4 8 86 <0.2 84.8 Surface 27.6 8.1 2.2 2.3 2.2 1.0 0.7 271 27.6 8.1 23.4 84.8 5.9 11.4 86 <0.2 8 3.4 0.5 236 5.8 15.2 9 89 <0.2 27.5 8.1 24.4 84.7 IM5 Sunny Moderate 14:44 6.8 Middle 24.4 84.7 13.3 89 820736 804867 2.2 8.1 84 7 5.8 91 0.5 24.4 15.2 3.4 258 27.5 8 25.3 91.6 5.8 0.4 210 27.6 8.1 25.3 6.3 13.3 12 91 <0.2 2.0 Bottom 2.2 5.8 0.4 211 27.6 8.1 25.3 6.3 13.3 12 90 < 0.2 247 27.7 8.1 23.0 5.9 6.6 <0.2 2.4 Surface 27.7 8.1 23.0 84 9 1.0 0.7 264 27.7 8.1 23.0 84.9 5.9 6.6 86 <0.2 2.5 3.4 0.7 248 27.6 8.1 23.1 6.0 8.7 88 < 0.2 87.1 8 27.6 8.1 23.1 87.1 821070 IM6 Sunny Moderate 14:38 6.7 Middle 88 805803 2.2 3.4 0.7 253 8.1 23.1 87.1 6.0 8.7 8 88 < 0.2 27.6 5.7 0.5 8.2 91 <0.2 19 248 27.7 8 1 23.1 91.3 6.3 8 Bottom 23.1 91.3 6.3 5.7 < 0.2 0.6 250 27.7 8.1 23.1 013 6.3 8.2 a 90 10 21.2 85.0 8.1 1.0 0.7 238 27.8 21.2 5.9 3.6 85 <0.2 3.4 Surface 27.8 8.1 85.0 1.0 0.7 256 27.8 8.1 21.2 85.0 5.9 3.6 87 < 0.2 3.2 3.2 0.7 252 27.7 8.1 22.2 85.6 6.0 5.7 4 90 <0.2 3.0 IM7 14:31 6.4 27.7 8.1 22.2 85.6 821348 806820 2.8 Sunny Moderate Middle 5.0 88 8.1 85.6 6.0 88 <0.2 2.5 3.2 22.2 5.7 0.7 260 27.7 3 2.5 5.4 0.5 260 27.7 8.1 22.2 85.8 6.0 5.8 5 91 < 0.2 8.1 22.2 85.8 6.0 Bottom 27.7 8.1 85.8 6.0 5.8 < 0.2 5.4 0.5 280 27.7 89 1.0 0.4 195 27.7 8.0 22.2 83.7 5.8 2.8 83 < 0.2 2.5 Surface 22.2 1.0 0.5 200 27.7 8.0 22.3 83.6 5.8 2.8 4 84 <0.2 2.3 3.4 0.3 207 2.9 86 2.4 27.7 8.0 23.4 83.5 5.8 4 <0.2 821826 14:57 23.4 83.5 808130 IM8 Sunny Moderate 6.8 Middle 27.7 8.0 86 2.4 2.4 3.4 0.4 213 27.7 8.0 23.4 83.5 5.8 2.9 4 86 <0.2 5.8 0.2 232 27.6 8.0 83.9 5.8 4.3 4 88 < 0.2 2.5 24.2 27.6 8.0 24.2 Rottom 84.0 5.8 5.8 0.2 246 27.6 84.0

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

Water Quality Monitoring

Water Qual	ity Monite	oring Resu	lts on		04 October 18	during Mid-	Flood Ti	ide																				
Monitoring	Weather	Sea	Sampling	Water	Sampling De	oth (m)	Current Speed	Current	Water Ten	nperature (°C)	р	Н	Salin	ity (ppt)		aturation %)	Disso		Turbidity(NTU)	Suspende (mg/		Total Alkalinity (ppm)	Coordinate HK Grid	Coordinate HK Grid	Chron (µg/		l (µg/L)
Station	Condition	Condition	Time	Depth (m)			(m/s)	Direction	Value	Average	Value	Average		Average		Average	Value	DA	Value	DA	Value	DA	Value DA	(Northing)	(Easting)		DA Value	DA
					Surface	1.0	0.3	207 222	27.7 27.7	27.7	8.0	8.0	22.3	22.3	84.8 84.8	84.8	5.9 5.9	5.9	2.6 2.6	-	3		84 84			<0.2	2.4	-
IM9	Sunny	Moderate	15:04	6.5	Middle	3.3	0.2	255 274	27.7 27.7	27.7	8.0	8.0	23.8	23.8	84.1 84.2	84.2	5.8	0.0	2.4	2.5	3	3	85 86 86	822112	808835	<0.2	<0.2	
					Bottom	5.5 5.5	0.2	283 308	27.6 27.6	27.6	8.0	8.0	24.1	24.0	85.4 85.7	85.6	5.9 5.9	5.9	2.6 2.6		3 2		88 88			<0.2	2.4 2.4	1
					Surface	1.0	0.1	172 187	27.7	27.7	8.0	8.0	23.3	23.3	84.3 84.0	84.2	5.8 5.8		1.9		4 4		82 84			<0.2	2.4	
IM10	Sunny	Moderate	15:13	6.3	Middle	3.2	0.1	332 305	27.7	27.7	8.0	8.0	25.3 25.4	25.3	80.4 80.3	80.4	5.5	5.7	2.7	3.2	5	5	85 87 86	822414	809795	<0.2	<0.2	2.5
					Bottom	5.3	0.1	312	27.7	27.7	8.0	8.0	25.9	25.9	80.2	80.3	5.5	5.5	4.8	ļ	5		88			<0.2	2.4	
					Surface	5.3 1.0	0.1	333 214	27.7 27.9	27.9	8.0	8.0	25.9 25.4	25.4	80.3 81.9	81.9	5.5 5.6		4.7 2.0		6 4		88 83			<0.2	2.4	
IM11	Sunny	Moderate	15:24	7.2	Middle	1.0 3.6	0.1	235 304	27.9 27.8	27.8	8.0	8.0	25.5 25.8	25.8	81.9 82.5	82.6	5.6 5.6	5.6	2.1 3.1	3.1	3	4	84 86 86	822054	811468	<0.2	<0.2	2.5
IIVIII	Suriny	Woderate	15.24	1.2		3.6 6.2	0.1 0.2	305 314	27.8 27.7		8.0 8.0		25.8 26.0		82.6 83.7		5.6 5.7		3.2 4.2	3.1	5 4	4	85 89	622054	011400	<0.2	2.4	
					Bottom	6.2 1.0	0.2	340 244	27.7 28.0	27.7	8.0	8.0	26.0 25.5	26.0	83.9 84.2	83.8	5.7 5.7	5.7	4.2 2.0		5		88 85			<0.2	2.6 2.5	
					Surface	1.0	0.1	250	28.0 27.6	28.0	8.0	8.0	25.5 25.9	25.5	84.3	84.3	5.7	5.8	2.1		4		85 88			< 0.2	2.4	
IM12	Sunny	Moderate	15:32	9.4	Middle	4.7	0.2	289 297	27.6	27.6	8.0	8.0	25.9	25.9	84.7	84.7	5.8		2.8	7.2	4	4	90 88	821469	812074	<0.2	<0.2	2.5
					Bottom	8.4 8.4	0.3	291 311	27.4 27.4	27.4	8.1 8.1	8.1	27.1 27.1	27.1	81.6 81.7	81.7	5.6 5.6	5.6	17.1 16.5		4 5		92 89			<0.2	2.5 2.4	
					Surface	1.0	0.1	24 24	27.7 27.7	27.7	8.1 8.1	8.1	26.1 26.1	26.1	89.8 89.8	89.8	6.1	6.1	2.0	-	4		87 87			<0.2	2.5	
SR2	Sunny	Moderate	15:59	4.1	Middle	-	-	-	-	-	-	-	-	-	-	-	-	6.1	-	2.1	-	5	- 89	821474	814163	-	<0.2	2.5
					Bottom	3.1 3.1	0.1	7	27.6 27.6	27.6	8.1	8.1	26.2 26.2	26.2	90.2	90.3	6.1	6.2	2.2	Ī	5		90 91			<0.2	2.5 2.5	
					Surface	1.0	0.6	185 194	27.7	27.7	8.0	8.0	20.5	20.5	82.3 82.0	82.2	5.8 5.8		3.1 3.1		2 2		-			-	-	一
SR3	Sunny	Moderate	14:51	7.5	Middle	3.8	0.3	220	27.6	27.6	8.0	8.0	24.1	24.1	80.4	80.4	5.5	5.7	3.1	5.5	2	3	-	822129	807579	-	. =	1 .
					Bottom	3.8 6.5	0.4	220 233	27.6 27.6	27.6	8.0	8.0	24.1	25.6	79.5	79.6	5.5	5.4	3.1 10.4		3		-			-	-	1
					Surface	6.5 1.0	0.4	239 256	27.6 27.9	27.9	8.0 8.2	8.2	25.6 26.1	26.1	79.6 86.8	86.8	5.4 5.9		10.4 11.7		6		-	1		-	-	
SR4A	Cummi	Madarata	15:58	8.7	Middle	1.0 4.4	0.5	266 247	27.9 27.8	27.8	8.2 8.2	8.2	26.1 26.1	26.1	86.8 86.2	86.2	5.9 5.9	5.9	11.7 18.3	18.6	7	7	-	817212	807826	-	-	-
SK4A	Sunny	Moderate	15.56	0.7		4.4 7.7	0.4	252 239	27.8 27.8		8.2 8.2		26.1 26.1		86.2 86.6		5.9 5.9		18.3 25.8	10.0	6 8	,	-	01/212	00/026	-	-	-
					Bottom	7.7 1.0	0.2	241 316	27.8 28.0	27.8	8.2 8.1	8.2	26.1 25.6	26.1	86.6 89.3	86.6	5.9 6.1	5.9	25.8 6.1		6		-			-	-	1
					Surface	1.0	0.2	341	28.0	28.0	8.1	8.1	25.6	25.6	89.3	89.3	6.1	6.1	6.1	ļ	7		-			-	-	
SR5A	Sunny	Moderate	16:18	4.7	Middle	-	-	-	-	-	-	-	-	-	-	-	-		-	6.1	-	7	-	816607	810723	-		-
					Bottom	3.7	0.3	304 307	28.0 28.0	28.0	8.1	8.1	25.6 25.6	25.6	90.7	90.7	6.2	6.2	6.0 6.0		7 8		-			-	-	
					Surface	1.0	0.1	256 279	27.9 27.9	27.9	8.2 8.2	8.2	25.0 25.0	25.0	91.7 91.7	91.7	6.3	6.3	7.9 7.9	-	6 7		-			-	-	-
SR6	Sunny	Moderate	17:12	4.8	Middle	-	-	-	-	-	-	-	-	-	-	-	-	0.3	-	9.5	-	7	-	817891	814654	-		-
					Bottom	3.8	0.1 0.1	243 260	27.9 27.9	27.9	8.1 8.1	8.1	25.2 25.2	25.2	92.1 92.1	92.1	6.3	6.3	11.0 11.0		7		-			-	-	1
					Surface	1.0	0.1	281 297	27.6 27.6	27.6	8.1	8.1	27.8	27.8	80.9 80.9	80.9	5.5 5.5		1.8		3		-			-	-	
SR7	Sunny	Moderate	16:55	15.8	Middle	7.9	0.1	75	27.5	27.5	8.1	8.1	28.8	28.8	76.9	76.9	5.2	5.4	3.4	4.1	3	3	-	823613	823740	-	-	
	,				Bottom	7.9 14.8	0.1 0.1	75 93	27.5 27.4	27.4	8.1 8.1	8.1	28.8 30.1	30.1	76.9 75.9	76.0	5.2 5.1	5.1	3.3 7.0		3 4		-			-	-	
					Surface	14.8	0.1	93	27.4 27.9	27.9	8.1	8.0	30.1 25.6	25.6	76.0 85.4	85.4	5.1 5.8		7.1 2.3		3		-			-	-	\vdash
050	0	Mad	45.15	4.0		1.0	-	-	27.9	21.5	8.0	0.0	25.6	23.0	85.4	00.4	5.8	5.8	2.4		5	-	-	000101	044054	-	-	-
SR8	Sunny	Moderate	15:45	4.9	Middle	3.9	-	-	27.9	-	8.0	-	25.6	•	85.5	-	5.8		3.8	3.0	- 5	5	-	820481	811654	-	-	-
					Bottom	3.9	-	-	27.9	27.9	8.0	8.0	25.6	25.6	85.6	85.6	5.8	5.8	3.3	-	5		-			-		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
Note: Access to SR8 was blocked by barge. The monitoring at SR8 was slightly shifted to the closest safe and accessible location temporarily.

Water Quality Monitoring

Water Quality Monitoring Results on 06 October 18 during Mid-Ebb Tide otal Alkalinity DO Saturation Dissolved Suspended Solids Turbidity(NTU) Nickel (µg/L) Sampling Water Water Temperature (°C) рΗ Salinity (ppt) Coordinate Coordinate Chromium (µg/L) Monitoring Current Speed Oxygen (mg/L) (ppm) Sampling Depth (m) HK Grid HK Grid Station Direction DA DA DA (m/s) DA DA Condition Condition Time Depth (m) Value Average Value Average Value Average Value Average Value Value Value Value (Northing) (Easting) Value Average Value 0.9 26.8 1.0 211 8.2 86.4 6.0 5.9 12 86 < 0.2 1.8 26.6 Surface 26.6 < 0.2 1.0 1.0 219 26.8 8.2 26.7 86.4 6.0 6.0 13 87 <0.2 1.8 5.9 0.7 13 89 19 41 238 26.9 8.2 27.2 84.8 5.8 6.2 <0.2 C1 09:57 8.1 Middle 27.2 6.1 13 90 815612 804273 <0.2 1.9 Fine Moderate 4.1 0.7 239 26.9 8.2 27.2 84.9 5.8 6.2 13 89 <0.2 2.0 7.1 0.6 233 26.9 8.2 5.9 6.2 13 93 <0.2 2.0 Bottom 26.9 8.2 27.5 86.1 5.9 < 0.2 0.6 26.9 8.2 27.5 86.1 5.9 6.2 14 94 < 0.2 1.0 0.9 153 27.1 8.1 24.9 83 < 0.2 1.9 91.2 6.3 6.7 3 Surface 27.1 8.1 24.9 91.2 < 0.2 91.2 24.9 6.3 1.0 1.0 158 27.1 8.1 6.8 3 83 <0.2 1.9 6.2 5.7 0.8 145 27.2 8.2 8.7 3 86 1.9 25.8 87.1 6.0 < 0.2 87.1 < 0.2 C2 Fine Moderate 12:26 11.4 Middle 27.2 25.8 8.9 86 825666 806948 < 0.2 2.0 87.0 6.0 5.7 0.9 153 27.2 8.2 25.8 8.5 4 85 < 0.2 2.4 10.4 0.8 152 27.2 8.2 27.0 89.9 6.1 11.1 4 89 <0.2 2.1 Bottom 27.2 8.2 27.0 90.0 6.2 10.4 0.8 166 27.2 8.2 27.0 90.1 6.2 11.6 5 89 < 0.2 2.0 0.5 1.3 86 <0.2 26.7 8.2 2.3 27.0 6.0 Surface 26.7 8.2 27.0 87.2 <0.2 0.5 93 26.7 8.2 6.0 1.3 87 <0.2 1.9 5.9 0.4 55 1.6 90 1.9 6.2 84.7 5.8 3 26.8 8.2 27.5 < 0.2 8.2 822104 817830 C3 Fine Moderate 09.44 123 Middle 26.8 27.5 84.7 90 < 0.2 <0.2 2.0 8.2 27.5 91 6.2 0.4 56 26.8 84.7 5.8 1.7 4 < 0.2 1.8 4 11.3 0.4 43 27.1 8.2 28.4 86.5 5.9 2.1 93 < 0.2 2.2 8.2 28.4 86.6 5.9 11.3 0.4 44 27 1 8.2 28.4 86.7 5.9 21 5 94 < 0.2 2.0 1.0 0.5 176 27.2 9.0 83 <0.2 2.3 8.2 26.0 86.5 5.9 Surface 27.2 8.2 26.0 86.5 <0.2 1.0 183 8.2 86.4 5.9 83 2.2 0.5 27.2 9.1 9 <0.2 5.9 ----IM1 Fine Moderate 10.21 5.3 Middle 10.1 84 817923 807128 <0.2 22 4.3 0.1 188 27.1 8.2 85 2.0 26.4 88.5 88.7 6.1 11.2 9 < 0.2 Bottom 27.1 88.6 6.1 43 0.1 204 27 1 8.2 26.4 11 2 q 86 <0.2 21 1.0 0.8 213 27.3 82 <0.2 2.0 8.2 26.2 87.5 6.0 14.3 27.3 Surface 26.2 1.0 0.9 217 27.2 8.2 26.3 87.2 6.0 14.4 83 <0.2 2.0 6.0 0.7 3.4 207 27.2 8.2 26.4 86.9 6.0 16.4 86 <0.2 1.8 IM2 Moderate 10:29 6.7 Middle 27.2 8.2 26.5 87.0 16.5 87 818152 806164 <0.2 < 0.2 1.9 Fine 3.4 0.8 215 27.1 8.2 17.1 8 86 < 0.2 2.0 0.4 182 27.1 8.2 18.6 92 < 0.2 1.9 5.7 26.6 88.5 6.1 8 Bottom 27.1 8.2 26.5 88.6 6.1 5.7 8.2 0.4 190 27 1 26.5 88.6 6.1 18 1 9 92 1.8 <0.2 6 85 1.0 0.9 210 27.0 8.2 25.7 89.7 6.2 9.0 < 0.2 2.0 Surface 8.2 25.7 1.0 0.9 217 27.0 8.2 25.7 89.7 6.2 9.2 5 86 <0.2 1.9 6.2 3.6 0.8 219 26.9 11.0 6 89 1.9 8.2 6.2 <0.2 IM3 10:37 7.1 Middle 26.9 8.2 25.8 89.7 12.4 89 818774 805606 < 0.2 Fine Moderate 0.9 26.9 8.2 25.8 89.7 6.2 11.3 6 90 <0.2 1.8 25.8 25.8 6.1 0.6 209 26.9 8.2 91.1 16.9 93 < 0.2 2.0 6.3 7 6.3 8.2 25.8 < 0.2 Bottom 26.9 91.1 8.2 91.1 6.3 0.7 16.9 93 < 0.2 1.9 6.1 209 26.9 1.0 1.1 223 27.1 8.2 86 2.0 25.8 89.5 6.2 8.7 < 0.2 Surface 27.1 8.2 25.8 89.5 < 0.2 89.5 2.0 1.0 1.2 235 27.1 8.2 25.8 6.2 8.8 1 86 < 0.2 6.2 3.5 0.9 214 27.0 8.2 25.9 90.0 6.2 14.2 5 89 <0.2 2.0 IM4 Moderate 10:49 7.0 Middle 27.0 8.2 25.9 90.0 12.0 90 819742 804602 < 0.2 2.0 Fine 3.5 0.9 215 27.0 8.2 25.9 90.0 6.2 14.1 4 90 < 0.2 1.8 0.6 220 27.0 8.2 25.9 25.9 91.4 6.3 13.0 8 94 <0.2 2.2 27.0 8.2 91.5 6.3 < 0.2 Bottom 25.9 6.0 0.7 229 27.0 8.2 91.5 6.3 13.0 9 94 <0.2 2.0 1.0 1.0 200 27.0 8.2 86 25.5 90.9 6.3 9.0 5 < 0.2 2.0 Surface 27.0 8.2 25.5 90.9 < 0.2 8.2 25.5 87 1.0 212 27.0 90.9 9.0 5 1.8 1.0 6.3 < 0.2 6.3 10.6 3.2 0.9 216 26.8 8.2 25.9 89.9 6.2 7 89 < 0.2 2.2 IM5 Fine Moderate 11:05 6.3 8.2 25.9 89.9 10.7 90 820721 804882 < 0.2 1.9 3.2 0.9 217 26.8 8.2 25.9 89.8 6.2 10.6 6 90 <0.2 1.9 5.3 0.7 26.8 93 1.8 233 8.2 25.9 92.0 6.4 12.3 6 <0.2 Bottom 26.8 8.2 25.9 92.1 6.4 <0.2 25.9 92.2 6.4 12.7 93 1.9 0.8 < 0.2 1.0 1.2 235 27.0 8.2 25.5 25.5 90.9 6.3 8.6 6 86 < 0.2 1.8 Surface 27.0 82 25.5 90.9 <0.2 8.2 90.9 6.3 1.2 87 1.8 1.0 249 27.0 8.6 6 < 0.2 6.3 3.1 1.1 231 26.8 8.2 25.8 90.0 6.2 9.8 6 89 < 0.2 1.8 11:17 6.1 Middle 26.8 25.8 90 821078 805851 1.8 IM6 Moderate 3.1 12 243 26.8 8.2 25.8 90.0 6.2 99 7 89 < 0.2 1.8 5.1 0.8 239 26.7 8.2 25.9 6.3 11.4 94 <0.2 1.9 90.5 Rottom 25.9 90.6 6.3 5.1 0.9 253 26.7 8.2 25.9 90.6 6.3 11.3 95 < 0.2 1.8 1.0 1.0 250 27.1 8.2 25.6 90.6 6.2 8.5 5 85 <0.2 1.9 27 1 Surface 8.2 25.6 90.6 < 0.2 1.0 1.1 266 27.1 8.2 25.6 90.5 6.2 8.5 4 85 < 0.2 1.9 6.3 9.1 90 1.9 3.7 0.9 243 26.9 8.2 25.8 90.8 6.3 5 < 0.2 IM7 Fine Moderate 11:38 7.3 Middle 26.9 25.8 90.8 9.2 90 821344 806814 <0.2 <0.2 1.9 3.7 8.2 25.8 90.8 90 17 0.9 261 26.9 6.3 9.1 5 < 0.2 6.3 0.9 249 26.7 8.2 26.0 92 1 6.4 10.0 6 94 <0.2 19 8.2 26.0 92.1 6.4 6.3 0.9 255 26.7 8.2 26.0 92.1 6.4 10.0 6 95 <0.2 2.2 1.0 0.4 156 27.0 8.2 26.1 6.3 86 <0.2 2.1 Surface 26.9 8.2 26.1 91.5 < 0.2 163 8.2 26.1 91.5 6.3 5.4 86 1.9 0.5 26.9 6 < 0.2 64 3.8 0.3 173 26.7 8.2 6.1 88 1.9 26.3 92.3 6.4 6 <0.2 821817 IM8 Fine Moderate 11:55 7.5 Middle 26.7 8.2 26.3 92.4 5.9 88 808133 <0.2 < 0.2 1.9 0.4 26.7 8.2 26.3 92.4 64 6.1 6 88 <0.2 1.8 3.8 187 8.2 6.5 175 6 90 1.8 0.2 26.7 26.4 94.9 6.6 6.2 <0.2 26.7 8.2 26.4 95.0 6.6 95.1 6.5 0.2 184 26.7 8.2 6 91 < 0.2 1.9

DA: Depth-Averaged

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

Water Quality Monitoring

Water Quality Monitoring Results on 06 October 18 during Mid-Ebb Tide otal Alkalinity DO Saturation Dissolved Suspended Solids Turbidity(NTU) Nickel (µg/L) Sampling Water Water Temperature (°C) рΗ Salinity (ppt) Coordinate Coordinate Chromium (µg/L) Monitoring Current Speed Oxygen (mg/L) (ppm) Sampling Depth (m) HK Grid HK Grid Station Direction DA DA DA (m/s) DA DA Condition Condition Time Depth (m) Value Average Value Average Value Average Value Average Value Value Value Value (Northing) (Easting) Value Average Value 0.5 132 27.1 1.0 8.2 25.8 6.3 5.3 86 < 0.2 1.9 91.2 Surface 27.0 8.2 25.8 < 0.2 1.0 137 25.8 0.5 27.0 8.2 91 1 6.3 5.4 87 < 0.2 1.9 6.3 0.4 8.2 7.0 5 88 1.9 3.6 115 26.7 26.3 91 0 6.3 <0.2 IM9 Moderate 11:49 7.2 Middle 8.2 26.3 91.0 6.9 89 822081 808793 <0.2 1.9 Fine 3.6 0.4 115 26.7 8.2 26.3 91.0 6.3 7.0 6 89 <0.2 1.9 6.2 0.3 26.7 8.2 26.4 6.4 8.1 92 <0.2 1.8 Bottom 26.7 8.2 26.4 92.1 6.4 < 0.2 0.3 101 26.7 8.2 26.4 92.1 6.4 8.3 92 < 0.2 1.9 1.0 0.7 110 26.9 8.2 26.0 26.0 5.3 87 < 0.2 1.9 90.3 6.2 5 Surface 26.9 8.2 26.0 90.2 < 0.2 90.1 6.2 1.0 0.8 110 26.9 8.2 5.5 6 87 <0.2 2.2 6.2 3.7 0.7 95 8.2 7.6 6 89 1.9 26.8 26.4 89.0 6.1 < 0.2 89.1 < 0.2 IM10 Fine Moderate 11:26 7.3 Middle 26.8 26.4 7.2 90 822363 809809 < 0.2 2.0 89.1 89 1.9 3.7 0.7 101 26.8 8.2 26.4 6.1 7.7 6 < 0.2 6.3 0.4 97 26.8 8.2 26.5 90.4 6.2 8.4 8 93 <0.2 2.2 Bottom 26.8 8.2 26.5 90.5 6.2 6.3 0.4 106 26.8 8.2 26.5 90.5 6.2 8.5 8 93 <0.2 2.1 0.7 104 27.1 12.8 86 87 <0.2 1.9 8.2 26.2 89.4 Surface 27.1 8.2 89.4 <0.2 26.2 0.7 110 27.1 8.2 26.2 6.2 13.1 <0.2 1.8 6.2 3.5 0.6 98 19.0 90 1.8 89.4 7 27.0 8.2 26.4 6.2 < 0.2 822041 811448 IM11 Fine Moderate 11:26 7.0 Middle 27.0 8.2 26.4 89.4 16.5 90 < 0.2 <0.2 1.9 3.5 8.2 0.7 104 27.0 26.4 89.4 6.2 19.2 6 90 < 0.2 1.8 6.0 0.5 101 27.0 8.2 26.4 90.6 6.2 17.7 8 93 < 0.2 1.9 8.2 26.4 90.7 6.2 6.0 0.5 110 27.0 8.2 26.4 90.7 6.2 17.4 8 92 < 0.2 19 1.0 0.6 105 27.0 12.6 12 <0.2 1.8 8.2 26.1 6.2 86 Surface 27.0 26.1 90.3 <0.2 0.7 113 27.0 8.2 26.1 90.3 6.2 12 86 1.7 12.6 <0.2 6.2 3.8 0.6 106 26.9 8.2 26.2 90.4 6.2 17.5 13 90 < 0.2 1.8 8.2 821437 IM12 Fine Moderate 11:19 7.5 Middle 26.9 26.2 90.4 18.0 13 90 812057 < 0.2 <0.2 1.8 113 8.2 26.2 90.4 6.2 17.7 13 90 < 0.2 1.8 3.8 0.6 26.9 6.5 0.4 109 26.9 8.2 26.2 91.4 6.3 23.9 13 93 < 0.2 1.8 Bottom 26.9 6.3 6.5 0.4 117 26.9 8.2 26.2 91.5 6.3 23.9 13 93 <0.2 19 1.0 0.5 66 27.1 26.4 89.0 4 86 <0.2 1.7 8.2 5.6 27.1 Surface 8.2 26.4 89.1 1.0 0.5 67 27.1 8.2 89.1 6.1 5.7 4 86 <0.2 1.9 6.1 SR2 Moderate 10:47 4.6 Middle 89 821464 814159 < 0.2 -1.8 Fine 3.6 0.2 48 27.1 92.1 7.0 90 < 0.2 1.8 8.2 26.8 6.3 4 Bottom 27.1 8.2 26.8 92.2 6.3 <0.2 0.2 52 27 1 8.2 26.8 92.3 3.6 6.3 6.9 5 92 19 <0.2 200 1.0 0.6 27 1 8.2 26.2 90.6 6.2 7.8 4 Surface 8.2 26.2 90.6 1.0 0.6 207 27.1 8.2 26.2 90.6 6.2 7.9 4 6.2 4.3 0.5 207 26.9 8.2 6.2 12.7 26.3 6 SR3 Moderate 12:02 8.6 Middle 26.9 8.2 26.3 90.7 822136 807549 Fine 0.5 26.9 8.2 26.3 90.7 12.9 26.3 7.6 0.4 216 26.9 8.2 91.4 14.1 6.3 6 6.3 8.2 26.3 91.5 Bottom 26.9 8.2 91.5 6.3 7.6 0.4 26.9 14.3 5 237 1.0 0.3 247 26.8 8.2 6 26.6 86.5 6.0 6.2 Surface 26.8 26.6 86.5 6.0 1.0 0.3 270 26.8 8.2 26.6 6.1 6 6.0 4.8 0.3 244 26.9 8.2 26.9 85.6 5.9 6.3 6 SR4A Calm 09:40 9.5 Middle 26.9 8.2 26.9 85.6 817209 807832 Fine 4.8 0.3 251 26.9 8.2 26.9 85.5 5.9 6.3 6 0.3 256 27.0 8.2 27.6 86.3 5.9 6.6 27.0 5.9 Bottom 8.2 27.6 86.4 8.5 0.3 258 27.0 8.2 27.6 86.4 6.6 6 1.0 0.1 333 27.0 7.0 8.1 28.1 81.7 5.6 4 Surface 27.0 8.1 28.1 81.5 1.0 0.1 335 27.0 8.1 28.1 7.0 81.2 5.5 4 5.6 SR5A Fine Calm 09:25 4.6 816601 810669 3.6 0.3 304 27.1 8.1 7.1 28.3 81.2 5.5 Bottom 27.1 8.1 28.3 81.2 5.5 8.1 28.3 81.2 5.5 7.1 0.3 1.0 0.1 66 27.1 8.1 28.2 80.6 5.5 7.4 5 Surface 27 1 8.1 28.2 80.5 0.1 8.1 28.2 80.4 5.5 66 27.1 1.0 7.4 5 5.5 SR6 08:59 4.3 Middle 817883 814668 Calm 3.3 0.0 300 27.2 8.1 28.8 81.0 5.5 8.0 27.2 28.8 5.5 Rottom 8.1 81.1 3.3 0.0 305 27.2 8.1 28.8 81.1 5.5 8.0 0.5 27.0 8.2 28.3 79.9 5.4 2.9 27.0 Surface 8.2 28.3 79.9 1.0 0.5 57 27.0 8.2 28.3 79.8 5.4 3.0 3 5.4 47 5.4 9.9 0.4 27.2 8.1 29.2 78.4 5.3 3 SR7 Fine Moderate 09:13 19.8 Middle 27.2 29.2 78.5 4.3 823657 823720 99 51 27.2 8.1 78.5 0.4 29.2 5.3 5.4 4 18.8 0.3 38 27.3 8.1 29.3 79.4 5.4 4.5 4 29.3 5.4 79.5 18.8 0.3 40 27.3 8.1 29.3 79.5 5.4 4.3 4 1.0 27.3 8.3 26.6 89.2 Surface 27.3 8.3 26.6 89.2 27.3 8.3 26.6 89.2 11.2 3 1.0 6.1 6 1 SR8 Fine Calm 11:06 4.9 Middle 13.1 820518 811632 -3.9 27.1 8.2 92.5 92.7 27.0 6.3 15.0 7 Bottom 27.1 8.2 27.0 92.6 6.3 3.9 27.1 8.2 8

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Water Quality Monitoring

Water Quality Monitoring Results on 06 October 18 during Mid-Flood Tide otal Alkalinity DO Saturation Dissolved Suspended Solids Nickel (µg/L) Sampling Water Water Temperature (°C) рΗ Salinity (ppt) Turbidity(NTU) Coordinate Coordinate Chromium (µg/L) Monitoring Current Speed Oxygen (mg/L) (ppm) Sampling Depth (m) HK Grid HK Grid Station Direction DA DA DA (m/s) DA Condition Condition Time Depth (m) Value Average Value Average Value Average Value Average Value Value DA Value Value (Northing) (Easting) Value Average DA Value 0.1 166 27.4 1.0 8.2 88.0 10.4 87 < 0.2 1.9 26.0 6.0 Surface 27.4 8.2 26.0 < 0.2 1.0 0.1 169 27.4 8.2 26.0 88.0 6.0 10.5 6 87 < 0.2 1.9 6.0 4.1 0.1 90 27.4 8.2 26.0 88.0 6.0 10.9 6 90 <0.2 2.0 C1 Middle 27.4 8.2 26.0 10.7 815613 804233 < 0.2 2.0 Sunnv Moderate 17:24 8.2 88.0 90 < 0.2 0.1 96 27.4 8.2 26.0 88.0 6.0 10.9 90 <0.2 2.0 7.2 0.1 70 27.4 8.2 25.9 88.5 6.1 10.6 8 93 < 0.2 2.0 Bottom 27.4 25.9 88.6 6.1 72 0.1 74 27.4 8.2 25.9 88.6 61 10.6 7 94 <0.2 19 1.0 0.9 165 27.6 8.1 23.8 88.2 6.1 8.4 86 <0.2 2.4 Surface 27.6 8.1 23.8 88.2 <0.2 1.0 0.9 180 27.6 8.1 23.8 88.1 6.1 8.5 86 <0.2 2.5 5 6.0 5.5 0.6 153 27.2 8.1 25.7 84.2 5.8 10.8 5 89 < 0.2 1.7 825689 806923 C2 Sunnv Moderate 15:58 10.9 Middle 27.2 8.1 25.7 84.2 90 < 0.2 < 0.2 2.0 5.5 153 27.2 8.1 25.7 84.1 5.8 10.3 5 90 1.8 0.7 < 0.2 9.9 0.4 148 27.3 8.1 26.7 85.0 5.8 14.3 5 93 < 0.2 1.8 Bottom 27.3 26.7 85.1 5.8 99 0.5 158 27.3 8.1 26.7 85.1 5.8 147 6 93 < 0.2 2.0 1.0 0.5 253 27.4 8.2 26.8 86.8 5.9 4.5 3 85 < 0.2 1.9 Surface 26.8 86.7 < 0.2 1.0 0.5 277 27.4 8.2 26.8 86.6 5.9 4.6 87 <0.2 1.9 5.8 5.8 0.5 250 27.2 8.2 27.4 83.5 5.7 6.4 3 90 <0.2 2.0 C3 27.2 82 27 4 83.5 822112 817782 < 0.2 17:50 116 Middle 64 90 19 Sunny Moderate <02 8.2 27.4 83.5 5.7 4 90 <0.2 2.0 5.8 0.6 263 27.2 6.5 10.6 0.5 249 27.3 8.2 27.8 27.8 93 < 0.2 1.9 5.9 8.1 5 86.3 Bottom 27.3 8.2 27.8 86.5 5.9 <0.2 5.9 86.6 10.6 0.5 249 27.3 8.2 8.0 4 93 <0.2 19 1.0 0.3 22 27.5 87 8.2 25.9 89.4 6.1 9.6 4 <0.2 19 Surface 27.5 <0.2 25.9 89.4 1.0 0.3 22 27.5 8.2 25.9 89.4 6.1 9.7 4 87 <0.2 1.8 6.1 IM1 17:03 4.3 Middle 10.0 88 817948 807107 1.9 Sunny Moderate < 0.2 3.3 0.3 29 27.3 25.9 25.9 10.3 89 < 0.2 2.0 8.2 91.8 6.3 6 Bottom 27.3 8.2 25.9 91.9 6.3 < 0.2 0.3 27.3 8.2 92.0 6.3 1.9 3.3 29 10.3 7 90 < 0.2 1.0 0.3 216 27.4 8.2 86 25.8 88.3 6.1 8.8 3 <0.2 1.8 Surface 27.4 25.8 88.3 < 0.2 8.1 25.8 88.2 2.0 1.0 0.3 220 27.4 6.0 9.0 3 86 < 0.2 3.3 0.1 12 27.4 8.1 25.9 88.4 6.1 9.9 3 89 <0.2 1.9 818150 IM2 Moderate 16:56 6.6 Middle 27.4 8.1 25.9 88.4 9.9 90 806181 < 0.2 <0.2 1.9 Sunny 3.3 0.1 12 27.4 8.1 25.9 88.4 6.1 9.9 4 90 < 0.2 2.0 5.6 0.2 27.4 8.2 25.9 6.2 11.0 6 94 <0.2 2.0 Bottom 27.4 8.2 25.9 90.0 6.2 < 0.2 19 27.4 8.2 25.9 90.0 6.2 10.9 94 5.6 0.2 < 0.2 1.9 1.0 0.6 231 8.1 87 1.8 27.6 3 <0.2 24.7 89.4 6.1 8.4 27.6 Surface 8.1 24.7 89.4 < 0.2 0.7 8.1 24.7 89.4 6.2 1.0 245 27.6 8.3 4 86 < 0.2 2.0 6.2 3.6 0.3 260 27.4 8.1 25.3 89.7 6.2 8.7 4 89 <0.2 2.0 IM3 Moderate 16:48 7.1 25.3 818812 805598 <0.2 Sunny 3.6 0.3 261 27.4 8.1 25.3 89.7 6.2 8.7 4 90 < 0.2 2.3 0.2 94 328 27.3 8.2 25.8 6.3 9.4 <0.2 2.2 Bottom 27.3 8.2 25.8 91.8 6.3 <0.2 358 27.3 8.2 25.8 91.9 6.3 9.4 94 2.2 6.1 0.3 < 0.2 1.0 0.3 246 27.5 8.1 25.0 89.0 9.7 5 86 <0.2 2.3 6.1 27.5 Surface 8.1 25.0 89.1 < 0.2 1.0 27.5 8.1 25.0 89.1 86 1.9 0.4 267 6.1 9.8 5 < 0.2 6 1 3.5 0.3 210 27.4 8.1 25.3 89.1 6.1 10.5 6 89 < 0.2 2.1 IM4 Moderate 16:39 7.0 Middle 27.4 25.3 89.1 10.4 90 819734 804614 < 0.2 2.2 Sunny 3.5 0.3 222 27.4 8.1 25.3 89 1 6.1 10.5 5 90 < 0.2 2.2 6.0 0.5 200 27.4 8.1 25.5 90.6 6.2 11.1 94 <0.2 2.3 6.2 Bottom 8.1 25.5 90.7 < 0.2 0.5 207 27.4 8.1 25.5 90.8 6.2 10.8 6 94 <0.2 2.4 27.4 2.4 1.0 0.9 232 8.1 25.0 89.6 6.2 10.8 6 86 <0.2 <0.2 Surface 27.4 8.1 25.0 89.6 1.0 1.0 232 27.4 8.1 25.0 89.6 6.2 10.8 87 < 0.2 2.3 62 3.2 1.0 222 25.1 25.1 2.2 27.4 8.1 90.0 6.2 11.2 89 <0.2 IM5 Moderate 16:27 6.3 Middle 27.4 8.1 25.1 90.1 11.4 90 820733 804843 < 0.2 < 0.2 2.3 Sunny 1.0 90.1 7 90 3.2 242 27 4 8 1 6.2 11 2 < 0.2 5.3 0.9 219 27.4 8.1 25.3 91.3 6.3 12.0 8 92 < 0.2 2.4 Bottom 27.4 25.3 91.3 6.3 5.3 0.9 234 27.4 8.1 25.3 91.3 6.3 12.1 9 93 < 0.2 2.2 0.9 261 27.5 24.4 89.2 12.0 86 <0.2 2.2 Surface 27.5 8.1 24.4 89.3 <0.2 1.0 1.0 275 27.5 8.1 24.4 89.3 6.2 12.1 4 86 <0.2 2.9 6 1 0.9 269 27.3 88.9 15.7 89 1.9 3.1 8.1 25.4 6.1 5 <0.2 27.3 8.1 821049 805838 < 0.2 IM6 Sunny Moderate 16:14 6.1 Middle 25.4 89.0 14.9 90 < 0.2 2.2 1.9 3.1 1.0 294 27.3 8.1 25.4 89.0 6.1 15.8 6 90 < 0.2 0.7 17.6 5.1 230 27.3 8 1 25.6 91.5 6.3 6 93 <0.2 2.0 Bottom 27.3 25.6 91.6 6.3 91.7 5.1 0.8 240 27.3 8.1 25.6 6.3 16.4 6 03 < 0.2 2.0 8.1 1.0 1.0 249 27.6 23.3 88.4 6.1 10.5 5 86 <0.2 1.9 Surface 27.6 8.1 23.3 88.4 < 0.2 1.0 1.0 250 27.6 8.1 23.3 88.4 6.1 10.5 5 87 < 0.2 2.0 6.0 3.8 0.9 261 27.3 8.1 24.5 85.1 5.9 15.2 90 <0.2 1.9 6 IM7 15:58 8.1 85.1 90 821340 806846 < 0.2 2.0 Sunny Moderate 7.5 Middle 27.3 24.5 15.4 < 0.2 85.1 5.9 2.0 0.9 8.1 24.5 15.3 90 < 0.2 3.8 270 27.3 6 6.5 0.8 240 27.3 8.1 25.9 84.3 5.8 6 93 < 0.2 2.0 20.4 8.1 5.8 Bottom 27.3 25.9 84.3 < 0.2 8.1 25.9 84.3 5.8 6.5 0.8 27.3 20.5 93 < 0.2 1.0 0.4 203 27.4 8.1 25.4 91.1 6.3 7.9 4 86 <0.2 2.0 Surface 27.4 25.4 <0.2 1.0 0.4 214 27.4 8.1 25.4 91.1 6.3 7.9 5 87 < 0.2 2.1 6.3 0.3 9.4 89 27.4 8.2 25.6 92.1 6.3 <0.2 2.0 808147 821850 IM8 Sunny Moderate 16:21 6.8 Middle 27.4 8.2 25.6 92.2 9.4 90 < 0.2 < 0.2 2.0 2.0 3.4 0.3 227 27.4 8.2 25.6 92.2 6.3 9.6 8 90 <0.2 5.8 0.3 232 27.3 8.2 94.5 10.8 9 94 < 0.2 2.0 25.8 6.5 27.3 8.2 25.8 6.5 <0.2 Rottom 94.7 5.8 0.3 241 27.3 94.9 10.9 95 < 0.2 2.0

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Water Quality Monitoring

Water Quality Monitoring Results on 06 October 18 during Mid-Flood Tide otal Alkalinity DO Saturation Dissolved Suspended Solids Turbidity(NTU) Nickel (µg/L) Sampling Water Water Temperature (°C) рΗ Salinity (ppt) Coordinate Coordinate Chromium (µg/L) Monitoring Current Speed Oxygen (mg/L) (ppm) Sampling Depth (m) HK Grid HK Grid Station Direction DA DA DA (m/s) DA DA Condition Condition Time Depth (m) Value Average Value Average Value Average Value Average Value Value Value Value (Northing) (Easting) Value Average Value 0.3 166 27.5 1.0 8.1 89.2 5.3 87 < 0.2 2.1 25.4 6.1 Surface 27.5 25.4 < 0.2 1.0 87 0.4 174 27.5 8.1 25.4 89.2 6.1 5.3 6 < 0.2 2.1 6.1 195 89 2.0 3.1 0.2 27 4 8.1 25.7 89.3 6.1 6.2 7 <0.2 IM9 Moderate 16:28 6.2 Middle 25.7 6.0 90 822108 808799 <0.2 1.9 Sunny 3.1 0.2 200 27.4 8.1 25.7 89.3 6.1 6.3 8 90 <0.2 1.8 5.2 0.2 213 27.4 8.1 6.2 6.5 9 93 <0.2 1.8 Bottom 27.4 8.1 25.9 90.2 6.2 < 0.2 0.2 27.4 8.1 25.9 90.2 6.2 6.5 94 < 0.2 1.8 1.0 0.3 124 27.6 8.1 25.1 25.1 4.2 86 < 0.2 1.9 89.7 6.2 5 Surface 27.6 8.1 25.1 89.7 < 0.2 89.6 6.2 1.0 0.3 124 27.6 8.1 4.3 5 87 <0.2 1.9 6.2 3.1 0.2 133 8.1 4.7 6 89 2.1 27.4 25.8 89.6 6.1 < 0.2 89.7 < 0.2 IM10 Sunny Moderate 16:36 6.1 Middle 27.4 8.1 25.8 4.6 89 822410 809786 < 0.2 2.0 89.7 90 3.1 0.2 133 27.4 8.1 25.8 6.1 4.6 6 < 0.2 2.0 5.1 263 27.3 8.2 26.0 91.5 6.3 5.0 7 92 <0.2 2.3 Bottom 27.3 8.2 26.0 91.7 6.3 5.1 282 27.3 8.2 26.0 91.8 6.3 5.0 6 92 < 0.2 2.0 0.1 27.4 4.3 88 <0.2 2.3 8.2 89.3 26.2 6 Surface 27.4 8.2 89.3 <0.2 26.2 0.1 301 27.4 8.2 26.2 6.1 4.4 89 <0.2 2.2 0.1 326 5.4 91 3.3 27.4 5 8.2 26.3 89.0 6.1 < 0.2 2.1 822070 811466 IM11 Sunny Moderate 16:47 6.6 Middle 27.4 8.2 26.3 89.1 5.1 91 < 0.2 <0.2 22 3.3 8.2 91 2.1 0.1 355 27.4 26.3 89.1 6.1 5.4 6 < 0.2 5.6 0.1 333 27.4 8.2 26.3 90.4 6.2 5.6 7 93 < 0.2 2.1 8.2 26.3 90.5 6.2 5.6 0.2 343 27.4 8.2 26.3 90.5 6.2 5.6 8 93 < 0.2 22 1.0 0.1 280 27.5 6.0 4 86 <0.2 2.0 8.2 26.4 6.1 Surface 27.5 26.4 90.0 <0.2 0.1 302 27.5 8.2 26.4 90.0 6.1 6.1 87 2.0 4 <0.2 6.2 3.8 0.1 319 27.4 8.2 26.4 91.3 6.2 8.4 5 89 < 0.2 2.0 8.2 IM12 Sunnv Moderate 16:54 76 Middle 27.4 26.4 91 4 8.0 90 821440 812069 < 0.2 <0.2 2.0 8.2 26.4 91.4 6.2 4 90 < 0.2 2.0 3.8 0.2 343 27.4 8.4 6.6 0.2 318 27.3 8.2 26.4 94.0 6.4 9.5 5 94 < 0.2 2.1 Bottom 27.3 94.1 6.4 6.6 0.2 329 27.3 8.2 26.4 94.2 64 9.4 5 94 <0.2 21 1.0 0.2 315 27.1 93.2 86 <0.2 2.0 8.2 26.2 6.4 6.5 27.1 93.2 Surface 8.2 26.2 1.0 0.2 322 27.1 8.2 93.2 6.4 6.6 86 <0.2 2.1 6.4 SR2 Sunny Moderate 17:20 4.2 Middle 88 821461 814172 < 0.2 -2.1 3.2 0.2 299 27.0 90 < 0.2 2.1 8.2 26.4 96.2 6.6 8.9 9 Bottom 27.0 8.2 26.4 96.3 6.6 <0.2 0.2 321 8.2 26.4 96.4 32 27.0 66 92 8 91 22 <0.2 1.0 77 0.6 175 27.6 8.1 24.6 90.6 6.2 2 Surface 24.6 90.6 1.0 0.6 181 27.6 8.1 24.6 90.5 6.2 7.9 3 6.2 4.1 0.5 197 27.3 8.2 6.2 13.3 4 SR3 16:14 8.2 Middle 27.3 8.2 25.9 89.9 12.2 822122 Sunny Moderate 0.5 209 27.3 8.2 25.9 89.9 6.2 13.4 26.0 26.0 7.2 0.4 206 27.3 8.2 92.8 15.5 6.4 5 6.4 8.2 26.0 92.9 Bottom 27.3 6.4 8.2 93.0 7.2 0.4 27.3 15.5 6 208 1.0 0.5 255 27.0 8.2 25.8 89.6 6.2 11.6 Surface 27.0 25.8 89.6 89.5 6.2 1.0 0.6 278 27.0 8.2 25.9 12.1 5 6.2 4.4 0.5 248 27.0 8.2 25.9 89.6 6.2 13.0 6 SR4A Moderate 17:42 Middle 27.0 8.2 25.9 89.7 12.9 807789 Sunny 4.4 0.6 264 27.0 8.2 25.9 89.8 6.2 13.1 6 0.4 243 27.0 8.2 25.9 90.5 13.6 6.2 27.0 6.2 Bottom 8.2 25.9 90.6 7.7 0.4 244 27.0 8.2 6.2 14.0 1.0 0.4 311 27.4 8.6 8.2 26.3 87.9 6.0 6 Surface 27.4 8.2 26.3 87.9 1.0 0.5 336 27.4 8.2 26.3 87.9 6.0 8.6 6 6.0 SR5A Sunny Calm 17:58 4.3 816566 810705 3.3 0.3 310 27.4 8.2 9.1 26.4 6.0 Bottom 27.4 8.2 26.4 87.9 6.0 0.4 328 26.4 87.9 6.0 9.1 27.4 1.0 0.2 209 27.5 8.2 26.3 88.6 8.4 6 6.1 Surface 27.4 8.2 26.3 88.5 0.2 8.2 26.3 88.4 6.0 27.4 1.0 220 8.5 6 6.1 SR6 18:24 4.2 Middle 817885 814681 Calm 3.2 0.1 216 27.4 8.2 26.4 87.9 6.0 8.7 27.4 6.0 Rottom 26.4 88.0 3.2 0.1 229 27.4 8.2 26.4 88.0 6.0 8.7 0.1 27.4 8.2 27.2 85.4 5.8 3.5 5 27.4 Surface 8.2 27.2 85.4 1.0 0.1 55 27.4 8.2 27.2 85.3 5.8 3.6 4 5.8 106 5.9 0.3 27.3 8.2 28.2 83.4 5.7 4 SR7 Sunny Moderate 18:27 19.3 Middle 27.3 28.2 83.4 823612 823716 9.7 108 8.2 28.2 83.4 5.7 0.3 27.3 6.0 6 18.3 0.3 86 27.3 8.2 28.3 85.1 5.8 5.8 6 8.2 28.3 5.8 85.2 18.3 0.4 89 27.3 8.2 28.3 85.3 5.8 5.8 5 1.0 27.3 8.2 26.1 6.0 Surface 27.3 8.2 26.1 97.3 27.3 8.2 26.1 97.3 6.7 1.0 6.1 6 6.7 SR8 Sunny Calm 17:05 4.8 Middle 10.9 820491 811688 -3.8 27.0 8.2 6.8 15.7 26.1 7 99.0 Bottom 27.0 8.2 26.1 99.1 6.8 3.8 27.0 8.2

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Water Quality Monitoring

Water Quality Monitoring Results on 09 October 18 during Mid-Ebb Tide DO Saturation Dissolved Suspended Solids otal Alkalinity Chromium Turbidity(NTU) Nickel (µg/L) Sampling Water Water Temperature (°C) Salinity (ppt) Coordinate Coordinate Monitoring Current (µg/L) Speed Oxygen (mg/L) (ppm) Sampling Depth (m) HK Grid HK Grid Station Direction DA DA DA DA DA Condition Condition Time Depth (m) (m/s) Value Average Value Average Value Value Average Value Value Value Value (Northing) (Easting) Value Value 0.1 138 27.3 8.7 1.0 8.2 27.7 95.2 6.5 87 0.9 < 0.2 Surface 27.3 8.2 95.2 1.0 27.7 0.1 148 27.3 8.2 95.2 6.5 8.8 q 87 < 0.2 1.0 45 13.0 1.0 0.2 203 27.2 8.2 28.8 94.8 64 8 90 < 0.2 C1 Calm 12:31 8.9 Middle 28.8 94.8 12.2 9 90 815624 804238 1.0 Cloudy < 0.2 4.5 0.2 216 27.2 8.2 28.8 94.8 6.4 13.1 9 91 <0.2 1.0 7.9 0.2 228 27.2 8.2 14.8 12 93 <0.2 0.9 Bottom 27.2 8.2 29.1 94.6 6.4 94.6 7.9 0.2 27.2 8.2 29.1 6.4 14.7 10 92 <0.2 1.0 1.0 0.2 56 27.5 8.1 18.4 11 84 <0.2 1.4 25.5 86.9 6.0 Surface 27.5 8.1 25.5 86.9 86.9 8.1 25.5 1.4 1.0 0.2 58 27.5 6.0 18.7 11 84 <0.2 6.5 0.3 81 27.4 87.2 6.0 11 88 <0.2 1.4 8.1 26.1 19.6 26.1 87.2 C2 Fine Moderate 11:23 13.0 Middle 27.4 20.2 12 87 825695 806945 1.4 87.2 6.0 87 <0.2 1.4 6.5 0.3 83 27.4 8.1 26.1 20.1 10 87.8 87.7 12.0 0.4 50 27.4 8.1 26.5 6.0 22.1 13 90 <0.2 1.5 87.8 Bottom 27.4 8.1 26.5 6.0 12.0 0.5 51 27.4 8.1 26.5 6.0 22.2 13 91 <0.2 1.4 0.6 27.6 8.2 85.4 85.4 10.7 1.0 26.8 85 <0.2 Surface 27.6 8.2 26.8 85.4 1.0 0.6 69 27.6 8.2 5.8 10.7 86 <0.2 0.9 6.3 0.4 14.0 80 27.4 81.3 5.5 9 90 <0.2 1.0 8.1 27.6 C3 27.6 81.3 822088 817796 Misty Moderate 13:11 12.6 Middle 27.4 14 0 9 90 1.0 6.3 27.6 81.3 5.5 0.4 84 27.4 8.1 14.1 8 90 < 0.2 1.0 11.6 0.5 104 27.4 8.1 28.0 81.4 5.5 17.1 9 93 <0.2 1.0 Bottom 8.1 28.0 81.4 5.5 11.6 0.5 108 27.4 8.1 28.0 81 4 5.5 17 1 10 93 < 0.2 1.0 1.0 0.1 210 27.5 12.4 85 <0.2 1.0 8.2 27.8 91.7 6.2 Surface 27.5 8.2 27.8 91.7 91.7 1.0 8.2 6.2 86 1.0 0.1 27.5 12.6 <0.2 6.2 -IM1 Cloudy Calm 12:12 5.5 Middle 15.5 90 817961 807115 1.0 4.5 94 <0.2 0.1 204 27.2 18.8 0.9 8.1 28.3 91.5 92.1 6.2 9 Bottom 28.3 91.8 6.2 45 0.1 218 27.2 8.1 28.3 6.2 18 1 q 95 <0.2 0.9 1.0 0.0 76 27.3 10.3 85 <0.2 0.8 8.2 28.4 95.6 6.5 28.4 95.6 Surface 1.0 0.0 83 27.3 8.2 28.4 95.5 6.5 10.4 87 <0.2 6.5 3.8 12.2 0.1 27.2 8.2 28.7 94.9 6.4 8 90 <0.2 0.9 IM2 Moderate 12:05 7.6 Middle 27.2 8.2 28.7 94.9 12.1 90 818168 806162 0.8 Cloudy 3.8 0.1 24 27.2 8.2 12.2 91 <0.2 0.8 6.6 27.2 28.8 94.5 13.6 11 93 < 0.2 0.8 0.0 89 8.2 6.4 Bottom 28.8 94.6 6.4 66 28.8 94.6 11 0.0 93 27.2 8.2 6.4 13.6 95 <0.2 0.8 1.0 27.3 0.2 81 8.2 28.0 94.3 6.4 14 4 8 86 <0.2 1.0 Surface 28.0 94.4 94.4 1.0 0.2 84 27.3 8.2 28.0 6.4 14.7 8 88 <0.2 0.8 4.0 0.1 355 27.2 17.3 11 <0.2 1.0 90 IM3 Cloudy Moderate 11:59 7.9 Middle 27.2 8.2 28.8 94.3 90 818773 805579 0.9 4.0 0.1 27.2 8.2 28.7 94.3 6.4 17.1 10 91 <0.2 0.9 6.9 0.0 327 27.2 8.2 29.0 94.0 12 92 < 0.2 0.9 6.4 22.4 29.0 93.9 8.2 6.4 Bottom 27.2 29.0 93.8 0.9 8.2 6.3 6.9 0.0 27.2 22.6 11 94 <0.2 356 1.0 0.1 144 27.3 8.2 91.6 91.5 15.3 12 85 1.2 28.0 6.2 <0.2 Surface 27.3 28.0 91.6 87 8.2 28.0 6.2 <0.2 1.2 1.0 0.1 151 27.3 15.6 14 6.2 <0.2 1.2 4.3 0.1 17 27.2 8.2 28.5 91.5 6.2 17.3 15 89 IM4 Moderate 11:50 8.5 Middle 27.2 8.2 28.5 91.6 18.2 90 819725 804628 1.2 Cloudy 4.3 0.1 18 27.2 8.2 28.5 91.6 6.2 18.9 15 91 7.5 0.1 313 27.2 8.2 28.6 91.4 91.4 20.4 17 94 <0.2 1.2 6.2 27.2 28.6 91.4 Bottom 8.2 6.2 7.5 0.1 333 27.2 8.2 28.6 6.2 21.9 16 94 <0.2 1.1 1.0 27.2 15.5 16 0.2 8.2 28.2 90.8 6.2 85 <0.2 0.8 28.2 Surface 27.2 90.8 28.2 90.8 87 1.0 0.2 27.2 8.2 6.2 16.3 17 <0.2 0.8 6.2 4.3 17.4 17 89 0.8 0.2 27.2 8.2 28.2 90.7 6.2 <0.2 IM5 Cloudy Moderate 11:41 8.6 Middle 8.2 28.2 90.7 820733 804882 0.8 4.3 0.2 4 27.2 8.2 28.2 90.7 6.2 18.8 17 91 <0.2 0.9 7.6 0.1 334 27.2 91.3 91.8 20.6 19 93 <0.2 0.8 8.2 28.2 6.2 Bottom 27.2 8.1 28.2 91.6 6.2 7.6 8.1 6.2 21.7 19 94 <0.2 0.1 27.2 1.0 0.1 289 27.5 8.2 26.6 90.5 6.2 12.1 9 85 <0.2 1.2 27.5 8.2 26.6 90.6 Surface 8.2 26.6 90.6 1.8 27.5 6.2 13.4 10 < 0.2 1.0 0.1 315 86 3.8 0.1 27.3 8.2 27.9 90.6 6.1 15.5 10 89 <0.2 1.3 11:33 7.6 Middle 27.9 90.6 90 821063 805808 1.3 IM6 Cloudy Moderate 3.8 0.1 27.3 8.2 27.9 90.6 6.1 15.7 10 90 < 0.2 6.6 0.1 331 27.2 8.2 28.2 90.6 90.6 20.8 11 94 <0.2 1.2 6.1 28.2 90.6 Bottom 6.6 0.1 337 27.3 8.2 28.2 6.1 20.9 11 95 < 0.2 1.2 1.0 0.1 352 27.5 8.1 25.9 88.4 6.0 13.7 10 84 <0.2 1.4 27.5 25.8 88.5 Surface 8.1 1.0 0.1 324 27.5 8.2 25.7 88.5 6.1 13.9 10 85 < 0.2 1.4 1.5 4.5 16.4 12 89 < 0.2 0.1 27.3 8.2 27.0 88.7 6.1 IM7 Cloudy Moderate 11:24 9.0 Middle 26.9 88.7 17.3 12 89 821356 806816 1.4 45 8.2 88.7 90 0.1 27.3 26.9 6.1 16.5 13 <0.2 8.0 0.1 22 27.3 8.2 27.7 88.8 6.0 21.5 14 93 < 0.2 1.4 27.7 88.8 6.0 Bottom 8.0 0.1 22 27.3 8.2 27.7 88.7 6.0 21.6 14 95 <0.2 1.4 1.0 0.4 120 27.7 8.1 25.1 6.0 16.5 84 <0.2 1.4 Surface 27.7 8.1 25.1 88.4 1.0 27.7 8.1 88.4 6.1 85 1.4 0.4 16.6 <0.2 <0.2 1.5 4.3 0.3 84 27.5 89.3 6.1 17.7 88 8.1 26.1 26.1 89.3 1.4 IM8 Fine Moderate 11:48 8.5 Middle 27.5 8.1 18.5 88 821811 808159 < 0.2 27.5 8.1 26.0 89.3 6.1 18 1 88 <0.2 43 0.3 84 7.5 91 1.4 83 90.7 9 < 0.2 0.4 27.3 8.2 27.3 6.2 21 1 Bottom 27.3 27.3 90.8 6.2 7.5 0.4 84 27.3 8.2 21.1 91 < 0.2 1.4

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Water Quality Monitoring

Water Quality Monitoring Results on 09 October 18 during Mid-Ebb Tide DO Saturation Dissolved Suspended Solids otal Alkalinity Chromium Turbidity(NTU) Nickel (µg/L) Sampling Water Water Temperature (°C) Salinity (ppt) Coordinate Coordinate Monitoring Current Oxygen (mg/L) Speed (ppm) (µg/L) Sampling Depth (m) HK Grid HK Grid Station Direction DA DA DA DA (m/s) Value Value DA Condition Condition Time Depth (m) Average Value Average Value Average Value Average Value Value Value (Northing) (Easting) Value Value 0.5 118 27.7 16.0 1.0 8.1 25.0 87.2 6.0 84 < 0.2 1.4 Surface 27.7 25.0 87.2 1.0 124 25.0 87.2 0.5 27.7 8.1 6.0 16.0 85 < 0.2 14 18.4 87 1.5 41 0.4 77 27 4 8.1 25.8 88.3 6.1 8 < 0.2 IM9 Moderate 11:55 8.2 Middle 25.8 88.3 88 822106 808803 1.4 Fine < 0.2 4.1 0.4 84 27.4 8.2 25.8 88.3 6.1 18.2 8 88 <0.2 1.4 7.2 0.5 73 27.3 8.2 27.2 20.8 92 <0.2 1.4 27.2 Bottom 27.3 8.2 89.2 6.1 7.2 0.5 27.3 8.2 27.2 89.2 6.1 20.8 91 <0.2 1.4 1.0 0.6 101 27.6 8.1 25.5 87.7 6.0 16.1 84 <0.2 1.3 Surface 27.6 8.1 25.5 87.7 87.6 8.1 25.5 1.4 1.0 0.6 107 27.6 6.0 16.3 9 85 <0.2 11 <0.2 3.9 0.6 86 27.5 8.1 25.8 88.0 6.0 18.8 87 1.4 25.8 88.1 IM10 Misty Moderate 12:03 7.7 Middle 27.5 8.1 191 88 822361 809784 1.4 25.8 88.1 6.0 88 <0.2 1.3 3.9 0.6 87 27.5 8.1 19.2 10 6.7 0.4 75 27.4 8.2 26.9 89.5 6.1 22.2 12 91 <0.2 1.3 89.6 Bottom 27.4 8.2 26.9 89.6 6.7 0.4 81 27.4 8.2 27.0 6.1 22.2 12 91 <0.2 1.4 0.4 27.6 8.2 86.9 87.0 13.9 10 85 1.3 25.9 5.9 <0.2 Surface 27.6 8.2 25.9 87.0 1.0 0.4 27.6 8.2 5.9 14.0 11 85 <0.2 1.2 4.7 0.4 108 5.9 18.6 10 88 1.3 27.4 86.2 <0.2 8.2 26.4 26.4 822079 811476 1.3 IM11 Misty Moderate 12:14 9.4 Middle 27.4 8.2 86.2 18 2 88 4.7 86.2 5.9 1.2 0.4 108 27.4 8.2 26.4 18.7 10 88 < 0.2 8.4 0.2 109 27.4 8.2 26.6 86.3 5.9 22.0 12 90 <0.2 1.3 Bottom 8.2 26.6 86.3 5.9 86.3 8.4 0.2 112 27.4 8.2 26.6 5.9 21.9 11 91 < 0.2 1.3 1.0 0.5 111 27.6 8.2 25.9 18.4 85 <0.2 1.3 6.1 Surface 27.6 8.2 25.9 88.7 88.7 1.0 0.5 27.6 8.2 26.0 6.1 18.7 85 <0.2 1.3 1.4 5.0 0.5 102 27.4 8.2 26.7 89.0 6.1 20.0 9 88 <0.2 27.4 8.2 26.7 89.0 IM12 Mistv Moderate 12:20 10.0 Middle 20.3 88 821434 812048 13 5.0 107 8.2 26.7 89.0 6.1 20.1 88 <0.2 1.3 0.5 27.4 9 9.0 91 1.3 0.4 86 27.4 8.2 27.1 89.0 89.1 6.1 21.9 9 <0.2 Bottom 89.1 9.0 0.4 86 27.4 8.2 27 1 6.1 22.4 10 91 <0.2 12 1.0 0.4 93 27.5 87.8 13.1 85 <0.2 1.2 8.2 26.3 6.0 26.3 87.8 Surface 8.2 1.0 0.4 93 27.6 8.2 87.8 6.0 13.1 86 <0.2 1.2 6.0 -SR2 Moderate 12:46 5.1 Middle 13.8 88 821453 814153 1.2 Misty 4.1 0.2 27.5 26.6 14.5 89 < 0.2 1.2 95 8.2 88.0 6.0 Bottom 27.5 8.2 26.6 88.1 6.0 41 0.2 27.5 8.2 26.6 88.1 6.0 96 14.5 8 90 <0.2 12 1.0 142 27.5 17.4 10 0.3 8.1 25.5 87.4 6.0 Surface 25.5 87.5 87.6 1.0 0.3 148 27.5 8.1 25.5 6.0 17.5 11 4.9 0.3 99 27.5 8.1 19.6 12 26.1 SR3 Fine Moderate 11:42 9.7 Middle 27.5 8.1 26.1 88.5 19.9 12 822170 807560 4.9 0.3 105 27.5 8.1 26.1 88.4 6.0 19.9 12 8.7 0.4 80 27.3 8.2 27.4 89.5 22.7 12 6.1 27.4 89.5 8.2 6.1 Bottom 27.3 89.5 8.2 27.4 6.1 8.7 0.4 27.3 22.4 12 1.0 0.3 65 27.4 92.3 92.3 13.1 8.2 28.3 6.2 8 Surface 27.4 28.3 92.3 8.2 28.3 6.2 1.0 0.3 67 27.4 13.1 9 6.2 4.8 0.4 80 27.2 8.2 28.4 91.1 6.2 18.3 9 SR4A Cloudy Calm 12:51 9.5 Middle 27.2 8.2 28.4 91.1 817199 807811 4.8 0.4 81 27.2 8.2 28.4 91.1 6.2 18.6 9 8.5 0.2 27.2 8.2 28.4 20.2 11 6.2 27.2 28.4 91.1 Bottom 8.2 6.2 8.5 0.3 69 27.2 8.2 28.4 91.1 6.2 21.1 11 1.0 0.1 43 27.4 10.6 8.1 27.4 87.3 5.9 27.4 Surface 27.4 8.1 87.3 1.0 0.1 43 27.4 27.4 87.3 5.9 7 8.1 10.8 5.9 SR5A Cloudy Calm 13:07 4.3 Middle 816590 810705 3.3 0.0 47 27.3 8.1 27.5 13.5 87.1 5.9 Bottom 27.3 8.1 27.5 87.2 5.9 3.3 0.0 8.1 27.5 87.3 5.9 14.0 1.0 0.0 106 27.5 8.1 26.9 87.8 6.0 6.0 8 Surface 27.5 8.1 26.9 87.8 113 8.1 87.7 1.0 0.0 27.5 26.9 6.0 6.1 7 6.0 SR6 13:48 3.9 Middle 817894 814670 Cloudy Calm 2.9 0.0 27.4 8.1 26.9 87.9 6.0 6.5 26.9 88.1 Bottom 8.1 6.0 2.9 0.0 105 27.5 8.1 26.9 88.2 6.0 6.3 10 1.0 0.7 79 27.6 8.2 27.5 85.4 5.8 10.5 6 Surface 27.6 8.2 27.5 85.3 85.2 1.0 0.7 84 27.6 8.2 27.5 5.8 10.5 5 5.8 58 5.7 16.0 8.1 0.5 27.5 8.2 27.8 83.6 5 SR7 Misty Moderate 13:38 16.1 Middle 27.8 83.6 15.9 6 823618 823722 8.1 58 8.2 27.8 83.6 5.7 0.5 27.5 16.1 6 -15.1 0.2 19 27.5 8.1 27.8 83.8 5.7 21.3 7 Bottom 8.1 27.8 83.9 5.7 15.1 0.2 20 27.5 8.1 27.8 83.9 5.7 21.1 8 1.0 27.5 8.3 26.5 89.3 6.1 18.9 11 Surface 27.5 8.3 26.5 89.4 1.0 27.5 8.3 26.5 89.4 6.1 19.6 10 6.1 SR8 Misty Moderate 12:32 5.9 Middle 20.5 12 820485 811678 13 4.9 27.4 8.4 27.0 89.8 6.1 21.6 Bottom 27.4 27.0 89.9 6.1 8.4 40 27.4 13

