



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

Construction Phase Monthly EM&A Report No.25
(For January 2018)

February 2018

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

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

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

Construction Phase Monthly EM&A Report No.25
(For January 2018)

February 2018

This Monthly EM&A Report No. 25 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:

A handwritten signature in black ink, appearing to read 'Terence Kong', written in a cursive style.

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

Date

14 February 2018

Our Ref : 60440482/C/JCHL180214

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 February 2018

Dear Sir,

Contract No. 3102
3RS Independent Environmental Checker Consultancy Services

Submission of Monthly EM&A Report No.25 (January 2018)

Reference is made to the Environmental Team's submission of the Monthly EM&A Report No.25 under Condition 3.5 of the Environmental Permit No. EP-489/2014 certified by the ET Leader on 14 February 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

Contents

Executive Summary	1
1 Introduction	5
1.1 Background	5
1.2 Scope of this Report	5
1.3 Project Organisation	5
1.4 Summary of Construction Works	7
1.5 Summary of EM&A Programme Requirements	7
2 Air Quality Monitoring	10
2.1 Monitoring Stations	10
2.2 Monitoring Requirements and Schedule	10
2.3 Monitoring Equipment	10
2.4 Monitoring Methodology	11
2.4.1 Measuring Procedure	11
2.4.2 Maintenance and Calibration	11
2.5 Analysis and Interpretation of Monitoring Results	11
3 Noise Monitoring	13
3.1 Monitoring Stations	13
3.2 Monitoring Requirements and Schedule	13
3.3 Monitoring Equipment	13
3.4 Monitoring Methodology	14
3.4.1 Monitoring Procedure	14
3.4.2 Maintenance and Calibration	14
3.5 Analysis and Interpretation of Monitoring Results	14
4 Water Quality Monitoring	16
4.1 Monitoring Stations	16
4.2 Monitoring Requirements and Schedule	17
4.2.1 Action and Limit Levels for Water Quality Monitoring	17
4.3 Monitoring Equipment	18
4.4 Monitoring Methodology	19
4.4.1 Measuring Procedure	19
4.4.2 Maintenance and Calibration	19
4.4.3 Laboratory Measurement / Analysis	19
4.5 Analysis and Interpretation of Monitoring Results	20

4.5.1	Summary of Monitoring Results	20
4.5.2	Summary of Findings for Investigation of Exceedances	20
5	Waste Management	22
5.1	Monitoring Requirements	22
5.2	Waste Management Status	22
6	Chinese White Dolphin Monitoring	23
6.1	CWD Monitoring Requirements	23
6.2	CWD Monitoring Transects and Stations	23
6.2.1	Small Vessel Line-transect Survey	23
6.2.2	Land-based Theodolite Tracking	25
6.3	CWD Monitoring Methodology	25
6.3.1	Small Vessel Line-transect Survey	25
6.3.2	Photo Identification	26
6.3.3	Land-based Theodolite Tracking	26
6.4	Monitoring Results and Observations	27
6.4.1	Small Vessel Line-transect Survey	27
6.4.2	Photo Identification	30
6.4.3	Land-based Theodolite Tracking	30
6.5	Progress Update on Passive Acoustic Monitoring	31
6.6	Site Audit for CWD-related Mitigation Measures	32
6.7	Timing of Reporting CWD Monitoring Results	32
6.8	Summary of CWD Monitoring	32
7	Environmental Site Inspection and Audit	33
7.1	Environmental Site Inspection	33
7.2	Audit of Route Diversion and Speed Control of the SkyPier High Speed Ferries	33
7.3	Audit of Construction and Associated Vessels	34
7.4	Implementation of Dolphin Exclusion Zone	35
7.5	Ecological Monitoring	35
7.6	Status of Submissions under Environmental Permits	36
7.7	Compliance with Other Statutory Environmental Requirements	36
7.8	Analysis and Interpretation of Complaints, Notification of Summons and Status of Prosecutions	36
7.8.1	Complaints	36
7.8.2	Notifications of Summons or Status of Prosecution	37
7.8.3	Cumulative Statistics	37
8	Future Key Issues and Other EIA & EM&A Issues	38
8.1	Construction Programme for the Coming Reporting Period	38
8.2	Key Environmental Issues for the Coming Reporting Period	39
8.3	Monitoring Schedule for the Coming Reporting Period	39

9 Conclusion and Recommendation

40

Tables

Table 1.1: Contact Information of Key Personnel	6
Table 1.2: Summary of status for all environmental aspects under the Updated EM&A Manual	8
Table 2.1: Locations of Impact Air Quality Monitoring Stations	10
Table 2.2: Action and Limit Levels for 1-hour TSP	10
Table 2.3: Air Quality Monitoring Equipment	10
Table 2.4: Summary of 1-hour TSP Monitoring Results	11
Table 3.1: Locations of Impact Noise Monitoring Stations	13
Table 3.2: Action and Limit Levels for Construction Noise	13
Table 3.3: Noise Monitoring Equipment	14
Table 3.4: Summary of Construction Noise Monitoring Results	15
Table 4.1: Monitoring Locations and Parameters for Impact Water Quality Monitoring	16
Table 4.2: Action and Limit Levels for General Water Quality Monitoring and Regular DCM Monitoring	17
Table 4.3: The Control and Impact Stations during Flood Tide and Ebb Tide for General Water Quality Monitoring and Regular DCM Monitoring	18
Table 4.4: Water Quality Monitoring Equipment	18
Table 4.5: Other Monitoring Equipment	18
Table 4.6: Laboratory Measurement/ Analysis of SS and Heavy Metals	20
Table 4.7: Summary of SS Compliance Status (Mid-Ebb Tide)	20
Table 4.8: Summary of Findings from Investigations of SS Exceedances (Mid-Ebb Tide)	21
Table 5.1: Action and Limit Levels for Construction Waste	22
Table 6.1: Derived Values of Action Level (AL) and Limit Level (LL) for Chinese White Dolphin Monitoring	23
Table 6.2: Coordinates of Transect Lines in NEL, NWL, AW, WL and SWL Survey Areas	24
Table 6.3: Land-based Survey Station Details	25
Table 6.4: Comparison of CWD Encounter Rates of the Whole Survey Area with Action Levels	29
Table 6.5: Summary of Photo Identification	30
Table 6.6: Summary of Survey Effort and CWD Group of Land-based Theodolite Tracking	31
Table 7.1: Summary of Key Audit Findings against the SkyPier Plan	34
Table 7.2: Status of Submissions under Environmental Permit	36

Figures

- Figure 1.1-1.2 Key Construction Areas in this Reporting Period
- Figure 2.1 Locations of Air and Noise Monitoring Stations and Chek Lap Kok Wind Station
- Figure 3.1 Water Quality Monitoring Stations
- Figure 6.1 Vessel based Dolphin Monitoring Transects in Construction, Post-construction and Operation Phases
- Figure 6.2 Land based Dolphin Monitoring in Baseline and Construction Phases
- Figure 6.3 Sightings Distribution of Chinese White Dolphins
- Figure 6.4 Plots of First Sightings of All CWD Groups obtained from Land-based Stations
- Figure 6.5 Location for Autonomous Passive Acoustic Monitoring
- Figure 7.1 Duration of the SkyPier HSFs travelled through the SCZ for 1 – 31 January 2018

Appendices

- Appendix A Contract Description
- Appendix B Environmental Mitigation Implementation Schedule (EMIS) for Construction Phase
- Appendix C Monitoring Schedule
- Appendix D Monitoring Results
- Appendix E Status of Environmental Permits and Licences
- Appendix F Cumulative Statistics on Exceedances, Environmental Complaints, Notification of Summons and Status of Prosecutions
- Appendix G Data of SkyPier HSF Movements to/from Zhuhai and Macau (between 1 and 31 January 2018)

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 25th Construction Phase Monthly EM&A Report for the Project which summarizes the monitoring results and audit findings of the EM&A programme during the reporting period from 1 to 31 January 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, seawall construction, laying of sand blanket, and prefabricated vertical drain (PVD) installation. Land-side works included horizontal directional drilling (HDD) works, site establishment, site office construction, cable ducting, concrete removal works, utilities demolition, antenna farm erection, piling, and excavation works.

EM&A Activities Conducted in the Reporting Period

The monthly EM&A programme was undertaken in accordance with the Manual of the Project. During the reporting period, the ET conducted 36 sets of construction dust measurements, 24 sets of construction noise measurements, 13 events of water quality measurements, 1 round of terrestrial ecology monitoring on Sheung Sha Chau Island, 2 complete sets of small vessel line-transect surveys and 5 days of land-based theodolite tracking survey effort for Chinese White Dolphin (CWD) monitoring and waste monitoring.

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

On the implementation of Marine Mammal Watching Plan (MMWP), dolphin observers were deployed by the contractors for laying of open sea silt curtain and laying of silt curtains for sand blanket works in accordance with the plan. On the implementation of Dolphin Exclusion Zone (DEZ) Plan, dolphin observers at 17 to 24 dolphin observation stations were deployed for continuous monitoring of the DEZ by all contractors for ground improvement works (DCM works and PVD installation) in accordance with the DEZ Plan. Trainings for the proposed dolphin observers were provided by the ET prior to the aforementioned works, with the training records kept by the ET. From the contractors' MMWP observation records and DEZ monitoring records, no dolphin or other marine mammals were observed within or around the silt curtains or the DEZs

in this reporting month. Audits of acoustic decoupling for construction vessels were also carried out by the ET.

On the implementation of the Marine Travel Routes and Management Plan for High Speed Ferries of SkyPier (the SkyPier Plan), the daily movements of all SkyPier high speed ferries (HSFs) in this reporting period were in the range of 89 to 91 daily movements, which are within the maximum daily cap of 125 daily movements. A total of 886 HSF movements under the SkyPier Plan were recorded in the reporting period. All HSFs had travelled through the Speed Control Zone (SCZ) with average speeds under 15 knots (10.2 to 14.0 knots), which were in compliance with the SkyPier Plan. No deviation from the diverted route in the reporting period was recorded. In summary, the ET and IEC have audited the HSF movements against the SkyPier Plan and conducted follow up investigation or actions accordingly.

On the implementation of the Marine Travel Routes and Management Plan for Construction and Associated Vessel (MTRMP-CAV), the Marine Surveillance System (MSS) automatically recorded the deviation case such as speeding, entering no entry zone, not 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 and entry from non-designated gates were reviewed by ET. All the concerned captains were reminded by the contractor's Marine Traffic Control Centre (MTCC) representative to comply with the requirements of the MTRMP-CAV. ET also 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.

Results of Impact Monitoring

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

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

One monitoring result of 1-hour total suspended particulate (TSP) exceeded the relevant Action Level, and the corresponding investigation was conducted accordingly. The investigation findings concluded that the exceedance was not due to the Project.

The water quality monitoring results for dissolved oxygen (DO), turbidity, total alkalinity, chromium, and nickel obtained during the reporting period did not trigger their corresponding Action and Limit Levels stipulated in the EM&A programme for triggering the relevant investigation and follow-up procedures under the programme if being exceeded. For suspended solids (SS), one of the testing results exceeded the relevant Action Level, and the corresponding investigations were conducted accordingly. The investigation findings concluded that the exceedance was not due to the Project.

The monthly terrestrial ecology monitoring on Sheung Sha Chau observed that HDD works were conducted at the daylighting location and there was no encroachment upon the egret area nor any significant disturbance to the ardeids foraging at Sheung Sha Chau by the works.

Summary of Upcoming Key Issues

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

Advanced Works:**Contract P560 (R) Aviation Fuel Pipeline Diversion Works**

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

DCM Works:**Contract 3201 to 3205 DCM Works**

- DCM works; and
- Seawall construction.

Reclamation Works:**Contract 3206 Main Reclamation Works**

- Laying of sand blanket; and
- PVD installation.

Airfield Works:**Contract 3301 North Runway Crossover Taxiway**

- Cable ducting works;
- Subgrade works; and
- Precast of duct bank and fabrication of steel works.

Terminal 2 Expansion Works:**Contract 3501 Antenna Farm and Sewage Pumping Station**

- Excavation works;
- Piling works; and
- Builders works of antenna farm.

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

- Removal of existing concrete;
- Formwork erection and concreting works; and
- Steel platform erection.

Contract 3503 Terminal 2 Foundation and Substructure Works

- Site establishment; and
- Drainage and road work.

APM works:**Contract 3602 Existing APM System Modification Works**

- Site office establishment.

Airport Support Infrastructure & Logistic Works:**Contract 3801 APM and BHS Tunnels on Existing Airport Island**

- Erection of hoarding;
- Diversion of underground utilities;
- Piling works; and
- Demolition of footbridge.

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

		
Land-Based Theodolite Tracking Survey for CWD at Sha Chau	Environmental Management Meeting on EM&A Matters	DEZ Monitoring by Dolphin Observer

Summary Table

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

	Yes	No	Details	Analysis / Recommendation / Remedial Actions
Exceedance of Limit Level^		√	No exceedance of project-related limit level was recorded.	Nil
Exceedance of Action Level^		√	No exceedance of project-related action level was recorded.	Nil
Complaints Received	√		A complaint on the use of disqualified non-road mobile machineries was received on 19 Jan 2018.	The complaint investigation was carried out in accordance with the Complaint Management Plan. Investigation details are presented in S7.8.1.
Notification of any summons and status of prosecutions		√	No notification of summon or prosecution was received.	Nil
Changes that affect the EM&A		√	There was no change to the construction works that may affect the EM&A	Nil

Remark: ^Only exceedance of Action or Limit Level related to Project works is counted as Breaches of Action or Limit Level.

1 Introduction

1.1 Background

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

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

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

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

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

1.2 Scope of this Report

This is the 25th Construction Phase Monthly EM&A Report for the Project which summarizes the key findings of the EM&A programme during the reporting period from 1 to 31 January 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 have been updated and is presented in **Table 1.1**.

Table 1.1: Contact Information of Key Personnel

Party	Position	Name	Telephone
Project Manager's Representative (Airport Authority Hong Kong)	Principal Manager, Environment	Lawrence Tsui	2183 2734
Environmental Team (ET) (Mott MacDonald Hong Kong Limited)	Environmental Team Leader	Terence Kong	2828 5919
	Deputy Environmental Team Leader	Heidi Yu	2828 5704
	Deputy Environmental Team Leader	Keith Chau	2972 1721
Independent Environmental Checker (IEC) (AECOM Asia Company Limited)	Independent Environmental Checker	Jackel Law	3922 9376
	Deputy Independent Environmental Checker	Roy Man	3922 9376
Advanced Works:			
Contract P560(R) Aviation Fuel Pipeline Diversion Works (Langfang Huayuan Mechanical and Electrical Engineering Co., Ltd.)	Project Manager	Wei Shih	2117 0566
	Environmental Officer	Lyn Liu	5172 6543
Deep Cement Mixing (DCM) Works:			
Contract 3201 DCM (Package 1) (Penta-Ocean-China State-Dong-Ah Joint Venture)	Project Director	Tsugunari Suzuki	9178 9689
	Environmental Officer	Alan Tam	6119 3107
Contract 3202 DCM (Package 2) (Samsung-BuildKing Joint Venture)	Project Manager	Ilkwon Nam	9643 3117
	Environmental Officer	Dickson Mak	9525 8408
Contract 3203 DCM (Package 3) (Sambo E&C Co., Ltd)	Project Manager	Eric Kan	9014 6758
	Environmental Officer	David Hung	9765 6151
Contract 3204 DCM (Package 4) (CRBC-SAMBO Joint Venture)	Project Manager	Kyung-Sik Yoo	9683 8697
	Environmental Officer	Kanny Cho	6799 8226
Contract 3205 DCM (Package 5) (Bachy Soletanche - Sambo Joint Venture)	Deputy Project Director	Min Park	9683 0765
	Environmental Officer	Margaret Chung	9130 3696
Reclamation Works:			

Party	Position	Name	Telephone
Contract 3206 (ZHEC-CCCC-CDC Joint Venture)	Project Manager	Kim Chuan Lim	3693 2288
	Environmental Officer	Kwai Fung Wong	3693 2252
Airfield Works			
Contract 3301 North Runway Crossover Taxiway (FJT-CHEC-ZHEC Joint Venture)	Project Manager	Kin Hang Chung	9412 1386
Terminal 2 (T2) Expansion Works:			
Contract 3501 Antenna Farm and Sewage Pumping Station (Build King Construction Ltd.)	Project Manager	Raymond Au	6985 8860
	Environmental Officer	Edward Tam	9287 8270
Contract 3502 Terminal 2 APM Depot Modification Works (Build King Construction Ltd.)	Project Manager	Kivin Cheng	9380 3635
	Environmental Officer	Chun Pong Chan	9187 7118
Contract 3503 Terminal 2 Foundation and Substructure Works (Leighton – Chun Wo Joint Venture)	Construction Manager	Stephen O'Donoghue	9732 6787
	Environmental Officer	Stephen Tsang	5508 6361
Automated People Mover (APM) Works:			
Contract 3602 Existing APM System Modification Works (Niigata Transys Co., Ltd.)	Project Manager	Kunihiro Tatecho	9755 0351
	Environmental Officer	Arthur Wong	9170 3394
Airport Support Infrastructure and Logistic Works:			
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 DCM works, seawall construction, laying of sand blanket, and PVD installation. Land-side works included HDD works, site establishment, site office construction, cable ducting, concrete removal works, utilities demolition, antenna farm erection, 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 is presented in **Table 1.2**. The EM&A requirements remained unchanged during the reporting period and details can be referred to Table 1.2 of the Construction Phase Monthly EM&A Report No. 1.

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

Parameters	Status
Air Quality	
Baseline Monitoring	The baseline air quality monitoring result has been reported in Baseline Monitoring Report and submitted to EPD under EP Condition 3.4.
Impact Monitoring	On-going
Noise	
Baseline Monitoring	The baseline noise monitoring result has been reported in Baseline Monitoring Report and submitted to EPD under EP Condition 3.4.
Impact Monitoring	On-going
Water Quality	
General Baseline Water Quality Monitoring for reclamation, water jetting and field joint works	The baseline water quality monitoring result has been reported in Baseline Water Quality Monitoring Report and submitted to EPD under EP Condition 3.4.
General Impact Water Quality Monitoring for reclamation, water jetting and field joint works	On-going
Initial Intensive Deep Cement Mixing (DCM) Water Quality Monitoring	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 and approved by 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 Egret Survey Plan	The Egret 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	On-going
Chinese White Dolphins (CWD)	
Vessel Survey, Land-based Theodolite Tracking and Passive Acoustic Monitoring (PAM)	
Baseline Monitoring	Baseline CWD results were reported in the CWD Baseline Monitoring Report and submitted to EPD in accordance with EP Condition 3.4.
Impact Monitoring	On-going
Landscape & Visual	
Baseline Monitoring	The baseline landscape & visual monitoring result has been reported in Baseline Monitoring Report and submitted to EPD under EP Condition 3.4.
Impact Monitoring	On-going
Environmental Auditing	
Regular site inspection	On-going
Marine Mammal Watching Plan (MMWP) implementation measures	On-going

Parameters	Status
Dolphin Exclusion Zone Plan (DEZP) implementation measures	On-going
SkyPier High Speed Ferries (HSF) implementation measures	On-going
Construction and Associated Vessels Implementation measures	On-going
Complaint Hotline and Email channel	On-going
Environmental Log Book	On-going

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

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

- One dolphin observer training provided by ET: 17 Jan 2018
- Two skipper trainings provided by ET: 10 and 24 Jan 2018
- One environmental briefing on EP and EM&A requirements of the 3RS provided by ET: 5 Jan 2018
- Nine environmental management meetings on EM&A matters: 8, 16, 18, 22, 24, and 26 Jan 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 B**.

2 Air Quality Monitoring

2.1 Monitoring Stations

Air quality monitoring was conducted at 2 representative monitoring stations in the vicinity of air sensitive receivers in Tung Chung and villages in North Lantau in accordance with the Manual. **Table 2.1** describes the details of the monitoring stations. **Figure 2.1** shows the locations of the monitoring stations.

Table 2.1: Locations of Impact Air Quality Monitoring Stations

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

2.2 Monitoring Requirements and Schedule

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

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

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

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

2.3 Monitoring Equipment

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

Table 2.3: Air Quality Monitoring Equipment

Equipment	Brand and Model	Last Calibration Date	Calibration Certificate Provided in
Portable direct reading dust meter (Laser dust monitor)	SIBATA LD-3B-001 (Serial No. 934393)	11 Oct 2017	Monthly EM&A Report No. 22, Appendix E
	SIBATA LD-3B-002 (Serial No. 974350)	11 Sep 2017	
	SIBATA LD-3B-003 (Serial No. 276018)	11 Sep 2017	

2.4 Monitoring Methodology

2.4.1 Measuring Procedure

The measurement procedures involved in the impact 1-hr TSP monitoring can be summarised as follows:

- a. The portable direct reading dust meter was mounted on a tripod at a height of 1.2 m above the ground.
- b. Prior to the measurement, the equipment was set up for 1 minute span check and 6 second background check.
- c. The one hour dust measurement was started. Site conditions and dust sources at the nearby area were recorded on a record sheet.
- d. When the measurement completed, the “Count” reading per hour was recorded for result calculation.

2.4.2 Maintenance and Calibration

The portable direct reading dust meter is calibrated every year against high volume sampler (HVS) to check the validity and accuracy of the results measured by direct reading method. The calibration record of the HVS provided in Appendix E of the Construction Phase Monthly EM&A Report No. 22, and the calibration certificates of portable direct reading dust meters listed in **Table 2.3** are still valid.

2.5 Analysis and Interpretation of Monitoring Results

The monitoring results for 1-hour TSP are summarized in **Table 2.4**. Detailed impact monitoring results are presented in **Appendix D**.

Table 2.4: Summary of 1-hour TSP Monitoring Results

Monitoring Station	1-hr TSP Concentration Range ($\mu\text{g}/\text{m}^3$)	Action Level ($\mu\text{g}/\text{m}^3$)	Limit Level ($\mu\text{g}/\text{m}^3$)
AR1A	12 – 95	306	500
AR2	12 – 406	298	

One Action Level exceedance case of air quality monitoring was recorded at AR2 on 8 January 2018 in the 1-hour TSP monitoring started at 09:00am. Actions were taken accordingly based on the established Event and Action Plan as presented in the Manual. Repeat measurement was conducted after the monitoring session that day. No exceedance was recorded during repeat measurement. Contractors, IEC, and AAHK were informed of the exceedance.

It was confirmed from the field investigation that visibility was low when the exceedance was recorded and no major construction dust emission source was observed in the whole monitoring period.

As confirmed with the contractors, no major dusty construction works was undertaken when the exceedance was recorded. Dust suppression measures, including water spraying, covering stockpiles with impervious sheets, and regular checking of dust collectors for cement silos, were implemented during the monitoring period. Rainy weather was observed throughout the monitoring period. The ground surface at construction works area had been kept wet by the rain, which suppressed the generation of fugitive dust.

The exceedance of 1-hour TSP occurred only in the first hour of monitoring while construction works was ongoing throughout the monitoring period with no major dusty construction activities

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

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

3 Noise Monitoring

3.1 Monitoring Stations

Noise monitoring was conducted at 5 representative monitoring stations in the vicinity of noise sensitive receivers in Tung Chung and villages in North Lantau in accordance with the Manual. **Figure 2.1** shows the locations of the monitoring stations and these are described in **Table 3.1** below. As described in Section 4.3.3 of the Manual, monitoring at NM2 will commence when the future residential buildings in Tung Chung West Development become occupied.

Table 3.1: Locations of Impact Noise Monitoring Stations

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

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

3.2 Monitoring Requirements and Schedule

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

Table 3.2: Action and Limit Levels for Construction Noise

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

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

3.3 Monitoring Equipment

Noise monitoring was performed using sound level meter at each designated monitoring station. The sound level meters deployed comply with the International Electrotechnical Commission Publications 651:1979 (Type 1) and 804:1985 (Type 1) specifications. Acoustic calibrator was used to check the sound level meters by a known sound pressure level for field measurement. Details of equipment are given in **Table 3.3**.

Table 3.3: Noise Monitoring Equipment

Equipment	Brand and Model	Last Calibration Date	Calibration Certificate Provided in
Integrated Sound Level Meter	B&K 2238 (Serial No. 2800932)	17 Jul 2017	Monthly EM&A Report No. 19, Appendix E
	B&K 2238 (Serial No. 2808432)	30 Aug 2017	Monthly EM&A Report No. 21, Appendix E
	B&K 2238 (Serial No. 2684503)	30 Aug 2017	Monthly EM&A Report No. 21, Appendix E
Acoustic Calibrator	B&K 4231 (Serial No. 3003246)	16 May 2017	Monthly EM&A Report No. 17, Appendix D
	B&K 4231 (Serial No. 3004068)	17 Jul 2017	Monthly EM&A Report No. 19, Appendix E

3.4 Monitoring Methodology

3.4.1 Monitoring Procedure

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

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

3.4.2 Maintenance and Calibration

The maintenance and calibration procedures are summarised below:

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

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

3.5 Analysis and Interpretation of Monitoring Results

The construction noise monitoring results are summarized in **Table 3.4** and the detailed monitoring data are provided in **Appendix D**.

Table 3.4: Summary of Construction Noise Monitoring Results

Monitoring Station	Noise Level Range, dB(A)	Limit Level, dB(A)
	<i>L_{eq}</i> (30 mins)	<i>L_{eq}</i> (30 mins)
NM1A ⁽ⁱ⁾	72 – 73	75
NM3A	61 – 63	75
NM4 ⁽ⁱ⁾	63 – 66	70 ⁽ⁱⁱ⁾
NM5 ⁽ⁱ⁾	53 – 61	75
NM6 ⁽ⁱ⁾	62 – 71	75

Notes: (i) +3 dB(A) Façade correction included;

(ii) Reduced to 65 dB(A) during school examination periods at NM4. No examination was held in this reporting period.

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

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

4 Water Quality Monitoring

4.1 Monitoring Stations

Water quality monitoring was conducted at a total of 22 water quality monitoring stations, comprising 12 impact (IM) stations, 7 sensitive receiver (SR) stations and 3 control stations in the vicinity of water quality sensitive receivers around the airport island in accordance with the Manual. **Table 4.1** describes the details of the monitoring stations. **Figure 3.1** shows the locations of the monitoring stations.

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

Monitoring Station	Description	Coordinates		Parameters
		Easting	Northing	
C1	Control	804247	815620	DO, pH, Temperature, Salinity, Turbidity, SS, Total Alkalinity, Heavy Metals ⁽²⁾
C2	Control	806945	825682	
C3 ⁽³⁾	Control	817803	822109	
IM1	Impact	806458	818351	
IM2	Impact	806193	818852	
IM3	Impact	806019	819411	
IM4	Impact	805039	819570	
IM5	Impact	804924	820564	
IM6	Impact	805828	821060	
IM7	Impact	806835	821349	
IM8	Impact	807838	821695	
IM9	Impact	808811	822094	
IM10	Impact	809838	822240	
IM11	Impact	810545	821501	
IM12	Impact	811519	821162	
SR1 ⁽¹⁾	Future Hong Kong-Zhuhai-Macao Bridge Hong Kong Boundary Crossing Facilities (HKBCF) Seawater Intake for cooling	812586	820069	DO, pH, Temperature, Salinity, Turbidity, SS
SR2 ⁽³⁾	Planned marine park / hard corals at The Brothers / Tai Mo To	814166	821463	
SR3	Sha Chau and Lung Kwu Chau Marine Park / fishing and spawning grounds in North Lantau	807571	822147	
SR4A	Sha Lo Wan	807810	817189	
SR5A	San Tau Beach SSSI	810696	816593	
SR6	Tai Ho Bay, Near Tai Ho Stream SSSI	814663	817899	
SR7	Ma Wan Fish Culture Zone (FCZ)	823742	823636	
SR8 ⁽⁴⁾	Seawater Intake for cooling at Hong Kong International Airport (East)	811418	820246	
		(from July 2017 onwards)		

Notes:

⁽¹⁾ The seawater intakes of SR1 for the future HKBCF is not yet in operation, hence no water quality impact monitoring was conducted at this station. The future permanent location for SR1 during impact monitoring is subject to finalisation after the HKBCF seawater is commissioned.

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

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

⁽⁴⁾ The monitoring location for SR8 is subject to further changes due to silt curtain arrangements and the progressive relocation of this seawater intake.

4.2 Monitoring Requirements and Schedule

In accordance with the Manual, baseline water quality levels at the abovementioned representative water quality monitoring stations were established as presented in the Baseline Water Quality Monitoring Report.

General water quality monitoring and regular DCM water quality monitoring were conducted three days per week, at mid-flood and mid-ebb tides, at the 22 water quality monitoring stations during the reporting period. The sea conditions varied from calm to rough, and the weather conditions varied from sunny to rainy during the monitoring period.

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

4.2.1 Action and Limit Levels for Water Quality Monitoring

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

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

Parameters	Action Level (AL)	Limit Level (LL)
Action and Limit Levels for general water quality monitoring and regular DCM monitoring (excluding SR1& SR8)		
DO in mg/L (Surface, Middle & Bottom)	Surface and Middle 4.5 mg/L	Surface and Middle 4.1 mg/L 5 mg/L for Fish Culture Zone (SR7) only
	Bottom 3.4 mg/L	Bottom 2.7 mg/L
SS in mg/L	23	37
Turbidity in NTU	22.6	36.1
Total Alkalinity in ppm	95	99
Representative Heavy Metals for regular DCM monitoring (Chromium)	0.2	0.2
Representative Heavy Metals for regular DCM monitoring (Nickel)	3.2	3.6
Action and Limit Levels SR1		
SS (mg/l)	To be determined prior to its commissioning	To be determined prior to its commissioning

Parameters	Action Level (AL)	Limit Level (LL)
Action and Limit Levels SR8		
SS (mg/l)	52	60

Notes:

- (1) For DO measurement, non-compliance occurs when monitoring result is lower than the limits.
- (2) For parameters other than DO, non-compliance of water quality results when monitoring results is higher than the limits.
- (3) Depth-averaged results are used unless specified otherwise.
- (4) Details of selection criteria for the two heavy metals for regular DCM monitoring refer to the Detailed Plan on Deep Cement Mixing available on the dedicated 3RS website (<http://env.threerunwaysystem.com/en/ep-submissions.html>)
- (5) The Action and Limit Levels for the two representative heavy metals chosen will be the same as that for the intensive DCM monitoring.

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

Control Station	Impact Stations
Flood Tide	
C1	IM1, IM2, IM3, IM4, IM5, IM6, IM7, IM8, SR3
SR2 [†]	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

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

4.3 Monitoring Equipment

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

Table 4.4: Water Quality Monitoring Equipment

Equipment	Brand and Model	Last Calibration Date	Calibration Certificate Provided in
Multifunctional Meter (measurement of DO, pH, temperature, salinity and turbidity)	YSI ProDSS (Serial No. 16H104234)	7 Dec 2017	Monthly EM&A Report No. 24, Appendix D
	YSI ProDSS (Serial No. 17H105557)	7 Dec 2017	
	YSI 6920 V2 (Serial No. 00019CB2)	7 Dec 2017	
	YSI 6920 V2 (Serial No. 000109DF)	7 Dec 2017	
Digital Titrator (measurement of total alkalinity)	Titrette Digital Burette 50ml Class A (Serial No. 10N65665)	18 Dec 2017	Monthly EM&A Report No. 24, 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

4.4 Monitoring Methodology

4.4.1 Measuring Procedure

Water quality monitoring samples were taken at three depths (at 1m below surface, at mid-depth, and at 1m above bottom) for locations with water depth >6m. For locations with water depth between 3m and 6m, water samples were taken at two depths (surface and bottom). For locations with water depth <3m, only the mid-depth was taken. Duplicate water samples were taken and analysed.

The water samples for all monitoring parameters were collected, stored, preserved and analysed according to the Standard Methods, APHA 22nd ed. and/or other methods as agreed by the EPD. In-situ measurements at monitoring locations including temperature, pH, DO, turbidity, salinity and water depth were collected by equipment listed in **Table 4.4** and **Table 4.5**. Water samples for heavy metals and SS analysis were stored in high density polythene bottles with no preservative added, packed in ice (cooled to 4 °C without being frozen), delivered to the laboratory within 24 hours of collection.

4.4.2 Maintenance and Calibration

Calibration of In-situ Instruments

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

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

4.4.3 Laboratory Measurement / Analysis

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

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

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

4.5 Analysis and Interpretation of Monitoring Results

4.5.1 Summary of Monitoring Results

The water quality monitoring results for DO, turbidity, total alkalinity, chromium, and nickel obtained during the reporting period did not trigger their corresponding Action and Limit Levels stipulated in the EM&A programme for triggering the relevant investigation and follow-up procedures under the programme if being exceeded. For SS, one of the testing results exceeded the relevant Action Level, and the corresponding investigation was conducted accordingly. Detailed analysis of the exceedance is presented in **Section 4.5.2**.

4.5.2 Summary of Findings for Investigation of Exceedances

During the reporting period, water quality monitoring was conducted at 12 IM stations, 7 SR stations, and 3 control stations in accordance with the Manual. The purpose of water quality monitoring at the IM stations is to promptly capture any potential water quality impact from the Project before it could become apparent at sensitive receivers (represented by the SR stations).

During the monitoring period, a testing result exceeding the corresponding Action Level was recorded on 1 monitoring day. Details of the exceedance case are presented below.

Findings for SS Exceedances (Mid-Ebb Tide)


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

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

	IM1	IM2	IM3	IM4	IM5	IM6	IM7	IM8	IM9	IM10	IM11	IM12	SR2	SR3	SR4A	SR5A	SR6	SR7	SR8	
02/01/2018																				
04/01/2018																				
06/01/2018																				
10/01/2018																				
12/01/2018																				
14/01/2018																				
16/01/2018																				
18/01/2018																				
20/01/2018																				
23/01/2018																				
25/01/2018																				
27/01/2018																				
30/01/2018																				
No. of Exceedance	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0

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

Legend:

 No exceedance of Action and Limit Level

	Exceedance of Action Level recorded at monitoring station located downstream of the Project based on dominant tidal flow
	Upstream station with respect to the Project during the respective tide based on dominant tidal flow

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

As part of the investigation on the downstream exceedance event, details of the Project's marine construction activities on the concerned monitoring day were collected, as well as any observations during the monitoring. The findings are summarized in **Table 4.8**.

Table 4.8: Summary of Findings from Investigations of SS Exceedances (Mid-Ebb Tide)

Date	Marine construction works nearby	Approximate distance from marine construction works*	Status of water quality measures (if applicable)	Construction vessels in the vicinity	Turbidity / Silt plume observed near the monitoring station	Exceedance due to Project
04/01/2018	DCM works Sand blanket laying	Around 500m	Silt curtain deployed	No	No	No

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

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

For the exceedance at IM11 on 4 January 2018, the exceedance appeared to be an isolated case with no observable temporal and spatial trend to indicate any effect due to Project activities. As there was no evidence of SS release due to Project activities from site observations and all mitigation measures were carried out properly, the exceedance was possibly due to natural fluctuation in the vicinity of the monitoring station, and considered not due to the Project.

Conclusions

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

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

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

5 Waste Management

5.1 Monitoring Requirements

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

Table 5.1: Action and Limit Levels for Construction Waste

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

5.2 Waste Management Status

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

Recommendations made included provision and maintenance of drip trays and proper chemical waste storage area. The contractors had taken actions to implement the recommended measures.

Based on the updated information provided by contractor, around 84m³, 530m³ and 1,320m³ of Construction and Demolition (C&D) materials was reused in the Project in October 2017, November 2017 and December 2017 respectively.

According to the Contractor's information, about 662m³ of excavated materials were produced from the HDD and excavation works in the reporting period. The excavated materials were temporarily stored at stockpiling areas and will be reused in the Project.

In addition, paper and plastics were recycled in the reporting month. Around 162 tonnes of general refuse was disposed of to the designated landfill, 210kg and 25,200L of chemical waste were collected by licensed chemical waste collector in the reporting period. Besides, around 4,180m³ of C&D materials was reused in the Project and around 597m³ of C&D material was disposed of as public fill in the reporting period.

No exceedance of the Action or Limit Levels was recorded in the reporting period.

6 Chinese White Dolphin Monitoring

6.1 CWD Monitoring Requirements

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

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

The Action Level (AL) and Limit Level (LL) for CWD monitoring were formulated by the action response approach using the running quarterly dolphin encounter rates STG and ANI derived from the baseline monitoring data, as presented in the CWD Baseline Monitoring Report. The derived values of AL and LL for CWD monitoring were summarized in **Table 6.1**.

Table 6.1: Derived Values of Action Level (AL) and Limit Level (LL) for Chinese White Dolphin Monitoring

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

[Notes for **Table 6.1** (referring to the baseline monitoring report):

*Action Level – running quarterly STG & ANI will be calculated from the three preceding survey months. For CWD monitoring for January 2018, data from 1 November 2017 to 31 January 2018 will be used to calculate the running quarterly encounter rates STG & ANI;

^Limit Level – two consecutive running quarters mean both the running quarterly encounter rates of the preceding month December 2017 (calculated by data from October 2017 to December 2017) and the running quarterly encounter rates of this month (calculated by data from November 2017 to January 2018).

AL and/or LL will be exceeded if both STG and ANI fall below the criteria.]

6.2 CWD Monitoring Transects and Stations

6.2.1 Small Vessel Line-transect Survey

Small vessel line-transect surveys were conducted along the transects covering Northeast Lantau (NEL), Northwest Lantau (NWL), Airport West (AW), West Lantau (WL) and Southwest Lantau (SWL) areas as proposed in the Manual, which are consistent with the Agriculture, Fisheries and Conservation Department (AFCD) long-term monitoring programme (except the addition of AW). The AW transect has not been previously surveyed in the AFCD programme due to the restrictions of HKIA Approach Area, nevertheless, this transect was established during the EIA of the 3RS Project and refined in the Manual with the aim to collect project specific baseline information within the HKIA Approach Area to fill the data gap that was not covered by the AFCD programme. This provided a larger sample size for estimating the density, abundance and patterns of movements in the broader study area of the project.

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

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

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

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

6.2.2 Land-based Theodolite Tracking

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

Table 6.3: Land-based Survey Station Details

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

6.3 CWD Monitoring Methodology

6.3.1 Small Vessel Line-transect Survey

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

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

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

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

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

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

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

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

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

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

6.3.2 Photo Identification

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

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

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

6.3.3 Land-based Theodolite Tracking

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

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

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

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

6.4 Monitoring Results and Observations

6.4.1 Small Vessel Line-transect Survey

Survey Effort

Within this reporting period, two complete sets of small vessel line-transect surveys were conducted on the 8, 10, 11, 15, 16, 17, 18, and 19 January 2018, covering all transects in NEL, NWL, AW, WL and SWL survey areas for twice.

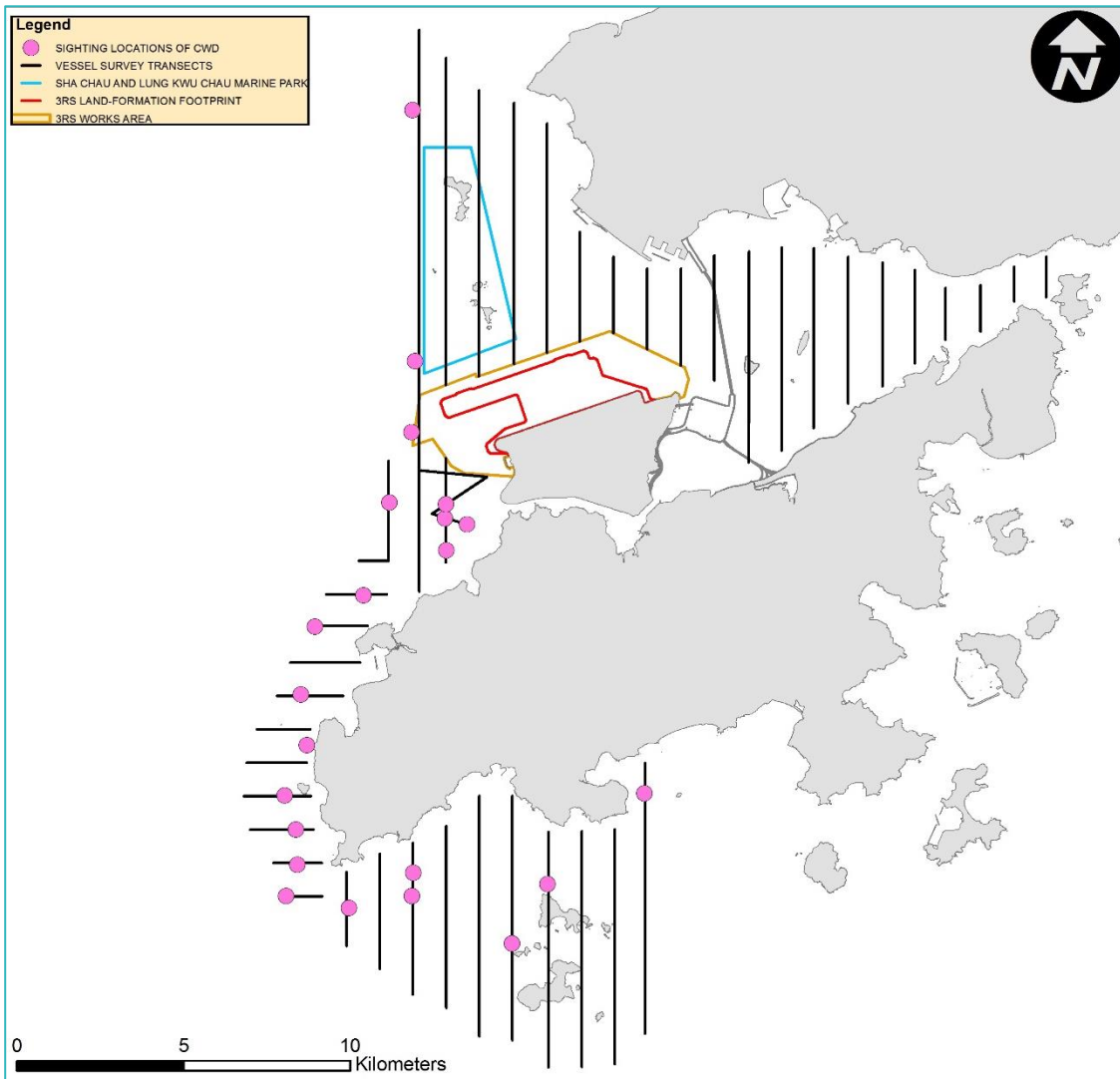
A total of around 456.20 km of survey effort was collected from these surveys, with around 94.52% of the total survey effort being conducted under favourable weather condition (i.e. Beaufort Sea State 3 or below with favourable visibility). Details of the survey effort are given in **Appendix D**.

Sighting Distribution

In January 2018, 22 sightings of CWDs with 86 individuals were sighted. All these sightings were recorded during on-effort search under favourable weather conditions (i.e. Beaufort Sea State 3 or below with favourable visibility). Details of cetacean sightings are presented in **Appendix D**.

Distribution of all CWD sightings recorded in January 2018 is illustrated in **Figure 6.3**. In NWL, seven sightings of CWD were recorded along the western edge, particularly around the AW transects. One of these seven sightings was recorded close to the 3RS works area. In WL, CWD sightings were recorded quite evenly along from the northernmost transect to the southernmost transect near Fan Lau. In SWL, CWD sightings were scattered at western part near Fan Lau, northwestern part of Soko Islands, and also Shui Hau. No sightings of CWDs were recorded in NEL and also the vicinity of or within the 3RS land-formation footprint.

Figure 6.3: Sightings Distribution of Chinese White Dolphins



Remarks: Please note that there are 22 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 January 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)

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

Encounter Rate by Number of Dolphins (ANI)

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

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

In January 2018, a total of around 431.21 km of survey effort were conducted under Beaufort Sea State 3 or below with favourable visibility, whilst a total number of 22 on-effort sightings with 86 individuals were sighted under such condition. Calculation of the encounter rates in January 2018 are shown in **Appendix D**.

For the running quarter of the reporting period (i.e., from November 2017 to January 2018), a total of around 1124.89 km of survey effort were conducted under Beaufort Sea State 3 or below with favourable visibility, whilst a total number of 48 on-effort sightings and a total number of 183 dolphins from on-effort sightings were obtained under such condition. Calculation of the running quarterly encounter rates are shown in **Appendix D**.

The STG and ANI of CWD in the whole survey area (i.e. NEL, NWL, AW, WL and SWL) during the month of January 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 the Action Level (i.e., remained above the Action Level).

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

	Encounter Rate (STG)	Encounter Rate (ANI)
January 2018	5.10	19.94
Running Quarter from November 2017 to January 2018*	4.27	16.27
Action Level	Running quarterly* < 1.86	Running quarterly* < 9.35

*Running quarterly encounter rates STG & ANI were calculated from data collected in the reporting period and the two preceding survey months, i.e. the data from November 2017 to January 2018, containing six sets of transect surveys for all monitoring areas.

Group Size

In January 2018, 22 groups of CWDs with 86 individuals were sighted, and the average group size of CWDs was 3.91 individuals per group. Sightings with small group size (i.e. 1-2 individuals) accounted for half of the total sightings. Two sightings with large group size (i.e. 10 or more individuals) were recorded in AW and WL respectively during this reporting period.

Activities and Association with Fishing Boats

Seven out of 22 sightings of CWDs were recorded engaging in feeding activities in January 2018. CWDs from three out of these seven sightings were observed associating with operating fishing boat including purse seiner and gillnetter.

Mother-calf Pair

In January 2018, three sightings of CWDs were recorded with the presence of mother-and-unspotted juvenile pair in NWL including AW.

6.4.2 Photo Identification

In January 2018, a total number of 40 different CWD individuals were identified for totally 50 times. A summary of photo identification works is presented in **Table 6.5**. Representative photos of these individuals are given in **Appendix D**.

Table 6.5: Summary of Photo Identification

Individual ID	Date of Sighting (dd/mm/yy)	Sighting Group No.	Area	Individual ID	Date of Sighting (dd/mm/yy)	Sighting Group No.	Area
NLMM002	18-Jan-18	1	NWL	WLMM004	15-Jan-18	3	WL
NLMM010	18-Jan-18	1	NWL	WLMM007	15-Jan-18	8	WL
NLMM021	18-Jan-18	2	NWL	WLMM015	15-Jan-18	3	WL
NLMM023	18-Jan-18	1	NWL	WLMM021	16-Jan-18	3	SWL
NLMM037	18-Jan-18	1	NWL	WLMM026	15-Jan-18	1	AW
NLMM057	18-Jan-18	3	NWL	WLMM027	15-Jan-18	1	AW
NLMM061	15-Jan-18	1	AW		18-Jan-18	4	NWL
	18-Jan-18	3	NWL	WLMM043	15-Jan-18	3	WL
NLMM062	15-Jan-18	2	WL	WLMM060	18-Jan-18	5	NWL
NLMM063	18-Jan-18	2	NWL	WLMM064	15-Jan-18	2	WL
SLMM003	15-Jan-18	8	WL	WLMM065	18-Jan-18	3	NWL
SLMM007	15-Jan-18	8	WL	WLMM066	15-Jan-18	1	AW
SLMM010	15-Jan-18	8	WL		18-Jan-18	3	NWL
	17-Jan-18	7	SWL	WLMM071	15-Jan-18	1	AW
SLMM012	17-Jan-18	7	SWL		18-Jan-18	5	NWL
SLMM018	17-Jan-18	5	SWL	WLMM079	15-Jan-18	8	WL
SLMM022	15-Jan-18	8	WL	WLMM081	15-Jan-18	3	WL
SLMM028	15-Jan-18	1	AW	WLMM108	15-Jan-18	3	WL
	16-Jan-18	1	AW	WLMM109	15-Jan-18	3	WL
SLMM030	17-Jan-18	6	SWL			5	WL
		7	SWL			7	WL
SLMM046	15-Jan-18	3	WL	WLMM110	15-Jan-18	3	WL
SLMM049	15-Jan-18	8	WL	WLMM111	15-Jan-18	3	WL
SLMM052	15-Jan-18	8	WL				7
SLMM060	08-Jan-18	1	SWL	WLMM112	15-Jan-18	3	WL

6.4.3 Land-based Theodolite Tracking

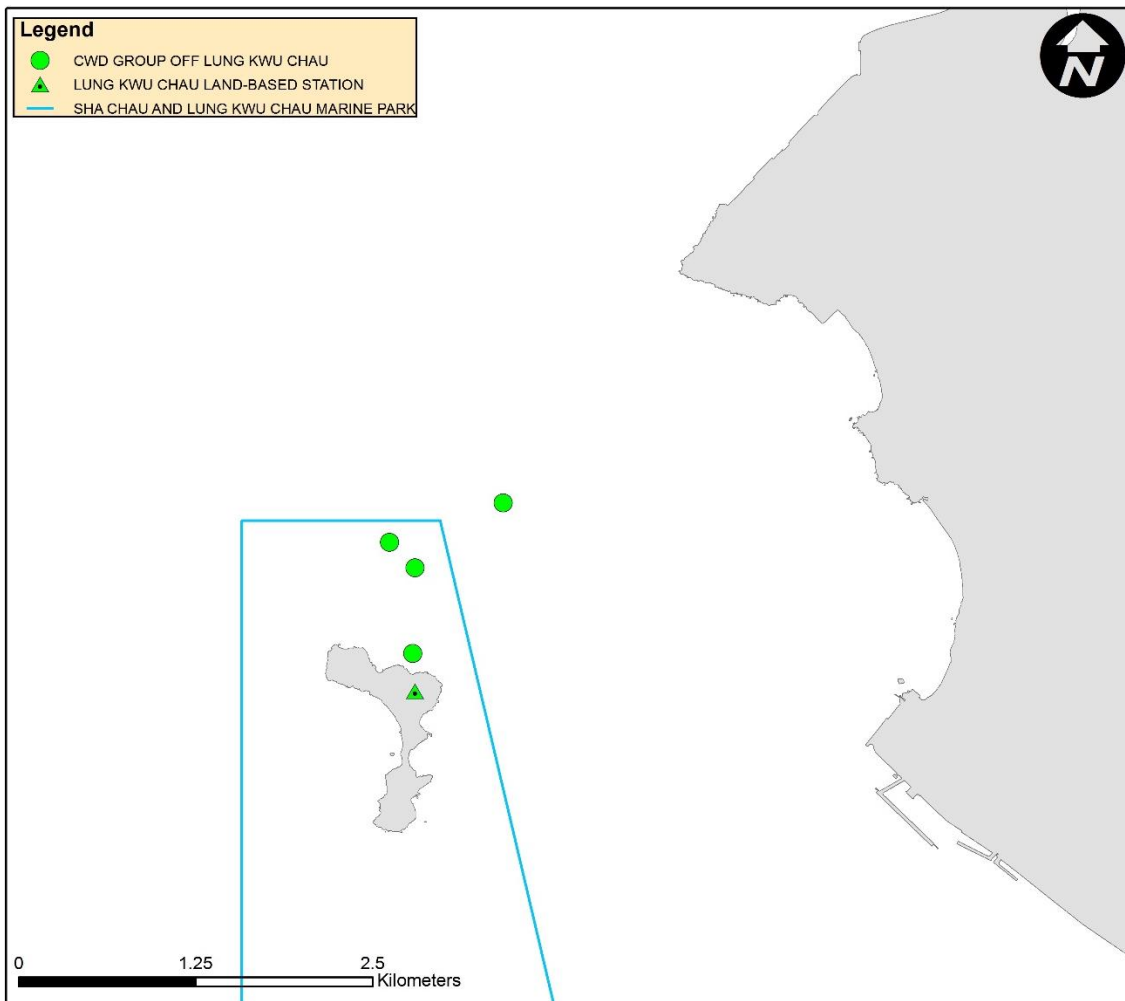
Survey Effort

Land-based theodolite tracking surveys were conducted at LKC on 16, 22, and 23 January 2018 and at SC on 15 and 24 January 2018, with a total of five days of land-based theodolite tracking survey effort accomplished in this reporting period. A total number of four CWD groups were tracked at LKC station during the surveys. Information of survey effort and CWD groups sighted during these land-based theodolite tracking surveys are presented in **Table 6.6**. Details of the survey effort and CWD groups tracked are presented in **Appendix D**. The first sighting locations of CWD groups tracked at LKC station during land-based theodolite tracking surveys in January 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	4	0.22
Sha Chau	2	12:00	0	0
TOTAL	5	30:00	4	0.13

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) has been retrieved and re-deployed on 15 January 2018 and positioned at south of Sha Chau Island inside the SCLKCMP with 20% duty cycle (**Figure 6.5**). The EAR deployment is generally for 4-6 weeks prior to data retrieval for analysis. Acoustic data is reviewed to give an indication of CWDs occurrence patterns and to obtain anthropogenic noise information simultaneously. Analysis (by a specialized team of acousticians) involved manually browsing through every acoustic recording and logging the occurrence of dolphin signals. All data will be re-played by computer as well as listened to by human ears for accurate assessment of dolphin

group presence. As the period of data collection and analysis takes more than two months, PAM results could not be reported in monthly intervals.

6.6 Site Audit for CWD-related Mitigation Measures

During the reporting period, silt curtains were in place by the contractors for sand blanket laying works, in which dolphin observers were deployed by each contractor in accordance with the MMWP. Teams of at least two dolphin observers were deployed at 17 to 24 dolphin observation stations by the contractors for continuous monitoring of the DEZ by all contractors for ground improvement works (DCM works and PVD installation) 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 562 individuals being trained and the training records kept by the ET. Observation was recorded on DEZ monitoring in this reporting period during site inspection by the ET. The contractors had taken actions to implement the recommended measures. From the contractors' MMWP observation records and DEZ monitoring records, no dolphin or other marine mammals were observed within or around the silt curtains or the DEZs in this reporting month. These contractors' records were also audited by the ET during site inspection.

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

6.7 Timing of Reporting CWD Monitoring Results

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

6.8 Summary of CWD Monitoring

Monitoring of CWD was conducted with two complete sets of small vessel line-transect surveys and five days of land-based theodolite tracking survey effort as scheduled. The running quarterly encounter rates STG and ANI in the reporting period did not trigger the Action Level for CWD monitoring.

7 Environmental Site Inspection and Audit

7.1 Environmental Site Inspection

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

The key observations from site inspection and associated recommendations were related to display of appropriate licences and labels; provision and maintenance of drip trays, spill kits, and chemical waste storage area; proper handling of chemical and chemical wastes; proper implementation of dust suppression, acoustic decoupling, tree protection, and runoff prevention measures; as well as proper implementation DEZ and marine traffic monitoring.

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

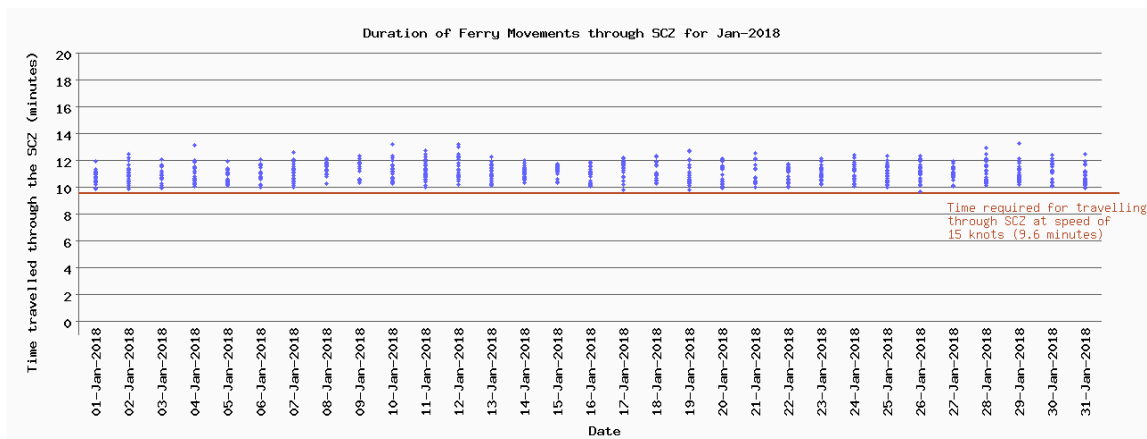
7.2 Audit of Route Diversion and Speed Control of the SkyPier High Speed Ferries

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

Key audit findings for the SkyPier HSFs travelling to/from Zhuhai and Macau against the requirements of the SkyPier Plan during the reporting period are summarized in **Table 7.1**. The daily movements of all SkyPier HSFs in this reporting period (i.e., 89 to 91 daily movements) were within the maximum daily cap of 125 daily movements. Status of compliance with the annual daily average of 99 movements will be further reviewed in the annual EM&A Report.

In total, 886 ferry movements between HKIA SkyPier and Zhuhai / Macau were recorded in January 2018 and the data are presented in **Appendix G**. The time spent by the SkyPier HSFs travelling through the SCZ in January 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 January 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 case of minor deviation from the diverted route on 29 December 2017 was followed up after receiving information from the ferry operator. ET’s investigation found that the minor route deviation was due to GPS error. After checking the radar graph provided by the ferry operator, it is confirmed that the coordinates of the ferry shifted easterly due to GPS error. The ferry operator was advised to investigate the reason for the GPS error and check the GPS system to ensure that accurate data points can be received.

Two cases of minor deviation from the diverted route on 12 and 15 November 2017, which were not recorded in High Speed Ferry Monitoring System, were recently discovered during auditing and followed up immediately in January 2018. ET’s investigation found that the minor route deviations on both 12 and 15 November 2017 were due to avoiding collision with floating objects on the sea to ensure safety. After that, the HSFs had returned to the normal route following the SkyPier Plan.

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

Requirements in the SkyPier Plan	1 January to 31 January 2018
Total number of ferry movements recorded and audited	886
Use diverted route and enter / leave SCZ through Gate Access Points	No deviation.
Speed control in speed control zone	The average speeds taken within the SCZ of all HSFs were within 15 knots (10.2 knots to 14.0 knots), which complied with the SkyPier Plan. The time used by HSFs to travel through SCZ is presented in Figure 7.1 .
Daily Cap (including all SkyPier HSFs)	89 to 91 daily movements (within the maximum daily cap - 125 daily movements).

7.3 Audit of Construction and Associated Vessels

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

ET carried out the following actions during the reporting period:

- 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.
- Three 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, 21 skippers were trained by ET and 4 skippers were trained by contractor's Environmental Officer. In total, 852 skippers were trained from August 2016 to January 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 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.

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

7.4 Implementation of Dolphin Exclusion Zone

The DEZ Plan was submitted in accordance with EP Condition 3.1 (v) requirement and Section 10.3 of the 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) according to their Method Statement for DEZ Monitoring that followed the specifications and requirements of the DEZ Plan.

During the reporting period, ET has been notified that no dolphin sightings were recorded within the DEZ by the contractors. ET has checked the relevant records by the contractors to audit the implementation of DEZ. Observation was recorded on DEZ monitoring in this reporting period during site inspection by the ET. The contractors had taken actions to implement the recommended measures.

7.5 Ecological Monitoring

In accordance with the Manual, ecological monitoring shall be undertaken monthly at the Horizontal Directional Drilling (HDD) daylighting location on Sheung Sha Chau Island during the HDD construction works period from August to March to identify and evaluate any impacts with appropriate actions taken as required to address and minimise any adverse impact found. During the reporting period, the monthly ecological monitoring at the HDD daylighting location on Sheung Sha Chau observed that HDD works were ongoing under the Contract P560(R) at the daylighting location, and there was no encroachment of any works upon the egret 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 site photos and location map regarding the monthly ecological monitoring for the HDD works and egret area are provided in **Appendix D** for reference.

7.6 Status of Submissions under Environmental Permits

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

Table 7.2: Status of Submissions under Environmental Permit

EP Condition	Submission	Status
2.1	Complaint Management Plan	
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 by EPD
2.13	Fisheries Management Plan	
2.14	Egrettry 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

A complaint was received on 19 January 2018 regarding the use of non-road mobile machineries (NRMM) in works sites of HKIA under the Development Bureau's Technical Circular (Works) No. 1/2015. Investigation was conducted by the ET in accordance with the Manual and the Complaint Management Plan of the Project. While the mentioned Technical Circular applies only to the government's public works projects, and that the 3RS Project is not classified under public works, this Technical Circular does not apply to the case of the 3RS Project. Nevertheless, based on ET's site inspections, it was observed that Contractors have used NRMMs with appropriate labels under Air Pollution Control (Non-road Mobile Machinery) (Emission) Regulation.

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

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

DCM Works:

Contract 3201 to 3205 DCM Works

- DCM works; and
- Seawall construction.

Reclamation Works:

Contract 3206 Main Reclamation Works

- Laying of sand blanket; and
- PVD installation.

Airfield Works:

Contract 3301 North Runway Crossover Taxiway

- Cable ducting works;
- Subgrade works; and
- Precast of duct bank and fabrication of steel works.

Terminal 2 Expansion Works:

Contract 3501 Antenna Farm and Sewage Pumping Station

- Excavation works;
- Piling works; and
- Builders works of antenna farm.

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

- Removal of existing concrete;
- Formwork erection and concreting works; and
- Steel platform erection.

Contract 3503 Terminal 2 Foundation and Substructure Works

- Site establishment; and
- Drainage and road work.

APM works:

Contract 3602 Existing APM System Modification Works

- Site office establishment.

Airport Support Infrastructure & Logistic Works:

Contract 3801 APM and BHS Tunnels on Existing Airport Island

- Erection of hoarding;
- Diversion of underground utilities;
- Piling 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 blankets and DCM works;
- DEZ monitoring for ground improvement works (DCM works and PVD installation); and implementation of MMWP for silt curtain deployment by the contractors' dolphin observers;
- Sorting, recycling, storage and disposal of general refuse and construction waste;
- Management of chemicals and avoidance of oil spillage on-site; and
- Acoustic decoupling measures for equipment on marine vessels.

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

8.3 Monitoring Schedule for the Coming Reporting Period

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

9 Conclusion and Recommendation

The key activities of the Project carried out in the reporting period included reclamation works and land-side works. Reclamation works included DCM works, laying of sand blanket and PVD installation. Land-side works included HDD works, site establishment, site office construction, cable ducting, concrete removal works, utilities demolition, antenna farm erection, piling, and excavation works.

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

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

One monitoring result of 1-hour TSP exceeded the relevant Action Level, and the corresponding investigation was conducted accordingly. The investigation findings concluded that the exceedance was not due to the Project.

The water quality monitoring results for DO, turbidity, total alkalinity, chromium, and nickel obtained during the reporting period did not trigger their corresponding Action and Limit Levels stipulated in the EM&A programme for triggering the relevant investigation and follow-up procedures under the programme if being exceeded. For SS, one of the testing results exceeded the relevant Action Level, and the corresponding investigations were conducted accordingly. The investigation findings concluded that the exceedance was not due to the Project.

The monthly terrestrial ecology monitoring on Sheung Sha Chau Island observed that HDD works were conducted at the daylighting location and there was no encroachment upon the egret area nor any significant disturbance to the egrets at Sheung Sha Chau by the works.

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

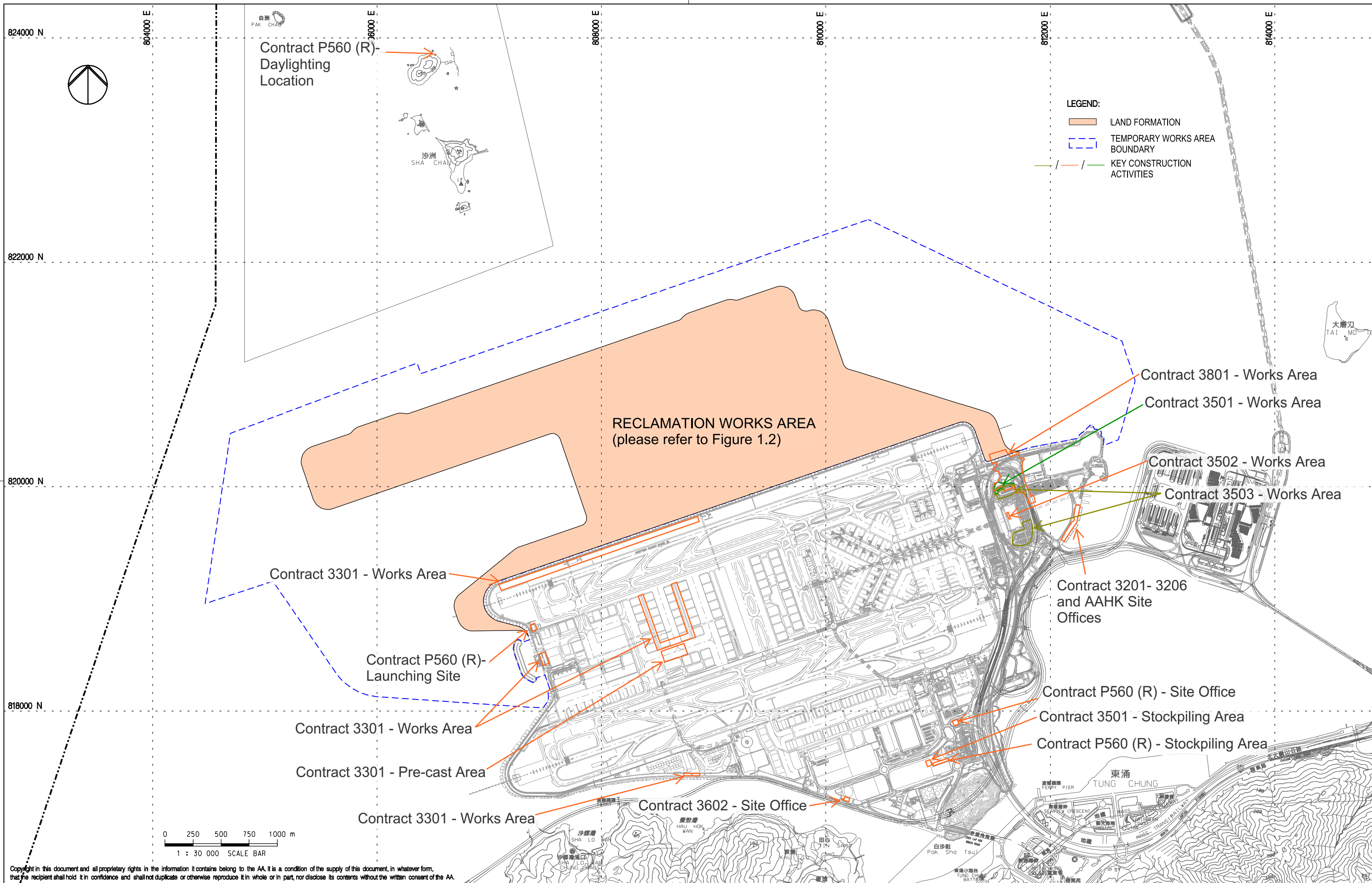
On the implementation of MMWP, dolphin observers were deployed by the contractors for laying of open sea silt curtain and laying of silt curtains for sand blanket works in accordance with the plan. On the implementation of DEZ Plan, dolphin observers at 17 to 24 dolphin observation stations were deployed for continuous monitoring of the DEZ by all contractors for ground improvement works (DCM works and PVD installation) in accordance with the DEZ Plan. Trainings for the proposed dolphin observers were provided by the ET prior to the aforementioned works, with the training records kept by the ET. From the contractors' MMWP observation records and DEZ monitoring records, no dolphin or other marine mammals were observed within or around the silt curtains or the DEZs in this reporting month. The contractor's record was checked by the ET during site inspection. Audits of acoustic decoupling for construction vessels were also carried out by the ET.

On the implementation of the SkyPier Plan, the daily movements of all SkyPier high speed ferries (HSFs) in January 2018 were in the range of 89 to 91 daily movements, which are within the

maximum daily cap of 125 daily movements. A total of 886 HSF movements under the SkyPier Plan were recorded in the reporting period. All HSFs had travelled through the Speed Control Zone (SCZ) with average speeds under 15 knots (10.2 to 14.0 knots), which were in compliance with the SkyPier Plan. No deviation from the diverted route in January 2018 is recorded in the High Speed Ferry Monitoring System. In summary, the ET and IEC have audited the HSF movements against the SkyPier Plan and conducted follow up investigation or actions accordingly.

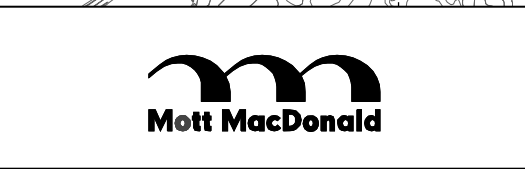
On the implementation of MTRMP-CAV, the MSS automatically recorded the deviation case such as speeding, entering no entry zone, not travelling through the designated gates. ET conducted checking to ensure the MSS records all deviation cases accurately. Training has been provided for the concerned skippers to facilitate them in familiarising with the requirements of the MTRMP-CAV. Deviations including speeding in the works area 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. 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



Copyright in this document and all proprietary rights in the information it contains belong to the AA. It is a condition of the supply of this document, in whatever form, that the recipient shall hold it in confidence and shall not duplicate or otherwise reproduce it in whole or in part, nor disclose its contents without the written consent of the AA.

Rev.	Date	Description	Checked
A	31AUG15	FIRST ISSUE	DC



Title
LOCATIONS OF KEY CONSTRUCTION ACTIVITIES

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

EXPANSION OF HONG KONG INTERNATIONAL AIRPORT INTO A THREE-RUNWAY SYSTEM		Scale at A3
Drawing No.	FIGURE 1.1	1 : 30000
Rev.	A	

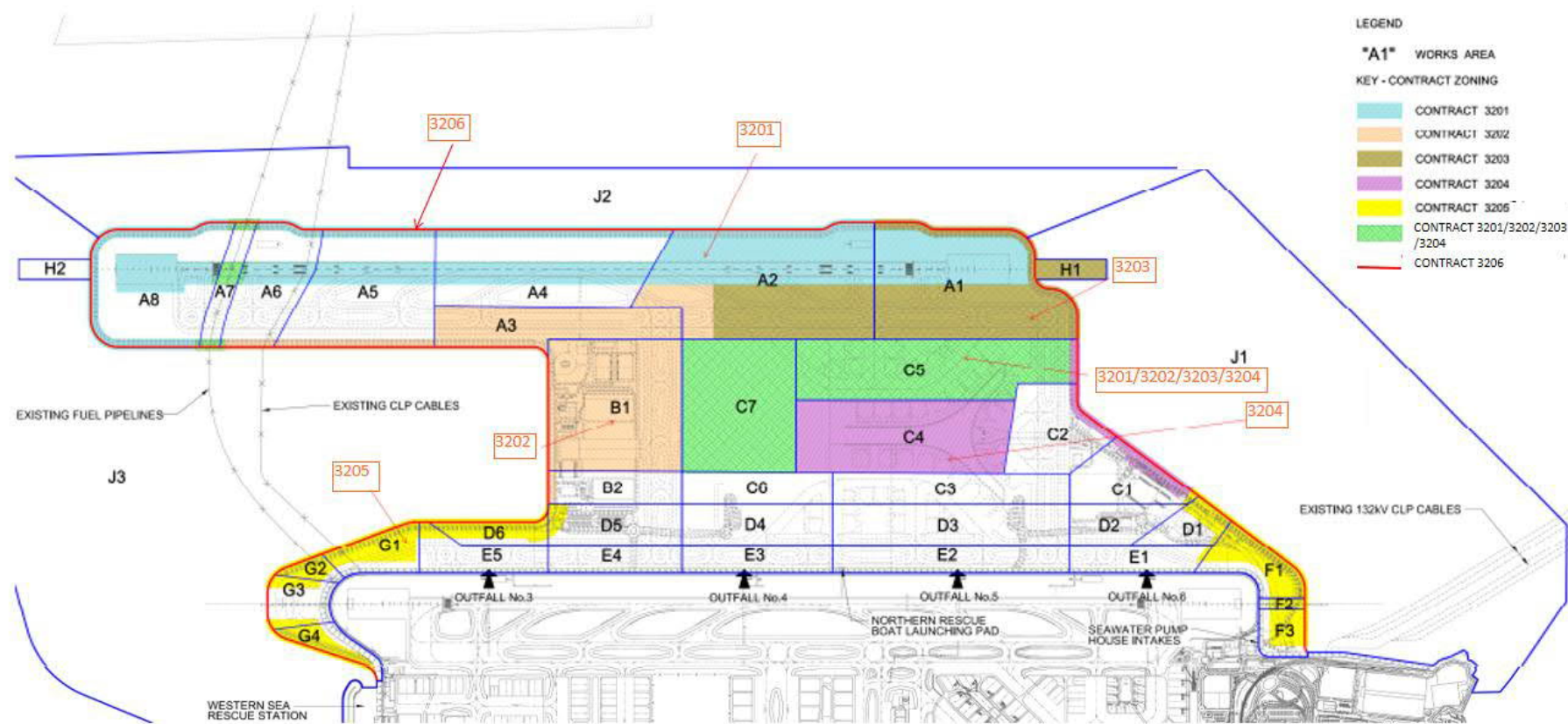


FIGURE 1.2- LOCATIONS OF RECLAMATION WORKS AREA



806000 E.

808000 E.

810000 E.

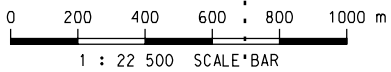
812000 E.

814000 E.

820000 N.

818000 N.

	LAND FORMATION
	NOISE MONITORING STATION (UPDATED EM&A MANUAL)
	AIR QUALITY MONITORING STATION (UPDATED EM&A MANUAL)
	CHEK LAP KOK WIND STATION



Copyright in this document and all proprietary rights in the information it contains belong to the AA. It is a condition of the supply of this document, in whatever form, that the recipient shall hold it in confidence and shall not duplicate or otherwise reproduce it in whole or in part, nor disclose its contents without the written consent of the AA.

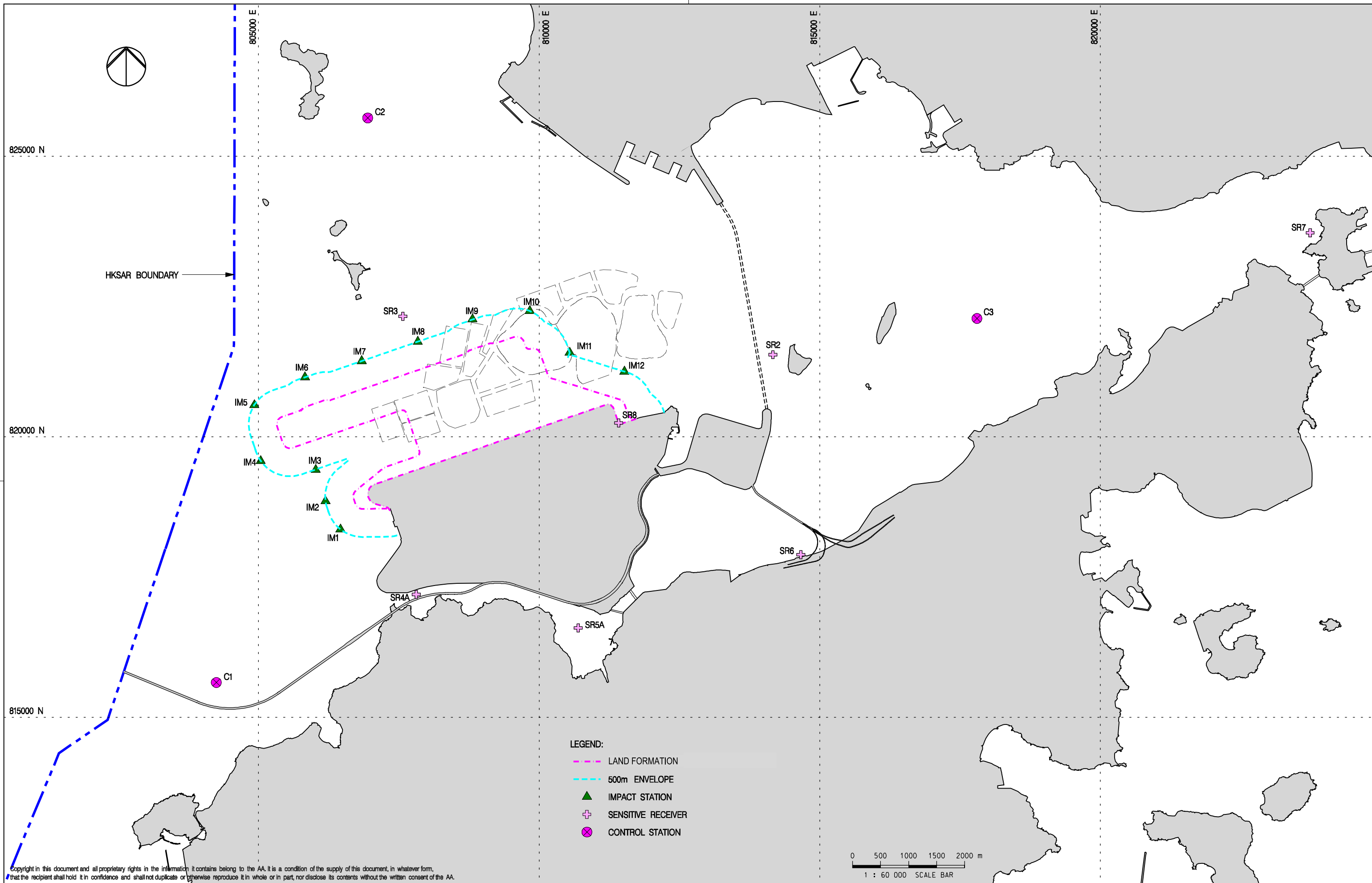
Rev.	Date	Description	Checked
A	06JAN16	FIRST ISSUE	RO
B	29JAN16	GENERAL REVISION	RO
C	11FEB16	GENERAL REVISION	RO



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

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

EXPANSION OF HONG KONG INTERNATIONAL AIRPORT INTO A THREE-RUNWAY SYSTEM		Scale at A3
Drawing No.	FIGURE 2.1	1 : 22500
Rev.	C	



Copyright in this document and all proprietary rights in the information it contains belong to the AA. It is a condition of the supply of this document, in whatever form, that the recipient shall hold it in confidence and shall not duplicate or otherwise reproduce it in whole or in part, nor disclose its contents without the written consent of the AA.

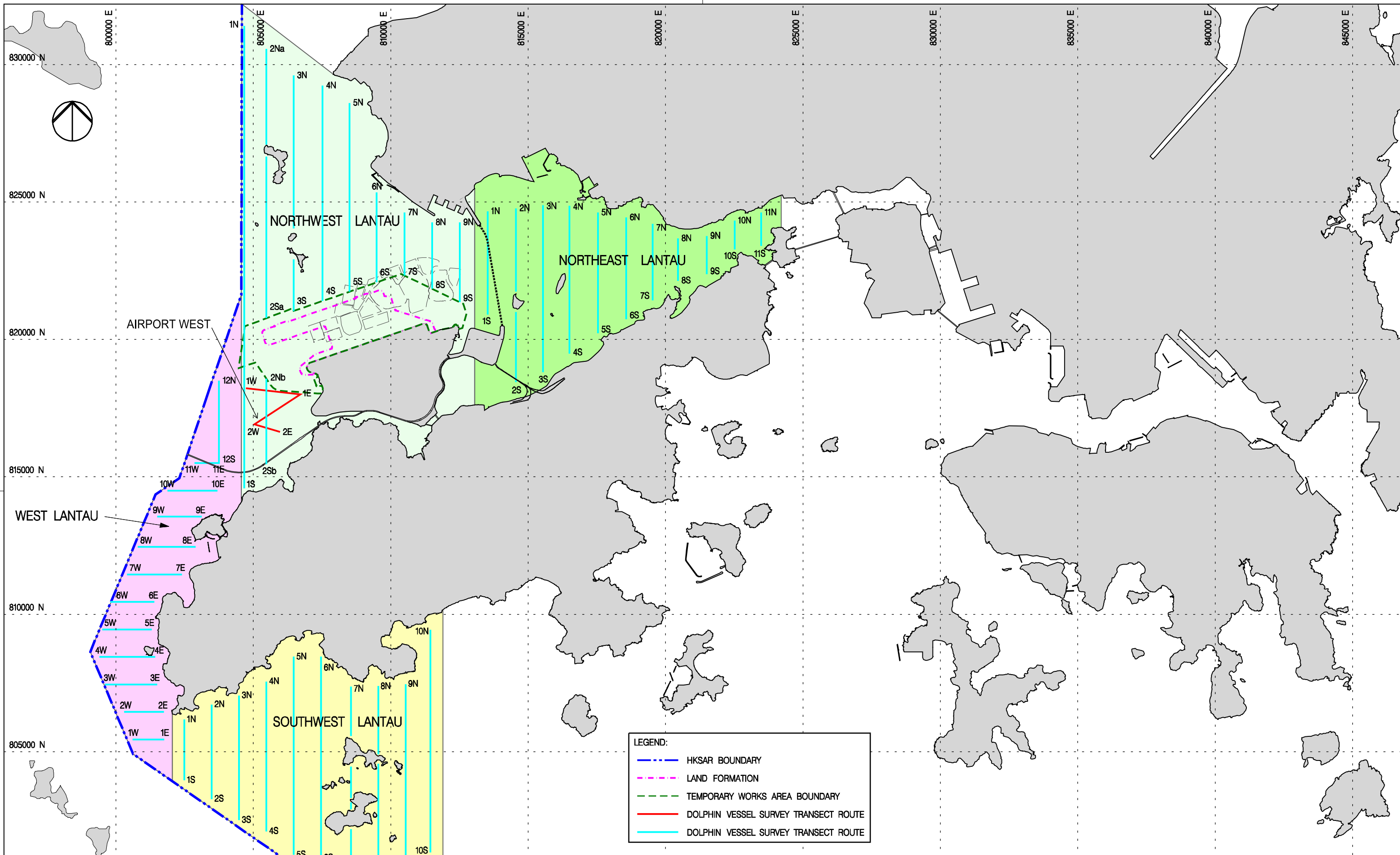
Rev.	Date	Description	Checked
A	02DEC15	FIRST ISSUE	DC
B	04MAY16	GENERAL REVISION	RO
C	06JUN16	GENERAL REVISION	LC
D	02AUG17	GENERAL REVISION	RO



Title
WATER QUALITY MONITORING STATIONS

Consultant's Signatures for Approval		Date
Design	DC	02AUG17
Checkers	DC / TK	02AUG17
Approver	EC	02AUG17

EXPANSION OF HONG KONG INTERNATIONAL AIRPORT INTO A THREE-RUNWAY SYSTEM		Scale at A3
Drawing No.	FIGURE 3.1	1 : 60000
Rev.	D	



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

Copyright in this document and all proprietary rights in the information it contains belong to the AA. It is a condition of the supply of this document, in whatever form, that the recipient shall hold it in confidence and shall not duplicate or otherwise reproduce it in whole or in part, nor disclose its contents without the written consent of the AA.

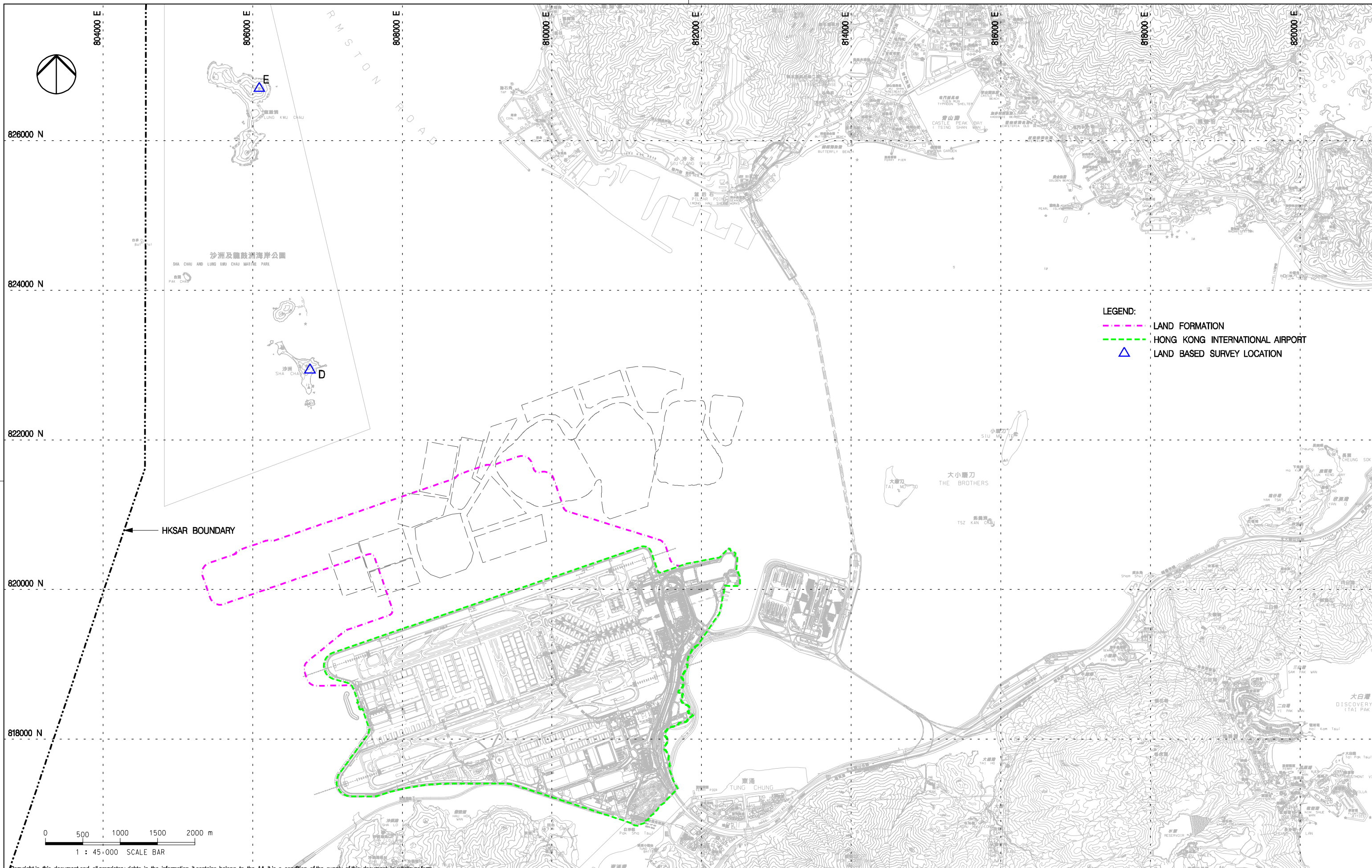
Rev.	Date	Description	Checked
A	02DEC15	FIRST ISSUE	JC
B	27JUL16	GENERAL REVISION	JT
C	06FEB17	GENERAL REVISION	JT
D	01MAR17	GENERAL REVISION	JT



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

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

EXPANSION OF HONG KONG INTERNATIONAL AIRPORT INTO A THREE-RUNWAY SYSTEM		Scale at A3
Drawing No.	FIGURE 6.1	1 : 125000
Rev.	D	



Copyright in this document and all proprietary rights in the information it contains belong to the AA. It is a condition of the supply of this document, in whatever form, that the recipient shall hold it in confidence and shall not duplicate or otherwise reproduce it in whole or in part, nor disclose its contents without the written consent of the AA.

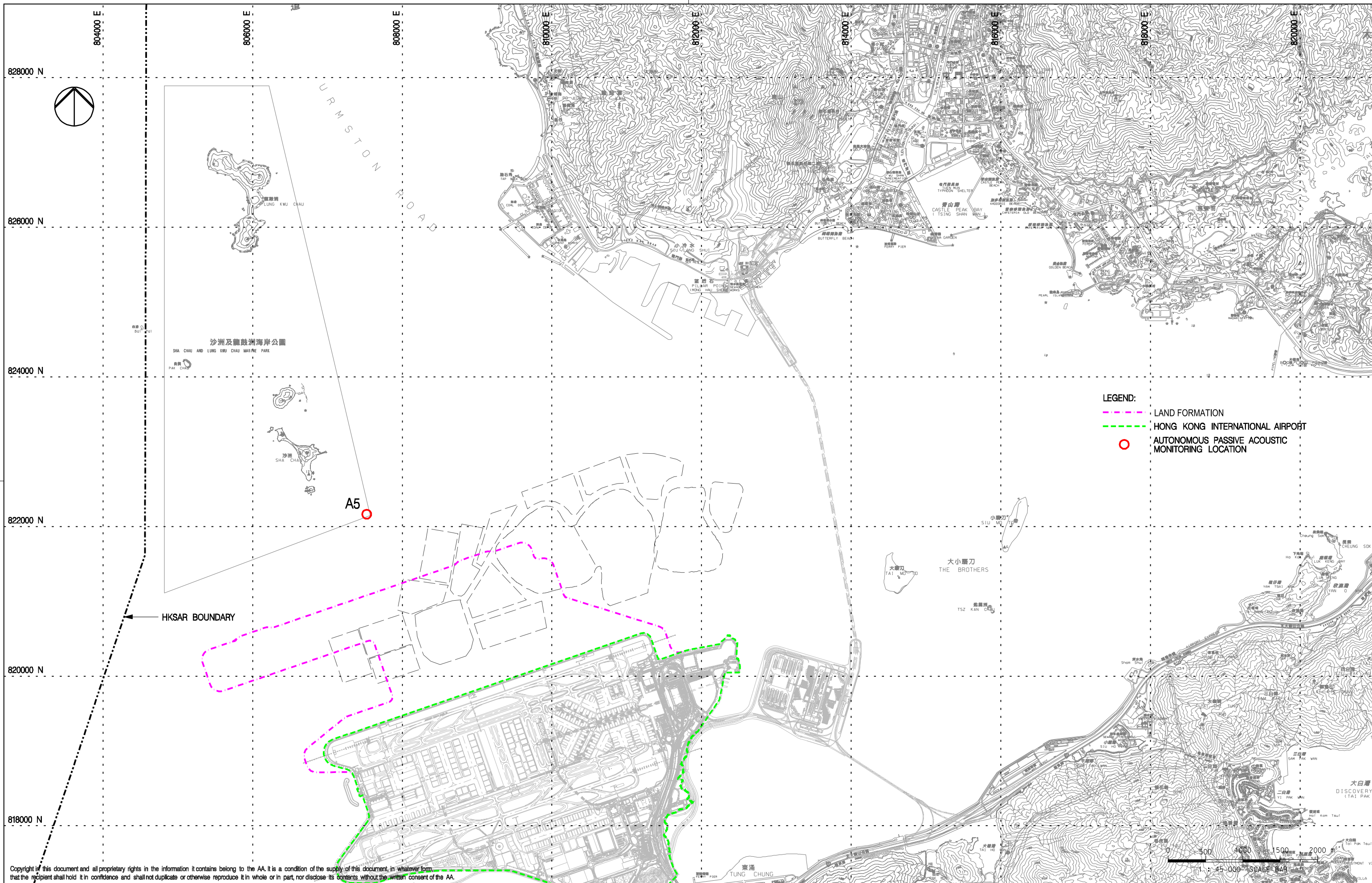
Rev.	Date	Description	Checked
A	02DEC15	FIRST ISSUE	JC
B	06FEB17	GENERAL REVISION	JC



Title
**LAND BASED DOLPHIN MONITORING
 IN BASELINE AND CONSTRUCTION PHASES**

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

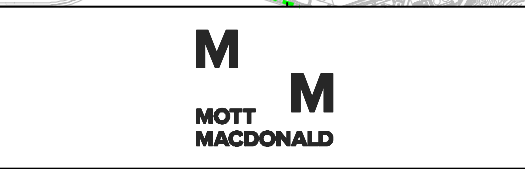
EXPANSION OF HONG KONG INTERNATIONAL AIRPORT INTO A THREE-RUNWAY SYSTEM	
Drawing No.	FIGURE 6.2
Scale at A3	1 : 45000
Rev.	B



- LEGEND:**
- - - LAND FORMATION
 - - - HONG KONG INTERNATIONAL AIRPORT
 - AUTONOMOUS PASSIVE ACOUSTIC MONITORING LOCATION

Copyright in this document and all proprietary rights in the information it contains belong to the AA. It is a condition of the supply of this document, in whatever form, that the recipient shall hold it in confidence and shall not duplicate or otherwise reproduce it in whole or in part, nor disclose its contents without the written consent of the AA.

Rev.	Date	Description	Checked
A	29AUG17	FIRST ISSUE	JT



Title
LOCATION FOR AUTONOMOUS PASSIVE ACOUSTIC MONITORING

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

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

Drawing No. **FIGURE 6.5**

Scale at A3
1 : 45000

Rev. **A**

Appendix A. Contract Description

Contract Description

Contract No.	Contract Title	Contractor	Key Construction Activities
P560 (R)	Aviation Fuel Pipeline Diversion Works	Langfang Huayuan Mechanical and Electrical Engineering Co., Ltd.	Diversion of the existing submarine aviation fuel pipelines will use a horizontal directional drilling (HDD) method forming two rock drill holes by drilling through bedrock from a launching site located at the west of the airport island to a daylighting point adjacent to the offshore receiving platform at Sha Chau. Two new pipelines will be installed through the drilled tunnels. The total length is approximately 5 km. Drilling works will proceed from the HDD launching site at the airport island.
3201	Deep Cement Mixing (Package 1)	Penta-Ocean-China State-Dong-Ah Joint Venture	<p>The works covered by the Contract 3201, 3202, 3203, 3204 and 3205 comprise ground improvement of seabed using Deep Cement Mixing (DCM) method, the major construction activities including without limitation the following</p> <ul style="list-style-type: none"> • Geophysical surveys; • Supply and placing of geotextile and sand blanket under seawalls; • Supply, maintenance, installation and removal of silt curtain systems; • Preliminary construction trails; • Supply and installation of DCM clusters within the works areas; and • Coring, sampling and testing of DCM treated soils and reporting works.
3202	Deep Cement Mixing (Package 2)	Samsung-BuildKing Joint Venture	
3203	Deep Cement Mixing (Package 3)	Sambo E&C Co.,Ltd	
3204	Deep Cement Mixing (Package 4)	CRBC-SAMBO Joint Venture	
3205	Deep Cement Mixing (Package 5)	Bachy Soletanche- Sambo Joint Venture	
3206	Reclamation Contract	ZHEC-CCCC-CDC Joint Venture	

Contract No.	Contract Title	Contractor	Key Construction Activities
			<ul style="list-style-type: none"> • Seawall construction; • Marine and land filling works; and • Civil works.
3301	North Runway Crossover Taxiway	FJT-CHEC-ZHEC Joint Venture	<p>The works covered by the Contract 3301 comprise the construction of a new dual taxiway across the existing north runway and utility services and cable ducting systems. The major construction activities include without limitation the following:</p> <ul style="list-style-type: none"> • Construction of a new dual taxiway; • Cable ducting works; • Extension of existing portable water supply system; and • All associated works.
3501	Antenna Farm and Sewage Pumping Station	Build King Construction Limited	<p>The works covered by the Contract 3501 comprise the construction of antenna farm and sewage pumping station. The major construction activities include without limitation the following:</p> <ul style="list-style-type: none"> • Civil and structural engineering works; • Building services works; • Architectural builder's works and finishes; • Trenchless excavation for sewage rising mains; and • All associated works.
3502	Terminal 2 APM Depot Modification Works	Build King Construction Limited	<p>The works covered by the Contract 3502 comprise the modification of the existing Automatic People Mover (APM) Depot in the basement of T2, for the APM line running between T1 East Hall, West Hall and Midfield Concourse. The major construction activities include without limitation the following:</p> <ul style="list-style-type: none"> • Removal of the existing steel guide rails; • Removal of the existing mass concrete fill and re-construction of the reinforced concrete fill; • Construction of separation walls and walkways; • Removal of re-provision of existing building services and airport systems; and • All associated testing and commissioning works.
3503	Terminal 2 Foundation and	Leighton - Chun Wo Joint Venture	<p>The works covered by the Contract 3503 comprise the foundations for the new T2 terminal, two annex buildings and associated viaducts, construction</p>

Contract No.	Contract Title	Contractor	Key Construction Activities
	Substructure Works		<p>of the new T2 basement and south annex building structures, diaphragm walls, utility services and other advance works.</p> <p>The major construction activities include without limitation the following:</p> <ul style="list-style-type: none"> • Re-configuration and demolition of existing utilities and structures; • Pile foundations for the expanded T2 Terminal Building, South Annex Building, and North Annex Building; • Construction of new South Annex Building; • Diversion and provisions of utilities; and • All associated testing and commissioning works.
3602	Existing APM System Modification Works	Niigata Transys Co., Ltd.	<p>The works covered by the Contract 3602 comprise the detailed design, supply, manufacture, fabrication, implementation, testing and commissioning of the following modification works of the existing APM systems:</p> <ul style="list-style-type: none"> • Modification of existing APM depot and APM cars; • Modification of existing T1 & T2 tunnels; and • Preparation of new APM depot.
3801	APM and BHS Tunnels on Existing Airport Island	China State Construction Engineering (HK) Ltd.	<p>The works covered by the Contract 3801 comprise the construction of the APM and Baggage Handling System (BHS) tunnels on existing airport island.</p> <p>The major construction activities include without limitation the following:</p> <ul style="list-style-type: none"> • Construction of APM and BHS tunnels; • Construction of ventilation building and associated infrastructure; and • Construction, testing and commissioning of sewerage pumping station; and • Civil and structural engineering works.