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

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Surface 27.4 8.1 25.6 86.6 1.0 0.2 330 27.4 8.1 25.6 5.9 15.7 19 85 <0.2 1.4 5.9 6.6 0.2 27.4 8.2 25.8 86.8 5.9 19.3 20 87 <0.2 1.3 825687 C2 Fine Moderate 07:51 13.1 Middle 8.2 25.8 86.9 21 88 806949 1.4 87 1.4 6.6 0.3 27.4 8.2 25.8 86.9 6.0 19.3 21 < 0.2 0.4 39 27.3 8.2 26.4 87.6 6.0 21.0 24 90 <0.2 1.4 Bottom 26.4 87.6 6.0 12 1 0.4 40 27.3 8.2 26.4 87.6 6.0 21.0 25 91 < 0.2 1.3 1.0 0.3 242 27.4 8.1 27.6 82.1 5.6 17.3 87 <0.2 1.0 27.6 82.2 Surface 1.0 0.3 258 27.4 8.1 27.6 82.2 5.6 17.5 87 <0.2 1.0 6.2 27.3 18.7 1.0 0.3 242 8.1 81.7 5.5 89 <0.2 C3 Middle 27.3 8 1 27.7 81.7 90 822108 817773 1.0 05:59 124 194 Cloudy Moderate 6.2 8.1 81.7 5.5 19.2 90 <0.2 1.0 0.3 258 27.3 11.4 0.3 239 27.3 27.7 21.5 93 < 0.2 1.0 8.1 82.4 5.6 8 Bottom 27.3 27.7 82.4 5.6 82.4 11 4 8.1 27.7 5.6 1.0 0.3 247 27.3 22.3 93 <0.2 1.0 317 0.1 27.3 8.2 27.8 89.7 6.1 18.3 10 84 <0.2 1.4 Surface 27.3 27.8 89.7 89.7 1.4 1.0 0.1 344 27.3 8.2 27.8 6.1 18.8 11 85 <0.2 IM1 06:45 Middle 19.2 89 817975 807118 1.3 Fine Moderate 5.8 4.8 0.2 15 27.2 89.9 89.8 19.7 14 93 < 0.2 1.1 8.1 28.2 6.1 Bottom 27.2 8.1 28.2 89.9 6.1 28.2 1.1 4.8 0.2 15 27.2 8.1 6.1 19.8 14 <0.2 94 1.0 0.4 27.3 16.4 16 8.2 28.6 95.1 6.4 85 <0.2 0.8 Surface 28.6 95.1 1.0 28.6 95.0 6.4 0.8 0.4 27.3 8.2 16.9 15 86 <0.2 4.2 0.4 0 27.3 8.2 28.6 94.1 6.4 18.6 16 90 <0.2 0.8 28.6 94.1 818188 806156 0.8 IM2 Moderate 06:53 8.3 Middle 8.2 18.6 90 Fine 4.2 0.4 27.3 8.2 28.6 94.1 6.4 18.4 17 91 <0.2 0.8 7.3 0.3 355 27.2 8.2 28.6 6.3 20.6 18 92 <0.2 Bottom 27.2 8.2 28.6 92.9 6.3 7.3 27.2 8.2 28.6 92.9 6.3 20.8 19 93 <0.2 0.8 0.3 327 1.0 0.4 27.2 19.5 13 85 0.9 94.3 <0.2 8.2 28.6 6.4 27.2 8.2 28.6 94.3 Surface 8.2 28.6 94.3 6.4 85 < 0.2 0.9 1.0 0.5 49 27.2 19.6 12 93.9 42 0.4 34 27.2 8.2 28.8 6.4 20.7 14 90 <0.2 0.9 Moderate 07:03 8.4 Middle 93.9 818808 805587 0.9 4.2 0.4 35 27.2 8.2 28.8 6.4 20.8 14 91 <0.2 0.9 7.4 0.3 18 93 <0.2 0.8 27.2 8.2 28.9 93.5 6.3 21.6 Bottom 8.2 28.9 93.5 6.3 7.4 0.3 31 27.2 8.2 28.9 93.5 6.3 21.5 18 93 < 0.2 1.0 0.3 27.2 8.2 28.2 6.2 15.3 18 85 <0.2 1.0 92.0 Surface 27.2 8.2 28.2 92.0 1.0 0.3 27.2 8.2 28.2 92.0 6.2 15.1 19 86 0.9 < 0.2 62 89 4.3 0.3 10 27.2 8.2 28.2 90.3 6.1 18.3 20 < 0.2 1.0 IM4 Moderate 07:12 8.6 Middle 28.2 90.3 18.0 20 90 819724 804598 1.0 43 0.3 10 27.2 8.2 28.2 90.3 6.1 18.3 20 91 <0.2 1.1 7.6 0.2 19 27.2 8.2 28.2 90.3 6.1 20.4 22 94 <0.2 1.0 28.2 90.3 6.1 Bottom 8.2 7.6 0.2 19 27.2 8.2 28.2 90.3 6.1 20.6 95 <0.2 1.0 1.0 0.3 37 27.2 27 0.9 8.2 28.1 90.9 6.2 14.8 85 <0.2 28.1 90.9 Surface 27.2 8.2 1.0 0.4 38 27.2 8.2 28.1 90.9 6.2 14.9 27 87 < 0.2 0.9 6.2 4.1 0.3 27 27.2 90.5 6.1 15.4 29 90 <0.2 1.0 8.2 28.2 IM5 Moderate 07:23 8.1 Middle 28.2 90.5 16.5 90 820717 804891 1.0 8.2 41 28.2 6.1 15.7 < 0.2 0.3 27 27.2 28 7.1 90.6 0.2 27.2 8.1 28.2 6.1 18.2 32 93 <0.2 1.0 28.2 90.6 Bottom 1.0 7.1 0.2 27.2 8.1 28.2 19.7 32 94 < 0.2 1.0 8.2 27.9 90.4 13.1 23 86 <0.2 1.1 Surface 27.3 27.9 90.4 8.2 1.0 0.2 27.3 8.2 27.9 6.1 13.2 24 87 <0.2 6.1 4.0 0.1 358 27.3 8.2 6.1 15.7 29 89 < 0.2 1.1 28.0 90.4 27.3 8.2 28.1 90.4 821071 IM6 Fine Moderate 07:30 8.0 Middle 29 90 805822 91 1.1 4.0 0.1 329 27.3 8.2 28.1 90.4 6.1 15.9 29 < 0.2 7.0 0.1 19.8 93 < 0.2 1.0 300 27.3 8.2 28.2 90.4 6.1 35 Bottom 28.1 90.5 6.1 90.5 7.0 28.1 6.1 QΛ 0.1 307 27.3 8.2 20.6 36 < 0.2 11 1.0 0.1 336 27.5 8.1 25.7 6.0 14.7 87 <0.2 1.5 Surface 27.5 8.1 25.7 88.1 1.0 0.1 309 27.5 8.1 25.7 88.1 6.0 15.0 5 86 <0.2 1.6 4.7 0.1 342 27.3 8.2 26.4 88.2 6.0 21.9 89 <0.2 1.5 IM7 07:40 9.3 8.2 26.4 88.3 90 821349 806843 1.5 Fine Moderate Middle 27.3 4.7 26.4 88.3 6.0 90 <0.2 1.5 8.2 0.1 315 27.3 22.3 9 8.3 0.1 67 27.3 8.2 27.6 88.2 6.0 17.9 14 93 < 0.2 1.5 8.2 27.6 88.2 Bottom 27.3 6.0 8.2 27.6 88.2 6.0 16.7 8.3 0.1 67 27.3 14 94 < 0.2 1.4 87.2 87.2 1.0 0.3 38 27.4 8.1 25.3 6.0 15.7 85 <0.2 1.5 Surface 25.3 87.2 1.0 0.3 38 27.4 8.1 25.3 6.0 15.8 85 <0.2 1.5 4.4 0.4 17.1 1.5 27.3 8.2 26.0 88.3 6.1 87 <0.2 88.3 821821 808165 1.5 IM8 Fine Moderate 07:23 8.8 Middle 27.3 8.2 26.0 18.3 88 < 0.2 1.5 4.4 0.4 60 27.3 8.2 26.0 88.3 6.1 17.2 8 88 <0.2 7.8 0.4 50 27.3 90.2 22.0 8 92 < 0.2 1.5 8.2 27.0 6.2 27.3 8.2 27.0 90.2 6.2 Rottom 7.8 0.5 50 27.3 1.5

DA: Depth-Averaged

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

Water Quality Monitoring

Water Quality Monitoring Results on 09 October 18 during Mid-Flood Tide DO Saturation Dissolved Suspended Solids otal Alkalinity Chromium Turbidity(NTU) Nickel (µg/L) Sampling Water Water Temperature (°C) Salinity (ppt) Coordinate Coordinate Monitoring Current Oxygen (mg/L) Speed (ppm) (µg/L) Sampling Depth (m) HK Grid HK Grid Station Direction DA DA DA DA (m/s) Value Value DA Condition Condition Time Depth (m) Average Value Average Value Value Average Value Value Value (Northing) (Easting) Value Value 0.3 27.4 8.2 16.7 1.0 25.8 87.4 6.0 85 < 0.2 82 1.5 Surface 27.4 8.2 25.8 87.4 1.0 87 25.8 87 4 0.3 27.4 8.2 6.0 16.8 8 85 < 0.2 1.6 6.0 41 84 18.3 88 1.5 0.2 27.3 8.2 26.5 87.6 6.0 7 < 0.2 IM9 Moderate 07:17 8.2 Middle 26.5 87.6 18.9 88 822085 808815 1.5 Fine < 0.2 4.1 0.2 88 27.3 8.2 26.5 87.6 6.0 18.4 8 88 <0.2 1.4 7.2 0.2 59 27.3 8.2 26.6 6.0 21.6 91 <0.2 1.6 Bottom 27.3 8.2 26.6 87.8 6.0 87.8 7.2 0.2 27.3 8.2 26.6 6.0 21.6 10 91 <0.2 1.6 1.0 0.2 67 27.4 8.1 86.2 86.2 15.7 85 <0.2 1.5 25.2 5.9 9 Surface 27.4 8.1 25.2 86.2 8.1 25.2 5.9 1.5 1.0 0.2 70 27.4 15.7 8 86 <0.2 <0.2 4.4 0.2 5 27.3 25.8 5.9 17.8 10 88 1.6 8.2 86.2 25.8 86.2 IM10 Fine Moderate 07:08 8.8 Middle 27.3 18 1 10 88 822398 809794 1.5 4.4 8.2 25.8 86.2 5.9 87 <0.2 1.5 0.2 27.3 18.0 10 7.8 0.3 327 27.4 8.1 26.4 86.5 5.9 20.7 12 91 <0.2 1.5 Bottom 27.4 8.1 26.4 86.5 5.9 86.5 7.8 0.3 327 27.4 8.1 26.4 5.9 20.6 12 91 <0.2 1.5 1.0 0.3 27.4 8.2 26.6 16.2 18 86 86.7 86.7 <0.2 5.9 Surface 27.4 8.2 26.6 86.7 1.0 0.3 321 27.4 8.2 5.9 16.4 18 86 <0.2 1.2 4.5 5.9 19.8 19 88 1.2 0.3 329 27.4 86.2 <0.2 8.2 26.6 26.6 822060 811436 1.2 IM11 Fine Moderate 06:57 8.9 Middle 27.4 8.2 86.2 191 19 88 1.2 4.5 26.6 86.1 5.9 0.3 345 27.4 8.2 20.1 18 88 < 0.2 7.9 0.2 322 27.4 8.2 26.6 86.5 5.9 21.0 19 91 <0.2 1.2 Bottom 8.2 26.6 86.6 5.9 79 86.6 0.2 347 27.4 8.2 26.6 5.9 20.9 20 91 < 0.2 1.2 1.0 0.2 27.4 8.2 26.6 86.3 86.2 15.1 12 85 <0.2 1.2 226 5.9 Surface 27.4 8.2 26.6 86.3 1.0 0.3 27.4 8.2 26.6 5.9 15.2 12 86 <0.2 1.2 4.7 1.3 0.3 221 27.4 8.2 26.6 86.2 5.9 17.5 14 88 <0.2 27.4 8.2 26.6 86.3 821477 IM12 Fine Moderate 06:49 94 Middle 17.8 88 812030 13 4.7 8.2 26.6 86.3 5.9 17.7 14 88 <0.2 1.3 0.3 226 27.4 8.4 1.3 0.3 210 27.4 8.2 26.6 86.2 5.9 20.6 15 92 <0.2 Bottom 86.2 8.4 0.3 226 27.4 8.1 26.6 86.2 5.9 20.6 16 91 <0.2 1.3 1.0 0.3 354 27.4 26.6 86.6 16.2 18 <0.2 1.3 8.1 5.9 85 26.6 86.7 Surface 8.1 1.0 0.3 326 27.4 8.1 86.7 5.9 16.1 17 86 <0.2 1.3 5.9 -SR2 Moderate 06:21 5.3 Middle 87 821444 814183 1.3 Fine 4.3 0.3 352 27.4 26.6 87.6 20.4 88 < 0.2 1.3 8.1 6.0 22 Bottom 27.4 8.1 26.6 87.6 6.0 20 43 324 8.1 26.6 87.6 6.0 0.3 27.4 20.5 88 <0.2 1.3 1.0 66 27.4 16 0.5 8.2 26.2 88.7 6.1 14 1 Surface 26.2 88.7 88.6 1.0 0.6 67 27.4 8.2 26.2 6.1 14.2 15 5.0 0.5 77 27.3 8.2 6.1 17.2 16 26.9 SR3 Fine Moderate 07:30 10.0 Middle 27.3 8.2 26.9 88.8 822151 807597 5.0 27.3 8.2 26.9 88.8 6.1 17.4 16 9.0 0.5 78 27.3 8.2 27.0 88.8 6.0 20.1 18 27.0 88.8 27.3 8.2 6.1 Bottom 88.8 8.2 27.0 6.1 9.0 0.6 27.3 20.4 18 80 1.0 0.5 72 27.2 89.5 89.5 20.4 19 8.2 27.8 6.1 Surface 27.2 27.8 89.5 8.2 27.8 6.1 1.0 0.5 76 27.2 20.5 20 3.1 0.5 80 27.2 8.1 27.8 89.4 6.1 9.4 19 SR4A Fine Calm 06:05 6.1 Middle 27.2 8.1 27.8 89.4 817207 807816 3.1 0.5 82 27.2 8.1 27.8 89.4 6.1 9.5 19 5.1 0.4 8.1 27.8 89.4 16.9 24 6.1 27.2 27.8 89.5 Bottom 8.1 6.1 5.1 0.4 83 27.2 8.1 27.8 89.5 6.1 16.8 25 1.0 0.1 181 27.2 9.9 8.1 27.3 86.7 5.9 9 Surface 27.2 8.0 27.3 86.7 1.0 0.1 198 27.2 27.3 86.7 5.9 8.0 10.3 8 5.9 SR5A Fine Calm 05:45 4.0 Middle 816580 810668 3.0 0.1 184 27.2 7.9 9.5 10 27.3 6.0 Bottom 27.2 7.8 27.3 88.1 6.0 3.0 186 7.8 88.6 6.0 9.8 10 0.1 1.0 0.2 190 27.3 8.2 27.1 86.2 5.9 8.9 12 Surface 27.3 8.2 27.1 86.2 8.2 86.2 1.0 0.2 207 27.3 27.1 5.9 9.0 13 5.9 SR6 05:13 3.1 Middle 15 817910 814690 Calm 2.1 0.1 202 27.3 8.2 27.1 88.3 10.8 17 6.0 27.1 88.3 Bottom 8.2 6.0 27.1 88.3 2.1 0.1 213 27.3 8.2 6.0 10.8 17 1.0 0.1 27.4 8.2 27.3 82.1 5.6 13.9 8 Surface 27.4 8.2 27.3 82.1 1.0 0.1 48 27.4 8.2 27.3 82.0 5.6 13.9 8 5.5 15.4 10 8.2 0.3 75 27.3 8.1 27.8 81.3 SR7 Cloudy Moderate 05:30 16.3 Middle 27.8 81.3 16.2 9 823613 823730 8.2 8.1 27.8 81.3 5.5 0.3 75 27.3 15.4 8 -15.3 0.2 86 27.4 8.2 27.9 81.0 5.5 19.2 9 Bottom 27.9 81.0 5.5 15.3 0.2 90 27.4 8.2 27.9 81.0 5.5 19.2 10 1.0 27.4 8.1 26.4 88.1 6.0 16.5 12 Surface 27.4 8.1 26.4 88.1 1.0 27.4 8.1 26.4 88.1 6.0 16.6 13 6.0 SR8 Fine Moderate 06:37 5.8 Middle 15 820512 811673 4.8 27.4 8.1 18 26.5 90.1 6.2 18.2 Bottom 27.4 26.5 90.2 6.2 8.1 17 4.8 27.4

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

Note: Access to SR8 was blocked by barge and its wires. The monitoring at SR8 was slightly shifted to the closest safe and accessible location temporarily.

Water Quality Monitoring Results on 11 October 18 during Mid-Ebb Tide DO Saturation Dissolved Suspended Solids Total Alkalinity Chromium Turbidity(NTU) Sampling Water Water Temperature (°C) Salinity (ppt) Coordinate Coordinate Nickel (µg/L) Monitoring Current Speed Oxygen (mg/L) (ppm) (µg/L) Sampling Depth (m) HK Grid HK Grid Station Direction DA DA DA Value DA Value DA Condition Condition Time Depth (m) (m/s) Value Average Value Average Value Average Value Value Value (Northing) (Easting) Value 0.4 26.8 8.2 12.4 1.0 102 28.2 93.2 6.4 87 < 0.2 0.6 Surface 8.2 28.2 93.2 1.0 102 87 0.4 26.8 8.2 28.2 93.1 64 12.5 11 < 0.2 0.7 8.2 13.4 90 0.6 44 0.3 71 26.9 28.6 92.0 6.3 9 <0.2 C1 13:50 8.8 Middle 8.2 28.6 92.0 10 90 815611 804252 0.7 Cloudy Rough 4.4 0.3 77 26.9 8.2 28.6 92.0 6.3 13.5 11 90 <0.2 0.8 7.8 0.1 32 26.9 8.1 6.2 14.4 11 92 <0.2 0.9 Bottom 26.9 8.1 29.1 90.9 6.2 7.8 0.1 26.9 8.1 29.1 90.9 6.2 14.4 10 93 <0.2 0.8 1.0 0.3 334 8.1 11.5 12 85 1.5 27.0 25.5 86.7 6.0 < 0.2 Surface 27.0 8.1 25.5 86.7 8.1 25.5 86.7 6.0 1.5 1.0 0.3 353 27.0 11.5 12 84 <0.2 10 6.1 0.3 87.5 16.2 88 < 0.2 1.5 26.9 8.1 25.9 6.0 25.9 87.5 825655 C2 Cloudy Moderate 12:57 12.1 Middle 26.9 8.1 16.6 86 806954 1.5 87.5 6.0 86 < 0.2 1.6 6.1 0.3 26.9 8.1 25.9 16.2 10 11 1 0.3 26.9 8.1 26.0 88.2 6.1 22.2 11 88 <0.2 1.4 Bottom 26.9 26.0 88.2 11.1 0.3 26.9 8.1 26.0 88.2 6.1 22.2 10 85 < 0.2 1.6 0.0 27.2 8.1 10 87 <0.2 1.4 28.0 Surface 28.0 83.9 8.1 1.0 0.0 27.2 8.1 5.7 4.7 10 85 <0.2 1.4 6.1 61 5.6 88 1.4 0.2 27.2 5.6 9 < 0.2 8.1 28.3 82.4 28.3 822113 817794 C3 Cloudy Moderate 14:53 12.2 Middle 27.2 82.4 5.5 10 88 6.1 5.6 1.5 0.2 64 27.2 8.1 28.3 82.4 5.6 9 88 < 0.2 10 1.4 11.2 0.3 27.2 8.1 28.6 82.9 5.6 6.2 89 < 0.2 Bottom 8.1 28.6 82.9 11 2 0.3 43 27.2 8.1 28.6 82 9 5.6 6.2 10 91 < 0.2 1.5 1.0 0.1 313 26.7 8.1 15.5 12 <0.2 0.9 26.7 83 Surface 26.7 8.1 26.7 88.6 1.0 0.1 8.1 88.7 6.1 15.4 11 83 <0.2 0.9 26.7 817969 -IM1 Cloudy Moderate 13:30 5.7 Middle 16 9 12 85 807151 1.0 4.7 13 86 <0.2 0.1 26.6 6.2 18.3 1.0 86 8.1 26.8 89.2 89.2 Bottom 26.8 89.2 6.2 47 0.1 89 26.6 8.1 26.8 18.3 12 87 <0.2 1.0 1.0 0.3 43 26.7 13.5 88 <0.2 0.8 8.2 27.4 6.4 27.4 93.0 Surface 1.0 0.3 43 26.7 8.2 27.4 92.9 6.4 13.6 10 89 <0.2 0.9 4.0 0.1 12.2 0.9 26.7 8.2 27.5 91.8 6.3 9 88 <0.2 IM2 Moderate 13:24 8.0 Middle 26.7 8.2 27.5 91.8 89 818151 806144 Cloudy 4.0 0.1 26.7 8.2 6.3 12.4 10 < 0.2 7.0 26.8 8.2 16.0 10 92 <0.2 1.0 0.2 10 27.6 90.1 6.2 Bottom 27.6 90.1 6.2 10 7.0 0.2 10 6.2 1.0 8.2 27.6 90.1 16.1 92 <0.2 26.8 1.0 86 0.9 0.3 26.8 8.2 27.4 92.0 6.3 15.1 13 <0.2 Surface 27.4 91.9 1.0 0.3 69 26.8 8.2 27.4 91.8 6.3 15.5 13 86 <0.2 0.9 4.2 0.2 56 22.7 13 90 <0.2 0.9 26.8 90.5 6.2 IM3 Cloudy 13:17 8.3 Middle 26.8 8.2 27.7 90.4 19.3 90 818784 805577 Moderate 0.3 26.8 8.2 6.2 22.4 15 91 <0.2 1.0 7.3 0.3 63 20.0 16 92 < 0.2 1.1 26.8 8.2 28.0 89.9 6.1 8.2 28.0 89.9 6.1 Bottom 26.8 89.9 8.2 28.0 6.1 20.1 93 1.0 7.3 0.3 26.8 16 < 0.2 66 1.0 0.4 18 26.8 13.2 12 86 <0.2 1.3 8.2 27.5 6.2 Surface 26.8 27.5 90.8 90.8 87 8.2 27.5 6.2 12 < 0.2 1.0 0.4 18 26.8 13.5 1.3 3.1 0.3 355 26.8 8.2 27.7 89.4 6.1 14.4 17 89 <0.2 IM4 Cloudy Moderate 13:08 6.2 Middle 26.8 8.2 27.7 819741 804598 3.1 0.3 327 26.8 8.2 27.7 89.4 6.1 14.0 15 90 < 0.2 0.5 26.9 8.2 27.9 6.1 19.0 19 94 <0.2 1.3 27.9 89.0 Bottom 26.9 8.2 5.2 0.5 328 26.9 8.2 6.1 18 95 <0.2 1.3 0.4 26.7 12.1 14 83 1.2 8.2 26.9 90.7 6.2 <0.2 Surface 8.2 26.9 90.7 13 1.2 1.0 0.5 19 8.2 26.9 90.7 6.2 12.2 83 < 0.2 26.7 14.2 14 86 3.8 0.5 22 26.8 8.2 27.0 88.88 6.1 <0.2 IM5 Cloudy Moderate 12:57 7.6 Middle 8.2 27.0 88.8 820760 804877 3.8 0.6 23 26.8 8.2 27.0 88.8 6.1 14.4 15 87 < 0.2 1.3 6.6 0.3 26.8 17.4 24 89 <0.2 1.3 8.2 27.0 6.1 Bottom 26.8 8.2 27.0 88.7 8.2 88.7 6.1 17.5 90 <0.2 1.4 26.8 1.0 0.1 26.8 8.1 26.4 88.8 6.1 14.2 11 86 <0.2 1.5 Surface 26.8 8.1 26.4 88.8 8.1 26.4 88.7 6.1 87 1.5 14.2 < 0.2 1.0 0.1 26.8 10 3.9 1.5 0.1 11 26.8 8.1 26.4 87.7 6.0 15.3 10 91 < 0.2 IM6 12:49 7.8 Middle 26.4 87.8 821081 805811 Cloudy Moderate 3.9 0.1 11 26.8 8.1 26.4 87.8 6.1 15.4 10 91 < 0.2 6.8 0.2 26.8 8.1 26.5 86.8 6.0 21.1 17 93 <0.2 1.6 26.5 86.8 Bottom 6.8 0.2 26.8 8.1 26.5 6.0 21.1 17 94 < 0.2 1.6 1.0 0.2 295 26.9 8.1 24.8 86.4 6.0 14.1 12 87 <0.2 1.6 24.8 86.4 Surface 26.9 8.1 1.0 0.2 312 26.9 8.1 24.8 86.4 6.0 14.1 12 87 <0.2 1.6 19.1 89 1.6 1.5 4.5 < 0.2 0.2 291 26.8 8.2 25.6 86.4 6.0 12 IM7 Cloudy Moderate 12:41 8.9 Middle 25.6 86.5 13 90 821321 806828 4.5 0.2 8.2 25.6 6.0 13 90 294 26.8 86.5 19.2 < 0.2 79 0.1 302 26.8 8.2 26.0 86.3 6.0 21.1 15 92 < 0.2 16 26.0 86.2 7.9 0.1 318 26.8 8.2 26.0 86.1 6.0 21.1 13 92 < 0.2 1.5 1.0 0.2 131 26.9 8.1 12.3 13 83 <0.2 1.5 Surface 26.9 8.1 25.5 87.6 8.1 25.5 87.6 6.1 12.3 14 83 <0.2 1.4 0.2 26.9 1.5 1.6 3.8 0.1 112 6.0 15.2 16 85 26.9 8.1 25.9 87.4 < 0.2 25.9 87.4 821858 IM8 Cloudy Moderate 13:22 7.6 Middle 26.9 8.1 15 86 808136 1.5 117 8 1 25.9 87.4 6.0 15.2 15 16 87 <0.2 3.8 0.1 26.9 6.6 89 16 0.1 61 26.8 8.1 26.3 88.3 6.1 16.6 <0.2 Bottom 26.3 88.3 6.6 0.1 61 26.8 15 88 < 0.2 1.6

DA: Depth-Average

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

Expansion of Hong Kong International Airport into a Three-Runway System Water Quality Monitoring Water Quality Monitoring Results on 11 October 18 during

11 October 18 during Mid-Ebb Tide

Water Qual	ity Monite	oring Resu	lts on		11 October 18	during Mid-	Ebb Tide	•																		
Monitoring	Weather	Sea	Sampling	Water	Sampling D	epth (m)	Current Speed	Current	Water Ten	mperature (°C)	pН	Sali	nity (ppt)		turation %)	Dissolv Oxyge		Turbidity(NTU)	Suspende (mg/		Coordinate HK Grid	Coordinate HK Grid	Chron (µg/		kel (µg/L)
Station	Condition	Condition	Time	Depth (m)	- Campang -		(m/s)	Direction	Value	Average	Value Aver	age Value	Average	Value	Average	Value	DA	Value	DA	Value	DA Value DA	(Northing)	(Easting)	Value	DA Valu	lue DA
					Surface	1.0 1.0 3.9	0.1 0.1 0.1	63 63 58	26.9 26.9 26.8	26.9	8.2 8.2 8.2	25.8		87.9 87.9 88.9	87.9	6.1 6.1	6.1	18.4 18.4 14.1		15 16 15	84 83 86			<0.2 <0.2 <0.2	1.6 1.5 1.3	5
IM9	Cloudy	Moderate	13:29	7.7	Middle	3.9 6.7	0.1	60	26.8 26.8	26.8	8.2	26.1	26.1	88.9 90.7	88.9	6.1	-	14.1	16.9	14	14 85 86 88	822075	808808	<0.2	<0.2	4 1.6
					Bottom	6.7	0.2	38 40	26.8	26.8	8.1	26.1	26.1	90.7	90.7	6.3	6.3	18.3		10	88 85			<0.2	1.4	4
					Surface	1.0	0.1	43 40	27.0 27.0 26.9	27.0	8.2 8.2 8.2	26.2	26.2	87.4 87.5	87.4	6.0 6.0	6.0	14.0 14.0 17.8	ŀ	13	84			<0.2	1.8	8
IM10	Cloudy	Moderate	13:36	7.4	Middle	3.7 6.4	0.1	42 44	26.9 26.8	26.9	8.2	26.3	26.3	87.5 87.8	87.5	6.0		17.8 17.4	16.4	11	12 87 87 89	822367	809774	<0.2	<0.2	6 1.6
					Bottom	6.4 1.0	0.1	46 271	26.8 27.0	26.8	8.2 8.1 8.1 8.1	26.5	26.5	87.8 86.3	87.8 86.3	6.1 5.9	6.1	17.4 14.5		11 11	88 85			<0.2	1.6	6
IM11	Cloudy	Moderate	13:48	8.4	Middle	1.0 4.2	0.1 0.1	272 246	27.0 27.1	27.1	8.1	26.6	26.7	86.3 86.8	86.8	6.0	6.0	14.5 18.8	18.0	11 11	87 87 88	822054	811453	<0.2	<0.2	5 15
	Cidady	Moderate	10.10	0	Bottom	4.2 7.4	0.1	250 214	27.1	27.1	8.1 8.1	26.7	26.7	86.8 88.3	88.3	6.0	6.1	18.8	.0.0	10	88	022001	011100	<0.2	1.4	4
					Surface	7.4 1.0 1.0	0.1 0.1 0.1	232 60 63	27.1 27.0 27.0	27.0	8.1 8.1 8.1 8.1	26.7		88.3 87.5 87.5	87.5	6.1 6.0 6.0		9.2 9.2		11 11 10	91 86 87			<0.2 <0.2 <0.2	1.5 2.2 1.5	2
IM12	Cloudy	Moderate	13:57	7.9	Middle	4.0	0.1	51 53	27.0 27.0	27.0	8.1 8.1 8.1	26.4	26.4	88.1 88.1	88.1	6.1	6.1	10.0	9.8	14 15	12 88 87	821474	812063	<0.2	<0.2	4 16
					Bottom	6.9	0.2	48 51	27.0	27.0	8.1 8.	26.4	26.4	90.5	90.5	6.2	6.2	10.3		13	85 86			<0.2	1.7	7
					Surface	1.0 1.0	0.1 0.2	63 68	27.0 27.0	27.0	8.1 8.1	1 26.5	26.5	88.2 88.2	88.2	6.1 6.1	6.1	9.0 9.0		11 10	87 86			<0.2	1.4	
SR2	Cloudy	Moderate	14:21	4.3	Middle	-	-	-	-	-	-	-	-	-	-	1	0.1	-	9.1	-	10 - 88	821458	814144	-	<0.2	
					Bottom	3.3 3.3 1.0	0.1	134 134 68	26.9 26.9	26.9	8.1 8.	26.6		91.7	91.8	6.3	6.3	9.3 8.9 18.6		10 9	89 90			<0.2 <0.2	1.4	4
					Surface	1.0	0.3 0.3 0.3	73 78	26.8 26.8 26.8	26.8	8.1 8.1 8.1	26.2	26.2	89.0 89.0 89.3	89.0	6.1 6.1 6.2	6.2	18.6		10 12 11	-			-	-	
SR3	Cloudy	Moderate	13:16	8.2	Middle	4.1	0.4	85 55	26.8	26.8	8.1	26.5	26.5	89.3 89.8	89.3	6.2	-	14.9	17.5	10	11 -	822173	807570	-	-	
					Bottom Surface	7.2 1.0	0.3	59 56	26.8 26.7	26.8	8.1 8. 8.1 8	26.7	26.7	89.8 90.5	89.8 90.4	6.2	6.2	18.9 22.0		10 18	-			-	-	
SR4A	Cloudy	Moderate	14:10	8.5	Middle	1.0 4.3	0.3	60 55	26.7 26.7	26.7	8.1 8.1	27.1		90.3	90.2	6.2	6.2	22.0 20.3	22.2	17 18	18	817199	807810	-	-	
	,				Bottom	4.3 7.5 7.5	0.3 0.2 0.2	58 54 58	26.7 26.7 26.7	26.7	8.1 8.1 8.1 8.1	27.1	27.1	90.2 89.8 89.8	89.8	6.2 6.2	6.2	20.5 24.3 24.3		19 18 19	-			-	-	
					Surface	1.0	0.1	1 1	26.8	26.8	8.1	26.5		86.2 86.3	86.3	5.9	ŀ	13.8		12	-			-	-	
SR5A	Cloudy	Moderate	14:25	5.0	Middle	-	-		-	-		-	-	-	-	-	6.0	-	14.3	-	11	816600	810689	-		
					Bottom	4.0 4.0	0.1 0.1	9	26.8 26.8	26.8	8.1 8.1	26.5	20.5	88.0 88.1	88.1	6.1	6.1	14.8 14.8		10 10	-				-	
					Surface	1.0	0.1	62 62	27.0 27.0	27.0	8.1 8.	26.1	26.1	87.4 87.3	87.4	6.0	6.0	11.0 11.0		10 10	-			-	-	
SR6	Cloudy	Moderate	14:53	4.8	Middle	3.8	0.1	- 60	26.9	-	8.1	26.1	-	- 88.8	-			10.5	10.8	- 11	11	817914	814644	-		
					Bottom	3.8 3.8 1.0	0.1	62 86	26.9	26.9	8.1	26.1	26.1	89.0 82.5	88.9	6.1 6.1 5.6	6.1	10.5		11	-			-	-	
05-7	Ol-	Mad	45.00	45.	Surface	1.0	0.4	94 74	27.2	27.2	8.1	28.4	28.4	82.5 82.1	82.5	5.6	5.6	5.1 7.1	7,	12	-	00000	000707	-	-	
SR7	Cloudy	Moderate	15:21	15.4	Middle Bottom	7.7 14.4	0.3 0.1	75 73	27.2 27.2	27.2	8.1 8.1	28.6	28.6	82.1 83.9	82.1 83.9	5.6 5.7	5.7	7.1 9.2	7.1	11 13	12 -	823627	823765	-	-	
					Surface	14.4 1.0	0.1	79 -	27.2 26.8	26.8	8.1 8.2	28.8	26.1	83.9 91.7	91.7	6.3	J.1	9.2 11.8		12 13				-	-	
SR8	Cloudy	Moderate	14:07	4.6	Middle	1.0	-		26.8			26.1	-	91.7	-	6.3	6.3	11.8	14.6	13	11 -	820527	811662	-		
					Bottom	3.6 3.6	-	-	26.8 26.8	26.8	8.1 8.1 8.1	1 26.2	26.2	93.1 93.1	93.1	6.4	6.4	17.3 17.3	ļ	9	-			-	-	
D. D			1	l	1	3.0		-	20.0		O. I	20.2	1	93. I		0.4		17.3		10	-	1	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

Note: Access to SR8 was blocked by barge and its wires. The monitoring at SR8 was slightly shifted to the closest safe and accessible location temporarily.

Water Quality Monitoring Water Quality Monitoring Results on 11 October 18 during Mid-Flood Tide DO Saturation Dissolved Suspended Solids otal Alkalinity Chromium Turbidity(NTU) Sampling Water Water Temperature (°C) Salinity (ppt) Coordinate Coordinate Nickel (µg/L) Monitoring Current Speed Oxygen (mg/L) (ppm) (µg/L) Sampling Depth (m) HK Grid HK Grid Station Direction DA DA DA Value DA DA Condition Condition Time Depth (m) (m/s) Value Average Value Average Value Value Average Value Value Value (Northing) (Easting) Value Value 0.7 26.7 8.2 16.2 1.0 51 27.2 90.9 6.2 20 86 < 0.2 1.1 Surface 8.2 1.0 0.7 54 26.7 8.2 27.2 90.9 6.2 16.2 18 87 <0.2 1.2 6.2 4.5 0.6 37 26.9 8.2 28.5 90.2 6.1 37.6 14 90 <0.2 1.2 C1 8.9 Middle 26.9 8.2 28.5 90.2 37.6 815612 804218 Cloudy Rough 07:48 16 90 4.5 0.6 40 26.9 8.2 28.5 90.2 6.1 38.0 16 91 <0.2 1.0 7.9 0.5 32 13 <0.2 1.0 27.0 8.1 29.0 88.6 6.0 59.0 93 Bottom 29.0 88.6 79 0.5 32 27.0 8.1 29.0 88.5 6.0 58.7 13 92 <0.2 1.0 1.0 0.4 1.5 27.0 8.1 25.1 85.6 5.9 15.0 8 83 <0.2 Surface 27.0 8.1 25.1 85.6 1.0 0.4 328 27.0 25.1 5.9 15.0 7 84 <0.2 1.4 1.4 6.1 0.4 26.9 8.1 25.7 86.1 6.0 11.3 6 85 < 0.2 825670 C2 Cloudy Moderate 09:29 12.2 Middle 26.9 8.1 25.7 86.1 86 806937 87 6.1 0.4 8.1 25.7 86.1 6.0 11.3 < 0.2 1.4 26.9 88 11.2 0.4 352 26.9 8.1 25.6 88.0 6.1 13.6 <0.2 1.4 Bottom 25.6 88.0 11.2 0.4 324 26.9 8.1 25.6 88.0 6.1 13.6 6 87 <0.2 14 1.0 0.5 256 27.1 8.1 26.8 84.6 5.8 14.0 10 85 <0.2 1.5 26.8 84.6 8.1 1.0 0.5 262 27.1 8.1 26.8 84.6 5.8 14.0 10 87 <0.2 1.6 5.8 0.5 27.3 14.1 1.5 253 8.1 27.6 81.8 5.6 9 86 <0.2 C3 07:30 Middle 27.3 8.1 27.6 81.8 822123 817800 Cloudy 11.5 Moderate 5.8 8.1 27.6 81.8 5.6 14.1 88 <0.2 1.4 0.6 27.3 9 10.5 0.3 252 27.3 5.6 15.2 8 89 < 0.2 1.4 8.1 27.6 82.7 Bottom 27.3 8.1 27.6 82.7 5.6 5.6 10.5 8.1 27.6 82.7 15.2 90 0.4 261 27.3 q <02 1.5 10 1.0 0.3 8.1 14.8 12 26.6 26.8 89.0 6.1 85 <0.2 1.1 Surface 26.6 26.8 89.0 1.2 1.0 0.3 10 26.6 8.1 26.8 89.0 6.1 14.9 12 86 <0.2 817944 IM1 08:05 Middle 88 807157 1.2 Cloudy Rough 5.6 4.6 0.1 349 26.6 26.9 21.7 20 91 <0.2 1.1 8.1 87.1 6.0 87.1 Bottom 26.6 8.1 26.9 6.0 87.1 18 4.6 0.1 321 8.1 26.9 6.0 21.1 91 1.2 26.6 < 0.2 1.0 0.3 11.4 26.7 8.2 26.9 89.3 6.2 16 86 <0.2 1.3 Surface 26.9 89.3 1.0 8.2 6.2 15 87 <0.2 0.4 15 26.7 26.9 89.3 11.4 1.2 3.9 0.4 20 26.7 8.2 26.9 88.0 6.1 13.5 21 90 <0.2 1.3 26.9 88.1 818157 806173 IM2 Cloudy Rough 08:12 7.7 Middle 8.2 3.9 0.5 21 26.7 8.2 26.9 88.1 6.1 13.4 24 91 < 0.2 1.2 6.7 0.4 26.7 8.1 26.9 26.9 86.6 6.0 21.8 25 93 <0.2 1.2 Bottom 26.7 8.1 86.6 6.0 6.7 0.4 8.1 6.0 21.9 94 <0.2 1.2 26.7 26.9 23 1.0 0.3 348 13.1 15 83 1.4 26.7 8.2 6.1 <0.2 27.1 89.0 27.1 89.1 Surface 26.7 8.2 8.2 89.1 6.1 13.1 84 < 0.2 1.3 1.0 0.3 320 26.7 27.1 13 1.2 3.2 0.4 19 26.7 8.2 27.1 88.0 6.1 14.3 12 86 <0.2 Cloudy Rough 08:18 6.3 Middle 27.1 16.0 818768 805593 3.2 0.4 20 26.7 8.2 27 1 87 9 6.1 14 7 12 87 < 0.2 0.4 20.4 23 89 <0.2 1.2 26.8 8.1 27.2 85.8 5.9 Bottom 26.8 8.1 27.2 85.8 5.9 5.3 0.4 8.1 20.4 24 < 0.2 1.2 26.8 0.4 26.7 8.2 26.8 6.2 11.0 14 86 <0.2 1.1 89.6 Surface 26.7 8.2 26.8 89.7 1.0 0.4 20 8.2 6.2 11.0 16 86 < 0.2 1.0 26.7 26.8 89.7 4.2 0.5 16 26.8 8.2 27.1 88.7 6.1 18.1 15 89 < 0.2 1.2 IM4 Cloudy 08:27 8.3 Middle 27.1 88.7 16.8 90 819701 804622 Rough 42 0.5 16 26.8 8.2 27.1 88.6 6.1 18.2 14 91 < 0.2 1.0 7.3 0.4 26.8 8.2 27.1 88.0 6.0 21.2 24 93 <0.2 1.4 27.1 6.0 Bottom 8.2 88.0 7.3 0.4 26.8 8.2 27.1 88.0 6.0 21.1 22 93 <0.2 1.1 1.0 0.5 17 26.7 8.2 89.9 6.2 <0.2 1.2 26.7 89.9 Surface 26.7 8.2 1.0 0.6 14 26.7 8.2 26.7 89.9 6.2 16.7 16 87 <0.2 1.2 1.2 3.8 0.4 356 88.5 6.1 26 <0.2 26.7 8.2 26.8 20.1 90 IM5 Cloudy Rough 08:34 7.5 Middle 26.8 88.5 19.8 820741 804889 1.2 91 8.2 88.5 3.8 328 26.8 6.1 < 0.2 0.4 26.7 20.4 28 6.5 0.4 26.7 8.1 26.8 86.9 6.0 22.3 28 94 < 0.2 1.2 Bottom 86.9 1.1 6.5 0.4 26.7 8.1 26.8 86.8 6.0 22.3 27 95 < 0.2 26.8 8.2 26.2 16.1 13 89 <0.2 1.2 89.2 6.2 Surface 26.8 26.2 89.2 8.2 1.0 0.3 36 26.8 8.2 26.2 6.2 16.2 14 90 <0.2 1.2 1.3 3.8 0.2 26.8 8.2 6.0 17.7 20 83 < 0.2 26.4 87.3 8.2 26.4 87.3 821069 IM6 Cloudy Rough 08:40 7.6 Middle 26.8 89 805853 1.2 3.8 0.2 328 8.2 26.4 87.3 6.0 17.9 20 84 < 0.2 26.8 6.6 0.3 21.5 19 93 <0.2 12 328 26.8 8.1 26.6 86.4 6.0 Bottom 26.5 86.3 6.0 5.9 17 93 6.6 0.4 328 26.8 8.1 26.5 86.2 21.7 < 0.2 1.2 24.8 1.0 0.1 16 26.9 8.1 24.8 6.0 13.6 11 88 <0.2 1.4 Surface 26.9 8.1 86.2 1.0 0.1 26.9 8.1 24.8 86.2 6.0 13.7 12 89 <0.2 1.5 4.6 0.1 315 26.9 8.1 25.5 85.6 5.9 15 90 <0.2 1.4 IM7 08:47 9.1 25.4 85.6 17.2 13 91 821361 806840 Cloudy Rough Middle 26.9 8.1 4.6 8.1 85.5 5.9 16.9 91 <0.2 1.5 319 25.4 0.1 26.9 13 8.1 0.0 58 26.8 8.1 25.7 85.2 5.9 21.0 12 93 < 0.2 1.4 25.7 85.2 5.9 Bottom 26.8 8.1 8.1 25.7 5.9 21.0 8.1 0.0 26.8 85.2 14 94 < 0.2 1.4 1.0 0.6 57 26.9 8.1 25.4 86.1 6.0 17.0 16 83 < 0.2 1.5 Surface 25.4 86.1 1.0 0.6 57 26.9 8.1 25.4 86.1 6.0 17.0 14 84 <0.2 1.5 0.6 50 16.5 16 85 1.4 3.8 26.9 8.1 25.6 86.5 6.0 <0.2 821829 808129 IM8 Cloudy Moderate 08:58 7.6 Middle 26.9 8.1 25.6 86.5 86 1.2 3.8 0.6 50 26.9 8.1 25.6 86.5 6.0 16.5 16 87 <0.2

8.2

8.2

26.8

26.3

26.3

87.6

87.6

87.6

6.0

6.0

16.2

18

19

88

88

< 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

6.6

6.6

Rottom

0.4

0.5

54

56

26.8

Expansion of Hong Kong International Airport into a Three-Runway System Water Quality Monitoring Water Quality Monitoring Results on 11 October 18 during

11 October 18 during Mid-Flood Tide

Water Qual	ity Monito	oring Resu	lts on		11 October 18	during Mid-	Flood Ti	de																		
Monitoring	Weather	Sea	Sampling	Water	Sampling D	epth (m)	Current Speed	Current	Water Ten	nperature (°C)	pН	Sali	nity (ppt)		aturation %)	Disso Oxy		Turbidity	NTU)	Suspende (mg/		Coordinate HK Grid	Coordinate HK Grid	Chror		ickel (µg/L)
Station	Condition	Condition	Time	Depth (m)	Gamping 5	opur (m)	(m/s)	Direction	Value	Average	Value Avera	ige Value	Average	Value	Average	Value	DA	Value	DA	Value	DA Value D		(Easting)	Value	DA Va	alue DA
					Surface	1.0	0.1 0.1	41 42	26.9 26.9	26.9	8.1 8.1	25.5		86.5 86.5	86.5	6.0	6.0	11.1 11.1		15 16	84 83			<0.2	1	1.4
IM9	Cloudy	Moderate	08:51	7.5	Middle	3.8 3.8	0.3	60 64	26.9 26.9	26.9	8.1 8.1	25.5	25.5	87.1 87.1	87.1	6.0		12.4 12.4	12.3	14 14	15 85 86	822118	808796	<0.2	<0.2	1.4
					Bottom	6.5 6.5	0.3	80 81	26.9 26.9	26.9	8.1 8.1	25.8	25.6	88.4 88.4	88.4	6.1 6.1	6.1	13.5 13.5		14 14	89 88			<0.2	1	1.4 1.5
					Surface	1.0	0.2	60 65	27.0 27.0	27.0	8.2 8.2	25.6	25.6	86.3 86.3	86.3	6.0	6.0	14.5 14.5		20 19	85 85			<0.2	1	1.4
IM10	Cloudy	Moderate	08:40	7.2	Middle	3.6 3.6	0.1 0.1	39 42	27.0 27.0	27.0	8.2 8.2	25.8 25.8		86.4 86.4	86.4	6.0	0.0	16.6 16.6	15.8	19 20	19 86 86	822363	809787	<0.2	<0.2	1.5 1.6
					Bottom	6.2	0.3	4	26.9 26.9	26.9	8.1 8.1	26.4		86.7 86.7	86.7	6.0	6.0	16.2 16.2		20 18	88 85			<0.2	1	1.4 1.5
					Surface	1.0	0.4	344 316	27.1 27.1	27.1	8.2 8.2	26.6 26.6	26.6	85.9 85.9	85.9	5.9 5.9	5.9	12.8 12.8		22 20	85 84			<0.2	2	2.0
IM11	Cloudy	Moderate	08:29	8.2	Middle	4.1 4.1	0.4	332 337	27.1 27.1	27.1	8.2 8.2	26.6		86.3 86.3	86.3	5.9 5.9	0.0	13.6 13.4	12.5	22 21	22 86 86	822045	811463	<0.2	<0.2	1.6
					Bottom	7.2 7.2	0.4	307 332	27.1 27.1	27.1	8.1 8.1	26.6 26.6		87.4 87.4	87.4	6.0	6.0	11.3 11.3		23 21	88 88			<0.2		1.4
					Surface	1.0	0.4	298 299	27.1 27.1	27.1	8.2 8.2	26.6 26.6		85.7 85.7	85.7	5.9 5.9	5.9	13.8 13.8		19 21	84 87			<0.2	1	1.7
IM12	Cloudy	Moderate	08:23	7.8	Middle	3.9	0.4	293 316	27.1 27.1	27.1	8.1 8.1	26.7	26.7	86.0 86.0	86.0	5.9 5.9	0.0	11.7 11.7	13.9	19 19	21 87 88	821480	812054	<0.2	1	1.5 1.4
					Bottom	6.8 6.8	0.2	295 321	27.1 27.1	27.1	8.1 8.1	26.7 26.7		87.2 87.2	87.2	6.0	6.0	16.1 16.1		24 24	90 89			<0.2	1	1.4
					Surface	1.0 1.0	0.4	316 320	27.1 27.1	27.1	8.1 8.1	26.6 26.6		85.8 85.8	85.8	5.9 5.9	5.9	15.8 15.8		20 21	86 85			<0.2		1.5 1.4
SR2	Cloudy	Moderate	07:54	3.7	Middle	-	-	1	-	-	-	-	-	-	-	-	0.0		19.0	-	15 - 87	821473	814170	-		1.4
					Bottom	2.7	0.3	301 315	27.1 27.1	27.1	8.1 8.1	26.6 26.6		86.5 86.5	86.5	5.9 5.9	5.9	22.1 22.1		9 10	88 88			<0.2		1.5 1.3
					Surface	1.0	0.5	75 76	26.8 26.8	26.8	8.2 8.2	26.0		87.8 87.8	87.8	6.1 6.1	6.1	16.4 16.4		21 20	-			-		-
SR3	Cloudy	Moderate	09:06	8.2	Middle	4.1 4.1	0.5	80 84	26.8 26.8	26.8	8.2 8.2	26.3	26.3	88.2 88.2	88.2	6.1 6.1	0.1	14.2 14.2	15.5	19 20	20	822165	807555	-	-	-
					Bottom	7.2 7.2	0.5 0.5	85 92	26.8 26.8	26.8	8.2 8.2 8.2	26.4	26.4	89.0 89.0	89.0	6.1 6.1	6.1	15.8 15.8		20 20	-			-		-
					Surface	1.0	0.3	55 58	26.8 26.8	26.8	8.1 8.1	26.6	26.6	83.5 83.5	83.5	5.8 5.8	5.8	15.5 15.5		14 15	-			-	_	-
SR4A	Cloudy	Moderate	07:26	9.8	Middle	4.9 4.9	0.3	67 70	26.7 26.7	26.7	8.0	26.6	26.6	83.1 83.0	83.1	5.7 5.7		21.0 21.2	21.0	14 14	14	817187	807834	-		-
					Bottom	8.8 8.8	0.2	60 61	26.7 26.7	26.7	8.0	26.8	26.8	79.8 79.5	79.7	5.5 5.5	5.5	26.3 26.4		13 13	-			-		-
					Surface	1.0	0.1	305 334	26.8 26.8	26.8	8.0	26.4		81.0 80.5	80.8	5.6 5.6	5.6	13.0 13.0		16 15	-			-		-
SR5A	Cloudy	Calm	07:10	4.4	Middle	-	-	-	-	-		-	-	-	-	-		-	13.3	-	15 -	816583	810707	-		-
					Bottom	3.4	0.0	312 329	26.8 26.8	26.8	7.9 7.9	26.4	20.4	77.6 77.5	77.6	5.4	5.4	13.6 13.6		14 15	-			-		-
					Surface	1.0	0.1	254 264	27.0 27.0	27.0	8.0	26.3		85.8 85.9	85.9	5.9 5.9	5.9	17.1 17.2		18 17	-			-		-
SR6	Cloudy	Calm	06:44	4.6	Middle	-	-	-	-	-	-	-	-	-	-	-		-	18.3	-	18	817923	814654	-	-	-
					Bottom	3.6 3.6	0.1	258 271	27.0 27.0	27.0	8.0	26.3	20.3	86.7 86.8	86.8	6.0	6.0	19.4 19.5		19 17	-			-		-
					Surface	1.0	0.1	50 51	27.2	27.2	8.1 8.1	27.9	27.9	82.1 82.1	82.1	5.6 5.6	5.6	10.9		13 12	-			-		-
SR7	Cloudy	Moderate	06:59	16.4	Middle	8.2 8.2	0.3	82 89	27.2	27.2	8.1 8.1	28.0	28.0	81.4	81.4	5.5		12.9	12.4	12	12	823662	823751	-		-
					Bottom	15.4 15.4	0.2	90 95	27.2	27.2	8.1 8.1	28.0	28.0	81.3	81.3	5.5	5.5	13.3		12 12	-			-		-
					Surface	1.0	-	-	27.0 27.0	27.0	8.1 8.1	26.2 26.2		87.0 87.0	87.0	6.0	6.0	12.0 12.0		16 16	-			-		-
SR8	Cloudy	Moderate	08:08	4.1	Middle	-	-	-	-	-		-	-		-	-		-	13.2	-	15 -	820484	811633	-		-
					Bottom	3.1 3.1	-	-	26.9 26.9	26.9	8.1 8.1	26.3 26.3	26.3	87.6 87.6	87.6	6.0	6.0	14.3 14.3		14 14	-			-	<u>L</u>	-

DA: Depth-Averaged

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

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

Note: Access to SR8 was blocked by barge and its wires. The monitoring at SR8 was slightly shifted to the closest safe and accessible location temporarily.

Water Quality Monitoring Results on 13 October 18 during Mid-Ebb Tide DO Saturation Dissolved Suspended Solids Total Alkalinity Chromium Turbidity(NTU) Sampling Water Water Temperature (°C) Salinity (ppt) Coordinate Coordinate Nickel (µg/L) Monitoring Current Speed Oxygen (mg/L) (ppm) (µg/L) Sampling Depth (m) HK Grid HK Grid Station Direction DA DA DA Value DA Value DA Condition Condition Time Depth (m) (m/s) Value Average Value Average Value Average Value Value Value (Northing) (Easting) Value 0.1 26.6 8.2 1.0 133 28.9 89.2 6.1 5.8 87 < 0.2 1.3 Surface 8.2 28.9 89.2 1.0 139 0.1 26.6 8.2 28.9 89 2 6.1 5.9 10 86 < 0.2 1.3 90 46 8.2 79 12 1.4 0.1 357 26.5 29 1 88 1 6.0 <0.2 C1 14:57 9.1 Middle 8.2 29.1 88.1 90 815648 804245 Cloudy Moderate 4.6 0.1 338 26.5 8.2 29.1 88.0 6.0 7.9 12 91 <0.2 1.4 8.1 0.0 326 26.4 8.2 29.4 87.6 13.0 13 93 <0.2 1.4 Bottom 26.4 8.2 87.6 6.0 8.1 0.0 26.4 8.2 29.4 6.0 12.9 13 92 <0.2 1.5 1.0 0.2 33 8.1 27.0 83.5 5.4 18 83 1.2 26.6 27.0 5.8 < 0.2 Surface 26.6 8.1 83.5 83.5 8.1 27.0 5.8 1.5 1.0 0.2 35 26.6 5.4 19 82 <0.2 21 5.9 87 0.3 51 27.1 5.7 6.7 < 0.2 1.2 26.6 8.1 82.6 27.1 82.6 825704 C2 Cloudy Moderate 14:01 11.8 Middle 26.6 8.1 21 86 806936 1.3 82.5 5.7 6.7 < 0.2 1.4 5.9 0.3 53 26.6 8.1 27.1 21 86 81.9 81.9 10.8 0.2 59 26.7 8.1 28.1 5.6 12.1 24 90 <0.2 1.4 Bottom 26.7 28.1 81.9 10.8 0.2 59 26.7 8.1 28.1 5.6 12 1 25 90 < 0.2 1.3 0.4 27.0 8.2 3.1 10 87 <0.2 1.3 30.5 Surface 27.0 8.2 30.5 85.9 1.0 0.4 27.0 8.2 5.8 3.1 10 86 <0.2 1.1 5.9 0.3 83 3.8 90 1.3 27.0 84.8 5.7 11 < 0.2 8.2 30.5 30.5 822114 817791 C3 Cloudy Moderate 15:58 11.8 Middle 27.0 8.2 84.8 4.9 1.2 5.9 5.7 91 1.3 0.4 84 27.0 8.2 30.5 84.8 3.9 12 < 0.2 10.8 1.2 0.2 82 26.8 8.2 30.7 83.7 5.6 7.8 11 94 < 0.2 Bottom 8.2 30.7 83.7 10.8 0.3 88 26.8 8.2 30.7 83.7 5.6 7.8 12 94 < 0.2 12 1.0 0.1 177 26.5 5.9 87 <0.2 1.4 8.2 29.3 88.2 6.0 9 Surface 26.5 8.2 29.3 88.2 1.0 0.1 194 8.2 29.3 88.2 6.0 86 <0.2 1.3 26.5 5.9 9 6.0 817920 -IM1 Cloudy Moderate 14:39 5.4 Middle 89 807135 1.3 12 90 <0.2 4.4 185 6.0 1.2 0.1 26.5 8.2 29.4 88.0 6.9 Bottom 29.4 88.0 6.0 44 0.1 186 26.5 8.2 29.4 6.9 12 92 <0.2 1.3 1.0 0.2 50 26.5 29.4 11.1 85 <0.2 1.3 8.2 6.0 29.4 87.8 Surface 1.0 0.2 52 26.5 8.2 29.4 87.7 6.0 11.2 10 86 <0.2 1.3 3.9 0.1 12.4 11 1.4 26.5 8.2 29.4 87.5 6.0 90 <0.2 IM2 Moderate 14:34 7.8 Middle 26.5 8.2 29.4 87.5 12 90 818151 806161 Cloudy 3.9 0.1 33 26.5 8.2 29.4 6.0 12.4 12 91 < 0.2 1.2 6.8 26.4 8.2 14.4 14 93 <0.2 1.6 0.1 29.4 87.4 6.0 Bottom 8.2 29.4 87.4 6.0 6.8 74 87.4 6.0 14 0.1 8.2 29.4 14 4 94 <0.2 1.3 26.5 44 1.0 0.2 26.6 8.2 28.6 89 1 6.1 8.2 11 86 <0.2 1.6 Surface 8.2 28.6 89.1 1.0 0.2 44 26.6 8.2 28.6 89.1 6.1 8.2 11 85 <0.2 1.6 4.1 0.1 49 9.5 12 91 <0.2 1.7 26.5 IM3 Cloudy 14:28 8.1 Middle 26.5 8.2 28.7 88.4 12 89 818762 805600 Moderate 0.1 26.5 8.2 28.7 88.4 9.4 12 91 <0.2 1.4 7.1 0.2 41 26.5 9.6 13 92 < 0.2 1.4 8.2 29.2 88.5 6.0 29.2 6.0 8.2 88.5 Bottom 26.5 1.7 8.2 88.5 6.0 9.6 7.1 0.2 26.5 29.2 13 91 < 0.2 41 1.0 0.3 33 26.6 10 86 <0.2 1.3 8.1 27.8 87.5 6.0 8.0 Surface 27.8 87.5 87.5 87 27.8 6.0 10 < 0.2 1.0 0.3 34 26.6 8.1 8.1 1.2 4.2 0.2 39 26.5 8.1 28.3 87.4 6.0 10.5 12 91 <0.2 IM4 Cloudy Moderate 14:21 8.4 Middle 26.5 28.3 87.4 819741 804624 4.2 0.2 41 26.5 8.1 28.3 87.4 6.0 10.5 13 90 < 0.2 7.4 0.1 340 26.5 8.2 28.6 6.0 10.3 16 92 <0.2 1.2 28.6 87.6 Bottom 26.5 8.2 6.0 7.4 0.1 347 26.5 8.2 28.6 6.0 10.4 14 92 <0.2 1.2 6.5 10 83 1.5 0.1 26.7 8.1 27.7 88.3 6.1 <0.2 27.7 Surface 88.3 12 1.7 1.0 0.1 21 8.1 27.7 88.3 6.1 6.6 84 < 0.2 26.7 1.5 6.0 13 86 3.8 0.2 28 26.6 8.2 28.1 88.0 8.1 < 0.2 IM5 Cloudy Moderate 14:11 7.6 Middle 8.2 28.1 88.0 820712 804853 3.8 0.2 30 26.6 8.2 28.1 88.0 6.0 8.1 13 88 < 0.2 1.6 28.8 88.1 6.6 0.1 30 26.5 10.6 15 90 <0.2 1.2 8.2 28.8 6.0 Bottom 26.5 8.2 88.1 6.0 8.2 28.8 88.1 6.0 10.5 14 91 <0.2 1.6 26.5 1.0 0.1 27 26.5 8.2 28.2 88.0 6.0 8.8 16 84 <0.2 1.4 Surface 26.5 8.2 28.2 88.0 8.2 28.2 88.0 6.0 83 <0.2 1.6 8.9 17 1.0 0.1 28 26.5 4.0 1.5 0.3 333 26.4 8.2 29.9 88.9 6.1 12.6 16 86 <0.2 IM6 14:03 8.0 Middle 29.9 88.9 821053 805822 Cloudy Moderate 4.0 0.3 340 26.4 8.2 29.9 88.8 6.1 12.4 17 87 < 0.2 7.0 0.1 26.4 8.2 30.0 88.4 6.0 17.9 19 90 <0.2 1.8 30.0 Bottom 26.4 7.0 0.1 68 26.4 8.2 30.0 88.4 6.0 17.9 18 90 < 0.2 1.3 1.0 0.0 20 26.6 8.1 27.0 83.6 5.8 5.1 11 80 <0.2 1.3 27.0 83.6 Surface 26.6 8.1 1.0 0.0 21 8.1 27.0 83.5 5.8 5.1 11 81 <0.2 1.2 26.6 1.5 1.5 5.8 85 < 0.2 4.7 0.1 327 26.6 8.1 27.0 82.9 5.7 12 IM7 Cloudy Moderate 14:00 9.4 Middle 27.0 82.9 12 85 821329 806836 47 339 27.0 5.7 12 86 0.1 26.6 8.1 82 9 5.8 < 0.2 8.4 0.1 43 26.7 8.1 27.3 82.2 5.7 72 13 88 < 0.2 16 27.3 82.2 8.4 0.1 43 26.7 8.1 27.3 82.2 5.7 7.1 14 89 < 0.2 1.7 1.0 0.2 99 26.7 8.1 6.9 13 87 <0.2 1.6 Surface 26.7 8.1 27.7 88.6 26.7 8.1 27.7 88.6 6.1 6.9 13 87 <0.2 1.6 0.2 4.5 0.3 92 88.7 8.9 16 91 1.6 26.5 8.2 28.2 6.1 < 0.2 28.2 88.8 821827 IM8 Cloudy Moderate 14:31 8.9 Middle 26.5 8.2 16 91 808168 1.7 1.8 0.3 26.5 8.2 28.2 88.8 6.1 8.7 17 17 91 <0.2 45 94 79 67 0.3 95 1.8 26.4 8.2 29.2 90.6 6.2 13.5 <0.2 Bottom 8.2 29.2 90.6 6.2 7.9 0.3 70 26.4 17 9.1 < 0.2 1.5

DA: Depth-Average

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

Water Quality Monitoring Results on 13 October 18 during Mid-Ebb Tide Suspended Solids DO Saturation Dissolved otal Alkalinity Chromium Turbidity(NTU) Nickel (µg/L) Sampling Water Water Temperature (°C) Salinity (ppt) Coordinate Coordinate Monitoring Current (ppm) (µg/L) Speed Oxygen (mg/L) Sampling Depth (m) HK Grid HK Grid Station Direction DA DA DA Value DA Value DA Condition Condition Time Depth (m) (m/s) Value Average Value Average Value Value Average Value Value Value (Northing) (Fasting) Value 0.4 26.6 8.1 1.0 27.9 87.9 6.0 8.0 88 < 0.2 1.5 90 Surface 8.1 27.9 1.0 27 9 87 17 0.4 96 26.6 8.1 87 9 6.0 8.1 10 < 0.2 91 1.7 42 8.2 10.9 13 0.4 71 26.5 28.4 88.5 6.1 <0.2 IM9 Moderate 14:38 8.3 Middle 8.2 28.4 88.5 12 91 822082 808810 Cloudy 4.2 0.4 71 26.5 8.2 28.4 88.5 6.1 10.7 12 91 <0.2 1.4 7.3 0.3 66 26.5 8.2 6.1 11.2 14 95 <0.2 1.7 29.0 Bottom 26.5 8.2 89.9 7.3 0.3 26.5 8.2 29.0 89.9 6.1 11.2 14 95 <0.2 1.7 1.0 0.4 80 8.2 8.4 9 87 1.8 26.6 28.6 89.1 6.1 < 0.2 Surface 26.6 8.2 28.6 89.1 8.2 89.1 6.1 87 1.7 1.0 0.4 86 26.6 28.6 8.4 10 <0.2 4.2 10 1.7 0.3 72 8.2 6.0 11.2 90 < 0.2 26.5 28.8 88.3 28.8 88.3 822373 IM10 Cloudy Moderate 14:49 8.4 Middle 26.5 8.2 12.3 91 809774 1.7 8.2 28.8 88.3 6.0 91 < 0.2 1.6 4.2 0.3 77 26.5 11.3 10 7.4 0.3 95 26.5 8.2 29.4 88.2 6.0 17.0 14 94 <0.2 1.4 29.4 Bottom 26.5 8.2 88.3 7.4 0.4 100 26.5 8.2 29.4 88.3 6.0 17.4 13 95 < 0.2 1.7 0.3 26.5 8.2 29.4 <0.2 1.3 6.0 Surface 26.5 8.2 29.4 87.8 1.0 0.4 109 26.5 8.2 6.0 10 87 <0.2 1.6 4.6 0.3 83 6.0 13.4 10 91 1.5 26.5 8.2 87.6 < 0.2 29.4 29.4 87.6 822076 811483 IM11 Cloudy Moderate 15:02 9.1 Middle 26.5 8.2 13.0 10 4.6 8.2 6.0 1.3 0.3 83 26.5 29.4 87.6 13.4 10 91 < 0.2 12 95 1.3 8.1 0.2 70 26.4 8.2 29.4 87.8 6.0 13.7 < 0.2 Bottom 8.2 29.4 87.8 8.1 0.2 70 26.4 8.2 29.4 87.8 6.0 13.8 11 95 < 0.2 16 1.0 0.5 89 26.5 8.2 29.3 29.3 88.2 6.0 10 <0.2 1.5 6.0 86 Surface 8.2 88.3 1.0 0.5 26.5 8.2 29.3 6.0 6.0 11 87 <0.2 1.6 1.7 4.2 0.4 78 26.4 8.2 29.4 88.3 6.0 7.9 12 91 <0.2 29.4 88.3 821477 812028 IM12 Cloudy Moderate 15:10 84 Middle 26.4 8.2 12 91 4.2 85 8.2 29.4 88.3 6.0 7.8 13 91 <0.2 1.8 0.5 26.4 7.4 2.0 0.3 85 26.5 8.2 29.4 89.0 6.1 9.0 13 95 < 0.2 Bottom 29.4 89.0 74 0.3 85 26.5 8.2 29.4 89.0 6.1 8.9 12 95 <0.2 21 1.0 0.4 84 26.5 29.4 88.6 6.9 87 <0.2 2.0 8.2 6.0 Surface 29.4 88.6 8.2 1.0 0.4 84 26.5 8.2 29.4 88.6 6.0 6.9 8 87 <0.2 6.0 -SR2 Moderate 15:37 5.6 Middle 89 821461 814177 2.1 Cloudy <0.2 4.6 0.2 101 26.5 8.2 29.5 6.0 9.5 10 91 2.0 88.0 Bottom 8.2 29.5 88.0 6.0 10 46 0.2 105 8.2 29.5 88.0 6.0 9.5 91 21 26.5 <0.2 1.0 143 8.5 0.3 26.5 8.1 28.2 88.2 6.1 11 Surface 28.2 88.2 1.0 0.3 156 26.5 8.1 28.2 88.2 6.1 8.5 11 5.0 0.3 118 26.4 8.2 13.3 12 SR3 Cloudy Moderate 14:24 10.0 Middle 26.4 8.2 29.5 89.0 13 822144 807589 0.3 120 26.4 8.2 29.5 89.0 13.3 12 9.0 0.4 83 8.2 90.3 18.2 15 26.4 30.0 6.2 30.0 6.2 8.2 90.4 Bottom 26.4 8.2 6.2 18.3 9.0 0.4 26.4 30.0 15 86 1.0 0.2 79 26.6 8.2 29.4 6.1 6.0 8 Surface 26.6 29.4 89.1 89.0 8.2 6.1 6.0 1.0 0.2 79 26.6 29.4 8 4.3 0.1 86 26.5 8.2 29.5 86.9 5.9 9.8 10 SR4A Cloudy Calm 15:20 8.6 Middle 26.5 8.2 29.5 817215 4.3 0.1 93 26.5 8.2 29.5 86.9 5.9 9.9 11 7.6 0.1 70 26.4 8.2 29.5 5.9 15.0 12 26.4 29.5 86.9 Bottom 8.2 5.9 7.6 0.1 74 26.4 8.2 29.5 5.9 11 1.0 51 27.0 3.0 0.2 8.2 30.5 85.4 5.7 11 Surface 27.0 8.2 30.5 85.4 1.0 0.2 53 8.2 30.5 85.4 5.7 3.0 10 27.0 5.7 SR5A Cloudy Calm 15:36 5.0 Middle 816597 810678 4.0 0.1 158 26.8 8.2 3.8 15 30.6 5.6 Bottom 26.8 8.2 30.6 83.9 5.6 4.0 0.1 161 8.2 30.6 83.9 5.6 3.8 14 26.8 1.0 0.1 41 26.9 8.2 30.8 5.5 3.8 Surface 26.9 8.2 30.8 81.7 8.2 81.7 5.5 1.0 0.1 41 30.8 3.8 26.9 8 5.5 SR6 15:59 4.3 Middle 817899 814660 Cloudy Calm 3.3 0.2 62 26.9 8.2 30.9 81.9 5.5 4.2 11 30.9 81.9 Rottom 26.9 3.3 0.2 67 26.9 8.2 30.9 81.9 5.5 4.2 11

8.2

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8.2

8.2

26.9

26.6

26.5

30.8

30.8

31.0

31.0

31.1

31.1

28.9

29.2

81.7

81.7

81.5

81.5

81.9

81 Q

90.0

89.2

81.7

81.5

81.9

90.0

89.2

30.8

31.0

31.1

28.9

29.2

5.5

5.5

5.5

5.5

5.5

5.5

6.1

6.1

5.5

3.9

4.0

4.1

41

41

4.2

5.4

5.5

7.5

7

8

7

8

9

10

10

10

10

823634

820518

823767

811663

DA: Depth-Average

SR7

SR8

Cloudy

Cloudy

Moderate

Moderate

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

15:21

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

16:29

18.0

4.3

Note: Access to SR8 was blocked by barge and its wires. The monitoring at SR8 was slightly shifted to the closest safe and accessible location temporarily.