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

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

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
Air Quality Impact – Construction Phase					
5.2.6.2	2.1	-	Dust Control Measures <ul style="list-style-type: none"> 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	-	<ul style="list-style-type: none"> 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 <ul style="list-style-type: none"> Good site management is important to help reducing potential air quality impact down to an acceptable level. As a general guide, the Contractor should maintain high standard of housekeeping to prevent emission of fugitive dust. Loading, unloading, handling and storage of raw materials, wastes or by-products should be carried out in a manner so as to minimise the release of visible dust emission. Any piles of materials accumulated on or around the work areas should be cleaned up regularly. Cleaning, repair and maintenance of all plant facilities within the work areas should be carried out in a manner minimising generation of fugitive dust emissions. The material should be handled properly to prevent fugitive dust emission before cleaning. 	Within construction site / Duration of the construction phase	I
			Disturbed Parts of the Roads <ul style="list-style-type: none"> 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 <ul style="list-style-type: none"> Exposed earth should be properly treated by compaction, hydroseeding, vegetation planting or seeding with latex, vinyl, bitumen within six months after the last construction activity on the site or part of the site where the exposed earth lies. 	Within construction site / Duration of the construction phase	N/A

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			Loading, Unloading or Transfer of Dusty Materials <ul style="list-style-type: none"> All dusty materials should be sprayed with water immediately prior to any loading or transfer operation so as to keep the dusty material wet. 	Within construction site / Duration of the construction phase	I
			Debris Handling <ul style="list-style-type: none"> Any debris should be covered entirely by impervious sheeting or stored in a debris collection area sheltered on the top and the three sides; and Before debris is dumped into a chute, water should be sprayed so that it remains wet when it is dumped. 	Within construction site / Duration of the construction phase	I
			Transport of Dusty Materials <ul style="list-style-type: none"> 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 <ul style="list-style-type: none"> 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 <ul style="list-style-type: none"> The speed of the trucks within the site should be controlled to about 10km/hour in order to reduce adverse dust impacts and secure the safe movement around the site; Immediately before leaving the construction site, every vehicle should be washed to remove any dusty materials from its body and wheels; and Where a vehicle leaving the construction site is carrying a load of dusty materials, the load should be covered entirely by clean impervious sheeting to ensure that the dusty materials do not leak from the vehicle. 	Within construction site / Duration of the construction phase	I
			Site hoarding <ul style="list-style-type: none"> Where a site boundary adjoins a road, street, service lane or other area accessible to the public, hoarding of not less than 2.4m high from ground level should be provided along the entire length of that portion of the site boundary except for a site entrance or exit. 	Within construction site / Duration of the construction phase	I
5.2.6.5	2.1	-	Best Practices for Concrete Batching Plant The relevant best practices for dust control as stipulated in the Guidance Note on the Best Practicable Means for Cement Works (Concrete Batching Plant) BPM 3/2 as well as in the future Specified Process licence should be adopted. The best practices are recommended to be applied to both the land based and floating concrete batching plants. Best practices include: Cement and other dusty materials	Within Concrete Batching Plant / Duration of the construction phase	N/A

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			<ul style="list-style-type: none"> ▪ 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. 		
			<p>Other raw materials</p> <ul style="list-style-type: none"> ▪ The loading, unloading, handling, transfer or storage of other raw materials which may generate airborne dust emissions such as crushed rock, sand, stone aggregate, shall be carried out in such a manner to prevent or minimize dust emissions; ▪ The materials shall be adequately wetted prior to and during the loading, unloading and handling operations. Manual or automatic water spraying system shall be provided at all unloading areas, stock piles and material discharge points; ▪ All receiving hoppers for unloading relevant materials shall be enclosed on three sides up to 3 m above the unloading point. In no case shall these hoppers be used as the material storage devices; ▪ The belt conveyor for handling materials shall be enclosed on top and two sides with a metal board at the bottom to eliminate any dust emission due to wind-whipping effect. Other type of enclosure will also be accepted by EPD if it can be demonstrated that the proposed enclosure can achieve same performance; ▪ All conveyor transfer points shall be totally enclosed. Openings for the passage of conveyors shall be fitted with adequate flexible seals; ▪ Scrapers shall be provided at the turning points of all conveyors to remove dust adhered to the belt surface; ▪ Conveyors discharged to stockpiles of relevant materials shall be arranged to minimize free fall as far as practicable. All free falling transfer points from conveyors to stockpiles shall be enclosed with chute(s) and water sprayed; ▪ Aggregates with a nominal size less than or equal to 5 mm should be stored in totally enclosed structure such as storage bin and should not be handled in open area. Where there is sufficient buffer area surrounding the concrete batching plant, ground stockpiling may be used; 	<p>Within Concrete Batching Plant / Duration of the construction phase</p>	<p>N/A</p>

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			<ul style="list-style-type: none"> 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. 		
			<p>Loading of materials for batching</p> <ul style="list-style-type: none"> Concrete truck shall be loaded in such a way as to minimise airborne dust emissions. The following control measures shall be implemented: <ol style="list-style-type: none"> 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 If truck mixing batching or other types of batching method is used, effective dust control measures acceptable to EPD shall be adopted. The dust control measures must have been demonstrated to EPD that they are capable to collect and vent all dust-laden air generated by the material loading/mixing to dust arrestment plant to meet the required emission limit. The loading bay shall be totally enclosed during the loading process. 	Within Concrete Batching Plant / Duration of the construction phase	N/A
			<p>Vehicles</p> <ul style="list-style-type: none"> All practicable measures shall be taken to prevent or minimize the dust emission caused by vehicle movement; and All access and route roads within the premises shall be paved and adequately wetted. 	Within Concrete Batching Plant / Duration of the construction phase	N/A
			<p>Housekeeping</p> <ul style="list-style-type: none"> A high standard of housekeeping shall be maintained. All spillages or deposits of materials on ground, support structures or roofs shall be cleaned up promptly by a cleaning method acceptable to EPD. Any dumping of materials at open area shall be prohibited. 	Within Concrete Batching Plant / Duration of the construction phase	N/A
5.2.6.6	2.1	-	<p>Best Practices for Asphaltic Concrete Plant</p> <p>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:</p> <p>Design of Chimney</p> <ul style="list-style-type: none"> The chimney shall not be less than 3 metres plus the building height or 8 metres above ground level, whichever is the greater; The efflux velocity of gases from the main chimney shall not be less than 12 m/s at full load condition; 	Within Concrete Batching Plant / Duration of the construction phase	N/A

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			<ul style="list-style-type: none"> ▪ 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. 		
			<p>Cold feed side</p> <ul style="list-style-type: none"> ▪ The aggregates with a nominal size less than or equal to 5 mm shall be stored in totally enclosed structure such as storage bin and shall not be handled in open area; ▪ Where there is sufficient buffer area surrounding the plant, ground stockpiling may be used. The stockpile shall be enclosed at least on top and three sides and with flexible curtain to cover the entrance side. If these aggregates are stored above the feeding hopper, they shall be enclosed at least on top and three sides and be wetted on the surface to prevent wind-whipping; ▪ The aggregates with a nominal size greater than 5 mm should preferably be stored in totally enclosed structure. Aggregates stockpile that is above the feeding hopper shall be enclosed at least on top and three sides. If open stockpiling is used, the stockpiles shall be enclosed on three sides with the enclosure wall sufficiently higher than the top of the stockpile to prevent wind whipping; ▪ Belt conveyors shall be enclosed on top and two sides and provided with a metal board at the bottom to eliminate any dust emission due to the wind-whipping effect. Other type of enclosure will also be accepted by EPD if it can be demonstrated that the proposed enclosure can be achieve the same performance; ▪ Scrapers shall be provided at the turning points of all belt conveyors inside the chute of the transfer points to remove dust adhered to the belt surface; ▪ All conveyor transfer points shall be totally enclosed. Openings for the passages of conveyors shall be fitted with adequate flexible seals; and ▪ All materials returned from dust collection system shall be transferred in enclosed system and shall be stored inside bins or enclosures. 	<p>Within Concrete Batching Plant / Duration of the construction phase</p>	<p>N/A</p>
			<p>Hot feed side</p> <ul style="list-style-type: none"> ▪ 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; 	<p>Within Concrete Batching Plant / Duration of the construction phase</p>	<p>N/A</p>

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			<ul style="list-style-type: none"> 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). 		
			<p>Material transportation</p> <ul style="list-style-type: none"> The loading, unloading, handling, transfer or storage of other raw materials which may generate airborne dust emissions such as crushed rocks, sands, stone aggregates, reject fines, shall be carried out in such a manner as to minimize dust emissions; Roadways from the entrance of the plant to the product loading points and/or any other working areas where there are regular movements of vehicles shall be paved or hard surfaced; and Haul roads inside the Works shall be adequately wetted with water and/or chemical suppressants by water trucks or water sprayers. 	Within Concrete Batching Plant / Duration of the construction phase	N/A
			<p>Control of emissions from bitumen decanting</p> <ul style="list-style-type: none"> The heating temperature of the particular bitumen type and grade shall not exceed the corresponding temperature limit of the same type listed in Appendix 1 of the Guidance Note; Tamper-free high temperature cut-off device shall be provided to shut off the fuel supply or electricity in case the upper limit for bitumen temperature is reached; Proper chimney for the discharge of bitumen fumes shall be provided at high level; The emission of bitumen fumes shall not exceed the required emission limit; and <p>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.</p>	Within Concrete Batching Plant / Duration of the construction phase	N/A
			<p>Liquid fuel</p> <ul style="list-style-type: none"> The receipt, handling and storage of liquid fuel shall be carried out so as to prevent the release of emissions of organic vapours and/or other noxious and offensive emissions to the air. 	Within Concrete Batching Plant / Duration of the construction phase	N/A
			<p>Housekeeping</p> <ul style="list-style-type: none"> A high standard of housekeeping shall be maintained. Waste material, spillage and scattered piles gathered beneath belt conveyors, inside and around enclosures shall be cleared frequently. The minimum clearing frequency is on a weekly basis. 	Within Concrete Batching Plant / Duration of the construction phase	N/A
5.2.6.7	2.1	-	<p>Best Practices for Rock Crushing Plants</p> <p>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:</p>	Within Concrete Batching Plant / Duration of the construction phase	N/A

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			<p>Crushers</p> <ul style="list-style-type: none"> ▪ 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. 		
			<p>Vibratory screens and grizzlies</p> <ul style="list-style-type: none"> ▪ All vibratory screens shall be totally enclosed in a housing. Screenhouses shall be rigid and reasonably dust tight with self-closing doors or close-fitted entrances and exits for access. Where conveyors pass through the screenhouse, flexible covers shall be installed at entries and exits of the conveyors to the housing. Where containment of dust within the screenhouse structure is not successful then a dust extraction and collection system shall be provided; and ▪ All grizzlies shall be enclosed on top and 3 sides and sufficient water sprayers shall be installed at their feeding and outlet areas. 	<p>Within Concrete Batching Plant / Duration of the construction phase</p>	<p>N/A</p>
			<p>Belt conveyors</p> <ul style="list-style-type: none"> ▪ Except for those conveyors which are placed within a totally enclosed structure such as a screenhouse or those erected at the ground level, all conveyors shall be totally enclosed with windshield on top and 2 sides; ▪ Effective belt scraper such as the pre-cleaner blades made by hard wearing materials and provided with pneumatic tensioner, or equivalent device, shall be installed at the head pulley of designated conveyor as required to dislodge fine dust particles that may adhere to the belt surface and to reduce carry-back of fine materials on the return belt. Bottom plates shall also be provided for the conveyor unless it has been demonstrated that the corresponding belt scraper is effective and well maintained to prevent falling material from the return belt; and ▪ Except for those transfer points which are placed within a totally enclosed structure such as a screenhouse, all transfer points to and from conveyors shall be enclosed. Where containment of dust within the enclosure is not successful, then water sprayers shall be provided. Openings for any enclosed structure for the passage of conveyors shall be fitted with flexible seals. 	<p>Within Concrete Batching Plant / Duration of the construction phase</p>	<p>N/A</p>

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			<p>Storage piles and bins</p> <ul style="list-style-type: none"> Where practicable, free falling transfer points from conveyors to stockpiles shall be fitted with flexible curtains or be enclosed with chutes designed to minimize the drop height. Water sprays shall also be used where required. The surface of all surge piles and stockpiles of blasted rocks or aggregates shall be kept sufficiently wet by water spraying wherever practicable; All open stockpiles for aggregates of size in excess of 5 mm shall be kept sufficiently wet by water spraying where practicable; or The stockpiles of aggregates 5 mm in size or less shall be enclosed on 3 sides or suitably located to minimize wind-whipping. Save for fluctuations in stock or production, the average stockpile shall stay within the enclosure walls and in no case the height of the stockpile shall exceed twice the height of the enclosure walls. Scattered piles gathered beneath belt conveyors, inside and around enclosures shall be cleared regularly. 	Within Concrete Batching Plant / Duration of the construction phase	N/A
			<p>Rock drilling equipment</p> <ul style="list-style-type: none"> Appropriate dust control equipment such as a dust extraction and collection system shall be used during rock drilling activities. 	Within Concrete Batching Plant / Duration of the construction phase	N/A
Hazard to Human Life – Construction Phase					
Table 6.40	3.2	-	<ul style="list-style-type: none"> Precautionary measures should be established to request barges to move away during typhoons. 	Construction Site / Construction Period	I
Table 6.40	3.2	-	<ul style="list-style-type: none"> An appropriate marine traffic management system should be established to minimize risk of ship collision. 	Construction Site / Construction Period	I
Table 6.40	3.2	-	<ul style="list-style-type: none"> Location of all existing hydrant networks should be clearly identified prior to any construction works. 	Construction Site / Construction Period	I
Noise Impact – Construction Phase					
7.5.6	4.3	-	<p>Good Site Practice</p> <p>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:</p> <ul style="list-style-type: none"> only well-maintained plant to be operated on-site and plant should be serviced regularly during the construction works; machines and plant that may be in intermittent use to be shut down between work periods or should be throttled down to a minimum; 	Within the Project site / During construction phase / Prior to commencement of operation	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			<ul style="list-style-type: none"> ▪ plant known to emit noise strongly in one direction, should, where possible, be orientated to direct noise away from the NSRs; ▪ mobile plant should be sited as far away from NSRs as possible; and ▪ material stockpiles and other structures to be effectively utilised, where practicable, to screen noise from on-site construction activities. 		
7.5.6	4.3	-	<p>Adoption of QPME</p> <ul style="list-style-type: none"> ▪ QPME should be adopted as far as applicable. 	Within the Project site / During construction phase / Prior to commencement of operation	
7.5.6	4.3	-	<p>Use of Movable Noise Barriers</p> <ul style="list-style-type: none"> ▪ Movable noise barriers should be placed along the active works area and mobile plants to block the direct line of sight between PME and the NSRs. 	Within the Project site / During construction phase / Prior to commencement of operation	
7.5.6	4.3	-	<p>Use of Noise Enclosure/ Acoustic Shed</p> <ul style="list-style-type: none"> ▪ Noise enclosure or acoustic shed should be used to cover stationary PME such as air compressor and generator. 	Within the Project site / During construction phase / Prior to commencement of operation	
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	<p>Marine Construction Activities</p> <p><u>General Measures to be Applied to All Works Areas</u></p> <ul style="list-style-type: none"> ▪ Barges or hoppers shall not be filled to a level which will cause overflow of materials or pollution of water during loading or transportation; ▪ Use of Lean Material Overboard (LMOB) systems shall be prohibited; ▪ Excess materials shall be cleaned from the decks and exposed fittings of barges and hopper dredgers before the vessels are moved; ▪ Plants should not be operated with leaking pipes and any pipe leakages shall be repaired quickly; ▪ Adequate freeboard shall be maintained on barges to reduce the likelihood of decks being washed by wave action; ▪ All vessels shall be sized such that adequate clearance is maintained between vessels and the sea bed at all states of the tide to ensure that undue turbidity is not generated by turbulence from vessel movement or propeller wash; ▪ The works shall not cause foam, oil, grease, litter or other objectionable matter to be present in the water within and adjacent to the works site; and ▪ For ground improvement activities including DCM, the wash water from cleaning of the drilling shaft should be appropriately treated before discharge. The Contractor should ensure the waste water meets the WPCO/TM requirements before discharge. No direct discharge of contaminated water is permitted. 	Within construction site / Duration of the construction phase	I
			<p><u>Specific Measures to be Applied to All Works Areas</u></p> <ul style="list-style-type: none"> ▪ The daily maximum production rates shall not exceed those assumed in the water quality assessment in the EIA report; ▪ A maximum of 10 % fines content to be adopted for sand blanket and 20 % fines content for marine filling below +2.5 mPD prior to substantial completion of seawall (until end of Year 2017) shall be specified in the works contract document; 	Within construction site / Duration of the construction phase	I
			<ul style="list-style-type: none"> ▪ 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
			<ul style="list-style-type: none"> ▪ Closed grab dredger shall be used to excavate marine sediment; ▪ Silt curtains surrounding the closed grab dredger shall be deployed in accordance with the Silt Curtain Deployment Plan; and 		N/A *(The arrangement of silt curtain has been modified. The details can be referred to Silt Curtain Deployment Plan)
			<ul style="list-style-type: none"> ▪ The Silt Curtain Deployment Plan shall be implemented. 		I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			<p><u>Specific Measures to be Applied to Land Formation Activities prior to Commencement of Marine Filling Works</u></p> <ul style="list-style-type: none"> 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; 	<p>Within construction site / Duration of the construction phase</p>	<p>NA *(The arrangement of silt curtain has been modified. The details can be referred to Silt Curtain Deployment Plan)</p>
			<ul style="list-style-type: none"> 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 		<p>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)</p>
			<ul style="list-style-type: none"> The silt curtains and silt screens should be regularly checked and maintained. 		<p>I</p>
			<p><u>Specific Measures to be Applied to Land Formation Activities during Marine Filling Works</u></p> <ul style="list-style-type: none"> 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; 	<p>Within construction site / Duration of the construction phase</p>	<p>N/A *(The arrangement of silt curtain has been modified. The details can be referred to Silt Curtain Deployment Plan)</p>
			<ul style="list-style-type: none"> Double layer silt curtains to be applied at the south-western opening prior to commencement of marine filling activities; 		<p>N/A *(The arrangement of silt curtain has been modified. The details can be referred to Silt Curtain Deployment Plan)</p>
			<ul style="list-style-type: none"> 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 		<p>N/A *(The requirement of silt curtain / screen has been modified. The details can be referred to Silt Curtain Deployment Plan)</p>
			<ul style="list-style-type: none"> The silt curtains and silt screens should be regularly checked and maintained. 		<p>N/A</p>

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			<p><u>Specific Measures to be Applied to the Field Joint Excavation Works for the Submarine Cable Diversion</u></p> <ul style="list-style-type: none"> Only closed grabs designed and maintained to avoid spillage shall be used and should seal tightly when operated. Excavated materials shall be disposed at designated marine disposal area in accordance with the Dumping and Sea Ordinance (DASO) permit conditions; and Silt curtains surrounding the closed grab dredger to be deployed as a precautionary measure. 	Within construction site / Duration of the construction phase	N/A
8.8.1.4	5.1	-	<p>Modification of the Existing Seawall</p> <ul style="list-style-type: none"> Silt curtains shall be deployed around the seawall modification activities to completely enclose the active works areas, and care should be taken to avoid splashing of rockfill / rock armour into the surrounding marine environment. For the connecting sections with the existing outfalls, works for these connection areas should be undertaken during the dry season in order that individual drainage culvert cells may be isolated for interconnection works. 	At the existing northern seawall / Duration of the construction phase	N/A
8.8.1.5	5.1	-	<p>Construction of New Stormwater Outfalls and Modifications to Existing Outfalls</p> <ul style="list-style-type: none"> During operation of the temporary drainage channel, runoff control measures such as bunding or silt fence shall be provided on both sides of the channel to prevent accumulation and release of SS via the temporary channel. Measures should also be taken to minimise the ingress of site drainage into the culvert excavations. 	Within construction site / Duration of the construction phase	N/A
8.8.1.6 8.8.1.7	5.1	2.27	<p>Piling Activities for Construction of New Runway Approach Lights and HKIAAA Marker Beacons</p> <p>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.</p> <p><u>For construction of the eastern approach lights at the CMPs</u></p> <ul style="list-style-type: none"> Ground improvement via DCM using a close-spaced layout shall be completed prior to commencement of piling works; Steel casings shall be installed to enclose the excavation area prior to commencement of excavation; The excavated materials shall be removed using a closed grab within the steel casings; No discharge of the cement mixed materials into the marine environment will be allowed; and Excavated materials shall be treated and reused on-site. 	Within construction site / Duration of the construction phase	N/A
8.8.1.8	5.1	-	<p>Construction of Site Runoff and Drainage</p> <p>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:</p> <ul style="list-style-type: none"> Install perimeter cut-off drains to direct off-site water around the site and implement internal drainage, erosion and sedimentation control facilities. Channels, earth bunds or sand bag barriers should be provided on site to direct storm water to silt removal facilities. The design of the temporary on-site 	Within construction site / Duration of the construction phase	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			<p>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);</p> <hr/> <ul style="list-style-type: none"> ▪ 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; <hr/> <ul style="list-style-type: none"> ▪ 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; <hr/> <ul style="list-style-type: none"> ▪ 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; <hr/> <ul style="list-style-type: none"> ▪ In the event that contaminated groundwater is identified at excavation areas, this should be treated on-site using a suitable wastewater treatment process. The effluent should be treated according to the requirements of the TM-DSS standards under the WPCO prior to discharge to foul sewers or collected for proper disposal off-site. No direct discharge of contaminated groundwater is permitted; and <hr/> <ul style="list-style-type: none"> ▪ 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	-	<p>Sewage Effluent from Construction Workforce</p> <ul style="list-style-type: none"> ▪ Temporary sanitary facilities, such as portable chemical toilets, should be employed on-site where necessary to handle sewage from the workforce. A licensed contractor should be employed to provide appropriate and adequate portable toilets and be responsible for appropriate disposal and maintenance. 	Within construction site / During construction phase	I
8.8.1.10 8.8.1.11	5.1		<p>General Construction Activities</p> <ul style="list-style-type: none"> ▪ Construction solid waste, debris and refuse generated on-site should be collected, handled and disposed of properly to avoid entering any nearby storm water drain. Stockpiles of cement and other construction materials should be kept covered when not being used; and 	Within construction site / During construction phase	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
8.8.1.12 8.8.1.13	5.1	2.28	<ul style="list-style-type: none"> ▪ 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. <p>Drilling Activities for the Submarine Aviation Fuel Pipelines</p> <p>To prevent potential water quality impacts at Sha Chau, the following measures shall be applied:</p> <ul style="list-style-type: none"> ▪ A 'zero-discharge' policy shall be applied for all activities to be conducted at Sha Chau; ▪ No bulk storage of chemicals shall be permitted; and ▪ A containment pit shall be constructed around the drill holes. This containment pit shall be lined with impermeable lining and bunded on the outside to prevent inflow from off-site areas. 	Within construction site / During construction phase	I
			<p>At the airport island side of the drilling works, the following measures shall be applied for treatment of wastewater:</p> <ul style="list-style-type: none"> ▪ During pipe cleaning, appropriate desilting or sedimentation device should be provided on site for treatment before discharge. The Contractor should ensure discharge water from the sedimentation tank meet the WPCO/TM requirements before discharge; and ▪ Drilling fluid used in drilling activities should be reconditioned and reused as far as possible. Temporary enclosed storage locations should be provided on-site for any unused chemicals that needs to be transported away after all the related construction activities are completed. The requirements in ProPECC Note PN 1/94 should be adhered to in the handling and disposal of bentonite slurries. 	Within construction site / During construction phase	I
Waste Management Implication – Construction Phase					
10.5.1.1	7.1	-	<p>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:</p> <ul style="list-style-type: none"> ▪ The relevant construction methods (particularly for the tunnel works) and construction programme have been carefully planned and developed to minimise the extent of excavation and to maximise the on-site reuse of inert C&D materials generated by the project as far as practicable. Temporary stockpiling areas will also be provided to facilitate on-site reuse of inert C&D materials; ▪ Priority should be given to collect and reuse suitable inert C&D materials generated from other concurrent projects and the Government's PFRF as fill materials for the proposed land formation works; ▪ Only non-dredged ground improvement methods should be adopted in order to completely avoid the need for dredging and disposal of marine sediment for the proposed land formation work; ▪ Excavation work for constructing the APM tunnels, BHS tunnels and airside tunnels will not be down to the CMPs beneath the fill materials in order to avoid excavating any sediments; and 	Project Site Area / During design and construction phase	I I I N/A

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			<ul style="list-style-type: none"> ▪ 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 HKIAAAA 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	-	<p>The following good site practices should be performed during the construction activities include:</p> <ul style="list-style-type: none"> ▪ Nomination of an approved person, such as a site manager, to be responsible for good site practices, arrangements for collection and effective disposal to an appropriate facility, of all wastes generated at the site; ▪ Training of site personnel in proper waste management and chemical waste handling procedures; ▪ Provision of sufficient waste disposal points and regular collection for disposal; ▪ Appropriate measures to minimise windblown litter and dust during transportation of waste by either covering trucks by tarpaulin/ similar material or by transporting wastes in enclosed containers. The cover should be extended over the edges of the sides and tailboards; ▪ Stockpiles of C&D materials should be kept wet or covered by impervious sheets to avoid wind-blown dust; ▪ All dusty materials including C&D materials should be sprayed with water immediately prior to any loading transfer operation so as to keep the dusty material wet during material handling at the barging points/ stockpile areas; ▪ C&D materials to be delivered to and from the project site by barges or by trucks should be kept wet or covered to avoid wind-blown dust; ▪ The speed of the trucks including dump trucks carrying C&D or waste materials within the site should be controlled to about 10 km/hour in order to reduce the adverse dust impact and secure the safe movement around the site; and ▪ To avoid or minimise dust emission during transport of C&D or waste materials within the site, each and every main temporary access should be paved with concrete, bituminous hardcore materials or metal plates and kept clear of dusty materials. Unpaved parts of the road should be sprayed with water or a dust suppression chemical so as to keep the entire road surface wet. 	Project Site Area / Construction Phase	I
10.5.1.3	7.1	-	<p>The following practices should be performed to achieve waste reduction include:</p> <ul style="list-style-type: none"> ▪ Use of steel or aluminium formworks and falseworks for temporary works as far as practicable; ▪ Adoption of repetitive design to allow reuse of formworks as far as practicable; ▪ Segregation and storage of different types of waste in different containers, skips or stockpiles to enhance reuse or recycling of materials and their proper disposal; 	Project Site Area / Construction Phase	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			<ul style="list-style-type: none"> 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		<ul style="list-style-type: none"> Inert and non-inert C&D materials should be handled and stored separately to avoid mixing the two types of materials. 	Project Site Area / Construction Phase	I
10.5.1.5	7.1	-	<ul style="list-style-type: none"> 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	-	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> The Contractor should prepare and implement a Waste Management Plan detailing various waste arising and waste management practices. 	Construction Phase	I
10.5.1.16	7.1	-	<p>The following mitigation measures are recommended during excavation and treatment of the sediments:</p> <ul style="list-style-type: none"> On-site remediation should be carried out in an enclosed area in order to minimise odour/dust emissions; The loading, unloading, handling, transfer or storage of treated and untreated sediment should be carried out in such a manner to prevent or minimise dust emissions; All practical measures, including but not limited to speed control for vehicles, should be taken to minimise dust emission; Good housekeeping should be maintained at all times at the sediment treatment facility and storage area; Treated and untreated sediment should be clearly separated and stored separately; and Surface runoff from the enclosed area should be properly collected and stored separately, and then properly treated to levels in compliance with the relevant effluent standards as required by the Water Pollution Control Ordinance before final discharge. 	Project Site Area / Construction Phase	N/A
10.5.1.18	7.1	-	<p>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</p>	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?^
			<p>followed to minimise potential impacts on water quality during transportation of the sediments requiring Type 1 disposal:</p> <ul style="list-style-type: none"> 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	-	<p>Contractor should register with the EPD as a chemical waste producer and to follow the relevant guidelines. The following measures should be implemented:</p> <ul style="list-style-type: none"> Good quality containers compatible with the chemical wastes should be used; Incompatible chemicals should be stored separately; Appropriate labels must be securely attached on each chemical waste container indicating the corresponding chemical characteristics of the chemical waste, such as explosive, flammable, oxidizing, irritant, toxic, harmful, corrosive, etc.; and The contractor will use a licensed collector to transport and dispose of the chemical wastes at the approved Chemical Waste Treatment Centre or other licensed recycling facilities, in accordance with the Waste Disposal (Chemical Waste) (General) Regulation. 	Project Site Area / Construction Phase	I
10.5.1.20	7.1	-	<ul style="list-style-type: none"> General refuse should be stored in enclosed bins or compaction units separated from inert C&D material. A reputable waste collector should be employed by the contractor to remove general refuse from the site for disposal at designated landfill sites. An enclosed and covered area should be provided to reduce the occurrence of 'wind blown' light material. 	Project Site Area / Construction Phase	I
10.5.1.21	7.1	-	<ul style="list-style-type: none"> The construction contractors will be required to regularly check and clean any refuse trapped or accumulated along the newly constructed seawall. Such refuse will then be stored and disposed of together with the general refuse. 	Project Site Area / Construction Phase	N/A
Land Contamination – Construction Phase					
11.10.1.2 to 11.10.1.3	8.1	2.32	<p>For areas inaccessible during site reconnaissance survey</p> <ul style="list-style-type: none"> Further site reconnaissance would be conducted once the areas are accessible in order to identify any land contamination concern for the areas. 	Project Site Area inaccessible during site reconnaissance / Prior to Construction Phase	I
			<ul style="list-style-type: none"> Subject to further site reconnaissance findings, a supplementary Contamination Assessment Plan (CAP) for additional site investigation (SI) (if necessary) may be prepared and submitted to EPD for endorsement prior to the commencement of SI at these areas. 		I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			<ul style="list-style-type: none"> ▪ After completion of SI, the Contamination Assessment Report (CAR) will be prepared and submitted to EPD for approval prior to start of the proposed construction works at the golf course, the underground and above-ground fuel storage tank areas, emergency power generation units, airside petrol filling station and fuel tank room. ▪ Should remediation be required, Remediation Action Plan (RAP) and Remediation Report (RR) will be prepared for EPD's approval prior to commencement of the proposed remediation and any construction works respectively. 		<p>I *(CAR for golf course)</p> <hr/> <p>N/A</p>
11.8.1.2	8.1	-	<p>If contaminated soil is identified, the following mitigation measures are for the excavation and transportation of contaminated materials (if any):</p> <ul style="list-style-type: none"> ▪ To minimize the incidents of construction workers coming in contact with any contaminated materials, bulk earth-moving excavation equipment should be employed; ▪ Contact with contaminated materials can be minimised by wearing appropriate clothing and personal protective equipment such as gloves and masks (especially when working directly with contaminated material), provision of washing facilities and prohibition of smoking and eating on site; ▪ Stockpiling of contaminated excavated materials on site should be avoided as far as possible; ▪ The use of any contaminated soil for landscaping purpose should be avoided unless pre-treatment was carried out; ▪ Vehicles containing any excavated materials should be suitably covered to reduce dust emissions and/or release of contaminated wastewater; ▪ Truck bodies and tailgates should be sealed to prevent any discharge; ▪ Only licensed waste haulers should be used to collect and transport contaminated material to treatment/disposal site and should be equipped with tracking system to avoid fly tipping; ▪ Speed control for trucks carrying contaminated materials should be exercised. 8km/h is the recommended speed limit; ▪ Strictly observe all relevant regulations in relation to waste handling, such as Waste Disposal Ordinance (Cap 354), Waste Disposal (Chemical Waste) (General) Regulation (Cap 354) and obtain all necessary permits where required; and ▪ Maintain records of waste generation and disposal quantities and disposal arrangements. 	Project Site Area / Construction Phase	N/A
Terrestrial Ecological – Construction Phase					
12.10.1.1	9.2	2.14	<p>Pre-construction Egretty Survey</p> <ul style="list-style-type: none"> ▪ Conduct ecological survey for Sha Chau egretty to update the latest boundary of the egretty. 	Breeding season (April - July) prior to commencement of HDD drilling works at HKIA	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
12.7.2.3 and 12.7.2.6	9.1	2.30	Avoidance and Minimisation of Direct Impact to Egret <ul style="list-style-type: none"> The daylighting location will avoid direct encroachment to the Sheung Sha Chau egret. The daylighting location and mooring of flat top barge, if required, will be kept away from the egret; In any event, controls such as demarcation of construction site boundary and confining the lighting within the site will be practised to minimise disturbance to off-site habitat at Sheung Sha Chau Island; and The containment pit at the daylighting location shall be covered or camouflaged. 	During construction phase at Sheung Sha Chau Island	
12.7.2.5	9.1	2.30	Preservation of Nesting Vegetation <ul style="list-style-type: none"> The proposed daylighting location and the arrangement of connecting pipeline will avoid the need of tree cutting, therefore the trees that are used by ardeids for nesting will be preserved. 	During construction phase at Sheung Sha Chau Island	
12.7.2.4 and 12.7.2.6	9.1	2.30	Timing the Pipe Connection Works outside Ardeid's Breeding Season <ul style="list-style-type: none"> All HDD and related construction works on Sheung Sha Chau Island will be scheduled outside the ardeids' breeding season (between April and July). No night-time construction work will be allowed on Sheung Sha Chau Island during all seasons. 	During construction phase at Sheung Sha Chau Island	
12.10.1.1	9.3	-	Ecological Monitoring <ul style="list-style-type: none"> 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	
Marine Ecological Impact – Pre-construction Phase					
13.11.4.1	10.2.2	-	<ul style="list-style-type: none"> Pre-construction phase Coral Dive Survey. 	HKIAAA artificial seawall	
Marine Ecological Impact – Construction Phase					
13.11.1.3 to 13.11.1.6	-	-	Minimisation of Land Formation Area <ul style="list-style-type: none"> Minimise the overall size of the land formation needed for the additional facilities to minimise the overall loss of habitat for marine resources, especially the CWD population. 	Land formation footprint / during detailed design phase to completion of construction	
13.11.1.7 to 13.11.1.10	-	2.31	Use of Construction Methods with Minimal Risk/Disturbance <ul style="list-style-type: none"> Use of non-dredge method for the main land formation and ancillary works including the diversion of the aviation fuel pipeline to the AFRF; Use of Deep Cement Mixing (DCM) method instead of conventional seabed dredging for the land formation works to reduce the risk of negative impacts through the elevation of suspended solids and contaminants on CWDs, fisheries and the marine environment; 	During construction phase at marine works area	

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			<ul style="list-style-type: none"> Use of bored piling in short duration to form the new approach lights and marker beacons for the new runway; 		N/A
			<ul style="list-style-type: none"> Avoid bored piling during CWD peak calving season (Mar to Jun); 		I
			<ul style="list-style-type: none"> Prohibition of underwater percussive piling; and 		I
			<ul style="list-style-type: none"> Use of horizontal directional drilling (HDD) method and water jetting methods for placement of submarine cables and pipelines to minimise the disturbance to the CWDs and other marine ecological resources. 		I
13.11.2.1 to 13.11.2.7	-	-	<p>Mitigation for Indirect Disturbance due to Deterioration of Water Quality</p> <ul style="list-style-type: none"> Water quality mitigation measures during construction phases include consideration of alternative construction methods, deployment of silt curtain and good site practices; Alternative construction methods including use of non-dredge methods for ground improvement (e.g. Deep Cement Mixing (DCM), prefabricated vertical drains (PVD), sand compaction piles, steel cells, stone columns and vertical sand drains); Use of bored piling in short duration to form the new approach lights and marker beacons for the new runway; and <p>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.</p>	All works area during the construction phase	I
					I
					N/A
					I
13.11.1.12	-	-	<p>Strict Enforcement of No-Dumping Policy</p> <ul style="list-style-type: none"> A policy prohibiting dumping of wastes, chemicals, oil, trash, plastic, or any other substance that would potentially be harmful to dolphins and/or their habitat in the work area; Mandatory educational programme of the no-dumping policy be made available to all construction site personnel for all project-related works; Fines for infractions should be implemented; and Unscheduled, on-site audits shall be implemented. 	All works area during the construction phase	I
13.11.1.13	-	-	<p>Good Construction Site Practices</p> <ul style="list-style-type: none"> Regular inspection of the integrity and effectiveness of all silt curtains and monitoring of effluents to ensure that any discharge meets effluent discharge guidelines; Keep the number of working or stationary vessels present on-site to the minimum anytime; and Unscheduled, on-site audits for all good site practice restrictions should be conducted, and fines or penalties sufficient to be an effective deterrent need to be levied against violators. 	All works area during the construction phase	I
13.11.1.3 to 13.11.1.6	-	-	<p>Minimisation of Land Formation Area</p> <ul style="list-style-type: none"> Minimise the overall size of the land formation needed for the additional facilities to minimise the overall loss of habitat for marine resources, especially the CWD population. 	Land formation footprint / during detailed design phase	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
13.11.5.4 to 13.11.5.13	10.3.1	-	<p>SkyPier High Speed Ferries' Speed Restrictions and Route Diversions</p> <ul style="list-style-type: none"> SkyPier HSFs operating to / from Zhuhai and Macau would divert north of SCLKC Marine Park with a 15 knot speed limit to apply for the part-journeys that cross high CWD abundance grid squares as indicatively shown in Drawing No. MCL/P132/EIA/13-023 of the EIA Report. Both the alignment of the northerly route and the portion of routings to be subject to the speed limit of 15 knots shall be finalised prior to commencement of construction based on the future review of up-to-date CWD abundance and EM&A data and taking reference to changes in total SkyPier HSF numbers; and A maximum of 10 knots will be enforced through the designated SCLKC Marine Park area at all times. <p>Other mitigation measures</p> <ul style="list-style-type: none"> The ET will audit various parameters including actual daily numbers of HSFs, compliance with the 15-knot speed limit in the speed control zone and diversion compliance for SkyPier HSFs operating to / from Zhuhai and Macau; and The effectiveness of the CWD mitigation measures after implementation of initial six month SkyPier HSF diversion and speed restriction will be reviewed. 	to completion of construction Area between the footprint and SCLKC Marine Park during construction phase	
13.11.5.14 to 13.11.5.18	10.3.1	2.31	<p>Dolphin Exclusion Zone</p> <ul style="list-style-type: none"> Establishment of a 24 hr Dolphin Exclusion Zone (DEZ) with a 250 m radius around the land formation works areas; A DEZ would also be implemented during ground improvement works (e.g. DCM), water jetting works for submarine cables diversion, open trench dredging at the field joint locations and seawall construction; and A DEZ would also be implemented during bored piling work but as a precautionary measure only. 	Marine waters around land formation works area during construction phase	 N/A
13.11.5.19	10.4	2.31	<p>Acoustic Decoupling of Construction Equipment</p> <ul style="list-style-type: none"> Air compressors and other noisy equipment that must be mounted on steel barges should be acoustically-decoupled to the greatest extent feasible, for instance by using rubber or air-filled tyres; and Specific acoustic decoupling measures shall be specified during the detailed design of the project for use during the land formation works. 	Around coastal works area during construction phase	
13.11.5.20	10.6.1	2.29	<p>Spill Response Plan</p> <ul style="list-style-type: none"> An oil and hazardous chemical spill response plan is proposed to be established during the construction phase as a precautionary measure so that appropriate actions to prevent or reduce risks to CWDs can be undertaken in the event of an accidental spillage. 	Construction phase	

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 <ul style="list-style-type: none"> 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 <ul style="list-style-type: none"> 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 <ul style="list-style-type: none"> Use of non-dredge method for the main land formation and ancillary works including the diversion of the aviation fuel pipeline to the AFRF; Use of Deep Cement Mixing (DCM) method instead of conventional seabed dredging for the land formation works to reduce the risk of negative impacts through the elevation of suspended solids and contaminants on fisheries and the marine environment; Use of bored piling in short duration to form the new approach lights and marker beacons for the new runway; and Use of horizontal directional drilling (HDD) method and water jetting methods for placement of undersea cables and pipelines to minimise the disturbance to fisheries resources. 	During construction phase at marine works area	I N/A I
14.9.1.11	-	-	Strict Enforcement of No-Dumping Policy <ul style="list-style-type: none"> A policy prohibiting dumping of wastes, chemicals, oil, trash, plastic, or any other substance that would potentially be harmful to dolphins and/or their habitat in the work area; Mandatory educational programme of the no-dumping policy be made available to all construction site personnel for all project-related works; Fines for infractions should be implemented; and Unscheduled, on-site audits shall be implemented. 	All works area during the construction phase	I
14.9.1.12	-	-	Good Construction Site Practices <ul style="list-style-type: none"> Regular inspection of the integrity and effectiveness of all silt curtains and monitoring of effluents to ensure that any discharge meets effluent discharge guidelines; Keep the number of working or stationary vessels present on-site to the minimum anytime; and 	All works area during the construction phase	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			<ul style="list-style-type: none"> ▪ Unscheduled, on-site audits for all good site practice restrictions should be conducted, and fines or penalties sufficient to be an effective deterrent need to be levied against violators. 		
14.9.1.13 to 14.9.1.18	-		<p>Mitigation for Indirect Disturbance due to Deterioration of Water Quality</p> <ul style="list-style-type: none"> ▪ Water quality mitigation measures during construction phases include consideration of alternative construction methods, deployment of silt curtain and good site practices; ▪ Alternative construction methods including use of non-dredge methods for ground improvement (e.g. Deep Cement Mixing (DCM), prefabricated vertical drains (PVD), sand compaction piles, steel cells, stone columns and vertical sand drains); ▪ Use of bored piling in short duration to form the new approach lights and marker beacons for the new runway; and ▪ Use of horizontal directional drilling (HDD) method and water jetting methods for placement of undersea cables and pipelines to minimise the disturbance to fisheries resources. 	All works area during the construction phase	
					N/A
Landscape and Visual Impact – Construction Phase					
Table 15.6	12.3	-	CM1 - The construction area and contractor's temporary works areas should be minimised to avoid impacts on adjacent landscape.	All works areas for duration of works; Upon handover and completion of works.	
Table 15.6	12.3	-	CM2 - Reduction of construction period to practical minimum.	All works areas for duration of works; Upon handover and completion of works.	
Table 15.6	12.3	-	CM3 - Phasing of the construction stage to reduce visual impacts during the construction phase.	All works areas for duration of works; Upon handover and completion of works.	
Table 15.6	12.3	-	CM4 - Construction traffic (land and sea) including construction plants, construction vessels and barges should be kept to a practical minimum.	All works areas for duration of works; Upon handover and completion of works.	
Table 15.6	12.3	-	CM5 - Erection of decorative mesh screens or construction hoardings around works areas in visually unobtrusive colours.	All works areas for duration of works; Upon handover and completion of works. –	

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

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

Notes:

I= implemented where applicable;

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

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

Appendix C. Monitoring Schedule

Monitoring Schedule of This Reporting Period

Jan-18

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1	2 Site Inspection AR1A, AR2 NM1A, NM3A, NM4, NM5 WQ General & Regular DCM mid-ebb: 13:13 mid-flood: 07:50	3 Site Inspection NM6	4 Site Inspection WQ General & Regular DCM mid-ebb: 14:49 mid-flood: 09:28	5 Site Inspection	6 WQ General & Regular DCM mid-ebb: 16:25 mid-flood: 11:01
7	8 Site Inspection CWD Survey (Vessel) AR1A, AR2 NM3A	9 Site Inspection	10 Site Inspection CWD Survey (Vessel) NM6 WQ General & Regular DCM mid-ebb: 07:32 mid-flood: 14:18	11 Site Inspection CWD Survey (Vessel)	12 Site Inspection AR1A, AR2 NM1A, NM4, NM5 WQ General & Regular DCM mid-ebb: 10:10 mid-flood: 15:42	13
14 WQ General & Regular DCM mid-ebb: 11:49 mid-flood: 06:41	15 Site Inspection CWD Survey (Vessel, Land-based)	16 Site Inspection CWD Survey (Vessel, Land-based) NM6 WQ General & Regular DCM mid-ebb: 12:59 mid-flood: 07:49	17 Site Inspection CWD Survey (Vessel)	18 Site Inspection CWD Survey (Vessel) AR1A, AR2 NM1A, NM3A, NM4, NM5 WQ General & Regular DCM mid-ebb: 14:05 mid-flood: 08:49	19 Site Inspection CWD Survey (Vessel)	20 WQ General & Regular DCM mid-ebb: 15:11 mid-flood: 09:44
21	22 Site Inspection CWD Survey (Land-based) NM6	23 Site Inspection CWD Survey (Land-based) WQ General & Regular DCM mid-ebb: 17:23 mid-flood: 11:23	24 Site Inspection CWD Survey (Land-based) AR1A, AR2 NM1A, NM4, NM5	25 Site Inspection Ecological Monitoring WQ General & Regular DCM mid-ebb: 05:55 mid-flood: 12:51	26 Site Inspection NM3A	27 WQ General & Regular DCM mid-ebb: 08:47 mid-flood: 14:40
28	29 Site Inspection	30 Site Inspection AR1A, AR2 NM1A, NM3A, NM4, NM5 WQ General & Regular DCM mid-ebb: 12:16 mid-flood: 06:54	31 Site Inspection			
		Notes: CWD - Chinese White Dolphin Air quality and Noise Monitoring Station WQ - Water Quality DCM - Deep Cement Mixing NM1A/AR1A - Man Tung Road Park NM3A - Site Office NM4 - Ching Chung Hau Po Woon Primary School NM5/AR2 - Village House, Tin Sum NM6 - House No. 1, Sha Lo Wan				

Tentative Monitoring Schedule of Next Reporting Period

Feb-18

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1 Site Inspection NM6 WQ General & Regular DCM mid-ebb: 13:49 mid-flood: 08:24	2 Site Inspection	3 WQ General & Regular DCM mid-ebb: 15:14 mid-flood: 09:42
4	5 CWD Survey (Vessel) AR1A, AR2 NM1A, NM3A, NM4, NM5	6 Site Inspection CWD Survey (Vessel) WQ General & Regular DCM mid-ebb: 17:30 mid-flood: 11:26	7 Site Inspection CWD Survey (Vessel)	8 Site Inspection CWD Survey (Land-based) WQ General & Regular DCM mid-ebb: 06:13 mid-flood: 12:44	9 Site Inspection CWD Survey (Land-based) AR1A, AR2 NM6	10
11 WQ General & Regular DCM mid-ebb: 10:51 mid-flood: 05:58	12 CWD Survey (Vessel)	13 Site Inspection CWD Survey (Vessel) NM6 WQ General & Regular DCM mid-ebb: 12:09 mid-flood: 06:58	14 Site Inspection CWD Survey (Land-based)	15 Site Inspection CWD Survey (Land-based) AR1A, AR2 NM1A, NM3A, NM4, NM5 WQ General & Regular DCM mid-ebb: 13:12 mid-flood: 07:51	16	17
18 WQ General & Regular DCM mid-ebb: 14:42 mid-flood: 08:59	19	20 Site Inspection NM6 WQ General & Regular DCM mid-ebb: 15:52 mid-flood: 09:48	21 Site Inspection CWD Survey (Vessel) AR1A, AR2 NM1A, NM3A, NM4, NM5	22 Site Inspection CWD Survey (Vessel) Ecological Monitoring WQ General & Regular DCM mid-ebb: 17:31 mid-flood: 10:52	23 Site Inspection CWD Survey (Vessel)	24 WQ General & Regular DCM mid-ebb: 06:55 mid-flood: 12:36
25	26 CWD Survey (Land-based) NM6	27 Site Inspection AR1A, AR2 NM1A, NM3A, NM4, NM5 WQ General & Regular DCM mid-ebb: 11:21 mid-flood: 05:55	28 Site Inspection			
		Notes: CWD - Chinese White Dolphin Air quality and Noise Monitoring Station WQ - Water Quality DCM - Deep Cement Mixing NM1A/AR1A - Man Tung Road Park NM3A - Site Office NM4 - Ching Chung Hau Po Woon Primary School NM5/AR2 - Village House, Tin Sum NM6 - House No. 1, Sha Lo Wan				

Appendix D. Monitoring Results

Air Quality Monitoring Results

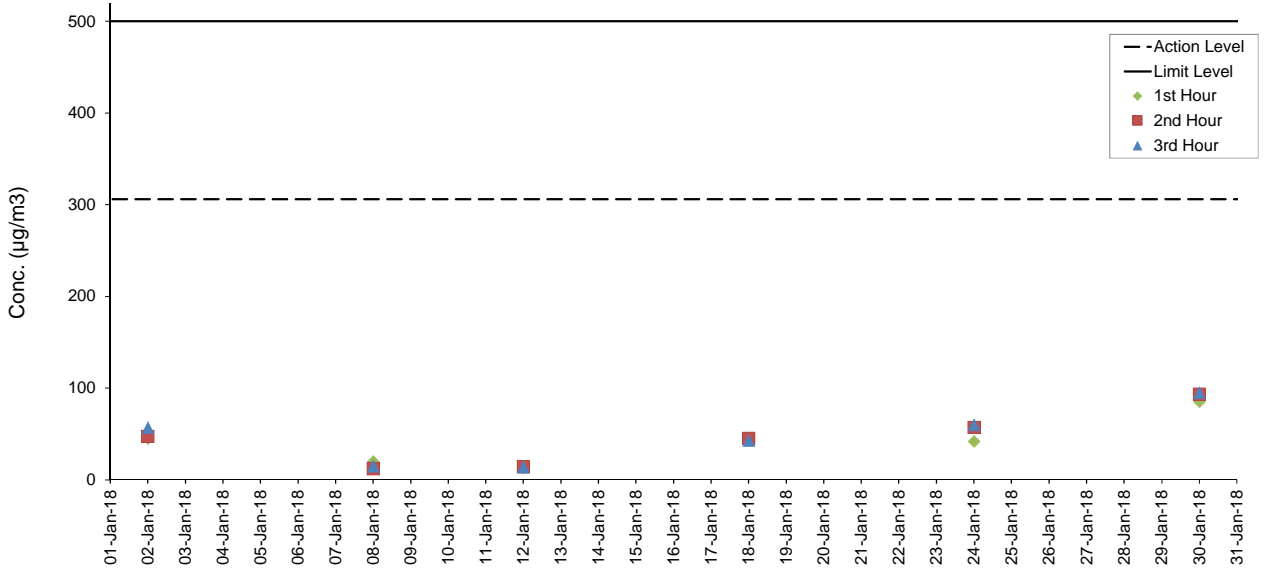
1-hour TSP Results**Station: AR1A- Man Tung Road Park**

Date	Time	Weather	Wind Speed (m/s)	Wind Direction (deg)	1-hr TSP ($\mu\text{g}/\text{m}^3$)	Action Level ($\mu\text{g}/\text{m}^3$)	Limit Level ($\mu\text{g}/\text{m}^3$)
02-Jan-18	13:52	Cloudy	6.0	120	45	306	500
02-Jan-18	14:52	Cloudy	3.7	115	47	306	500
02-Jan-18	15:52	Cloudy	3.9	57	57	306	500
08-Jan-18	13:35	Rainy	10.9	331	20	306	500
08-Jan-18	14:35	Rainy	9.9	339	12	306	500
08-Jan-18	15:35	Rainy	10.0	346	15	306	500
12-Jan-18	13:00	Sunny	5.7	353	13	306	500
12-Jan-18	14:00	Sunny	3.8	49	14	306	500
12-Jan-18	15:00	Sunny	2.9	55	14	306	500
18-Jan-18	13:00	Sunny	3.7	272	45	306	500
18-Jan-18	14:00	Sunny	3.2	278	45	306	500
18-Jan-18	15:00	Sunny	4.2	271	43	306	500
24-Jan-18	13:00	Sunny	9.2	95	42	306	500
24-Jan-18	14:00	Sunny	9.3	95	57	306	500
24-Jan-18	15:00	Sunny	9.1	92	60	306	500
30-Jan-18	13:00	Cloudy	3.0	32	85	306	500
30-Jan-18	14:00	Cloudy	3.4	19	93	306	500
30-Jan-18	15:00	Cloudy	2.4	54	95	306	500

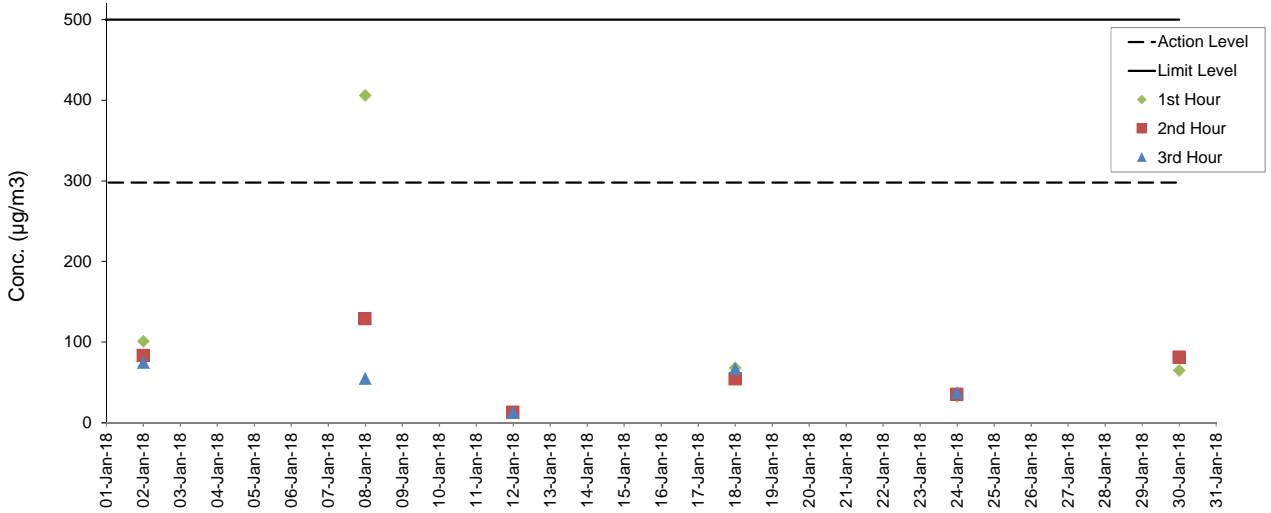
1-hour TSP Results**Station: AR2- Village House, Tin Sum**

Date	Time	Weather	Wind Speed (m/s)	Wind Direction (deg)	1-hr TSP ($\mu\text{g}/\text{m}^3$)	Action Level ($\mu\text{g}/\text{m}^3$)	Limit Level ($\mu\text{g}/\text{m}^3$)
02-Jan-18	08:51	Fine	3.3	73	101	298	500
02-Jan-18	09:51	Fine	4.0	97	83	298	500
02-Jan-18	10:51	Fine	6.9	86	75	298	500
08-Jan-18	09:00	Rainy	2.2	322	406	298	500
08-Jan-18	10:00	Rainy	4.7	319	129	298	500
08-Jan-18	11:00	Rainy	8.8	324	55	298	500
12-Jan-18	08:56	Sunny	5.8	31	12	298	500
12-Jan-18	09:56	Sunny	5.6	41	13	298	500
12-Jan-18	10:56	Sunny	5.3	18	13	298	500
18-Jan-18	08:50	Sunny	2.1	65	68	298	500
18-Jan-18	09:50	Sunny	2.4	47	54	298	500
18-Jan-18	10:50	Sunny	2.7	275	67	298	500
24-Jan-18	09:00	Sunny	9.4	104	33	298	500
24-Jan-18	10:00	Sunny	10.9	99	35	298	500
24-Jan-18	11:00	Sunny	11.8	110	37	298	500
30-Jan-18	08:53	Cloudy	4.5	11	65	298	500
30-Jan-18	09:53	Cloudy	3.4	6	81	298	500
30-Jan-18	10:53	Cloudy	4.6	43	70	298	500

AR1A 1-Hour TSP



AR2 1-Hour TSP



Noise Monitoring Results

Noise Monitoring Results
Station: NM1A- Man Tung Road Park

Date	Weather	Time	Measured	Measured	L _{eq(30mins)} dB(A)
			L ₁₀ dB(A)	L ₉₀ dB(A)	
02-Jan-18	Cloudy	14:20	71.5	55.5	72
02-Jan-18	Cloudy	14:25	73.0	54.5	
02-Jan-18	Cloudy	14:30	71.0	54.0	
02-Jan-18	Cloudy	14:35	73.5	55.5	
02-Jan-18	Cloudy	14:40	71.5	55.5	
02-Jan-18	Cloudy	14:45	73.0	54.0	
12-Jan-18	Sunny	13:05	74.0	54.5	73
12-Jan-18	Sunny	13:10	73.5	56.0	
12-Jan-18	Sunny	13:15	74.0	54.5	
12-Jan-18	Sunny	13:20	72.0	54.0	
12-Jan-18	Sunny	13:25	73.5	55.0	
12-Jan-18	Sunny	13:30	74.0	57.0	
18-Jan-18	Sunny	13:06	74.0	56.0	72
18-Jan-18	Sunny	13:11	72.5	55.0	
18-Jan-18	Sunny	13:16	69.5	55.0	
18-Jan-18	Sunny	13:21	73.0	55.5	
18-Jan-18	Sunny	13:26	71.5	54.0	
18-Jan-18	Sunny	13:31	73.0	56.5	
24-Jan-18	Sunny	13:12	72.5	56.5	72
24-Jan-18	Sunny	13:17	72.5	55.5	
24-Jan-18	Sunny	13:22	71.5	56.0	
24-Jan-18	Sunny	13:27	72.5	55.5	
24-Jan-18	Sunny	13:32	72.5	57.5	
24-Jan-18	Sunny	13:37	73.5	58.5	
30-Jan-18	Cloudy	15:20	70.0	55.0	72
30-Jan-18	Cloudy	15:25	72.0	56.5	
30-Jan-18	Cloudy	15:30	73.0	57.0	
30-Jan-18	Cloudy	15:35	73.0	56.5	
30-Jan-18	Cloudy	15:40	73.0	56.5	
30-Jan-18	Cloudy	15:45	72.5	57.5	

Remarks:

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

Noise Monitoring Results
Station: NM3A- Site Office

Date	Weather	Time	Measured	Measured	L _{eq(30mins)} dB(A)
			L ₁₀ dB(A)	L ₉₀ dB(A)	
02-Jan-18	Cloudy	09:05	70.0	55.0	63
02-Jan-18	Cloudy	09:10	70.0	55.0	
02-Jan-18	Cloudy	09:15	69.5	59.5	
02-Jan-18	Cloudy	09:20	70.5	59.5	
02-Jan-18	Cloudy	09:25	68.5	59.5	
02-Jan-18	Cloudy	09:30	70.5	59.0	
08-Jan-18	Cloudy	09:36	65.0	60.0	63
08-Jan-18	Cloudy	09:41	65.0	60.0	
08-Jan-18	Cloudy	09:46	67.5	59.5	
08-Jan-18	Cloudy	09:51	67.5	59.5	
08-Jan-18	Cloudy	09:56	65.5	59.5	
08-Jan-18	Cloudy	10:01	67.0	59.5	
18-Jan-18	Sunny	09:35	66.5	59.0	61
18-Jan-18	Sunny	09:40	65.5	58.5	
18-Jan-18	Sunny	09:45	68.0	59.0	
18-Jan-18	Sunny	09:50	71.0	59.5	
18-Jan-18	Sunny	09:55	69.5	59.5	
18-Jan-18	Sunny	10:00	70.5	59.5	
26-Jan-18	Cloudy	09:58	68.5	58.0	61
26-Jan-18	Cloudy	10:03	67.5	58.0	
26-Jan-18	Cloudy	10:08	69.0	58.5	
26-Jan-18	Cloudy	10:13	67.0	58.5	
26-Jan-18	Cloudy	10:18	70.5	58.5	
26-Jan-18	Cloudy	10:23	71.0	58.5	
30-Jan-18	Cloudy	09:29	70.5	54.5	63
30-Jan-18	Cloudy	09:34	71.0	55.0	
30-Jan-18	Cloudy	09:39	72.0	56.5	
30-Jan-18	Cloudy	09:44	68.5	55.0	
30-Jan-18	Cloudy	09:49	65.0	54.0	
30-Jan-18	Cloudy	09:54	70.5	52.5	

Noise Monitoring Results

Station: NM4- Ching Chung Hau Po Woon Primary School

Date	Weather	Time	Measured L ₁₀ dB(A)	Measured L ₉₀ dB(A)	L _{eq(30mins)} dB(A)
02-Jan-18	Fine	14:49	63.0	57.5	63
02-Jan-18	Fine	14:54	62.0	57.0	
02-Jan-18	Fine	14:59	61.5	57.0	
02-Jan-18	Fine	15:04	62.0	57.5	
02-Jan-18	Fine	15:09	62.0	57.5	
02-Jan-18	Fine	15:14	63.0	58.0	
12-Jan-18	Sunny	14:14	62.0	57.5	64
12-Jan-18	Sunny	14:19	63.0	57.5	
12-Jan-18	Sunny	14:24	62.5	56.5	
12-Jan-18	Sunny	14:29	62.5	58.0	
12-Jan-18	Sunny	14:34	62.5	57.5	
12-Jan-18	Sunny	14:39	63.0	57.5	
18-Jan-18	Fine	13:58	64.0	59.5	66
18-Jan-18	Fine	14:03	66.0	60.0	
18-Jan-18	Fine	14:08	65.5	59.5	
18-Jan-18	Fine	14:13	65.0	59.5	
18-Jan-18	Fine	14:18	66.5	60.0	
18-Jan-18	Fine	14:23	64.0	58.5	
24-Jan-18	Sunny	14:04	64.0	59.5	65
24-Jan-18	Sunny	14:09	63.0	60.0	
24-Jan-18	Sunny	14:14	64.5	60.0	
24-Jan-18	Sunny	14:19	63.5	59.5	
24-Jan-18	Sunny	14:24	65.0	60.5	
24-Jan-18	Sunny	14:29	64.0	60.5	
30-Jan-18	Cloudy	13:52	64.5	58.0	65
30-Jan-18	Cloudy	13:57	63.0	58.0	
30-Jan-18	Cloudy	14:02	65.5	59.0	
30-Jan-18	Cloudy	14:07	64.5	60.0	
30-Jan-18	Cloudy	14:12	64.0	58.5	
30-Jan-18	Cloudy	14:17	63.5	58.5	

Remarks:

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

Noise Monitoring Results

Station: NM5- Village House, Tin Sum

Date	Weather	Time	Measured L ₁₀ dB(A)	Measured L ₉₀ dB(A)	L _{eq(30mins)} dB(A)
02-Jan-18	Cloudy	09:30	56.0	50.0	58
02-Jan-18	Cloudy	09:35	58.0	50.0	
02-Jan-18	Cloudy	09:40	60.5	50.0	
02-Jan-18	Cloudy	09:45	59.0	49.5	
02-Jan-18	Cloudy	09:50	59.0	51.0	
02-Jan-18	Cloudy	09:55	56.0	50.0	
12-Jan-18	Sunny	09:30	62.5	54.5	57
12-Jan-18	Sunny	09:35	60.0	52.5	
12-Jan-18	Sunny	09:40	61.0	52.5	
12-Jan-18	Sunny	09:45	59.5	52.0	
12-Jan-18	Sunny	09:50	59.0	51.5	
12-Jan-18	Sunny	09:55	58.5	50.5	
18-Jan-18	Sunny	09:26	64.0	49.0	61
18-Jan-18	Sunny	09:31	59.0	50.5	
18-Jan-18	Sunny	09:36	54.0	49.0	
18-Jan-18	Sunny	09:41	55.0	49.0	
18-Jan-18	Sunny	09:46	55.0	47.0	
18-Jan-18	Sunny	09:51	65.5	49.0	
24-Jan-18	Sunny	09:27	63.0	54.0	57
24-Jan-18	Sunny	09:32	60.0	51.5	
24-Jan-18	Sunny	09:37	59.0	50.5	
24-Jan-18	Sunny	09:42	59.5	51.0	
24-Jan-18	Sunny	09:47	60.5	51.5	
24-Jan-18	Sunny	09:52	63.5	52.0	
30-Jan-18	Cloudy	09:29	58.0	49.5	53
30-Jan-18	Cloudy	09:34	59.5	51.0	
30-Jan-18	Cloudy	09:39	60.5	51.5	
30-Jan-18	Cloudy	09:44	60.0	51.0	
30-Jan-18	Cloudy	09:49	59.5	49.5	
30-Jan-18	Cloudy	09:54	59.0	48.0	

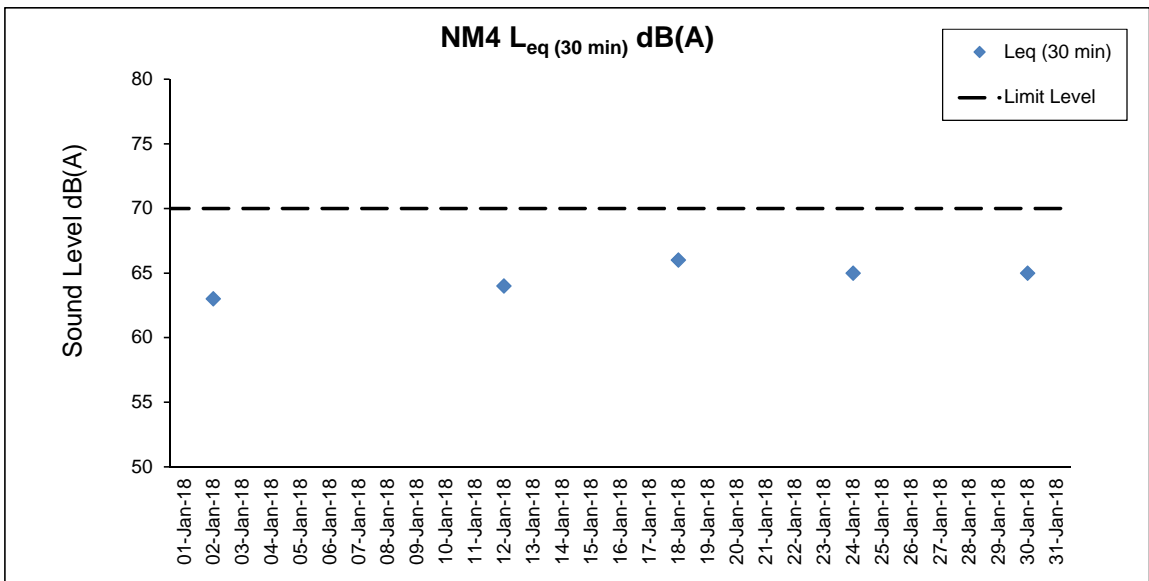
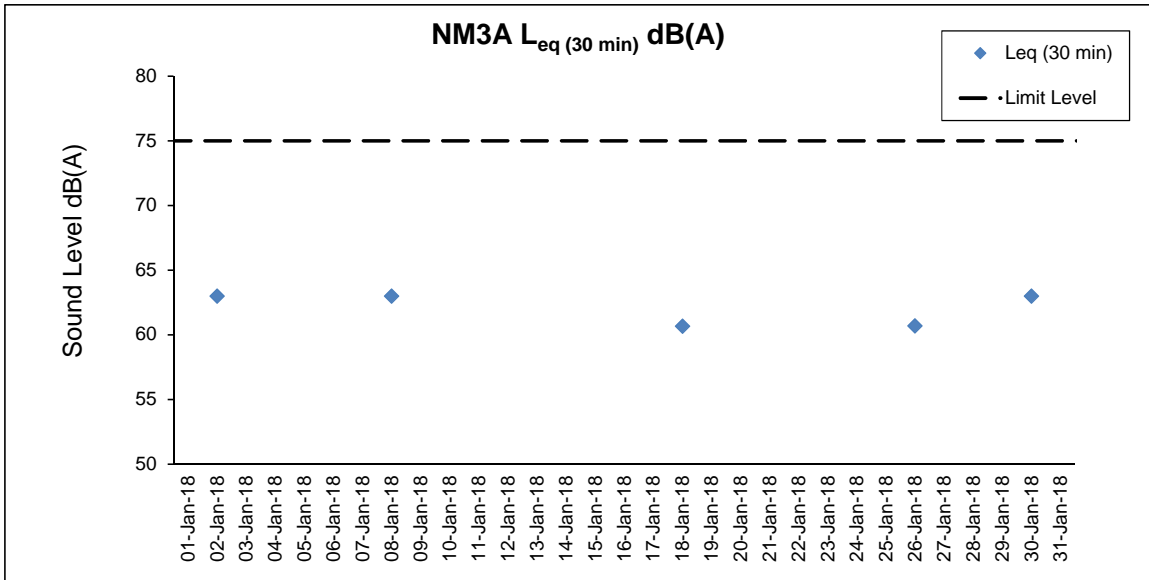
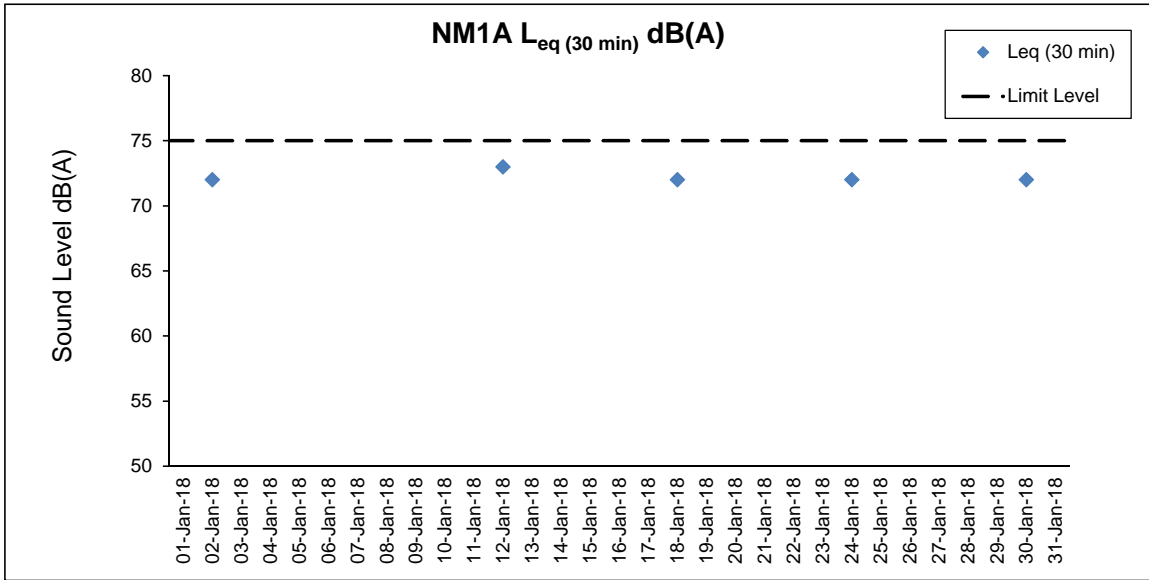
Remarks:

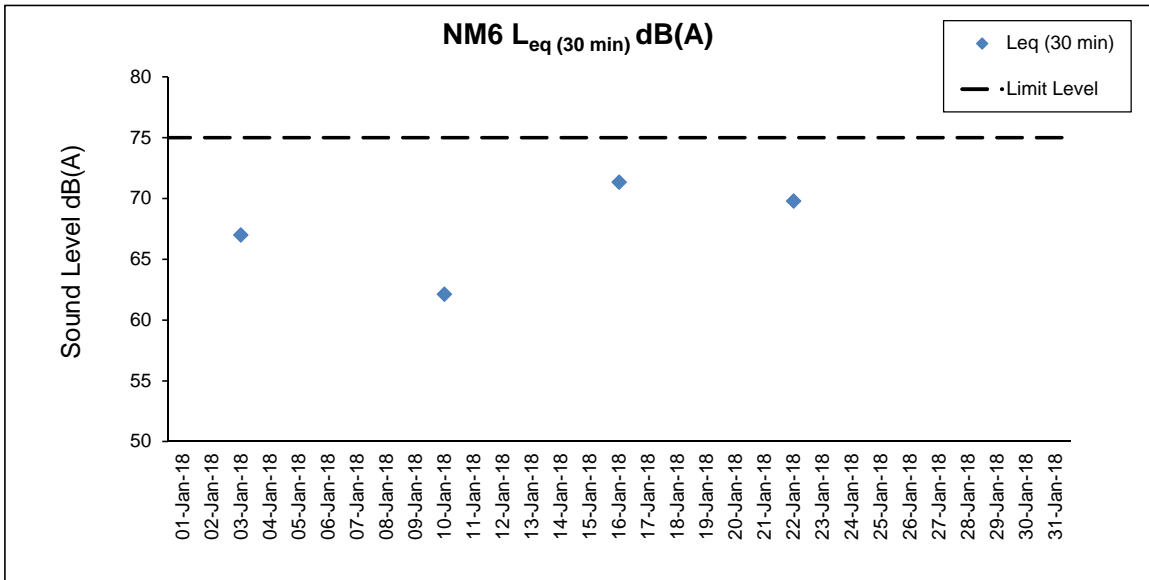
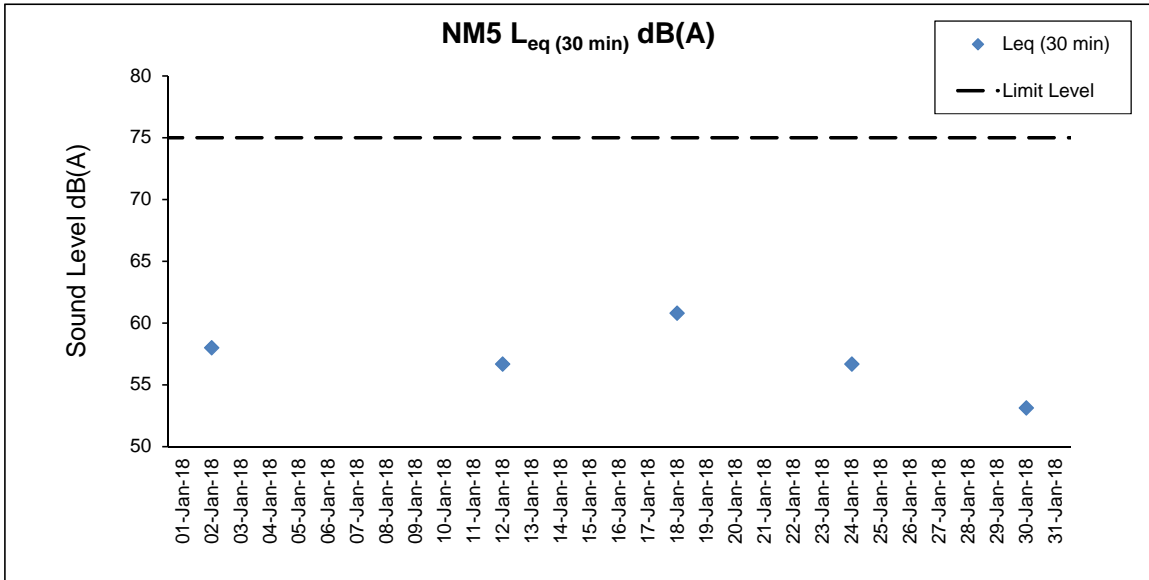
+3dB (A) correction was applied to free-field measurement.

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

Date	Weather	Time	Measured L ₁₀ dB(A)	Measured L ₉₀ dB(A)	L _{eq(30mins)} dB(A)
03-Jan-18	Fine	09:42	65.5	52.5	67
03-Jan-18	Fine	09:47	70.0	52.5	
03-Jan-18	Fine	09:52	68.5	54.5	
03-Jan-18	Fine	09:57	65.0	52.0	
03-Jan-18	Fine	10:02	67.0	53.5	
03-Jan-18	Fine	10:07	70.5	60.0	
10-Jan-18	Sunny	09:40	70.5	55.5	62
10-Jan-18	Sunny	09:45	71.5	60.5	
10-Jan-18	Sunny	09:50	69.0	57.5	
10-Jan-18	Sunny	09:55	69.0	57.0	
10-Jan-18	Sunny	10:00	70.0	56.0	
10-Jan-18	Sunny	10:05	71.0	56.0	
16-Jan-18	Sunny	09:42	75.5	49.5	71
16-Jan-18	Sunny	09:47	74.0	50.0	
16-Jan-18	Sunny	09:52	77.0	50.5	
16-Jan-18	Sunny	09:57	73.5	51.5	
16-Jan-18	Sunny	10:02	71.0	49.5	
16-Jan-18	Sunny	10:07	73.0	50.5	
22-Jan-18	Haze	09:42	70.0	51.5	70
22-Jan-18	Haze	09:47	71.0	52.0	
22-Jan-18	Haze	09:52	76.0	50.5	
22-Jan-18	Haze	09:57	73.0	48.0	
22-Jan-18	Haze	10:02	76.5	48.5	
22-Jan-18	Haze	10:07	72.5	51.0	

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





Water Quality Monitoring Results

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

Water Quality Monitoring

Water Quality Monitoring Results on 02 January 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)			
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA
									Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA
C1	Fine	Moderate	12:32	8.7	Surface	1.0	0.1	147	18.2	18.2	8.1	8.1	29.7	29.7	97.8	97.8	7.7	7.7	12.4	12.4	10	73	75	815635	804219	<0.2	<0.2	1.0	1.0			
						1.0	0.1	159	18.2	8.1	8.1	29.7	29.7	97.8	97.8	7.7	7.7	12.4	12.4	11	75	75	75									
					Middle	4.4	0.1	183	17.8	17.8	8.1	8.1	30.7	30.7	96.8	96.8	7.7	7.7	19.0	19.0	11	73	75	815635	804219	<0.2	<0.2	1.0	1.0			
						4.4	0.1	192	17.8	17.8	8.1	8.1	30.7	30.7	96.8	96.8	7.7	7.7	19.0	19.0	11	76	76	76								
					Bottom	7.7	0.1	218	17.9	17.9	8.1	8.1	30.9	30.9	97.1	97.1	7.7	7.7	24.8	24.8	21	76	76	76	76	76	815635	804219	<0.2	<0.2	1.9	1.9
						7.7	0.1	237	17.9	17.9	8.1	8.1	30.9	30.9	97.1	97.1	7.7	7.7	24.6	24.6	21	76	76	76	76	76	815635	804219	<0.2	<0.2	2.0	2.0
C2	Cloudy	Moderate	11:41	11.8	Surface	1.0	0.1	242	18.7	18.7	8.1	8.1	27.1	27.1	97.6	97.7	7.8	7.8	9.1	9.1	9	72	74	825664	806930	<0.2	<0.2	1.6	1.6			
						1.0	0.1	256	18.7	18.7	8.1	8.1	27.1	27.1	97.7	97.7	7.8	7.8	9.0	9.0	9	72	74	825664	806930	<0.2	<0.2	1.4	1.4			
					Middle	5.9	0.1	64	18.6	18.6	8.1	8.1	27.5	27.5	97.7	97.7	7.8	7.8	9.4	9.4	9	74	74	74	825664	806930	<0.2	<0.2	1.4	1.4		
						5.9	0.1	64	18.6	18.6	8.1	8.1	27.5	27.5	97.7	97.7	7.8	7.8	9.5	9.5	9	74	74	74	825664	806930	<0.2	<0.2	1.4	1.4		
					Bottom	10.8	0.3	74	18.6	18.6	8.1	8.1	28.5	28.5	97.9	97.9	7.7	7.7	12.4	12.4	12	76	76	76	76	825664	806930	<0.2	<0.2	1.1	1.1	
						10.8	0.3	78	18.6	18.6	8.1	8.1	28.5	28.5	97.9	97.9	7.7	7.7	12.4	12.4	12	75	75	75	75	825664	806930	<0.2	<0.2	1.0	1.0	
C3	Cloudy	Moderate	13:36	11.5	Surface	1.0	0.4	76	18.6	18.6	8.2	8.2	29.4	29.4	98.1	98.1	7.7	7.7	6.0	6.0	11	72	74	822079	817809	<0.2	<0.2	1.2	1.2			
						1.0	0.4	79	18.6	18.6	8.2	8.2	29.4	29.4	98.0	98.0	7.7	7.7	6.0	6.0	11	72	74	822079	817809	<0.2	<0.2	1.2	1.2			
					Middle	5.8	0.3	96	18.6	18.6	8.1	8.1	29.4	29.4	96.8	96.8	7.6	7.6	6.3	6.3	10	74	74	74	822079	817809	<0.2	<0.2	1.6	1.6		
						5.8	0.4	104	18.6	18.6	8.1	8.1	29.4	29.4	96.8	96.8	7.6	7.6	6.4	6.4	10	74	74	74	822079	817809	<0.2	<0.2	1.3	1.3		
					Bottom	10.5	0.4	111	18.6	18.6	8.1	8.1	29.4	29.4	96.4	96.4	7.6	7.6	12.0	12.0	11	76	76	76	76	822079	817809	<0.2	<0.2	1.2	1.2	
						10.5	0.4	120	18.6	18.6	8.1	8.1	29.4	29.4	96.4	96.4	7.6	7.6	12.1	12.1	11	76	76	76	76	822079	817809	<0.2	<0.2	1.3	1.3	
IM1	Fine	Moderate	12:14	7.5	Surface	1.0	0.1	91	18.2	18.2	8.1	8.1	30.1	30.1	98.9	98.9	7.8	7.8	11.0	11.0	13	72	74	818338	806477	<0.2	<0.2	1.7	1.7			
						1.0	0.1	95	18.2	18.2	8.1	8.1	30.1	30.1	98.9	98.9	7.8	7.8	11.0	11.0	13	73	73	73	818338	806477	<0.2	<0.2	1.6	1.6		
					Middle	3.8	0.1	59	17.9	17.9	8.1	8.1	30.4	30.4	98.1	98.1	7.8	7.8	12.6	12.6	14	74	74	74	818338	806477	<0.2	<0.2	1.8	1.8		
						3.8	0.1	60	17.9	17.9	8.1	8.1	30.4	30.4	98.1	98.1	7.8	7.8	12.6	12.6	14	74	74	74	818338	806477	<0.2	<0.2	1.7	1.7		
					Bottom	6.5	0.1	29	17.9	17.9	8.1	8.1	30.5	30.5	98.5	98.5	7.8	7.8	14.8	14.8	15	75	75	75	75	818338	806477	<0.2	<0.2	1.4	1.4	
						6.5	0.1	29	17.9	17.9	8.1	8.1	30.5	30.5	98.5	98.5	7.8	7.8	14.8	14.8	14	75	75	75	75	818338	806477	<0.2	<0.2	1.3	1.3	
IM2	Fine	Moderate	12:09	8.5	Surface	1.0	0.1	0	18.2	18.2	8.1	8.1	29.8	29.8	98.5	98.5	7.8	7.8	12.1	12.1	9	73	74	818843	806194	<0.2	<0.2	1.9	1.9			
						1.0	0.2	0	18.2	18.2	8.1	8.1	29.8	29.8	98.5	98.5	7.8	7.8	12.1	12.1	7	73	73	73	818843	806194	<0.2	<0.2	1.7	1.7		
					Middle	4.3	0.2	30	17.9	17.9	8.1	8.1	30.5	30.5	97.4	97.4	7.7	7.7	16.2	16.2	8	74	74	74	818843	806194	<0.2	<0.2	1.4	1.4		
						4.3	0.2	30	17.9	17.9	8.1	8.1	30.5	30.5	97.4	97.4	7.7	7.7	16.2	16.2	10	74	74	74	818843	806194	<0.2	<0.2	1.7	1.7		
					Bottom	7.5	0.1	10	17.9	17.9	8.1	8.1	30.6	30.6	97.7	97.7	7.7	7.7	16.8	16.8	16	75	75	75	75	818843	806194	<0.2	<0.2	1.6	1.6	
						7.5	0.1	10	17.9	17.9	8.1	8.1	30.6	30.6	97.7	97.7	7.7	7.7	16.8	16.8	17	76	76	76	76	818843	806194	<0.2	<0.2	1.3	1.3	
IM3	Fine	Moderate	12:03	8.9	Surface	1.0	0.2	30	18.2	18.2	8.1	8.1	29.9	29.9	98.4	98.4	7.8	7.8	14.3	14.3	11	73	74	819386	806042	<0.2	<0.2	1.7	1.7			
						1.0	0.2	30	18.2	18.2	8.1	8.1	29.9	29.9	98.4	98.4	7.8	7.8	14.3	14.3	10	73	73	73	819386	806042	<0.2	<0.2	1.6	1.6		
					Middle	4.5	0.1	21	17.9	17.9	8.1	8.1	30.6	30.6	97.2	97.2	7.7	7.7	20.6	20.6	11	74	74	74	819386	806042	<0.2	<0.2	1.5	1.5		
						4.5	0.1	21	17.9	17.9	8.1	8.1	30.6	30.6	97.2	97.2	7.7	7.7	20.6	20.6	11	74	74	74	819386	806042	<0.2	<0.2	1.7	1.7		
					Bottom	7.9	0.1	20	17.9	17.9	8.1	8.1	30.7	30.7	97.1	97.1	7.7	7.7	26.3	26.3	24	76	76	76	76	819386	806042	<0.2	<0.2	1.3	1.3	
						7.9	0.1	20	17.9	17.9	8.1	8.1	30.7	30.7	97.1	97.1	7.7	7.7	26.1	26.1	26	76	76	76	76	819386	806042	<0.2	<0.2	1.3	1.3	
IM4	Fine	Moderate	11:54	7.9	Surface	1.0	0.1	25	18.2	18.2	8.1	8.1	30.2	30.2	98.8	98.8	7.8	7.8	13.8	13.8	11	73	74	819583	805022	<0.2	<0.2	1.6	1.6			
						1.0	0.1	27	18.2	18.2	8.1	8.1	30.2	30.2	98.8	98.8	7.8	7.8	13.8	13.8	12	73	73	73	819583	805022	<0.2	<0.2	1.6	1.6		
					Middle	4.0	0.1	327	17.9	17.9	8.1	8.1	30.7	30.7	97.1	97.1	7.7	7.7	21.3	21.3	13	75	75	75	819583	805022	<0.2	<0.2	1.5	1.5		
						4.0	0.1	354	17.9	17.9	8.1	8.1	30.7	30.7	97.1	97.1	7.7	7.7	21.3	21.3	15	75	75	75	819583	805022	<0.2	<0.2	1.6	1.6		
					Bottom	6.9	0.1	9	17.9	17.9	8.1	8.1	30.7	30.7	97.2	97.2	7.7	7.7	29.6	29.6	15	76	76	76	76	819583	805022	<0.2	<0.2	1.5	1.5	
						6.9	0.1	9	17.9	17.9	8.1	8.1	30.7	30.7	97.2	97.2	7.7	7.7	29.6	29.6	14	76	76	76	76	819583	805022	<0.2	<0.2	1.4	1.4	
IM5	Fine	Moderate	11:45	7.1	Surface	1.0	0.2	18	18.2	18.2	8.1	8.1	30.4	30.4	98.8	98.8	7.8	7.8	13.1	13.1	10	72	74	820547	804944	<0.2	<0.2	1.5	1.5			
						1.0	0.2	18	18.2	18.2	8.1	8.1	30.4	30.4	98.8	98.8	7.8	7.8	13.1	13.1	10	73	73	73	820547	804944	<0.2	<0.2	1.3	1.3		
					Middle	3.6	0.2	7	17.9	17.9	8.1	8.1	30.8	30.8	97.6	97.6	7.7	7.7	15.6	15.6	10	74	74	74	820547	804944	<0.2					

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

Water Quality Monitoring

Water Quality Monitoring Results on 02 January 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity (NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)					
					Value	Average			Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA		
IM9	Cloudy	Moderate	12:19	7.2	Surface	1.0	0.1	123	18.6	18.6	8.2	8.2	29.4	29.4	99.4	99.4	7.8	7.8	10.5	7.8	10	72	74	822074	808788	<0.2	1.4	1.5	1.4					
						1.0	0.1	130	18.6	18.6	8.2	8.2	29.4	29.4	99.4	99.4	7.8	7.8	10.5	7.8	8	73	74	74	74	<0.2	1.3	1.5	1.6					
					Middle	3.6	0.1	80	18.4	18.4	8.2	8.2	29.5	29.5	98.9	98.9	7.8	7.8	10.5	7.8	10.5	7.8	9	74	74	74	74	<0.2	1.6	1.5	1.6	1.4		
						3.6	0.2	84	18.4	18.4	8.2	8.2	29.5	29.5	98.9	98.9	7.8	7.8	10.5	7.8	10	76	76	76	76	<0.2	1.4	1.5	1.6	1.4				
					Bottom	6.2	0.2	57	18.4	18.4	8.2	8.2	29.5	29.5	99.2	99.2	7.8	7.8	10.3	7.8	10.3	7.8	8	76	76	76	76	<0.2	1.4	1.5	1.6	1.4		
						6.2	0.2	57	18.4	18.4	8.2	8.2	29.5	29.5	99.1	99.2	7.8	7.8	10.3	7.8	10.3	7.8	8	76	76	76	76	<0.2	1.4	1.5	1.6	1.4		
IM10	Cloudy	Moderate	12:29	8.4	Surface	1.0	0.4	98	18.6	18.6	8.2	8.2	29.3	29.3	99.1	99.1	7.8	7.8	10.2	7.8	9	73	74	822236	809849	<0.2	1.4	1.5	1.6	1.5				
						1.0	0.4	103	18.6	18.6	8.2	8.2	29.3	29.3	99.0	99.1	7.8	7.8	10.3	7.8	8	72	74	74	74	<0.2	1.6	1.6	1.6	1.6				
					Middle	4.2	0.4	102	18.3	18.3	8.2	8.2	29.6	29.6	98.2	98.3	7.7	7.7	10.3	7.7	10.3	7.7	9	74	74	74	74	<0.2	1.6	1.5	1.6	1.5		
						4.2	0.4	112	18.3	18.3	8.2	8.2	29.6	29.6	98.3	98.3	7.8	7.8	10.3	7.8	12	76	76	76	76	<0.2	1.4	1.4	1.4	1.4				
					Bottom	7.4	0.3	111	18.3	18.3	8.2	8.2	29.6	29.6	98.3	98.3	7.7	7.7	11.8	7.7	11.8	7.7	12	76	76	76	76	<0.2	1.4	1.4	1.4	1.4		
						7.4	0.3	114	18.3	18.3	8.2	8.2	29.6	29.6	98.3	98.3	7.8	7.8	11.9	7.8	11.9	7.8	10	76	76	76	76	<0.2	1.6	1.6	1.6	1.6		
IM11	Cloudy	Moderate	12:39	8.3	Surface	1.0	0.3	110	18.6	18.6	8.3	8.3	29.1	29.1	98.4	98.4	7.7	7.7	11.5	7.7	10	72	74	821519	810551	<0.2	1.7	1.6	1.7	1.6				
						1.0	0.3	120	18.6	18.6	8.3	8.3	29.1	29.1	98.4	98.4	7.7	7.7	11.4	7.7	9	72	74	74	74	<0.2	1.5	1.5	1.5	1.5				
					Middle	4.2	0.3	92	18.5	18.5	8.3	8.3	29.2	29.2	98.4	98.4	7.8	7.8	11.9	7.8	12	74	74	74	74	<0.2	1.6	1.6	1.6	1.6				
						4.2	0.3	98	18.5	18.5	8.3	8.3	29.2	29.2	98.4	98.4	7.8	7.8	12.0	7.8	13	74	74	74	74	<0.2	1.6	1.6	1.6	1.6				
					Bottom	7.3	0.3	81	18.4	18.4	8.2	8.2	29.6	29.6	98.6	98.6	7.8	7.8	12.6	7.8	12.6	7.8	12	76	76	76	76	<0.2	1.6	1.6	1.6	1.6		
						7.3	0.3	83	18.4	18.4	8.2	8.2	29.6	29.6	98.6	98.6	7.8	7.8	12.7	7.8	12.7	7.8	12	76	76	76	76	<0.2	1.6	1.6	1.6	1.6		
IM12	Cloudy	Moderate	12:48	8.8	Surface	1.0	0.3	83	18.6	18.6	8.2	8.2	29.1	29.1	98.8	98.8	7.8	7.8	10.8	7.8	9	72	74	821147	811529	<0.2	1.6	1.7	1.7	1.7				
						1.0	0.4	86	18.6	18.6	8.2	8.2	29.1	29.1	98.8	98.8	7.8	7.8	10.9	7.8	10	74	74	74	74	<0.2	1.5	1.5	1.5	1.5				
					Middle	4.4	0.5	89	18.6	18.6	8.2	8.2	29.2	29.2	98.9	98.9	7.8	7.8	12.6	7.8	12.6	7.8	10	74	74	74	74	<0.2	1.8	1.8	1.8	1.8		
						4.4	0.5	93	18.6	18.6	8.2	8.2	29.2	29.2	98.9	98.9	7.8	7.8	12.6	7.8	12.6	7.8	9	74	74	74	74	<0.2	1.5	1.5	1.5	1.5		
					Bottom	7.8	0.3	105	18.4	18.4	8.1	8.1	29.7	29.7	98.6	98.6	7.8	7.8	8.7	7.8	8.7	7.8	11	76	76	76	76	<0.2	1.8	1.8	1.8	1.8		
						7.8	0.3	108	18.4	18.4	8.1	8.1	29.7	29.7	98.6	98.6	7.8	7.8	8.8	7.8	8.8	7.8	10	76	76	76	76	<0.2	1.7	1.7	1.7	1.7		
SR2	Cloudy	Moderate	13:15	3.6	Surface	1.0	0.3	80	18.5	18.5	8.1	8.1	29.7	29.7	99.2	99.2	7.8	7.8	6.1	7.8	10	72	73	821458	814190	<0.2	1.6	1.4	1.4	1.4				
						1.0	0.3	85	18.5	18.5	8.1	8.1	29.7	29.7	99.2	99.2	7.8	7.8	6.1	7.8	9	72	72	72	72	<0.2	1.2	1.2	1.2	1.2				
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					Bottom	2.6	0.2	83	18.5	18.5	8.1	8.1	29.7	29.7	99.4	99.4	7.8	7.8	6.3	7.8	6.3	7.8	8	73	73	73	73	<0.2	1.3	1.3	1.3	1.3		
						2.6	0.2	88	18.5	18.5	8.1	8.1	29.7	29.7	99.3	99.4	7.8	7.8	6.4	7.8	6.4	7.8	9	73	73	73	73	<0.2	1.4	1.4	1.4	1.4		
SR3	Cloudy	Moderate	12:04	9.0	Surface	1.0	0.3	94	18.5	18.5	8.1	8.1	27.9	27.9	99.1	99.2	7.9	7.9	10.0	7.9	9	-	-	822141	807547	-	-	-	-	-				
						1.0	0.3	94	18.5	18.5	8.1	8.1	27.9	27.9	99.2	99.2	7.9	7.9	10.1	7.9	11	-	-	-	-	-	-	-	-	-	-			
					Middle	4.5	0.3	81	18.4	18.4	8.1	8.1	28.0	28.0	98.9	98.9	7.9	7.9	12.5	7.9	12.5	7.9	9	-	-	-	-	-	-	-	-	-	-	
						4.5	0.3	86	18.4	18.4	8.1	8.1	28.0	28.0	98.9	98.9	7.9	7.9	12.6	7.9	12.6	7.9	11	-	-	-	-	-	-	-	-	-	-	
					Bottom	8.0	0.4	75	18.3	18.3	8.1	8.1	28.1	28.1	99.1	99.1	7.9	7.9	13.5	7.9	13.5	7.9	11	-	-	-	-	-	-	-	-	-	-	-
						8.0	0.4	81	18.3	18.3	8.1	8.1	28.1	28.1	99.0	99.0	7.9	7.9	13.6	7.9	13.6	7.9	11	-	-	-	-	-	-	-	-	-	-	-
SR4A	Fine	Calm	12:53	8.5	Surface	1.0	0.4	89	18.1	18.1	8.1	8.1	30.6	30.6	99.6	99.6	7.8	7.8	9.0	7.8	11	-	-	821785	807810	-	-	-	-	-				
						1.0	0.4	92	18.1	18.1	8.1	8.1	30.6	30.6	99.6	99.6	7.8	7.8	9.0	7.8	9.0	7.8	11	-	-	-	-	-	-	-	-			
					Middle	4.3	0.4	82	18.1	18.1	8.1	8.1	30.6	30.6	99.2	99.2	7.8	7.8	9.2	7.8	9.2	7.8	14	-	-	-	-	-	-	-	-	-	-	
						4.3	0.4	86	18.1	18.1	8.1	8.1	30.6	30.6	99.2	99.2	7.8	7.8	9.2	7.8	9.2	7.8	14	-	-	-	-	-	-	-	-	-		
					Bottom	7.5	0.4	70	18.1	18.1	8.1	8.1	30.6	30.6	98.9	98.9	7.8	7.8	9.3	7.8	9.3	7.8	14	-	-	-	-	-	-	-	-	-	-	
						7.5	0.4	75	18.1	18.1	8.1	8.1	30.6	30.6	98.9	98.9	7.8	7.8	9.3	7.8	9.3	7.8	13	-	-	-	-	-	-	-	-	-		
SR5A	Fine	Calm	13:08	5.1	Surface	1.0	0.1	50	18.3	18.3	8.1	8.1	30.9	30.9	103.8	103.8	8.1	8.1	5.6	8.1	8	-	-	816565	810719	-	-	-	-	-				
						1.0	0.1	50	18.3	18.3	8.1	8.1	30.9	30.9	103.8	103.8	8.1	8.1	5.6	8.1	9	-	-	-	-	-	-	-	-	-				
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
					Bottom	4.1	0.1	49	18.3	18.3	8.1	8.1	30.9	30.9	102.4	102.4	8.0	8.0	6.5	8.0	6.5	8.0	10	-	-	-	-	-	-	-	-	-		
						4.1	0.1	53	18.3	18.3																								

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

Water Quality Monitoring

Water Quality Monitoring Results on 02 January 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
									Value	DA	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	07:55	8.4	Surface	1.0	0.5	39	17.9	17.9	8.1	8.1	30.8	30.8	97.9	97.9	7.7	7.7	14.2	13	73	73	815616	804270	<0.2	<0.2	1.6	1.4		
						1.0	0.5	41	17.9	8.1	8.1	30.8	30.8	97.9	97.9	7.7	7.7	14.2	12	73	73	<0.2	<0.2	1.5	1.5					
						4.2	0.5	34	17.9	17.9	8.1	8.1	30.8	30.8	97.6	97.6	7.7	7.7	21.4	15	76	76	<0.2	<0.2	1.5	1.4				
					Middle	4.2	0.6	34	17.9	17.9	8.1	8.1	30.8	30.8	97.6	97.6	7.7	7.7	21.4	14	76	76	<0.2	<0.2	1.5	1.4				
						7.4	0.5	34	17.9	17.9	8.1	8.1	30.8	30.8	97.5	97.5	7.7	7.7	26.1	26	77	77	<0.2	<0.2	1.4	1.4				
						7.4	0.5	36	17.9	17.9	8.1	8.1	30.8	30.8	97.6	97.6	7.7	7.7	26.7	27	77	77	<0.2	<0.2	1.1	1.1				
C2	Cloudy	Moderate	08:43	11.6	Surface	1.0	0.4	322	18.6	18.6	8.1	8.1	27.5	27.5	96.3	96.4	7.7	7.7	10.7	11	73	73	825704	806929	<0.2	<0.2	1.6	1.5		
						1.0	0.5	338	18.6	18.6	8.1	8.1	27.5	27.5	96.4	96.4	7.7	7.7	10.8	9	73	73	<0.2	<0.2	1.7	1.7				
						5.8	0.4	338	18.6	18.6	8.1	8.1	27.6	27.6	95.7	95.7	7.6	7.6	14.3	9	75	75	<0.2	<0.2	1.8	1.8				
					Middle	5.8	0.4	311	18.6	18.6	8.1	8.1	27.6	27.6	95.7	95.7	7.6	7.6	14.5	11	75	75	<0.2	<0.2	1.4	1.4				
						10.6	0.3	20	18.5	18.5	8.1	8.1	27.8	27.8	96.3	96.4	7.7	7.7	36.2	11	77	77	<0.2	<0.2	1.3	1.3				
						10.6	0.3	21	18.5	18.5	8.1	8.1	27.8	27.8	96.4	96.4	7.7	7.7	36.1	9	77	77	<0.2	<0.2	1.3	1.3				
C3	Cloudy	Moderate	06:53	10.8	Surface	1.0	0.4	252	18.5	18.5	8.1	8.1	30.3	30.3	97.2	97.2	7.6	7.6	7.5	9	73	73	822118	817808	<0.2	<0.2	1.9	1.9		
						1.0	0.4	268	18.5	18.5	8.1	8.1	30.3	30.3	97.2	97.2	7.6	7.6	7.5	8	73	73	<0.2	<0.2	1.8	1.8				
						5.4	0.4	260	18.5	18.5	8.1	8.1	30.4	30.4	97.2	97.2	7.6	7.6	9.1	13	75	75	<0.2	<0.2	1.7	1.7				
					Middle	5.4	0.4	273	18.5	18.5	8.1	8.1	30.4	30.4	97.2	97.2	7.6	7.6	9.2	15	75	75	<0.2	<0.2	1.8	1.8				
						9.8	0.3	276	18.4	18.4	8.1	8.1	30.6	30.6	96.9	96.9	7.6	7.6	14.4	16	77	77	<0.2	<0.2	2.0	2.0				
						9.8	0.3	302	18.4	18.4	8.1	8.1	30.6	30.6	96.9	96.9	7.6	7.6	14.5	14	76	76	<0.2	<0.2	1.9	1.9				
IM1	Fine	Moderate	08:12	7.1	Surface	1.0	0.5	14	18.1	18.1	8.1	8.1	30.4	30.4	97.7	97.7	7.7	7.7	11.1	11	73	73	818348	806455	<0.2	<0.2	1.4	1.3		
						1.0	0.5	14	18.1	18.1	8.1	8.1	30.4	30.4	97.7	97.7	7.7	7.7	11.1	11	73	73	<0.2	<0.2	1.3	1.3				
						3.6	0.5	4	18.0	18.0	8.1	8.1	30.6	30.6	97.5	97.5	7.7	7.7	14.9	11	74	74	<0.2	<0.2	1.6	1.6				
					Middle	3.6	0.5	4	18.0	18.0	8.1	8.1	30.6	30.6	97.5	97.5	7.7	7.7	14.9	11	74	74	<0.2	<0.2	1.4	1.4				
						6.1	0.4	354	18.0	18.0	8.1	8.1	30.7	30.7	97.3	97.3	7.7	7.7	27.7	18	75	75	<0.2	<0.2	1.0	1.0				
						6.1	0.4	326	18.0	18.0	8.1	8.1	30.7	30.7	97.3	97.3	7.7	7.7	27.7	19	76	76	<0.2	<0.2	1.1	1.1				
IM2	Fine	Moderate	08:19	8.0	Surface	1.0	0.5	21	18.2	18.2	8.1	8.1	30.3	30.3	97.5	97.5	7.7	7.7	12.0	13	73	73	818852	806201	<0.2	<0.2	1.6	1.4		
						1.0	0.5	21	18.2	18.2	8.1	8.1	30.3	30.3	97.5	97.5	7.7	7.7	12.0	13	74	74	<0.2	<0.2	1.5	1.5				
						4.0	0.5	15	18.1	18.1	8.1	8.1	30.4	30.4	97.3	97.3	7.7	7.7	15.1	17	74	74	<0.2	<0.2	1.4	1.4				
					Middle	4.0	0.5	15	18.1	18.1	8.1	8.1	30.4	30.4	97.3	97.3	7.7	7.7	15.1	17	75	75	<0.2	<0.2	1.3	1.3				
						7.0	0.4	11	18.1	18.1	8.1	8.1	30.4	30.4	97.7	97.7	7.7	7.7	27.4	24	76	76	<0.2	<0.2	1.2	1.2				
						7.0	0.4	11	18.1	18.1	8.1	8.1	30.4	30.4	97.7	97.7	7.7	7.7	27.4	26	76	76	<0.2	<0.2	1.3	1.3				
IM3	Fine	Moderate	08:29	8.0	Surface	1.0	0.5	34	18.2	18.2	8.1	8.1	30.2	30.2	97.3	97.3	7.7	7.7	12.0	10	73	73	819415	806015	<0.2	<0.2	1.6	1.4		
						1.0	0.5	35	18.2	18.2	8.1	8.1	30.2	30.2	97.3	97.3	7.7	7.7	12.0	11	73	73	<0.2	<0.2	1.5	1.5				
						4.0	0.5	31	18.2	18.2	8.1	8.1	30.3	30.3	97.2	97.2	7.7	7.7	16.3	12	75	75	<0.2	<0.2	1.4	1.4				
					Middle	4.0	0.5	33	18.2	18.2	8.1	8.1	30.3	30.3	97.2	97.2	7.7	7.7	16.3	13	75	75	<0.2	<0.2	1.4	1.4				
						7.0	0.4	21	18.1	18.1	8.1	8.1	30.4	30.4	97.5	97.5	7.7	7.7	19.9	15	76	76	<0.2	<0.2	1.4	1.4				
						7.0	0.4	22	18.1	18.1	8.1	8.1	30.4	30.4	97.5	97.5	7.7	7.7	19.9	15	76	76	<0.2	<0.2	1.2	1.2				
IM4	Fine	Moderate	08:37	7.5	Surface	1.0	0.5	17	18.1	18.1	8.1	8.1	30.4	30.4	97.2	97.2	7.7	7.7	15.8	13	73	73	819546	805018	<0.2	<0.2	1.1	1.3		
						1.0	0.5	17	18.1	18.1	8.1	8.1	30.4	30.4	97.2	97.2	7.7	7.7	15.8	14	74	74	<0.2	<0.2	1.3	1.3				
						3.8	0.4	18	18.1	18.1	8.1	8.1	30.4	30.4	96.9	97.0	7.6	7.6	19.8	14	75	75	<0.2	<0.2	1.2	1.2				
					Middle	3.8	0.5	18	18.1	18.1	8.1	8.1	30.4	30.4	97.0	97.0	7.6	7.6	19.9	16	75	75	<0.2	<0.2	1.4	1.4				
						6.5	0.4	13	18.1	18.1	8.1	8.1	30.4	30.4	97.0	97.0	7.6	7.6	26.5	16	76	76	<0.2	<0.2	1.2	1.2				
						6.5	0.4	13	18.1	18.1	8.1	8.1	30.4	30.4	97.0	97.0	7.6	7.6	26.2	17	76	76	<0.2	<0.2	1.3	1.3				
IM5	Fine	Moderate	08:44	6.7	Surface	1.0	0.6	9	18.2	18.2	8.1	8.1	30.3	30.3	97.1	97.1	7.6	7.6	18.0	16	73	73	820573	804944	<0.2	<0.2	1.3	1.3		
						1.0	0.6	9	18.2	18.2	8.1	8.1	30.3	30.3	97.1	97.1	7.6	7.6	18.0	15	73	73	<0.2	<0.2	1.4	1.4				
						3.4	0.6	13	18.2	18.2	8.1	8.1	30.3	30.3	97.1	97.1	7.6	7.6	17.7	23	74	74	<0.2	<0.2	1.3	1.3				
					Middle	3.4	0.6	13	18.2	18.2	8.1	8.1	30.3	30.3	97.1	97.1	7.6	7.6	17.7	22	74	74	<0.2	<0.2	1.3	1.3				
						5.7	0.5	12	18.2	18.2	8.1	8.1	30.3	30.3	97.7	97.7	7.7	7.7	28.8	26	75	75	<0.2	<0.2	1.4	1.4				
						5.7	0.5	12	18.2	18.2	8.1	8.1	30.3	30.3	97.7	97.7	7.7	7.7	28.8	26	76	76	<0.2	<0.2	1.2	1.2				
IM6	Fine	Moderate	08:50	6.7	Surface	1.0	0.4	27	18.1	18.1	8.1	8.1	30.4	30.4	97.3	97.3	7.7	7.7	9.6	11	73	73	821086	805849	<0.2	<0.2	1.3	1.3		
						1.0	0.4	29	18.1	18.1	8.1	8.1	30.4	30.4	97.3	97.3	7.7	7.7	9.6	10	73	73	<0.2	<0.2	1.4	1.4				
						3.4	0.4	20	18.1	18.1	8.1	8.1	30.4	30.4	97.3	97.3	7.7	7.7	10.1	12	74	74	<0.2	<0.2	1.2	1.2				
					Middle	3.4	0.4	20	18.1	18.1	8.1	8.1	30.4	30.4	97.3	97.3	7.7	7.7	10.1	12	74	74	<0.2	<0.2	1.4	1.4				
						5.7	0.4	22	18.1	18.1	8.1	8.1	30.5	30.5	97.5	97.5	7.7	7.7	9.3	12</										