Surface

Middle

Bottom

Surface

Middle

Bottom

1.0

1.0

9.0

9.0

17.0

17.0

1.0

1.0

3.3

3.3

0.7

0.8

0.6

0.6

0.2

0.2

87

87

93

98

125

132

26.9

26.9

26.9

26.9

26.9

26.9

26.6

26.6

26.5

Water Quality Monitoring Water Quality Monitoring Results on 13 October 18 during Mid-Flood Tide DO Saturation Dissolved Suspended Solids otal Alkalinity Chromium Turbidity(NTU) Sampling Water Water Temperature (°C) Salinity (ppt) Coordinate Coordinate Nickel (µg/L) Monitoring Current Speed Oxygen (mg/L) (ppm) (µg/L) Sampling Depth (m) HK Grid HK Grid Station Direction DA DA DA DA DA Condition Condition Time Depth (m) (m/s) Value Average Value Average Value Average Value Value Value Value (Northing) (Easting) Value Value 0.6 26.4 8.2 1.0 55 29.4 87.4 6.0 13.1 82 < 0.2 2.0 Surface 26.4 8.2 1.0 0.6 55 26.4 8.2 29.4 87.4 6.0 13.0 11 84 <0.2 1.8 4.4 0.4 52 26.4 8.2 29.4 87.1 6.0 16.5 13 87 <0.2 1.9 C1 09:32 8.8 Middle 8.2 29.4 87.1 16.0 13 815604 804255 Cloudy Moderate 26.4 86 1.9 4.4 0.5 53 26.4 8.2 29.4 87.1 6.0 16.6 12 87 <0.2 1.6 7.8 0.5 59 15 89 <0.2 1.8 26.4 8.2 29.4 87.2 6.0 18.4 Bottom 8.2 29.4 87.2 7.8 0.5 63 26.4 8.2 29.4 87.2 6.0 18.4 15 89 <0.2 2.0 1.0 356 84.6 84.6 0.3 26.6 8.1 27.1 5.8 5.1 10 87 <0.2 2.1 Surface 26.6 8.1 27.1 84.6 1.0 0.3 8.1 5.8 5.2 9 87 <0.2 2.0 328 26.6 5.8 0.3 26.7 8.1 27.3 82.3 5.7 8.6 10 91 <0.2 1.8 27.3 82.3 825661 C2 Cloudy Moderate 11:18 11.6 Middle 8.1 91 806928 5.7 1.7 5.8 0.3 8.1 27.3 8.7 11 91 < 0.2 11 26.7 82.3 10.6 95 0.3 294 26.7 8.1 28.4 83.7 5.7 16.8 12 < 0.2 1.6 Bottom 28.4 83.8 5.7 5.7 10.6 0.3 303 26.7 8.1 28.4 83.8 16.7 12 94 <0.2 16 1.0 0.5 255 26.5 8.2 29.5 86.9 5.9 5.0 9 83 <0.2 1.7 29.5 1.0 0.5 256 26.5 8.2 29.5 86.9 5.9 5.0 10 83 <0.2 1.7 5.7 0.6 5.7 11 87 1.8 253 26.7 8.2 29.7 83.7 8.9 <0.2 C3 09:30 Middle 26.7 8 2 29.7 83.7 10.0 822137 817795 11 4 Cloudy Moderate 5.7 8.2 29.7 83.7 5.7 87 <0.2 1.7 0.6 255 26.7 9.0 10 10.4 0.4 259 8.2 5.7 15.9 12 90 < 0.2 1.7 26.8 30.1 83.6 Bottom 8.2 30.1 83.7 5.7 8.2 5.7 83.8 15.9 90 10.4 0.5 278 26.8 30.1 <02 14 322 1.0 0.2 22 1.7 26.5 8.2 29.2 87.9 6.0 9.1 86 <0.2 Surface 26.5 29.2 87.9 1.0 0.2 345 26.5 8.2 29.2 87.9 6.0 9.1 22 85 <0.2 817935 IM1 09:48 Middle 89 807106 Cloudy Moderate 5.5 22 4.5 0.2 21 26.4 29.3 10.3 22 91 <0.2 1.7 8.2 87.6 6.0 Bottom 26.4 8.2 29.3 87.6 6.0 87.6 23 4.5 0.2 8.2 29.3 6.0 10.4 92 1.7 22 26.4 < 0.2 30 1.0 0.4 8.4 12 87 26.4 8.2 29.2 88.1 6.0 <0.2 1.6 Surface 29.2 88.1 8.2 6.0 12 86 <0.2 1.7 1.0 0.4 30 26.4 29.2 88.1 8.5 4.0 0.3 27 26.4 8.2 29.3 87.5 6.0 12.1 14 90 <0.2 1.6 29.3 87.5 818156 806179 IM2 Cloudy Moderate 09:55 8.0 Middle 8.2 4.0 0.3 28 26.4 8.2 29.3 87.5 6.0 12.2 15 91 <0.2 1.6 7.0 0.3 26.4 8.2 29.5 20.3 19 92 <0.2 1.6 6.0 29.5 87.4 Bottom 26.4 8.2 87.4 6.0 7.0 8.2 29.5 6.0 20.2 91 <0.2 1.7 0.3 26.4 20 1.0 0.4 25 10.8 12 85 1.7 26.4 8.2 6.0 <0.2 29.1 87.8 29.1 87.8 Surface 26.4 8.2 8.2 29.1 87.8 6.0 10.8 12 87 < 0.2 1.7 1.0 0.4 25 26.4 1.7 41 0.3 29 26.4 8.2 29.2 87.4 6.0 12.2 13 90 <0.2 Cloudy Moderate 10:02 8.1 Middle 29.2 818787 805621 4.1 0.3 29 26.4 8.2 29.2 87.4 6.0 12.2 13 91 < 0.2 0.2 13.3 13 93 <0.2 1.6 26.4 8.2 29.2 87.4 6.0 Bottom 26.4 8.2 29.2 87.4 6.0 7.1 0.2 13 8.2 87.4 13.4 14 < 0.2 1.7 26.4 1.0 0.4 21 26.5 8.1 27.7 6.0 10.6 22 85 <0.2 1.7 86.9 Surface 26.5 8.1 27.7 86.9 1.0 0.5 8.1 27.7 6.0 23 84 < 0.2 1.7 22 26.5 86.9 10.6 4.1 0.3 26.5 8.1 27.8 85.7 5.9 12.8 14 88 < 0.2 1.7 IM4 Moderate 10:09 8.2 Middle 27.8 85.7 13.7 88 819732 804632 Cloudy 41 0.4 17 26.5 8.1 27.8 85.7 5.9 12.6 13 90 < 0.2 1.8 7.2 0.3 20 26.5 8.1 27.8 85.9 5.9 17.6 15 91 <0.2 1.6 27.8 5.9 Bottom 8.1 85.9 7.2 0.3 20 26.5 8.1 27.8 85.9 5.9 17.7 16 91 <0.2 1.6 1.0 0.4 27.4 86.6 7.7 12 26.6 8.1 6.0 <0.2 1.6 86.6 Surface 26.6 8.1 1.0 0.4 27 26.6 8.1 27.4 86.6 6.0 7.7 13 86 <0.2 1.6 1.7 3.7 0.3 10 6.0 10.3 13 91 <0.2 26.5 8.1 27.8 86.6 86.6 IM5 Cloudy Moderate 10:16 7.4 Middle 27.8 86.6 90 820761 804883 8.1 6.0 90 3.7 27.8 < 0.2 0.4 10 26.5 10.4 14 6.4 0.2 44 26.4 8.1 28.5 86.6 5.9 12.1 15 92 < 0.2 1.5 28.5 86.6 Bottom 86.6 5.9 6.4 0.2 47 26.4 8.1 12.1 15 91 < 0.2 1.8 26.6 8.1 27.3 5.9 8.0 86 <0.2 1.4 Surface 26.6 27.3 85.9 8.1 1.0 0.2 11 26.6 8.1 27.3 5.9 8.0 11 83 <0.2 1.6 1.6 3.8 0.2 26.4 8.1 28.2 86.4 5.9 16.2 91 < 0.2 11 8.1 28.3 86.4 821072 IM6 Cloudy Moderate 10:22 7.6 Middle 26.4 89 805802 1.6 3.8 5.9 0.2 39 8.1 28.3 86.4 16.4 11 91 < 0.2 26.4 6.6 0.2 52 23.3 12 91 <0.2 17 26.4 8 1 28.7 86.2 5.9 Bottom 28.7 86.2 5.9 5.9 12 6.6 0.2 52 26.4 8.1 28.7 86.2 23.4 92 < 0.2 17 1.0 0.0 18 26.6 8.1 27.1 83.4 5.8 5.8 10 84 <0.2 1.7 Surface 26.6 8.1 27.1 83.4 1.0 0.0 26.6 8.1 27.1 83.4 5.8 5.8 10 84 < 0.2 1.6 4.5 0.1 350 26.6 8.1 27.1 5.7 5.9 11 86 <0.2 1.5 IM7 10:30 27.1 82.7 12 87 821336 806829 Cloudy Moderate 9.0 Middle 26.6 8.1 4.5 8.1 82.7 5.7 87 <0.2 1.5 322 27.1 5.9 12 0.1 26.6 8.0 0.1 57 26.7 8.1 27.2 83.0 5.7 6.6 13 91 < 0.2 1.5 27.2 83.1 5.7 Bottom 26.7 8.1 5.7 8.1 83.1 6.5 8.0 0.2 61 26.7 13 91 < 0.2 1.6 1.0 0.3 54 26.6 8.1 27.4 6.0 8.3 11 87 < 0.2 1.5 Surface 27.4 1.0 0.3 58 26.6 8.1 27 4 87 1 6.0 8.3 12 87 < 0.2 1.8

8.1

8.1

8.2

8.1

8.2

26.5

27.8

27.8

29.3

27.8

29.3

86.9

86.9

88.7

86.9

88.7

11.5

11.7

16.8

16.4

12.2

6.0

6.0

6.1

6.1

13

12

14

15

92

92

95

92

13

821830

1.6

1.6

1.6

1.5

<0.2

<0.2

< 0.2

808133

DA: Depth-Averaged

Cloudy

Moderate

IM8

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

10:51

7.8

Middle

Bottom

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

3.9

3.9

6.8

6.8

0.2

0.2

0.2

0.3

49

49

26

26.5

26.5

26.4

Water Quality Monitoring
Water Quality Monitoring Results on 13 October 18 during Mid-Flood Tide

Water Qua	lity Monite	oring Resu	lts on		13 October 18	during Mid-		le																
Monitoring	Weather	Sea	Sampling	Water	Sampling Dep	oth (m)	Current Speed	Current	Water Ter	mperature (°C)	pН	Sali	nity (ppt)		aturation %)	Dissolved Oxygen	Turbidity	(NTU) Suspend (mg		Total Alkalinity (ppm)	Coordinate HK Grid	Coordinate HK Grid	Chromium (µg/L)	Nickel (μg/L)
Station	Condition	Condition	Time	Depth (m)	Jampang 2 sp	,	(m/s)	Direction	Value	Average	Value Avera	ge Value	Average	Value	Average	Value DA	Value	DA Value	DA	Value DA	(Northing)	(Easting)	Value DA	A Value DA
					Surface	1.0	0.1	30 31	26.5 26.5	26.5	8.1 8.1	27.7	27.7	87.1 87.1	87.1	6.0	11.6 11.7	19		87 87			<0.2	1.5
IM9	Cloudy	Moderate	10:44	7.8	Middle	3.9	0.1	66 69	26.5 26.5	26.5	8.1 8.1	27.8	27.8	86.3 86.3	86.3	5.9	16.8 16.6	16.3	20	92 91	822096	808787	<0.2	.2 1.6 1.5
					Bottom	6.8	0.2	70 73	26.5 26.5	26.5	8.1 8.1	27.8 27.8		86.7 86.8	86.8	6.0 6.0	20.7	20 21		95 96			<0.2	1.4
					Surface	1.0	0.4	314	26.4	26.4	8.2	29.2	+	88.1	88.1	6.0	9.7	12		88			<0.2	1.5
IM10	Cloudy	Moderate	10:35	8.2	Middle	1.0 4.1	0.5	344 308	26.4 26.4	26.4	8.2 8.2 8.2 8.2	29.2	29.2	88.1 87.5	87.5	6.0	9.7	12.0	14	92 92 92	822393	809812	<0.2	1.5 1.5 1.5
					Bottom	4.1 7.2	0.5	333 307	26.4 26.4	26.4	8.2 8.2 8.2 8.2	29.2 29.2	29.2	87.5 88.2	88.2	6.0	12.5 13.9	14 16		91 95			<0.2	1.5
					Surface	7.2 1.0	0.3	325 269	26.4 26.4	26.4	8.2	29.2	29.2	88.2 88.4	88.4	6.0	13.8 7.7	16 11		96 88			<0.2	1.6
				7.0		1.0 4.0	0.3	273 291	26.4 26.4		8.2	29.2		88.4 87.4		6.0	7.8 13.6	12		92			<0.2	1.6
IM11	Cloudy	Moderate	10:24	7.9	Middle	4.0 6.9	0.3	313 301	26.4 26.4	26.4	8.2	29.3	29.3	87.4 87.4	87.4	6.0	13.6 18.1	13.1	12	91 96	822078	811446	<0.2	.2 1.5 1.5 1.6
					Bottom	6.9	0.3	319 231	26.4	26.4	8.2	29.6	29.6	87.4 87.9	87.4	6.0	18.0	12		95 88			<0.2	1.4
					Surface	1.0	0.3	240	26.5	26.5	8.2	29.2	29.2	87.9	87.9	6.0	9.2	23		87			<0.2	1.5
IM12	Cloudy	Moderate	10:17	8.7	Middle	4.4	0.2	238 259	26.4 26.4	26.4	8.2 8.2	29.3	29.3	87.7 87.7	87.7	6.0	11.8 11.8	12.1 24 25	<u>24</u>	92 91	821457	812047	<0.2	1.6
					Bottom	7.7	0.2	262 263	26.4 26.4	26.4	8.2 8.2 8.2	29.4 29.4	29.4	88.1 88.2	88.2	6.0 6.0	15.3 15.3	25 26		95 95			<0.2	1.5 1.5
					Surface	1.0	0.6	322 331	26.3 26.3	26.3	8.2 8.2 8.2	29.4 29.4	29.4	89.5 89.5	89.5	6.1 6.1 6.1	8.4 8.5	8		87 88			<0.2	1.5
SR2	Cloudy	Moderate	09:49	4.0	Middle	-	-	-	-	=		-	-	-	-	- 0.1	-	10.9	10	- 90	821464	814170	- <0.2	2 - 1.5
					Bottom	3.0	0.5 0.6	318 336	26.4 26.4	26.4	8.2 8.2 8.2	29.4 29.4	29.4	89.5 89.6	89.6	6.1 6.1	13.4 13.4	11		92 91			<0.2	1.6 1.5
					Surface	1.0	0.1	25 27	26.6 26.6	26.6	8.1 8.1	27.2		85.7 85.7	85.7	5.9	8.3 8.4	10		-			-	-
SR3	Cloudy	Moderate	10:58	9.1	Middle	4.6 4.6	0.2	71 74	26.4 26.4	26.4	8.1 8.1 8.1	20 E	28.5	86.8 86.8	86.8	6.0	11.2	12.5	11	-	822120	807571		-
					Bottom	8.1	0.4	48	26.4	26.4	8.2	29.0	29.0	87.9 88.0	88.0	6.0	17.8	11 12		-				-
					Surface	8.1 1.0	0.4	50 88	26.4 26.3	26.3	8.2 8.2	29.0 29.3	29.3	89.4	89.4	6.1	7.3	9		-			-	+
SR4A	Cloudy	Calm	09:09	8.5	Middle	1.0 4.3	0.1	88 98	26.3 26.3	26.3	8.2	29.3		89.4 89.0	89.0	6.1 6.1	7.4 12.4	12.0	9	-	817200	807820	-	-
	,				Bottom	4.3 7.5	0.3	103 85	26.3 26.4	26.4	8.2	29.4	20.4	89.0 88.9	89.0	6.1	12.6 16.0	10		-			-	-
						7.5 1.0	0.4	87 231	26.4 26.5	26.5	8.2	29.4	29.4	89.0 86.6		6.1 6.1 5.9	16.0 4.6	10		-			-	
					Surface	1.0	0.2	245	26.5		8.2	29.5	29.5	86.6	86.6	5.9	4.6	10		-			-	-
SR5A	Cloudy	Calm	08:59	5.2	Middle	4.2	0.1	257	26.6	-	8.2	29.6	-	86.2	-	5.9	5.1	4.9	11	-	816612	810689	-	-
					Bottom	4.2	0.2	257 220	26.6	26.6	8.2 8.2	29.6	29.0	86.2 82.9	86.2	5.9 5.9	5.1	12		-			-	-
					Surface	1.0	0.2	225	26.7	26.7	8.1	30.2	30.2	82.9	82.9	5.6 5.6	7.9	10		-			-	-
SR6	Cloudy	Calm	08:28	4.5	Middle	-	-	-	-	-		-	-	-	-	-	-	8.7	11	-	817898	814674	-	-
					Bottom	3.5 3.5	0.1	229 236	26.7 26.7	26.7	8.1 8.1	30.2	30.2	82.8 82.8	82.8	5.6 5.6	9.5 9.6	11		-			-	-
					Surface	1.0	0.1 0.1	313 317	26.7 26.7	26.7	8.1 8.1	30.2 30.2	30.2	83.0 83.0	83.0	5.6 5.6	8.5 8.6	10	-	-			-	-
SR7	Cloudy	Moderate	09:01	15.2	Middle	7.6 7.6	0.1	75 76	26.8 26.8	26.8	8.1 8.1	30.3	30.3	82.7 82.7	82.7	5.6 5.6	9.5 9.6	9.5	13	-	823628	823758	Ξ.	-
					Bottom	14.2 14.2	0.2	62	26.8 26.8	26.8	8.1	30.4	30.4	82.7 82.7	82.7	5.6 5.6	10.2	15 16]	-			-	-
					Surface	1.0		-	26.4 26.4	26.4	8.2 8.2 8.2	20.4	20.4	87.8 87.8	87.8	6.0	9.8 9.9	13		-				-
SR8	Cloudy	Moderate	10:07	4.3	Middle	-	-	-	-	=		-	-	-	-	- 6.0	-	124	15	-	820521	811636	-	-
					Bottom	3.3	-	-	26.4	26.4	8.2 8.2	29.4	29.4	88.3	88.4	6.0	14.8	17		-			-	-
L						3.3	-	-	26.4		8.2	29.4		88.4		6.0	14.9	16		-			<u> </u>	-

DA: Depth-Averaged

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

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

Note: Access to SR8 was blocked by barge and its wires. The monitoring at SR8 was slightly shifted to the closest safe and accessible location temporarily.

Water Quality Monitoring Results on 16 October 18 during Mid-Ebb Tide DO Saturation Dissolved Suspended Solids Total Alkalinity Chromium Turbidity(NTU) Sampling Water Water Temperature (°C) Salinity (ppt) Coordinate Coordinate Nickel (µg/L) Monitoring Current Speed (%) Oxygen (mg/L) (ppm) (µg/L) Sampling Depth (m) HK Grid HK Grid Station Direction DA DA DA Value DA DA Condition Condition Time Depth (m) (m/s) Value Average Value Average Value Value Average Value Value Value (Northing) (Easting) Value Value 0.1 26.4 1.0 117 8.1 25.7 92.9 6.5 4.4 81 < 0.2 2.1 Surface 26.4 92.9 1.0 117 0.1 26.4 8.1 25.7 929 6.5 4.4 82 < 0.2 2.1 4.0 6.0 86 2.1 0.2 141 26.4 8.1 25.9 91.3 64 6 <0.2 C1 04:49 8.0 Middle 8.1 25.9 91.3 86 815631 804228 2.1 Cloudy Moderate 4.0 0.2 142 26.4 8.1 25.9 91.3 6.4 6.0 7 87 <0.2 2.1 7.0 0.3 155 26.5 8.2 13.7 6 90 <0.2 2.0 Bottom 26.5 8.2 29.7 87.2 5.9 7.0 0.3 26.5 8.2 29.7 87.3 5.9 13.6 91 <0.2 2.0 1.0 0.2 153 8.0 82 3.1 26.6 26.2 88.1 6.1 7.1 3 < 0.2 Surface 26.6 8.0 26.2 88.0 3.1 8.0 87.8 1.0 0.2 130 26.6 26.2 6.1 7.1 4 83 < 0.2 3.0 5.7 0.3 124 5.9 7.3 3 86 < 0.2 26.6 8.1 26.8 85.5 26.8 85.5 825706 C2 Rainy Moderate 06:02 11.4 Middle 26.6 8.1 87 806943 3.1 85.4 5.9 86 < 0.2 5.7 0.3 133 26.6 8.1 26.8 7.4 4 10.4 0.3 175 26.6 8.1 29.2 85.5 5.8 7.6 5 92 <0.2 3.0 Bottom 26.6 8.1 29.2 86.0 10.4 0.3 177 26.6 8.1 29.1 86.5 5.9 7.7 4 92 < 0.2 3.1 0.1 26.5 8.1 28.6 6.3 80 <0.2 3.0 6.0 Surface 26.5 28.6 88.1 8.1 1.0 0.1 26.5 8.1 6.0 6.4 5 83 <0.2 5.7 83 7.1 85 3.0 0.1 26.5 8.1 87.7 6.0 < 0.2 28.6 6 C3 28.6 822114 817804 Rainy Moderate 04:08 11.4 Middle 26.5 87.6 3.1 5.7 6.0 0.1 84 26.5 8.1 28.7 87.5 7.2 6 86 < 0.2 10.4 90 0.1 83 26.5 8.1 29.1 86.8 5.9 8.4 7 < 0.2 3.1 Bottom 8.0 29.0 87.3 6.0 10.4 0.1 83 26.5 8.0 28.8 87.8 6.0 8.5 8 90 < 0.2 29 1.0 0.1 163 26.4 4.0 87 <0.2 2.6 8.2 26.7 92.7 6.4 3 Surface 26.4 8.2 26.7 92.7 1.0 0.1 167 8.2 92.6 6.4 87 <0.2 2.6 26.4 26.7 4.1 3 817939 -IM1 Cloudy Moderate 04:29 54 Middle 89 807123 2.6 90 <0.2 2.5 4.4 0.2 152 26.5 8.2 27.8 91.0 6.3 6.0 4 Bottom 26.5 27.8 91.0 6.3 44 0.2 152 26.5 8.2 27.8 6.3 6.0 5 90 <0.2 2.5 1.0 0.2 172 26.4 5.9 83 <0.2 1.8 8.2 26.8 6.4 26.8 92.6 Surface 1.0 0.2 182 26.4 8.2 26.8 92.6 6.4 6.0 6 84 <0.2 1.8 3.4 0.2 8.1 87 2.0 26.4 8.2 27.4 92.7 6.4 8 <0.2 IM2 Moderate 04:22 6.8 Middle 26.4 8.2 27.4 92.7 87 818148 806163 Cloudy 3.4 0.2 221 26.4 8.2 6.4 8.2 88 < 0.2 5.8 0.1 26.5 8.2 11.0 10 90 <0.2 2.1 198 27.7 92.6 6.4 Bottom 8.2 27.7 92.7 6.4 5.8 8.2 27.7 q 91 2.0 0.1 199 92.7 6.4 10.9 <0.2 26.5 1.0 77 2.8 0.2 181 26.4 8.1 25.6 91.9 6.4 6 83 <0.2 Surface 25.6 91.9 1.0 0.2 186 26.4 8.1 25.6 91.9 6.4 7.7 84 <0.2 3.0 3.5 0.1 166 8.4 88 <0.2 2.9 26.4 8.2 91.8 6.4 IM3 Cloudy 04:15 7.0 Middle 26.4 8.2 26.6 91.8 8.2 89 818760 805604 2.9 Rough 3.5 0.1 26.4 8.2 26.6 91.8 6.4 8.4 8 89 <0.2 2.9 2.9 6.0 0.1 202 8.5 10 93 < 0.2 26.5 8.2 27.8 91.8 6.3 27.7 6.3 91.8 Bottom 26.5 8.2 3.0 8.2 27.7 91.8 6.3 6.0 0.1 26.5 8.5 10 94 < 0.2 203 1.0 0.3 220 26.4 5.2 86 <0.2 3.2 8.1 26.7 92.0 6.4 Surface 26.4 26.7 92.0 92.0 6.4 5.2 86 < 0.2 1.0 0.4 247 26.4 8.1 26.7 6 3.0 3.6 0.2 217 26.4 8.1 26.8 91.1 6.3 7.0 7 90 <0.2 IM4 Cloudy 04:05 7.1 Middle 26.4 8.1 26.8 91.1 819733 804634 Rough 3.6 0.2 219 26.4 8.1 26.8 91.0 6.3 7.0 6 90 < 0.2 6.1 0.2 245 26.4 8.1 27.1 6.3 10.1 8 95 <0.2 3.2 27.1 90.7 Bottom 26.4 8.1 6.3 6.1 0.2 26.4 8.1 27.1 6.3 10.1 8 96 <0.2 3.1 1.0 0.4 243 9.6 85 26.5 8.1 24.5 88.88 6.2 9 <0.2 3.3 24.5 Surface 26.5 88.8 3.2 10 85 1.0 0.4 253 8.1 24.5 88.8 6.2 9.6 < 0.2 26.5 6.2 9.9 10 86 3.2 0.4 238 26.5 8.1 25.7 88.8 6.2 <0.2 IM5 Cloudy Rough 03:57 6.4 Middle 8.1 25.7 820725 804864 3.2 0.4 260 26.5 8.1 25.7 88 9 6.2 10.0 11 86 <0.2 3.3 26.1 89.8 5.4 0.1 197 9.3 13 89 <0.2 3.3 26.5 8.1 26.1 6.2 Bottom 26.5 8.1 89.9 6.2 8.1 89.9 6.2 9.3 13 89 <0.2 3.2 0.1 26.5 1.0 0.5 234 26.5 8.0 24.0 87.4 6.1 5.9 6 84 <0.2 2.7 Surface 26.5 8.0 24.0 87.4 8.0 24.0 87.4 6.1 <0.2 2.6 5.9 84 1.0 0.5 244 26.5 7 3.1 0.3 244 26.5 8.0 24.1 87.5 6.1 9.0 8 87 <0.2 2.8 IM6 03:50 6.1 Middle 24.1 87.5 821045 805849 2.6 Cloudy Rough 3.1 0.3 252 26.5 8.0 24 1 87.5 6.1 9.0 7 88 < 0.2 2.4 5.1 0.3 229 26.5 8.0 24.2 87.6 6.2 9.7 10 90 <0.2 2.4 24.2 87.7 Bottom 26.5 5.1 0.3 233 26.5 8.0 24.2 87.7 6.2 9.7 9 92 < 0.2 2.5 1.0 0.5 216 26.6 8.0 23.0 86.1 6.1 5.0 4 82 <0.2 3.5 Surface 26.6 8.0 23.0 86.1 3.3 1.0 0.5 232 8.0 23.0 86.0 6.1 5.1 5 84 <0.2 26.6 87 3.4 3.1 6.5 < 0.2 3.6 0.5 226 26.6 8.0 23.0 86.2 6.1 5 IM7 Cloudy Rough 03:43 7.2 Middle 23.0 86.2 87 821370 806819 3.3 3.6 0.5 23.0 6.1 88 234 26.6 8.0 86.2 6.6 5 < 0.2 6.2 0.4 231 26.6 8.0 23.5 86.5 6.1 10.7 6 91 < 0.2 3.2 Bottom 23.5 86.5 6.2 0.4 234 26.6 8.0 23.5 86.5 6.1 10.7 6 92 < 0.2 3.2 1.0 0.1 127 26.6 8.0 26.0 6.1 82 <0.2 3.0 Surface 26.6 8.0 26.0 88.0 8.0 26.0 88.0 6.1 6.3 82 <0.2 3.0 0.1 26.6 3

8.1

8 1

8.1

8.1

8.1

26.6

26.8

26.8

29.6

85.2

85 1

83.0

85.2

84.4

26.8

29.6

60

5.7

7.4

7.5

7.6

3

3

1

88

88

89

80

86

821839

5.9

5.9

5.6

3.1

3.0

3.0

3.0

< 0.2

<0.2

<0.2

< 0.2

808163

Rainy

Moderate

IM8

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

05:21

7.7

Middle

Bottom

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

3.9

39

6.7

6.7

0.3

0.3

0.1

0.1

122

154

172

183

26.6

26.6

26.6

Water Quality Monitoring

Water Quality Monitoring Results on 16 October 18 during Mid-Ebb Tide Suspended Solids DO Saturation Dissolved Total Alkalinity Chromium Turbidity(NTU) Nickel (µg/L) Sampling Water Water Temperature (°C) Salinity (ppt) Coordinate Coordinate Monitoring Current (ppm) (µg/L) Speed Oxygen (mg/L) Sampling Depth (m) HK Grid HK Grid Station Direction DA DA DA Value DA Value DA Condition Condition Time Depth (m) (m/s) Value Average Value Average Value Value Average Value Value Value (Northing) (Easting) Value 0.0 149 26.6 8.1 1.0 26.5 88.9 6.2 8.6 81 < 0.2 3.0 Surface 26.6 8.1 26.6 88.9 1.0 157 0.0 26.6 8.1 26.6 88.8 6.1 8.7 4 82 < 0.2 3.1 87 3.5 0.1 142 9.3 3.1 26.6 8.1 26.8 88 6 6.1 6 <0.2 IM9 Moderate 05:08 6.9 Middle 8.1 26.8 88.7 87 822084 808796 3.1 Rainy 3.5 0.2 115 26.6 8.1 26.8 88.7 6.1 9.6 6 88 <0.2 3.0 5.9 0.2 129 26.6 8.1 10.1 9 90 <0.2 3.0 27.3 Bottom 26.6 8.1 88.2 6.1 5.9 0.2 26.6 8.1 27.3 88.2 6.1 10.3 92 <0.2 3.1 1.0 0.1 77 8.0 8.5 4 83 3.1 26.6 26.5 89.0 6.2 < 0.2 Surface 26.6 8.0 26.5 89.2 8.0 89.4 6.2 3.1 1.0 0.1 79 26.6 26.6 8.7 4 84 <0.2 3.1 3.6 0.0 114 8.1 6.2 9.5 5 86 < 0.2 26.6 27.1 90.1 27.1 90.2 822395 IM10 Rainy Moderate 04:54 7.2 Middle 26.6 8.1 97 87 809796 3.1 90.2 6.2 9.7 87 < 0.2 3.2 3.6 0.0 114 26.6 8.1 27.1 5 6.2 0.0 105 26.6 8.1 27.5 89.7 6.2 10.5 8 91 <0.2 3.1 27.4 Bottom 26.6 8.1 89.2 6.2 6.2 0.0 128 26.6 8.1 27 4 88.7 6.1 11.5 8 92 < 0.2 3.0 0.1 26.6 8.1 8.1 81 <0.2 3.1 26.7 6.2 Surface 26.6 8.1 26.7 89.1 1.0 0.1 26.6 8.1 6.1 8.7 3 82 <0.2 3.2 4.0 118 6.2 12.5 85 3.1 0.1 8.1 89.3 < 0.2 26.6 26.8 3 26.8 89.4 822035 811443 IM11 Rainy Moderate 04:44 79 Middle 26.6 8.1 3.1 4.0 6.2 0.1 129 26.6 8.1 26.8 89.4 12.5 4 86 < 0.2 6.9 89 3.1 0.0 152 26.6 8.1 27.7 88.8 6.1 13.5 4 < 0.2 Bottom 27.6 88.9 6.9 0.0 173 26.6 8.1 27.5 89.0 6.1 13.6 5 89 < 0.2 3.2 1.0 0.1 121 26.6 8.1 26.8 89.4 7.4 81 <0.2 3.0 26.8 6.2 5 Surface 26.6 8.1 90.3 1.0 0.1 8.1 26.8 91.1 6.3 7.4 4 82 <0.2 3.1 26.6 7.7 3.2 4.1 0.0 115 26.6 8.1 27.0 90.8 6.3 5 86 <0.2 27.0 90.8 821448 IM12 Rainy Moderate 04:36 82 Middle 26.6 8.1 12 1 86 812054 3.1 4.1 0.0 115 8.1 27.0 90.7 6.3 7.7 85 <0.2 3.0 26.6 6 7.2 90 < 0.2 3.0 0.1 136 26.6 8.1 27.8 90.1 6.2 21.2 6 Bottom 27.8 6.2 7.2 0.1 109 26.6 8.1 27.8 89.8 6.2 21 4 7 91 <0.2 3.1 1.0 0.4 88 26.5 87.6 7.7 82 <0.2 3.1 8.1 27.5 6.0 Surface 27.5 87.2 26.5 8.1 1.0 0.4 90 26.5 8.1 6.0 7.8 7 83 <0.2 3.1 6.0 -SR2 Moderate 04:16 4.5 Middle 821476 814144 3.1 Rainv 86 <0.2 3.5 0.2 109 26.4 5.7 7.9 90 3.2 8.0 27.6 82.2 Bottom 26.4 8.0 27.6 81.4 5.7 10 3.5 0.2 118 8.0 27.6 5.6 7 9 80.5 90 3.1 26.4 <0.2 1.0 129 5.2 0.1 26.6 8.1 26.0 88.0 6.1 3 Surface 26.0 88.1 1.0 0.1 131 26.6 8.1 26.0 88.1 6.1 5.9 4 4.3 0.2 122 26.6 8.1 5.8 6.7 5 SR3 05:40 8.5 Middle 26.6 8.1 26.6 83.7 822126 807592 Rainv Moderate 4.3 0.3 26.6 8.1 26.6 83.3 5.8 6.9 7.5 0.2 187 29.7 84.1 5.7 7.4 6 26.6 8.1 29.7 85.4 5.8 8.1 Bottom 26.6 86.6 5.9 8.1 7.6 7.5 0.2 26.6 29.7 202 1.0 0.3 146 26.6 8.2 28.7 90.5 6.2 6.1 Surface 26.6 8.2 28.7 90.5 90.5 8.2 6.2 1.0 0.3 167 26.6 28.7 6.0 7 4.8 0.3 146 26.6 8.2 28.7 90.1 6.2 6.6 7 SR4A Cloudy Moderate 05:09 9.6 Middle 26.6 8.2 28.7 90.1 817189 807792 4.8 0.3 153 26.6 8.2 28.7 90.1 6.2 6.5 8 8.6 0.2 149 26.6 8.2 28.7 89.9 6.2 8.7 8 28.7 89.9 Bottom 26.6 8.2 6.2 8.6 0.2 173 26.6 8.2 28.7 6.2 8.7 9 1.0 106 6.4 0.1 26.5 8.2 28.8 91.0 6.2 6 Surface 26.5 8.2 28.8 91.0 1.0 0.1 119 8.2 28.8 6.2 6 26.5 91.0 6.5 6.2 SR5A Cloudy Moderate 05:26 4.7 Middle 816590 810712 3.7 0.1 106 26.5 8.2 28.9 13.4 6 6.2 Bottom 26.5 8.2 28.9 91.1 6.2 0.1 8.2 28.9 91.1 6.2 13.3 26.5 1.0 0.1 141 26.3 8.2 28.4 90.4 6.2 6.7 Surface 26.3 8.2 28.4 90.4 8.2 90.4 6.2 1.0 0.1 155 28.5 6.7 26.3 7 6.2 SR6 06:02 4.5 Middle 817913 814638 Cloudy Moderate 3.5 0.1 165 26.4 8.2 29.1 6.3 7.6 12 91.4 29.1 91.4 Rottom 26.4 8.2 6.3 3.5 0.1 190 26.4 8.2 29.1 91.4 6.3 7.6 12 1.0 0.7 26.5 8.0 28.6 88.2 6.0 5.0 4 Surface 26.5 28.6 88.1 8.0 1.0 0.8 83 26.5 8.0 28.6 88.0 6.0 5.4 3 6.1 8.2 0.6 99 26.5 8.0 28.7 87.3 6.0 4 SR7 Rainy Moderate 03:40 16.3 Middle 28.7 87.4 823653 823736 8.2 0.7 106 8.0 87.4 6.0 26.5 28.7 6.1 4 15.3 0.2 130 26.5 8.0 29.2 84.9 5.8 8.7 5 Bottom 29.2 85.1 5.8 15.3 0.2 136 26.5 8.0 29.2 85.3 5.8 8.8 5 1.0 26.5 8.1 8.6 Surface 26.5 8.1 27.3 88.3 1.0 26.5 8.1 27.3 87.7 6.1 9.8 4 SR8 Rainy Moderate 04:27 4.2 Middle 820493 811688 3.2 27.4 13.7 8 26.4 8.0 5.8 83.6 Bottom 26.4 8.0 27.4 83.4

8.0

8

3.2

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

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

Note: Access to SR8 was blocked by barge and its wires. The monitoring at SR8 was slightly shifted to the closest safe and accessible location temporarily.

Water Quality Monitoring Results on 16 October 18 during Mid-Flood Tide DO Saturation Dissolved Suspended Solids otal Alkalinity Chromium Turbidity(NTU) Sampling Water Water Temperature (°C) Salinity (ppt) Coordinate Coordinate Nickel (µg/L) Monitoring Current Speed Oxygen (mg/L) (ppm) (µg/L) Sampling Depth (m) HK Grid HK Grid Station Direction DA DA DA DA Value DA Condition Condition Time Depth (m) (m/s) Value Average Value Average Value Average Value Value Value Value (Northing) (Easting) Value 0.0 26.3 1.0 85 8.1 25.8 93.3 6.5 2.7 < 0.2 1.8 81 Surface 1.0 0.0 88 26.3 8.1 25.8 93.3 6.5 2.7 82 <0.2 1.9 6.3 4.3 0.1 82 26.5 8.2 30.2 89.9 6.1 5.7 6 87 <0.2 1.7 C1 17:12 8.6 Middle 26.5 8.2 30.2 89.9 815638 804255 Cloudy Moderate 5.9 86 1.8 0.1 82 26.5 8.2 30.2 89.9 6.1 5.7 4 88 <0.2 1.8 7.6 0.1 67 <0.2 1.7 26.5 8.2 31.0 89.3 6.0 9.2 6 90 Bottom 31.0 89.3 76 0.1 70 26.5 8.2 31.0 89.3 6.0 92 7 90 <0.2 17 1.0 136 3.2 0.1 26.7 8.0 22.3 86.4 6.1 7.5 82 <0.2 Surface 26.7 8.0 22.3 86.4 1.0 0.1 8.0 22.3 7.5 4 82 <0.2 3.2 26.7 3.1 5.9 0.1 333 26.6 8.0 26.6 84.7 5.9 9.4 5 86 <0.2 84.7 87 825681 C2 Cloudy Moderate 16:04 11.7 Middle 8.0 26.6 806951 3.2 5.9 0.1 345 8.0 26.6 84.7 5.9 9.4 87 < 0.2 26.6 5 10.7 92 3.2 0.1 307 26.7 8.0 29.0 84.1 5.7 12.0 6 <0.2 Bottom 28.9 84.3 5.8 10.7 0.1 323 26.7 8.0 28.9 84 5 5.8 11.5 7 92 <0.2 3.2 1.0 0.0 207 26.6 8.1 29.0 88.7 6.1 6.0 4 82 <0.2 3.2 29.0 88.7 1.0 0.0 223 26.6 8.1 29.0 88.7 6.1 6.0 4 84 <0.2 3.2 4.9 0.1 87 3.1 26.6 8.1 29.6 86.7 5.9 6.3 5 <0.2 C3 17:44 Middle 8.1 29.6 86.5 822099 817793 Fine 9.8 26.6 3.1 Moderate 4.9 8.1 29.6 86.3 5.9 88 <0.2 3.1 0.1 249 26.6 6.2 8.8 0.1 238 5.7 6.7 5 90 < 0.2 3.0 26.6 8.1 30.3 84.2 Bottom 8.1 30.3 84.3 5.7 5.7 8.1 30.3 84.4 6.9 90 8.8 0.1 247 26.6 6 <02 32 1.0 0.1 94 8.2 26.3 25.3 96.3 6.7 4.3 83 <0.2 1.8 Surface 26.3 25.3 96.3 96.3 1.8 1.0 0.1 98 26.3 8.2 25.3 6.8 4.3 7 84 <0.2 817961 IM1 16:53 Middle 85 807117 Rainv Moderate 5.1 4.1 0.1 139 26.3 85 <0.2 1.8 8.2 25.5 96.5 6.7 5.2 8 Bottom 26.3 8.2 25.5 96.6 6.8 96.6 4.1 0.1 145 8.2 25.5 6.8 5.2 86 1.9 26.3 8 < 0.2 1.0 0.2 3.3 82 26.4 8.2 25.8 94.5 6.6 6 <0.2 1.8 Surface 25.8 94.5 1.0 8.2 94.5 6.6 83 <0.2 0.2 91 26.4 25.8 3.3 5 1.9 3.7 0.1 0 26.4 8.1 26.0 92.9 6.5 5.9 6 87 <0.2 1.8 26.0 92.9 818174 806153 IM2 Rainy Moderate 16:45 7.3 Middle 8.1 3.7 0.2 26.4 8.1 26.0 92.8 6.5 6.0 87 < 0.2 1.8 6.3 0.1 26.5 8.1 27.7 10.8 8 90 <0.2 1.8 6.1 Bottom 26.5 8.1 27.7 88.8 6.1 83 8.1 27.7 88.8 6.1 10.7 91 <0.2 1.8 6.3 0.2 26.5 1.0 0.1 77 2.8 82 1.8 26.4 6.5 6 <0.2 8.1 26.1 93.5 26.1 93.5 Surface 26.4 8.1 8.1 26.1 93.5 6.5 2.8 82 < 0.2 1.8 1.0 0.1 80 26.4 6 3.8 0.1 91 26.5 8.1 26.3 92.1 6.4 3.6 7 86 <0.2 1.8 IM3 Rainy Moderate 16:39 7.5 Middle 26.3 92.1 818793 805577 1.8 3.8 0.1 99 26.5 8.1 26.3 92 1 6.4 3.6 6 86 < 0.2 6.5 0.1 10.1 91 <0.2 1.8 26.5 8.1 27.8 88.9 6.1 Bottom 26.5 8.1 27.8 89.0 6.5 0.1 65 8.1 10.0 < 0.2 1.7 26.5 0.2 26.4 8.1 26.5 6.4 3.5 81 <0.2 1.7 92.0 6 Surface 26.4 8.1 26.5 92.0 1.0 0.2 53 8.1 26.5 6.4 3.6 82 < 0.2 1.6 26.4 92.0 6 3.8 0.1 355 26.5 8.1 26.9 88.8 6.1 6.7 7 86 < 0.2 1.7 IM4 Moderate 16:30 7.6 Middle 26.9 88.8 819747 804603 Rainy 3.8 0.1 327 26.5 8.1 26.9 88.8 6.1 6.9 8 86 < 0.2 1.8 6.6 0.1 342 26.5 8.1 28.1 87.4 6.0 12.1 10 91 <0.2 1.7 28.1 6.0 Bottom 8.1 87.4 6.6 0.2 315 26.5 8.1 28.1 87.4 6.0 12.1 10 91 <0.2 1.7 1.0 0.1 340 26.4 94.5 26.4 8.2 26.4 6.6 4.8 83 <0.2 1.6 94.5 Surface 26.4 8.2 1.0 0.1 340 26.4 8.2 26.4 94.5 6.6 4.8 84 <0.2 1.7 1.7 3.5 0.2 87 <0.2 8 26.5 8.2 26.5 93.8 6.5 5.9 8 IM5 Moderate 16:22 6.9 Middle 26.5 93.8 6.2 820739 804881 1.7 8.2 93.8 87 26.5 6.5 < 0.2 3.5 0.2 8 26.5 5.8 8 1.7 5.9 0.1 26 26.5 8.2 27.3 91.6 6.3 8.0 9 88 < 0.2 Bottom 27.3 91.7 1.6 5.9 0.2 26 26.5 8.2 27.3 91.7 6.3 8.1 8 88 < 0.2 139 26.6 2.9 8.0 22.0 6.4 3.4 81 <0.2 Surface 26.6 22.0 90.5 8.0 1.0 0.0 148 26.6 8.0 6.4 3.4 82 <0.2 2.5 3.5 0.1 39 26.5 8.1 6.5 8.4 87 < 0.2 26.0 93.0 8 8.1 26.0 93.0 821040 IM6 Rainy Moderate 16:14 7.0 Middle 86 805824 2.7 3.5 0.1 42 8.1 26.0 6.5 8.3 8 89 < 0.2 26.5 93.0 6.0 12.8 89 <0.2 2.7 0.1 20 26.5 8.2 27.2 92.8 6.4 q Bottom 27.2 92.8 6.4 92.8 6.4 < 0.2 6.0 0.1 21 26.5 8.2 27.2 12.8 a 90 2.8

8.0

8.0

8.1

8.1

8.2

8.2

8.0

8.0

8.1

8.1

8.0

8.0

8.1

8.2

8.1

26.6

26.5

26.5

26.6

23.0 94.5

23.0

22.2

24.7

26.4

94.5

93.8

93.8

92.8 27.2

92.8

88.2

88.1

88.0

88.0

85.0

94.5

93.8

92.8

88.0

85.1

6.6

6.5

6.5

6.4

6.4

6.3

6.2

6.2

6.2

5.9

6.4

5.9

3.4

3.4

8.3

12.8

12.8

12.5

12.6

15.0

15.0

14.5

14.6

8.4

8.2

4

4

5

5

4

5

5

6

6

86

87

91

92

93

95

82

83

86

87

92

87

821331

821851

<0.2

< 0.2

<0.2

<0.2

< 0.2

< 0.2

< 0.2

< 0.2

<0.2

<0.2

< 0.2

806843

808150

3.2

3.1

3.1

3.2

3.1

2.9

3.1

3.0

3.1

3.2

3.

3.1 3.1

23.0

23.0

23.0

23.0

27.2

27.2

22.2

22.2

24.7

24.7

26.4 8.0

DA: Depth-Averaged

IM7

IM8

Rainy

Cloudy

Moderate

Moderate

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

16:05

16:28

8.5

7.8

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

1.0

1.0

4.3

4.3

7.5

7.5

1.0

1.0

3.9

3.9

6.8

6.8

Surface

Middle

Bottom

Surface

Middle

Bottom

0.1

0.1

0.1

0.1

0.1

0.1

0.1

0.1

0.1

0.1

0.1

0.1

263

77

81

85

152

163

84

89

106

110

26.6

26.6

26.5

26.5

26.5

26.5

26.6

26.6

26.6

26.6

26.6

Expansion of Hong Kong International Airport into a Three-Runway System Water Quality Monitoring Water Quality Monitoring Results on 16 October 18 during

16 October 18 during Mid-Flood Tide

Water Qua	lity Monite	oring Resu	lts on		16 October 18	during Mid-		le																
Monitoring	Weather	Sea	Sampling	Water	Sampling Dep	oth (m)	Current Speed	Current	Water Ter	mperature (°C)	pН	Sali	nity (ppt)		aturation %)	Dissolved Oxygen	Turbidity		ided Solids ng/L)	Total Alkalini (ppm)	Coordinate HK Grid	Coordinate HK Grid	Chromium (µg/L)	Nickel (µg/L)
Station	Condition	Condition	Time	Depth (m)	Jampang 2 sp	,	(m/s)	Direction	Value	Average	Value Averag	ge Value	Average	Value	Average	Value DA	Value	DA Valu	: DA	Value DA		(Easting)	Value DA	Value DA
					Surface	1.0	0.2	130 142	26.6 26.6	26.6	8.0	22.1	22.1	87.3 87.2	87.3	6.2	8.8 8.9	2		82 83			<0.2	3.1
IM9	Cloudy	Moderate	16:35	7.3	Middle	3.7	0.1	100 103	26.6 26.6	26.6	8.0	23.1	23.1	86.1 86.0	86.1	6.1	11.8	11.3		86 87	822106	808792	<0.2	2 3.2 3.2
					Bottom	6.3 6.3	0.1 0.1	96 97	26.6 26.6	26.6	8.0 8.0	25.5 25.5		86.0 86.2	86.1	6.0 6.0	13.1 13.1	7		89 91			<0.2 <0.2	3.2
					Surface	1.0	0.2	106	26.6	26.6	8.0	22.1		90.1	90.1	6.4	9.4	3		80			<0.2	3.1
IM10	Cloudy	Moderate	16:42	8.5	Middle	1.0 4.3	0.2	112 14	26.6 26.6	26.6	8.0 8.1 8.1	22.1	24.8	90.1	91.5	6.4	9.5 11.8	11.4	4	82 88 86	822374	809818	<0.2	3.1 2 3.0 3.1
	,				Bottom	4.3 7.5	0.2	15 313	26.6 26.5	26.5	8.1 8.1 8.1	24.7 28.1	28.1	91.4 90.9	91.0	6.4	11.8 12.8	4 4		88 89			<0.2	3.1 3.1
					Surface	7.5 1.0	0.1	333 105	26.5 26.6	26.6	8.1 8.1 8.1	28.1	23.4	91.1 89.9	89.9	6.3	12.8 8.3	5		89 82			<0.2 <0.2	3.1
			40.50			1.0 4.2	0.2	109 326	26.6 26.5		8.1	23.4		89.9 87.7		6.3 6.0	8.2 8.7	3 4		83 86		044400	<0.2	3.1
IM11	Rainy	Moderate	16:52	8.3	Middle	4.2 7.3	0.1	348 299	26.5 26.6	26.5	8.1	27.3	27.4	87.0 85.9	87.4	6.0	9.0 10.4	9.2	4	86 91	822065	811488	<0.2 <0.2 <0.2	2 3.1 3.1 3.1
					Bottom	7.3	0.1	307 99	26.6	26.6	8.1	28.8	28.8	85.8	85.9	5.9	10.3	6		91			<0.2	3.0
					Surface	1.0	0.1	99	26.5	26.5	8.1 8.1	25.1	25.1	88.8	88.7	6.2	9.1	5		82 82			<0.2	3.2
IM12	Rainy	Moderate	16:59	9.0	Middle	4.5 4.5	0.1	230 237	26.4 26.4	26.4	8.1	28.6	28.6	87.0 87.0	87.0	6.0	9.5 9.5	9.5		86 87	821476	812023	<0.2	3.0
					Bottom	8.0 8.0	0.1	227 237	26.5 26.5	26.5	8.1 8.1	29.0 29.0	29.0	86.7 87.2	87.0	5.9 6.0	9.8 9.8	8		91 92			<0.2 <0.2	3.2
					Surface	1.0	0.2	25 26	26.5 26.5	26.5	8.1 8.1	27.1 27.1	27.1	90.3	90.2	6.2	6.5 6.7	4		82 83			<0.2 <0.2	3.2
SR2	Fine	Moderate	17:22	5.7	Middle	-	-	-	-	-		-	-	-	-	6.2	-	6.8	- 5	- 87	821459	814177	- <0.2	
					Bottom	4.7	0.1	70 72	26.5 26.5	26.5	8.1 8.1	29.3	29.2	87.1 87.7	87.4	5.9 6.0	6.9 7.0	6		90 91			<0.2	3.0 2.9
					Surface	1.0	0.1	132	26.6	26.6	8.0 8.0	21 E		87.2 86.6	86.9	6.2	7.3	5		-				-
SR3	Cloudy	Moderate	16:23	9.1	Middle	1.0 4.6	0.1	140 83	26.6 26.6	26.6	8.0	26.0	26.0	85.1	84.8	6.2 5.9 6.1	9.6	9.8	7	-	822161	807580	-	-
	,				Bottom	4.6 8.1	0.1	86 146	26.6 26.7	26.7	8.0	26.1	27.4	84.5 83.5	83.9	5.9 5.7 5.8	10.5 11.9	7		-			-	-
					Surface	8.1 1.0	0.2	154 50	26.7 26.3	26.3	8.0 8.1 8.1	27.4		93.8	93.8	5.8 5.6 6.6	11.5 5.9	11 6		-			-	-
SR4A	Olevert	Madasta	47.00	8.2		1.0 4.1	0.2	50 44	26.3 26.4		8.1	25.4		93.8 91.3		6.6	6.0 9.5	6 7	8	-	047400	807810	-	-
SK4A	Cloudy	Moderate	17:32	8.2	Middle	4.1 7.2	0.1	45 103	26.4 26.6	26.4	8.1 8.1	26.7	26.7	91.2 88.1	91.3	6.0	9.6 17.1	10.8		-	817198	807810	-	-
					Bottom	7.2	0.0	111	26.6 26.5	26.6	8.1	28.7		88.1 90.5	88.1	6.0 6.0	16.7	10		-			-	-
					Surface	1.0	0.0	140	26.5	26.5	8.1	28.3	28.3	90.4	90.5	6.2	4.9	6		-			-	-
SR5A	Cloudy	Moderate	17:48	3.7	Middle	-	-	-	-	=	-	-	-	-	-	-	-	5.2	- 8	-	816613	810696	-	-
					Bottom	2.7	0.0	67 70	26.5 26.5	26.5	8.1 8.1	28.6	20.0	90.9	90.9	6.2 6.2	5.4 5.4	10 10		-			Ħ	-
					Surface	1.0	0.0	238 240	26.3 26.3	26.3	8.2 8.2	27.8 27.8	27.8	93.0 92.9	93.0	6.4	2.1	6		-			-	-
SR6	Cloudy	Moderate	18:13	4.6	Middle	-	-	-	-	=		-	-		-	- 0.4	-	3.8	7	-	817912	814660		
					Bottom	3.6 3.6	0.0	249 252	26.3 26.3	26.3	8.2 8.2 8.2	28.4 28.4	28.4	88.9 88.9	88.9	6.1 6.1	5.5 5.5	7		-			-	-
					Surface	1.0	0.0	286 286	26.6 26.6	26.6	8.2 8.2 8.2	20 E	29.5	86.0 86.0	86.0	5.9	6.6 6.6	6 5	1	-	İ		-	1-1
SR7	Fine	Moderate	18:11	16.0	Middle	8.0	0.4	313	26.7	26.7	8.1	30.9	30.9	85.3	85.2	5.8	6.8	6.9 7	7		823607	823742		-
					Bottom	8.0 15.0	0.4	337 242	26.7 26.8	26.8	8.1	31.3	31.3	85.1 86.2	86.2	5.7 5.8 5.8	6.8 7.2	9		-			-	-
					Surface	15.0 1.0	0.1	259	26.8 26.7	26.7	8.2	25.9	25.9	91.8	91.7	6.4	7.2 9.3	9 5		-	1		-	-
epo.	Fine	Madarat-	17:00	4.6		1.0	-	-	26.7	20.7	8.2	25.9	20.0	91.6	31.7	6.4	9.4	5		-	920492	044644	-	-
SR8	Fine	Moderate	17:09	4.6	Middle	3.6	-	-	26.5	-	8.1	27.1		90.6	-	6.3	9.7	9.5	6	-	820482	811641	-	
					Bottom	3.6	-	-	26.5	26.5	8.1	27.1	27.1	90.5	90.6	6.2 6.3	9.7	6		-				

DA: Depth-Averaged

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

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

Note: Access to SR8 was blocked by barge and its wires. The monitoring at SR8 was slightly shifted to the closest safe and accessible location temporarily.

Water Quality Monitoring Results on 18 October 18 during Mid-Ebb Tide DO Saturation Dissolved Suspended Solids otal Alkalinity Chromium Turbidity(NTU) Nickel (µg/L) Sampling Water Water Temperature (°C) Salinity (ppt) Coordinate Coordinate Monitoring Current (ppm) Speed Oxygen (mg/L) (µg/L) Sampling Depth (m) HK Grid HK Grid Station Direction DA DA DA Value DA Value DA Condition Condition Time Depth (m) (m/s) Value Average Value Average Value Average Value Value Value (Northing) (Easting) Value 1.0 0.5 215 25.9 8.2 79 30.5 91.8 6.3 3.2 < 0.2 0.9 Surface 25.9 8.2 91.8 1.0 0.5 216 25.9 8.2 30.5 91.8 6.3 3.2 80 < 0.2 0.9 6.2 81 43 0.2 6.1 42 4 1.0 209 26.5 8.2 32.0 91.2 <02 C1 07:36 8.6 Middle 8.2 32.0 91.2 82 815604 804269 Rainy Rough 4.3 0.2 224 26.5 8.2 32.0 91.2 6.1 4.2 4 82 <0.2 1.1 7.6 0.1 219 26.6 8.2 4.6 4 85 <0.2 1.2 Bottom 26.6 8.2 32.5 92.0 6.2 7.6 0.1 26.6 8.2 32.5 92.0 6.2 4.5 86 <0.2 1.2 1.0 0.5 170 8.1 5.9 3 26.1 27.7 85.2 6.6 81 < 0.2 1.2 Surface 26.1 8.1 27.7 85.2 8.1 27.7 5.9 1.0 0.6 184 26.1 85.1 6.6 3 80 < 0.2 1.2 5.7 1.2 0.3 165 8.1 30.7 5.5 7.6 4 84 < 0.2 26.7 81.5 30.7 81.5 825669 C2 Rainy Moderate 09:14 11.3 Middle 26.7 8.1 806917 1.2 5.5 81.5 7.5 84 < 0.2 5.7 0.3 169 26.7 8.1 30.7 3 10.3 0.1 147 26.7 8.1 31.2 83.8 5.6 8.9 88 <0.2 1.2 Bottom 26.7 31.2 83.9 84.0 10.3 0.1 154 26.7 8.1 5.7 8.9 6 88 <0.2 1.3 0.1 25.8 8.1 5.5 82 <0.2 1.3 29.1 6.1 Surface 25.8 8.1 29.2 87.7 1.0 0.2 45 8.1 87.6 6.1 5.5 81 1.3 25.8 29.2 <0.2 6.1 5.8 87 1.3 79 5.7 0.1 26.4 8.0 30.4 84.2 4 < 0.2 30.4 822111 817791 C3 Rainy Moderate 07:14 12.1 Middle 26.4 8.0 84.3 6.1 86 5.7 86 0.1 26.4 8.0 30.4 84.3 5.8 3 < 0.2 5.6 91 1.4 0.2 26.5 8.0 31.1 83.6 5.9 3 < 0.2 Bottom 8.0 31.1 83.7 11.1 0.2 75 26.5 8.0 31.1 83.7 5.6 6.0 2 90 < 0.2 1 4 1.0 0.1 212 26.4 3.8 <0.2 8.2 31.6 89.4 6.0 82 0.7 Surface 26.4 8.2 31.6 89.4 1.0 0.1 26.4 8.2 31.6 89.4 6.0 4 82 <0.2 0.7 3.8 817923 IM1 Rainv Moderate 07:57 48 Middle 807117 0.8 3.8 0.0 85 <0.2 0.8 204 26.5 8.2 32.0 91.6 6.2 4.8 4 Bottom 32.0 91.9 6.2 3.8 0.0 224 26.5 8.2 32.0 92 1 6.2 47 4 85 <0.2 0.8 1.0 0.2 194 26.1 8.2 8.2 80 <0.2 1.3 29.7 6.2 3.3 29.7 90.7 Surface 1.0 0.2 197 26.1 29.8 90.7 6.2 3.4 81 <0.2 1.2 6.2 3.5 179 6.1 5.2 85 1.2 0.1 26.6 8.2 32.1 91.2 4 <0.2 Rough 08:05 6.9 Middle 26.6 8.2 32.1 91.3 818172 806182 IM2 Rainv 12 3.5 0.1 194 8.2 32.1 91.4 6.1 5.2 4 86 < 0.2 1.2 26.6 1.2 5.9 89 0.0 156 26.6 8.2 32.2 92.9 6.2 5.4 < 0.2 Bottom 32.2 93.2 6.3 5.9 6.3 5.5 90 0.0 156 8.2 32.2 93.4 5 1.3 26.6 <0.2 1.0 0.4 216 26.0 8.2 29.2 90.6 6.2 4.2 81 <0.2 1.3 Surface 29.2 90.6 1.0 0.4 231 26.0 8.2 29.2 90.6 6.2 4.2 4 81 <0.2 1.4 3.5 0.2 225 26.5 6.9 4 84 <0.2 1.3 8.2 6.2 IM3 08:11 7.0 Middle 26.5 82 31.6 91.5 818782 805573 Rainy Rough 8.2 31.6 91.5 6.2 7.0 86 <0.2 1.2 3.5 0.2 239 26.5 6.0 0.1 179 89 1.2 26.6 8.2 32.2 93.6 6.3 8.5 2 <0.2 32.2 93.7 6.3 Bottom 26.6 8.2 8.2 93.7 6.3 90 1.2 6.0 0.1 32.2 8.5 <0.2 187 26.6 1.0 0.5 220 25.9 91.3 91.3 4.7 74 <0.2 1.3 8.2 28.7 6.3 Surface 25.9 8.2 28.7 91.3 6.3 8.2 5.1 7/ < 0.2 1.2 1.0 0.5 223 25.9 28.7 4 1.3 3.5 0.5 214 26.1 8.2 29.9 6.3 8.4 4 80 <0.2 IM4 08:19 6.9 Middle 26.1 8.2 29.5 92.0 819723 804585 Rainy Rough 3.5 0.5 218 26.1 8.2 29.1 92.0 6.3 8.5 4 81 < 0.2 5.9 0.3 26.3 8.2 6.4 14.6 85 <0.2 1.4 30.9 94.6 30.9 94.7 Bottom 26.3 8.2 5.9 0.3 221 26.3 8.2 30.9 94.7 6.4 14.5 3 86 <0.2 1.3 1.0 78 0.4 26.1 8.2 29.0 90.6 6.2 3.1 < 0.2 1.2 Surface 8.2 29.0 90.6 1.0 0.5 219 8.2 90.6 6.2 3.1 4 78 < 0.2 1.2 26.1 29.0 1.2 3.3 0.4 210 26.3 8.2 30.4 91.2 6.2 4.3 4 81 <0.2 IM5 Rainy Moderate 08:28 6.5 Middle 8.2 30.5 91.3 820742 804875 3.3 0.4 224 26.3 8.2 30.5 91.4 6.2 4.5 4 82 <0.2 1.2 5.5 0.4 212 5.5 6 86 <0.2 1.2 26.4 8.2 30.9 92.7 6.3 92.8 8.2 30.9 6.3 Bottom 26.4 92.8 6.3 87 5.5 0.4 223 26.4 8.2 30.9 5.4 <0.2 1.2 1.0 0.4 220 26.1 8.2 89.8 6.2 3.1 81 <0.2 1.2 29.2 Surface 26.1 8.2 29.2 89.8 8.2 29.2 89.8 6.2 82 1.1 1.0 0.4 26.1 3.5 < 0.2 223 3 3.2 0.3 217 26.4 8.2 30.7 90.8 6.2 7.6 3 85 <0.2 1.2 IM6 08:35 6.4 Middle 30.6 91.0 821075 805809 1.2 Rainy Moderate 3.2 0.3 235 26.4 8.2 30.5 91 1 6.2 7.8 4 86 <0.2 5.4 0.3 224 26.4 9.3 87 <0.2 1.1 8.2 31.1 6.4 Bottom 26.4 8.2 31.1 94.0 6.4 5.4 0.3 236 26.4 8.2 31.1 94.0 6.4 9.0 87 <0.2 1.2 1.0 0.4 26.0 8.1 28.7 89.8 6.2 1.4 80 <0.2 1.3 Surface 26.0 8.1 28.7 89.8 1.0 0.4 232 26.0 8.1 28.7 89.8 6.2 1.3 81 <0.2 1.3 4 2.8 3.9 6.3 86 0.4 223 26.2 8.2 < 0.2 1.3 28.8 91.2 IM7 Rainy Moderate 08:44 7.8 Middle 28.8 91.4 821361 806814 3.9 237 6.3 3.0 5 86 1.2 0.4 26.3 8.2 28.8 91.5 <0.2 6.8 0.3 246 26.3 8.2 31.4 94.0 6.4 3.1 4 89 <0.2 1.3 31.4 94.1 6.8 0.3 260 26.3 8.2 31.4 94.1 6.4 3.1 4 90 < 0.2 1.2 1.0 0.3 207 26.1 5.9 82 <0.2 1.2 Surface 28.8 88.7 26.1 8 1 88.7 8.1 28.8 6.1 5.8 82 <0.2 1.3 1.0 0.3 210 26.1 4 87 3.7 198 6.9 0.2 26.2 8.2 29.4 88.4 6.1 3 <0.2 1.3 29.4 88.4 821818 IM8 Rainy Moderate 08:44 7.3 Middle 26.2 8.2 86 808135 0.2 1.3 1.2 3.7 8.2 29.4 88.4 6.1 6.9 86 < 0.2 0.2 204 26.2 3 90 1.3 6.3 0.1 232 26.4 8.2 29.8 89.0 6.1 8.3 0.2 Bottom 8.2 29.8 89.1 6.3 0.1 236 26.4 1.2

DA: Depth-Average

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

Water Quality Monitoring

Water Qua	ity Monite	oring Resu	lts on		18 October 18	during Mid-		9																					
Monitoring	Weather	Sea	Sampling	Water	Sampling Dep	oth (m)	Current Speed	Current	Water Te	mperature (°C)	1	Н	Salir	nity (ppt)		aturation (%)	Disso Oxy		Turbidity(NTU)	Suspende (mg/		Total All (ppi		Coordinate HK Grid	Coordinate HK Grid	Chron (µg/		lickel (µg/L
Station	Condition	Condition	Time	Depth (m)			(m/s)	Direction	Value	Average		Average		Averag		Average		DA	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)	Value		alue DA
					Surface	1.0	0.2	186 187	26.1 26.1	26.1	8.1	8.1	28.8	28.8	88.3 88.4	88.4	6.1	6.1	5.9 5.9	ŀ	3		81 82				<0.2		1.2
IM9	Rainy	Moderate	08:38	7.4	Middle	3.7	0.2	154 164	26.2 26.2	26.2	8.2	8.2	29.4	29.4	88.3 88.2	88.3	6.1	0.1	6.4 6.5	6.5	3	4	86 86	86	822084	808804	<0.2		1.1
					Bottom	6.4 6.4	0.0	1	26.5 26.5	26.5	8.2 8.2	8.2	30.3	30.3	88.3 88.4	88.4	6.0	6.0	7.2 7.2	Ī	5		90 90				<0.2	1	1.1
					Surface	1.0	0.2	133 137	26.0 26.0	26.0	8.1 8.1	8.1	28.9 28.9	28.9	88.4 88.3	88.4	6.1		6.1		5		81 82				<0.2	1	1.3
IM10	Rainy	Moderate	08:30	9.0	Middle	4.5	0.2	122	26.5	26.5	8.2	8.2	30.7	30.7	87.1	87.2	5.9	6.0	8.0	8.5	5	5	86	86	822371	809778	<0.2	.0.2	1.3 1.3
					Bottom	4.5 8.0	0.3	129 119	26.5 26.5	26.5	8.2	8.2	30.7	30.8	87.2 87.7	87.7	5.9	5.9	8.0 11.3		5		86 90				<0.2	1	1.2
					Surface	1.0	0.2	121 132	26.5 26.2	26.2	8.2	8.2	30.8 29.3	29.3	87.7 87.0	87.0	5.9 6.0		11.4 6.8		4 5		90 81			l	<0.2	1	1.2
IM11	Rainy	Moderate	08:17	9.3	Middle	1.0 4.7	0.2	134 129	26.2 26.2	26.2	8.2 8.2	8.2	29.3 29.4	29.4	86.9 85.9	85.9	6.0 5.9	6.0	6.8 7.7	8.4	5 5	5	81 87	86	822031	811471	<0.2 <0.2	.0.2	1.3
IIVIII	Railly	ivioderate	06.17	9.3		4.7 8.3	0.3	137 112	26.2 26.5		8.2 8.2		29.4 30.6		85.8 85.7	85.8	5.9 5.8		7.7 10.8	0.4	6 4	. 5	86 90	00	022031	011471	<0.2	1	1.2
					Bottom	8.3 1.0	0.1	112 95	26.5 25.9	26.5	8.2 8.2	8.2	30.6 28.5	30.6	85.8 88.7		5.8 6.1	5.8	10.8 6.3		4		91 82				<0.2		1.2
					Surface	1.0	0.3	100 119	25.9 26.1	25.9	8.2 8.2	8.2	28.5	28.5	88.7 87.5	88.7	6.1	6.1	6.3	İ	2		81 85				<0.2	1	1.2
IM12	Rainy	Moderate	08:08	10.6	Middle	5.3 9.6	0.3	121	26.1 26.3	26.1	8.2 8.2	8.2	28.8	28.8	87.4	87.5	6.0		6.8 7.6	6.9	3 4	3	87 90	86	821454	812054	<0.2	<0.2	1.2
					Bottom	9.6	0.1 0.1	98 105	26.3	26.3	8.2	8.2	29.7	29.7	87.9 87.9	87.9	6.0	6.0	7.7		4		88				<0.2	1	1.2
					Surface	1.0	0.2	88 94	25.9 25.9	25.9	8.0	8.0	28.9 28.9	28.9	88.2 88.1	88.2	6.1 6.1	6.1	5.7 5.7	ŀ	4		81 82				<0.2 <0.2	1	1.3
SR2	Rainy	Moderate	07:40	4.3	Middle	-	-	-	-	-	-	-	-	-	-	-	-		-	6.6	-	3	-	84	821469	814144	-	<0.2	1.3
					Bottom	3.3	0.2	87 94	26.4 26.4	26.4	8.0	8.0	29.8 29.8	29.8	83.6 83.5	83.6	5.7 5.7	5.7	7.4 7.5	-	2		85 86				<0.2		1.2
					Surface	1.0	0.4	183 189	26.1 26.1	26.1	8.2 8.2	8.2	28.9 28.9	28.9	88.6 88.5	88.6	6.1 6.1		6.1 6.1		3		-				-		-
SR3	Rainy	Moderate	08:51	9.1	Middle	4.6 4.6	0.3	200 215	26.3 26.3	26.3	8.2 8.2	8.2	29.9	29.9	88.2 88.1	88.2	6.0	6.1	6.9	6.8	3	3	-	-	822166	807587	-		-
					Bottom	8.1 8.1	0.2	261 280	26.4 26.4	26.4	8.2 8.2	8.2	30.6	30.6	88.6 88.5	88.6	6.0	6.0	7.4		2		-				-		
					Surface	1.0	0.3	255	26.0	26.0	8.2	8.2	30.8	30.8	91.6	91.6	6.2		3.7		5						-		-
SR4A	Rainy	Moderate	07:20	8.2	Middle	1.0 4.1	0.3	264 250	26.0 26.5	26.5	8.2 8.2	8.2	30.8 32.0	32.1	91.6 90.9	90.9	6.3 6.1	6.2	3.7 4.8	4.7	6 4	4	-		817202	807813	-		<u>-</u>
					Bottom	4.1 7.2	0.3	250 251	26.5 26.6	26.6	8.2 8.2	8.2	32.1 32.4	32.4	90.9 91.3	91.3	6.1 6.1	6.1	4.9 5.4	ŀ	3		-				-		-
					Surface	7.2 1.0	0.2	261 311	26.6 26.3	26.4	8.2 8.1	8.1	32.4 27.1	27.0	91.3 77.3	77.3	6.1 5.4	0.1	5.4 4.9		7		-				-		-
0051						1.0	0.1	339	26.4	20.4	8.1	0.1	26.9	27.0	77.2	11.3	5.3	5.4	5.4		5		-			040740	-		-
SR5A	Rainy	Moderate	07:02	3.8	Middle	2.8	0.1	317	26.5	-	8.0		29.9		78.2	-	5.3		6.0	5.6	- 6	6	-	-	816616	810712	-		- 1
					Bottom	2.8	0.1	345 299	26.4	26.5	8.0	8.0	30.0	30.0	78.6 78.8	78.4	5.4	5.4	6.0		6	•	-				-		-
					Surface	1.0	0.1	301	26.2	26.2	8.1	8.0	26.9	26.9	78.7	78.8	5.5	5.5	8.0		6		-				-		-
SR6	Rainy	Moderate	06:41	4.1	Middle	-	-	-	-	=	-	-		-	-	-	-		-	6.7	-	6	-	-	817918	814669	-	· E	-
					Bottom	3.1 3.1	0.0	321 333	26.5 26.5	26.5	8.0	8.0	29.9 29.9	29.9	80.6 82.6	81.6	5.5 5.6	5.6	5.7 5.6		5 6		-				-		-
					Surface	1.0	0.3	66 69	25.9 25.9	25.9	8.1	8.1	29.0 29.0		87.4 87.3	87.4	6.0	5.9	5.6 5.6	7	3		-				-		-
SR7	Rainy	Moderate	06:37	15.9	Middle	8.0 8.0	0.1	329 337	26.6 26.6	26.6	8.1 8.1	8.1	31.9 31.9	31.9	85.2 85.2	85.2	5.7 5.7	3.5	6.2 6.1	6.1	3 2	3	-	-	823640	823765	-		-
					Bottom	14.9 14.9	0.3	304 318	26.7 26.7	26.7	8.1 8.1	8.1	32.2 32.3	32.2	85.9 85.8	85.9	5.7 5.7	5.7	6.4 6.4	ŀ	2 2		-				-		-
					Surface	1.0	-	-	25.8 25.8	25.8	8.2 8.2	8.2	27.7	27.7	91.9 91.9	91.9	6.4		7.1		4 5		-				Ħ	F	=
SR8	Rainy	Moderate	07:58	4.8	Middle	-	-	-	-	=	-	-	-	-	-	-	-	6.4	-	7.1	-	4	-	-	820498	811661	-		= .
					Bottom	3.8	-	-	25.6	25.6	8.2	8.2	27.9	27.9	91.9	92.0	6.4	6.4	7.1	-	3	.	-				-		-
DA: Depth-Aver					_5000	3.8	-	-	25.6		8.2		27.9		92.0		6.4		7.1		4		-				<u> </u>		<u>- L</u>

DA: Depth-Averaged

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

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

Note: Access to SR8 was blocked by barge and its wires. The monitoring at SR8 was slightly shifted to the closest safe and accessible location temporarily.