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

Water Quality Monitoring

Water Quality Monitoring Results on 02 January 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity (NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)							
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA	Value	DA	Value	DA
IM9	Cloudy	Moderate	08:06	6.8	Surface	1.0	0.1	358	18.6	18.6	8.1	8.1	28.0	28.0	96.1	96.1	7.6	7.6	16.7	7.6	13	14	73	75	822104	808840	<0.2	1.4	1.4							
						1.0	0.1	329	18.6	18.6	8.1	8.1	28.0	28.0	96.1	96.1	7.6	7.6	16.7	7.6	12	14	73	75			<0.2	1.3								
					Middle	3.4	0.2	354	18.6	18.6	8.1	8.1	28.1	28.1	96.5	96.5	7.6	7.6	22.4	7.6	14	14	75	75			<0.2	1.5								
						3.4	0.2	326	18.6	18.6	8.1	8.1	28.1	28.1	96.5	96.5	7.6	7.6	22.3	7.6	15	14	76	75			<0.2	1.4								
					Bottom	5.8	0.2	8	18.6	18.6	8.1	8.1	28.2	28.2	96.8	96.8	7.7	7.7	25.3	7.7	17	14	77	77			<0.2	1.8								
						5.8	0.2	8	18.6	18.6	8.1	8.1	28.2	28.2	96.7	96.8	7.7	7.7	25.3	7.7	14	14	77	77			<0.2	1.5								
IM10	Cloudy	Moderate	07:59	7.4	Surface	1.0	0.4	320	18.6	18.6	8.1	8.1	27.9	27.9	96.2	96.2	7.6	7.6	18.7	7.6	11	14	73	75	822257	809836	<0.2	1.4	1.7							
						1.0	0.4	342	18.6	18.6	8.1	8.1	27.9	27.9	96.1	96.2	7.6	7.6	18.8	7.6	12	14	73	75			<0.2	1.5								
					Middle	3.7	0.4	318	18.6	18.6	8.1	8.1	28.0	28.0	96.0	96.1	7.6	7.6	21.4	7.6	15	14	75	75			<0.2	1.7								
						3.7	0.4	325	18.6	18.6	8.1	8.1	28.0	28.0	96.1	96.1	7.6	7.6	21.6	7.6	14	14	75	75			<0.2	2.0								
					Bottom	6.4	0.4	319	18.6	18.6	8.1	8.1	28.3	28.3	96.5	96.5	7.6	7.6	24.1	7.6	17	17	77	77			<0.2	1.8								
						6.4	0.4	342	18.6	18.6	8.1	8.1	28.3	28.3	96.5	96.5	7.6	7.6	24.0	7.6	17	17	77	77			<0.2	1.8								
IM11	Cloudy	Moderate	07:47	7.0	Surface	1.0	0.5	293	18.5	18.5	8.1	8.1	30.0	30.0	97.5	97.5	7.6	7.6	14.8	7.6	14	15	73	75	821518	810519	<0.2	1.3	1.7							
						1.0	0.5	322	18.5	18.5	8.1	8.1	30.1	30.1	97.5	97.5	7.6	7.6	15.0	7.6	14	15	73	75			<0.2	1.3								
					Middle	3.5	0.4	297	18.5	18.5	8.1	8.1	30.1	30.1	97.5	97.6	7.6	7.6	17.2	7.6	15	15	76	75			<0.2	1.7								
						3.5	0.4	311	18.5	18.5	8.1	8.1	30.1	30.1	97.6	97.6	7.7	7.7	17.1	7.7	16	15	76	75			<0.2	1.7								
					Bottom	6.0	0.4	303	18.5	18.5	8.1	8.1	30.1	30.1	97.6	97.6	7.7	7.7	27.7	7.7	14	14	77	77			<0.2	2.2								
						6.0	0.4	322	18.5	18.5	8.1	8.1	30.1	30.1	97.6	97.6	7.7	7.7	28.1	7.7	15	15	77	77			<0.2	2.0								
IM12	Cloudy	Moderate	07:41	6.9	Surface	1.0	0.5	280	18.4	18.4	8.1	8.1	29.2	29.2	98.5	98.5	7.8	7.8	9.4	7.8	10	12	74	75	821172	811531	<0.2	1.7	1.3							
						1.0	0.6	306	18.4	18.4	8.1	8.1	29.2	29.2	98.5	98.5	7.8	7.8	9.6	7.8	11	12	73	75			<0.2	1.5								
					Middle	3.5	0.6	280	18.4	18.4	8.1	8.1	29.3	29.3	98.7	98.7	7.8	7.8	12.8	7.8	12	12	75	75			<0.2	1.3								
						3.5	0.6	299	18.4	18.4	8.1	8.1	29.3	29.3	98.7	98.7	7.8	7.8	12.8	7.8	13	12	76	75			<0.2	1.0								
					Bottom	5.9	0.5	277	18.4	18.4	8.1	8.1	29.3	29.3	98.6	98.6	7.8	7.8	21.4	7.8	13	13	77	77			<0.2	1.0								
						5.9	0.5	293	18.4	18.4	8.1	8.1	29.3	29.3	98.6	98.6	7.8	7.8	21.9	7.8	12	12	77	77			<0.2	1.3								
SR2	Cloudy	Moderate	07:14	3.9	Surface	1.0	0.4	350	18.3	18.3	8.1	8.1	29.6	29.6	97.5	97.5	7.7	7.7	15.8	7.7	10	12	73	74	821476	814187	<0.2	1.0	1.1							
						1.0	0.4	322	18.3	18.3	8.1	8.1	29.6	29.6	97.5	97.5	7.7	7.7	16.0	7.7	12	12	73	74			<0.2	1.0								
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-		-	-	-	-	-		
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-		-	-	-	-	-		
					Bottom	2.9	0.3	352	18.2	18.2	8.1	8.1	30.0	30.0	98.0	98.1	7.7	7.7	25.7	7.7	12	12	75	75			<0.2	1.3								
						2.9	0.3	324	18.2	18.2	8.1	8.1	30.0	30.0	98.1	98.1	7.7	7.7	25.4	7.7	14	14	75	75			<0.2	1.2								
SR3	Cloudy	Moderate	08:22	8.6	Surface	1.0	0.2	354	18.6	18.6	8.1	8.1	28.2	28.2	96.1	96.1	7.6	7.6	16.6	7.6	12	12	-	-	822150	807559	-	-	-							
						1.0	0.2	326	18.6	18.6	8.1	8.1	28.2	28.2	96.1	96.1	7.6	7.6	16.7	7.6	11	12	-	-												
					Middle	4.3	0.4	10	18.5	18.5	8.1	8.1	28.5	28.5	96.2	96.2	7.6	7.6	19.6	7.6	12	12	-	-			-	-								
						4.3	0.4	10	18.5	18.5	8.1	8.1	28.5	28.5	96.1	96.1	7.6	7.6	19.4	7.6	12	12	-	-			-	-								
					Bottom	7.6	0.3	22	18.5	18.5	8.1	8.1	28.7	28.7	96.4	96.4	7.6	7.6	22.4	7.6	13	13	-	-			-	-								
						7.6	0.3	22	18.5	18.5	8.1	8.1	28.7	28.7	96.4	96.4	7.6	7.6	22.6	7.6	14	14	-	-			-	-								
SR4A	Fine	Calm	07:33	8.7	Surface	1.0	0.2	250	18.2	18.2	8.1	8.1	30.8	30.8	100.8	100.8	7.9	7.9	7.5	7.9	7	10	-	-	817206	807817	-	-	-							
						1.0	0.2	263	18.2	18.2	8.1	8.1	30.8	30.8	100.8	100.8	7.9	7.9	7.5	7.9	7	10	-	-												
					Middle	4.4	0.2	240	18.2	18.2	8.1	8.1	30.8	30.8	100.4	100.4	7.9	7.9	8.1	7.9	8	10	-	-			-	-								
						4.4	0.2	246	18.2	18.2	8.1	8.1	30.8	30.8	100.4	100.4	7.9	7.9	8.1	7.9	9	10	-	-			-	-								
					Bottom	7.7	0.1	233	18.2	18.2	8.1	8.1	30.8	30.8	99.8	99.8	7.8	7.8	8.5	7.8	12	12	-	-			-	-								
						7.7	0.1	245	18.2	18.2	8.1	8.1	30.8	30.8	99.8	99.8	7.8	7.8	8.5	7.8	12	12	-	-			-	-								
SR5A	Fine	Calm	07:17	3.7	Surface	1.0	0.2	298	18.1	18.1	8.1	8.1	30.8	30.8	100.2	100.2	7.9	7.9	8.0	7.9	10	10	-	-	816622	810708	-	-	-							
						1.0	0.2	325	18.1	18.1	8.1	8.1	30.8	30.8	100.2	100.2	7.9	7.9	8.0	7.9	9	10	-	-												
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-		-	-	-	-	-		
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-		-	-	-	-			
					Bottom	2.7	0.2	290	18.1	18.1	8.1	8.1	30.8	30.8	100.0	100.0	7.9	7.9	7.2	7.9	10	10	-	-			-	-								
						2.7	0.2	298	18.1	18.1	8.1	8.1	30.8	30.8	100.0	100.0	7.9	7.9	7.2	7.9	9	10	-	-			-	-								
SR6	Fine	Calm	06:54	3.3	Surface	1.0	0.2	246	18.2	18.2	8.1	8.1	30.0	30.0	97.8	97.8	7.7	7.7	4.3	7.7	11	10	-	-	817884	814634	-	-	-							
						1.0	0.2	268	18.2	18.2	8.1	8.1	30.0	30.0	97.8	97.8	7.7	7.7	4.3	7.7	10	10	-	-												
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-		-	-	-	-			
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-		-	-	-				
					Bottom	2.3	0.2	254	18.2	18.2	8.1	8.1	29.8	29.8	98.6	98.6	7.8	7.8	4.6	7.8	11	10	-	-			-	-								
						2.3	0.2	266	18.2	18.2	8.1	8.1	29.8	29.8	98.6	98.6	7.8	7.8	4.6	7.8	9	10	-	-			-	-								
SR7	Cloudy	Moderate	06:20	18.6	Surface																															

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

Water Quality Monitoring

Water Quality Monitoring Results on 04 January 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)			
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA
C1	Cloudy	Moderate	14:10	8.7	Surface	1.0	0.1	218	18.2	18.2	8.1	8.1	29.5	29.5	96.2	96.2	7.6	7.6	13.4	7.6	8	73	75	815647	804250	<0.2	1.0	<0.2	0.9			
						1.0	0.1	231	18.2	8.1	8.1	29.5	29.5	96.2	96.2	7.6	7.6	13.3	7.6	10	75	75	75									
					Middle	4.4	0.1	216	18.2	18.2	8.1	8.1	29.8	29.8	96.0	96.0	7.6	7.6	15.1	7.6	10	75	75	75	75	815647	804250	<0.2	0.9	<0.2	0.8	
						4.4	0.2	228	18.2	18.2	8.1	8.1	29.8	29.8	96.0	96.0	7.6	7.6	15.2	7.6	10	75	75	75	75	815647	804250	<0.2	0.8	<0.2	0.9	
					Bottom	7.7	0.2	213	18.1	18.1	8.1	8.1	30.9	30.9	96.0	96.0	7.6	7.6	19.6	7.6	11	76	76	76	76	76	815647	804250	<0.2	0.9	<0.2	0.9
						7.7	0.2	213	18.1	18.1	8.1	8.1	30.9	30.9	96.0	96.0	7.6	7.6	19.7	7.6	10	77	77	77	77	77	815647	804250	<0.2	0.9	<0.2	0.9
C2	Cloudy	Moderate	13:10	12.1	Surface	1.0	0.1	315	19.1	19.1	8.0	8.0	28.1	28.1	96.8	96.8	7.6	7.6	9.9	7.6	8	72	73	825659	806942	<0.2	2.6	<0.2	2.1			
						1.0	0.2	326	19.1	19.1	8.0	8.0	28.1	28.1	96.8	96.8	7.6	7.6	9.9	7.6	7	72	72	72	72	825659	806942	<0.2	2.4	<0.2	2.1	
					Middle	6.1	0.2	25	19.0	19.0	8.0	8.0	28.5	28.5	97.1	97.1	7.6	7.6	10.3	7.6	7	73	73	73	73	825659	806942	<0.2	2.2	<0.2	2.2	
						6.1	0.2	25	19.0	19.0	8.0	8.0	28.5	28.5	97.1	97.1	7.6	7.6	10.3	7.6	7	73	73	73	73	825659	806942	<0.2	2.2	<0.2	2.2	
					Bottom	11.1	0.3	60	18.9	18.9	8.0	8.0	29.1	29.1	96.9	96.9	7.6	7.6	20.5	7.6	6	75	75	75	75	75	825659	806942	<0.2	2.4	<0.2	2.4
						11.1	0.3	63	18.9	18.9	8.0	8.0	29.1	29.1	96.9	96.9	7.6	7.6	20.5	7.6	7	75	75	75	75	75	825659	806942	<0.2	2.2	<0.2	2.2
C3	Cloudy	Moderate	14:57	11.6	Surface	1.0	0.5	75	18.8	18.8	8.1	8.1	30.1	30.1	97.1	97.1	7.6	7.6	6.8	7.6	3	73	73	822104	817826	<0.2	0.9	<0.2	0.9			
						1.0	0.5	77	18.8	18.8	8.1	8.1	30.1	30.1	97.1	97.1	7.6	7.6	6.8	7.6	4	73	73	73	73	822104	817826	<0.2	0.9	<0.2	0.9	
					Middle	5.8	0.4	77	18.8	18.8	8.1	8.1	30.3	30.3	96.6	96.6	7.5	7.5	9.8	7.5	4	75	75	75	75	822104	817826	<0.2	0.8	<0.2	0.8	
						5.8	0.4	78	18.8	18.8	8.1	8.1	30.3	30.3	96.6	96.6	7.5	7.5	9.8	7.5	5	75	75	75	75	822104	817826	<0.2	0.9	<0.2	0.9	
					Bottom	10.6	0.4	101	18.7	18.7	8.0	8.0	30.4	30.4	96.8	96.8	7.5	7.5	17.8	7.5	5	76	76	76	76	76	822104	817826	<0.2	0.9	<0.2	0.9
						10.6	0.4	101	18.7	18.7	8.0	8.0	30.4	30.4	96.8	96.8	7.5	7.5	17.8	7.5	5	78	78	78	78	78	822104	817826	<0.2	0.9	<0.2	0.9
IM1	Cloudy	Moderate	13:52	7.5	Surface	1.0	0.1	152	18.3	18.3	8.1	8.1	29.8	29.8	97.0	97.0	7.7	7.7	10.3	7.7	10	73	73	818346	806483	<0.2	1.0	<0.2	0.9			
						1.0	0.1	160	18.3	18.3	8.1	8.1	29.8	29.8	97.0	97.0	7.7	7.7	10.3	7.7	10	73	73	73	73	818346	806483	<0.2	0.8	<0.2	0.9	
					Middle	3.8	0.1	110	18.3	18.3	8.1	8.1	30.0	30.0	96.9	96.9	7.6	7.6	10.4	7.6	11	75	75	75	75	818346	806483	<0.2	1.0	<0.2	1.0	
						3.8	0.1	120	18.3	18.3	8.1	8.1	30.0	30.0	96.9	96.9	7.6	7.6	10.5	7.6	10	75	75	75	75	818346	806483	<0.2	1.0	<0.2	1.0	
					Bottom	6.5	0.0	122	18.4	18.4	8.1	8.1	30.0	30.0	97.1	97.1	7.6	7.6	10.8	7.6	11	76	76	76	76	76	818346	806483	<0.2	1.0	<0.2	1.0
						6.5	0.0	128	18.4	18.4	8.1	8.1	30.0	30.0	97.1	97.1	7.6	7.6	10.8	7.6	10	77	77	77	77	77	818346	806483	<0.2	1.1	<0.2	1.1
IM2	Cloudy	Moderate	13:45	8.5	Surface	1.0	0.1	347	18.2	18.2	8.1	8.1	29.8	29.8	98.4	98.5	7.8	7.8	15.1	7.8	12	73	73	818836	806167	<0.2	1.1	<0.2	0.8			
						1.0	0.1	319	18.2	18.2	8.1	8.1	29.8	29.8	98.5	98.5	7.8	7.8	15.1	7.8	12	73	73	73	73	818836	806167	<0.2	1.0	<0.2	0.8	
					Middle	4.3	0.1	44	18.1	18.1	8.1	8.1	30.1	30.1	95.5	95.5	7.5	7.5	22.0	7.5	11	75	75	75	75	818836	806167	<0.2	1.1	<0.2	1.0	
						4.3	0.1	48	18.1	18.1	8.1	8.1	30.1	30.1	95.4	95.5	7.5	7.5	22.1	7.5	12	75	75	75	75	818836	806167	<0.2	1.0	<0.2	1.0	
					Bottom	7.5	0.1	50	18.1	18.1	8.1	8.1	30.2	30.2	95.7	95.7	7.6	7.6	28.2	7.6	12	77	77	77	77	77	818836	806167	<0.2	0.9	<0.2	0.9
						7.5	0.1	51	18.1	18.1	8.1	8.1	30.2	30.2	95.7	95.7	7.6	7.6	28.3	7.6	12	76	76	76	76	76	818836	806167	<0.2	0.9	<0.2	0.9
IM3	Cloudy	Moderate	13:37	8.6	Surface	1.0	0.2	5	18.3	18.3	8.1	8.1	29.5	29.5	96.8	96.8	7.6	7.6	13.5	7.6	10	73	73	819383	806018	<0.2	1.0	<0.2	1.1			
						1.0	0.2	5	18.3	18.3	8.1	8.1	29.5	29.5	96.8	96.8	7.6	7.6	13.4	7.6	12	73	73	73	73	819383	806018	<0.2	1.1	<0.2	1.1	
					Middle	4.3	0.1	15	18.1	18.1	8.1	8.1	29.9	29.9	95.7	95.7	7.6	7.6	19.7	7.6	11	75	75	75	75	819383	806018	<0.2	0.9	<0.2	0.9	
						4.3	0.1	16	18.1	18.1	8.1	8.1	29.9	29.9	95.7	95.7	7.6	7.6	19.8	7.6	11	75	75	75	75	819383	806018	<0.2	0.9	<0.2	0.9	
					Bottom	7.6	0.2	36	18.1	18.1	8.1	8.1	30.2	30.2	95.6	95.6	7.5	7.5	30.7	7.5	12	76	76	76	76	76	819383	806018	<0.2	0.9	<0.2	0.9
						7.6	0.2	36	18.1	18.1	8.1	8.1	30.2	30.2	95.6	95.6	7.5	7.5	30.6	7.5	12	76	76	76	76	76	819383	806018	<0.2	0.8	<0.2	0.8
IM4	Cloudy	Moderate	13:29	7.9	Surface	1.0	0.1	352	18.4	18.4	8.1	8.1	29.4	29.4	96.7	96.7	7.6	7.6	16.7	7.6	14	73	73	819542	805027	<0.2	0.9	<0.2	0.9			
						1.0	0.1	353	18.4	18.4	8.1	8.1	29.4	29.4	96.7	96.7	7.6	7.6	16.8	7.6	14	73	73	73	73	819542	805027	<0.2	0.9	<0.2	0.9	
					Middle	4.0	0.1	41	18.1	18.1	8.1	8.1	30.3	30.3	95.4	95.4	7.5	7.5	19.8	7.5	15	75	75	75	75	819542	805027	<0.2	0.5	<0.2	0.5	
						4.0	0.1	43	18.1	18.1	8.1	8.1	30.3	30.3	95.4	95.4	7.5	7.5	19.8	7.5	13	74	74	74	74	819542	805027	<0.2	1.1	<0.2	1.1	
					Bottom	6.9	0.1	40	18.1	18.1	8.1	8.1	30.4	30.4	95.5	95.5	7.5	7.5	26.5	7.5	14	76	76	76	76	76	819542	805027	<0.2	1.1	<0.2	1.1
						6.9	0.1	43	18.1	18.1	8.1	8.1	30.4	30.4	95.5	95.5	7.5	7.5	26.7	7.5	15	77	77	77	77	77	819542	805027	<0.2	1.0	<0.2	1.0
IM5	Cloudy	Moderate	13:20	7.1	Surface	1.0	0.2	6	18.5	18.5	8.1	8.1	29.4	29.4	96.9	96.9	7.6	7.6	16.8	7.6	15	73	73	820586	804936	<0.2	0.9	<0.2	0.9			
						1.0	0.3	6	18.5	18.5	8.1	8.1	29.4	29.4	96.9	96.9	7.6	7.6	16.8	7.6	16	73	73	73	73	820586	804936	<0.2	1.0	<0.2	1.0	
					Middle	3.6	0.2	4	18.1	18.1	8.1																					

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

Water Quality Monitoring

Water Quality Monitoring Results on 04 January 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)			
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA		
									Value	DA	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA
IM9	Cloudy	Rough	13:43	7.3	Surface	1.0	0.2	76	18.8	18.8	8.1	8.1	29.5	29.5	98.3	98.3	7.7	7.7	12.6	12.6	10	73	74	822093	808786	<0.2	<0.2	1.4	1.4			
						1.0	0.2	76	18.8	18.8	8.1	8.1	29.5	29.5	98.3	98.3	7.7	7.7	12.6	12.6	10	72	74	822093	808786	<0.2	<0.2	1.4	1.4			
					Middle	3.7	0.3	71	18.8	18.8	8.1	8.1	29.5	29.5	98.2	98.2	7.7	7.7	13.5	13.5	10	74	74	822093	808786	<0.2	<0.2	1.5	1.5			
						3.7	0.3	76	18.8	18.8	8.1	8.1	29.5	29.5	98.2	98.2	7.7	7.7	13.5	13.5	10	74	74	822093	808786	<0.2	<0.2	1.5	1.5			
					Bottom	6.3	0.2	56	18.7	18.7	8.1	8.1	29.6	29.6	98.4	98.4	7.7	7.7	14.3	14.3	12	75	75	822093	808786	<0.2	<0.2	1.6	1.6			
						6.3	0.2	58	18.7	18.7	8.1	8.1	29.6	29.6	98.4	98.4	7.7	7.7	14.3	14.3	12	75	75	822093	808786	<0.2	<0.2	1.3	1.3			
IM10	Cloudy	Rough	13:52	7.6	Surface	1.0	0.3	112	18.9	18.9	8.1	8.1	29.1	29.1	97.7	97.7	7.6	7.6	10.1	10.1	7	73	74	822252	809851	<0.2	<0.2	1.5	1.5			
						1.0	0.3	120	18.9	18.9	8.1	8.1	29.1	29.1	97.7	97.7	7.6	7.6	10.1	10.1	7	73	74	822252	809851	<0.2	<0.2	1.5	1.5			
					Middle	3.8	0.3	110	18.7	18.7	8.1	8.1	29.6	29.6	97.3	97.3	7.6	7.6	10.0	10.0	9	74	75	822252	809851	<0.2	<0.2	1.5	1.5			
						3.8	0.3	115	18.7	18.7	8.1	8.1	29.6	29.6	97.3	97.3	7.6	7.6	10.0	10.0	8	75	75	822252	809851	<0.2	<0.2	1.5	1.5			
					Bottom	6.6	0.1	90	18.7	18.7	8.0	8.0	29.7	29.7	98.2	98.2	7.7	7.7	8.2	8.2	9	75	75	822252	809851	<0.2	<0.2	1.6	1.6			
						6.6	0.1	97	18.7	18.7	8.0	8.0	29.7	29.7	98.2	98.2	7.7	7.7	8.2	8.2	8	76	76	822252	809851	<0.2	<0.2	1.7	1.7			
IM11	Cloudy	Rough	14:02	8.5	Surface	1.0	0.3	85	18.9	18.9	8.1	8.1	29.1	29.1	97.2	97.2	7.6	7.6	23.6	23.6	20	73	74	821480	810550	<0.2	<0.2	1.6	1.6			
						1.0	0.3	85	18.9	18.9	8.1	8.1	29.1	29.1	97.2	97.2	7.6	7.6	23.6	23.6	21	73	73	821480	810550	<0.2	<0.2	1.9	1.9			
					Middle	4.3	0.3	102	18.8	18.8	8.1	8.1	29.3	29.3	96.9	96.9	7.6	7.6	14.3	14.3	20	74	74	821480	810550	<0.2	<0.2	1.6	1.6			
						4.3	0.4	107	18.8	18.8	8.1	8.1	29.3	29.3	96.9	96.9	7.6	7.6	14.3	14.3	20	74	74	821480	810550	<0.2	<0.2	1.6	1.6			
					Bottom	7.5	0.2	91	18.7	18.7	8.0	8.0	29.8	29.8	97.3	97.3	7.6	7.6	9.9	9.9	35	75	75	821480	810550	<0.2	<0.2	1.6	1.6			
						7.5	0.2	94	18.7	18.7	8.0	8.0	29.8	29.8	97.3	97.3	7.6	7.6	9.9	9.9	35	75	75	821480	810550	<0.2	<0.2	1.8	1.8			
IM12	Cloudy	Rough	14:10	8.8	Surface	1.0	0.4	93	19.0	19.0	8.0	8.0	29.1	29.1	98.6	98.6	7.7	7.7	7.5	7.5	7	73	74	821181	811489	<0.2	<0.2	1.7	1.7			
						1.0	0.4	95	19.0	19.0	8.0	8.0	29.1	29.1	98.6	98.6	7.7	7.7	7.5	7.5	6	73	73	821181	811489	<0.2	<0.2	1.7	1.7			
					Middle	4.4	0.3	101	18.8	18.8	8.0	8.0	29.7	29.7	98.2	98.2	7.7	7.7	7.2	7.2	7	73	73	821181	811489	<0.2	<0.2	1.8	1.8			
						4.4	0.3	105	18.8	18.8	8.0	8.0	29.7	29.7	98.2	98.2	7.7	7.7	7.2	7.2	6	74	74	821181	811489	<0.2	<0.2	1.9	1.9			
					Bottom	7.8	0.2	109	18.7	18.7	8.1	8.1	29.8	29.8	98.3	98.3	7.7	7.7	7.2	7.2	7	75	75	821181	811489	<0.2	<0.2	1.7	1.7			
						7.8	0.3	111	18.7	18.7	8.1	8.1	29.8	29.8	98.3	98.3	7.7	7.7	7.2	7.2	8	76	76	821181	811489	<0.2	<0.2	1.8	1.8			
SR2	Cloudy	Moderate	14:36	3.4	Surface	1.0	0.4	93	18.7	18.7	8.1	8.1	30.0	30.0	97.0	97.0	7.6	7.6	7.9	7.9	4	73	74	821440	814156	<0.2	<0.2	1.0	1.0			
						1.0	0.4	93	18.7	18.7	8.1	8.1	30.0	30.0	97.0	97.0	7.6	7.6	7.9	7.9	4	73	73	821440	814156	<0.2	<0.2	1.0	1.0			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	74	821440	814156	<0.2	<0.2	1.1	1.1
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	74	821440	814156	<0.2	<0.2	1.1
					Bottom	2.4	0.3	91	18.7	18.7	8.1	8.1	30.0	30.0	97.4	97.4	7.6	7.6	8.3	8.3	5	75	75	821440	814156	<0.2	<0.2	1.2	1.2			
						2.4	0.3	92	18.7	18.7	8.1	8.1	30.0	30.0	97.4	97.4	7.6	7.6	8.3	8.3	4	75	75	821440	814156	<0.2	<0.2	1.0	1.0			
SR3	Cloudy	Moderate	13:30	9.7	Surface	1.0	0.2	62	18.8	18.8	8.0	8.0	29.2	29.2	97.8	97.8	7.7	7.7	11.1	11.1	10	-	-	822148	807580	-	-	-	-			
						1.0	0.2	64	18.8	18.8	8.0	8.0	29.2	29.2	97.8	97.8	7.7	7.7	11.1	11.1	9	-	-	822148	807580	-	-	-	-			
					Middle	4.9	0.2	69	18.8	18.8	8.0	8.0	29.2	29.2	97.7	97.7	7.6	7.6	11.6	11.6	10	-	-	822148	807580	-	-	-	-			
						4.9	0.2	73	18.8	18.8	8.0	8.0	29.2	29.2	97.7	97.7	7.6	7.6	11.6	11.6	11	-	-	822148	807580	-	-	-	-			
					Bottom	8.7	0.2	58	18.8	18.8	8.0	8.0	29.2	29.2	98.9	98.9	7.7	7.7	10.7	10.7	9	-	-	822148	807580	-	-	-	-			
						8.7	0.3	62	18.8	18.8	8.0	8.0	29.2	29.2	98.9	98.9	7.7	7.7	10.7	10.7	10	-	-	822148	807580	-	-	-	-			
SR4A	Cloudy	Moderate	14:31	8.1	Surface	1.0	0.3	100	18.4	18.4	8.1	8.1	29.6	29.6	97.4	97.4	7.7	7.7	9.8	9.8	6	-	-	817191	807809	-	-	-	-			
						1.0	0.3	102	18.4	18.4	8.1	8.1	29.6	29.6	97.4	97.4	7.7	7.7	9.8	9.8	6	-	-	817191	807809	-	-	-	-			
					Middle	4.1	0.2	91	18.4	18.4	8.1	8.1	29.8	29.8	96.9	96.9	7.6	7.6	11.5	11.5	9	-	-	817191	807809	-	-	-	-			
						4.1	0.2	98	18.4	18.4	8.1	8.1	29.8	29.8	96.9	96.9	7.6	7.6	11.6	11.6	8	-	-	817191	807809	-	-	-	-			
					Bottom	7.1	0.2	87	18.3	18.3	8.1	8.1	29.9	29.9	96.6	96.6	7.6	7.6	13.8	13.8	10	-	-	817191	807809	-	-	-	-			
						7.1	0.2	88	18.3	18.3	8.1	8.1	29.9	29.9	96.6	96.6	7.6	7.6	13.9	13.9	8	-	-	817191	807809	-	-	-	-			
SR5A	Cloudy	Calm	14:51	5.8	Surface	1.0	0.2	162	18.6	18.6	8.1	8.1	30.6	30.6	103.2	103.2	8.1	8.1	9.6	9.6	9	-	-	816604	810686	-	-	-	-			
						1.0	0.2	163	18.6	18.6	8.1	8.1	30.6	30.6	103.2	103.2	8.1	8.1	9.7	9.7	8	-	-	816604	810686	-	-	-	-			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	816604	810686	-	-	-	-	
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	816604	810686	-	-	-	-	
					Bottom	4.8	0.1	95	18.5	18.5	8.1	8.1	30.6	30.6	102.3	102.3	8.0	8.0	12.2	12.2	7	-	-	816604	810686	-	-	-	-			
						4.8	0.1	96	18.5	18.5	8.1	8.1	30.6	30.6	102.3	102.3	8.0	8.0	12.5	12.5	9	-	-	816604	810686	-	-	-	-			
SR6	Cloudy	Calm	15:13	3.9	Surface</																											

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

Water Quality Monitoring

Water Quality Monitoring Results on 04 January 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity (NTU)	Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)			
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA		Value	DA	Value	DA			Value	DA	Value	DA	Value	DA
									Value	DA	Value	DA	Value	DA	Value	DA	Value	DA		Value	DA	Value	DA			Value	DA	Value	DA	Value	DA
C1	Cloudy	Moderate	09:33	8.1	Surface	1.0	0.4	51	18.2	18.2	8.1	8.1	30.1	30.1	96.3	96.3	7.6	7.6	17.3	7.6	10	73	75	815633	804255	<0.2	<0.2	1.5	1.8		
						1.0	0.4	54	18.2	8.1	8.1	30.1	30.1	96.3	96.3	7.6	7.6	17.1	7.6	9	73	75	75	75	<0.2	<0.2	1.6	2.0			
						4.1	0.4	35	18.2	18.2	8.1	8.1	30.1	30.1	96.0	96.0	7.6	7.6	22.4	7.6	15	75	75	75	75	<0.2	<0.2	1.8	1.8		
					Middle	4.1	0.5	36	18.2	18.2	8.1	8.1	30.1	30.1	96.0	96.0	7.6	7.6	22.6	7.6	14	75	75	75	75	75	<0.2	<0.2	1.8	1.8	
						7.1	0.4	36	18.2	18.2	8.1	8.1	30.1	30.1	95.9	95.9	7.6	7.6	25.5	7.6	16	77	75	75	75	75	<0.2	<0.2	1.8	1.8	
						7.1	0.4	37	18.2	18.2	8.1	8.1	30.1	30.1	95.9	95.9	7.6	7.6	26.6	7.6	16	76	75	75	75	75	<0.2	<0.2	1.9	1.9	
C2	Cloudy	Moderate	10:11	11.6	Surface	1.0	0.4	330	18.9	18.9	7.9	7.9	27.6	27.6	93.9	93.9	7.4	7.4	12.2	7.4	7	72	74	825708	806934	<0.2	<0.2	3.0	2.9		
						1.0	0.4	357	18.9	18.9	7.9	7.9	27.6	27.6	93.9	93.9	7.4	7.4	12.2	7.4	6	73	73	73	73	<0.2	<0.2	2.9	2.9		
						5.8	0.3	356	18.8	18.8	7.9	7.9	27.9	27.9	94.2	94.2	7.4	7.4	18.8	7.4	8	73	73	73	73	<0.2	<0.2	3.2	2.9		
					Middle	5.8	0.4	328	18.8	18.8	7.9	7.9	27.9	27.9	94.2	94.2	7.4	7.4	18.8	7.4	8	73	73	73	73	73	73	<0.2	<0.2	3.2	2.9
						10.6	0.2	26	18.8	18.8	7.9	7.9	28.3	28.3	94.4	94.4	7.4	7.4	18.2	7.4	6	75	75	75	75	<0.2	<0.2	2.6	2.6		
						10.6	0.2	26	18.8	18.8	7.9	7.9	28.3	28.3	94.4	94.4	7.4	7.4	18.2	7.4	8	75	75	75	75	<0.2	<0.2	2.9	2.9		
C3	Cloudy	Moderate	08:28	11.2	Surface	1.0	0.5	261	18.8	18.8	8.0	8.0	29.8	29.8	96.8	96.8	7.6	7.6	8.6	7.6	5	73	75	822138	817784	<0.2	<0.2	1.3	1.2		
						1.0	0.5	266	18.8	18.8	8.0	8.0	29.8	29.8	96.8	96.8	7.6	7.6	8.6	7.6	5	73	75	75	75	<0.2	<0.2	1.3	1.3		
						5.6	0.4	258	18.6	18.6	8.0	8.0	30.0	30.0	97.0	97.0	7.6	7.6	14.2	7.6	5	75	75	75	75	<0.2	<0.2	1.0	1.0		
					Middle	5.6	0.5	281	18.6	18.6	8.0	8.0	30.0	30.0	97.0	97.0	7.6	7.6	14.2	7.6	6	75	75	75	75	75	75	<0.2	<0.2	1.2	1.2
						10.2	0.4	264	18.6	18.6	8.0	8.0	30.0	30.0	97.4	97.4	7.6	7.6	19.1	7.6	6	77	75	75	75	75	75	<0.2	<0.2	1.2	1.2
						10.2	0.4	284	18.6	18.6	8.0	8.0	30.0	30.0	97.4	97.4	7.6	7.6	19.1	7.6	5	77	75	75	75	75	75	<0.2	<0.2	1.0	1.0
IM1	Cloudy	Moderate	09:50	7.2	Surface	1.0	0.5	5	18.4	18.4	8.2	8.2	29.7	29.7	97.0	97.0	7.6	7.6	9.3	7.6	10	73	75	818347	806430	<0.2	<0.2	1.5	1.3		
						1.0	0.5	5	18.4	18.4	8.2	8.2	29.7	29.7	97.0	97.0	7.6	7.6	9.4	7.6	9	73	75	75	75	<0.2	<0.2	1.6	1.6		
						3.6	0.5	2	18.4	18.4	8.2	8.2	29.7	29.7	96.6	96.6	7.6	7.6	12.2	7.6	10	75	75	75	75	<0.2	<0.2	1.2	1.3		
					Middle	3.6	0.5	2	18.4	18.4	8.2	8.2	29.7	29.7	96.6	96.6	7.6	7.6	12.3	7.6	10	75	75	75	75	75	75	<0.2	<0.2	1.3	1.3
						6.2	0.4	359	18.3	18.3	8.2	8.2	29.9	29.9	96.4	96.4	7.6	7.6	29.8	7.6	13	77	75	75	75	75	75	<0.2	<0.2	1.1	1.1
						6.2	0.4	330	18.3	18.3	8.2	8.2	29.9	29.9	96.3	96.3	7.6	7.6	29.8	7.6	14	77	75	75	75	75	75	<0.2	<0.2	1.0	1.0
IM2	Cloudy	Moderate	09:56	8.0	Surface	1.0	0.5	5	18.5	18.5	8.1	8.1	29.4	29.4	96.3	96.3	7.6	7.6	14.4	7.6	11	73	75	818862	806220	<0.2	<0.2	1.6	1.4		
						1.0	0.5	5	18.5	18.5	8.1	8.1	29.4	29.4	96.3	96.3	7.6	7.6	14.4	7.6	10	74	75	75	75	<0.2	<0.2	1.5	1.5		
						4.0	0.5	1	18.5	18.5	8.1	8.1	29.5	29.5	96.0	96.0	7.6	7.6	18.9	7.6	11	75	75	75	75	<0.2	<0.2	1.4	1.6		
					Middle	4.0	0.5	1	18.5	18.5	8.1	8.1	29.5	29.5	96.0	96.0	7.6	7.6	19.2	7.6	12	75	75	75	75	75	75	<0.2	<0.2	1.6	1.6
						7.0	0.4	3	18.5	18.5	8.1	8.1	29.5	29.5	96.5	96.5	7.6	7.6	22.4	7.6	15	77	75	75	75	75	75	<0.2	<0.2	1.0	1.0
						7.0	0.4	3	18.5	18.5	8.1	8.1	29.5	29.5	96.5	96.5	7.6	7.6	22.3	7.6	16	77	75	75	75	75	75	<0.2	<0.2	1.2	1.2
IM3	Cloudy	Moderate	10:04	8.0	Surface	1.0	0.4	24	18.5	18.5	8.1	8.1	29.3	29.3	96.1	96.1	7.6	7.6	13.2	7.6	11	73	75	819438	806011	<0.2	<0.2	1.6	1.5		
						1.0	0.4	24	18.5	18.5	8.1	8.1	29.3	29.3	96.1	96.1	7.6	7.6	13.3	7.6	12	73	75	75	75	75	<0.2	<0.2	1.7	1.7	
						4.0	0.4	30	18.5	18.5	8.1	8.1	29.3	29.3	95.7	95.7	7.5	7.5	20.7	7.5	11	76	75	75	75	75	<0.2	<0.2	1.6	1.5	
					Middle	4.0	0.4	31	18.5	18.5	8.1	8.1	29.3	29.3	95.7	95.7	7.5	7.5	20.8	7.5	10	75	75	75	75	75	75	<0.2	<0.2	1.5	1.5
						7.0	0.3	33	18.5	18.5	8.1	8.1	29.3	29.3	95.9	95.9	7.6	7.6	30.4	7.6	12	77	75	75	75	75	75	<0.2	<0.2	1.3	1.3
						7.0	0.3	35	18.5	18.5	8.1	8.1	29.3	29.3	96.0	96.0	7.6	7.6	30.8	7.6	13	77	75	75	75	75	75	<0.2	<0.2	1.4	1.4
IM4	Cloudy	Moderate	10:12	7.5	Surface	1.0	0.5	0	18.5	18.5	8.1	8.1	29.5	29.5	96.6	96.6	7.6	7.6	15.8	7.6	10	73	75	819599	805066	<0.2	<0.2	1.6	1.5		
						1.0	0.5	0	18.5	18.5	8.1	8.1	29.5	29.5	96.6	96.6	7.6	7.6	15.9	7.6	11	73	75	75	75	75	<0.2	<0.2	1.4	1.4	
						3.8	0.5	3	18.5	18.5	8.1	8.1	29.5	29.5	96.3	96.3	7.6	7.6	18.8	7.6	12	75	75	75	75	75	<0.2	<0.2	1.6	1.6	
					Middle	3.8	0.5	3	18.5	18.5	8.1	8.1	29.5	29.5	96.4	96.4	7.6	7.6	18.8	7.6	12	75	75	75	75	75	75	<0.2	<0.2	1.6	1.6
						6.5	0.5	3	18.5	18.5	8.1	8.1	29.5	29.5	96.8	96.8	7.6	7.6	29.4	7.6	14	77	75	75	75	75	75	<0.2	<0.2	1.5	1.5
						6.5	0.5	3	18.5	18.5	8.1	8.1	29.5	29.5	96.8	96.8	7.6	7.6	29.9	7.6	14	77	75	75	75	75	75	<0.2	<0.2	1.3	1.3
IM5	Cloudy	Moderate	10:19	6.7	Surface	1.0	0.7	12	18.5	18.5	8.1	8.1	29.4	29.4	96.4	96.4	7.6	7.6	15.3	7.6	12	73	75	820556	804894	<0.2	<0.2	1.3	1.5		
						1.0	0.7	13	18.5	18.5	8.1	8.1	29.4	29.4	96.4	96.4	7.6	7.6	14.8	7.6	14	74	75	75	75	75	<0.2	<0.2	1.6	1.5	
						3.4	0.6	19	18.5	18.5	8.1	8.1	29.4	29.4	96.3	96.3	7.6	7.6	16.4	7.6	13	75	75	75	75	75	<0.2	<0.2	1.5	1.5	
					Middle	3.4	0.7	20	18.5	18.5	8.1	8.1	29.4	29.4	96.3	96.3	7.6	7.6	16.6	7.6	14	75	75	75	75	75	75	<0.2	<0.2	1.4	1.4
						5.7	0.5	19	18.5	18.5	8.1	8.1	29.4	29.4	96																

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

Water Quality Monitoring

Water Quality Monitoring Results on 04 January 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)	Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)			
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA		Value	DA	Value	DA			Value	DA	Value	DA	Value	DA
									Value	DA	Value	DA	Value	DA	Value	DA	Value	DA		Value	DA	Value	DA			Value	DA	Value	DA	Value	DA
IM9	Cloudy	Moderate	09:37	6.6	Surface	1.0	0.2	345	18.8	8.0	8.0	28.6	28.6	96.0	96.0	7.5	7.6	14.8	14.7	9	73	74	822067	808785	<0.2	2.1	2.0				
						1.0	0.2	317	18.8	8.0	8.0	28.6	28.6	96.0	96.0	7.5	7.6	14.8	14.7	11	72	74	<0.2	1.8							
					Middle	3.3	0.2	353	18.8	8.0	8.0	28.6	28.6	97.1	97.1	7.6	7.6	15.5	15.5	12	73	74	<0.2	2.0							
						3.3	0.2	325	18.8	8.0	8.0	28.6	28.6	97.1	97.1	7.6	7.6	15.5	15.5	11	74	74	<0.2	1.8							
					Bottom	5.6	0.2	10	18.8	8.0	8.0	28.6	28.6	99.0	99.0	7.8	7.8	13.8	13.8	13	75	75	<0.2	2.1							
						5.6	0.2	10	18.8	8.0	8.0	28.6	28.6	99.0	99.0	7.8	7.8	13.8	13.8	12	75	75	<0.2	2.0							
IM10	Cloudy	Moderate	09:30	6.5	Surface	1.0	0.5	322	18.9	8.0	8.0	28.8	28.8	95.5	95.5	7.5	7.5	20.8	22.4	18	73	74	822216	809820	<0.2	1.7	1.8				
						1.0	0.6	350	18.9	8.0	8.0	28.8	28.8	95.5	95.5	7.5	7.5	20.8	22.4	17	73	74	<0.2	1.9							
					Middle	3.3	0.5	321	18.8	8.0	8.0	28.8	28.8	95.9	95.9	7.5	7.5	22.2	22.2	18	74	74	<0.2	1.8							
						3.3	0.5	328	18.8	8.0	8.0	28.8	28.8	95.9	95.9	7.5	7.5	22.2	22.2	19	75	75	<0.2	1.7							
					Bottom	5.5	0.5	325	18.8	8.0	8.0	28.8	28.8	97.4	97.4	7.6	7.6	24.3	24.3	17	76	76	<0.2	1.7							
						5.5	0.5	356	18.8	8.0	8.0	28.8	28.8	97.4	97.4	7.6	7.6	24.3	24.3	17	75	75	<0.2	1.7							
IM11	Cloudy	Moderate	09:19	6.7	Surface	1.0	0.4	299	18.8	8.0	8.0	29.1	29.1	96.8	96.8	7.6	7.6	18.8	22.4	12	73	74	821528	810532	<0.2	1.8	1.6				
						1.0	0.4	309	18.8	8.0	8.0	29.1	29.1	96.8	96.8	7.6	7.6	18.8	22.4	14	73	74	<0.2	1.8							
					Middle	3.4	0.4	303	18.8	8.0	8.0	29.2	29.2	97.3	97.3	7.6	7.6	23.5	23.5	16	74	74	<0.2	1.4							
						3.4	0.4	305	18.8	8.0	8.0	29.2	29.2	97.3	97.3	7.6	7.6	23.5	23.5	14	73	74	<0.2	1.5							
					Bottom	5.7	0.4	296	18.7	8.0	8.0	29.3	29.3	98.6	98.6	7.7	7.7	25.0	25.0	14	75	75	<0.2	1.6							
						5.7	0.4	320	18.7	8.0	8.0	29.3	29.3	98.6	98.6	7.7	7.7	25.0	25.0	15	75	75	<0.2	1.6							
IM12	Cloudy	Moderate	09:13	7.8	Surface	1.0	0.5	285	18.8	8.0	8.0	29.1	29.1	98.2	98.2	7.7	7.7	15.2	16.8	12	73	74	821157	811528	<0.2	1.8	1.7				
						1.0	0.5	309	18.8	8.0	8.0	29.1	29.1	98.2	98.2	7.7	7.7	15.2	16.8	10	73	74	<0.2	1.6							
					Middle	3.9	0.5	274	18.6	8.0	8.0	30.1	30.1	98.1	98.1	7.7	7.7	17.7	17.7	10	74	74	<0.2	1.6							
						3.9	0.6	280	18.6	8.0	8.0	30.1	30.1	98.1	98.1	7.7	7.7	17.7	17.7	12	73	74	<0.2	1.7							
					Bottom	6.8	0.4	277	18.6	8.0	8.0	30.1	30.1	99.0	99.0	7.7	7.7	17.5	17.5	10	75	75	<0.2	1.6							
						6.8	0.5	277	18.6	8.0	8.0	30.1	30.1	99.0	99.0	7.7	7.7	17.5	17.5	11	75	75	<0.2	1.6							
SR2	Cloudy	Moderate	08:48	3.8	Surface	1.0	0.2	189	18.6	8.0	8.0	29.8	29.8	97.9	97.9	7.7	7.7	16.6	17.4	11	73	74	821467	814141	<0.2	1.4	1.4				
						1.0	0.2	189	18.6	8.0	8.0	29.8	29.8	97.9	97.9	7.7	7.7	16.6	17.4	11	73	74	<0.2	1.3							
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-
					Bottom	2.8	0.2	189	18.6	8.0	8.0	29.8	29.8	98.6	98.6	7.7	7.7	18.2	18.2	13	75	75	<0.2	1.4							
						2.8	0.2	196	18.6	8.0	8.0	29.8	29.8	98.6	98.6	7.7	7.7	18.2	18.2	13	75	75	<0.2	1.3							
SR3	Cloudy	Moderate	09:51	8.4	Surface	1.0	0.2	1	18.9	8.0	8.0	28.1	28.1	96.4	96.4	7.6	7.6	12.8	18.7	7	-	-	822120	807563	-	-	-				
						1.0	0.2	1	18.9	8.0	8.0	28.1	28.1	96.4	96.4	7.6	7.6	12.8	18.7	9	-	-	-	-	-	-					
					Middle	4.2	0.4	9	18.8	8.0	8.0	28.8	28.8	96.6	96.6	7.6	7.6	15.8	15.8	10	-	-	-	-	-	-		-	-		
						4.2	0.4	9	18.8	8.0	8.0	28.8	28.8	96.6	96.6	7.6	7.6	15.8	15.8	9	-	-	-	-	-	-		-	-		
					Bottom	7.4	0.3	12	18.8	8.0	8.0	29.0	29.0	97.4	97.4	7.6	7.6	27.4	27.4	10	-	-	-	-	-	-		-	-	-	
						7.4	0.3	13	18.8	8.0	8.0	29.0	29.0	97.4	97.4	7.6	7.6	27.4	27.4	12	-	-	-	-	-	-		-	-	-	
SR4A	Cloudy	Moderate	09:12	8.6	Surface	1.0	0.1	204	18.4	8.1	8.1	30.5	30.5	99.0	99.0	7.8	7.8	10.9	10.6	9	-	-	817159	807797	-	-	-				
						1.0	0.1	218	18.4	8.1	8.1	30.5	30.5	99.0	99.0	7.8	7.8	11.0	10.6	9	-	-	-	-	-	-					
					Middle	4.3	0.1	187	18.4	8.1	8.1	30.5	30.5	98.7	98.7	7.7	7.7	9.9	9.9	8	-	-	-	-	-	-		-	-		
						4.3	0.1	187	18.4	8.1	8.1	30.5	30.5	98.7	98.7	7.7	7.7	9.9	9.9	7	-	-	-	-	-	-		-	-		
					Bottom	7.6	0.1	211	18.4	8.1	8.1	30.5	30.5	98.1	98.1	7.7	7.7	10.9	10.9	10	-	-	-	-	-	-		-	-	-	
						7.6	0.1	215	18.4	8.1	8.1	30.5	30.5	98.1	98.1	7.7	7.7	11.0	11.0	10	-	-	-	-	-	-		-	-	-	
SR5A	Cloudy	Calm	08:56	4.5	Surface	1.0	0.3	291	18.4	8.1	8.1	30.5	30.5	99.6	99.6	7.8	7.8	7.5	8.2	8	-	-	816586	810712	-	-	-				
						1.0	0.3	296	18.4	8.1	8.1	30.5	30.5	99.6	99.6	7.8	7.8	7.5	8.2	9	-	-	-	-	-	-					
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	
					Bottom	3.5	0.3	295	18.4	8.1	8.1	30.5	30.5	99.0	99.0	7.8	7.8	8.9	8.9	9	-	-	-	-	-	-		-	-	-	
						3.5	0.3	324	18.4	8.1	8.1	30.5	30.5	99.0	99.0	7.8	7.8	8.8	8.8	8	-	-	-	-	-	-		-	-	-	
SR6	Cloudy	Calm	08:35	3.6	Surface	1.0	0.2	231	18.3	8.0	8.0	29.8	29.8	96.0	96.0	7.6	7.6	8.1	8.7	10	-	-	817889	814650	-	-	-				
						1.0	0.2	238	18.3	8.0	8.0	29.8	29.8	96.0	96.0	7.6	7.6	8.2	8.2	8	-	-	-	-	-	-					
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	
					Bottom	2.6	0.2	233	18.3	8.0	8.0	29.9	29.9	96.4	96.4	7.6	7.6	9.2	9.2	12	-	-	-	-	-	-		-	-	-	
						2.6	0.2	253	18.3	8.0	8.0	29.8	29.8	96.4	96.4	7.6	7.6	9.3	9.3	11	-	-	-	-	-	-		-	-	-	
SR7	Cloudy	Moderate	08:00	16.1	Surface	1.0	0.3	12	18.6	8.0	8.0	30.1	30.1	97.0	97.1	7.6	7.6	11.8	15.2	9	-	-	823654	823747	-	-	-				
						1.0	0.4	13	18.6	8.0	8.0	30.1	30.1	97.1	97.1	7.6	7.6	11.9	15.2	10	-	-	-	-	-	-					
					Middle	8.1	0.3	22	18.6	8.0	8.0	30.1	30.1	96.8	96.8	7.6	7.6	15.2	15.2	9	-	-	-	-							

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

Water Quality Monitoring

Water Quality Monitoring Results on 06 January 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)	Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)			
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA		Value	DA	Value	DA			Value	DA	Value	DA	Value	DA
									Value	DA	Value	DA	Value	DA	Value	DA	Value	DA		Value	DA	Value	DA			Value	DA	Value	DA	Value	DA
C1	Cloudy	Moderate	15:49	8.9	Surface	1.0	0.2	216	18.0	18.0	8.1	8.1	30.1	30.1	96.1	96.1	7.6	7.6	10.6	7.6	10	73	75	815643	804218	<0.2	<0.2	0.6	0.9		
						1.0	0.2	234	18.0	8.1	8.1	30.1	30.1	96.1	96.1	7.6	7.6	10.7	7.6	10	73	75									
					Middle	4.5	0.2	179	18.0	18.0	8.1	8.1	30.8	30.8	95.9	95.9	7.6	7.6	14.5	7.6	10	75	75								
						4.5	0.2	190	18.0	18.0	8.1	8.1	30.8	30.8	95.9	95.9	7.6	7.6	14.2	7.6	11	75	75								
					Bottom	7.9	0.1	168	18.1	18.1	8.1	8.1	31.2	31.2	95.9	95.9	7.5	7.5	21.6	7.5	17	77	77								
						7.9	0.1	177	18.1	18.1	8.1	8.1	31.2	31.2	95.9	95.9	7.5	7.5	21.6	7.5	15	77	77								
C2	Rainy	Moderate	14:45	12.1	Surface	1.0	0.1	33	18.9	18.9	8.0	8.0	28.0	28.0	93.7	93.7	7.4	7.4	9.0	7.4	6	72	73	825695	806940	<0.2	<0.2	2.5	2.5		
						1.0	0.1	33	18.9	18.9	8.0	8.0	28.0	28.0	93.7	93.7	7.4	7.4	9.0	7.4	7	71	71								
					Middle	6.1	0.1	50	18.9	18.9	8.0	8.0	28.1	28.1	94.2	94.2	7.4	7.4	13.0	7.4	7	72	72								
						6.1	0.2	53	18.9	18.9	8.0	8.0	28.1	28.1	94.2	94.2	7.4	7.4	13.0	7.4	7	72	72								
					Bottom	11.1	0.1	27	18.9	18.9	8.0	8.0	28.2	28.2	95.1	95.1	7.5	7.5	17.2	7.5	12	75	75								
						11.1	0.1	27	18.9	18.9	8.0	8.0	28.2	28.2	95.1	95.1	7.5	7.5	17.2	7.5	12	75	75								
C3	Cloudy	Moderate	16:39	12.1	Surface	1.0	0.3	66	18.7	18.7	8.1	8.1	28.7	28.7	93.8	93.8	7.4	7.4	5.3	7.4	4	73	75	822099	817798	<0.2	<0.2	1.6	1.6		
						1.0	0.3	70	18.7	18.7	8.1	8.1	28.7	28.7	93.8	93.8	7.4	7.4	5.3	7.4	5	73	73								
					Middle	6.1	0.3	84	18.7	18.7	8.1	8.1	28.9	28.9	93.5	93.5	7.4	7.4	6.9	7.4	6	74	74								
						6.1	0.3	85	18.7	18.7	8.1	8.1	28.9	28.9	93.5	93.5	7.4	7.4	6.9	7.4	5	75	75								
					Bottom	11.1	0.3	90	18.7	18.7	8.1	8.1	29.1	29.1	94.0	94.0	7.4	7.4	7.9	7.4	4	76	76								
						11.1	0.3	95	18.7	18.7	8.1	8.1	29.1	29.1	94.0	94.0	7.4	7.4	7.9	7.4	4	77	77								
IM1	Cloudy	Moderate	15:32	7.6	Surface	1.0	0.1	199	18.1	18.1	8.1	8.1	29.7	29.7	94.9	94.9	7.5	7.5	12.7	7.5	10	73	75	818323	806473	<0.2	<0.2	1.5	1.5		
						1.0	0.1	203	18.1	18.1	8.1	8.1	29.7	29.7	94.9	94.9	7.5	7.5	12.7	7.5	10	73	73								
					Middle	3.8	0.0	129	18.1	18.1	8.1	8.1	29.9	29.9	94.6	94.6	7.5	7.5	17.7	7.5	12	75	75								
						3.8	0.0	139	18.1	18.1	8.1	8.1	29.9	29.9	94.6	94.6	7.5	7.5	17.8	7.5	11	75	75								
					Bottom	6.6	0.1	117	18.2	18.2	8.1	8.1	30.2	30.2	94.6	94.6	7.5	7.5	28.5	7.5	11	77	77								
						6.6	0.1	121	18.2	18.2	8.1	8.1	30.2	30.2	94.6	94.6	7.5	7.5	28.6	7.5	13	77	77								
IM2	Cloudy	Moderate	15:26	8.7	Surface	1.0	0.1	256	18.1	18.1	8.1	8.1	29.8	29.8	94.9	94.9	7.5	7.5	13.3	7.5	12	73	75	818858	806207	<0.2	<0.2	1.5	1.5		
						1.0	0.1	269	18.1	18.1	8.1	8.1	29.8	29.8	94.9	94.9	7.5	7.5	13.4	7.5	13	73	73								
					Middle	4.4	0.0	141	18.1	18.1	8.1	8.1	29.9	29.9	94.6	94.6	7.5	7.5	16.5	7.5	12	75	75								
						4.4	0.0	141	18.1	18.1	8.1	8.1	29.8	29.8	94.6	94.6	7.5	7.5	16.4	7.5	12	75	75								
					Bottom	7.7	0.2	105	18.2	18.2	8.1	8.1	30.3	30.3	94.5	94.5	7.4	7.4	24.7	7.4	14	77	77								
						7.7	0.2	112	18.2	18.2	8.1	8.1	30.3	30.3	94.5	94.5	7.4	7.4	24.8	7.4	15	77	77								
IM3	Cloudy	Moderate	15:18	8.7	Surface	1.0	0.1	313	18.1	18.1	8.1	8.1	29.9	29.9	94.8	94.8	7.5	7.5	14.7	7.5	14	73	75	819428	806037	<0.2	<0.2	1.4	1.4		
						1.0	0.1	338	18.1	18.1	8.1	8.1	29.9	29.9	94.8	94.8	7.5	7.5	14.8	7.5	14	73	73								
					Middle	4.4	0.1	40	18.1	18.1	8.1	8.1	30.0	30.0	94.5	94.5	7.5	7.5	18.3	7.5	14	75	75								
						4.4	0.1	43	18.1	18.1	8.1	8.1	30.0	30.0	94.5	94.5	7.5	7.5	18.3	7.5	14	75	75								
					Bottom	7.7	0.1	126	18.2	18.2	8.1	8.1	30.2	30.2	94.3	94.3	7.4	7.4	26.0	7.4	14	77	77								
						7.7	0.1	127	18.2	18.2	8.1	8.1	30.2	30.2	94.3	94.3	7.4	7.4	26.3	7.4	15	76	76								
IM4	Rainy	Moderate	15:10	8.0	Surface	1.0	0.1	307	18.1	18.1	8.1	8.1	29.7	29.7	94.9	94.9	7.5	7.5	13.1	7.5	10	73	75	819560	805054	<0.2	<0.2	1.5	1.5		
						1.0	0.1	319	18.1	18.1	8.1	8.1	29.7	29.7	94.9	94.9	7.5	7.5	13.1	7.5	11	73	73								
					Middle	4.0	0.1	61	18.1	18.1	8.1	8.1	30.0	30.0	94.4	94.4	7.5	7.5	21.0	7.5	11	75	75								
						4.0	0.1	62	18.1	18.1	8.1	8.1	30.0	30.0	94.4	94.4	7.5	7.5	21.1	7.5	12	75	75								
					Bottom	7.0	0.1	65	18.2	18.2	8.1	8.1	30.2	30.2	94.3	94.3	7.4	7.4	24.3	7.4	13	77	77								
						7.0	0.1	69	18.2	18.2	8.1	8.1	30.2	30.2	94.4	94.4	7.4	7.4	24.2	7.4	13	76	76								
IM5	Rainy	Moderate	15:00	7.3	Surface	1.0	0.1	17	18.1	18.1	8.1	8.1	29.4	29.4	94.5	94.5	7.5	7.5	17.9	7.5	14	73	75	820548	804953	<0.2	<0.2	1.7	1.7		
						1.0	0.1	18	18.1	18.1	8.1	8.1	29.5	29.5	94.5	94.5	7.5	7.5	17.7	7.5	14	73	73								
					Middle	3.7	0.1	62	18.2	18.2	8.1	8.1	29.7	29.7	93.8	93.8	7.4	7.4	19.4	7.4	17	75	75								
						3.7	0.1	65	18.2	18.2	8.1	8.1	29.7	29.7	93.8	93.8	7.4	7.4	19.3	7.4	18	75	75								
					Bottom	6.3	0.1	4	18.2	18.2	8.1	8.1	29.7	29.7	93.8	93.8	7.4	7.4	23.4	7.4	19	76	76								
						6.3	0.1	4	18.2	18.2	8.1	8.1	29.7	29.7	93.9	93.9	7.4	7.4	23.4	7.4	18	76	76								
IM6	Rainy	Moderate	14:52	7.2	Surface	1.0	0.1	51	18.1	18.1	8.1	8.1	29.6	29.6	94.6	94.6	7.5	7.5	16.7	7.5	17	73	75	821075	805825	<0.2	<0.2	1.6	1.6		
						1.0	0.1	51	18.1	18.1	8.1	8.1	29.6	29.6	94.6	94.6	7.5	7.5	16.6	7.5	16	73	73								
					Middle	3.6	0.1	51	18.1	18.1	8.1	8.1	29.6	29.6	94.3	94.3	7.5	7.5	20.3	7.5	15	75	75								
						3.6	0.1	51	18.1	18.1	8.1	8.1	29.6	29.6	94.3	94.3	7.5	7.5	20.3	7.5	17	75	75								
					Bottom	6.2	0.2	58	18.2	18.2	8.1	8.1	29.8	29.8	94.3	94.3	7.5	7.5	26.1	7.5	22	76	76								
						6.2	0.2	58	18.2	18.2	8.1	8.1	29.8	29.8	94.3	94.3	7.5	7.5	26.0	7.5	20	76	76								
IM7	Rainy	Moderate	14:41	8.6	Surface	1.0	0.1	75	18.2	18.2	8.1	8.1	29.3	29.3	94.8	94.8	7.5	7.5	17.1	7.5	18	73	75	821321	806822	<0.2	<0.2	1.6	1.6		
						1.0	0.1	78	18.2	18.2	8.1	8.1	29.3	29.3	94.8	94.8	7.5	7.5	17.1	7.5	18	73	73								
					Middle	4.3	0.3	74	18.2	18.2	8.1	8.1	29.4	29.4	94.7	94.7	7.5	7.5	20.4	7.5	18	75	75								
						4.3	0.3	80	18.2	18.2	8.1	8.1	29.4	29.4	94.8	94.8	7.5	7.5	20.5	7.5	20	75	75								
					Bottom	7.6	0.3	87	18.1	18.1	8.1	8.1	29.7	29.7																	

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

Water Quality Monitoring

Water Quality Monitoring Results on 06 January 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity (NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)							
									Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA	Value	DA	Value	DA
IM9	Rainy	Rough	15:23	7.6	Surface	1.0	0.2	109	18.7	18.7	8.2	8.2	27.7	27.7	95.5	95.5	7.6	7.6	11.3	7.6	8	73	74	822111	808790	<0.2	<0.2	1.9	1.9							
						1.0	0.2	112	18.7	8.2	8.2	27.7	27.7	95.5	95.5	7.6	7.6	11.3	7.6	10	72	73	<0.2	<0.2	2.2	2.2										
						3.8	0.2	95	18.6	8.2	8.2	28.0	28.0	95.4	95.4	7.6	7.6	13.2	7.6	10	73	74	<0.2	<0.2	1.7	1.7										
					Middle	3.8	0.2	97	18.6	8.2	8.2	28.0	28.0	95.4	95.4	7.6	7.6	13.2	7.6	10	74	75	<0.2	<0.2	1.9	1.9										
						6.6	0.3	80	18.5	8.2	8.2	28.3	28.3	95.1	95.1	7.5	7.5	17.3	7.5	12	74	75	<0.2	<0.2	1.7	1.7										
						6.6	0.3	86	18.5	8.2	8.2	28.3	28.3	95.1	95.1	7.5	7.5	17.3	7.5	12	75	76	<0.2	<0.2	1.6	1.6										
IM10	Rainy	Rough	15:33	6.7	Surface	1.0	0.3	108	18.6	18.6	8.1	8.1	29.1	29.1	94.8	94.8	7.5	7.5	14.5	7.5	12	73	74	822210	809810	<0.2	<0.2	1.4	1.4							
						1.0	0.3	113	18.6	8.1	8.1	29.1	29.1	94.8	94.8	7.5	7.5	14.5	7.5	14	72	73	<0.2	<0.2	1.9	1.9										
						3.4	0.3	113	18.6	8.1	8.1	29.2	29.2	94.9	94.9	7.5	7.5	16.5	7.5	14	75	76	<0.2	<0.2	1.9	1.9										
					Middle	3.4	0.3	116	18.6	8.1	8.1	29.2	29.2	94.9	94.9	7.5	7.5	16.5	7.5	12	75	76	<0.2	<0.2	1.3	1.3										
						5.7	0.3	111	18.6	8.1	8.1	29.2	29.2	95.7	95.7	7.5	7.5	13.8	7.5	20	75	76	<0.2	<0.2	1.9	1.9										
						5.7	0.3	121	18.6	8.1	8.1	29.2	29.2	95.7	95.7	7.5	7.5	13.8	7.5	22	76	77	<0.2	<0.2	2.0	2.0										
IM11	Rainy	Rough	15:43	8.4	Surface	1.0	0.3	102	18.7	18.7	8.2	8.2	27.7	27.7	94.9	94.9	7.5	7.5	12.3	7.5	12	73	74	821471	810523	<0.2	<0.2	2.3	2.3							
						1.0	0.3	104	18.7	8.2	8.2	27.7	27.7	94.9	94.9	7.5	7.5	12.3	7.5	10	73	74	<0.2	<0.2	2.3	2.3										
						4.2	0.2	94	18.7	8.2	8.2	27.8	27.8	94.8	94.8	7.5	7.5	11.9	7.5	13	74	75	<0.2	<0.2	1.6	1.6										
					Middle	4.2	0.2	98	18.7	8.2	8.2	27.8	27.8	94.8	94.8	7.5	7.5	11.9	7.5	13	74	75	<0.2	<0.2	1.3	1.3										
						7.4	0.2	87	18.7	8.1	8.1	28.4	28.4	95.1	95.1	7.5	7.5	12.3	7.5	12	75	76	<0.2	<0.2	2.4	2.4										
						7.4	0.2	87	18.7	8.1	8.1	28.4	28.4	95.1	95.1	7.5	7.5	12.3	7.5	11	75	76	<0.2	<0.2	2.0	2.0										
IM12	Cloudy	Rough	15:51	9.0	Surface	1.0	0.4	84	18.6	18.6	8.1	8.1	28.6	28.6	95.1	95.1	7.5	7.5	9.3	7.5	14	73	74	821176	811546	<0.2	<0.2	1.9	1.9							
						1.0	0.4	87	18.6	8.1	8.1	28.6	28.6	95.1	95.1	7.5	7.5	9.3	7.5	12	73	74	<0.2	<0.2	1.6	1.6										
						4.5	0.3	96	18.6	8.1	8.1	28.9	28.9	95.2	95.2	7.5	7.5	8.4	7.5	12	74	75	<0.2	<0.2	2.0	2.0										
					Middle	4.5	0.3	103	18.6	8.1	8.1	28.9	28.9	95.2	95.2	7.5	7.5	8.4	7.5	12	75	76	<0.2	<0.2	1.8	1.8										
						8.0	0.2	105	18.6	8.1	8.1	29.0	29.0	95.9	95.9	7.5	7.5	8.2	7.5	12	75	76	<0.2	<0.2	1.7	1.7										
						8.0	0.3	114	18.6	8.1	8.1	29.0	29.0	95.9	95.9	7.5	7.5	8.2	7.5	12	76	77	<0.2	<0.2	1.7	1.7										
SR2	Cloudy	Moderate	16:18	3.8	Surface	1.0	0.4	99	18.7	18.7	8.1	8.1	28.8	28.8	95.6	95.6	7.5	7.5	8.2	7.5	6	73	74	821472	814171	<0.2	<0.2	1.9	1.9							
						1.0	0.4	106	18.7	8.1	8.1	28.8	28.8	95.6	95.6	7.5	7.5	8.2	7.5	4	73	74	<0.2	<0.2	1.7	1.7										
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
						2.8	0.2	109	18.7	8.1	8.1	29.1	29.1	96.3	96.3	7.6	7.6	4.8	7.6	6	75	76	<0.2	<0.2	1.7	1.7										
						2.8	0.2	118	18.7	8.1	8.1	29.1	29.1	96.3	96.3	7.6	7.6	4.8	7.6	4	75	76	<0.2	<0.2	1.6	1.6										
SR3	Rainy	Moderate	15:09	9.3	Surface	1.0	0.1	64	18.6	18.6	8.1	8.1	29.0	29.0	95.3	95.3	7.5	7.5	15.4	7.5	13	-	-	822153	807544	-	-	-	-							
						1.0	0.1	64	18.6	8.1	8.1	29.0	29.0	95.3	95.3	7.5	7.5	15.4	7.5	12	-	-	-	-	-	-	-	-								
						4.7	0.2	73	18.6	8.1	8.1	29.0	29.0	95.4	95.4	7.5	7.5	16.9	7.5	12	-	-	-	-	-	-	-	-								
					Middle	4.7	0.2	79	18.6	8.1	8.1	29.0	29.0	95.4	95.4	7.5	7.5	16.9	7.5	12	-	-	-	-	-	-	-	-	-	-						
						8.3	0.3	77	18.5	8.1	8.1	29.1	29.1	96.0	96.0	7.6	7.6	21.4	7.6	14	-	-	-	-	-	-	-	-	-							
						8.3	0.3	78	18.5	8.1	8.1	29.1	29.1	96.0	96.0	7.6	7.6	21.4	7.6	12	-	-	-	-	-	-	-	-	-							
SR4A	Cloudy	Moderate	16:12	9.2	Surface	1.0	0.3	102	18.1	18.1	8.1	8.1	29.6	29.6	94.9	94.9	7.5	7.5	10.8	7.5	8	-	-	817175	807788	-	-	-	-							
						1.0	0.3	106	18.1	8.1	8.1	29.6	29.6	94.9	94.9	7.5	7.5	10.8	7.5	10	-	-	-	-	-	-	-	-								
						4.6	0.3	89	18.1	8.1	8.1	29.6	29.6	94.8	94.8	7.5	7.5	11.0	7.5	10	-	-	-	-	-	-	-	-								
					Middle	4.6	0.3	92	18.1	8.1	8.1	29.6	29.6	94.8	94.8	7.5	7.5	11.1	7.5	11	-	-	-	-	-	-	-	-	-							
						8.2	0.3	68	18.2	8.1	8.1	29.6	29.6	94.8	94.8	7.5	7.5	12.7	7.5	11	-	-	-	-	-	-	-	-	-							
						8.2	0.3	70	18.2	8.1	8.1	29.6	29.6	94.9	94.9	7.5	7.5	12.6	7.5	12	-	-	-	-	-	-	-	-	-							
SR5A	Cloudy	Moderate	16:26	4.3	Surface	1.0	0.1	341	18.3	18.3	8.1	8.1	30.0	30.0	95.9	95.9	7.6	7.6	7.4	7.6	8	-	-	816568	810702	-	-	-	-							
						1.0	0.1	314	18.3	8.1	8.1	30.0	30.0	95.9	95.9	7.6	7.6	7.4	7.6	8	-	-	-	-	-	-	-									
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-								
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-							
						3.3	0.1	313	18.3	8.1	8.1	30.0	30.0	96.1	96.1	7.6	7.6	7.9	7.6	9	-	-	-	-	-	-	-	-								
						3.3	0.1	341	18.3	8.1	8.1	30.0	30.0	96.1	96.1	7.6	7.6	7.9	7.6	10	-	-	-	-	-	-	-	-								
SR6	Cloudy	Moderate	16:52	4.1	Surface	1.0	0.1	325	18.3	18.3	8.1	8.1	29.6	29.6	95.2	95.2	7.5	7.5	7.9	7.5	8	-	-	817877	814638	-	-	-	-							
						1.0	0.1	340	18.3	8.1	8.1	29.6	29.6	95.2	95.2	7.5	7.5	8.0	7.5	7	-	-	-	-	-	-	-									
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-								
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-							
						3.1	0.1	329	18.3	8.1	8.1	29.6	29.6	95.7	95.7	7.5	7.5	8.0	7.5	8	-	-	-	-	-	-	-	-								
						3.1	0.1	332	18.3	8.1	8.1	29.6	29.6	95.7	95.7	7.5	7.5	8.0	7.5	8	-	-	-	-	-	-	-	-								
SR7	Rainy	Moderate	17:11	16.5	Surface	1.0																														

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

Water Quality Monitoring

Water Quality Monitoring Results on 06 January 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)							
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA	Value	DA	Value	DA
C1	Cloudy	Moderate	11:03	8.2	Surface	1.0	0.5	46	18.1	18.1	8.0	8.0	29.4	29.4	94.5	94.5	7.5	7.5	15.7	7.5	18	73	75	75	815649	804240	<0.2	<0.2	1.9	1.8						
						1.0	0.5	49	18.1	8.0	8.0	29.4	29.4	94.5	94.5	7.5	7.5	15.4	7.5	17	74	75	75													
						4.1	0.4	50	18.2	8.1	8.1	29.9	29.9	94.2	94.2	7.4	7.4	22.2	7.4	20	75	75	75													
					Middle	4.1	0.5	53	18.2	8.1	8.1	29.9	29.9	94.2	94.2	7.4	7.4	22.4	7.4	20	75	75	75													
						7.2	0.4	48	18.2	8.1	8.1	30.0	30.0	94.2	94.2	7.4	7.4	26.5	7.4	21	77	77	77													
						7.2	0.4	48	18.2	8.1	8.1	30.0	30.0	94.2	94.2	7.4	7.4	26.4	7.4	20	77	77	77													
C2	Rainy	Moderate	11:47	11.8	Surface	1.0	0.5	334	19.0	19.0	8.0	8.0	27.7	27.7	92.6	92.6	7.3	7.3	8.8	7.3	6	72	73	73	825702	806928	<0.2	<0.2	2.4	2.4						
						1.0	0.5	349	19.0	8.0	8.0	27.7	27.7	92.6	92.6	7.3	7.3	8.8	7.3	7	71	73	73													
						5.9	0.4	339	19.0	8.0	8.0	27.9	27.9	92.5	92.5	7.3	7.3	10.8	7.3	8	73	75	75													
					Middle	5.9	0.4	349	19.0	8.0	8.0	27.9	27.9	92.5	92.5	7.3	7.3	10.8	7.3	7	72	75	75													
						10.8	0.3	1	19.0	8.0	8.0	28.2	28.2	92.1	92.1	7.2	7.2	20.6	7.2	9	75	75	75													
						10.8	0.3	1	19.0	8.0	8.0	28.2	28.2	92.1	92.1	7.2	7.2	20.6	7.2	11	74	74	74													
C3	Rainy	Moderate	09:54	11.3	Surface	1.0	0.5	268	18.7	18.7	8.0	8.0	29.3	29.3	94.2	94.2	7.4	7.4	8.1	7.4	5	73	73	73	822111	817777	<0.2	<0.2	1.3	1.4						
						1.0	0.5	272	18.7	8.0	8.0	29.3	29.3	94.2	94.2	7.4	7.4	8.1	7.4	6	73	75	75													
						5.7	0.5	269	18.7	8.0	8.0	29.6	29.6	93.9	93.9	7.4	7.4	14.7	7.4	9	75	75	75													
					Middle	5.7	0.5	281	18.7	8.0	8.0	29.6	29.6	93.9	93.9	7.4	7.4	14.7	7.4	9	75	75	75													
						10.3	0.4	270	18.7	8.0	8.0	29.6	29.6	94.3	94.3	7.4	7.4	17.4	7.4	20	77	77	77													
						10.3	0.4	272	18.7	8.0	8.0	29.6	29.6	94.3	94.3	7.4	7.4	17.4	7.4	20	77	77	77													
IM1	Cloudy	Moderate	11:22	7.2	Surface	1.0	0.4	356	18.3	18.3	8.2	8.2	29.3	29.3	95.2	95.2	7.5	7.5	10.9	7.5	10	74	74	74	818354	806472	<0.2	<0.2	1.3	1.3						
						1.0	0.4	328	18.3	8.2	8.2	29.3	29.3	95.2	95.2	7.5	7.5	11.0	7.5	10	74	75	75													
						3.6	0.4	5	18.3	8.2	8.2	29.3	29.3	95.0	95.0	7.5	7.5	13.5	7.5	12	75	75	75													
					Middle	3.6	0.5	5	18.3	8.2	8.2	29.3	29.3	95.0	95.0	7.5	7.5	13.7	7.5	13	76	75	75													
						6.2	0.4	1	18.3	8.1	8.1	29.3	29.3	95.0	95.0	7.5	7.5	17.6	7.5	14	77	77	77													
						6.2	0.4	1	18.3	8.1	8.1	29.3	29.3	95.0	95.0	7.5	7.5	17.7	7.5	12	77	77	77													
IM2	Cloudy	Moderate	11:30	8.1	Surface	1.0	0.4	12	18.3	18.3	8.1	8.1	29.1	29.1	94.6	94.6	7.5	7.5	16.2	7.5	16	74	74	74	818850	806212	<0.2	<0.2	1.4	1.6						
						1.0	0.4	13	18.3	8.1	8.1	29.1	29.1	94.7	94.7	7.5	7.5	16.1	7.5	16	73	76	76													
						4.1	0.4	31	18.3	8.1	8.1	29.1	29.1	94.3	94.3	7.5	7.5	21.2	7.5	17	75	75	75													
					Middle	4.1	0.4	33	18.3	8.1	8.1	29.1	29.1	94.3	94.3	7.5	7.5	21.1	7.5	17	76	75	75													
						7.1	0.4	21	18.4	8.1	8.1	29.1	29.1	94.6	94.6	7.5	7.5	26.4	7.5	23	77	77	77													
						7.1	0.4	22	18.4	8.1	8.1	29.1	29.1	94.6	94.6	7.5	7.5	26.1	7.5	21	77	77	77													
IM3	Cloudy	Moderate	11:38	8.2	Surface	1.0	0.3	21	18.4	18.4	8.1	8.1	29.1	29.1	94.6	94.6	7.5	7.5	13.8	7.5	13	74	74	74	819412	806025	<0.2	<0.2	1.3	1.5						
						1.0	0.4	22	18.4	8.1	8.1	29.1	29.1	94.6	94.6	7.5	7.5	13.7	7.5	13	74	75	75													
						4.1	0.4	38	18.4	8.1	8.1	29.1	29.1	94.3	94.3	7.4	7.4	19.0	7.4	15	76	76	76													
					Middle	4.1	0.4	39	18.4	8.1	8.1	29.1	29.1	94.3	94.3	7.4	7.4	19.1	7.4	14	76	76	76													
						7.2	0.4	30	18.4	8.1	8.1	29.1	29.1	94.3	94.3	7.4	7.4	22.8	7.4	16	77	77	77													
						7.2	0.4	31	18.4	8.1	8.1	29.1	29.1	94.3	94.3	7.4	7.4	22.7	7.4	14	77	77	77													
IM4	Cloudy	Moderate	11:46	7.6	Surface	1.0	0.5	357	18.4	18.4	8.1	8.1	29.1	29.1	94.5	94.5	7.5	7.5	13.6	7.5	12	74	74	74	819594	805041	<0.2	<0.2	1.6	1.6						
						1.0	0.5	328	18.4	8.1	8.1	29.1	29.1	94.5	94.5	7.5	7.5	13.7	7.5	13	74	76	76													
						3.8	0.4	0	18.4	8.1	8.1	29.1	29.1	94.3	94.3	7.5	7.5	20.4	7.5	14	76	76	76													
					Middle	3.8	0.4	0	18.4	8.1	8.1	29.1	29.1	94.3	94.3	7.5	7.5	20.5	7.5	14	76	76	76													
						6.6	0.4	0	18.4	8.1	8.1	29.1	29.1	94.5	94.5	7.5	7.5	25.8	7.5	16	77	77	77													
						6.6	0.4	0	18.4	8.1	8.1	29.1	29.1	94.5	94.5	7.5	7.5	25.5	7.5	16	77	77	77													
IM5	Cloudy	Moderate	11:55	6.8	Surface	1.0	0.4	26	18.5	18.5	8.1	8.1	28.8	28.8	94.4	94.4	7.5	7.5	13.5	7.5	12	73	73	73	820544	804903	<0.2	<0.2	1.7	1.8						
						1.0	0.4	26	18.5	8.1	8.1	28.8	28.8	94.4	94.4	7.5	7.5	13.5	7.5	12	74	75	75													
						3.4	0.4	21	18.5	8.1	8.1	28.8	28.8	94.3	94.3	7.5	7.5	16.5	7.5	18	75	76	76													
					Middle	3.4	0.4	21	18.5	8.1	8.1	28.8	28.8	94.3	94.3	7.5	7.5	16.6	7.5	19	76	76	76													
						5.8	0.3	18	18.3	8.1	8.1	29.3	29.3	94.4	94.4	7.5	7.5	18.2	7.5	19	77	77	77													
						5.8	0.3	19	18.3	8.1	8.1	29.3	29.3	94.6	94.6	7.5	7.5	16.8	7.5	19	77	77	77													
IM6	Rainy	Moderate	12:03	6.9	Surface	1.0	0.2	33	18.4	18.4	8.1	8.1	28.7	28.7	94.6	94.6	7.5	7.5	11.5	7.5	12	74	74	74	821084	805821	<0.2	<0.2	1.3	1.2						
						1.0	0.2	34	18.4	8.1	8.1	28.7	28.7	94.6	94.6	7.5	7.5	11.6	7.5	12	74	76	76													
						3.5	0.3	31	18.2	8.1	8.1	29.6	29.6	94.4	94.4	7.5	7.5	13.4	7.5	13	76	76	76													
					Middle	3.5	0.3	32	18.2	8.1	8.1	29.6	29.6	94.4	94.4	7.5	7.5	13.4	7.5	14	76	77	77													
						5.9	0.3	32	18.2	8.1	8.1	29.7	29.7	94.6	94.6	7.5	7.5	14.7	7.5	15	77	77	77													
						5.9	0.3	33	18.2	8.1	8.1	29.7	29.7	94.6	94.6	7.5	7.5	14.7	7.5	17	77	77	77													
IM7	Rainy	Moderate	12:12	8.4	Surface	1.0	0.1	18	18.4	18.4	8.1	8.1	28.9	28.9	94.3	94.3	7.5	7.5	12.0	7.5	10	73	74	74	821371	806854	<0.2	<0.2	2.2	2.1						
						1.0	0.1	18	18.4	8.1	8.1	28.9	28.9	94.3	94.3	7.5	7.5	12.0	7.5	10	74	75	75													
						4.2	0.3	43	18.3	8.1	8.1	29.4	29.4	94.0	94.0	7.4	7.4	16.5	7.4	14	75	75	75													
					Middle	4.2	0.3	45	18.3	8.1	8.1	29.4	29.4	94.1	94.1	7.4	7.4	16.5	7.4	14	76	76	76													
						7.4	0.3	40	18.3	8.1	8.1	29.5	29.5	94.																						

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

Water Quality Monitoring

Water Quality Monitoring Results on 06 January 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)			
									Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA		
									Value	DA	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA
IM9	Rainy	Moderate	11:09	6.9	Surface	1.0	0.2	330	18.9	18.9	8.0	8.0	27.3	27.3	93.4	93.4	7.4	7.4	13.7	7.4	14	72	74	822109	808818	<0.2	<0.2	2.4	2.1			
						1.0	0.2	345	18.9	18.9	8.0	8.0	27.3	27.3	93.4	93.4	7.4	7.4	13.7	7.4	12	73	74	74	822109	808818	<0.2	<0.2	1.8	2.1		
					Middle	3.5	0.2	323	18.9	18.9	8.0	8.0	27.3	27.3	93.5	93.5	7.4	7.4	14.6	7.4	14.6	15.0	14	74	74	822109	808818	<0.2	<0.2	2.1	2.1	
						3.5	0.2	343	18.9	18.9	8.0	8.0	27.3	27.3	93.5	93.5	7.4	7.4	14.6	7.4	14.6	15.0	13	74	74	822109	808818	<0.2	<0.2	2.1	2.1	
					Bottom	5.9	0.2	323	18.9	18.9	8.0	8.0	28.0	28.0	94.3	94.3	7.4	7.4	16.7	7.4	16.7	7.5	14	75	74	822109	808818	<0.2	<0.2	2.1	2.1	
						5.9	0.2	337	18.9	18.9	8.0	8.0	28.0	28.0	94.3	94.3	7.4	7.4	16.7	7.4	16.7	7.5	15	74	74	822109	808818	<0.2	<0.2	2.0	2.0	
IM10	Rainy	Moderate	11:00	6.3	Surface	1.0	0.5	320	18.8	18.8	8.1	8.1	28.9	28.9	94.6	94.6	7.4	7.4	13.3	7.4	10	73	74	822235	809819	<0.2	<0.2	1.6	1.7			
						1.0	0.5	323	18.8	18.8	8.1	8.1	28.9	28.9	94.6	94.6	7.4	7.4	13.2	7.4	8	73	74	822235	809819	<0.2	<0.2	1.6	1.7			
					Middle	3.2	0.5	320	18.8	18.8	8.1	8.1	29.0	29.0	95.0	95.0	7.5	7.5	14.4	7.5	11	73	74	822235	809819	<0.2	<0.2	1.3	1.3			
						3.2	0.5	323	18.8	18.8	8.1	8.1	29.0	29.0	95.0	95.0	7.5	7.5	14.4	7.5	11	74	74	822235	809819	<0.2	<0.2	1.6	1.6			
					Bottom	5.3	0.5	317	18.8	18.8	8.1	8.1	29.0	29.0	95.6	95.6	7.5	7.5	12.3	7.5	12	75	75	822235	809819	<0.2	<0.2	1.6	1.6			
						5.3	0.5	342	18.8	18.8	8.1	8.1	29.0	29.0	95.6	95.6	7.5	7.5	12.3	7.5	13	75	75	822235	809819	<0.2	<0.2	1.8	1.8			
IM11	Rainy	Moderate	10:48	7.3	Surface	1.0	0.5	294	18.7	18.7	8.1	8.1	29.1	29.1	94.9	94.9	7.4	7.4	18.4	7.4	15	73	74	821514	810528	<0.2	<0.2	1.4	1.4			
						1.0	0.6	319	18.7	18.7	8.1	8.1	29.1	29.1	94.9	94.9	7.4	7.4	18.4	7.4	14	73	74	821514	810528	<0.2	<0.2	1.5	1.5			
					Middle	3.7	0.5	293	18.7	18.7	8.1	8.1	29.1	29.1	95.2	95.2	7.5	7.5	21.3	7.5	16	73	74	821514	810528	<0.2	<0.2	1.4	1.4			
						3.7	0.5	309	18.7	18.7	8.1	8.1	29.1	29.1	95.2	95.2	7.5	7.5	21.3	7.5	16	73	74	821514	810528	<0.2	<0.2	1.3	1.3			
					Bottom	6.3	0.4	290	18.8	18.8	8.1	8.1	29.1	29.1	95.6	95.6	7.5	7.5	26.1	7.5	20	75	75	821514	810528	<0.2	<0.2	1.4	1.4			
						6.3	0.4	306	18.8	18.8	8.1	8.1	29.1	29.1	95.6	95.6	7.5	7.5	26.1	7.5	21	75	75	821514	810528	<0.2	<0.2	1.3	1.3			
IM12	Rainy	Moderate	10:40	7.0	Surface	1.0	0.6	278	18.7	18.7	8.1	8.1	29.5	29.5	95.5	95.5	7.5	7.5	12.3	7.5	10	73	74	821181	811548	<0.2	<0.2	1.1	1.2			
						1.0	0.7	287	18.7	18.7	8.1	8.1	29.5	29.5	95.5	95.5	7.5	7.5	12.3	7.5	12	72	74	821181	811548	<0.2	<0.2	1.1	1.2			
					Middle	3.5	0.6	280	18.7	18.7	8.1	8.1	29.5	29.5	95.2	95.2	7.5	7.5	16.7	7.5	11	74	74	821181	811548	<0.2	<0.2	1.4	1.4			
						3.5	0.6	289	18.7	18.7	8.1	8.1	29.5	29.5	95.2	95.2	7.5	7.5	16.7	7.5	12	73	74	821181	811548	<0.2	<0.2	1.1	1.1			
					Bottom	6.0	0.4	287	18.7	18.7	8.1	8.1	29.5	29.5	95.9	95.9	7.5	7.5	19.3	7.5	11	75	74	821181	811548	<0.2	<0.2	1.3	1.3			
						6.0	0.4	295	18.7	18.7	8.1	8.1	29.5	29.5	95.9	95.9	7.5	7.5	19.3	7.5	12	74	74	821181	811548	<0.2	<0.2	1.1	1.1			
SR2	Rainy	Moderate	10:14	3.9	Surface	1.0	0.2	158	18.6	18.6	8.0	8.0	29.3	29.3	95.1	95.1	7.5	7.5	21.8	7.5	18	73	74	821465	814138	<0.2	<0.2	1.3	1.2			
						1.0	0.2	163	18.6	18.6	8.0	8.0	29.3	29.3	95.1	95.1	7.5	7.5	21.8	7.5	20	73	74	821465	814138	<0.2	<0.2	1.2	1.2			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	74	821465	814138	<0.2	<0.2	1.1	1.1
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	74	821465	814138	<0.2	<0.2	1.1
					Bottom	2.9	0.2	148	18.6	18.6	8.0	8.0	29.4	29.4	95.7	95.7	7.5	7.5	23.2	7.5	20	75	75	821465	814138	<0.2	<0.2	1.0	1.0			
						2.9	0.2	161	18.6	18.6	8.0	8.0	29.4	29.4	95.7	95.7	7.5	7.5	23.2	7.5	20	75	75	821465	814138	<0.2	<0.2	1.1	1.1			
SR3	Rainy	Moderate	11:27	8.8	Surface	1.0	0.2	11	19.0	19.0	8.0	8.0	27.1	27.1	94.1	94.1	7.4	7.4	9.7	7.4	7	-	-	822158	807546	-	-	-	-			
						1.0	0.2	11	19.0	19.0	8.0	8.0	27.1	27.1	94.1	94.1	7.4	7.4	9.7	7.4	8	-	-	822158	807546	-	-	-	-			
					Middle	4.4	0.2	3	18.9	18.9	8.0	8.0	27.4	27.4	94.4	94.4	7.5	7.5	10.2	7.5	10	-	-	822158	807546	-	-	-	-			
						4.4	0.2	3	18.9	18.9	8.0	8.0	27.4	27.4	94.4	94.4	7.5	7.5	10.2	7.5	8	-	-	822158	807546	-	-	-	-			
					Bottom	7.8	0.2	356	18.9	18.9	8.0	8.0	27.7	27.7	94.9	94.9	7.5	7.5	10.6	7.5	11	-	-	822158	807546	-	-	-	-			
						7.8	0.3	328	18.9	18.9	8.0	8.0	27.7	27.7	94.9	94.9	7.5	7.5	10.6	7.5	12	-	-	822158	807546	-	-	-	-			
SR4A	Cloudy	Moderate	10:41	7.9	Surface	1.0	0.3	237	18.3	18.3	8.1	8.1	29.9	29.9	94.7	94.7	7.5	7.5	10.5	7.5	10	-	-	817198	807823	-	-	-	-			
						1.0	0.3	243	18.3	18.3	8.1	8.1	29.9	29.9	94.7	94.7	7.5	7.5	10.6	7.5	12	-	-	817198	807823	-	-	-	-			
					Middle	4.0	0.2	229	18.3	18.3	8.1	8.1	29.9	29.9	94.5	94.5	7.4	7.4	11.9	7.4	11	-	-	817198	807823	-	-	-	-			
						4.0	0.2	250	18.3	18.3	8.1	8.1	29.9	29.9	94.5	94.5	7.4	7.4	11.9	7.4	13	-	-	817198	807823	-	-	-	-			
					Bottom	6.9	0.2	228	18.3	18.3	8.1	8.1	29.9	29.9	94.6	94.6	7.4	7.4	12.7	7.4	11	-	-	817198	807823	-	-	-	-			
						6.9	0.3	242	18.3	18.3	8.1	8.1	29.9	29.9	94.6	94.6	7.4	7.4	12.8	7.4	12	-	-	817198	807823	-	-	-	-			
SR5A	Cloudy	Calm	10:25	4.4	Surface	1.0	0.3	278	18.4	18.4	8.1	8.1	29.9	29.9	95.4	95.4	7.5	7.5	10.2	7.5	10	-	-	816574	810712	-	-	-	-			
						1.0	0.3	280	18.4	18.4	8.1	8.1	29.9	29.9	95.4	95.4	7.5	7.5	10.2	7.5	11	-	-	816574	810712	-	-	-	-			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	816574	810712	-	-	-	-	
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	816574	810712	-	-	-	-	
					Bottom	3.4	0.2	282	18.4	18.4	8.1	8.1	29.9	29.9	95.4	95.4	7.5	7.5	11.0	7.5	13	-	-	816574	810712	-	-	-	-			
						3.4	0.2	293	18.4	18.4	8.1	8.1	29.9	29.9	95.4	95.4	7.5	7.5	11.1	7.5	11	-	-	8165								

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

Water Quality Monitoring

Water Quality Monitoring Results on 10 January 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
									Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Moderate	06:48	8.6	Surface	1.0	0.1	168	17.2	8.2	8.2	31.3	31.3	92.8	92.8	7.4	7.4	2.9	2.9	4	72	74	815638	804275	<0.2	<0.2	1.6	1.7		
						1.0	0.1	168	17.2	8.2	8.2	31.3	31.3	92.8	92.8	7.4	7.4	2.9	2.9	4	72	74	<0.2	<0.2	1.8	1.8				
						4.3	0.2	228	17.2	8.2	8.2	31.3	31.3	92.2	92.2	7.4	7.4	2.8	2.8	5	74	74	<0.2	<0.2	1.6	1.6				
					Middle	4.3	0.2	244	17.2	8.2	8.2	31.3	31.3	92.2	92.2	7.3	7.3	2.8	2.8	5	74	74	<0.2	<0.2	1.6	1.6				
						7.6	0.2	224	17.6	8.2	8.2	31.6	31.6	93.1	93.1	7.4	7.4	2.8	2.8	4	76	76	<0.2	<0.2	1.6	1.6				
						7.6	0.2	230	17.5	8.2	8.2	31.6	31.6	93.1	93.1	7.4	7.4	2.8	2.8	4	76	76	<0.2	<0.2	1.5	1.5				
C2	Cloudy	Moderate	08:41	11.6	Surface	1.0	0.3	93	17.4	8.1	8.1	29.1	29.1	92.2	92.3	7.4	7.4	6.1	6.1	5	72	74	825681	806952	<0.2	<0.2	1.0	1.0		
						1.0	0.3	101	17.4	8.1	8.1	29.1	29.1	92.4	92.3	7.4	7.4	6.4	6.4	5	72	74	<0.2	<0.2	1.0	1.0				
						5.8	0.1	275	17.4	8.1	8.1	29.1	29.1	91.5	91.4	7.4	7.4	5.4	5.4	4	73	73	<0.2	<0.2	1.0	1.0				
					Middle	5.8	0.1	275	17.4	8.1	8.1	29.1	29.1	91.3	91.4	7.3	7.3	5.8	5.8	3	73	73	<0.2	<0.2	1.0	1.0				
						10.6	0.1	226	17.6	8.1	8.1	29.3	29.3	90.7	90.6	7.3	7.3	5.9	5.9	5	75	75	<0.2	<0.2	1.0	1.0				
						10.6	0.1	235	17.6	8.1	8.1	29.3	29.3	90.5	90.6	7.3	7.3	6.5	6.5	5	76	76	<0.2	<0.2	0.9	0.9				
C3	Cloudy	Moderate	06:46	12.6	Surface	1.0	0.0	59	17.6	8.1	8.1	30.4	30.4	94.5	94.5	7.5	7.5	3.0	3.0	7	72	73	822100	817823	<0.2	<0.2	1.0	1.0		
						1.0	0.0	63	17.6	8.1	8.1	30.4	30.4	94.5	94.5	7.5	7.5	3.1	3.1	6	72	73	<0.2	<0.2	1.0	1.0				
						6.3	0.1	67	17.6	8.1	8.1	30.4	30.4	94.0	94.0	7.5	7.5	3.2	3.2	8	73	73	<0.2	<0.2	0.9	0.9				
					Middle	6.3	0.1	72	17.6	8.1	8.1	30.4	30.4	94.0	94.0	7.5	7.5	3.1	3.1	7	73	73	<0.2	<0.2	1.0	1.0				
						11.6	0.1	75	17.6	8.1	8.1	30.5	30.5	94.1	94.2	7.5	7.5	3.3	3.3	9	75	75	<0.2	<0.2	1.1	1.1				
						11.6	0.1	80	17.6	8.1	8.1	30.5	30.5	94.2	94.2	7.5	7.5	3.2	3.2	7	75	75	<0.2	<0.2	0.9	0.9				
IM1	Fine	Moderate	07:07	7.2	Surface	1.0	0.1	113	17.1	8.2	8.2	31.3	31.3	92.7	92.7	7.4	7.4	2.8	2.8	7	72	74	818334	806429	<0.2	<0.2	2.0	2.0		
						1.0	0.1	123	17.2	8.2	8.2	31.3	31.3	92.7	92.7	7.4	7.4	2.8	2.8	6	72	74	<0.2	<0.2	2.0	2.0				
						3.6	0.0	116	17.2	8.2	8.2	31.3	31.3	92.4	92.4	7.4	7.4	2.8	2.8	9	75	75	<0.2	<0.2	2.0	2.0				
					Middle	3.6	0.0	126	17.2	8.2	8.2	31.3	31.3	92.4	92.4	7.4	7.4	2.8	2.8	7	75	75	<0.2	<0.2	2.0	2.0				
						6.2	0.1	163	17.6	8.2	8.2	31.6	31.6	93.1	93.2	7.4	7.4	3.3	3.3	11	76	76	<0.2	<0.2	2.1	2.1				
						6.2	0.1	176	17.5	8.2	8.2	31.6	31.6	93.2	93.2	7.4	7.4	3.3	3.3	11	76	76	<0.2	<0.2	1.9	1.9				
IM2	Fine	Moderate	07:13	6.9	Surface	1.0	0.1	91	17.2	8.2	8.2	31.3	31.3	92.6	92.6	7.4	7.4	2.5	2.5	5	72	74	818861	806219	<0.2	<0.2	1.8	1.9		
						1.0	0.1	94	17.2	8.2	8.2	31.3	31.3	92.6	92.6	7.4	7.4	2.5	2.5	6	72	74	<0.2	<0.2	1.9	1.9				
						3.5	0.0	104	17.4	8.2	8.2	31.4	31.4	92.6	92.6	7.3	7.3	2.7	2.7	6	74	74	<0.2	<0.2	2.0	2.0				
					Middle	3.5	0.0	107	17.4	8.2	8.2	31.5	31.5	92.6	92.6	7.3	7.3	2.7	2.7	5	74	74	<0.2	<0.2	1.9	1.9				
						5.9	0.0	81	17.6	8.2	8.2	31.6	31.6	93.2	93.2	7.4	7.4	3.1	3.1	9	76	76	<0.2	<0.2	2.1	2.1				
						5.9	0.0	88	17.5	8.2	8.2	31.6	31.6	93.2	93.2	7.4	7.4	3.0	3.0	10	76	76	<0.2	<0.2	1.8	1.8				
IM3	Fine	Moderate	07:20	7.3	Surface	1.0	0.0	148	17.2	8.2	8.2	31.3	31.3	92.5	92.5	7.4	7.4	2.8	2.8	6	72	74	819440	806017	<0.2	<0.2	1.8	1.8		
						1.0	0.0	148	17.2	8.2	8.2	31.3	31.3	92.5	92.5	7.4	7.4	2.8	2.8	5	72	74	<0.2	<0.2	1.9	1.9				
						3.7	0.0	56	17.4	8.2	8.2	31.4	31.4	92.3	92.3	7.3	7.3	2.8	2.8	8	73	73	<0.2	<0.2	1.8	1.8				
					Middle	3.7	0.0	60	17.4	8.2	8.2	31.4	31.4	92.3	92.3	7.3	7.3	2.8	2.8	6	74	74	<0.2	<0.2	1.9	1.9				
						6.3	0.0	358	17.6	8.2	8.2	31.6	31.6	92.8	92.8	7.3	7.3	2.7	2.7	6	75	75	<0.2	<0.2	1.7	1.7				
						6.3	0.0	329	17.6	8.2	8.2	31.6	31.6	92.8	92.8	7.3	7.3	2.8	2.8	8	76	76	<0.2	<0.2	1.8	1.8				
IM4	Fine	Moderate	07:26	7.4	Surface	1.0	0.1	120	17.2	8.2	8.2	31.3	31.3	92.6	92.6	7.4	7.4	2.6	2.6	4	72	74	819565	805021	<0.2	<0.2	1.7	1.9		
						1.0	0.1	126	17.2	8.2	8.2	31.3	31.3	92.5	92.5	7.4	7.4	2.6	2.6	5	72	74	<0.2	<0.2	1.8	1.8				
						3.7	0.0	260	17.4	8.2	8.2	31.4	31.4	92.4	92.5	7.3	7.3	2.8	2.8	4	74	74	<0.2	<0.2	2.0	2.0				
					Middle	3.7	0.0	270	17.4	8.2	8.2	31.5	31.5	92.5	92.5	7.3	7.3	2.7	2.7	5	74	74	<0.2	<0.2	1.9	1.9				
						6.4	0.1	252	17.5	8.2	8.2	31.5	31.5	93.2	93.2	7.4	7.4	2.8	2.8	6	76	76	<0.2	<0.2	2.0	2.0				
						6.4	0.1	257	17.4	8.2	8.2	31.5	31.5	93.1	93.1	7.4	7.4	2.8	2.8	6	76	76	<0.2	<0.2	1.9	1.9				
IM5	Fine	Moderate	07:32	7.1	Surface	1.0	0.1	102	17.2	8.2	8.2	31.3	31.3	92.6	92.6	7.4	7.4	2.8	2.8	7	72	74	820542	804929	<0.2	<0.2	2.0	2.0		
						1.0	0.1	111	17.2	8.2	8.2	31.3	31.3	92.6	92.6	7.4	7.4	2.8	2.8	7	72	74	<0.2	<0.2	2.2	2.2				
						3.6	0.1	30	17.3	8.2	8.2	31.3	31.3	92.2	92.2	7.3	7.3	2.8	2.8	8	74	74	<0.2	<0.2	2.0	2.0				
					Middle	3.6	0.1	32	17.3	8.2	8.2	31.4	31.4	92.2	92.2	7.3	7.3	2.8	2.8	7	74	74	<0.2	<0.2	2.0	2.0				
						6.1	0.1	8	17.6	8.2	8.2	31.6	31.6	92.9	92.9	7.3	7.3	2.7	2.7	8	76	76	<0.2	<0.2	1.8	1.8				
						6.1	0.1	8	17.6	8.2	8.2	31.6	31.6	93.0	93.0	7.4	7.4	2.7	2.7	6	76	76	<0.2	<0.2	1.8	1.8				
IM6	Fine	Moderate	07:42	7.4	Surface	1.0	0.1	80	17.2	8.2	8.2	31.3	31.3	92.7	92.7	7.4	7.4	2.8	2.8	6	72	74	821055	805818	<0.2	<0.2	1.9	1.9		
						1.0	0.1	87	17.2	8.2	8.2	31.3	31.3	92.6	92.6	7.4	7.4	2.8	2.8	6	72	74	<0.2	<0.2	2.0	2.0				
						3.7	0.2	80	17.2	8.2	8.2	31.3	31.3	92.2	92.2	7.4	7.4	2.8	2.8	6	74	74	<0.2	<0.2	1.9	1.9				
					Middle	3.7	0.2	82	17.2	8.2	8.2	31.3	31.3	92.2	92.2	7.3	7.3	2.8	2.8	6	74	74	<0.2	<0.2	1.9	1.9				
						6.4	0.1	64	17.5	8.2	8.2	31.6	31.6	93.2	93.2	7.4	7.4	2.7	2.7	5	76	76	<0.2	<0.2	1.9	1.9				
						6.4	0.2	66	17.5	8.2	8.2	31.6																		

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

Water Quality Monitoring

Water Quality Monitoring Results on 10 January 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity (NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
									Value	DA	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Moderate	13:43	8.2	Surface	1.0	0.4	45	17.5	8.2	8.2	30.6	30.6	90.5	90.5	7.2	7.2	2.0	2.0	5	5	73	73	815594	804217	<0.2	0.7	0.7		
						1.0	0.4	46	17.5	8.2	8.2	30.6	30.6	90.4	90.5	7.2	7.2	1.9	1.9	4	4	73	73	<0.2	0.7					
						4.1	0.4	52	17.7	8.2	8.2	30.9	31.0	90.5	90.6	7.2	7.2	2.5	2.5	6	6	75	75	<0.2	0.7					
					4.1	0.5	52	17.8	8.2	8.2	31.0	31.0	90.6	90.6	7.2	7.2	2.4	2.4	6	6	75	75	<0.2	0.7						
					7.2	0.5	42	17.7	8.2	8.2	31.0	31.0	91.6	91.7	7.2	7.3	2.5	2.5	6	6	77	77	<0.2	0.8						
					7.2	0.5	42	17.7	8.2	8.2	31.0	31.0	91.7	91.7	7.3	7.3	2.6	2.6	7	7	77	77	<0.2	0.8						
C2	Cloudy	Moderate	12:36	11.5	Surface	1.0	0.5	348	17.0	8.2	8.2	27.5	27.5	95.8	95.8	7.8	7.8	5.9	5.9	5	5	72	72	825652	806936	<0.2	1.5	1.4		
						1.0	0.5	320	17.0	8.2	8.2	27.5	27.5	95.8	95.8	7.8	7.8	6.0	6.0	4	4	72	72	<0.2	1.4					
						5.8	0.5	350	17.0	8.2	8.2	27.4	27.4	95.4	95.4	7.8	7.8	7.0	7.0	3	3	74	74	<0.2	1.4					
					5.8	0.5	322	17.0	8.2	8.2	27.4	27.4	95.3	95.4	7.8	7.8	7.0	7.0	5	5	74	74	<0.2	1.4						
					10.5	0.2	318	17.2	8.1	8.1	27.7	27.6	95.1	95.4	7.8	7.8	5.7	5.7	3	3	75	75	<0.2	1.4						
					10.5	0.2	333	17.1	8.2	8.1	27.5	27.6	95.7	95.4	7.8	7.8	5.7	5.7	3	3	75	75	<0.2	1.4						
C3	Cloudy	Moderate	14:44	12.1	Surface	1.0	0.5	276	17.5	8.1	8.1	30.0	30.0	93.7	93.7	7.5	7.5	2.6	2.6	3	3	71	71	822091	817783	<0.2	1.3	1.4		
						1.0	0.6	302	17.5	8.1	8.1	30.0	30.0	93.6	93.7	7.5	7.5	2.6	2.6	3	3	72	72	<0.2	1.3					
						6.1	0.5	271	17.5	8.1	8.1	30.0	30.0	93.2	93.2	7.5	7.5	3.0	3.0	3	3	73	73	<0.2	1.5					
					6.1	0.5	273	17.5	8.1	8.1	30.0	30.0	93.1	93.2	7.4	7.4	3.2	3.2	2	2	74	74	<0.2	1.5						
					11.1	0.4	267	17.5	8.1	8.1	30.0	30.0	92.8	92.8	7.4	7.4	3.5	3.5	3	3	75	75	<0.2	1.3						
					11.1	0.4	292	17.5	8.1	8.1	30.0	30.0	92.8	92.8	7.4	7.4	3.6	3.6	3	3	76	76	<0.2	1.6						
IM1	Fine	Moderate	13:25	6.9	Surface	1.0	0.4	31	17.3	8.2	8.2	30.5	30.5	90.9	90.9	7.3	7.3	3.1	3.1	7	7	73	73	818322	806479	<0.2	2.0	2.1		
						1.0	0.5	32	17.3	8.2	8.2	30.5	30.5	90.8	90.9	7.3	7.3	3.0	3.0	7	7	73	73	<0.2	2.1					
						3.5	0.4	22	17.7	8.2	8.2	30.8	30.9	90.5	90.5	7.2	7.2	3.6	3.6	6	6	75	75	<0.2	2.2					
					3.5	0.5	22	17.7	8.2	8.2	30.9	30.9	90.4	90.5	7.2	7.2	3.5	3.5	7	7	75	75	<0.2	2.0						
					5.9	0.4	348	17.8	8.2	8.2	31.1	31.1	91.1	91.2	7.2	7.2	4.3	4.3	5	5	77	77	<0.2	2.0						
					5.9	0.4	320	17.8	8.2	8.2	31.1	31.1	91.3	91.2	7.2	7.2	4.3	4.3	5	5	77	77	<0.2	2.0						
IM2	Fine	Moderate	13:18	7.8	Surface	1.0	0.5	29	17.3	8.2	8.2	30.5	30.5	91.3	91.3	7.3	7.3	3.0	3.0	5	5	74	74	818835	806213	<0.2	2.2	2.1		
						1.0	0.6	30	17.3	8.2	8.2	30.5	30.5	91.3	91.3	7.3	7.3	3.0	3.0	6	6	73	73	<0.2	2.0					
						3.9	0.5	15	17.4	8.2	8.2	30.6	30.6	91.7	91.7	7.3	7.3	3.7	3.7	5	5	75	75	<0.2	2.2					
					3.9	0.5	15	17.4	8.2	8.2	30.6	30.6	91.7	91.7	7.3	7.3	3.9	3.9	5	5	75	75	<0.2	1.9						
					6.8	0.3	10	17.7	8.2	8.2	30.9	30.9	90.9	91.0	7.2	7.2	4.5	4.5	4	4	77	77	<0.2	2.0						
					6.8	0.3	10	17.7	8.2	8.2	30.9	30.9	91.0	91.0	7.2	7.2	4.5	4.5	4	4	77	77	<0.2	2.1						
IM3	Fine	Moderate	13:13	8.0	Surface	1.0	0.5	37	17.4	8.2	8.2	30.6	30.6	90.7	90.7	7.2	7.2	2.8	2.8	5	5	73	73	819406	806047	<0.2	2.1	2.0		
						1.0	0.5	38	17.5	8.2	8.2	30.6	30.6	90.7	90.7	7.2	7.2	2.8	2.8	3	3	73	73	<0.2	1.9					
						4.0	0.5	24	17.7	8.2	8.2	30.8	30.8	90.7	90.7	7.2	7.2	3.6	3.6	5	5	75	75	<0.2	2.1					
					4.0	0.6	24	17.7	8.2	8.2	30.8	30.8	90.7	90.7	7.2	7.2	3.5	3.5	3	3	75	75	<0.2	2.2						
					7.0	0.3	29	17.7	8.2	8.2	30.9	30.9	91.7	91.7	7.3	7.3	4.4	4.4	3	3	77	77	<0.2	2.0						
					7.0	0.3	31	17.6	8.2	8.2	30.9	30.9	91.7	91.7	7.3	7.3	4.5	4.5	4	4	77	77	<0.2	2.0						
IM4	Fine	Moderate	13:05	7.1	Surface	1.0	0.6	8	17.4	8.2	8.2	30.5	30.5	90.6	90.6	7.2	7.2	2.9	2.9	7	7	74	74	819567	805011	<0.2	2.1	2.0		
						1.0	0.6	8	17.4	8.2	8.2	30.6	30.5	90.6	90.6	7.2	7.2	2.8	2.8	7	7	73	73	<0.2	2.0					
						3.6	0.6	17	17.7	8.2	8.2	30.9	30.9	90.7	90.7	7.2	7.2	3.3	3.3	8	8	75	75	<0.2	2.1					
					3.6	0.6	18	17.7	8.2	8.2	30.9	30.9	90.7	90.7	7.2	7.2	3.3	3.3	6	6	75	75	<0.2	1.8						
					6.1	0.4	20	17.8	8.2	8.2	31.0	31.0	91.2	91.2	7.2	7.2	4.2	4.2	7	7	78	78	<0.2	2.0						
					6.1	0.4	21	17.8	8.2	8.2	31.0	31.0	91.3	91.3	7.2	7.2	4.2	4.2	7	7	77	77	<0.2	1.8						
IM5	Fine	Moderate	12:57	6.5	Surface	1.0	0.6	16	17.4	8.2	8.2	30.5	30.6	90.6	90.6	7.2	7.2	3.0	3.0	7	7	73	73	820561	804940	<0.2	1.9	2.0		
						1.0	0.6	16	17.4	8.2	8.2	30.6	30.6	90.6	90.6	7.2	7.2	2.9	2.9	7	7	73	73	<0.2	1.9					
						3.3	0.5	16	17.7	8.2	8.2	30.9	30.9	90.8	90.9	7.2	7.2	3.3	3.3	8	8	75	75	<0.2	2.2					
					3.3	0.5	17	17.7	8.2	8.2	30.9	30.9	90.9	90.9	7.2	7.2	3.3	3.3	7	7	76	76	<0.2	1.9						
					5.5	0.4	15	17.7	8.2	8.2	31.0	30.9	91.7	91.8	7.3	7.3	4.3	4.3	7	7	77	77	<0.2	1.9						
					5.5	0.4	15	17.7	8.2	8.2	30.9	30.9	91.8	91.8	7.3	7.3	4.4	4.4	7	7	77	77	<0.2	1.9						
IM6	Fine	Moderate	12:48	6.6	Surface	1.0	0.3	24	17.3	8.2	8.2	30.5	30.5	91.3	91.3	7.3	7.3	3.0	3.0	8	8	73	73	821051	805831	<0.2	2.0	2.0		
						1.0	0.3	25	17.3	8.2	8.2	30.5	30.5	91.2	91.3	7.3	7.3	3.0	3.0	6	6	73	73	<0.2	1.9					
						3.3	0.4	30	17.7	8.2	8.2	30.9	30.9	90.7	90.7	7.2	7.2	3.5	3.5	7	7	75	75	<0.2	2.2					
					3.3	0.4	31	17.7	8.2	8.2	30.9	30.9	90.7	90.7	7.2	7.2	3.4	3.4	6	6	75	75	<0.2	1.8						
					5.6	0.3	28	17.7	8.2	8.2	31.0	31.0	91.3	91.4	7.2	7.2	4.1	4.1	7	7	77	77	<0.2	1.8						
					5.6	0.3	29	17.7	8.2	8.2	31.0	31.0	91.5	91.4	7.2	7.2	4.1	4.1	6	6	77	77	<0.2	2.0						
IM7	Fine	Moderate	12:34	7.8	Surface	1.0	0.3	50	17.4	8.2	8.2	30.5	30.5	90.8	90.8	7.2	7.2	3.0	3.0	4	4	73	73	821332	806808	<0.2	2.1	1.9		
						1.0	0.3	54	17.4	8.2	8.2	30.5	30.5	90.8	90.8	7.2	7.2	3.0	3.0	3	3	73	73	<0.2	1.9					
						3.9	0.4	47	17.7	8.1	8.1	30.9	30.9																	

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

Water Quality Monitoring

Water Quality Monitoring Results on 10 January 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity (NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)			
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA		
									Value	DA	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA		
IM9	Cloudy	Moderate	13:18	7.0	Surface	1.0	0.3	1	17.3	8.2	8.2	28.6	28.6	94.3	94.3	7.6	7.6	3.6	3.6	4	4	72	72	822116	808808	<0.2	1.4	1.4	1.4			
						1.0	0.3	1	17.3	8.2	8.2	28.6	28.6	94.2	94.3	7.6	7.6	3.6	3.6	4	4	72	72	<0.2	1.4	1.4	1.4					
					Middle	3.5	0.3	342	17.3	8.1	8.1	28.7	28.7	93.4	93.4	7.6	7.6	4.7	4.7	5	5	74	74	<0.2	1.4	1.4	1.4					
						3.5	0.3	342	17.4	8.1	8.1	28.7	28.7	93.4	93.4	7.5	7.5	4.4	4.4	5	5	73	73	<0.2	1.4	1.4	1.4					
					Bottom	6.0	0.3	338	17.5	8.1	8.1	29.0	29.0	93.5	93.5	7.5	7.5	3.8	3.8	5	5	76	76	<0.2	1.4	1.4	1.4					
						6.0	0.3	359	17.5	8.1	8.1	29.0	29.0	93.7	93.6	7.5	7.5	3.6	3.6	5	5	77	77	<0.2	1.4	1.4	1.3					
IM10	Cloudy	Moderate	13:27	7.7	Surface	1.0	0.6	320	17.3	8.2	8.2	28.6	28.6	95.5	95.5	7.7	7.7	4.8	4.8	3	3	73	73	822256	809850	<0.2	1.5	1.5	1.4			
						1.0	0.6	342	17.3	8.2	8.2	28.6	28.6	95.4	95.5	7.7	7.7	4.3	4.3	3	3	73	73	<0.2	1.4	1.4	1.4					
					Middle	3.9	0.7	316	17.3	8.1	8.1	28.7	28.7	94.4	94.4	7.6	7.6	3.2	3.2	4	4	73	73	<0.2	1.3	1.3	1.3					
						3.9	0.7	345	17.3	8.1	8.1	28.7	28.7	94.3	94.4	7.6	7.6	3.2	3.2	5	5	73	73	<0.2	1.3	1.3	1.3					
					Bottom	6.7	0.5	315	17.4	8.1	8.1	29.0	29.0	94.8	94.8	7.6	7.6	3.4	3.4	5	5	76	76	<0.2	1.4	1.4	1.4					
						6.7	0.6	316	17.4	8.1	8.1	28.9	28.9	94.8	94.8	7.6	7.6	3.4	3.4	4	4	76	76	<0.2	1.3	1.3	1.3					
IM11	Cloudy	Moderate	13:39	7.8	Surface	1.0	0.4	286	17.6	8.1	8.1	29.3	29.3	91.9	91.9	7.4	7.4	5.1	5.1	5	5	72	72	821516	810544	<0.2	1.2	1.2	1.3			
						1.0	0.4	307	17.6	8.1	8.1	29.3	29.3	91.9	91.9	7.4	7.4	5.0	5.0	3	3	72	72	<0.2	1.3	1.3	1.3					
					Middle	3.9	0.5	287	17.7	8.1	8.1	29.5	29.5	91.8	91.8	7.3	7.3	5.2	5.2	5	5	73	73	<0.2	1.3	1.3	1.3					
						3.9	0.5	310	17.7	8.1	8.1	29.5	29.5	91.8	91.8	7.3	7.3	5.1	5.1	4	4	74	74	<0.2	1.3	1.3	1.3					
					Bottom	6.8	0.4	292	17.7	8.1	8.1	29.5	29.5	91.9	91.9	7.3	7.3	5.3	5.3	8	8	75	75	<0.2	1.2	1.2	1.2					
						6.8	0.5	302	17.7	8.1	8.1	29.5	29.5	92.0	92.0	7.3	7.3	4.9	4.9	8	8	76	76	<0.2	1.4	1.4	1.4					
IM12	Cloudy	Moderate	13:51	9.0	Surface	1.0	0.7	281	17.6	8.1	8.1	29.3	29.3	91.4	91.4	7.3	7.3	5.3	5.3	4	4	72	72	821160	811527	<0.2	1.3	1.3	1.4			
						1.0	0.8	303	17.6	8.1	8.1	29.3	29.3	91.4	91.4	7.3	7.3	5.4	5.4	6	6	73	73	<0.2	1.4	1.4	1.4					
					Middle	4.5	0.6	280	17.7	8.1	8.1	29.6	29.5	91.2	91.2	7.3	7.3	5.4	5.4	4	4	75	75	<0.2	1.3	1.3	1.4					
						4.5	0.7	289	17.7	8.1	8.1	29.5	29.5	91.2	91.2	7.3	7.3	5.5	5.5	5	5	75	75	<0.2	1.4	1.4	1.4					
					Bottom	8.0	0.5	281	17.7	8.1	8.1	29.6	29.6	91.3	91.3	7.3	7.3	6.3	6.3	6	6	76	76	<0.2	1.4	1.4	1.4					
						8.0	0.5	284	17.7	8.1	8.1	29.6	29.6	91.3	91.3	7.3	7.3	6.4	6.4	6	6	76	76	<0.2	1.4	1.4	1.4					
SR2	Cloudy	Moderate	14:21	4.1	Surface	1.0	0.1	47	17.6	8.1	8.1	29.4	29.4	93.9	93.9	7.5	7.5	4.2	4.2	6	6	72	72	821480	814177	<0.2	1.4	1.4	1.4			
						1.0	0.1	51	17.6	8.1	8.1	29.4	29.4	93.9	93.9	7.5	7.5	4.2	4.2	6	6	72	72	<0.2	1.3	1.3	1.3					
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					Bottom	3.1	0.1	32	17.7	8.1	8.1	29.4	29.4	93.8	93.8	7.5	7.5	6.0	6.0	8	8	75	75	<0.2	1.4	1.4	1.4					
						3.1	0.1	34	17.7	8.1	8.1	29.4	29.4	93.8	93.8	7.5	7.5	6.1	6.1	7	7	75	75	<0.2	1.4	1.4	1.4					
SR3	Cloudy	Moderate	13:00	8.5	Surface	1.0	0.2	340	17.0	8.2	8.2	27.7	27.7	96.0	96.0	7.9	7.9	6.7	6.7	5	5	-	-	822132	807577	-	-	-	-			
						1.0	0.2	313	17.0	8.2	8.2	27.7	27.7	96.0	96.0	7.9	7.9	6.7	6.7	3	3	-	-	-	-	-	-					
					Middle	4.3	0.4	9	17.0	8.2	8.2	27.7	27.7	95.6	95.5	7.8	7.8	6.3	6.3	5	5	-	-	-	-	-	-					
						4.3	0.4	9	17.0	8.2	8.2	27.7	27.7	95.4	95.4	7.8	7.8	6.4	6.4	4	4	-	-	-	-	-	-					
					Bottom	7.5	0.3	13	17.1	8.2	8.2	27.7	27.7	95.4	95.4	7.8	7.8	7.2	7.2	6	6	-	-	-	-	-	-					
						7.5	0.3	13	17.1	8.2	8.2	27.7	27.7	95.4	95.4	7.8	7.8	7.2	7.2	8	8	-	-	-	-	-	-					
SR4A	Fine	Moderate	14:03	8.5	Surface	1.0	0.2	249	17.4	8.2	8.2	30.5	30.5	90.6	90.6	7.2	7.2	2.9	2.9	5	5	-	-	817214	807823	-	-	-	-			
						1.0	0.2	255	17.4	8.2	8.2	30.6	30.6	90.5	90.5	7.2	7.2	2.9	2.9	4	4	-	-	-	-	-	-					
					Middle	4.3	0.2	250	17.7	8.2	8.2	31.0	31.0	90.5	90.6	7.2	7.2	2.6	2.6	5	5	-	-	-	-	-	-					
						4.3	0.2	273	17.7	8.2	8.2	31.0	31.0	90.6	90.6	7.2	7.2	2.6	2.6	4	4	-	-	-	-	-	-					
					Bottom	7.5	0.2	227	17.7	8.2	8.2	31.1	31.0	91.4	91.4	7.2	7.2	2.6	2.6	6	6	-	-	-	-	-	-					
						7.5	0.2	235	17.6	8.2	8.2	31.0	31.0	91.4	91.4	7.2	7.2	2.7	2.7	5	5	-	-	-	-	-	-					
SR5A	Fine	Moderate	14:18	4.1	Surface	1.0	0.2	301	17.4	8.2	8.2	30.5	30.6	91.2	91.3	7.3	7.3	2.9	2.9	4	4	-	-	816590	810676	-	-	-	-			
						1.0	0.3	303	17.4	8.2	8.2	30.6	30.6	91.3	91.3	7.3	7.3	2.9	2.9	5	5	-	-	-	-	-	-					
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
					Bottom	3.1	0.2	305	17.4	8.2	8.2	30.6	30.6	91.6	91.6	7.3	7.3	3.8	3.8	8	8	-	-	-	-	-	-					
						3.1	0.2	310	17.4	8.2	8.2	30.6	30.6	91.5	91.6	7.3	7.3	3.9	3.9	7	7	-	-	-	-	-	-					
SR6	Fine	Moderate	14:40	4.0	Surface	1.0	0.2	257	17.3	8.2	8.2	30.5	30.5	91.2	91.2	7.3	7.3	3.0	3.0	6	6	-	-	817876	814667	-	-	-	-			
						1.0	0.2	265	17.3	8.2	8.2	30.5	30.5	91.1	91.2	7.3	7.3	3.0	3.0	4	4	-	-	-	-	-	-					
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
					Bottom	3.0	0.2	256	17.5	8.2	8.2	30.7	30.7	91.6	91.6	7.3	7.3	4.7	4.7	4	4	-	-	-	-	-	-					
						3.0	0.2	259	17.5	8.2	8.2	30.7	30.7	91.6	91.6	7.3	7.3	4.7	4.7	5	5	-	-	-	-	-	-					
SR7	Cloudy	Moderate	15:17	16.1	Surface	1.0	0.1	162	17.5	8.1	8																					

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

Water Quality Monitoring

Water Quality Monitoring Results on 12 January 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
									Value	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value			Value	Value	Value	Value
C1	Fine	Moderate	09:31	7.9	Surface	1.0	0.2	162	16.1	8.1	8.1	31.2	31.2	97.5	97.6	8.0	8.0	12.3	8.0	5	7	73	75	815610	804258	<0.2	0.5	0.5		
						1.0	0.2	164	16.1	8.1	8.1	31.2	31.2	97.6	97.6	8.0	8.0	12.6	8.0	7	7	73	75	<0.2	0.5					
						4.0	0.2	107	16.1	8.1	8.1	31.2	31.2	97.6	97.6	8.0	8.0	7.0	8.0	8	7	75	75	<0.2	0.4					
					4.0	0.2	112	16.1	8.1	8.1	31.2	31.2	97.6	97.6	8.0	8.0	7.1	8.0	9	7	75	75	<0.2	0.6						
					6.9	0.1	95	16.1	8.1	8.1	31.2	31.2	98.2	98.2	8.0	8.0	6.8	8.0	7	7	77	77	<0.2	0.6						
					6.9	0.1	101	16.1	8.1	8.1	31.2	31.2	98.3	98.3	8.0	8.0	6.8	8.0	7	7	77	77	<0.2	0.6						
C2	Fine	Rough	11:08	11.7	Surface	1.0	0.4	216	16.6	8.2	8.2	28.7	28.7	96.3	96.3	7.9	7.9	4.8	7.9	6	7	73	74	825709	806926	<0.2	0.6	0.7		
						1.0	0.4	233	16.6	8.2	8.2	28.7	28.7	96.3	96.3	7.9	7.9	4.8	7.9	6	7	73	74	<0.2	0.5					
						5.9	0.3	213	16.7	8.2	8.2	28.6	28.6	95.9	95.9	7.8	7.8	3.8	7.8	7	7	74	74	<0.2	1.1					
					5.9	0.3	223	16.7	8.2	8.2	28.6	28.6	95.9	95.9	7.8	7.8	3.8	7.8	7	7	74	74	<0.2	0.9						
					10.7	0.1	228	17.4	8.1	8.1	29.6	29.6	98.0	98.0	7.9	7.9	4.5	7.9	8	7	75	75	<0.2	0.5						
					10.7	0.1	250	17.4	8.1	8.1	29.6	29.6	98.0	98.0	7.9	7.9	4.5	7.9	9	7	75	75	<0.2	0.6						
C3	Fine	Moderate	09:04	11.4	Surface	1.0	0.2	233	17.2	8.1	8.1	30.2	30.2	94.1	94.1	7.5	7.5	3.4	7.5	10	12	73	75	822088	817810	<0.2	0.7	0.7		
						1.0	0.2	245	17.2	8.1	8.1	30.2	30.2	94.1	94.1	7.5	7.5	3.4	7.5	11	11	73	74	<0.2	0.6					
						5.7	0.1	258	17.2	8.1	8.1	30.7	30.7	94.3	94.3	7.5	7.5	3.7	7.5	11	11	74	74	<0.2	0.7					
					5.7	0.1	262	17.2	8.1	8.1	30.7	30.7	94.3	94.3	7.5	7.5	3.7	7.5	11	11	75	75	<0.2	0.7						
					10.4	0.1	253	17.2	8.1	8.1	31.2	31.2	94.1	94.1	7.5	7.5	3.5	7.5	13	13	77	77	<0.2	0.8						
					10.4	0.1	257	17.2	8.1	8.1	31.2	31.2	94.1	94.1	7.5	7.5	3.5	7.5	14	14	77	77	<0.2	0.8						
IM1	Fine	Moderate	09:51	7.0	Surface	1.0	0.1	224	15.8	8.1	8.1	30.5	30.5	97.4	97.4	8.0	8.0	5.7	8.0	4	5	73	75	818340	806480	<0.2	0.4	0.5		
						1.0	0.1	243	15.8	8.1	8.1	30.5	30.5	97.4	97.4	8.0	8.0	5.7	8.0	4	5	73	75	<0.2	0.5					
						3.5	0.0	86	15.8	8.1	8.1	30.6	30.6	97.5	97.5	8.0	8.0	5.4	8.0	5	5	75	75	<0.2	0.4					
					3.5	0.0	93	15.8	8.1	8.1	30.6	30.6	97.5	97.5	8.0	8.0	5.4	8.0	3	3	75	75	<0.2	0.5						
					6.0	0.1	95	15.8	8.1	8.1	30.6	30.6	98.0	98.1	8.1	8.1	6.0	8.1	6	6	77	77	<0.2	0.5						
					6.0	0.1	98	15.8	8.1	8.1	30.6	30.6	98.1	98.1	8.1	8.1	6.1	8.1	5	5	77	77	<0.2	0.4						
IM2	Fine	Moderate	09:57	7.9	Surface	1.0	0.1	59	15.8	8.1	8.1	30.6	30.6	97.6	97.6	8.0	8.0	5.8	8.0	4	3	73	75	818830	806215	<0.2	0.4	0.5		
						1.0	0.1	60	15.8	8.1	8.1	30.6	30.6	97.6	97.6	8.0	8.0	5.8	8.0	2	3	73	75	<0.2	0.4					
						4.0	0.1	65	15.8	8.1	8.1	30.6	30.6	97.6	97.6	8.0	8.0	6.8	8.0	4	3	75	75	<0.2	0.6					
					4.0	0.1	65	15.8	8.1	8.1	30.6	30.6	97.6	97.6	8.0	8.0	6.8	8.0	3	3	75	75	<0.2	0.4						
					6.9	0.1	42	15.8	8.1	8.1	30.6	30.6	98.1	98.1	8.1	8.1	9.0	8.1	3	3	77	77	<0.2	0.5						
					6.9	0.1	44	15.8	8.1	8.1	30.6	30.6	98.1	98.1	8.1	8.1	9.2	8.1	3	3	77	77	<0.2	0.4						
IM3	Fine	Moderate	10:05	7.9	Surface	1.0	0.0	272	15.9	8.1	8.1	30.4	30.4	98.0	98.0	8.1	8.1	5.9	8.1	3	6	73	75	819412	806024	<0.2	0.5	0.5		
						1.0	0.0	274	15.9	8.1	8.1	30.4	30.4	98.0	98.0	8.1	8.1	5.9	8.1	3	6	73	75	<0.2	0.4					
						4.0	0.0	147	15.9	8.1	8.1	30.4	30.4	98.5	98.5	8.1	8.1	6.0	8.1	4	6	75	75	<0.2	0.6					
					4.0	0.0	148	15.9	8.1	8.1	30.4	30.4	98.5	98.5	8.1	8.1	6.0	8.1	6	6	75	75	<0.2	0.5						
					6.9	0.0	173	15.9	8.1	8.1	30.4	30.4	99.6	99.7	8.2	8.2	5.8	8.2	9	9	77	77	<0.2	0.5						
					6.9	0.0	184	15.9	8.1	8.1	30.4	30.4	99.7	99.7	8.2	8.2	5.8	8.2	10	10	77	77	<0.2	0.5						
IM4	Fine	Moderate	10:13	7.4	Surface	1.0	0.1	238	15.8	8.1	8.1	30.4	30.4	97.7	97.7	8.1	8.1	5.8	8.1	<2	8.1	4	4	73	75	819597	805033	<0.2	0.5	0.5
						1.0	0.1	250	15.8	8.1	8.1	30.4	30.4	97.7	97.7	8.1	8.1	5.8	8.1	<2	8.1	4	4	73	75	<0.2	0.6			
						3.7	0.1	215	15.8	8.1	8.1	30.4	30.4	97.6	97.6	8.0	8.0	6.4	8.0	<2	8.0	4	4	75	75	<0.2	0.4			
					3.7	0.1	228	15.8	8.1	8.1	30.4	30.4	97.6	97.6	8.1	8.1	6.4	8.1	<2	8.1	4	4	75	75	<0.2	0.4				
					6.4	0.0	65	15.9	8.1	8.1	30.5	30.5	98.1	98.1	8.1	8.1	7.2	8.1	<2	8.1	4	4	77	77	<0.2	0.6				
					6.4	0.0	70	15.8	8.1	8.1	30.5	30.5	98.1	98.1	8.1	8.1	7.1	8.1	<2	8.1	4	4	77	77	<0.2	0.4				
IM5	Fine	Moderate	10:22	6.5	Surface	1.0	0.3	189	15.9	8.1	8.1	30.1	30.1	98.3	98.4	8.1	8.1	10.0	8.1	<2	8.1	2	3	73	75	820546	804925	<0.2	0.5	0.5
						1.0	0.3	190	15.9	8.1	8.1	30.2	30.1	98.4	98.4	8.1	8.1	9.3	8.1	<2	8.1	2	3	73	75	<0.2	0.5			
						3.3	0.2	271	15.9	8.1	8.1	30.2	30.2	99.2	99.2	8.2	8.2	8.3	8.2	<2	8.2	4	4	75	75	<0.2	0.4			
					3.3	0.2	297	15.9	8.1	8.1	30.2	30.2	99.2	99.2	8.2	8.2	8.3	8.2	<2	8.2	4	4	75	75	<0.2	0.4				
					5.5	0.1	247	16.0	8.1	8.1	30.2	30.2	100.9	100.9	8.3	8.3	8.8	8.3	<2	8.3	2	3	77	77	<0.2	0.5				
					5.5	0.1	249	16.0	8.1	8.1	30.2	30.2	101.0	101.0	8.3	8.3	8.9	8.3	<2	8.3	2	3	77	77	<0.2	0.4				
IM6	Fine	Moderate	10:32	6.6	Surface	1.0	0.3	187	15.9	8.2	8.2	30.1	30.1	98.5	98.5	8.1	8.1	8.1	8.1	2	3	73	75	821084	805846	<0.2	0.4	0.5		
						1.0	0.3	192	15.9	8.2	8.2	30.1	30.1	98.5	98.5	8.1	8.1	8.1	8.1	3	3	73	75	<0.2	0.5					
						3.3	0.2	206	15.9	8.2	8.2	30.1	30.1	99.2	99.2	8.2	8.2	7.7	8.2	4	3	75	75	<0.2	0.6					
					3.3	0.2	225	15.9	8.2	8.2	30.1	30.1	99.2	99.2	8.2	8.2	7.8	8.2	3	3	75	75	<0.2	0.6						
					5.6	0.2	224	16.0	8.2	8.2	30.2	30.2	101.8	101.8	8.4	8.4	8.4	8.4	2	2	77	77	<0.2	0.5						
					5.6	0.2	240	16.0	8.2	8.2	30.2	30.2	101.9	101.9	8.4	8.4	8.5	8.4	2	2	77	77	<0.2	0.5						
IM7	Fine	Moderate	10:41	8.0	Surface	1.0	0.2	158	16.1	8.1	8.1	29.9	29.9	97.6	97.6	8.0	8.0	4.9	8.0	4	5	73	75	821324	8068					

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

Water Quality Monitoring

Water Quality Monitoring Results on 12 January 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)			
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA
									Value	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value			Value	Value	Value	Value	Value	Value
C1	Fine	Moderate	15:06	8.4	Surface	1.0	0.3	52	16.2	16.2	8.1	8.1	31.6	31.6	99.3	99.3	8.1	8.1	5.5	6	73	73	<0.2	<0.2	0.5	0.5	815619	804252	<0.2	<0.2	0.5	0.5
						1.0	0.3	56	16.2	8.1	8.1	31.6	31.6	99.3	99.3	8.1	8.1	5.5	5	74	74	<0.2	<0.2	0.5	0.5							
						4.2	0.3	35	16.1	16.1	8.1	8.1	31.6	31.6	99.1	99.2	8.1	8.1	5.9	4	76	76	<0.2	<0.2	0.6	0.6						
					4.2	0.3	36	16.1	16.1	8.1	8.1	31.6	31.6	99.2	99.2	8.1	8.1	6.0	4	76	76	<0.2	<0.2	0.5	0.5							
					7.4	0.1	356	16.1	16.1	8.1	8.1	31.7	31.7	100.0	100.0	8.1	8.1	8.3	4	78	78	<0.2	<0.2	0.7	0.7							
					7.4	0.1	328	16.1	16.1	8.1	8.1	31.7	31.7	100.0	100.0	8.1	8.1	8.2	5	78	78	<0.2	<0.2	0.5	0.5							
C2	Fine	Rough	14:03	11.0	Surface	1.0	0.1	268	17.1	17.1	8.1	8.1	29.2	29.2	98.3	98.3	8.0	8.0	3.1	7	71	71	<0.2	<0.2	0.4	0.4	825678	806938	<0.2	<0.2	0.5	0.5
						1.0	0.1	277	17.1	17.1	8.1	8.1	29.2	29.2	98.3	98.3	8.0	8.0	3.1	7	72	72	<0.2	<0.2	0.5	0.5						
						5.5	0.3	323	17.2	17.2	8.1	8.1	29.9	29.9	96.9	96.9	7.8	7.8	4.9	9	73	73	<0.2	<0.2	0.5	0.5						
					5.5	0.3	339	17.2	17.2	8.1	8.1	29.9	29.9	96.9	96.9	7.8	7.8	4.9	8	73	73	<0.2	<0.2	0.5	0.5							
					10.0	0.3	337	17.2	17.2	8.1	8.1	30.8	30.8	97.8	97.8	7.8	7.8	6.1	8	75	75	<0.2	<0.2	0.4	0.4							
					10.0	0.3	353	17.2	17.2	8.1	8.1	30.8	30.8	97.8	97.8	7.8	7.8	6.1	9	75	75	<0.2	<0.2	0.4	0.4							
C3	Fine	Moderate	16:07	12.1	Surface	1.0	0.5	273	17.2	17.2	8.1	8.1	29.8	29.8	95.8	95.8	7.7	7.7	3.4	6	73	73	<0.2	<0.2	0.5	0.5	822110	817814	<0.2	<0.2	0.5	0.5
						1.0	0.5	283	17.2	17.2	8.1	8.1	29.8	29.8	95.8	95.8	7.7	7.7	3.4	7	73	73	<0.2	<0.2	0.5	0.5						
						6.1	0.4	279	17.2	17.2	8.1	8.1	29.7	29.7	96.1	96.1	7.7	7.7	3.7	7	75	75	<0.2	<0.2	0.4	0.4						
					6.1	0.5	301	17.2	17.2	8.1	8.1	29.7	29.7	96.1	96.1	7.7	7.7	3.7	5	75	75	<0.2	<0.2	0.4	0.4							
					11.1	0.4	274	17.2	17.2	8.1	8.1	29.6	29.6	96.6	96.7	7.8	7.8	3.4	9	77	77	<0.2	<0.2	0.4	0.4							
					11.1	0.4	290	17.2	17.2	8.1	8.1	29.7	29.7	96.8	96.7	7.8	7.8	3.6	8	78	78	<0.2	<0.2	0.5	0.5							
IM1	Fine	Moderate	14:47	7.2	Surface	1.0	0.3	351	16.1	16.1	8.4	8.4	30.8	30.8	100.7	100.7	8.2	8.2	3.5	5	74	74	<0.2	<0.2	0.5	0.5	818364	806480	<0.2	<0.2	0.5	0.5
						1.0	0.3	323	16.1	16.1	8.4	8.4	30.8	30.8	100.7	100.7	8.2	8.2	3.5	4	74	74	<0.2	<0.2	0.5	0.5						
						3.6	0.4	3	16.0	16.0	8.4	8.4	30.9	30.9	100.6	100.6	8.2	8.2	4.6	4	76	76	<0.2	<0.2	0.5	0.5						
					3.6	0.4	3	16.0	16.0	8.4	8.4	30.9	30.9	100.6	100.6	8.2	8.2	4.6	4	76	76	<0.2	<0.2	0.5	0.5							
					6.2	0.3	14	15.9	15.9	8.4	8.4	31.1	31.1	101.0	101.1	8.3	8.3	6.5	5	78	78	<0.2	<0.2	0.6	0.6							
					6.2	0.3	14	15.9	15.9	8.4	8.4	31.1	31.1	101.1	101.1	8.3	8.3	6.5	6	78	78	<0.2	<0.2	0.5	0.5							
IM2	Fine	Moderate	14:41	8.1	Surface	1.0	0.1	303	16.0	16.0	8.2	8.2	30.6	30.6	100.3	100.3	8.2	8.2	3.7	7	74	74	<0.2	<0.2	0.6	0.6	818874	806188	<0.2	<0.2	0.5	0.5
						1.0	0.1	323	16.0	16.0	8.2	8.2	30.6	30.6	100.3	100.3	8.2	8.2	3.7	6	74	74	<0.2	<0.2	0.5	0.5						
						4.1	0.2	343	15.9	15.9	8.2	8.2	30.7	30.7	100.1	100.1	8.2	8.2	4.4	6	76	76	<0.2	<0.2	0.5	0.5						
					4.1	0.2	316	15.9	15.9	8.2	8.2	30.7	30.7	100.1	100.1	8.2	8.2	4.4	5	76	76	<0.2	<0.2	0.5	0.5							
					7.1	0.2	11	15.9	15.9	8.1	8.1	31.1	31.1	100.5	100.5	8.2	8.2	6.1	6	78	78	<0.2	<0.2	0.5	0.5							
					7.1	0.2	11	15.9	15.9	8.1	8.1	31.1	31.1	100.5	100.5	8.2	8.2	6.1	5	78	78	<0.2	<0.2	0.6	0.6							
IM3	Fine	Moderate	14:33	8.0	Surface	1.0	0.1	9	16.1	16.1	8.3	8.3	30.4	30.4	100.1	100.1	8.2	8.2	4.1	4	73	73	<0.2	<0.2	0.5	0.5	819434	806005	<0.2	<0.2	0.4	0.4
						1.0	0.1	9	16.1	16.1	8.3	8.3	30.4	30.4	100.1	100.1	8.2	8.2	4.1	4	74	74	<0.2	<0.2	0.5	0.5						
						4.0	0.1	11	16.0	16.0	8.2	8.2	30.5	30.5	99.7	99.7	8.2	8.2	4.1	4	75	75	<0.2	<0.2	0.4	0.4						
					4.0	0.1	11	16.0	16.0	8.2	8.2	30.5	30.5	99.7	99.7	8.2	8.2	4.1	3	76	76	<0.2	<0.2	0.5	0.5							
					7.0	0.2	61	15.9	15.9	8.1	8.1	30.9	30.9	100.0	100.1	8.2	8.2	5.4	3	77	77	<0.2	<0.2	0.5	0.5							
					7.0	0.2	61	15.9	15.9	8.1	8.1	30.9	30.9	100.1	100.1	8.2	8.2	5.4	3	78	78	<0.2	<0.2	0.6	0.6							
IM4	Fine	Moderate	14:25	7.3	Surface	1.0	0.2	349	16.1	16.1	8.3	8.3	30.7	30.7	100.0	100.0	8.2	8.2	6.5	6	74	74	<0.2	<0.2	0.5	0.5	819570	805060	<0.2	<0.2	0.6	0.6
						1.0	0.2	321	16.1	16.1	8.3	8.3	30.7	30.7	100.0	100.0	8.2	8.2	6.5	6	74	74	<0.2	<0.2	0.6	0.6						
						3.7	0.2	358	16.1	16.1	8.2	8.2	30.7	30.7	100.0	100.0	8.2	8.2	5.6	4	76	76	<0.2	<0.2	0.6	0.6						
					3.7	0.2	358	16.1	16.1	8.2	8.2	30.7	30.7	100.0	100.0	8.2	8.2	5.6	5	76	76	<0.2	<0.2	0.6	0.6							
					6.3	0.3	9	16.0	16.0	8.1	8.1	30.8	30.8	100.4	100.4	8.2	8.2	5.4	4	78	78	<0.2	<0.2	0.5	0.5							
					6.3	0.3	9	16.0	16.0	8.1	8.1	30.8	30.8	100.4	100.4	8.2	8.2	5.4	4	78	78	<0.2	<0.2	0.5	0.5							
IM5	Fine	Moderate	14:17	6.5	Surface	1.0	0.2	356	16.3	16.3	8.1	8.1	30.4	30.4	99.1	99.1	8.1	8.1	4.4	5	74	74	<0.2	<0.2	0.4	0.4	820585	804906	<0.2	<0.2	0.5	0.5
						1.0	0.2	328	16.3	16.3	8.1	8.1	30.4	30.4	99.1	99.1	8.1	8.1	4.4	4	74	74	<0.2	<0.2	0.5	0.5						
						3.3	0.2	352	16.3	16.3	8.1	8.1	30.5	30.5	98.9	98.9	8.1	8.1	4.2	5	75	75	<0.2	<0.2	0.4	0.4						
					3.3	0.2	357	16.3	16.3	8.1	8.1	30.5	30.5	98.9	98.9	8.1	8.1	4.2	3	76	76	<0.2	<0.2	0.5	0.5							
					5.5	0.2	351	16.2	16.2	8.1	8.1	30.6	30.6	99.5	99.6	8.1	8.1	4.4	5	78	78	<0.2	<0.2	0.4	0.4							
					5.5	0.2	323	16.2	16.2	8.1	8.1	30.6	30.6	99.6	99.6	8.1	8.1	4.4	4	78	78	<0.2	<0.2	0.4	0.4							
IM6	Fine	Moderate	14:09	6.5	Surface	1.0	0.2	335	16.2	16.2	8.1	8.1	30.5	30.5	100.2	100.2	8.2	8.2	4.4	3	74	74	<0.2	<0.2	0.5	0.5	821086	805833	<0.2	<0.2	0.5	0.5
						1.0	0.2	308	16.2	16.2	8.1	8.1	30.5	30.5	100.2	100.2	8.2	8.2	4.4	4	74	74	<0.2	<0.2	0.5	0.5						
						3.3	0.3	350	16.2	16.2	8.1	8.1	30.5	30.5	100.3	100.3	8.2	8.2	4.5	2	76	76	<0.2	<0.2	0							

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

Water Quality Monitoring

Water Quality Monitoring Results on 12 January 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity (NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)				
									Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA			
IM9	Fine	Moderate	14:40	7.0	Surface	1.0	0.2	298	17.0	8.2	8.2	29.3	29.3	98.0	98.0	7.9	5.6	8.0	7	73	7	73	74	822067	808831	<0.2	0.4	<0.2	0.4				
						1.0	0.2	320	17.0	8.2	8.2	29.3	29.3	98.0	98.0	7.9	5.6	8.0	6	72	6	72	6	72	74	808831	<0.2	0.4	<0.2	0.4			
					Middle	3.5	0.3	302	17.0	8.2	8.2	29.3	29.3	98.5	98.5	8.0	5.4	8.0	5.4	8.0	4	74	4	74	74	822067	808831	<0.2	0.4	<0.2	0.4		
						3.5	0.3	331	17.0	8.2	8.2	29.3	29.3	98.5	98.5	8.0	5.4	8.0	5	74	5	74	5	74	74	822067	808831	<0.2	0.4	<0.2	0.5		
					Bottom	6.0	0.2	289	17.0	8.2	8.2	29.3	29.3	98.8	98.8	8.0	5.8	8.0	5.8	8.0	5	75	5	75	5	75	74	822067	808831	<0.2	0.5	<0.2	0.4
						6.0	0.2	316	17.0	8.2	8.2	29.3	29.3	98.8	98.8	8.0	5.8	8.0	5	75	5	75	5	75	5	75	74	822067	808831	<0.2	0.4	<0.2	0.4
IM10	Fine	Moderate	14:49	7.2	Surface	1.0	0.5	301	17.1	8.2	8.2	29.6	29.6	97.5	97.5	7.9	4.2	7.9	6	73	6	73	74	822269	809823	<0.2	0.4	<0.2	0.4				
						1.0	0.5	324	17.1	8.2	8.2	29.6	29.6	97.5	97.5	7.9	4.2	7.9	5	73	5	73	6	74	74	822269	809823	<0.2	0.4	<0.2	0.6		
					Middle	3.6	0.4	298	17.0	8.2	8.2	29.6	29.6	97.3	97.3	7.9	4.5	7.9	4.5	7.9	8	75	8	75	74	822269	809823	<0.2	0.4	<0.2	0.4		
						3.6	0.5	312	17.0	8.2	8.2	29.6	29.6	97.3	97.3	7.9	4.5	7.9	9	75	9	75	9	75	74	822269	809823	<0.2	0.4	<0.2	0.4		
					Bottom	6.2	0.4	292	17.1	8.2	8.2	29.7	29.7	97.5	97.5	7.9	11.3	7.9	11.3	9	75	9	75	9	75	74	822269	809823	<0.2	0.4	<0.2	0.4	
						6.2	0.4	317	17.1	8.2	8.2	29.7	29.7	97.5	97.5	7.9	11.3	7.9	9	75	9	75	9	75	9	75	74	822269	809823	<0.2	0.4	<0.2	0.4
IM11	Fine	Moderate	15:02	7.3	Surface	1.0	0.4	289	17.2	8.2	8.2	29.8	29.8	96.9	96.9	7.8	3.4	7.8	6	74	6	74	75	821524	810551	<0.2	0.4	<0.2	0.5				
						1.0	0.4	306	17.2	8.2	8.2	29.8	29.8	96.9	96.9	7.8	3.4	7.8	6	73	6	73	7	76	75	821524	810551	<0.2	0.5	<0.2	0.4		
					Middle	3.7	0.4	287	17.2	8.1	8.1	29.8	29.8	96.9	96.9	7.8	3.8	7.8	8	76	8	76	7	77	75	821524	810551	<0.2	0.4	<0.2	0.5		
						3.7	0.4	305	17.2	8.1	8.1	29.8	29.8	96.9	96.9	7.8	3.8	7.8	7	77	7	77	8	76	7	76	75	821524	810551	<0.2	0.5	<0.2	0.4
					Bottom	6.3	0.2	277	17.2	8.1	8.1	29.8	29.8	97.7	97.7	7.9	5.0	7.9	13	76	13	76	12	76	12	76	75	821524	810551	<0.2	0.5	<0.2	0.4
						6.3	0.3	290	17.2	8.1	8.1	29.8	29.8	97.7	97.7	7.9	5.0	7.9	12	76	12	76	12	76	12	76	75	821524	810551	<0.2	0.4	<0.2	0.4
IM12	Fine	Moderate	15:11	8.5	Surface	1.0	0.5	288	17.2	8.2	8.2	29.5	29.5	95.9	95.9	7.7	4.0	7.7	6	73	6	73	75	821176	811499	<0.2	0.5	<0.2	0.4				
						1.0	0.5	316	17.2	8.2	8.2	29.5	29.5	95.9	95.9	7.7	4.0	7.7	7	74	7	74	7	75	75	821176	811499	<0.2	0.5	<0.2	0.4		
					Middle	4.3	0.4	289	17.2	8.1	8.1	29.7	29.7	96.6	96.6	7.8	5.0	7.8	5.1	7	75	7	75	7	75	75	821176	811499	<0.2	0.4	<0.2	0.4	
						4.3	0.4	302	17.2	8.1	8.1	29.7	29.7	96.6	96.6	7.8	5.0	7.8	7	75	7	75	7	75	7	75	75	821176	811499	<0.2	0.4	<0.2	0.4
					Bottom	7.5	0.3	286	17.3	8.1	8.1	29.9	29.9	97.5	97.5	7.8	6.2	7.8	8	76	8	76	7	77	7	76	75	821176	811499	<0.2	0.5	<0.2	0.5
						7.5	0.3	305	17.3	8.1	8.1	29.9	29.9	97.5	97.5	7.8	6.2	7.8	7	77	7	77	7	77	7	77	75	821176	811499	<0.2	0.5	<0.2	0.5
SR2	Fine	Moderate	15:39	4.1	Surface	1.0	0.1	51	17.2	8.2	8.2	29.9	29.9	98.8	98.8	7.9	5.2	7.9	4	73	4	73	74	821450	814181	<0.2	0.6	<0.2	0.5				
						1.0	0.1	52	17.2	8.2	8.2	29.9	29.9	98.8	98.8	7.9	5.2	7.9	6	74	6	74	6	74	74	821450	814181	<0.2	0.5	<0.2	0.5		
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	74	821450	814181	<0.2	0.6	<0.2	0.5	
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	74	821450	814181	<0.2	0.5	<0.2	0.5
					Bottom	3.1	0.1	43	17.3	8.1	8.1	29.9	29.9	99.9	99.9	8.0	6.4	8.0	5	75	5	75	5	75	5	75	74	821450	814181	<0.2	0.4	<0.2	0.5
						3.1	0.1	45	17.3	8.1	8.1	29.9	29.9	99.9	99.9	8.0	6.4	8.0	7	75	7	75	7	75	7	75	74	821450	814181	<0.2	0.5	<0.2	0.5
SR3	Fine	Moderate	14:26	8.1	Surface	1.0	0.1	306	16.6	8.2	8.2	28.1	28.1	100.5	100.5	8.3	6.0	8.3	7	-	7	-	-	822134	807588	-	-	-	-				
						1.0	0.1	334	16.6	8.2	8.2	28.1	28.1	100.5	100.5	8.3	6.0	8.3	7	-	7	-	-	-	-	822134	807588	-	-	-	-		
					Middle	4.1	0.1	320	16.5	8.2	8.2	28.5	28.5	100.4	100.4	8.3	5.4	8.3	5.1	7	-	7	-	-	-	822134	807588	-	-	-	-		
						4.1	0.1	327	16.5	8.2	8.2	28.5	28.5	100.4	100.4	8.3	5.4	8.3	6	-	6	-	-	-	-	822134	807588	-	-	-	-		
					Bottom	7.1	0.1	352	16.5	8.2	8.2	29.4	29.4	100.3	100.3	8.2	3.9	8.2	8.2	10	-	10	-	-	-	-	822134	807588	-	-	-	-	
						7.1	0.1	356	16.5	8.2	8.2	29.4	29.4	100.3	100.3	8.2	3.9	8.2	9	-	9	-	-	-	-	-	822134	807588	-	-	-	-	
SR4A	Fine	Moderate	15:26	8.3	Surface	1.0	0.2	238	16.5	8.0	8.0	29.9	29.9	97.4	97.4	7.9	5.6	8.0	4	-	4	-	-	817193	807817	-	-	-	-				
						1.0	0.2	241	16.5	8.0	8.0	29.9	29.9	97.3	97.3	7.9	5.6	8.0	3	-	3	-	-	-	-	817193	807817	-	-	-	-		
					Middle	4.2	0.1	247	16.2	8.0	8.0	30.2	30.2	97.3	97.3	8.0	6.1	8.0	5.8	4	-	4	-	-	-	817193	807817	-	-	-	-		
						4.2	0.1	249	16.2	8.0	8.0	30.2	30.2	97.3	97.3	8.0	6.1	8.0	4	-	4	-	-	-	-	817193	807817	-	-	-	-		
					Bottom	7.3	0.0	97	15.9	8.0	8.0	31.0	31.0	98.4	98.5	8.1	5.7	8.1	8.1	4	-	4	-	-	-	817193	807817	-	-	-	-		
						7.3	0.0	98	15.9	8.0	8.0	31.0	31.0	98.5	98.5	8.1	5.7	8.1	4	-	4	-	-	-	-	817193	807817	-	-	-	-		
SR5A	Fine	Moderate	15:44	5.2	Surface	1.0	0.2	302	16.2	8.0	8.0	29.7	29.7	98.0	98.0	8.0	5.4	8.0	2	-	2	-	-	816582	810720	-	-	-	-				
						1.0	0.2	321	16.2	8.0	8.0	29.7	29.7	98.0	98.0	8.0	5.4	8.0	4	-	4	-	-	-	-	816582	810720	-	-	-	-		
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	816582	810720	-	-	-	-		
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	816582	810720	-	-	-	-		
					Bottom	4.2	0.2	303	16.2	8.0	8.0	29.7	29.7	99.0	99.1	8.1	7.9	8.1	6.7	3	-	3	-	-	-	816582	810720	-	-	-</			

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

Water Quality Monitoring

Water Quality Monitoring Results on 14 January 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)				
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA	
									Value	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value			Value	Value	Value	Value	Value	Value	Value
C1	Sunny	Moderate	11:10	8.4	Surface	1.0	0.2	149	16.1	8.2	8.2	31.8	31.8	99.7	99.7	8.1	8.1	7.4	7.4	5	73	74	815594	804222	<0.2	<0.2	0.6	0.7					
						1.0	0.2	154	16.1	8.2	8.2	31.8	31.8	99.7	99.7	8.1	8.1	7.4	7.4	6	73	74											
					Middle	4.2	0.1	177	16.0	8.3	8.3	31.8	31.8	99.7	99.7	8.1	8.1	7.5	7.5	6	74	74											
						4.2	0.1	193	16.0	8.3	8.3	31.8	31.8	99.7	99.7	8.1	8.1	7.5	7.5	6	74	74											
					Bottom	7.4	0.1	141	16.0	8.3	8.3	31.8	31.8	100.1	100.1	8.1	8.1	7.0	7.0	6	74	74											
						7.4	0.1	141	16.0	8.3	8.3	31.8	31.8	100.1	100.1	8.1	8.1	7.0	7.0	6	74	74											
C2	Fine	Moderate	10:06	11.6	Surface	1.0	0.2	24	16.3	8.2	8.2	29.6	29.6	98.5	98.5	8.1	8.1	3.6	3.6	3	72	73	825696	806925	<0.2	<0.2	0.7	0.8					
						1.0	0.2	24	16.3	8.2	8.2	29.6	29.6	98.5	98.5	8.1	8.1	3.6	3.6	3	72	73											
					Middle	5.8	0.2	28	16.2	8.2	8.2	29.8	29.8	98.0	98.0	8.0	8.0	5.7	5.7	3	73	73											
						5.8	0.2	28	16.2	8.2	8.2	29.8	29.8	98.0	98.0	8.0	8.0	5.7	5.7	4	73	73											
					Bottom	10.6	0.2	35	16.2	8.2	8.2	30.3	30.3	98.0	98.0	8.0	8.0	10.2	10.2	4	74	74											
						10.6	0.2	36	16.2	8.2	8.2	30.3	30.3	98.0	98.0	8.0	8.0	10.2	10.2	4	75	75											
C3	Fine	Moderate	11:54	11.9	Surface	1.0	0.2	103	16.9	8.2	8.2	30.3	30.3	97.8	97.8	7.9	7.9	3.8	3.8	2	73	74	822107	817824	<0.2	<0.2	0.6	0.5					
						1.0	0.2	104	16.9	8.2	8.2	30.3	30.3	97.8	97.8	7.9	7.9	3.8	3.8	2	74	74											
					Middle	6.0	0.3	89	16.9	8.2	8.2	30.2	30.2	98.1	98.1	7.9	7.9	4.9	4.9	2	74	74											
						6.0	0.3	94	16.9	8.2	8.2	30.2	30.2	98.1	98.1	7.9	7.9	4.9	4.9	2	75	75											
					Bottom	10.9	0.2	90	16.9	8.2	8.2	30.1	30.1	99.7	99.7	8.1	8.1	2.8	2.8	3	77	77											
						10.9	0.2	92	16.9	8.2	8.2	30.1	30.1	99.7	99.7	8.1	8.1	2.8	2.8	3	77	77											
IM1	Sunny	Moderate	10:52	7.5	Surface	1.0	0.2	3	16.0	8.3	8.3	31.9	31.9	100.3	100.3	8.2	8.2	7.1	7.1	5	73	73	818325	806429	<0.2	<0.2	0.7	0.6					
						1.0	0.2	3	16.0	8.3	8.3	31.9	31.9	100.3	100.3	8.2	8.2	7.1	7.1	6	73	73											
					Middle	3.8	0.2	12	15.9	8.3	8.3	31.9	31.9	100.1	100.1	8.2	8.2	7.4	7.4	4	74	74											
						3.8	0.2	12	15.9	8.3	8.3	31.9	31.9	100.1	100.1	8.2	8.2	7.4	7.4	6	74	74											
					Bottom	6.5	0.1	17	15.9	8.3	8.3	31.8	31.8	100.4	100.4	8.2	8.2	7.4	7.4	5	75	75											
						6.5	0.2	17	15.9	8.3	8.3	31.8	31.8	100.4	100.4	8.2	8.2	7.4	7.4	5	75	75											
IM2	Sunny	Moderate	10:47	8.3	Surface	1.0	0.2	61	16.0	8.3	8.3	31.9	31.9	99.7	99.7	8.1	8.1	8.6	8.6	8	72	73	818849	806168	<0.2	<0.2	0.6	0.6					
						1.0	0.2	66	16.0	8.3	8.3	31.9	31.9	99.7	99.7	8.1	8.1	8.6	8.6	7	72	72											
					Middle	4.2	0.1	37	16.0	8.3	8.3	31.9	31.9	99.6	99.6	8.1	8.1	8.4	8.4	6	72	72											
						4.2	0.2	40	16.0	8.3	8.3	31.9	31.9	99.6	99.6	8.1	8.1	8.4	8.4	7	72	72											
					Bottom	7.3	0.2	22	16.0	8.3	8.3	31.9	31.9	100.2	100.2	8.2	8.2	8.5	8.5	7	73	73											
						7.3	0.2	23	16.0	8.3	8.3	31.9	31.9	100.2	100.2	8.2	8.2	8.5	8.5	8	74	74											
IM3	Sunny	Moderate	10:40	8.5	Surface	1.0	0.2	52	16.1	8.3	8.3	31.9	31.9	99.3	99.3	8.1	8.1	9.2	9.2	5	72	73	819397	806029	<0.2	<0.2	0.5	0.6					
						1.0	0.2	52	16.1	8.3	8.3	31.9	31.9	99.3	99.3	8.1	8.1	9.2	9.2	6	73	73											
					Middle	4.3	0.2	66	16.1	8.3	8.3	31.9	31.9	99.1	99.1	8.0	8.0	8.9	8.9	6	73	73											
						4.3	0.2	71	16.1	8.3	8.3	31.9	31.9	99.1	99.1	8.0	8.0	8.9	8.9	7	73	73											
					Bottom	7.5	0.2	62	16.1	8.3	8.3	31.9	31.9	99.3	99.3	8.1	8.1	9.1	9.1	6	74	74											
						7.5	0.2	65	16.1	8.3	8.3	31.9	31.9	99.3	99.3	8.1	8.1	9.1	9.1	6	74	74											
IM4	Sunny	Moderate	10:33	7.8	Surface	1.0	0.2	5	16.0	8.3	8.3	31.9	31.9	99.4	99.4	8.1	8.1	9.5	9.5	8	72	73	819576	805047	<0.2	<0.2	0.6	0.6					
						1.0	0.2	5	16.0	8.3	8.3	31.9	31.9	99.4	99.4	8.1	8.1	9.5	9.5	7	72	72											
					Middle	3.9	0.1	39	16.0	8.3	8.3	31.9	31.9	99.7	99.7	8.1	8.1	9.8	9.8	7	73	73											
						3.9	0.1	40	16.0	8.3	8.3	31.9	31.9	99.7	99.7	8.1	8.1	9.8	9.8	9	73	73											
					Bottom	6.8	0.1	34	16.0	8.3	8.3	31.9	31.9	100.2	100.2	8.2	8.2	10.2	10.2	8	73	73											
						6.8	0.1	36	16.0	8.3	8.3	31.9	31.9	100.2	100.2	8.2	8.2	10.2	10.2	8	74	74											
IM5	Sunny	Moderate	10:25	7.1	Surface	1.0	0.1	19	15.7	8.3	8.3	31.8	31.8	99.7	99.7	8.2	8.2	9.3	9.3	8	72	73	820555	804896	<0.2	<0.2	0.6	0.6					
						1.0	0.1	19	15.7	8.3	8.3	31.8	31.8	99.7	99.7	8.2	8.2	9.3	9.3	8	72	73											
					Middle	3.6	0.1	352	15.7	8.3	8.3	31.8	31.8	99.6	99.6	8.2	8.2	9.7	9.7	7	73	73											
						3.6	0.1	354	15.7	8.3	8.3	31.8	31.8	99.6	99.6	8.2	8.2	9.7	9.7	9	73	73											
					Bottom	6.1	0.1	38	15.7	8.3	8.3	31.8	31.8	100.1	100.1	8.2	8.2	10.2	10.2	10	74	74											
						6.1	0.1	39	15.7	8.3	8.3	31.8	31.8	100.1	100.1	8.2	8.2	10.2	10.2	8	74	74											
IM6	Sunny	Moderate	10:17	7.0	Surface	1.0	0.1	56	15.4	8.3	8.3	31.6	31.6	100.5	100.5	8.3	8.3	7.8	7.8	6	73	73	821073	805800	<0.2	<0.2	0.6	0.7					
						1.0	0.1	61	15.4	8.3	8.3	31.6	31.6	100.5	100.5	8.3	8.3	7.8	7.8	7	73	73											
					Middle	3.5	0.2	54	15.4	8.3	8.3	31.7	31.7	100.3	100.3	8.3	8.3	7.4	7.4	6	73	73											

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

Water Quality Monitoring

Water Quality Monitoring Results on 14 January 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity (NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)							
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA	Value	DA	Value	DA
IM9	Fine	Moderate	10:40	7.0	Surface	1.0	0.2	64	15.8	15.8	8.3	8.3	30.3	30.3	100.7	100.7	8.3	8.3	9.0	8.5	10	10	73	74	822105	808811	<0.2	<0.2	0.9	0.8						
						1.0	0.2	65	15.8	8.3	8.3	30.3	30.3	100.7	100.7	8.3	8.3	9.0	8.5	10	10	73	74	<0.2			<0.2	0.7	0.8							
					Middle	3.5	0.2	67	15.7	15.7	8.3	8.3	30.4	30.4	100.6	100.6	8.3	8.3	8.1	8.5	8	8	74	75			74	75	<0.2	<0.2	0.7	0.8				
						3.5	0.2	67	15.7	15.7	8.3	8.3	30.4	30.4	100.6	100.6	8.3	8.3	8.1	8.5	8	8	75	75			75	75	<0.2	<0.2	0.7	0.8				
					Bottom	6.0	0.2	76	15.8	15.8	8.3	8.3	30.5	30.5	100.9	100.9	8.3	8.3	8.5	8.5	10	10	75	75			75	75	<0.2	<0.2	0.7	0.8				
						6.0	0.2	77	15.8	15.8	8.3	8.3	30.5	30.5	100.9	100.9	8.3	8.3	8.5	8.5	11	11	75	75			75	75	<0.2	<0.2	0.7	0.8				
IM10	Fine	Moderate	10:48	6.8	Surface	1.0	0.1	38	16.1	16.1	8.2	8.2	30.4	30.4	100.5	100.5	8.2	8.2	6.3	8.5	5	5	73	75	822237	809844	<0.2	<0.2	0.9	1.0						
						1.0	0.1	41	16.1	16.1	8.2	8.2	30.4	30.4	100.5	100.5	8.2	8.2	6.3	8.5	5	5	73	75			<0.2	<0.2	0.8	1.1						
					Middle	3.4	0.1	54	16.1	16.1	8.2	8.2	30.4	30.4	100.6	100.6	8.2	8.2	8.5	8.5	3	3	74	75			74	75	<0.2	<0.2	0.9	1.1				
						3.4	0.1	54	16.1	16.1	8.2	8.2	30.4	30.4	100.6	100.6	8.2	8.2	8.5	8.5	3	3	75	75			75	75	<0.2	<0.2	0.9	1.1				
					Bottom	5.8	0.1	45	16.1	16.1	8.2	8.2	30.4	30.4	101.1	101.1	8.3	8.3	10.8	10.8	4	4	77	77			77	77	<0.2	<0.2	1.1	0.9				
						5.8	0.1	48	16.1	16.1	8.2	8.2	30.4	30.4	101.1	101.1	8.3	8.3	10.8	10.8	3	3	77	77			77	77	<0.2	<0.2	0.9	0.8				
IM11	Fine	Moderate	10:59	8.3	Surface	1.0	0.2	65	15.9	15.9	8.3	8.3	30.4	30.4	101.5	101.5	8.3	8.4	7.3	7.5	5	5	74	75	821483	810538	<0.2	<0.2	0.8	0.8						
						1.0	0.2	68	15.9	15.9	8.3	8.3	30.4	30.4	101.5	101.5	8.3	8.4	7.3	7.5	6	6	73	75			<0.2	<0.2	0.9	0.8						
					Middle	4.2	0.2	65	15.9	15.9	8.3	8.3	30.4	30.4	101.7	101.7	8.4	8.4	7.3	7.5	4	4	75	75			74	75	<0.2	<0.2	0.8	0.8				
						4.2	0.3	65	15.9	15.9	8.3	8.3	30.4	30.4	101.7	101.7	8.4	8.4	7.3	7.5	6	6	74	77			74	77	<0.2	<0.2	0.8	0.8				
					Bottom	7.3	0.2	72	15.9	15.9	8.3	8.3	30.4	30.4	102.4	102.4	8.4	8.4	7.7	7.8	8	8	77	76			77	76	<0.2	<0.2	0.8	0.8				
						7.3	0.2	74	15.9	15.9	8.3	8.3	30.4	30.4	102.4	102.4	8.4	8.4	7.8	7.8	9	9	76	76			76	76	<0.2	<0.2	0.8	0.8				
IM12	Fine	Moderate	11:06	8.6	Surface	1.0	0.1	87	16.4	16.4	8.2	8.2	30.5	30.5	99.8	99.8	8.1	8.1	3.5	3.4	3	3	73	74	821162	811504	<0.2	<0.2	0.8	0.8						
						1.0	0.1	91	16.4	16.4	8.2	8.2	30.5	30.5	99.8	99.8	8.1	8.1	3.5	3.4	2	2	73	74			<0.2	<0.2	0.7	0.8						
					Middle	4.3	0.2	92	16.4	16.3	8.2	8.2	30.5	30.5	99.8	99.9	8.1	8.1	3.1	3.4	3	3	74	75			74	74	<0.2	<0.2	0.6	0.7				
						4.3	0.2	95	16.3	16.3	8.2	8.2	30.5	30.5	99.9	99.9	8.1	8.1	3.3	3.4	3	3	74	75			74	75	<0.2	<0.2	0.7	1.0				
					Bottom	7.6	0.2	117	16.3	16.3	8.2	8.2	30.5	30.5	100.8	100.8	8.2	8.2	3.6	3.6	4	4	75	75			75	75	<0.2	<0.2	1.0	0.8				
						7.6	0.2	121	16.3	16.3	8.2	8.2	30.5	30.5	100.8	100.8	8.2	8.2	3.6	3.6	6	6	75	75			75	75	<0.2	<0.2	0.8	0.8				
SR2	Fine	Moderate	11:31	3.6	Surface	1.0	0.1	14	16.7	16.7	8.2	8.2	30.2	30.2	100.7	100.7	8.2	8.2	3.7	2.8	3	3	73	74	821475	814157	<0.2	<0.2	0.9	0.8						
						1.0	0.1	14	16.7	16.7	8.2	8.2	30.2	30.2	100.7	100.7	8.2	8.2	3.7	2.8	3	3	74	75			<0.2	<0.2	0.8	0.8						
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	74	814157	<0.2	<0.2	-	-		
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-	74	814157	<0.2	<0.2	-	-	
					Bottom	2.6	0.1	26	16.7	16.7	8.2	8.2	30.1	30.1	101.7	101.7	8.2	8.2	1.9	1.9	4	4	75	75			75	75	<0.2	<0.2	0.8	0.8				
						2.6	0.1	26	16.7	16.7	8.2	8.2	30.1	30.1	101.7	101.7	8.2	8.2	1.9	1.9	3	3	75	75			75	75	<0.2	<0.2	0.8	0.8				
SR3	Fine	Moderate	10:27	9.7	Surface	1.0	0.2	90	16.0	16.0	8.2	8.2	30.0	30.0	101.1	101.1	8.3	8.3	10.9	9.3	9	9	-	-	822174	807562	-	-	-	-						
						1.0	0.2	97	16.0	16.0	8.2	8.2	30.0	30.0	101.1	101.1	8.3	8.3	10.9	9.3	8	8	-	-			-	-	-	-	-	-				
					Middle	4.9	0.2	58	15.9	15.9	8.2	8.2	30.0	30.0	100.7	100.7	8.3	8.3	9.0	9.3	7	7	-	-			-	-	-	-	-	-	-			
						4.9	0.2	59	15.9	15.9	8.2	8.2	30.0	30.0	100.7	100.7	8.3	8.3	9.0	9.3	7	7	-	-			-	-	-	-	-	-	-			
					Bottom	8.7	0.2	57	15.8	15.8	8.3	8.3	30.4	30.4	100.7	100.7	8.3	8.3	8.0	8.3	8	8	-	-			-	-	-	-	-	-	-	-		
						8.7	0.3	59	15.8	15.8	8.3	8.3	30.4	30.4	100.7	100.7	8.3	8.3	8.0	8.3	9	9	-	-			-	-	-	-	-	-	-	-		
SR4A	Sunny	Calm	11:30	8.5	Surface	1.0	0.4	69	15.7	15.7	8.3	8.3	31.6	31.6	101.0	101.0	8.3	8.3	5.7	5.8	5	5	-	-	817165	807819	-	-	-	-						
						1.0	0.4	75	15.7	15.7	8.3	8.3	31.6	31.6	101.0	101.0	8.3	8.3	5.7	5.8	6	6	-	-			-	-	-	-						
					Middle	4.3	0.3	79	15.7	15.7	8.3	8.3	31.7	31.7	100.7	100.7	8.3	8.3	6.0	6.0	4	4	-	-			-	-	-	-	-	-				
						4.3	0.3	81	15.7	15.7	8.3	8.3	31.7	31.7	100.7	100.7	8.3	8.3	6.0	6.0	5	5	-	-			-	-	-	-	-	-				
					Bottom	7.5	0.3	80	15.7	15.7	8.3	8.3	31.7	31.7	100.9	100.9	8.3	8.3	5.6	5.6	9	9	-	-			-	-	-	-	-	-	-			
						7.5	0.3	87	15.7	15.7	8.3	8.3	31.7	31.7	100.9	100.9	8.3	8.3	5.6	5.6	9	9	-	-			-	-	-	-	-	-	-			
SR5A	Sunny	Calm	11:46	3.3	Surface	1.0	0.1	238	15.6	15.6	8.2	8.2	30.6	30.6	101.0	101.0	8.3	8.3	6.1	6.1	6	6	-	-	816590	810689	-	-	-	-						
						1.0	0.1	242	15.6	15.6	8.2	8.2	30.6	30.6	101.0	101.0	8.3	8.3	6.1	6.1	7	7	-	-			-	-								
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-	-	-	-				
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-	-	-	-				
					Bottom	2.3	0.1	236	15.6	15.6	8.2	8.2	30.6	30.6	101.0	101.0	8.3	8.3	6.0	6.0	7	7	-	-			-	-	-	-	-	-				
						2.3	0.1	256	15.6	15.6	8.2	8.2	30.6	30.6	101.0	101.0	8.3	8.3	6.0	6.0	8	8	-	-			-	-	-	-	-	-				
SR6	Sunny	Calm	12:09	4.1	Surface	1.0	0.1	67	16.4	16.4	8.2</																									

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

Water Quality Monitoring

Water Quality Monitoring Results on 14 January 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity (NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)			
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA
C1	Fine	Moderate	06:44	8.2	Surface	1.0	0.3	84	16.1	16.1	8.2	8.2	31.9	31.9	98.7	98.7	8.0	8.0	11.3	8.0	12	73	74	815639	804275	<0.2	0.7	<0.2	0.6			
						1.0	0.3	91	16.1	8.2	8.2	31.9	31.9	98.7	98.7	8.0	8.0	11.4	8.0	12	73	74	815639	804275	<0.2	0.6	<0.2	0.6				
						4.1	0.3	52	16.1	8.2	8.2	31.9	31.9	98.6	98.6	8.0	8.0	13.2	8.0	11	74	74	815639	804275	<0.2	0.6	<0.2	0.6				
					Middle	4.1	0.3	54	16.1	8.2	8.2	31.9	31.9	98.6	98.6	8.0	8.0	13.2	8.0	11	74	74	815639	804275	<0.2	0.6	<0.2	0.6				
						7.2	0.3	45	16.1	8.2	8.2	31.9	31.9	99.1	99.1	8.0	8.0	15.0	8.0	14	75	75	815639	804275	<0.2	0.5	<0.2	0.6				
						7.2	0.3	48	16.1	8.2	8.2	31.9	31.9	99.1	99.1	8.0	8.0	15.0	8.0	14	75	75	815639	804275	<0.2	0.6	<0.2	0.6				
C2	Fine	Moderate	07:30	11.6	Surface	1.0	0.3	340	16.4	16.4	8.2	8.2	29.8	29.8	97.0	97.0	7.9	7.9	3.4	7.9	3	73	74	825683	806962	<0.2	0.7	<0.2	0.8			
						1.0	0.3	313	16.4	8.2	8.2	29.8	29.8	97.0	97.0	7.9	7.9	3.4	7.9	3	73	74	825683	806962	<0.2	0.7	<0.2	0.8				
						5.8	0.3	342	16.6	8.2	8.2	30.0	30.0	96.9	96.9	7.9	7.9	4.1	7.9	4	73	74	825683	806962	<0.2	0.8	<0.2	0.8				
					Middle	5.8	0.3	315	16.6	8.2	8.2	30.0	30.0	96.9	96.9	7.9	7.9	4.1	7.9	4	73	74	825683	806962	<0.2	0.8	<0.2	0.8				
						10.6	0.2	344	16.6	8.2	8.2	29.9	29.9	96.7	96.7	7.9	7.9	4.1	7.9	4	75	75	825683	806962	<0.2	0.6	<0.2	0.6				
						10.6	0.2	348	16.6	8.2	8.2	29.9	29.9	96.7	96.7	7.9	7.9	4.1	7.9	3	75	75	825683	806962	<0.2	0.7	<0.2	0.7				
C3	Fine	Moderate	05:20	11.2	Surface	1.0	0.2	221	16.6	16.6	8.2	8.2	30.9	30.9	97.7	97.7	7.9	7.9	4.1	7.9	4	73	75	822138	817789	<0.2	0.9	<0.2	1.0			
						1.0	0.2	240	16.6	8.2	8.2	30.9	30.9	97.7	97.7	7.9	7.9	4.1	7.9	5	74	74	822138	817789	<0.2	1.0	<0.2	1.0				
						5.6	0.2	221	16.5	8.2	8.2	30.9	30.9	97.4	97.4	7.9	7.9	4.4	7.9	4	75	75	822138	817789	<0.2	1.1	<0.2	1.1				
					Middle	5.6	0.2	234	16.5	8.2	8.2	30.9	30.9	97.4	97.4	7.9	7.9	4.4	7.9	4	74	74	822138	817789	<0.2	1.0	<0.2	1.1				
						10.2	0.2	245	16.5	8.2	8.2	31.1	31.1	97.0	97.0	7.9	7.9	5.3	7.9	4	77	77	822138	817789	<0.2	1.0	<0.2	1.0				
						10.2	0.2	269	16.5	8.2	8.2	31.1	31.1	97.0	97.0	7.9	7.9	5.3	7.9	6	77	77	822138	817789	<0.2	1.2	<0.2	1.2				
IM1	Fine	Moderate	07:01	7.1	Surface	1.0	0.4	8	15.5	15.5	8.3	8.3	31.5	31.5	99.4	99.4	8.2	8.2	6.7	8.2	6	74	75	818372	806471	<0.2	0.8	<0.2	0.7			
						1.0	0.5	8	15.5	8.3	8.3	31.5	31.5	99.4	99.4	8.2	8.2	6.7	8.2	6	74	74	818372	806471	<0.2	0.7	<0.2	0.7				
						3.6	0.3	3	15.5	8.3	8.3	31.5	31.5	99.4	99.4	8.2	8.2	7.8	8.2	6	75	75	818372	806471	<0.2	0.8	<0.2	0.7				
					Middle	3.6	0.3	3	15.5	8.3	8.3	31.5	31.5	99.4	99.4	8.2	8.2	7.8	8.2	6	74	74	818372	806471	<0.2	0.7	<0.2	0.7				
						6.1	0.3	356	15.5	8.3	8.3	31.6	31.6	99.4	99.4	8.2	8.2	8.0	8.2	6	75	75	818372	806471	<0.2	0.6	<0.2	0.6				
						6.1	0.3	328	15.5	8.3	8.3	31.6	31.6	99.4	99.4	8.2	8.2	8.0	8.2	5	75	75	818372	806471	<0.2	0.7	<0.2	0.7				
IM2	Fine	Moderate	07:07	7.9	Surface	1.0	0.3	33	15.4	15.4	8.3	8.3	31.4	31.4	99.7	99.7	8.2	8.2	8.3	8.2	7	72	73	818875	806163	<0.2	0.8	<0.2	0.8			
						1.0	0.3	34	15.4	8.3	8.3	31.4	31.4	99.7	99.7	8.2	8.2	8.3	8.2	8	72	72	818875	806163	<0.2	0.8	<0.2	0.8				
						4.0	0.3	12	15.6	8.3	8.3	31.5	31.5	99.7	99.7	8.2	8.2	8.4	8.2	10	73	73	818875	806163	<0.2	0.6	<0.2	0.6				
					Middle	4.0	0.3	12	15.6	8.3	8.3	31.5	31.5	99.7	99.7	8.2	8.2	8.4	8.2	8	73	73	818875	806163	<0.2	0.8	<0.2	0.8				
						6.9	0.2	17	15.6	8.3	8.3	31.5	31.5	99.8	99.8	8.2	8.2	8.6	8.2	9	74	74	818875	806163	<0.2	0.7	<0.2	0.7				
						6.9	0.3	18	15.6	8.3	8.3	31.5	31.5	99.8	99.8	8.2	8.2	8.6	8.2	9	74	74	818875	806163	<0.2	0.8	<0.2	0.8				
IM3	Fine	Moderate	07:15	7.9	Surface	1.0	0.2	16	15.5	15.5	8.3	8.3	31.5	31.5	99.5	99.5	8.2	8.2	7.7	8.2	6	73	74	819438	806002	<0.2	0.8	<0.2	0.9			
						1.0	0.2	16	15.5	8.3	8.3	31.5	31.5	99.5	99.5	8.2	8.2	7.7	8.2	6	73	73	819438	806002	<0.2	0.8	<0.2	0.8				
						4.0	0.3	21	15.6	8.3	8.3	31.5	31.5	99.3	99.3	8.2	8.2	8.0	8.2	5	74	74	819438	806002	<0.2	0.9	<0.2	0.9				
					Middle	4.0	0.3	21	15.6	8.3	8.3	31.5	31.5	99.3	99.3	8.2	8.2	8.0	8.2	6	74	74	819438	806002	<0.2	0.8	<0.2	0.8				
						6.9	0.2	32	15.6	8.3	8.3	31.6	31.6	99.7	99.7	8.2	8.2	8.4	8.2	7	75	75	819438	806002	<0.2	0.8	<0.2	0.8				
						6.9	0.3	33	15.6	8.3	8.3	31.6	31.6	99.8	99.8	8.2	8.2	8.3	8.2	8	75	75	819438	806002	<0.2	0.7	<0.2	0.7				
IM4	Fine	Moderate	07:21	7.5	Surface	1.0	0.4	352	15.5	15.5	8.3	8.3	31.3	31.3	99.8	99.8	8.2	8.2	6.6	8.2	5	72	73	819555	805021	<0.2	0.9	<0.2	0.9			
						1.0	0.4	324	15.5	8.3	8.3	31.3	31.3	99.9	99.9	8.2	8.2	6.7	8.2	7	72	72	819555	805021	<0.2	0.7	<0.2	0.7				
						3.8	0.3	1	15.5	8.3	8.3	31.5	31.5	99.7	99.7	8.2	8.2	7.3	8.2	7	73	73	819555	805021	<0.2	0.9	<0.2	0.9				
					Middle	3.8	0.4	1	15.5	8.3	8.3	31.5	31.5	99.7	99.7	8.2	8.2	7.3	8.2	6	73	73	819555	805021	<0.2	0.8	<0.2	0.8				
						6.5	0.3	8	15.5	8.3	8.3	31.6	31.6	99.7	99.7	8.2	8.2	7.2	8.2	6	74	74	819555	805021	<0.2	0.7	<0.2	0.7				
						6.5	0.3	8	15.5	8.3	8.3	31.6	31.6	99.7	99.7	8.2	8.2	7.2	8.2	6	74	74	819555	805021	<0.2	0.7	<0.2	0.7				
IM5	Fine	Moderate	07:30	6.7	Surface	1.0	0.4	354	15.7	15.7	8.3	8.3	31.3	31.3	99.7	99.7	8.2	8.2	6.9	8.2	5	73	74	820593	804924	<0.2	0.9	<0.2	0.9			
						1.0	0.4	326	15.7	8.3	8.3	31.3	31.3	99.7	99.7	8.2	8.2	6.9	8.2	5	73	73	820593	804924	<0.2	0.7	<0.2	0.7				
						3.4	0.4	2	15.6	8.3	8.3	31.5	31.5	99.5	99.5	8.2	8.2	7.7	8.2	5	74	74	820593	804924	<0.2	0.9	<0.2	0.9				
					Middle	3.4	0.4	2	15.6	8.3	8.3	31.5	31.5	99.5	99.5	8.2	8.2	7.7	8.2	4	74	74	820593	804924	<0.2	0.6	<0.2	0.6				
						5.7	0.3	8	15.6	8.3	8.3	31.5	31.5	99.6	99.6	8.2	8.2	8.1	8.2	6	74	74	820593	804924	<0.2	0.9	<0.2	0.9				
						5.7	0.3	8	15.6	8.3	8.3	31.5	31.5	99.6	99.6	8.2	8.2	8.1	8.2	7	74	74	820593	804924	<0.2	0.8	<0.2	0.8				
IM6	Fine	Moderate	07:37	6.6	Surface	1.0	0.2	26																								

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

Water Quality Monitoring

Water Quality Monitoring Results on 14 January 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)							
									Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA	Value	DA	Value	DA
IM9	Fine	Moderate	06:54	6.2	Surface	1.0	0.2	317	16.3	8.3	8.3	30.4	30.4	98.1	98.1	8.0	8.0	5.7	5.7	4	4	73	73	<0.2	<0.2	0.8	0.8									
						1.0	0.2	345	16.3	8.3	8.3	30.4	30.4	98.1	98.1	8.0	8.0	5.7	5.7	3	3	75	75	<0.2	<0.2	0.7	0.7									
					Middle	3.1	0.2	308	16.3	8.3	8.3	30.4	30.4	98.0	98.0	8.0	8.0	5.2	5.2	5	5	74	74	<0.2	<0.2	0.8	0.8									
						3.1	0.2	337	16.3	8.3	8.3	30.4	30.4	98.0	98.0	8.0	8.0	5.2	5.2	3	3	74	74	<0.2	<0.2	0.7	0.7									
					Bottom	5.2	0.2	302	16.3	8.3	8.3	30.4	30.4	97.8	97.8	8.0	8.0	5.0	5.0	4	4	75	75	<0.2	<0.2	0.8	0.8									
						5.2	0.2	305	16.3	8.3	8.3	30.4	30.4	97.7	97.7	8.0	8.0	5.1	5.1	4	4	75	75	<0.2	<0.2	0.9	0.9									
IM10	Fine	Moderate	06:45	6.9	Surface	1.0	0.4	300	15.9	8.2	8.2	30.5	30.5	100.1	100.1	8.2	8.2	5.6	5.6	4	4	73	73	<0.2	<0.2	1.0	1.0									
						1.0	0.4	300	15.9	8.2	8.2	30.5	30.5	100.1	100.1	8.2	8.2	5.6	5.6	5	5	73	73	<0.2	<0.2	0.9	0.9									
					Middle	3.5	0.4	303	15.9	8.2	8.2	30.5	30.5	99.9	99.9	8.2	8.2	5.8	5.8	4	4	74	74	<0.2	<0.2	0.9	0.9									
						3.5	0.4	332	15.9	8.2	8.2	30.5	30.5	99.9	99.9	8.2	8.2	5.8	5.8	4	4	73	73	<0.2	<0.2	0.8	0.8									
					Bottom	5.9	0.4	305	15.9	8.2	8.2	30.5	30.5	98.6	98.6	8.1	8.1	6.0	6.0	5	5	76	76	<0.2	<0.2	0.9	0.9									
						5.9	0.4	333	15.9	8.2	8.2	30.5	30.5	98.6	98.6	8.1	8.1	6.0	6.0	6	6	75	75	<0.2	<0.2	0.8	0.8									
IM11	Fine	Moderate	06:33	7.4	Surface	1.0	0.3	290	15.8	8.2	8.2	30.5	30.5	99.7	99.7	8.2	8.2	7.5	7.5	9	9	73	73	<0.2	<0.2	0.9	0.9									
						1.0	0.3	313	15.8	8.2	8.2	30.5	30.5	99.7	99.7	8.2	8.2	7.5	7.5	8	8	73	73	<0.2	<0.2	0.7	0.7									
					Middle	3.7	0.3	288	15.8	8.2	8.2	30.5	30.5	99.2	99.2	8.2	8.2	8.9	8.9	8	8	75	75	<0.2	<0.2	0.8	0.8									
						3.7	0.3	312	15.8	8.2	8.2	30.5	30.5	99.2	99.2	8.2	8.2	8.9	8.9	9	9	76	76	<0.2	<0.2	0.8	0.8									
					Bottom	6.4	0.3	293	15.8	8.2	8.2	30.5	30.5	98.4	98.4	8.1	8.1	8.8	8.8	7	7	76	76	<0.2	<0.2	0.8	0.8									
						6.4	0.3	314	15.8	8.2	8.2	30.5	30.5	98.4	98.4	8.1	8.1	8.8	8.8	9	9	77	77	<0.2	<0.2	0.9	0.9									
IM12	Fine	Moderate	06:24	8.1	Surface	1.0	0.4	274	15.9	8.2	8.2	30.3	30.3	100.5	100.5	8.3	8.3	6.6	6.6	4	4	74	74	<0.2	<0.2	1.0	1.0									
						1.0	0.5	279	15.9	8.2	8.2	30.3	30.3	100.5	100.5	8.3	8.3	6.6	6.6	5	5	73	73	<0.2	<0.2	0.9	0.9									
					Middle	4.1	0.4	270	15.7	8.2	8.2	30.4	30.4	99.2	99.2	8.2	8.2	7.6	7.6	3	3	74	74	<0.2	<0.2	0.8	0.8									
						4.1	0.4	276	15.7	8.2	8.2	30.4	30.4	99.2	99.2	8.2	8.2	7.6	7.6	3	3	73	73	<0.2	<0.2	0.8	0.8									
					Bottom	7.1	0.3	270	15.8	8.2	8.2	30.5	30.5	98.7	98.7	8.1	8.1	8.0	8.0	6	6	75	75	<0.2	<0.2	0.9	0.9									
						7.1	0.3	288	15.8	8.2	8.2	30.5	30.5	98.7	98.7	8.1	8.1	8.0	8.0	4	4	76	76	<0.2	<0.2	1.0	1.0									
SR2	Fine	Moderate	05:54	4.3	Surface	1.0	0.3	319	16.2	8.2	8.2	30.7	30.7	97.8	97.8	8.0	8.0	4.9	4.9	2	2	73	73	<0.2	<0.2	1.0	1.0									
						1.0	0.3	348	16.2	8.2	8.2	30.7	30.7	97.8	97.8	8.0	8.0	4.9	4.9	3	3	73	73	<0.2	<0.2	0.9	0.9									
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
					Bottom	3.3	0.3	317	16.2	8.2	8.2	30.9	30.9	97.3	97.3	7.9	7.9	4.2	4.2	5	5	75	75	<0.2	<0.2	0.9	0.9									
						3.3	0.4	324	16.2	8.2	8.2	30.9	30.9	97.3	97.3	7.9	7.9	4.2	4.2	5	5	75	75	<0.2	<0.2	0.9	0.9									
SR3	Fine	Moderate	07:09	8.6	Surface	1.0	0.2	346	16.4	8.2	8.2	30.5	30.5	98.8	98.8	8.0	8.0	4.5	4.5	4	4	-	-	-	-	-	-									
						1.0	0.2	318	16.4	8.2	8.2	30.5	30.5	98.8	98.8	8.0	8.0	4.5	4.5	4	4	-	-	-	-	-	-									
					Middle	4.3	0.1	340	16.4	8.2	8.2	30.5	30.5	99.6	99.6	8.1	8.1	4.5	4.5	6	6	-	-	-	-	-	-									
						4.3	0.1	359	16.4	8.2	8.2	30.5	30.5	99.5	99.5	8.1	8.1	4.5	4.5	6	6	-	-	-	-	-	-									
					Bottom	7.6	0.1	350	16.4	8.2	8.2	30.5	30.5	100.0	100.0	8.1	8.1	4.5	4.5	8	8	-	-	-	-	-	-									
						7.6	0.1	359	16.4	8.2	8.2	30.5	30.5	100.0	100.0	8.1	8.1	4.5	4.5	7	7	-	-	-	-	-	-									
SR4A	Fine	Calm	06:28	8.6	Surface	1.0	0.2	230	15.4	8.2	8.2	30.6	30.6	99.0	99.0	8.2	8.2	5.8	5.8	5	5	-	-	-	-	-	-									
						1.0	0.2	241	15.4	8.2	8.2	30.6	30.6	99.0	99.0	8.2	8.2	5.8	5.8	6	6	-	-	-	-	-	-									
					Middle	4.3	0.1	262	15.5	8.2	8.2	30.9	30.9	99.1	99.1	8.2	8.2	5.9	5.9	4	4	-	-	-	-	-	-									
						4.3	0.1	284	15.5	8.2	8.2	30.9	30.9	99.1	99.1	8.2	8.2	5.9	5.9	6	6	-	-	-	-	-	-									
					Bottom	7.6	0.1	244	15.5	8.2	8.2	31.1	31.1	99.2	99.2	8.2	8.2	6.0	6.0	6	6	-	-	-	-	-	-									
						7.6	0.1	246	15.5	8.2	8.2	31.1	31.1	99.2	99.2	8.2	8.2	6.0	6.0	6	6	-	-	-	-	-	-									
SR5A	Fine	Calm	06:08	4.6	Surface	1.0	0.2	317	15.5	8.2	8.2	30.5	30.5	98.8	98.8	8.2	8.2	6.1	6.1	6	6	-	-	-	-	-	-									
						1.0	0.2	332	15.5	8.2	8.2	30.5	30.5	98.8	98.8	8.2	8.2	6.1	6.1	6	6	-	-	-	-	-	-									
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-								
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-								
					Bottom	3.6	0.2	311	15.5	8.2	8.2	30.5	30.5	98.9	98.9	8.2	8.2	6.1	6.1	5	5	-	-	-	-	-	-									
						3.6	0.2	337	15.5	8.2	8.2	30.5	30.5	98.9	98.9	8.2	8.2	6.1	6.1	6	6	-	-	-	-	-	-									
SR6	Fine	Calm	05:45	3.6	Surface	1.0	0.1	248	15.7	8.2	8.2	29.6	29.6	98.2	98.2	8.2	8.2	5.6	5.6	5	5	-	-	-	-	-	-									
						1.0	0.1	261	15.7	8.2	8.2	29.6	29.6	98.3	98.3	8.2	8.2	5.7	5.7	6	6	-	-	-	-	-	-									
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-								
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-								
					Bottom	2.6	0.1	260	16.3	8.2	8.2	29.6	29.6	104.0	104.0	8.5	8.5	6.8	6.8	7	7	-	-	-	-	-	-									
						2.6	0.1	276	16.3	8.2	8.2	29.5	29.6	104.2	104.1	8.5	8.5	6.8	6.8	6	6	-	-	-	-	-	-									
SR7	Fine	Moderate	04:56	16.7	Surface	1.0	0.2	221	16.9	8.1	8.1	31.4	31.4	95.7	95.7	7.7	7.7	3.4	3.4	4	4	-	-	-	-											

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

Water Quality Monitoring

Water Quality Monitoring Results on 16 January 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)							
									Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA	Value	DA	Value	DA
C1	Fine	Moderate	12:32	8.2	Surface	1.0	0.0	50	16.4	16.3	8.1	8.1	29.6	29.6	104.7	104.5	8.6	8.4	6.7	8.5	9	72	74	815593	804255	<0.2	1.0	<0.2	0.9							
						1.0	0.0	51	16.3	8.1	8.1	29.6	29.6	104.3	104.5	8.5	8.4	7.0	8.5	10	72	73	<0.2	0.9	<0.2	0.9										
						4.1	0.1	216	16.0	8.1	8.1	30.5	30.5	100.9	100.9	8.3	8.3	8.9	8.3	8	73	74	<0.2	0.8	<0.2	1.1										
					Middle	4.1	0.1	233	16.0	8.1	8.1	30.5	30.5	100.9	100.9	8.3	8.3	9.0	8.3	10	74	75	<0.2	0.8	<0.2	1.1										
						7.2	0.1	264	16.0	8.1	8.1	30.4	30.4	100.5	100.5	8.3	8.3	9.8	8.3	9	75	76	<0.2	0.8	<0.2	1.1										
						7.2	0.1	278	16.0	8.1	8.1	30.4	30.4	100.5	100.5	8.3	8.3	9.8	8.3	8	75	76	<0.2	0.8	<0.2	1.3										
C2	Fine	Moderate	11:14	11.2	Surface	1.0	0.2	51	17.0	17.0	8.2	8.2	26.0	26.0	104.2	104.2	8.6	8.5	8.0	8.5	4	72	74	825700	806964	<0.2	2.3	<0.2	2.3							
						1.0	0.2	51	17.0	8.2	8.2	26.0	26.0	104.2	104.2	8.6	8.5	8.0	8.5	4	72	73	<0.2	2.3	<0.2	2.4										
						5.6	0.1	0	16.6	8.2	8.2	28.7	28.7	103.1	103.1	8.4	8.4	7.1	8.4	4	73	74	<0.2	2.4	<0.2	2.1										
					Middle	5.6	0.1	0	16.6	8.2	8.2	28.7	28.7	103.1	103.1	8.4	8.4	7.1	8.4	5	74	75	<0.2	2.1	<0.2	2.5										
						10.2	0.1	273	16.6	8.2	8.2	29.0	29.0	102.5	102.5	8.4	8.4	6.4	8.4	10	75	76	<0.2	2.5	<0.2	2.4										
						10.2	0.1	288	16.6	8.2	8.2	29.0	29.0	102.5	102.5	8.4	8.4	6.4	8.4	9	75	76	<0.2	2.4	<0.2	2.4										
C3	Fine	Moderate	12:57	11.7	Surface	1.0	0.4	85	17.1	17.1	8.3	8.3	29.7	29.7	105.8	105.8	8.5	8.5	3.3	8.5	10	73	75	822109	817818	<0.2	0.8	<0.2	0.8							
						1.0	0.5	92	17.1	8.3	8.3	29.7	29.7	105.8	105.8	8.5	8.5	3.3	8.5	9	73	74	<0.2	0.8	<0.2	0.9										
						5.9	0.3	87	16.9	8.2	8.2	29.5	29.5	103.1	103.1	8.4	8.4	3.3	8.4	11	75	76	<0.2	1.0	<0.2	1.0										
					Middle	5.9	0.4	89	16.9	8.2	8.2	29.5	29.5	103.1	103.1	8.4	8.4	3.3	8.4	10	75	76	<0.2	0.9	<0.2	1.0										
						10.7	0.3	86	16.8	8.2	8.2	29.5	29.5	103.0	103.0	8.4	8.4	3.4	8.4	12	77	78	<0.2	1.0	<0.2	1.0										
						10.7	0.3	92	16.8	8.2	8.2	29.5	29.5	103.0	103.0	8.4	8.4	3.4	8.4	10	77	78	<0.2	0.8	<0.2	0.8										
IM1	Fine	Moderate	12:12	7.1	Surface	1.0	0.1	67	16.6	16.6	8.1	8.1	29.7	29.7	111.8	111.8	9.1	9.0	6.0	9.0	8	73	75	818370	806433	<0.2	1.6	<0.2	1.3							
						1.0	0.1	70	16.6	8.1	8.1	29.7	29.7	111.8	111.8	9.1	9.0	6.0	9.0	9	73	74	<0.2	1.3	<0.2	1.2										
						3.6	0.1	341	16.4	8.2	8.2	30.5	30.5	108.4	108.4	8.8	8.8	6.3	8.8	10	75	76	<0.2	1.2	<0.2	1.2										
					Middle	3.6	0.1	314	16.4	8.2	8.2	30.5	30.5	108.3	108.3	8.8	8.8	6.5	8.8	12	75	76	<0.2	1.2	<0.2	1.0										
						6.1	0.1	292	16.3	8.2	8.2	30.5	30.5	107.0	107.0	8.7	8.7	5.8	8.7	10	76	77	<0.2	0.9	<0.2	1.0										
						6.1	0.1	301	16.3	8.2	8.2	30.5	30.5	107.0	107.0	8.7	8.7	5.8	8.7	11	76	77	<0.2	1.0	<0.2	1.0										
IM2	Fine	Moderate	12:02	8.1	Surface	1.0	0.1	54	16.6	16.6	8.1	8.1	29.7	29.7	109.0	108.8	8.9	8.7	6.2	8.7	8	72	73	818824	806217	<0.2	1.2	<0.2	1.2							
						1.0	0.1	55	16.6	8.1	8.1	29.7	29.7	108.5	108.8	8.8	8.7	6.3	8.8	9	71	72	<0.2	1.2	<0.2	1.2										
						4.1	0.0	18	16.3	8.1	8.1	30.6	30.6	105.4	105.4	8.6	8.6	6.6	8.6	11	73	74	<0.2	1.0	<0.2	1.1										
					Middle	4.1	0.0	18	16.3	8.1	8.1	30.6	30.6	105.3	105.4	8.6	8.6	6.5	8.6	13	73	74	<0.2	1.0	<0.2	1.1										
						7.1	0.1	314	16.2	8.1	8.1	30.6	30.6	104.3	104.3	8.5	8.5	5.7	8.5	15	75	76	<0.2	1.1	<0.2	1.1										
						7.1	0.1	330	16.2	8.1	8.1	30.6	30.6	104.3	104.3	8.5	8.5	5.8	8.5	13	75	76	<0.2	0.8	<0.2	0.8										
IM3	Fine	Moderate	11:54	8.3	Surface	1.0	0.2	24	16.5	16.5	8.1	8.1	29.7	29.7	108.2	108.0	8.8	8.7	6.6	8.7	7	72	73	819390	806023	<0.2	1.3	<0.2	1.0							
						1.0	0.2	26	16.5	8.1	8.1	29.7	29.7	107.7	108.0	8.8	8.7	6.7	8.8	7	72	73	<0.2	1.0	<0.2	1.0										
						4.2	0.1	21	16.3	8.1	8.1	30.3	30.3	104.5	104.5	8.5	8.5	7.6	8.5	8	73	74	<0.2	0.9	<0.2	0.8										
					Middle	4.2	0.1	22	16.3	8.1	8.1	30.3	30.3	104.5	104.5	8.5	8.5	7.6	8.5	8	73	74	<0.2	0.8	<0.2	0.9										
						7.3	0.1	34	16.3	8.1	8.1	30.2	30.1	103.7	103.6	8.5	8.5	7.6	8.5	10	75	76	<0.2	0.9	<0.2	0.9										
						7.3	0.1	35	16.3	8.1	8.1	30.1	30.1	103.5	103.6	8.5	8.5	7.6	8.5	10	75	76	<0.2	0.8	<0.2	0.8										
IM4	Fine	Moderate	11:45	7.4	Surface	1.0	0.1	33	16.5	16.5	8.1	8.1	29.4	29.4	110.6	110.4	9.0	8.8	5.9	8.8	6	71	72	819582	805058	<0.2	1.2	<0.2	1.3							
						1.0	0.1	34	16.5	8.1	8.1	29.4	29.4	110.2	110.4	9.0	8.8	6.0	8.8	7	72	73	<0.2	1.3	<0.2	0.9										
						3.7	0.1	5	16.2	8.1	8.1	30.3	30.3	104.9	104.9	8.6	8.6	7.0	8.6	9	73	74	<0.2	0.9	<0.2	1.0										
					Middle	3.7	0.1	5	16.2	8.1	8.1	30.3	30.3	104.8	104.8	8.6	8.6	6.9	8.6	9	74	75	<0.2	1.0	<0.2	1.0										
						6.4	0.1	300	16.3	8.1	8.1	30.1	30.1	103.7	103.6	8.5	8.5	7.5	8.5	10	75	76	<0.2	1.0	<0.2	1.0										
						6.4	0.1	307	16.3	8.1	8.1	30.0	30.0	103.5	103.5	8.5	8.5	7.5	8.5	11	75	76	<0.2	0.9	<0.2	0.9										
IM5	Fine	Moderate	11:37	7.0	Surface	1.0	0.2	130	16.6	16.5	8.1	8.1	29.4	29.4	110.8	110.6	9.0	8.9	6.8	8.9	8	71	72	820557	804924	<0.2	1.4	<0.2	1.5							
						1.0	0.2	133	16.5	8.1	8.1	29.4	29.4	110.4	110.6	9.0	8.9	6.9	8.9	8	71	72	<0.2	1.1	<0.2	1.1										
						3.5	0.1	48	16.3	8.1	8.1	29.9	29.8	107.4	107.4	8.8	8.8	7.7	8.8	13	73	74	<0.2	1.1	<0.2	1.1										
					Middle	3.5	0.1	51	16.3	8.1	8.1	29.8	29.8	107.3	107.4	8.8	8.8	7.0	8.8	11	73	74	<0.2	1.0	<0.2	1.0										
						6.0	0.0	15	16.3	8.1	8.1	29.7	29.6	107.3	106.2	8.7	8.7	6.9	8.7	13	75	76	<0.2	1.2	<0.2	1.2										
						6.0	0.0	15	16.3	8.1	8.1	29.6	29.6	106.0	106.2	8.7	8.7	6.8	8.7	12	75	76	<0.2	1.0	<0.2	1.0										
IM6	Fine	Moderate	11:25	6.9	Surface	1.0	0.0	131	16.5	16.5	8.1	8.1	29.6	29.6	109.5	109.5	8.9	8.9	7.3	8.9	13	72	73	821036	805802	<0.2	1.2	<0.2	1.2							
						1.0	0.0	142	16.5	8.1	8.1	29.6	29.6	109.5	109.5	8.9	8.9	7.4	8.9	12	72	73	<0.2	1.1	<0.2	1.1										
						3.5	0.0	35	16.5	8.1	8.1	29.6	29.6	108.0	107.9	8.8	8.8	8.5	8.8	12	73	74	<0.2	1.1	<0.2	1.1										
					Middle	3.5	0.0	36	16.4	8.1	8.1	29.6	29.6	107.8	107.9	8.8	8.8	8.8	8.8	11	73	74	<0.2	1.2	<0.2											