Water Quality Monitoring Results on 18 October 18 during Mid-Flood Tide DO Saturation Dissolved Suspended Solids otal Alkalinity Chromium Salinity (ppt) Turbidity(NTU) Nickel (µg/L) Sampling Water Water Temperature (°C) Coordinate Coordinate Monitoring Current Oxygen (ppm) Speed (mg/L) (µg/L) Sampling Depth (m) HK Grid HK Grid Station Direction DA DA DA Value DA Value DA Condition Condition Time Depth (m) (m/s) Value Average Value Average Value Average Value Average Value Value Value (Northing) (Easting) Value 1.0 0.3 26.3 23 8.2 31.0 94.8 6.4 3.7 81 < 0.2 0.7 Surface 26.3 8.2 31.0 94.8 1.0 0.3 25 26.3 8.2 31 0 94.8 6.4 3.8 4 81 < 0.2 0.7 4.3 0.4 32 26.6 8.2 32.4 95.0 6.4 10.0 6 85 <0.2 0.7 C1 15:45 8.6 Middle 26.6 8.2 32.4 95.0 815594 804232 Fine Moderate 85 0.8 0.4 26.6 8.2 32.4 95.0 6.4 10.0 85 <0.2 0.8 7.6 0.4 30 7 88 < 0.2 0.8 26.6 8.2 32.5 97.0 6.5 11.5 Bottom 32.5 97.1 7.6 0.4 30 26.6 8.2 32.5 97.2 6.5 11.5 7 90 <0.2 0.8 1.0 0.1 276 25.9 <0.2 8.1 26.9 88.8 6.2 5.9 82 1.7 88.7 Surface 25.9 8.1 26.9 1.0 0.1 280 25.9 8.1 26.9 88.6 6.2 5.8 3 82 <0.2 1.7 1.7 5.7 0.1 352 26.6 8.1 29.7 84.1 5.7 6.5 4 87 <0.2 29.7 84.1 825674 806920 C2 Cloudy Moderate 15:05 11.4 Middle 8.1 87 5.7 0.2 324 8.1 29.7 84.0 5.7 6.5 87 < 0.2 1.8 26.6 3 10.4 92 1.7 0.1 300 26.6 8.1 30.5 84.7 5.7 7.9 3 < 0.2 Bottom 30.5 84.7 5.7 10.4 0.2 328 26.6 8.1 30.5 84 7 7 9 4 92 <0.2 17 1.0 0.4 250 26.2 8.2 30.1 88.3 6.0 5.3 81 <0.2 1.2 Surface 30.1 88.3 8.2 1.0 0.4 270 26.2 8.2 30.1 88.2 6.0 5.3 <2 82 <0.2 1.2 5.9 0.3 258 7.0 4 86 1.3 26.6 8.2 31.7 83.3 5.6 <0.2 C3 17:04 Middle 26.6 82 31.7 83.2 822124 817776 1.3 Cloudy 117 Moderate 5.6 1.3 5.9 8.2 83.1 7.0 85 < 0.2 0.3 267 26.6 31.7 4 10.7 0.2 270 8.1 5.6 8.1 4 90 < 0.2 1.2 26.7 31.9 83.7 Bottom 26.7 8.1 31.9 83.7 5.6 5.6 10.7 8.1 31.9 83.7 8.1 89 1.3 0.2 294 26.7 5 <02 1.0 0.1 12 26.5 8.2 31.9 91.8 6.2 5.8 80 <0.2 0.6 Surface 26.5 31.9 91.8 8.2 0.7 1.0 0.1 12 6.2 5.9 6 81 < 0.2 6.2 -15:26 Middle 817956 807142 IM1 Fine Moderate 5.2 83 0.7 4.2 0.1 26.5 6.3 10.6 85 <0.2 0.6 8.2 31.9 94.4 5 Bottom 26.5 8.2 31.9 94.5 6.4 4.2 0.1 8.2 31.9 94.6 6.4 10.7 4 86 0.7 3 26.5 <0.2 92.4 92.5 7.2 7.2 1.0 0.1 333 26.3 30.9 81 <0.2 0.7 7 Surface 8.2 30.9 92.5 8.2 30.9 6.3 81 0.8 1.0 0.1 306 26.3 <0.2 4.3 0.1 332 26.5 8.2 30.9 93.7 6.3 7.8 7 86 <0.2 0.8 15:19 30.9 93.8 818152 806172 IM2 Cloudy Moderate 8.6 Middle 26.5 8.2 4.3 0.1 349 26.5 8.2 30.9 93.8 6.3 7.8 7 86 < 0.2 0.8 7.6 0.1 55 26.5 8.2 32.3 96.4 6.5 7.6 89 <0.2 0.8 Bottom 26.5 8.2 32.3 96.5 6.5 7.6 8.2 32.3 96.6 6.5 7.6 90 <0.2 0.8 0.1 26.5 1.0 0.3 3.2 85 0.8 26.3 <0.2 8.2 30.6 91.9 6.2 30.6 92.0 Surface 26.3 8.2 0.3 26.3 8.2 30.6 92.0 6.3 3.5 3 86 < 0.2 0.9 1.0 3.6 0.2 32 26.6 8.2 32.3 93.2 6.2 7.8 2 89 <0.2 0.9 IM3 Cloudy Rough 15:13 7.2 Middle 32.3 93.3 818781 805591 6.3 3.6 0.2 32 26.5 8.2 32.4 93.3 7.8 <2 91 <0.2 0.8 6.2 26.6 13.4 92 <0.2 0.8 0.3 8.2 32.4 95.1 6.4 Bottom 26.6 8.2 32.4 95.1 6.4 95.1 6.4 6.2 0.3 41 26.6 8.2 32.4 13.5 2 93 <0.2 0.8 342 0.3 26.3 8.2 6.4 2.6 81 <0.2 0.9 30.2 93.3 Surface 26.3 8.2 30.2 93.4 1.0 0.3 350 8.2 93.4 6.4 2.7 <2 82 <0.2 0.9 26.3 30.2 3.7 0.4 28 26.4 8.2 31.3 94.4 6.4 77 <2 86 <0.2 1.0 IM4 Cloudy Rough 15:04 7.4 Middle 8.2 31.3 94.4 819710 804598 3.7 0.4 28 26.4 8.2 31.3 94.4 6.4 7.9 <2 87 < 0.2 0.9 6.4 0.3 22 26.6 8.2 32.4 97.1 6.5 15.8 89 <0.2 1.0 Bottom 26.6 8.2 32.4 97.2 6.5 6.4 0.3 26.6 8.2 32.4 97.2 6.5 16.1 90 <0.2 1.0 1.0 0.3 336 26.3 8.2 30.0 92.3 6.3 3.9 81 <0.2 1.1 8.2 30.0 92.3 Surface 26.3 1.0 0.3 347 26.3 8.2 29.9 92.2 6.3 4.1 82 <0.2 1.0 4 3.4 0.3 354 8.2 92.3 6.2 7.1 3 85 <0.2 1.0 26.5 31.0 IM5 Cloudy Rough 14:57 6.7 Middle 26.5 8.2 31.0 92.3 820727 804850 1.3 8.2 92.3 6.2 86 3.4 0.3 31.0 7.3 <0.2 326 26.5 3 5.7 0.2 327 26.6 8.2 32.2 94.8 6.4 10.5 89 <0.2 1.1 26.6 32.2 94.9 Bottom 8.2 94.9 5.7 0.2 336 26.6 8.2 32.2 6.4 10.4 90 < 0.2 1.1 1.0 0.2 347 26.3 79 8.2 28.9 91.3 6.3 2.8 <0.2 1.3 Surface 26.3 82 28.9 91.3 1.0 0.2 319 8.2 28.9 6.3 2.9 79 <0.2 1.3 26.3 91.3 3 6.3 1.3 6.3 6.5 84 3.3 0.2 351 26.3 8.2 29.4 92.0 3 <0.2 92.1 821070 805813 IM6 Cloudy Moderate 14:50 6.6 Middle 26.3 8.2 29.4 84 3.3 0.2 323 8.2 6.3 6.5 4 85 26.3 29.4 92.1 < 0.2 87 5.6 0.3 26.4 8.2 30.2 95.8 6.5 13.0 <0.2 1.3 Bottom 30.2 95.9 6.5 8.2 96.0 6.5 87 5.6 0.3 26.4 30.3 14.0 4 < 0.2 1.3 1.0 0.1 223 26.4 8.1 28.4 89.4 1.1 4 82 <0.2 1.4 Surface 26.4 8.1 28.4 89.4 1.0 0.1 26.4 8.1 28.4 89.4 6.1 1.1 83 <0.2 1.5 0.1 26.4 8.1 6.2 2 85 <0.2 1.4 29.0 90.6 IM7 14:40 8.2 29.0 90.6 821344 806844 Cloudy Moderate Middle 26.4 8.1 4.1 8.1 90.6 6.2 1.4 85 <0.2 1.5 0.1 306 26.4 29.0 3 7.2 293 92.4 92.5 1.6 90 <0.2 1.5 0.1 26.4 8.1 29.0 6.3 3 8.1 29.0 92.5 6.3 Bottom 26.4 29.0 6.3 90 1.5 7.2 0.1 296 26.4 8.1 < 0.2 91.6 1.0 0.1 188 26.3 8.2 29.1 6.3 7.7 83 <0.2 1.8 Surface 26.3 8.2 29.1 91.6

8.2

8.2

8.2

8.2

8.2

8.2

8.2

26.3

26.4

29.1

29.2

29.2

29.6

29.6

29.2

29.6

91.6

89.4

89.3

88.5

88.5

89.4

88.5

6.3

6.1

6.1

6.0

6.0

6.0

7.7

7.7

7.8

8.7

8.7

4

4

4

3

84

88

87

91

92

88

821858

<0.2

<0.2

<0.2

<0.2

< 0.2

808135

1.7

1.7

1.7

1.8

1.6

1.7

DA: Depth-Averaged

Cloudy

Moderate

IM8

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

15:31

7.5

Middle

Rottom

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

1.0

3.8

3.8

6.5

6.5

0.1

0.1

0.2

0.1

0.1

205

133

225

227

26.3

26.3

26.3

26.4

Water Quality Monitoring

18 October 18 during Mid-Flood Tide

Water Qua	lity Monite	oring Resu	lts on		18 October 18	during Mid-	Flood Ti	ide																						
Monitoring	Weather	Sea	Sampling	Water	Sampling De	oth (m)	Current Speed	Current	Water Te	emperature (°C)		рН	Sali	nity (ppt)		aturation (%)	Dissolv Oxyge		Turbidity(NTU)	Suspende (mg		Total Al		Coordinate HK Grid	Coordinate HK Grid	Chror (µg		Nickel (µ	g/L)
Station	Condition	Condition	Time	Depth (m)	Jan.,pg		(m/s)	Direction	Value	Average		Average	1	Average		Average		DA	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)	Value			DA
					Surface	1.0	0.1 0.1	33 36	26.4 26.4	26.4	8.3	8.3	29.1	29.1	91.0 91.0	91.0	6.2	6.2	10.5 10.5	-	9 10		83 84				<0.2 <0.2		1.7	
IM9	Cloudy	Moderate	15:38	7.2	Middle	3.6 3.6	0.1	34 34	26.4 26.4	26.4	8.3	8.3	29.1	29.1	90.0	90.1	6.2	-	10.2 10.3	9.8	9	9	88 87	88	822081	808803	<0.2	<0.2	1.7	1.7
					Bottom	6.2 6.2	0.0	100 104	26.5 26.5	26.5	8.2 8.2	8.2	30.1	30.1	88.9 88.8	88.9	6.0	6.0	8.6 8.7		8		92 91				<0.2		1.7	
					Surface	1.0	0.4	311 337	26.1 26.1	26.1	8.2 8.2	8.2	28.7	28.7	90.1 90.0	90.1	6.2		6.0	ŀ	3		83 83				<0.2		1.4	
IM10	Cloudy	Moderate	15:45	6.3	Middle	3.2	0.4	317 343	26.5 26.5	26.5	8.2	8.2	30.3	30.3	82.8 82.8	82.8	5.6	5.9	7.5 7.6	7.6	3	3	88 87	87	822376	809807	<0.2	-0.2	4.4	1.5
					Bottom	5.3 5.3	0.3	320 320	26.5 26.5	26.5	8.2	8.2	30.5 30.5	30.5	83.5 83.6	83.6	E 7	5.7	9.2	ļ	4 3		91 91				<0.2		1.5	
					Surface	1.0	0.5 0.5	302 313	26.2 26.2	26.2	8.2 8.2	8.2	29.1	29.1	87.8 87.8	87.8	6.0	İ	6.6 6.6		2		83				<0.2	Ĺ	1.4	_
IM11	Cloudy	Moderate	15:59	7.4	Middle	3.7	0.4	294	26.4	26.4	8.2	8.2	29.8	29.8	84.6 84.6	84.6	5.8	5.9	8.3	8.8	4	4	83 87	87	822040	811456	<0.2	-0.2	1.4	1.4
					Bottom	3.7 6.4	0.4	311 292	26.4 26.6	26.6	8.2 8.2	8.2	29.8 31.0	31.0	84.2	84.2	5.8 5.7	5.7	8.4 11.5		3 4		87 91				<0.2		1.4	
					Surface	6.4 1.0	0.2	302 274	26.6 26.4	26.4	8.2	8.2	31.0 30.0	30.0	84.2 84.4	84.4	5.7		11.5 7.4		5 3		91 83				<0.2	Ĺ	1.5	_
IM12	Cloudy	Moderate	16:07	8.4	Middle	1.0 4.2	0.5	296 290	26.4 26.5	26.5	8.2 8.2	8.2	30.0 30.4	30.4	84.4 83.4	83.4	5./	5.8	7.4 8.8	8.6	3	. 3	83 87	87	821446	812024	<0.2 <0.2	-0.2	1.3	1.3
IIVIZ	Oloddy	Woderate	10.07	0.4	Bottom	4.2 7.4	0.3 0.2	317 263	26.5 26.5	26.5	8.2 8.2	8.2	30.4 30.8	30.8	83.4 83.5	83.5	5.7 5.7	5.7	8.8 9.7	0.0	4		87 90	0,	021440	012024	<0.2 <0.2		1.3	1.5
					Surface	7.4 1.0	0.2	281 323	26.5 26.2	26.2	8.2 8.3	8.3	30.8 29.1	29.1	83.5 89.8	89.8	5.7 6.2	3.1	9.7 7.3		3		92 83				<0.2		1.3	
000			40.04			1.0	0.3	351	26.2	20.2	8.3	0.3	29.1	29.1	89.8	09.0	6.2	6.2	7.3		2		83			044455	<0.2	· -	1.3	
SR2	Cloudy	Moderate	16:34	4.7	Middle	3.7	0.1	319	26.3	-	8.3	-	29.6	-	88.6	-	6.1		8.7	8.0	- <2	2	- 88	86	821443	814155	<0.2	<0.2	1.3	1.3
					Bottom	3.7	0.1	342 239	26.3 26.6	26.3	8.3 8.1	8.3	29.6 28.6	29.6	88.7 89.2	88.7	6.1	6.1	8.7 5.6		<2 <2		89				<0.2		1.4	
					Surface	1.0	0.1	259 316	26.6 26.4	26.6	8.1	8.1	28.6	28.6	89.4 90.1	89.3	6.1	6.2	5.6 5.7	ļ	<2 <2		-					.	-	
SR3	Cloudy	Moderate	15:25	8.6	Middle	4.3	0.1	339 198	26.4	26.4	8.1	8.1	29.0	29.0	90.2	90.2	6.2		5.7	6.0	<2	2	-	-	822137	807546	-	-	-	-
					Bottom	7.6 1.0	0.1	216 345	26.4 26.1	26.4	8.0	8.0	29.4	29.4	89.8	89.8	6.1	6.1	6.7	-	<2		-				-		-	
					Surface	1.0	0.0	317	26.1	26.1	8.2	8.2	28.1	28.1	89.4 89.3	89.4	6.2	6.2	4.0		3		-					,	-	
SR4A	Fine	Moderate	16:04	9.0	Middle	4.5 4.5	0.2	70 70	26.5 26.5	26.5	8.2	8.2	31.7	31.7	90.5	90.5	6.1		5.5 5.5	5.3	4	4	-	-	817184	807799	-	-	-	-
					Bottom	8.0 8.0	0.2	56 58	26.5 26.5	26.5	8.2	8.2	32.0 32.0	32.0	92.6 92.7	92.7	6.2	6.2	6.3 6.4	-	5 3		-				-		-	
					Surface	1.0	0.1 0.1	247 264	25.8 25.8	25.8	8.2	8.2	27.4 27.4	27.4	91.9 91.9	91.9	6.4	6.4	6.9 7.2		5 5		-				-		-	
SR5A	Fine	Moderate	16:20	4.1	Middle	-	-	-	-	-	-	-	-	-	-	-		-	-	10.1		4	-	-	816601	810670	-		-	-
					Bottom	3.1	0.1	287 299	26.0 26.0	26.0	8.1	8.1	28.1	28.1	91.8 91.8	91.8	6.4	6.4	13.2 13.2		3		-				-		-	
					Surface	1.0	0.1	57 59	26.2 26.2	26.2	8.1 8.1	8.1	28.0	28.0	86.0 86.0	86.0	5.9 5.9	-	2.4		<2 <2		-				-	F	-	
SR6	Fine	Moderate	17:00	4.4	Middle	-	-	-	-	-	-	-	-	-	-	-	-	5.9	-	3.2	-	<2	-	-	817894	814645	-	F	-	-
					Bottom	3.4 3.4	0.0	152 157	26.3 26.3	26.3	8.1 8.1	8.1	29.1	29.1	85.5 85.6	85.6	5.9 5.9	5.9	3.9 3.9	ŀ	<2 <2		-				-	. F		
					Surface	1.0	0.1	343 316	26.3 26.3	26.3	8.2	8.2	30.5	30.5	87.8 87.7	87.8	6.0	-	5.4 5.4		<2 <2		-				-	F	-	_
SR7	Cloudy	Moderate	17:53	14.7	Middle	7.4 7.4	0.1	94 97	26.6 26.6	26.6	8.2 8.2	8.2	31.8 31.8	31.8	83.2 83.2	83.2	5.6	5.8	7.3	8.2	<2	2	-	-	823640	823753	-		-	-
					Bottom	13.7	0.1	95 104	26.6 26.6	26.6	8.2 8.2	8.2	31.8 31.8	31.8	83.2 83.2	83.2	5.6	5.6	11.8 11.9		2 4		-				-	,	-	
					Surface	1.0	-	-	26.4	26.4	8.2	8.2	29.8	29.8	83.8	83.8	5.7	1	8.3		4		-				-		-	_
SR8	Cloudy	Moderate	16:22	4.5	Middle	1.0	-	-	26.4	-	8.2	-	29.9	-	83.8	_	5.7	5.7	8.4	8.6	3	5	-		820510	811652	-	:	-	_
					Bottom	3.5	-	-	26.6	26.6	8.2	8.2	31.0	31.0	83.2	83.3	5.6	5.6	8.9		6		-				-	.	-	
						3.5	-	-	26.6		8.2	"-	31.0	20	83.3	- 5.0	5.6		8.9		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
Note: Access to SR8 was blocked by barge and its wires. The monitoring at SR8 was slightly shifted to the closest safe and accessible location temporarily.

Water Quality Monitoring Results on 20 October 18 during Mid-Ebb Tide DO Saturation Dissolved Suspended Solids Total Alkalinity Chromium Turbidity(NTU) Sampling Water Water Temperature (°C) Salinity (ppt) Coordinate Coordinate Nickel (µg/L) Monitoring Current Speed Oxygen (mg/L) (ppm) (µg/L) Sampling Depth (m) HK Grid HK Grid Station Direction DA DA DA Value DA DA Condition Condition Time Depth (m) (m/s) Value Average Value Average Value Value Average Value Value Value (Northing) (Easting) Value Value 0.3 26.2 8.2 1.0 225 32.6 97.8 6.6 6.9 83 < 0.2 0.5 Surface 26.2 8.2 32.6 1.0 0.4 241 26.2 8.2 32.6 97.7 6.6 6.9 6 84 < 0.2 0.5 8.2 72 88 0.5 43 0.3 227 26.2 32.6 97.6 6.6 5 <0.2 C1 10:02 8.6 Middle 8.2 32.6 97.6 88 815625 804257 0.5 Fine Moderate 4.3 0.3 236 26.2 8.2 32.6 97.6 6.6 7.2 6 89 <0.2 0.4 32.6 97.7 7.6 0.3 231 26.2 8.1 8.4 92 <0.2 0.5 Bottom 26.2 8.1 97.7 6.6 7.6 0.3 26.2 8.1 32.6 6.6 8.4 93 <0.2 0.4 1.0 0.5 188 8.2 30.6 5.5 84 0.6 26.1 30.6 6.6 5 < 0.2 Surface 26.1 8.2 96.2 8.2 96.1 6.6 0.6 1.0 0.6 195 26.1 30.6 5.5 4 84 <0.2 0.5 4.7 0.9 142 8.2 6.5 6.5 4 89 < 0.2 26.0 30.8 95.4 30.8 95.4 C2 Fine Moderate 11:29 9.3 Middle 26.0 8.2 88 825672 806956 0.6 30.8 95.4 6.5 88 < 0.2 4.7 0.9 150 26.0 8.2 6.5 4 8.3 0.5 115 26.0 8.2 31.9 95.5 6.5 7.5 4 93 <0.2 0.5 Bottom 26.0 8.2 31.9 95.5 8.3 0.6 123 26.0 8.2 31.9 95.5 6.5 7.5 4 92 < 0.2 0.6 0.5 25.7 8.1 6.3 84 <0.2 0.4 29.6 6.6 Surface 25.7 29.6 95.9 8.1 1.0 0.6 25.7 8.1 6.6 6.3 5 85 <0.2 0.4 6.1 97 6.7 89 0.4 0.2 25.7 8.1 6.5 < 0.2 29.7 94.7 3 C3 29.7 822097 817826 Fine Moderate 09:07 12.2 Middle 25.7 94.7 6.9 0.4 6.1 106 6.5 0.4 0.3 25.7 8.1 29.7 94.7 6.7 3 89 < 0.2 11.2 0.4 62 26.4 8.2 32.2 95.2 6.4 7.8 4 94 < 0.2 0.4 Bottom 8.2 32.2 95.2 11 2 0.4 63 26.3 8.2 32.2 95.2 6.4 77 4 93 < 0.2 0.4 1.0 0.3 222 26.1 8.3 7.4 4 <0.2 0.4 32.4 96.2 6.5 89 Surface 26.1 8.3 32.4 96.2 1.0 0.3 8.3 6.5 7.4 4 89 <0.2 0.4 26.1 32.4 6.5 817963 -IM1 Fine Moderate 10.24 5.1 Middle 91 807155 0.4 92 <0.2 4.1 0.2 216 6.5 6.5 7.7 0.4 26.1 8.3 32.4 96.2 96.2 7 Bottom 32.4 96.2 6.5 41 0.2 236 26.1 8.3 32.4 7.8 8 92 <0.2 0.4 1.0 0.4 179 26.1 6.7 85 <0.2 0.4 8.3 32.2 6.6 32.2 97.7 Surface 1.0 0.4 179 26.1 8.3 32.2 97.7 6.6 6.7 6 86 <0.2 0.5 6.6 3.6 0.4 7.1 89 0.4 26.0 8.3 32.2 97.5 6.6 5 <0.2 IM2 Moderate 10:32 7.2 Middle 26.0 8.3 32.2 97.5 89 818140 806174 Fine 3.6 0.4 26.0 8.3 6.6 7.1 4 90 < 0.2 0.4 6.2 0.3 26.0 8.3 7.3 92 <0.2 0.4 169 32.3 97.1 6.6 9 Bottom 32.3 97.1 6.6 6.2 0.3 173 32.3 97 1 7.3 93 8.3 6.6 8 <0.2 0.5 26.0 1.0 85 0.8 0.4 194 26.1 8.3 31.8 97.7 6.6 8.3 8 <0.2 Surface 31.7 97.7 1.0 0.4 205 26.1 8.3 31.7 97.6 6.6 8.3 86 <0.2 0.7 3.7 0.3 186 7.4 89 <0.2 0.7 26.0 8.3 IM3 10:39 7.4 Middle 26.0 8.3 32.1 97.4 818795 805620 Fine Moderate 3.7 0.3 26.0 8.3 6.6 7.4 91 <0.2 0.7 0.7 6.4 0.2 157 6 95 < 0.2 26.0 8.3 32.4 96.7 6.5 8.1 32.4 6.5 8.3 96.8 Bottom 26.0 96.8 0.9 8.3 32.4 6.5 6.4 0.2 26.0 8.1 96 < 0.2 163 1.0 0.6 217 26.0 5.8 88 <0.2 0.7 8.3 31.4 99.6 6.8 Surface 26.0 31.4 99.6 0.7 99.6 8.3 6.8 5.8 88 < 0.2 1.0 0.7 221 26.0 31 / 5 0.8 3.9 0.5 213 26.0 8.3 31.5 6.7 7.6 6 92 <0.2 IM4 Moderate 10:49 7.7 Middle 26.0 31.5 98.7 819752 804611 Fine 3.9 0.5 220 26.0 8.3 31.5 98.6 6.7 7.6 5 92 < 0.2 6.7 0.4 26.0 8.3 32.0 98.0 6.6 12.1 97 <0.2 32.0 98.1 Bottom 26.0 8.3 6.7 0.5 212 26.0 8.3 32.0 6.7 12.1 5 98 <0.2 0.8 0.5 6.0 87 0.5 25.9 8.3 31.5 98.9 6.7 5 <0.2 Surface 8.3 31.5 99.0 0.6 87 1.0 0.6 193 8.3 31.5 99.0 6.7 6.0 5 < 0.2 25.9 6.7 6.8 6 87 3.5 0.5 186 25.9 8.3 31.7 98.6 < 0.2 IM5 Fine Moderate 11:00 7.0 Middle 8.3 31.7 820719 804849 3.5 0.5 191 25.9 8.3 31.7 98.4 6.7 6.8 6 88 < 0.2 0.6 31.8 98.0 6.0 0.4 25.9 8.1 91 <0.2 0.6 8.3 31.8 6.7 5 Bottom 25.9 8.3 97.9 6.7 0.4 8.3 6.7 8.0 91 <0.2 0.6 25.9 1.0 0.5 247 26.1 8.2 30.8 97.9 6.7 5.7 6 86 <0.2 0.7 Surface 26.1 8.2 30.8 97.9 8.2 97.9 6.7 5.7 <0.2 0.8 30.8 86 1.0 0.5 253 26.1 6 3.5 0.5 236 26.0 8.3 31.2 97.6 6.6 6.6 5 89 <0.2 0.7 IM6 11:10 6.9 Middle 31.2 97.7 821061 805856 0.7 Moderate 3.5 0.5 240 26.0 8.3 31.2 97.7 6.7 6.7 5 90 < 0.2 0.7 5.9 0.3 224 26.0 8.3 31.8 6.6 8.9 4 92 <0.2 0.7 31.8 97.8 Bottom 5.9 0.3 225 26.0 8.3 31.8 97.8 6.6 8.9 4 94 < 0.2 0.7 1.0 0.4 249 26.1 8.2 30.6 96.3 6.6 5.5 6 84 <0.2 0.8 Surface 26.1 8.2 30.6 96.3 1.0 0.4 269 26.1 8.2 30.6 96.3 6.6 5.4 5 86 < 0.2 0.8 89 0.7 5.9 < 0.2 4.2 0.3 251 26.1 8.1 30.7 95.7 6.5 5 IM7 Fine Moderate 11:20 8.3 Middle 30.7 95.7 89 821359 806836 4.2 6.5 90 0.4 260 26.1 8.1 30.7 95.7 5.9 5 < 0.2 7.3 0.2 247 26.1 8.1 31.8 96.2 6.5 7.8 6 93 < 0.2 0.8 31.8 96.3 6.5 7.3 0.2 266 26.1 8.1 31.8 96.3 6.5 7.8 5 94 < 0.2 0.7 1.0 0.3 184 25.9 8.3 6.4 85 <0.2 0.6 Surface 25.9 8.3 31.6 98.8 25.9 8.3 31.6 98.8 6.7 6.4 85 <0.2 0.5 0.3 6 0.6 3.9 0.3 156 6.6 7.8 90 25.9 8.3 31.7 97.8 6 < 0.2 31.7 97.9 821825 IM8 Fine Moderate 10:52 7.7 Middle 25.9 8.3 89 808154 0.6 8.3 31.7 97 9 6.7 7.8 6 89 <0.2 39 0.3 165 25.9 94 6.7 141 5 0.6 0.4 25.9 8.3 31.8 97.8 6.6 8.3 <0.2 Bottom 31.8 97.8

8.3

93

< 0.2

0.6

5

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

6.7

0.4

150

25.9

Expansion of Hong Kong International Airport into a Three-Runway System Water Quality Monitoring Water Quality Monitoring Results on 20 October 18 during

during Mid-Ebb Tide

water Quai	ity Monit	oring Resu	its on		20 October 18	auring Mia-		-																				
Monitoring	Weather	Sea	Sampling	Water	Sampling [Denth (m)	Current Speed	Current	Water Ten	nperature (°C)	pl	Н	Salin	ity (ppt)		aturation (%)	Disso Oxyg		Turbidity	NTU)	Suspende (mg/		Total Alkalinity (ppm)	Coordinate HK Grid	Coordinate HK Grid	Chron (µg/		Nickel (µg.
Station	Condition	Condition	Time	Depth (m)	Samping 2	Sopar ()	(m/s)	Direction	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value DA	(Northing)	(Easting)	Value	DA \	Value D
					Surface	1.0 1.0	0.3	160 160	26.0 26.0	26.0	8.3 8.3	8.3	31.4 31.4	31.4	99.6 99.6	99.6	6.8		7.0 7.0		5 6		85 85			<0.2		0.6
IM9	Fine	Moderate	10:43	7.0	Middle	3.5	0.3	159	26.0	26.0	8.3	8.3	31.8	31.8	98.7	98.7	6.7	6.8	13.4	13.1	7	6	89 89	822080	808820	<0.2	-0.2	0.6
					Bottom	3.5 6.0	0.3	172 133	26.0 26.0	26.0	8.3 8.3	8.3	31.8	31.9	98.7 98.5	98.5	6.7 6.7	6.7	13.4 18.8	ŀ	7 5		93			<0.2		0.5
			1			6.0 1.0	0.4	142 187	26.0 26.1		8.3 8.3		31.9		98.5 98.3		6.7	0.7	18.8 8.3		5 8		93 84			<0.2		0.6
					Surface	1.0	0.5	194	26.1	26.1	8.3	8.3	31.7	31.7	98.3	98.3	6.7	6.7	8.3		10		85			<0.2		0.6
IM10	Fine	Moderate	10:34	6.8	Middle	3.4	0.5	172 177	26.0 26.0	26.0	8.3 8.3	8.3	32.0 32.0	32.0	97.4 97.5	97.5	6.6		7.4 7.4	7.7	10	9	90 89	822403	809786	<0.2 <0.2	<0.2	0.5
					Bottom	5.8 5.8	0.4	122 125	26.0 26.0	26.0	8.3	8.3	32.2	32.2	97.2 97.2	97.2	6.6	6.6	7.4 7.4		10 9		93			<0.2		0.5
					Surface	1.0	0.7	125 129	26.1 26.1	26.1	8.3 8.3	8.3	32.2 32.2	32.2	97.7 97.8	97.8	6.6		6.8 6.8		8		84 85			<0.2		0.6
IM11	Fine	Moderate	10:16	8.0	Middle	4.0	0.7	140	26.0	26.0	8.3	8.3	32.2	32.2	97.5	97.5	6.6	6.6	7.1	7.1	8	8	89 89	822047	811459	<0.2	-0.2	0.6
					Bottom	4.0 7.0	0.7	149 130	26.0 26.0		8.3 8.3		32.2		97.4 97.3	97.4	6.6 6.6	0.0	7.1 7.5		8 9	-	90			<0.2		0.5
						7.0 1.0	0.5 0.6	139 166	26.0 26.1	26.0	8.3 8.3	8.3	32.2 32.4	32.2	97.4 96.2		6.6 6.5	6.6	7.5 7.8		9		94 85			<0.2		0.6
					Surface	1.0	0.7	174	26.1	26.1	8.3	8.3	32.4	32.4	96.1	96.2	6.5	6.5	7.8		6		89			<0.2		0.4
IM12	Fine	Moderate	10:06	8.9	Middle	4.5 4.5	0.6 0.7	141 150	26.1 26.1	26.1	8.3 8.3	8.3	32.4 32.4	32.4	96.0 96.0	96.0	6.5 6.5		9.8 9.8	12.2	6 8	7	89 89	821470	812061	<0.2	<0.2	0.5
					Bottom	7.9 7.9	0.6	112 121	26.1 26.1	26.1	8.3	8.3	32.4	32.4	95.8 95.8	95.8	6.5 6.5	6.5	18.7 19.1	ŀ	6 7		94			<0.2		0.5
					Surface	1.0	0.5	104 106	25.8 25.8	25.8	8.2 8.2	8.2	30.9	30.9	96.0 96.0	96.0	6.6		6.4 6.4		5		85 84			<0.2		0.5
SR2	Fine	Moderate	09:33	4.5	Middle	-	-	-	-	-	-	-	-	-	-	-	6.6	6.6	-	6.8	-	7	- 87	821470	814178	-	<0.2	- 0
					Bottom	3.5	0.2	87	26.1	26.1	8.2	8.2	32.2	32.2	96.0	96.0	6.5	6.5	7.2		9		90			<0.2		0.5
			1			3.5 1.0	0.2	90 184	26.1 26.1		8.2 8.2		32.2 30.8		96.0 97.6		6.5 6.7	6.5	7.2 5.8		8		89			<0.2		0.5
					Surface	1.0	0.4	192	26.1	26.1	8.2	8.2	30.8	30.8	97.5	97.6	6.7	6.7	5.8	ļ	4		-			-	.	-
SR3	Fine	Moderate	10:59	8.5	Middle	4.3	0.2	120 123	26.0 26.0	26.0	8.3	8.3	31.1 31.1	31.1	97.8 97.8	97.8	6.7		6.7 6.8	6.9	6 5	5	-	822123	807560	-	-	-
					Bottom	7.5 7.5	0.3	103 103	26.0 26.0	26.0	8.3	8.3	31.8	31.8	97.2 97.2	97.2	6.6	6.6	8.1 8.0	ŀ	7		-			-		-
					Surface	1.0 1.0	0.1	54 57	25.8 25.8	25.8	8.1	8.1	30.9 30.9	30.9	95.7 95.8	95.8	6.5 6.6		6.6 6.6		6 5					-	F	-
SR4A	Fine	Calm	09:42	9.4	Middle	4.7	0.3	55	26.2	26.2	8.1	8.1	32.6	32.6	95.8	95.8	6.5	6.5	8.4	8.2	7	5		817204	807812	-	🗀	-
					Bottom	4.7 8.4	0.3	57 53	26.2 26.2	26.2	8.1 8.1	8.1	32.6 32.6	32.6	95.8 95.4	95.5	6.5 6.4	6.4	8.4 9.7	ŀ	6 4		-			-		-
						1.0	0.2	54 101	26.2 25.7		8.1		32.6 29.6		95.6 95.6		6.4	0.4	9.6 6.4		4		-			-	\rightarrow	-
					Surface	1.0	0.1	109	25.7	25.7	8.1	8.1	29.6	29.6	95.5	95.6	6.6	6.6	6.5	ŀ	5					-	_	-
SR5A	Fine	Calm	09:25	5.3	Middle	-	-	-	-	-	-	•	-	•	-	•	-		-	6.9	-	4		816615	810705	-	-	-
					Bottom	4.3	0.1 0.1	124 133	26.2 26.2	26.2	8.0	8.0	31.2 31.2	31.2	95.1 95.1	95.1	6.5 6.5	6.5	7.4 7.3		4		-			-		-
					Surface	1.0	0.1	63 66	26.0 26.0	26.0	8.1	8.1	30.0	30.0	91.0 91.0	91.0	6.2		6.8 6.9		14 12		-			-	-	-
SR6	Fine	Calm	09:00	4.9	Middle	-	-	-	-	-	-	-	-	-	-	-	-	6.2	-	6.8	-	13	-	817912	814683	-		
					Bottom	3.9	0.1	81	26.0	26.0	8.0	8.0	30.3	30.3	91.0	91.0	6.2	6.2	6.7		13		-			-		-
						3.9 1.0	0.1	83 116	26.0 26.0		8.0		30.3 29.9		90.9		6.2	0.2	6.8		12 6		-			-	\rightarrow	-
					Surface	1.0	0.6	118 112	26.0 25.9	26.0	8.1	8.1	29.9	29.9	90.1	90.1	6.2	6.2	6.7 7.3	ļ	5					-	. F	-
SR7	Fine	Moderate	08:20	15.2	Middle	7.6	0.4	118	25.9	25.9	8.1	8.1	30.2	30.2	88.2	88.3	6.1		7.3	7.7	7	6	-	823639	823753	-		-
					Bottom	14.2 14.2	0.5 0.5	92 94	26.2 26.2	26.2	8.1	8.1	30.9	30.9	85.6 85.6	85.6	5.8 5.8	5.8	9.1 9.1		7 6		-			-		-
					Surface	1.0 1.0	-	-	26.2 26.2	26.2	8.2 8.2	8.2	32.6 32.6	32.6	97.9 97.9	97.9	6.6		6.7 6.8		8						F	=
SR8	Fine	Moderate	09:59	4.1	Middle	-	-	-	-	-	-	-	-	-	-	-	-	6.6	-	7.0	-	6		820519	811641	-		-
					Bottom	3.1	-	-	26.2	26.2	8.2	8.2	32.6	32.6	97.8	97.8	6.6	6.6	7.2		4		-			-		-
					DULUIII	3.1	-	-	26.2	20.2	8.2	0.2	32.6	32.0	97.7	91.0	6.6	0.0	7.2		5		-			-		-

DA: Depth-Averaged

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

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

Note: SR8 cannot be accessed due to windy weather. The monitoring at SR8 was slightly shifted to the closest safe and accessible location temporarily.

Water Quality Monitoring Results on 20 October 18 during Mid-Flood Tide DO Saturation Dissolved Suspended Solids otal Alkalinity Chromium Turbidity(NTU) Sampling Water Water Temperature (°C) Salinity (ppt) Coordinate Coordinate Nickel (µg/L) Monitoring Current Speed Oxygen (mg/L) (ppm) (µg/L) Sampling Depth (m) HK Grid HK Grid Station Direction DA DA DA DA DA Condition Condition Time Depth (m) (m/s) Value Average Value Average Value Value Average Value Value Value Value (Northing) (Easting) Value Value 0.2 26.0 1.0 65 8.1 32.1 99.5 6.7 7.5 82 < 0.2 0.6 Surface 32.1 1.0 0.2 65 26.0 8.1 32.1 99.6 6.7 7.4 83 <0.2 0.6 4.1 0.3 48 26.1 8.1 32.2 98.9 6.7 8.3 8 88 <0.2 0.6 C1 8.2 Middle 8.1 32.2 99.0 815616 804237 Cloudy Moderate 16:44 26.1 9.0 88 0.6 4.1 0.3 49 26.1 8.1 32.2 99.0 6.7 8.4 9 89 <0.2 0.5 7.2 0.2 46 10 <0.2 0.5 26.1 8.0 32.2 98.2 6.6 11.4 91 Bottom 32.2 98.2 7.2 0.3 50 26.1 8.0 32.2 98.2 6.6 11 2 q 92 <0.2 0.5 1.0 211 0.5 26.1 8.0 29.4 92.6 6.4 6.1 <2 87 <0.2 0.7 Surface 26.1 8.0 29.4 92.6 1.0 0.5 219 8.0 29.4 92.6 6.4 6.2 3 87 <0.2 0.6 26.1 4.6 0.6 26.2 8.0 30.1 93.5 6.4 7.0 4 90 <0.2 0.7 825700 93.5 C2 Cloudy Moderate 15:34 9.1 Middle 26.2 8.0 30.1 806962 0.7 0.7 4.6 0.6 178 8.0 93.5 6.4 7.0 91 < 0.2 30.1 26.2 3 7.8 8.1 0.1 270 26.3 8.0 30.4 93.5 6.4 4 95 <0.2 0.6 Bottom 30.4 93.5 6.4 8.1 0.1 287 26.3 8.0 30.4 93.5 6.4 7.8 4 95 <0.2 0.7 1.0 0.3 236 25.8 8.1 30.1 96.4 6.6 8.7 6 87 <0.2 0.6 30.1 96.5 1.0 0.4 242 25.8 8.1 30.1 96.5 6.6 8.7 87 <0.2 0.5 6.0 0.5 9.0 25.9 8.0 30.2 95.9 6.6 91 <0.2 0.6 C3 17:46 12.0 Middle 25.9 8.0 30.2 95.9 822094 817817 Cloudy Moderate 6.0 8.0 95.9 6.6 90 <0.2 0.8 0.5 265 25.9 30.2 9.1 11.0 0.3 277 9.5 6 95 <0.2 0.6 25.9 8.0 96.0 6.6 30.2 Bottom 8.0 30.2 96.0 6.6 96.0 8.0 6.6 9.5 11.0 0.3 294 25.9 30.2 94 <02 0.7 45 1.0 0.1 7.3 26.0 8.2 31.7 98.0 6.7 85 <0.2 0.6 Surface 26.0 31.7 98.0 97.9 0.5 1.0 0.1 46 26.0 8.2 31.7 6.7 7.3 5 85 <0.2 817942 IM1 16:24 Middle 807112 0.5 Cloudy Moderate 4.6 3.6 0.1 26.0 8.4 87 <0.2 0.5 8.2 31.9 98.6 6.7 5 Bottom 26.0 8.2 31.9 98.7 6.7 87 0.5 3.6 0.1 38 8.2 31.9 98.7 6.7 26.0 8.4 5 < 0.2 1.0 0.2 210 7.4 84 26.0 8.3 31.5 100.0 6.8 5 <0.2 0.6 Surface 31.5 100.0 1.0 211 99.9 85 <0.2 0.7 0.2 26.0 8.3 31.5 6.8 7.4 5 3.5 0.0 209 26.0 8.3 31.5 99.3 6.7 7.9 4 88 <0.2 0.7 31.5 99.3 818176 806192 IM2 Cloudy Moderate 16:16 6.9 Middle 8.3 3.5 0.0 225 26.0 8.3 31.5 99.2 6.7 7.8 89 < 0.2 0.7 5.9 0.1 26.0 8.3 31.6 6.7 8.1 6 92 <0.2 0.6 31.6 99.1 Bottom 26.0 8.3 99.1 6.7 5.9 8.3 31.6 6.7 8.1 92 <0.2 0.7 0.1 26.0 1.0 0.2 255 7.2 10 84 0.8 8.2 6.8 <0.2 26.0 31.1 100.4 31.1 100.4 Surface 26.0 8.2 26.0 8.2 100.3 6.8 7.2 84 <0.2 0.8 1.0 0.3 256 31.1 8 3.6 0.2 271 26.0 8.2 31.1 99.7 6.8 7.2 6 87 <0.2 0.7 Cloudy Moderate 16:08 7.1 Middle 8.2 818778 805601 3.6 0.2 280 26.0 8.2 31.1 99.7 6.8 7.2 8 88 < 0.2 0.8 6.1 0.2 92 <0.2 0.7 26.0 8.2 31.1 99.8 6.8 7.5 Bottom 26.0 8.2 31.1 99.8 6.8 6.1 0.2 8.2 7.4 < 0.2 0.7 26.0 1.0 0.2 343 26.0 8.2 98.8 6.7 9.6 83 <0.2 0.9 31.0 Surface 26.0 8.2 31.0 98.8 1.0 0.2 316 8.2 98.8 6.7 9.7 7 83 < 0.2 1.0 26.0 31.0 12.6 3.7 0.2 26.0 8.2 31.5 98.7 6.7 8 87 < 0.2 1.0 IM4 Moderate 15:58 7.4 Middle 31.5 98.8 11.0 87 819729 804635 Cloudy 3.7 0.2 26.0 8.2 31.5 98.8 6.7 12.6 8 87 < 0.2 1.0 6.4 0.1 349 26.0 8.2 31.7 98.6 6.7 10.8 9 92 <0.2 1.0 31.7 Bottom 8.2 98.6 6.4 0.1 354 26.0 8.2 31.7 98.6 6.7 10.8 92 <0.2 1.0 30.0 95.0 1.0 0.5 254 84 0.9 26.2 8.1 30.0 6.5 6.8 6 <0.2 95.1 Surface 26.2 8.1 1.0 0.6 261 26.2 8.1 30.0 95.1 6.5 6.8 86 <0.2 0.9 3.4 0.4 253 6.5 10.1 88 <0.2 1.0 26.2 8.1 30.2 95.0 8 IM5 Cloudy Moderate 15:49 6.7 Middle 30.2 95.0 820734 804887 1.2 95.0 6.5 10.3 89 8.1 30.2 3.4 0.4 263 26.2 8 96.0 96.0 5.7 0.3 251 26.2 8.1 30.4 6.5 9.0 8 89 < 0.2 1.5 Bottom 30.4 1.5 5.7 0.4 261 26.2 8.1 30.4 6.6 9.0 9 90 < 0.2 268 26.2 8.1 29.8 6.4 6.9 82 <0.2 1.2 Surface 26.2 29.8 93.9 8.1 1.0 0.6 279 26.2 8.1 29.8 93.9 6.4 6.9 83 <0.2 1.3 1.4 3.3 0.5 277 8.1 6.4 9.2 88 < 0.2 26.2 30.2 94.2 4 8.1 30.2 94.2 821030 IM6 Cloudy Moderate 15:42 6.5 Middle 26.2 88 805829 1.6 90 3.3 0.5 304 8.1 30.2 94.2 6.4 9.2 5 < 0.2 26.2 5.5 0.4 11.3 91 <0.2 19 275 26.2 8 1 30.3 94 7 6.5 3 Bottom 30.3 94.8 6.5 5.5 9/1/8 6.5 < 0.2 0.4 286 26.2 8.1 30.3 11 3 ٥ 92 2.0 29.4 93.1 1.0 0.5 230 26.2 8.0 29.4 6.4 6.5 87 <0.2 2.0 Surface 26.2 8.0 93.1 1.0 0.5 234 26.2 8.0 29.4 93.1 6.4 6.3 89 < 0.2 2.1 3.7 0.5 26.2 8.0 30.1 6.4 7.2 93 <0.2 2.0 IM7 15:35 30.1 94.2 92 821362 806807 2.0 Cloudy Moderate 7.4 Middle 26.2 8.0 3.7 8.0 94.2 6.4 7.2 93 <0.2 1.9 258 30.1 0.5 26.2 6 6.4 0.4 262 26.3 8.0 30.4 95.7 6.5 8.0 6 95 < 0.2 2.1 30.4 95.7 6.5 Bottom 26.3 8.0 8.0 30.4 95.7 6.5 8.0 6.4 0.4 266 26.3 96 < 0.2 1.8 1.0 0.3 240 26.2 8.1 30.0 6.5 7.0 88 < 0.2 1.0 Surface 30.0 95.1 1.0 0.3 242 26.2 8.1 30.0 95.1 6.5 7.0 6 87 < 0.2 1.0 258 8.3 1.0 3.8 0.2 26.2 8.1 30.3 95.1 6.5 6 91 <0.2 821826 15:57 808134 IM8 Cloudy Moderate 7.6 Middle 26.2 8.1 30.3 95.1 1.0 1.0 3.8 0.3 282 26.2 8.1 30.3 95.0 6.5 8.3 5 91 <0.2 6.6 70 8.1 94.8 6.5 9.9 95 < 0.2 0.9 0.1 26.1 30.5 5 8.1 30.5 Bottom 94.9 6.5 6.6 0.1 26.1 94.9

DA: Depth-Averaged

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

Expansion of Hong Kong International Airport into a Three-Runway System Water Quality Monitoring Water Quality Monitoring Results on 20 October 18 during

20 October 18 during Mid-Flood Tide

Moderate Rocal Bottom Sampling Depth (m) Sampling Depth (m) Cloudy Moderate Rocal Bottom Rocal	Water Qual	ity Monite	oring Resu	lts on		20 October 18	during Mid-		ide																				
Martin Country Count		Weather	Sea	Sampling	Water	Sampling De	oth (m)	Current Speed		Water Ter	nperature (°C)	pl	н	Salir	nity (ppt)	DO S				Turbidity	(NTU)								el (µg/L)
Marcon M	Station	Condition	Condition	Time	Depth (m)			(m/s)	Direction	Value	Average	Value /	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value DA	(Northing)	(Easting)	Value	DA Value	DA
Marcon M						Surface					26.0		8.2		31.0		98.9											1.1	
Marcon Same	IM9	Cloudy	Moderate	16:06	6.5	Middle			267	26.0	26.0	8.2	8.2		31.5		98.4	6.7	6.7	13.7	11.2		8	91 91	822086	808839	< 0.2	1.0	1.1
MIT Cloudy Moderne 16:18 78 Masse 3.8 3.3 3.8 3.0						Bottom	5.5	0.1	280	26.0	26.0	8.2	8.2	31.7	31.7	98.2	98.2	6.7	6.7	10.4	. [12		95			<0.2	1.2	
Mile Class Moderate 16:18 TO Moderate TO Moderate 16:18 TO Moderate 16:18 TO Moderate TO Moderate 16:18 TO Moderate TO Mode																			0										
Milto Cooky Moderne 10-36 70 Moderne 10-36 Moderne 10-36 70 Moderne 10-36 70 Moderne 10-36 Mo						Surface	1.0	0.3	330	26.0	26.0	8.2	8.2	31.1	31.1	100.5	100.5	6.8	6.8	7.0		5		87			<0.2	2.2	
Months M	IM10	Cloudy	Moderate	16:18	7.0	Middle	3.5		344	26.0	26.0		8.2	31.1	31.1		100.0			7.5	7.7	8	7	91	822375	809794	<0.2	<0.2	2.0
Model Mode						Bottom					26.0		8.2		31.1		99.8		6.8		.							1.8	
Mill Couly Moderate 10-94 72 Middle 34 04 272 940 80 80 80 80 80 80 80 80 80 80 80 80 80						Surface					26.0		8.3		31.4		99.8											1.9	
Bottom Bottom	IM11	Cloudy	Moderate	16:34	72	Middle	3.6	0.4	272	26.0	26.0	8.3	8.3	31.5	31.5	99.4	99.4	6.8	6.8	7.6	7.8	6	6	91 91	822066	811462	<0.2	1.9	1.0
Moderate 10.44 2.3 2.3 2.6 2.0		Cloudy	modorato	10.01																			Ü	91	022000	011102		1.6	
Mail						Bottom			283	26.0	26.0	8.3	8.3	31.5	31.5	99.3		6.7	6.7	8.5				95			<0.2	1.9	
Moderate 16-24 8.3 Moderate 16-24 8.3 Moderate 16-24 8.3 Moderate 17-24						Surface	1.0	0.5	280	26.0	26.0	8.2	8.2	31.7	31.7	97.3	97.3	6.6	6.6	7.3		5		87			<0.2	1.4	
Second 1.3 0.3 274 286 6.0 1.2 1.0 1.1 1.0 1.1 1.0 1.1 1.0 1.1 1.0 1.1 1.0 1.1 1.0 1.1 1.0 1.1 1.0 1	IM12	Cloudy	Moderate	16:44	8.3	Middle					26.0		8.2		31.7		97.8		-		9.4		6		821466	812028		<0.2	
SR2 Cloudy Moderate 17.21 4.6 Moderate 17.21 4.8 Modera						Bottom					26.0		8.2		31.8		97.2		6.6		. [1.3	
SR2						Surface	1.0	0.1	350	25.9	25.9	8.1	8.1	30.2	30.2	95.0	95.1	6.5		8.2		7		87			<0.2	1.2	
Bestion 3.6	SP2	Cloudy	Moderate	17:21	46	Middle	1.0	0.1	- 322	25.9		8.1		30.2	_	95.1		6.5	6.5	8.3	8.5	-	8		821/70	81/1157	<0.2	_	1.1
Second S	ONE	Oloudy	Woderate	17.21	4.0		3.6	0.1	357	25.9		8.1		30.4		94.9		6.5		8.8	0.0	7	Ü	-	021473	014107	<0.2	1.0	
SR3 Cloudy Moderate 15.51 8.4 Middle 42 0.4 252 26.1 8.1 8.1 30.2 92 94.2 94.2 8.4 8.4 9.4 9.4 9.4 9.4 9.4 9.4 9.4 9.4 9.4 9						Bottom				25.9	25.9	8.1	8.1	30.4	30.4	94.9	94.9	6.5	6.5					91			<0.2	1.0	
SR3 Cloudy Moderate 15:51 8.4 Middle 42 0.4 22 0.4 22 26 2 8.1 8.1 8.1 8.2 30 30 842 84. 8.4 94. 6.6 6. 6. 10. 0 6. 0 7 82131 807564						Surface	1.0	0.4	252	26.1	26.1	8.1	8.1	29.7	29.7	93.6	93.6	6.4	64	6.9	. [7							1
Second Section T.4	SR3	Cloudy	Moderate	15:51	8.4	Middle					26.2		8.1		30.2		94.2		-		9.0		7		822131	807554			
SR4A Cloudy Moderate 17.06 8.5						Bottom					26.2		8.1		30.3		93.9		6.4		. [. =	1
SR4A Cloudy Moderate 17.06 8.5 Middle 4.3 0.3 2.92 2.93 2.60 8.0 8.0 30.5 94.4 6.5 6.5 6.5 6.5 8.9 9.0 9 . 817173 807790 						Surface	1.0	0.4	278	25.9	25.9	8.0	8.0	30.3	30.3	94.8	94.9	6.5		8.4		9		-			-		
SR5A Cloudy Calm 17.26 4.8 Middle	SRAA	Cloudy	Moderate	17:06	8.5	Middle	4.3		278	26.0	26.0	8.0	8.0	30.5		94.4		6.5	6.5	8.9	9.0	9	0	-	817173	807790	-	🚞	1
SR5A Cloudy Calm 17.26 4.8 Surface 1.00 0.2 296 25.9 25.9 8.0 8.0 30.1 30.1 96.6 96.6 6.6 95.0 1.0 1.0 0.2 308 25.9 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	OI(4/A	Oloudy	Woderate	17.00	0.5																5.0		3		017173	007730	\vdash		-
SR5A Cloudy Calm 17:26 4.8 Middle 1. 2. 2. 2. 2. 300 25.9 25.9 8.0 8.0 9.0 1 96.6 96.6 6.6 6.6 6.6 6.6 6.6 6.6 6.6 6						Bottom	7.5	0.3	295	26.0	26.0	8.0	8.0	31.0	31.0	94.6	94.6	6.4	6.4	9.8		9							<u> </u>
SR5A Cloudy Calm 17.26 4.8 Middle						Surface		0.2		25.9	25.9		8.0		30.1		96.6		66		. [-	-	
SR6 Cloudy Calm 17:52 4.3 Surface 1.0 0.1 229 26.2 26.2 8.0 8.0 8.0 8.0 30.7 30.7 90.6 96.6 6.2 10.0 0.1 221 26.2 26.2 8.0 8.0 8.0 30.7 30.7 90.6 96.6 2.2 10.0 10.0 10.0 10.0 10.0 10.0 10.0	SR5A	Cloudy	Calm	17:26	4.8	Middle			-		-		-	-	-		-				9.5		9		816563	810696		_	
SR6 Cloudy Calm 17:52 4.3						Bottom					25.9		7.9		30.2		96.4		6.6		. [-				. =	1
SR6 Cloudy Calm 17:52 4.3 Middle						Surface	1.0	0.1	219	26.2	26.2	8.0	8.0	30.7	30.7	90.6	90.6	6.2		7.7		9					-		_
Bottom 3.3 0.1 210 26.2 26.2 7.9 7.9 7.9 30.9 30.9 30.9 30.7 91.7 6.2 6.2 8.4 9 9 10	SD6	Cloudy	Colm	17:52	4.2	Middle								30.7		90.6			6.2		0 1		10		017071	914650	-		-
SR7 Cloudy Moderate 18:25 14.9 Surface 1.0 0.1 325 26.2 26.2 8.0 8.0 8.0 30.7 30.7 30.7 30.9 91.7 91.7 6.2 6.2 8.0 8.0 8.0 30.7 91.7 91.7 6.2 6.2 8.0 8.0 8.0 9 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	SINO	Cloudy	Callii	17.52	4.3						-	7.9		30.9		91.7	-	6.2			0.1		10	\vdash	017071	814039			-
SR7 Cloudy Moderate 18:25 14.9 Middle 7.5 0.1 64 26.2 7.5 0.2 65 26.2 8.0 8.0 8.0 30.7 30.7 91.0 91.0 6.2 6.2 13.5 15.9 9 9 - 823612 823748						Bottom	3.3	0.1	212	26.2	26.2	7.9	7.9	30.9	30.9	91.7	91.7	6.2	6.2	8.4		10		-			-	-	1
SR7 Cloudy Moderate 18:25 14.9 Middle 7.5 0.1 64 26.2 26.2 8.0 8.0 8.0 30.9 30.9 91.1 91.1 6.2 13.5 15.9 8 9 9 - 823612 823748						Surface					26.2		8.0		30.7		91.0		62		.						_		-
Bottom 13.9 0.2 85 26.2 26.2 8.0 8.0 8.0 30.9 30.9 90.5 6.1 6.1 26.2 26.7 8.0 26.0 26.0 13.9 0.2 90 26.2 26.2 8.0 8.0 8.0 30.9 90.5 6.1 6.1 6.1 26.7 26.7 8 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5	SR7	Cloudy	Moderate	18:25	14.9	Middle					26.2		8.0		30.9		91.1		0.2		15.9		9	-	823612	823748	-	-	-
SR8 Cloudy Moderate 16:59 4.0 Middle 26.0 26.0 8.2 8.2 8.2 32.1 32.1 99.8 99.8 6.8 7.5 12 820493 811647						Bottom	13.9	0.2	85	26.2	26.2	8.0	8.0	30.9	30.9	90.5	90.5	6.1	6.1	26.2	.	9					-		1
SR8 Cloudy Moderate 16:59 4.0 Middle 26.0 8.2 32.1 99.8 6.8 6.8 6.8 - 7.7 - 11 - 820493 811647						Surface	1.0	-	-	26.0	26.0	8.2	8.2	32.1	32.1	99.8	99.8	6.8		7.6		13		-	1		-	-	+
Bettom 3.0 26.0 26.0 8.1 8.1 8.2 32.2 39.4 99.5 6.7 6.7 7.9 10	05.0	01	Mad	40.50	4.0		1.0		-					32.1		99.8			6.8	7.5		12	4.	-	000100	04101=	-		+
	SK8	Cloudy	Moderate	16:59	4.0	Middle	- 3.0		-		-		-	- 32.2	-	- 99.4	-	- 6.7		7.0	1.1	- 10	11		820493	811647			1 -
						Bottom		1	-		26.0		8.1		32.2		99.5		6.7		•			-					<u>1</u>

DA: Depth-Averaged

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

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

Note: SR8 cannot be accessed due to windy weather. The monitoring at SR8 was slightly shifted to the closest safe and accessible location temporarily.

Expansion of Hong Kong International Airport into a Three-Runway System Water Quality Monitoring Water Quality Monitoring Results on

23 October 18 during Mid-Flood Tide

Water Qua	lity Monii	toring Resi	ults on		23 October 18	during Mid		de																				
Monitoring Station	Weather	Sea	Sampling	Water	Sampling Dep	oth (m)	Current Speed	Current Direction		mperature (°0	7	рН		nity (ppt)	(aturation %)	Disso	gen	Turbidity(NTU)	Suspende (mg/	/L)	To: Alkal	linity	Coordinate HK Grid	Coordinate HK Grid	Chromium (µg/L)	Nickei (µg/L)
Station	Condition	Condition	Time	Depth (m)			(m/s)	Direction	Value	Average	Value	Average	e Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA	(Northing)	(Easting)	Value DA	
					Surface	1.0	0.5	36 38	26.2 26.2	26.2	8.1	8.1	25.0 25.1	25.0	94.5	94.5	6.6		23.3	-	10 11		86 86				<0.2	1.4
C1	Cloudy	Moderate	05:21	9.0	Middle	4.5	0.6	33	26.3	26.3	8.1	8.1	29.9	29.9	94.8	94.8	6.5	6.6	47.9	47.5	9	10	88	90	815592	804249	<0.2	1.4
0.	Cicacy	Moderate	00.21	0.0		4.5 8.0	0.7	34 35	26.3 26.3		8.1 8.1		30.0		94.8 95.0		6.5		49.1 69.6		9 10		90	00	0.0002	001210	<0.2	1.4
					Bottom	8.0	0.6	37	26.3	26.3	8.1	8.1	30.1	30.1	95.0	95.0	6.5	6.5	71.1		11		94				<0.2	1.3
					Surface	1.0	0.2	112 122	26.4 26.4	26.4	8.0	8.0	28.5	28.6	88.3 88.4	88.4	6.1		6.9 7.0	-	5 6		83 83				<0.2	2.6
C2	Cloudy	Moderate	07:03	12.3	Middle	6.2	0.0	99	26.3	26.3	8.0	8.0	29.0	29.1	88.6	88.6	6.1	6.1	9.5	9.6	5	8	86	86	825687	806918	<0.2	2.2
02	Cicacy	modorato	07.00	12.0		6.2 11.3	0.0	102 229	26.3 26.3		8.0		29.2		88.6 89.0		6.1		10.3 12.1	0.0	5 12	•	86 88	00	020007	000010	<0.2	2.3
					Bottom	11.3	0.1	230	26.3	26.3	8.0	8.0	29.2	29.3	89.1	89.1	6.1	6.1	12.0		13		88				<0.2	2.1
					Surface	1.0	0.6	272 282	26.2 26.2	26.2	8.0	8.0	30.5	30.5	88.7 88.5	88.6	6.0		5.8 6.3	-	6 5		86 85				<0.2	1.9
СЗ	Cloudy	Moderate	04:48	12.2	Middle	6.1	0.6	270	26.1	26.1	8.0	8.0	31.2	31.2	87.1	87.1	5.9	6.0	8.4	9.0	4	5	90	90	822108	817782	<0.2	1.1
	,					6.1 11.2	0.7	295 271	26.1 26.1		8.0		31.2 31.2		87.0 86.0		5.9 5.8		8.4 12.6	ŀ	5 4		91 94				<0.2	1.0
					Bottom	11.2	0.5	282	26.1	26.1	8.0	8.0	31.2	31.2	85.9	86.0	5.8	5.8	12.5		4 6		95				<0.2	1.2
					Surface	1.0	0.1	343 316	26.5 26.5	26.5	8.1	8.1	29.4	29.4	94.4	94.6	6.4	6.5	9.3 9.2	-	6		83 84				<0.2	1.4
IM1	Cloudy	Moderate	05:39	5.5	Middle	-	-	-	-	-	-	-	-	-	-	-		6.5	-	8.9	-	6		85	817960	807119	- <0.2	2 - 1.4
					Bottom	4.5	0.1	325	26.5	26.5	8.0	8.0	29.3	29.3	95.7	95.8	6.5	6.5	8.9		6		85				<0.2	1.4
						4.5	0.1	348 20	26.5 26.3		8.0		29.3		95.8 94.7		6.5	0.0	8.0 11.6		7		86 82				<0.2	1.3
					Surface	1.0	0.6	21	26.4	26.3	8.1	8.1	27.2	27.2	94.7	94.7	6.6	6.6	11.7		9		83				<0.2	1.4
IM2	Cloudy	Moderate	05:46	7.9	Middle	4.0	0.4	20	26.5 26.5	26.5	8.1	8.1	29.0	28.9	95.1 95.2	95.2	6.5		14.1 13.8	14.1	7	8	86 87	86	818172	806167	<0.2	2 1.4 1.4
					Bottom	6.9	0.3	9	26.5	26.5	8.1	8.1	29.1	29.1	96.1	96.1	6.6	6.6	16.7	Ī	8 7		89 90				<0.2	1.5
					Surface	6.9 1.0	0.3	9 18	26.5 26.2	26.2	8.1 8.1	8.1	29.1	26.5	96.1 95.1	95.1	6.6		16.7 11.8		11		83				<0.2	1.4
						1.0 4.1	0.6	19 15	26.2 26.5		8.1 8.1		26.5 29.1		95.0 95.4		6.6 6.5	6.6	12.0 14.6	F	10 8		83 86				<0.2	1.5
IM3	Cloudy	Moderate	05:51	8.1	Middle	4.1	0.5	16	26.5	26.5	8.1	8.1	29.0	29.0	95.6	95.5	6.5		14.3	14.7	7	9	86	86	818776	805620	<0.2	1.5
					Bottom	7.1	0.3	9	26.5 26.5	26.5	8.1	8.1	29.1	29.1	96.5 96.5	96.5	6.6	6.6	17.4 17.8	ŀ	9		89 90				<0.2	1.4
					Surface	1.0	0.6	18	26.3	26.3	8.1	8.1	27.5	27.5	95.8	95.9	6.6		15.2		10		87				<0.2	1.5
						1.0 4.1	0.6	19 4	26.3 26.5		8.1 8.1		27.5 29.2		95.9 96.4		6.6	6.6	15.5 14.7		12 9		87 89				<0.2	1.5
IM4	Cloudy	Moderate	05:58	8.1	Middle	4.1	0.4	4	26.5	26.5	8.1	8.1	29.2	29.2	96.4	96.4	6.6		14.8	15.5	9	10	90	90	819724	804603	<0.2	1.5
					Bottom	7.1 7.1	0.3	359 330	26.5 26.5	26.5	8.1 8.1	8.1	29.3 29.3	29.3	97.1 97.1	97.1	6.6	6.6	16.3 16.3	-	9 10		93 93				<0.2 <0.2	1.5
					Surface	1.0	0.6	355 327	26.4 26.4	26.4	8.1	8.1	28.1	28.1	95.6 95.6	95.6	6.6		16.7 17.0	L	8		86 87				<0.2	1.5
IM5	Cloudy	Moderate	06:05	7.6	Middle	3.8	0.5	343	26.5	26.5	8.1	8.1	29.1	29.1	96.1	96.2	6.6	6.6	14.6	16.5	6	7	89	90	820741	804894	<0.2	1.4
	Cicacy	modorato	55.55	7.0		3.8 6.6	0.5	316 352	26.5 26.5		8.1 8.1		29.1 29.1		96.3 96.9		6.6		14.2 18.2	-0.0	6 7	•	89 92	00	0207 11	001001	<0.2	1.2
					Bottom	6.6	0.4	324	26.5	26.5	8.1	8.1	29.1	29.1	96.8	96.9	6.6	6.6	18.5		6		94				<0.2	1.5
					Surface	1.0	0.4	65 69	26.5 26.5	26.5	8.1	8.1	26.7	26.7	94.9 95.0	95.0	6.6	0.0	11.9 12.0	-	5 6		86 86				<0.2	1.4
IM6	Cloudy	Moderate	06:13	7.3	Middle	3.7 3.7	0.4	74	26.5	26.5	8.1 8.1	8.1	28.8	28.8	95.9 95.9	95.9	6.6	6.6	14.5	14.1	7	7	89	89	821073	805824	<0.2	1.4
					Bottom	6.3	0.5	80 78	26.5 26.5	26.5	8.1	8.1	29.0	29.0	95.9	95.5	6.6	6.5	14.4 15.8	-	7		89 93				<0.2	1.3
						6.3 1.0	0.3	79 90	26.5 26.5		8.1 8.2		29.0		95.6 94.9		6.5	0.5	15.8 12.1		7 6		93 87				<0.2	1.3
					Surface	1.0	0.3	92	26.5	26.5	8.2	8.2	27.9	27.9	95.0	95.0	6.5	6.5	12.2	L	5		88				<0.2	1.5
IM7	Cloudy	Moderate	06:23	8.2	Middle	4.1	0.4	99 102	26.5 26.5	26.5	8.2	8.2	28.6	28.6	95.2 95.0	95.1	6.5	0.0	13.6 14.2	14.1	5 5	6	90 91	90	821358	806856	<0.2	2 1.2 1.4
					Bottom	7.2	0.3	99	26.5	26.5	8.2	8.2	29.0	29.0	94.4	94.4	6.5	6.5	16.8	Į	6		92				<0.2	1.3
						7.2 1.0	0.3	101 77	26.5 26.3		8.2 8.0		29.0		94.3		6.5		15.9 6.5	+	6 3		93 82				<0.2	1.5
					Surface	1.0	0.3	80	26.3	26.3	8.0	8.0	27.8	27.8	90.3	90.3	6.2	6.3	6.6	ļ	5		82				<0.2	1.5
IM8	Cloudy	Moderate	06:32	7.7	Middle	3.9 3.9	0.3	75 79	26.3 26.3	26.3	8.0	8.0	28.1	28.1	91.2 91.3	91.3	6.3		8.0 8.1	10.0	4	4	85 85	85	821817	808121	<0.2 <0.2	2 1.6 1.8
					Bottom	6.7 6.7	0.2	78 79	26.3 26.3	26.3	8.0	8.0	29.7 29.7	29.7	92.5 92.4	92.5	6.3	6.3	15.2 15.5	ļ	4		89 89				<0.2	1.5
DA: Depth-Ave	raged		1 1		1	6./	0.3	79	20.3		8.0	1	29.7	1	92.4		0.3		15.5		3		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
Note: The ebb tide monitoring session on 23 October 2018 was cancelled due to marine traffic management.