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

Water Quality Monitoring

Water Quality Monitoring Results on 16 January 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)							
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA	Value	DA	Value	DA
IM9	Fine	Moderate	11:47	6.9	Surface	1.0	0.2	85	17.1	8.2	8.2	26.7	26.7	108.1	108.1	8.9	8.9	5.9	5.9	9	73	74	822074	808819	<0.2	<0.2	2.4	2.4								
						1.0	0.2	90	17.1	8.2	8.2	26.7	26.7	108.1	108.1	8.9	8.9	5.9	5.9	7	73	74	822074	808819	<0.2	<0.2	2.5	2.5								
					Middle	3.5	0.2	92	16.9	8.3	8.3	27.6	27.6	107.6	107.6	8.8	8.8	7.1	7.1	9	74	74	822074	808819	<0.2	<0.2	2.2	2.2								
						3.5	0.3	100	16.9	8.3	8.3	27.6	27.6	107.6	107.6	8.8	8.8	7.1	7.1	7	73	74	822074	808819	<0.2	<0.2	2.4	2.4								
					Bottom	5.9	0.2	59	16.6	8.3	8.3	29.4	29.4	106.4	106.4	8.7	8.7	7.6	7.6	10	75	75	822074	808819	<0.2	<0.2	2.3	2.3								
						5.9	0.2	61	16.6	8.3	8.3	29.4	29.4	106.4	106.4	8.7	8.7	7.6	7.6	8	76	76	822074	808819	<0.2	<0.2	2.5	2.5								
IM10	Fine	Moderate	11:54	6.8	Surface	1.0	0.2	126	17.0	8.3	8.3	27.7	27.7	108.3	108.3	8.9	8.9	5.2	5.2	5	73	74	822225	809832	<0.2	<0.2	2.1	2.1								
						1.0	0.2	131	17.0	8.3	8.3	27.7	27.7	108.3	108.3	8.9	8.9	5.2	5.2	5	72	73	822225	809832	<0.2	<0.2	2.0	2.0								
					Middle	3.4	0.1	98	16.7	8.3	8.3	29.5	29.5	107.3	107.3	8.7	8.7	6.1	6.1	7	73	74	822225	809832	<0.2	<0.2	2.2	2.2								
						3.4	0.1	103	16.7	8.3	8.3	29.5	29.5	107.3	107.3	8.7	8.7	6.1	6.1	8	74	74	822225	809832	<0.2	<0.2	2.2	2.2								
					Bottom	5.8	0.1	120	16.7	8.3	8.3	29.7	29.7	106.7	106.7	8.7	8.7	5.0	5.0	7	75	75	822225	809832	<0.2	<0.2	2.2	2.2								
						5.8	0.1	121	16.7	8.3	8.3	29.7	29.7	106.7	106.7	8.7	8.7	5.0	5.0	7	75	75	822225	809832	<0.2	<0.2	2.1	2.1								
IM11	Fine	Moderate	12:03	8.0	Surface	1.0	0.3	78	17.0	8.3	8.3	28.1	28.1	108.2	108.2	8.8	8.8	6.7	6.7	6	73	75	821493	810553	<0.2	<0.2	2.0	2.0								
						1.0	0.3	79	17.0	8.3	8.3	28.1	28.1	108.2	108.2	8.8	8.8	6.7	6.7	7	73	75	821493	810553	<0.2	<0.2	2.0	2.0								
					Middle	4.0	0.2	79	16.7	8.3	8.3	29.4	29.4	106.6	106.6	8.7	8.7	6.3	6.3	6	75	75	821493	810553	<0.2	<0.2	1.9	1.9								
						4.0	0.2	86	16.7	8.3	8.3	29.4	29.4	106.6	106.6	8.7	8.7	6.3	6.3	6	75	75	821493	810553	<0.2	<0.2	2.0	2.0								
					Bottom	7.0	0.1	96	16.7	8.3	8.3	29.7	29.7	106.2	106.2	8.6	8.6	5.7	5.7	9	76	76	821493	810553	<0.2	<0.2	2.0	2.0								
						7.0	0.1	101	16.7	8.3	8.3	29.7	29.7	106.2	106.2	8.6	8.6	5.7	5.7	11	77	77	821493	810553	<0.2	<0.2	1.9	1.9								
IM12	Fine	Moderate	12:10	8.8	Surface	1.0	0.3	74	17.0	8.3	8.3	28.4	28.4	110.5	110.5	9.0	9.0	5.4	5.4	9	73	75	821153	811507	<0.2	<0.2	1.7	1.7								
						1.0	0.3	80	17.0	8.3	8.3	28.4	28.4	110.5	110.5	9.0	9.0	5.4	5.4	8	73	75	821153	811507	<0.2	<0.2	1.7	1.7								
					Middle	4.4	0.1	106	16.7	8.3	8.3	29.8	29.8	109.3	109.3	8.9	8.9	4.4	4.4	8	75	75	821153	811507	<0.2	<0.2	1.7	1.7								
						4.4	0.1	114	16.7	8.3	8.3	29.8	29.8	109.3	109.3	8.9	8.9	4.4	4.4	9	76	76	821153	811507	<0.2	<0.2	1.7	1.7								
					Bottom	7.8	0.0	101	16.7	8.3	8.3	30.1	30.1	107.0	107.0	8.7	8.7	4.3	4.3	8	76	76	821153	811507	<0.2	<0.2	1.7	1.7								
						7.8	0.0	109	16.7	8.3	8.3	30.1	30.1	107.0	107.0	8.7	8.7	4.3	4.3	8	75	75	821153	811507	<0.2	<0.2	1.8	1.8								
SR2	Fine	Moderate	12:36	4.1	Surface	1.0	0.2	49	16.8	8.3	8.3	29.3	29.3	108.9	108.9	8.9	8.9	6.2	6.2	6	73	74	821455	814191	<0.2	<0.2	1.0	1.1								
						1.0	0.2	50	16.8	8.3	8.3	29.3	29.3	108.9	108.9	8.9	8.9	6.2	6.2	7	73	73	821455	814191	<0.2	<0.2	1.1	1.1								
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
					Bottom	3.1	0.1	52	16.8	8.3	8.3	29.4	29.4	107.6	107.6	8.8	8.8	4.2	4.2	9	75	75	821455	814191	<0.2	<0.2	1.1	1.1								
						3.1	0.1	54	16.8	8.3	8.3	29.4	29.4	107.6	107.6	8.8	8.8	4.2	4.2	11	75	75	821455	814191	<0.2	<0.2	1.1	1.1								
SR3	Fine	Moderate	11:34	9.0	Surface	1.0	0.3	100	17.0	8.2	8.2	25.6	25.6	107.9	107.9	8.9	8.9	5.3	5.3	4	-	-	822141	807581	-	-	-	-								
						1.0	0.3	106	17.0	8.2	8.2	25.6	25.6	107.9	107.9	8.9	8.9	5.3	5.3	6	-	-	822141	807581	-	-	-	-								
					Middle	4.5	0.3	63	16.7	8.3	8.3	28.4	28.4	107.7	107.7	8.8	8.8	8.2	8.2	7	-	-	822141	807581	-	-	-	-								
						4.5	0.3	67	16.7	8.3	8.3	28.4	28.4	107.7	107.7	8.8	8.8	8.2	8.2	8	-	-	822141	807581	-	-	-	-								
					Bottom	8.0	0.2	76	16.6	8.3	8.3	28.8	28.8	105.1	105.1	8.6	8.6	7.9	7.9	6	-	-	822141	807581	-	-	-	-								
						8.0	0.2	77	16.6	8.3	8.3	28.8	28.8	105.1	105.1	8.6	8.6	7.9	7.9	7	-	-	822141	807581	-	-	-	-								
SR4A	Fine	Calm	12:51	8.7	Surface	1.0	0.3	78	16.7	8.2	8.2	30.2	30.2	111.1	111.0	9.0	9.0	6.0	6.0	6	-	-	817209	807811	-	-	-	-								
						1.0	0.3	81	16.7	8.2	8.2	30.2	30.2	110.8	110.8	9.0	9.0	6.2	6.2	7	-	-	817209	807811	-	-	-	-								
					Middle	4.4	0.2	75	16.4	8.2	8.2	30.2	30.2	107.0	106.9	8.7	8.7	6.4	6.4	11	-	-	817209	807811	-	-	-	-								
						4.4	0.2	80	16.4	8.2	8.2	30.2	30.2	106.7	106.7	8.7	8.7	6.2	6.2	10	-	-	817209	807811	-	-	-	-								
					Bottom	7.7	0.2	47	16.3	8.1	8.1	30.1	30.1	105.5	105.5	8.6	8.6	6.7	6.7	13	-	-	817209	807811	-	-	-	-								
						7.7	0.2	49	16.3	8.1	8.1	30.1	30.1	105.4	105.4	8.6	8.6	6.9	6.9	11	-	-	817209	807811	-	-	-	-								
SR5A	Fine	Calm	13:07	5.3	Surface	1.0	0.1	61	16.8	8.2	8.2	30.3	30.3	113.6	113.9	9.2	9.2	5.0	5.0	11	-	-	816573	810693	-	-	-	-								
						1.0	0.1	61	16.8	8.2	8.2	30.3	30.3	113.6	113.6	9.2	9.2	5.0	5.0	12	-	-	816573	810693	-	-	-	-								
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
					Bottom	4.3	0.1	13	16.7	8.2	8.2	30.0	29.9	108.7	107.8	8.8	8.8	4.6	4.6	14	-	-	816573	810693	-	-	-	-								
						4.3	0.1	14	16.7	8.2	8.2	29.8	29.9	106.9	107.8	8.7	8.7	4.6	4.6	14	-	-	816573	810693	-	-	-	-								
SR6	Fine	Calm	13:29	4.3	Surface	1.0	0.1	48	17.3	8.2	8.2	30.1	30.1	119.1	118.9	9.6	9.5	5.4	5.4	7	-	-	817904	814643	-	-	-	-								
						1.0	0.1	52	17.3	8.2	8.2	30.1	30.1	118.7	118.9	9.5	9.5	5.4	5.4	7	-	-	817904	814643	-	-	-	-								
					Middle	-	-	-	-																											

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

Water Quality Monitoring

Water Quality Monitoring Results on 16 January 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity (NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)			
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA
									Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA
C1	Fine	Moderate	07:48	7.8	Surface	1.0	0.6	45	16.2	8.1	8.1	30.6	30.6	105.4	105.5	8.6	8.6	7.5	8.6	13	17	71	73	815618	804225	<0.2	<0.2	0.9	0.9			
						1.0	0.6	48	16.2	8.1	8.1	30.6	30.6	105.5	105.5	8.6	8.6	7.5	8.6	13	17	72	73	<0.2	<0.2	1.0	1.0					
						3.9	0.6	46	16.3	8.1	8.1	30.8	30.8	104.5	104.5	8.5	8.5	13.3	13.6	14	17	73	73	<0.2	<0.2	1.0	1.0					
					3.9	0.6	49	16.3	8.1	8.1	30.8	30.8	104.5	104.5	8.5	8.5	13.5	13.6	13	17	73	73	<0.2	<0.2	0.9	0.9						
					6.8	0.5	43	16.3	8.1	8.1	30.8	30.8	104.4	104.4	8.5	8.5	19.9	8.3	25	17	75	75	<0.2	<0.2	0.9	0.9						
					6.8	0.5	43	16.3	8.1	8.1	30.7	30.7	104.4	104.4	8.5	8.5	19.7	8.3	24	17	75	75	<0.2	<0.2	0.9	0.9						
C2	Fine	Moderate	08:30	11.5	Surface	1.0	0.4	350	16.8	8.2	8.2	26.3	26.3	102.4	102.4	8.5	8.5	5.1	8.5	12	12	73	74	825698	806925	<0.2	<0.2	2.8	2.8			
						1.0	0.4	322	16.8	8.2	8.2	26.3	26.3	102.4	102.4	8.5	8.5	5.1	8.5	12	12	73	74	<0.2	<0.2	2.6	2.6					
						5.8	0.4	347	16.7	8.2	8.2	28.0	28.0	102.1	102.1	8.4	8.4	6.9	8.1	10	12	74	74	<0.2	<0.2	2.5	2.5					
					5.8	0.4	357	16.7	8.2	8.2	28.0	28.0	102.1	102.1	8.4	8.4	6.9	8.1	10	12	74	74	<0.2	<0.2	2.9	2.9						
					10.5	0.2	328	16.7	8.2	8.2	28.8	28.8	101.9	101.9	8.3	8.3	12.2	8.3	12	12	75	75	<0.2	<0.2	3.0	3.0						
					10.5	0.2	354	16.7	8.2	8.2	28.8	28.8	101.9	101.9	8.3	8.3	12.2	8.3	14	12	75	75	<0.2	<0.2	2.6	2.6						
C3	Fine	Moderate	06:41	10.8	Surface	1.0	0.4	252	16.6	8.2	8.2	30.3	30.3	106.1	106.1	8.6	8.6	4.8	8.6	9	8	73	75	822086	817782	<0.2	<0.2	1.1	1.1			
						1.0	0.4	260	16.6	8.2	8.2	30.3	30.3	106.1	106.1	8.6	8.6	4.8	8.6	9	8	73	75	<0.2	<0.2	1.1	1.1					
						5.4	0.4	256	16.7	8.2	8.2	30.8	30.8	105.3	105.3	8.5	8.5	5.9	5.9	7	8	75	75	<0.2	<0.2	1.2	1.2					
					5.4	0.5	261	16.7	8.2	8.2	30.8	30.8	105.3	105.3	8.5	8.5	5.9	5.9	7	8	75	75	<0.2	<0.2	1.2	1.2						
					9.8	0.4	269	16.7	8.2	8.2	30.8	30.8	104.4	104.4	8.4	8.4	7.1	8.4	9	8	77	78	<0.2	<0.2	1.2	1.2						
					9.8	0.4	293	16.7	8.2	8.2	30.8	30.8	104.4	104.4	8.4	8.4	7.1	8.4	8	8	78	78	<0.2	<0.2	1.0	1.0						
IM1	Fine	Moderate	08:05	7.0	Surface	1.0	0.4	17	16.2	8.2	8.2	29.6	29.6	104.7	104.7	8.6	8.6	9.1	8.6	10	16	71	73	818344	806441	<0.2	<0.2	1.3	1.3			
						1.0	0.5	17	16.2	8.2	8.2	29.6	29.6	104.7	104.7	8.6	8.6	9.2	8.6	10	16	72	73	<0.2	<0.2	1.3	1.3					
						3.5	0.4	23	16.3	8.2	8.2	29.6	29.6	103.8	103.9	8.5	8.5	12.2	8.5	14	16	73	73	<0.2	<0.2	1.4	1.4					
					3.5	0.5	23	16.3	8.2	8.2	29.6	29.6	103.9	103.9	8.5	8.5	12.3	8.5	14	16	73	73	<0.2	<0.2	1.3	1.3						
					6.0	0.3	7	16.3	8.2	8.2	29.5	29.5	103.2	103.1	8.5	8.5	12.8	8.5	24	16	75	75	<0.2	<0.2	1.3	1.3						
					6.0	0.3	7	16.3	8.2	8.2	29.4	29.5	103.0	103.1	8.5	8.5	12.7	8.5	25	16	75	75	<0.2	<0.2	1.2	1.2						
IM2	Fine	Moderate	08:09	7.7	Surface	1.0	0.4	20	16.3	8.2	8.2	29.0	29.0	104.0	104.0	8.6	8.6	7.3	8.6	16	21	72	74	818842	806208	<0.2	<0.2	1.5	1.5			
						1.0	0.4	20	16.3	8.2	8.2	29.0	29.0	104.0	104.0	8.6	8.6	7.4	8.6	15	21	73	74	<0.2	<0.2	1.5	1.5					
						3.9	0.5	20	16.3	8.2	8.2	29.4	29.4	104.0	104.0	8.5	8.5	11.8	8.5	17	21	73	73	<0.2	<0.2	1.4	1.4					
					3.9	0.5	20	16.3	8.2	8.2	29.4	29.4	104.0	104.0	8.5	8.5	12.0	8.5	16	21	73	73	<0.2	<0.2	1.5	1.5						
					6.7	0.4	18	16.3	8.2	8.2	29.4	29.4	102.3	102.3	8.4	8.4	20.3	8.4	29	21	75	75	<0.2	<0.2	1.4	1.4						
					6.7	0.4	18	16.3	8.2	8.2	29.4	29.4	102.3	102.3	8.4	8.4	20.6	8.4	31	21	75	75	<0.2	<0.2	1.6	1.6						
IM3	Fine	Moderate	08:16	8.0	Surface	1.0	0.4	29	16.3	8.1	8.1	28.7	28.7	103.5	103.5	8.5	8.5	6.8	8.5	11	12	72	73	819428	806014	<0.2	<0.2	1.7	1.7			
						1.0	0.4	29	16.3	8.1	8.1	28.7	28.7	103.5	103.5	8.5	8.5	6.8	8.5	11	12	72	73	<0.2	<0.2	1.7	1.7					
						4.0	0.5	25	16.3	8.2	8.2	29.3	29.3	103.1	103.1	8.5	8.5	7.7	8.5	11	12	73	73	<0.2	<0.2	1.3	1.3					
					4.0	0.5	25	16.3	8.2	8.2	29.3	29.3	103.1	103.1	8.5	8.5	7.8	8.5	12	12	74	74	<0.2	<0.2	1.1	1.1						
					7.0	0.3	24	16.4	8.1	8.1	30.2	30.2	101.9	101.7	8.3	8.3	7.4	8.3	13	12	74	74	<0.2	<0.2	1.4	1.4						
					7.0	0.3	25	16.4	8.1	8.1	30.1	30.1	101.5	101.7	8.3	8.3	7.5	8.3	12	12	75	75	<0.2	<0.2	1.6	1.6						
IM4	Fine	Moderate	08:24	7.3	Surface	1.0	0.5	9	16.2	8.1	8.1	28.9	28.9	104.5	104.5	8.6	8.6	7.1	8.6	10	15	71	73	819546	805065	<0.2	<0.2	1.6	1.6			
						1.0	0.5	9	16.2	8.1	8.1	28.9	28.9	104.5	104.5	8.6	8.6	7.2	8.6	12	15	71	73	<0.2	<0.2	1.3	1.3					
						3.7	0.5	19	16.3	8.1	8.1	29.8	29.8	104.6	104.6	8.6	8.6	12.4	8.6	17	15	73	73	<0.2	<0.2	1.8	1.8					
					3.7	0.5	20	16.3	8.1	8.1	29.8	29.8	104.6	104.6	8.6	8.6	12.5	8.6	17	15	74	74	<0.2	<0.2	1.3	1.3						
					6.3	0.4	17	16.3	8.1	8.1	29.7	29.7	103.6	103.6	8.5	8.5	21.1	8.5	18	15	75	75	<0.2	<0.2	1.3	1.3						
					6.3	0.4	18	16.3	8.1	8.1	29.7	29.7	103.6	103.6	8.5	8.5	21.2	8.5	17	15	75	75	<0.2	<0.2	1.3	1.3						
IM5	Fine	Moderate	08:31	6.5	Surface	1.0	0.5	17	16.3	8.1	8.1	29.0	28.9	103.8	103.8	8.5	8.5	8.4	8.5	10	10	72	74	820538	804900	<0.2	<0.2	1.9	1.9			
						1.0	0.5	17	16.3	8.1	8.1	28.9	28.9	103.7	103.8	8.5	8.5	8.6	8.5	10	10	72	74	<0.2	<0.2	1.5	1.5					
						3.3	0.5	21	16.3	8.1	8.1	29.3	29.3	103.3	103.3	8.5	8.5	10.6	8.5	11	10	73	73	<0.2	<0.2	1.8	1.8					
					3.3	0.5	22	16.3	8.1	8.1	29.3	29.3	103.3	103.3	8.5	8.5	10.5	8.5	10	10	74	74	<0.2	<0.2	1.6	1.6						
					5.5	0.4	14	16.3	8.1	8.1	29.2	29.2	101.9	101.9	8.4	8.4	17.7	8.4	10	10	75	75	<0.2	<0.2	1.4	1.4						
					5.5	0.4	14	16.3	8.1	8.1	29.2	29.2	101.9	101.9	8.4	8.4	17.3	8.4	9	10	75	75	<0.2	<0.2	1.5	1.5						
IM6	Fine	Moderate	08:38	6.6	Surface	1.0	0.3	24	16.4	8.1	8.1	30.0	30.0	104.3	104.3	8.5	8.5	7.1	8.5	8	13	73	74	821057	805844	<0.2	<0.2	1.4	1.4			
						1.0	0.3	25	16.4	8.1	8.1	30.0	30.0	104.3	104.3	8.5	8.5	6.9	8.5	10	13	73	74	<0.2	<0.2	1.5	1.5					
						3.3	0.3	12	16.4	8.1	8.1	30.2	30.2	103.9	103.9	8.5	8.5	7.3	8.5	13	13	74	74	<0.2	<0.2	1.						

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

Water Quality Monitoring

Water Quality Monitoring Results on 18 January 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)	Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
					Value	Average			Value	Average	Value	Average	Value	Average	Value	DA	Value	DA		Value	DA	Value	DA			Value	DA	Value	DA
C1	Sunny	Moderate	13:20	8.3	Surface	1.0	0.0	73	17.1	8.1	8.1	28.0	28.0	108.3	108.1	8.8	8.6	6.0	7.1	5	8	73	75	815597	804243	<0.2	<0.2	2.2	2.1
						1.0	0.0	73	17.1	8.1	8.1	28.0	28.0	107.8	108.1	8.8	8.6	5.9	7.1	6	8	73	75			<0.2	<0.2	2.3	2.0
					Middle	4.2	0.1	96	16.6	8.1	8.1	28.9	28.9	102.9	102.7	8.4	8.2	7.9	7.1	9	8	75	75			<0.2	<0.2	2.0	2.2
						4.2	0.1	98	16.6	8.1	8.1	28.9	28.9	102.5	102.7	8.4	8.2	7.5	7.1	7	8	75	75			<0.2	<0.2	2.2	2.1
					Bottom	7.3	0.1	153	16.5	8.1	8.1	29.2	29.1	102.5	102.7	8.4	8.2	7.8	7.1	10	8	77	77			<0.2	<0.2	1.9	2.0
						7.3	0.1	157	16.5	8.1	8.1	28.9	29.1	99.0	99.4	8.1	8.2	7.5	7.1	8	8	77	77			<0.2	<0.2	2.1	2.1
C2	Cloudy	Moderate	12:20	12.2	Surface	1.0	0.2	68	17.2	8.2	8.2	25.5	25.5	109.4	109.4	9.0	9.0	5.6	8.3	6	8	73	75	825686	806940	<0.2	<0.2	2.5	2.2
						1.0	0.2	74	17.2	8.2	8.2	25.5	25.5	109.4	109.4	9.0	9.0	5.6	8.3	5	8	73	75			<0.2	<0.2	2.5	2.1
					Middle	6.1	0.1	342	17.1	8.2	8.2	27.2	27.2	110.1	110.1	9.0	9.0	7.7	7.1	6	8	75	75			<0.2	<0.2	2.1	2.2
						6.1	0.1	315	17.1	8.2	8.2	27.2	27.2	110.1	110.1	9.0	9.0	7.7	7.1	7	8	75	75			<0.2	<0.2	2.2	2.0
					Bottom	11.2	0.2	288	17.2	8.3	8.3	28.4	28.4	111.2	111.2	9.0	9.0	11.7	11.7	11	8	76	76			<0.2	<0.2	2.0	2.1
						11.2	0.3	299	17.2	8.3	8.3	28.4	28.4	111.2	111.2	9.0	9.0	11.7	11.7	12	8	77	77			<0.2	<0.2	2.1	2.1
C3	Cloudy	Moderate	14:07	11.7	Surface	1.0	0.5	75	18.0	8.3	8.3	28.3	28.3	117.6	117.6	9.4	9.3	4.9	4.4	7	8	73	75	822119	817825	<0.2	<0.2	1.5	1.2
						1.0	0.5	81	18.0	8.3	8.3	28.3	28.3	117.6	117.6	9.4	9.3	4.9	4.4	6	8	73	75			<0.2	<0.2	1.2	1.1
					Middle	5.9	0.5	86	17.4	8.3	8.3	28.9	28.9	113.3	113.3	9.1	9.1	4.0	4.0	8	8	75	75			<0.2	<0.2	1.1	1.2
						5.9	0.5	89	17.4	8.3	8.3	28.9	28.9	113.3	113.3	9.1	9.1	4.0	4.0	8	8	75	75			<0.2	<0.2	1.2	1.1
					Bottom	10.7	0.4	86	17.2	8.3	8.3	29.0	29.0	113.7	113.7	9.2	9.2	4.3	4.3	8	8	77	77			<0.2	<0.2	1.1	1.1
						10.7	0.4	89	17.2	8.3	8.3	29.0	29.0	113.7	113.7	9.2	9.2	4.3	4.3	8	8	77	77			<0.2	<0.2	1.1	1.1
IM1	Sunny	Moderate	13:00	7.3	Surface	1.0	0.1	42	16.7	8.1	8.1	29.0	29.0	113.6	113.5	9.3	9.1	7.2	6.5	5	6	73	75	818335	806448	<0.2	<0.2	2.0	2.0
						1.0	0.1	42	16.7	8.1	8.1	29.0	29.0	113.4	113.5	9.3	9.1	7.1	6.5	5	6	73	75			<0.2	<0.2	2.0	2.0
					Middle	3.7	0.1	35	16.7	8.1	8.1	28.9	28.8	108.2	108.2	8.8	8.8	6.2	6.2	6	6	75	75			<0.2	<0.2	2.2	1.9
						3.7	0.1	38	16.7	8.1	8.1	28.8	28.8	108.1	108.2	8.8	8.8	6.2	6.2	6	6	75	75			<0.2	<0.2	1.9	2.0
					Bottom	6.3	0.0	244	16.7	8.2	8.2	28.8	28.7	105.5	105.0	8.6	8.6	6.3	6.3	7	8	77	77			<0.2	<0.2	1.9	2.0
						6.3	0.0	244	16.7	8.2	8.2	28.7	28.7	104.4	105.0	8.5	8.6	6.2	6.2	9	8	77	77			<0.2	<0.2	2.0	2.0
IM2	Sunny	Moderate	12:55	8.2	Surface	1.0	0.1	36	17.4	8.1	8.1	28.6	28.6	111.2	111.1	9.0	8.9	6.8	7.6	7	8	73	75	818825	806198	<0.2	<0.2	2.0	2.2
						1.0	0.1	39	17.4	8.1	8.1	28.6	28.6	110.9	110.9	9.0	8.9	6.9	7.6	7	8	73	75			<0.2	<0.2	2.4	2.2
					Middle	4.1	0.1	50	16.6	8.1	8.1	28.9	28.9	107.1	107.0	8.8	8.7	7.9	7.6	6	8	75	75			<0.2	<0.2	2.3	2.2
						4.1	0.1	50	16.6	8.1	8.1	28.9	28.9	106.9	107.0	8.7	8.7	8.1	7.6	7	8	75	75			<0.2	<0.2	2.2	2.2
					Bottom	7.2	0.1	58	16.6	8.1	8.1	28.8	28.8	104.6	104.2	8.6	8.6	8.0	8.0	10	8	77	77			<0.2	<0.2	2.2	2.2
						7.2	0.1	58	16.6	8.1	8.1	28.8	28.8	103.8	104.2	8.5	8.6	8.1	8.0	11	8	77	77			<0.2	<0.2	2.2	2.2
IM3	Sunny	Moderate	12:48	8.4	Surface	1.0	0.2	21	16.8	8.1	8.1	28.9	28.9	110.2	110.0	9.0	8.8	7.2	7.5	7	7	72	74	819438	806026	<0.2	<0.2	2.2	2.2
						1.0	0.2	22	16.8	8.1	8.1	28.9	28.9	109.8	110.0	9.0	8.8	7.3	7.5	7	7	72	73			<0.2	<0.2	2.1	2.3
					Middle	4.2	0.1	16	16.5	8.1	8.1	29.0	29.0	105.3	105.2	8.6	8.6	7.5	7.5	7	7	73	73			<0.2	<0.2	2.1	2.1
						4.2	0.1	16	16.5	8.1	8.1	29.0	29.0	105.0	105.2	8.6	8.6	7.7	7.5	8	7	73	73			<0.2	<0.2	2.1	2.1
					Bottom	7.4	0.1	34	16.5	8.1	8.1	28.6	28.6	100.1	99.7	8.2	8.2	7.6	7.6	7	7	76	76			<0.2	<0.2	2.2	2.2
						7.4	0.1	35	16.5	8.1	8.1	28.5	28.5	99.2	99.2	8.1	8.1	7.5	7.5	7	7	76	76			<0.2	<0.2	2.2	2.2
IM4	Sunny	Moderate	12:41	7.8	Surface	1.0	0.1	49	17.0	8.1	8.1	28.5	28.5	110.1	109.9	9.0	8.7	7.7	9.7	6	7	74	75	819555	805058	<0.2	<0.2	2.1	2.1
						1.0	0.1	50	17.0	8.1	8.1	28.5	28.5	109.6	109.9	8.9	8.7	8.0	9.7	7	7	74	75			<0.2	<0.2	2.1	2.1
					Middle	3.9	0.1	16	16.5	8.1	8.1	29.2	29.2	103.8	103.7	8.5	8.5	9.9	9.9	6	7	75	75			<0.2	<0.2	2.2	2.2
						3.9	0.1	17	16.5	8.1	8.1	29.2	29.2	103.5	103.7	8.5	8.5	9.9	9.9	7	7	75	75			<0.2	<0.2	2.1	2.1
					Bottom	6.8	0.1	359	16.4	8.1	8.1	29.0	29.0	100.9	100.7	8.3	8.3	11.2	11.2	7	7	76	76			<0.2	<0.2	2.1	2.1
						6.8	0.1	330	16.4	8.1	8.1	28.9	28.9	100.4	100.4	8.2	8.3	11.4	11.4	6	7	76	76			<0.2	<0.2	2.0	2.0
IM5	Sunny	Moderate	12:34	7.1	Surface	1.0	0.2	13	17.0	8.1	8.1	28.9	28.9	109.3	109.3	8.9	8.8	7.6	8.0	5	7	73	75	820561	804903	<0.2	<0.2	2.1	2.1
						1.0	0.2	13	17.0	8.1	8.1	28.9	28.9	109.2	109.3	8.9	8.8	7.6	8.0	6	7	73	75			<0.2	<0.2	2.1	2.1
					Middle	3.6	0.1	347	16.6	8.1	8.1	29.0	29.0	106.0	105.9	8.7	8.7	8.4	8.0	7	7	75	76			<0.2	<0.2	2.3	2.1
						3.6	0.1	319	16.6	8.1	8.1	29.0	29.0	105.7	105.9	8.7	8.7	8.5	8.0	6	7	76	76			<0.2	<0.2	2.3	2.1
					Bottom	6.1	0.1	350	16.6	8.1	8.1	28.8	28.8	103.0	102.7	8.4	8.4	7.9	7.9	8	7	76	76			<0.2	<0.2	2.1	2.0
						6.1	0.1	322	16.6	8.1	8.1	28.7	28.8	102.3	102.7	8.4	8.4	7.9	7.9	9	7	76	76			<0.2	<0.2	2.0	2.0
IM6	Sunny	Moderate	12:27	7.0	Surface	1.0	0.1	198	16.9	8.1	8.1	28.7	28.7	114.8	114.8	9.4	9.2	9.4	9.2	7	9	71	73	821064	805855	<0.2	<0.2	2.1	2.2
						1.0	0.1	207	16.9	8.1	8.1	28.7	28.7																

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

Water Quality Monitoring

Water Quality Monitoring Results on 18 January 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)				
					Value	Average			Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA	
IM9	Cloudy	Moderate	12:54	7.2	Surface	1.0	0.3	77	17.7	8.3	8.3	27.6	27.6	115.9	115.9	9.4	9.4	6.9	9.4	4	73	75	75	822082	808815	<0.2	<0.2	2.6	2.3				
						1.0	0.3	82	17.7	8.3	8.3	27.6	27.6	115.9	115.9	9.4	9.4	6.9	9.4	5	73	75	75	75	75	822082	808815	<0.2	<0.2	1.6	1.6		
					Middle	3.6	0.3	67	17.1	8.4	8.4	28.1	28.1	114.7	114.7	9.3	9.3	8.0	9.3	8.0	9.3	8	75	75	75	822082	808815	<0.2	<0.2	1.7	1.7		
						3.6	0.3	71	17.1	8.4	8.4	28.1	28.1	114.7	114.7	9.3	9.3	8.0	9.3	8.6	9.3	9	75	75	75	822082	808815	<0.2	<0.2	1.4	1.4		
					Bottom	6.2	0.2	67	17.1	8.4	8.4	28.2	28.2	114.3	114.3	9.3	9.3	8.6	9.3	8.6	9.3	10	76	76	76	822082	808815	<0.2	<0.2	1.5	1.5		
						6.2	0.2	72	17.1	8.4	8.4	28.2	28.2	114.3	114.3	9.3	9.3	8.6	9.3	8.6	9.3	10	76	76	76	822082	808815	<0.2	<0.2	1.4	1.4		
IM10	Cloudy	Moderate	13:02	7.7	Surface	1.0	0.3	85	17.3	8.4	8.4	27.5	27.5	115.2	115.2	9.4	9.4	6.7	9.4	7	74	74	74	822234	809826	<0.2	<0.2	2.2	2.1				
						1.0	0.4	87	17.3	8.4	8.4	27.5	27.5	115.2	115.2	9.4	9.4	6.7	9.4	6	74	74	74	822234	809826	<0.2	<0.2	1.8	1.8				
					Middle	3.9	0.3	89	17.1	8.4	8.4	28.1	28.1	114.8	114.8	9.3	9.3	8.7	9.3	8.7	9.3	6	75	75	75	822234	809826	<0.2	<0.2	2.1	2.1		
						3.9	0.3	97	17.1	8.4	8.4	28.1	28.1	114.8	114.8	9.3	9.3	8.7	9.3	7	75	75	75	822234	809826	<0.2	<0.2	1.6	1.6				
					Bottom	6.7	0.3	98	17.2	8.3	8.3	28.3	28.3	115.1	115.1	9.4	9.4	6.2	9.4	6.2	9.4	8	76	76	76	822234	809826	<0.2	<0.2	1.5	1.5		
						6.7	0.3	100	17.2	8.3	8.3	28.3	28.3	115.1	115.1	9.4	9.4	6.2	9.4	6.2	9.4	8	76	76	76	822234	809826	<0.2	<0.2	1.6	1.6		
IM11	Cloudy	Moderate	13:13	7.3	Surface	1.0	0.3	86	17.6	8.3	8.3	27.2	27.2	115.8	115.8	9.4	9.4	6.1	9.4	6	73	73	73	821487	810556	<0.2	<0.2	2.1	2.1				
						1.0	0.3	93	17.6	8.3	8.3	27.2	27.2	115.8	115.8	9.4	9.4	6.1	9.4	6	73	73	73	821487	810556	<0.2	<0.2	2.2	2.2				
					Middle	3.7	0.3	66	17.2	8.4	8.4	28.0	28.0	113.9	113.9	9.3	9.3	7.2	9.3	7.2	9.3	7	75	75	75	821487	810556	<0.2	<0.2	2.0	2.0		
						3.7	0.3	69	17.2	8.4	8.4	28.0	28.0	113.9	113.9	9.3	9.3	7.2	9.3	8	75	75	75	821487	810556	<0.2	<0.2	2.1	2.1				
					Bottom	6.3	0.2	56	17.2	8.3	8.3	28.3	28.3	113.5	113.5	9.2	9.2	7.2	9.2	16	76	76	76	821487	810556	<0.2	<0.2	1.5	1.5				
						6.3	0.2	59	17.2	8.3	8.3	28.3	28.3	113.5	113.5	9.2	9.2	7.2	9.2	14	77	77	77	821487	810556	<0.2	<0.2	1.7	1.7				
IM12	Cloudy	Moderate	13:20	8.8	Surface	1.0	0.4	84	17.3	8.3	8.3	27.6	27.6	119.3	119.3	9.7	9.7	5.0	9.7	7	73	73	73	821152	811539	<0.2	<0.2	1.9	1.9				
						1.0	0.4	84	17.3	8.3	8.3	27.6	27.6	119.3	119.3	9.7	9.7	5.0	9.7	6	74	74	74	821152	811539	<0.2	<0.2	2.0	2.0				
					Middle	4.4	0.2	93	17.3	8.3	8.3	28.3	28.3	119.1	119.1	9.7	9.7	5.2	9.7	5	75	75	75	821152	811539	<0.2	<0.2	1.7	1.7				
						4.4	0.2	94	17.3	8.3	8.3	28.3	28.3	119.1	119.1	9.7	9.7	5.2	9.7	6	75	75	75	821152	811539	<0.2	<0.2	1.8	1.8				
					Bottom	7.8	0.1	99	17.3	8.3	8.3	28.6	28.6	116.9	116.9	9.5	9.5	6.2	9.5	5	73	73	73	821152	811539	<0.2	<0.2	1.4	1.4				
						7.8	0.1	99	17.3	8.3	8.3	28.6	28.6	116.9	116.9	9.5	9.5	6.5	9.5	5	74	74	74	821152	811539	<0.2	<0.2	1.4	1.4				
SR2	Cloudy	Moderate	13:46	3.7	Surface	1.0	0.2	66	17.4	8.3	8.3	28.2	28.2	117.7	117.7	9.5	9.5	5.6	9.5	6	74	74	74	821491	814164	<0.2	<0.2	1.3	1.3				
						1.0	0.2	70	17.4	8.3	8.3	28.2	28.2	117.7	117.7	9.5	9.5	5.6	9.5	6	73	73	73	821491	814164	<0.2	<0.2	1.5	1.5				
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					Bottom	2.7	0.1	51	17.2	8.3	8.3	28.3	28.3	116.4	116.4	9.4	9.4	6.9	9.4	6	75	75	75	821491	814164	<0.2	<0.2	1.5	1.5				
						2.7	0.1	53	17.2	8.3	8.3	28.3	28.3	116.4	116.4	9.4	9.4	6.9	9.4	6	75	75	75	821491	814164	<0.2	<0.2	1.6	1.6				
SR3	Cloudy	Moderate	12:41	9.4	Surface	1.0	0.3	71	17.3	8.3	8.3	27.2	27.2	114.5	114.5	9.3	9.3	10.0	9.3	7	-	-	-	822158	807593	-	-	-	-				
						1.0	0.3	72	17.3	8.3	8.3	27.2	27.2	114.5	114.5	9.3	9.3	10.0	9.3	8	-	-	-	822158	807593	-	-	-	-				
					Middle	4.7	0.3	69	17.1	8.3	8.3	27.4	27.4	113.6	113.6	9.3	9.3	10.5	9.3	8	-	-	-	822158	807593	-	-	-	-				
						4.7	0.3	72	17.1	8.3	8.3	27.4	27.4	113.6	113.6	9.3	9.3	10.5	9.3	8	-	-	-	822158	807593	-	-	-	-				
					Bottom	8.4	0.3	86	17.0	8.3	8.3	28.0	28.0	114.0	114.0	9.3	9.3	15.4	9.3	9	-	-	-	822158	807593	-	-	-	-				
						8.4	0.3	92	17.0	8.3	8.3	28.0	28.0	114.0	114.0	9.3	9.3	15.4	9.3	11	-	-	-	822158	807593	-	-	-	-				
SR4A	Sunny	Moderate	13:40	9.0	Surface	1.0	0.3	89	17.2	8.2	8.2	28.5	28.5	117.2	117.0	9.5	9.5	6.6	9.5	9	-	-	-	817161	807820	-	-	-	-				
						1.0	0.3	96	17.2	8.2	8.2	28.5	28.5	116.8	116.8	9.5	9.5	6.6	9.5	7	-	-	-	817161	807820	-	-	-	-				
					Middle	4.5	0.2	70	16.9	8.2	8.2	28.4	28.4	112.3	112.3	9.2	9.2	6.6	9.2	8	-	-	-	817161	807820	-	-	-	-				
						4.5	0.2	75	16.9	8.2	8.2	28.4	28.4	112.2	112.2	9.2	9.2	6.7	9.2	9	-	-	-	817161	807820	-	-	-	-				
					Bottom	8.0	0.2	62	16.8	8.1	8.1	28.2	28.2	108.7	108.3	8.9	8.9	7.1	8.9	8	-	-	-	817161	807820	-	-	-	-				
						8.0	0.3	62	16.8	8.1	8.1	28.2	28.2	107.9	107.9	8.8	8.8	7.1	8.8	8	-	-	-	817161	807820	-	-	-	-				
SR5A	Sunny	Calm	13:55	5.3	Surface	1.0	0.1	59	17.4	8.3	8.3	28.9	28.9	122.3	122.2	9.9	9.9	5.9	9.9	8	-	-	-	816598	810722	-	-	-	-				
						1.0	0.1	59	17.4	8.3	8.3	28.9	28.9	122.1	122.1	9.8	9.8	5.9	9.8	7	-	-	-	816598	810722	-	-	-	-				
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
					Bottom	4.3	0.0	19	17.3	8.2	8.2	28.3	28.3	107.9	107.9	8.8	8.8	6.8	8.8	8	-	-	-	816598	810722	-	-	-	-				
						4.3	0.0	19	17.3	8.2	8.2	28.0	28.2	104.5	106.2	8.5	8.7	7.1	8.5	10	-	-	-	816598	810722	-	-	-	-				
SR6	Sunny	Calm	14:18	4.2	Surface	1.0	0.1	65	17.9	8.2	8.2	28.5	28.5	133.9	134.0	10.7	10.7	7.3	10.7	9	-												

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

Water Quality Monitoring

Water Quality Monitoring Results on 18 January 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity (NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)			
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA
									Value	DA	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA
C1	Fine	Moderate	08:50	7.9	Surface	1.0	0.5	46	16.6	16.6	8.1	8.1	28.9	28.9	108.9	108.9	8.9	8.9	8.6	8.6	8	8	72	72	815633	804245	<0.2	<0.2	1.6	1.6		
						1.0	0.6	46	16.6	16.6	8.1	8.1	28.9	28.9	108.8	108.8	8.9	8.9	8.7	8.7	7	7	72	72	<0.2	<0.2	1.4	1.4				
						4.0	0.5	44	16.6	16.6	8.1	8.1	28.9	28.9	107.6	107.6	8.8	8.8	9.8	9.8	10	10	73	73	<0.2	<0.2	1.5	1.5				
					Middle	4.0	0.5	44	16.6	16.6	8.1	8.1	28.9	28.9	107.6	107.6	8.8	8.8	9.8	9.8	9	9	73	73	<0.2	<0.2	1.5	1.5				
						6.9	0.4	27	16.6	16.6	8.1	8.1	29.1	29.1	104.0	104.0	8.5	8.5	11.9	11.9	9	9	76	76	<0.2	<0.2	1.4	1.4				
						6.9	0.5	27	16.5	16.5	8.1	8.1	29.1	29.1	103.9	104.0	8.5	8.5	12.0	12.0	8	8	76	76	<0.2	<0.2	1.4	1.4				
C2	Cloudy	Moderate	09:31	11.8	Surface	1.0	0.4	355	17.2	17.2	8.2	8.2	26.3	26.3	106.0	106.0	8.6	8.6	7.6	7.6	6	6	72	72	825709	806959	<0.2	<0.2	2.7	2.7		
						1.0	0.4	327	17.2	17.2	8.2	8.2	26.3	26.3	106.0	106.0	8.6	8.6	7.6	7.6	5	5	72	72	<0.2	<0.2	2.8	2.8				
						5.9	0.4	350	17.2	17.2	8.2	8.2	27.2	27.2	105.1	105.1	8.6	8.6	12.1	12.1	5	5	73	73	<0.2	<0.2	2.4	2.4				
					Middle	5.9	0.4	322	17.2	17.2	8.2	8.2	27.2	27.2	105.1	105.1	8.6	8.6	12.1	12.1	6	6	73	73	<0.2	<0.2	2.3	2.3				
						10.8	0.3	311	17.1	17.1	8.2	8.2	28.5	28.5	106.0	106.0	8.6	8.6	23.0	23.0	9	9	75	75	<0.2	<0.2	2.1	2.1				
						10.8	0.3	316	17.1	17.1	8.2	8.2	28.5	28.5	106.0	106.0	8.6	8.6	23.0	23.0	11	11	74	74	<0.2	<0.2	2.1	2.1				
C3	Cloudy	Moderate	07:43	10.6	Surface	1.0	0.5	273	17.1	17.1	8.3	8.3	28.9	28.9	111.1	111.1	9.0	9.0	7.1	7.1	7	7	73	73	822134	817777	<0.2	<0.2	1.5	1.5		
						1.0	0.5	278	17.1	17.1	8.3	8.3	28.9	28.9	111.1	111.1	9.0	9.0	7.1	7.1	7	7	73	73	<0.2	<0.2	1.5	1.5				
						5.3	0.6	273	17.2	17.2	8.2	8.2	29.5	29.5	110.6	110.6	8.9	8.9	10.6	10.6	9	9	75	75	<0.2	<0.2	1.4	1.4				
					Middle	5.3	0.7	275	17.2	17.2	8.2	8.2	29.5	29.5	110.6	110.6	8.9	8.9	10.6	10.6	8	8	75	75	<0.2	<0.2	1.4	1.4				
						9.6	0.4	273	17.2	17.2	8.2	8.2	29.9	29.9	111.5	111.5	9.0	9.0	13.7	13.7	7	7	76	76	<0.2	<0.2	1.4	1.4				
						9.6	0.4	296	17.2	17.2	8.2	8.2	29.9	29.9	111.5	111.5	9.0	9.0	13.7	13.7	7	7	77	77	<0.2	<0.2	1.4	1.4				
IM1	Fine	Moderate	09:06	7.0	Surface	1.0	0.5	25	16.8	16.8	8.2	8.2	28.0	28.0	107.7	107.7	8.8	8.8	8.5	8.5	7	7	73	73	818360	806458	<0.2	<0.2	1.7	1.7		
						1.0	0.5	27	16.8	16.8	8.2	8.2	28.0	28.0	107.6	107.6	8.8	8.8	8.2	8.2	7	7	73	73	<0.2	<0.2	1.6	1.6				
						3.5	0.5	17	16.7	16.7	8.1	8.1	28.2	28.2	104.5	104.5	8.6	8.6	9.8	9.8	7	7	75	75	<0.2	<0.2	1.8	1.8				
					Middle	3.5	0.5	18	16.7	16.7	8.1	8.1	28.2	28.2	104.5	104.5	8.6	8.6	9.8	9.8	6	6	75	75	<0.2	<0.2	1.6	1.6				
						6.0	0.4	349	16.6	16.6	8.1	8.1	28.3	28.3	101.9	101.9	8.4	8.4	11.5	11.5	7	7	76	76	<0.2	<0.2	1.6	1.6				
						6.0	0.4	358	16.6	16.6	8.1	8.1	28.2	28.3	101.3	101.6	8.3	8.3	11.3	11.3	7	7	77	77	<0.2	<0.2	1.8	1.8				
IM2	Fine	Moderate	09:11	7.8	Surface	1.0	0.5	27	16.8	16.8	8.1	8.1	27.9	27.9	107.1	107.1	8.8	8.8	7.4	7.4	7	7	73	73	818838	806179	<0.2	<0.2	1.9	1.9		
						1.0	0.5	29	16.8	16.8	8.1	8.1	27.9	27.9	107.0	107.0	8.8	8.8	7.7	7.7	8	8	73	73	<0.2	<0.2	1.9	1.9				
						3.9	0.5	17	16.8	16.8	8.2	8.2	28.0	28.0	105.3	105.2	8.6	8.6	10.2	10.2	8	8	75	75	<0.2	<0.2	1.9	1.9				
					Middle	3.9	0.6	17	16.8	16.8	8.2	8.2	28.0	28.0	105.1	105.2	8.6	8.6	9.2	9.2	7	7	75	75	<0.2	<0.2	1.9	1.9				
						6.8	0.4	13	16.7	16.7	8.2	8.2	28.2	28.1	102.0	101.7	8.4	8.4	9.5	9.5	12	12	76	76	<0.2	<0.2	2.0	2.0				
						6.8	0.4	13	16.7	16.7	8.2	8.2	28.1	28.1	101.4	101.4	8.3	8.3	9.6	9.6	11	11	76	76	<0.2	<0.2	2.0	2.0				
IM3	Fine	Moderate	09:17	7.9	Surface	1.0	0.3	39	16.8	16.8	8.1	8.1	27.6	27.6	106.5	106.5	8.7	8.7	6.8	6.8	10	10	72	72	819408	805993	<0.2	<0.2	1.9	1.9		
						1.0	0.3	41	16.8	16.8	8.1	8.1	27.6	27.6	106.5	106.5	8.7	8.7	6.8	6.8	9	9	72	72	<0.2	<0.2	1.8	1.8				
						4.0	0.3	14	16.8	16.8	8.2	8.2	27.8	27.8	105.3	105.2	8.6	8.6	7.1	7.1	8	8	73	73	<0.2	<0.2	2.0	2.0				
					Middle	4.0	0.3	14	16.8	16.8	8.2	8.2	27.8	27.8	105.1	105.1	8.6	8.6	7.2	7.2	9	9	73	73	<0.2	<0.2	2.0	2.0				
						6.9	0.2	13	16.6	16.6	8.1	8.1	28.9	28.9	103.1	102.9	8.4	8.4	7.3	7.3	12	12	76	76	<0.2	<0.2	1.9	1.9				
						6.9	0.2	13	16.6	16.6	8.1	8.1	28.9	28.9	102.6	102.6	8.4	8.4	7.4	7.4	11	11	76	76	<0.2	<0.2	2.1	2.1				
IM4	Fine	Moderate	09:25	7.4	Surface	1.0	0.5	359	16.8	16.8	8.1	8.1	27.9	27.9	108.5	108.5	8.9	8.9	8.1	8.1	6	6	72	72	819560	805051	<0.2	<0.2	2.0	2.0		
						1.0	0.5	330	16.8	16.8	8.1	8.1	27.9	27.9	108.4	108.5	8.9	8.9	8.4	8.4	7	7	72	72	<0.2	<0.2	1.9	1.9				
						3.7	0.5	4	16.8	16.8	8.1	8.1	28.2	28.2	106.8	106.8	8.8	8.8	10.4	10.4	8	8	73	73	<0.2	<0.2	2.0	2.0				
					Middle	3.7	0.6	4	16.8	16.8	8.1	8.1	28.2	28.2	106.8	106.8	8.8	8.8	10.4	10.4	8	8	73	73	<0.2	<0.2	1.8	1.8				
						6.4	0.5	13	16.8	16.8	8.1	8.1	28.1	28.1	103.1	103.1	8.5	8.5	20.5	20.5	8	8	75	75	<0.2	<0.2	2.0	2.0				
						6.4	0.5	13	16.8	16.8	8.1	8.1	28.1	28.1	103.0	103.1	8.4	8.4	20.6	20.6	8	8	76	76	<0.2	<0.2	1.8	1.8				
IM5	Fine	Moderate	09:32	6.5	Surface	1.0	0.6	10	16.9	16.9	8.1	8.1	27.5	27.5	106.6	106.6	8.8	8.8	7.9	7.9	8	8	73	73	820586	804947	<0.2	<0.2	2.2	2.2		
						1.0	0.6	10	16.9	16.9	8.1	8.1	27.5	27.5	106.5	106.6	8.7	8.7	7.9	7.9	7	7	73	73	<0.2	<0.2	1.8	1.8				
						3.3	0.5	15	16.8	16.8	8.1	8.1	28.0	28.0	105.1	105.1	8.6	8.6	11.4	11.4	8	8	75	75	<0.2	<0.2	2.0	2.0				
					Middle	3.3	0.5	16	16.8	16.8	8.1	8.1	28.0	28.0	105.0	105.1	8.6	8.6	11.9	11.9	9	9	75	75	<0.2	<0.2	2.0	2.0				
						5.5	0.5	13	16.8	16.8	8.1	8.1	27.9	27.9	102.6	102.6	8.4	8.4	18.0	18.0	8	8	75	75	<0.2	<0.2	1.9	1.9				
						5.5	0.5	14	16.8	16.8	8.1	8.1	27.9	27.9	102.0	102.3	8.4	8.4	18.8	18.8	8	8	76	76	<0.2	<0.2	2.1	2.1				
IM6	Fine	Moderate	09:39	6.4	Surface	1.0	0.3	48	16.8	16.8	8.1	8.1	28.0	28.0	105.																	

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

Water Quality Monitoring

Water Quality Monitoring Results on 18 January 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)							
					Value	Average			Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA				
IM9	Cloudy	Moderate	08:57	6.6	Surface	1.0	0.2	359	17.2	8.2	8.2	26.1	26.1	106.3	106.3	8.8	8.8	6.4	6.4	6	7	73	73	822064	808785	<0.2	2.5	<0.2	2.5							
						1.0	0.2	330	17.2	8.2	8.2	26.1	26.1	106.3	106.3	8.8	8.8	6.4	6.4	7	7	75	75													
					Middle	3.3	0.2	345	17.1	17.1	8.3	8.3	26.3	26.3	107.1	107.1	8.8	8.8	6.5	6.5	6	7	75			75										
						3.3	0.2	359	17.1	17.1	8.3	8.3	26.3	26.3	107.1	107.1	8.8	8.8	6.5	6.5	8	7	75			75										
					Bottom	5.6	0.2	344	17.1	17.1	8.3	8.3	26.3	26.3	109.0	109.0	9.0	9.0	6.8	6.8	8	7	74			74										
						5.6	0.2	316	17.1	17.1	8.3	8.3	26.3	26.3	109.0	109.0	9.0	9.0	6.8	6.8	7	7	73			73										
IM10	Cloudy	Moderate	08:49	7.4	Surface	1.0	0.6	320	17.1	8.2	8.2	27.1	27.1	109.4	109.4	9.0	9.0	6.0	6.0	5	7	73	73	822219	809853	<0.2	2.0	<0.2	1.9							
						1.0	0.7	328	17.1	17.1	8.2	8.2	27.1	27.1	109.4	109.4	9.0	9.0	6.0	6.0	6	7	73			73										
					Middle	3.7	0.5	314	17.1	17.1	8.2	8.2	27.6	27.6	110.0	110.0	9.0	9.0	9.0	9.0	6	7	75			75										
						3.7	0.5	334	17.1	17.1	8.2	8.2	27.6	27.6	110.0	110.0	9.0	9.0	9.0	9.0	7	7	75			75										
					Bottom	6.4	0.4	316	17.1	17.1	8.2	8.2	27.7	27.7	111.0	111.0	9.1	9.1	12.1	12.1	9	9	77			77										
						6.4	0.4	316	17.1	17.1	8.2	8.2	27.7	27.7	111.0	111.0	9.1	9.1	12.1	12.1	10	10	77			77										
IM11	Cloudy	Moderate	08:38	7.0	Surface	1.0	0.5	306	17.1	8.2	8.2	27.2	27.2	110.2	110.2	9.0	9.0	7.1	7.1	7	7	73	73	821516	810521	<0.2	2.1	<0.2	1.9							
						1.0	0.5	333	17.1	17.1	8.2	8.2	27.2	27.2	110.2	110.2	9.0	9.0	7.1	7.1	5	7	73			73										
					Middle	3.5	0.4	301	17.1	17.1	8.2	8.2	27.7	27.7	110.6	110.6	9.0	9.0	12.4	12.4	5	8	74			74										
						3.5	0.4	318	17.1	17.1	8.2	8.2	27.7	27.7	110.6	110.6	9.0	9.0	12.4	12.4	6	7	75			75										
					Bottom	6.0	0.3	299	17.1	17.1	8.2	8.2	27.8	27.8	111.7	111.7	9.1	9.1	15.1	15.1	12	12	76			76										
						6.0	0.3	319	17.1	17.1	8.2	8.2	27.8	27.8	111.7	111.7	9.1	9.1	15.1	15.1	14	14	75			75										
IM12	Cloudy	Moderate	08:30	7.6	Surface	1.0	0.5	286	17.1	8.2	8.2	27.8	27.8	113.9	113.9	9.3	9.3	7.9	7.9	5	7	74	74	821185	811508	<0.2	1.7	<0.2	1.7							
						1.0	0.5	301	17.1	17.1	8.2	8.2	27.8	27.8	113.9	113.9	9.3	9.3	7.9	7.9	4	7	73			73										
					Middle	3.8	0.6	280	17.2	17.2	8.3	8.3	28.3	28.3	115.4	115.4	9.4	9.4	13.6	13.6	5	7	75			75										
						3.8	0.6	288	17.2	17.2	8.3	8.3	28.3	28.3	115.4	115.4	9.4	9.4	13.6	13.6	4	7	75			75										
					Bottom	6.6	0.5	280	17.2	17.2	8.3	8.3	28.5	28.5	115.2	115.2	9.3	9.3	19.2	19.2	13	13	76			76										
						6.6	0.5	304	17.2	17.2	8.3	8.3	28.5	28.5	115.2	115.2	9.3	9.3	19.2	19.2	12	12	77			77										
SR2	Cloudy	Moderate	08:04	4.0	Surface	1.0	0.1	79	17.1	8.2	8.2	29.1	29.1	111.1	111.1	9.0	9.0	10.0	10.0	9	10	74	74	821486	814193	<0.2	1.6	<0.2	1.5							
						1.0	0.1	81	17.1	17.1	8.2	8.2	29.1	29.1	111.1	111.1	9.0	9.0	10.0	10.0	9	10	73			73										
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-			-	-	-	-	-	-	-
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-			-	-	-	-	-	-	-
					Bottom	3.0	0.1	119	17.1	17.1	8.2	8.2	29.2	29.2	111.1	111.1	9.0	9.0	11.4	11.4	11	11	75			75										
						3.0	0.1	125	17.1	17.1	8.2	8.2	29.2	29.2	111.1	111.1	9.0	9.0	11.4	11.4	12	12	76			76										
SR3	Cloudy	Moderate	09:11	8.5	Surface	1.0	0.2	22	17.2	8.2	8.2	25.8	25.9	106.1	106.2	8.7	8.7	7.4	7.4	4	6	-	-	822152	807563	-	-	-	-							
						1.0	0.3	22	17.1	17.1	8.2	8.2	25.9	25.9	106.3	106.3	8.7	8.7	7.7	7.7	5	6	-			-										
					Middle	4.3	0.4	10	17.1	17.1	8.2	8.2	26.2	26.2	105.7	105.7	8.7	8.7	10.1	10.1	4	6	-			-										
						4.3	0.4	10	17.1	17.1	8.2	8.2	26.2	26.2	105.7	105.7	8.7	8.7	10.1	10.1	4	6	-			-										
					Bottom	7.5	0.2	11	17.1	17.1	8.2	8.2	26.6	26.6	107.5	107.5	8.8	8.8	8.5	8.5	9	9	-			-										
						7.5	0.2	11	17.1	17.1	8.2	8.2	26.6	26.6	107.5	107.5	8.8	8.8	8.5	8.5	9	9	-			-										
SR4A	Fine	Calm	08:27	8.5	Surface	1.0	0.2	234	16.9	8.1	8.1	29.2	29.2	114.9	114.9	9.3	9.3	7.6	7.6	5	6	-	-	817206	807811	-	-	-	-							
						1.0	0.2	248	16.9	16.9	8.1	8.1	29.2	29.2	114.8	114.8	9.3	9.3	7.9	7.9	6	6	-			-										
					Middle	4.3	0.1	236	16.8	16.8	8.1	8.1	29.0	29.0	112.5	112.4	9.2	9.2	8.1	8.1	8	6	-			-										
						4.3	0.2	243	16.8	16.8	8.1	8.1	28.9	28.9	112.3	112.3	9.1	9.1	8.3	8.3	7	6	-			-										
					Bottom	7.5	0.2	223	16.8	16.8	8.1	8.1	28.6	28.6	109.0	108.6	8.9	8.9	7.3	7.3	6	6	-			-										
						7.5	0.2	227	16.8	16.8	8.1	8.1	28.5	28.5	108.2	108.2	8.8	8.8	7.3	7.3	6	6	-			-										
SR5A	Fine	Calm	08:11	4.7	Surface	1.0	0.3	301	16.9	8.2	8.2	28.6	28.5	110.1	109.9	9.0	9.0	6.2	6.2	8	8	-	-	816596	810694	-	-	-	-							
						1.0	0.3	320	16.9	16.9	8.2	8.2	28.5	28.5	109.6	109.6	8.9	8.9	6.2	6.2	9	8	-			-										
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-			-	-	-	-	-	-	-
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-			-	-	-	-	-	-	-
					Bottom	3.7	0.3	303	16.9	16.9	8.1	8.1	27.6	27.6	102.5	102.4	8.4	8.4	6.1	6.0	8	8	-			-										
						3.7	0.4	321	16.9	16.9	8.1	8.1	27.6	27.6	102.2	102.4	8.4	8.4	6.0	6.0	8	8	-			-										
SR6	Fine	Calm	07:48	3.6	Surface	1.0	0.2	246	16.9	8.1	8.1	28.8	28.8	112.2	112.2	9.1	9.1	6.9	6.9	8	8	-	-	817909	814639	-	-	-	-							
						1.0	0.2	263	16.9	16.9	8.1	8.1	28.8	28.8	112.1	112.2	9.1	9.1	7.0	7.0	7	8	-			-										
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-			-	-	-	-	-	-	-
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-			-	-	-	-	-	-	-
					Bottom	2.6	0.2	249	16.9	16.9	8.1	8.1	28.2	28.2	105.5	105.4	8.6	8.6	6.3	6.2	9	8	-			-										
						2.6	0.2	268	16.9	16.9	8.1	8.1	28.2	28.2	105.3	105.4	8.6	8.6	6.2	6.2	8	8	-			-										
SR7	Cloudy	Moderate	07:12	16.3	Surface	1.0	0.3	56	17.2	8.2	8.2	29.4	29.4	108.6	108.6	8.8	8.8	5.6	5.6	7	6	-	-	823641	823763	-	-	-	-							
						1.0	0.4	58	17.2	17.2	8.2	8.2	29.4	29.4	108.6	108.6	8.8	8.8	5.6	5.6	6	6	-			-										
					Middle	8.2	0.3	72	17.2	17.2	8.2	8.2	29.6	29.6	107.5	107.5	8.7	8.7	6.2	6.2	5	6	-			-										
						8.2	0.3	73	17.2	17.2	8.2	8.2	29.6	29.6	107.5	107.5	8.7	8.7	6.2	6.2																

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

Water Quality Monitoring

Water Quality Monitoring Results on 20 January 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity (NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)				
					Value	Average			Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA	
C1	Fine	Moderate	14:33	8.4	Surface	1.0	0.2	217	17.7	7.9	7.9	27.8	27.8	112.4	112.4	9.1	8.8	5.9	7.0	8	8	74	75	815598	804267	<0.2	1.9	<0.2	1.7				
						1.0	0.2	234	17.7	7.9	7.9	27.8	27.8	112.3	112.4	9.1	8.8	5.9	7.0	8	8	73	75	<0.2	1.6	<0.2	1.7						
					Middle	4.2	0.1	193	17.0	7.9	7.9	29.8	29.8	105.5	105.5	8.5	8.5	7.1	7.0	7	7	75	75	<0.2	1.7	<0.2	1.9	<0.2	0.9	<0.2	0.8		
						4.2	0.1	196	17.0	7.9	7.9	29.8	29.8	105.5	105.5	8.5	8.5	7.1	7.0	7	7	75	75	<0.2	1.7	<0.2	1.9	<0.2	0.9	<0.2	0.8		
					Bottom	7.4	0.1	200	16.9	7.9	7.9	30.3	30.3	105.5	105.5	8.5	8.5	8.1	8.1	7	7	77	77	<0.2	1.7	<0.2	1.7	<0.2	0.8	<0.2	0.8		
						7.4	0.1	215	16.9	7.9	7.9	30.3	30.3	105.6	105.6	8.5	8.5	8.1	8.1	7	7	77	77	<0.2	1.7	<0.2	1.7	<0.2	0.8	<0.2	0.8		
C2	Cloudy	Moderate	13:27	12.1	Surface	1.0	0.1	57	17.8	8.0	8.0	27.3	27.3	108.7	108.7	8.8	8.8	6.5	8.0	4	7	73	74	825695	806964	<0.2	2.8	<0.2	3.2	<0.2	2.9		
						1.0	0.1	57	17.8	8.0	8.0	27.3	27.3	108.7	108.7	8.8	8.8	6.5	8.0	4	7	72	74	<0.2	2.9	<0.2	3.2	<0.2	2.9				
					Middle	6.1	0.0	216	17.6	8.0	8.0	29.8	29.8	108.4	108.4	8.7	8.7	8.4	8.0	8	8	74	74	<0.2	2.9	<0.2	2.9	<0.2	2.7	<0.2	2.7		
						6.1	0.0	231	17.6	8.0	8.0	29.8	29.8	108.4	108.4	8.7	8.7	8.4	8.0	8	8	74	74	<0.2	2.9	<0.2	2.9	<0.2	2.7	<0.2	2.7		
					Bottom	11.1	0.1	228	17.5	8.0	8.0	31.9	31.9	110.9	110.9	8.8	8.8	9.0	9.0	8	8	75	75	<0.2	2.7	<0.2	2.7	<0.2	2.7	<0.2	2.6	<0.2	2.6
						11.1	0.1	237	17.5	8.0	8.0	31.9	31.9	110.9	110.9	8.8	8.8	9.0	9.0	8	8	75	75	<0.2	2.7	<0.2	2.7	<0.2	2.6	<0.2	2.6		
C3	Cloudy	Moderate	15:28	11.5	Surface	1.0	0.4	72	17.7	8.2	8.2	31.6	31.6	115.7	115.7	9.1	9.0	4.0	4.9	6	7	73	75	822107	817820	<0.2	1.6	<0.2	1.7	<0.2	1.6		
						1.0	0.4	76	17.7	8.2	8.2	31.6	31.6	115.7	115.7	9.1	9.0	4.0	4.9	6	7	73	75	<0.2	1.7	<0.2	1.6	<0.2	1.6				
					Middle	5.8	0.3	77	17.6	8.1	8.1	32.2	32.2	113.0	113.0	8.9	8.9	5.2	5.2	6	6	75	75	<0.2	1.6	<0.2	1.6	<0.2	1.4	<0.2	1.3		
						5.8	0.3	82	17.6	8.1	8.1	32.2	32.2	112.9	113.0	8.9	8.9	5.2	5.2	6	6	75	75	<0.2	1.6	<0.2	1.4	<0.2	1.3				
					Bottom	10.5	0.3	99	17.5	8.0	8.0	32.5	32.5	112.8	112.8	8.9	8.9	5.4	5.4	8	7	77	76	<0.2	1.3	<0.2	1.3	<0.2	1.3				
						10.5	0.3	100	17.5	8.0	8.0	32.5	32.5	112.8	112.8	8.9	8.9	5.4	5.4	7	7	76	76	<0.2	1.3	<0.2	1.3	<0.2	1.3				
IM1	Fine	Moderate	14:15	7.5	Surface	1.0	0.1	275	17.5	8.0	8.0	28.8	28.8	116.2	116.2	9.4	9.3	6.0	6.8	7	8	73	75	818358	806443	<0.2	1.6	<0.2	1.7	<0.2	1.7		
						1.0	0.1	284	17.5	8.0	8.0	28.8	28.8	116.2	116.2	9.4	9.3	6.0	6.8	6	8	73	75	<0.2	1.7	<0.2	1.8	<0.2	1.7				
					Middle	3.8	0.1	34	17.3	8.0	8.0	28.9	28.9	112.8	112.8	9.1	9.1	6.5	6.8	8	8	75	75	<0.2	1.8	<0.2	1.7	<0.2	1.7				
						3.8	0.1	36	17.3	8.0	8.0	28.9	28.9	112.7	112.8	9.1	9.1	6.5	6.8	8	8	75	75	<0.2	1.8	<0.2	1.7	<0.2	1.7				
					Bottom	6.5	0.1	116	17.0	8.0	8.0	29.3	29.3	110.2	110.3	8.9	8.9	7.8	7.8	8	8	77	77	<0.2	1.6	<0.2	1.6	<0.2	1.9	<0.2	1.9		
						6.5	0.1	127	17.0	8.0	8.0	29.3	29.3	110.3	110.3	8.9	8.9	7.8	7.8	8	8	77	77	<0.2	1.6	<0.2	1.6	<0.2	1.9	<0.2	1.9		
IM2	Fine	Moderate	14:10	8.3	Surface	1.0	0.1	272	17.5	8.0	8.0	28.8	28.8	115.0	115.0	9.3	9.1	6.4	7.4	9	9	73	75	818861	806172	<0.2	1.7	<0.2	1.6	<0.2	1.6		
						1.0	0.1	272	17.5	8.0	8.0	28.8	28.8	114.9	115.0	9.3	9.1	6.4	7.4	9	9	73	75	<0.2	1.6	<0.2	1.6	<0.2	1.6				
					Middle	4.2	0.1	86	17.1	8.0	8.0	29.3	29.3	110.0	110.0	8.9	8.9	7.8	7.8	8	9	75	75	<0.2	1.8	<0.2	1.8	<0.2	1.8				
						4.2	0.1	94	17.1	8.0	8.0	29.3	29.3	110.0	110.0	8.9	8.9	7.8	7.8	7	9	75	75	<0.2	1.8	<0.2	1.8	<0.2	1.8				
					Bottom	7.3	0.2	101	17.0	8.0	8.0	29.5	29.5	110.0	110.1	8.9	8.9	7.9	7.9	9	9	77	77	<0.2	1.6	<0.2	1.6	<0.2	1.6				
						7.3	0.2	108	17.0	8.0	8.0	29.5	29.5	110.1	110.1	8.9	8.9	7.9	7.9	9	9	77	77	<0.2	1.6	<0.2	1.6	<0.2	1.7				
IM3	Fine	Moderate	14:02	8.4	Surface	1.0	0.1	294	17.4	8.0	8.0	28.9	28.9	115.4	115.4	9.3	9.1	6.1	7.2	8	8	74	75	819400	806023	<0.2	1.6	<0.2	1.5	<0.2	1.5		
						1.0	0.1	300	17.4	8.0	8.0	28.9	28.9	115.3	115.4	9.3	9.1	6.0	7.2	7	8	73	75	<0.2	1.5	<0.2	1.5	<0.2	1.5				
					Middle	4.2	0.0	148	17.1	8.0	8.0	29.3	29.3	109.0	109.0	8.8	8.8	7.3	7.3	7	8	75	75	<0.2	1.6	<0.2	1.6	<0.2	1.6				
						4.2	0.0	153	17.1	8.0	8.0	29.3	29.3	109.0	109.0	8.8	8.8	7.3	7.3	6	8	75	75	<0.2	1.6	<0.2	1.6	<0.2	1.5				
					Bottom	7.4	0.1	143	17.0	8.0	8.0	29.5	29.5	108.2	108.3	8.8	8.8	8.1	8.1	9	11	77	77	<0.2	1.5	<0.2	1.5	<0.2	1.5				
						7.4	0.1	149	17.0	8.0	8.0	29.5	29.5	108.3	108.3	8.8	8.8	8.1	8.1	11	11	77	77	<0.2	1.6	<0.2	1.6	<0.2	1.6				
IM4	Fine	Moderate	13:54	7.8	Surface	1.0	0.1	332	17.4	8.0	8.0	28.7	28.7	112.0	111.8	9.0	8.9	6.8	7.9	8	9	73	75	819559	805049	<0.2	1.6	<0.2	1.4	<0.2	1.4		
						1.0	0.1	357	17.4	8.0	8.0	28.7	28.7	111.6	111.8	9.0	8.9	6.7	7.9	8	9	73	75	<0.2	1.4	<0.2	1.4	<0.2	1.4				
					Middle	3.9	0.1	42	17.1	8.0	8.0	29.3	29.3	108.0	108.0	8.7	8.7	7.7	7.7	8	9	75	75	<0.2	1.4	<0.2	1.4	<0.2	1.6				
						3.9	0.1	42	17.0	8.0	8.0	29.3	29.3	108.0	108.0	8.7	8.7	7.7	7.7	9	9	75	75	<0.2	1.6	<0.2	1.6	<0.2	1.4				
					Bottom	6.8	0.0	299	17.0	8.0	8.0	29.4	29.4	107.5	107.6	8.7	8.7	9.3	9.3	9	9	77	77	<0.2	1.4	<0.2	1.4	<0.2	1.4				
						6.8	0.0	310	17.0	8.0	8.0	29.4	29.4	107.6	107.6	8.7	8.7	9.4	9.4	10	10	77	77	<0.2	1.5	<0.2	1.5	<0.2	1.5				
IM5	Fine	Moderate	13:46	7.0	Surface	1.0	0.1	296	17.4	8.0	8.0	28.7	28.7	113.8	113.8	9.2	9.1	6.8	7.9	7	7	74	75	820586	804947	<0.2	1.5	<0.2	1.7	<0.2	1.5		
						1.0	0.1	303	17.4	8.0	8.0	28.7	28.7	113.8	113.8	9.2	9.1	6.9	7.9	7	7	73	75	<0.2	1.7	<0.2	1.5	<0.2	1.5				
					Middle	3.5	0.1	20	17.2	8.0	8.0	28.9	28.9	110.1	110.1	8.9	8.9	8.3	8.4	7	7	75	75	<0.2	1.4	<0.2	1.4	<0.2	1.4				
						3.5	0.1	21	17.2	8.0	8.0	28.9	28.9	110.1	110.1	8.9	8.9	8.4	8.4	8	7	75	75	<0.2	1.6	<0.2	1.6	<0.2	1.4				
					Bottom	6.0	0.0	46	17.0	8.0	8.0	29.3	2																				

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

Water Quality Monitoring

Water Quality Monitoring Results on 20 January 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity (NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)		
									Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	
C1	Fine	Moderate	09:31	8.1	Surface	1.0	0.3	35	17.1	7.9	7.9	29.5	29.5	107.5	107.4	8.7	8.7	10.9	13	74	74	74	74	815599	804228	<0.2	<0.2	1.8	1.9		
						1.0	0.3	37	17.1	7.9	7.9	29.5	29.5	107.3	107.4	8.7	8.7	11.3	11	74	74	74	74	74	74	<0.2	<0.2	1.6	1.6		
						4.1	0.4	45	17.0	7.9	7.9	30.1	30.1	106.0	106.0	8.6	8.6	15.9	11	76	76	76	76	76	76	<0.2	<0.2	1.6	1.6		
					Middle	4.1	0.4	46	17.0	7.9	7.9	30.1	30.1	106.0	106.0	8.6	8.6	15.8	11	76	76	76	76	76	76	76	76	<0.2	<0.2	1.3	1.3
						7.1	0.3	42	17.0	7.9	7.9	30.1	30.1	105.8	105.8	8.5	8.5	23.4	16	78	78	78	78	78	78	78	78	<0.2	<0.2	1.5	1.5
						7.1	0.3	46	17.0	7.9	7.9	30.1	30.1	105.8	105.8	8.5	8.5	23.1	17	77	77	77	77	77	77	77	77	<0.2	<0.2	3.3	3.3
C2	Cloudy	Moderate	10:13	11.3	Surface	1.0	0.3	318	17.8	8.0	8.0	26.8	26.8	106.8	105.8	8.6	8.6	7.3	8	72	72	72	72	825694	806958	<0.2	<0.2	3.2	2.6		
						1.0	0.3	329	17.8	8.0	8.0	26.8	26.8	105.8	105.8	8.6	8.6	7.3	8	73	73	73	73	73	73	<0.2	<0.2	2.8	2.8		
						5.7	0.4	329	17.7	8.0	8.0	27.5	27.5	106.0	106.0	8.6	8.6	7.8	9	73	73	73	73	73	73	<0.2	<0.2	2.9	2.9		
					Middle	5.7	0.4	329	17.7	8.0	8.0	27.5	27.5	106.0	106.0	8.6	8.6	7.8	8	74	74	74	74	74	74	74	74	<0.2	<0.2	2.5	2.5
						10.3	0.3	355	17.6	8.0	8.0	28.3	28.3	106.0	106.0	8.5	8.5	13.3	10	75	75	75	75	75	75	75	75	<0.2	<0.2	2.6	2.6
						10.3	0.3	327	17.6	8.0	8.0	28.3	28.3	106.0	106.0	8.5	8.5	13.3	11	75	75	75	75	75	75	75	75	<0.2	<0.2	1.8	1.8
C3	Cloudy	Moderate	08:30	11.4	Surface	1.0	0.6	276	17.5	8.3	8.3	28.2	28.2	110.9	110.9	9.0	9.0	5.5	9	74	74	74	74	822089	817779	<0.2	<0.2	2.0	1.9		
						1.0	0.6	291	17.5	8.3	8.3	28.2	28.2	110.9	110.9	9.0	9.0	5.5	8	73	73	73	73	73	73	<0.2	<0.2	2.0	2.0		
						5.7	0.5	272	17.5	8.3	8.3	28.9	28.9	109.2	109.2	8.8	8.8	9.5	11	75	75	75	75	75	75	<0.2	<0.2	1.8	1.8		
					Middle	5.7	0.5	299	17.5	8.3	8.3	28.9	28.9	109.2	109.2	8.8	8.8	9.5	12	75	75	75	75	75	75	75	75	<0.2	<0.2	2.0	2.0
						10.4	0.4	271	17.4	8.2	8.2	29.8	29.8	109.0	109.0	8.7	8.7	17.9	22	78	78	78	78	78	78	78	78	<0.2	<0.2	1.7	1.7
						10.4	0.4	273	17.4	8.2	8.2	29.8	29.8	109.0	109.0	8.7	8.7	17.9	20	77	77	77	77	77	77	77	77	<0.2	<0.2	2.1	2.1
IM1	Fine	Moderate	09:49	7.1	Surface	1.0	0.5	16	17.3	8.0	8.0	28.4	28.4	107.2	107.2	8.7	8.7	7.9	8	74	74	74	74	818368	806477	<0.2	<0.2	2.3	2.2		
						1.0	0.5	16	17.3	8.0	8.0	28.4	28.4	107.2	107.2	8.7	8.7	8.0	9	74	74	74	74	74	74	<0.2	<0.2	2.3	2.3		
						3.6	0.4	1	17.3	8.0	8.0	28.8	28.8	106.5	106.5	8.6	8.6	10.9	8	76	76	76	76	76	76	<0.2	<0.2	2.1	2.1		
					Middle	3.6	0.4	1	17.3	8.0	8.0	28.8	28.8	106.5	106.5	8.6	8.6	11.1	8	76	76	76	76	76	76	76	76	<0.2	<0.2	2.1	2.1
						6.1	0.4	335	17.0	7.9	7.9	30.0	30.0	105.9	105.9	8.5	8.5	13.5	16	78	78	78	78	78	78	78	78	<0.2	<0.2	1.8	1.8
						6.1	0.4	358	17.0	7.9	7.9	30.0	30.0	105.9	105.9	8.5	8.5	13.5	18	78	78	78	78	78	78	78	78	<0.2	<0.2	2.3	2.3
IM2	Fine	Moderate	09:53	7.9	Surface	1.0	0.4	15	17.3	8.0	8.0	28.2	28.2	106.9	106.9	8.7	8.7	7.4	9	74	74	74	74	818868	806175	<0.2	<0.2	2.4	2.3		
						1.0	0.4	16	17.3	8.0	8.0	28.2	28.2	106.8	106.8	8.7	8.7	7.5	7	74	74	74	74	74	74	<0.2	<0.2	2.2	2.2		
						4.0	0.4	13	17.3	8.0	8.0	28.4	28.4	106.4	106.4	8.6	8.6	8.4	11	76	76	76	76	76	76	<0.2	<0.2	2.5	2.5		
					Middle	4.0	0.5	14	17.3	8.0	8.0	28.4	28.4	106.4	106.4	8.6	8.6	8.4	10	76	76	76	76	76	76	76	76	<0.2	<0.2	2.3	2.3
						6.9	0.4	2	17.2	8.0	8.0	29.1	29.1	105.9	105.9	8.6	8.6	10.4	9	78	78	78	78	78	78	78	78	<0.2	<0.2	2.2	2.2
						6.9	0.4	2	17.2	8.0	8.0	29.1	29.1	105.9	105.9	8.6	8.6	10.4	10	78	78	78	78	78	78	78	78	<0.2	<0.2	2.4	2.4
IM3	Fine	Moderate	10:00	8.0	Surface	1.0	0.4	10	17.3	7.9	7.9	28.1	28.1	106.3	106.3	8.6	8.6	7.4	6	74	74	74	74	819410	805995	<0.2	<0.2	2.5	2.4		
						1.0	0.4	10	17.3	7.9	7.9	28.1	28.1	106.3	106.3	8.6	8.6	7.4	7	74	74	74	74	74	74	<0.2	<0.2	2.4	2.4		
						4.0	0.4	16	17.3	7.9	7.9	28.1	28.1	105.6	105.6	8.6	8.6	7.4	5	76	76	76	76	76	76	<0.2	<0.2	2.3	2.3		
					Middle	4.0	0.5	16	17.3	7.9	7.9	28.1	28.1	105.5	105.5	8.6	8.6	7.4	6	76	76	76	76	76	76	76	76	<0.2	<0.2	2.6	2.6
						7.0	0.3	10	17.0	7.9	7.9	30.1	30.1	104.6	104.6	8.4	8.4	8.8	6	78	78	78	78	78	78	78	78	<0.2	<0.2	2.4	2.4
						7.0	0.3	10	17.0	7.9	7.9	30.1	30.1	104.6	104.6	8.4	8.4	8.9	7	78	78	78	78	78	78	78	78	<0.2	<0.2	2.3	2.3
IM4	Fine	Moderate	10:08	7.5	Surface	1.0	0.4	343	17.3	7.9	7.9	28.2	28.2	107.2	107.2	8.7	8.7	7.8	7	74	74	74	74	819588	805016	<0.2	<0.2	2.4	2.3		
						1.0	0.4	359	17.3	7.9	7.9	28.2	28.2	107.2	107.2	8.7	8.7	7.9	6	74	74	74	74	74	74	<0.2	<0.2	2.6	2.6		
						3.8	0.5	357	17.3	7.9	7.9	28.4	28.4	106.8	106.8	8.7	8.7	12.6	7	76	76	76	76	76	76	<0.2	<0.2	2.4	2.4		
					Middle	3.8	0.5	328	17.3	7.9	7.9	28.4	28.4	106.9	106.9	8.7	8.7	12.5	6	76	76	76	76	76	76	76	76	<0.2	<0.2	2.0	2.0
						6.5	0.4	359	17.2	7.9	7.9	28.8	28.8	106.5	106.5	8.6	8.6	27.3	13	78	78	78	78	78	78	78	78	<0.2	<0.2	2.0	2.0
						6.5	0.4	330	17.2	7.9	7.9	28.8	28.8	106.5	106.5	8.6	8.6	27.5	15	78	78	78	78	78	78	78	78	<0.2	<0.2	2.5	2.5
IM5	Fine	Moderate	10:15	6.6	Surface	1.0	0.5	17	17.3	7.9	7.9	28.1	28.1	106.5	106.5	8.6	8.6	7.9	9	73	73	73	73	820573	804894	<0.2	<0.2	2.2	2.4		
						1.0	0.5	17	17.3	7.9	7.9	28.1	28.1	106.5	106.5	8.6	8.6	7.9	9	74	74	74	74	74	74	<0.2	<0.2	2.3	2.3		
						3.3	0.5	24	17.3	7.9	7.9	28.3	28.3	105.9	105.9	8.6	8.6	10.6	8	76	76	76	76	76	76	<0.2	<0.2	2.4	2.4		
					Middle	3.3	0.5	26	17.3	7.9	7.9	28.3	28.3	105.9	105.9	8.6	8.6	10.6	7	76	76	76	76	76	76	76	76	<0.2	<0.2	2.4	2.4
						5.6	0.5	39	17.2	7.9	7.9	28.4	28.4	105.7	105.7	8.6	8.6	14.2	8	77	77	77	77	77	77	77	77	<0.2	<0.2	2.5	2.5
						5.6	0.5	39	17.2	7.9	7.9	28.4	28																		

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

Water Quality Monitoring

Water Quality Monitoring Results on 20 January 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity (NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)				
									Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA	
IM9	Cloudy	Moderate	09:40	7.0	Surface	1.0	0.2	321	17.6	17.6	8.0	8.0	27.9	27.9	104.3	104.3	8.4	8.4	8.9	8.4	11	73	74	822068	808832	<0.2	2.9	2.8	2.9				
						1.0	0.2	338	17.6	17.6	8.0	8.0	27.9	27.9	104.3	104.3	8.4	8.4	8.9	8.4	11	72	74	74	74	<0.2	2.9	2.9					
					Middle	3.5	0.2	319	17.6	17.6	8.0	8.0	27.9	27.9	104.1	104.1	8.4	8.4	8.8	8.8	10.1	10.1	14	14	73	74	<0.2	2.7	2.8	2.7			
						3.5	0.2	329	17.6	17.6	8.0	8.0	27.9	27.9	104.1	104.1	8.4	8.4	8.8	8.8	10	10	14	14	75	75	<0.2	2.7	2.8	2.7			
					Bottom	6.0	0.2	325	17.6	17.6	8.0	8.0	27.9	27.9	103.9	103.9	8.4	8.4	12.6	12.6	8.4	8.4	20	20	76	76	<0.2	2.5	2.5	2.5			
						6.0	0.2	337	17.6	17.6	8.0	8.0	27.9	27.9	103.9	103.9	8.4	8.4	12.6	12.6	8.4	8.4	20	20	76	76	<0.2	2.5	2.5	2.5			
IM10	Cloudy	Moderate	09:33	7.2	Surface	1.0	0.6	310	17.6	17.6	8.0	8.0	27.9	27.9	106.1	106.1	8.6	8.6	8.6	8.6	9	73	75	822215	809833	<0.2	2.7	2.5	2.7				
						1.0	0.6	338	17.6	17.6	8.0	8.0	27.9	27.9	106.1	106.1	8.6	8.6	8.6	8.6	9	73	75	75	75	<0.2	2.6	2.6					
					Middle	3.6	0.5	308	17.6	17.6	8.0	8.0	28.5	28.5	105.5	105.5	8.5	8.5	14.0	14.0	13.3	13.3	19	19	75	75	<0.2	2.3	2.3	2.3			
						3.6	0.5	333	17.6	17.6	8.0	8.0	28.5	28.5	105.5	105.5	8.5	8.5	14.0	14.0	13.3	13.3	19	19	75	75	<0.2	2.3	2.3	2.3			
					Bottom	6.2	0.4	314	17.6	17.6	8.0	8.0	28.6	28.6	105.4	105.4	8.5	8.5	17.2	17.2	8.5	8.5	37	37	77	77	<0.2	2.3	2.3	2.3			
						6.2	0.4	327	17.6	17.6	8.0	8.0	28.6	28.6	105.4	105.4	8.5	8.5	17.2	17.2	8.5	8.5	37	37	77	77	<0.2	2.6	2.6	2.6			
IM11	Cloudy	Moderate	09:22	6.5	Surface	1.0	0.5	296	17.6	17.6	8.0	8.0	28.1	28.1	106.3	106.3	8.6	8.6	7.4	7.4	10	74	75	821524	810540	<0.2	2.4	2.4	2.4				
						1.0	0.5	320	17.6	17.6	8.0	8.0	28.1	28.1	106.3	106.3	8.6	8.6	7.4	7.4	10	74	75	75	75	<0.2	2.3	2.3					
					Middle	3.3	0.4	290	17.6	17.6	8.0	8.0	28.1	28.1	105.9	105.9	8.5	8.5	9.1	9.1	8.5	8.5	12	12	75	75	<0.2	2.6	2.6	2.6			
						3.3	0.4	307	17.6	17.6	8.0	8.0	28.1	28.1	105.9	105.9	8.5	8.5	9.1	9.1	8.5	8.5	12	12	75	75	<0.2	2.3	2.3	2.3			
					Bottom	5.5	0.4	289	17.6	17.6	8.1	8.1	28.5	28.5	105.3	105.3	8.5	8.5	9.0	9.0	8.5	8.5	13	13	76	76	<0.2	2.4	2.4	2.4			
						5.5	0.4	302	17.6	17.6	8.1	8.1	28.5	28.5	105.3	105.3	8.5	8.5	9.0	9.0	8.5	8.5	13	13	76	76	<0.2	2.4	2.4	2.4			
IM12	Cloudy	Moderate	09:16	7.7	Surface	1.0	0.6	280	17.6	17.6	8.0	8.0	28.0	28.0	111.4	111.4	9.0	9.0	5.2	5.2	8	73	75	821164	811536	<0.2	2.3	2.0	2.3				
						1.0	0.6	280	17.6	17.6	8.0	8.0	28.0	28.0	111.4	111.4	9.0	9.0	5.2	5.2	8	73	75	75	75	<0.2	2.3	2.3					
					Middle	3.9	0.7	277	17.6	17.6	8.1	8.1	29.1	29.1	111.6	111.6	8.9	8.9	12.3	12.3	14.4	14.4	12	12	75	75	<0.2	1.8	1.8	1.8			
						3.9	0.7	296	17.6	17.6	8.1	8.1	29.1	29.1	111.6	111.6	8.9	8.9	12.3	12.3	14.4	14.4	12	12	75	75	<0.2	2.1	2.1	2.1			
					Bottom	6.7	0.5	276	17.6	17.6	8.1	8.1	29.4	29.4	109.3	109.3	8.7	8.7	25.7	25.7	8.7	8.7	20	20	75	75	<0.2	1.9	1.9	1.9			
						6.7	0.5	277	17.6	17.6	8.1	8.1	29.4	29.4	109.3	109.3	8.7	8.7	25.7	25.7	8.7	8.7	21	21	75	75	<0.2	1.8	1.8	1.8			
SR2	Cloudy	Moderate	08:49	4.3	Surface	1.0	0.2	3	17.5	17.5	8.1	8.1	28.2	28.2	107.8	107.8	8.7	8.7	16.6	16.6	16	74	75	821464	814151	<0.2	2.0	1.9	2.0				
						1.0	0.2	3	17.5	17.5	8.1	8.1	28.2	28.2	107.8	107.8	8.7	8.7	16.6	16.6	16	73	73	73	73	-	-	-	-				
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					Bottom	3.3	0.2	5	17.5	17.5	8.1	8.1	28.5	28.5	107.0	107.0	8.6	8.6	16.6	16.6	8.6	8.6	18	75	76	75	75	<0.2	1.9	1.9	1.9		
						3.3	0.2	5	17.5	17.5	8.1	8.1	28.5	28.5	107.0	107.0	8.6	8.6	16.6	16.6	8.6	8.6	18	76	76	76	76	<0.2	1.9	1.9	1.9		
SR3	Cloudy	Moderate	09:54	8.4	Surface	1.0	0.2	345	17.7	17.7	8.0	8.0	27.3	27.3	103.6	103.6	8.4	8.4	6.6	6.6	5	-	-	-	-	-	-	-	-	-			
						1.0	0.3	317	17.7	17.7	8.0	8.0	27.3	27.3	103.6	103.6	8.4	8.4	6.6	6.6	8	-	-	-	-	-	-	-	-	-	-	-	
					Middle	4.2	0.2	7	17.7	17.7	8.0	8.0	27.6	27.6	102.8	102.8	8.3	8.3	6.5	6.5	6.4	6.4	7	-	-	-	-	-	-	-	-	-	-
						4.2	0.3	7	17.7	17.7	8.0	8.0	27.6	27.6	102.8	102.8	8.3	8.3	6.5	6.5	6.4	6.4	7	-	-	-	-	-	-	-	-	-	-
					Bottom	7.4	0.2	23	17.7	17.7	8.0	8.0	27.7	27.7	103.8	103.8	8.4	8.4	6.0	6.0	8.4	8.4	8	-	-	-	-	-	-	-	-	-	-
						7.4	0.3	24	17.7	17.7	8.0	8.0	27.7	27.7	103.8	103.8	8.4	8.4	6.0	6.0	8.4	8.4	7	-	-	-	-	-	-	-	-	-	-
SR4A	Fine	Moderate	09:10	8.5	Surface	1.0	0.2	248	17.4	17.4	8.0	8.0	29.7	29.7	113.0	113.0	9.1	9.1	8.7	8.7	11	-	-	-	-	-	-	-	-				
						1.0	0.2	253	17.4	17.4	8.0	8.0	29.7	29.7	113.0	113.0	9.1	9.1	8.7	8.7	12	-	-	-	-	-	-	-	-	-			
					Middle	4.3	0.2	261	17.4	17.4	8.0	8.0	29.6	29.6	111.9	111.9	9.0	9.0	8.7	8.7	8.7	8.7	10	-	-	-	-	-	-	-	-		
						4.3	0.2	284	17.4	17.4	8.0	8.0	29.6	29.6	111.9	111.9	9.0	9.0	8.7	8.7	8.7	8.7	12	-	-	-	-	-	-	-	-		
					Bottom	7.5	0.2	267	17.4	17.4	8.0	8.0	29.5	29.5	110.2	110.2	8.9	8.9	8.6	8.6	8.9	8.9	13	-	-	-	-	-	-	-	-		
						7.5	0.2	284	17.4	17.4	8.0	8.0	29.5	29.5	110.1	110.1	8.9	8.9	8.6	8.6	8.9	8.9	14	-	-	-	-	-	-	-	-		
SR5A	Fine	Calm	08:54	4.5	Surface	1.0	0.3	285	17.4	17.4	8.0	8.0	29.6	29.6	114.6	114.6	9.2	9.2	7.8	7.8	9	-	-	-	-	-	-	-					
						1.0	0.3	301	17.4	17.4	8.0	8.0	29.6	29.6	114.6	114.6	9.2	9.2	7.8	7.8	9	-	-	-	-	-	-	-	-				
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
					Bottom	3.5	0.2	291	17.4	17.4	8.0	8.0	29.4	29.4	112.9	112.9	9.1	9.1	8.8	8.8	9.1	9.1	11	-	-	-	-	-	-	-			
						3.5	0.3	300	17.4	17.4	8.0	8.0	29.4	29.4	112.8	112.8	9.1	9.1	8.8	8.8	9.1	9.1	11	-	-	-	-	-	-	-			
SR6	Fine	Calm	08:31	3.7	Surface	1.0	0.2	271	17.3	17.3	8.0	8.0	29.4	29.4	108.7	108.7	8.8	8.8	6.2	6.2	11	-	-	-									