Water Quality Monitoring Results on 23 October 18 during Mid-Flood Tide Turbidity(NTU) Nickel (µg/L) Salinity (ppt) рΗ Sampling Water Water Temperature (°C) Coordinate Coordinate Monitoring Alkalinity Oxygen (mg/L) (µg/L) Sampling Depth (m) HK Grid HK Grid Direction Condition Condition Time Depth (m) (m/s) Value Average Value Average Value Average Value DA Value DA Value DA Value DA Value DA Value DA Value Average (Northing) (Fasting) 0.3 26.3 83 Surface 26.3 88.4 1.0 0.3 50 26.3 8.0 6.1 5.2 82 <0.2 1.5 6.2 3.8 0.4 6.8 1.5 31 26.3 8.0 28.3 89.4 6.2 5 85 <0.2 808831 IM9 Cloudy Moderate 06:03 7.5 Middle 26.3 8.0 28.3 89.5 6.3 85 822083 < 0.2 3.8 0.4 32 26.3 8.0 28.3 89.5 6.2 6.7 5 86 <0.2 1.6 0.3 26.2 88 1.5 6.5 16 8.0 28.7 90.1 6.2 6.9 6 < 0.2 Bottom 26.2 8.0 28.7 90.1 6.2 6.5 0.3 17 8.0 90.1 6.2 7.0 88 1.6 26.2 < 0.2 1.0 0.5 332 26.1 8.0 29.7 29.7 92.5 6.3 3.7 6 83 <0.2 1.5 Surface 26.1 8.0 29.7 92.5 8.0 0.6 358 26.1 92.4 6.3 3.8 6 83 <0.2 1.6 4.0 0.5 333 26.2 8.0 29.9 92.1 6.3 4.5 6 86 < 0.2 1.7 IM10 Cloudy Moderate 05:56 7.9 Middle 29.9 92.1 86 822403 809813 4.0 0.5 306 26.2 8.0 29.9 92.1 6.3 4.5 6 86 <0.2 1.8 6.9 0.4 320 26.1 8.0 30.0 91.6 6.3 13.8 6 89 <0.2 1.9 Bottom 26.1 8.0 30.0 91.6 6.3 8.0 6.9 0.4 340 26.1 30.0 916 6.3 13.6 6 89 < 0.2 2.0 1.0 0.3 299 26.2 8.0 90.9 11.9 15 85 <0.2 0.8 30.3 6.2 Surface 26.2 8.0 30.3 90.9 8.0 30.3 6.2 11.9 14 85 <0.2 0.8 0.3 26.2 6.2 4.0 297 90.7 90.7 13.7 12 88 0.8 26.2 8.0 30.3 6.2 <0.2 90.7 822072 811480 Cloudy 05:45 8.0 30.3 15 88 0.9 IM11 Moderate 8.0 Middle 26.2 < 0.2 30.3 4.0 0.3 323 26.2 8.0 6.2 14.2 14 88 <0.2 7.0 0.3 301 26.2 8.0 30.3 90.7 90.7 16.5 17 91 < 0.2 1.0 6.2 30.3 90.7 6.2 Rottom 26.2 8.0 8.0 30.3 6.2 16.4 18 91 < 0.2 0.9 7.0 0.4 320 26.2 1.0 30.2 30.2 0.4 260 26.2 8.0 90.6 90.6 6.2 6.8 12 85 <0.2 1.4 Surface 26.2 8.0 30.2 90.6 8.0 0.4 276 26.2 6.2 6.8 11 84 <0.2 1.4 6.2 87 4.9 0.4 257 26.2 8.0 30.2 90.4 6.2 11.5 11 <0.2 1.1 05:37 Middle 821429 812045 IM12 Cloudy Moderate 49 0.4 267 26.2 8.0 30.2 90.4 6.2 11.7 11 87 <0.2 1.0 8.7 0.4 240 26.2 8.0 30.3 90.1 6.1 14.2 12 90 <0.2 1.0 26.2 30.3 90.1 6.1 Bottom 8.0 8.7 0.4 242 26.2 8.0 30.3 90.1 6.1 14 1 11 91 < 0.2 0.9 1.0 0.3 26.2 8.0 30.0 91.2 6.2 6.1 85 <0.2 2.1 Surface 26.2 8.0 30.0 91.2 1.0 0.3 8.0 91.2 6.2 10 <0.2 2.0 333 26.2 6.2 85 6.2 86 821445 814146 SR2 Cloudy Moderate 05:09 4.9 Middle < 0.2 2.5 3.9 0.3 317 26.3 87 2.8 6.2 11.3 8 < 0.2 8.0 30.1 91.1 Bottom 26.3 8.0 30.1 91.1 6.2 3.9 0.3 8.0 30.1 91.1 6.2 11.4 323 26.3 8 88 < 0.2 3.0 0.4 63 26.3 8.0 28.2 91.3 6.3 5.9 6 Surface 26.3 8.0 28.2 91.4 8.0 91.5 0.4 67 26.3 28.2 6.3 6.0 6 4.6 0.4 72 26.3 8.1 29.9 93.1 6.4 9.3 5 Cloudy Moderate 06:38 8.1 29.9 93.1 822174 807578 46 0.4 72 26.3 8.1 29.9 93.1 6.4 9.0 5 8.1 0.3 76 26.3 8.1 29.8 92.7 6.3 13.8 4 Bottom 26.3 8.1 29.8 92.7 6.3 8.1 0.4 80 26.3 8.1 29.8 92.7 6.3 13.5 1.0 0.2 54 8.1 94.1 94.1 7.7 26.4 29.4 6.4 Surface 26.4 8.1 29.4 94.1 8.1 29.5 6.4 7.7 0.2 26.4 6.4 4.8 67 26.4 93.9 6.4 7.9 SR4A 05:00 Middle 26.4 8.0 29.7 93.9 817184 807794 Cloudy Calm 9.6 4.8 0.1 67 26.4 8.0 29.7 93.8 6.4 7.9 7.8 8.6 0.1 38 26.4 8.0 29.7 94.5 6.4 Bottom 26.4 8.0 29.7 94.5 6.4 8.0 29.7 94.5 6.4 7.8 8.6 0.1 40 26.4 1.0 357 8.1 7.3 0.1 26.3 29.6 93.9 6.4 Surface 26.3 8.1 29.6 94.0 0.1 328 26.3 8.1 29.6 94.0 6.4 7.3 6 6.4 Cloudy Calm 04:44 Middle 816572 810712 4.6 0.1 359 26.3 94.9 6.5 7.3 29.6 Bottom 26.3 8.0 29.6 95.0 6.5 4.6 0.1 330 26.3 8.0 29.6 95.0 6.5 7.6 6 1.0 26.3 0.1 Surface 26.3 8.0 29.3 92.5 1.0 0.1 277 26.3 8.0 29.3 92.5 6.3 7.3 8 6.3 04:20 4.5 Middle 817919 814683 SR6 Cloudy Calm 3.5 0.1 260 26.2 8.0 29.5 91.9 6.3 6.4 29.5 Bottom 26.2 8.0 91.9 6.3 3.5 8.0 29.5 91.8 6.3 0.1 26.2 6.4 263 6 1.0 0.1 219 8.2 3.0 26.2 31.0 88.9 6.0 Surface 26.2 8.2 31.0 88.9 8.2 88.9 3.0 0.1 236 26.2 31.0 6.0 8.3 0.1 90 26.2 8.2 31.3 87.9 6.0 3.8 4 Cloudy Moderate 04:21 26.2 8.2 31.3 87.9 823620 823759 8.3 0.1 90 26.2 8.2 31.3 87.9 6.0 3.9 4 15.6 0.1 136 26.2 8.2 31.4 87.5 5.9 4.9 5 Bottom 26.2 8.2 31.4 87.5 5.9 15.6 0.1 139 26.2 8.2 31.4 87.5 5.9 4.9 6 1.0 26.2 8.0 30.2 6.2 10.1 Surface 26.2 8.0 30.2 90.4 1.0 26.2 8.0 30.2 90.4 6.2 10.1 10 6.2 SR8 Cloudy Moderate 05:25 5.2 Middle 10 820517 811677 30.2 90.4 90.4 90.4 6.2 10.7 10 4.2 26.2 8.0 26.2 8.0 30.2 6.2 Bottom 26.2

DA: Depth-Averaged

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

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

Note: The ebb tide monitoring session on 23 October 2018 was cancelled due to marine traffic management.

Note 1: Due to safety concern, the monitoring at SR8 was slightly shifted to the closest safe and accessible location temporarily.

Water Qual Water Qual			ılts on		25 October 18	during Mid-	Ebb Tide	,																
Monitoring	Weather	Sea	Sampling	Water			Current Speed	Current	Water Te	mperature (°C)	1	pН	Salinity (pp	ot)	OO Saturation (%)	Dissolved Oxygen	Turbidity(NTU)	Suspende (mg		Total Alkalini (ppm)	Coordinate	Coordinate	Chromium (µg/L)	Nickel (µg/L)
Station	Condition	Condition	Time	Depth (m)	Sampling Dep	h (m)	(m/s)	Direction	Value	Average	Value	Average	Value Aver	rage V		Value DA	Value DA	Value	DA	Value DA	HK Grid (Northing)	HK Grid (Easting)	Value DA	Value DA
					Surface	1.0 1.0	0.1	133 145	26.1 26.1	26.1	8.2 8.2	8.2	29.6 29.6		01.0 101.0	6.9	2.8 2.8	3		86 87			<0.2 <0.2	1.2
C1	Fine	Moderate	12:44	9.0	Middle	4.5	0.0	342	26.0	26.0	8.3	8.3	30.7	7 1	00.9	6.9	5.7	4	4	90 00	815629	804242	<0.2	1.2
					Bottom	4.5 8.0	0.0	315 337	26.0 26.0	26.0	8.3 8.3	8.3	31.8	1	00.0	6.9 6.8 6.8	5.9 19.3	4	ŀ	93			<0.2	1.2
						8.0 1.0	0.0	310 43	26.0 26.3		8.3 8.2		31.0	- 1	12.2	6.8	19.7 5.3	5 6		93 85			<0.2 <0.2	1.2
					Surface	1.0	0.1	43 52	26.3	26.3	8.2	8.2	29.0 29	1.0	12.3	6.3 6.2	5.4	6	İ	84			<0.2	1.2
C2	Fine	Moderate	11:46	11.4	Middle	5.7	0.3	54	26.0	26.0	8.2	8.2	29.9	1.9	0.9	6.2	10.9	7	8	88	825702	806930	<0.2	1.2
					Bottom	10.4 10.4	0.2	55 58	26.0 26.0	26.0	8.2 8.2	8.2	30.1 30.1		91.0	6.2 6.2	18.6	11 10		93 92			<0.2 <0.2	1.3
					Surface	1.0	0.4	52 54	26.4 26.4	26.4	8.2 8.2	8.2	30.3		95.3	6.5	4.0	4 5		85 85			<0.2	1.0
C3	Fine	Moderate	14:11	12.6	Middle	6.3 6.3	0.3	90 98	26.3 26.3	26.3	8.2 8.2	8.2	30.4 30.4	14	15.4 OF 4	6.5 6.5	4.6 4.7 4.8	4	4	89 89	822097	817825	<0.2 <0.2	1.1
					Bottom	11.6	0.3	87	26.2	26.2	8.2	8.2	30.7	17	14.7	6.4	5.6	5	1	93			<0.2	1.1
					Surface	11.6 1.0	0.3	87 213	26.2 26.1	26.1	8.2 8.2	8.2	30.7	S S	14.8	6.4	5.6 5.4	7		93 85			<0.2 <0.2	1.2
	-		40.00			1.0	0.2	229	26.1		8.2	0.2	30.6	6	4.8	6.5	5.3	7	_	85	047004	007400	<0.2	1.2
IM1	Fine	Moderate	12:23	5.4	Middle	4.4	0.2	223	26.1	-	8.2	-	30.7		4.0	6.4	6.1	- 8	7	88	817934	807139	<0.2	1.2
					Bottom	4.4	0.2	228	26.1	26.1	8.2	8.2	30.7	1.7	14.0	6.4	6.1	7		88			<0.2	1.2
					Surface	1.0	0.1 0.1	94 97	26.3 26.4	26.3	8.2	8.2	30.2 30.2			6.7 6.7 6.7	4.3	3	ł	82 82			<0.2 <0.2	1.2
IM2	Fine	Moderate	12:15	7.8	Middle	3.9	0.1	163 170	26.0 26.0	26.0	8.2	8.2	30.9 30.9			6.6	7.3 7.1	4	4	87 87	818141	806156	<0.2	1.2
					Bottom	6.8 6.8	0.1	191 209	26.0 26.0	26.0	8.2 8.2	8.2	31.1 31.1		95.4 95.4	6.5 6.5	9.7 9.7	4 5		90 91			<0.2	1.2
					Surface	1.0	0.2	83 83	26.2	26.2	8.2	8.2	30.2 30		8.3	6.7	3.9	5		83			<0.2 <0.2	1.2
IM3	Fine	Moderate	12:07	8.1	Middle	4.1	0.1	49	26.1	26.1	8.2	8.2	31.2	2 6	8.1	6.7	4.8	5	5	86 87	818777	805586	<0.2	1.2
					Bottom	4.1 7.1	0.1 0.1	49 44	26.1 26.0	26.0	8.2 8.2	8.2	31.2	٤	8.1	6.7 6.6 6.6	4.9 6.5	5 6		90			<0.2	1.0
						7.1 1.0	0.1	46 80	26.0 26.2		8.2		31.3		17.3	6.6	6.5 6.1	6 8		91 85			<0.2	1.1
					Surface	1.0	0.1	83 41	26.2	26.2	8.2	8.2	30.6	1.6	95.3	6.5 6.5	6.2	7	İ	86 89			<0.2	1.1
IM4	Fine	Moderate	11:57	8.2	Middle	4.1	0.1	43	26.0	26.0	8.2	8.2	31.0	.0	95.1	6.5	8.9	6	6	91	819714	804629	<0.2	1.0
					Bottom	7.2 7.2	0.1 0.1	39 42	26.0 26.0	26.0	8.2 8.2	8.2	31.1 31.1	.1	94.9 94.9	6.5 6.5	12.3 12.3	5 5		93 94			<0.2 <0.2	1.0
					Surface	1.0	0.1	32 33	26.1 26.1	26.1	8.2 8.2	8.2	30.7 30.7			6.5	9.5	9		83 84			<0.2	1.0
IM5	Fine	Moderate	11:48	7.6	Middle	3.8 3.8	0.1	30 32	26.0 26.0	26.0	8.2 8.2	8.2	30.9 30.9	9	3.8	6.5 6.4 6.4	17.3 17.4	8 10	10	86 87	820748	804886	<0.2	1.2
					Bottom	6.6	0.1	43	26.0	26.0	8.2	8.2	30.9	9	14.2	6.4	20.8	12		93			<0.2	1.1
					Surface	6.6 1.0	0.1	44 218	26.0 26.1	26.1	8.2 8.2	8.2	30.9		3.6	6.4 6.4	20.8 11.2	12 13		94 83			<0.2 <0.2	1.2
IM6	-		44.00			1.0 3.4	0.2	234 275	26.1 26.0		8.2 8.2		30.3	٤	13.6	6.4 6.4	11.3	12 12	40	83 87	004000	005000	<0.2	1.2
IMb	Fine	Moderate	11:39	6.8	Middle	3.4 5.8	0.1 0.1	276 273	26.0 26.0	26.0	8.2 8.2	8.2	30.5	6	13.1	6.4	16.5 16.5 25.5	12 11	12	88 90	821066	805830	<0.2 <0.2 <0.2	1.1 1.2
					Bottom	5.8	0.1	295	26.0	26.0	8.2	8.2	30.7	1.7	3.5	6.4	25.5	13		91			<0.2	1.2
					Surface	1.0	0.1	285 301	26.3 26.3	26.3	8.2	8.2	29.1 29.1	1.1	12.1	6.3	5.6 5.7	12 12	ł	82 82			<0.2 <0.2	1.2
IM7	Fine	Moderate	11:31	7.2	Middle	3.6	0.1	237 240	26.0 26.0	26.0	8.2	8.2	29.8 29.8			6.3	9.7 8.7	9	10	86 88	821334	806826	<0.2	1.0 1.2
					Bottom	6.2 6.2	0.1 0.1	303 319	26.0 26.0	26.0	8.2 8.2	8.2	30.1 30.1	1 9	12.0	6.3 6.3	10.6 10.6	8 10	1	90 91			<0.2 <0.2	1.2
					Surface	1.0	0.2	89	26.1	26.1	8.2	8.2	30.7	7 9	14.5 O4.5	6.4	10.9	7		86			<0.2	3.3
IM8	Fine	Moderate	12:16	8.3	Middle	1.0 4.2	0.2	95 80	26.1 26.0	26.0	8.2 8.2	8.2	30.7	10 5	3.5	6.4 6.4	11.0 14.7 15.4	6 7	8	85 89 89	821811	808130	<0.2	3.5 3.4 3.4 3.4 3.4
livio	Fille	woderate	12.10	0.3		4.2 7.3	0.3	83 77	26.0 26.0		8.2 8.2		30.9	٤	13.5	6.4	14.6 20.5	8 10		93	021011	000130	<0.2 <0.2	3.4 3.4
DA: Depth-Aver	<u> </u>				Bottom	7.3	0.3	83	26.0	26.0	8.2	8.2	30.9			6.4	20.5	11	<u> </u>	93			<0.2	3.5

DA: Depth-Averaged

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

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

Monitoring Sampling Depth (m) Speed Current (%) Oxygen (mg/L) (ppm) HK Grid HK	Water Qual	ity Monit	oring Resu	lts on		25 October 18	during Mid-	Ebb Tid	<u>e</u>																	
Prof. Prof	Monitoring	Weather	Sea	Sampling	Water				Current	Water T	emperature (°C	:)	рН	Salin	ity (ppt)	DO Saturation		Turbidity(NTU)							Nickel (µg/L)
Marchan 122		Condition	Condition	Time	Depth (m)	Sampling De	pth (m)			Value	Average	Value	Average	Value	Average	Value Average	1 1	Value	DA	((FF)				Value DA
Monte Mont						Surface					26.2		8.2		30.5	95.2 95.2	CF									
Martin M	11.40	Fi		40.00	7.0	NA:-Juli-					20.0		0.0		24.0	04.0					40	00	000005	000044	-0.2	2.2
Marie Mari	livi9	rine	woderate	12:23	7.0	Middle					20.0		0.2		31.0	94.8			9.6		10	89	822085	000011	<0.2	3.3
Miles Free Maderies 1294 74 20 20 20 20 20 20 20 2						Bottom					26.0		8.2		31.1				-							
Montroop Montroop						Surface		0.3	92		26.2		8.2		30.2											3.6
Martin M		_														09.7					_	90			-O 2	3.4
Marie Mari	IM10	Fine	Moderate	12:34	7.5	Middle	3.8		95	26.1	26.1	8.2	8.2	31.1	31.1	98.7	6.7	3.9	4.1	6	7	90	822381	809800	<0.2	3.3 3.4
Maries 1246 Pro						Bottom					26.0		8.2		31.3				ŀ							
Mile Fire Molere 12-66 7-8 Molere 12-66 Mole						Surface					26.1		8.2		30.7											3.4
March Marc		_		40.40	7.0						00.0				04.0	05.3					-	90	000047	044405	-0.2	2.2
Miles Mile	IM11	rine	Moderate	12:46	7.8	Middle					26.0		8.2		31.0	95.3			7.5		5	89	822047	811465	<0.2	3.4
Main Main						Bottom					26.0		8.2		31.1		6.5		ŀ							3.5
Fig. Moderate 124 8.7 Moderate 125 8.7 Moderate 12						Surface					26.1	8.2	8.2		30.6							84			<0.2	3.5
Second S		_		40.54							00.4					93.0			7.0		-	00	004400	040040	-0.2	2.4
SRIA Fre Moderate 1349 7.1 South 77 0.3 66 280 281	IM12	Fine	Moderate	12:54	8.7	Middle	4.4	0.4	96	26.1	26.1	8.2	8.2	30.6	30.6	92.8	6.3	7.7	7.6		7	89	821482	812043	<0.2	3.3
SRIA Pro Moderate 13-49 7.1 Middle 10						Bottom					26.0		8.2	30.7	30.7	93.0 93.0	6.3 6.3		ŀ						<0.2	3.3
SRIA File Moderate 13:49 7.1 Midde 13:49 7.1 Midde 13:49 7.1 Midde 13:49 7.1 Midde 13:40 7.1 Midde 13:40 7.1 Midde 13:40 7.1 Midde 13:40 7.1 Midde 13:40 7.1 Midde 13:40 7.1 Midde 13:40 7.1 Midde 13:40 7.1 Midde 13:40 7.1 Midde 13:40 7.1 Midde 13:40 7.1 Midde 13:40 7.1 Midde 13:40 7.1 Midde 13:40 7.1 Midde 13:40 7.1 Midde 15:40 7.1 M						Surface		-			26.2		8.2		29.1			2.0				-			-	-
Fig. Moderate 13-99 1-1 Moderate 13-99 Moderate 13-99 Moderate 13-99 Moderate 13-99 Moderate 13-99 Moderate 13-99 Moderate 13-99 Moderate 13-99 Moderate 13-99 Moderate 13-99 Moderate 13-99 Moderate 13-99 Moderate		_						-								101.0	6.9				_	-			-	
SRIA Fre Moderate 1209 9.8 Mode 4.9 0.3 111 200 0.3 11	SR1A	Fine	Moderate	13:49	7.1	Middle	3.6	-		26.0	26.0	8.2	8.2	30.1	30.1	101.2		2.2	2.4	4	5	- '	820065	812589	- '	
Suffice 10 0.4 64 262 262 262 262 305 305 65 65 55 41 10 6 65 85 62 305 305 862 865						Bottom		-			26.0		8.2		31.4				ŀ							
Second Second						Surface					26.2		8.2		30.5											
Secondary Seco	000	_		40.40			1.0		- 90	26.2				30.5		95.2	6.5				-	-	004405	044457		
SR3 Fine Moderate 12.09 9.8 Surface 1.0 0.3 172 26:1 86.1 86.1 86.2 82 30.3 30.7 83.7 83.7 83.7 84.4 84.8 85.9 87.7 88 8 8 80.3 83.5 83.5 83.5 83.5 83.5 83.5 83.5 83	SR2	rine	Moderate	13:49	4.8	Middle				-		-		-	-				5.0		/		821465	814157	-	-
SR3 Frie Moderate 12.09 9.8 Middle 4.9 0.3 1172 26.1 26.1 26.1 26.1 27 12.0 26.1 26.1 26.1 26.1 26.1 26.1 26.1 26.1						Bottom					26.1		8.2		30.7				ŀ							
Second Fine Moderate 12:09 9.8 Middle 4.9 0.3 1111 26:00 26:0 8.2 8.2 30.5 30						Surface					26.1		8.2		30.3							-			-	
Second S	CDO	Fi		40.00	0.0	NA:-Juli-					20.0		0.0		20.5	03.0			40.4	15	40		000404	007500	-	-
SR4A Fine Calm 13.07 P.5 Middle 1.0 0.2 99 264 26.1 26.1 26.1 82 82 82 82 82 82 82 82 82 82 82 82 82	SKS	rine	woderate	12:09	9.0	Middle					20.0		0.2		30.5	92.9			10.4		16		022134	807590	- '	
SR4A Fine Calm 13.07 9.5 Middle 4.8 0.1 84 0.2 80 0.2 80 0.2 80 0.2 80 0.2 80 0.2 80 0.0 80 0						Bottom					26.0	8.2	8.2		30.7	92.9	6.3 6.3	25.9	ŀ			-				-
State Fine Calm 13.07 9.5 Middle 4.8 0.1 84 26.1 84 26.1 82 82 30.8 30.8 33.5 83.5 1 8.4 8.4 8.4 1 8.4 8.5 1 8.5 8.3 8.5 1 8.5 8.3 8.5 1 8.5 8.5 1 8.5 1 8.5 1 8.5 8.5 1 8.5						Surface					26.2		8.2		30.5		C E		-			-				
Bottom A77 O.1 Bottom Bottom A77 O.1 Bottom Bottom Bottom A77 O.1 Bottom B	CDAA	Fino	Colm	12:07	0.5	Middle	4.8	0.1	84	26.1	26.1	8.2	0.2	30.8	20.0	93.5		8.3	7.3	9	10	-	017102	907702		-
SR5A Fine Calm 13.23 S.7 Middle 1.0 0.2 59 264 26.1 8.2 8.2 8.2 30.1 30.1 94.9 94.9 95.0 6.5 6.5 3.7 4.2 4.2 1.0 7.2 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	SNAM	Fille	Callii	13.07	9.5											93.5	- 6.4		7.3		10		617193	00//92	- '	
SR5A Fine Calm 13.23 5.7 Middle						Bottom					26.1		8.2		30.9							-				<u> </u>
SR6A Fine Calm 13:23 5.7 Middle						Surface					26.4		8.2		30.1		C E		-	,		-				
Reference of the boundary of t	SPSA	Fine	Calm	13-23	5.7	Middle			-					-	_	-			12		7		816578	810710		
SR6 Fine Calm 13:55 4.7 Middle	ONOA	1 1110	Cairi	13.23	3.7		4.7	- 0.1	152	26.3			_	30.4	_	95.1	C.F.		7.2		,		010370	010/13		
SR6 Fine Calm 13.55 4.7 Middle						Bottom	4.7	0.1	153	26.3	26.3	8.2	8.2	30.4	30.4	95.1	6.5	4.6		8		-				
R6 Fine Calm 13.55 4.7 Middle						Surface					26.4		8.2		29.5		6.2		-			-			-	-
Bottom 3.7 0.2 62 26.3 26.3 8.2 29.8 29.8 29.8 29.5 92.5 6.3 6.3 5.3 7	SR6	Fine	Calm	13:55	47	Middle								-					46		7		817882	814658		
SR7 Fine Moderate 1321 3.9 Middle	0110		Cum	10.00	***			- 0.2		26.3		- 82		20.8		92.5	- 63			- 8		-	017002	014000	-	-
SR7 Fine Moderate 14.37 18.6 Middle 9.3 0.6 86 26.4 26.4 8.2 8.2 29.7 92.2 92.2 .						Bottom	3.7	0.2	62	26.3	26.3	8.2		29.8	29.8	92.5	6.3	5.4		7		-				
SR7 Fine Moderate 14.37 18.6 Middle 9.3 0.6 86 26.4 26.4 8.2 28.2 29.7 29.7 92.2 92.2 0.0 3.7 3.8 4 5 0.0 82614 823763 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.						Surface					26.4		8.2		29.6		6.0		-			-			-	-
Bottom 17.6 0.2 146 26.2 26.2 8.2 8.2 29.9 29.9 91.8 6.3 6.3 4.2 6.5	SR7	Fine	Moderate	14:37	18.6	Middle	9.3	0.6	86	26.4	26.4	8.2	8.2	29.7	29.7	92.2		3.7	3.8	4	5		823614	823763	-	
SR8 Fine Moderate 13:21 3.9 Middle 26.0 26.0 26.0 26.0 26.0 26.0 26.0 26.0	5.0		···ocolato		.5.0											92.2	6.3		5.5		3		525014	525765		
SR8 Fine Moderate 13.21 3.9 Middle 1.0 - 26.1 26.1 8.2 6.2 29.2 29.2 101.0 101.0 6.9 6.9 2.7 2.5 6 2.5 6 2.5 2.5 6 2.5 2.5 6 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5						Bottom	17.6	0.2		26.2	26.2	8.2	8.2	29.9	29.9	91.8	6.3	4.2	-	5		-			-	
SR8 Fine Moderate 13:21 3.9 Middle						Surface			-		26.1	8.2	8.2		29.2	101.0	0.0		}			-			-	-
Petton 2.9 26.0 36.0 8.2 8.2 30.6 30.6 100.9 400.0 6.9 6.0 2.2 6 · · · · ·	SR8	Fine	Moderate	13:21	3.9	Middle			-	-				-			- 6.9		2.5		6		820488	811683	-	
							2.9	-	-	26.0		8.2		30.6		100.9	6.9	2.2		6	-	-			-	-
						Bottom		-			26.0		8.2		30.6							-			-	-

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
Note: Access to SR8 was blocked by barge and its wires. The monitoring at SR8 was slightly shifted to the closest safe and accessible location temporarily.

Water Qual Water Qual			ilts on		25 October 18	during Mid-	Flood Ti	ide																	
Monitoring	Weather	Sea	Sampling	Water			Current Speed	Current	Water Te	emperature (°C)	1	pН	Salinity (pp	ot)	O Saturation (%)	Dissolved Oxygen	Turbidity(N		nded Solids ng/L)	Total Alk	n) '	Coordinate	Coordinate	Chromium (µg/L)	Nickel (µg/L)
Station	Condition	Condition	Time	Depth (m)	Sampling Dept	h (m)	(m/s)	Direction	Value	Average	Value	Average	Value Aver	age Va	-17	Value DA	Value	DA Value				HK Grid (Northing)	HK Grid (Easting)	Value DA	Value DA
					Surface	1.0	0.4 0.5	32 35	26.0 26.0	26.0	8.2 8.2	8.2	29.6 29.6		6.5 6.6 96.6	6.6	4.2	6 5		83 84				<0.2 <0.2	3.3
C1	Cloudy	Moderate	07:34	9.5	Middle	4.8	0.3	37 38	26.0	26.0	8.2	8.2	31.3	3 9	9.8 99.9	6.8 6.8	12.7	1.9	12	91	91	815613	804255	<0.2	3.4 3.2 3.3
					Bottom	8.5	0.3	18	26.0	26.0	8.3	8.3	31.9 31.9	0 10	0.7	6.8 6.8 6.8	17.6	22		96				<0.2	3.3
					Surface	8.5 1.0	0.3	19 344	26.0 26.3	26.3	8.2	8.2	29.1	1 9	2.0	6.3	5.1	14		88				<0.2	3.4
C2	Cloudy	Moderate	08:36	11.2	Middle	1.0 5.6	0.2	316 32	26.3 26.1	26.1	8.2	8.2	29.1	5 9	2.0	6.3	8.6	8.2	9	92	92	825682	806960	<0.2 <0.2 <0.2	3.5 3.2 3.3
					Bottom	5.6 10.2	0.4	33 27	26.1	26.0	8.2	8.2	29.5 30.0 30.0 30.0	0 9	0.9 90.8	6.2 6.2 6.2	11.0	7		92 96				<0.2 <0.2	3.1
					Surface	10.2	0.3	29 242	26.0 26.0	26.0	8.2	8.2	30.0	0 9	1.7	6.3	2.8	7		95 87				<0.2 <0.2	3.2
C3	Cloudy	Moderate	06:16	10.6	Middle	1.0 5.3	0.7	251 240	26.0 26.0	26.0	8.2	8.2	30.0 30.0 30.0 30.0	n 9	1.7 91.7 1.3 91.3	6.3	3.8	4.7	5	91 91	91	822128	817806	<0.2	3.3 3.1 3.4
					Bottom	5.3 9.6 9.6	0.8	244 255	26.0 26.0 26.0	26.0	8.2 8.2 8.2	8.2	30.0 30.0 30.0	n 9	1.3 91.3 1.3 91.3	6.3 6.3 6.3	7.2 7.5	6		91 95 94				<0.2 <0.2 <0.2	3.8 3.5 3.0
					Surface	1.0	0.4	264 331	26.0	26.0	8.2	8.2	30.4	, 9	2.2	6.3	10.9	8		84				<0.2	3.0
IM1	Cloudy	Moderate	07:53	5.7	Middle	1.0	0.1	354	26.0	-	8.2			9		6.3	-	3.9	7	85	86	817971	807151	<0.2	3.2
					Bottom	4.7	0.2	24	26.0	26.0	8.2	8.2	30.7 30.7 30.7	, 9	3.3 3.4 93.4	6.4 6.4 6.4	16.9 16.9	7		- 88 88				<0.2	3.3
					Surface	1.0	0.2	25 48	26.0	26.0	8.2	8.2	30.8	g 9	5.9 95.9	6.5	9.3	7		84				<0.2	2.9
IM2	Cloudy	Moderate	08:01	8.0	Middle	1.0 4.0 4.0	0.3 0.3 0.3	50 29 29	26.0 26.0 26.0	26.0	8.2 8.2 8.2	8.2	30.8 31.0 31.0 31.0	0 9	5.9 5.0 95.0	6.5 6.5 6.5	9.3 17.1 17.0	5.7	8	85 88 89	88	818165	806177	<0.2 <0.2 <0.2	2.9 3.6 3.8 3.3
					Bottom	7.0 7.0	0.2	23	26.0 26.0	26.0	8.2	8.2	31.1 31.1 31.1	, 9	5.1 5.2 95.2	6.5 6.5 6.5	20.9	11		92				<0.2 <0.2 <0.2	3.2
					Surface	1.0 1.0	0.3	42 44	26.1 26.1	26.1	8.2	8.2	30.8	g 9	5.8 5.8 95.8	6.5	12.3 12.6	16 16		85 86				<0.2 <0.2 <0.2	1.7 3.2
IM3	Cloudy	Moderate	08:09	8.2	Middle	4.1 4.1	0.2	32	26.0	26.0	8.2 8.2	8.2	31.0 31.0	0 9	5.0 5.0 95.0	6.5 6.5	15.0	6.2	12	88	89	818791	805584	<0.2 <0.2 <0.2	1.8 1.8 2.0
					Bottom	7.2 7.2	0.1	35 37	26.0	26.0	8.2	8.2	31.1 31.1	1 9	4.6 4.7 94.7	6.5 6.5	20.8	8		92 92				<0.2	1.9
					Surface	1.0	0.3	1	26.1	26.1	8.2	8.2	30.7 30.7	, 9	5.1 95.1	6.5	9.2	9		84 84				<0.2 <0.2	2.9
IM4	Cloudy	Moderate	08:20	8.2	Middle	4.1 4.1	0.3	339 341	26.0 26.0	26.0	8.2 8.2	8.2	30.9 30.9		3.7 3.7 93.7	6.4 6.4	13.4 13.6	5.2 8	8	88 89	88	819710	804608	<0.2	2.0 3.6 2.8
					Bottom	7.2 7.2	0.2	337 310	26.0 26.0	26.0	8.2 8.2	8.2	30.9 30.9	.9 9	3.7 3.7 93.7	6.4 6.4	22.7 22.9	6		92 93				<0.2	3.5 2.5
					Surface	1.0	0.3	354 326	26.2 26.2	26.2	8.2 8.2	8.2	30.6 30.6		4.8 4.8 94.8	6.5 6.5	9.9	7		85 85				<0.2	3.5
IM5	Cloudy	Moderate	08:29	7.6	Middle	3.8 3.8	0.3	350 322	26.1 26.1	26.1	8.2 8.2	8.2	30.7 30.7		3.9 3.9	6.4 6.4	16.5	6.2 5	7	88 90	89	820712	804858	<0.2	3.5 3.4 3.2
					Bottom	6.6 6.6	0.2	350 359	26.0 26.0	26.0	8.2 8.2	8.2	30.8 30.	.8	3.6 3.6	6.4 6.4	22.3 22.3	7 8		91 93				<0.2 <0.2	3.3 1.9
					Surface	1.0	0.0	36 39	26.1 26.1	26.1	8.2 8.2	8.2	30.2 30.2	.2 9	3.3 3.3	6.4	10.7	9		86 86				<0.2 <0.2	1.8
IM6	Cloudy	Moderate	08:37	7.7	Middle	3.9	0.1	8	26.0 26.0	26.0	8.2 8.2	8.2	30.6	.6	3.0 3.0	6.4	17.2	6.5	9	89 89	89	821070	805823	<0.2	1.9
					Bottom	6.7 6.7	0.0	236 239	26.0 26.0	26.0	8.2	8.2	30.6 30.6	.6	3.3 3.3 93.3	6.4 6.4	21.6 21.5	9		92 93				<0.2 <0.2	1.9
					Surface	1.0	0.1 0.1	228 241	26.3 26.3	26.3	8.2	8.2	29.1 29.1 29.1	.1 9	2.1 2.1 92.1	6.3 6.3	5.2 5.2	8		85 85				<0.2 <0.2	1.8
IM7	Cloudy	Moderate	08:47	8.7	Middle	4.4 4.4	0.0	211 230	26.1 26.1	26.1	8.2	8.2	29.4 29.4	.4 9	1.1 1.1 91.1	6.3	8.4	8.9 10	9	92 92	91	821359	806820	<0.2 <0.2	1.8 2.1
					Bottom	7.7	0.1	8	26.0 26.0	26.0	8.2	8.2	30.1 30.	.1 9	1.8 91.9	6.3 6.3	13.3	9		95 95				<0.2 <0.2	3.6 1.9
					Surface	1.0	0.2	88 94	26.2 26.2	26.2	8.2	8.2	30.6 30.6	.6	4.9 4.9 94.9	6.5 6.5 6.5	11.3	9		87 88				<0.2	2.0
IM8	Cloudy	Moderate	08:05	7.9	Middle	4.0	0.4	54 56	26.1	26.1	8.2	8.2	30.7 30.	.7	4.0 4.0 94.0	6.4	16.2	6.5	9	92 91	92	821813	808162	<0.2	1.9 2.0
DA: Depth-Aver					Bottom	6.9	0.4	40 43	26.0 26.0	26.0	8.2 8.2	8.2	30.8 30.8		3.5 3.5 93.5	6.4 6.4	22.1	9		96 96				<0.2	1.9

DA: Depth-Averaged
Caim: 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

Water Quali	ity Monit		ılts on		25 October 18	during Mid-		le										_									
Monitoring	Weather	Sea	Sampling	Water	Sampling Depth	n (m)	Current Speed	Current	Water Te	emperature (°C)	pН	Salinity	y (ppt)		aturation %)	Dissolved Oxygen		Turbidity(NTU)	Suspend (mg		Total Alk (ppn		Coordinate HK Grid	Coordinate HK Grid	Chromium (µg/L)	Nickel (µg
Station	Condition	Condition	Time	Depth (m)			(m/s)	Direction	Value	Average	Value	Average		Average		Average	Value DA	١.	Value DA	Value	DA			(Northing)	(Easting)	Value DA	Value D
					Surface	1.0 1.0	0.4	46 48	26.1 26.1	26.1	8.2 8.2	8.2	30.7	30.7	95.0 95.0	95.0	6.5 6.5 6.5		9.7 9.8	9		88 87				<0.2 <0.2	1.8
IM9	Cloudy	Moderate	07:56	7.6	Middle	3.8	0.4	50 50	26.0 26.0	26.0	8.2	8.2	30.9	30.9	93.6 93.6	93.6	6.4	+	15.6 15.7	12 11	11	92 91	92	822108	808816	<0.2	1.8
					Bottom	6.6 6.6	0.5 0.5	12 12	26.0 26.0	26.0	8.2 8.2	8.2	30.9 30.9	30.9	93.5 93.5		6.4 6.4	1	20.3 20.5	11 11	1	96 96				<0.2	1.9
					Surface	1.0	0.4	327 331	26.2 26.2	26.2	8.2	8.2	30.3	30.3	96.2 96.2	06.2	6.6	L	8.9 9.0	11		88				<0.2	1.8
IM10	Cloudy	Moderate	07:47	8.2	Middle	4.1	0.4	341	26.0	26.0	8.2	8.2	31.0	31.0	94.7	94.7	6.5	3 -	12.8	10	10	92	92	822361	809775	<0.2	1.8
		I		0.2	Bottom	4.1 7.2	0.4	314 340	26.0 26.0	26.0	8.2 8.2	8.2	31.0 31.1	31.1	94.7 94.5	04.5	6.5 6.4 6.4	1	19.8	10 9		91 95				<0.2	1.9
					Surface	7.2 1.0	0.3	358 300	26.0 26.0	26.0	8.2 8.2	8.2	31.1 30.7	30.7	94.5 96.2	06.2	6.4		19.8 7.5	11 8		96 87				<0.2	1.9 1.8
						1.0 3.9	0.2	324 43	26.0 26.0		8.2 8.2		30.7 31.0		96.2 95.1		6.6	3	7.5 15.5	9	1	88 91				<0.2	1.9
IM11	Cloudy	Moderate	07:36	7.8	Middle	3.9 6.8	0.4	44 90	26.0 26.0	26.0	8.2	8.2	31.0 31.1	31.0	95.1	95.1	6.5		15.7 17.1	6	8	92	91	822052	811446	<0.2	2.0
					Bottom	6.8	0.5	92	26.0	26.0	8.2	8.2	31.1	31.1	95.0 95.0	95.0	6.5 6.5	5 -	16.7	8		95				<0.2	2.0
					Surface	1.0	0.7	265 275	26.0 26.0	26.0	8.2	8.2	30.5	30.5	91.9 92.0	92.0	6.3 6.3	, -	10.3	14	1	88 87 92 92 92				<0.2	1.8
IM12	Cloudy	Moderate	07:28	8.9	Middle	4.5 4.5	0.6	260 271	26.0 26.0	26.0	8.2	8.2	30.6	30.6	92.3 92.3	92.3	- 0.3	' E	14.6 14.7	12 13	13		92	821452	812029	<0.2	1.8 1.9
					Bottom	7.9 7.9	0.5 0.5	262 265	26.0 26.0	26.0	8.2 8.2	8.2	30.8	30.8	92.2 92.2	92.2	6.3 6.3	3	14.4 14.2	12 13	1	96 96				<0.2	1.8
					Surface	1.0	-	-	26.0 26.0	26.0	8.2	8.2	29.5	29.5	97.2 97.3	07.2	6.7	Ė	5.1	6		-				-	2.0
SR1A	Cloudy	Moderate	06:50	7.2	Middle	3.6	-		26.0	26.0	8.2	8.2	31.0	31.0	98.9	08.0	6.7	' <u>-</u>	10.7	5	5	-		820063	812584		-
	,				Bottom	3.6 6.2		- :	26.0 26.0	26.0	8.2 8.2	8.2	31.0 31.7	31.7	98.9 99.3	00.0	6.7 6.7 6.7	, _	10.9	5 3	1	-				-	-
					Surface	6.2 1.0	0.3	65	26.0 26.0	26.0	8.2 8.2	8.2	31.7 30.7		99.3 92.7	92.7	6.7	+	12.6 17.4	3 18		87				<0.2	1.9
						1.0	0.3	68	26.0	20.0	8.2	0.2	30.7	30.7	92.7	92.7	6.3	3	17.6	18	1	87				<0.2	2.0
SR2	Cloudy	Moderate	06:36	4.8	Middle	3.8	0.3	- 40	26.0	-	8.2	-	30.7	-	92.6	•	6.3		22.4	- 18	19	92	90	821457	814147	-	2.0
					Bottom	3.8	0.3	42	26.0	26.0	8.2	8.2	30.7	30.7	92.6	92.0	6.3		22.3	21		92				<0.2	1.9
					Surface	1.0	0.2	33	26.1 26.1	26.1	8.2 8.2	8.2	30.2	30.2	93.3 93.3		6.4		11.1	10 11	1	-					-
SR3	Cloudy	Moderate	08:14	8.2	Middle	4.1 4.1	0.6	51 55	26.0 26.0	26.0	8.2	8.2	30.5	30.5	92.9 92.9	92.9	- 0.4	' -	15.7 15.8	12 14	12	-	-	822125	807551	-	-
					Bottom	7.2 7.2	0.5 0.5	64 69	26.0 26.0	26.0	8.2 8.2	8.2	30.6 30.6	30.6	92.8 92.9	92.9	6.3	3 -	23.1	14 13	1	-				-	-
					Surface	1.0 1.0	0.5	55 55	26.0 26.0	26.0	8.2 8.2	8.2	30.7 30.7	30.7	92.8 92.8	92.8	6.3	T	10.3 10.3	17 15		-	\rightarrow			-	-
SR4A	Cloudy	Calm	07:10	10.0	Middle	5.0	0.5	55	26.0	26.0	8.2	8.2	30.7	30.7	92.5	92.5	- 6.3	3 =	15.5	16	16		-	817210	807809		
	,				Bottom	5.0 9.0	0.5	55 60	26.0 26.0	26.0	8.2 8.2	8.2	30.7	30.7	92.5 92.5	92.6	6.3		23.6	16 17	1	-				COL COL	-
						9.0 1.0	0.4	64 128	26.0 26.0	26.0	8.2 8.2	8.2	30.7 30.0	30.0	92.6 91.8	91.8	6.3	_	23.9 2.6	17 4		-					-
					Surface	1.0	0.2	128	26.0		8.2	0.2	30.0	30.0	91.8	91.0	6.3	3	2.6	5	1	-				-	-
SR5A	Cloudy	Calm	06:51	5.0	Middle	4.0	0.2	138	26.0	-	8.2	•	30.0		92.0	•	- 63		3.0	- 4	4	-	-	816604	810715		-
					Bottom	4.0	0.2	141	26.0	26.0	8.2	8.2	30.0	30.0	92.0	92.0	6.3	3 -	3.5	4		-				ᆂ	-
					Surface	1.0	0.1	230 231	26.1 26.1	26.1	8.1 8.1	8.1	29.7	29.7	90.3	90.3	6.2 6.2 6.2	, E	2.6	4	1	-				-	-
SR6	Cloudy	Calm	06:26	4.7	Middle		-	-	-	-	-	-	-	-	-	-	- 0.2	` -	3.5	-	4	-	-	817876	814660	-	-
					Bottom	3.7 3.7	0.1 0.1	253 265	26.1 26.1	26.1	8.1 8.1	8.1	29.9 29.9	29.9	90.1	90.2	6.2 6.2	2 -	4.4 4.4	3	1	-				-	-
					Surface	1.0	0.1	166	26.1	26.1	8.2	8.2	29.7	29.7	90.3	90.3	6.2	L	2.5	4		-				_	-
SR7	Cloudy	Moderate	05:50	14.9	Middle	1.0 7.5	0.1	180 122	26.1 26.1	26.1	8.2	8.2	29.7	29.8	90.0	90.0	6.2	<u> </u>	4.6	5	6	-	_	823657	823752	= .	-
	Cidudy			14.9	Bottom	7.5 13.9	0.2	127 139	26.1 26.1	26.1	8.2 8.2	8.2	29.8 29.8	29.8	90.0 89.9	80.0	6.2 6.2 6.2	,	11.4	6 10	† -	-					-
						13.9 1.0	0.2	142	26.1 26.0		8.2 8.2		29.8 29.6		89.9 97.1	07.0	6.7	+	11.7 4.5	9			-			- -	+-+
					Surface	1.0	-	- :	26.0	26.0	8.2	8.2	29.6	29.6	97.2	97.2	6.7	,	4.6	4	1	-					-
SR8	Cloudy	Moderate	07:18	5.2	Middle	4.2		- :	26.0	-	8.2	-	31.0	-			6.6	l	7.1	-	11	-	-	820492	811637	= -	
DA: Depth-Avera					Bottom	4.2		- :	26.0	26.0	8.2	8.2	31.0	31.0	97.5 97.5	97.5	6.6	i –	7.1	18 19	†						-

DA: Depth-Averaged
Caim: Small or no wave; Moderate: Between caim and rough; Rough: White capped or rougher
Value exceeding Action Level is underlined: Value exceeding Limit Level is bolded and underlined
Note: Access to SR8 was blocked by barge and its wires. The monitoring at SR8 was slightly shifted to the closest safe and accessible location temporarily.

Water Qua Water Qua			ılts on		27 October 18 durii	ng Mid-E	bb Tide																				
	Weather	Sea	Sampling	Water	27 October 10 dam	ng ma L	Current		Water Te	mperature (°C)		pН	Salinity	v (ppt)	DO Sat		Dissolved		Turbidity(NTU)		led Solids			Coordinate	Coordinate	Chromium	Nickel (µg/L)
Monitoring Station	Condition	Condition	Time	Depth (m)	Sampling Depth (m)		Speed (m/s)	Current Direction	Value	Average	Value	i i	Value		Value /	,	Oxygen Value D	-	Value DA	(m	g/L) DA	(ppm Value	1)	HK Grid (Northing)	HK Grid (Easting)	(μg/L) Value DA	
				-, - , -		1.0	0.2	174	26.1	26.1	8.1	8.1	28.5	20.5	100.4	100.4	6.9		1.5	2		79				<0.2	2.0
C1	Cloudy	Moderate	14:01	8.8		1.0 4.4	0.2	180 157	26.1 25.9	25.9	8.1 8.2	8.2	28.5 29.7	29.7	100.3 99.5	00.5	6.8	.9	1.5 2.5 2.3	2	2	78 86	85	815621	804269	<0.2	1.9 1.8 1.8
Ci	Cloudy	woderate	14:01	0.0		4.4 7.8	0.1	160 130	25.9 25.9		8.2 8.1		29.8 29.7		99.4 99.5		6.8		2.8 2.9	2] _	88 87	85	815021	604269	<0.2 <0.2	1.7
					Bottom	7.8	0.0	130	25.9	25.9	8.1	8.1	29.6		99.6		6.9	.9	2.7	3		89				<0.2	1.3
					Surface	1.0	0.2	155 159	26.2 26.2	26.2	8.1 8.1	8.1	27.3 27.4	27.4	90.4	90.5	6.3	.3	5.0 5.0	6 5	1	83 84				<0.2 <0.2	2.1
C2	Cloudy	Moderate	12:49	11.4		5.7 5.7	0.1	210 212	26.1 26.1	26.1	8.1 8.1	8.1	27.8 27.8	27.8	90.6	90.7	6.3	_	7.1 7.3 6.5	5 5	5	87 86	86	825668	806932	<0.2	2.2
						10.4	0.0	153 161	26.1 26.1	26.1	8.1	8.1	27.8		91.7 91.9		6.4 6.	.4	7.5 7.4	5	1	89 89				<0.2	2.3
					Surface	1.0	0.5	60 64	26.3 26.3	26.3	8.1 8.1	8.1	29.1	29.1	93.9 93.8	03.0	6.4		3.5	3		79 77				<0.2 <0.2	2.2
C3	Cloudy	Moderate	14:39	12.2	Middle	6.1	0.4	112	26.3	26.3	8.1	8.1	29.2	20.2	93.6	02.7	6.4	.4	3.6	3	3	90	85	822087	817818	<0.2	2.3
	,				Pottom	6.1 11.2	0.4	113 66	26.3 26.3	26.3	8.1 8.1	8.1	29.2 29.2	20.2	93.7 93.9	00.0	6.4 6.4 6.	4	3.7 6.3	3	ł	91 88				<0.2 <0.2	1.9
						11.2	0.3	67 214	26.3 26.1		8.1 8.1		29.2		93.9 94.5		6.4 b.	-	6.3 4.2	3		87 88				<0.2 <0.2	1.8
					Surface	1.0	0.1	243	26.1	26.1	8.1	8.1	28.7		94.5		6.5	.5	4.3	3	1	85				<0.2	1.9
IM1	Cloudy	Moderate	13:37	5.2	Middle	-	-		-	-	-		-	-	-	-	-		- 4.3	-	3		88	817951	807130	<0.2	2.0
					Bottom	4.2 4.2	0.1 0.1	209 238	26.2 26.2	26.2	8.1 8.1	8.1	28.7	20.7	94.5 94.6	34.0	0.0	.5	4.4 4.4	3		89 91				<0.2 <0.2	2.0
						1.0	0.3	172 175	26.1 26.1	26.1	8.1 8.1	8.1	28.8		96.7 96.5		6.7 6.6 6.	_	3.0	5		83 82				<0.2	2.0
IM2	Cloudy	Moderate	13:30	7.6		3.8	0.2	237 239	26.0 26.0	26.0	8.1 8.1	8.1	29.2 29.2		95.4 95.4		6.6 6.6	.6	4.6 4.8 6.8	4	4	88 87	86	818160	806164	<0.2	1.8
					Bottom	6.6	0.0	216 216	26.1 26.1	26.1	8.1 8.1	8.1	29.0		97.1 97.2		6.7 6.7	.7	12.4 12.4	3	1	87 87				<0.2	1.9
					Surface	1.0	0.3	144	26.1	26.1	8.1	8.1	28.6	28.6	97.8	97.8	6.8		2.4	4		79				<0.2	1.8
IM3	Cloudy	Moderate	13:24	7.9	Middle	1.0 4.0	0.3	144 215	26.0 26.0	26.0	8.1 8.1	8.1	28.6 29.7	20.7	97.7 96.4	96.4	6.7 6.6	.7	2.7 6.9 7.8	3	3	79 86	84	818789	805608	<0.2	2.0
	Oloddy	Moderate	10.24	7.0		4.0 6.9	0.3	215 232	26.0 26.0		8.1 8.1	8.1	29.7 29.4		96.4 97.2	97.3	6.6 6.7 6.	7	7.3	3	+ ~	85 87	0.	0.0700	000000	<0.2	2.0
						6.9 1.0	0.2	234 29	26.0 26.2	26.0	8.1 8.1		29.3		97.4 97.2		6.7 6.7	./	13.8 4.3	6	<u> </u>	89 82				<0.2 <0.2	1.9 2.1
					Surface	1.0	0.2	30 8	26.2	26.2	8.1	8.1	28.9	28.9	97.1 96.1	97.2	6.7 6.6	.7	4.2	6	1	81 85				<0.2	2.0
IM4	Cloudy	Moderate	13:16	7.7	Middle	3.9	0.2	8	26.0	26.0	8.1	8.1	29.6		96.1	96.1	6.6		4.2	6	6	85	84	819721	804592	<0.2	1.9
					Bottom	6.7 6.7	0.2	340 313	26.1 26.1	26.1	8.1 8.1	8.1	29.5 29.3	29.4	96.5 96.6		6.6 6.6	.6	12.9 12.9	6 7	8	87 86				<0.2 <0.2	2.0
						1.0	0.3	207 207	26.1 26.1	26.1	8.1	8.1	28.5	28.5	94.7	94.7	6.5		6.3	6		86 86				<0.2	1.8
IM5	Cloudy	Moderate	13:08	8.1		4.1	0.3	219 220	26.1 26.1	26.1	8.1 8.1	8.1	28.6	28.6	94.3 94.3	04.2	6.5 6.5	.5	12.3 12.3	7	7	89 89	89	820738	804859	<0.2	1.6
					Rottom	7.1	0.4	215	26.1	26.1	8.1	8.1	28.6	20.6	94.8	04.0	6.5	.5	16.8	9	1	91				<0.2	1.4
					Surface	7.1 1.0	0.4	216 279	26.1 26.1	26.1	8.1 8.1	8.1	28.6 28.2	20.2	94.9 93.0	03.0	6.4		16.8 11.1	12		90 79				<0.2 <0.2	1.5 1.8
	0		40.04			1.0 4.0	0.1	287 153	26.1 26.1		8.1 8.1		28.2		93.0 93.3		6.4 6.	.4	8.6	13	٠	78 85		004000	005050	<0.2	1.7
IM6	Cloudy	Moderate	13:01	8.0	Middle	4.0 7.0	0.1	154 226	26.1 26.1	26.1	8.1 8.1	8.1	28.2 28.2	20.2	93.3 93.1	93.3	6.4		8.8 8.1	10 9	11	85 89	84	821060	805850	<0.2 <0.2 <0.2	1.6 1.8
					Bottom	7.0	0.1	226	26.1	26.1	8.1	8.1	28.2	20.2	93.1	93.1	6.4	.4	8.1	9		89				<0.2	1.9
					Surface	1.0	0.2	221 243	26.2 26.2	26.2	8.1 8.1	8.1	27.3 27.3	21.3	90.4	30.4	6.3 6.3 6.	3	4.6 4.8	5 4	1	77 78				<0.2 <0.2	1.8
IM7	Cloudy	Moderate	12:50	8.1		4.1	0.1	212	26.1 26.1	26.1	8.1	8.1	27.8		89.7 89.7		6.2		7.4 7.4 6.0	5 6	5	86 88	85	821349	806831	<0.2	1.7
						7.1 7.1	0.1	220 241	26.1 26.1	26.1	8.1 8.1	8.1	27.6 27.5	27.6	90.3 90.4		6.3 6.3	.3	6.2 5.8	6	1	89 89				<0.2 <0.2	1.6 1.6
					Surface	1.0	0.2	122	26.1	26.1	8.1	8.1	28.5	28.5	95.0	05.0	6.6	F	4.7 4.7	7	1	86				<0.2	1.8
IM8	Cloudy	Moderate	13:28	8.3	Middle	1.0 4.2	0.2	123 76	26.1 26.1	26.1	8.1 8.1	8.1	28.5 28.6	20.0	94.9 94.5	045	6.5 6.5	.5	11.4	6	6	87 89	88	821827	808141	<0.2	1.9 1.8 1.8
	Oloudy	.,,,,,,,,,,	10.20	0.0	Rottom	7.3	0.3	82 100	26.1 26.1	26.1	8.1 8.1	8.1	28.7 28.7	28.7	94.5 95.2	05.3	6.5 6.6 6.	6	15.4	6	1	88 89	~	22.02.	300111	<0.2	1.7
DA: Denth-Aver						7.3	0.3	100	26.1	26.1	8.1	8.1	28.7	28.7	95.4		6.6	σ.	15.4	5		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 boided and underlined

Water Qua				1	27 October 18	during Mid-Ebb Ti	de					1	. I DO	Saturation	Dissolve	d l		Suspende	ed Solids	Total Al	lkalinity			Chrom	nium T	
Monitoring	Weather	Sea	Sampling	Water	Sampling De	Speed	Current	Water Te	emperature (°C)	pН	Salinity (ppt	,	(%)	Oxyger	i urbidit	/(NTU)	(mg		(pp	m)	Coordinate HK Grid	Coordinate HK Grid	(µg/	/L)	Nickel (µg/L)
Station	Condition	Condition	Time	Depth (m)		(m/s)	Direction	Value	Average		Average			e Average)A Value	DA	Value	DA	Value	DA	(Northing)	(Easting)			Value DA
					Surface	1.0 0.5 1.0 0.5	102 106	26.2 26.2	26.2	8.1	8.1	29.1	96.9	97.1	6.7	4.1	-	7	ŀ	86 85				<0.2		1.6
IM9	Cloudy	Moderate	13:35	7.6	Middle	3.8 0.5 3.8 0.5	80 80	26.0 26.0	26.0	8.1 8.1	8.1	29.6	96.1		6.6	4.6	7.5	7	7	88 87	88	822070	808802	<0.2		1.5 1.6
					Bottom	6.6 0.4	92	26.0	26.0	8.1	8.1	29.6	96.4	96.5	6.6	13.7		6		89				<0.2		1.6
						6.6 0.4 1.0 0.6	100 90	26.0 26.0		8.1 8.1		29.6	96.)	6.6	13.7		6 5		91 85				<0.2		1.6
					Surface	1.0 0.7 3.9 0.5	94 88	26.0 26.0	26.0	8.1 8.1	8.1	28.8	97.	,	6.7	3.0 5.1		5 5	Ī	87 88				<0.2		1.6
IM10	Cloudy	Moderate	13:46	7.8	Middle	3.9 0.5	89	26.0	26.0	8.1	8.1	29.5	96.7	96.7	6.7	5.0	6.0	6	6	91	89	822378	809787	<0.2	<0.2	1.6
					Bottom	6.8 0.3 6.8 0.3	99 105	26.0 26.0	26.0	8.1	8.1	29.7	96.9		6.6	9.9		8		89 91				<0.2		1.5
					Surface	1.0 0.6 1.0 0.6	103 105	26.1 26.1	26.1	8.1 8.1	8.1	28.8 28.9	06.9	06.7	6.7	3.6		5		87 83				<0.2		1.5
IM11	Cloudy	Moderate	13:53	7.7	Middle	3.9 0.5	95	26.0	26.0	8.1	8.1	29.2	95.5	05.5	- 6.7	6.2	5.6	4	4	89	88	822039	811459	< 0.2	-0.2	1.6
IIVIII	Cioddy	Wioderate	13.33	7.7		3.9 0.6 6.7 0.5	98 109	26.0 26.0		8.1 8.1		29.2	95.5)	6.6	6.2	- 5.0	3	,	88 91		022000	011433	<0.2	L	1.4
					Bottom	6.7 0.5	110	26.0	26.0	8.1	8.1	29.2	96.3	90.2	6.6	7.1		3		89				<0.2		1.5
					Surface	1.0 0.5 1.0 0.6	118 124	26.2 26.2	26.2	8.1 8.1	8.1	28.7 28.7	94.	94.7	6.5	5.4		3		87 85				<0.2		1.5
IM12	Cloudy	Moderate	13:59	8.2	Middle	4.1 0.5 4.1 0.6	93 93	26.1 26.1	26.1	8.1 8.1	8.1	28.7	94.6		6.5	6.5	6.4	3	4	88 88	88	821460	812040	<0.2		1.4 1.3
					Bottom	7.2 0.2	108	26.1	26.1	8.1	8.1	28.7	94.6	046	6.5	7.8		4		91				<0.2		1.3
					Surface	7.2 0.3 1.0 -	108	26.1 26.1	26.1	8.1 8.1	8.1	28.5 28.5	100.	3 100.3	6.5	7.0 1.5		5 4		91				<0.2	-	1.4
						1.0 - 3.6 -		26.1 25.9		8.1 8.2		28.5	100.	3	6.9	1.5		3						-	-	-
SR1A	Cloudy	Moderate	14:24	7.2	Middle	3.6 -	-	25.9	25.9	8.2	8.2	29.8	99.2	99.3	6.8	2.5	3.3	4	4	-	-	820074	812585	-		-
					Bottom	6.2 -	-	25.9 25.9	25.9	8.2	8.2	30.4	98.9	99.0	6.8	5.8 5.8		4		-				-		-
					Surface	1.0 0.5 1.0 0.6	90 95	26.2 26.2	26.2	8.1 8.1	8.1	28.8 28.8	98.9		6.8	3.0		3		83 84				<0.2		1.4
SR2	Cloudy	Moderate	14:24	4.3	Middle			-		-			-	-	- 6	.8 -	2.9	-	3	-	87	821480	814184	-	<0.2	- 1.4
	,				Bottom	3.3 0.3	81	26.2	26.2	8.1	8.1	28.8	99.	99.2	6.8	2.9		3	ļ	90				<0.2		1.4
						3.3 0.3 1.0 0.4	85 117	26.2 26.1		8.1 8.1		28.8	99.2	!	6.8	3.0		3 12		89				<0.2	\rightarrow	1.4
					Surface	1.0 0.5	124	26.1	26.1	8.1	8.1	28.2	93.5	93.5	e e	10.1		13		-				-		-
SR3	Cloudy	Moderate	13:22	8.7	Middle	4.4 0.4 4.4 0.4	197 199	26.1 26.1	26.1	8.1 8.1	8.1	28.2 28.2	93.8		-	9.0	9.4	7	9	-	-	822127	807573	-		-
					Bottom	7.7 0.3 7.7 0.3	184 186	26.1 26.1	26.1	8.1	8.1	28.2 28.2	94.	94.2	6.5	9.0		6		-				-	-	-
					Surface	1.0 0.3	88	26.2	26.2	8.1	8.1	28.8	98.7	08.7	6.8	3.0		4		-				-		-
SR4A	Cloudy	Moderate	14:25	9.2	Middle	1.0 0.3 4.6 0.3	93 95	26.2 26.1	26.1	8.1 8.1	8.1	28.8	98.0	00.2	6.8	i.8 3.1 4.3	3.8	4		-		817196	807800	-	-	-
SN4A	Cioddy	Woderate	14.25	9.2		4.6 0.3 8.2 0.3	103 67	26.1 26.1		8.1 8.1		28.9	96.	:	6.8	4.4	3.0	3	-			617190	807800			- '
					Bottom	8.2 0.3	70	26.1	26.1	8.1	8.1	28.9	98.6	90.0	6.8	3.9		3		-						-
					Surface	1.0 0.1 1.0 0.1	353 325	26.3 26.3	26.3	8.1 8.1	8.1	29.0 29.0	94.6		6.5	3.3		5 4		-				-	Ŀ	-
SR5A	Cloudy	Moderate	14:39	4.3	Middle			-	-	-	-		-		`	-	3.5	-	4	-	-	816579	810700	-		-
					Bottom	3.3 0.1	348	26.3	26.3	8.1	8.1	29.1	94.3		6.5	3.5		3		-				-	ļ	-
					Surface	3.3 0.1 1.0 0.0	356 33	26.3 26.4	26.4	8.1 8.1	8.1	29.1 29.	94.3		6.5	3.6		2		-					\rightarrow	-
						1.0 0.0	34	26.4	20.4	8.1	0.1	28.5	97.4	97.4	6.7	1.8		2						-	F	-
SR6	Cloudy	Moderate	15:02	4.6	Middle		-	-	-	-	-	- 1	-	-	-	-	1.8	-	3		-	817881	814656	-	- [- 1
					Bottom	3.6 0.0 3.6 0.0	33 35	26.5 26.5	26.5	8.1	8.1	28.5	97.6		6.7	1.9		3	ł	-				-	-	-
					Surface	1.0 0.9 1.0 0.9	77 83	26.5 26.5	26.5	8.1 8.1	8.1	28.5 28.5	97.6		6.7	2.4		4		-					-	-
SR7	Cloudy	Moderate	15:12	16.5	Middle	8.3 0.5	70	26.3	26.3	8.1	8.1	28.6	96.7	06.7	6.6	9.0	6.7	4	4	÷	_	823649	823737		. [-
						8.3 0.5 15.5 0.4	73 62	26.3 26.3		8.1 8.1		20.0	96.		6.6	9.0	1	4	•	-				-	ŀ	-
					Bottom	15.5 0.4 1.0 -	66	26.3 26.0	26.3	8.1 8.1	8.1	28.6	97.3	97.2	6.7	i.7 8.8 1.7		3 4		-				-	_	=
					Surface	1.0 -	-	26.0	26.0	8.1	8.1	28.9 28.9	99.9		6.0	1.7	1	3	İ	-					ŀ	-
SR8	Cloudy	Moderate	14:10	4.6	Middle		-	-	-	-	-	-	-	-	H `		1.9	-	4	-	-	820483	811651	-		-
					Bottom	3.6 -	-	25.9 25.9	25.9	8.1 8.1	8.1	29.4 29.4 29.4	99.6		6.9	2.0	1	4	İ	-				-	F	-
OA: Depth-Aver	1		1			3.6 -		25.9		8.1		29.4	99.6)	6.9	2.0	1	4		-	ш		l	لنل		

DA: Depth-Averaged
Caim: Small or no wave; Moderate: Between caim and rough; Rough: White capped or rougher
Value exceeding Action Level is underlined: Value exceeding Limit Level is bolded and underlined
Note: Access to SR8 was blocked by barge and its wires. The monitoring at SR8 was slightly shifted to the closest safe and accessible location temporarily.