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

Water Quality Monitoring

Water Quality Monitoring Results on 23 January 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)							
									Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA	Value	DA	Value	DA
C1	Misty	Moderate	16:40	8.7	Surface	1.0	0.2	131	17.7	17.7	7.8	7.8	31.2	31.2	126.5	126.5	10.0	9.7	5.0	6.2	6	7	73	75	815598	804222	<0.2	<0.2	1.3	1.1						
						1.0	0.2	133	17.7	7.8	7.8	31.2	31.2	126.4	126.5	10.0	9.7	5.0	6.2	5	7	73	75	<0.2			<0.2	1.2	1.1							
					Middle	4.4	0.2	134	17.4	17.4	7.8	7.8	32.1	32.1	119.5	119.5	9.4	9.4	6.3	6.2	6	7	75	75			<0.2	<0.2	1.2	1.1						
						4.4	0.2	136	17.4	17.4	7.8	7.8	32.1	32.1	119.4	119.5	9.4	9.4	5.5	6.2	6	7	75	75			<0.2	<0.2	1.1	1.1						
					Bottom	7.7	0.2	141	17.3	17.3	7.8	7.8	33.1	33.1	118.7	118.9	9.3	9.4	7.9	9.4	9	10	77	77			<0.2	<0.2	1.4	1.4						
						7.7	0.2	154	17.3	17.3	7.8	7.8	33.1	33.1	119.0	118.9	9.4	9.4	7.4	9.4	10	10	77	77			<0.2	<0.2	1.0	1.0						
C2	Misty	Moderate	15:41	11.8	Surface	1.0	0.2	107	18.9	18.9	8.0	8.0	27.8	27.8	122.1	122.1	9.6	9.5	6.3	8.1	7	10	72	74	825690	806937	<0.2	<0.2	1.2	1.3						
						1.0	0.3	110	18.9	18.9	8.0	8.0	27.8	27.8	122.1	122.1	9.6	9.5	6.3	8.1	8	10	73	74			<0.2	<0.2	1.0	1.1						
					Middle	5.9	0.1	194	18.0	18.0	8.0	8.0	31.3	31.2	118.8	118.8	9.3	9.3	9.7	9.3	9	10	74	74			<0.2	<0.2	1.1	1.1						
						5.9	0.1	199	18.0	18.0	8.0	8.0	31.2	31.2	118.8	118.8	9.3	9.3	9.8	9.3	10	10	74	74			<0.2	<0.2	1.6	1.6						
					Bottom	10.8	0.1	176	18.0	18.0	8.0	8.0	31.7	31.7	120.6	120.6	9.5	9.5	8.3	9.5	14	15	75	75			<0.2	<0.2	1.4	1.4						
						10.8	0.1	179	18.0	18.0	8.0	8.0	31.7	31.7	120.6	120.6	9.5	9.5	8.3	9.5	13	15	75	75			<0.2	<0.2	1.5	1.5						
C3	Misty	Moderate	17:24	11.8	Surface	1.0	0.3	69	18.1	18.1	8.1	8.1	30.6	30.6	119.8	119.8	9.4	9.4	4.1	5.4	7	7	73	75	822112	817782	<0.2	<0.2	2.9	2.2						
						1.0	0.3	72	18.1	18.1	8.1	8.1	30.6	30.6	119.8	119.8	9.4	9.4	4.1	5.4	6	7	73	75			<0.2	<0.2	3.1	2.2						
					Middle	5.9	0.2	86	17.9	17.9	8.0	8.0	31.4	31.4	118.7	118.7	9.3	9.3	4.7	5.4	7	7	75	75			<0.2	<0.2	1.9	1.9						
						5.9	0.2	91	17.9	17.9	8.0	8.0	31.4	31.4	118.7	118.7	9.3	9.3	4.7	5.4	6	7	75	75			<0.2	<0.2	1.7	1.7						
					Bottom	10.8	0.2	98	17.9	17.9	8.0	8.0	31.6	31.6	119.1	119.1	9.4	9.4	7.5	9.4	7	7	77	77			<0.2	<0.2	1.8	1.8						
						10.8	0.2	99	17.9	17.9	8.0	8.0	31.6	31.6	119.1	119.1	9.4	9.4	7.5	9.4	6	7	77	77			<0.2	<0.2	1.6	1.6						
IM1	Misty	Moderate	16:21	7.5	Surface	1.0	0.1	170	18.0	18.0	7.8	7.8	30.8	30.8	133.3	133.2	10.5	10.2	6.6	7.9	6	8	74	75	818374	806474	<0.2	<0.2	1.3	1.1						
						1.0	0.1	183	18.0	18.0	7.8	7.8	30.8	30.8	133.1	133.2	10.5	10.2	6.7	7.9	6	8	73	75			<0.2	<0.2	1.0	1.0						
					Middle	3.8	0.1	116	17.6	17.6	7.8	7.8	31.2	31.2	124.2	124.2	9.8	9.8	7.7	7.9	7	8	75	75			<0.2	<0.2	1.5	1.1						
						3.8	0.1	125	17.6	17.6	7.8	7.8	31.2	31.2	124.1	124.2	9.8	9.8	7.8	7.9	8	8	75	75			<0.2	<0.2	1.0	1.0						
					Bottom	6.5	0.1	114	17.4	17.4	7.8	7.8	32.3	32.3	122.6	122.7	9.7	9.7	9.3	9.7	10	10	77	77			<0.2	<0.2	1.0	1.0						
						6.5	0.1	122	17.4	17.4	7.8	7.8	32.3	32.3	122.7	122.7	9.7	9.7	9.3	9.7	9	10	77	77			<0.2	<0.2	1.0	1.0						
IM2	Misty	Moderate	16:15	8.5	Surface	1.0	0.1	256	18.0	18.0	7.8	7.8	31.1	31.1	131.6	131.6	10.4	10.1	6.5	7.3	8	9	73	75	818823	806215	<0.2	<0.2	1.1	1.2						
						1.0	0.1	266	18.0	18.0	7.8	7.8	31.1	31.1	131.6	131.6	10.3	10.1	6.5	7.3	8	9	73	75			<0.2	<0.2	1.2	1.2						
					Middle	4.3	0.1	253	17.9	17.9	7.8	7.8	31.2	31.2	125.5	125.4	9.9	9.9	6.8	7.3	10	9	75	75			<0.2	<0.2	1.3	1.2						
						4.3	0.1	262	17.9	17.9	7.8	7.8	31.2	31.2	125.3	125.4	9.9	9.9	6.8	7.3	10	9	75	75			<0.2	<0.2	1.3	1.3						
					Bottom	7.5	0.0	229	17.4	17.4	7.8	7.8	32.4	32.4	120.5	120.6	9.5	9.5	8.6	9.5	11	11	77	77			<0.2	<0.2	1.0	1.0						
						7.5	0.0	240	17.4	17.4	7.8	7.8	32.4	32.4	120.7	120.6	9.5	9.5	8.6	9.5	8	11	77	77			<0.2	<0.2	1.2	1.2						
IM3	Misty	Moderate	16:09	8.7	Surface	1.0	0.0	343	18.4	18.4	7.8	7.8	31.3	31.3	131.9	131.9	10.3	10.1	5.9	9.2	7	9	74	75	819396	806030	<0.2	<0.2	1.1	1.1						
						1.0	0.0	359	18.4	18.4	7.8	7.8	31.3	31.3	131.8	131.9	10.3	10.1	5.9	9.2	8	9	73	75			<0.2	<0.2	1.3	1.1						
					Middle	4.4	0.1	32	17.9	17.9	7.8	7.8	31.6	31.6	124.8	124.7	9.8	9.8	7.7	9.2	7	9	75	75			<0.2	<0.2	1.4	1.1						
						4.4	0.1	34	17.9	17.9	7.8	7.8	31.6	31.6	124.6	124.7	9.8	9.8	7.8	9.2	9	9	75	75			<0.2	<0.2	1.2	1.2						
					Bottom	7.7	0.1	105	17.4	17.4	7.7	7.7	32.3	32.3	119.0	119.1	9.4	9.4	13.8	9.4	12	10	77	77			<0.2	<0.2	1.0	1.0						
						7.7	0.1	105	17.4	17.4	7.7	7.7	32.3	32.3	119.1	119.1	9.4	9.4	14.0	9.4	10	10	77	77			<0.2	<0.2	0.8	0.8						
IM4	Misty	Moderate	16:01	7.9	Surface	1.0	0.1	146	17.7	17.7	7.8	7.8	31.5	31.5	123.6	123.6	9.8	9.7	8.8	9.2	10	12	73	75	819552	805018	<0.2	<0.2	1.2	1.2						
						1.0	0.1	150	17.7	17.7	7.8	7.8	31.5	31.5	123.6	123.6	9.8	9.7	8.8	9.2	9	12	73	75			<0.2	<0.2	1.1	1.1						
					Middle	4.0	0.1	181	17.6	17.6	7.8	7.8	31.7	31.7	121.5	121.5	9.6	9.6	9.2	9.2	11	11	75	75			<0.2	<0.2	1.1	1.1						
						4.0	0.1	198	17.6	17.6	7.8	7.8	31.7	31.7	121.4	121.5	9.6	9.6	9.2	9.2	11	11	75	75			<0.2	<0.2	1.2	1.2						
					Bottom	6.9	0.1	274	17.5	17.5	7.8	7.8	32.0	32.0	121.1	121.1	9.6	9.6	9.5	9.6	13	13	77	77			<0.2	<0.2	1.3	1.3						
						6.9	0.1	285	17.5	17.5	7.8	7.8	32.0	32.0	121.1	121.1	9.6	9.6	9.5	9.6	15	15	77	77			<0.2	<0.2	1.1	1.1						
IM5	Misty	Moderate	15:52	7.2	Surface	1.0	0.1	152	17.9	17.9	7.8	7.8	31.1	31.1	122.2	121.9	9.6	9.3	9.0	10.5	7	11	73	75	820576	804928	<0.2	<0.2	1.2	1.1						
						1.0	0.1	157	17.9	17.9	7.8	7.8	31.1	31.1	121.5	121.9	9.6	9.3	9.0	10.5	9	11	73	75			<0.2	<0.2	1.1	1.1						
					Middle	3.6	0.1	60	17.4	17.4	7.7	7.7	31.8	31.8	114.2	114.2	9.0	9.0	10.9	9.3	8	11	75	75			<0.2	<0.2	1.2	1.2						
						3.6	0.1	65	17.4	17.4	7.7	7.7	31.8	31.8	114.2	114.2	9.0	9.0	11.1	9.3	10	11	75	75			<0.2	<0.2	1.3	1.1						
					Bottom	6.2	0.1	19	17.4	17.4	7.7	7.7	31.8	31.8	115.1	115.1	9.1	9.1	11.4	9.2	16	16	77	77			<0.2	<0.2	1.1	1.1						
						6.2	0.1	19	17.4	17.4	7.7	7.7	31.9	31.8	115.6	115.4	9.2	9.2	11.4	9.2	16	16	77	77			<0.2	<0.2	0							

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

Water Quality Monitoring

Water Quality Monitoring Results on 23 January 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity (NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)			
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA
									Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA
C1	Sunny	Moderate	11:05	8.0	Surface	1.0	0.5	28	17.6	17.6	7.9	7.9	30.7	30.7	118.0	118.0	9.4	9.1	8.8	20.8	9	10	74	76	815595	804245	<0.2	<0.2	1.4	1.2		
						1.0	0.5	30	17.6	17.6	7.9	7.9	30.7	30.7	117.9	118.0	9.4	9.1	8.9	20.8	8	10	73	76			<0.2	<0.2	0.9	1.2		
						4.0	0.5	27	17.4	17.4	7.8	7.8	31.7	31.7	110.1	110.1	8.7	8.7	18.8	20.8	10	10	75	76			<0.2	<0.2	1.0	1.2		
					Middle	4.0	0.5	28	17.4	17.4	7.8	7.8	31.7	31.7	110.0	110.1	8.7	8.7	18.9	20.8	8	10	76	76			<0.2	<0.2	1.0	1.2		
						7.0	0.5	19	17.3	17.3	7.8	7.8	32.0	32.0	109.3	109.3	8.7	8.7	34.6	20.8	12	10	77	76			<0.2	<0.2	1.3	1.2		
						7.0	0.5	19	17.3	17.3	7.8	7.8	32.0	32.0	109.3	109.3	8.7	8.7	34.8	20.8	15	10	78	76			<0.2	<0.2	1.4	1.2		
C2	Cloudy	Moderate	12:00	11.9	Surface	1.0	0.5	354	18.6	18.6	7.9	7.9	27.3	27.3	110.5	110.5	8.8	8.8	6.3	11.2	6	7	73	74	825671	806955	<0.2	<0.2	2.9	2.8		
						1.0	0.5	326	18.6	18.6	7.9	7.9	27.3	27.3	110.5	110.5	8.8	8.8	6.3	11.2	4	7	73	74			<0.2	<0.2	3.3	2.8		
						6.0	0.3	-	18.2	18.2	7.9	7.9	28.0	28.0	109.9	109.9	8.8	8.8	10.1	11.2	7	7	73	74			<0.2	<0.2	3.0	2.8		
					Middle	6.0	0.3	-	18.2	18.2	7.9	7.9	28.0	28.0	109.9	109.9	8.8	8.8	10.1	11.2	6	7	73	74			<0.2	<0.2	3.1	2.8		
						10.9	0.2	328	18.1	18.1	7.9	7.9	29.1	29.1	110.3	110.3	8.8	8.8	17.1	11.2	10	7	75	74			<0.2	<0.2	2.3	2.8		
						10.9	0.2	344	18.1	18.1	7.9	7.9	29.1	29.1	110.3	110.3	8.8	8.8	17.1	11.2	8	7	75	74			<0.2	<0.2	2.1	2.8		
C3	Sunny	Moderate	10:13	11.4	Surface	1.0	0.6	274	18.1	18.1	8.0	8.0	29.8	29.8	116.1	116.1	9.2	9.0	4.8	9.5	6	7	73	75	822095	817782	<0.2	<0.2	2.1	2.0		
						1.0	0.7	290	18.1	18.1	8.0	8.0	29.8	29.8	116.1	116.1	9.2	9.0	4.8	9.5	6	7	73	75			<0.2	<0.2	2.1	2.0		
						5.7	0.5	266	18.0	18.0	8.0	8.0	30.8	30.8	111.1	111.1	8.8	8.8	7.1	9.5	6	7	75	75			<0.2	<0.2	1.8	2.0		
					Middle	5.7	0.6	266	18.0	18.0	8.0	8.0	30.8	30.8	111.1	111.1	8.8	8.8	7.1	9.5	5	7	76	75			<0.2	<0.2	2.2	2.0		
						10.4	0.4	264	17.9	17.9	8.0	8.0	31.8	31.8	110.5	110.5	8.7	8.7	16.7	9.5	8	7	77	75			<0.2	<0.2	2.0	2.0		
						10.4	0.4	278	17.9	17.9	8.0	8.0	31.8	31.8	110.5	110.5	8.7	8.7	16.7	9.5	9	7	78	75			<0.2	<0.2	2.0	2.0		
IM1	Sunny	Moderate	11:22	7.3	Surface	1.0	0.5	23	18.1	18.1	8.0	8.0	29.5	29.5	124.4	124.4	9.9	9.5	7.0	11.1	6	9	74	76	818380	806481	<0.2	<0.2	2.2	1.8		
						1.0	0.5	23	18.1	18.1	8.0	8.0	29.5	29.5	124.3	124.4	9.9	9.5	7.0	11.1	6	9	74	76			<0.2	<0.2	2.2	1.8		
						3.7	0.5	9	17.6	17.6	7.9	7.9	30.9	30.9	115.3	115.2	9.2	9.5	9.6	11.1	7	9	76	76			<0.2	<0.2	1.9	1.8		
					Middle	3.7	0.5	9	17.6	17.6	7.9	7.9	30.9	30.9	115.1	115.2	9.1	9.5	9.9	11.1	7	9	76	76			<0.2	<0.2	1.8	1.8		
						6.3	0.4	354	17.5	17.5	7.9	7.9	31.3	31.3	112.8	112.8	9.0	9.0	16.9	11.1	15	9	78	76			<0.2	<0.2	1.2	1.8		
						6.3	0.4	326	17.5	17.5	7.9	7.9	31.3	31.3	112.8	112.8	9.0	9.0	16.2	11.1	14	9	78	76			<0.2	<0.2	1.4	1.8		
IM2	Sunny	Moderate	11:28	8.4	Surface	1.0	0.5	34	18.1	18.1	8.0	8.0	29.5	29.5	121.0	121.0	9.6	9.4	11.1	18.3	6	11	74	76	818827	806211	<0.2	<0.2	0.5	1.5		
						1.0	0.5	36	18.1	18.1	8.0	8.0	29.5	29.5	121.0	121.0	9.6	9.4	11.3	18.3	6	11	74	76			<0.2	<0.2	2.1	1.5		
						4.2	0.5	32	17.6	17.6	7.9	7.9	30.9	30.9	114.1	114.1	9.1	9.4	16.9	18.3	8	11	76	76			<0.2	<0.2	1.7	1.5		
					Middle	4.2	0.5	32	17.6	17.6	7.9	7.9	30.9	30.9	114.1	114.1	9.1	9.4	17.1	18.3	9	11	76	76			<0.2	<0.2	1.9	1.5		
						7.4	0.4	29	17.6	17.6	7.9	7.9	30.9	30.9	113.6	113.7	9.0	9.0	26.7	18.3	16	11	79	76			<0.2	<0.2	1.4	1.5		
						7.4	0.4	30	17.6	17.6	7.9	7.9	30.9	30.9	113.7	113.7	9.0	9.0	26.9	18.3	18	11	79	76			<0.2	<0.2	1.5	1.5		
IM3	Sunny	Moderate	11:34	8.2	Surface	1.0	0.4	28	18.1	18.1	8.0	8.0	29.1	29.1	119.7	119.7	9.5	9.3	7.9	17.8	6	10	74	76	819435	806041	<0.2	<0.2	2.3	2.2		
						1.0	0.5	30	18.1	18.1	8.0	8.0	29.1	29.1	119.6	119.7	9.5	9.3	7.9	17.8	5	10	74	76			<0.2	<0.2	2.3	2.2		
						4.1	0.4	37	17.7	17.7	7.9	7.9	29.9	29.9	113.8	113.8	9.1	9.3	13.0	17.8	7	10	76	76			<0.2	<0.2	2.0	2.2		
					Middle	4.1	0.4	40	17.7	17.7	7.9	7.9	29.9	29.9	113.7	113.8	9.1	9.3	12.5	17.8	6	10	76	76			<0.2	<0.2	2.5	2.2		
						7.2	0.4	27	17.5	17.5	7.9	7.9	30.9	30.9	112.4	112.4	8.9	8.9	32.7	17.8	18	10	79	76			<0.2	<0.2	1.8	2.2		
						7.2	0.4	27	17.5	17.5	7.9	7.9	30.9	30.9	112.4	112.4	8.9	8.9	32.7	17.8	17	10	78	76			<0.2	<0.2	1.8	2.2		
IM4	Sunny	Moderate	11:43	7.6	Surface	1.0	0.5	33	18.0	18.0	7.9	7.9	28.9	28.9	121.6	121.6	9.7	9.4	6.9	18.0	5	6	74	76	819567	805037	<0.2	<0.2	2.5	2.3		
						1.0	0.5	35	18.0	18.0	7.9	7.9	28.9	28.9	121.6	121.6	9.7	9.4	7.0	18.0	5	6	74	76			<0.2	<0.2	2.7	2.3		
						3.8	0.6	32	17.7	17.7	7.9	7.9	30.1	30.1	114.3	114.3	9.1	9.4	13.8	18.0	5	6	76	76			<0.2	<0.2	2.2	2.3		
					Middle	3.8	0.6	32	17.7	17.7	7.9	7.9	30.1	30.1	114.3	114.3	9.1	9.4	13.8	18.0	6	6	76	76			<0.2	<0.2	2.2	2.3		
						6.6	0.4	28	17.6	17.6	7.9	7.9	30.2	30.2	113.2	113.2	9.0	9.0	32.7	18.0	7	6	79	76			<0.2	<0.2	2.1	2.3		
						6.6	0.4	30	17.6	17.6	7.9	7.9	30.2	30.2	113.5	113.4	9.0	9.0	33.6	18.0	6	6	78	76			<0.2	<0.2	2.0	2.3		
IM5	Sunny	Moderate	11:50	6.8	Surface	1.0	0.6	18	17.9	17.9	7.9	7.9	29.1	29.1	117.3	117.3	9.3	9.2	8.8	12.4	7	9	74	76	820584	804922	<0.2	<0.2	2.4	2.4		
						1.0	0.6	19	17.9	17.9	7.9	7.9	29.1	29.1	117.2	117.3	9.3	9.2	8.9	12.4	5	9	74	76			<0.2	<0.2	2.5	2.4		
						3.4	0.5	18	17.8	17.8	7.9	7.9	29.2	29.2	114.6	114.6	9.1	9.2	14.0	12.4	10	9	76	76			<0.2	<0.2	2.3	2.4		
					Middle	3.4	0.5	19	17.8	17.8	7.9	7.9	29.2	29.2	114.6	114.6	9.1	9.2	14.1	12.4	11	9	76	76			<0.2	<0.2	2.4	2.4		
						5.8	0.4	19	17.8	17.8	7.9	7.9	29.2	29.2	114.1	114.1	9.1	9.1	14.4	12.4	11	9	79	76			<					

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

Water Quality Monitoring

Water Quality Monitoring Results on 23 January 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)	Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)							
									Value	Average	Value	Average	Value	Average	Value	DA	Value	DA		Value	DA	Value	DA			Value	DA	Value	DA	Value	DA	Value	DA	Value	DA
IM9	Cloudy	Moderate	11:26	6.8	Surface	1.0	0.2	330	18.4	18.4	8.1	8.1	28.9	28.9	118.8	118.8	9.4	9.4	7.3	7.3	7	7	75	75	822086	808828	<0.2	<0.2	2.5	2.5					
						1.0	0.2	350	18.4	18.4	8.1	8.1	28.9	28.9	118.8	118.8	9.4	9.4	7.3	7.3	6	6	75	75			<0.2	<0.2	2.4	2.4					
					Middle	3.4	0.2	323	18.3	18.3	8.1	8.1	28.9	28.9	118.4	118.4	9.4	9.4	7.9	7.9	10	10	9	9	75	75			<0.2	<0.2	2.7	2.7			
						3.4	0.2	337	18.3	18.3	8.1	8.1	28.9	28.9	118.4	118.4	9.4	9.4	7.9	7.9	9	9	75	75			<0.2	<0.2	2.6	2.6					
					Bottom	5.8	0.2	323	18.3	18.3	8.1	8.1	28.9	28.9	117.7	117.7	9.3	9.3	7.9	7.9	12	12	76	76	12	12	76	76			<0.2	<0.2	2.8	2.8	
						5.8	0.2	337	18.3	18.3	8.1	8.1	28.9	28.9	117.7	117.7	9.3	9.3	7.9	7.9	12	12	76	76			<0.2	<0.2	2.6	2.6					
IM10	Cloudy	Moderate	11:18	6.4	Surface	1.0	0.5	317	18.2	18.2	8.1	8.1	29.5	29.5	120.5	120.5	9.5	9.5	8.3	8.3	8	8	75	75	822249	809818	<0.2	<0.2	2.2	2.2					
						1.0	0.6	340	18.2	18.2	8.1	8.1	29.5	29.5	120.5	120.5	9.5	9.5	8.3	8.3	9	9	75	75			<0.2	<0.2	2.0	2.0					
					Middle	3.2	0.6	313	18.2	18.2	8.1	8.1	29.6	29.6	120.2	120.2	9.5	9.5	10.7	10.7	12	12	75	75	12	12			<0.2	<0.2	2.2	2.2			
						3.2	0.6	336	18.2	18.2	8.1	8.1	29.6	29.6	120.2	120.2	9.5	9.5	10.7	10.7	10	10	75	75			<0.2	<0.2	2.2	2.2					
					Bottom	5.4	0.5	315	18.2	18.2	8.1	8.1	29.5	29.5	118.5	118.5	9.4	9.4	11.4	11.4	16	16	76	76	16	16			<0.2	<0.2	2.1	2.1			
						5.4	0.5	319	18.2	18.2	8.1	8.1	29.5	29.5	118.5	118.5	9.4	9.4	11.4	11.4	14	14	76	76			<0.2	<0.2	2.4	2.4					
IM11	Cloudy	Moderate	11:07	7.0	Surface	1.0	0.5	290	18.2	18.2	8.1	8.1	29.9	29.9	124.2	124.2	9.8	9.8	11.7	11.7	11	11	73	73	821480	810546	<0.2	<0.2	2.2	2.2					
						1.0	0.5	316	18.2	18.2	8.1	8.1	29.9	29.9	124.2	124.2	9.8	9.8	11.7	11.7	11	11	73	73			<0.2	<0.2	2.0	2.0					
					Middle	3.5	0.4	287	18.2	18.2	8.1	8.1	29.9	29.9	122.7	122.7	9.7	9.7	13.0	13.0	12	12	75	75	12	12			<0.2	<0.2	1.9	1.9			
						3.5	0.5	300	18.2	18.2	8.1	8.1	29.9	29.9	122.7	122.7	9.7	9.7	13.0	13.0	11	11	76	76			<0.2	<0.2	2.1	2.1					
					Bottom	6.0	0.4	298	18.2	18.2	8.1	8.1	30.0	30.0	120.3	120.3	9.5	9.5	22.3	22.3	22	22	74	74	22	22			<0.2	<0.2	2.1	2.1			
						6.0	0.4	304	18.2	18.2	8.1	8.1	30.0	30.0	120.3	120.3	9.5	9.5	22.3	22.3	20	20	74	74			<0.2	<0.2	2.0	2.0					
IM12	Cloudy	Moderate	11:00	7.7	Surface	1.0	0.5	281	18.2	18.2	8.1	8.1	30.1	30.1	122.3	122.3	9.6	9.6	12.7	12.7	14	14	73	73	821183	811506	<0.2	<0.2	1.9	1.9					
						1.0	0.5	288	18.2	18.2	8.1	8.1	30.1	30.1	122.3	122.3	9.6	9.6	12.7	12.7	12	12	73	73			<0.2	<0.2	2.0	2.0					
					Middle	3.9	0.5	283	18.2	18.2	8.1	8.1	30.1	30.1	121.5	121.5	9.6	9.6	16.6	16.6	16	16	74	74	16	16			<0.2	<0.2	2.0	2.0			
						3.9	0.6	291	18.2	18.2	8.1	8.1	30.1	30.1	121.5	121.5	9.6	9.6	16.6	16.6	16	16	74	74			<0.2	<0.2	2.2	2.2					
					Bottom	6.7	0.5	282	18.2	18.2	8.1	8.1	30.0	30.0	119.8	119.8	9.4	9.4	18.1	18.1	23	23	75	75	23	23			<0.2	<0.2	2.1	2.1			
						6.7	0.5	304	18.2	18.2	8.1	8.1	30.0	30.0	119.8	119.8	9.4	9.4	18.1	18.1	23	23	75	75			<0.2	<0.2	2.1	2.1					
SR2	Sunny	Moderate	10:35	4.3	Surface	1.0	0.6	338	18.2	18.2	8.0	8.0	29.8	29.8	118.3	118.3	9.3	9.3	8.8	8.8	8	8	73	73	821447	814145	<0.2	<0.2	2.2	2.2					
						1.0	0.6	348	18.2	18.2	8.0	8.0	29.8	29.8	118.3	118.3	9.3	9.3	8.8	8.8	9	9	74	74			<0.2	<0.2	2.0	2.0					
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
					Bottom	3.3	0.4	338	18.2	18.2	8.0	8.0	30.4	30.4	115.0	115.0	9.1	9.1	10.9	10.9	18	18	75	75	18	18			<0.2	<0.2	2.1	2.1			
						3.3	0.5	343	18.2	18.2	8.0	8.0	30.4	30.4	115.0	115.0	9.1	9.1	10.9	10.9	17	17	75	75			<0.2	<0.2	2.4	2.4					
SR3	Cloudy	Moderate	11:41	8.7	Surface	1.0	0.3	17	18.3	18.3	8.0	8.0	27.9	27.9	116.8	116.8	9.3	9.3	6.0	6.0	5	5	-	-	822133	807545	-	-	-	-					
						1.0	0.4	17	18.3	18.3	8.0	8.0	27.9	27.9	116.8	116.8	9.3	9.3	6.0	6.0	6	6	-	-			-	-	-	-					
					Middle	4.4	0.3	17	18.3	18.3	8.1	8.1	28.3	28.3	117.0	117.0	9.3	9.3	6.7	6.7	8	8	-	-	-	-			-	-	-	-			
						4.4	0.4	18	18.3	18.3	8.1	8.1	28.3	28.3	117.0	117.0	9.3	9.3	6.7	6.7	6	6	-	-	-	-			-	-	-	-			
					Bottom	7.7	0.3	21	18.3	18.3	8.1	8.1	28.5	28.5	117.2	117.2	9.3	9.3	8.3	8.3	11	11	-	-	-	-			-	-	-	-			
						7.7	0.4	21	18.3	18.3	8.1	8.1	28.5	28.5	117.2	117.2	9.3	9.3	8.3	8.3	9	9	-	-	-	-			-	-	-	-			
SR4A	Sunny	Calm	10:44	8.9	Surface	1.0	0.3	255	18.0	18.0	8.0	8.0	30.5	30.5	125.1	125.1	9.9	9.9	10.1	10.1	7	7	-	-	821798	807839	-	-	-	-					
						1.0	0.3	276	18.0	18.0	8.0	8.0	30.5	30.5	125.1	125.1	9.9	9.9	10.2	10.2	6	6	-	-			-	-	-	-					
					Middle	4.5	0.3	244	18.0	18.0	8.0	8.0	30.5	30.5	124.4	124.4	9.8	9.8	11.3	11.3	8	8	-	-	-	-			-	-	-	-			
						4.5	0.3	264	18.0	18.0	8.0	8.0	30.5	30.5	124.4	124.4	9.8	9.8	11.4	11.4	9	9	-	-	-	-			-	-	-	-			
					Bottom	7.9	0.2	251	18.0	18.0	7.9	7.9	30.5	30.5	123.1	123.1	9.7	9.7	10.8	10.8	12	12	-	-	-	-			-	-	-	-			
						7.9	0.2	259	18.0	18.0	7.9	7.9	30.5	30.5	123.1	123.1	9.7	9.7	10.6	10.6	11	11	-	-	-	-			-	-	-	-			
SR5A	Sunny	Calm	10:28	4.7	Surface	1.0	0.2	278	18.0	18.0	8.0	8.0	30.4	30.4	124.6	124.6	9.8	9.8	9.0	9.0	10	10	-	-	816567	810693	-	-	-	-					
						1.0	0.3	278	18.0	18.0	8.0	8.0	30.4	30.4	124.6	124.6	9.8	9.8	9.0	9.0	10	10	-	-			-	-	-	-					
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
					Bottom	3.7	0.2	277	17.9	17.9	8.0	8.0	30.4	30.4	120.5	120.5	9.5	9.5	12.1	12.1	10	10	-	-	-	-			-	-	-	-			
						3.7	0.2	288	17.9	17.9	8.0	8.0	30.4	30.4	120.4	120.4	9.5	9.5																	

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

Water Quality Monitoring

Water Quality Monitoring Results on 25 January 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
					Value	Average			Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Rough	06:11	8.7	Surface	1.0	0.6	224	17.4	8.1	8.1	32.6	32.6	115.2	115.2	9.1	9.1	5.1	5.1	6	7	72	72	815611	804245	<0.2	2.3	2.4		
						1.0	0.6	230	17.4	8.1	8.1	32.6	32.6	115.1	115.2	9.1	9.1	5.1	5.1	7	7	72	72	<0.2	2.3					
					Middle	4.4	0.4	236	17.4	17.4	8.1	8.1	32.8	32.8	114.1	114.1	9.0	9.0	5.3	5.3	10	10	73	73	<0.2	2.3				
						4.4	0.4	258	17.4	17.4	8.1	8.1	32.8	32.8	114.0	114.1	9.0	9.0	5.5	5.5	12	12	73	73	<0.2	2.4				
					Bottom	7.7	0.3	245	17.4	17.4	8.1	8.1	33.3	33.3	112.2	112.2	8.8	8.8	6.2	6.2	15	15	75	75	<0.2	2.5				
						7.7	0.3	248	17.4	17.4	8.1	8.1	33.2	33.2	111.9	112.1	8.8	8.8	6.4	6.4	17	17	75	75	<0.2	2.8				
C2	Cloudy	Rough	06:45	11.5	Surface	1.0	0.7	178	18.4	7.9	7.9	27.7	27.7	113.5	113.5	9.0	9.0	5.2	5.2	9	9	72	72	825694	806957	<0.2	3.1	2.2		
						1.0	0.7	185	18.4	18.4	7.9	7.9	27.7	27.7	113.5	113.5	9.0	9.0	5.2	5.2	8	8	72	72	<0.2	2.7				
					Middle	5.8	0.4	176	18.3	18.3	8.0	8.0	31.0	31.0	113.3	113.3	8.9	8.9	5.4	5.4	9	9	73	73	<0.2	1.6				
						5.8	0.4	184	18.3	18.3	8.0	8.0	31.0	31.0	113.3	113.3	8.9	8.9	5.4	5.4	10	10	74	74	<0.2	1.8				
					Bottom	10.5	0.2	164	18.2	18.2	7.9	7.9	31.5	31.5	109.6	109.6	8.6	8.6	10.6	10.6	10	10	75	75	<0.2	1.8				
						10.5	0.3	164	18.2	18.2	7.9	7.9	31.5	31.5	109.6	109.6	8.6	8.6	10.6	10.6	10	10	75	75	<0.2	1.9				
C3	Cloudy	Moderate	04:50	11.9	Surface	1.0	0.1	58	17.9	7.9	7.9	33.3	33.3	111.6	111.6	8.7	8.7	3.7	3.7	8	7	73	75	822095	817791	<0.2	1.1	1.1		
						1.0	0.2	61	17.9	17.9	7.9	7.9	33.3	33.3	111.6	111.6	8.7	8.7	3.7	3.7	7	7	73	75	<0.2	1.0				
					Middle	6.0	0.2	61	17.9	17.9	7.9	7.9	33.4	33.4	110.4	110.4	8.6	8.6	3.9	3.9	9	9	75	75	<0.2	1.1				
						6.0	0.2	63	17.9	17.9	7.9	7.9	33.4	33.4	110.4	110.4	8.6	8.6	3.9	3.9	9	9	75	75	<0.2	1.2				
					Bottom	10.9	0.1	19	17.9	17.9	7.9	7.9	33.6	33.6	108.7	108.7	8.4	8.4	4.3	4.3	11	11	77	77	<0.2	1.2				
						10.9	0.1	20	17.9	17.9	7.9	7.9	33.6	33.6	108.7	108.7	8.4	8.4	4.3	4.3	9	9	76	76	<0.2	1.1				
IM1	Cloudy	Rough	06:34	7.2	Surface	1.0	0.3	190	17.5	8.1	8.1	32.2	32.2	116.0	116.0	9.1	9.1	7.1	7.1	10	9	72	72	818336	806438	<0.2	2.6	2.7		
						1.0	0.3	202	17.5	17.5	8.1	8.1	32.2	32.2	116.0	116.0	9.1	9.1	7.2	7.2	9	9	72	72	<0.2	2.8				
					Middle	3.6	0.3	177	17.5	17.5	8.1	8.1	32.4	32.4	114.2	114.1	9.0	9.0	7.3	7.3	10	8	73	73	<0.2	2.7				
						3.6	0.3	189	17.5	17.5	8.1	8.1	32.4	32.4	113.9	114.1	9.0	9.0	7.4	7.4	8	7	73	73	<0.2	2.9				
					Bottom	6.2	0.1	173	17.4	17.4	8.1	8.1	33.1	33.1	111.0	110.8	8.7	8.7	9.2	9.2	16	14	75	75	<0.2	2.5				
						6.2	0.1	180	17.5	17.4	8.1	8.1	33.1	33.1	110.6	110.8	8.7	8.7	8.9	8.9	14	14	75	75	<0.2	2.6				
IM2	Cloudy	Rough	06:43	8.2	Surface	1.0	0.5	220	17.6	8.2	8.2	31.3	31.3	115.4	115.5	9.1	9.1	10.9	10.9	15	15	73	73	818848	806207	<0.2	2.3	2.5		
						1.0	0.6	238	17.6	17.6	8.2	8.2	31.3	31.3	115.5	115.5	9.1	9.1	10.6	10.6	15	15	73	73	<0.2	2.4				
					Middle	4.1	0.3	194	17.6	17.6	8.2	8.2	31.9	31.9	114.9	114.8	9.1	9.1	9.2	9.2	15	16	74	74	<0.2	2.6				
						4.1	0.3	211	17.6	17.6	8.2	8.2	31.9	31.9	114.7	114.8	9.1	9.1	9.2	9.2	16	16	74	74	<0.2	2.4				
					Bottom	7.2	0.2	185	17.5	17.5	8.1	8.1	32.7	32.7	112.4	112.4	8.8	8.8	9.1	9.1	15	15	75	75	<0.2	2.7				
						7.2	0.2	203	17.5	17.5	8.1	8.1	32.7	32.7	112.3	112.4	8.8	8.8	9.1	9.1	16	16	75	75	<0.2	2.4				
IM3	Cloudy	Rough	06:52	8.1	Surface	1.0	0.6	225	17.6	8.2	8.2	31.0	31.0	114.1	114.1	9.0	9.0	9.6	9.6	9	9	73	73	819382	805995	<0.2	2.5	2.6		
						1.0	0.7	230	17.6	17.6	8.2	8.2	31.0	31.0	114.1	114.1	9.0	9.0	9.5	9.5	9	9	73	73	<0.2	2.4				
					Middle	4.1	0.4	213	17.6	17.6	8.2	8.2	31.2	31.2	113.7	113.7	9.0	9.0	11.7	11.7	10	10	74	74	<0.2	2.6				
						4.1	0.4	219	17.6	17.6	8.2	8.2	31.2	31.2	113.6	113.7	9.0	9.0	11.7	11.7	10	10	74	74	<0.2	2.8				
					Bottom	7.1	0.4	199	17.5	17.5	8.1	8.1	31.7	31.7	112.3	112.2	8.9	8.9	12.5	12.5	11	11	75	75	<0.2	2.6				
						7.1	0.4	204	17.5	17.5	8.1	8.1	31.7	31.7	112.1	112.2	8.9	8.9	12.3	12.3	10	10	75	75	<0.2	2.7				
IM4	Cloudy	Rough	07:00	7.6	Surface	1.0	0.4	204	17.7	8.1	8.1	30.5	30.5	112.1	112.1	8.9	8.9	7.2	7.2	7	7	73	73	819581	805066	<0.2	2.8	2.6		
						1.0	0.4	212	17.7	17.7	8.1	8.1	30.5	30.5	112.1	112.1	8.9	8.9	7.3	7.3	7	7	73	73	<0.2	2.5				
					Middle	3.8	0.4	189	17.7	17.7	8.1	8.1	31.0	31.0	111.4	111.3	8.8	8.8	7.6	7.6	8	8	75	75	<0.2	2.4				
						3.8	0.5	203	17.7	17.7	8.1	8.1	30.9	30.9	111.1	111.3	8.8	8.8	7.6	7.6	8	8	75	75	<0.2	2.5				
					Bottom	6.6	0.2	193	17.6	17.6	8.1	8.1	32.0	32.0	106.7	106.6	8.4	8.4	7.8	7.8	12	12	76	76	<0.2	2.8				
						6.6	0.2	201	17.6	17.6	8.1	8.1	32.0	32.0	106.5	106.6	8.4	8.4	7.7	7.7	11	11	76	76	<0.2	2.6				
IM5	Cloudy	Rough	07:09	6.8	Surface	1.0	0.6	207	17.9	8.1	8.1	29.8	29.8	113.5	113.6	9.0	9.0	5.4	5.4	8	9	73	73	820537	804899	<0.2	2.8	2.5		
						1.0	0.6	224	17.8	17.8	8.1	8.1	29.8	29.8	113.6	113.6	9.0	9.0	5.5	5.5	9	9	73	73	<0.2	2.6				
					Middle	3.4	0.5	203	17.9	17.9	8.1	8.1	30.0	30.0	114.1	114.1	9.1	9.1	6.4	6.4	7	7	75	75	<0.2	2.3				
						3.4	0.6	204	17.9	17.9	8.1	8.1	30.0	30.0	114.0	114.1	9.0	9.0	6.6	6.6	7	7	75	75	<0.2	2.2				
					Bottom	5.8	0.3	215	17.7	17.7	8.1	8.1	31.3	31.3	112.7	112.7	8.9	8.9	8.9	8.9	9	9	76	76	<0.2	2.3				
						5.8	0.4	215	17.7	17.7	8.1	8.1	31.2	31.2	112.2	112.5	8.9	8.9	8.9	8.9	8	8	76	76	<0.2	2.3				
IM6	Cloudy	Rough	07:19	6.6	Surface	1.0	0.6	217	18.0	8.1	8.1	29.3	29.3	113.4	113.4	9.0	9.0	4.9	4.9	7	6	73	73	821032	805848	<0.2	2.4	2.4		
						1.0	0.6	237	18.0	18.0	8.1	8.1	29.3	29.3	113.4	113.4	9.0	9.0	4.9	4.9	6	7	73	73	<0.2	2.4				
					Middle	3.3	0.4	219	17.9	17.9	8.1	8.1	30.0	30.0	112.7	112.7	8.9	8.9	5.8	5.8	7	7	75	75	<0.2	2.4				
						3.3	0.5	224	17.9	17.9	8.1	8.1	30.0	30.0	112.6	112.7	8.9	8.9	5.9	5.9	7	7	75	75	<0.2	2.4				
					Bottom	5.6	0.5	215	17.8	17.8	8.1	8.1	30.6	30.6	110.6	110.2	8.8	8.8	7.1	7.1	7	7	76	76	<0.2	2.3				
						5.6	0.5	235	17.8	17.8	8.1																			

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

Water Quality Monitoring

Water Quality Monitoring Results on 25 January 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)				
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA	
IM9	Cloudy	Rough	06:10	7.3	Surface	1.0	0.2	110	18.2	18.2	8.0	8.0	30.8	30.8	115.3	115.3	9.1	9.1	5.7	7.0	8	8	73	74	822101	808788	<0.2	1.6	<0.2	1.6			
						1.0	0.2	115	18.2	8.0	8.0	30.8	30.8	115.3	115.3	9.1	9.1	5.7	7.0	8	8	73	74	822101	808788	<0.2	1.6	<0.2	1.6				
					Middle	3.7	0.1	149	18.2	18.2	8.0	8.0	30.8	30.8	114.6	114.6	9.0	9.0	6.3	6.3	6	6	74	74	822101	808788	<0.2	1.6	<0.2	1.6			
						3.7	0.2	161	18.2	18.2	8.0	8.0	30.8	30.8	114.6	114.6	9.0	9.0	6.3	6.3	6	6	74	74	822101	808788	<0.2	1.6	<0.2	1.6			
					Bottom	6.3	0.2	82	17.9	17.9	8.0	8.0	32.3	32.3	112.6	112.6	8.8	8.8	9.1	9.1	8	8	75	75	822101	808788	<0.2	1.6	<0.2	1.6			
						6.3	0.3	85	17.9	17.9	8.0	8.0	32.3	32.3	112.6	112.6	8.8	8.8	9.1	9.1	8	8	75	75	822101	808788	<0.2	1.6	<0.2	1.6			
IM10	Cloudy	Rough	06:03	7.6	Surface	1.0	0.3	129	18.1	18.1	8.0	8.0	30.8	30.8	115.8	115.8	9.1	9.1	6.3	10.1	8	7	73	75	822215	809849	<0.2	1.6	<0.2	1.6			
						1.0	0.4	135	18.1	18.1	8.0	8.0	30.8	30.8	115.8	115.8	9.1	9.1	6.3	10.1	8	7	73	75	822215	809849	<0.2	1.6	<0.2	1.6			
					Middle	3.8	0.4	113	18.2	18.2	8.0	8.0	31.1	31.1	114.5	114.5	9.0	9.0	11.1	11.1	7	7	75	75	822215	809849	<0.2	1.6	<0.2	1.6			
						3.8	0.4	115	18.2	18.2	8.0	8.0	31.1	31.1	114.5	114.5	9.0	9.0	11.1	11.1	7	7	75	75	822215	809849	<0.2	1.6	<0.2	1.6			
					Bottom	6.6	0.4	98	18.1	18.1	8.0	8.0	31.8	31.8	111.9	111.9	8.8	8.8	12.8	12.8	7	7	76	76	822215	809849	<0.2	1.6	<0.2	1.6			
						6.6	0.4	100	18.1	18.1	8.0	8.0	31.8	31.8	111.9	111.9	8.8	8.8	12.8	12.8	7	7	76	76	822215	809849	<0.2	1.6	<0.2	1.6			
IM11	Cloudy	Rough	05:50	8.3	Surface	1.0	0.2	116	18.2	18.2	8.0	8.0	31.0	31.0	116.6	116.6	9.1	9.1	6.4	6.3	6	6	73	75	821475	810541	<0.2	1.6	<0.2	1.6			
						1.0	0.2	127	18.2	18.2	8.0	8.0	31.0	31.0	116.6	116.6	9.1	9.1	6.4	6.3	7	7	74	75	821475	810541	<0.2	1.6	<0.2	1.6			
					Middle	4.2	0.3	114	18.2	18.2	8.0	8.0	31.1	31.1	113.4	113.4	8.9	8.9	6.1	6.1	6	6	75	75	821475	810541	<0.2	1.6	<0.2	1.6			
						4.2	0.3	116	18.2	18.2	8.0	8.0	31.1	31.1	113.4	113.4	8.9	8.9	6.1	6.1	6	6	75	75	821475	810541	<0.2	1.6	<0.2	1.6			
					Bottom	7.3	0.2	115	18.1	18.1	8.0	8.0	31.2	31.2	112.1	112.1	8.8	8.8	6.3	6.3	6	6	76	76	821475	810541	<0.2	1.6	<0.2	1.6			
						7.3	0.2	123	18.1	18.1	8.0	8.0	31.2	31.2	112.1	112.1	8.8	8.8	6.3	6.3	6	6	76	76	821475	810541	<0.2	1.6	<0.2	1.6			
IM12	Cloudy	Rough	05:41	8.8	Surface	1.0	0.2	106	18.1	18.1	8.0	8.0	31.3	31.3	114.8	114.8	9.0	9.0	5.3	5.8	7	6	73	74	821187	811531	<0.2	1.5	<0.2	1.4			
						1.0	0.2	108	18.1	18.1	8.0	8.0	31.3	31.3	114.8	114.8	9.0	9.0	5.3	5.8	6	6	73	74	821187	811531	<0.2	1.5	<0.2	1.4			
					Middle	4.4	0.3	99	18.1	18.1	8.0	8.0	31.4	31.4	113.4	113.5	8.9	8.9	5.5	5.6	5	5	74	75	821187	811531	<0.2	1.5	<0.2	1.5			
						4.4	0.3	99	18.1	18.1	8.0	8.0	31.4	31.4	113.5	113.5	8.9	8.9	5.6	5.6	6	6	74	75	821187	811531	<0.2	1.5	<0.2	1.5			
					Bottom	7.8	0.2	105	18.1	18.1	8.0	8.0	31.4	31.4	111.3	111.3	8.7	8.7	6.4	6.4	5	5	75	75	821187	811531	<0.2	1.5	<0.2	1.5			
						7.8	0.2	106	18.1	18.1	8.0	8.0	31.4	31.4	111.3	111.3	8.7	8.7	6.4	6.4	6	6	75	75	821187	811531	<0.2	1.5	<0.2	1.5			
SR2	Cloudy	Moderate	05:13	3.8	Surface	1.0	0.3	56	18.2	18.2	8.0	8.0	31.3	31.3	114.2	114.2	8.9	8.9	5.9	5.7	7	6	73	74	821439	814146	<0.2	1.5	<0.2	1.5			
						1.0	0.3	56	18.2	18.2	8.0	8.0	31.3	31.3	114.2	114.2	8.9	8.9	5.9	5.7	5	5	74	75	821439	814146	<0.2	1.5	<0.2	1.5			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					Bottom	2.8	0.2	33	18.2	18.2	8.0	8.0	31.7	31.7	111.5	111.5	8.7	8.7	5.5	5.5	6	6	75	75	821439	814146	<0.2	1.5	<0.2	1.5			
						2.8	0.2	35	18.2	18.2	8.0	8.0	31.7	31.7	111.5	111.5	8.7	8.7	5.5	5.5	6	6	75	75	821439	814146	<0.2	1.5	<0.2	1.5			
SR3	Cloudy	Rough	06:25	8.9	Surface	1.0	0.4	188	18.3	18.3	8.0	8.0	29.0	29.0	115.1	115.2	9.1	9.1	5.6	6.4	5	6	-	-	822124	807554	-	-	-	-			
						1.0	0.4	198	18.3	18.3	8.0	8.0	29.0	29.0	115.2	115.2	9.1	9.1	5.6	6.4	6	6	-	-	822124	807554	-	-	-	-			
					Middle	4.5	0.2	173	18.2	18.2	8.0	8.0	30.9	30.9	115.6	115.6	9.1	9.1	6.1	6.1	5	5	-	-	-	-	822124	807554	-	-	-	-	
						4.5	0.2	189	18.2	18.2	8.0	8.0	30.9	30.9	115.5	115.5	9.1	9.1	6.1	6.1	6	6	-	-	-	-	822124	807554	-	-	-	-	
					Bottom	7.9	0.0	117	18.1	18.1	8.0	8.0	31.7	31.7	112.6	112.6	8.8	8.8	7.4	7.4	7	7	-	-	-	-	822124	807554	-	-	-	-	
						7.9	0.0	128	18.1	18.1	8.0	8.0	31.7	31.7	112.6	112.6	8.8	8.8	7.4	7.4	7	7	-	-	-	-	822124	807554	-	-	-	-	
SR4A	Cloudy	Moderate	05:51	9.1	Surface	1.0	0.2	251	17.8	17.8	8.2	8.2	31.5	31.5	120.2	120.2	9.5	9.5	6.6	6.5	6	6	-	-	817178	807820	-	-	-	-			
						1.0	0.2	271	17.8	17.8	8.2	8.2	31.5	31.5	120.2	120.2	9.5	9.5	6.6	6.5	6	6	-	-	817178	807820	-	-	-	-			
					Middle	4.6	0.2	102	17.7	17.7	8.2	8.2	32.1	32.1	119.6	119.5	9.4	9.4	6.1	6.1	4	4	-	-	-	-	817178	807820	-	-	-	-	
						4.6	0.2	102	17.7	17.7	8.2	8.2	32.1	32.1	119.4	119.4	9.4	9.4	6.2	6.2	5	5	-	-	-	-	817178	807820	-	-	-	-	
					Bottom	8.1	0.1	32	17.6	17.6	8.1	8.1	32.8	32.8	117.2	117.0	9.2	9.2	6.5	6.5	6	6	-	-	-	-	817178	807820	-	-	-	-	
						8.1	0.1	32	17.6	17.6	8.1	8.1	32.8	32.8	116.7	116.7	9.1	9.1	6.7	6.7	6	6	-	-	-	-	817178	807820	-	-	-	-	
SR5A	Cloudy	Calm	05:32	4.9	Surface	1.0	0.0	346	18.1	18.1	8.3	8.3	30.7	30.7	123.6	123.6	9.7	9.7	7.2	7.3	7	7	-	-	816609	810690	-	-	-	-			
						1.0	0.0	318	18.1	18.1	8.3	8.3	30.7	30.7	123.5	123.5	9.7	9.7	7.2	7.3	6	6	-	-	816609	810690	-	-	-	-			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
					Bottom	3.9	0.0	327	18.1	18.1	8.2	8.2	30.8	30.8	121.0	121.0	9.5	9.5	7.4	7.3	7	7	-	-	-	-	816609	810690	-	-	-	-	
						3.9	0.0	333	18.1	18.1	8.2																						

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

Water Quality Monitoring

Water Quality Monitoring Results on 25 January 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity (NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
									Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Rough	12:16	8.7	Surface	1.0	0.4	41	17.5	17.5	8.2	8.2	32.7	32.7	121.2	121.2	9.5	9.5	9.4	9.5	14.7	7	72	74	815600	804237	<0.2	<0.2	4.0	4.0
						1.0	0.4	43	17.5	8.2	8.2	32.7	32.7	121.1	121.2	9.5	9.5	9.4	9.5	14.7	8	72	74	815600	804237	<0.2	<0.2	3.9	3.9	
						4.4	0.4	41	17.5	8.1	8.1	33.1	33.1	118.1	118.1	9.3	9.3	9.4	14.6	14.7	7	73	74	815600	804237	<0.2	<0.2	4.0	4.0	
					4.4	0.4	42	17.5	8.1	8.1	33.1	33.1	118.1	118.1	9.3	9.3	9.4	14.8	14.7	9	73	74	815600	804237	<0.2	<0.2	4.3	4.3		
					7.7	0.4	41	17.5	8.1	8.1	33.1	33.1	117.4	117.4	9.2	9.2	9.4	19.7	14.7	9	75	74	815600	804237	<0.2	<0.2	4.1	4.1		
					7.7	0.4	42	17.5	8.1	8.1	33.1	33.1	117.4	117.4	9.2	9.2	9.4	19.9	14.7	8	76	74	815600	804237	<0.2	<0.2	4.2	4.2		
C2	Misty	Rough	11:06	10.9	Surface	1.0	0.2	216	18.4	18.4	7.8	7.8	25.7	25.7	108.8	108.8	8.8	8.8	8.7	5.7	8.2	7	71	73	825709	806950	<0.2	<0.2	3.9	3.9
						1.0	0.2	236	18.4	7.8	7.8	25.7	25.7	108.8	108.8	8.8	8.8	8.7	5.7	8.2	7	72	73	825709	806950	<0.2	<0.2	4.0	4.0	
						5.5	0.2	269	18.4	7.9	7.9	30.4	30.4	109.4	109.4	8.6	8.6	8.7	7.9	8.2	6	73	73	825709	806950	<0.2	<0.2	3.2	3.4	
					5.5	0.2	271	18.4	7.9	7.9	30.4	30.4	109.4	109.4	8.6	8.6	8.7	7.9	8.2	6	73	73	825709	806950	<0.2	<0.2	3.4	3.4		
					9.9	0.2	343	18.3	7.9	7.9	31.2	31.2	106.9	106.9	8.4	8.4	8.4	11.1	8.2	8	75	73	825709	806950	<0.2	<0.2	2.9	2.9		
					9.9	0.2	351	18.3	7.9	7.9	31.2	31.2	106.9	106.9	8.4	8.4	8.4	11.1	8.2	10	75	73	825709	806950	<0.2	<0.2	3.0	3.0		
C3	Misty	Moderate	13:03	11.9	Surface	1.0	0.5	281	17.9	17.9	8.0	8.0	32.4	32.4	118.5	118.5	9.3	9.3	9.0	3.4	6.6	8	73	75	822114	817824	<0.2	<0.2	1.2	1.2
						1.0	0.5	298	17.9	8.0	8.0	32.4	32.4	118.5	118.5	9.3	9.3	9.0	3.4	6.6	9	73	75	822114	817824	<0.2	<0.2	1.4	1.4	
						6.0	0.4	279	17.9	8.0	8.0	32.8	32.8	110.8	110.8	8.6	8.6	9.0	7.6	6.6	8	75	75	822114	817824	<0.2	<0.2	1.1	1.1	
					6.0	0.4	285	17.9	8.0	8.0	32.8	32.8	110.8	110.8	8.6	8.6	9.0	7.6	6.6	9	76	75	822114	817824	<0.2	<0.2	1.0	1.0		
					10.9	0.3	279	17.8	7.9	7.9	32.9	32.9	109.3	109.3	8.5	8.5	8.5	8.8	6.6	10	77	73	822114	817824	<0.2	<0.2	1.1	1.1		
					10.9	0.3	296	17.8	7.9	7.9	32.9	32.9	109.3	109.3	8.5	8.5	8.5	8.8	6.6	9	77	73	822114	817824	<0.2	<0.2	0.9	0.9		
IM1	Cloudy	Rough	11:56	7.4	Surface	1.0	0.4	331	17.8	17.8	8.2	8.2	32.1	32.1	126.5	126.5	9.9	9.9	9.9	9.5	11.7	8	72	74	818348	806454	<0.2	<0.2	3.7	3.7
						1.0	0.5	332	17.8	8.2	8.2	32.1	32.1	126.5	126.5	9.9	9.9	9.9	9.5	11.7	6	73	74	818348	806454	<0.2	<0.2	3.6	3.6	
						3.7	0.4	344	17.8	8.2	8.2	32.1	32.1	124.7	124.7	9.8	9.8	9.9	11.4	11.7	10	73	74	818348	806454	<0.2	<0.2	3.5	3.5	
					3.7	0.4	353	17.8	8.2	8.2	32.1	32.1	124.6	124.6	9.8	9.8	9.9	11.4	11.7	8	74	74	818348	806454	<0.2	<0.2	3.5	3.5		
					6.4	0.3	349	17.7	8.2	8.2	32.2	32.2	123.1	123.1	9.7	9.7	9.7	14.3	11.7	11	75	74	818348	806454	<0.2	<0.2	3.6	3.6		
					6.4	0.3	321	17.7	8.2	8.2	32.2	32.2	123.1	123.1	9.7	9.7	9.7	14.3	11.7	9	75	74	818348	806454	<0.2	<0.2	3.6	3.6		
IM2	Cloudy	Rough	11:50	8.3	Surface	1.0	0.3	336	17.7	17.7	8.2	8.2	31.5	31.5	120.5	120.5	9.5	9.5	9.5	8.6	10.8	6	73	75	818878	806217	<0.2	<0.2	3.6	3.6
						1.0	0.3	309	17.7	8.2	8.2	31.5	31.5	120.5	120.5	9.5	9.5	9.5	8.4	10.8	7	73	75	818878	806217	<0.2	<0.2	3.8	3.8	
						4.2	0.3	356	17.7	8.2	8.2	31.5	31.5	119.2	119.2	9.4	9.4	9.5	9.2	10.8	9	75	75	818878	806217	<0.2	<0.2	4.2	4.2	
					4.2	0.3	328	17.7	8.2	8.2	31.5	31.5	119.2	119.2	9.4	9.4	9.5	9.2	10.8	7	75	75	818878	806217	<0.2	<0.2	3.6	3.6		
					7.3	0.3	7	17.6	8.2	8.2	32.3	32.2	117.9	118.0	9.3	9.3	9.3	14.7	10.8	9	77	74	818878	806217	<0.2	<0.2	4.1	4.1		
					7.3	0.3	7	17.6	8.2	8.2	32.2	32.2	118.0	118.0	9.3	9.3	9.3	14.7	10.8	8	77	74	818878	806217	<0.2	<0.2	4.1	4.1		
IM3	Cloudy	Rough	11:41	8.2	Surface	1.0	0.2	288	18.1	18.1	8.2	8.2	29.3	29.3	122.9	122.9	9.8	9.8	9.5	6.7	8.5	6	73	75	819392	806011	<0.2	<0.2	3.8	3.8
						1.0	0.3	314	18.1	8.2	8.2	29.3	29.3	122.9	122.9	9.7	9.7	9.5	6.7	8.5	8	73	75	819392	806011	<0.2	<0.2	4.0	4.0	
						4.1	0.3	322	17.7	8.2	8.2	31.3	31.3	117.6	117.6	9.3	9.3	9.5	9.4	8.5	6	75	75	819392	806011	<0.2	<0.2	3.8	3.8	
					4.1	0.3	333	17.7	8.2	8.2	31.3	31.3	117.6	117.6	9.3	9.3	9.5	9.6	8.5	7	75	75	819392	806011	<0.2	<0.2	4.0	4.0		
					7.2	0.3	335	17.6	8.2	8.2	31.9	31.9	117.0	117.0	9.2	9.2	9.2	9.3	8.5	8	76	74	819392	806011	<0.2	<0.2	4.2	4.2		
					7.2	0.3	345	17.6	8.2	8.2	31.9	31.9	117.0	117.0	9.2	9.2	9.2	9.3	8.5	7	76	74	819392	806011	<0.2	<0.2	3.8	3.8		
IM4	Cloudy	Rough	11:31	7.6	Surface	1.0	0.4	283	18.0	18.0	8.2	8.2	29.4	29.4	121.1	121.1	9.6	9.6	9.5	6.3	6.9	5	73	74	819563	805050	<0.2	<0.2	3.7	3.7
						1.0	0.4	308	18.0	8.2	8.2	29.4	29.4	121.0	121.1	9.6	9.6	9.5	6.4	6.9	6	73	74	819563	805050	<0.2	<0.2	3.8	3.8	
						3.8	0.2	290	17.9	8.2	8.2	30.0	30.0	118.3	118.3	9.4	9.4	9.5	6.8	6.9	9	74	74	819563	805050	<0.2	<0.2	3.7	3.7	
					3.8	0.2	316	17.9	8.2	8.2	30.0	30.0	118.3	118.3	9.4	9.4	9.5	6.9	6.9	8	74	74	819563	805050	<0.2	<0.2	3.5	3.5		
					6.6	0.1	337	17.8	8.1	8.1	30.5	30.4	117.2	117.3	9.3	9.3	9.3	7.5	6.9	7	75	74	819563	805050	<0.2	<0.2	3.6	3.6		
					6.6	0.1	310	17.8	8.2	8.1	30.4	30.4	117.4	117.3	9.3	9.3	9.3	7.2	6.9	7	75	74	819563	805050	<0.2	<0.2	3.7	3.7		
IM5	Cloudy	Rough	11:23	6.8	Surface	1.0	0.3	297	18.1	18.1	8.1	8.1	28.7	28.7	119.1	119.1	9.5	9.5	9.4	6.8	7.7	7	72	73	820537	804922	<0.2	<0.2	3.6	3.6
						1.0	0.3	304	18.1	8.1	8.1	28.7	28.7	119.1	119.1	9.5	9.5	9.4	6.8	7.7	5	72	73	820537	804922	<0.2	<0.2	3.7	3.7	
						3.4	0.3	326	18.0	8.1	8.1	29.4	29.4	116.7	116.7	9.3	9.3	9.4	8.1	7.7	7	73	73	820537	804922	<0.2	<0.2	3.6	3.6	
					3.4	0.3	339	18.0	8.1	8.1	29.4	29.4	116.6	116.7	9.3	9.3	9.4	8.1	7.7	7	73	73	820537	804922	<0.2	<0.2	3.6	3.6		
					5.8	0.3	328	17.9	8.1	8.1	30.0	30.0	117.1	117.2	9.3</															

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

Water Quality Monitoring

Water Quality Monitoring Results on 25 January 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)				
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA	
									Value	DA	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA	Value
IM9	Misty	Rough	11:41	7.2	Surface	1.0	0.3	297	18.6	18.6	8.0	8.0	29.1	29.1	119.5	119.5	9.4	9.4	4.8	4.8	7	7	73	73	822117	808788	<0.2	<0.2	2.2	2.2			
						1.0	0.3	309	18.6	8.0	8.0	29.1	29.1	119.5	119.5	9.4	9.4	4.8	4.8	7	7	73	73	<0.2			<0.2	2.2	2.2				
						3.6	0.3	298	18.5	8.0	8.0	29.2	29.2	116.3	116.3	9.2	9.2	5.3	5.3	8	8	74	74	<0.2			<0.2	2.3	2.3				
					3.6	0.3	308	18.5	8.0	8.0	29.2	29.2	116.3	116.3	9.2	9.2	5.3	5.3	7	7	74	74	<0.2	<0.2			2.5	2.5					
					6.2	0.3	309	18.4	8.0	8.0	29.6	29.6	113.5	113.5	8.9	8.9	6.4	6.4	11	11	75	75	<0.2	<0.2			2.3	2.3					
					6.2	0.4	335	18.4	8.0	8.0	29.6	29.6	113.5	113.5	8.9	8.9	6.4	6.4	9	9	75	75	<0.2	<0.2			2.3	2.3					
IM10	Misty	Rough	11:53	7.7	Surface	1.0	0.4	306	18.5	18.5	8.1	8.1	30.6	30.6	123.7	123.7	9.7	9.7	5.5	5.5	9	9	73	73	822235	809847	<0.2	<0.2	1.7	1.7			
						1.0	0.4	332	18.5	8.1	8.1	30.6	30.6	123.7	123.7	9.7	9.7	5.5	5.5	8	8	73	73	<0.2			<0.2	1.7	1.7				
						3.9	0.4	303	18.4	8.0	8.0	30.6	30.6	123.3	123.3	9.6	9.6	6.1	6.1	10	10	73	73	<0.2			<0.2	1.8	1.8				
					3.9	0.4	310	18.4	8.0	8.0	30.6	30.6	123.3	123.3	9.6	9.6	6.1	6.1	9	9	74	74	<0.2	<0.2			1.8	1.8					
					6.7	0.3	302	18.4	8.0	8.0	30.6	30.6	117.7	117.7	9.2	9.2	13.3	13.3	10	10	75	75	<0.2	<0.2			1.8	1.8					
					6.7	0.3	311	18.4	8.0	8.0	30.6	30.6	117.7	117.7	9.2	9.2	13.3	13.3	9	9	75	75	<0.2	<0.2			2.0	2.0					
IM11	Misty	Rough	12:06	8.3	Surface	1.0	0.5	298	18.3	18.3	8.1	8.1	30.8	30.8	121.2	121.2	9.5	9.5	6.6	6.6	10	10	73	73	821500	810558	<0.2	<0.2	1.9	1.9			
						1.0	0.5	310	18.3	8.1	8.1	30.8	30.8	121.2	121.2	9.5	9.5	6.6	6.6	10	10	73	73	<0.2			<0.2	1.9	1.9				
						4.2	0.4	289	18.3	8.1	8.1	30.9	30.9	118.0	118.0	9.2	9.2	8.0	8.0	9	9	75	75	<0.2			<0.2	1.8	1.8				
					4.2	0.4	298	18.3	8.1	8.1	30.9	30.9	118.0	118.0	9.2	9.2	8.0	8.0	9	9	75	75	<0.2	<0.2			1.8	1.8					
					7.3	0.4	293	18.2	8.1	8.1	30.9	30.9	114.9	114.9	9.0	9.0	8.5	8.5	10	10	76	76	<0.2	<0.2			1.9	1.9					
					7.3	0.4	297	18.2	8.1	8.1	30.9	30.9	114.9	114.9	9.0	9.0	8.5	8.5	11	11	77	77	<0.2	<0.2			1.9	1.9					
IM12	Misty	Rough	12:15	8.4	Surface	1.0	0.6	278	18.1	18.1	8.0	8.0	31.3	31.3	116.4	116.4	9.1	9.1	8.8	8.8	11	11	74	74	821175	811495	<0.2	<0.2	1.7	1.7			
						1.0	0.6	300	18.1	8.0	8.0	31.3	31.3	116.4	116.4	9.1	9.1	8.8	8.8	11	11	73	73	<0.2			<0.2	1.7	1.7				
						4.2	0.5	280	18.1	8.0	8.0	31.3	31.3	113.4	113.4	8.9	8.9	8.9	8.9	12	12	75	75	<0.2			<0.2	1.8	1.8				
					4.2	0.5	289	18.1	8.0	8.0	31.3	31.3	113.4	113.4	8.9	8.9	8.9	8.9	12	12	75	75	<0.2	<0.2			1.8	1.8					
					7.4	0.4	281	18.1	8.0	8.0	31.4	31.4	111.8	111.8	8.8	8.8	9.5	9.5	11	11	75	75	<0.2	<0.2			1.6	1.6					
					7.4	0.4	301	18.1	8.0	8.0	31.4	31.4	111.8	111.8	8.8	8.8	9.5	9.5	11	11	76	76	<0.2	<0.2			1.5	1.5					
SR2	Misty	Rough	12:41	4.8	Surface	1.0	0.5	330	18.2	18.2	8.1	8.1	31.5	31.5	120.7	120.7	9.4	9.4	5.2	5.2	8	8	73	73	821470	814155	<0.2	<0.2	1.5	1.5			
						1.0	0.5	304	18.2	8.1	8.1	31.5	31.5	120.7	120.7	9.4	9.4	5.2	5.2	9	9	73	73	<0.2			<0.2	1.4	1.4				
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-	-	-	-	-
					3.8	0.5	328	18.1	8.1	8.1	31.6	31.6	116.0	116.0	9.1	9.1	3.3	3.3	8	8	75	75	<0.2	<0.2			1.5	1.5					
					3.8	0.5	329	18.1	8.1	8.1	31.6	31.6	116.0	116.0	9.1	9.1	3.3	3.3	8	8	75	75	<0.2	<0.2			1.5	1.5					
					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-	-	-	-	-
SR3	Misty	Rough	11:26	8.3	Surface	1.0	0.3	253	18.5	18.5	7.9	7.9	27.4	27.4	114.4	114.4	9.1	9.1	4.8	4.8	6	6	-	-	822155	807558	-	-	-	-			
						1.0	0.3	275	18.5	7.9	7.9	27.4	27.4	114.4	114.4	9.1	9.1	4.8	4.8	5	5	-	-	-			-	-	-				
						4.2	0.3	256	18.4	7.9	7.9	29.4	29.4	113.3	113.3	8.9	8.9	5.5	5.5	6	6	-	-	-			-	-	-				
					4.2	0.3	277	18.4	7.9	7.9	29.4	29.4	113.3	113.3	8.9	8.9	5.5	5.5	7	7	-	-	-	-			-	-					
					7.3	0.2	280	18.4	8.0	8.0	29.8	29.8	112.2	112.2	8.8	8.8	7.3	7.3	7	7	-	-	-	-			-	-					
					7.3	0.2	300	18.4	8.0	8.0	29.8	29.8	112.2	112.2	8.8	8.8	7.3	7.3	6	6	-	-	-	-			-	-					
SR4A	Fine	Moderate	12:38	8.8	Surface	1.0	0.1	239	18.1	18.1	8.3	8.3	31.0	31.0	127.0	127.0	10.0	10.0	8.9	8.9	10	10	-	-	817200	807817	-	-	-	-			
						1.0	0.2	262	18.1	8.3	8.3	31.0	31.0	126.9	126.9	10.0	10.0	8.9	8.9	10	10	-	-	-			-						
						4.4	0.0	226	17.9	8.2	8.2	31.4	31.4	123.8	123.8	9.7	9.7	9.0	9.0	10	10	-	-	-			-						
					4.4	0.0	229	17.9	8.2	8.2	31.5	31.5	123.8	123.8	9.7	9.7	9.2	9.2	9	9	-	-	-	-									
					7.8	0.2	59	17.7	8.2	8.2	32.3	32.3	122.6	122.6	9.6	9.6	10.7	10.7	11	11	-	-	-	-									
					7.8	0.2	64	17.7	8.2	8.2	32.3	32.3	122.6	122.6	9.6	9.6	10.5	10.5	10	10	-	-	-	-									
SR5A	Fine	Calm	12:56	5.2	Surface	1.0	0.1	325	18.1	18.1	8.4	8.4	30.7	30.7	130.9	130.9	10.3	10.3	9.7	9.7	12	12	-	-	816580	810673	-	-	-	-			
						1.0	0.1	335	18.1	8.4	8.4	30.7	30.7	130.8	130.8	10.3	10.3	9.7	9.7	11	11	-	-	-			-						
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-	-	-		
					4.2	0.1	307	18.1	8.3	8.3	30.7	30.7	127.9	127.9	10.1	10.1	8.5	8.5	16	16	-	-	-	-									
					4.2	0.1	326	18.1	8.3	8.3	30.7	30.7	127.8	127.8	10.1	10.1	8.3	8.3	14	14	-	-	-	-									
					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-				
SR6	Fine	Calm	13:22	4.8	Surface	1.0	0.1	250	18.0	18.0	8.3	8.3	31.3	31.3	131.8	131.8	10.4	10.4	6.3	6.3	10	10	-	-	817913	814647	-	-	-	-			
						1.0	0.1	269	18.0	8.3	8.3	31.3	31.3	131.8	131.8	10.4	10.4	6.4	6.4	11	11	-	-	-			-						
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-				
					3.8	0.1	247	17.9	8.3	8.3	31.3	31.3	125.1	125.1	9.8	9.8	7.3	7.3	11	11	-	-	-	-									
					3.8	0.1	253	17.9	8.3	8.3	31.3	31.3	125.0	125.0	9.8	9.8	7.3	7.3	13	13	-	-	-	-									
					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-					
SR7	Misty	Moderate	13:37	1																													

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

Water Quality Monitoring

Water Quality Monitoring Results on 27 January 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)							
									Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA	Value	DA	Value	DA	Value	DA
C1	Fine	Moderate	08:38	8.7	Surface	1.0	0.1	232	17.3	8.1	8.1	32.2	32.2	113.1	113.1	9.0	8.8	4.3	4.9	4	5	73	75	815600	804233	<0.2	<0.2	1.3	0.9							
						1.0	0.1	253	17.3	8.1	8.1	32.2	32.2	113.1	113.1	8.9	8.8	4.4	4.9	4	5	73	75	815600	804233	<0.2	<0.2	1.2	0.9							
						4.4	0.1	210	17.4	8.1	8.1	33.8	33.8	111.4	111.4	8.7	8.8	4.8	4.9	6	5	75	75	815600	804233	<0.2	<0.2	0.8	0.6							
					4.4	0.1	228	17.4	8.1	8.1	33.8	33.8	111.4	111.4	8.7	8.8	4.8	4.9	4	5	75	75	815600	804233	<0.2	<0.2	0.8	0.6								
					7.7	0.1	222	17.4	8.1	8.1	33.9	33.9	110.0	110.0	8.6	8.6	5.6	8.6	6	6	77	77	815600	804233	<0.2	<0.2	0.6	0.7								
					7.7	0.1	229	17.4	8.1	8.1	33.9	33.9	110.0	110.0	8.6	8.6	5.6	8.6	6	6	77	77	815600	804233	<0.2	<0.2	0.7	0.7								
C2	Fine	Moderate	09:58	11.7	Surface	1.0	0.3	164	18.3	8.0	8.0	29.9	29.9	114.4	114.4	9.0	9.0	5.9	8.8	6	7	72	73	825710	806966	<0.2	<0.2	2.8	2.1							
						1.0	0.4	166	18.3	8.0	8.0	29.9	29.9	114.4	114.4	9.0	9.0	5.9	8.8	6	7	72	73	825710	806966	<0.2	<0.2	2.8	2.3							
						5.9	0.4	152	18.2	8.0	8.0	31.5	31.5	113.3	113.3	8.9	8.9	7.9	8.8	8	7	73	73	825710	806966	<0.2	<0.2	2.3	2.1							
					5.9	0.4	161	18.2	8.0	8.0	31.5	31.5	113.3	113.3	8.9	8.9	7.9	8.8	7	7	73	73	825710	806966	<0.2	<0.2	2.3	2.1								
					10.7	0.3	137	18.0	8.0	8.0	33.0	33.0	111.5	111.5	8.7	8.7	12.7	8.7	7	7	75	75	825710	806966	<0.2	<0.2	1.2	1.2								
					10.7	0.3	147	18.0	8.0	8.0	33.0	33.0	111.5	111.5	8.7	8.7	12.7	8.7	8	7	75	75	825710	806966	<0.2	<0.2	1.2	1.2								
C3	Fine	Moderate	07:50	12.2	Surface	1.0	0.1	89	17.8	8.0	8.0	33.8	33.8	112.7	112.7	8.8	8.7	3.0	3.5	6	5	73	75	822084	817777	<0.2	<0.2	1.1	1.2							
						1.0	0.1	92	17.8	8.0	8.0	33.8	33.8	112.7	112.7	8.8	8.7	3.0	3.5	4	5	73	75	822084	817777	<0.2	<0.2	1.3	1.2							
						6.1	0.2	84	17.8	8.0	8.0	34.2	34.2	111.0	111.0	8.6	8.6	3.8	3.5	4	5	75	75	822084	817777	<0.2	<0.2	1.0	1.2							
					6.1	0.2	87	17.8	8.0	8.0	34.2	34.2	111.0	111.0	8.6	8.6	3.8	3.5	5	5	76	75	822084	817777	<0.2	<0.2	1.2	1.2								
					11.2	0.2	97	17.8	8.0	8.0	34.3	34.3	109.9	109.9	8.5	8.5	3.6	3.5	6	5	76	77	822084	817777	<0.2	<0.2	1.1	1.3								
					11.2	0.2	99	17.8	8.0	8.0	34.3	34.3	109.9	109.9	8.5	8.5	3.6	3.5	5	5	77	77	822084	817777	<0.2	<0.2	1.3	1.3								
IM1	Fine	Moderate	09:00	7.3	Surface	1.0	0.1	192	17.6	8.2	8.2	31.4	31.4	118.8	118.8	9.4	9.3	5.1	5.6	6	8	73	75	818346	806484	<0.2	<0.2	2.0	1.6							
						1.0	0.1	201	17.6	8.2	8.2	31.4	31.4	118.7	118.7	9.4	9.3	5.1	5.6	6	8	73	75	818346	806484	<0.2	<0.2	2.2	1.6							
						3.7	0.2	153	17.6	8.1	8.1	33.2	33.2	116.9	116.9	9.1	9.1	5.7	5.6	8	8	75	75	818346	806484	<0.2	<0.2	1.7	1.6							
					3.7	0.2	156	17.6	8.1	8.1	33.2	33.2	116.9	116.9	9.1	9.1	5.7	5.6	8	8	75	75	818346	806484	<0.2	<0.2	1.8	1.6								
					6.3	0.1	153	17.7	8.1	8.1	33.2	33.2	116.9	116.9	9.1	9.1	6.1	9.1	10	8	77	75	818346	806484	<0.2	<0.2	1.0	1.0								
					6.3	0.2	154	17.7	8.1	8.1	33.2	33.2	116.9	116.9	9.1	9.1	6.1	9.1	11	8	77	75	818346	806484	<0.2	<0.2	1.0	1.0								
IM2	Fine	Moderate	09:05	8.3	Surface	1.0	0.1	179	17.6	8.1	8.1	31.0	31.0	118.8	118.8	9.4	9.3	5.7	6.6	8	8	73	75	818829	806216	<0.2	<0.2	1.9	1.6							
						1.0	0.1	179	17.6	8.1	8.1	31.0	31.0	118.8	118.8	9.4	9.3	5.6	6.6	7	8	73	75	818829	806216	<0.2	<0.2	1.9	1.6							
						4.2	0.2	159	17.7	8.1	8.1	33.1	33.1	116.5	116.5	9.1	9.1	6.2	6.6	7	8	75	75	818829	806216	<0.2	<0.2	2.0	1.6							
					4.2	0.2	168	17.7	8.1	8.1	33.1	33.1	116.4	116.4	9.1	9.1	6.2	6.6	8	8	75	75	818829	806216	<0.2	<0.2	1.8	1.6								
					7.3	0.1	167	17.7	8.1	8.1	33.1	33.1	114.4	114.4	8.9	8.9	8.0	8.9	8	8	77	75	818829	806216	<0.2	<0.2	1.0	1.0								
					7.3	0.1	174	17.7	8.1	8.1	33.1	33.1	114.4	114.4	8.9	8.9	8.1	8.9	8	8	77	75	818829	806216	<0.2	<0.2	1.0	1.0								
IM3	Fine	Moderate	09:13	8.2	Surface	1.0	0.2	193	17.5	8.1	8.1	31.3	31.3	119.5	119.5	9.5	9.4	5.0	6.5	8	8	73	75	819403	805996	<0.2	<0.2	1.7	1.3							
						1.0	0.2	197	17.5	8.1	8.1	31.3	31.3	119.5	119.5	9.5	9.4	5.0	6.5	7	8	75	75	819403	805996	<0.2	<0.2	1.6	1.3							
						4.1	0.2	155	17.7	8.1	8.1	32.6	32.6	118.0	118.0	9.3	9.3	7.2	6.5	7	8	75	75	819403	805996	<0.2	<0.2	1.2	1.3							
					4.1	0.2	159	17.7	8.1	8.1	32.6	32.6	118.0	118.0	9.3	9.3	7.3	6.5	6	8	75	75	819403	805996	<0.2	<0.2	1.2	1.3								
					7.2	0.1	121	17.7	8.1	8.1	33.0	33.0	116.4	116.4	9.1	9.1	7.2	9.1	8	8	77	75	819403	805996	<0.2	<0.2	1.0	1.0								
					7.2	0.1	125	17.7	8.1	8.1	33.0	33.0	116.4	116.4	9.1	9.1	7.2	9.1	10	8	77	75	819403	805996	<0.2	<0.2	1.0	1.0								
IM4	Fine	Moderate	09:21	7.7	Surface	1.0	0.2	196	17.5	8.1	8.1	30.9	30.9	119.4	119.4	9.5	9.4	4.5	5.4	3	8	73	75	819568	805065	<0.2	<0.2	1.8	1.3							
						1.0	0.2	200	17.5	8.1	8.1	30.9	30.9	119.4	119.4	9.5	9.4	4.4	5.4	5	8	73	75	819568	805065	<0.2	<0.2	1.9	1.3							
						3.9	0.3	159	17.7	8.1	8.1	32.9	32.9	118.3	118.3	9.3	9.3	5.2	5.4	7	9	75	75	819568	805065	<0.2	<0.2	1.2	1.3							
					3.9	0.3	170	17.7	8.1	8.1	32.9	32.9	118.4	118.4	9.3	9.3	5.3	5.4	8	9	75	75	819568	805065	<0.2	<0.2	1.1	1.3								
					6.7	0.2	185	17.7	8.1	8.1	33.1	33.1	117.2	117.2	9.2	9.2	6.6	9.2	13	8	77	75	819568	805065	<0.2	<0.2	0.9	1.1								
					6.7	0.2	196	17.7	8.1	8.1	33.1	33.1	117.2	117.2	9.2	9.2	6.6	9.2	10	8	77	75	819568	805065	<0.2	<0.2	1.1	1.1								
IM5	Fine	Moderate	09:29	6.9	Surface	1.0	0.3	200	17.6	8.1	8.1	31.1	31.1	119.2	119.2	9.5	9.4	4.8	7.1	5	9	73	75	820587	804931	<0.2	<0.2	1.7	1.4							
						1.0	0.3	219	17.6	8.1	8.1	31.1	31.1	119.2	119.2	9.5	9.4	4.8	7.1	6	9	75	75	820587	804931	<0.2	<0.2	1.8	1.4							
						3.5	0.3	192	17.7	8.1	8.1	32.8	32.8	117.7	117.7	9.2	9.2	6.8	7.1	9	9	75	75	820587	804931	<0.2	<0.2	1.3	1.4							
					3.5	0.3	208	17.7	8.1	8.1	32.8	32.8	117.6	117.6	9.2	9.2	6.8	7.1	10	9	75	75	820587	804931	<0.2	<0.2	1.2	1.4								
					5.9	0.3	192	17.7	8.1	8.1	32.8	32.8	115.4	115.4	9.0	9.0	9.5	9.0	14	9	77	75	820587	804931	<0.2	<0.2	1.1	1.4								

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

Water Quality Monitoring

Water Quality Monitoring Results on 27 January 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity (NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
									Value	DA	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	14:08	8.9	Surface	1.0	0.2	29	17.6	17.6	8.1	8.1	32.8	32.8	119.3	119.3	9.4	9.1	4.1	8.0	6	7	75	75	815595	804254	<0.2	<0.2	1.1	1.2
						1.0	0.3	30	17.6	17.4	8.1	8.1	32.8	32.8	119.3	119.3	9.4	9.1	4.1	8.0	4	7	73	75	<0.2	<0.2	1.1	1.2		
						4.5	0.3	36	17.4	17.4	8.0	8.0	33.9	33.9	111.4	111.5	8.7	8.7	7.7	8.0	4	7	75	75	<0.2	<0.2	1.1	1.2		
					4.5	0.3	36	17.4	17.4	8.0	8.0	33.9	33.9	111.5	111.5	8.7	8.7	7.8	8.0	4	7	75	75	<0.2	<0.2	1.1	1.2			
					7.9	0.3	42	17.3	17.3	8.1	8.1	34.0	34.0	112.0	112.0	8.8	8.8	12.1	9.2	12	10	77	77	<0.2	<0.2	1.1	1.2			
					7.9	0.3	44	17.3	17.3	8.1	8.1	34.0	34.0	112.1	112.1	8.8	8.8	12.0	9.2	13	10	77	77	<0.2	<0.2	1.4	1.4			
C2	Fine	Moderate	12:58	12.8	Surface	1.0	0.1	320	18.7	18.7	8.1	8.1	30.6	30.6	122.1	122.1	9.5	9.3	4.2	6.2	5	6	73	74	825699	806948	<0.2	<0.2	2.5	2.1
						1.0	0.1	330	18.7	18.2	8.1	8.0	32.1	32.1	117.0	117.0	9.1	9.1	5.8	6.2	6	6	72	73	<0.2	<0.2	2.5	2.0		
						6.4	0.3	309	18.2	18.2	8.0	8.0	32.1	32.1	117.0	117.0	9.1	9.1	5.8	6.2	7	6	73	74	<0.2	<0.2	2.1	1.7		
					6.4	0.3	315	18.2	18.1	8.0	8.0	32.1	32.1	117.0	117.9	9.1	9.2	5.8	9.2	6	8	74	75	<0.2	<0.2	2.0	1.8			
					11.8	0.2	2	18.1	18.1	8.0	8.0	32.7	32.7	117.9	117.9	9.2	9.2	8.7	9.2	8	6	75	75	<0.2	<0.2	1.7	1.8			
					11.8	0.2	2	18.1	18.1	8.0	8.0	32.7	32.7	117.9	117.9	9.2	9.2	8.7	9.2	6	6	75	75	<0.2	<0.2	1.7	1.8			
C3	Fine	Moderate	15:00	12.3	Surface	1.0	0.3	265	17.9	17.9	8.0	8.0	33.0	33.0	114.9	114.9	9.0	8.9	3.5	6.1	5	5	73	75	822132	817793	<0.2	<0.2	1.2	1.2
						1.0	0.3	280	17.9	17.8	8.0	8.0	33.0	33.0	114.9	114.9	9.0	8.9	3.5	6.1	5	5	73	75	<0.2	<0.2	1.2	1.2		
						6.2	0.3	266	17.8	17.8	8.0	8.0	33.4	33.4	112.7	112.7	8.8	8.8	5.1	6.1	4	5	75	75	<0.2	<0.2	1.6	1.3		
					6.2	0.3	275	17.8	17.8	8.0	8.0	33.4	33.4	112.7	112.7	8.8	8.8	5.1	6.1	4	5	75	75	<0.2	<0.2	1.3	0.8			
					11.3	0.2	270	17.8	17.8	8.0	8.0	33.5	33.5	113.2	113.2	8.8	8.8	9.6	8.8	7	7	77	77	<0.2	<0.2	0.8	0.8			
					11.3	0.2	271	17.8	17.8	8.0	8.0	33.5	33.5	113.2	113.2	8.8	8.8	9.6	8.8	6	6	77	77	<0.2	<0.2	0.8	0.8			
IM1	Cloudy	Moderate	13:46	7.7	Surface	1.0	0.2	333	17.8	17.8	8.1	8.1	32.9	32.9	126.7	126.7	9.9	9.8	5.5	6.7	5	10	74	76	818341	806456	<0.2	<0.2	1.1	1.1
						1.0	0.2	349	17.8	17.8	8.1	8.1	32.9	32.9	126.7	126.7	9.9	9.8	5.5	6.7	6	10	75	75	<0.2	<0.2	1.2	1.0		
						3.9	0.3	9	17.8	17.8	8.1	8.1	32.9	32.9	123.0	123.0	9.6	9.6	6.0	6.7	6	7	75	75	<0.2	<0.2	1.1	1.1		
					3.9	0.3	9	17.8	17.8	8.1	8.1	32.9	32.9	123.0	123.0	9.6	9.6	6.0	6.7	7	7	75	75	<0.2	<0.2	1.0	1.0			
					6.7	0.2	25	17.6	17.6	8.1	8.1	33.4	33.4	120.7	120.7	9.4	9.4	8.7	9.4	16	16	77	77	<0.2	<0.2	1.1	1.1			
					6.7	0.2	27	17.6	17.6	8.1	8.1	33.4	33.4	120.7	120.7	9.4	9.4	8.7	9.4	17	17	77	77	<0.2	<0.2	1.0	1.0			
IM2	Cloudy	Moderate	13:45	8.5	Surface	1.0	0.2	339	17.8	17.8	8.1	8.1	32.8	32.8	126.8	126.8	9.9	9.8	5.8	6.6	6	8	74	76	818824	806219	<0.2	<0.2	1.2	1.1
						1.0	0.2	312	17.8	17.8	8.1	8.1	32.8	32.8	126.8	126.8	9.9	9.8	5.8	6.6	7	8	75	76	<0.2	<0.2	1.0	1.1		
						4.3	0.3	4	17.8	17.8	8.1	8.1	32.9	32.9	124.5	124.5	9.7	9.7	5.1	6.6	9	8	76	76	<0.2	<0.2	1.1	1.1		
					4.3	0.3	4	17.8	17.8	8.1	8.1	32.9	32.9	124.5	124.5	9.7	9.7	5.1	6.6	7	8	76	76	<0.2	<0.2	1.1	1.1			
					7.5	0.2	16	17.6	17.6	8.1	8.1	33.4	33.4	117.9	117.9	9.2	9.2	8.8	9.2	9	9	79	79	<0.2	<0.2	1.2	1.2			
					7.5	0.2	16	17.6	17.6	8.1	8.1	33.4	33.4	117.9	117.9	9.2	9.2	8.8	9.2	10	10	78	78	<0.2	<0.2	1.2	1.2			
IM3	Cloudy	Moderate	13:30	8.7	Surface	1.0	0.2	316	17.8	17.8	8.1	8.1	32.3	32.3	126.0	126.0	9.9	9.7	6.7	8.4	8	10	74	76	819401	806038	<0.2	<0.2	1.4	1.3
						1.0	0.2	332	17.8	17.7	8.1	8.1	32.3	32.3	126.0	126.0	9.9	9.7	6.7	8.4	6	10	75	76	<0.2	<0.2	1.4	1.4		
						4.4	0.2	9	17.7	17.7	8.1	8.1	32.6	32.6	120.7	120.7	9.5	9.5	7.5	8.4	7	7	75	76	<0.2	<0.2	1.4	1.2		
					4.4	0.2	9	17.7	17.7	8.1	8.1	32.6	32.6	120.7	120.7	9.5	9.5	7.6	8.4	8	7	76	76	<0.2	<0.2	1.2	1.2			
					7.7	0.2	21	17.7	17.7	8.1	8.1	33.0	33.0	118.5	118.6	9.3	9.3	11.0	9.3	15	15	78	78	<0.2	<0.2	1.2	1.2			
					7.7	0.2	22	17.7	17.7	8.1	8.1	33.0	33.0	118.6	118.6	9.3	9.3	11.1	9.3	13	13	78	78	<0.2	<0.2	1.2	1.2			
IM4	Cloudy	Moderate	13:22	8.0	Surface	1.0	0.2	286	17.8	17.8	8.2	8.2	31.5	31.5	128.1	128.1	10.1	9.8	5.2	7.6	7	9	74	76	819553	805041	<0.2	<0.2	1.6	1.3
						1.0	0.2	296	17.8	17.7	8.2	8.1	31.5	31.5	128.0	128.0	10.1	9.8	5.3	7.6	7	9	74	76	<0.2	<0.2	1.5	1.3		
						4.0	0.2	354	17.7	17.7	8.1	8.1	32.4	32.4	120.9	120.9	9.5	9.5	6.6	7.6	8	7	74	76	<0.2	<0.2	1.3	1.4		
					4.0	0.2	326	17.7	17.7	8.1	8.1	32.4	32.4	120.8	120.8	9.5	9.5	6.7	7.6	7	7	76	76	<0.2	<0.2	1.4	1.4			
					7.0	0.2	13	17.7	17.7	8.1	8.1	33.1	33.1	118.7	118.7	9.3	9.3	10.9	9.3	13	13	78	78	<0.2	<0.2	1.2	1.2			
					7.0	0.2	13	17.7	17.7	8.1	8.1	33.1	33.1	118.7	118.7	9.3	9.3	10.7	9.3	14	14	79	79	<0.2	<0.2	1.1	1.0			
IM5	Cloudy	Moderate	13:13	7.1	Surface	1.0	0.2	298	17.9	17.9	8.2	8.2	31.4	31.4	126.6	126.6	10.0	9.8	6.8	7.4	9	17	73	75	820577	804935	<0.2	<0.2	1.8	1.4
						1.0	0.2	311	17.9	17.7	8.2	8.1	31.4	31.4	126.5	126.5	10.0	9.8	6.8	7.4	8	17	73	75	<0.2	<0.2	1.8	1.4		
						3.6	0.2	300	17.7	17.7	8.1	8.1	32.1	32.1	122.4	122.4	9.6	9.6	6.6	7.4	11	10	75	74	<0.2	<0.2	1.4	1.3		
					3.6	0.2	311	17.7	17.7	8.1	8.1	32.1	32.1	122.3	122.4	9.6	9.6	6.8	7.4	10	10	74	74	<0.2	<0.2	1.3	1.3			
					6.1	0.2	285	17.7	17.7	8.1	8.1	32.8	32.8	119.4	119.4	9.3	9.3	8.7	9.3	34	34	78	78	<0.2	<0.2	1.1	1.1			
					6.1	0.2	295	17.7	17.7	8.1	8.1	32.8	32.8	119.4	119.4	9.3	9.3	8.7	9.3	31	31	78	78	<0.2	<0.2	1.1	1.1			
IM6	Cloudy	Moderate	13:06	7.0	Surface	1.0	0.2	319	18.1	18.1	8.2	8.2	30.3	30.3	131.1	131.1	10.3	10.1	4.8	6.2	7	8	73	75	821088	805817	<0.2	<0		

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

Water Quality Monitoring Results on 30 January 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity (NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	11:39	8.5	Surface	1.0	0.3	194	15.8	8.0	8.0	34.1	98.7	98.7	7.9	13.4	12	73	75	815598	804260	<0.2	0.6	0.7						
						1.0	0.3	195	15.8	8.0	8.0	34.1	98.7	98.7	7.9	13.5	12	73	75	815598	804260	<0.2	0.6							
						4.3	0.2	181	15.9	8.0	8.0	34.1	99.0	99.1	8.0	13.9	12	75	76	815598	804260	<0.2	0.6							
					Middle	4.3	0.2	192	15.9	8.0	8.0	34.1	99.1	99.1	8.0	13.9	14	76	76	815598	804260	<0.2	0.6							
						7.5	0.3	172	15.9	8.0	8.0	34.1	101.3	101.3	8.1	16.8	12	76	76	815598	804260	<0.2	0.6							
						7.5	0.3	175	15.9	7.9	7.9	34.1	101.3	101.3	8.1	16.8	12	77	77	815598	804260	<0.2	1.3							
C2	Cloudy	Moderate	10:31	10.5	Surface	1.0	0.1	333	16.6	8.0	8.0	33.1	102.1	102.1	8.1	8.4	8	72	73	825652	806936	<0.2	1.3	1.3						
						1.0	0.2	356	16.6	8.0	8.0	33.1	102.1	102.1	8.2	8.4	6	72	73	825652	806936	<0.2	1.2							
						5.3	0.1	333	16.6	8.0	8.0	33.0	102.8	102.8	8.2	9.6	10	73	73	825652	806936	<0.2	1.3							
					Middle	5.3	0.1	352	16.6	8.0	8.0	33.0	102.8	102.8	8.2	9.6	8	73	73	825652	806936	<0.2	1.3							
						9.5	0.3	28	16.6	8.0	8.0	33.0	103.3	103.3	8.2	9.6	8	75	75	825652	806936	<0.2	1.4							
						9.5	0.3	29	16.6	8.0	8.0	33.0	103.3	103.3	8.2	9.6	9	75	75	825652	806936	<0.2	1.2							
C3	Cloudy	Moderate	12:27	11.7	Surface	1.0	0.5	99	16.7	8.0	8.0	34.7	102.1	102.1	8.0	4.2	5	73	75	822134	817830	<0.2	0.6	0.6						
						1.0	0.5	99	16.7	8.0	8.0	34.7	102.1	102.1	8.0	4.2	4	73	75	822134	817830	<0.2	0.7							
						5.9	0.4	94	16.8	8.0	8.0	34.8	102.4	102.4	8.1	5.7	5	75	75	822134	817830	<0.2	0.6							
					Middle	5.9	0.5	101	16.8	8.0	8.0	34.8	102.4	102.4	8.1	5.7	7	75	75	822134	817830	<0.2	0.6							
						10.7	0.4	82	16.8	7.9	7.9	34.9	103.9	103.9	8.2	7.4	6	77	77	822134	817830	<0.2	0.5							
						10.7	0.4	87	16.8	7.9	7.9	34.9	103.9	103.9	8.2	7.4	7	77	77	822134	817830	<0.2	0.5							
IM1	Cloudy	Moderate	11:20	7.7	Surface	1.0	0.1	301	15.6	8.1	8.1	33.3	99.7	99.7	8.1	9.9	10	72	73	818365	806447	<0.2	0.9	0.9						
						1.0	0.1	326	15.6	8.1	8.1	33.3	99.7	99.7	8.1	10.0	10	72	73	818365	806447	<0.2	0.9							
						3.9	0.1	35	15.7	8.1	8.1	33.5	100.0	100.0	8.1	9.4	11	73	73	818365	806447	<0.2	0.9							
					Middle	3.9	0.1	37	15.7	8.1	8.1	33.5	100.0	100.0	8.1	9.3	11	73	73	818365	806447	<0.2	1.0							
						6.7	0.2	37	15.7	8.1	8.0	33.6	100.5	100.6	8.1	9.7	10	75	75	818365	806447	<0.2	1.0							
						6.7	0.2	37	15.7	8.0	8.0	33.6	100.6	100.6	8.1	9.8	9	75	75	818365	806447	<0.2	0.9							
IM2	Cloudy	Moderate	11:15	8.7	Surface	1.0	0.1	328	15.7	8.1	8.1	33.3	99.7	99.7	8.1	9.5	8	73	74	818842	806175	<0.2	0.9	0.9						
						1.0	0.1	353	15.7	8.1	8.1	33.3	99.7	99.7	8.1	9.7	7	73	73	818842	806175	<0.2	0.9							
						4.4	0.2	27	15.8	8.1	8.1	33.8	99.8	99.8	8.1	11.8	9	74	74	818842	806175	<0.2	0.9							
					Middle	4.4	0.2	28	15.8	8.1	8.1	33.8	99.8	99.8	8.1	11.9	9	74	74	818842	806175	<0.2	0.9							
						7.7	0.2	44	15.8	8.0	7.9	34.0	101.4	101.5	8.2	14.2	9	75	75	818842	806175	<0.2	0.8							
						7.7	0.2	44	15.8	7.9	7.9	34.0	101.5	101.5	8.2	14.2	9	76	76	818842	806175	<0.2	0.8							
IM3	Cloudy	Moderate	11:07	8.3	Surface	1.0	0.2	62	15.8	8.1	8.1	34.0	99.0	99.0	8.0	13.0	11	73	74	819432	805990	<0.2	0.6	0.6						
						1.0	0.2	64	15.8	8.1	8.0	34.0	99.0	99.0	8.0	13.2	11	73	74	819432	805990	<0.2	0.6							
						4.2	0.3	32	15.8	8.1	8.0	34.0	99.3	99.3	8.0	17.2	12	74	74	819432	805990	<0.2	0.5							
					Middle	4.2	0.3	32	15.8	8.0	8.0	34.0	99.3	99.3	8.0	15.0	11	74	74	819432	805990	<0.2	0.6							
						7.3	0.2	35	15.9	7.9	7.9	34.1	101.2	101.2	8.1	19.7	11	75	75	819432	805990	<0.2	0.6							
						7.3	0.2	38	15.9	7.9	7.9	34.1	101.2	101.2	8.2	19.7	10	75	75	819432	805990	<0.2	0.7							
IM4	Cloudy	Moderate	10:59	7.8	Surface	1.0	0.2	76	15.8	8.1	8.1	34.0	98.4	98.4	7.9	15.1	13	73	75	819540	805025	<0.2	0.6	0.6						
						1.0	0.2	76	15.8	8.1	8.1	34.1	98.4	98.4	7.9	15.1	13	73	75	819540	805025	<0.2	0.6							
						3.9	0.2	55	15.8	8.1	8.1	34.1	98.3	98.4	7.9	16.8	15	75	75	819540	805025	<0.2	0.6							
					Middle	3.9	0.2	58	15.8	8.1	8.1	34.1	98.4	98.4	7.9	17.0	15	75	75	819540	805025	<0.2	0.6							
						6.8	0.1	337	15.8	8.0	8.0	34.1	98.8	98.8	8.0	21.5	14	76	76	819540	805025	<0.2	0.6							
						6.8	0.1	350	15.8	8.0	8.0	34.1	98.8	98.8	8.0	21.6	15	77	77	819540	805025	<0.2	0.5							
IM5	Cloudy	Moderate	10:49	7.0	Surface	1.0	0.2	76	15.7	8.1	8.1	33.4	99.7	99.7	8.1	10.9	12	73	75	820574	804943	<0.2	0.8	0.8						
						1.0	0.2	82	15.7	8.1	8.1	33.4	99.7	99.7	8.1	10.9	11	73	75	820574	804943	<0.2	0.8							
						3.5	0.2	46	15.7	8.1	8.1	33.5	99.4	99.4	8.1	11.7	12	75	75	820574	804943	<0.2	0.7							
					Middle	3.5	0.2	46	15.7	8.1	8.1	33.5	99.4	99.4	8.0	11.7	12	75	75	820574	804943	<0.2	0.8							
						6.0	0.3	27	15.8	8.0	8.0	34.0	100.0	100.5	8.1	18.6	11	76	76	820574	804943	<0.2	0.8							
						6.0	0.3	28	15.8	8.0	8.0	34.0	100.9	100.5	8.1	18.9	11	76	76	820574	804943	<0.2	0.8							
IM6	Cloudy	Moderate	10:40	7.1	Surface	1.0	0.2	58	15.7	8.1	8.1	33.5	99.9	100.0	8.1	13.0	12	72	74	821034	805851	<0.2	0.8	0.8						
						1.0	0.2	61	15.7	8.1	8.1	33.5	100.0	100.0	8.1	13.2	11	72	74	821034	805851	<0.2	0.7							
						3.6	0.2	65	15.8	8.1	8.1	33.5	100.4	100.5	8.1	14.0	11	73	73	821034	805851	<0.2	0.8							
					Middle	3.6	0.2	65	15.7	8.1	8.1	33.5	100.5	100.5	8.1	14.0	10	74	74	821034	805851	<0.2	0.9							
						6.1	0.2	41	15.8	7.9	7.9	33.5	101.4	101.4	8.2	15.2	13	75	75	821034	805851	<0.2	0.8							
						6.1	0.2	42	15.8	7.9	7.9	33.5	101.6	101.5	8.2	15.5	14	75	75	821034	805851	<0.2	0.8							
IM7	Cloudy	Moderate	10:31	8.4	Surface	1.0	0.2	52	15.9	8.1	8.1	33.1	100.0	100.0	8.1	9.6	9	72	73	821357	806842	<0.2	1.0	1.0						
						1.0	0.2	56	15.9	8.1	8.1	33.1	99.9	99.9	8.1	9.5	10	72	73	821357	806842	<0.2	1.0							
						4.2	0.2	40	15.9	8.1	8.1	33.3	99.8	99.9	8.1	12.2	9	73	73	821357	806842	<0.2	1.0							
					Middle	4.2	0.2	43	15.9	8.1	8.1	33.3	99.9	99.9	8.1	12.2	10	73	73	821357	806842	<0.2	1.0							
						7.4	0.2	36	15.8	8.0	8.0	33.5	100.7	100.8	8.1	14.8	13	75	75	821357	806842	<0.2	1.0							
						7.4	0.3	38	15.8	8.0	8.0	33.5	100.8	100.8	8.1	14.9	14	75	75	821357	806842	<0.2	1.0							
IM8																														