Water Qualit	Weather				27 October 18	during Mid-l																					
		Sea	Sampling	Water			Current		Water Te	mperature (°C)		рН	Salinit	ty (ppt)		turation	Dissolved	Π.	Turbidity(NTU)	Suspende				Coordinate	Coordinate	Chromium	Nickel (µg/L)
Monitoring Station	Condition	Condition	Time	Depth (m)	Sampling Depti	h (m)	Speed (m/s)	Current Direction	Value	Average	Value	Average	1	Average		%) Average	Oxygen Value D/	-	Value DA	(mg Value	DA	(ppm Value)	HK Grid (Northing)	HK Grid (Easting)	(μg/L) Value DA	+
				.,,	Surface	1.0	0.5	43 45	25.9 25.9	25.9	8.1	8.1	28.8	28.8	95.5 95.6	95.6	6.6	Ŧ	5.2 5.7	4 4	-	80				<0.2	1.0
C1	Cloudy	Moderate	08:26	8.7	Middle	4.4	0.5	52	25.9	25.9	8.1	8.1	29.6	29.7	96.0	96.0	6.6	6	8.7	6	5	83	84	815599	804229	<0.2	1.2
	,				Bottom	4.4 7.7	0.5 0.6	56 31	25.9 25.9	25.9	8.1 8.1	8.1	29.8 30.6	30.5	96.0 95.6	95.6	6.6 6.5 6.5	5	8.7 10.6	5 6	İ	85 88				<0.2 <0.2	0.7
						7.7 1.0	0.6	31 54	25.9 26.2		8.1 8.1		30.4 27.3		95.6 90.6		6.5	,	10.6 4.6	6 8		89 82				<0.2 <0.2	0.6 1.5
					Surface	1.0 5.9	0.4	54 30	26.2 26.1	26.2	8.1 8.1	8.1	27.3 27.8	27.3	90.5 90.3	90.6	6.3 6.3	3	4.8	9	1	81 87				<0.2	1.2
C2	Cloudy	Moderate	09:36	11.8	Middle	5.9 10.8	0.3	31 308	26.1	26.1	8.1	8.1	27.8	27.8	90.4	90.4	6.3	_	7.0 7.2 7.0	7	7	86 89	86	825691	806929	<0.2 <0.2 <0.2	2.0 1.8
					Bottom	10.8 1.0	0.4	338 244	26.1	26.1	8.1	8.1	27.8 29.1	27.8	91.4 92.2	91.3	6.3	3 -	6.7 2.3	6		91				<0.2	1.9
					Surface	1.0	0.7	268 249	26.1 26.1	26.1	8.0	8.0	29.1	29.1	92.3 92.1	92.3	6.4	3	2.3	4		84				<0.2	1.9
C3	Cloudy	Moderate	07:43	12.2	Middle	6.1	0.6	258	26.0	26.1	8.0	8.0	29.2	29.2	92.2	92.2	6.3	_	2.7	4 3	4	85 89	86	822106	817796	<0.2	1.8 1.9
					Bottom	11.2 11.2	0.4	273 290	26.0 26.0	26.0	8.0	8.0	29.2	29.2	92.7 93.1	92.9	6.4 6.4	4	2.7	4		89				<0.2 <0.2	1.9
					Surface	1.0	0.1 0.1	3	26.0 26.0	26.0	8.1 8.1	8.1	28.7	28.7	94.9 94.9	94.9	6.6	6	5.0 5.1	7	1	86 87				<0.2 <0.2	1.2
IM1	Cloudy	Moderate	08:43	5.4	Middle	-		-	-	-	-	-	-	-	-	-	-	_	5.3	-	8	-	88	817954	807108	- <0.2	-
					Bottom	4.4 4.4	0.0	17 18	26.0 26.0	26.0	8.1	8.1	28.7	28.7	94.9 94.9	94.9	6.6 6.0	6 -	5.7 5.3	7	1	88 89				<0.2	1.2
					Surface	1.0	0.5	34 36	26.0 26.0	26.0	8.1	8.1	28.4	28.4	95.8 95.7	95.8	6.6 6.6	_	3.2	4		85 86				<0.2	1.4
IM2	Cloudy	Moderate	08:52	7.8	Middle	3.9 3.9	0.4 0.5	13 13	26.0 26.0	26.0	8.1 8.1	8.1	29.0 29.0	29.0	95.4 95.5	95.5	6.6	6	3.9 3.4 6.2	6 5	6	88 87	88	818181	806180	<0.2	1.2
					Bottom	6.8 6.8	0.4	1	26.0 26.0	26.0	8.1 8.1	8.1	28.8	28.8	95.7 95.8	95.8	6.6	6 –	11.7 11.7	7		90 89				<0.2 <0.2	1.3
					Surface	1.0	0.4	21 21	26.1 26.1	26.1	8.1 8.1	8.1	28.4	28.5	94.9 94.8	94.9	6.6 6.5	F	3.8	5 6		86 88				<0.2 <0.2	1.3
IM3	Cloudy	Moderate	08:58	7.9	Middle	4.0	0.4	11	26.1 26.1	26.1	8.1	8.1	29.0	29.0	94.5	94.5	6.5 6.5	5	7.4 7.1	4 5	5	89 87	88	818764	805572	<0.2	13
					Bottom	6.9	0.4	13	26.1	26.1	8.1	8.1	28.8	28.7	95.0 95.1	95.1	6.6	6 -	10.1	4	1	88				<0.2	1.2
					Surface	1.0	0.5	12	26.1 26.1	26.1	8.1	8.1	28.3	28.3	94.1	94.0	6.5	Ť	6.0	4		85 85				<0.2 <0.2	1.3
IM4	Cloudy	Moderate	09:06	7.8	Middle	3.9	0.4	354 326	26.1	26.1	8.1	8.1	28.7	28.7	93.5 93.5	93.5	6.4	5	10.1 9.6	5	6	86 84	87	819735	804617	<0.2	1.4
					Bottom	6.8	0.4	12	26.1 26.1	26.1	8.1	8.1	28.6	28.5	94.1 94.1	94.1	6.5 6.5	5 -	12.6 12.6	8	1	90				<0.2	1.4
					Surface	1.0	0.4	37	26.0	26.0	8.1	8.1	28.4	28.4	94.2	94.2	6.5	t	13.3	16		87				<0.2	1.5
IM5	Cloudy	Moderate	09:13	7.7	Middle	1.0 3.9	0.4	39 20	26.0 26.0	26.0	8.1 8.1	8.1	28.4	28.4	94.1 93.9	93.9	6.5 6.5	5 –	13.1	18 14	15	86 91	89	820720	804855	<0.2	1.4
	,				Bottom	3.9 6.7	0.3	20 358	26.0 26.0	26.0	8.1 8.1	8.1	28.4 28.4	28.4	93.9 94.1	94.1	6.5 6.5 6.5	5 -	10.7	14 14	İ	90 90				<0.2 <0.2	1.4
					Surface	6.7 1.0	0.4 0.1	329 73	26.0 26.2	26.2	8.1 8.1	8.1	28.4 27.9	27.9	94.1 92.5	92.5	6.4		11.7 9.0	13 11		91 84				<0.2 <0.2	1.4
IM6	Cloudy	Moderate	09:20	7.8	Middle	1.0 3.9	0.1	74	26.1 26.1	26.1	8.1 8.1	8.1	27.9 28.1	28.1	92.5 92.3	92.3	6.4	4	9.0	12 11	12	85 89	88	821053	805807	<0.2	1.3
livio	Cloudy	Woderate	09.20	7.0		3.9 6.8	0.1	3 46	26.1 26.1	26.1	8.1 8.1	8.1	28.1 28.1		92.3 92.3	92.3	6.4 6.4 6.4	_	13.9	13 11	12	90 89	00	021000	803807	<0.2	1.3
					Bottom	6.8 1.0	0.1	49 26	26.1 26.2		8.1 8.1		28.1	28.1	92.3 90.3		6.4	4	14.0 4.6	12		90 83				<0.2 <0.2	1.2
					Surface	1.0 4.1	0.2	27 26	26.2 26.1	26.2	8.1 8.1	8.1	27.3 27.5	27.3	90.2 90.0	90.3	6.3 6.2	3	4.7	5 4	1	84 86				<0.2	1.1
IM7	Cloudy	Moderate	09:27	8.1	Middle	4.1	0.1	26 66	26.1	26.1	8.1	8.1	27.5 27.5	27.5	90.0	90.0	6.2	#	5.8 5.7	4 5	4	87 89	87	821325	806852	<0.2 <0.2 <0.2	1.2
					Bottom	7.1	0.2	70 102	26.2 26.0	26.2	8.1	8.1	27.4	27.5	90.5	90.5	6.3	3	5.7 5.2 14.8	3 22		90				<0.2 <0.2	1.2
					Surface	1.0	0.2	103	26.0	26.0	8.1	8.1	28.4	28.4	94.1	94.1	6.5 6.5 6.5	5	14.9	21	‡	86 85				<0.2	1.9
IM8	Cloudy	Moderate	08:59	7.8	Middle	3.9	0.3	78 79	26.0 26.0	26.0	8.1	8.1	28.4	28.4	93.8	93.8	6.5	_	11.8	19	20	90	89	821820	808144	<0.2	2.0
DA: Depth-Average					Bottom	6.8	0.3	62 67	26.0 26.0	26.0	8.1	8.1	28.4	28.4	94.0 94.1	94.1	6.5 6.5	5 –	13.9 13.9	17 18	1	90 91				<0.2 <0.2	1.7

DA: Depth-Averaged
Caim: 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

Water Qua Water Qua		oring Resu	ılts on		27 October 18	during Mid-F	Flood Ti	ide																			
Monitoring	Weather	Sea	Sampling	Water			Current Speed	Current	Water Te	mperature (°C)) [рН	Salinity (ppt)	DO S	Saturation	Dissolve Oxygen	d Turbidity	(NTU)	Suspended (mg/		Total All		Coordinate	Coordinate	Chrom (µg/		Nickel (µg/L)
Station	Condition	Condition	Time	Depth (m)	Sampling De	pth (m)	(m/s)	Direction	Value	Average	Value	Average	Value Average	Value	Average	Value D	A Value	DA	Value	DA	Value	DA	HK Grid (Northing)	HK Grid (Easting)	Value	DA	Value DA
					Surface	1.0	0.1	66 69	26.1 26.1	26.1	8.1	8.1	28.5 28.5 28.5	93.8	93.8	6.5	9.1		5		85 ee				<0.2		1.8
IM9	Cloudy	Moderate	08:52	7.4	Middle	3.7	0.2	54	26.1	26.1	8.1	8.1	28.7	93.7	93.6	6.5 6.5	.5 9.5	12.2	5	5	85 89	88	822114	808813	<0.2	<0.2	1.6
IIVIS	Cioddy	Wioderate	00.52	7.4		3.7 6.4	0.3	55 37	26.1 26.1		8.1 8.1		28.7	93.6 93.8		6.5	14.4	12.2	5 5	3	91 88	00	022114	000013	<0.2	NO.2	1.8
					Bottom	6.4	0.2	37	26.1	26.1	8.1	8.1	28.7	93.9	93.9	6.5	.5 13.0		6		88				<0.2		1.7
					Surface	1.0	0.2	59 64	26.1 26.1	26.1	8.1	8.1	28.3 28.4	94.9	94.9	6.6	7.0		5 6		85 86				<0.2	, ,	2.0
IM10	Cloudy	Moderate	08:44	7.7	Middle	3.9 3.9	0.3	8	26.0	26.0	8.1	8.1	29.0	94.5 94.5	94.5	- 6	13.9	10.8	5	5	90	88	822383	809781	< 0.2	<0.2	1.7 1.8
					Bottom	6.7	0.4	300	26.0 26.0	26.0	8.1 8.1	8.1	29.0 29.0	94.8	94.9	6.5	13.8		5		90 88				<0.2		1.7
						6.7 1.0	0.4	319 280	26.0 26.0		8.1 8.1		29.1	94.9 95.9		6.5	.5 11.3 3.6		5 5		87 85				<0.2 <0.2		1.8
					Surface	1.0	0.4	291	26.0	26.0	8.1	8.1	28.5	95.8		6.6	3.6		4		87				< 0.2	.	1.8
IM11	Cloudy	Moderate	08:36	7.9	Middle	4.0	0.2	271 275	26.0 26.0	26.0	8.1 8.1	8.1	28.9 28.9	95.4 95.4	95.4	6.6	3.7	6.0	3	4	91 89	88	822033	811467	<0.2	<0.2	1.6 1.7
					Bottom	6.9	0.1	234	26.0	26.0	8.1	8.1	29.1 29.1	95.5 95.6	95.6	6.6	.6 10.7		4		88				< 0.2	, [1.6
					Surface	6.9 1.0	0.1	244 259	26.0 26.0	26.0	8.1	8.1	28.7	94.8	94.8	6.6	5.3		8		88 90				<0.2	_	1.7
						1.0 4.4	0.3	275 266	26.0 26.0		8.1 8.1		20.7	94.8 94.9		6.5 6.6	.6 5.3		8		90 89				<0.2	. [1.7
IM12	Cloudy	Moderate	08:29	8.8	Middle	4.4	0.2	267	26.0	26.0	8.1	8.1	28.7	95.0	95.0	6.6	5.5	5.4	6	7	89	89	821450	812067	< 0.2	<0.2	1.8
					Bottom	7.8 7.8	0.2	281 301	26.0 25.9	26.0	8.1 8.1	8.1	28.7 28.7	95.7 95.7	95.7	6.6	.6 5.3		6		88 88				<0.2	, ,	1.7
					Surface	1.0			25.9 25.9	25.9	8.1	8.1	28.8 28.8	94.1	94.0	6.5	5.9		6		-				-		-
SR1A	Cloudy	Moderate	08:16	7.3	Middle	3.7	-	-	26.0	26.0	8.1	8.1	28.8	93.9	93.3	6.5	.5 7.1	7.0	6	7	-		820073	812583			-
SKIA	Cioddy	Woderate	08.10	7.3	Wildle	3.7 6.3			26.0 26.0		8.1 8.1		28.9	93.3 93.9		6.5	7.6 7.8	7.0	6 7	,	-	Ť	020073	012303	-		- '
					Bottom	6.3	-		26.0	26.0	8.1	8.1	28.9	94.1	94.0	6.5	.5 7.7		8						-		-
					Surface	1.0	0.4	300 308	25.9 25.9	25.9	8.1 8.1	8.1	28.7	95.1 95.2	95.2	6.6	6.3		7		83 82				<0.2		1.6
SR2	Cloudy	Moderate	08:05	4.3	Middle	-		-		-	-			-		- 6	.6	7.5	-	7	-	85	821477	814188	-	<0.2	- 1.7
					Bottom	3.3	0.2	320	25.8	25.8	8.1	8.1	28.8 28.8	95.6	95.5	6.6	6 8.8		8		87				<0.2		1.6
						3.3	0.2	333 80	25.8 26.1		8.1 8.1		28.9	95.4 92.6		6.6	8.7		7 14		87				<0.2		1.8
					Surface	1.0	0.2	84	26.1	26.1	8.1	8.1	28.0	92.6	92.6	6.4	11.3		13							,	-
SR3	Cloudy	Moderate	09:10	8.3	Middle	4.2 4.2	0.4	66 71	26.1 26.1	26.1	8.1	8.1	28.1 28.1	92.6 92.6	92.6	6.4	12.2	14.2	13 13	17	-	-	822129	807557	-		-
					Bottom	7.3 7.3	0.4	59 59	26.1 26.1	26.1	8.1 8.1	8.1	28.1 28.1	93.2 93.3	93.3	6.4	.5 18.5		25 25		-				-	. [-
					Surface	1.0	0.4	86	25.9	25.9	8.1	8.1	28.8	93.9	93.9	6.5	7.5		7		-				-		
						1.0 4.5	0.5	90 79	25.9 26.0		8.1 8.1		28.8	93.8 93.2		6.5	.5 7.7		9 11						-	,	-
SR4A	Cloudy	Moderate	08:04	8.9	Middle	4.5	0.4	80	26.0	26.0	8.1	8.1	28.8	93.1	93.2	-	8.1	7.9	10	10	-	-	817204	807813	-		- '
					Bottom	7.9 7.9	0.3	65 66	26.0 26.0	26.0	8.1	8.1	28.9 28.9	93.4 93.5	93.5	6.4	.5 8.0		12 12		-				-		-
					Surface	1.0	0.1	60	26.1 26.1	26.1	8.1	8.1	29.1 29.1	92.2 92.2	92.2	6.3	2.2		3		-				-		-
SR5A	Cloudy	Moderate	07:46	4.6	Middle	-		-			-			-		- 0	.3	2.3	-	4	-		816601	810709		1	-
	,					3.6	0.1	35	26.1		8.1		29.2	92.0	00.4	6.3	2.3		5		-				-		-
					Bottom	3.6	0.1	38	26.1	26.1	8.0	8.0	29.2 29.2	92.1	92.1	6.3	2.3		5		-						-
					Surface	1.0	0.1	241 248	26.1 26.1	26.1	7.9 7.9	7.9	28.5 28.5	91.6 91.6	91.6	6.3	3.7		4		-						-
SR6	Cloudy	Moderate	07:22	4.1	Middle	-		-	-	-	-	-	-	-	-	- 0		3.6	-	4	-	-	817921	814677	-	[-
					Bottom	3.1	0.1	238	26.1	26.1	7.9	7.9	28.5	91.8	91.9	6.3	.3 3.7		4		-						
						3.1 1.0	0.1	251 170	26.1 26.1		7.9 7.9		28.5	91.9 92.0		6.3	3.6		4 5		-				-	_	-
					Surface	1.0	0.1	176	26.1	26.1	7.9	7.9	28.4	92.0	92.0	6.3	3.4		4 5		-				-	,	-
SR7	Cloudy	Moderate	07:11	16.2	Middle	8.1	0.2	33 33	26.1 26.1	26.1	7.8 7.8	7.8	28.4 28.4	92.1 92.1	92.1	6.4	4.6	6.2	5	5	-	-	823627	823730	-		-
					Bottom	15.2 15.2	0.2	164 175	26.1 26.1	26.1	7.8	7.8	28.5 28.5	92.2 92.4	92.3	6.4 6	4 10.8		6 7		-					. [
					Surface	1.0	-	-	25.9	25.9	8.1	8.1	28.7	95.7	95.7	6.6	3.8		6		-						
000	CI- :	Mark	00.00	4.0		1.0	-	-	25.9		8.1		28.8	95.7		6.6	.6 4.2		6		-		000507	044070	-	, }	-
SR8	Cloudy	Moderate	08:22	4.6	Middle	3.6	-	-	25.9		8.1	-	30.0	97.0	1	6.7	- 8.1	6.0	- 6	ь	-	-	820507	811678	-		- 1
					Bottom	3.6	- :	-	25.9	25.9	8.1	8.1	30.2 30.1	97.0	97.0	6.7	.7 8.0		6								<u> </u>
A. Donth-Aver																											

DA: Depth-Averaged

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

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

Note: Access to SR8 was blocked by barge and its wires. The monitoring at SR8 was slightly shifted to the closest safe and accessible location temporarily.

Water Qua			lts on		30 October 18	during Mid-l	Ebb Tide	е																	
Monitoring	Weather	Sea	Sampling	Water			Current Speed	Current	Water Temperature	re (°C)	pН	Salii	nity (ppt)	DO S	aturation	Dissolv		ity(NTU)		led Solids a/L)	Total Alkalinity (ppm)	Coordinate	Coordinate	Chromium (ug/L)	m Nickel (µg/L)
Station	Condition	Condition	Time	Depth (m)	Sampling De	pth (m)	(m/s)	Direction	Value Avera	age	Value Averag	e Value	Average	Value	Average	T T	DA Value	DA	Value	DA	Value DA	HK Grid (Northing)	HK Grid (Easting)	Value DA	A Value DA
					Surface	1.0	0.2	64 66	25.3 25.3 25.3	3	8.2 8.2 8.2	28.8	28.8	98.0 97.9	98.0	6.8	3.1		5		85 86			<0.2	1.1
C1	Sunny	Rough	16:35	8.6	Middle	4.3	0.2	76	25.4	4	8.2	31.1	31.1	97.5	97.5	6.7	6.9	7.1	5 6	6	89 89	815618	804252	<0.2	1.2
0.	ou,	rtougn	10.00	0.0		4.3 7.6	0.2	81 52	25.4		8.2	31.1 31.4		97.5 96.6		6.7	7.0		5 6	-	92	0.00.0	001202	<0.2	1.3
					Bottom	7.6	0.2	53	25.4	4	8.2	31.3	31.4	96.5	96.6	6.6	11.2		6		92			<0.2	1.1
					Surface	1.0	0.3	10 10	25.6 25.6	6	8.2 8.2 8.2	27.6 27.6	27.6	94.6 94.6	94.6	6.6	6.6		6 5		85 85			<0.2	1.5
C2	Fine	Moderate	15:26	11.2	Middle	5.6 5.6	0.3	24 25	25.6 25.6 25.6	6	8.2 8.2	27.6 28.0	27.8	94.6 94.3	94.5	6.6	4.7	4.4	5	5	88 89	825674	806962	<0.2 <0.2	0.2 1.7 1.7
					Bottom	10.2 10.2	0.3	12 12	25.6 25.6 25.6	6	8.2 8.2	28.0 28.0	28.0	94.3 95.0	94.7	6.6	6.6 5.1		3		93 93			<0.2	1.6
					Surface	1.0 1.0	0.1	2	25.9 25.9 25.9	9	8.2 8.2	31.0 31.0	31.0	91.3 91.3	91.3	6.2	5.5		5 5		84 85			<0.2	1.7
C3	Fine	Moderate	16:20	9.4	Middle	4.7	0.2	285	25.9	9	8.2	31.2	31.2	91.4	91.4	6.2	6.3	6.7	4	4	90 80	822121	817826	<0.2	1.6
					Bottom	4.7 8.4	0.2	294 288	25.9		8.2	31.2	31.3	91.4 92.8	92.9	6.2	6.4		3		93			<0.2	1.6
						8.4 1.0	0.2	313 36	25.9		8.2	31.3		93.0 96.3		6.3	8.5		6		94 85			<0.2	1.6
					Surface	1.0	0.2	36	25.3 25.3	3	8.2	28.7	28.7	96.3	96.3	6.7	6.7		7		85			<0.2	1.2
IM1	Sunny	Moderate	16:14	5.1	Middle	-	-		-					-	-	-	-	5.8	-	7	- 87	817965	807108	- <0.	-
					Bottom	4.1 4.1	0.1	328 345	25.3 25.3	3	8.2 8.2	29.4 29.4	29.4	95.6 95.6	95.6	6.7	6.7 7.9		7		88 88			<0.2	1.3
					Surface	1.0	0.3	46 49	25.3 25.3	3	8.2 8.2	29.0 29.0	29.0	94.8	94.8	6.6	3.5	-	8		85 86			<0.2	1.1
IM2	Sunny	Moderate	16:07	7.6	Middle	3.8 3.8	0.2	57 62	25.1 25.1 25.1	1	8.2 8.2	29.4 29.4	29.4	92.9 93.0	93.0	6.5 6.5	6.6	5.5	7	6	88 88	818152	806163	<0.2	1.1
					Bottom	6.6	0.2	39	25.2	2	8.2 8.2 8.2	29.6	29.6	93.8	93.8	C E	6.5		3		91			<0.2	1.1
					Surface	6.6 1.0	0.2	39 27	25.2 25.3 25.3	3	8.2	28.3	28.4	94.8	94.6	6.6	3.4		3		85			<0.2 <0.2	1.1
			40.00			1.0 3.9	0.3	28	25.3		8.2	28.5 29.4		94.4 92.1		6.6	6.5 7.2	-	3		85	040704	005004	<0.2	1.2
IM3	Sunny	Moderate	16:00	7.7	Middle	3.9 6.7	0.3	1 355	25.2 25.2 25.1 25.1		8.2 8.2	29.5 29.6	29.4	92.0 92.2	92.1	6.4	7.5	7.1	4 5	4	88 91	818784	805604	<0.2 <0.2 <0.2	1.1
					Bottom	6.7	0.2	327	25.1	1	8.2	29.6	29.6	92.5	92.4	6.5	10.1		4 7		91			<0.2	1.2
					Surface	1.0	0.4 0.5	359 330	25.3 25.3	3	8.2 8.2	28.6 28.6	28.6	95.6 95.6	95.6	6.7	3.3 3.3		7		85 85			<0.2	1.1
IM4	Sunny	Moderate	15:51	7.9	Middle	4.0	0.3	16 16	25.1 25.1 25.1	1	8.2 8.2	29.6 29.6	29.6	91.5 91.5	91.5	6.4	12.8	10.5	5 5	5	88 88	819722	804607	<0.2	0.2 1.1 1.1
					Bottom	6.9 6.9	0.3	356 357	25.1 25.1 25.1	1	8.2 8.2 8.2	29.6 29.6	29.6	91.9 92.0	92.0	6.4	6.4 14.7		4		91 91			<0.2	1.1
					Surface	1.0	0.4	19 20	25.2 25.2 25.2	2	8.2 8.2	28.6 28.6	28.6	93.0 92.9	93.0	6.5 6.5	5.3		9		85 85			<0.2	1.2
IM5	Sunny	Moderate	15:42	7.3	Middle	3.7	0.2	337	25.2	2	8.2	28.9	28.9	92.0	92.0	6.4	9.0	9.1	7	8	88 00	820714	804848	<0.2	1.3
					Bottom	3.7 6.3	0.2	347 21	25.2		8.2 8.1 8.1	28.9 29.1	29.1	92.0 92.0	92.1	6.4	9.5 6.4 12.0		6		91			<0.2	1.3
						6.3 1.0	0.5	21 89	25.1		8.1	29.0 28.3		92.2 90.4		6.4	12.8 4.6		7		91 84			<0.2 <0.2	1.2
					Surface	1.0	0.2	95 26	25.3		8.2	28.3 28.5	28.3	90.4 89.7	90.4	6.2	6.3 4.8		10		84			<0.2	1.3
IM6	Sunny	Moderate	15:34	7.2	Middle	3.6	0.2	27	25.3	3	8.2	28.5	28.5	89.6	89.7	6.3	5.7	5.7	8	8	87	821040	805850	<0.2	1.6
					Bottom	6.2	0.1	11	25.2 25.2	2	8.2 8.2	28.7	28.7	89.1 89.2	89.2	6.2	6.2		6 7		90			<0.2	1.6
					Surface	1.0	0.1	201 210	25.5 25.5	5	8.1 8.1	27.6 27.7	27.6	90.0	90.1	6.3	3.1		6		83 83			<0.2	1.6
IM7	Sunny	Moderate	15:26	8.7	Middle	4.4	0.1	257 273	25.2 25.2 25.2	2	8.2 8.2	28.8 28.8	28.8	89.9 89.9	89.9	6.3	6.3 5.0	6.3	7	7	87 87	821335	806811	<0.2	1.6
					Bottom	7.7	0.2	244	25.2	2	8.2	28.9	28.9	89.5	89.5	6.3	6.2 10.7		8		90			<0.2	1.6
-					Surface	7.7 1.0	0.2	262 67	25.6		8.2	28.9 28.3	28.3	89.5 99.1	99.2	6.9	7.1		8 6		90 84			<0.2 <0.2	1.6 1.6
						1.0	0.2	67 65	25.6		8.2	28.4 28.7		99.2 99.2		6.9 6.9	6.9 7.3		6	1	85 90			<0.2	1.5
IM8	Fine	Moderate	15:55	7.5	Middle	3.8	0.4	69 69	25.5		8.3	28.8	28.8	99.2	99.2	6.9	8.5	8.6	3	4	90 89	821823	808136	<0.2 <0.2 <0.2	0.2 1.6 1.7 1.6
					Bottom	6.5 6.5	0.3	69 70	25.3 25.3	3	8.3 8.3	29.7 29.7	29.7	98.8 98.8	98.8	6.9	6.9 10.1		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 boiled and underlined

Water Qual			lts on		30 October 18	during Mid-l	Ebb Tid	е																		
Monitoring	Weather	Sea	Sampling	Water			Current Speed	Current	Water To	emperature (°C)	pН	5	Salinity (p	pt) DO	Saturation (%)	Dissolved Oxygen	Turbidity	NTU)	Suspended (mg/l)	Solids	Total Ali (ppi		Coordinate	Coordinate	Chromium (µg/L)	Nickel (µg/L)
Station	Condition	Condition	Time	Depth (m)	Sampling Dep	oth (m)	(m/s)	Direction	Value	Average	Value Av	verage Va	lue Ave	erage Value	17-7		Value	DA	(DA	Value	DA	HK Grid (Northing)	HK Grid (Easting)	Value DA	Value DA
				,	Surface	1.0	0.2	135	25.7	25.7	8.2	0.2	1.3	99.0	00.1	6.9	5.4		5		85				<0.2	1.6
						1.0 3.2	0.2	142 92	25.7 25.7		0.2	20		99.1		6.9	5.6 8.6	-	5	-	86 89				<0.2	1.6
IM9	Fine	Moderate	16:02	6.4	Middle	3.2	0.2	101	25.7	25.7	8.3	6.3	1.5	99.4	99.5	-	8.7	7.8	4	4	89	90	822106	808794	<0.2	1.6
					Bottom	5.4 5.4	0.2	102 109	25.8 25.7	25.7	8.3	8.3		8.7 99.3		6.9 6.9	9.1 9.3	-	3		94 95				<0.2	1.5
					Surface	1.0	0.1	109	25.6	25.6	8.3	0 2	1.5	97.6	07.6	6.8	5.4		4		85				<0.2	1.6
						1.0 4.2	0.1	119 60	25.6 25.6		8.3	25	1.5	97.6	1	6.8	5.6 6.7	-	6	-	86 88				<0.2	1.5
IM10	Fine	Moderate	16:09	8.3	Middle	4.2	0.1	63	25.6	25.6	8.3	8.3	1.5	9.5	97.0	6.7	6.9	7.0	6	6	90	89	822385	809773	<0.2	1.7
					Bottom	7.3 7.3	0.1	62 66	25.6 25.6	25.6	8.3	8.3		96.9		6.7	8.4 8.7	-	8	-	93 93				<0.2	1.6
					Surface	1.0	0.2	336 309	25.6 25.6	25.6	8.3	8.3	1.5	9.5	97.7	6.8	7.5 7.6		4	-	85 86				<0.2	1.7
IM11	Fine	Moderate	16:20	6.5	Middle	3.3	0.2	315	25.6	25.5	8.3	0 2	1.5	97.4	07.4	6.7	8.5	8.5	4	4	89	89	822036	811444	<0.2	1.7
IIVIII	rille	Woderate	10.20	0.5		3.3 5.5	0.2	328 297	25.5 25.5		8.3	25	1.5	97.4		6.8	8.6 9.3	0.5	3	*	89 93	09	022030	011444	<0.2	1.6
					Bottom	5.5	0.1	308	25.5	25.5	8.3	6.3	1.5	97.6	97.6	6.8	9.6		4		94				<0.2	1.6
					Surface	1.0	0.2	255 267	25.5 25.5	25.5	8.3	8.3	1.4 29	9.4 97.2		6.7	4.1	-	6		85 86				<0.2	1.7
IM12	Fine	Moderate	16:28	7.3	Middle	3.7	0.1	255	25.6	25.6	8.3	83 29	1.5	96.9	96.9	6.7	5.1	5.3	6	6	89	90	821468	812063	<0.2	1.6
			10.20			3.7 6.3	0.1	255 265	25.6 25.6		8.3	25	1.5	96.9	1	6.7	5.3 6.4		5	-	91 93	**			<0.2	1.7
					Bottom	6.3	0.1	283	25.6	25.6	8.3	6.3	1.5	96.8	90.8	6.7	6.5		5		93				<0.2	1.7
					Surface	1.0		-	25.6 25.6	25.6	8.3	8.3		9.5		6.9	4.7	ŀ	5	ŀ	-				-	-
SR1A	Fine	Moderate	16:59	4.2	Middle	2.1	-	-	25.6	25.6	8.2	8.2		99.5		6.9	5.6	5.5	6	7			820067	812591		
					Bottom	2.1 3.2			25.6 25.6	25.6	8.2 8.2	8.2	.5	99.5	00.0	6.8	5.7 6.1	-	8	ŀ	-					-
						3.2 1.0	0.3	268	25.6 25.7		8.2	25	1.5	98.8	,	6.8	6.2 2.7		10 4		- 86				<0.2	1.6
					Surface	1.0	0.4	268	25.7	25.7	8.2	8.2		9.6		6.6	2.9		5	E	86				<0.2	1.6
SR2	Fine	Moderate	16:59	4.2	Middle	-		-	-	-	-	-			-	- 0.0	-	3.3	-	4	-	90	821457	814164	<0.2	2 - 1.6
					Bottom	3.2	0.2	261	25.8	25.8	8.2	8.2	30	0.1		6.5 6.6	3.6		4	Į	94				<0.2	1.5
					0.4	3.2 1.0	0.2	266 5	25.8 25.6	05.0	8.2	30	1.1	95.6		6.6	3.8 4.3		4 5		94				<0.2	1.7
					Surface	1.0 4.4	0.3	5 23	25.6 25.4	25.6	8.2	0.2	1.4	8.4 98.5 98.9		6.9	4.5 5.4		6 5						-	-
SR3	Fine	Moderate	15:48	8.7	Middle	4.4	0.3	23	25.4	25.4	8.3	8.3		98.9			5.4	5.6	5	5	-	-	822147	807582	-	-
					Bottom	7.7	0.2	6	25.3 25.3	25.3	8.3	8.3	1.7 29	98.4		6.8	6.6		5 5	[-	-
					Surface	1.0	0.2	43	25.4	25.4	8.2	8 2	1.7	97.1	97.1	6.8	4.1		5		-				-	
						1.0 4.7	0.2	45 33	25.4 25.3		8.2	28	1.7	97.0		6.8	4.2 3.6	-	6	-	-				-	-
SR4A	Fine	Calm	16:55	9.4	Middle	4.7	0.2	35	25.3	25.3	8.2	0.2	1.3	96.7	90.7	6.7	3.6	3.9	7	6	-	-	817212	807819		-
					Bottom	8.4 8.4	0.1	52 52	25.3 25.3	25.3	8.2	8.2		96.3		6.7	3.9	ŀ	7	ŀ	-				-	-
					Surface	1.0	0.1 0.1	161 168	25.6 25.6	25.6	8.1 8.1	8.1		8.7 95.6 95.5		6.6	3.6 3.7		12 11		-				-	-
SR5A	Fine	Calm	15:28	4.0	Middle	-	- 0.1	-	- 25.6		0.1	20		95.5	'	- 6.6	3.7	3.6	-	10	-		816586	810717		-
SKSA	rille	Califi	13.20	4.0		3.0	0.1	- 196	25.4		8.1	28		93.9		6.5	3.5	3.0	- 8	10		•	010300	810717		- 1
					Bottom	3.0	0.1	215	25.4	25.4	8.1	8.1	1.8	93.9	93.9	6.6	3.5		9		-					
					Surface	1.0	0.2	343 316	25.7 25.7	25.7	8.1 8.1	8.1		8.5 95.1 94.9		6.6	5.1 5.4	-	5 4	-	-				-	-
SR6	Fine	Calm	15:48	4.7	Middle	-		-	-	-	-					- 0.0	-	5.5	-	5	-		817895	814678		
			10.10			3.7	0.1	- 5	25.6		8.1	0.4 28		94.6	:	6.6	5.9		5		-				-	
					Bottom	3.7	0.1	5	25.6	25.6	8.1	0.1	1.5	94.7	94.7	6.6	5.8		4		-				-	
					Surface	1.0	0.1	338 311	25.9 25.9	25.9	8.2	8.2		1.3 91.6		6.2	4.4 4.6		4	ŀ	-				-	-
SR7	Fine	Moderate	16:45	14.6	Middle	7.3 7.3	0.1	13 14	25.9 25.9	25.9	0.2	8.2	.4	1.4 91.0	01.0	6.2 6.2	5.6 5.8	5.5	6	5	-	-	823616	823737		
					Bottom	13.6	0.0	201	25.9	25.9	8.2	82 3	.5 3	91.0	923	6.3	6.2		7	ŀ	-					-
						13.6 1.0	0.0	214	25.9 25.6		8.2	3	.5	92.3	92.3	6.3	6.3 2.4		6		-				1	434
					Surface	1.0	- :		25.6	25.6	8.2	8.2		9.4 97.8	97.9	6.8	2.4	l	3	ŀ	-					
SR8	Fine	Moderate	16:36	5.2	Middle	-		-	-	-	-					- 0.0	-	3.1	-	5		-	820513	811640	-	
					Bottom	4.2		-	25.5	25.5	8.2	8.2		97.6		6.8	3.7		6	Į	-				-	
DA: Depth-Aver	L				_5.0	4.2	-	-	25.5		8.2	29	1.4	97.6	i 51.0	6.8	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

Note: Access to SR8 was blocked by barge and its wires. The monitoring at SR8 was slightly shifted to the closest safe and accessible location temporarily.

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

Water Quality Monitoring Water Quality Monitoring Results on 30 October 18 during Mid-Flood Tide DO Saturation Dissolved Suspended Solids Water pН Salinity (ppt) Turbidity(NTU) Coordinate Coordinate Nickel (µg/L) Sea Sampling Water Temperature (°C) Monitoring Current Speed Oxygen (ma/L) (npm) (ua/L) Sampling Depth (m) HK Grid HK Grid Direction Value Value Average Value Average Value DA Value DA DA Value DA (Northing) (Easting) Value DA Value DA Condition Time (m/s) Value Condition Depth (m) Average 28.8 28.8 Surface 25.2 8.2 28.8 93.1 1.0 0.5 51 25.2 8.2 93.0 6.5 3.8 10 85 <0.2 6.5 29.4 91.5 91.4 7.6 1.3 4.2 0.4 59 25.2 8.2 29.4 29.4 6.4 89 <0.2 91.5 8 C1 11:32 8.2 815639 804224 1.3 Sunny Moderate 8.4 Middle 25.2 8.4 89 < 0.2 7.7 <0.2 1.3 0.5 59 25.2 6.3 7.4 0.5 12 25.2 8.2 30.0 14.0 92 <0.2 1.2 30.0 90.9 90.9 6.3 25.2 Bottom 7.4 0.5 12 25.2 8.2 13.7 6 92 <0.2 14 27.5 27.5 95.7 1.0 0.3 25.6 8.2 2.0 85 <0.2 1.3 Surface 25.6 8.2 27.5 95.7 2.4 4.3 86 1.2 0.4 25.6 8.2 95.7 6.7 5 <0.2 5.6 0.3 43 25.6 4 90 8.2 28.0 95.0 6.6 806944 < 0.2 C2 13:01 8.2 825691 Fine Rough 11.1 Middle 28.0 95.1 90 < 0.2 1.3 47 25.6 4.4 <0.2 1.3 5.6 0.4 8.2 6.6 10.1 0.4 300 25.6 7.6 4 <0.2 1.3 8.2 28.0 28.0 96.0 Bottom 25.6 8.2 96.3 10.1 0.4 6.7 7.7 94 1.2 8.2 8.2 8.2 29.8 29.8 29.8 92.7 4.3 <0.2 Surface 25.7 92.7 1.0 0.6 283 25.7 6.4 4.4 6 85 <0.2 1.4 278 25.8 89 90 <0.2 1.3 5.5 0.6 8.2 8.2 30.3 30.3 92.1 СЗ 11:09 Middle 92.1 822116 817780 Fine 11.0 25.8 5.3 5 89 <0.2 1.4 Rough 5.5 0.6 296 25.8 8.2 6.3 5.2 5 10.0 0.4 281 25.9 8.2 30.5 94.5 6.5 6.4 4 92 <0.2 1.3 Bottom 25.9 8.2 30.5 95.1 6.6 1.3 10.0 307 25.9 95.7 6.5 0.4 8.2 30.5 6.6 4 93 < 0.2 1.0 0.1 41 25.2 94.2 3.3 86 <0.2 8.2 8.2 29.0 6.6 9 1.3 Surface 25.2 29.0 94.2 1.0 0.1 44 25.2 6.6 3.3 9 86 <0.2 1.2 IM1 Sunny Moderate 11:50 5.0 Middle 9 88 817946 807111 <0.2 1.3 4.0 0.2 25.2 8.2 29.5 29.5 93.4 3.6 <0.2 1.3 93.4 6.5 8 25.2 6.5 Bottom 4.0 0.2 25.2 8.2 3.6 89 <0.2 1.2 1.0 0.2 41 25.2 8.2 28.5 28.5 92.7 4.4 85 1.4 Surface 25.2 92.7 25.2 1.0 0.2 44 8.2 6.5 4.6 85 < 0.2 1.4 6.5 6.8 0.3 25.2 88 <0.2 1.4 8.2 29.2 91.9 6.4 806164 IM2 Sunny Moderate 11:58 7.3 Middle 25.2 8.2 29.2 91.9 88 818150 -n 2 13 25.2 29.2 88 <0.2 1.2 0.4 12 8.2 7.0 0.3 347 25.1 8.2 8.2 11.9 <0.2 1.2 29.3 Bottom 25.1 29.3 91.3 63 0.3 319 25.1 29.3 913 6.4 116 91 12 1.0 0.2 11 25.2 8.1 8.1 28.6 28.7 28.7 90.9 90.6 6.4 4.5 8 85 85 < 0.2 1.3 Surface 25.2 90.8 1.3 8.1 6.3 4.6 <0.2 1.0 0.2 11 25.2 8 0.3 25.1 8.1 8.1 29.2 29.2 89.9 14.4 8 88 87 <0.2 <0.2 IM3 12:05 7.5 Middle 25.1 8.1 89.9 12.8 88 818760 805587 Sunny Moderate 1.4 3.8 0.3 25.1 6.3 14.3 7 6.5 0.4 356 25.1 8.1 29.3 29.3 90.3 6.3 19.4 7 91 < 0.2 1.4 Bottom 25.1 8.1 29.3 90.4 6.3 90.4 6.5 0.4 328 25.1 8.1 6.3 19.8 6 91 <0.2 1.4 0.4 353 357 25.2 8.2 28.8 6.4 4.2 <0.2 1.4 Surface 25.2 8.2 28.9 91.4 1.0 0.4 25.2 8.2 91.2 6.4 4.3 1.3 29.3 3.9 0.3 356 25.1 8.1 90.2 6.3 13.7 7 88 <0.2 1.3 IM4 12:14 7.7 Middle 90.2 88 819711 804602 <0.2 Sunny Moderate 29.3 3.9 0.3 328 25.1 8.1 29.3 90.2 6.3 13.4 7 88 1.2 6.7 0.4 25.1 8.1 8.1 8.1 29.3 29.3 90.6 29.3 29.8 90.7 6.3 20.4 6 91 <0.2 1.4 Bottom 25.1 6.3 6.7 1.0 0.4 25.2 28.5 28.5 90.5 90.4 1.4 8.1 28.5 90.5 Surface 25.2 85 0.4 17 25.2 8.1 6.3 7.3 14.4 9 <0.2 1.2 3.4 0.5 354 25.1 8.1 28.7 28.7 89.7 6.3 11 87 804849 <0.2 1.3 12:22 6.8 8.1 820755 IM5 Sunny Moderate Middle 25.1 28.7 89.7 11 88 <0.2 1.3 3.4 0.5 326 25.1 8.1 89.7 14.9 11 88 1.2 6.3 5.8 0.4 25.1 8.1 89.8 6.3 18.1 14 <0.2 1.2 28.7 25.1 8.1 Bottom 28.7 89.9 0.4 25.1 25.3 8.1 1.5 8.2 8.2 28.5 28.5 28.5 90.1 6.3 5.3 <0.2 1.4 Surface 25.3 8.2 90.1 25.3 6.3 85 <0.2 1.4 1.0 0.3 329 5.3 8 3.6 0.2 343 25.2 28.7 89.4 7.1 9 88 <0.2 1.5 8.2 8.2 28.7 28.7 12:28 6.3 821043 805833 IM6 Sunnv Moderate 7.1 Middle 25.2 89.4 10 88 <0.2 1.4 0.2 348 25.2 8.2 10 88 <0.2 1.4 6.1 0.1 25.1 8.2 28.7 89.6 6.3 6.8 14 90 <0.2 1.4 Bottom 25.1 8.2 28.7 89.7 6.3 6.1 0.1 25.1 8.2 28.7 89.8 6.3 6.9 12 < 0.2 1.4 242 25.5 27.6 27.7 27.6 Surface 1.0 0.2 25.5 8.1 8.1 89.7 89.8 6.3 3.4 83 < 0.2 1.4 1.0 0.2 248 25.5 8.1 89.8 3.7 83 <0.2 1.7 87 87 <0.2 4.3 0.1 208 25.2 8.2 28.6 28.6 89.7 6.3 6.2 5 1.7 IM7 Sunny Moderate 12:35 8.5 Middle 89.7 87 821336 806830 4.3 0.1 218 25.2 8.2 89.7 6.3 6.2 6 17 0.0 25.2 25.2 <0.2 7.5 8.2 8.2 29.0 29.0 89.7 89.7 6.3 1.6 1.6 192 7.1 8 90 Bottom 25.2 8.2 29.0 89.7 6.3 25.6 8.2 28.1 28.1 97.9 28.1 98.1 1.0 0.2 95 8.2 6.8 4.1 86 <0.2 1.3 Surface 25.6 98.0 0.2 1.0 100 25.6 8.2 6.8 4.3 7 86 <0.2 1.4 <0.2 25.6 5.4 1.3

8.2

8.2

8.2

8.2

8.2

25.6

25.5

28.4

28.4

28.9

28.4

28.9

98.8

98.8

100.1

98.8

100.2

6

6

5.7

6.6

7.0

90

90

90

821820

808133

<0.2

1.5

<0.2

1.4

IM8

Fine

Rough

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

12:35

7.5

Middle

Bottom

3.8

3.8

74

74

49

0.3

0.3

25.6

25.5

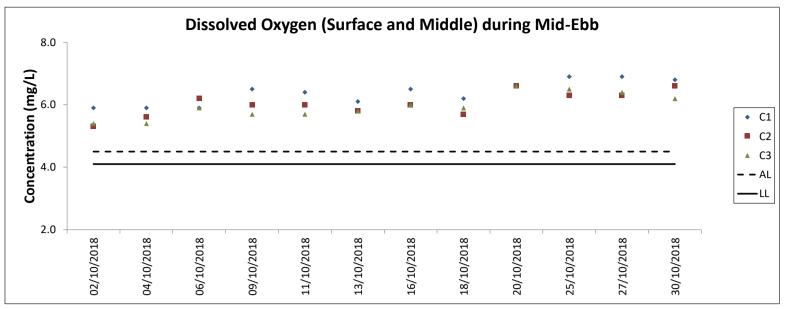
Water Qual			ılts on		30 October 18	during Mid-		ide															_		
Monitoring	Weather	Sea	Sampling	Water	CE D-		Current Speed	Current	Water Te	mperature (°C)	pН	5	alinity (ppt)	DC	O Saturation (%)	Dissolve Oxygen		(NTU)	Suspend (mg		Total Alkalinity (ppm)	Coordinate HK Grid	Coordinate HK Grid	Chromiu (µg/L)	
Station	Condition	Condition	Time	Depth (m)	Sampling De	ptn (m)	(m/s)	Direction	Value	Average	Value A	verage Va	ue Averaç	ge Vali	lue Average	Value D	A Value	DA	Value	DA	Value DA	(Northing)	(Easting)	Value E	DA Value DA
					Surface	1.0	0.2	45	25.7	25.7	8.2		.3 28.3	99.		6.9	3.6		7		85			<0.2	1.3
	_					1.0 4.1	0.3	45 28	25.7 25.7		8.2 8.3	20	.3	99.	0.0	6.9 7.0	3.7		8	_	86			<0.2	1.1
IM9	Fine	Rough	12:28	8.1	Middle	4.1	0.3	28	25.7	25.7	8.3	6.3	.5 26.5	100	0.5	7.0	5.6	5.2	7	7	89	822074	808797	<0.2	1.4
					Bottom	7.1 7.1	0.3	7	25.7 25.7	25.7	8.3	8.3		101		7.1 7	6.3		7		93 94			<0.2	1.4
					Surface	1.0	0.4	322	25.5	25.5	8.2	8.2		97.		6.7	8.5		6		85 86			<0.2	1.2
IM10	Fin-	Daniele	12:21	7.6	Middle	1.0 3.8	0.5 0.5	323 322	25.5 25.5	25.5	8.2 8.2	8.2	.4	97.	7.1	6.7	.7 8.7 9.5	9.9	5 8	7	89	822375	809806	<0.2	1.1
IIVITO	Fine	Rough	12.21	7.0		3.8 6.6	0.5	349 322	25.5 25.5		8.2 8.3	23	.4	97.	.2	6.7	9.7	9.9	7	′	93	622375	909900	<0.2	1.4
					Bottom	6.6	0.3	325	25.5	25.5	8.3	8.3	.4 29.4	98.	98.3	6.8	11.5		8		94			<0.2	1.6
					Surface	1.0	0.4	302 311	25.6 25.6	25.6	8.2	8.2		97.		6.8	4.5		11 10		85 85			<0.2	1.3
IM11	Fine	Rough	12:10	7.7	Middle	3.9	0.4	308	25.6	25.6	8.2	0.0 29	.4 20.4	98.	3.5	- 6	5.7	5.7	7	8	89 00	822045	811461	<0.2	0.0 1.2
						3.9 6.7	0.4	336 310	25.6 25.5		8.2	25	.4	98.	5.b	7.0	5.9	-	7		89 94			<0.2	1.5
					Bottom	6.7	0.3	319	25.5	25.5	8.3	0.3	.4	101	1.2	7.0	.0 6.8		8		94			<0.2	1.4
					Surface	1.0	0.3	266 267	25.5 25.5	25.5	8.3	8.3		99.		6.9	3.5		7		85 85			<0.2	1.3
IM12	Fine	Rough	12:03	8.4	Middle	4.2	0.2	271	25.4	25.4	8.3 8.3	8.3	.5 29.5	103		- 6	5.3	5.2	8	8	90 90	821466	812063	<0.2	:0.2 1.4 1.3
					Bottom	7.4	0.2	287 278	25.4 25.4	25.4	8.3	0.0 29	.5	104	4.4	7.2	6.6	1	8 9		91 93			<0.2	1.3
						7.4 1.0	0.2	296	25.4 25.5		8.3 8.2	23	.5	105	0.7	7.3 ⁷	.3 6.7 4.5		8 5		93			<0.2	1.3
					Surface	1.0	-	- :	25.5	25.5	8.2	8.2	.5 29.5	98.	98.1	6.8	8 4.9		4		-				
SR1A	Fine	Rough	11:42	7.2	Middle	3.6	-	-	25.5 25.5	25.5	8.2 8.2	8.2		98. 98.		6.8	5.2	5.5	4	4		820065	812581	-	
					Bottom	6.2	-		25.5	25.5	8.2	8 2	.5 20.5	98.	3.7	6.8	6.4		3		-			-	-
					Confess	6.2 1.0	0.3	312	25.5 25.5		8.2 8.2	29	.5	98.	3.8	6.9	6.6 4.7		4		85			<0.2	1.3
					Surface	1.0	0.3	338	25.5	25.5	8.2	8.2		97.		6.0	4.8		4		85			<0.2	1.3
SR2	Fine	Rough	11:30	4.2	Middle	-	-	-	-	-	-		-	-	.	-	-	5.3	-	4	- 89	821477	814181	-	:0.2 - 1.4
					Bottom	3.2 3.2	0.2	311 313	25.4 25.4	25.4	8.3 8.3	8.3		98. 98.		6.8	.8 5.8		4 5		93			<0.2	1.5
					Surface	1.0	0.3	48	25.5	25.5	8.2	8.2 28	.4 28.4	98.	3.7	6.9	5.2		7		-			-	-
						1.0 4.6	0.2	51 68	25.5 25.5		8.2 8.2	28	.4	98.	3.7	6.9 6.9	5.9		6		-			 	-
SR3	Fine	Rough	12:41	9.1	Middle	4.6	0.4	73	25.5	25.5	8.2	8.2	.6	99.	99.1	6.9	6.9	6.6	6	6	- '	822168	807580	-	
					Bottom	8.1 8.1	0.3	52 55	25.3 25.3	25.3	8.3	8.3	.6 29.6	99.	99.1	6.9	7.4		6		-			-	-
					Surface	1.0	0.1	121	25.2	25.2	8.1	8.1		89.		6.3	3.0		4		-			-	-
SR4A	Sunny	Calm	11:10	9.3	Middle	1.0 4.7	0.1	126 74	25.2 25.1	25.1	8.1 8.1	8.1	.0 00.0	89. 89.		6.3	3.1	3.1	6	6	-	817170	807801	H	-
SNAM	Suriny	Califi	11.10	9.3		4.7 8.3	0.1	75 89	25.1 25.1		8.1 8.1	25	.0	89.	9.2	6.3 6.3	3.1	3.1	6 8	0	-	817170	807801	-	
					Bottom	8.3	0.1	97	25.1	25.1	8.1	6.1	.0 29.0	89.	9.3	6.3	3.2		9						
					Surface	1.0	0.1	260 276	25.3 25.3	25.3	8.1 8.1	8.1		91.		6.4 6.4	5.2		5 4		-				-
SR5A	Sunny	Calm	10:54	3.6	Middle	-	-		-		-			-		- 6	.4 -	5.5	-	5		816587	810716	-	. 🖭 .
	. ,					2.6	0.1	277	25.3	05.0	8.1	0.4 28	.6	92.	2.2	6.5	5.6		5		-			-	-
					Bottom	2.6	0.1	277	25.3	25.3	8.1	0.1	.6	92.	2.4	6.5	6.0		6		-				
					Surface	1.0	0.1	202 219	25.3 25.3	25.3	8.1 8.1	8.1		90.		6.3	6.6		14 14		-				-
SR6	Sunny	Calm	10:32	3.8	Middle	-	-	-	-				-	-		. 6	.3	6.3	-	15		817904	814643	-	
					Bottom	2.8	0.1	194	25.3	25.3	8.1	0.4 28	.4 00.4	91.	.1 01.2	6.4	5.9	1	16		-				-
						2.8 1.0	0.1	198 36	25.3 25.8		8.1 8.2	20	.4	91.	1.2	6.4	6.2 3.0		16 6		-			-	-
					Surface	1.0	0.2	37	25.8	25.8	8.2	8.2	.4 30.4	90.).3	6.2	3.4	1	5		-				-
SR7	Fine	Rough	10:42	19.0	Middle	9.5 9.5	0.2	26 28	25.8 25.8	25.8	8.2	8.2		89. 89.		6.2	4.1	4.2	4	5		823630	823752		
					Bottom	18.0	0.2	46	25.8	25.8	8.2	0.2 30	.8 20.0	89.	9.4	6.1	5.0	1	4		-				-
						18.0	0.2	46	25.8 25.4		8.2 8.3	30	.8	89.	9.4	6.1	5.4 4.6		4		-				
					Surface	1.0	-	-	25.4	25.4	8.3	8.3	.3 29.3	98.		6.8	.8 4.8	1	4		-			-	-
SR8	Fine	Rough	11:51	4.2	Middle		-	-	-	-			-	-	-		-	5.3	-	4	-	820524	811643		
					Bottom	3.2 3.2	-	-	25.4 25.4	25.4	8.3	8.3		101		7.0 7.0	5.7	1	4		-				-
ı			1		1	3.∠	1 -	-	20.4		0.3	1 28	.0	101	1.0	7.0	5.9	1	4		1 - 1	1	1	1	1 - 1

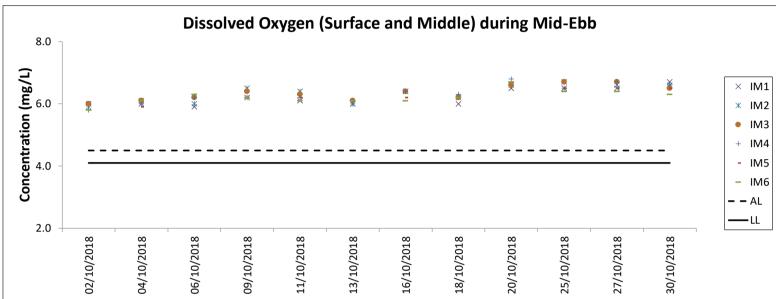
DA: Depth-Averaged

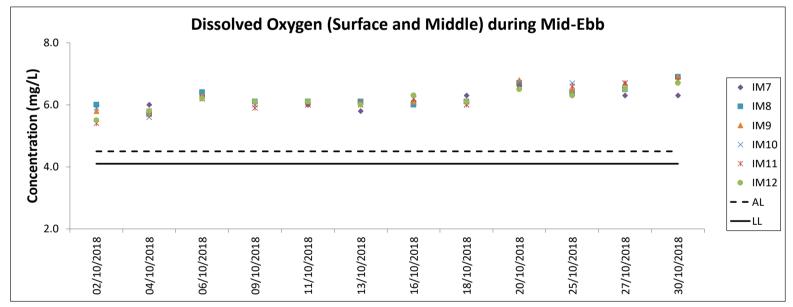
Calm: Small or no wave, Moderate: Between calm and rough; Rough: White capped or rougher

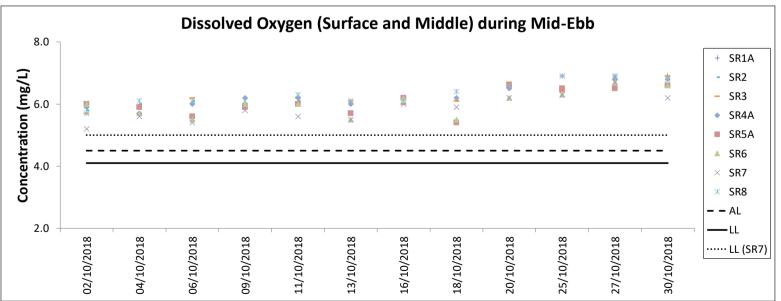
Value exceeding Action Level is underlined; Value exceeding Limit Level is bolded and underlined

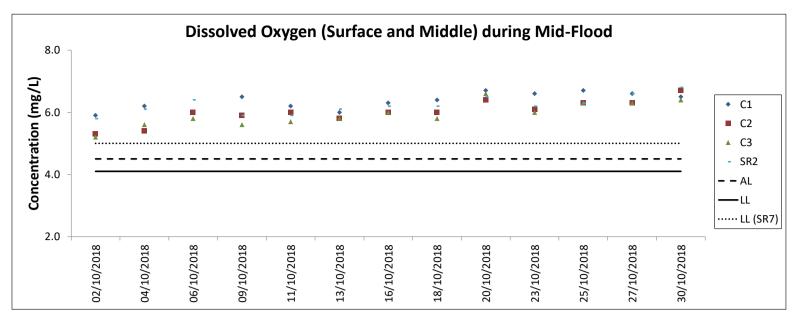
Note: Access to SR8 was blocked by barge and its wires. The monitoring at SR8 was slightly shifted to the closest safe and accessible location temporarily.

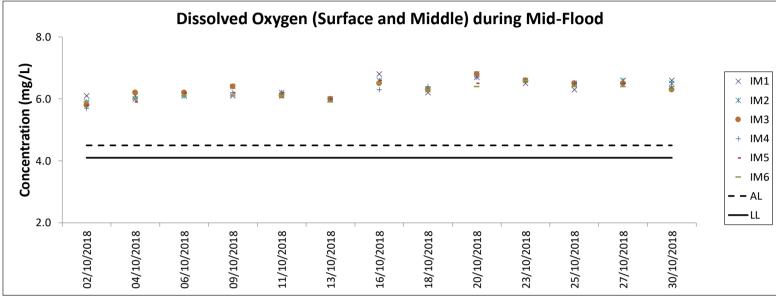


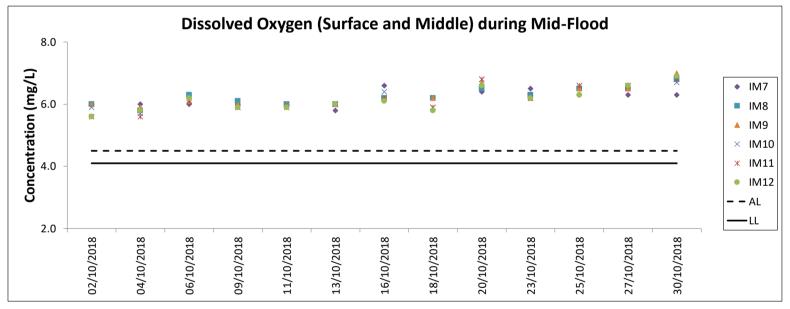


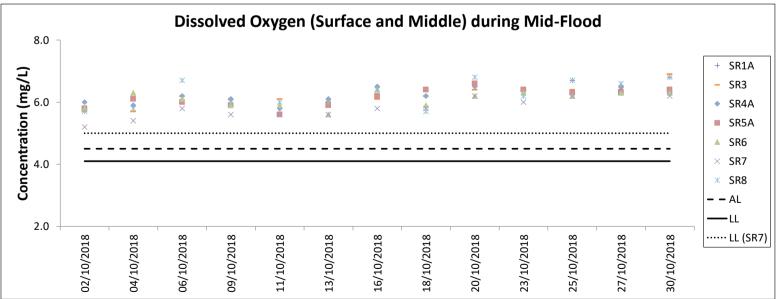


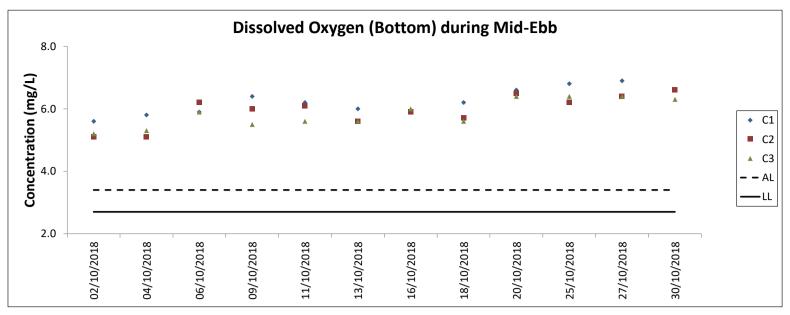


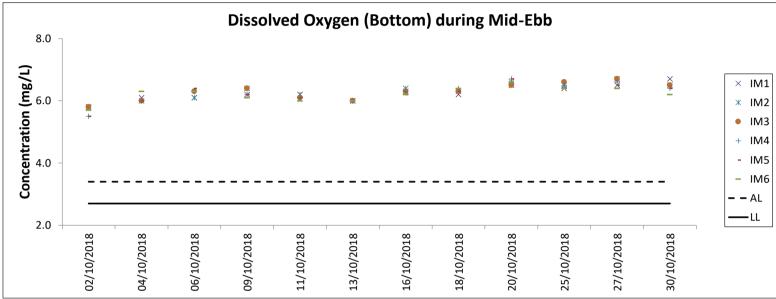


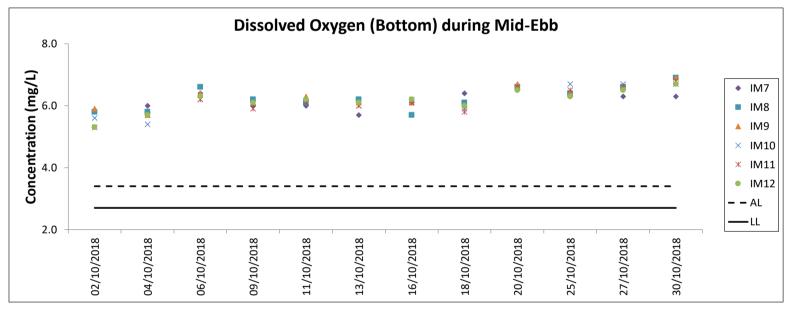


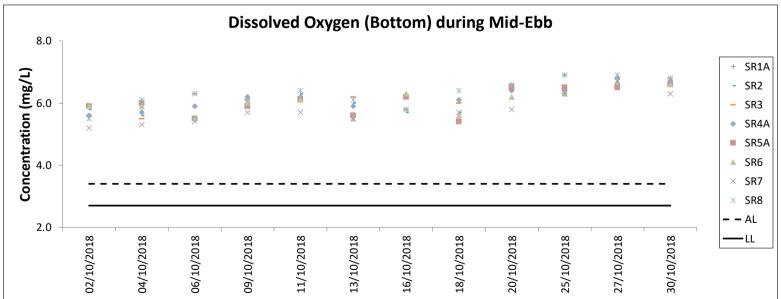


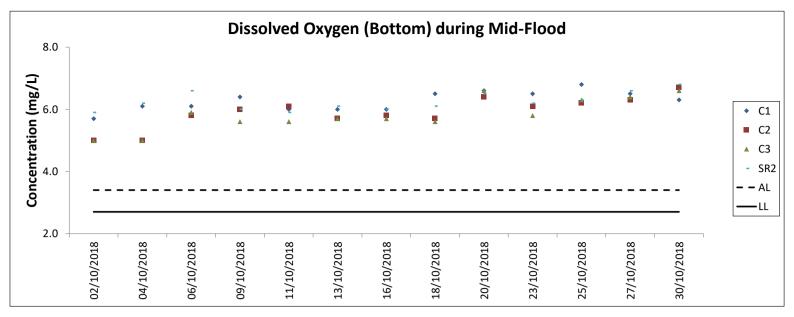


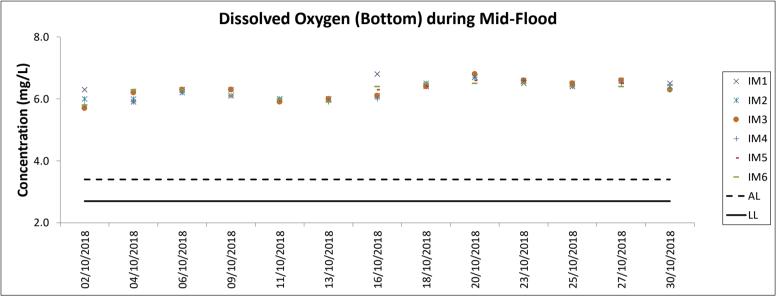


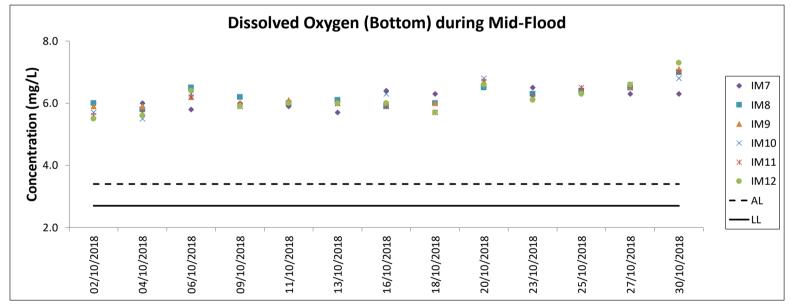


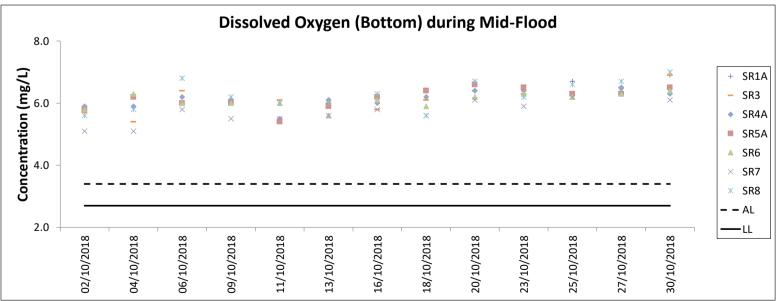


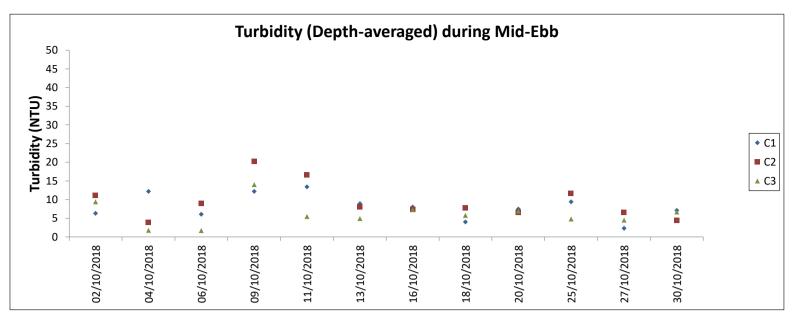


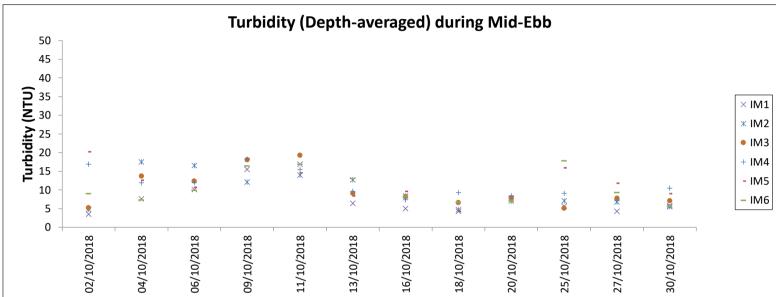


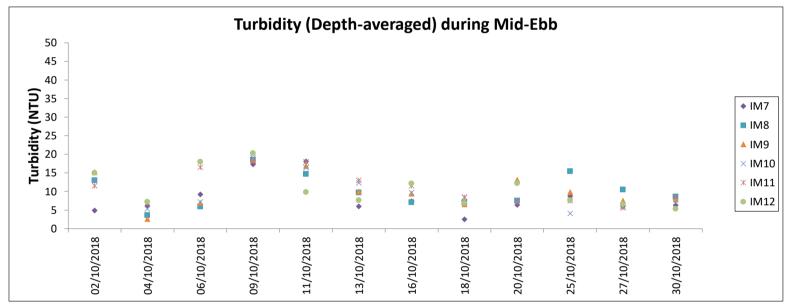


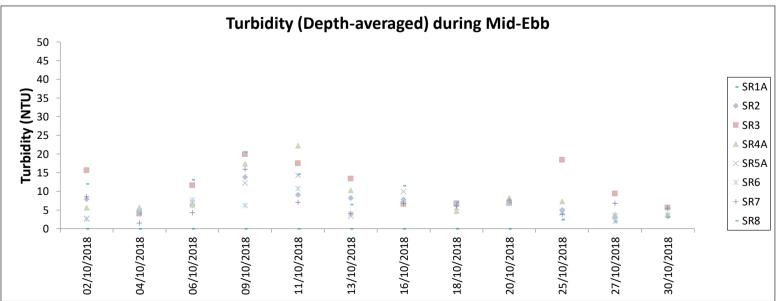




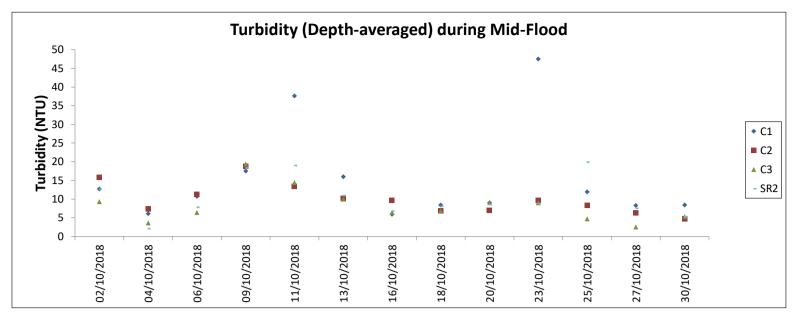


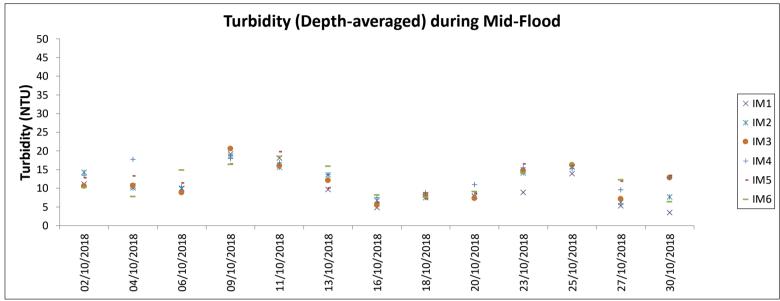


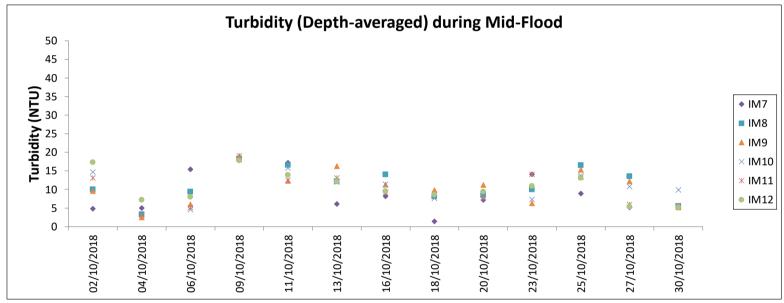


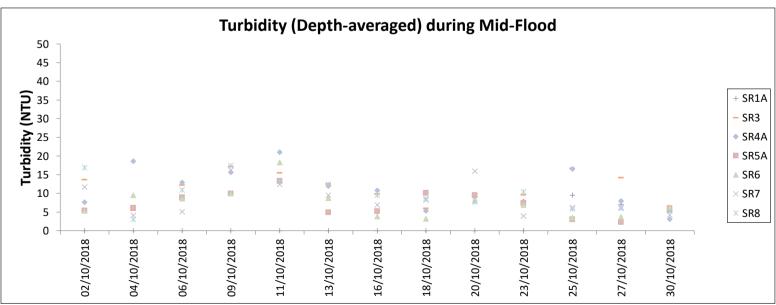


Note: The Action and Limit Level of turbidity can be referred to Table 4.2 of the monthly EM&A report.

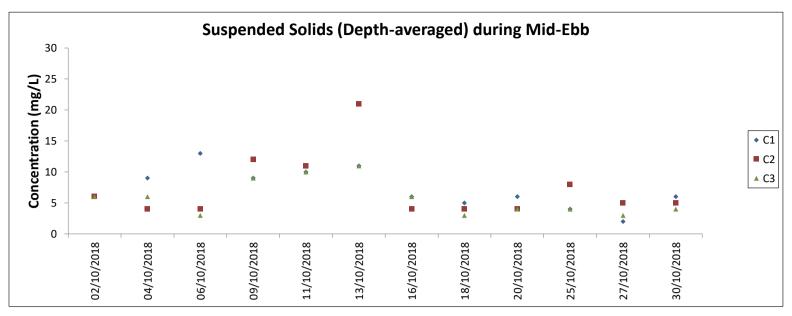


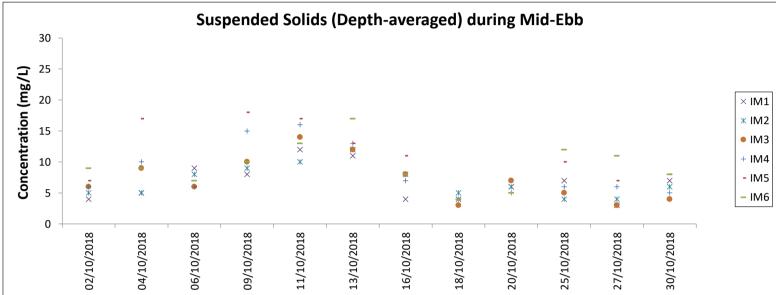


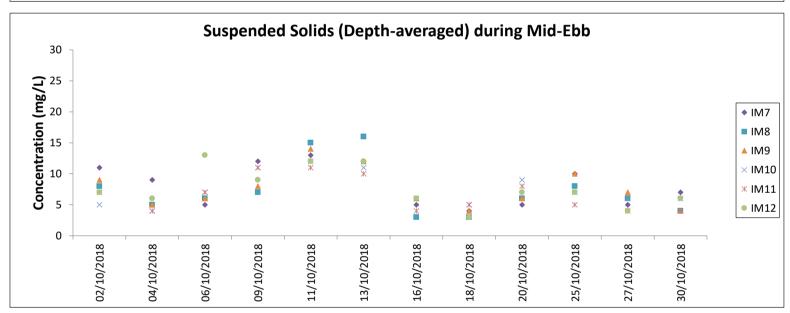


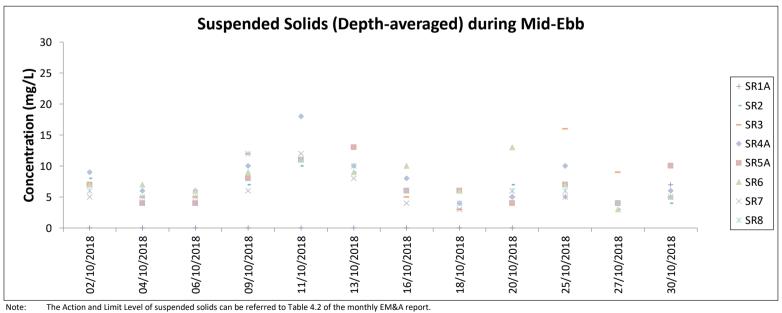


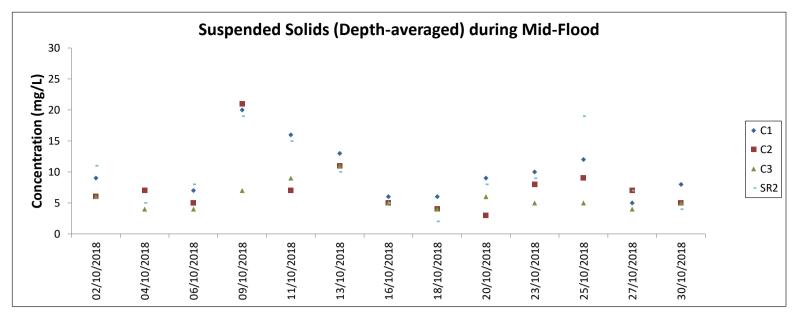
Note: The Action and Limit Level of turbidity can be referred to Table 4.2 of the monthly EM&A report.

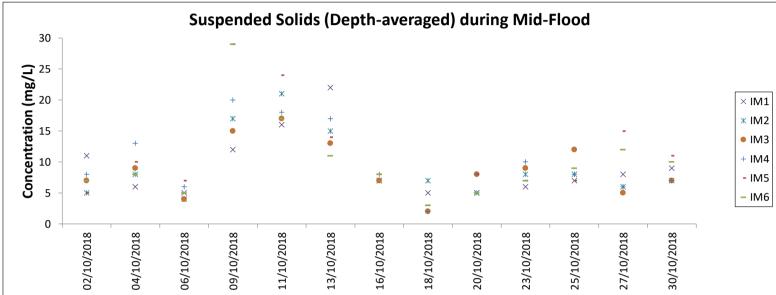


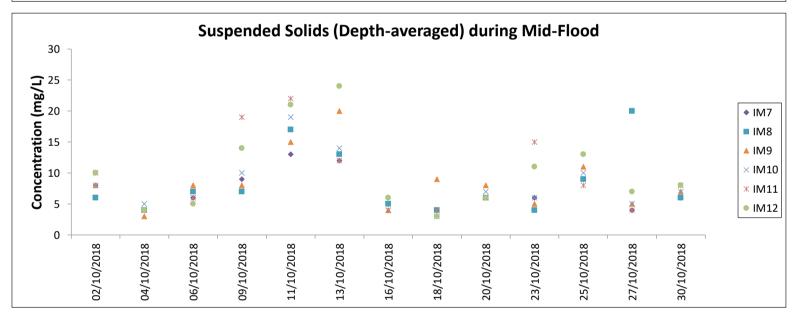


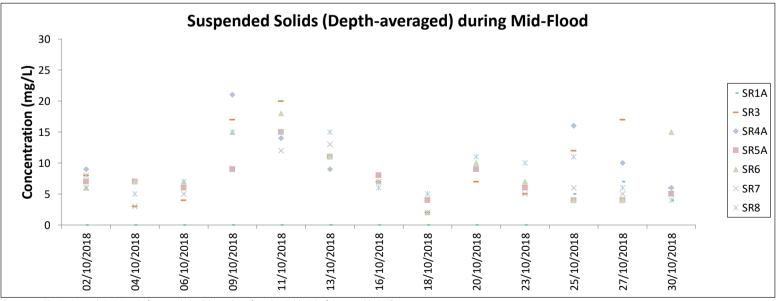




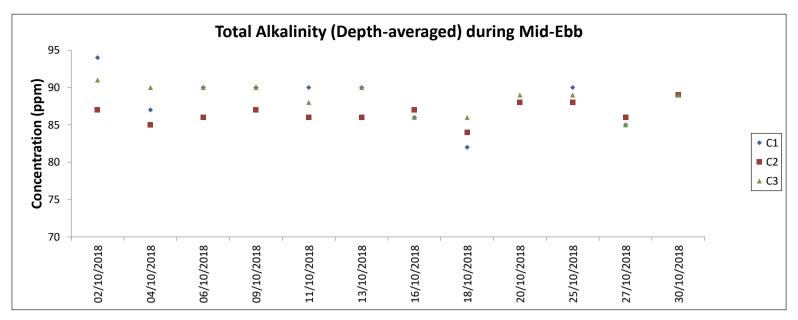


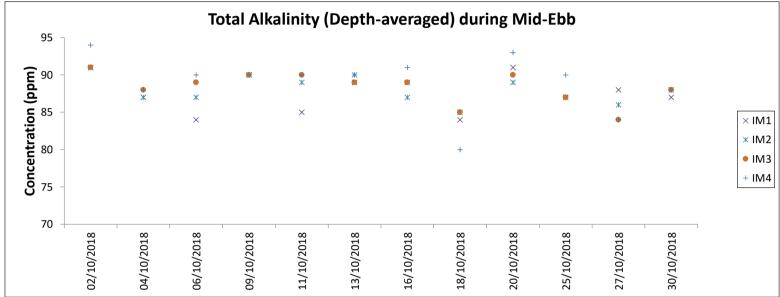


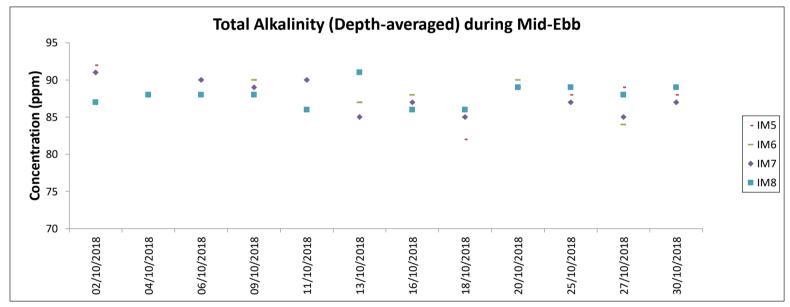


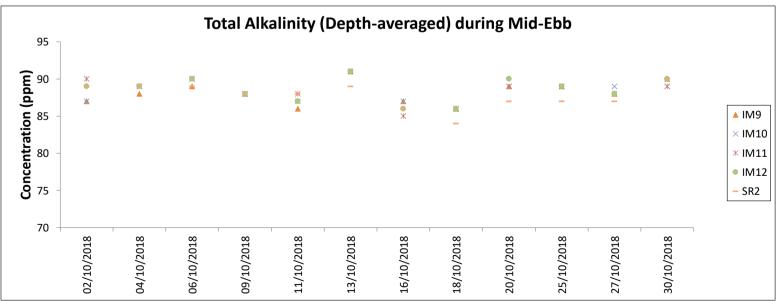


The Action and Limit Level of suspended solids can be referred to Table 4.2 of the monthly EM&A report.

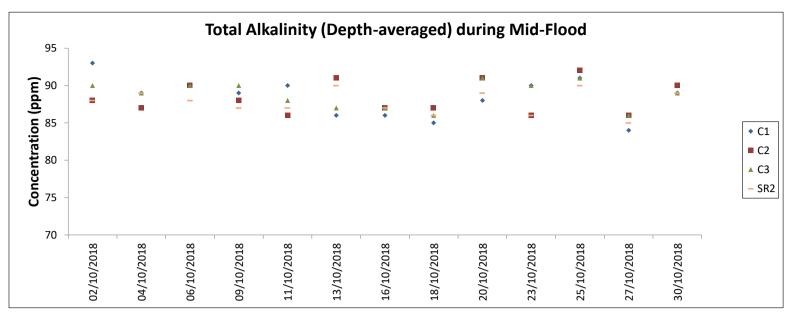


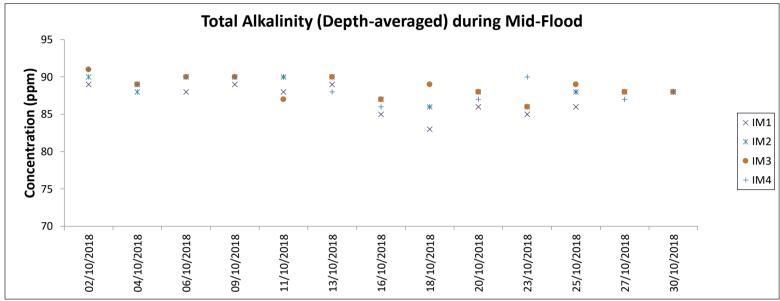


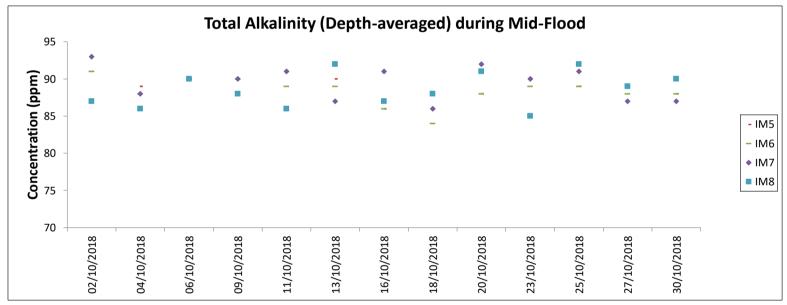


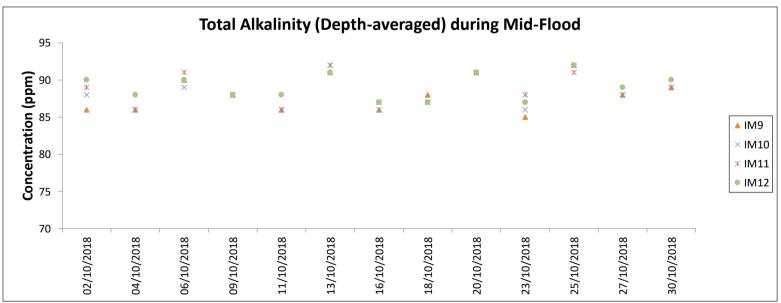


Note: The Action and Limit Level of total alkalinity can be referred to Table 4.2 of the monthly EM&A report.

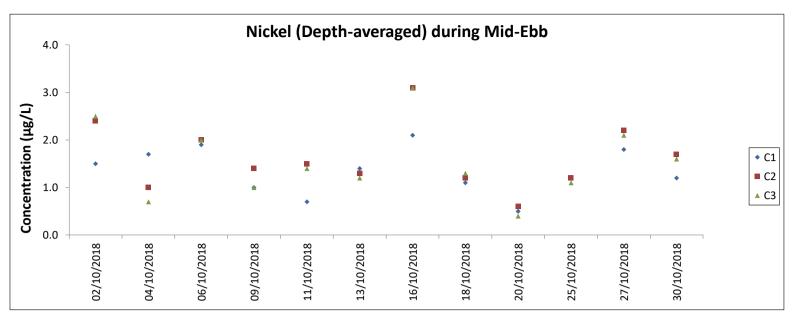


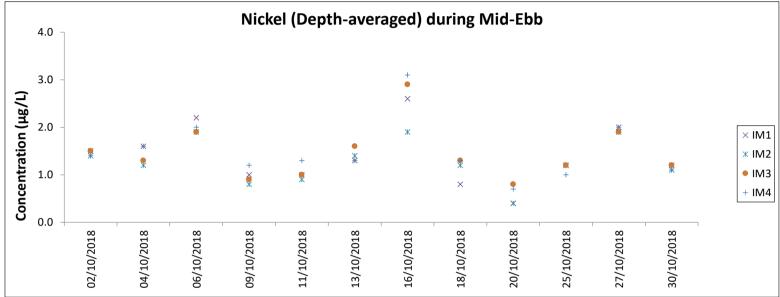


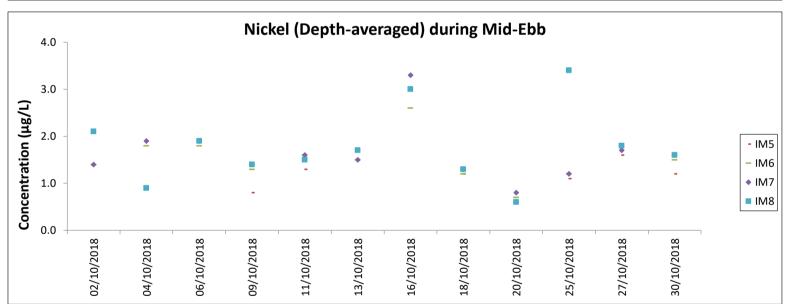


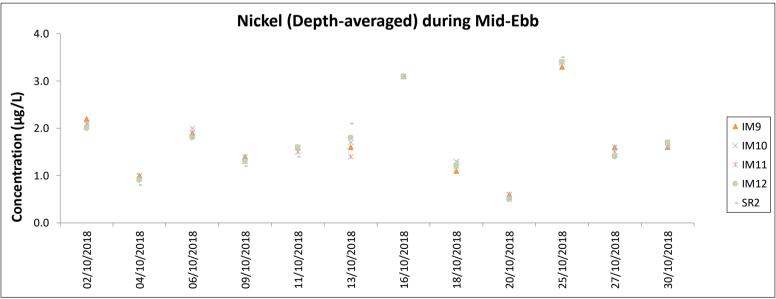


Note: The Action and Limit Level of total alkalinity can be referred to Table 4.2 of the monthly EM&A report.

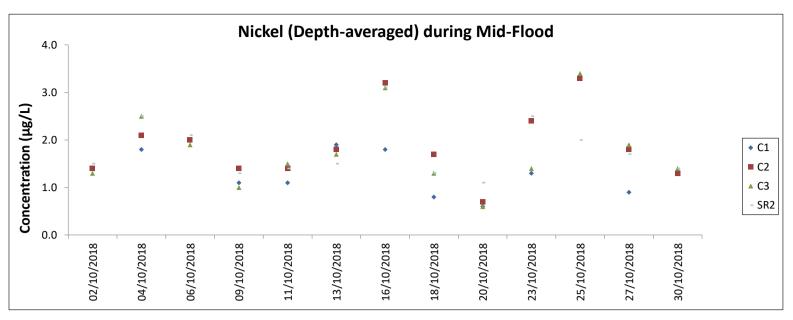


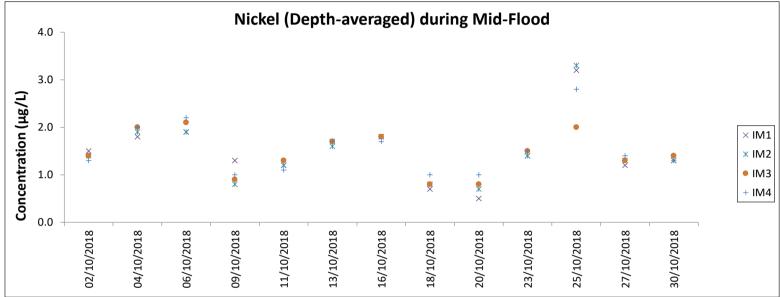


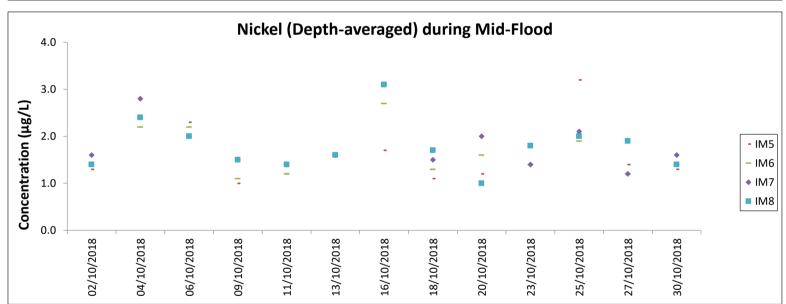


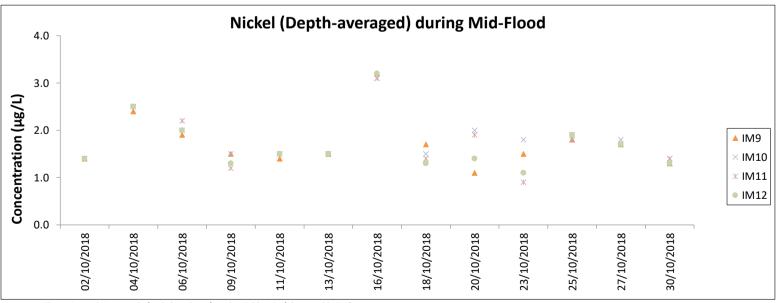


Note: The Action and Limit Level of nickel can be referred to Table 4.2 of the monthly EM&A report.

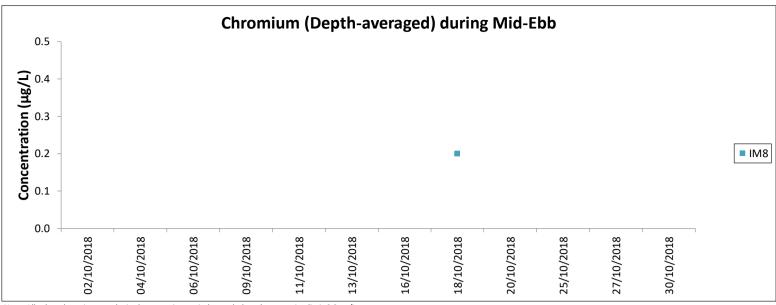








Note: The Action and Limit Level of nickel can be referred to Table 4.2 of the monthly EM&A report.



Note: All other chromium results in the reporting period were below the reporting limit 0.2 μ g/L.

Mott MacDonald Expansion of Hong Kong International Airport into a Three-Runway System
Chinese White Dolphin Monitoring Results

CWD Small Vessel Line-transect Survey

Survey Effort Data

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
2-Aug-18	NWL	2	9.284	SUMMER	32166	3RS ET	Р
2-Aug-18	NWL	3	46.887	SUMMER	32166	3RS ET	Р
2-Aug-18	NWL	4	6.300	SUMMER	32166	3RS ET	Р
2-Aug-18	NWL	2	2.029	SUMMER	32166	3RS ET	S
2-Aug-18	NWL	3	9.770	SUMMER	32166	3RS ET	S
2-Aug-18	NWL	4	0.400	SUMMER	32166	3RS ET	S
7-Aug-18	AW	2	4.960	SUMMER	32166	3RS ET	Р
7-Aug-18	WL	1	2.480	SUMMER	32166	3RS ET	Р
7-Aug-18	WL	2	8.859	SUMMER	32166	3RS ET	Р
7-Aug-18	WL	3	4.158	SUMMER	32166	3RS ET	Р
7-Aug-18	WL	4	3.370	SUMMER	32166	3RS ET	Р
7-Aug-18	WL	2	3.270	SUMMER	32166	3RS ET	S
7-Aug-18	WL	3	4.142	SUMMER	32166	3RS ET	S
7-Aug-18	WL	4	1.120	SUMMER	32166	3RS ET	S
16-Aug-18	NEL	1	0.900	SUMMER	32166	3RS ET	Р
16-Aug-18	NEL	2	29.510	SUMMER	32166	3RS ET	Р
16-Aug-18	NEL	3	7.200	SUMMER	32166	3RS ET	Р
16-Aug-18	NEL	1	0.400	SUMMER	32166	3RS ET	S
16-Aug-18	NEL	2	9.690	SUMMER	32166	3RS ET	S
17-Aug-18	NEL	2	35.410	SUMMER	32166	3RS ET	Р
17-Aug-18	NEL	3	1.100	SUMMER	32166	3RS ET	Р
17-Aug-18	NEL	2	9.880	SUMMER	32166	3RS ET	S
17-Aug-18	NEL	3	0.200	SUMMER	32166	3RS ET	S
20-Aug-18	NWL	1	9.500	SUMMER	32166	3RS ET	Р
20-Aug-18	NWL	2	51.800	SUMMER	32166	3RS ET	Р
20-Aug-18	NWL	3	1.300	SUMMER	32166	3RS ET	Р
20-Aug-18	NWL	1	1.000	SUMMER	32166	3RS ET	S
20-Aug-18	NWL	2	11.000	SUMMER	32166	3RS ET	S
21-Aug-18	AW	1	4.700	SUMMER	32166	3RS ET	Р
21-Aug-18	WL	2	24.554	SUMMER	32166	3RS ET	Р
21-Aug-18	WL	3	3.309	SUMMER	32166	3RS ET	Р
21-Aug-18	WL	2	7.939	SUMMER	32166	3RS ET	S
21-Aug-18	WL	3	0.572	SUMMER	32166	3RS ET	S
22-Aug-18	SWL	2	50.350	SUMMER	32166	3RS ET	Р
22-Aug-18	SWL	3	4.900	SUMMER	32166	3RS ET	Р
22-Aug-18	SWL	2	13.170	SUMMER	32166	3RS ET	S
22-Aug-18	SWL	3	2.400	SUMMER	32166	3RS ET	S
23-Aug-18	SWL	2	51.850	SUMMER	32166	3RS ET	Р
23-Aug-18	SWL	3	2.905	SUMMER	32166	3RS ET	Р
23-Aug-18	SWL	2	11.220	SUMMER	32166	3RS ET	S
23-Aug-18	SWL	3	4.000	SUMMER	32166	3RS ET	S
7-Sep-18	SWL	1	0.800	AUTUMN	32166	3RS ET	Р
7-Sep-18	SWL	2	43.560	AUTUMN	32166	3RS ET	Р
7-Sep-18	SWL	3	11.660	AUTUMN	32166	3RS ET	Р
7-Sep-18	SWL	1	1.500	AUTUMN	32166	3RS ET	S
7-Sep-18	SWL	2	8.130	AUTUMN	32166	3RS ET	S
7-Sep-18	SWL	3	4.900	AUTUMN	32166	3RS ET	S

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
10-Sep-18	NEL	2	37.280	AUTUMN	32166	3RS ET	Р
10-Sep-18	NEL	2	8.640	AUTUMN	32166	3RS ET	S
10-Sep-18	NEL	3	1.080	AUTUMN	32166	3RS ET	S
14-Sep-18	NWL	1	1.400	AUTUMN	32166	3RS ET	Р
14-Sep-18	NWL	2	58.520	AUTUMN	32166	3RS ET	Р
14-Sep-18	NWL	3	3.600	AUTUMN	32166	3RS ET	Р
14-Sep-18	NWL	2	11.780	AUTUMN	32166	3RS ET	S
18-Sep-18	NEL	2	4.900	AUTUMN	32166	3RS ET	Р
18-Sep-18	NEL	3	28.270	AUTUMN	32166	3RS ET	Р
18-Sep-18	NEL	4	4.070	AUTUMN	32166	3RS ET	Р
18-Sep-18	NEL	2	1.000	AUTUMN	32166	3RS ET	S
18-Sep-18	NEL	3	8.260	AUTUMN	32166	3RS ET	S
18-Sep-18	NEL	4	1.000	AUTUMN	32166	3RS ET	S
19-Sep-18	SWL	2	42.334	AUTUMN	32166	3RS ET	Р
19-Sep-18	SWL	3	12.170	AUTUMN	32166	3RS ET	Р
19-Sep-18	SWL	2	13.810	AUTUMN	32166	3RS ET	S
19-Sep-18	SWL	3	0.900	AUTUMN	32166	3RS ET	S
20-Sep-18	AW	2	4.940	AUTUMN	32166	3RS ET	Р
20-Sep-18	WL	2	6.421	AUTUMN	32166	3RS ET	Р
20-Sep-18	WL	3	11.471	AUTUMN	32166	3RS ET	Р
20-Sep-18	WL	2	5.212	AUTUMN	32166	3RS ET	S
20-Sep-18	WL	3	6.235	AUTUMN	32166	3RS ET	S
21-Sep-18	AW	2	4.690	AUTUMN	32166	3RS ET	P
21-Sep-18	WL	2	4.136	AUTUMN	32166	3RS ET	P
21-Sep-18	WL	3	13.589	AUTUMN	32166	3RS ET	Р
21-Sep-18	WL	2	2.288	AUTUMN	32166	3RS ET	S
21-Sep-18	WL	3	7.393	AUTUMN	32166	3RS ET	S
26-Sep-18	NWL	2	40.190	AUTUMN	32166	3RS ET	P
26-Sep-18	NWL	3	21.690	AUTUMN	32166	3RS ET	P
26-Sep-18	NWL	2	6.418	AUTUMN	32166	3RS ET	S
26-Sep-18	NWL	3	3.520	AUTUMN	32166	3RS ET	S
4-Oct-18	AW	2	1.010	AUTUMN	32166	3RS ET	P
4-Oct-18	AW	3	3.830	AUTUMN	32166	3RS ET	Р
4-Oct-18	WL	3	16.560	AUTUMN	32166	3RS ET	P
4-Oct-18	WL	4	3.020	AUTUMN	32166	3RS ET	Р
4-Oct-18	WL	2	0.740	AUTUMN	32166	3RS ET	S
4-Oct-18	WL	3	8.310	AUTUMN	32166	3RS ET	S
4-Oct-18	WL	4	1.110	AUTUMN	32166	3RS ET	S
5-Oct-18	NWL	2	9.800	AUTUMN	32166	3RS ET	P
5-Oct-18	NWL	3	37.010	AUTUMN	32166	3RS ET	P
5-Oct-18	NWL	4	15.400	AUTUMN	32166	3RS ET	Р
5-Oct-18	NWL	2	1.100	AUTUMN	32166	3RS ET	S
5-Oct-18	NWL	3	8.290	AUTUMN	32166	3RS ET	S
5-Oct-18	NWL	4	1.400	AUTUMN	32166	3RS ET	S
8-Oct-18	NWL	2	45.386	AUTUMN	32166	3RS ET	P
8-Oct-18	NWL	3	14.046	AUTUMN	32166	3RS ET	Р
8-Oct-18	NWL	2	10.674	AUTUMN	32166	3RS ET	S
8-Oct-18	NWL	3	1.390	AUTUMN	32166	3RS ET	S
5 500 10	NEL	2	15.780	AUTUMN	32166	3RS ET	P

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
11-Oct-18	NEL	3	19.940	AUTUMN	32166	3RS ET	Р
11-Oct-18	NEL	4	1.900	AUTUMN	32166	3RS ET	Р
11-Oct-18	NEL	2	3.580	AUTUMN	32166	3RS ET	S
11-Oct-18	NEL	3	5.900	AUTUMN	32166	3RS ET	S
12-Oct-18	NEL	2	29.540	AUTUMN	32166	3RS ET	Р
12-Oct-18	NEL	3	6.500	AUTUMN	32166	3RS ET	Р
12-Oct-18	NEL	2	7.440	AUTUMN	32166	3RS ET	S
12-Oct-18	NEL	3	2.900	AUTUMN	32166	3RS ET	S
23-Oct-18	SWL	2	24.730	AUTUMN	32166	3RS ET	Р
23-Oct-18	SWL	3	31.390	AUTUMN	32166	3RS ET	Р
23-Oct-18	SWL	2	9.780	AUTUMN	32166	3RS ET	S
23-Oct-18	SWL	3	5.100	AUTUMN	32166	3RS ET	S
24-Oct-18	AW	2	4.710	AUTUMN	32166	3RS ET	Р
24-Oct-18	WL	2	13.470	AUTUMN	32166	3RS ET	Р
24-Oct-18	WL	3	4.494	AUTUMN	32166	3RS ET	Р
24-Oct-18	WL	4	1.000	AUTUMN	32166	3RS ET	Р
24-Oct-18	WL	2	6.760	AUTUMN	32166	3RS ET	S
24-Oct-18	WL	3	2.240	AUTUMN	32166	3RS ET	S
24-Oct-18	WL	4	0.300	AUTUMN	32166	3RS ET	S
24-Oct-18	WL	5	0.500	AUTUMN	32166	3RS ET	S
26-Oct-18	SWL	2	25.709	AUTUMN	32166	3RS ET	Р
26-Oct-18	SWL	3	30.667	AUTUMN	32166	3RS ET	Р
26-Oct-18	SWL	2	9.234	AUTUMN	32166	3RS ET	S
26-Oct-18	SWL	3	5.860	AUTUMN	32166	3RS ET	S

Notes: CWD monitoring survey data of the two preceding survey months (i.e. August and September 2018) 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
2-Aug-18	1	1029	CWD	15	NWL	2	999	ON	3RS ET	22.2945	113.8705	SUMMER	NONE	Р
2-Aug-18	2	1122	CWD	1	NWL	3	12	ON	3RS ET	22.2741	113.8705	SUMMER	NONE	Р
2-Aug-18	3	1156	CWD	2	NWL	2	17	ON	3RS ET	22.2901	113.8786	SUMMER	NONE	Р
7-Aug-18	1	1008	CWD	2	WL	1	250	ON	3RS ET	22.2920	113.8613	SUMMER	NONE	Р
7-Aug-18	2	1043	CWD	5	WL	2	69	ON	3RS ET	22.2642	113.8578	SUMMER	NONE	S
7-Aug-18	3	1328	CWD	2	WL	2	524	ON	3RS ET	22.2027	113.8233	SUMMER	NONE	S
7-Aug-18	4	1344	CWD	5	WL	2	352	ON	3RS ET	22.1966	113.8411	SUMMER	NONE	Р
17-Aug-18	1	1149	CWD	1	NEL	2	8	ON	3RS ET	22.3387	113.9562	SUMMER	NONE	Р
21-Aug-18	1	1025	CWD	2	WL	2	22	ON	3RS ET	22.2688	113.8601	SUMMER	NONE	Р
21-Aug-18	2	1052	CWD	5	WL	2	267	ON	3RS ET	22.2526	113.8343	SUMMER	NONE	S
21-Aug-18	3	1133	CWD	1	WL	2	380	ON	3RS ET	22.2417	113.8352	SUMMER	NONE	Р
21-Aug-18	4	1149	CWD	1	WL	2	181	ON	3RS ET	22.2357	113.8253	SUMMER	NONE	S
21-Aug-18	5	1209	CWD	8	WL	2	93	ON	3RS ET	22.2226	113.8359	SUMMER	NONE	Р
21-Aug-18	6	1241	CWD	2	WL	2	26	ON	3RS ET	22.2140	113.8291	SUMMER	NONE	Р
21-Aug-18	7	1304	CWD	2	WL	2	26	ON	3RS ET	22.2055	113.8303	SUMMER	NONE	Р
21-Aug-18	8	1320	CWD	5	WL	2	160	ON	3RS ET	22.2039	113.8222	SUMMER	NONE	S
21-Aug-18	9	1340	CWD	2	WL	3	162	ON	3RS ET	22.1963	113.8415	SUMMER	NONE	Р
22-Aug-18	1	1439	CWD	3	SWL	2	17	ON	3RS ET	22.1860	113.8689	SUMMER	NONE	Р
23-Aug-18	1	1457	CWD	1	SWL	2	161	ON	3RS ET	22.1881	113.8592	SUMMER	NONE	Р
23-Aug-18	2	1522	CWD	5	SWL	2	263	ON	3RS ET	22.1842	113.8491	SUMMER	NONE	Р
7-Sep-18	1	1408	FP	1	SWL	2	244	ON	3RS ET	22.1951	113.9275	AUTUMN	NONE	Р
7-Sep-18	2	1425	FP	5	SWL	2	147	ON	3RS ET	22.1751	113.9282	AUTUMN	NONE	Р
14-Sep-18	1	1326	CWD	1	NWL	2	38	ON	3RS ET	22.3994	113.8982	AUTUMN	NONE	Р
19-Sep-18	1	1041	CWD	9	SWL	2	808	ON	3RS ET	22.1925	113.8590	AUTUMN	NONE	Р
19-Sep-18	2	1112	CWD	3	SWL	2	208	ON	3RS ET	22.1937	113.8589	AUTUMN	NONE	Р
19-Sep-18	3	1303	CWD	1	SWL	3	49	ON	3RS ET	22.1726	113.8970	AUTUMN	NONE	Р
20-Sep-18	1	1025	CWD	5	WL	3	38	ON	3RS ET	22.2686	113.8478	AUTUMN	NONE	Р
20-Sep-18	2	1047	CWD	10	WL	2	18	ON	3RS ET	22.2686	113.8526	AUTUMN	NONE	Р
20-Sep-18	3	1108	CWD	1	WL	2	72	ON	3RS ET	22.2600	113.8497	AUTUMN	NONE	Р
20-Sep-18	4	1135	CWD	3	WL	3	66	ON	3RS ET	22.2416	113.8462	AUTUMN	NONE	Р
20-Sep-18	5	1145	CWD	2	WL	3	8	ON	3RS ET	22.2415	113.8406	AUTUMN	NONE	Р
20-Sep-18	6	1250	CWD	7	WL	3	77	ON	3RS ET	22.1964	113.8414	AUTUMN	NONE	Р

DATE	STG#	TIME	CWD/FP	GP SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.	P/S
20-Sep-18	7	1317	CWD	1	WL	3	83	ON	3RS ET	22.1871	113.8399	AUTUMN	NONE	Р
20-Sep-18	8	1327	CWD	2	WL	3	81	ON	3RS ET	22.1870	113.8312	AUTUMN	NONE	Р
21-Sep-18	1	1026	CWD	6	WL	3	44	ON	3RS ET	22.2688	113.8523	AUTUMN	NONE	Р
21-Sep-18	2	1105	CWD	2	WL	3	520	ON	3RS ET	22.2499	113.8394	AUTUMN	NONE	Р
21-Sep-18	3	1142	CWD	3	WL	3	4	ON	3RS ET	22.2285	113.8377	AUTUMN	NONE	S
21-Sep-18	4	1208	CWD	6	WL	3	279	ON	3RS ET	22.2143	113.8313	AUTUMN	NONE	Р
21-Sep-18	5	1237	CWD	1	WL	2	2	ON	3RS ET	22.2135	113.8351	AUTUMN	NONE	Р
21-Sep-18	6	1306	CWD	4	WL	3	57	ON	3RS ET	22.1957	113.8348	AUTUMN	NONE	Р
26-Sep-18	1	1030	CWD	2	NWL	2	77	ON	3RS ET	22.2832	113.8697	AUTUMN	NONE	Р
26-Sep-18	2	1050	CWD	1	NWL	2	125	ON	3RS ET	22.2713	113.8721	AUTUMN	NONE	S
26-Sep-18	3	1221	CWD	1	NWL	3	387	ON	3RS ET	22.3863	113.8878	AUTUMN	NONE	Р
26-Sep-18	4	1426	CWD	1	NWL	2	131	ON	3RS ET	22.3659	113.9188	AUTUMN	NONE	S
4-Oct-18	1	1104	CWD	3	WL	3	461	ON	3RS ET	22.2411	113.8415	AUTUMN	NONE	Р
4-Oct-18	2	1148	CWD	1	WL	3	2	ON	3RS ET	22.2319	113.8356	AUTUMN	NONE	Р
4-Oct-18	3	1210	CWD	3	WL	3	325	ON	3RS ET	22.2232	113.8283	AUTUMN	NONE	Р
4-Oct-18	4	1253	CWD	2	WL	3	49	ON	3RS ET	22.2029	113.8235	AUTUMN	NONE	S
4-Oct-18	5	1314	CWD	7	WL	4	214	ON	3RS ET	22.1965	113.8380	AUTUMN	NONE	Р
5-Oct-18	1	1038	CWD	3	NWL	3	182	ON	3RS ET	22.2805	113.8703	AUTUMN	NONE	Р
8-Oct-18	1	0948	CWD	6	NWL	3	860	ON	3RS ET	22.3855	113.8703	AUTUMN	NONE	Р
8-Oct-18	2	1201	CWD	1	NWL	2	59	ON	3RS ET	22.3717	113.8774	AUTUMN	NONE	Р
8-Oct-18	3	1223	CWD	4	NWL	2	196	ON	3RS ET	22.3923	113.8781	AUTUMN	NONE	Р
8-Oct-18	4	1410	CWD	1	NWL	2	116	ON	3RS ET	22.3887	113.8980	AUTUMN	NONE	Р
8-Oct-18	5	1423	CWD	2	NWL	2	15	ON	3RS ET	22.3897	113.8979	AUTUMN	NONE	Р
12-Oct-18	1	1210	CWD	1	NEL	2	18	ON	3RS ET	22.3219	113.9658	AUTUMN	NONE	Р
24-Oct-18	1	1033	CWD	5	WL	3	264	ON	3RS ET	22.2690	113.8447	AUTUMN	NONE	S
24-Oct-18	2	1054	CWD	6	WL	3	300	ON	3RS ET	22.2690	113.8459	AUTUMN	NONE	Р
26-Oct-18	1	1236	FP	1	SWL	2	55	ON	3RS ET	22.1571	113.8774	AUTUMN	NONE	S

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 (i.e. August and September 2018) are presented for reference only. No relevant figure or text will be mentioned in the monthly EM&A report.

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

Calculation of the October 2018 encounter rates STG and ANI in the whole survey area (NEL, NWL, AW, WL, SWL):

A total of 423.870 km of survey effort was collected under Beaufort Sea State 3 or below with favourable visibility; total no. of 13 on-effort sightings and total number of 38 dolphins from on-effort sightings were collected under such condition. Calculation of the encounter rates in October 2018 are shown as below:

Encounter Rate by Number of Dolphin Sightings (STG) in October 2018

$$STG = \frac{13}{423.870} \times 100 = 3.07$$

Encounter Rate by Number of Dolphins (ANI) in October 2018

$$ANI = \frac{38}{423.870} \times 100 = 8.97$$

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

A total of 1313.155 km of survey effort was collected under Beaufort Sea State 3 or below with favourable visibility; total no. of 55 on-effort sightings and total number of 180 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)

$$STG = \frac{55}{1313.155} \times 100 = 4.19$$

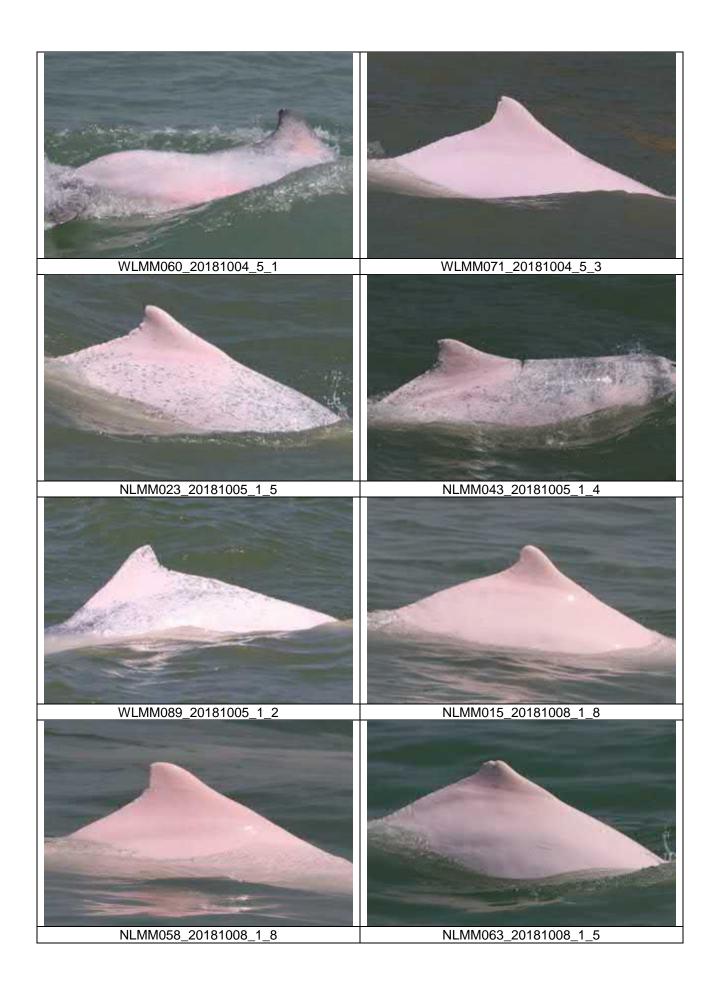
Running Quarterly Encounter Rate by Number of Dolphins (ANI)

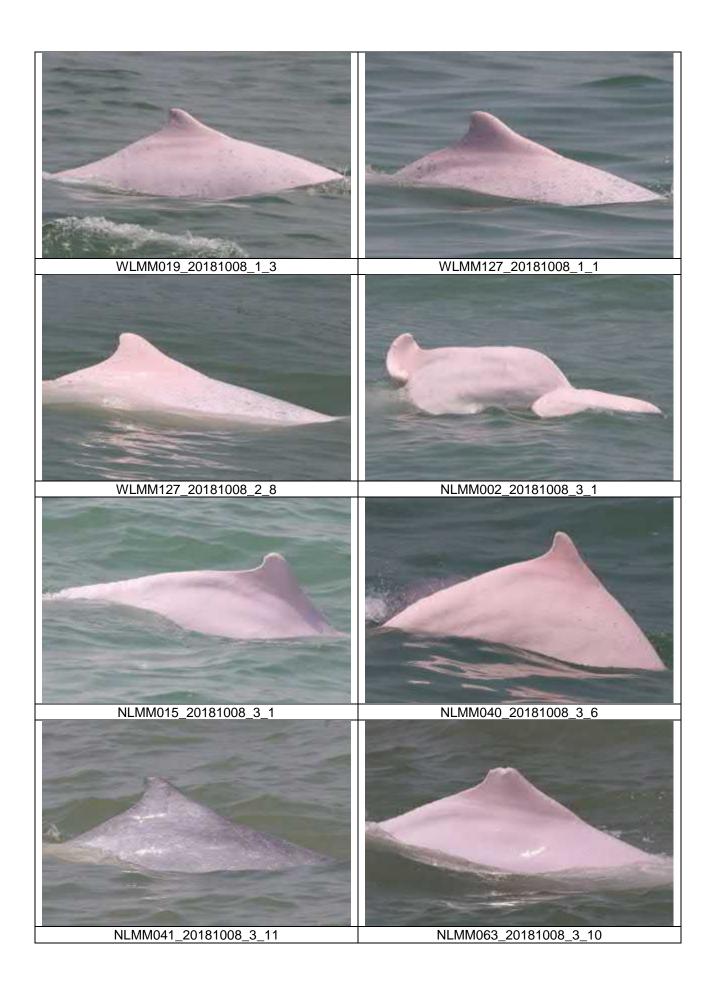
$$ANI = \frac{180}{1313.155} \times 100 = 13.71$$

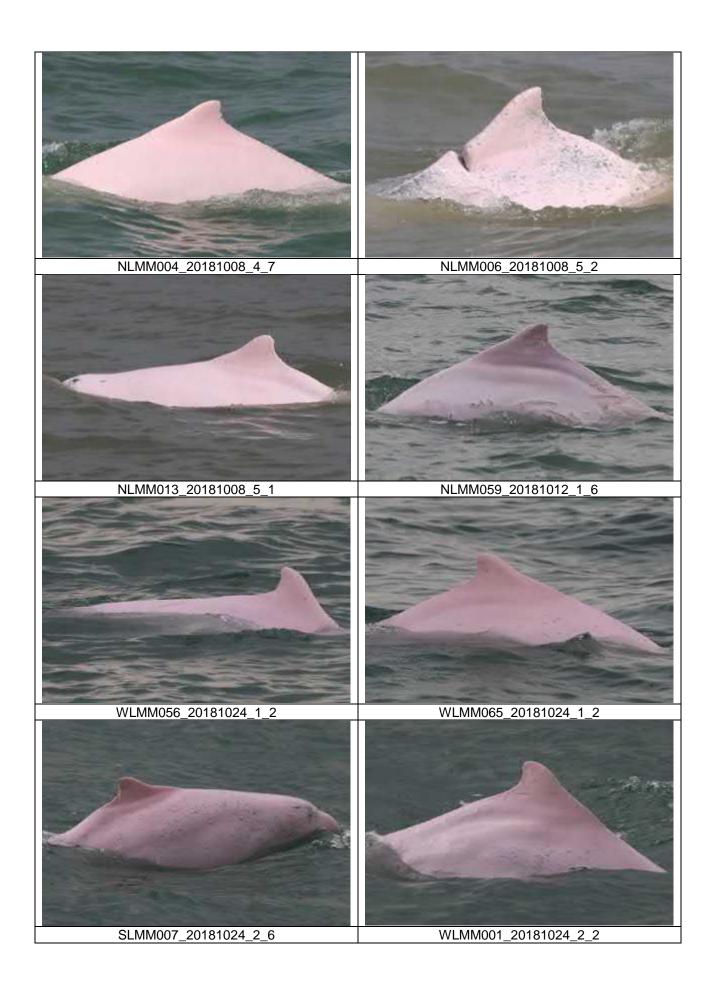
CWD Small Vessel Line-transect Survey

Photo Identification











CWD Land-based Theodolite Tracking Survey

CWD Groups by Survey Date

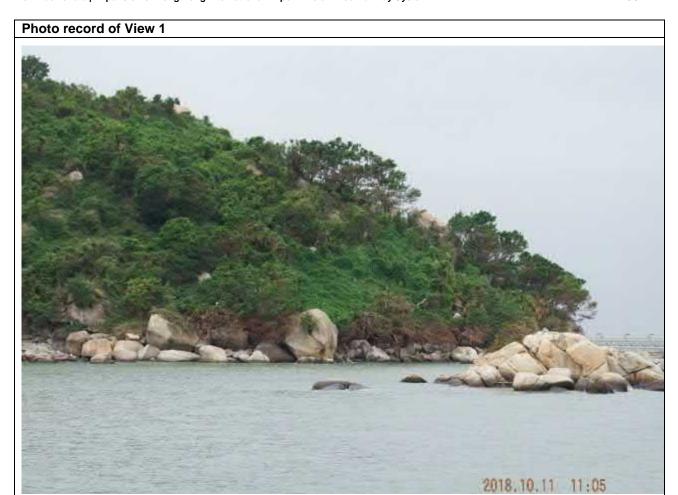
Date	Station	Start Time	End Time	Duration	Beaufort Range	Visibility	No. of Focal Follow Dolphin Groups Tracked	Dolphin Group Size Range
8/Oct/18	Sha Chau	8:37	14:37	6:00	2	3	0	N/A
9/Oct/18	Sha Chau	8:51	14:51	6:00	2	3	0	N/A
15/Oct/18	Lung Kwu Chau	8:47	14:47	6:00	2	2	3	1-2
22/Oct/18	Lung Kwu Chau	8:42	14:42	6:00	2	2-3	4	1-5
29/Oct/18	Lung Kwu Chau	9:22	15:22	6:00	2-3	2	4	1-7

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



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









Appendix D. Calibration Certificates



OUALITY PRO TEST-CONSULT LIMITED

Unit 10, 14/F, Wah Wai Centre, 38-40 Au Pui Wan St., Fotan, Hong Kong Email: info@qualityprotest.com; Website: www.qualityprotest.com

Tel: (852) 3956 8717; Fax: (852) 3956 3928

REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No.

: AH100180

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26 October 2018

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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

16H104234

Date of Received

Oct 26, 2018

Date of Calibration

Oct 26, 2018

Date of Next Calibration(a)

Jan 26, 2019

PART C - REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

Parameter

Reference Method

pH at 25°C

APHA 21e 4500-H+ B APHA 21e 4500-O G

Dissolved Oxygen Conductivity at 25°C

APHA 21c 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) oH at 25°C

Target (pH unit)	Displayed Reading(d) (pH Unit)	Tolerance(v)(pH Unit)	Results
4.00	4.05	0.05	Satisfactory
7.42	7.46	0.04	Satisfactory
10.01	9.98	-0.03	Satisfactory

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

(2) Temperature

Reading of Ref. thermometer	Displayed Reading (°C)	Tolerance (°C)	Results
10.8	10.7	-0.1	Satisfactory
23.5	23.4	-0.1	Satisfactory
45.0	45.5	0.5	Satisfactory

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

- CONTINUED ON NEXT PAGE -

Remark(s): -

The "Date of Next Calibration" is recommended according to best practice principals as practiced by QPT or quoted form relevant international standards.

The results relate only to the calibrated equipment as received

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

"Displayed Reading" denotes the figure shown on item under calibration' checking regardless of equipment precision or significant figures.

The "Tolerance Limit" mentioned is the acceptance criteria applicable for similar equipment used by QPT or quoted form relevant international standards.

APPROVED SIGNATORY:

LAM Ho-yee, Emma Assistant Laboratory Manager



QUALITY PRO TEST-CONSULT LIMITED

Unit 10, 14/F, Wah Wai Centre, 38-40 Au Pui Wan St., Fotan, Hong Kong Email: info@qualityprotest.com; Website: www.qualityprotest.com

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PART D - CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
0.00	0.00	0.00	Satisfactory
1.70	1.81	0.11	Satisfactory
4.79	4.81	0.02	Satisfactory
7.70	7.74	0.04	Satisfactory

Tolerance limit of dissolved oxygen should be less than ±0.20 (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	4.2	Satisfactory
0.01	1412	1359	-3.8	Satisfactory
0.1	12890	12520	-2.9	Satisfactory
0.5	58670	57672	-1.7	Satisfactory
1.0	111900	112190	0.3	Satisfactory

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

(5) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	10.11	1.1	Satisfactory
20	20.47	2.3	Satisfactory
30	30.18	0.6	Satisfactory

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

(6) Turbidity

Expected Reading (NTU)	Displayed Reading ^(f) (NTU)	Tolerance ^(g) (%)	Results
0	0.40		
10	9.80	-2.0	Satisfactory
20	19.36	-3.2	Satisfactory
100	102.34	2.3	Satisfactory
800	803.10	0.4	Satisfactory

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

- END OF REPORT -

[&]quot;Displayed Reading" presents the figures shown on item under calibration/ checking regardless of equipment precision or significant figures.

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.



OUALITY PRO TEST-CONSULT LIMITED

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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

17H105557

Date of Received

Oct 26, 2018

Date of Calibration

Oct 26, 2018

Date of Next Calibration(s)

Jan 26, 2019

PART C - REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

Parameter

Reference Method

pH at 25°C

APHA 21e 4500-H1 B APHA 21e 4500-O G

Dissolved Oxygen Conductivity at 25°C

APHA 21e 2510 B

Salinity

APHA 21e 2520 B

Saunity Turbidity APHA 21c 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	4.07	0.07	Satisfactory
7.42	7.42	0.00	Satisfactory
10.01	10.01	0,00	Satisfactory

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

(2) Temperature

Reading of Ref. thermometer	Displayed Reading (°C)	Tolerance (°C)	Results
10.8	10.7	-0.1	Satisfactory
23.5	23.3	-0.2	Satisfactory
45.0	45.7	0.7	Satisfactory

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

~ CONTINUED ON NEXT PAGE ~

Remark(s): -

The "Date of Next Calibration" is recommended according to best practice principals as practiced by QPT or quoted form relevant international standards.

The results relate only to the calibrated equipment as received

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

"Displayed Reading" denotes the figure shown on item under calibration checking regardless of equipment precision or significant figures.

*1 The "Tolerance Limit" mentioned is the acceptance criteria applicable for similar equipment used by QPT or quoted form relevant international standards.

APPROVED SIGNATORY:

LAM Ho-yee, Emma Assistant Laboratory Manager



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PART D - CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
0.00	0.00	0.00	Satisfactory
1.70	1.77	0.07	Satisfactory
4.79	4.83	0.04	Satisfactory
7.70	7.81	0.11	Satisfactory

Tolerance limit of dissolved oxygen should be less than ±0.20 (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	150.0	2.1	Satisfactory
0.01	1412	1439	1.9	Satisfactory
0.1	12890	11949	-7.3	Satisfactory
0.5	58670	58670	0.0	Satisfactory
1.0	111900	111563	-0.3	Satisfactory

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

(5) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	10.13	1.3	Satisfactory
20	20.16	0.8	Satisfactory
30	30.26	0.9	Satisfactory

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

(6) Turbidity

Expected Reading (NTU)	Displayed Reading ^(f) (NTU)	Tolerance ^(g) (%)	Results
0	0.30		** 1
10	9.70	-3.0	Satisfactory
20	19.76	-1.2	Satisfactory
100	98.33	-1.7	Satisfactory
800	804.22	0.5	Satisfactory

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

- END OF REPORT -

Remark(s): -

[&]quot;Displayed Reading" presents the figures shown on item under calibration checking regardless of equipment precision or significant figures.