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

Water Quality Monitoring

Water Quality Monitoring Results on 30 January 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity (NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)					
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA				
IM9	Cloudy	Moderate	11:09	7.4	Surface	1.0	0.3	91	16.2	16.2	8.1	8.1	33.5	33.5	101.4	101.4	8.1	8.1	9.9	9.9	9	9	73	73	74	822107	808833	<0.2	<0.2	0.9	0.9			
						1.0	0.3	98	16.2	16.2	8.1	8.1	33.5	33.5	101.4	101.4	8.1	8.1	9.9	9.9	9	9	73	73	74	822107	808833	<0.2	<0.2	1.0	1.0			
					Middle	3.7	0.4	75	16.2	16.2	8.1	8.1	33.5	33.5	102.1	102.1	8.2	8.2	12.5	12.5	8	8	73	73	74	822107	808833	<0.2	<0.2	0.9	0.9			
						3.7	0.4	77	16.2	16.2	8.1	8.1	33.5	33.5	102.1	102.1	8.2	8.2	12.5	12.5	10	10	74	74	74	822107	808833	<0.2	<0.2	0.9	0.9			
					Bottom	6.4	0.1	14	16.2	16.2	8.1	8.1	33.5	33.5	104.7	104.7	8.4	8.4	13.3	13.3	12	12	74	74	75	75	74	822107	808833	<0.2	<0.2	0.9	0.9	
						6.4	0.1	14	16.2	16.2	8.1	8.1	33.5	33.5	104.7	104.7	8.4	8.4	13.3	13.3	12	12	75	75	75	75	74	822107	808833	<0.2	<0.2	1.0	1.0	
IM10	Cloudy	Moderate	11:19	8.2	Surface	1.0	0.3	97	16.5	16.5	8.1	8.1	33.1	33.1	102.4	102.4	8.2	8.2	9.6	9.6	10	10	73	73	75	822266	809826	<0.2	<0.2	1.2	1.2			
						1.0	0.3	102	16.5	16.5	8.1	8.1	33.1	33.1	102.4	102.4	8.2	8.2	9.1	9.1	9	9	73	73	75	822266	809826	<0.2	<0.2	1.2	1.2			
					Middle	4.1	0.3	94	16.5	16.5	8.0	8.0	33.3	33.3	102.7	102.8	8.2	8.2	8.4	8.4	10	10	75	75	76	76	75	822266	809826	<0.2	<0.2	1.0	1.0	
						4.1	0.3	100	16.5	16.5	8.0	8.0	33.3	33.3	102.8	102.8	8.2	8.2	8.4	8.4	8	8	76	76	76	76	75	822266	809826	<0.2	<0.2	1.0	1.0	
					Bottom	7.2	0.2	88	16.5	16.5	8.0	8.0	33.5	33.5	105.2	105.2	8.4	8.4	8.4	8.4	8	8	76	76	77	77	75	822266	809826	<0.2	<0.2	1.0	1.0	
						7.2	0.2	95	16.5	16.5	8.0	8.0	33.5	33.5	105.2	105.2	8.4	8.4	8.4	8.4	8	8	77	77	77	77	75	822266	809826	<0.2	<0.2	1.0	1.0	
IM11	Cloudy	Moderate	11:30	8.5	Surface	1.0	0.3	87	16.5	16.5	8.1	8.1	33.1	33.1	101.7	101.7	8.1	8.1	9.7	9.7	10	10	73	73	75	821478	810536	<0.2	<0.2	1.1	1.1			
						1.0	0.3	94	16.5	16.5	8.1	8.1	33.1	33.1	101.7	101.7	8.1	8.1	9.7	9.7	10	10	73	73	75	821478	810536	<0.2	<0.2	1.1	1.1			
					Middle	4.3	0.4	94	16.5	16.5	8.0	8.0	33.1	33.1	101.4	101.4	8.1	8.1	9.5	9.5	8	8	75	75	75	75	75	821478	810536	<0.2	<0.2	1.0	1.0	
						4.3	0.4	97	16.5	16.5	8.0	8.0	33.1	33.1	101.4	101.4	8.1	8.1	9.4	9.4	9	9	75	75	75	75	75	821478	810536	<0.2	<0.2	1.0	1.0	
					Bottom	7.5	0.4	65	16.6	16.5	8.0	8.0	33.4	33.4	101.3	103.2	8.1	8.1	8.7	8.7	10	10	77	77	76	76	76	821478	810536	<0.2	<0.2	1.0	1.0	
						7.5	0.4	65	16.5	16.5	8.0	8.0	33.5	33.4	101.3	103.2	8.1	8.1	8.7	8.7	9	9	77	77	76	76	76	821478	810536	<0.2	<0.2	1.0	1.0	
IM12	Cloudy	Moderate	11:37	9.1	Surface	1.0	0.3	90	16.7	16.7	8.0	8.0	33.7	33.7	102.4	102.4	8.1	8.1	5.7	5.7	7	7	73	73	75	821137	811497	<0.2	<0.2	0.8	0.8			
						1.0	0.3	92	16.7	16.7	8.0	8.0	33.7	33.7	102.4	102.4	8.1	8.1	5.7	5.7	6	6	73	73	75	821137	811497	<0.2	<0.2	0.8	0.8			
					Middle	4.6	0.3	93	16.7	16.7	8.0	8.0	33.8	33.8	103.1	103.1	8.2	8.2	6.7	6.7	5	5	74	74	76	76	75	821137	811497	<0.2	<0.2	0.8	0.8	
						4.6	0.3	99	16.7	16.7	8.0	8.0	33.8	33.8	103.1	103.1	8.2	8.2	6.8	6.8	5	5	75	75	76	76	75	821137	811497	<0.2	<0.2	0.9	0.9	
					Bottom	8.1	0.3	109	16.7	16.7	8.0	8.0	33.8	33.8	104.3	104.3	8.3	8.3	8.3	8.3	7	7	76	76	76	76	76	821137	811497	<0.2	<0.2	0.8	0.8	
						8.1	0.3	115	16.7	16.7	8.0	8.0	33.8	33.8	104.3	104.3	8.3	8.3	8.3	8.3	6	6	76	76	76	76	76	821137	811497	<0.2	<0.2	0.8	0.8	
SR2	Cloudy	Moderate	12:05	4.4	Surface	1.0	0.3	85	16.7	16.7	8.0	8.0	33.5	33.5	104.8	104.8	8.3	8.3	6.2	6.2	7	7	73	73	74	821461	814182	<0.2	<0.2	0.9	0.9			
						1.0	0.3	87	16.7	16.7	8.0	8.0	33.5	33.5	104.8	104.8	8.3	8.3	6.2	6.2	8	8	73	73	74	821461	814182	<0.2	<0.2	0.8	0.8			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					Bottom	3.4	0.2	90	16.7	16.7	8.0	8.0	33.8	33.8	106.2	106.2	8.4	8.4	5.2	5.2	8	8	75	75	75	75	75	821461	814182	<0.2	<0.2	0.8	0.8	
						3.4	0.2	90	16.7	16.7	8.0	8.0	33.8	33.8	106.2	106.2	8.4	8.4	5.2	5.2	6	6	75	75	75	75	75	821461	814182	<0.2	<0.2	0.9	0.9	
SR3	Cloudy	Moderate	10:55	9.1	Surface	1.0	0.4	84	16.3	16.3	8.0	8.0	33.8	33.8	101.4	101.4	8.1	8.1	14.3	14.3	10	10	-	-	-	822123	807560	-	-	-	-			
						1.0	0.4	92	16.3	16.3	8.0	8.0	33.8	33.8	101.4	101.4	8.1	8.1	14.3	14.3	10	10	-	-	-	-	-	822123	807560	-	-	-	-	
					Middle	4.6	0.2	76	16.2	16.2	8.0	8.0	34.3	34.3	101.0	101.0	8.1	8.1	21.3	21.3	17	17	-	-	-	-	-	822123	807560	-	-	-	-	
						4.6	0.2	82	16.2	16.2	8.0	8.0	34.3	34.3	101.0	101.0	8.1	8.1	21.3	21.3	16	16	-	-	-	-	-	822123	807560	-	-	-	-	
					Bottom	8.1	0.2	61	16.1	16.1	8.0	8.0	34.5	34.5	102.4	102.4	8.2	8.2	22.3	22.3	15	15	-	-	-	-	-	822123	807560	-	-	-	-	
						8.1	0.2	65	16.1	16.1	8.0	8.0	34.5	34.5	102.4	102.4	8.2	8.2	22.3	22.3	15	15	-	-	-	-	-	822123	807560	-	-	-	-	
SR4A	Cloudy	Moderate	11:59	9.2	Surface	1.0	0.4	80	15.6	15.6	8.1	8.1	33.1	33.1	99.1	99.1	8.1	8.1	12.6	12.6	8	8	-	-	-	817170	807825	-	-	-	-			
						1.0	0.4	85	15.6	15.6	8.1	8.1	33.1	33.1	99.1	99.1	8.1	8.1	12.6	12.6	8	8	-	-	-	-	-	817170	807825	-	-	-	-	
					Middle	4.6	0.4	75	15.7	15.7	8.1	8.1	33.5	33.5	99.5	99.6	8.1	8.1	16.2	16.2	9	9	-	-	-	-	-	817170	807825	-	-	-	-	
						4.6	0.4	78	15.7	15.7	8.1	8.1	33.5	33.5	99.7	99.7	8.1	8.1	16.5	16.5	8	8	-	-	-	-	-	817170	807825	-	-	-	-	
					Bottom	8.2	0.3	70	15.7	15.7	8.0	8.0	33.6	33.6	101.5	101.6	8.2	8.2	19.5	19.5	11	11	-	-	-	-	-	817170	807825	-	-	-	-	
						8.2	0.4	74	15.7	15.7	8.0	8.0	33.6	33.6	101.6	101.6	8.2	8.2	19.5	19.5	10	10	-	-	-	-	-	817170	807825	-	-	-	-	
SR5A	Cloudy	Calm	12:15	5.0	Surface	1.0	0.1	28	16.0	16.0	8.1	8.1	31.9	31.9	100.3	100.3	8.2	8.2	7.8	7.8	9	9	-	-	-	816571	810701	-	-	-	-			
						1.0	0.1	30	16.0	16.0	8.1	8.1	31.9	31.9	100.3	100.3	8.2</																	

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

Water Quality Monitoring

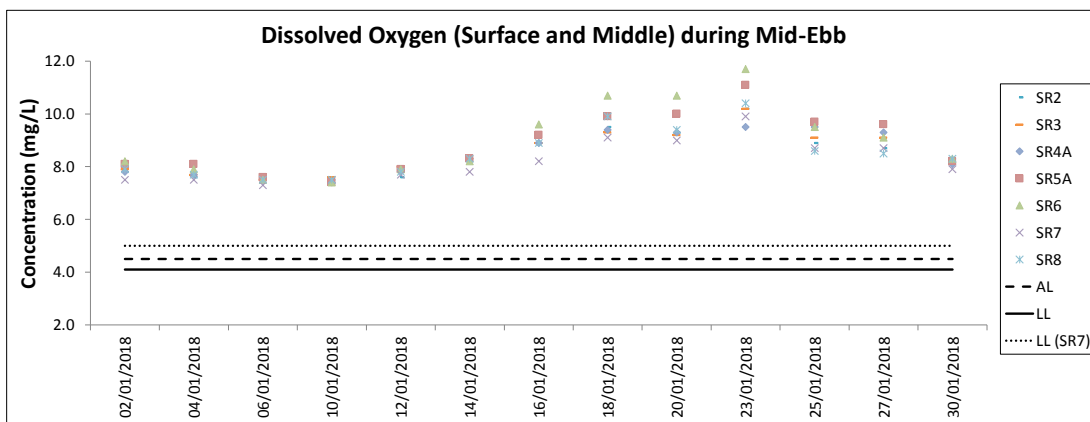
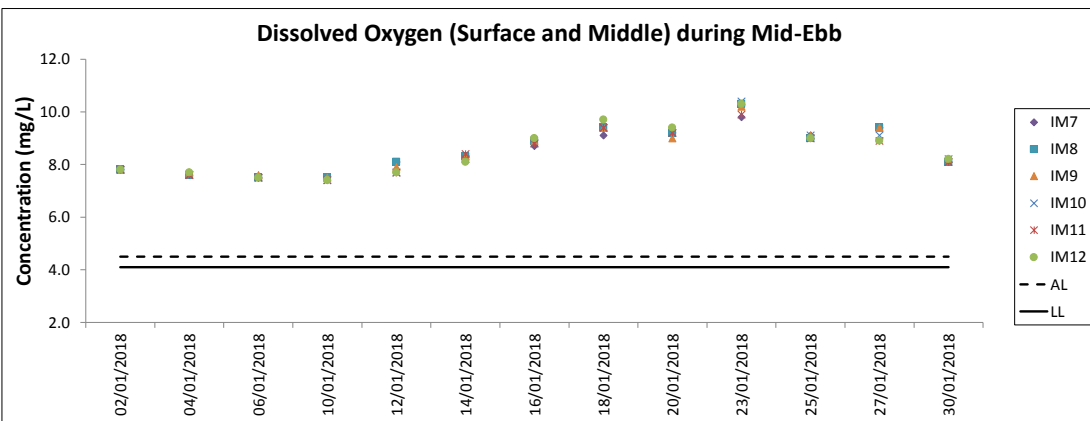
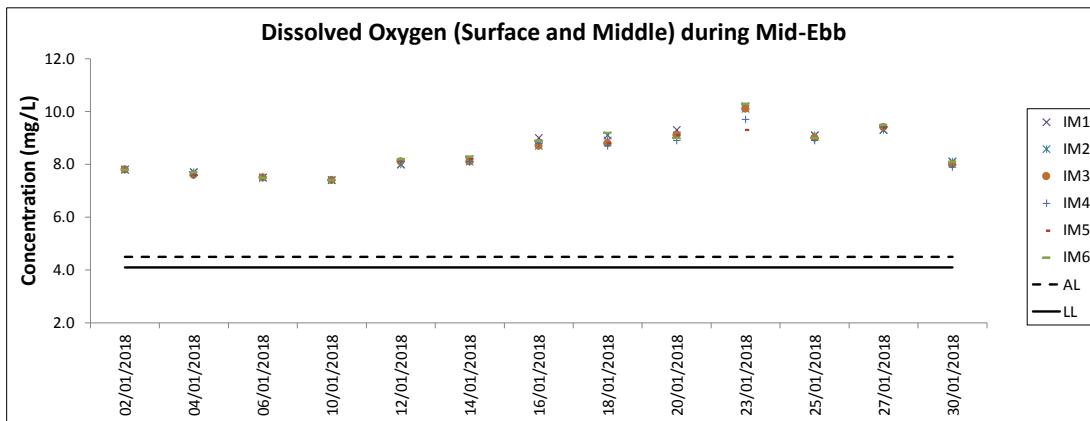
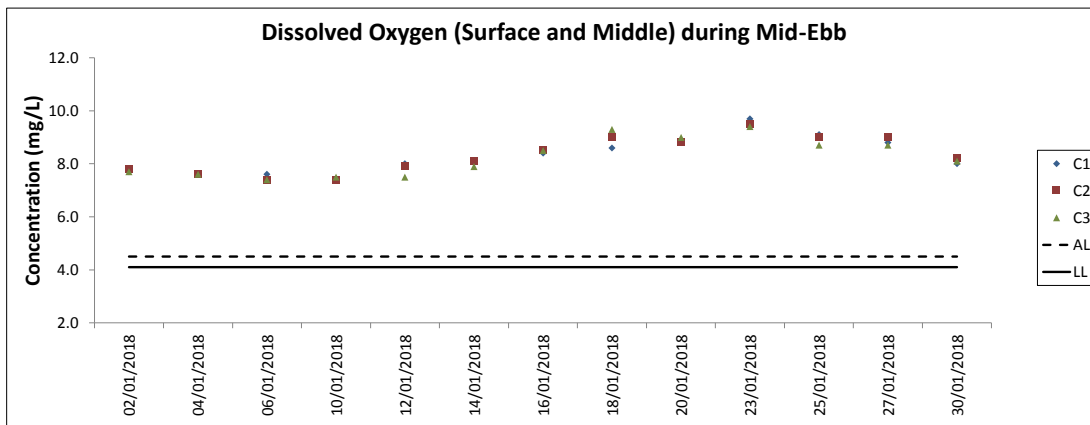
Water Quality Monitoring Results on 30 January 18 during Mid-Flood Tide

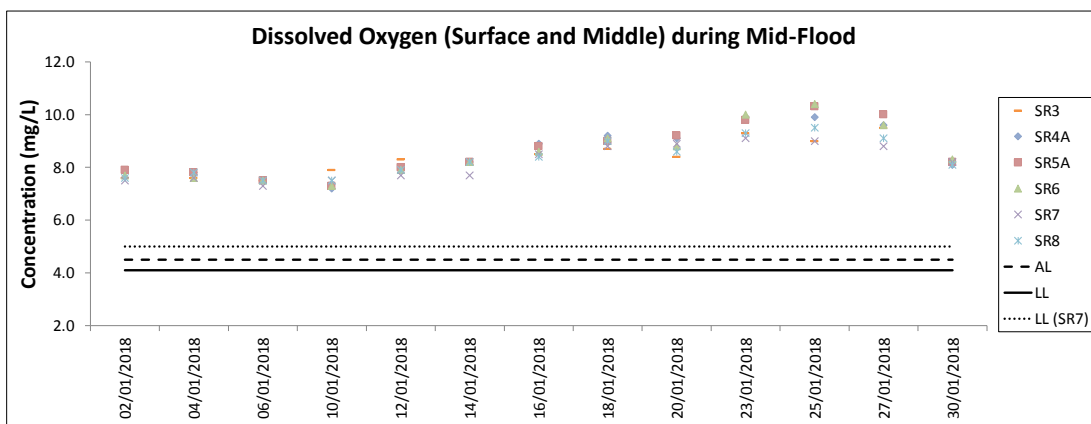
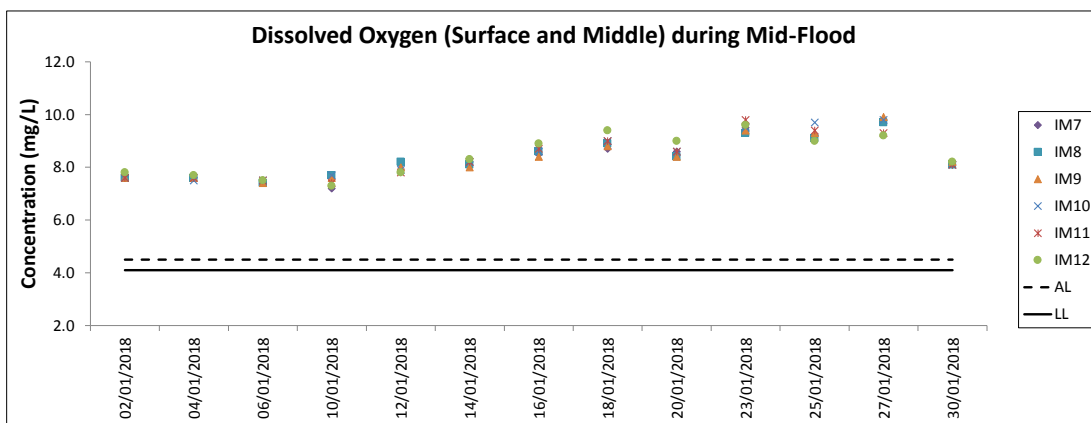
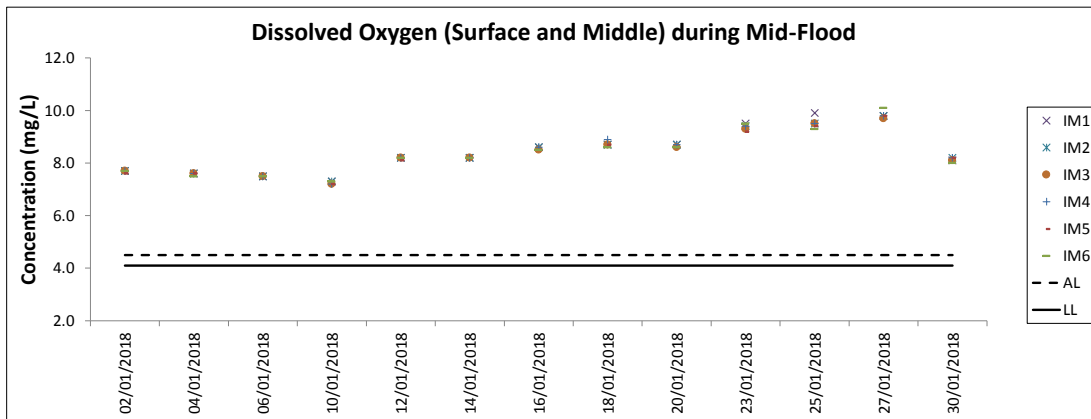
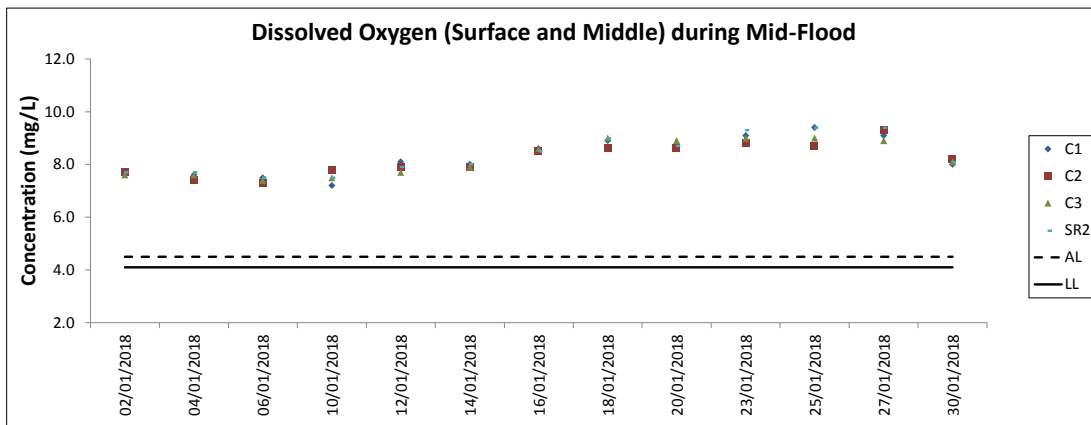
Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity (NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Rainy	Rough	06:40	7.9	Surface	1.0	0.4	49	15.9	15.9	8.1	8.1	33.4	33.4	99.6	99.6	8.0	8.0	11.4	8	72	74	815593	804260	<0.2	0.8	0.9			
						1.0	0.4	52	15.9	8.1	8.1	33.4	33.4	99.6	99.6	8.0	8.0	11.7	6	72	74	<0.2	0.9							
					Middle	4.0	0.4	38	16.0	16.0	8.1	8.1	33.5	33.5	99.4	99.4	8.0	8.0	14.1	11	73	74	<0.2	0.8						
						4.0	0.4	40	16.0	16.0	8.1	8.1	33.5	33.5	99.4	99.4	8.0	8.0	14.2	9	73	74	<0.2	0.8						
					Bottom	6.9	0.5	64	16.0	16.0	8.1	8.1	33.6	33.6	99.7	99.7	8.0	8.0	21.3	18	75	74	<0.2	0.9						
						6.9	0.5	65	16.0	16.0	8.1	8.1	33.6	33.6	99.9	99.8	8.0	8.0	21.6	17	76	74	<0.2	1.0						
C2	Rainy	Moderate	07:42	11.3	Surface	1.0	0.4	333	16.8	16.8	8.0	8.0	32.5	32.5	102.3	102.3	8.2	8.2	8.9	4	72	73	825681	806951	<0.2	1.3	1.3			
						1.0	0.5	353	16.8	16.8	8.0	8.0	32.5	32.5	102.3	102.3	8.2	8.2	9.0	5	72	73	<0.2	1.3						
					Middle	5.7	0.6	344	17.0	17.0	8.0	8.0	32.8	32.8	102.5	102.5	8.1	8.1	13.5	7	73	73	<0.2	1.2						
						5.7	0.6	347	17.0	17.0	8.0	8.0	32.8	32.8	102.5	102.5	8.1	8.1	13.5	7	73	73	<0.2	1.2						
					Bottom	10.3	0.4	350	17.0	17.0	7.9	7.9	33.1	33.1	102.8	102.8	8.1	8.1	25.0	8	74	73	<0.2	1.4						
						10.3	0.4	322	17.0	17.0	7.9	7.9	33.1	33.1	102.8	102.8	8.1	8.1	25.0	9	75	73	<0.2	1.3						
C3	Rainy	Moderate	05:44	10.7	Surface	1.0	0.3	258	16.9	16.9	8.0	8.0	34.2	34.2	102.3	102.3	8.1	8.1	6.2	5	73	75	822106	817779	<0.2	0.9	0.9			
						1.0	0.4	268	16.9	16.9	8.0	8.0	34.2	34.2	102.3	102.3	8.1	8.1	6.2	6	73	75	<0.2	0.8						
					Middle	5.4	0.4	260	16.9	16.9	8.0	8.0	34.2	34.2	101.5	101.5	8.0	8.0	8.7	5	75	75	<0.2	0.8						
						5.4	0.4	268	16.9	16.9	8.0	8.0	34.2	34.2	101.5	101.5	8.0	8.0	8.7	5	75	75	<0.2	0.9						
					Bottom	9.7	0.3	262	17.0	17.0	8.0	8.0	34.3	34.3	101.4	101.4	8.0	8.0	13.7	7	76	74	<0.2	1.0						
						9.7	0.3	285	17.0	17.0	8.0	8.0	34.3	34.3	101.4	101.4	8.0	8.0	13.7	6	76	74	<0.2	0.9						
IM1	Rainy	Rough	07:00	6.9	Surface	1.0	0.4	10	16.1	16.1	8.2	8.2	32.7	32.7	100.8	100.8	8.1	8.1	11.3	8	72	74	818367	806445	<0.2	1.0	1.1			
						1.0	0.5	10	16.1	16.1	8.2	8.2	32.7	32.7	100.8	100.8	8.1	8.1	11.8	8	72	74	<0.2	1.1						
					Middle	3.5	0.5	10	16.1	16.1	8.2	8.2	32.7	32.7	100.9	100.9	8.1	8.1	11.9	10	73	74	<0.2	1.1						
						3.5	0.5	10	16.1	16.1	8.2	8.2	32.7	32.7	100.9	100.9	8.1	8.1	11.9	10	73	74	<0.2	1.2						
					Bottom	5.9	0.4	6	16.1	16.1	8.2	8.2	32.7	32.7	100.8	100.6	8.1	8.1	14.1	12	75	74	<0.2	1.2						
						5.9	0.4	6	16.1	16.1	8.2	8.2	32.7	32.7	100.3	100.6	8.1	8.1	14.7	13	76	74	<0.2	1.2						
IM2	Rainy	Rough	07:09	8.3	Surface	1.0	0.4	20	16.2	16.2	8.2	8.2	32.5	32.5	101.1	101.1	8.2	8.2	10.2	10	71	73	818823	806181	<0.2	1.1	1.2			
						1.0	0.4	21	16.2	16.2	8.2	8.2	32.5	32.5	101.1	101.1	8.2	8.2	10.5	10	72	73	<0.2	1.1						
					Middle	4.2	0.4	26	16.2	16.2	8.1	8.1	32.6	32.6	101.2	101.2	8.2	8.2	13.8	12	73	73	<0.2	1.2						
						4.2	0.4	27	16.2	16.2	8.1	8.1	32.6	32.6	101.2	101.2	8.2	8.2	13.8	11	73	73	<0.2	1.2						
					Bottom	7.3	0.3	30	16.1	16.1	8.1	8.1	32.6	32.6	102.0	102.2	8.2	8.3	18.4	15	75	73	<0.2	1.1						
						7.3	0.3	31	16.1	16.1	8.1	8.1	32.6	32.6	102.3	102.3	8.3	8.3	18.5	17	75	73	<0.2	1.2						
IM3	Rainy	Moderate	07:18	7.8	Surface	1.0	0.4	24	16.0	16.0	8.1	8.1	32.8	32.8	99.3	99.4	8.0	8.0	8.3	7	72	74	819404	806012	<0.2	1.0	1.0			
						1.0	0.4	24	16.0	16.0	8.1	8.1	32.8	32.8	99.4	99.4	8.0	8.0	8.5	7	72	74	<0.2	1.0						
					Middle	3.9	0.4	23	16.0	16.0	8.1	8.1	32.8	32.8	99.6	99.7	8.1	8.1	8.8	7	73	74	<0.2	1.0						
						3.9	0.4	24	16.0	16.0	8.1	8.1	32.8	32.8	99.7	99.7	8.1	8.1	8.7	9	73	74	<0.2	1.0						
					Bottom	6.8	0.3	22	16.1	16.1	8.1	8.1	33.0	33.0	100.5	100.5	8.1	8.1	9.0	11	76	74	<0.2	0.9						
						6.8	0.3	22	16.1	16.1	8.1	8.1	33.0	33.0	100.5	100.5	8.1	8.1	9.0	11	77	74	<0.2	0.9						
IM4	Rainy	Moderate	07:26	7.5	Surface	1.0	0.4	7	16.2	16.2	8.2	8.1	32.2	32.2	101.3	101.3	8.2	8.1	8.1	8	72	73	819567	805062	<0.2	1.4	1.3			
						1.0	0.5	7	16.2	16.2	8.1	8.1	32.2	32.2	101.3	101.3	8.2	8.2	8.1	7	72	73	<0.2	1.3						
					Middle	3.8	0.4	357	16.2	16.2	8.1	8.1	32.2	32.2	101.0	101.0	8.2	8.2	8.9	9	73	73	<0.2	1.4						
						3.8	0.4	328	16.2	16.2	8.1	8.1	32.1	32.1	100.9	101.0	8.2	8.2	8.6	8	73	73	<0.2	1.3						
					Bottom	6.5	0.5	11	16.3	16.3	8.1	8.1	32.4	32.4	100.9	100.9	8.1	8.1	13.1	15	75	73	<0.2	1.2						
						6.5	0.5	11	16.3	16.3	8.1	8.1	32.3	32.4	100.9	100.9	8.1	8.1	13.5	13	75	73	<0.2	1.3						
IM5	Rainy	Rough	07:34	6.5	Surface	1.0	0.6	15	16.3	16.3	8.1	8.1	32.2	32.2	101.2	101.2	8.2	8.2	13.0	11	72	74	820578	804918	<0.2	1.3	1.3			
						1.0	0.6	15	16.3	16.3	8.1	8.1	32.2	32.2	101.1	101.2	8.2	8.2	13.7	12	72	73	<0.2	1.3						
					Middle	3.3	0.4	6	16.4	16.4	8.1	8.1	32.3	32.3	101.2	101.2	8.2	8.2	13.4	10	73	74	<0.2	1.3						
						3.3	0.5	6	16.4	16.4	8.1	8.1	32.3	32.3	101.2	101.2	8.2	8.2	14.6	12	73	74	<0.2	1.3						
					Bottom	5.5	0.5	12	16.3	16.3	8.1	8.0	32.2	32.2	101.3	101.4	8.2	8.2	14.6	13	75	74	<0.2	1.3						
						5.5	0.5	12	16.4	16.3	8.0	8.0	32.3	32.2	101.5	101.4	8.2	8.2	14.3	12	76	74	<0.2	1.4						
IM6	Rainy	Moderate	07:45	6.7	Surface	1.0	0.2	15	15.9	15.9	8.1	8.1	32.9	32.9	98.6	98.6	8.0	8.0	12.1	11	71	73	821088	805821	<0.2	1.0	1.1			
						1.0	0.3	15	15.9	15.9	8.1	8.1	32.9	32.9	98.6	98.6	8.0	8.0	12.2	10	72	73	<0.2	1.1						
					Middle	3.4	0.3	353	16.0	16.0	8.1	8.1	32.9	32.9	98.6	98.6	8.0	8.0	15.3	13	73	73	<0.2	1.1						
						3.4	0.3	325	16.0	16.0	8.1	8.1	32.9	32.9	98.6	98.6	8.0	8.0	15.6	12	73	73	<0.2	1.1						
					Bottom	5.7	0.3	4	16.0	16.0	8.1	8.0	32.9	32.9	99.0	99.0	8.0	8.0	19.0	13	75	73	<0.2	1.0						
						5.7	0.3	4	16.0	16.0	8.0	8.0	32.9	32.9	99.0	99.0	8.0	8.0	19.3	11	75	73	<0.2	1.0						
IM7	Rainy	Moderate	07:53	7.9	Surface	1.0	0.2	44	16.3	16.3	8.1	8.1	32.1	32.1	100.5	100.5	8.1	8.1	9.7	10	72	74	821350	806829	<0.2	1.3	1.3			
						1.0	0.2	47	16.3	16.3	8.1	8.1	32.1	32.1	100.5	100.5	8.1	8.1	9.8	9	72	74	<0.2	1.2						
					Middle	4.0	0.3	12	16.1	16.1	8.1	8.1	32.7	32.7	99.6															

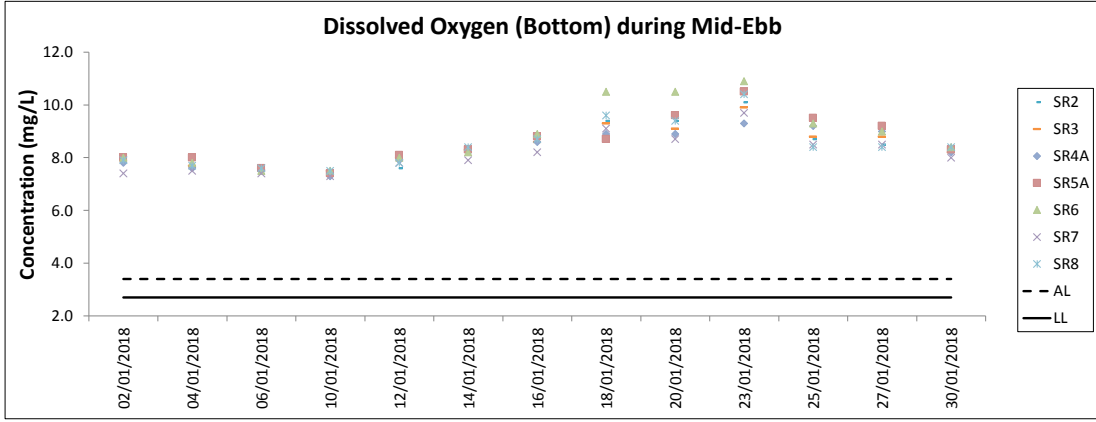
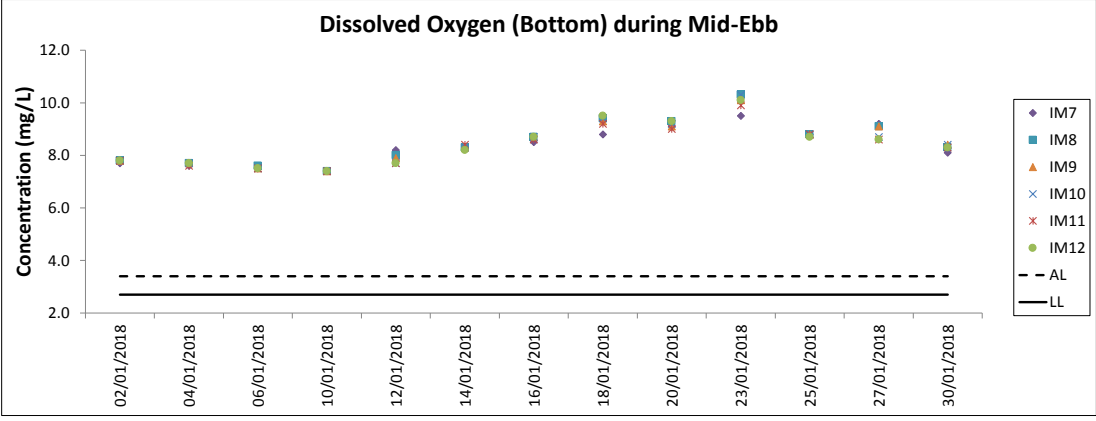
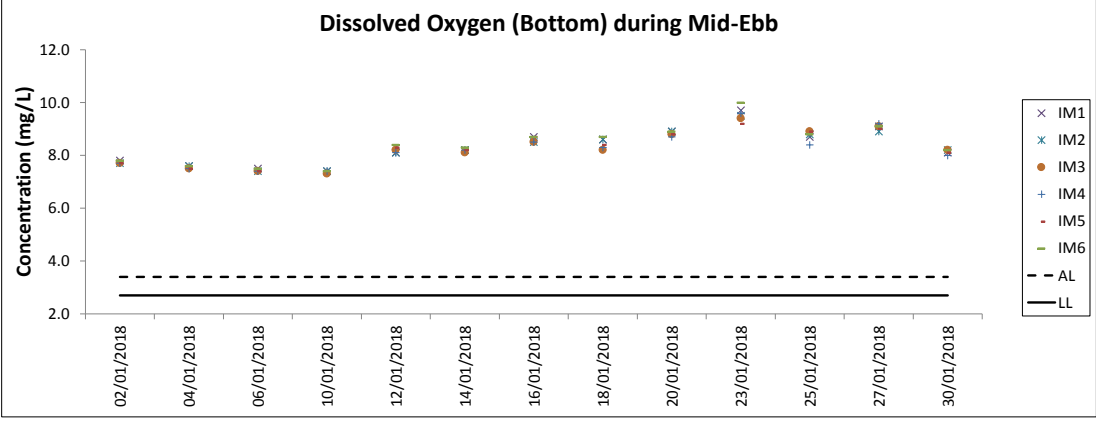
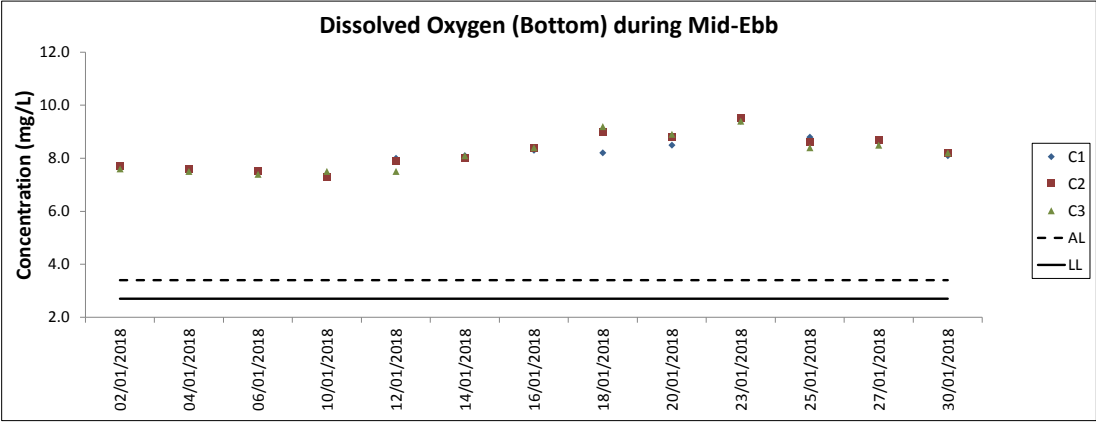
Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring

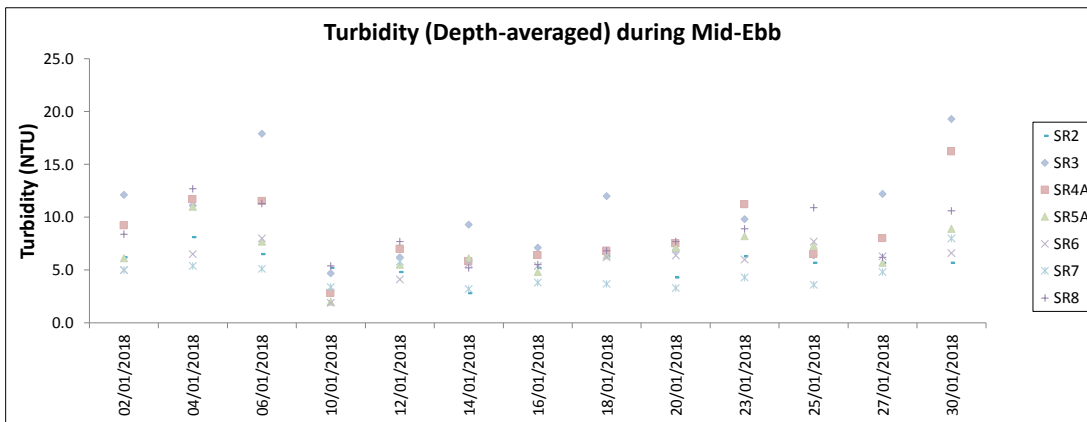
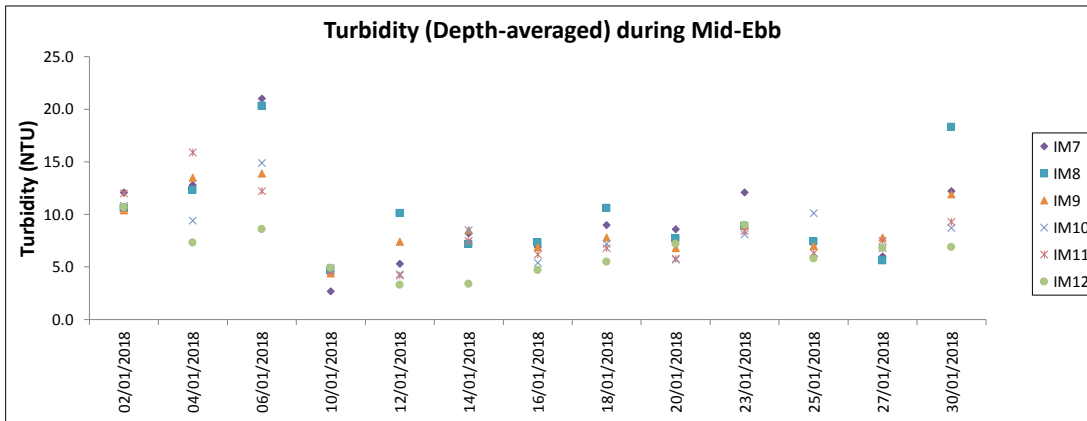
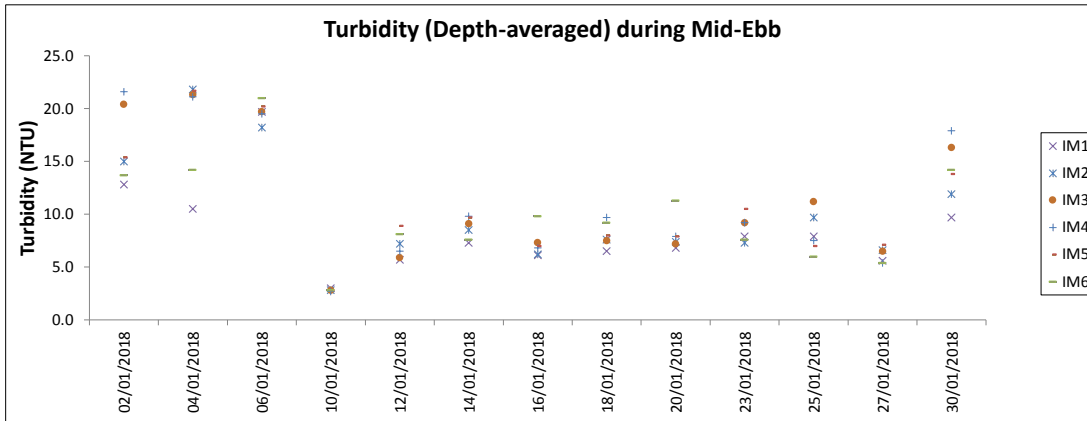
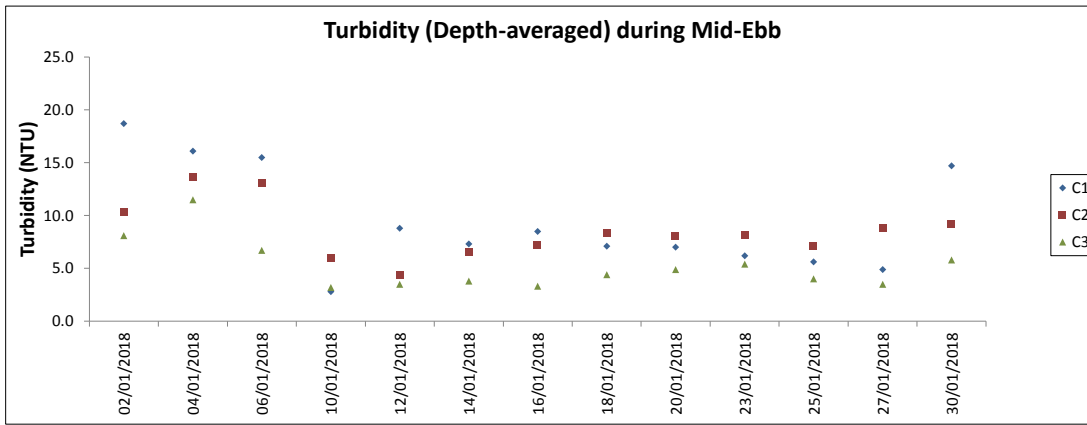
Water Quality Monitoring Results on 30 January 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity (NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)											
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA										
IM9	Rainy	Moderate	07:04	6.9	Surface	1.0	0.2	357	16.8	16.8	8.0	8.0	32.9	32.9	102.4	102.4	8.2	8.2	9.0	9.0	7	7	72	72	74	822106	808820	<0.2	<0.2	1.2	1.2									
						1.0	0.2	328	16.8	8.0	8.0	32.9	32.9	102.4	102.4	8.2	8.2	9.0	9.0	8	8	74	74	9	9	73	73	74	822106	808820	<0.2	<0.2	1.2	1.2						
						3.5	0.2	348	16.8	16.8	8.0	8.0	32.9	32.9	102.1	102.1	8.1	8.1	9.0	9.0	9	9	74	74	9	9	74	74	74	822106	808820	<0.2	<0.2	1.3	1.3					
					Middle	3.5	0.2	356	16.8	16.8	8.0	8.0	32.9	32.9	102.1	102.1	8.1	8.1	9.7	9.7	10	10	75	75	9	9	74	74	74	822106	808820	<0.2	<0.2	1.3	1.3					
						5.9	0.3	333	16.8	16.8	8.0	8.0	32.9	32.9	102.0	102.0	8.1	8.1	9.7	9.7	9	9	75	75	9	9	74	74	74	822106	808820	<0.2	<0.2	1.3	1.3					
						5.9	0.3	336	16.8	16.8	8.0	8.0	32.9	32.9	102.0	102.0	8.1	8.1	9.7	9.7	9	9	74	74	9	9	74	74	74	822106	808820	<0.2	<0.2	1.3	1.3					
					IM10	Rainy	Moderate	06:56	7.2	Surface	1.0	0.5	306	16.8	16.8	8.0	8.0	33.4	33.4	101.7	101.7	8.1	8.1	16.3	16.3	14	14	73	73	74	822240	809844	<0.2	<0.2	1.0	1.0				
											1.0	0.5	317	16.8	16.8	8.0	8.0	33.4	33.4	101.7	101.7	8.1	8.1	16.3	16.3	15	15	73	73	14	14	74	74	74	822240	809844	<0.2	<0.2	1.0	1.0
											3.6	0.5	306	16.8	16.8	8.0	8.0	33.4	33.4	101.8	101.8	8.1	8.1	19.1	19.1	14	14	74	74	14	14	74	74	74	822240	809844	<0.2	<0.2	1.0	1.0
Middle	3.6	0.5	329	16.8						16.8	8.0	8.0	33.4	33.4	101.8	101.8	8.1	8.1	19.1	19.1	15	15	74	74	15	15	74	74	74	822240	809844	<0.2	<0.2	1.0	1.0					
	6.2	0.3	319	16.8						16.8	8.0	8.0	33.4	33.4	101.8	101.8	8.1	8.1	20.2	20.2	29	29	75	75	20	20	75	75	74	822240	809844	<0.2	<0.2	1.2	1.2					
	6.2	0.4	322	16.8						16.8	8.0	8.0	33.4	33.4	101.8	101.8	8.1	8.1	20.2	20.2	28	28	75	75	20	20	75	75	74	822240	809844	<0.2	<0.2	1.1	1.1					
IM11	Rainy	Moderate	06:43	7.2						Surface	1.0	0.5	288	16.6	16.6	8.0	8.0	33.3	33.3	101.7	101.7	8.1	8.1	11.6	11.6	8	8	73	73	75	821485	810550	<0.2	<0.2	1.0	1.0				
											1.0	0.5	309	16.6	16.6	8.0	8.0	33.3	33.3	101.7	101.7	8.1	8.1	11.6	11.6	10	10	73	73	8	8	75	75	74	821485	810550	<0.2	<0.2	1.0	1.0
											3.6	0.4	295	16.6	16.6	8.0	8.0	33.3	33.3	101.5	101.5	8.1	8.1	14.1	14.1	8	8	75	75	8	8	76	76	74	821485	810550	<0.2	<0.2	1.0	1.0
					Middle	3.6	0.4	301	16.6	16.6	8.0	8.0	33.3	33.3	101.5	101.5	8.1	8.1	14.1	14.1	8	8	76	76	8	8	75	75	74	821485	810550	<0.2	<0.2	1.0	1.0					
						6.2	0.3	298	16.7	16.7	8.0	8.0	33.3	33.3	101.5	101.5	8.1	8.1	24.2	24.2	19	19	75	75	19	19	75	75	74	821485	810550	<0.2	<0.2	1.1	1.1					
						6.2	0.3	321	16.7	16.7	8.0	8.0	33.3	33.3	101.5	101.5	8.1	8.1	24.2	24.2	19	19	76	76	19	19	76	76	74	821485	810550	<0.2	<0.2	1.0	1.0					
					IM12	Cloudy	Moderate	06:35	7.7	Surface	1.0	0.6	272	16.6	16.6	8.0	8.0	33.1	33.1	102.2	102.2	8.2	8.2	6.7	6.7	6	6	73	73	74	821147	811543	<0.2	<0.2	1.2	1.2				
											1.0	0.6	298	16.6	16.6	8.0	8.0	33.1	33.1	102.2	102.2	8.2	8.2	6.7	6.7	5	5	73	73	6	6	75	75	74	821147	811543	<0.2	<0.2	1.1	1.1
											3.9	0.5	284	16.7	16.7	8.0	8.0	33.4	33.4	101.8	101.8	8.1	8.1	9.3	9.3	8	8	75	75	7	7	75	75	74	821147	811543	<0.2	<0.2	1.2	1.2
Middle	3.9	0.5	289	16.7						16.7	8.0	8.0	33.4	33.4	101.8	101.8	8.1	8.1	9.3	9.3	7	7	75	75	7	7	75	75	74	821147	811543	<0.2	<0.2	1.2	1.2					
	6.7	0.4	277	16.6						16.6	8.0	8.0	33.4	33.4	101.3	101.3	8.1	8.1	12.1	12.1	10	10	75	75	10	10	75	75	74	821147	811543	<0.2	<0.2	1.1	1.1					
	6.7	0.4	302	16.6						16.6	8.0	8.0	33.4	33.4	101.3	101.3	8.1	8.1	12.1	12.1	12	12	75	75	12	12	75	75	74	821147	811543	<0.2	<0.2	1.1	1.1					
SR2	Cloudy	Moderate	06:06	4.5						Surface	1.0	0.4	339	16.5	16.5	8.0	8.0	34.0	34.0	101.3	101.3	8.1	8.1	15.0	15.0	12	12	73	73	74	821441	814152	<0.2	<0.2	1.0	1.0				
											1.0	0.4	312	16.5	16.5	8.0	8.0	34.0	34.0	101.3	101.3	8.1	8.1	15.0	15.0	12	12	73	73	12	12	73	73	74	821441	814152	<0.2	<0.2	1.0	1.0
											-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
						3.5	0.3	340	16.5	16.5	8.0	8.0	34.0	34.0	101.2	101.2	8.1	8.1	15.6	15.6	14	14	75	75	14	14	75	75	74	821441	814152	<0.2	<0.2	1.0	1.0					
					Bottom	3.5	0.3	359	16.5	16.5	8.0	8.0	34.0	34.0	101.2	101.2	8.1	8.1	15.5	15.5	13	13	75	75	13	13	75	75	74	821441	814152	<0.2	<0.2	1.1	1.1					
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
SR3	Rainy	Moderate	07:21	8.6	Surface	1.0	0.2	26	16.8	16.8	8.0	8.0	32.7	32.7	102.3	102.3	8.1	8.1	8.8	8.8	8	8	-	-	-	-	-	-	-	-	-									
						1.0	0.2	26	16.8	16.8	8.0	8.0	32.7	32.7	102.3	102.3	8.1	8.1	8.8	8.8	9	9	-	-	-	-	-	-	-	-	-	-	-							
						4.3	0.3	19	16.9	16.9	8.0	8.0	32.8	32.8	102.5	102.5	8.2	8.2	9.0	9.0	8	8	-	-	-	-	-	-	-	-	-	-	-							
					Middle	4.3	0.3	19	16.9	16.9	8.0	8.0	32.8	32.8	102.5	102.5	8.2	8.2	9.0	9.0	7	7	-	-	-	-	-	-	-	-	-	-	-	-						
						7.6	0.3	38	16.9	16.9	8.0	8.0	32.9	32.9	102.6	102.6	8.2	8.2	10.2	10.2	9	9	-	-	-	-	-	-	-	-	-	-	-	-						
						7.6	0.3	41	16.9	16.9	8.0	8.0	32.9	32.9	102.6	102.6	8.2	8.2	10.2	10.2	10	10	-	-	-	-	-	-	-	-	-	-	-							
					SR4A	Rainy	Calm	06:16	8.7	Surface	1.0	0.3	245	16.3	16.3	8.2	8.2	31.9	31.9	100.1	100.1	8.1	8.1	10.5	10.5	9	9	-	-	-	-	-	-	-	-					
											1.0	0.3	250	16.3	16.3	8.2	8.2	31.9	31.9	100.1	100.1	8.1	8.1	10.6	10.6	9	9	-	-	-	-	-	-	-	-	-				
											4.4	0.2	255	16.3	16.3	8.2	8.2	31.9	31.9	99.9	99.9	8.1	8.1	11.8	11.8	10	10	-	-	-	-	-	-	-	-	-				
Middle	4.4	0.2	261	16.3						16.3	8.2	8.2	31.9	31.9	100.0	100.0	8.1	8.1	11.5	11.5	10	10	-	-	-	-	-	-	-	-	-	-								
	7.7	0.2	266	16.3						16.3	8.2																													

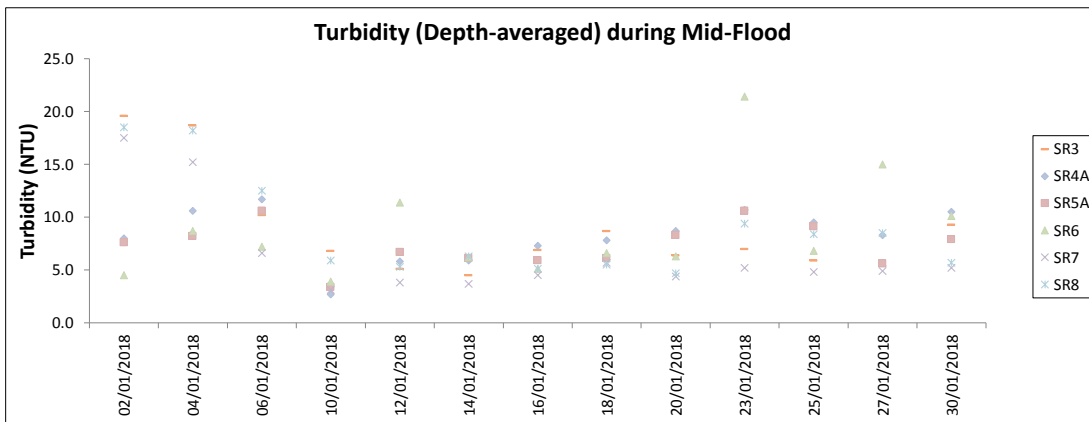
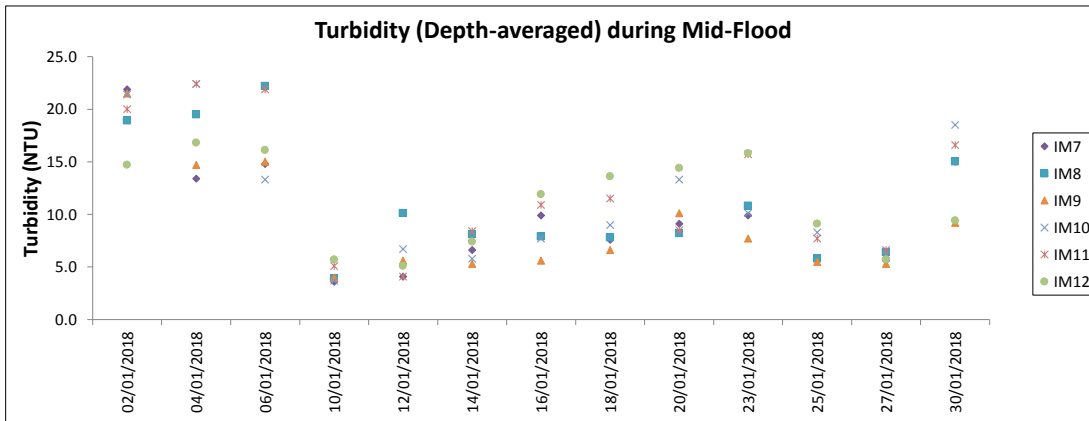
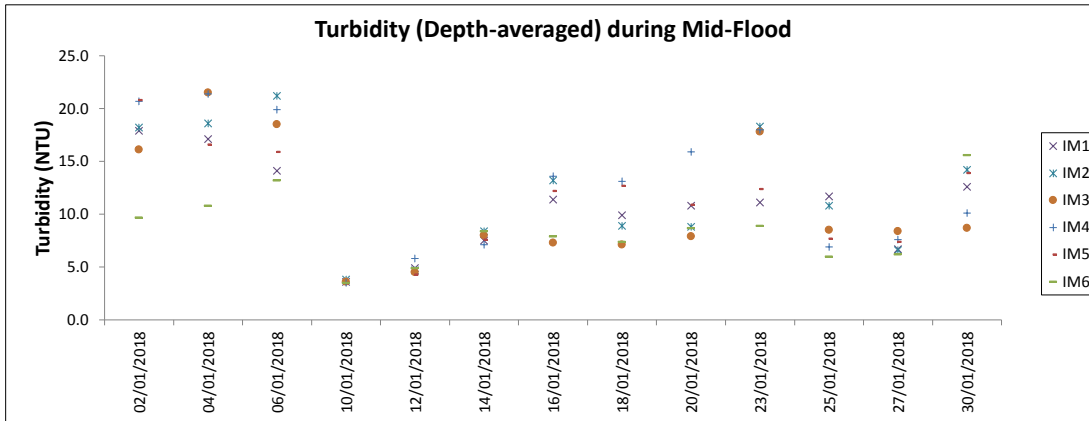
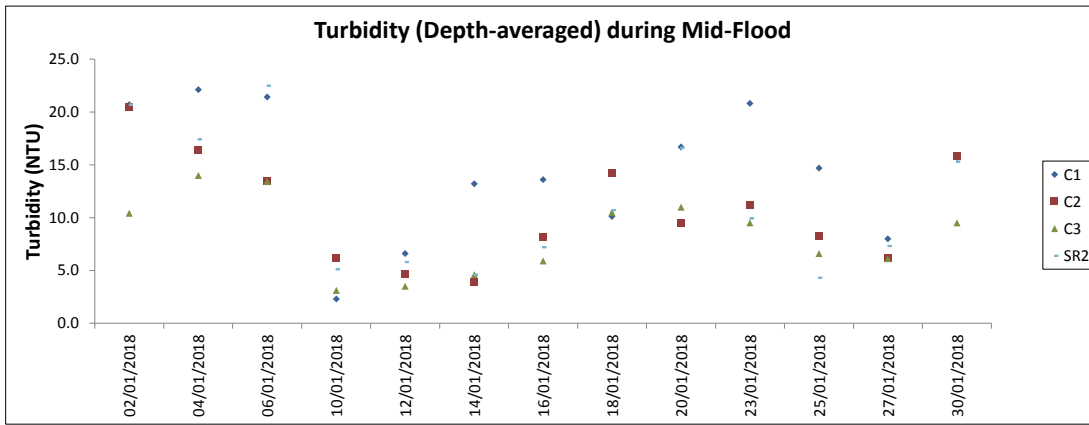




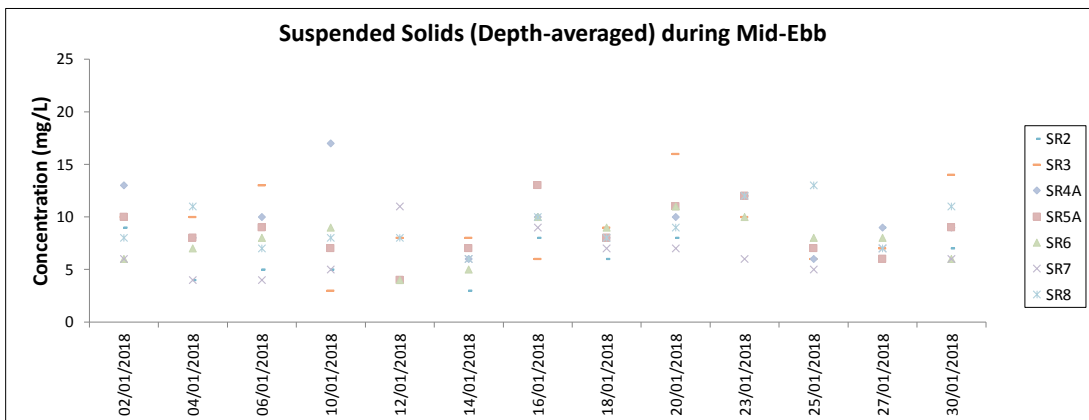
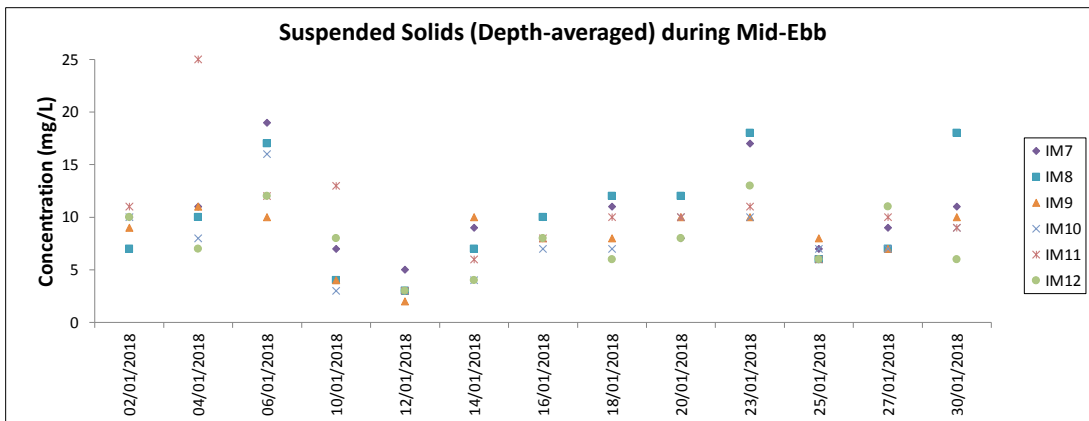
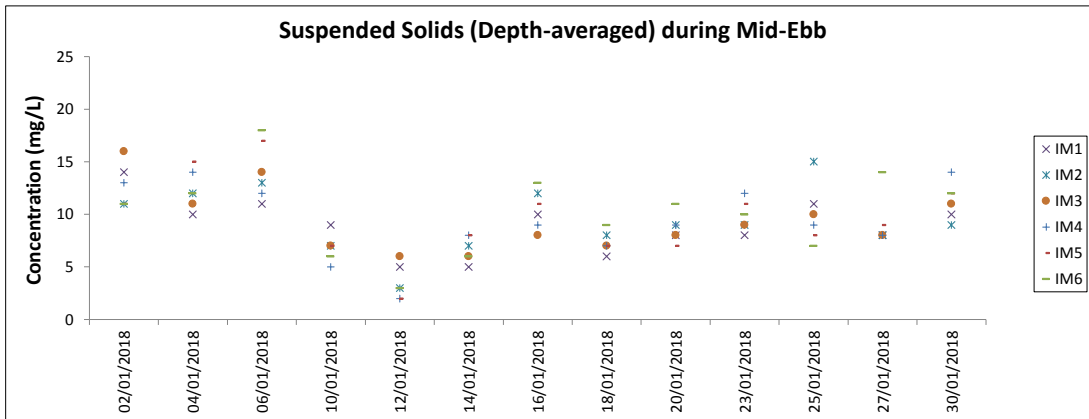
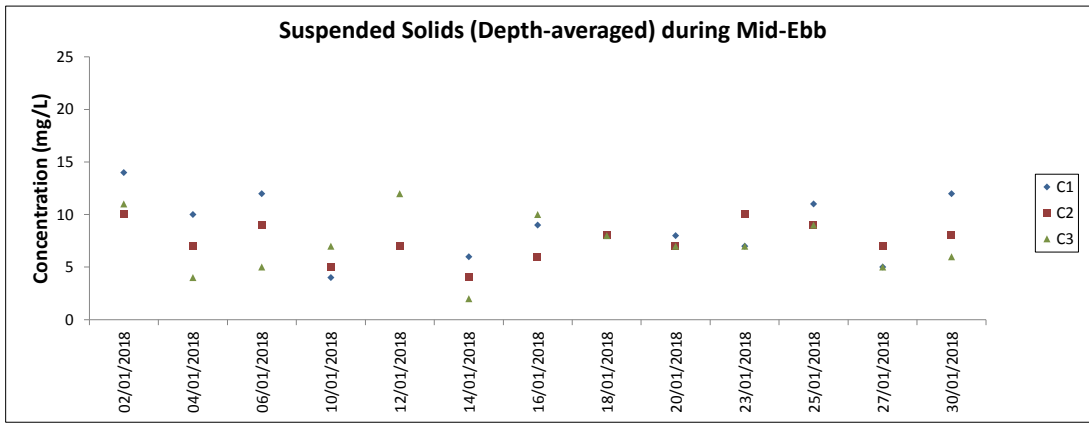




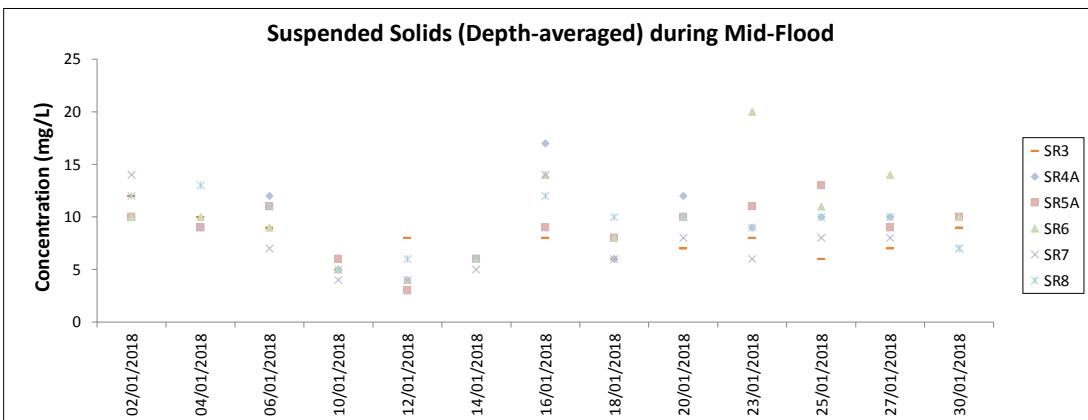
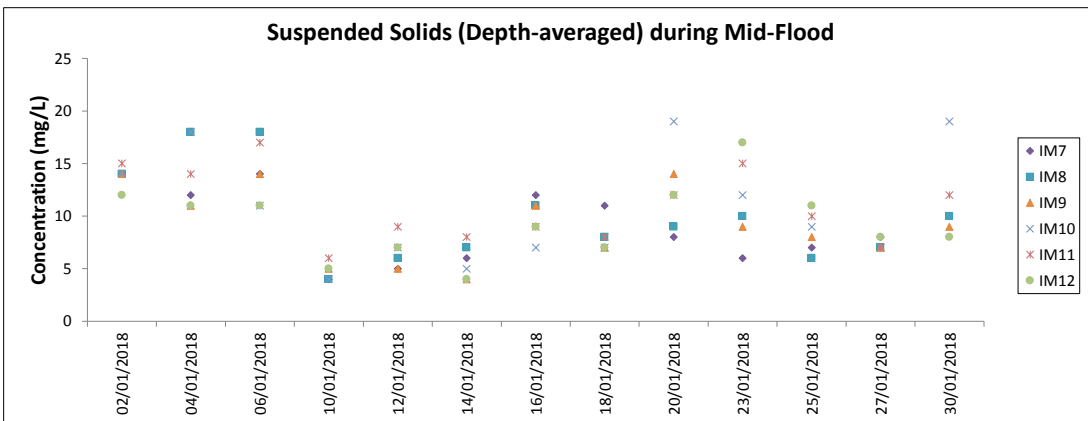
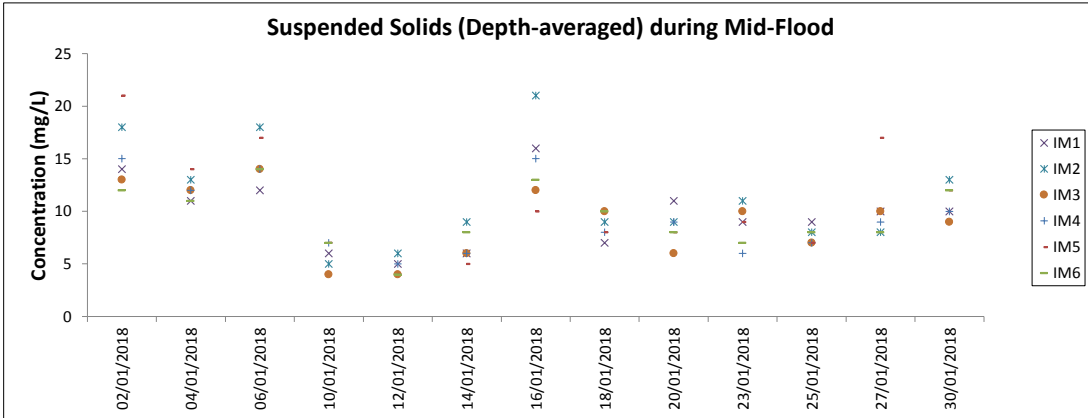
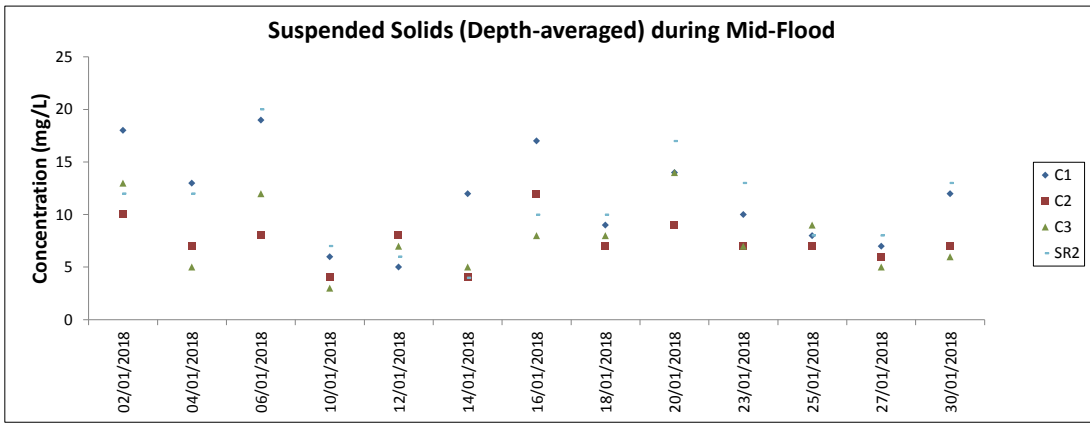
Note: The Action and Limit Level of turbidity can be referred to Table 4.2 of the monthly EM&A report.



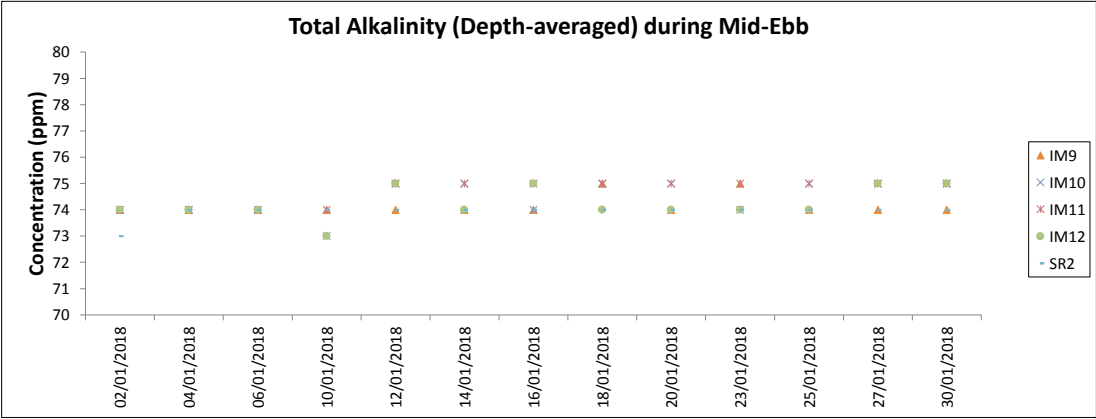
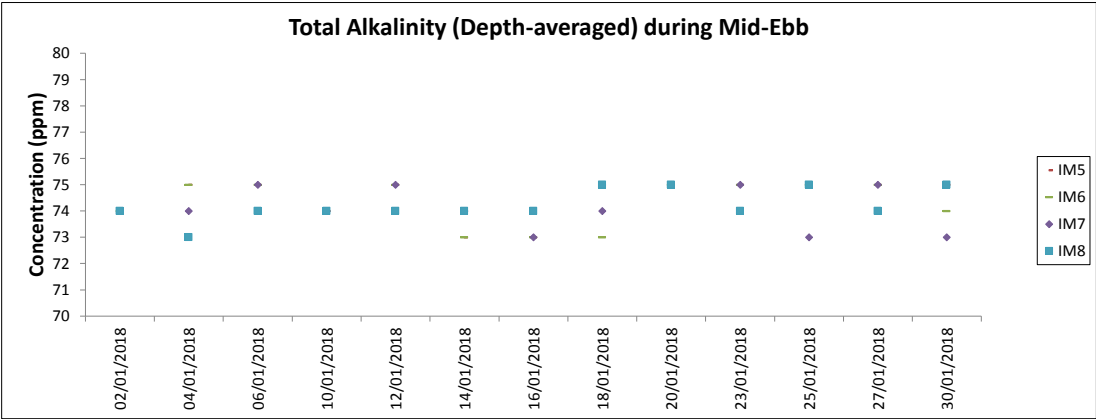
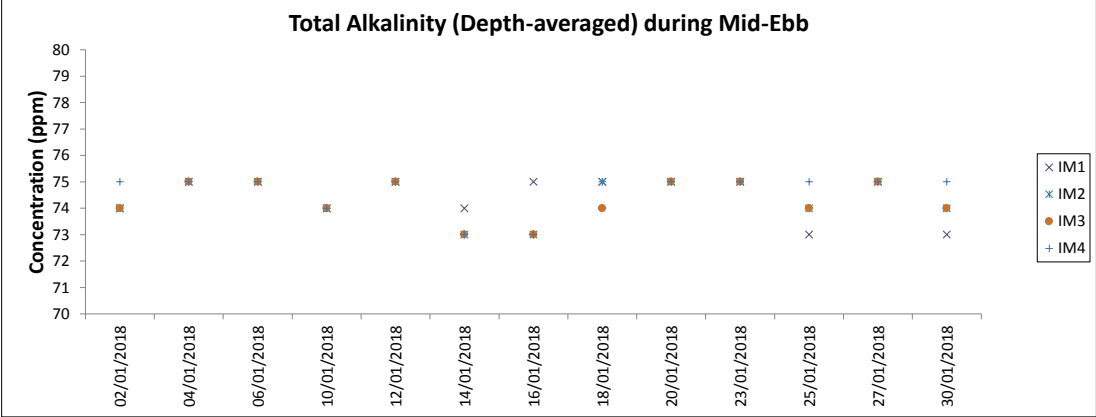
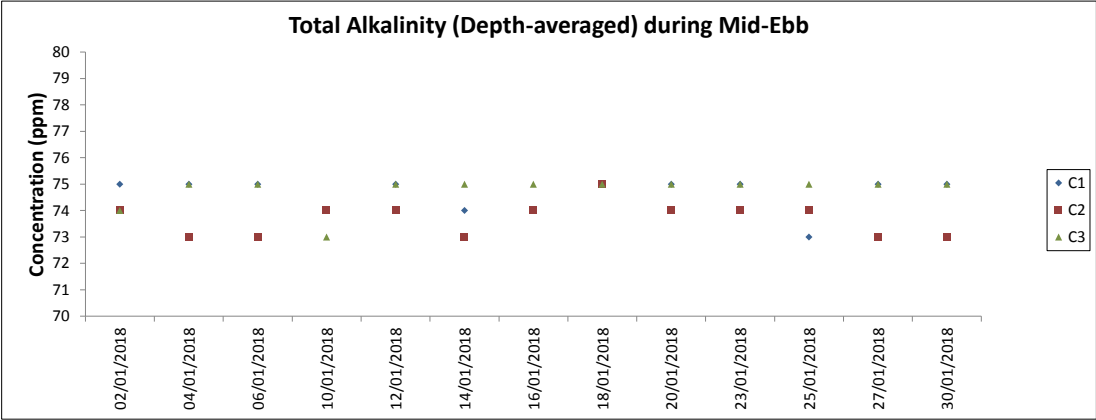
Note: The Action and Limit Level of turbidity can be referred to Table 4.2 of the monthly EM&A report.



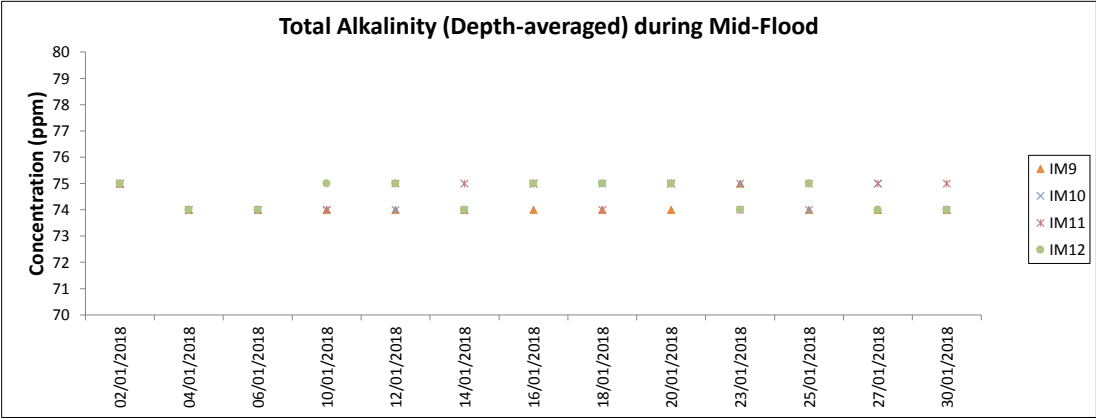
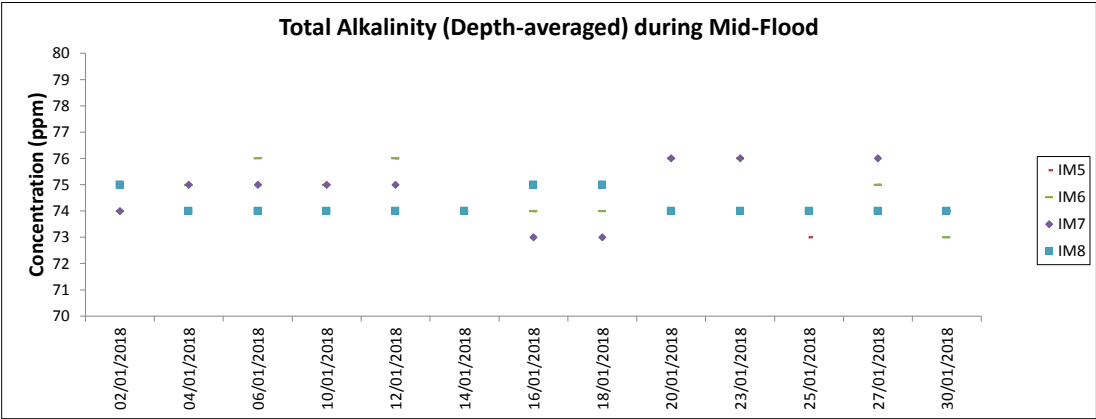
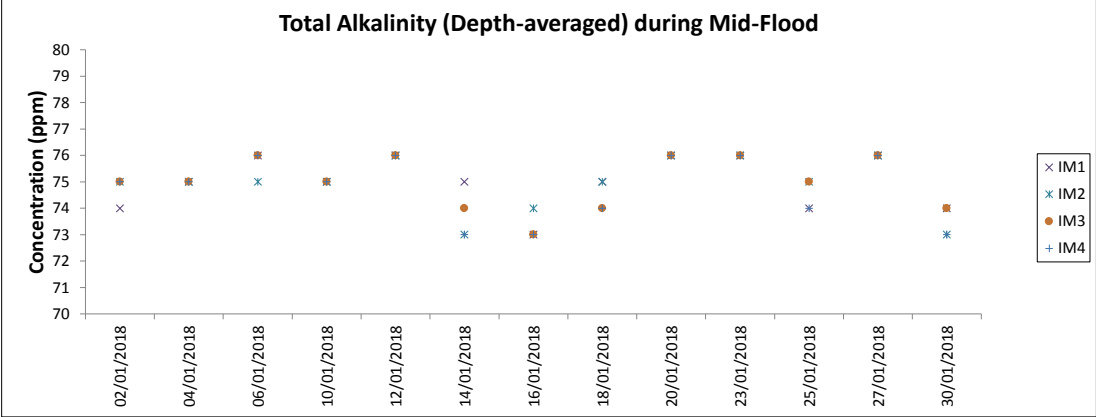
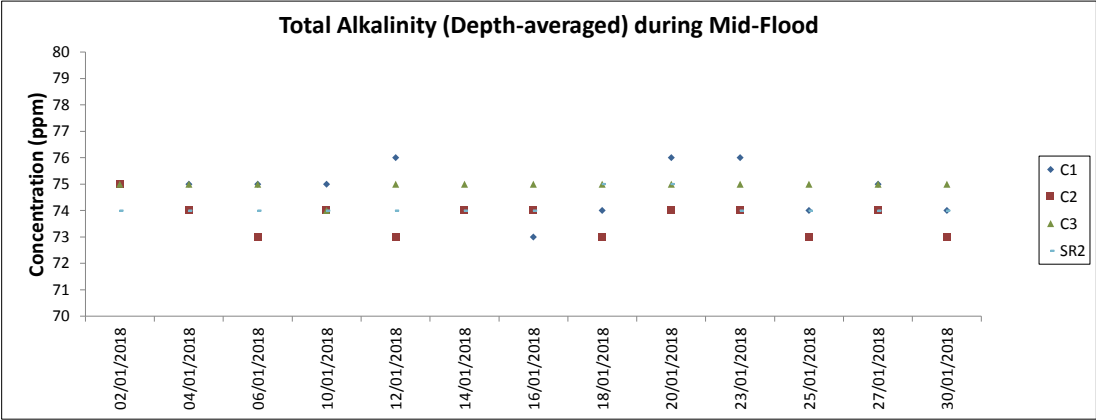
Note: The Action and Limit Level of suspended solids can be referred to Table 4.2 of the monthly EM&A report.



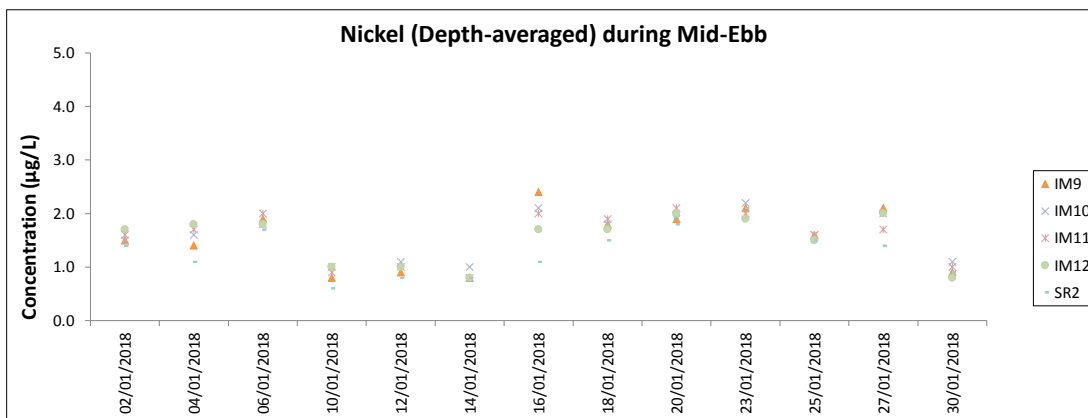
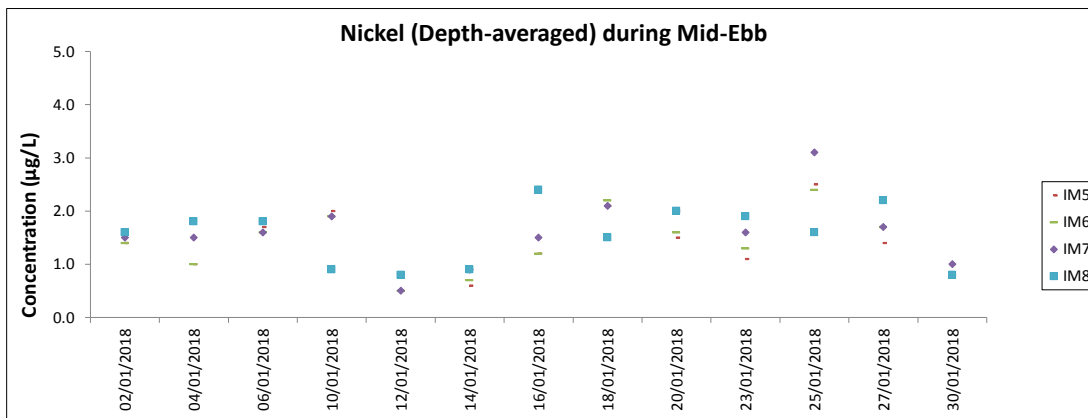
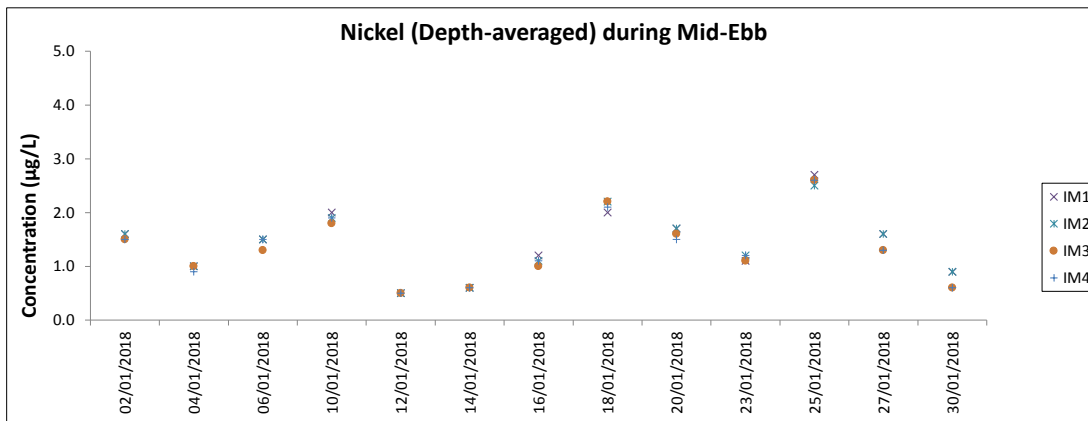
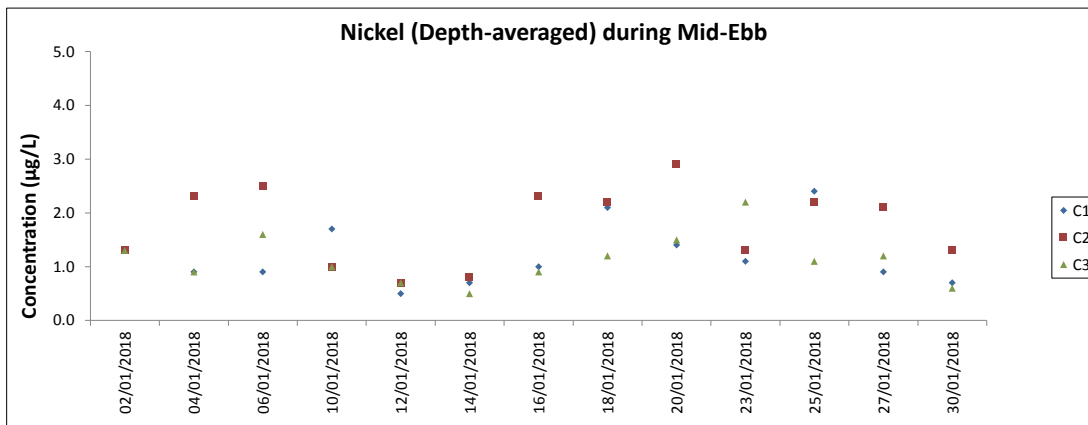
Note: The Action and Limit Level of suspended solids can be referred to Table 4.2 of the monthly EM&A report.



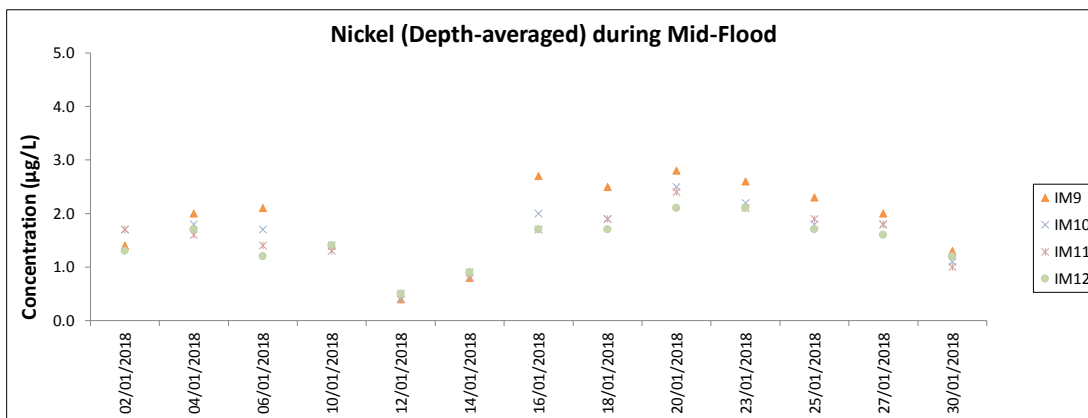
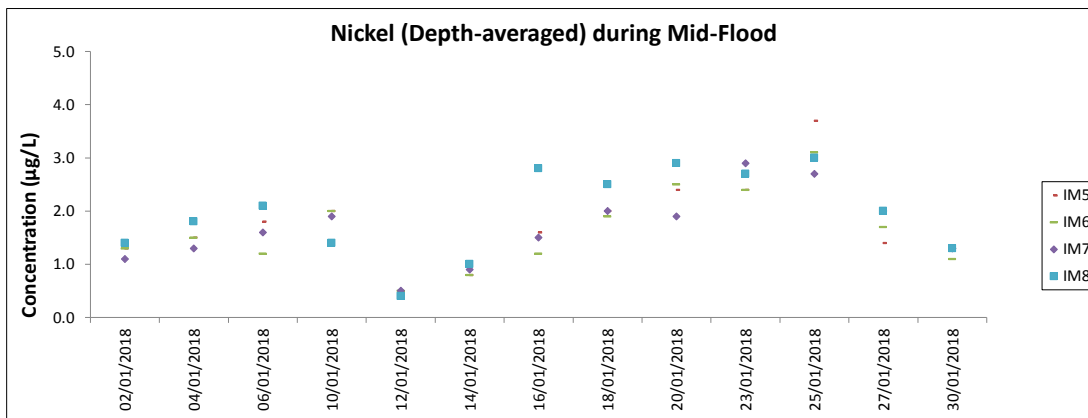
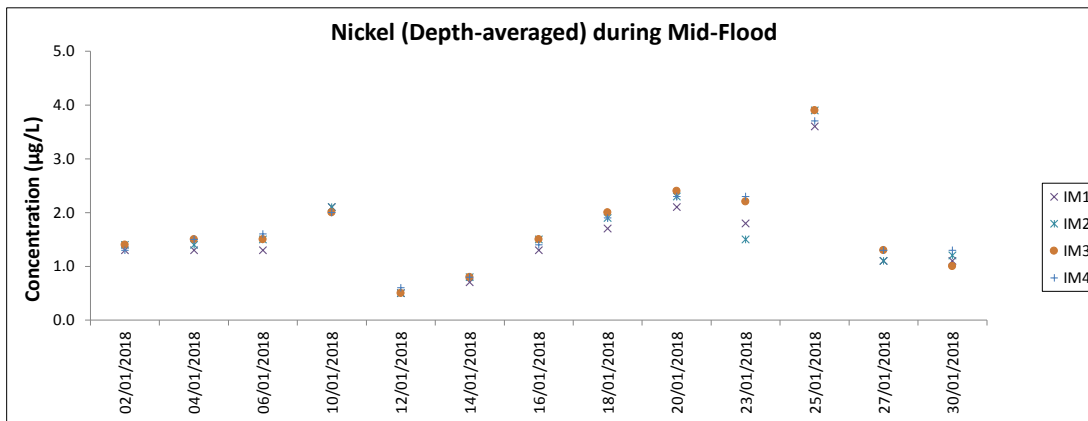
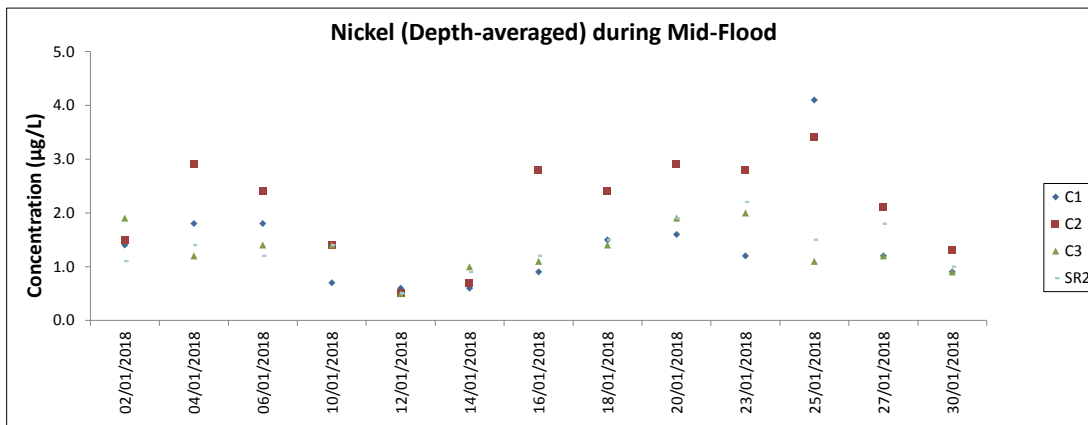
Note: The Action and Limit Level of total alkalinity can be referred to Table 4.2 of the monthly EM&A report.



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



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



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

Chinese White Dolphin Monitoring Results

CWD Small Vessel Line-transect Survey

Survey Effort Data

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE
06-Nov-17	NEL	2	37.700	AUTUMN	32166	3RS ET
06-Nov-17	NEL	3	9.600	AUTUMN	32166	3RS ET
07-Nov-17	NWL	2	5.860	AUTUMN	32166	3RS ET
07-Nov-17	NWL	3	53.860	AUTUMN	32166	3RS ET
07-Nov-17	NWL	4	14.980	AUTUMN	32166	3RS ET
15-Nov-17	NWL	2	13.220	AUTUMN	32166	3RS ET
15-Nov-17	NWL	3	55.550	AUTUMN	32166	3RS ET
15-Nov-17	NWL	4	5.100	AUTUMN	32166	3RS ET
16-Nov-17	NEL	2	12.810	AUTUMN	32166	3RS ET
16-Nov-17	NEL	3	31.090	AUTUMN	32166	3RS ET
16-Nov-17	NEL	4	2.100	AUTUMN	32166	3RS ET
17-Nov-17	AW	2	2.920	AUTUMN	32166	3RS ET
17-Nov-17	AW	3	1.800	AUTUMN	32166	3RS ET
17-Nov-17	WL	1	1.082	AUTUMN	32166	3RS ET
17-Nov-17	WL	2	18.218	AUTUMN	32166	3RS ET
17-Nov-17	WL	3	1.660	AUTUMN	32166	3RS ET
17-Nov-17	WL	4	12.240	AUTUMN	32166	3RS ET
17-Nov-17	SWL	3	16.340	AUTUMN	32166	3RS ET
17-Nov-17	SWL	4	2.360	AUTUMN	32166	3RS ET
20-Nov-17	SWL	2	3.100	AUTUMN	32166	3RS ET
20-Nov-17	SWL	3	24.410	AUTUMN	32166	3RS ET
20-Nov-17	SWL	4	22.590	AUTUMN	32166	3RS ET
21-Nov-17	AW	3	4.660	AUTUMN	32166	3RS ET
21-Nov-17	WL	2	1.000	AUTUMN	32166	3RS ET
21-Nov-17	WL	3	22.000	AUTUMN	32166	3RS ET
21-Nov-17	WL	4	10.500	AUTUMN	32166	3RS ET
21-Nov-17	SWL	2	3.860	AUTUMN	32166	3RS ET
21-Nov-17	SWL	3	12.600	AUTUMN	32166	3RS ET
21-Nov-17	SWL	4	2.190	AUTUMN	32166	3RS ET
22-Nov-17	SWL	3	4.100	AUTUMN	32166	3RS ET
22-Nov-17	SWL	4	18.741	AUTUMN	32166	3RS ET
22-Nov-17	SWL	5	27.459	AUTUMN	32166	3RS ET
06-Dec-17	NWL	2	38.557	WINTER	32166	3RS ET
06-Dec-17	NWL	3	33.211	WINTER	32166	3RS ET
07-Dec-17	AW	2	4.662	WINTER	32166	3RS ET
07-Dec-17	WL	2	8.193	WINTER	32166	3RS ET
07-Dec-17	WL	3	25.630	WINTER	32166	3RS ET
07-Dec-17	SWL	2	1.930	WINTER	32166	3RS ET
07-Dec-17	SWL	3	4.795	WINTER	32166	3RS ET
08-Dec-17	SWL	3	27.200	WINTER	32166	3RS ET
08-Dec-17	SWL	4	23.990	WINTER	32166	3RS ET
08-Dec-17	SWL	5	11.760	WINTER	32166	3RS ET
13-Dec-17	NEL	2	46.600	WINTER	32166	3RS ET
14-Dec-17	NWL	2	63.690	WINTER	32166	3RS ET
14-Dec-17	NWL	3	11.210	WINTER	32166	3RS ET
18-Dec-17	SWL	3	10.240	WINTER	32166	3RS ET
18-Dec-17	SWL	4	35.830	WINTER	32166	3RS ET

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE
18-Dec-17	SWL	5	17.000	WINTER	32166	3RS ET
21-Dec-17	NEL	2	10.490	WINTER	32166	3RS ET
21-Dec-17	NEL	3	25.110	WINTER	32166	3RS ET
21-Dec-17	NEL	4	10.900	WINTER	32166	3RS ET
28-Dec-17	AW	2	4.810	WINTER	32166	3RS ET
28-Dec-17	WL	2	32.373	WINTER	32166	3RS ET
28-Dec-17	WL	3	0.910	WINTER	32166	3RS ET
28-Dec-17	SWL	2	5.346	WINTER	32166	3RS ET
28-Dec-17	SWL	3	1.280	WINTER	32166	3RS ET
08-Jan-18	SWL	2	1.780	WINTER	32166	3RS ET
08-Jan-18	SWL	3	15.124	WINTER	32166	3RS ET
08-Jan-18	SWL	4	17.100	WINTER	32166	3RS ET
10-Jan-18	NEL	2	7.314	WINTER	32166	3RS ET
10-Jan-18	NEL	3	36.486	WINTER	32166	3RS ET
10-Jan-18	NEL	4	2.800	WINTER	32166	3RS ET
11-Jan-18	NEL	2	21.000	WINTER	32166	3RS ET
11-Jan-18	NEL	3	24.500	WINTER	32166	3RS ET
11-Jan-18	NEL	4	1.900	WINTER	32166	3RS ET
15-Jan-18	AW	2	4.691	WINTER	32166	3RS ET
15-Jan-18	WL	2	32.670	WINTER	32166	3RS ET
15-Jan-18	SWL	2	1.020	WINTER	32166	3RS ET
15-Jan-18	SWL	3	9.910	WINTER	32166	3RS ET
15-Jan-18	SWL	4	1.590	WINTER	32166	3RS ET
16-Jan-18	AW	2	4.820	WINTER	32166	3RS ET
16-Jan-18	WL	2	3.719	WINTER	32166	3RS ET
16-Jan-18	WL	3	29.681	WINTER	32166	3RS ET
16-Jan-18	SWL	2	14.580	WINTER	32166	3RS ET
16-Jan-18	SWL	3	14.510	WINTER	32166	3RS ET
17-Jan-18	SWL	1	12.768	WINTER	32166	3RS ET
17-Jan-18	SWL	2	38.865	WINTER	32166	3RS ET
17-Jan-18	SWL	3	9.180	WINTER	32166	3RS ET
17-Jan-18	SWL	4	1.600	WINTER	32166	3RS ET
18-Jan-18	NWL	1	6.510	WINTER	32166	3RS ET
18-Jan-18	NWL	2	66.180	WINTER	32166	3RS ET
18-Jan-18	NWL	3	1.200	WINTER	32166	3RS ET
19-Jan-18	NWL	1	2.700	WINTER	32166	3RS ET
19-Jan-18	NWL	2	68.300	WINTER	32166	3RS ET
19-Jan-18	NWL	3	3.700	WINTER	32166	3RS ET

Notes:

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

CWD Small Vessel Line-transect Survey

Sighting Data

DATE	STG #	TIME	CWD/FP	GP SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.
07-Nov-17	1	1211	CWD	3	NWL	3	5	ON	3RS ET	22.3622	113.8877	AUTUMN	NONE
15-Nov-17	1	0946	CWD	6	NWL	2	594	ON	3RS ET	22.3850	113.8683	AUTUMN	NONE
15-Nov-17	2	1314	CWD	1	NWL	3	4	ON	3RS ET	22.3705	113.8983	AUTUMN	NONE
17-Nov-17	1	1053	CWD	4	WL	2	668	ON	3RS ET	22.2504	113.8432	AUTUMN	NONE
20-Nov-17	1	1154	FP	2	SWL	3	122	ON	3RS ET	22.1564	113.9180	AUTUMN	NONE
21-Nov-17	1	0936	CWD	5	AW	3	46	ON	3RS ET	22.3009	113.8862	AUTUMN	NONE
21-Nov-17	2	1324	CWD	2	SWL	3	142	ON	3RS ET	22.1785	113.8689	AUTUMN	NONE
22-Nov-17	1	1121	CWD	2	SWL	3	21	ON	3RS ET	22.2048	113.9271	AUTUMN	NONE
06-Dec-17	1	1031	CWD	12	NWL	3	630	ON	3RS ET	22.2881	113.8684	WINTER	NONE
06-Dec-17	2	1113	CWD	4	NWL	3	100	ON	3RS ET	22.2719	113.8692	WINTER	NONE
06-Dec-17	3	1132	CWD	7	NWL	2	137	ON	3RS ET	22.2727	113.8733	WINTER	NONE
06-Dec-17	4	1236	CWD	5	NWL	3	494	ON	3RS ET	22.3596	113.8777	WINTER	NONE
06-Dec-17	5	1350	CWD	3	NWL	2	13	ON	3RS ET	22.3551	113.8848	WINTER	NONE
07-Dec-17	1	0929	CWD	5	AW	2	145	ON	3RS ET	22.3023	113.8765	WINTER	NONE
07-Dec-17	2	1058	CWD	3	WL	2	146	ON	3RS ET	22.2694	113.8601	WINTER	NONE
07-Dec-17	3	1126	CWD	1	WL	2	46	ON	3RS ET	22.2653	113.8580	WINTER	NONE
07-Dec-17	4	1238	CWD	3	WL	3	194	ON	3RS ET	22.2204	113.8146	WINTER	NONE
07-Dec-17	5	1407	CWD	2	WL	3	530	ON	3RS ET	22.1855	113.8498	WINTER	NONE
08-Dec-17	1	1213	FP	1	SWL	3	61	ON	3RS ET	22.1481	113.9173	WINTER	NONE
08-Dec-17	2	1258	CWD	1	SWL	5	343	ON	3RS ET	22.2053	113.9070	WINTER	NONE
14-Dec-17	1	1204	CWD	7	NWL	2	765	ON	3RS ET	22.3952	113.8884	WINTER	NONE
14-Dec-17	2	1327	CWD	2	NWL	3	127	ON	3RS ET	22.3888	113.8974	WINTER	NONE
18-Dec-17	1	1056	FP	2	SWL	4	135	ON	3RS ET	22.1511	113.9358	WINTER	NONE
28-Dec-17	1	1044	CWD	1	WL	3	216	ON	3RS ET	22.2559	113.8364	WINTER	NONE
28-Dec-17	2	1102	CWD	3	WL	2	34	ON	3RS ET	22.2541	113.8354	WINTER	NONE
28-Dec-17	3	1146	CWD	4	WL	2	82	ON	3RS ET	22.2318	113.8249	WINTER	NONE
28-Dec-17	4	1244	CWD	4	WL	2	106	ON	3RS ET	22.2146	113.8276	WINTER	NONE
28-Dec-17	5	1303	CWD	3	WL	2	100	ON	3RS ET	22.2055	113.8302	WINTER	NONE
28-Dec-17	6	1322	CWD	2	WL	2	306	ON	3RS ET	22.2024	113.8215	WINTER	NONE
28-Dec-17	7	1332	CWD	3	WL	2	N/A	OFF	3RS ET	22.2030	113.8213	WINTER	NONE
28-Dec-17	8	1428	CWD	3	SWL	2	1182	ON	3RS ET	22.1918	113.8586	WINTER	NONE

DATE	STG #	TIME	CWD/FP	GP SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.
08-Jan-18	1	1019	CWD	5	SWL	2	30	ON	3RS ET	22.2153	113.9359	WINTER	PURSE SEINE
15-Jan-18	1	0949	CWD	11	AW	2	72	ON	3RS ET	22.2896	113.8777	WINTER	NONE
15-Jan-18	2	1048	CWD	2	WL	2	147	ON	3RS ET	22.2938	113.8616	WINTER	NONE
15-Jan-18	3	1128	CWD	13	WL	2	817	ON	3RS ET	22.2602	113.8400	WINTER	GILLNET
15-Jan-18	4	1217	CWD	2	WL	2	206	ON	3RS ET	22.2418	113.8359	WINTER	GILLNET
15-Jan-18	5	1242	CWD	3	WL	2	309	ON	3RS ET	22.2281	113.8377	WINTER	NONE
15-Jan-18	6	1316	CWD	2	WL	2	65	ON	3RS ET	22.2145	113.8313	WINTER	NONE
15-Jan-18	7	1335	CWD	6	WL	2	281	ON	3RS ET	22.2053	113.8346	WINTER	NONE
15-Jan-18	8	1405	CWD	9	WL	2	179	ON	3RS ET	22.1958	113.8350	WINTER	NONE
15-Jan-18	9	1432	CWD	3	WL	2	5	ON	3RS ET	22.1873	113.8318	WINTER	NONE
15-Jan-18	10	1453	CWD	2	SWL	2	248	ON	3RS ET	22.1841	113.8501	WINTER	NONE
16-Jan-18	1	0944	CWD	1	AW	2	79	ON	3RS ET	22.2880	113.8842	WINTER	NONE
16-Jan-18	2	1032	CWD	2	WL	3	74	ON	3RS ET	22.2687	113.8541	WINTER	NONE
16-Jan-18	3	1448	CWD	1	SWL	2	191	ON	3RS ET	22.1746	113.8975	WINTER	NONE
17-Jan-18	1	1045	FP	2	SWL	2	813	ON	3RS ET	22.1681	113.9359	WINTER	NONE
17-Jan-18	2	1057	FP	1	SWL	2	N/A	OFF	3RS ET	22.1529	113.9358	WINTER	NONE
17-Jan-18	3	1106	FP	1	SWL	1	372	ON	3RS ET	22.1437	113.9272	WINTER	NONE
17-Jan-18	4	1152	FP	1	SWL	2	140	ON	3RS ET	22.1835	113.9203	WINTER	NONE
17-Jan-18	5	1244	CWD	2	SWL	2	43	ON	3RS ET	22.1907	113.9078	WINTER	NONE
17-Jan-18	6	1457	CWD	1	SWL	2	149	ON	3RS ET	22.1874	113.8683	WINTER	NONE
17-Jan-18	7	1512	CWD	6	SWL	2	533	ON	3RS ET	22.1937	113.8687	WINTER	NONE
18-Jan-18	1	0933	CWD	4	NWL	2	451	ON	3RS ET	22.4000	113.8681	WINTER	NONE
18-Jan-18	2	1017	CWD	4	NWL	1	362	ON	3RS ET	22.3321	113.8689	WINTER	NONE
18-Jan-18	3	1044	CWD	4	NWL	2	221	ON	3RS ET	22.3129	113.8680	WINTER	NONE
18-Jan-18	4	1121	CWD	1	NWL	2	120	ON	3RS ET	22.2809	113.8782	WINTER	NONE
18-Jan-18	5	1135	CWD	2	NWL	2	56	ON	3RS ET	22.2934	113.8780	WINTER	NONE

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

Notes:

CWD monitoring survey data of the two preceding survey months (i.e. November and December 2017) are presented for reference only. No relevant figure or text will be mentioned in the monthly EM&A report.

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

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

A total of 431.208 km of survey effort was collected under Beaufort Sea State 3 or below with favourable visibility; total no. of 22 on-effort sightings and total number of 86 dolphins from on-effort sightings were collected under such condition. Calculation of the encounter rates in January 2018 are shown as below:

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

$$STG = \frac{22}{431.208} \times 100 = 5.10$$

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

$$ANI = \frac{86}{431.208} \times 100 = 19.94$$

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

A total of 1124.885 km of survey effort was collected under Beaufort Sea State 3 or below with favourable visibility; total no. of 48 on-effort sightings and total number of 183 dolphins from on-effort sightings were collected under such condition. Calculation of the running quarterly encounter rates are shown as below:

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









$$STG = \frac{48}{1124.885} \times 100 = 4.27$$

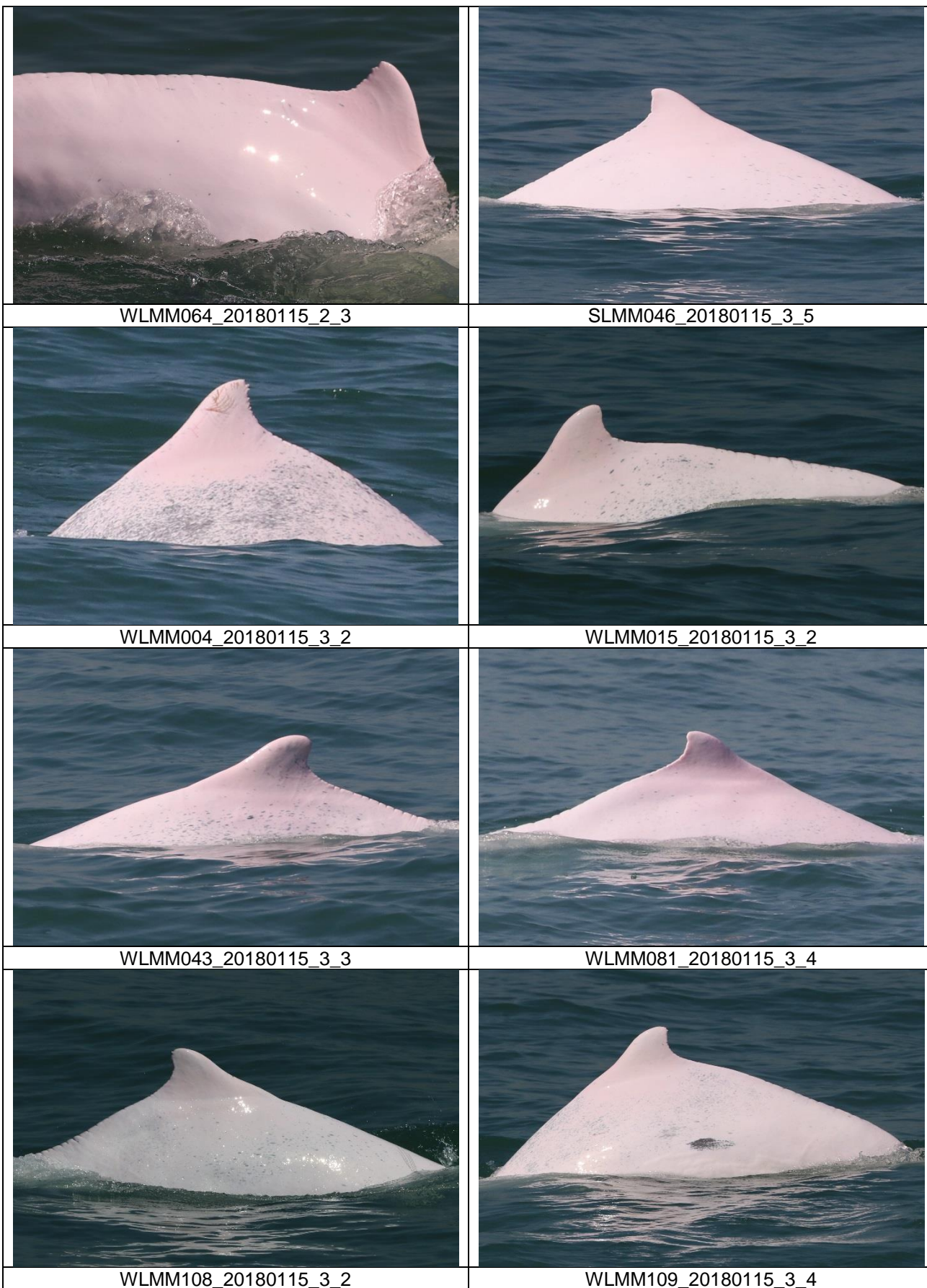
Running Quarterly Encounter Rate by Number of Dolphins (ANI)

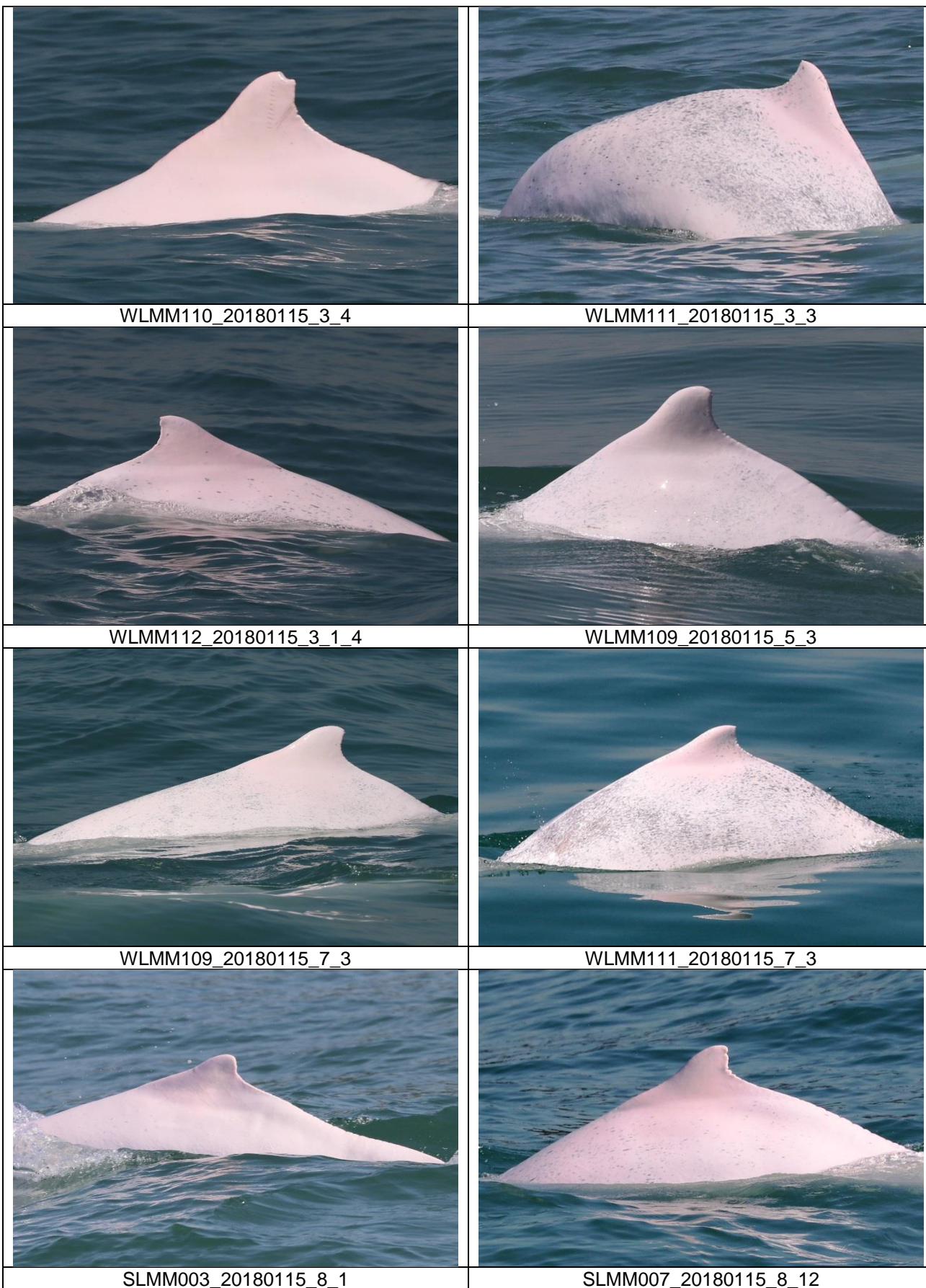
$$ANI = \frac{183}{1124.885} \times 100 = 16.27$$

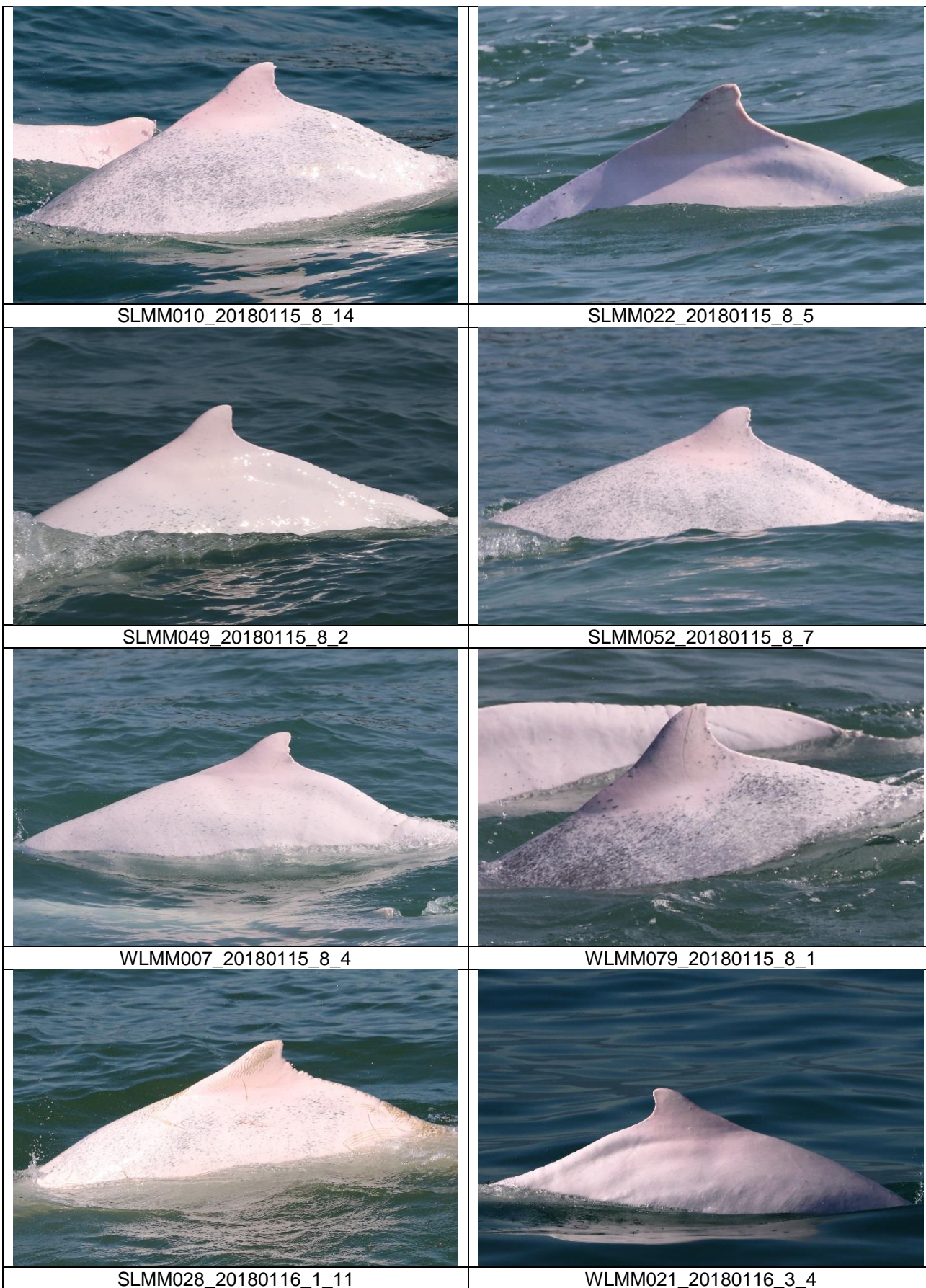
CWD Small Vessel Line-transect Survey

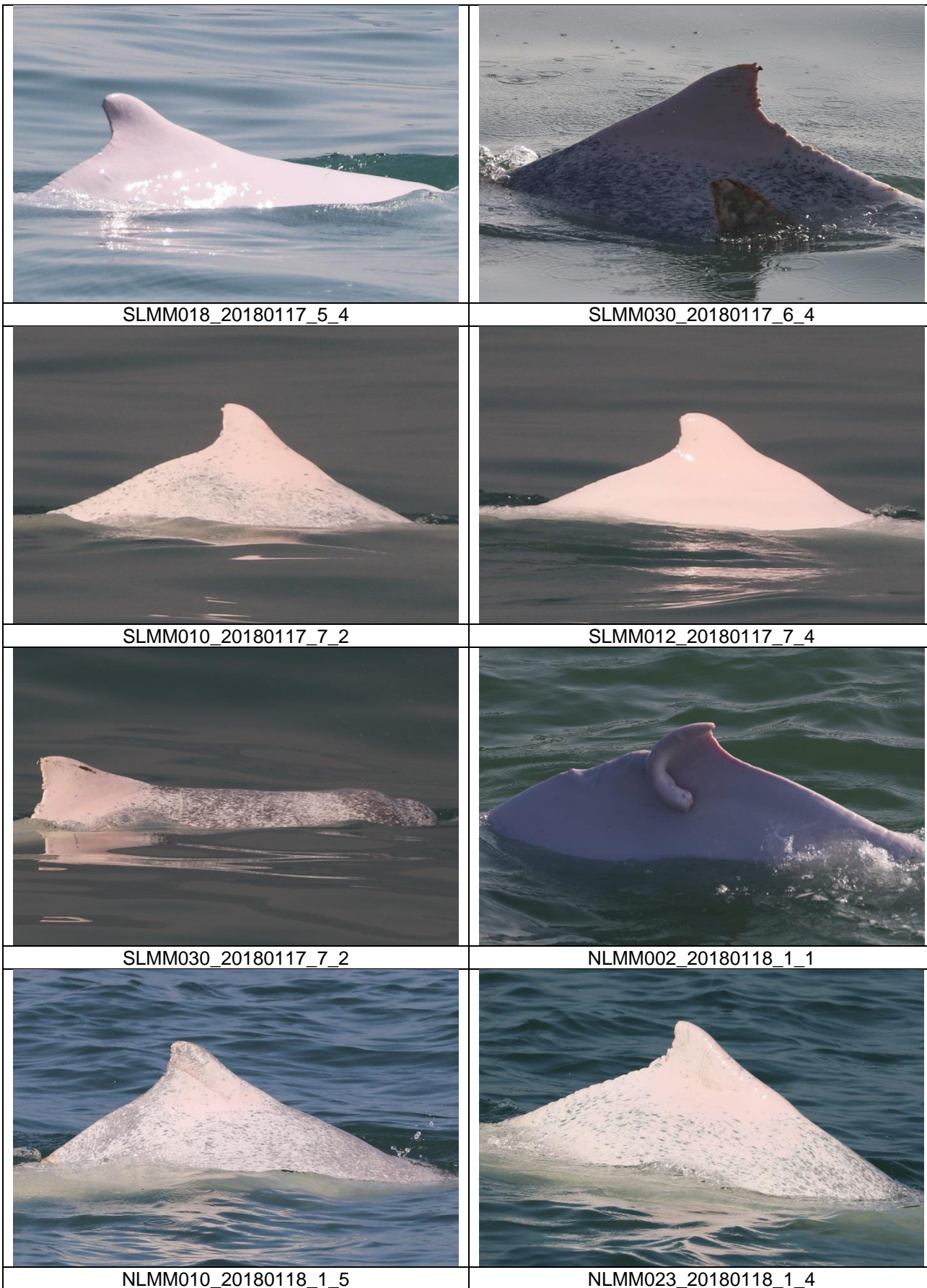
Photo Identification

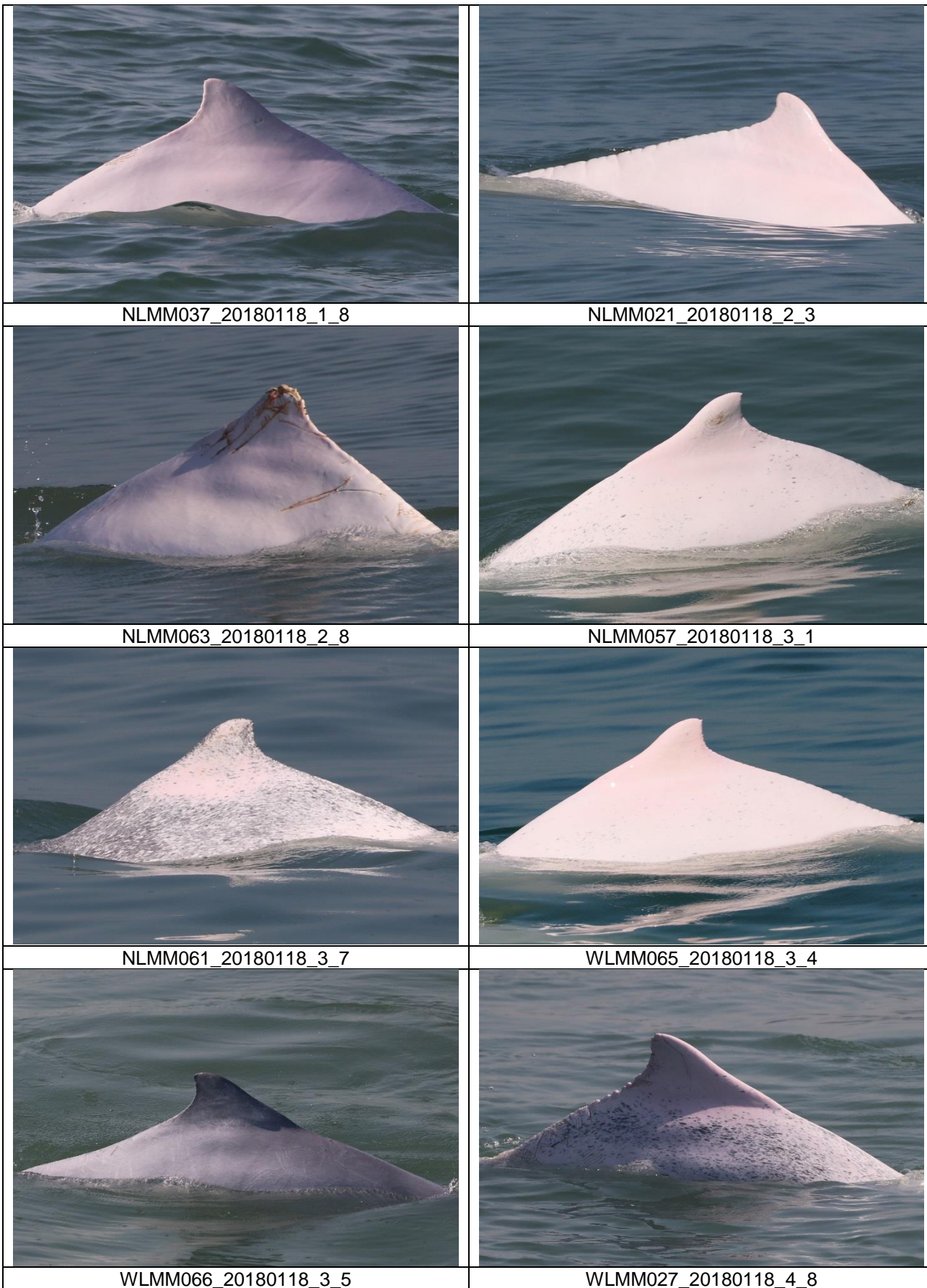
	
SLMM060_20180108_1_1	NLMM061_20180115_1_1
	
SLMM028_20180115_1_5	WLMM026_20180115_1_5
	
WLMM027_20180115_1_3	WLMM066_20180115_1_4
	
WLMM071_20180115_1_3	NLMM062_20180115_2_3













WLMM060_20180118_5_2

WLMM071_20180118_5_8

CWD Land-based Theodolite Tracking**CWD Groups by Survey Date**

Date	Station	Start Time	End Time	Duration	Beaufort Range	Visibility	No. of Focal Follow Dolphin Groups Tracked	Dolphin Group Size Range
15/Jan/18	Sha Chau	8:44	14:44	6:00	2	3	0	N/A
16/Jan/18	Lung Kwu Chau	8:49	14:49	6:00	2-3	3-4	2	1-5
22/Jan/18	Lung Kwu Chau	8:54	14:54	6:00	2	4	1	2
23/Jan/18	Lung Kwu Chau	9:00	15:00	6:00	1-2	3-4	1	1
24/Jan/18	Sha Chau	8:48	14:48	6:00	4	2	0	N/A

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

Ecological Monitoring Results

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



Photo record of View 1



Photo record of View 2



Appendix E. Status of Environmental Permits and Licences

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

Contract No.	Description	Location	Permit/ Reference No.	Status
P560 (R)	Notification of Construction Work under APCO	Launching Site	423880	Receipt acknowledged by EPD on 1 Dec 2017
		Site Office	397151	Receipt acknowledged by EPD on 15 Jan 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 Works)	Launching Site	GW-RS1006-17	Valid until 13 May 2018
		Sheung Sha Chau	GW-RW0533-17	Valid until 8 Apr 2018
		Stockpiling Area	GW-RS0719-17	Valid until 13 Feb 2018
	Discharge License under WPCO	Launching Site	WT00024249-2016	Approved on 25 Apr 2016
		Stockpiling Area	WT00024250-2016	Approved on 25 Apr 2016
	Registration as Chemical Waste Producer	Launching Site	WPN 5213-951-L2902-01	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
Construction Noise Permit (General Works)		Works area of 3201	GW-RS1119-17	Superseded by GW-RS1169-17 on 5 Jan 2018
		Works area of 3201	GW-RS1169-17	Superseded by GW-RS0015-18 on 19 Jan 2018
		Works area of 3201	GW-RS0015-18	Valid until 15 Jul 2018
Registration as Chemical Waste Producer		Works area of 3201	WPN 5213-951-P3231-01	Completion of Registration on 9 Sep 2016

Contract No.	Description	Location	Permit/ Reference No.	Status
	Bill Account for disposal		A/C 7025760	Approval granted from EPD on 31 Aug 2016
3202	Notification of Construction Work under APCO	Works area of 3202	407624	Receipt acknowledged by EPD on 15 Sep 2016
	Construction Noise Permit (General Works)	Works area of 3202	GW-RS1120-17	Superseded by GW-RS1171-17 on 5 Jan 2018
		Works area of 3202	GW-RS1171-17	Superseded by GW-RS0016-18 on 19 Jan 2018
		Works area of 3202	GW-RS0016-18	Valid until 15 Jul 2018
	Registration as Chemical Waste Producer	Works area of 3202	WPN 5213-951-S3967-01	Registration was updated on 23 May 2017
	Discharge License	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)	Works area of 3203	GW-RS1121-17	Superseded by GW-RS1172-17 on 5 Jan 2018
		Works area of 3203	GW-RS1172-17	Valid until 28 Jun 2018
	Registration as Chemical Waste Producer	Works area of 3203	WPN 5213-951-S3954-01	Registration was updated on 12 Dec 2016
	Discharge License	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-RS1062-17	Superseded by GW-RS1173-17 on 5 Jan 2018
		Works Area of 3204	GW-RS1173-17	Valid until 28 Jun 2018
	Registration as Chemical Waste Producer	Works Area of 3204	WPN 5213-951-C4102-01	Completion of Registration on 15 Sep 2016
		Site Office of 3204	WPN 5213-951-C4102-02	Completion of Registration on 17 Mar 2017
	Discharge License	Works area of 3204	WT00028245-2017	Valid from 5 Jun 2017 to 30 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

Contract No.	Description	Location	Permit/ Reference No.	Status
	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-RS1002-17	Superseded by GW-RS1174-17 on 5 Jan 2018
		Works Area of 3205	GW-RS1174-17	Superseded by GW-RS0017-18 on 19 Jan 2018
		Works Area of 3205	GW-RS0017-18	Valid until 15 Jul 2018
Discharge License	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
		Works area of 3206	WPN 5213-951-Z4035-02	Completion of Registration on 18 Nov 2016
	Construction Noise Permit (General Works)	Works Area of 3206	GW-RS1122-17	Superseded by GW-RS1175-17 on 5 Jan 2018
		Works Area of 3206	GW-RS1175-17	Superseded by GW-RS0018-18 on 19 Jan 2018
		Works Area of 3206	GW-RS0018-18	Valid until 15 Jul 2018
Bill Account for disposal	Works area of 3206	A/C 7026398	Approval granted from EPD on 16 Nov 2016	
3301	Notification of Construction Work under APCO	Works area of 3301	415821	Receipt acknowledged by EPD on 19 Apr 2017
	Registration as Chemical Waste Producer	Works area of 3301	WPN 5213-951-F2718-02	Completion of Registration on 9 Jun 2017
	Bill Account for disposal	Works area of 3301	A/C 7027728	Approval granted from EPD on 8 May 2017
	Construction Noise Permit (General Works)	Works area of 3301 (Cable ducting works)	GW-RS0991-17	Valid until 14 May 2018
		Works area of 3301	GW-RS0712-17	Superseded by GW-RS1184-17 on 8 Jan 2018
		Works area of 3301	GW-RS1184-17	Valid until 7 July 2018
3501	Notification of Construction Work under APCO	Works area of 3501	417903	Receipt acknowledged by EPD on 13 Jun 2017
	Registration as Chemical Waste Producer	Works area of 3501	WPN 5213-951-B2520-02	Completion of Registration on 25 Jul 2017

Contract No.	Description	Location	Permit/ Reference No.	Status
	Bill Account for disposal	Works area of 3501	A/C 7028144	Approval granted from EPD on 23 Jun 2017
	Construction Noise Permit (General Works)	Works area of 3501	GW-RS0667-17	Superseded by GW-RS1187-17 on 2 Jan 2018
GW-RS1187-17			Valid until 1 July 2018	
GW-RS1069-17			Superseded by GW-RS0023-18 on 17 Jan 2018	
GW-RS0023-18			Valid until 28 Feb 2018	
3502	Notification of Construction Work under APCO	Works area of 3502	417511	Receipt acknowledged by EPD on 2 Jun 2017
	Registration as Chemical Waste Producer	Works area of 3502	WPN 5213-951-B2520-01	Completion of Registration on 3 Jul 2017
	Bill Account for disposal	Works area of 3502	A/C 7028050	Approval granted from EPD on 21 Jun 2017
	Construction Noise Permit (General Works)	Works area of 3502	GW-RS0784-17	Valid until 10 Mar 2018
3503	Notification of Construction Work under APCO	Works area of 3503	424591	Receipt acknowledged by EPD on 8 Dec 2017
	Registration as Chemical Waste Producer	Works area of 3503	WPN 5113-951-L2845-02	Completion of Registration on 8 Jan 2018
	Bill Account for disposal	Works area of 3503	A/C 7029665	Approval granted from EPD on 27 Dec 2017
3602	Notification of Construction Work under APCO	Works area of 3602	421278	Receipt acknowledged by EPD on 18 Sep 2017
	Registration as Chemical Waste Producer	Works area of 3602	WPN 5296-951-N2673-01	Completion of Registration on 9 Oct 2017
		Site office of 3602	WPN 5296-951-N2673-02	Completion of Registration on 11 Dec 2017
	Bill Account for disposal	Works area of 3602	A/C 7028942	Approval granted from EPD on 6 Oct 2017
3801	Notification of Construction Work under APCO	Works area of 3801	418345	Receipt acknowledged by EPD on 26 Jun 2017
	Registration as Chemical Waste Producer	Works area of 3801	WPN 5296-951-C1169-51	Completion of Registration on 4 Aug 2017
	Discharge License	Works 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
	Construction Noise Permit (General Works)	Works area of 3801	GW-RS1095-17	Superseded by GW-RS0036-18 on 22 Jan 2018
GW-RS1133-17			Valid until 18 Jun 2018	
GW-RS0036-18			Valid until 18 July 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	1	0	0
From 28 December 2015 to end of the reporting period	9	1	0

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

Data of SkyPier HSF Movements to/from Zhuhai and Macau (between 1 and 31 January 2018)

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-Jan	08:15	3A061	YFT	Arrival	12.1	-	-
01-Jan	08:36	8S210	XZM	Arrival	12.4	-	-
01-Jan	09:45	3A062	YFT	Arrival	12.3	-	-
01-Jan	10:18	3A163	YFT	Departure	12.6	-	-
01-Jan	10:34	8S212	XZM	Arrival	12.6	-	-
01-Jan	10:45	3A081	ZUI	Arrival	13.3	-	-
01-Jan	11:06	8S121	XZM	Departure	13.1	-	-
01-Jan	11:17	3A063	YFT	Arrival	12	-	-
01-Jan	12:19	3A168	YFT	Departure	11.4	-	-
01-Jan	12:21	3A181	ZUI	Departure	12.7	-	-
01-Jan	12:47	8S215	XZM	Arrival	12.6	-	-
01-Jan	12:55	3A064	YFT	Arrival	12.9	-	-
01-Jan	13:21	8S123	XZM	Departure	12.7	-	-
01-Jan	13:50	3A082	ZUI	Arrival	12.7	-	-
01-Jan	14:22	3A164	YFT	Departure	12.2	-	-
01-Jan	14:27	3A182	ZUI	Departure	13.2	-	-
01-Jan	14:55	3A065	YFT	Arrival	12.2	-	-
01-Jan	16:22	3A167	YFT	Departure	12	-	-
01-Jan	16:37	3A083	ZUI	Arrival	13.7	-	-
01-Jan	16:44	8S218	XZM	Arrival	13	-	-
01-Jan	16:54	3A067	YFT	Arrival	12.6	-	-
01-Jan	17:15	3A183	ZUI	Departure	12.7	-	-
01-Jan	17:16	8S126	XZM	Departure	13.1	-	-
01-Jan	19:19	3A166	YFT	Departure	12.8	-	-
01-Jan	19:47	3A084	ZUI	Arrival	13.8	-	-
01-Jan	20:09	3A185	ZUI	Departure	13.2	-	-
01-Jan	21:03	8S2113	XZM	Arrival	11.1	-	-
01-Jan	21:04	3A169	YFT	Departure	12.4	-	-
01-Jan	22:12	8S522	XZM	Departure	11.4	-	-
02-Jan	08:13	3A061	YFT	Arrival	12.9	-	-
02-Jan	08:28	8S210	XZM	Arrival	13	-	-
02-Jan	10:12	3A062	YFT	Arrival	11.3	-	-
02-Jan	10:27	3A163	YFT	Departure	12	-	-
02-Jan	10:40	8S212	XZM	Arrival	12.4	-	-
02-Jan	10:45	3A081	ZUI	Arrival	13.2	-	-
02-Jan	11:08	8S121	XZM	Departure	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)
02-Jan	11:27	3A063	YFT	Arrival	11.6	-	-
02-Jan	12:14	3A168	YFT	Departure	12.2	-	-
02-Jan	12:15	3A181	ZUI	Departure	13.4	-	-
02-Jan	12:57	8S215	XZM	Arrival	13.2	-	-
02-Jan	12:58	3A064	YFT	Arrival	12.3	-	-
02-Jan	13:29	8S123	XZM	Departure	12.3	-	-
02-Jan	13:46	3A082	ZUI	Arrival	12	-	-
02-Jan	14:26	3A164	YFT	Departure	11.7	-	-
02-Jan	14:27	3A182	ZUI	Departure	12.9	-	-
02-Jan	15:01	3A065	YFT	Arrival	12.3	-	-
02-Jan	16:25	3A167	YFT	Departure	11.1	-	-
02-Jan	16:48	8S218	XZM	Arrival	10.9	-	-
02-Jan	16:50	3A083	ZUI	Arrival	12.6	-	-
02-Jan	17:04	3A067	YFT	Arrival	12	-	-
02-Jan	17:15	3A183	ZUI	Departure	13.8	-	-
02-Jan	17:26	8S126	XZM	Departure	12.5	-	-
02-Jan	19:17	3A166	YFT	Departure	11.9	-	-
02-Jan	19:46	3A084	ZUI	Arrival	13.1	-	-
02-Jan	20:10	3A185	ZUI	Departure	12.2	-	-
02-Jan	20:55	8S2113	XZM	Arrival	12.5	-	-
02-Jan	21:11	3A169	YFT	Departure	13	-	-
02-Jan	22:09	8S522	XZM	Departure	12.8	-	-
03-Jan	08:19	3A061	YFT	Arrival	12.1	-	-
03-Jan	08:20	8S210	XZM	Arrival	11.3	-	-
03-Jan	09:53	3A062	YFT	Arrival	11.8	-	-
03-Jan	10:16	3A163	YFT	Departure	12.3	-	-
03-Jan	10:36	8S212	XZM	Arrival	12.2	-	-
03-Jan	10:46	3A081	ZUI	Arrival	12.6	-	-
03-Jan	11:14	3A063	YFT	Arrival	12.1	-	-
03-Jan	11:16	8S121	XZM	Departure	12.3	-	-
03-Jan	12:16	3A168	YFT	Departure	12.5	-	-
03-Jan	12:16	3A181	ZUI	Departure	12.9	-	-
03-Jan	12:51	8S215	XZM	Arrival	11.9	-	-
03-Jan	13:06	3A064	YFT	Arrival	12.1	-	-
03-Jan	13:19	8S123	XZM	Departure	12.2	-	-
03-Jan	13:52	3A082	ZUI	Arrival	12.5	<= 5	< 1min
03-Jan	14:14	3A182	ZUI	Departure	13.7	<= 5	< 1min
03-Jan	14:18	3A164	YFT	Departure	12.2	-	-
03-Jan	14:53	3A065	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)
03-Jan	16:39	3A167	YFT	Departure	12.8	-	-
03-Jan	16:48	3A083	ZUI	Arrival	12.4	-	-
03-Jan	16:53	8S218	XZM	Arrival	11.7	-	-
03-Jan	17:01	3A067	YFT	Arrival	11.3	-	-
03-Jan	17:09	3A183	ZUI	Departure	12.9	-	-
03-Jan	17:25	8S126	XZM	Departure	13.4	-	-
03-Jan	19:25	3A166	YFT	Departure	13.2	-	-
03-Jan	19:46	3A084	ZUI	Arrival	13.4	-	-
03-Jan	20:13	3A185	ZUI	Departure	12.1	-	-
03-Jan	20:57	8S2113	XZM	Arrival	11.9	-	-
03-Jan	20:58	3A169	YFT	Departure	12.8	-	-
03-Jan	22:11	8S522	XZM	Departure	11.7	-	-
04-Jan	08:19	3A061	YFT	Arrival	11.8	-	-
04-Jan	08:32	8S210	XZM	Arrival	11.8	-	-
04-Jan	09:56	3A062	YFT	Arrival	13	-	-
04-Jan	10:18	3A163	YFT	Departure	12.8	-	-
04-Jan	10:38	8S212	XZM	Arrival	11.9	-	-
04-Jan	10:54	3A081	ZUI	Arrival	12.1	-	-
04-Jan	11:08	8S121	XZM	Departure	11.4	-	-
04-Jan	11:21	3A063	YFT	Arrival	10.4	-	-
04-Jan	12:25	3A168	YFT	Departure	12.1	-	-
04-Jan	12:26	3A181	ZUI	Departure	12.1	-	-
04-Jan	12:59	3A064	YFT	Arrival	12.9	-	-
04-Jan	13:00	8S215	XZM	Arrival	11.4	-	-
04-Jan	13:43	3A082	ZUI	Arrival	13.2	-	-
04-Jan	13:43	8S123	XZM	Departure	12.8	-	-
04-Jan	14:20	3A164	YFT	Departure	13.3	-	-
04-Jan	14:22	3A182	ZUI	Departure	12.7	-	-
04-Jan	15:03	3A065	YFT	Arrival	11.8	-	-
04-Jan	16:22	3A167	YFT	Departure	11.4	-	-
04-Jan	16:46	3A083	ZUI	Arrival	12.6	-	-
04-Jan	16:58	8S218	XZM	Arrival	12.3	-	-
04-Jan	17:01	3A067	YFT	Arrival	13.1	-	-
04-Jan	17:05	3A183	ZUI	Departure	12.9	-	-
04-Jan	17:19	8S126	XZM	Departure	13.3	-	-
04-Jan	19:06	3A166	YFT	Departure	13.5	-	-
04-Jan	19:49	3A084	ZUI	Arrival	12	-	-
04-Jan	20:15	3A185	ZUI	Departure	12.7	-	-
04-Jan	20:59	3A169	YFT	Departure	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)
04-Jan	20:59	8S2113	XZM	Arrival	12.4	-	-
05-Jan	08:17	3A061	YFT	Arrival	11.9	-	-
05-Jan	08:28	8S210	XZM	Arrival	12.3	-	-
05-Jan	09:52	3A062	YFT	Arrival	13.4	-	-
05-Jan	10:31	3A163	YFT	Departure	13.4	-	-
05-Jan	10:54	8S212	XZM	Arrival	11.2	-	-
05-Jan	10:55	3A081	ZUI	Arrival	12.4	-	-
05-Jan	11:15	3A063	YFT	Arrival	12.1	-	-
05-Jan	11:20	8S121	XZM	Departure	11.6	-	-
05-Jan	12:09	3A168	YFT	Departure	12.3	-	-
05-Jan	12:17	3A181	ZUI	Departure	12.8	-	-
05-Jan	12:46	8S215	XZM	Arrival	12.9	-	-
05-Jan	12:53	3A064	YFT	Arrival	13.1	-	-
05-Jan	13:20	8S123	XZM	Departure	13	-	-
05-Jan	13:43	3A082	ZUI	Arrival	11.4	-	-
05-Jan	14:12	3A164	YFT	Departure	13.2	-	-
05-Jan	14:13	3A182	ZUI	Departure	12.3	-	-
05-Jan	14:56	3A065	YFT	Arrival	12.2	-	-
05-Jan	16:15	3A167	YFT	Departure	12.2	-	-
05-Jan	16:44	3A083	ZUI	Arrival	13.3	-	-
05-Jan	16:44	8S218	XZM	Arrival	11.5	-	-
05-Jan	16:53	3A067	YFT	Arrival	13	-	-
05-Jan	17:03	3A183	ZUI	Departure	13	-	-
05-Jan	17:17	8S126	XZM	Departure	12	-	-
05-Jan	19:06	3A166	YFT	Departure	11.7	-	-
05-Jan	20:01	3A084	ZUI	Arrival	12.7	-	-
05-Jan	20:17	3A185	ZUI	Departure	13.3	-	-
05-Jan	20:51	8S2113	XZM	Arrival	12.3	-	-
05-Jan	21:01	3A169	YFT	Departure	11.4	-	-
05-Jan	22:03	8S522	XZM	Departure	13.5	-	-
06-Jan	08:17	3A061	YFT	Arrival	12.4	-	-
06-Jan	08:21	8S210	XZM	Arrival	11.1	-	-
06-Jan	09:53	3A062	YFT	Arrival	11.9	-	-
06-Jan	10:14	3A163	YFT	Departure	11.7	-	-
06-Jan	10:42	8S212	XZM	Arrival	10.7	-	-
06-Jan	10:44	3A081	ZUI	Arrival	12.4	-	-
06-Jan	11:06	8S121	XZM	Departure	11.2	-	-
06-Jan	11:20	3A063	YFT	Arrival	11.3	-	-
06-Jan	12:15	3A181	ZUI	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)
06-Jan	12:17	3A168	YFT	Departure	11.7	-	-
06-Jan	12:55	3A064	YFT	Arrival	11.8	-	-
06-Jan	13:04	8S215	XZM	Arrival	11.7	-	-
06-Jan	13:28	8S123	XZM	Departure	12.7	-	-
06-Jan	13:49	3A082	ZUI	Arrival	12.5	-	-
06-Jan	14:14	3A182	ZUI	Departure	13	-	-
06-Jan	14:18	3A164	YFT	Departure	12.7	-	-
06-Jan	15:05	3A065	YFT	Arrival	11.7	-	-
06-Jan	16:15	3A167	YFT	Departure	11.6	-	-
06-Jan	16:40	3A083	ZUI	Arrival	13.4	-	-
06-Jan	16:41	8S218	XZM	Arrival	12.2	-	-
06-Jan	16:59	3A183	ZUI	Departure	13.4	-	-
06-Jan	17:04	8S126	XZM	Departure	12.3	-	-
06-Jan	17:07	3A067	YFT	Arrival	12.4	-	-
06-Jan	19:10	3A166	YFT	Departure	13.6	-	-
06-Jan	19:48	3A084	ZUI	Arrival	12.9	-	-
06-Jan	20:11	3A185	ZUI	Departure	12.6	-	-
06-Jan	20:51	3A169	YFT	Departure	12.2	-	-
06-Jan	21:00	8S2113	XZM	Arrival	12.3	-	-
07-Jan	08:15	3A061	YFT	Arrival	12	-	-
07-Jan	08:28	8S210	XZM	Arrival	12.5	-	-
07-Jan	09:52	3A062	YFT	Arrival	12.7	-	-
07-Jan	10:25	3A163	YFT	Departure	12.2	-	-
07-Jan	10:36	8S212	XZM	Arrival	10.8	-	-
07-Jan	10:52	3A081	ZUI	Arrival	12.3	-	-
07-Jan	11:04	8S121	XZM	Departure	12	-	-
07-Jan	11:16	3A063	YFT	Arrival	13	-	-
07-Jan	12:10	3A168	YFT	Departure	13.2	-	-
07-Jan	12:12	3A181	ZUI	Departure	11.4	-	-
07-Jan	12:48	8S215	XZM	Arrival	12	-	-
07-Jan	13:01	3A064	YFT	Arrival	11.3	-	-
07-Jan	13:17	8S123	XZM	Departure	11.6	-	-
07-Jan	13:49	3A082	ZUI	Arrival	10.7	-	-
07-Jan	14:26	3A182	ZUI	Departure	12.7	-	-
07-Jan	14:27	3A164	YFT	Departure	12.3	-	-
07-Jan	14:53	3A065	YFT	Arrival	13.1	-	-
07-Jan	16:19	3A167	YFT	Departure	13.6	-	-
07-Jan	16:42	3A083	ZUI	Arrival	11.8	-	-
07-Jan	16:48	8S218	XZM	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)
07-Jan	17:02	3A067	YFT	Arrival	12.1	-	-
07-Jan	17:13	3A183	ZUI	Departure	12.1	-	-
07-Jan	17:19	8S126	XZM	Departure	13.1	-	-
07-Jan	19:07	3A166	YFT	Departure	12.9	-	-
07-Jan	19:51	3A084	ZUI	Arrival	13.4	-	-
07-Jan	20:10	3A185	ZUI	Departure	13	-	-
07-Jan	20:59	8S2113	XZM	Arrival	12	-	-
07-Jan	21:03	3A169	YFT	Departure	11.8	-	-
07-Jan	22:03	8S522	XZM	Departure	13	-	-
08-Jan	08:21	3A061	YFT	Arrival	11.8	-	-
08-Jan	08:31	8S210	XZM	Arrival	12.3	-	-
08-Jan	10:00	3A062	YFT	Arrival	11.8	-	-
08-Jan	10:16	3A163	YFT	Departure	11.2	-	-
08-Jan	10:35	8S212	XZM	Arrival	11.5	-	-
08-Jan	10:43	3A081	ZUI	Arrival	12.1	-	-
08-Jan	11:04	8S121	XZM	Departure	12.1	-	-
08-Jan	11:17	3A063	YFT	Arrival	12	-	-
08-Jan	12:08	3A181	ZUI	Departure	11.6	-	-
08-Jan	12:14	3A168	YFT	Departure	11.5	-	-
08-Jan	12:52	8S215	XZM	Arrival	11.6	-	-
08-Jan	12:58	3A064	YFT	Arrival	11.7	-	-
08-Jan	13:22	8S123	XZM	Departure	12.4	-	-
08-Jan	13:48	3A082	ZUI	Arrival	12.4	-	-
08-Jan	14:11	3A164	YFT	Departure	11.2	-	-
08-Jan	14:13	3A182	ZUI	Departure	12.3	-	-
08-Jan	15:00	3A065	YFT	Arrival	12.4	-	-
08-Jan	16:14	3A167	YFT	Departure	13.3	-	-
08-Jan	16:39	3A083	ZUI	Arrival	12.3	-	-
08-Jan	16:40	8S218	XZM	Arrival	10.8	-	-
08-Jan	16:58	3A067	YFT	Arrival	12.1	-	-
08-Jan	17:04	3A183	ZUI	Departure	12.8	-	-
08-Jan	17:08	8S126	XZM	Departure	11.3	-	-
08-Jan	19:04	3A166	YFT	Departure	11.7	-	-
08-Jan	19:48	3A084	ZUI	Arrival	11.9	-	-
08-Jan	20:08	3A185	ZUI	Departure	11.7	-	-
08-Jan	21:08	3A169	YFT	Departure	13.2	-	-
08-Jan	21:22	8S2113	XZM	Arrival	12.6	-	-
09-Jan	08:20	3A061	YFT	Arrival	11.5	-	-
09-Jan	08:31	8S210	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)
09-Jan	09:54	3A062	YFT	Arrival	11.5	-	-
09-Jan	10:35	3A163	YFT	Departure	11.2	-	-
09-Jan	10:39	8S212	XZM	Arrival	11.8	-	-
09-Jan	10:51	3A081	ZUI	Arrival	13	-	-
09-Jan	11:09	8S121	XZM	Departure	11.6	-	-
09-Jan	11:22	3A063	YFT	Arrival	11.6	-	-
09-Jan	12:14	3A181	ZUI	Departure	12	-	-
09-Jan	12:17	3A168	YFT	Departure	12.1	-	-
09-Jan	12:50	8S215	XZM	Arrival	12	-	-
09-Jan	13:09	3A064	YFT	Arrival	11	-	-
09-Jan	13:15	8S123	XZM	Departure	12.8	-	-
09-Jan	13:49	3A082	ZUI	Arrival	0.0 **	-	-
09-Jan	14:17	3A164	YFT	Departure	11.8	-	-
09-Jan	14:18	3A182	ZUI	Departure	12.9	<= 5	< 1min
09-Jan	14:59	3A065	YFT	Arrival	11.8	-	-
09-Jan	16:20	3A167	YFT	Departure	12.1	-	-
09-Jan	16:32	8S218	XZM	Arrival	11	-	-
09-Jan	16:49	3A083	ZUI	Arrival	12.2	-	-
09-Jan	17:02	8S126	XZM	Departure	11.5	-	-
09-Jan	17:04	3A183	ZUI	Departure	12.9	-	-
09-Jan	17:15	3A067	YFT	Arrival	11.8	-	-
09-Jan	19:05	3A166	YFT	Departure	11.5	-	-
09-Jan	20:05	3A084	ZUI	Arrival	13.1	-	-
09-Jan	20:19	3A185	ZUI	Departure	12.6	-	-
09-Jan	20:59	8S2113	XZM	Arrival	11.9	-	-
09-Jan	21:00	3A169	YFT	Departure	12.6	-	-
09-Jan	22:06	8S522	XZM	Departure	12.8	-	-
10-Jan	08:21	3A061	YFT	Arrival	11.7	-	-
10-Jan	08:31	8S210	XZM	Arrival	12.2	-	-
10-Jan	09:59	3A062	YFT	Arrival	12	-	-
10-Jan	10:22	3A163	YFT	Departure	11.7	-	-
10-Jan	10:44	8S212	XZM	Arrival	12.1	-	-
10-Jan	10:49	3A081	ZUI	Arrival	12	-	-
10-Jan	11:02	8S121	XZM	Departure	13	-	-
10-Jan	11:26	3A063	YFT	Arrival	0.0 **	-	-
10-Jan	12:10	3A168	YFT	Departure	0.0 **	-	-
10-Jan	12:14	3A181	ZUI	Departure	13	-	-
10-Jan	12:44	8S215	XZM	Arrival	11	-	-
10-Jan	13:00	3A064	YFT	Arrival	12.2	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT - Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
10-Jan	13:23	8S123	XZM	Departure	11.9	-	-
10-Jan	13:50	3A082	ZUI	Arrival	12	-	-
10-Jan	14:13	3A182	ZUI	Departure	12.9	-	-
10-Jan	14:13	3A164	YFT	Departure	12.4	-	-
10-Jan	14:58	3A065	YFT	Arrival	11.1	-	-
10-Jan	16:18	3A167	YFT	Departure	12.8	-	-
10-Jan	16:40	8S218	XZM	Arrival	10.3	-	-
10-Jan	16:44	3A083	ZUI	Arrival	12.2	-	-
10-Jan	16:57	3A183	ZUI	Departure	12.7	-	-
10-Jan	17:03	3A067	YFT	Arrival	12.3	-	-
10-Jan	17:06	8S126	XZM	Departure	12.7	-	-
10-Jan	19:03	3A166	YFT	Departure	12.8	-	-
10-Jan	19:48	3A084	ZUI	Arrival	13.2	-	-
10-Jan	20:09	3A185	ZUI	Departure	13.2	-	-
10-Jan	20:50	8S2113	XZM	Arrival	11.7	-	-
10-Jan	21:06	3A169	YFT	Departure	11.4	-	-
10-Jan	22:00	8S522	XZM	Departure	12.6	-	-
11-Jan	08:17	3A061	YFT	Arrival	11.7	-	-
11-Jan	08:28	8S210	XZM	Arrival	11.1	-	-
11-Jan	09:55	3A062	YFT	Arrival	11.5	-	-
11-Jan	10:09	3A163	YFT	Departure	11.7	-	-
11-Jan	10:36	8S212	XZM	Arrival	12.1	-	-
11-Jan	10:50	3A081	ZUI	Arrival	12.7	-	-
11-Jan	11:03	8S121	XZM	Departure	12.9	-	-
11-Jan	11:18	3A063	YFT	Arrival	11.7	-	-
11-Jan	12:13	3A181	ZUI	Departure	13.1	-	-
11-Jan	12:14	3A168	YFT	Departure	12.3	-	-
11-Jan	12:43	8S215	XZM	Arrival	10.7	-	-
11-Jan	13:03	3A064	YFT	Arrival	11.6	-	-
11-Jan	13:20	8S123	XZM	Departure	12.2	-	-
11-Jan	13:44	3A082	ZUI	Arrival	12.6	-	-
11-Jan	14:13	3A164	YFT	Departure	12.4	-	-
11-Jan	14:13	3A182	ZUI	Departure	13	-	-
11-Jan	15:00	3A065	YFT	Arrival	12	-	-
11-Jan	16:13	3A167	YFT	Departure	12	-	-
11-Jan	16:41	8S218	XZM	Arrival	10.9	-	-
11-Jan	16:42	3A083	ZUI	Arrival	12.4	-	-
11-Jan	16:57	3A067	YFT	Arrival	11.4	-	-
11-Jan	17:06	3A183	ZUI	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)
11-Jan	17:09	8S126	XZM	Departure	12.8	-	-
11-Jan	19:02	3A166	YFT	Departure	13.4	-	-
11-Jan	19:59	3A084	ZUI	Arrival	12.5	-	-
11-Jan	20:12	3A185	ZUI	Departure	11.9	-	-
11-Jan	20:58	8S2113	XZM	Arrival	11.3	-	-
11-Jan	20:58	3A169	YFT	Departure	13.6	-	-
12-Jan	08:24	3A061	YFT	Arrival	11.1	-	-
12-Jan	08:32	8S210	XZM	Arrival	10.3	-	-
12-Jan	09:58	3A062	YFT	Arrival	11	-	-
12-Jan	10:17	3A163	YFT	Departure	10.5	-	-
12-Jan	10:37	8S212	XZM	Arrival	12.3	-	-
12-Jan	10:49	3A081	ZUI	Arrival	12.5	-	-
12-Jan	11:05	8S121	XZM	Departure	13.3	-	-
12-Jan	11:18	3A063	YFT	Arrival	12	-	-
12-Jan	12:20	3A168	YFT	Departure	12	-	-
12-Jan	12:21	3A181	ZUI	Departure	12.6	-	-
12-Jan	12:57	3A064	YFT	Arrival	11.3	-	-
12-Jan	12:59	8S215	XZM	Arrival	12.3	-	-
12-Jan	13:32	8S123	XZM	Departure	12.1	-	-
12-Jan	13:51	3A082	ZUI	Arrival	12.2	-	-
12-Jan	14:16	3A182	ZUI	Departure	12.8	-	-
12-Jan	14:17	3A164	YFT	Departure	11.6	-	-
12-Jan	14:59	3A065	YFT	Arrival	12	-	-
12-Jan	16:16	3A167	YFT	Departure	12.5	-	-
12-Jan	16:38	8S218	XZM	Arrival	11.2	-	-
12-Jan	16:41	3A083	ZUI	Arrival	13	-	-
12-Jan	16:58	3A067	YFT	Arrival	10.9	-	-
12-Jan	16:58	3A183	ZUI	Departure	12.9	-	-
12-Jan	17:04	8S126	XZM	Departure	12.5	-	-
12-Jan	18:58	3A166	YFT	Departure	11.5	-	-
12-Jan	19:49	3A084	ZUI	Arrival	12.6	-	-
12-Jan	20:04	3A185	ZUI	Departure	13.5	-	-
12-Jan	20:54	8S2113	XZM	Arrival	11.7	-	-
12-Jan	21:06	3A169	YFT	Departure	12.7	-	-
13-Jan	08:16	3A061	YFT	Arrival	12	-	-
13-Jan	08:24	8S210	XZM	Arrival	12.4	-	-
13-Jan	09:51	3A062	YFT	Arrival	12	-	-
13-Jan	10:17	3A163	YFT	Departure	12.1	-	-
13-Jan	10:45	8S212	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)
13-Jan	10:54	3A081	ZUI	Arrival	12.9	-	-
13-Jan	11:09	8S121	XZM	Departure	12.5	-	-
13-Jan	11:17	3A063	YFT	Arrival	12.1	-	-
13-Jan	11:55	3A181	ZUI	Departure	13.1	-	-
13-Jan	12:12	3A168	YFT	Departure	11.4	-	-
13-Jan	12:47	8S215	XZM	Arrival	12.4	-	-
13-Jan	12:58	3A064	YFT	Arrival	12.4	-	-
13-Jan	13:16	8S123	XZM	Departure	13.3	-	-
13-Jan	13:54	3A082	ZUI	Arrival	13	-	-
13-Jan	14:13	3A182	ZUI	Departure	13.4	-	-
13-Jan	14:16	3A164	YFT	Departure	12.4	<= 5	< 1min
13-Jan	15:00	3A065	YFT	Arrival	11.9	-	-
13-Jan	16:18	3A167	YFT	Departure	11.9	-	-
13-Jan	16:36	8S218	XZM	Arrival	11.9	-	-
13-Jan	16:39	3A083	ZUI	Arrival	12.5	-	-
13-Jan	16:58	3A067	YFT	Arrival	11.7	-	-
13-Jan	16:59	3A183	ZUI	Departure	12.7	-	-
13-Jan	17:05	8S126	XZM	Departure	12.4	-	-
13-Jan	18:57	3A166	YFT	Departure	12.6	-	-
13-Jan	19:48	3A084	ZUI	Arrival	12.9	-	-
13-Jan	20:13	3A185	ZUI	Departure	13.3	-	-
13-Jan	20:56	8S2113	XZM	Arrival	11.1	-	-
13-Jan	20:59	3A169	YFT	Departure	12.3	-	-
13-Jan	22:04	8S522	XZM	Departure	11.7	-	-
14-Jan	08:19	3A061	YFT	Arrival	11.9	-	-
14-Jan	08:26	8S210	XZM	Arrival	12.7	-	-
14-Jan	09:41	3A062	YFT	Arrival	11.9	-	-
14-Jan	10:09	3A163	YFT	Departure	12.2	-	-
14-Jan	10:30	8S212	XZM	Arrival	12.9	-	-
14-Jan	10:44	3A081	ZUI	Arrival	12.1	-	-
14-Jan	11:01	8S121	XZM	Departure	12.8	-	-
14-Jan	11:17	3A063	YFT	Arrival	11.5	-	-
14-Jan	12:08	3A181	ZUI	Departure	13.2	-	-
14-Jan	12:09	3A168	YFT	Departure	11.9	-	-
14-Jan	12:47	8S215	XZM	Arrival	12.3	-	-
14-Jan	12:52	3A064	YFT	Arrival	12.7	-	-
14-Jan	13:20	8S123	XZM	Departure	12.2	-	-
14-Jan	13:48	3A082	ZUI	Arrival	13.4	-	-
14-Jan	14:14	3A182	ZUI	Departure	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)
14-Jan	14:16	3A164	YFT	Departure	12.6	-	-
14-Jan	14:57	3A065	YFT	Arrival	11.3	-	-
14-Jan	16:11	3A167	YFT	Departure	12	-	-
14-Jan	16:44	8S218	XZM	Arrival	12.1	-	-
14-Jan	16:47	3A083	ZUI	Arrival	12.7	-	-
14-Jan	16:53	3A067	YFT	Arrival	12.7	-	-
14-Jan	17:03	8S126	XZM	Departure	12.4	-	-
14-Jan	17:05	3A183	ZUI	Departure	12.7	-	-
14-Jan	19:15	3A166	YFT	Departure	12	-	-
14-Jan	19:47	3A084	ZUI	Arrival	12.7	-	-
14-Jan	20:07	3A185	ZUI	Departure	13.2	-	-
14-Jan	20:59	8S2113	XZM	Arrival	12.4	-	-
14-Jan	21:09	3A169	YFT	Departure	11.7	-	-
14-Jan	21:53	8S522	XZM	Departure	12.6	-	-
15-Jan	08:20	3A061	YFT	Arrival	11.9	-	-
15-Jan	08:24	8S210	XZM	Arrival	12.5	-	-
15-Jan	09:46	3A062	YFT	Arrival	11.6	-	-
15-Jan	10:24	3A163	YFT	Departure	11.6	-	-
15-Jan	10:37	8S212	XZM	Arrival	12.4	-	-
15-Jan	10:49	3A081	ZUI	Arrival	12.1	-	-
15-Jan	11:02	8S121	XZM	Departure	12.2	-	-
15-Jan	11:18	3A063	YFT	Arrival	12.2	-	-
15-Jan	12:14	3A168	YFT	Departure	12	-	-
15-Jan	12:18	3A181	ZUI	Departure	12.4	-	-
15-Jan	12:47	8S215	XZM	Arrival	11.6	-	-
15-Jan	12:53	3A064	YFT	Arrival	11.9	-	-
15-Jan	13:18	8S123	XZM	Departure	12.4	-	-
15-Jan	13:45	3A082	ZUI	Arrival	12.3	-	-
15-Jan	14:14	3A164	YFT	Departure	11.7	-	-
15-Jan	14:15	3A182	ZUI	Departure	13.1	-	-
15-Jan	15:02	3A065	YFT	Arrival	12.1	-	-
15-Jan	16:11	3A167	YFT	Departure	11.6	<= 5	< 1min
15-Jan	16:39	3A083	ZUI	Arrival	12.7	-	-
15-Jan	16:40	8S218	XZM	Arrival	11.8	-	-
15-Jan	16:54	3A067	YFT	Arrival	11.9	-	-
15-Jan	17:08	3A183	ZUI	Departure	12.9	-	-
15-Jan	17:10	8S126	XZM	Departure	13.1	-	-
15-Jan	19:04	3A166	YFT	Departure	12.1	-	-
15-Jan	19:49	3A084	ZUI	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)
15-Jan	20:04	3A185	ZUI	Departure	13.1	-	-
15-Jan	20:56	8S2113	XZM	Arrival	11.8	-	-
15-Jan	21:07	3A169	YFT	Departure	12.9	-	-
16-Jan	08:16	3A061	YFT	Arrival	12.4	-	-
16-Jan	08:28	8S210	XZM	Arrival	12.3	-	-
16-Jan	09:54	3A062	YFT	Arrival	11.7	-	-
16-Jan	10:08	3A163	YFT	Departure	11.8	-	-
16-Jan	10:35	8S212	XZM	Arrival	12.6	-	-
16-Jan	10:40	3A081	ZUI	Arrival	13.3	-	-
16-Jan	11:02	8S121	XZM	Departure	13.5	-	-
16-Jan	11:15	3A063	YFT	Arrival	12.4	-	-
16-Jan	12:15	3A168	YFT	Departure	12.1	-	-
16-Jan	12:17	3A181	ZUI	Departure	13	-	-
16-Jan	12:46	8S215	XZM	Arrival	12.2	-	-
16-Jan	12:58	3A064	YFT	Arrival	12.5	-	-
16-Jan	13:18	8S123	XZM	Departure	12.6	-	-
16-Jan	13:45	3A082	ZUI	Arrival	12.8	-	-
16-Jan	14:13	3A182	ZUI	Departure	12.5	-	-
16-Jan	14:21	3A164	YFT	Departure	12.4	-	-
16-Jan	14:55	3A065	YFT	Arrival	12.4	-	-
16-Jan	16:12	3A167	YFT	Departure	13.3	-	-
16-Jan	16:41	3A083	ZUI	Arrival	12.6	-	-
16-Jan	16:44	8S218	XZM	Arrival	11.5	-	-
16-Jan	16:53	3A067	YFT	Arrival	11.5	-	-
16-Jan	16:59	3A183	ZUI	Departure	13	-	-
16-Jan	17:08	8S126	XZM	Departure	13.3	-	-
16-Jan	18:58	3A166	YFT	Departure	13.4	-	-
16-Jan	19:48	3A084	ZUI	Arrival	13	-	-
16-Jan	20:10	3A185	ZUI	Departure	12	-	-
16-Jan	20:51	8S2113	XZM	Arrival	11.7	-	-
16-Jan	20:52	3A169	YFT	Departure	13.2	-	-
17-Jan	08:17	3A061	YFT	Arrival	11.3	-	-
17-Jan	08:26	8S210	XZM	Arrival	11.6	-	-
17-Jan	09:58	3A062	YFT	Arrival	10.5	-	-
17-Jan	10:11	3A163	YFT	Departure	11.1	-	-
17-Jan	10:33	8S212	XZM	Arrival	11.9	-	-
17-Jan	10:49	3A081	ZUI	Arrival	13	-	-
17-Jan	11:02	8S121	XZM	Departure	13.3	-	-
17-Jan	11:20	3A063	YFT	Arrival	11.4	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT - Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
17-Jan	11:59	3A168	YFT	Departure	11.4	-	-
17-Jan	12:09	3A181	ZUI	Departure	13.9	-	-
17-Jan	12:46	8S215	XZM	Arrival	11.2	-	-
17-Jan	13:04	3A064	YFT	Arrival	11.8	-	-
17-Jan	13:15	8S123	XZM	Departure	11.6	-	-
17-Jan	13:44	3A082	ZUI	Arrival	12.7	-	-
17-Jan	14:12	3A164	YFT	Departure	11.5	-	-
17-Jan	14:13	3A182	ZUI	Departure	12.2	-	-
17-Jan	14:57	3A065	YFT	Arrival	11.7	-	-
17-Jan	16:13	3A167	YFT	Departure	11.6	-	-
17-Jan	16:43	3A083	ZUI	Arrival	13	-	-
17-Jan	16:45	8S218	XZM	Arrival	11.5	-	-
17-Jan	17:05	3A067	YFT	Arrival	11.6	-	-
17-Jan	17:07	3A183	ZUI	Departure	13.1	-	-
17-Jan	17:15	8S126	XZM	Departure	11.9	-	-
17-Jan	18:58	3A166	YFT	Departure	12	-	-
17-Jan	19:47	3A084	ZUI	Arrival	12.1	-	-
17-Jan	20:13	3A185	ZUI	Departure	12.7	-	-
17-Jan	20:46	8S2113	XZM	Arrival	12.6	-	-
17-Jan	21:03	3A169	YFT	Departure	11.7	-	-
18-Jan	08:20	3A061	YFT	Arrival	11.7	-	-
18-Jan	08:28	8S210	XZM	Arrival	11.4	-	-
18-Jan	09:54	3A062	YFT	Arrival	11	-	-
18-Jan	10:34	3A163	YFT	Departure	12.3	-	-
18-Jan	10:37	8S212	XZM	Arrival	11.1	-	-
18-Jan	10:50	3A081	ZUI	Arrival	12.3	-	-
18-Jan	11:02	8S121	XZM	Departure	11.5	-	-
18-Jan	11:16	3A063	YFT	Arrival	12.5	-	-
18-Jan	12:16	3A168	YFT	Departure	12.4	-	-
18-Jan	12:16	3A181	ZUI	Departure	12.8	-	-
18-Jan	12:42	8S215	XZM	Arrival	13.1	-	-
18-Jan	13:00	3A064	YFT	Arrival	11.7	-	-
18-Jan	13:12	8S123	XZM	Departure	12.9	-	-
18-Jan	13:45	3A082	ZUI	Arrival	11.8	-	-
18-Jan	14:23	3A182	ZUI	Departure	13	-	-
18-Jan	14:23	3A164	YFT	Departure	12.3	-	-
18-Jan	14:52	3A065	YFT	Arrival	12.8	-	-
18-Jan	16:18	3A167	YFT	Departure	12.5	-	-
18-Jan	16:41	3A083	ZUI	Arrival	13.2	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT - Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
18-Jan	16:42	8S218	XZM	Arrival	12.8	-	-
18-Jan	17:03	3A067	YFT	Arrival	11.7	-	-
18-Jan	17:06	8S126	XZM	Departure	12.4	-	-
18-Jan	17:09	3A183	ZUI	Departure	12.8	-	-
18-Jan	18:58	3A166	YFT	Departure	13	-	-
18-Jan	19:50	3A084	ZUI	Arrival	13.2	-	-
18-Jan	20:04	3A185	ZUI	Departure	13.1	-	-
18-Jan	20:55	8S2113	XZM	Arrival	13.3	-	-
18-Jan	20:58	3A169	YFT	Departure	12.8	-	-
19-Jan	08:21	3A061	YFT	Arrival	11	-	-
19-Jan	08:24	8S210	XZM	Arrival	12.8	-	-
19-Jan	09:58	3A062	YFT	Arrival	12.7	-	-
19-Jan	10:13	3A163	YFT	Departure	13	-	-
19-Jan	10:41	8S212	XZM	Arrival	11.6	-	-
19-Jan	10:49	3A081	ZUI	Arrival	13.2	-	-
19-Jan	11:02	8S121	XZM	Departure	12.6	-	-
19-Jan	11:20	3A063	YFT	Arrival	11.3	-	-
19-Jan	12:13	3A181	ZUI	Departure	12.9	-	-
19-Jan	12:13	3A168	YFT	Departure	11.3	-	-
19-Jan	12:44	8S215	XZM	Arrival	10.7	-	-
19-Jan	12:55	3A064	YFT	Arrival	13.1	-	-
19-Jan	13:13	8S123	XZM	Departure	12.4	-	-
19-Jan	13:52	3A082	ZUI	Arrival	13.1	-	-
19-Jan	14:23	3A164	YFT	Departure	13.1	-	-
19-Jan	14:24	3A182	ZUI	Departure	13.9	-	-
19-Jan	15:09	3A065	YFT	Arrival	11.3	-	-
19-Jan	16:18	3A167	YFT	Departure	10.7	-	-
19-Jan	16:40	3A083	ZUI	Arrival	12.7	-	-
19-Jan	16:46	8S218	XZM	Arrival	11.9	-	-
19-Jan	17:00	3A067	YFT	Arrival	13.2	-	-
19-Jan	17:01	3A183	ZUI	Departure	12.9	-	-
19-Jan	17:07	8S126	XZM	Departure	12.9	-	-
19-Jan	19:01	3A166	YFT	Departure	11.3	-	-
19-Jan	19:45	3A084	ZUI	Arrival	13.5	-	-
19-Jan	20:11	3A185	ZUI	Departure	12.9	-	-
19-Jan	20:57	8S2113	XZM	Arrival	13.1	-	-
19-Jan	20:59	3A169	YFT	Departure	12.2	-	-
20-Jan	08:18	3A061	YFT	Arrival	12	-	-
20-Jan	08:29	8S210	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)
20-Jan	09:51	3A062	YFT	Arrival	12.8	-	-
20-Jan	10:13	3A163	YFT	Departure	13.5	-	-
20-Jan	10:40	8S212	XZM	Arrival	11.2	-	-
20-Jan	10:52	3A081	ZUI	Arrival	12.4	-	-
20-Jan	11:01	8S121	XZM	Departure	11.7	-	-
20-Jan	11:21	3A063	YFT	Arrival	11.4	-	-
20-Jan	12:09	3A181	ZUI	Departure	13.1	-	-
20-Jan	12:12	3A168	YFT	Departure	11.8	-	-
20-Jan	12:48	8S215	XZM	Arrival	11.3	-	-
20-Jan	12:55	3A064	YFT	Arrival	13	-	-
20-Jan	13:15	8S123	XZM	Departure	11.3	-	-
20-Jan	13:47	3A082	ZUI	Arrival	12.7	-	-
20-Jan	14:14	3A182	ZUI	Departure	12.3	-	-
20-Jan	14:15	3A164	YFT	Departure	13.5	-	-
20-Jan	14:57	3A065	YFT	Arrival	11.7	-	-
20-Jan	16:12	3A167	YFT	Departure	12.3	-	-
20-Jan	16:41	3A083	ZUI	Arrival	12.5	-	-
20-Jan	16:43	8S218	XZM	Arrival	11.9	-	-
20-Jan	16:51	3A067	YFT	Arrival	13.3	-	-
20-Jan	17:00	3A183	ZUI	Departure	13.1	-	-
20-Jan	17:05	8S126	XZM	Departure	12.8	-	-
20-Jan	18:57	3A166	YFT	Departure	11.9	-	-
20-Jan	19:52	3A084	ZUI	Arrival	13.7	-	-
20-Jan	20:12	3A185	ZUI	Departure	13.5	-	-
20-Jan	20:58	3A169	YFT	Departure	12	-	-
20-Jan	20:58	8S2113	XZM	Arrival	13.1	-	-
20-Jan	22:00	8S522	XZM	Departure	13.3	-	-
21-Jan	08:18	3A061	YFT	Arrival	11.6	-	-
21-Jan	08:34	8S210	XZM	Arrival	12	-	-
21-Jan	09:52	3A062	YFT	Arrival	11.6	-	-
21-Jan	10:12	3A163	YFT	Departure	11.8	-	-
21-Jan	10:43	8S212	XZM	Arrival	11.2	-	-
21-Jan	10:49	3A081	ZUI	Arrival	11.4	-	-
21-Jan	11:07	8S121	XZM	Departure	11.3	-	-
21-Jan	11:18	3A063	YFT	Arrival	12.9	-	-
21-Jan	12:21	3A181	ZUI	Departure	12	-	-
21-Jan	12:25	3A168	YFT	Departure	13.6	-	-
21-Jan	12:52	8S215	XZM	Arrival	12.1	-	-
21-Jan	12:58	3A064	YFT	Arrival	11	-	-

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-Jan	13:21	8S123	XZM	Departure	10.3	-	-
21-Jan	13:56	3A082	ZUI	Arrival	12.7	-	-
21-Jan	14:17	3A164	YFT	Departure	13	-	-
21-Jan	14:18	3A182	ZUI	Departure	13.6	-	-
21-Jan	14:55	3A065	YFT	Arrival	13.2	-	-
21-Jan	16:20	3A167	YFT	Departure	13.1	-	-
21-Jan	16:50	8S218	XZM	Arrival	13.1	-	-
21-Jan	16:50	3A083	ZUI	Arrival	13.2	-	-
21-Jan	16:55	3A067	YFT	Arrival	12.7	-	-
21-Jan	17:07	3A183	ZUI	Departure	12.7	-	-
21-Jan	17:33	8S126	XZM	Departure	11.2	-	-
21-Jan	19:03	3A166	YFT	Departure	10.8	-	-
21-Jan	19:50	3A084	ZUI	Arrival	13.2	-	-
21-Jan	20:06	3A185	ZUI	Departure	13.1	-	-
21-Jan	20:58	8S2113	XZM	Arrival	11.8	-	-
21-Jan	21:01	3A169	YFT	Departure	11.7	-	-
21-Jan	21:49	8S522	XZM	Departure	11.9	-	-
22-Jan	08:13	3A061	YFT	Arrival	11.9	-	-
22-Jan	08:19	8S210	XZM	Arrival	12.2	-	-
22-Jan	09:59	3A062	YFT	Arrival	11.6	-	-
22-Jan	10:11	3A163	YFT	Departure	12	-	-
22-Jan	10:31	3A081	ZUI	Arrival	13.1	-	-
22-Jan	10:39	8S212	XZM	Arrival	11.8	-	-
22-Jan	11:03	8S121	XZM	Departure	12.2	-	-
22-Jan	11:12	3A063	YFT	Arrival	13.1	-	-
22-Jan	12:13	3A181	ZUI	Departure	13.1	-	-
22-Jan	12:15	3A168	YFT	Departure	12.9	-	-
22-Jan	12:45	8S215	XZM	Arrival	12.5	-	-
22-Jan	12:59	3A064	YFT	Arrival	11.8	-	-
22-Jan	13:13	8S123	XZM	Departure	12	-	-
22-Jan	13:44	3A082	ZUI	Arrival	12.5	-	-
22-Jan	14:12	3A182	ZUI	Departure	11.8	-	-
22-Jan	14:18	3A164	YFT	Departure	12	-	-
22-Jan	14:51	3A065	YFT	Arrival	13.6	-	-
22-Jan	16:15	3A167	YFT	Departure	13.5	-	-
22-Jan	16:37	8S218	XZM	Arrival	13	-	-
22-Jan	16:39	3A083	ZUI	Arrival	12.8	-	-
22-Jan	17:00	3A067	YFT	Arrival	12.1	-	-
22-Jan	17:05	3A183	ZUI	Departure	13.3	-	-

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-Jan	17:10	8S126	XZM	Departure	13.2	-	-
22-Jan	18:58	3A166	YFT	Departure	12.8	-	-
22-Jan	19:50	3A084	ZUI	Arrival	12.9	-	-
22-Jan	20:10	3A185	ZUI	Departure	13.5	-	-
22-Jan	20:52	8S2113	XZM	Arrival	11.6	-	-
22-Jan	20:58	3A169	YFT	Departure	12.6	-	-
23-Jan	08:17	3A061	YFT	Arrival	12.3	-	-
23-Jan	08:25	8S210	XZM	Arrival	12	-	-
23-Jan	09:48	3A062	YFT	Arrival	11.2	-	-
23-Jan	10:15	3A163	YFT	Departure	12.1	-	-
23-Jan	10:34	8S212	XZM	Arrival	11.2	-	-
23-Jan	10:52	3A081	ZUI	Arrival	12.1	-	-
23-Jan	11:04	8S121	XZM	Departure	11.4	-	-
23-Jan	11:16	3A063	YFT	Arrival	11.7	-	-
23-Jan	12:10	3A168	YFT	Departure	12.6	-	-
23-Jan	12:11	3A181	ZUI	Departure	13.3	-	-
23-Jan	12:47	8S215	XZM	Arrival	11.9	-	-
23-Jan	12:56	3A064	YFT	Arrival	12.2	-	-
23-Jan	13:18	8S123	XZM	Departure	11.9	-	-
23-Jan	13:50	3A082	ZUI	Arrival	13.2	-	-
23-Jan	14:08	3A182	ZUI	Departure	12.9	-	-
23-Jan	14:11	3A164	YFT	Departure	13	-	-
23-Jan	14:52	3A065	YFT	Arrival	12.4	-	-
23-Jan	16:13	3A167	YFT	Departure	11.9	-	-
23-Jan	16:40	8S218	XZM	Arrival	11.4	-	-
23-Jan	16:41	3A083	ZUI	Arrival	12.7	-	-
23-Jan	16:59	3A067	YFT	Arrival	12.8	-	-
23-Jan	17:04	8S126	XZM	Departure	12.6	-	-
23-Jan	17:06	3A183	ZUI	Departure	12.6	-	-
23-Jan	19:00	3A166	YFT	Departure	12	-	-
23-Jan	19:44	3A084	ZUI	Arrival	13	-	-
23-Jan	20:11	3A185	ZUI	Departure	12.5	-	-
23-Jan	20:53	8S2113	XZM	Arrival	11.9	-	-
23-Jan	21:00	3A169	YFT	Departure	13.3	-	-
24-Jan	08:16	3A061	YFT	Arrival	12.6	<= 5	< 1min
24-Jan	08:51	8S210	XZM	Arrival	12	-	-
24-Jan	10:00	3A062	YFT	Arrival	11.8	-	-
24-Jan	10:14	3A163	YFT	Departure	11.6	-	-
24-Jan	10:40	8S212	XZM	Arrival	11.1	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT - Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
24-Jan	10:50	3A081	ZUI	Arrival	11.7	-	-
24-Jan	11:02	8S121	XZM	Departure	11.4	-	-
24-Jan	11:19	3A063	YFT	Arrival	11	-	-
24-Jan	12:10	3A181	ZUI	Departure	13.5	-	-
24-Jan	12:14	3A168	YFT	Departure	12.2	-	-
24-Jan	12:48	8S215	XZM	Arrival	11.7	-	-
24-Jan	13:04	3A064	YFT	Arrival	11.9	-	-
24-Jan	13:14	8S123	XZM	Departure	12	-	-
24-Jan	13:53	3A082	ZUI	Arrival	13	-	-
24-Jan	14:19	3A164	YFT	Departure	11.9	-	-
24-Jan	14:22	3A182	ZUI	Departure	13.2	-	-
24-Jan	14:59	3A065	YFT	Arrival	11.9	-	-
24-Jan	16:18	3A167	YFT	Departure	12.2	-	-
24-Jan	16:35	8S218	XZM	Arrival	12.5	-	-
24-Jan	16:43	3A083	ZUI	Arrival	12.5	-	-
24-Jan	17:02	3A067	YFT	Arrival	11.8	-	-
24-Jan	17:07	8S126	XZM	Departure	12.5	-	-
24-Jan	17:07	3A183	ZUI	Departure	13.3	-	-
24-Jan	19:06	3A166	YFT	Departure	12.9	-	-
24-Jan	19:54	3A084	ZUI	Arrival	12.8	-	-
24-Jan	20:12	3A185	ZUI	Departure	12.7	-	-
24-Jan	20:53	8S2113	XZM	Arrival	12.5	<= 5	< 2min
24-Jan	21:01	3A169	YFT	Departure	12	-	-
25-Jan	08:18	8S210	XZM	Arrival	13	-	-
25-Jan	08:21	3A061	YFT	Arrival	11	-	-
25-Jan	10:09	3A062	YFT	Arrival	12.1	-	-
25-Jan	10:23	3A163	YFT	Departure	12.3	-	-
25-Jan	10:42	8S212	XZM	Arrival	12.3	-	-
25-Jan	11:07	8S121	XZM	Departure	11.3	-	-
25-Jan	11:07	3A081	ZUI	Arrival	11.7	-	-
25-Jan	11:14	3A063	YFT	Arrival	11.8	-	-
25-Jan	12:17	3A168	YFT	Departure	12.8	-	-
25-Jan	12:18	3A181	ZUI	Departure	13	-	-
25-Jan	12:46	8S215	XZM	Arrival	12.1	-	-
25-Jan	12:52	3A064	YFT	Arrival	12.2	-	-
25-Jan	13:21	8S123	XZM	Departure	13.3	-	-
25-Jan	13:54	3A082	ZUI	Arrival	13.1	-	-
25-Jan	14:20	3A182	ZUI	Departure	13.5	-	-
25-Jan	14:20	3A164	YFT	Departure	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)
25-Jan	14:59	3A065	YFT	Arrival	12	-	-
25-Jan	16:14	3A167	YFT	Departure	13.1	-	-
25-Jan	16:47	8S218	XZM	Arrival	11.7	-	-
25-Jan	16:50	3A083	ZUI	Arrival	11.8	-	-
25-Jan	16:56	3A067	YFT	Arrival	12.4	-	-
25-Jan	17:05	3A183	ZUI	Departure	13.1	-	-
25-Jan	17:09	8S126	XZM	Departure	13.6	-	-
25-Jan	18:58	3A166	YFT	Departure	12.5	-	-
25-Jan	19:50	3A084	ZUI	Arrival	11.7	-	-
25-Jan	20:08	3A185	ZUI	Departure	12.9	-	-
25-Jan	20:58	8S2113	XZM	Arrival	11.7	-	-
25-Jan	21:01	3A169	YFT	Departure	12.3	-	-
25-Jan	22:25	8S522	XZM	Departure	11.5	-	-
26-Jan	08:13	3A061	YFT	Arrival	11.9	-	-
26-Jan	08:26	8S210	XZM	Arrival	12.4	-	-
26-Jan	09:56	3A062	YFT	Arrival	11.3	-	-
26-Jan	10:14	3A163	YFT	Departure	11.4	-	-
26-Jan	10:36	8S212	XZM	Arrival	12.3	-	-
26-Jan	10:59	3A081	ZUI	Arrival	12.2	-	-
26-Jan	11:05	8S121	XZM	Departure	13.1	-	-
26-Jan	11:15	3A063	YFT	Arrival	11.4	-	-
26-Jan	12:21	3A181	ZUI	Departure	13.2	-	-
26-Jan	12:22	3A168	YFT	Departure	12.2	-	-
26-Jan	12:56	8S215	XZM	Arrival	12.9	-	-
26-Jan	12:59	3A064	YFT	Arrival	11.2	-	-
26-Jan	13:20	8S123	XZM	Departure	11.3	-	-
26-Jan	13:52	3A082	ZUI	Arrival	13.3	-	-
26-Jan	14:16	3A182	ZUI	Departure	14	-	-
26-Jan	14:18	3A164	YFT	Departure	12.1	-	-
26-Jan	14:56	3A065	YFT	Arrival	11.8	-	-
26-Jan	16:17	3A167	YFT	Departure	12.3	-	-
26-Jan	16:46	3A083	ZUI	Arrival	11.9	-	-
26-Jan	16:47	8S218	XZM	Arrival	11.4	-	-
26-Jan	16:55	3A067	YFT	Arrival	11.9	-	-
26-Jan	17:14	8S126	XZM	Departure	11.7	-	-
26-Jan	17:16	3A183	ZUI	Departure	12.2	-	-
26-Jan	18:59	3A166	YFT	Departure	11	-	-
26-Jan	19:55	3A084	ZUI	Arrival	12.8	-	-
26-Jan	20:13	3A185	ZUI	Departure	13.4	-	-

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)
26-Jan	20:48	8S2113	XZM	Arrival	12.9	-	-
26-Jan	21:00	3A169	YFT	Departure	12.4	-	-
26-Jan	21:55	8S522	XZM	Departure	12.4	-	-
27-Jan	08:15	3A061	YFT	Arrival	12.4	-	-
27-Jan	08:22	8S210	XZM	Arrival	12.3	-	-
27-Jan	09:48	3A062	YFT	Arrival	11.4	-	-
27-Jan	10:17	3A163	YFT	Departure	11.6	-	-
27-Jan	10:39	8S212	XZM	Arrival	12	-	-
27-Jan	10:51	3A081	ZUI	Arrival	12	-	-
27-Jan	11:08	8S121	XZM	Departure	11.9	-	-
27-Jan	11:15	3A063	YFT	Arrival	12.3	-	-
27-Jan	12:13	3A181	ZUI	Departure	13.4	-	-
27-Jan	12:18	3A168	YFT	Departure	12.5	-	-
27-Jan	12:48	8S215	XZM	Arrival	12.9	-	-
27-Jan	12:55	3A064	YFT	Arrival	11.4	-	-
27-Jan	13:16	8S123	XZM	Departure	12.2	-	-
27-Jan	13:45	3A082	ZUI	Arrival	11.8	-	-
27-Jan	14:16	3A182	ZUI	Departure	12.6	-	-
27-Jan	14:18	3A164	YFT	Departure	12	-	-
27-Jan	14:56	3A065	YFT	Arrival	12.5	-	-
27-Jan	16:26	3A167	YFT	Departure	12.6	-	-
27-Jan	16:43	8S218	XZM	Arrival	12.4	-	-
27-Jan	16:45	3A083	ZUI	Arrival	12.6	-	-
27-Jan	16:53	3A067	YFT	Arrival	11.8	-	-
27-Jan	17:10	8S126	XZM	Departure	12.9	-	-
27-Jan	17:13	3A183	ZUI	Departure	13.4	-	-
27-Jan	18:58	3A166	YFT	Departure	13.6	-	-
27-Jan	19:49	3A084	ZUI	Arrival	12.9	-	-
27-Jan	20:09	3A185	ZUI	Departure	13.4	-	-
27-Jan	20:58	3A169	YFT	Departure	12.7	-	-
27-Jan	21:01	8S2113	XZM	Arrival	13.5	-	-
27-Jan	22:01	8S522	XZM	Departure	13.5	-	-
28-Jan	08:13	3A061	YFT	Arrival	11.7	-	-
28-Jan	08:25	8S210	XZM	Arrival	13.2	-	-
28-Jan	10:02	3A062	YFT	Arrival	11.2	-	-
28-Jan	10:14	3A163	YFT	Departure	11.3	-	-
28-Jan	10:39	8S212	XZM	Arrival	11.8	-	-
28-Jan	10:52	3A081	ZUI	Arrival	13	-	-
28-Jan	11:09	8S121	XZM	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)
28-Jan	11:21	3A063	YFT	Arrival	11.8	-	-
28-Jan	12:09	3A181	ZUI	Departure	13.2	-	-
28-Jan	12:16	3A168	YFT	Departure	11.7	-	-
28-Jan	12:54	8S215	XZM	Arrival	12.1	-	-
28-Jan	13:01	3A064	YFT	Arrival	10.9	-	-
28-Jan	13:34	8S123	XZM	Departure	12.7	-	-
28-Jan	13:51	3A082	ZUI	Arrival	11.3	-	-
28-Jan	14:24	3A164	YFT	Departure	11.4	-	-
28-Jan	14:25	3A182	ZUI	Departure	12.8	-	-
28-Jan	14:54	3A065	YFT	Arrival	11.3	-	-
28-Jan	16:22	3A167	YFT	Departure	12.1	-	-
28-Jan	16:47	3A083	ZUI	Arrival	12.4	-	-
28-Jan	16:51	8S218	XZM	Arrival	11.4	-	-
28-Jan	17:04	3A183	ZUI	Departure	12.9	-	-
28-Jan	17:04	3A067	YFT	Arrival	10.5	-	-
28-Jan	17:27	8S126	XZM	Departure	12.9	-	-
28-Jan	18:57	3A166	YFT	Departure	12.6	-	-
28-Jan	20:27	3A084	ZUI	Arrival	13.4	-	-
28-Jan	20:54	3A185	ZUI	Departure	13	-	-
28-Jan	20:57	8S2113	XZM	Arrival	13.1	-	-
28-Jan	21:04	3A169	YFT	Departure	12.1	-	-
28-Jan	22:03	8S522	XZM	Departure	13.1	-	-
29-Jan	08:22	3A061	YFT	Arrival	11.5	-	-
29-Jan	08:36	8S210	XZM	Arrival	12.3	-	-
29-Jan	09:54	3A062	YFT	Arrival	11.2	-	-
29-Jan	10:15	3A163	YFT	Departure	12.1	-	-
29-Jan	10:35	8S212	XZM	Arrival	12.6	-	-
29-Jan	10:46	3A081	ZUI	Arrival	13.3	-	-
29-Jan	11:04	8S121	XZM	Departure	12.7	-	-
29-Jan	11:17	3A063	YFT	Arrival	11.4	-	-
29-Jan	12:13	3A181	ZUI	Departure	13.2	-	-
29-Jan	12:16	3A168	YFT	Departure	11.8	-	-
29-Jan	12:56	8S215	XZM	Arrival	12.3	-	-
29-Jan	13:06	3A064	YFT	Arrival	11.8	-	-
29-Jan	13:17	8S123	XZM	Departure	13.1	-	-
29-Jan	13:50	3A082	ZUI	Arrival	12.4	-	-
29-Jan	14:14	3A164	YFT	Departure	11.8	-	-
29-Jan	14:16	3A182	ZUI	Departure	12.9	-	-
29-Jan	14:56	3A065	YFT	Arrival	11.4	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT - Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
29-Jan	16:17	3A167	YFT	Departure	12	-	-
29-Jan	16:45	8S218	XZM	Arrival	10.2	-	-
29-Jan	16:47	3A083	ZUI	Arrival	12.5	-	-
29-Jan	16:57	3A067	YFT	Arrival	11.9	-	-
29-Jan	17:12	3A183	ZUI	Departure	13	-	-
29-Jan	17:19	8S126	XZM	Departure	12.8	-	-
29-Jan	19:24	3A166	YFT	Departure	12.9	-	-
29-Jan	19:58	3A084	ZUI	Arrival	13.1	-	-
29-Jan	20:20	3A185	ZUI	Departure	12.6	-	-
29-Jan	20:51	8S2113	XZM	Arrival	12.3	-	-
29-Jan	20:59	3A169	YFT	Departure	12.8	-	-
29-Jan	21:51	8S522	XZM	Departure	12.9	-	-
30-Jan	08:18	3A061	YFT	Arrival	11.2	-	-
30-Jan	08:23	8S210	XZM	Arrival	11.4	-	-
30-Jan	09:52	3A062	YFT	Arrival	11.6	-	-
30-Jan	10:24	3A163	YFT	Departure	11.6	-	-
30-Jan	10:40	8S212	XZM	Arrival	11.4	-	-
30-Jan	10:55	3A081	ZUI	Arrival	12.8	-	-
30-Jan	11:05	8S121	XZM	Departure	12	-	-
30-Jan	11:27	3A063	YFT	Arrival	11.2	-	-
30-Jan	12:17	3A168	YFT	Departure	11	-	-
30-Jan	12:22	3A181	ZUI	Departure	12.2	-	-
30-Jan	12:47	8S215	XZM	Arrival	13.2	-	-
30-Jan	12:54	3A064	YFT	Arrival	11.5	-	-
30-Jan	13:17	8S123	XZM	Departure	12.2	-	-
30-Jan	13:56	3A082	ZUI	Arrival	13.1	-	-
30-Jan	14:17	3A164	YFT	Departure	11.8	-	-
30-Jan	14:20	3A182	ZUI	Departure	13.5	-	-
30-Jan	15:01	3A065	YFT	Arrival	11.6	-	-
30-Jan	16:24	3A167	YFT	Departure	13.2	-	-
30-Jan	16:53	3A083	ZUI	Arrival	11.6	-	-
30-Jan	16:56	8S218	XZM	Arrival	12.3	-	-
30-Jan	16:58	3A067	YFT	Arrival	11.6	-	-
30-Jan	17:24	8S126	XZM	Departure	12.2	-	-
30-Jan	17:35	3A183	ZUI	Departure	13.2	-	-
30-Jan	18:58	3A166	YFT	Departure	13.1	-	-
30-Jan	20:19	3A084	ZUI	Arrival	12.2	-	-
30-Jan	20:34	3A185	ZUI	Departure	11.7	-	-
30-Jan	20:54	8S2113	XZM	Arrival	13.6	-	-

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)
30-Jan	21:00	3A169	YFT	Departure	12.2	-	-
30-Jan	22:12	8S522	XZM	Departure	13.5	-	-
31-Jan	08:15	3A061	YFT	Arrival	13.1	-	-
31-Jan	08:26	8S210	XZM	Arrival	12.5	-	-
31-Jan	09:52	3A062	YFT	Arrival	11.7	-	-
31-Jan	10:19	3A163	YFT	Departure	13.3	-	-
31-Jan	10:34	8S212	XZM	Arrival	12.6	-	-
31-Jan	10:55	3A081	ZUI	Arrival	13.3	-	-
31-Jan	11:00	8S121	XZM	Departure	13.3	-	-
31-Jan	11:29	3A063	YFT	Arrival	12.9	-	-
31-Jan	12:10	3A168	YFT	Departure	12.2	-	-
31-Jan	12:10	3A181	ZUI	Departure	13.7	-	-
31-Jan	12:55	3A064	YFT	Arrival	12.4	-	-
31-Jan	13:00	8S215	XZM	Arrival	12.2	-	-
31-Jan	13:18	8S123	XZM	Departure	13.1	-	-
31-Jan	14:00	3A082	ZUI	Arrival	12.3	<= 5	< 1min
31-Jan	14:17	3A182	ZUI	Departure	12.3	-	-
31-Jan	14:17	3A164	YFT	Departure	12.9	-	-
31-Jan	15:07	3A065	YFT	Arrival	12.2	-	-
31-Jan	16:16	3A167	YFT	Departure	11.6	-	-
31-Jan	16:44	3A083	ZUI	Arrival	12.5	-	-
31-Jan	16:44	8S218	XZM	Arrival	10.9	-	-
31-Jan	16:52	3A067	YFT	Arrival	12.7	-	-
31-Jan	17:20	3A183	ZUI	Departure	13.4	-	-
31-Jan	17:23	8S126	XZM	Departure	12.8	-	-
31-Jan	19:04	3A166	YFT	Departure	13	-	-
31-Jan	19:57	3A084	ZUI	Arrival	13.2	-	-
31-Jan	20:15	3A185	ZUI	Departure	13.3	-	-
31-Jan	20:56	8S2113	XZM	Arrival	13.3	-	-
31-Jan	21:15	3A169	YFT	Departure	11.4	-	-
31-Jan	21:58	8S522	XZM	Departure	13.7	-	-

Follow-up on instantaneous speeding

Referring to the data of SkyPier HSF movements in January 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 8 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 avoiding collision with floating objects. The captains had reduced speed and maintained the speed at less than 15 knots after the incidents.

Three HSF movements with no AIS data and two HSFs with insufficient transmission of AIS data were received in January 2018. Vessel captains were requested to provide the AIS plots to indicate the vessel entered the SCZ though the gate access points with no speeding in the SCZ.