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

Appendix E. Status of Environmental Permits and Licences

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

Contract No.	Description	Location	Permit/ Reference No.	Status
P560 (R)	Notification of Construction Work	Launching Site	423880	Receipt acknowledged by EPD on 1 Dec 2017
	under APCO	Site Office	397151	Receipt acknowledged by EPD on 15 Jar 2016
		Stockpiling Area	398015	Receipt acknowledged by EPD on 18 Jan 2016
		Sheung Sha Chau	405860	Receipt acknowledged by EPD on 5 Aug 2016
	Construction Noise Permit (General	Launching Site	GW-RS0326-18	Superseded by GW-RS0965-18 on 24 Oct 2018
	Works)		GW-RS0965-18	Valid until 22 Apr 2019
		Stockpiling Area	GW-RS0683-18	Valid until 3 Feb 2019
	Discharge License under WPCO	Launching Site	WT00024249- 2016	Valid from to 25 Apr 2016 to 30 Apr 2021
		Stockpiling Area	WT00024250- 2016	Approved on 25 Apr 2016 to 30 Apr 2021
	Registration as Chemical Waste Producer	Launching Site	WPN 5213-951- L2902-01	Registration was updated on 29 Sep 2017
		Sheung Sha Chau	WPN 5111-434- L2902-03	Registration was updated on 6 Oct 2017
		Stockpiling Area	WPN 5213-951- L2902-02	Registration was updated on 3 Oct 2016
	Bill Account for disposal		A/C 7023982	Approval granted from EPD on 14 Dec 2015
3201	Notification of Construction Work under APCO	Works area of 3201	406004	Receipt acknowledged by EPD on 10 Aug 2016
	Construction Noise Permit (General Works)	Works area of 3201	GW-RS0761-18	Valid until 28 Feb 2019
	Registration as Chemical Waste Producer	Works area of 3201	WPN 5213-951- P3231-01	Completion of Registration on 9 Sep 2016
	Bill Account for disposal		A/C 7025760	Approval granted from EPD on 31 Aug 2016
3202	Notification of Construction Work under APCO	Works area of 3202	437501	Receipt acknowledged by EPD on 17 Sep 2018
	Construction Noise Permit (General Works)	Works area of 3202	GW-RS0429-18	Valid until 24 Nov 2018

Contract No.	Description	Location	Permit/ Reference No.	Status
	Registration as Chemical Waste Producer	Works area of 3202	WPN 5213-951- S3967-01	Registration was updated on 23 May 2017
	Discharge License under WPCO	Works area of 3202	WT00028293- 2017	Valid from 12 Jun 2017 to 30 Jun 2022
	Bill Account for disposal		A/C 7025739	Approval granted from EPD on 31 August 2016
3203	Notification of Construction Work under APCO	Works area of 3203	407053	Receipt acknowledged by EPD on 2 Sep 2016
	Construction Noise Permit (General	Works area of 3203	GW-RS0819-18	Superseded by GW-RS0949-18 on 20 Oct 2018
	Works)		GW-RS0949-18	Valid until 19 Apr 2019
	Registration as Chemical Waste Producer	Works area of 3203	WPN 5213-951- S3954-01	Registration was updated on 12 Dec 2016
	Discharge License under WPCO	Works area of 3203	WT00028251- 2017	Valid from 9 Jun 2017 to 30 Jun 2022
	Bill Account for disposal		A/C 7025846	Approval granted from EPD on 9 Sep 2016
3204	Notification of Construction Work under APCO	Works area of 3204	406446	Receipt acknowledged by EPD on 19 Aug 2016
	Construction Noise Permit (General Works)	Works Area of 3204	GW-RS0431-18	Valid until 24 Nov 2018
	Registration as Chemical Waste Producer	Works Area of 3204	WPN 5213-951- C4102-01	Completion of Registration on 15 Sep 2016
		Site Office of 3204	WPN 5213-951- C4102-02	Completion of Registration on 17 Mar 2017
	Discharge License under WPCO	Works area of 3204	WT00028245- 2017	Valid from 5 Jun 2017 to 30 Jun 2022
	Bill Account for disposal		A/C 7025969	Approval granted from EPD on 21 Sep 2016
3205	Notification of Construction Work under APCO	Works area of 3205	409041	Receipt acknowledged by EPD on 19 Oct 2016
	Registration as Chemical Waste Producer	Works Area of 3205	WPN 5213-951- B2502-01	Registration was updated on 25 Sep 2017
		Works Area of 3205	WPN 5111-421- B2509-01	Registration was updated on 25 Sep 2017
	Construction Noise Permit (General Works)	Works Area of 3205	GW-RS0950-18	Valid until 19 Apr 2019
	Discharge License under WPCO	Works area of 3205	WT00028370- 2017	Valid from 21 Jun 2017 to 30 Jun 2022
	Bill Account for disposal	Works area of 3205	A/C 7026295	Approval granted from EPD on 9 Nov 2016
3206	Notification of Construction Work under APCO	Works area of 3206	409237	Receipt acknowledged by EPD on 25 Oct 2016
	Registration as Chemical Waste Producer	Site office of 3206	WPN 5213-951- Z4035-01	Completion of Registration on 18 Nov 2016

Contract No.	Description	Location	Permit/ Reference No.	Status
		Works area of 3206	WPN 5213-951- Z4035-02	Completion of Registration on 18 Nov 2016
	Construction Noise	Works Area of	GW-RS0596-18	Valid until 10 Jan 2019
	Permit (General Works)	3206	GW-RS0821-18	Superseded by GW-RS0951-18 on 20 Oct 2018
			GW-RS0951-18	Valid until 15 Apr 2019
	Bill Account for disposal	Works area of 3206	A/C 7026398	Approval granted from EPD on 16 Nov 2016
3301	Notification of Construction Work under APCO	Works area of 3301	415821	Receipt acknowledged by EPD on 19 Apr 2017
	Registration as Chemical Waste Producer	Works area of 3301	WPN 5213-951- F2718-02	Completion of Registration on 9 Jun 2017
	Bill Account for disposal	Works area of 3301	A/C 7027728	Approval granted from EPD on 8 May 2017
	Construction Noise Permit (General	Works area of 3301	GW-RS0270-18	Valid until 5 Oct 2018
	Works)	(Cable ducting works)	GW-RS0923-18	Valid from 15 Oct 2018 to 11 Apr 2019
		Works area of 3301	GW-RS0288-17	Valid until 5 Oct 2018
			GW-RS0856-18	Effective from 6 Oct 2018 Superseded by GW-RS0937-18 on 15 Oct 2018
			GW-RS0937-18	Valid until 11 Apr 2019
3501	Notification of Construction Work under APCO	Works area of 3501	434640	Receipt acknowledged by EPD on 13 Jun 2018
	Registration as Chemical Waste Producer	Works area of 3501	WPN 5213-951- B2520-02	Completion of Registration on 25 Jul 2017
	Discharge License under WPCO	Works area of 3501	WT00031400- 2018	Valid from 30 Aug 2018 to 31 Aug 2023
	Bill Account for disposal	Works area of 3501	A/C 7028144	Approval granted from EPD on 23 Jun 2017
	Construction Noise Permit (General Works)	Works area of 3501	GW-RS0541-18	Valid until 31 Oct 2018
3502	Notification of Construction Work under APCO	Works area of 3502	417511	Receipt acknowledged by EPD on 2 Jun 2017
	Registration as Chemical Waste Producer	Works area of 3502	WPN 5213-951- B2520-01	Completion of Registration on 3 Jul 2017
	Bill Account for disposal	Works area of 3502	A/C 7028050	Approval granted from EPD on 21 Jun 2017
	Construction Noise Permit (General Works)	Works area of 3502	GW-RS0845-18	Valid until 10 Mar 2019

Contract No.	Description	Location	Permit/ Reference No.	Status
3503	Notification of Construction Work under APCO	Works area of 3503	435180	Receipt acknowledged by EPD on 29 Jun 2018
	Registration as Chemical Waste Producer	Works area of 3503	WPN 5113-951- L2845-02	Completion of Registration on 8 Jan 2018
	Discharge License under WPCO	Works area of 3503	WT00031258- 2018	Valid from 7 Jun 2018 to 30 Jun 2023
	Bill Account for disposal	Works area of 3503	A/C 7029665	Approval granted from EPD on 27 Dec 2017
	Construction Noise Permit (General	Works area of 3503	GW-RS0822-18	Superseded by GW-RS0940-18 on 16 Oct 2018
	Works)		GW-RS0940-18	Valid until 10 Apr 2019
		Stockpiling area of 3503	GW-RS0384-18	Valid until 13 Nov 2018
3505	Bill Account for disposal	Works area of 3505	A/C 7030321	Approval granted from EPD on 16 Mar 2018
	Construction Noise Permit (General Works)	Works area of 3505	GW-RS0497-18	Valid until 31 Oct 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	Works area of 3602	WPN 5296-951- N2673-01	Completion of Registration on 9 Oct 2017
	Producer	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
3603	Notification of Construction Work under APCO	Site office of 3603	433604	Receipt acknowledged by EPD on 16 May 2018
	Registration as Chemical Waste Producer	Works area of 3603	WPN 5296-951- S4069-01	Completion of Registration on 22 Jan 2018
	Bill Account for disposal	Works area of 3603	A/C 7030002	Approval granted from EPD on 1 Feb 2018
	Construction Noise Permit (General	Works area of 3603	GW-RS0771-18	Superseded by GW-RS0975-18 on 26 Oct 2018
	Works)		GW-RS0975-18	Valid until 25 Apr 2019
3801	Notification of Construction Work	Works area of 3801	418345	Receipt acknowledged by EPD on 26 Jun 2017
	under APCO		430372	Receipt acknowledged by EPD on 2 Feb 2018
			435652	Receipt acknowledged by EPD on 16 Jul 2018
	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
	Bill Account for disposal	Works area of 3801	A/C 7028254	Approval granted from EPD on 3 Jul 2017

Contract No.	Description	Location	Permit/ Reference No.	Status
	Construction Noise Permit (General Works)	Works and stockpiling area of 3801	GW-RS0783-18	Valid until 28 Feb 2019
		Works area of 3801	GW-RS0781-18	Valid until 31 Oct 2018

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

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

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

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

Statistics for Complaints, Notifications of Summons and Prosecution

Reporting Period	Cumulative Statistics					
	Complaints	Notifications of Summons	Prosecutions			
This reporting period	0	0	0			
From 28 December 2015 to end of the reporting period	15	1	1			

Appendix G. Data of SkyPier HSF Movements to/from Zhuhai and Macau (between 1 and 31 October 2018)

<u>Data of SkyPier HSF Movements to/from Zhuhai and Macau (between 1 and 31 October 2018)</u>

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM Macao (Maritime Ferry Terminal) YFT Macao (Taipa) ZUI Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
01-Oct	08:21	8S210	XZM	Arrival	12.3	-	-
01-Oct	08:21	3A061	YFT	Arrival	12.3	-	-
01-Oct	10:01	3A062	YFT	Arrival	12.3	-	-
01-Oct	10:18	3A163	YFT	Departure	12.4	-	-
01-Oct	10:43	8S212	XZM	Arrival	12.1	-	-
01-Oct	10:52	3A081	ZUI	Arrival	12.2	-	-
01-Oct	11:05	8S121	XZM	Departure	11.7	-	-
01-Oct	11:19	3A063	YFT	Arrival	11.3	-	-
01-Oct	12:24	3A168	YFT	Departure	12.2	-	-
01-Oct	12:31	3A181	ZUI	Departure	13	-	-
01-Oct	12:49	8S215	XZM	Arrival	12	-	-
01-Oct	12:55	3A064	YFT	Arrival	11.9	-	-
01-Oct	13:17	8S123	XZM	Departure	12.6	-	-
01-Oct	13:51	3A082	ZUI	Arrival	12.4	-	-
01-Oct	14:13	3A164	YFT	Departure	12.4	-	-
01-Oct	14:15	3A182	ZUI	Departure	13.3	-	-
01-Oct	14:55	3A065	YFT	Arrival	12.8	-	-
01-Oct	16:20	3A167	YFT	Departure	11.8	1	-
01-Oct	16:37	8S218	XZM	Arrival	12.5	-	-
01-Oct	16:52	3A083	ZUI	Arrival	13.3	-	-
01-Oct	16:57	3A067	YFT	Arrival	12.6	-	-
01-Oct	17:10	3A183	ZUI	Departure	12.4	-	-
01-Oct	17:11	8S126	XZM	Departure	12.7	-	-
01-Oct	19:06	3A166	YFT	Departure	12.3	-	-
01-Oct	19:41	3A084	ZUI	Arrival	12.6	-	-
01-Oct	20:19	3A185	ZUI	Departure	12.5	-	-
01-Oct	20:56	8S2113	XZM	Arrival	11.9	-	-
01-Oct	21:05	3A169	YFT	Departure	11.9	-	-
01-Oct	21:55	8S522	XZM	Departure	13.1	-	-
02-Oct	08:15	3A061	YFT	Arrival	12	-	-
02-Oct	08:22	8S210	XZM	Arrival	12.4	-	-
02-Oct	10:03	3A062	YFT	Arrival	12	-	-
02-Oct	10:20	3A163	YFT	Departure	11.3	-	-
02-Oct	10:39	8S212	XZM	Arrival	11.6	-	-
02-Oct	10:54	3A081	ZUI	Arrival	11.4	-	-
02-Oct	11:15	8S121	XZM	Departure	11.9	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT - Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
02-Oct	11:24	3A063	YFT	Arrival	10.9	-	-
02-Oct	12:24	3A168	YFT	Departure	11.6	-	-
02-Oct	12:25	3A181	ZUI	Departure	13.6	-	-
02-Oct	12:46	8S215	XZM	Arrival	11.8	-	-
02-Oct	13:08	3A064	YFT	Arrival	12.3	-	-
02-Oct	13:14	8S123	XZM	Departure	12.5	-	-
02-Oct	13:46	3A082	ZUI	Arrival	12.6	-	-
02-Oct	14:17	3A164	YFT	Departure	12.8	-	-
02-Oct	14:20	3A182	ZUI	Departure	11.9	-	-
02-Oct	14:59	3A065	YFT	Arrival	11.9	-	-
02-Oct	16:12	3A167	YFT	Departure	12.2	-	-
02-Oct	16:39	8S218	XZM	Arrival	11.3	-	-
02-Oct	16:43	3A083	ZUI	Arrival	13	-	-
02-Oct	16:54	3A067	YFT	Arrival	12.7	-	-
02-Oct	17:03	3A183	ZUI	Departure	13.1	-	-
02-Oct	17:08	8S126	XZM	Departure	12.9	-	-
02-Oct	19:07	3A166	YFT	Departure	12.8	-	-
02-Oct	19:50	3A084	ZUI	Arrival	13.5	-	-
02-Oct	20:18	3A185	ZUI	Departure	13.1	-	-
02-Oct	20:51	8S2113	XZM	Arrival	12.1	-	-
02-Oct	21:04	3A169	YFT	Departure	13.3	-	-
02-Oct	22:00	8S522	XZM	Departure	12.7	-	-
03-Oct	08:16	3A061	YFT	Arrival	12.6	-	-
03-Oct	08:17	8S210	XZM	Arrival	12.7	-	-
03-Oct	09:55	3A062	YFT	Arrival	12.2	-	-
03-Oct	10:17	3A163	YFT	Departure	12.4	-	-
03-Oct	10:39	8S212	XZM	Arrival	11.9	-	-
03-Oct	10:49	3A081	ZUI	Arrival	12.9	-	-
03-Oct	11:06	8S121	XZM	Departure	12	-	-
03-Oct	11:17	3A063	YFT	Arrival	12.2	<= 5	< 1min
03-Oct	12:11	3A168	YFT	Departure	10.7	-	-
03-Oct	12:13	3A181	ZUI	Departure	12.6	-	-
03-Oct	12:45	8S215	XZM	Arrival	12.7	-	-
03-Oct	12:53	3A064	YFT	Arrival	12.2	-	-
03-Oct	13:11	8S123	XZM	Departure	11.9	-	-
03-Oct	13:42	3A082	ZUI	Arrival	13	-	-
03-Oct	14:11	3A164	YFT	Departure	11.9	-	-
03-Oct	14:16	3A182	ZUI	Departure	12.8	-	-
03-Oct	14:59	3A065	YFT	Arrival	10.8	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT - Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
03-Oct	16:14	3A167	YFT	Departure	11.1	1	-
03-Oct	16:42	8S218	XZM	Arrival	11.1	-	-
03-Oct	16:49	3A083	ZUI	Arrival	12.8	-	-
03-Oct	16:51	3A067	YFT	Arrival	12.6	-	-
03-Oct	17:15	8S126	XZM	Departure	12.7	-	-
03-Oct	17:19	3A183	ZUI	Departure	13.3	-	-
03-Oct	19:01	3A166	YFT	Departure	12.6	-	-
03-Oct	20:01	3A084	ZUI	Arrival	12.8	-	-
03-Oct	20:14	3A185	ZUI	Departure	13	-	-
03-Oct	20:55	8S2113	XZM	Arrival	11.7	-	-
03-Oct	21:08	3A169	YFT	Departure	12.8	-	-
03-Oct	21:53	8S522	XZM	Departure	12.9	-	-
04-Oct	08:15	3A061	YFT	Arrival	11.9	-	-
04-Oct	08:20	8S210	XZM	Arrival	12.4	-	-
04-Oct	09:50	3A062	YFT	Arrival	12.2	-	-
04-Oct	10:24	3A163	YFT	Departure	11.2	-	-
04-Oct	10:35	8S212	XZM	Arrival	12.7	-	-
04-Oct	10:51	3A081	ZUI	Arrival	13.1	-	-
04-Oct	11:06	8S121	XZM	Departure	11.8	-	-
04-Oct	11:13	3A063	YFT	Arrival	12.5	-	-
04-Oct	12:14	3A181	ZUI	Departure	12.3	-	-
04-Oct	12:19	3A168	YFT	Departure	12.7	-	-
04-Oct	12:42	8S215	XZM	Arrival	12.8	-	-
04-Oct	13:12	3A064	YFT	Arrival	11.5	-	-
04-Oct	13:16	8S123	XZM	Departure	13	-	-
04-Oct	13:42	3A082	ZUI	Arrival	13.2	-	-
04-Oct	14:16	3A164	YFT	Departure	11.4	-	-
04-Oct	14:21	3A182	ZUI	Departure	13	-	-
04-Oct	14:53	3A065	YFT	Arrival	12.8	-	-
04-Oct	16:22	3A167	YFT	Departure	12.7	-	-
04-Oct	16:41	3A083	ZUI	Arrival	12.7	1	-
04-Oct	16:44	8S218	XZM	Arrival	11.2	-	-
04-Oct	16:52	3A067	YFT	Arrival	12.3	-	-
04-Oct	17:13	3A183	ZUI	Departure	13.5	-	-
04-Oct	17:19	8S126	XZM	Departure	13.3	-	-
04-Oct	19:02	3A166	YFT	Departure	12.3	-	-
04-Oct	19:57	3A084	ZUI	Arrival	13.3	-	-
04-Oct	20:12	3A185	ZUI	Departure	12.9	-	-
04-Oct	20:51	8S2113	XZM	Arrival	11.9	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM Macao (Maritime Ferry Terminal) YFT Macao (Taipa) ZUI Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
04-Oct	21:02	3A169	YFT	Departure	13.1	-	-
04-Oct	22:07	8S522	XZM	Departure	11	-	-
05-Oct	08:13	3A061	YFT	Arrival	12.7	-	-
05-Oct	08:15	8S210	XZM	Arrival	12.9	-	-
05-Oct	09:58	3A062	YFT	Arrival	12.6	-	-
05-Oct	10:18	3A163	YFT	Departure	12.3	-	-
05-Oct	10:37	8S212	XZM	Arrival	11.7	-	-
05-Oct	10:55	3A081	ZUI	Arrival	12.8	-	-
05-Oct	11:05	8S121	XZM	Departure	12.5	-	-
05-Oct	11:12	3A063	YFT	Arrival	12.2	-	-
05-Oct	12:18	3A168	YFT	Departure	12.3	-	-
05-Oct	12:20	3A181	ZUI	Departure	12	-	-
05-Oct	12:46	8S215	XZM	Arrival	11.4	-	-
05-Oct	12:59	3A064	YFT	Arrival	12.3	-	-
05-Oct	13:12	8S123	XZM	Departure	10	-	-
05-Oct	13:55	3A082	ZUI	Arrival	12.5	-	-
05-Oct	14:12	3A164	YFT	Departure	12.4	-	-
05-Oct	14:13	3A182	ZUI	Departure	13.5	-	-
05-Oct	14:54	3A065	YFT	Arrival	12.2	-	-
05-Oct	16:21	3A167	YFT	Departure	12	-	-
05-Oct	16:45	8S218	XZM	Arrival	11.2	-	-
05-Oct	16:51	3A083	ZUI	Arrival	12.7	-	-
05-Oct	16:59	3A067	YFT	Arrival	12.3	-	-
05-Oct	17:08	8S126	XZM	Departure	10.9	-	-
05-Oct	17:15	3A183	ZUI	Departure	13.5	-	-
05-Oct	19:03	3A166	YFT	Departure	12.3	-	-
05-Oct	19:50	3A084	ZUI	Arrival	12	-	-
05-Oct	20:21	3A185	ZUI	Departure	13.3	-	-
05-Oct	20:58	8S2113	XZM	Arrival	13	-	-
05-Oct	21:09	3A169	YFT	Departure	12	-	-
05-Oct	22:04	8S522	XZM	Departure	12.8	-	-
06-Oct	08:18	3A061	YFT	Arrival	11.9	-	-
06-Oct	08:22	8S210	XZM	Arrival	11.5	-	-
06-Oct	10:16	3A062	YFT	Arrival	12.9	-	-
06-Oct	10:51	3A163	YFT	Departure	13.6	-	-
06-Oct	10:52	8S212	XZM	Arrival	12.8	-	-
06-Oct	11:05	3A081	ZUI	Arrival	13.6	-	-
06-Oct	11:23	3A063	YFT	Arrival	11.2	-	-
06-Oct	11:32	8S121	XZM	Departure	12.9	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM Macao (Maritime Ferry Terminal) YFT Macao (Taipa) ZUI Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
06-Oct	12:44	3A168	YFT	Departure	12.1	-	-
06-Oct	12:49	3A181	ZUI	Departure	11.7	-	-
06-Oct	13:05	8S215	XZM	Arrival	12.5	-	-
06-Oct	13:10	3A064	YFT	Arrival	12.9	-	-
06-Oct	13:31	8S123	XZM	Departure	11.4	-	-
06-Oct	13:45	3A082	ZUI	Arrival	11.6	-	-
06-Oct	14:38	3A164	YFT	Departure	13.4	-	-
06-Oct	14:42	3A182	ZUI	Departure	12.3	-	-
06-Oct	15:07	3A065	YFT	Arrival	11.6	-	-
06-Oct	16:34	8S218	XZM	Arrival	11.2	-	-
06-Oct	16:42	3A083	ZUI	Arrival	12.7	-	-
06-Oct	16:57	3A167	YFT	Departure	12.2	-	-
06-Oct	17:13	3A067	YFT	Arrival	12.3	-	-
06-Oct	17:39	8S126	XZM	Departure	13.3	-	-
06-Oct	18:11	3A183	ZUI	Departure	12	-	-
06-Oct	19:35	3A166	YFT	Departure	12	-	-
06-Oct	20:05	3A084	ZUI	Arrival	12.9	-	-
06-Oct	21:09	8S2113	XZM	Arrival	12	-	-
06-Oct	21:46	3A185	ZUI	Departure	12.4	-	-
06-Oct	23:28	3A169	YFT	Departure	13.2	-	-
07-Oct	00:04	8S522	XZM	Departure	12.2	-	-
07-Oct	08:13	3A061	YFT	Arrival	12.6	-	-
07-Oct	08:21	8S210	XZM	Arrival	12.9	-	-
07-Oct	09:49	3A062	YFT	Arrival	12.3	-	-
07-Oct	10:47	8S212	XZM	Arrival	13.3	-	-
07-Oct	10:51	3A163	YFT	Departure	12.4	-	-
07-Oct	10:52	3A081	ZUI	Arrival	13.7	-	-
07-Oct	11:17	3A063	YFT	Arrival	12.5	-	-
07-Oct	11:45	8S121	XZM	Departure	10.6	-	-
07-Oct	12:38	3A168	YFT	Departure	12.4	-	-
07-Oct	12:43	3A181	ZUI	Departure	11.7	1	-
07-Oct	12:54	8S215	XZM	Arrival	12.9	-	-
07-Oct	13:22	3A064	YFT	Arrival	12.7	-	-
07-Oct	13:45	8S123	XZM	Departure	11.4	-	-
07-Oct	13:45	3A082	ZUI	Arrival	12.8	-	-
07-Oct	14:32	3A164	YFT	Departure	12.2	-	-
07-Oct	14:36	3A182	ZUI	Departure	12.8	-	-
07-Oct	15:03	3A065	YFT	Arrival	12.1	-	-
07-Oct	16:27	8S218	XZM	Arrival	12.4	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT - Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
07-Oct	16:37	3A083	ZUI	Arrival	12.5	1	-
07-Oct	16:49	3A167	YFT	Departure	12.7	-	-
07-Oct	17:25	3A067	YFT	Arrival	12.3	-	-
07-Oct	18:03	3A183	ZUI	Departure	12.6	-	-
07-Oct	18:21	8S126	XZM	Departure	11.8	-	-
07-Oct	19:32	3A166	YFT	Departure	12.6	-	-
07-Oct	19:37	3A084	ZUI	Arrival	11.5	-	-
07-Oct	21:05	3A185	ZUI	Departure	12.1	-	-
07-Oct	21:05	8S2113	XZM	Arrival	11.3	-	-
07-Oct	22:07	3A169	YFT	Departure	13.3	-	-
08-Oct	08:10	3A061	YFT	Arrival	12.4	-	-
08-Oct	08:20	8S210	XZM	Arrival	11.6	-	-
08-Oct	10:02	3A062	YFT	Arrival	12.6	-	-
08-Oct	10:59	3A081	ZUI	Arrival	11.8	-	-
08-Oct	11:00	3A163	YFT	Departure	12.4	-	-
08-Oct	11:07	8S212	XZM	Arrival	12.6	-	-
08-Oct	11:19	3A063	YFT	Arrival	12.7	-	-
08-Oct	11:36	8S121	XZM	Departure	12.9	-	-
08-Oct	12:44	3A168	YFT	Departure	13	-	-
08-Oct	12:45	3A181	ZUI	Departure	12.4	-	-
08-Oct	13:13	8S215	XZM	Arrival	11.7	-	-
08-Oct	13:21	3A064	YFT	Arrival	13	-	-
08-Oct	13:41	3A082	ZUI	Arrival	12.4	-	-
08-Oct	13:53	8S123	XZM	Departure	10.7	-	-
08-Oct	14:48	3A164	YFT	Departure	12.8	-	-
08-Oct	15:04	3A182	ZUI	Departure	12	-	-
08-Oct	15:14	3A065	YFT	Arrival	12	-	-
08-Oct	16:50	3A167	YFT	Departure	13.3	-	-
08-Oct	17:06	8S218	XZM	Arrival	11.8	-	-
08-Oct	17:06	3A083	ZUI	Arrival	12.9	-	-
08-Oct	17:22	3A067	YFT	Arrival	11.9	1	-
08-Oct	17:50	3A183	ZUI	Departure	13.6	-	-
08-Oct	18:14	8S126	XZM	Departure	11.9	-	-
08-Oct	19:57	3A166	YFT	Departure	12.9		-
08-Oct	20:04	3A084	ZUI	Arrival	11.6	-	-
08-Oct	20:53	3A185	ZUI	Departure	12.5	-	-
08-Oct	20:59	8S2113	XZM	Arrival	11.3	-	-
08-Oct	21:31	3A169	YFT	Departure	12.3	-	-
09-Oct	08:13	3A061	YFT	Arrival	11.7	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM Macao (Maritime Ferry Terminal) YFT Macao (Taipa) ZUI Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
09-Oct	08:20	8S210	XZM	Arrival	11.5	-	-
09-Oct	10:26	3A062	YFT	Arrival	12.1	-	-
09-Oct	10:40	3A163	YFT	Departure	12.4	-	-
09-Oct	10:45	3A081	ZUI	Arrival	13.4	-	-
09-Oct	10:48	8S212	XZM	Arrival	12.4	-	-
09-Oct	11:08	8S121	XZM	Departure	13.1	-	-
09-Oct	11:19	3A063	YFT	Arrival	11.6	-	-
09-Oct	12:28	3A168	YFT	Departure	11.6	-	-
09-Oct	12:35	3A181	ZUI	Departure	12	-	-
09-Oct	12:54	8S215	XZM	Arrival	13	-	-
09-Oct	13:08	3A064	YFT	Arrival	12.5	-	-
09-Oct	13:34	8S123	XZM	Departure	12.9	-	-
09-Oct	13:45	3A082	ZUI	Arrival	12.9	-	-
09-Oct	14:24	3A182	ZUI	Departure	12.5	-	-
09-Oct	14:28	3A164	YFT	Departure	11.1	-	-
09-Oct	15:03	3A065	YFT	Arrival	12.1	-	-
09-Oct	16:28	3A167	YFT	Departure	11.4	-	-
09-Oct	16:59	8S218	XZM	Arrival	11.2	-	-
09-Oct	17:04	3A083	ZUI	Arrival	13	-	-
09-Oct	17:05	3A067	YFT	Arrival	12.2	-	-
09-Oct	17:24	3A183	ZUI	Departure	13.1	-	-
09-Oct	17:34	8S126	XZM	Departure	11.5	-	-
09-Oct	19:12	3A166	YFT	Departure	12.9	-	-
09-Oct	20:07	3A084	ZUI	Arrival	12.4	-	-
09-Oct	20:42	3A185	ZUI	Departure	13.6	-	-
09-Oct	21:01	8S2113	XZM	Arrival	11.3	-	-
09-Oct	21:13	3A169	YFT	Departure	13.3	-	-
10-Oct	08:16	3A061	YFT	Arrival	12.1	-	-
10-Oct	08:20	8S210	XZM	Arrival	11.1	-	-
10-Oct	09:53	3A062	YFT	Arrival	12.7	-	-
10-Oct	10:30	3A163	YFT	Departure	12.5	-	-
10-Oct	10:46	3A081	ZUI	Arrival	13	-	-
10-Oct	10:46	8S212	XZM	Arrival	12.4	-	-
10-Oct	11:10	8S121	XZM	Departure	10.8	-	-
10-Oct	11:16	3A063	YFT	Arrival	13	-	-
10-Oct	12:19	3A168	YFT	Departure	12.9	-	-
10-Oct	12:23	3A181	ZUI	Departure	12.2	-	-
10-Oct	12:38	8S215	XZM	Arrival	12	-	-
10-Oct	12:55	3A064	YFT	Arrival	12.6	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM Macao (Maritime Ferry Terminal) YFT Macao (Taipa) ZUI Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
10-Oct	13:30	8S123	XZM	Departure	13.4	1	-
10-Oct	13:40	3A082	ZUI	Arrival	12.2	-	-
10-Oct	14:17	3A164	YFT	Departure	11.9	-	-
10-Oct	14:20	3A182	ZUI	Departure	11.9	-	-
10-Oct	14:56	3A065	YFT	Arrival	12.9	-	-
10-Oct	16:25	3A167	YFT	Departure	12.5	-	-
10-Oct	16:53	3A083	ZUI	Arrival	13.3	-	-
10-Oct	16:56	8S218	XZM	Arrival	11.5	-	-
10-Oct	17:07	3A067	YFT	Arrival	12	-	-
10-Oct	17:26	3A183	ZUI	Departure	13.1	-	-
10-Oct	17:32	8S126	XZM	Departure	13.4	-	-
10-Oct	19:06	3A166	YFT	Departure	12.3	-	-
10-Oct	20:05	3A084	ZUI	Arrival	12.8	-	-
10-Oct	20:21	3A185	ZUI	Departure	13.6	-	-
10-Oct	21:08	8S2113	XZM	Arrival	12.6	-	-
10-Oct	21:32	3A169	YFT	Departure	13.4	-	-
10-Oct	22:02	8S522	XZM	Departure	12.9	-	-
11-Oct	08:14	3A061	YFT	Arrival	11.1	-	-
11-Oct	08:17	8S210	XZM	Arrival	11.8	-	-
11-Oct	10:04	3A062	YFT	Arrival	11	-	-
11-Oct	10:19	3A163	YFT	Departure	11.5	-	-
11-Oct	10:38	8S212	XZM	Arrival	12	-	-
11-Oct	10:45	3A081	ZUI	Arrival	12.8	-	-
11-Oct	11:07	8S121	XZM	Departure	11.7	-	-
11-Oct	11:15	3A063	YFT	Arrival	11.9	-	-
11-Oct	12:21	3A168	YFT	Departure	10.8	-	-
11-Oct	12:25	3A181	ZUI	Departure	12.9	-	-
11-Oct	12:49	3A064	YFT	Arrival	13	-	-
11-Oct	12:52	8S215	XZM	Arrival	10.4	-	-
11-Oct	13:24	8S123	XZM	Departure	12.6	-	-
11-Oct	13:45	3A082	ZUI	Arrival	12.9	1	-
11-Oct	14:18	3A164	YFT	Departure	13.1	-	-
11-Oct	14:20	3A182	ZUI	Departure	11.9	-	-
11-Oct	15:00	3A065	YFT	Arrival	11.6	-	-
11-Oct	16:23	3A167	YFT	Departure	12.5	-	-
11-Oct	16:35	8S218	XZM	Arrival	10.8	-	-
11-Oct	16:47	3A083	ZUI	Arrival	12.9	-	-
11-Oct	17:03	3A067	YFT	Arrival	13	-	-
11-Oct	17:12	3A183	ZUI	Departure	12.8	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT - Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
11-Oct	17:19	8S126	XZM	Departure	12.1	1	-
11-Oct	19:13	3A166	YFT	Departure	12.5	-	-
11-Oct	19:53	3A084	ZUI	Arrival	12.3	1	-
11-Oct	20:37	3A185	ZUI	Departure	13.7	-	-
11-Oct	21:07	8S2113	XZM	Arrival	11.5	-	-
11-Oct	21:15	3A169	YFT	Departure	12.7	-	-
11-Oct	22:05	8S522	XZM	Departure	12.6	-	-
12-Oct	08:17	3A061	YFT	Arrival	11.4	-	-
12-Oct	08:20	8S210	XZM	Arrival	11.9	-	-
12-Oct	10:03	3A062	YFT	Arrival	12.2	-	-
12-Oct	10:27	3A163	YFT	Departure	12.6	-	-
12-Oct	10:41	8S212	XZM	Arrival	11.3	-	-
12-Oct	10:50	3A081	ZUI	Arrival	12.5	-	-
12-Oct	11:10	8S121	XZM	Departure	12.1	-	-
12-Oct	11:19	3A063	YFT	Arrival	11.7	-	-
12-Oct	12:29	3A168	YFT	Departure	13	-	-
12-Oct	12:35	3A181	ZUI	Departure	13.4	-	-
12-Oct	12:43	8S215	XZM	Arrival	11.8	-	-
12-Oct	12:59	3A064	YFT	Arrival	12	-	-
12-Oct	13:24	8S123	XZM	Departure	12.8	-	-
12-Oct	13:43	3A082	ZUI	Arrival	13	-	-
12-Oct	14:17	3A164	YFT	Departure	13.5	-	-
12-Oct	14:20	3A182	ZUI	Departure	13	-	-
12-Oct	15:02	3A065	YFT	Arrival	12.7	-	-
12-Oct	16:17	3A167	YFT	Departure	12.8	-	-
12-Oct	16:37	8S218	XZM	Arrival	12.5	-	-
12-Oct	16:43	3A083	ZUI	Arrival	13.3	-	-
12-Oct	16:51	3A067	YFT	Arrival	12.2	-	-
12-Oct	17:08	3A183	ZUI	Departure	12.6	-	-
12-Oct	17:11	8S126	XZM	Departure	12.7	-	-
12-Oct	19:15	3A166	YFT	Departure	13	-	-
12-Oct	19:56	3A084	ZUI	Arrival	12.4	-	-
12-Oct	20:15	3A185	ZUI	Departure	13.5	-	
12-Oct	21:00	8S2113	XZM	Arrival	12.3	-	-
12-Oct	21:06	3A169	YFT	Departure	12.8	-	-
13-Oct	08:16	3A061	YFT	Arrival	11.6	-	-
13-Oct	08:19	8S210	XZM	Arrival	11.5	-	-
13-Oct	10:07	3A062	YFT	Arrival	12	-	-
13-Oct	10:29	3A163	YFT	Departure	11.9	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM Macao (Maritime Ferry Terminal) YFT Macao (Taipa) ZUI Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
13-Oct	10:42	8S212	XZM	Arrival	12.5	-	1
13-Oct	10:47	3A081	ZUI	Arrival	12.6	-	-
13-Oct	11:10	8S121	XZM	Departure	12.7	-	-
13-Oct	11:14	3A063	YFT	Arrival	12.7	-	-
13-Oct	12:13	3A168	YFT	Departure	13.4	-	1
13-Oct	12:15	3A181	ZUI	Departure	13.7	-	-
13-Oct	12:47	8S215	XZM	Arrival	11.1	-	-
13-Oct	13:13	3A064	YFT	Arrival	12.6	-	-
13-Oct	13:19	8S123	XZM	Departure	12.3	-	-
13-Oct	13:39	3A082	ZUI	Arrival	13	-	-
13-Oct	14:19	3A164	YFT	Departure	12.5	-	-
13-Oct	14:22	3A182	ZUI	Departure	13	-	-
13-Oct	14:50	3A065	YFT	Arrival	12.4	-	-
13-Oct	16:14	3A167	YFT	Departure	13.2	-	1
13-Oct	16:40	8S218	XZM	Arrival	11.2	-	-
13-Oct	16:41	3A083	ZUI	Arrival	12.6	-	-
13-Oct	16:51	3A067	YFT	Arrival	12.7	-	-
13-Oct	17:17	8S126	XZM	Departure	13	-	-
13-Oct	17:23	3A183	ZUI	Departure	12.9	-	-
13-Oct	19:19	3A166	YFT	Departure	13.9	-	-
13-Oct	19:54	3A084	ZUI	Arrival	12.7	-	-
13-Oct	20:34	3A185	ZUI	Departure	13.7	-	-
13-Oct	21:13	8S2113	XZM	Arrival	12.2	-	-
13-Oct	21:21	3A169	YFT	Departure	13	-	-
13-Oct	22:13	8S522	XZM	Departure	11.9	-	-
14-Oct	08:18	3A061	YFT	Arrival	12.6	<= 5	< 1min
14-Oct	08:29	8S210	XZM	Arrival	12.8	-	-
14-Oct	09:55	3A062	YFT	Arrival	11.7	-	-
14-Oct	10:47	3A163	YFT	Departure	12.5	-	-
14-Oct	10:56	8S212	XZM	Arrival	11.9	-	-
14-Oct	10:59	3A081	ZUI	Arrival	12.6	-	-
14-Oct	11:24	3A063	YFT	Arrival	12.3	-	-
14-Oct	11:33	8S121	XZM	Departure	11.8	-	-
14-Oct	12:45	3A168	YFT	Departure	13.2	-	-
14-Oct	12:50	3A181	ZUI	Departure	13.6	-	-
14-Oct	13:00	8S215	XZM	Arrival	10.9	-	-
14-Oct	13:08	3A064	YFT	Arrival	11.8	-	-
14-Oct	13:43	8S123	XZM	Departure	12.7	-	-
14-Oct	13:56	3A082	ZUI	Arrival	12.4	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM Macao (Maritime Ferry Terminal) YFT Macao (Taipa) ZUI Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
14-Oct	14:49	3A164	YFT	Departure	12.7	1	-
14-Oct	14:53	3A182	ZUI	Departure	13.7	-	-
14-Oct	15:12	3A065	YFT	Arrival	11.9	-	-
14-Oct	16:27	3A167	YFT	Departure	12.6	-	-
14-Oct	16:35	8S218	XZM	Arrival	11	-	-
14-Oct	16:57	3A083	ZUI	Arrival	13.2	-	-
14-Oct	17:16	3A067	YFT	Arrival	12.6	-	-
14-Oct	17:52	3A183	ZUI	Departure	12.7	-	-
14-Oct	17:55	8S126	XZM	Departure	12.8	-	-
14-Oct	19:26	3A166	YFT	Departure	12.5	-	-
14-Oct	19:56	3A084	ZUI	Arrival	11.8	-	-
14-Oct	20:20	3A185	ZUI	Departure	12.2	-	-
14-Oct	21:02	8S2113	XZM	Arrival	12.3	-	-
14-Oct	21:14	3A169	YFT	Departure	14.2	-	-
14-Oct	22:15	8S522	XZM	Departure	12.9	-	-
15-Oct	08:13	3A061	YFT	Arrival	12.3	-	-
15-Oct	08:18	8S210	XZM	Arrival	11.3	-	-
15-Oct	09:50	3A062	YFT	Arrival	10.8	-	-
15-Oct	10:34	3A163	YFT	Departure	11.8	-	-
15-Oct	10:39	8S212	XZM	Arrival	12.2	-	-
15-Oct	10:54	3A081	ZUI	Arrival	12.4	-	-
15-Oct	11:29	8S121	XZM	Departure	13.8	-	-
15-Oct	11:33	3A063	YFT	Arrival	11.8	-	-
15-Oct	12:29	3A168	YFT	Departure	12.4	-	-
15-Oct	12:34	3A181	ZUI	Departure	12.7	-	-
15-Oct	12:58	8S215	XZM	Arrival	12	-	-
15-Oct	12:59	3A064	YFT	Arrival	11.6	-	
15-Oct	13:23	8S123	XZM	Departure	13	-	-
15-Oct	13:47	3A082	ZUI	Arrival	12.5	-	-
15-Oct	14:28	3A164	YFT	Departure	12.6	-	-
15-Oct	14:30	3A182	ZUI	Departure	13.2	-	-
15-Oct	14:57	3A065	YFT	Arrival	12.3	-	-
15-Oct	16:40	3A167	YFT	Departure	12.8	-	-
15-Oct	16:53	3A083	ZUI	Arrival	12.8	-	-
15-Oct	17:03	8S218	XZM	Arrival	12.4	-	-
15-Oct	17:14	3A067	YFT	Arrival	11.8	-	-
15-Oct	17:36	3A183	ZUI	Departure	13.3	-	-
15-Oct	17:38	8S126	XZM	Departure	13.1	-	-
15-Oct	19:34	3A166	YFT	Departure	12.9	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM Macao (Maritime Ferry Terminal) YFT Macao (Taipa) ZUI Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
15-Oct	19:43	3A084	ZUI	Arrival	11.1	-	-
15-Oct	20:39	3A185	ZUI	Departure	12.3	1	-
15-Oct	21:21	8S2113	XZM	Arrival	11.5	-	-
15-Oct	21:35	3A169	YFT	Departure	12.3	-	-
15-Oct	22:11	8S522	XZM	Departure	12.1	-	-
16-Oct	08:14	3A061	YFT	Arrival	11.8	-	-
16-Oct	08:21	8S210	XZM	Arrival	12.5	-	-
16-Oct	10:05	3A062	YFT	Arrival	10.6	-	-
16-Oct	10:33	3A163	YFT	Departure	10.8	-	-
16-Oct	10:38	8S212	XZM	Arrival	13.3	-	-
16-Oct	10:59	3A081	ZUI	Arrival	12.9	-	-
16-Oct	11:18	3A063	YFT	Arrival	12.1	-	-
16-Oct	11:26	8S121	XZM	Departure	11.9	-	-
16-Oct	12:34	3A181	ZUI	Departure	13.2	-	-
16-Oct	12:36	3A168	YFT	Departure	12.6	-	-
16-Oct	13:02	8S215	XZM	Arrival	11.7	-	-
16-Oct	13:04	3A064	YFT	Arrival	11.8	-	-
16-Oct	13:24	8S123	XZM	Departure	12.9	-	-
16-Oct	13:45	3A082	ZUI	Arrival	12.9	-	-
16-Oct	14:25	3A164	YFT	Departure	11.2	-	-
16-Oct	14:30	3A182	ZUI	Departure	10.9	-	-
16-Oct	14:59	3A065	YFT	Arrival	12.1	-	-
16-Oct	16:13	3A167	YFT	Departure	12.2	-	-
16-Oct	16:43	3A083	ZUI	Arrival	12.5	-	-
16-Oct	16:47	8S218	XZM	Arrival	12.7	-	-
16-Oct	17:06	3A067	YFT	Arrival	11.1	-	-
16-Oct	17:18	8S126	XZM	Departure	13.8	-	-
16-Oct	17:23	3A183	ZUI	Departure	12.2	-	-
16-Oct	19:18	3A166	YFT	Departure	12.4	-	-
16-Oct	19:53	3A084	ZUI	Arrival	12.8	-	-
16-Oct	20:12	3A185	ZUI	Departure	12.5	-	-
16-Oct	20:57	8S2113	XZM	Arrival	11.7	-	-
16-Oct	21:15	3A169	YFT	Departure	12.4	-	-
16-Oct	22:03	8S522	XZM	Departure	13.1	-	-
17-Oct	08:16	3A061	YFT	Arrival	12	-	-
17-Oct	08:19	8S210	XZM	Arrival	12	-	-
17-Oct	10:02	3A062	YFT	Arrival	12.1	-	-
17-Oct	10:29	3A163	YFT	Departure	12.8	-	-
17-Oct	10:41	8S212	XZM	Arrival	12.1	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM Macao (Maritime Ferry Terminal) YFT Macao (Taipa) ZUI Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
17-Oct	10:59	3A081	ZUI	Arrival	12.8	1	-
17-Oct	11:19	8S121	XZM	Departure	12.7	-	-
17-Oct	11:25	3A063	YFT	Arrival	11.6	-	-
17-Oct	12:26	3A181	ZUI	Departure	13.3	-	-
17-Oct	12:29	3A168	YFT	Departure	12.4	-	-
17-Oct	12:45	8S215	XZM	Arrival	11.5	-	-
17-Oct	12:56	3A064	YFT	Arrival	12.1	-	-
17-Oct	13:21	8S123	XZM	Departure	13	-	-
17-Oct	13:44	3A082	ZUI	Arrival	13.7	<= 5	< 1min
17-Oct	14:21	3A164	YFT	Departure	13.2	-	-
17-Oct	14:25	3A182	ZUI	Departure	13.7	-	-
17-Oct	14:57	3A065	YFT	Arrival	11.5	-	-
17-Oct	16:22	3A167	YFT	Departure	12.1	-	-
17-Oct	16:46	8S218	XZM	Arrival	10.7	-	-
17-Oct	16:48	3A083	ZUI	Arrival	11.9	-	-
17-Oct	17:01	3A067	YFT	Arrival	12.4	-	-
17-Oct	17:26	8S126	XZM	Departure	13	1	-
17-Oct	17:28	3A183	ZUI	Departure	12.2	-	-
17-Oct	19:06	3A166	YFT	Departure	13.3	-	-
17-Oct	19:57	3A084	ZUI	Arrival	12.6	-	-
17-Oct	20:19	3A185	ZUI	Departure	13.4	-	-
17-Oct	20:47	8S2113	XZM	Arrival	12.6	-	-
17-Oct	21:05	3A169	YFT	Departure	12.4	-	-
17-Oct	21:56	8S522	XZM	Departure	13.1	-	-
18-Oct	08:17	3A061	YFT	Arrival	12.7	-	-
18-Oct	08:21	8S210	XZM	Arrival	12.5	-	-
18-Oct	09:51	3A062	YFT	Arrival	12.1	-	-
18-Oct	10:20	3A163	YFT	Departure	12.5	-	-
18-Oct	10:40	8S212	XZM	Arrival	12.5	-	-
18-Oct	10:56	3A081	ZUI	Arrival	13.3	-	-
18-Oct	11:21	8S121	XZM	Departure	11.7	-	-
18-Oct	11:27	3A063	YFT	Arrival	12.3	-	-
18-Oct	12:21	3A181	ZUI	Departure	12.9	-	-
18-Oct	12:23	3A168	YFT	Departure	12.1	-	-
18-Oct	12:52	8S215	XZM	Arrival	12.4	-	-
18-Oct	12:54	3A064	YFT	Arrival	12.3	-	-
18-Oct	13:27	8S123	XZM	Departure	13.4	-	-
18-Oct	13:53	3A082	ZUI	Arrival	12.4	-	-
18-Oct	14:15	3A164	YFT	Departure	11.8	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM Macao (Maritime Ferry Terminal) YFT Macao (Taipa) ZUL- Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
18-Oct	14:20	3A182	ZUI	Departure	11.5	1	-
18-Oct	14:57	3A065	YFT	Arrival	12.2	-	-
18-Oct	16:28	3A167	YFT	Departure	12.9	-	-
18-Oct	16:42	3A083	ZUI	Arrival	12.3	-	-
18-Oct	16:55	3A067	YFT	Arrival	12.1	-	-
18-Oct	17:10	3A183	ZUI	Departure	12.3	-	-
18-Oct	17:18	8S218	XZM	Arrival	0.0 **	-	-
18-Oct	17:29	8S126	XZM	Departure	12.2	-	-
18-Oct	19:07	3A166	YFT	Departure	13.1	<= 5	< 1min
18-Oct	19:53	3A084	ZUI	Arrival	12.5	-	-
18-Oct	20:15	3A185	ZUI	Departure	13.4	-	-
18-Oct	20:58	8S2113	XZM	Arrival	11.3	-	-
18-Oct	21:09	3A169	YFT	Departure	13.4	-	-
18-Oct	21:55	8S522	XZM	Departure	11.7	-	-
19-Oct	08:16	8S210	XZM	Arrival	13	-	-
19-Oct	08:18	3A061	YFT	Arrival	10.7	-	-
19-Oct	09:49	3A062	YFT	Arrival	11.6	-	-
19-Oct	10:20	3A163	YFT	Departure	12.3	-	-
19-Oct	10:35	8S212	XZM	Arrival	12.1	-	-
19-Oct	10:51	3A081	ZUI	Arrival	12.8	-	-
19-Oct	11:01	8S121	XZM	Departure	12.2	-	-
19-Oct	11:12	3A063	YFT	Arrival	12.4	-	-
19-Oct	12:25	3A181	ZUI	Departure	12.6	-	-
19-Oct	12:27	3A168	YFT	Departure	12.8	-	-
19-Oct	12:52	8S215	XZM	Arrival	11.5	-	-
19-Oct	12:57	3A064	YFT	Arrival	12.2	-	-
19-Oct	13:17	8S123	XZM	Departure	13	-	-
19-Oct	13:48	3A082	ZUI	Arrival	11.7	-	-
19-Oct	14:14	3A164	YFT	Departure	12.5	-	-
19-Oct	14:15	3A182	ZUI	Departure	13.5	-	-
19-Oct	15:01	3A065	YFT	Arrival	11.6	1	-
19-Oct	16:16	3A167	YFT	Departure	13.3	-	-
19-Oct	16:44	8S218	XZM	Arrival	10.3	-	-
19-Oct	16:47	3A083	ZUI	Arrival	12.5	-	-
19-Oct	16:54	3A067	YFT	Arrival	12.1	-	-
19-Oct	17:15	8S126	XZM	Departure	13.5	-	-
19-Oct	17:19	3A183	ZUI	Departure	12.3	-	-
19-Oct	19:03	3A166	YFT	Departure	12.8	-	-
19-Oct	19:55	3A084	ZUI	Arrival	12.5	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT - Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
19-Oct	20:14	3A185	ZUI	Departure	13.6	-	-
19-Oct	20:48	8S2113	XZM	Arrival	11.7	-	-
19-Oct	20:56	3A169	YFT	Departure	12.4	-	-
19-Oct	21:58	8S522	XZM	Departure	11.5	-	-
20-Oct	08:14	3A061	YFT	Arrival	11.4	-	-
20-Oct	08:17	8S210	XZM	Arrival	12.5	-	-
20-Oct	09:56	3A062	YFT	Arrival	12	-	-
20-Oct	10:20	3A163	YFT	Departure	12.1	-	-
20-Oct	10:35	8S212	XZM	Arrival	12.2	-	-
20-Oct	11:05	3A081	ZUI	Arrival	13.3	-	-
20-Oct	11:07	8S121	XZM	Departure	12.4	-	-
20-Oct	11:11	3A063	YFT	Arrival	12.1	-	-
20-Oct	12:13	3A181	ZUI	Departure	12.5	-	-
20-Oct	12:13	3A168	YFT	Departure	12.1	-	-
20-Oct	12:53	8S215	XZM	Arrival	11.1	-	-
20-Oct	13:01	3A064	YFT	Arrival	12	-	-
20-Oct	13:19	8S123	XZM	Departure	11.7	-	-
20-Oct	13:53	3A082	ZUI	Arrival	12.6	-	-
20-Oct	14:13	3A182	ZUI	Departure	11.9	-	-
20-Oct	14:15	3A164	YFT	Departure	12.2	-	-
20-Oct	15:00	3A065	YFT	Arrival	12.3	-	-
20-Oct	16:26	3A167	YFT	Departure	12.9	-	-
20-Oct	16:29	3A083	ZUI	Arrival	12.7	-	-
20-Oct	16:41	8S218	XZM	Arrival	10.6	-	-
20-Oct	16:59	3A067	YFT	Arrival	12.2	-	-
20-Oct	17:13	8S126	XZM	Departure	12.9	-	-
20-Oct	17:13	3A183	ZUI	Departure	12.5	-	-
20-Oct	19:03	3A166	YFT	Departure	12.7	-	-
20-Oct	19:57	3A084	ZUI	Arrival	12.6	-	-
20-Oct	20:27	3A185	ZUI	Departure	13.6	-	-
20-Oct	21:01	8S2113	XZM	Arrival	12.2	1	-
20-Oct	21:15	3A169	YFT	Departure	12.8	-	-
20-Oct	21:59	8S522	XZM	Departure	12.8	-	-
21-Oct	08:16	3A061	YFT	Arrival	11.9	-	-
21-Oct	08:22	8S210	XZM	Arrival	11.6	-	-
21-Oct	10:06	3A062	YFT	Arrival	12.3	-	-
21-Oct	10:39	3A163	YFT	Departure	13.4	-	-
21-Oct	10:49	3A081	ZUI	Arrival	13.4	-	-
21-Oct	10:52	8S212	XZM	Arrival	12	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT - Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
21-Oct	11:12	3A063	YFT	Arrival	12.3	1	-
21-Oct	11:24	8S121	XZM	Departure	12.3	-	-
21-Oct	12:24	3A168	YFT	Departure	12.2	-	-
21-Oct	12:33	3A181	ZUI	Departure	12	-	-
21-Oct	12:47	8S215	XZM	Arrival	11.9	-	-
21-Oct	13:09	3A064	YFT	Arrival	12.9	-	-
21-Oct	13:21	8S123	XZM	Departure	12.3	-	-
21-Oct	13:47	3A082	ZUI	Arrival	11.8	-	-
21-Oct	14:22	3A182	ZUI	Departure	12.3	-	-
21-Oct	14:27	3A164	YFT	Departure	13.4	-	-
21-Oct	14:54	3A065	YFT	Arrival	12.1	-	-
21-Oct	16:28	3A167	YFT	Departure	12.8	-	-
21-Oct	16:59	3A083	ZUI	Arrival	12.7	-	-
21-Oct	17:00	8S218	XZM	Arrival	12.1	-	-
21-Oct	17:06	3A067	YFT	Arrival	11.6	<= 5	< 1min
21-Oct	17:26	3A183	ZUI	Departure	13.6	-	-
21-Oct	17:32	8S126	XZM	Departure	12.4	-	-
21-Oct	19:04	3A166	YFT	Departure	12.1	-	-
21-Oct	19:43	3A084	ZUI	Arrival	11.7	-	-
21-Oct	20:05	3A185	ZUI	Departure	12.6	-	-
21-Oct	21:05	8S2113	XZM	Arrival	11.7	-	-
21-Oct	21:12	3A169	YFT	Departure	13	-	-
22-Oct	08:13	3A061	YFT	Arrival	12.3	-	-
22-Oct	08:19	8S210	XZM	Arrival	12.5	-	-
22-Oct	10:20	3A062	YFT	Arrival	11.9	-	-
22-Oct	10:40	8S212	XZM	Arrival	12.3	-	-
22-Oct	10:40	3A163	YFT	Departure	11.1	-	-
22-Oct	10:47	3A081	ZUI	Arrival	13.9	-	-
22-Oct	11:13	3A063	YFT	Arrival	12.3	-	-
22-Oct	11:22	8S121	XZM	Departure	12.5	-	-
22-Oct	12:20	3A168	YFT	Departure	12.3	-	-
22-Oct	12:24	3A181	ZUI	Departure	12.2	-	-
22-Oct	12:54	8S215	XZM	Arrival	13	-	-
22-Oct	13:12	3A064	YFT	Arrival	11.5	-	-
22-Oct	13:24	8S123	XZM	Departure	12.8	-	-
22-Oct	13:55	3A082	ZUI	Arrival	12	-	-
22-Oct	14:30	3A164	YFT	Departure	10.9	-	-
22-Oct	14:33	3A182	ZUI	Departure	12.8	-	-
22-Oct	14:56	3A065	YFT	Arrival	12.3	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM Macao (Maritime Ferry Terminal) YFT Macao (Taipa) ZUI Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
22-Oct	16:23	3A167	YFT	Departure	12.1	-	-
22-Oct	16:56	8S218	XZM	Arrival	12.2	-	-
22-Oct	17:00	3A083	ZUI	Arrival	12.7	-	-
22-Oct	17:06	3A067	YFT	Arrival	11	-	-
22-Oct	17:32	3A183	ZUI	Departure	13.8	-	1
22-Oct	17:37	8S126	XZM	Departure	13.3	-	-
22-Oct	19:25	3A166	YFT	Departure	12.6	-	-
22-Oct	19:52	3A084	ZUI	Arrival	11.8	-	-
22-Oct	20:13	3A185	ZUI	Departure	12.8	-	-
22-Oct	20:57	8S2113	XZM	Arrival	12	-	-
22-Oct	21:13	3A169	YFT	Departure	12.2	-	-
22-Oct	22:00	8S522	XZM	Departure	13.2	-	-
23-Oct	08:11	3A061	YFT	Arrival	12.4	-	-
23-Oct	08:18	8S210	XZM	Arrival	13.1	-	-
23-Oct	09:50	3A062	YFT	Arrival	0.0 **	-	-
23-Oct	10:27	3A163	YFT	Departure	13	-	-
23-Oct	10:45	8S212	XZM	Arrival	12.9	-	-
23-Oct	10:49	3A081	ZUI	Arrival	13.4	-	-
23-Oct	11:18	8S121	XZM	Departure	12.3	-	-
23-Oct	11:20	3A063	YFT	Arrival	0.0 **	-	-
23-Oct	12:32	3A181	ZUI	Departure	12.4	-	-
23-Oct	12:33	3A168	YFT	Departure	13	-	-
23-Oct	12:55	8S215	XZM	Arrival	12.4	-	-
23-Oct	12:57	3A064	YFT	Arrival	12.4	-	-
23-Oct	13:22	8S123	XZM	Departure	11.9	-	-
23-Oct	13:49	3A082	ZUI	Arrival	12.9	-	-
23-Oct	14:21	3A164	YFT	Departure	12.6	-	-
23-Oct	14:23	3A182	ZUI	Departure	12.2	-	-
23-Oct	15:10	3A065	YFT	Arrival	12.6	<= 5	< 1min
23-Oct	16:18	3A167	YFT	Departure	12.8	-	-
23-Oct	16:59	8S218	XZM	Arrival	10.3	-	-
23-Oct	17:06	3A083	ZUI	Arrival	12.7	-	-
23-Oct	17:11	3A067	YFT	Arrival	11.6	-	-
23-Oct	17:22	3A183	ZUI	Departure	13.8	-	-
23-Oct	17:26	8S126	XZM	Departure	12.4	-	-
23-Oct	19:13	3A166	YFT	Departure	13.3	-	-
23-Oct	20:02	3A084	ZUI	Arrival	12.6	-	-
23-Oct	20:17	3A185	ZUI	Departure	13.8	-	-
23-Oct	20:52	8S2113	XZM	Arrival	11.6	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT - Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
23-Oct	21:02	3A169	YFT	Departure	12.4	1	-
23-Oct	22:11	8S522	XZM	Departure	12.5	-	-
24-Oct	08:14	3A061	YFT	Arrival	12.4	1	-
24-Oct	08:21	8S210	XZM	Arrival	12.3	-	-
24-Oct	10:04	3A062	YFT	Arrival	11.6	-	-
24-Oct	10:25	3A163	YFT	Departure	10.9	-	-
24-Oct	10:49	3A081	ZUI	Arrival	13.4	-	-
24-Oct	10:50	8S212	XZM	Arrival	12.2	-	-
24-Oct	11:08	8S121	XZM	Departure	13.5	-	-
24-Oct	11:17	3A063	YFT	Arrival	11.7	-	-
24-Oct	12:21	3A168	YFT	Departure	10.7	-	-
24-Oct	12:26	3A181	ZUI	Departure	12.6	-	-
24-Oct	12:49	8S215	XZM	Arrival	12.9	-	-
24-Oct	13:01	3A064	YFT	Arrival	12.3	-	-
24-Oct	13:20	8S123	XZM	Departure	12.9	-	-
24-Oct	13:44	3A082	ZUI	Arrival	12.9	-	-
24-Oct	14:15	3A164	YFT	Departure	12.4	-	-
24-Oct	14:16	3A182	ZUI	Departure	12.4	-	-
24-Oct	15:04	3A065	YFT	Arrival	11.9	-	-
24-Oct	16:25	3A167	YFT	Departure	10.7	-	-
24-Oct	16:57	8S218	XZM	Arrival	12.6	-	-
24-Oct	16:59	3A083	ZUI	Arrival	12.9	-	-
24-Oct	17:06	3A067	YFT	Arrival	10.7	-	-
24-Oct	17:16	3A183	ZUI	Departure	12.3	-	-
24-Oct	17:34	8S126	XZM	Departure	12.5	-	-
24-Oct	19:01	3A166	YFT	Departure	12.7	-	-
24-Oct	19:45	3A084	ZUI	Arrival	12.3	-	-
24-Oct	20:04	3A185	ZUI	Departure	12.2	-	-
24-Oct	20:55	8S2113	XZM	Arrival	11.9	-	-
24-Oct	21:09	3A169	YFT	Departure	13	-	-
24-Oct	21:53	8S522	XZM	Departure	12.3	-	-
25-Oct	08:16	3A061	YFT	Arrival	12.2	-	-
25-Oct	08:22	8S210	XZM	Arrival	12.1	-	-
25-Oct	10:00	3A062	YFT	Arrival	12.1	-	-
25-Oct	10:20	3A163	YFT	Departure	12.5	-	-
25-Oct	10:35	8S212	XZM	Arrival	12.7	-	-
25-Oct	10:47	3A081	ZUI	Arrival	11.2	-	-
25-Oct	11:12	8S121	XZM	Departure	12.5	-	-
25-Oct	11:18	3A063	YFT	Arrival	12.8	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM Macao (Maritime Ferry Terminal) YFT Macao (Taipa) ZUI Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
25-Oct	12:18	3A168	YFT	Departure	11.9	-	-
25-Oct	12:19	3A181	ZUI	Departure	12.7	-	-
25-Oct	12:46	8S215	XZM	Arrival	11.8	-	-
25-Oct	13:01	3A064	YFT	Arrival	12.2	-	-
25-Oct	13:18	8S123	XZM	Departure	13.4	-	-
25-Oct	13:40	3A082	ZUI	Arrival	12.8	-	-
25-Oct	14:15	3A182	ZUI	Departure	13.1	-	-
25-Oct	14:17	3A164	YFT	Departure	12.4	-	-
25-Oct	14:56	3A065	YFT	Arrival	12.9	-	-
25-Oct	16:20	3A167	YFT	Departure	12.5	-	-
25-Oct	16:44	8S218	XZM	Arrival	10.5	-	-
25-Oct	16:45	3A083	ZUI	Arrival	12.7	-	-
25-Oct	17:04	3A183	ZUI	Departure	13.3	-	-
25-Oct	17:05	3A067	YFT	Arrival	12	-	-
25-Oct	17:26	8S126	XZM	Departure	13.4	-	-
25-Oct	18:58	3A166	YFT	Departure	12.6	-	-
25-Oct	19:53	3A084	ZUI	Arrival	12.4	-	-
25-Oct	20:10	3A185	ZUI	Departure	13.5	-	-
25-Oct	20:56	8S2113	XZM	Arrival	11.8	-	-
25-Oct	21:10	3A169	YFT	Departure	12.6	-	-
25-Oct	22:03	8S522	XZM	Departure	13	-	-
26-Oct	08:11	3A061	YFT	Arrival	11.8	-	-
26-Oct	08:19	8S210	XZM	Arrival	10.7	-	-
26-Oct	10:00	3A062	YFT	Arrival	12.1	-	-
26-Oct	10:16	3A163	YFT	Departure	12.2	-	-
26-Oct	10:42	8S212	XZM	Arrival	12.3	-	-
26-Oct	10:53	3A081	ZUI	Arrival	13.4	-	-
26-Oct	11:06	8S121	XZM	Departure	12.6	-	-
26-Oct	11:17	3A063	YFT	Arrival	12.2	-	-
26-Oct	12:18	3A168	YFT	Departure	12	-	-
26-Oct	12:19	3A181	ZUI	Departure	11.8	-	-
26-Oct	12:49	8S215	XZM	Arrival	11.5	-	-
26-Oct	12:51	3A064	YFT	Arrival	12.6	-	-
26-Oct	13:16	8S123	XZM	Departure	13	-	-
26-Oct	13:44	3A082	ZUI	Arrival	12.9	-	-
26-Oct	14:22	3A182	ZUI	Departure	12.8	-	-
26-Oct	14:26	3A164	YFT	Departure	13	-	-
26-Oct	14:58	3A065	YFT	Arrival	10.6	-	-
26-Oct	16:19	3A167	YFT	Departure	11.8	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT - Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
26-Oct	16:40	8S218	XZM	Arrival	11.9	-	-
26-Oct	16:45	3A083	ZUI	Arrival	13.1	1	-
26-Oct	16:58	3A067	YFT	Arrival	13	-	-
26-Oct	17:14	3A183	ZUI	Departure	12.9	-	-
26-Oct	17:15	8S126	XZM	Departure	12.4	-	-
26-Oct	19:02	3A166	YFT	Departure	11.4	-	-
26-Oct	19:52	3A084	ZUI	Arrival	12.6	-	-
26-Oct	20:07	3A185	ZUI	Departure	13.9	-	-
26-Oct	20:55	8S2113	XZM	Arrival	12.4	-	-
26-Oct	20:59	3A169	YFT	Departure	12.3	-	-
26-Oct	22:08	8S522	XZM	Departure	13.5	-	-
27-Oct	08:17	3A061	YFT	Arrival	10.9	-	-
27-Oct	08:25	8S210	XZM	Arrival	11.6	-	-
27-Oct	09:57	3A062	YFT	Arrival	10.3	-	-
27-Oct	10:26	3A163	YFT	Departure	12	-	-
27-Oct	10:39	8S212	XZM	Arrival	12.5	-	-
27-Oct	10:49	3A081	ZUI	Arrival	12.4	-	-
27-Oct	11:12	8S121	XZM	Departure	12.9	-	-
27-Oct	11:18	3A063	YFT	Arrival	12	-	-
27-Oct	12:21	3A168	YFT	Departure	12.4	-	-
27-Oct	12:22	3A181	ZUI	Departure	13.3	-	-
27-Oct	12:48	8S215	XZM	Arrival	12.1	-	-
27-Oct	12:55	3A064	YFT	Arrival	12.7	-	-
27-Oct	13:21	8S123	XZM	Departure	12.8	-	-
27-Oct	13:47	3A082	ZUI	Arrival	12.8	-	-
27-Oct	14:15	3A182	ZUI	Departure	12.6	-	-
27-Oct	14:20	3A164	YFT	Departure	12.8	-	-
27-Oct	14:58	3A065	YFT	Arrival	12	-	-
27-Oct	16:16	3A167	YFT	Departure	12	-	-
27-Oct	16:51	8S218	XZM	Arrival	12.5	-	-
27-Oct	16:52	3A083	ZUI	Arrival	13.2	1	-
27-Oct	17:02	3A067	YFT	Arrival	12.8	-	-
27-Oct	17:10	3A183	ZUI	Departure	13	-	-
27-Oct	17:14	8S126	XZM	Departure	12.8	-	-
27-Oct	19:04	3A166	YFT	Departure	12.5	-	-
27-Oct	19:54	3A084	ZUI	Arrival	12.2	-	-
27-Oct	20:12	3A185	ZUI	Departure	13.9	-	-
27-Oct	20:53	8S2113	XZM	Arrival	12.4	-	-
27-Oct	21:05	3A169	YFT	Departure	11.9	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT - Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
27-Oct	21:56	8S522	XZM	Departure	12.6	1	-
28-Oct	08:15	3A061	YFT	Arrival	11.5	-	-
28-Oct	08:24	8S210	XZM	Arrival	11.5	-	-
28-Oct	09:56	3A062	YFT	Arrival	11.8	-	-
28-Oct	10:16	3A163	YFT	Departure	12.5	-	-
28-Oct	10:35	8S212	XZM	Arrival	12.5	-	-
28-Oct	10:46	3A081	ZUI	Arrival	12.8	-	-
28-Oct	11:10	8S121	XZM	Departure	13.6	-	-
28-Oct	11:16	3A063	YFT	Arrival	10.7	-	-
28-Oct	12:33	3A168	YFT	Departure	11.8	-	-
28-Oct	12:38	3A181	ZUI	Departure	13.4	-	-
28-Oct	12:48	8S215	XZM	Arrival	12	-	-
28-Oct	12:58	3A064	YFT	Arrival	12.4	-	-
28-Oct	13:28	8S123	XZM	Departure	13.1	-	-
28-Oct	13:53	3A082	ZUI	Arrival	12.2	-	-
28-Oct	14:15	3A164	YFT	Departure	12.8	-	-
28-Oct	14:19	3A182	ZUI	Departure	13.6	-	-
28-Oct	14:52	3A065	YFT	Arrival	12.8	-	-
28-Oct	16:21	3A167	YFT	Departure	12.5	-	-
28-Oct	16:53	8S218	XZM	Arrival	12.4	-	-
28-Oct	16:53	3A083	ZUI	Arrival	13.2	-	-
28-Oct	17:05	3A067	YFT	Arrival	13.1	-	-
28-Oct	17:17	3A183	ZUI	Departure	12.9	-	-
28-Oct	17:38	8S126	XZM	Departure	13.8	-	-
28-Oct	19:19	3A166	YFT	Departure	11.5	-	-
28-Oct	19:58	3A084	ZUI	Arrival	12.5	-	-
28-Oct	20:08	3A185	ZUI	Departure	14	-	-
28-Oct	20:55	8S2113	XZM	Arrival	12	-	-
28-Oct	20:58	3A169	YFT	Departure	11.9	-	-
28-Oct	22:01	8S522	XZM	Departure	12.1	-	-
29-Oct	08:15	3A061	YFT	Arrival	12.7	-	-
29-Oct	08:21	8S210	XZM	Arrival	12.2	<= 5	< 1min
29-Oct	09:58	3A062	YFT	Arrival	11.3	-	-
29-Oct	10:14	3A163	YFT	Departure	12.1	-	-
29-Oct	10:39	3A081	ZUI	Arrival	12.3	-	-
29-Oct	10:43	8S212	XZM	Arrival	12.3	-	-
29-Oct	11:03	8S121	XZM	Departure	12.8	-	-
29-Oct	11:14	3A063	YFT	Arrival	11.7	-	-
29-Oct	12:18	3A168	YFT	Departure	12.4	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT - Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
29-Oct	12:20	3A181	ZUI	Departure	12.5	1	-
29-Oct	12:49	8S215	XZM	Arrival	10.3	-	-
29-Oct	12:53	3A064	YFT	Arrival	12.5	-	-
29-Oct	13:19	8S123	XZM	Departure	11.5	-	-
29-Oct	13:54	3A082	ZUI	Arrival	13.2	-	-
29-Oct	14:11	3A182	ZUI	Departure	13.2	-	-
29-Oct	14:14	3A164	YFT	Departure	12.2	-	-
29-Oct	14:57	3A065	YFT	Arrival	11.9	-	-
29-Oct	16:26	3A167	YFT	Departure	12.3	-	-
29-Oct	16:49	8S218	XZM	Arrival	10.3	-	-
29-Oct	16:53	3A083	ZUI	Arrival	12.5	-	-
29-Oct	17:01	3A067	YFT	Arrival	12.8	-	-
29-Oct	17:10	3A183	ZUI	Departure	13	-	-
29-Oct	17:12	8S126	XZM	Departure	10.9	-	-
29-Oct	19:10	3A166	YFT	Departure	13.3	<= 5	< 1min
29-Oct	19:52	3A084	ZUI	Arrival	12.7	-	-
29-Oct	20:16	3A185	ZUI	Departure	13.9	-	-
29-Oct	20:51	8S2113	XZM	Arrival	12.6	-	-
29-Oct	21:06	3A169	YFT	Departure	11.5	-	-
29-Oct	22:00	8S522	XZM	Departure	11.7	-	-
30-Oct	08:13	3A061	YFT	Arrival	11.8	-	-
30-Oct	08:27	8S210	XZM	Arrival	13.1	-	-
30-Oct	09:58	3A062	YFT	Arrival	11.5	-	-
30-Oct	10:21	3A163	YFT	Departure	11.6	-	-
30-Oct	10:33	8S212	XZM	Arrival	11.7	-	-
30-Oct	10:50	3A081	ZUI	Arrival	12.2	-	-
30-Oct	11:09	8S121	XZM	Departure	12.1	-	-
30-Oct	11:17	3A063	YFT	Arrival	11.9	<= 5	< 1min
30-Oct	12:12	3A168	YFT	Departure	12.9	-	-
30-Oct	12:14	3A181	ZUI	Departure	13.5	-	-
30-Oct	12:37	8S215	XZM	Arrival	12.3	-	-
30-Oct	12:57	3A064	YFT	Arrival	12	-	-
30-Oct	13:27	8S123	XZM	Departure	12.6	-	-
30-Oct	13:48	3A082	ZUI	Arrival	12	-	-
30-Oct	14:16	3A164	YFT	Departure	12.8	-	-
30-Oct	14:18	3A182	ZUI	Departure	11.8	-	-
30-Oct	14:55	3A065	YFT	Arrival	12.4	-	-
30-Oct	16:28	8S218	XZM	Arrival	12	-	-
30-Oct	16:30	3A167	YFT	Departure	12.4	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM Macao (Maritime Ferry Terminal) YFT Macao (Taipa) ZUI Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
30-Oct	16:52	3A083	ZUI	Arrival	13	-	-
30-Oct	17:02	3A067	YFT	Arrival	12.1	-	-
30-Oct	17:07	3A183	ZUI	Departure	13	-	-
30-Oct	17:13	8S126	XZM	Departure	12.9	-	-
30-Oct	19:04	3A166	YFT	Departure	12.6	-	-
30-Oct	19:55	3A084	ZUI	Arrival	13.2	-	-
30-Oct	20:13	3A185	ZUI	Departure	13.6	-	-
30-Oct	20:51	8S2113	XZM	Arrival	11.8	-	-
30-Oct	20:58	3A169	YFT	Departure	13.2	-	-
30-Oct	21:59	8S522	XZM	Departure	11.9	-	-
31-Oct	08:16	3A061	YFT	Arrival	11.9	-	-
31-Oct	08:23	8S210	XZM	Arrival	11.8	-	-
31-Oct	09:56	3A062	YFT	Arrival	11.9	-	-
31-Oct	10:20	3A163	YFT	Departure	11.4	-	-
31-Oct	10:37	8S212	XZM	Arrival	12.2	-	-
31-Oct	10:53	3A081	ZUI	Arrival	12.6	-	-
31-Oct	11:09	8S121	XZM	Departure	12.9	-	-
31-Oct	11:15	3A063	YFT	Arrival	11.7	-	-
31-Oct	12:13	3A168	YFT	Departure	12.3	-	-
31-Oct	12:15	3A181	ZUI	Departure	13.6	-	-
31-Oct	12:48	8S215	XZM	Arrival	10.9	-	-
31-Oct	13:02	3A064	YFT	Arrival	11.1	-	-
31-Oct	13:18	8S123	XZM	Departure	13.4	-	-
31-Oct	13:53	3A082	ZUI	Arrival	13.4	-	-
31-Oct	14:10	3A182	ZUI	Departure	13.4	-	-
31-Oct	14:18	3A164	YFT	Departure	13.6	-	-
31-Oct	15:01	3A065	YFT	Arrival	12.2	-	-
31-Oct	16:20	3A167	YFT	Departure	11.8	-	-
31-Oct	16:41	8S218	XZM	Arrival	10.5	-	-
31-Oct	16:46	3A083	ZUI	Arrival	13	-	-
31-Oct	17:02	3A067	YFT	Arrival	11.3	-	-
31-Oct	17:08	3A183	ZUI	Departure	13.2	-	-
31-Oct	17:11	8S126	XZM	Departure	13.4	-	-
31-Oct	19:01	3A166	YFT	Departure	12.7	-	-
31-Oct	19:55	3A084	ZUI	Arrival	13	-	-
31-Oct	20:10	3A185	ZUI	Departure	13.1	-	-
31-Oct	20:52	8S2113	XZM	Arrival	12.3	-	-
31-Oct	20:55	3A169	YFT	Departure	12.7	-	-
31-Oct	21:59	8S522	XZM	Departure	11.4	-	-

** Insufficient or no AIS data for speed calculation.

Follow-up on instantaneous speeding

Referring to the data of SkyPier HSF movements in October 2018, instantaneous speeding (i.e. a sudden change in speed at over 15 knots for a short period of time) within the SCZ was recorded from 9 HSF movements of which the durations of all instantaneous speeding cases were less than one minute. The AIS data and ferry operators' responses showed the cases were due to local strong water currents and giving way to vessels. The captains had reduced speed and maintained the speed at less than 15 knots after the incidents.

No HSFs with insufficient transmission of AIS data was received in October 2018.